Appendix Test Data

Report No.:	18220WC30258502	Test Sample No.:	1-2-2
Start Test Date:	2023.12.07	Finish Test Date:	2023.12.11
Test Engineer:	Hayman Chen	Auditor:	Rick Luo
Temperature:	25.6℃	Relative Humidity:	43%
Pressure:	101kPa		

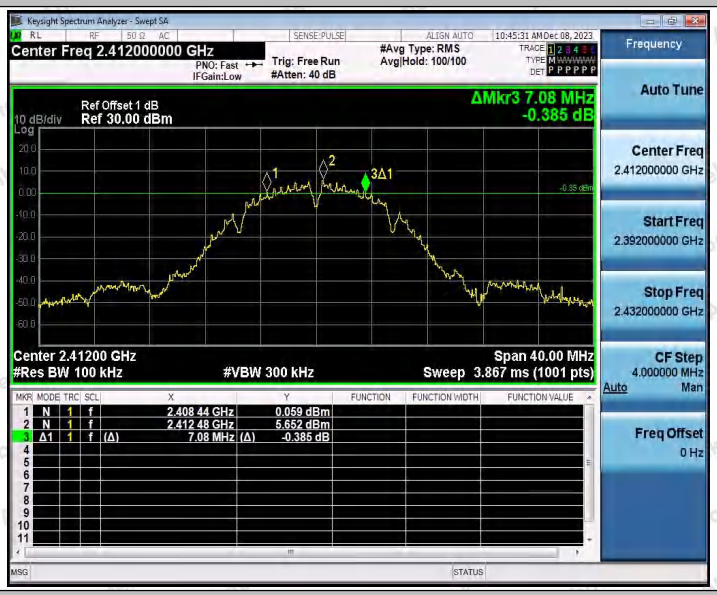
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	7.080	2408.440	2415.520	0.5	PASS
	Ant2	2412	7.080	2408.920	2416.000	0.5	PASS
	Ant1	2437	6.640	2433.880	2440.520	0.5	PASS
	Ant2	2437	7.520	2433.000	2440.520	0.5	PASS
	Ant1	2462	7.040	2458.480	2465.520	0.5	PASS
	Ant2	2462	7.040	2458.920	2465.960	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
	Ant2	2412	16.320	2403.840	2420.160	0.5	PASS
	Ant1	2437	16.360	2428.800	2445.160	0.5	PASS
	Ant2	2437	16.360	2428.800	2445.160	0.5	PASS
	Ant1	2462	16.320	2453.840	2470.160	0.5	PASS
	Ant2	2462	16.360	2453.800	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.200	2420.760	0.5	PASS
	Ant2	2412	17.560	2403.200	2420.760	0.5	PASS
	Ant1	2437	17.600	2428.200	2445.800	0.5	PASS
	Ant2	2437	17.280	2428.480	2445.760	0.5	PASS
	Ant1	2462	17.360	2453.440	2470.800	0.5	PASS
	Ant2	2462	17.560	2453.200	2470.760	0.5	PASS
11AX20SISO	Ant1	2412	18.520	2402.920	2421.440	0.5	PASS
	Ant2	2412	18.640	2402.760	2421.400	0.5	PASS
	Ant1	2437	18.320	2427.800	2446.120	0.5	PASS
	Ant2	2437	18.560	2427.880	2446.440	0.5	PASS
	Ant1	2462	18.720	2452.640	2471.360	0.5	PASS
	Ant2	2462	17.640	2453.680	2471.320	0.5	PASS

