

Case No. : <u>CTA24101700902</u>
Ambient Condition: <u>22 °C</u> , <u>56 %RH</u> ,
Test Date: <u>2024.9.24</u> Test Engineer: <u>Lushan Kong</u>

Appendix A.1: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.080	2406.960	2417.040	0.5	PASS
		2437	10.080	2431.960	2442.040	0.5	PASS
		2462	10.080	2456.960	2467.040	0.5	PASS
11G	Ant1	2412	16.400	2403.800	2420.200	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.360	2453.800	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.600	2403.200	2420.800	0.5	PASS
		2437	17.600	2428.200	2445.800	0.5	PASS
		2462	17.600	2453.200	2470.800	0.5	PASS

Test Graphs

11B_Ant1_2412



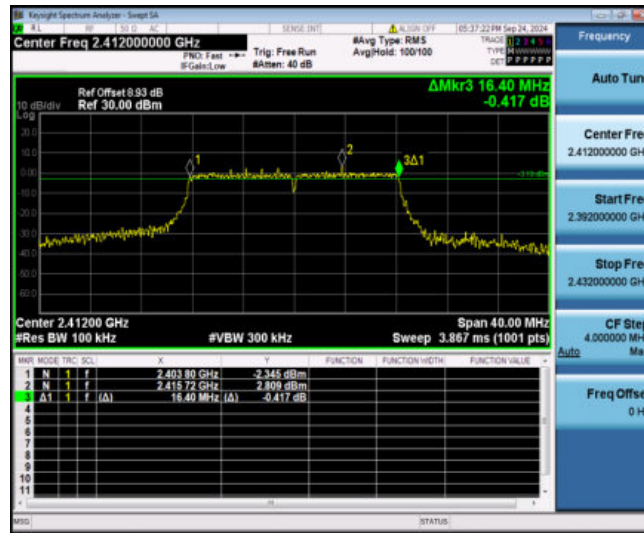
11B_Ant1_2437



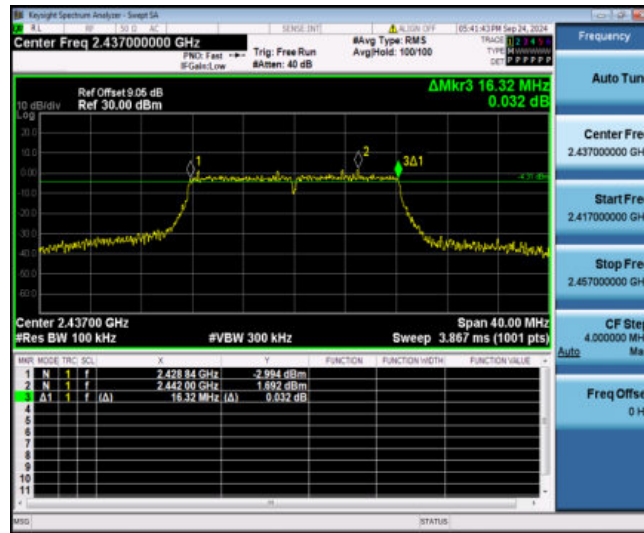
11B_Ant1_2462



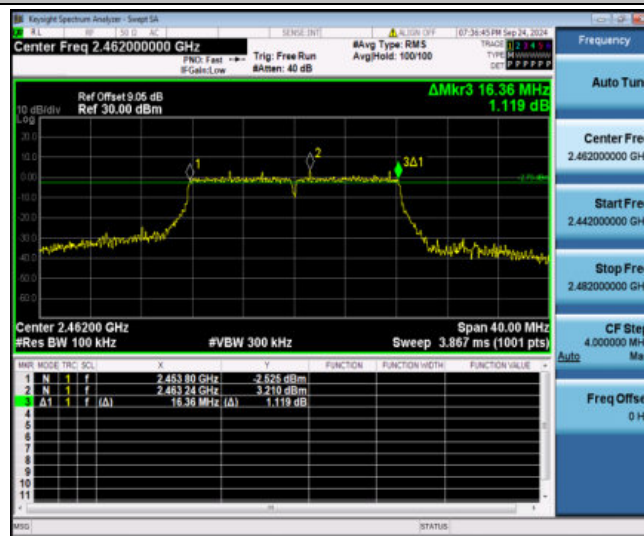
11G_Ant1_2412



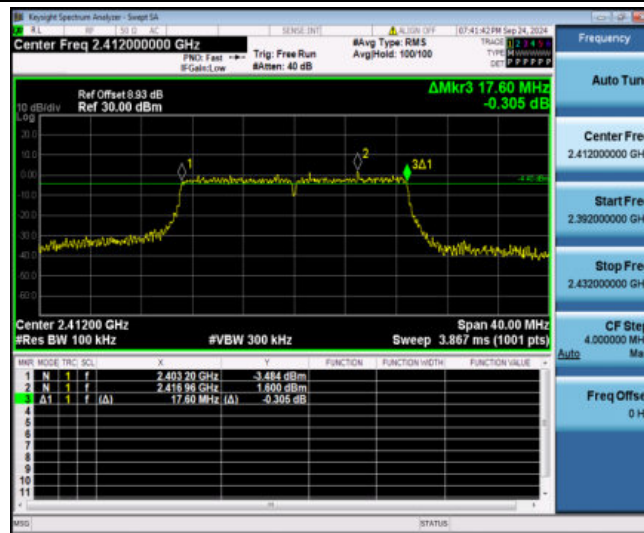
11G_Ant1_2437



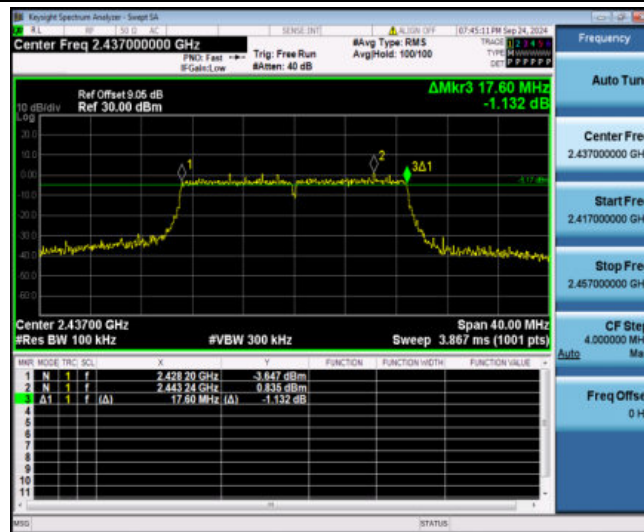
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix A.2: Occupied Channel Bandwidth

