Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: AMD R1505G Player

Test Model: SMPA-R1505G

Environmental Conditions

Temperature:	21.1 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

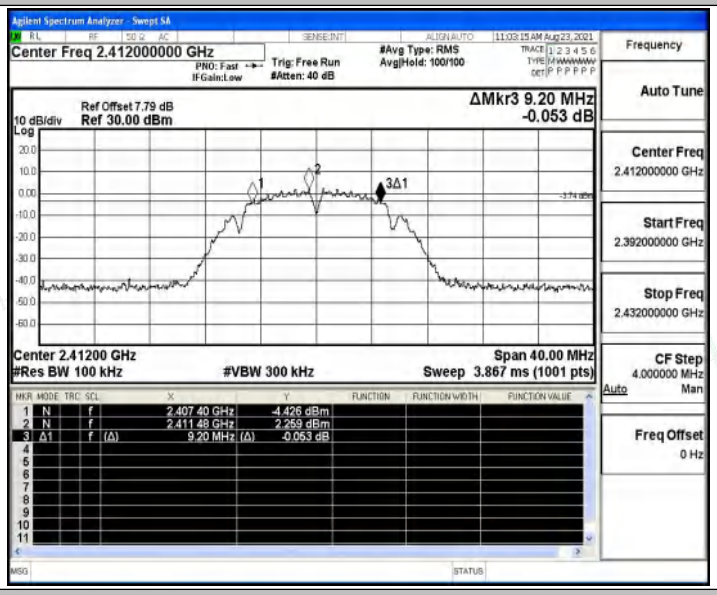
C.1 6dB Bandwidth

Test Result

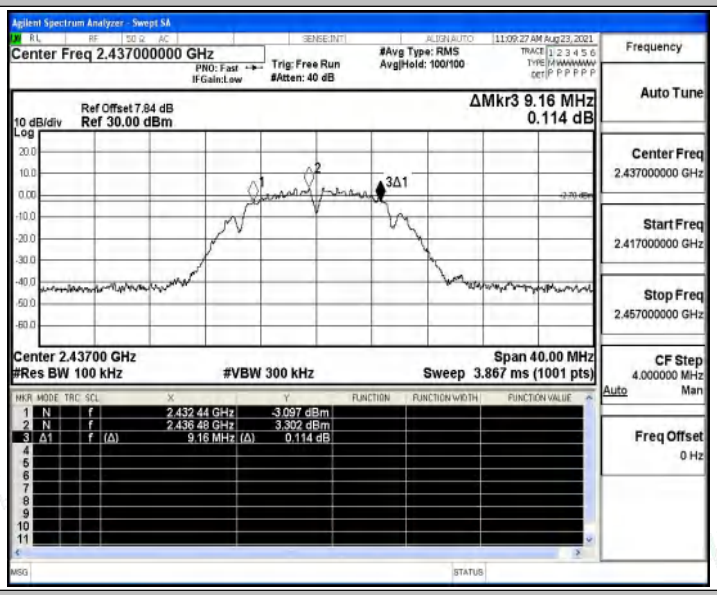
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.200	2407.400	2416.600	0.5	PASS
		2437	9.160	2432.440	2441.600	0.5	PASS
		2462	9.480	2457.080	2466.560	0.5	PASS
11G	Ant1	2412	16.400	2403.800	2420.200	0.5	PASS
		2437	16.120	2429.080	2445.200	0.5	PASS
		2462	16.160	2453.680	2469.840	0.5	PASS
11N20SISO	Ant1	2412	17.880	2403.080	2420.960	0.5	PASS
		2437	17.800	2428.160	2445.960	0.5	PASS
		2462	17.800	2453.040	2470.840	0.5	PASS
11N40SISO	Ant1	2422	36.560	2403.760	2440.320	0.5	PASS
		2437	36.560	2418.760	2455.320	0.5	PASS
		2452	36.080	2433.760	2469.840	0.5	PASS

Test Graphs

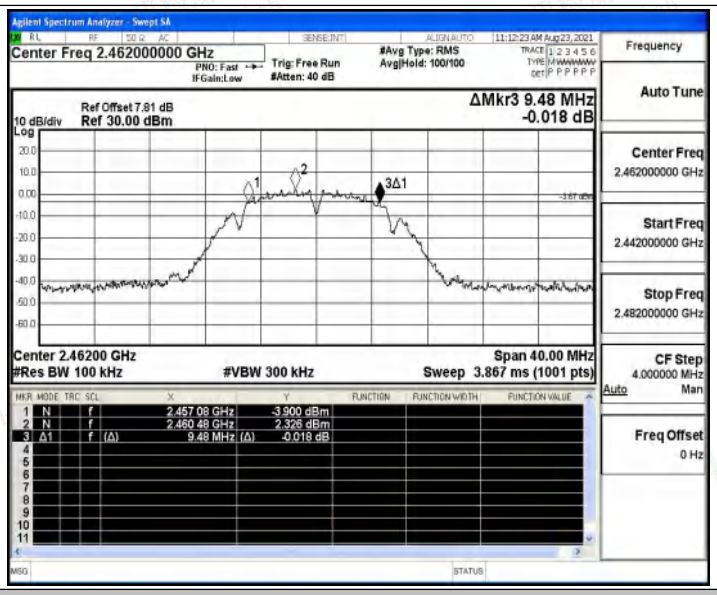
11B_Ant1_2412



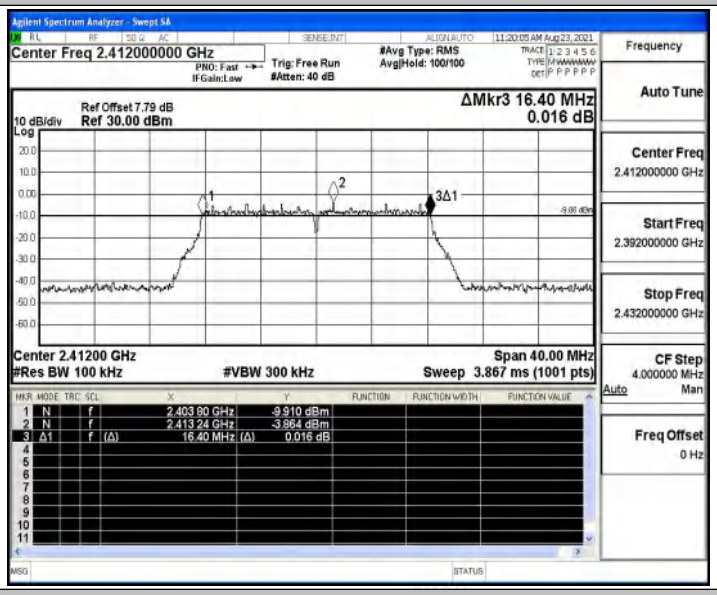
11B_Ant1_2437



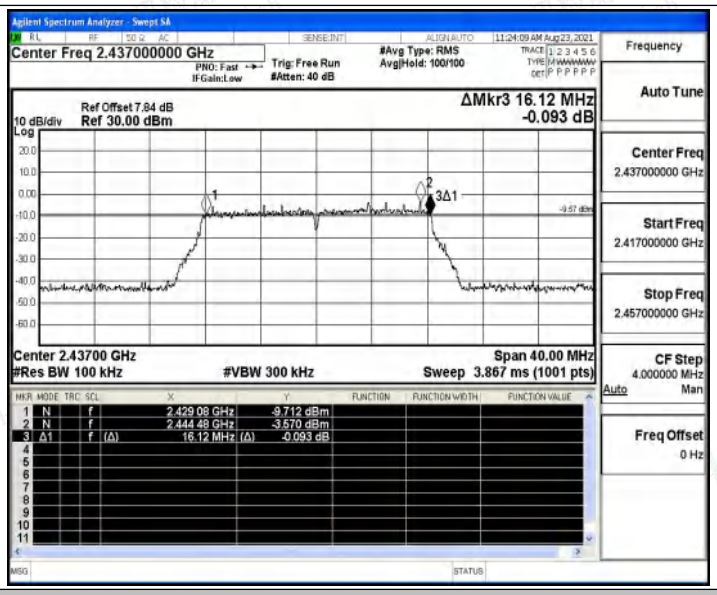
11B_Ant1_2462



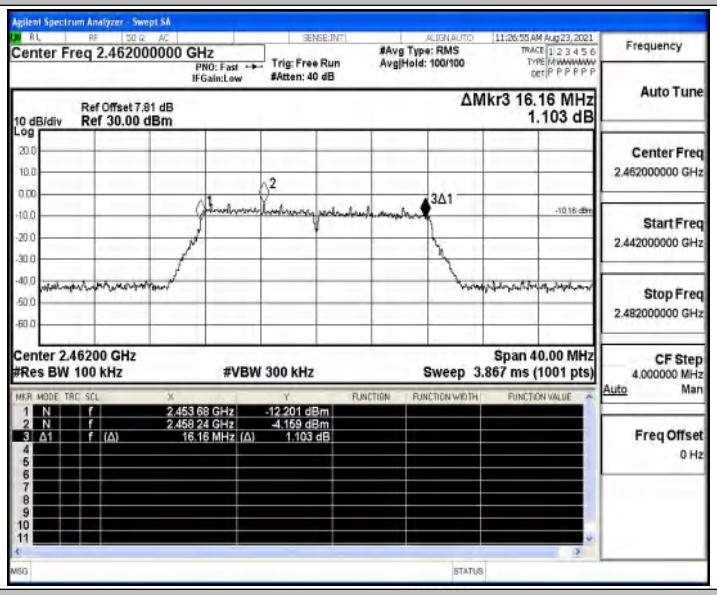
11G_Ant1_2412



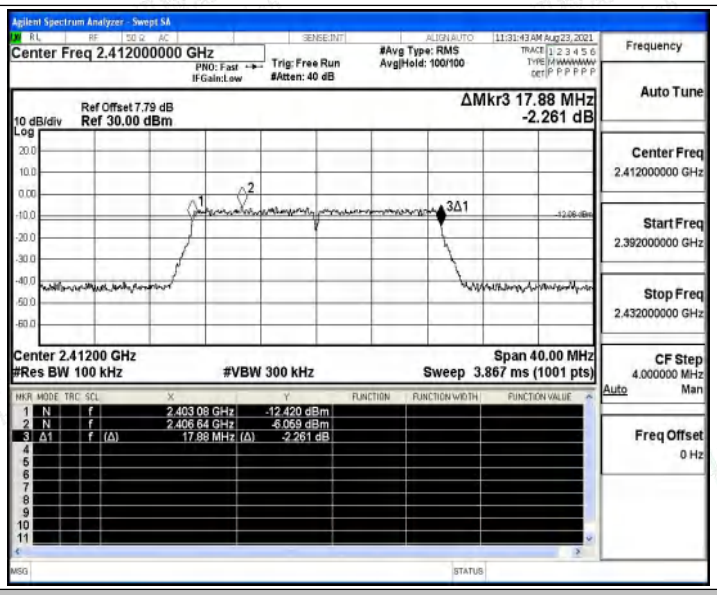
11G_Ant1_2437



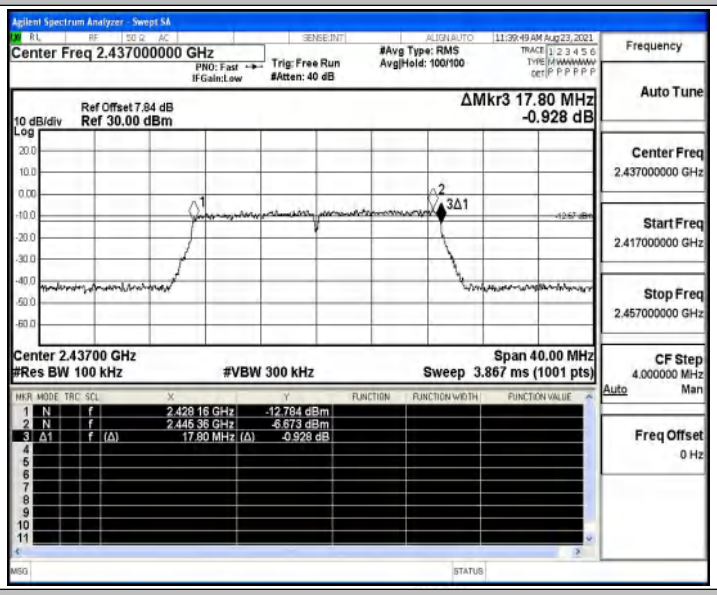
11G_Ant1_2462



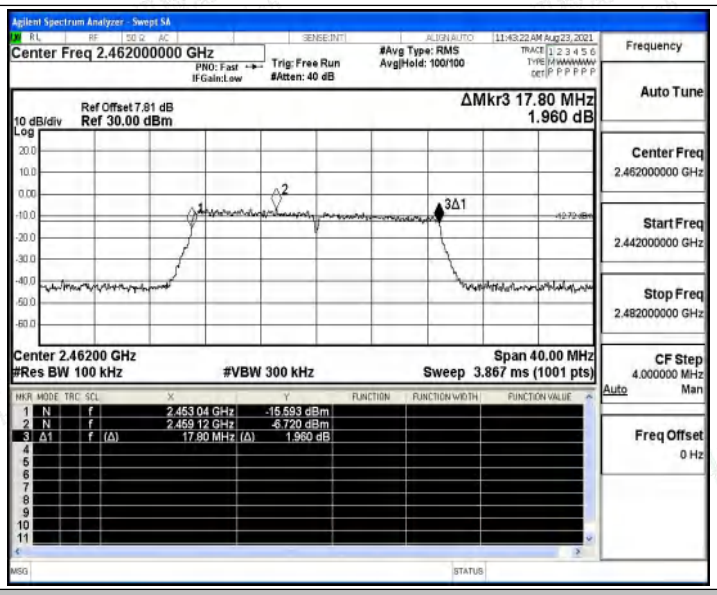
11N20SISO_Ant1_2412



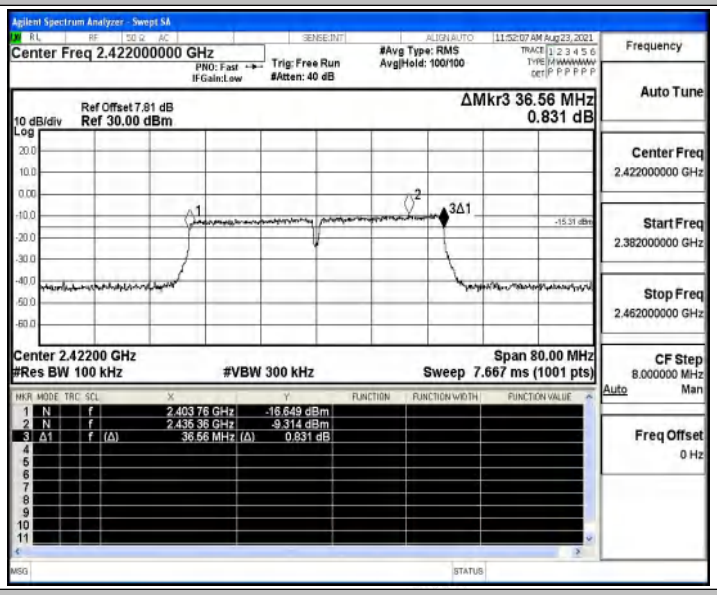
11N20SISO_Ant1_2437



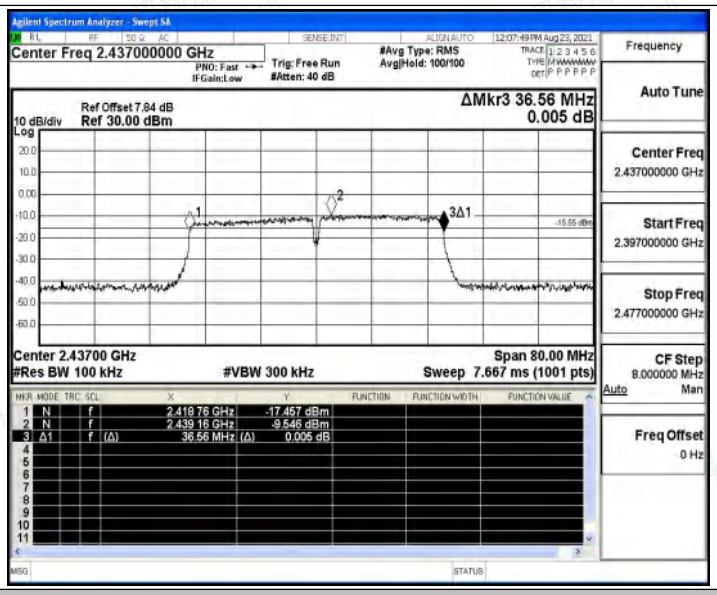
11N20SISO_Ant1_2462



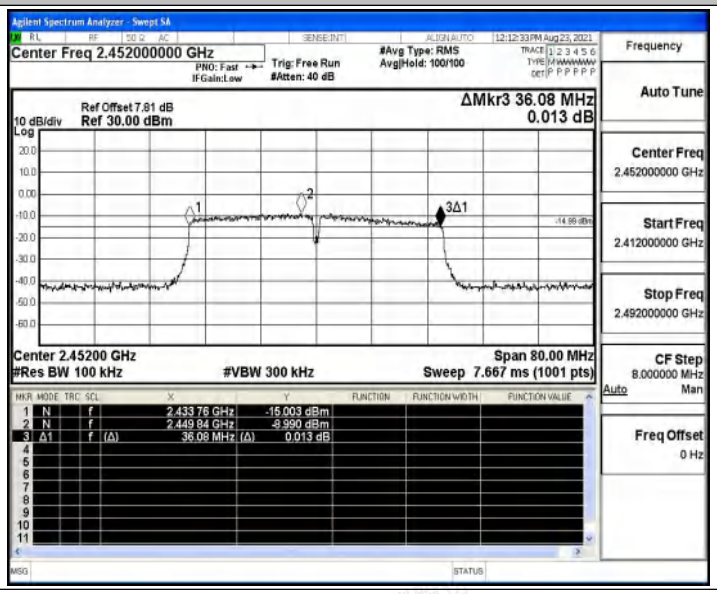
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



