

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BU33-S3

Company : shenzhenshichengsukejiyouxiangongsi

EUT : Permanent outdoor lights

Model Number : S3

Report No. : CTA26082800903

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.200	2406.920	2417.120	0.5	PASS
		2437	10.240	2431.920	2442.160	0.5	PASS
		2462	10.240	2456.920	2467.160	0.5	PASS
11G	Ant1	2412	15.920	2404.080	2420.000	0.5	PASS
		2437	15.960	2429.040	2445.000	0.5	PASS
		2462	15.560	2454.320	2469.880	0.5	PASS
11N20SISO	Ant1	2412	16.680	2403.680	2420.360	0.5	PASS
		2437	16.640	2428.720	2445.360	0.5	PASS
		2462	16.800	2453.680	2470.480	0.5	PASS

Test Graphs

11B_Ant1_2412



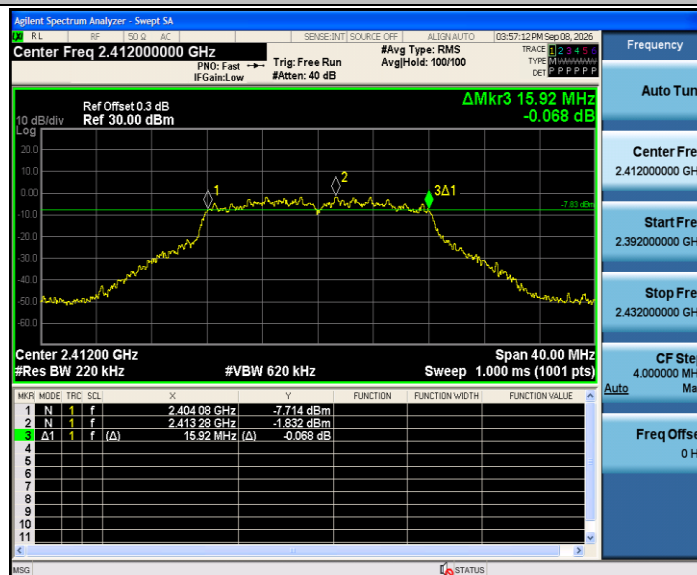
11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



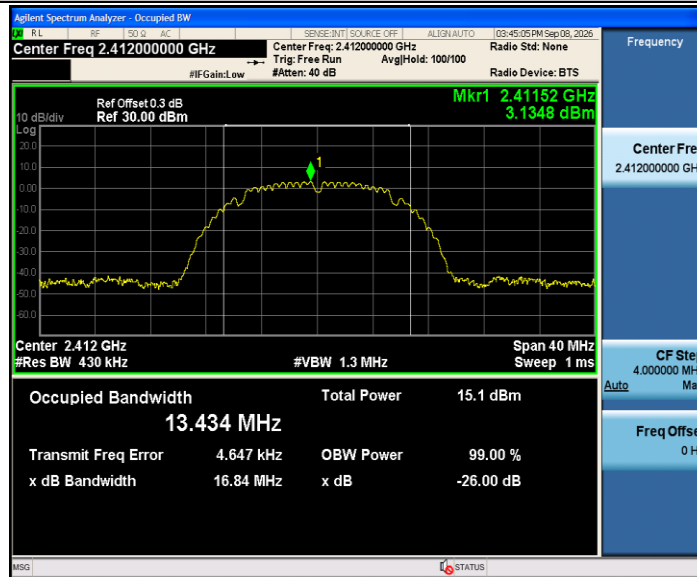
Appendix B: Occupied Channel Bandwidth

Test Result

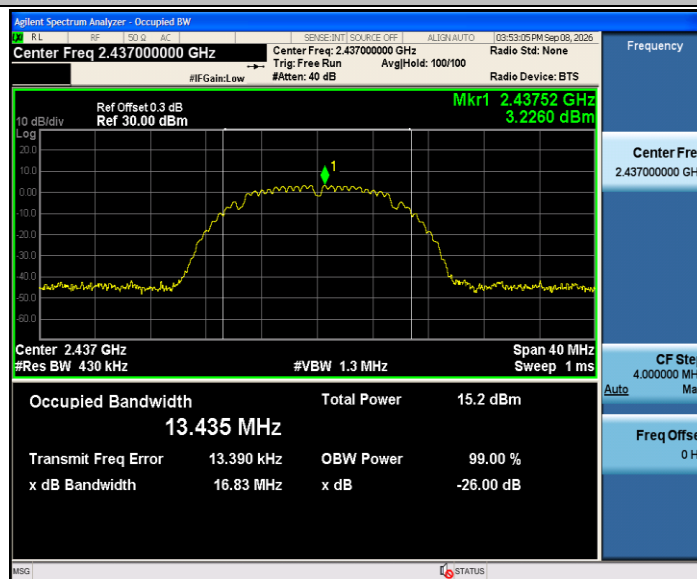
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.434	2405.2877	2418.7217	---	---
		2437	13.435	2430.2959	2443.7309	---	---
		2462	13.425	2455.3113	2468.7363	---	---
11G	Ant1	2412	16.854	2403.6163	2420.4703	---	---
		2437	16.789	2428.6741	2445.4631	---	---
		2462	16.875	2453.6090	2470.4840	---	---
11N20SISO	Ant1	2412	17.810	2403.0926	2420.9026	---	---
		2437	17.939	2428.0183	2445.9573	---	---
		2462	17.904	2453.0685	2470.9725	---	---

