



Appendix B

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Multi function projector

Test Model: NeoPix Prime One

Environmental Conditions

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



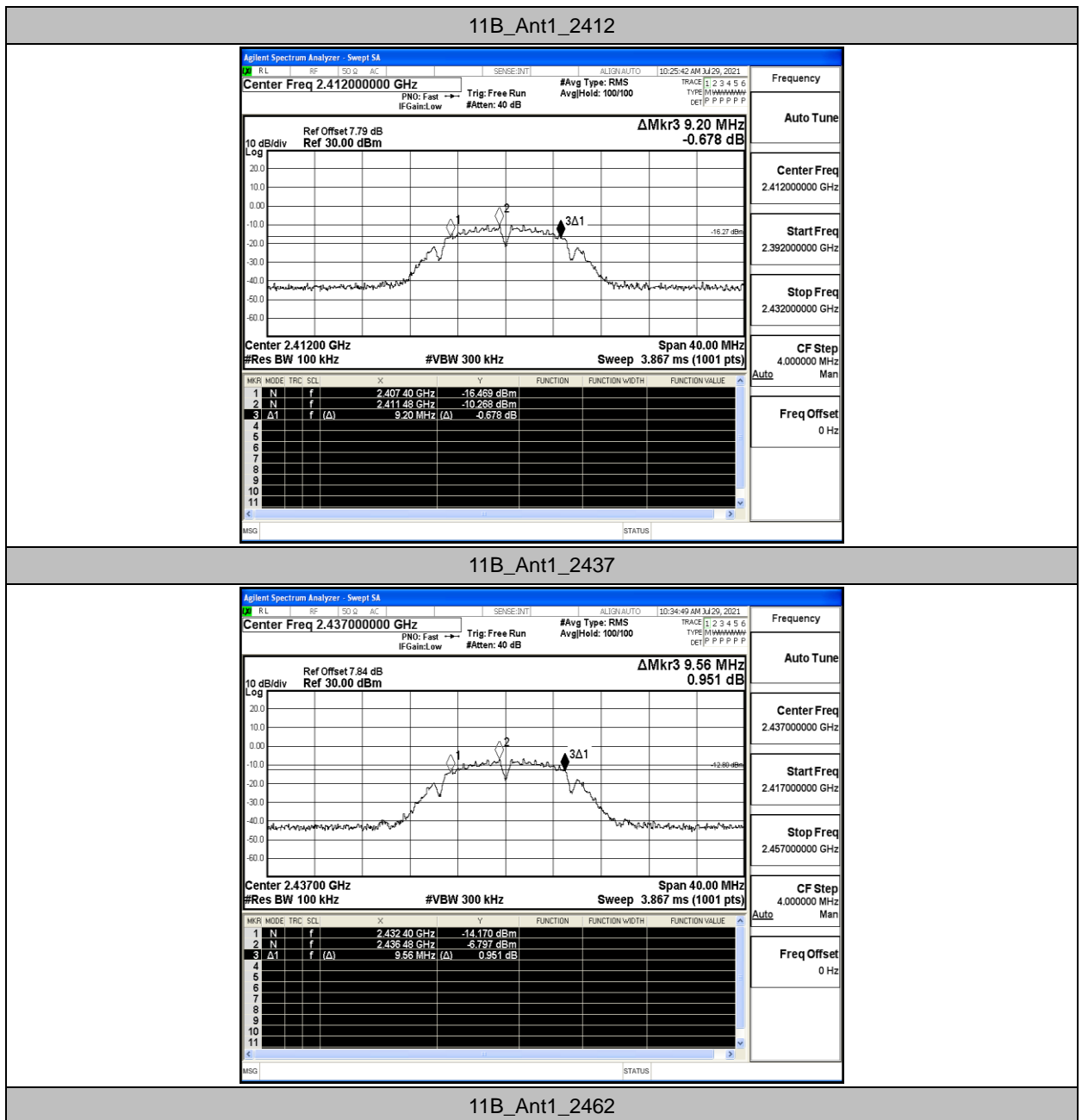
B.1 DTS Bandwidth

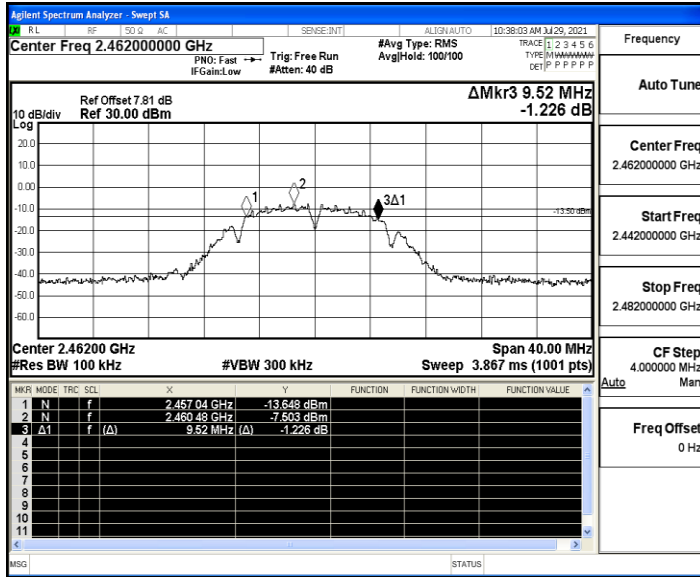
Test Result

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	9.560	2432.400	2441.960	0.5	PASS
		2462	9.520	2457.040	2466.560	0.5	PASS
11G	Ant1	2412	16.480	2403.760	2420.240	0.5	PASS
		2437	16.440	2428.800	2445.240	0.5	PASS
		2462	16.280	2453.680	2469.960	0.5	PASS
11N20SISO	Ant1	2412	17.680	2403.160	2420.840	0.5	PASS
		2437	17.680	2428.200	2445.880	0.5	PASS
		2462	17.000	2453.080	2470.080	0.5	PASS
11N40SISO	Ant1	2422	36.560	2403.760	2440.320	0.5	PASS
		2437	35.440	2419.800	2455.240	0.5	PASS
		2452	34.400	2434.160	2468.560	0.5	PASS

