



Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: smart creative light panel

Test Model: FWWPCB-33-12

Environmental Conditions

Temperature:	21.2° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan



A.1 6dB Bandwidth

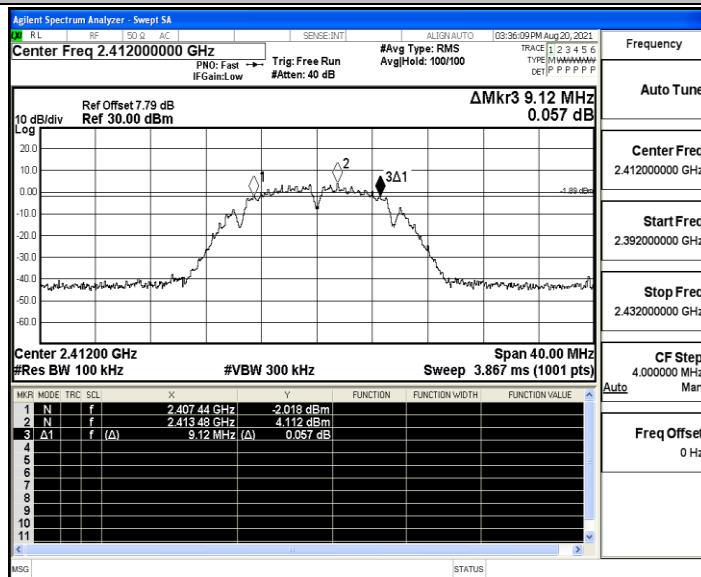
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.120	2407.440	2416.560	0.5	PASS
		2437	8.640	2432.920	2441.560	0.5	PASS
		2462	9.160	2456.920	2466.080	0.5	PASS
11G	Ant1	2412	16.400	2403.800	2420.200	0.5	PASS
		2437	16.480	2428.800	2445.280	0.5	PASS
		2462	16.200	2453.680	2469.880	0.5	PASS
11N20SISO	Ant1	2412	17.680	2403.160	2420.840	0.5	PASS
		2437	17.480	2428.360	2445.840	0.5	PASS
		2462	17.080	2453.120	2470.200	0.5	PASS
11N40SISO	Ant1	2422	35.840	2404.400	2440.240	0.5	PASS
		2437	34.240	2420.680	2454.920	0.5	PASS
		2452	35.200	2434.400	2469.600	0.5	PASS

