

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BHL2-S100

Company : SHAREUAV Ltd

EUT : Multi-functional Handheld High-Precision LiDAR
Scanner

Model Number : SHARE SLAM S100-32 PRO

Report No. : CTA25103100602

Reviewed By : Eric Wang

Appendix RF Test Data for 2.4GWIFI ANT1

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.960	2407.560	2416.520	0.5	PASS
		2437	8.720	2432.480	2441.200	0.5	PASS
		2462	8.840	2457.520	2466.360	0.5	PASS
11G	Ant1	2412	16.240	2403.920	2420.160	0.5	PASS
		2437	16.240	2428.920	2445.160	0.5	PASS
		2462	16.240	2453.920	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.400	2420.680	0.5	PASS
		2437	17.320	2428.360	2445.680	0.5	PASS
		2462	17.240	2453.400	2470.640	0.5	PASS
11N40SISO	Ant1	2422	33.760	2405.360	2439.120	0.5	PASS
		2437	33.760	2420.520	2454.280	0.5	PASS
		2452	34.000	2435.280	2469.280	0.5	PASS
11AX20SISO	Ant1	2412	17.240	2403.400	2420.640	0.5	PASS
		2437	17.320	2428.360	2445.680	0.5	PASS
		2462	17.160	2453.520	2470.680	0.5	PASS
11AX40SISO	Ant1	2422	33.680	2405.360	2439.040	0.5	PASS
		2437	33.920	2420.280	2454.200	0.5	PASS
		2452	33.920	2435.120	2469.040	0.5	PASS

Test Graphs

11B_Ant1_2412



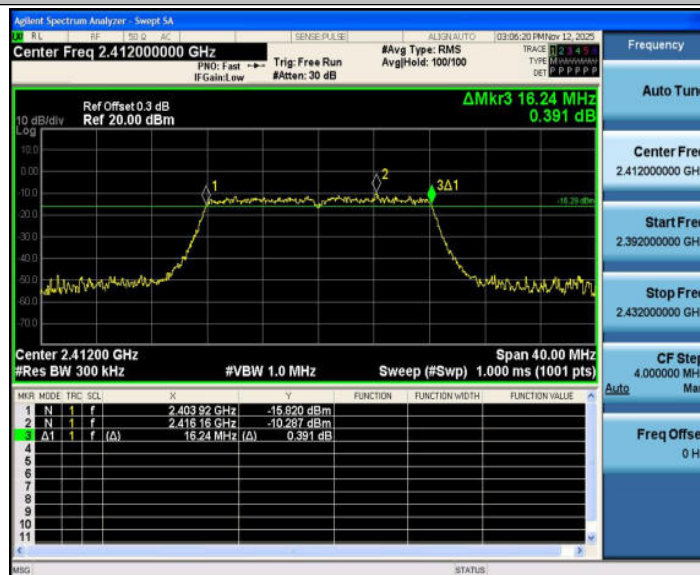
11B_Ant1_2437



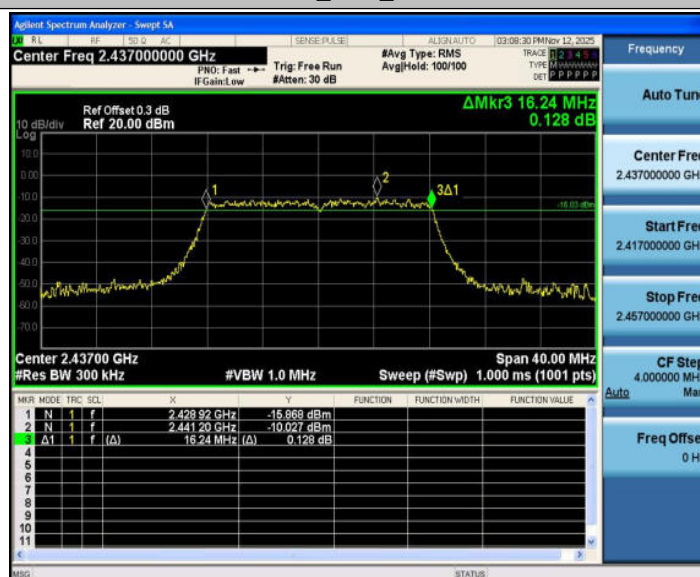
11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



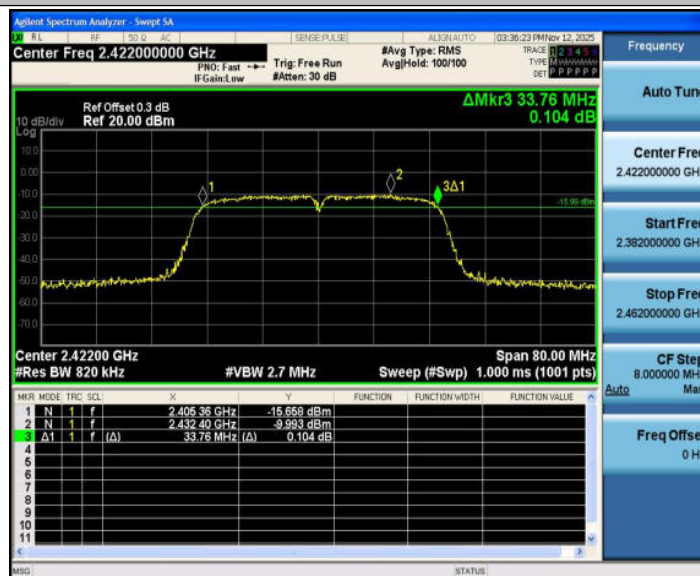
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



