

RF Test Data for WLAN(2.4G) (Conducted Measurement)

Product Name: Pro¹ X

Trade Mark: F

Test Model: QX1051

FCC ID: 2AUCLQX1050

Environmental Conditions

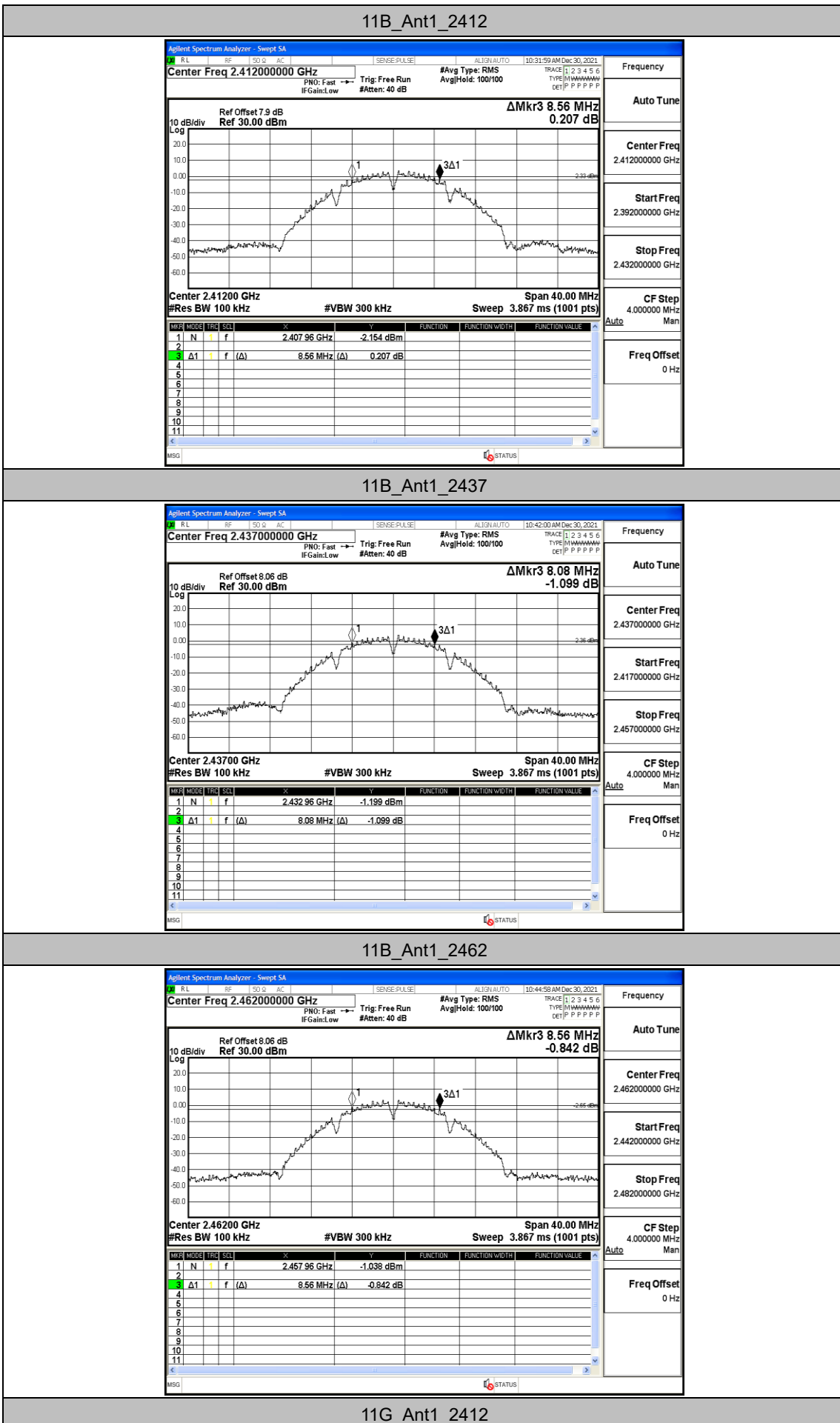
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

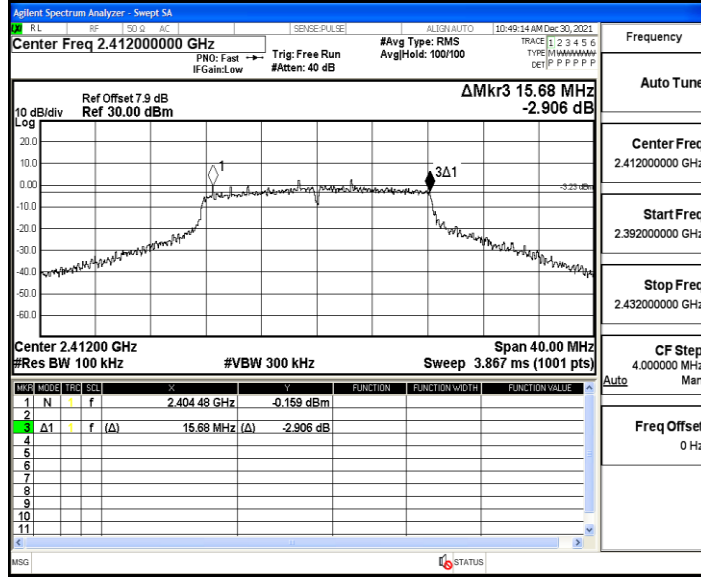
Appendix A: DTS Bandwidth

Test Result

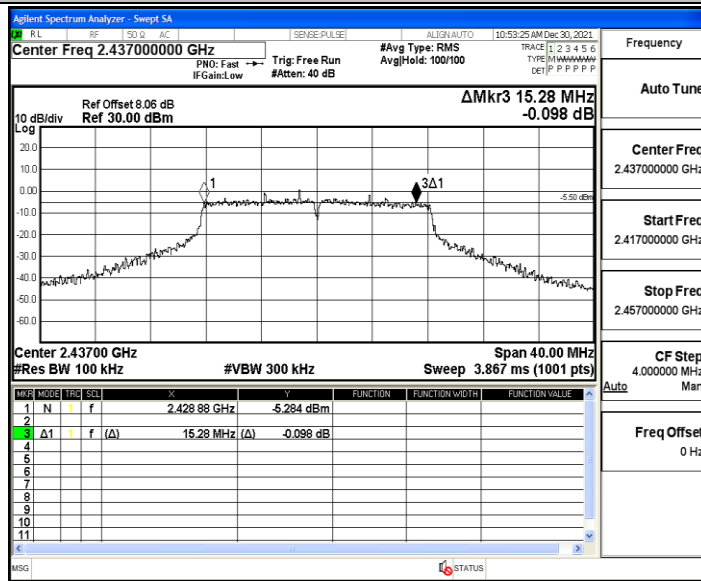
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.560	2407.960	2416.520	0.5	PASS
		2437	8.080	2432.960	2441.040	0.5	PASS
		2462	8.560	2457.960	2466.520	0.5	PASS
11G	Ant1	2412	15.680	2404.480	2420.160	0.5	PASS
		2437	15.280	2428.880	2444.160	0.5	PASS
		2462	11.280	2457.000	2468.280	0.5	PASS
11N20SISO	Ant1	2412	14.720	2405.680	2420.400	0.5	PASS
		2437	15.960	2428.600	2444.560	0.5	PASS
		2462	17.280	2453.480	2470.760	0.5	PASS
11N40SISO	Ant1	2422	33.760	2405.760	2439.520	0.5	PASS
		2437	35.040	2419.480	2454.520	0.5	PASS
		2452	34.640	2434.480	2469.120	0.5	PASS

Test Graphs

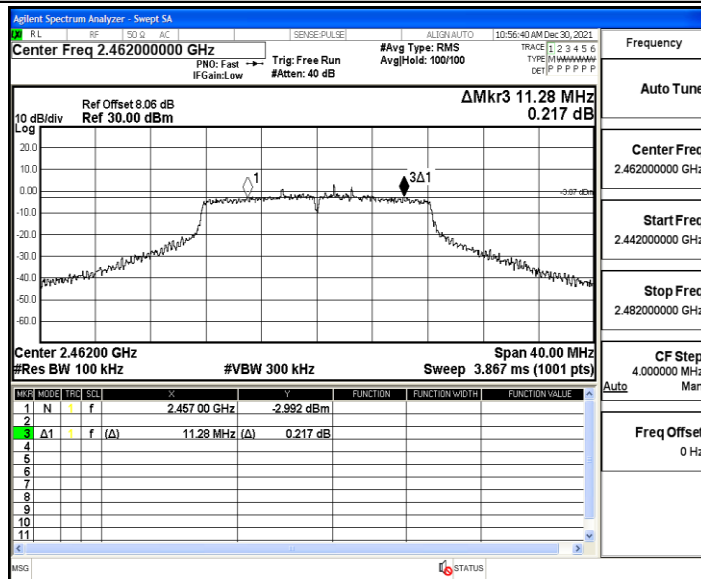




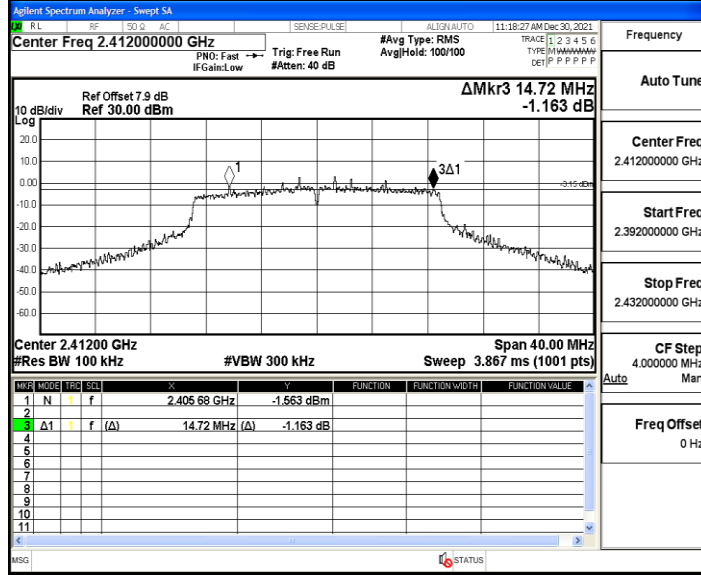
11G_Ant1_2437



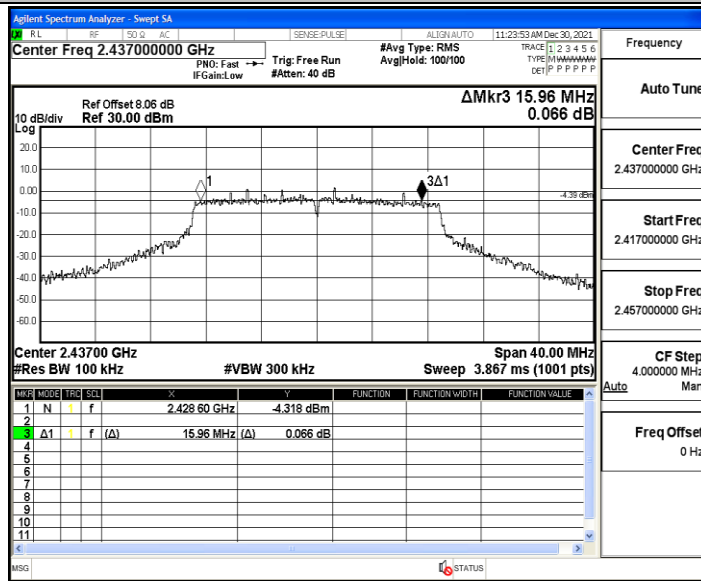
11G_Ant1_2462



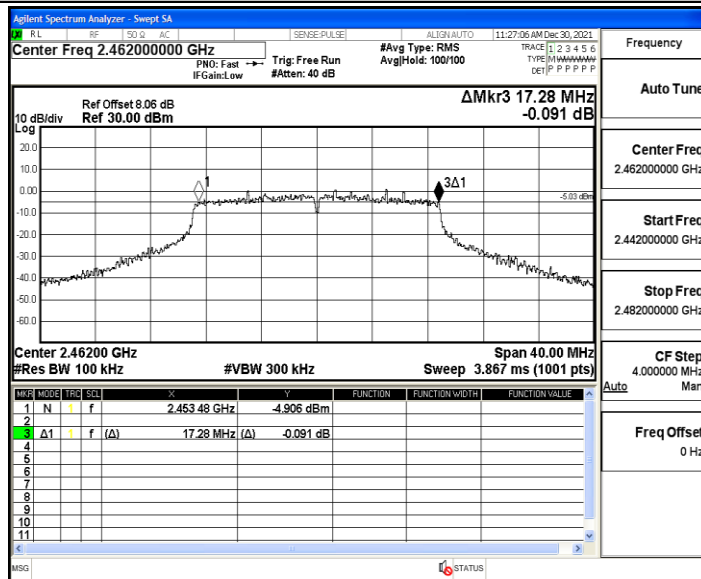
11N20SISO_Ant1_2412



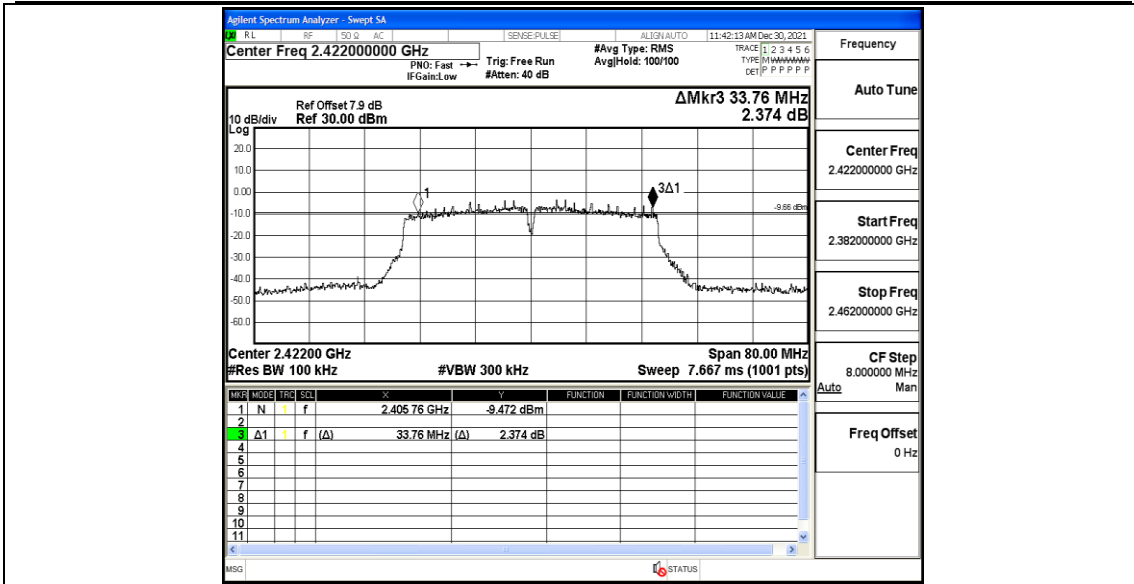
11N20SISO_Ant1_2437



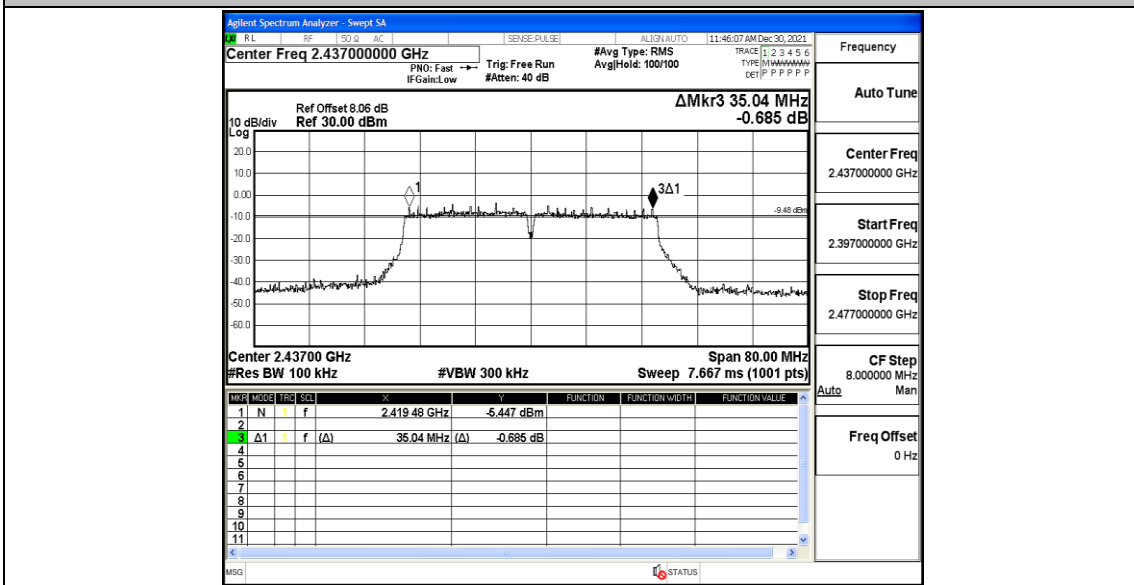
11N20SISO_Ant1_2462



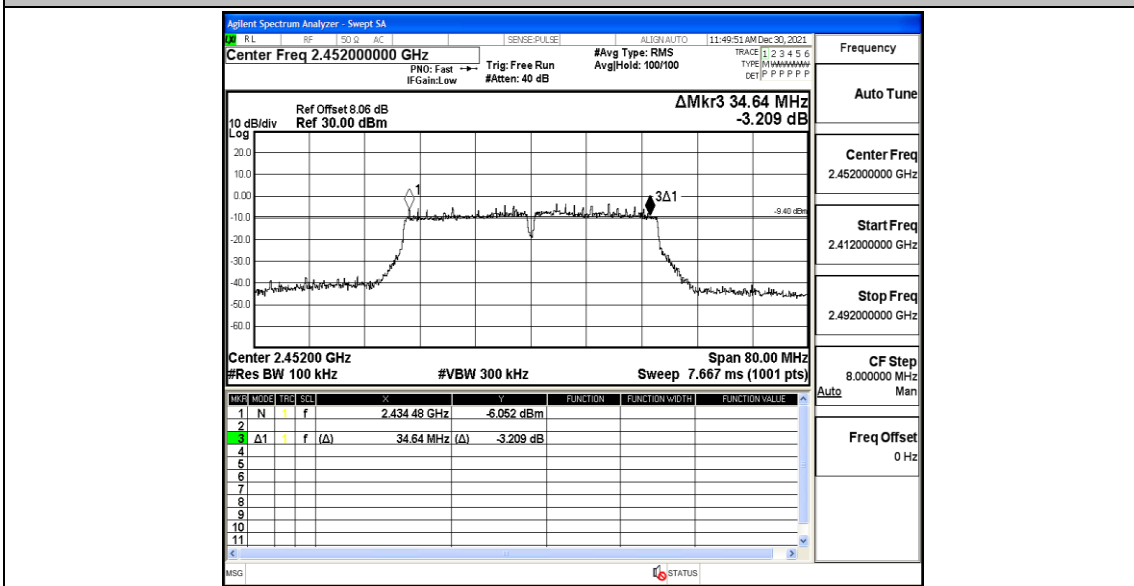
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

