



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: RK3399 R Pro Player

Trade Mark: SCALA

Test Model: SMPRP

Environmental Conditions

Temperature:	21.5℃
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan



Appendix C.1: DTS Bandwidth

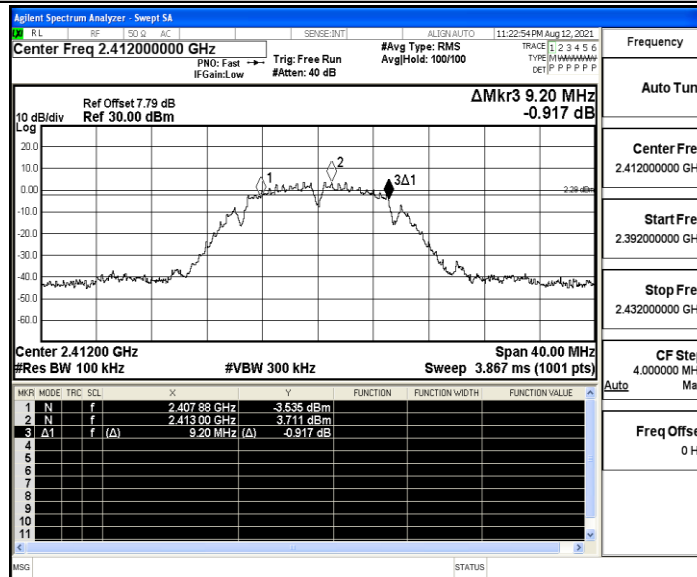
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.200	2407.880	2417.080	0.5	PASS
		2437	8.680	2432.880	2441.560	0.5	PASS
		2462	9.120	2457.440	2466.560	0.5	PASS
11G	Ant1	2412	13.520	2405.640	2419.160	0.5	PASS
		2437	16.400	2428.800	2445.200	0.5	PASS
		2462	16.400	2453.800	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.680	2403.160	2420.840	0.5	PASS
		2437	17.680	2428.160	2445.840	0.5	PASS
		2462	17.680	2453.160	2470.840	0.5	PASS
11N40SISO	Ant1	2422	35.280	2404.320	2439.600	0.5	PASS
		2437	36.240	2419.000	2455.240	0.5	PASS
		2452	36.000	2434.000	2470.000	0.5	PASS