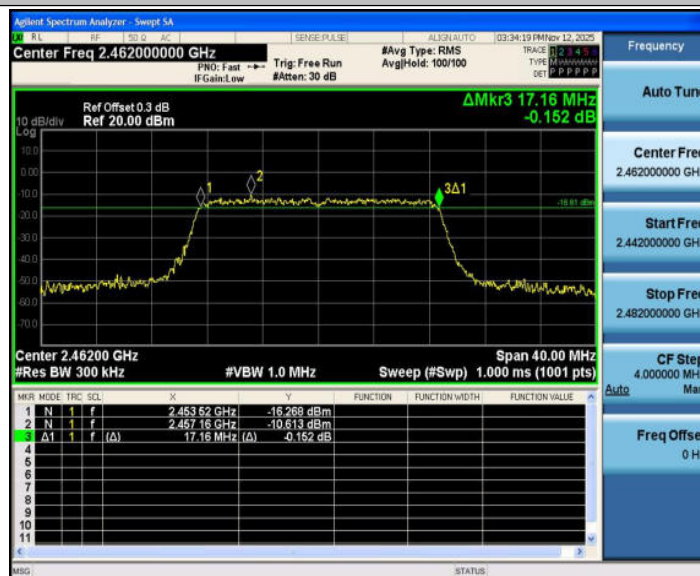
11AX20SISO_Ant1_2412



11AX20ISO_Ant1_2437



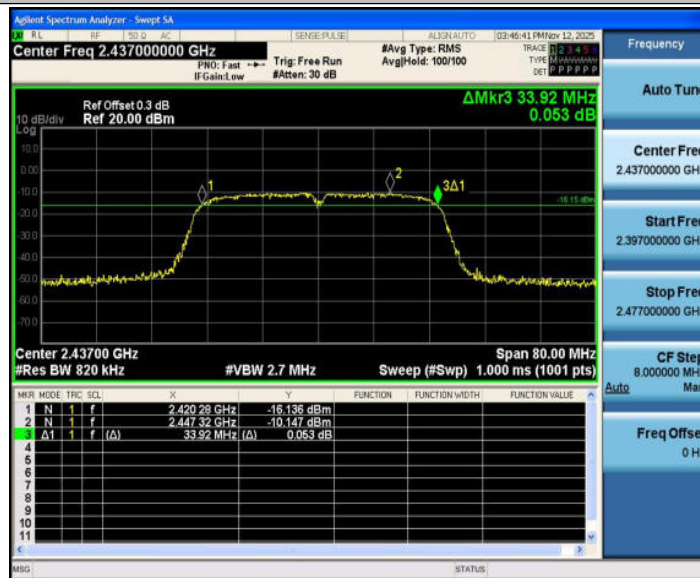
11AX20ISO_Ant1_2462



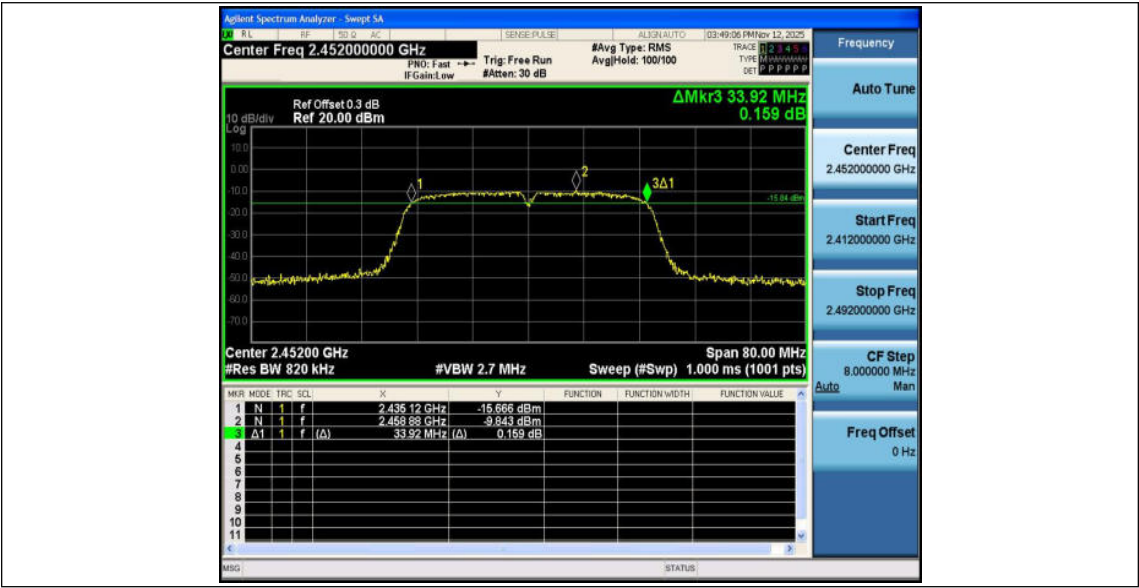
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_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	12.970	2405.5683	2418.5383	---	---
		2437	12.962	2430.5470	2443.5090	---	---
		2462	12.951	2455.5439	2468.4949	---	---
11G	Ant1	2412	16.581	2403.7397	2420.3207	---	---
		2437	16.563	2428.7454	2445.3084	---	---
		2462	16.597	2453.7284	2470.3254	---	---
11N20SISO	Ant1	2412	17.439	2403.3300	2420.7690	---	---
		2437	17.465	2428.3009	2445.7659	---	---
		2462	17.451	2453.3013	2470.7523	---	---
11N40SISO	Ant1	2422	34.810	2404.7507	2439.5607	---	---
		2437	34.836	2419.6910	2454.5270	---	---
		2452	34.795	2434.7150	2469.5100	---	---
11AX20SISO	Ant1	2412	17.432	2403.3227	2420.7547	---	---
		2437	17.456	2428.3043	2445.7603	---	---
		2462	17.436	2453.3169	2470.7529	---	---
11AX40SISO	Ant1	2422	34.880	2404.7110	2439.5910	---	---
		2437	34.837	2419.6767	2454.5137	---	---
		2452	34.857	2434.6351	2469.4921	---	---