C.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.21	≤30	PASS
		2437	16.30	≤30	PASS
		2462	15.26	≤30	PASS
11G	Ant1	2412	14.66	≤30	PASS
		2437	14.68	≤30	PASS
		2462	14.38	≤30	PASS
11N20SISO	Ant1	2412	14.73	≤30	PASS
		2437	14.55	≤30	PASS
		2462	14.43	≤30	PASS
11N40SISO	Ant1	2422	14.24	≤30	PASS
		2437	14.52	≤30	PASS
		2452	14.70	≤30	PASS

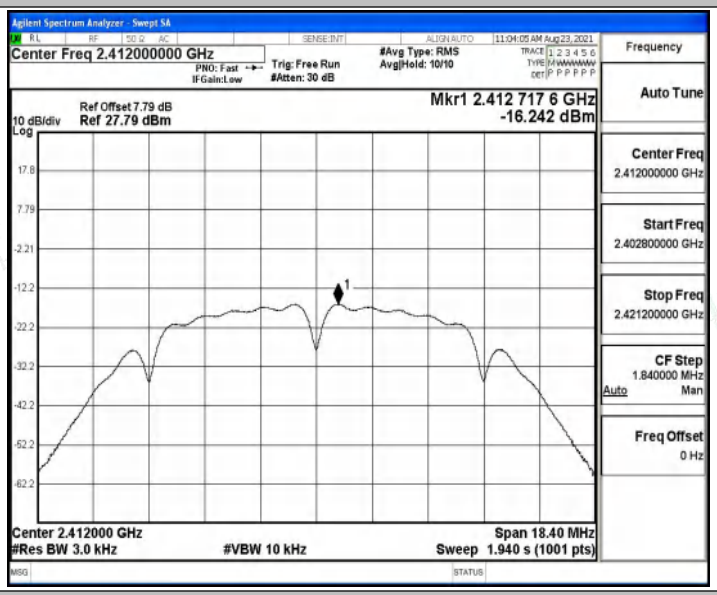
C.3 Maximum power spectral density

Test Result

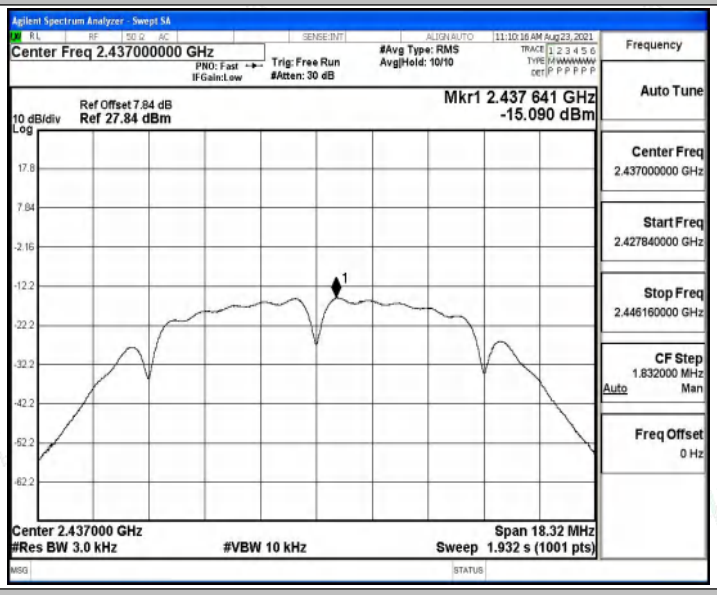
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-16.24	≤8	PASS
		2437	-15.09	≤8	PASS
		2462	-16.07	≤8	PASS
11G	Ant1	2412	-16.92	≤8	PASS
		2437	-17.93	≤8	PASS
		2462	-17.82	≤8	PASS
11N20SISO	Ant1	2412	-19.71	≤8	PASS
		2437	-20.83	≤8	PASS
		2462	-19.73	≤8	PASS
11N40SISO	Ant1	2422	-20.78	≤8	PASS
		2437	-21	≤8	PASS
		2452	-21.22	≤8	PASS

Test Graphs

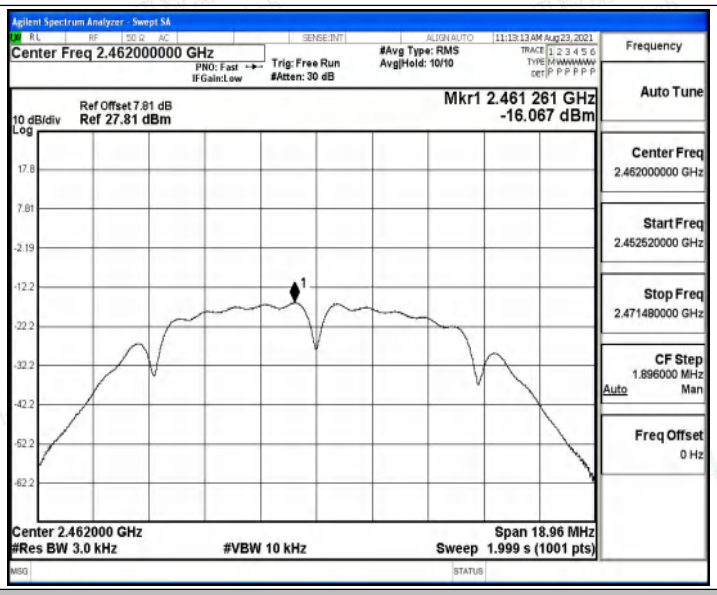
11B_Ant1_2412



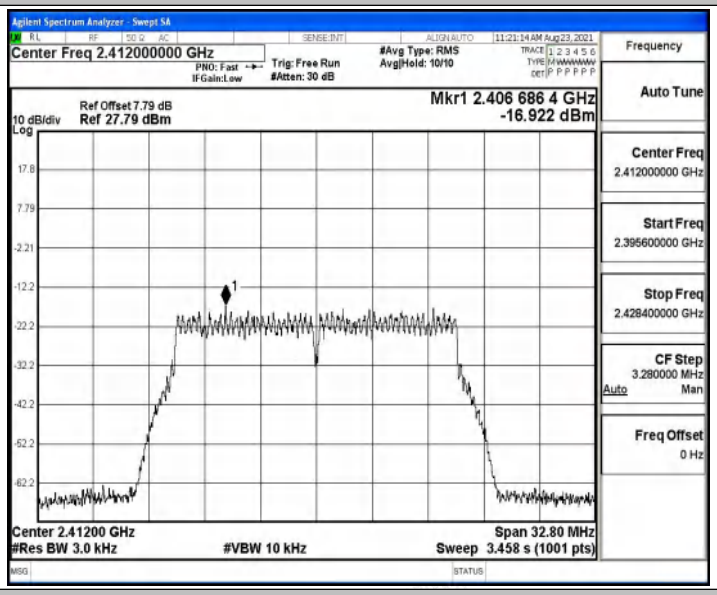
11B_Ant1_2437



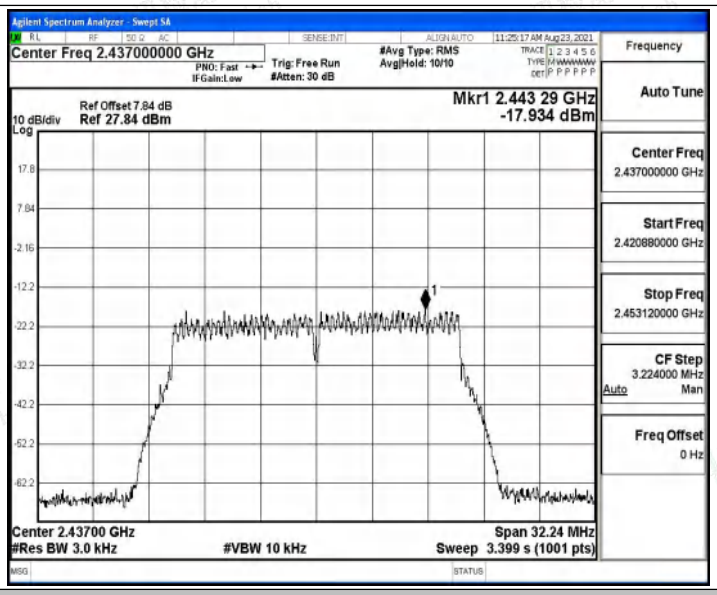
11B_Ant1_2462



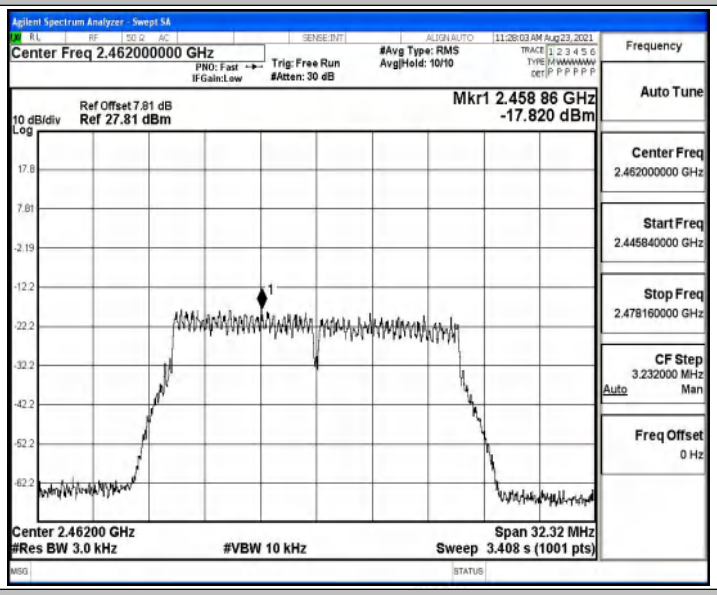
11G_Ant1_2412



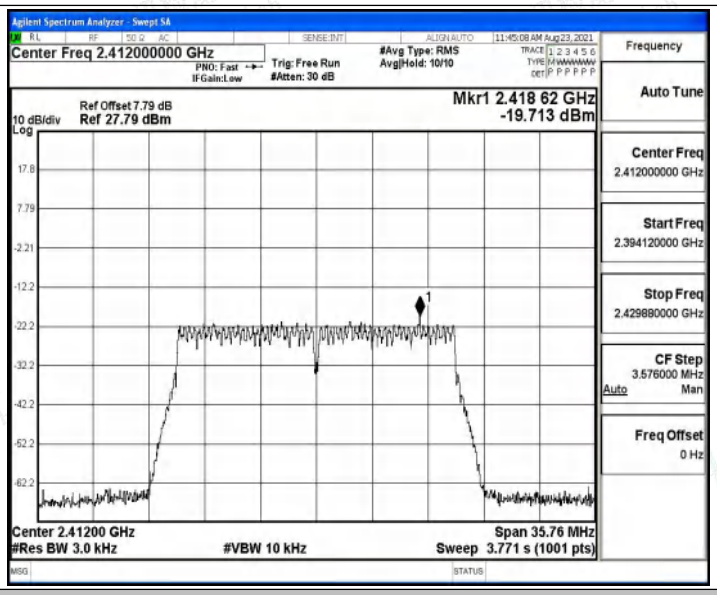
11G_Ant1_2437



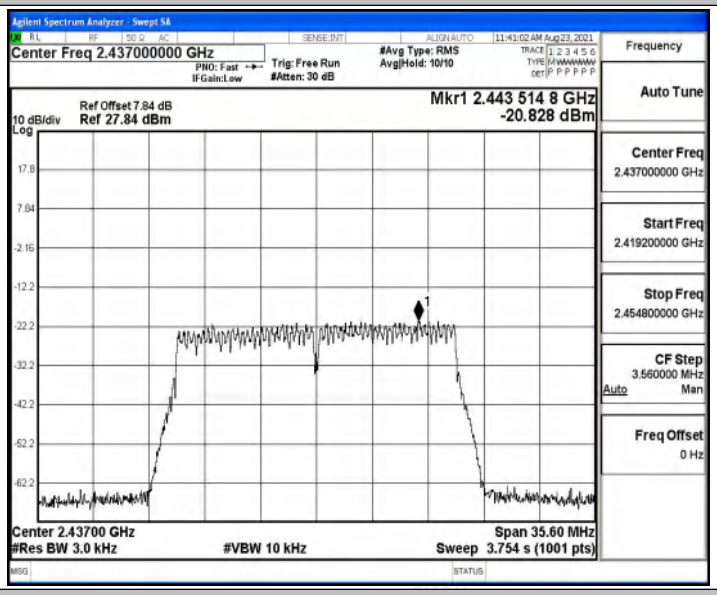
11G_Ant1_2462



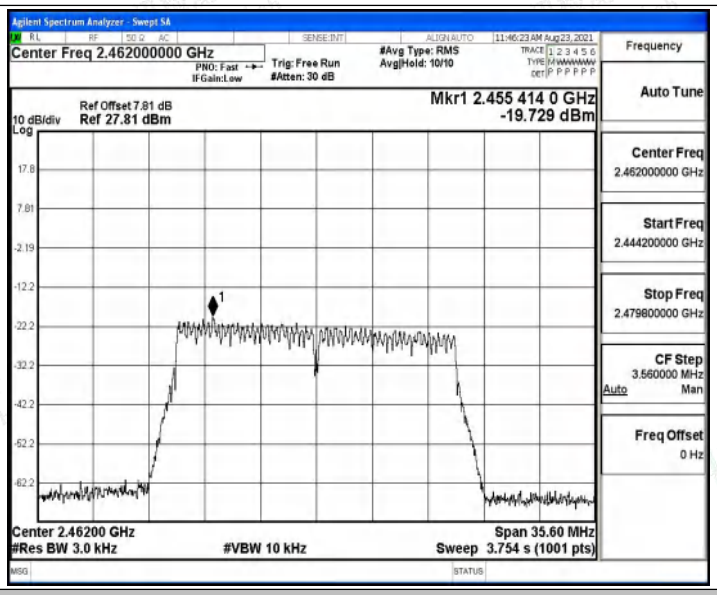
11N20SISO_Ant1_2412



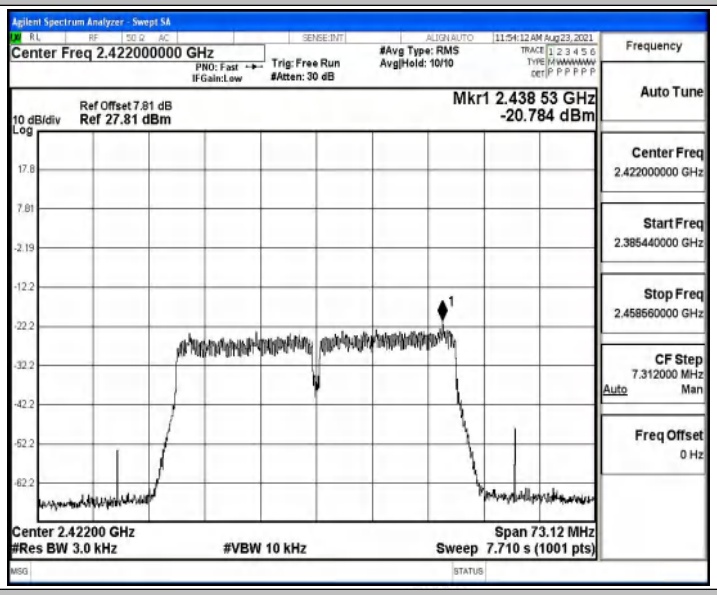
11N20SISO_Ant1_2437



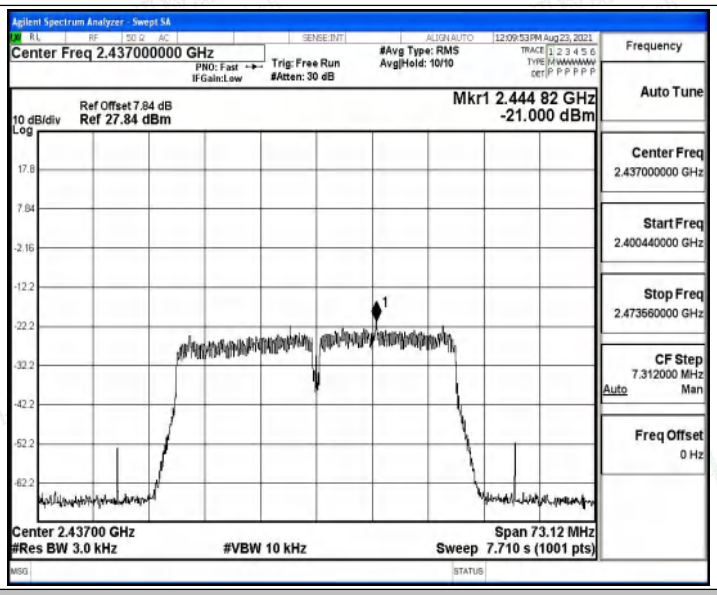
11N20SISO_Ant1_2462



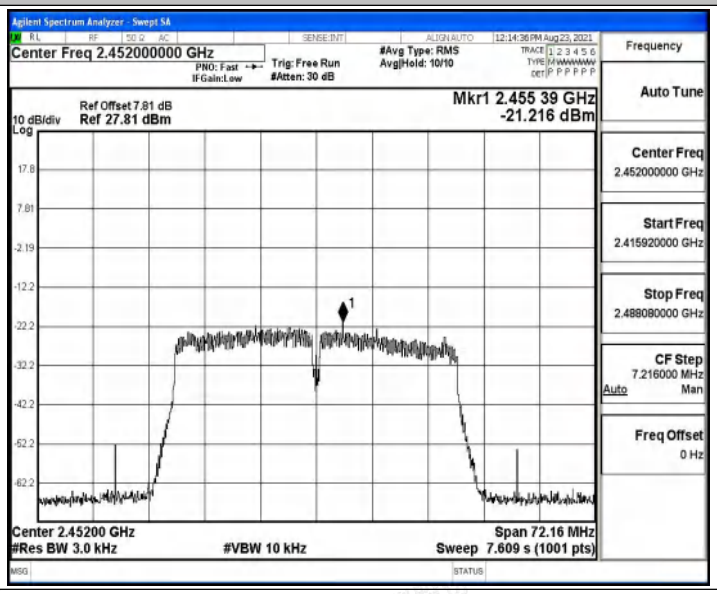
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