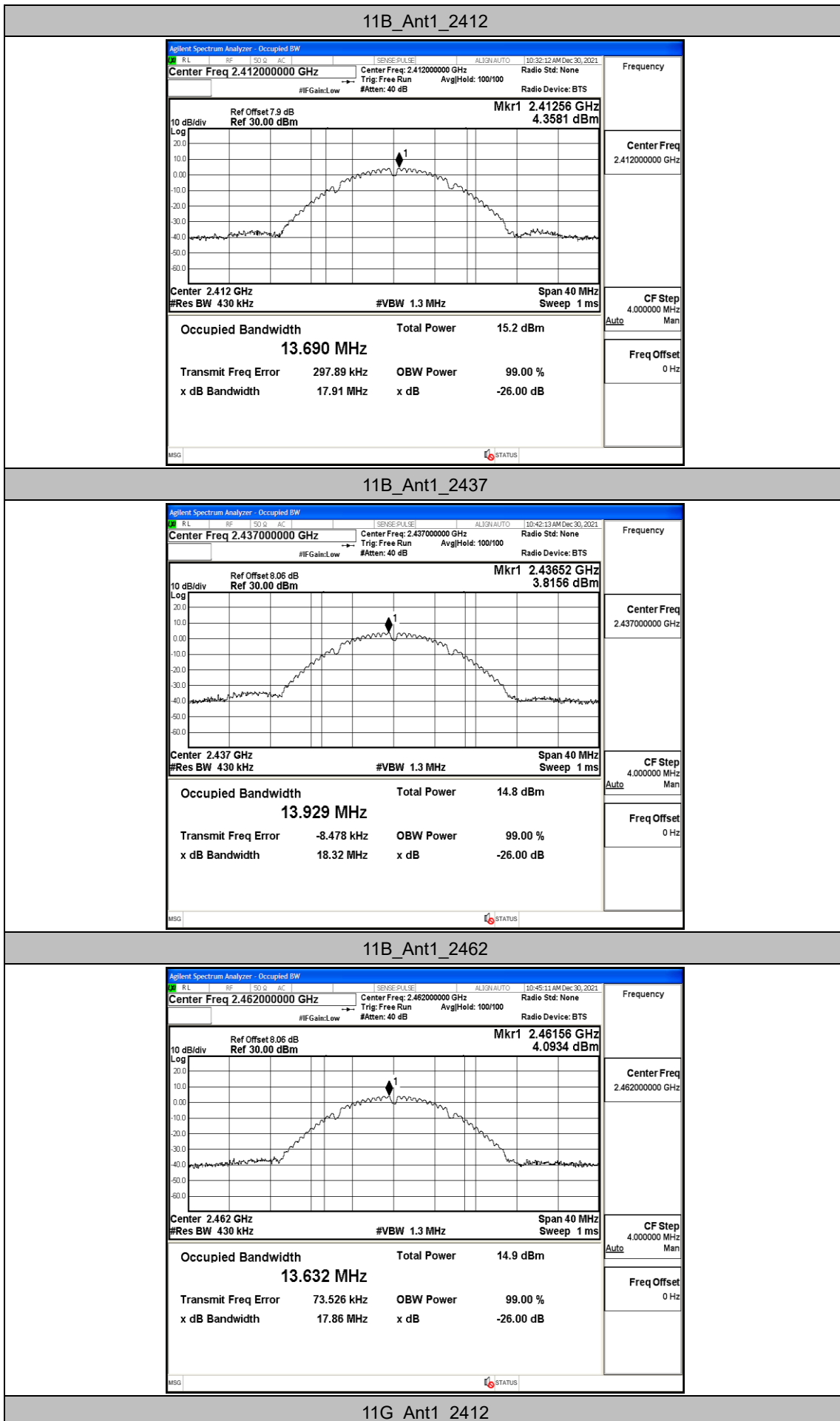


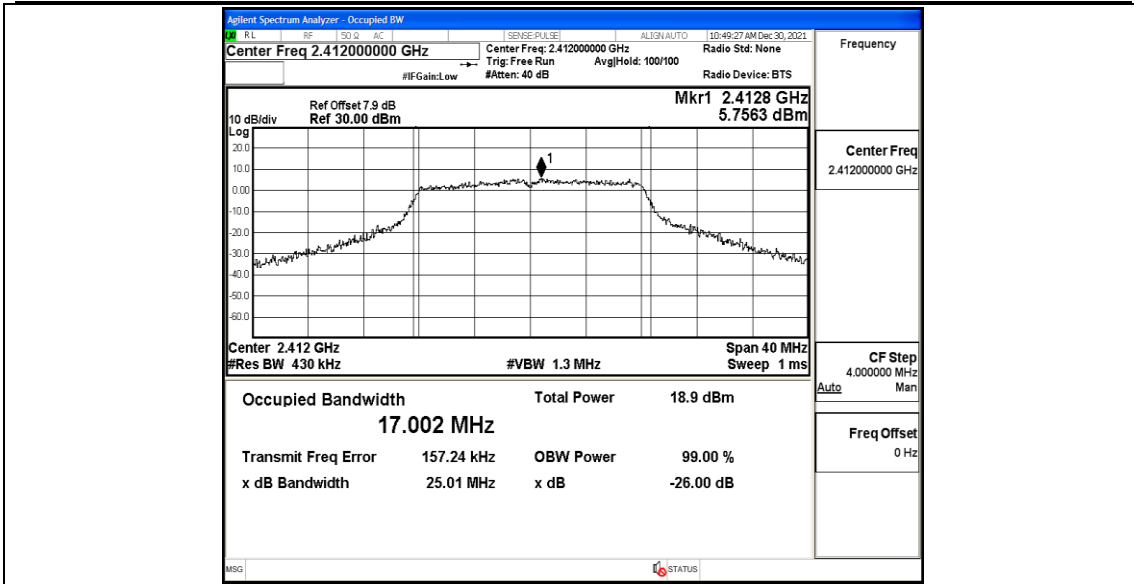
Appendix B: Occupied Channel Bandwidth

Test Result

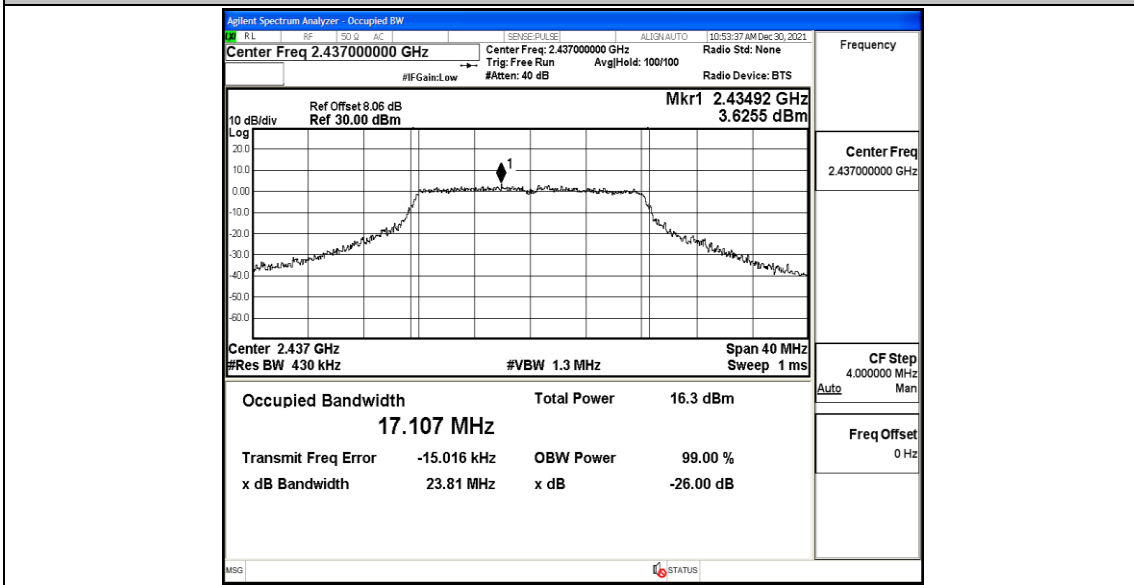
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.690	2405.453	2419.143	---	PASS
		2437	13.929	2430.027	2443.956	---	PASS
		2462	13.632	2455.258	2468.890	---	PASS
11G	Ant1	2412	17.002	2403.656	2420.658	---	PASS
		2437	17.107	2428.431	2445.538	---	PASS
		2462	16.906	2453.563	2470.469	---	PASS
11N20SISO	Ant1	2412	18.051	2403.126	2421.177	---	PASS
		2437	18.163	2427.909	2446.072	---	PASS
		2462	17.967	2453.054	2471.021	---	PASS
11N40SISO	Ant1	2422	36.094	2404.091	2440.185	---	PASS
		2437	36.468	2418.791	2455.259	---	PASS
		2452	36.443	2433.890	2470.333	---	PASS