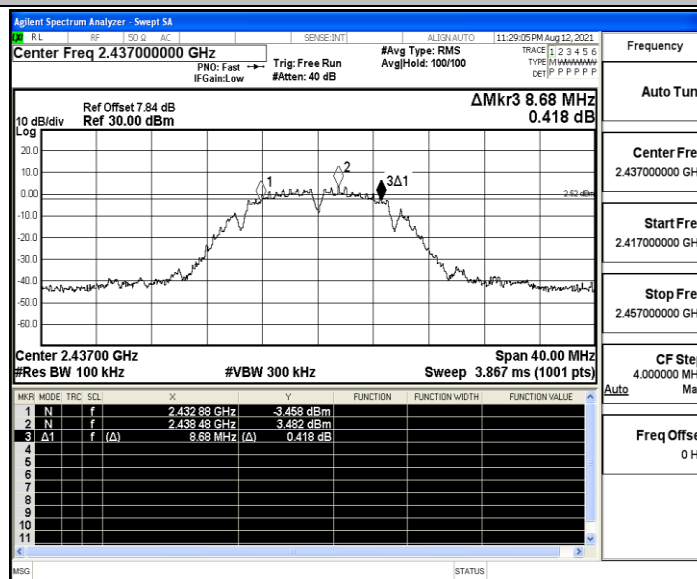


Test Graphs

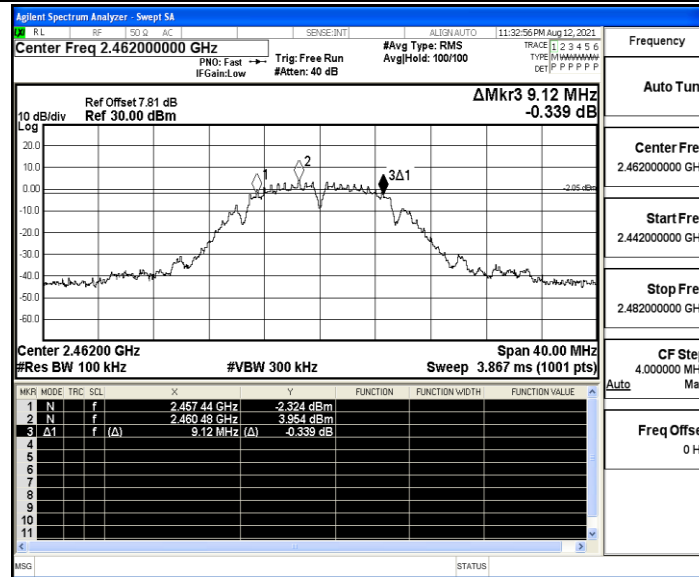
11B_Ant1_2412



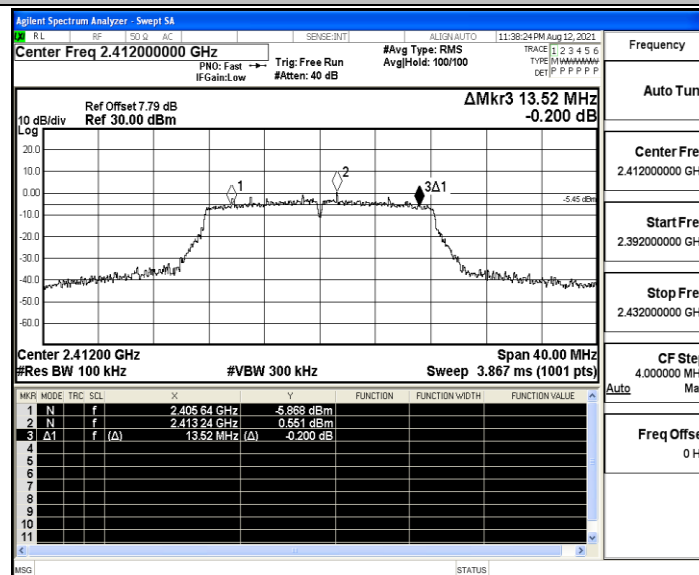
11B_Ant1_2437



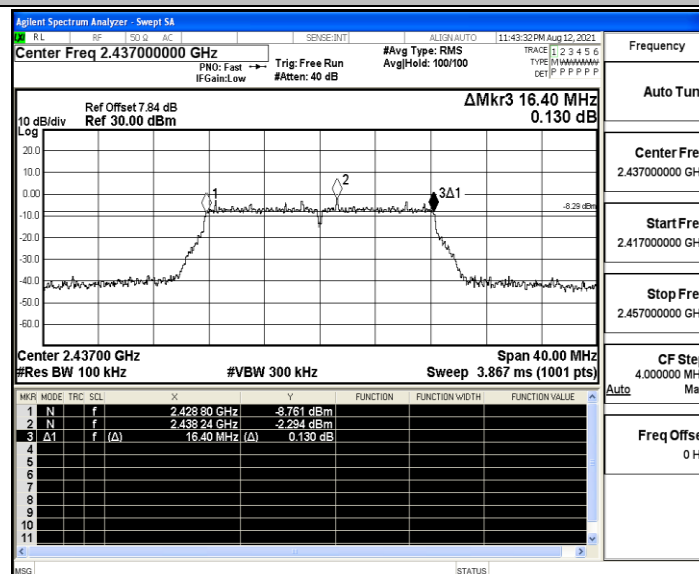
11B_Ant1_2462



11G_Ant1_2412

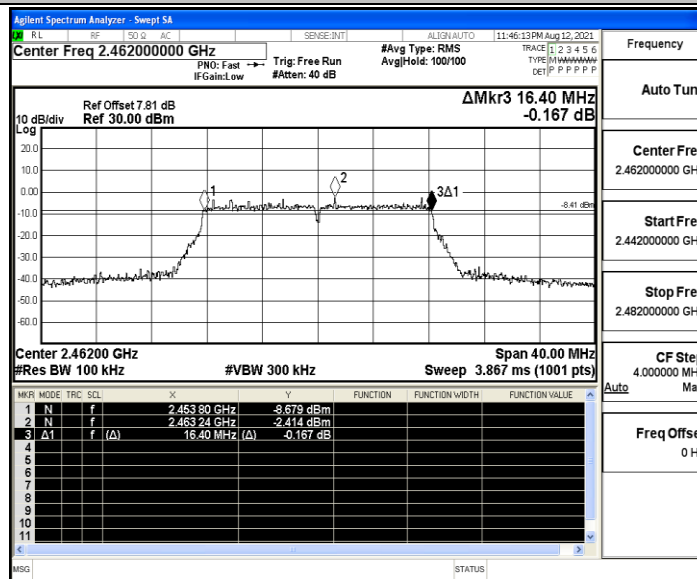


11G_Ant1_2437

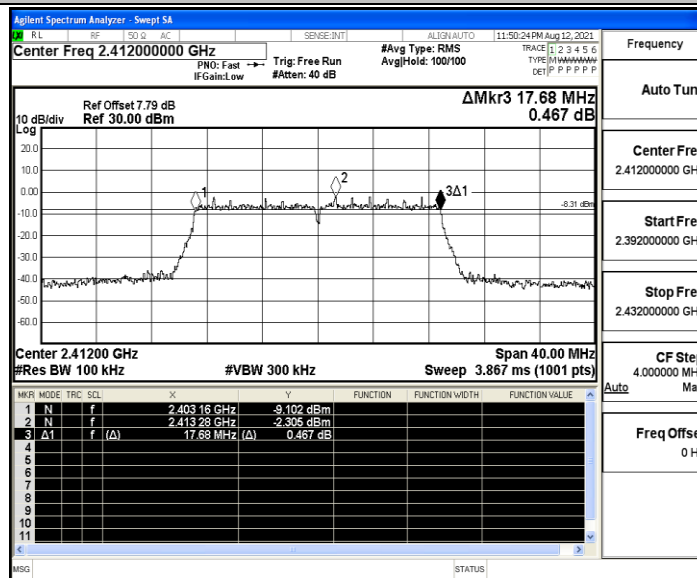




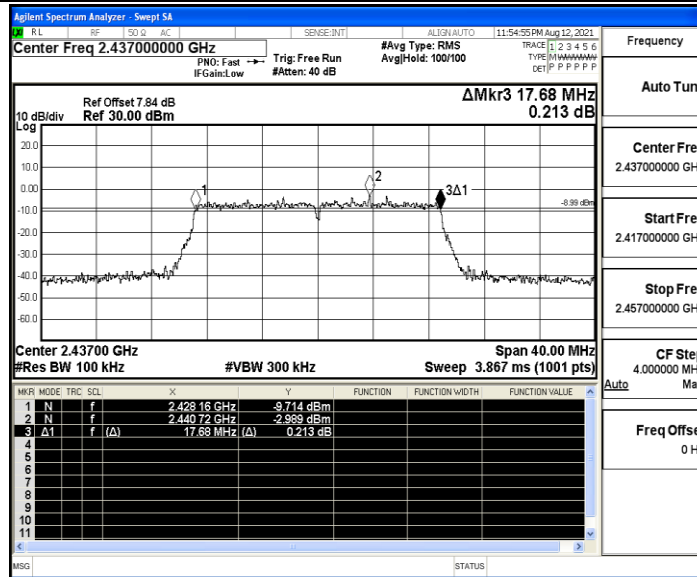
11G_Ant1_2462



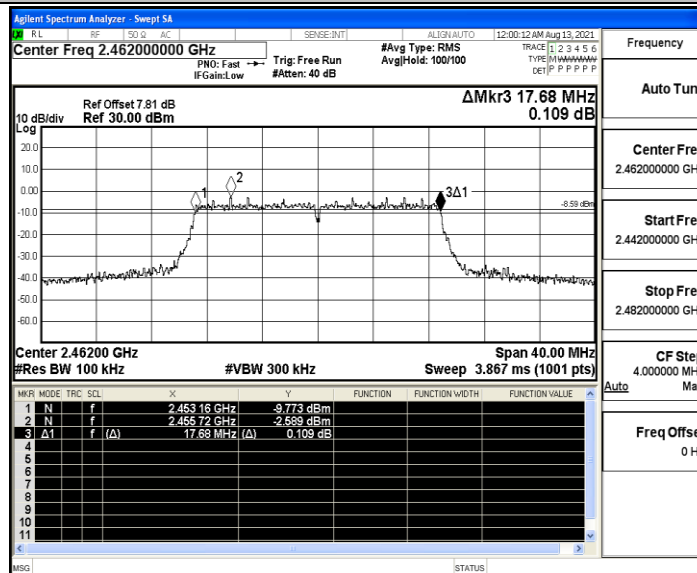
11N20SISO_Ant1_2412



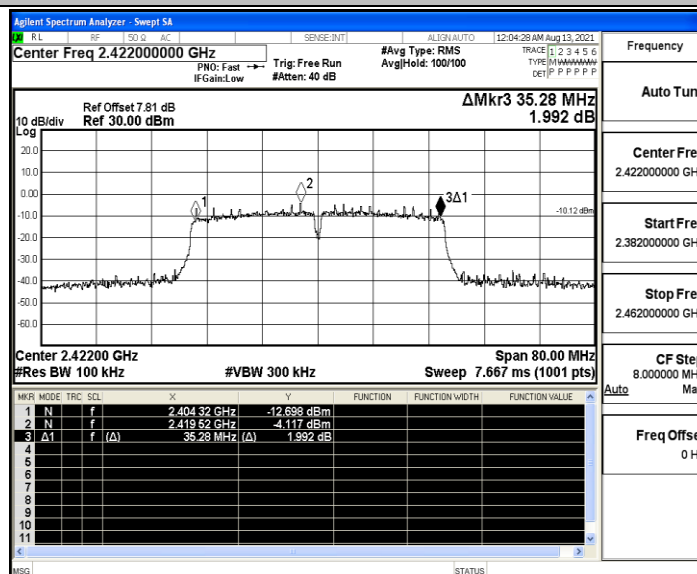
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

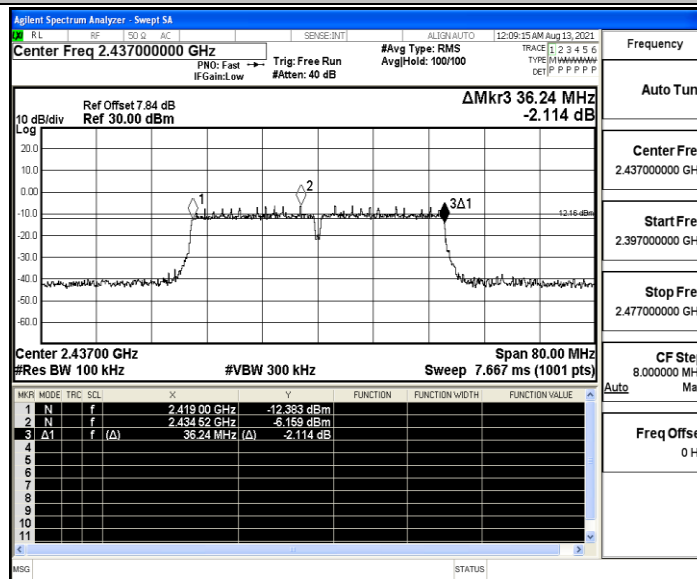


11N40SISO_Ant1_2422

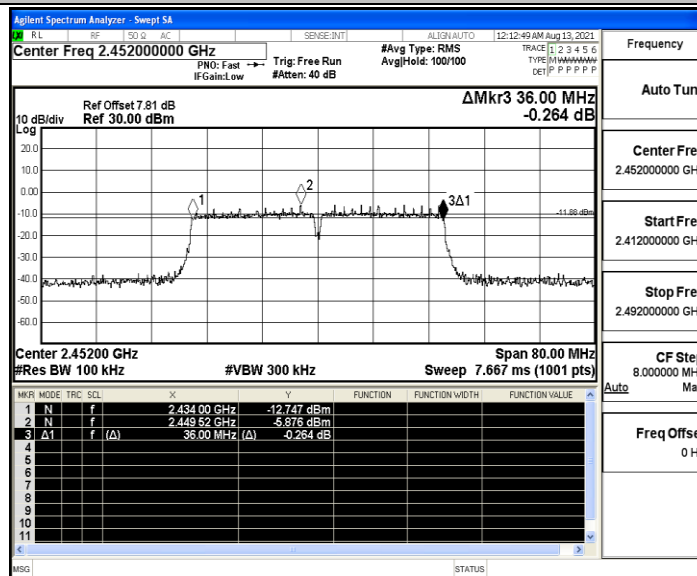




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





Appendix C.2: Maximum peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	16.09	≤30	PASS
		2437	15.44	≤30	PASS
		2462	15.76	≤30	PASS
11G	Ant1	2412	16.57	≤30	PASS
		2437	15.85	≤30	PASS
		2462	16.26	≤30	PASS
11N20SISO	Ant1	2412	16.54	≤30	PASS
		2437	15.89	≤30	PASS
		2462	16.29	≤30	PASS
11N40SISO	Ant1	2422	16.52	≤30	PASS
		2437	15.15	≤30	PASS
		2452	15.59	≤30	PASS

Note: The Duty Cycle Factor is compensated in the graph.



Appendix C.3: Maximum power spectral density

Test Result

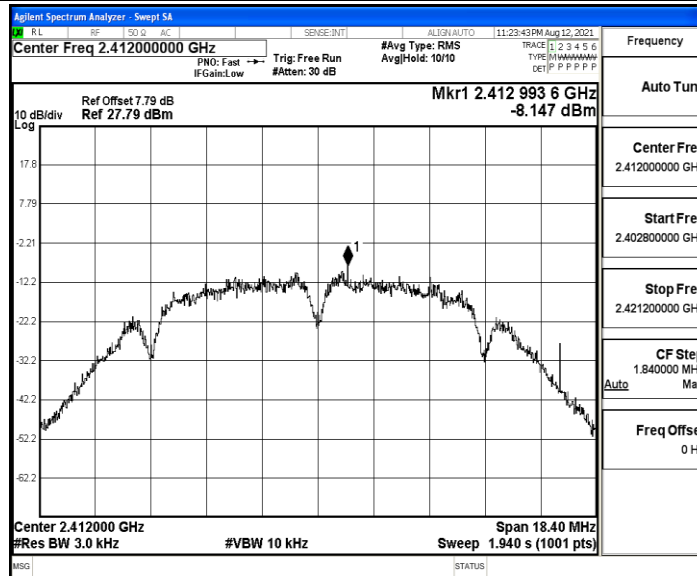
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-8.15	≤8	PASS
		2437	-10.99	≤8	PASS
		2462	-9.84	≤8	PASS
11G	Ant1	2412	-14.12	≤8	PASS
		2437	-15.84	≤8	PASS
		2462	-16.26	≤8	PASS
11N20SISO	Ant1	2412	-16.35	≤8	PASS
		2437	-16.96	≤8	PASS
		2462	-16.41	≤8	PASS
11N40SISO	Ant1	2422	-19.1	≤8	PASS
		2437	-20.67	≤8	PASS
		2452	-18.3	≤8	PASS

Note: The Duty Cycle Factor is compensated in the graph.

