

Case No. : <u>CTA24061300403</u>	
Ambient Condition: <u>23</u> °C, <u>49</u> %RH,	
Test Date: <u>2024.6.15</u>	Test Engineer: <u>Evan ouyang</u>

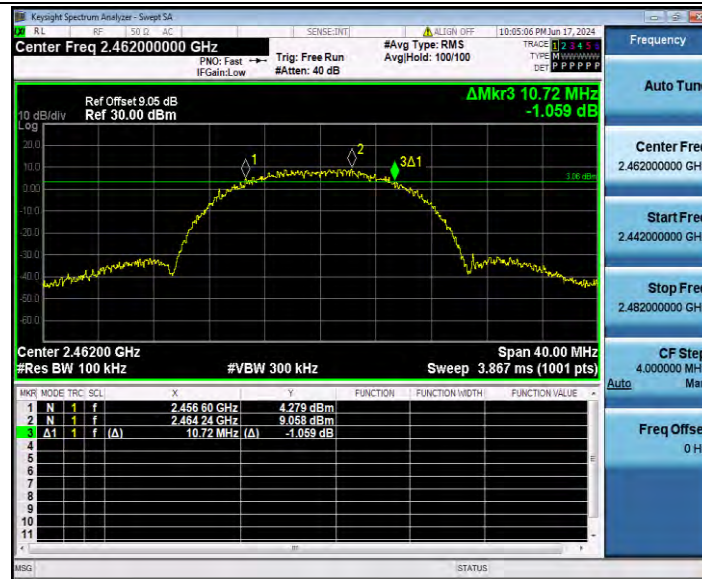
Appendix C.1: DTS Bandwidth

Test Result

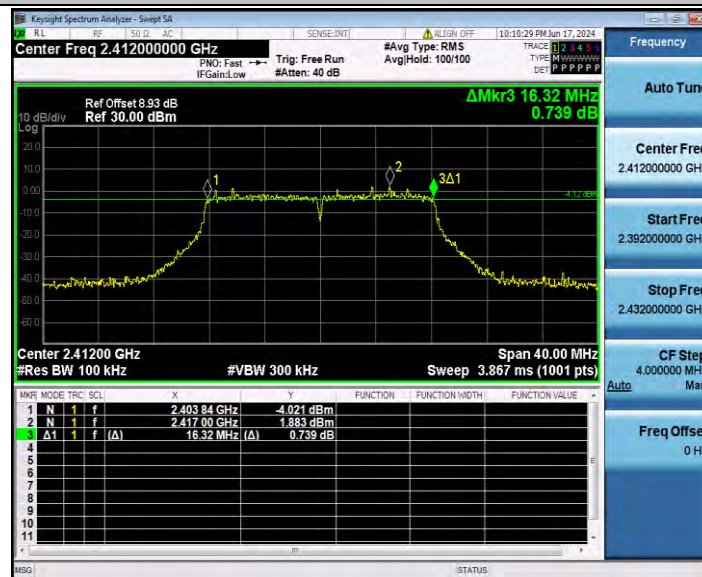
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.880	2407.120	2417.000	0.5	PASS
		2437	10.880	2431.960	2442.840	0.5	PASS
		2462	10.720	2456.600	2467.320	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.400	2428.800	2445.200	0.5	PASS
		2462	16.280	2453.840	2470.120	0.5	PASS
11N20SISO	Ant1	2412	16.600	2403.880	2420.480	0.5	PASS
		2437	16.880	2428.600	2445.480	0.5	PASS
		2462	16.600	2453.800	2470.400	0.5	PASS
11N40SISO	Ant1	2422	35.040	2404.480	2439.520	0.5	PASS
		2437	35.200	2419.400	2454.600	0.5	PASS
		2452	33.760	2435.360	2469.120	0.5	PASS

Test Graphs

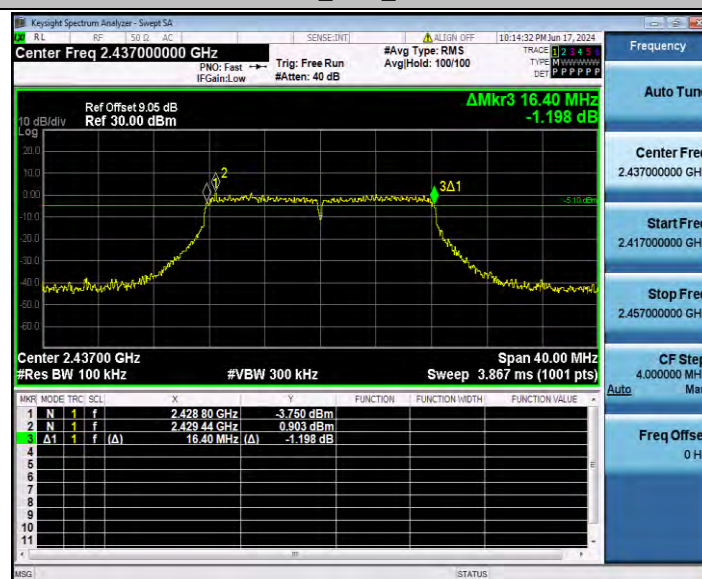




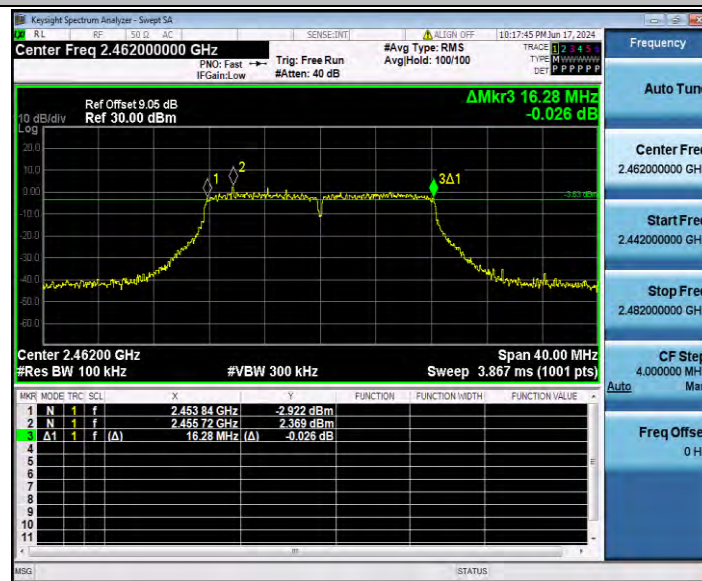
11G_Ant1_2412



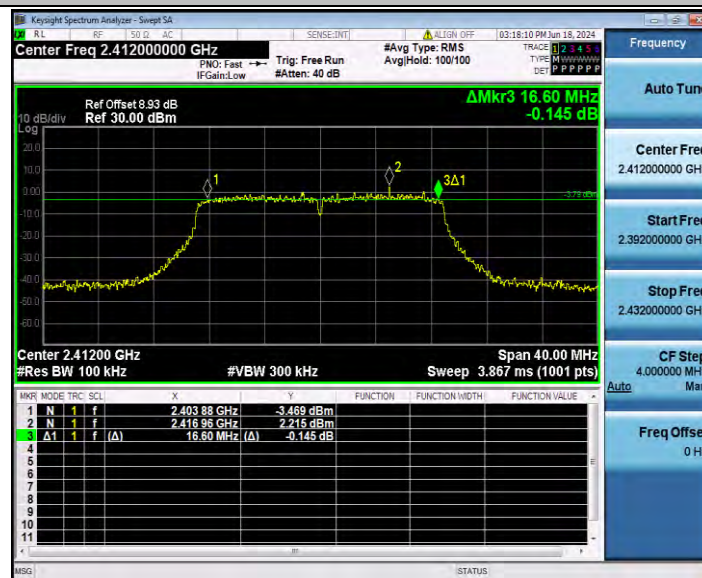
11G_Ant1_2437



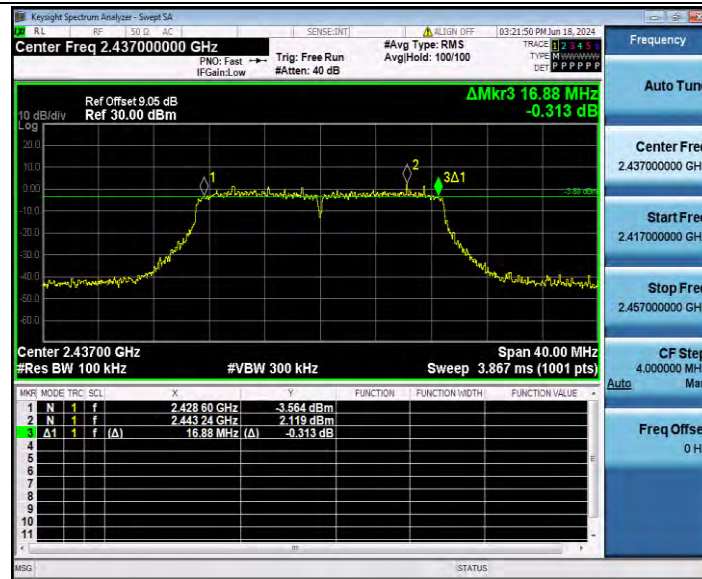
11G_Ant1_2462



11N20SISO_Ant1_2412



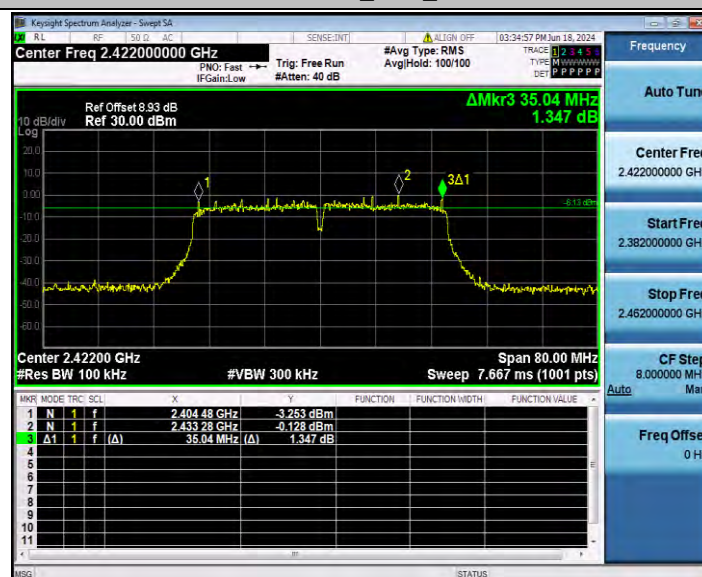
11N20SISO_Ant1_2437



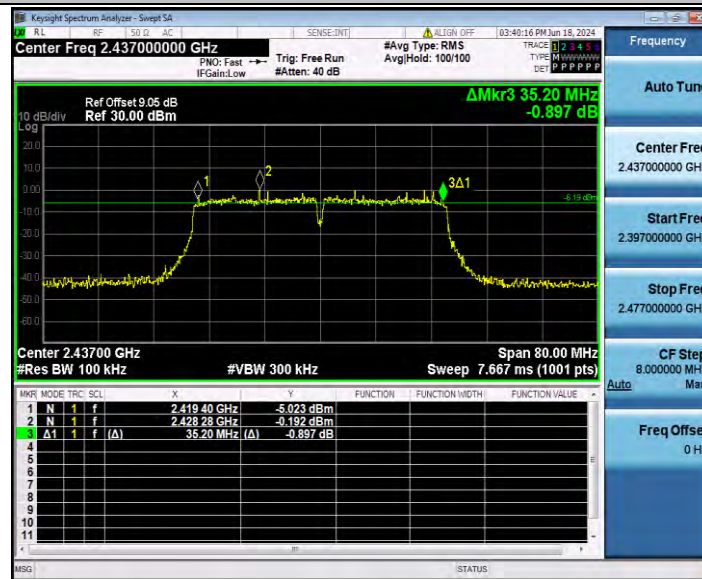
11N20SISO_Ant1_2462



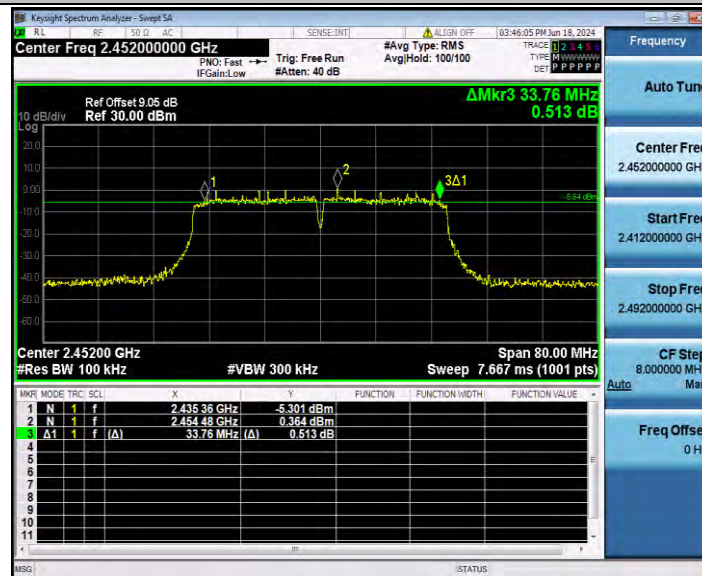
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