Test Graphs

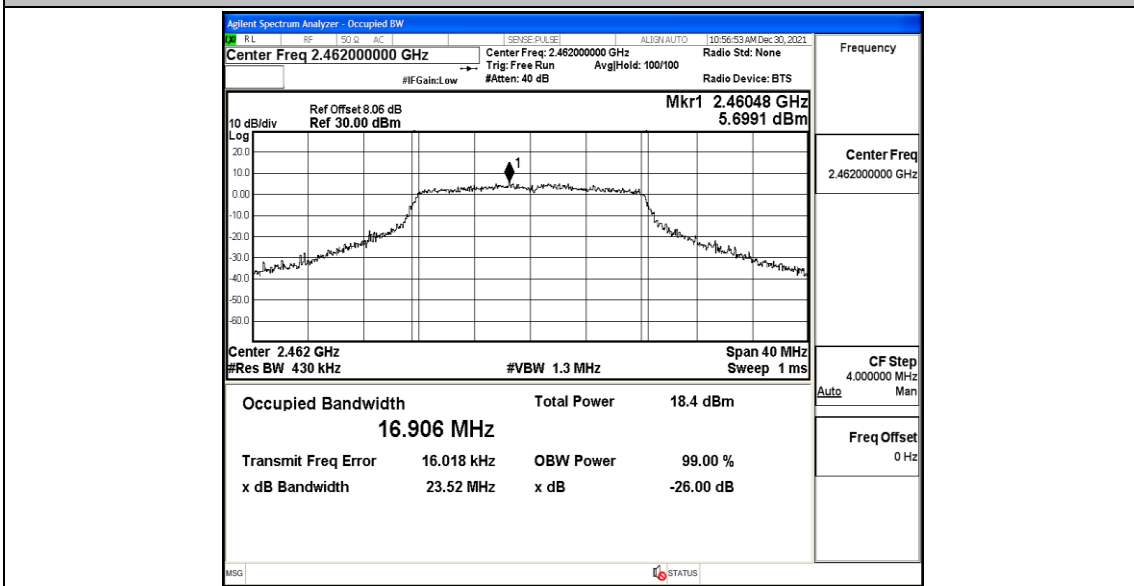




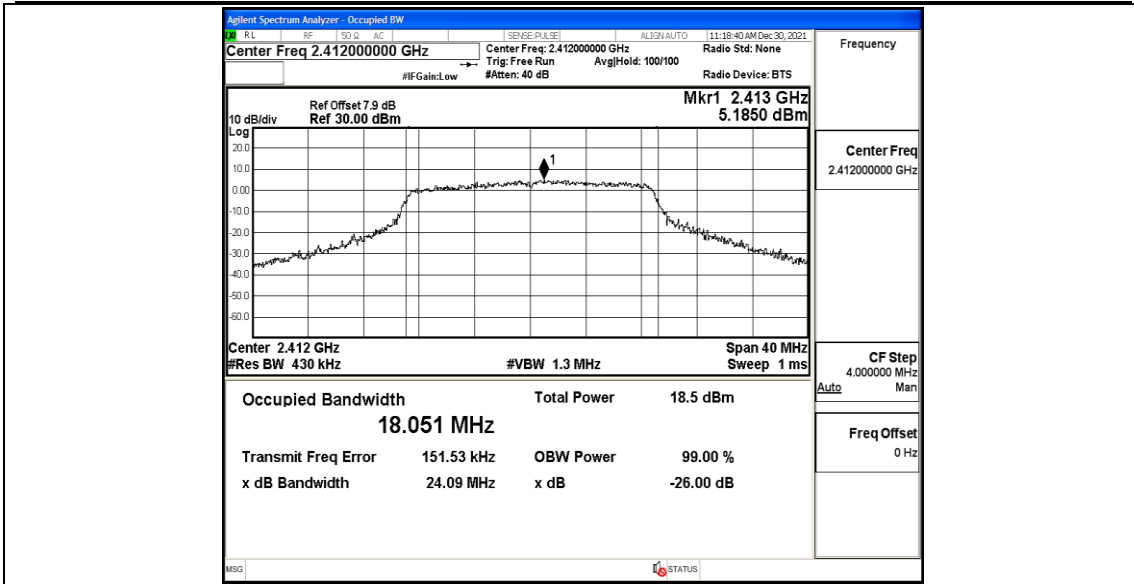
11G_Ant1_2437



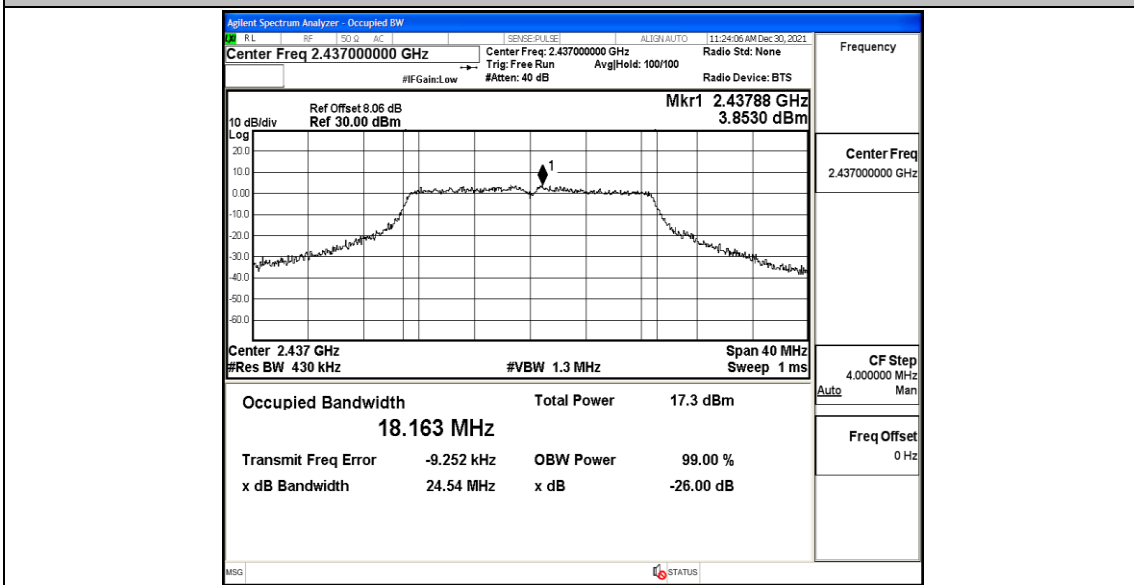
11G_Ant1_2462



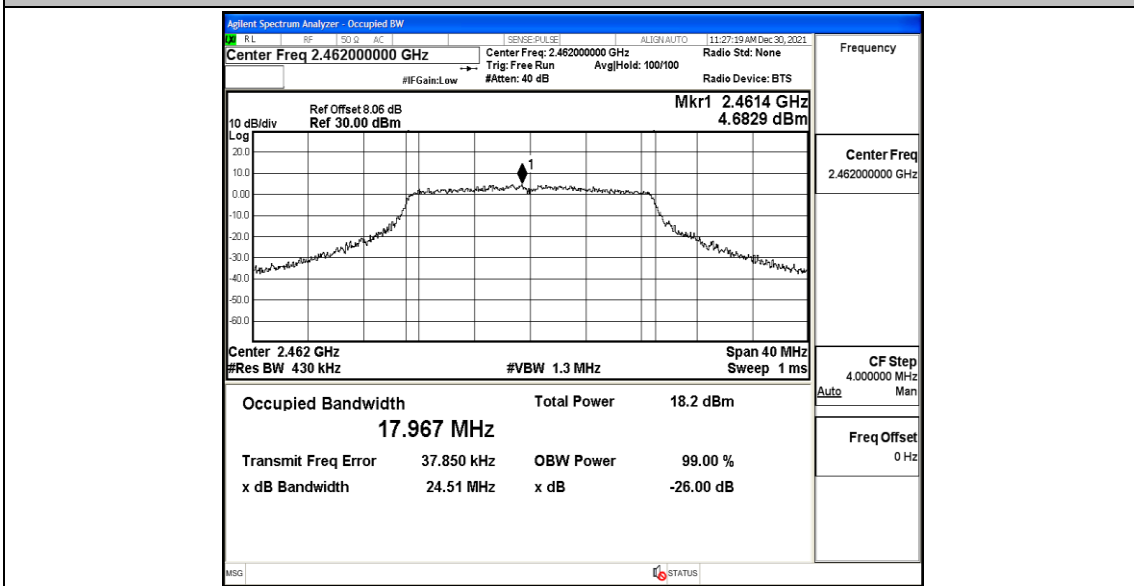
11N20SISO_Ant1_2412



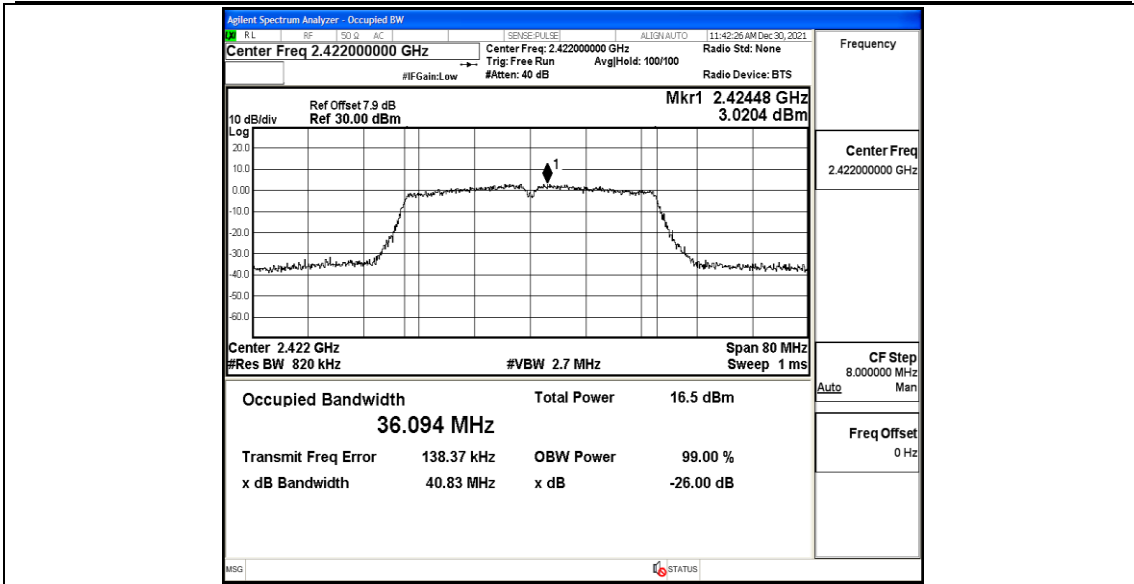
11N20SISO_Ant1_2437



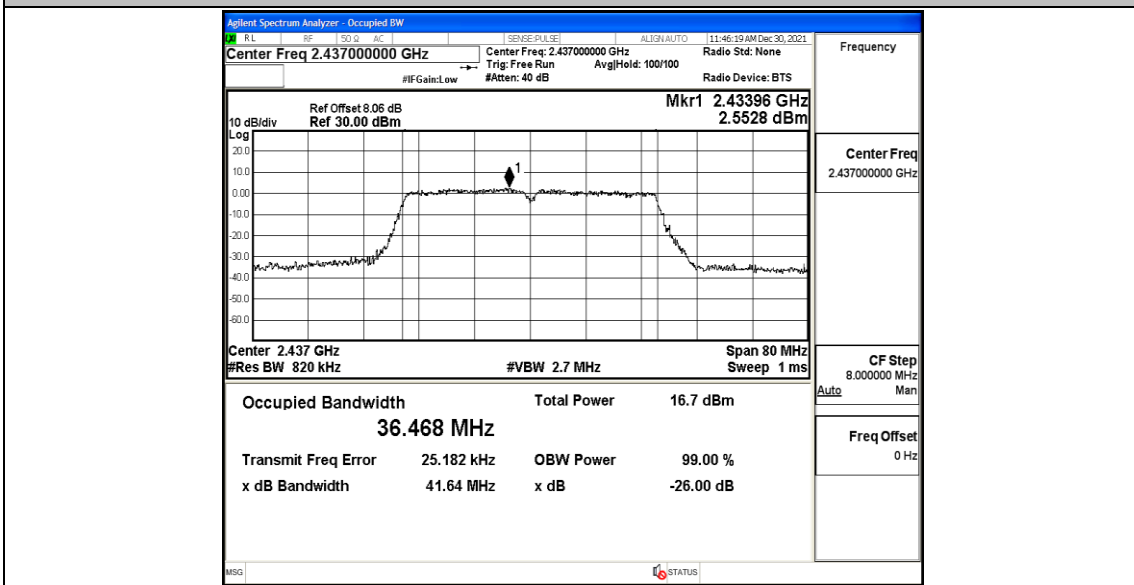
11N20SISO_Ant1_2462



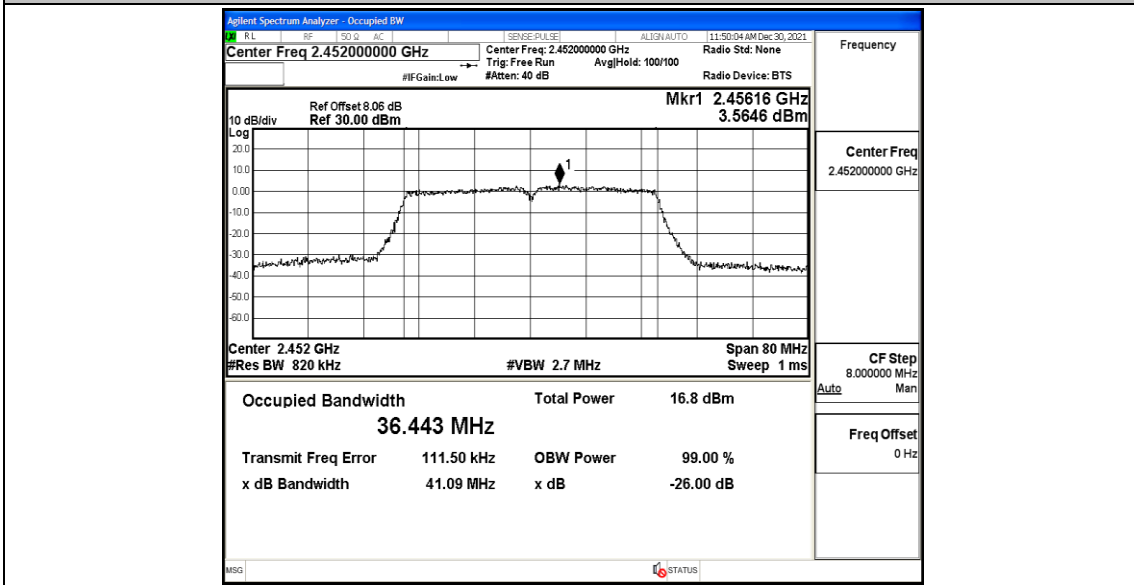
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

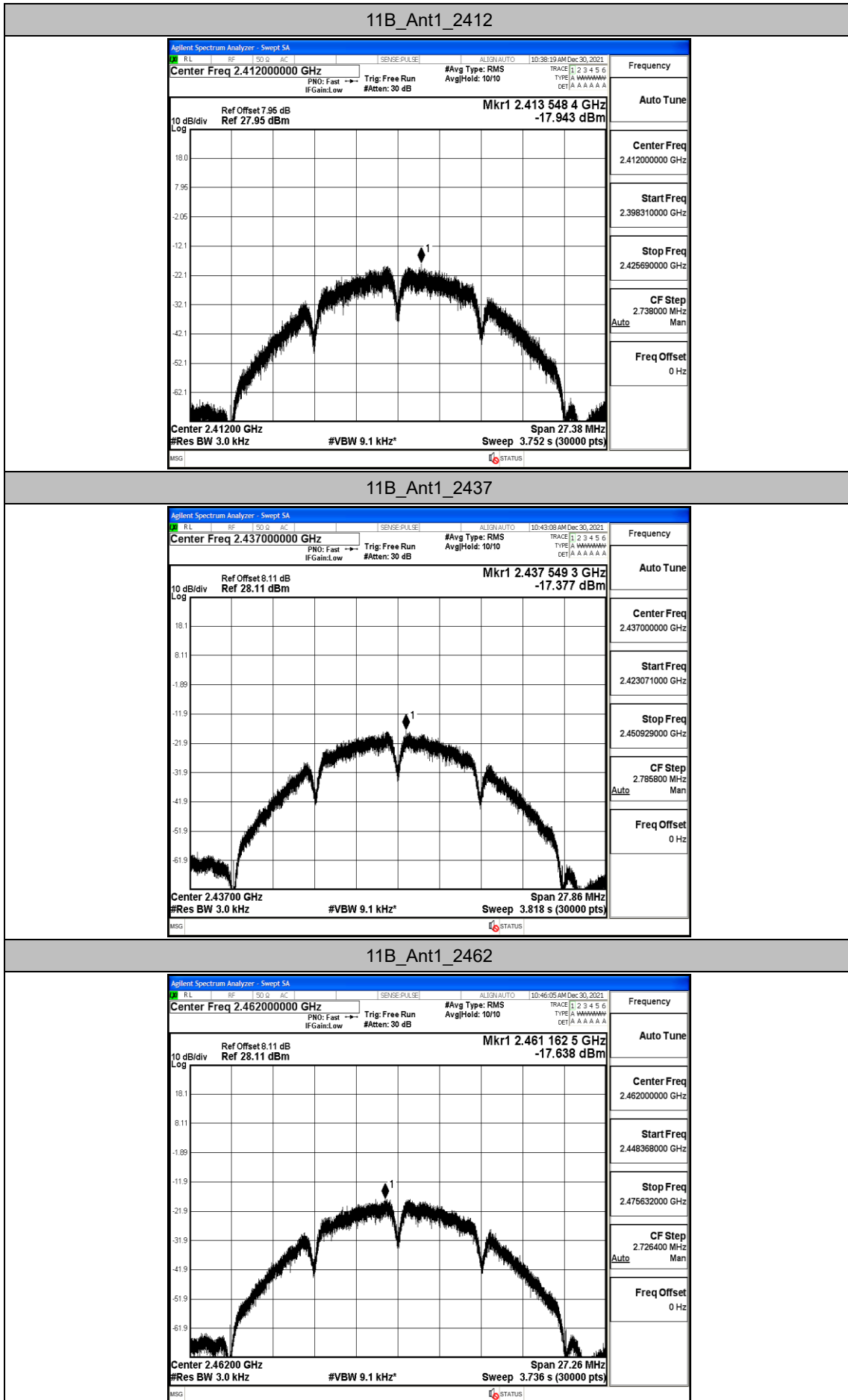
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	12.21	≤30	PASS
		2437	11.76	≤30	PASS
		2462	12.02	≤30	PASS
11G	Ant1	2412	12.75	≤30	PASS
		2437	10.23	≤30	PASS
		2462	12.14	≤30	PASS
11N20SISO	Ant1	2412	12.21	≤30	PASS
		2437	11.11	≤30	PASS
		2462	11.94	≤30	PASS
11N40SISO	Ant1	2422	9.52	≤30	PASS
		2437	9.68	≤30	PASS
		2452	9.82	≤30	PASS

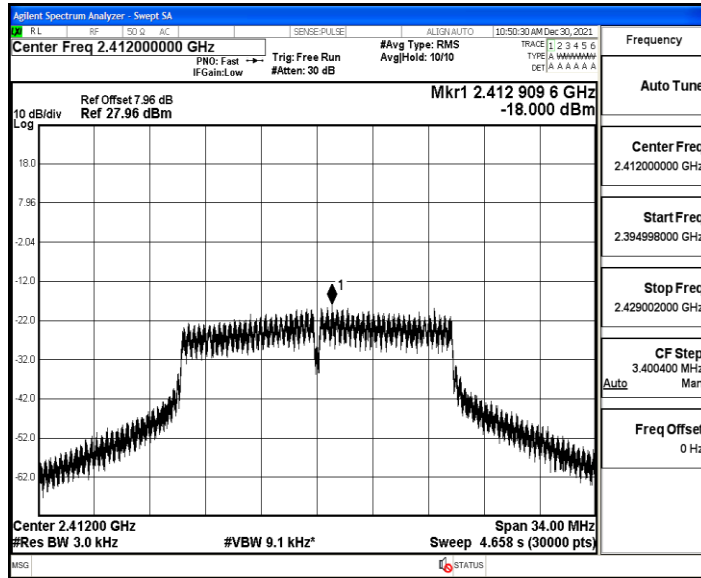
Appendix D: Maximum power spectral density**Test Result**

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-17.94	≤8	PASS
		2437	-17.38	≤8	PASS
		2462	-17.64	≤8	PASS
11G	Ant1	2412	-18	≤8	PASS
		2437	-21.2	≤8	PASS
		2462	-19.14	≤8	PASS
11N20SISO	Ant1	2412	-19.2	≤8	PASS
		2437	-21.41	≤8	PASS
		2462	-19.66	≤8	PASS
11N40SISO	Ant1	2422	-24.94	≤8	PASS
		2437	-23.86	≤8	PASS
		2452	-25.15	≤8	PASS