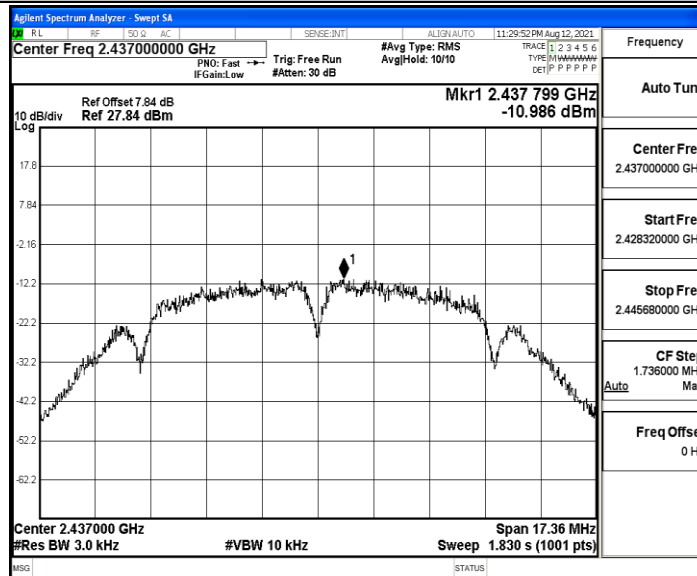


Test Graphs

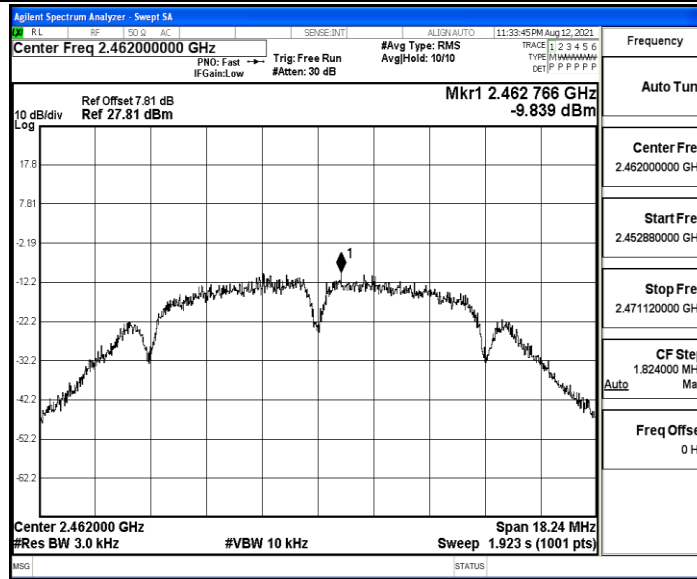
11B_Ant1_2412



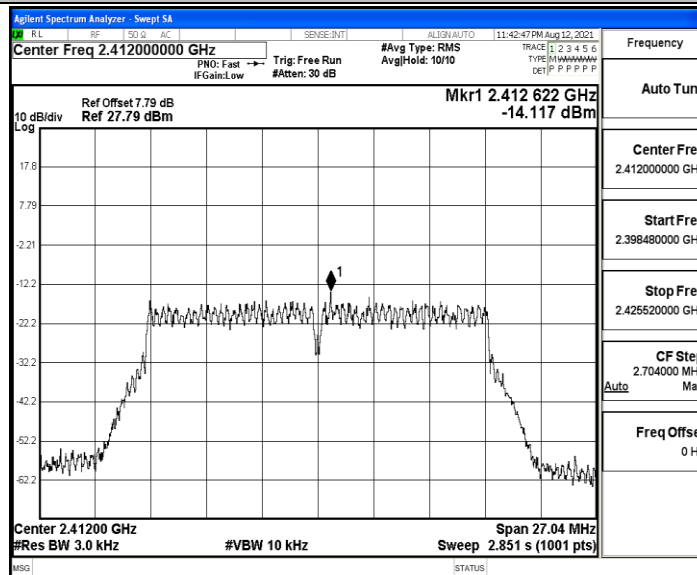
11B_Ant1_2437



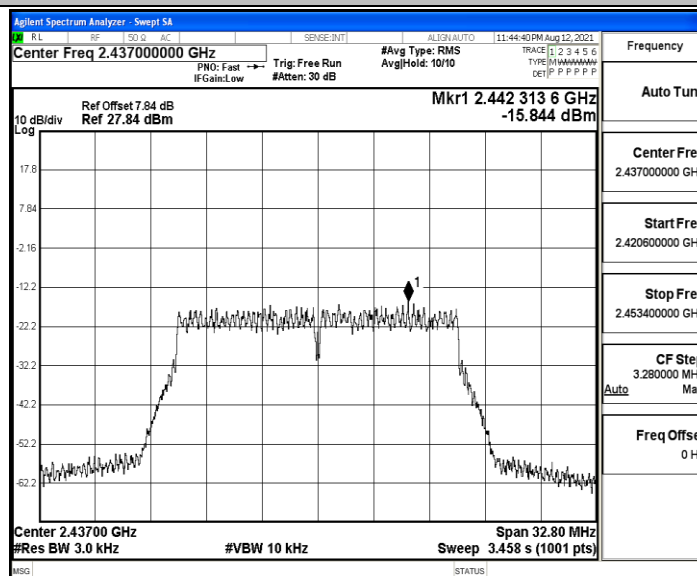
11B_Ant1_2462



11G_Ant1_2412

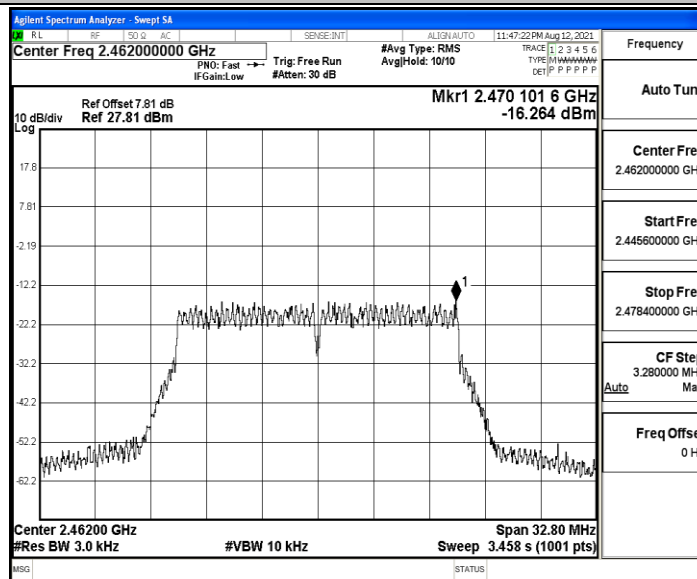


11G_Ant1_2437

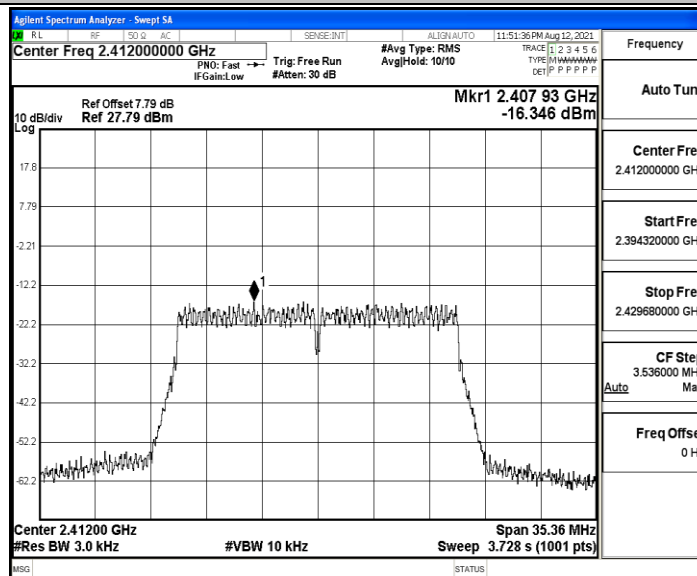




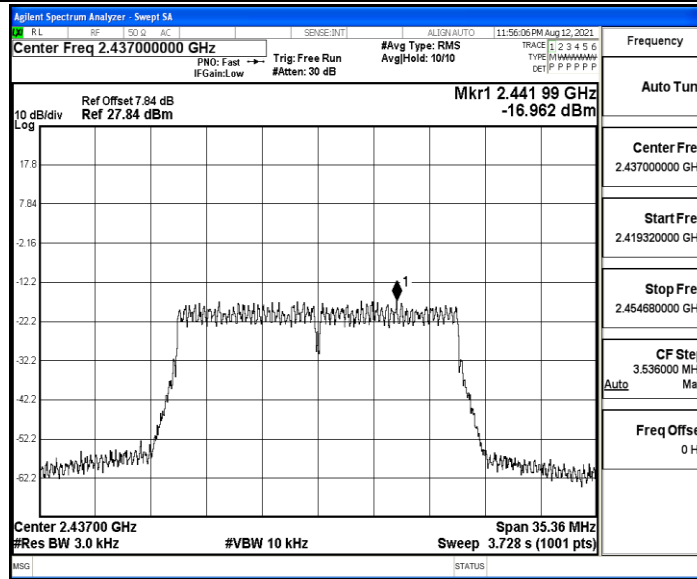
11G_Ant1_2462



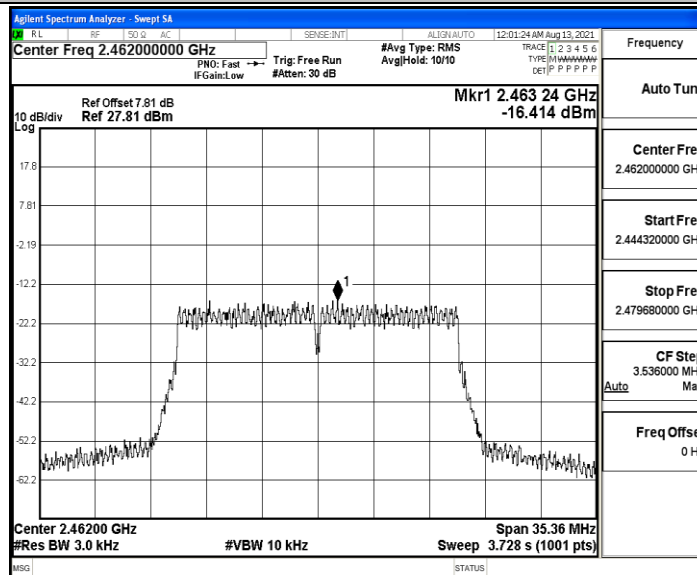
11N20SISO_Ant1_2412



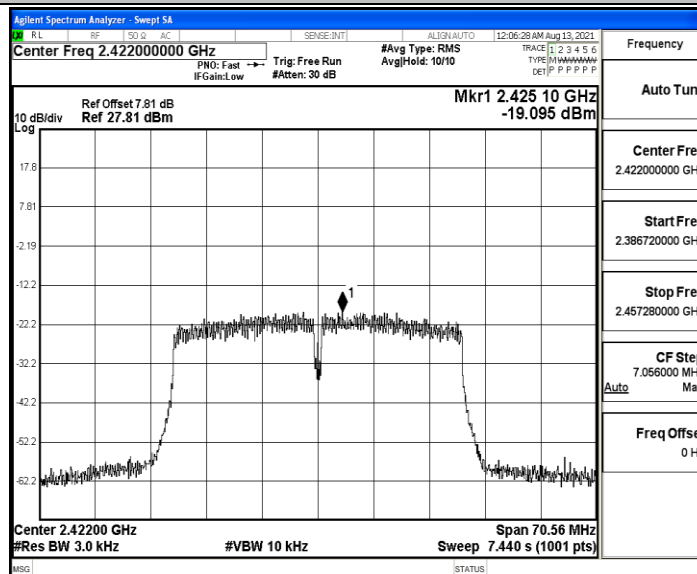
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

