Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Projector

Test Model: Pro V8

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Wunder Wu
Supervised by:	Li Huan

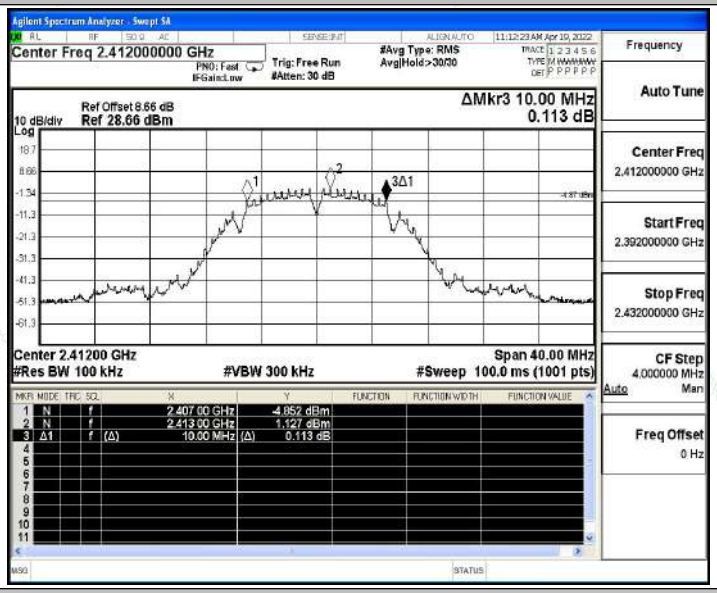
C.1 DTS Bandwidth

Test Result

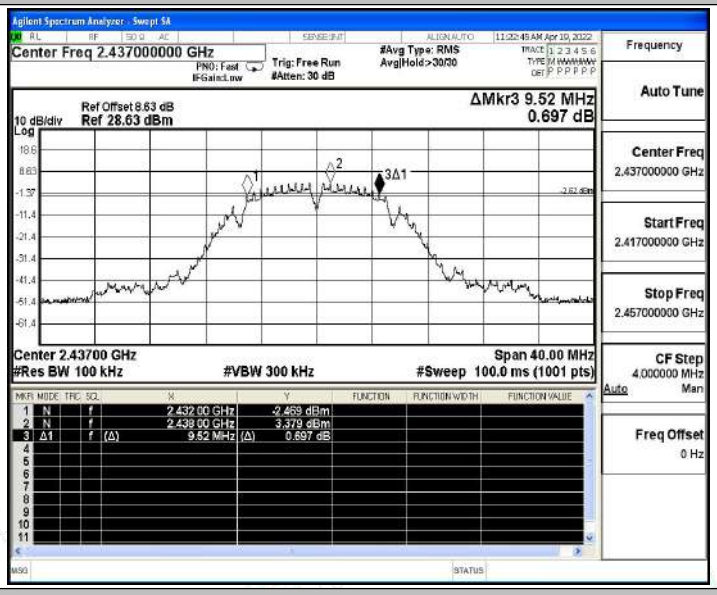
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.000	2407.000	2417.000	0.5	PASS
		2437	9.520	2432.000	2441.520	0.5	PASS
		2462	9.520	2457.480	2467.000	0.5	PASS
11G	Ant1	2412	16.360	2403.800	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.360	2453.800	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.560	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	36.080	2404.080	2440.160	0.5	PASS
		2437	36.000	2419.160	2455.160	0.5	PASS
		2452	36.000	2434.080	2470.080	0.5	PASS

Test Graphs

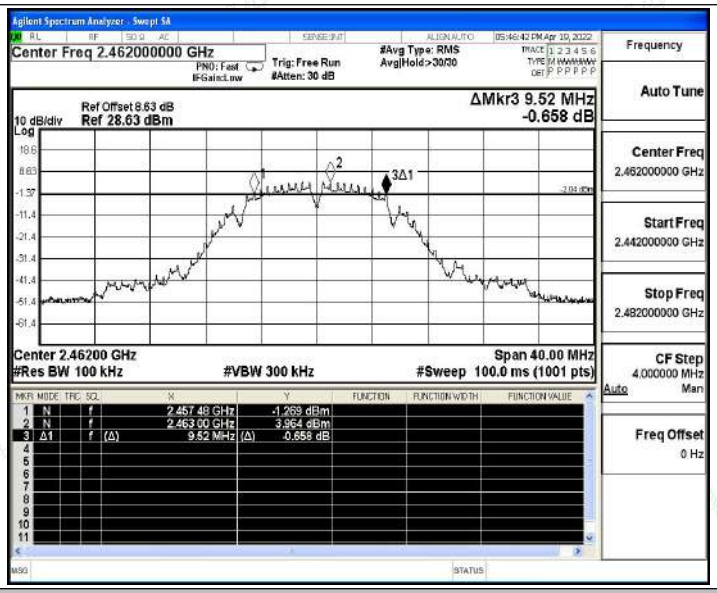
11B_Ant1_2412



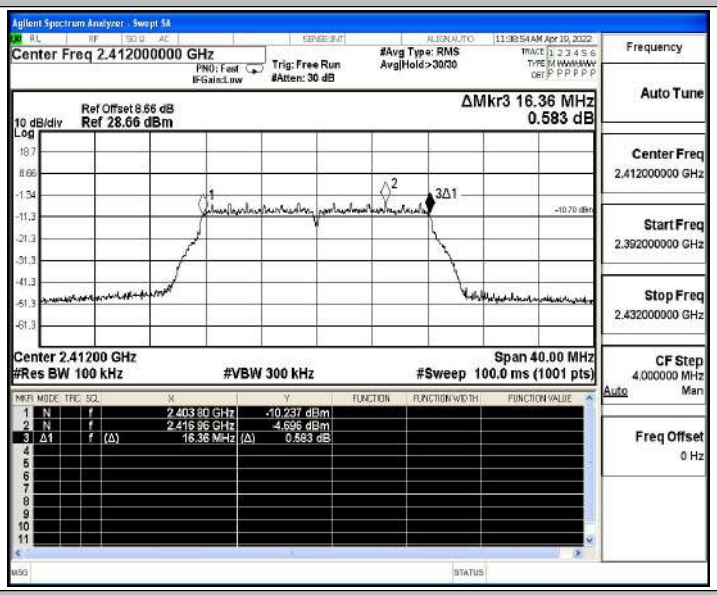
11B_Ant1_2437



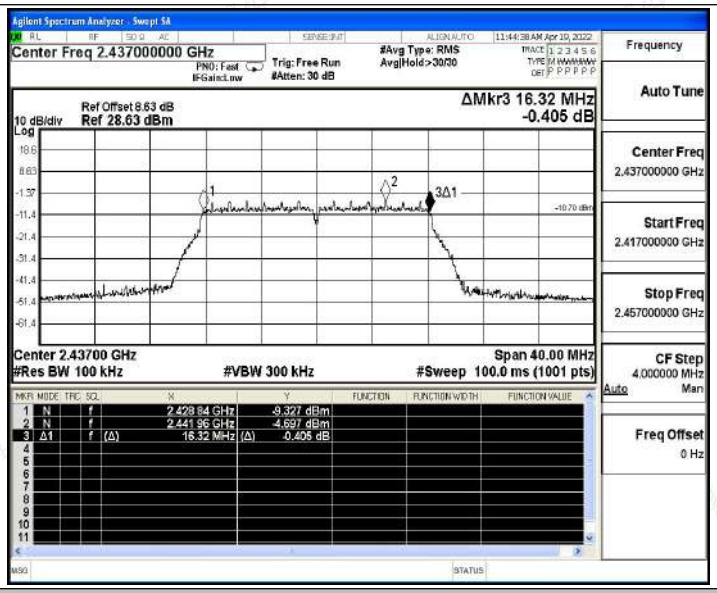
11B_Ant1_2462



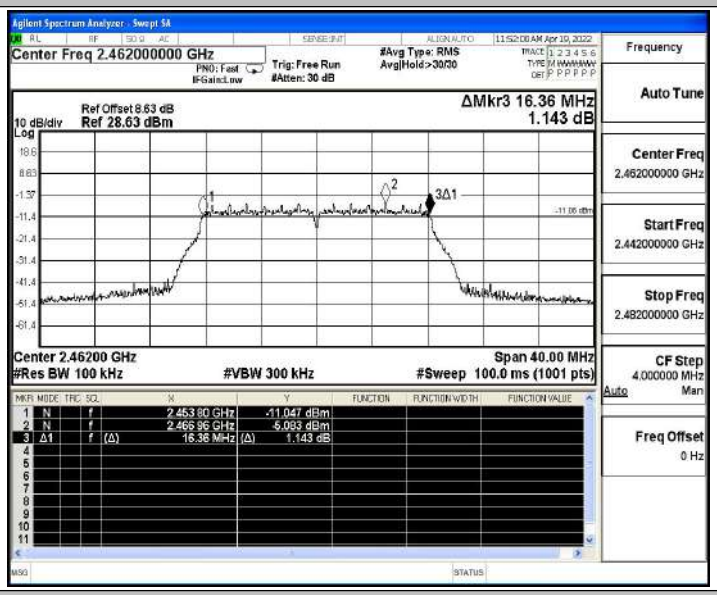
11G_Ant1_2412



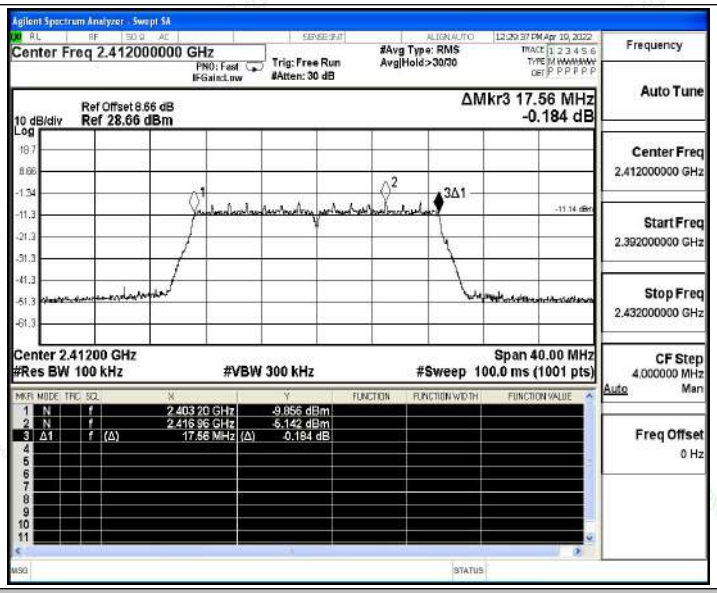
11G_Ant1_2437



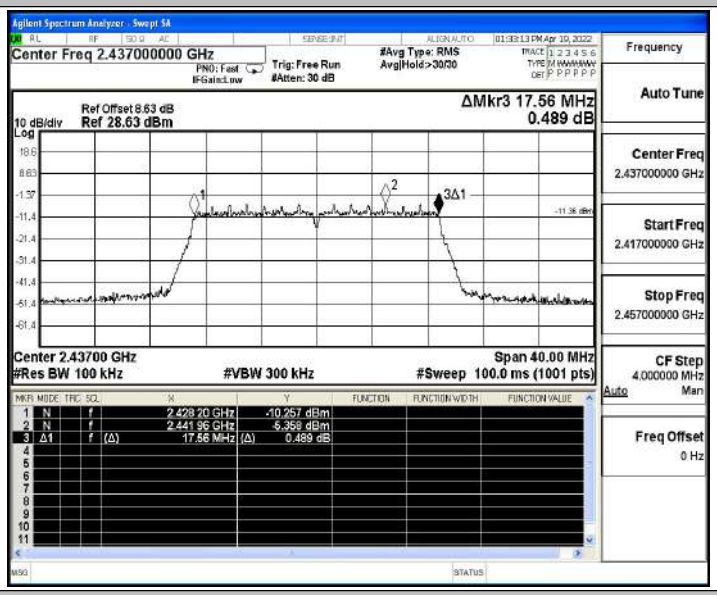
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



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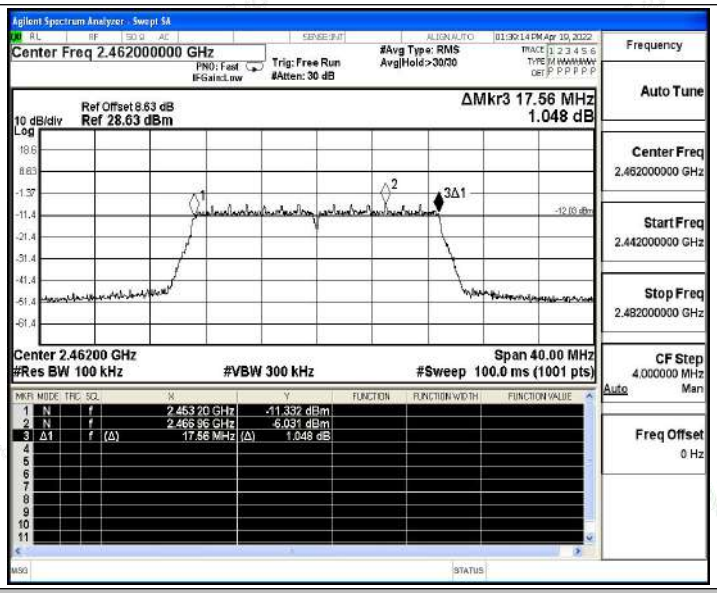
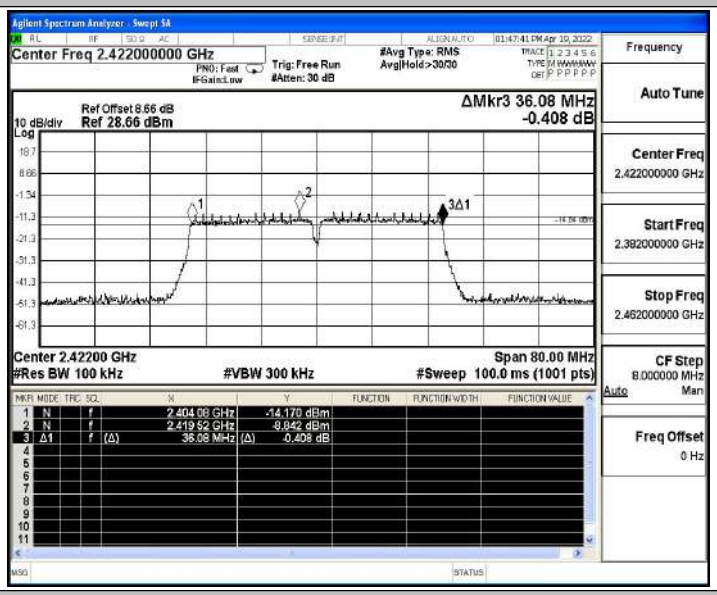
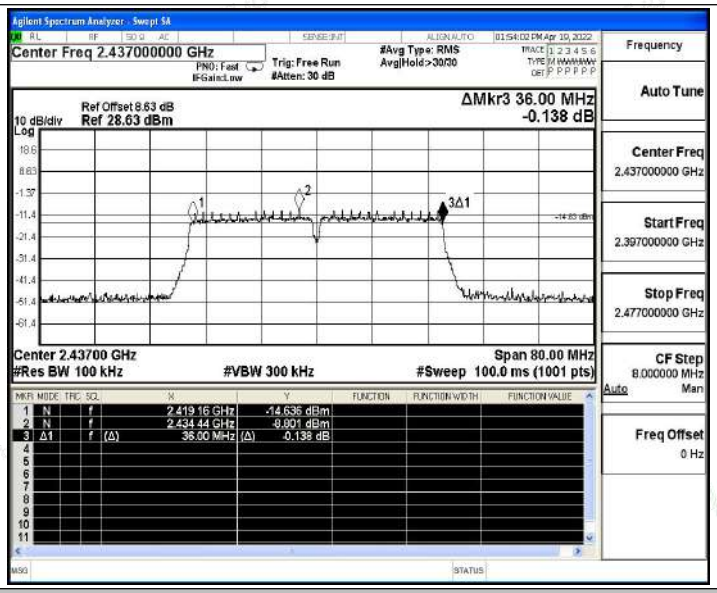


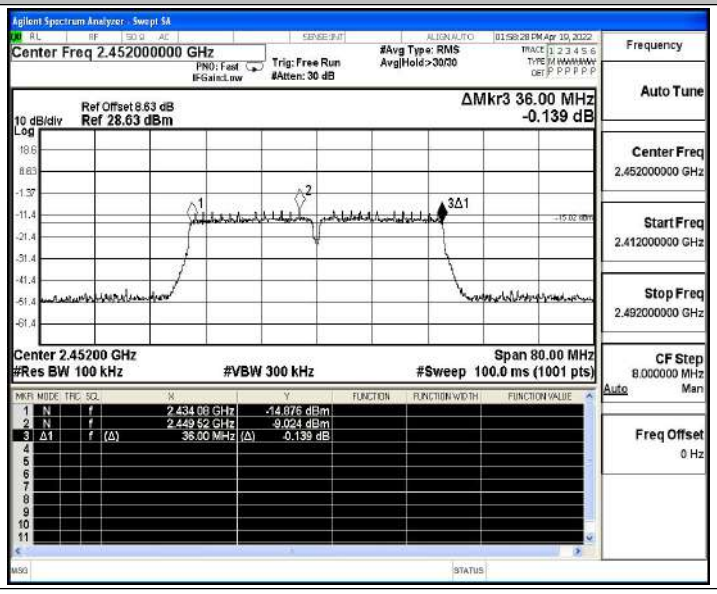
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



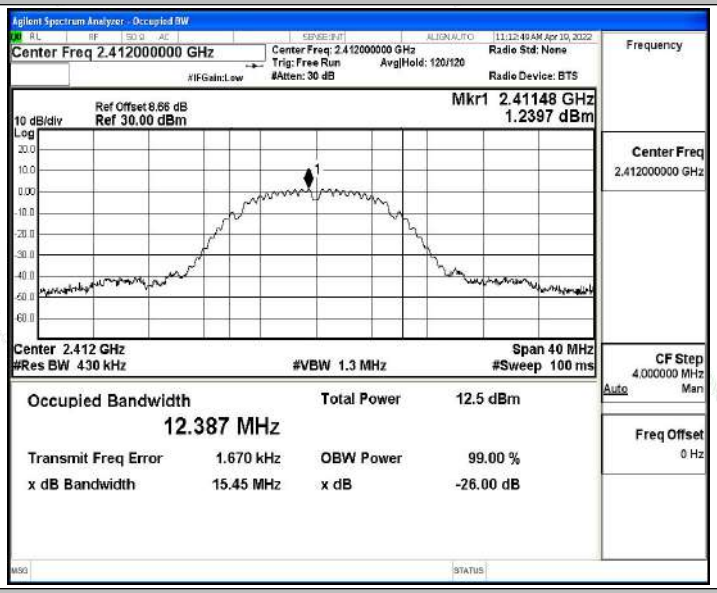
C.2 Occupied Channel Bandwidth

Test Result

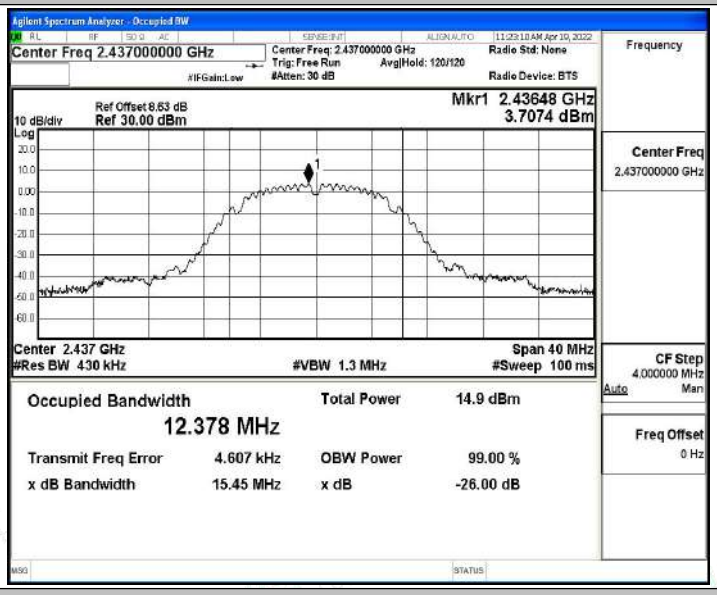
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.387	2405.808	2418.195	---	---
		2437	12.378	2430.816	2443.194	---	---
		2462	12.433	2455.798	2468.231	---	---
11G	Ant1	2412	16.985	2403.520	2420.505	---	---
		2437	16.976	2428.503	2445.479	---	---
		2462	17.045	2453.467	2470.512	---	---
11N20SISO	Ant1	2412	17.940	2403.019	2420.959	---	---
		2437	17.927	2428.042	2445.969	---	---
		2462	17.945	2453.019	2470.964	---	---
11N40SISO	Ant1	2422	36.258	2403.883	2440.141	---	---
		2437	36.286	2418.873	2455.159	---	---
		2452	36.305	2433.862	2470.167	---	---