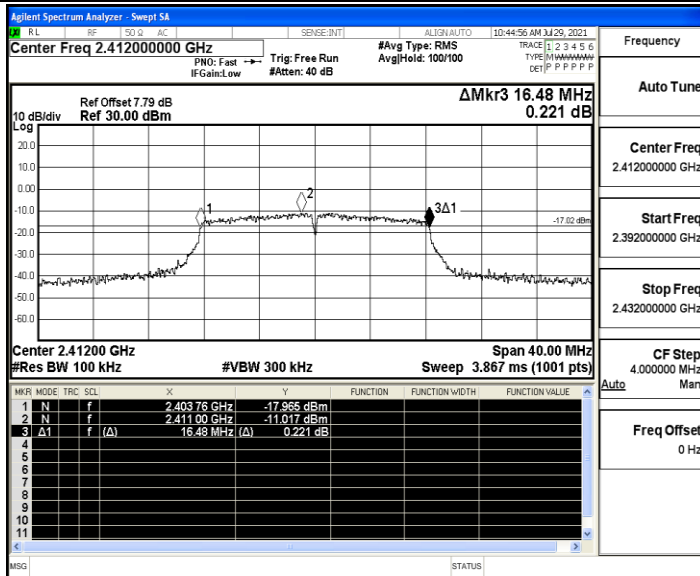


Test Graphs

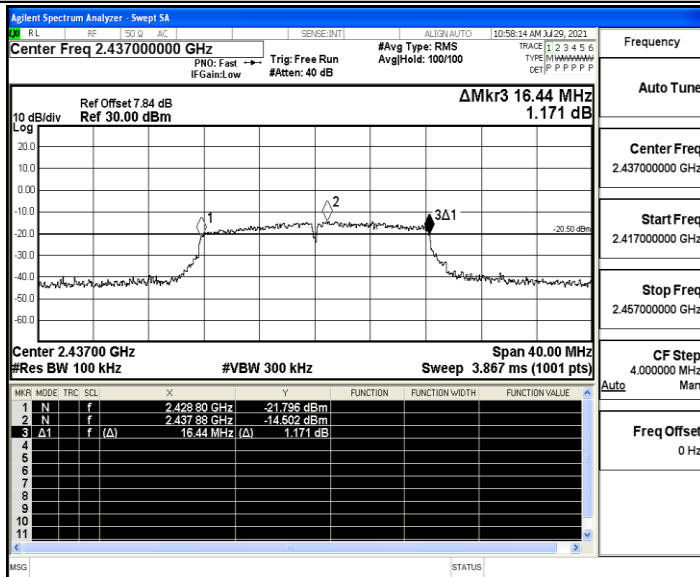




11G_Ant1_2412

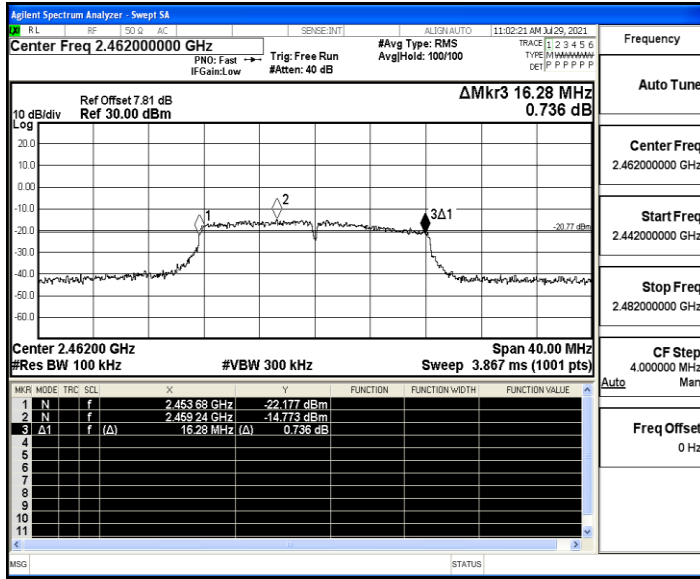


11G_Ant1_2437

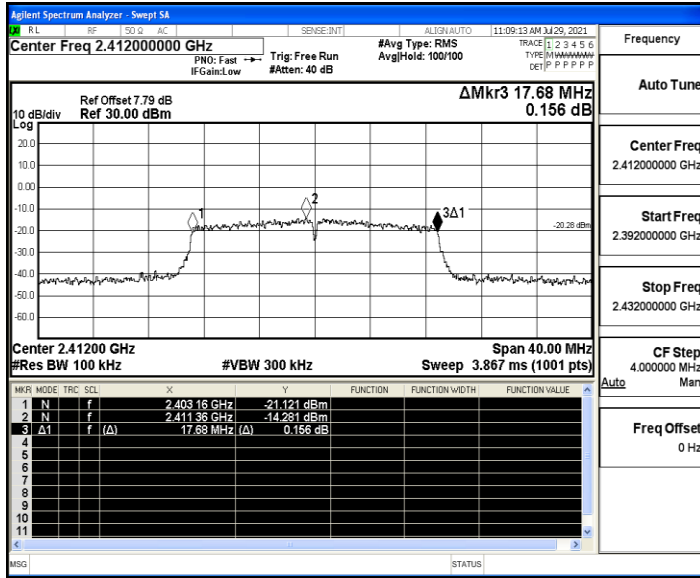




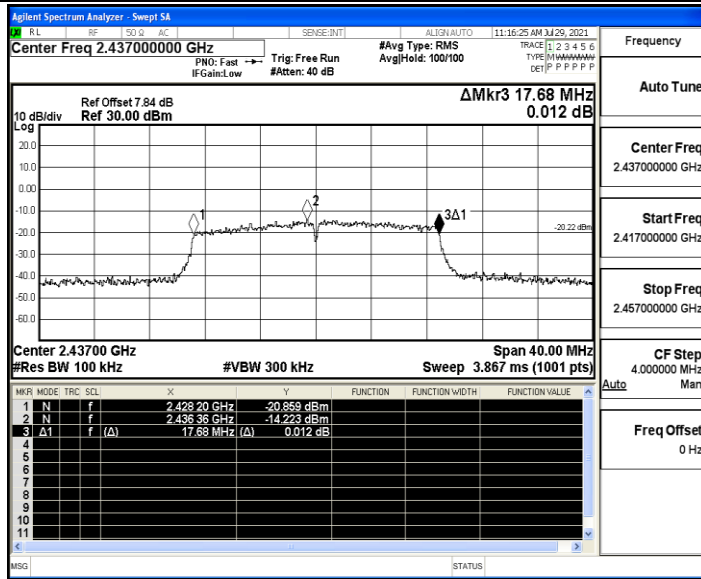
11G_Ant1_2462



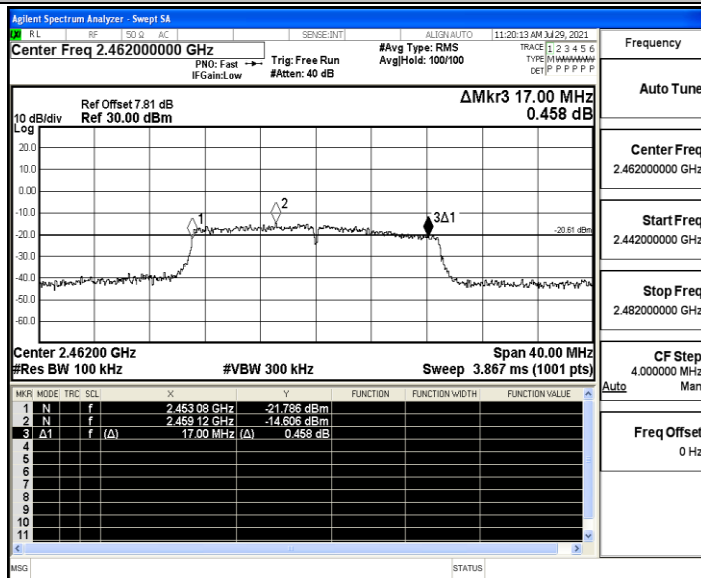
11N20SISO_Ant1_2412



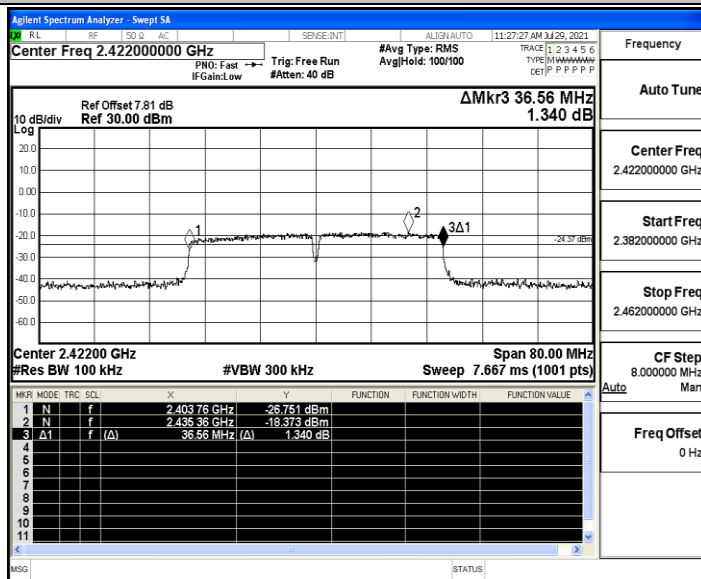
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

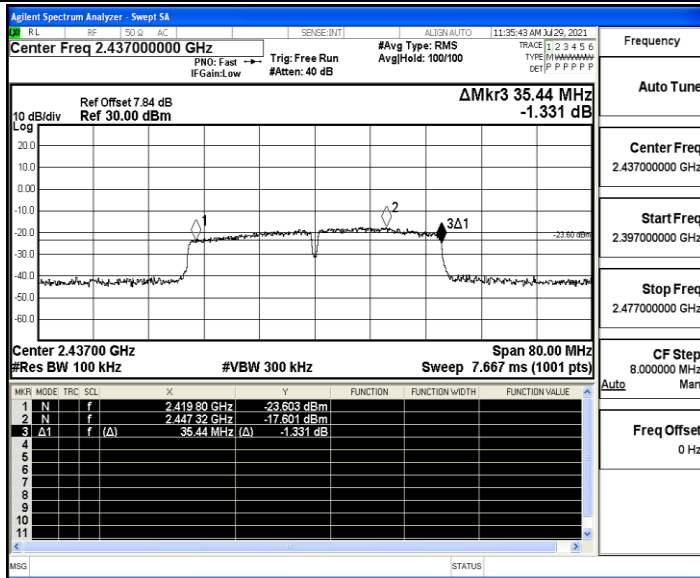


11N40SISO_Ant1_2422

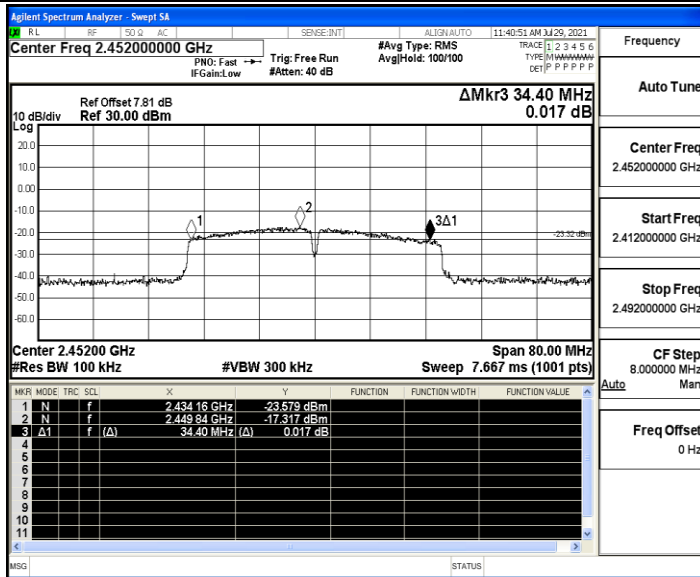




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





B.2 Maximum peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	13.02	≤30	PASS
		2437	13.06	≤30	PASS
		2462	12.12	≤30	PASS
11G	Ant1	2412	12.05	≤30	PASS
		2437	12.02	≤30	PASS
		2462	11.24	≤30	PASS
11N20SISO	Ant1	2412	12.24	≤30	PASS
		2437	12.35	≤30	PASS
		2462	11.54	≤30	PASS
11N40SISO	Ant1	2422	11.76	≤30	PASS
		2437	11.81	≤30	PASS
		2452	11.64	≤30	PASS



