

Appendix: 2.4G WIFI

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Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.160	2407.880	2416.040	0.5	PASS
	Ant2	2412	8.640	2407.440	2416.080	0.5	PASS
	Ant1	2437	8.600	2432.400	2441.000	0.5	PASS
	Ant2	2437	9.120	2432.400	2441.520	0.5	PASS
	Ant1	2462	7.720	2457.880	2465.600	0.5	PASS
	Ant2	2462	8.640	2457.400	2466.040	0.5	PASS
11G	Ant1	2412	16.480	2403.760	2420.240	0.5	PASS
	Ant2	2412	16.400	2403.800	2420.200	0.5	PASS
	Ant1	2437	16.440	2428.760	2445.200	0.5	PASS
	Ant2	2437	16.440	2428.760	2445.200	0.5	PASS
	Ant1	2462	16.480	2453.720	2470.200	0.5	PASS
	Ant2	2462	16.440	2453.760	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.680	2403.160	2420.840	0.5	PASS
	Ant2	2412	17.680	2403.160	2420.840	0.5	PASS
	Ant1	2437	17.640	2428.160	2445.800	0.5	PASS
	Ant2	2437	17.720	2428.120	2445.840	0.5	PASS
	Ant1	2462	17.640	2453.160	2470.800	0.5	PASS
	Ant2	2462	17.240	2453.160	2470.400	0.5	PASS
11N40SISO	Ant1	2422	36.480	2403.760	2440.240	0.5	PASS
	Ant2	2422	36.240	2404.000	2440.240	0.5	PASS
	Ant1	2437	36.000	2419.000	2455.000	0.5	PASS
	Ant2	2437	36.480	2418.760	2455.240	0.5	PASS
	Ant1	2452	35.920	2433.680	2469.600	0.5	PASS
	Ant2	2452	35.920	2433.760	2469.680	0.5	PASS

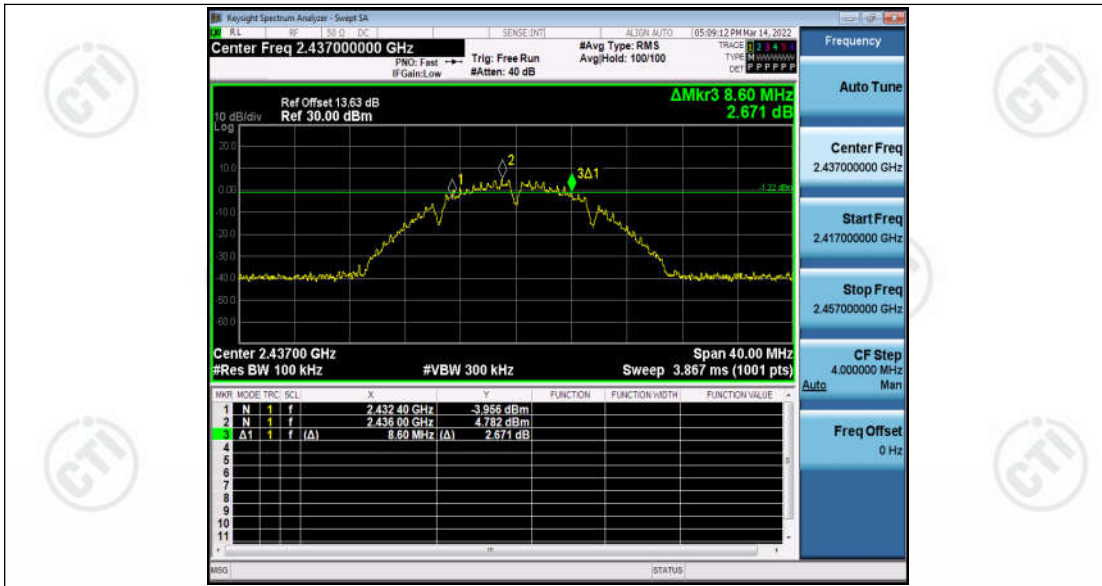
Test Graphs



11B_Ant1_2412



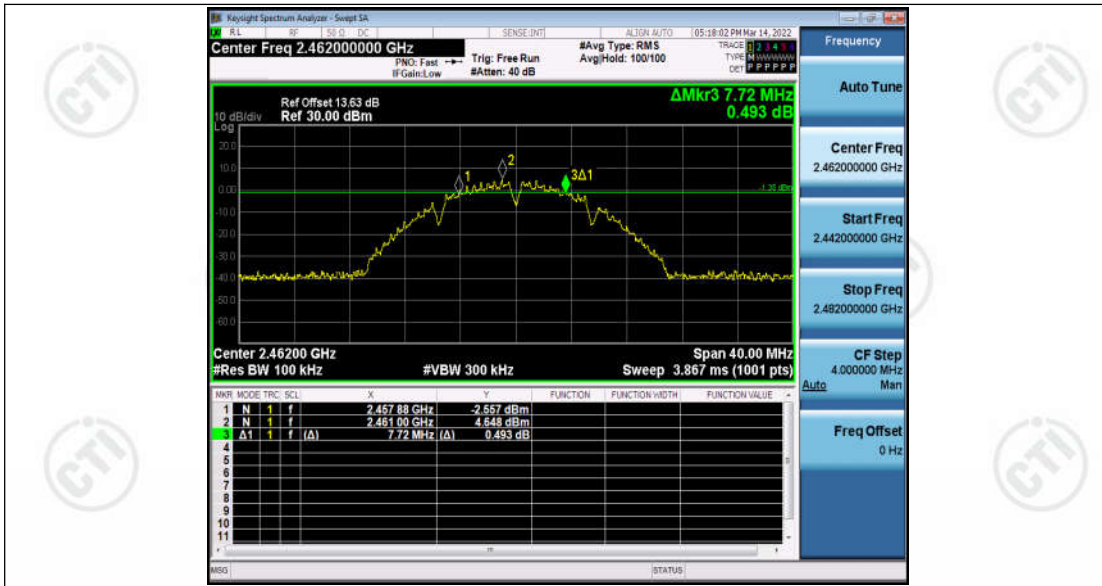
11B_Ant2_2412



11B_Ant1_2437



11B_Ant2_2437



11B_Ant1_2462



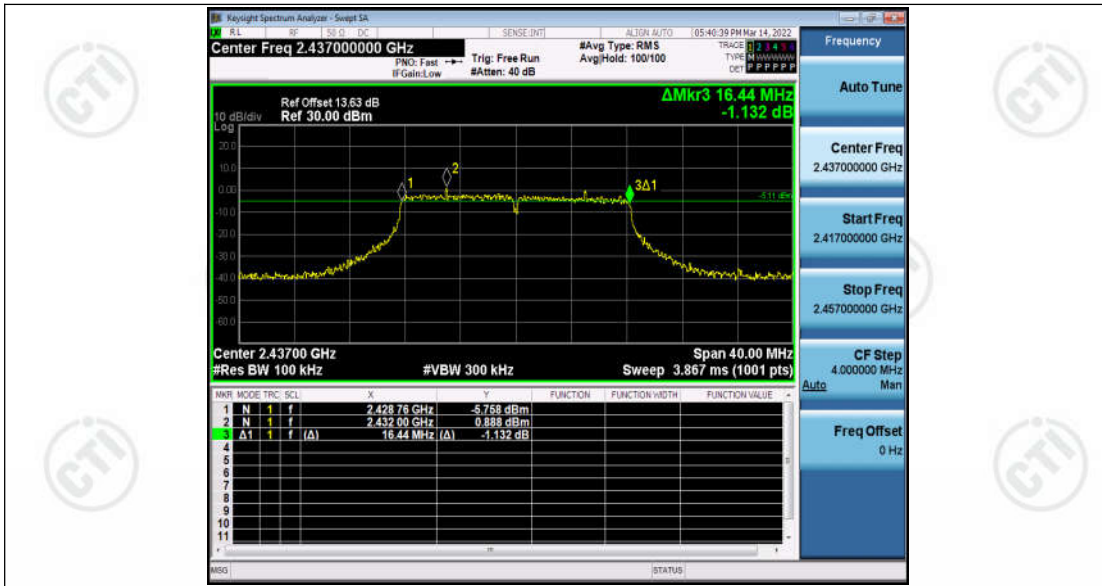
11B_Ant2_2462



11G_Ant1_2412



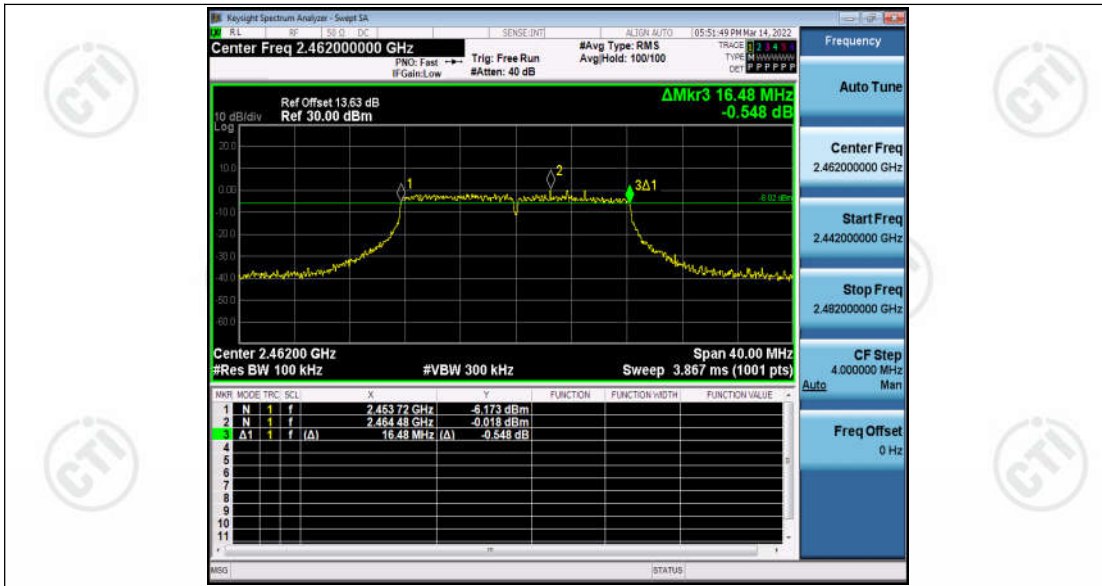
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11G_Ant1_2437



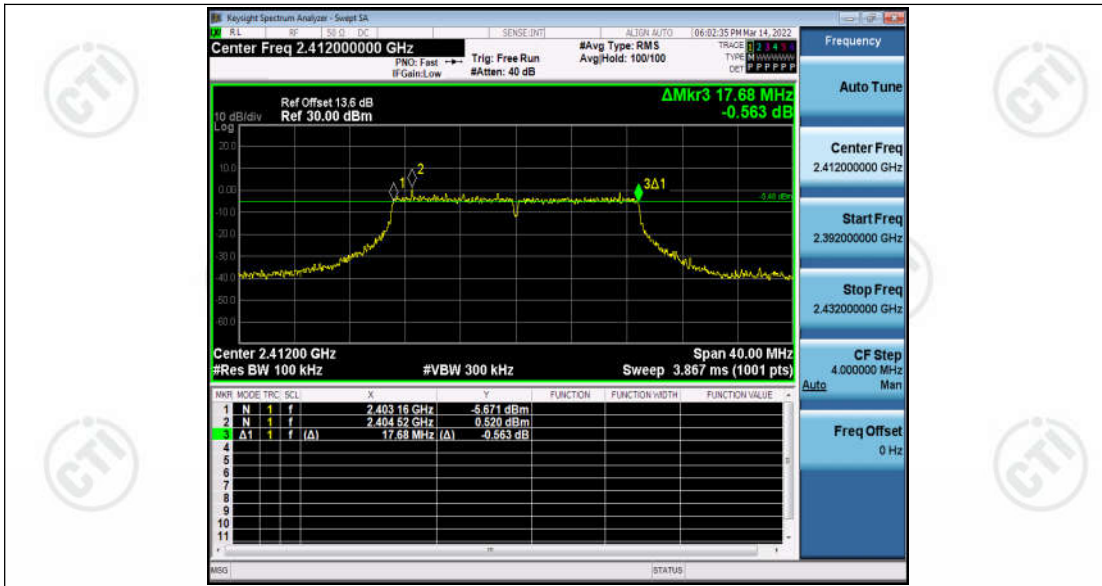
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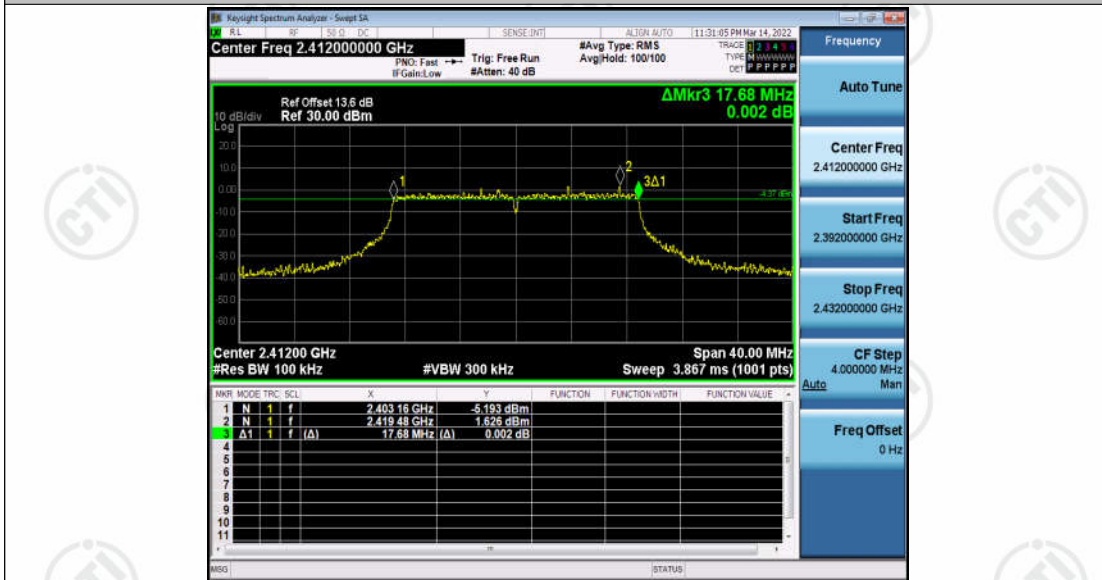
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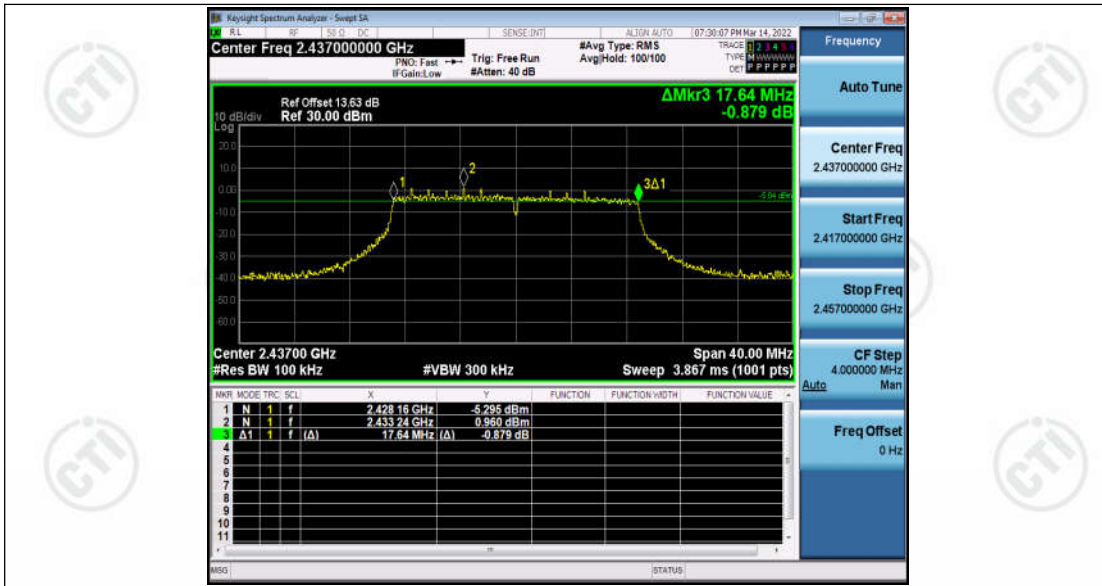
11G_Ant2_2462



