

Case No. : <u>GTS20221215003-1-5</u>
Ambient Condition: <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.6.1</u> Test Engineer: <u>Jenny zeng</u>

Appendix C.1: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.080	2407.960	2416.040	0.5	PASS
		2437	8.520	2432.520	2441.040	0.5	PASS
		2462	9.000	2457.520	2466.520	0.5	PASS
11G	Ant1	2412	15.720	2404.400	2420.120	0.5	PASS
		2437	15.880	2428.880	2444.760	0.5	PASS
		2462	14.760	2454.760	2469.520	0.5	PASS
11N20SISO	Ant1	2412	17.240	2403.480	2420.720	0.5	PASS
		2437	15.360	2428.880	2444.240	0.5	PASS
		2462	14.400	2455.120	2469.520	0.5	PASS
11N40SISO	Ant1	2422	35.680	2404.480	2440.160	0.5	PASS
		2437	35.280	2419.480	2454.760	0.5	PASS
		2452	36.080	2434.080	2470.160	0.5	PASS

Test Graphs



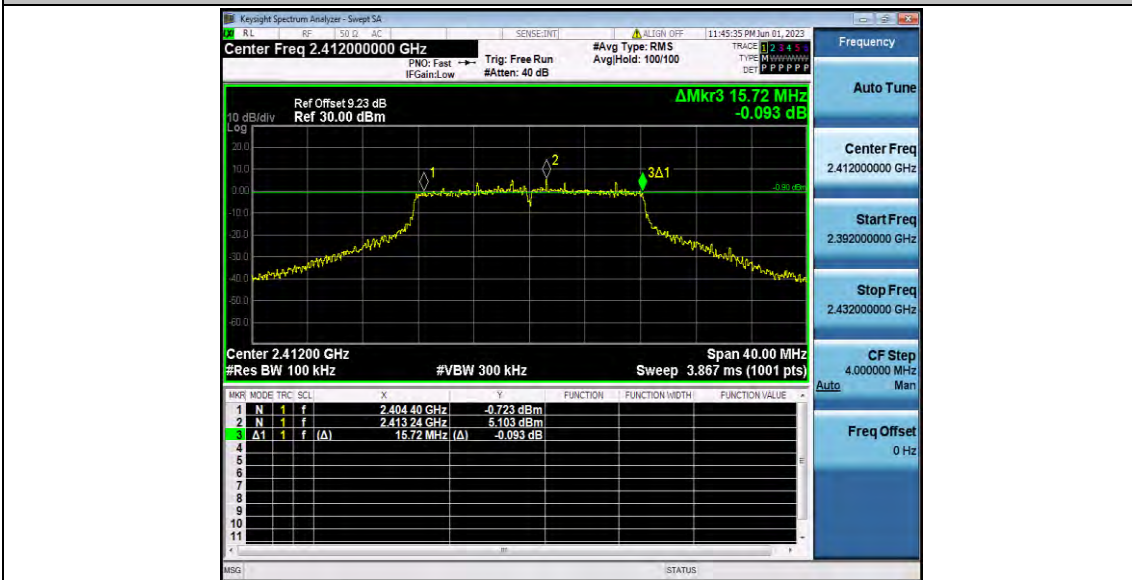
11B_Ant1_2412



11B_Ant1_2437



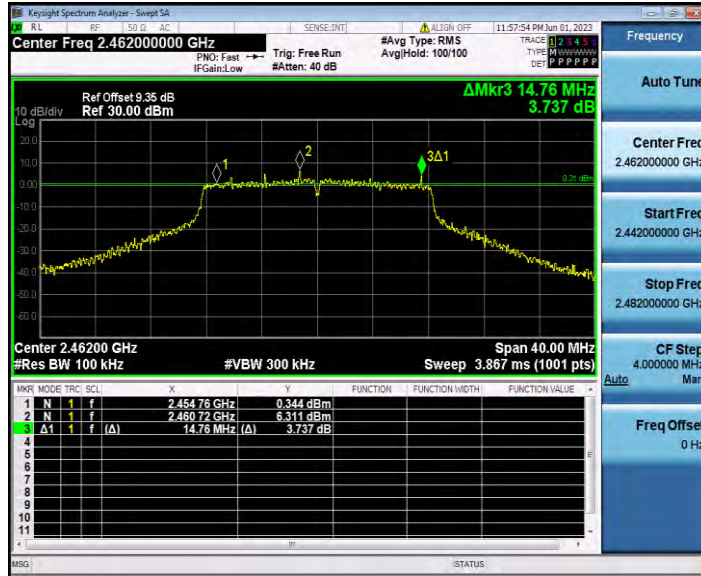
11B_Ant1_2462



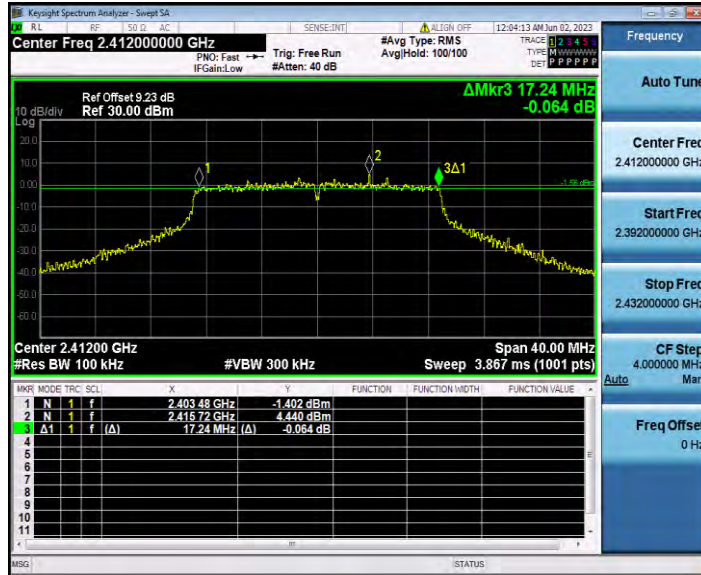
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



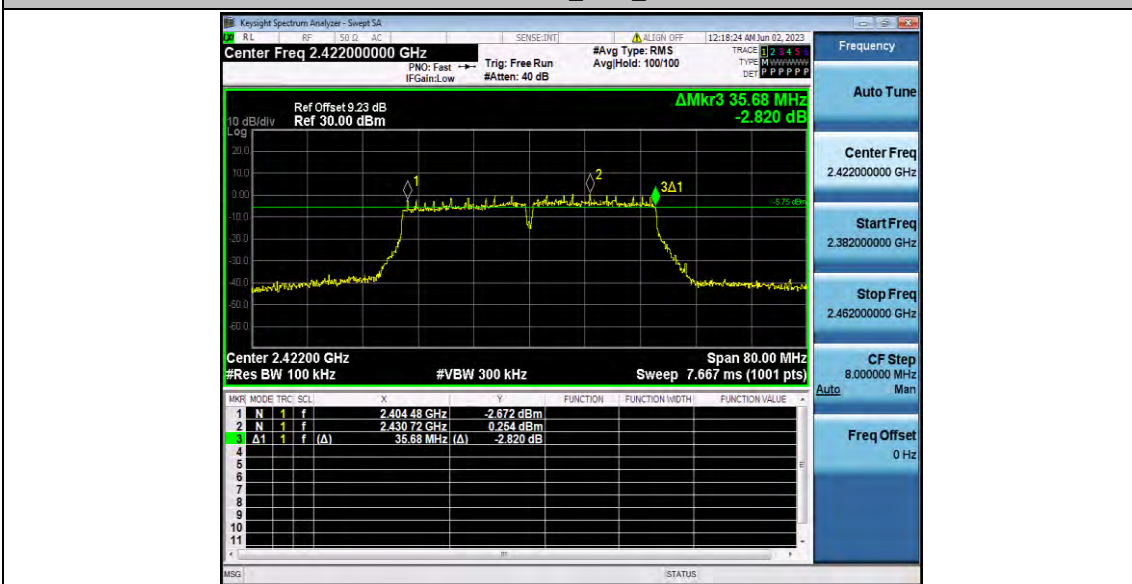
11N20SISO_Ant1_2412



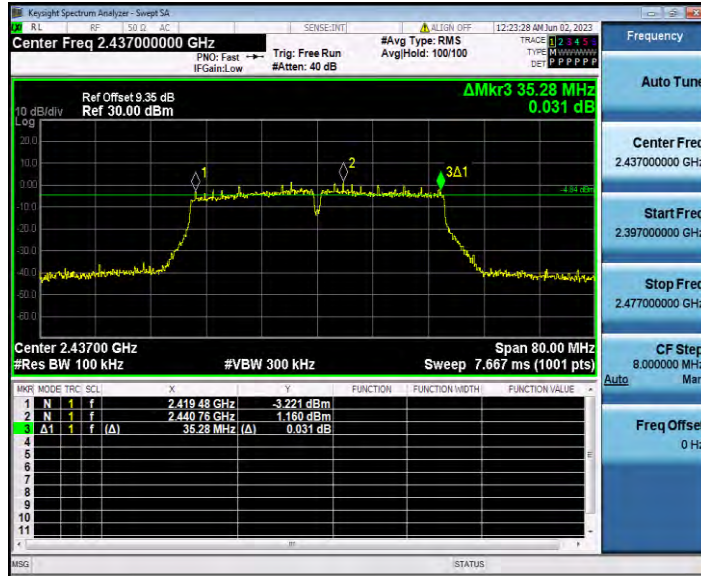
11N20SISO_Ant1_2437



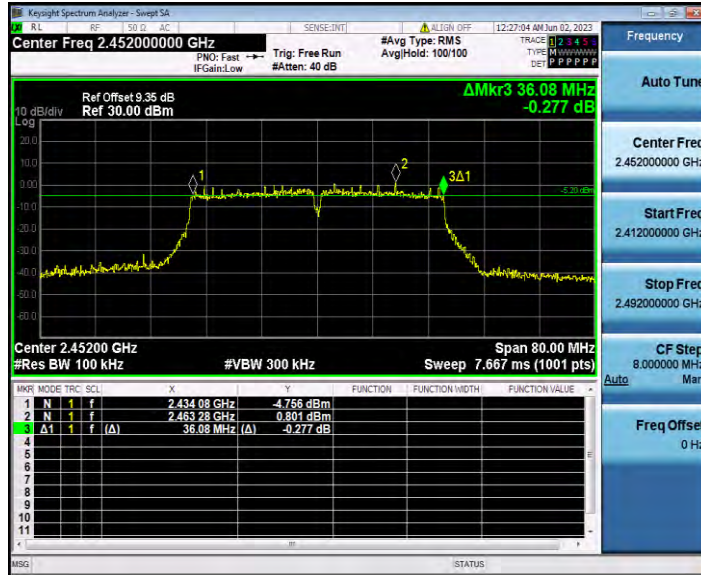
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

Appendix C.2: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.823	2405.180	2419.003	---	---
		2437	13.682	2430.227	2443.909	---	---
		2462	13.613	2455.207	2468.820	---	---
11G	Ant1	2412	17.074	2403.463	2420.537	---	---
		2437	16.838	2428.619	2445.457	---	---
		2462	16.920	2453.531	2470.451	---	---
11N20SISO	Ant1	2412	18.158	2402.985	2421.143	---	---
		2437	18.065	2428.010	2446.075	---	---
		2462	18.034	2452.973	2471.007	---	---
11N40SISO	Ant1	2422	36.316	2403.982	2440.298	---	---
		2437	36.244	2419.045	2455.289	---	---
		2452	36.328	2433.833	2470.161	---	---

Test Graphs



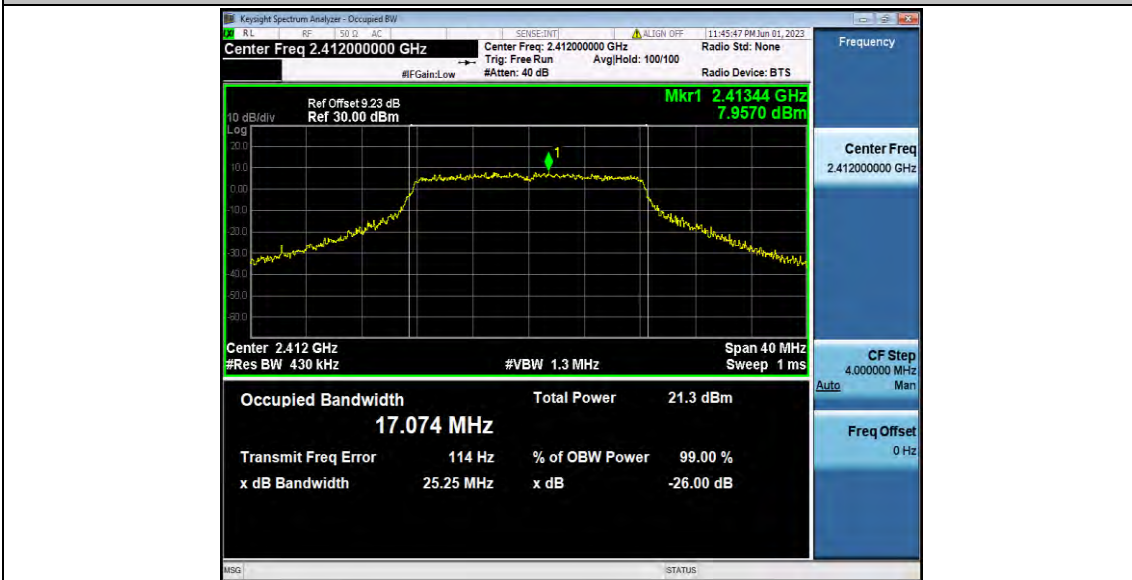
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