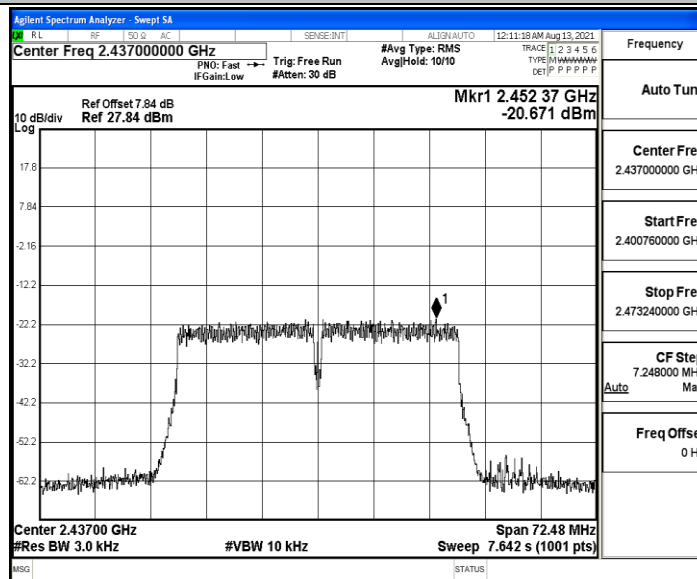


11N40SISO_Ant1_2422

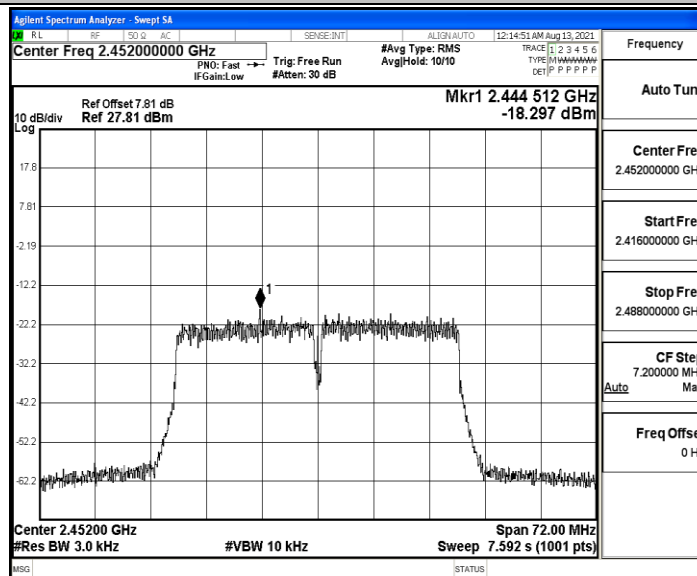




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





Appendix C.4: Band edge measurements

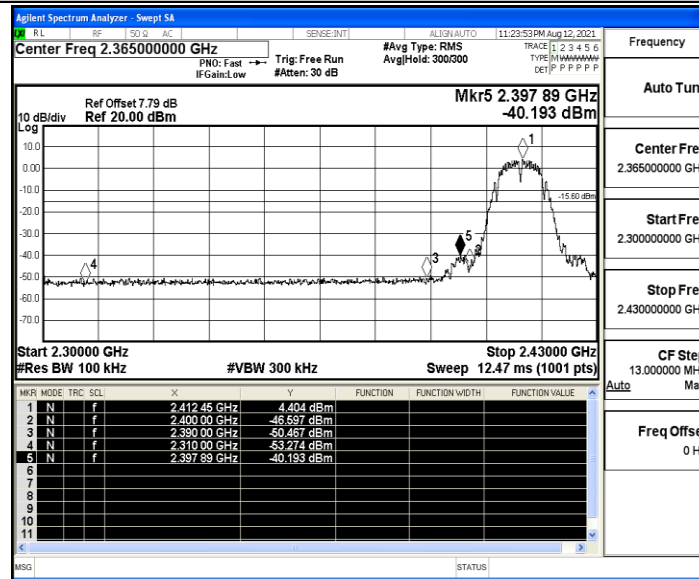
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.40	-40.19	≤ -15.6	PASS
		High	2462	4.02	-48.58	≤ -15.98	PASS
11G	Ant1	Low	2412	0.79	-34.09	≤ -19.21	PASS
		High	2462	-1.81	-46.66	≤ -21.81	PASS
11N20SISO	Ant1	Low	2412	-1.97	-37.1	≤ -21.97	PASS
		High	2462	-2.13	-44.47	≤ -22.13	PASS
11N40SISO	Ant1	Low	2422	-3.92	-37.65	≤ -23.92	PASS
		High	2452	-5.68	-38.96	≤ -25.68	PASS