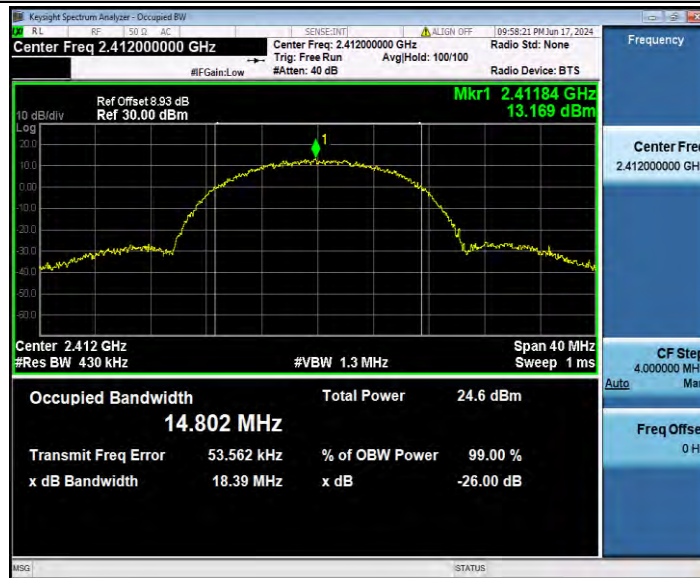
Appendix C.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
11B	Ant1	2412	14.802	2404.6526	2419.4546
		2437	14.802	2429.6291	2444.4311
		2462	14.778	2454.6162	2469.3942
11G	Ant1	2412	16.829	2403.6137	2420.4427
		2437	16.879	2428.5399	2445.4189
		2462	16.877	2453.5733	2470.4503
11N20SISO	Ant1	2412	17.852	2403.1175	2420.9695
		2437	17.857	2428.0521	2445.9091
		2462	17.865	2453.0683	2470.9333
11N40SISO	Ant1	2422	36.009	2404.0329	2440.0419
		2437	36.109	2418.9873	2455.0963
		2452	36.074	2433.9739	2470.0479

Test Graphs

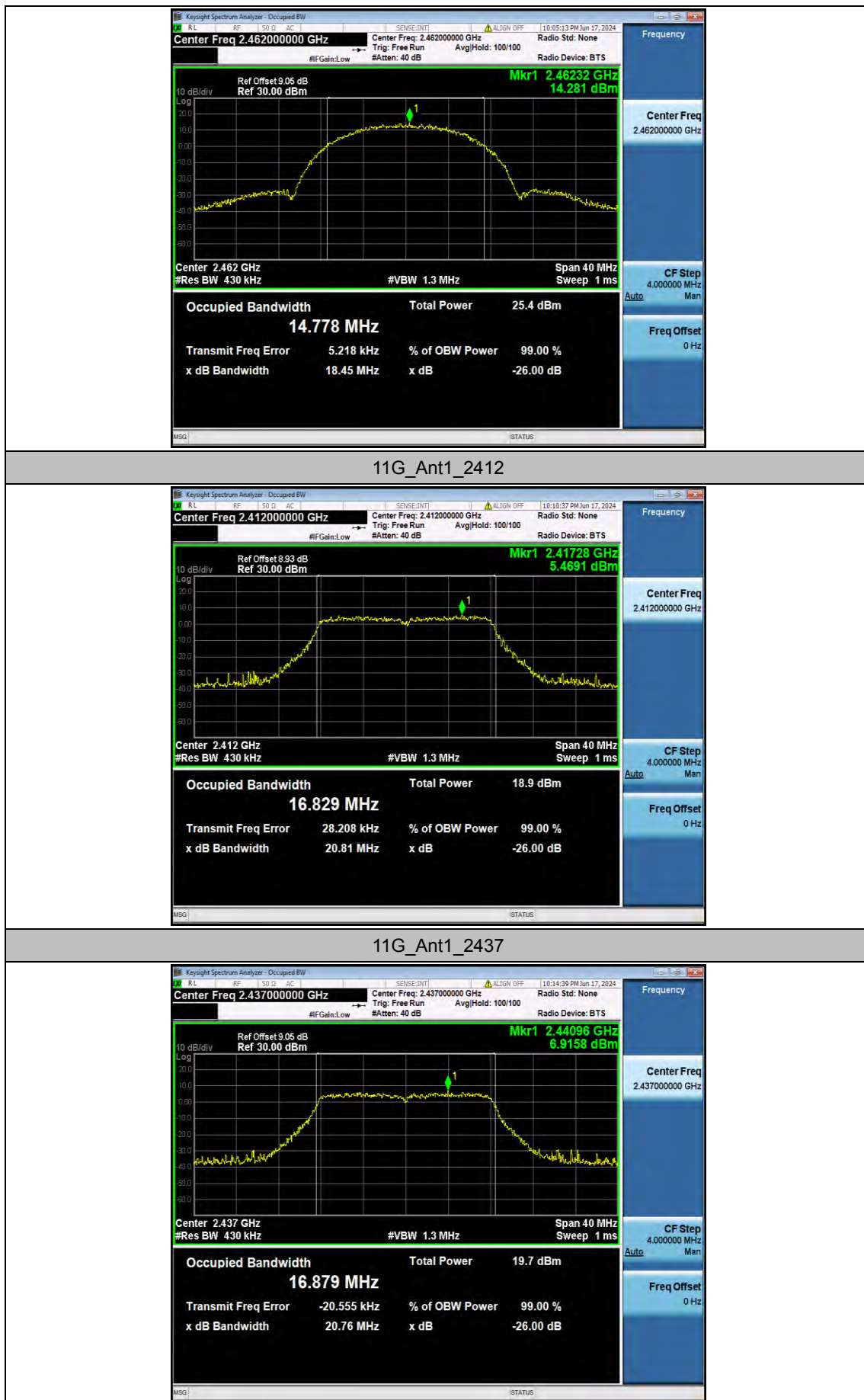
11B_Ant1_2412



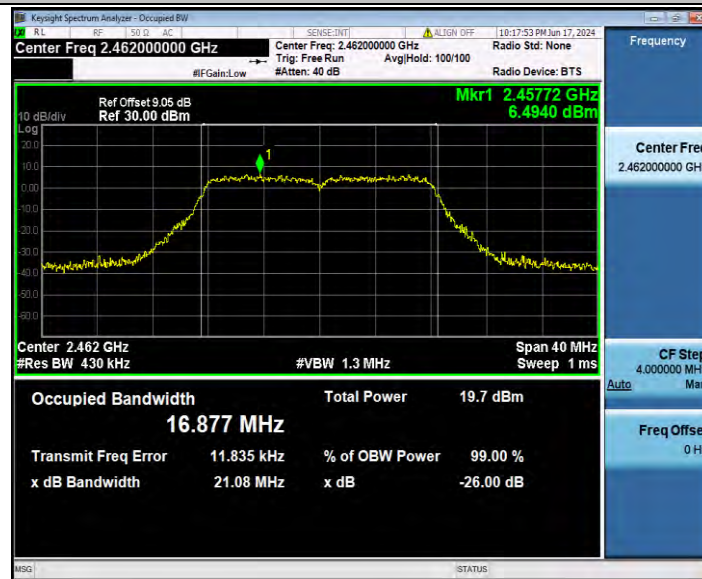
11B_Ant1_2437



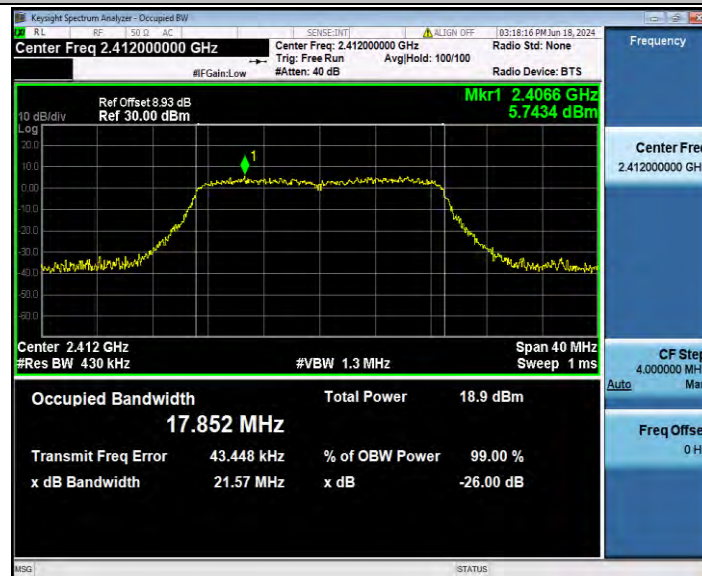
11B_Ant1_2462



11G_Ant1_2462



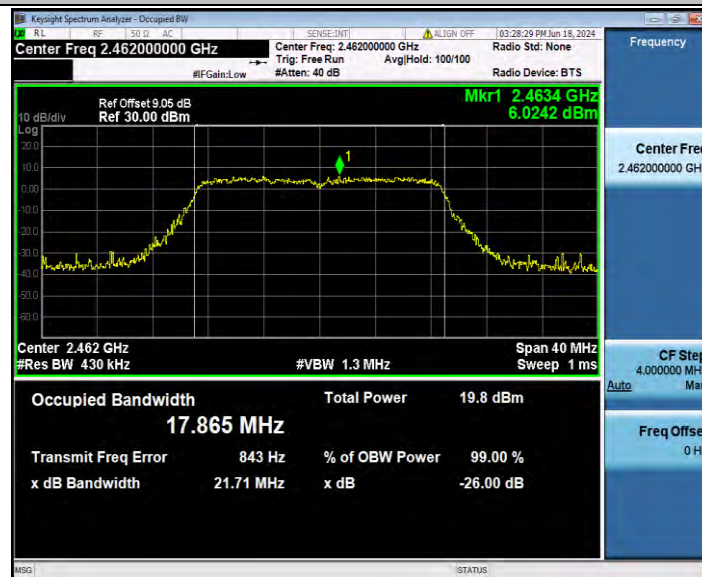
11N20SISO_Ant1_2412



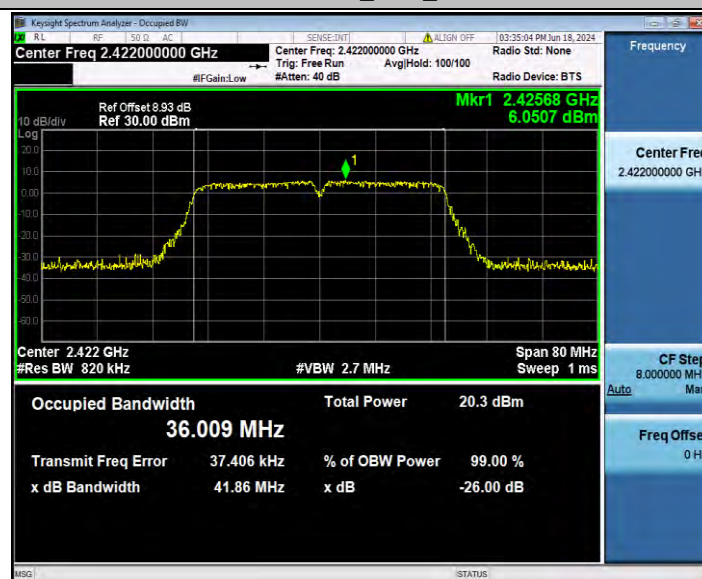
11N20SISO_Ant1_2437



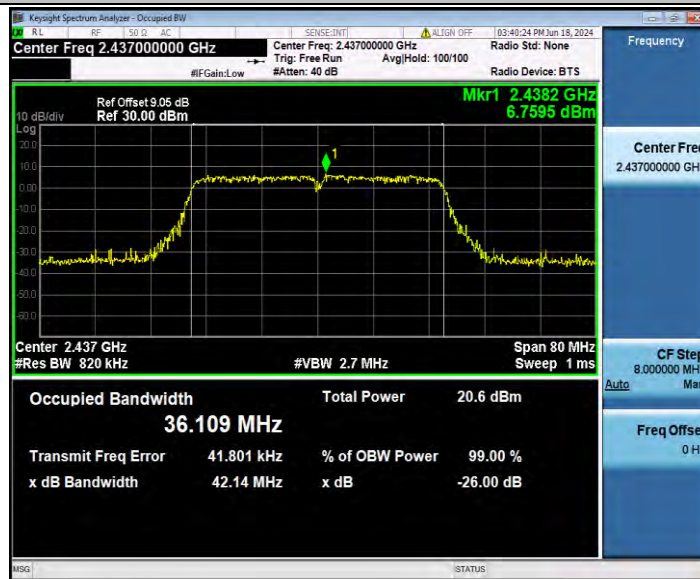
11N20SISO_Ant1_2462



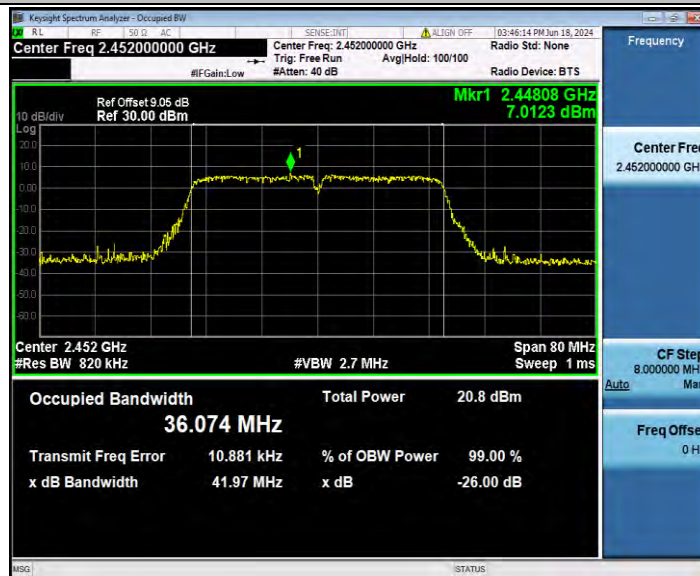
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C.3: Maximum conducted output power

