



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: TV Remote

Test Model: RC20

Environmental Conditions

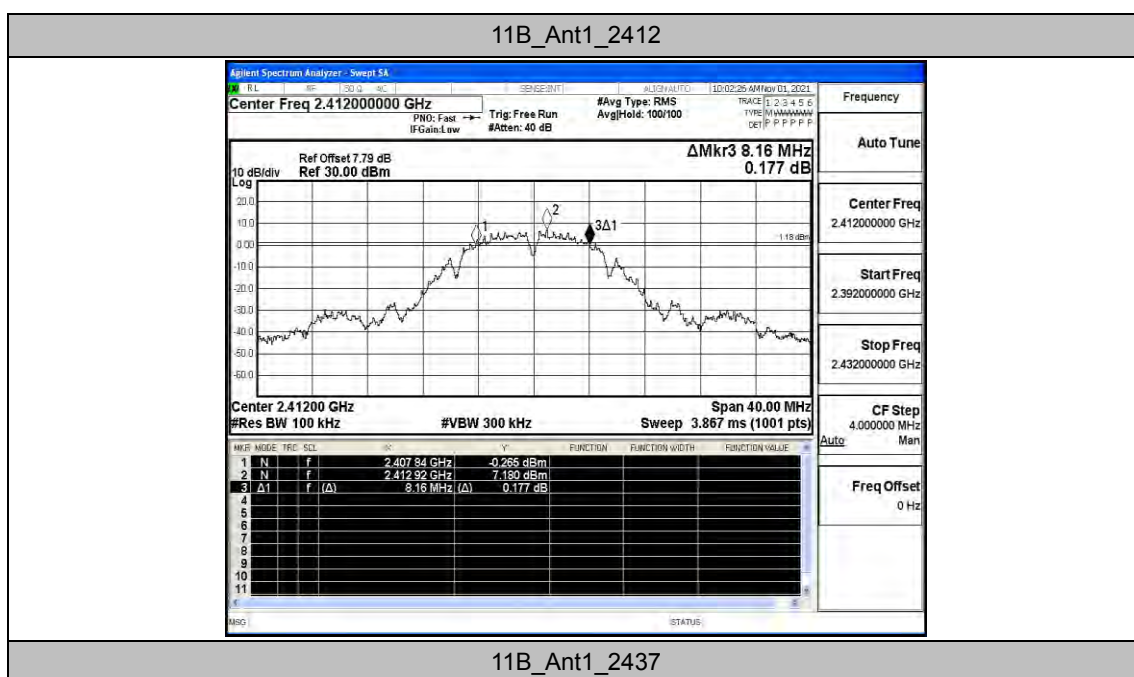
Temperature:	22.4° C
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

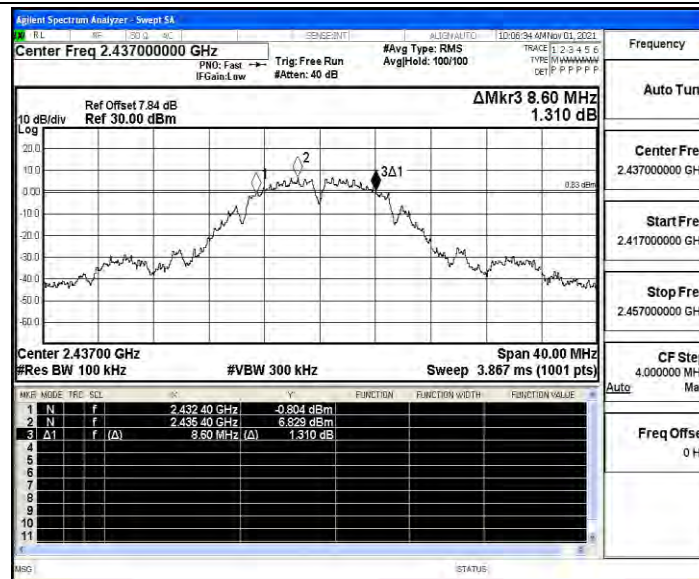
C.1 6dB Bandwidth

Test Result

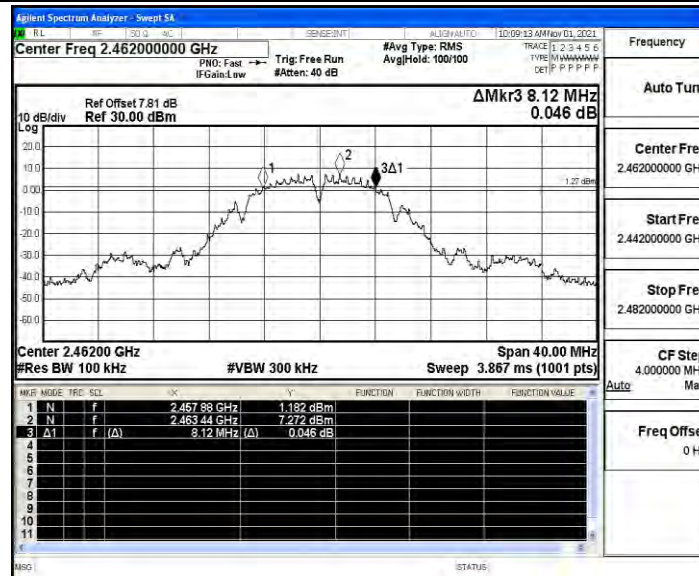
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.160	2407.840	2416.000	0.5	PASS
		2437	8.600	2432.400	2441.000	0.5	PASS
		2462	8.120	2457.880	2466.000	0.5	PASS
11G	Ant1	2412	16.400	2403.720	2420.120	0.5	PASS
		2437	16.360	2428.760	2445.120	0.5	PASS
		2462	16.160	2453.760	2469.920	0.5	PASS
11N20SISO	Ant1	2412	16.640	2403.480	2420.120	0.5	PASS
		2437	17.360	2428.120	2445.480	0.5	PASS
		2462	16.360	2454.040	2470.400	0.5	PASS
11N40SISO	Ant1	2422	35.200	2404.400	2439.600	0.5	PASS
		2437	35.120	2419.400	2454.520	0.5	PASS
		2452	35.200	2434.400	2469.600	0.5	PASS

Test Graphs

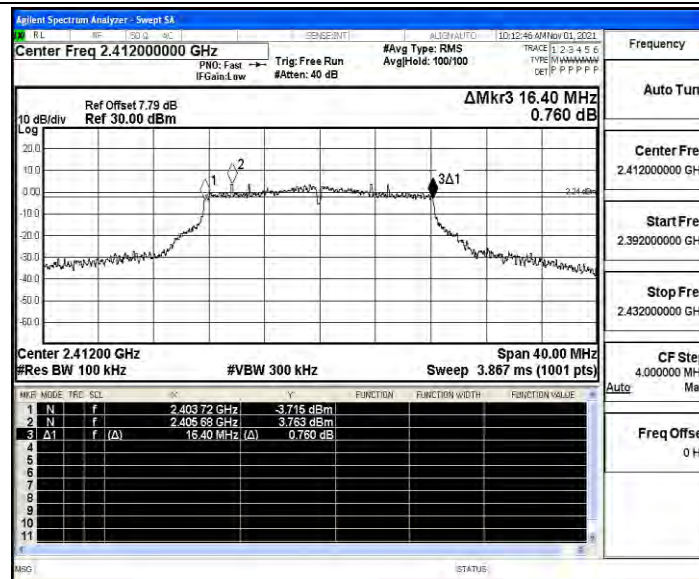




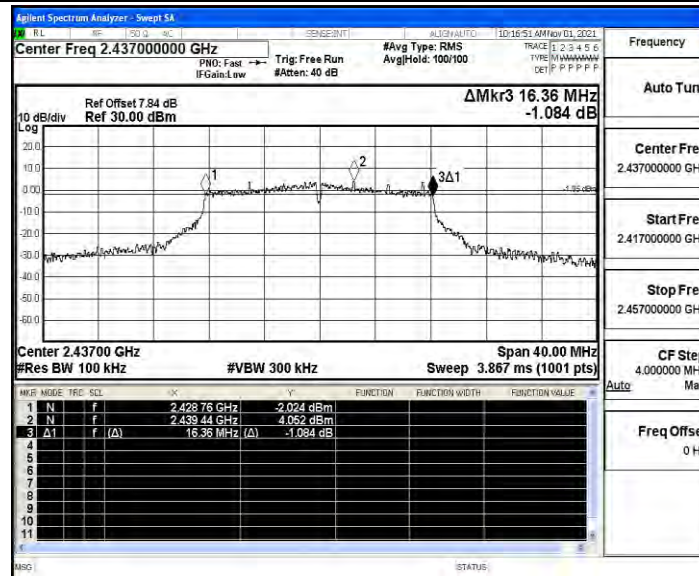
11B_Ant1_2462



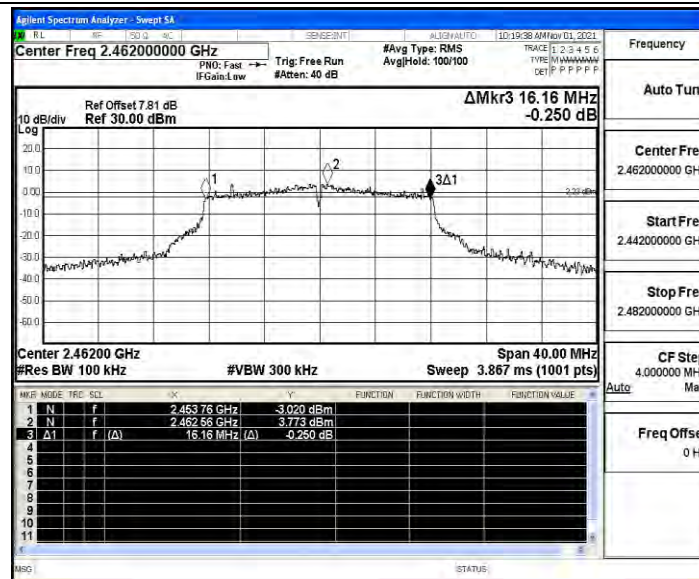
11G_Ant1_2412



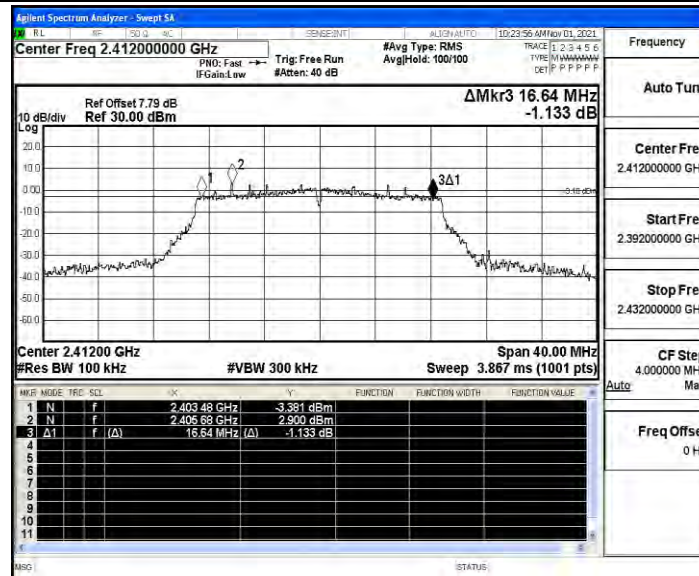
11G_Ant1_2437



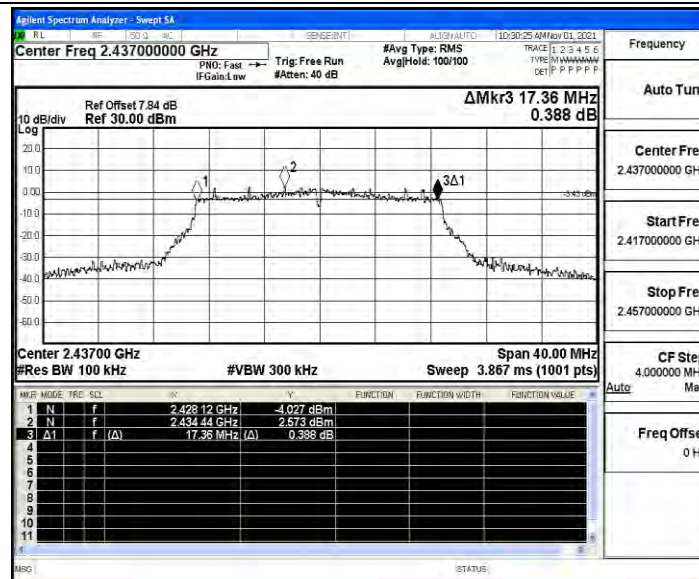
11G_Ant1_2462



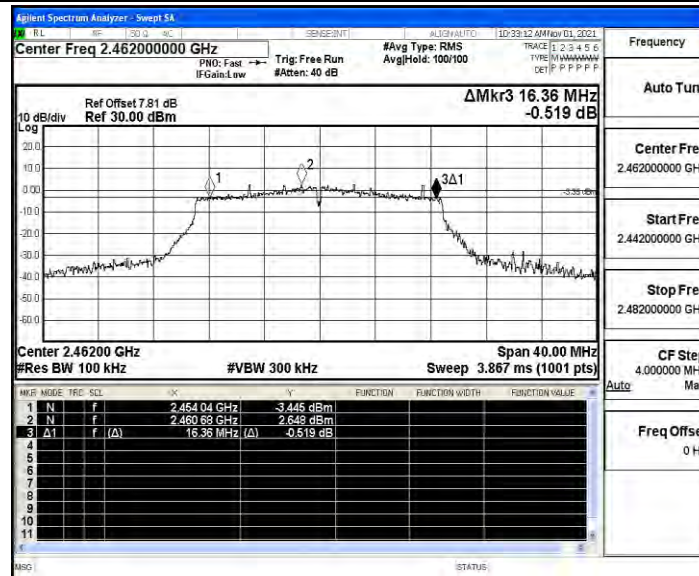
11N20SISO_Ant1_2412



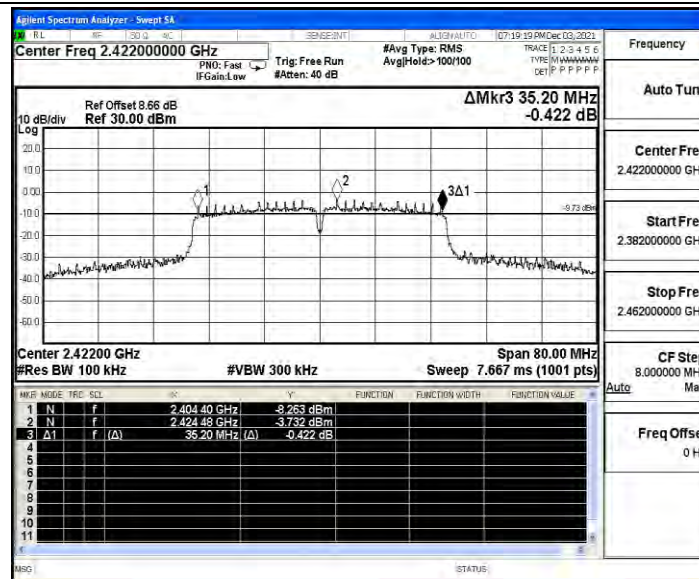
11N20SISO_Ant1_2437



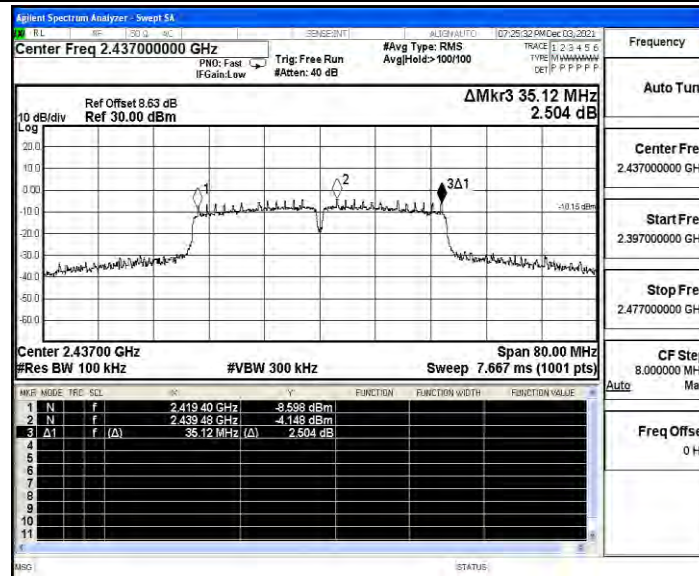
11N20SISO_Ant1_2462



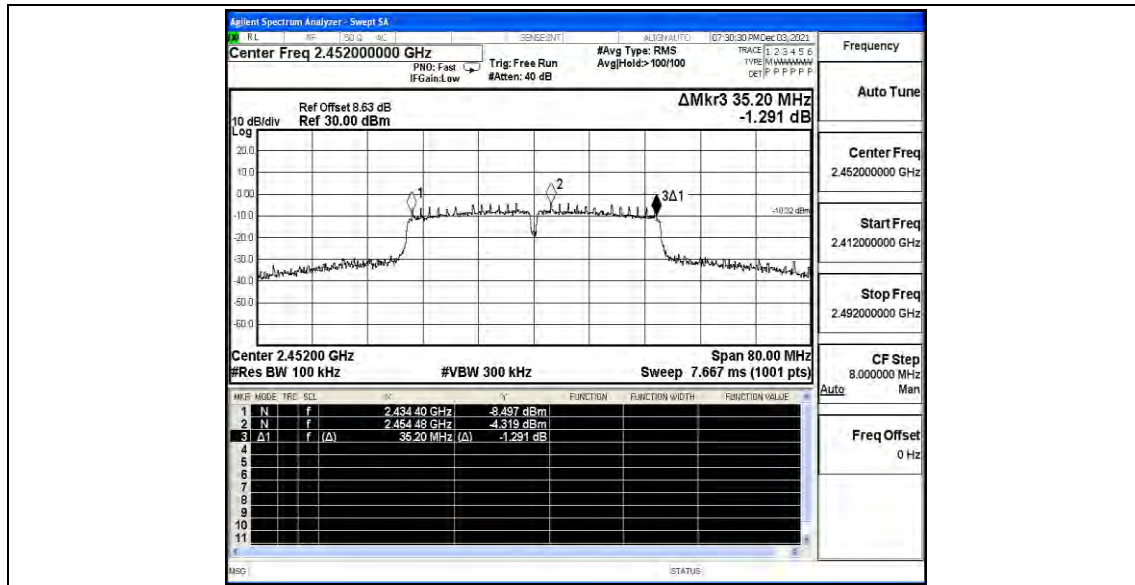
11N40SISO_Ant1_2422



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	16.99	≤30	PASS
		2437	17.29	≤30	PASS
		2462	17.14	≤30	PASS
11G	Ant1	2412	17.11	≤30	PASS
		2437	17.75	≤30	PASS
		2462	17.95	≤30	PASS
11N20SISO	Ant1	2412	17.17	≤30	PASS
		2437	17.70	≤30	PASS
		2462	17.98	≤30	PASS
11N40SISO	Ant1	2422	16.90	≤30	PASS
		2437	16.38	≤30	PASS
		2452	16.29	≤30	PASS