Test Graphs

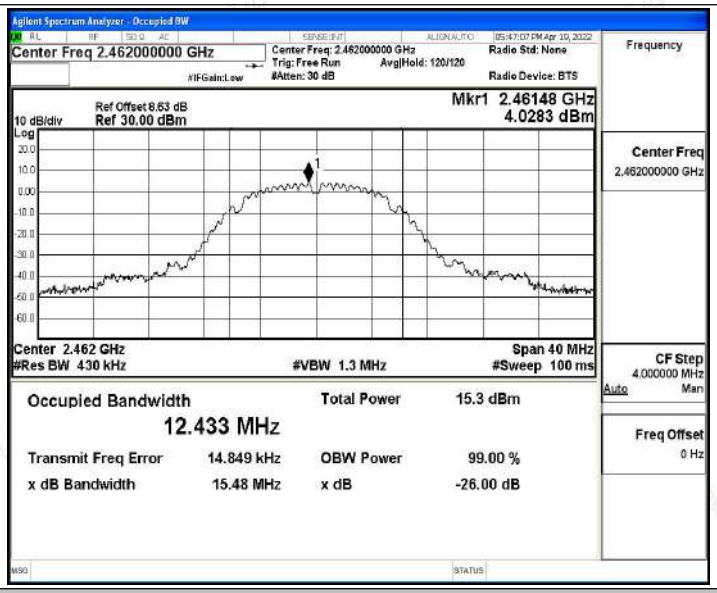
11B_Ant1_2412



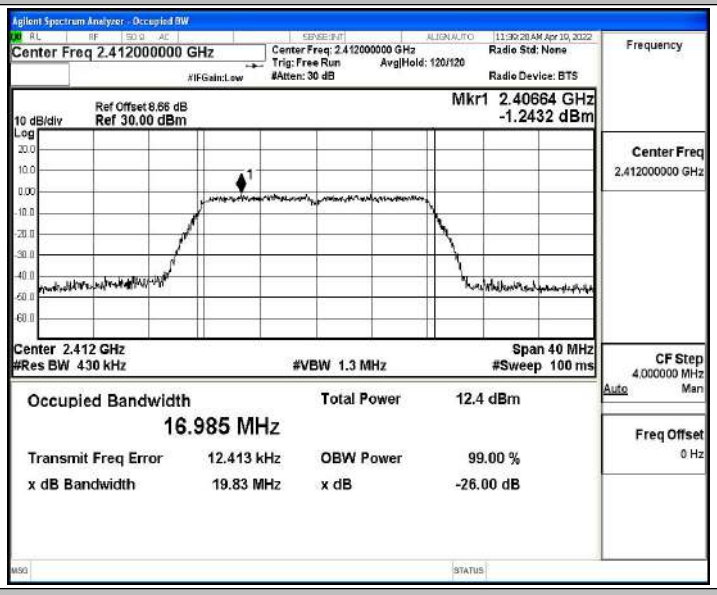
11B_Ant1_2437



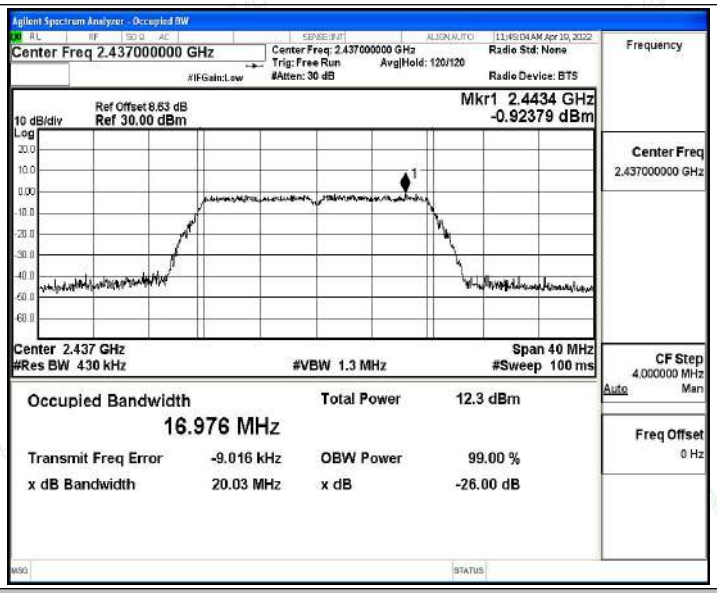
11B_Ant1_2462



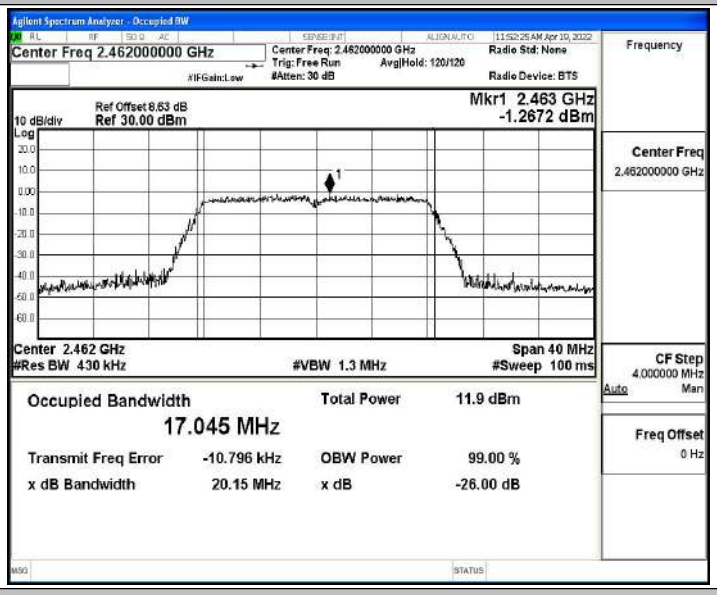
11G_Ant1_2412



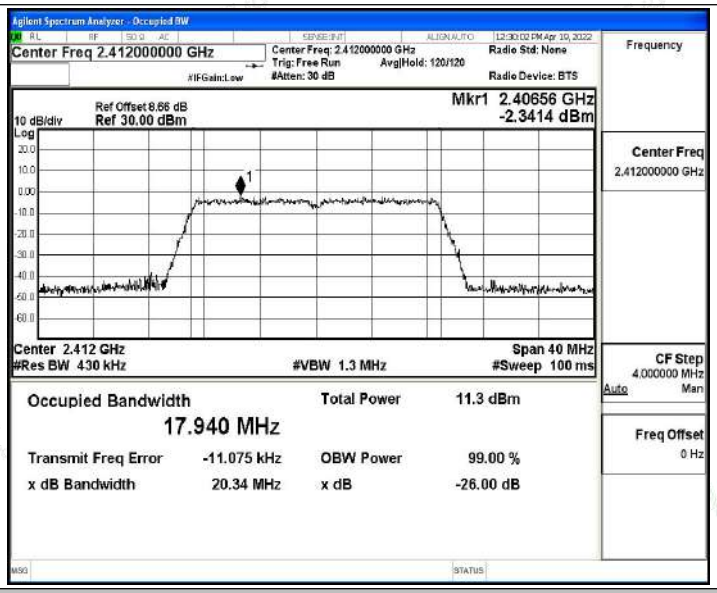
11G_Ant1_2437



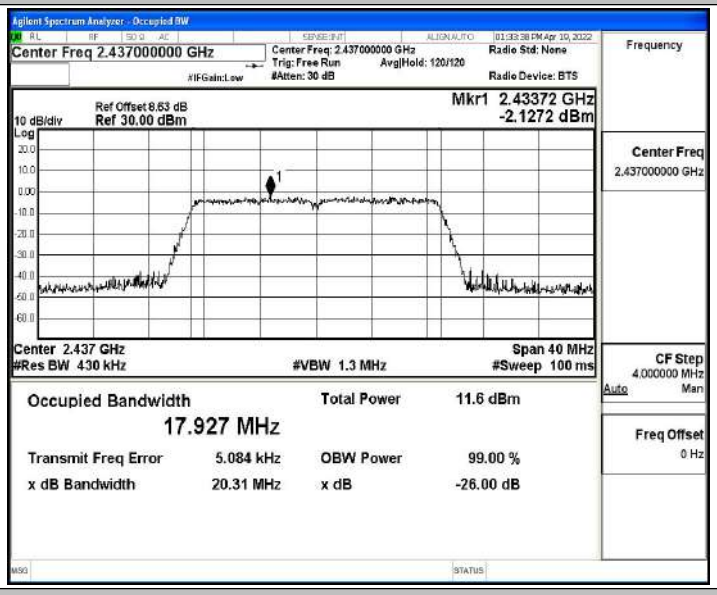
11G_Ant1_2462



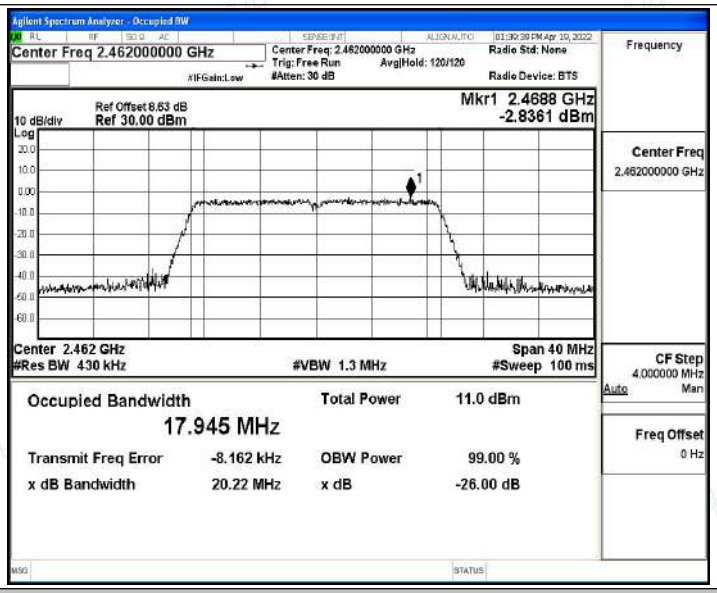
11N20SISO_Ant1_2412



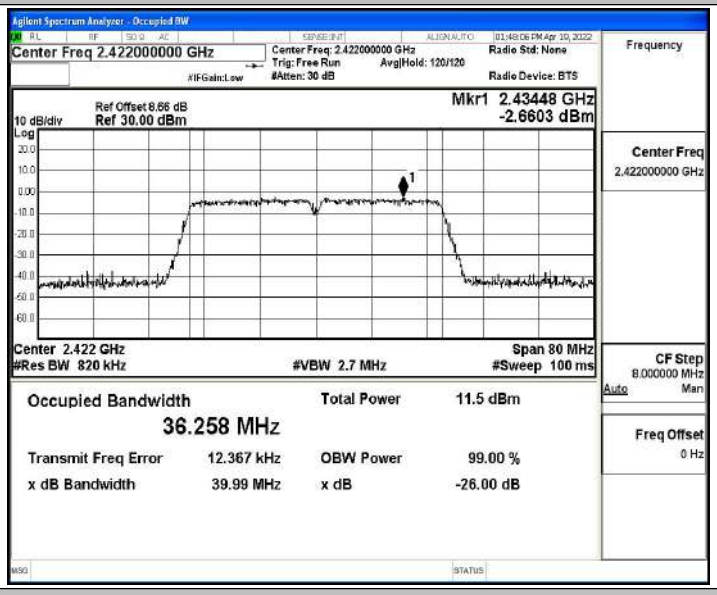
11N20SISO_Ant1_2437



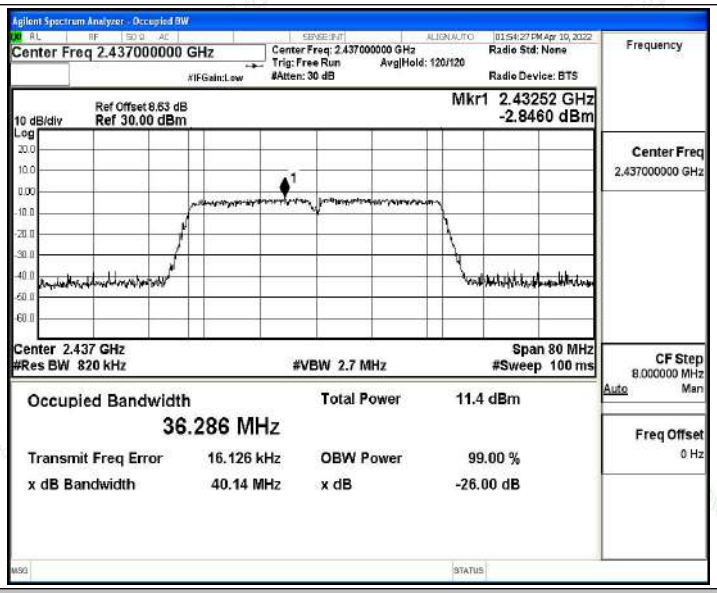
11N20SISO_Ant1_2462



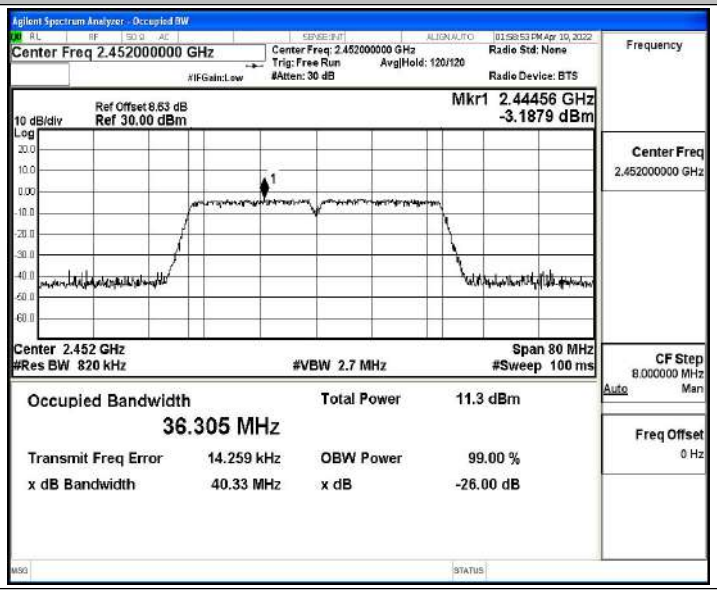
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



C.3 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.14	≤30.00	PASS
		2437	15.18	≤30.00	PASS
		2462	15.49	≤30.00	PASS
11G	Ant1	2412	14.80	≤30.00	PASS
		2437	14.80	≤30.00	PASS
		2462	14.43	≤30.00	PASS
11N20SISO	Ant1	2412	14.09	≤30.00	PASS
		2437	14.13	≤30.00	PASS
		2462	13.46	≤30.00	PASS
11N40SISO	Ant1	2422	13.54	≤30.00	PASS
		2437	13.45	≤30.00	PASS
		2452	13.30	≤30.00	PASS

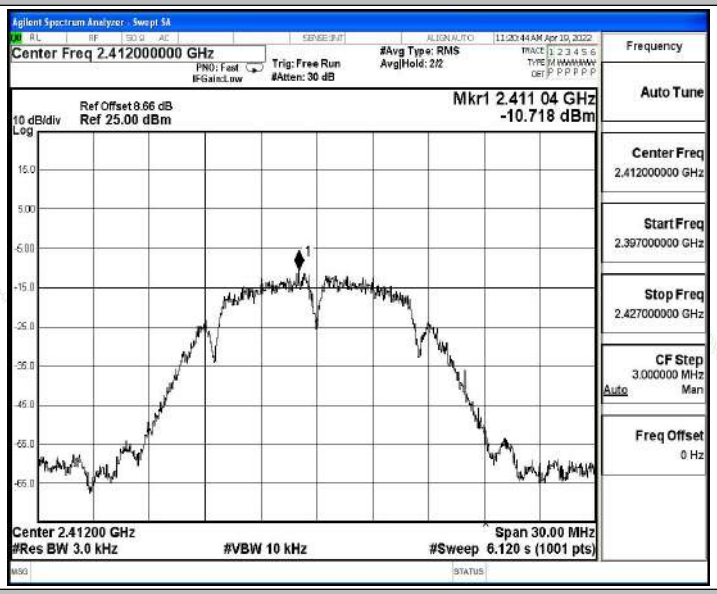
C.4 Maximum power spectral density

Test Result

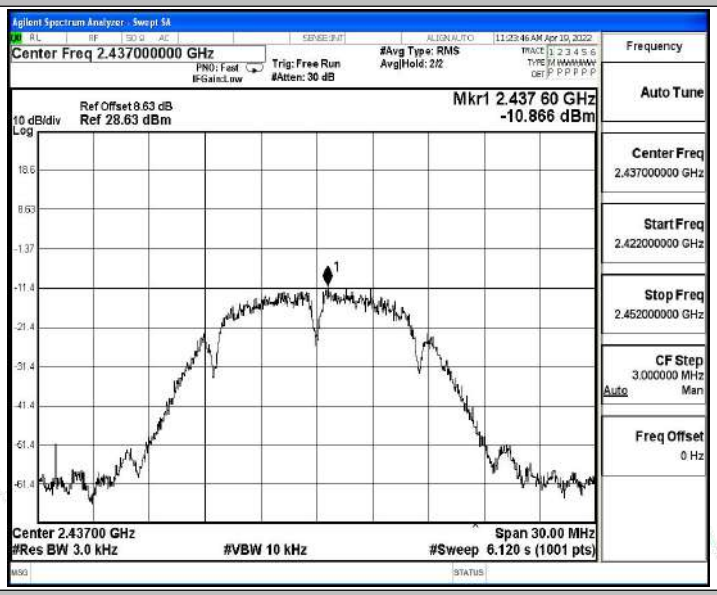
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-10.72	≤8.00	PASS
		2437	-10.87	≤8.00	PASS
		2462	-9.18	≤8.00	PASS
11G	Ant1	2412	-17.72	≤8.00	PASS
		2437	-19.68	≤8.00	PASS
		2462	-18.94	≤8.00	PASS
11N20SISO	Ant1	2412	-19.56	≤8.00	PASS
		2437	-19.74	≤8.00	PASS
		2462	-19.2	≤8.00	PASS
11N40SISO	Ant1	2422	-23.43	≤8.00	PASS
		2437	-22.46	≤8.00	PASS
		2452	-23.98	≤8.00	PASS