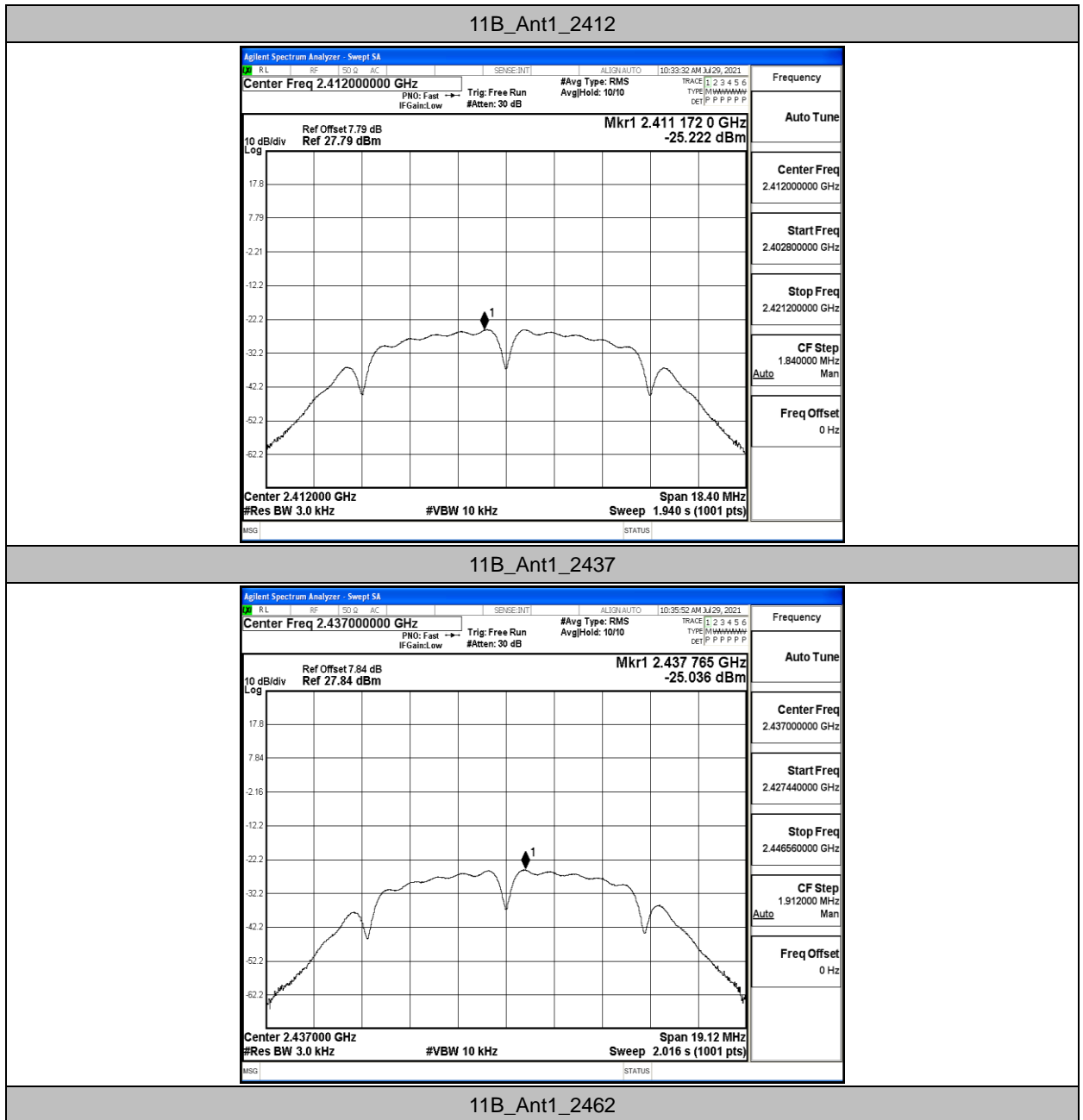
B.3 Maximum power spectral density

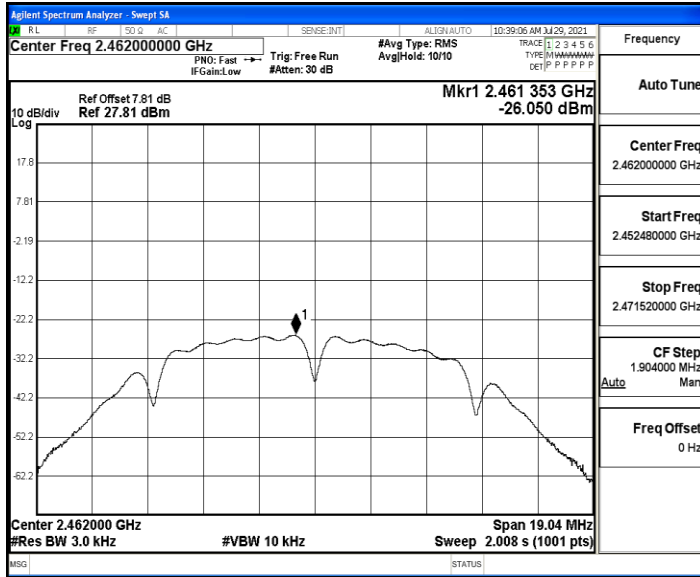
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-25.22	≤8	PASS
		2437	-25.04	≤8	PASS
		2462	-26.05	≤8	PASS
11G	Ant1	2412	-28.11	≤8	PASS
		2437	-28.26	≤8	PASS
		2462	-28.68	≤8	PASS
11N20SISO	Ant1	2412	-28.29	≤8	PASS
		2437	-28.2	≤8	PASS
		2462	-28.57	≤8	PASS
11N40SISO	Ant1	2422	-30.24	≤8	PASS
		2437	-28.58	≤8	PASS
		2452	-29.07	≤8	PASS