11N20SISO_Ant1_2412



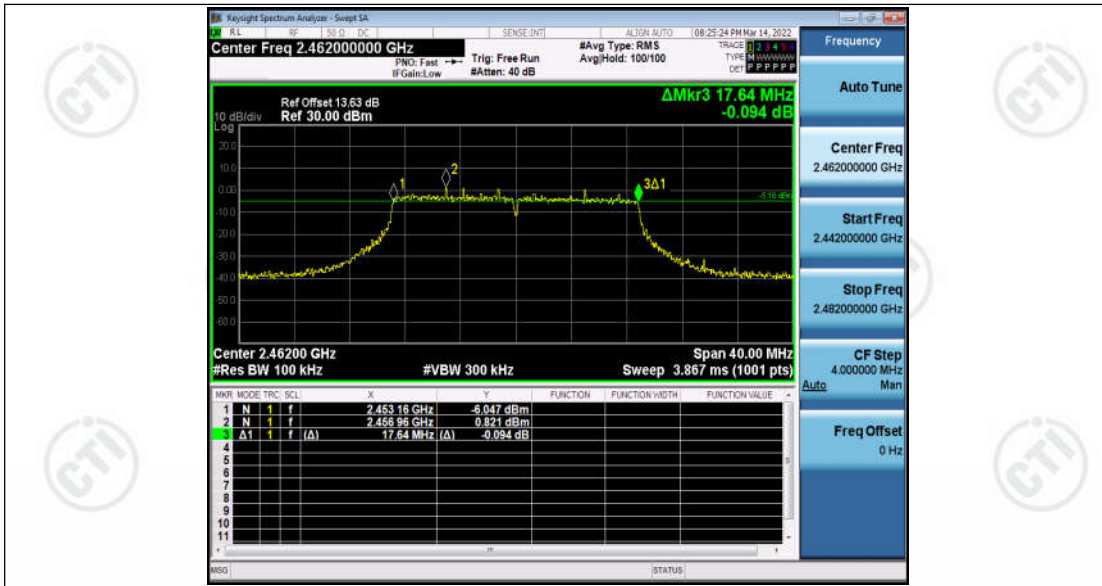
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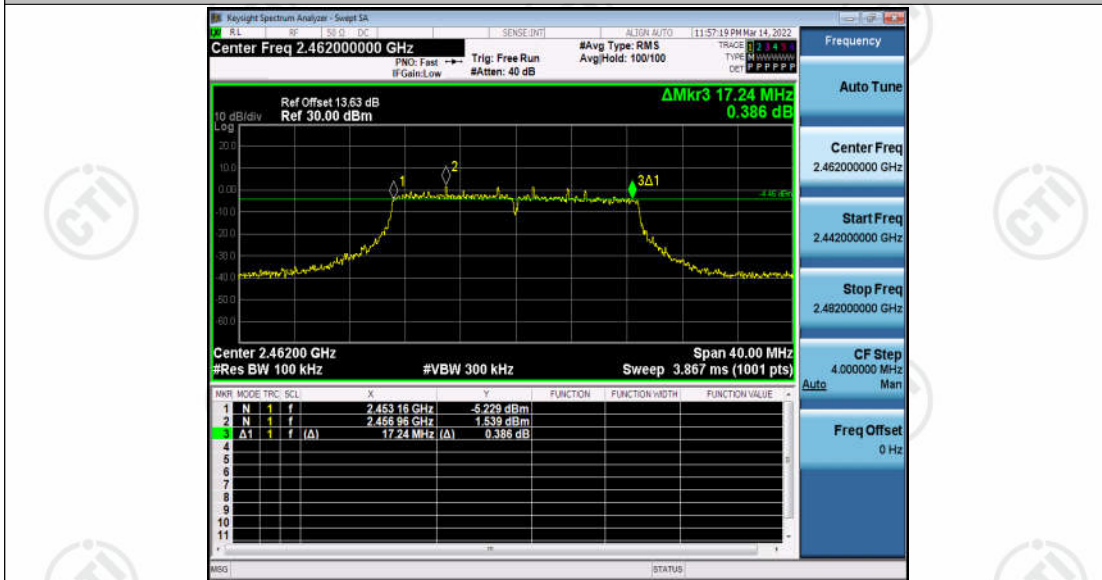
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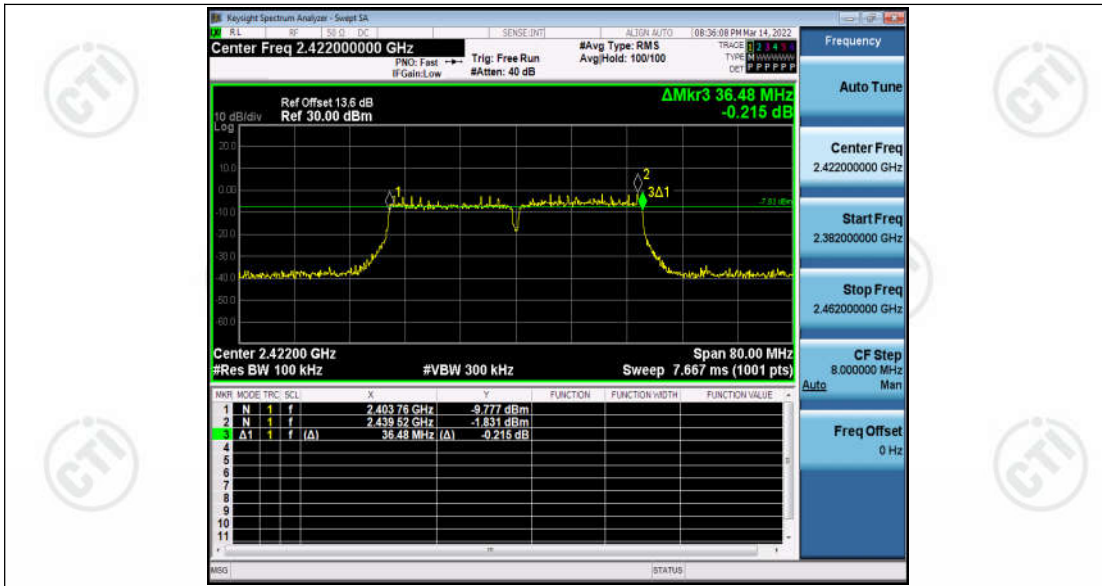
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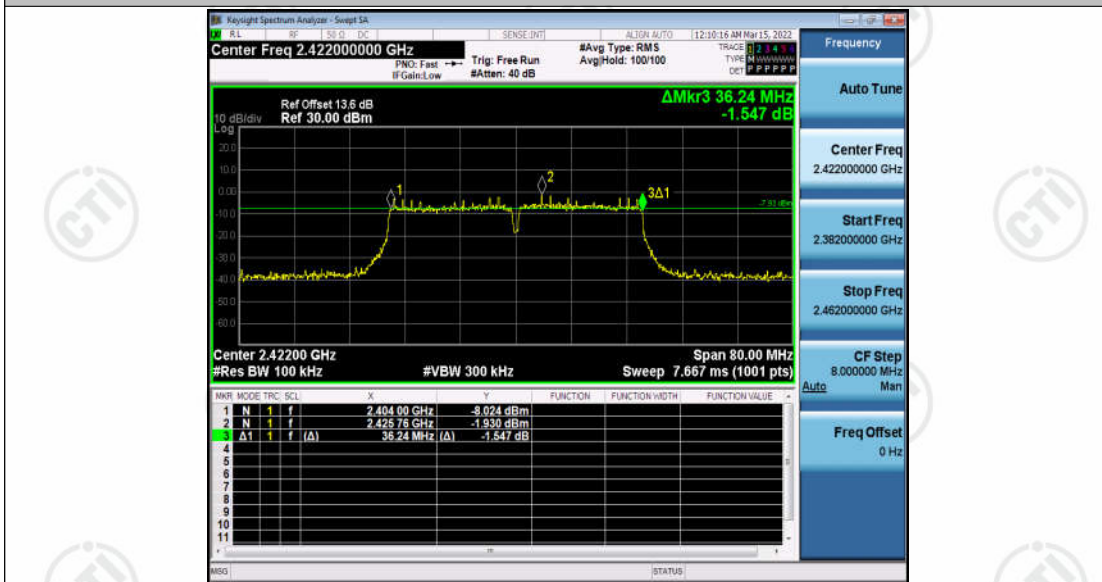
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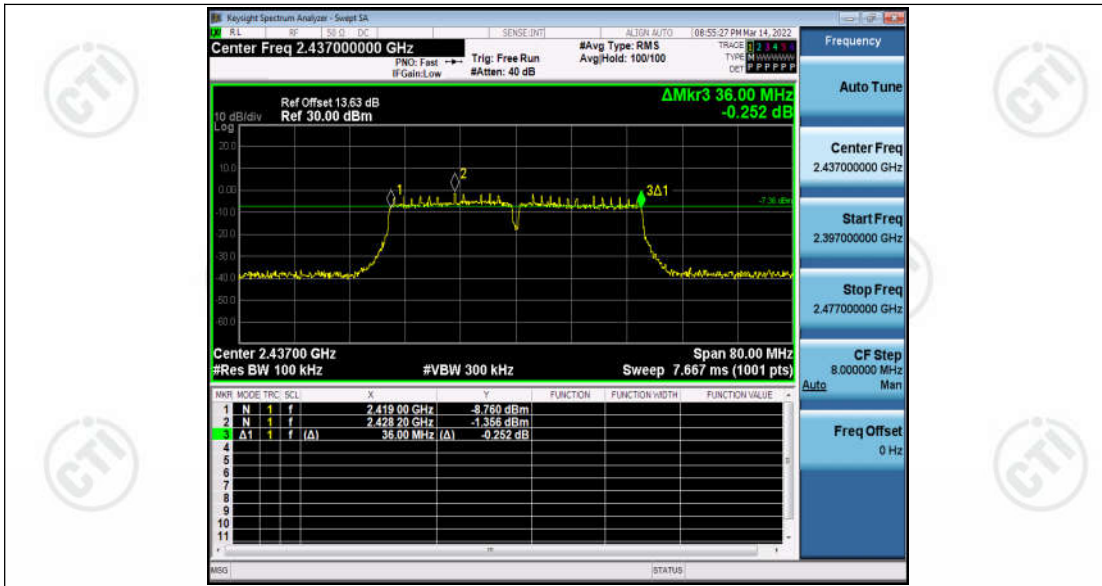
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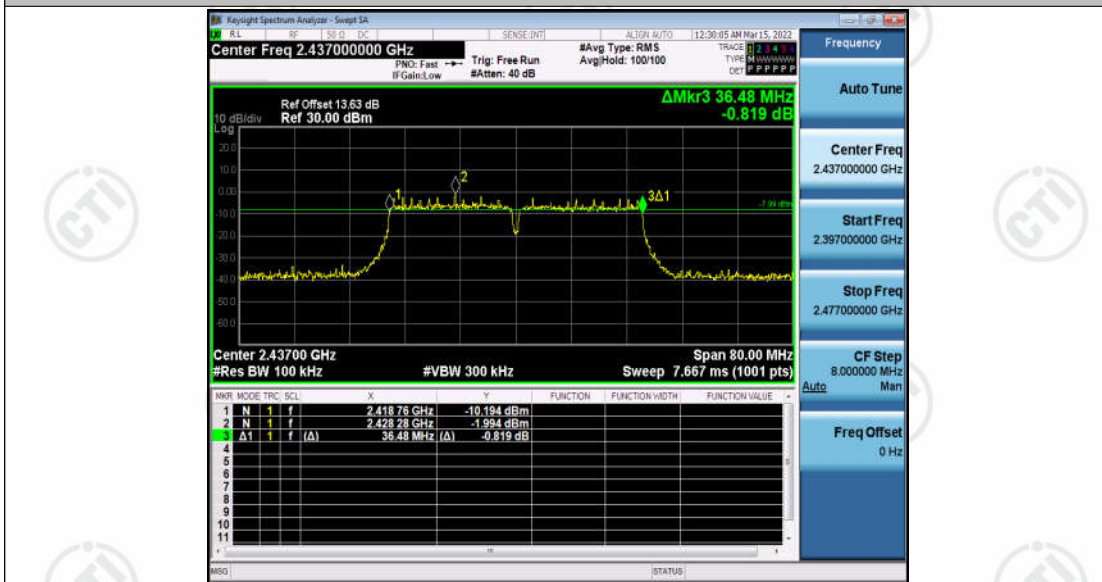
11N40SISO_Ant1_2422



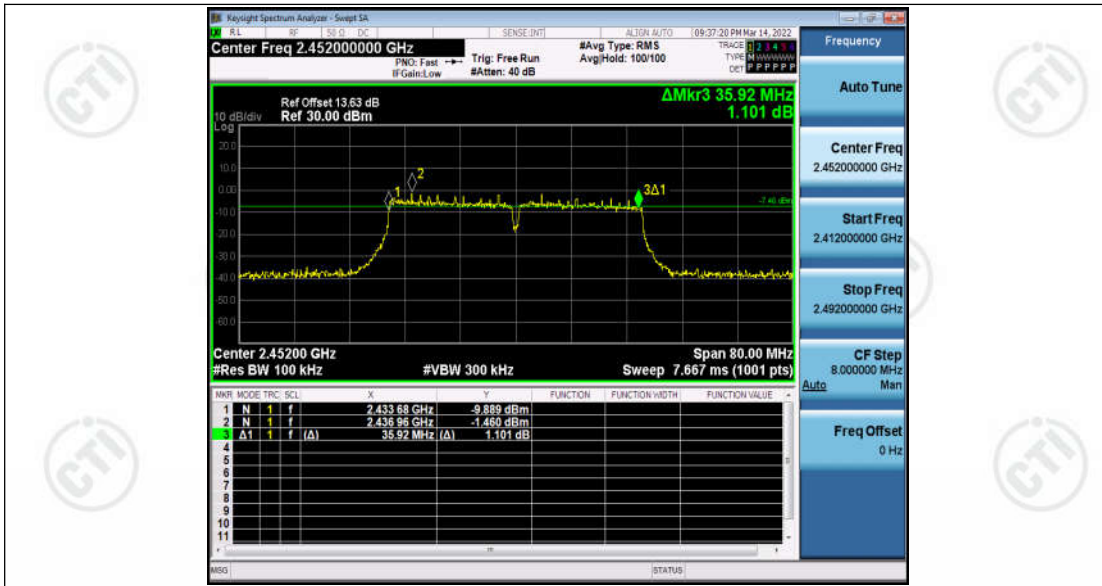
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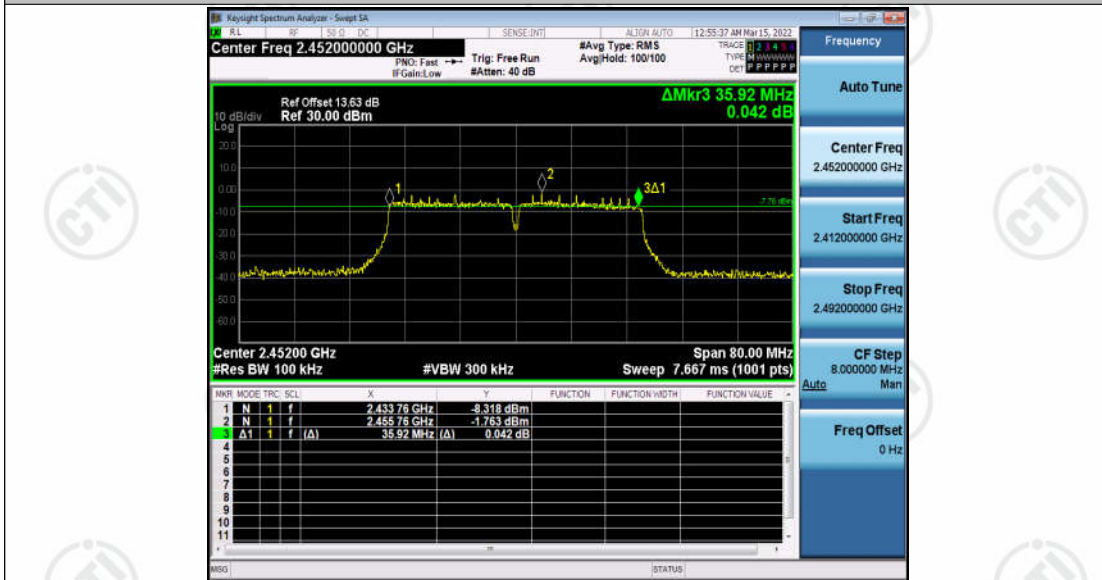
11N40SISO_Ant1_2437



11N40SISO_Ant2_2437



11N40SISO_Ant1_2452



11N40SISO_Ant2_2452

Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.165	2404.879	2419.044	---	PASS
	Ant2	2412	14.021	2405.080	2419.101	---	PASS
	Ant1	2437	13.879	2429.932	2443.811	---	PASS
	Ant2	2437	14.112	2429.856	2443.968	---	PASS
	Ant1	2462	14.005	2454.896	2468.901	---	PASS
	Ant2	2462	13.785	2454.921	2468.706	---	PASS
11G	Ant1	2412	17.327	2403.310	2420.637	---	PASS
	Ant2	2412	17.228	2403.451	2420.679	---	PASS
	Ant1	2437	17.068	2428.372	2445.440	---	PASS
	Ant2	2437	17.110	2428.380	2445.490	---	PASS
	Ant1	2462	17.081	2453.407	2470.488	---	PASS
	Ant2	2462	17.089	2453.365	2470.454	---	PASS
11N20SISO	Ant1	2412	18.493	2402.693	2421.186	---	PASS
	Ant2	2412	18.316	2402.875	2421.191	---	PASS
	Ant1	2437	18.213	2427.829	2446.042	---	PASS
	Ant2	2437	18.265	2427.802	2446.067	---	PASS
	Ant1	2462	18.212	2452.822	2471.034	---	PASS
	Ant2	2462	18.180	2452.802	2470.982	---	PASS
11N40SISO	Ant1	2422	36.911	2403.516	2440.427	---	PASS
	Ant2	2422	36.787	2403.614	2440.401	---	PASS
	Ant1	2437	36.600	2418.768	2455.368	---	PASS
	Ant2	2437	36.843	2418.569	2455.412	---	PASS
	Ant1	2452	36.830	2433.376	2470.206	---	PASS
	Ant2	2452	36.811	2433.461	2470.272	---	PASS

