



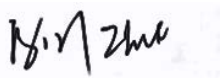
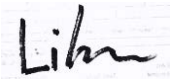
Appendix A

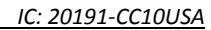
RF Test Data for 2.4G WIFI (Conducted Measurement)

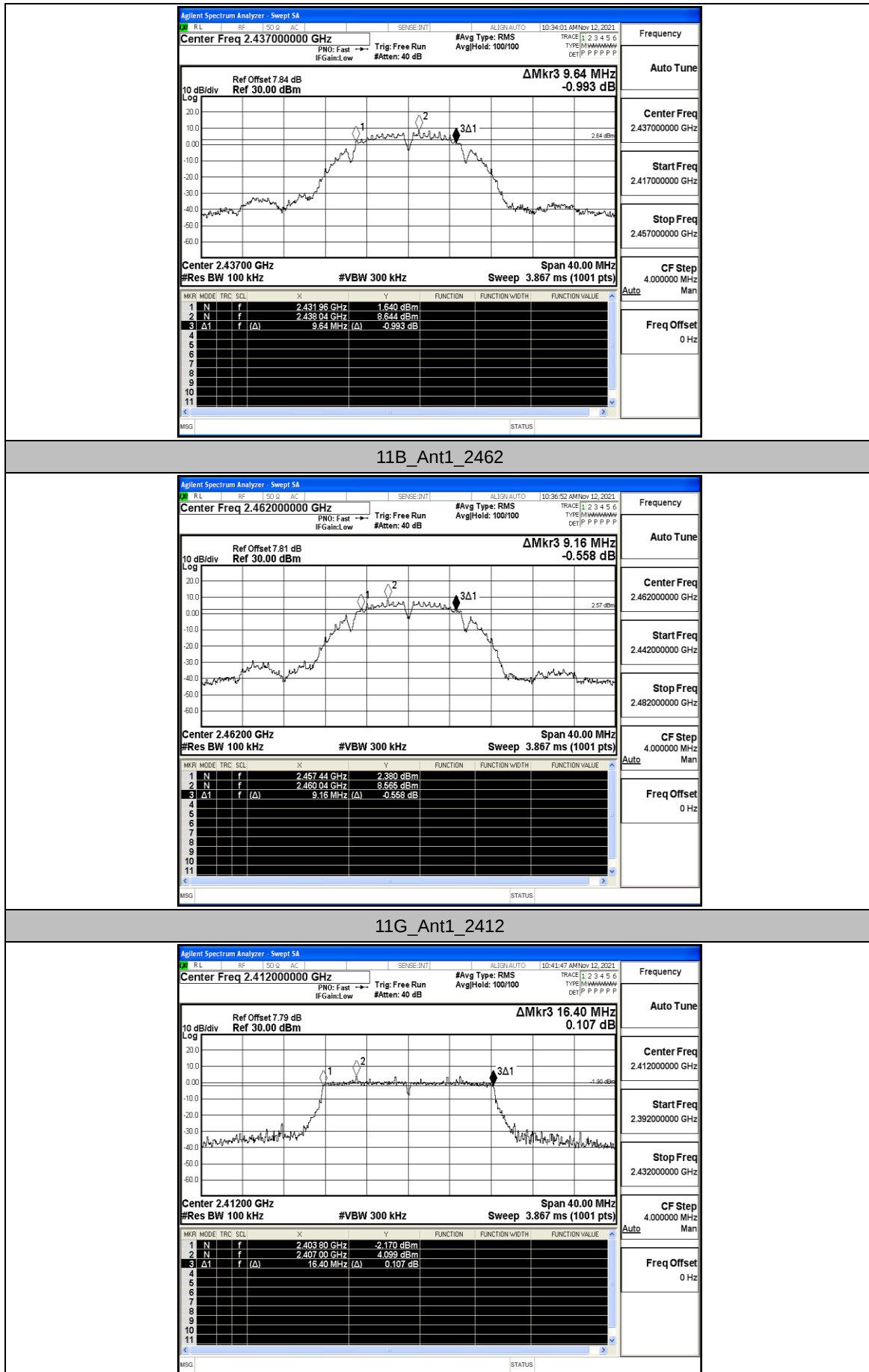
Product Name: Petcube Cam

Test Model: CC10US

Environmental Conditions

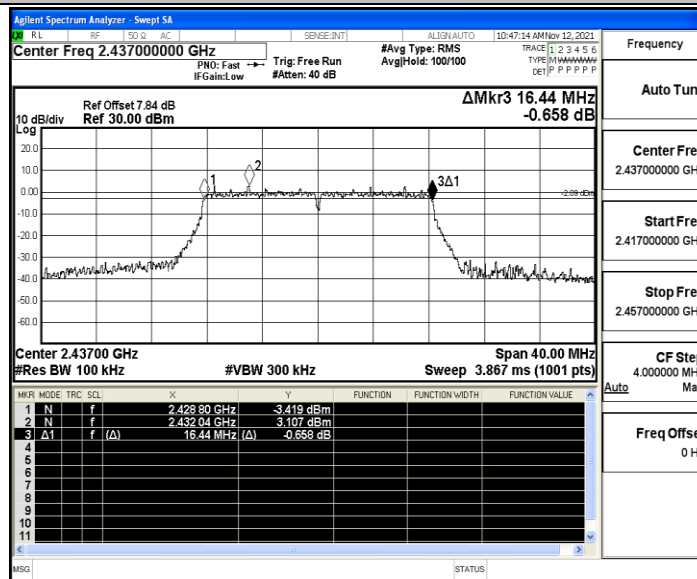
Temperature:	21.1° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	
Supervised by:	



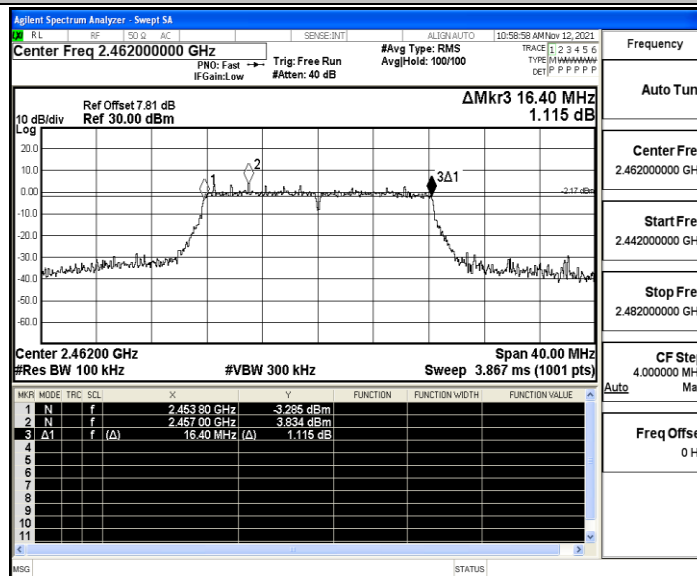




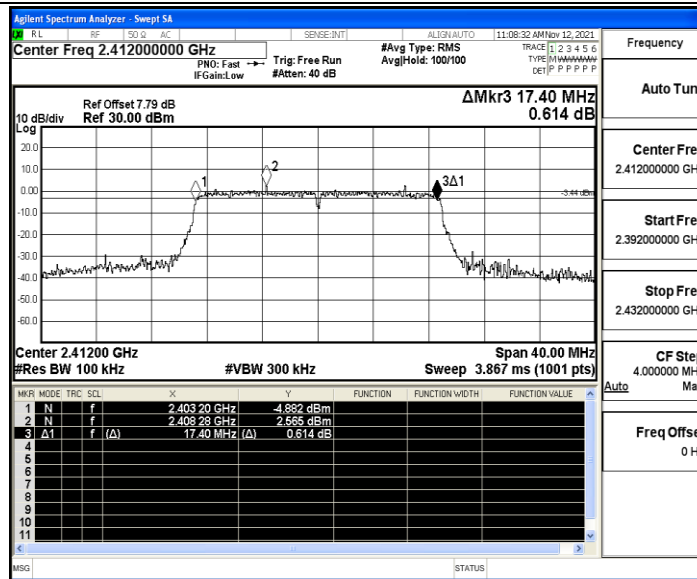
11G_Ant1_2437



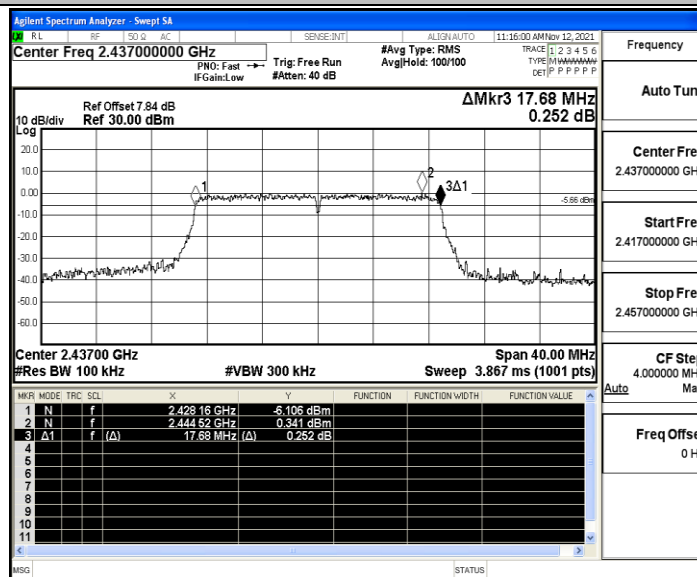
11G_Ant1_2462



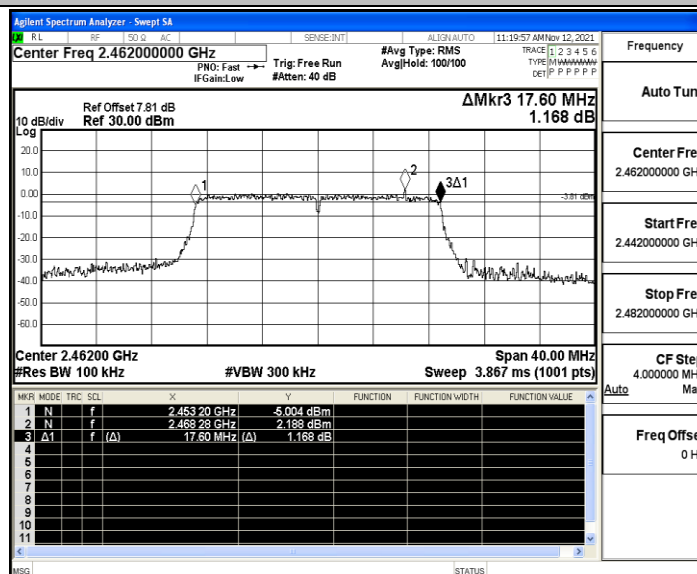
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



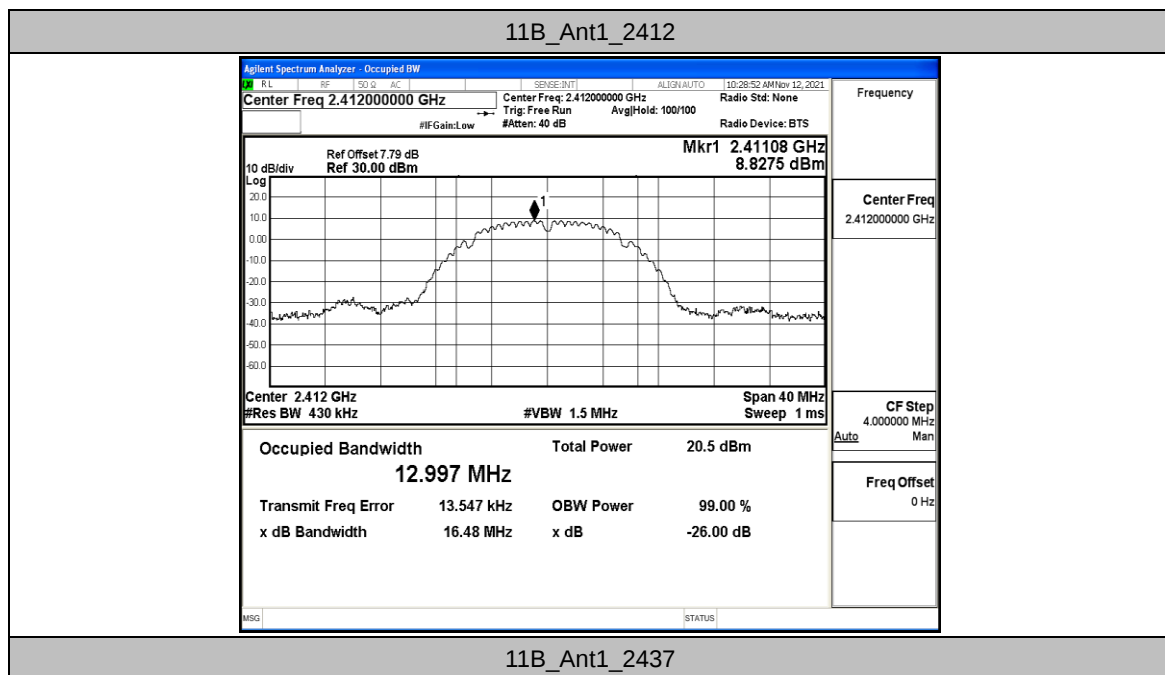


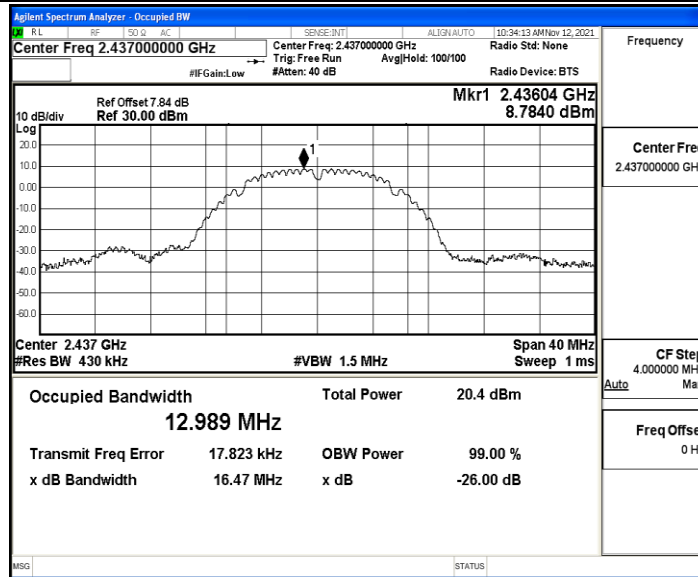
A.2 Occupied Channel Bandwidth

Test Result

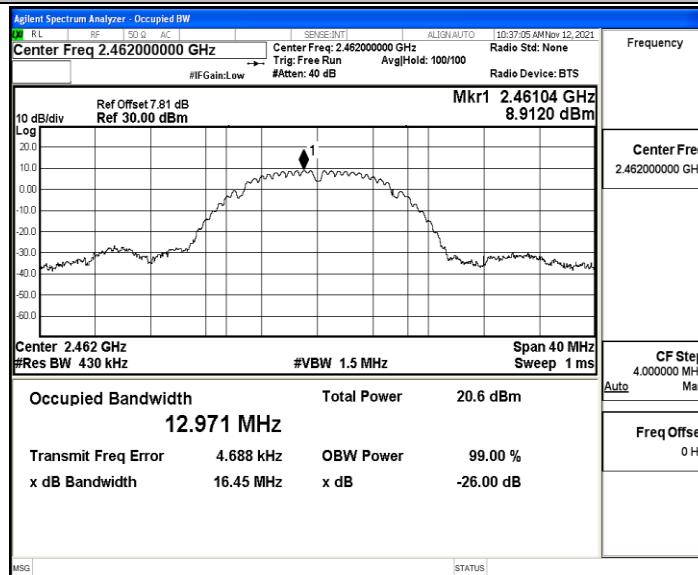
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.997	2405.515	2418.512	---	PASS
		2437	12.989	2430.523	2443.512	---	PASS
		2462	12.971	2455.519	2468.490	---	PASS
11G	Ant1	2412	16.874	2403.545	2420.419	---	PASS
		2437	16.864	2428.558	2445.422	---	PASS
		2462	16.911	2453.544	2470.455	---	PASS
11N20SISO	Ant1	2412	17.730	2403.162	2420.892	---	PASS
		2437	17.662	2428.177	2445.839	---	PASS
		2462	17.668	2453.184	2470.852	---	PASS