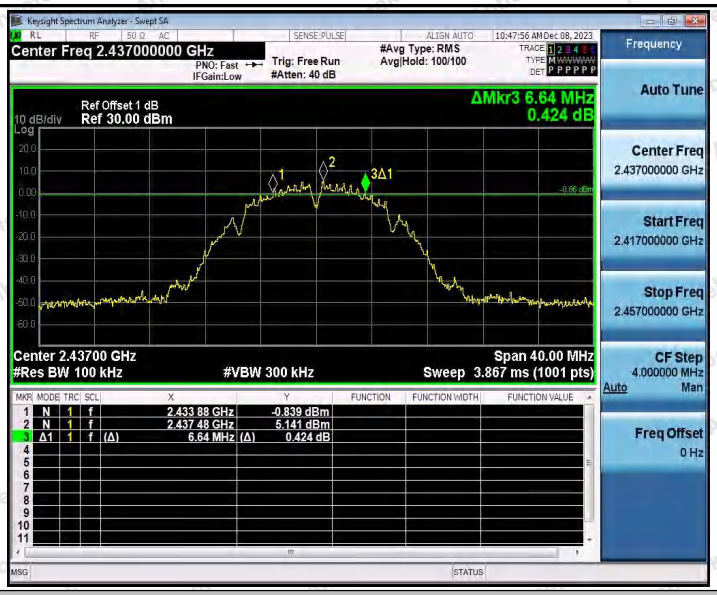
Test Graphs

11B_Ant1_2412

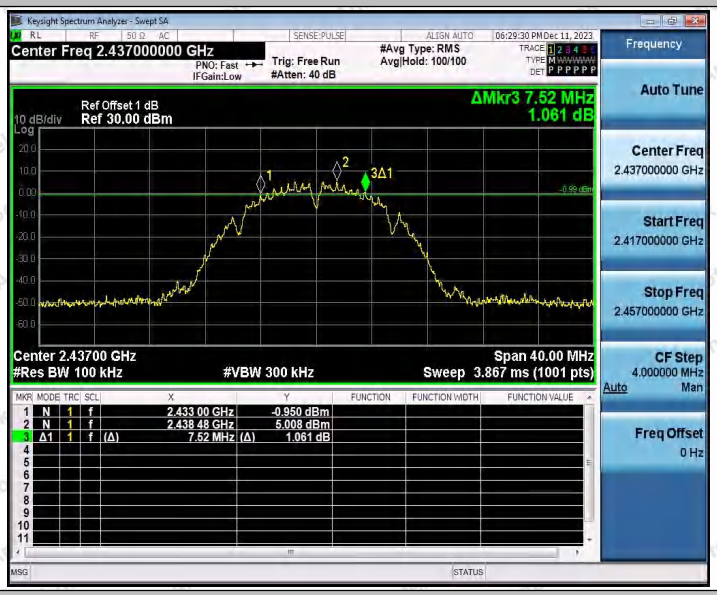


11B_Ant2_2412

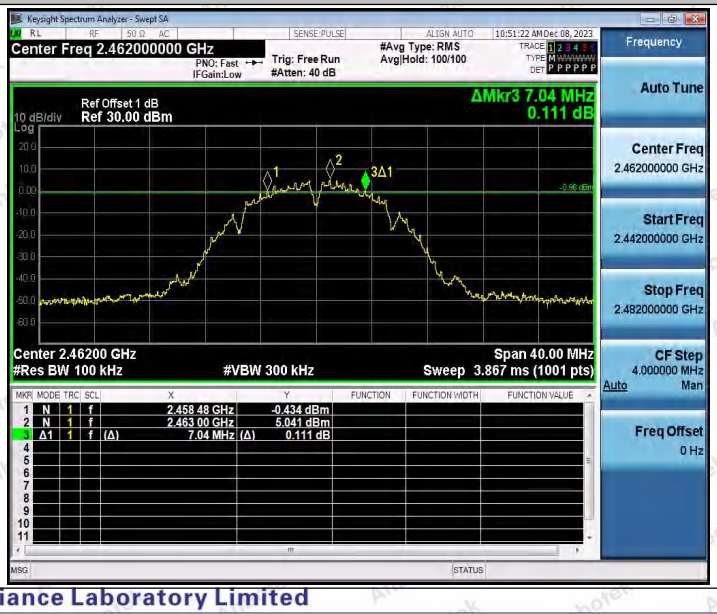
11B_Ant1_2437



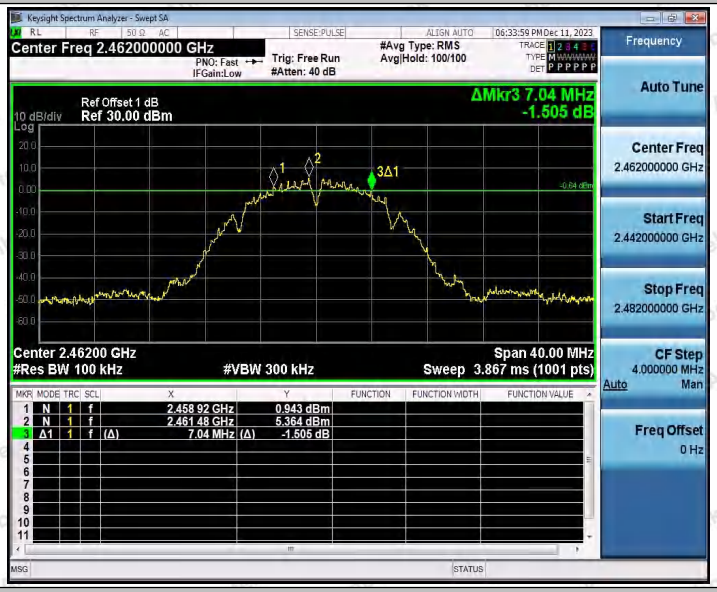
11B_Ant2_2437



11B_Ant1_2462

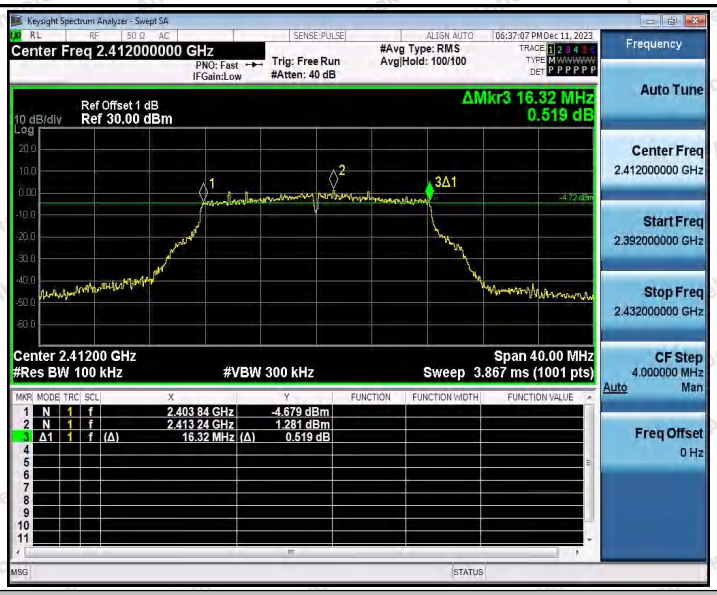


11B_Ant2_2462

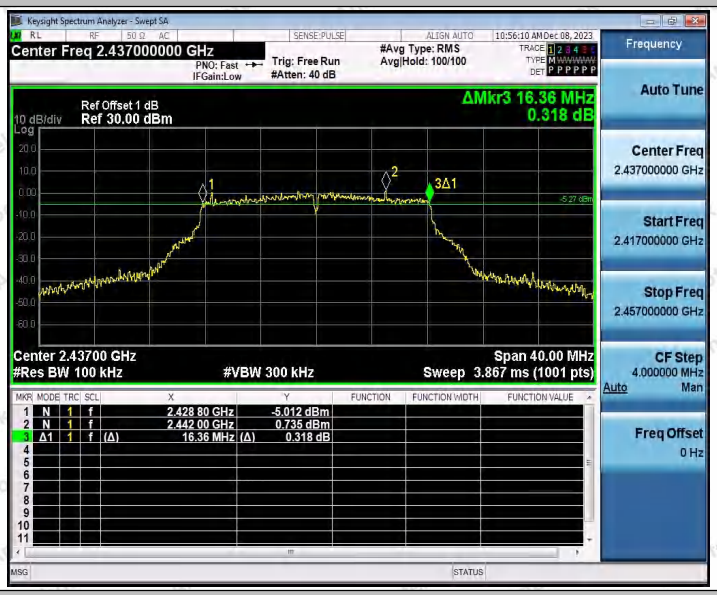


11G_Ant1_2412

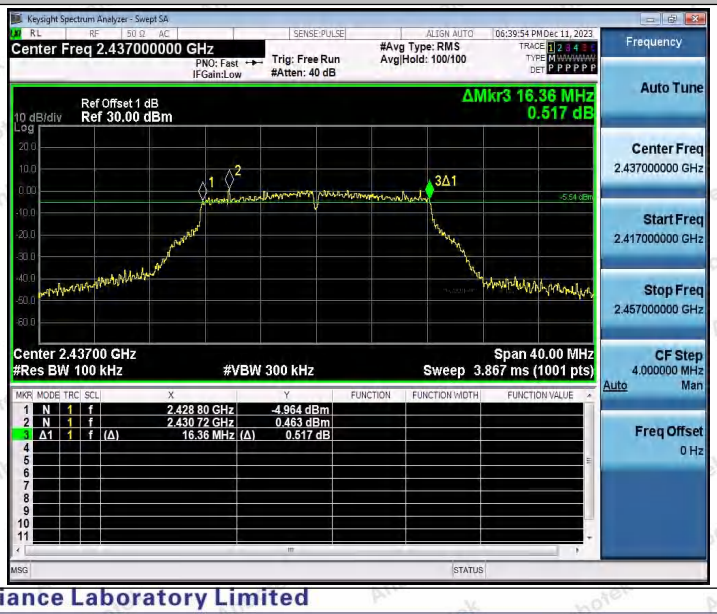
11G_Ant2_2412



11G_Ant1_2437



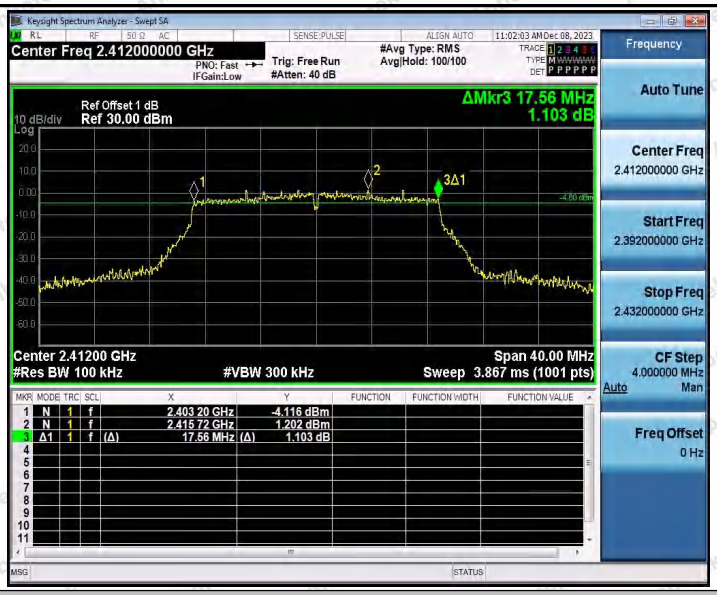
11G_Ant2_2437



11G_Ant1_2462

11G_Ant2_2462

11N20SISO_Ant1_2412



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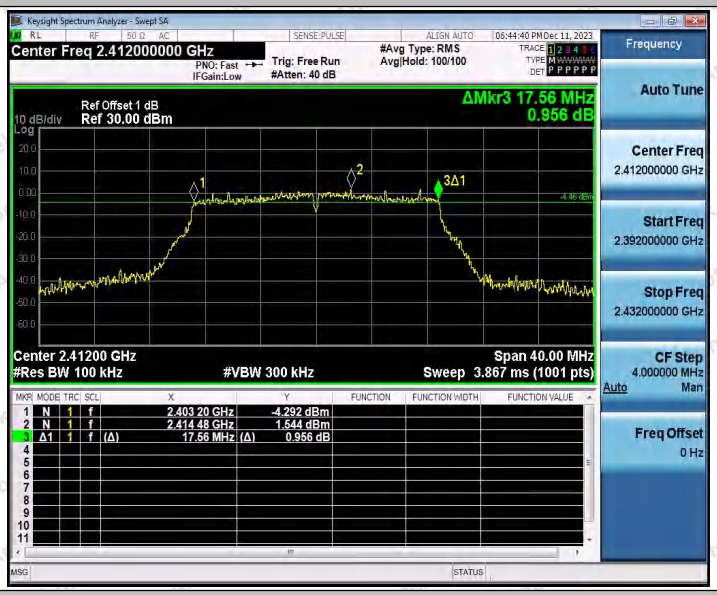
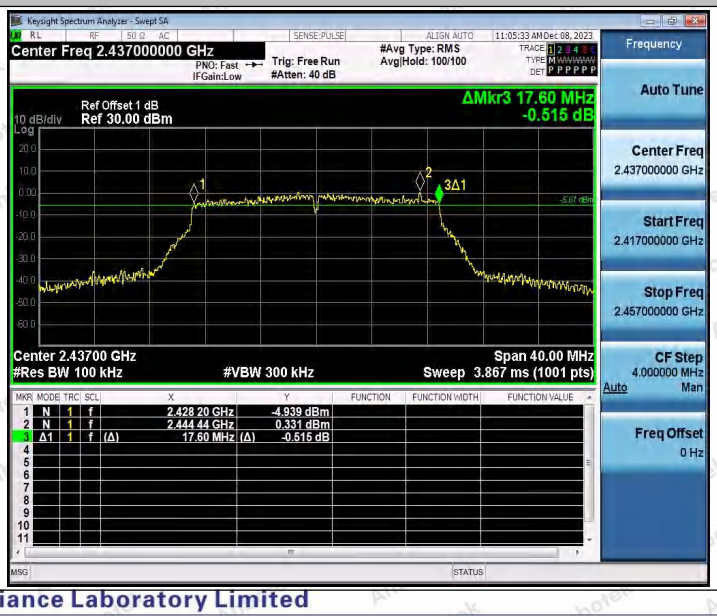
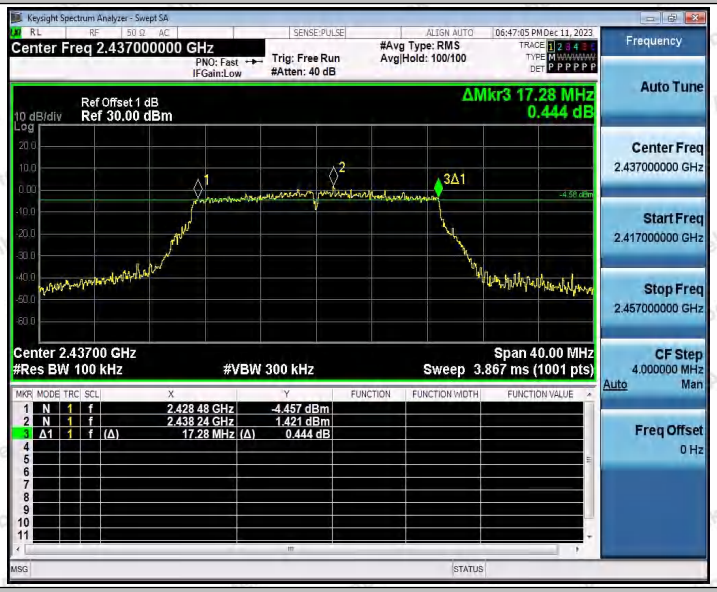


11N20SISO_Ant1_2437



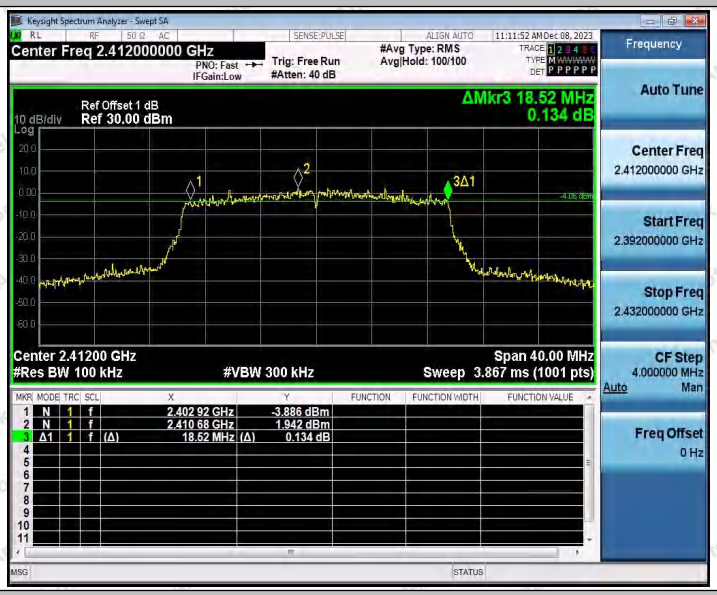
11N20SISO_Ant2_2437



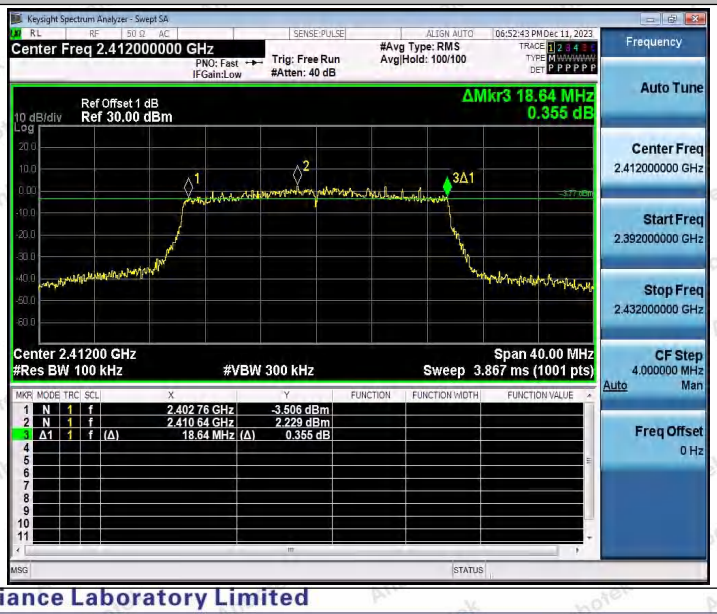
11N20SISO_Ant1_2462

11N20SISO_Ant2_2462

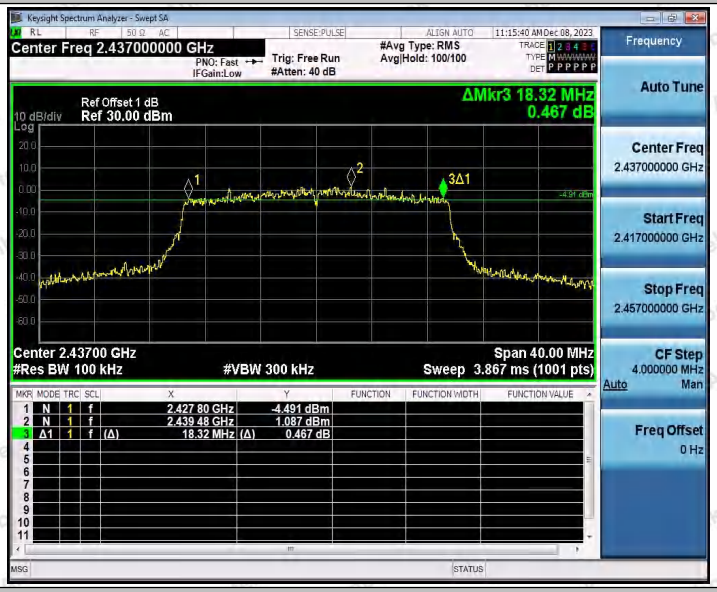
11AX20SISO_Ant1_2412



11AX20SISO_Ant2_2412

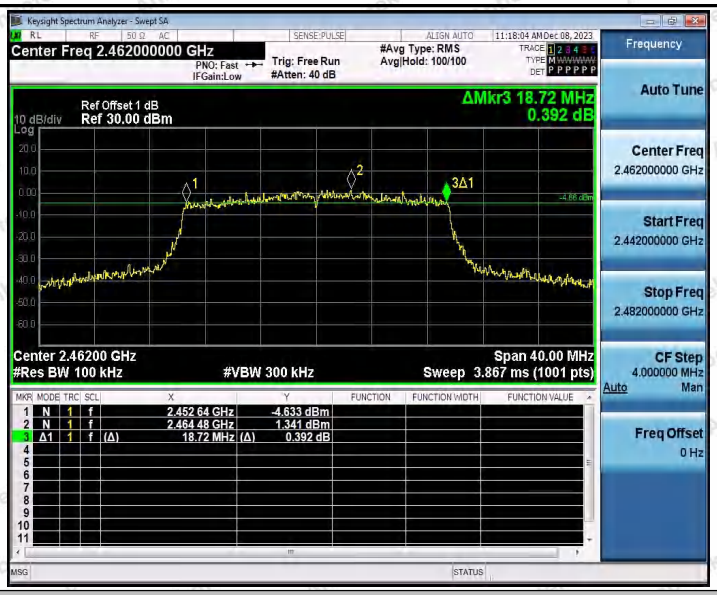


11AX20SISO_Ant1_2437



11AX20SISO_Ant2_2437

11AX20SISO_Ant1_2462



11AX20SISO_Ant2_2462

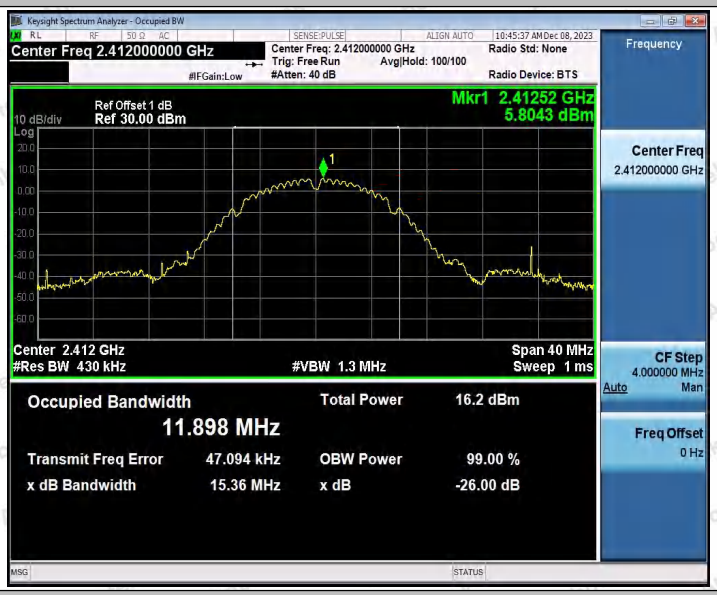