Test Graphs



11B_Ant1_2412



11B_Ant2_2412



11B_Ant1_2437



11B_Ant2_2437



11B_Ant1_2462



11B_Ant2_2462



11G_Ant1_2412



11G_Ant2_2412



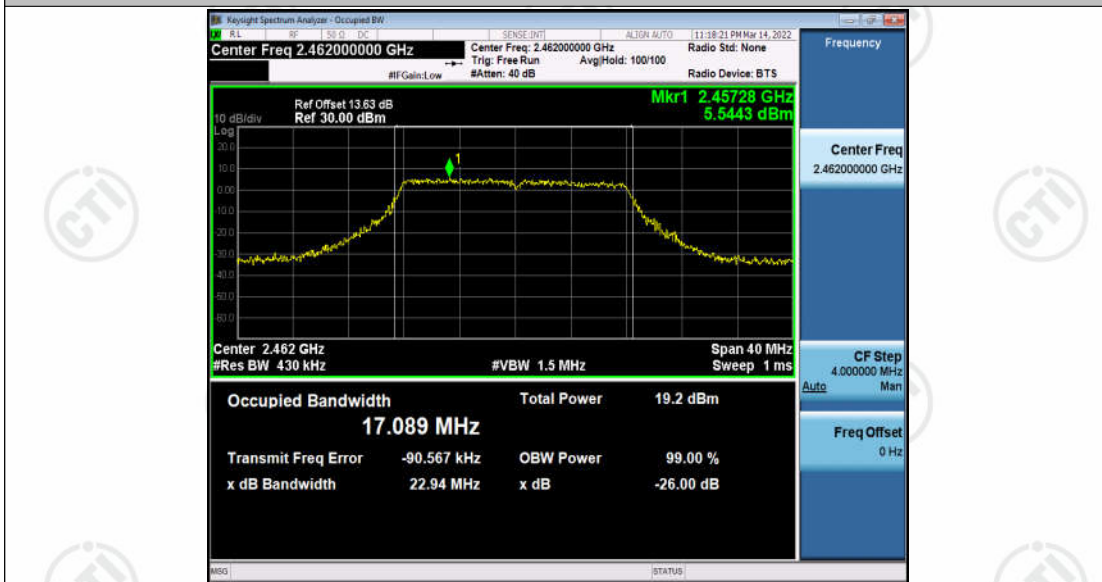
11G_Ant1_2437



11G_Ant2_2437



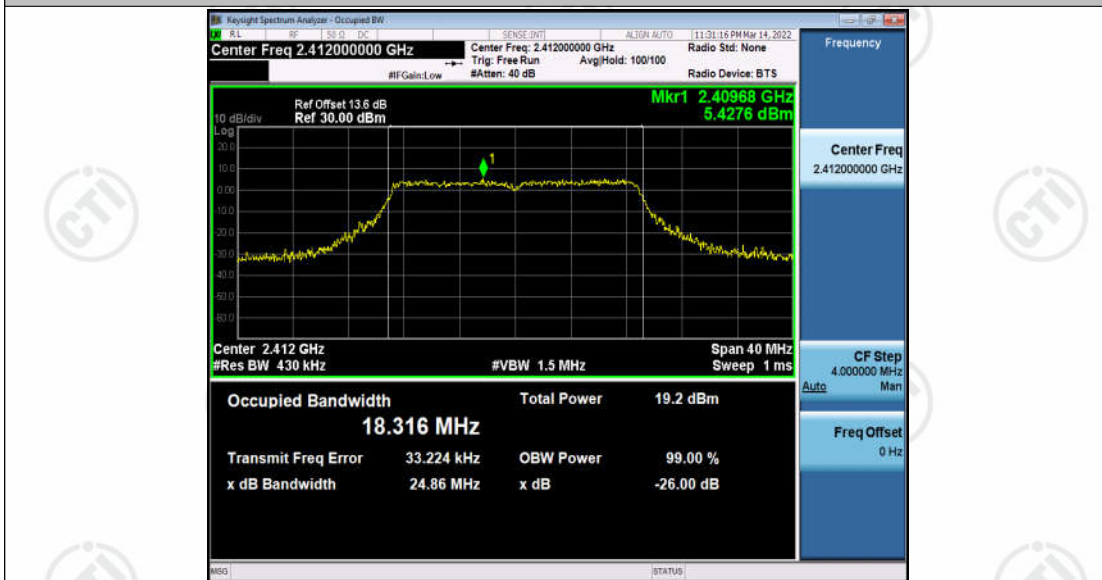
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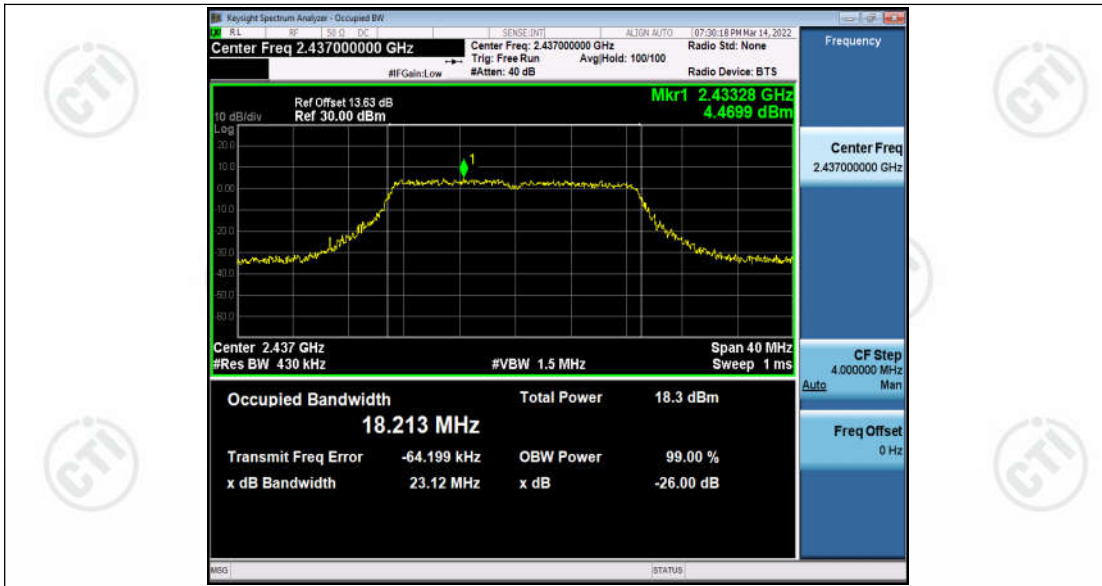
11G_Ant2_2462



11N20SISO_Ant1_2412



11N20SISO_Ant2_2412



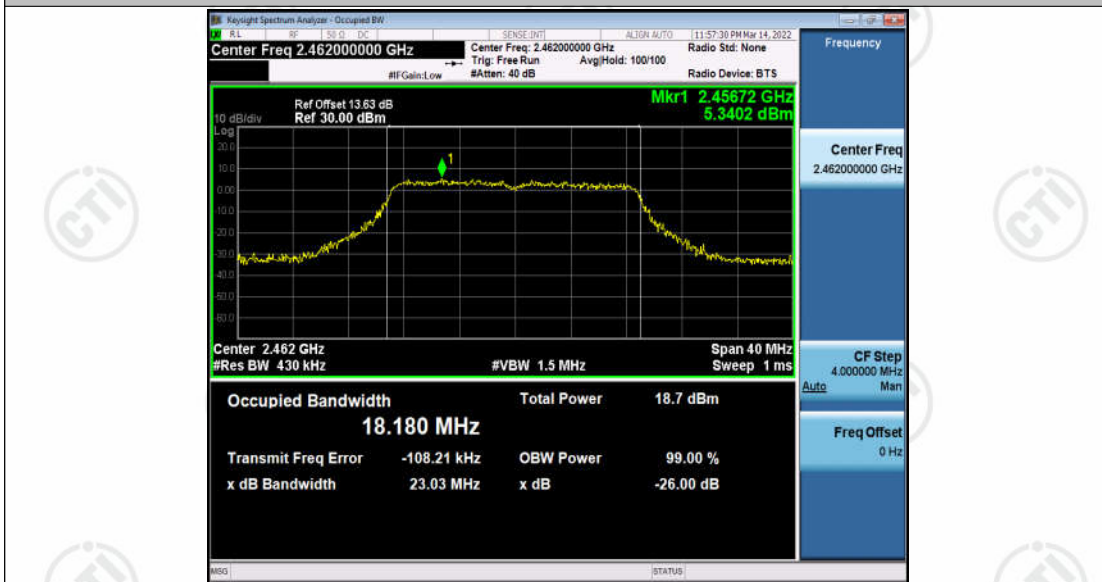
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11N20SISO_Ant2_2437



11N20SISO_Ant1_2462



11N20SISO_Ant2_2462



11N40SISO_Ant1_2422



11N40SISO_Ant2_2422



11N40SISO_Ant1_2437



11N40SISO_Ant2_2437



11N40SISO_Ant1_2452



11N40SISO_Ant2_2452

Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Channel	Power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	13.42	<=30	PASS
	Ant2	2412	12.44	<=30	PASS
	Ant1	2437	13.45	<=30	PASS
	Ant2	2437	12.47	<=30	PASS
	Ant1	2462	13.41	<=30	PASS
	Ant2	2462	12.86	<=30	PASS
11G	Ant1	2412	12.20	<=30	PASS
	Ant2	2412	12.57	<=30	PASS
	Ant1	2437	12.17	<=30	PASS
	Ant2	2437	12.18	<=30	PASS
	Ant1	2462	12.12	<=30	PASS
	Ant2	2462	12.54	<=30	PASS
11N20SISO	Ant1	2412	12.29	<=30	PASS
	Ant2	2412	12.60	<=30	PASS
	Ant1	2437	12.22	<=30	PASS
	Ant2	2437	12.17	<=30	PASS
	Ant1	2462	12.16	<=30	PASS
	Ant2	2462	12.53	<=30	PASS
11N40SISO	Ant1	2422	12.24	<=30	PASS
	Ant2	2422	12.58	<=30	PASS
	Ant1	2437	12.26	<=30	PASS
	Ant2	2437	12.26	<=30	PASS
	Ant1	2452	12.24	<=30	PASS
	Ant2	2452	12.05	<=30	PASS
11N20MIMO	Ant1	2412	7.80	<=30	PASS
	Ant2	2412	8.06	<=30	PASS
	total	2412	10.9	<=30	PASS
	Ant1	2437	7.70	<=30	PASS
	Ant2	2437	6.59	<=30	PASS
	total	2437	10.2	<=30	PASS
	Ant1	2462	7.76	<=30	PASS
	Ant2	2462	7.66	<=30	PASS
	total	2462	10.7	<=30	PASS
11N40MIMO	Ant1	2422	7.74	<=30	PASS

	Ant2	2422	7.55	<=30	PASS
	total	2422	10.7	<=30	PASS
	Ant1	2437	8.80	<=30	PASS
	Ant2	2437	7.72	<=30	PASS
	total	2437	11.3	<=30	PASS
	Ant1	2452	7.67	<=30	PASS
	Ant2	2452	6.93	<=30	PASS
	total	2452	10.3	<=30	PASS

Appendix D: Maximum power spectral density

Test Result

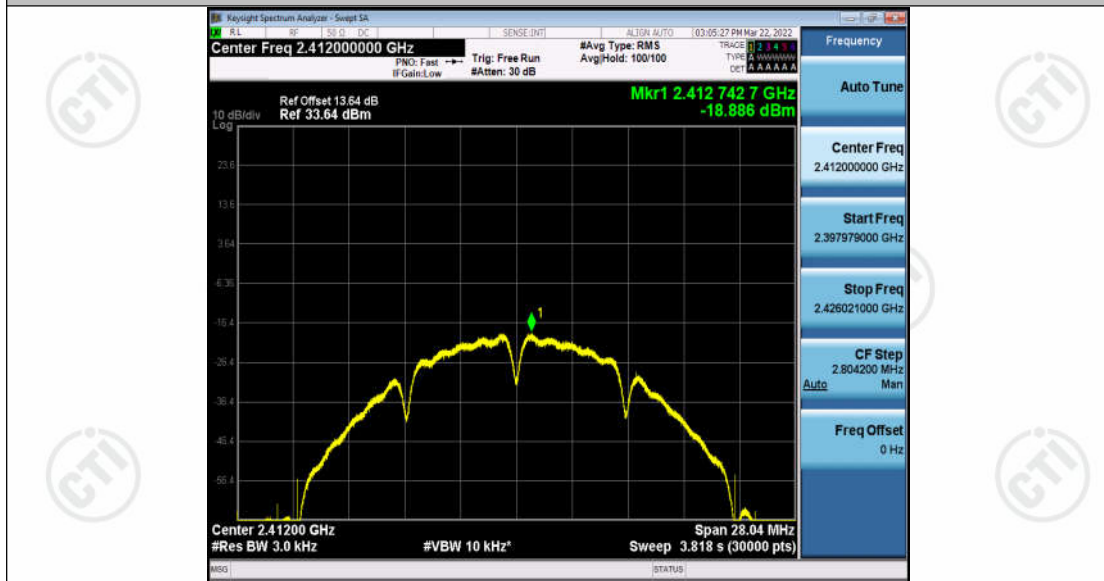
Test Mode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-17.82	<=8	PASS
	Ant2	2412	-18.89	<=8	PASS
	Ant1	2437	-17.58	<=8	PASS
	Ant2	2437	-18.93	<=8	PASS
	Ant1	2462	-17.95	<=8	PASS
	Ant2	2462	-18.41	<=8	PASS
11G	Ant1	2412	-21.89	<=8	PASS
	Ant2	2412	-21.58	<=8	PASS
	Ant1	2437	-21.54	<=8	PASS
	Ant2	2437	-21.98	<=8	PASS
	Ant1	2462	-21.97	<=8	PASS
	Ant2	2462	-21.26	<=8	PASS
11N20SISO	Ant1	2412	-21.89	<=8	PASS
	Ant2	2412	-21.54	<=8	PASS
	Ant1	2437	-21.81	<=8	PASS
	Ant2	2437	-21.76	<=8	PASS
	Ant1	2462	-21.99	<=8	PASS
	Ant2	2462	-21.27	<=8	PASS
11N40SISO	Ant1	2422	-23.07	<=8	PASS
	Ant2	2422	-22.94	<=8	PASS
	Ant1	2437	-23.36	<=8	PASS
	Ant2	2437	-23.81	<=8	PASS
	Ant1	2452	-23.39	<=8	PASS
	Ant2	2452	-24.01	<=8	PASS
11N20MIMO	Ant1	2412	-22.31	<=8	PASS
	Ant2	2412	-25.39	<=8	PASS
	total	2412	-20.57	<=8	PASS
	Ant1	2437	-20.28	<=8	PASS
	Ant2	2437	-27.27	<=8	PASS
	total	2437	-19.49	<=8	PASS
	Ant1	2462	-22.1	<=8	PASS
	Ant2	2462	-25.44	<=8	PASS
	total	2462	-20.45	<=8	PASS
11N40MIMO	Ant1	2422	-20.89	<=8	PASS

Ant2	2422	-27.79	<=8	PASS
total	2422	-20.08	<=8	PASS
Ant1	2437	-21.8	<=8	PASS
Ant2	2437	-28.35	<=8	PASS
total	2437	-20.93	<=8	PASS
Ant1	2452	-22.98	<=8	PASS
Ant2	2452	-28.55	<=8	PASS
total	2452	-21.92	<=8	PASS