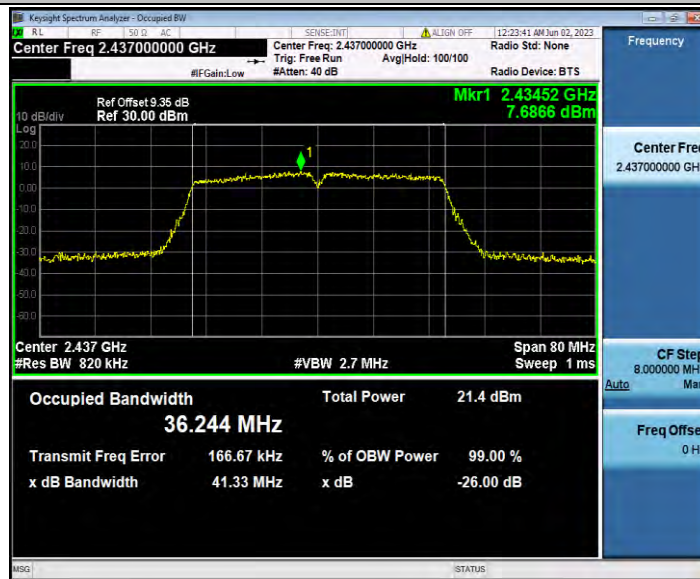
11N20SISO_Ant1_2437



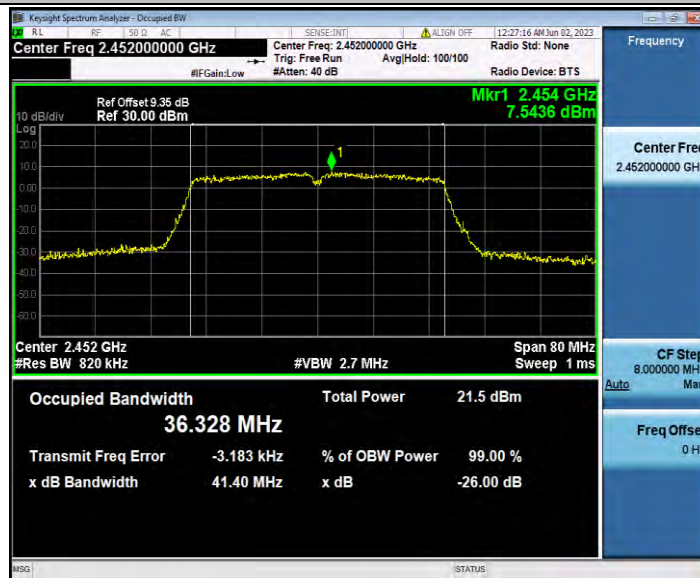
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

Appendix C.3: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	18.67	≤30.00	PASS
		2437	19.13	≤30.00	PASS
		2462	19.32	≤30.00	PASS
11G	Ant1	2412	22.33	≤30.00	PASS
		2437	22.93	≤30.00	PASS
		2462	23.26	≤30.00	PASS
11N20SISO	Ant1	2412	22.21	≤30.00	PASS
		2437	22.79	≤30.00	PASS
		2462	23.04	≤30.00	PASS
11N40SISO	Ant1	2422	21.32	≤30.00	PASS
		2437	21.77	≤30.00	PASS
		2452	21.66	≤30.00	PASS

Appendix C.4: Maximum power spectral density

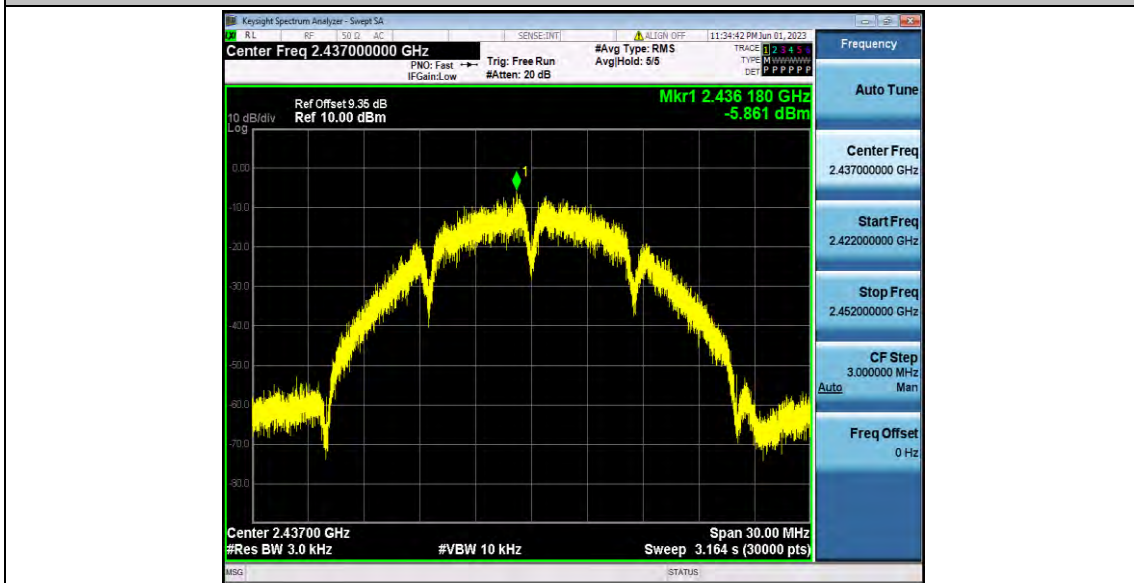
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-5.43	≤8.00	PASS
		2437	-5.86	≤8.00	PASS
		2462	-4.48	≤8.00	PASS
11G	Ant1	2412	-9.98	≤8.00	PASS
		2437	-7.52	≤8.00	PASS
		2462	-9.15	≤8.00	PASS
11N20SISO	Ant1	2412	-9.96	≤8.00	PASS
		2437	-9.7	≤8.00	PASS
		2462	-9.01	≤8.00	PASS
11N40SISO	Ant1	2422	-13.62	≤8.00	PASS
		2437	-13.45	≤8.00	PASS
		2452	-13.26	≤8.00	PASS