Test Result

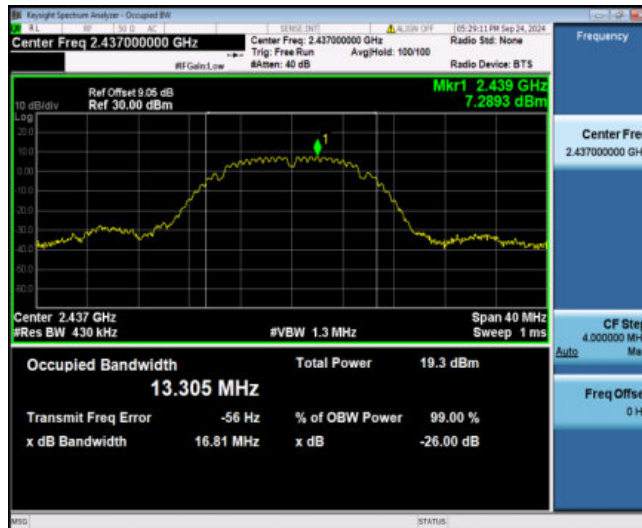
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.285	2405.3549	2418.6399	---	---
		2437	13.305	2430.3474	2443.6524	---	---
		2462	13.256	2455.3422	2468.5982	---	---
11G	Ant1	2412	16.879	2403.5493	2420.4283	---	---
		2437	16.784	2428.6005	2445.3845	---	---
		2462	16.901	2453.5288	2470.4298	---	---
11N20SISO	Ant1	2412	17.810	2403.1005	2420.9105	---	---
		2437	17.818	2428.0880	2445.9060	---	---
		2462	17.856	2453.0356	2470.8916	---	---

Test Graphs

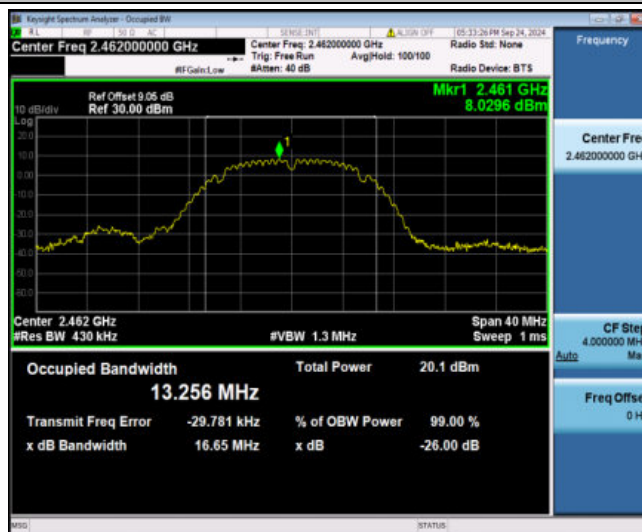
11B_Ant1_2412



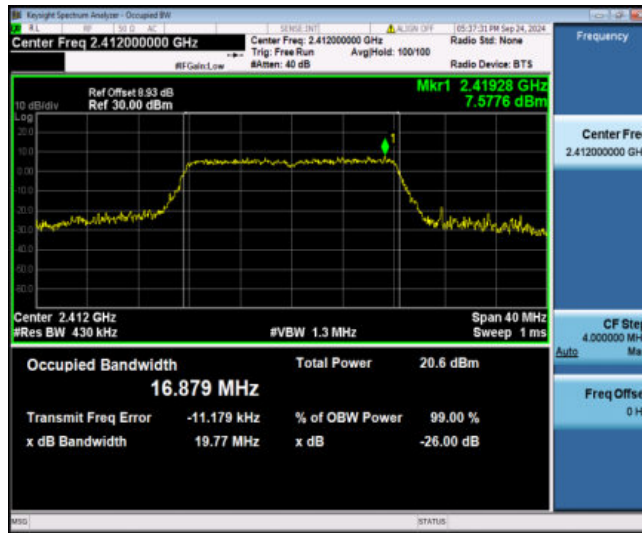
11B_Ant1_2437



11B_Ant1_2462



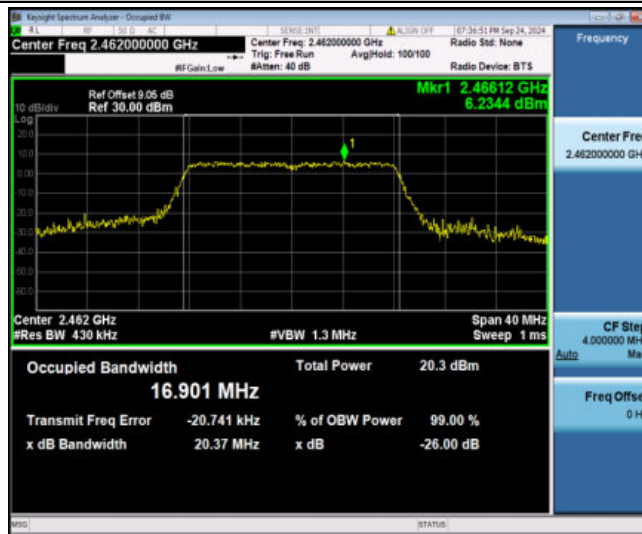
11G_Ant1_2412



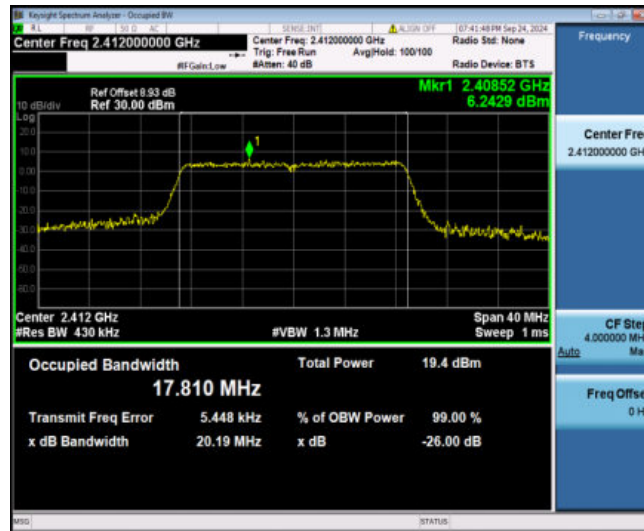
11G_Ant1_2437



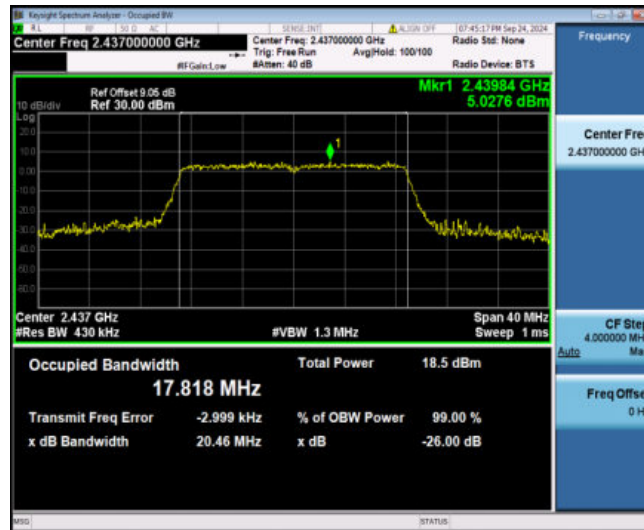
11G_Ant1_2462



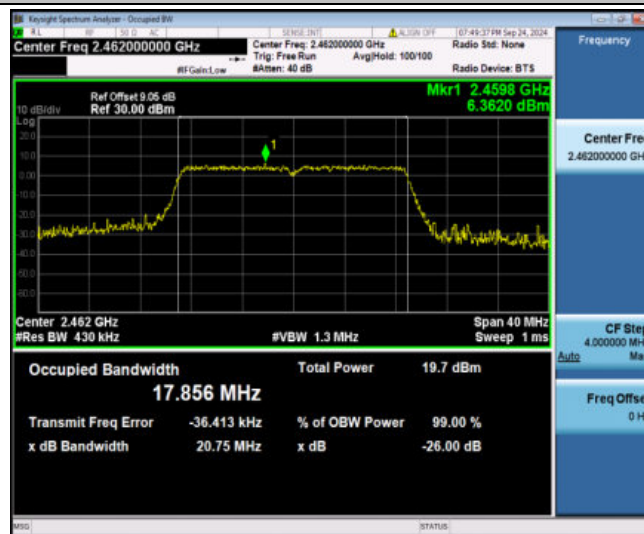
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix A.3: Maximum conducted output power