C.3 Maximum power spectral density

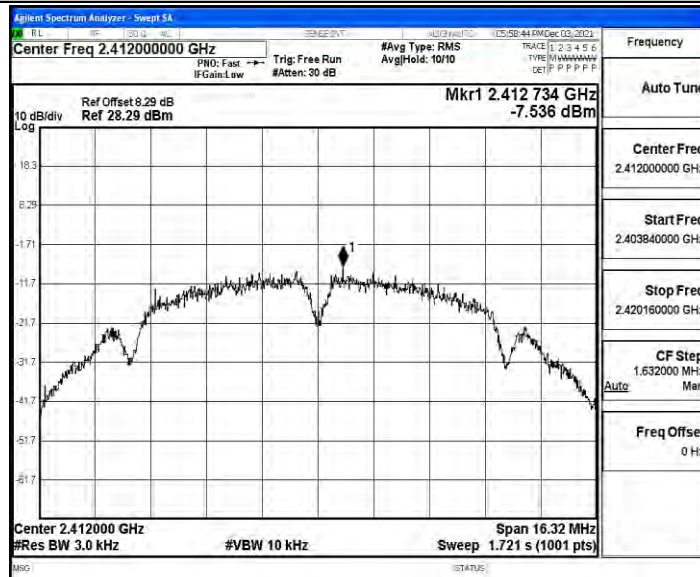
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-7.54	≤8	PASS
		2437	-8.52	≤8	PASS
		2462	-8.64	≤8	PASS
11G	Ant1	2412	-13.77	≤8	PASS
		2437	-12.73	≤8	PASS
		2462	-12.14	≤8	PASS
11N20SISO	Ant1	2412	-14.34	≤8	PASS
		2437	-13.9	≤8	PASS
		2462	-11.3	≤8	PASS
11N40SISO	Ant1	2422	-18.21	≤8	PASS
		2437	-18.34	≤8	PASS
		2452	-18.42	≤8	PASS

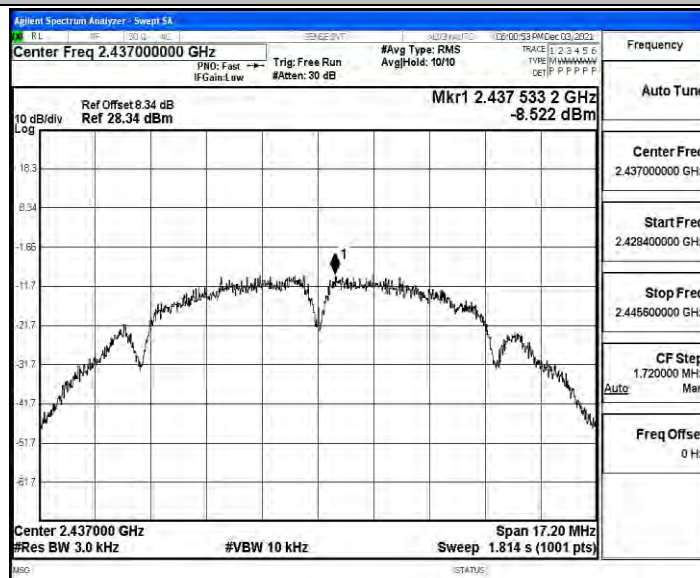


Test Graphs

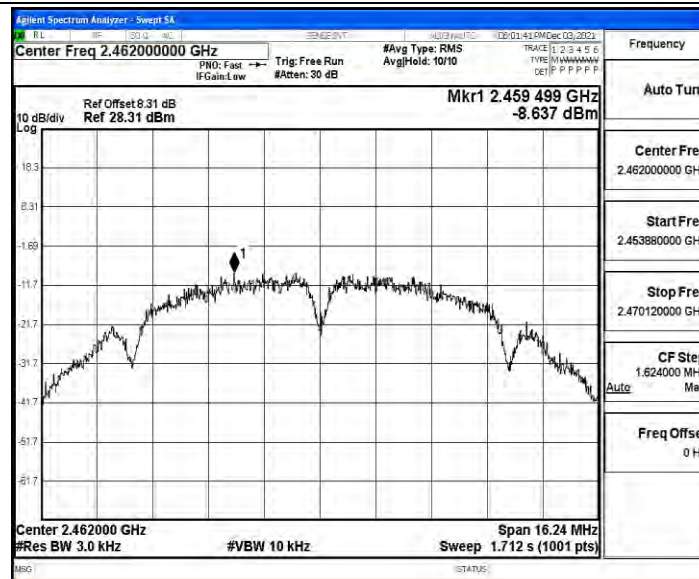
11B_Ant1_2412



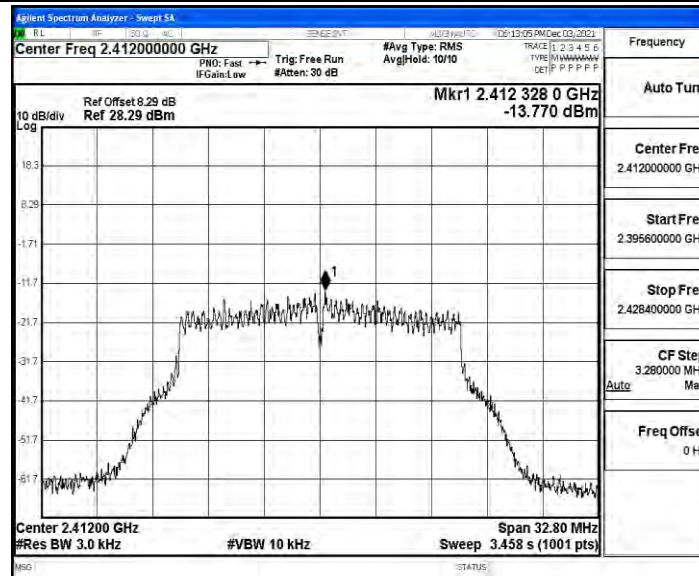
11B_Ant1_2437



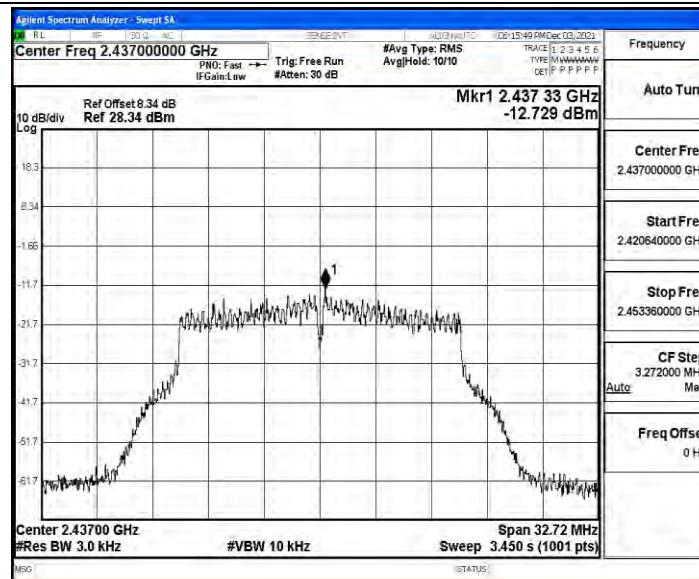
11B_Ant1_2462



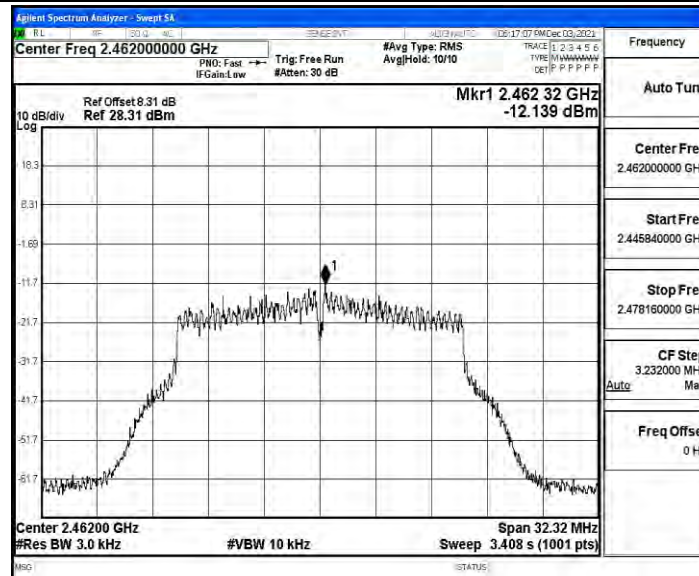
11G_Ant1_2412



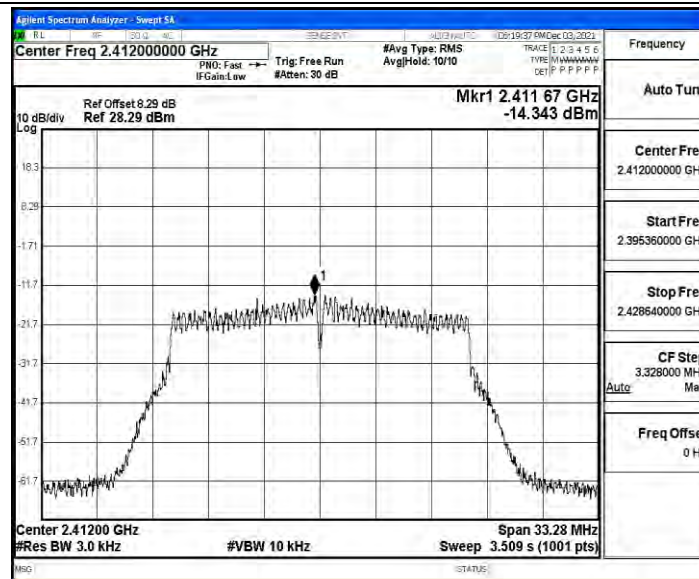
11G_Ant1_2437



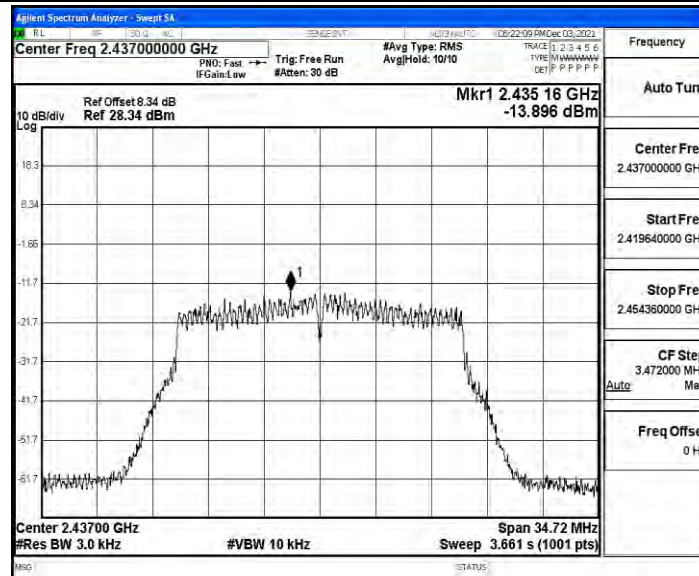
11G_Ant1_2462



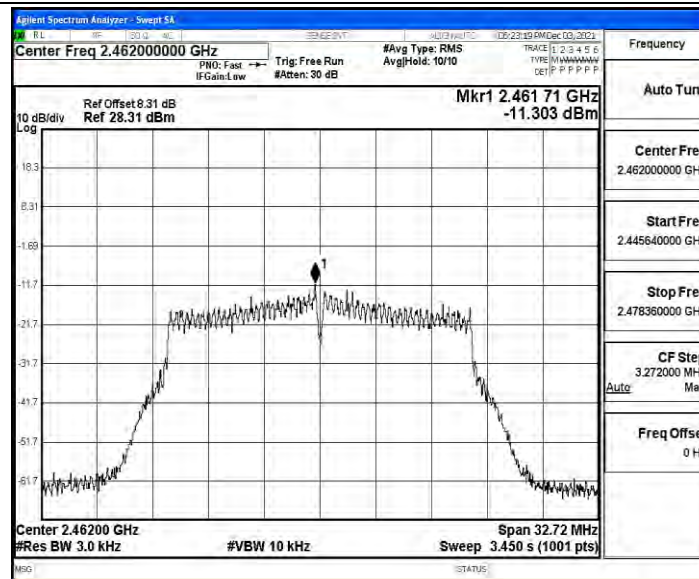
11N20SISO_Ant1_2412



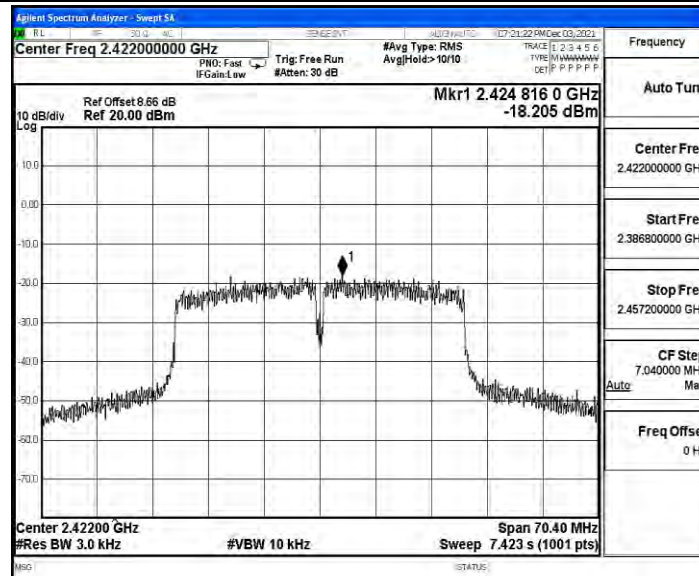
11N20SISO_Ant1_2437



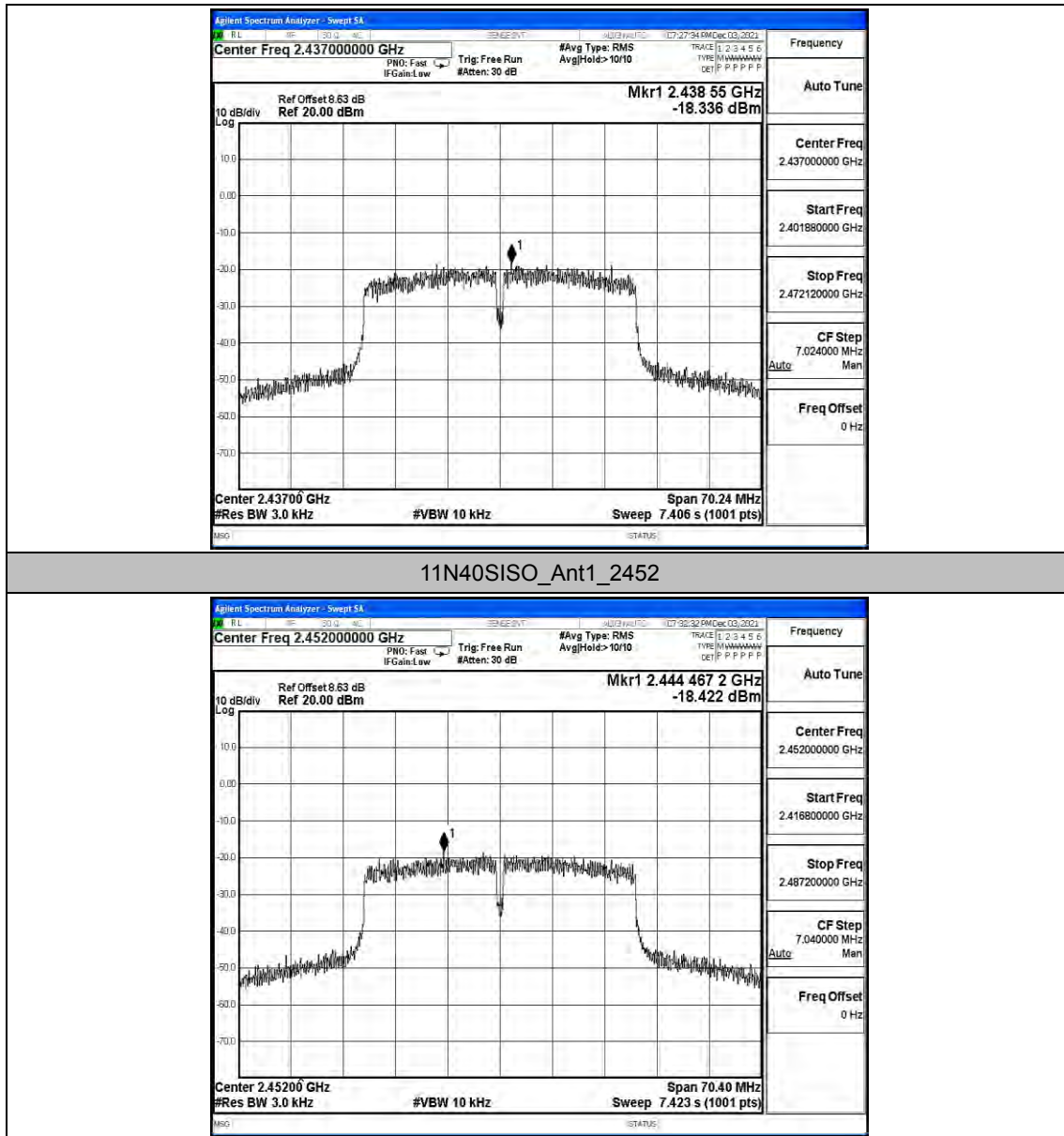
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