Test Graphs

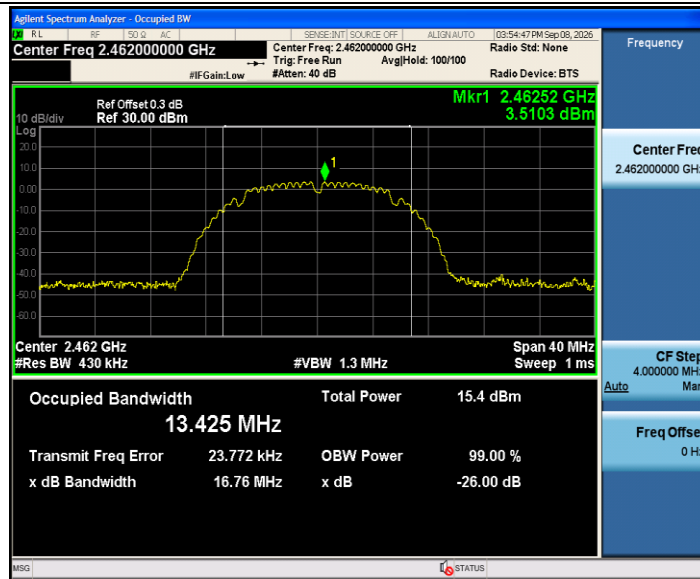
11B_Ant1_2412



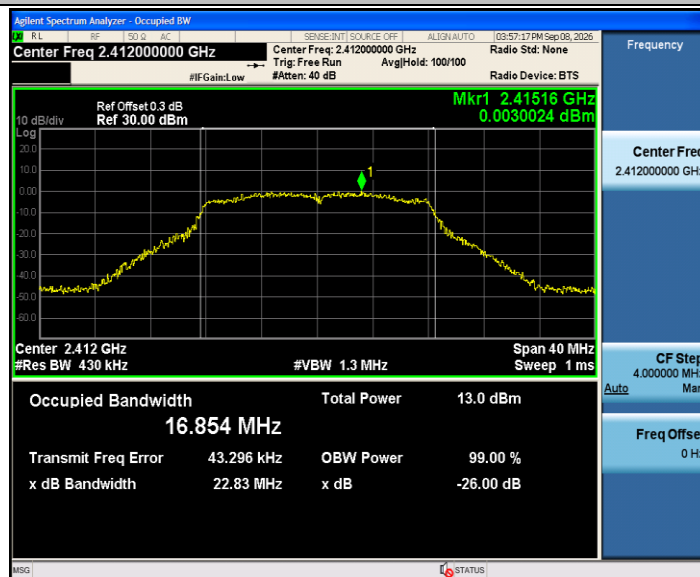
11B_Ant1_2437



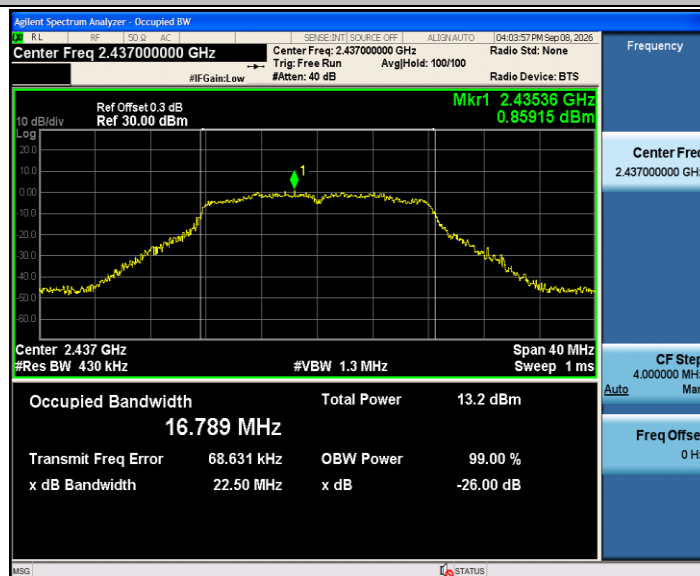
11B_Ant1_2462



11G_Ant1_2412



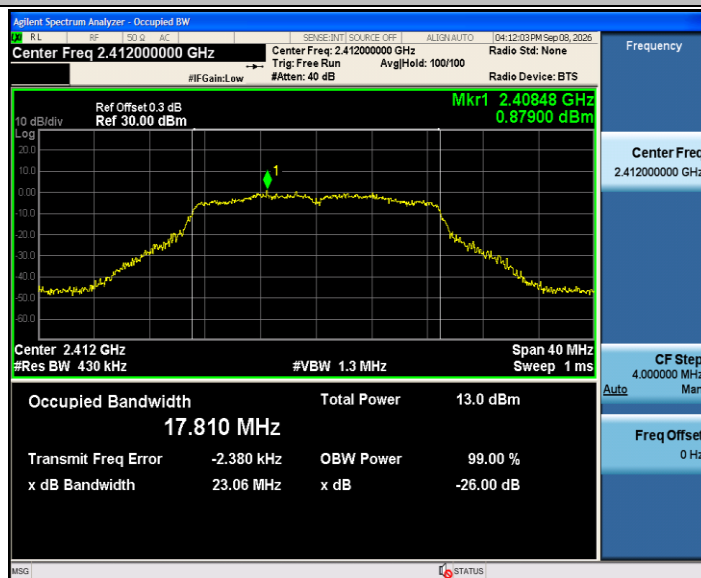
11G_Ant1_2437



11G_Ant1_2462



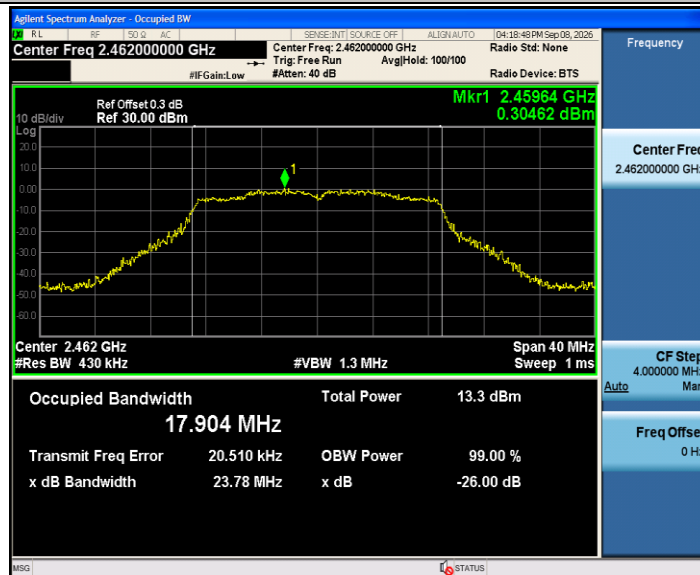
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.69	≤30.00	PASS
		2437	14.89	≤30.00	PASS
		2462	15.05	≤30.00	PASS
11G	Ant1	2412	13.96	≤30.00	PASS
		2437	14.13	≤30.00	PASS
		2462	14.20	≤30.00	PASS
11N20SISO	Ant1	2412	13.84	≤30.00	PASS
		2437	13.95	≤30.00	PASS
		2462	14.14	≤30.00	PASS

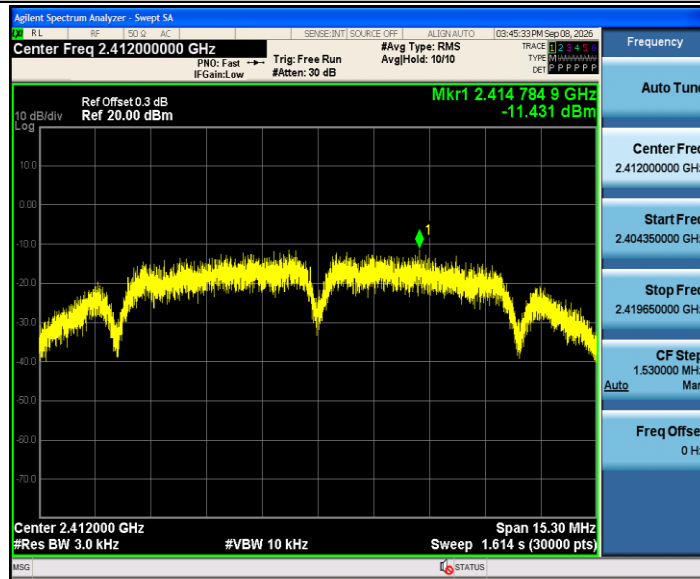
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.43	≤8.00	PASS
		2437	-11.50	≤8.00	PASS
		2462	-11.36	≤8.00	PASS
11G	Ant1	2412	-17.80	≤8.00	PASS
		2437	-17.21	≤8.00	PASS
		2462	-17.67	≤8.00	PASS
11N20SISO	Ant1	2412	-17.69	≤8.00	PASS
		2437	-15.77	≤8.00	PASS
		2462	-16.98	≤8.00	PASS