Test Graphs

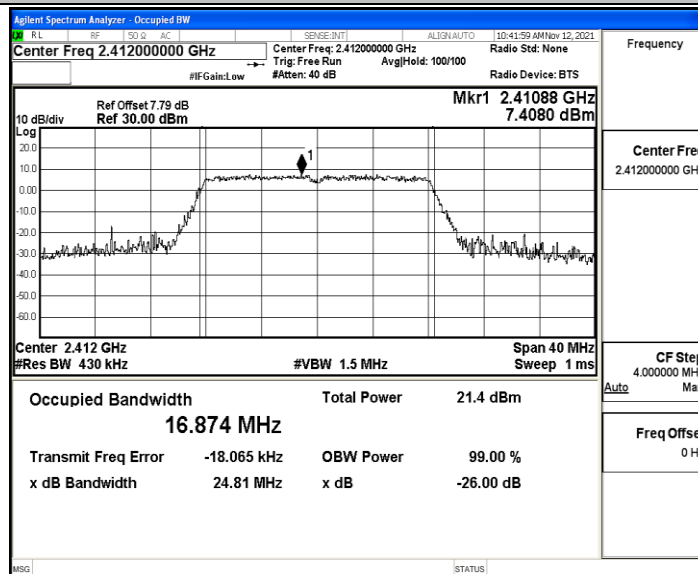




11B_Ant1_2462

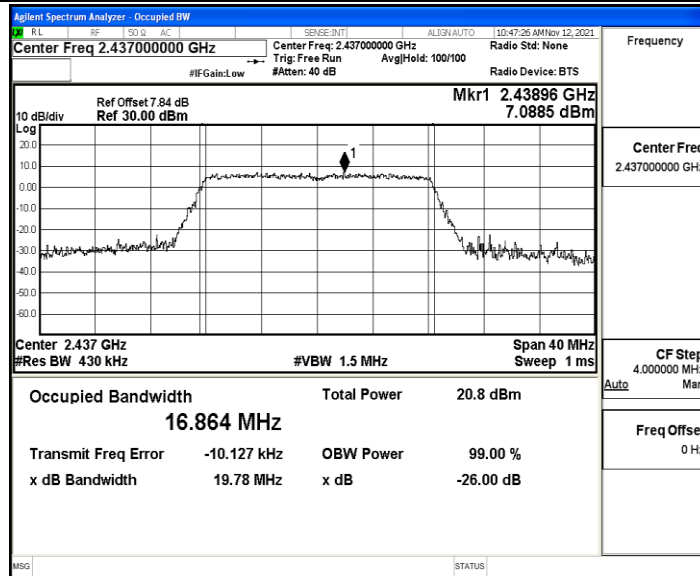


11G_Ant1_2412

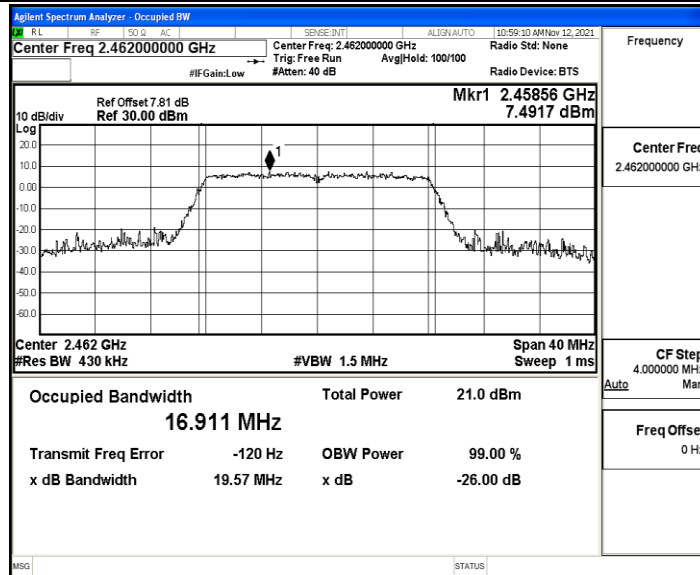




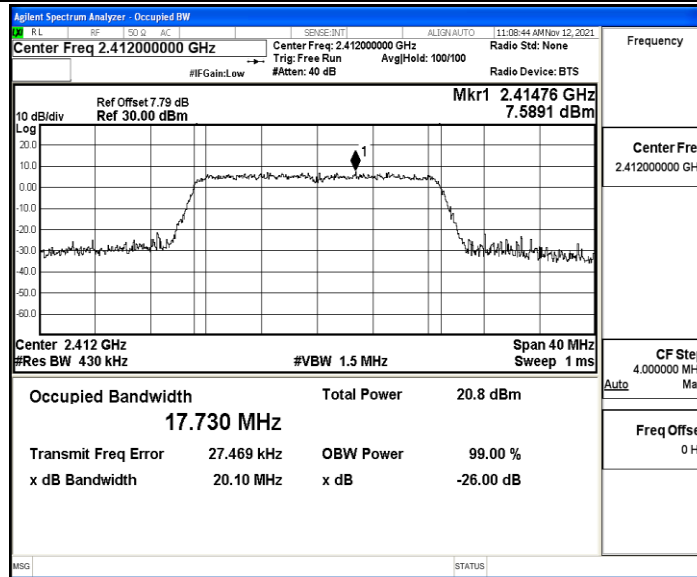
11G_Ant1_2437



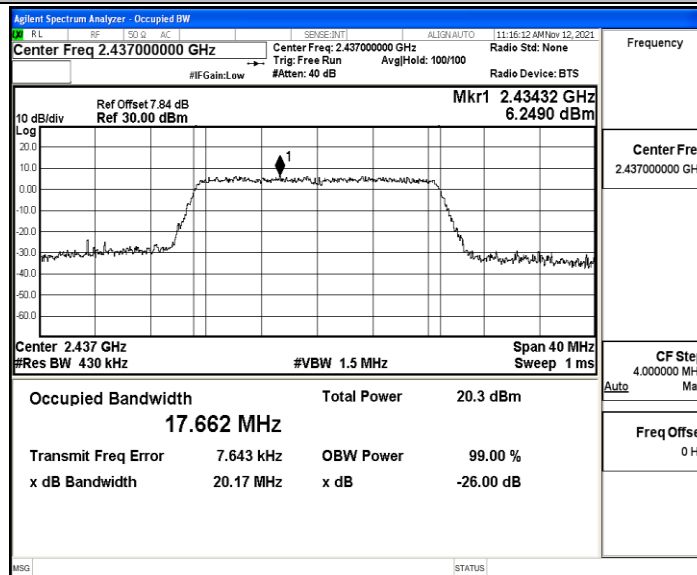
11G_Ant1_2462



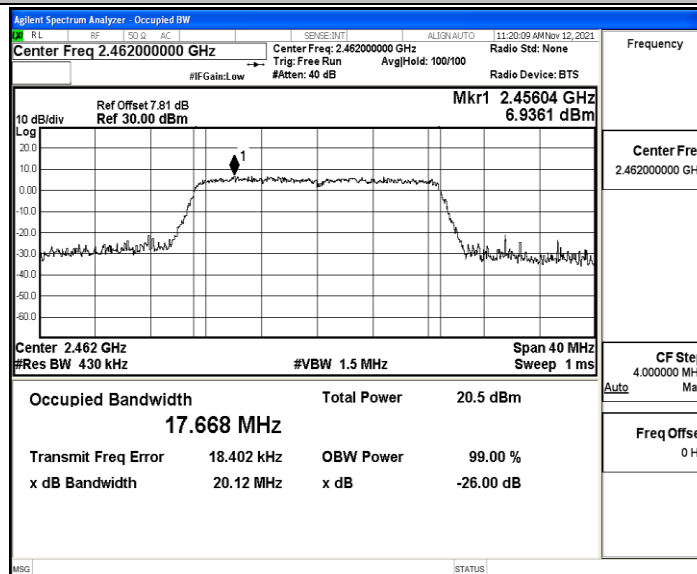
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462





A.3 Maximum conducted output power

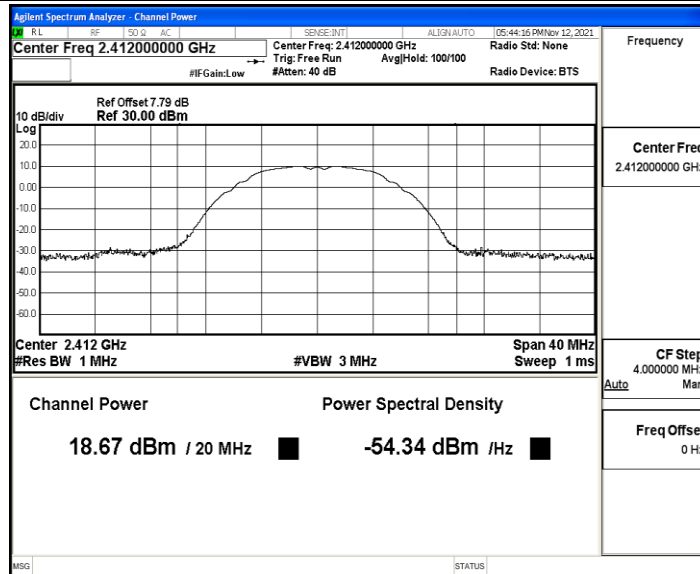
Test Result

TestMode	Antenna	Channel	Result[dBm]	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit[dBm]	Verdict
11B	Ant1	2412	18.67	0	18.67	≤30	PASS
		2437	18.64	0	18.64	≤30	PASS
		2462	18.29	0	18.29	≤30	PASS
11G	Ant1	2412	18.21	0.13	18.34	≤30	PASS
		2437	17.68	0.16	17.84	≤30	PASS
		2462	17.96	0.13	18.09	≤30	PASS
11N20SISO	Ant1	2412	17.48	0	17.48	≤30	PASS
		2437	17.14	0	17.14	≤30	PASS
		2462	17.32	0	17.32	≤30	PASS