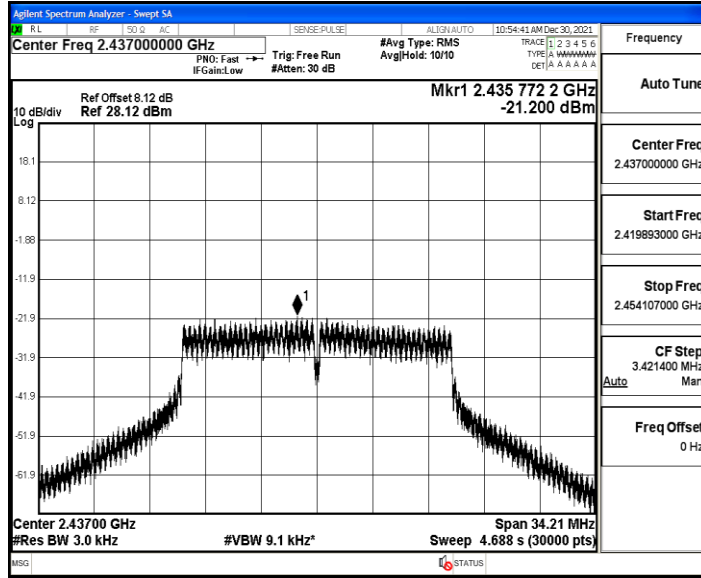
Test Graphs



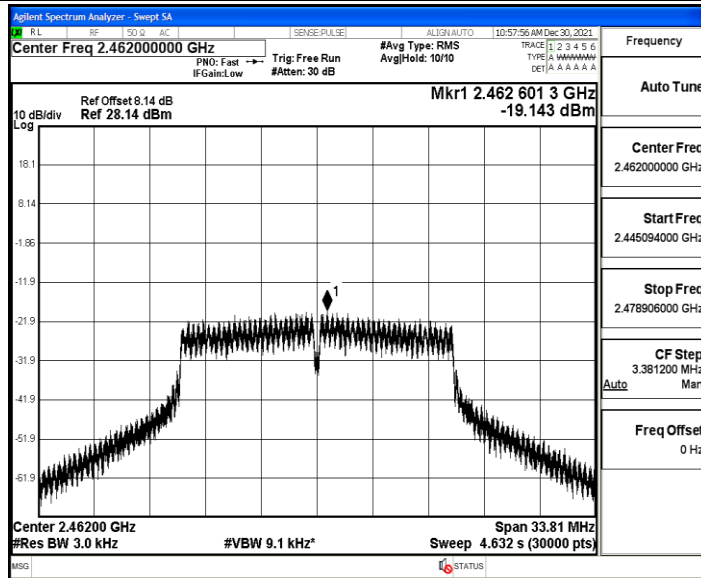
11G_Ant1_2412



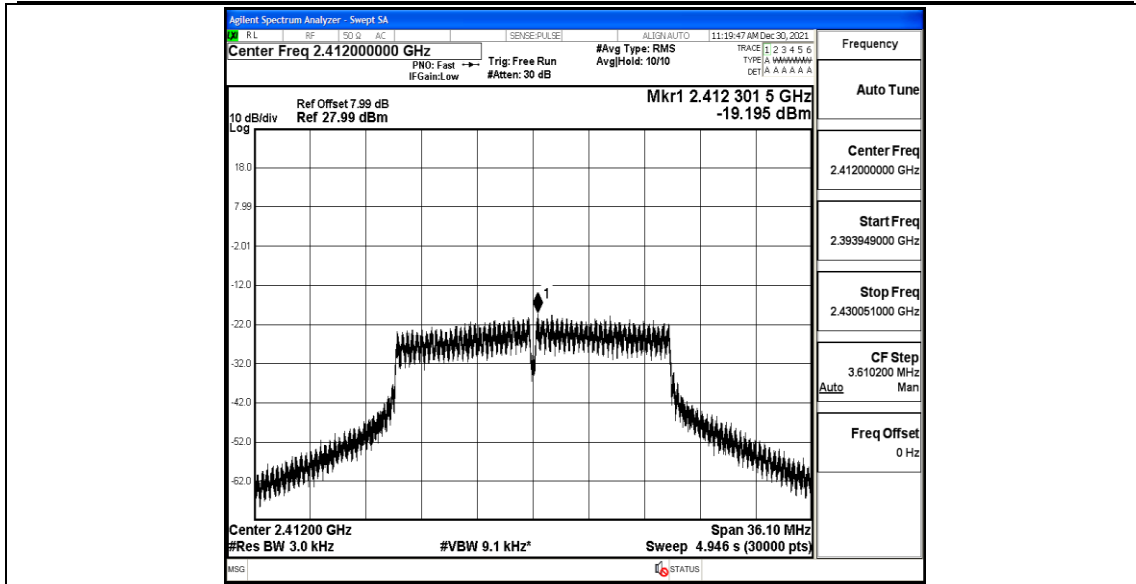
11G_Ant1_2437



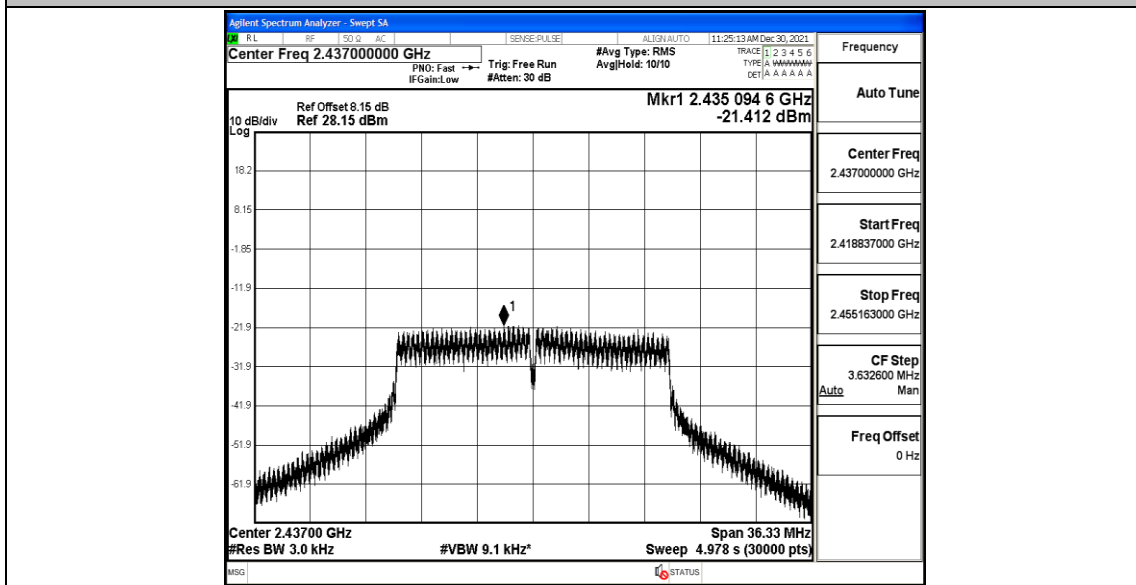
11G_Ant1_2462



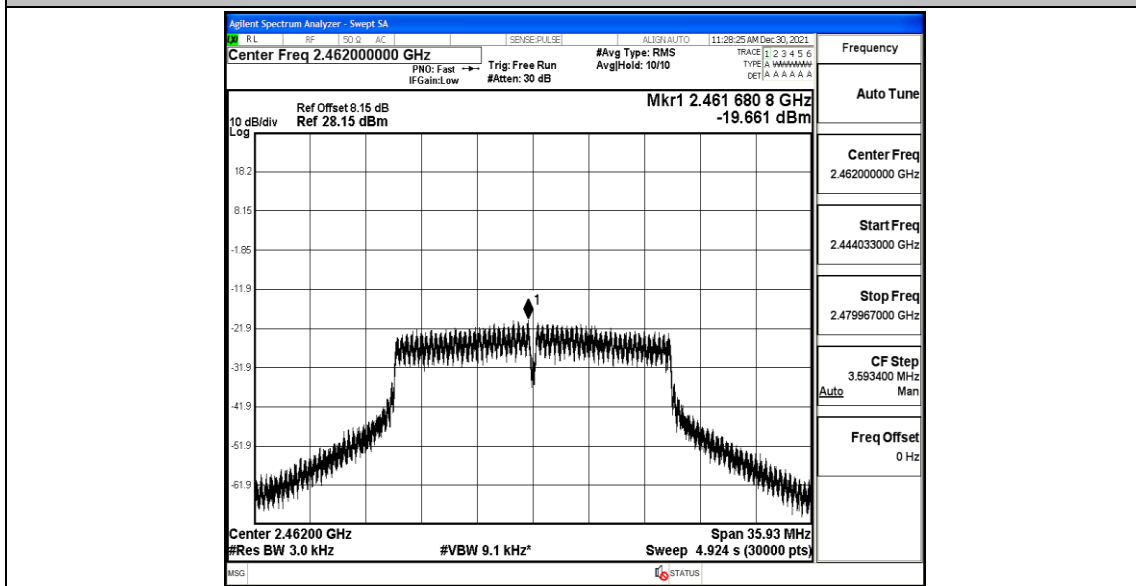
11N20SISO_Ant1_2412



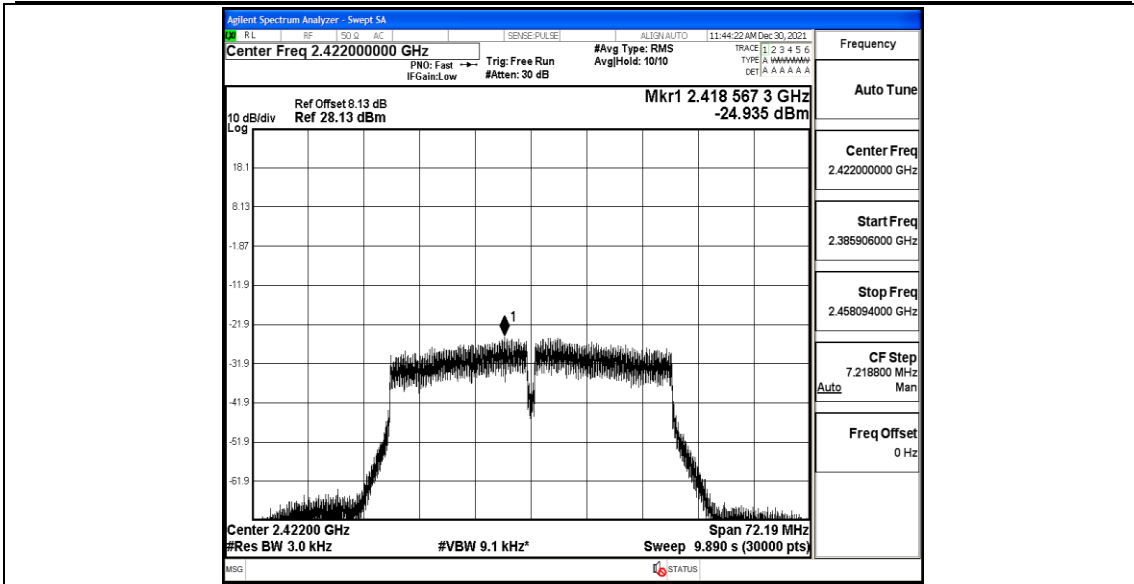
11N20SISO_Ant1_2437



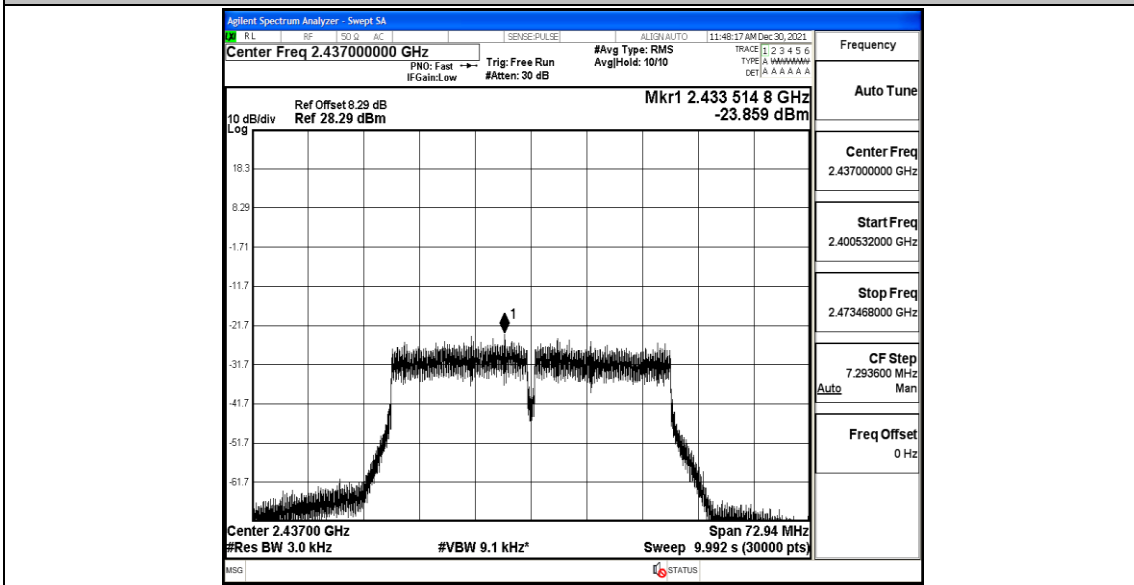
11N20SISO_Ant1_2462



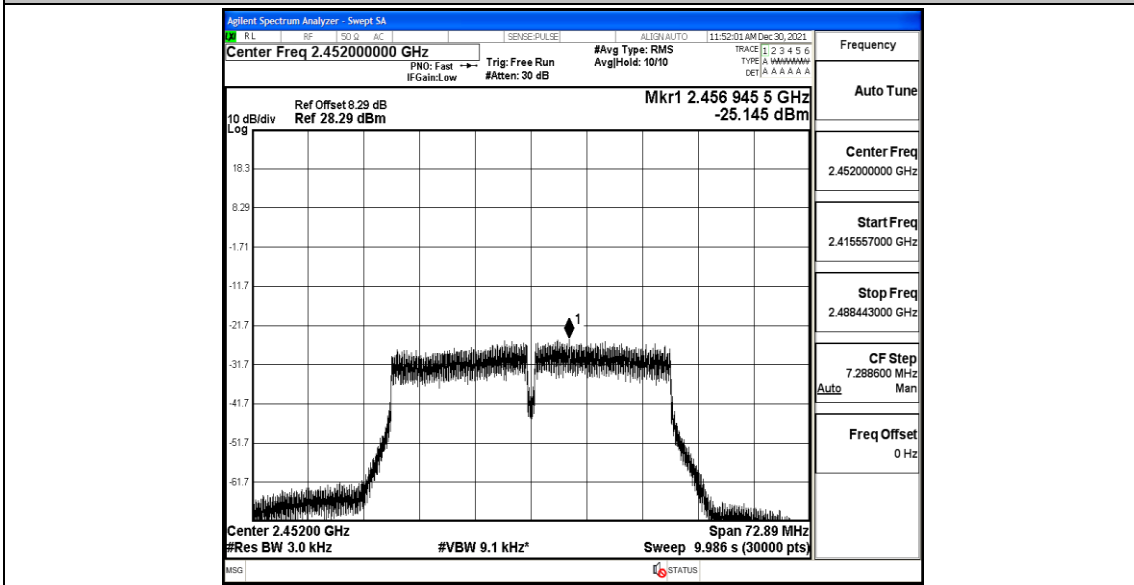
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



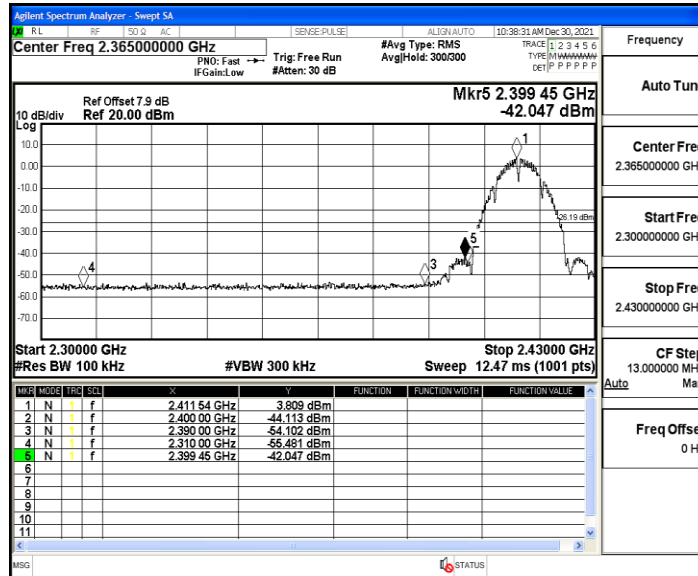
Appendix E: Band edge measurements

Test Result

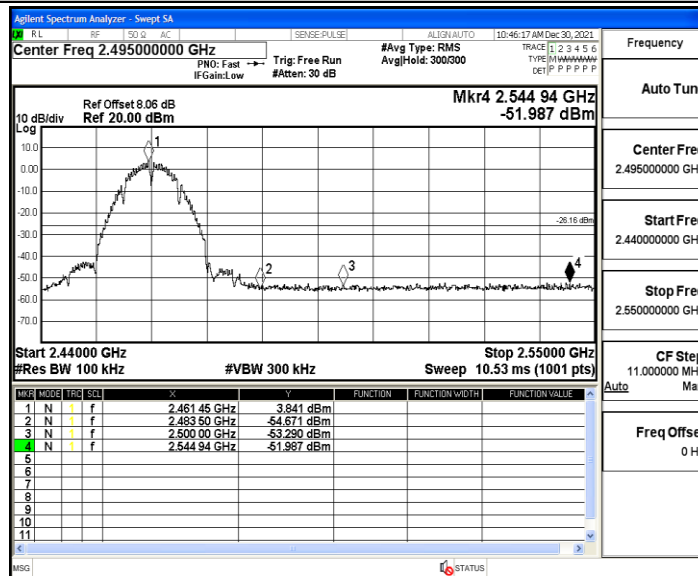
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.81	-42.05	≤-26.19	PASS
		High	2462	3.84	-51.99	≤-26.16	PASS
11G	Ant1	Low	2412	3.94	-26.48	≤-26.06	PASS
		High	2462	2.51	-46.51	≤-27.49	PASS
11N20SISO	Ant1	Low	2412	1.10	-29.81	≤-28.9	PASS
		High	2462	3.12	-46.52	≤-26.88	PASS
11N40SISO	Ant1	Low	2422	-3.20	-39.6	≤-33.2	PASS
		High	2452	-3.15	-43.11	≤-33.15	PASS

Test Graphs

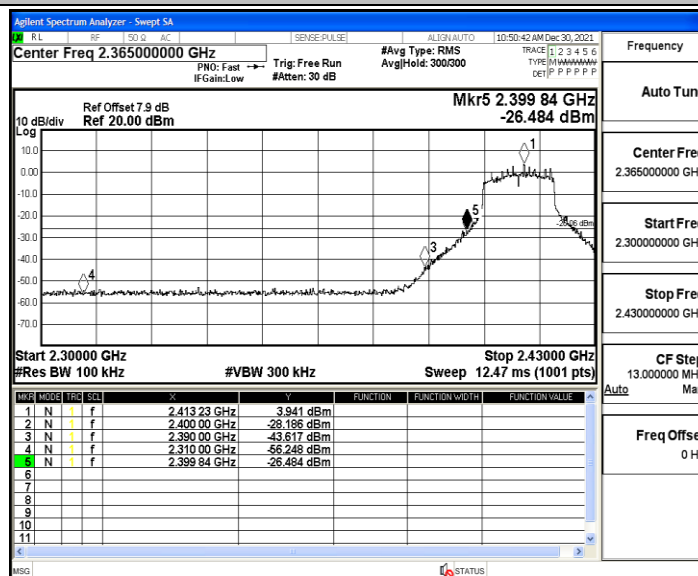
11B_Ant1_Low_2412



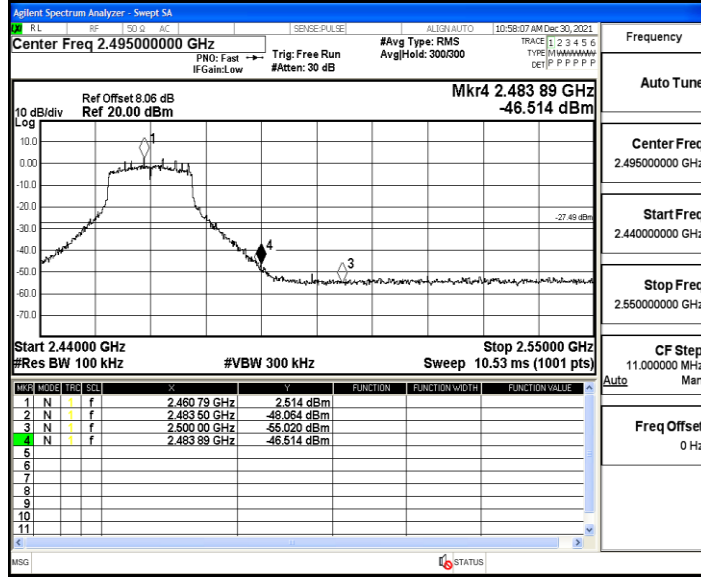
11B_Ant1_High_2462



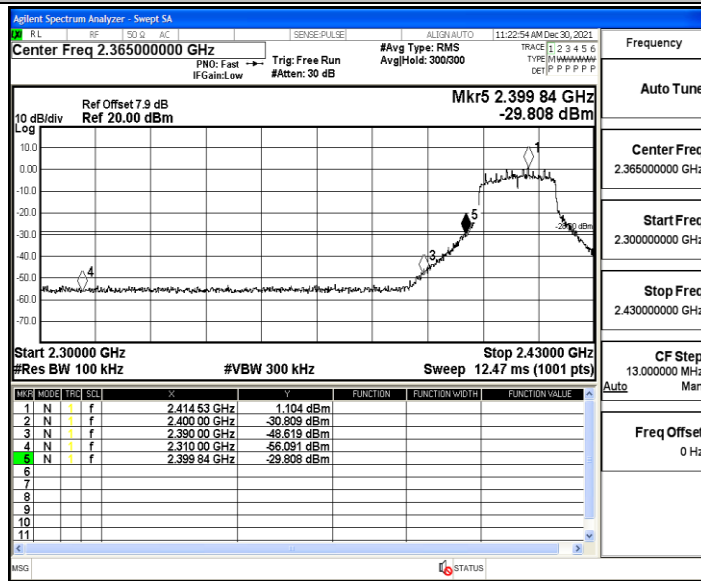
11G_Ant1_Low_2412



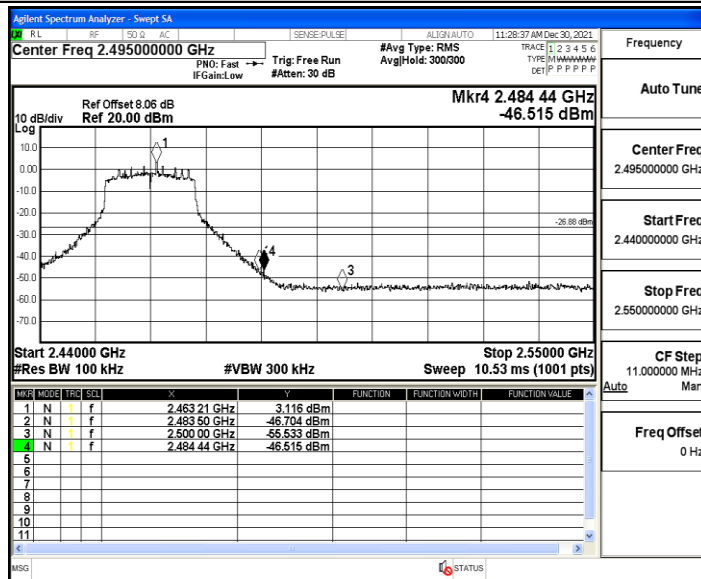
11G_Ant1_High_2462



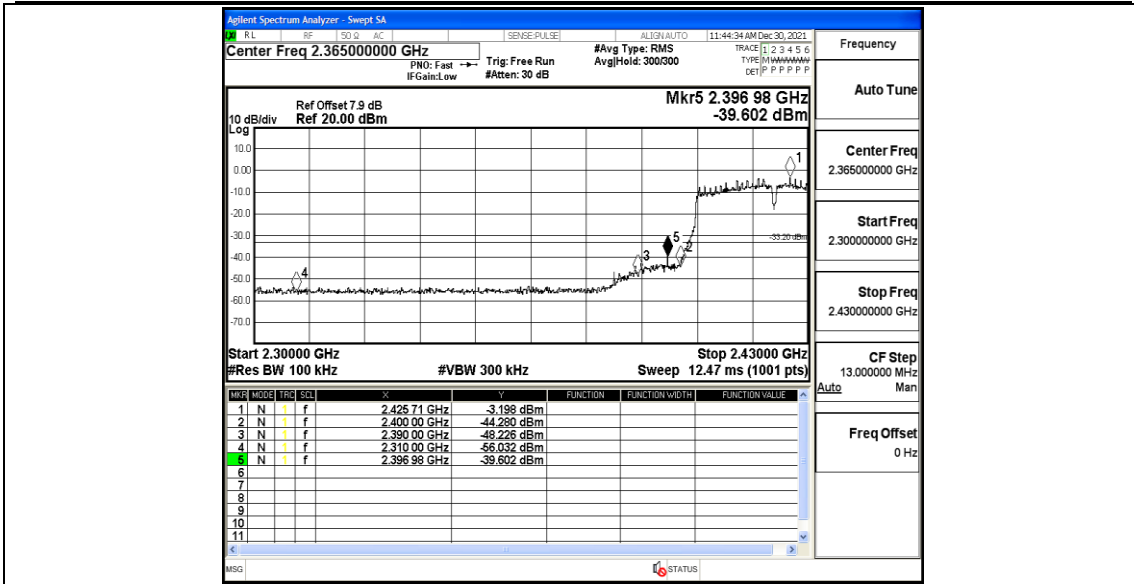
11N20SISO_Ant1_Low_2412



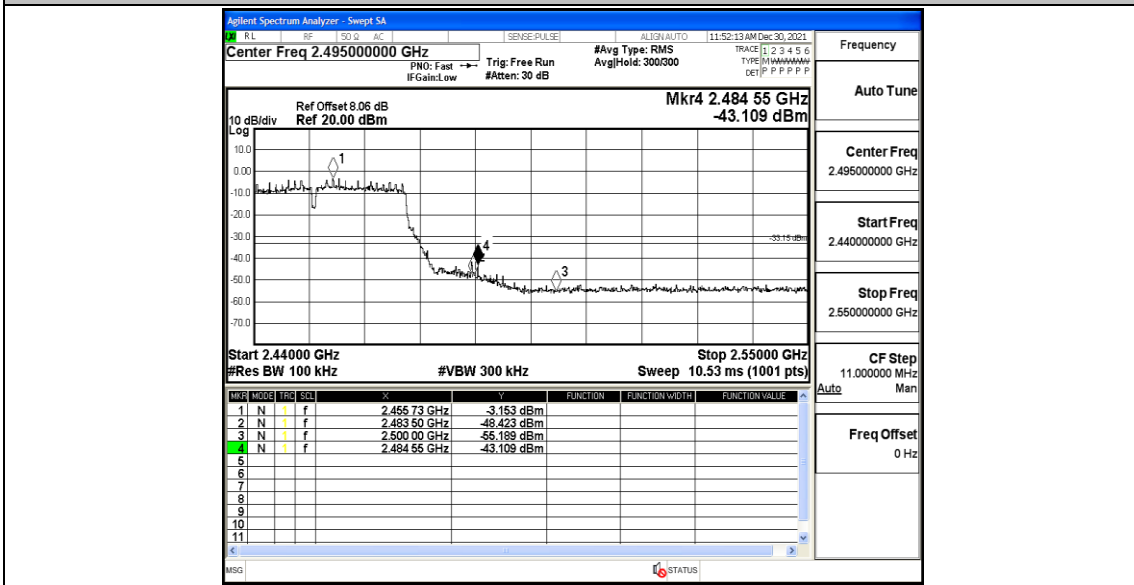
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