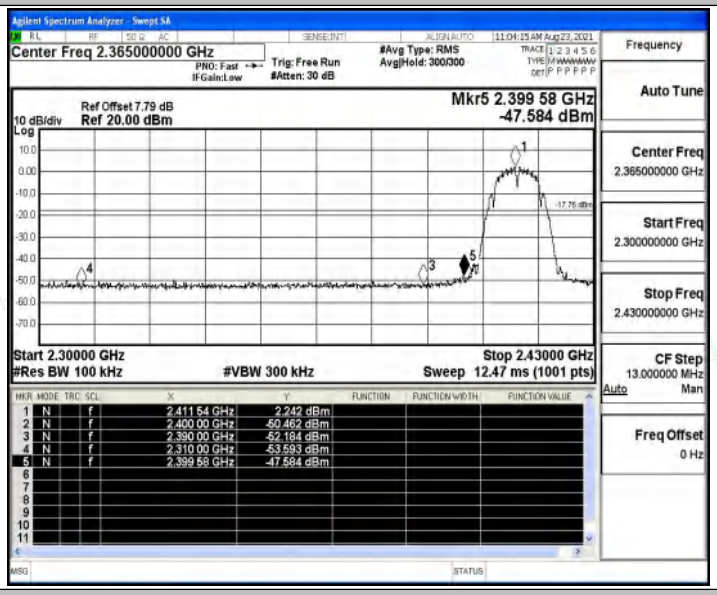
C.4 Band edge measurements

Test Result

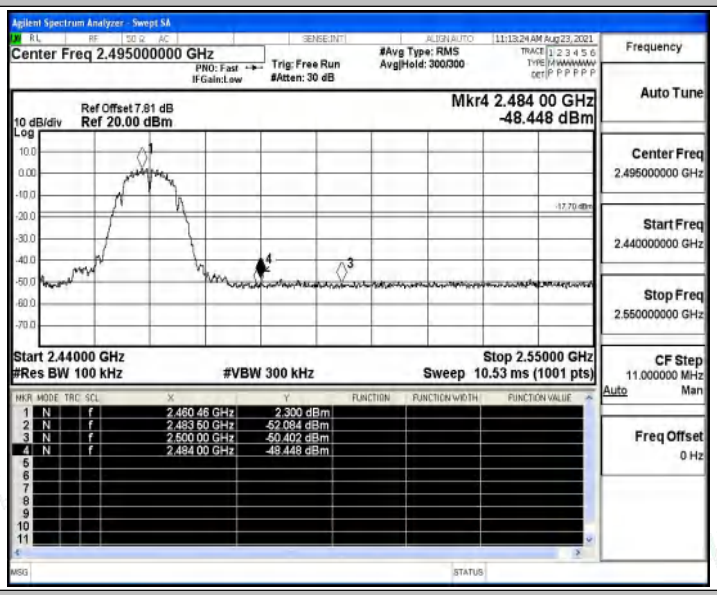
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.24	-47.58	≤-17.76	PASS
		High	2462	2.30	-48.45	≤-17.7	PASS
11G	Ant1	Low	2412	-3.77	-48.26	≤-23.77	PASS
		High	2462	-3.06	-45.96	≤-23.06	PASS
11N20SISO	Ant1	Low	2412	-7.54	-49.25	≤-27.54	PASS
		High	2462	-6.55	-47.38	≤-26.55	PASS
11N40SISO	Ant1	Low	2422	-10.10	-47.94	≤-30.1	PASS
		High	2452	-9.04	-48.86	≤-29.04	PASS

Test Graphs

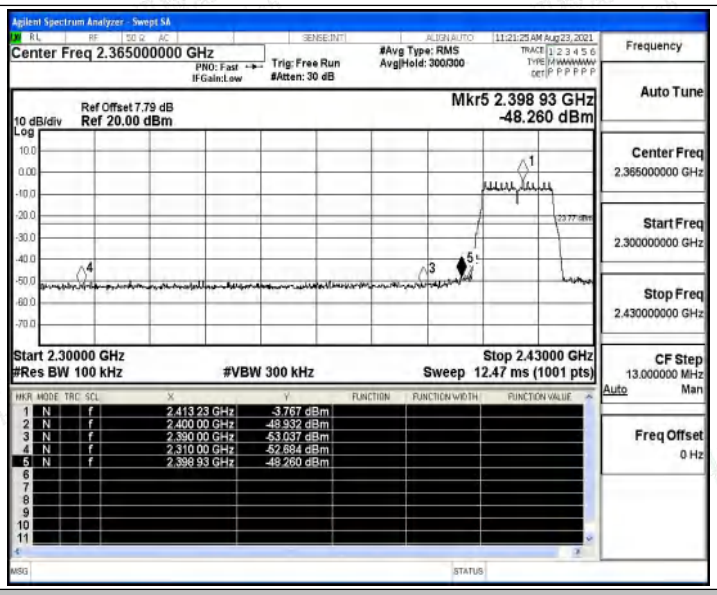
11B_Ant1_Low_2412



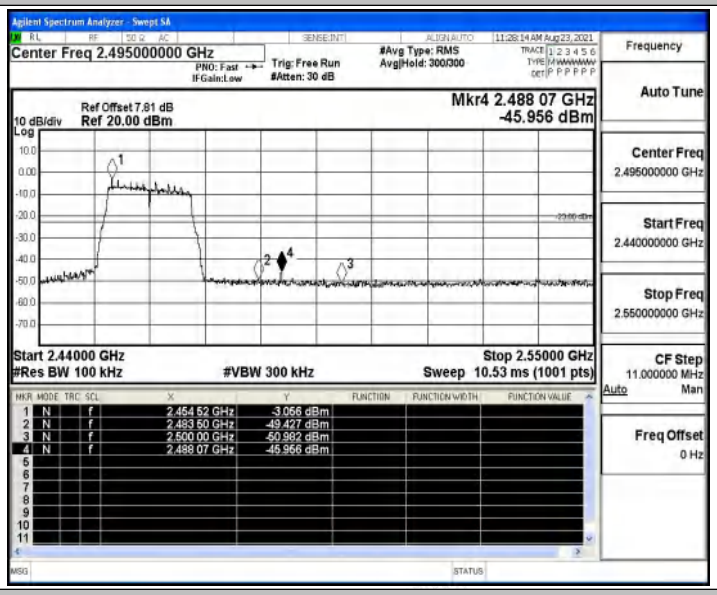
11B_Ant1_High_2462



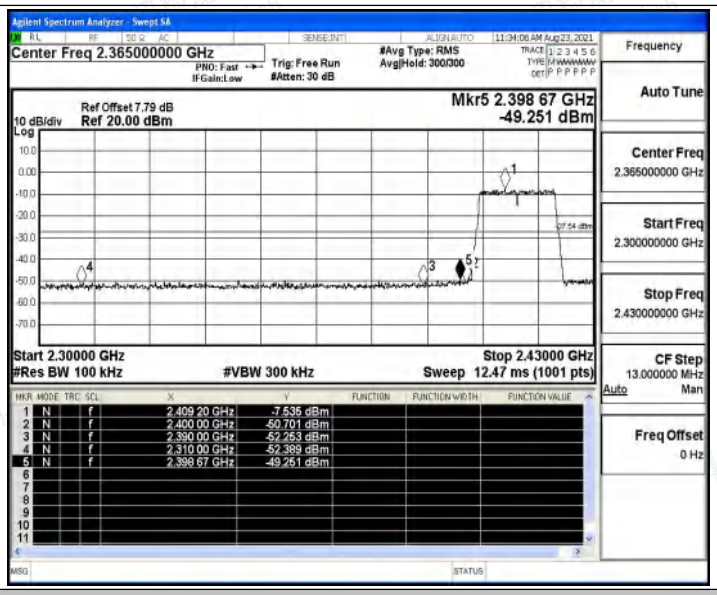
11G_Ant1_Low_2412



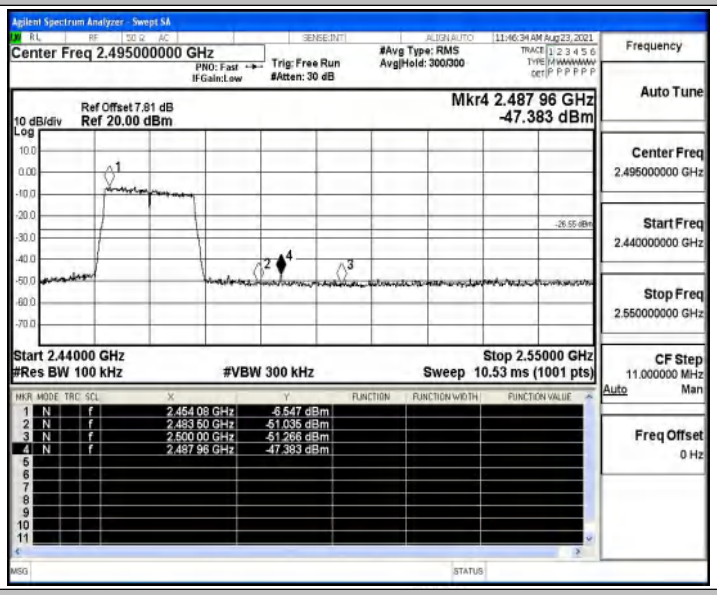
11G_Ant1_High_2462



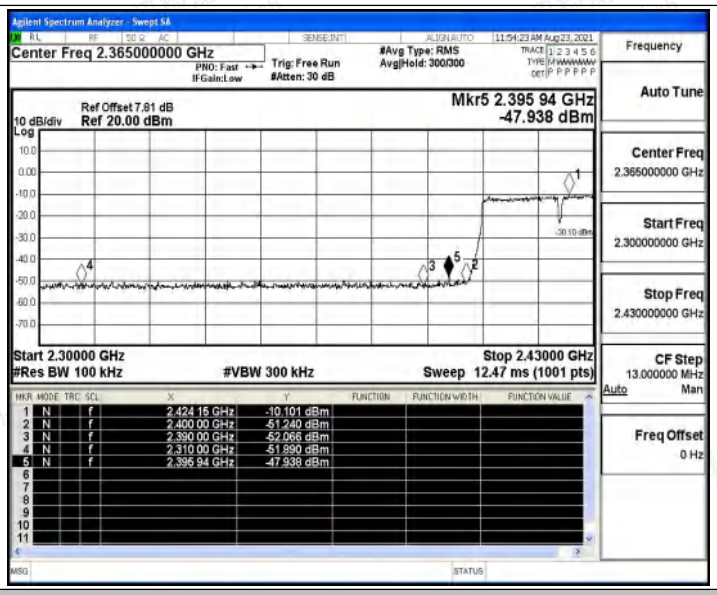
11N20SISO_Ant1_Low_2412



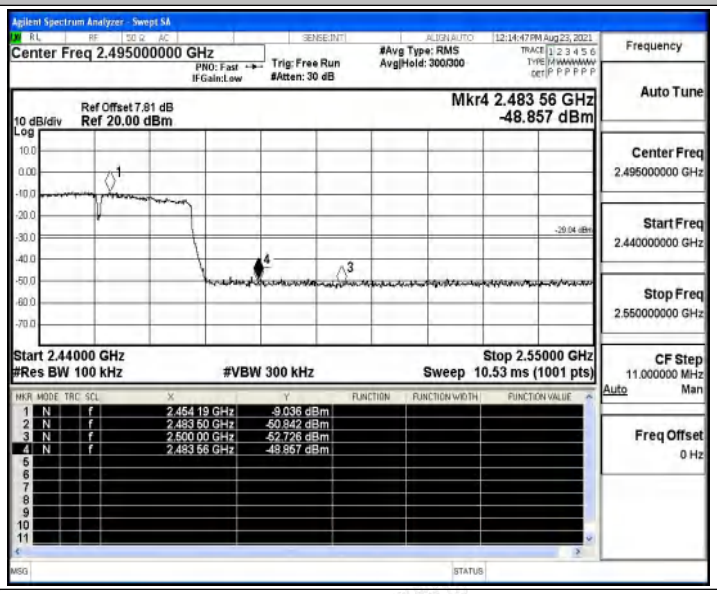
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



C.5 Conducted Spurious Emission

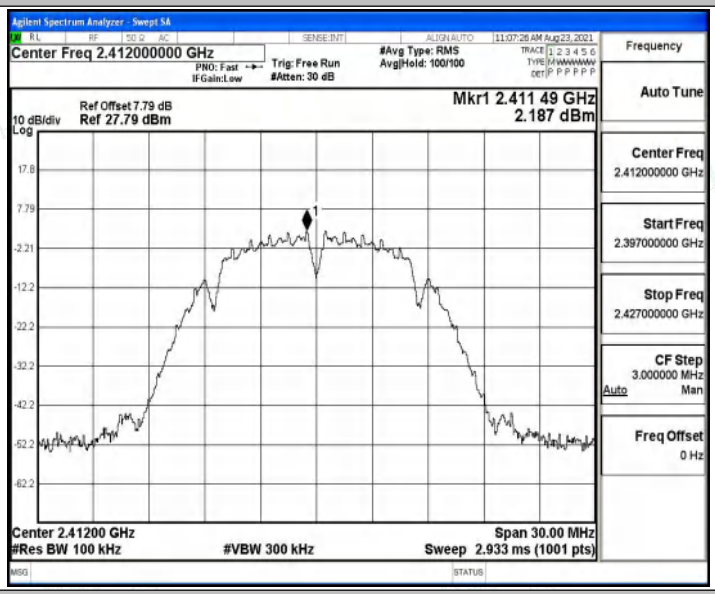
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.19	2.19	---	PASS
			30~1000	2.19	-61.69	≤-17.81	PASS
			1000~26500	2.19	-46.65	≤-17.81	PASS
		2437	Reference	3.20	3.20	---	PASS
			30~1000	3.20	-60.7	≤-16.8	PASS
			1000~26500	3.20	-47.59	≤-16.8	PASS
		2462	Reference	2.26	2.26	---	PASS
			30~1000	2.26	-62.07	≤-17.74	PASS
			1000~26500	2.26	-47.09	≤-17.74	PASS
11G	Ant1	2412	Reference	-4.36	-4.36	---	PASS
			30~1000	-4.36	-61.83	≤-24.36	PASS
			1000~26500	-4.36	-47.68	≤-24.36	PASS
		2437	Reference	-3.33	-3.33	---	PASS
			30~1000	-3.33	-61.63	≤-23.33	PASS
			1000~26500	-3.33	-47.37	≤-23.33	PASS
		2462	Reference	-3.40	-3.40	---	PASS
			30~1000	-3.40	-61	≤-23.4	PASS
			1000~26500	-3.40	-47.23	≤-23.4	PASS
11N20SISO	Ant1	2412	Reference	-7.68	-7.68	---	PASS
			30~1000	-7.68	-61.7	≤-27.68	PASS
			1000~26500	-7.68	-47.7	≤-27.68	PASS
		2437	Reference	-6.93	-6.93	---	PASS
			30~1000	-6.93	-61.42	≤-26.93	PASS
			1000~26500	-6.93	-47.67	≤-26.93	PASS
		2462	Reference	-6.74	-6.74	---	PASS
			30~1000	-6.74	-61.62	≤-26.74	PASS
			1000~26500	-6.74	-47.09	≤-26.74	PASS
11N40SISO	Ant1	2422	Reference	-9.52	-9.52	---	PASS
			30~1000	-9.52	-61.68	≤-29.52	PASS
			1000~26500	-9.52	-47.65	≤-29.52	PASS
		2437	Reference	-9.39	-9.39	---	PASS
			30~1000	-9.39	-61.78	≤-29.39	PASS
			1000~26500	-9.39	-47.34	≤-29.39	PASS

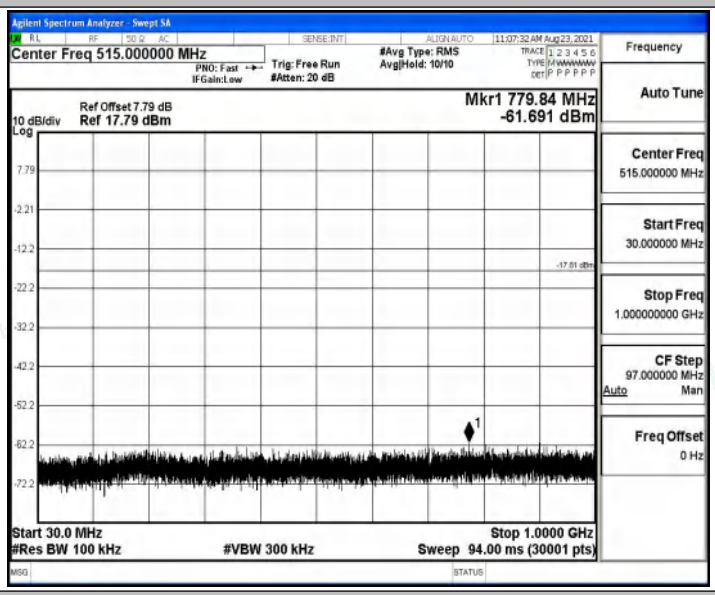
			Reference	-9.04	-9.04	---	PASS
		2452	30~1000	-9.04	-61.84	≤-29.04	PASS
			1000~26500	-9.04	-47.8	≤-29.04	PASS