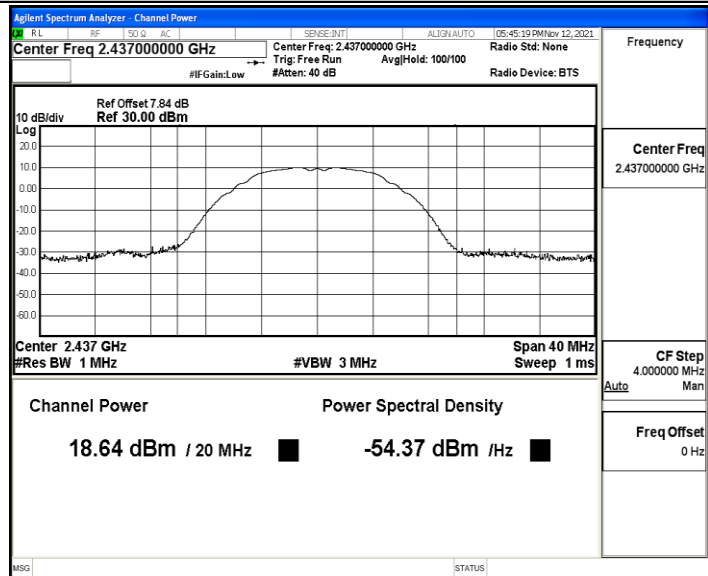


Test Graphs

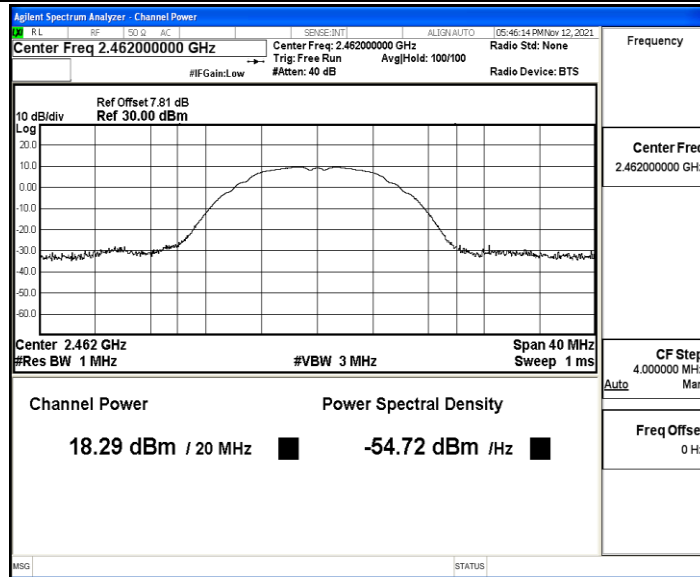
11B_Ant1_2412



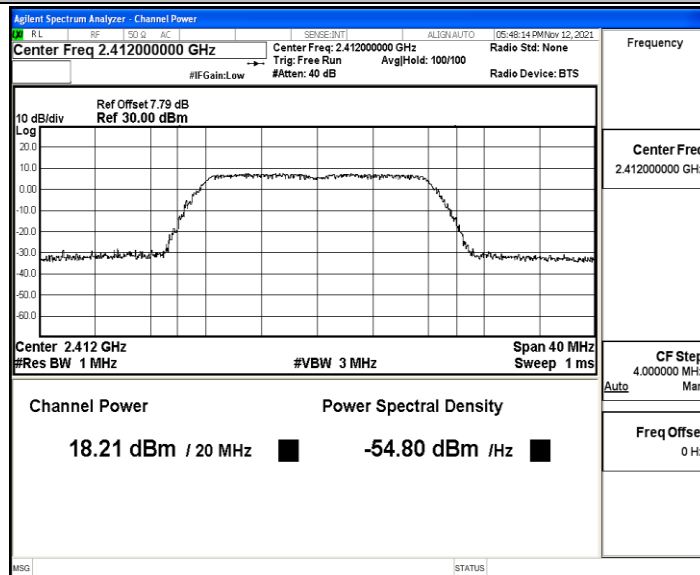
11B_Ant1_2437



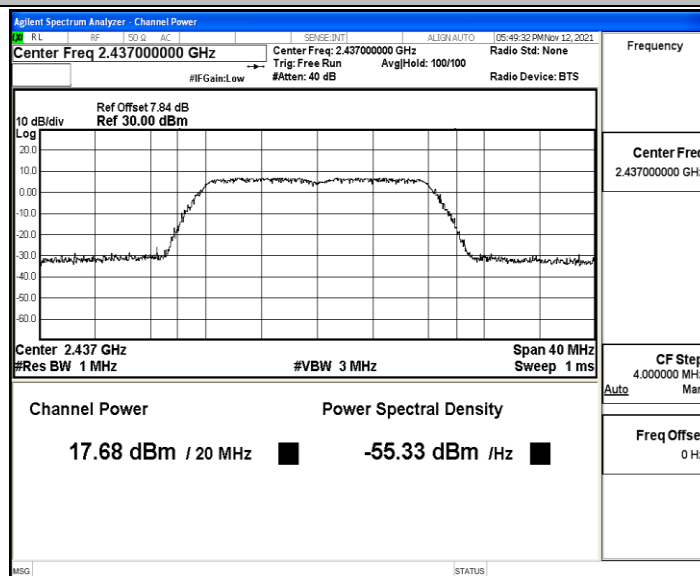
11B_Ant1_2462



11G_Ant1_2412

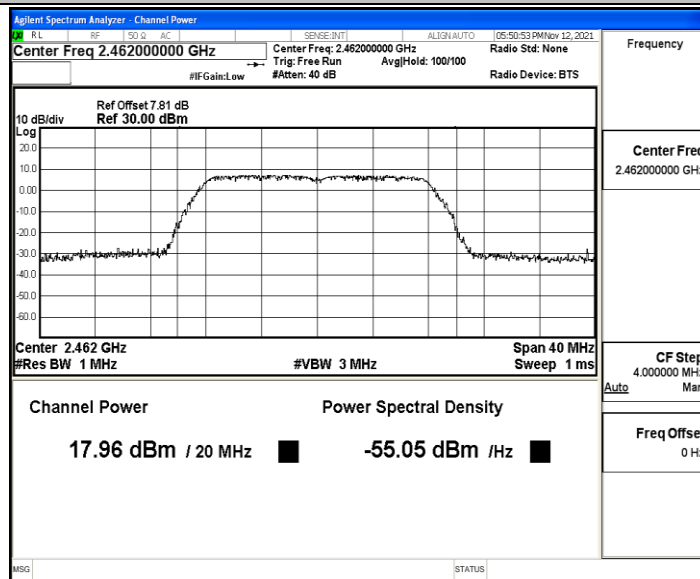


11G_Ant1_2437

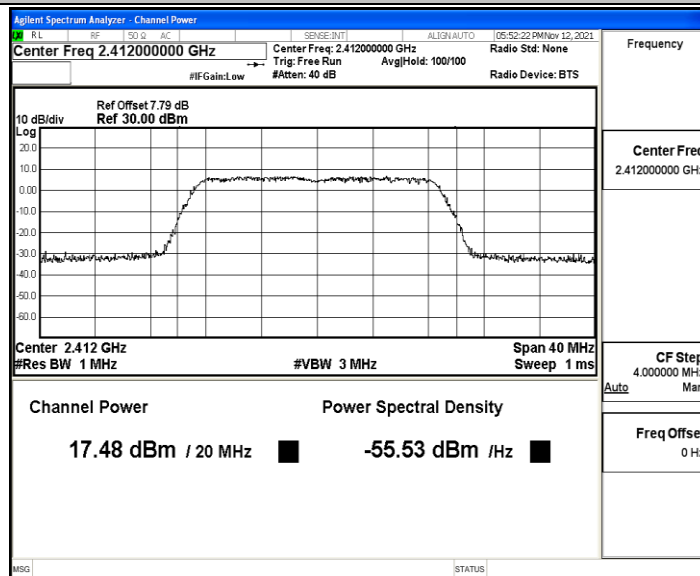




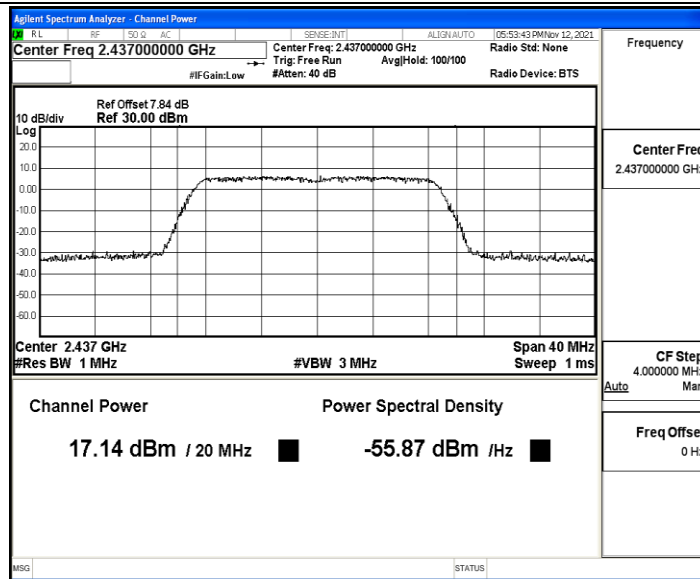
11G_Ant1_2462



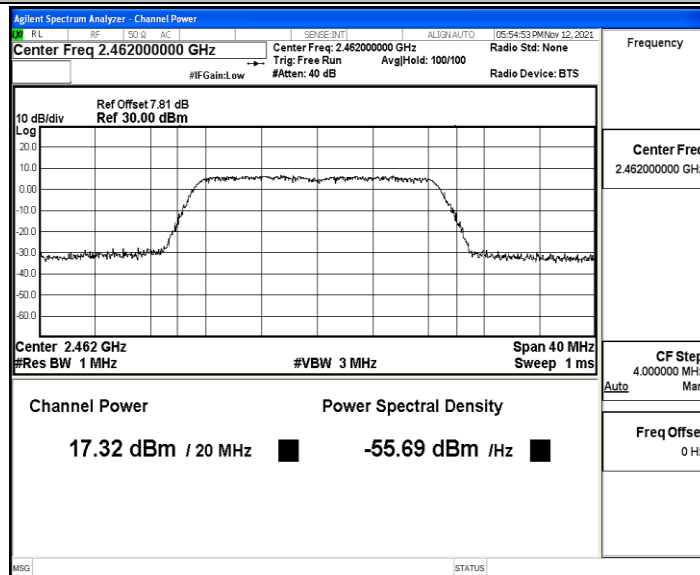
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462





A.4 Maximum power spectral density

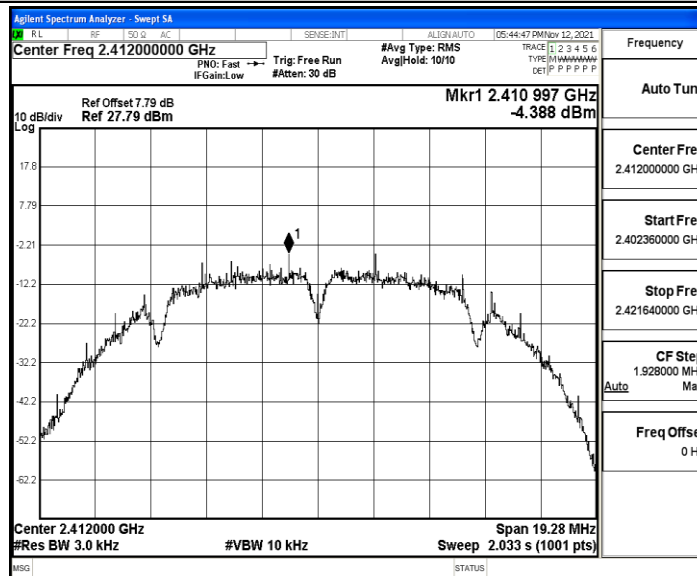
Test Result

TestMode	Antenna	Channel	Result[dBm/ 3kHz]	Duty Cycle Factor(dB)	Report Result[dBm/3kHz]	Limit[dBm/ 3kHz]	Verdict
11B	Ant1	2412	-4.39	0	-4.39	≤8	PASS
		2437	-5.75	0	-5.75	≤8	PASS
		2462	-5.14	0	-5.14	≤8	PASS
11G	Ant1	2412	-12.95	0.13	-12.82	≤8	PASS
		2437	-14.31	0.16	-14.15	≤8	PASS
		2462	-13.38	0.13	-13.25	≤8	PASS
11N20SISO	Ant1	2412	-15.54	0	-15.54	≤8	PASS
		2437	-15.51	0	-15.51	≤8	PASS
		2462	-14.53	0	-14.53	≤8	PASS