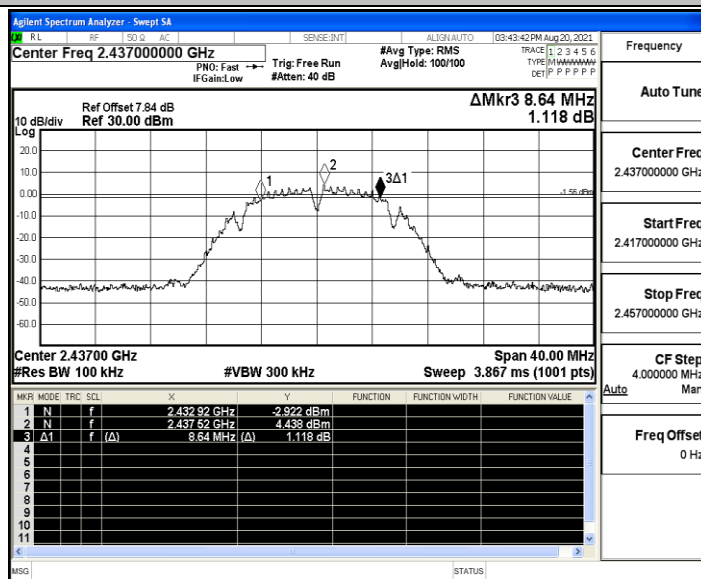


Test Graphs

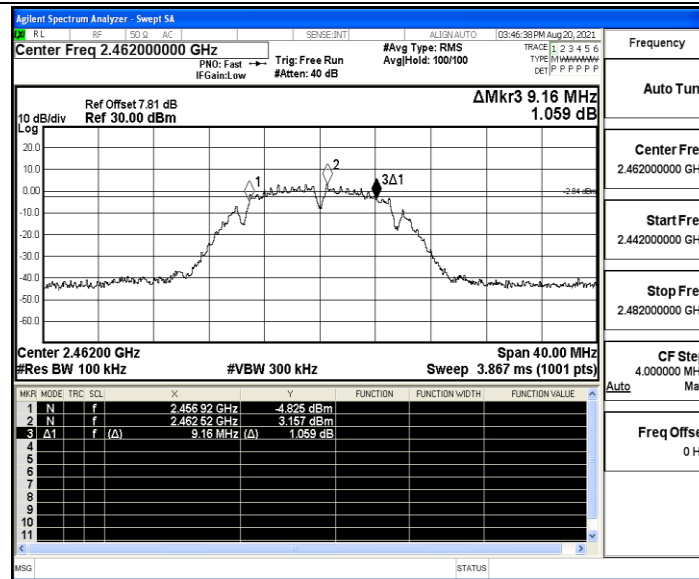
11B_Ant1_2412



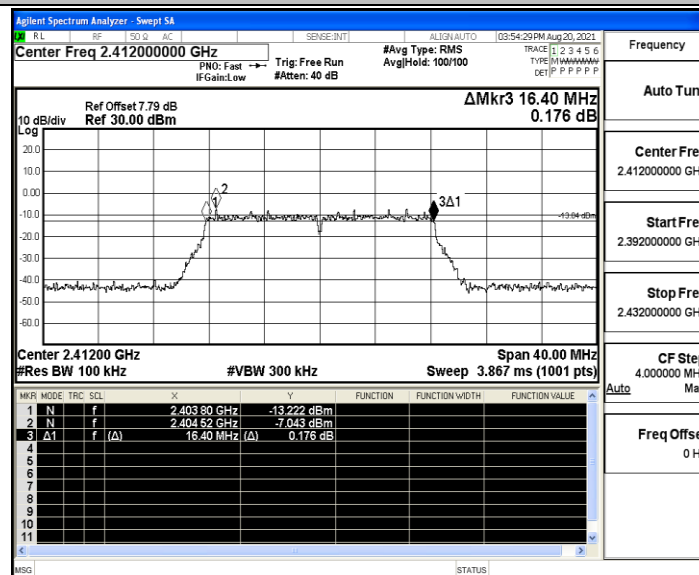
11B_Ant1_2437



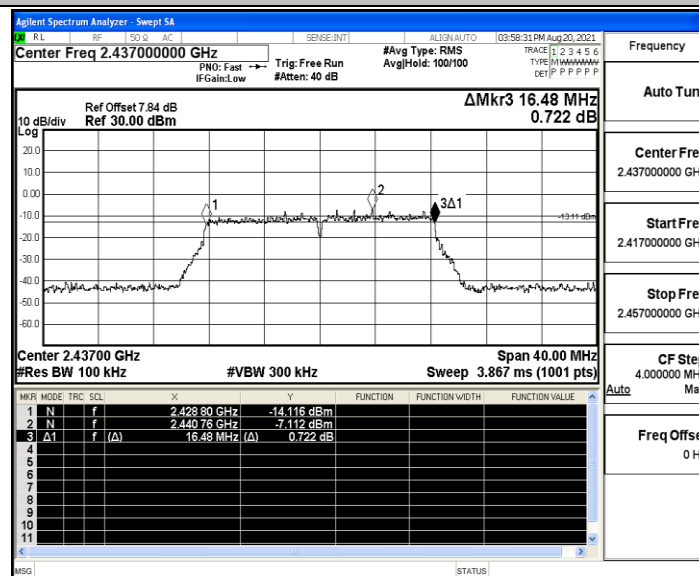
11B_Ant1_2462



11G_Ant1_2412

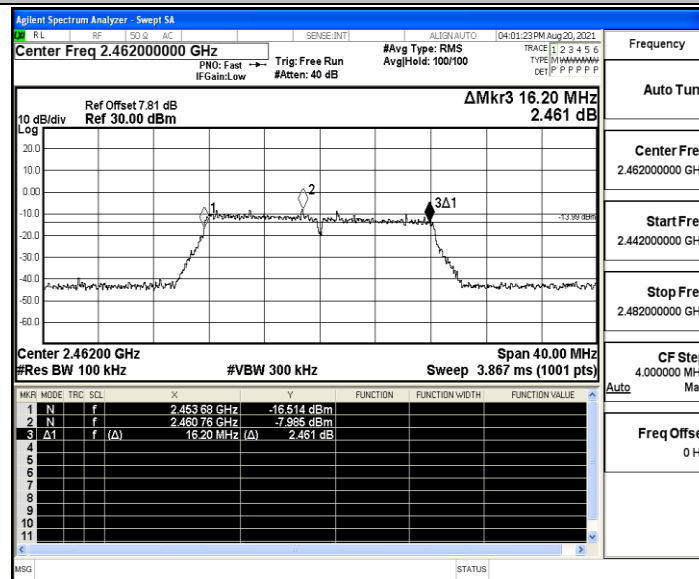


11G_Ant1_2437

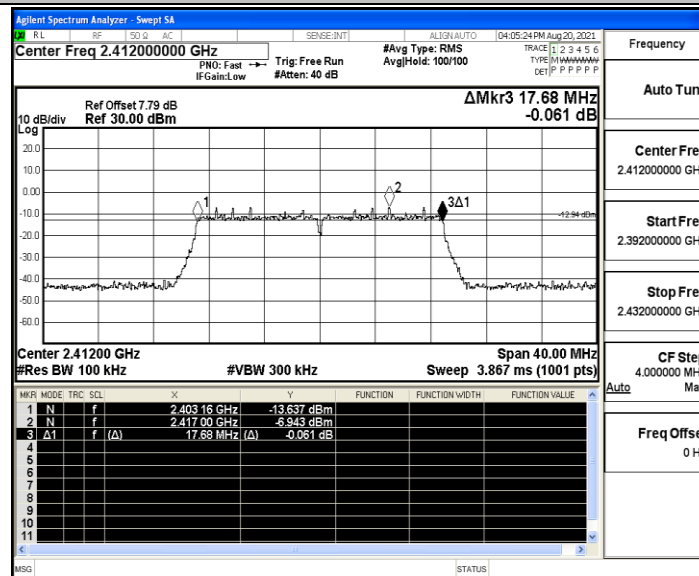




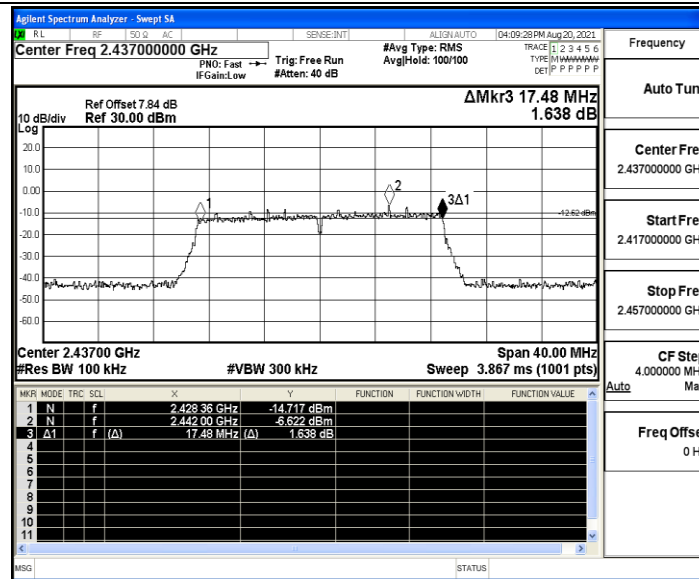
11G_Ant1_2462



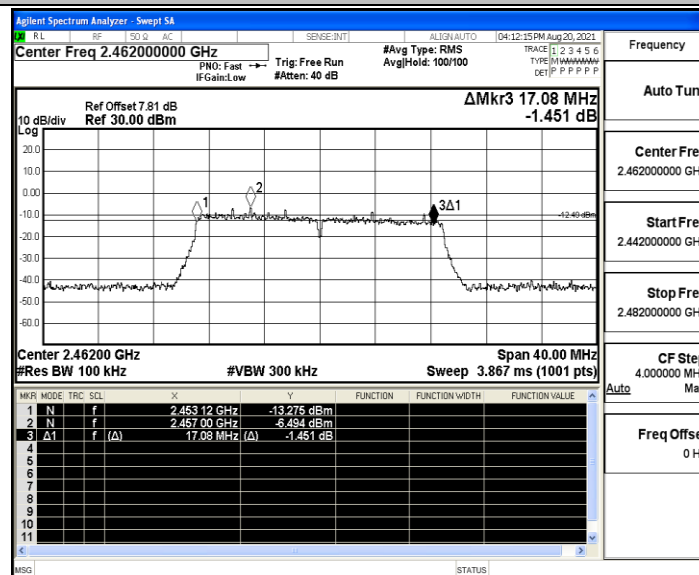
11N20SISO_Ant1_2412



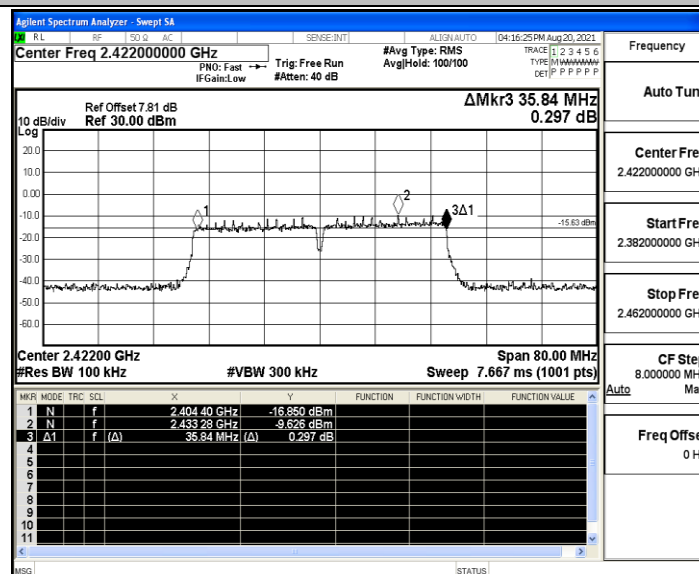
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

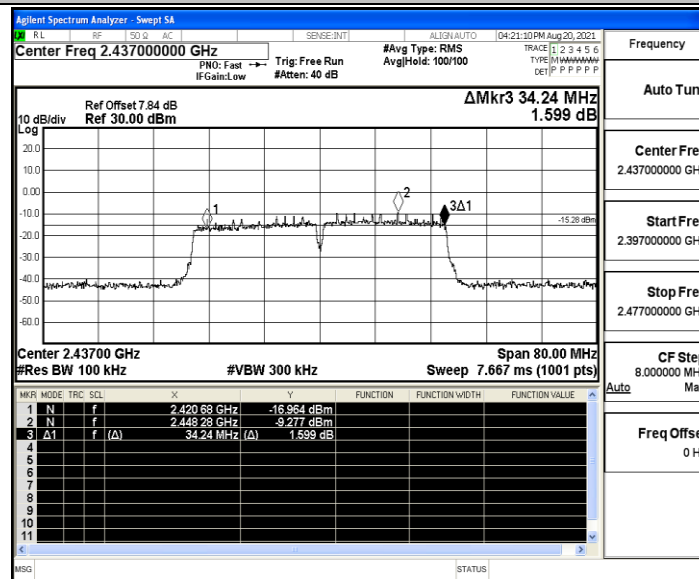


11N40SISO_Ant1_2422

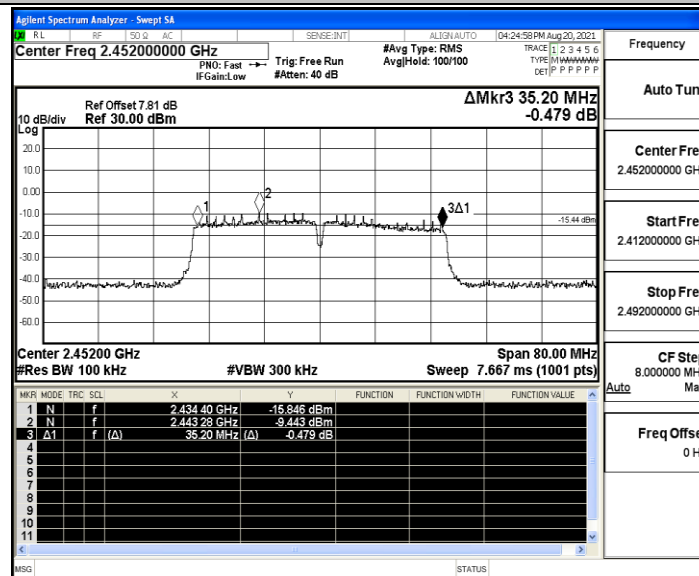




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





A.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	16.08	≤30	PASS
		2437	16.02	≤30	PASS
		2462	15.29	≤30	PASS
11G	Ant1	2412	11.74	≤30	PASS
		2437	11.75	≤30	PASS
		2462	10.79	≤30	PASS
11N20SISO	Ant1	2412	11.65	≤30	PASS
		2437	11.60	≤30	PASS
		2462	11.35	≤30	PASS
11N40SISO	Ant1	2422	11.31	≤30	PASS
		2437	11.27	≤30	PASS
		2452	11.18	≤30	PASS