Test Graphs



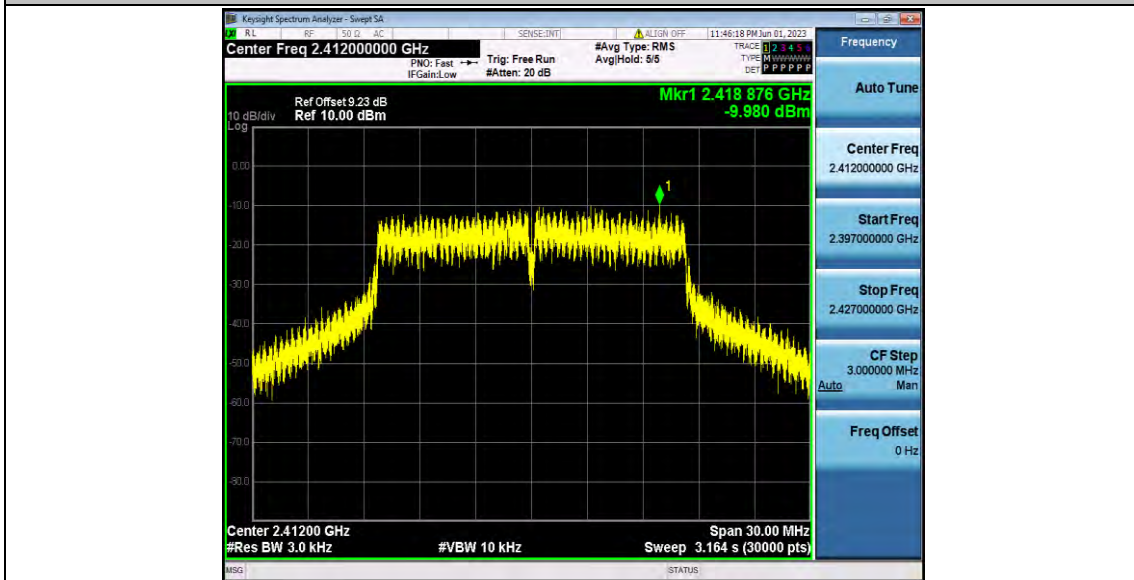
11B_Ant1_2412



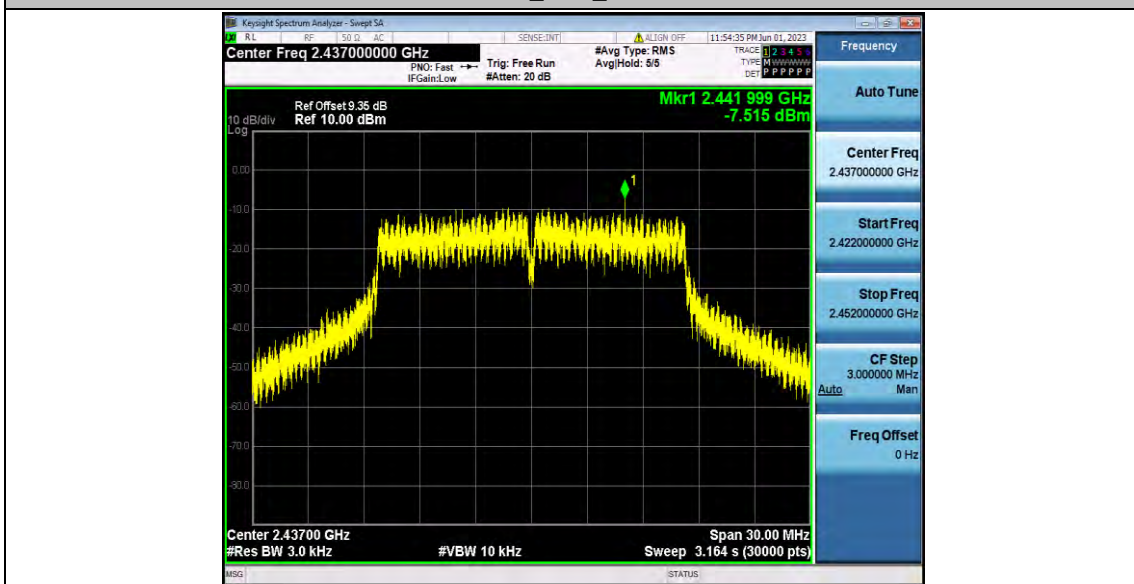
11B_Ant1_2437



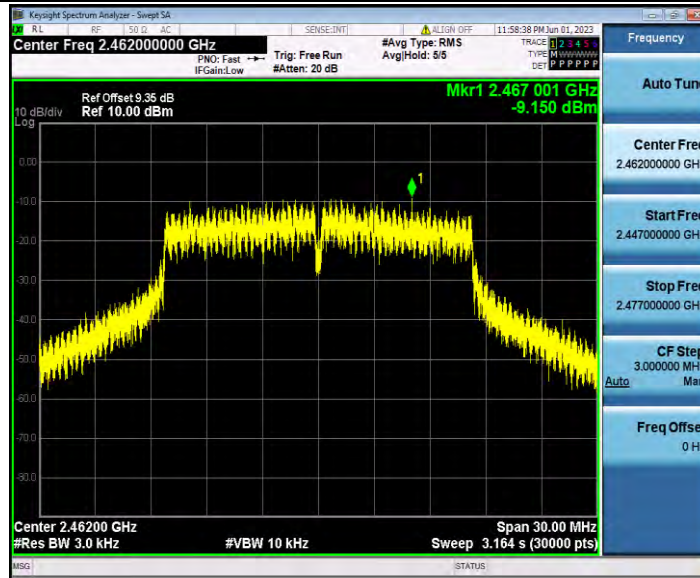
11B_Ant1_2462



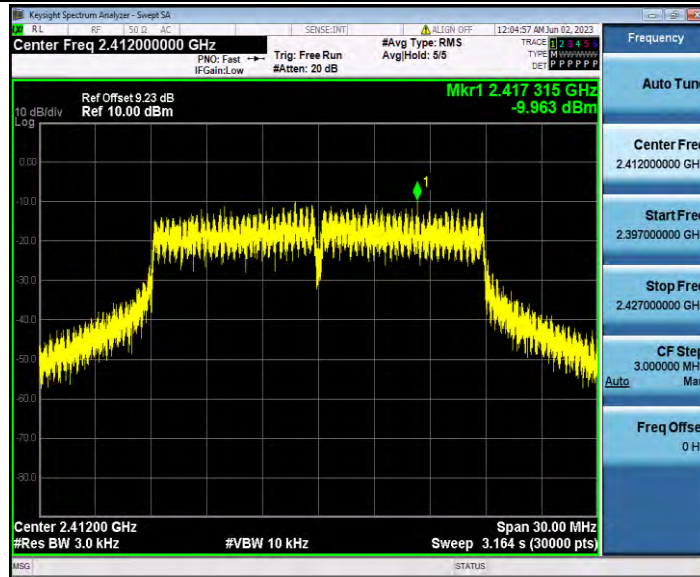
11G_Ant1_2412



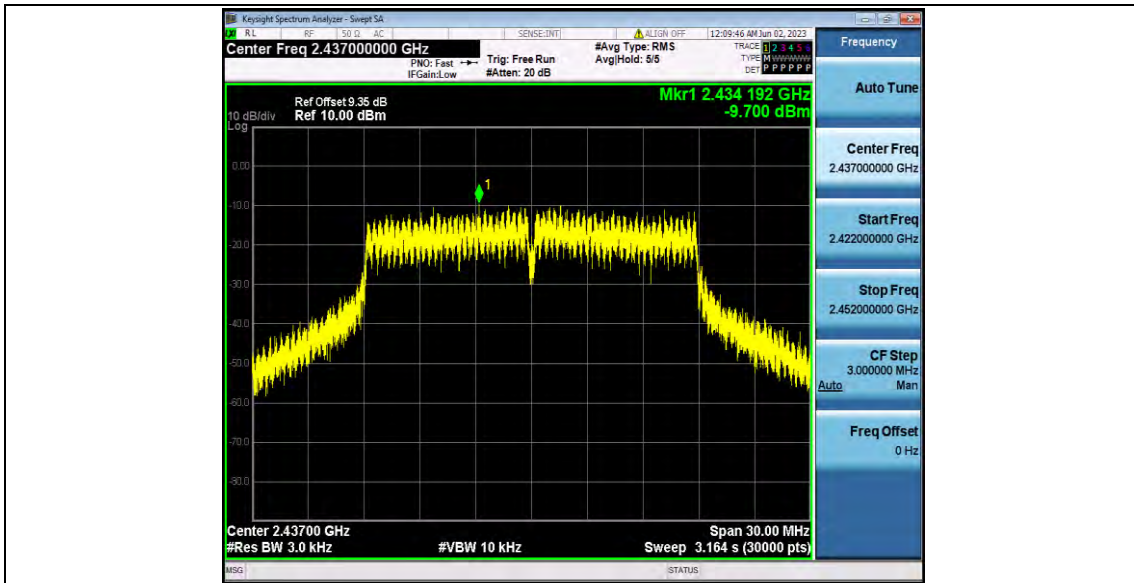
11G_Ant1_2437



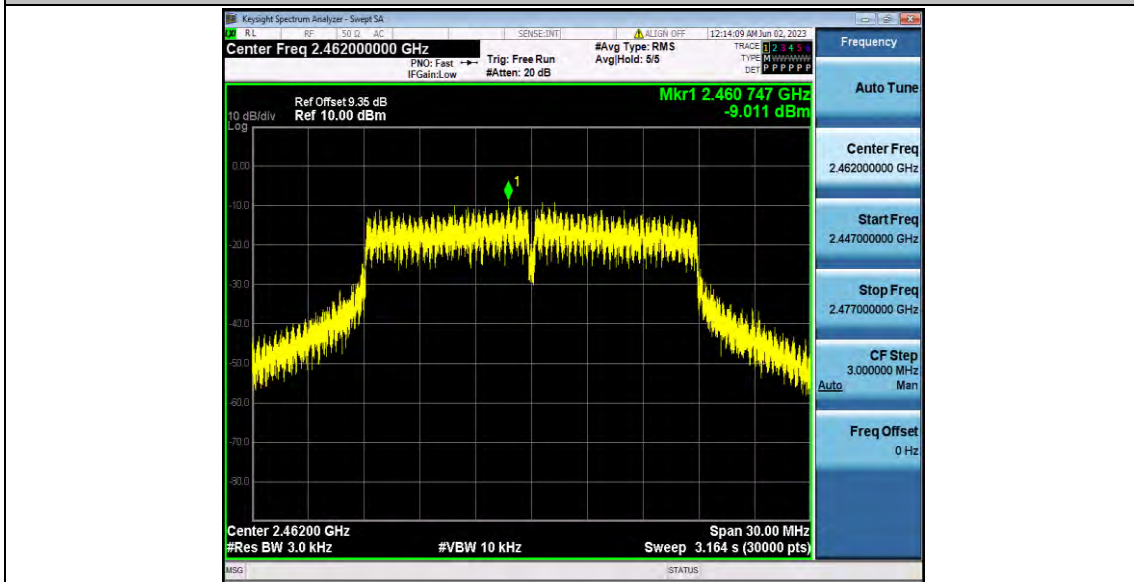
11G_Ant1_2462



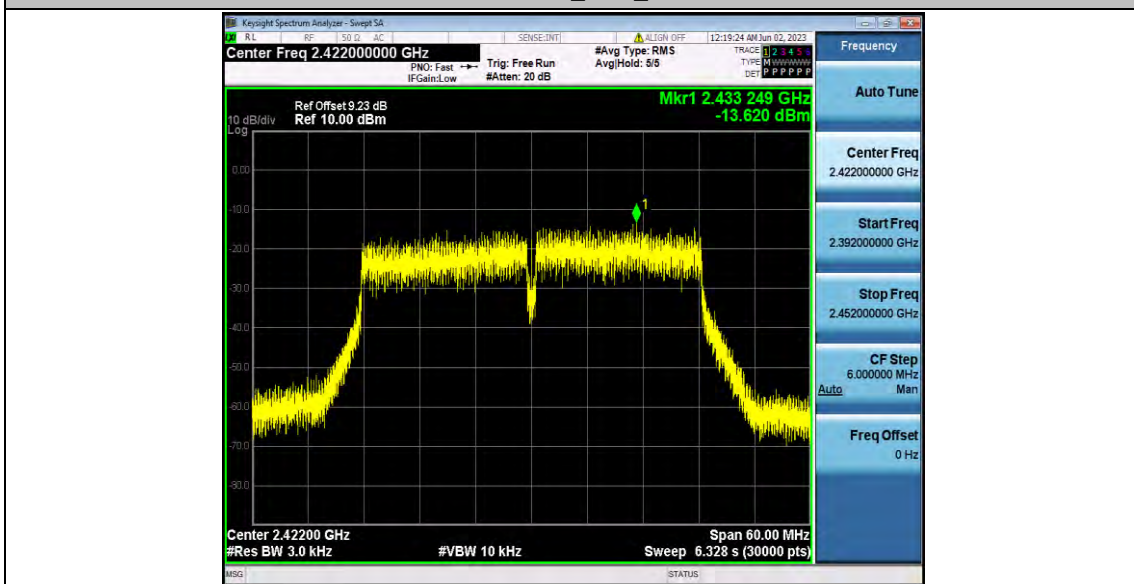
11N20SISO_Ant1_2412



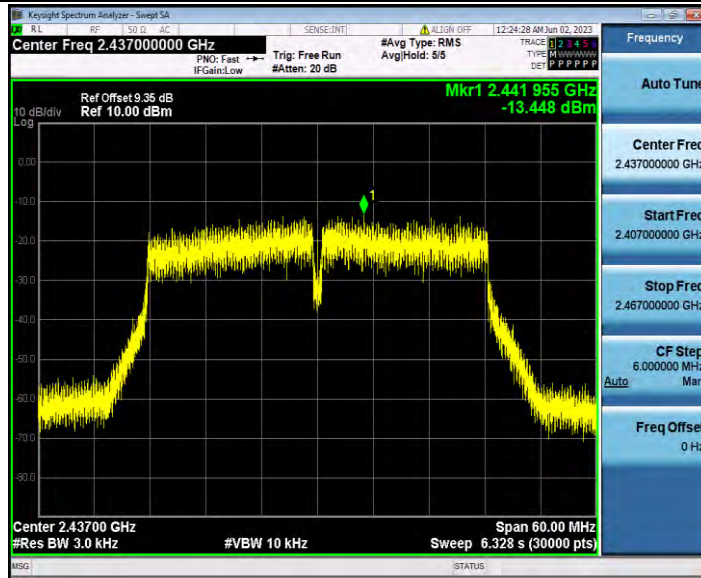
11N20SISO_Ant1_2437



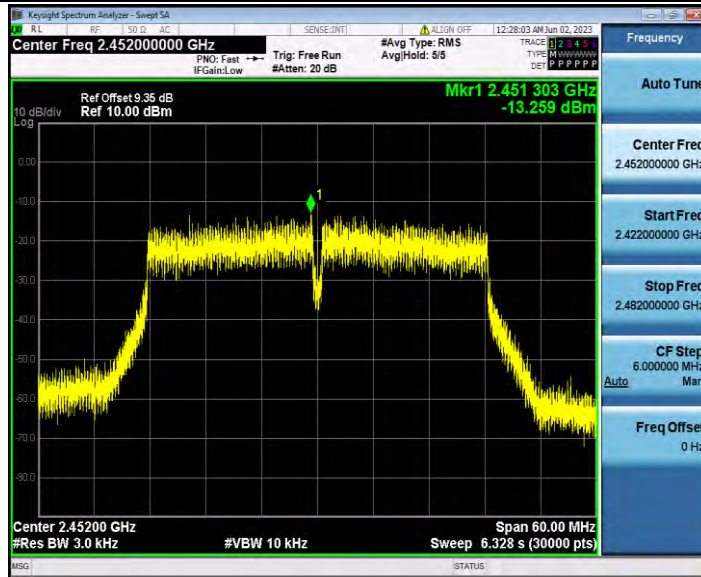
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



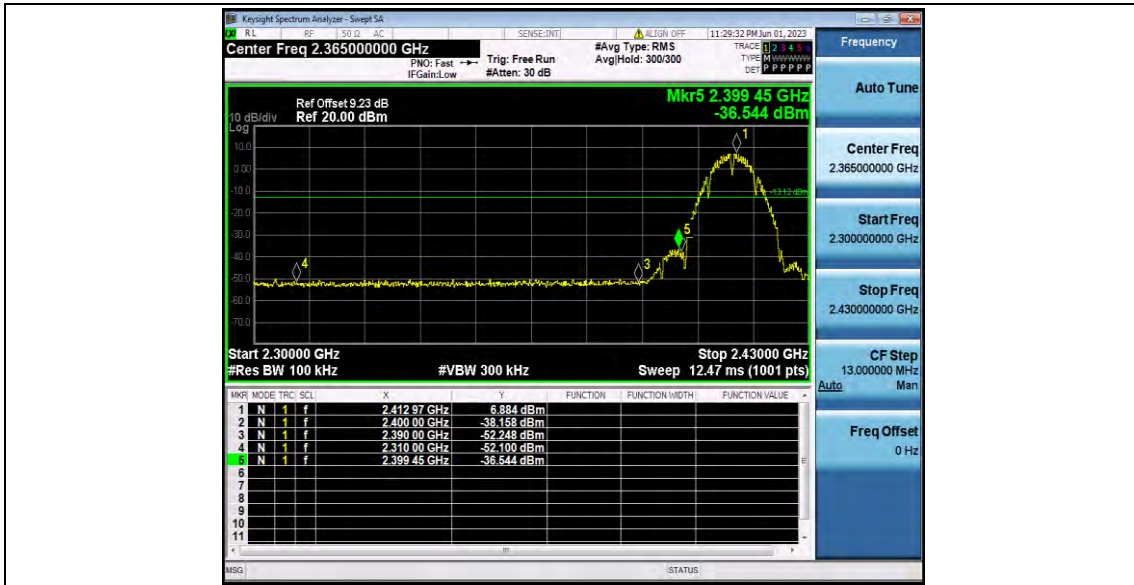
11N40SISO_Ant1_2452

Appendix C.5: Band edge measurements

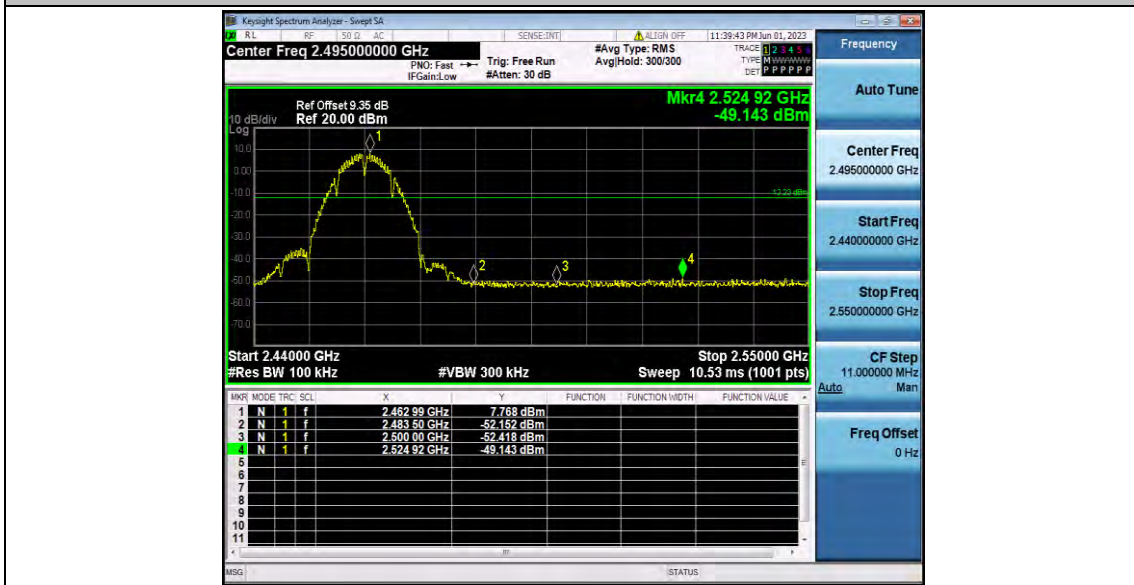
Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.88	-36.54	≤ -13.12	PASS
		High	2462	7.77	-49.14	≤ -12.23	PASS
11G	Ant1	Low	2412	5.77	-23.06	≤ -14.23	PASS
		High	2462	6.94	-43.77	≤ -13.06	PASS
11N20SISO	Ant1	Low	2412	5.43	-22.72	≤ -14.57	PASS
		High	2462	6.76	-44.38	≤ -13.25	PASS
11N40SISO	Ant1	Low	2422	1.21	-34.77	≤ -18.79	PASS
		High	2452	1.21	-42.89	≤ -18.8	PASS