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	20.11	≤30.00	PASS
		2437	19.34	≤30.00	PASS
		2462	20.10	≤30.00	PASS
11G	Ant1	2412	21.74	≤30.00	PASS
		2437	20.36	≤30.00	PASS
		2462	21.42	≤30.00	PASS
11N20SISO	Ant1	2412	20.54	≤30.00	PASS
		2437	19.74	≤30.00	PASS
		2462	20.57	≤30.00	PASS

Appendix A.4: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-6.94	≤8.00	PASS
		2437	-7.64	≤8.00	PASS
		2462	-6.45	≤8.00	PASS
11G	Ant1	2412	-9.82	≤8.00	PASS
		2437	-12.08	≤8.00	PASS
		2462	-10.85	≤8.00	PASS
11N20SISO	Ant1	2412	-9.85	≤8.00	PASS
		2437	-12.41	≤8.00	PASS
		2462	-11.94	≤8.00	PASS

Test Graphs

11B_Ant1_2412



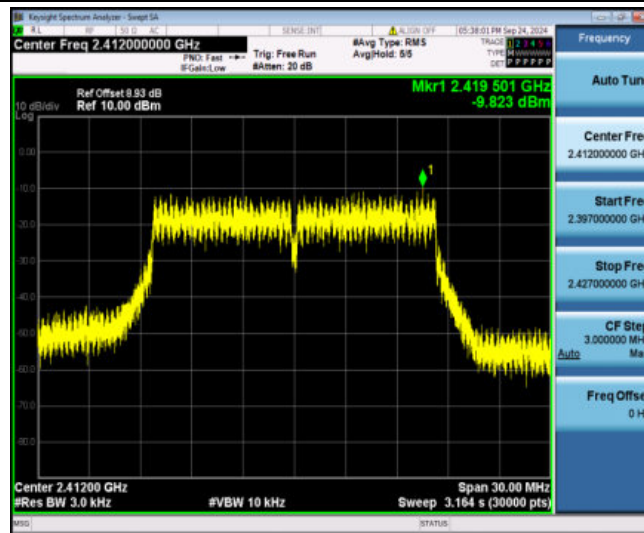
11B_Ant1_2437



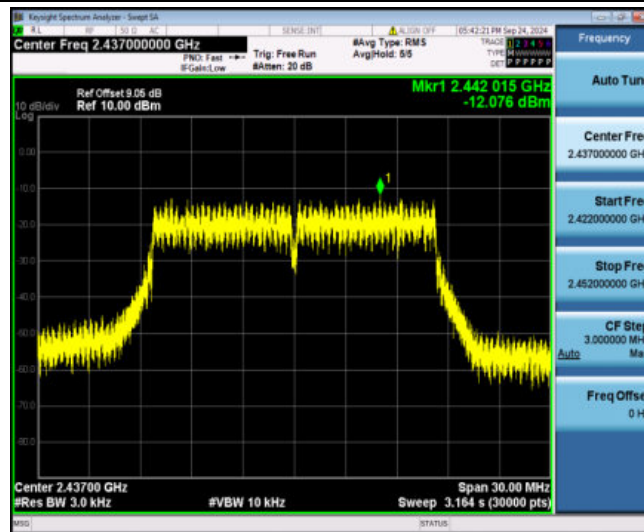
11B_Ant1_2462



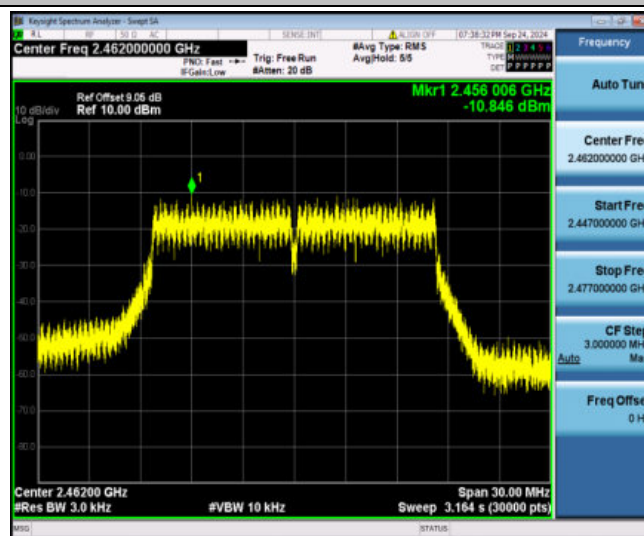
11G_Ant1_2412



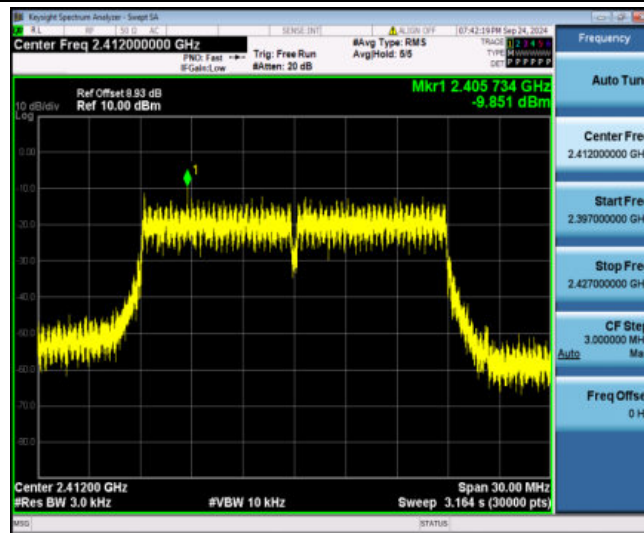
11G_Ant1_2437



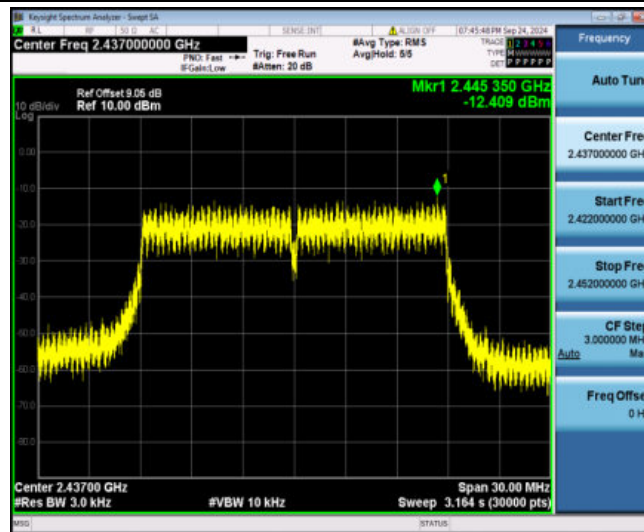
11G_Ant1_2462



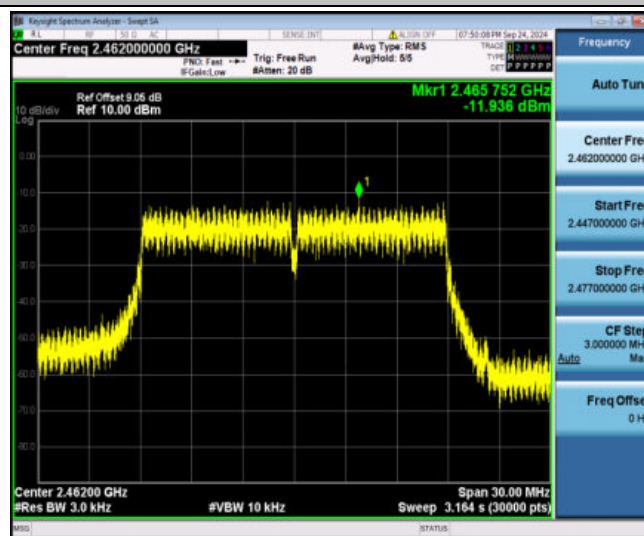
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



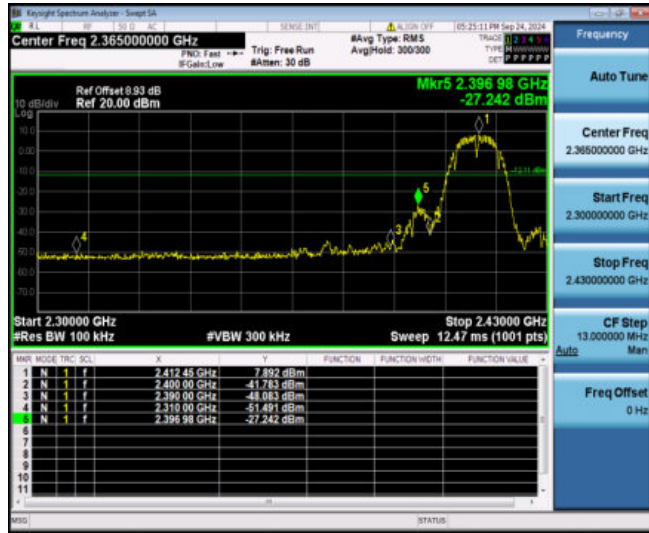
Appendix A.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	7.89	-27.24	≤-12.11	PASS
		High	2462	7.80	-47.31	≤-12.2	PASS
11G	Ant1	Low	2412	3.19	-26.7	≤-16.82	PASS
		High	2462	2.72	-38.97	≤-17.28	PASS
11N20SISO	Ant1	Low	2412	1.95	-28.99	≤-18.05	PASS
		High	2462	1.60	-41.38	≤-18.4	PASS

Test Graphs