Test Graphs

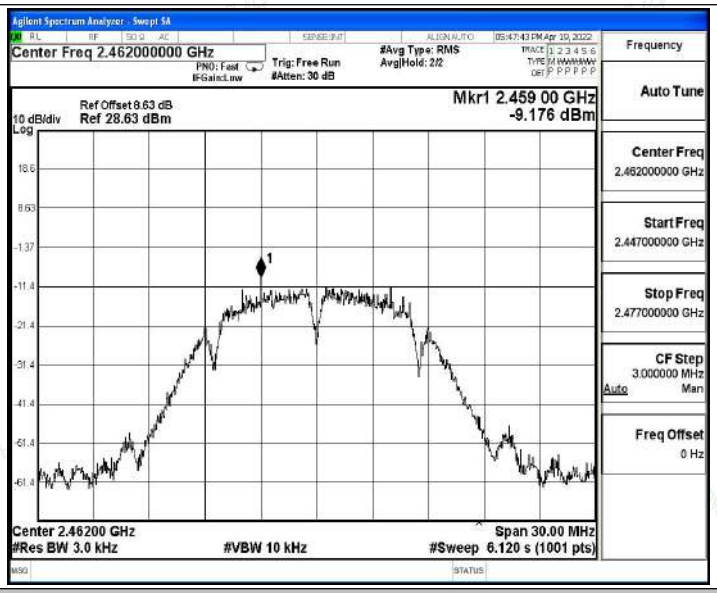
11B_Ant1_2412



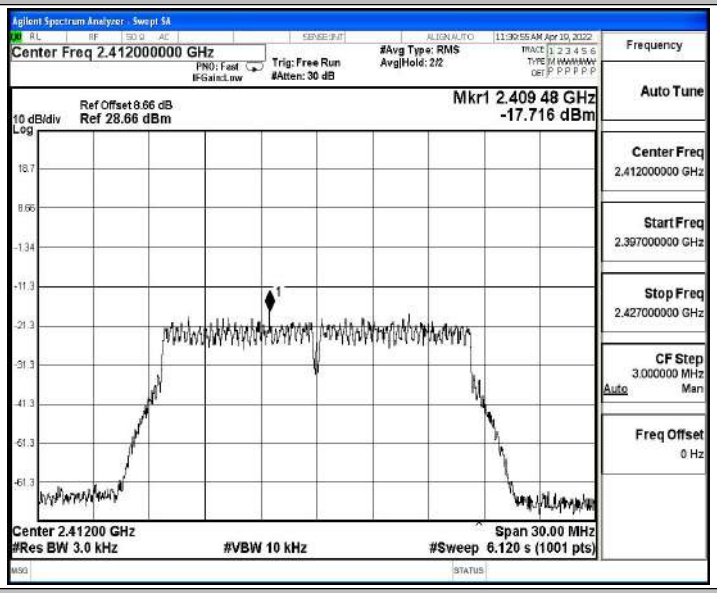
11B_Ant1_2437



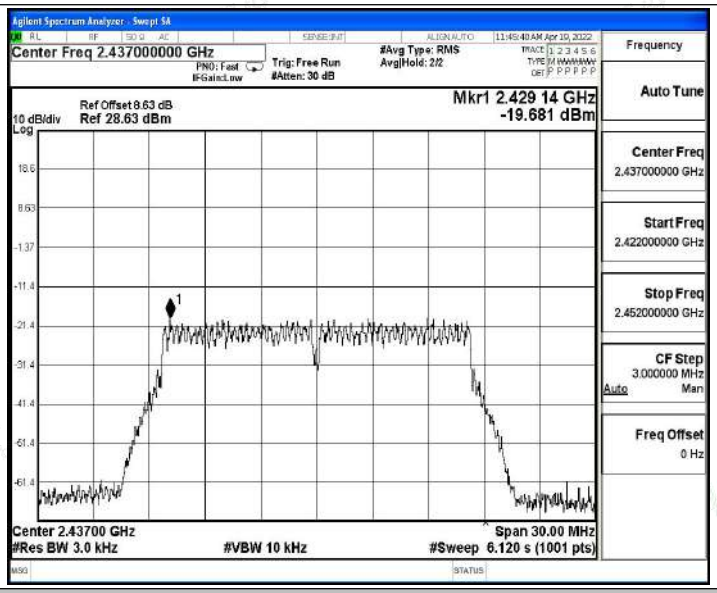
11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



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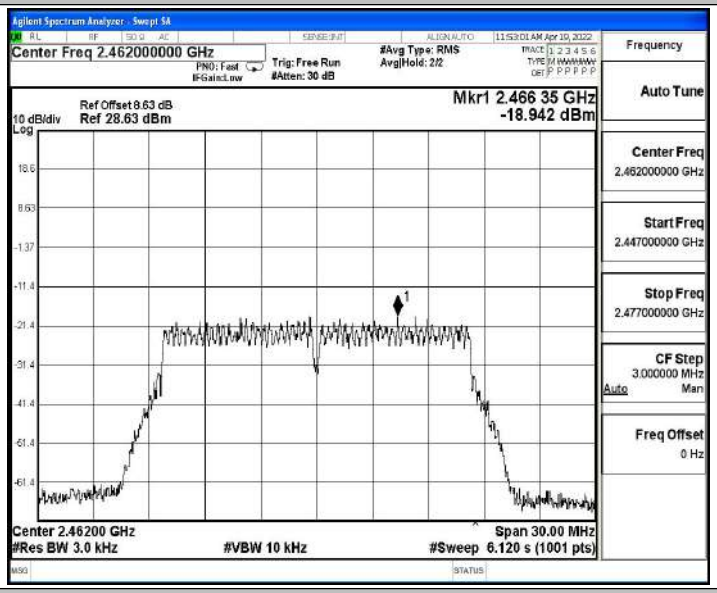
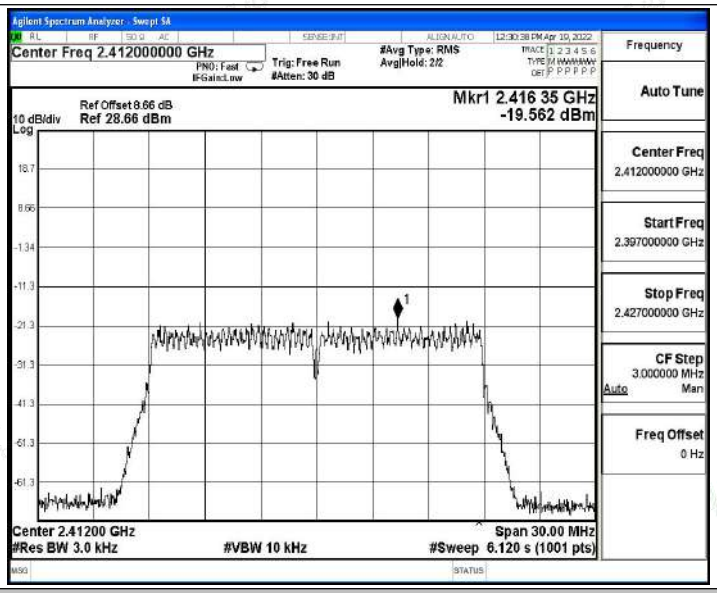
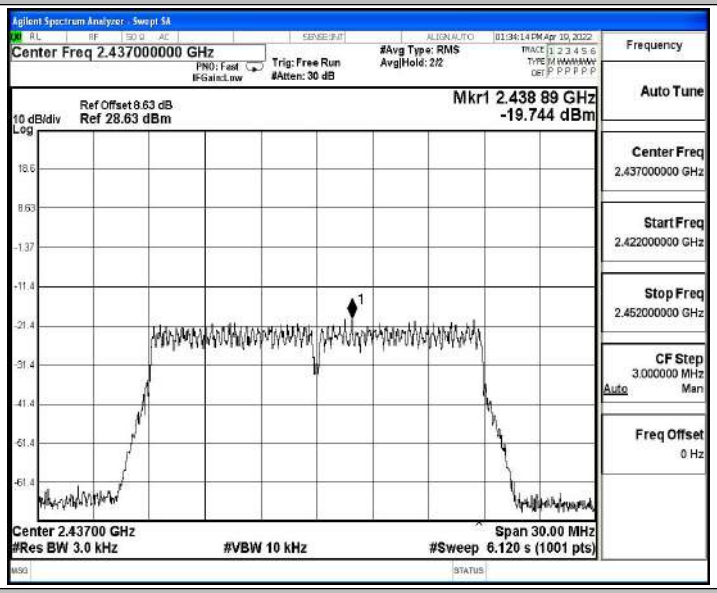


11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



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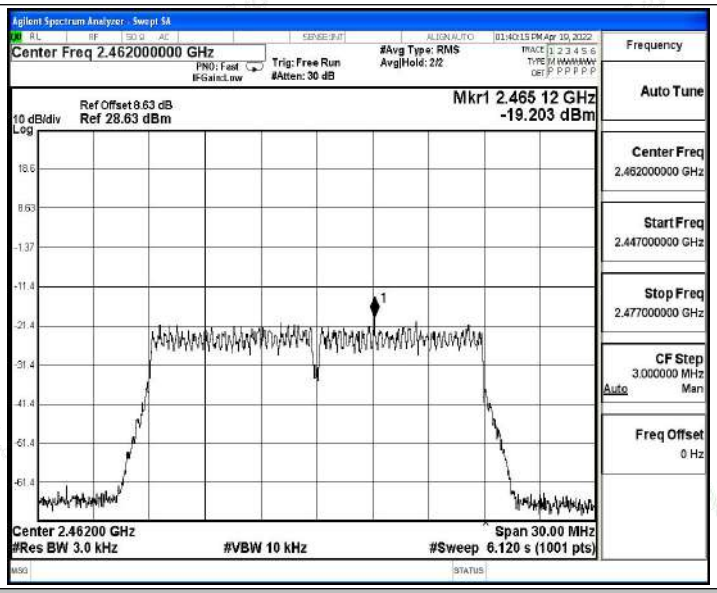
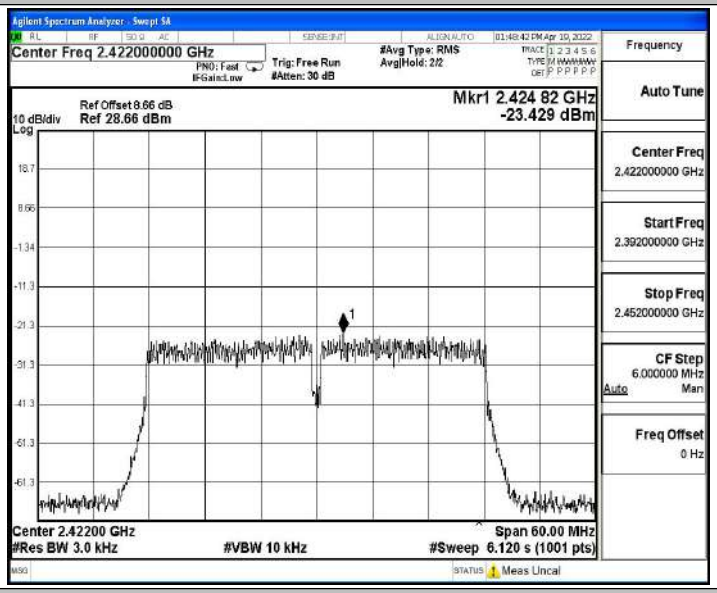


11N40SISO_Ant1_2422



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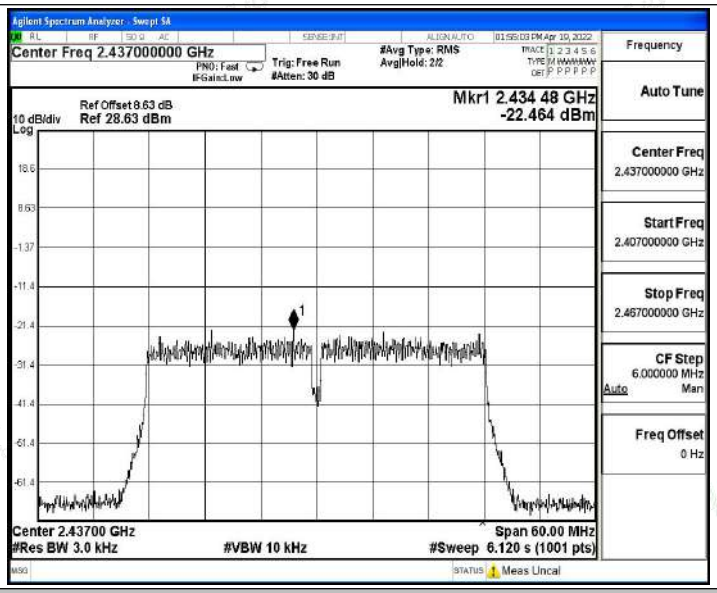
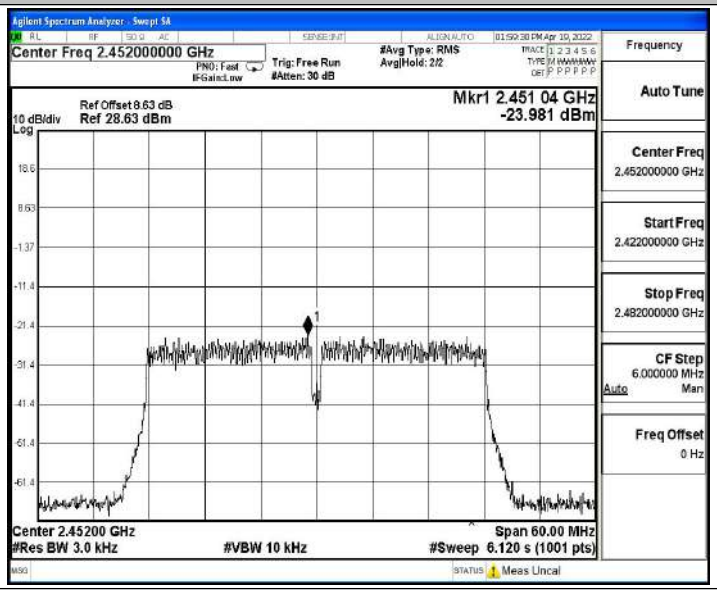


11N40SISO_Ant1_2452



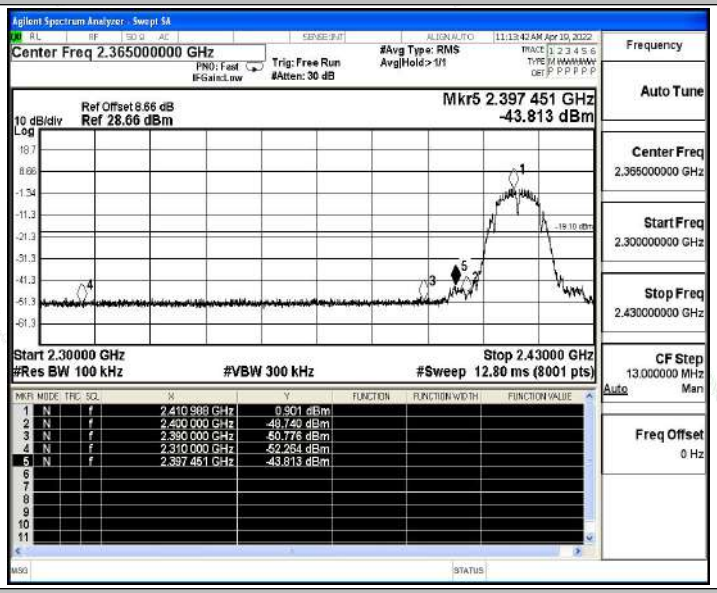
C.5 Band edge measurements

Test Result

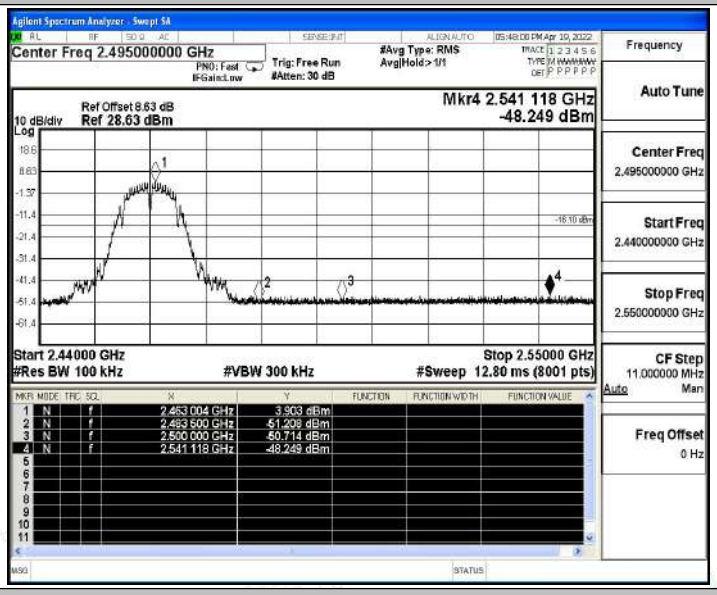
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	0.90	-43.81	≤-19.1	PASS
		High	2462	3.90	-48.25	≤-16.1	PASS
11G	Ant1	Low	2412	-4.27	-45.08	≤-24.27	PASS
		High	2462	-4.73	-48.36	≤-24.73	PASS
11N20SISO	Ant1	Low	2412	-5.45	-47.11	≤-25.45	PASS
		High	2462	-5.69	-47.8	≤-25.69	PASS
11N40SISO	Ant1	Low	2422	-8.71	-47.05	≤-28.71	PASS
		High	2452	-8.97	-47.43	≤-28.97	PASS