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	24.18	≤30.00	PASS
		2437	24.88	≤30.00	PASS
		2462	25.06	≤30.00	PASS
11G	Ant1	2412	20.12	≤30.00	PASS
		2437	20.84	≤30.00	PASS
		2462	20.81	≤30.00	PASS
11N20SISO	Ant1	2412	20.04	≤30.00	PASS
		2437	20.38	≤30.00	PASS
		2462	21.05	≤30.00	PASS
11N40SISO	Ant1	2422	20.52	≤30.00	PASS
		2437	20.94	≤30.00	PASS
		2452	20.99	≤30.00	PASS

Appendix C.4: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-5.69	≤8.00	PASS
		2437	-4.29	≤8.00	PASS
		2462	-3.70	≤8.00	PASS
11G	Ant1	2412	-12.00	≤8.00	PASS
		2437	-10.38	≤8.00	PASS
		2462	-11.35	≤8.00	PASS
11N20SISO	Ant1	2412	-12.00	≤8.00	PASS
		2437	-11.74	≤8.00	PASS
		2462	-11.17	≤8.00	PASS
11N40SISO	Ant1	2422	-13.72	≤8.00	PASS
		2437	-14.03	≤8.00	PASS
		2452	-14.03	≤8.00	PASS

Note:

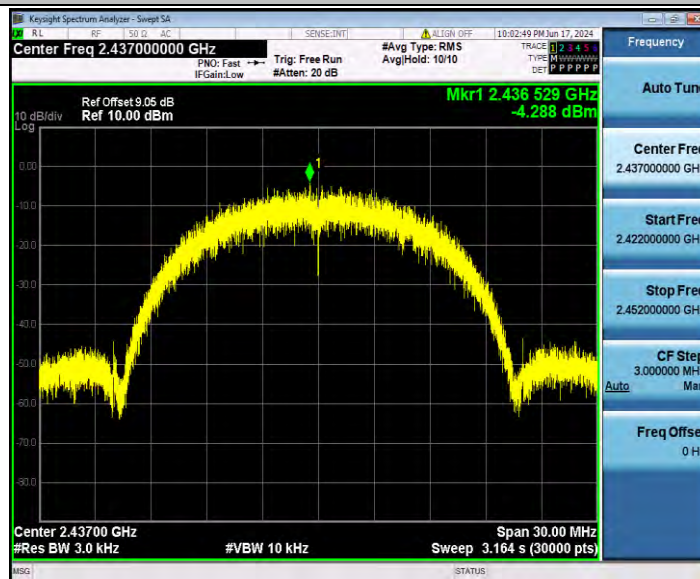
1. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

11B_Ant1_2412



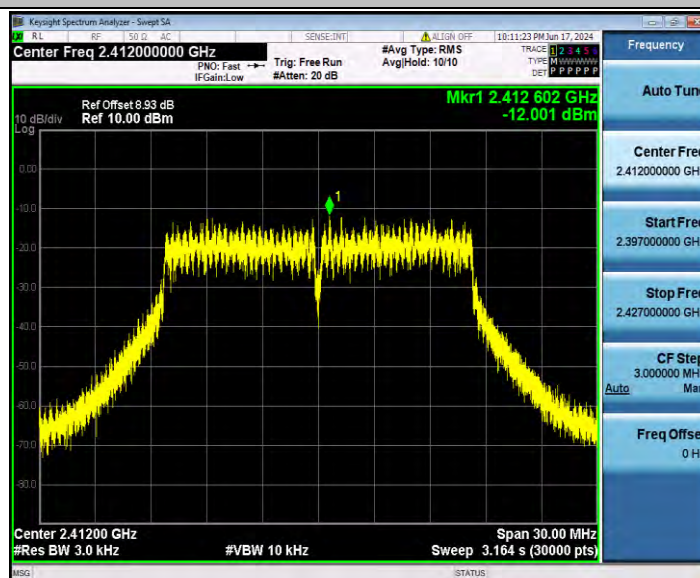
11B_Ant1_2437



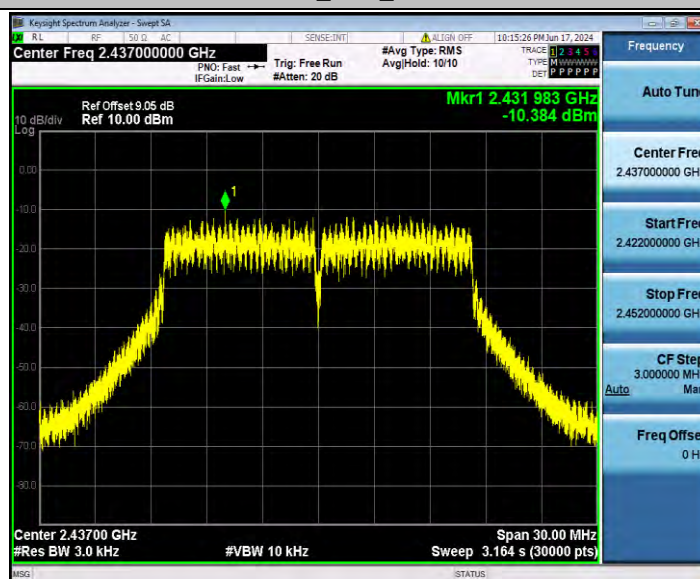
11B_Ant1_2462



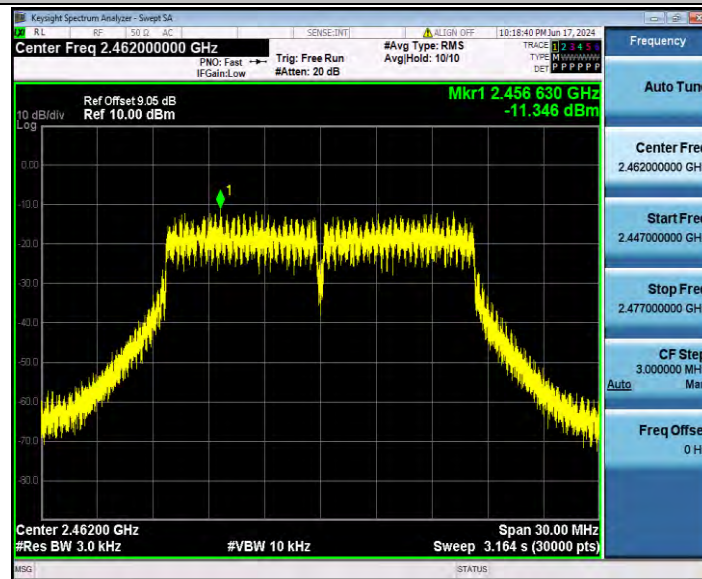
11G_Ant1_2412



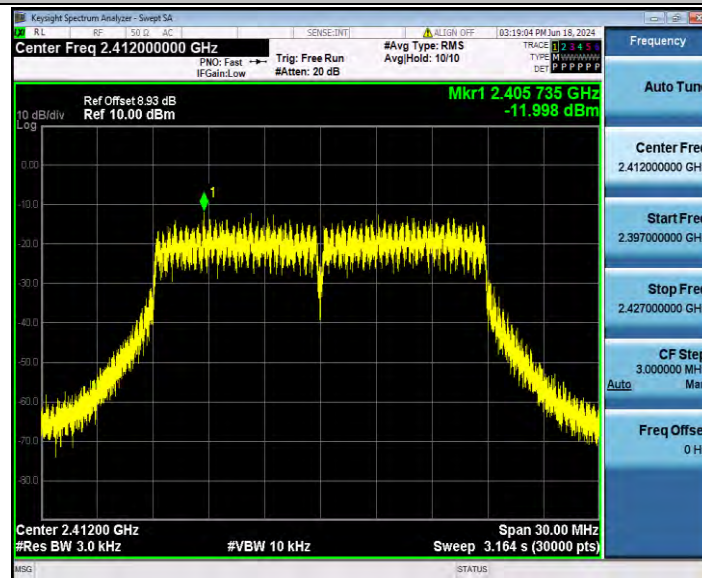
11G_Ant1_2437



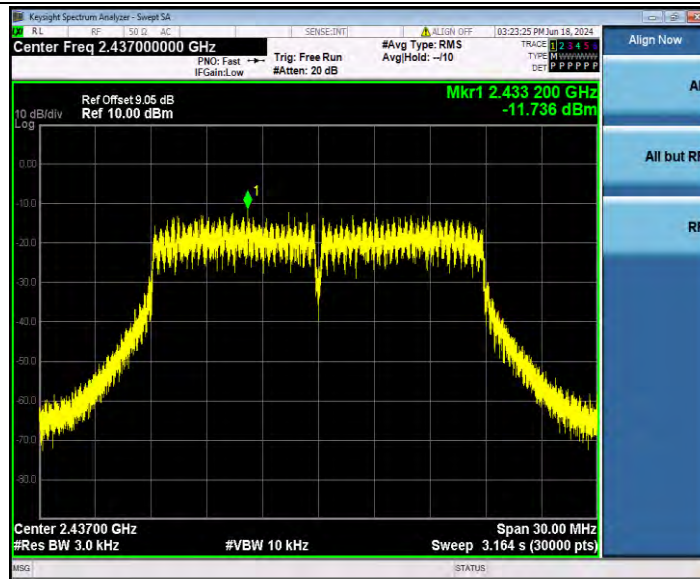
11G_Ant1_2462



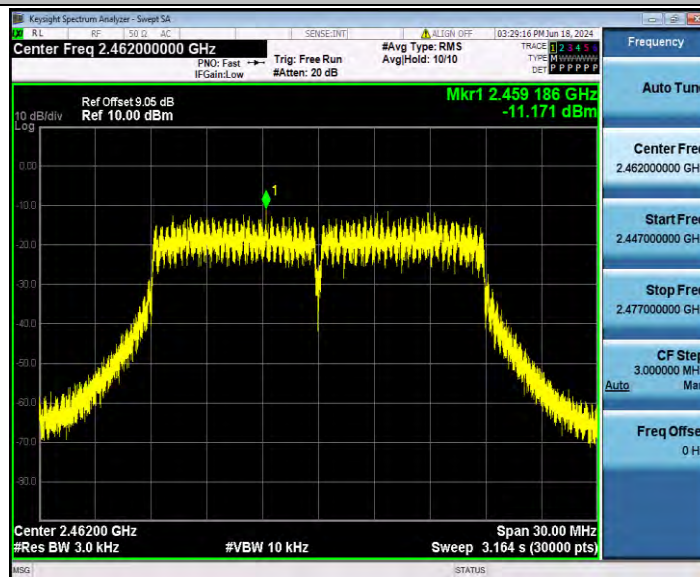
11N20SISO_Ant1_2412



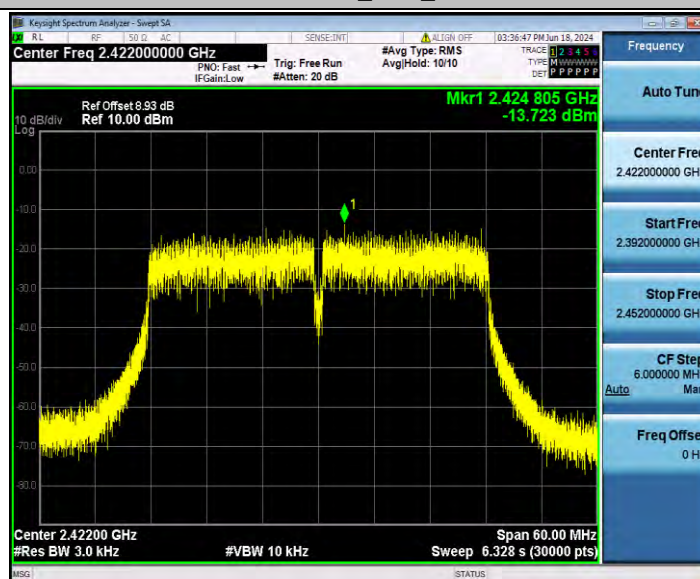
11N20SISO_Ant1_2437



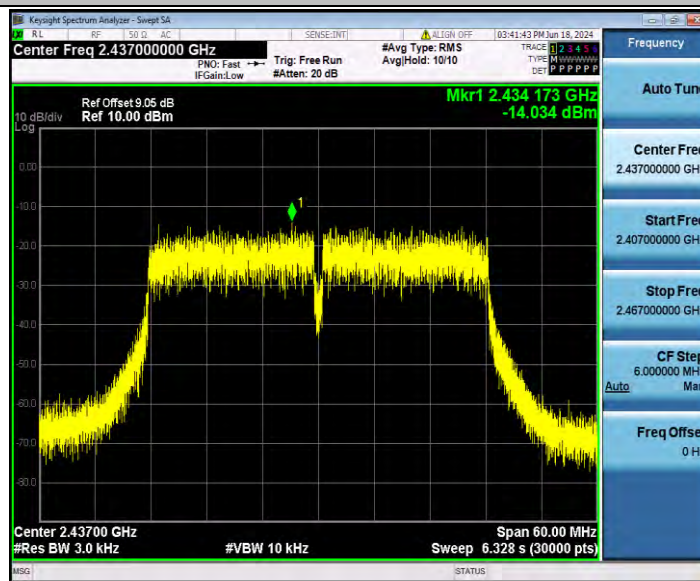
11N20SISO_Ant1_2462



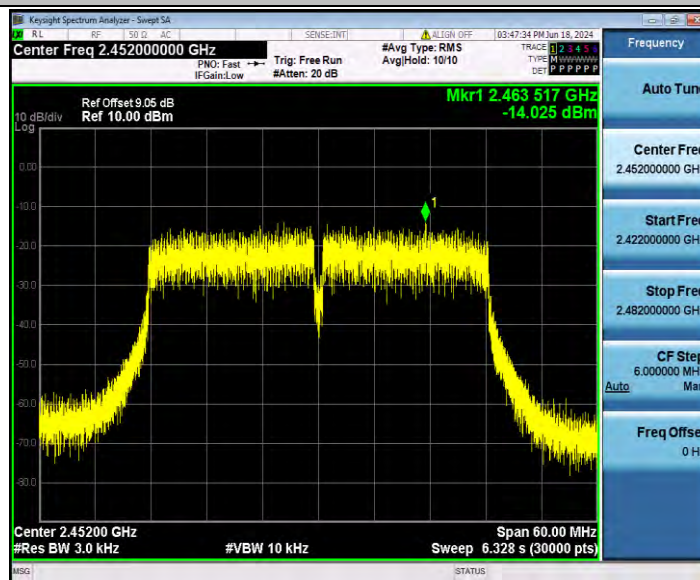
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



