Appendix Test Data

Report No.:	18220WC10216502	Test Date:	2021.10.12
Test Engineer:	Tony.He	Auditor:	Edward.Pan
Temperature:	24.3℃	Relative Humidity:	57 %
Pressure:	1012 hPa		

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.680	2407.480	2416.160	≥0.5	PASS
		2437	10.120	2432.000	2442.120	≥0.5	PASS
		2462	9.160	2457.480	2466.640	≥0.5	PASS
11G	Ant1	2412	14.520	2405.120	2419.640	≥0.5	PASS
		2437	16.360	2428.880	2445.240	≥0.5	PASS
		2462	15.720	2454.520	2470.240	≥0.5	PASS
11N20	Ant1	2412	15.160	2404.480	2419.640	≥0.5	PASS
		2437	15.080	2429.520	2444.600	≥0.5	PASS
		2462	16.160	2454.480	2470.640	≥0.5	PASS
11N40	Ant1	2422	35.220	2404.480	2439.700	≥0.5	PASS
		2437	35.220	2419.420	2454.640	≥0.5	PASS
		2452	35.220	2434.480	2469.700	≥0.5	PASS

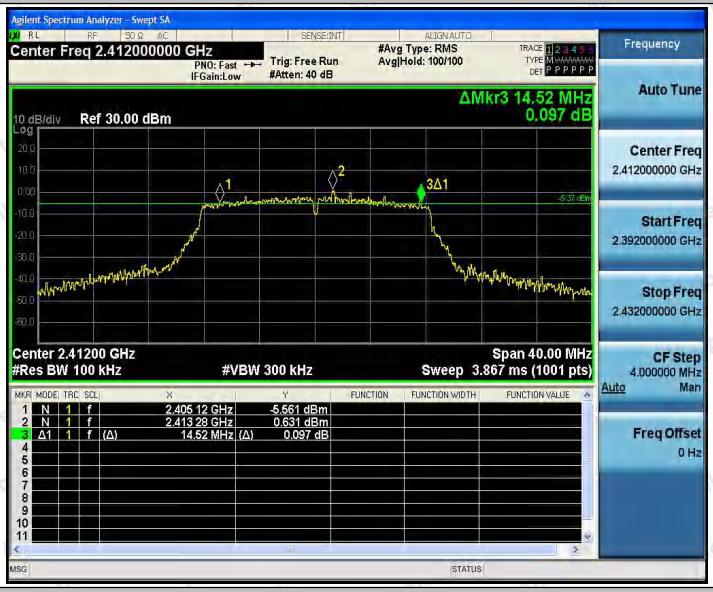
Test Graphs

11B_Ant1_2412

11B_Ant1_2437

11B_Ant1_2462

11G_Ant1_2412



11G_Ant1_2437

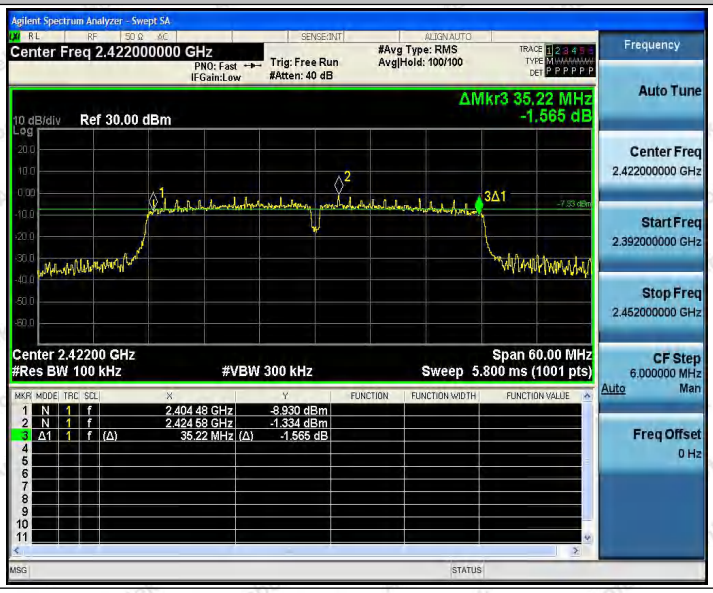
11G_Ant1_2462

11N20_Ant1_2412

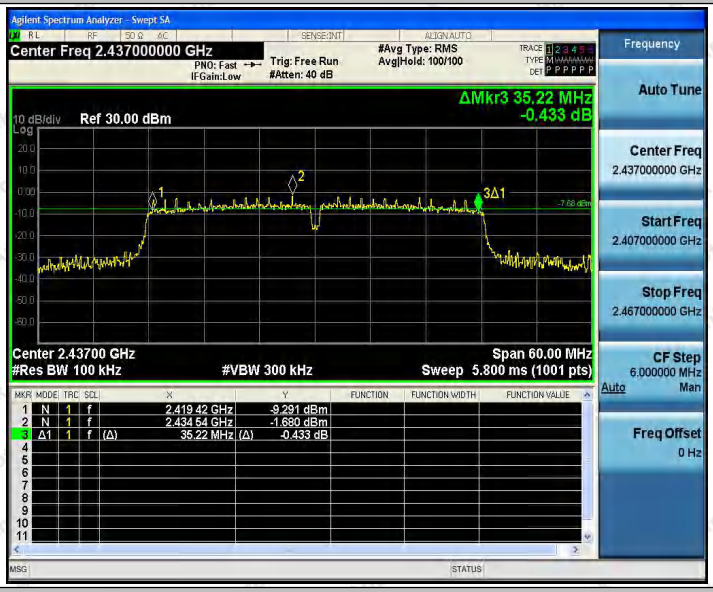
11N20_Ant1_2437

11N20_Ant1_2462

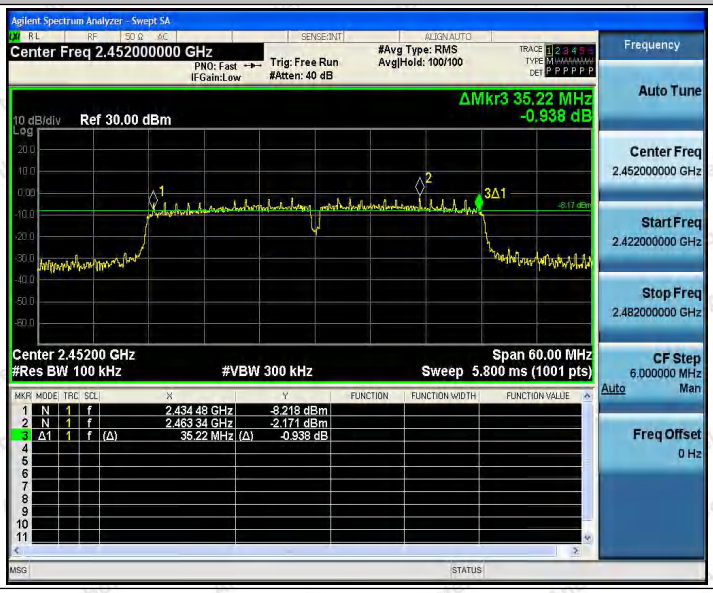
11N40_Ant1_2422



11N40_Ant1_2437



11N40_Ant1_2452



Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.530	2405.788	2418.318	---	PASS
		2437	12.762	2430.726	2443.488	---	PASS
		2462	13.050	2455.634	2468.684	---	PASS
11G	Ant1	2412	16.839	2403.625	2420.464	---	PASS
		2437	17.204	2428.463	2445.667	---	PASS
		2462	17.108	2453.602	2470.710	---	PASS
11N20	Ant1	2412	17.758	2403.141	2420.899	---	PASS
		2437	17.954	2428.079	2446.033	---	PASS
		2462	18.016	2453.133	2471.149	---	PASS
11N40	Ant1	2422	36.054	2404.030	2440.084	---	PASS
		2437	36.138	2419.011	2455.149	---	PASS
		2452	36.071	2434.126	2470.197	---	PASS