Test Graphs

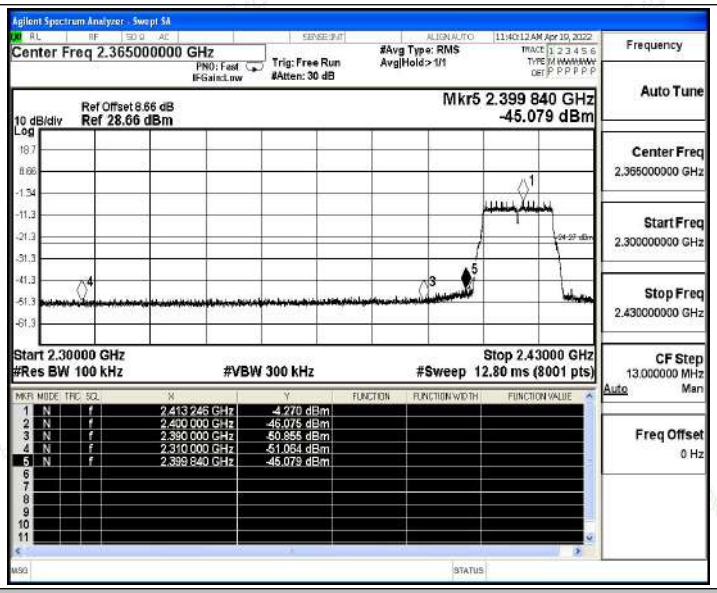
11B_Ant1_Low_2412



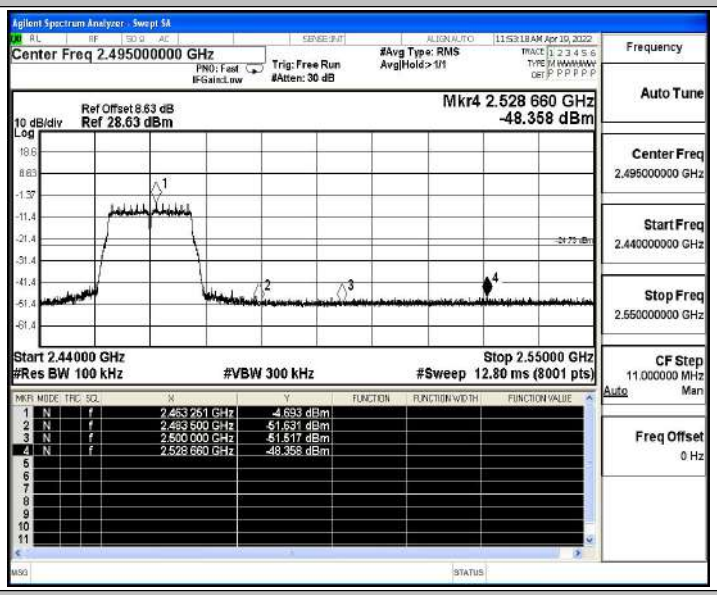
11B_Ant1_High_2462



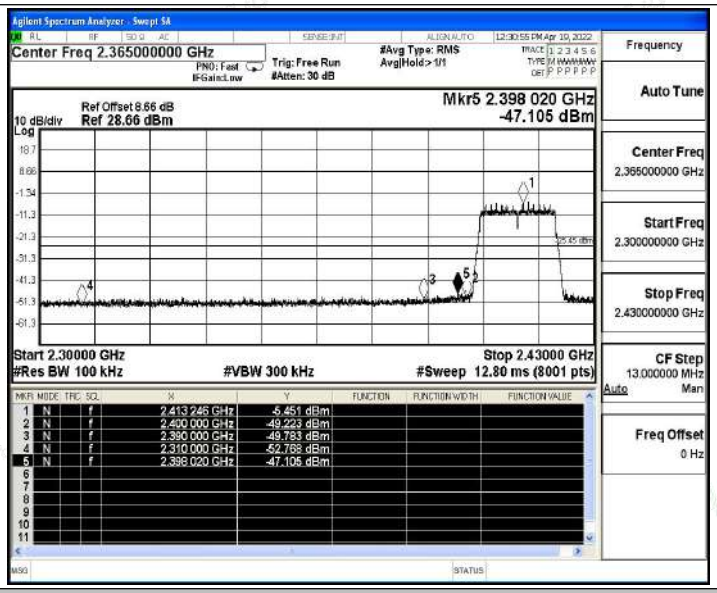
11G_Ant1_Low_2412



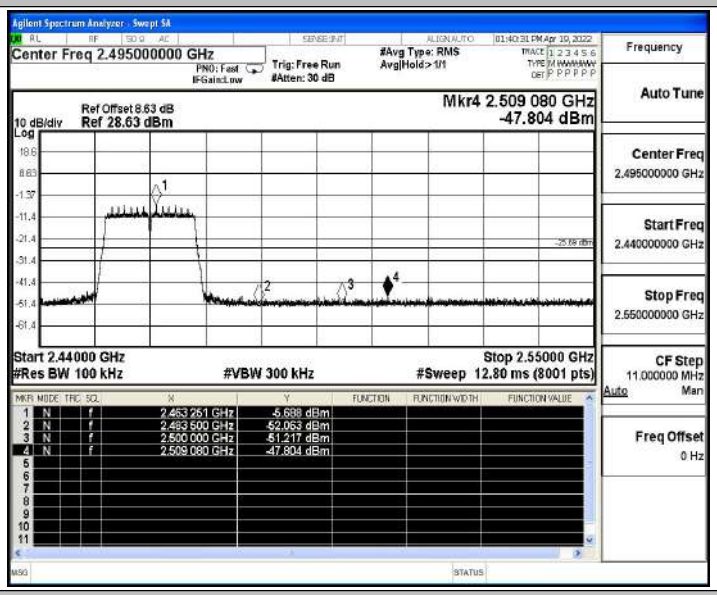
11G_Ant1_High_2462



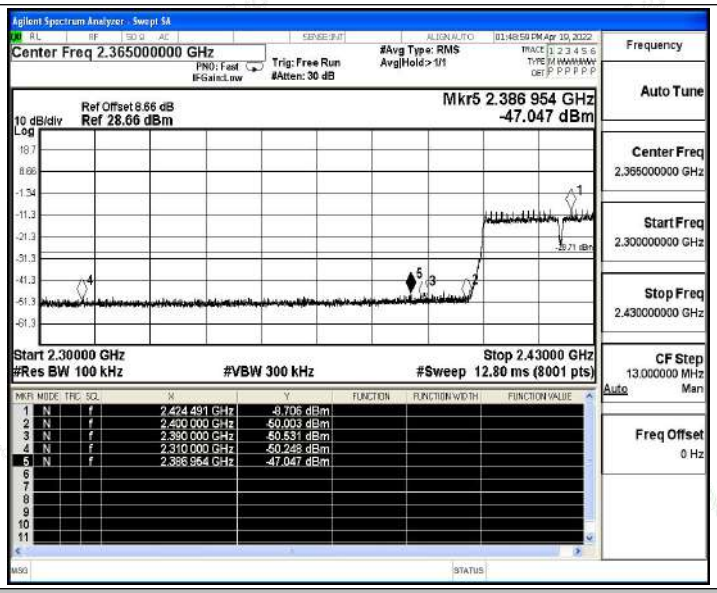
11N20SISO_Ant1_Low_2412



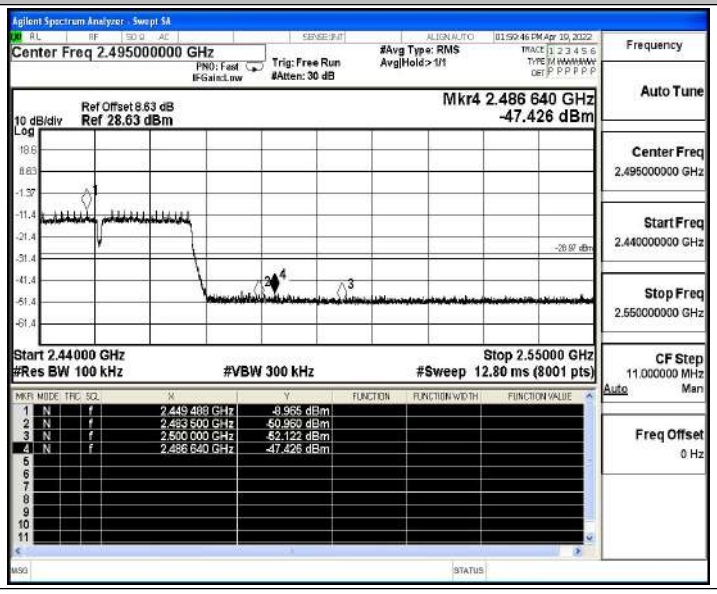
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



C.6 Conducted Spurious Emission

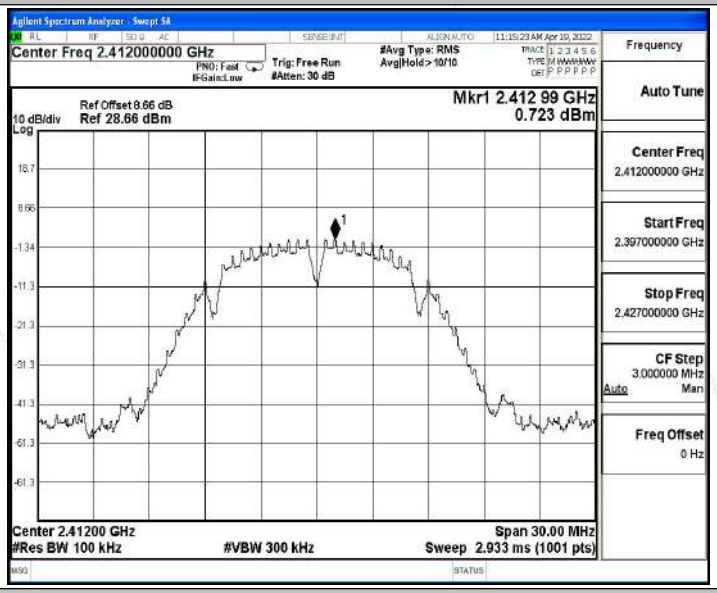
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.72	0.72	---	PASS
			30~1000	0.72	-60.57	≤-19.28	PASS
			1000~26500	0.72	-45.84	≤-19.28	PASS
		2437	Reference	3.60	3.60	---	PASS
			30~1000	3.60	-60.48	≤-16.4	PASS
			1000~26500	3.60	-46.16	≤-16.4	PASS
		2462	Reference	3.78	3.78	---	PASS
			30~1000	3.78	-45.64	≤-16.22	PASS
			1000~26500	3.78	-45.96	≤-16.22	PASS
11G	Ant1	2412	Reference	-4.44	-4.44	---	PASS
			30~1000	-4.44	-60.95	≤-24.44	PASS
			1000~26500	-4.44	-46.3	≤-24.44	PASS
		2437	Reference	-4.73	-4.73	---	PASS
			30~1000	-4.73	-60.59	≤-24.73	PASS
			1000~26500	-4.73	-46.11	≤-24.73	PASS
		2462	Reference	-4.94	-4.94	---	PASS
			30~1000	-4.94	-60.3	≤-24.94	PASS
			1000~26500	-4.94	-46.43	≤-24.94	PASS
11N20SISO	Ant1	2412	Reference	-4.85	-4.85	---	PASS
			30~1000	-4.85	-60.33	≤-24.85	PASS
			1000~26500	-4.85	-45.54	≤-24.85	PASS
		2437	Reference	-5.34	-5.34	---	PASS
			30~1000	-5.34	-60.66	≤-25.34	PASS
			1000~26500	-5.34	-45.23	≤-25.34	PASS
		2462	Reference	-5.51	-5.51	---	PASS
			30~1000	-5.51	-60.77	≤-25.51	PASS
			1000~26500	-5.51	-46.05	≤-25.51	PASS
11N40SISO	Ant1	2422	Reference	-8.62	-8.62	---	PASS
			30~1000	-8.62	-60.45	≤-28.62	PASS
			1000~26500	-8.62	-41.62	≤-28.62	PASS
		2437	Reference	-8.61	-8.61	---	PASS
			30~1000	-8.61	-60.63	≤-28.61	PASS
			1000~26500	-8.61	-45.91	≤-28.61	PASS
		2452	Reference	-9.15	-9.15	---	PASS
			30~1000	-9.15	-60.77	≤-29.15	PASS