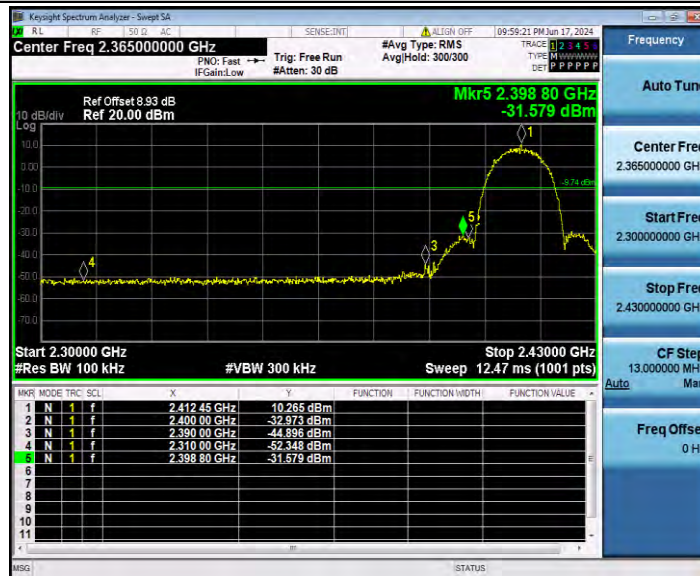
Appendix C.5: Band edge measurements

Test Result

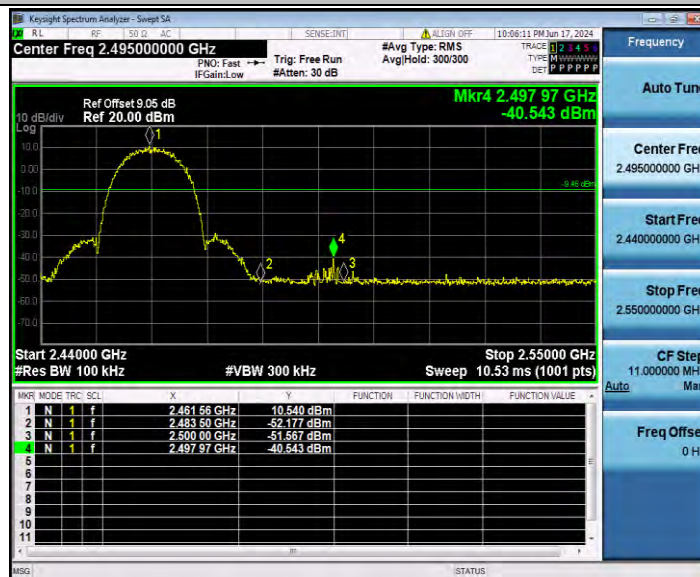
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	10.27	-31.58	≤ -9.74	PASS
		High	2462	10.54	-40.54	≤ -9.46	PASS
11G	Ant1	Low	2412	1.86	-37.04	≤ -18.14	PASS
		High	2462	2.83	-45.32	≤ -17.18	PASS
11N20SISO	Ant1	Low	2412	1.74	-36.13	≤ -18.26	PASS
		High	2462	2.45	-44.46	≤ -17.55	PASS
11N40SISO	Ant1	Low	2422	-0.04	-38.33	≤ -20.04	PASS
		High	2452	0.27	-42.95	≤ -19.73	PASS

Test Graphs

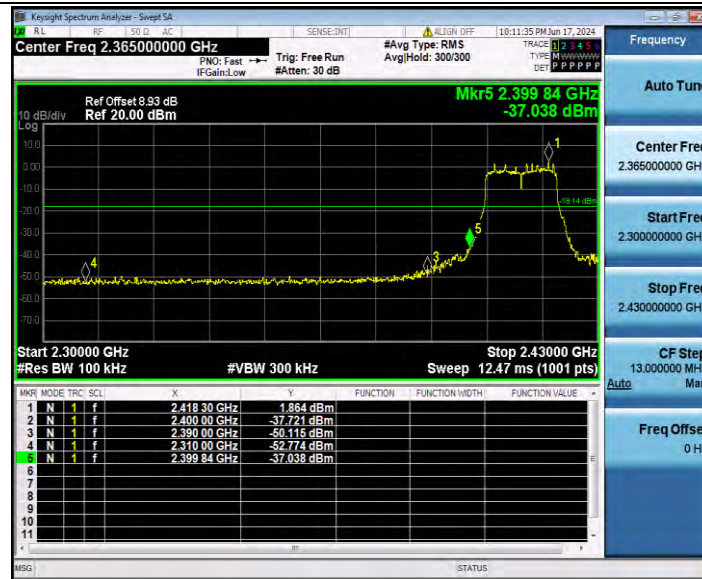
11B_Ant1_Low_2412



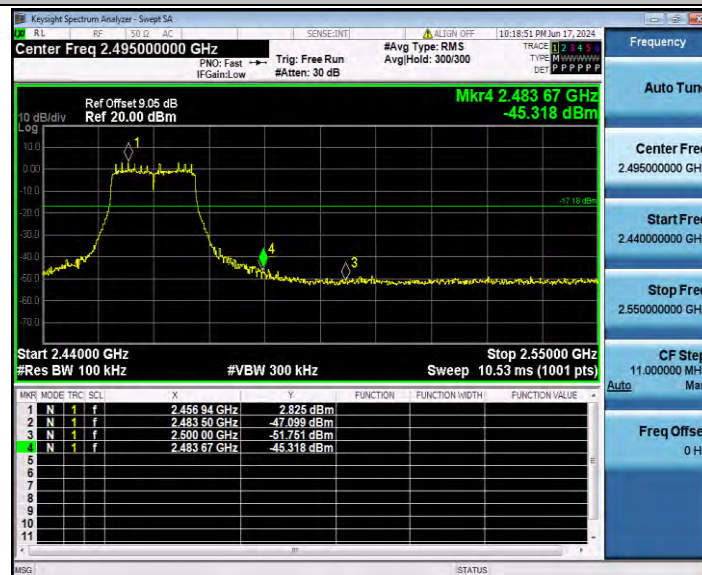
11B_Ant1_High_2462



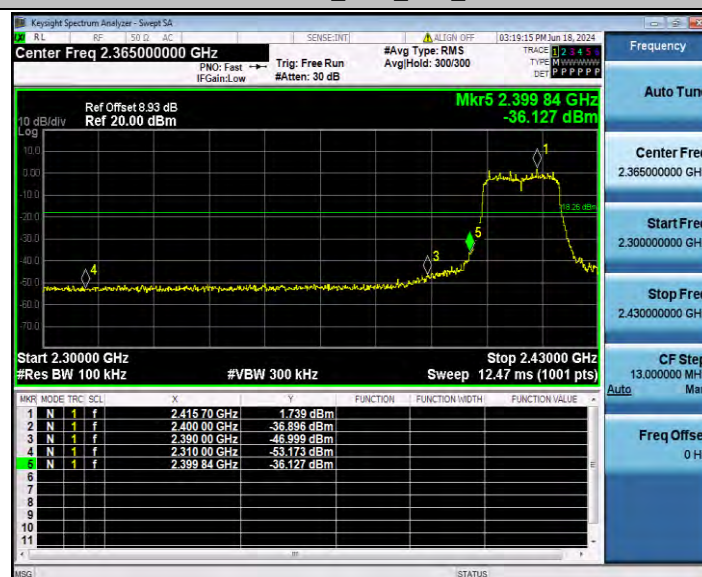
11G_Ant1_Low_2412



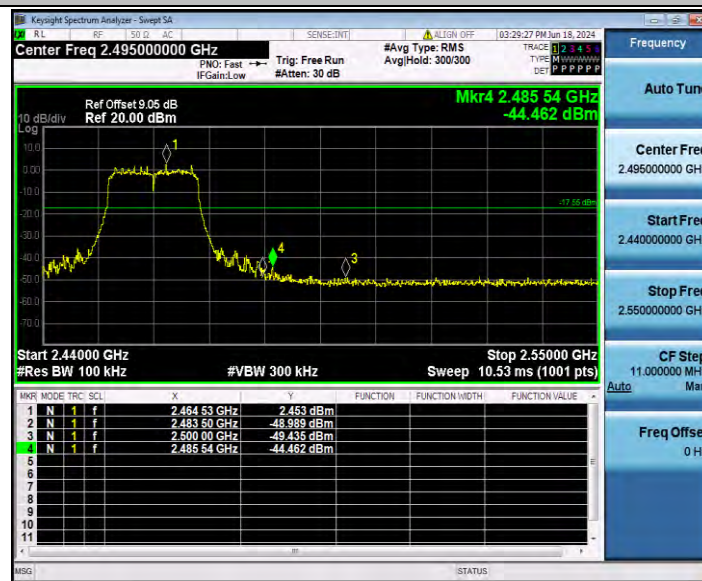
11G_Ant1_High_2462



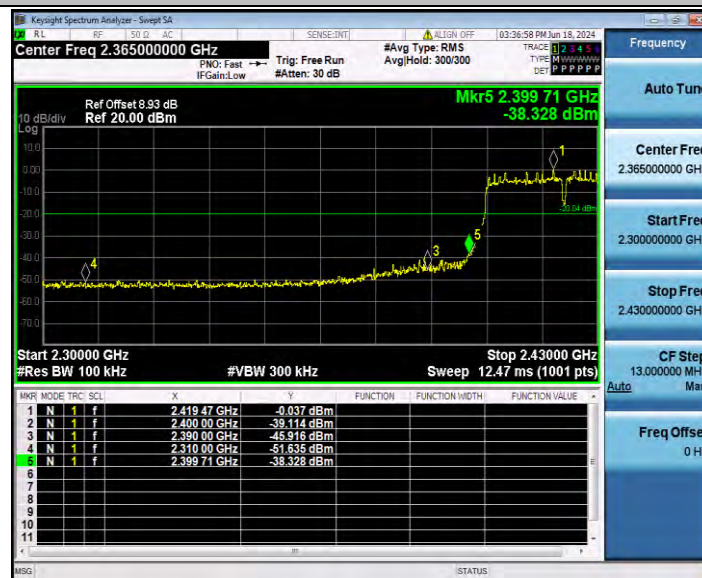
11N20SISO_Ant1_Low_2412



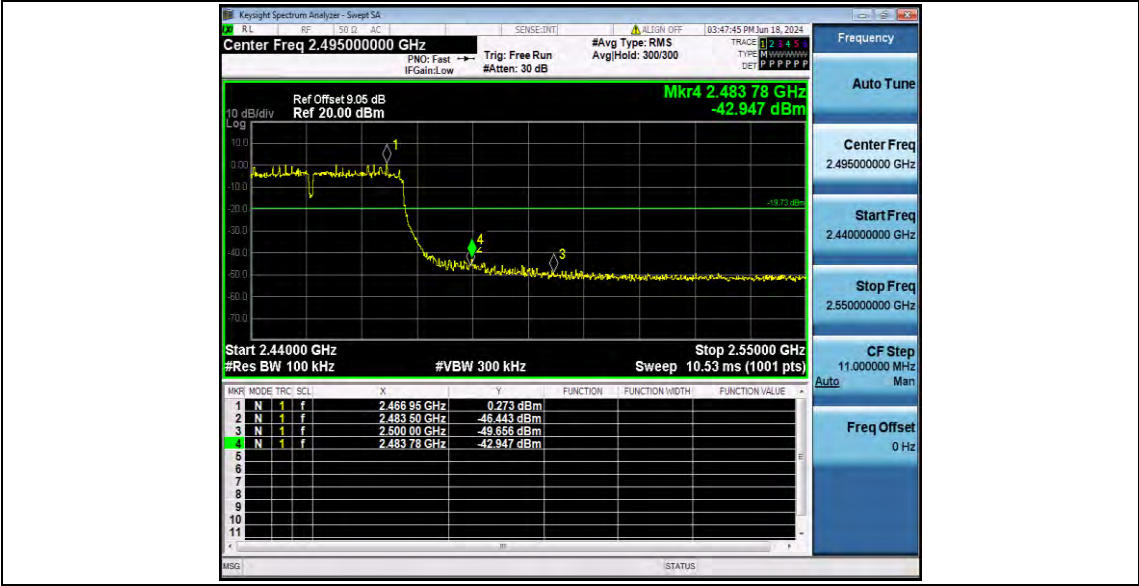
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