A.3 Maximum power spectral density

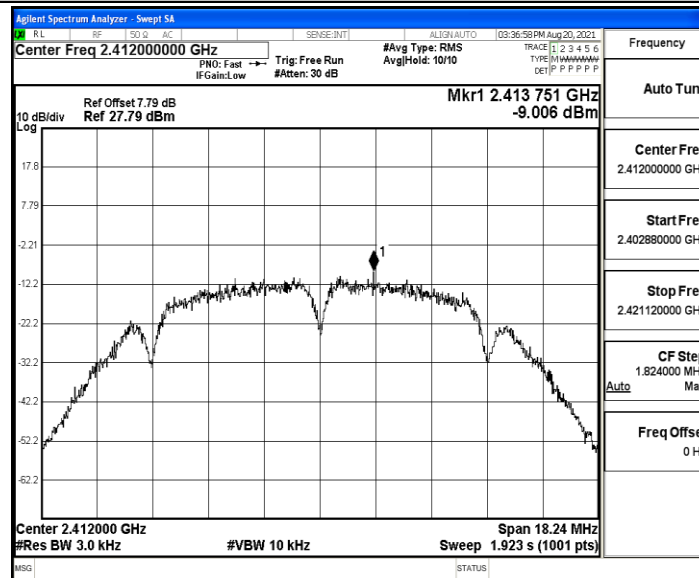
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.01	≤8	PASS
		2437	-7.68	≤8	PASS
		2462	-10.68	≤8	PASS
11G	Ant1	2412	-20.93	≤8	PASS
		2437	-20.5	≤8	PASS
		2462	-20.58	≤8	PASS
11N20SISO	Ant1	2412	-21.18	≤8	PASS
		2437	-20.97	≤8	PASS
		2462	-20.96	≤8	PASS
11N40SISO	Ant1	2422	-22.99	≤8	PASS
		2437	-24.03	≤8	PASS
		2452	-23.13	≤8	PASS