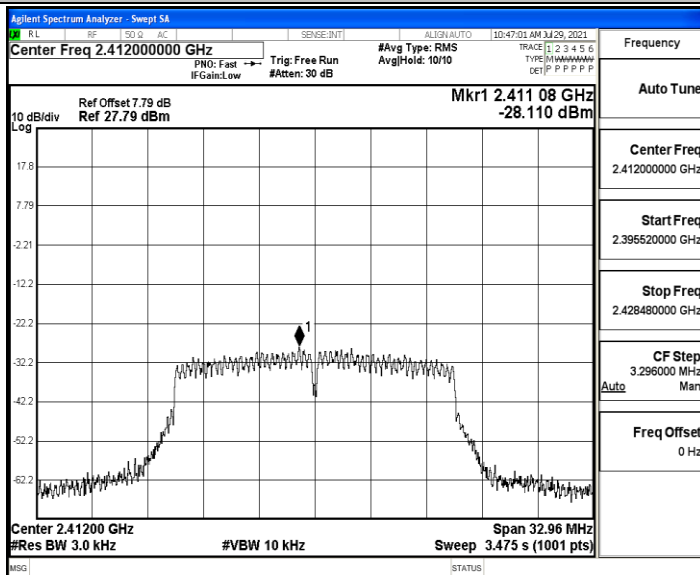


Test Graphs

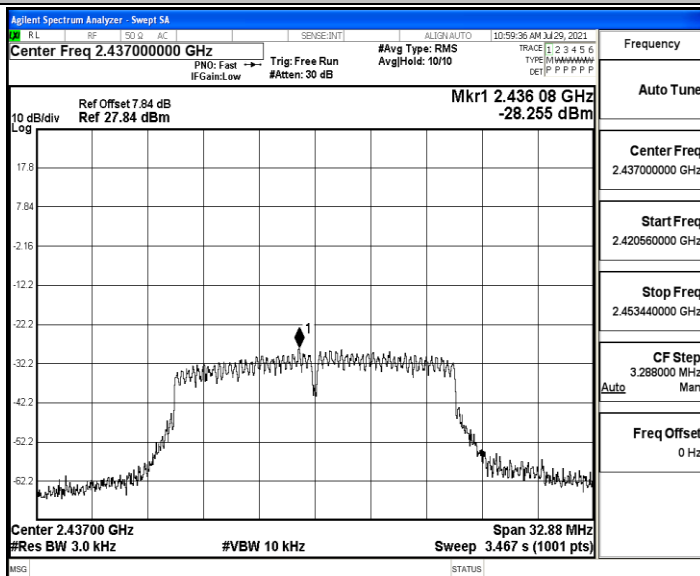




11G_Ant1_2412

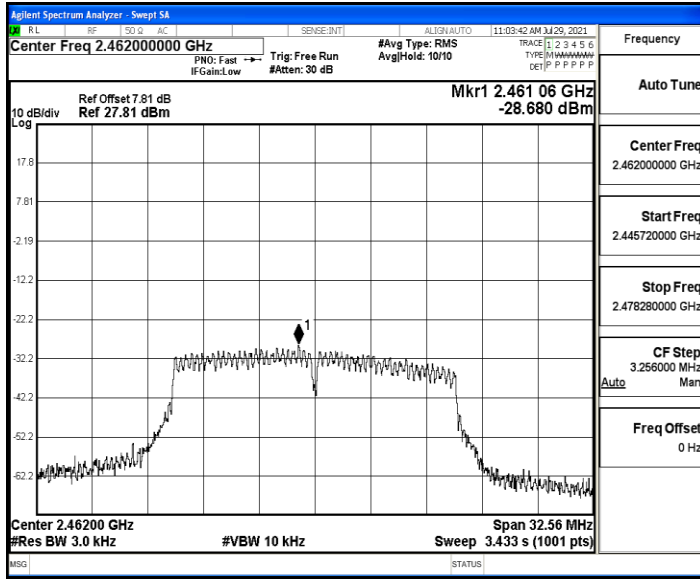


11G_Ant1_2437

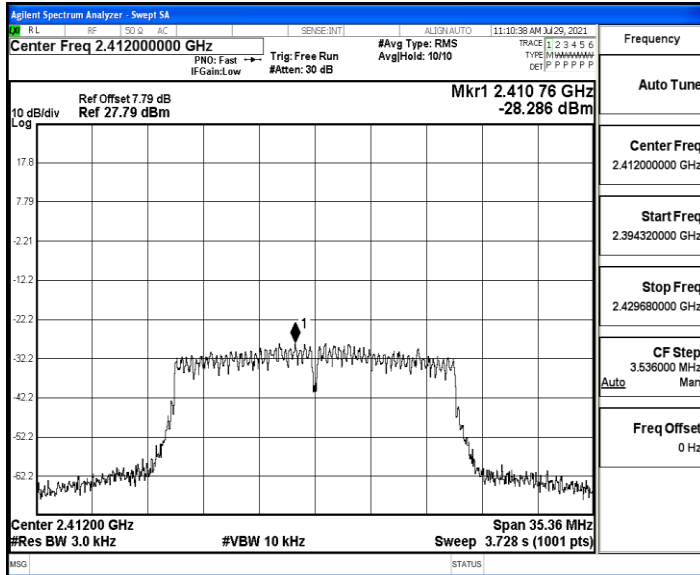




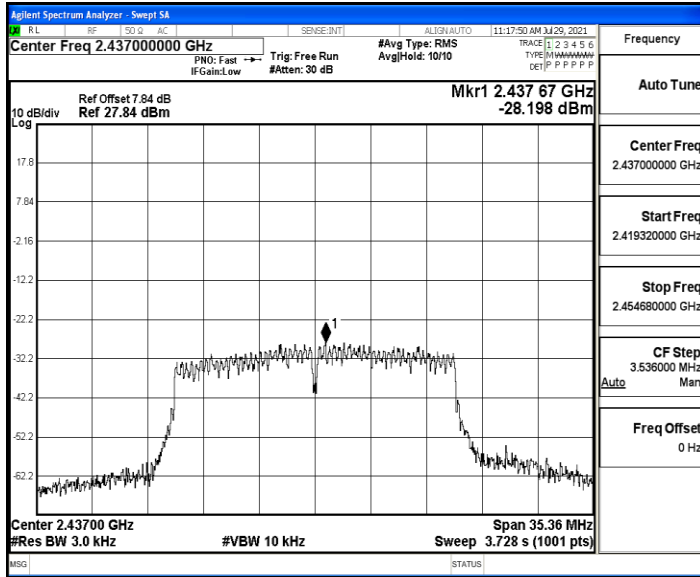
11G_Ant1_2462



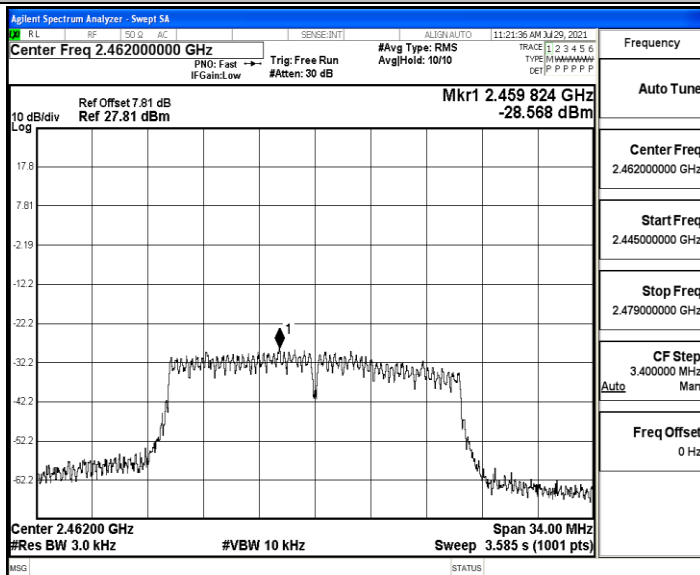
11N20SISO_Ant1_2412



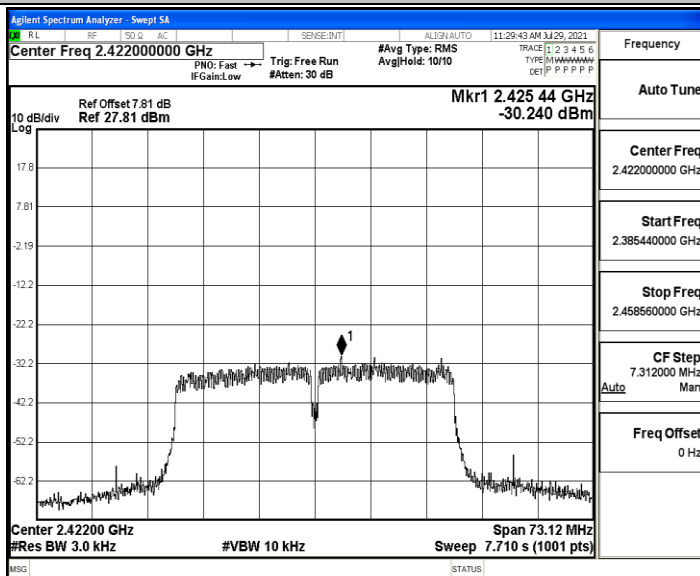
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

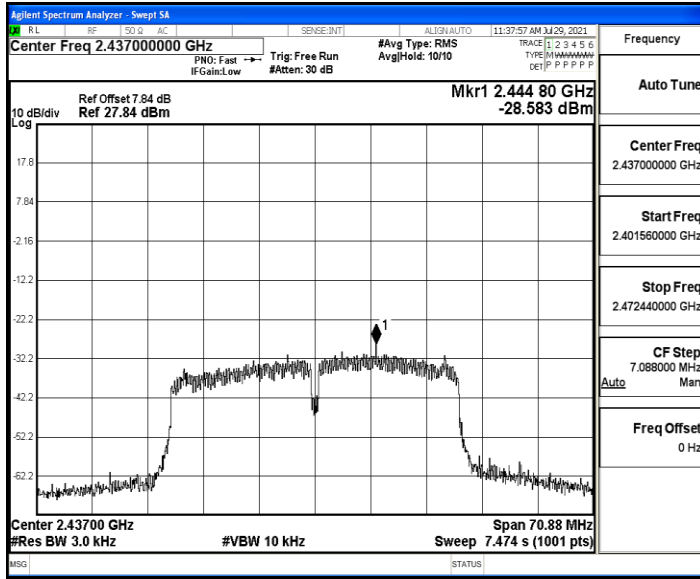


11N40SISO_Ant1_2422

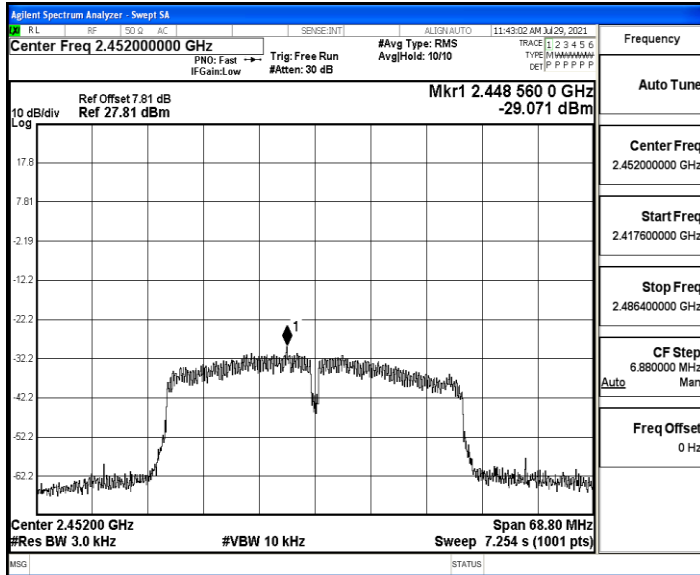




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





B.4 Band edge measurements

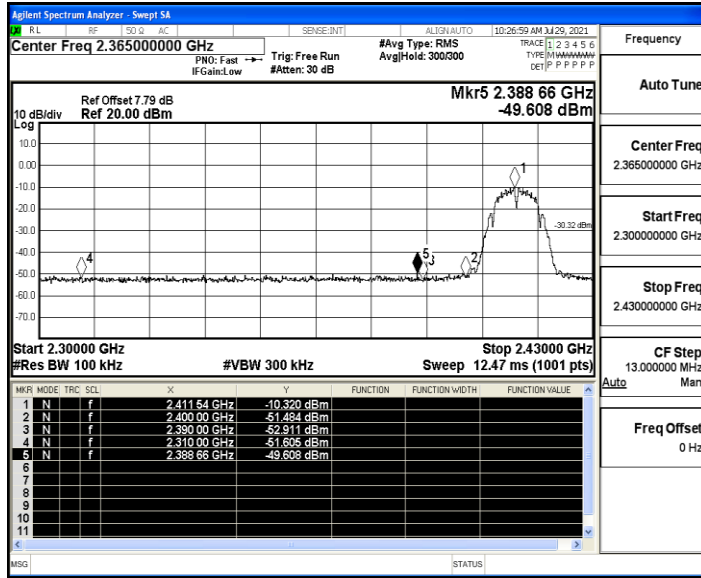
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-10.32	-49.61	≤-30.32	PASS
		High	2462	-7.58	-48.89	≤-27.58	PASS
11G	Ant1	Low	2412	-14.55	-44.24	≤-34.55	PASS
		High	2462	-15.02	-48.58	≤-35.02	PASS
11N20SISO	Ant1	Low	2412	-14.16	-43.87	≤-34.16	PASS
		High	2462	-14.84	-49.13	≤-34.84	PASS
11N40SISO	Ant1	Low	2422	-18.37	-46.3	≤-38.37	PASS
		High	2452	-17.25	-46.12	≤-37.25	PASS

