

Applicant: SHENZHEN AILSEE TECHNICAL.,LTD

Case No. : TH2309047-C02

EUT: Smart Floodlight Camera

M/N: R11-30E

Standard: FCC PART 15 C 15.247

Test Power Supply: AC 120V/60Hz

Ambient Condition: 25 °C, 45 %RH, 101.325 kPa

Test Date: 2023.09.06

Test Engineer: Blue Hu

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.000	2406.960	2416.960	0.5	PASS
		2437	10.040	2431.960	2442.000	0.5	PASS
		2462	10.040	2456.960	2467.000	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.320	2453.800	2470.120	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.200	2420.760	0.5	PASS
		2437	17.560	2428.200	2445.760	0.5	PASS
		2462	17.560	2453.200	2470.760	0.5	PASS
11N40SISO	Ant1	2422	35.040	2404.480	2439.520	0.5	PASS
		2437	35.520	2419.560	2455.080	0.5	PASS
		2452	35.040	2434.480	2469.520	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	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.997	2404.4816	2419.4786	---	---
		2437	15.008	2429.4668	2444.4748	---	---
		2462	15.023	2454.4678	2469.4908	---	---
11G	Ant1	2412	16.712	2403.6951	2420.4071	---	---
		2437	16.797	2428.6074	2445.4044	---	---
		2462	16.904	2453.5418	2470.4458	---	---
11N20SISO	Ant1	2412	17.939	2402.9438	2420.8828	---	---
		2437	17.846	2428.0195	2445.8655	---	---
		2462	17.913	2453.0374	2470.9504	---	---
11N40SISO	Ant1	2422	36.301	2403.9219	2440.2229	---	---
		2437	36.382	2418.8327	2455.2147	---	---
		2452	36.308	2433.8043	2470.1123	---	---

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



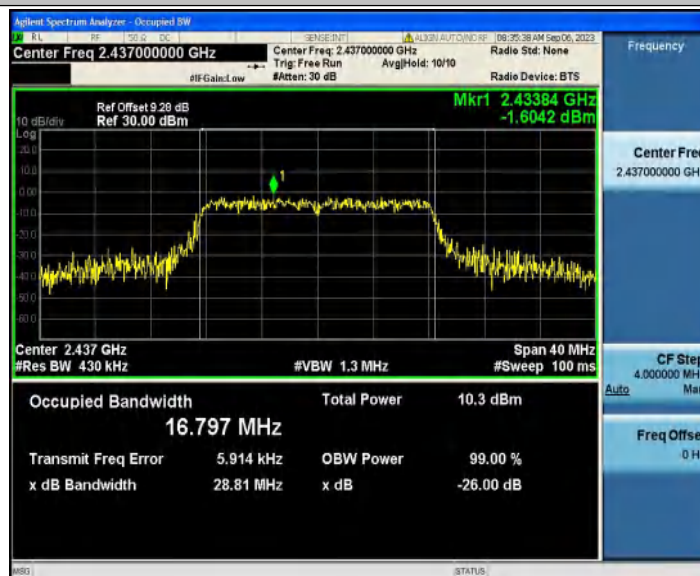
11B_Ant1_2462



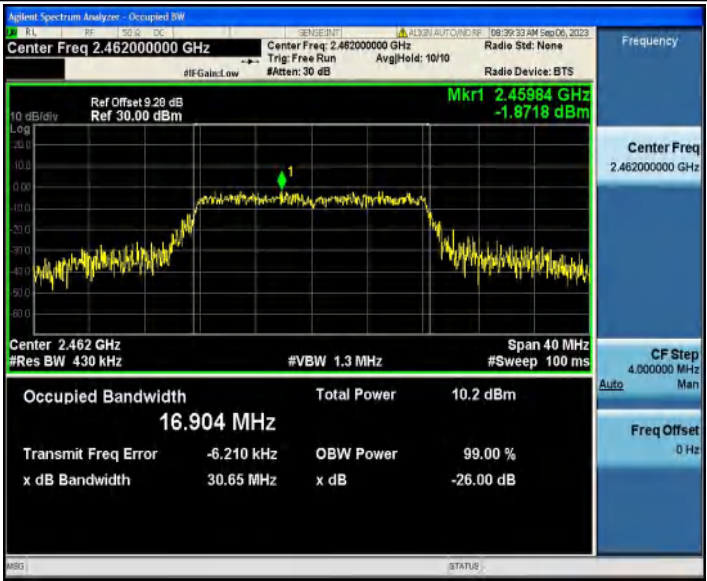
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



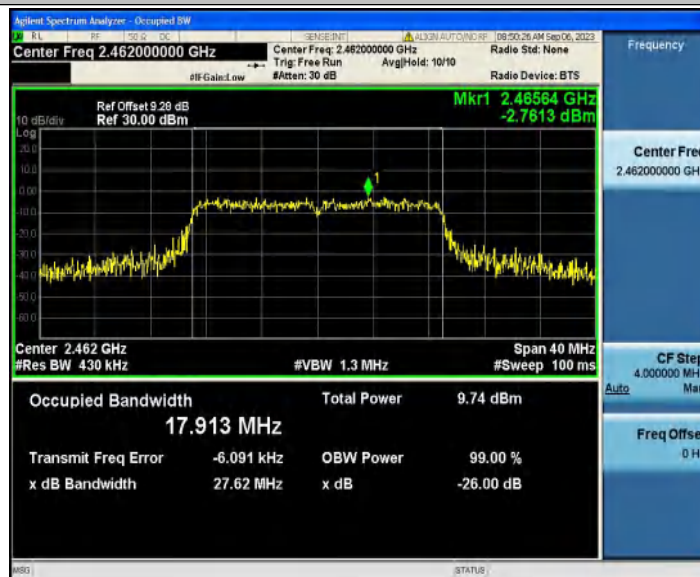
11N20SISO_Ant1_2412



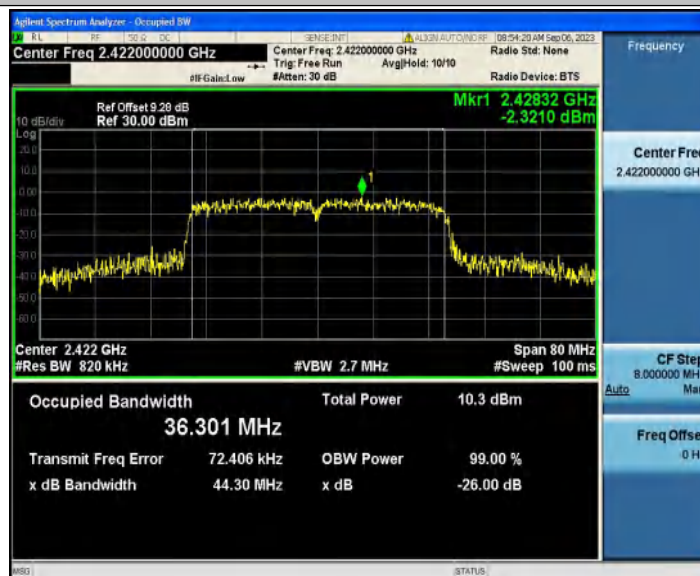
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Channel	Set Power	Peak Power[dBm]	Conducted Limit[dBm]	EIRP [dBm]	EIRP Limit[dBm]	Verdict
11B	Ant1	2412	---	9.59	≤30.00	12.31	≤36.00	PASS
		2437	---	9.63	≤30.00	12.35	≤36.00	PASS
		2462	---	9.57	≤30.00	12.29	≤36.00	PASS
11G	Ant1	2412	---	14.74	≤30.00	17.46	≤36.00	PASS
		2437	---	14.80	≤30.00	17.52	≤36.00	PASS
		2462	---	14.71	≤30.00	17.43	≤36.00	PASS
11N20SIS O	Ant1	2412	---	14.07	≤30.00	16.79	≤36.00	PASS
		2437	---	14.08	≤30.00	16.80	≤36.00	PASS
		2462	---	13.96	≤30.00	16.68	≤36.00	PASS
11N40SIS O	Ant1	2422	---	14.34	≤30.00	17.06	≤36.00	PASS
		2437	---	14.36	≤30.00	17.08	≤36.00	PASS
		2452	---	14.29	≤30.00	17.01	≤36.00	PASS