Test Graphs



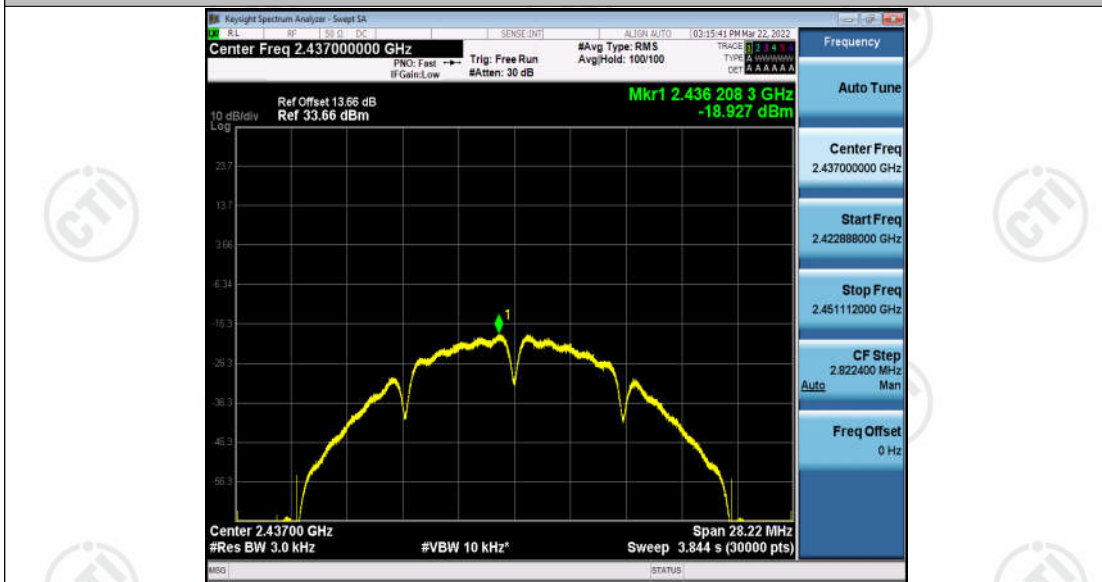
11B_Ant1_2412



11B_Ant2_2412



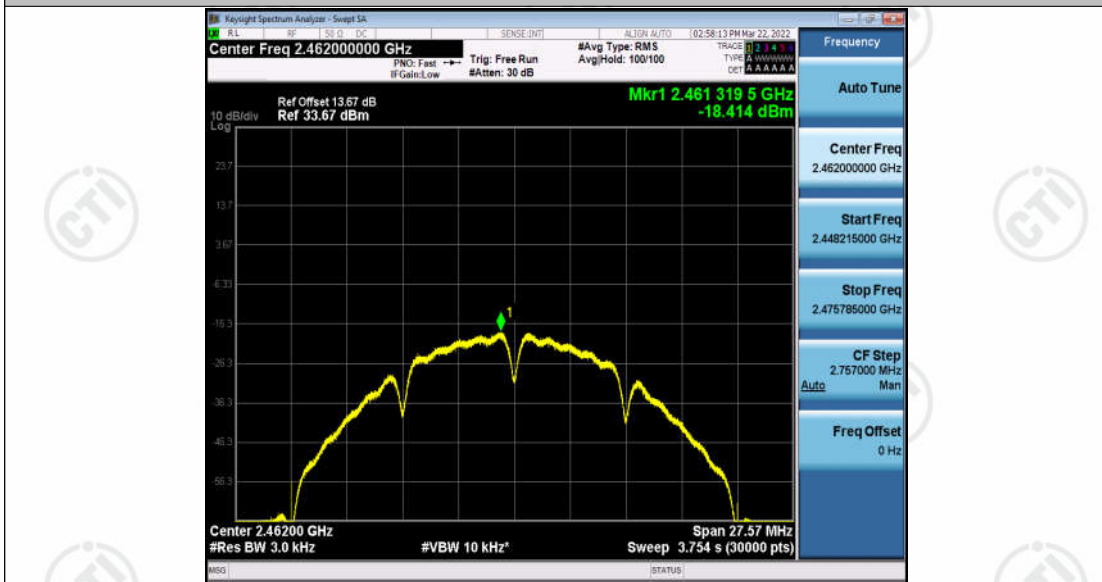
11B_Ant1_2437



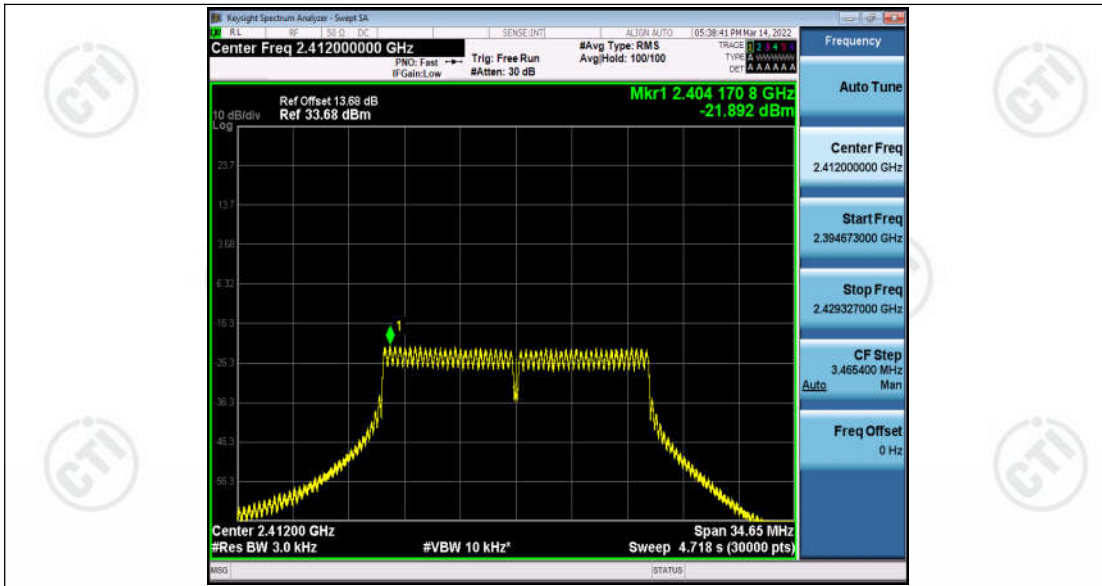
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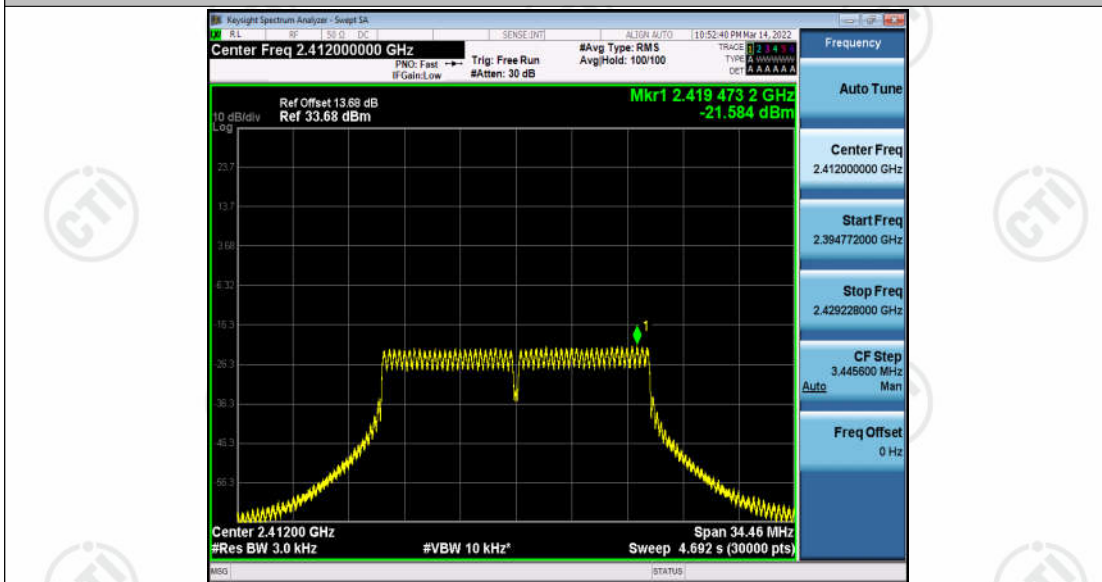
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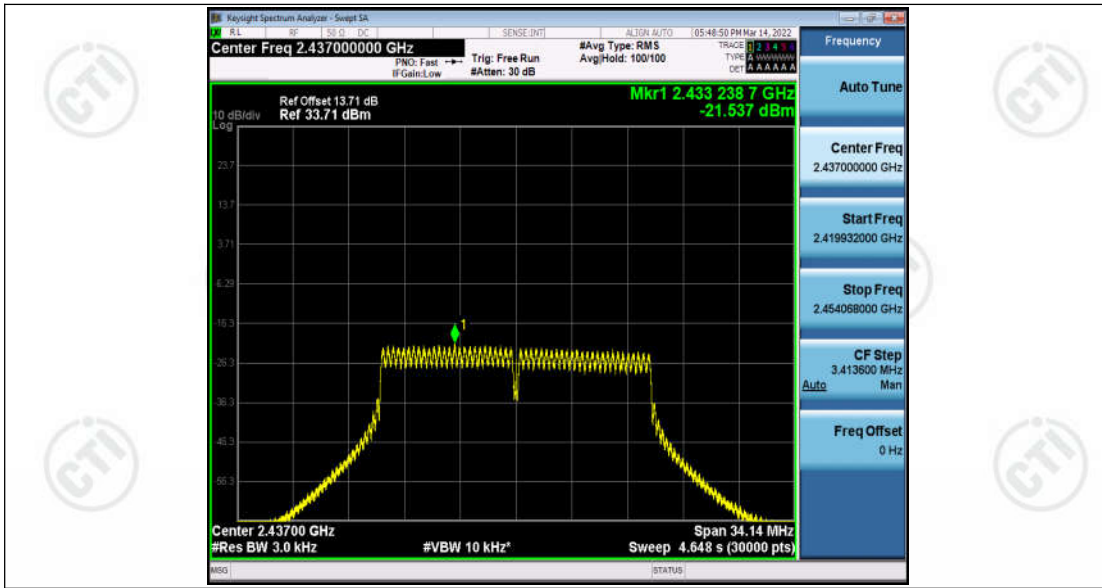
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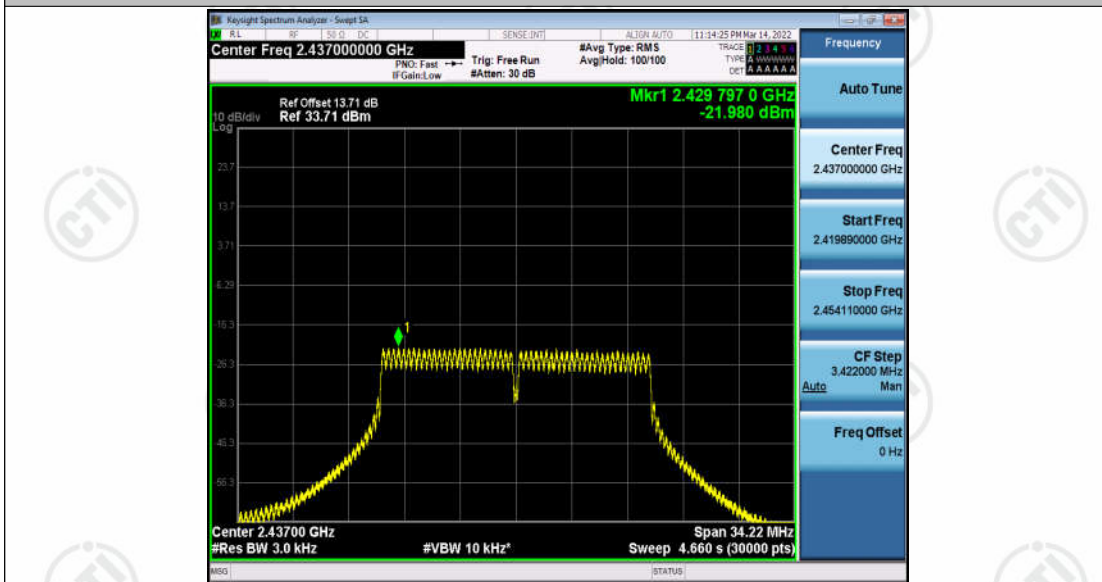
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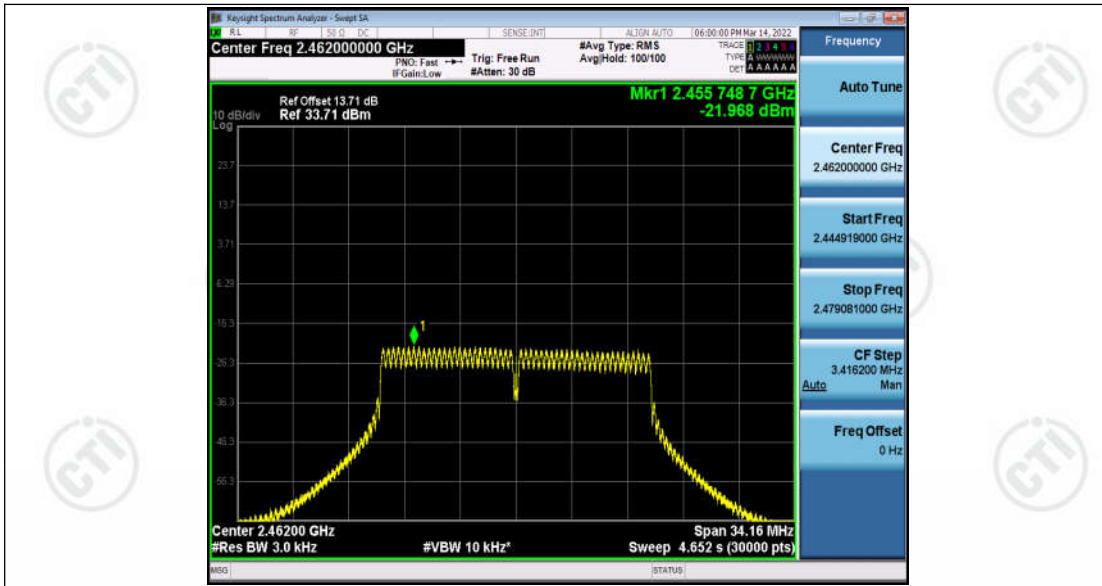
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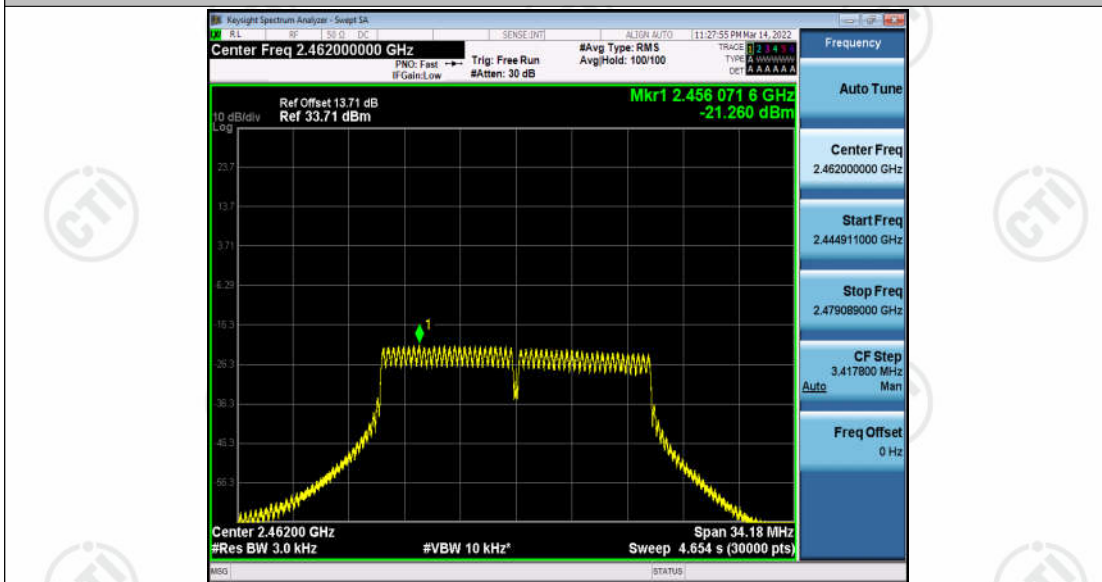
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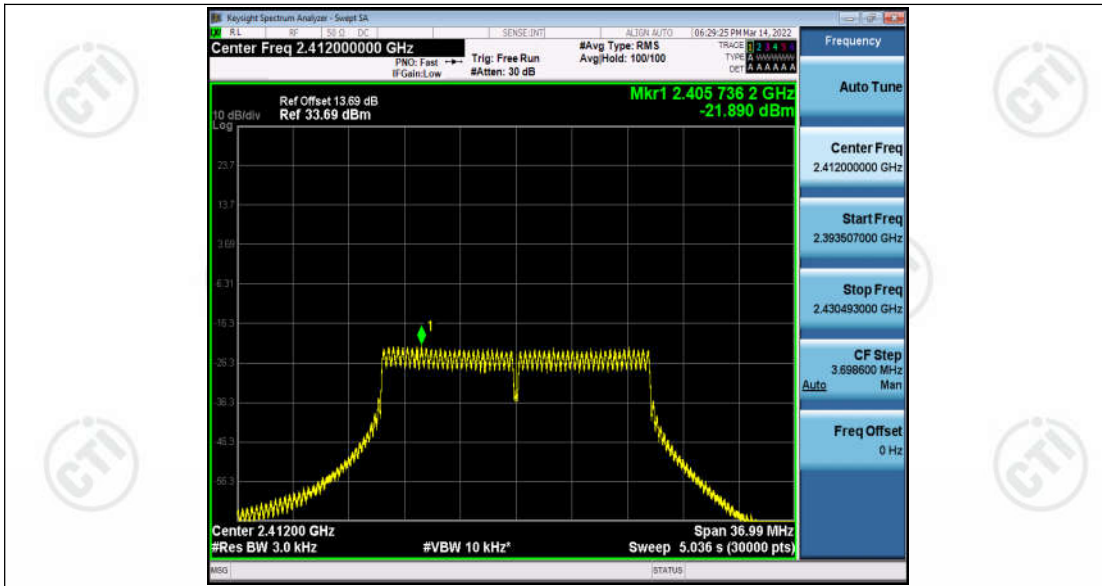
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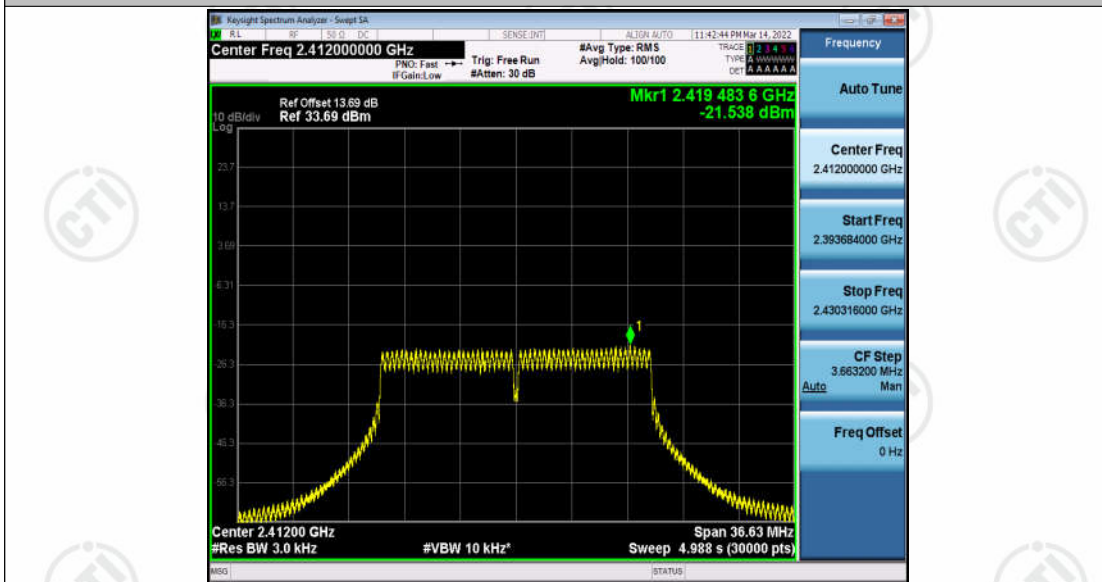