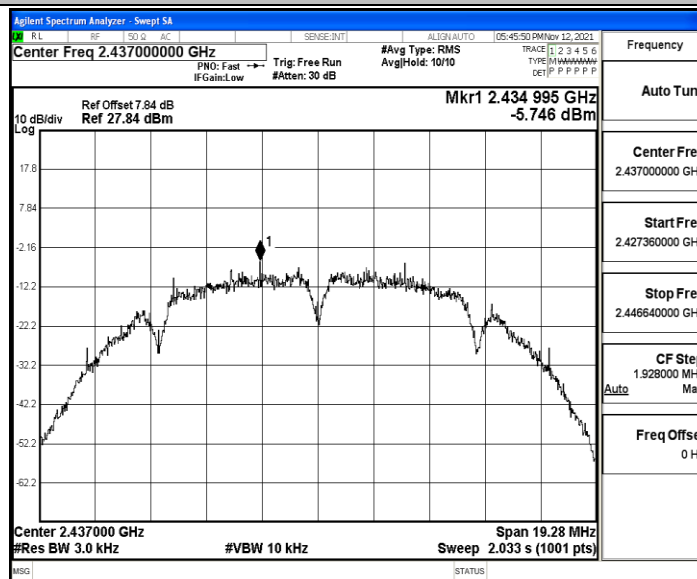


Test Graphs

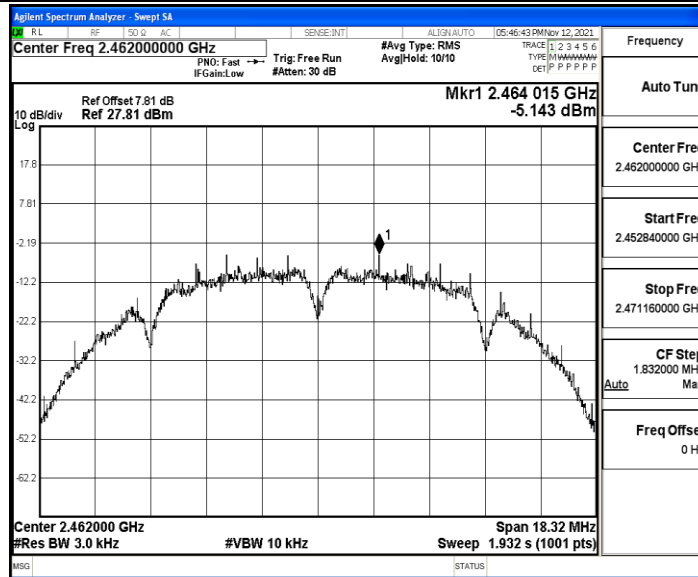
11B_Ant1_2412



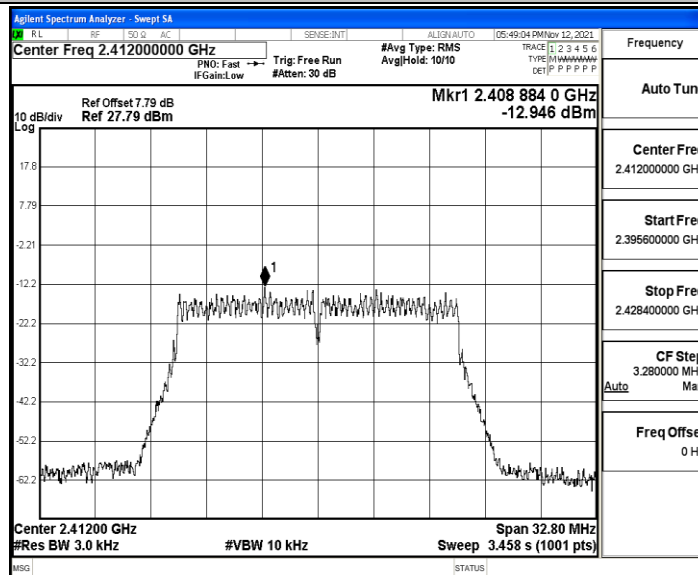
11B_Ant1_2437



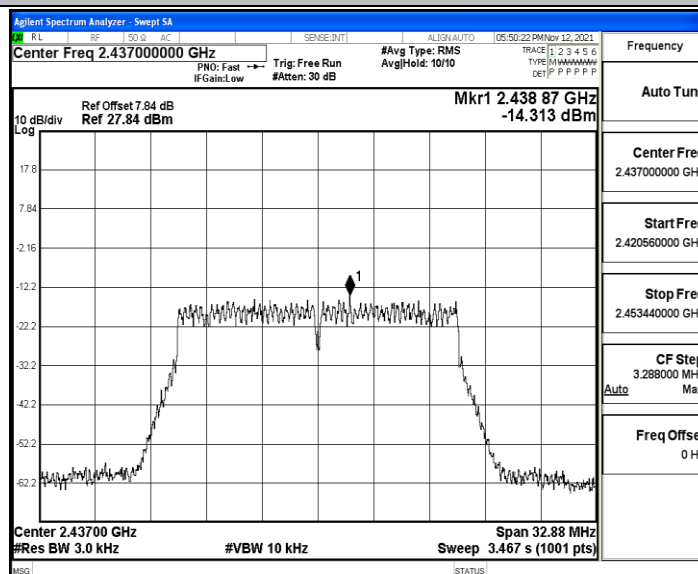
11B_Ant1_2462



11G_Ant1_2412

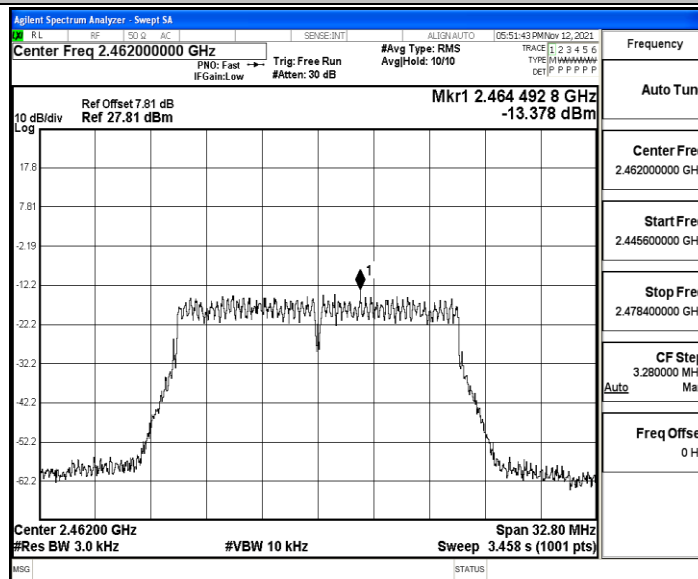


11G_Ant1_2437

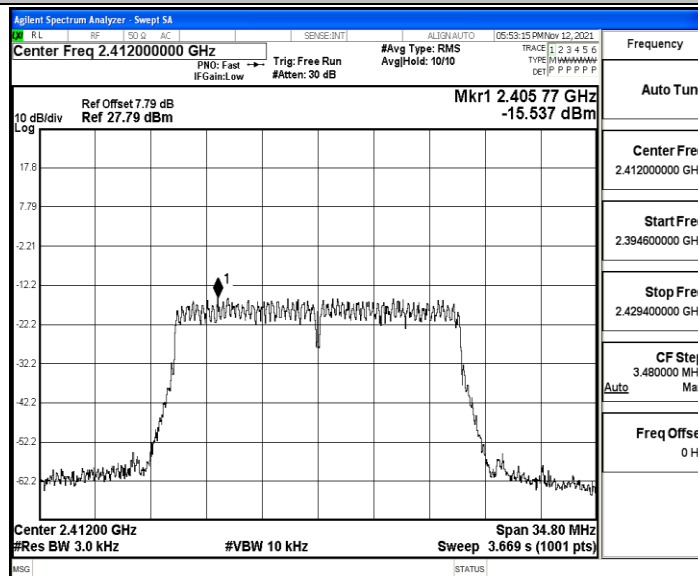




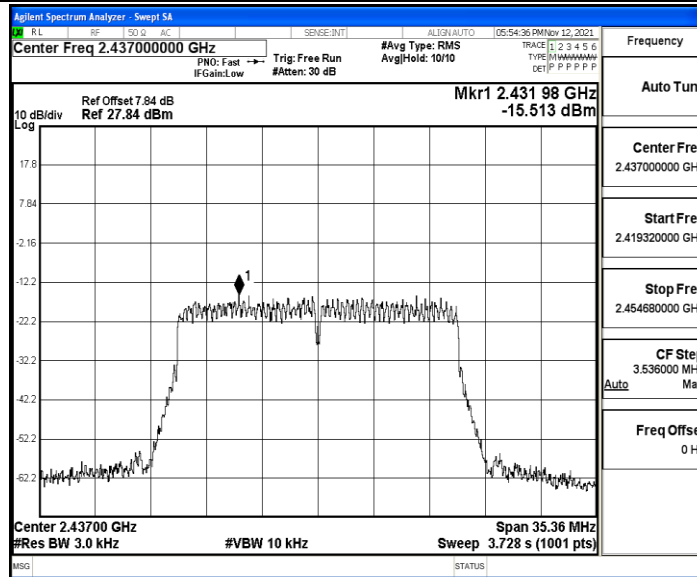
11G_Ant1_2462



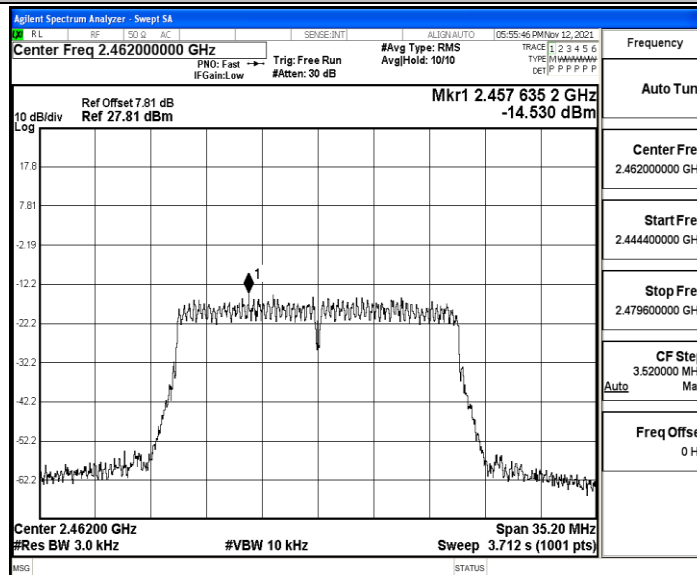
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



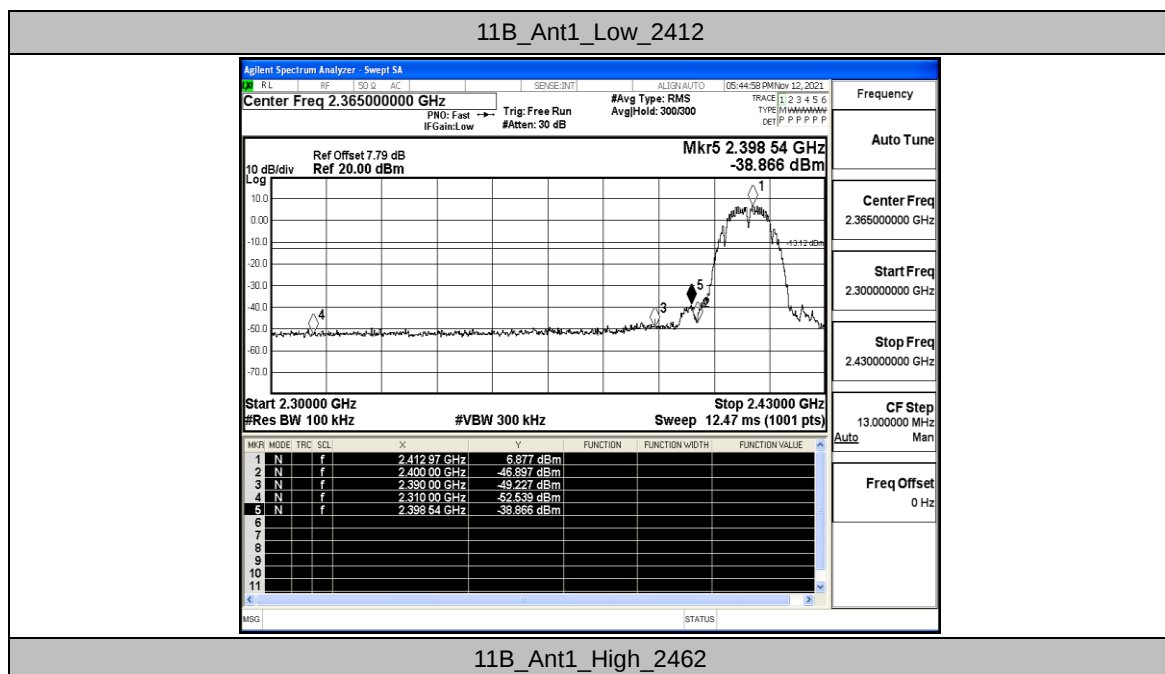


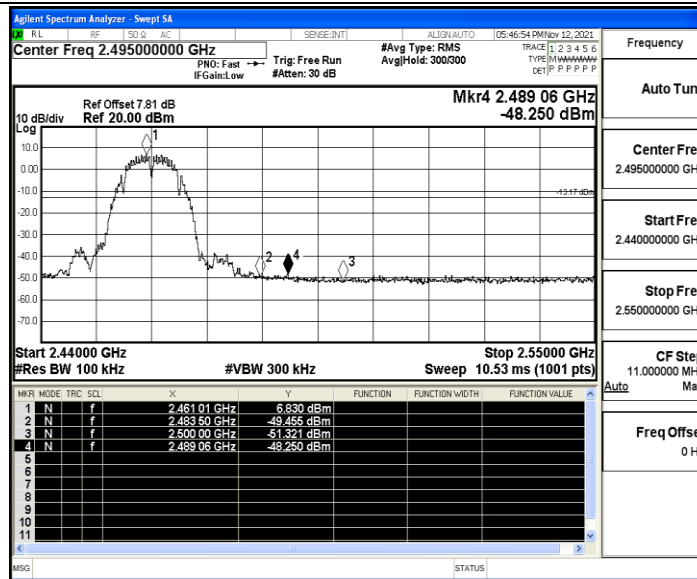
A.5 Band edge measurements

Test Result

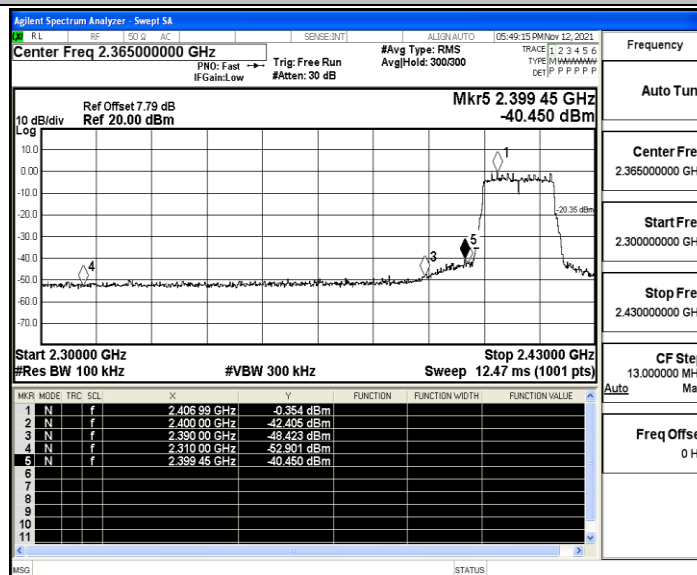
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.88	-38.87	≤ -13.12	PASS
		High	2462	6.83	-48.25	≤ -13.17	PASS
11G	Ant1	Low	2412	-0.35	-40.45	≤ -20.35	PASS
		High	2462	-0.48	-48.62	≤ -20.48	PASS
11N20SISO	Ant1	Low	2412	-1.38	-42.42	≤ -21.38	PASS
		High	2462	-1.66	-48.27	≤ -21.66	PASS

Test Graphs

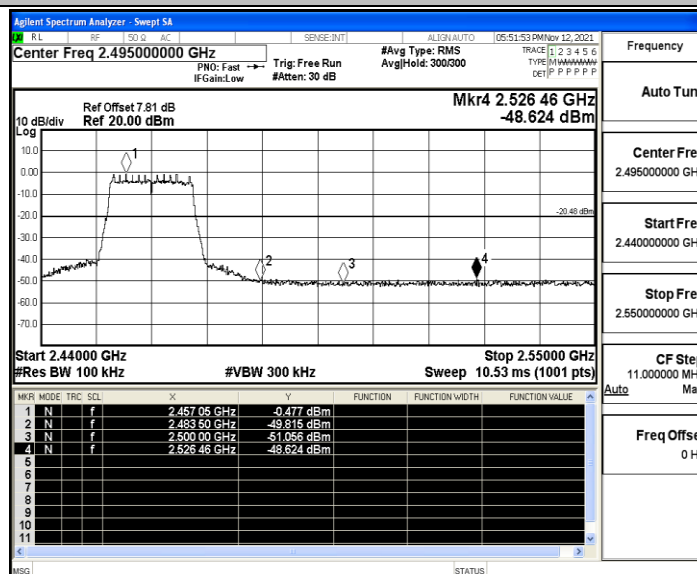


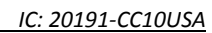


11G_Ant1_Low_2412



11G_Ant1_High_2462







A.6 Conducted Spurious Emission

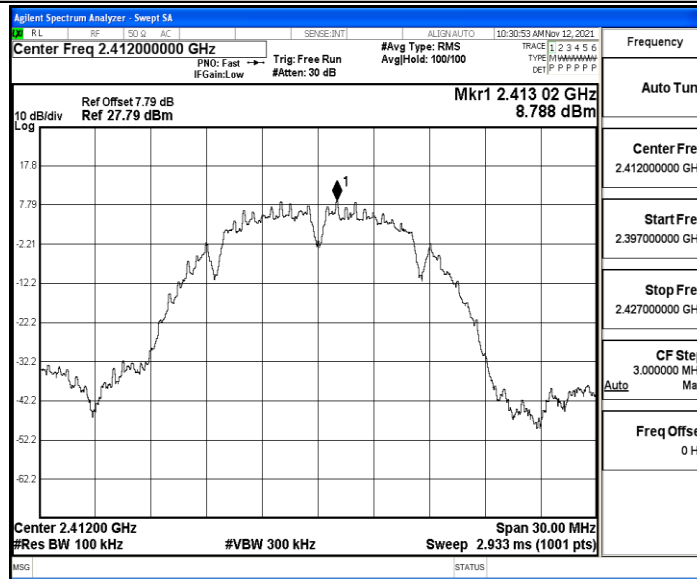
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	8.79	8.79	---	PASS
			30~1000	8.79	-61.37	≤ -11.21	PASS
			1000~26500	8.79	-46.92	≤ -11.21	PASS
		2437	Reference	8.59	8.59	---	PASS
			30~1000	8.59	-61.45	≤ -11.41	PASS
			1000~26500	8.59	-46.89	≤ -11.41	PASS
		2462	Reference	8.85	8.85	---	PASS
			30~1000	8.85	-60.37	≤ -11.16	PASS
			1000~26500	8.85	-47.08	≤ -11.16	PASS
11G	Ant1	2412	Reference	3.88	3.88	---	PASS
			30~1000	3.88	-61.05	≤ -16.12	PASS
			1000~26500	3.88	-46.37	≤ -16.12	PASS
		2437	Reference	3.14	3.14	---	PASS
			30~1000	3.14	-61.61	≤ -16.86	PASS
			1000~26500	3.14	-46.73	≤ -16.86	PASS
		2462	Reference	3.39	3.39	---	PASS
			30~1000	3.39	-61.64	≤ -16.61	PASS
			1000~26500	3.39	-46.72	≤ -16.61	PASS
11N20SISO	Ant1	2412	Reference	3.10	3.10	---	PASS
			30~1000	3.10	-60.32	≤ -16.91	PASS
			1000~26500	3.10	-47.16	≤ -16.91	PASS
		2437	Reference	2.11	2.11	---	PASS
			30~1000	2.11	-61.06	≤ -17.89	PASS
			1000~26500	2.11	-46.77	≤ -17.89	PASS
		2462	Reference	1.97	1.97	---	PASS
			30~1000	1.97	-60.8	≤ -18.03	PASS
			1000~26500	1.97	-47.19	≤ -18.03	PASS