Test Graphs Peak

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



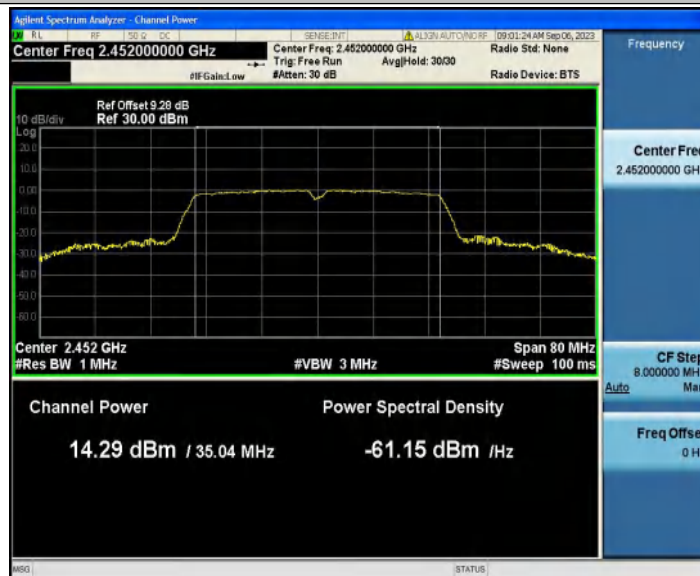
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-15.73	≤8.00	PASS
		2437	-15.98	≤8.00	PASS
		2462	-15.49	≤8.00	PASS
11G	Ant1	2412	-17.91	≤8.00	PASS
		2437	-16.28	≤8.00	PASS
		2462	-18.25	≤8.00	PASS
11N20SISO	Ant1	2412	-19.1	≤8.00	PASS
		2437	-19.33	≤8.00	PASS
		2462	-18.63	≤8.00	PASS
11N40SISO	Ant1	2422	-21.5	≤8.00	PASS
		2437	-20.91	≤8.00	PASS
		2452	-21.63	≤8.00	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