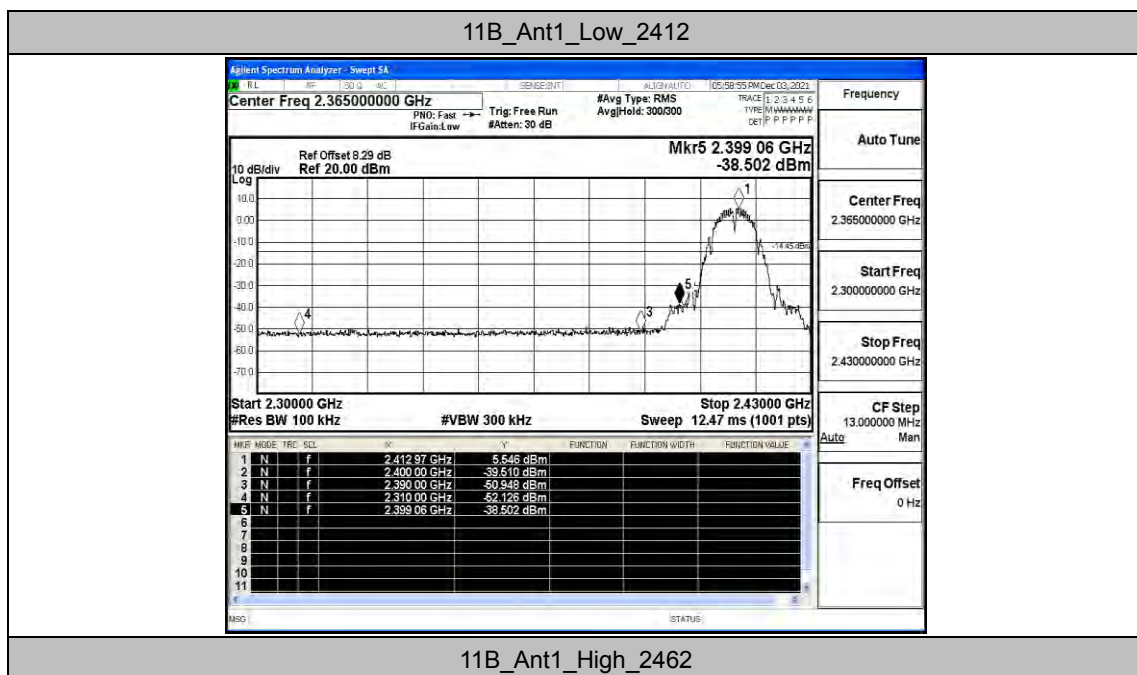


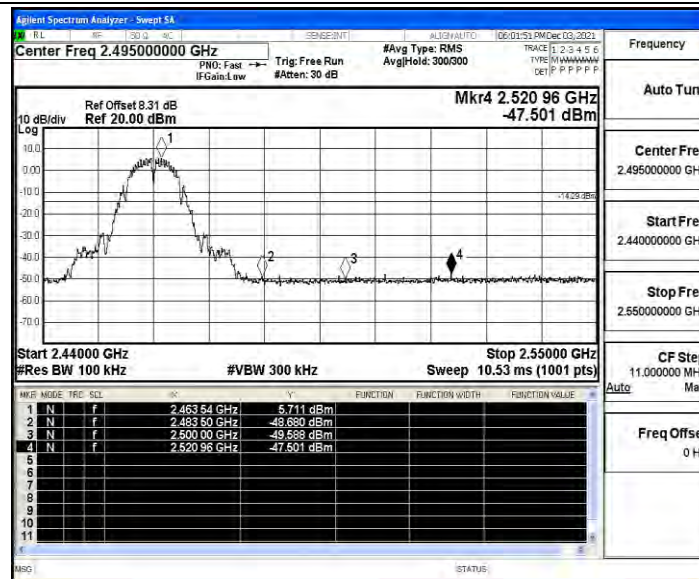
C.4 Band edge measurements

Test Result

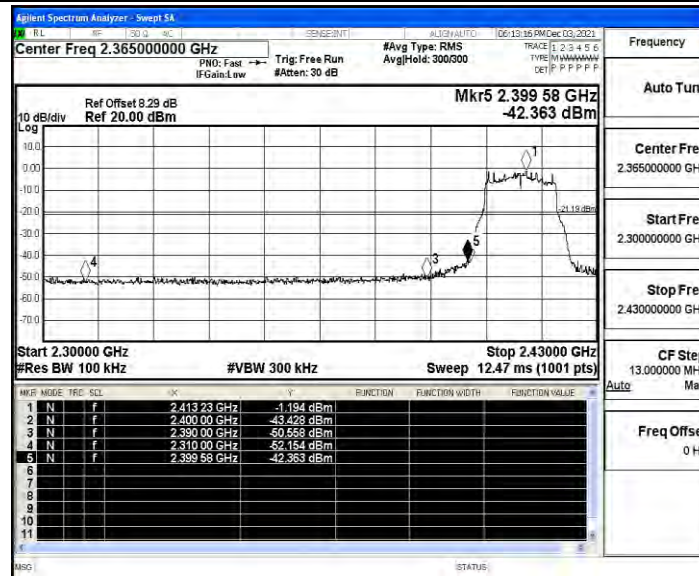
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.55	-38.5	≤-14.45	PASS
		High	2462	5.71	-47.5	≤-14.29	PASS
11G	Ant1	Low	2412	-1.19	-42.36	≤-21.19	PASS
		High	2462	-0.84	-47.74	≤-20.84	PASS
11N20SISO	Ant1	Low	2412	-1.21	-42.9	≤-21.21	PASS
		High	2462	-0.41	-48.08	≤-20.41	PASS
11N40SISO	Ant1	Low	2422	-3.86	-30.91	≤-23.86	PASS
		High	2452	-4.32	-30.65	≤-24.32	PASS

Test Graphs

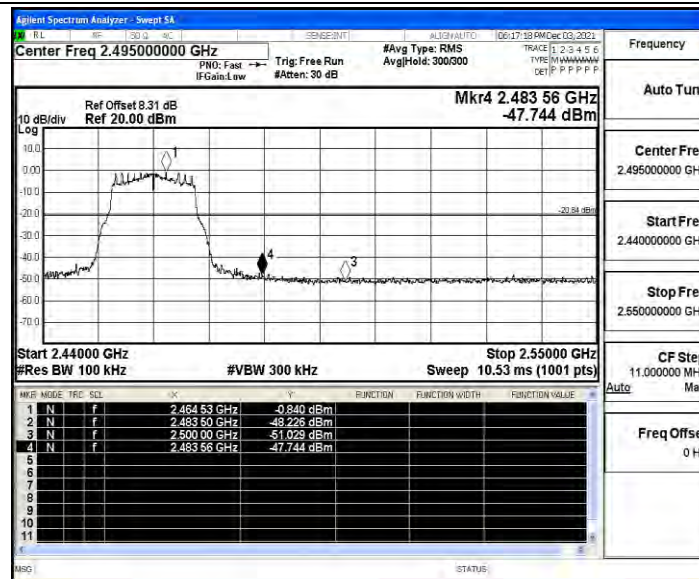




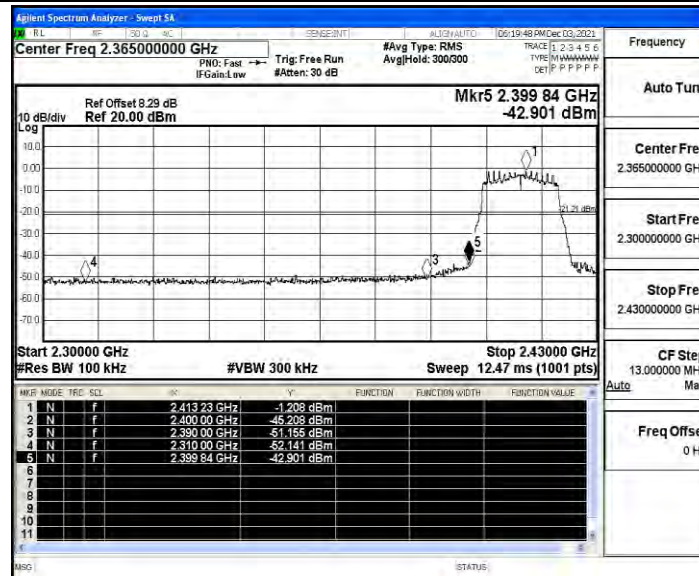
11G_Ant1_Low_2412



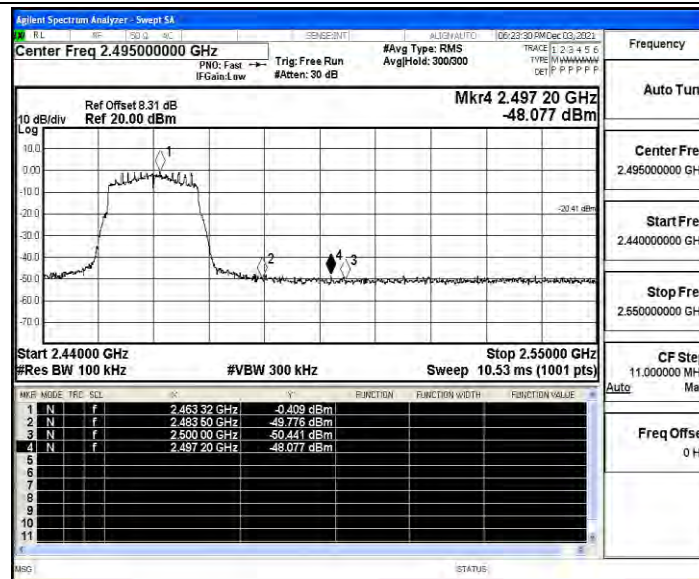
11G_Ant1_High_2462



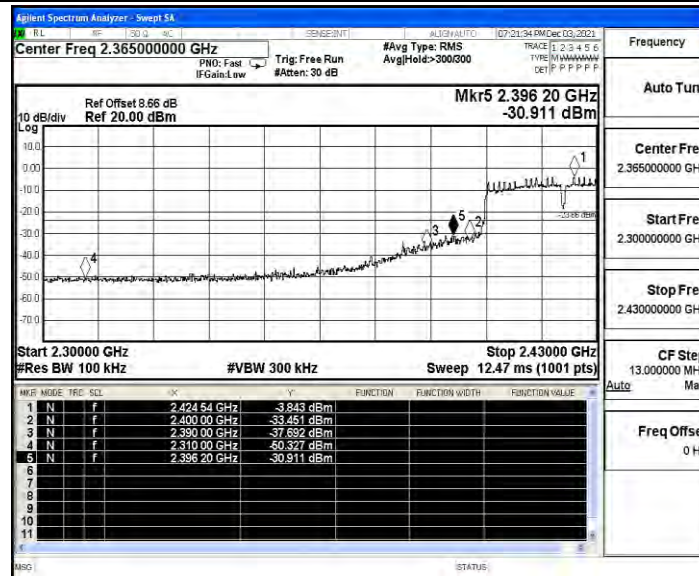
11N20SISO_Ant1_Low_2412



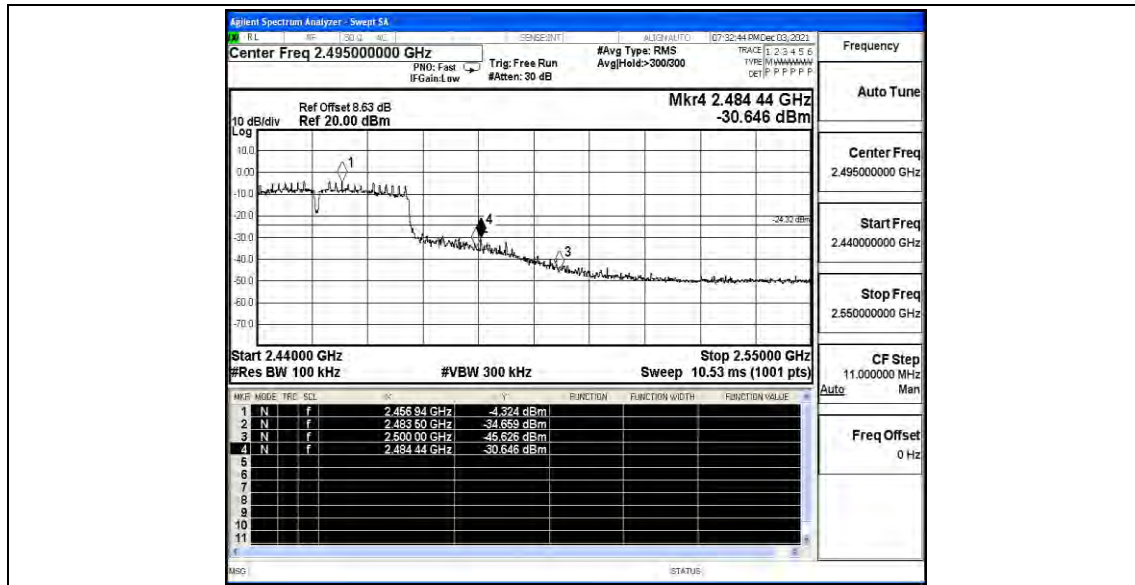
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452