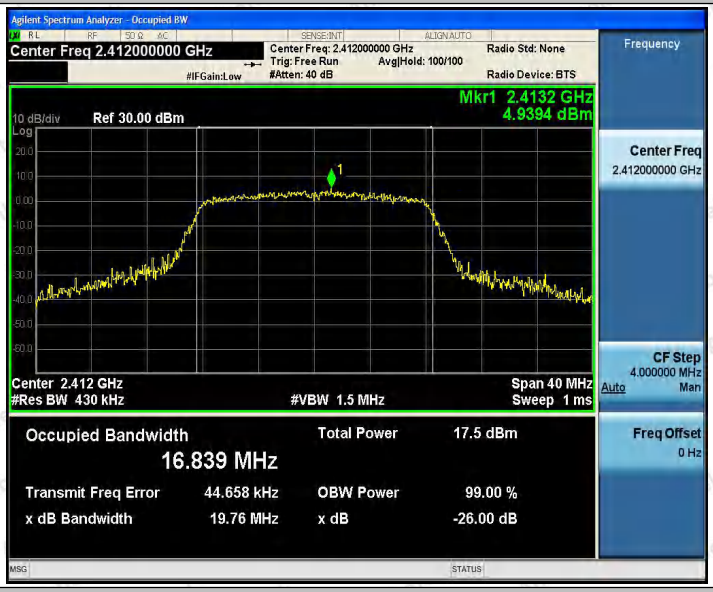
Test Graphs

11B_Ant1_2412

11B_Ant1_2437

11B_Ant1_2462

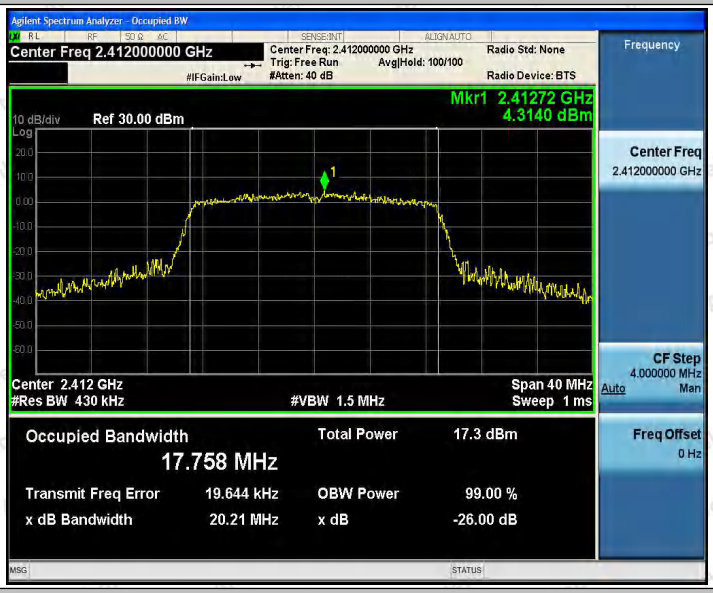
11G_Ant1_2412



11G_Ant1_2437

11G_Ant1_2462

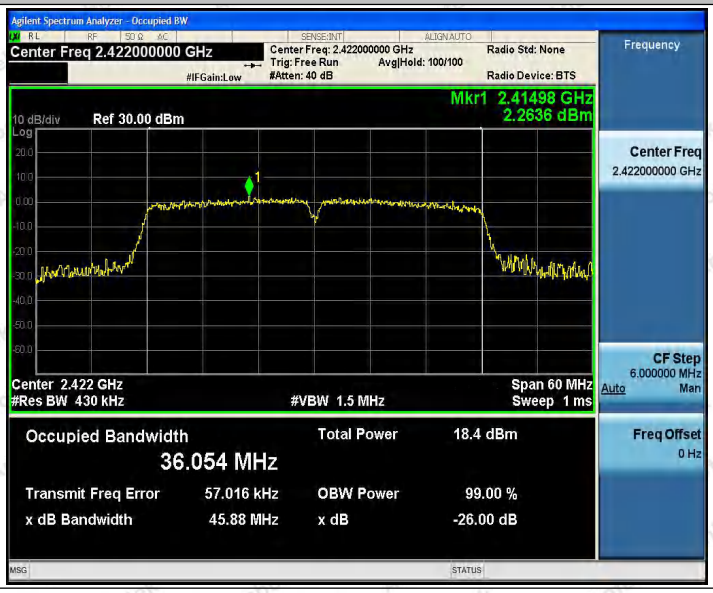
11N20_Ant1_2412



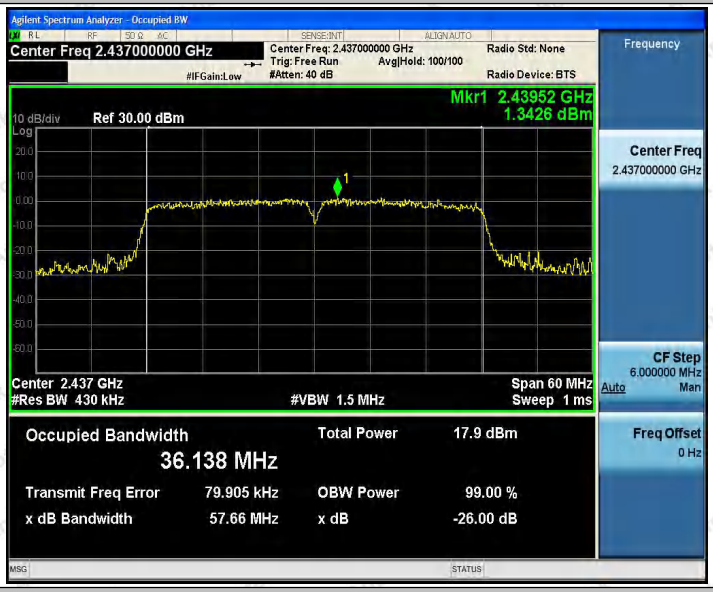
11N20_Ant1_2437

11N20_Ant1_2462

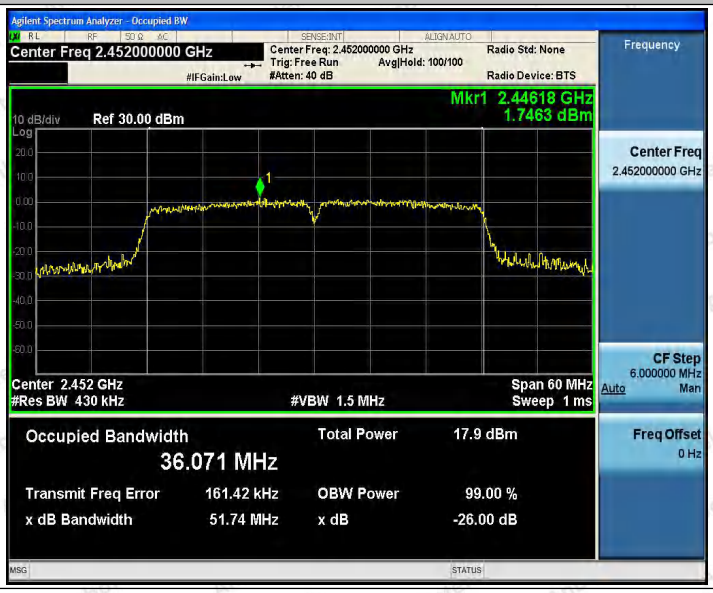
11N40_Ant1_2422



11N40_Ant1_2437



11N40_Ant1_2452



Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	17.92	≤30	PASS
		2437	16.89	≤30	PASS
		2462	16.88	≤30	PASS
11G	Ant1	2412	18.42	≤30	PASS
		2437	19.70	≤30	PASS
		2462	19.12	≤30	PASS
11N20	Ant1	2412	18.66	≤30	PASS
		2437	19.15	≤30	PASS
		2462	19.17	≤30	PASS
11N40	Ant1	2422	17.52	≤30	PASS
		2437	16.95	≤30	PASS
		2452	16.84	≤30	PASS

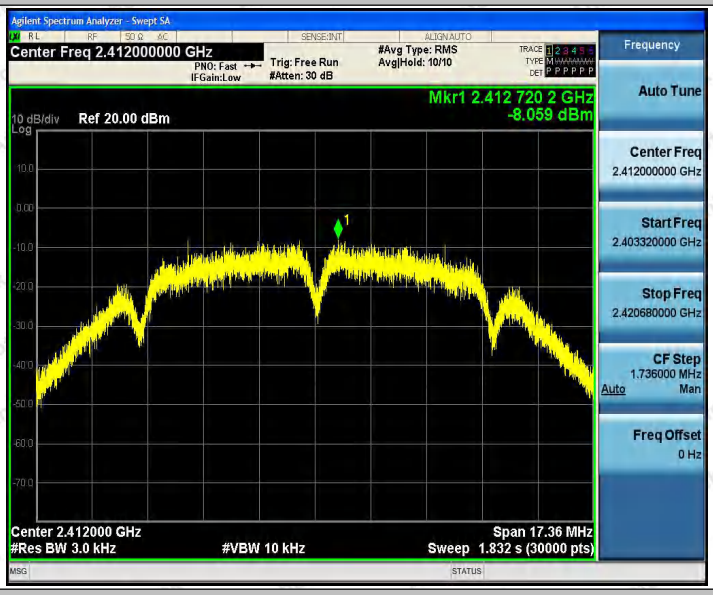
Appendix D: Maximum power spectral density

Test Result

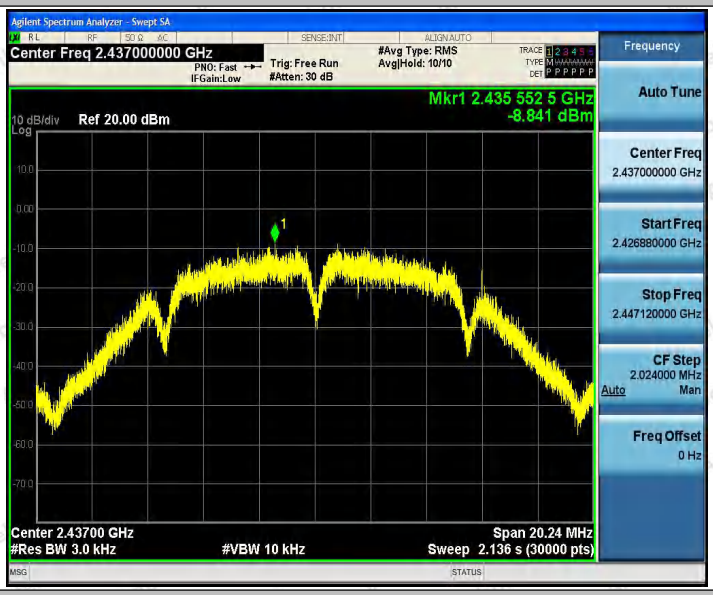
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-8.06	≤8	PASS
		2437	-8.84	≤8	PASS
		2462	-8.52	≤8	PASS
11G	Ant1	2412	-13.08	≤8	PASS
		2437	-11.38	≤8	PASS
		2462	-11.89	≤8	PASS
11N20	Ant1	2412	-13.47	≤8	PASS
		2437	-13.21	≤8	PASS
		2462	-12.76	≤8	PASS
11N40	Ant1	2422	-14.65	≤8	PASS
		2437	-15.95	≤8	PASS
		2452	-15.35	≤8	PASS