Test Graphs



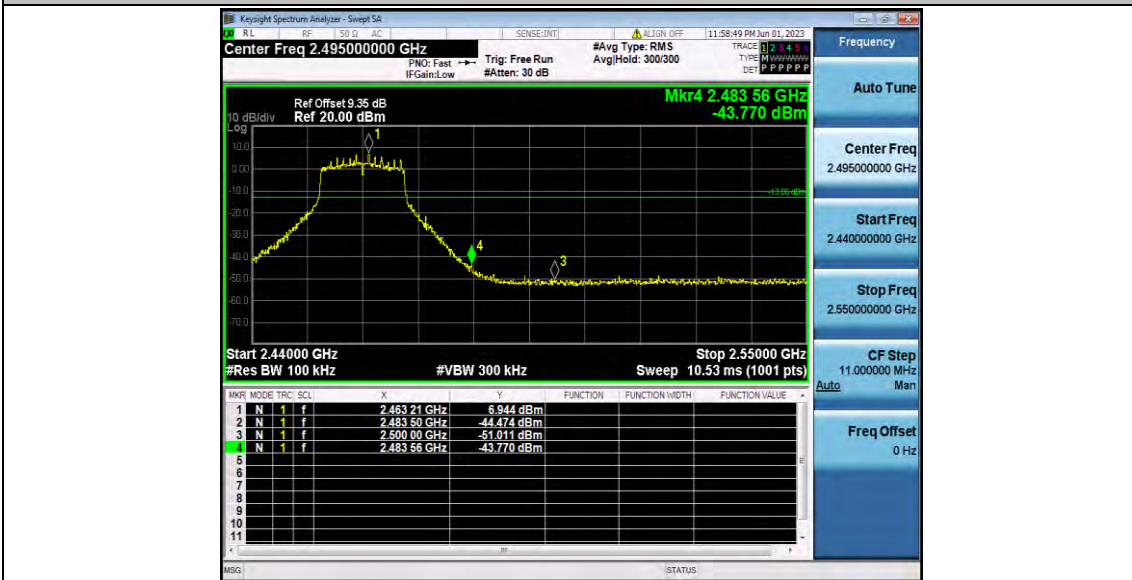
11B_Ant1_Low_2412



11B_Ant1_High_2462



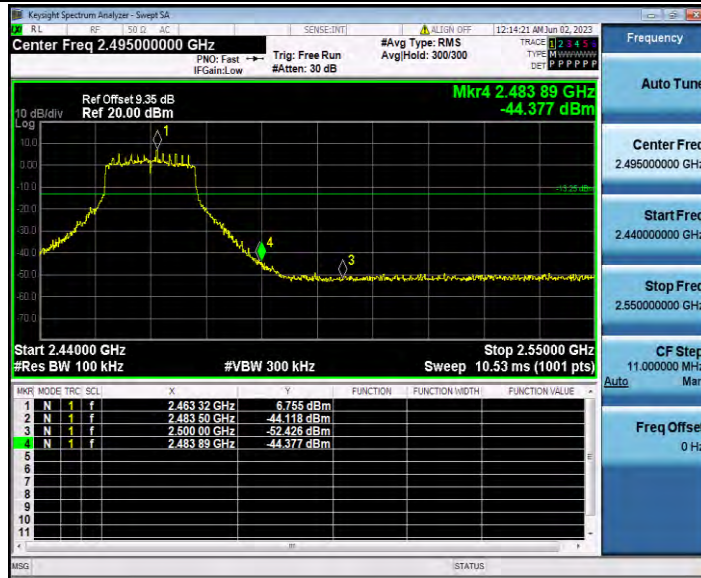
11G_Ant1_Low_2412



11G_Ant1_High_2462



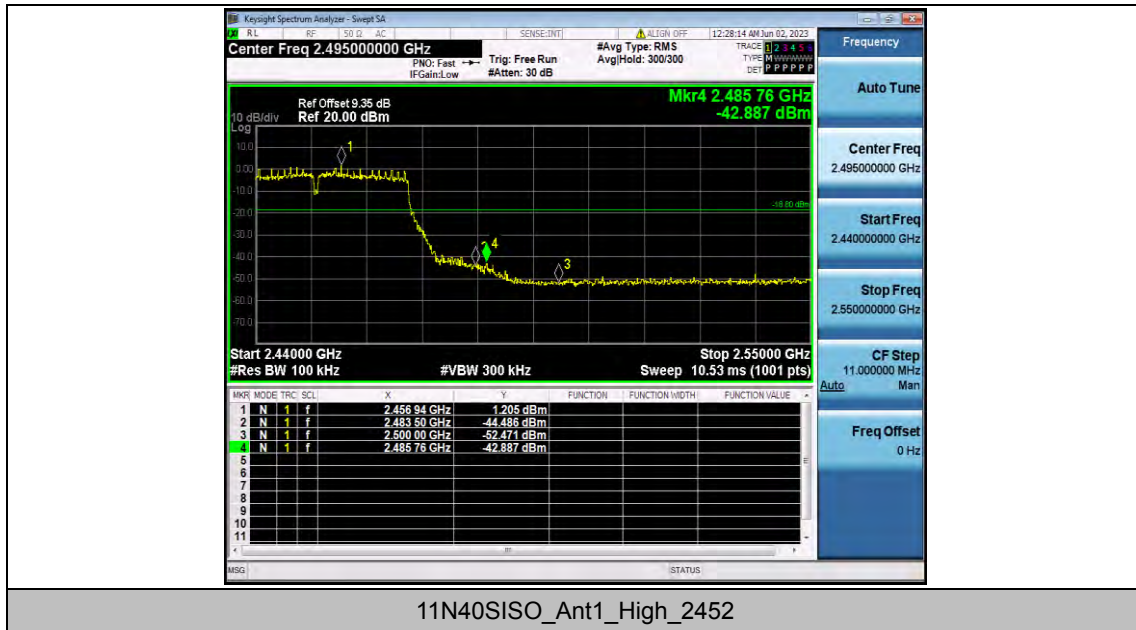
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

Appendix C.6: Conducted Spurious Emission

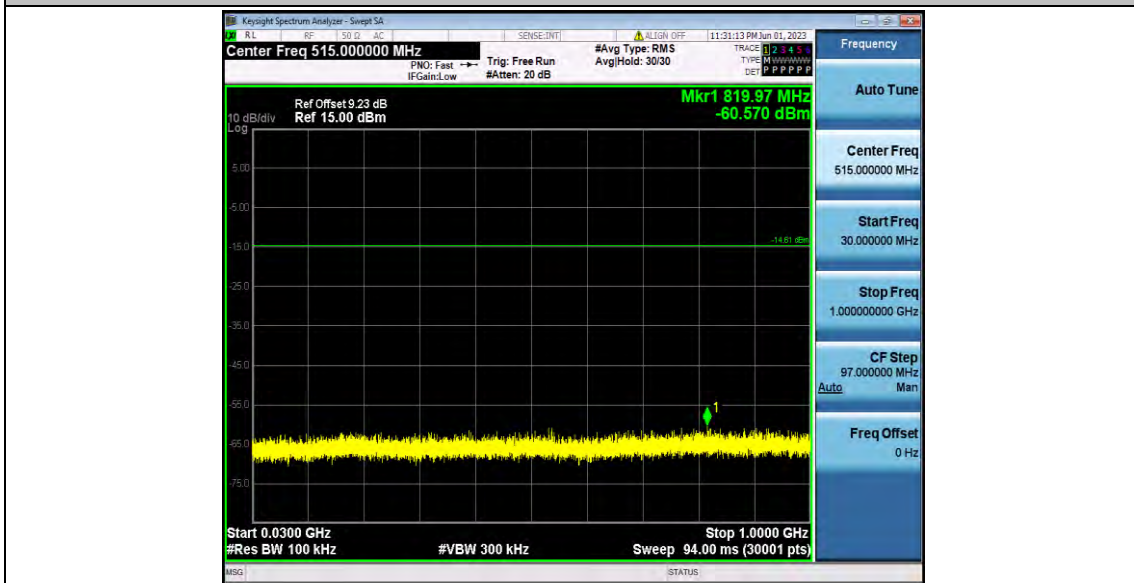
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	5.39	5.39	---	PASS
			30~1000	5.39	-60.57	≤-14.61	PASS
			1000~26500	5.39	-47.43	≤-14.61	PASS
		2437	Reference	5.92	5.92	---	PASS
			30~1000	5.92	-60.65	≤-14.08	PASS
			1000~26500	5.92	-47.8	≤-14.08	PASS
		2462	Reference	6.35	6.35	---	PASS
			30~1000	6.35	-59.99	≤-13.65	PASS
			1000~26500	6.35	-47.01	≤-13.65	PASS
11G	Ant1	2412	Reference	3.84	3.84	---	PASS
			30~1000	3.84	-60.08	≤-16.16	PASS
			1000~26500	3.84	-47.33	≤-16.16	PASS
		2437	Reference	4.91	4.91	---	PASS
			30~1000	4.91	-60.41	≤-15.09	PASS
			1000~26500	4.91	-47.8	≤-15.09	PASS
		2462	Reference	3.70	3.70	---	PASS
			30~1000	3.70	-60.26	≤-16.3	PASS
			1000~26500	3.70	-47.49	≤-16.3	PASS
11N20SISO	Ant1	2412	Reference	2.72	2.72	---	PASS
			30~1000	2.72	-60.19	≤-17.28	PASS
			1000~26500	2.72	-47.45	≤-17.28	PASS
		2437	Reference	4.44	4.44	---	PASS
			30~1000	4.44	-59.71	≤-15.56	PASS
			1000~26500	4.44	-47.32	≤-15.56	PASS
		2462	Reference	2.53	2.53	---	PASS
			30~1000	2.53	-60.89	≤-17.47	PASS
			1000~26500	2.53	-46.71	≤-17.47	PASS
11N40SISO	Ant1	2422	Reference	-0.33	-0.33	---	PASS
			30~1000	-0.33	-59.95	≤-20.33	PASS
			1000~26500	-0.33	-47.59	≤-20.33	PASS
		2437	Reference	0.59	0.59	---	PASS
			30~1000	0.59	-59.49	≤-19.41	PASS
			1000~26500	0.59	-46.43	≤-19.41	PASS
		2452	Reference	0.05	0.05	---	PASS
			30~1000	0.05	-60.33	≤-19.95	PASS
			1000~26500	0.05	-47.47	≤-19.95	PASS

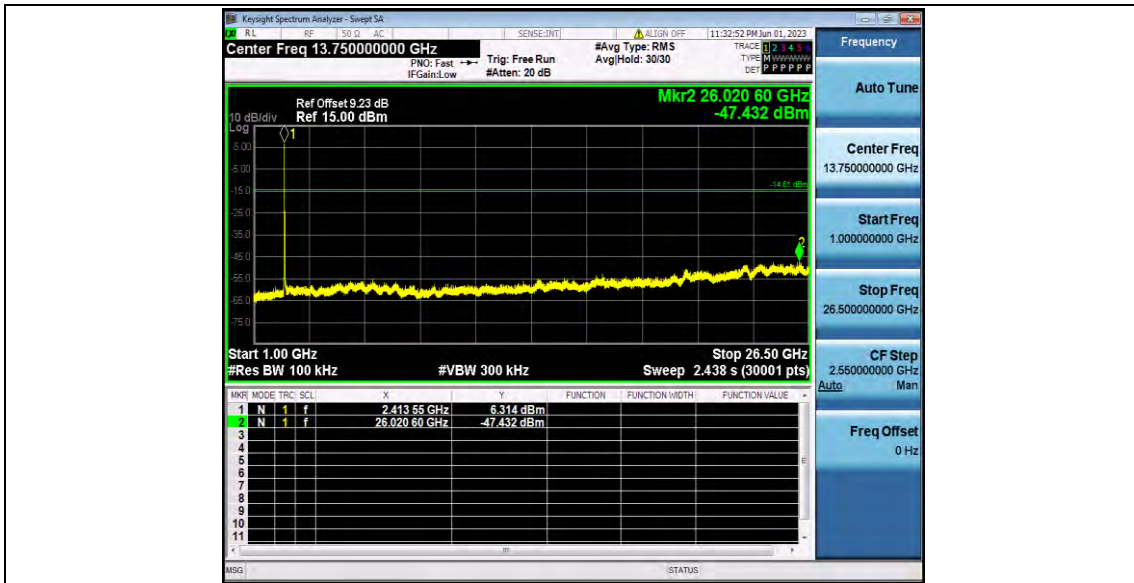
Test Graphs



11B_Ant1_2412_0~Reference



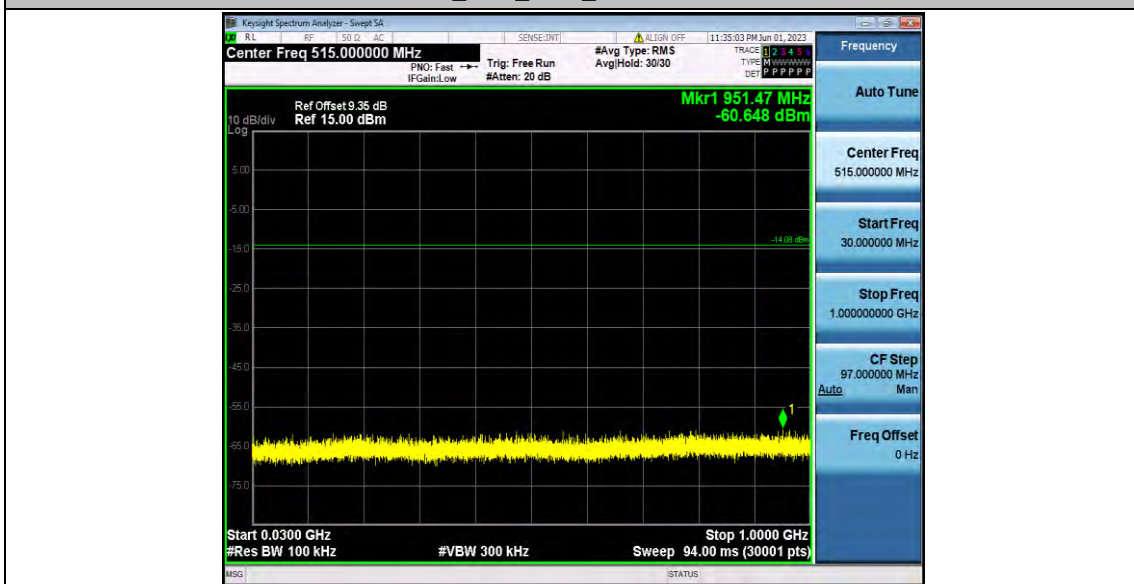
11B_Ant1_2412_30~1000



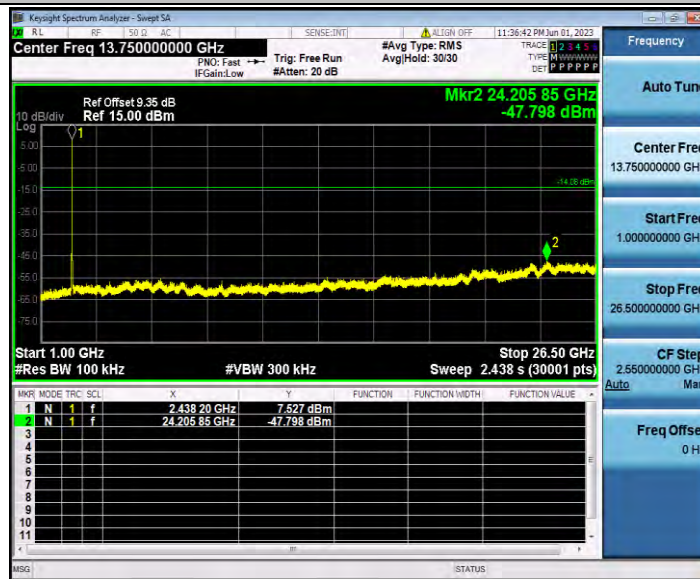
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference



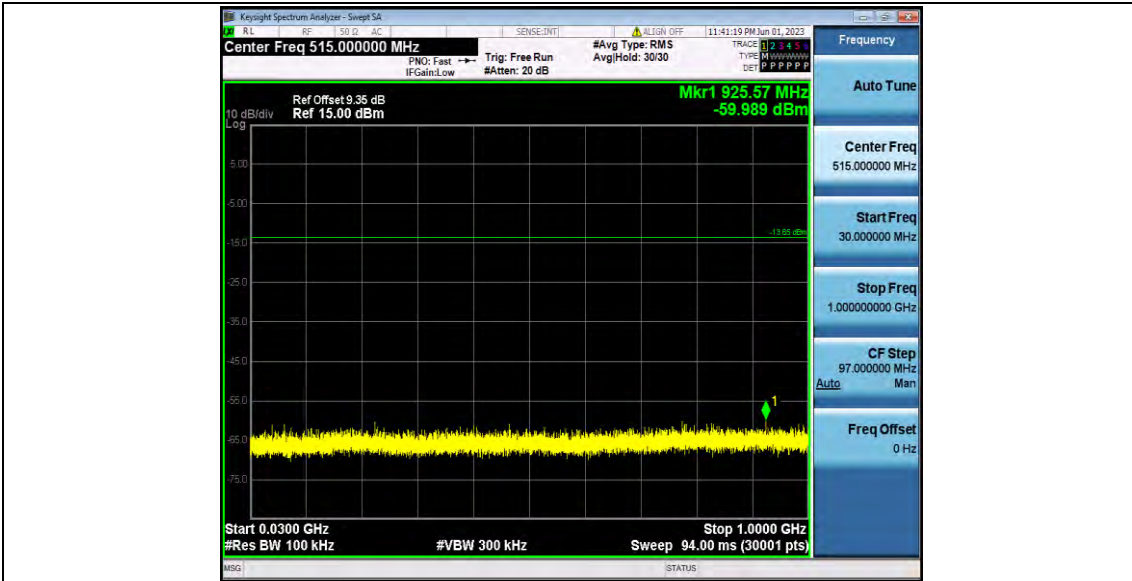
11B_Ant1_2437_30~1000



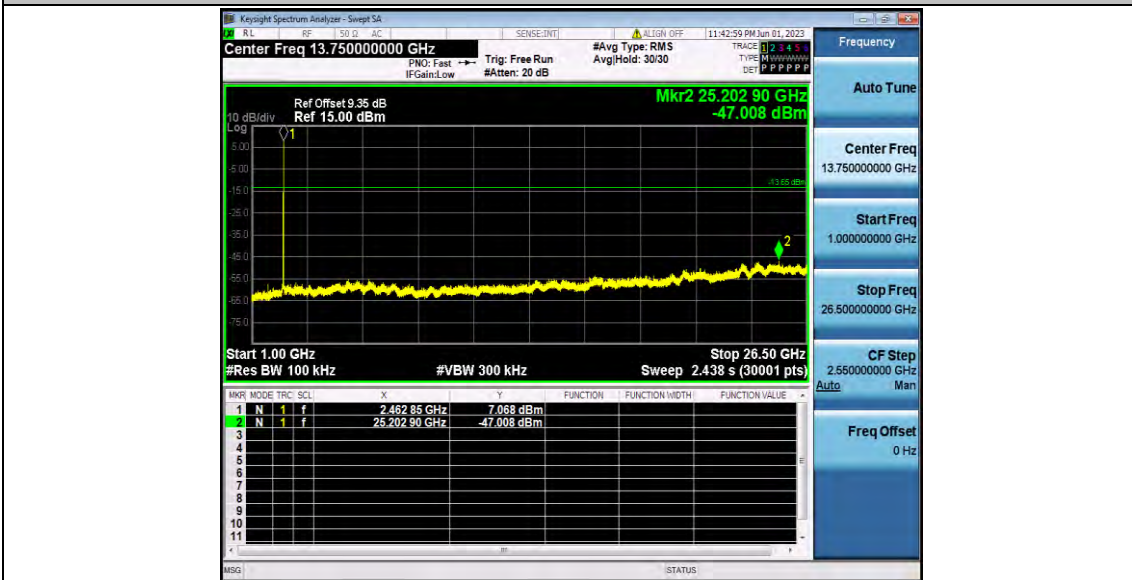
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



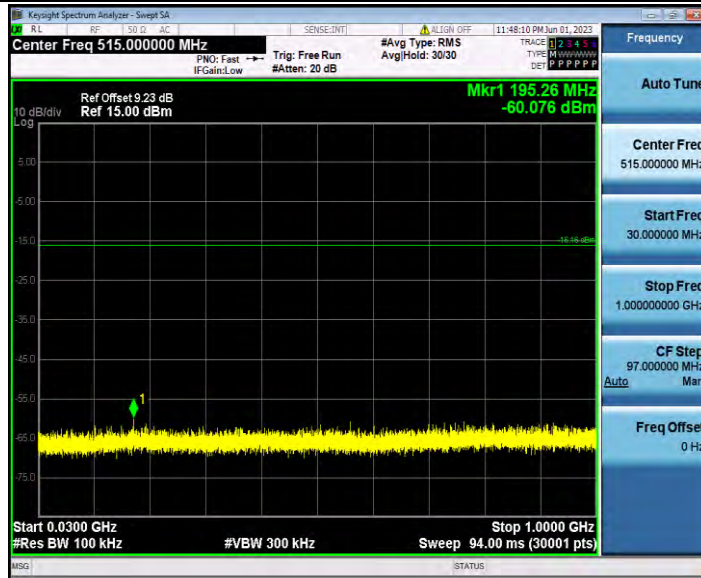
11B_Ant1_2462_30~1000



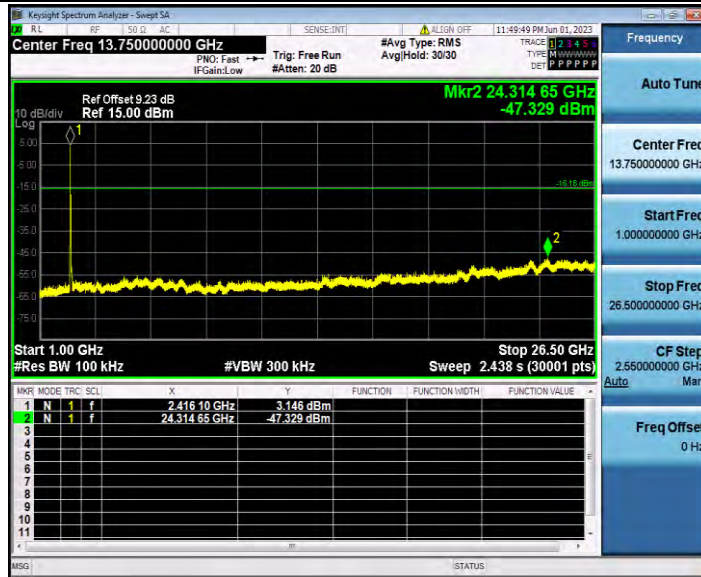
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



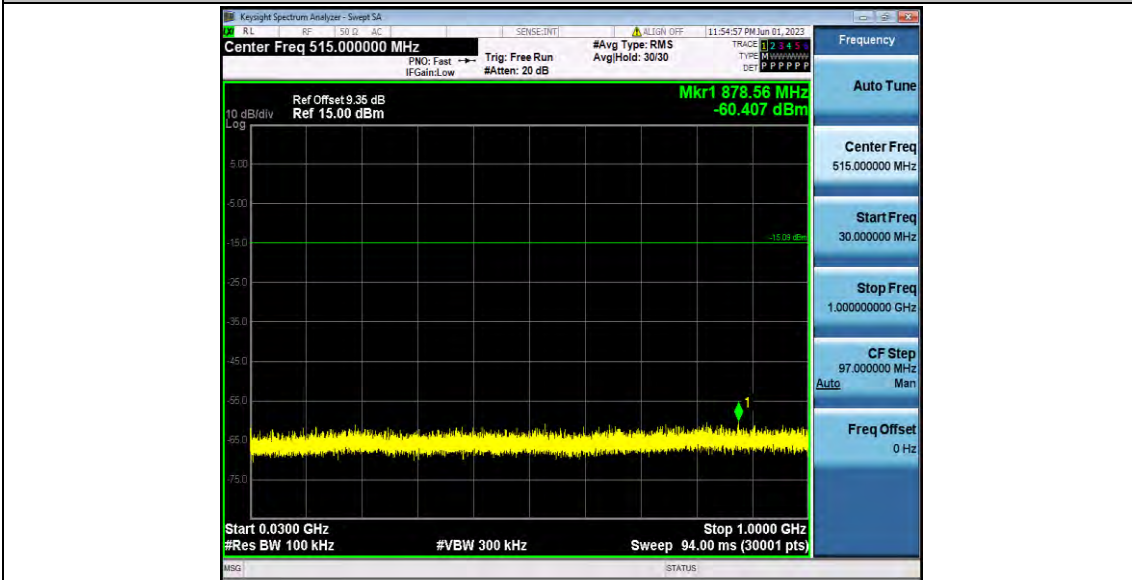
11G_Ant1_2412_30~1000



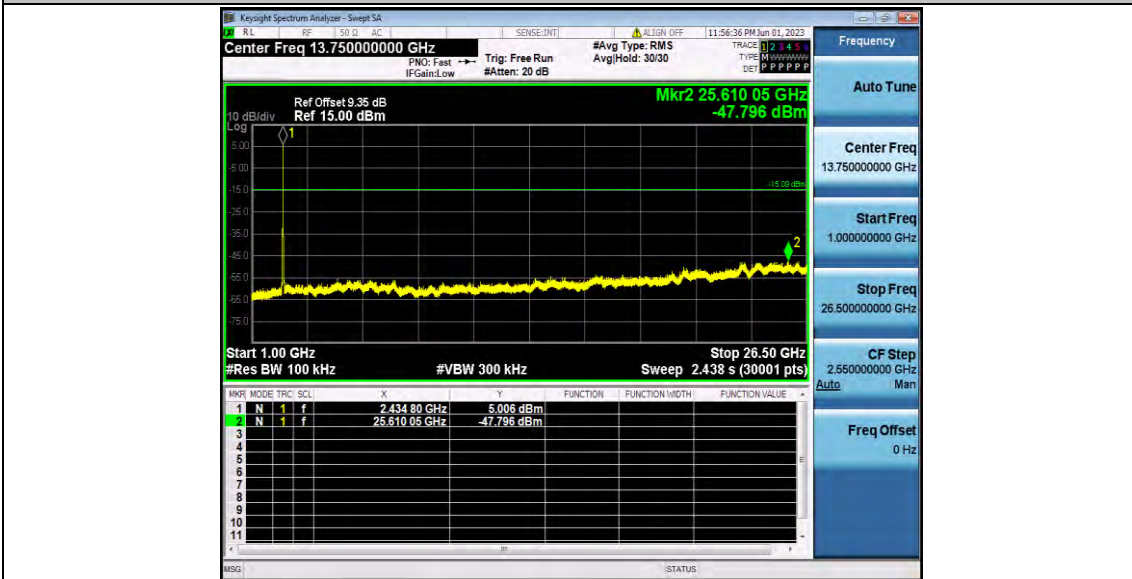
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



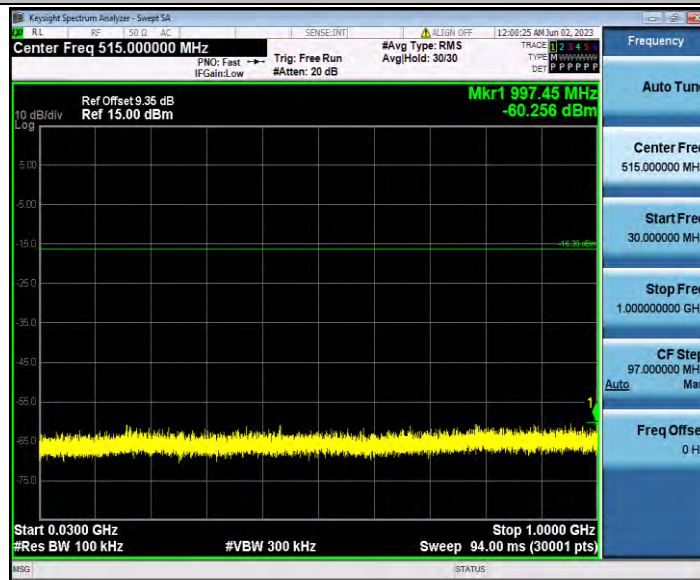
11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500