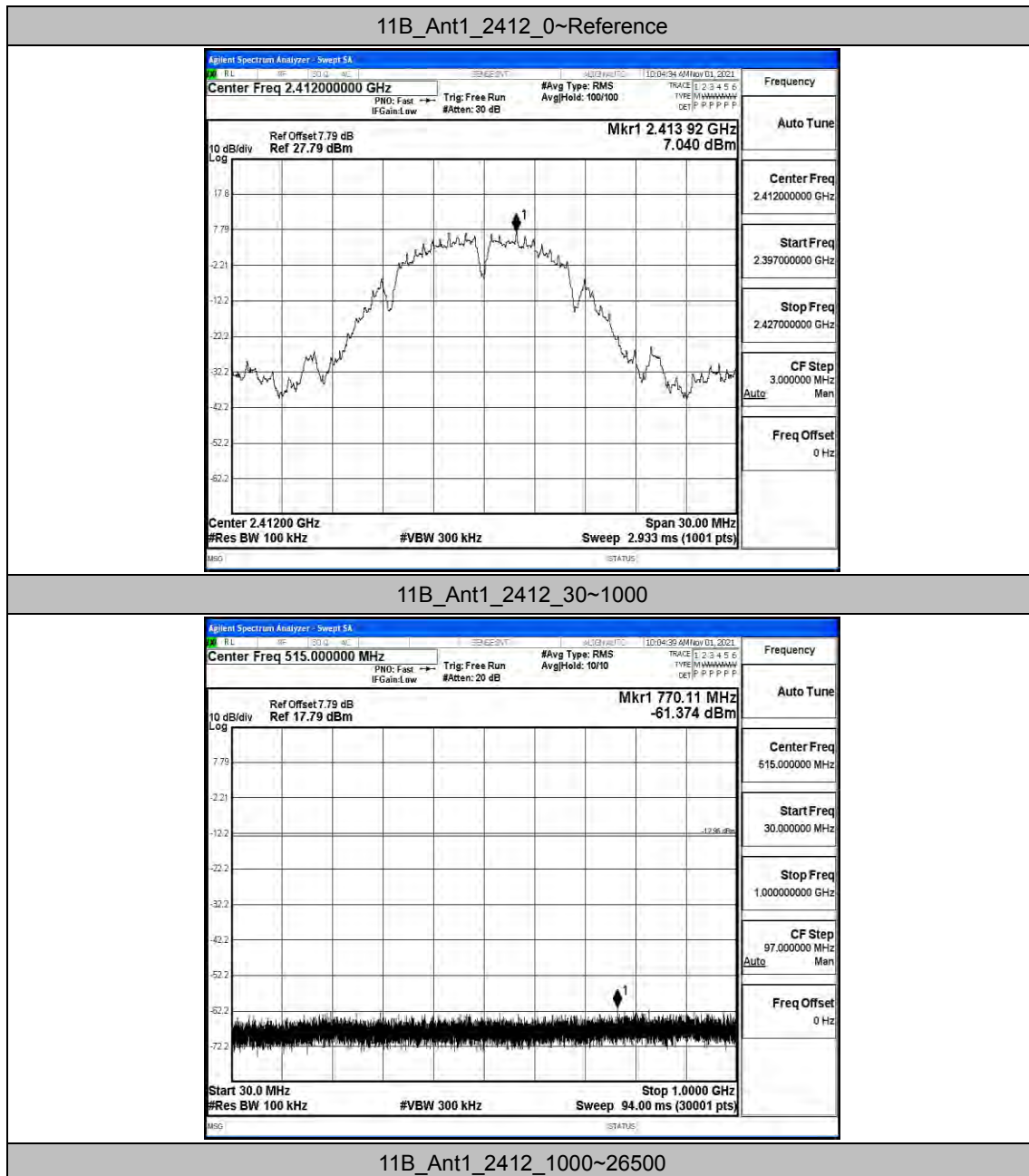
C.5 Conducted Spurious Emission

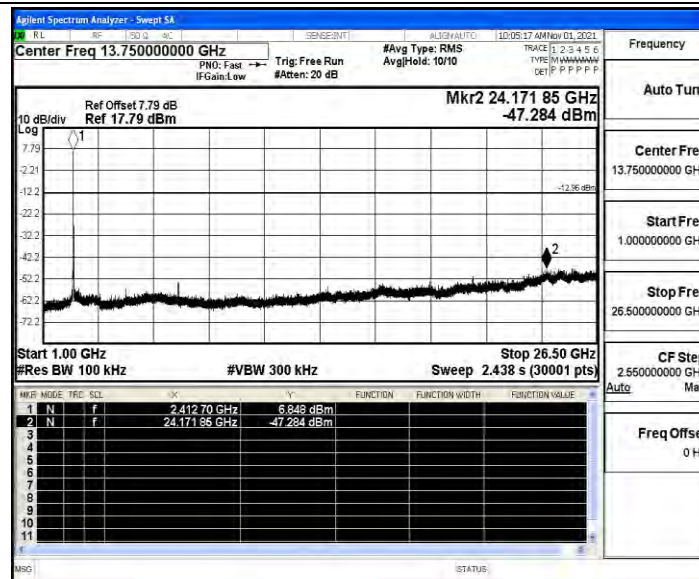
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	7.04	7.04	---	PASS
			30~1000	7.04	-61.37	≤ -12.96	PASS
			1000~26500	7.04	-47.28	≤ -12.96	PASS
		2437	Reference	7.36	7.36	---	PASS
			30~1000	7.36	-61.08	≤ -12.64	PASS
			1000~26500	7.36	-47.85	≤ -12.64	PASS
		2462	Reference	7.39	7.39	---	PASS
			30~1000	7.39	-61.91	≤ -12.61	PASS
			1000~26500	7.39	-47.54	≤ -12.61	PASS
11G	Ant1	2412	Reference	3.95	3.95	---	PASS
			30~1000	3.95	-61.41	≤ -16.05	PASS
			1000~26500	3.95	-47.42	≤ -16.05	PASS
		2437	Reference	4.39	4.39	---	PASS
			30~1000	4.39	-61.33	≤ -15.61	PASS
			1000~26500	4.39	-47.32	≤ -15.61	PASS
		2462	Reference	4.10	4.10	---	PASS
			30~1000	4.10	-62.15	≤ -15.9	PASS
			1000~26500	4.10	-47.86	≤ -15.9	PASS
11N20SISO	Ant1	2412	Reference	2.85	2.85	---	PASS
			30~1000	2.85	-61.4	≤ -17.15	PASS
			1000~26500	2.85	-47.09	≤ -17.15	PASS
		2437	Reference	2.90	2.90	---	PASS
			30~1000	2.90	-61.24	≤ -17.1	PASS
			1000~26500	2.90	-47.53	≤ -17.1	PASS
		2462	Reference	3.78	3.78	---	PASS
			30~1000	3.78	-61.8	≤ -16.22	PASS
			1000~26500	3.78	-47.54	≤ -16.22	PASS
11N40SISO	Ant1	2422	Reference	-3.90	-3.90	---	PASS
			30~1000	-3.90	-60.5	≤ -23.9	PASS
			1000~26500	-3.90	-46.26	≤ -23.9	PASS
		2437	Reference	-4.25	-4.25	---	PASS
			30~1000	-4.25	-60.77	≤ -24.25	PASS
			1000~26500	-4.25	-46.09	≤ -24.25	PASS
		2452	Reference	-4.38	-4.38	---	PASS
			30~1000	-4.38	-60.85	≤ -24.38	PASS
			1000~26500	-4.38	-46	≤ -24.38	PASS