Test Graphs

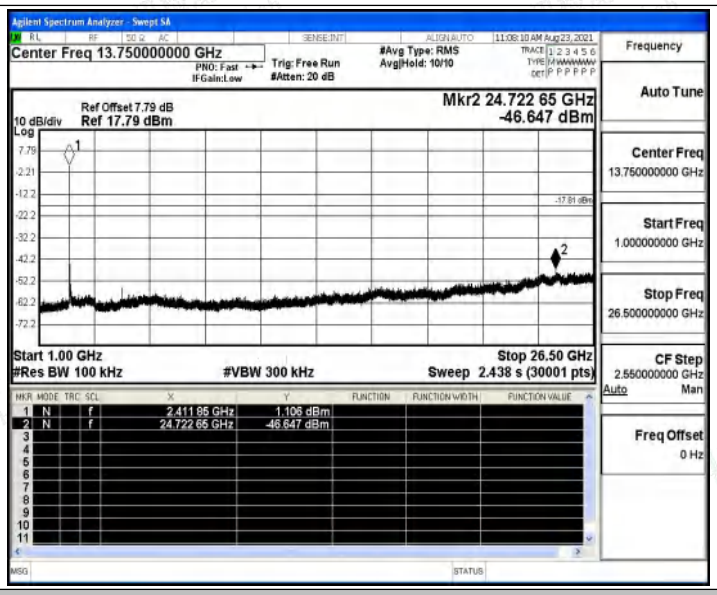
11B_Ant1_2412_0~Reference



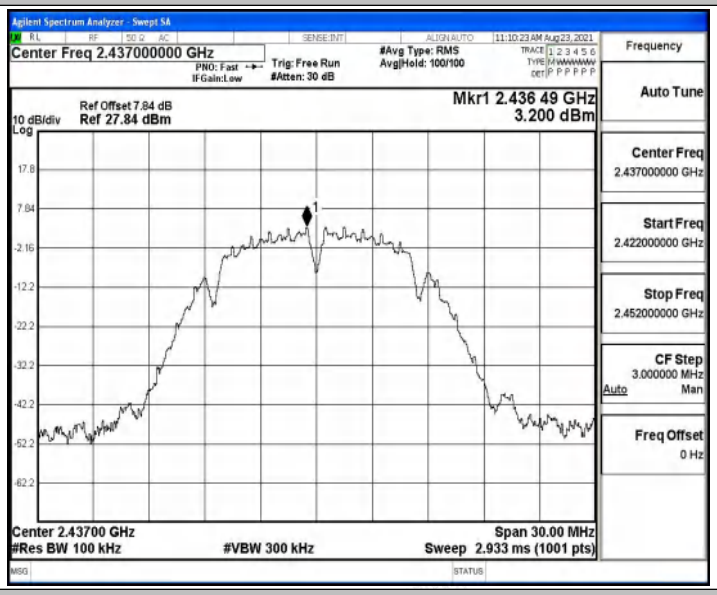
11B_Ant1_2412_30~1000



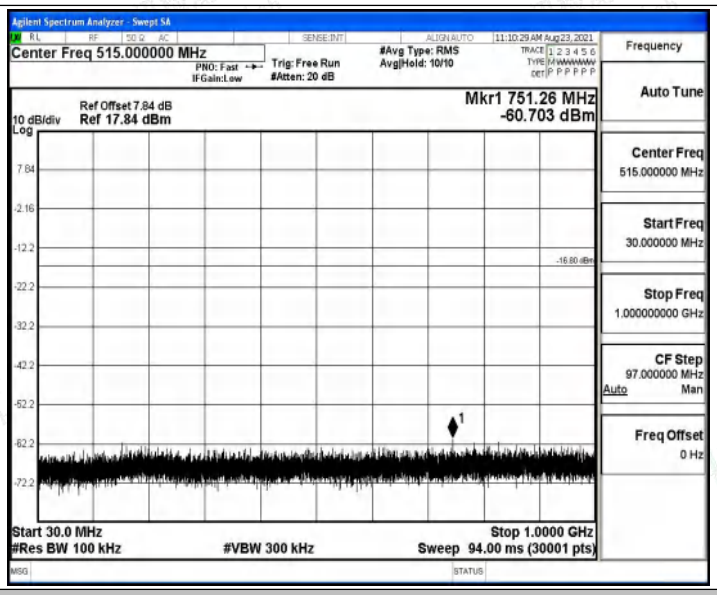
11B_Ant1_2412_1000~26500



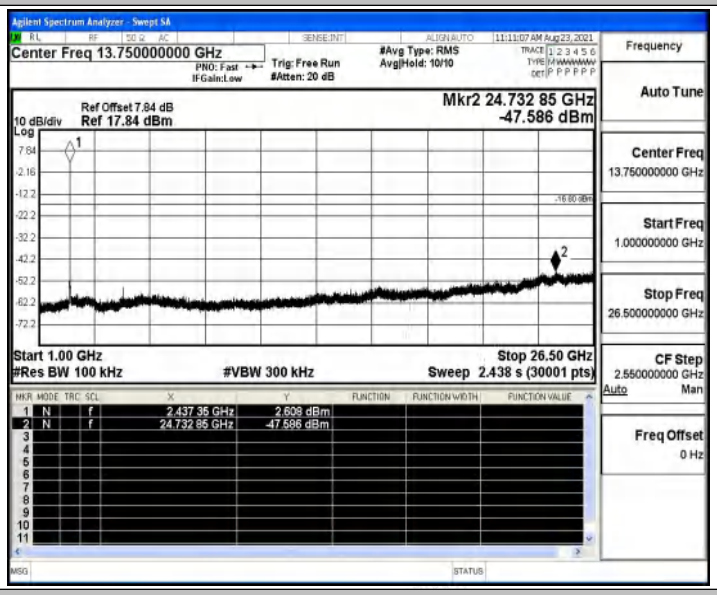
11B_Ant1_2437_0~Reference



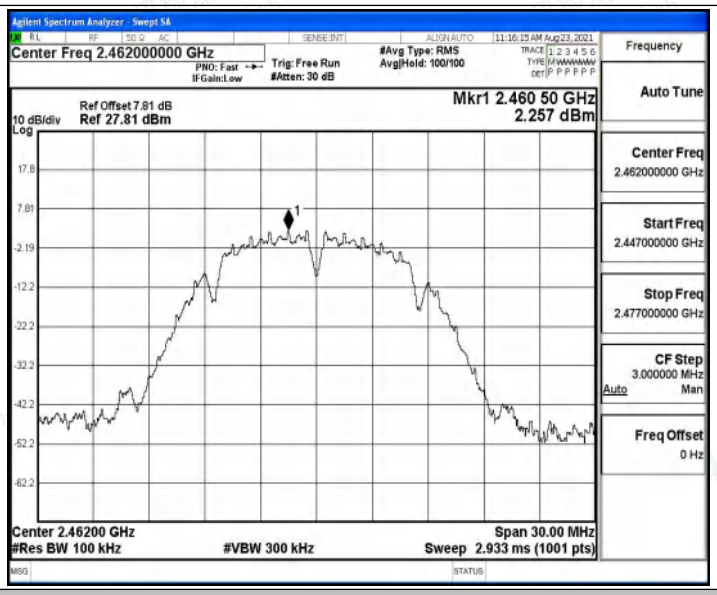
11B_Ant1_2437_30~1000



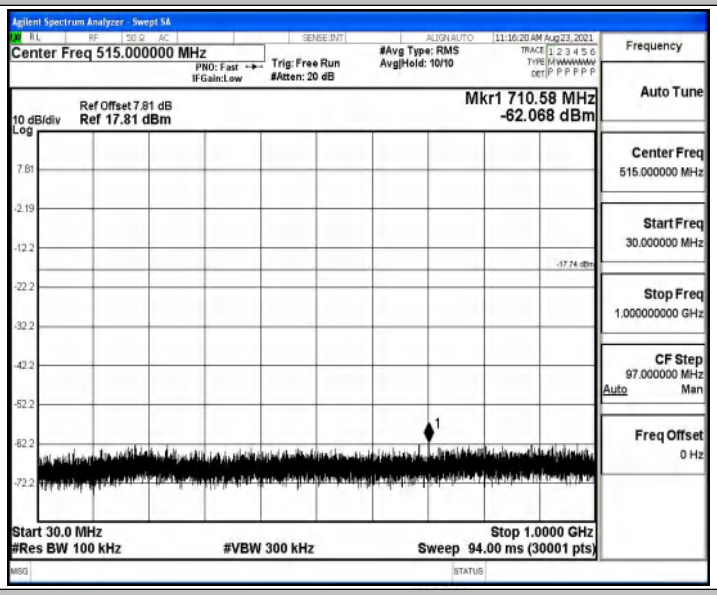
11B_Ant1_2437_1000~26500



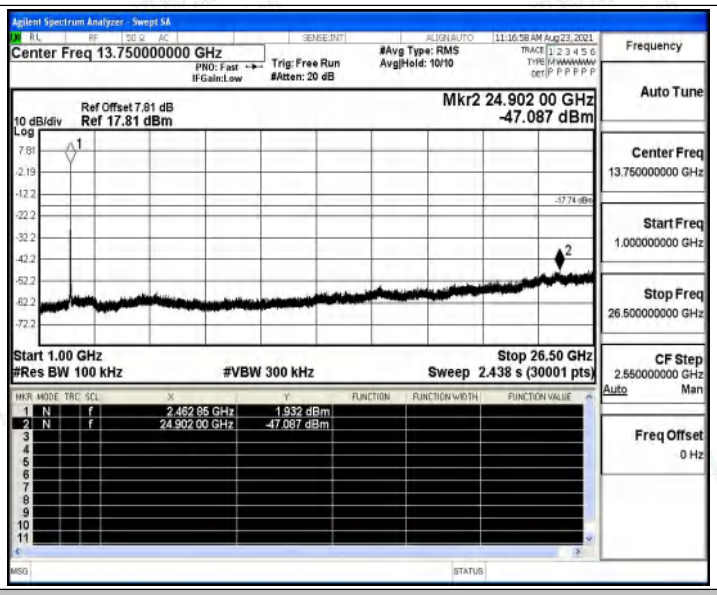
11B_Ant1_2462_0~Reference



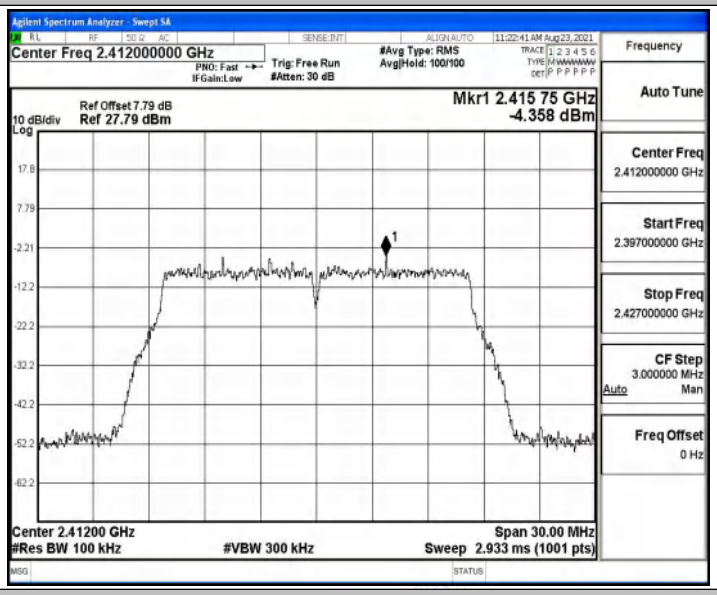
11B_Ant1_2462_30~1000



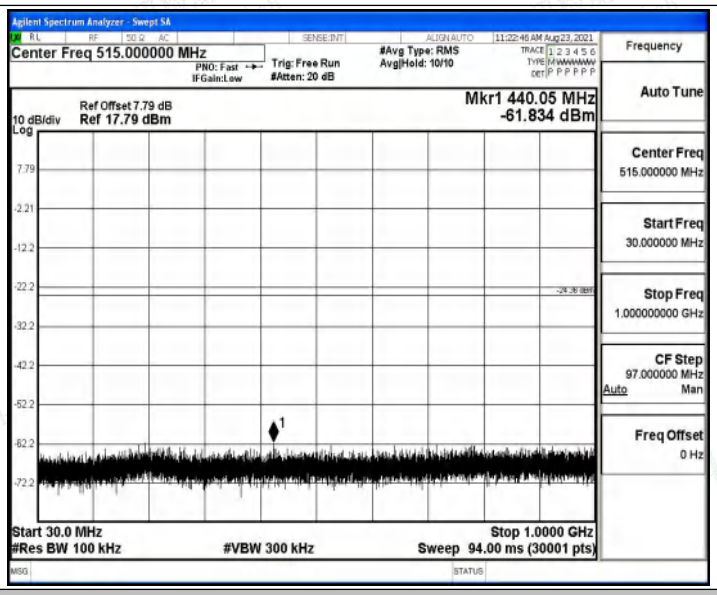
11B_Ant1_2462_1000~26500



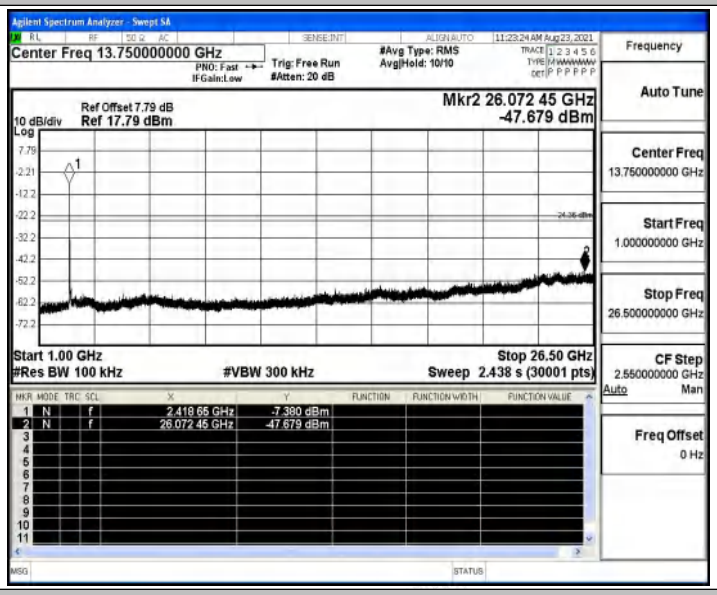
11G_Ant1_2412_0~Reference



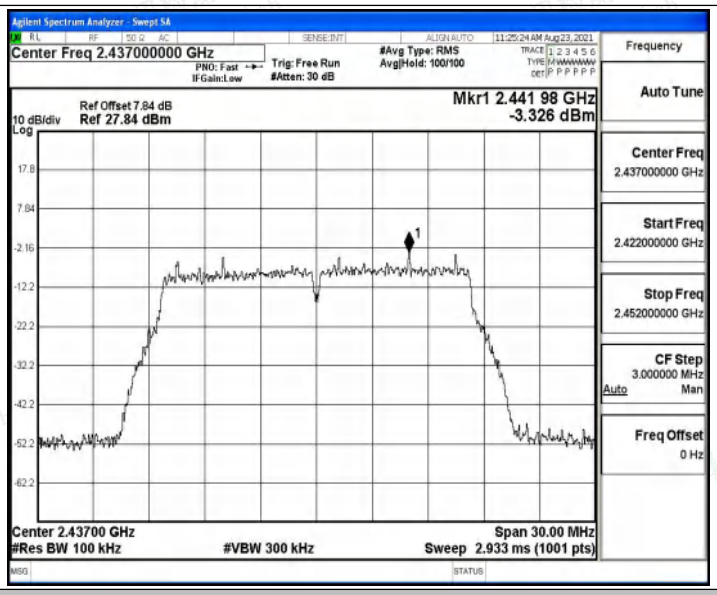
11G_Ant1_2412_30~1000



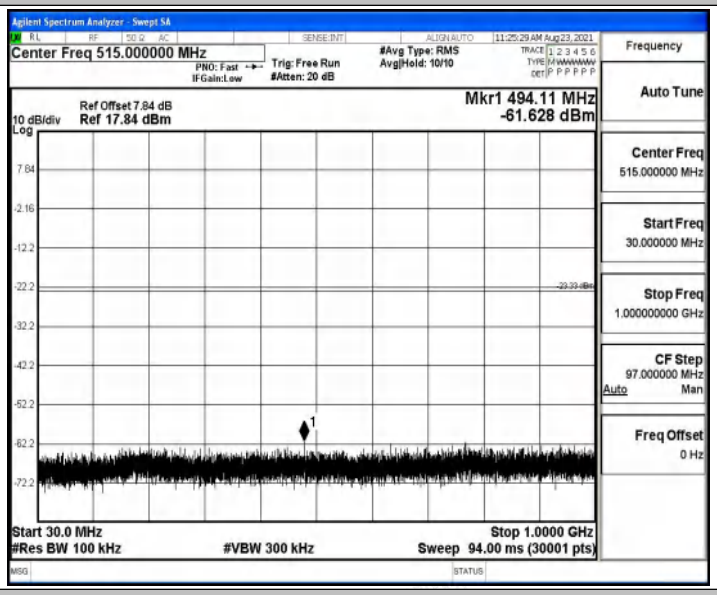
11G_Ant1_2412_1000~26500



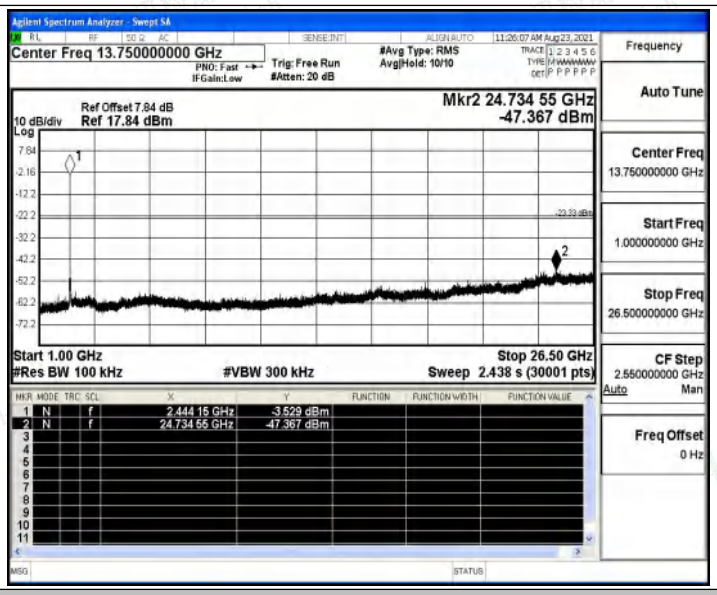
11G_Ant1_2437_0~Reference



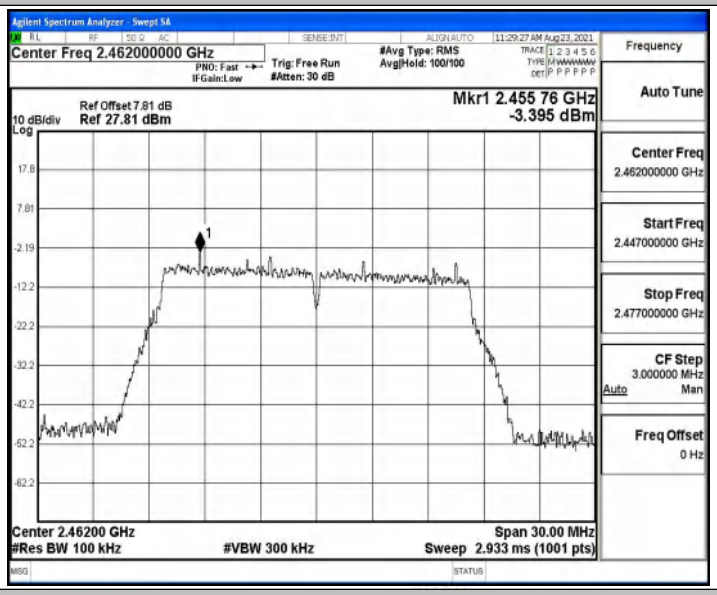
11G_Ant1_2437_30~1000



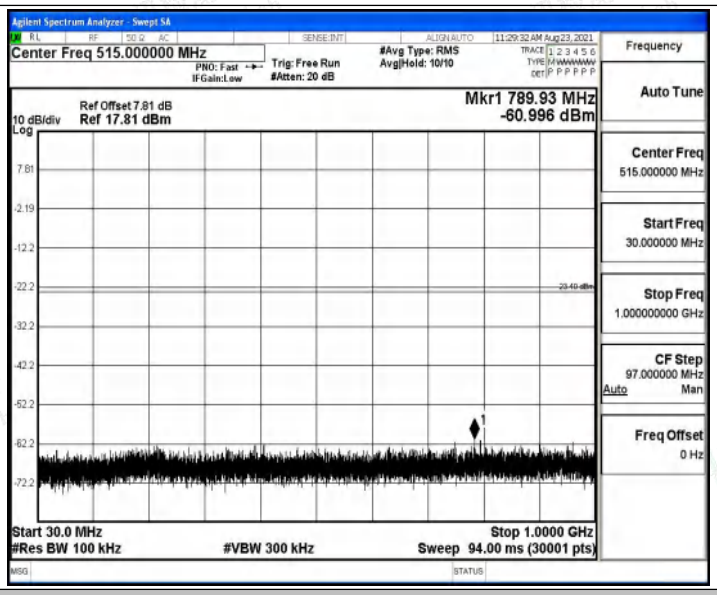