11B_Ant1_Low_2412



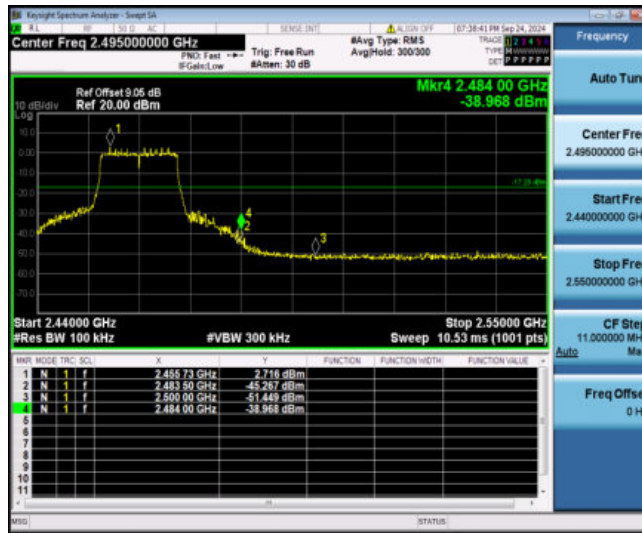
11B_Ant1_High_2462



11G_Ant1_Low_2412



11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix A.6: Conducted Spurious Emission

Test Result

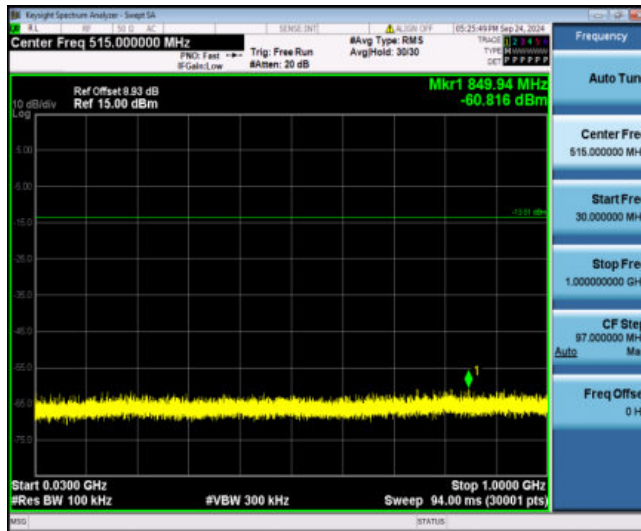
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	6.49	6.49	---	PASS
			30~1000	6.49	-60.82	≤ -13.51	PASS
			1000~26500	6.49	-38.31	≤ -13.51	PASS
		2437	Reference	6.06	6.06	---	PASS
			30~1000	6.06	-60.22	≤ -13.94	PASS
			1000~26500	6.06	-40.07	≤ -13.94	PASS
		2462	Reference	6.08	6.08	---	PASS
			30~1000	6.08	-52.47	≤ -13.92	PASS
			1000~26500	6.08	-40.95	≤ -13.92	PASS
11G	Ant1	2412	Reference	-0.20	-0.20	---	PASS
			30~1000	-0.20	-60.93	≤ -20.2	PASS
			1000~26500	-0.20	-48.08	≤ -20.2	PASS
		2437	Reference	-1.24	-1.24	---	PASS
			30~1000	-1.24	-60.92	≤ -21.24	PASS
			1000~26500	-1.24	-47.82	≤ -21.24	PASS
		2462	Reference	-0.15	-0.15	---	PASS
			30~1000	-0.15	-60.06	≤ -20.15	PASS
			1000~26500	-0.15	-47.36	≤ -20.15	PASS
11N20SISO	Ant1	2412	Reference	-0.31	-0.31	---	PASS
			30~1000	-0.31	-60.81	≤ -20.31	PASS
			1000~26500	-0.31	-48.22	≤ -20.31	PASS
		2437	Reference	-2.54	-2.54	---	PASS
			30~1000	-2.54	-60.95	≤ -22.54	PASS
			1000~26500	-2.54	-47.99	≤ -22.54	PASS
		2462	Reference	-1.23	-1.23	---	PASS
			30~1000	-1.23	-60.66	≤ -21.23	PASS
			1000~26500	-1.23	-47.77	≤ -21.23	PASS