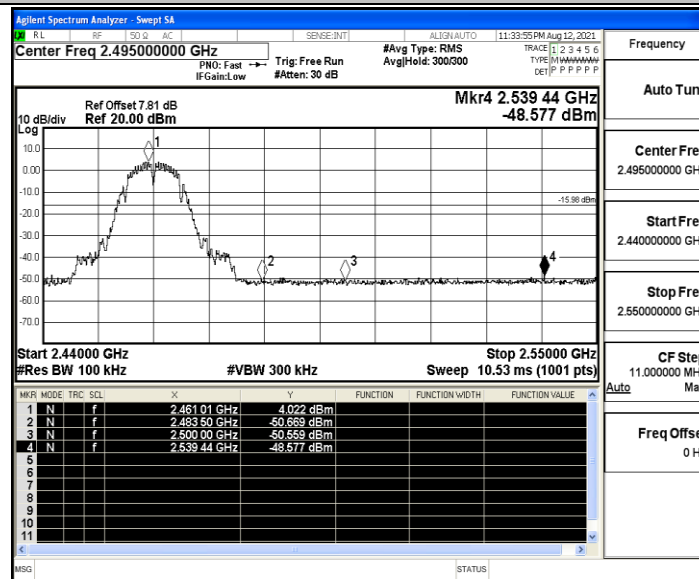


Test Graphs

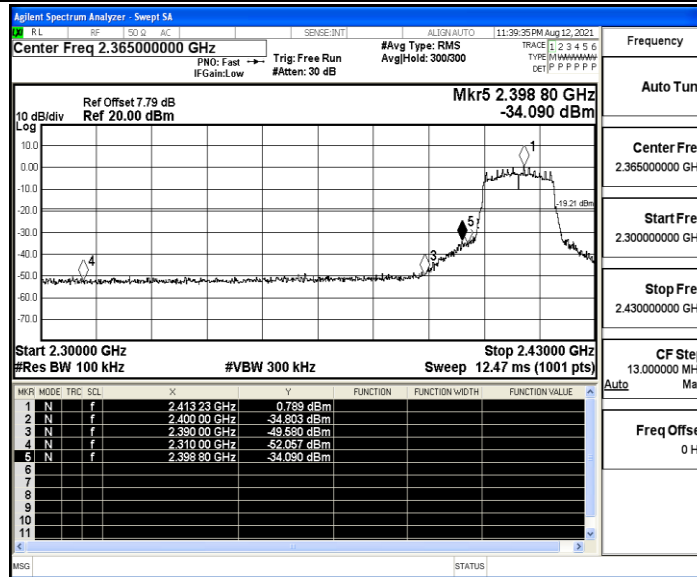
11B_Ant1_Low_2412



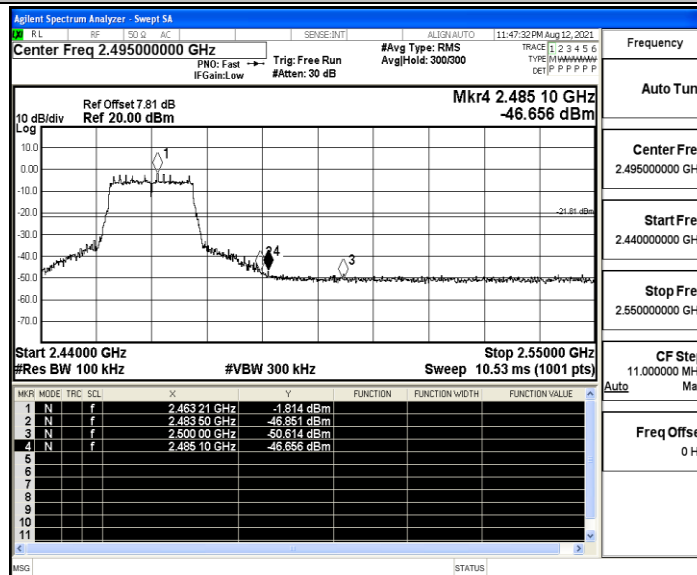
11B_Ant1_High_2462



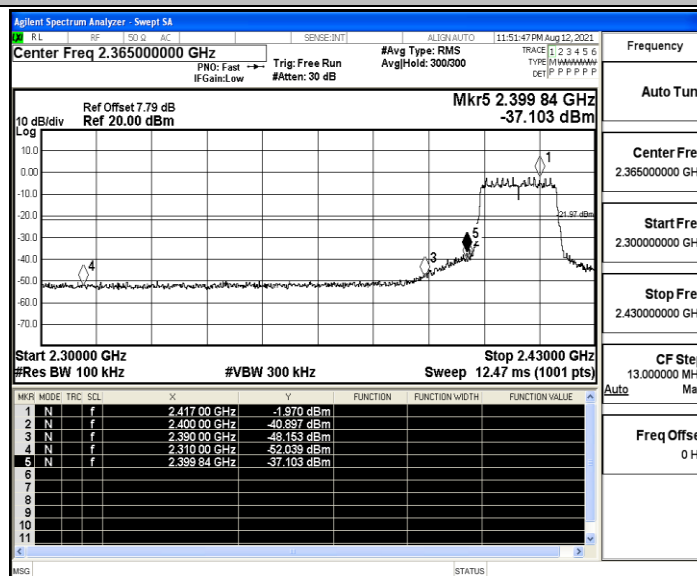
11G_Ant1_Low_2412



11G_Ant1_High_2462

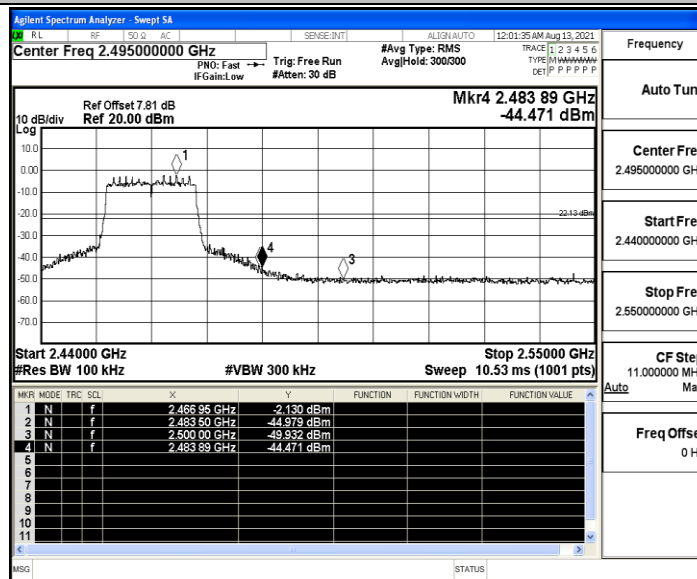


11N20SISO_Ant1_Low_2412

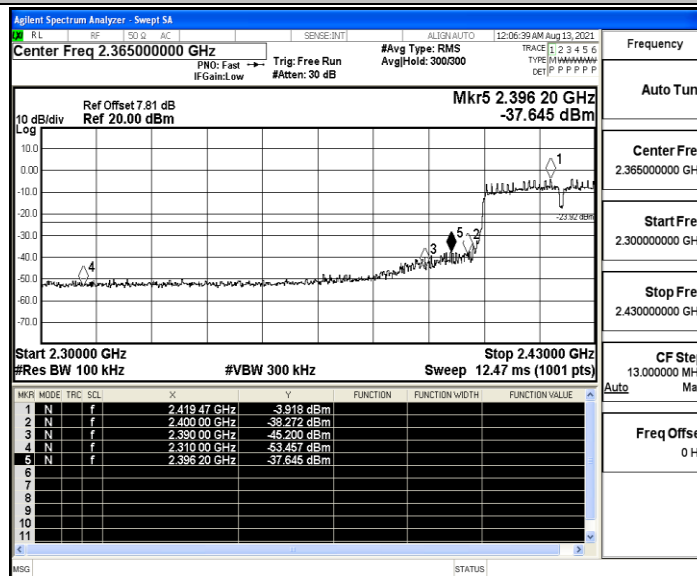




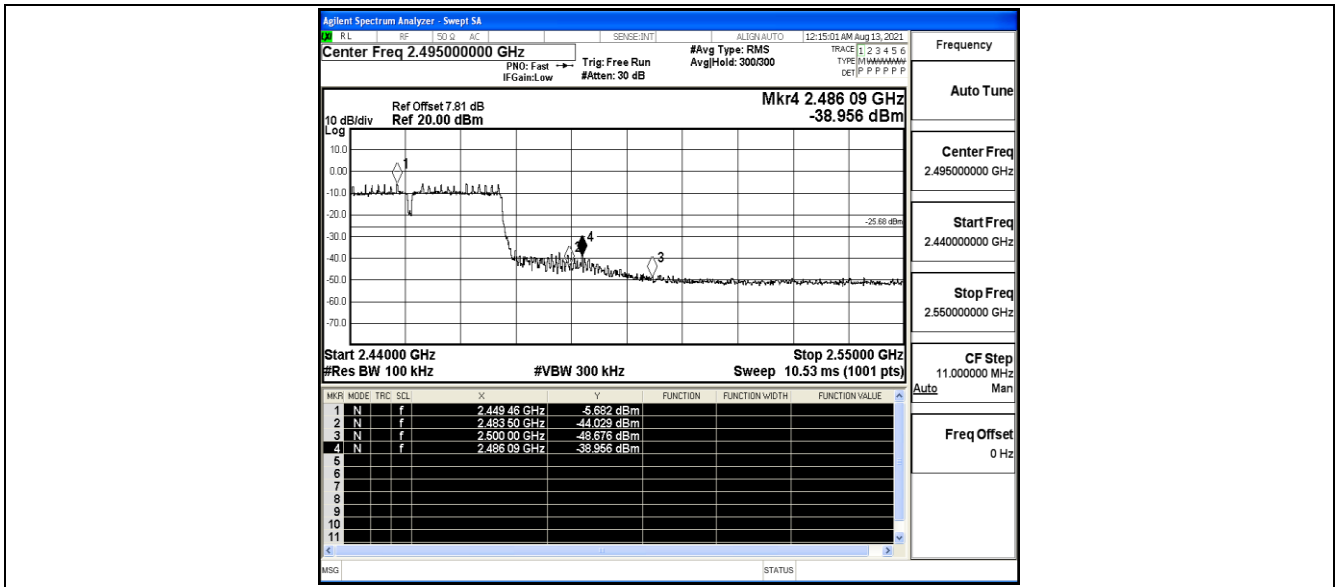
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452





Appendix C.5: Conducted Spurious Emission

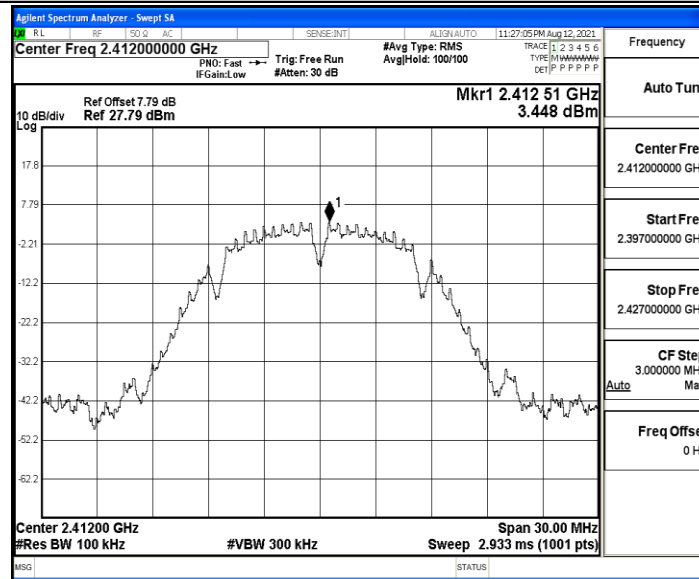
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.45	3.45	---	PASS
			30~1000	3.45	-60.44	≤-16.55	PASS
			1000~26500	3.45	-47.89	≤-16.55	PASS
		2437	Reference	3.28	3.28	---	PASS
			30~1000	3.28	-61.22	≤-16.72	PASS
			1000~26500	3.28	-42.53	≤-16.72	PASS
		2462	Reference	3.66	3.66	---	PASS
			30~1000	3.66	-60.07	≤-16.34	PASS
			1000~26500	3.66	-47.77	≤-16.34	PASS
11G	Ant1	2412	Reference	-0.27	-0.27	---	PASS
			30~1000	-0.27	-61.62	≤-20.27	PASS
			1000~26500	-0.27	-47.36	≤-20.27	PASS
		2437	Reference	-2.76	-2.76	---	PASS
			30~1000	-2.76	-60.66	≤-22.76	PASS
			1000~26500	-2.76	-47.63	≤-22.76	PASS
		2462	Reference	-2.41	-2.41	---	PASS
			30~1000	-2.41	-61.48	≤-22.41	PASS
			1000~26500	-2.41	-47.79	≤-22.41	PASS
11N20SISO	Ant1	2412	Reference	-2.14	-2.14	---	PASS
			30~1000	-2.14	-60.72	≤-22.14	PASS
			1000~26500	-2.14	-46.59	≤-22.14	PASS
		2437	Reference	-2.49	-2.49	---	PASS
			30~1000	-2.49	-60.64	≤-22.49	PASS
			1000~26500	-2.49	-47.57	≤-22.49	PASS
		2462	Reference	-2.46	-2.46	---	PASS
			30~1000	-2.46	-61.51	≤-22.46	PASS
			1000~26500	-2.46	-47.03	≤-22.46	PASS
11N40SISO	Ant1	2422	Reference	-3.89	-3.89	---	PASS
			30~1000	-3.89	-60.1	≤-23.89	PASS
			1000~26500	-3.89	-47.62	≤-23.89	PASS
		2437	Reference	-6.37	-6.37	---	PASS
			30~1000	-6.37	-61.95	≤-26.37	PASS
			1000~26500	-6.37	-47.26	≤-26.37	PASS
		2452	Reference	-5.60	-5.60	---	PASS
			30~1000	-5.60	-59.78	≤-25.6	PASS
			1000~26500	-5.60	-48.03	≤-25.6	PASS