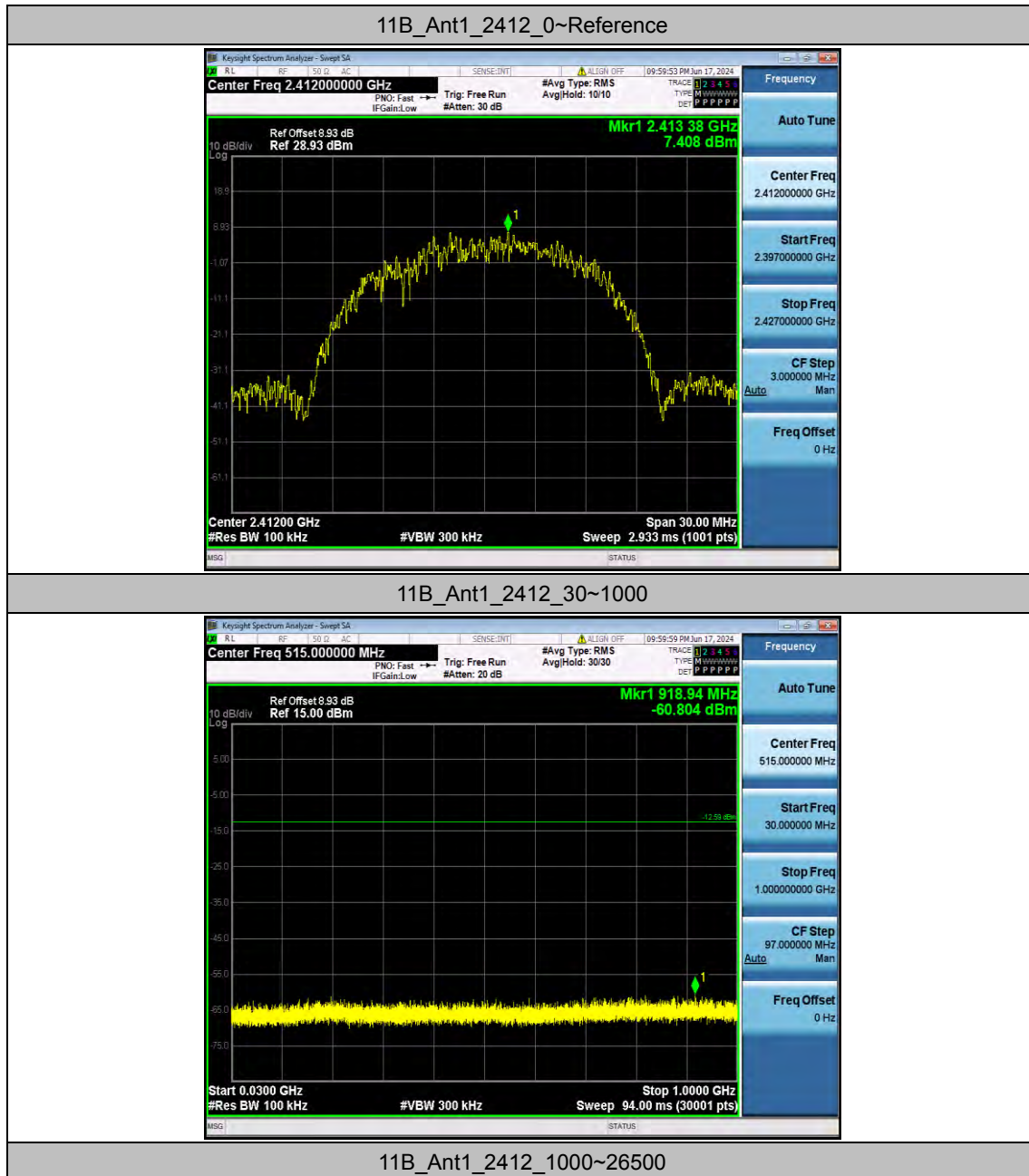


Appendix C.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	7.41	7.41	---	PASS
			30~1000	7.41	-60.8	≤ -12.59	PASS
			1000~26500	7.41	-43.37	≤ -12.59	PASS
		2437	Reference	9.24	9.24	---	PASS
			30~1000	9.24	-60.75	≤ -10.76	PASS
			1000~26500	9.24	-48.08	≤ -10.76	PASS
		2462	Reference	9.05	9.05	---	PASS
			30~1000	9.05	-60.2	≤ -10.95	PASS
			1000~26500	9.05	-46.89	≤ -10.95	PASS
11G	Ant1	2412	Reference	-1.56	-1.56	---	PASS
			30~1000	-1.56	-60.47	≤ -21.56	PASS
			1000~26500	-1.56	-43.83	≤ -21.56	PASS
		2437	Reference	-0.75	-0.75	---	PASS
			30~1000	-0.75	-58.73	≤ -20.75	PASS
			1000~26500	-0.75	-47.31	≤ -20.75	PASS
		2462	Reference	2.83	2.83	---	PASS
			30~1000	2.83	-60.64	≤ -17.17	PASS
			1000~26500	2.83	-48.1	≤ -17.17	PASS
11N20SISO	Ant1	2412	Reference	0.43	0.43	---	PASS
			30~1000	0.43	-60.75	≤ -19.57	PASS
			1000~26500	0.43	-48.9	≤ -19.57	PASS
		2437	Reference	2.16	2.16	---	PASS
			30~1000	2.16	-60.78	≤ -17.84	PASS
			1000~26500	2.16	-48.2	≤ -17.84	PASS
		2462	Reference	0.78	0.78	---	PASS
			30~1000	0.78	-60.1	≤ -19.22	PASS
			1000~26500	0.78	-48	≤ -19.22	PASS
11N40SISO	Ant1	2422	Reference	-3.67	-3.67	---	PASS
			30~1000	-3.67	-59.43	≤ -23.67	PASS
			1000~26500	-3.67	-44.8	≤ -23.67	PASS
		2437	Reference	-3.04	-3.04	---	PASS
			30~1000	-3.04	-60.44	≤ -23.04	PASS
			1000~26500	-3.04	-47.41	≤ -23.04	PASS
		2452	Reference	-1.80	-1.80	---	PASS
			30~1000	-1.80	-58.98	≤ -21.8	PASS
			1000~26500	-1.80	-47.63	≤ -21.8	PASS

Test Graphs

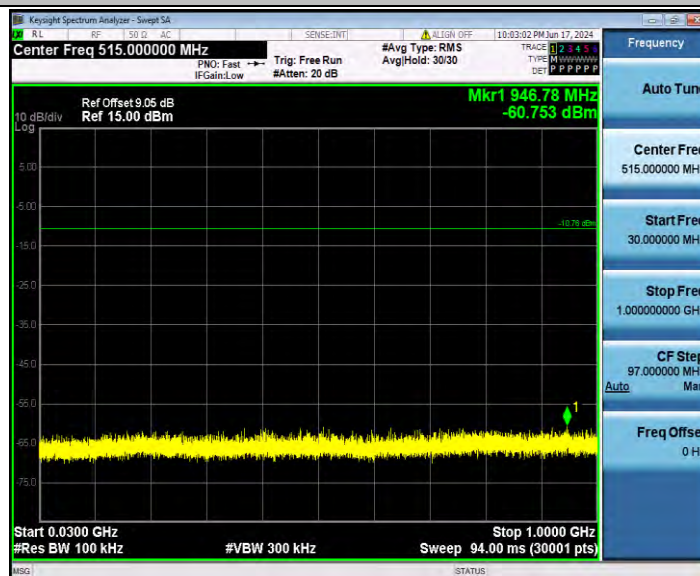




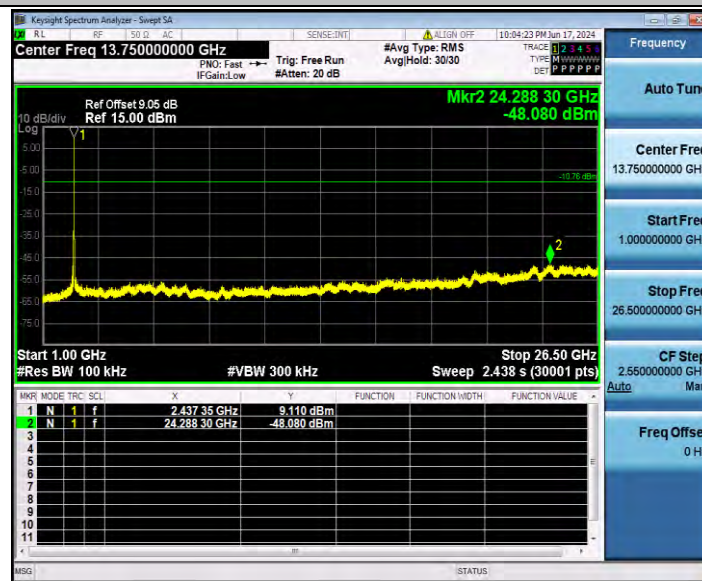
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



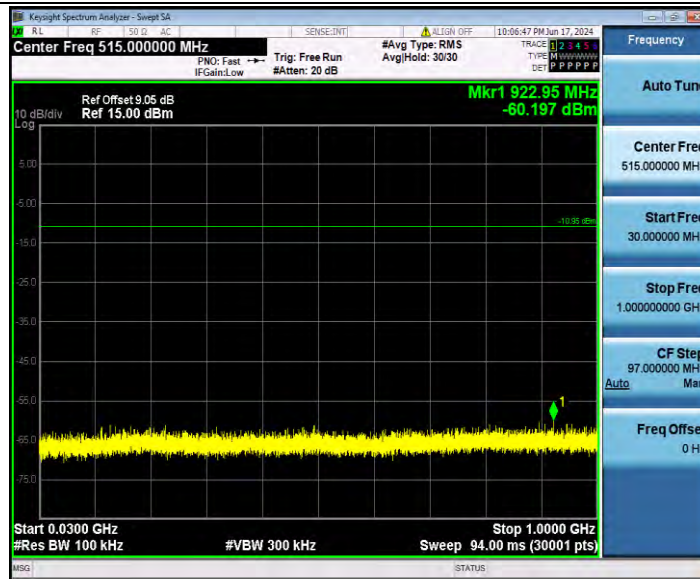
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



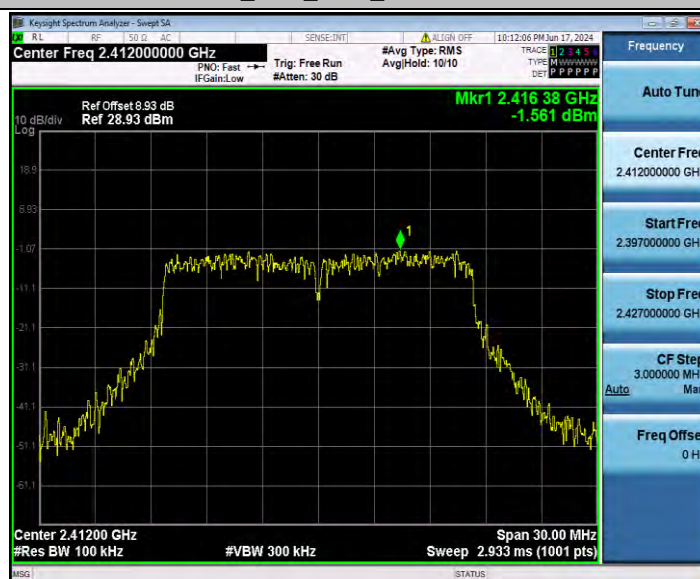
11B_Ant1_2462_30~1000



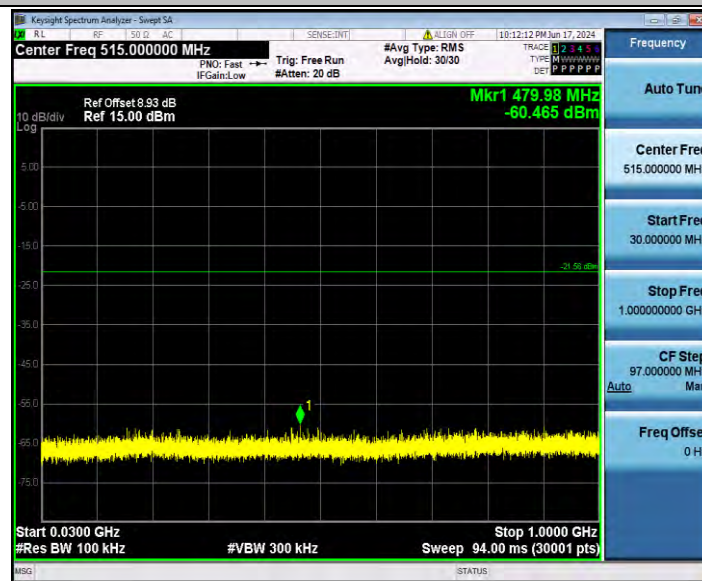
11B_Ant1_2462_1000~26500



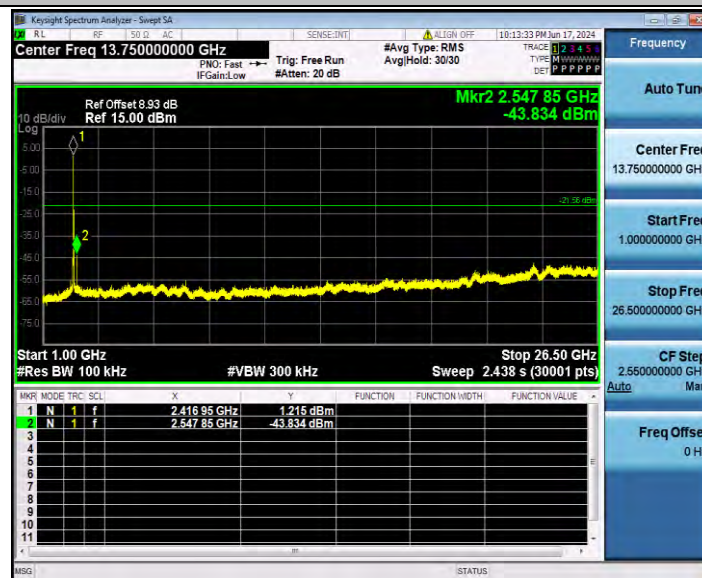
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