Test Graphs

11B_Ant1_2412



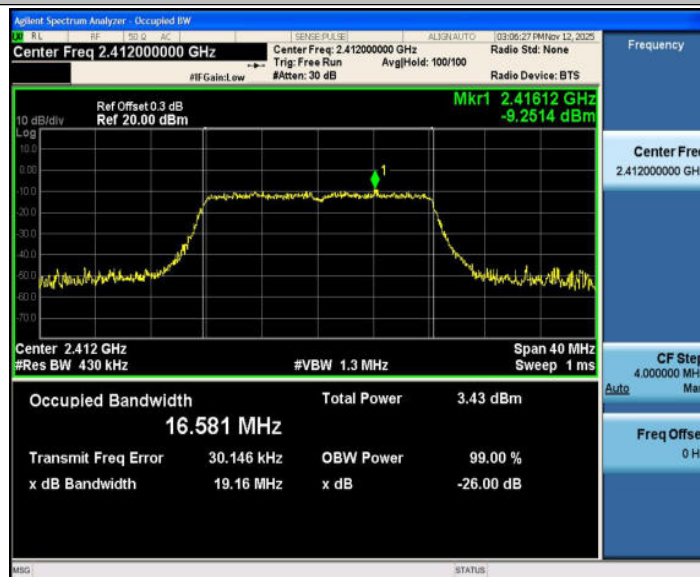
11B_Ant1_2437



11B_Ant1_2462



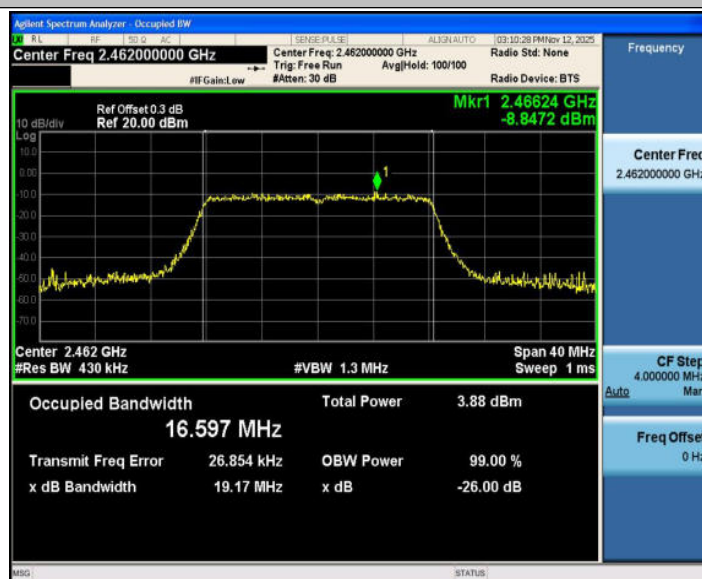
11G_Ant1_2412



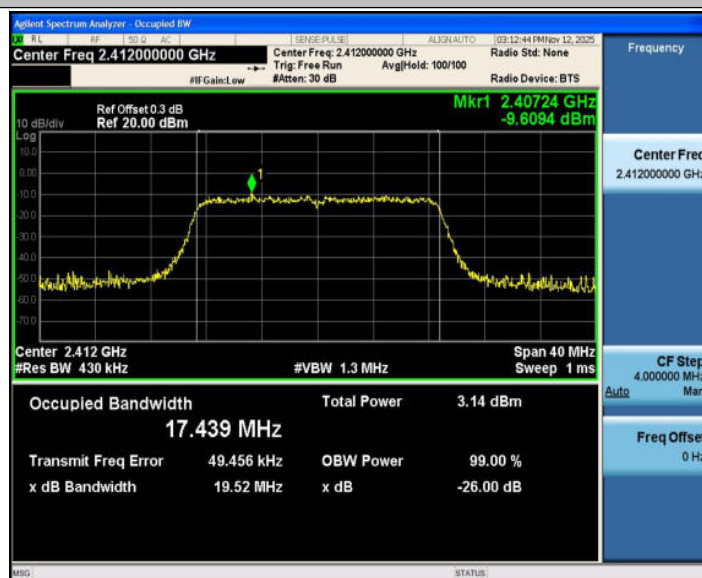
11G_Ant1_2437



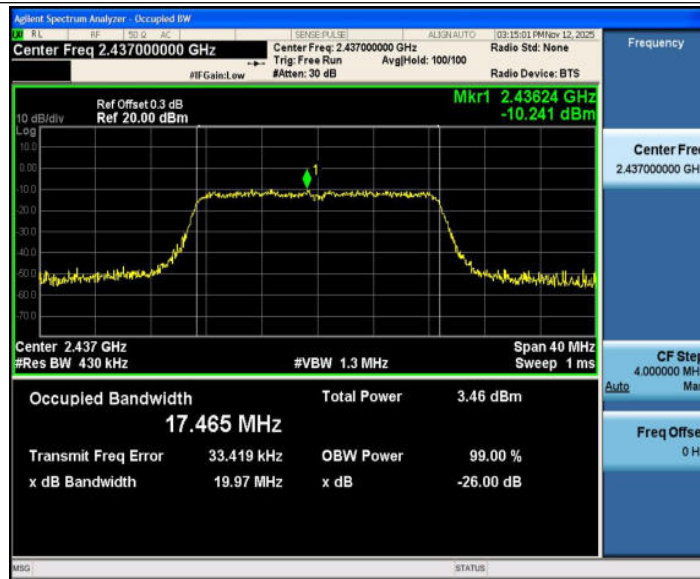
11G_Ant1_2462



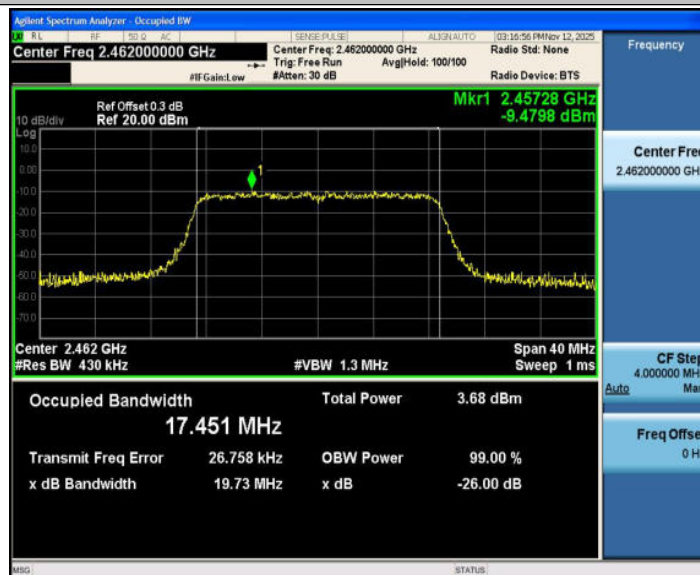
11N20SISO_Ant1_2412



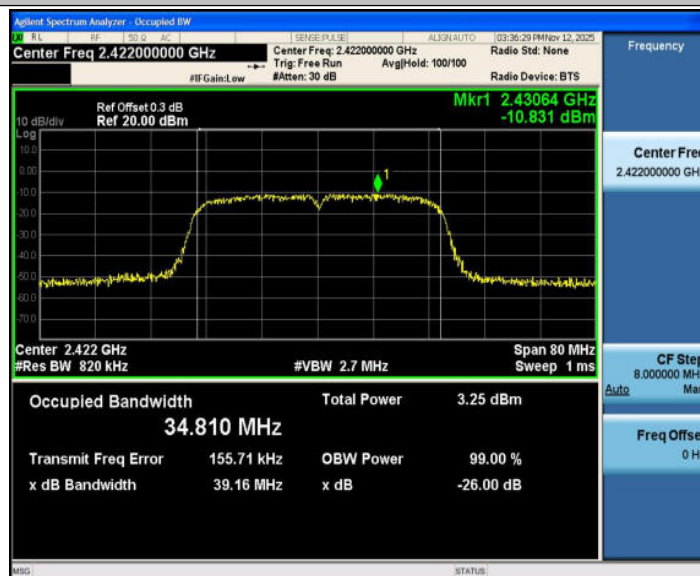
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



