

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	10.120	2406.960	2417.080	0.5	PASS
		2437	10.160	2431.920	2442.080	0.5	PASS
		2462	10.200	2456.880	2467.080	0.5	PASS
11G	Ant1	2412	16.400	2403.800	2420.200	0.5	PASS
		2437	16.440	2428.760	2445.200	0.5	PASS
		2462	16.400	2453.800	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.640	2403.160	2420.800	0.5	PASS
		2437	17.400	2428.160	2445.560	0.5	PASS
		2462	17.360	2453.200	2470.560	0.5	PASS
11N40SISO	Ant1	2422	36.160	2403.760	2439.920	0.5	PASS
		2437	35.840	2419.000	2454.840	0.5	PASS
		2452	35.840	2434.000	2469.840	0.5	PASS

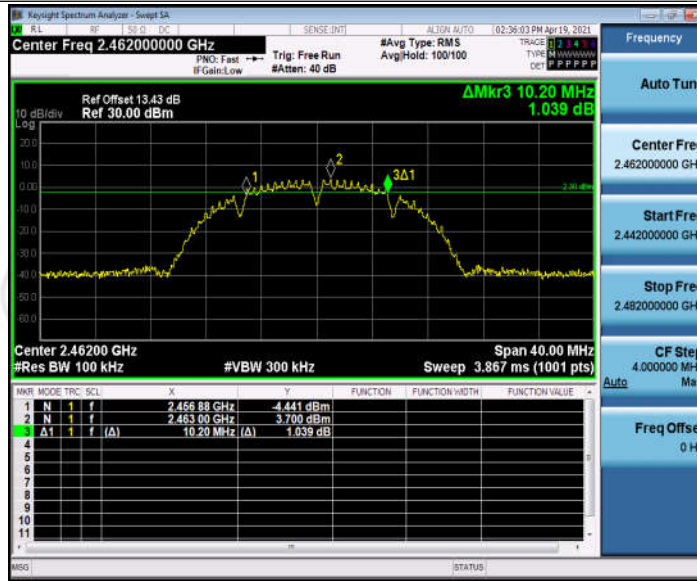