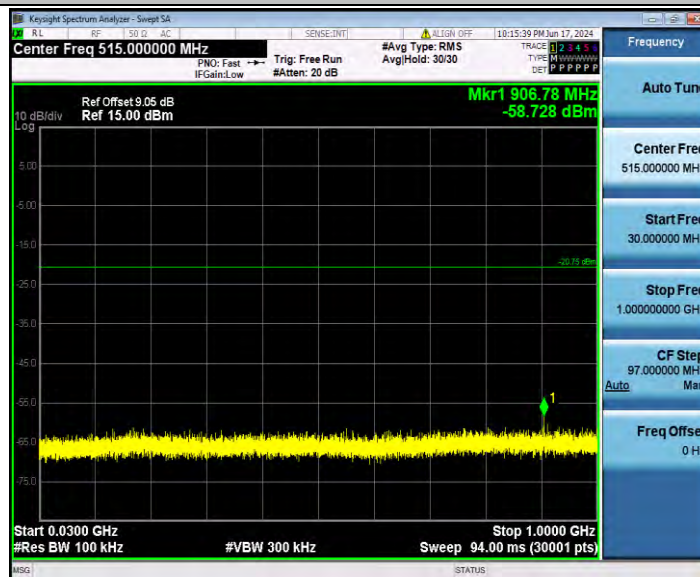
11G_Ant1_2412_1000~26500



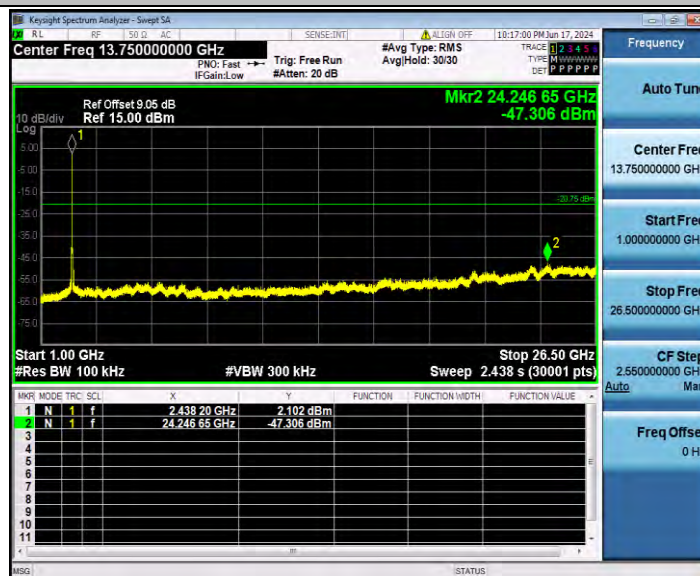
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



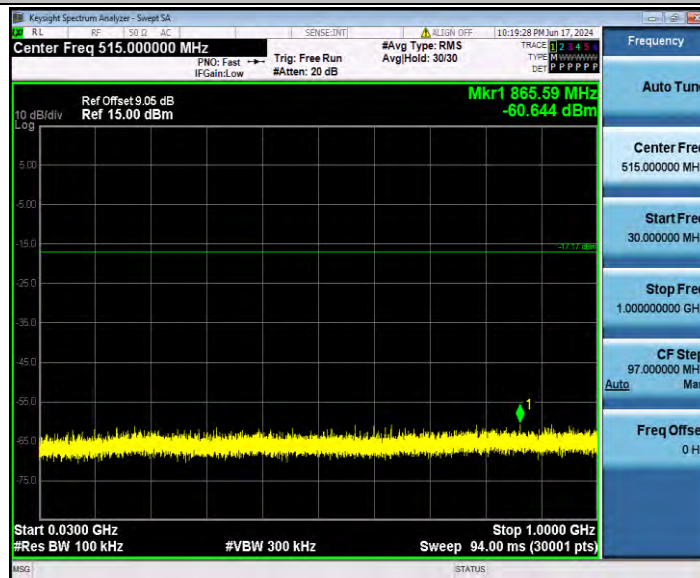
11G_Ant1_2437_1000~26500



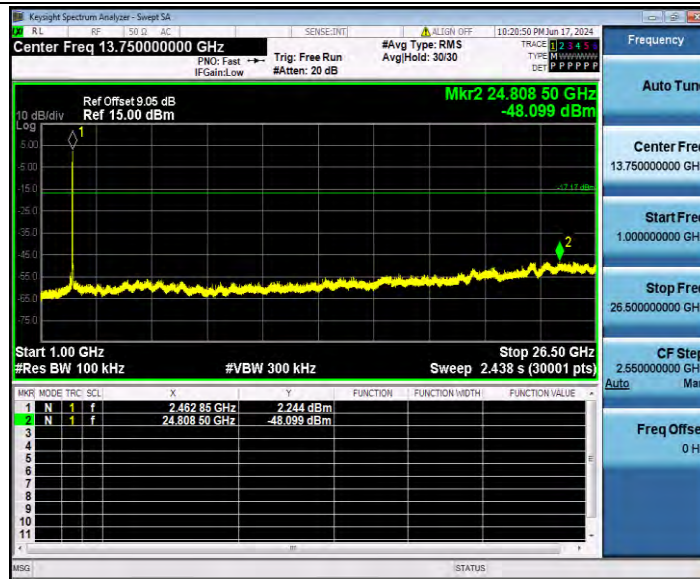
11G_Ant1_2462_0~Reference



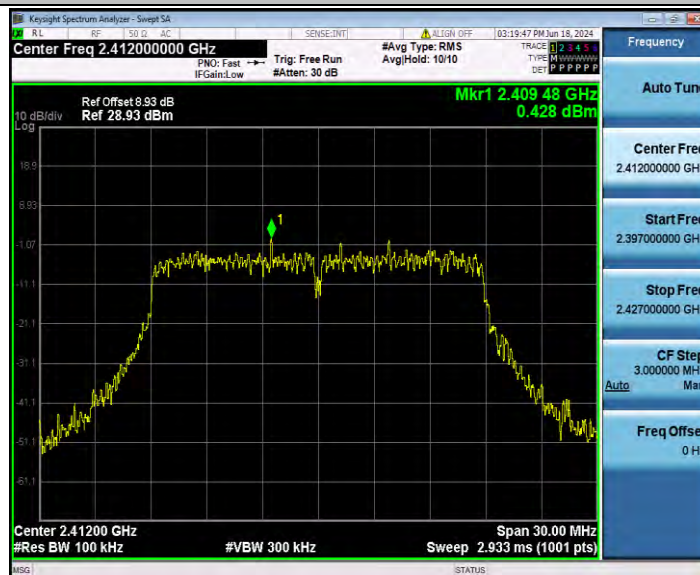
11G_Ant1_2462_30~1000



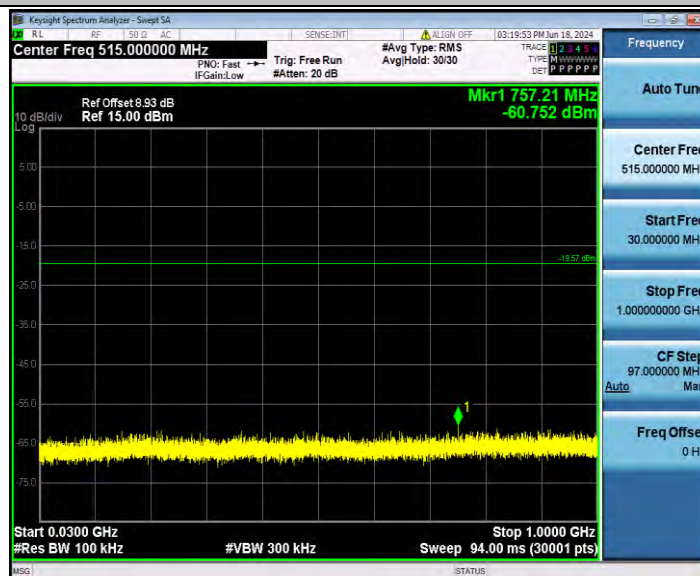
11G_Ant1_2462_1000~26500



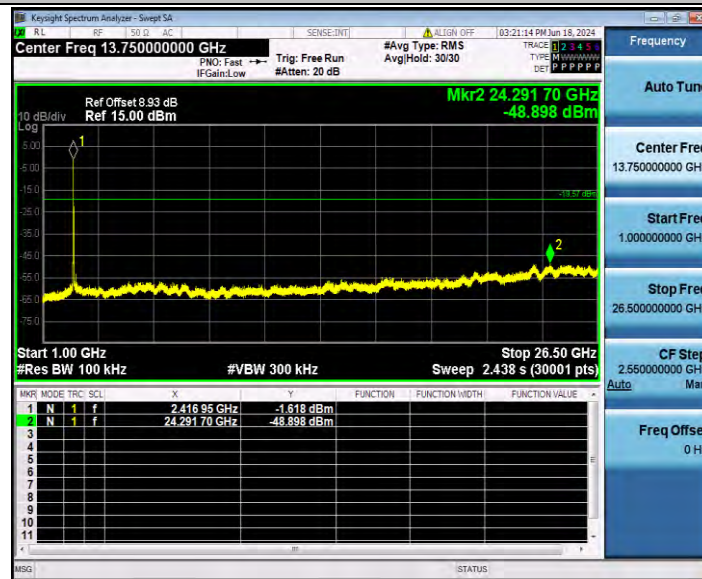
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



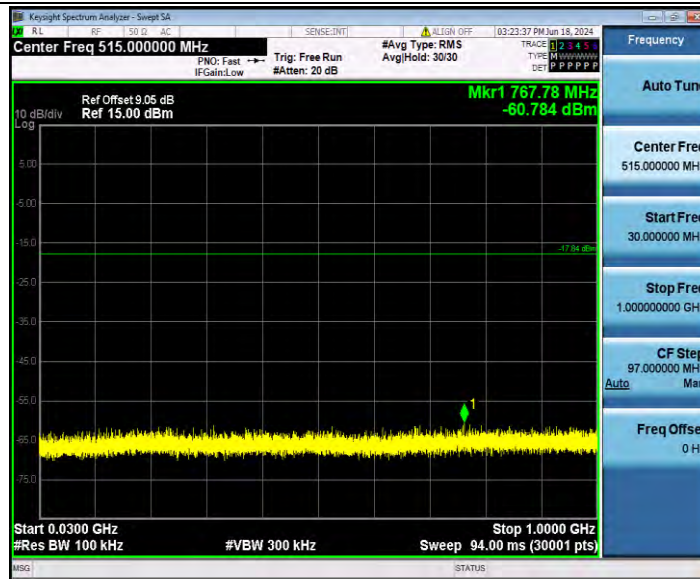
11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



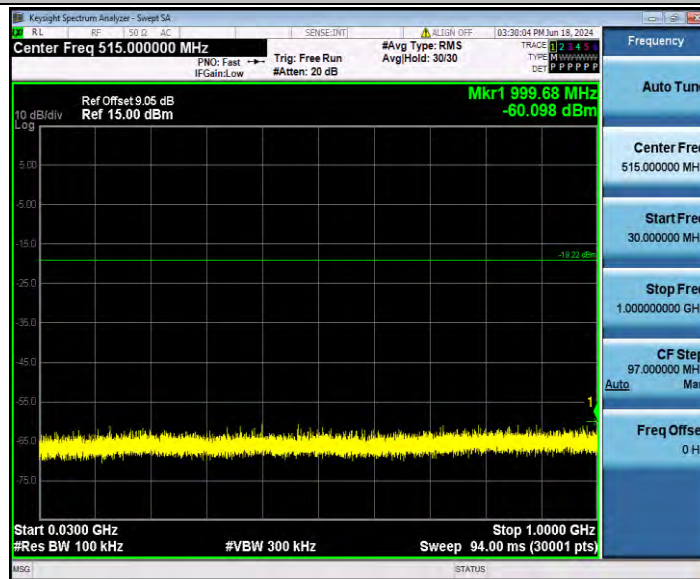
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



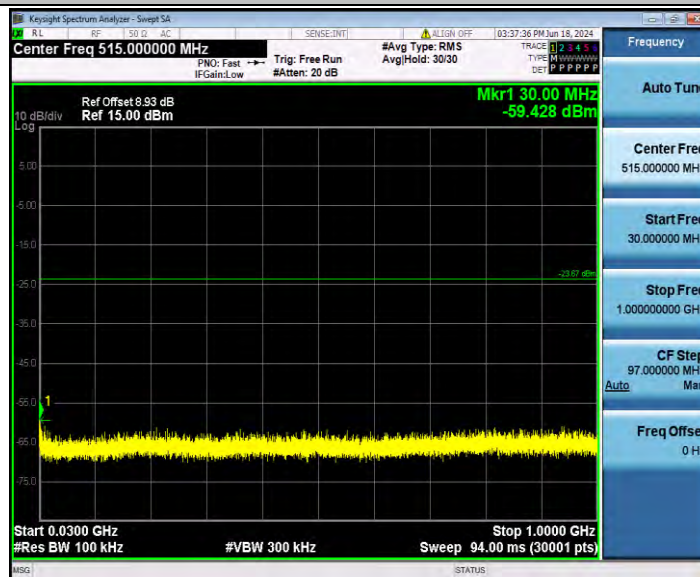
11N20SISO_Ant1_2462_1000~26500



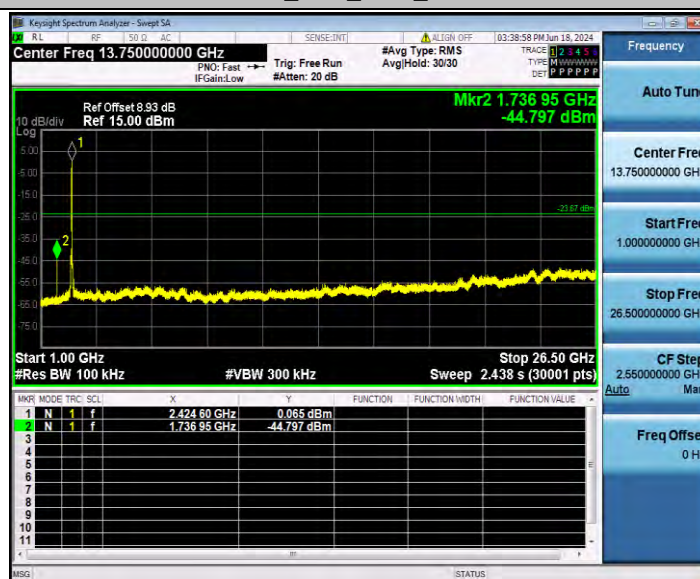
11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000