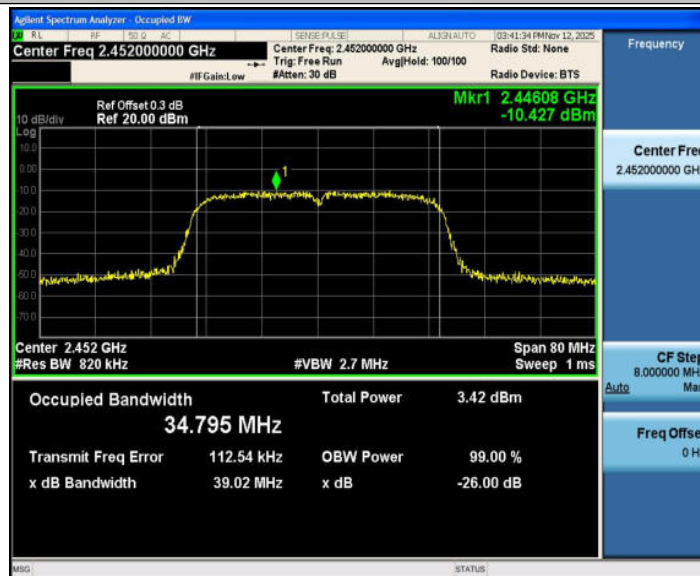
11N40SISO_Ant1_2422



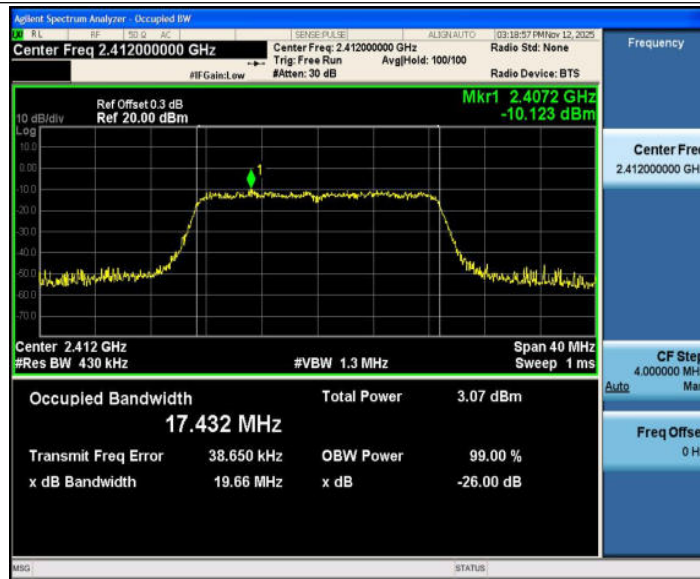
11N40SISO_Ant1_2437



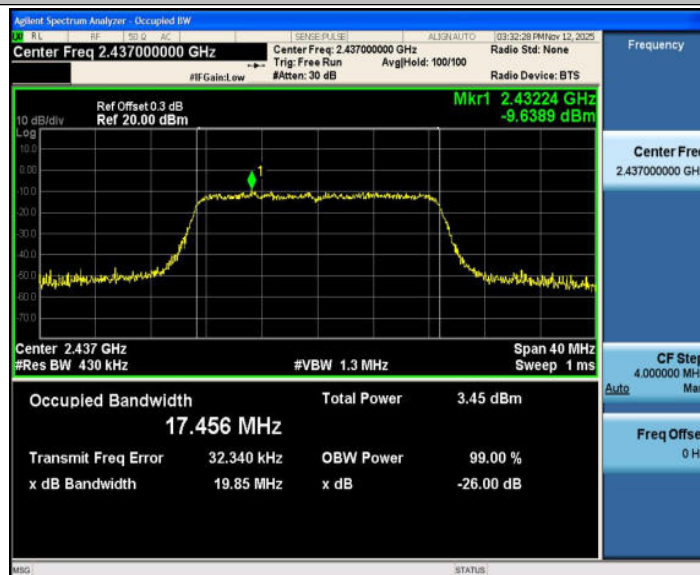
11N40SISO_Ant1_2452



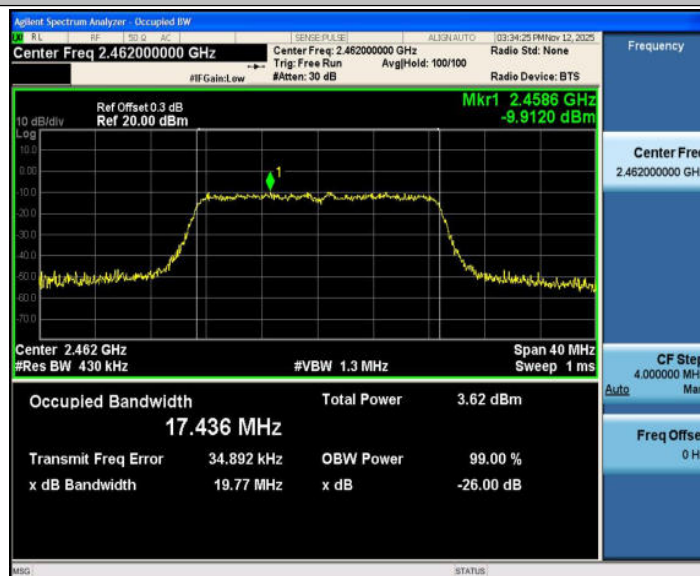
11AX20SISO_Ant1_2412



11AX20ISO_Ant1_2437



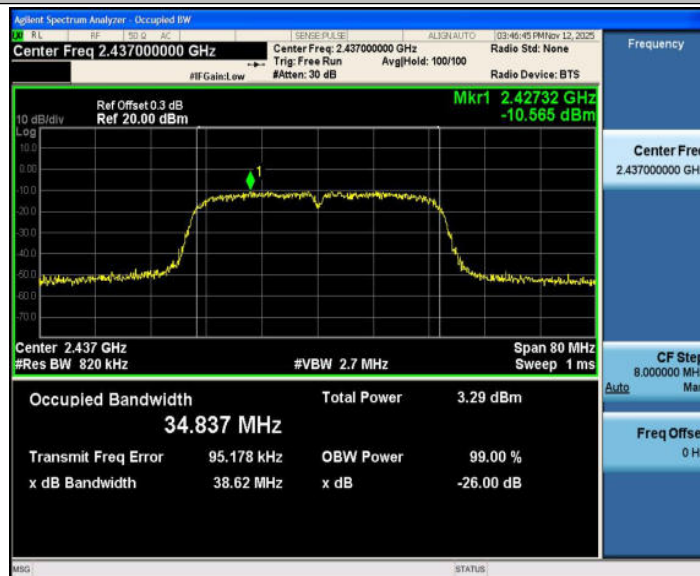
11AX20ISO_Ant1_2462



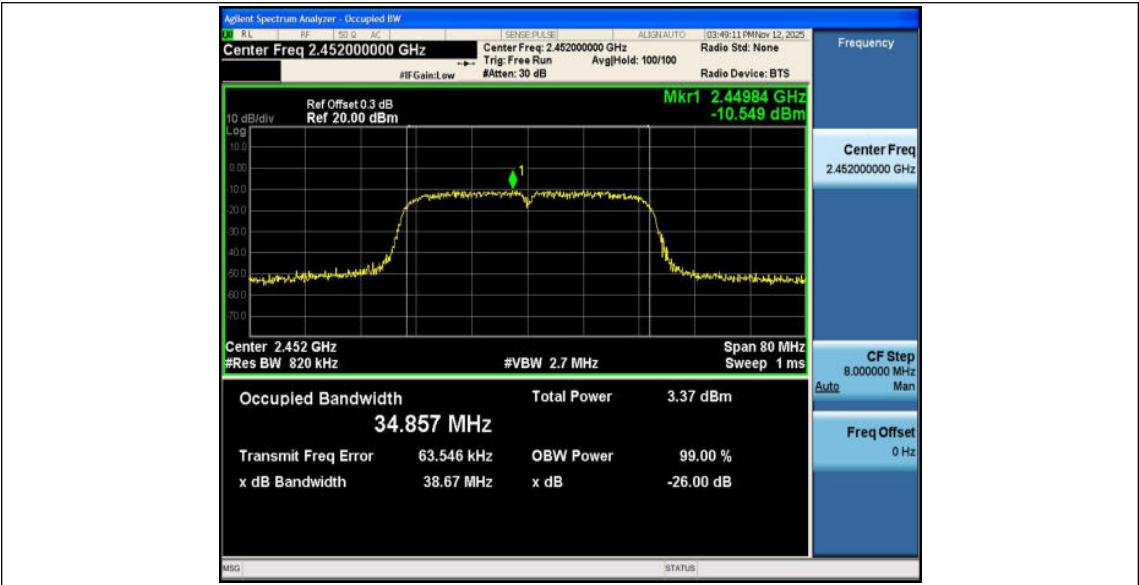
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	6.71	≤30.00	PASS
		2437	6.53	≤30.00	PASS
		2462	6.44	≤30.00	PASS
11G	Ant1	2412	4.25	≤30.00	PASS
		2437	4.51	≤30.00	PASS
		2462	4.67	≤30.00	PASS
11N20SISO	Ant1	2412	4.30	≤30.00	PASS
		2437	4.72	≤30.00	PASS
		2462	4.78	≤30.00	PASS
11N40SISO	Ant1	2422	3.49	≤30.00	PASS
		2437	3.70	≤30.00	PASS
		2452	3.72	≤30.00	PASS
11AX20SISO	Ant1	2412	4.28	≤30.00	PASS
		2437	4.64	≤30.00	PASS
		2462	4.81	≤30.00	PASS
11AX40SISO	Ant1	2422	3.48	≤30.00	PASS
		2437	3.55	≤30.00	PASS
		2452	3.74	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-22.69	≤8.00	PASS
		2437	-22.26	≤8.00	PASS
		2462	-22.45	≤8.00	PASS
11G	Ant1	2412	-30.25	≤8.00	PASS
		2437	-29.84	≤8.00	PASS
		2462	-29.82	≤8.00	PASS
11N20SISO	Ant1	2412	-30.38	≤8.00	PASS
		2437	-29.76	≤8.00	PASS
		2462	-29.83	≤8.00	PASS
11N40SISO	Ant1	2422	-31.95	≤8.00	PASS
		2437	-31.61	≤8.00	PASS
		2452	-30.99	≤8.00	PASS
11AX20SISO	Ant1	2412	-30.25	≤8.00	PASS
		2437	-29.95	≤8.00	PASS
		2462	-30.13	≤8.00	PASS
11AX40SISO	Ant1	2422	-31.68	≤8.00	PASS
		2437	-31.86	≤8.00	PASS
		2452	-31.23	≤8.00	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