Test Graphs

11B_Ant1_2412



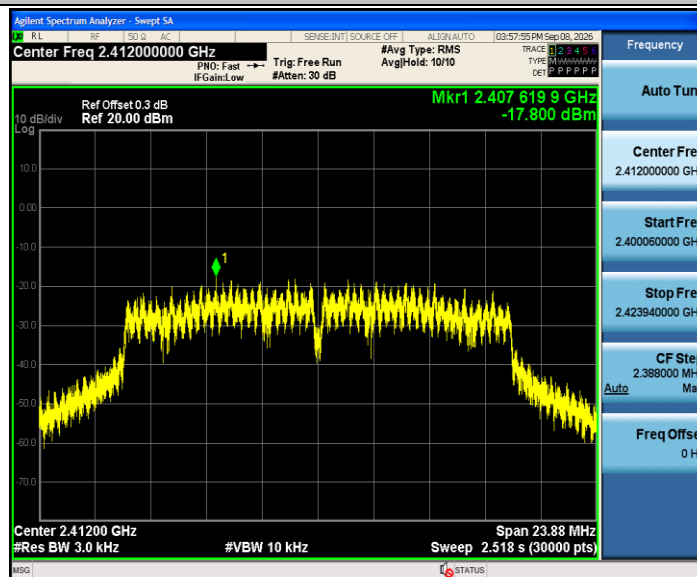
11B_Ant1_2437



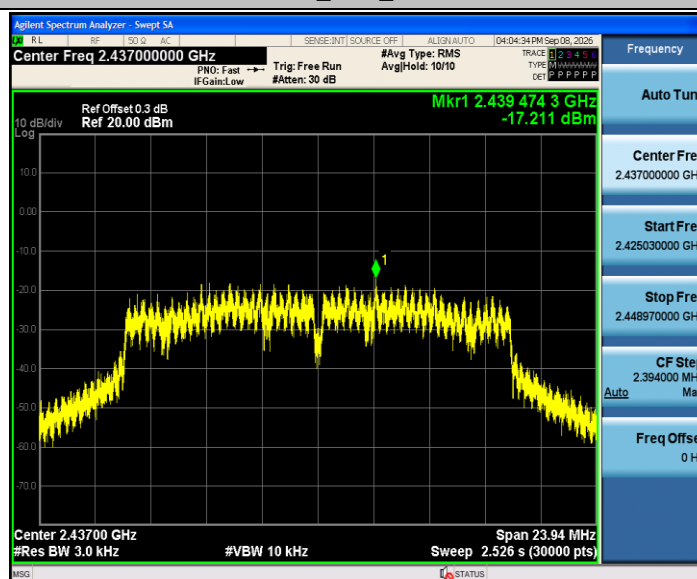
11B_Ant1_2462



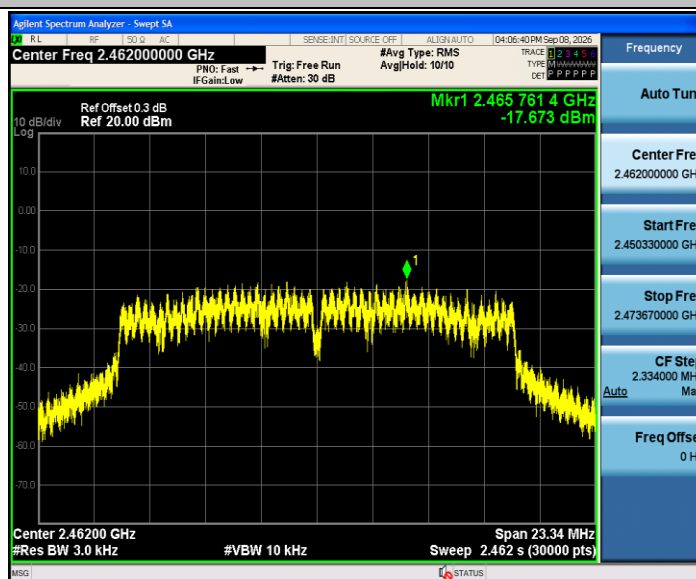
11G_Ant1_2412



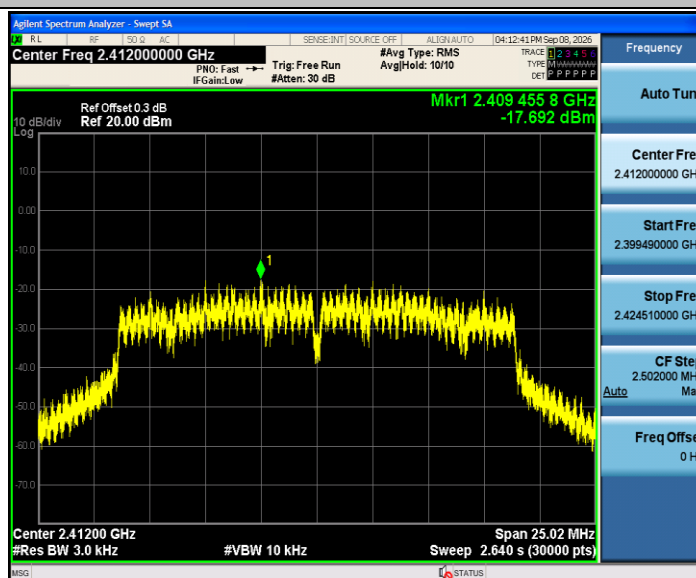
11G_Ant1_2437



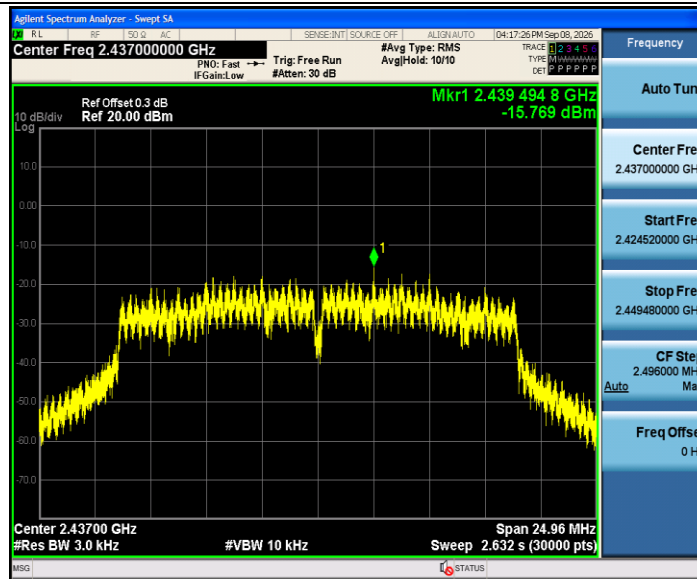
11G_Ant1_2462



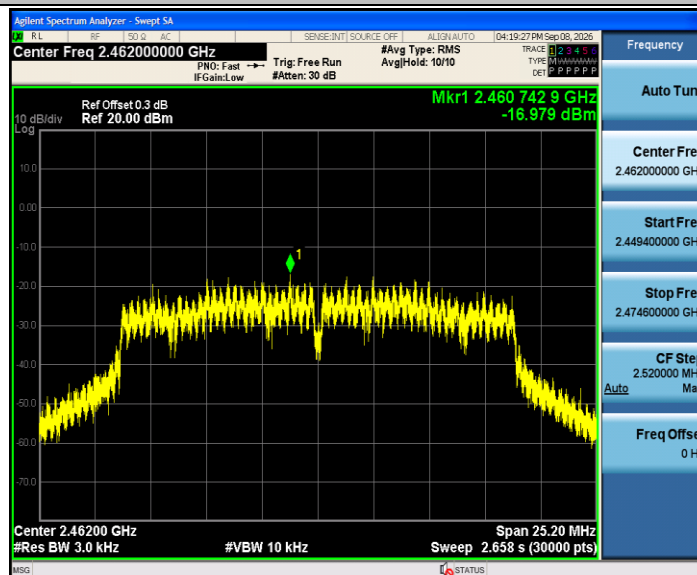
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



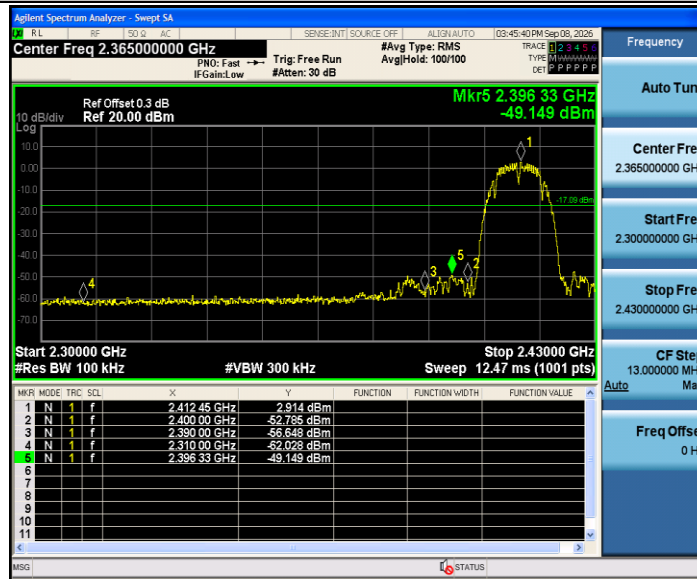
Appendix E: Band edge measurements

Test Result

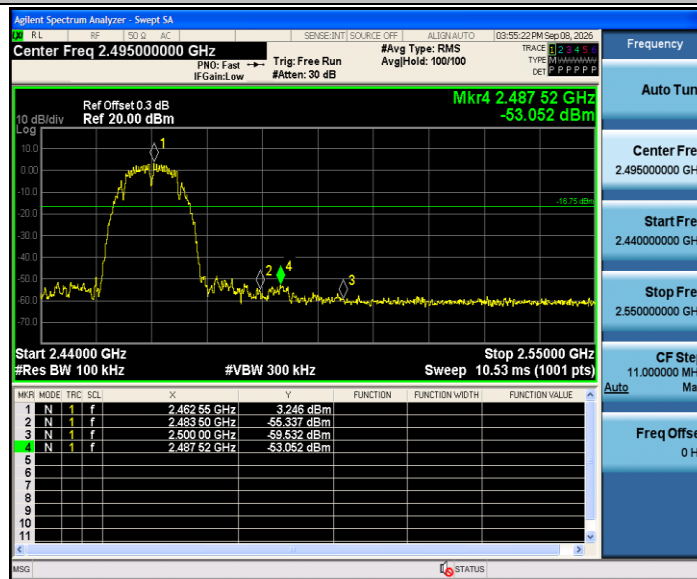
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.91	-49.15	≤ -17.09	PASS
		High	2462	3.25	-53.05	≤ -16.75	PASS
11G	Ant1	Low	2412	-2.36	-32.88	≤ -22.36	PASS
		High	2462	-2.13	-57.84	≤ -22.13	PASS
11N20SISO	Ant1	Low	2412	-2.63	-33.82	≤ -22.63	PASS
		High	2462	-2.14	-58.37	≤ -22.14	PASS