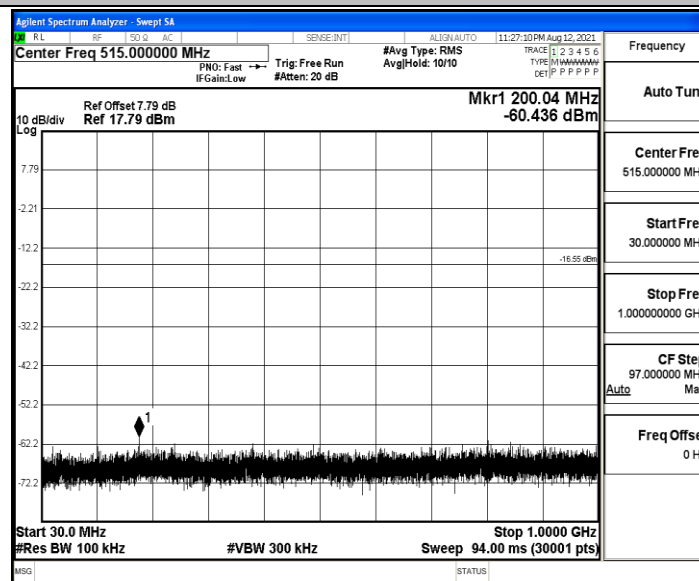


Test Graphs

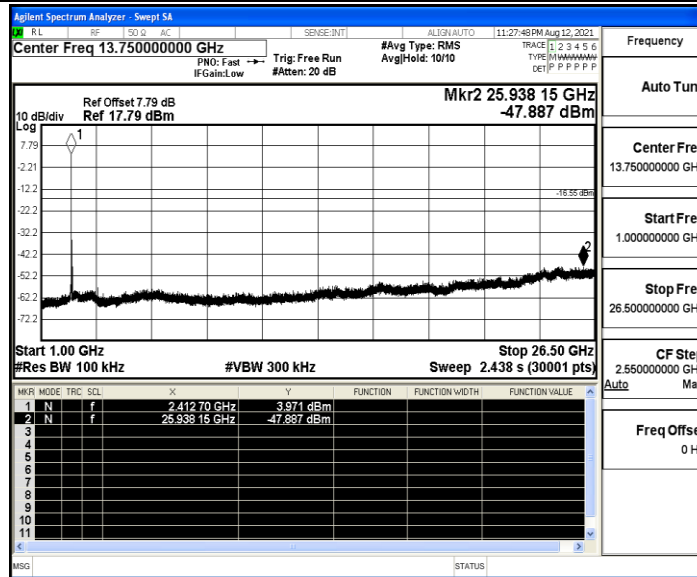
11B_Ant1_2412_0~Reference



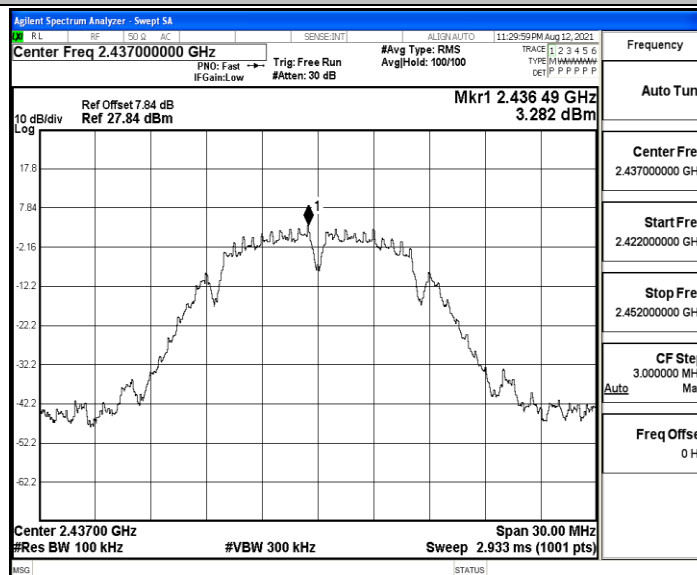
11B_Ant1_2412_30~1000



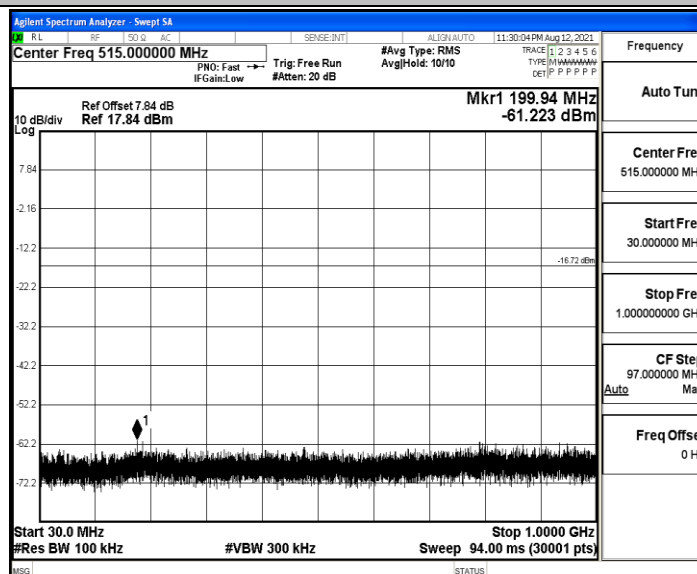
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference

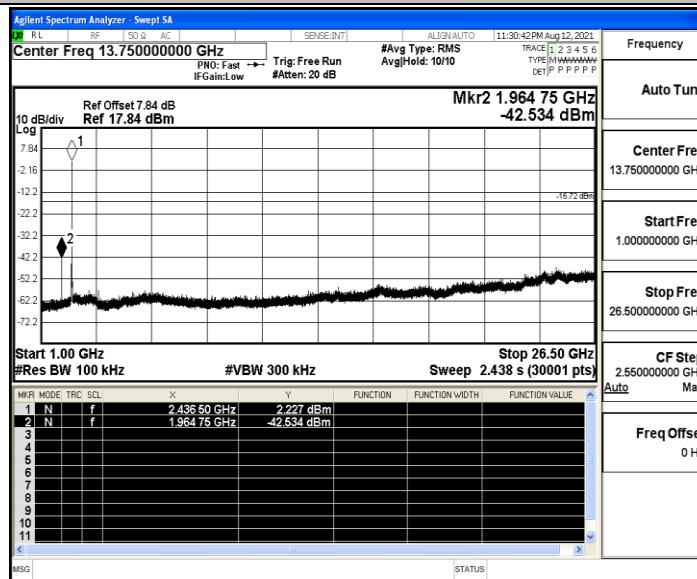


11B_Ant1_2437_30~1000

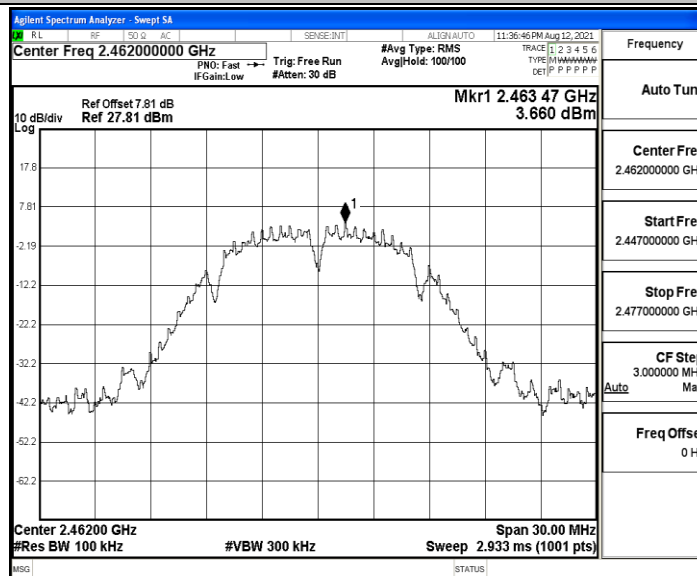




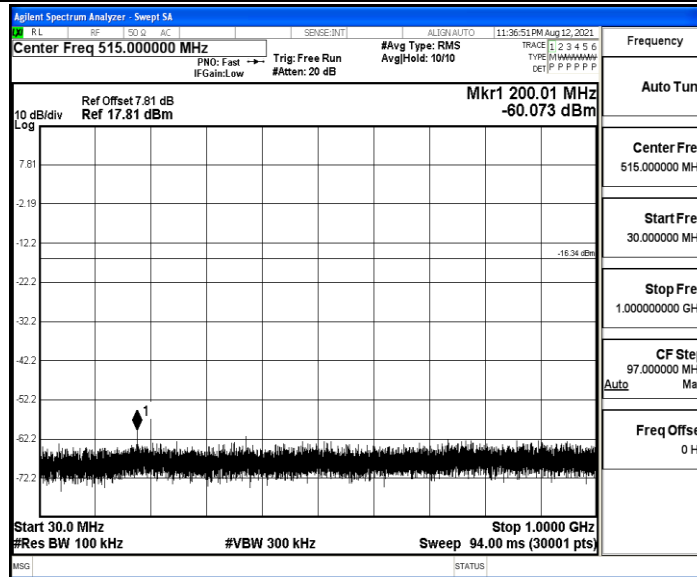
11B_Ant1_2437_1000~26500



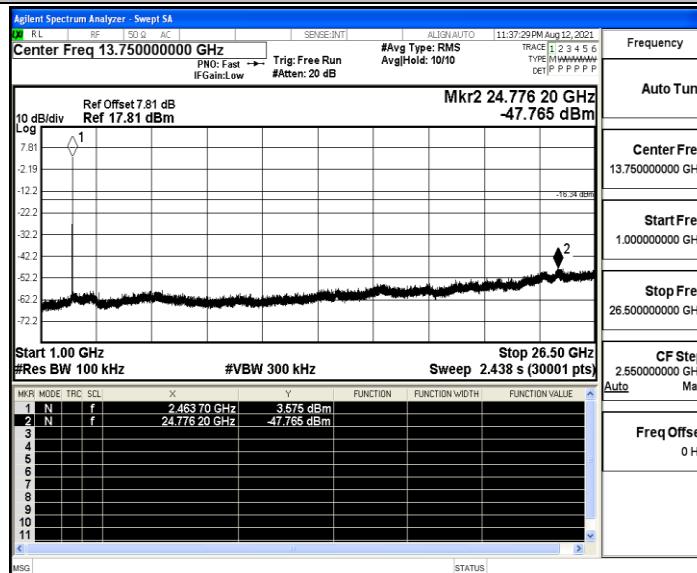
11B_Ant1_2462_0~Reference



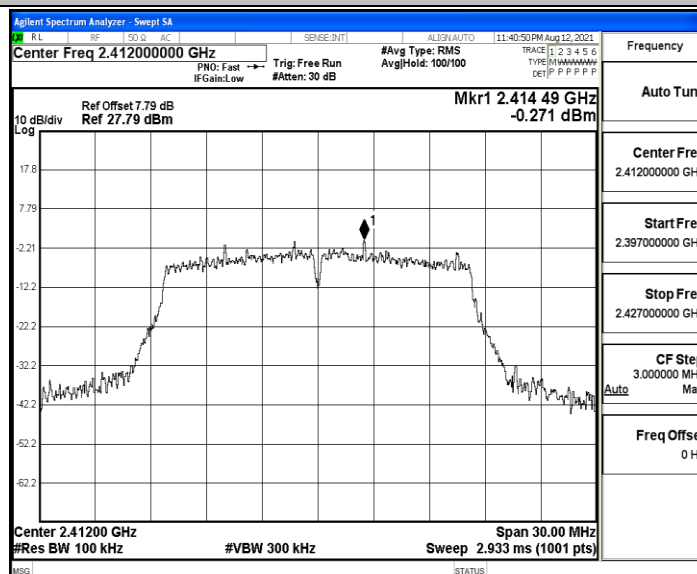
11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500

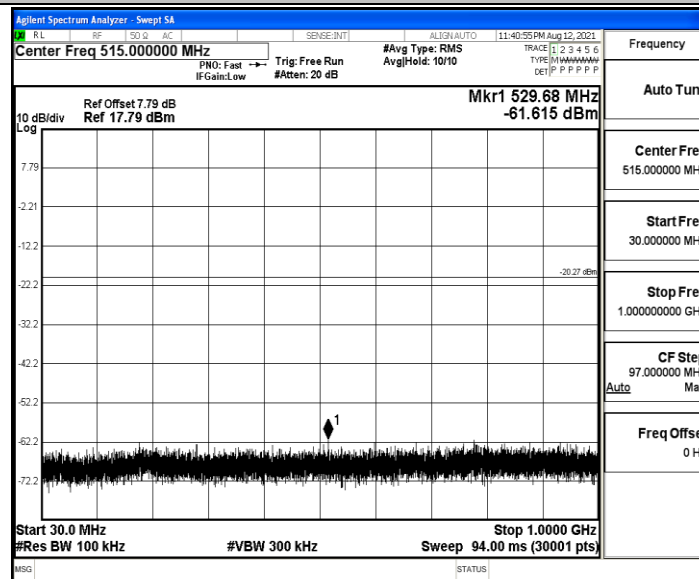


11G_Ant1_2412_0-Reference

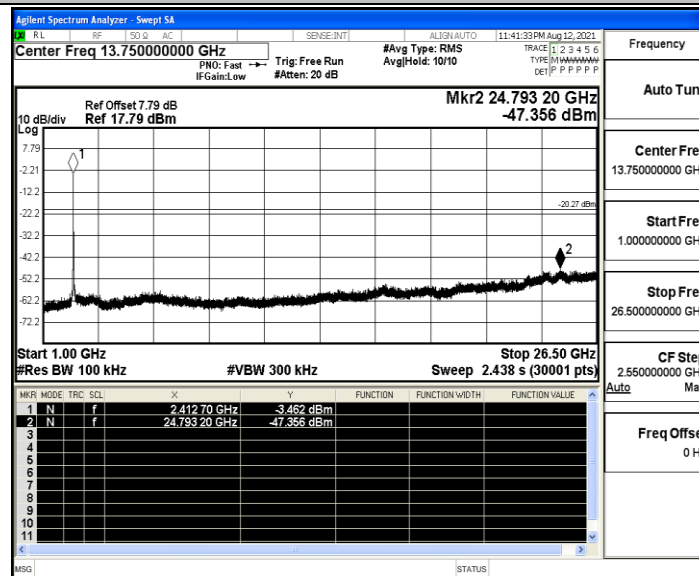




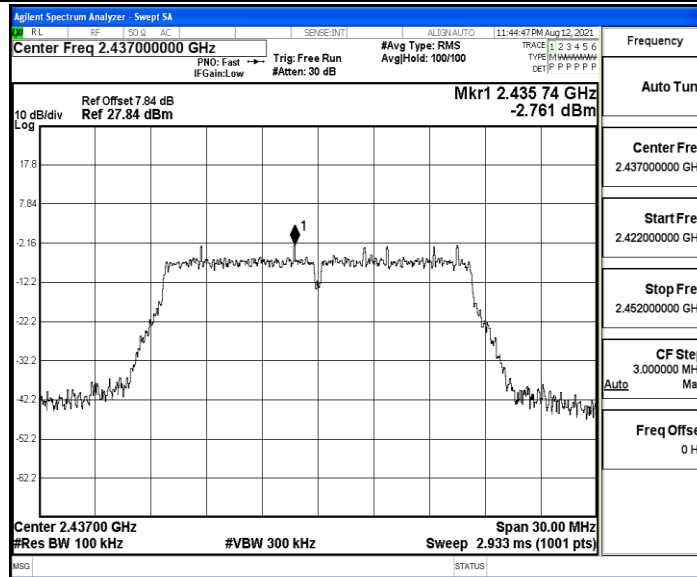
11G_Ant1_2412_30~1000



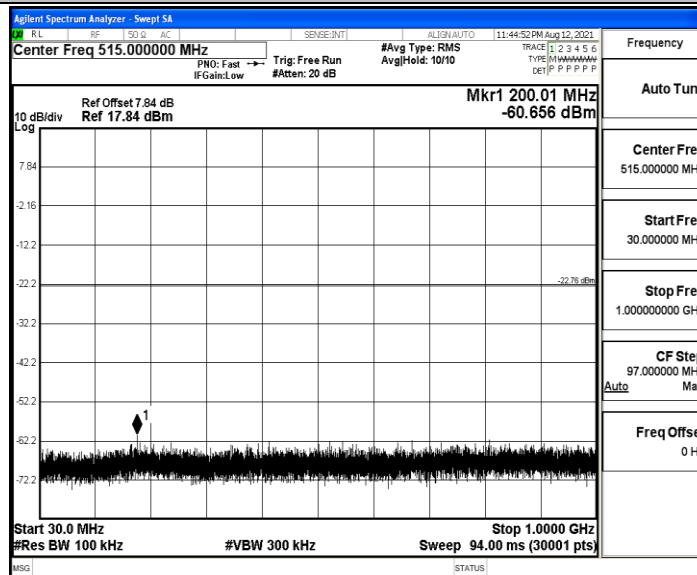
11G_Ant1_2412_1000~26500



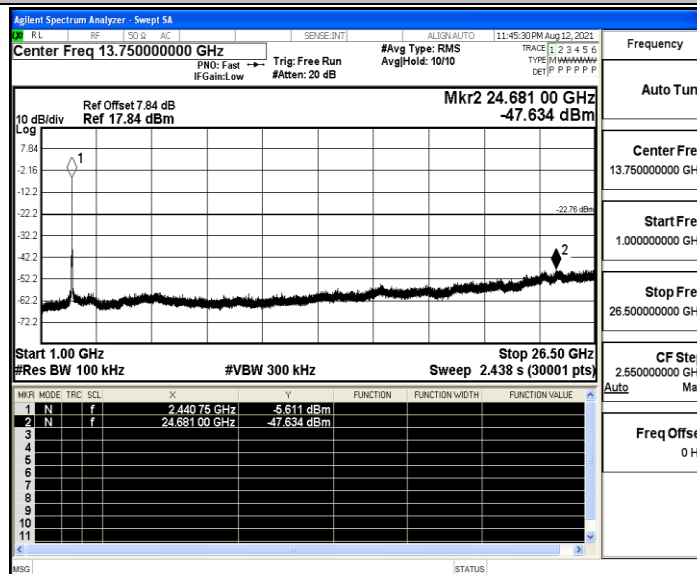
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000