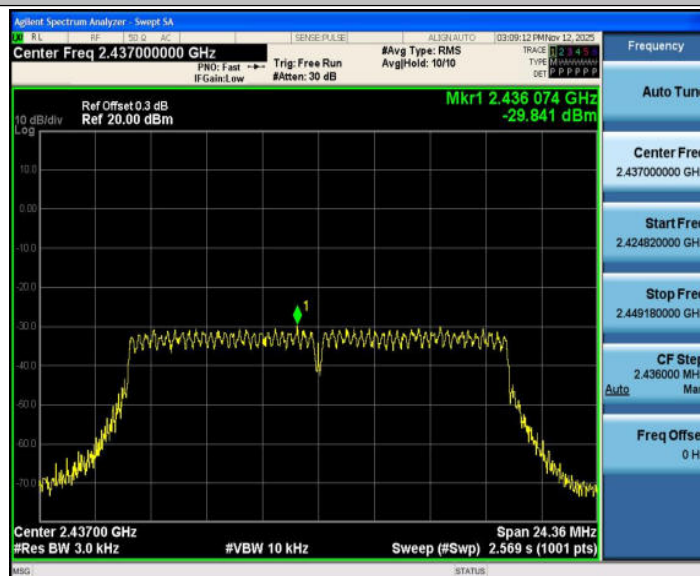
11B_Ant1_2462



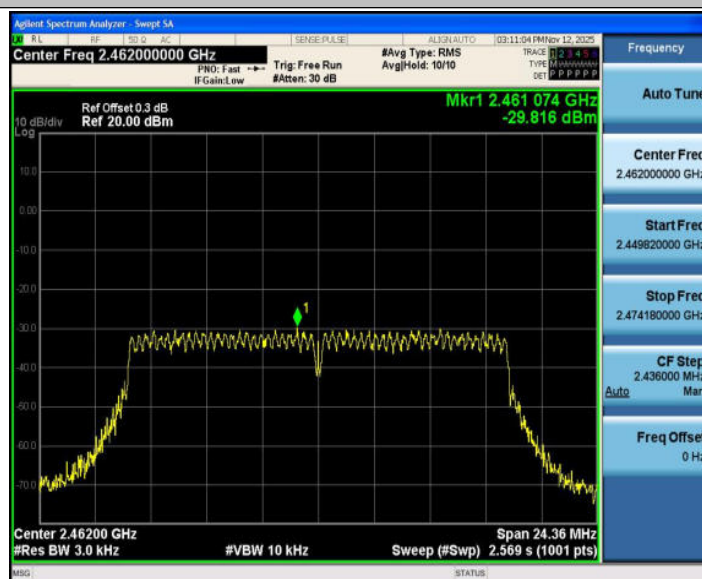
11G_Ant1_2412



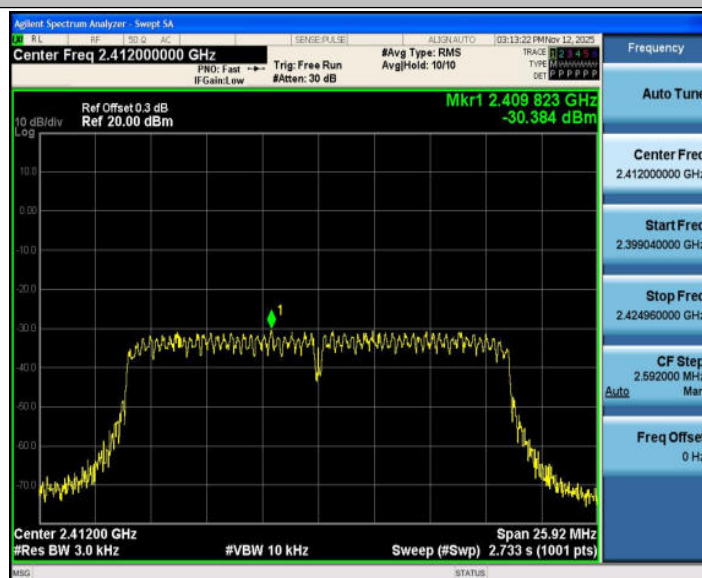
11G_Ant1_2437



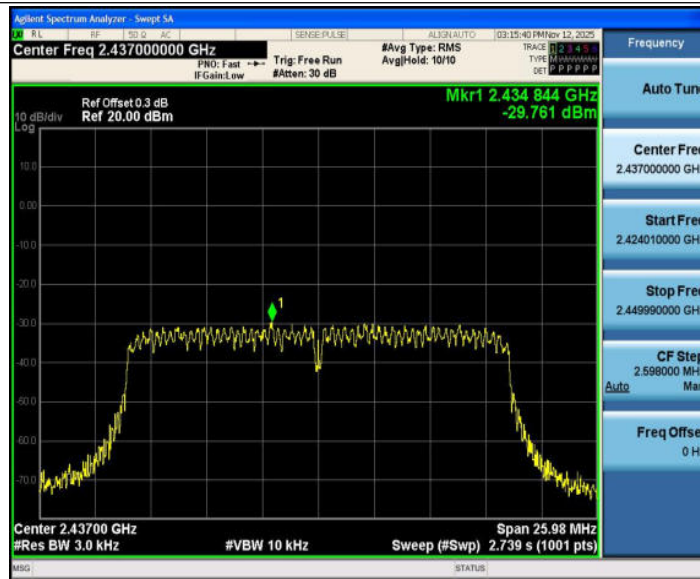
11G_Ant1_2462



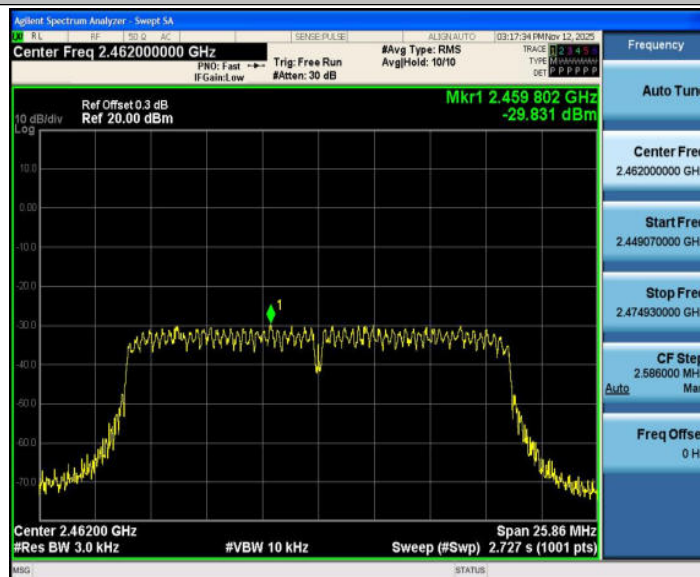
11N20SISO_Ant1_2412



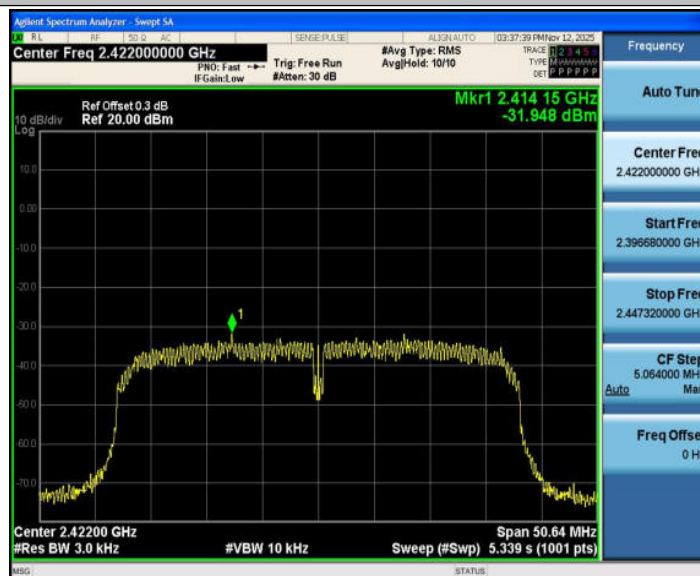
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