Test Graphs

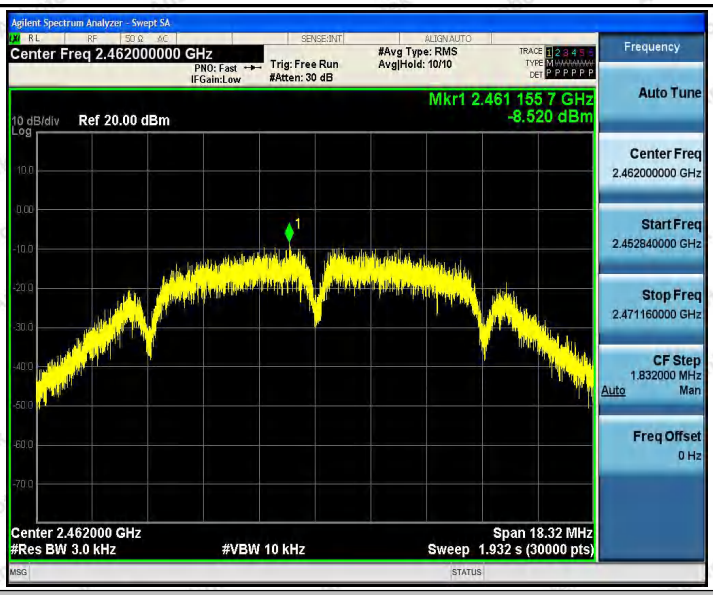
11B_Ant1_2412



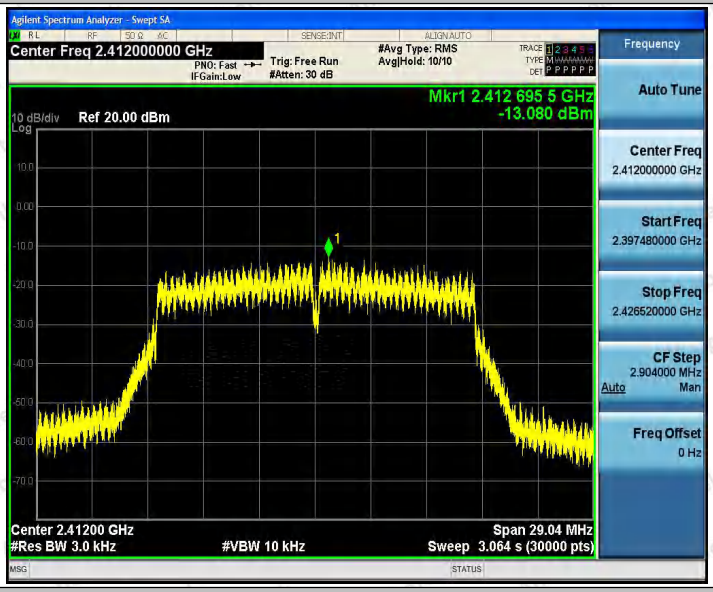
11B_Ant1_2437



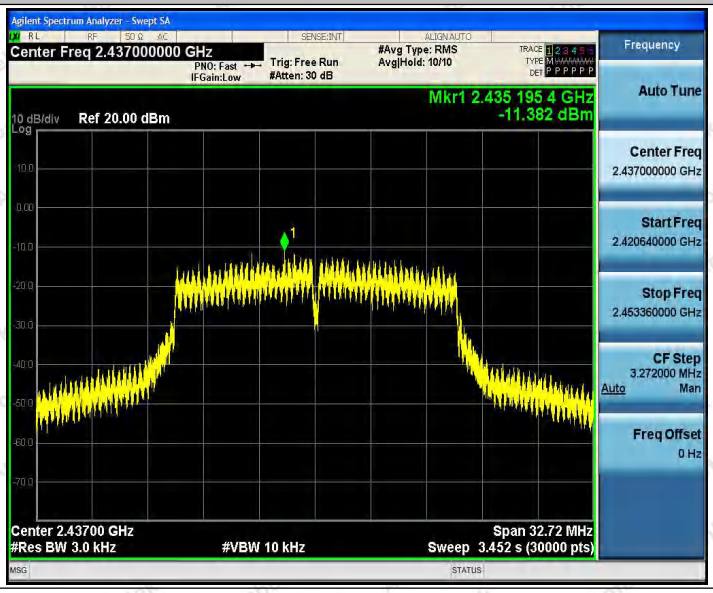
11B_Ant1_2462



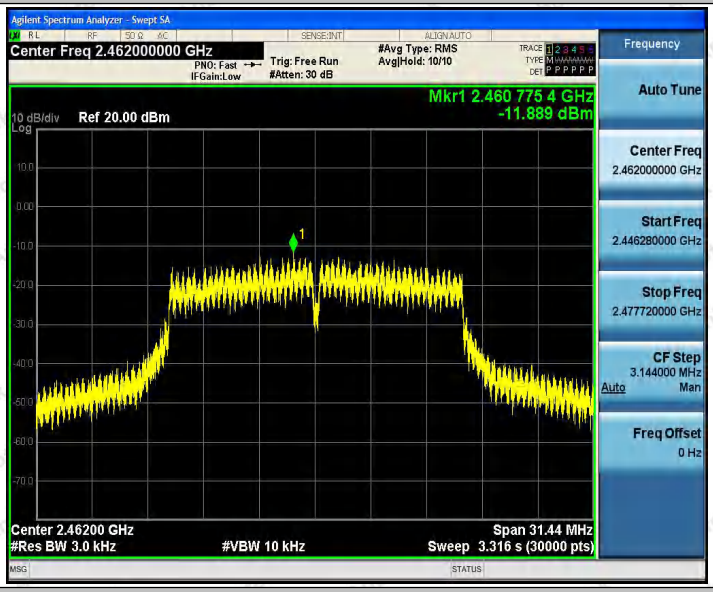
11G_Ant1_2412



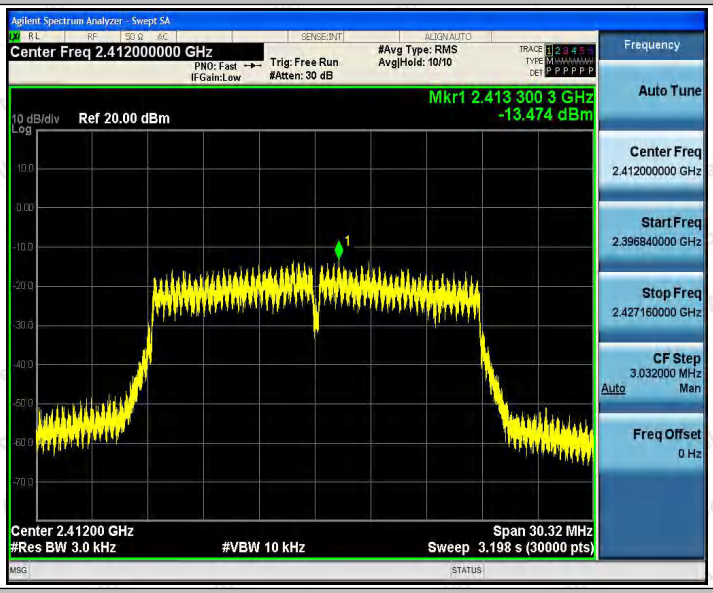
11G_Ant1_2437



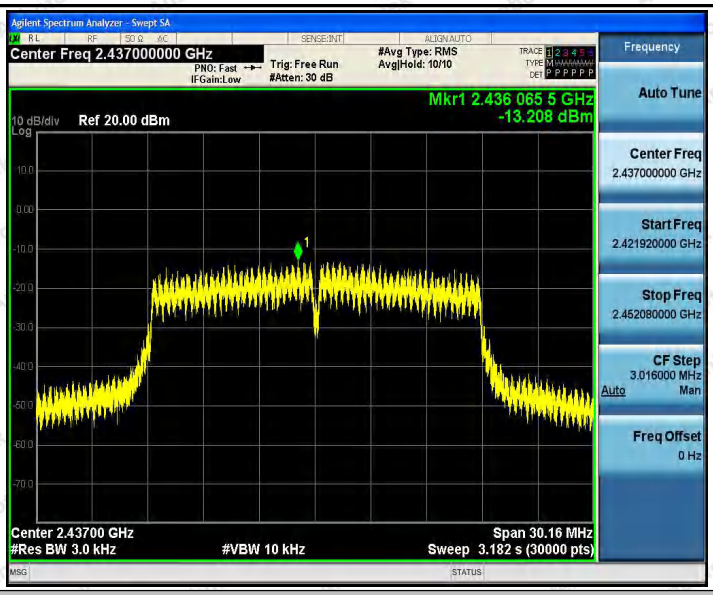
11G_Ant1_2462



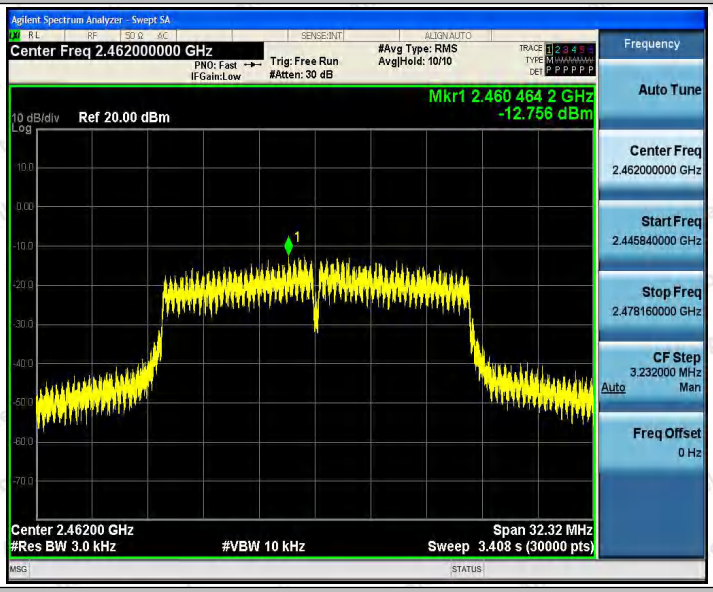
11N20_Ant1_2412



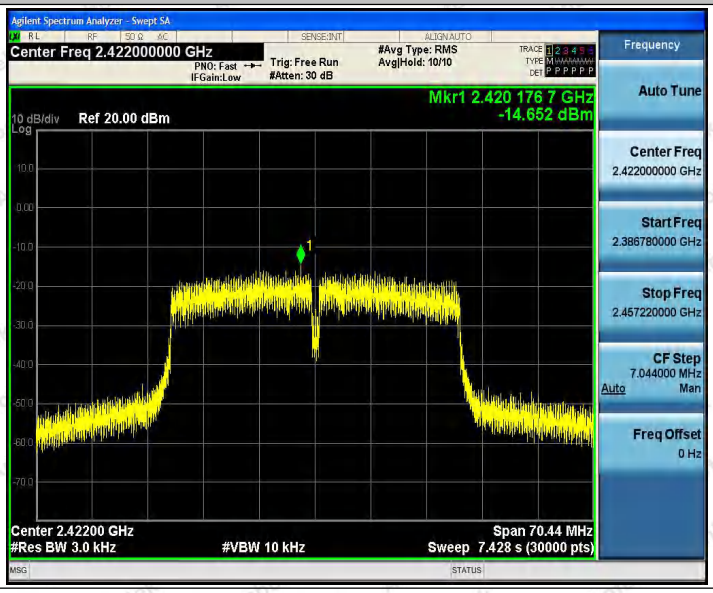
11N20_Ant1_2437



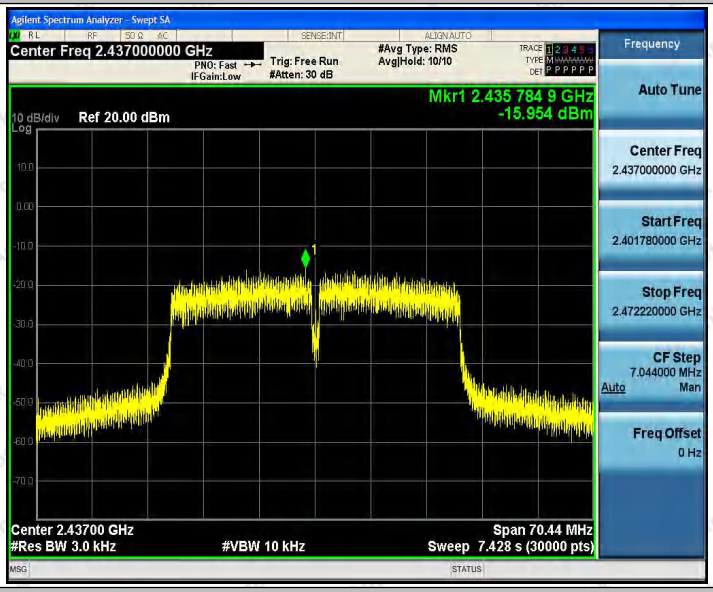
11N20_Ant1_2462



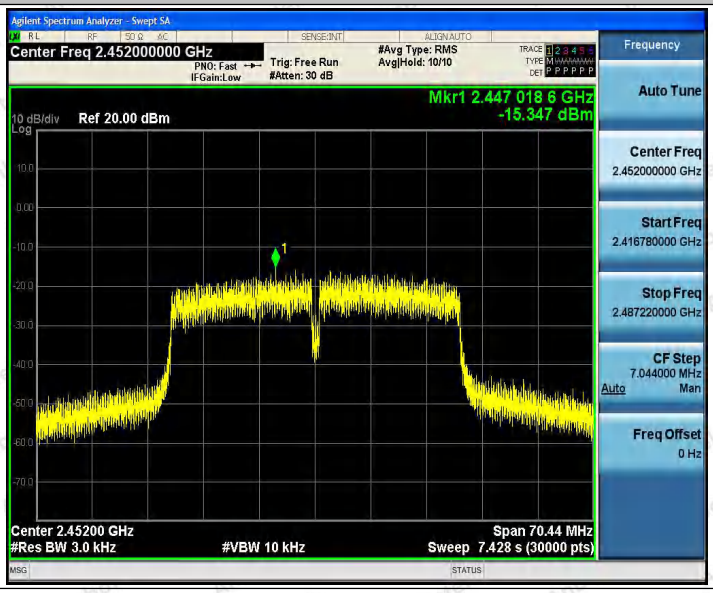
11N40_Ant1_2422



11N40_Ant1_2437



11N40_Ant1_2452



Appendix E: Band edge measurements

Test Result

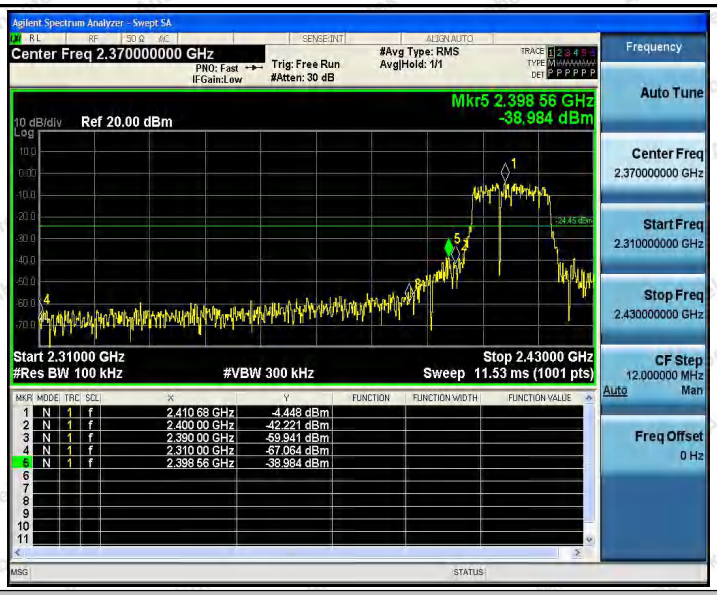
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.74	-37.53	≤-16.26	PASS
		High	2462	2.18	-53.58	≤-17.82	PASS
11G	Ant1	Low	2412	-4.45	-38.98	≤-24.45	PASS
		High	2462	-3.76	-46.28	≤-23.76	PASS
11N20	Ant1	Low	2412	-3.74	-39.71	≤-23.74	PASS
		High	2462	-2.60	-42.88	≤-22.6	PASS
11N40	Ant1	Low	2422	-3.25	-36.41	≤-23.25	PASS
		High	2452	-6.17	-32.93	≤-26.17	PASS

Test Graphs

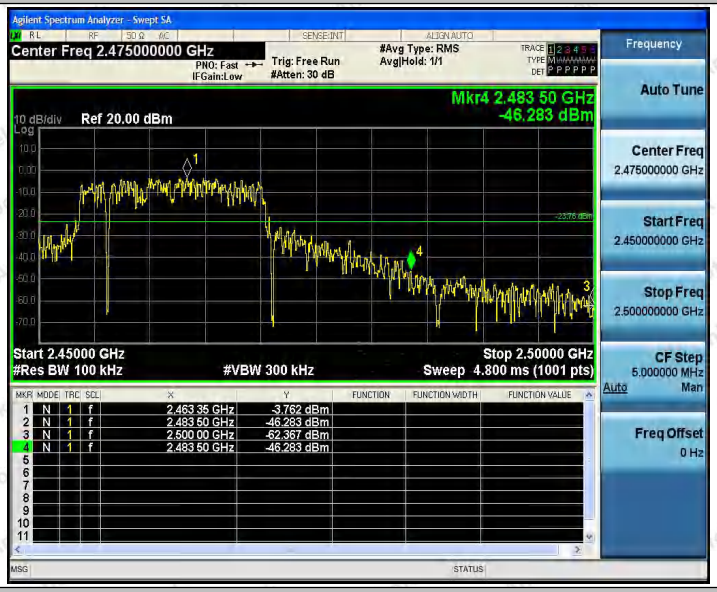
11B_Ant1_Low_2412

11B_Ant1_High_2462

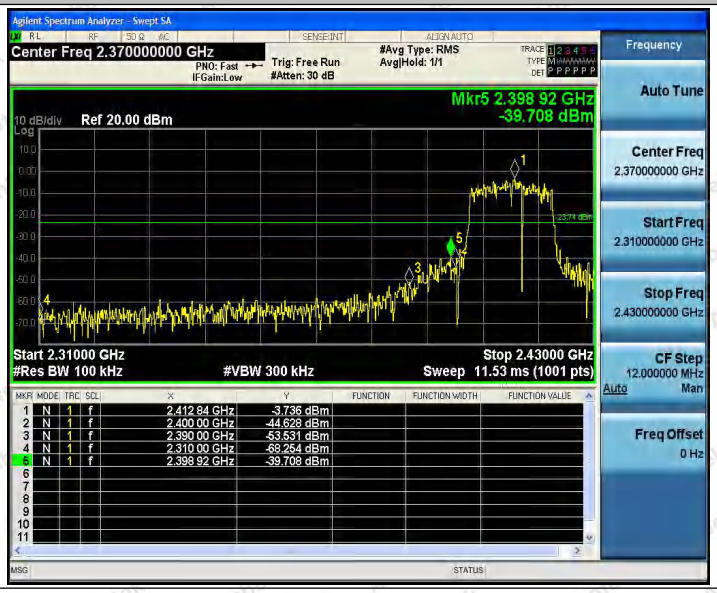
11G_Ant1_Low_2412



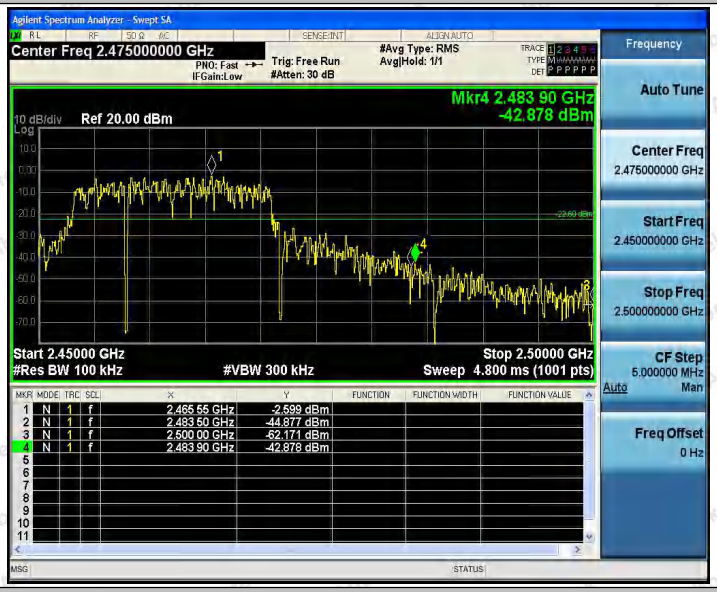
11G_Ant1_High_2462



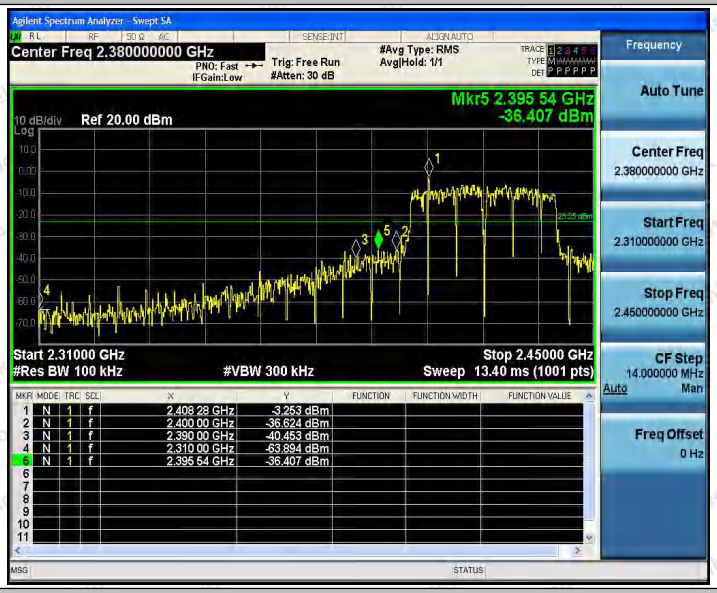
11N20_Ant1_Low_2412



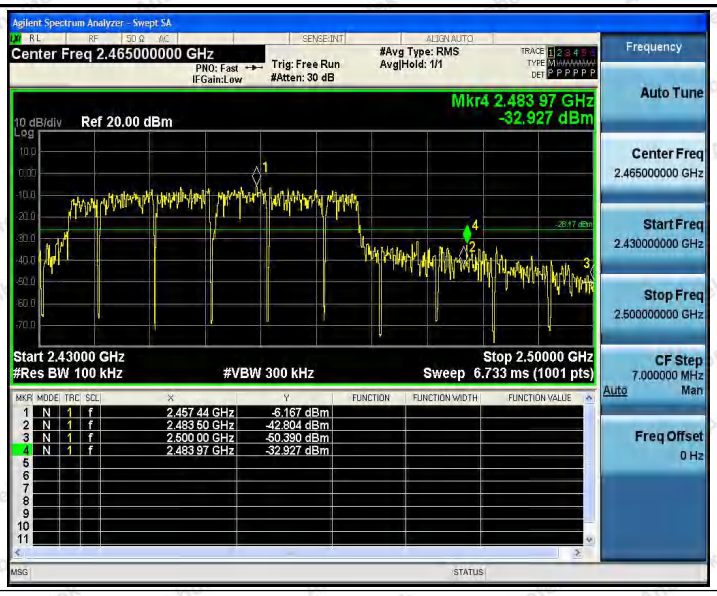
11N20_Ant1_High_2462



11N40_Ant1_Low_2422



11N40_Ant1_High_2452


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.465000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 1/1
Mkr4 2.483 97 GHz
-32.927 dBm
10 dB/div
Ref 20.00 dBm
Start 2.43000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.50000 GHz
Sweep 6.733 ms (1001 pts)
1 N 1 f 2.457 44 GHz -6.167 dBm
2 N 1 f 2.483 50 GHz -42.804 dBm
3 N 1 f 2.500 00 GHz -50.390 dBm
4 N 1 f 2.483 97 GHz -32.927 dBm
Frequency
Auto Tune
Center Freq
2.465000000 GHz
Start Freq
2.430000000 GHz
Stop Freq
2.500000000 GHz
CF Step
7.000000 MHz
Auto
Man
Freq Offset
0 Hz

Appendix F: Conducted Spurious Emission

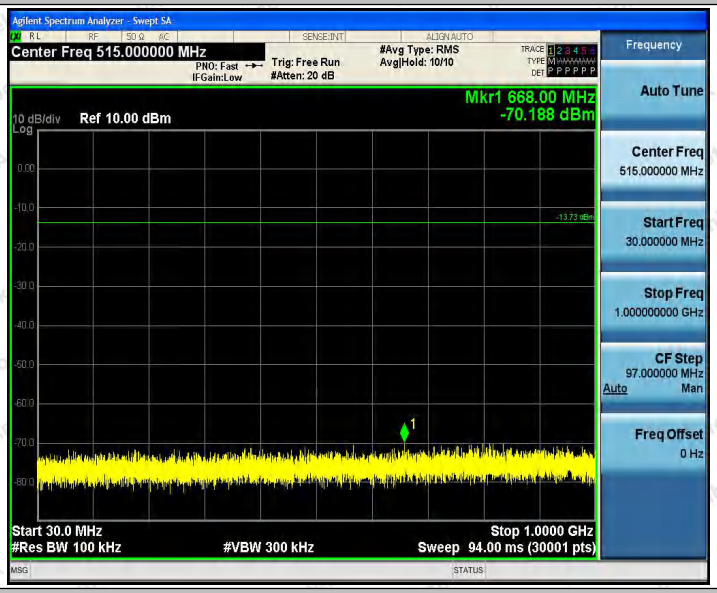
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	6.27	6.27	---	PASS
			30~1000	6.27	-70.19	≤-13.73	PASS
			1000~26500	6.27	-44.96	≤-13.73	PASS
		2437	Reference	4.65	4.65	---	PASS
			30~1000	4.65	-70.3	≤-15.35	PASS
			1000~26500	4.65	-46.7	≤-15.35	PASS
		2462	Reference	4.24	4.24	---	PASS
			30~1000	4.24	-69.83	≤-15.76	PASS
			1000~26500	4.24	-46.83	≤-15.76	PASS
11G	Ant1	2412	Reference	-0.38	-0.38	---	PASS
			30~1000	-0.38	-70.04	≤-20.38	PASS
			1000~26500	-0.38	-53.13	≤-20.38	PASS
		2437	Reference	2.48	2.48	---	PASS
			30~1000	2.48	-69.73	≤-17.52	PASS
			1000~26500	2.48	-51.09	≤-17.52	PASS
		2462	Reference	1.12	1.12	---	PASS
			30~1000	1.12	-69.68	≤-18.88	PASS
			1000~26500	1.12	-55.42	≤-18.88	PASS
11N20	Ant1	2412	Reference	0.81	0.81	---	PASS
			30~1000	0.81	-69.49	≤-19.19	PASS
			1000~26500	0.81	-49.17	≤-19.19	PASS
		2437	Reference	1.02	1.02	---	PASS
			30~1000	1.02	-69.7	≤-18.98	PASS
			1000~26500	1.02	-48.38	≤-18.98	PASS
		2462	Reference	1.76	1.76	---	PASS
			30~1000	1.76	-69.93	≤-18.24	PASS
			1000~26500	1.76	-52.61	≤-18.24	PASS
11N40	Ant1	2422	Reference	-1.51	-1.51	---	PASS
			30~1000	-1.51	-68.91	≤-21.51	PASS
			1000~26500	-1.51	-52.38	≤-21.51	PASS
		2437	Reference	-1.81	-1.81	---	PASS
			30~1000	-1.81	-69.9	≤-21.81	PASS
			1000~26500	-1.81	-54.41	≤-21.81	PASS
		2452	Reference	-1.83	-1.83	---	PASS
			30~1000	-1.83	-68.79	≤-21.83	PASS
			1000~26500	-1.83	-54.83	≤-21.83	PASS