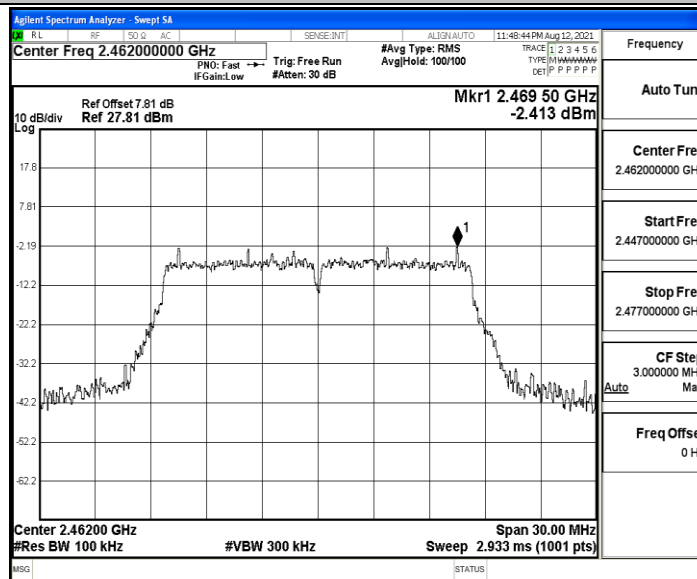


11G_Ant1_2437_1000~26500

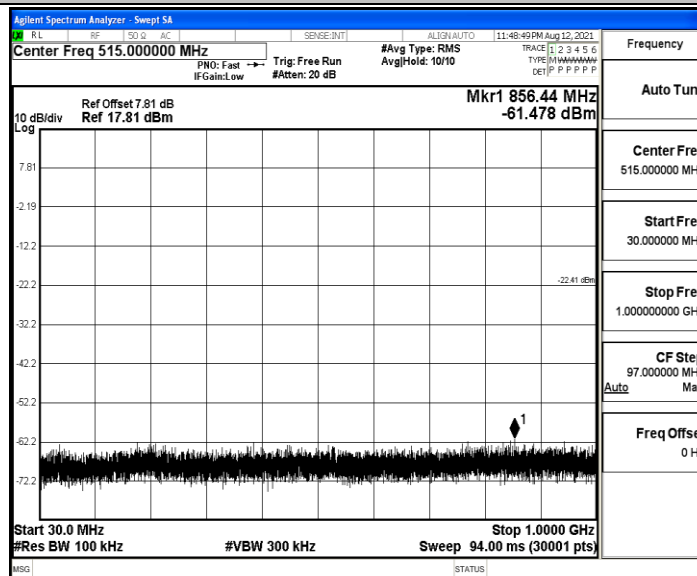




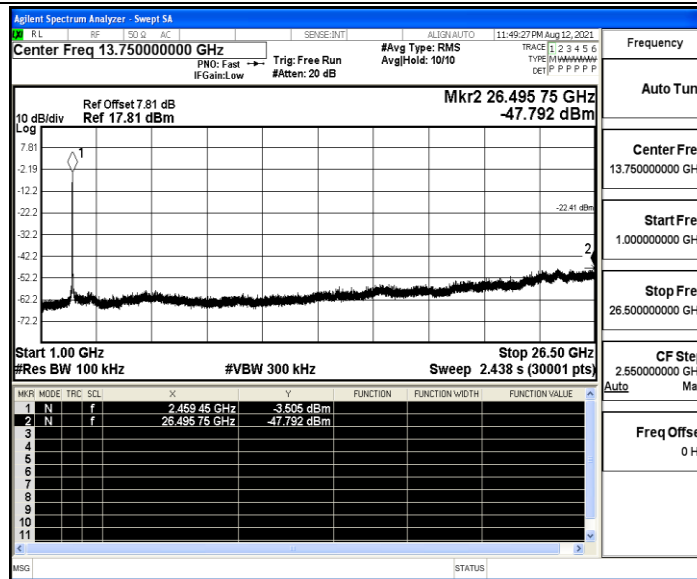
11G_Ant1_2462_0~Reference



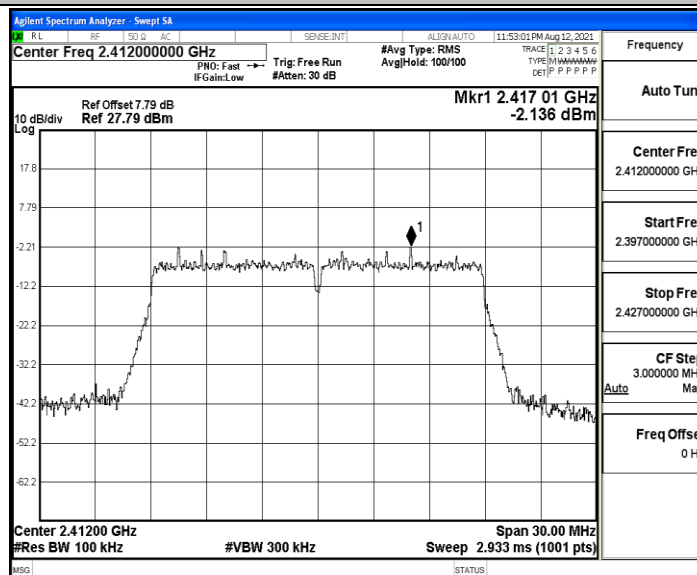
11G_Ant1_2462_30~1000



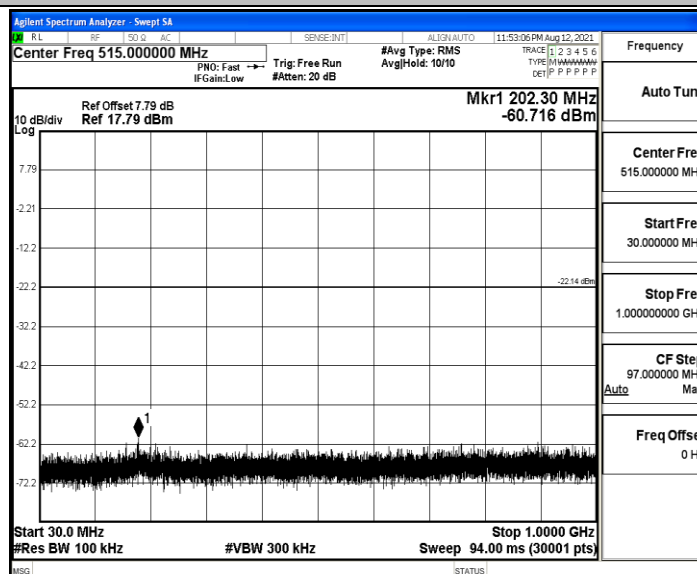
11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference

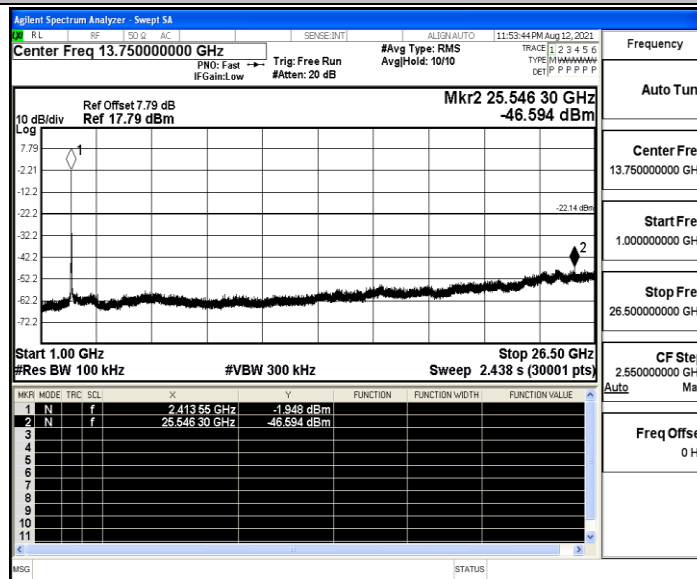


11N20SISO_Ant1_2412_30~1000

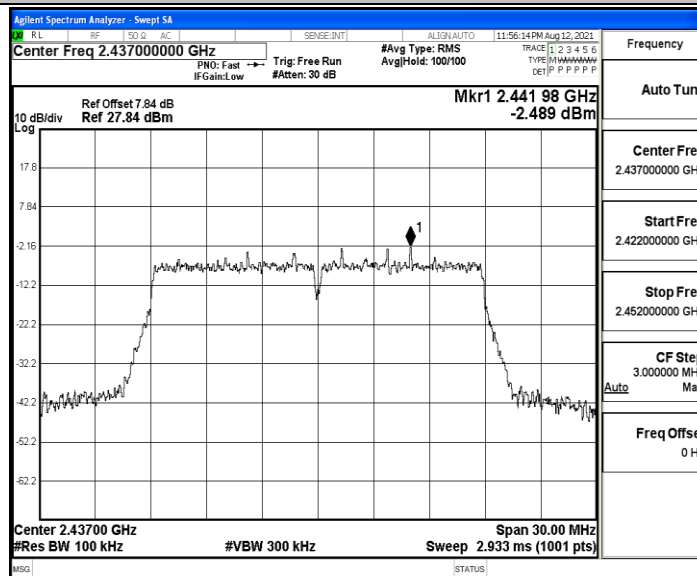




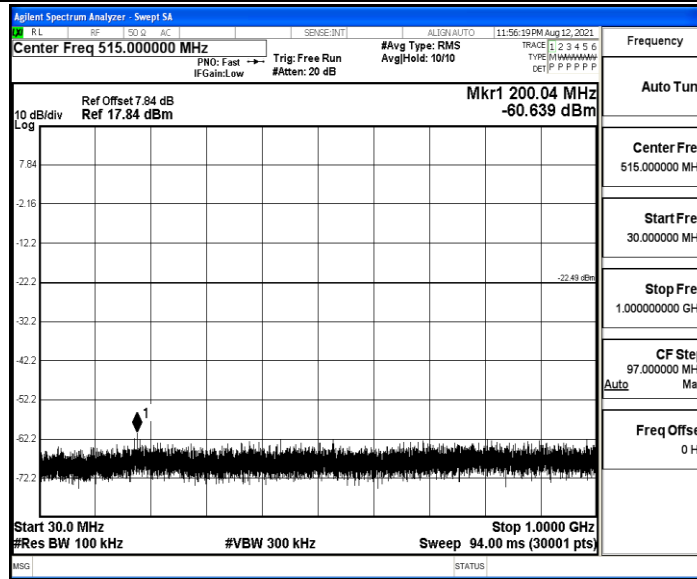
11N20SISO_Ant1_2412_1000~26500



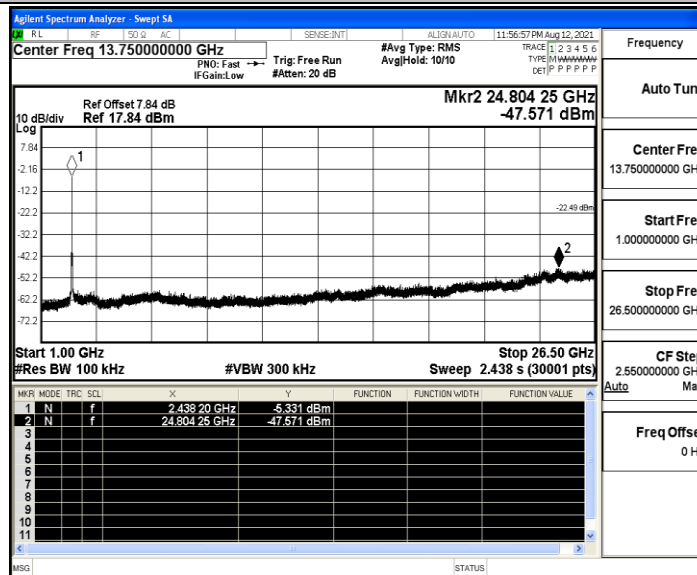
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference