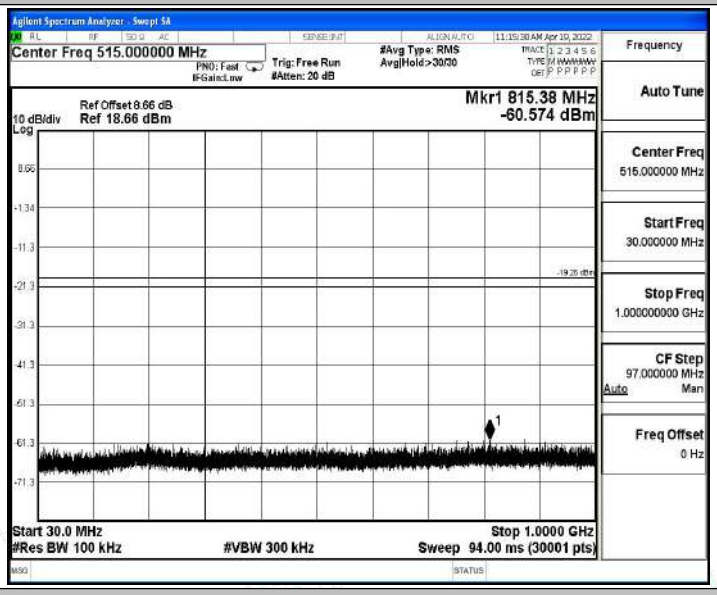
			1000~26500	-9.15	-45.85	≤-29.15	PASS

Test Graphs

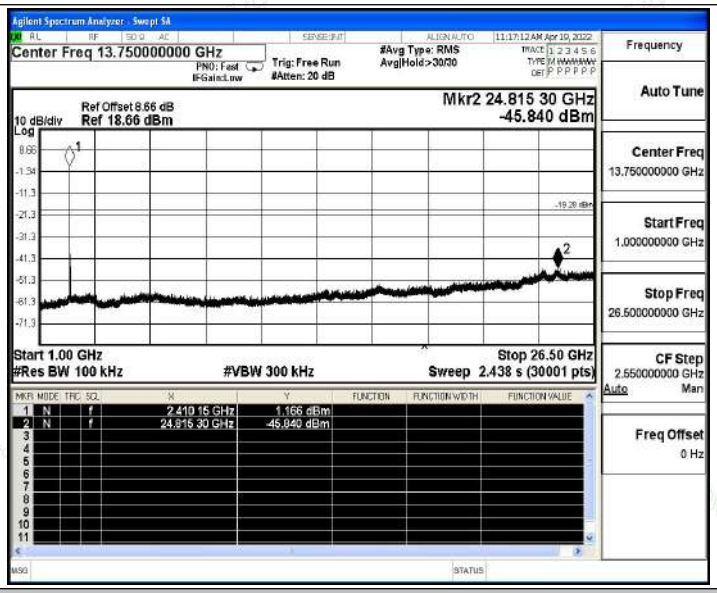
11B_Ant1_2412_0~Reference



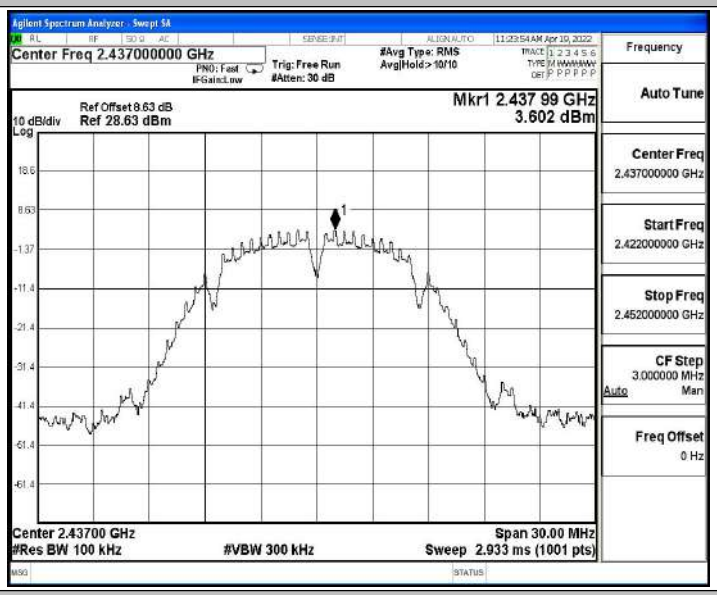
11B_Ant1_2412_30~1000



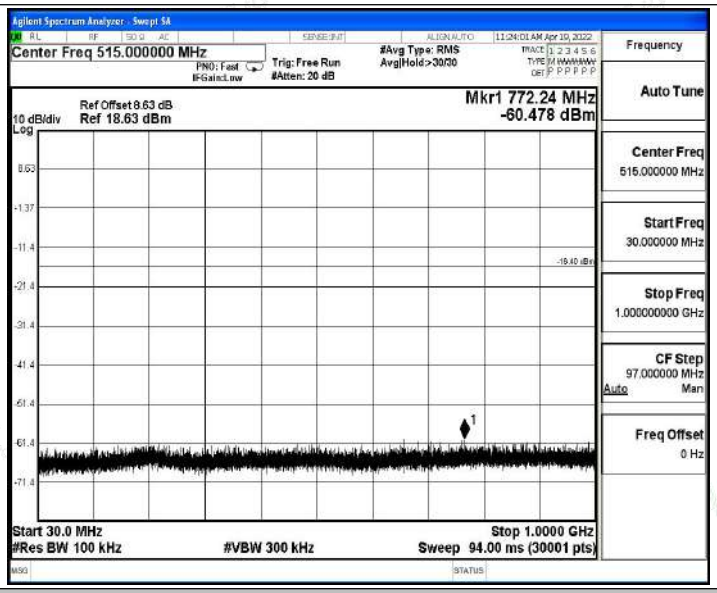
11B_Ant1_2412_1000~26500



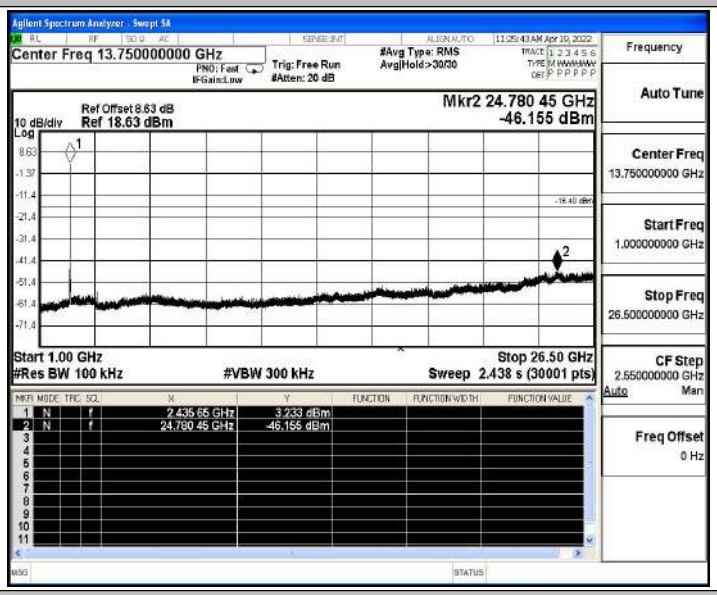
11B_Ant1_2437_0~Reference



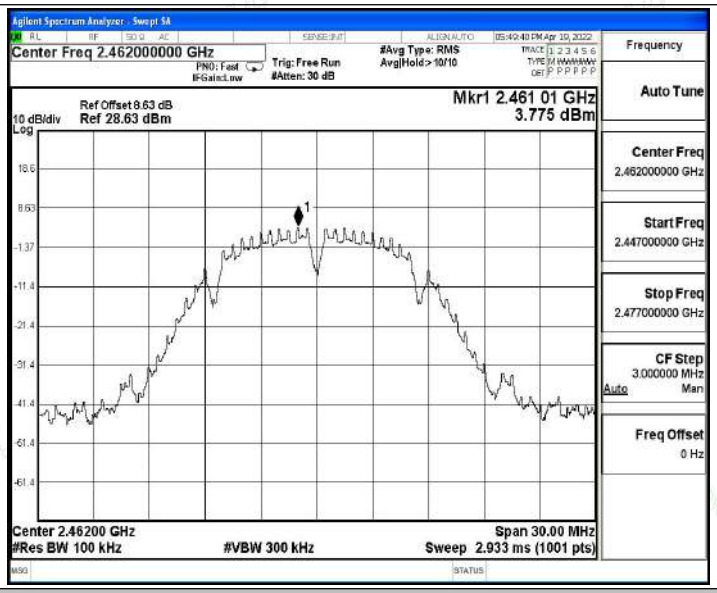
11B_Ant1_2437_30~1000



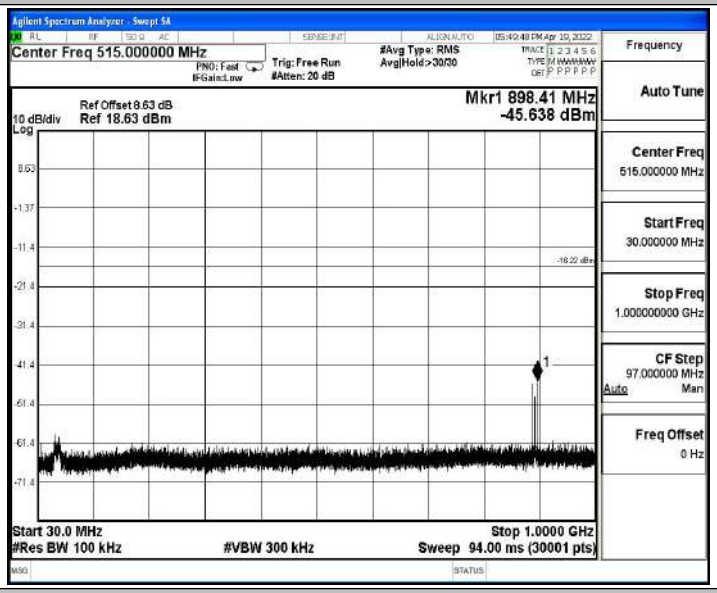
11B_Ant1_2437_1000~26500



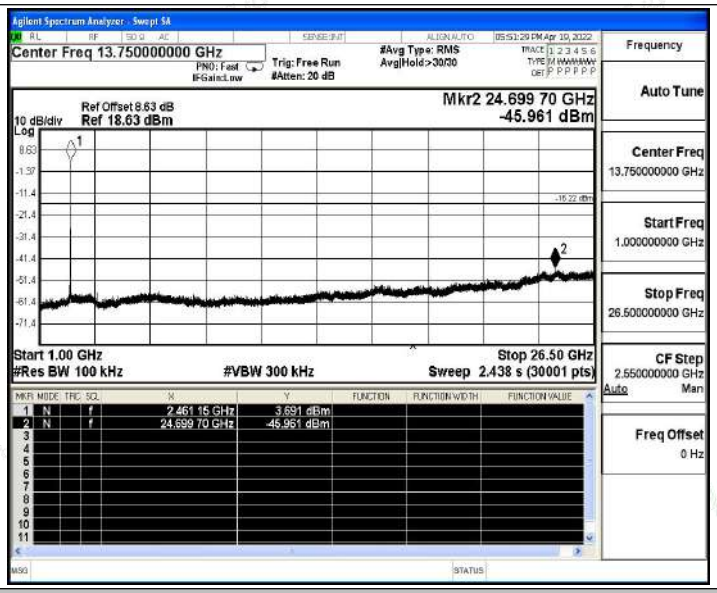
11B_Ant1_2462_0~Reference



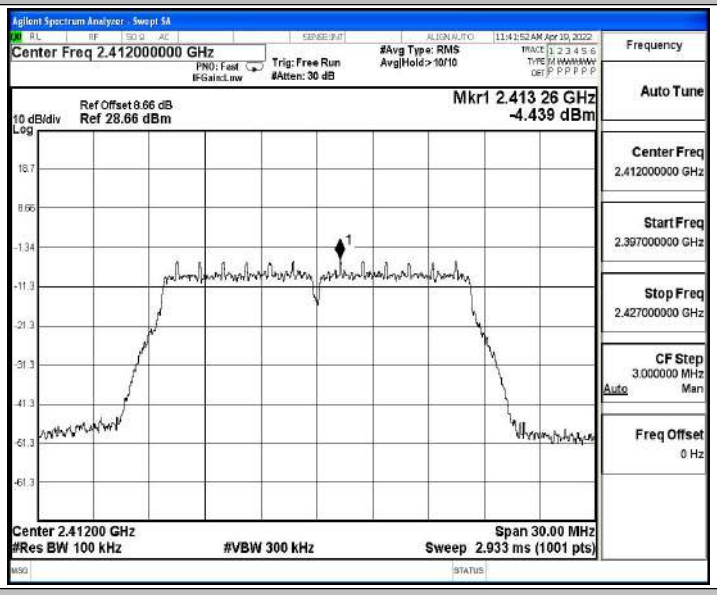
11B_Ant1_2462_30~1000



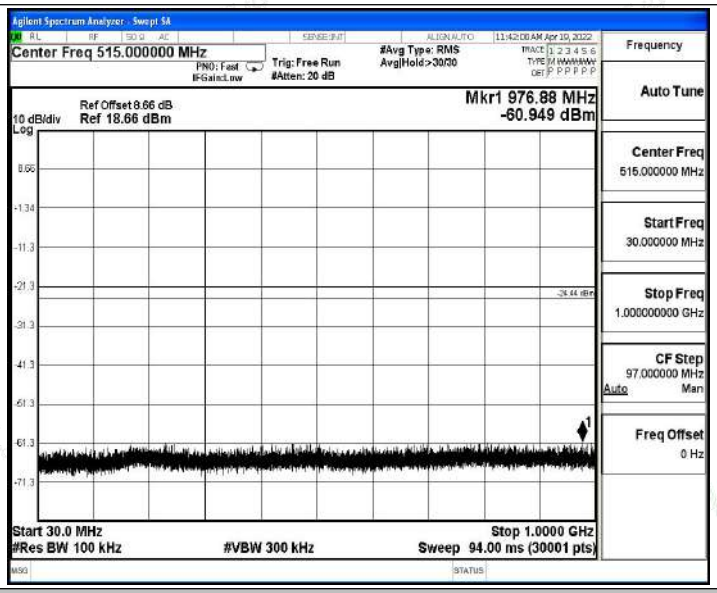
11B_Ant1_2462_1000~26500



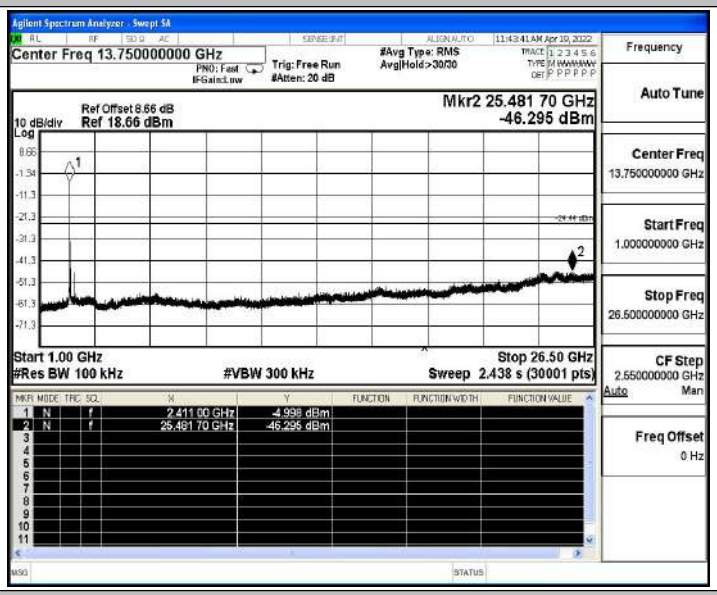
11G_Ant1_2412_0~Reference



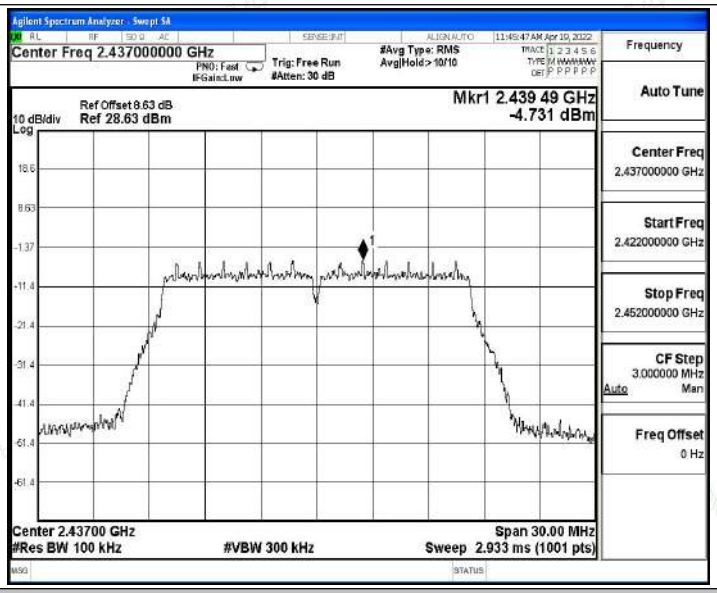
11G_Ant1_2412_30~1000



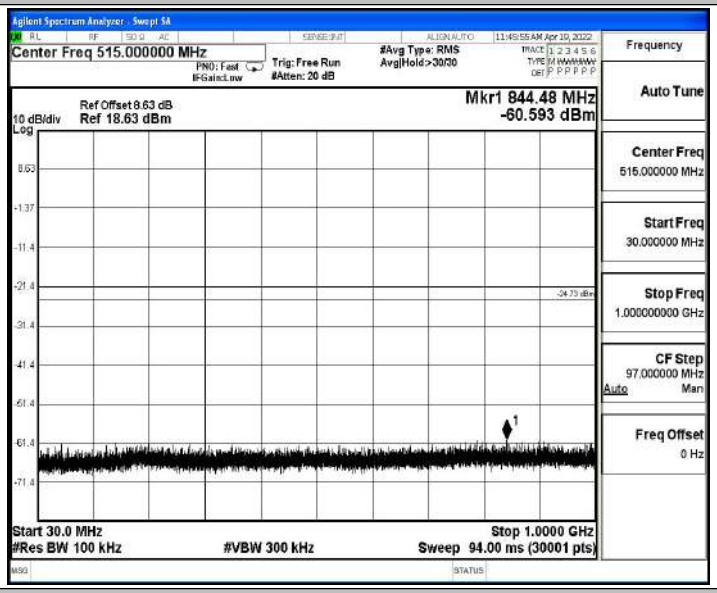
11G_Ant1_2412_1000~26500



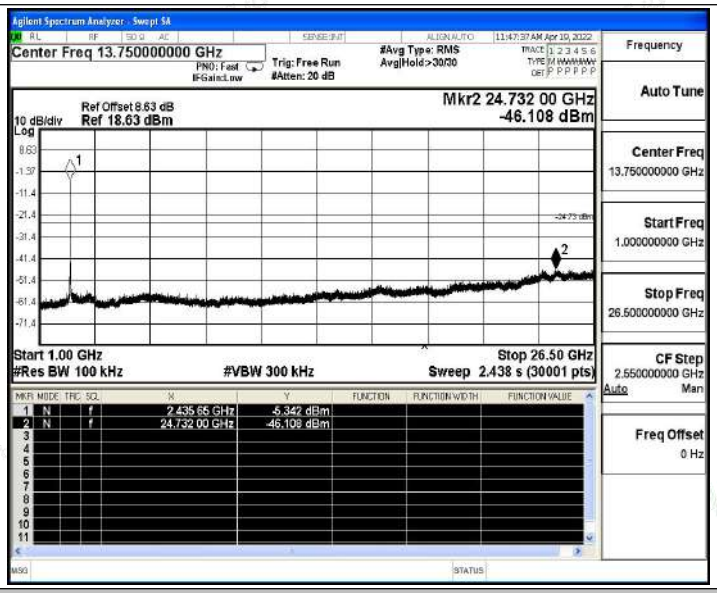
11G_Ant1_2437_0~Reference



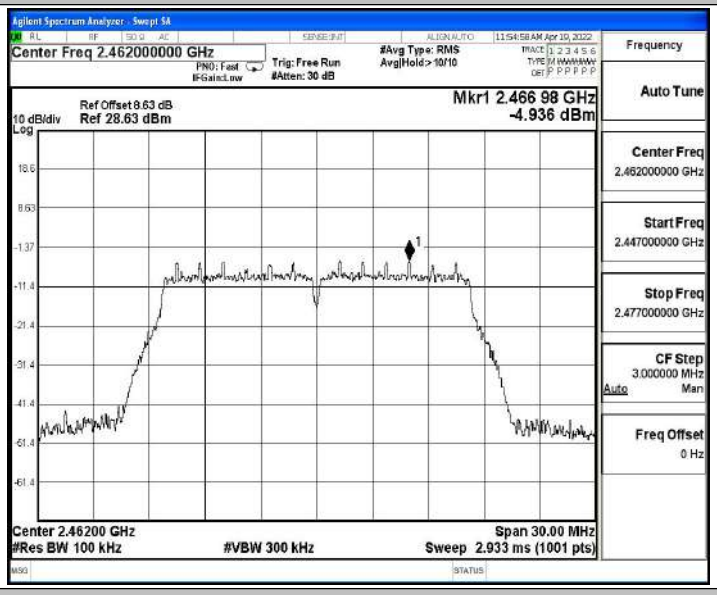
11G_Ant1_2437_30~1000



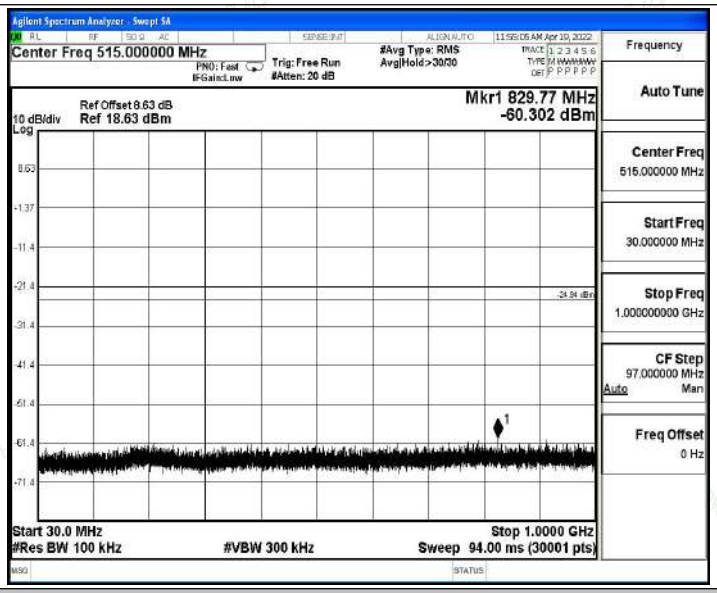
11G_Ant1_2437_1000~26500



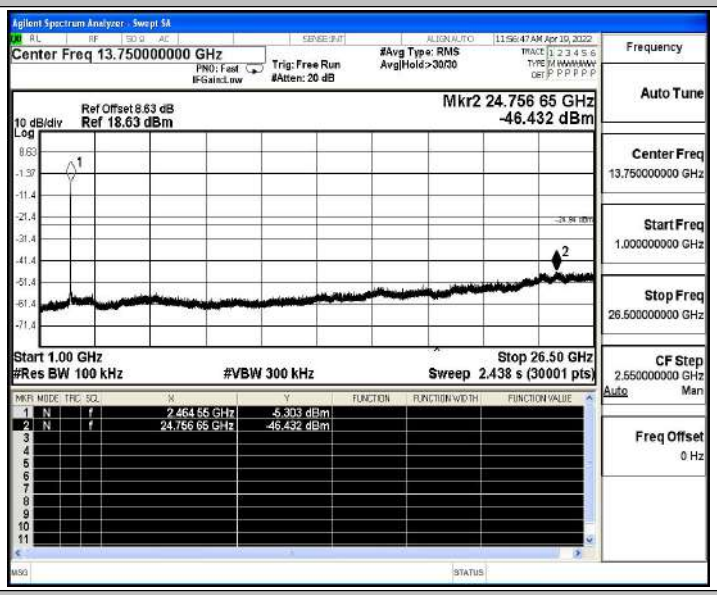
11G_Ant1_2462_0~Reference



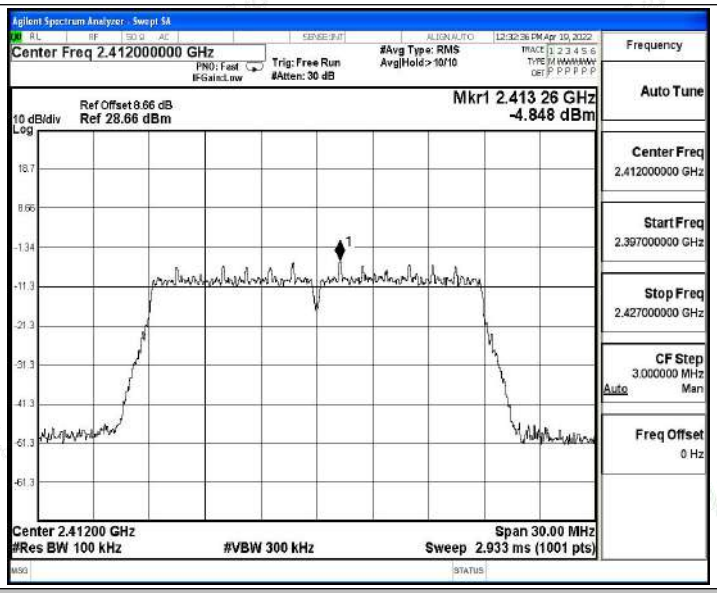
11G_Ant1_2462_30~1000



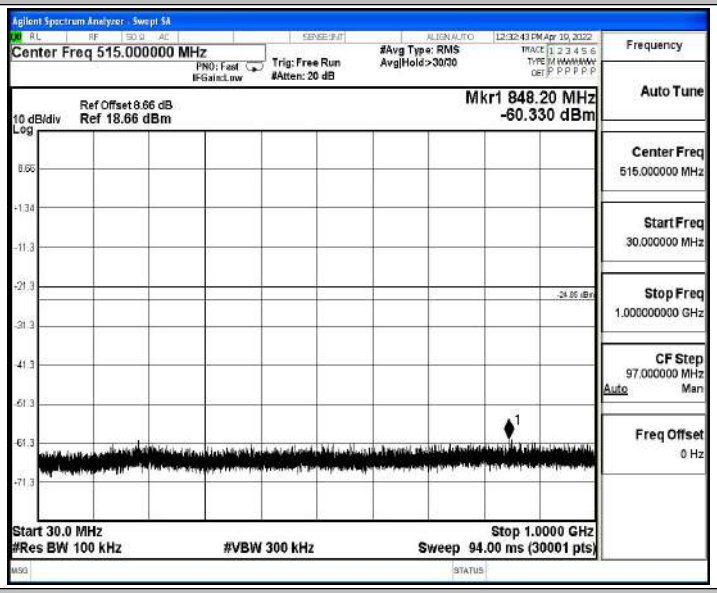
11G_Ant1_2462_1000~26500



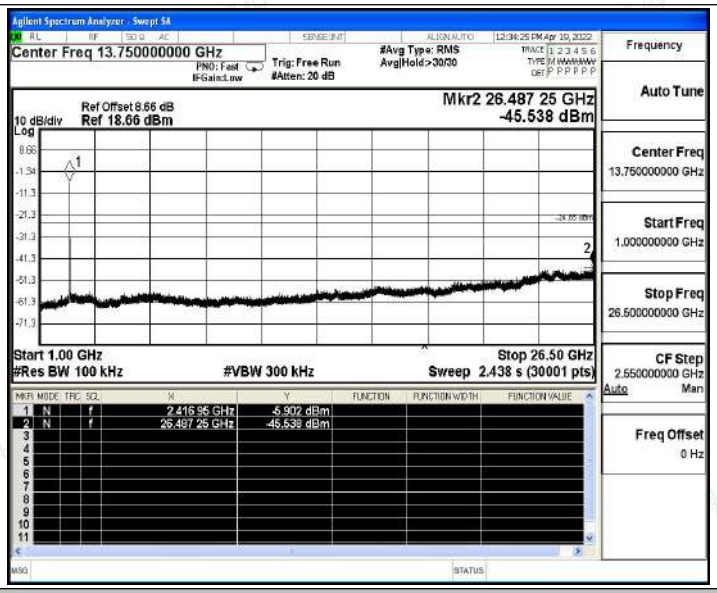
11N20SISO_Ant1_2412_0~Reference



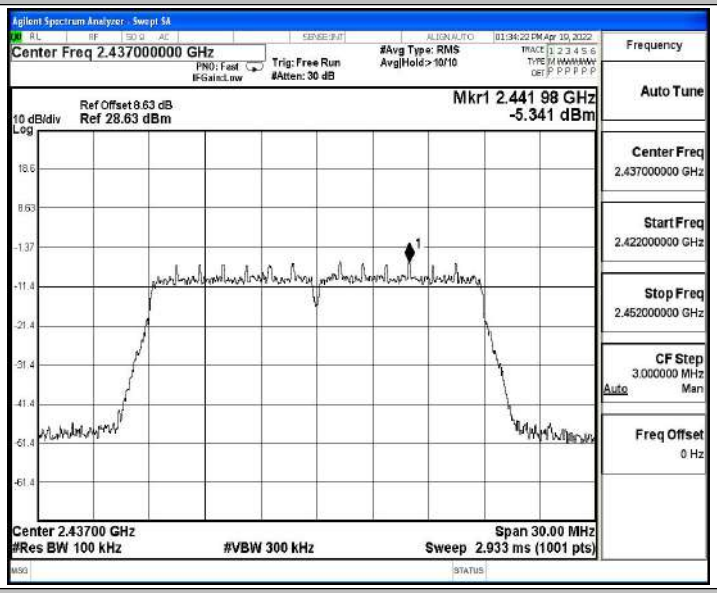
11N20SISO_Ant1_2412_30~1000



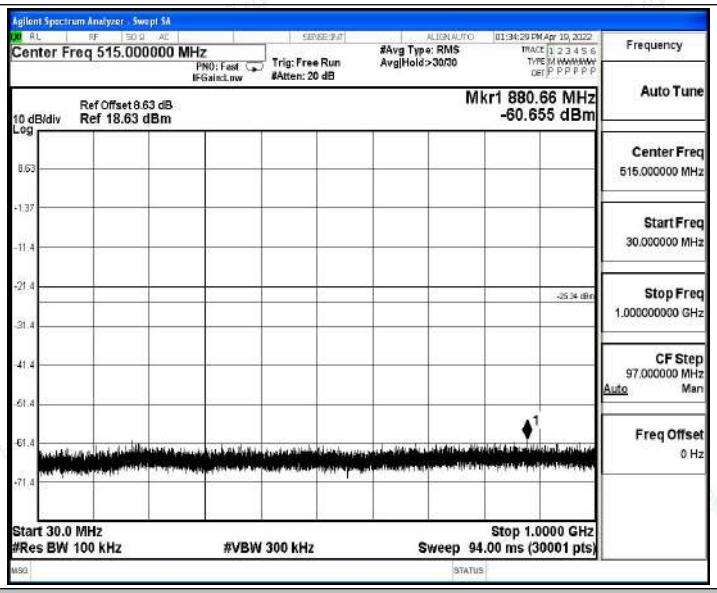
11N20SISO_Ant1_2412_1000~26500