Test Graphs

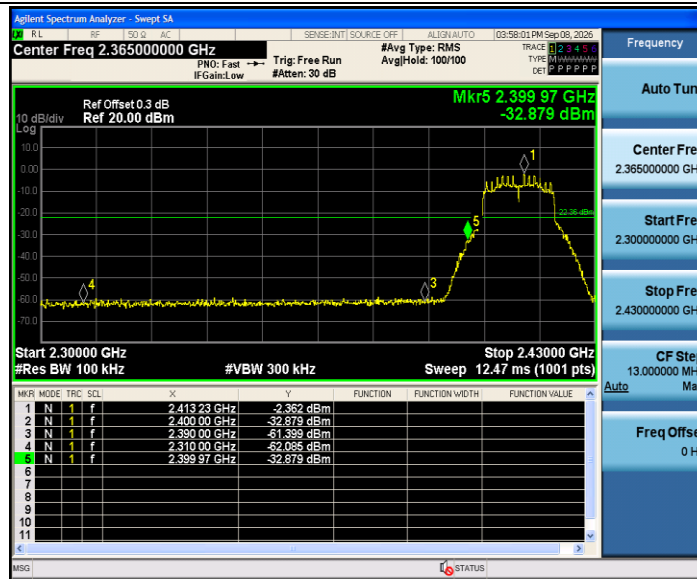
11B_Ant1_Low_2412



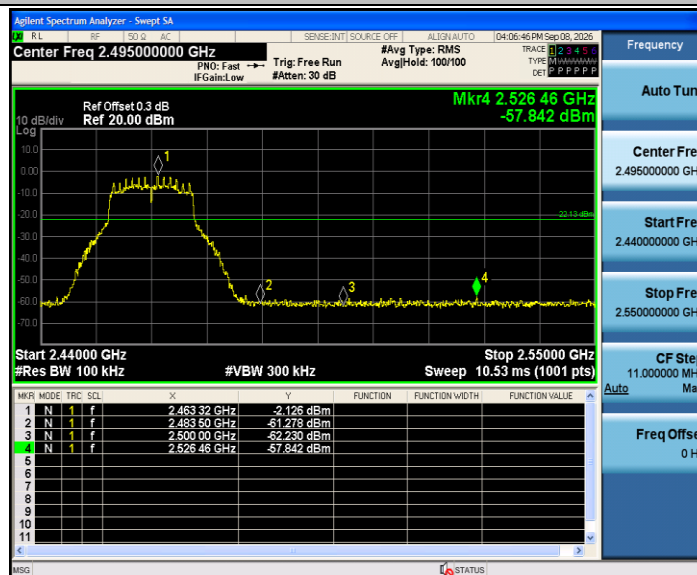
11B_Ant1_High_2462



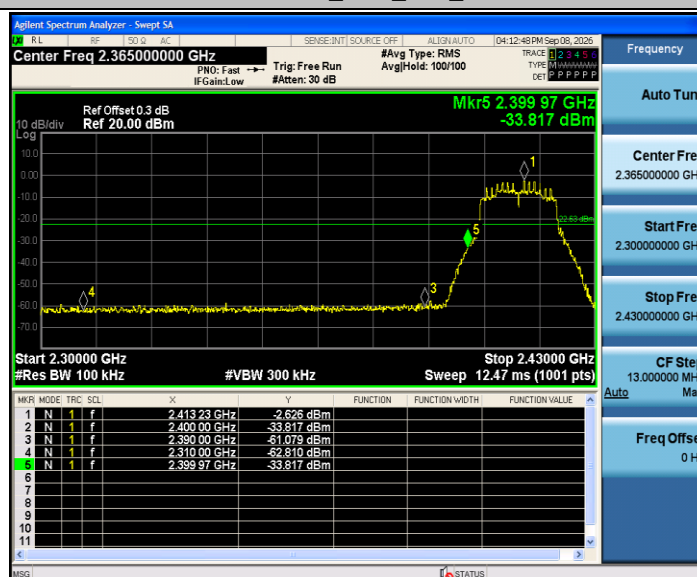
11G_Ant1_Low_2412



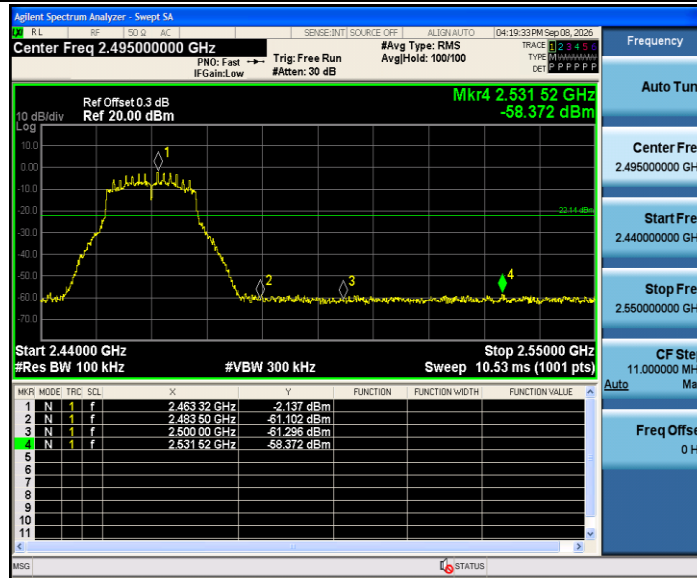
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

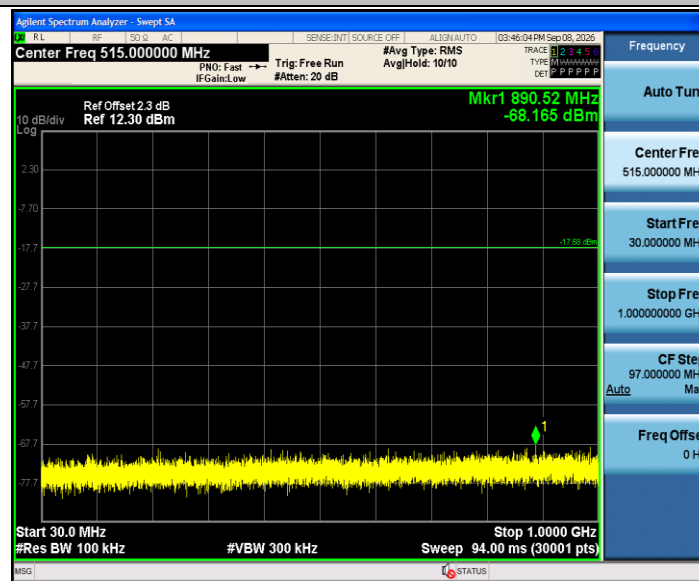
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.32	2.32	---	PASS
			30~1000	2.32	-68.17	≤-17.68	PASS
			1000~26500	2.32	-46.81	≤-17.68	PASS
		2437	Reference	2.63	2.63	---	PASS
			30~1000	2.63	-68.05	≤-17.37	PASS
			1000~26500	2.63	-46.26	≤-17.37	PASS
		2462	Reference	2.54	2.54	---	PASS
			30~1000	2.54	-68.08	≤-17.46	PASS
			1000~26500	2.54	-46.66	≤-17.46	PASS
11G	Ant1	2412	Reference	-2.84	-2.84	---	PASS
			30~1000	-2.84	-68.48	≤-22.84	PASS
			1000~26500	-2.84	-46.82	≤-22.84	PASS
		2437	Reference	-3.28	-3.28	---	PASS
			30~1000	-3.28	-68.01	≤-23.28	PASS
			1000~26500	-3.28	-46.73	≤-23.28	PASS
		2462	Reference	-3.00	-3.00	---	PASS
			30~1000	-3.00	-68.84	≤-23	PASS
			1000~26500	-3.00	-47.07	≤-23	PASS
11N20SISO	Ant1	2412	Reference	-2.87	-2.87	---	PASS
			30~1000	-2.87	-68.34	≤-22.87	PASS
			1000~26500	-2.87	-46.93	≤-22.87	PASS
		2437	Reference	-2.93	-2.93	---	PASS
			30~1000	-2.93	-68.76	≤-22.93	PASS
			1000~26500	-2.93	-45.87	≤-22.93	PASS
		2462	Reference	-2.53	-2.53	---	PASS
			30~1000	-2.53	-68.64	≤-22.53	PASS
			1000~26500	-2.53	-47.21	≤-22.53	PASS

Test Graphs

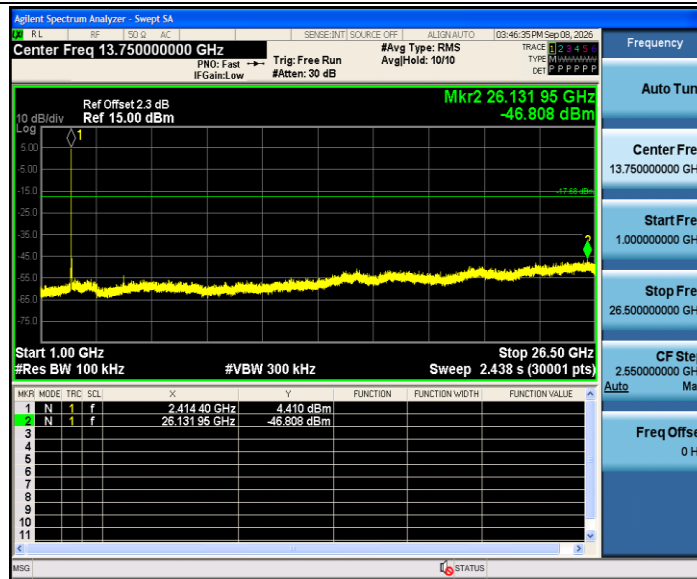
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



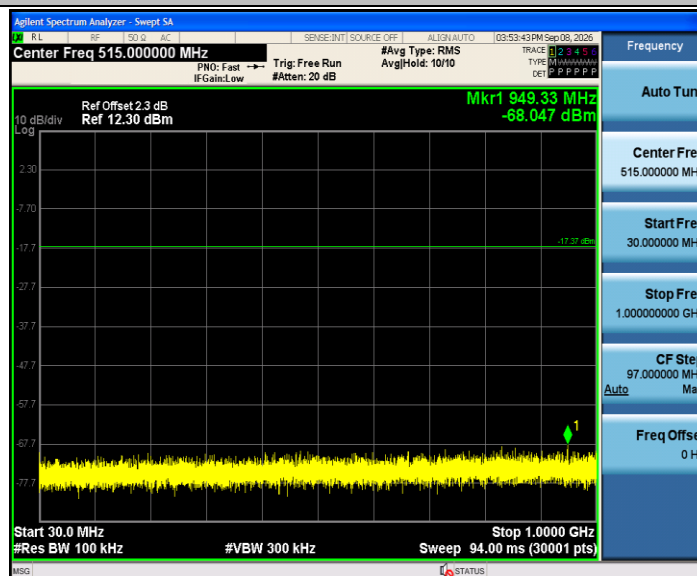
11B_Ant1_2412_1000~26500



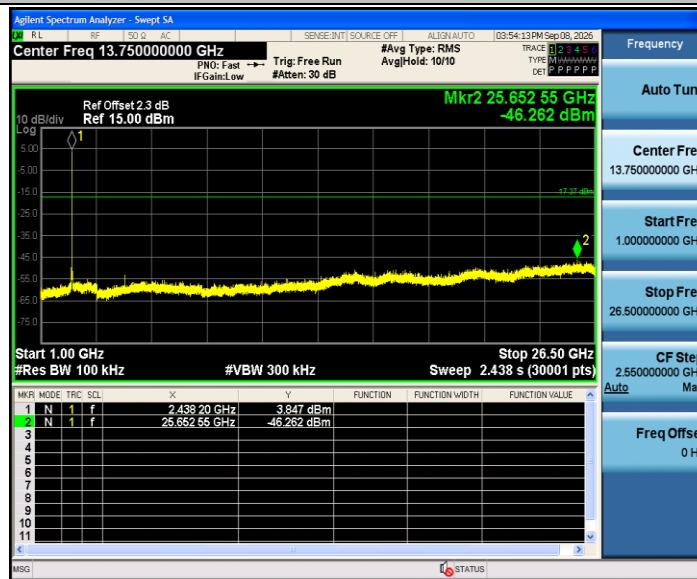
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



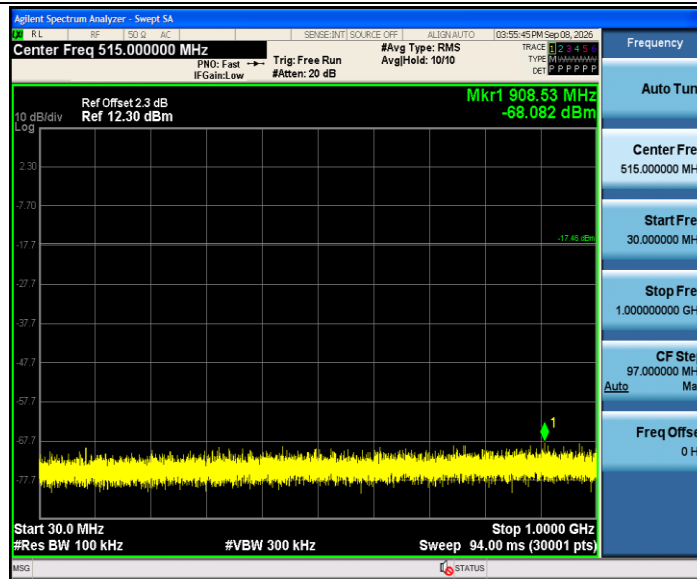
11B_Ant1_2437_1000~26500



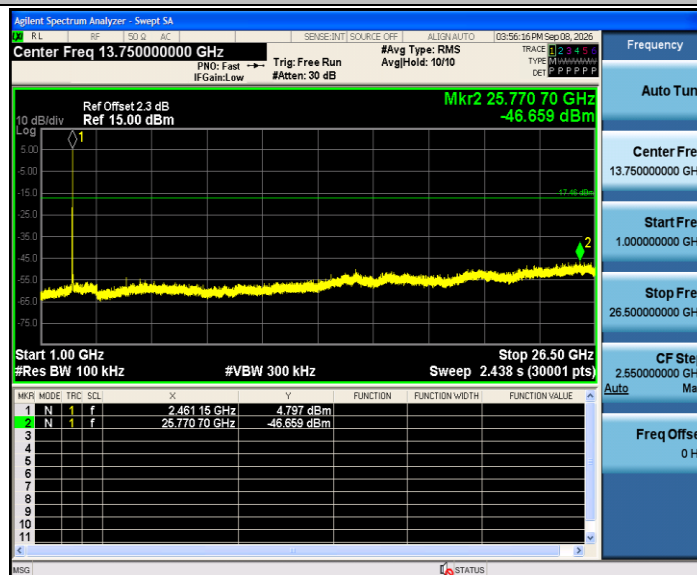
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