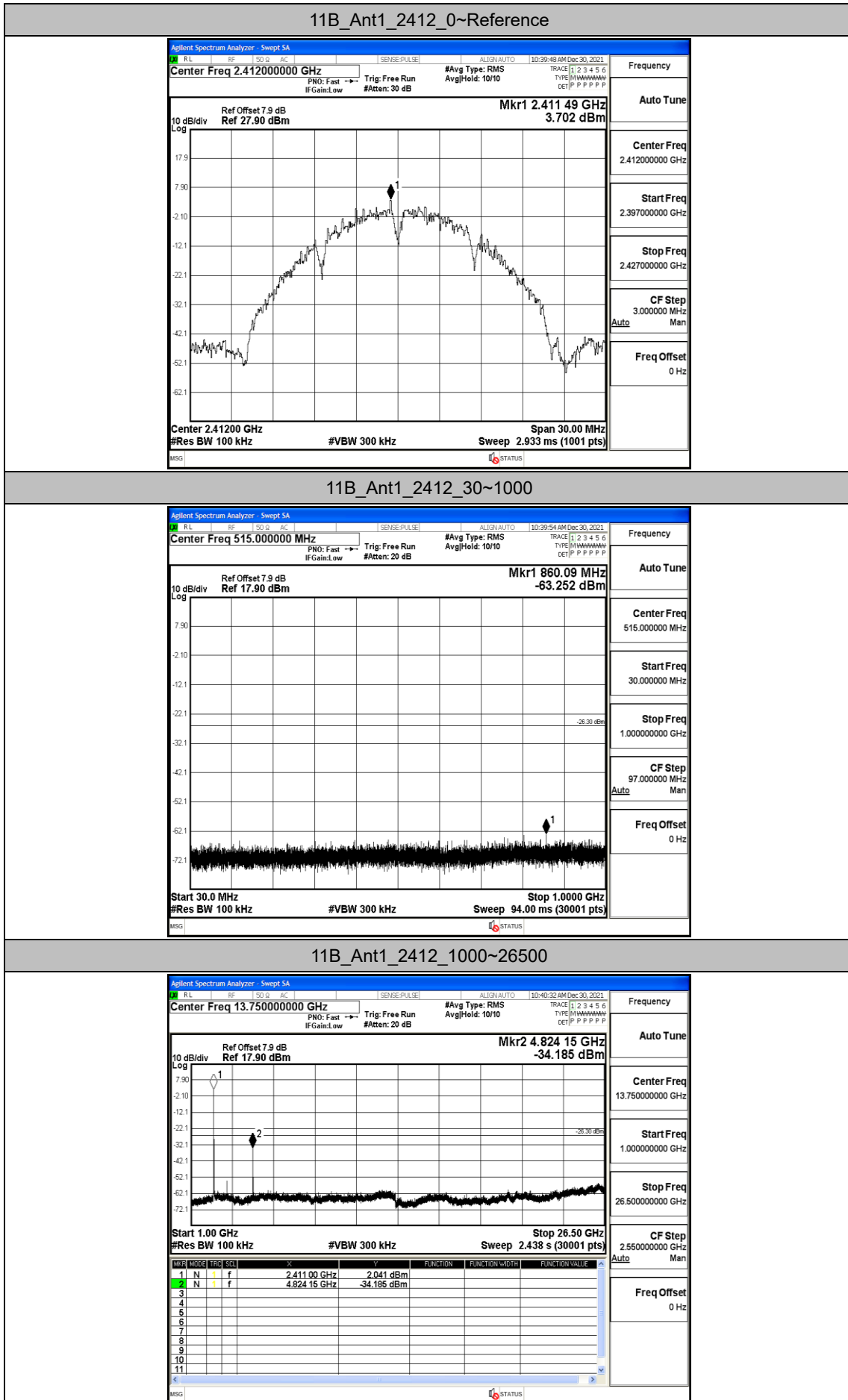


Appendix F: Conducted Spurious Emission

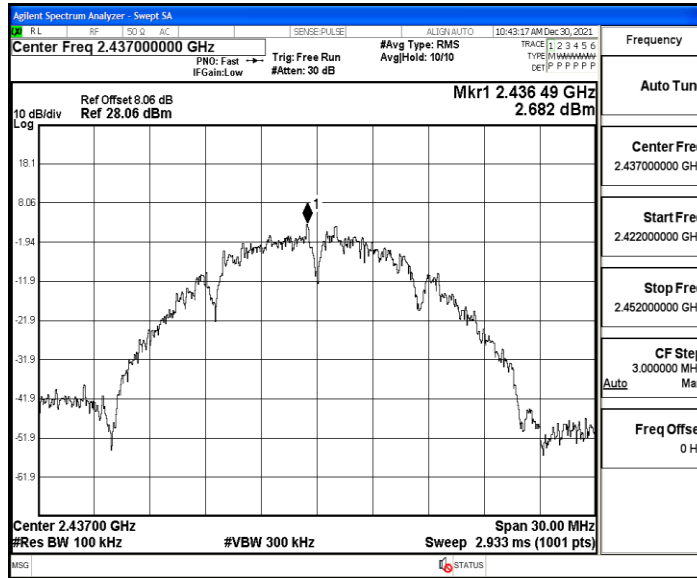
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.70	3.70	---	PASS
			30~1000	3.70	-63.25	≤-26.3	PASS
			1000~26500	3.70	-34.19	≤-26.3	PASS
		2437	Reference	2.68	2.68	---	PASS
			30~1000	2.68	-63.94	≤-27.32	PASS
			1000~26500	2.68	-34.18	≤-27.32	PASS
		2462	Reference	1.97	1.97	---	PASS
			30~1000	1.97	-63.61	≤-28.03	PASS
			1000~26500	1.97	-35.66	≤-28.03	PASS
11G	Ant1	2412	Reference	0.07	0.07	---	PASS
			30~1000	0.07	-64.21	≤-29.93	PASS
			1000~26500	0.07	-43.94	≤-29.93	PASS
		2437	Reference	-2.80	-2.80	---	PASS
			30~1000	-2.80	-64.08	≤-32.8	PASS
			1000~26500	-2.80	-42.34	≤-32.8	PASS
		2462	Reference	-1.49	-1.49	---	PASS
			30~1000	-1.49	-64.31	≤-31.49	PASS
			1000~26500	-1.49	-45.9	≤-31.49	PASS
11N20SISO	Ant1	2412	Reference	-1.80	-1.80	---	PASS
			30~1000	-1.80	-63.81	≤-31.8	PASS
			1000~26500	-1.80	-44.73	≤-31.8	PASS
		2437	Reference	-1.39	-1.39	---	PASS
			30~1000	-1.39	-62.75	≤-31.39	PASS
			1000~26500	-1.39	-44.86	≤-31.39	PASS
		2462	Reference	2.88	2.88	---	PASS
			30~1000	2.88	-63.64	≤-27.12	PASS
			1000~26500	2.88	-45.75	≤-27.12	PASS
11N40SISO	Ant1	2422	Reference	-4.30	-4.30	---	PASS
			30~1000	-4.30	-64.58	≤-34.3	PASS
			1000~26500	-4.30	-52.88	≤-34.3	PASS
		2437	Reference	-5.47	-5.47	---	PASS
			30~1000	-5.47	-64.09	≤-35.47	PASS
			1000~26500	-5.47	-52.26	≤-35.47	PASS
		2452	Reference	-6.88	-6.88	---	PASS
			30~1000	-6.88	-63.87	≤-36.88	PASS
			1000~26500	-6.88	-48.12	≤-36.88	PASS