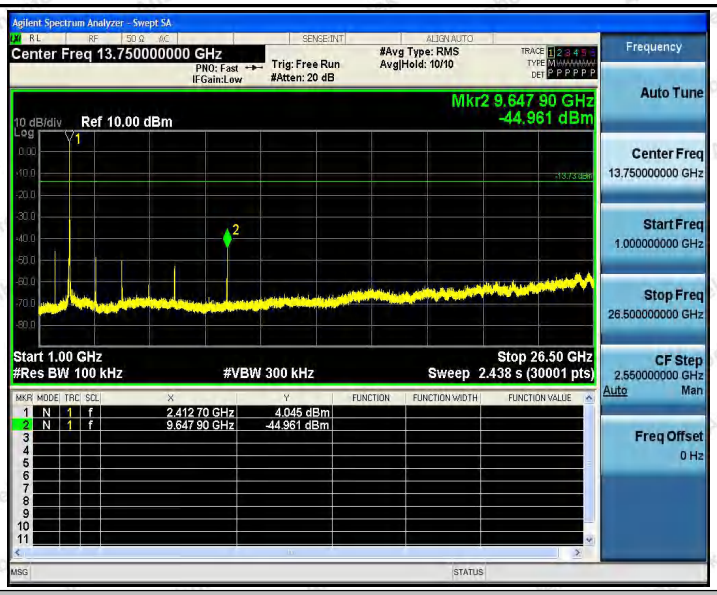
Test Graphs

11B_Ant1_2412_0~Reference

11B_Ant1_2412_30~1000

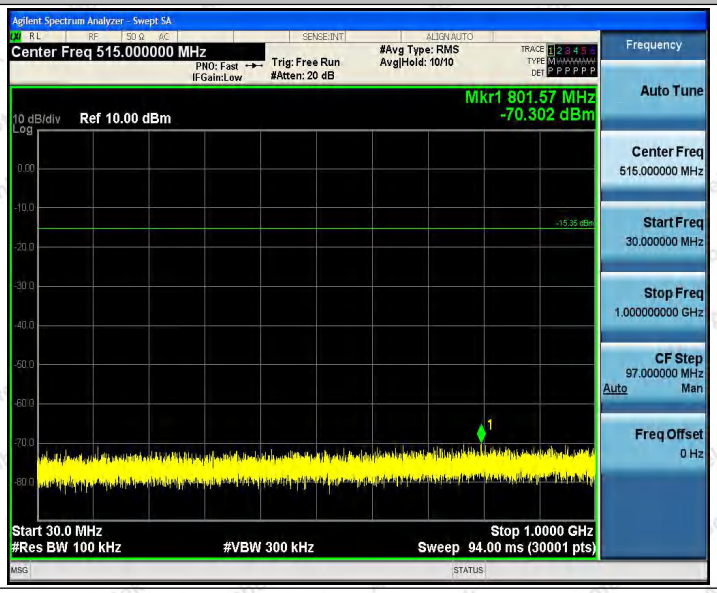


11B_Ant1_2412_1000~26500

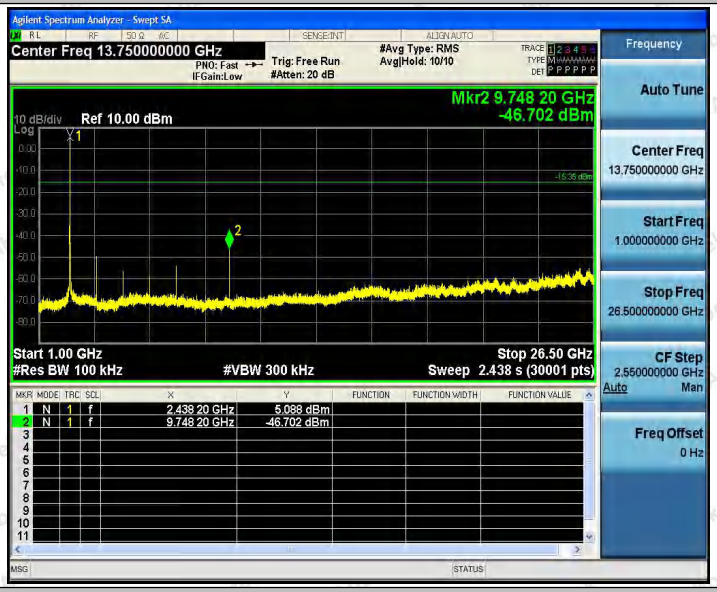


11B_Ant1_2437_0~Reference

11B_Ant1_2437_30~1000

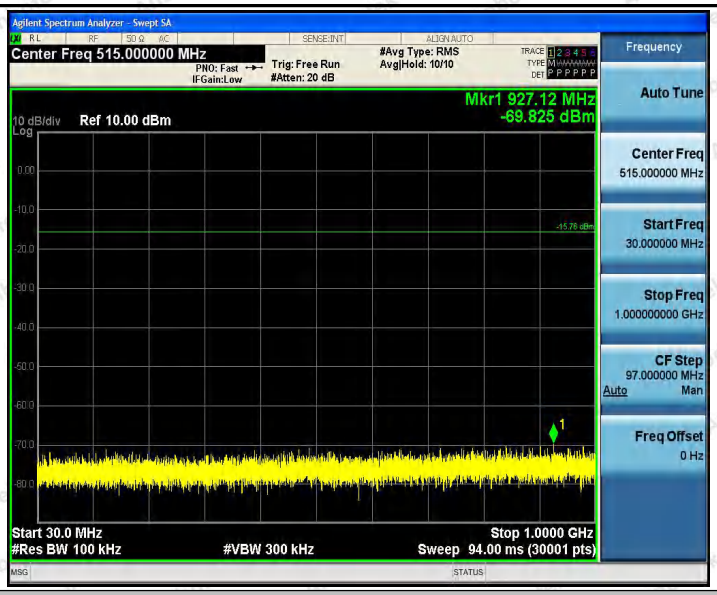


11B_Ant1_2437_1000~26500

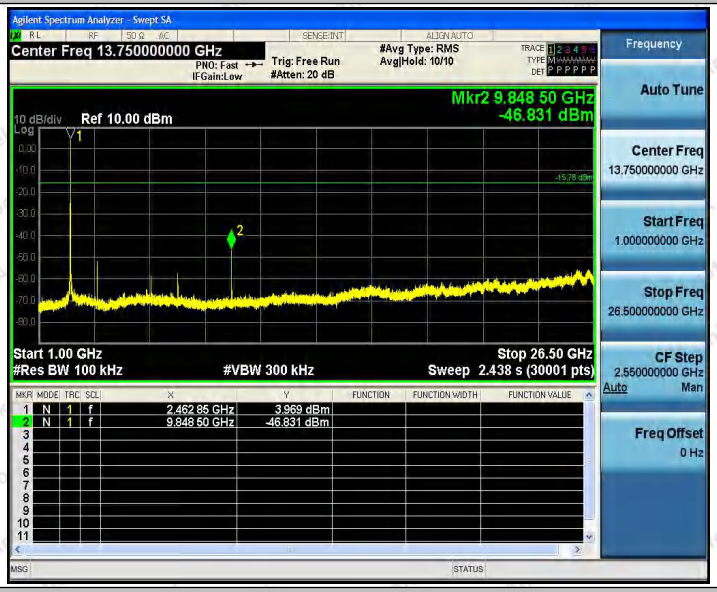


11B_Ant1_2462_0~Reference

11B_Ant1_2462_30~1000

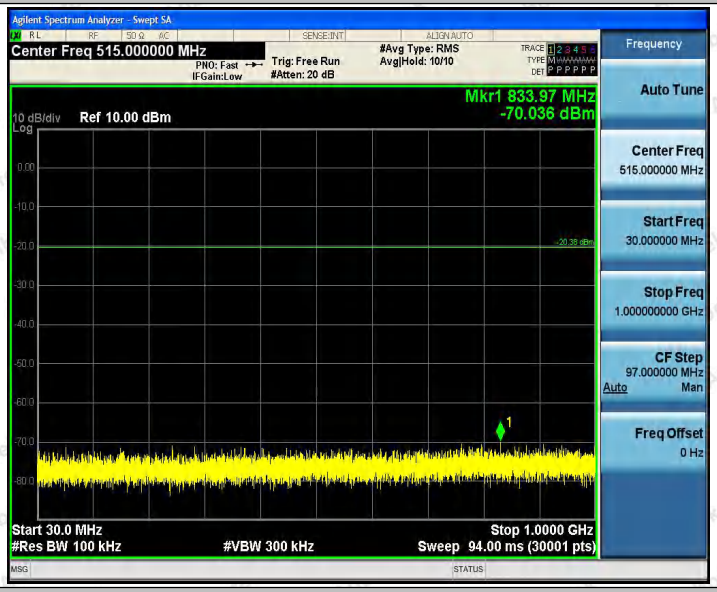


11B_Ant1_2462_1000~26500

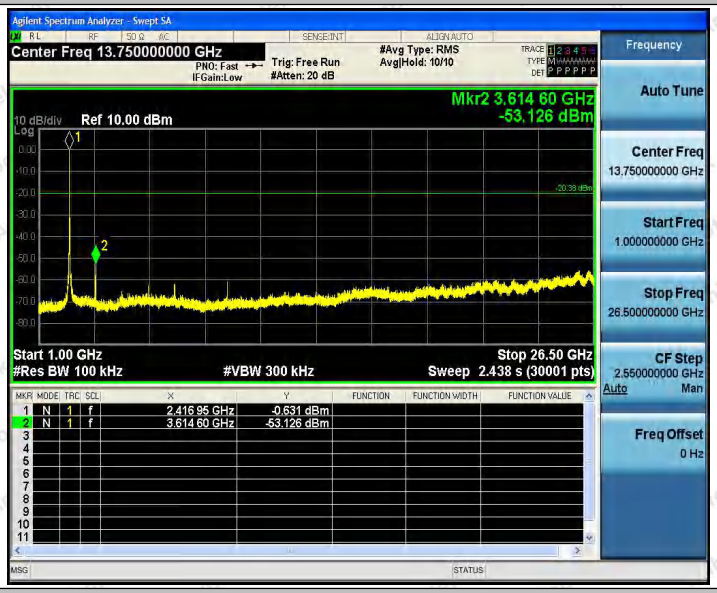


11G_Ant1_2412_0~Reference

11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference

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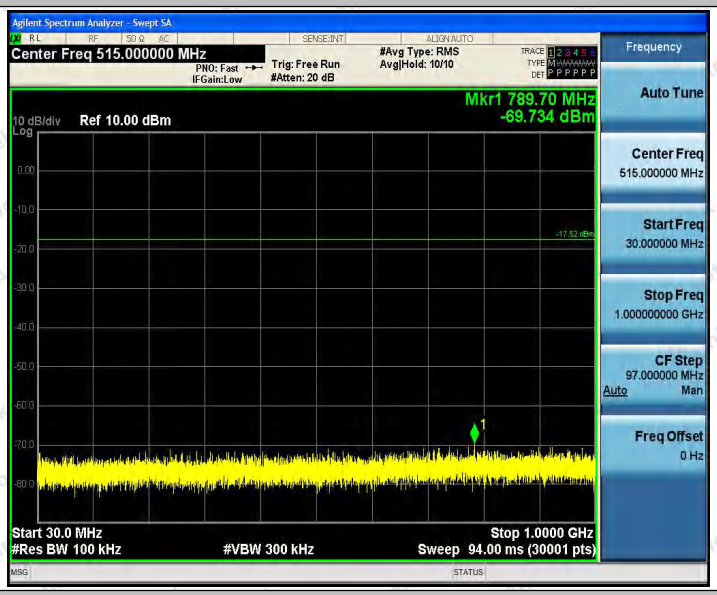

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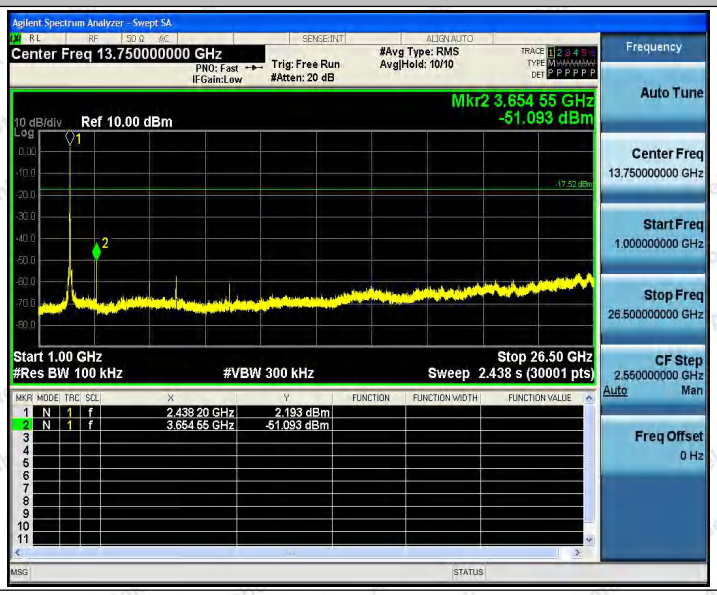
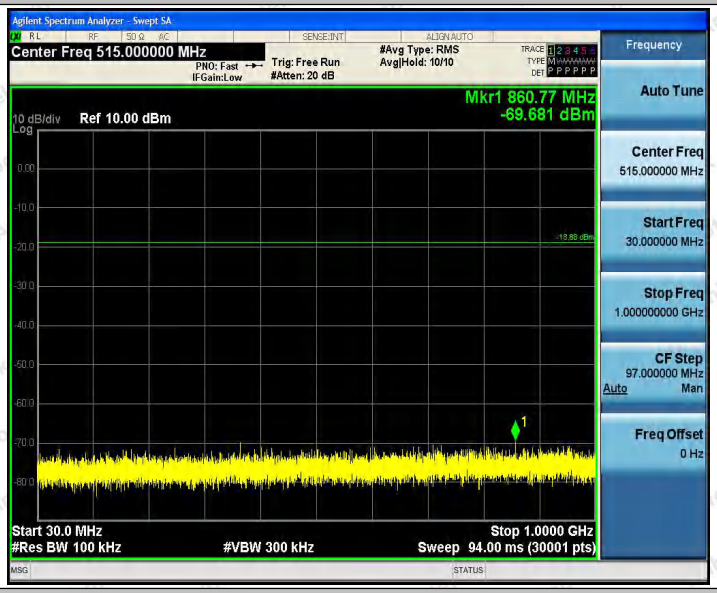