11G_Ant1_2437_1000~26500



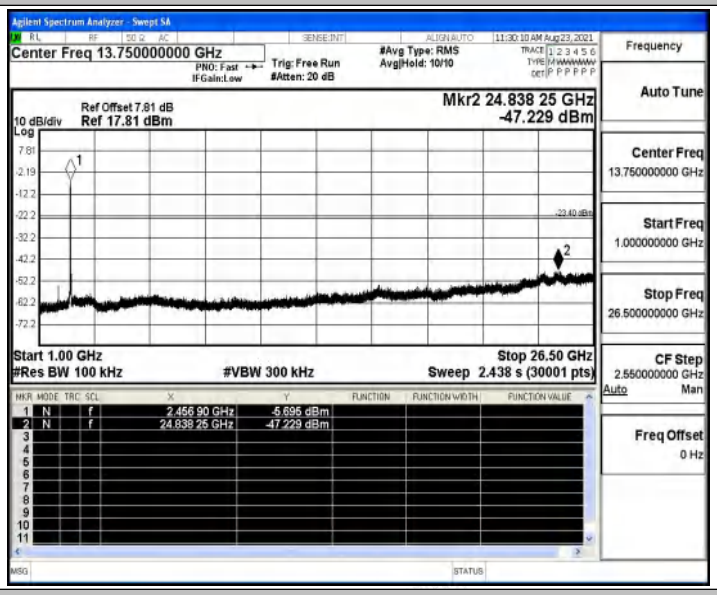
11G_Ant1_2462_0~Reference



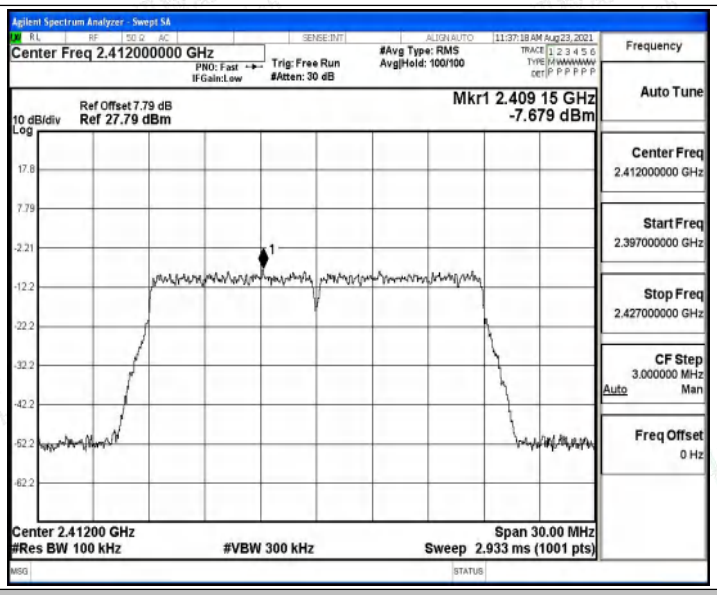
11G_Ant1_2462_30~1000



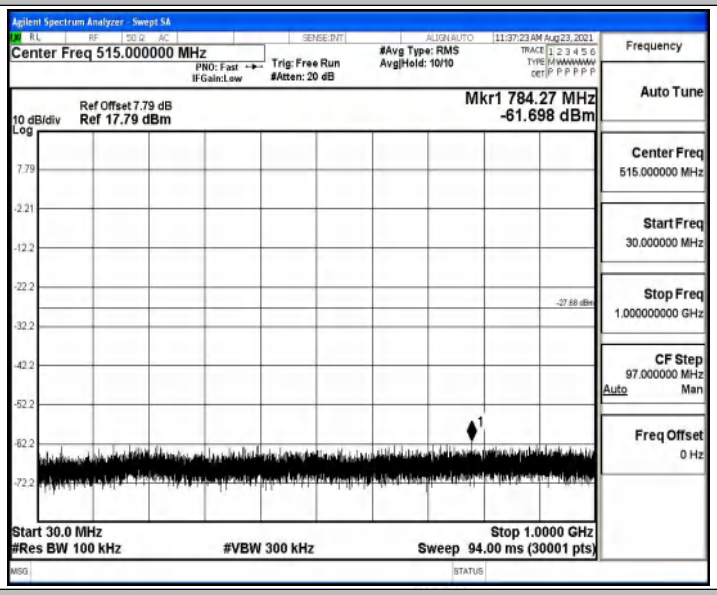
11G_Ant1_2462_1000~26500



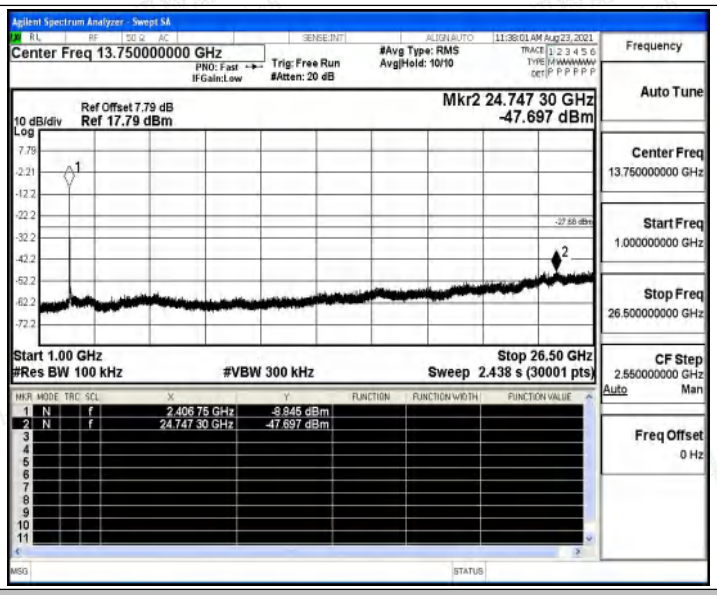
11N20SISO_Ant1_2412_0~Reference



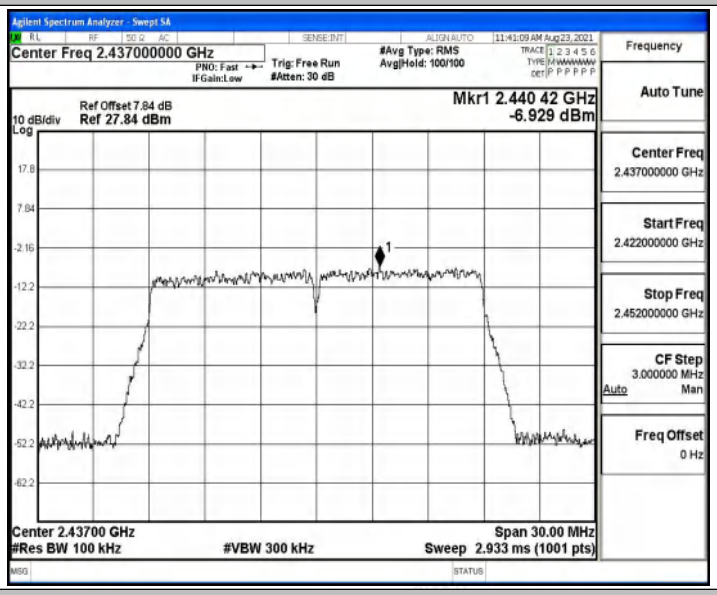
11N20SISO_Ant1_2412_30~1000



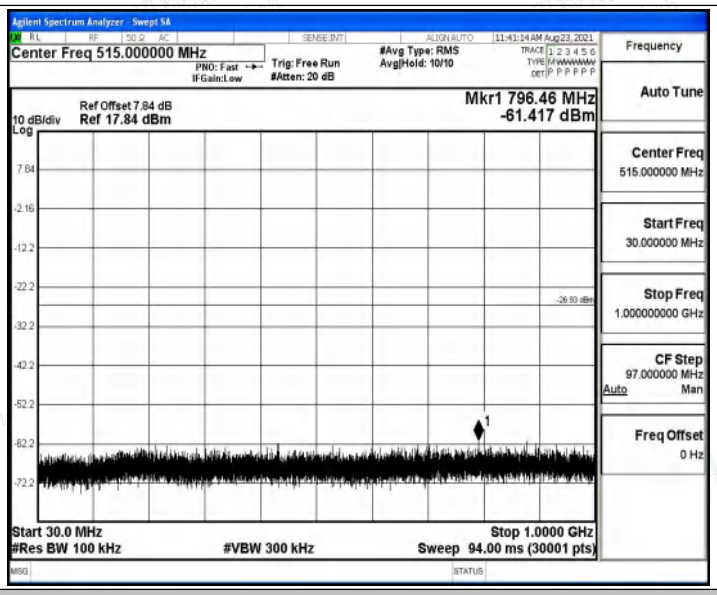
11N20SISO_Ant1_2412_1000~26500



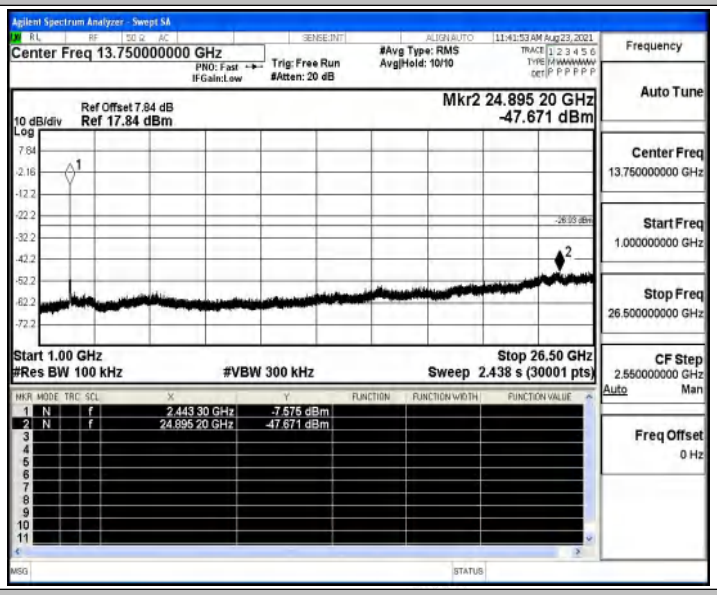
11N20SISO_Ant1_2437_0~Reference



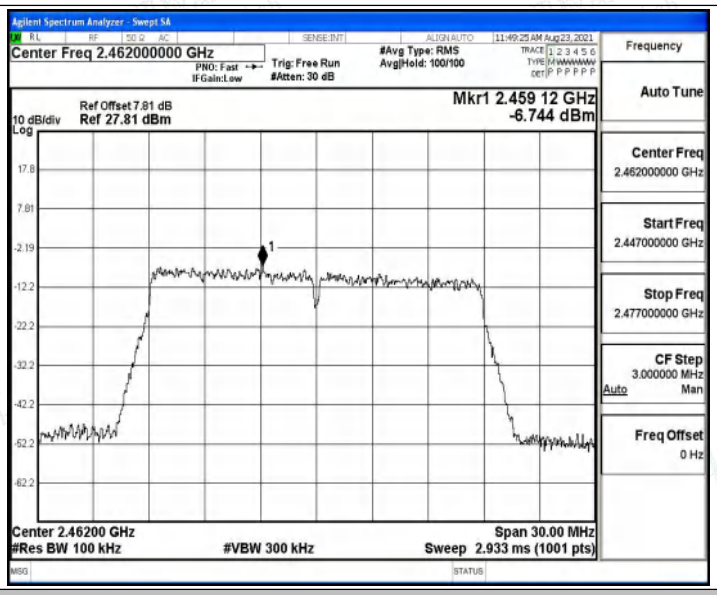
11N20SISO_Ant1_2437_30~1000



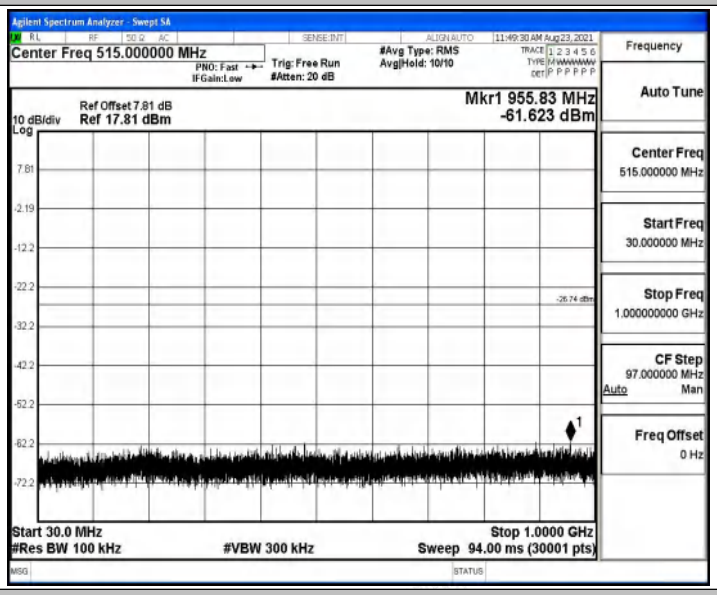
11N20SISO_Ant1_2437_1000~26500



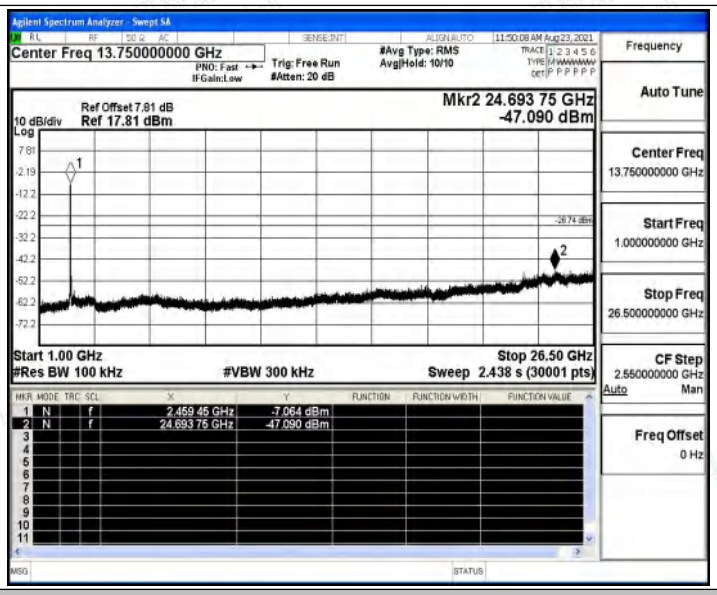
11N20SISO_Ant1_2462_0~Reference



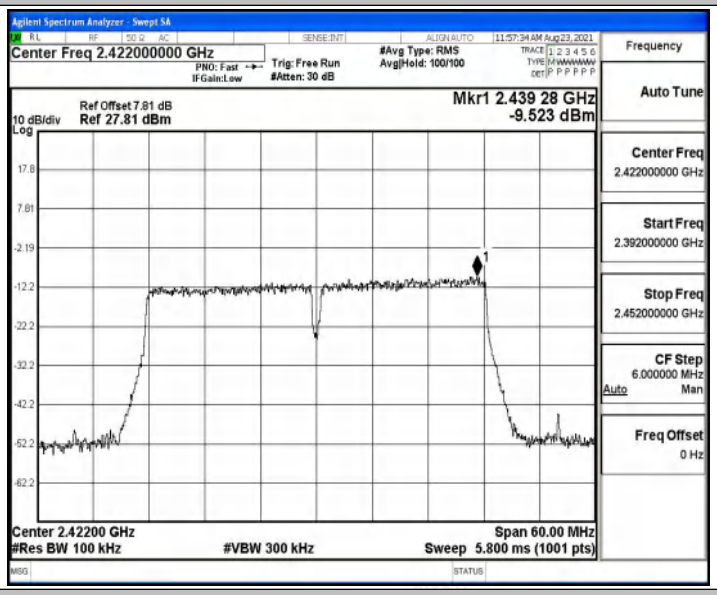
11N20SISO_Ant1_2462_30~1000



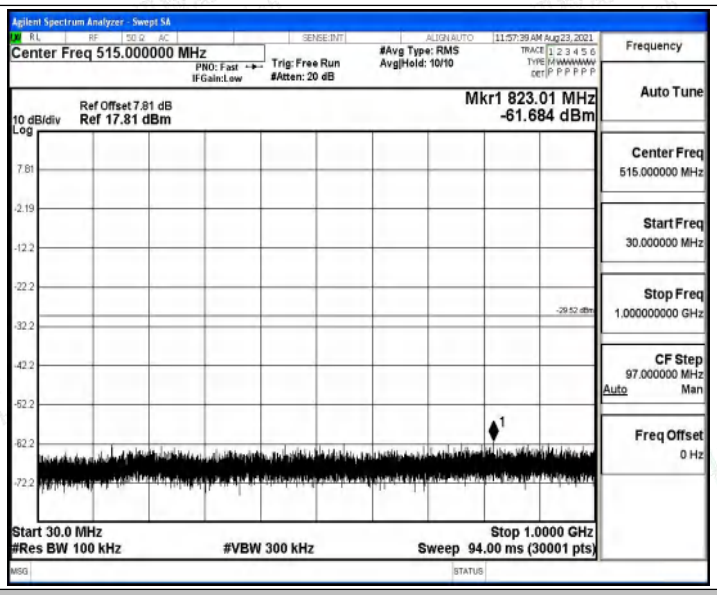
11N20SISO_Ant1_2462_1000~26500



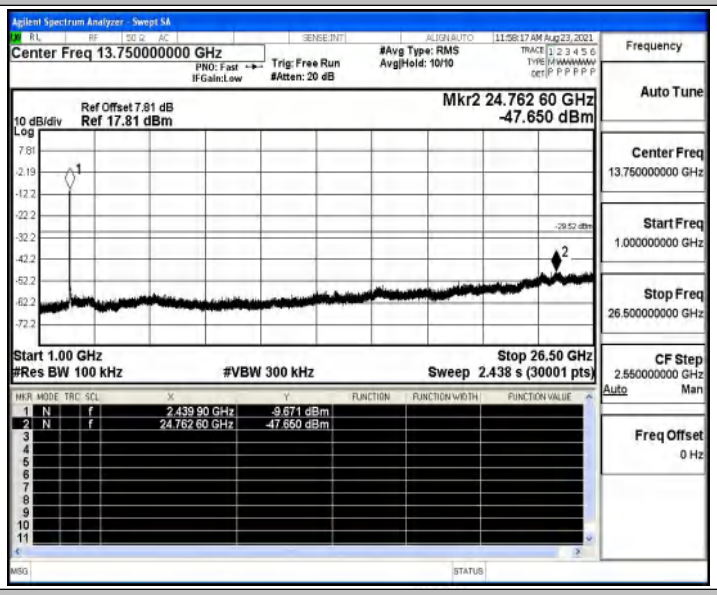
11N40SISO_Ant1_2422_0~Reference