11G_Ant1_2462_0~Reference



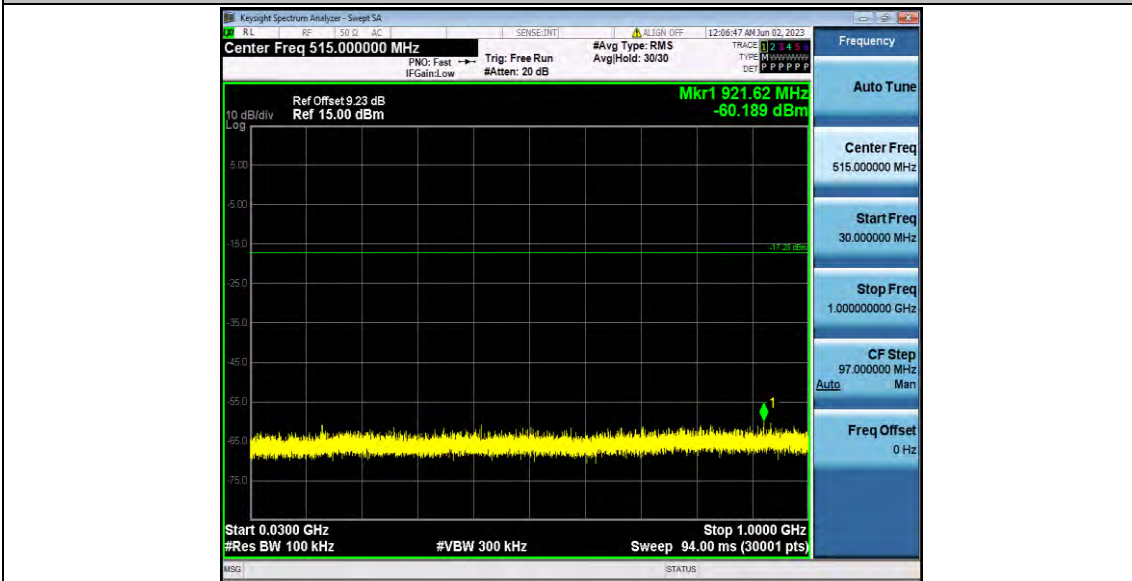
11G_Ant1_2462_30~1000



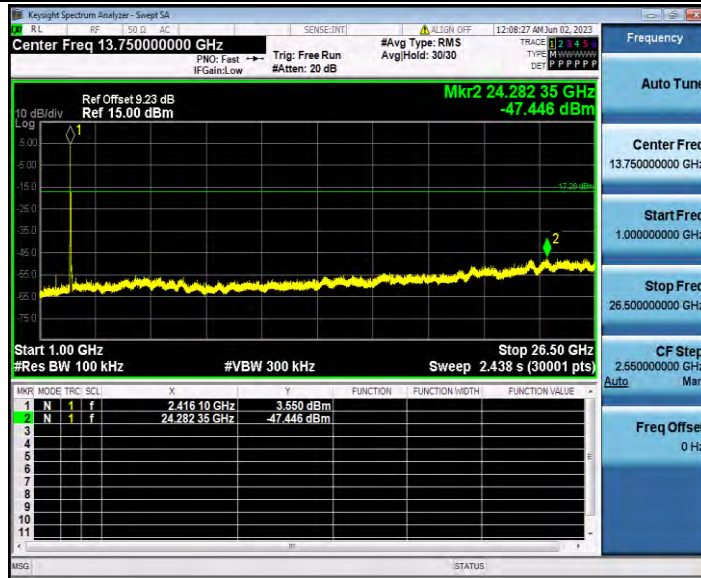
11G_Ant1_2462_1000~26500



11N20SIS0_Ant1_2412_0~Reference



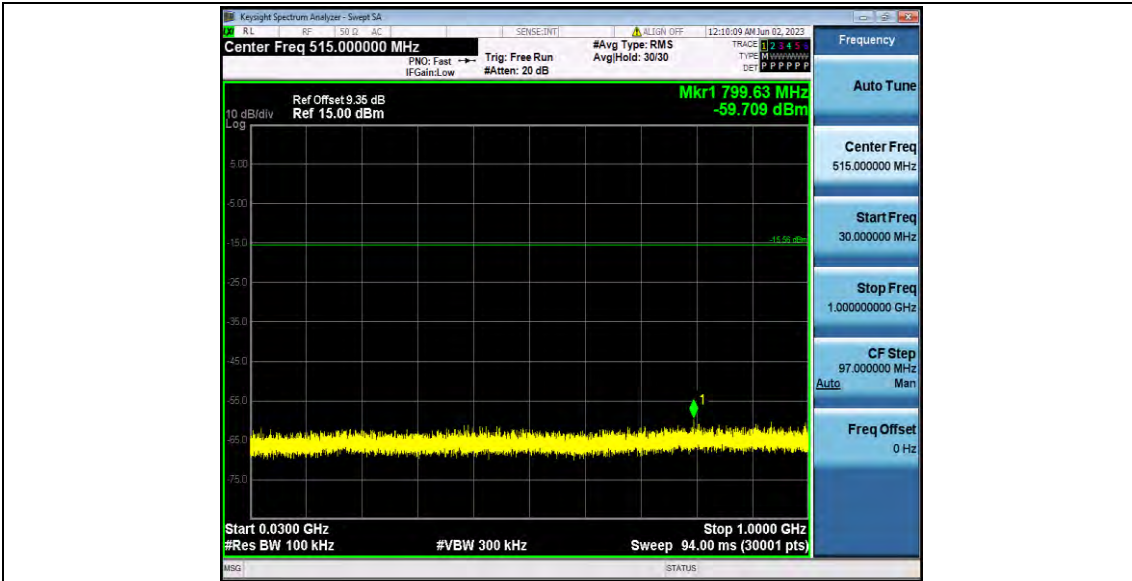
11N20SISO_Ant1_2412_30~1000



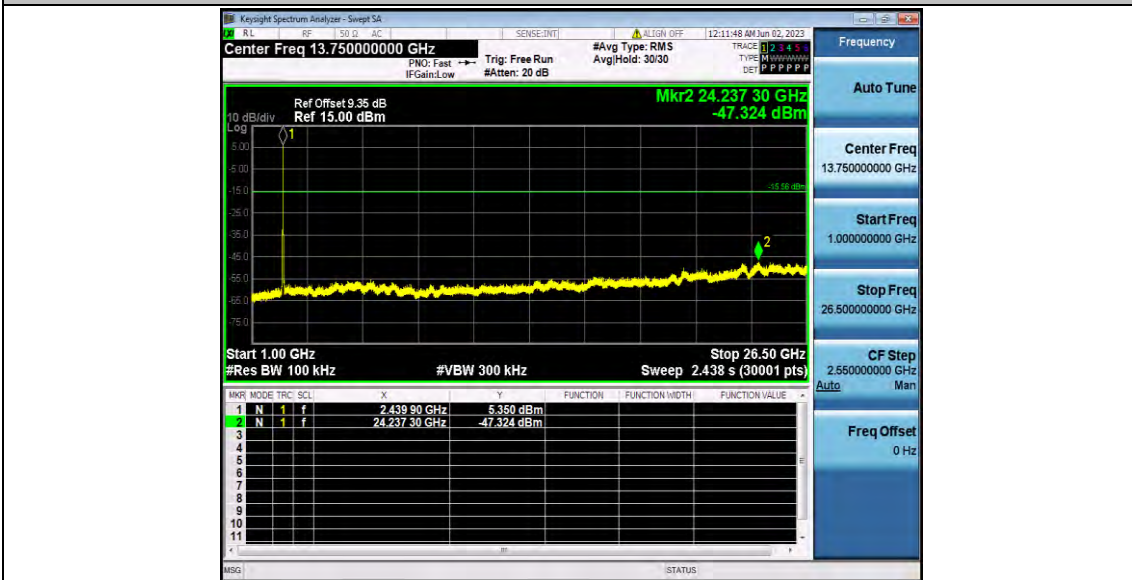
11N20SISO_Ant1_2412_1000~26500



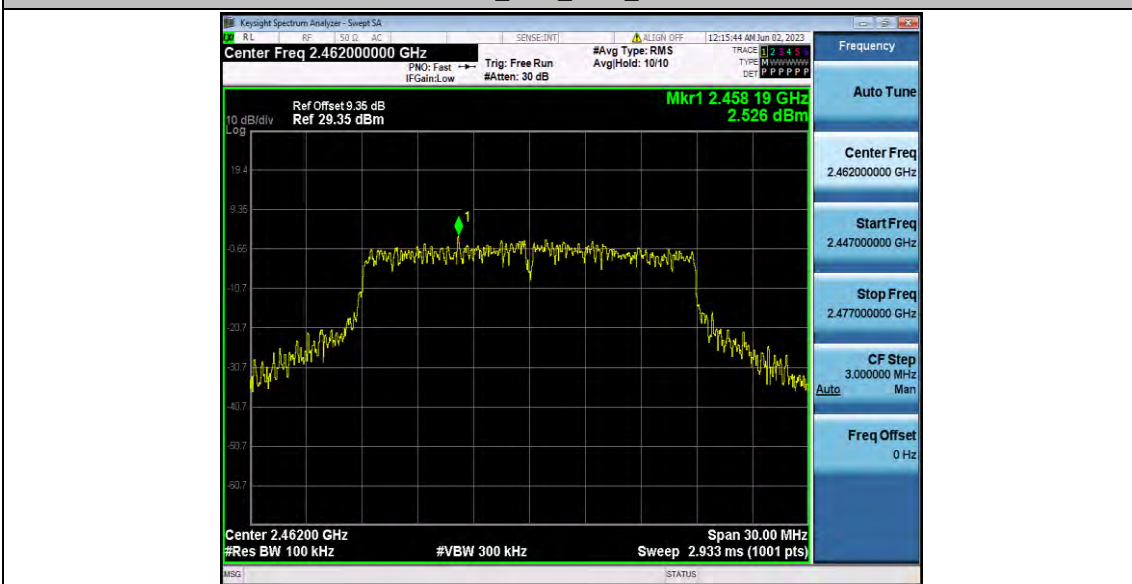
11N20SISO_Ant1_2437_0~Reference



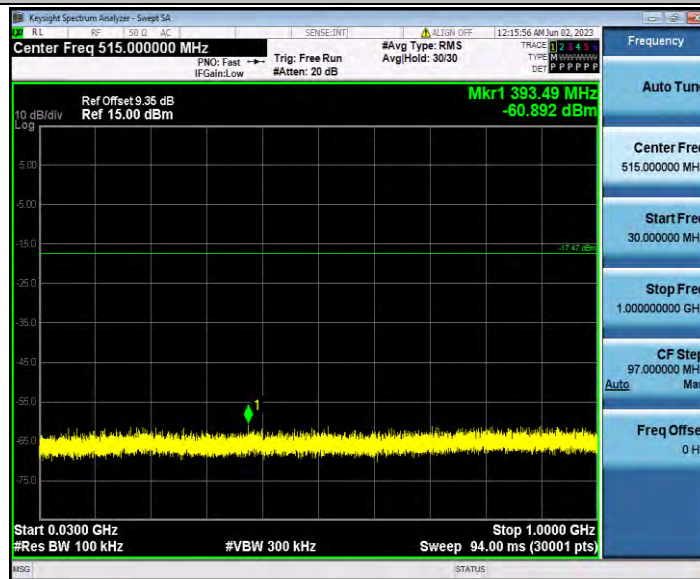
11N20SISO_Ant1_2437_30~1000



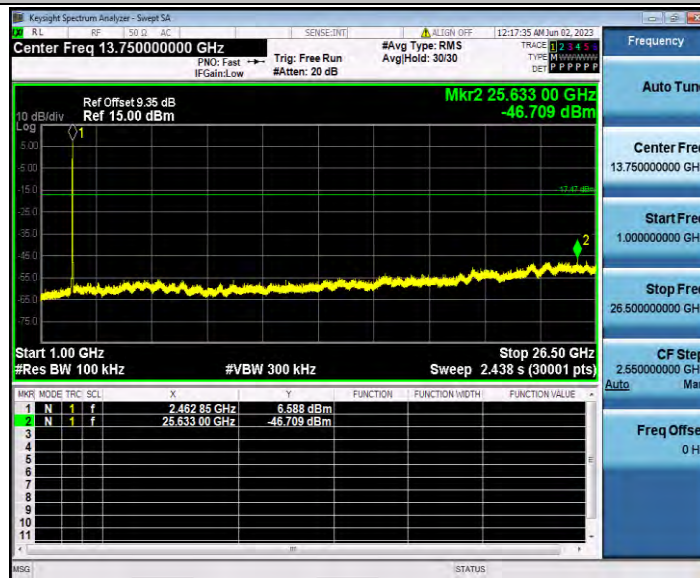
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