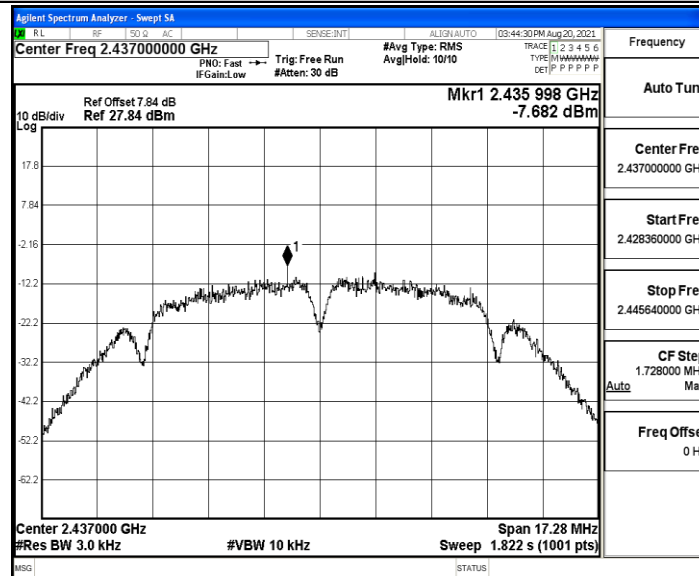


Test Graphs

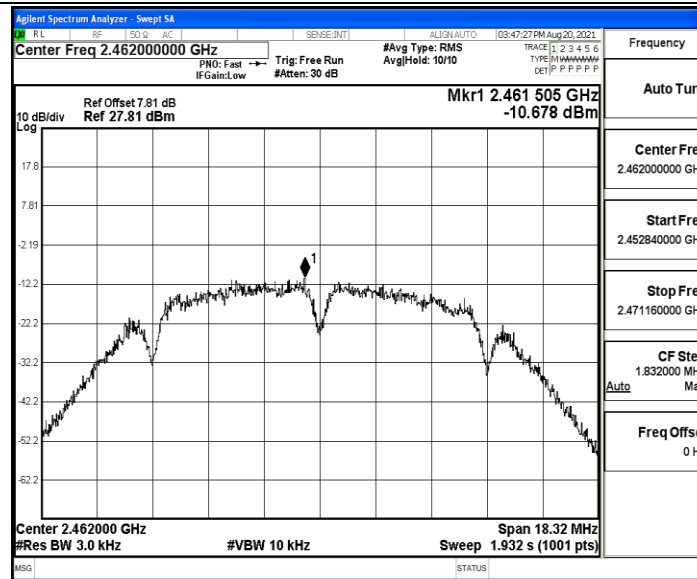
11B_Ant1_2412



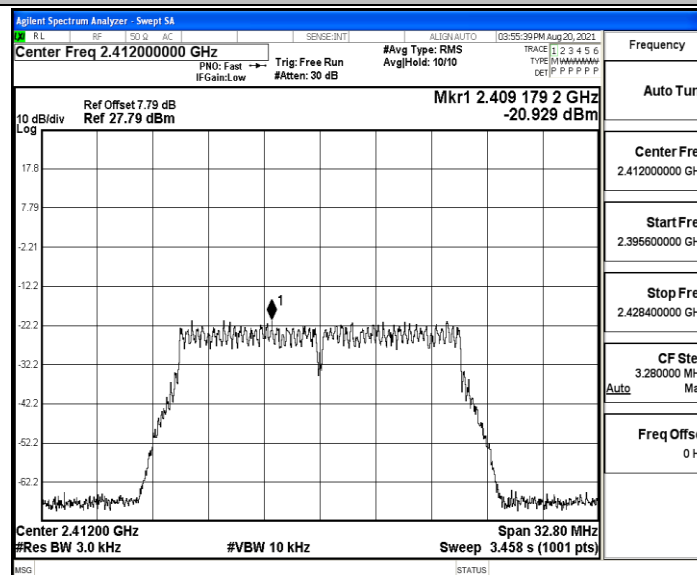
11B_Ant1_2437



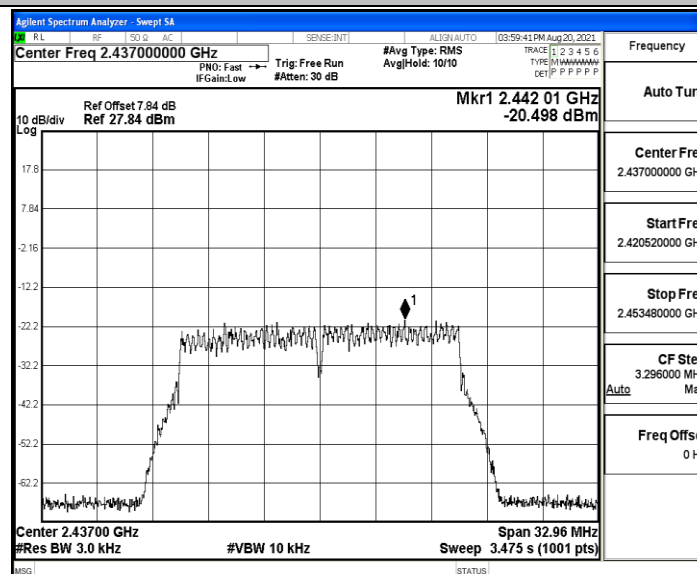
11B_Ant1_2462



11G_Ant1_2412

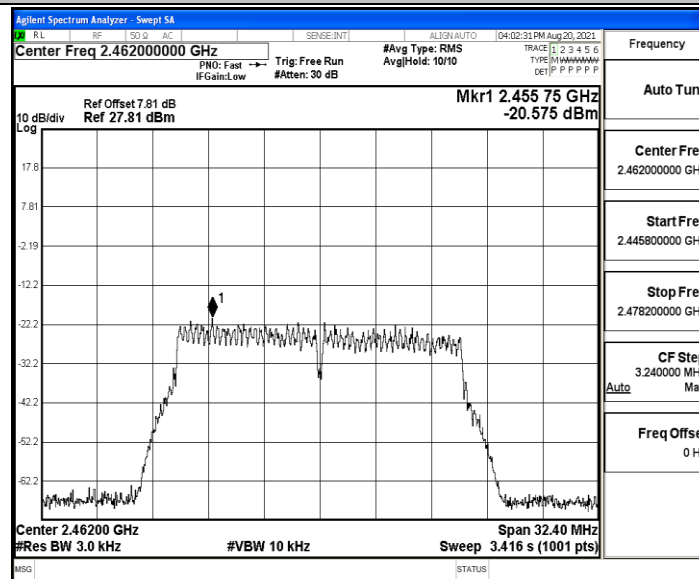


11G_Ant1_2437

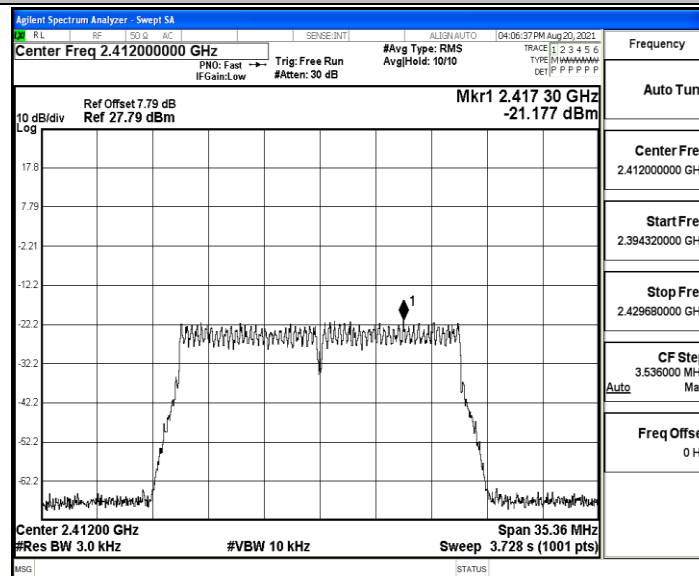




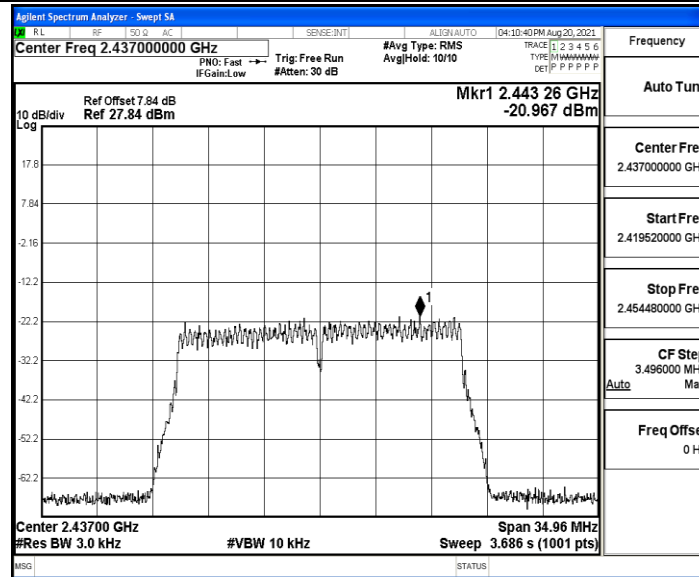
11G_Ant1_2462



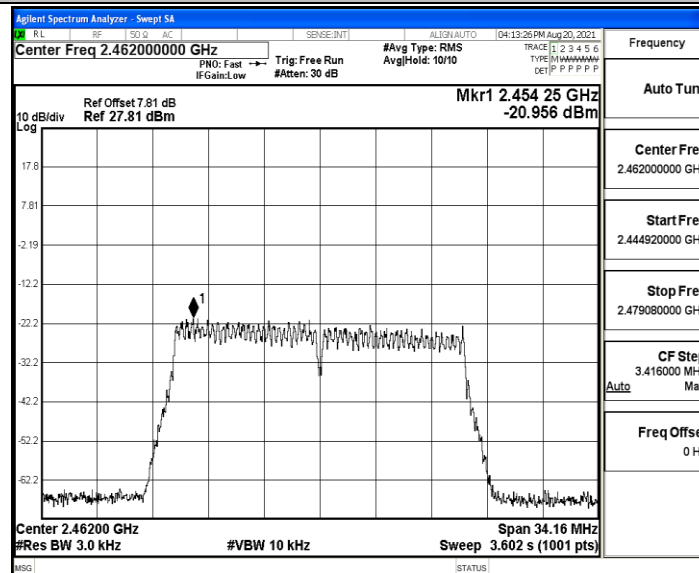
11N20SISO_Ant1_2412



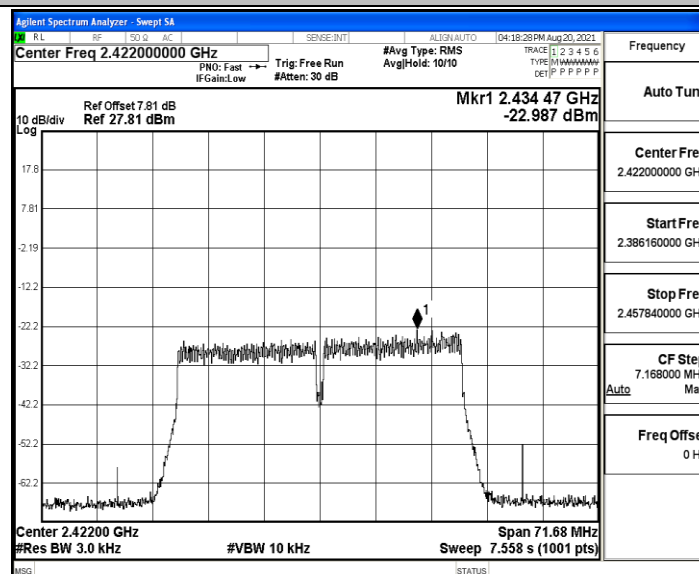
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

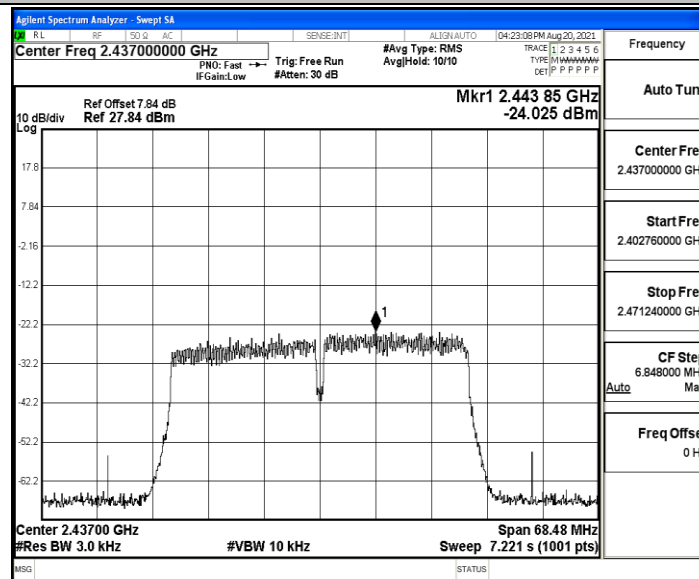


11N40SISO_Ant1_2422

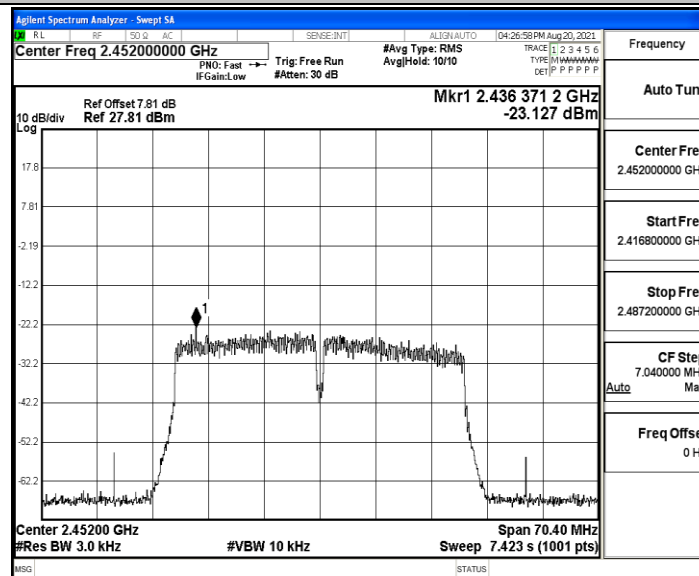




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





A.4 Band edge measurements

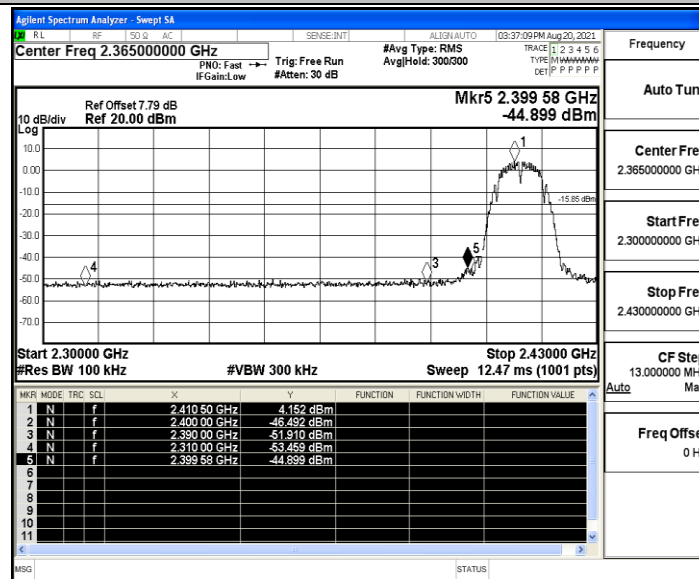
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.15	-44.9	≤ -15.85	PASS
		High	2462	3.80	-48.55	≤ -16.2	PASS
11G	Ant1	Low	2412	-6.55	-49.72	≤ -26.55	PASS
		High	2462	-7.06	-48.53	≤ -27.06	PASS
11N20SISO	Ant1	Low	2412	-6.65	-49.6	≤ -26.65	PASS
		High	2462	-6.26	-47.72	≤ -26.26	PASS
11N40SISO	Ant1	Low	2422	-10.41	-49.51	≤ -30.41	PASS
		High	2452	-9.22	-48.94	≤ -29.22	PASS