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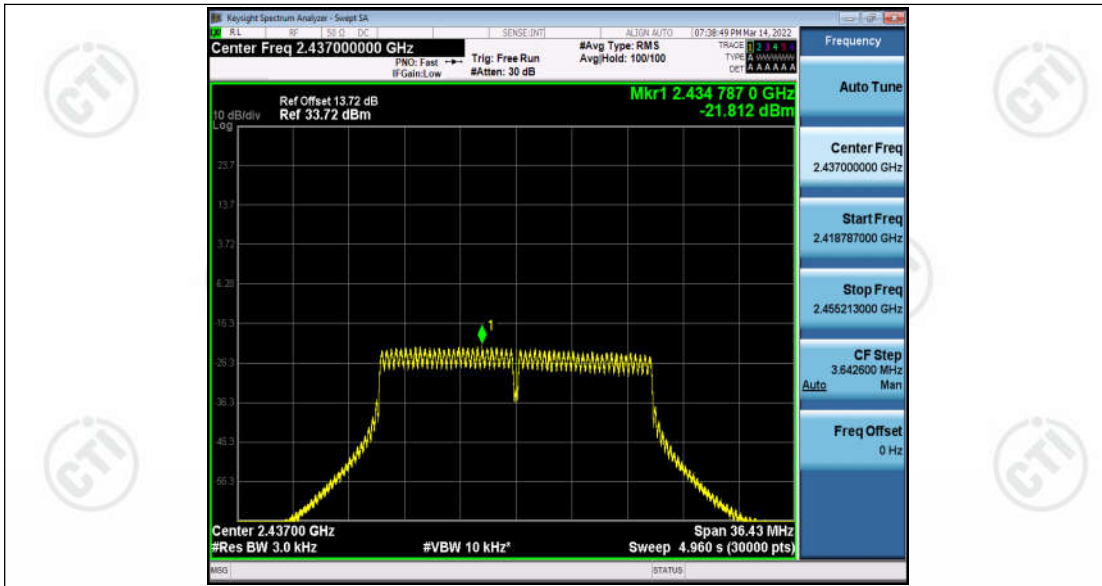
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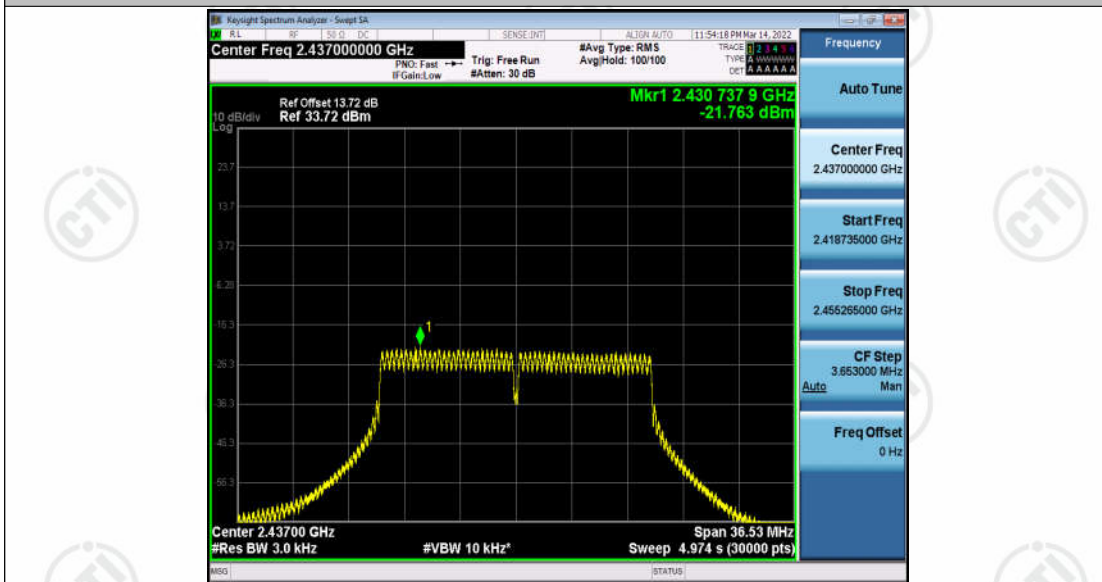
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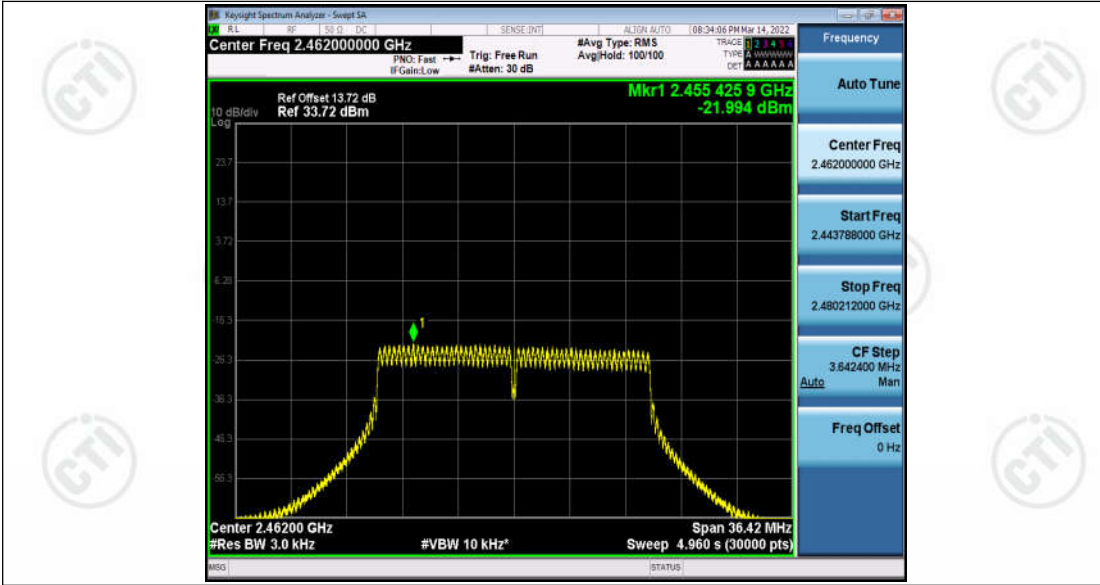
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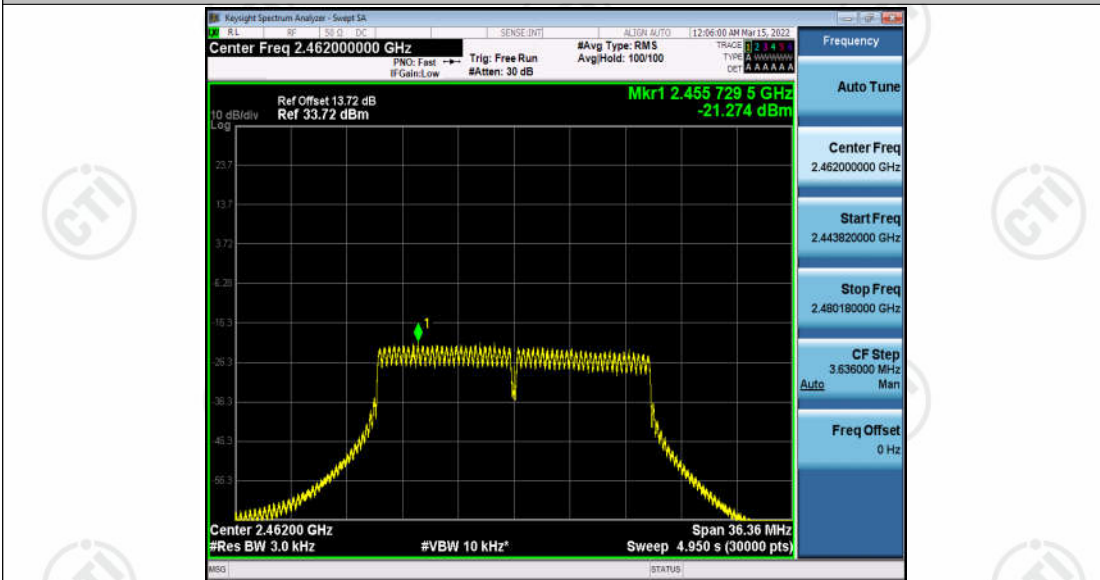
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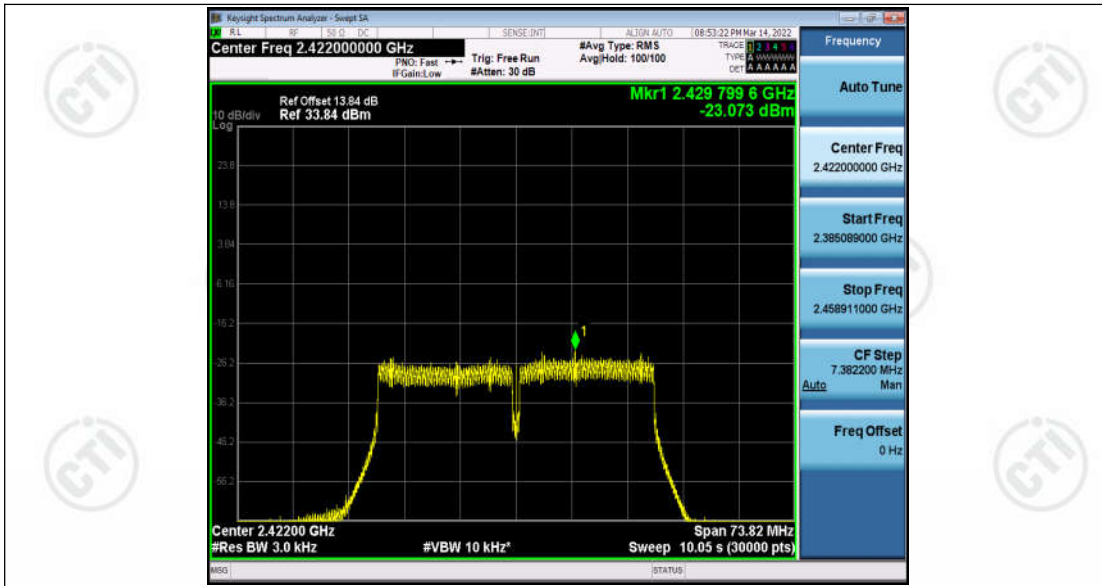
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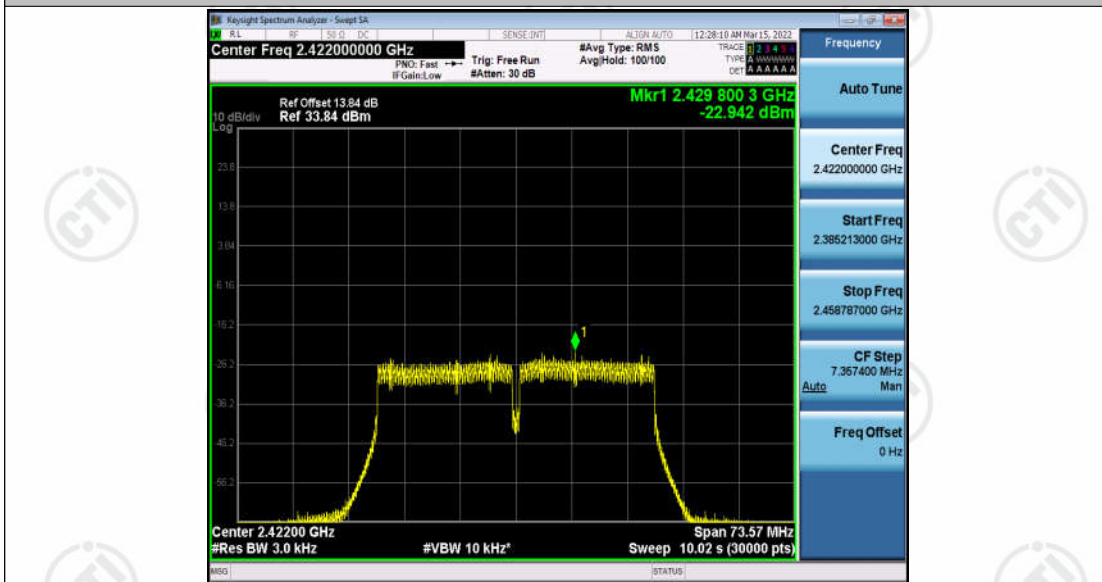
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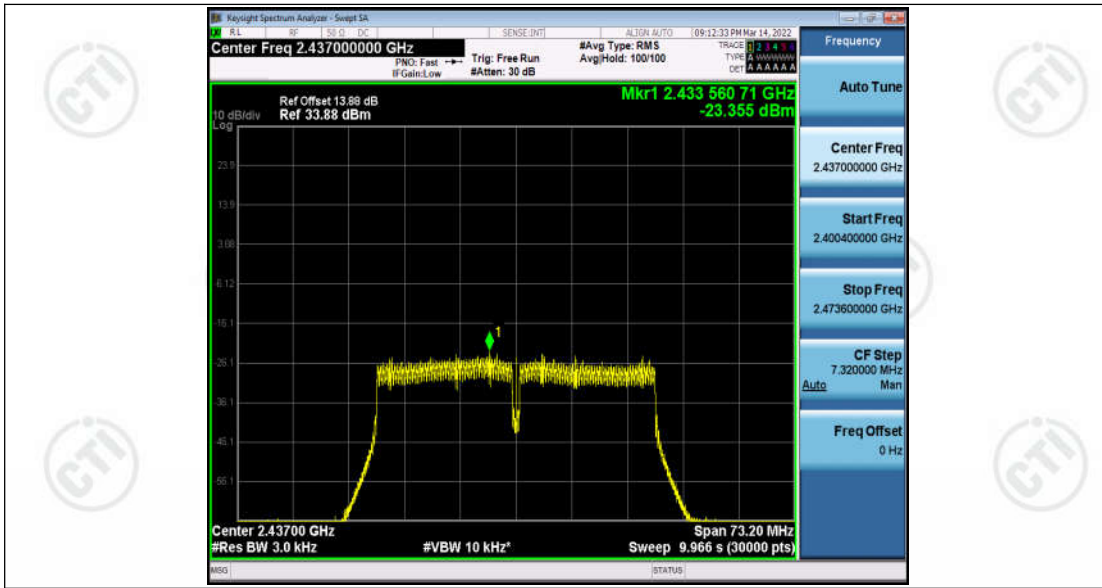
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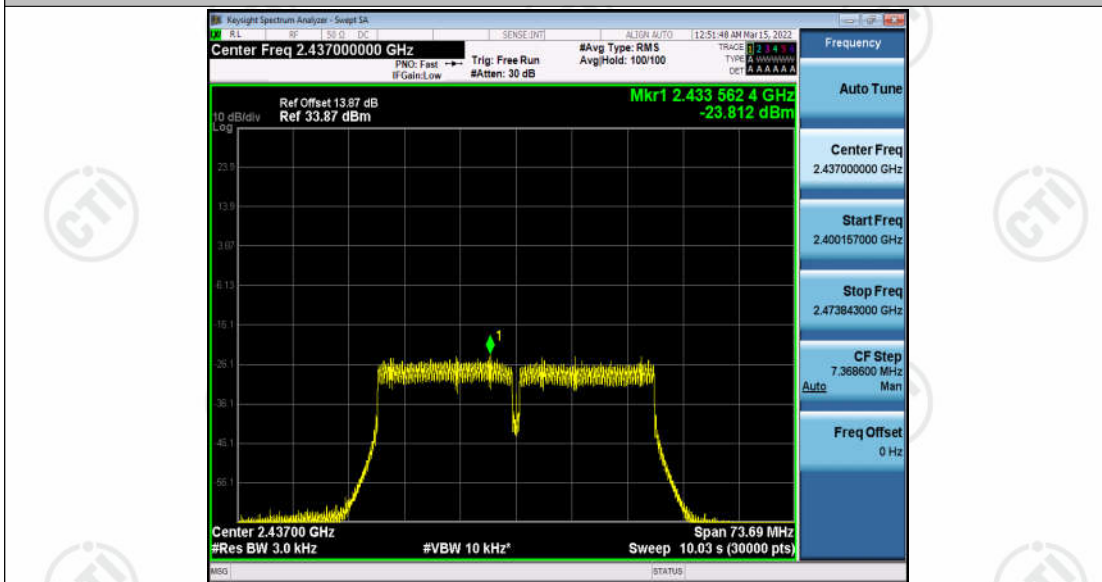
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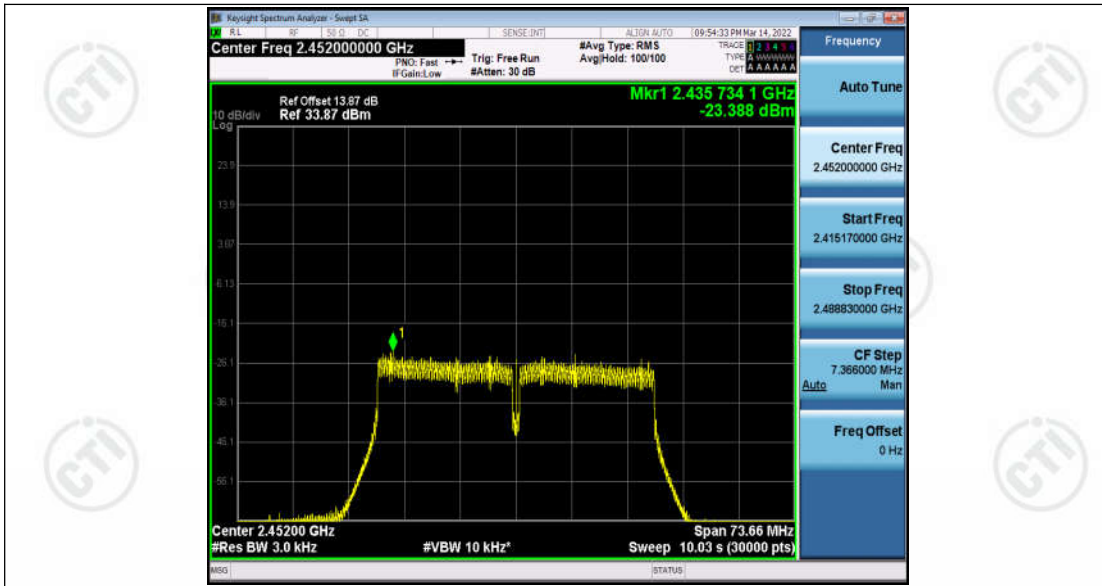