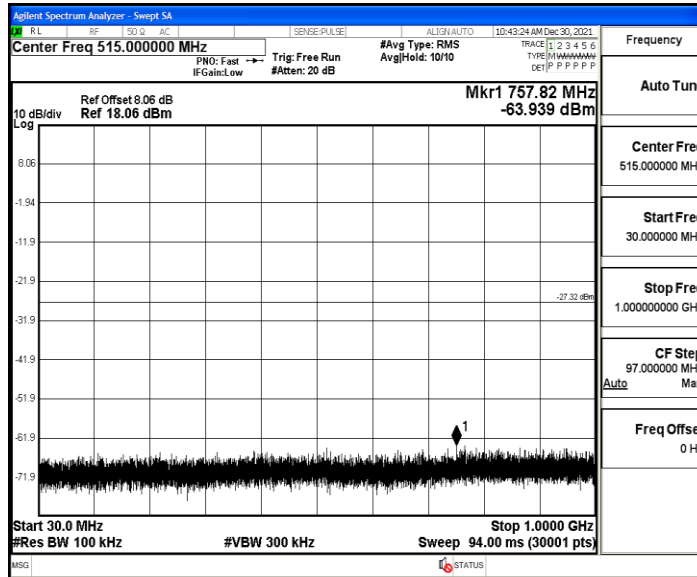
Test Graphs



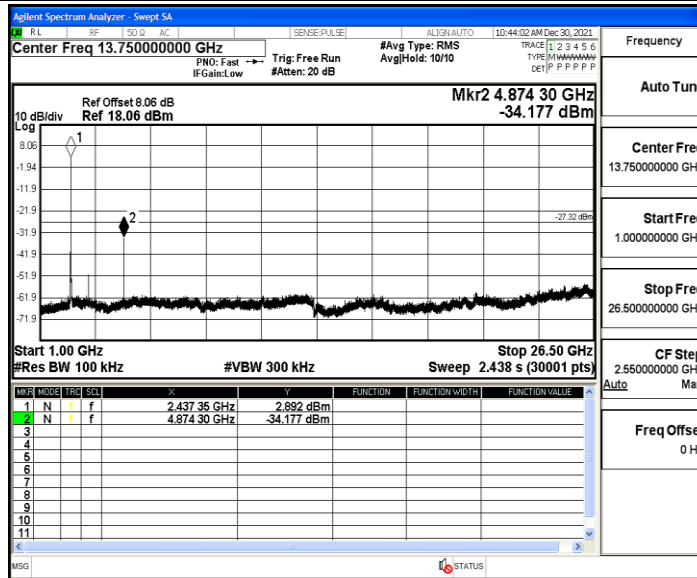
11B_Ant1_2437_0~Reference



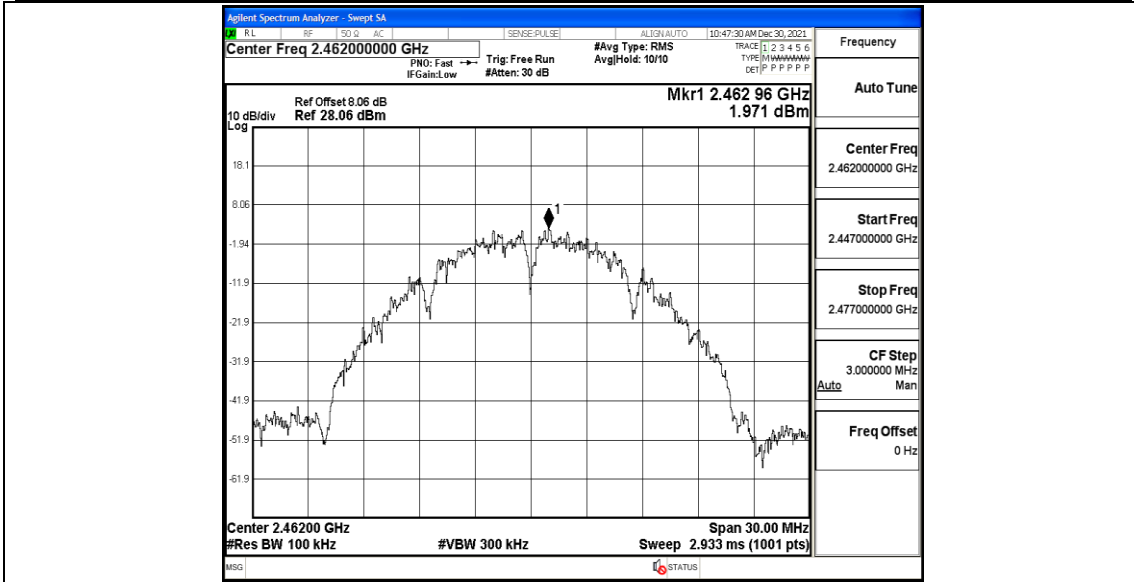
11B_Ant1_2437_30~1000



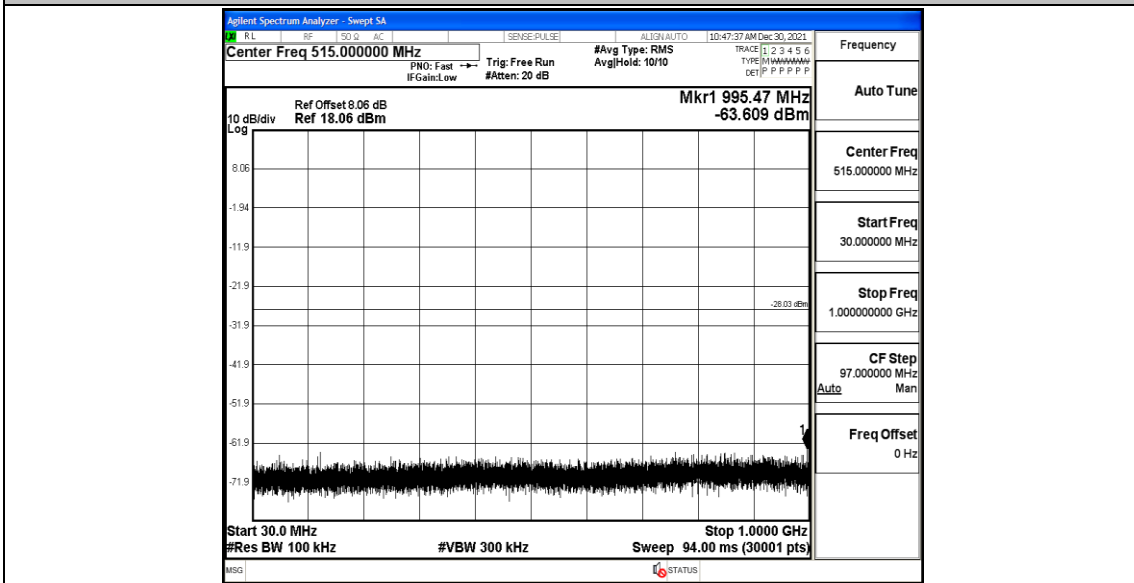
11B_Ant1_2437_1000~26500



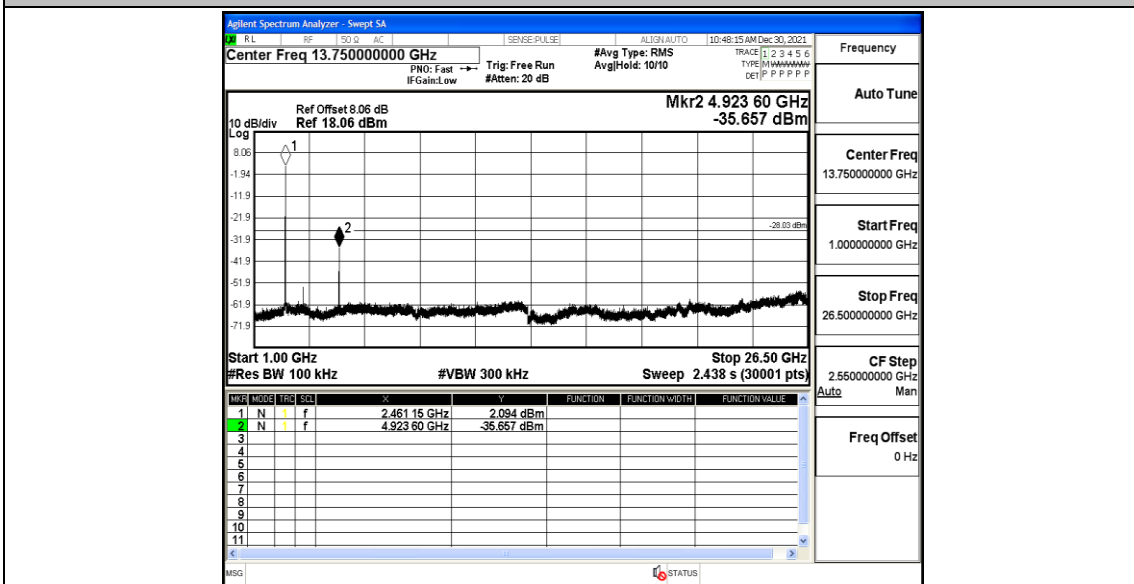
11B_Ant1_2462_0~Reference



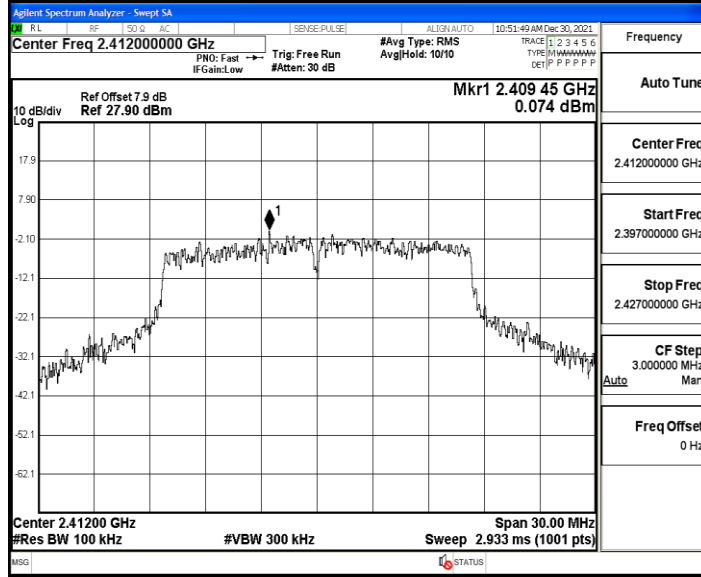
11B_Ant1_2462_30~1000



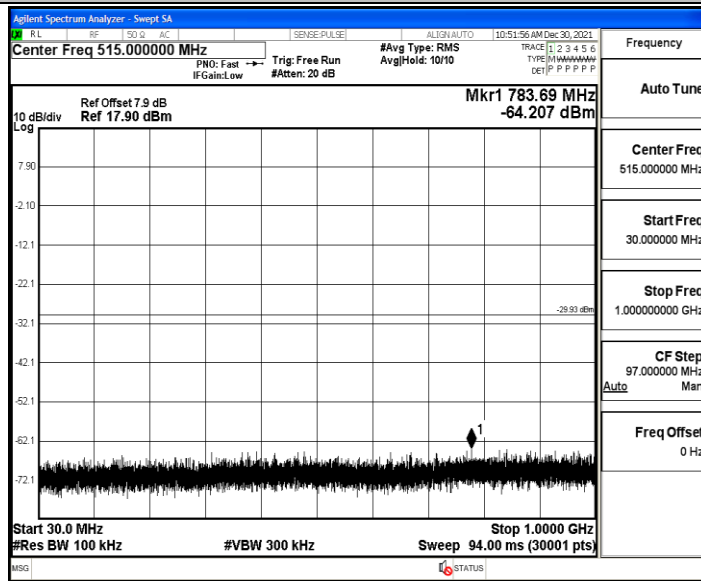
11B_Ant1_2462_1000~26500



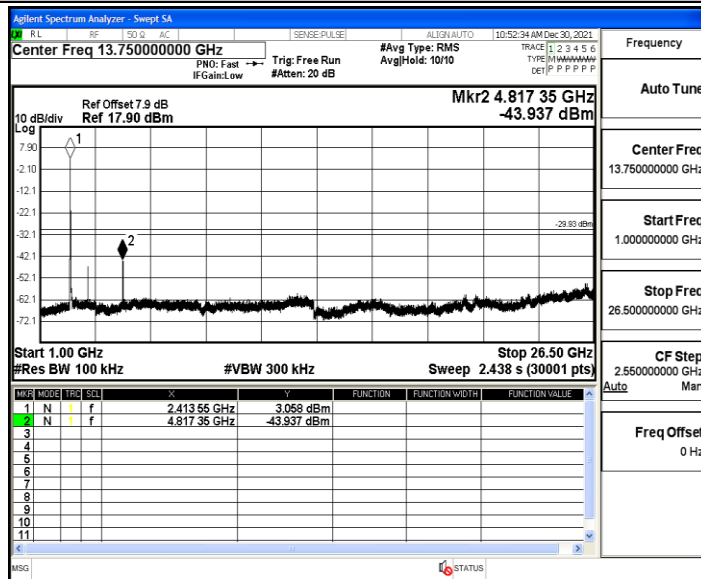
11G_Ant1_2412_0~Reference



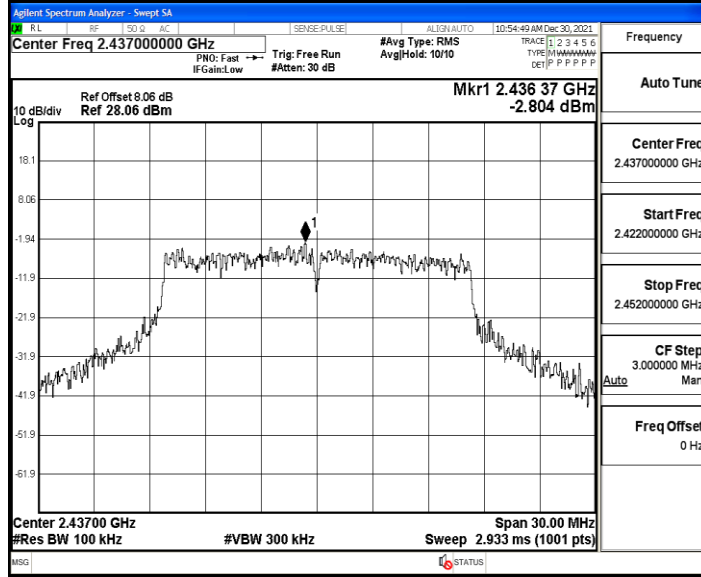
11G_Ant1_2412_30~1000



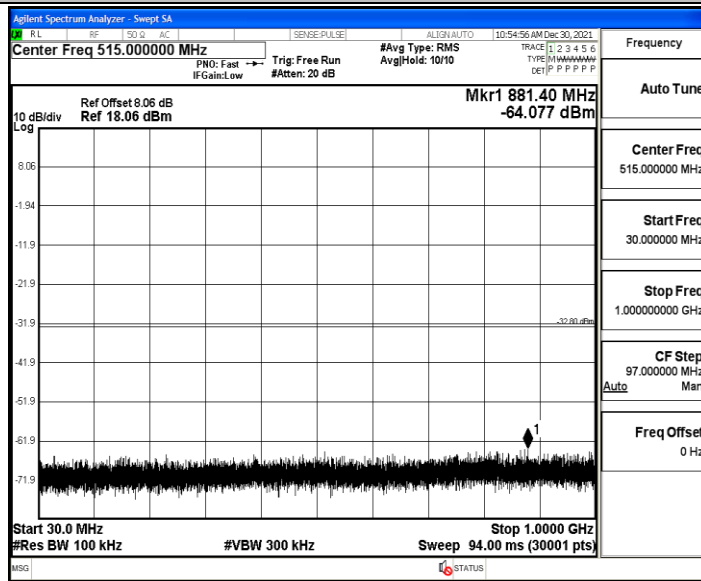
11G_Ant1_2412_1000~26500



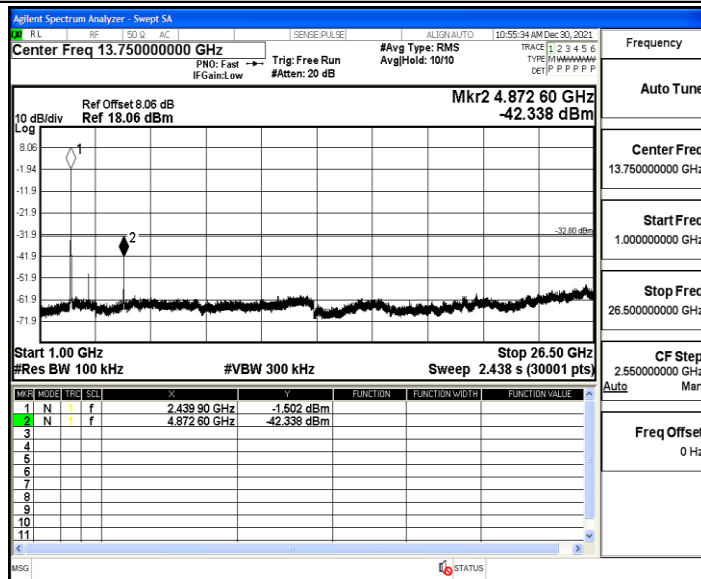
11G_Ant1_2437_0~Reference



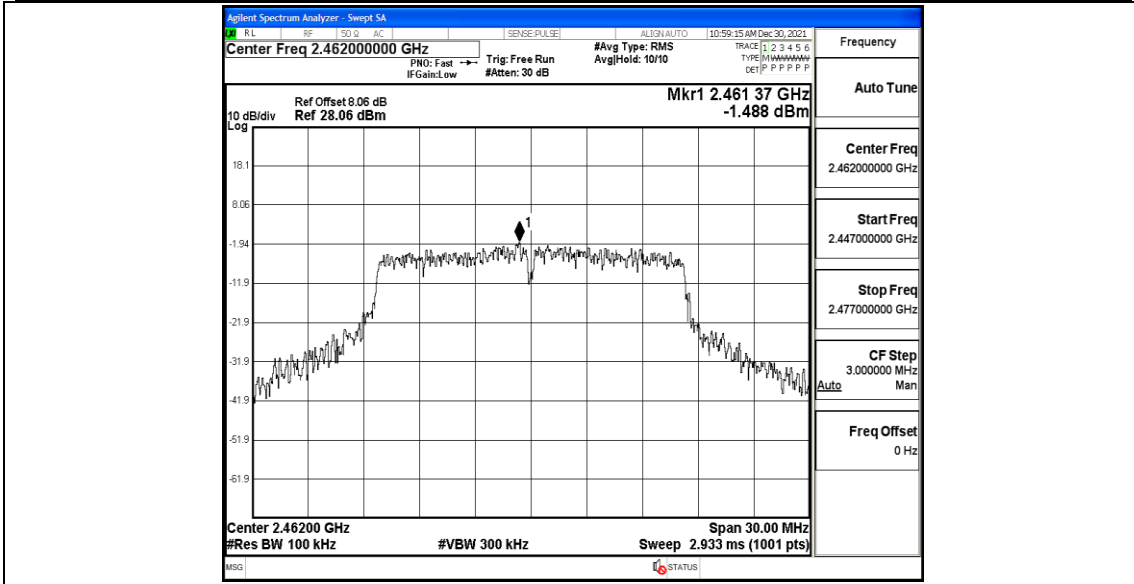
11G_Ant1_2437_30~1000



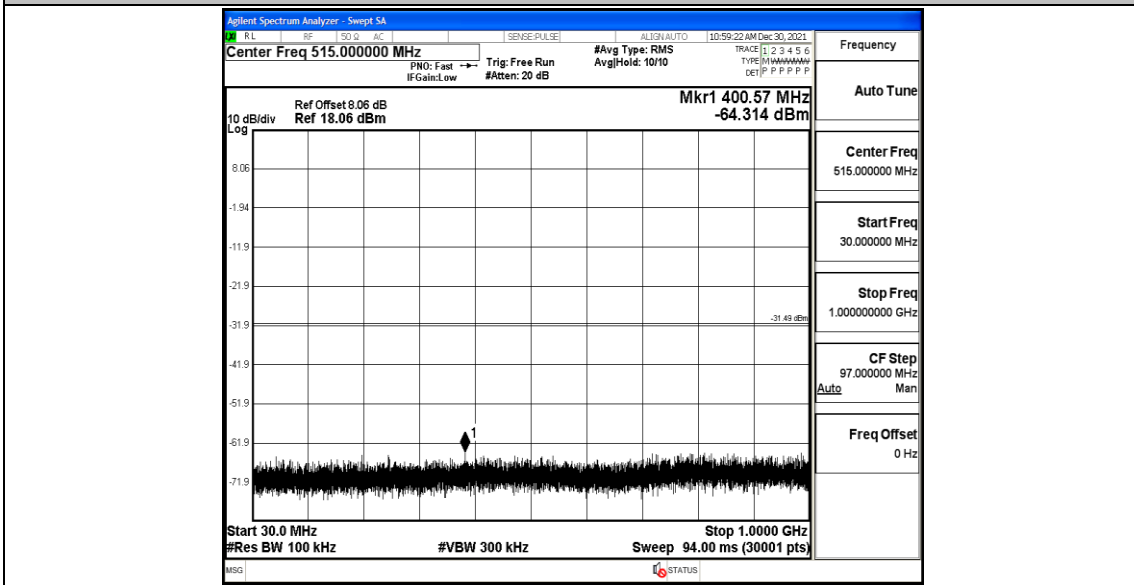
11G_Ant1_2437_1000~26500



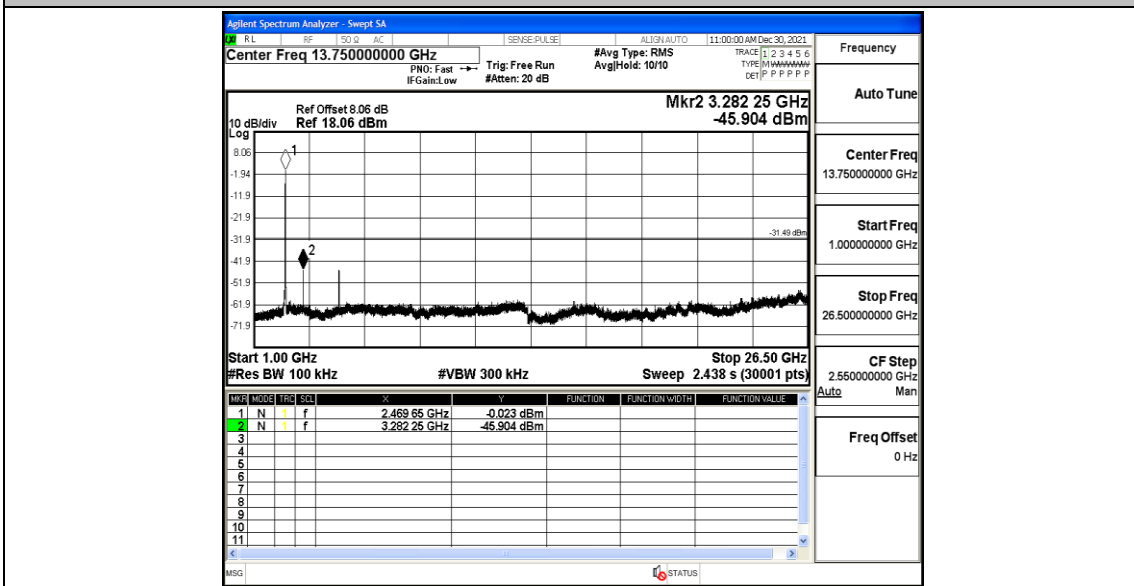
11G_Ant1_2462_0~Reference



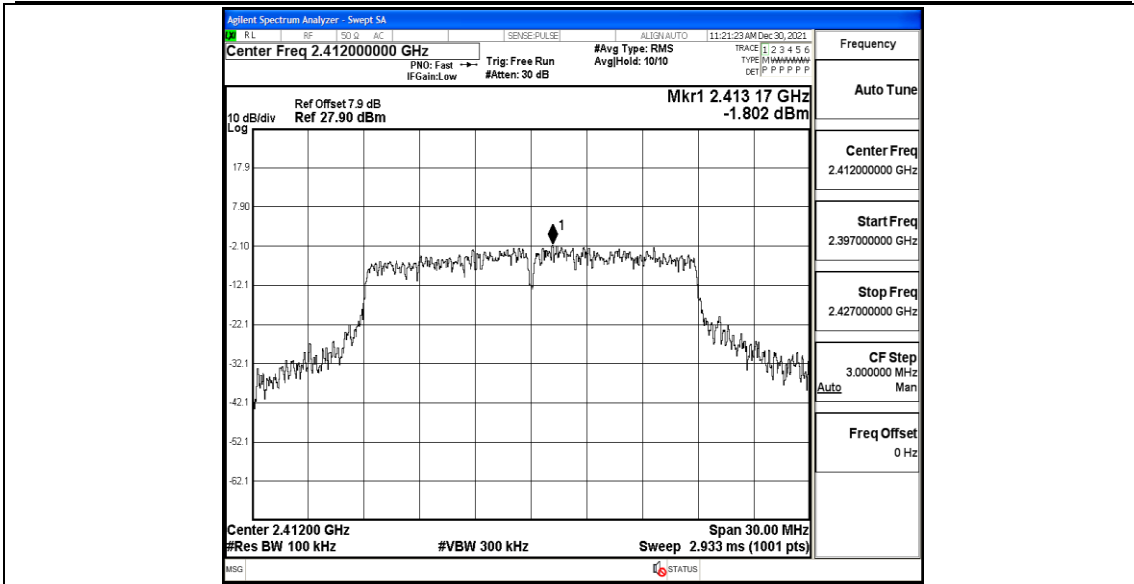
11G_Ant1_2462_30~1000



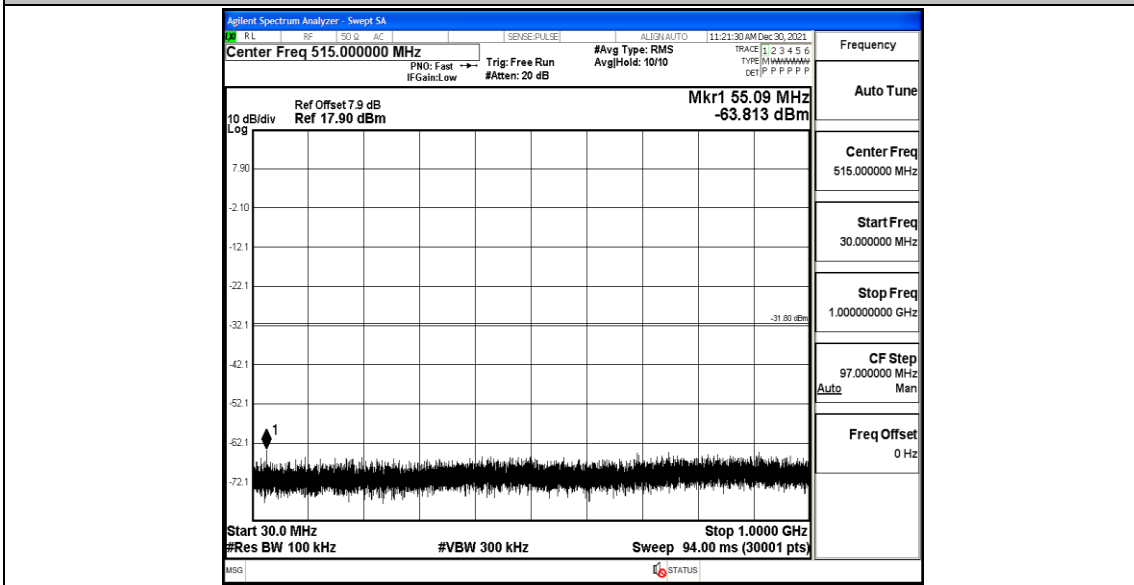
11G_Ant1_2462_1000~26500



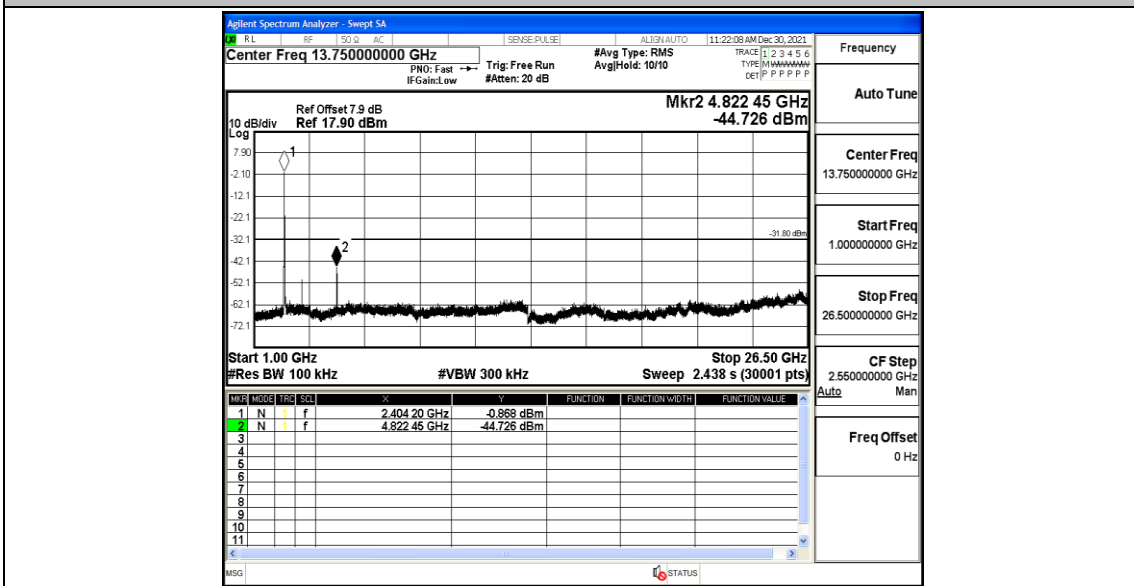
11N20SISO_Ant1_2412_0~Reference



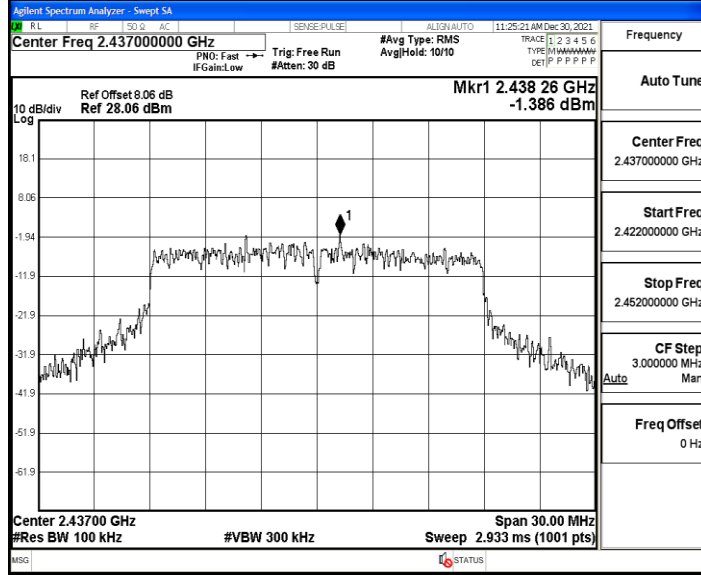