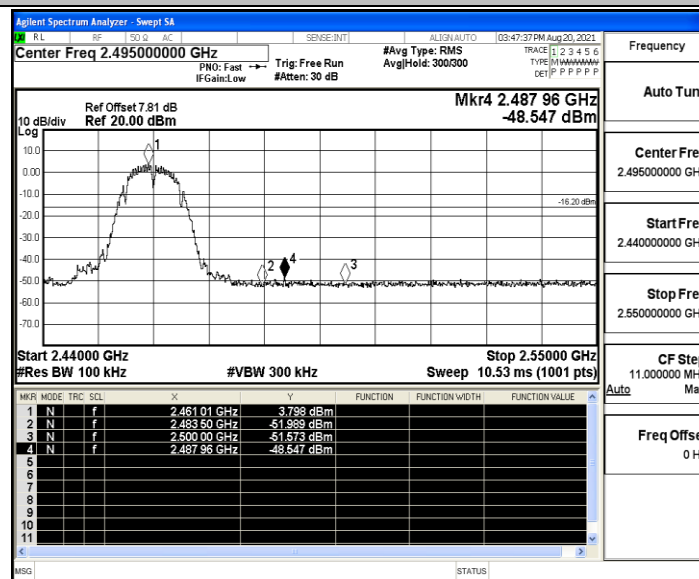


Test Graphs

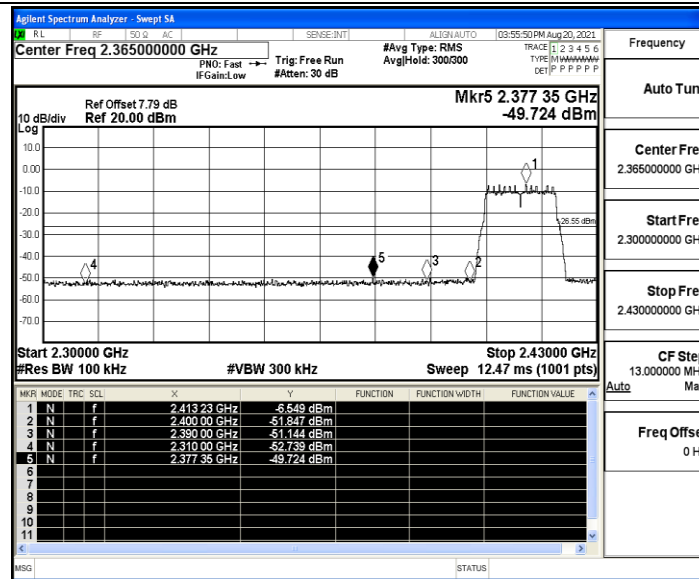
11B_Ant1_Low_2412



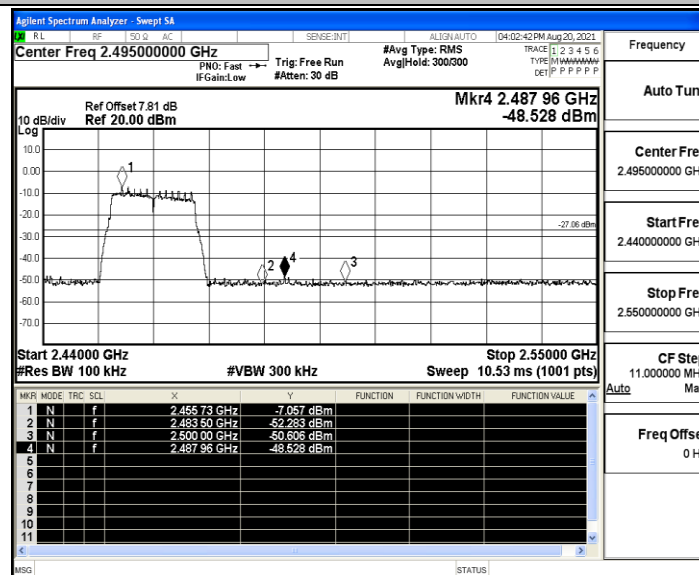
11B_Ant1_High_2462



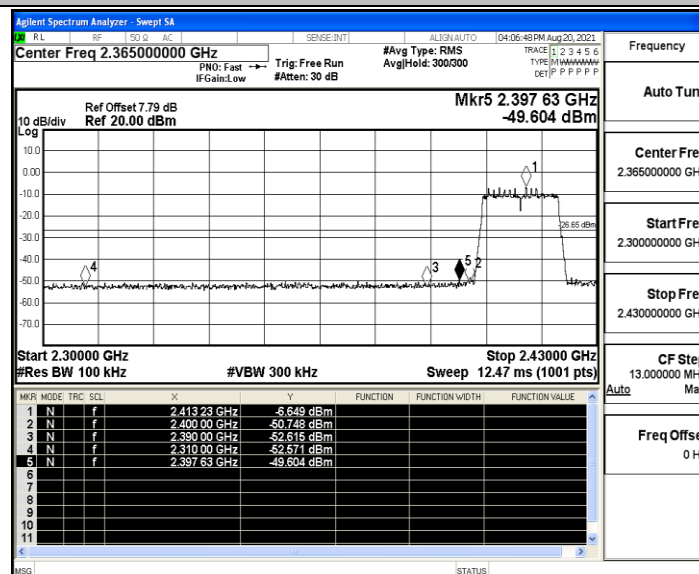
11G_Ant1_Low_2412



11G_Ant1_High_2462

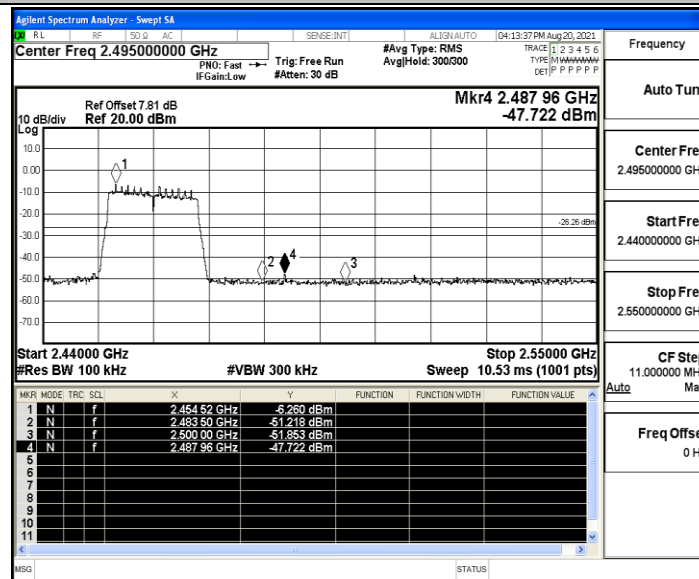


11N20SISO_Ant1_Low_2412

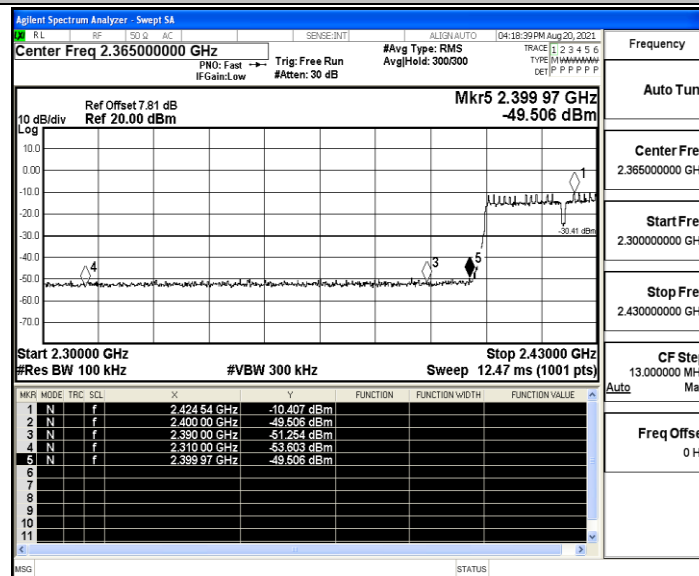




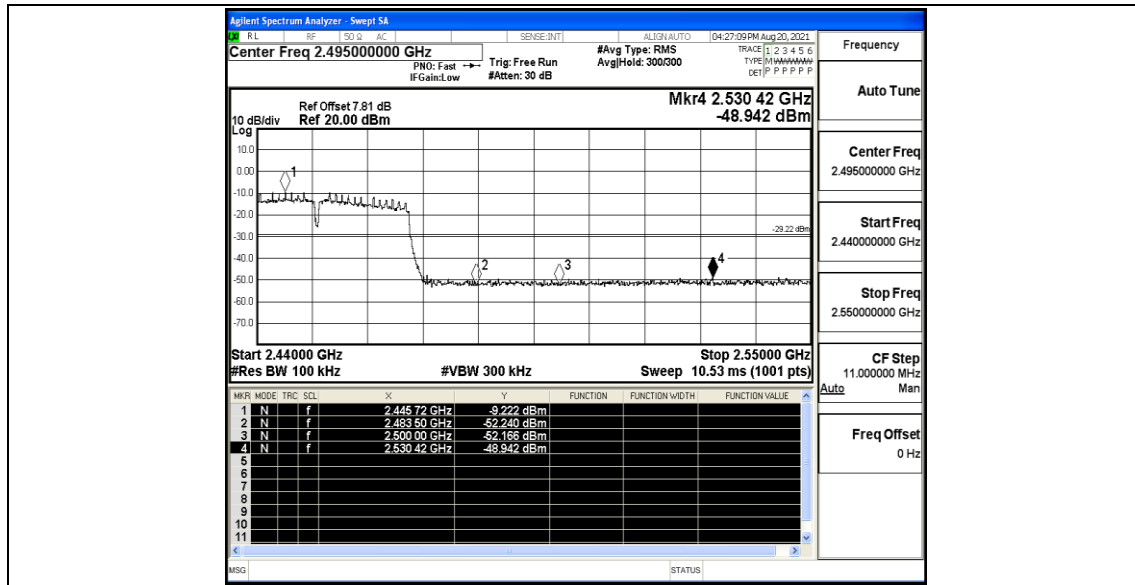
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452