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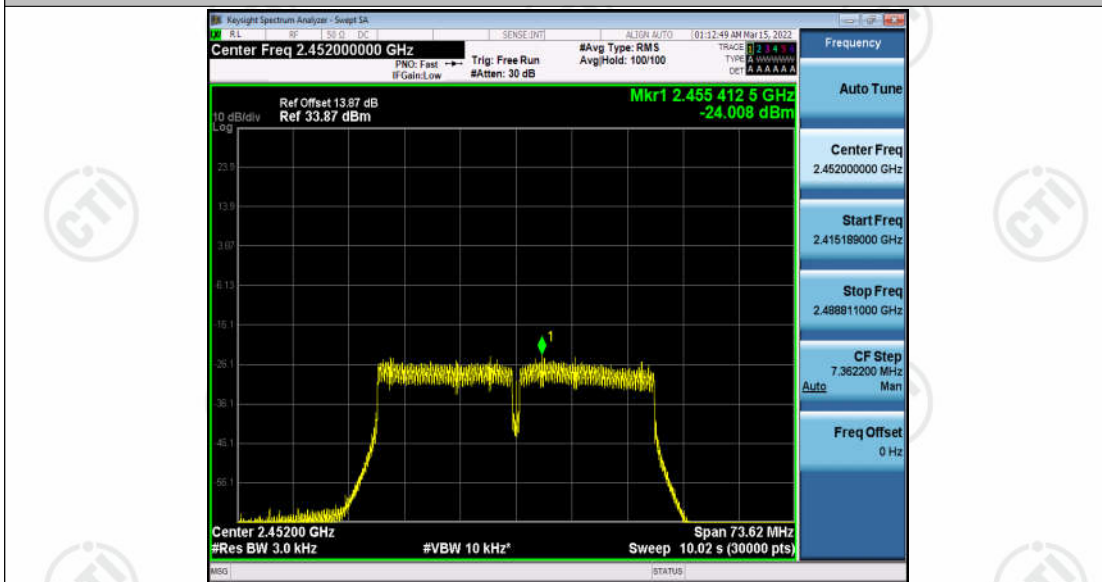
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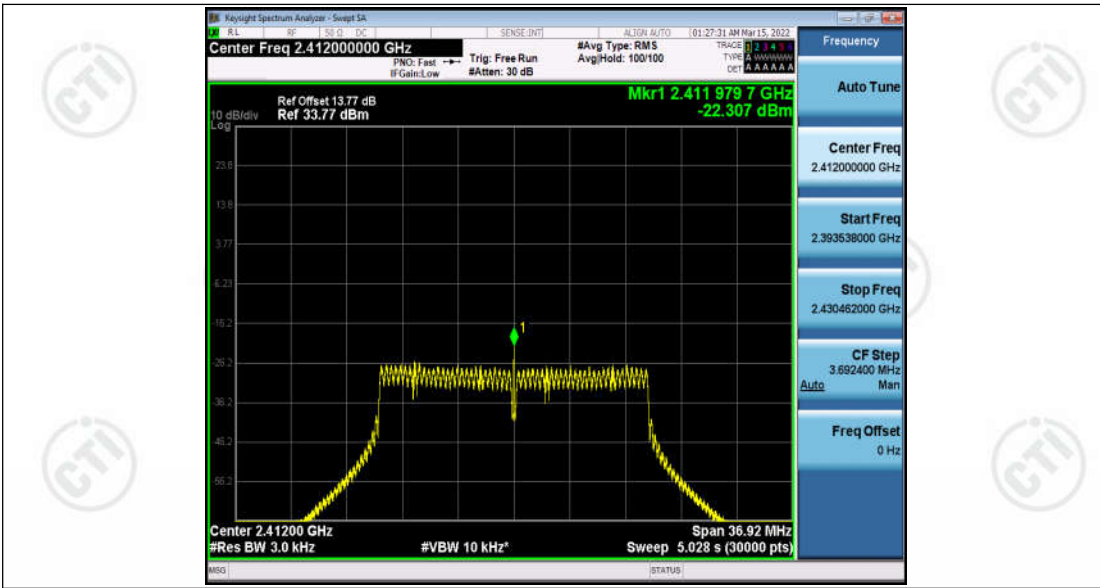
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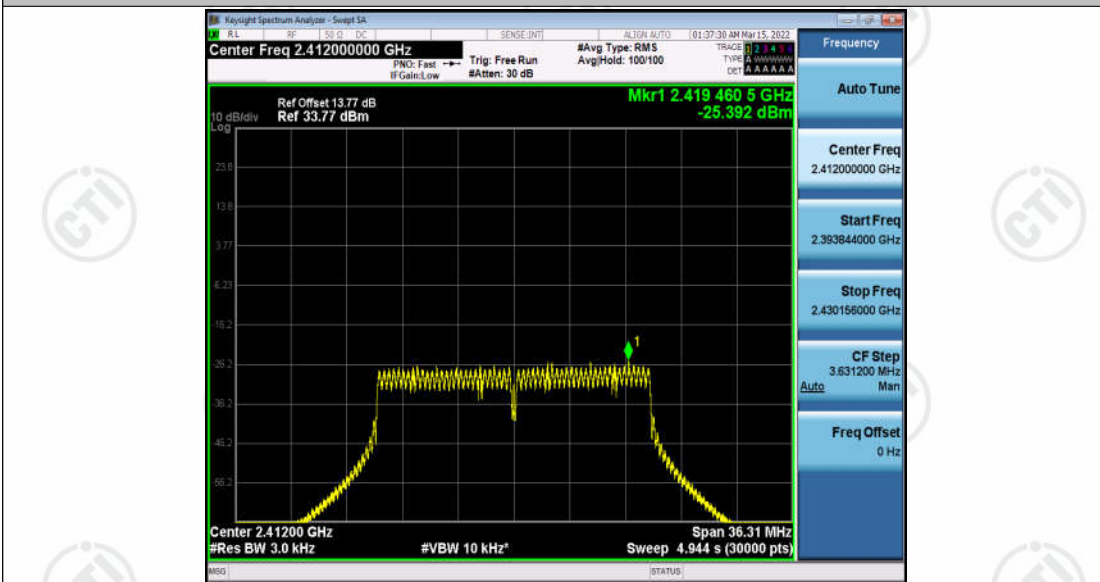
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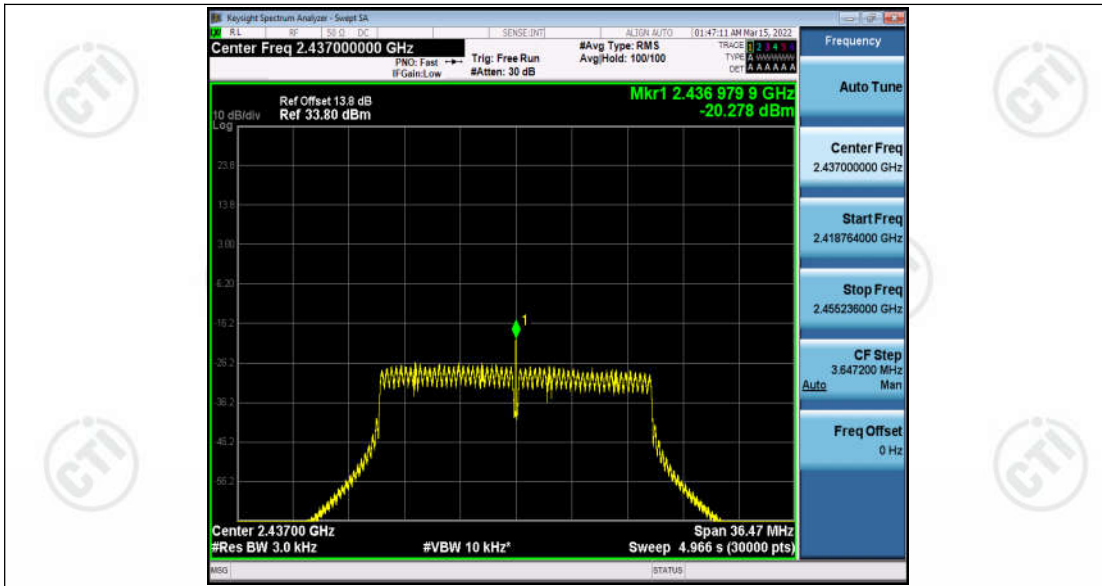
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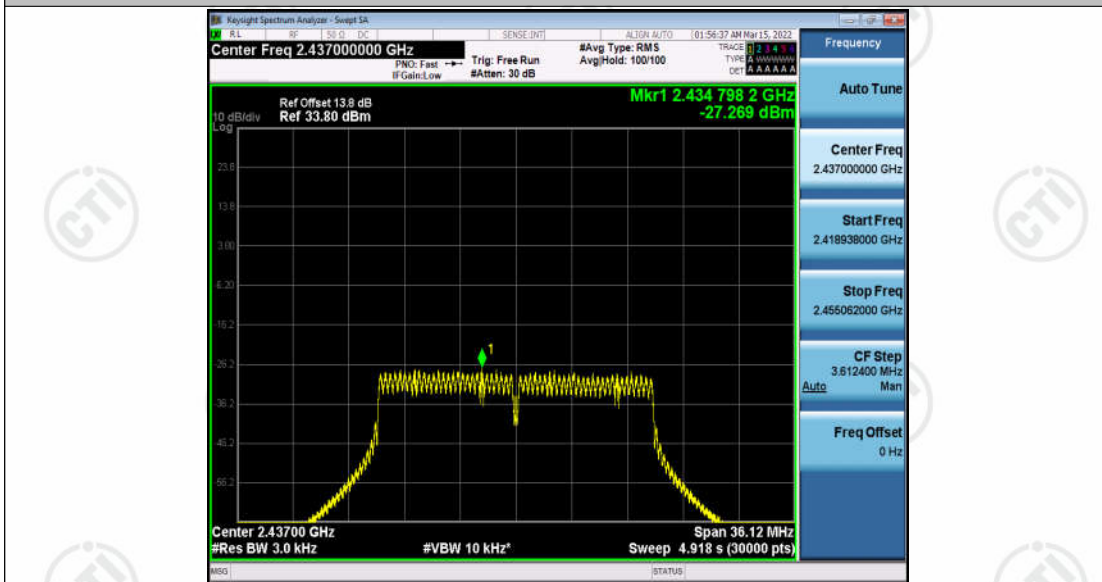
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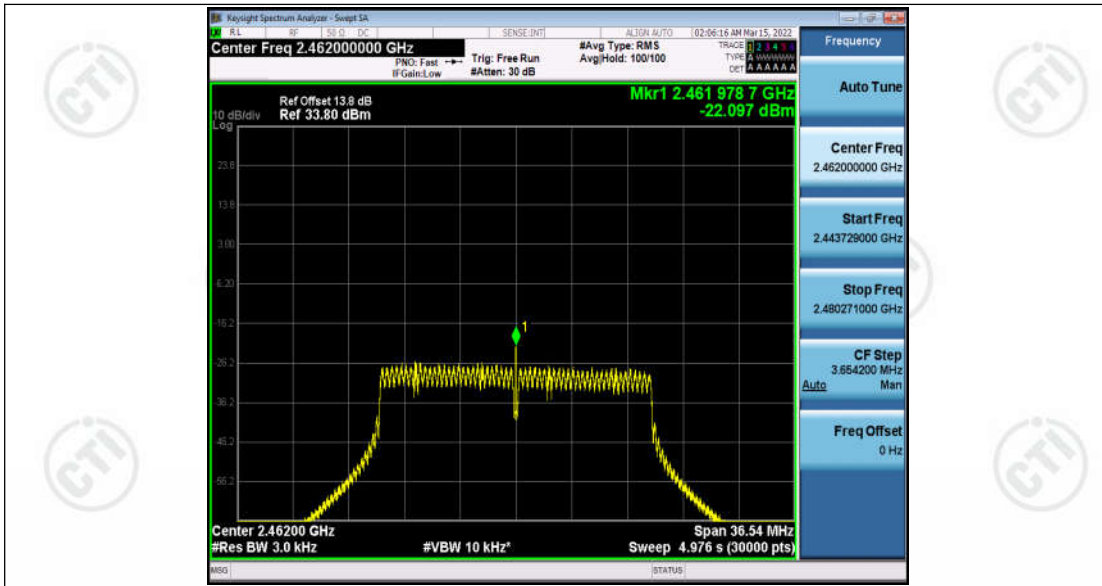
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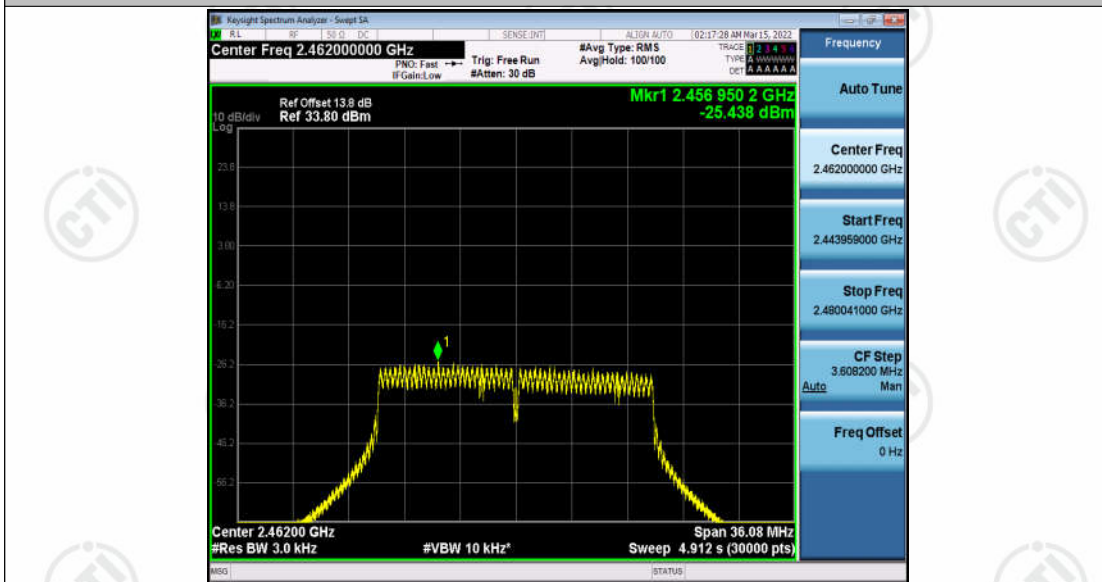
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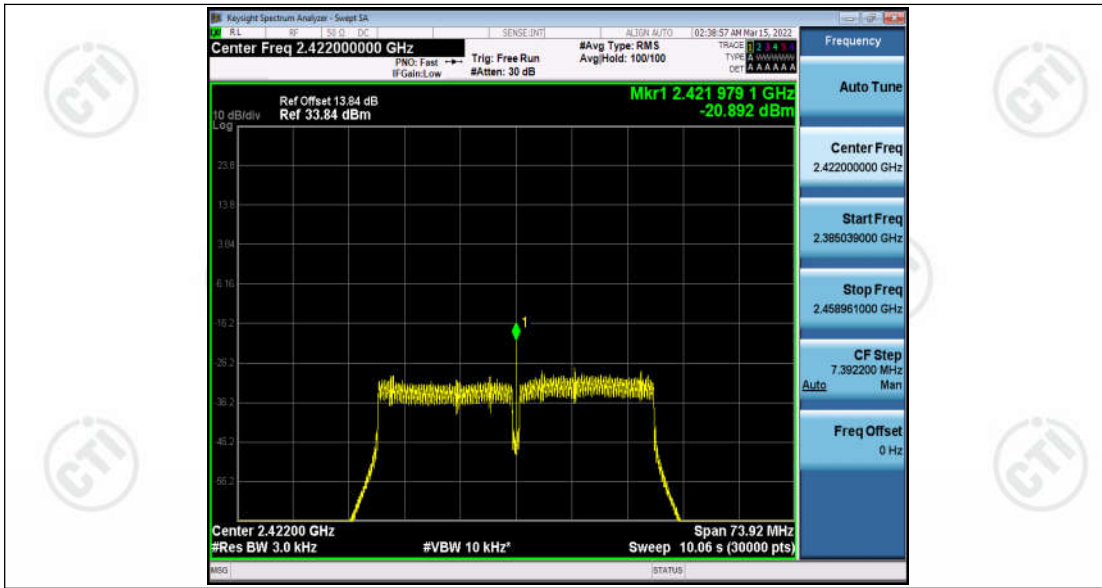
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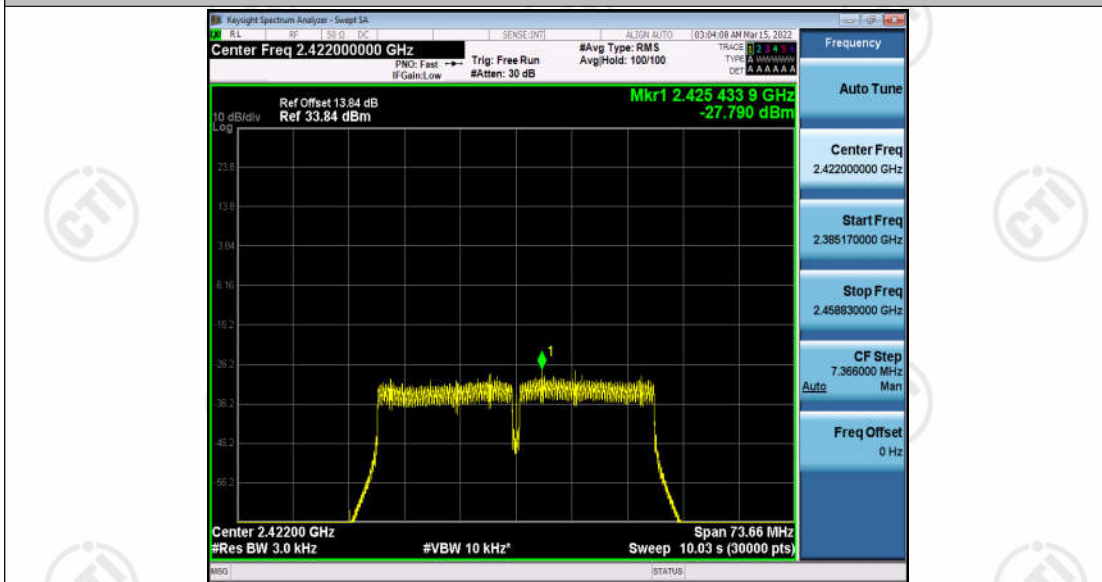
11N20MIMO_Ant1_2462