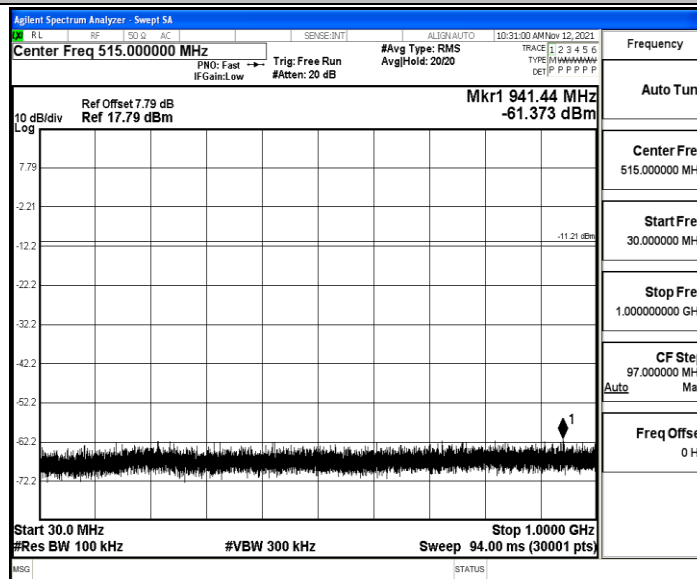


Test Graphs

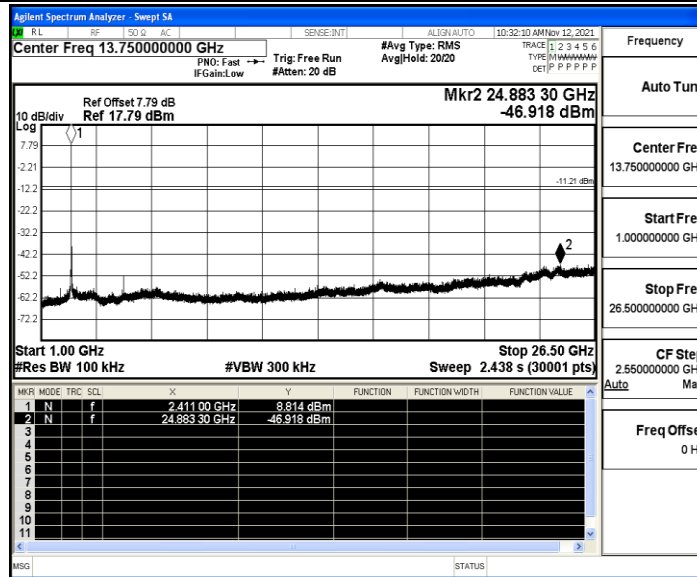
11B_Ant1_2412_0~Reference



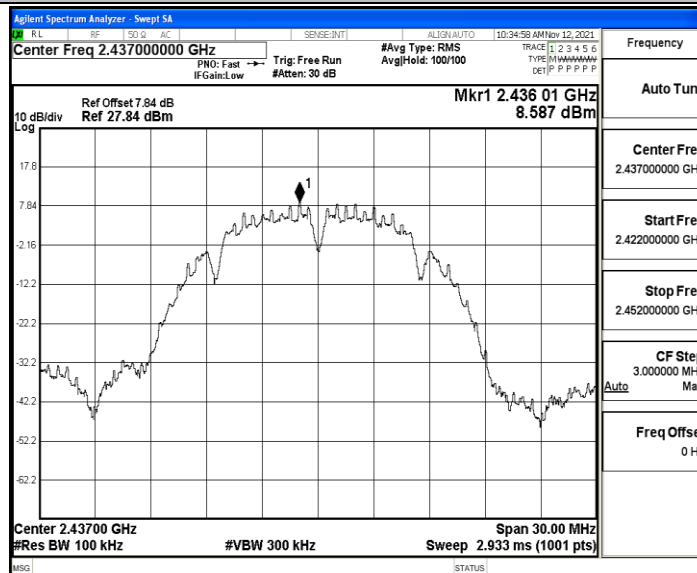
11B_Ant1_2412_30~1000



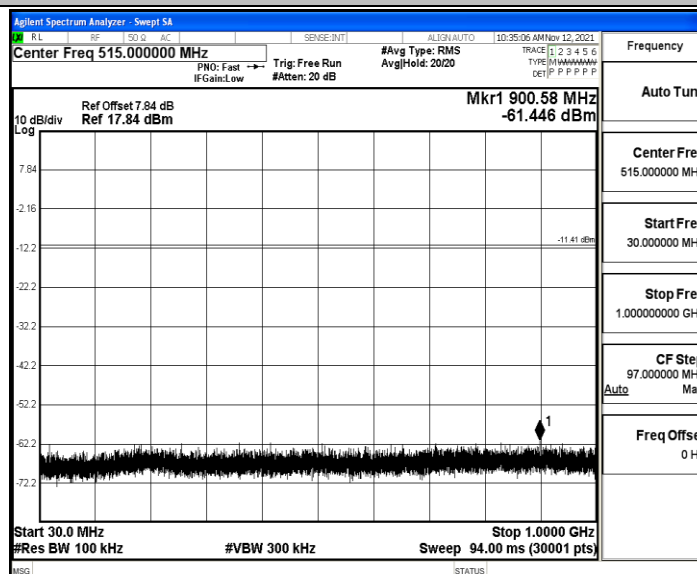
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference

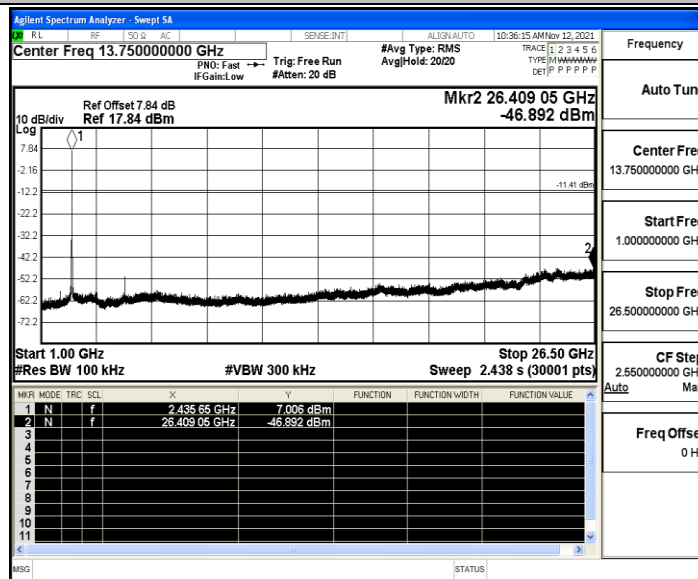


11B_Ant1_2437_30~1000

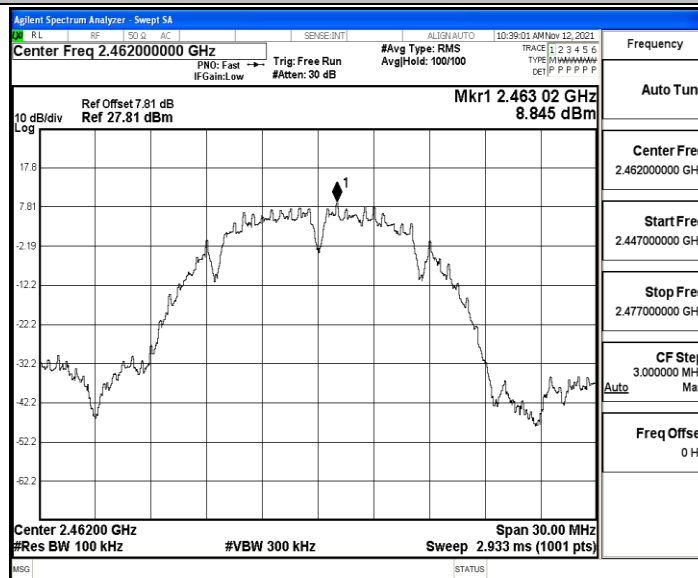




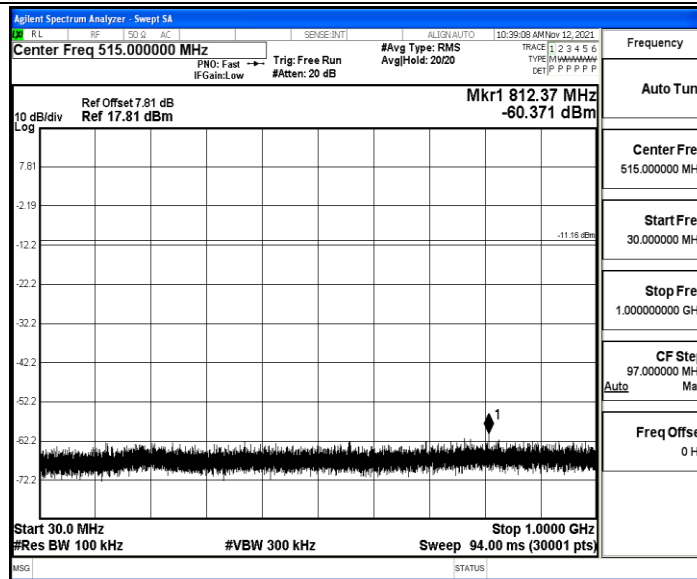
11B_Ant1_2437_1000~26500



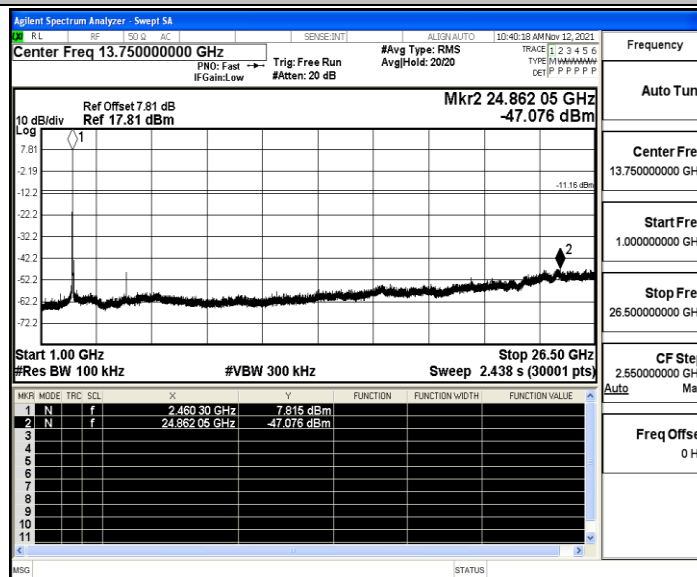
11B_Ant1_2462_0~Reference



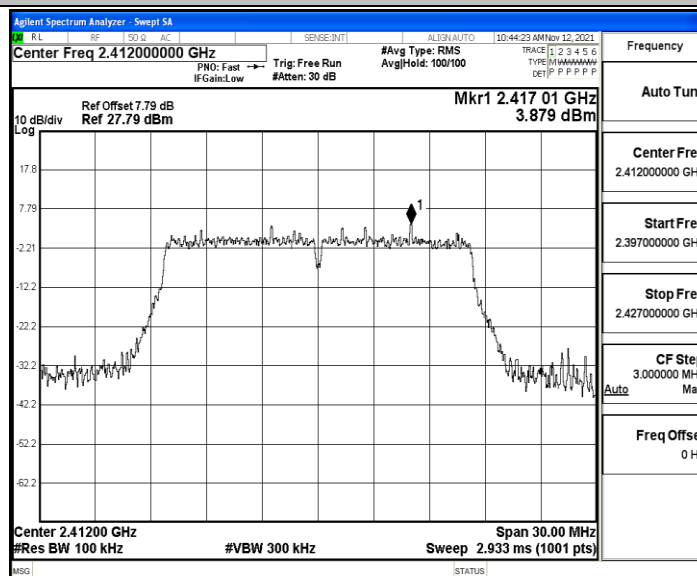
11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500

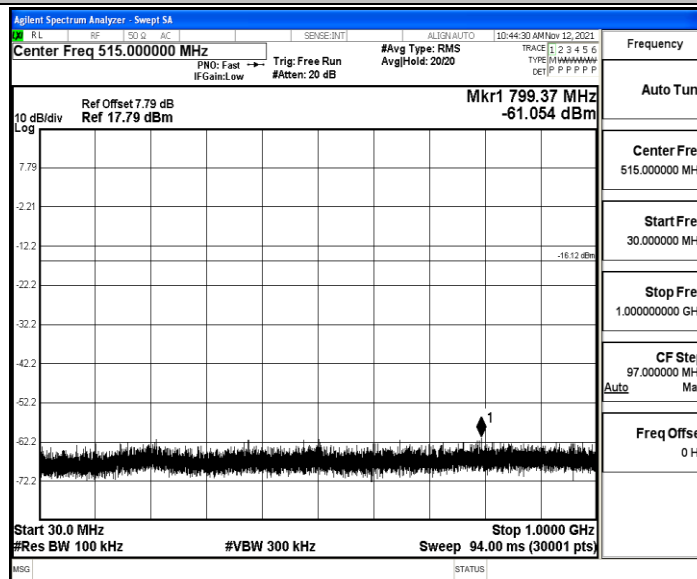


11G_Ant1_2412_0~Reference

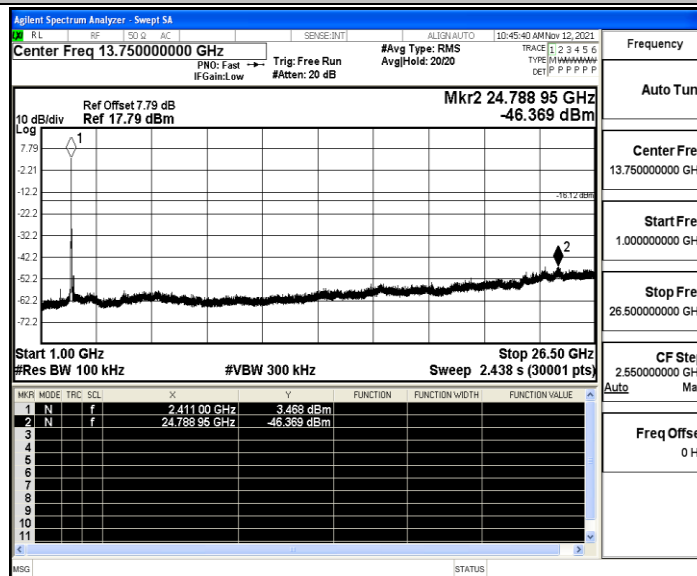




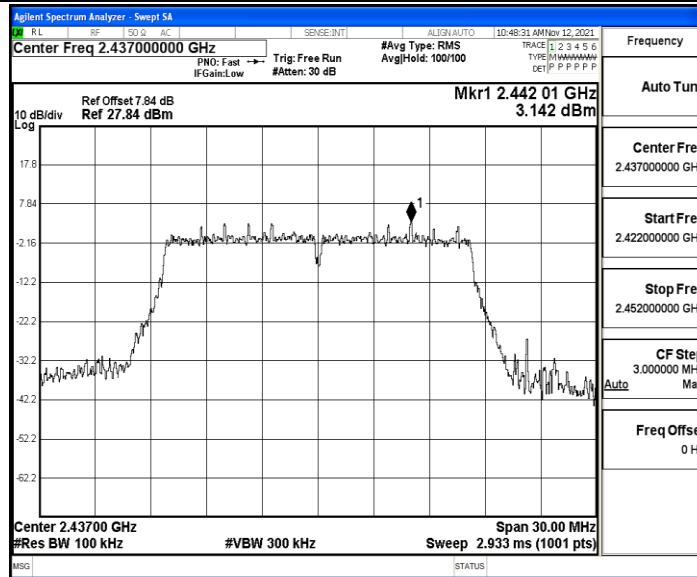
11G_Ant1_2412_30~1000



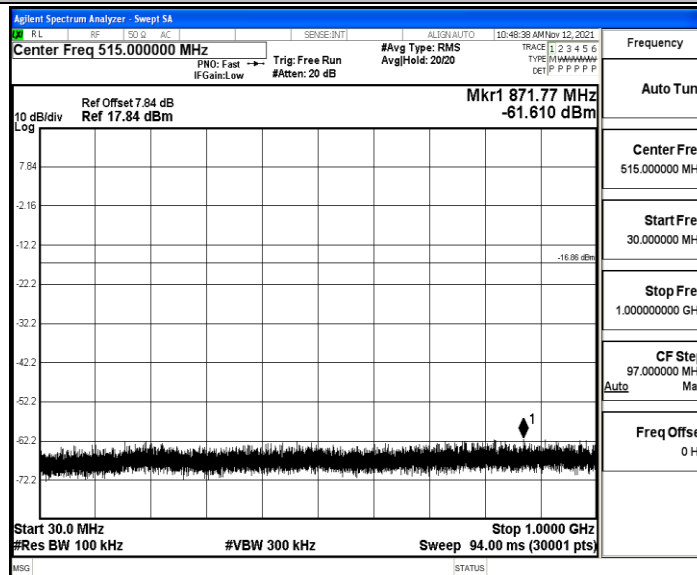
11G_Ant1_2412_1000~26500



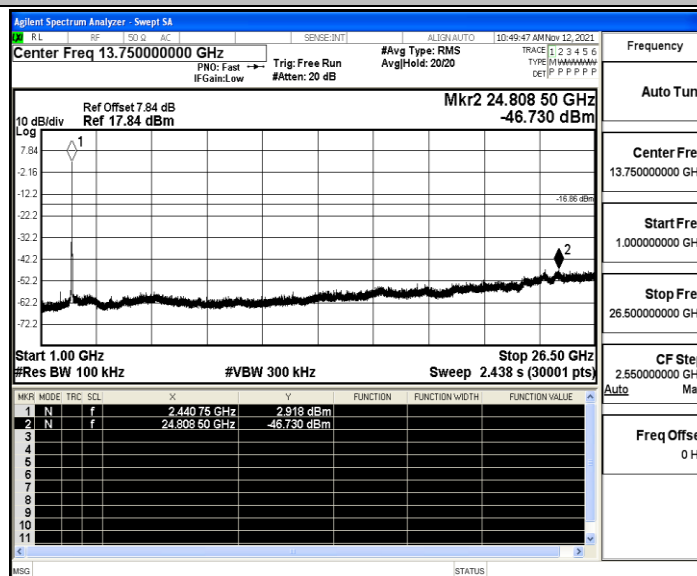
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000