A.5 Conducted Spurious Emission

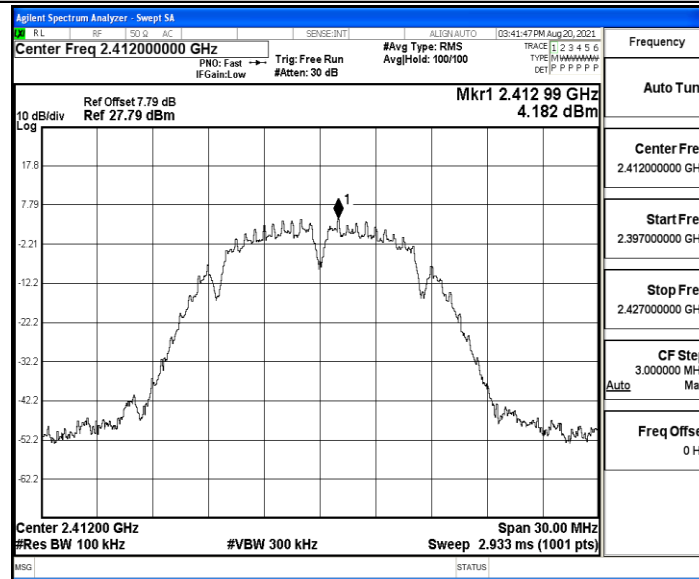
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.18	4.18	---	PASS
			30~1000	4.18	-61.96	≤-15.82	PASS
			1000~26500	4.18	-47.43	≤-15.82	PASS
		2437	Reference	3.97	3.97	---	PASS
			30~1000	3.97	-61.4	≤-16.03	PASS
			1000~26500	3.97	-47.8	≤-16.03	PASS
		2462	Reference	3.19	3.19	---	PASS
			30~1000	3.19	-60.11	≤-16.81	PASS
			1000~26500	3.19	-48.09	≤-16.81	PASS
11G	Ant1	2412	Reference	-6.83	-6.83	---	PASS
			30~1000	-6.83	-60.18	≤-26.83	PASS
			1000~26500	-6.83	-47.28	≤-26.83	PASS
		2437	Reference	-7.56	-7.56	---	PASS
			30~1000	-7.56	-59.65	≤-27.56	PASS
			1000~26500	-7.56	-47.1	≤-27.56	PASS
		2462	Reference	-7.12	-7.12	---	PASS
			30~1000	-7.12	-61.2	≤-27.12	PASS
			1000~26500	-7.12	-47.18	≤-27.12	PASS
11N20SISO	Ant1	2412	Reference	-6.79	-6.79	---	PASS
			30~1000	-6.79	-61.36	≤-26.79	PASS
			1000~26500	-6.79	-47.04	≤-26.79	PASS
		2437	Reference	-7.49	-7.49	---	PASS
			30~1000	-7.49	-61.18	≤-27.49	PASS
			1000~26500	-7.49	-47.26	≤-27.49	PASS
		2462	Reference	-6.78	-6.78	---	PASS
			30~1000	-6.78	-61.94	≤-26.78	PASS
			1000~26500	-6.78	-47.64	≤-26.78	PASS
11N40SISO	Ant1	2422	Reference	-9.85	-9.85	---	PASS
			30~1000	-9.85	-60.26	≤-29.85	PASS
			1000~26500	-9.85	-47.02	≤-29.85	PASS
		2437	Reference	-9.42	-9.42	---	PASS
			30~1000	-9.42	-60.41	≤-29.42	PASS
			1000~26500	-9.42	-47.33	≤-29.42	PASS
		2452	Reference	-9.69	-9.69	---	PASS
			30~1000	-9.69	-61.85	≤-29.69	PASS
			1000~26500	-9.69	-46.71	≤-29.69	PASS

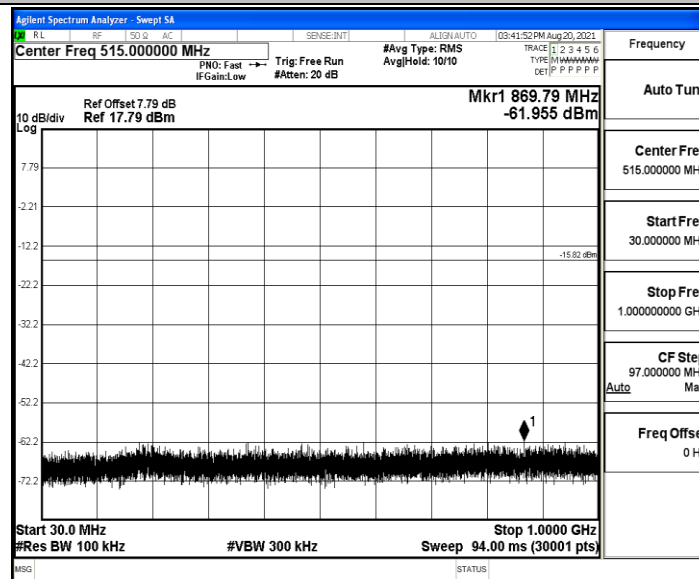


Test Graphs

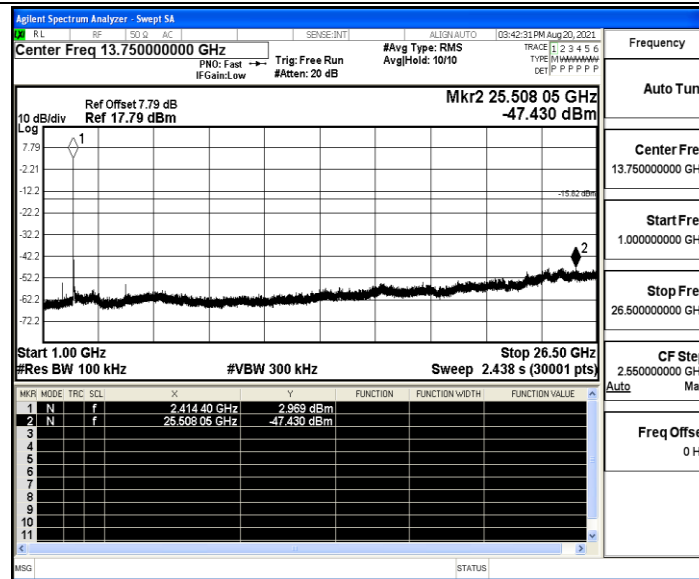
11B_Ant1_2412_0~Reference



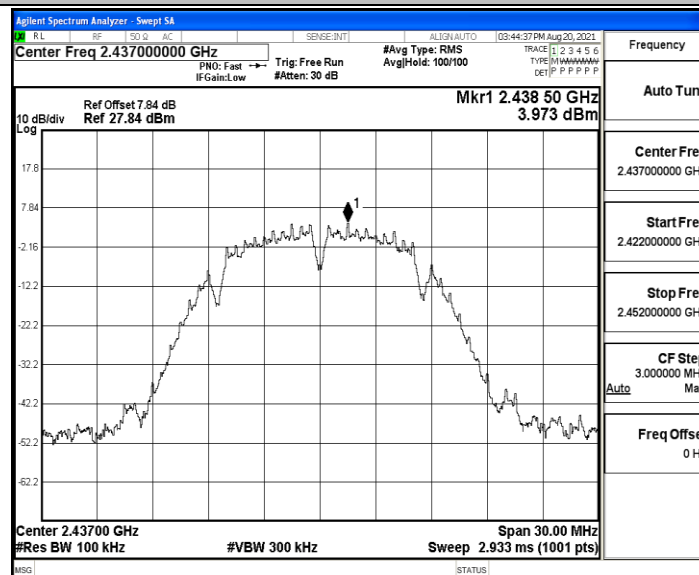
11B_Ant1_2412_30~1000



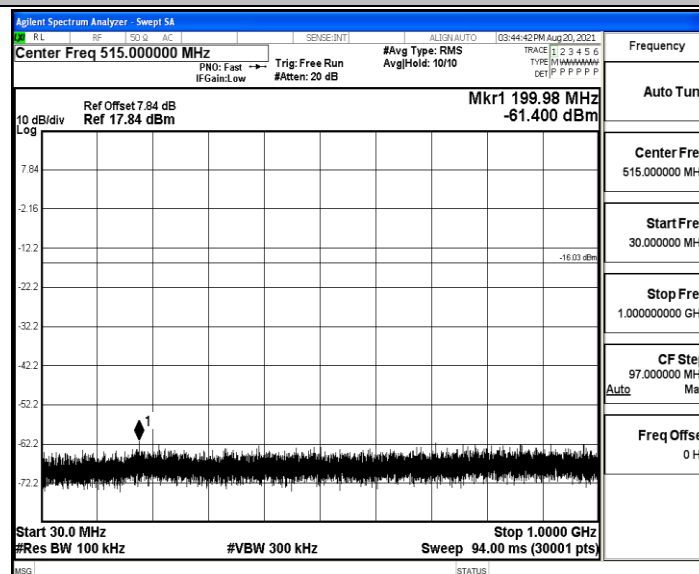
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference

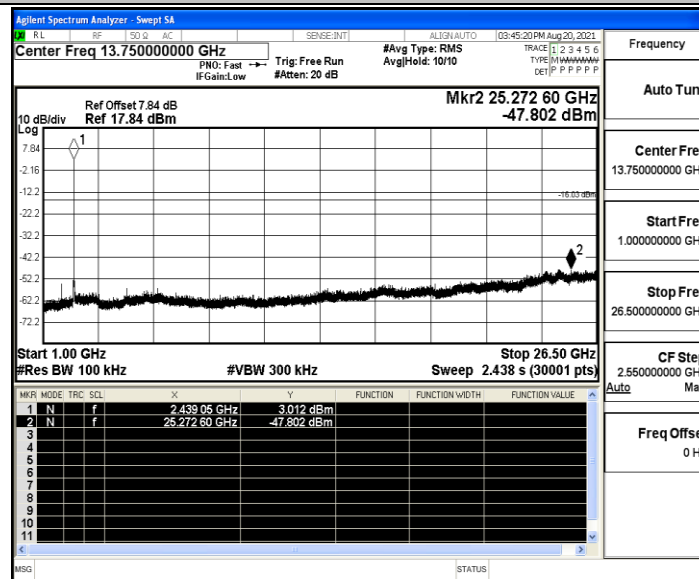


11B_Ant1_2437_30~1000

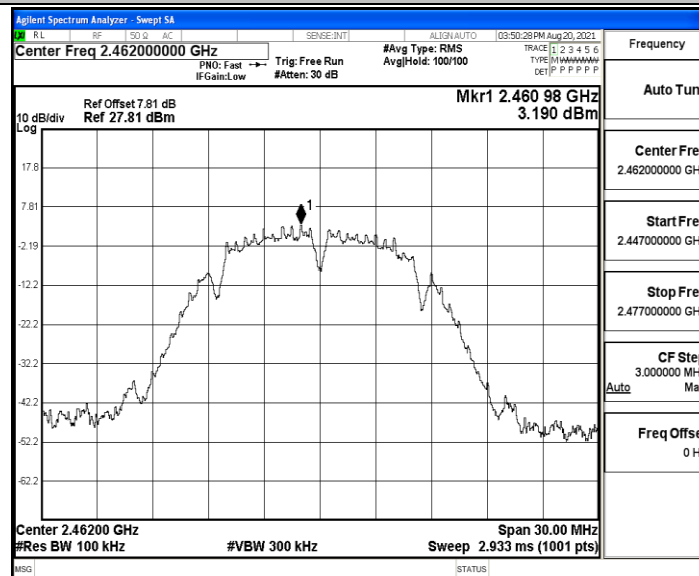




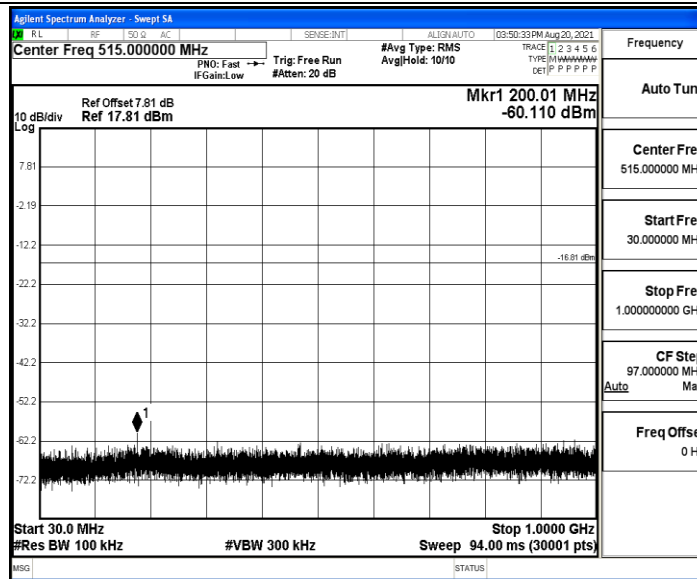
11B_Ant1_2437_1000~26500



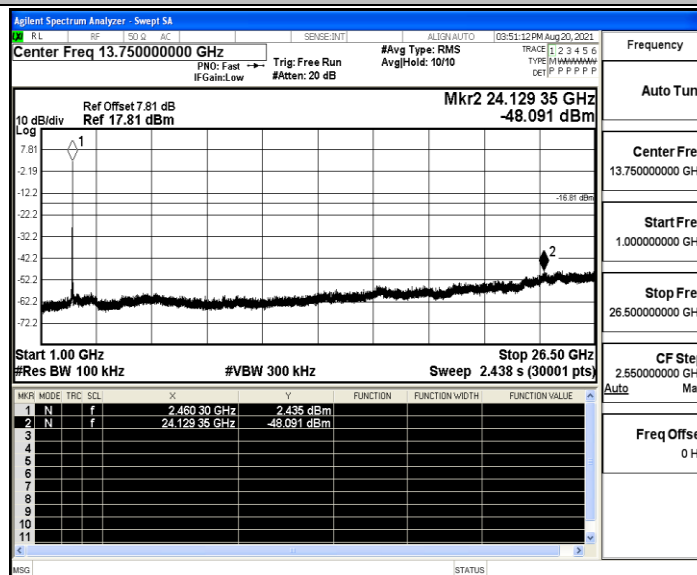
11B_Ant1_2462_0~Reference



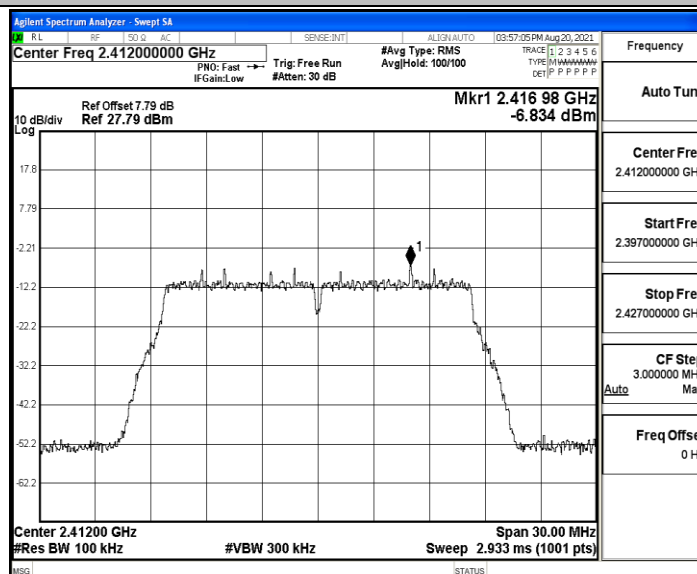
11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500