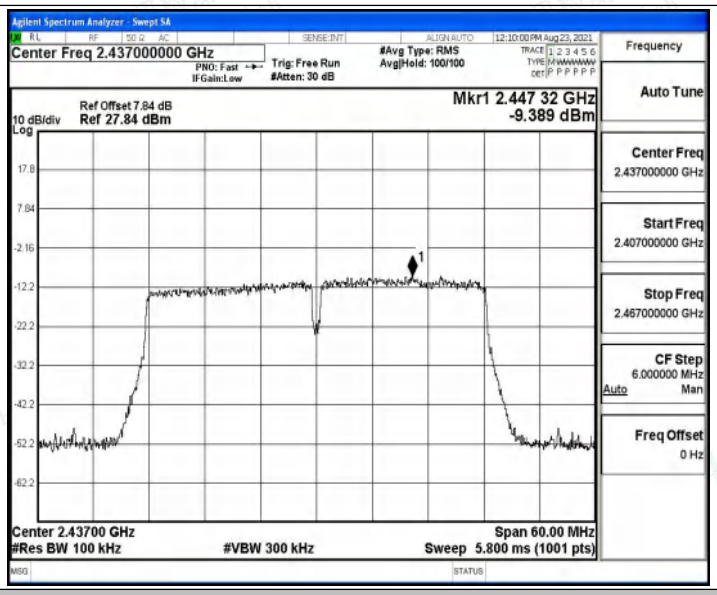
11N40SISO_Ant1_2422_30~1000



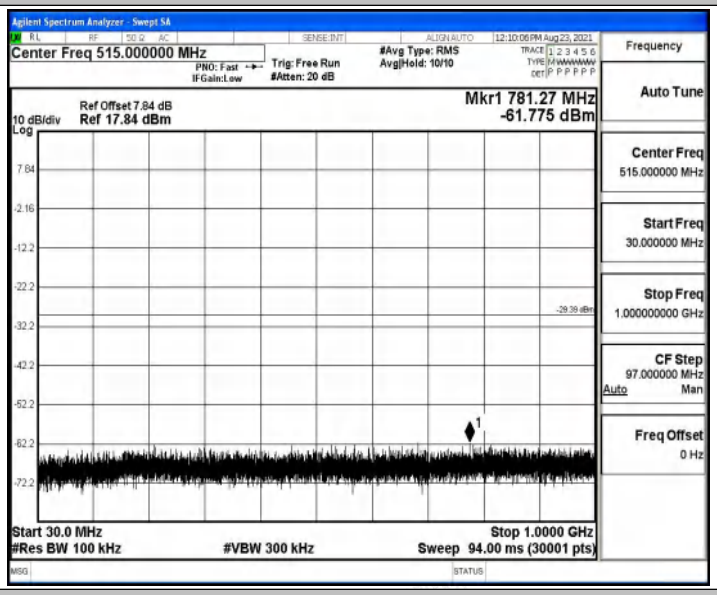
11N40SISO_Ant1_2422_1000~26500



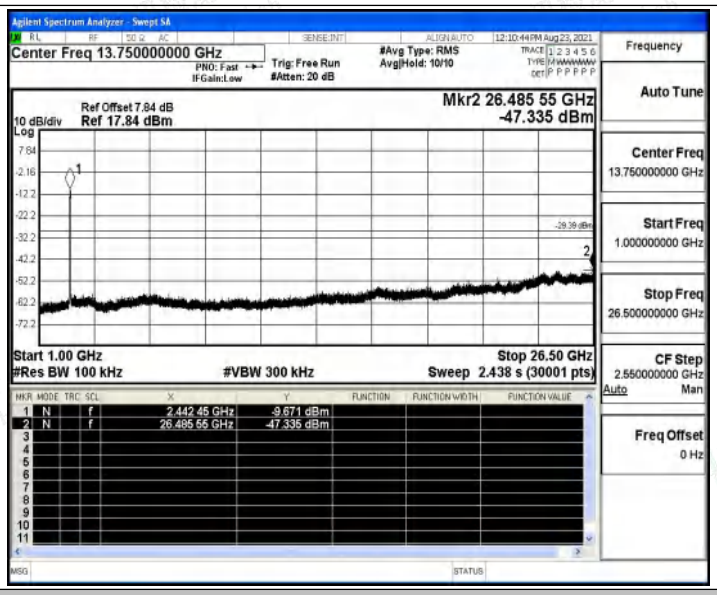
11N40SISO_Ant1_2437_0~Reference



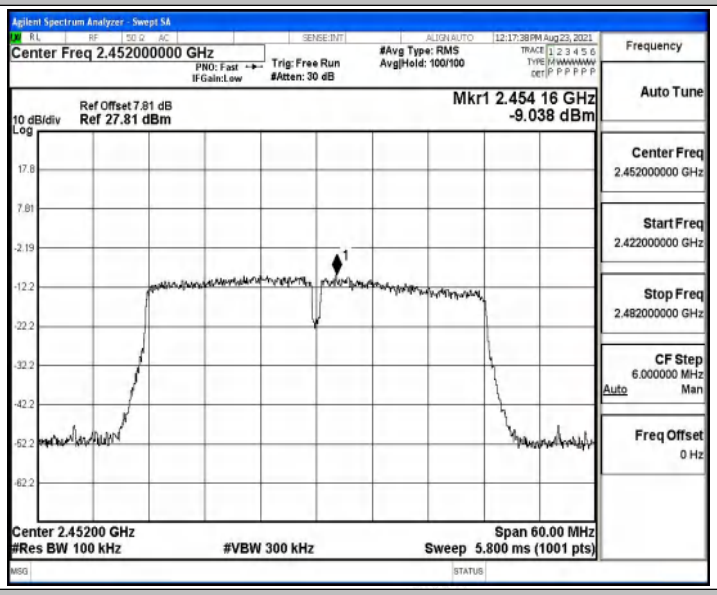
11N40SISO_Ant1_2437_30~1000



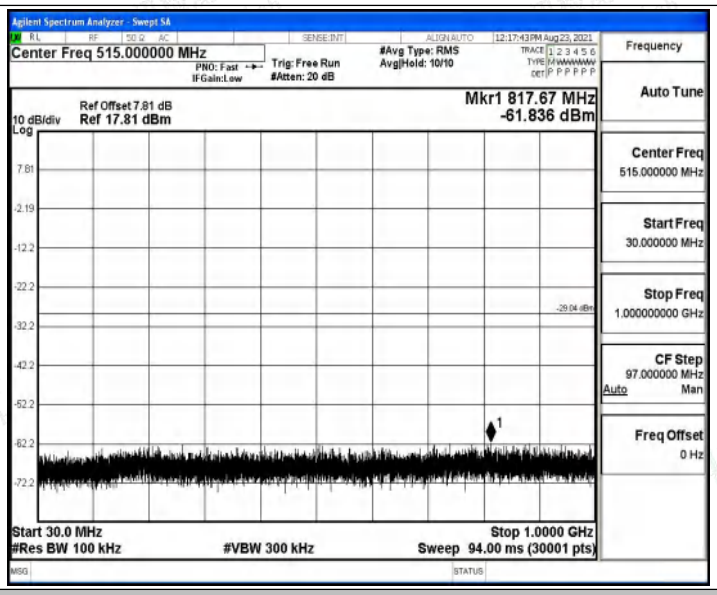
11N40SISO_Ant1_2437_1000~26500



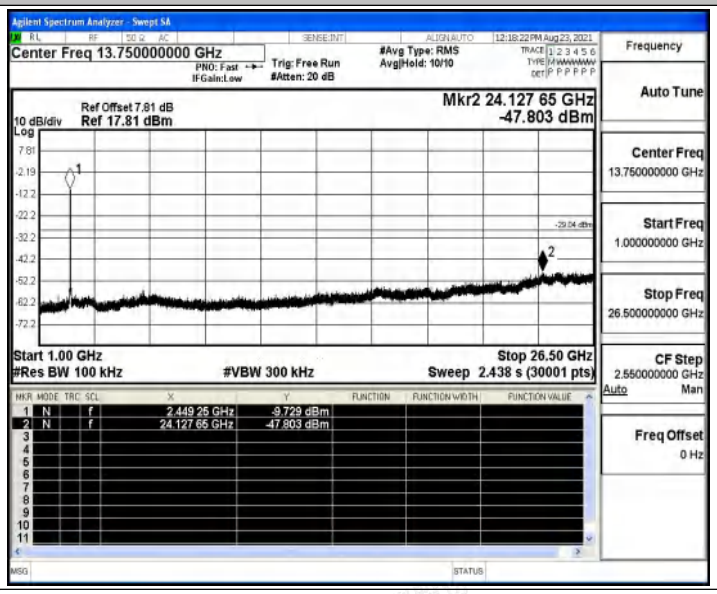
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500



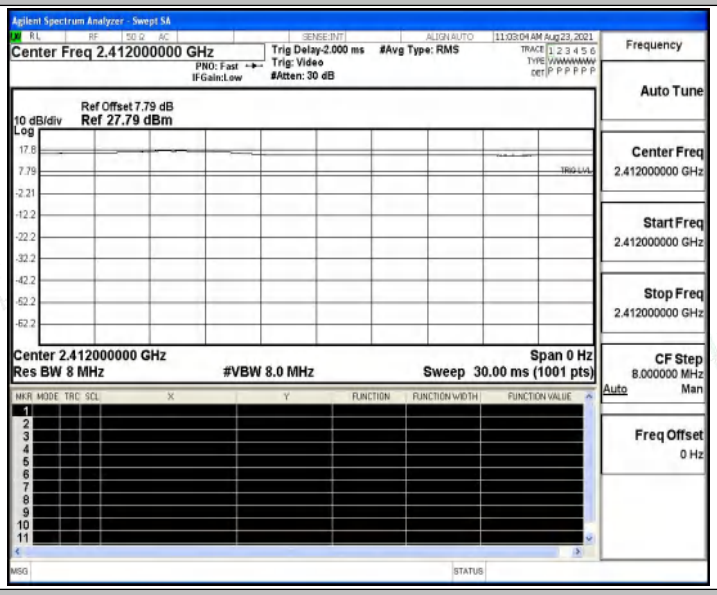
C.6 Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	30.00	30.00	100.00	---	PASS
		2437	30.00	30.00	100.00	---	PASS
		2462	30.00	30.00	100.00	---	PASS
11G	Ant1	2412	30.00	30.00	100.00	---	PASS
		2437	30.00	30.00	100.00	---	PASS
		2462	30.00	30.00	100.00	---	PASS
11N20SISO	Ant1	2412	30.00	30.00	100.00	---	PASS
		2437	30.00	30.00	100.00	---	PASS
		2462	30.00	30.00	100.00	---	PASS
11N40SISO	Ant1	2422	30.00	30.00	100.00	---	PASS
		2437	30.00	30.00	100.00	---	PASS
		2452	30.00	30.00	100.00	---	PASS