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	11.898	2406.0981	2417.9961	---	---
	Ant2	2412	11.904	2406.0969	2418.0009	---	---
	Ant1	2437	11.485	2431.3767	2442.8617	---	---
	Ant2	2437	11.307	2431.4823	2442.7893	---	---
	Ant1	2462	11.550	2456.3584	2467.9084	---	---
	Ant2	2462	11.442	2456.4267	2467.8687	---	---
11G	Ant1	2412	17.160	2403.4481	2420.6081	---	---
	Ant2	2412	17.099	2403.5266	2420.6256	---	---
	Ant1	2437	17.174	2428.4634	2445.6374	---	---
	Ant2	2437	17.159	2428.4934	2445.6524	---	---
	Ant1	2462	17.233	2453.4756	2470.7086	---	---
	Ant2	2462	17.180	2453.4392	2470.6192	---	---
11N20SISO	Ant1	2412	18.125	2402.9632	2421.0882	---	---
	Ant2	2412	18.226	2402.9388	2421.1648	---	---
	Ant1	2437	18.218	2427.9590	2446.1770	---	---
	Ant2	2437	18.195	2427.9690	2446.1640	---	---
	Ant1	2462	18.181	2452.9550	2471.1360	---	---
	Ant2	2462	18.159	2453.0313	2471.1903	---	---
11AX20SISO	Ant1	2412	18.937	2402.5767	2421.5137	---	---
	Ant2	2412	19.020	2402.5286	2421.5486	---	---
	Ant1	2437	18.959	2427.5438	2446.5028	---	---
	Ant2	2437	18.976	2427.5829	2446.5589	---	---
	Ant1	2462	18.974	2452.5531	2471.5271	---	---
	Ant2	2462	18.963	2452.5631	2471.5261	---	---