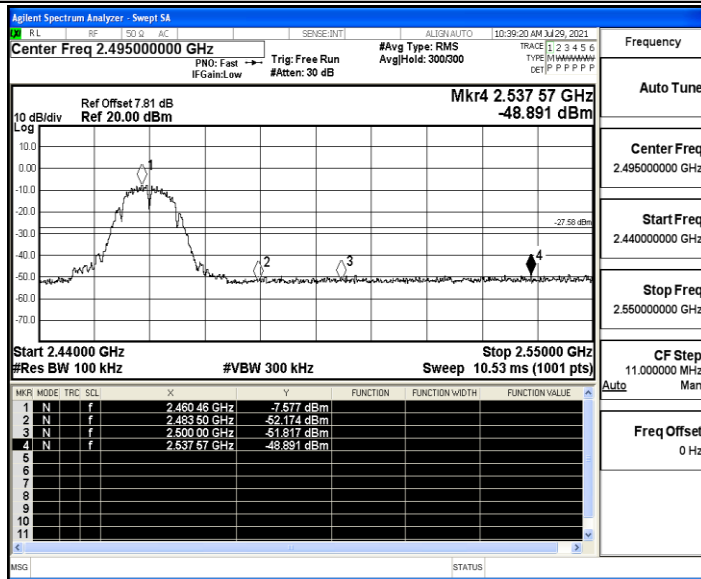


Test Graphs

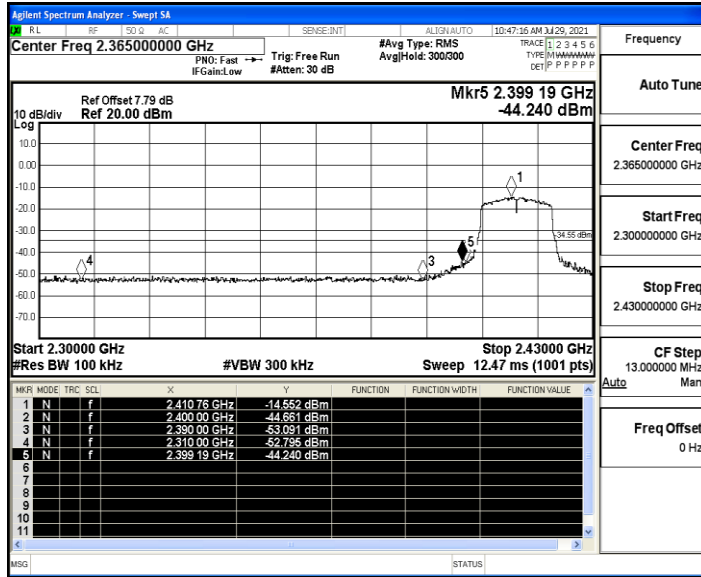
11B_Ant1_Low_2412



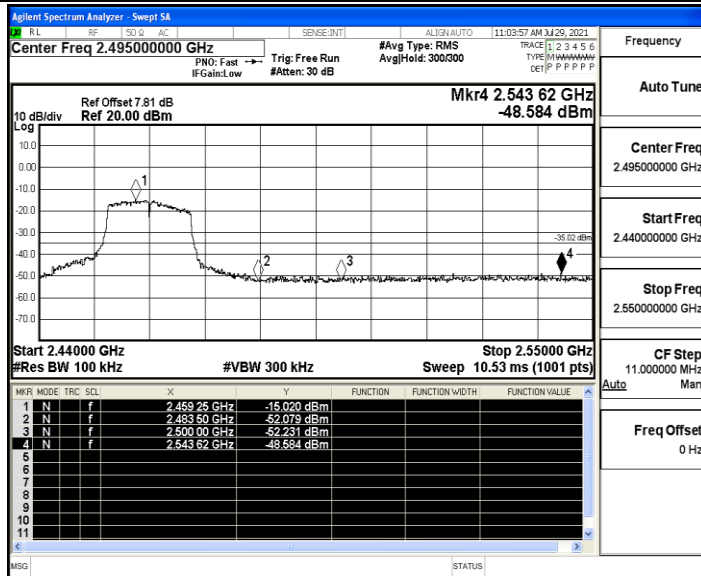
11B_Ant1_High_2462



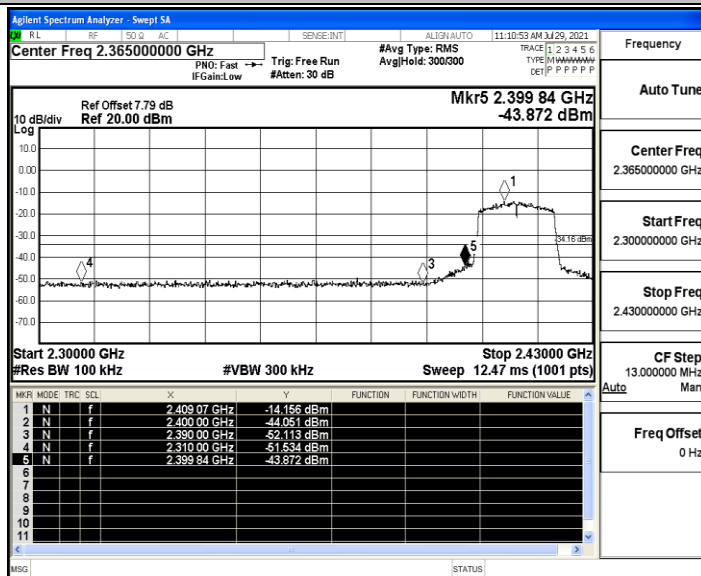
11G_Ant1_Low_2412



11G_Ant1_High_2462

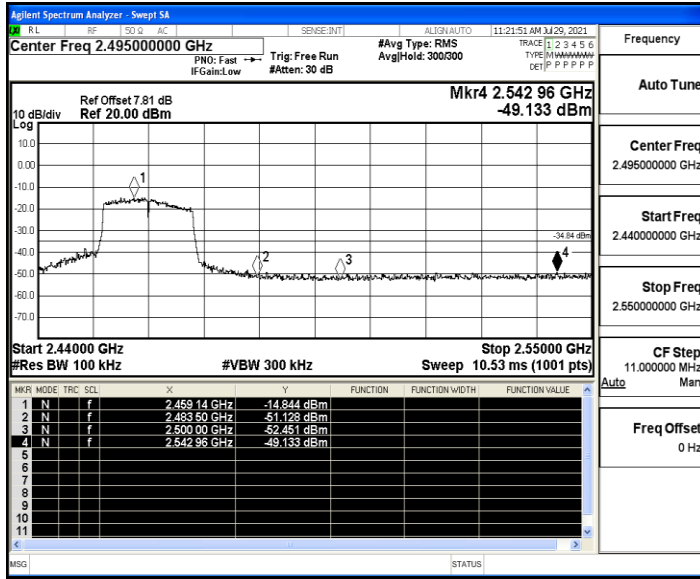


11N20SISO_Ant1_Low_2412

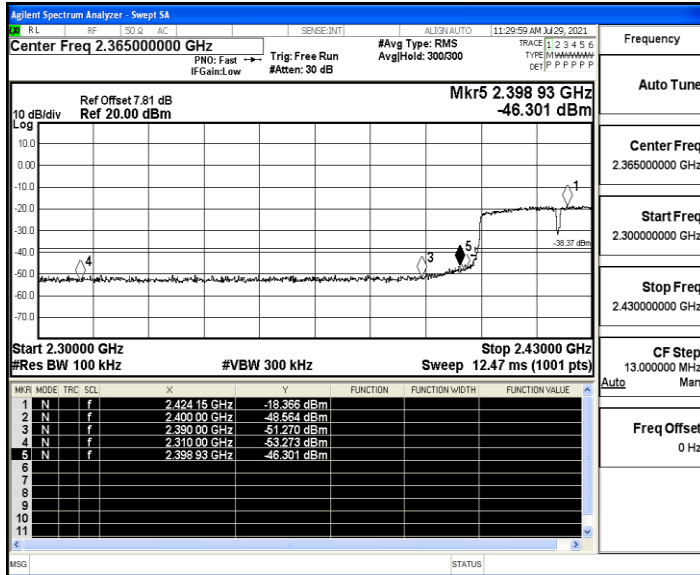




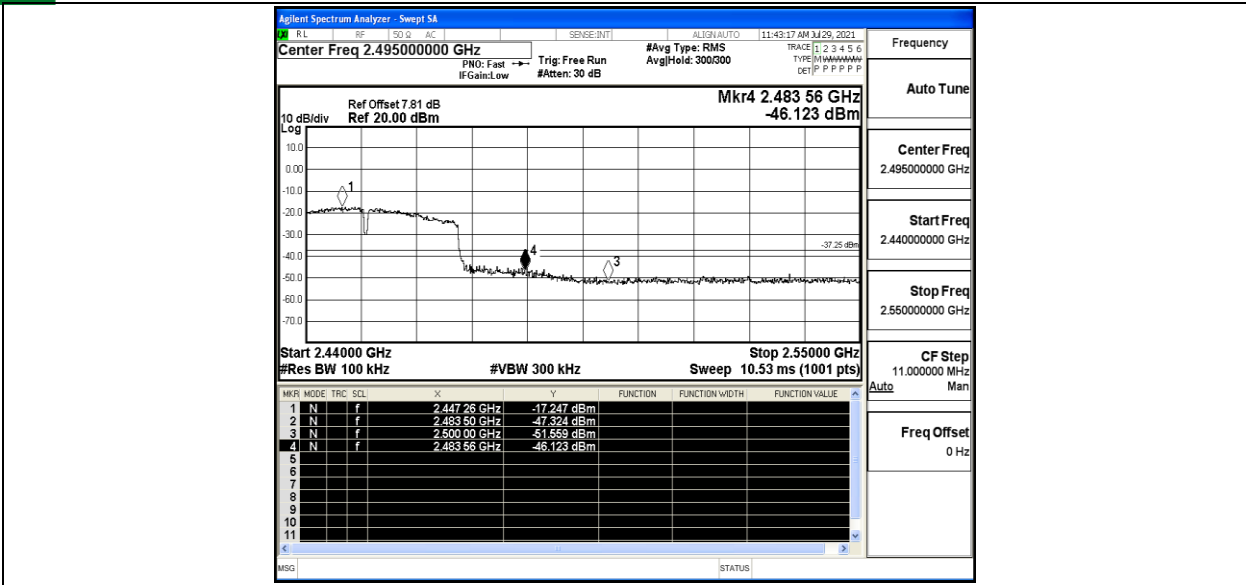
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452