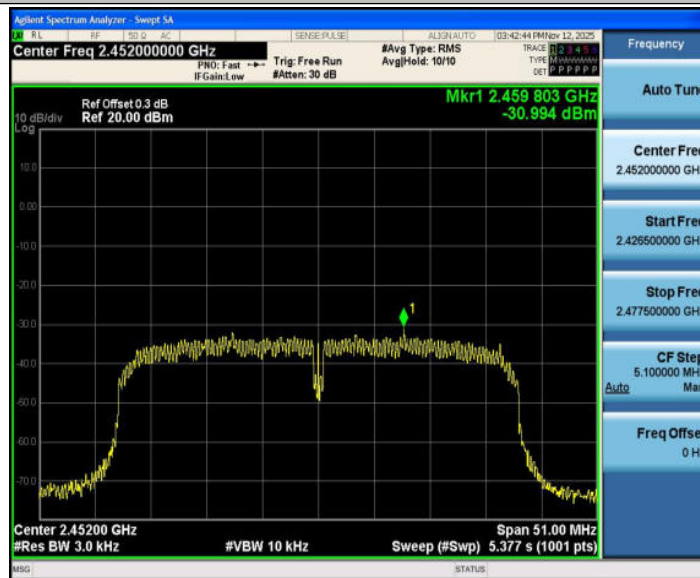
11N40SISO_Ant1_2422



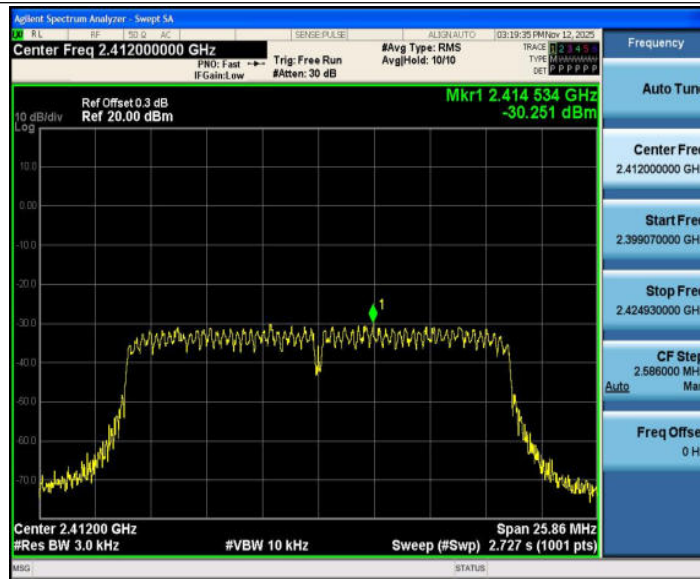
11N40SISO_Ant1_2437



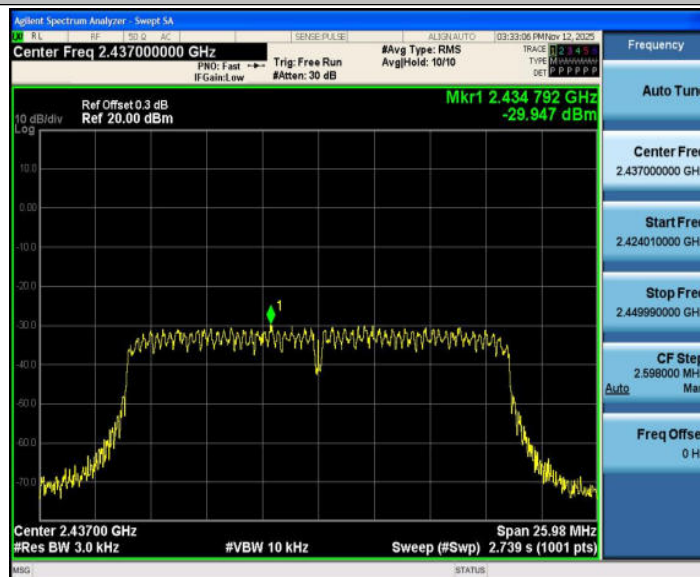
11N40SISO_Ant1_2452



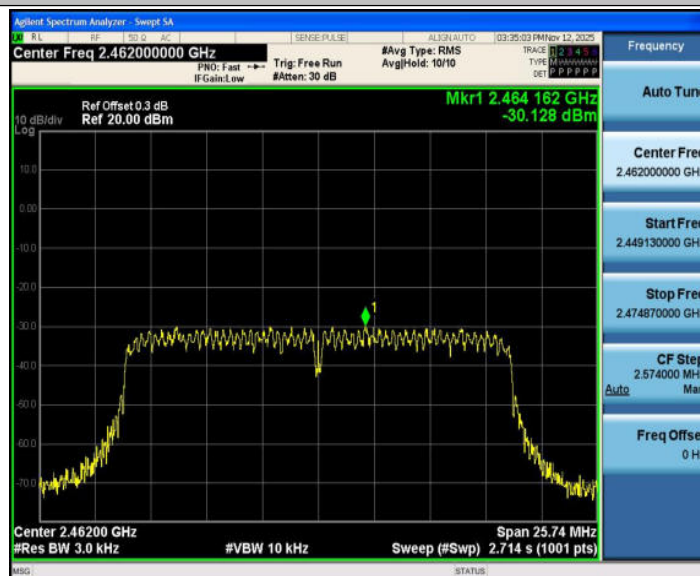
11AX20SISO_Ant1_2412



11AX20ISO_Ant1_2437



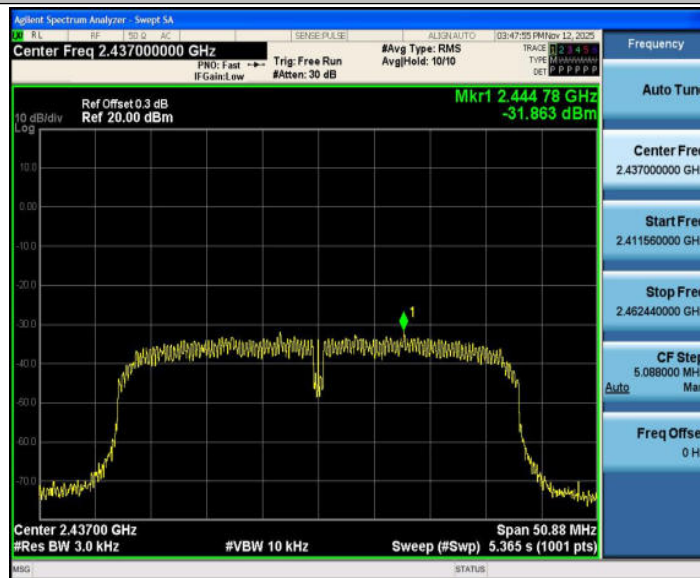
11AX20ISO_Ant1_2462



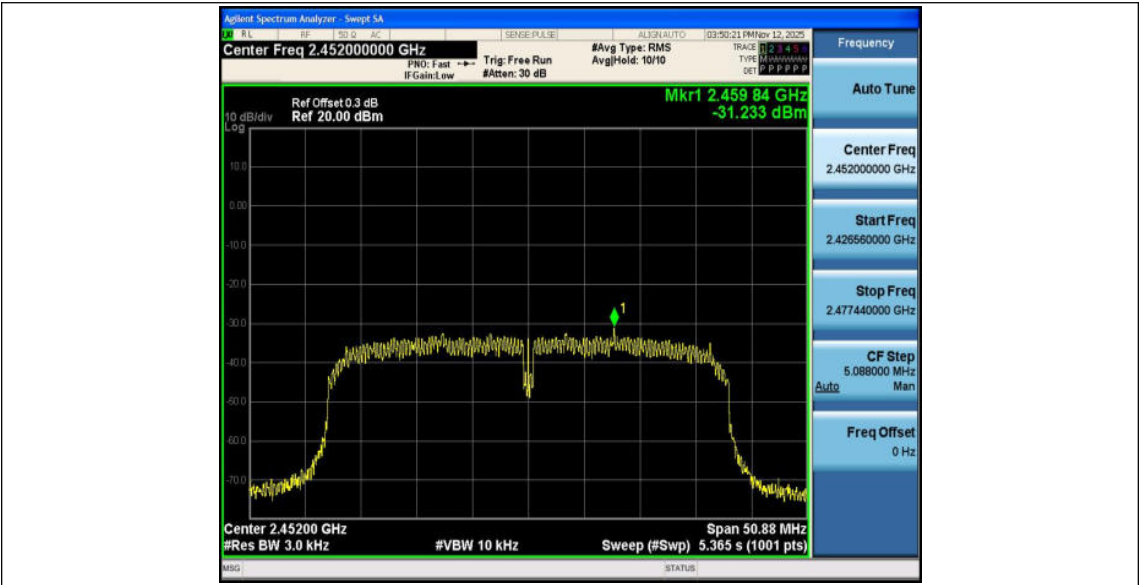
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



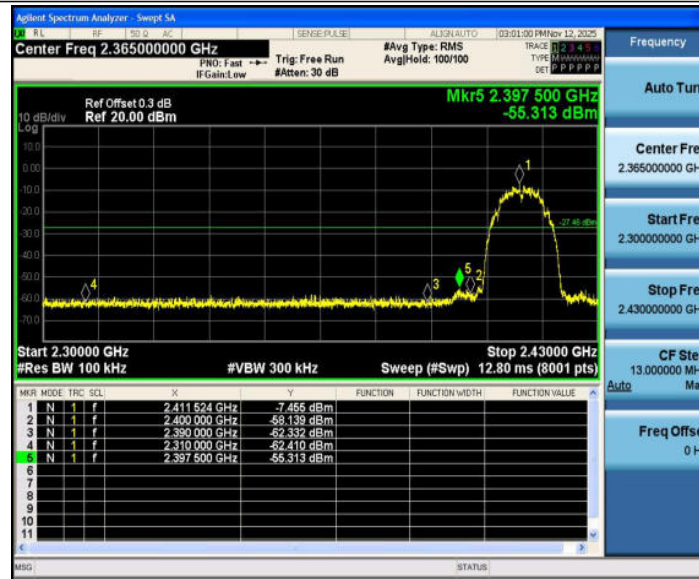
Appendix E: Band edge measurements

Test Result

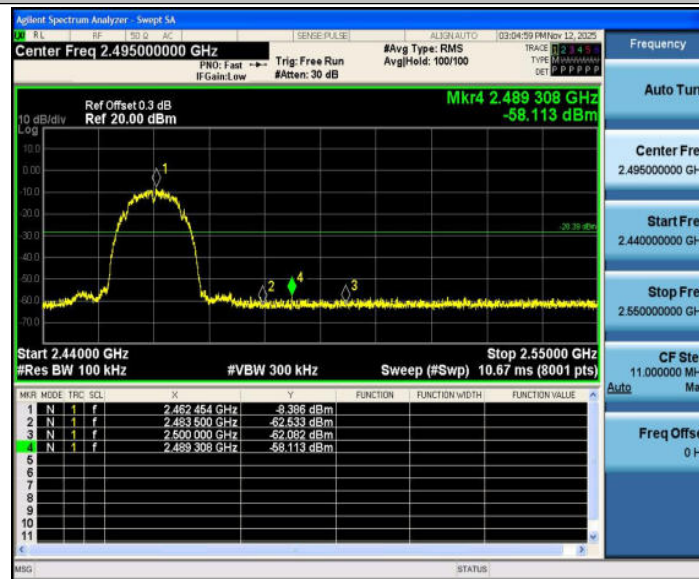
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-7.46	-55.31	≤-27.46	PASS
		High	2462	-8.39	-58.11	≤-28.39	PASS
11G	Ant1	Low	2412	-16.25	-53.17	≤-36.25	PASS
		High	2462	-15.74	-56.5	≤-35.74	PASS
11N20SISO	Ant1	Low	2412	-16.21	-54.45	≤-36.21	PASS
		High	2462	-15.62	-56.88	≤-35.62	PASS
11N40SISO	Ant1	Low	2422	-19.56	-56.02	≤-39.56	PASS
		High	2452	-19.64	-57.86	≤-39.64	PASS
11AX20SISO	Ant1	Low	2412	-16.56	-53.69	≤-36.56	PASS
		High	2462	-15.93	-58.15	≤-35.93	PASS
11AX40SISO	Ant1	Low	2422	-19.69	-54.96	≤-39.69	PASS
		High	2452	-19.59	-57.87	≤-39.59	PASS

Test Graphs

11B_Ant1_Low_2412



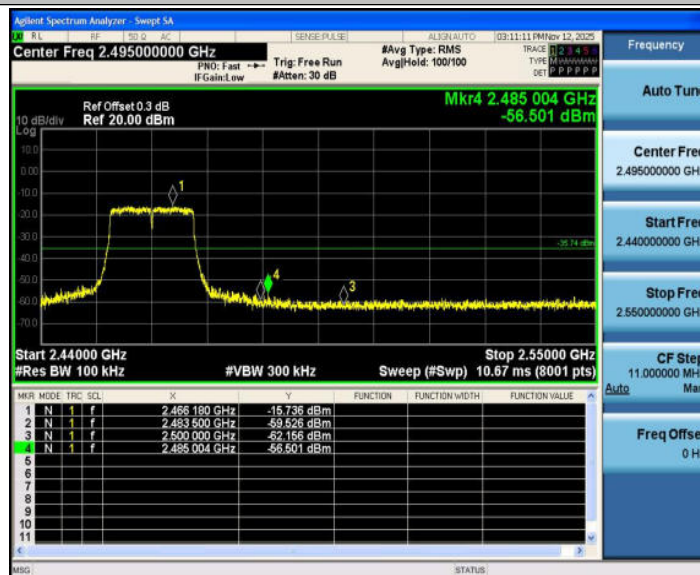
11B_Ant1_High_2462



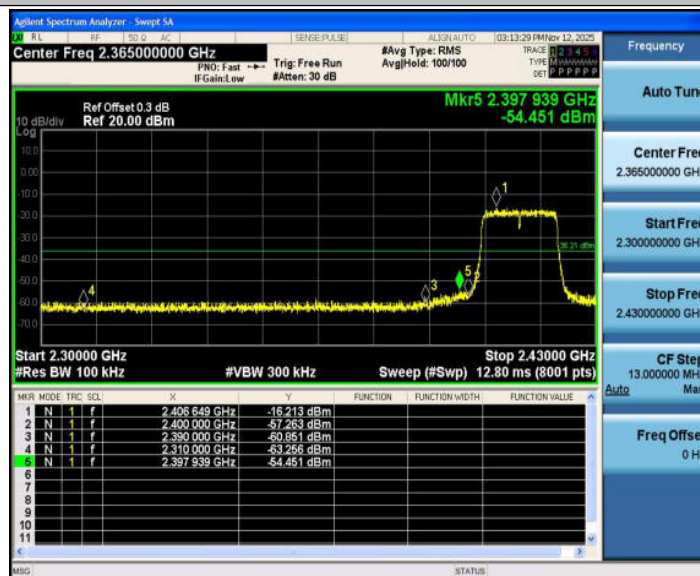
11G_Ant1_Low_2412



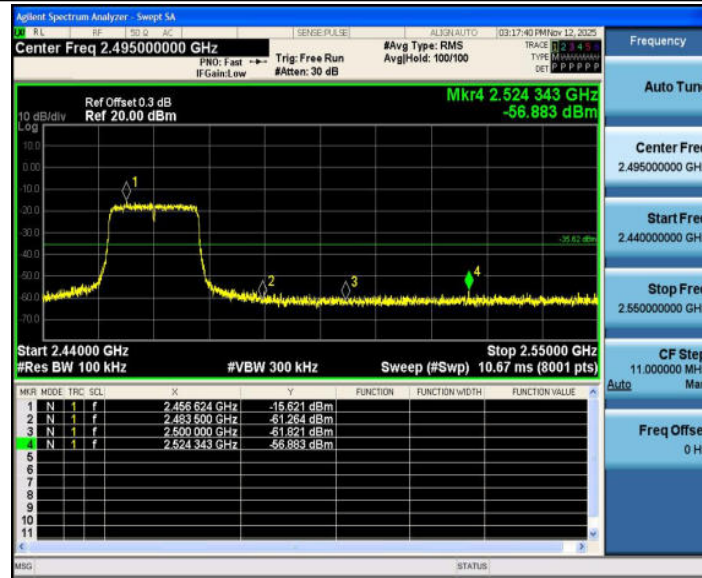
11G_Ant1_High_2462



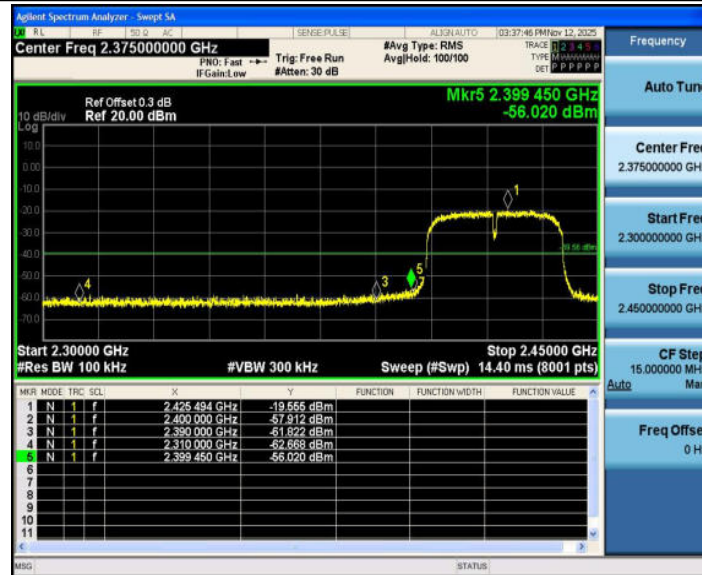
11N20SISO_Ant1_Low_2412



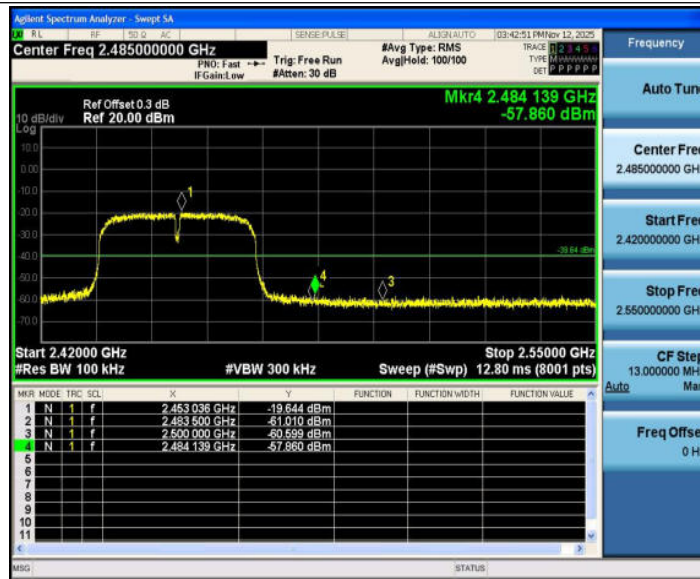
11N20SISO_Ant1_High_2462



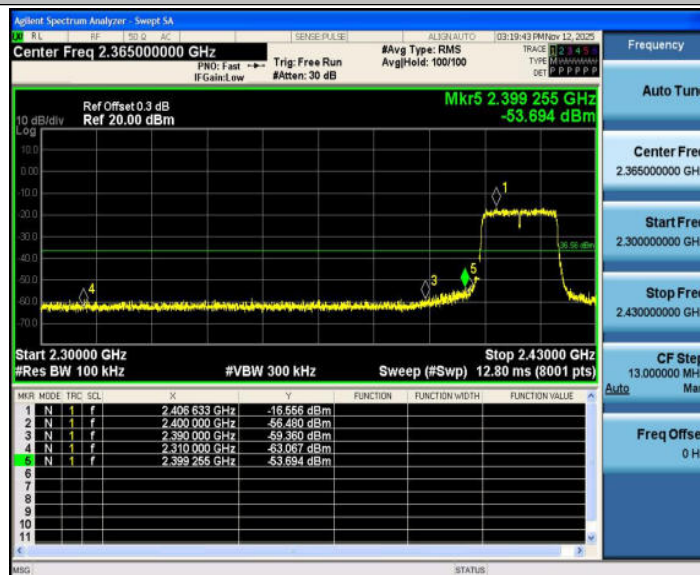
11N40SISO_Ant1_Low_2422



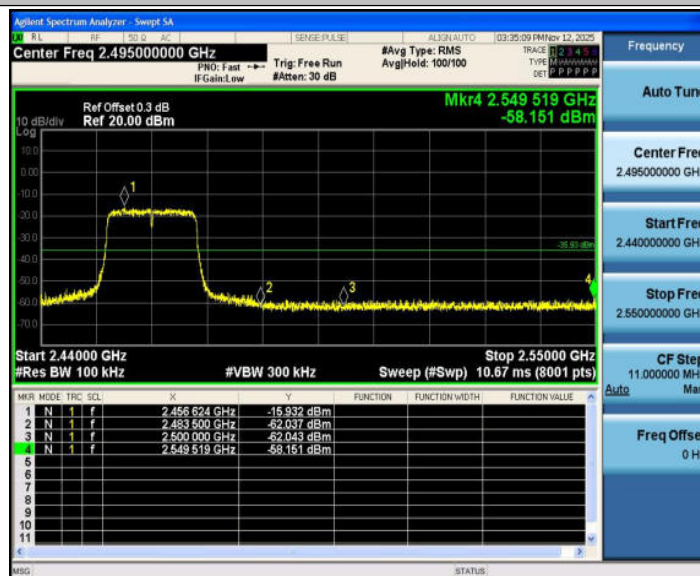
11N40SISO_Ant1_High_2452



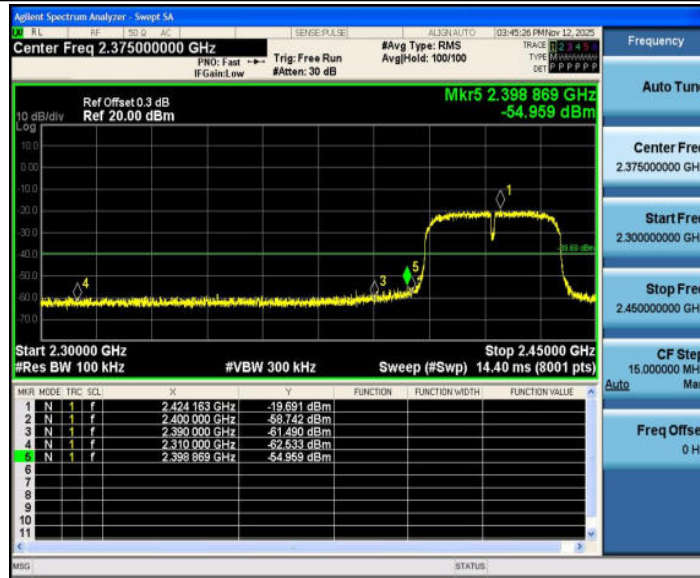
11AX20SISO_Ant1_Low_2412



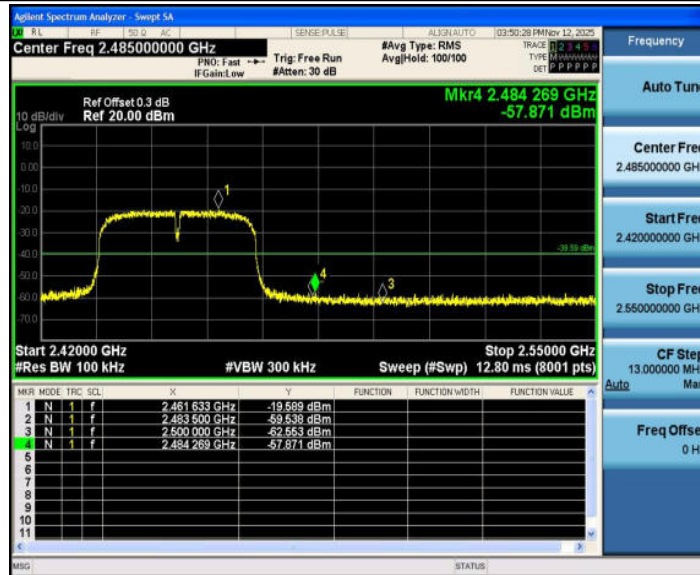
11AX20SISO_Ant1_High_2462



11AX40SISO_Ant1_Low_2422



11AX40SISO_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	-8.67	-8.67	---	PASS
			30~1000	-8.67	-60.57	≤-28.67	PASS
			1000~26500	-8.67	-45.13	≤-28.67	PASS
		2437	Reference	-8.38	-8.38	---	PASS
			30~1000	-8.38	-60.97	≤-28.38	PASS
			1000~26500	-8.38	-45.7	≤-28.38	PASS
		2462	Reference	-7.70	-7.70	---	PASS
			30~1000	-7.70	-60.5	≤-27.7	PASS
			1000~26500	-7.70	-46.14	≤-27.7	PASS
11G	Ant1	2412	Reference	-16.60	-16.60	---	PASS
			30~1000	-16.60	-64.25	≤-36.6	PASS
			1000~26500	-16.60	-45.2	≤-36.6	PASS
		2437	Reference	-16.54	-16.54	---	PASS
			30~1000	-16.54	-64.37	≤-36.54	PASS
			1000~26500	-16.54	-45.91	≤-36.54	PASS
		2462	Reference	-16.42	-16.42	---	PASS
			30~1000	-16.42	-64.68	≤-36.42	PASS
			1000~26500	-16.42	-46.39	≤-36.42	PASS
11N20SISO	Ant1	2412	Reference	-17.27	-17.27	---	PASS
			30~1000	-17.27	-65.36	≤-37.27	PASS
			1000~26500	-17.27	-45.4	≤-37.27	PASS
		2437	Reference	-16.64	-16.64	---	PASS
			30~1000	-16.64	-64.42	≤-36.64	PASS
			1000~26500	-16.64	-45.84	≤-36.64	PASS