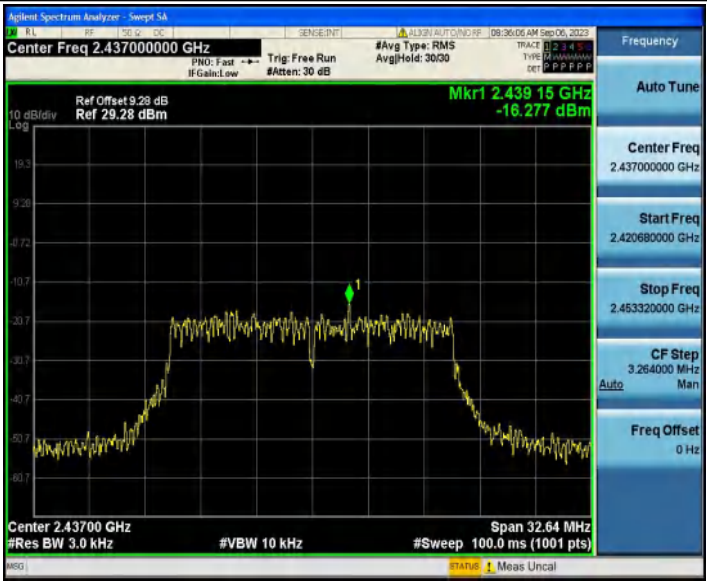
11B_Ant1_2462



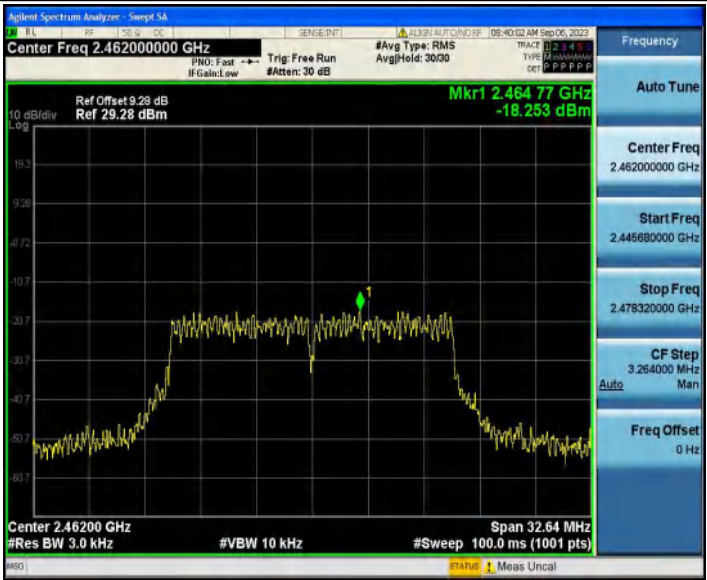
11G_Ant1_2412



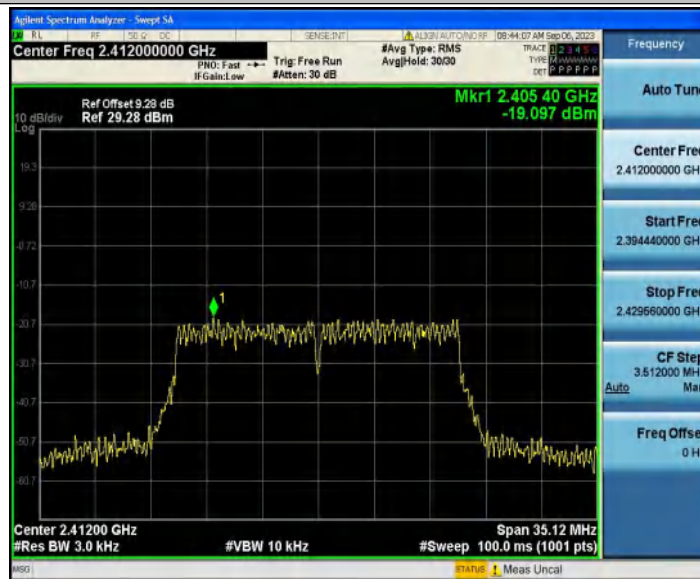
11G_Ant1_2437



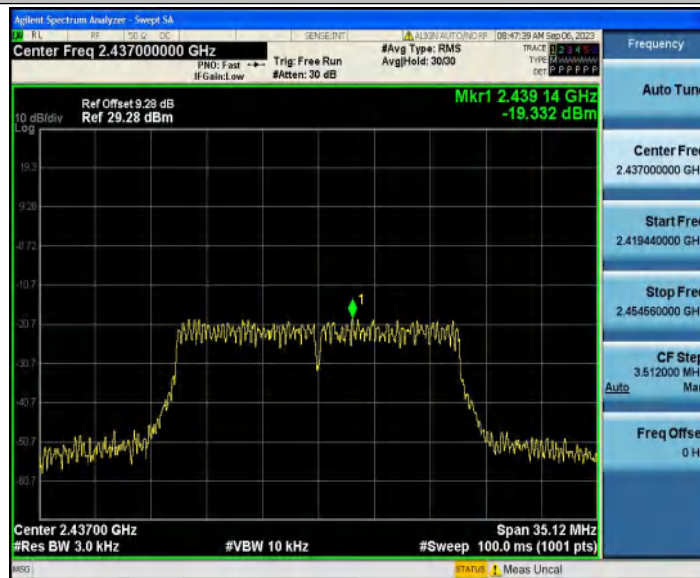
11G_Ant1_2462



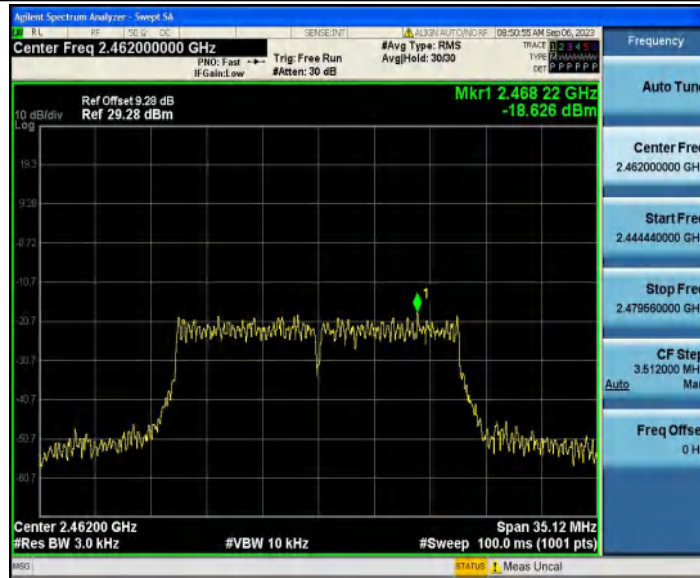
11N20SISO_Ant1_2412



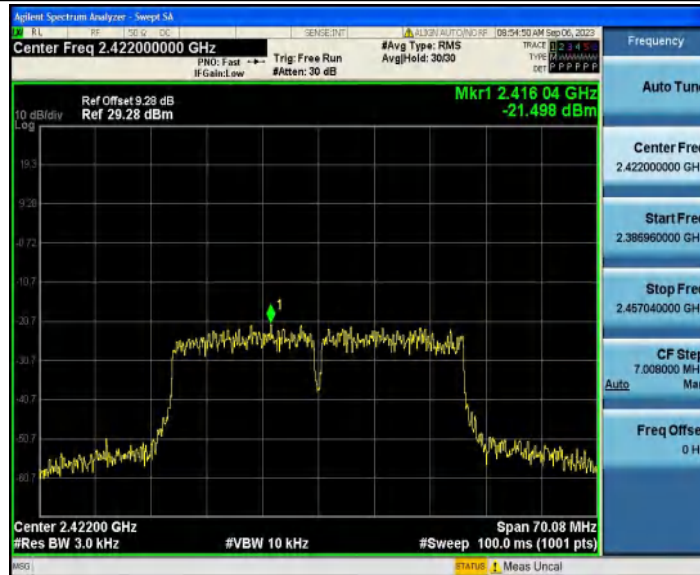
11N20SISO_Ant1_2437



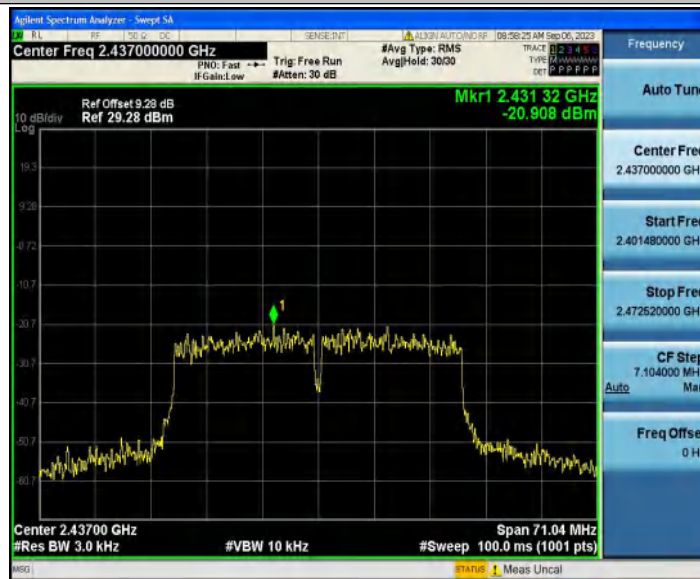
11N20SISO_Ant1_2462



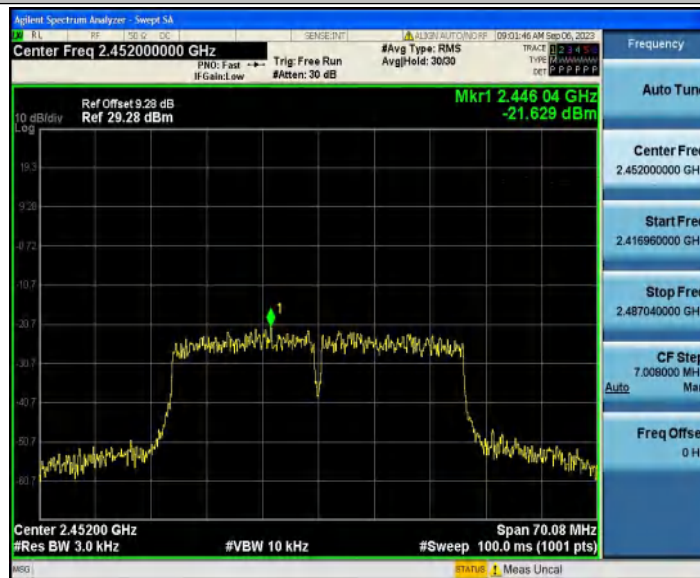
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix E: Band edge measurements

Test Result

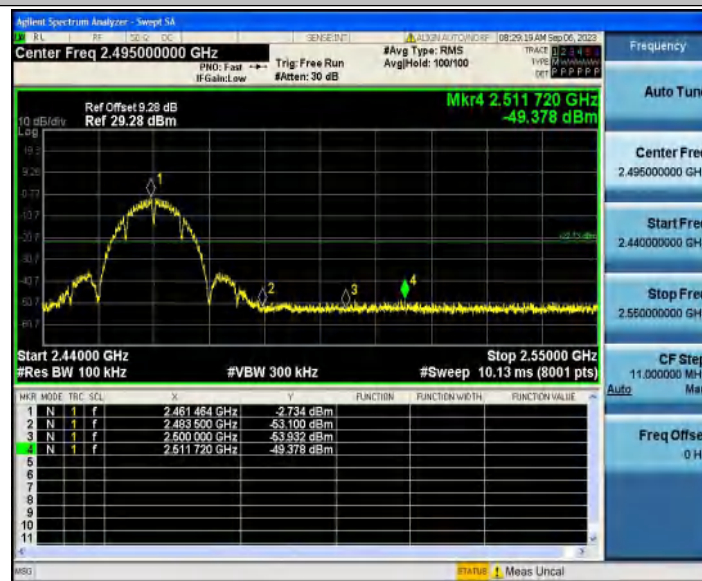
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-2.66	-36.43	≤ -22.66	PASS
		High	2462	-2.73	-49.38	≤ -22.73	PASS
11G	Ant1	Low	2412	-4.76	-30.46	≤ -24.76	PASS
		High	2462	-4.51	-42.42	≤ -24.51	PASS
11N20SISO	Ant1	Low	2412	-4.94	-34.3	≤ -24.94	PASS
		High	2462	-5.08	-42.23	≤ -25.08	PASS
11N40SISO	Ant1	Low	2422	-7.57	-34.78	≤ -27.57	PASS
		High	2452	-8.53	-37.24	≤ -28.53	PASS