**Test Graphs**



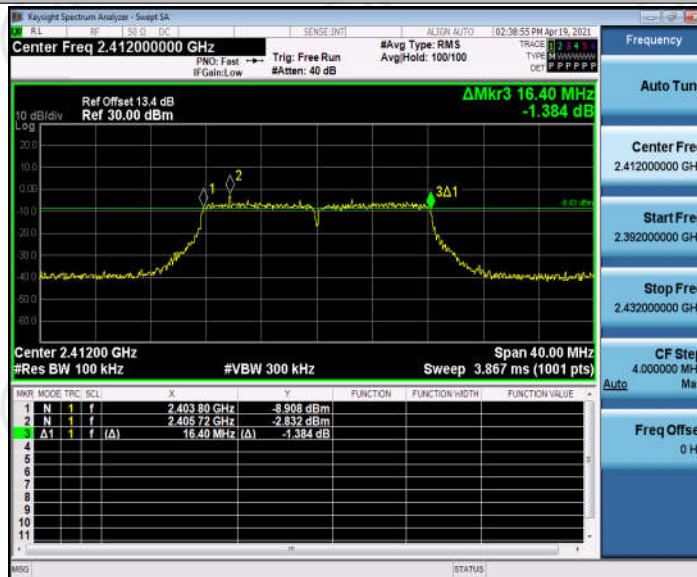
11B\_Ant1\_2412



11B\_Ant1\_2437

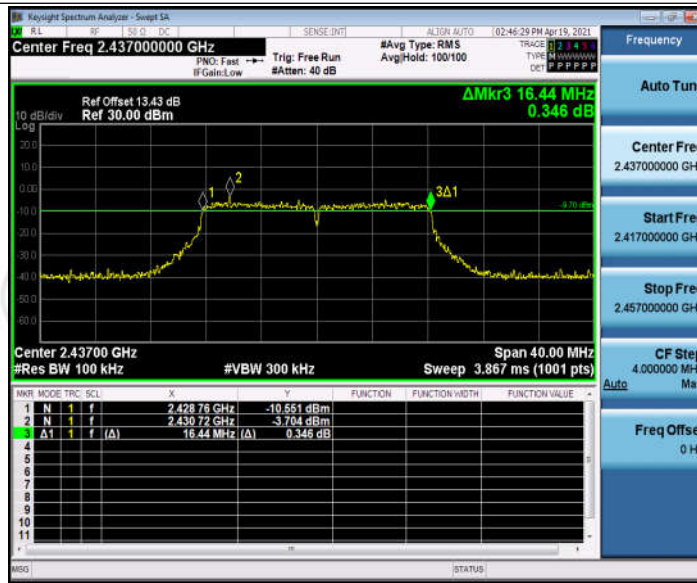


11B\_Ant1\_2462

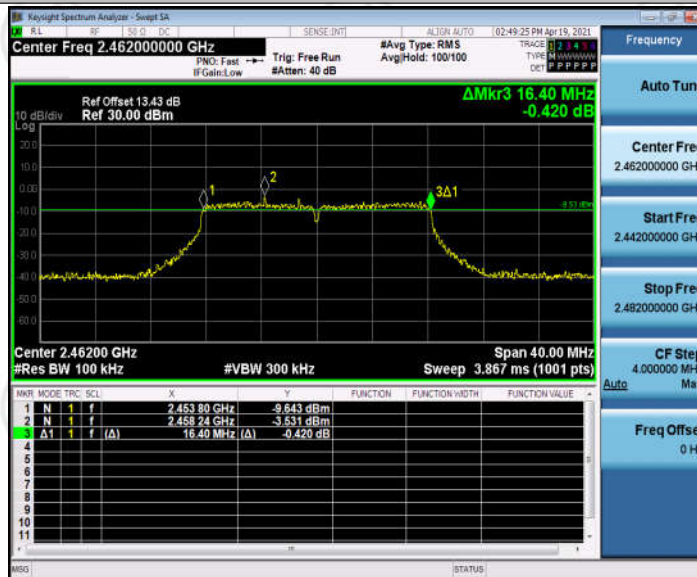


11G\_Ant1\_2412





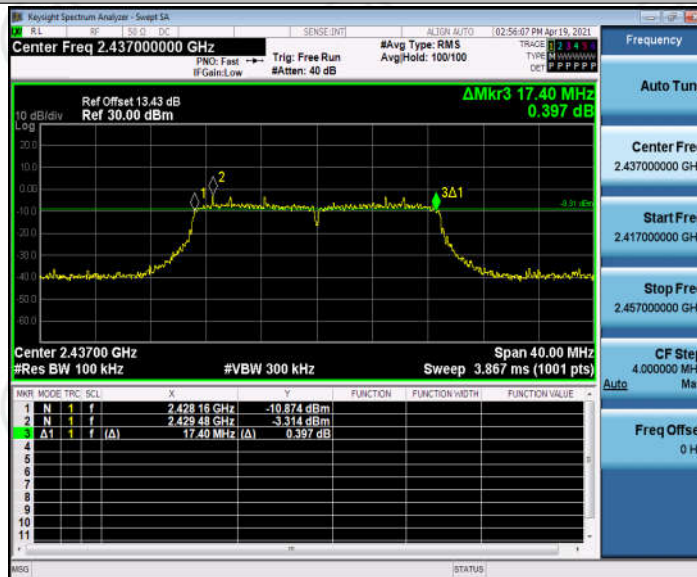
11G\_Ant1\_2437



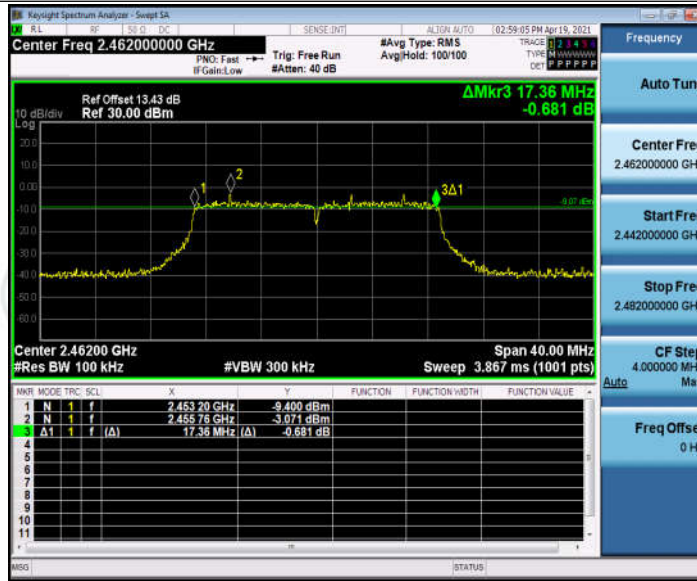
11G\_Ant1\_2462



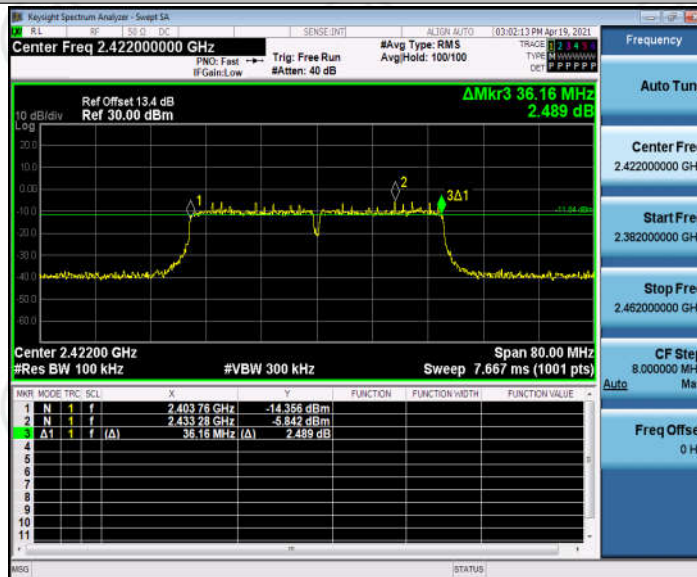
11N20SISO\_Ant1\_2412



11N20SISO\_Ant1\_2437

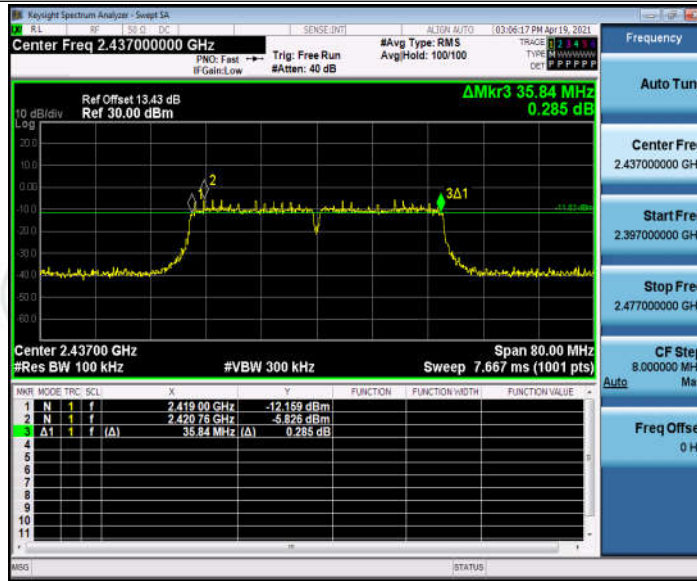


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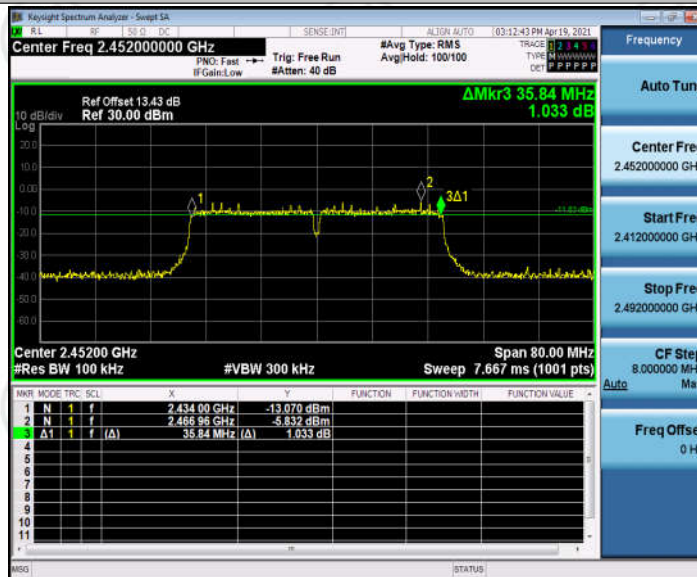


11N40SISO\_Ant1\_2422





11N40SISO\_Ant1\_2437



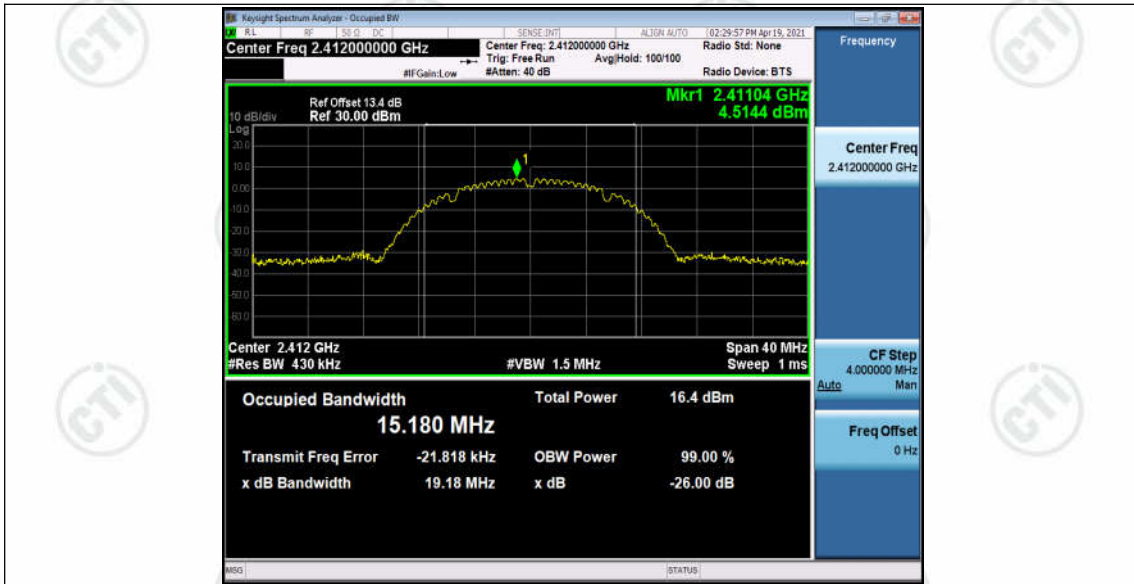
11N40SISO\_Ant1\_2452

## Appendix B: Occupied Channel Bandwidth

### Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	15.180	2404.388	2419.568	---	PASS
		2437	15.182	2429.381	2444.563	---	PASS
		2462	15.186	2454.389	2469.575	---	PASS
11G	Ant1	2412	17.127	2403.431	2420.558	---	PASS
		2437	17.141	2428.412	2445.553	---	PASS
		2462	17.137	2453.423	2470.560	---	PASS
11N20SISO	Ant1	2412	18.124	2402.948	2421.072	---	PASS
		2437	18.087	2427.938	2446.025	---	PASS
		2462	18.078	2452.931	2471.009	---	PASS
11N40SISO	Ant1	2422	36.506	2403.706	2440.212	---	PASS
		2437	36.733	2418.595	2455.328	---	PASS
		2452	36.550	2433.779	2470.329	---	PASS