11N20SISO_Ant1_2412_30~1000



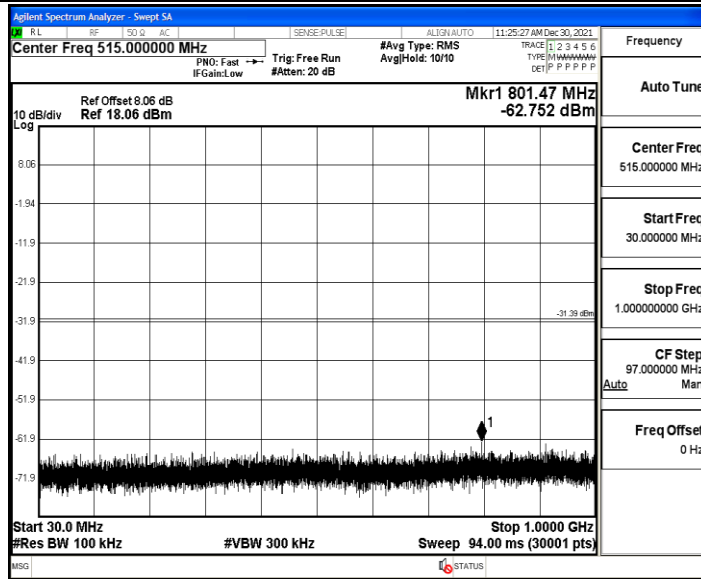
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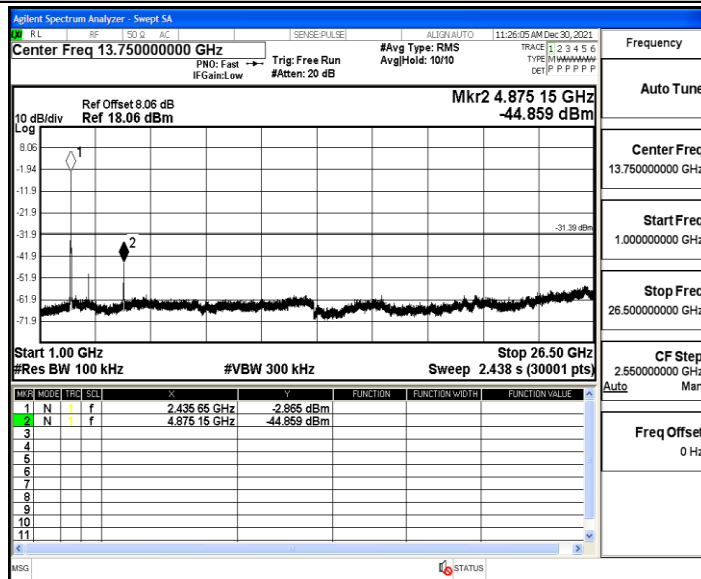
11N20SISO_Ant1_2437_0~Reference



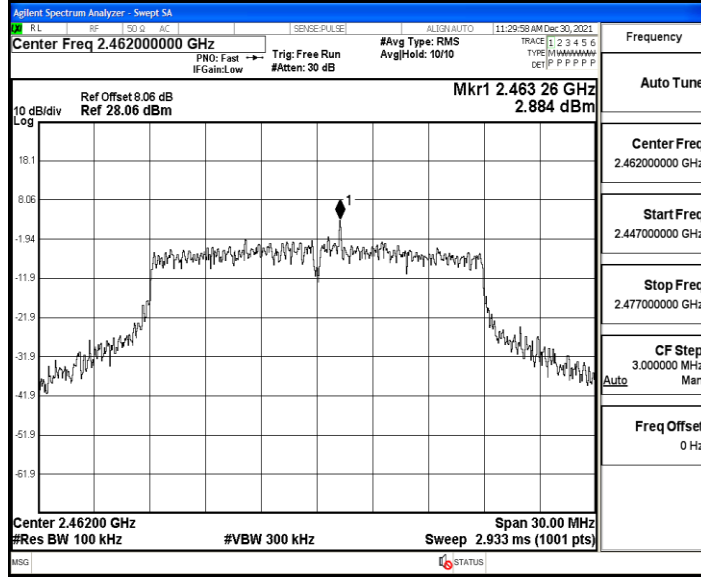
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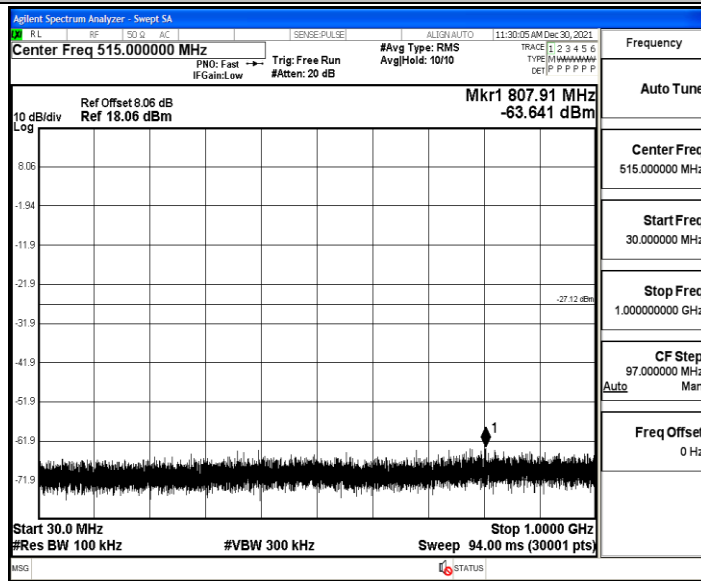
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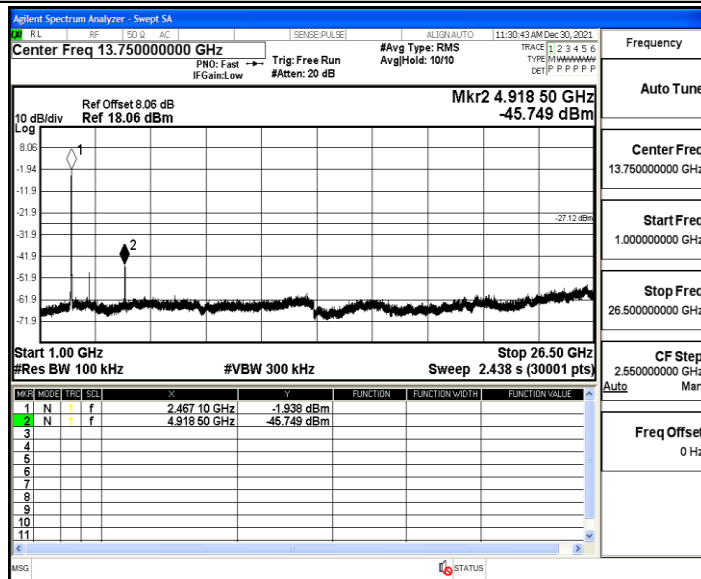
11N20SISO_Ant1_2462_0~Reference



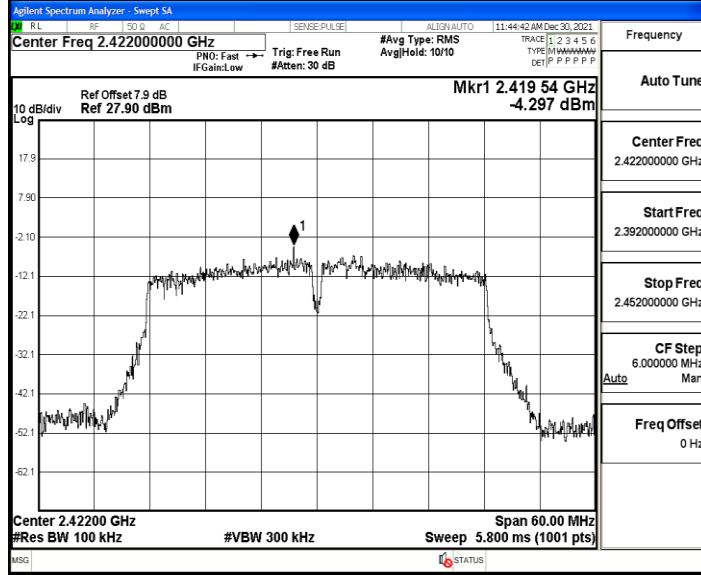
11N20SISO_Ant1_2462_30~1000



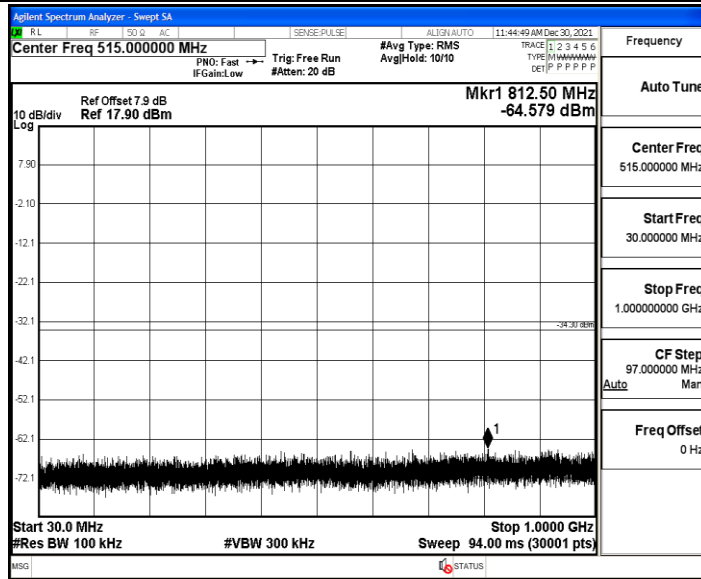
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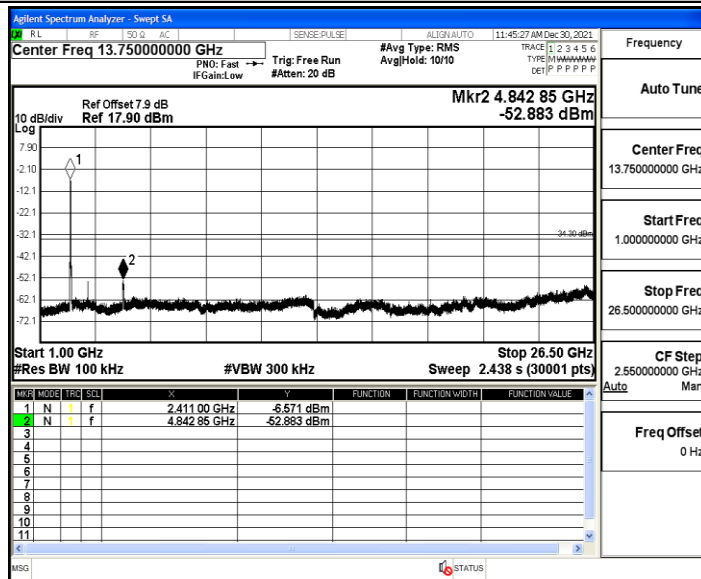
11N40SISO_Ant1_2422_0~Reference



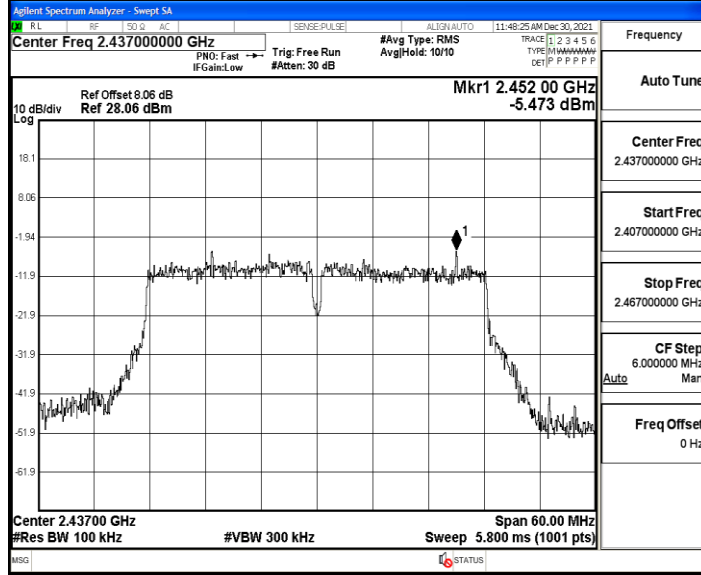
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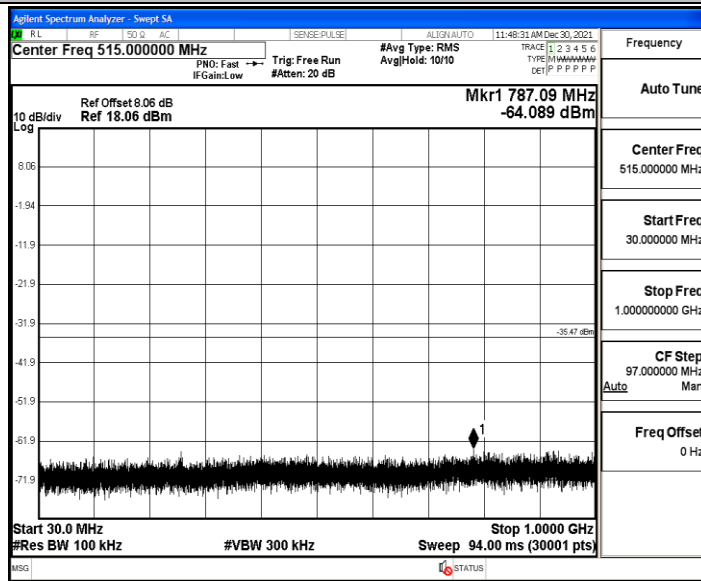
11N40SISO_Ant1_2422_1000~26500



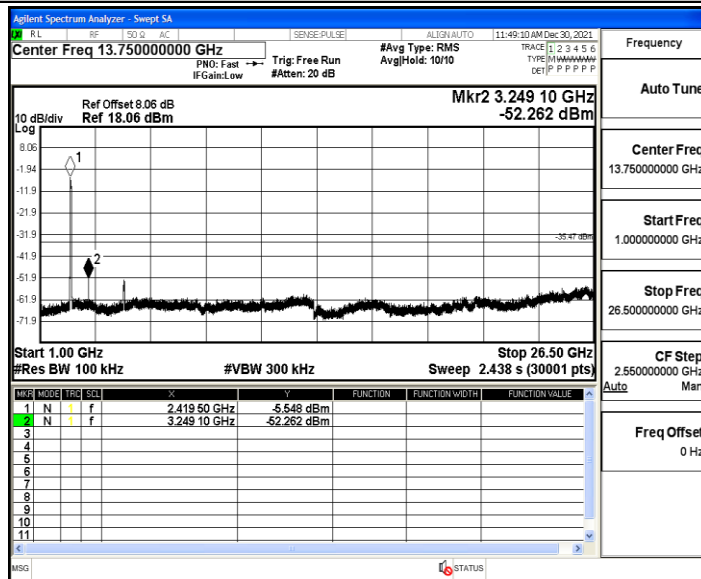
11N40SISO_Ant1_2437_0~Reference



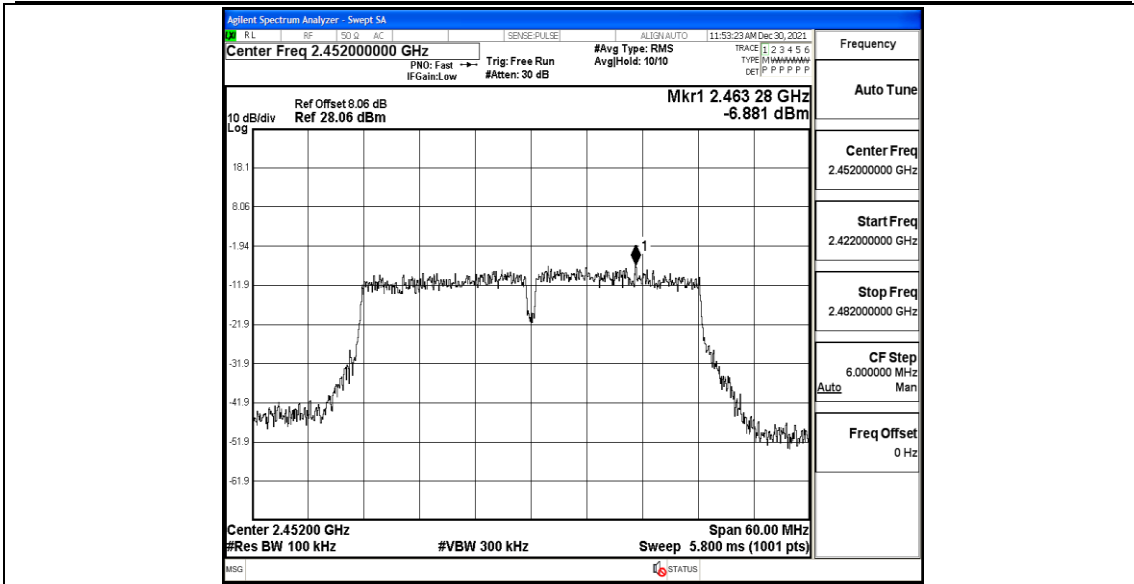
11N40SISO_Ant1_2437_30~1000



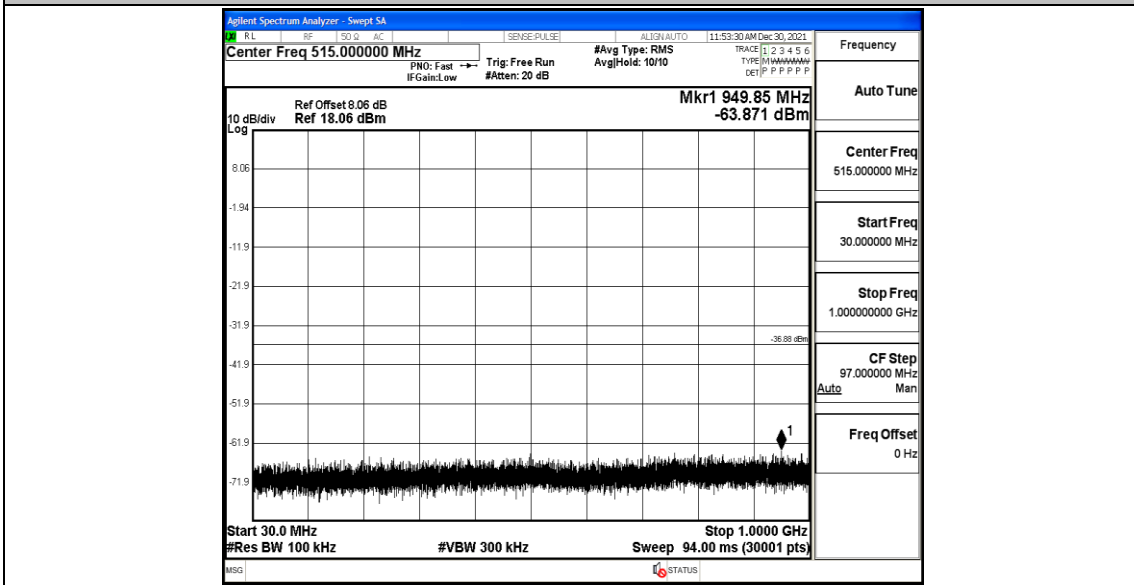
11N40SISO_Ant1_2437_1000~26500



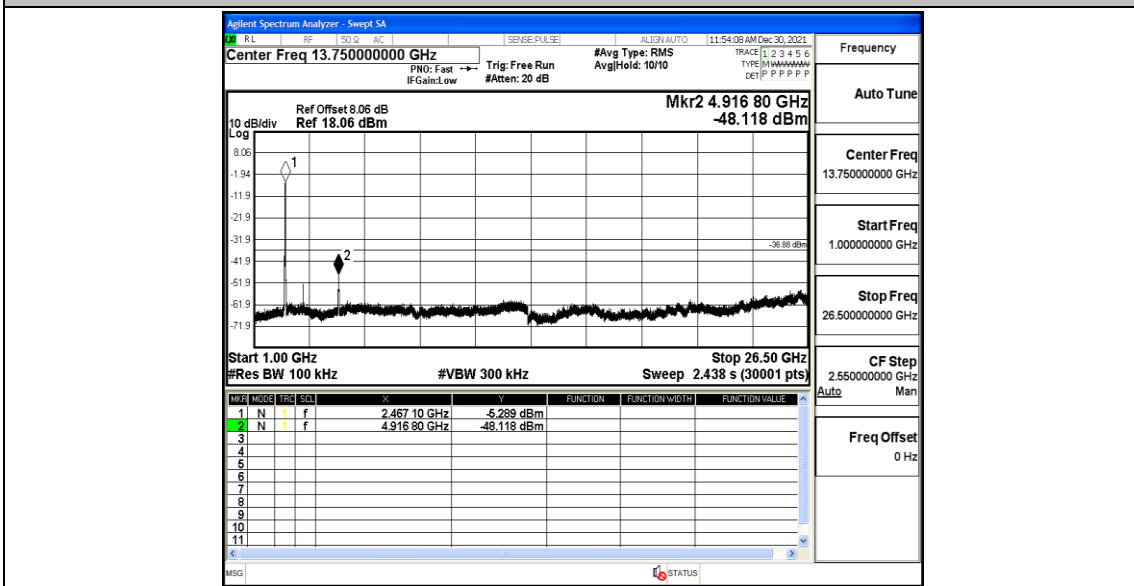
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500