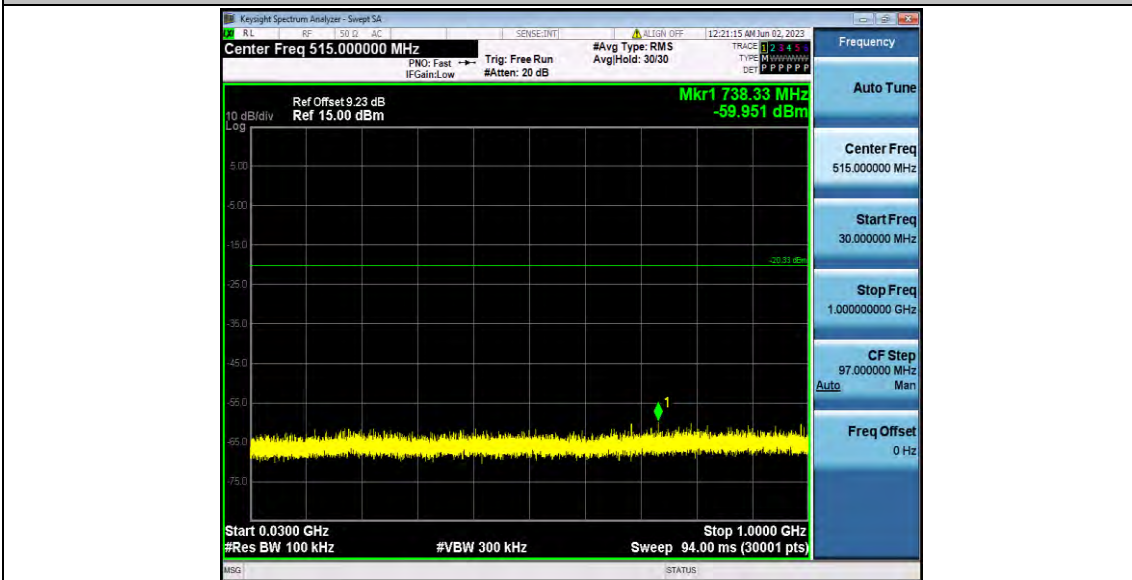
11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0-Reference



11N40SISO_Ant1_2422_30~1000



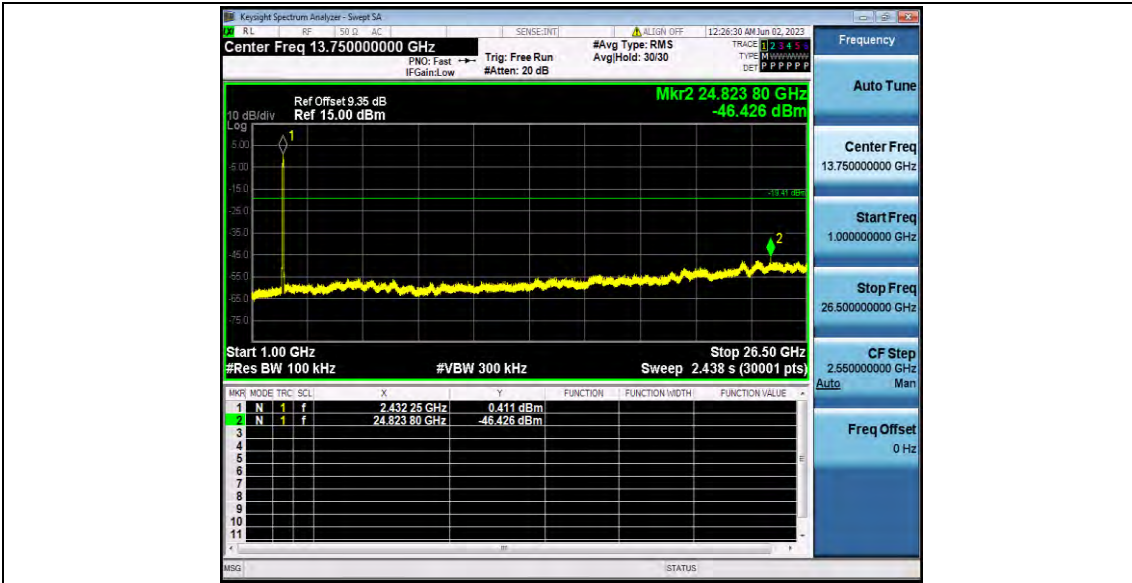
11N40SISO_Ant1_2422_1000~26500



11N40SISO_Ant1_2437_0~Reference



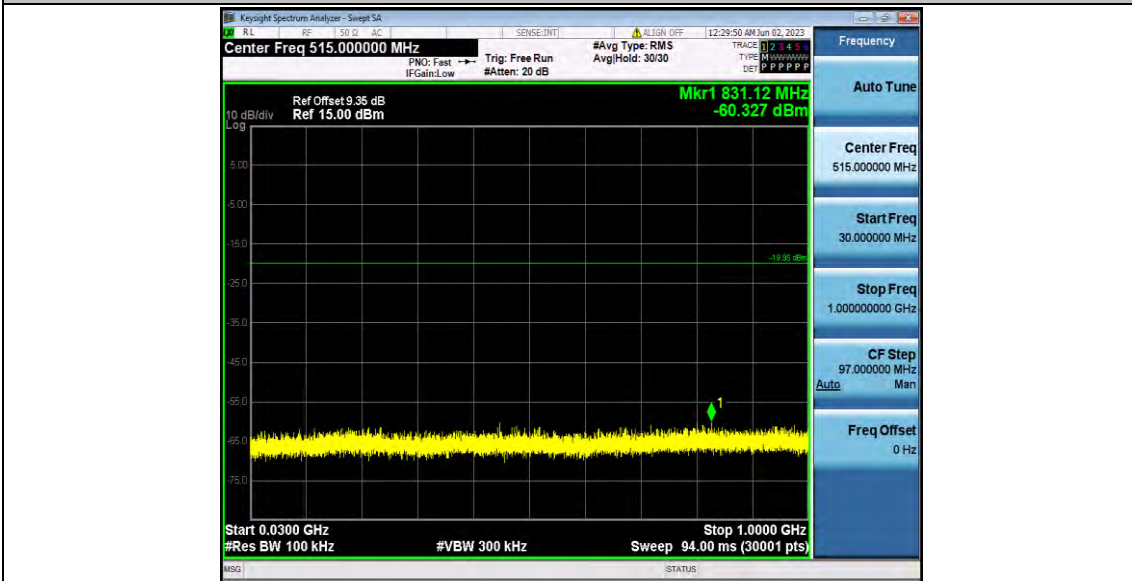
11N40SISO_Ant1_2437_30~1000

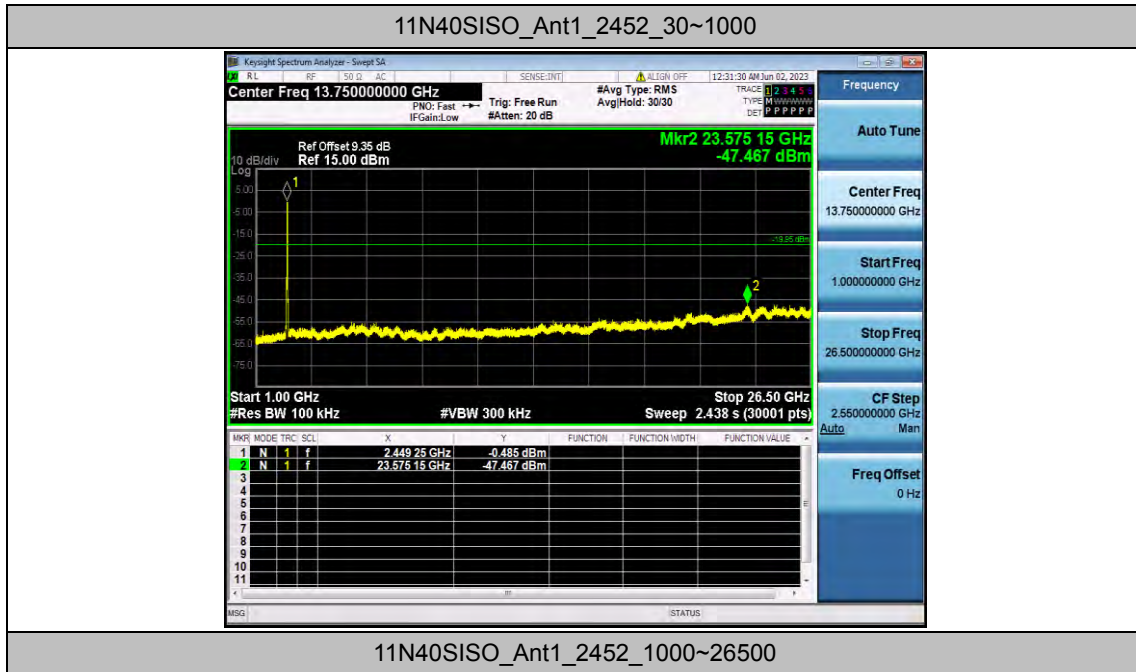


11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference





Appendix C.7: Emissions in Restricted Bands

Test Result

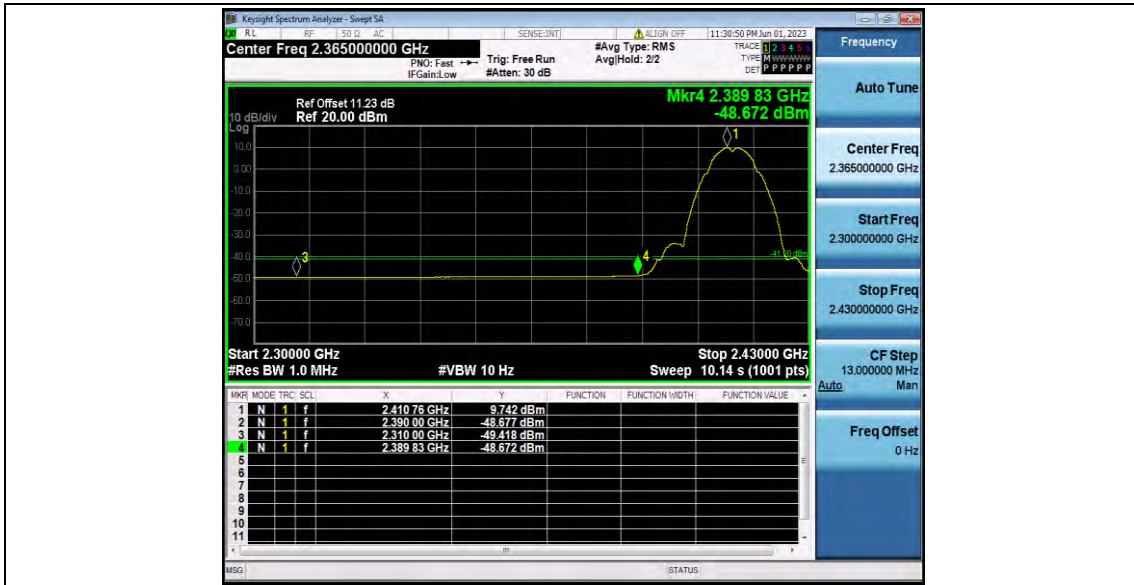
Test Mode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.42	≤-41.20	45.78	≤54	PASS
				AV	2389.830	-48.67	≤-41.20	46.53	≤54	PASS
				AV	2390.000	-48.68	≤-41.20	46.52	≤54	PASS
				Peak	2310.000	-43.13	≤-21.20	52.07	≤74	PASS
				Peak	2382.680	-40.93	≤-21.20	54.27	≤74	PASS
				Peak	2390.000	-45.3	≤-21.20	49.90	≤74	PASS
		High	2462	AV	2483.500	-48.4	≤-41.20	46.80	≤54	PASS
				AV	2486.860	-48.4	≤-41.20	46.80	≤54	PASS
				AV	2500.000	-48.68	≤-41.20	46.52	≤54	PASS
				Peak	2483.500	-47.89	≤-21.20	47.31	≤74	PASS
				Peak	2492.030	-40.3	≤-21.20	54.90	≤74	PASS
				Peak	2500.000	-48.27	≤-21.20	46.93	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.4	≤-41.20	45.80	≤54	PASS
				AV	2389.960	-41.72	≤-41.20	53.48	≤54	PASS
				AV	2390.000	-41.72	≤-41.20	53.48	≤54	PASS
				Peak	2310.000	-47.63	≤-21.20	47.57	≤74	PASS
				Peak	2387.880	-36.22	≤-21.20	58.98	≤74	PASS
				Peak	2390.000	-38.64	≤-21.20	56.56	≤74	PASS
		High	2462	AV	2483.500	-42.79	≤-41.20	52.41	≤54	PASS
				AV	2483.560	-42.96	≤-41.20	52.24	≤54	PASS
				AV	2500.000	-48.69	≤-41.20	46.51	≤54	PASS
				Peak	2483.500	-38.09	≤-21.20	57.11	≤74	PASS
				Peak	2484.000	-36.39	≤-21.20	58.81	≤74	PASS
				Peak	2500.000	-43.39	≤-21.20	51.81	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.38	≤-41.20	45.82	≤54	PASS
				AV	2389.960	-43.61	≤-41.20	51.59	≤54	PASS
				AV	2390.000	-43.61	≤-41.20	51.59	≤54	PASS
				Peak	2310.000	-48.09	≤-21.20	47.11	≤74	PASS
				Peak	2389.310	-37.7	≤-21.20	57.50	≤74	PASS
				Peak	2390.000	-38.26	≤-21.20	56.94	≤74	PASS
		High	2462	AV	2483.500	-41.61	≤-41.20	53.59	≤54	PASS
				AV	2483.560	-41.81	≤-41.20	53.39	≤54	PASS
				AV	2500.000	-48.69	≤-41.20	46.51	≤54	PASS
				Peak	2483.500	-37.96	≤-21.20	57.24	≤74	PASS
				Peak	2485.760	-37.61	≤-21.20	57.59	≤74	PASS
				Peak	2500.000	-46.09	≤-21.20	49.11	≤74	PASS

11N40SIS O	Ant1	Low	2422	AV	2310.000	-49.39	≤ -41.20	45.81	≤ 54	PASS
				AV	2389.960	-43.61	≤ -41.20	51.59	≤ 54	PASS
				AV	2390.000	-43.61	≤ -41.20	51.59	≤ 54	PASS
				Peak	2310.000	-51.67	≤ -21.20	43.53	≤ 74	PASS
				Peak	2389.310	-39.34	≤ -21.20	55.86	≤ 74	PASS
				Peak	2390.000	-42.25	≤ -21.20	52.95	≤ 74	PASS
	High	2452	AV	2483.500	-41.93	≤ -41.20	53.27	≤ 54	PASS	
			AV	2483.560	-42	≤ -41.20	53.20	≤ 54	PASS	
			AV	2500.000	-48.71	≤ -41.20	46.49	≤ 54	PASS	
			Peak	2483.500	-40.82	≤ -21.20	54.38	≤ 74	PASS	
			Peak	2483.560	-33.88	≤ -21.20	61.32	≤ 74	PASS	
			Peak	2500.000	-44.55	≤ -21.20	50.65	≤ 74	PASS	

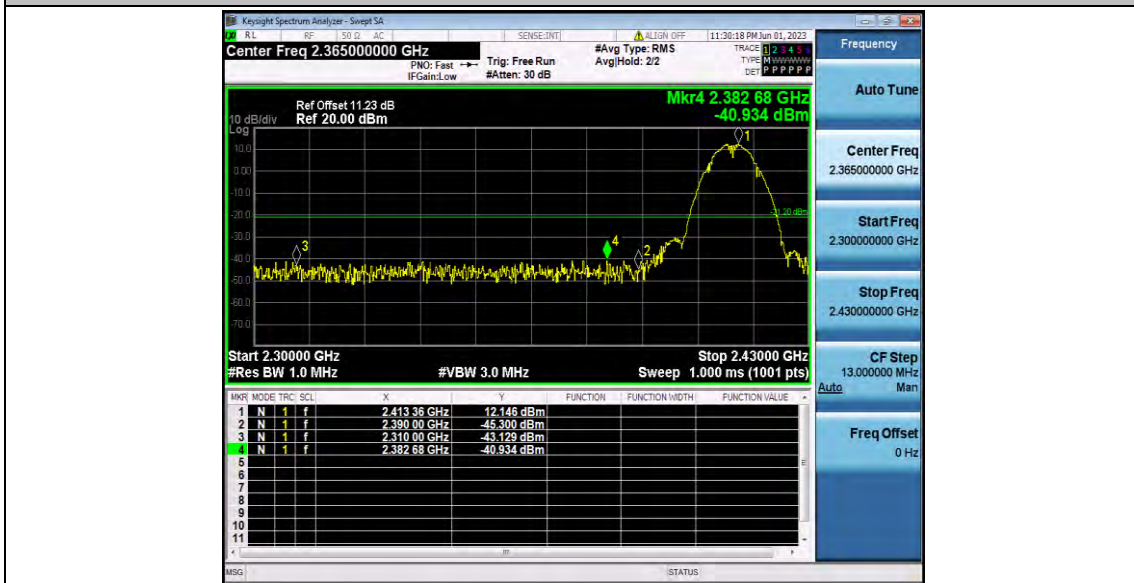
Note:

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

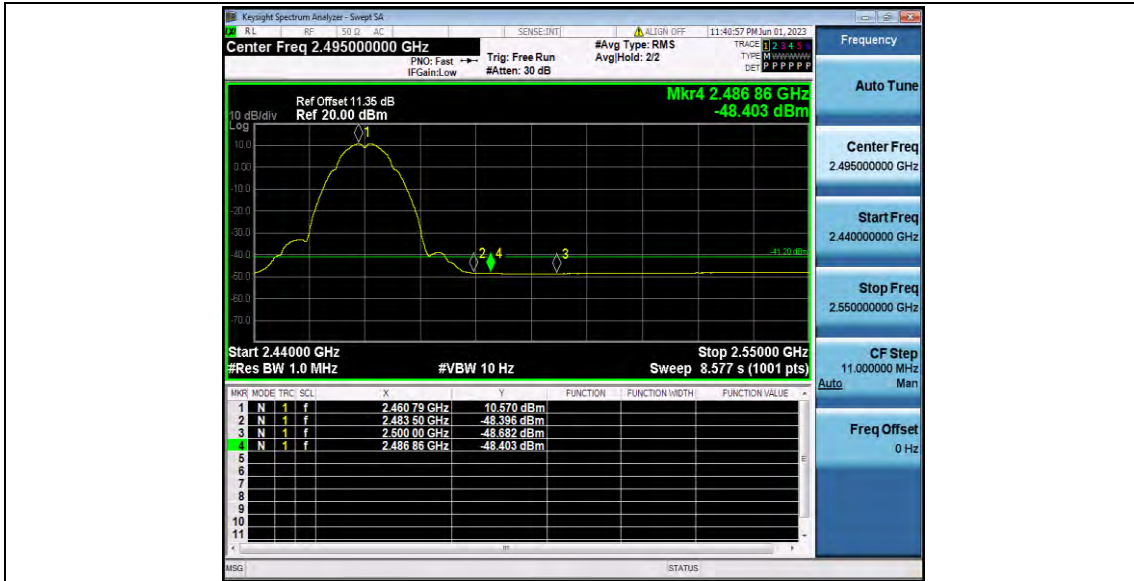
Test Graphs



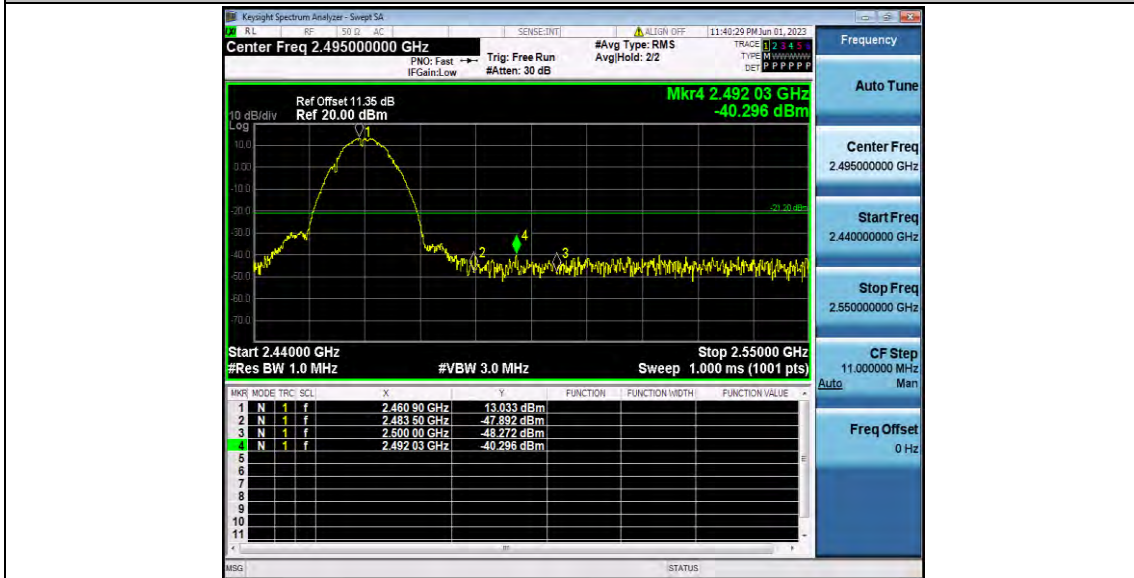
11B_Ant1_Low_2412_AV



11B_Ant1_Low_2412_Peak



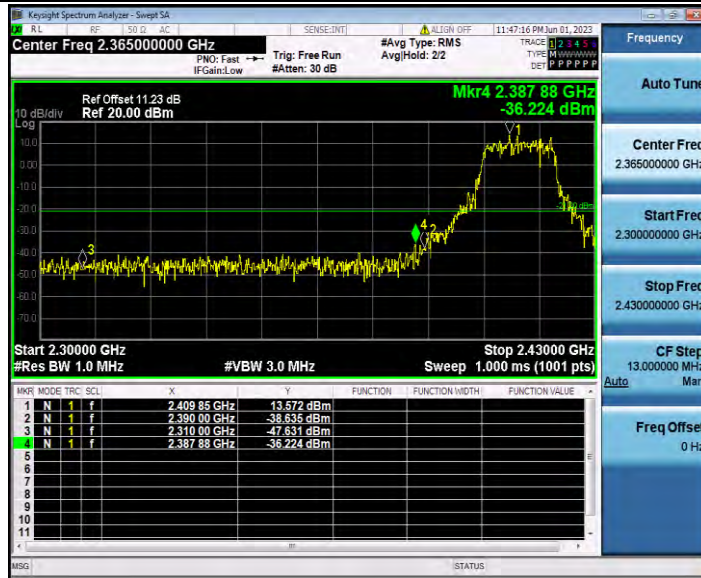
11B_Ant1_High_2462_AV



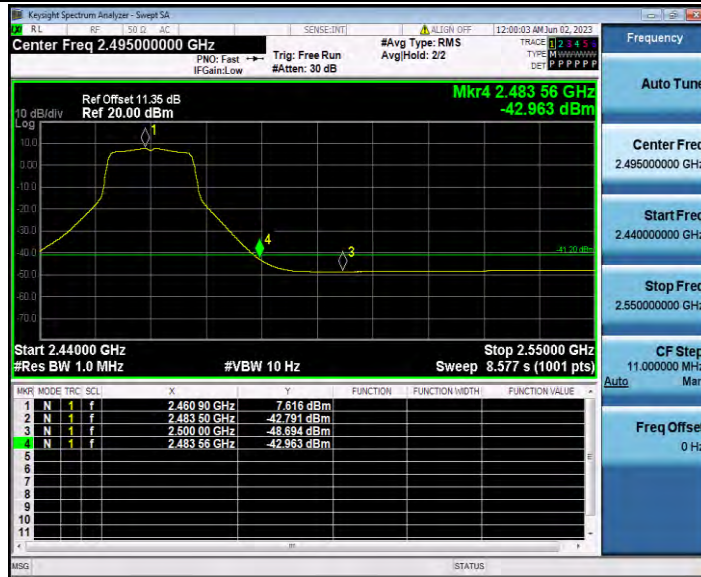
11B_Ant1_High_2462_Peak



11G_Ant1_Low_2412_AV



11G_Ant1_Low_2412_Peak



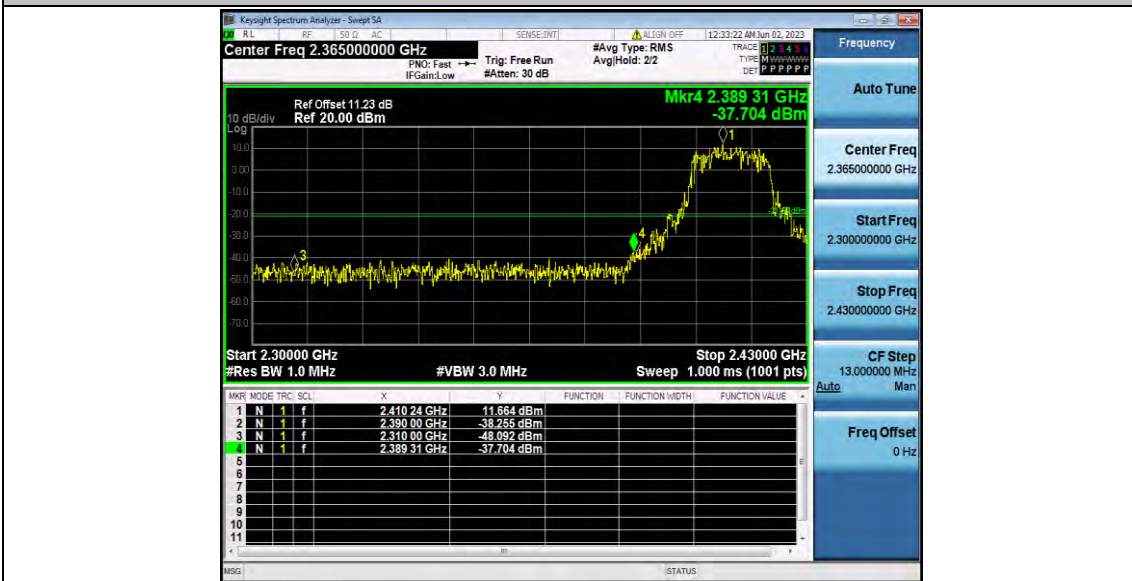
11G_Ant1_High_2462_AV



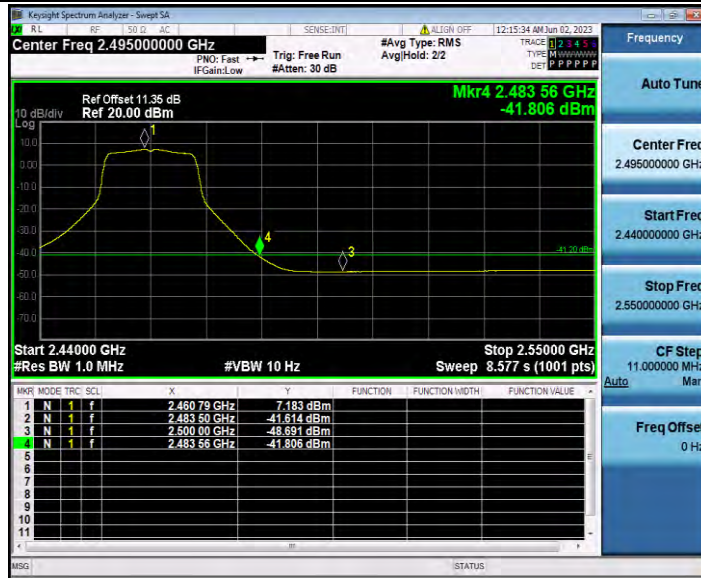
11G_Ant1_High_2462_Peak



11N20SISO_Ant1_Low_2412_AV



11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