Test Graphs

11B_Ant1_Low_2412



11B_Ant1_High_2462



11G_Ant1_Low_2412



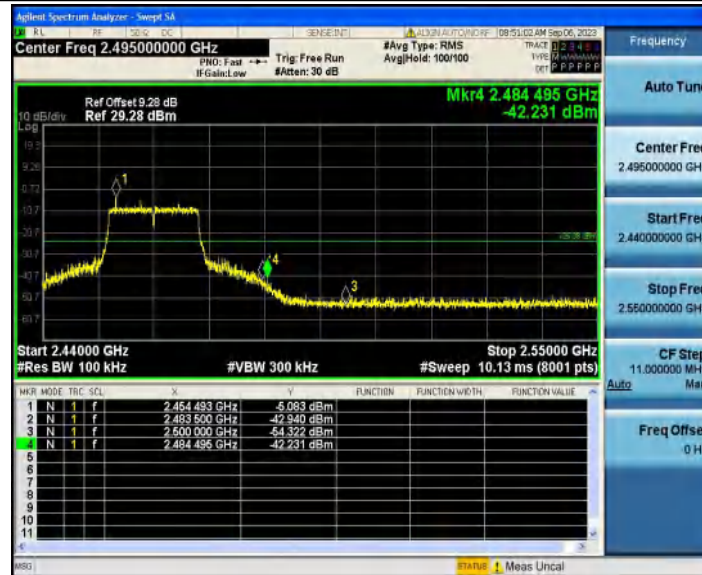
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

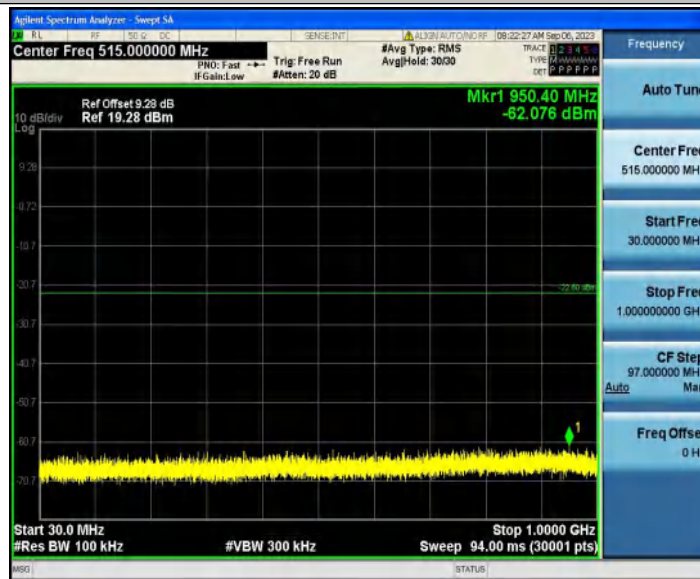
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-2.80	-2.80	---	PASS
			30~1000	-2.80	-62.08	≤-22.8	PASS
			1000~26500	-2.80	-51.69	≤-22.8	PASS
		2437	Reference	-2.67	-2.67	---	PASS
			30~1000	-2.67	-61.44	≤-22.67	PASS
			1000~26500	-2.67	-51.8	≤-22.67	PASS
		2462	Reference	-2.91	-2.91	---	PASS
			30~1000	-2.91	-61.12	≤-22.91	PASS
			1000~26500	-2.91	-51.65	≤-22.91	PASS
11G	Ant1	2412	Reference	-6.15	-6.15	---	PASS
			30~1000	-6.15	-60.82	≤-26.15	PASS
			1000~26500	-6.15	-50.59	≤-26.15	PASS
		2437	Reference	-7.45	-7.45	---	PASS
			30~1000	-7.45	-60.77	≤-27.45	PASS
			1000~26500	-7.45	-50.59	≤-27.45	PASS
		2462	Reference	-4.72	-4.72	---	PASS
			30~1000	-4.72	-60.4	≤-24.72	PASS
			1000~26500	-4.72	-51.84	≤-24.72	PASS
11N20SISO	Ant1	2412	Reference	-8.42	-8.42	---	PASS
			30~1000	-8.42	-60.56	≤-28.42	PASS
			1000~26500	-8.42	-51.3	≤-28.42	PASS
		2437	Reference	-8.97	-8.97	---	PASS
			30~1000	-8.97	-61.95	≤-28.97	PASS
			1000~26500	-8.97	-51.79	≤-28.97	PASS
		2462	Reference	-8.71	-8.71	---	PASS
			30~1000	-8.71	-61.53	≤-28.71	PASS
			1000~26500	-8.71	-51.63	≤-28.71	PASS
11N40SISO	Ant1	2422	Reference	-8.48	-8.48	---	PASS
			30~1000	-8.48	-60.54	≤-28.48	PASS
			1000~26500	-8.48	-51.39	≤-28.48	PASS
		2437	Reference	-9.73	-9.73	---	PASS
			30~1000	-9.73	-61.15	≤-29.73	PASS
			1000~26500	-9.73	-51.08	≤-29.73	PASS
		2452	Reference	-8.96	-8.96	---	PASS
			30~1000	-8.96	-60.63	≤-28.96	PASS
			1000~26500	-8.96	-51.69	≤-28.96	PASS

Test Graphs

11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



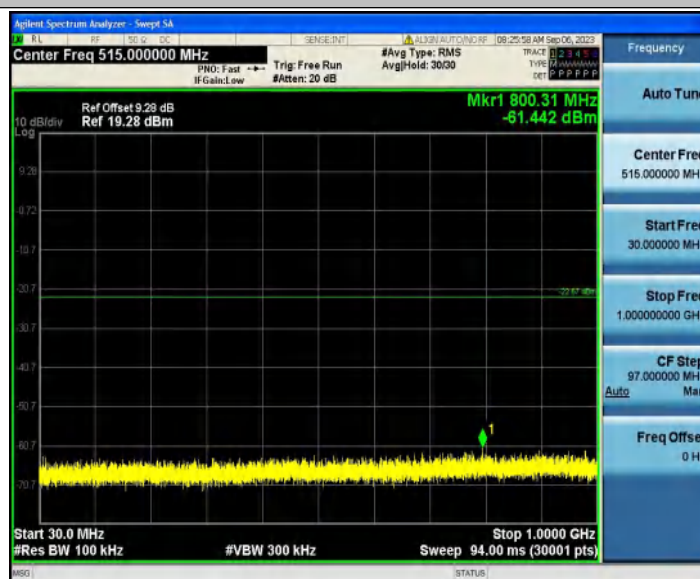
11B_Ant1_2412_1000~26500



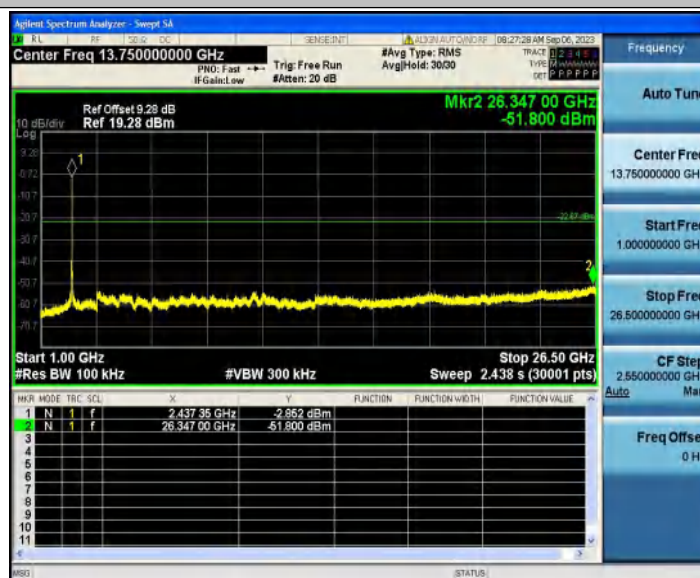
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