11G_Ant1_2462_0~Reference

11G_Ant1_2462_30~1000



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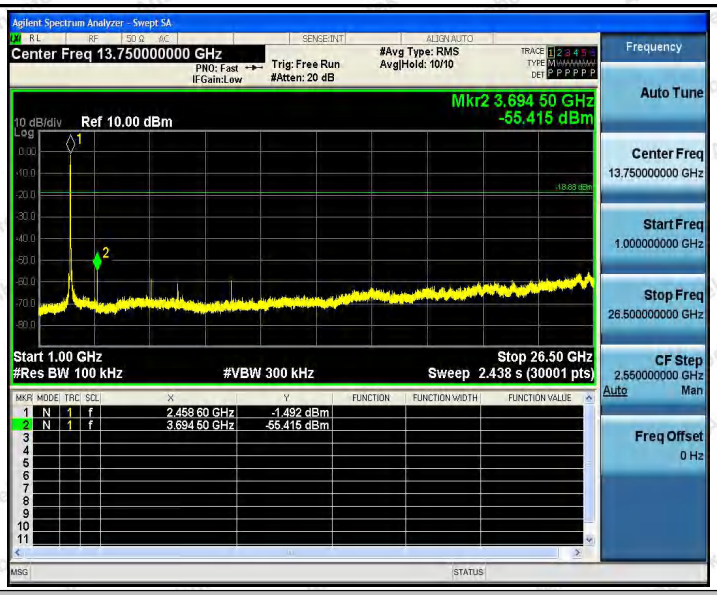

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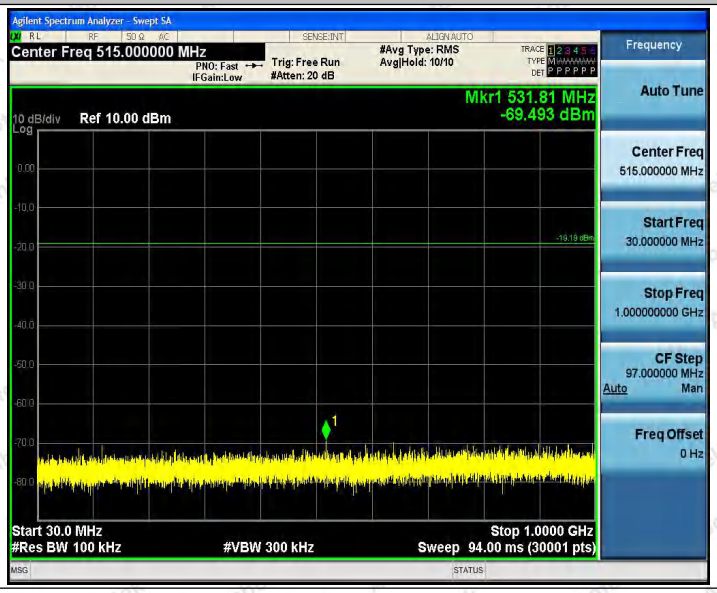

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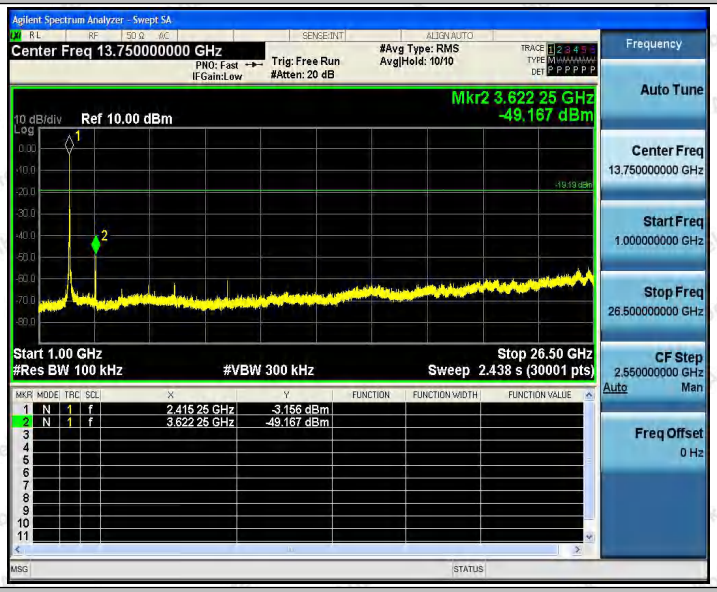

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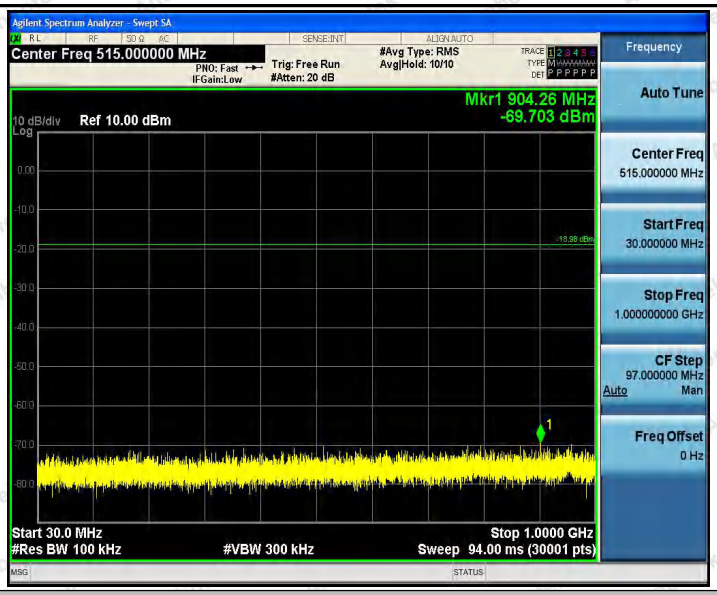
11N20_Ant1_2437_30~1000



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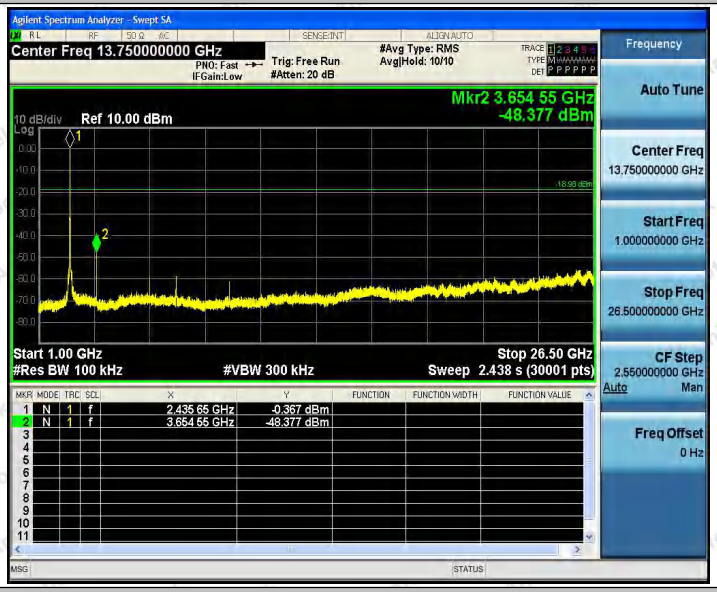

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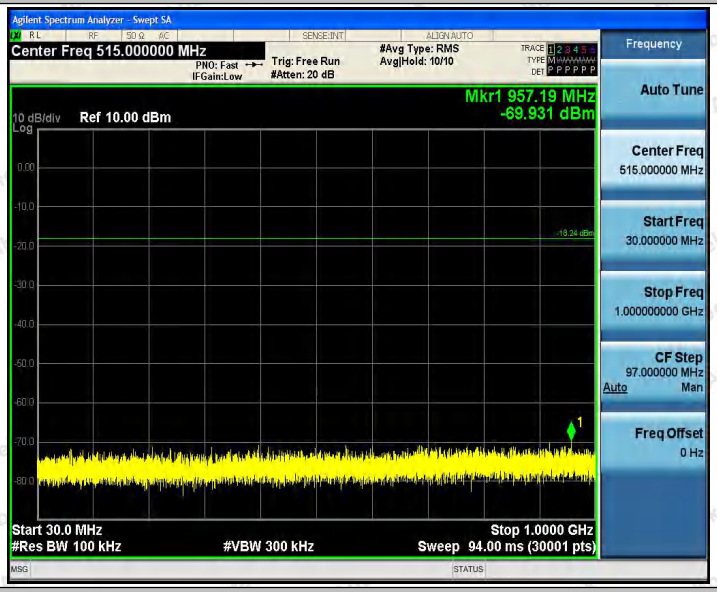

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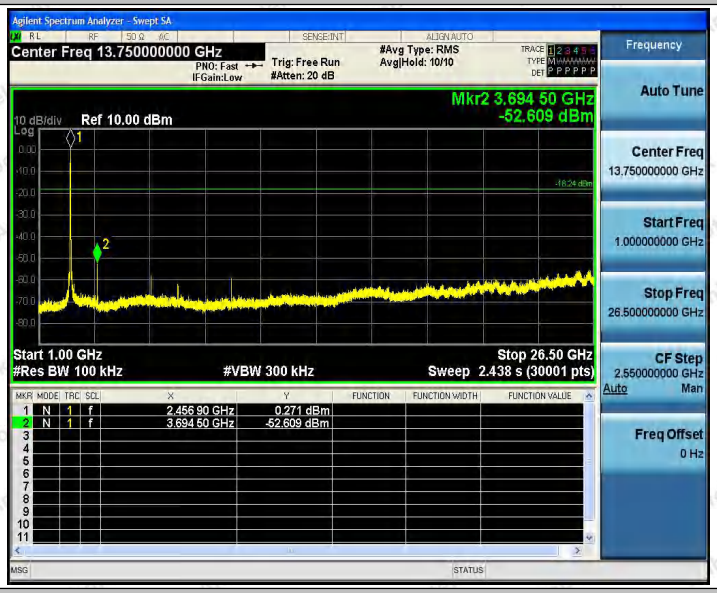

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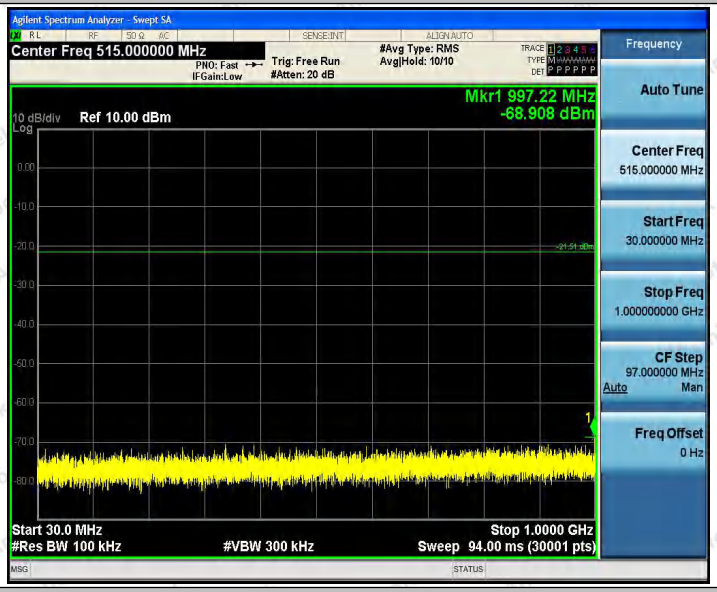

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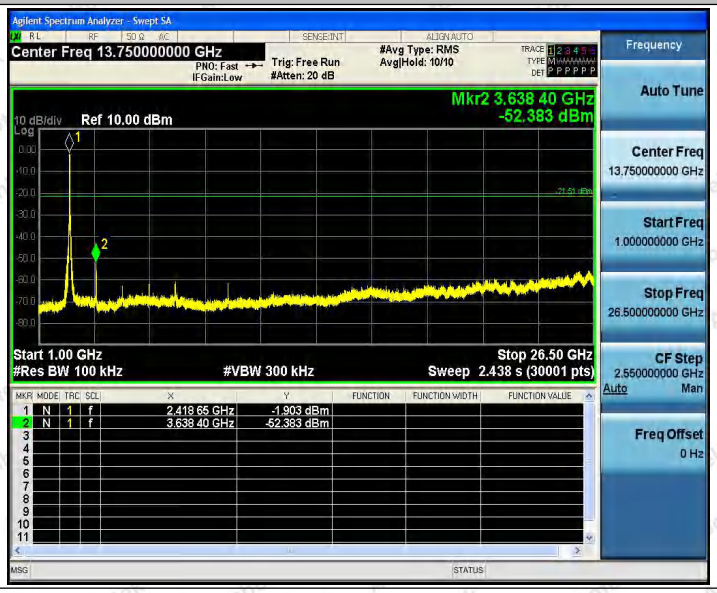
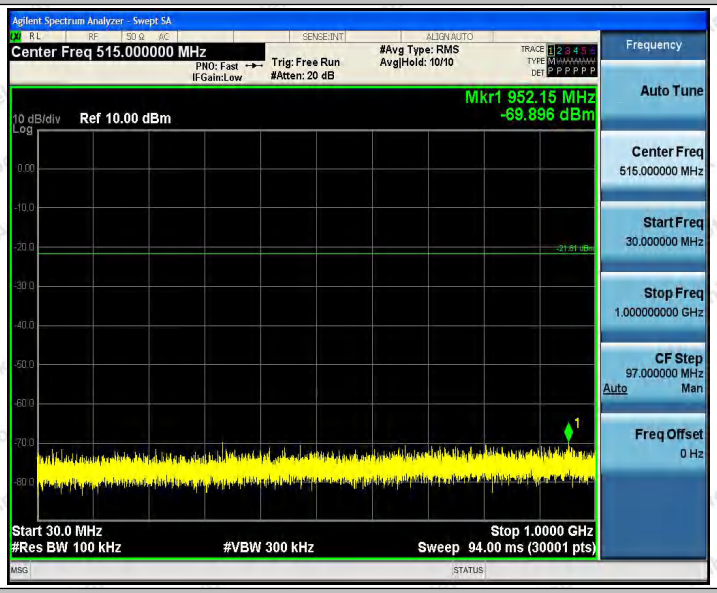