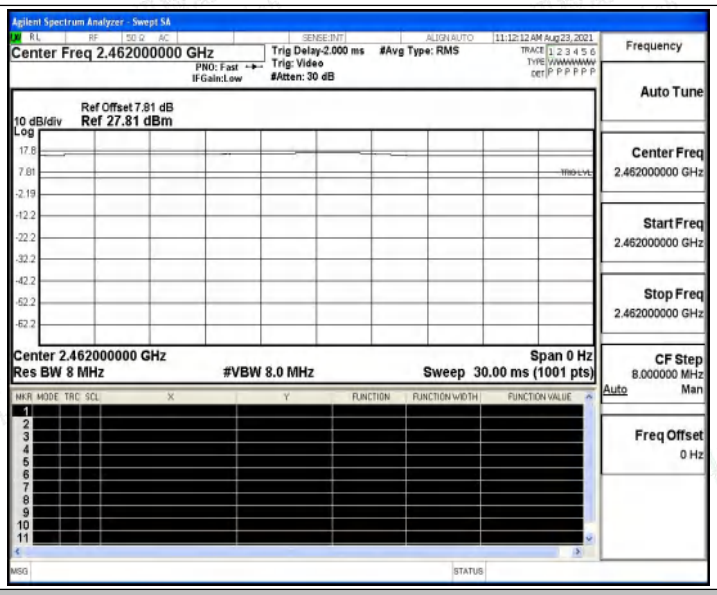
Test Graphs

11B_Ant1_2412

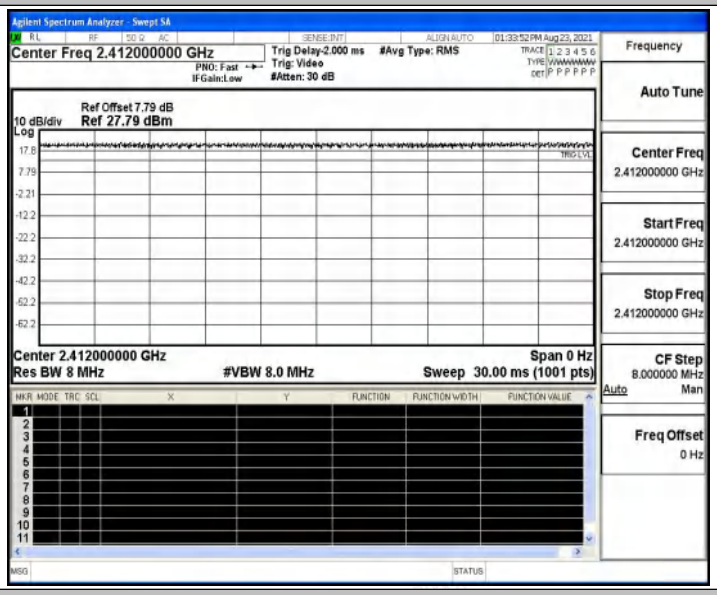


11B_Ant1_2437

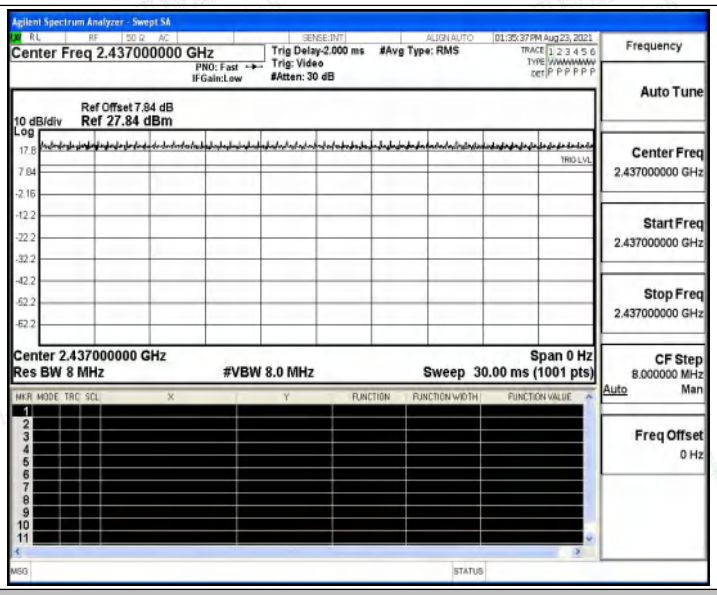
11B_Ant1_2462



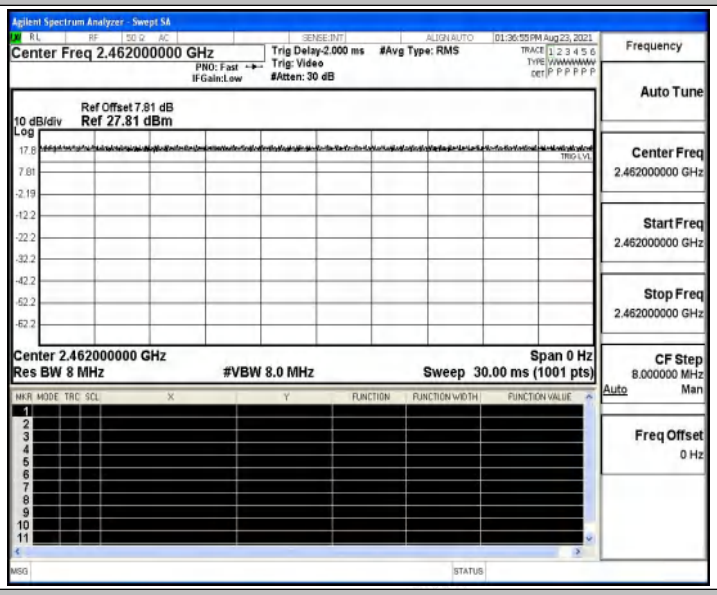
11G_Ant1_2412



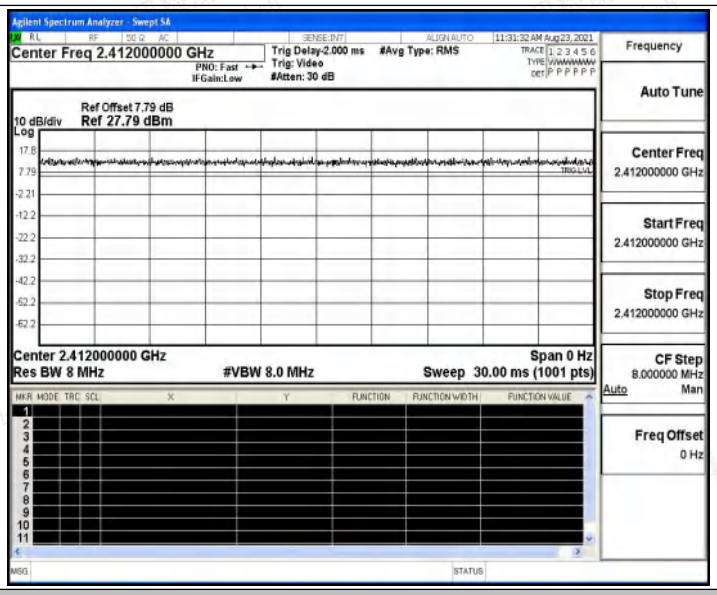
11G_Ant1_2437



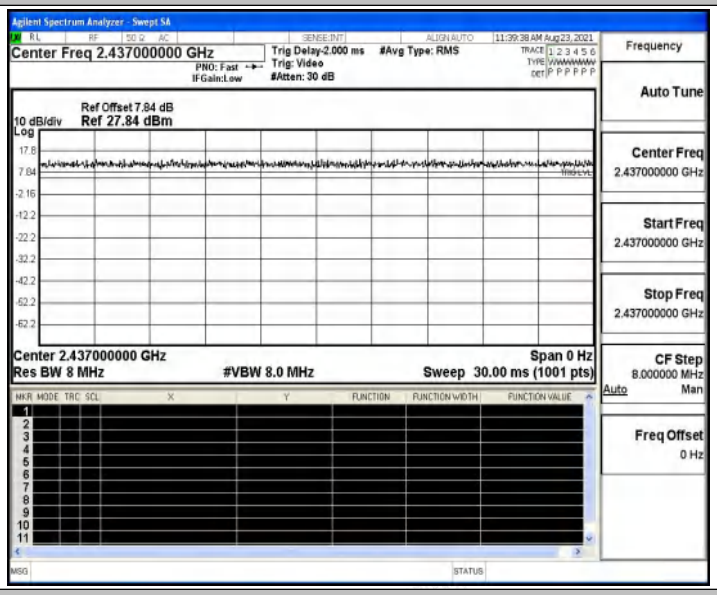
11G_Ant1_2462



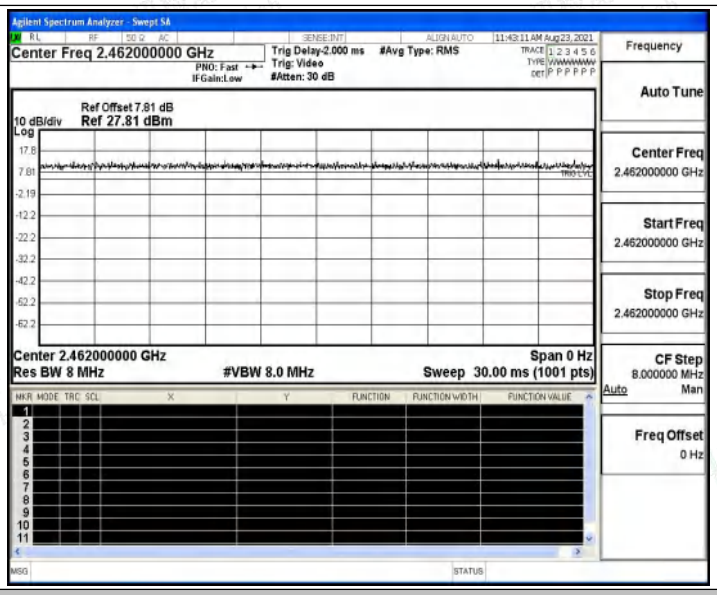
11N20SISO_Ant1_2412



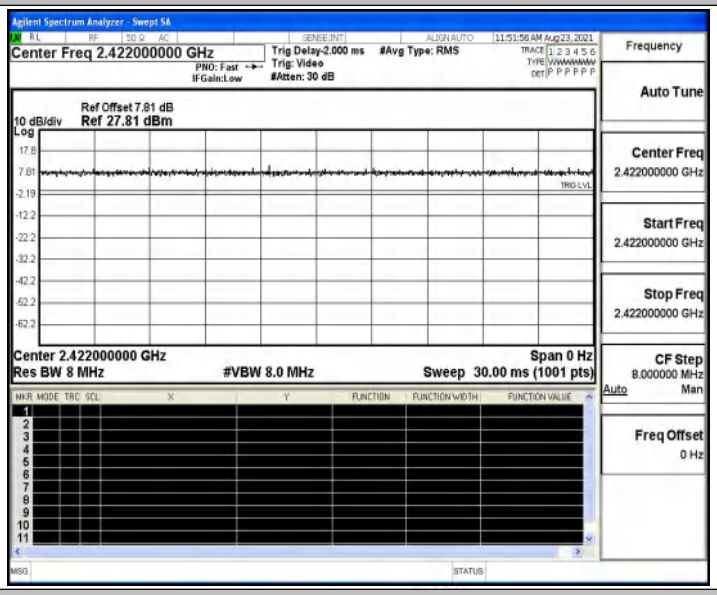
11N20SISO_Ant1_2437



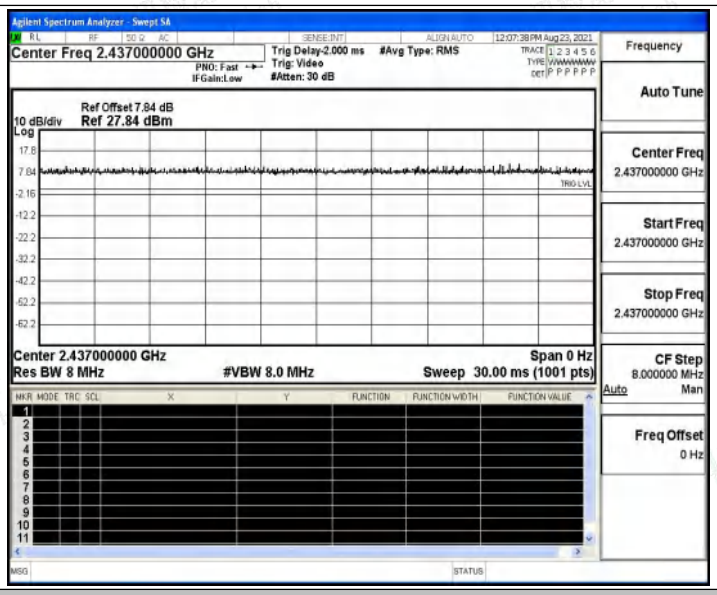
11N20SISO_Ant1_2462



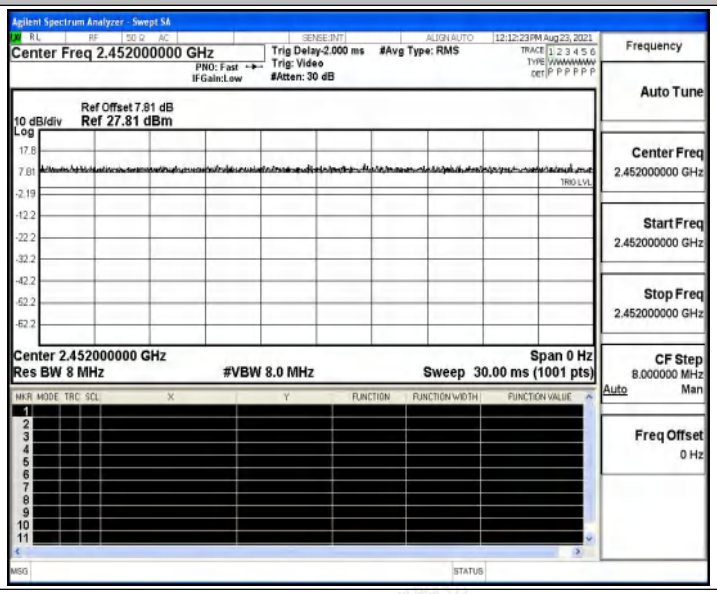
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



C.7 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	-49.47	≤-41.20	45.73	≤54	PASS
				AV	2389.960	-49.01	≤-41.20	46.19	≤54	PASS
				AV	2390.000	-49.01	≤-41.20	46.19	≤54	PASS
				Peak	2310.000	-44.99	≤-21.20	50.21	≤74	PASS
				Peak	2382.810	-40.17	≤-21.20	55.03	≤74	PASS
				Peak	2390.000	-43.95	≤-21.20	51.25	≤74	PASS
		High	2462	AV	2483.500	-48.08	≤-41.20	47.12	≤54	PASS
				AV	2488.070	-47.14	≤-41.20	48.06	≤54	PASS
				AV	2500.000	-48.49	≤-41.20	46.71	≤54	PASS
				Peak	2483.500	-44.04	≤-21.20	51.16	≤74	PASS
				Peak	2484.770	-38.7	≤-21.20	56.50	≤74	PASS
				Peak	2500.000	-41.09	≤-21.20	54.11	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-48.91	≤-41.20	46.29	≤54	PASS
				AV	2388.270	-48.26	≤-41.20	46.94	≤54	PASS
				AV	2390.000	-48.38	≤-41.20	46.82	≤54	PASS
				Peak	2310.000	-42.23	≤-21.20	52.97	≤74	PASS
				Peak	2344.720	-39.14	≤-21.20	56.06	≤74	PASS
				Peak	2390.000	-42.86	≤-21.20	52.34	≤74	PASS
		High	2462	AV	2483.500	-47.08	≤-41.20	48.12	≤54	PASS
				AV	2487.960	-44.72	≤-41.20	50.48	≤54	PASS
				AV	2500.000	-47.81	≤-41.20	47.39	≤54	PASS
				Peak	2483.500	-40.45	≤-21.20	54.75	≤74	PASS
				Peak	2487.520	-37.46	≤-21.20	57.74	≤74	PASS
				Peak	2500.000	-38.67	≤-21.20	56.53	≤74	PASS
11N20SISO	Ant1	Low	2412	AV	2310.000	-49.39	≤-41.20	45.81	≤54	PASS
				AV	2389.960	-48.9	≤-41.20	46.30	≤54	PASS
				AV	2390.000	-48.9	≤-41.20	46.30	≤54	PASS
				Peak	2310.000	-45.13	≤-21.20	50.07	≤74	PASS
				Peak	2334.970	-38.82	≤-21.20	56.38	≤74	PASS
				Peak	2390.000	-44.94	≤-21.20	50.26	≤74	PASS
		High	2462	AV	2483.500	-47.89	≤-41.20	47.31	≤54	PASS
				AV	2487.960	-46.19	≤-41.20	49.01	≤54	PASS
				AV	2500.000	-48.42	≤-41.20	46.78	≤54	PASS

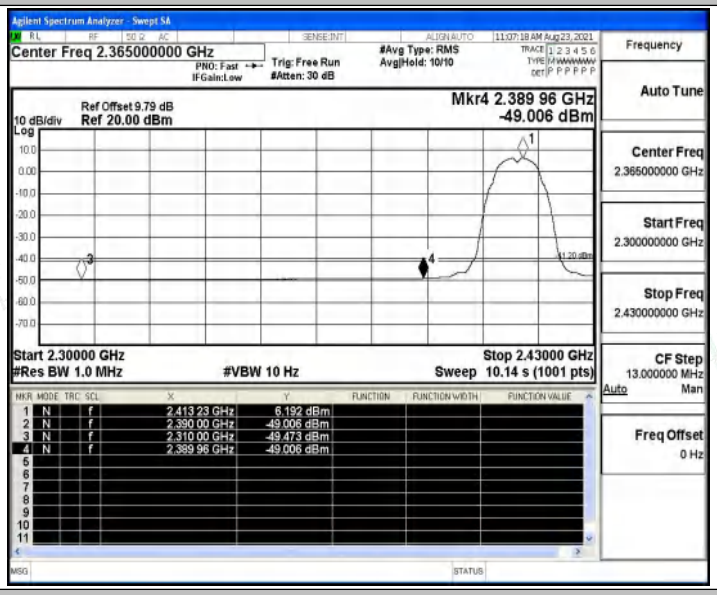
				Peak	2483.500	-43.26	≤-21.20	51.94	≤74	PASS
				Peak	2488.290	-39.17	≤-21.20	56.03	≤74	PASS
				Peak	2500.000	-41.02	≤-21.20	54.18	≤74	PASS
11N40SISO	Ant1	Low	2422	AV	2310.000	-49.37	≤-41.20	45.83	≤54	PASS
				AV	2389.440	-48.88	≤-41.20	46.32	≤54	PASS
				AV	2390.000	-48.89	≤-41.20	46.31	≤54	PASS
				Peak	2310.000	-43.64	≤-21.20	51.56	≤74	PASS
				Peak	2349.400	-39.54	≤-21.20	55.66	≤74	PASS
				Peak	2390.000	-45.04	≤-21.20	50.16	≤74	PASS
		High	2452	AV	2483.500	-47.74	≤-41.20	47.46	≤54	PASS
				AV	2483.670	-47.72	≤-41.20	47.48	≤54	PASS
				AV	2500.000	-48.4	≤-41.20	46.80	≤54	PASS
				Peak	2483.500	-42.33	≤-21.20	52.87	≤74	PASS
				Peak	2484.990	-39.58	≤-21.20	55.62	≤74	PASS
				Peak	2500.000	-42.12	≤-21.20	53.08	≤74	PASS

Note：

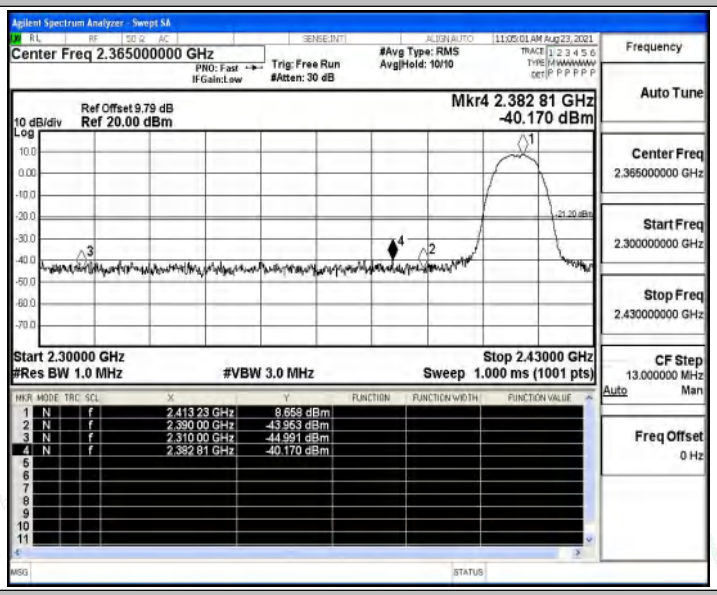
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