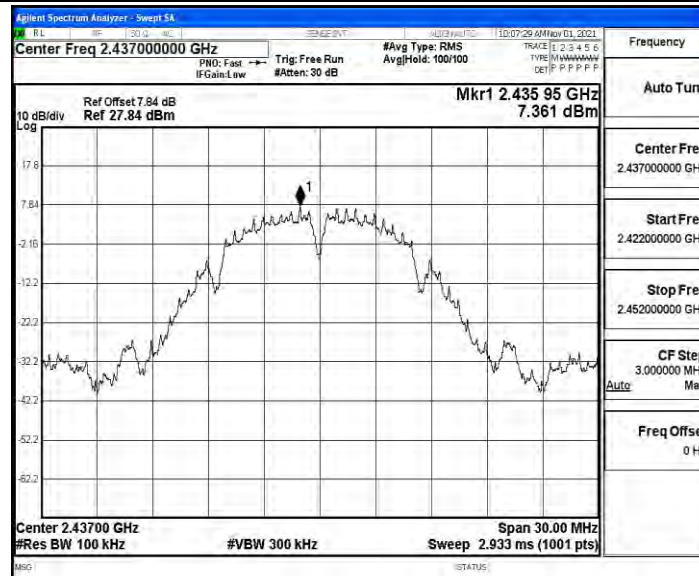


Test Graphs

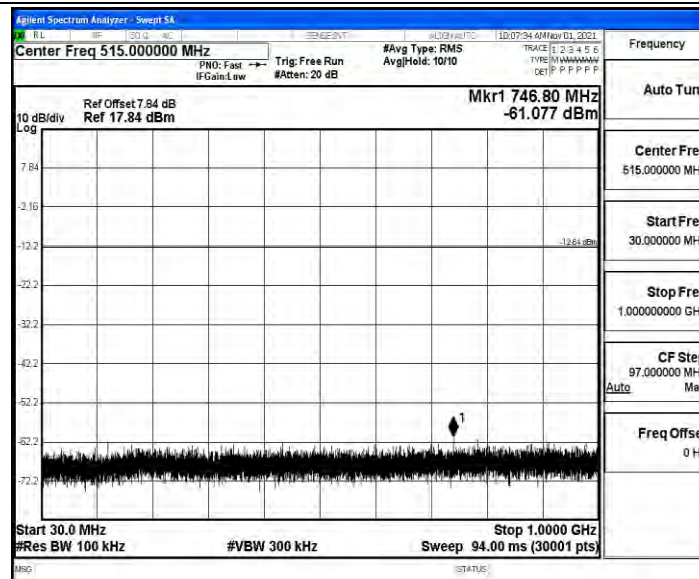




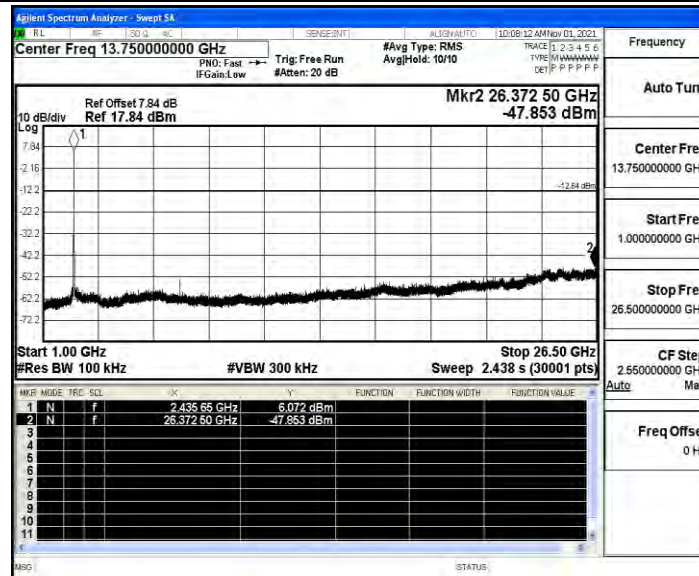
11B_Ant1_2437_0~Reference



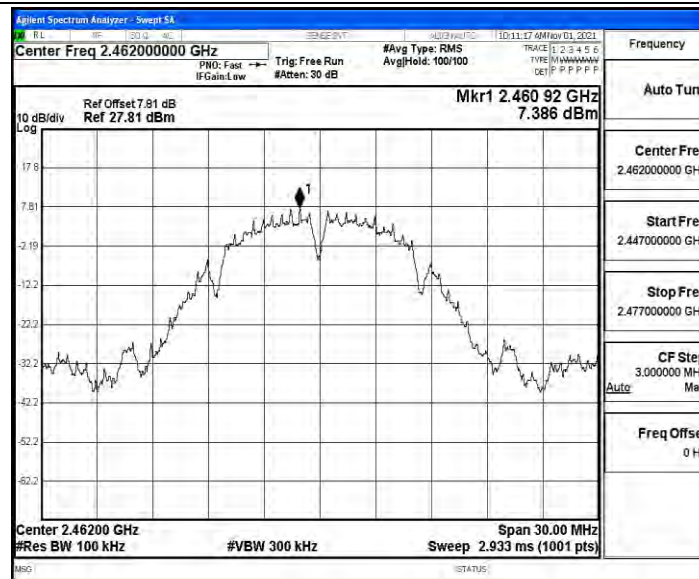
11B_Ant1_2437_30~1000



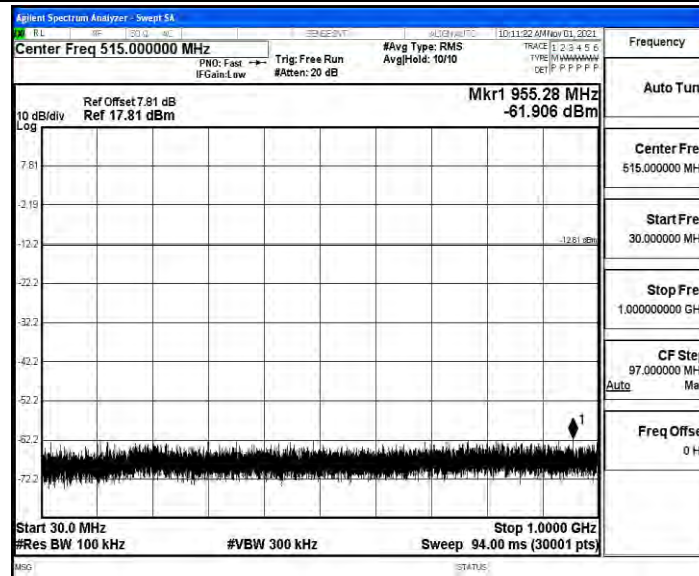
11B_Ant1_2437_1000~26500



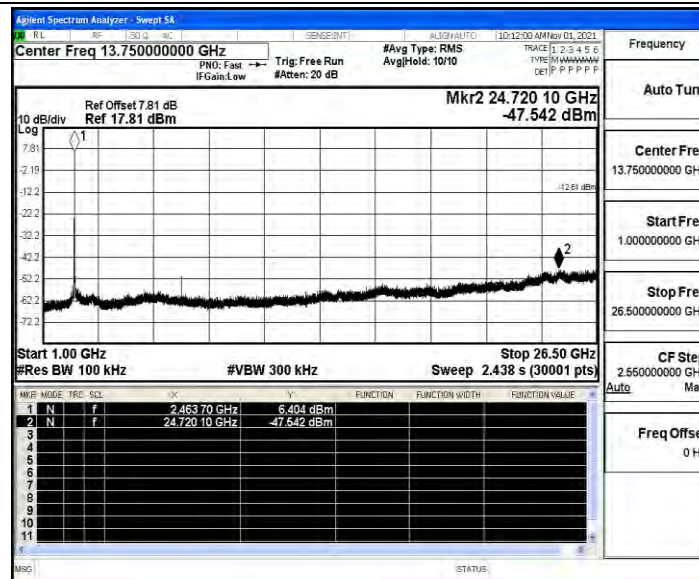
11B_Ant1_2462_0~Reference



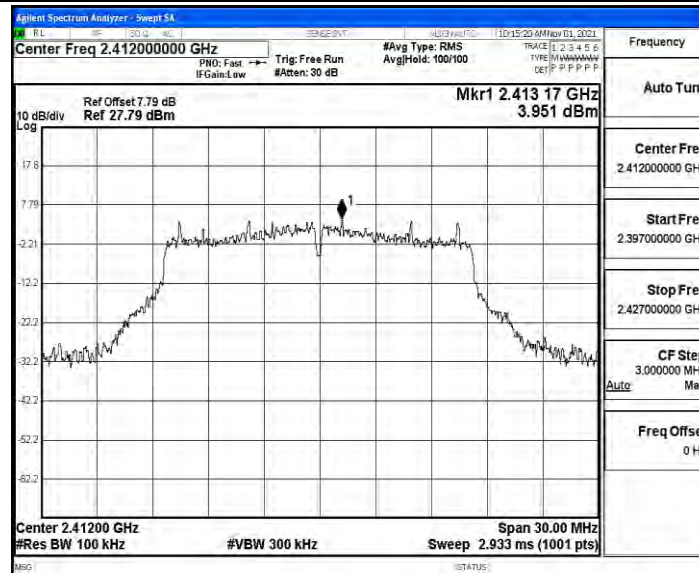
11B_Ant1_2462_30~1000



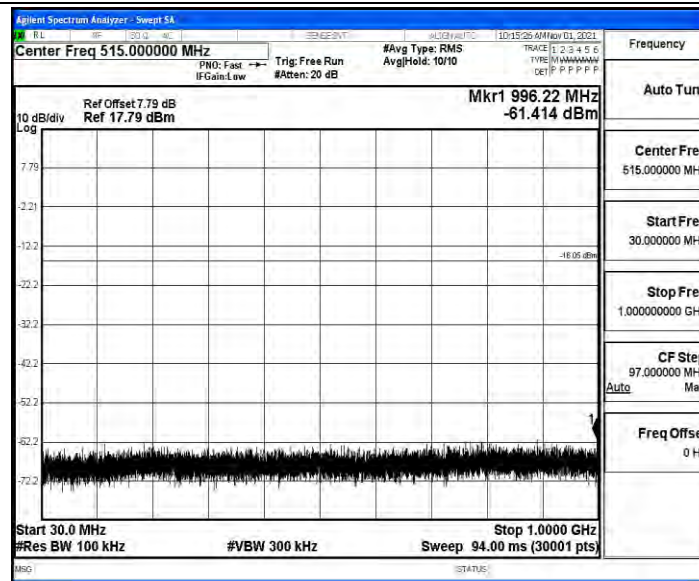
11B_Ant1_2462_1000~26500



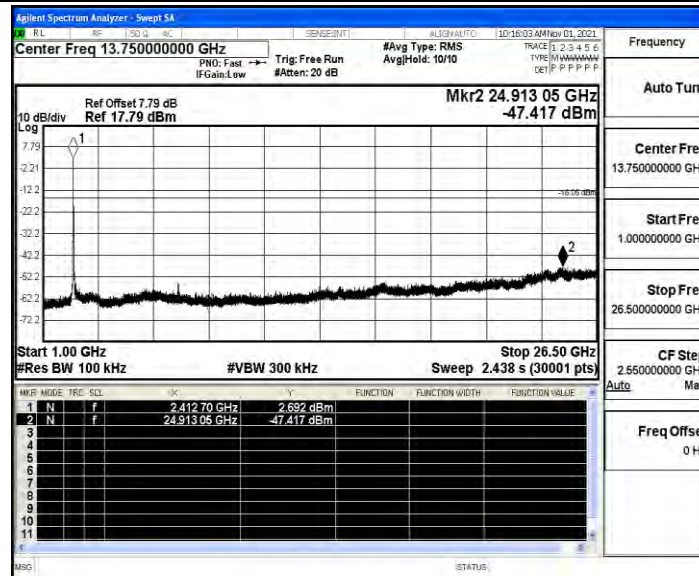
11G_Ant1_2412_0~Reference



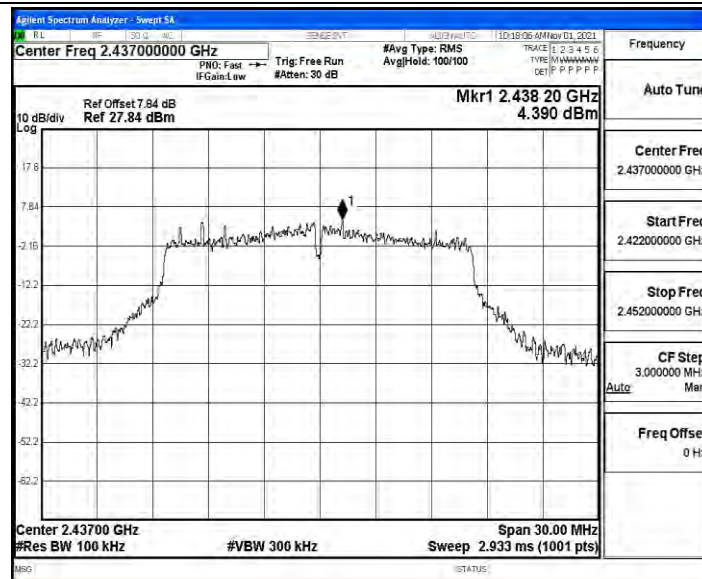
11G_Ant1_2412_30~1000



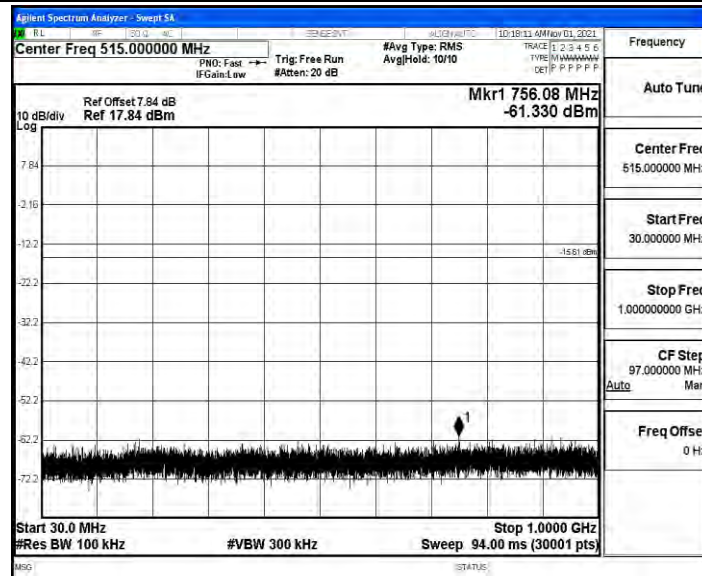
11G_Ant1_2412_1000~26500



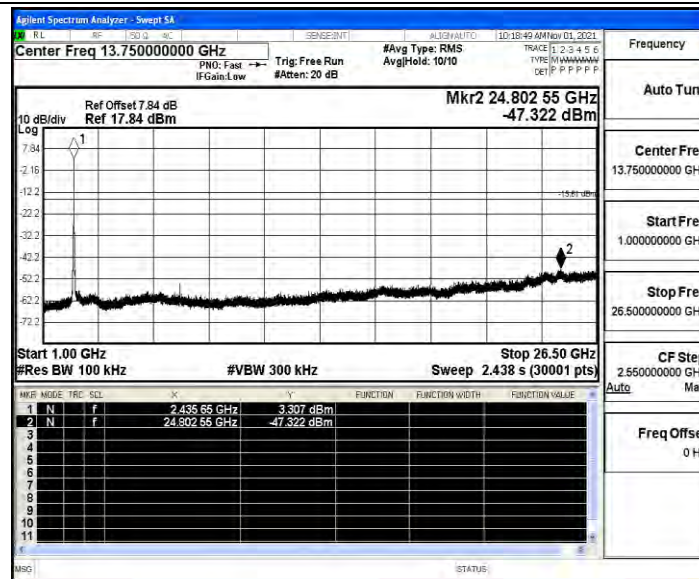
11G_Ant1_2437_0~Reference



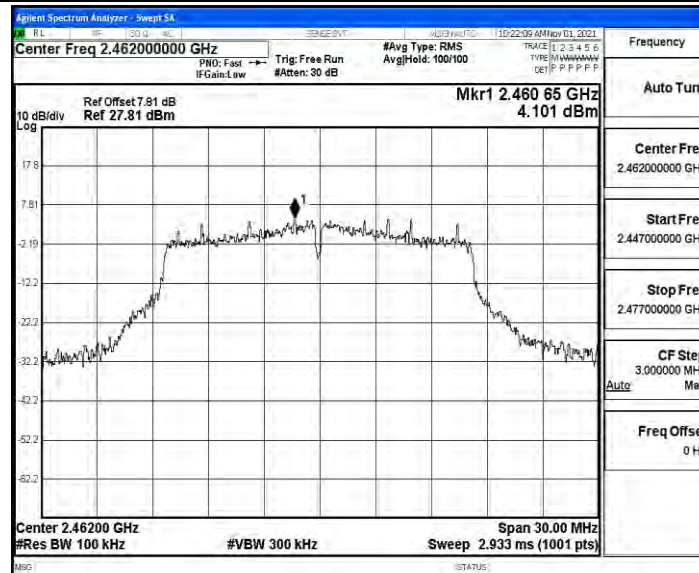
11G_Ant1_2437_30~1000



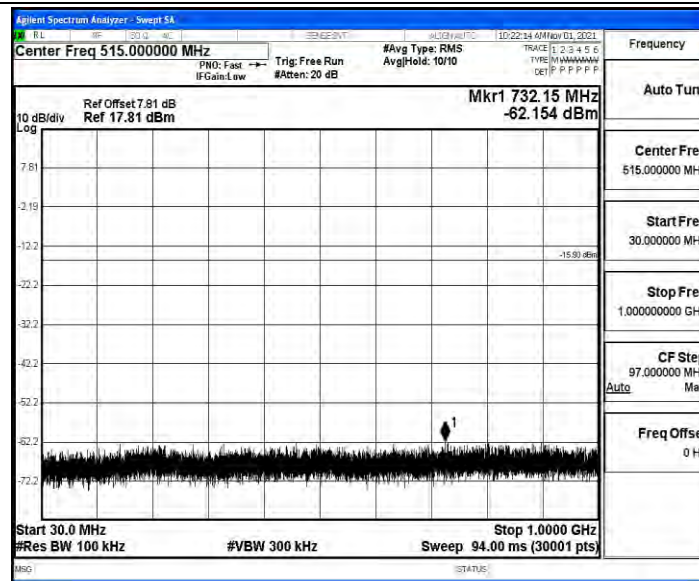
11G_Ant1_2437_1000~26500



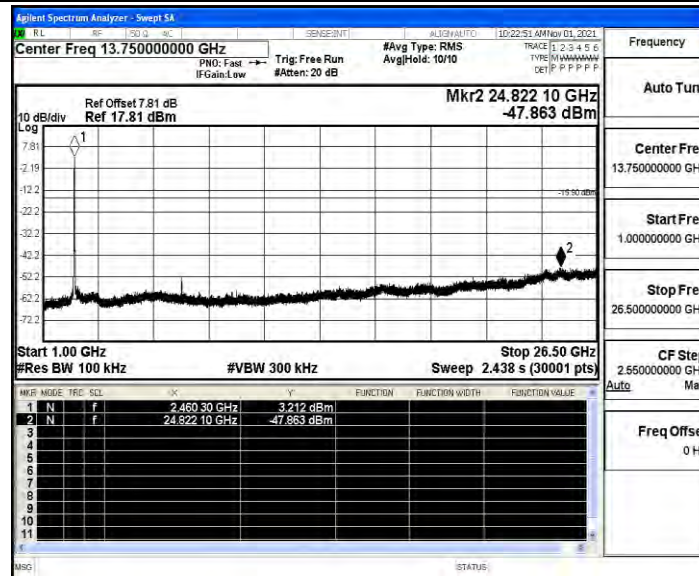
11G_Ant1_2462_0~Reference



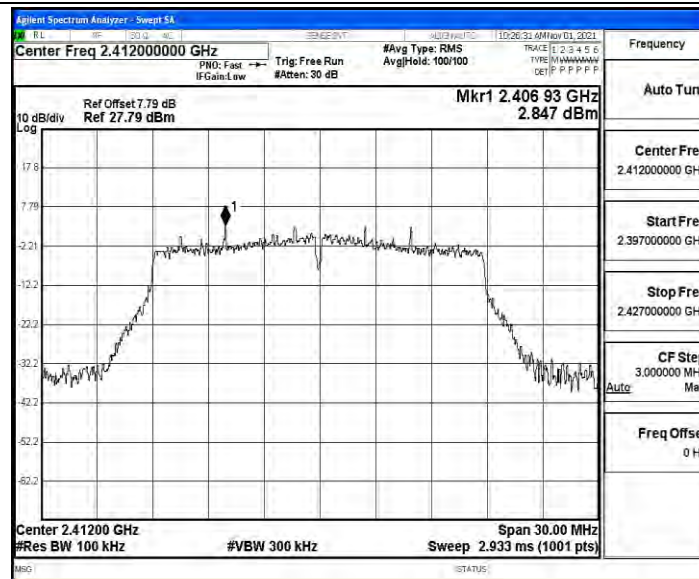
11G_Ant1_2462_30~1000



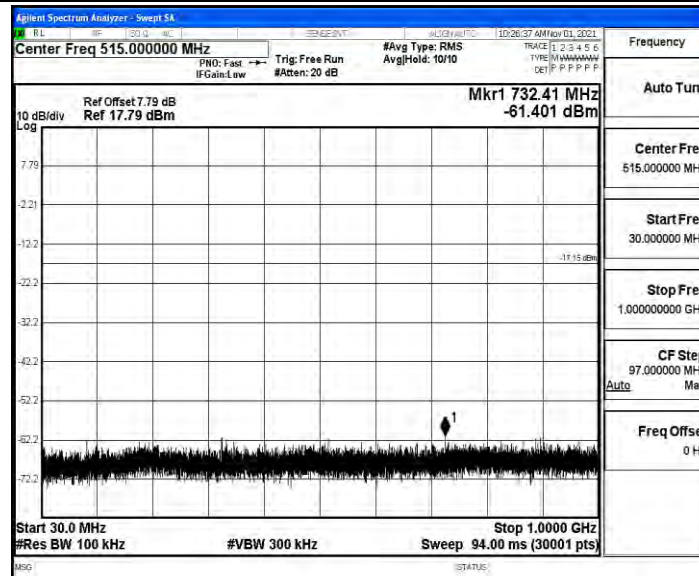
11G_Ant1_2462_1000~26500



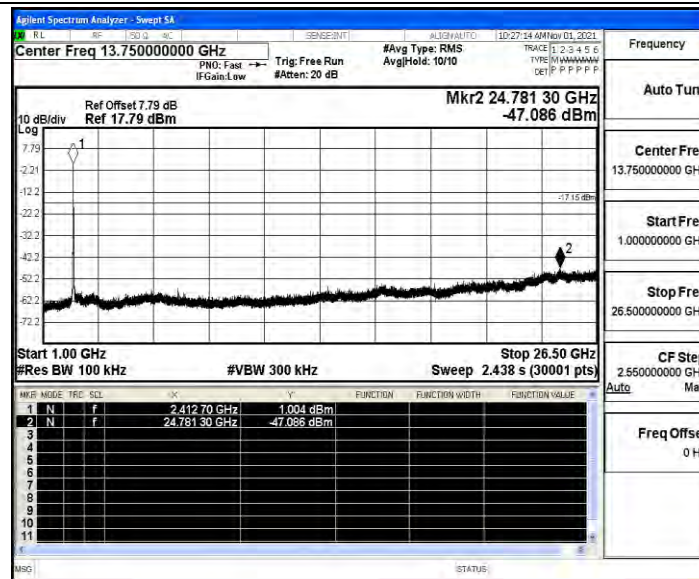
11N20SISO_Ant1_2412_0~Reference



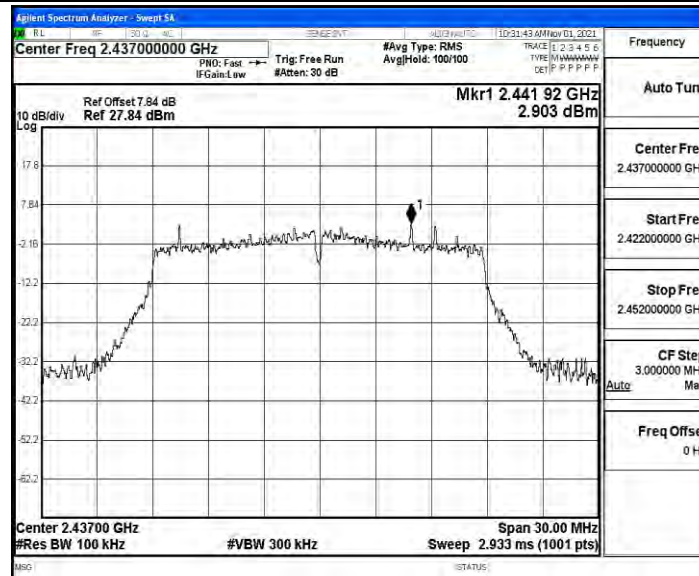
11N20SISO_Ant1_2412_30~1000



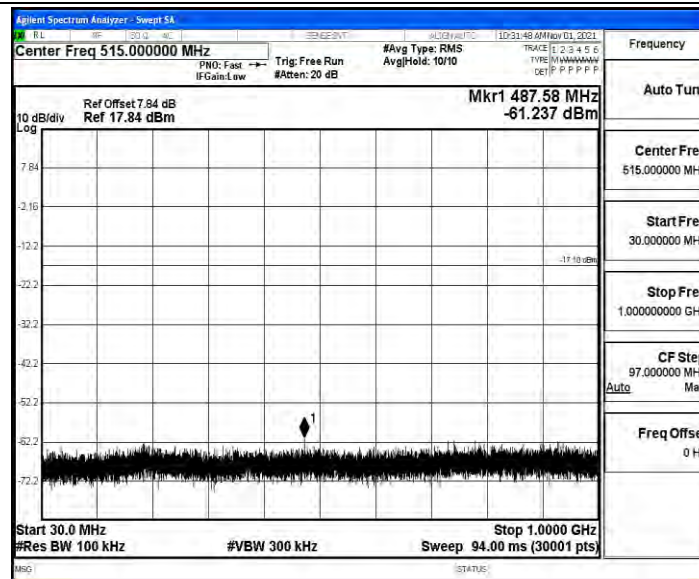
11N20SISO_Ant1_2412_1000~26500



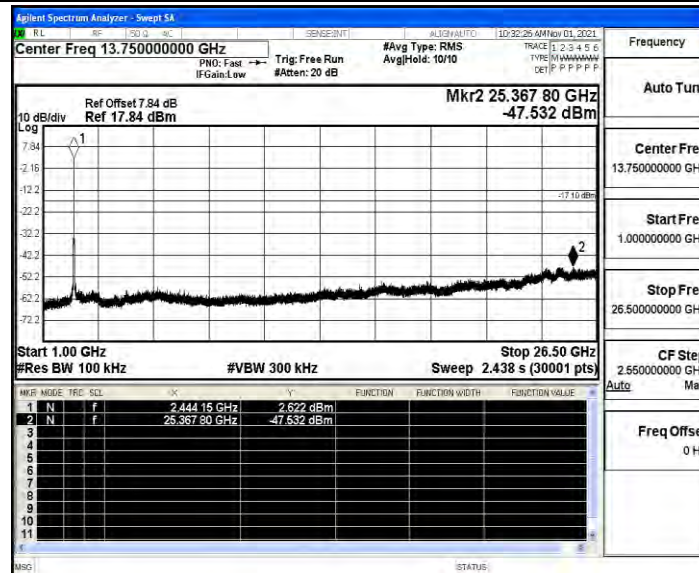