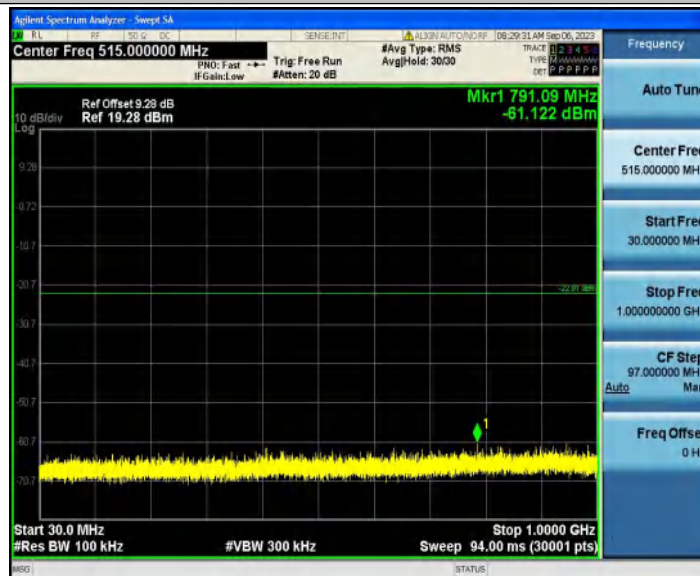
11B_Ant1_2437_1000~26500



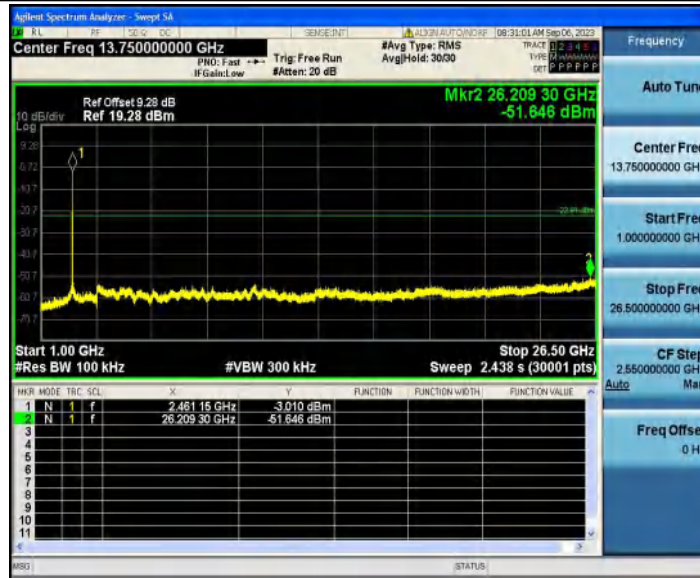
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



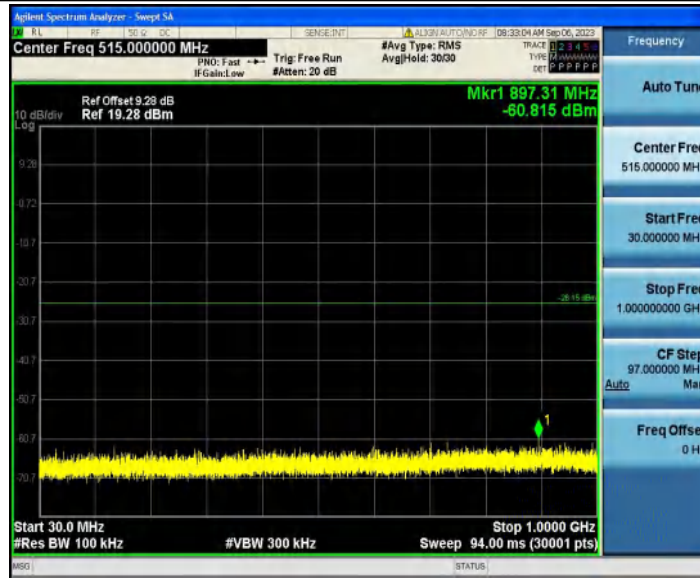
11B_Ant1_2462_1000~26500



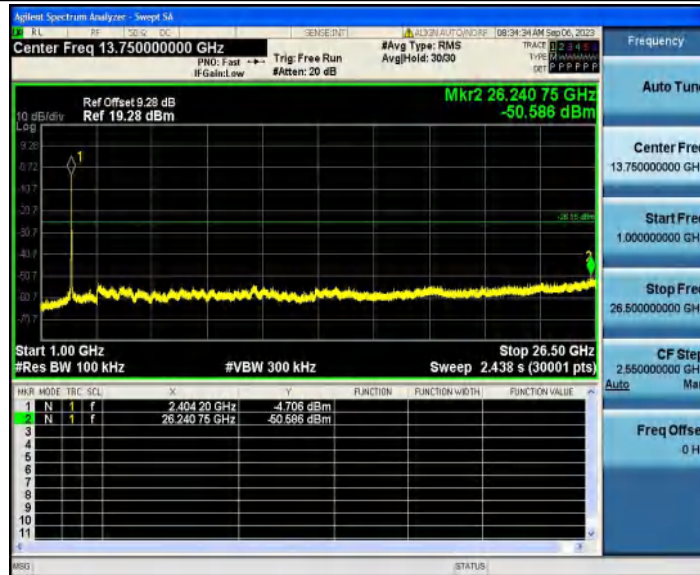
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