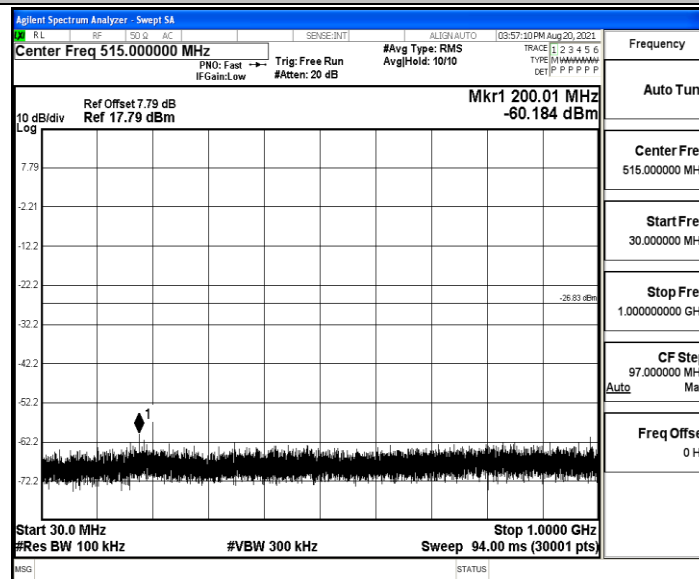


11G_Ant1_2412_0~Reference

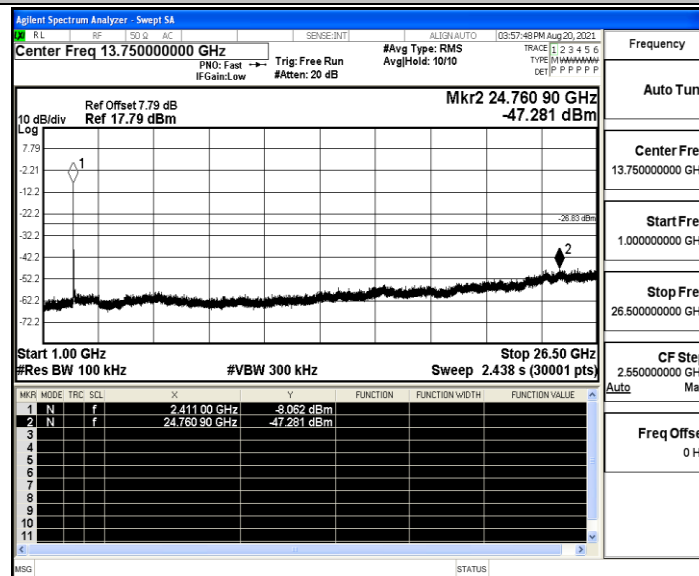




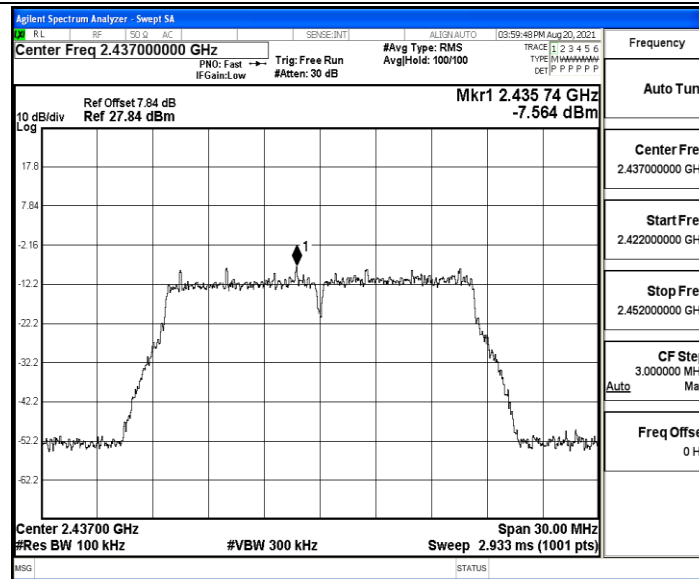
11G_Ant1_2412_30~1000



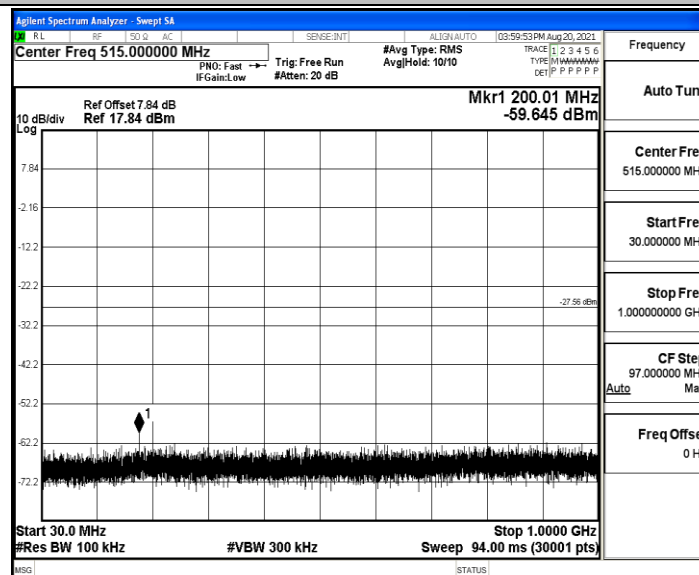
11G_Ant1_2412_1000~26500



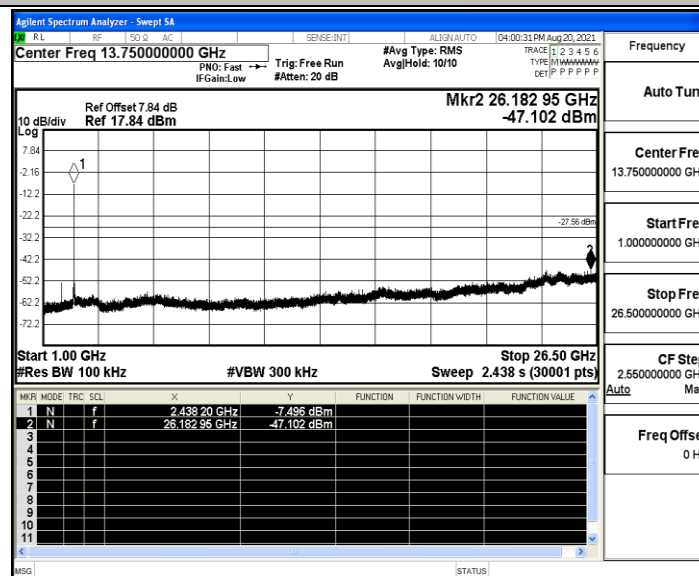
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000

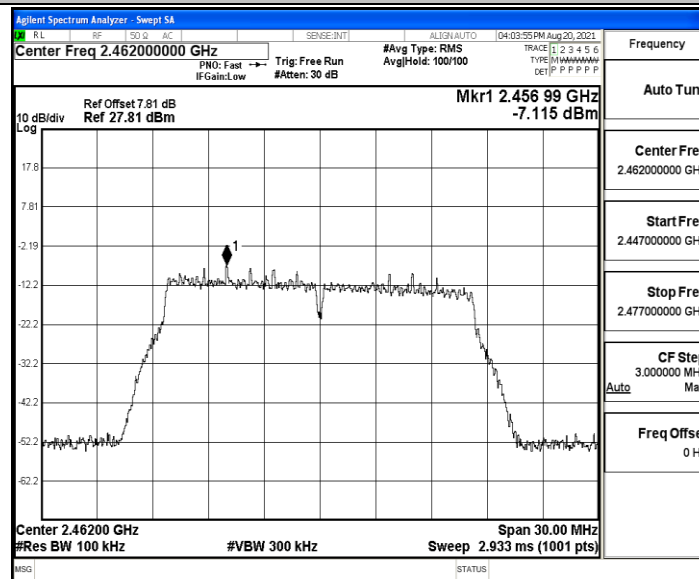


11G_Ant1_2437_1000~26500

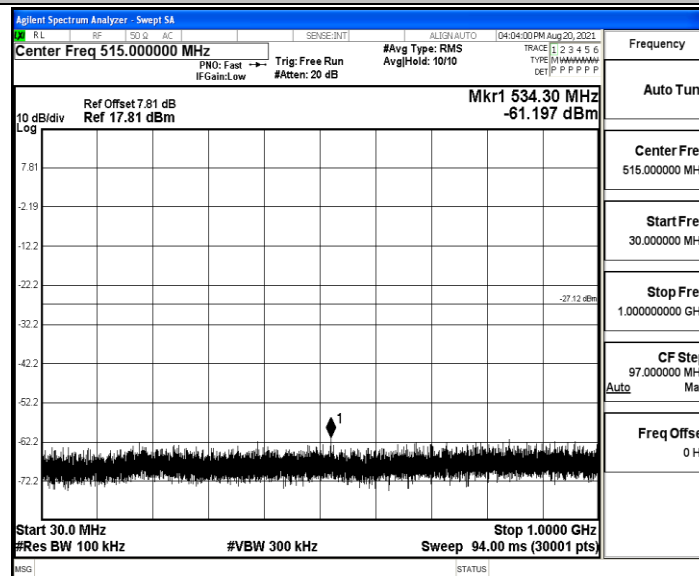




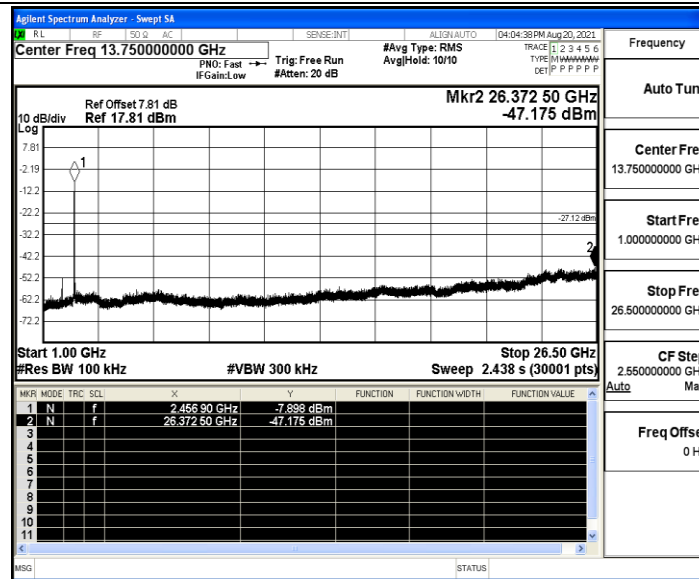
11G_Ant1_2462_0~Reference



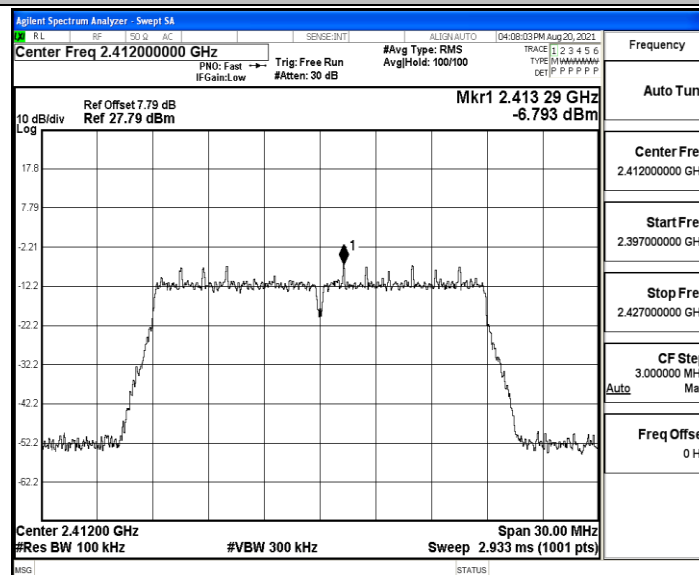
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