11N20SISO_Ant1_2437_0~Reference



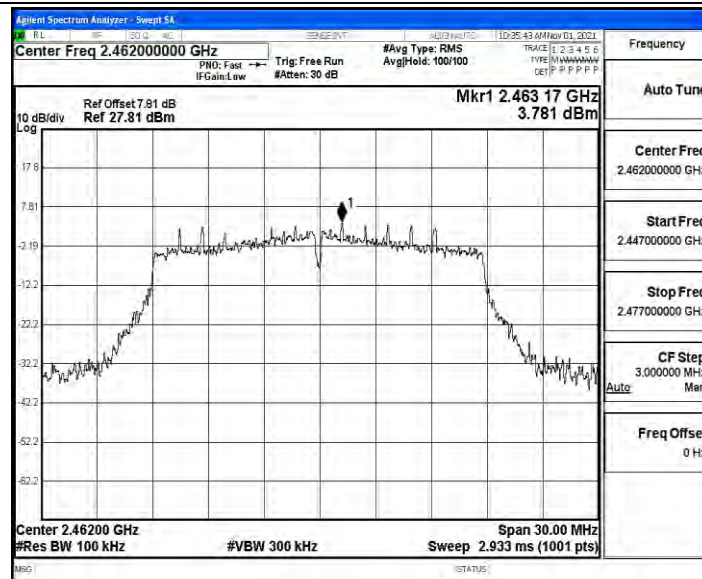
11N20SISO_Ant1_2437_30~1000



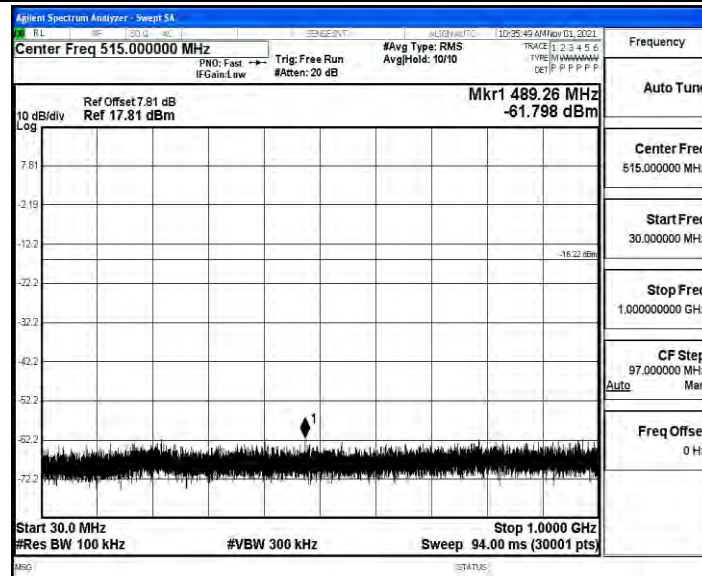
11N20SISO_Ant1_2437_1000~26500



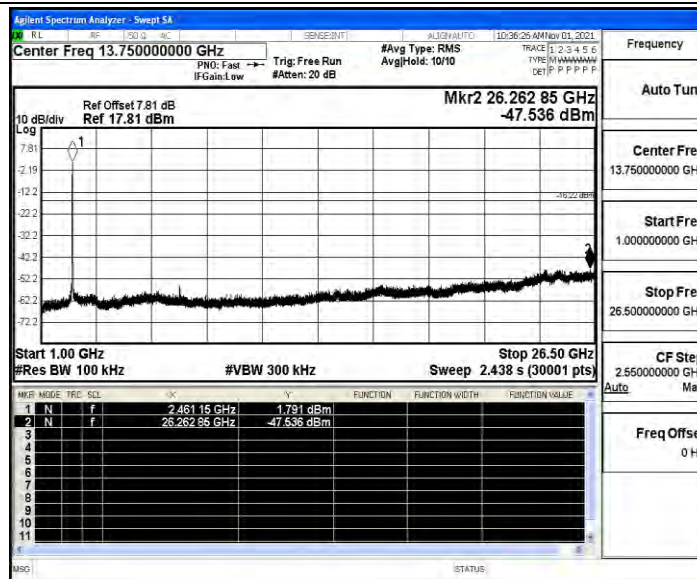
11N20SISO_Ant1_2462_0~Reference



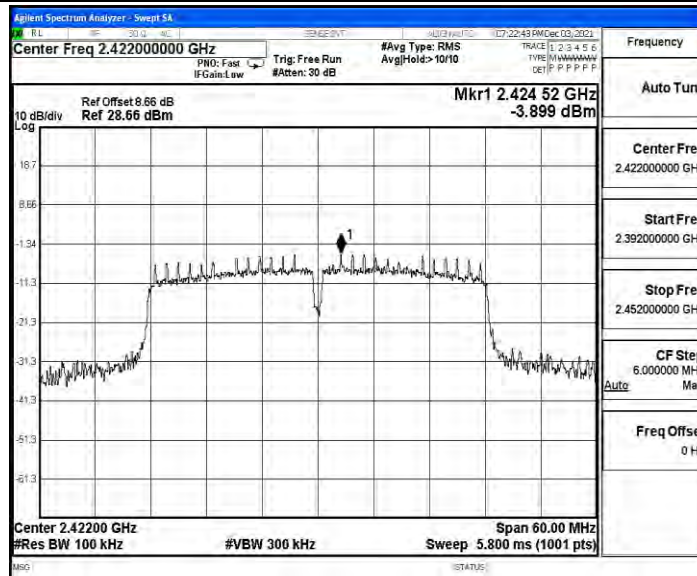
11N20SISO_Ant1_2462_30~1000



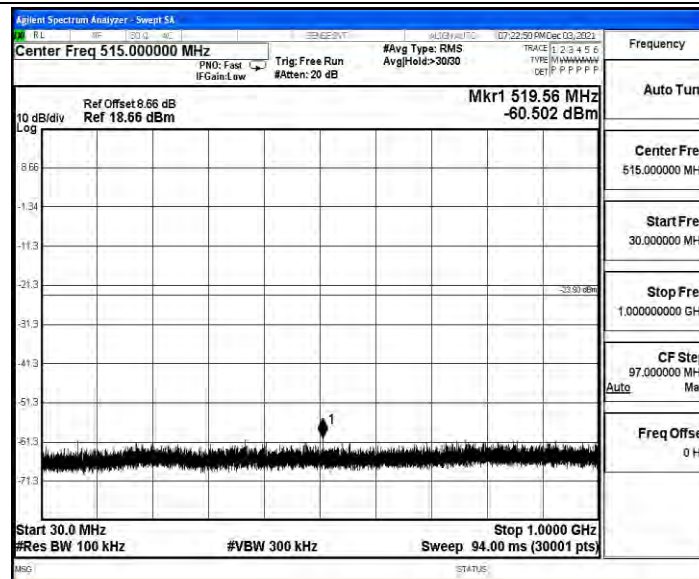
11N20SISO_Ant1_2462_1000~26500



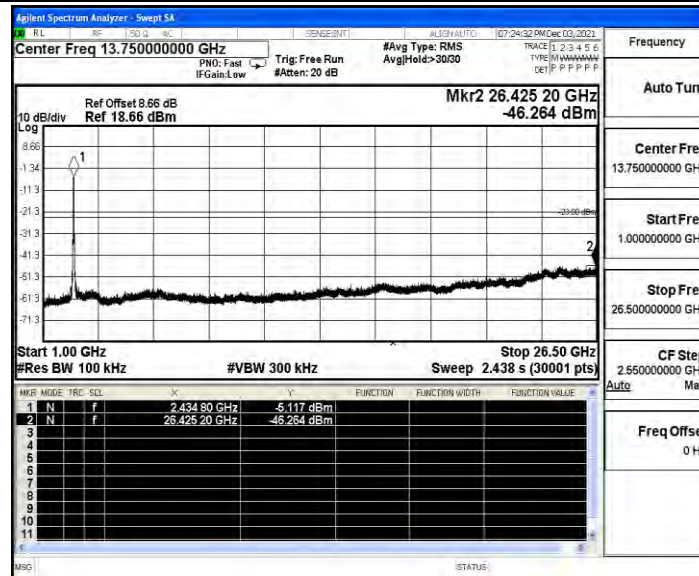
11N40SISO_Ant1_2422_0~Reference



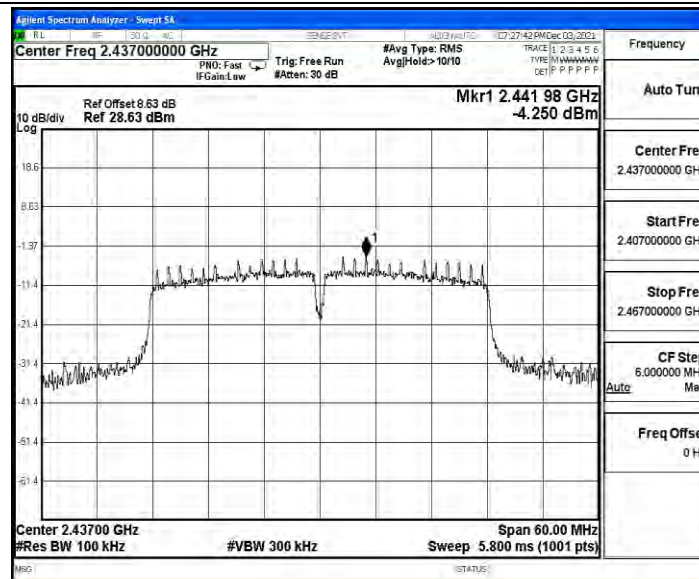
11N40SISO_Ant1_2422_30~1000



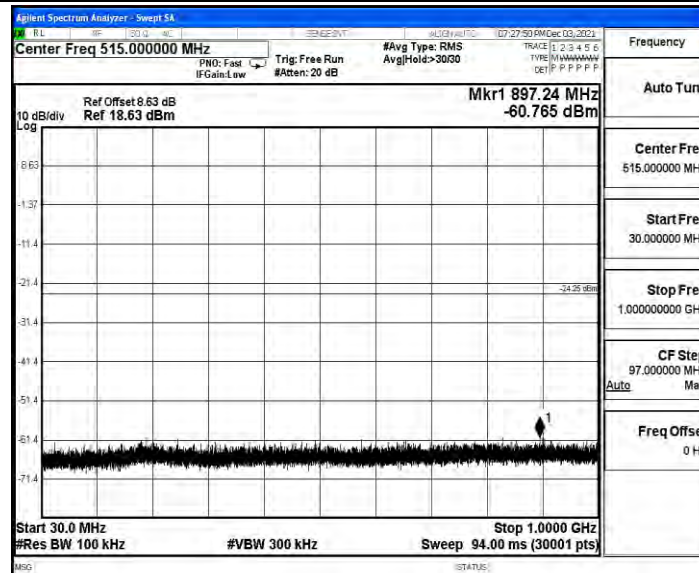
11N40SISO_Ant1_2422_1000~26500



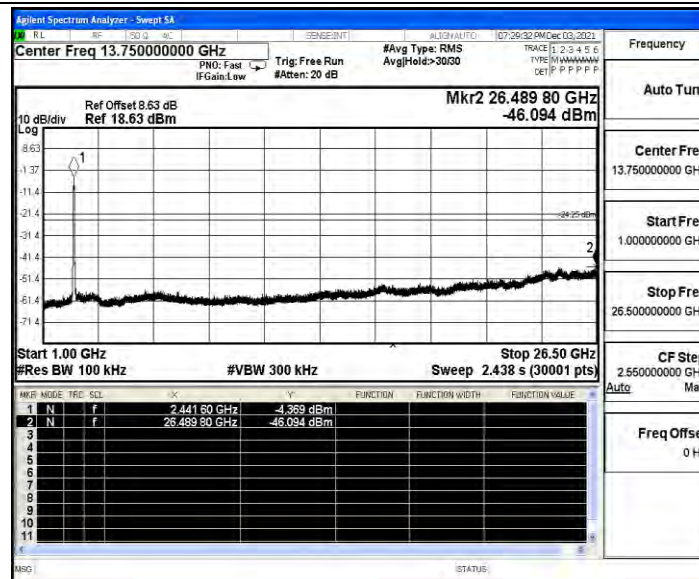
11N40SISO_Ant1_2437_0~Reference



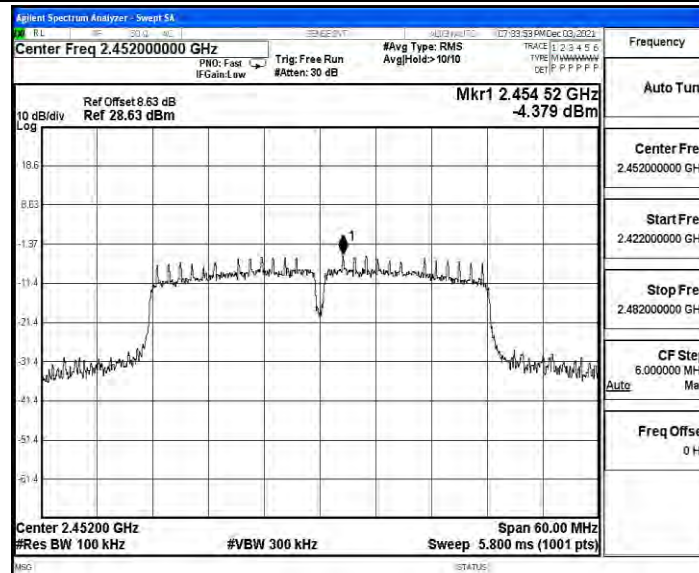
11N40SISO_Ant1_2437_30~1000



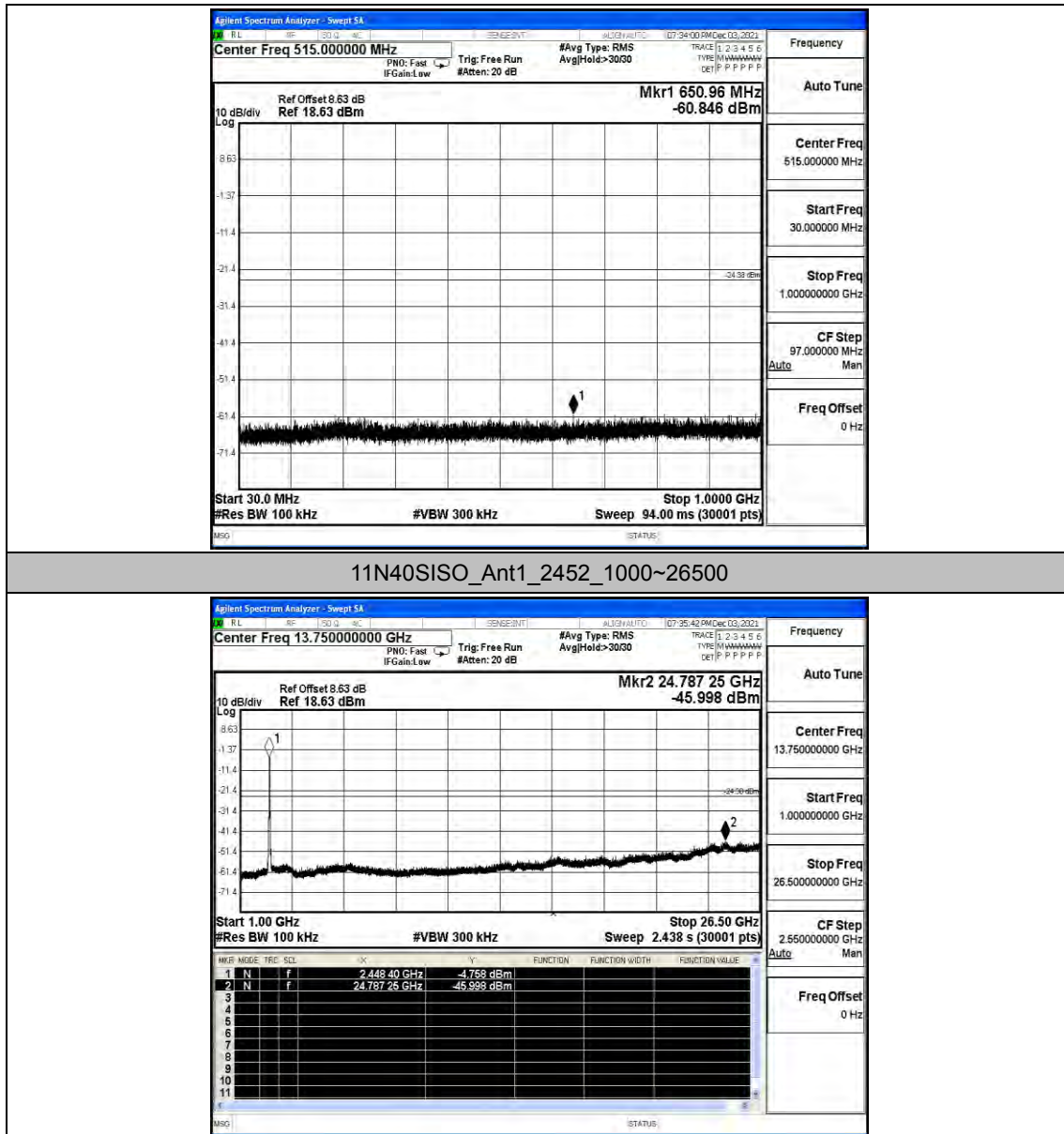
11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000





C.6 Duty Cycle

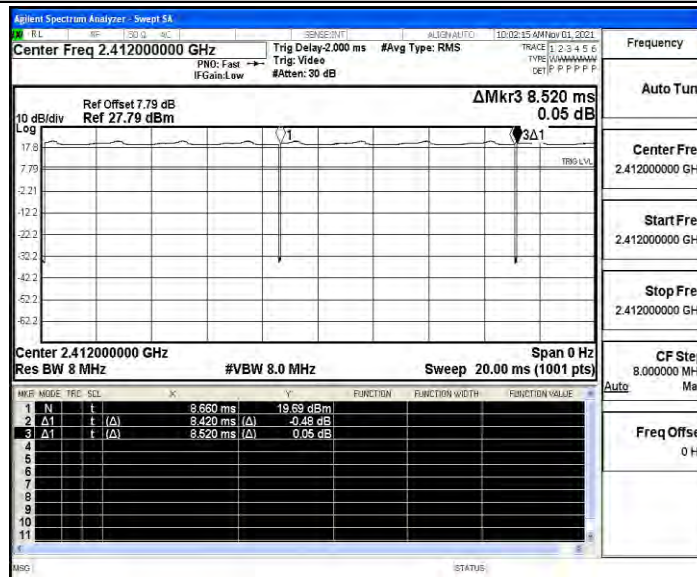
Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	8.42	8.52	98.83	---	PASS
		2437	8.42	8.52	98.83	---	PASS
		2462	8.42	8.52	98.83	---	PASS
11G	Ant1	2412	1.39	1.49	93.29	---	PASS
		2437	1.40	1.50	93.33	---	PASS
		2462	1.39	1.50	92.67	---	PASS
11N20SISO	Ant1	2412	1.30	1.41	92.20	---	PASS
		2437	1.30	1.41	92.20	---	PASS
		2462	1.30	1.41	92.20	---	PASS
11N40SISO	Ant1	2422	0.64	0.68	94.12	---	PASS
		2437	0.64	0.68	94.12	---	PASS
		2452	0.64	0.68	94.12	---	PASS