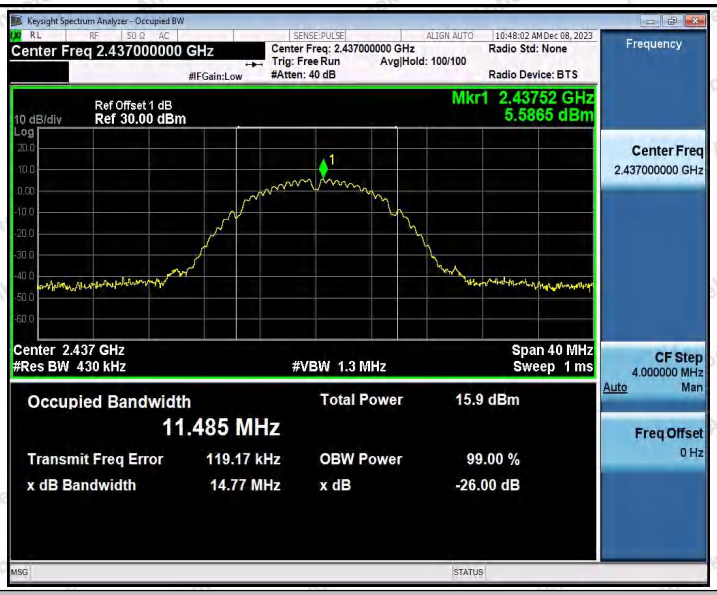
Test Graphs

11B_Ant1_2412

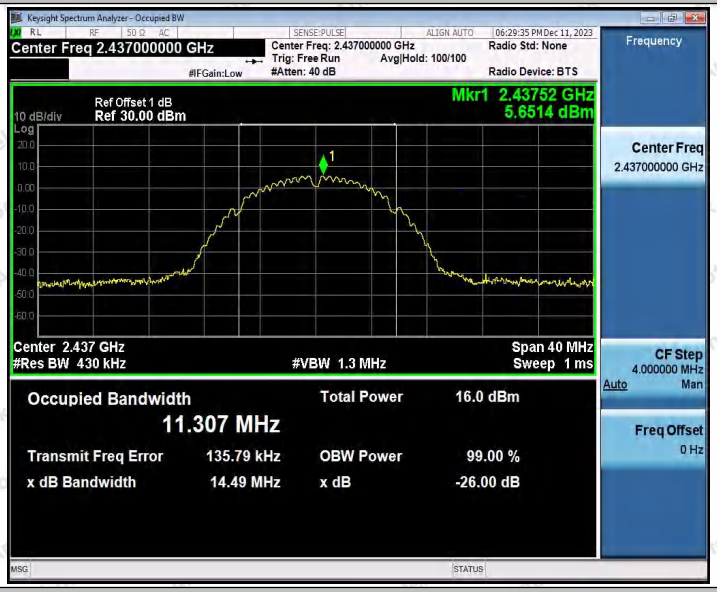


11B_Ant2_2412

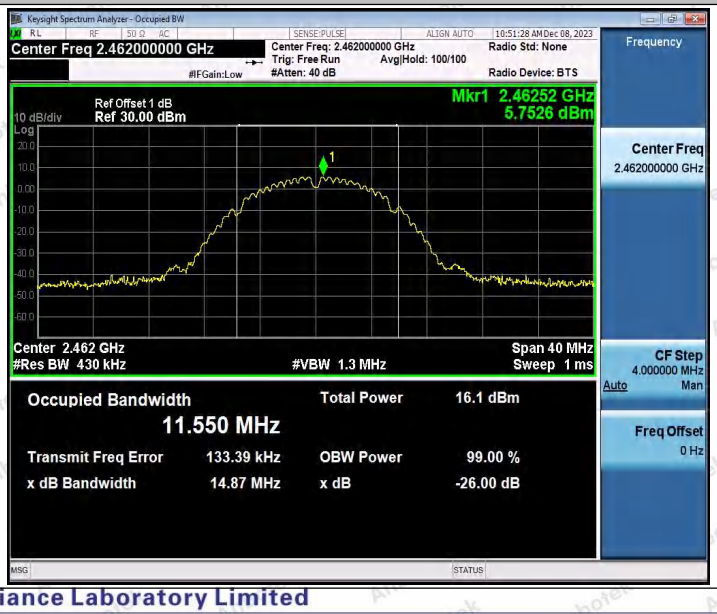
11B_Ant1_2437



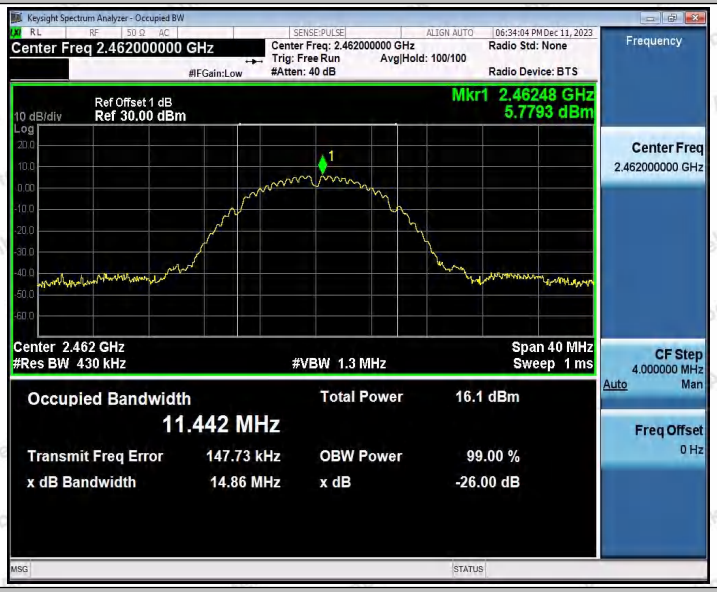
11B_Ant2_2437



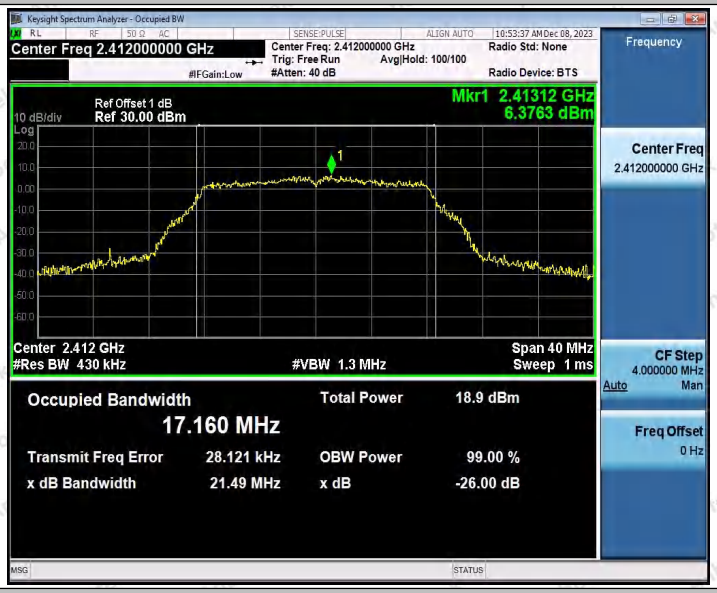
11B_Ant1_2462



11B_Ant2_2462

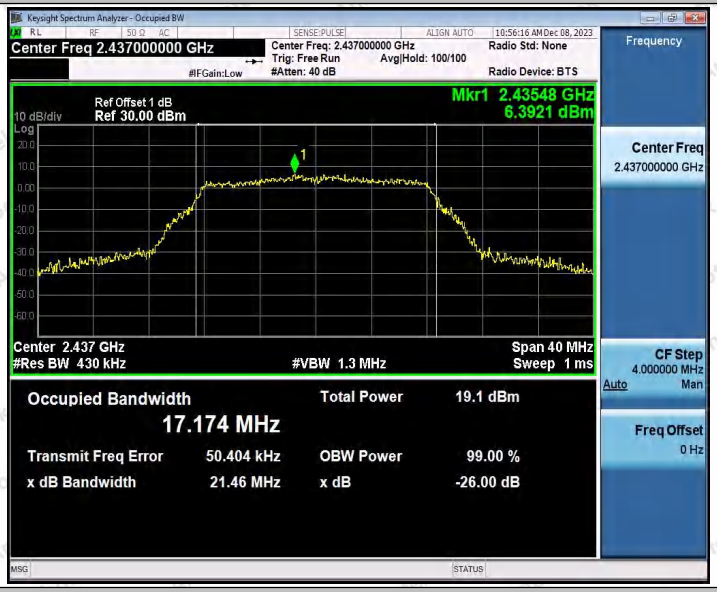


11G_Ant1_2412

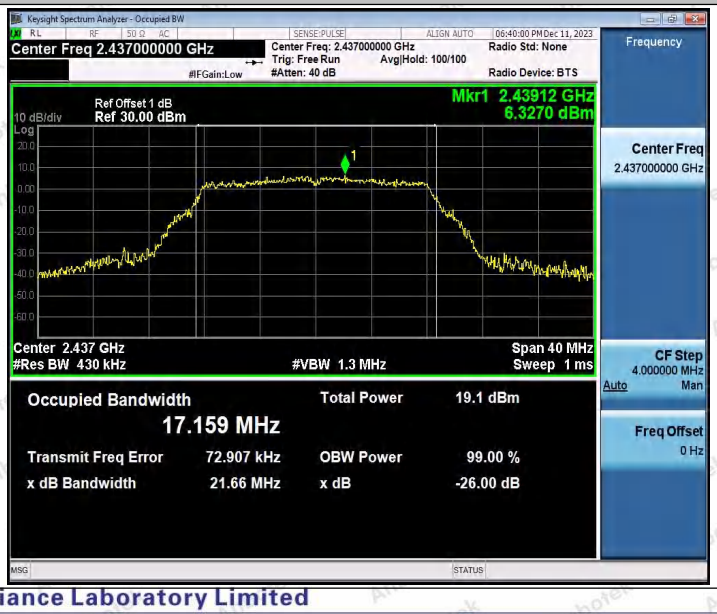


11G_Ant2_2412

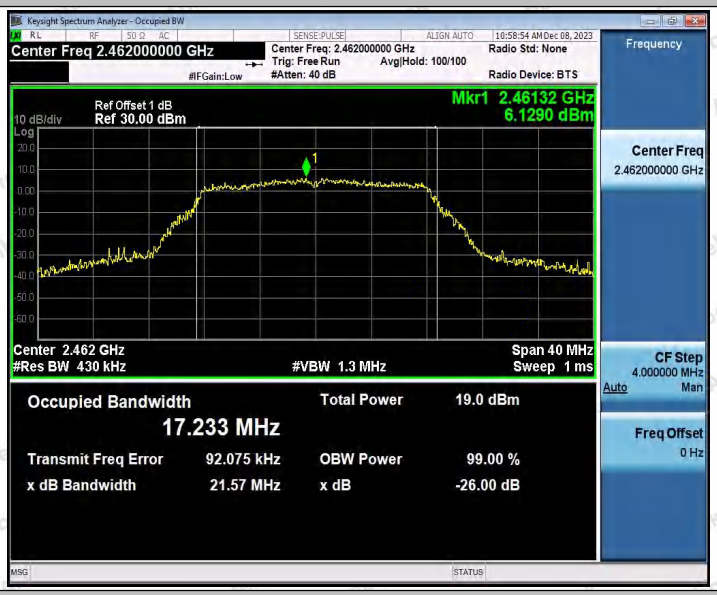
11G_Ant1_2437



11G_Ant2_2437



11G_Ant1_2462



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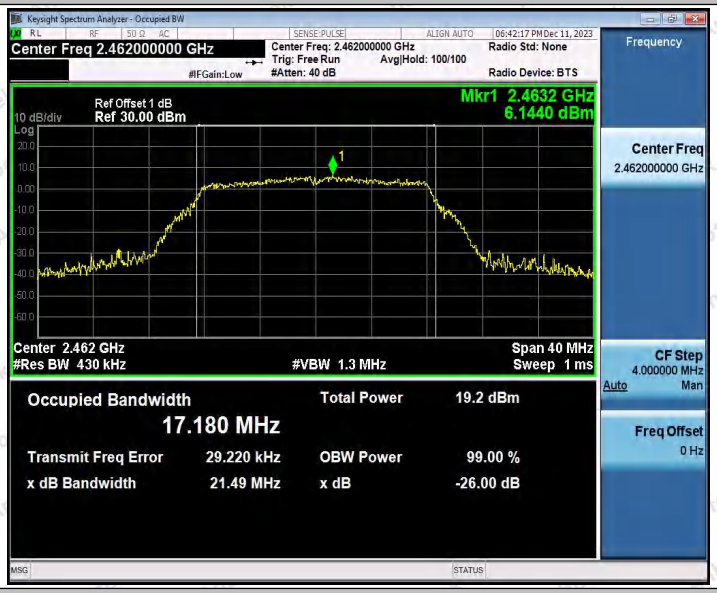
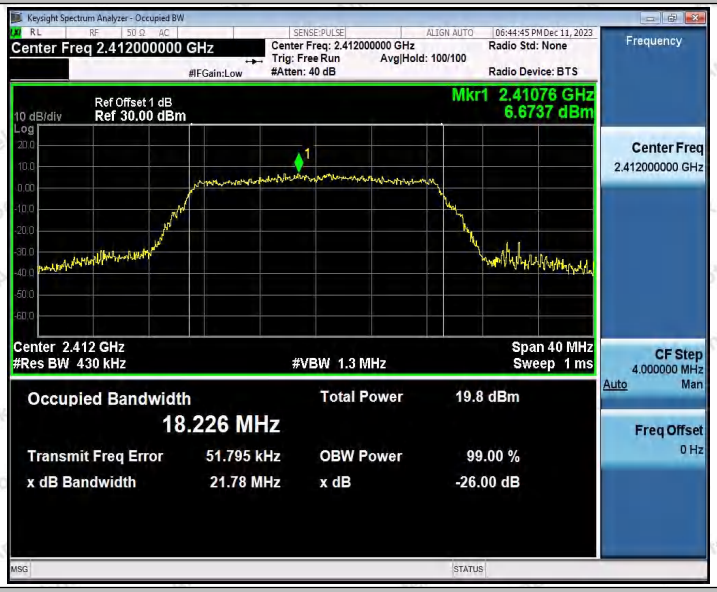
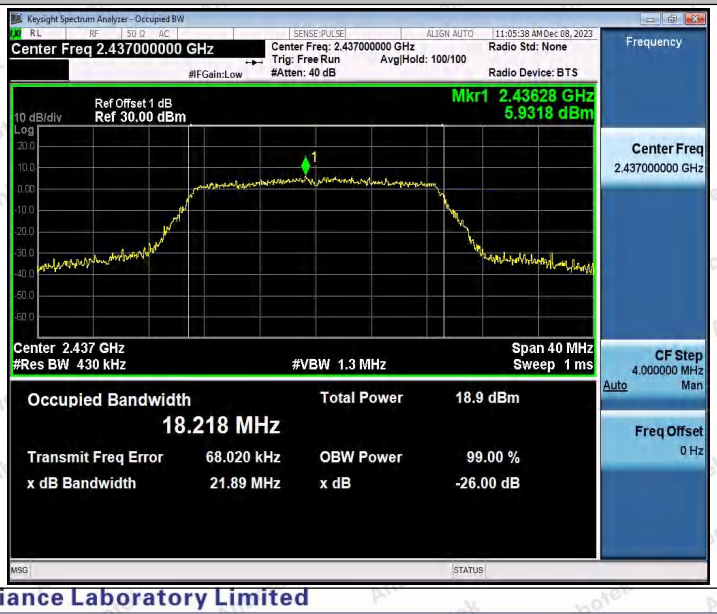


11N20SISO_Ant1_2412

11N20SISO_Ant2_2412



11N20SISO_Ant1_2437



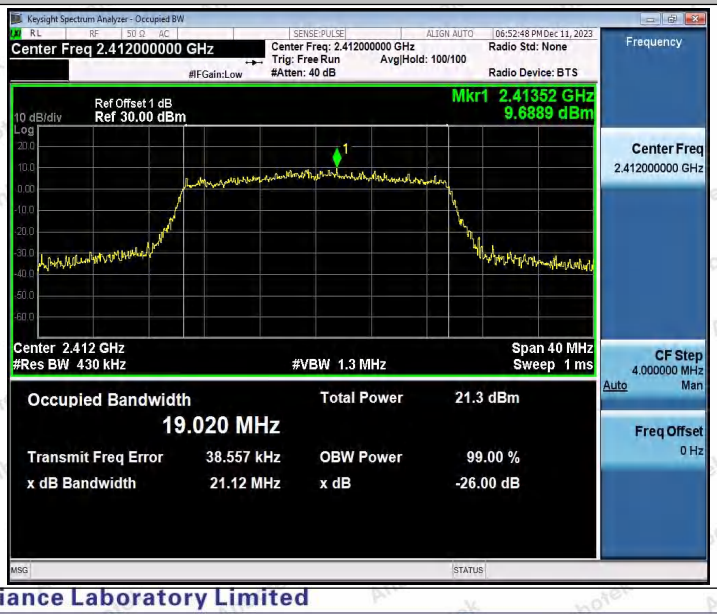
11N20SISO_Ant2_2437

11N20SISO_Ant1_2462

11N20SISO_Ant2_2462

11AX20SISO_Ant1_2412

11AX20SISO_Ant2_2412



11AX20SISO_Ant1_2437

11AX20SISO_Ant2_2437

11AX20SISO_Ant1_2462

11AX20SISO_Ant2_2462

Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Frequency[MHz]	Average Output Power[dBm]	Conducted Limit[dBm]
11B	Ant1	2412	13.29	≤30.00
	Ant2	2412	13.28	≤30.00
	Ant1	2437	13.04	≤30.00
	Ant2	2437	12.92	≤30.00
	Ant1	2462	12.99	≤30.00
	Ant2	2462	13.17	≤30.00
11G	Ant1	2412	12.54	≤30.00
	Ant2	2412	12.81	≤30.00
	Ant1	2437	13.10	≤30.00
	Ant2	2437	13.08	≤30.00
	Ant1	2462	12.87	≤30.00
	Ant2	2462	12.97	≤30.00
11N20SISO	Ant1	2412	13.66	≤30.00
	Ant2	2412	13.63	≤30.00
	Ant1	2437	12.79	≤30.00
	Ant2	2437	13.00	≤30.00
	Ant1	2462	12.83	≤30.00
	Ant2	2462	13.01	≤30.00
11AX20SISO	Ant1	2412	13.93	≤30.00
	Ant2	2412	13.97	≤30.00
	Ant1	2437	13.21	≤30.00
	Ant2	2437	13.36	≤30.00
	Ant1	2462	13.17	≤30.00
	Ant2	2462	13.17	≤30.00

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

MIMO:

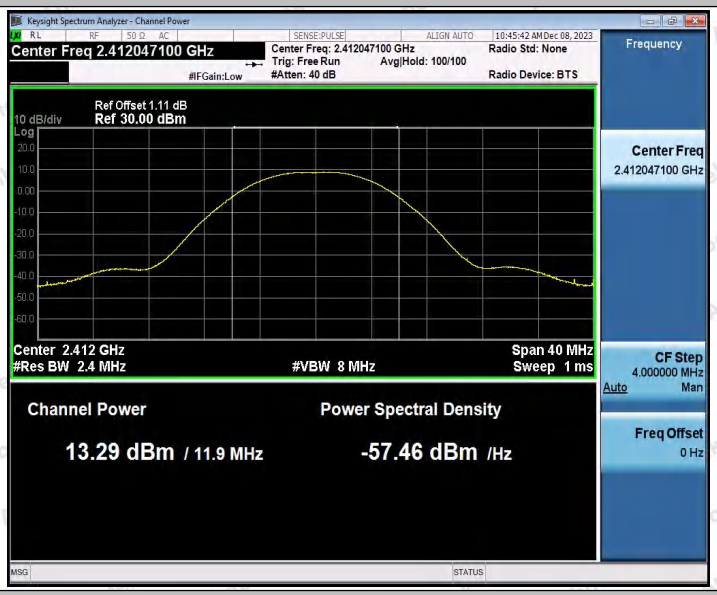
Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Total [dBm]	Limit [dBm]	Verdict
11N20MIMO	Ant1	2412	13.66	16.66	≤30.00	PASS
	Ant2	2412	13.63			
	Ant1	2437	12.79	15.91	≤30.00	PASS
	Ant2	2437	13.00			
	Ant1	2462	12.83	15.93	≤30.00	PASS
	Ant2	2462	13.01			
11AX20MIMO	Ant1	2412	13.93	**16.96**	≤30.00	PASS
	Ant2	2412	13.97			
	Ant1	2437	13.21	16.30	≤30.00	PASS
	Ant2	2437	13.36			
	Ant1	2462	13.17	16.18	≤30.00	PASS
	Ant2	2462	13.17			

Note:

1. Total (dBm)=10xlog($10^{(ANT1\ power(dBm)/10)} + 10^{(ANT2\ power(dBm)/10)}$)

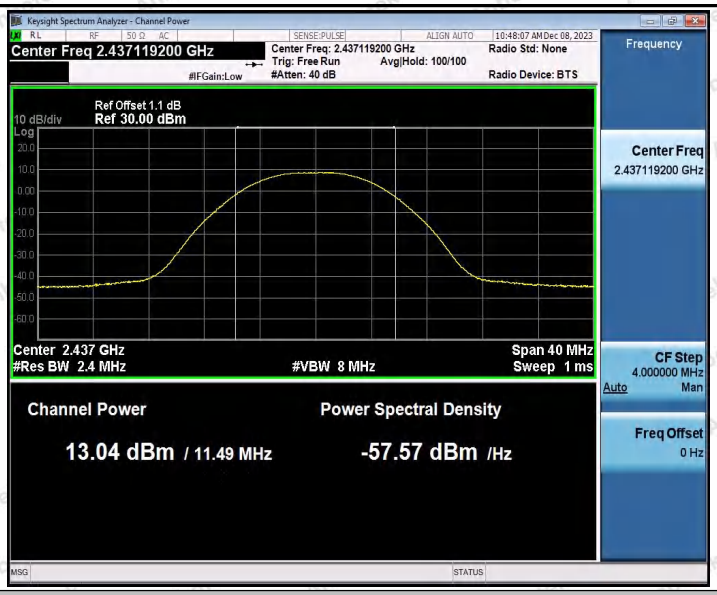
Test Graphs

11B_Ant1_2412

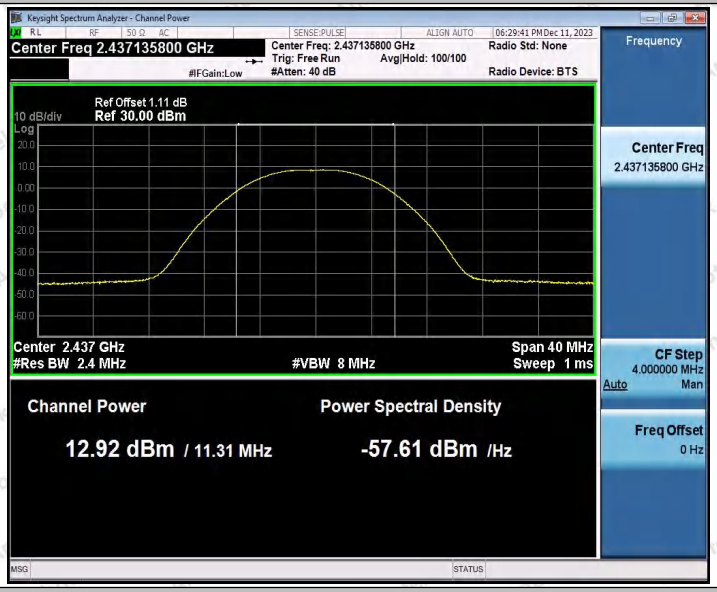


11B_Ant2_2412

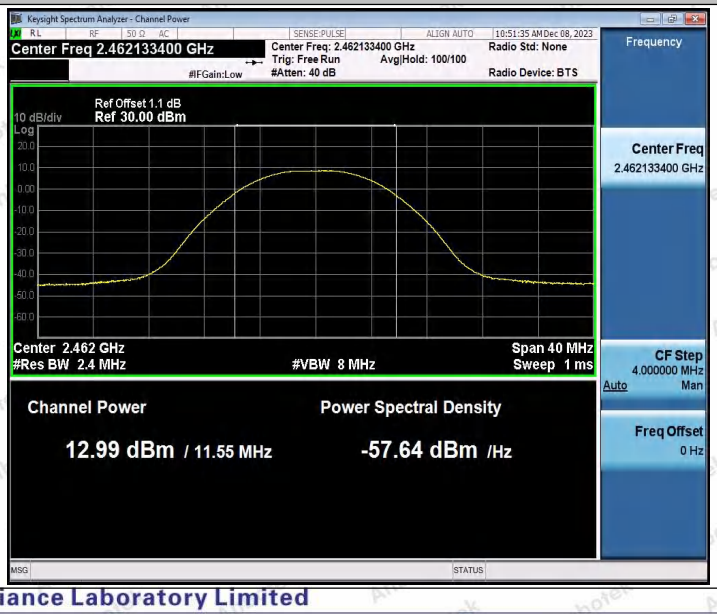
11B_Ant1_2437



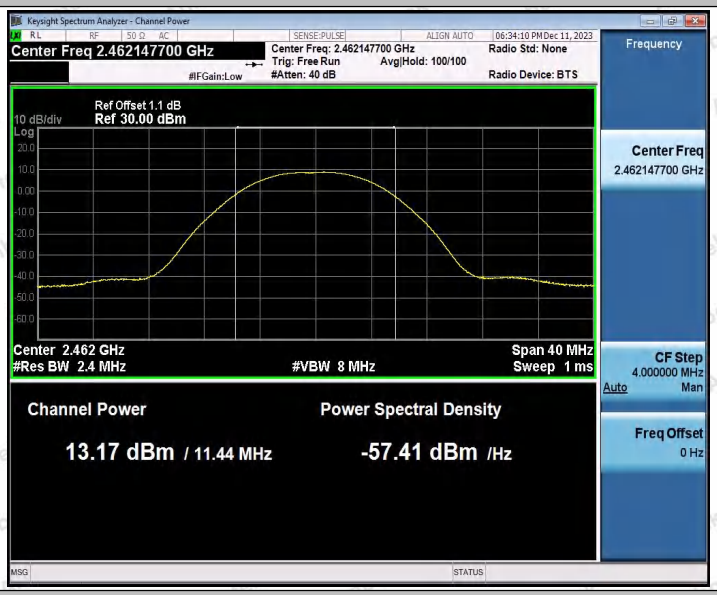
11B_Ant2_2437



11B_Ant1_2462

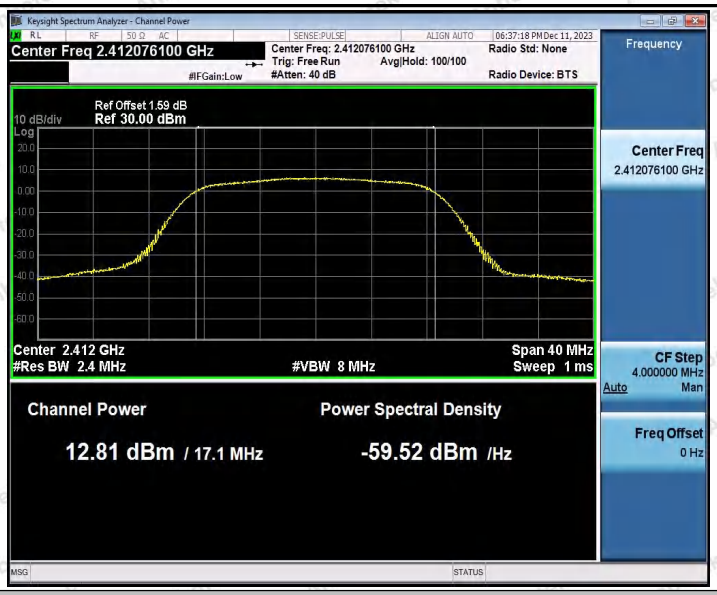


11B_Ant2_2462

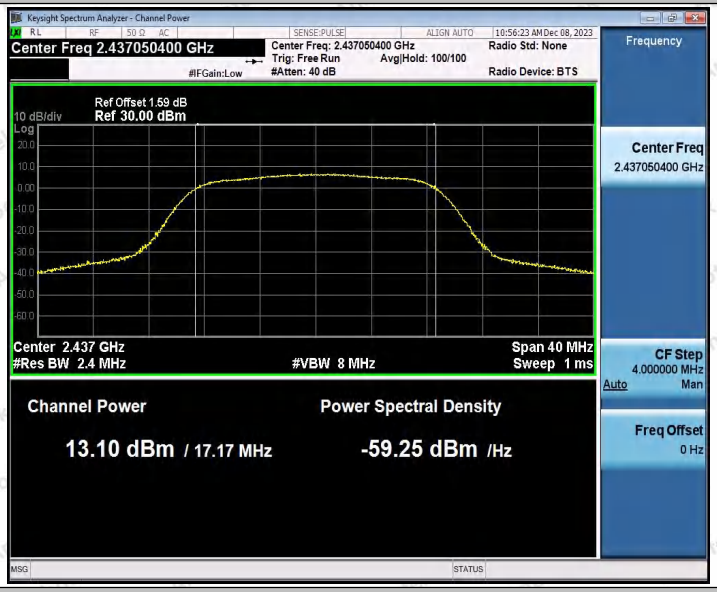


11G_Ant1_2412

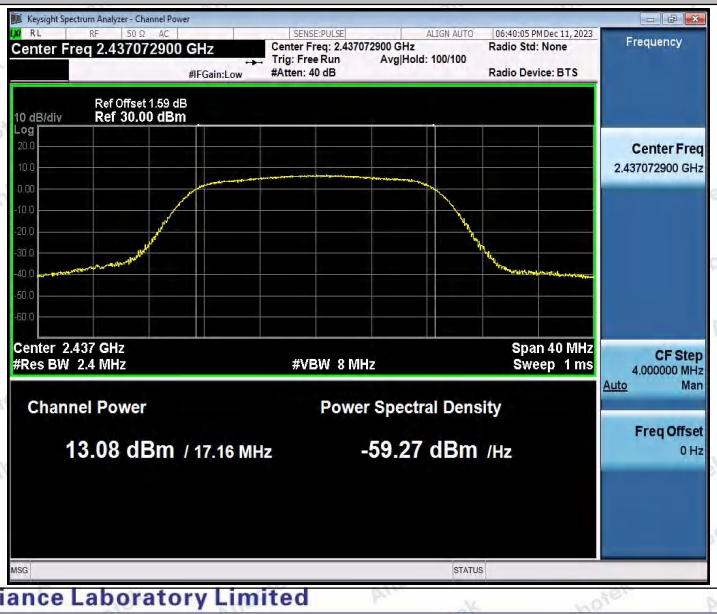
11G_Ant2_2412



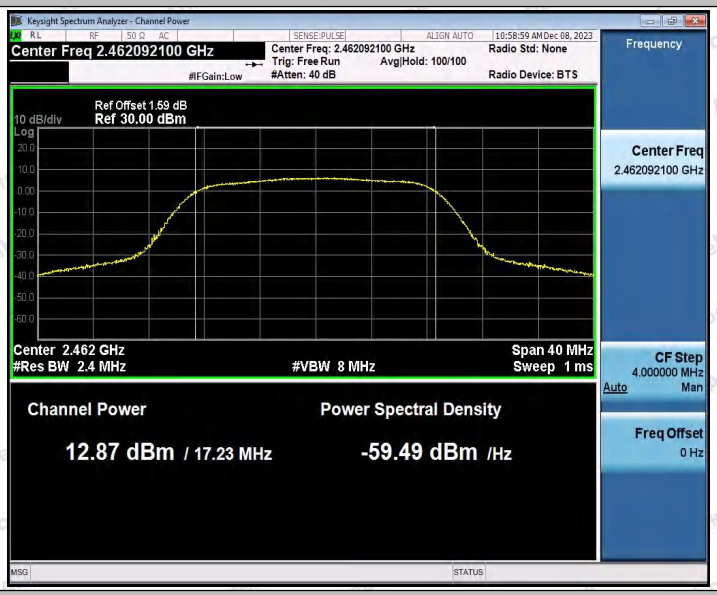
11G_Ant1_2437



11G_Ant2_2437



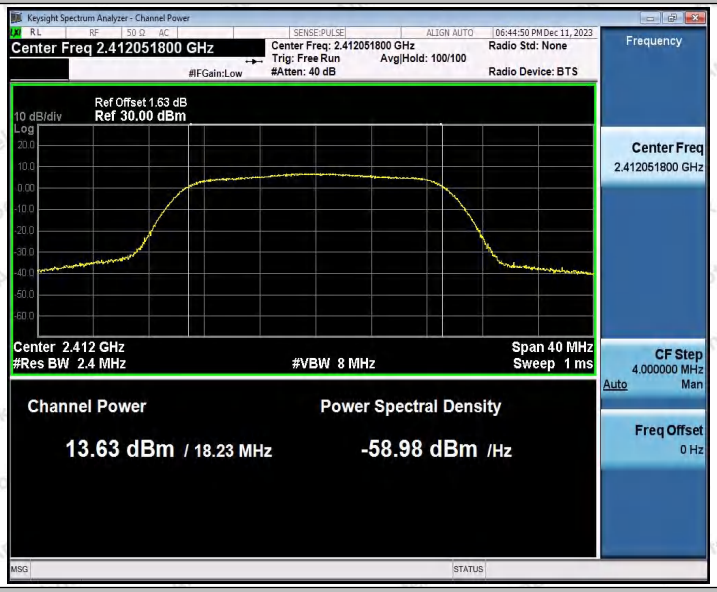
11G_Ant1_2462



11G_Ant2_2462

11N20SISO_Ant1_2412

11N20SISO_Ant2_2412



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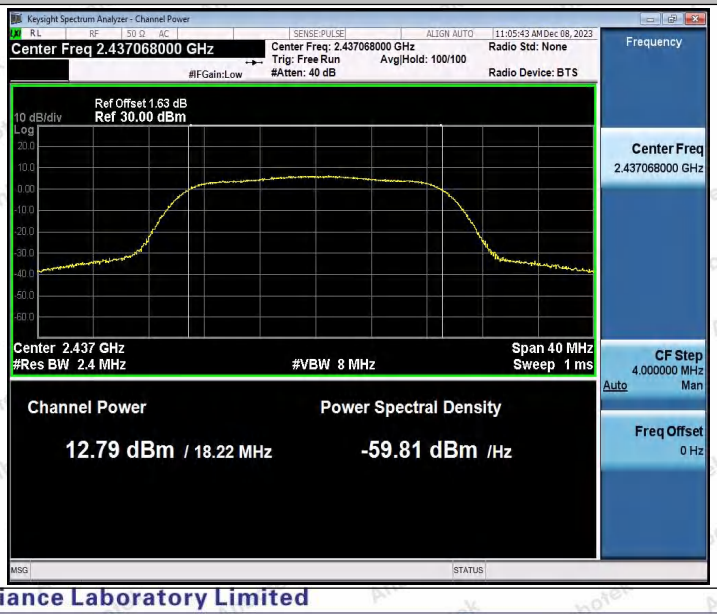

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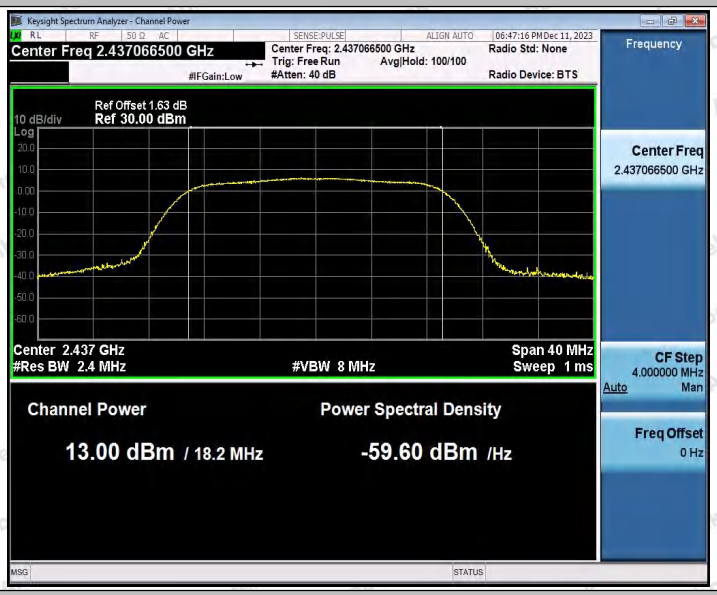

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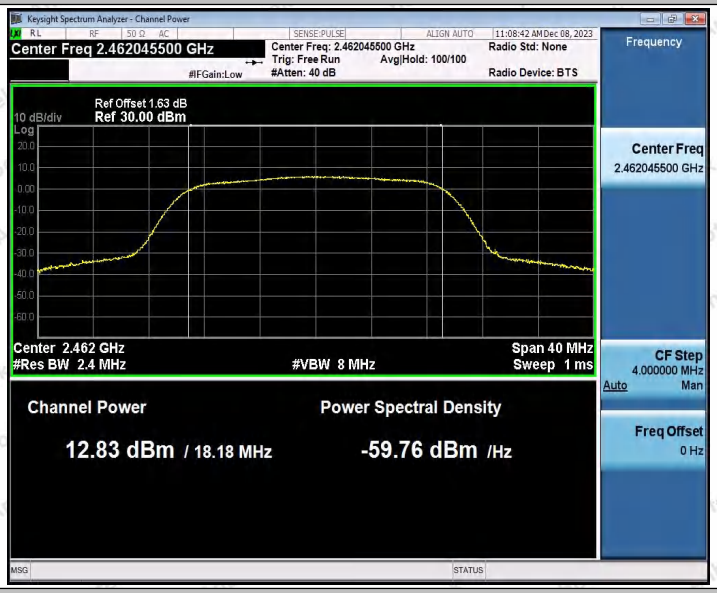
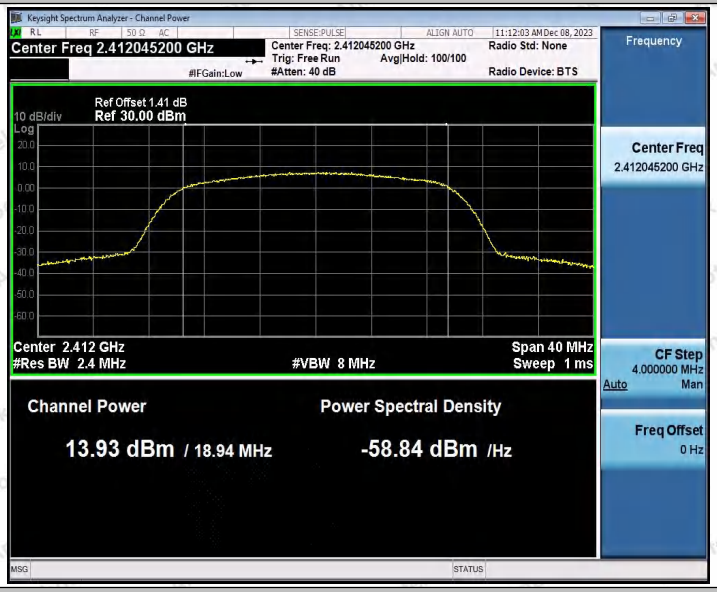
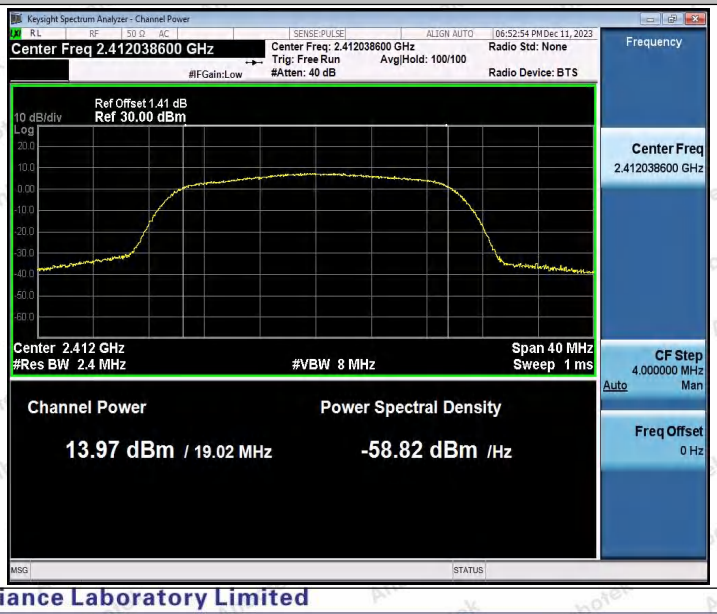