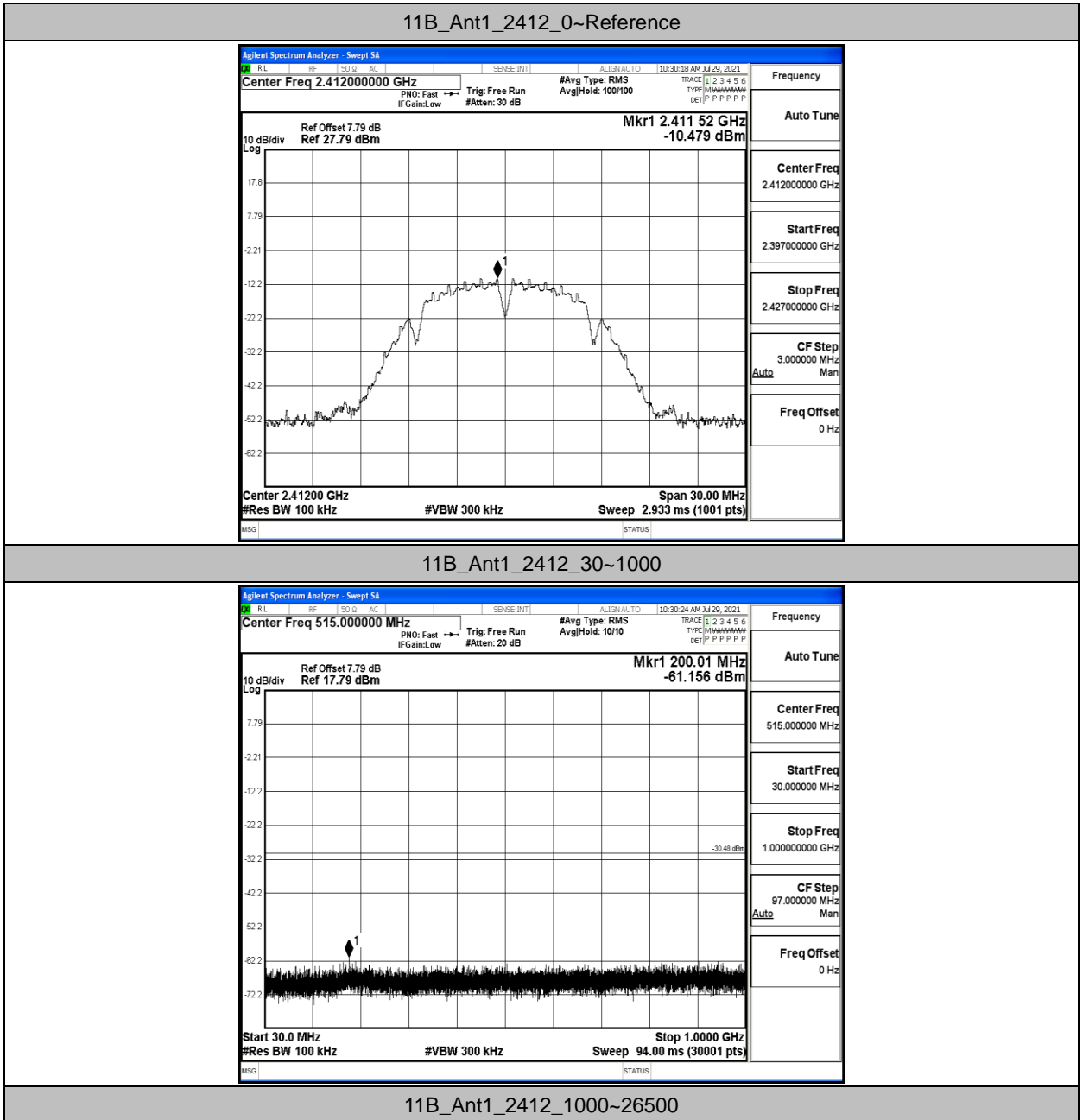
B.5 Conducted Spurious Emission

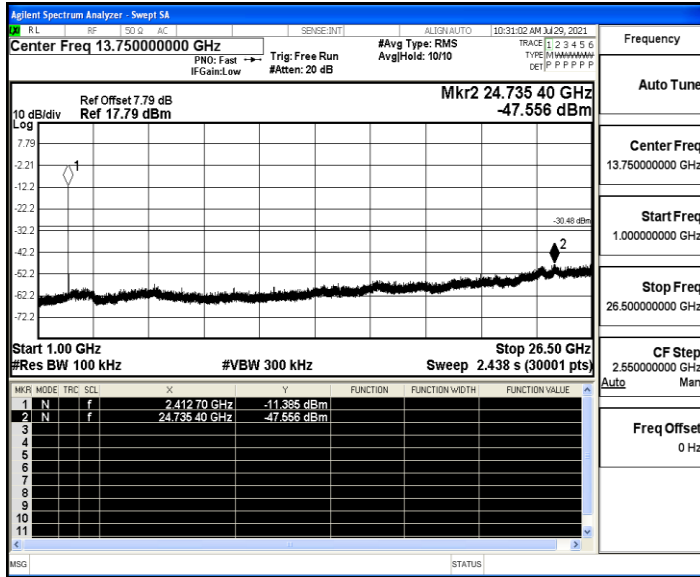
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-10.48	-10.48	---	PASS
			30~1000	-10.48	-61.16	≤-30.48	PASS
			1000~26500	-10.48	-47.56	≤-30.48	PASS
		2437	Reference	-6.83	-6.83	---	PASS
			30~1000	-6.83	-58.37	≤-26.83	PASS
			1000~26500	-6.83	-48.24	≤-26.83	PASS
		2462	Reference	-7.65	-7.65	---	PASS
			30~1000	-7.65	-58.57	≤-27.65	PASS
			1000~26500	-7.65	-47.55	≤-27.65	PASS
11G	Ant1	2412	Reference	-14.55	-14.55	---	PASS
			30~1000	-14.55	-61.56	≤-34.55	PASS
			1000~26500	-14.55	-47.79	≤-34.55	PASS
		2437	Reference	-14.69	-14.69	---	PASS
			30~1000	-14.69	-62.07	≤-34.69	PASS
			1000~26500	-14.69	-47.58	≤-34.69	PASS
		2462	Reference	-15.07	-15.07	---	PASS
			30~1000	-15.07	-61.42	≤-35.07	PASS
			1000~26500	-15.07	-47.12	≤-35.07	PASS
11N20SISO	Ant1	2412	Reference	-14.24	-14.24	---	PASS
			30~1000	-14.24	-61.94	≤-34.24	PASS
			1000~26500	-14.24	-47.73	≤-34.24	PASS
		2437	Reference	-14.27	-14.27	---	PASS
			30~1000	-14.27	-62.03	≤-34.27	PASS
			1000~26500	-14.27	-47.73	≤-34.27	PASS
		2462	Reference	-14.89	-14.89	---	PASS
			30~1000	-14.89	-61.58	≤-34.89	PASS
			1000~26500	-14.89	-47.52	≤-34.89	PASS
11N40SISO	Ant1	2422	Reference	-18.44	-18.44	---	PASS
			30~1000	-18.44	-60.93	≤-38.44	PASS
			1000~26500	-18.44	-47.05	≤-38.44	PASS
		2437	Reference	-17.21	-17.21	---	PASS
			30~1000	-17.21	-61.23	≤-37.21	PASS
			1000~26500	-17.21	-46.55	≤-37.21	PASS
		2452	Reference	-17.49	-17.49	---	PASS
			30~1000	-17.49	-61.61	≤-37.49	PASS
			1000~26500	-17.49	-46.54	≤-37.49	PASS