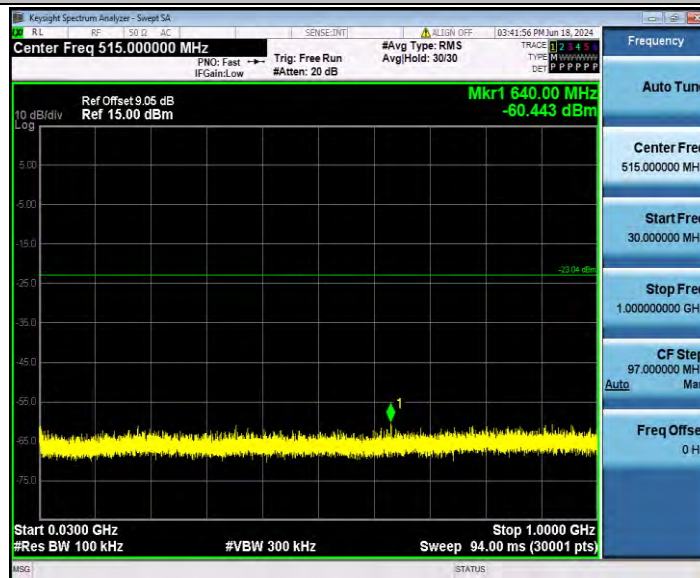
11N40SISO_Ant1_2422_1000~26500



11N40SISO_Ant1_2437_0~Reference



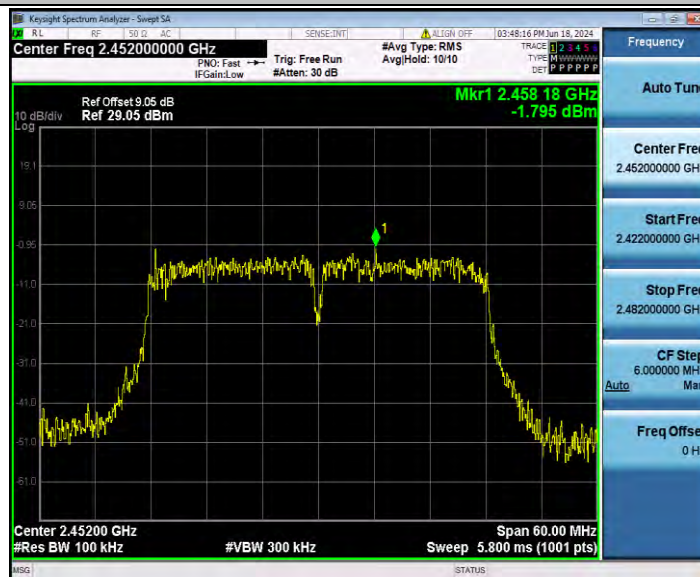
11N40SISO_Ant1_2437_30~1000



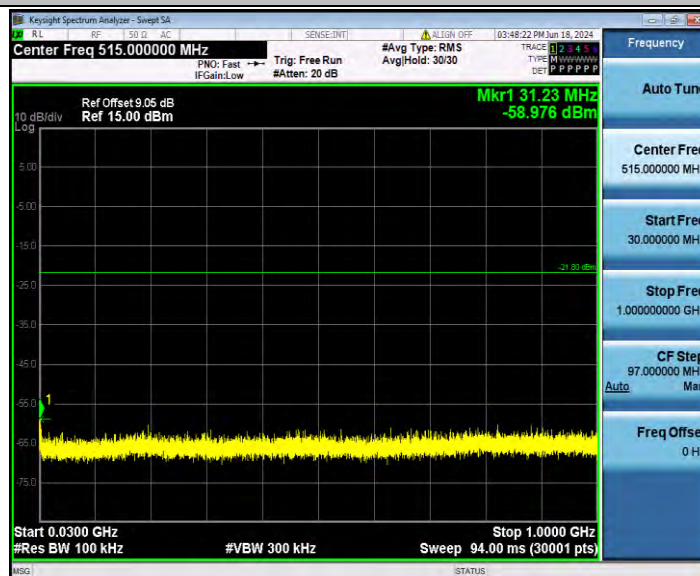
11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000





Appendix C.7: Emissions in Restricted Bands

Test Result

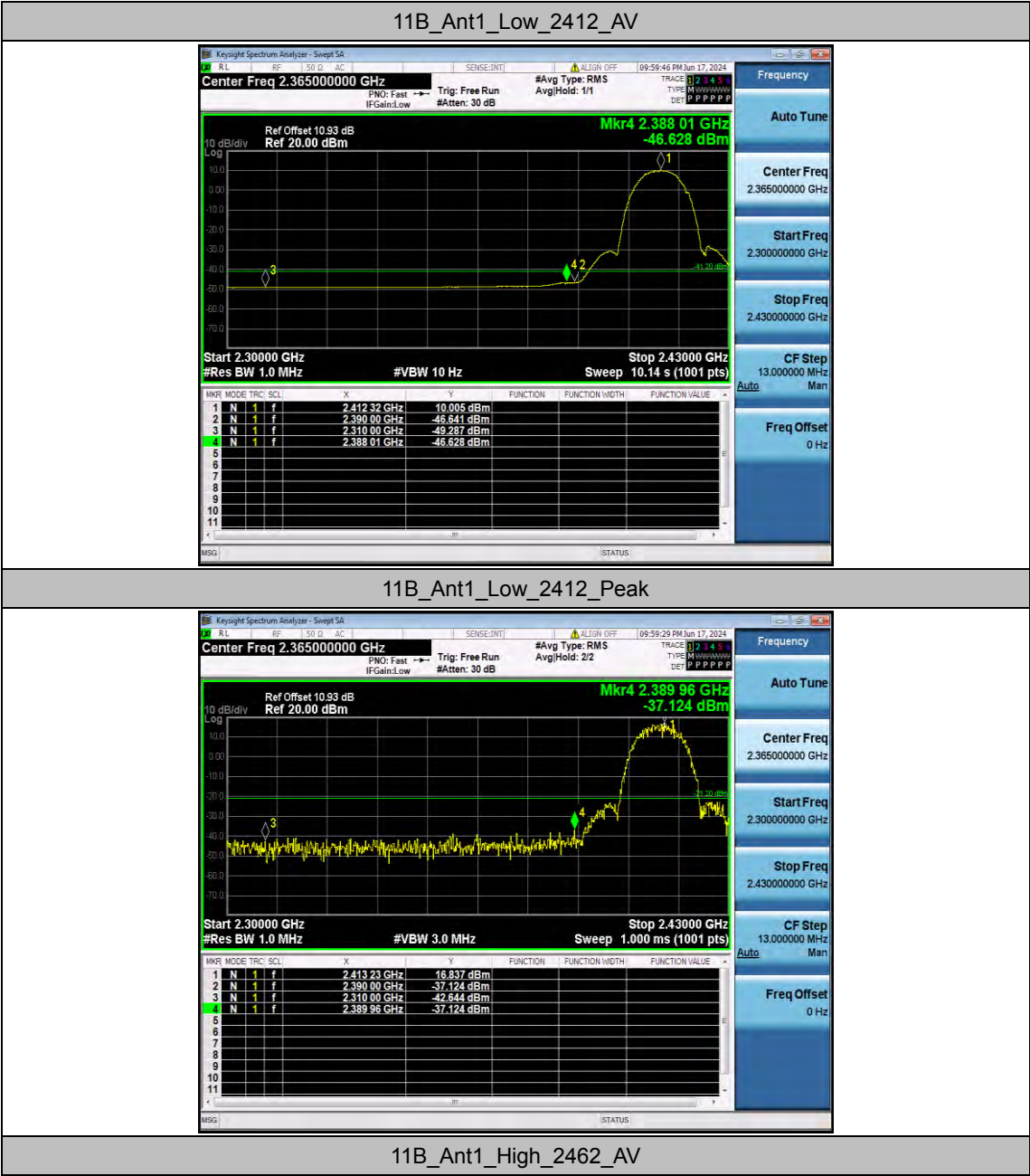
TestMode	Antenna	ChName	Frequency[MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.29	≤-41.20	45.91	≤54	PASS
				AV	2388.010	-46.63	≤-41.20	48.57	≤54	PASS
				AV	2390.000	-46.64	≤-41.20	48.56	≤54	PASS
				Peak	2310.000	-42.64	≤-21.20	52.56	≤74	PASS
				Peak	2389.960	-37.12	≤-21.20	58.08	≤74	PASS
				Peak	2390.000	-37.12	≤-21.20	58.08	≤74	PASS
		High	2462	AV	2483.500	-47.45	≤-41.20	47.75	≤54	PASS
				AV	2483.780	-47.41	≤-41.20	47.79	≤54	PASS
				AV	2500.000	-48.02	≤-41.20	47.18	≤54	PASS
				Peak	2483.500	-49.07	≤-21.20	46.13	≤74	PASS
				Peak	2491.920	-38.14	≤-21.20	57.06	≤74	PASS
				Peak	2500.000	-41.11	≤-21.20	54.09	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.31	≤-41.20	45.89	≤54	PASS
				AV	2389.960	-46.2	≤-41.20	49.00	≤54	PASS
				AV	2390.000	-46.2	≤-41.20	49.00	≤54	PASS
				Peak	2310.000	-48.68	≤-21.20	46.52	≤74	PASS
				Peak	2385.020	-39.04	≤-21.20	56.16	≤74	PASS
				Peak	2390.000	-43.6	≤-21.20	51.60	≤74	PASS
		High	2462	AV	2483.500	-45.83	≤-41.20	49.37	≤54	PASS
				AV	2483.560	-45.88	≤-41.20	49.32	≤54	PASS
				AV	2500.000	-48.37	≤-41.20	46.83	≤54	PASS
				Peak	2483.500	-38.24	≤-21.20	56.96	≤74	PASS
				Peak	2498.190	-34.36	≤-21.20	60.84	≤74	PASS
				Peak	2500.000	-46.27	≤-21.20	48.93	≤74	PASS
11N20SISO	Ant1	Low	2412	AV	2310.000	-49.68	≤-41.20	45.52	≤54	PASS
				AV	2389.960	-45.78	≤-41.20	49.42	≤54	PASS
				AV	2390.000	-45.78	≤-41.20	49.42	≤54	PASS
				Peak	2310.000	-45.49	≤-21.20	49.71	≤74	PASS
				Peak	2381.770	-39.19	≤-21.20	56.01	≤74	PASS
				Peak	2390.000	-45.93	≤-21.20	49.27	≤74	PASS
		High	2462	AV	2483.500	-45.75	≤-41.20	49.45	≤54	PASS
				AV	2483.560	-45.8	≤-41.20	49.40	≤54	PASS
				AV	2500.000	-48.33	≤-41.20	46.87	≤54	PASS
				Peak	2483.500	-38.49	≤-21.20	56.71	≤74	PASS
				Peak	2483.670	-27.35	≤-21.20	67.85	≤74	PASS

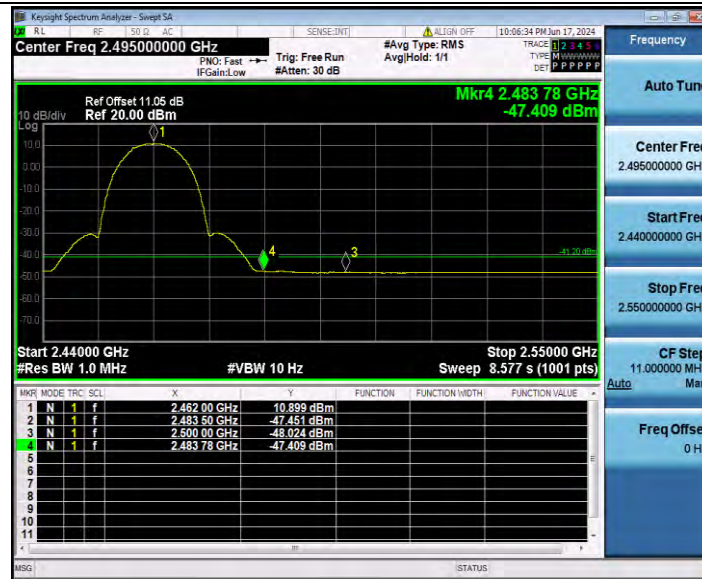
				Peak	2500.000	-44.46	≤-21.20	50.74	≤74	PASS
11N40SISO	Ant1	Low	2422	AV	2310.000	-49.52	≤-41.20	45.68	≤54	PASS
				AV	2389.050	-44.21	≤-41.20	50.99	≤54	PASS
				AV	2390.000	-44.42	≤-41.20	50.78	≤54	PASS
				Peak	2310.000	-47.32	≤-21.20	47.88	≤74	PASS
				Peak	2389.310	-32.99	≤-21.20	62.21	≤74	PASS
				Peak	2390.000	-36.41	≤-21.20	58.79	≤74	PASS
		High	2452	AV	2483.500	-46.15	≤-41.20	49.05	≤54	PASS
				AV	2483.560	-46.19	≤-41.20	49.01	≤54	PASS
				AV	2500.000	-47.81	≤-41.20	47.39	≤54	PASS
				Peak	2483.500	-42.39	≤-21.20	52.81	≤74	PASS
				Peak	2485.210	-31.2	≤-21.20	64.00	≤74	PASS
				Peak	2500.000	-45.54	≤-21.20	49.66	≤74	PASS

Note:

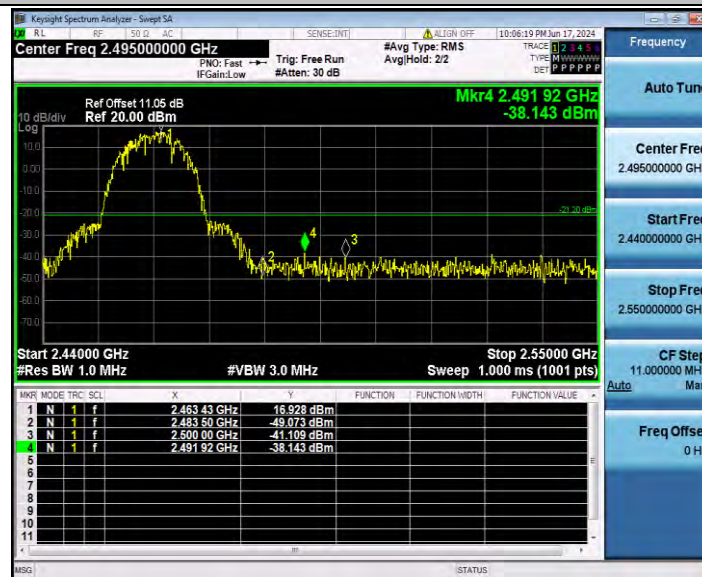
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

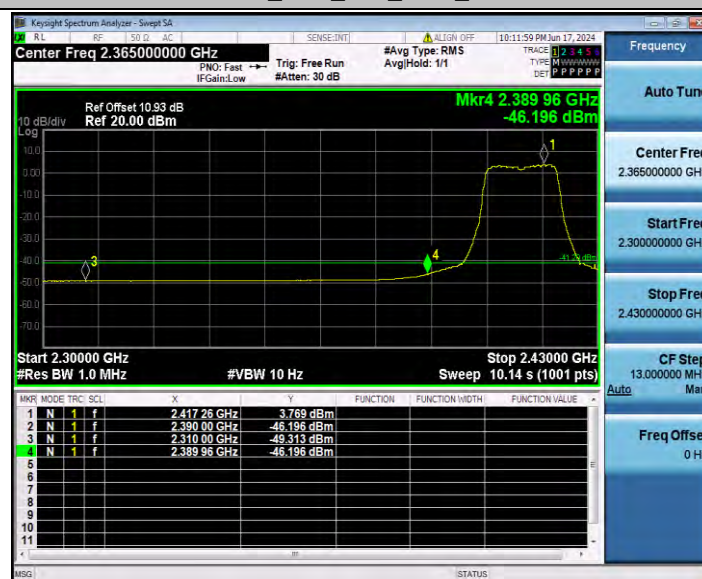


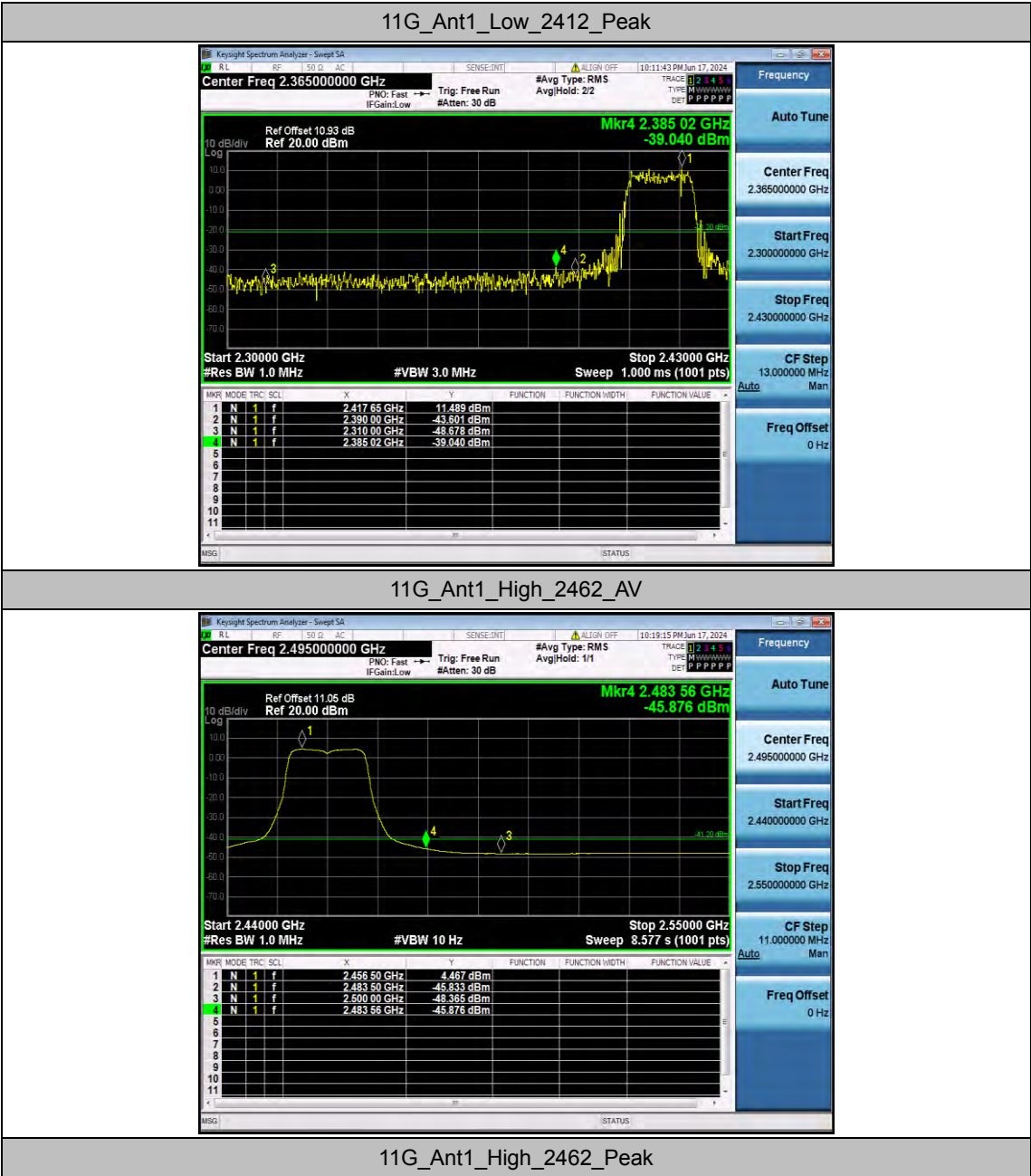


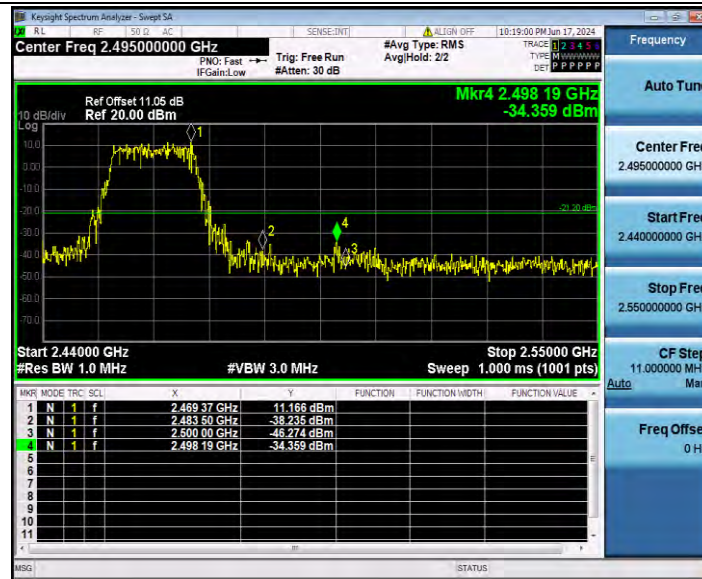
11B_Ant1_High_2462_Peak



11G_Ant1_Low_2412_AV



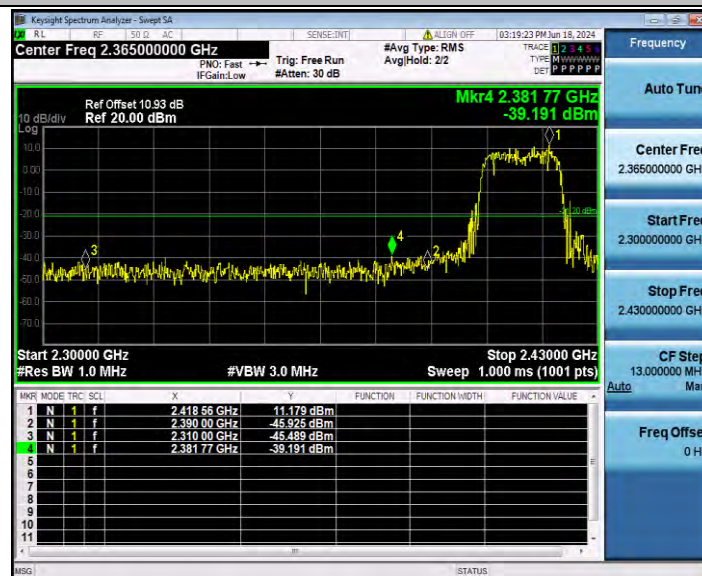




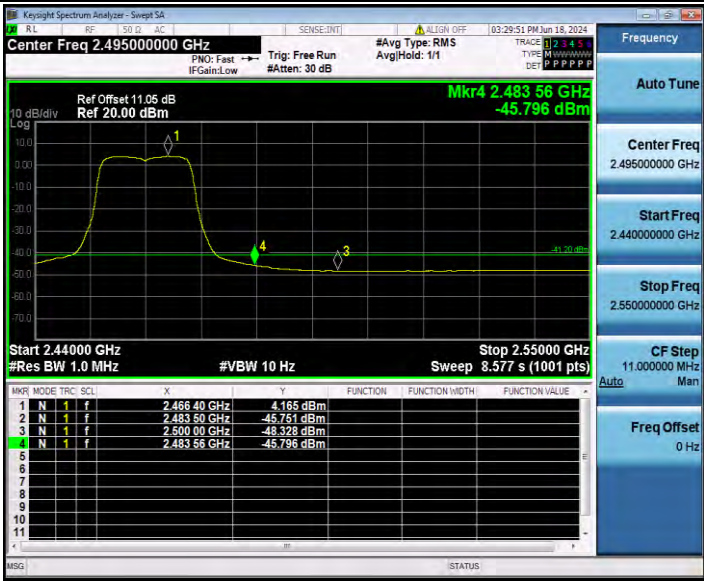
11N20SISO_Ant1_Low_2412_AV



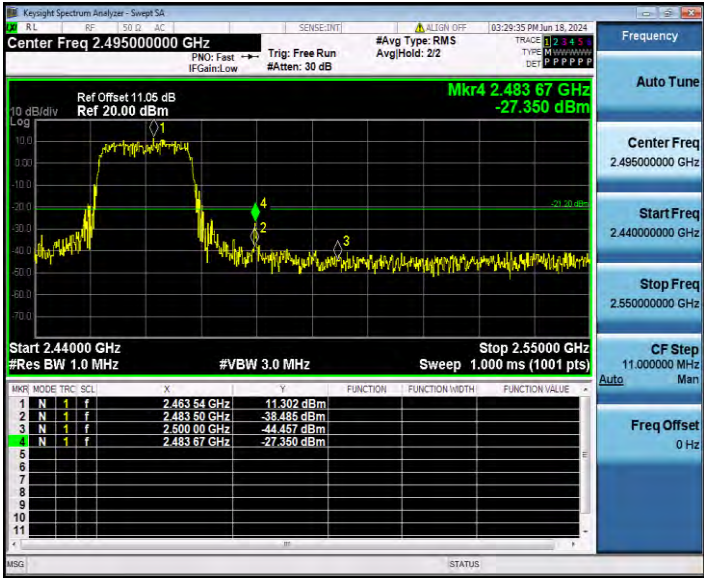
11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



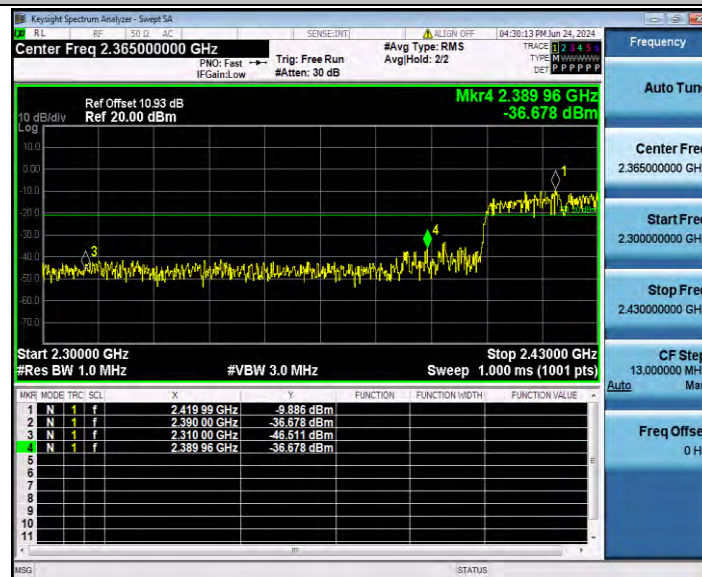
11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV