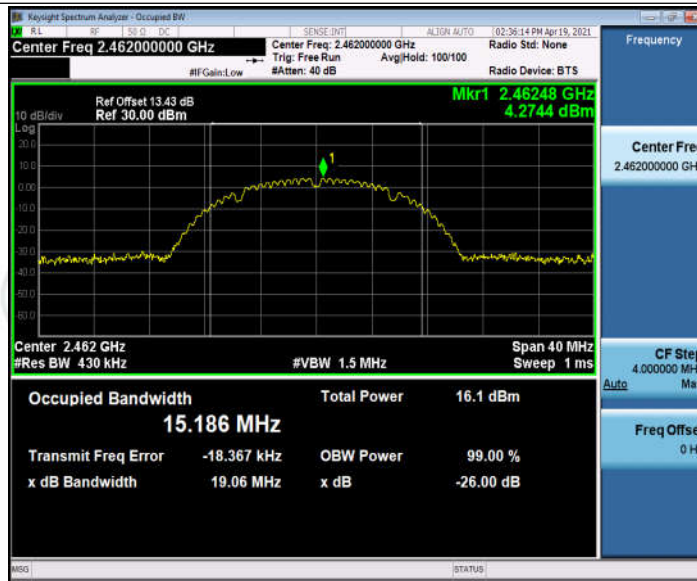
**Test Graphs**



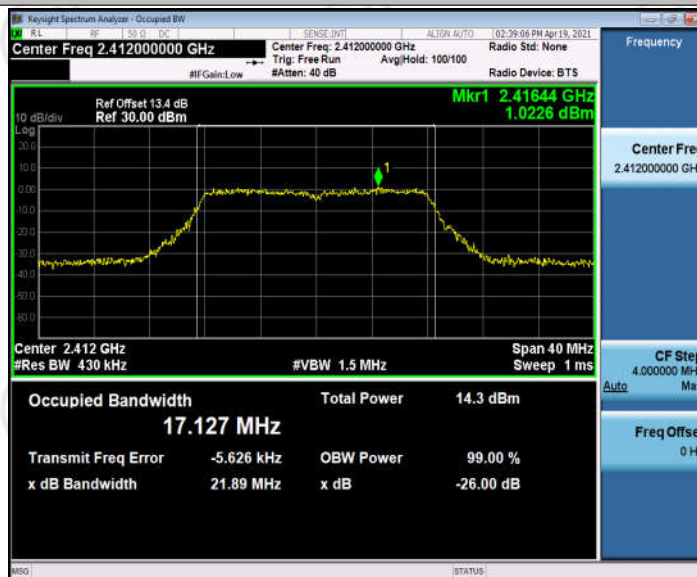
11B\_Ant1\_2412



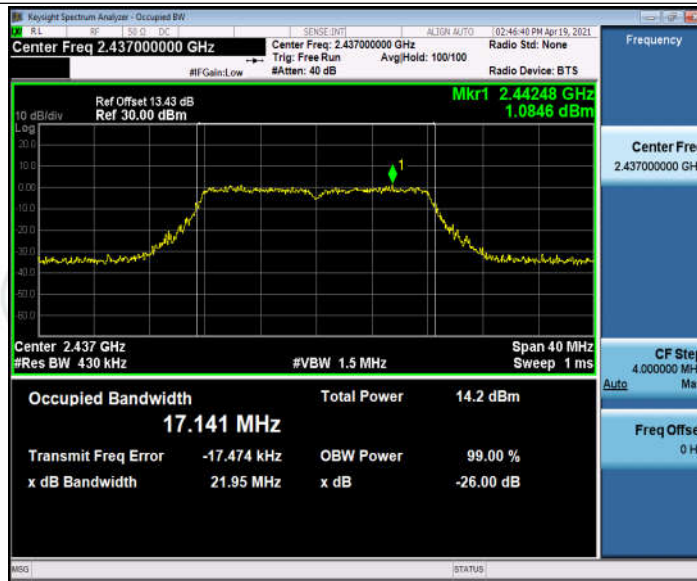
11B\_Ant1\_2437



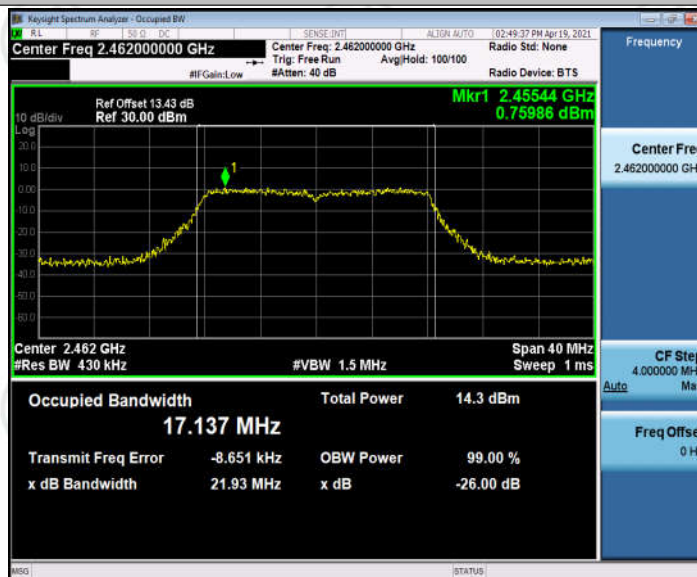
11B\_Ant1\_2462



11G\_Ant1\_2412



11G\_Ant1\_2437



11G\_Ant1\_2462

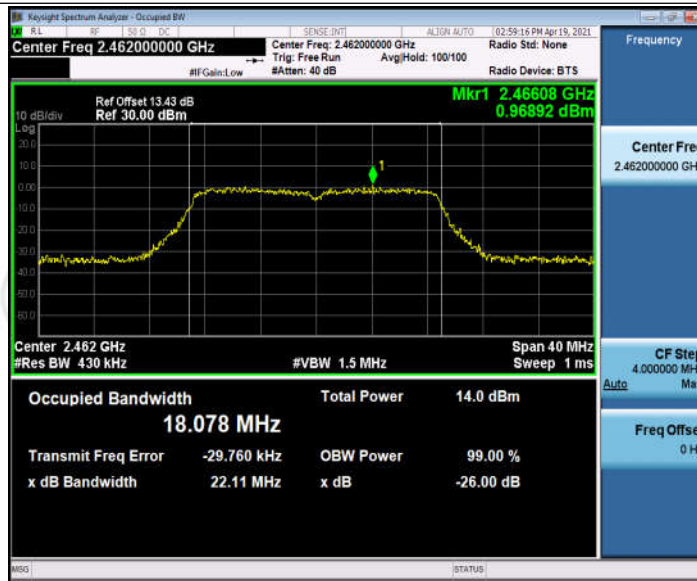




11N20SISO\_Ant1\_2412



11N20SISO\_Ant1\_2437



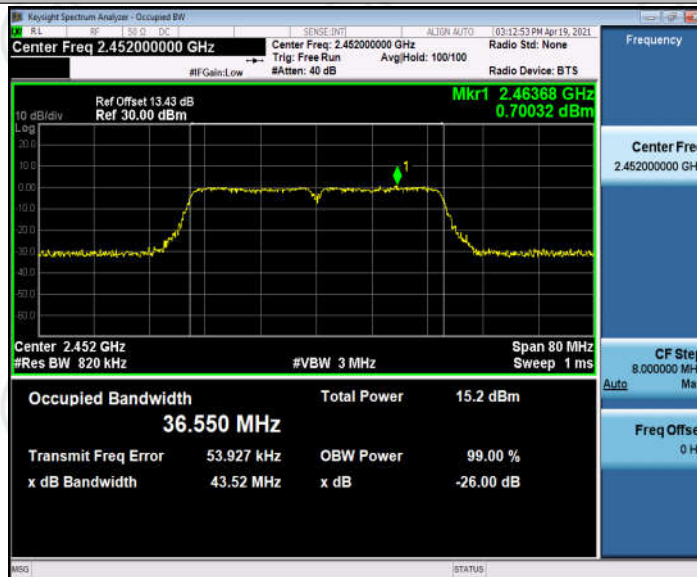
11N20SISO\_Ant1\_2462



11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452

## Appendix C: Maximum conducted output power

### Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.96	<=30	PASS
		2437	15.78	<=30	PASS
		2462	15.70	<=30	PASS
11G	Ant1	2412	15.24	<=30	PASS