11N20SISO_Ant2_2462

11AX20SISO_Ant1_2412



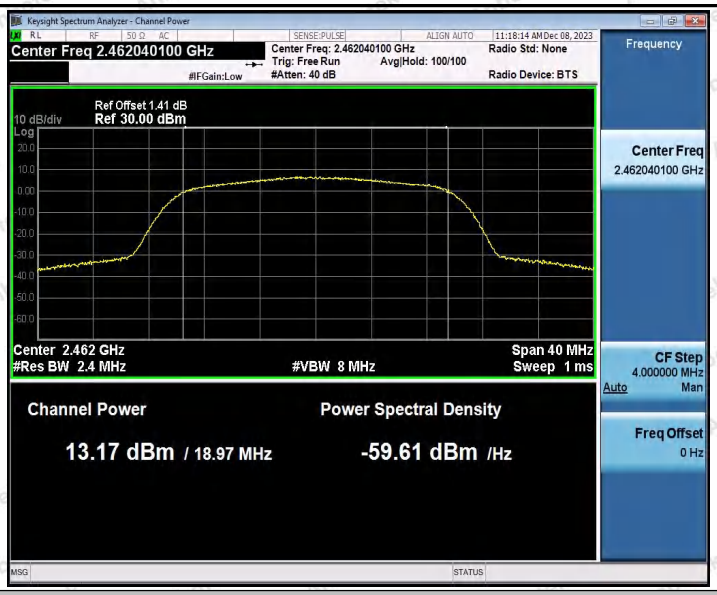
11AX20SISO_Ant2_2412



11AX20SISO_Ant1_2437

11AX20SISO_Ant2_2437

11AX20SISO_Ant1_2462



11AX20SISO_Ant2_2462

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-15.47	≤8.00	PASS
	Ant2	2412	-15.45	≤8.00	PASS
	Ant1	2437	-15.36	≤8.00	PASS
	Ant2	2437	-15.43	≤8.00	PASS
	Ant1	2462	-15.13	≤8.00	PASS
	Ant2	2462	-15.24	≤8.00	PASS
11G	Ant1	2412	-17.59	≤8.00	PASS
	Ant2	2412	-16.33	≤8.00	PASS
	Ant1	2437	-16.89	≤8.00	PASS
	Ant2	2437	-16.70	≤8.00	PASS
	Ant1	2462	-18.14	≤8.00	PASS
	Ant2	2462	-17.34	≤8.00	PASS
11N20SISO	Ant1	2412	-16.65	≤8.00	PASS
	Ant2	2412	-16.74	≤8.00	PASS
	Ant1	2437	-17.60	≤8.00	PASS
	Ant2	2437	-17.58	≤8.00	PASS
	Ant1	2462	-18.19	≤8.00	PASS
	Ant2	2462	-18.10	≤8.00	PASS
11AX20SISO	Ant1	2412	-16.94	≤8.00	PASS
	Ant2	2412	-17.70	≤8.00	PASS
	Ant1	2437	-18.76	≤8.00	PASS
	Ant2	2437	-18.42	≤8.00	PASS
	Ant1	2462	-18.69	≤8.00	PASS
	Ant2	2462	-18.02	≤8.00	PASS

MIMO:

Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Total [dBm/MHz]	Limit[dBm/MHz]	Verdict
11N20MIMO	Ant1	2412	-16.65	-13.68	≤8.00	PASS
	Ant2	2412	-16.74			
	Ant1	2437	-17.60	-14.58	≤8.00	PASS
	Ant2	2437	-17.58			
	Ant1	2462	-18.19	-15.13	≤8.00	PASS
	Ant2	2462	-18.10			
11AX20MIMO	Ant1	2412	-16.94	-14.29	≤8.00	PASS
	Ant2	2412	-17.70			
	Ant1	2437	-18.76	-15.58	≤8.00	PASS
	Ant2	2437	-18.42			
	Ant1	2462	-18.69	-15.33	≤8.00	PASS
	Ant2	2462	-18.02			

Note:

1. Total (dBm)=10xlog($10^{(ANT1\ power(dBm)/10)}$ + $10^{(ANT2\ power(dBm)/10)}$)

Test Graphs

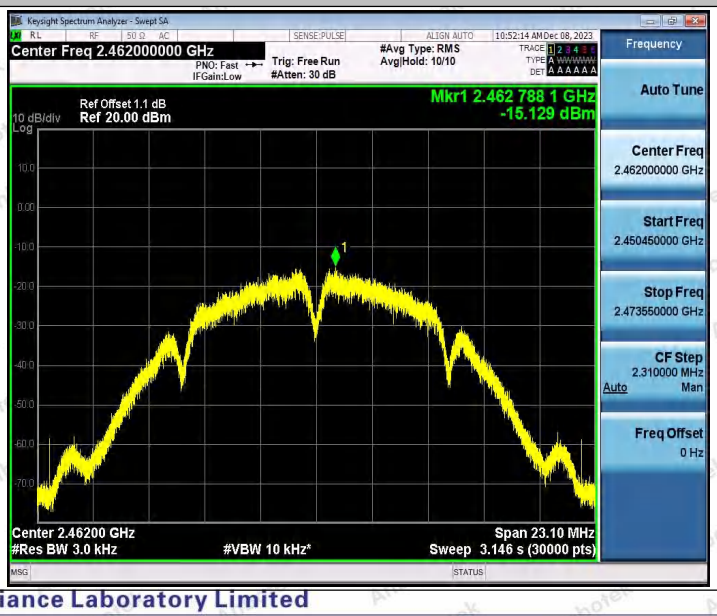
11B_Ant1_2412

11B_Ant2_2412

11B_Ant1_2437

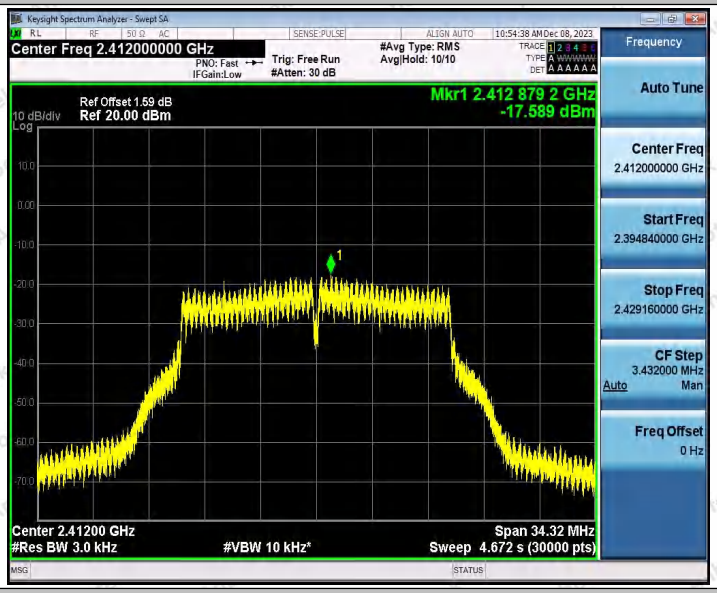
11B_Ant2_2437

11B_Ant1_2462

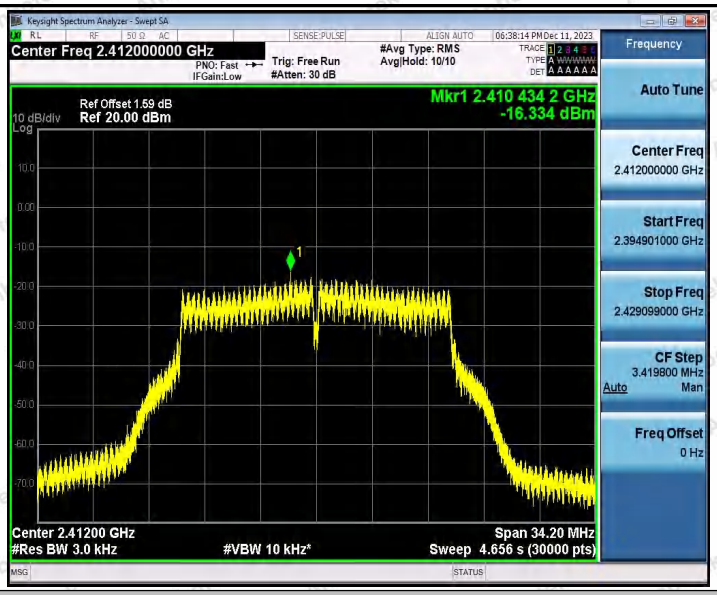


11B_Ant2_2462

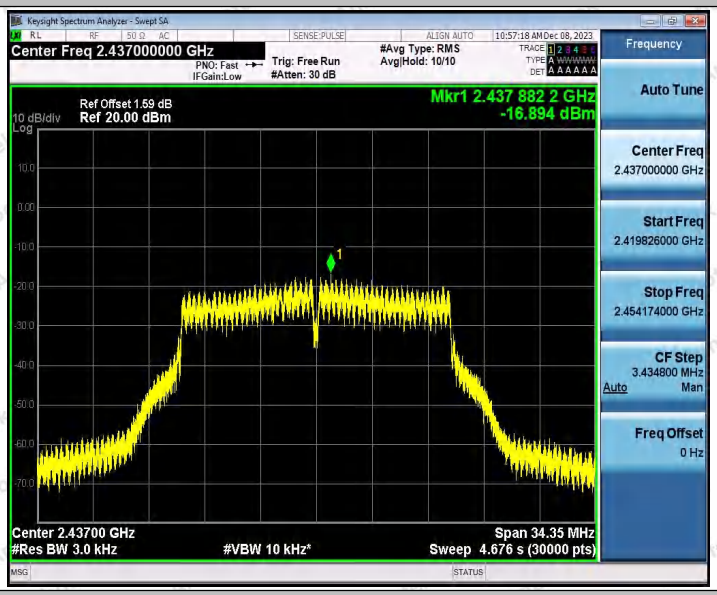
11G_Ant1_2412



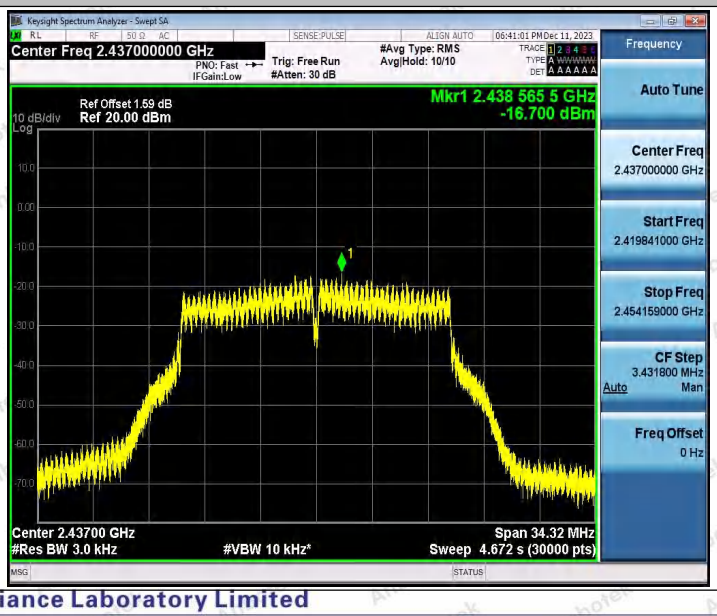
11G_Ant2_2412



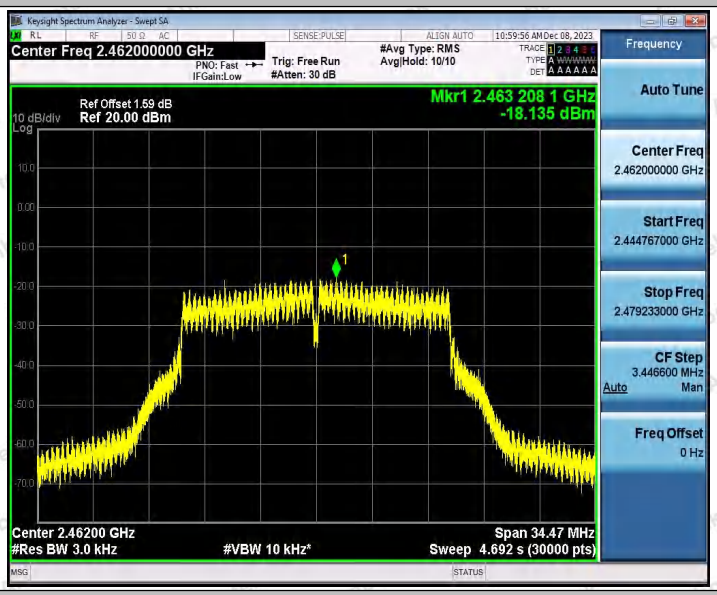
11G_Ant1_2437



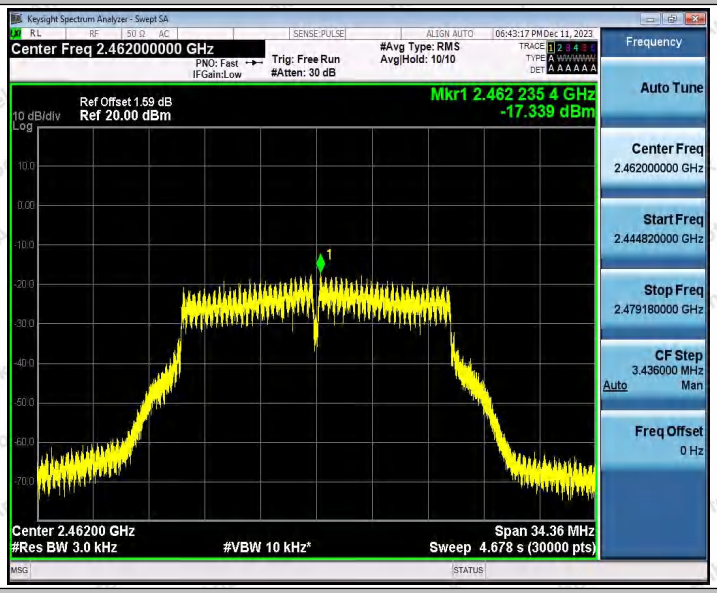
11G_Ant2_2437



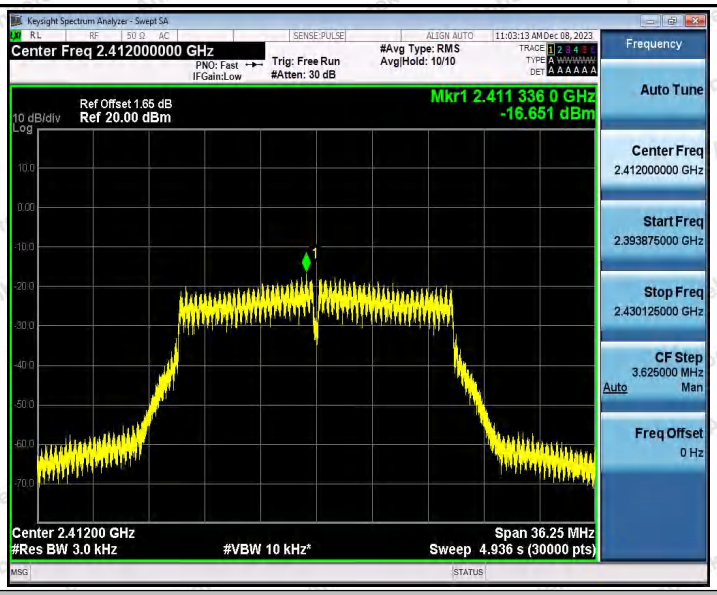
11G_Ant1_2462



11G_Ant2_2462



11N20SISO_Ant1_2412



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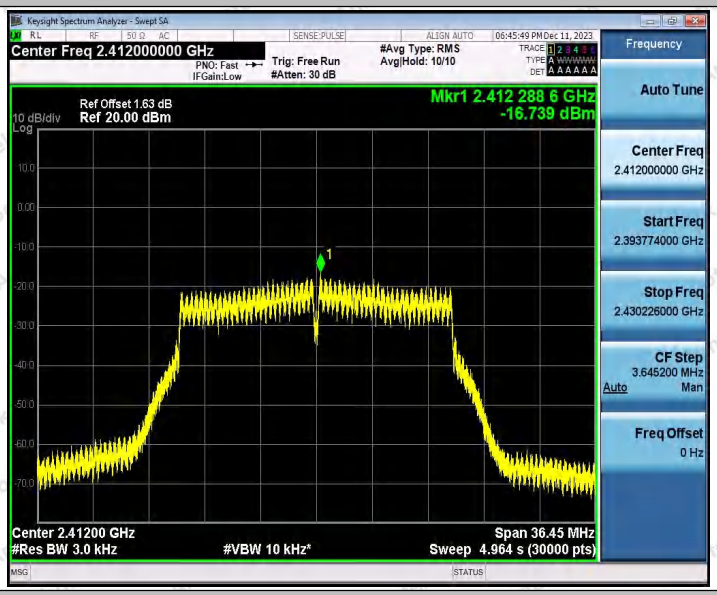

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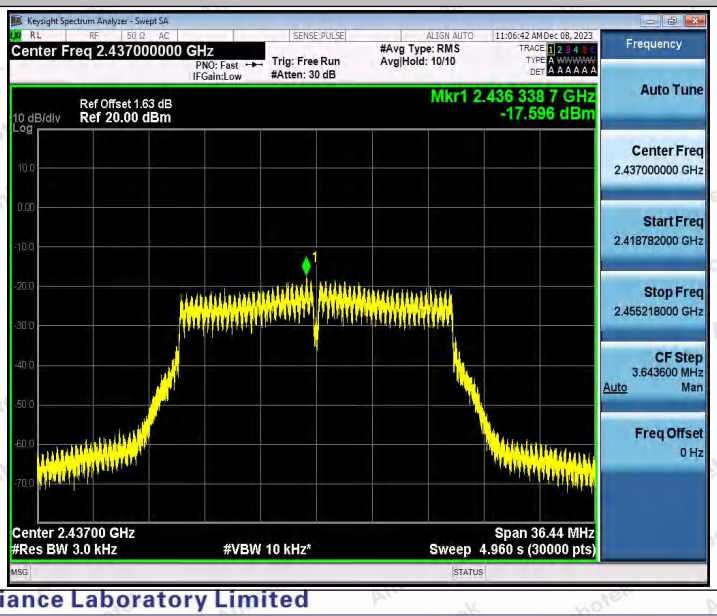

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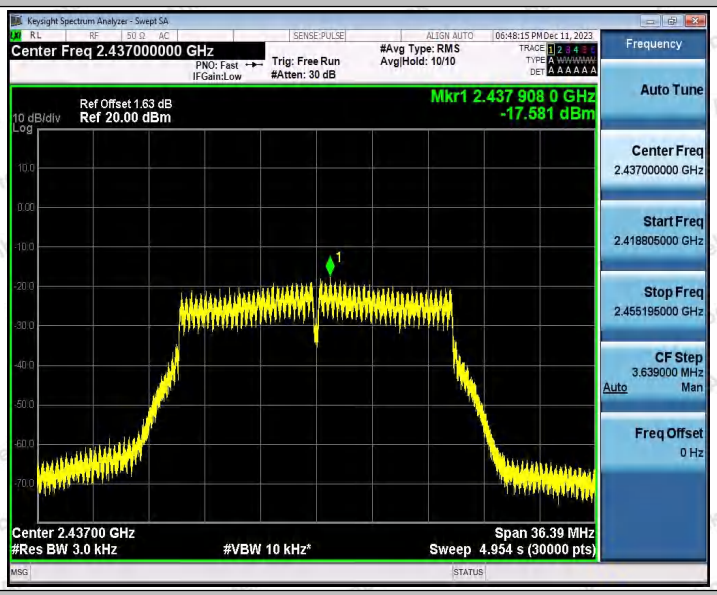

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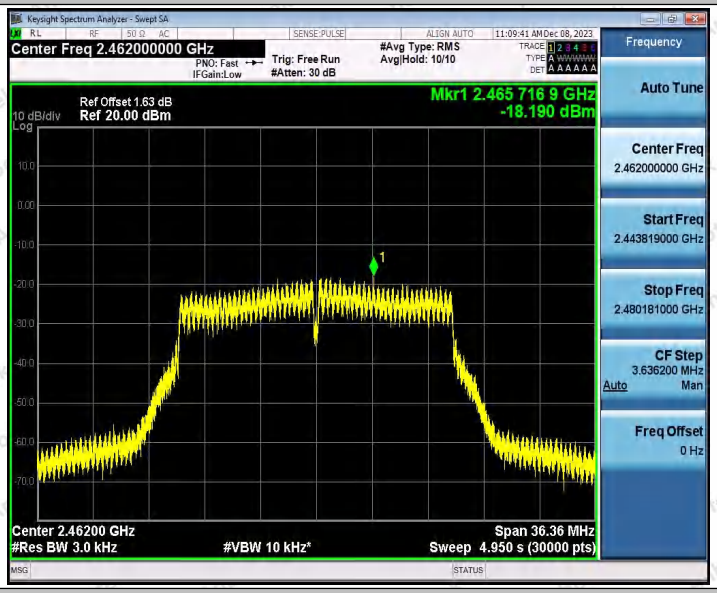
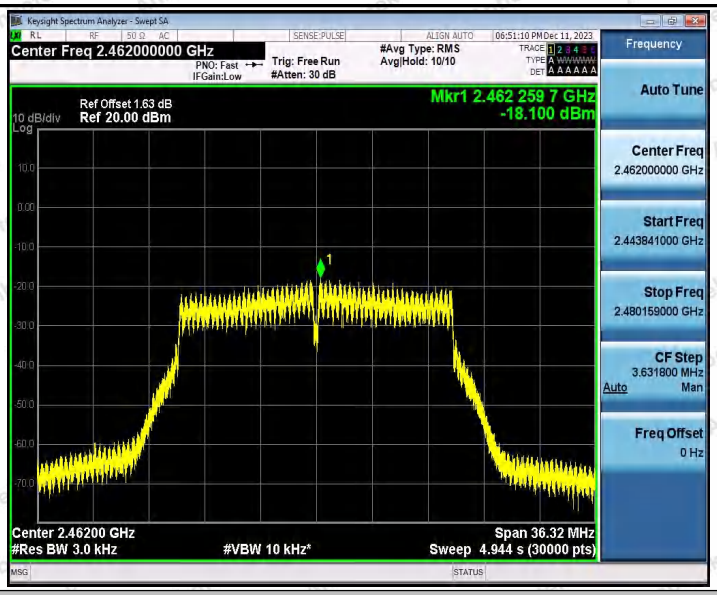
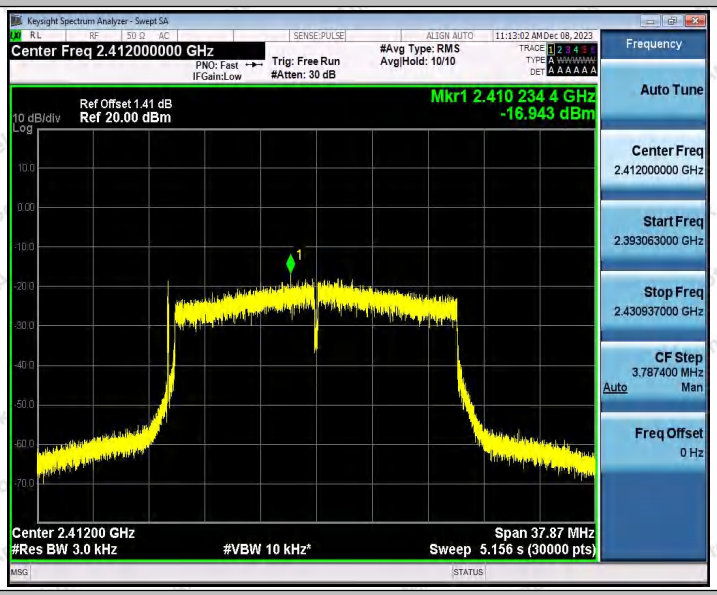


11N20SISO_Ant2_2462



11AX20SISO_Ant1_2412



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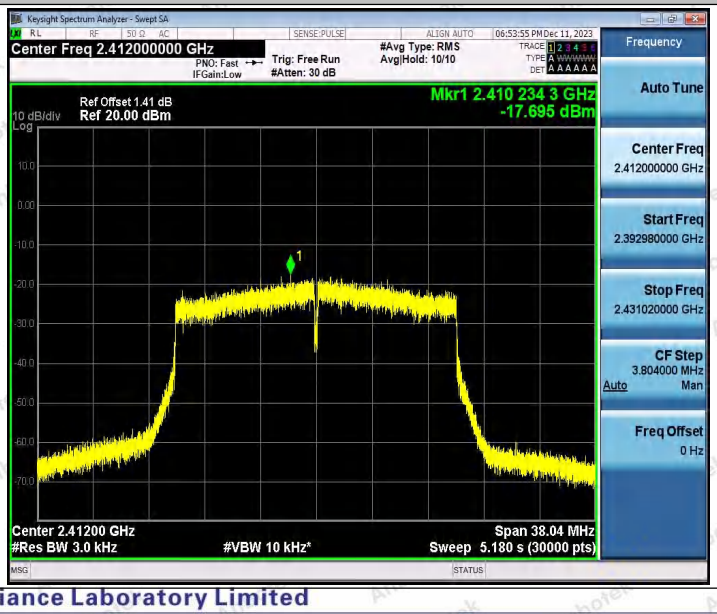
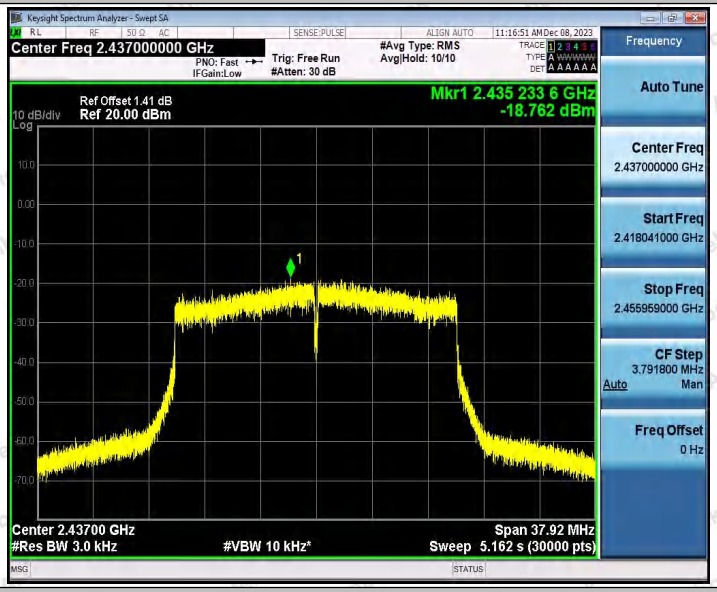
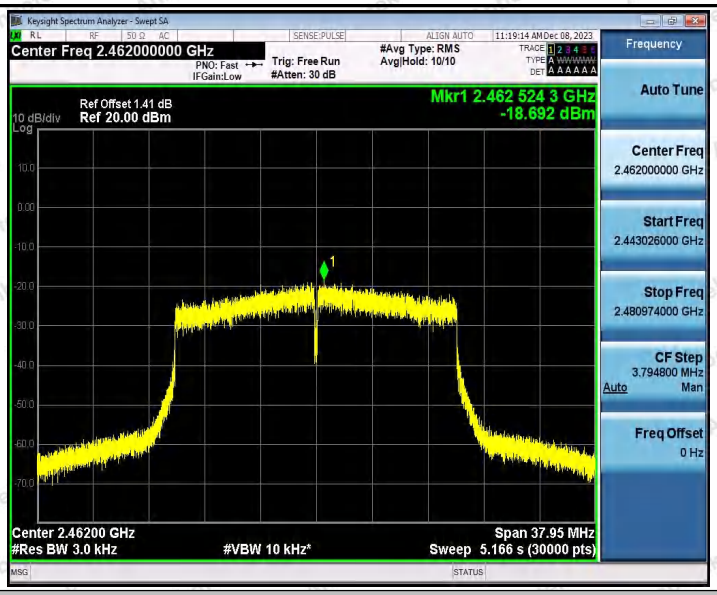