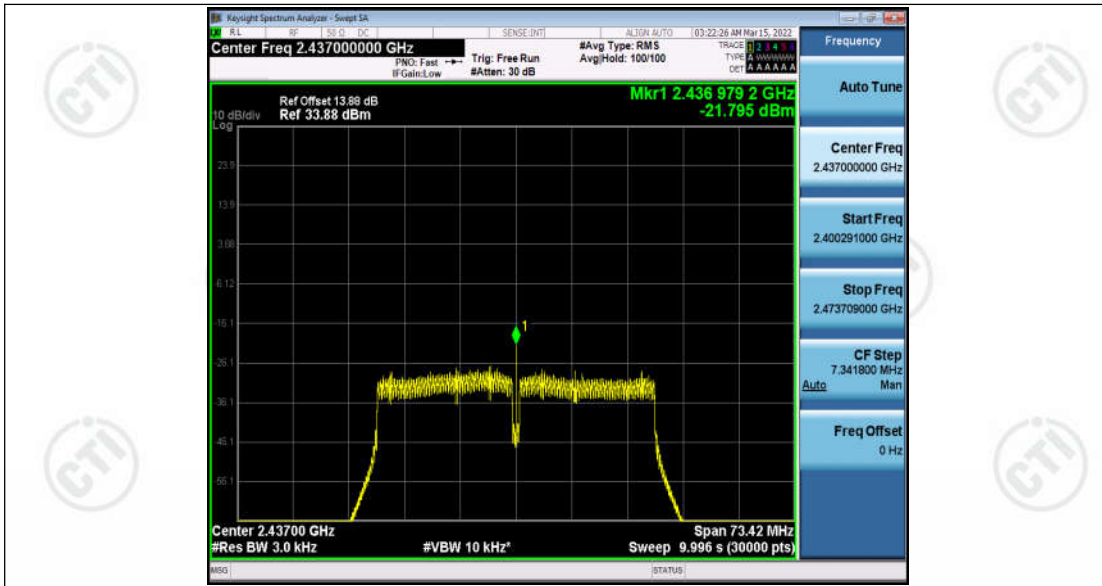
11N20MIMO_Ant2_2462



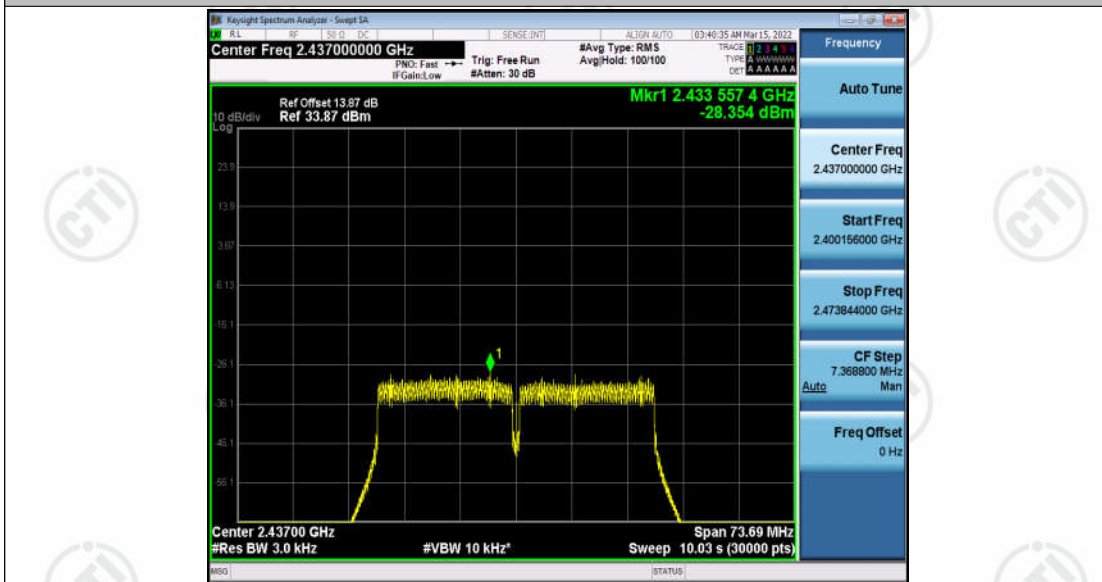
11N40MIMO_Ant1_2422



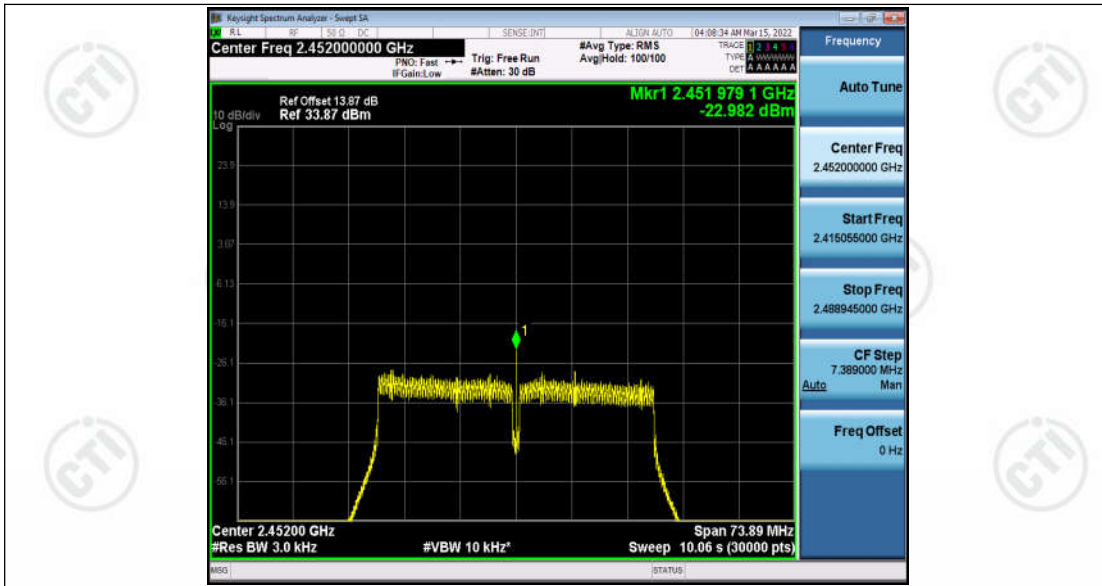
11N40MIMO_Ant2_2422



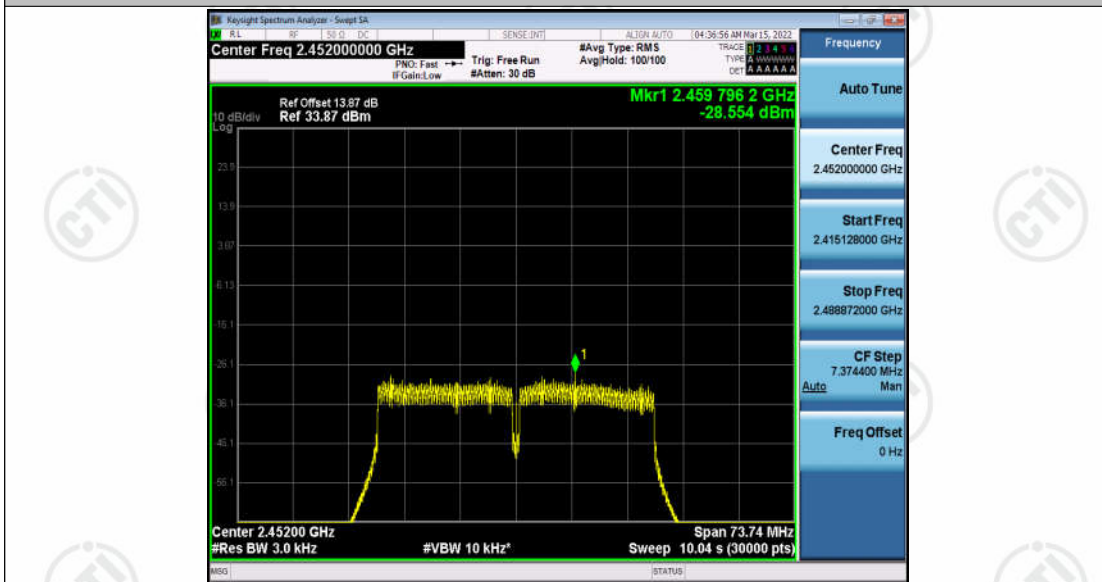
11N40MIMO_Ant1_2437



11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



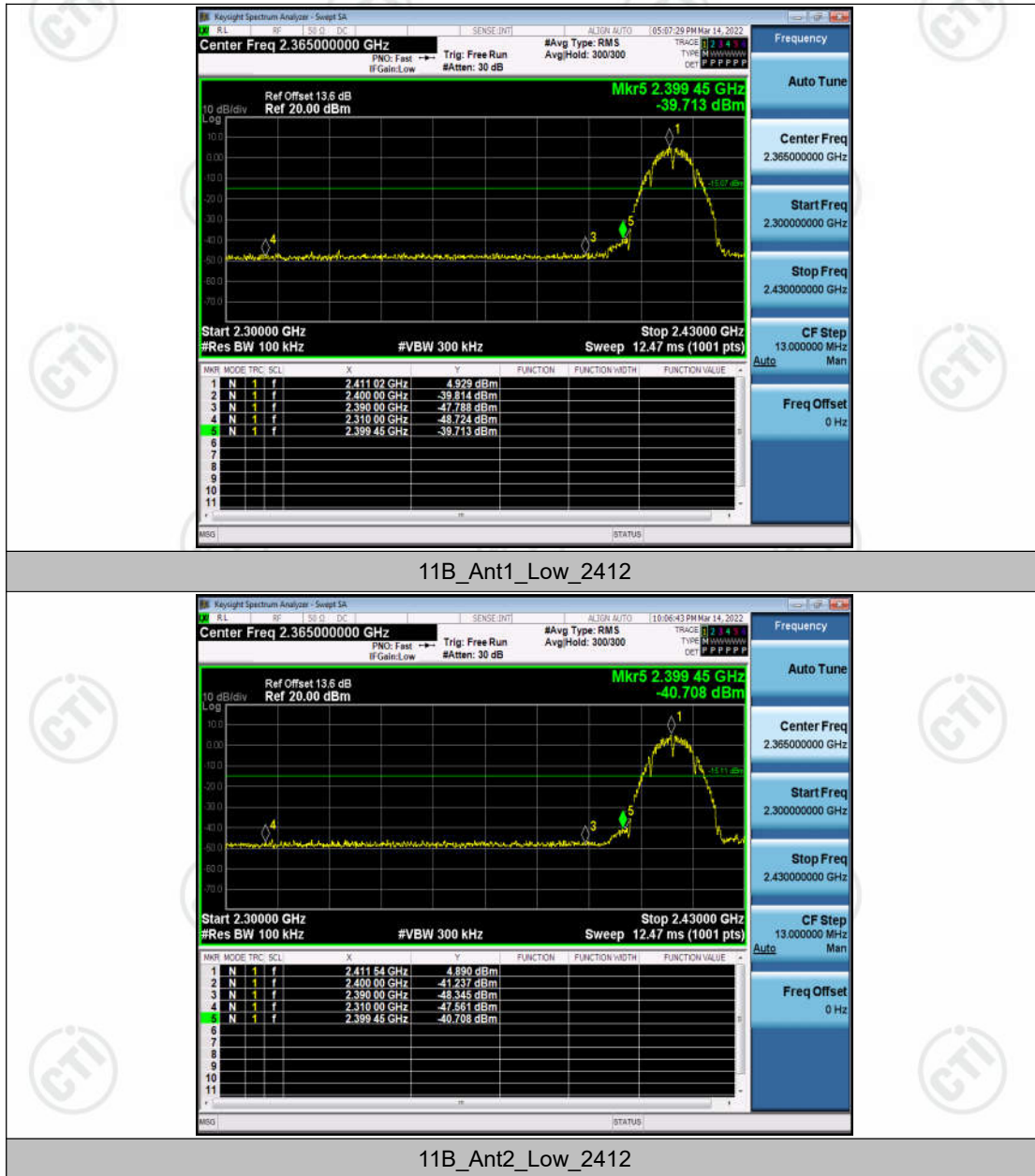
11N40MIMO_Ant2_2452

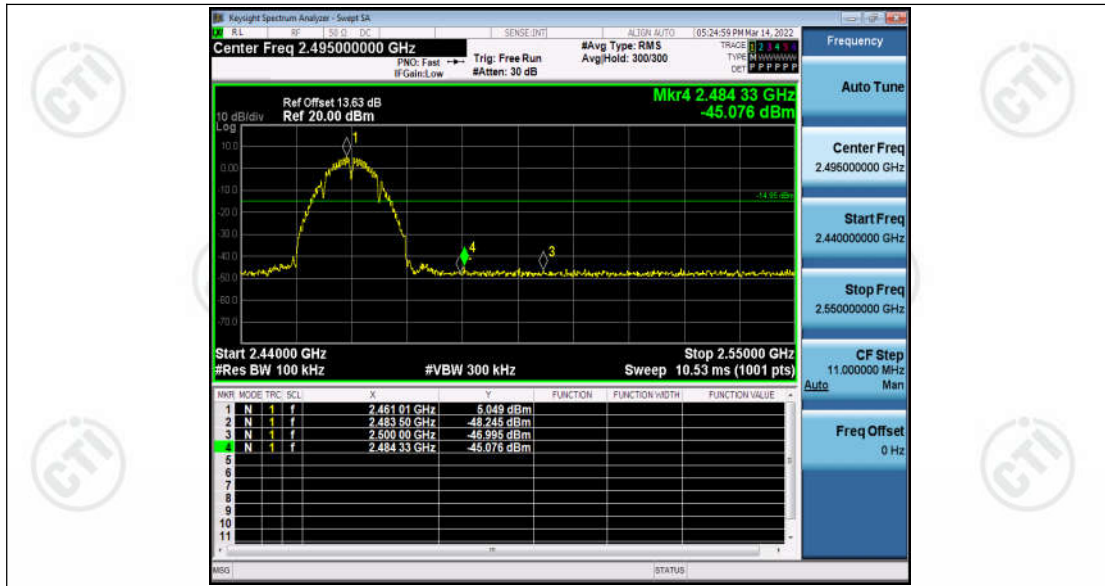
Appendix E: Band edge measurements

Test Result

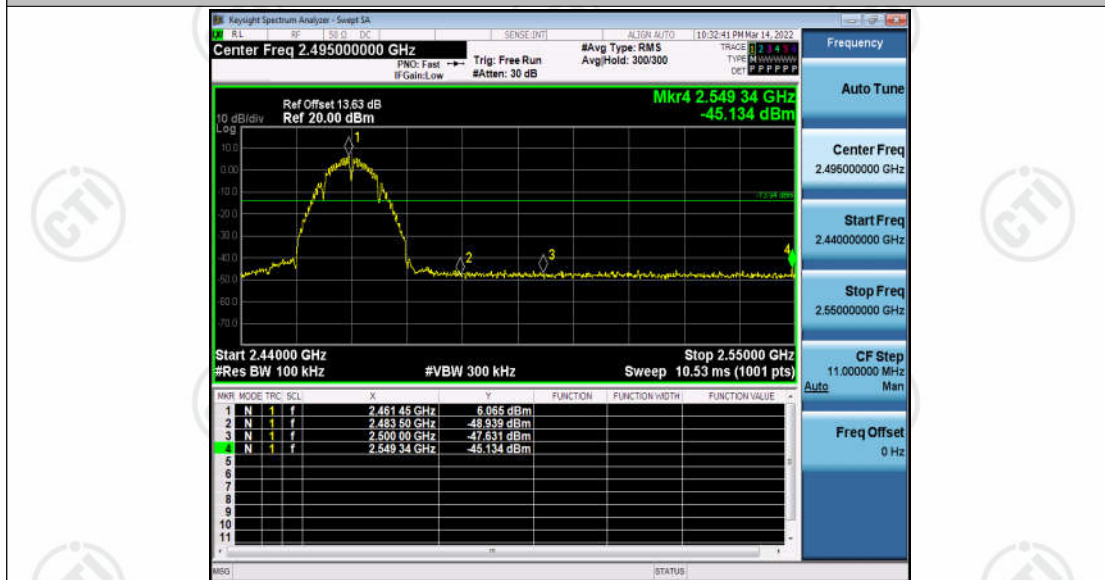
Test Mode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.93	-39.71	<=-15.07	PASS
	Ant2	Low	2412	4.89	-40.71	<=-15.11	PASS
	Ant1	High	2462	5.05	-45.08	<=-14.95	PASS
	Ant2	High	2462	6.07	-45.13	<=-13.94	PASS
11G	Ant1	Low	2412	0.67	-29.06	<=-19.33	PASS
	Ant2	Low	2412	1.21	-31.67	<=-18.8	PASS
	Ant1	High	2462	0.94	-44.98	<=-19.06	PASS
	Ant2	High	2462	1.64	-45.06	<=-18.36	PASS
11N20SISO	Ant1	Low	2412	1.29	-29.91	<=-18.72	PASS
	Ant2	Low	2412	1.53	-30.97	<=-18.47	PASS
	Ant1	High	2462	1.18	-45.17	<=-18.82	PASS
	Ant2	High	2462	1.42	-45.33	<=-18.58	PASS
11N40SISO	Ant1	Low	2422	-1.45	-36.86	<=-21.45	PASS
	Ant2	Low	2422	-1.20	-36.86	<=-21.2	PASS
	Ant1	High	2452	-1.83	-42.94	<=-21.83	PASS
	Ant2	High	2452	-1.74	-44.29	<=-21.74	PASS

Test Graphs





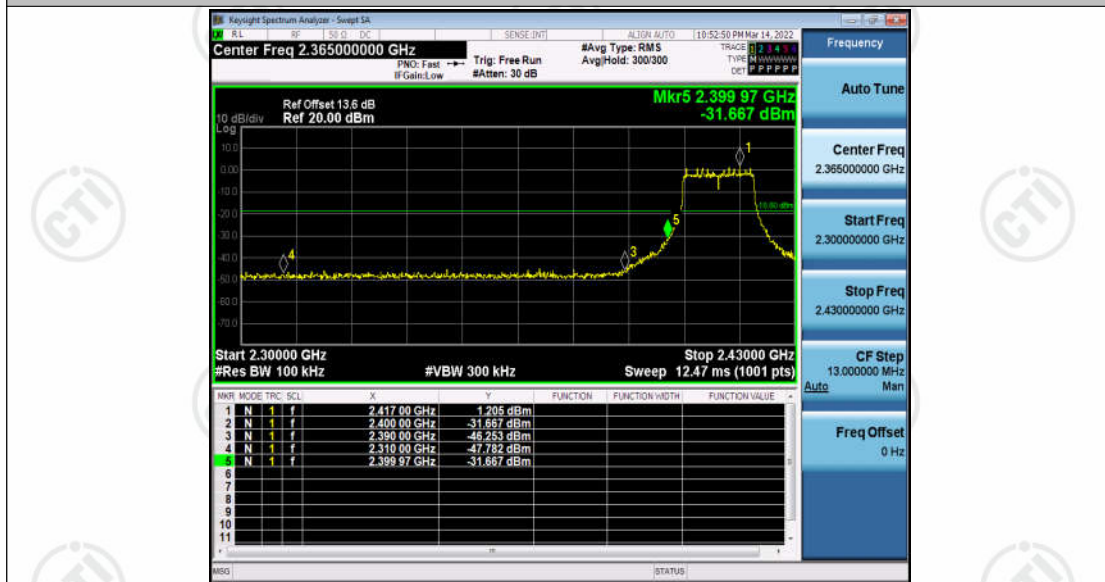
11B_Ant1_High_2462



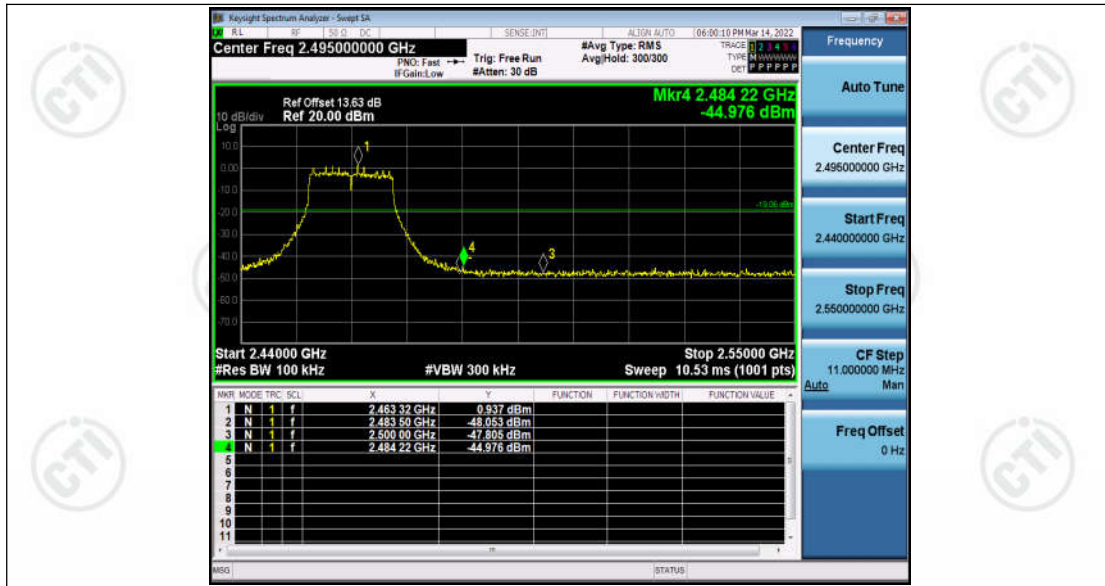
11B_Ant2_High_2462



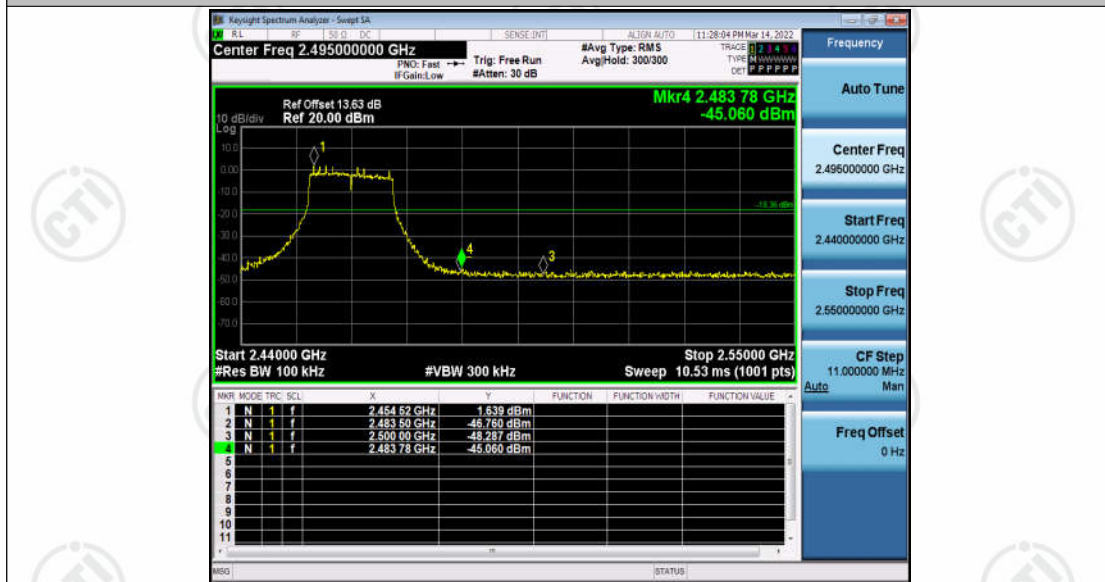
11G_Ant1_Low_2412



11G_Ant2_Low_2412



11G_Ant1_High_2462



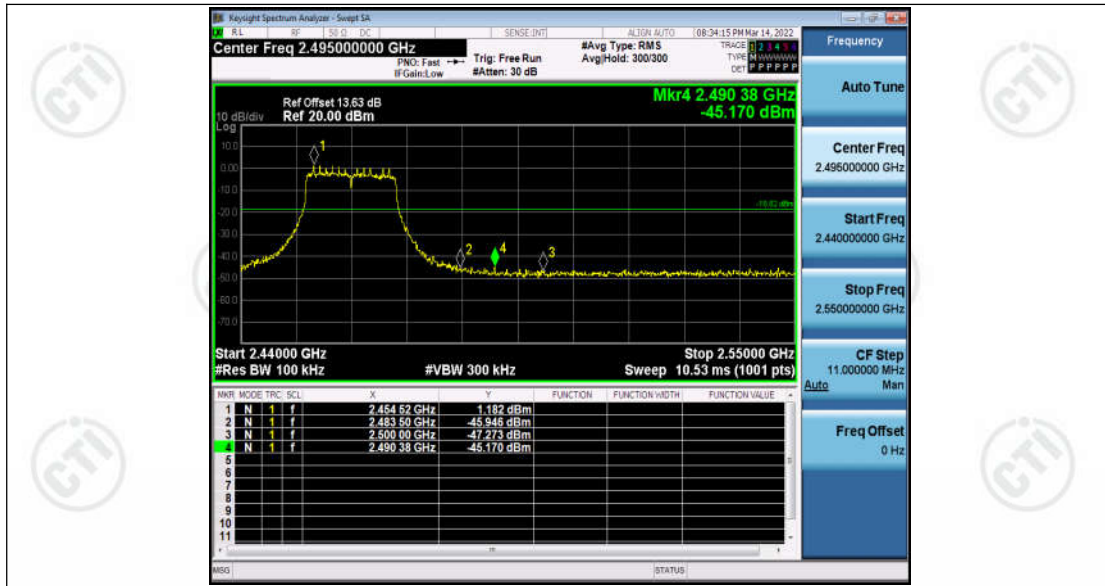
11G_Ant2_High_2462



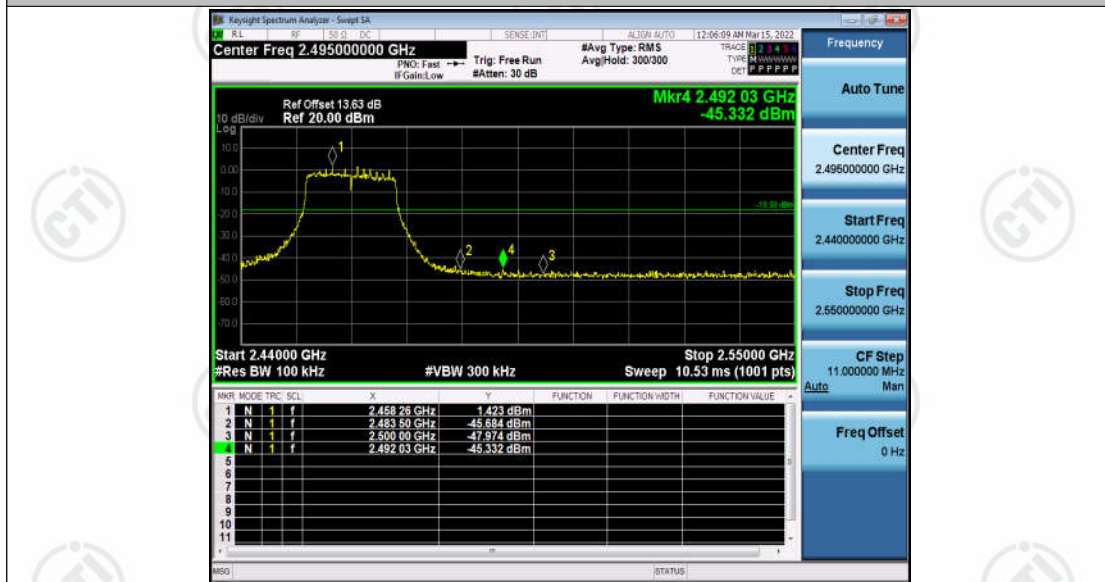
11N20SISO_Ant1_Low_2412



11N20SISO_Ant2_Low_2412



11N20SISO_Ant1_High_2462



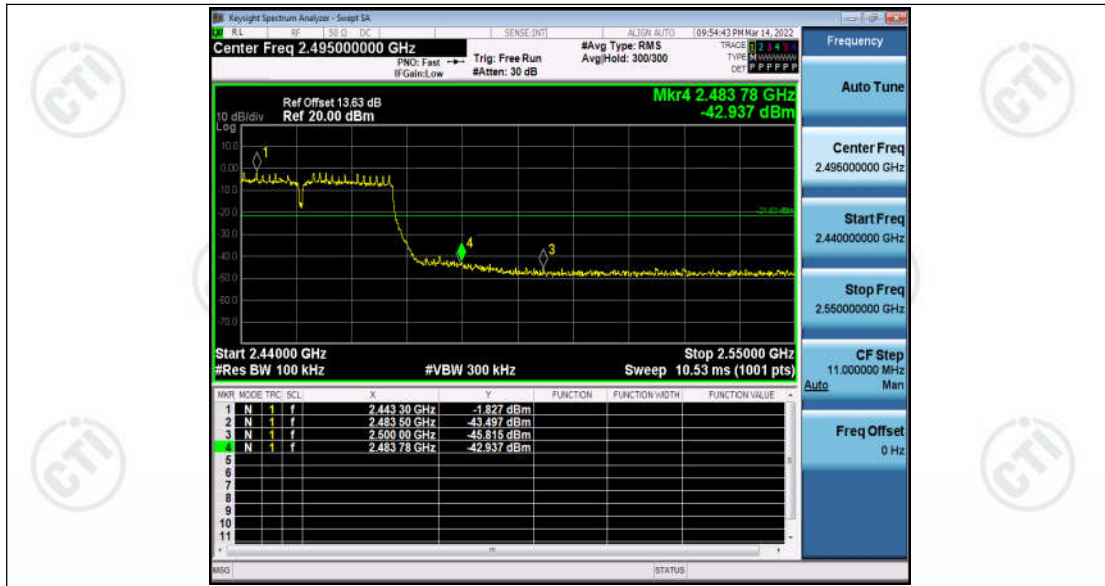
11N20SISO_Ant2_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant2_Low_2422



11N40SISO_Ant1_High_2452



11N40SISO_Ant2_High_2452

Appendix F: Conducted Spurious Emission

Test Result

Test Mode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.82	4.82	---	PASS
			30~1000	30~1000	-52.092	<=-15.183	PASS
			1000~26500	1000~26500	-49.689	<=-15.183	PASS
	Ant2	2412	Reference	4.66	4.66	---	PASS
			30~1000	30~1000	-49.748	<=-15.341	PASS
			1000~26500	1000~26500	-48.274	<=-15.341	PASS
	Ant1	2437	Reference	5.35	5.35	---	PASS
			30~1000	30~1000	-50.009	<=-14.655	PASS
			1000~26500	1000~26500	-49.458	<=-14.655	PASS
	Ant2	2437	Reference	4.25	4.25	---	PASS
			30~1000	30~1000	-51.573	<=-15.748	PASS
			1000~26500	1000~26500	-49.455	<=-15.748	PASS
	Ant1	2462	Reference	5.32	5.32	---	PASS
			30~1000	30~1000	-39.728	<=-14.678	PASS
			1000~26500	1000~26500	-49.139	<=-14.678	PASS
	Ant2	2462	Reference	5.51	5.51	---	PASS
			30~1000	30~1000	-51.223	<=-14.489	PASS
			1000~26500	1000~26500	-48.547	<=-14.489	PASS
11G	Ant1	2412	Reference	-0.43	-0.43	---	PASS
			30~1000	30~1000	-51.642	<=-20.428	PASS
			1000~26500	1000~26500	-40.173	<=-20.428	PASS
	Ant2	2412	Reference	0.37	0.37	---	PASS
			30~1000	30~1000	-41.453	<=-19.633	PASS
			1000~26500	1000~26500	-49.362	<=-19.633	PASS
	Ant1	2437	Reference	0.94	0.94	---	PASS
			30~1000	30~1000	-43.141	<=-19.065	PASS
			1000~26500	1000~26500	-49.283	<=-19.065	PASS
	Ant2	2437	Reference	1.22	1.22	---	PASS
			30~1000	30~1000	-51.088	<=-18.776	PASS
			1000~26500	1000~26500	-49.219	<=-18.776	PASS
	Ant1	2462	Reference	1.32	1.32	---	PASS
			30~1000	30~1000	-51.599	<=-18.679	PASS
			1000~26500	1000~26500	-49.202	<=-18.679	PASS
	Ant2	2462	Reference	1.63	1.63	---	PASS
			30~1000	30~1000	-35.726	<=-18.368	PASS