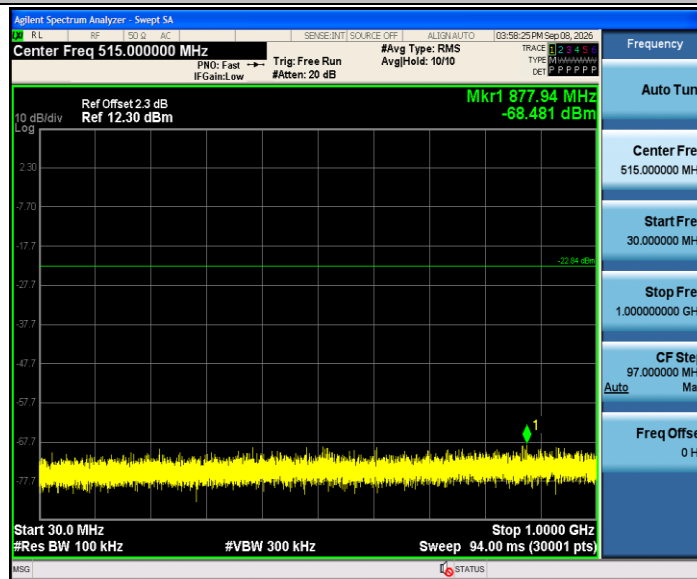
11B_Ant1_2462_1000~26500



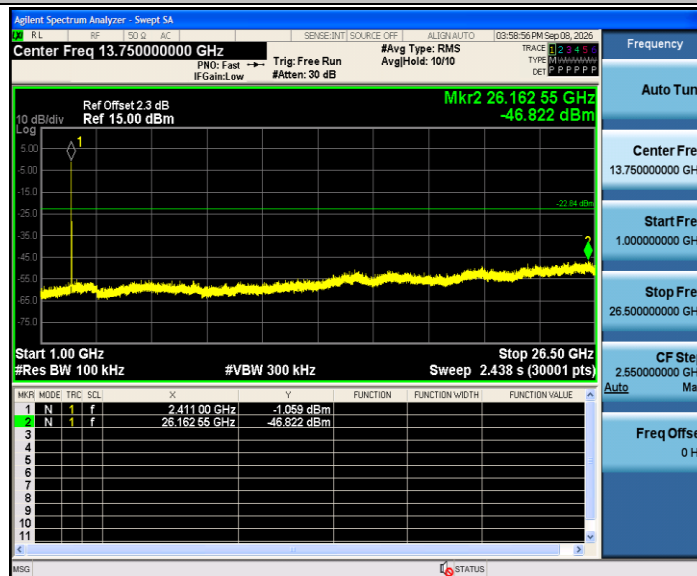
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



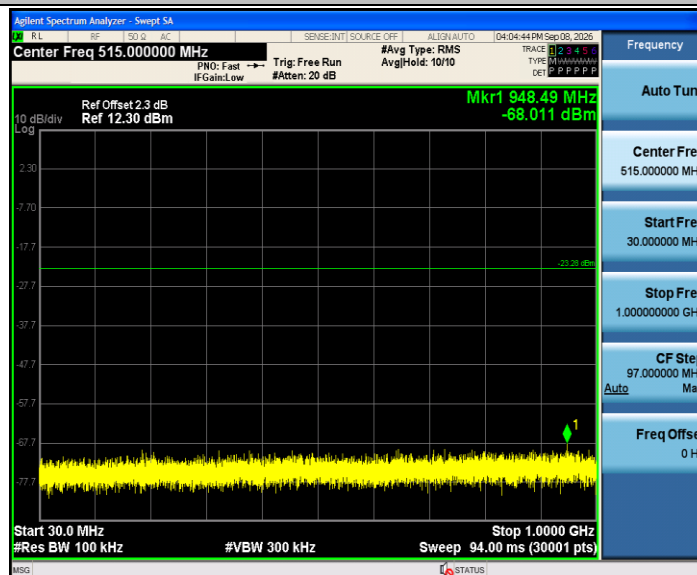
11G_Ant1_2412_1000~26500



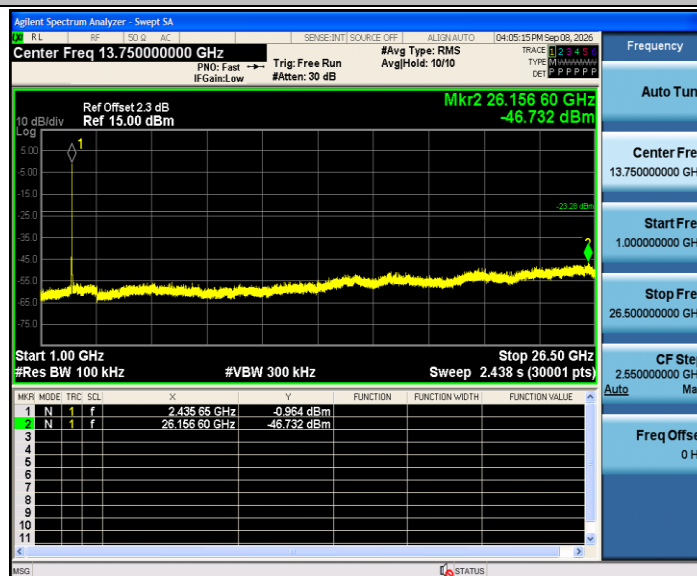
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