11AX20SISO_Ant1_2437

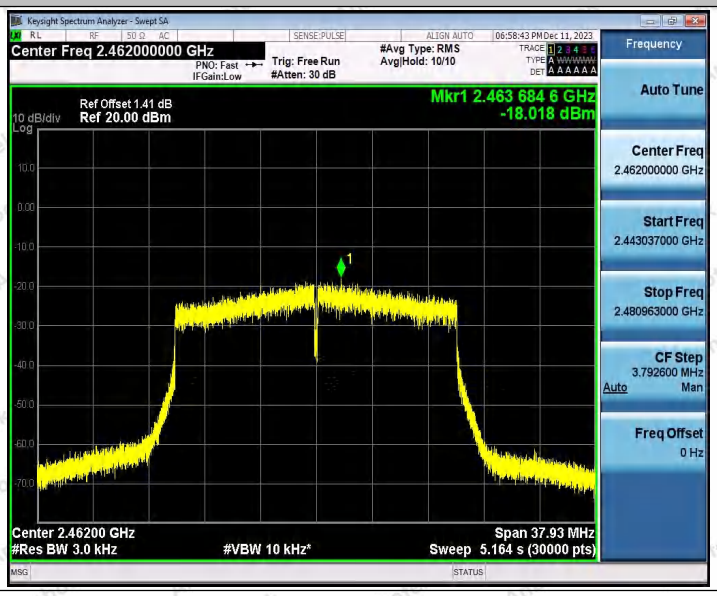


11AX20SISO_Ant2_2437

11AX20SISO_Ant1_2462



11AX20SISO_Ant2_2462



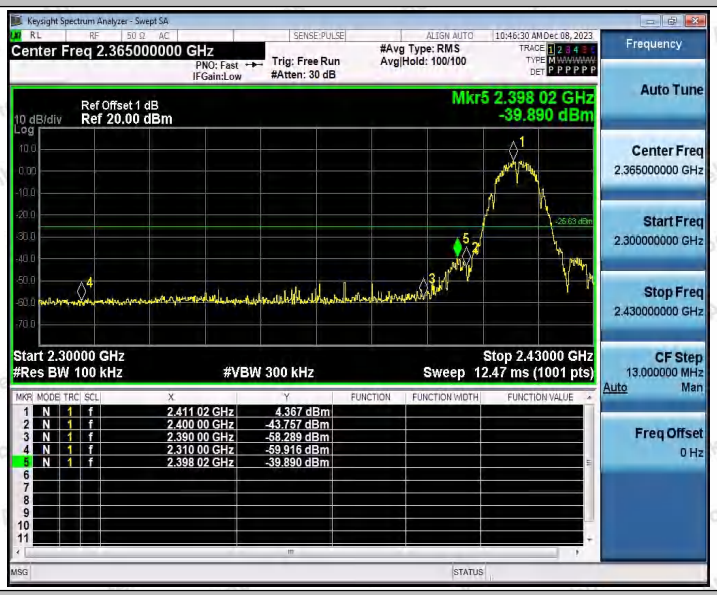
Appendix E: Band edge measurements

Test Result

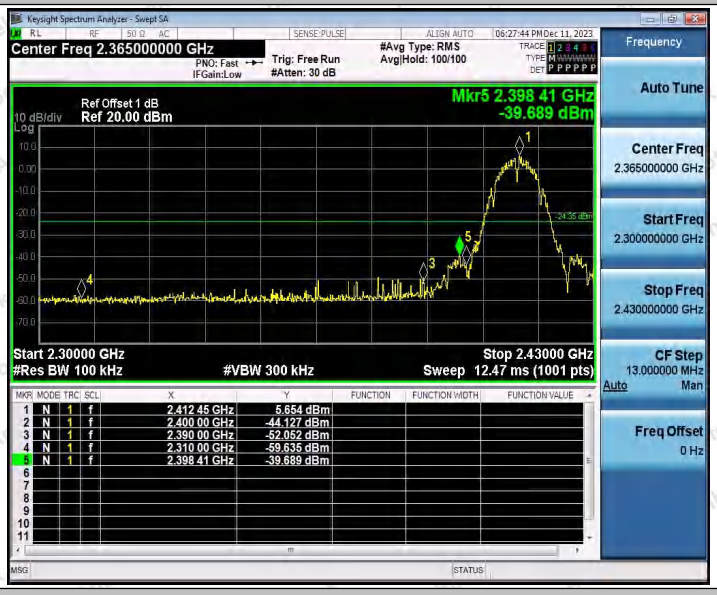
TestMode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.37	-39.89	≤-25.63	PASS
	Ant2	Low	2412	5.65	-39.69	≤-24.35	PASS
	Ant1	High	2462	5.67	-49.34	≤-24.33	PASS
	Ant2	High	2462	5.38	-48.80	≤-24.62	PASS
11G	Ant1	Low	2412	0.57	-36.50	≤-29.43	PASS
	Ant2	Low	2412	0.44	-38.63	≤-29.56	PASS
	Ant1	High	2462	0.26	-46.56	≤-29.74	PASS
	Ant2	High	2462	0.86	-46.31	≤-29.14	PASS
11N20SISO	Ant1	Low	2412	1.33	-34.29	≤-28.67	PASS
	Ant2	Low	2412	2.16	-32.29	≤-27.84	PASS
	Ant1	High	2462	1.51	-42.98	≤-28.49	PASS
	Ant2	High	2462	1.49	-44.11	≤-28.51	PASS
11AX20SISO	Ant1	Low	2412	1.59	-32.59	≤-28.42	PASS
	Ant2	Low	2412	2.02	-34.46	≤-27.98	PASS
	Ant1	High	2462	0.97	-43.90	≤-29.03	PASS
	Ant2	High	2462	1.30	-43.98	≤-28.7	PASS

Test Graphs

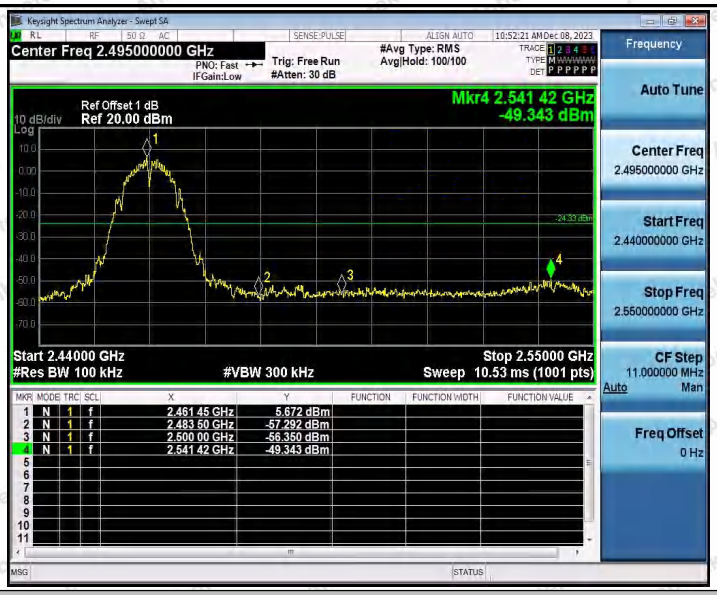
11B_Ant1_Low_2412



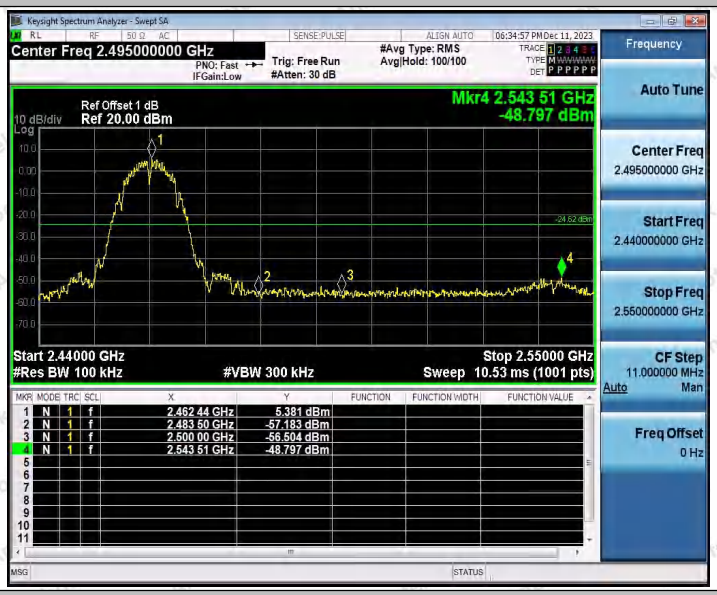
11B_Ant2_Low_2412



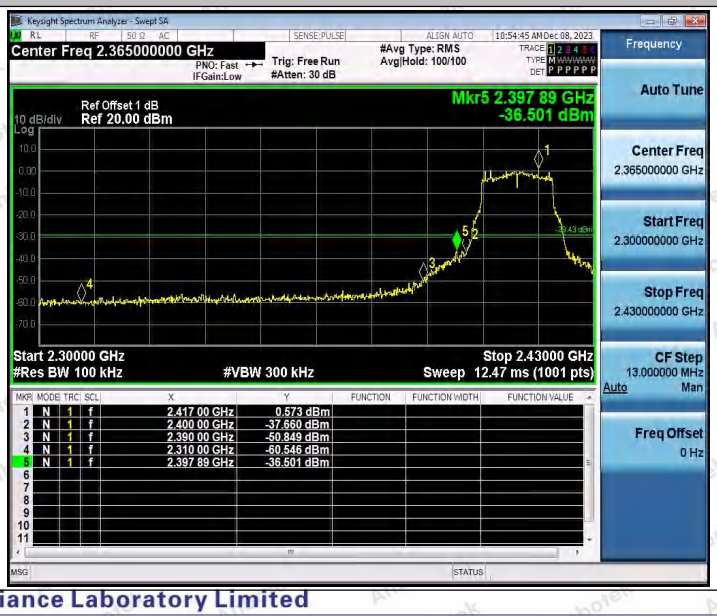
11B_Ant1_High_2462



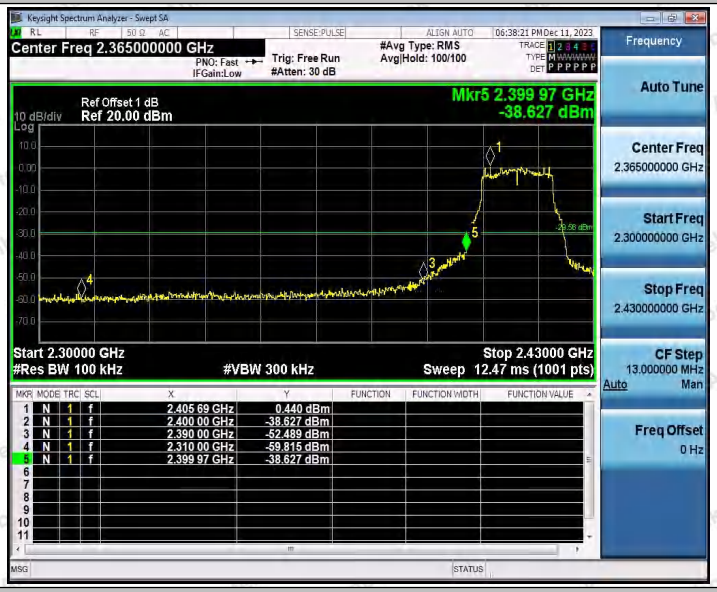
11B_Ant2_High_2462



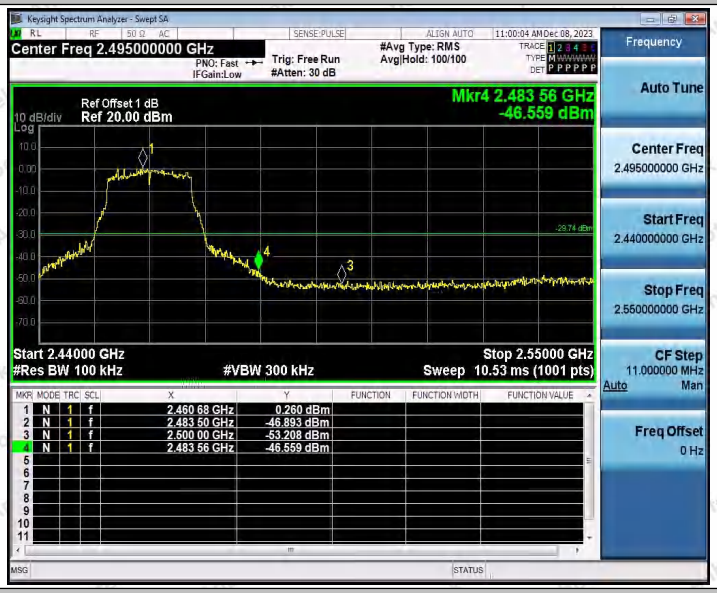
11G_Ant1_Low_2412



11G_Ant2_Low_2412



11G_Ant1_High_2462



11G_Ant2_High_2462