11N40_Ant1_2437_0~Reference

11N40_Ant1_2437_30~1000



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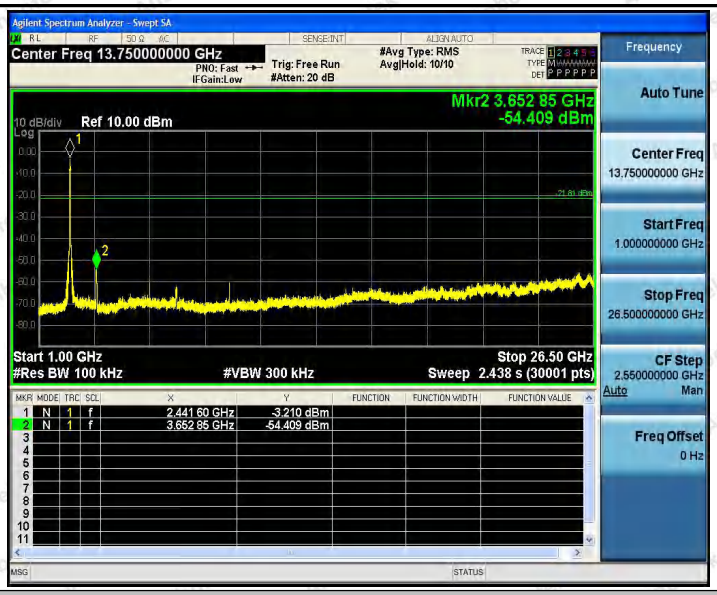
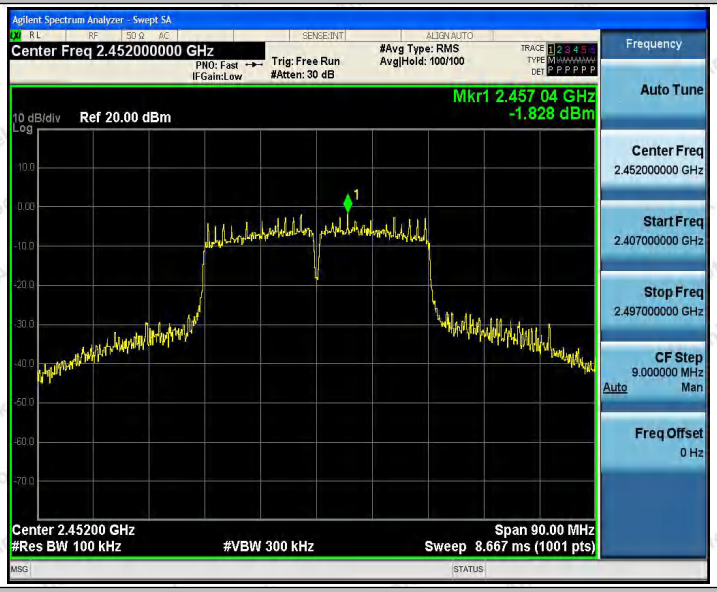


11N40_Ant1_2452_0~Reference



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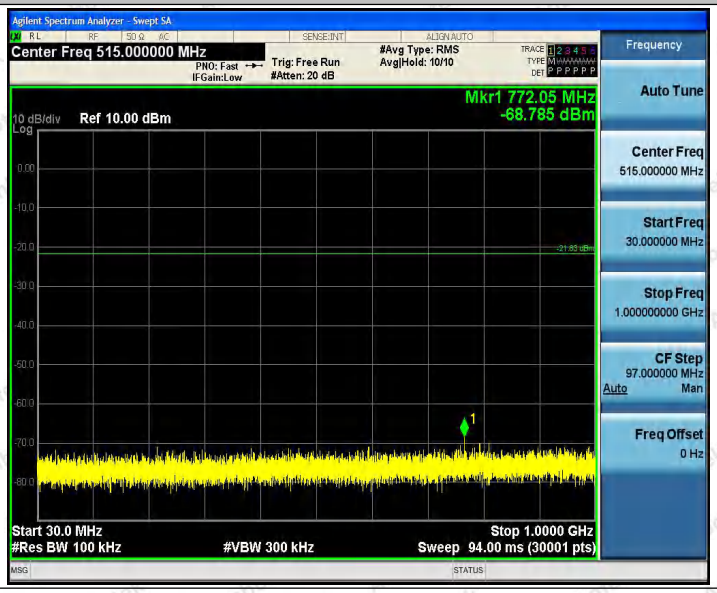

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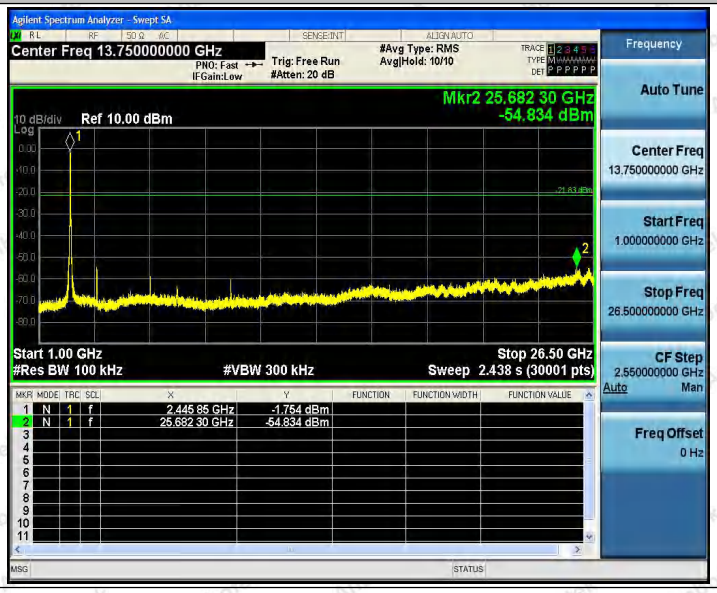


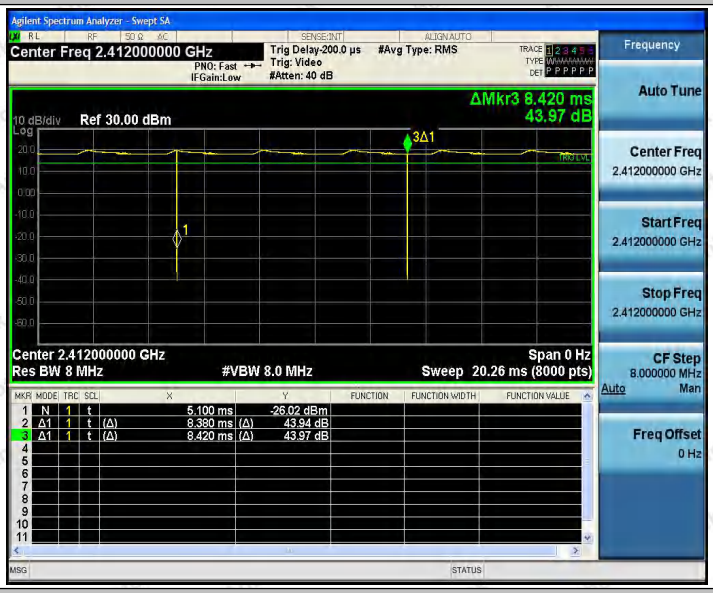
Appendix G: Duty Cycle

Test Result

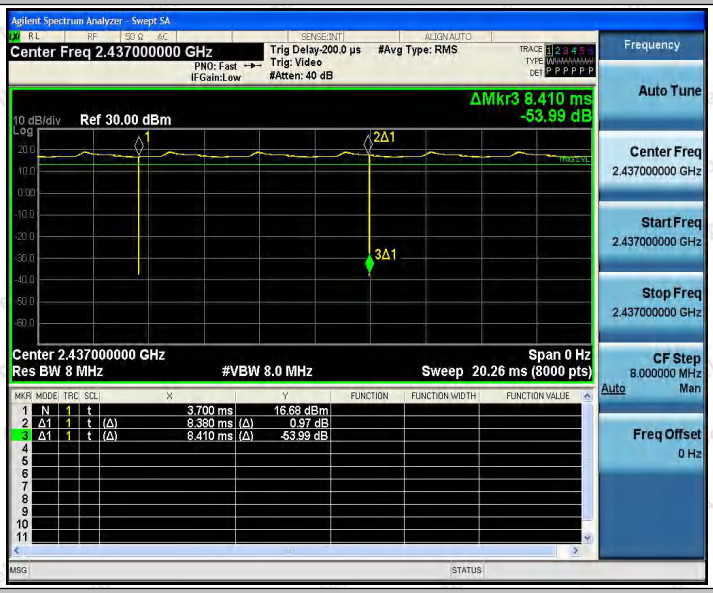
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	8.38	8.42	99.52	---	PASS
		2437	8.38	8.41	99.64	---	PASS
		2462	8.38	8.41	99.64	---	PASS
11G	Ant1	2412	1.39	1.43	97.20	---	PASS
		2437	1.39	1.43	97.20	---	PASS
		2462	1.39	1.42	97.89	---	PASS
11N20	Ant1	2412	1.30	1.33	97.74	---	PASS
		2437	1.30	1.34	97.01	---	PASS
		2462	1.30	1.34	97.01	---	PASS
11N40	Ant1	2422	0.65	0.68	95.59	---	PASS
		2437	0.65	0.69	94.20	---	PASS
		2452	0.65	0.68	95.59	---	PASS

Test Graphs

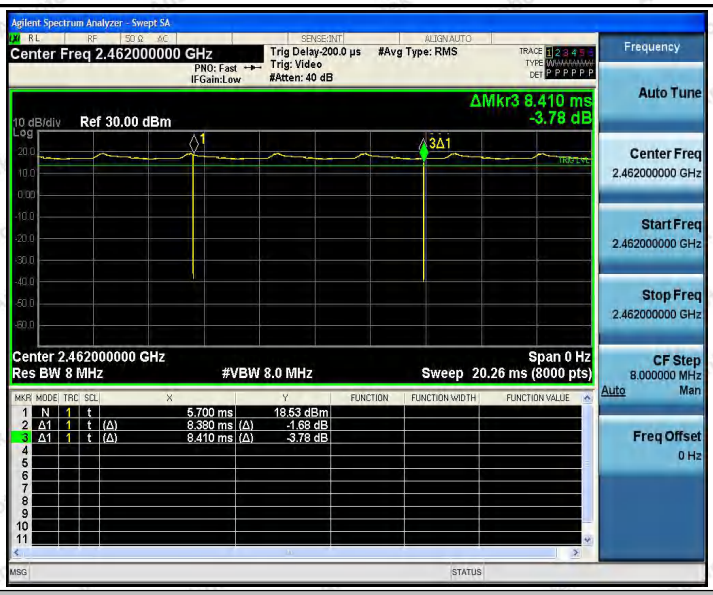
11B_Ant1_2412



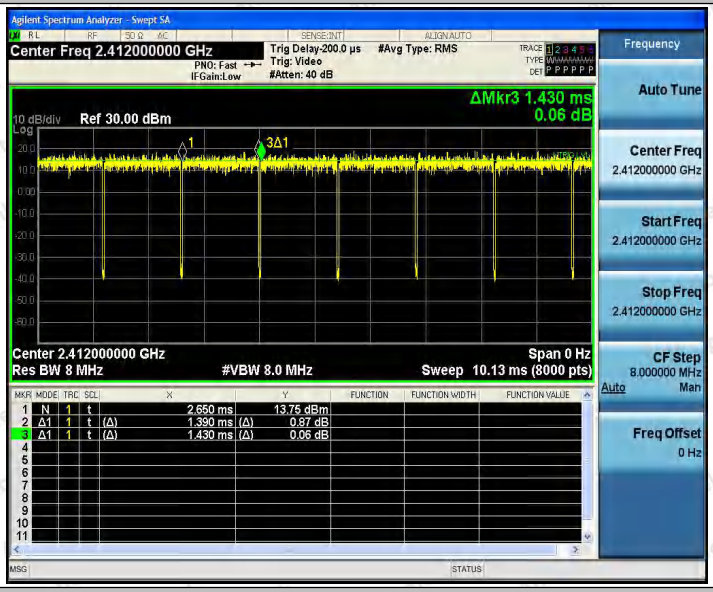
11B_Ant1_2437



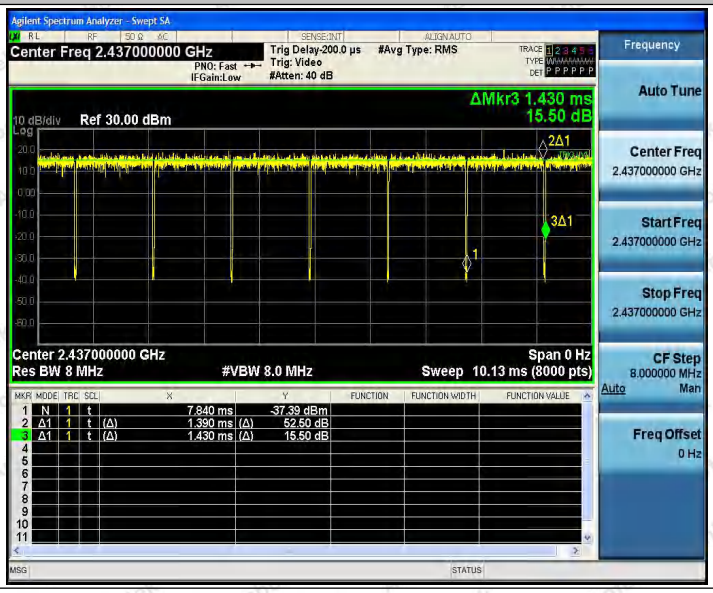
11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



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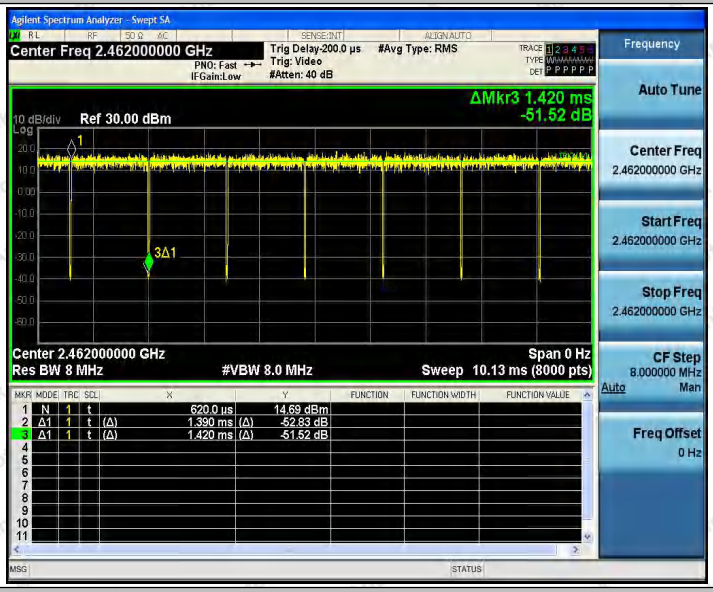
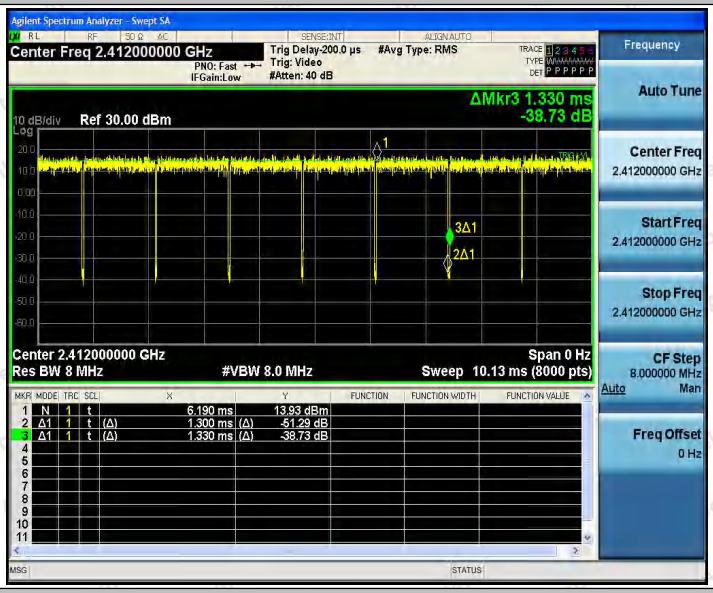


11N20_Ant1_2412



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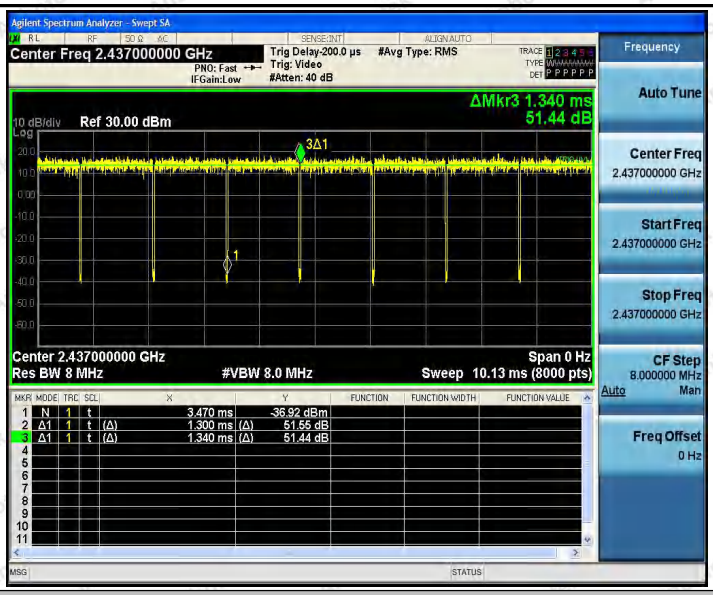

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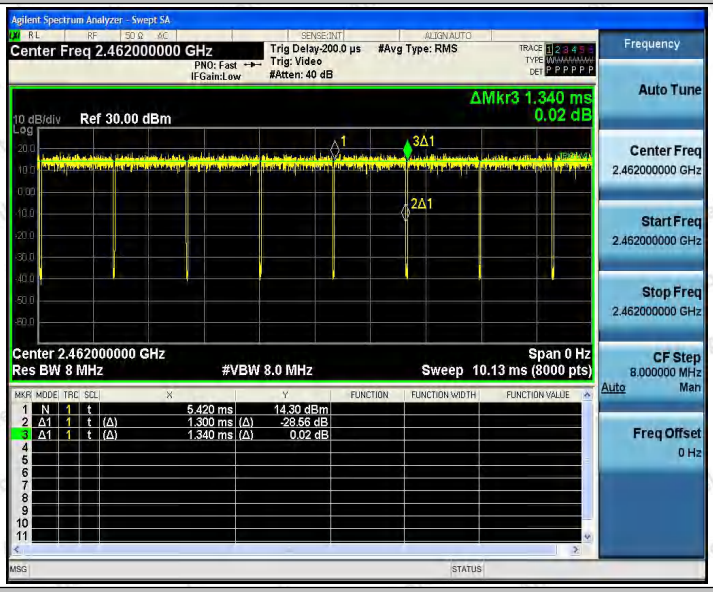
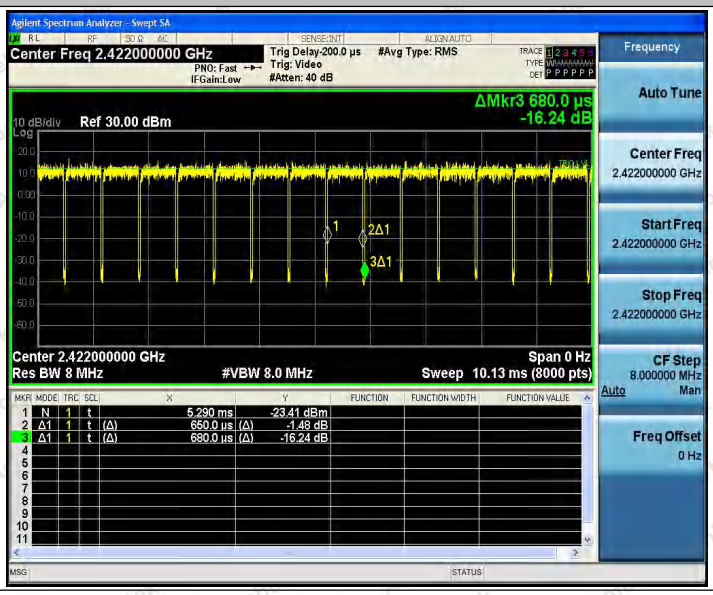
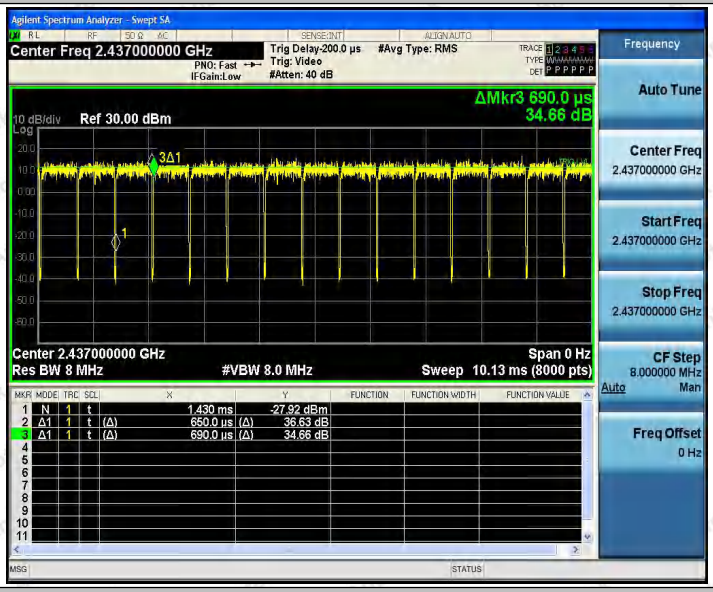


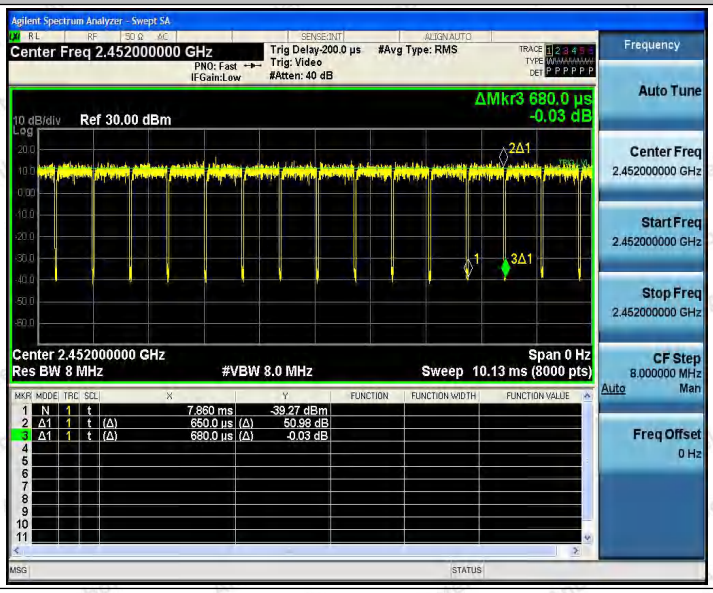
11N40_Ant1_2422



11N40_Ant1_2437



11N40_Ant1_2452



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