		2437	15.33	<=30	PASS
		2462	15.17	<=30	PASS
11N20SISO	Ant1	2412	15.33	<=30	PASS
		2437	15.21	<=30	PASS
		2462	15.08	<=30	PASS
11N40SISO	Ant1	2422	15.58	<=30	PASS
		2437	15.46	<=30	PASS
		2452	15.33	<=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	-4.21	<=8	PASS
		2437	-4.66	<=8	PASS
		2462	-2.2	<=8	PASS
11G	Ant1	2412	-12.11	<=8	PASS
		2437	-10.85	<=8	PASS
		2462	-11.11	<=8	PASS
11N20SISO	Ant1	2412	-11.06	<=8	PASS
		2437	-11.36	<=8	PASS
		2462	-12.32	<=8	PASS
11N40SISO	Ant1	2422	-14.56	<=8	PASS
		2437	-15.45	<=8	PASS
		2452	-14.38	<=8	PASS



**Test Graphs**



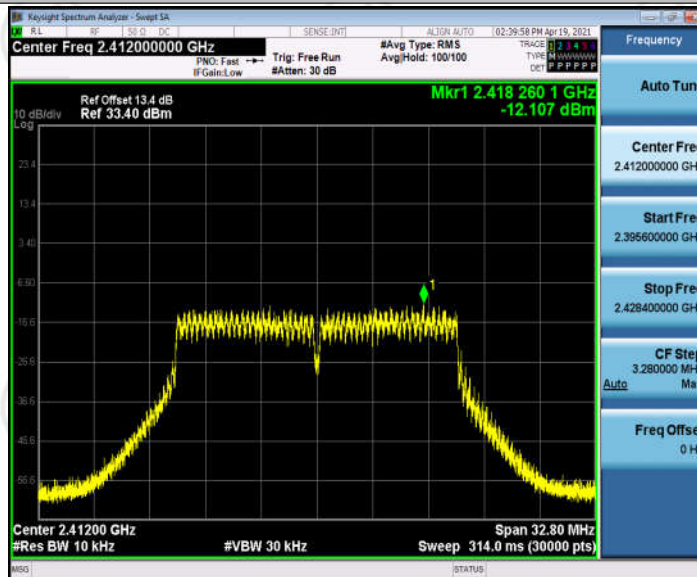
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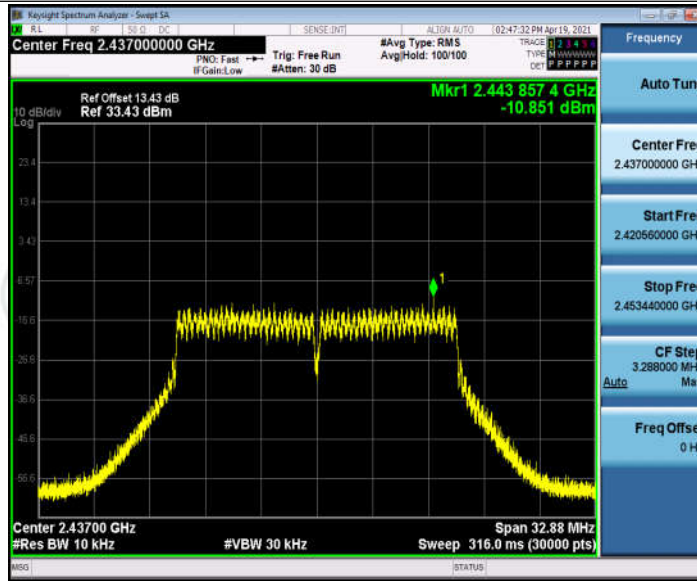
11B\_Ant1\_2437