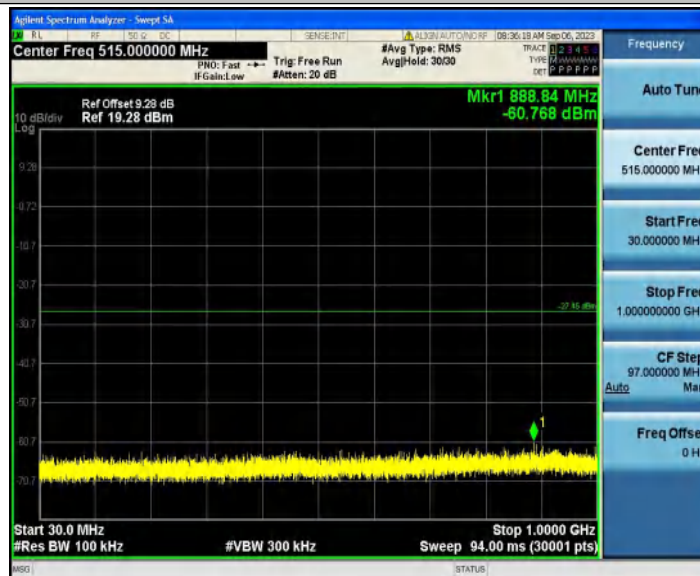
11G_Ant1_2412_1000~26500



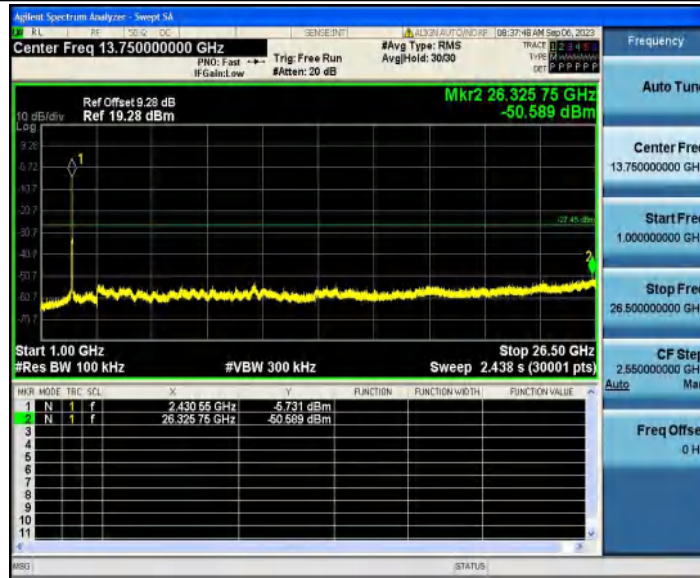
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500



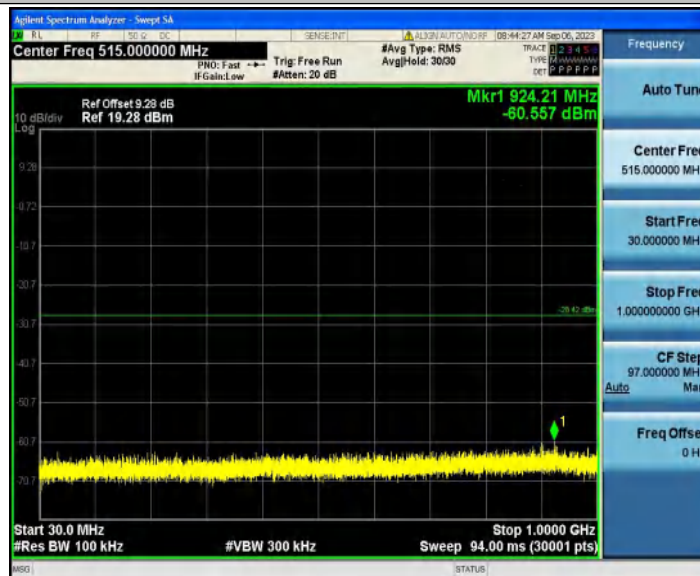
11G_Ant1_2462_0~Reference



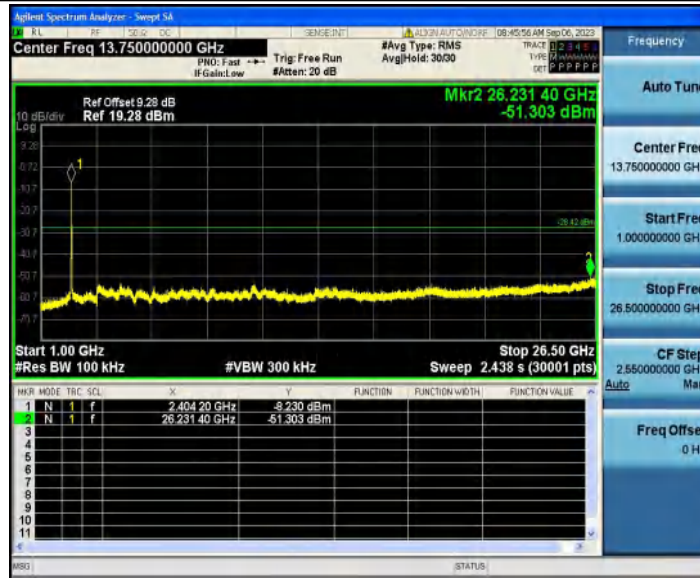
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



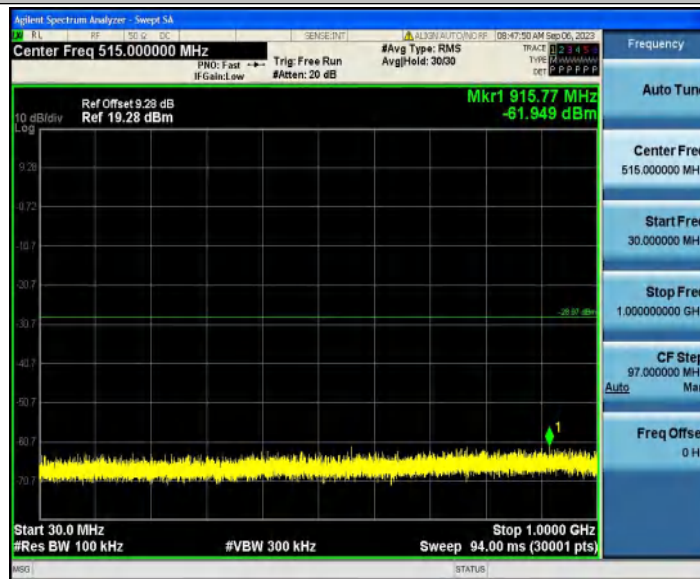
11N20SISO_Ant1_2412_1000~26500



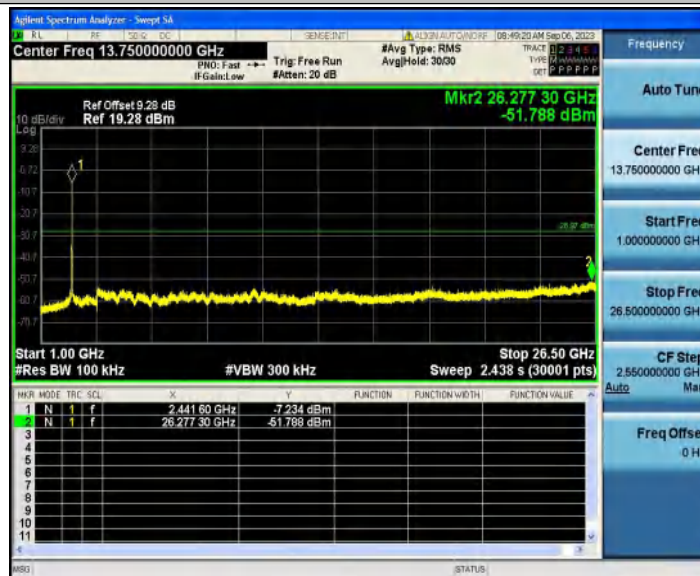
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