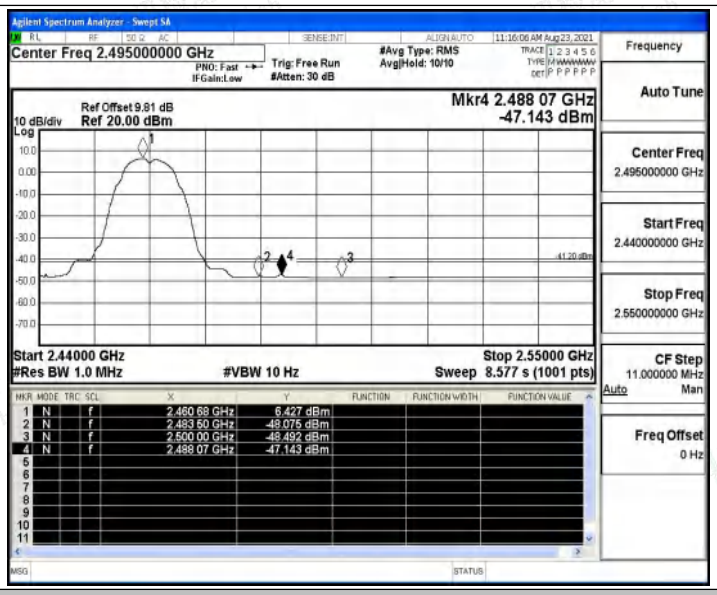
11B_Ant1_Low_2412_AV



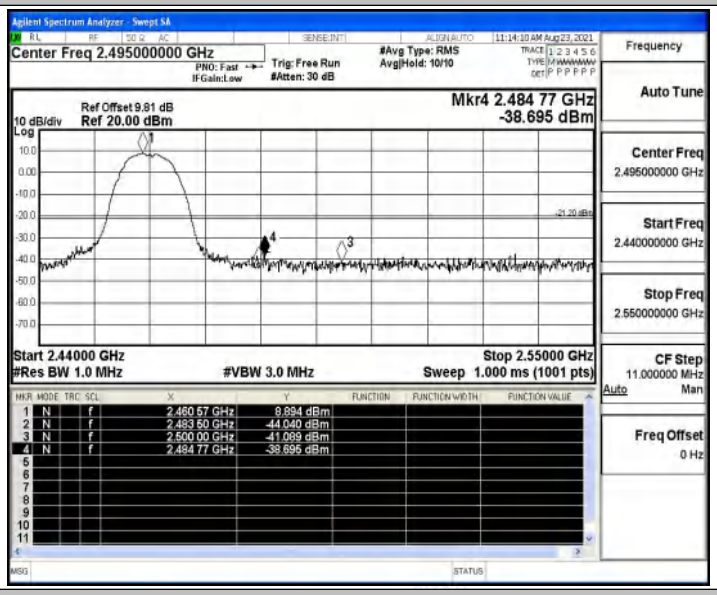
11B_Ant1_Low_2412_Peak



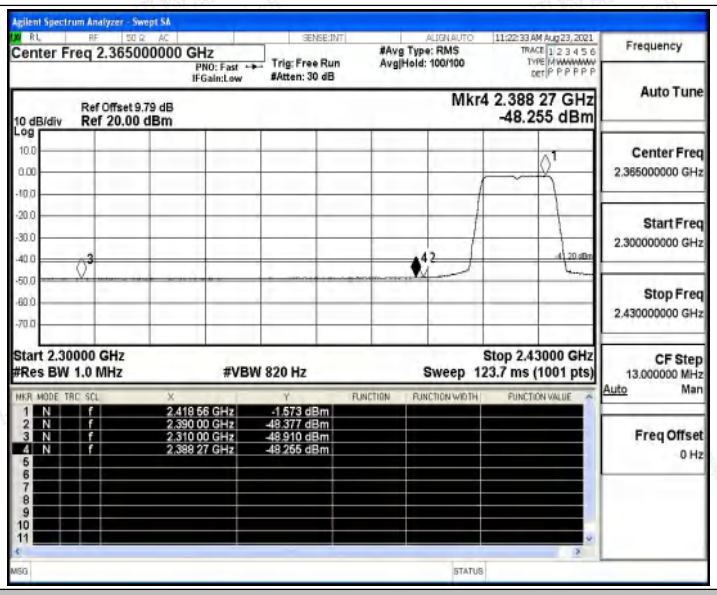
11B_Ant1_High_2462_AV



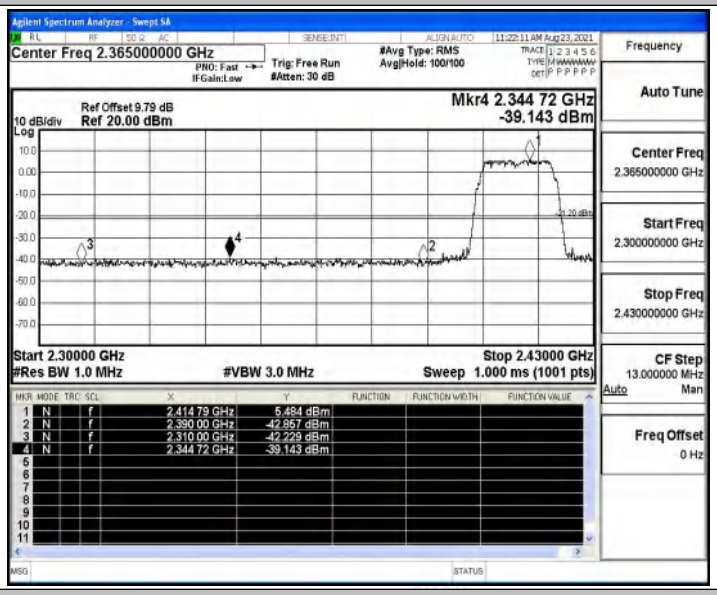
11B_Ant1_High_2462_Peak



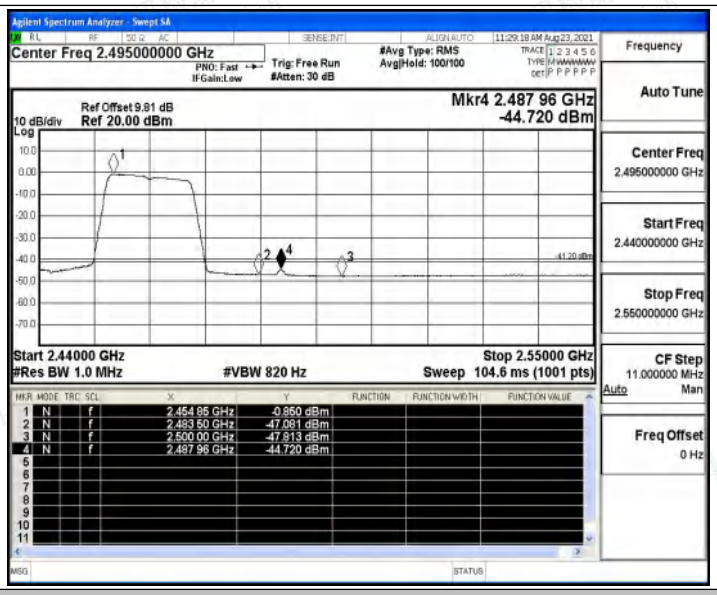
11G_Ant1_Low_2412_AV



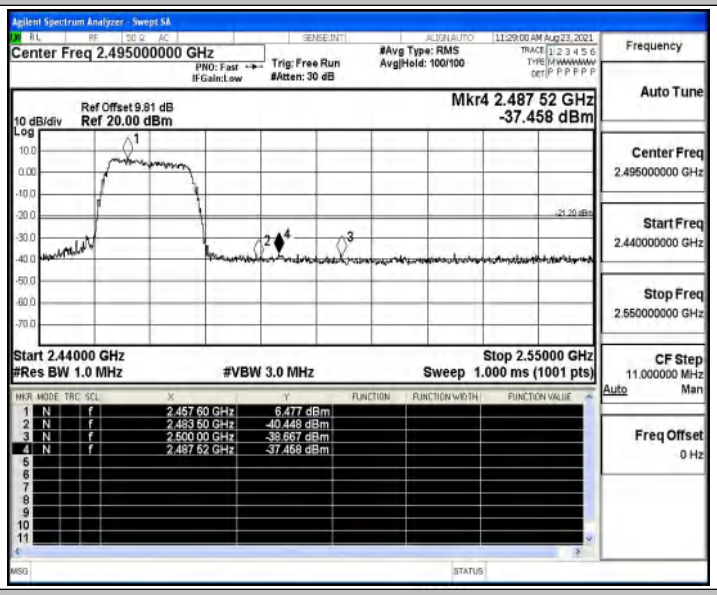
11G_Ant1_Low_2412_Peak



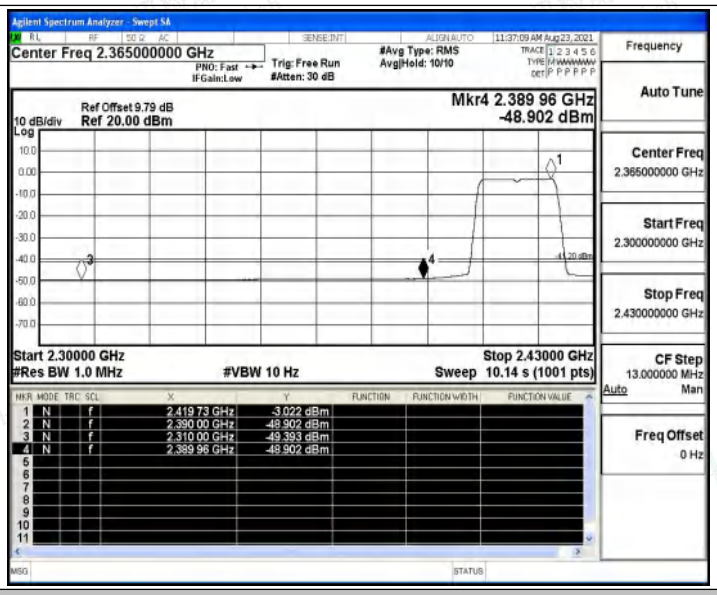
11G_Ant1_High_2462_AV



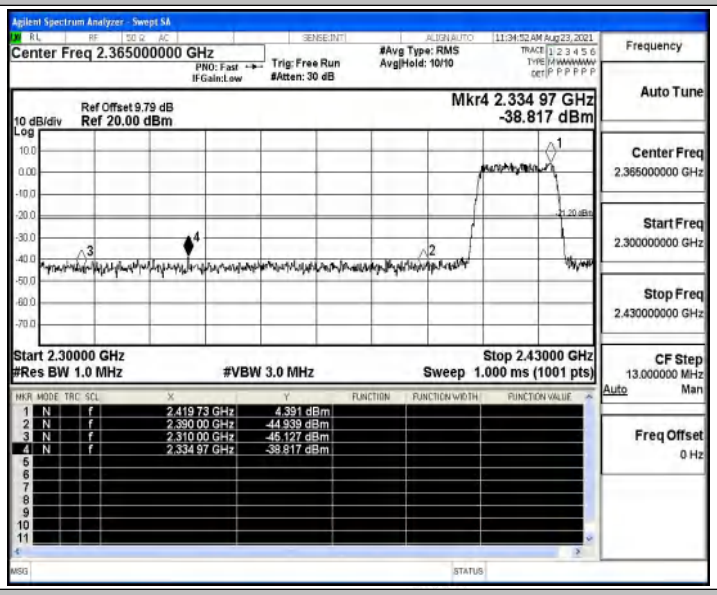
11G_Ant1_High_2462_Peak



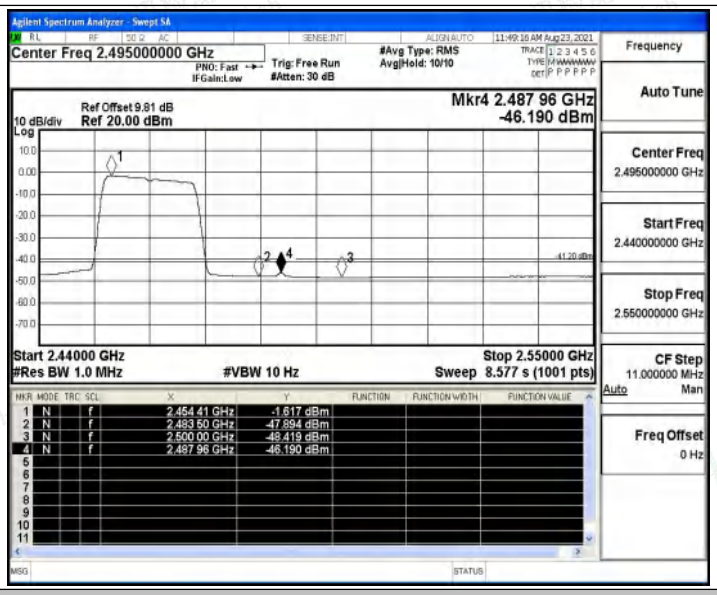
11N20SISO_Ant1_Low_2412_AV



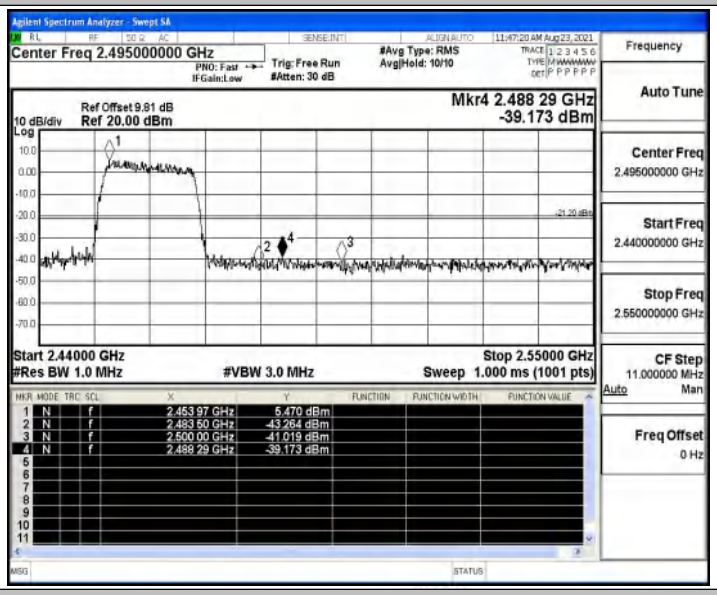
11N20SISO_Ant1_Low_2412_Peak



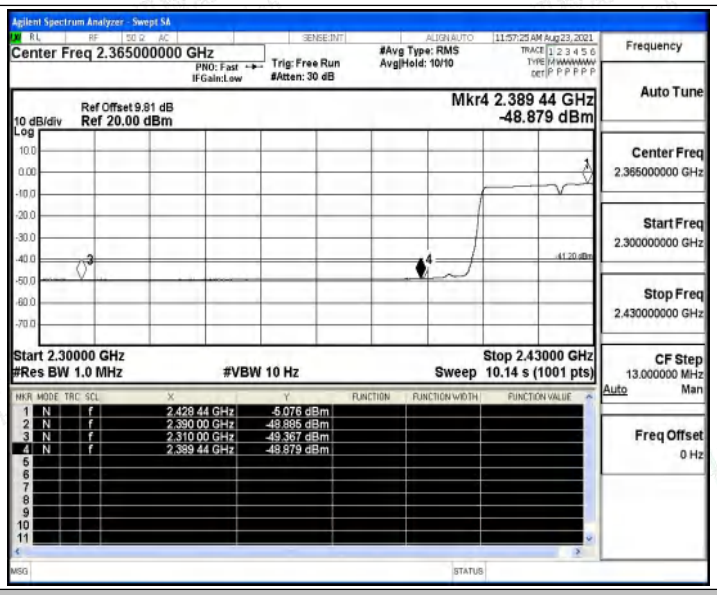
11N20SISO_Ant1_High_2462_AV



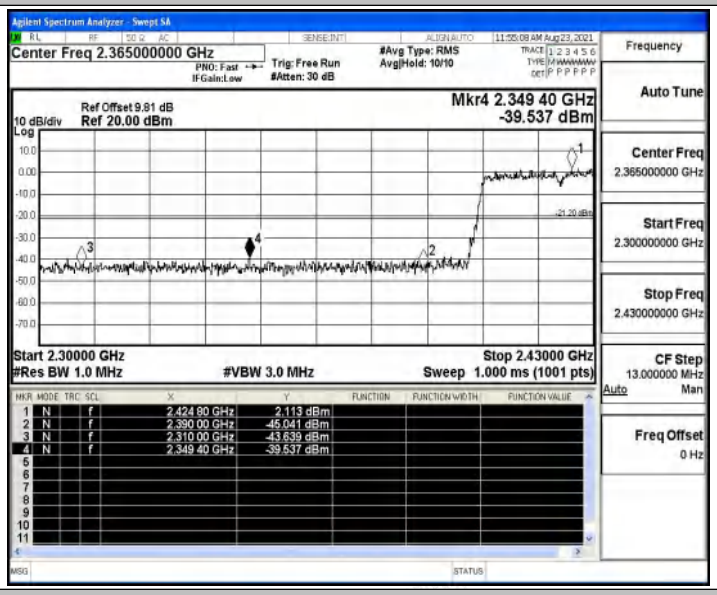
11N20SISO_Ant1_High_2462_Peak



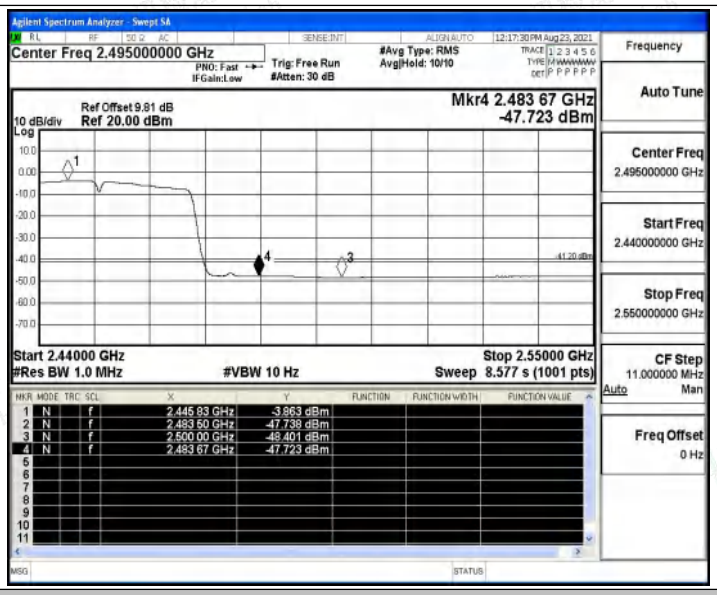
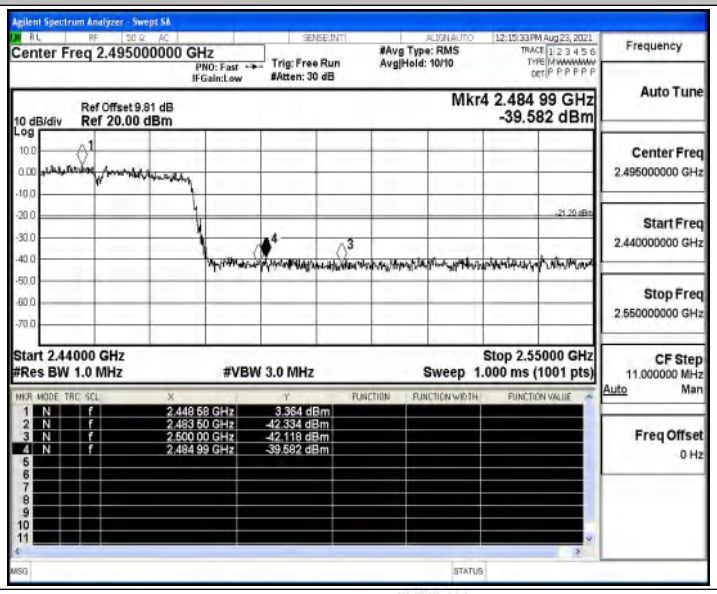
11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



11N40SISO_Ant1_High_2452_Peak