Test Graphs

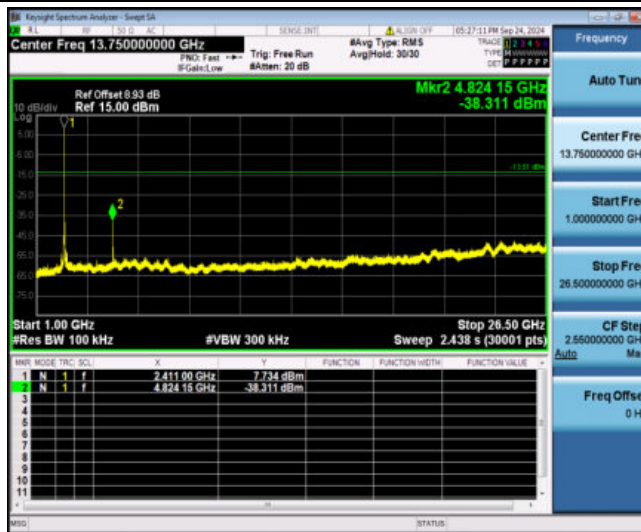
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



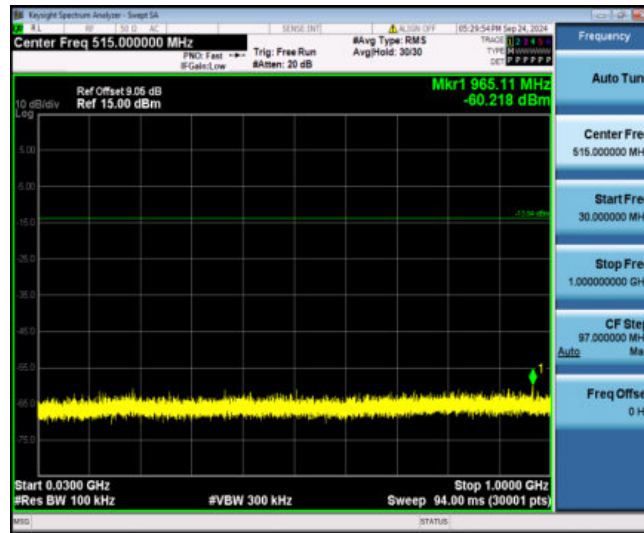
11B_Ant1_2412_1000~26500



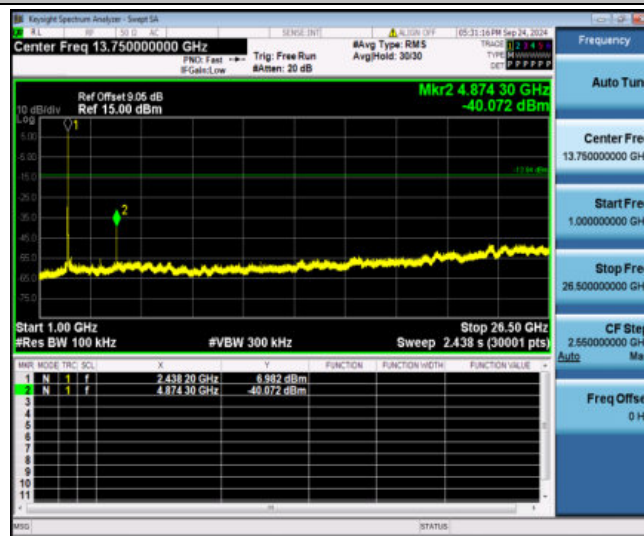
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



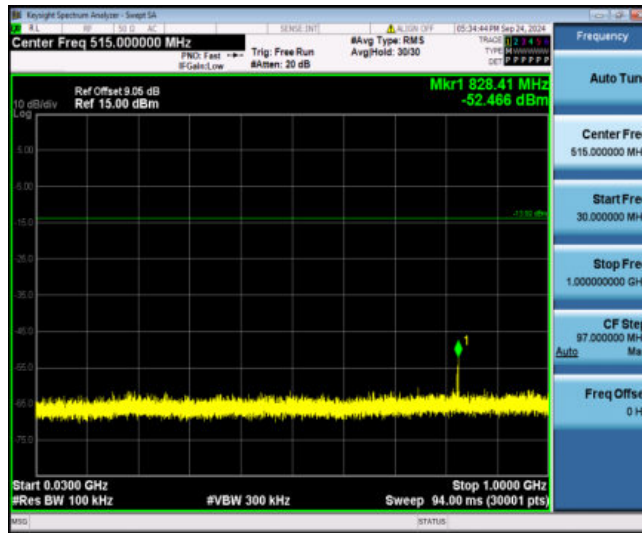
11B_Ant1_2437_1000~26500



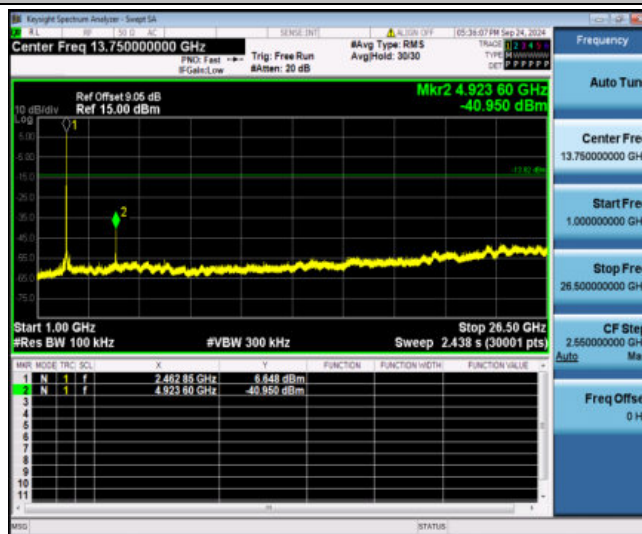
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