		2462	Reference	-16.44	-16.44	---	PASS
			30~1000	-16.44	-65.18	≤-36.44	PASS
			1000~26500	-16.44	-46.22	≤-36.44	PASS
11N40SISO	Ant1	2422	Reference	-20.05	-20.05	---	PASS
			30~1000	-20.05	-66.37	≤-40.05	PASS
			1000~26500	-20.05	-45.5	≤-40.05	PASS
		2437	Reference	-19.69	-19.69	---	PASS
			30~1000	-19.69	-66.38	≤-39.69	PASS
			1000~26500	-19.69	-45.91	≤-39.69	PASS
		2452	Reference	-19.69	-19.69	---	PASS
			30~1000	-19.69	-66.86	≤-39.69	PASS
			1000~26500	-19.69	-45.93	≤-39.69	PASS
11AX20SISO	Ant1	2412	Reference	-17.54	-17.54	---	PASS

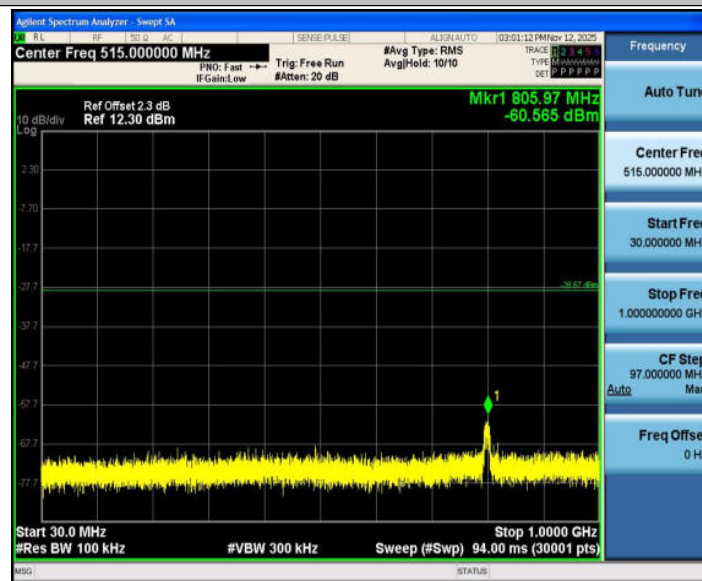
			30~1000	-17.54	-65.07	≤-37.54	PASS
			1000~26500	-17.54	-45.38	≤-37.54	PASS
		2437	Reference	-17.25	-17.25	---	PASS
			30~1000	-17.25	-65.12	≤-37.25	PASS
			1000~26500	-17.25	-45.88	≤-37.25	PASS
		2462	Reference	-16.65	-16.65	---	PASS
			30~1000	-16.65	-65.09	≤-36.65	PASS
			1000~26500	-16.65	-46.28	≤-36.65	PASS
11AX40SISO	Ant1	2422	Reference	-19.98	-19.98	---	PASS
			30~1000	-19.98	-64.98	≤-39.98	PASS
			1000~26500	-19.98	-45.55	≤-39.98	PASS
		2437	Reference	-19.91	-19.91	---	PASS
			30~1000	-19.91	-66.15	≤-39.91	PASS
			1000~26500	-19.91	-45.78	≤-39.91	PASS
		2452	Reference	-19.75	-19.75	---	PASS
			30~1000	-19.75	-66.3	≤-39.75	PASS
			1000~26500	-19.75	-46.02	≤-39.75	PASS

Test Graphs

11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



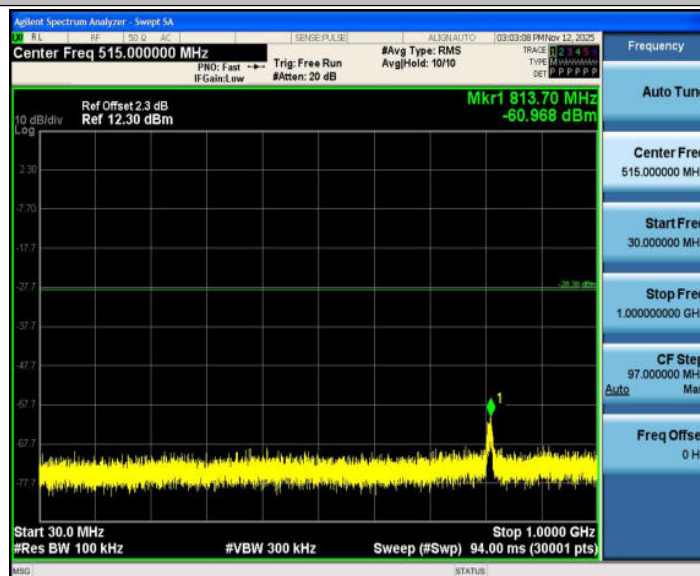
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500



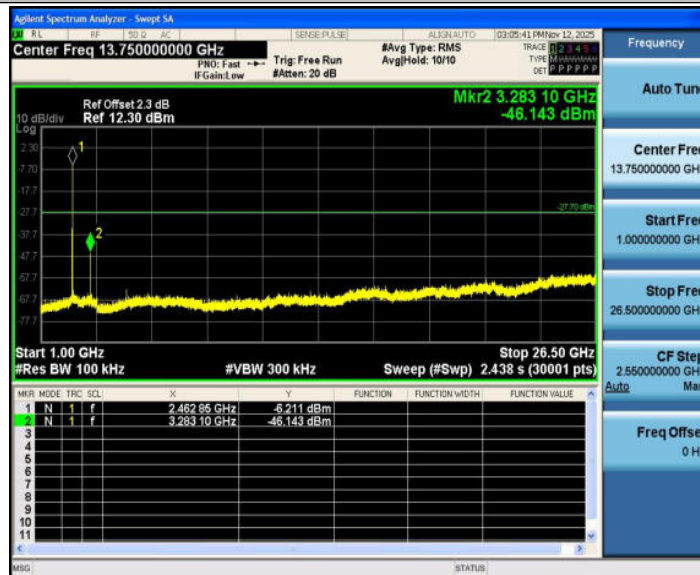
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500



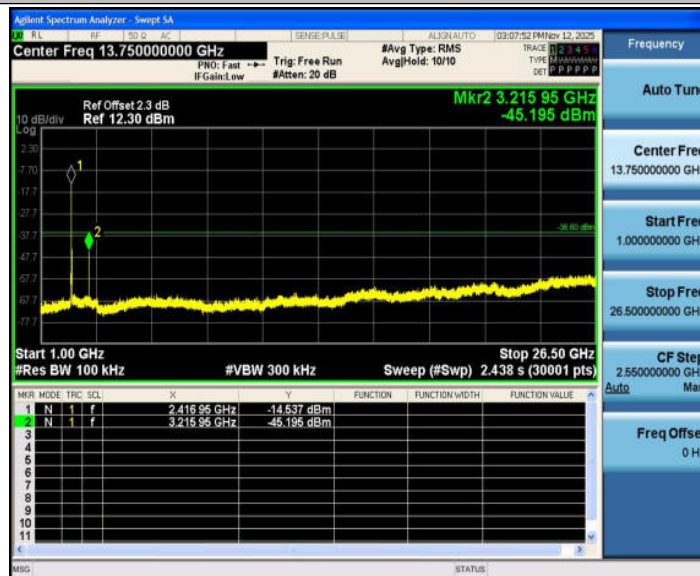
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500