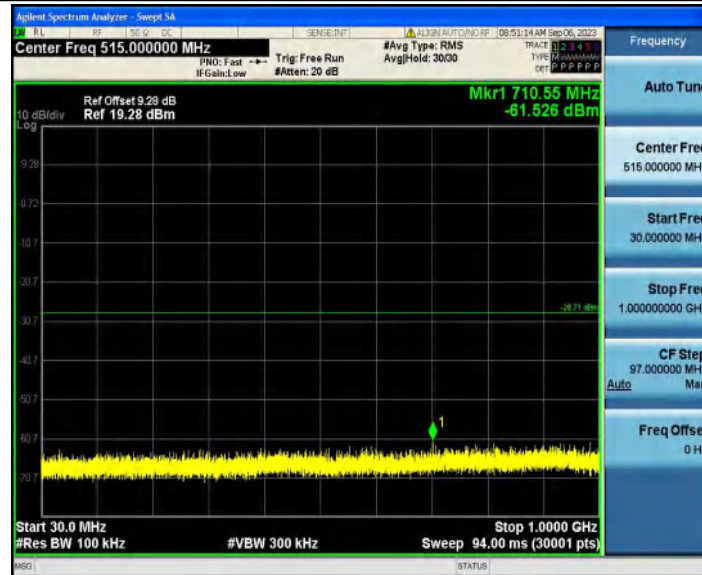
11N20SISO_Ant1_2437_1000~26500



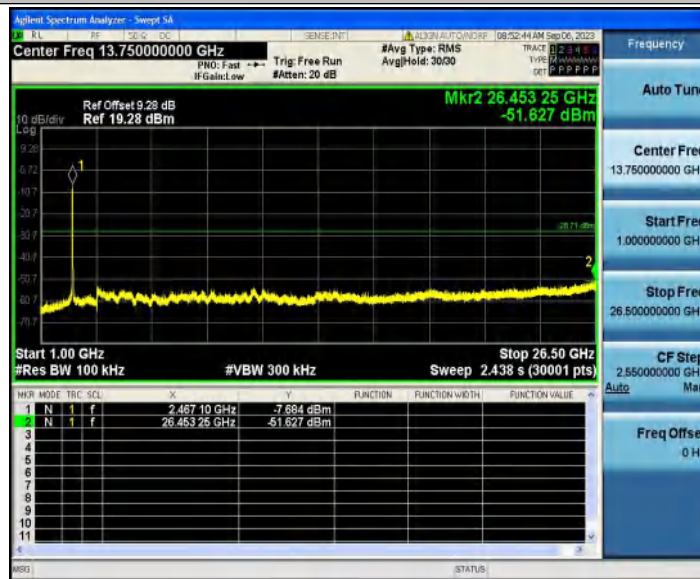
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



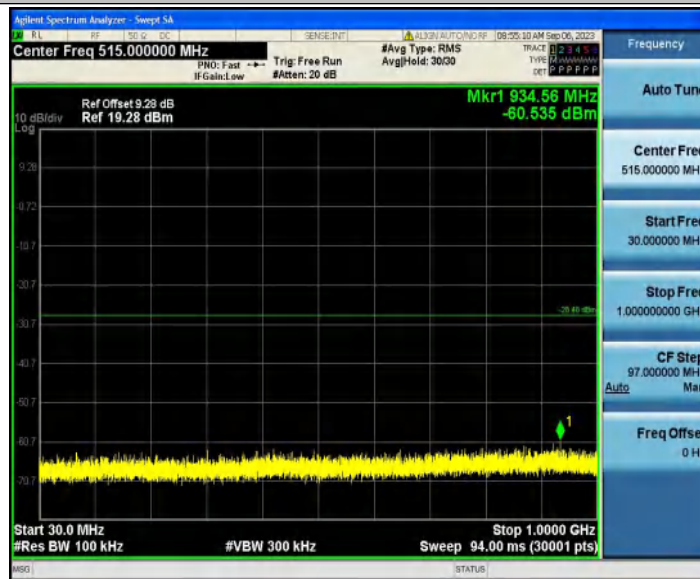
11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000



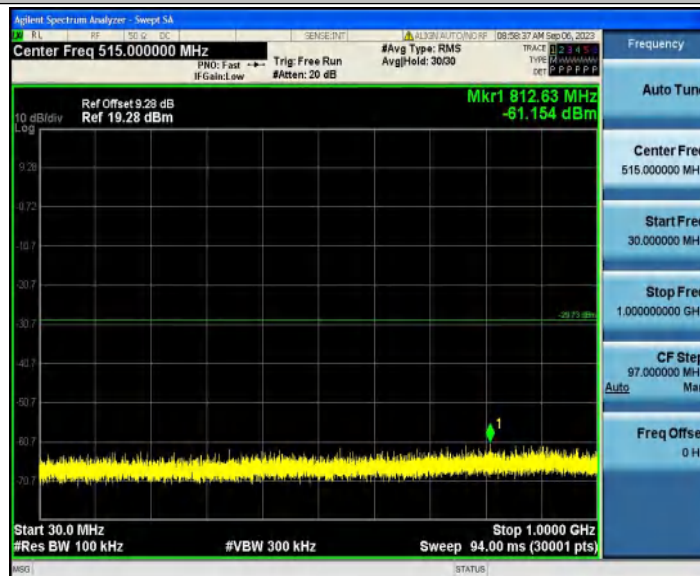
11N40SISO_Ant1_2422_1000~26500



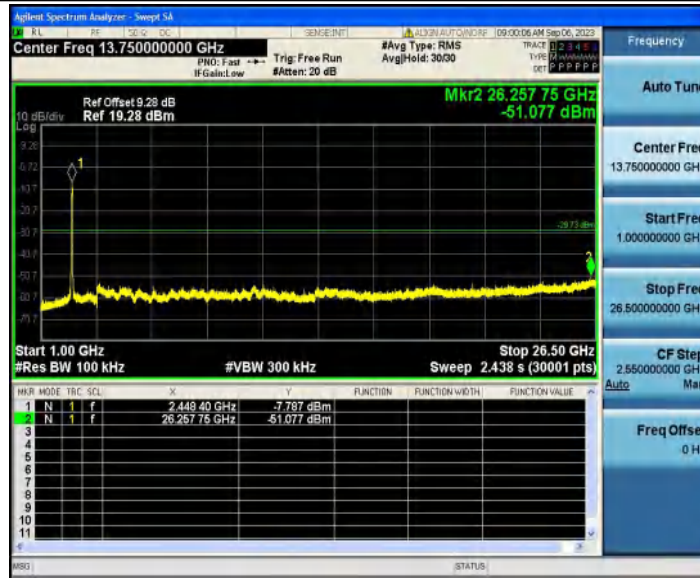
11N40SISO_Ant1_2437_0~Reference



11N40SISO_Ant1_2437_30~1000



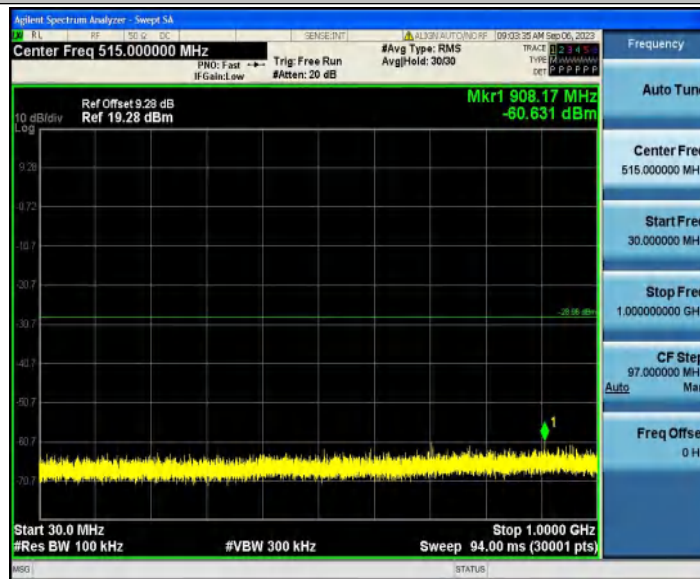
11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500