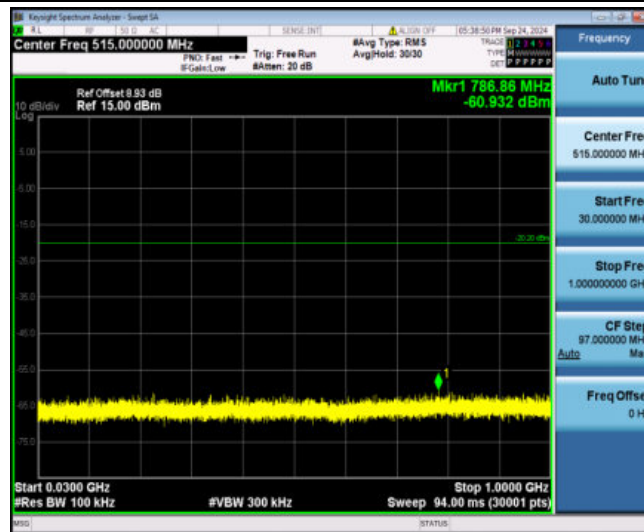
11B_Ant1_2462_1000~26500



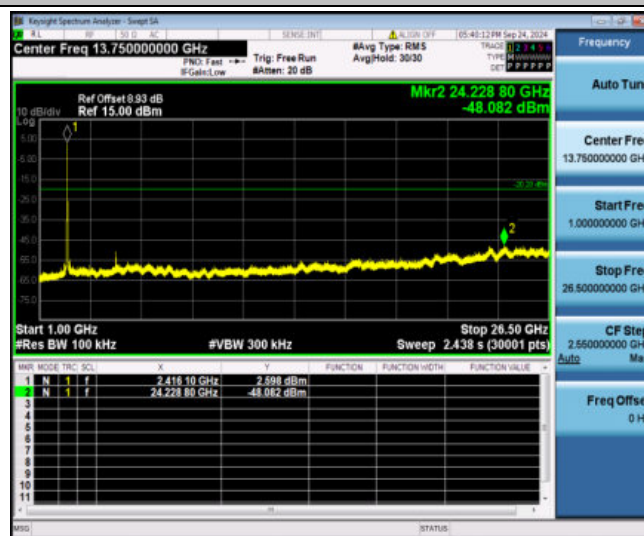
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



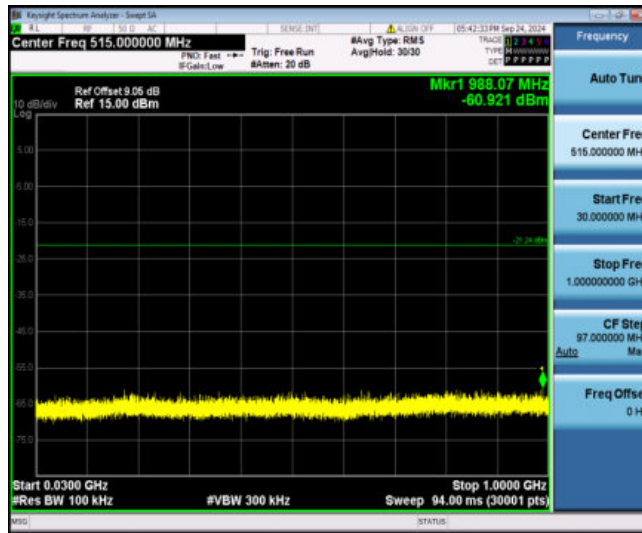
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



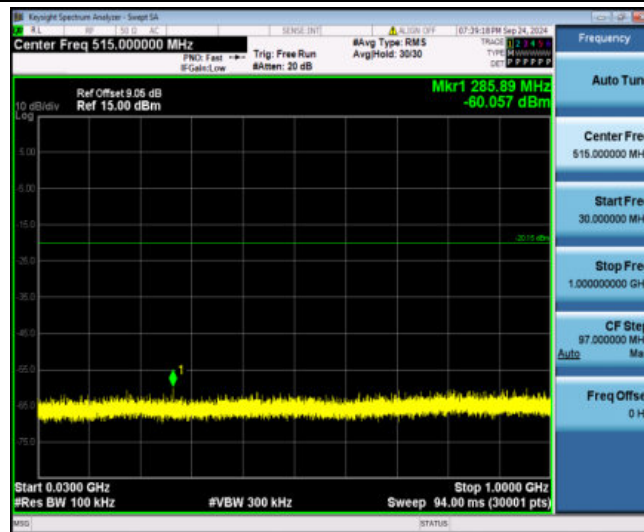
11G_Ant1_2437_1000~26500



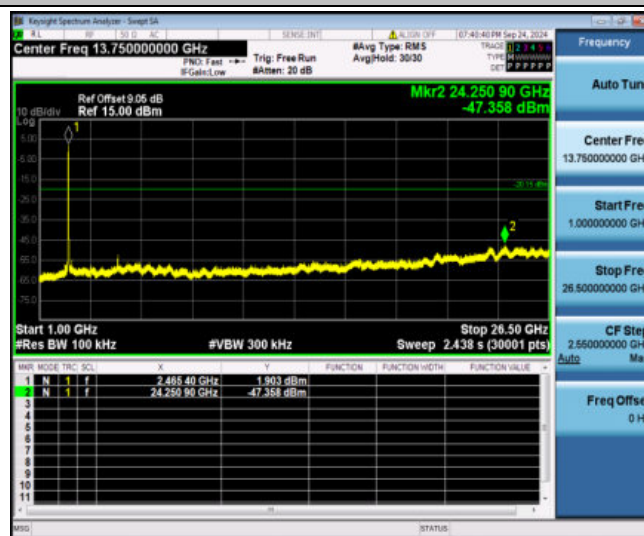
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