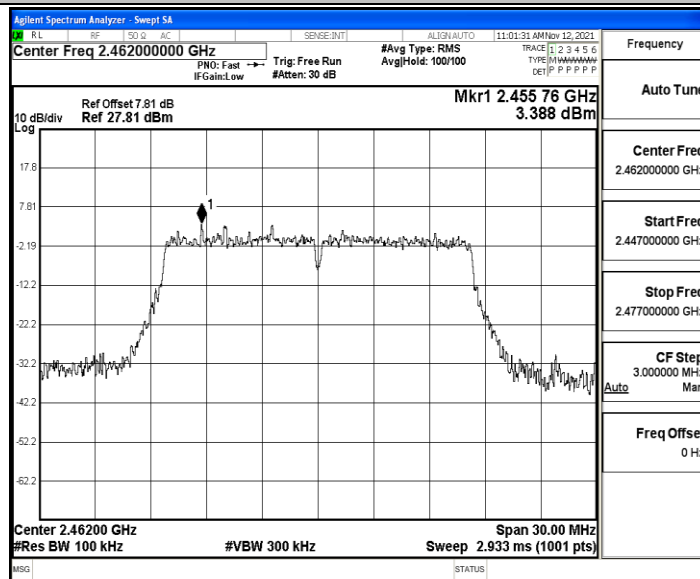


11G_Ant1_2437_1000~26500

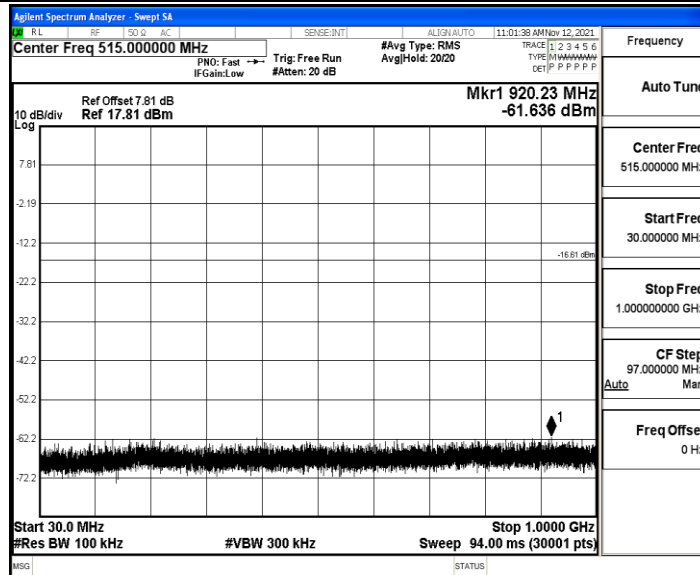




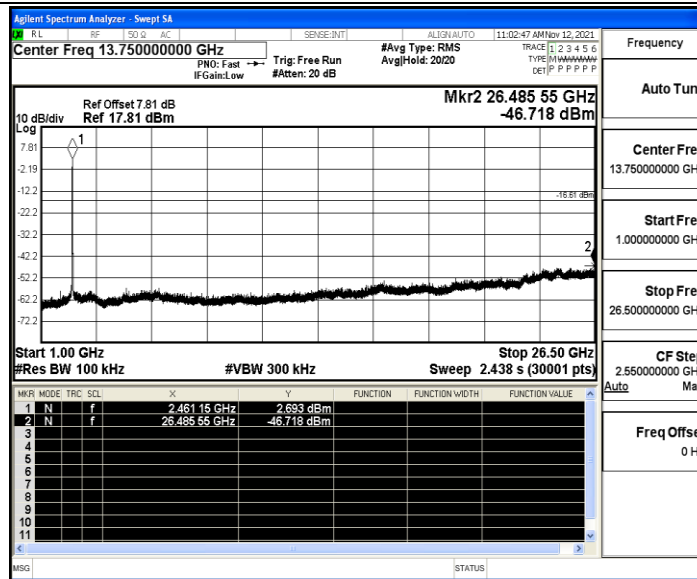
11G_Ant1_2462_0~Reference



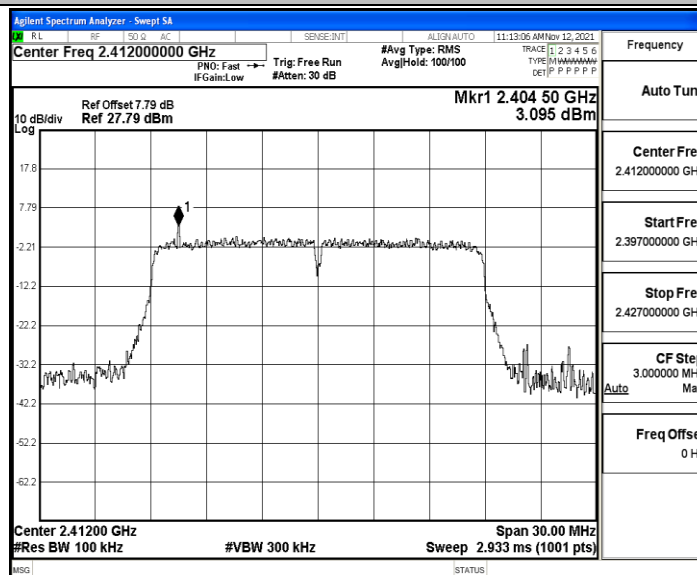
11G_Ant1_2462_30~1000



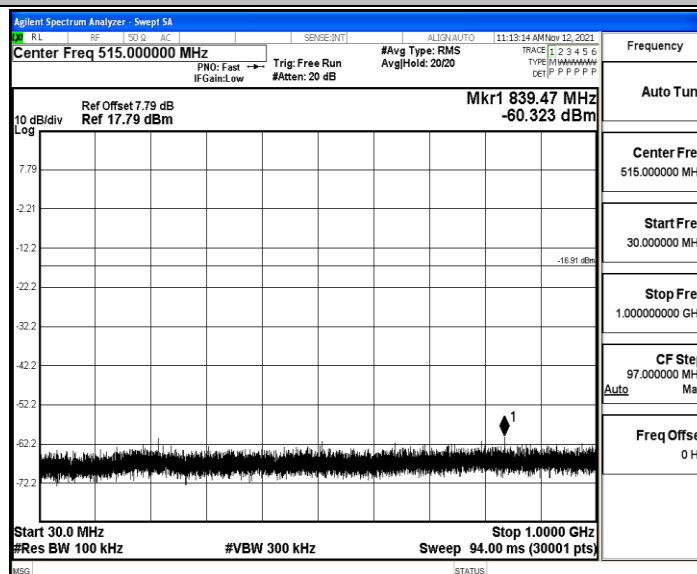
11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference

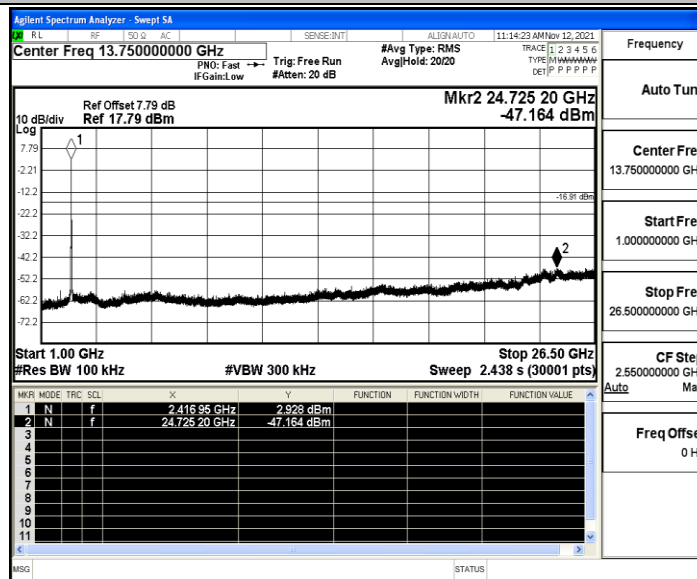


11N20SISO_Ant1_2412_30~1000

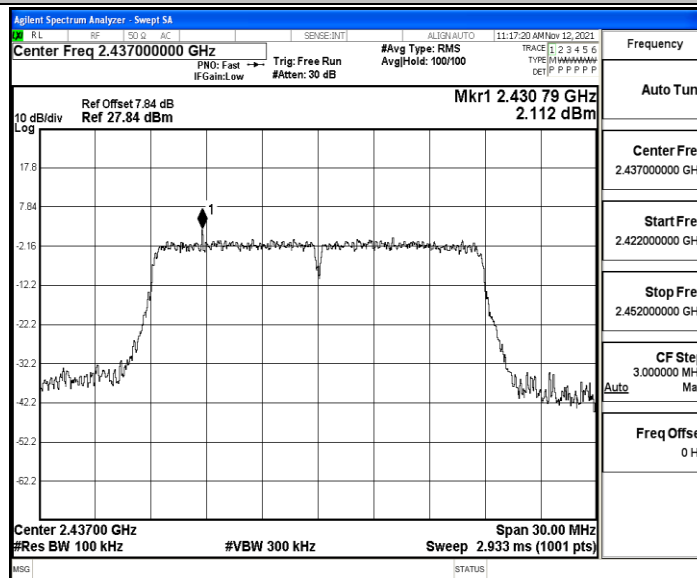




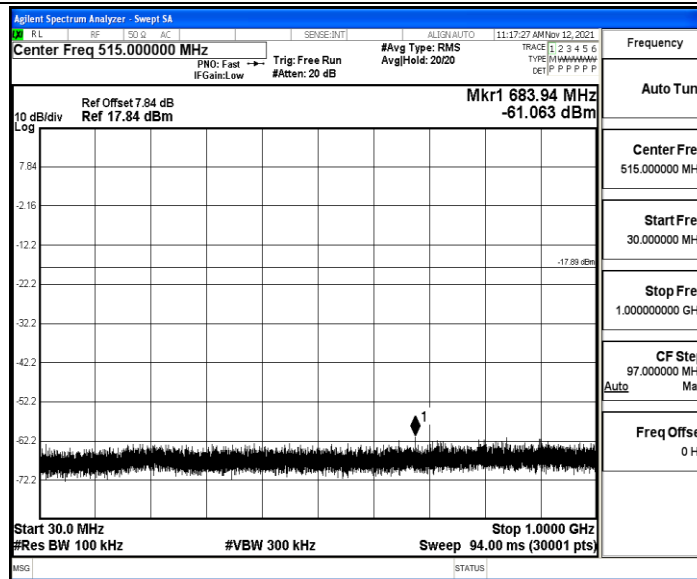
11N20SISO_Ant1_2412_1000~26500



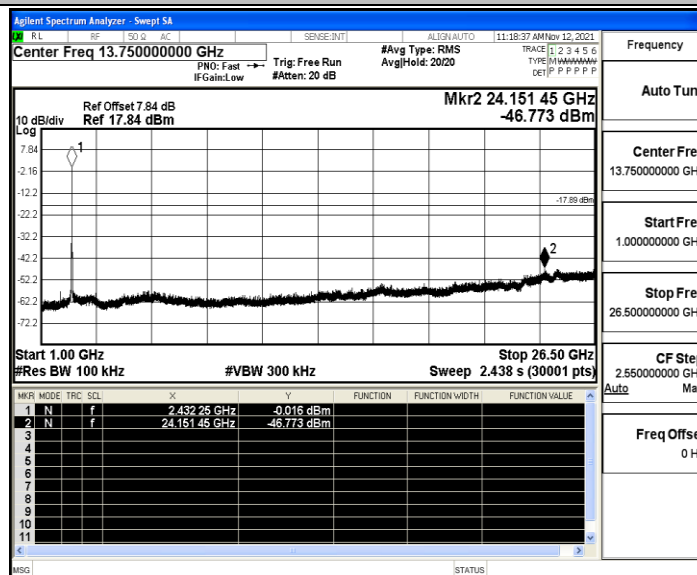
11N20SISO_Ant1_2437_0~Reference



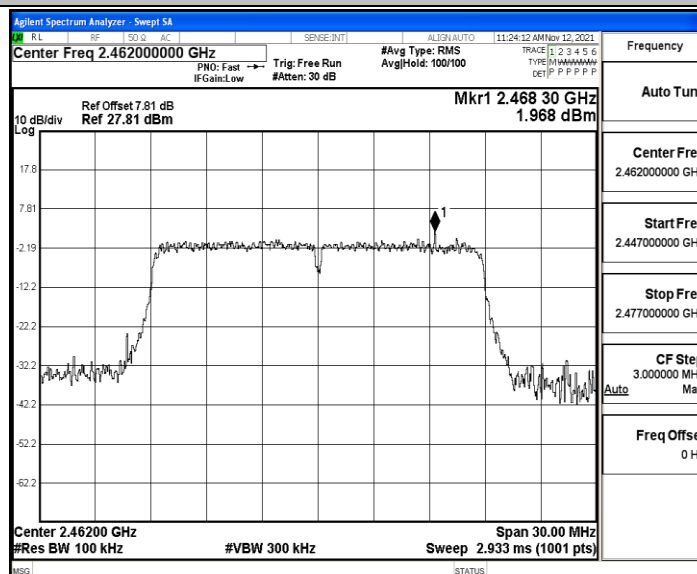
11N20SISO_Ant1_2437_30~1000



11N20SISO_Ant1_2437_1000~26500

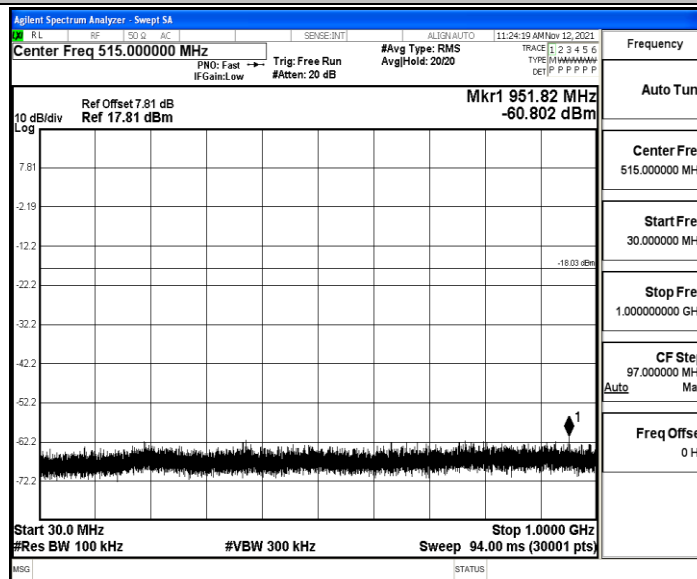


11N20SISO_Ant1_2462_0~Reference

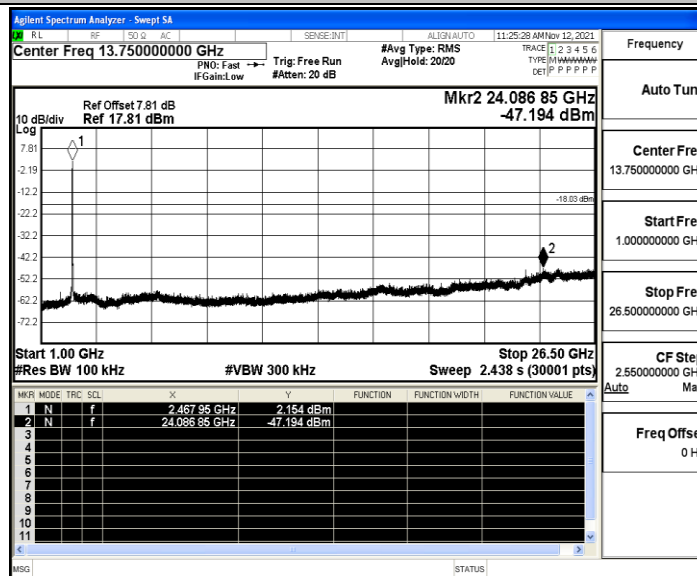




11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500





A.7 Duty Cycle

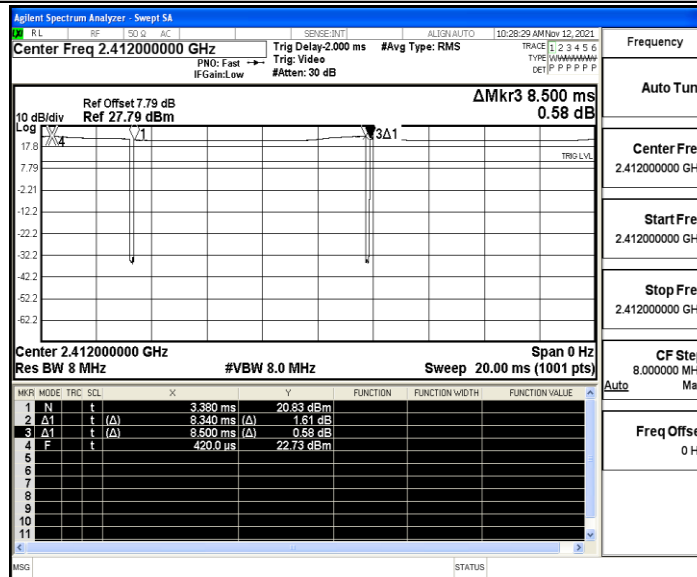
Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	8.34	8.50	98.12	---	PASS
		2437	8.32	8.48	98.11	---	PASS
		2462	8.32	8.48	98.11	---	PASS
11G	Ant1	2412	1.37	1.41	97.16	---	PASS
		2437	1.37	1.42	96.48	---	PASS
		2462	1.37	1.41	97.16	---	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

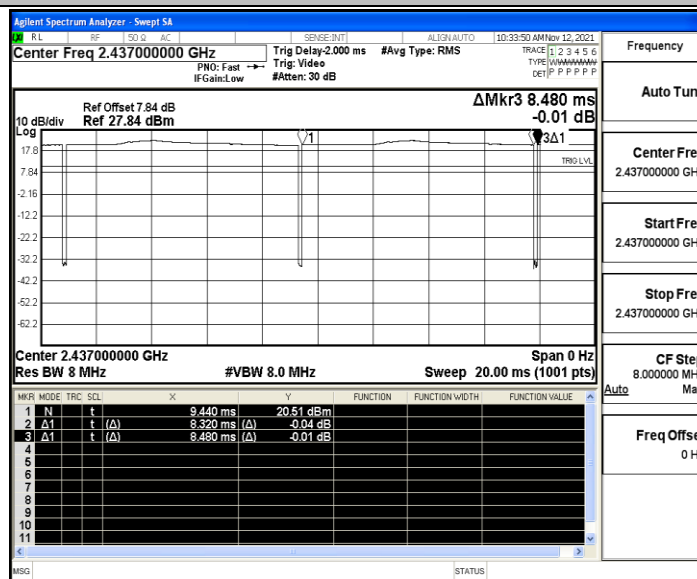


Test Graphs

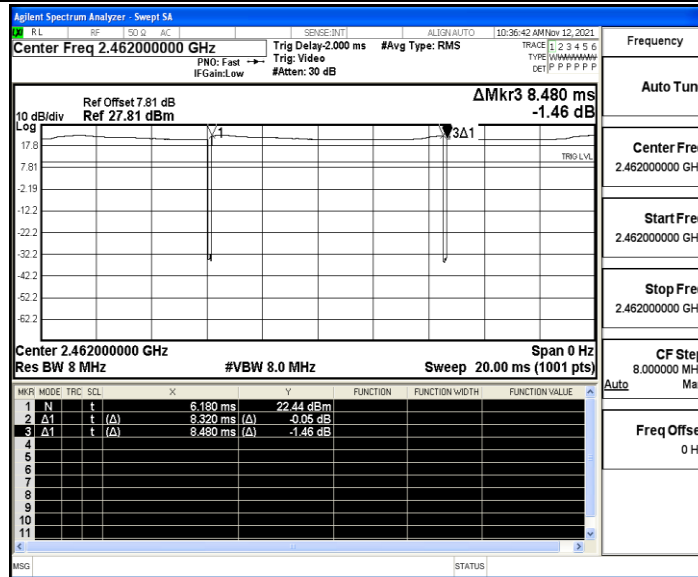
11B_Ant1_2412



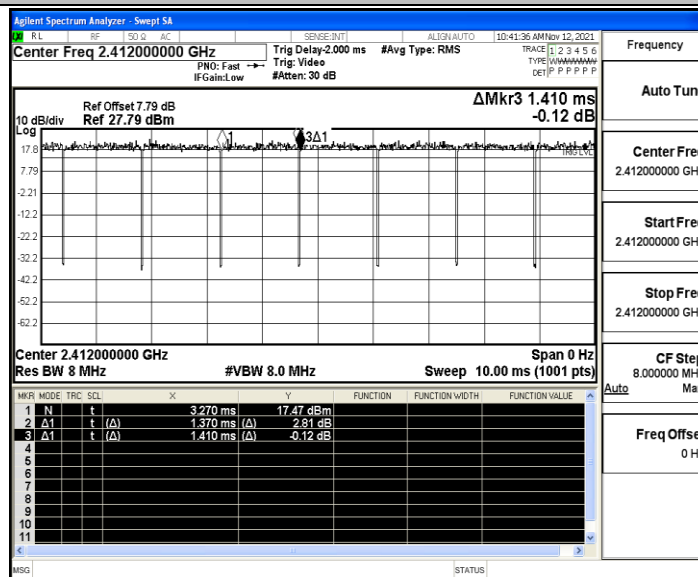
11B_Ant1_2437



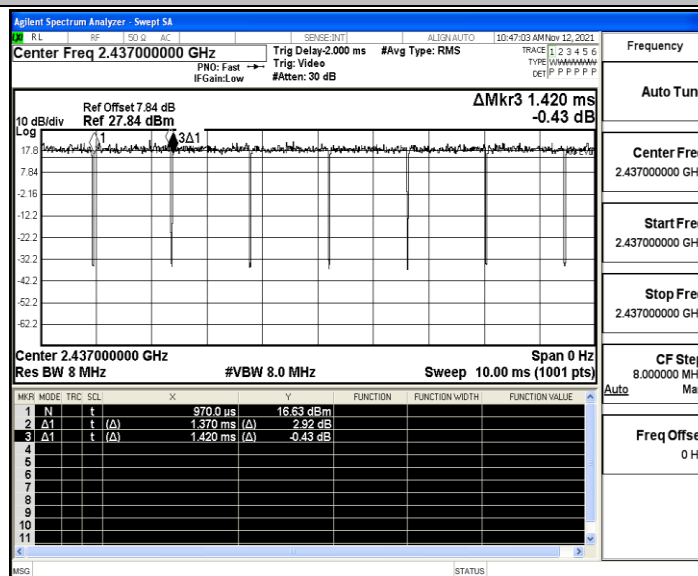
11B_Ant1_2462



11G_Ant1_2412

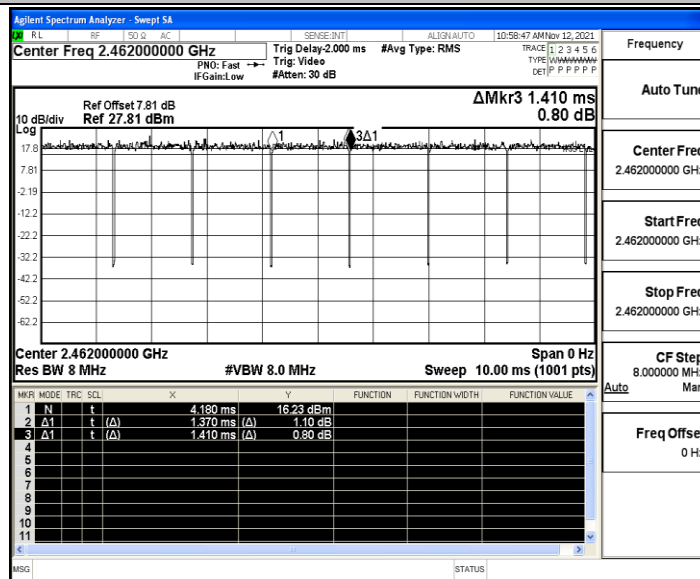


11G_Ant1_2437

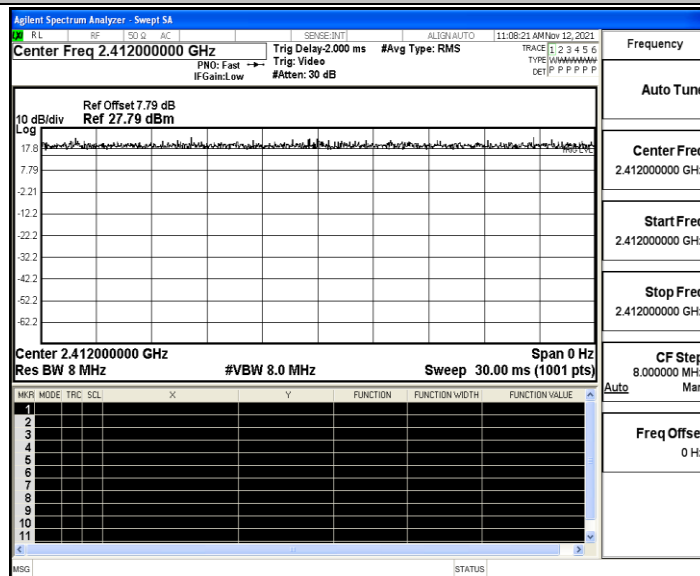




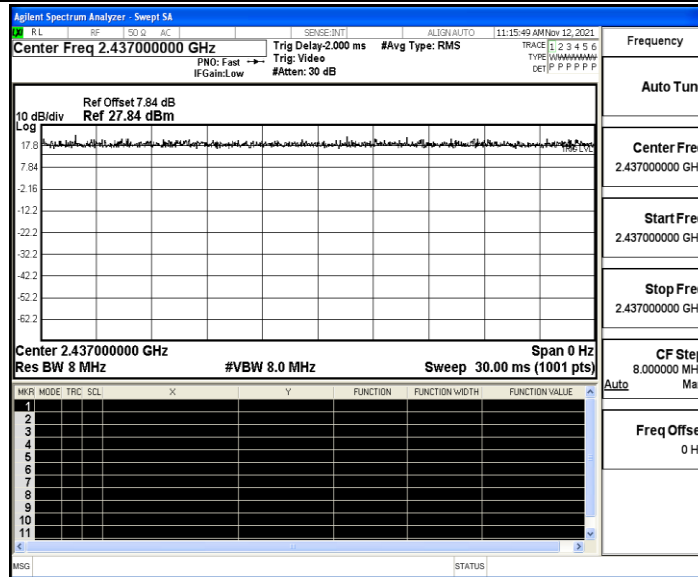
11G_Ant1_2462



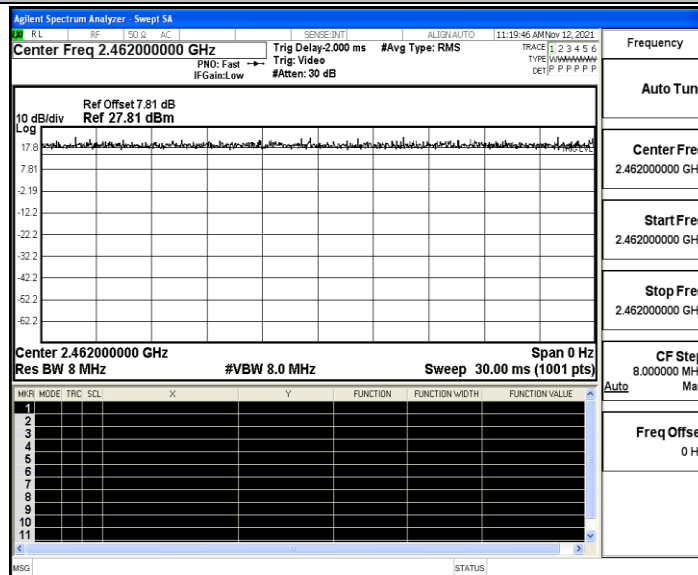
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462





A.8 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	≤-41.20	46.20	≤54	PASS
				AV	2387.100	-44.13	≤-41.20	51.07	≤54	PASS
				AV	2390.000	-44.67	≤-41.20	50.53	≤54	PASS
				Peak	2310.000	-43.87	≤-21.20	51.33	≤74	PASS
				Peak	2386.710	-36.22	≤-21.20	58.98	≤74	PASS
				Peak	2390.000	-40.32	≤-21.20	54.88	≤74	PASS
		High	2462	AV	2483.500	-43.57	≤-41.20	51.63	≤54	PASS
				AV	2484.330	-43.39	≤-41.20	51.81	≤54	PASS
				AV	2500.000	-47.49	≤-41.20	47.71	≤54	PASS
				Peak	2483.500	-42.05	≤-21.20	53.15	≤74	PASS
				Peak	2483.890	-38.12	≤-21.20	57.08	≤74	PASS
				Peak	2500.000	-42.57	≤-21.20	52.63	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-48.56	≤-41.20	46.64	≤54	PASS
				AV	2389.960	-43.92	≤-41.20	51.28	≤54	PASS
				AV	2390.000	-43.92	≤-41.20	51.28	≤54	PASS
				Peak	2310.000	-42.62	≤-21.20	52.58	≤74	PASS
				Peak	2389.310	-33.75	≤-21.20	61.45	≤74	PASS
				Peak	2390.000	-36.7	≤-21.20	58.50	≤74	PASS
		High	2462	AV	2483.500	-45.01	≤-41.20	50.19	≤54	PASS
				AV	2483.560	-45.19	≤-41.20	50.01	≤54	PASS
				AV	2500.000	-47.57	≤-41.20	47.63	≤54	PASS
				Peak	2483.500	-37.69	≤-21.20	57.51	≤74	PASS
				Peak	2484.770	-31.93	≤-21.20	63.27	≤74	PASS
				Peak	2500.000	-40.75	≤-21.20	54.45	≤74	PASS
11N20SISO	Ant1	Low	2412	AV	2310.000	-49.16	≤-41.20	46.04	≤54	PASS
				AV	2389.960	-44.12	≤-41.20	51.08	≤54	PASS
				AV	2390.000	-44.12	≤-41.20	51.08	≤54	PASS
				Peak	2310.000	-43.48	≤-21.20	51.72	≤74	PASS
				Peak	2389.960	-35.83	≤-21.20	59.37	≤74	PASS
				Peak	2390.000	-35.83	≤-21.20	59.37	≤74	PASS
		High	2462	AV	2483.500	-45.96	≤-41.20	49.24	≤54	PASS
				AV	2483.560	-45.98	≤-41.20	49.22	≤54	PASS
				AV	2500.000	-47.99	≤-41.20	47.21	≤54	PASS
				Peak	2483.500	-42.68	≤-21.20	52.52	≤74	PASS
				Peak	2483.670	-38.83	≤-21.20	56.37	≤74	PASS
				Peak	2500.000	-44.7	≤-21.20	50.50	≤74	PASS



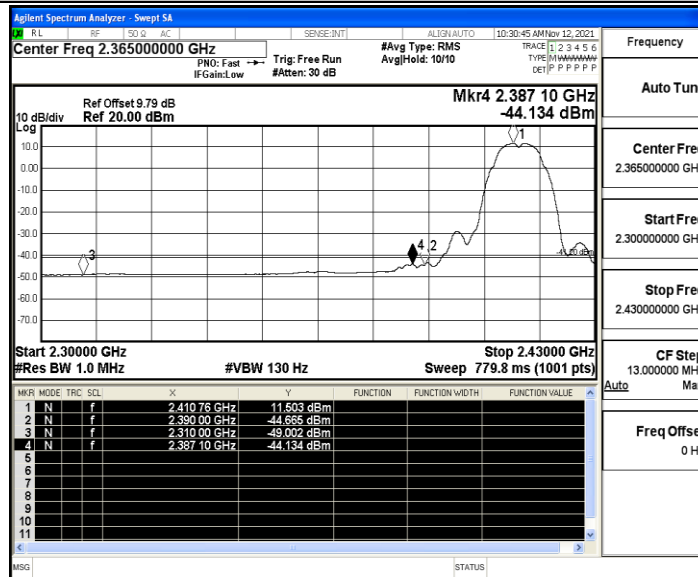
Note:

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.