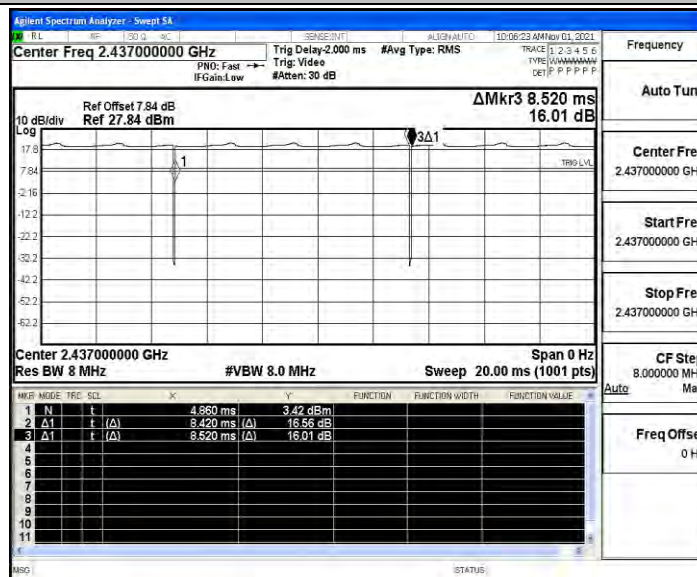


Test Graphs

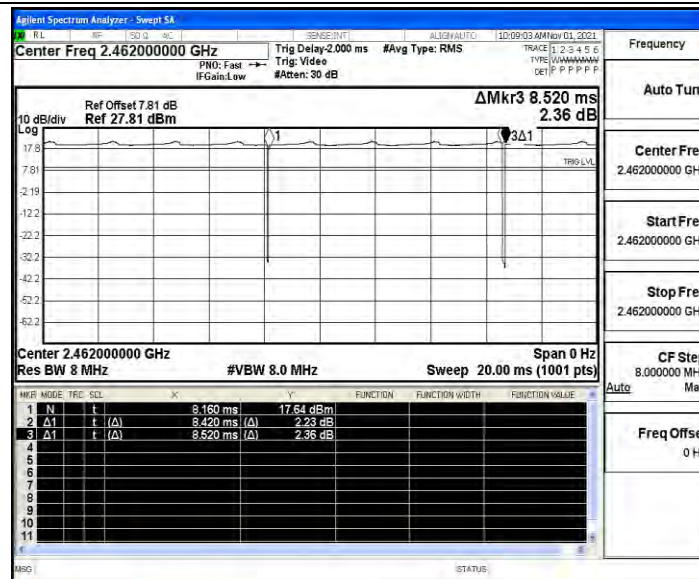
11B_Ant1_2412



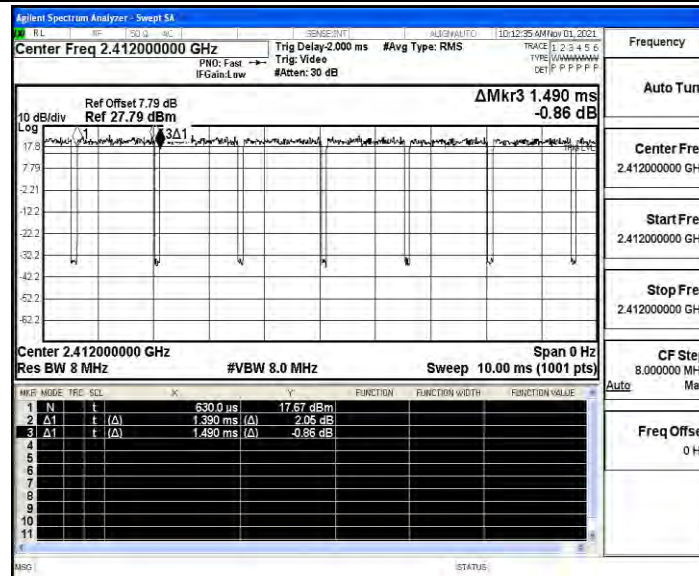
11B_Ant1_2437



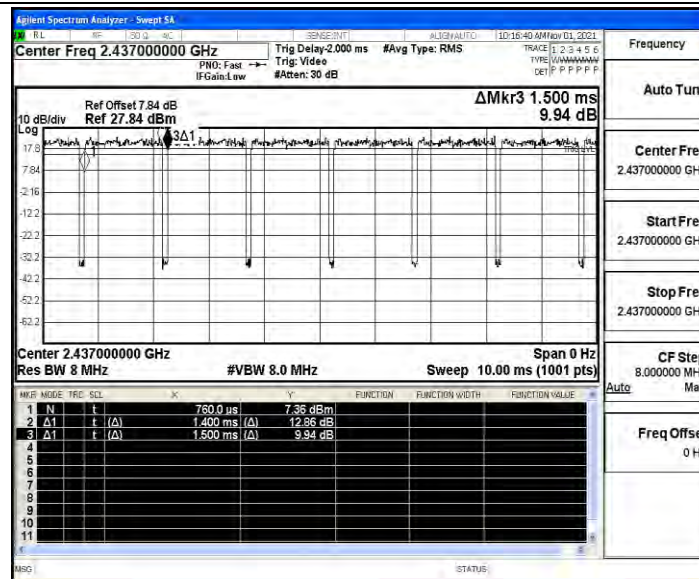
11B_Ant1_2462



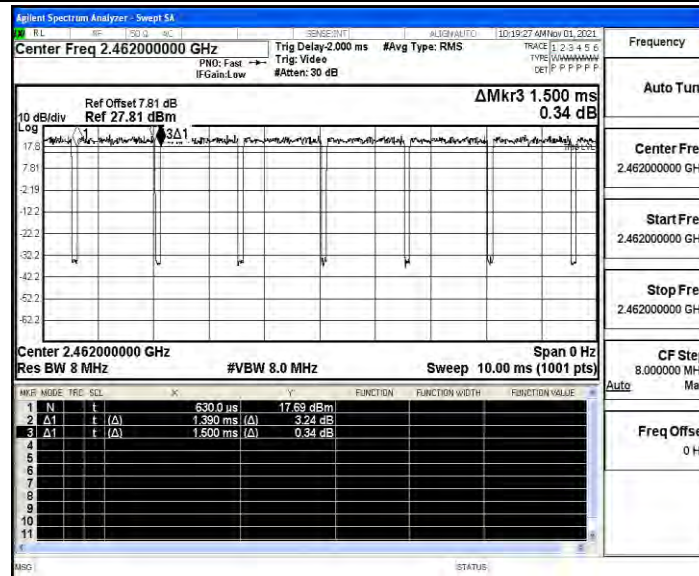
11G_Ant1_2412



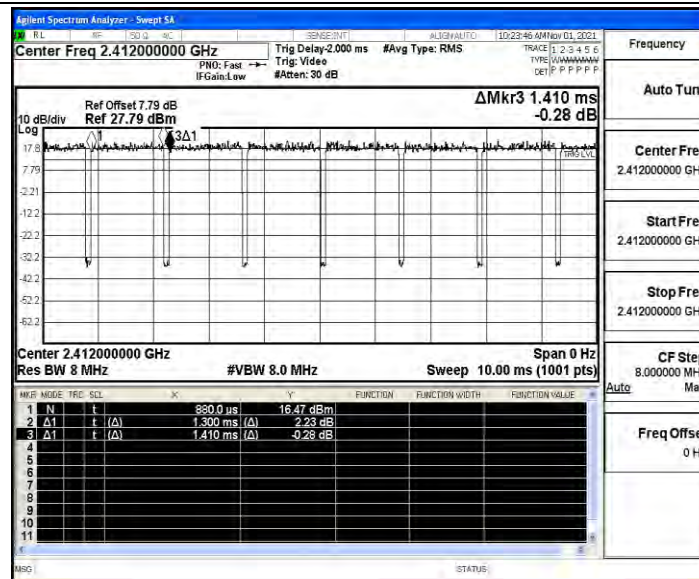
11G_Ant1_2437



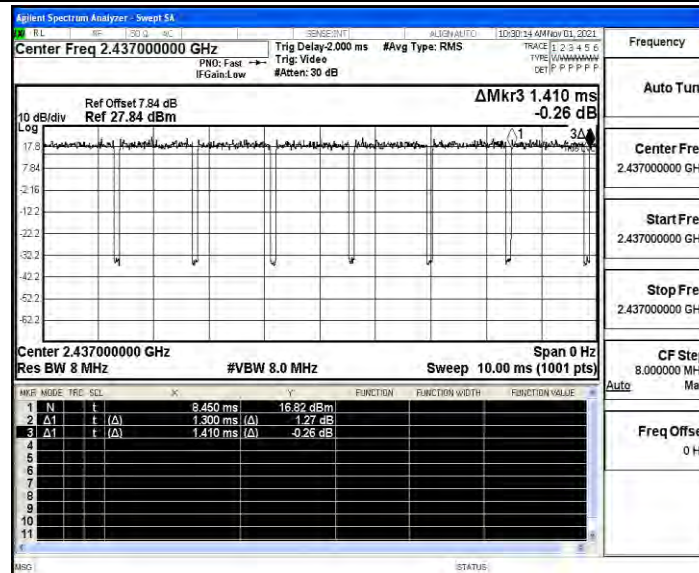
11G_Ant1_2462



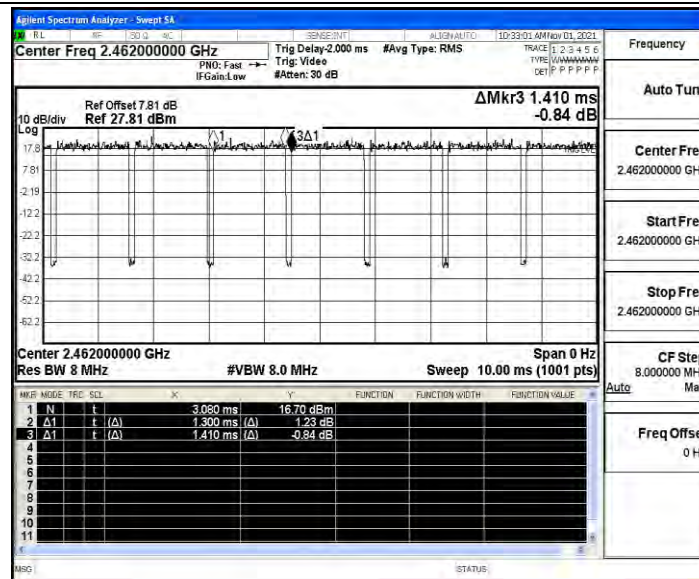
11N20SISO_Ant1_2412



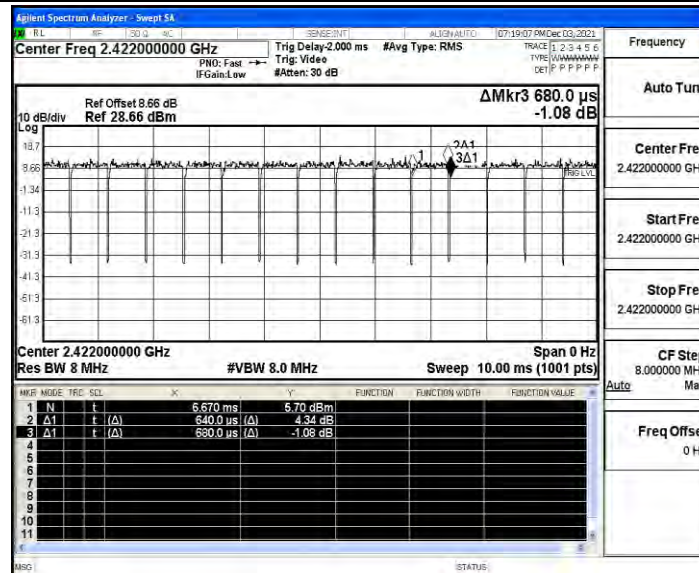
11N20SISO_Ant1_2437



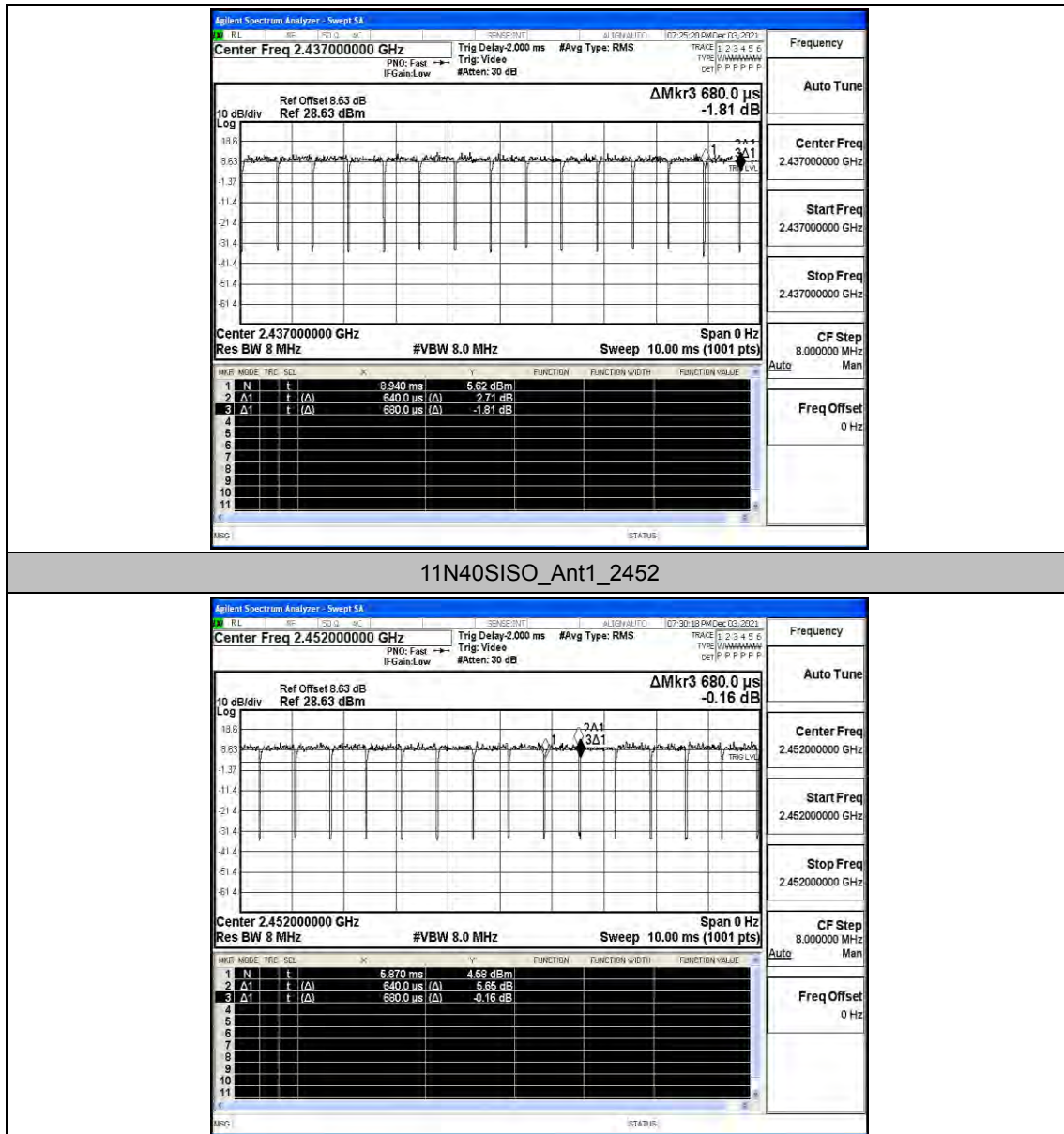
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437





C.7 Emissions in Restricted Bands

Test Result

TestMode	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	2412	AV	2310.000	-48.84	≤-41.20	46.36	≤54	PASS
		AV	2389.700	-47.95	≤-41.20	47.25	≤54	PASS
		AV	2390.000	-48.02	≤-41.20	47.18	≤54	PASS
		Peak	2310.000	-46.78	≤-21.20	48.42	≤74	PASS
		Peak	2377.870	-37.36	≤-21.20	57.84	≤74	PASS
		Peak	2390.000	-41.79	≤-21.20	53.41	≤74	PASS
	2462	AV	2483.500	-47.22	≤-41.20	47.98	≤54	PASS
		AV	2483.560	-47.11	≤-41.20	48.09	≤54	PASS
		AV	2500.000	-47.52	≤-41.20	47.68	≤54	PASS
		Peak	2483.500	-43.17	≤-21.20	52.03	≤74	PASS
		Peak	2485.100	-39.21	≤-21.20	55.99	≤74	PASS
		Peak	2500.000	-43.96	≤-21.20	51.24	≤74	PASS
11G	2412	AV	2310.000	-48.45	≤-41.20	46.75	≤54	PASS
		AV	2389.960	-45.55	≤-41.20	49.65	≤54	PASS
		AV	2390.000	-45.55	≤-41.20	49.65	≤54	PASS
		Peak	2310.000	-42.78	≤-21.20	52.42	≤74	PASS
		Peak	2388.140	-34.99	≤-21.20	60.21	≤74	PASS
		Peak	2390.000	-39.05	≤-21.20	56.15	≤74	PASS
	2462	AV	2483.500	-45.6	≤-41.20	49.60	≤54	PASS
		AV	2483.670	-45.53	≤-41.20	49.67	≤54	PASS
		AV	2500.000	-47.26	≤-41.20	47.94	≤54	PASS
		Peak	2483.500	-37.18	≤-21.20	58.02	≤74	PASS
		Peak	2483.560	-32.14	≤-21.20	63.06	≤74	PASS
		Peak	2500.000	-40.31	≤-21.20	54.89	≤74	PASS
11N20 SISO	2412	AV	2310.000	-48.27	≤-41.20	46.93	≤54	PASS
		AV	2389.440	-46.15	≤-41.20	49.05	≤54	PASS
		AV	2390.000	-46.32	≤-41.20	48.88	≤54	PASS
		Peak	2310.000	-41.68	≤-21.20	53.52	≤74	PASS
		Peak	2388.920	-36.55	≤-21.20	58.65	≤74	PASS
		Peak	2390.000	-37.86	≤-21.20	57.34	≤74	PASS
	2462	AV	2483.500	-45.96	≤-41.20	49.24	≤54	PASS
		AV	2483.560	-45.86	≤-41.20	49.34	≤54	PASS
		AV	2500.000	-47.31	≤-41.20	47.89	≤54	PASS
		Peak	2483.500	-37.61	≤-21.20	57.59	≤74	PASS
		Peak	2486.860	-35.41	≤-21.20	59.79	≤74	PASS
		Peak	2500.000	-41	≤-21.20	54.20	≤74	PASS



11N40 SISO	2422	AV	2310.000	-47.77	≤ -41.20	47.43	≤ 54	PASS
		AV	2389.310	-45.27	≤ -41.20	49.93	≤ 54	PASS
		AV	2390.000	-45.77	≤ -41.20	49.43	≤ 54	PASS
		Peak	2310.000	-38.32	≤ -21.20	56.88	≤ 74	PASS
		Peak	2389.050	-31.29	≤ -21.20	63.91	≤ 74	PASS
		Peak	2390.000	-32.59	≤ -21.20	62.61	≤ 74	PASS
	2452	AV	2483.500	-45.95	≤ -41.20	49.25	≤ 54	PASS
		AV	2483.670	-45.52	≤ -41.20	49.68	≤ 54	PASS
		AV	2500.000	-46.69	≤ -41.20	48.51	≤ 54	PASS
		Peak	2483.500	-31.56	≤ -21.20	63.64	≤ 74	PASS
		Peak	2486.310	-29.55	≤ -21.20	65.65	≤ 74	PASS
		Peak	2500.000	-37.77	≤ -21.20	57.43	≤ 74	PASS

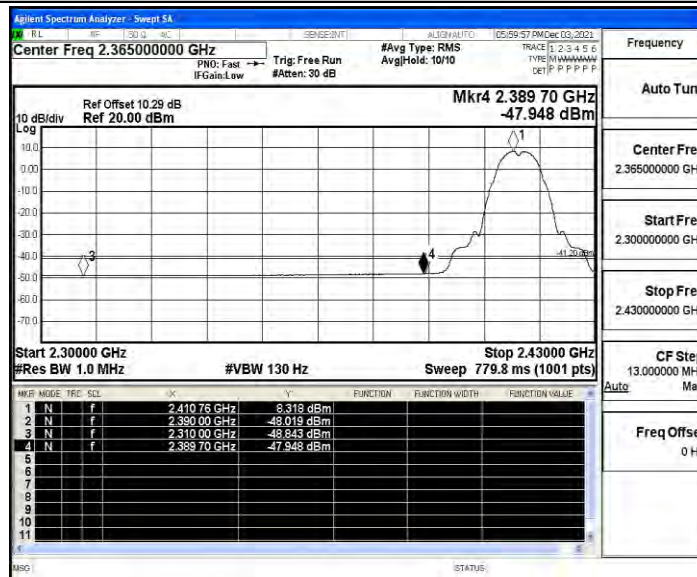
Note:

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.