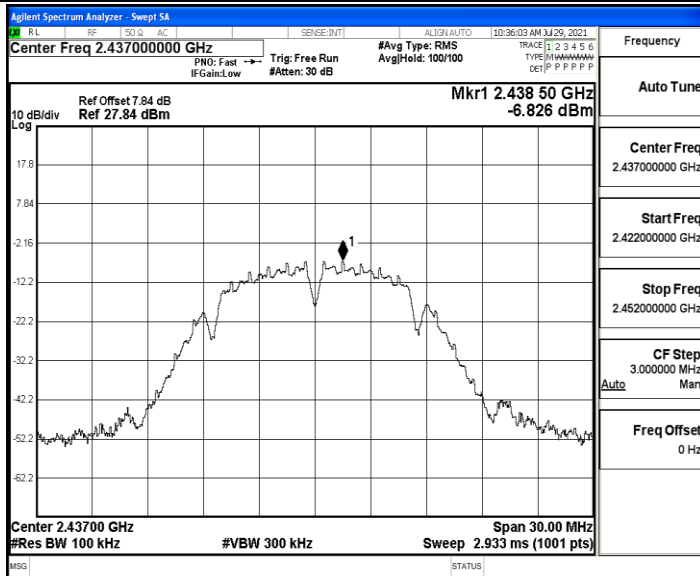


Test Graphs

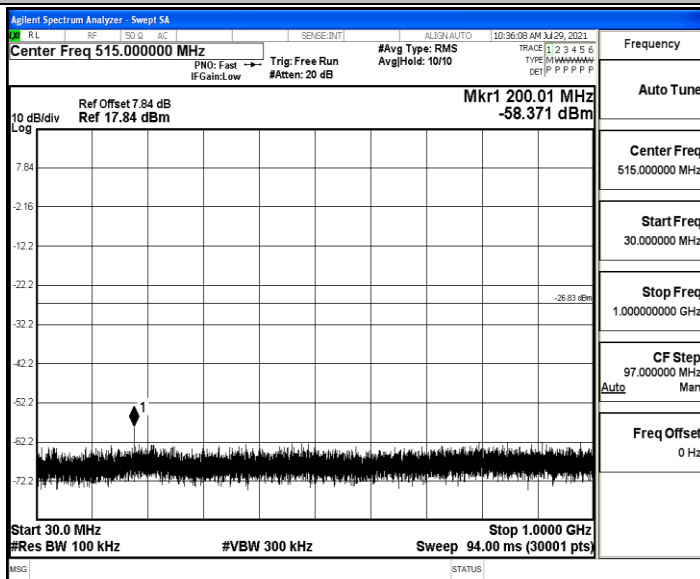




11B_Ant1_2437_0~Reference

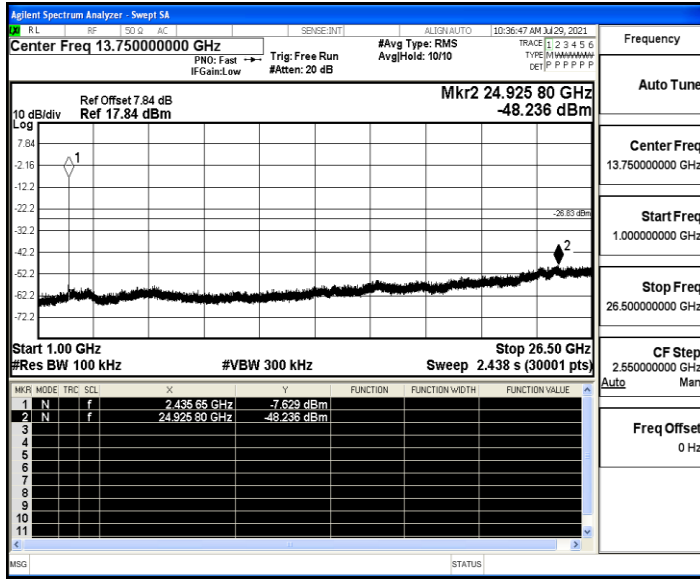


11B_Ant1_2437_30~1000

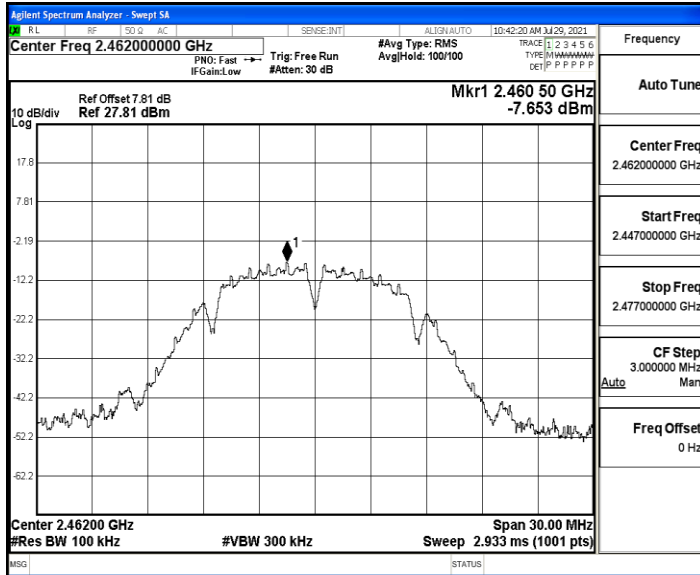




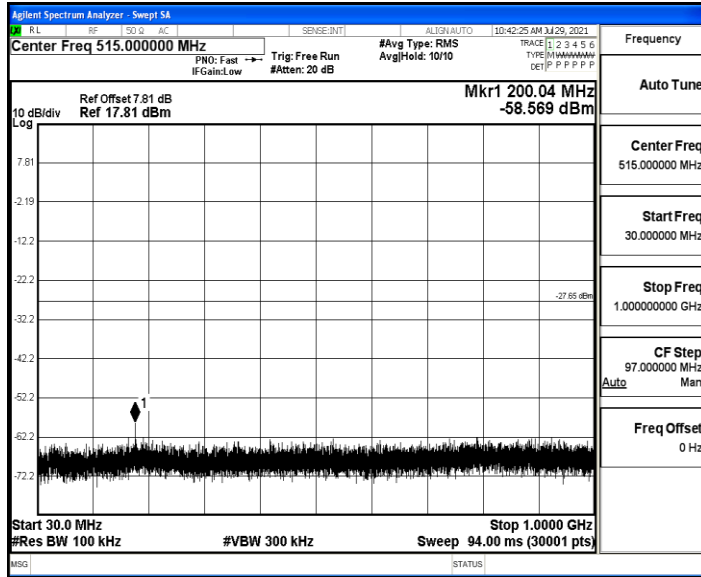
11B_Ant1_2437_1000~26500



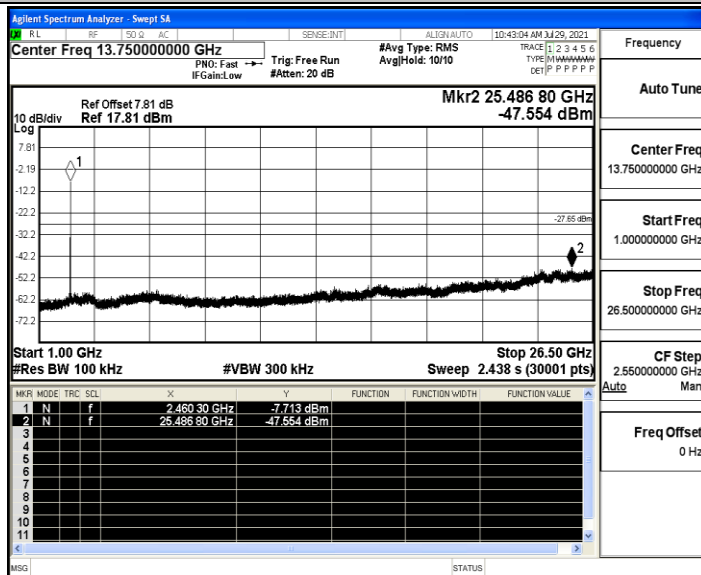
11B_Ant1_2462_0~Reference



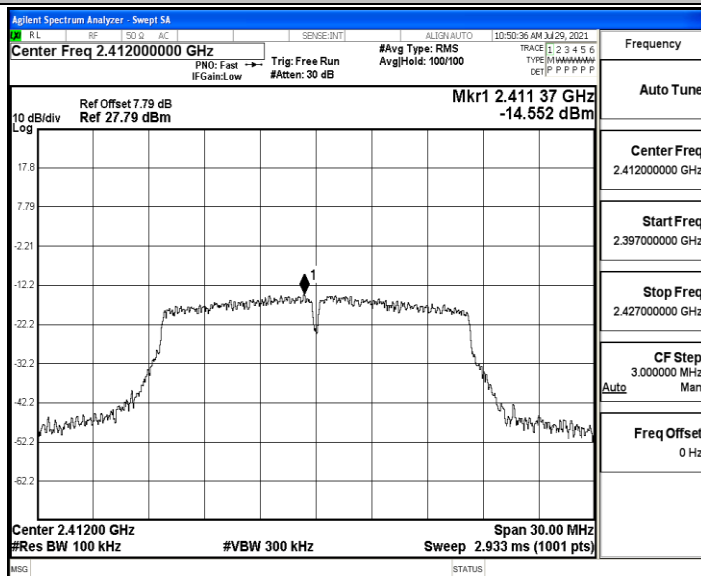
11B_Ant1_2462_30~1000



11B_Ant1_2462_1000-26500

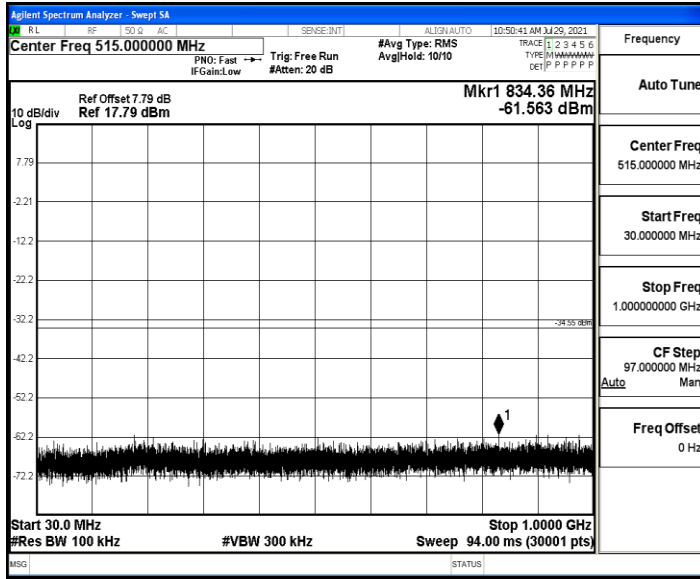


11G_Ant1_2412_0-Reference

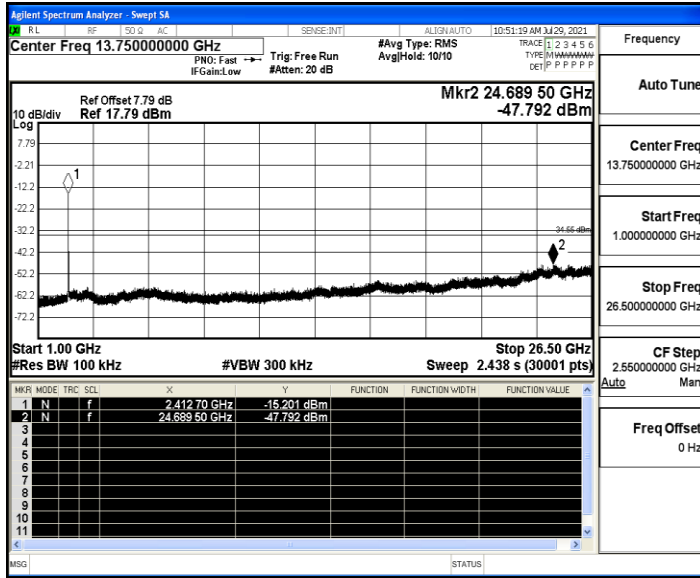