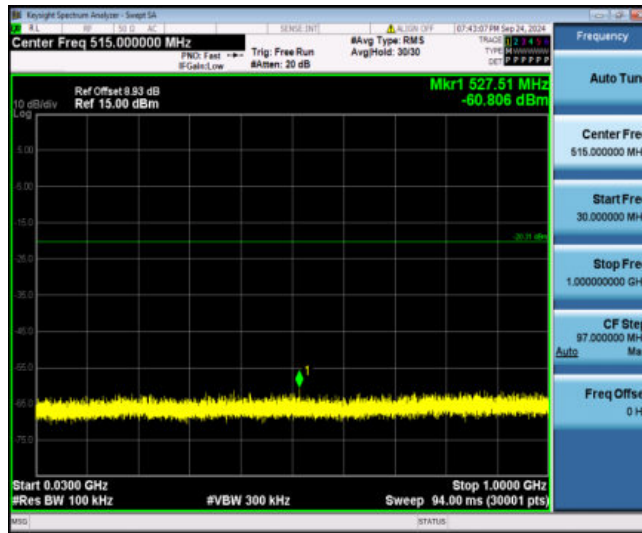
11G_Ant1_2462_1000~26500



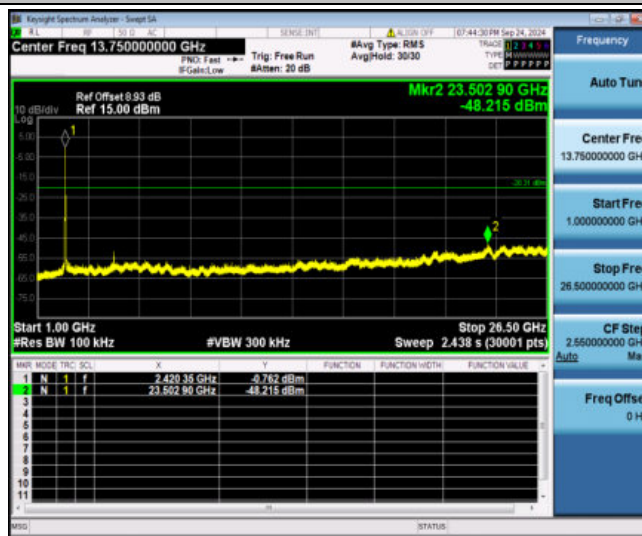
11N20SISO_Ant1_2412_0-Reference



11N20SISO_Ant1_2412_30~1000



11N20SISO_Ant1_2412_1000~26500



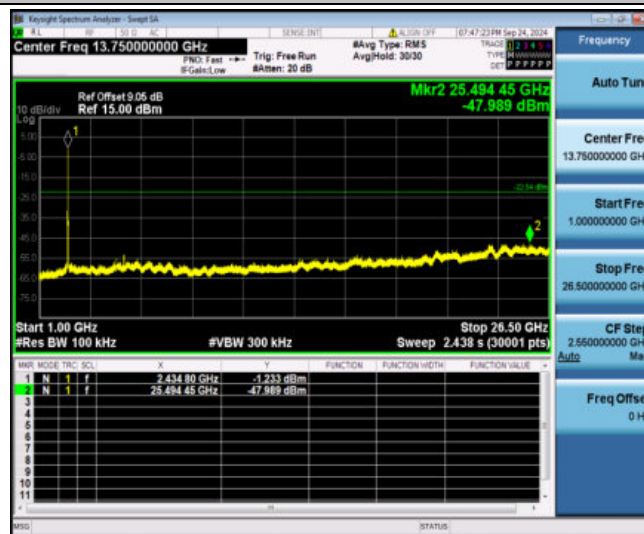
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



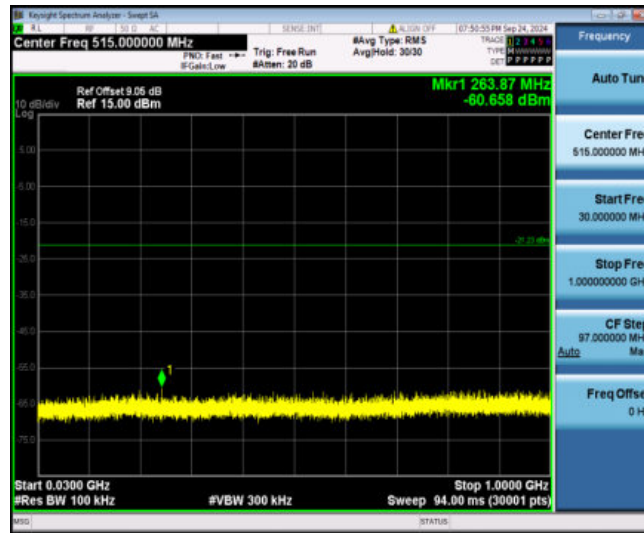
11N20SISO_Ant1_2437_1000~26500



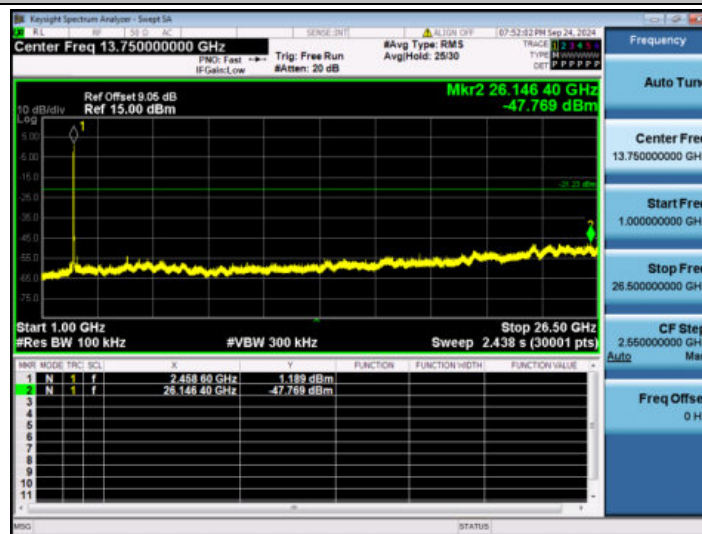
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



Appendix A.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	-49.41	≤-41.20	45.79	≤54	PASS
				AV	2373.970	-42.34	≤-41.20	52.86	≤54	PASS
				AV	2390.000	-43.6	≤-41.20	51.60	≤54	PASS
				Peak	2310.000	-44.68	≤-21.20	50.52	≤74	PASS
				Peak	2389.700	-37.69	≤-21.20	57.51	≤74	PASS
				Peak	2390.000	-39.61	≤-21.20	55.59	≤74	PASS
		High	2462	AV	2483.500	-46.18	≤-41.20	49.02	≤54	PASS
				AV	2487.300	-46.12	≤-41.20	49.08	≤54	PASS
				AV	2500.000	-46.68	≤-41.20	48.52	≤54	PASS
				Peak	2483.500	-38.78	≤-21.20	56.42	≤74	PASS
				Peak	2491.260	-39.38	≤-21.20	55.82	≤74	PASS
				Peak	2500.000	-42.75	≤-21.20	52.45	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.55	≤-41.20	45.65	≤54	PASS
				AV	2389.960	-43.82	≤-41.20	51.38	≤54	PASS
				AV	2390.000	-43.82	≤-41.20	51.38	≤54	PASS
				Peak	2310.000	-43.03	≤-21.20	52.17	≤74	PASS
				Peak	2382.030	-39.41	≤-21.20	55.79	≤74	PASS
				Peak	2390.000	-45.68	≤-21.20	49.52	≤74	PASS
		High	2462	AV	2483.500	-41.56	≤-41.20	53.64	≤54	PASS
				AV	2483.560	-41.81	≤-41.20	53.39	≤54	PASS
				AV	2500.000	-48.27	≤-41.20	46.93	≤54	PASS
				Peak	2483.500	-42.2	≤-21.20	53.00	≤74	PASS
				Peak	2485.430	-35.1	≤-21.20	60.10	≤74	PASS
				Peak	2500.000	-42.83	≤-21.20	52.37	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.55	≤-41.20	45.65	≤54	PASS
				AV	2389.960	-44.04	≤-41.20	51.16	≤54	PASS
				AV	2390.000	-44.04	≤-41.20	51.16	≤54	PASS
				Peak	2310.000	-47.01	≤-21.20	48.19	≤74	PASS
				Peak	2389.570	-39.72	≤-21.20	55.48	≤74	PASS
				Peak	2390.000	-42.78	≤-21.20	52.42	≤74	PASS
		High	2462	AV	2483.500	-42.22	≤-41.20	52.98	≤54	PASS
				AV	2483.560	-42.33	≤-41.20	52.87	≤54	PASS
				AV	2500.000	-48.31	≤-41.20	46.89	≤54	PASS
				Peak	2483.500	-38.73	≤-21.20	56.47	≤74	PASS
				Peak	2485.980	-33.36	≤-21.20	61.84	≤74	PASS
				Peak	2485.980	-33.36	≤-21.20	61.84	≤74	PASS

				Peak	2500.000	-45.42	≤-21.20	49.78	≤74	PASS
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Note:

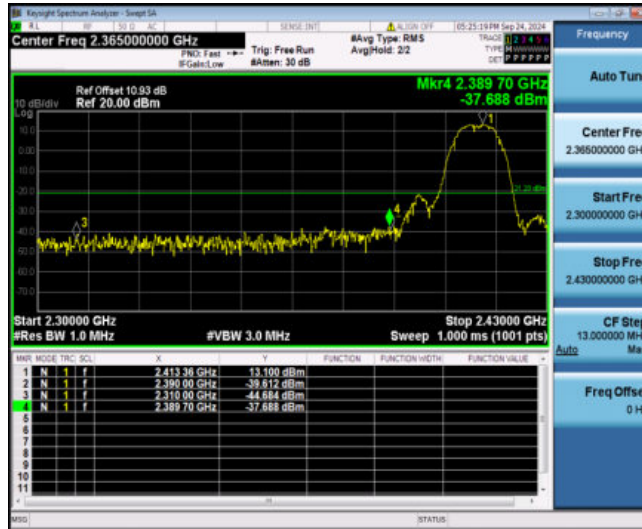
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

11B_Ant1_Low_2412_AV



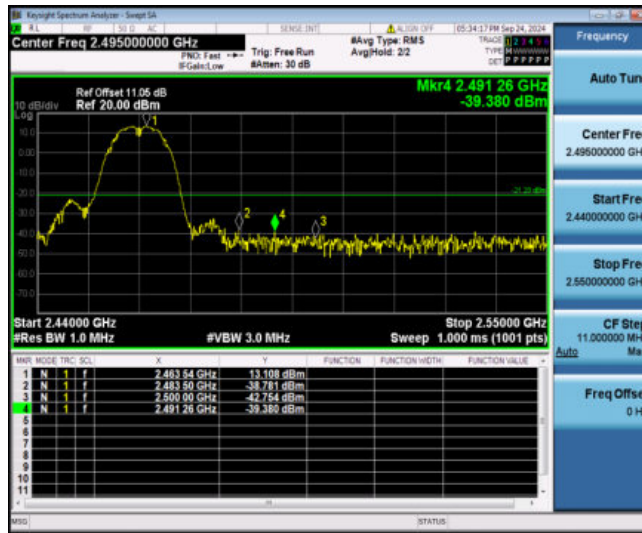
11B_Ant1_Low_2412_Peak



11B_Ant1_High_2462_AV



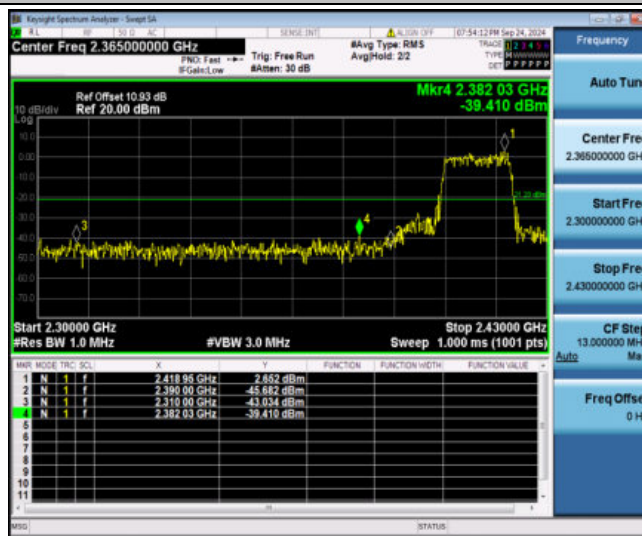
11B_Ant1_High_2462_Peak



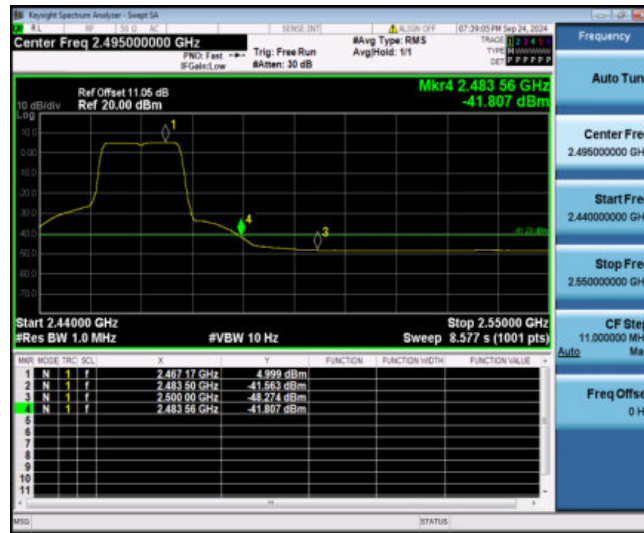
11G_Ant1_Low_2412_AV



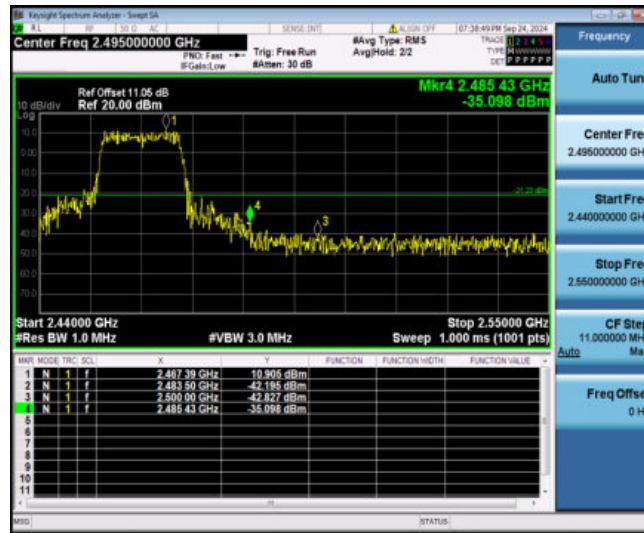
11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV



11G_Ant1_High_2462_Peak



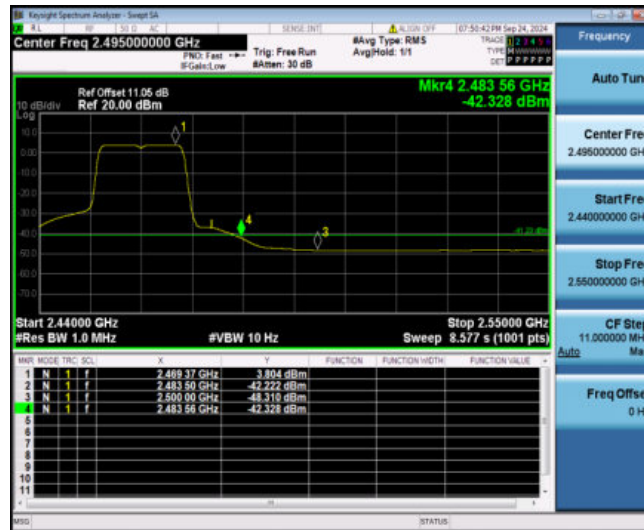
11N20SISO_Ant1_Low_2412_AV



11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak