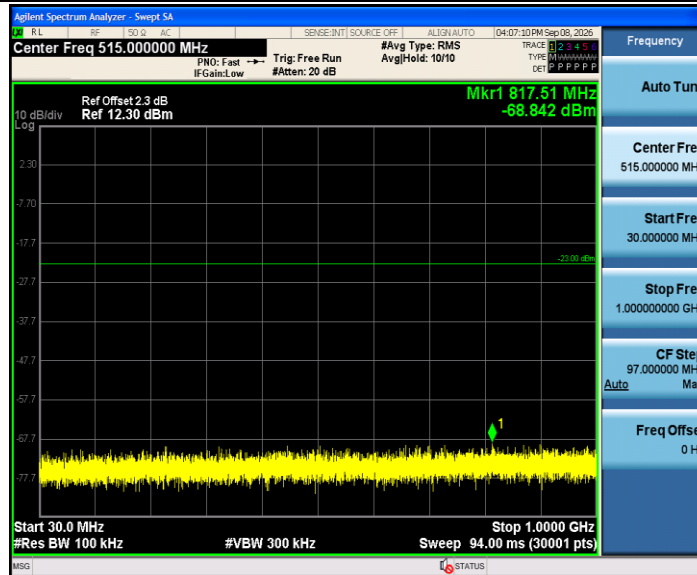
11G_Ant1_2437_1000~26500



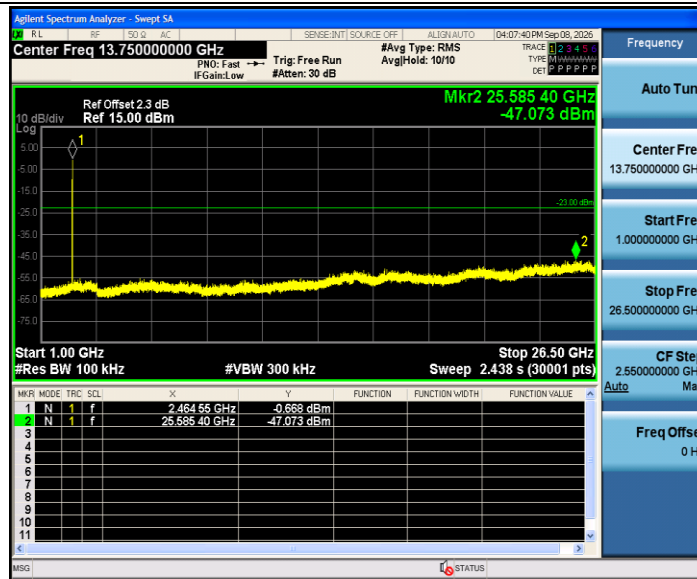
11G_Ant1_2462_0~Reference



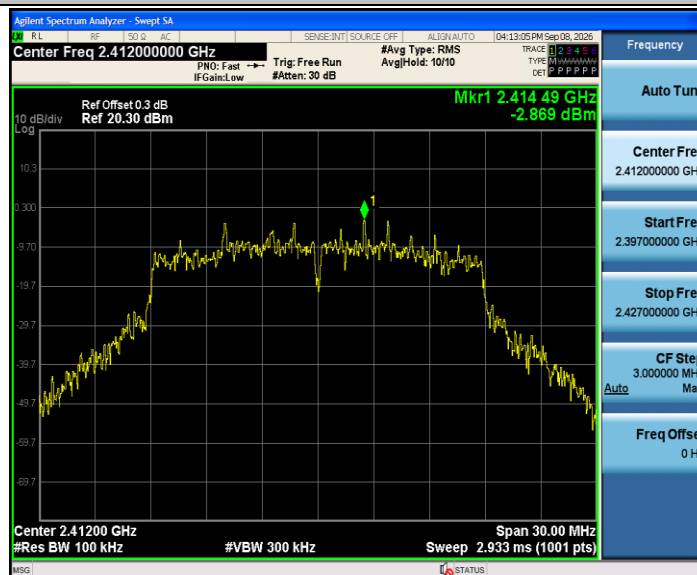
11G_Ant1_2462_30~1000



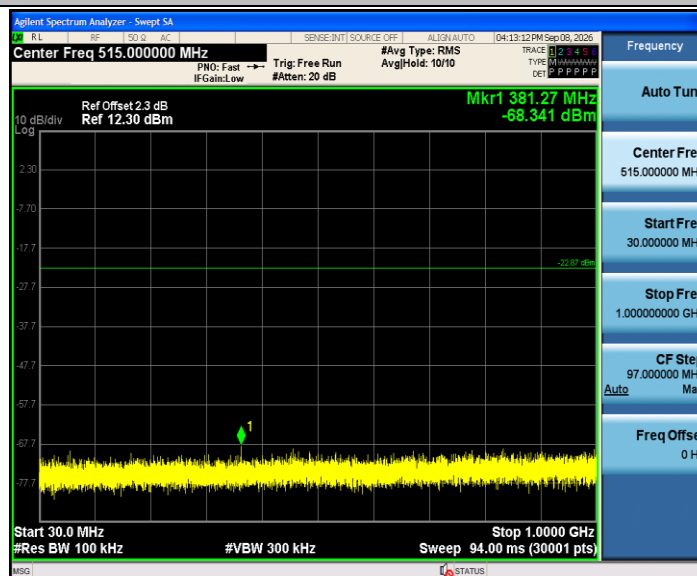
11G_Ant1_2462_1000~26500



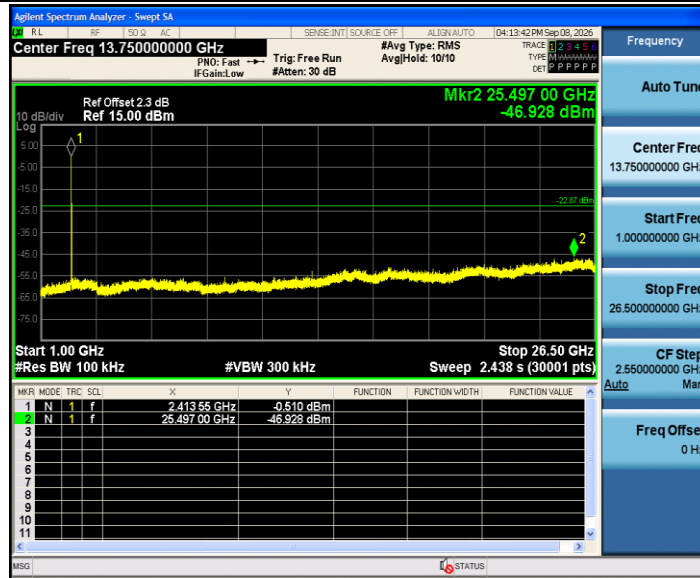
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