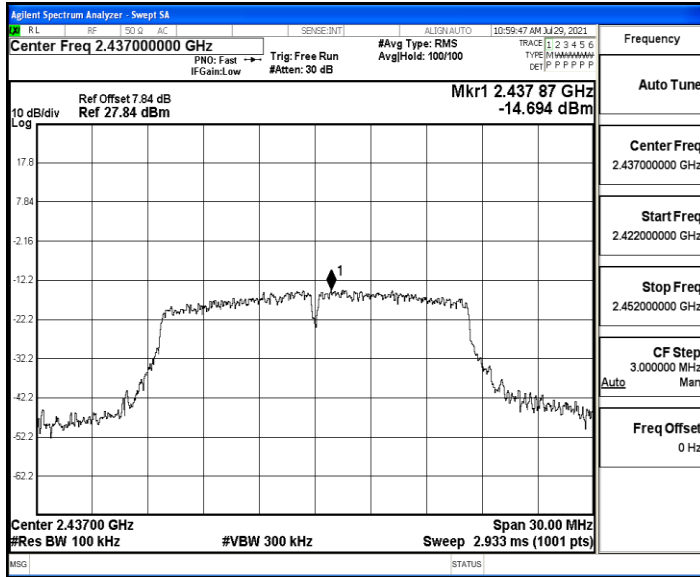
11G_Ant1_2412_30~1000



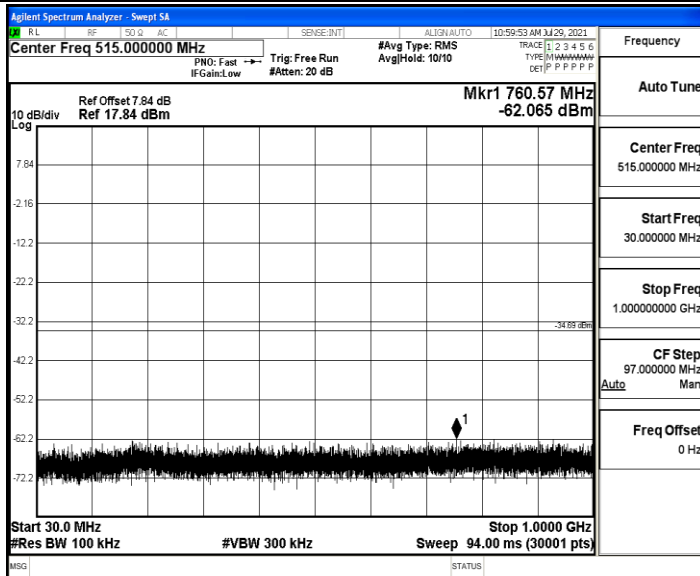
11G_Ant1_2412_1000~26500



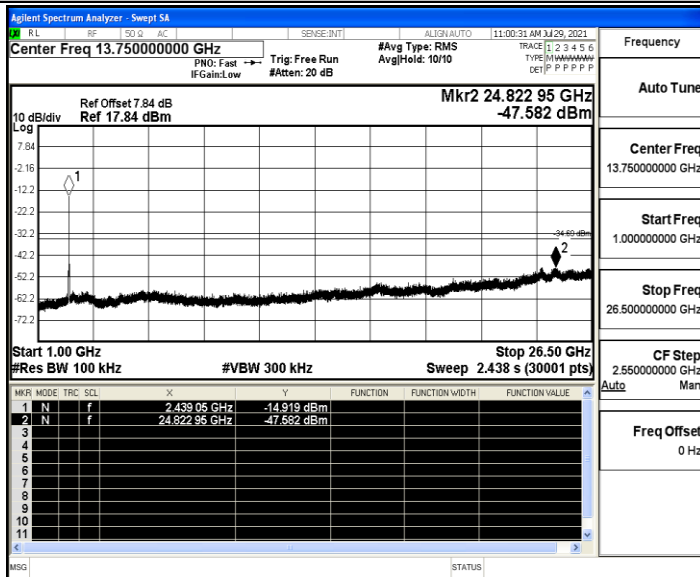
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000

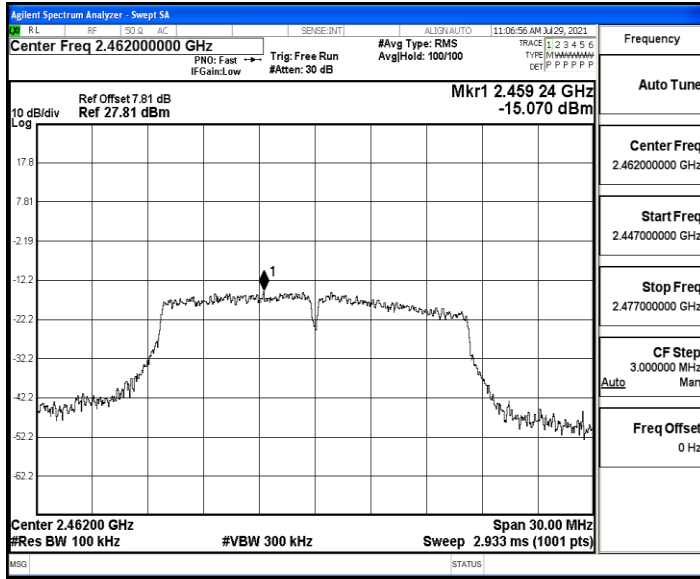


11G_Ant1_2437_1000~26500

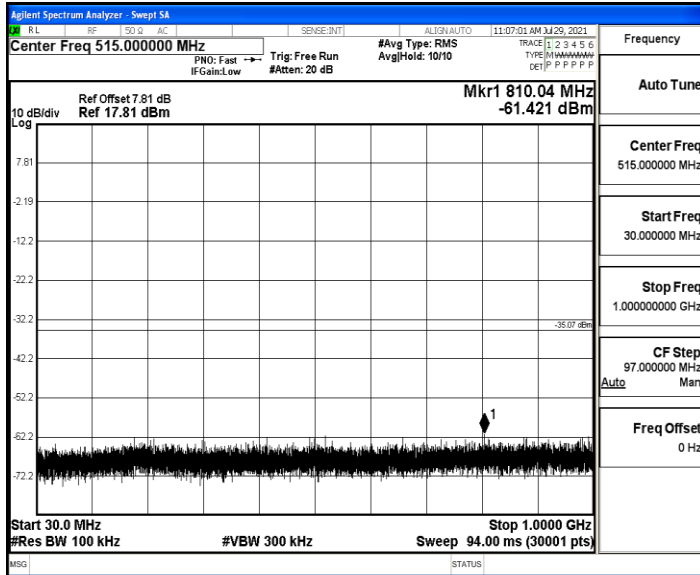




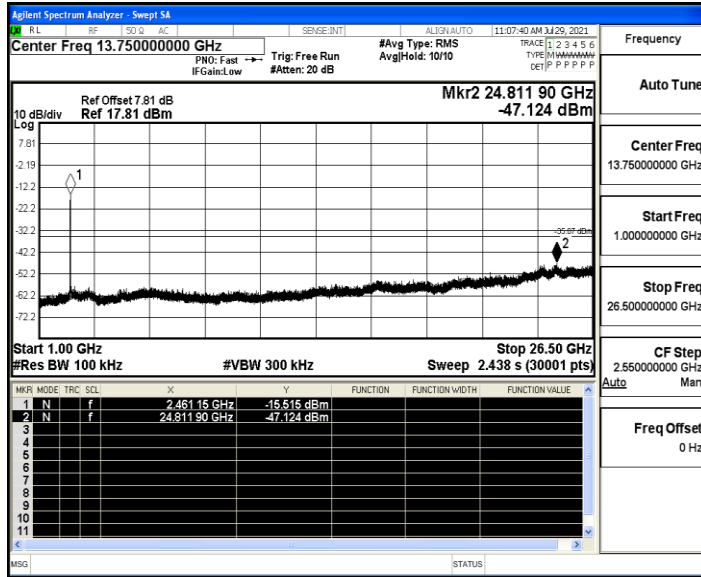
11G_Ant1_2462_0~Reference



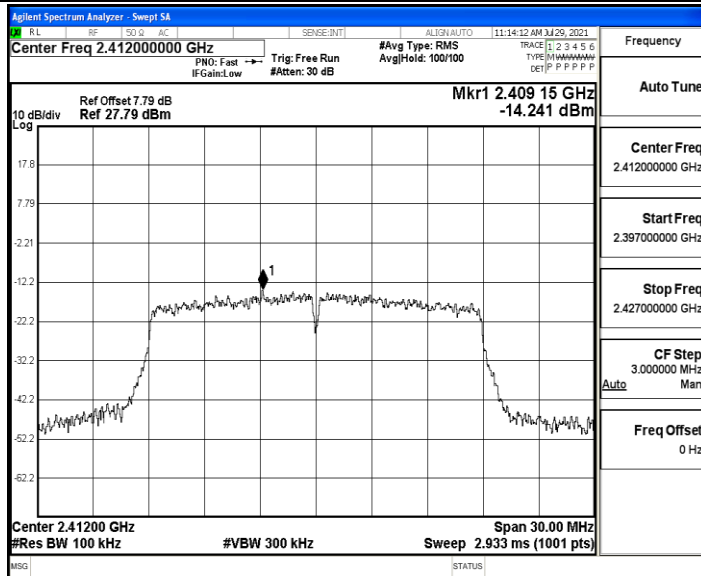
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0-Reference



11N20SISO_Ant1_2412_30-1000