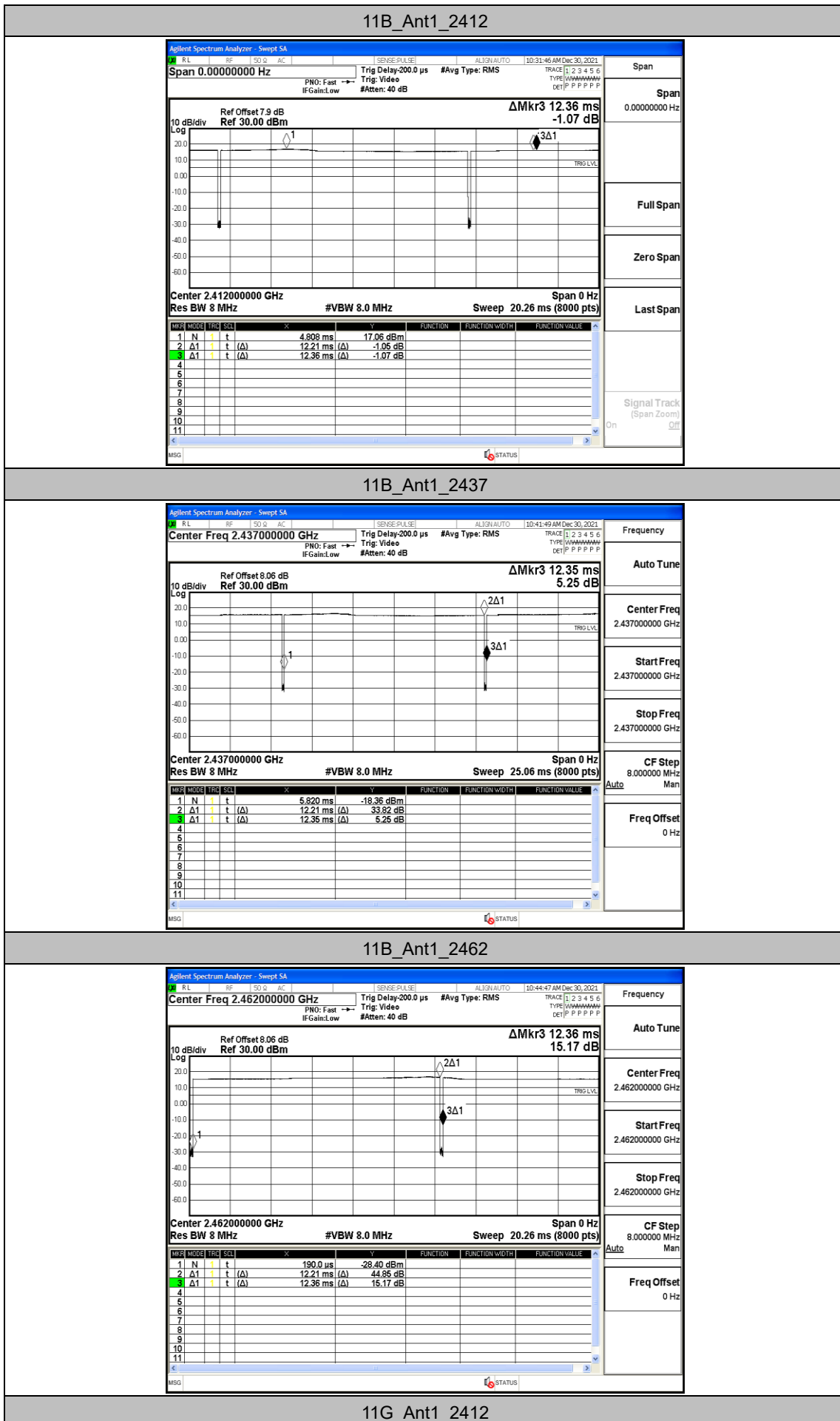


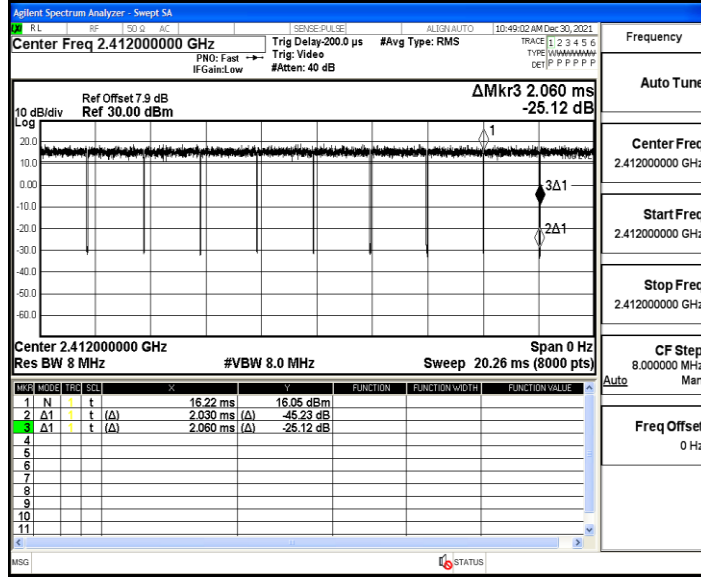
Appendix G: Duty Cycle

Test Result

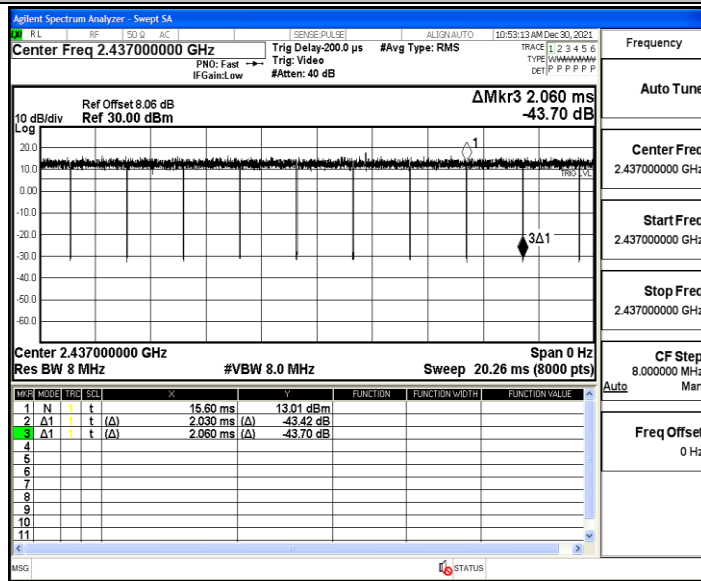
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T
11B	Ant1	2412	12.21	12.36	98.79	0.08
		2437	12.21	12.35	98.87	0.08
		2462	12.21	12.36	98.79	0.08
11G	Ant1	2412	2.03	2.06	98.54	0.49
		2437	2.03	2.06	98.54	0.49
		2462	2.03	2.07	98.07	0.49
11N20SISO	Ant1	2412	1.89	1.93	97.93	0.53
		2437	1.88	1.92	97.92	0.53
		2462	1.89	1.93	97.93	0.53
11N40SISO	Ant1	2422	0.93	0.98	94.90	1.08
		2437	0.93	0.98	94.90	1.08
		2452	0.93	0.98	94.90	1.08

Test Graphs

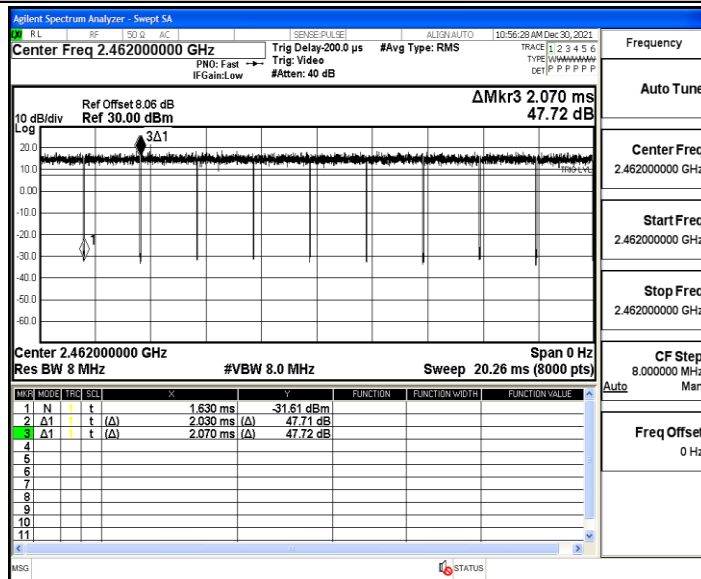




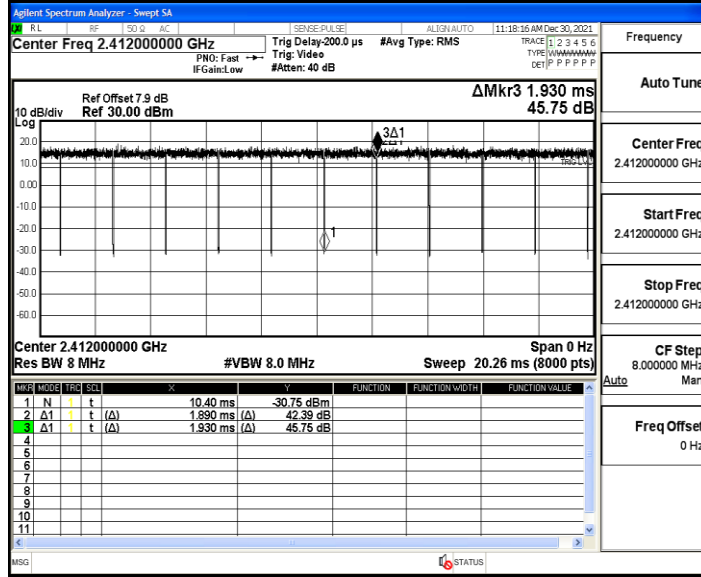
11G_Ant1_2437



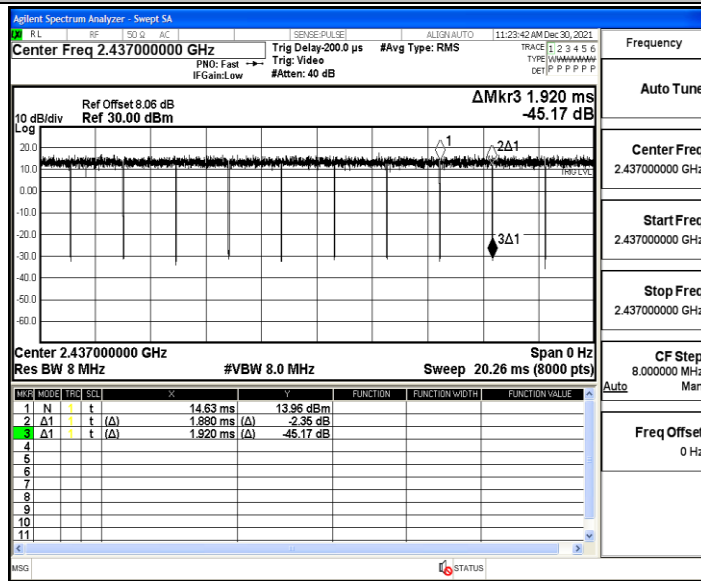
11G_Ant1_2462



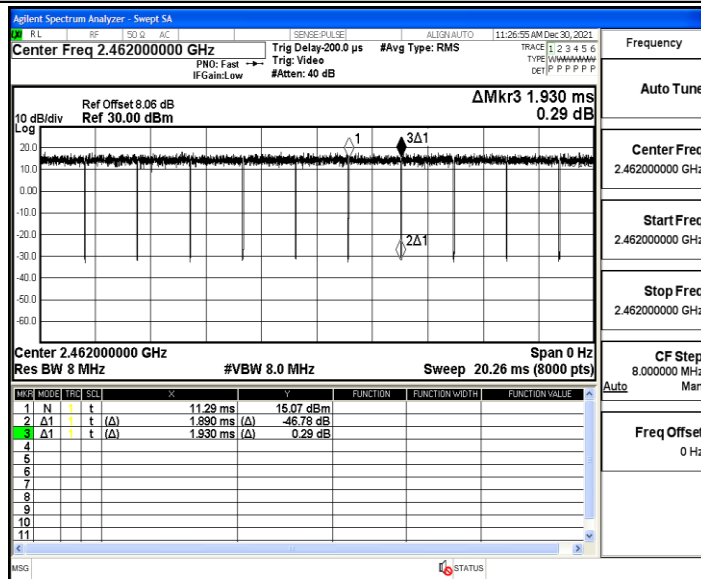
11N20SISO_Ant1_2412



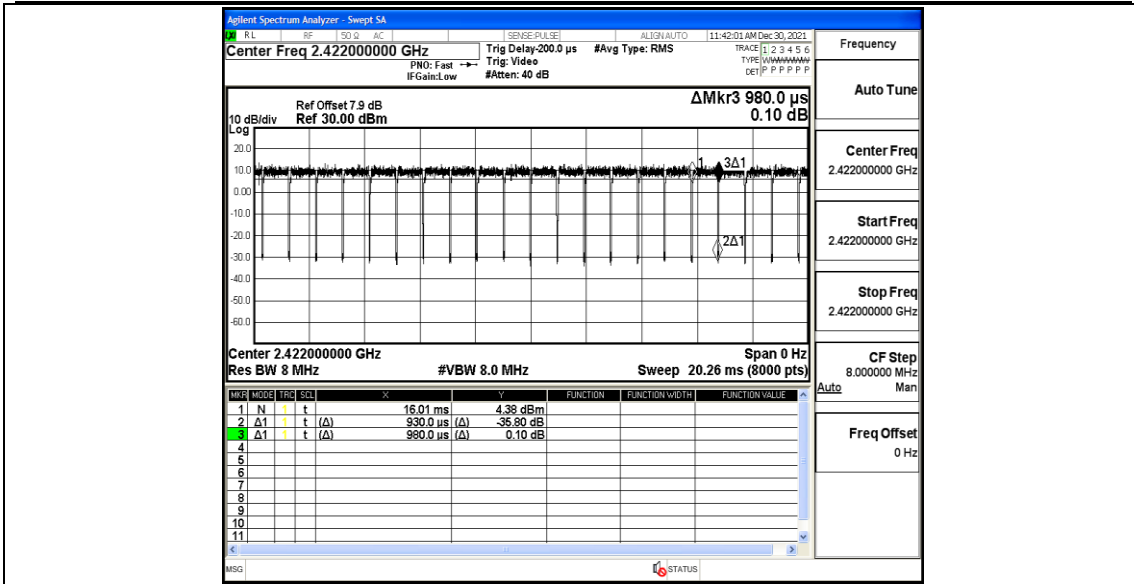
11N20SISO_Ant1_2437



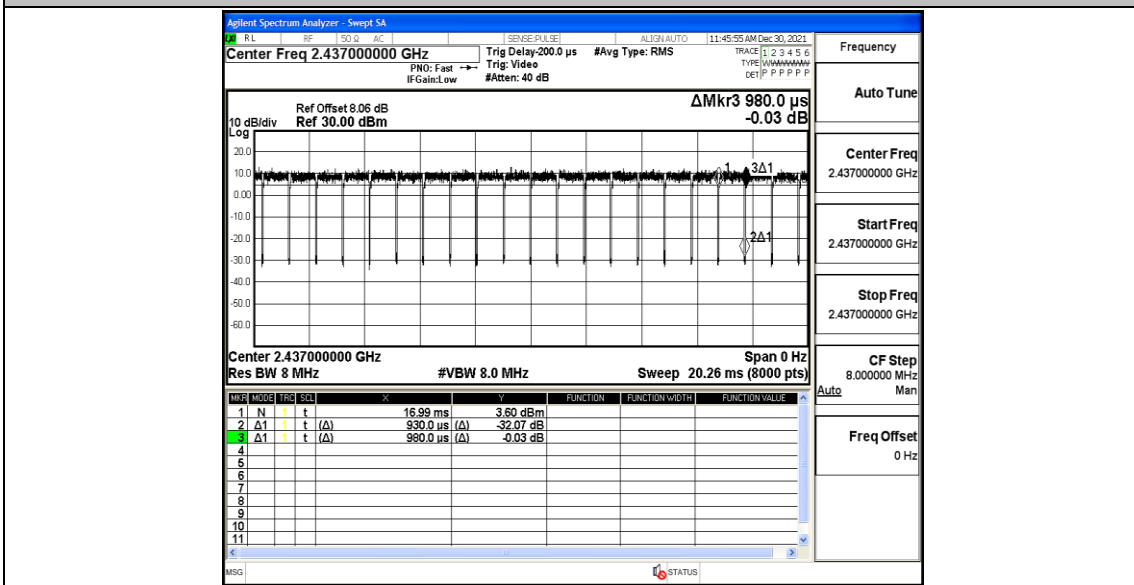
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