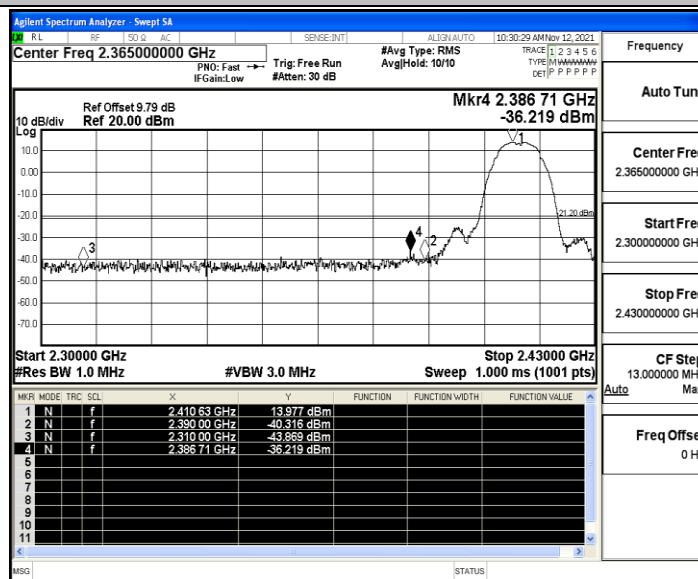


Test Graphs

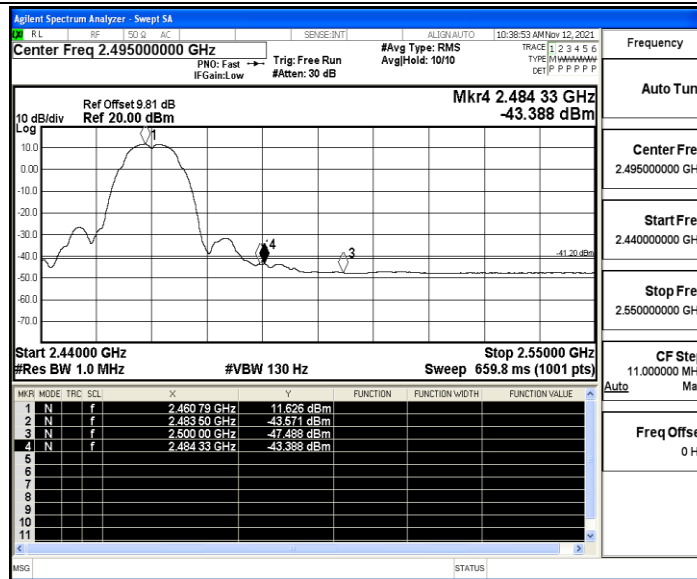
11B_Ant1_Low_2412_AV



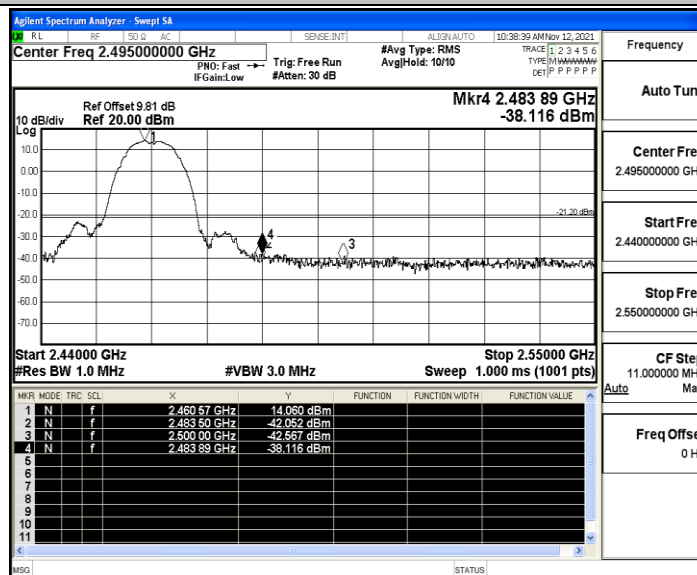
11B_Ant1_Low_2412_Peak



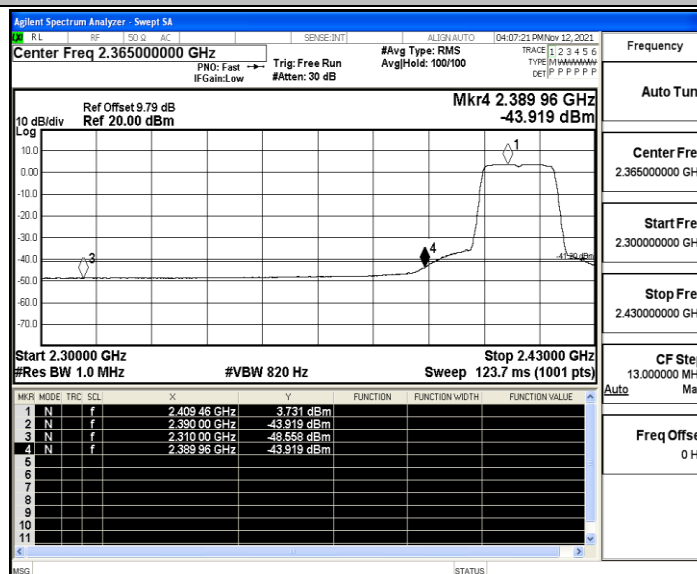
11B_Ant1_High_2462_AV



11B_Ant1_High_2462_Peak

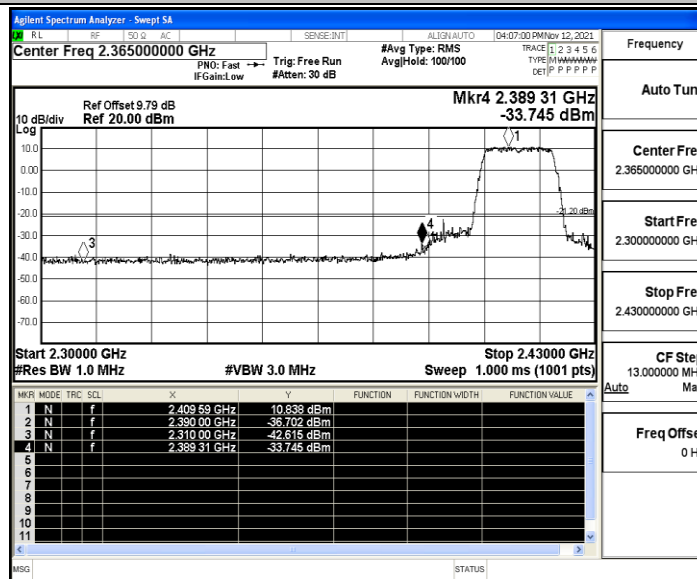


11G_Ant1_Low_2412_AV

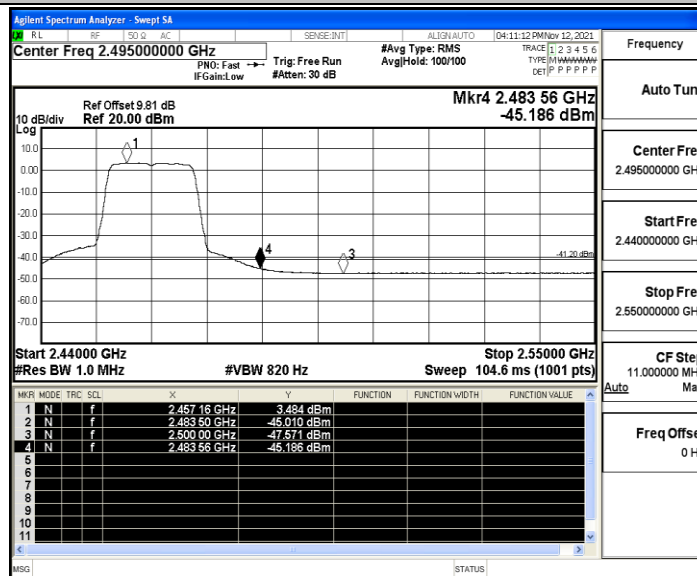




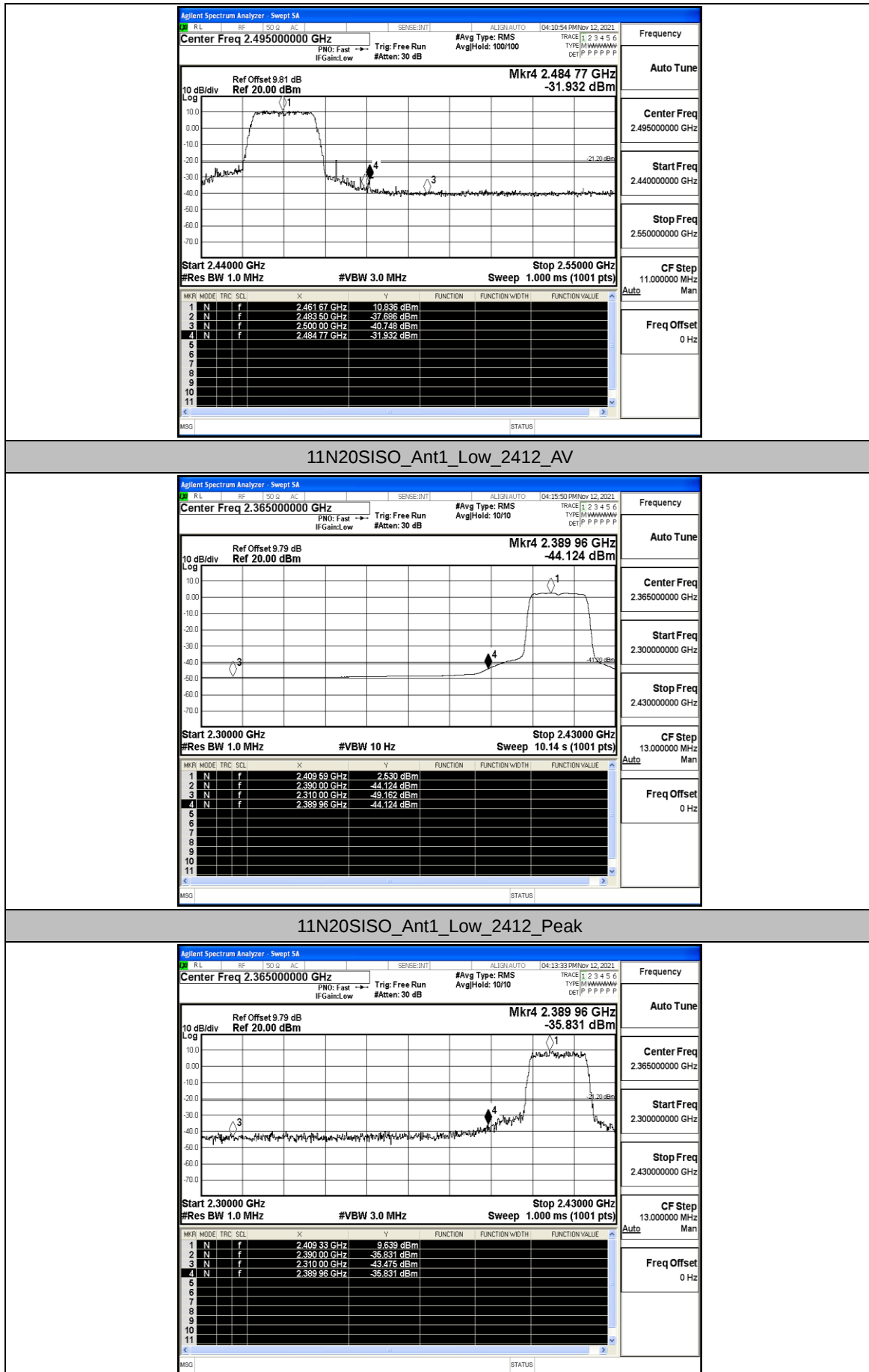
11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV

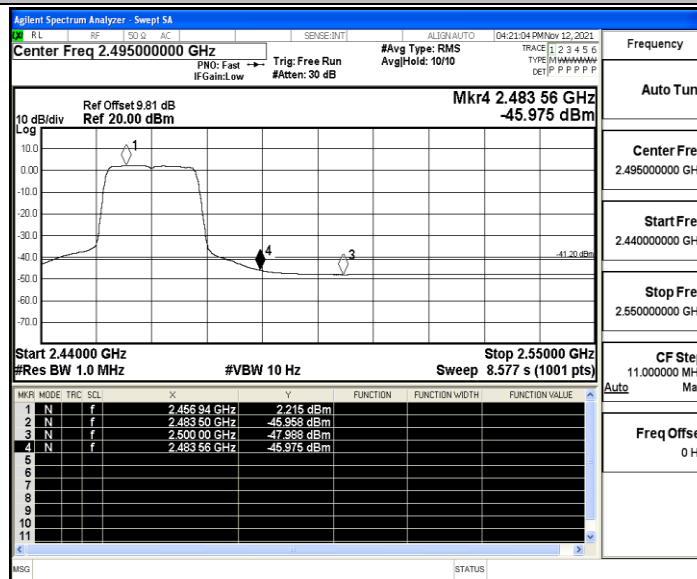


11G_Ant1_High_2462_Peak





11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak