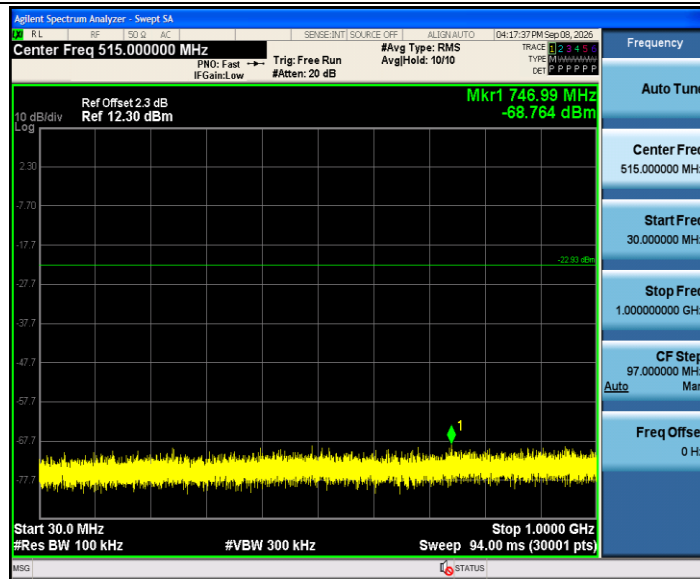
11N20SISO_Ant1_2412_1000~26500



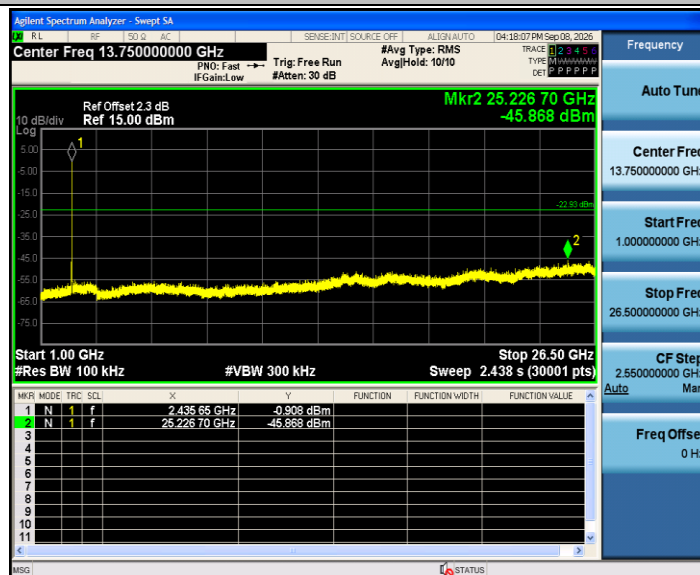
11N20SISO_Ant1_2437_0~Reference



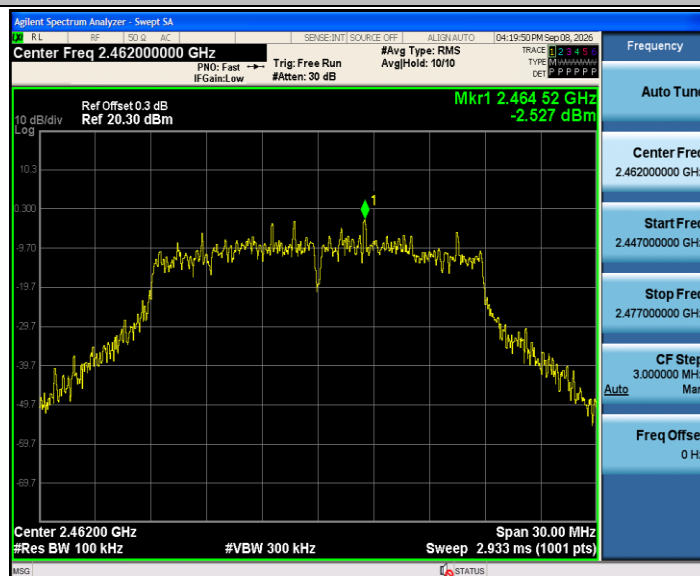
11N20SISO_Ant1_2437_30~1000



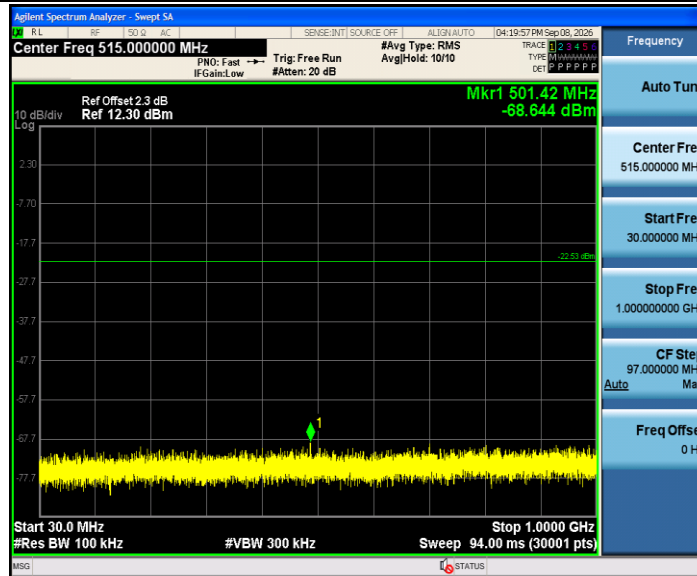
11N20SISO_Ant1_2437_1000~26500



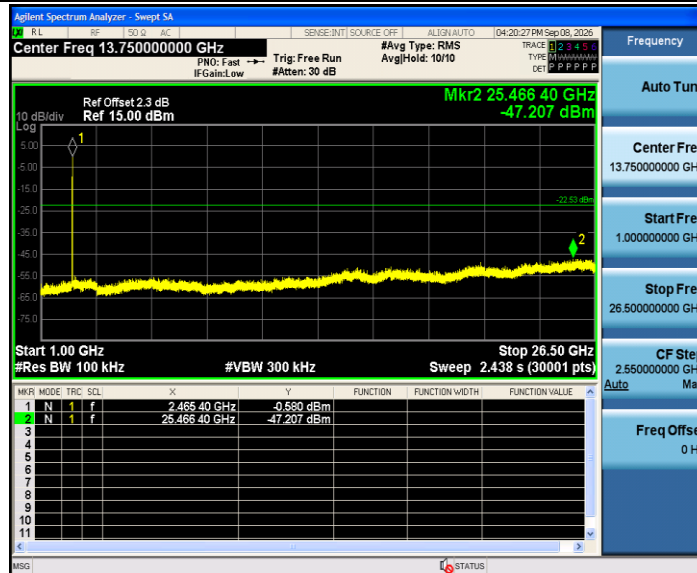
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



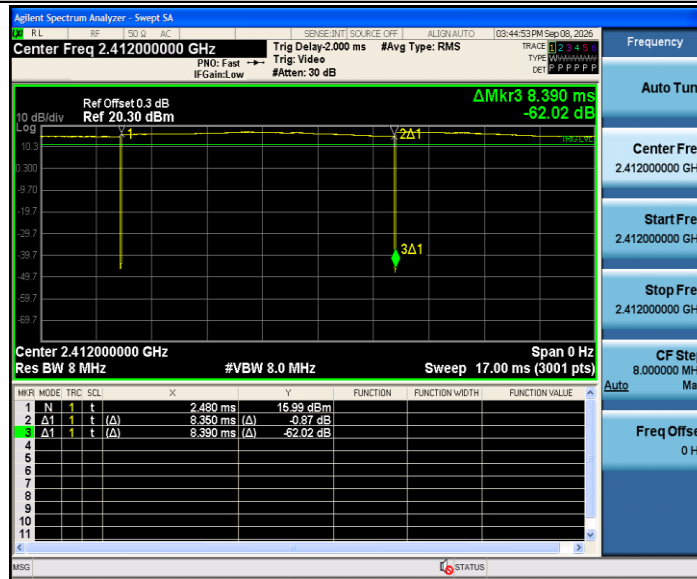
Appendix G: Duty Cycle

Test Result

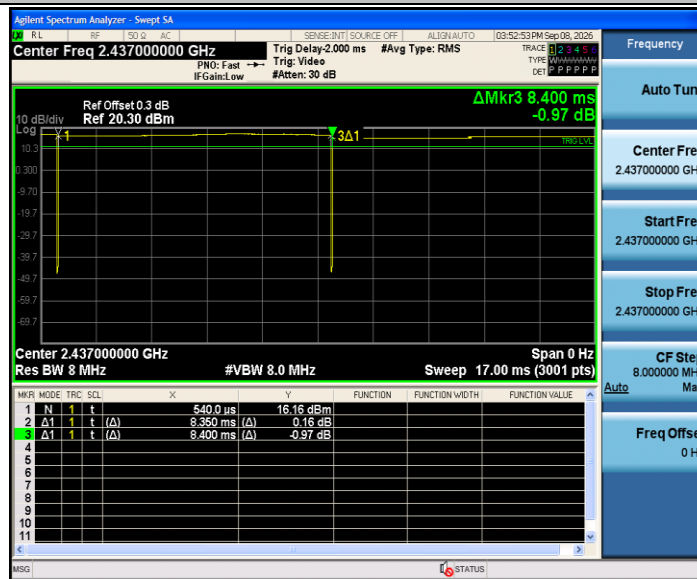
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	T Factor [dB]
11B	Ant1	2412	8.35	8.39	99.52	0.02	0.12
		2437	8.35	8.40	99.40	0.03	0.12
		2462	8.35	8.39	99.52	0.02	0.12
11G	Ant1	2412	0.15	0.19	78.95	1.03	6.67
		2437	0.15	0.20	75.00	1.25	6.67
		2462	0.15	0.20	75.00	1.25	6.67
11N20SISO	Ant1	2412	0.18	0.22	81.82	0.87	5.56
		2437	0.18	0.23	78.26	1.06	5.56
		2462	0.17	0.22	77.27	1.12	5.88

Test Graphs

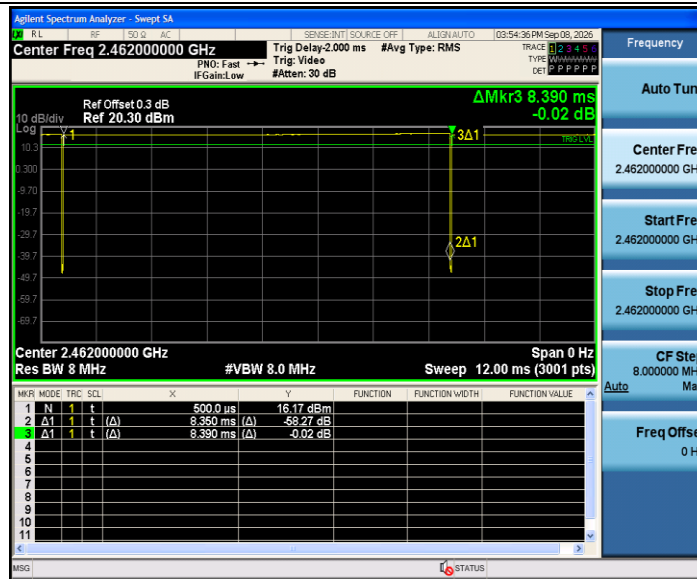
11B_Ant1_2412



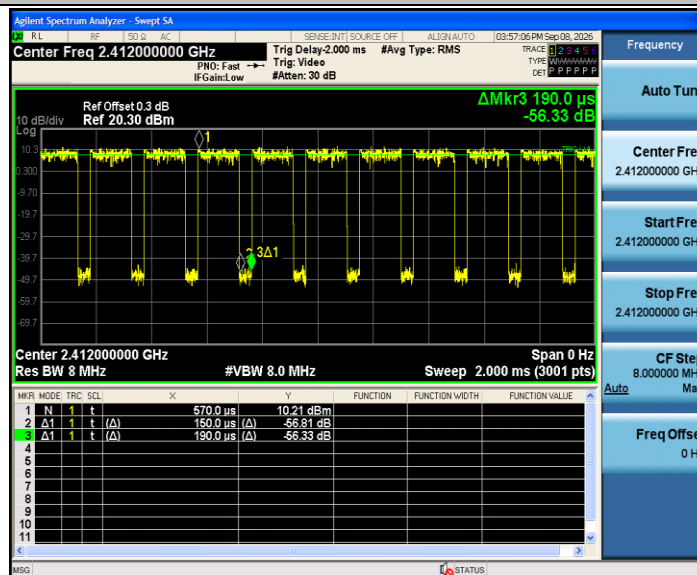
11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437