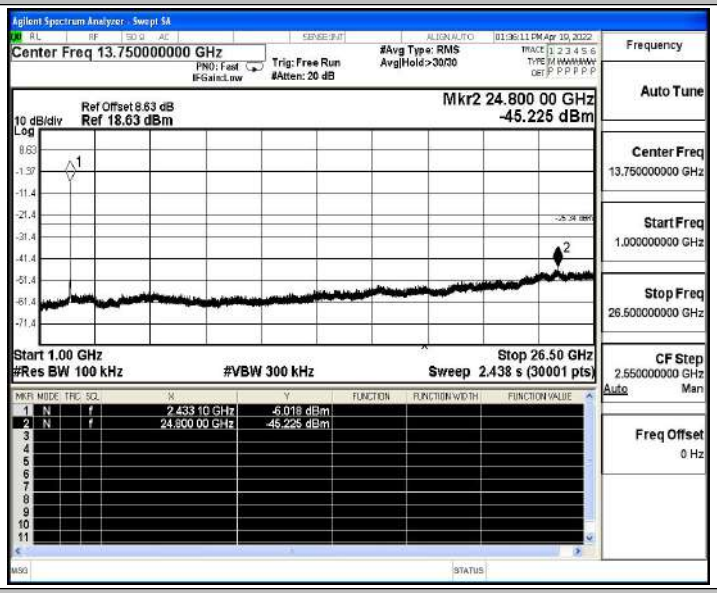
11N20SISO_Ant1_2437_0~Reference



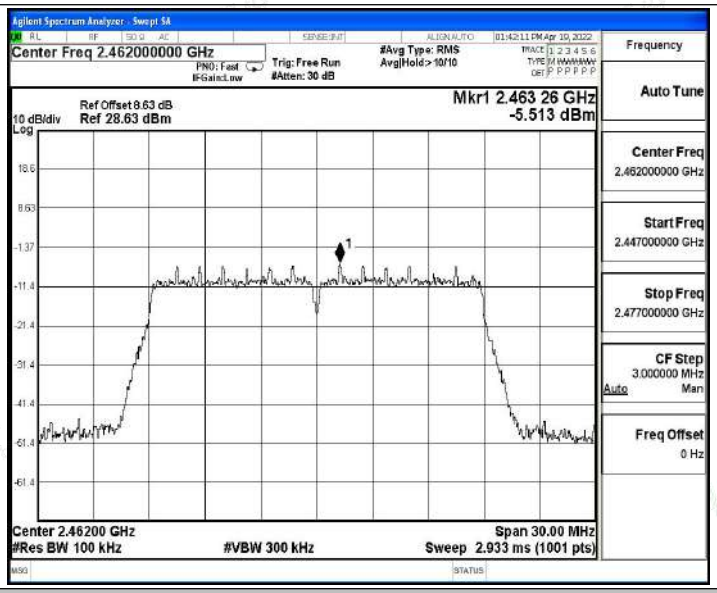
11N20SISO_Ant1_2437_30~1000



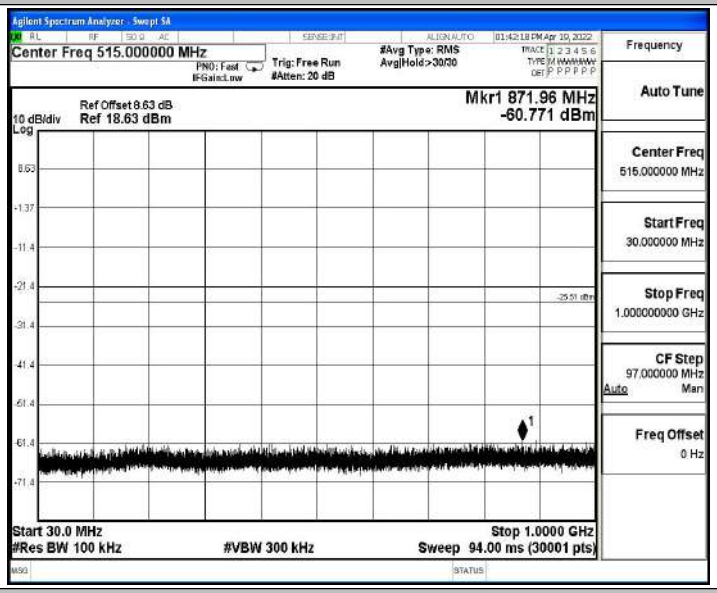
11N20SISO_Ant1_2437_1000~26500



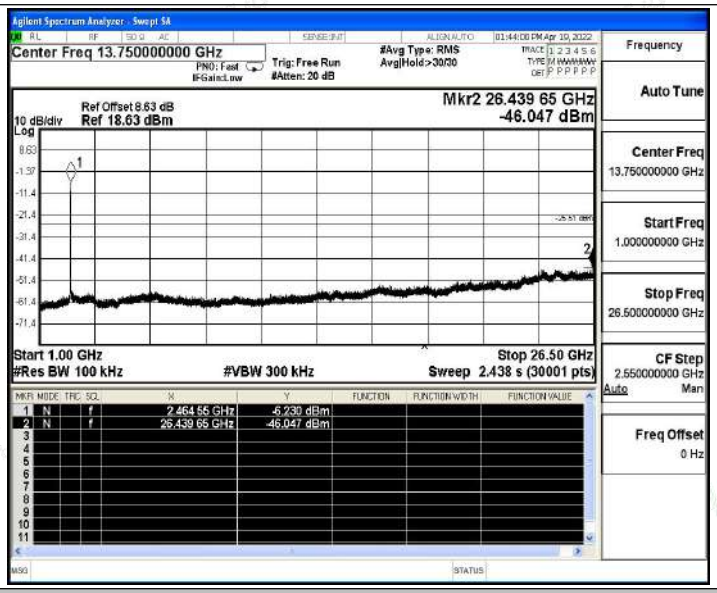
11N20SISO_Ant1_2462_0~Reference



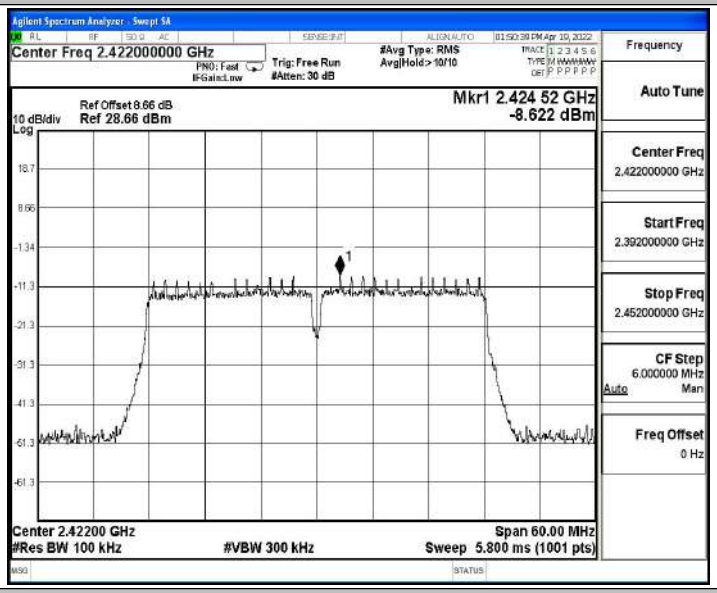
11N20SISO_Ant1_2462_30~1000



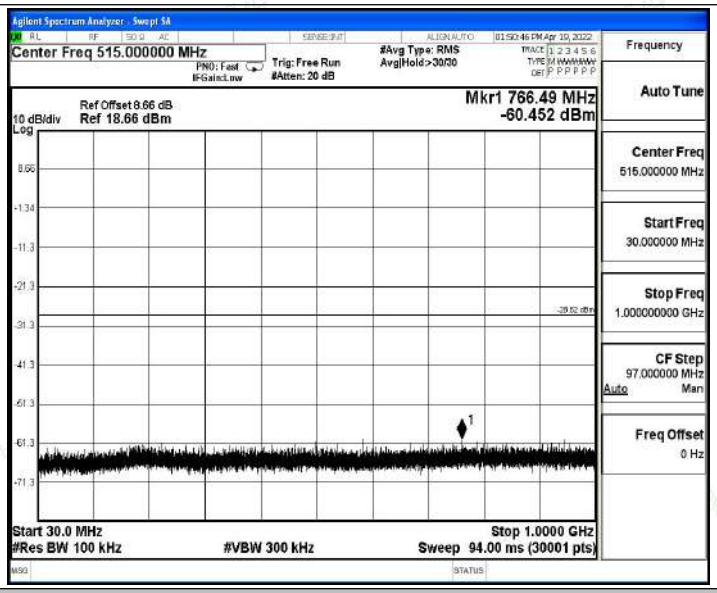
11N20SISO_Ant1_2462_1000~26500



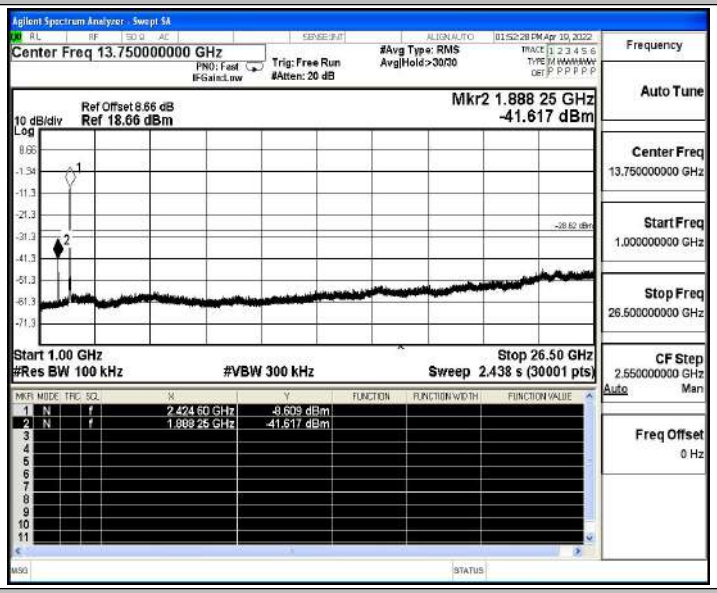
11N40SISO_Ant1_2422_0~Reference



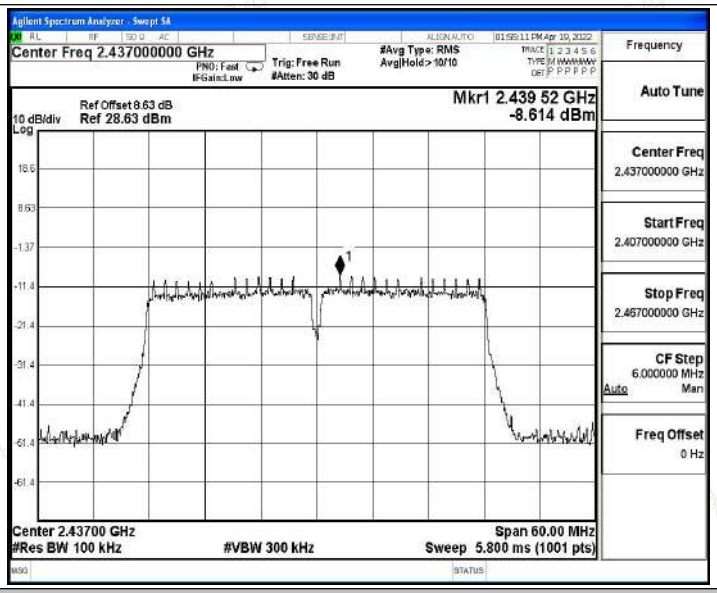
11N40SISO_Ant1_2422_30~1000



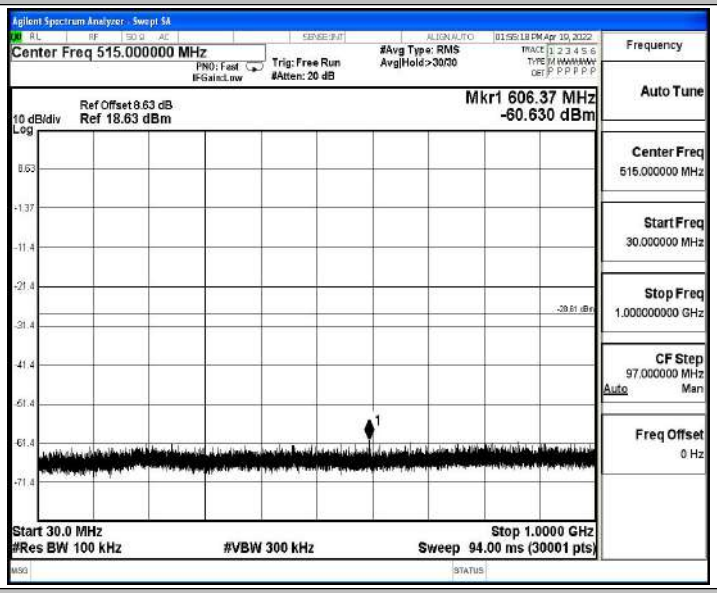
11N40SISO_Ant1_2422_1000~26500



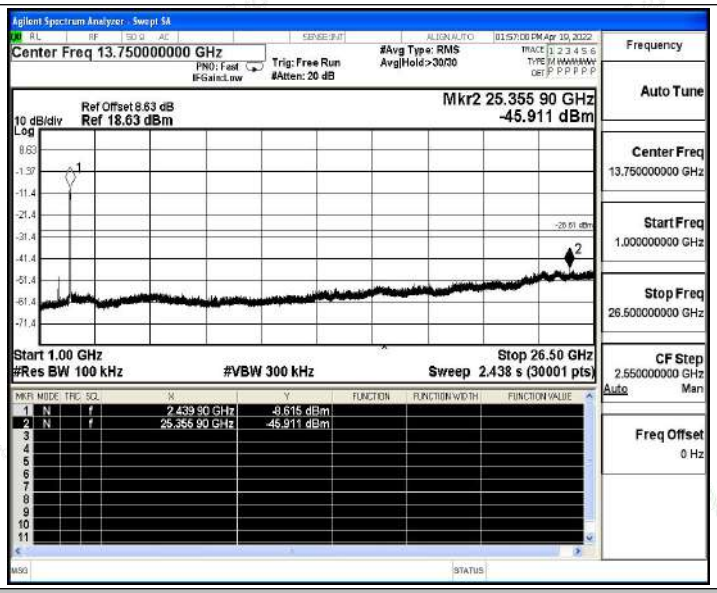
11N40SISO_Ant1_2437_0~Reference



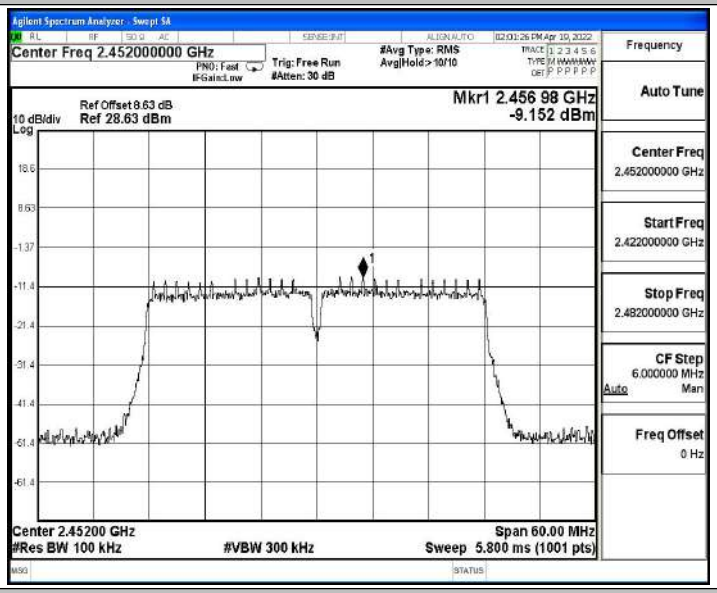
11N40SISO_Ant1_2437_30~1000



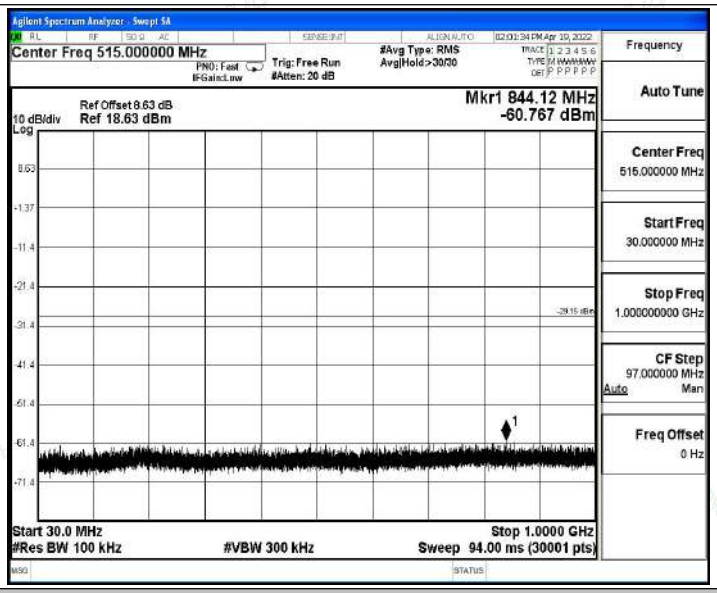
11N40SISO_Ant1_2437_1000~26500



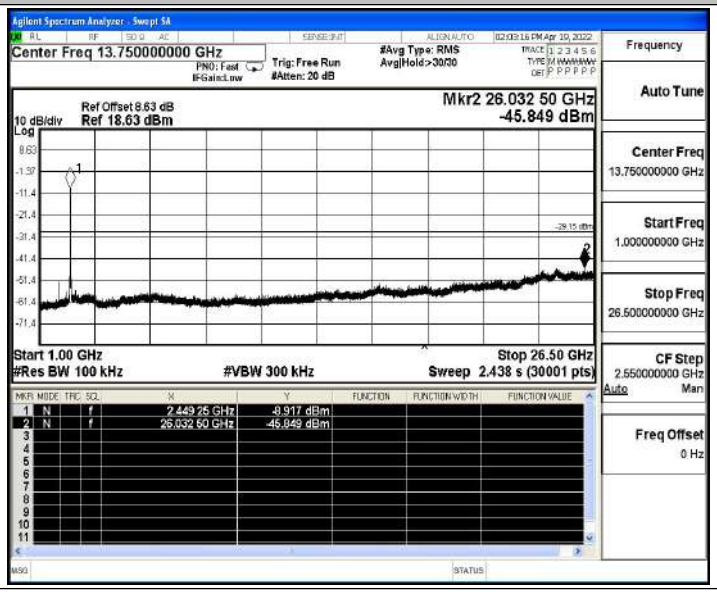
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500



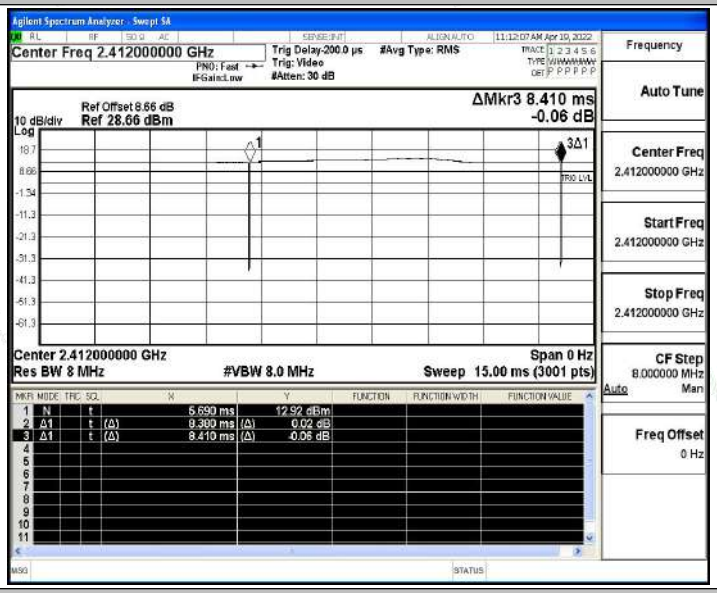
C.7 Duty Cycle

Test Result

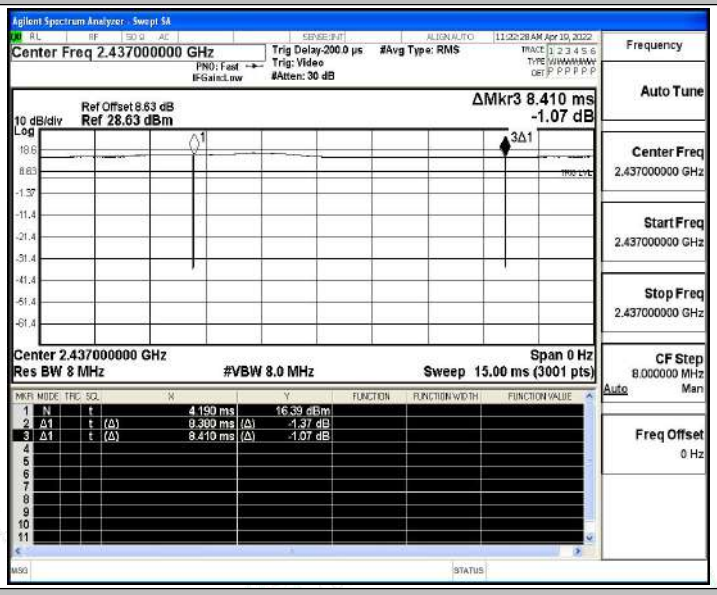
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	8.38	8.41	99.64	---	---
		2437	8.38	8.41	99.64	---	---
		2462	8.39	8.42	99.64	---	---
11G	Ant1	2412	1.39	1.43	97.20	---	---
		2437	1.40	1.43	97.90	---	---
		2462	1.39	1.43	97.20	---	---
11N20SISO	Ant1	2412	1.30	1.34	97.01	---	---
		2437	1.30	1.33	97.74	---	---
		2462	1.30	1.33	97.74	---	---
11N40SISO	Ant1	2422	0.65	0.69	94.20	---	---
		2437	0.65	0.68	95.59	---	---
		2452	0.65	0.68	95.59	---	---

Test Graphs

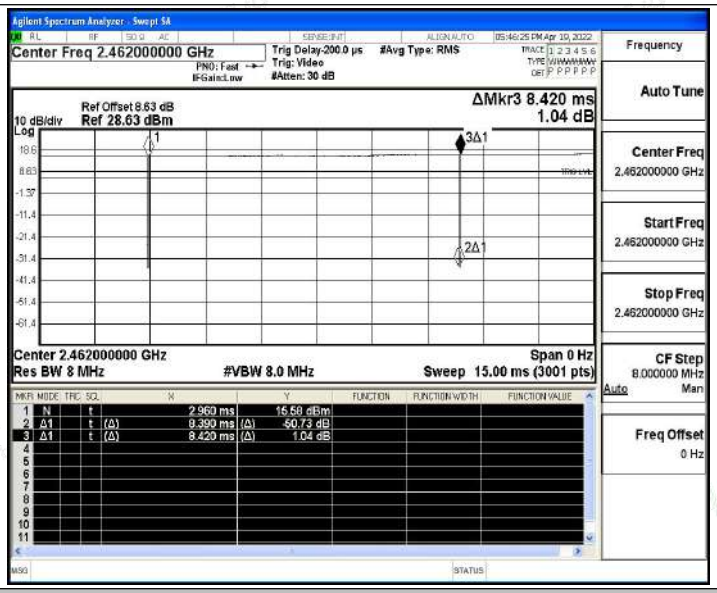
11B_Ant1_2412



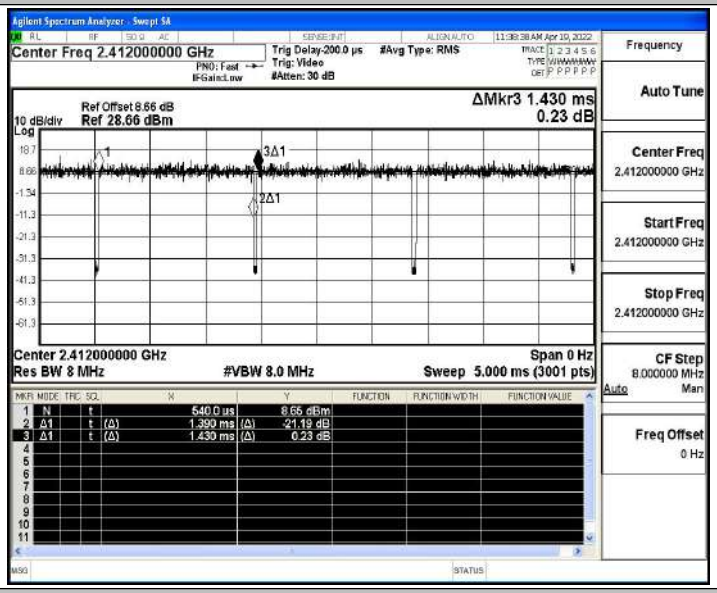
11B_Ant1_2437



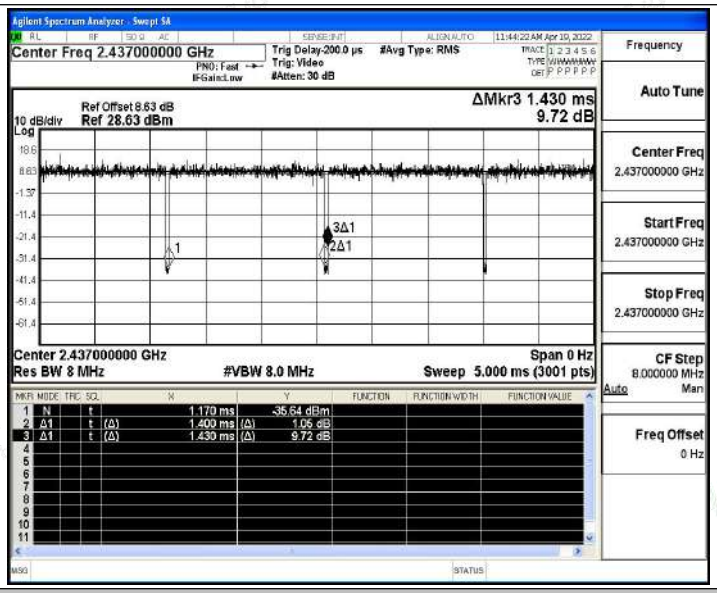
11B_Ant1_2462



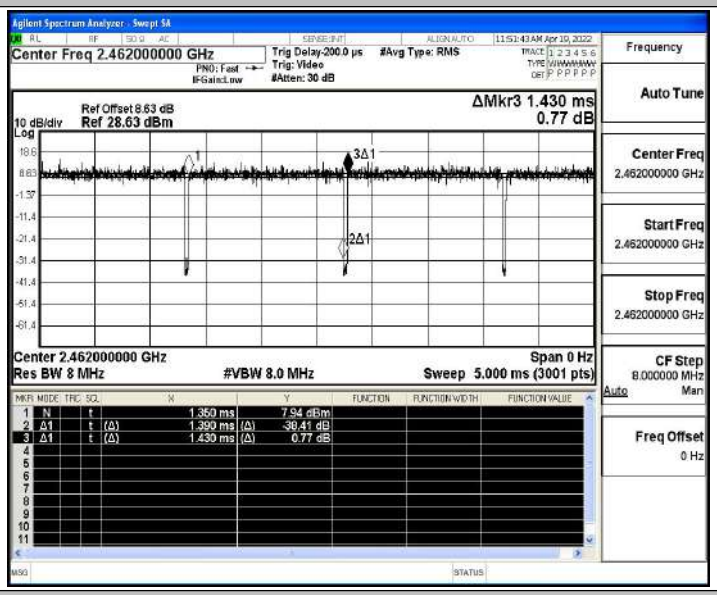
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



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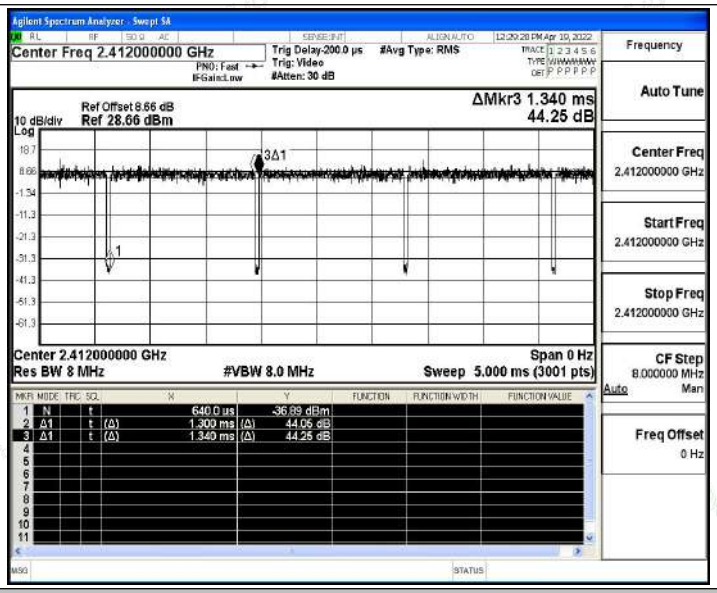

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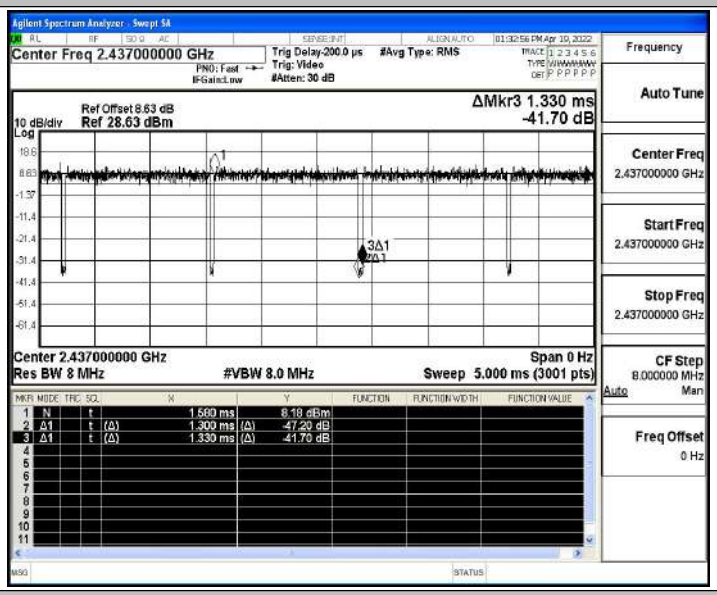

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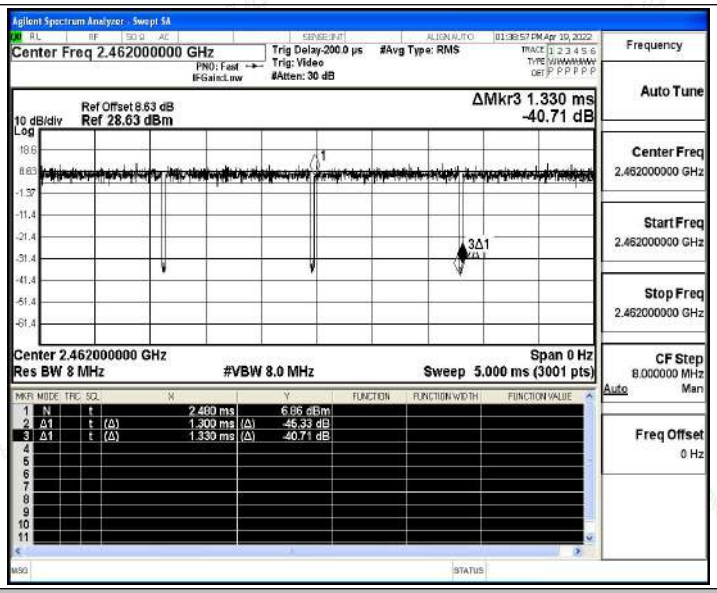

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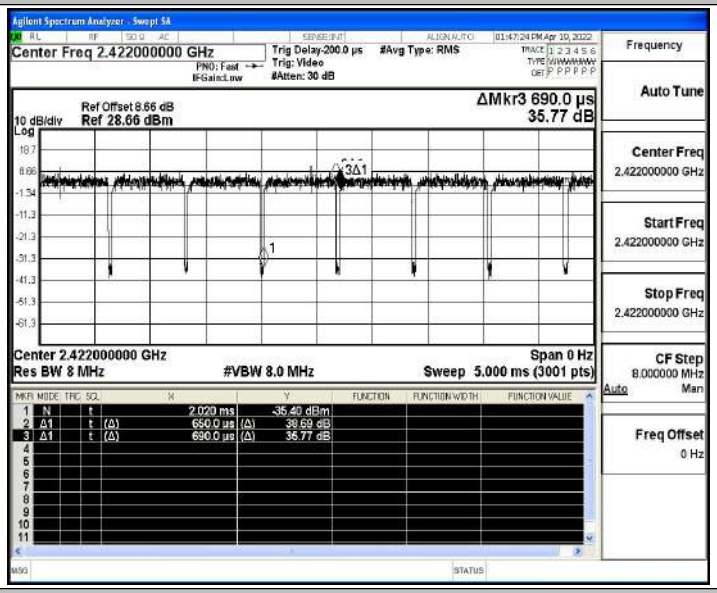

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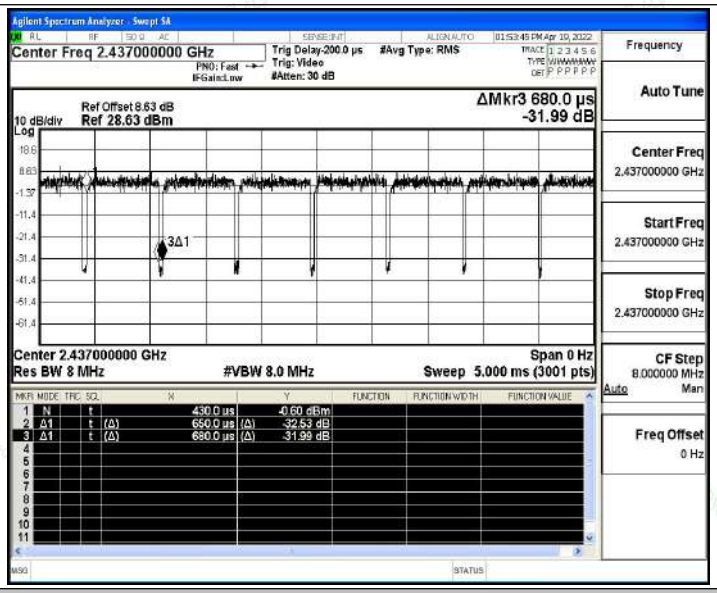

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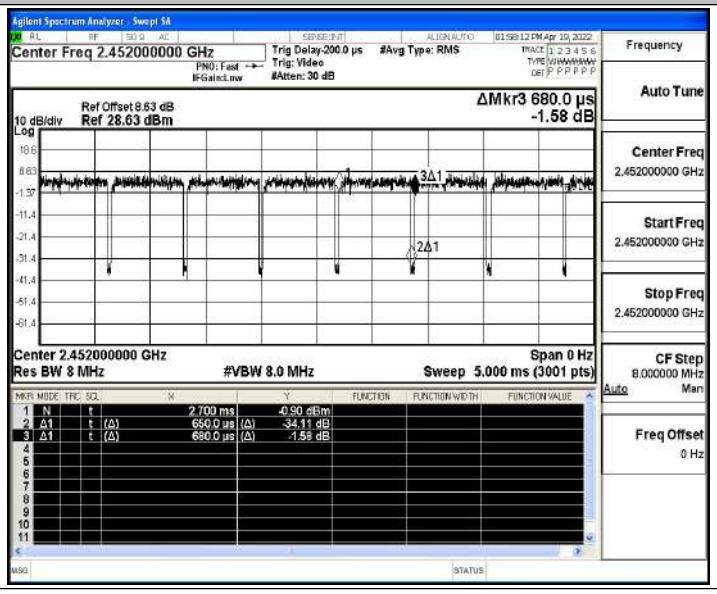


C.8 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-58.6	≤-41.20	36.60	≤54	PASS
				AV	2389.830	-56.31	≤-41.20	38.89	≤54	PASS
				AV	2390.000	-56.35	≤-41.20	38.85	≤54	PASS
				Peak	2310.000	-48.27	≤-21.20	46.93	≤74	PASS
				Peak	2370.980	-45.18	≤-21.20	50.02	≤74	PASS
				Peak	2390.000	-45.76	≤-21.20	49.44	≤74	PASS
		High	2462	AV	2483.500	-54.93	≤-41.20	40.27	≤54	PASS
				AV	2483.560	-55.04	≤-41.20	40.16	≤54	PASS
				AV	2500.000	-56.79	≤-41.20	38.41	≤54	PASS
				Peak	2483.500	-45.12	≤-21.20	50.08	≤74	PASS
				Peak	2486.090	-43.81	≤-21.20	51.39	≤74	PASS
				Peak	2500.000	-45.74	≤-21.20	49.46	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-57.7	≤-41.20	37.50	≤54	PASS
				AV	2389.960	-52.66	≤-41.20	42.54	≤54	PASS
				AV	2390.000	-52.66	≤-41.20	42.54	≤54	PASS
				Peak	2310.000	-47.94	≤-21.20	47.26	≤74	PASS
				Peak	2389.960	-38.93	≤-21.20	56.27	≤74	PASS
				Peak	2390.000	-38.93	≤-21.20	56.27	≤74	PASS
		High	2462	AV	2483.500	-52.62	≤-41.20	42.58	≤54	PASS
				AV	2483.670	-52.9	≤-41.20	42.30	≤54	PASS
				AV	2500.000	-55.27	≤-41.20	39.93	≤54	PASS
				Peak	2483.500	-37.6	≤-21.20	57.60	≤74	PASS
				Peak	2485.100	-36.23	≤-21.20	58.97	≤74	PASS
				Peak	2500.000	-45.02	≤-21.20	50.18	≤74	PASS
11N20SISO	Ant1	Low	2412	AV	2310.000	-58.13	≤-41.20	37.07	≤54	PASS
				AV	2389.960	-52.34	≤-41.20	42.86	≤54	PASS
				AV	2390.000	-52.34	≤-41.20	42.86	≤54	PASS
				Peak	2310.000	-46.77	≤-21.20	48.43	≤74	PASS
				Peak	2389.960	-37.83	≤-21.20	57.37	≤74	PASS
				Peak	2390.000	-37.83	≤-21.20	57.37	≤74	PASS
		High	2462	AV	2483.500	-53.66	≤-41.20	41.54	≤54	PASS
				AV	2483.560	-53.49	≤-41.20	41.71	≤54	PASS
				AV	2500.000	-54.98	≤-41.20	40.22	≤54	PASS
				Peak	2483.500	-39.94	≤-21.20	55.26	≤74	PASS
				Peak	2483.670	-37.37	≤-21.20	57.83	≤74	PASS

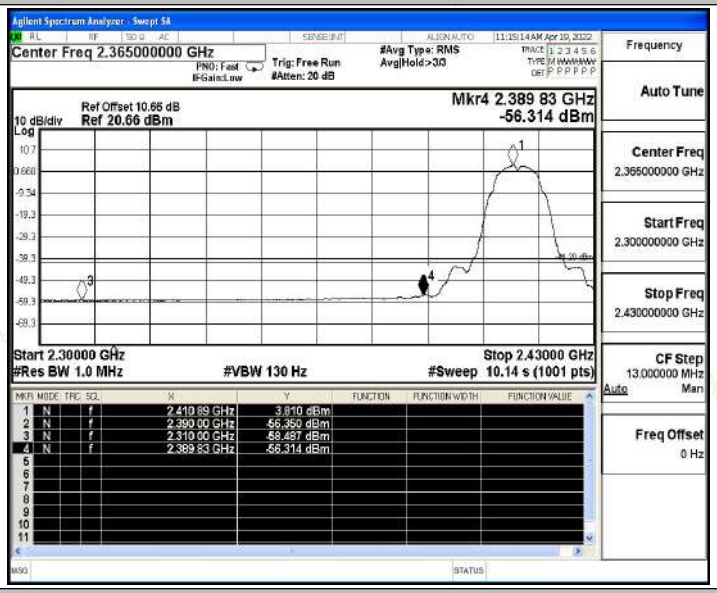
				Peak	2500.000	-45.22	≤-21.20	49.98	≤74	PASS
11N40SISO	Ant1	Low	2422	AV	2310.000	-57.96	≤-41.20	37.24	≤54	PASS
				AV	2389.310	-51.48	≤-41.20	43.72	≤54	PASS
				AV	2390.000	-51.58	≤-41.20	43.62	≤54	PASS
				Peak	2310.000	-47.41	≤-21.20	47.79	≤74	PASS
				Peak	2389.050	-33.98	≤-21.20	61.22	≤74	PASS
				Peak	2390.000	-35.34	≤-21.20	59.86	≤74	PASS
		High	2452	AV	2483.500	-51.05	≤-41.20	44.15	≤54	PASS
				AV	2484.330	-50.9	≤-41.20	44.30	≤54	PASS
				AV	2500.000	-54.66	≤-41.20	40.54	≤54	PASS
				Peak	2483.500	-34.46	≤-21.20	60.74	≤74	PASS
				Peak	2485.650	-32.75	≤-21.20	62.45	≤74	PASS
				Peak	2500.000	-42.76	≤-21.20	52.44	≤74	PASS

Note：

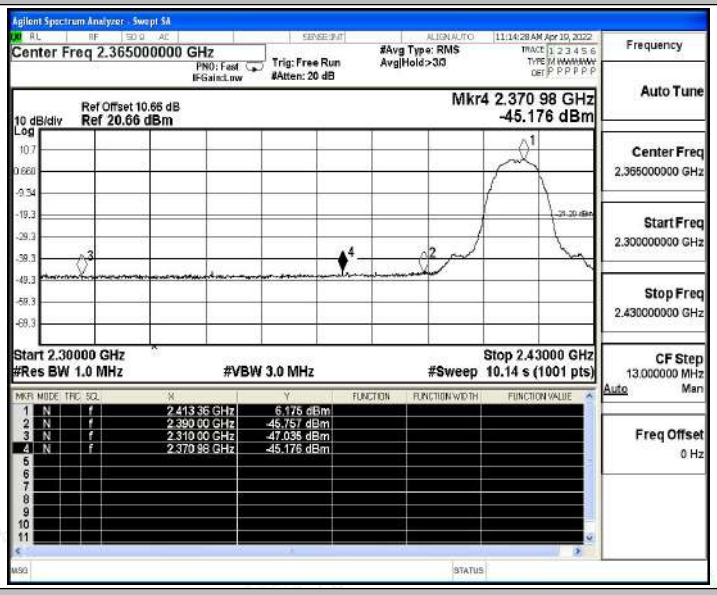
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

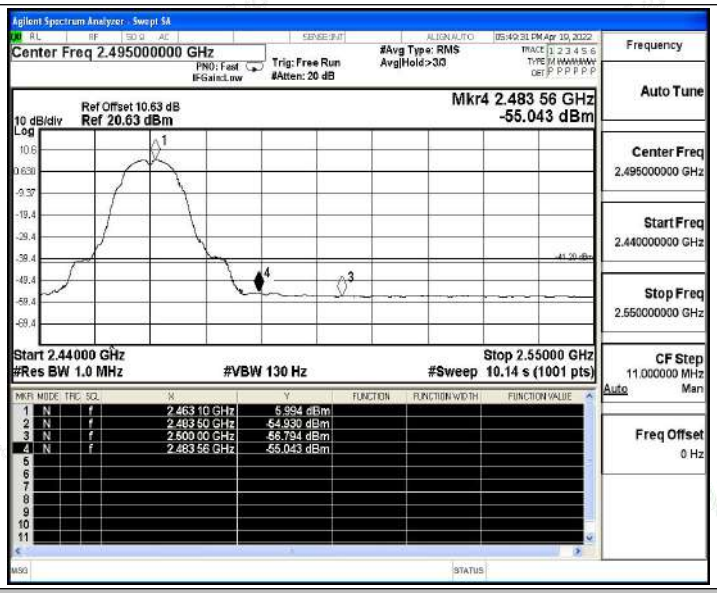
11B_Ant1_Low_2412_AV



11B_Ant1_Low_2412_Peak



11B_Ant1_High_2462_AV



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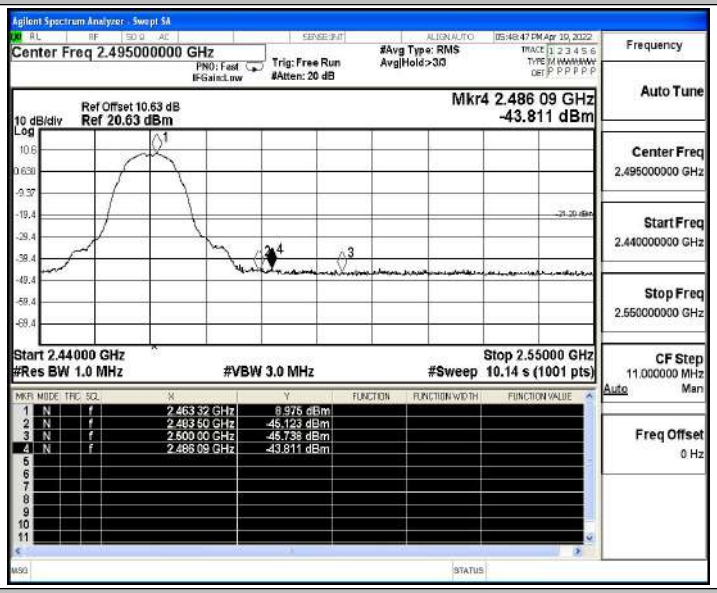
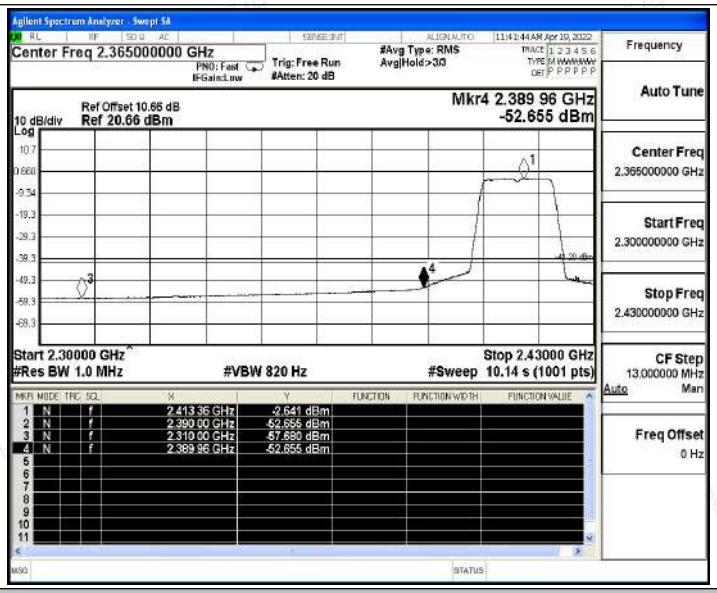


11G_Ant1_Low_2412_AV



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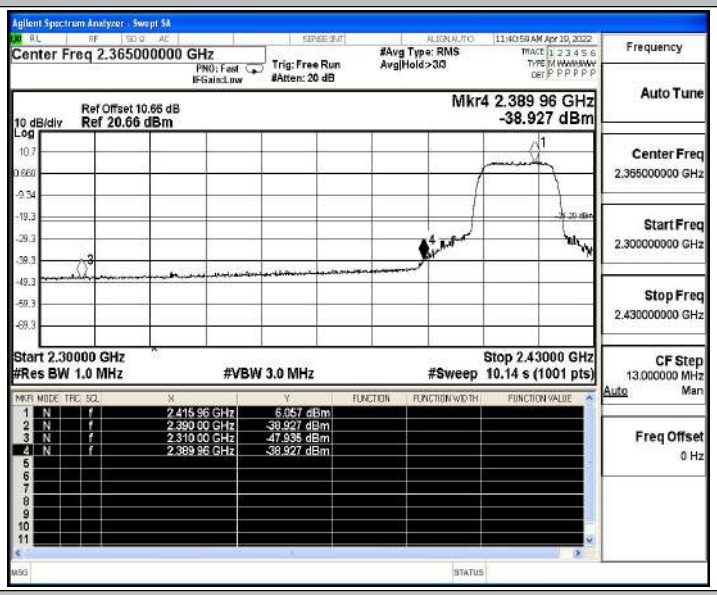

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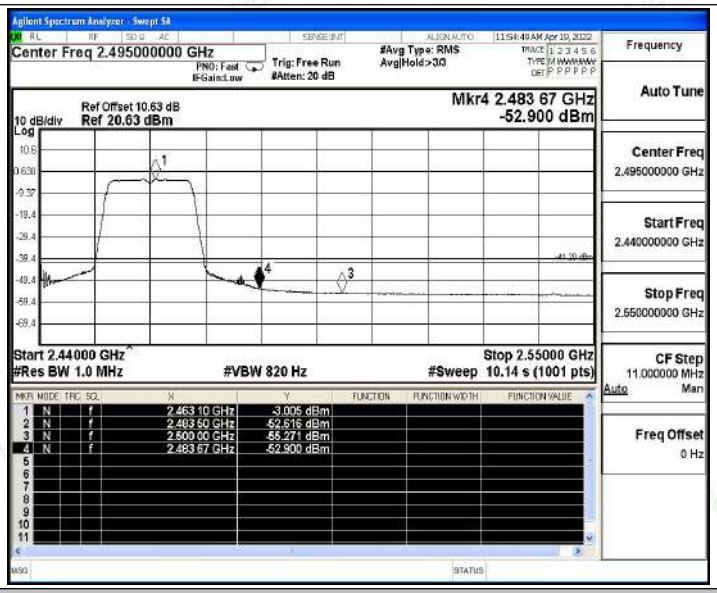

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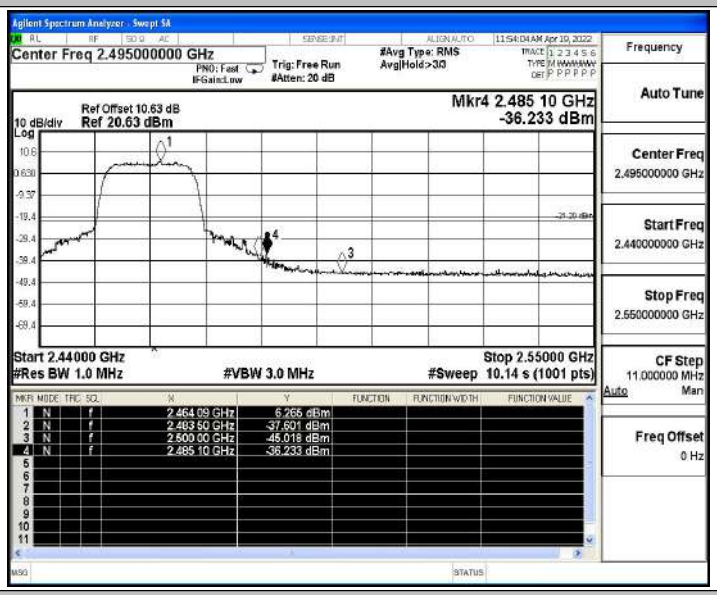

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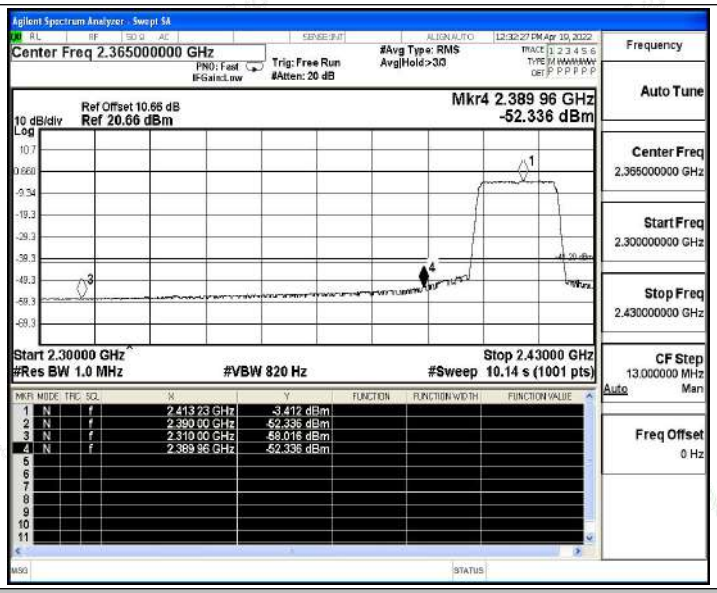

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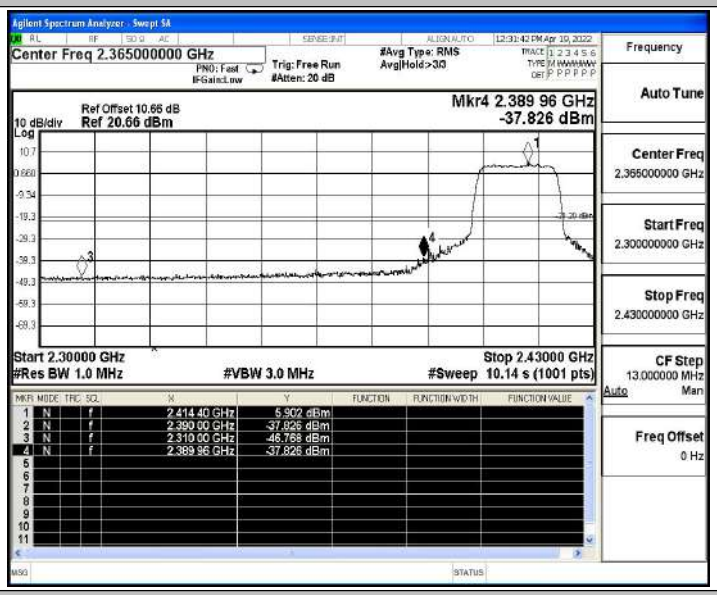

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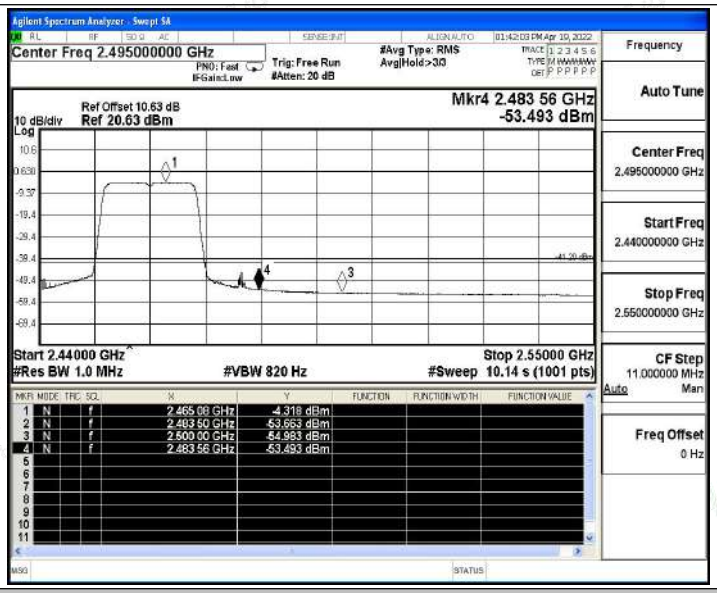

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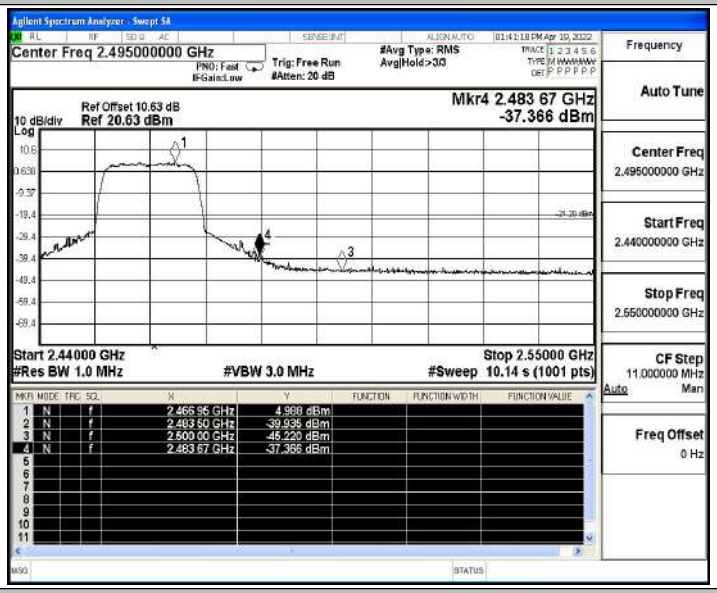

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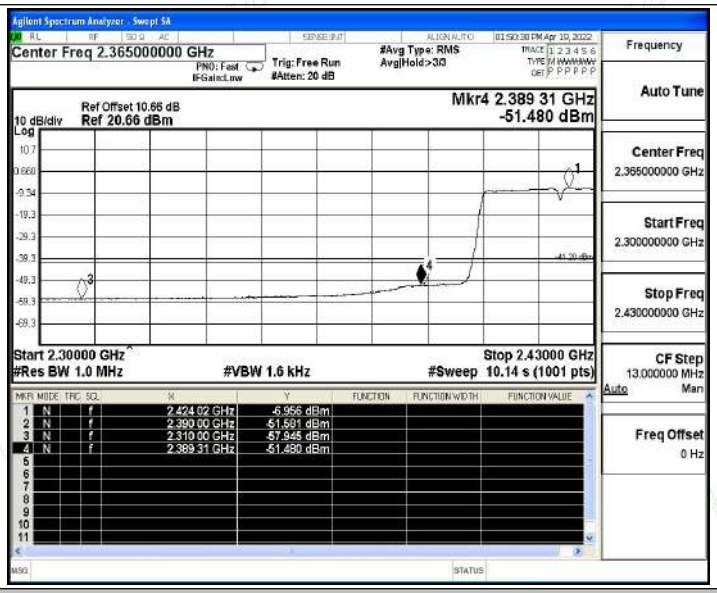

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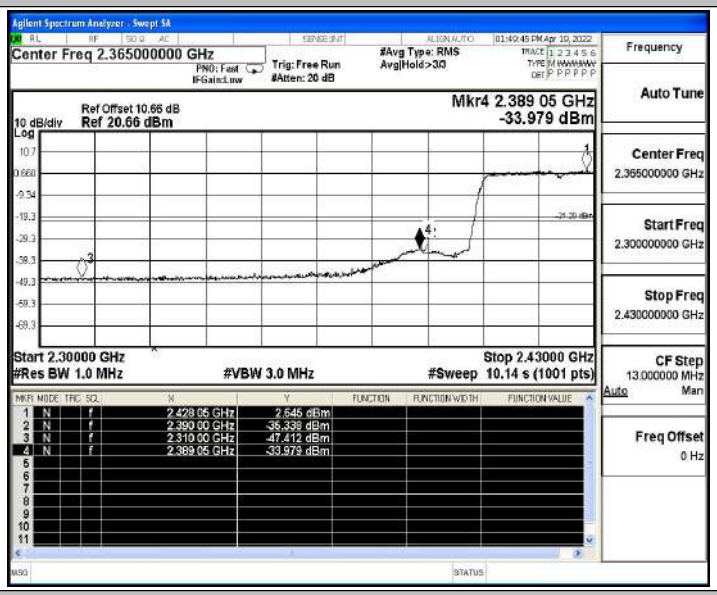

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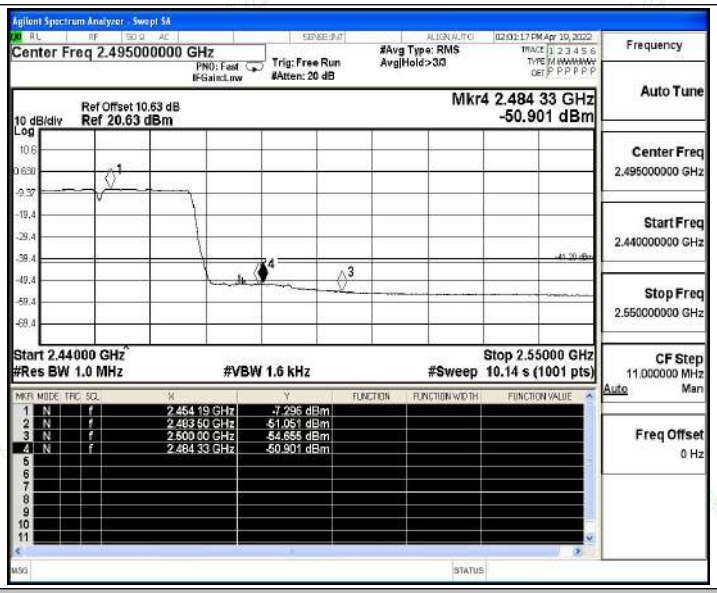
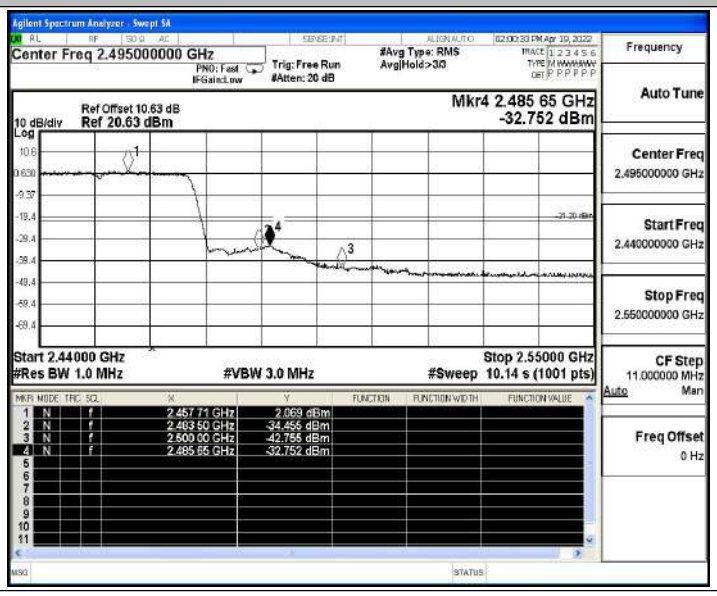
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