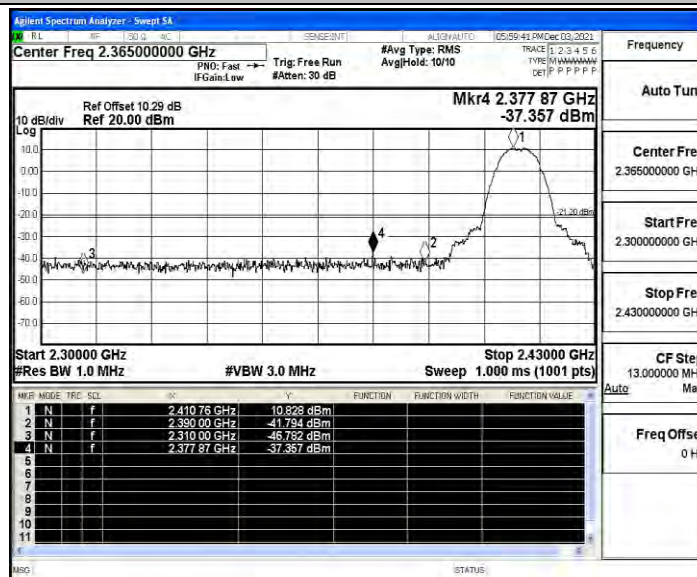


Test Graphs

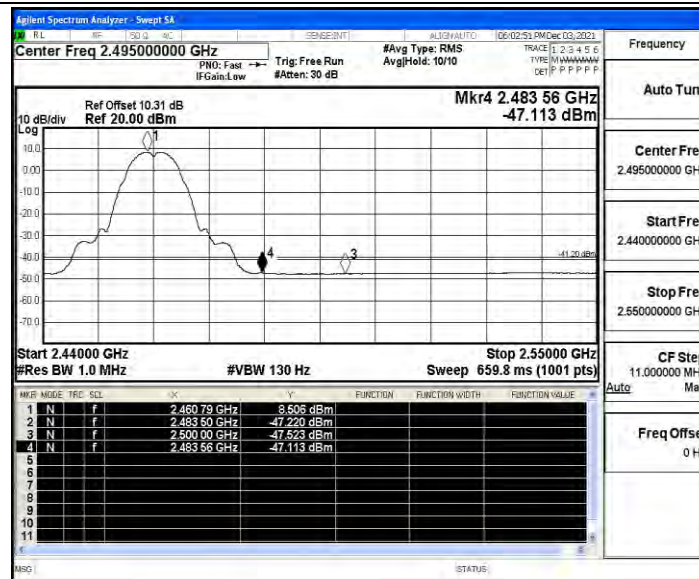
11B_Ant1_Low_2412_AV



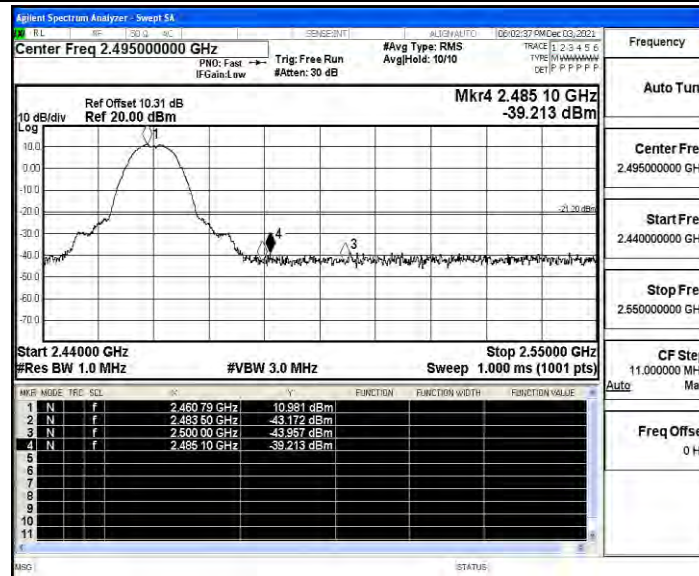
11B_Ant1_Low_2412_Peak



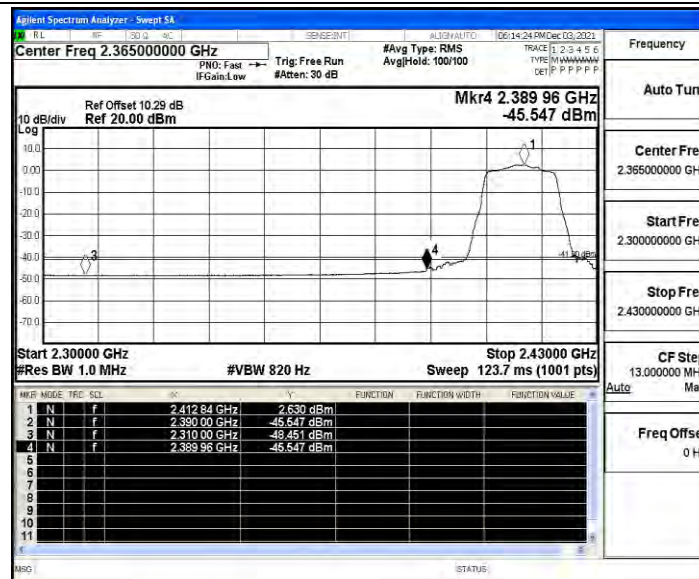
11B_Ant1_High_2462_AV



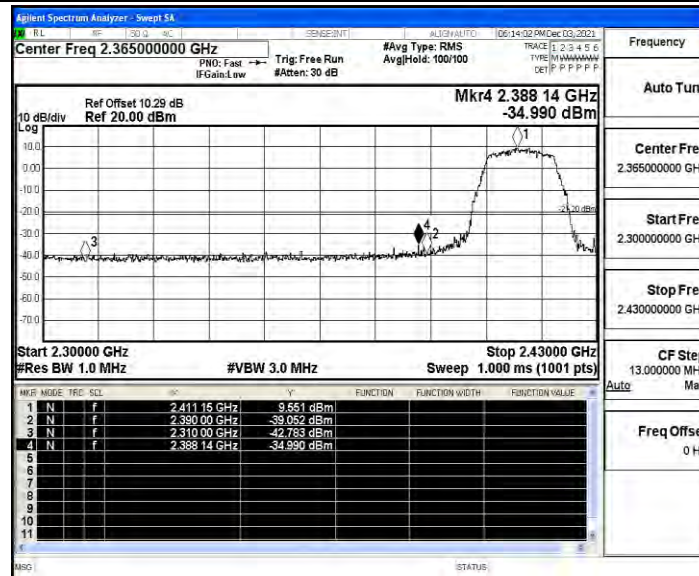
11B_Ant1_High_2462_Peak



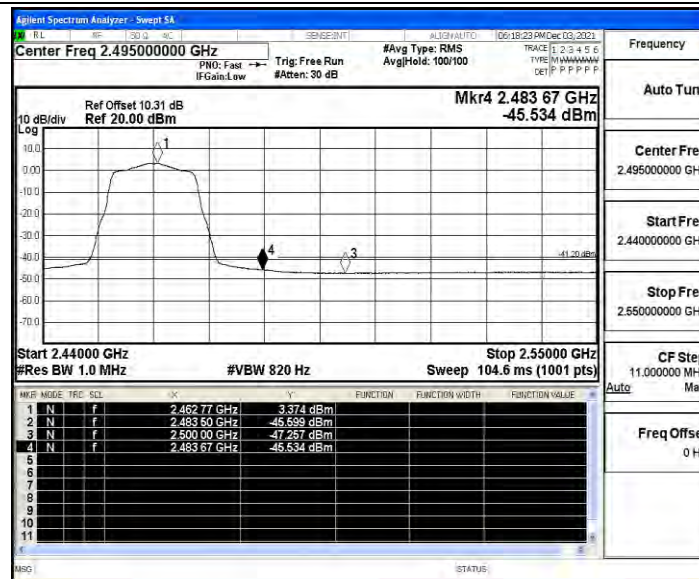
11G_Ant1_Low_2412_AV



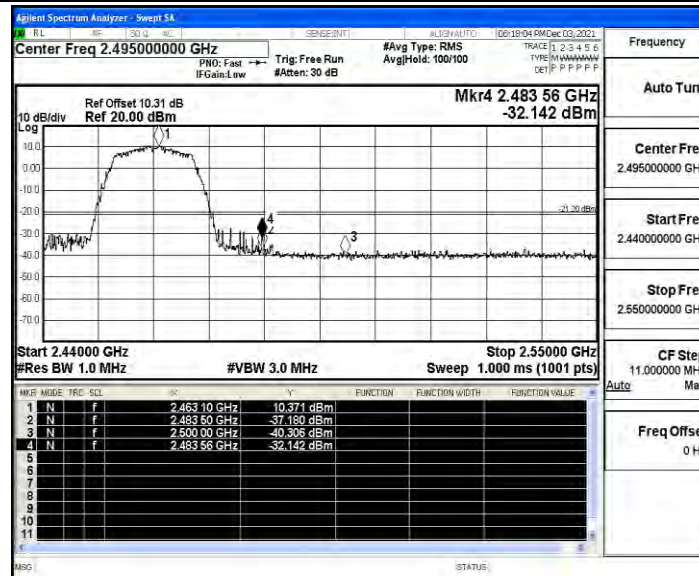
11G_Ant1_Low_2412_Peak



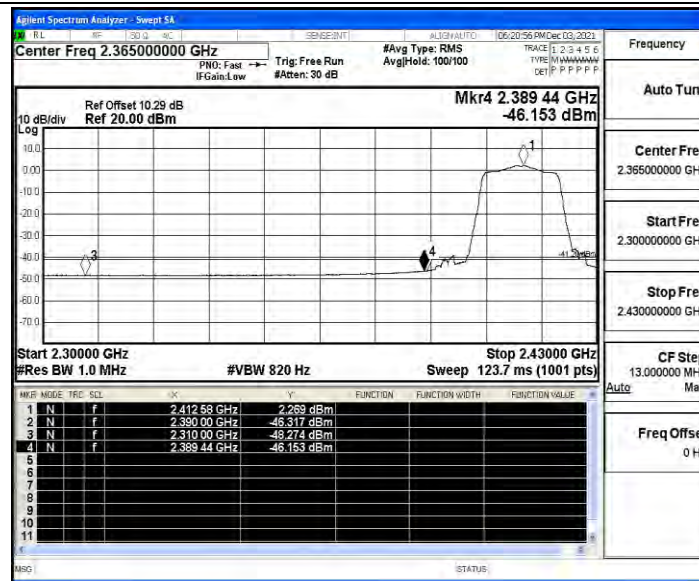
11G_Ant1_High_2462_AV



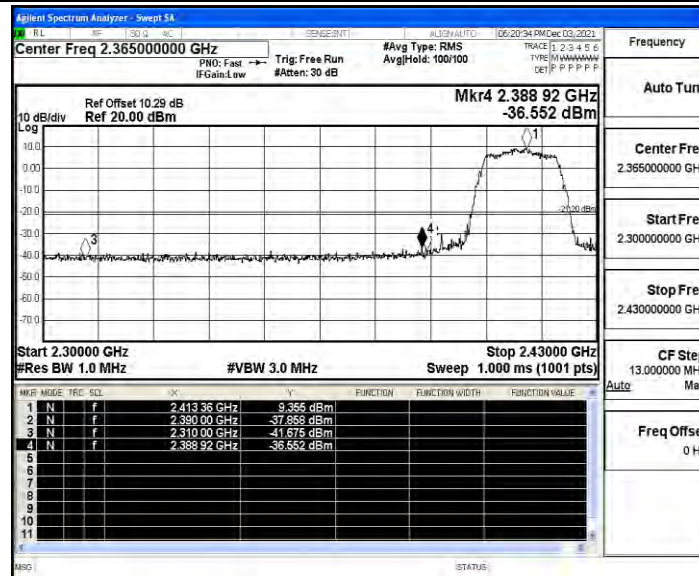
11G_Ant1_High_2462_Peak



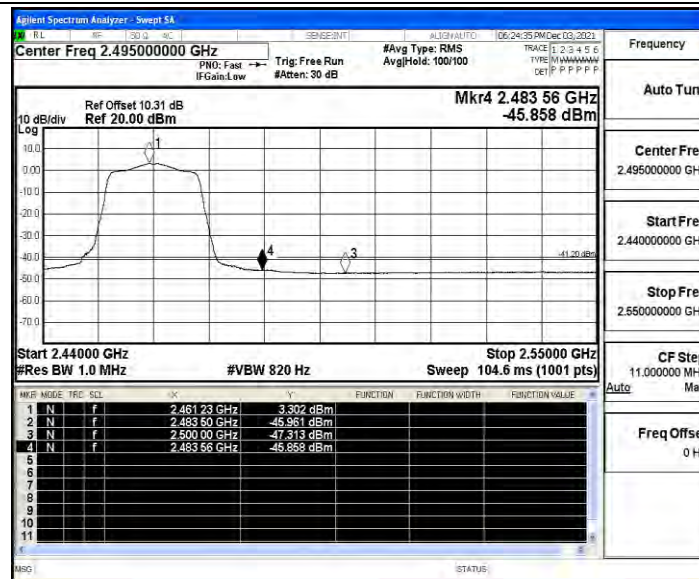
11N20SISO_Ant1_Low_2412_AV



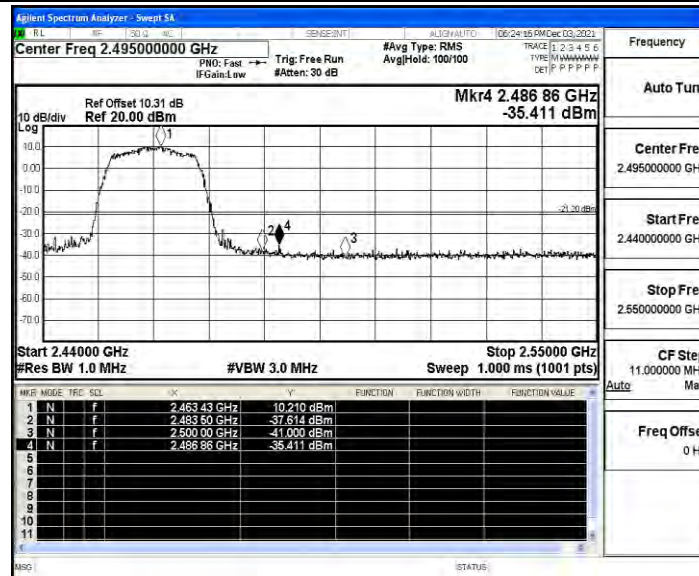
11N20SISO_Ant1_Low_2412_Peak



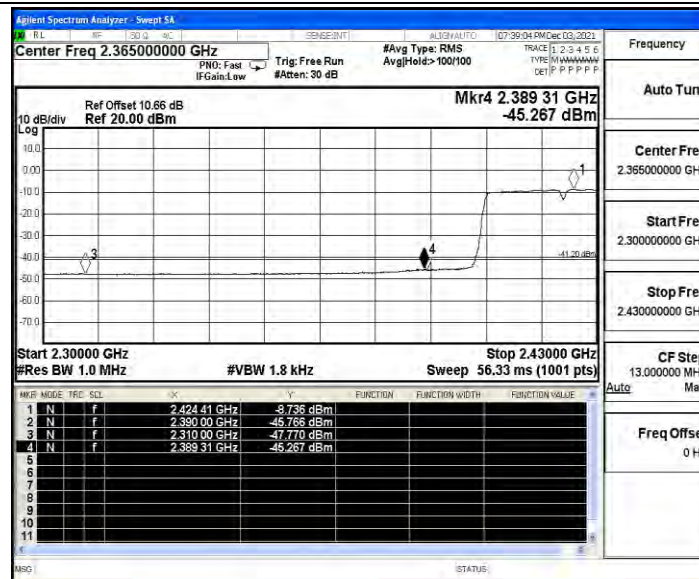
11N20SISO_Ant1_High_2462_AV



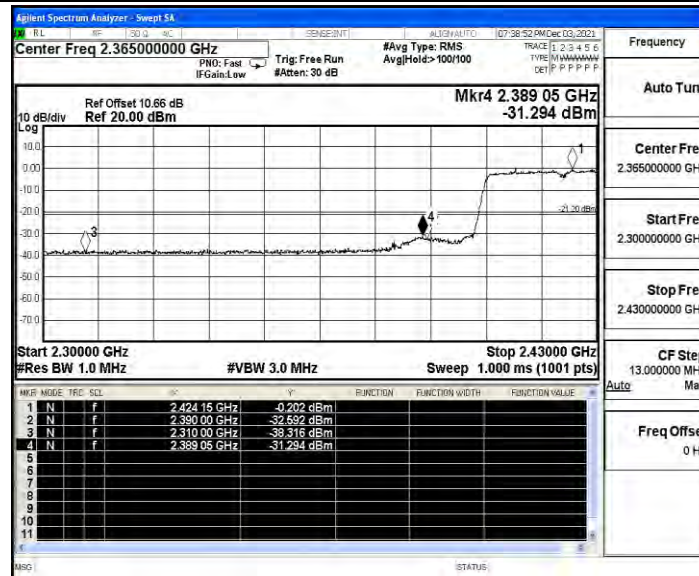
11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV