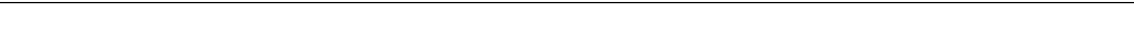
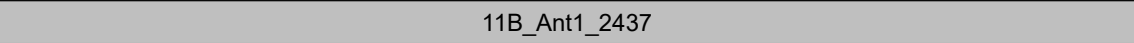


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	8.38	9.04	92.70	---	---
		2437	8.38	9.03	92.80	---	---
		2462	8.38	9.04	92.70	---	---
11G	Ant1	2412	1.39	2.05	67.80	---	---
		2437	1.40	2.05	68.29	---	---
		2462	1.40	2.05	68.29	---	---
11N20SISO	Ant1	2412	5.08	5.73	88.66	---	---
		2437	5.08	5.73	88.66	---	---
		2462	5.08	5.73	88.66	---	---
11N40SISO	Ant1	2422	2.47	3.12	79.17	---	---
		2437	2.46	3.12	78.85	---	---
		2452	2.47	3.12	79.17	---	---

11B_Ant1_2412



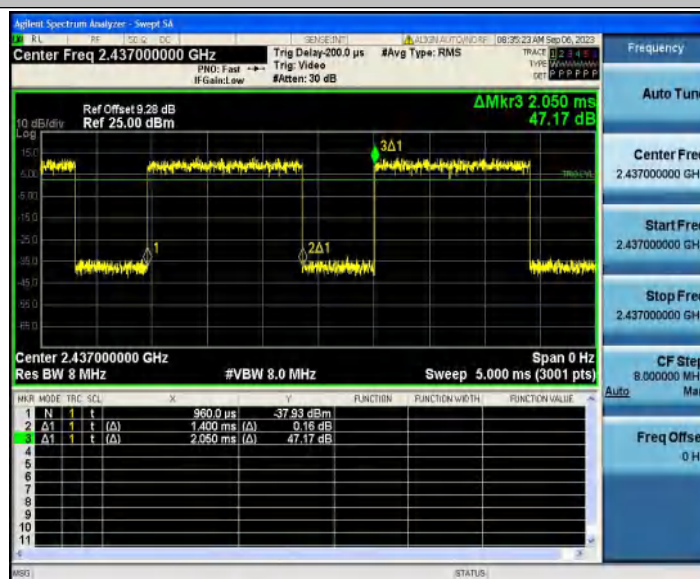
11B_Ant1_2462



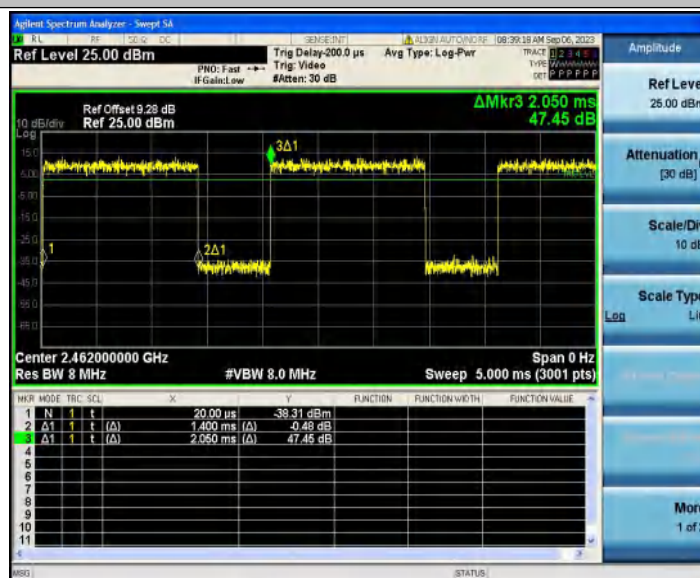
11G_Ant1_2412



11G_Ant1_2437



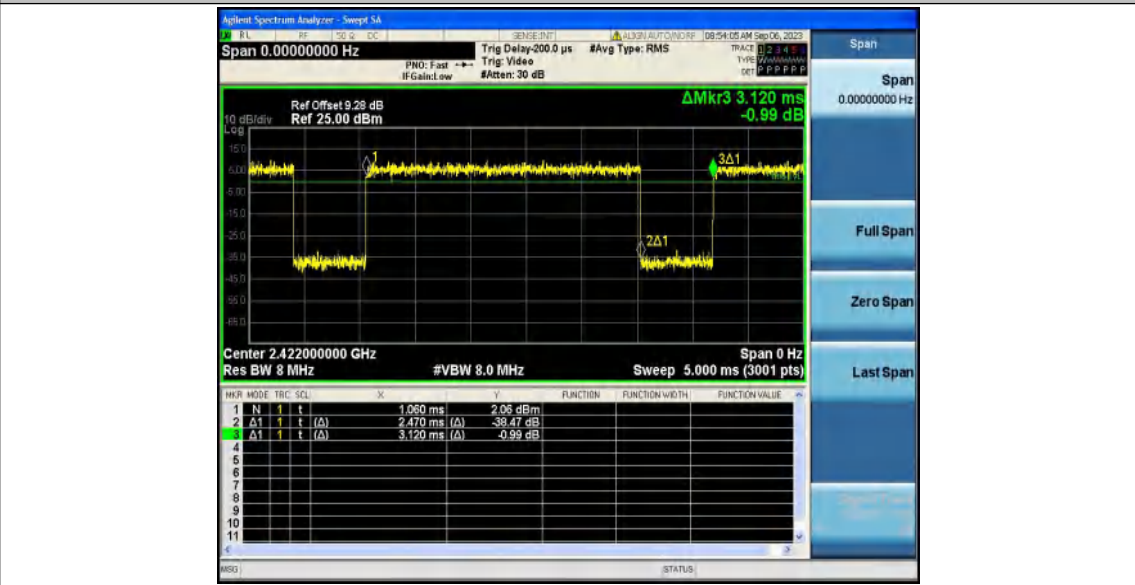
11G_Ant1_2462



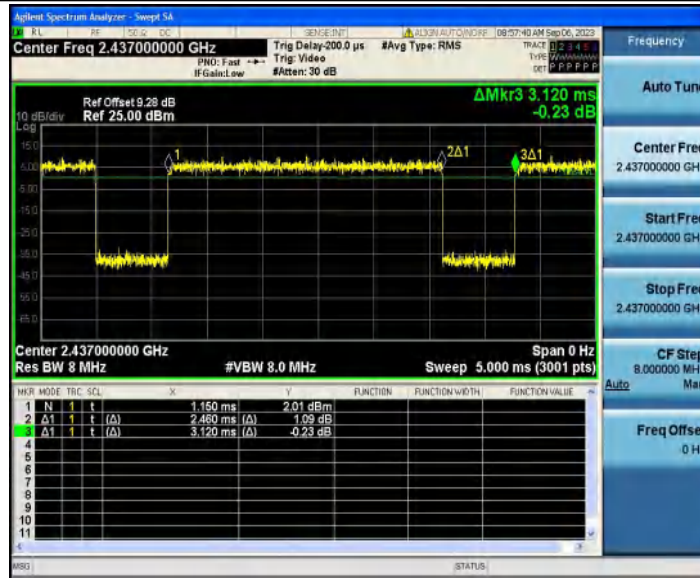
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