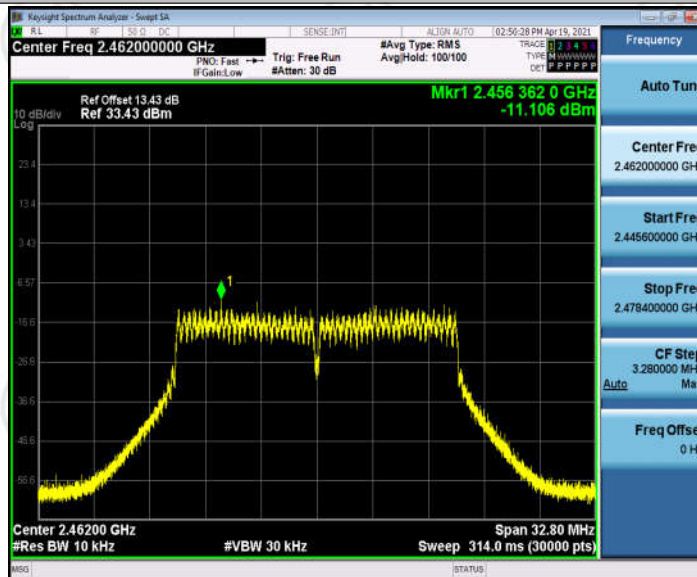
11B\_Ant1\_2462



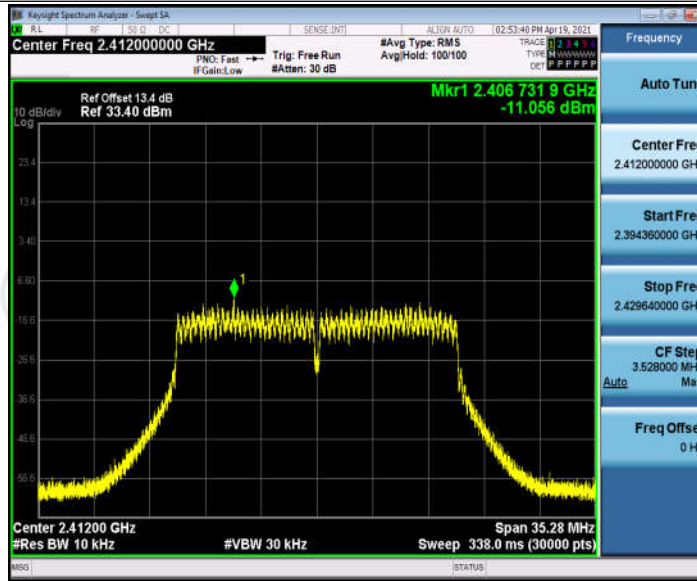
11G\_Ant1\_2412



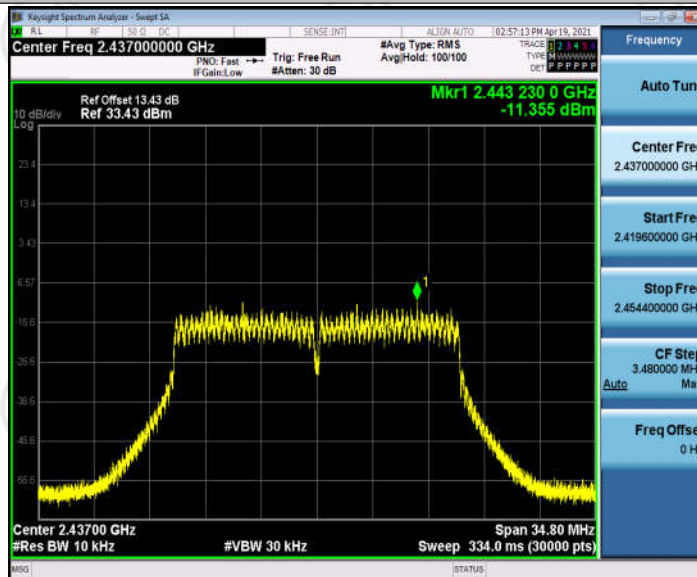
11G\_Ant1\_2437



11G\_Ant1\_2462

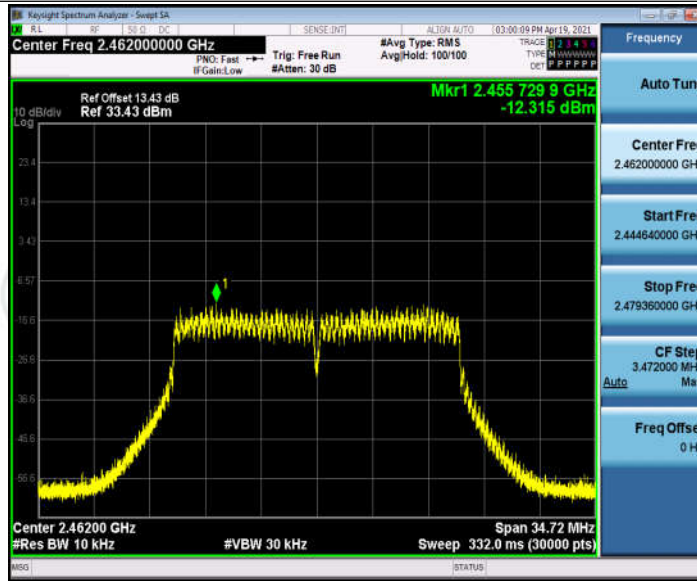


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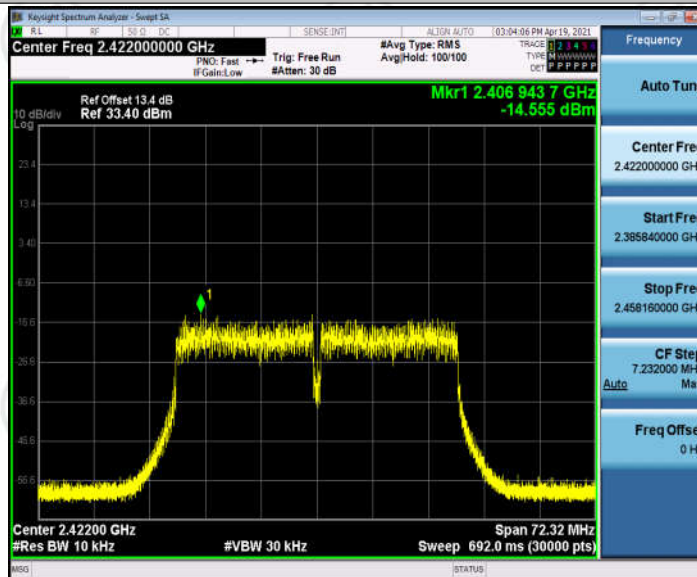


11N20SISO\_Ant1\_2437



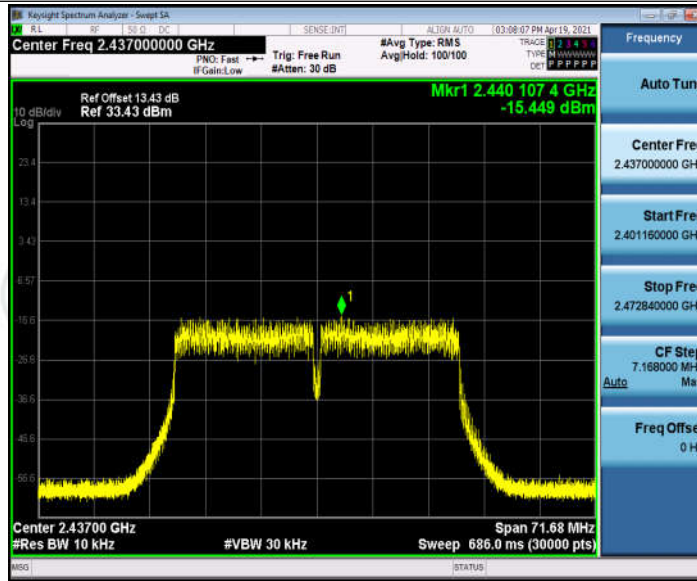


11N20SISO\_Ant1\_2462

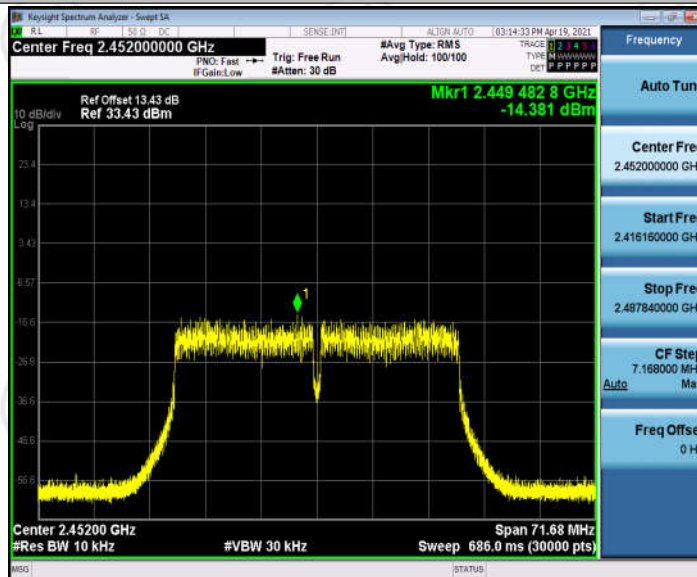


11N40SISO\_Ant1\_2422





11N40SISO\_Ant1\_2437



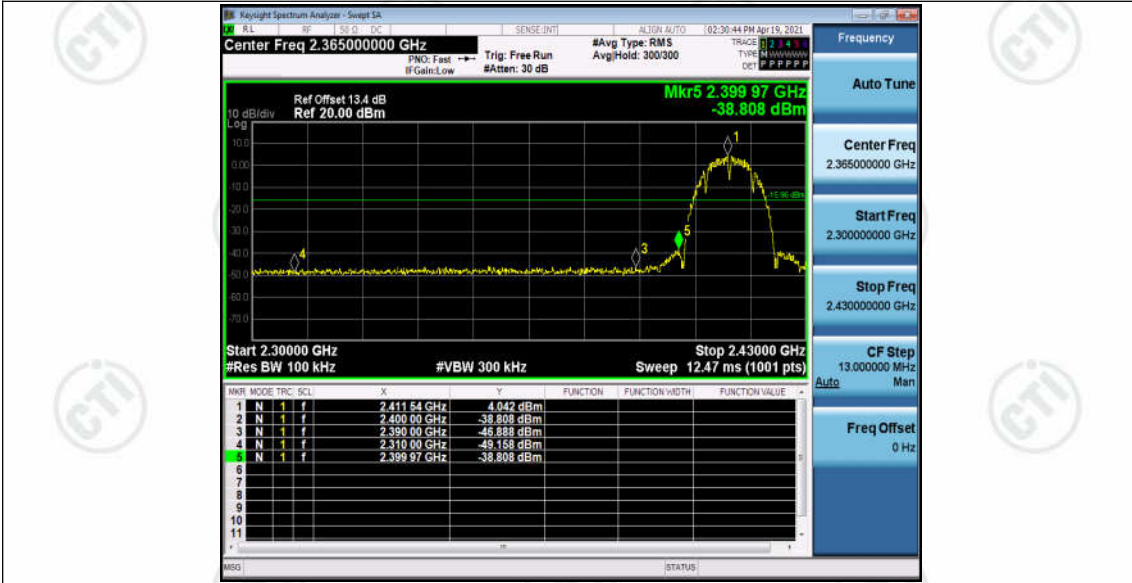
11N40SISO\_Ant1\_2452

## Appendix E: Band edge measurements

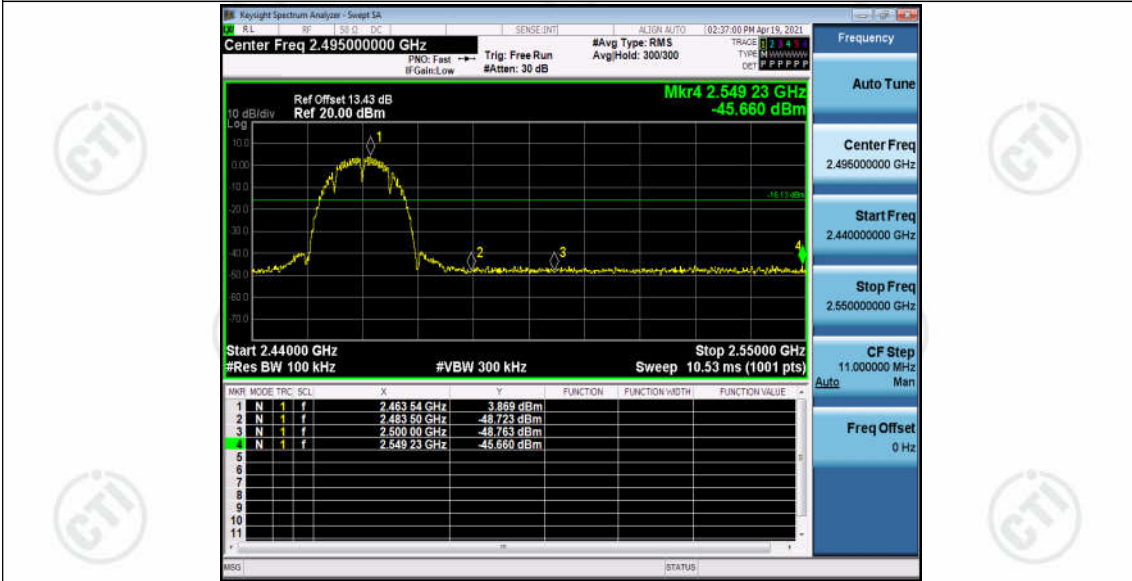
### Test Result

Test Mode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.04	-38.81	<=-15.96	PASS
		High	2462	3.87	-45.66	<=-16.13	PASS
11G	Ant1	Low	2412	-2.86	-41	<=-22.86	PASS
		High	2462	-3.10	-45.93	<=-23.1	PASS
11N20SISO	Ant1	Low	2412	-3.09	-40.69	<=-23.09	PASS
		High	2462	-3.39	-45.64	<=-23.39	PASS
11N40SISO	Ant1	Low	2422	-5.80	-41.48	<=-25.8	PASS
		High	2452	-5.73	-45.28	<=-25.73	PASS

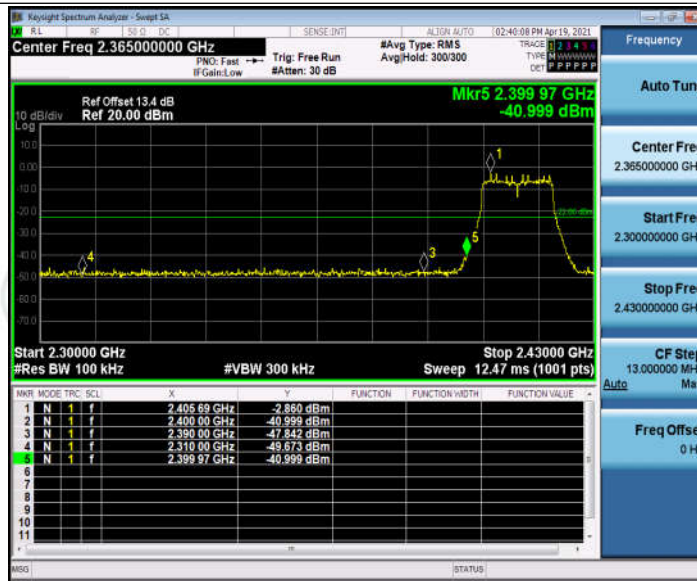
**Test Graphs**



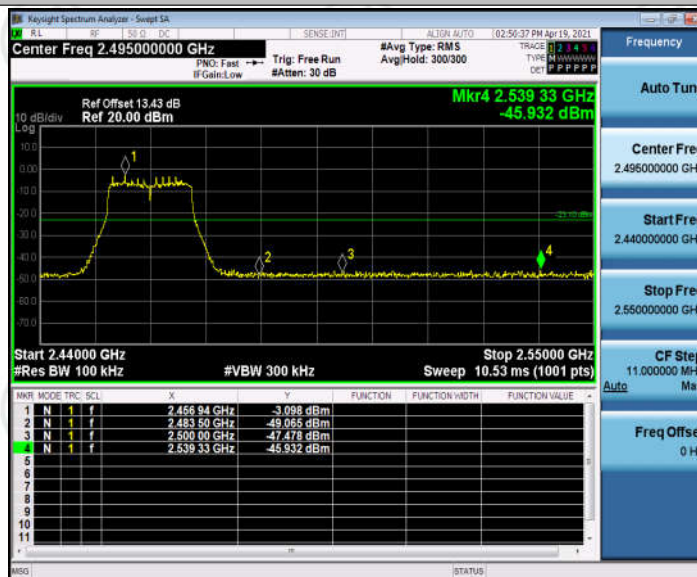
11B\_Ant1\_Low\_2412



11B\_Ant1\_High\_2462

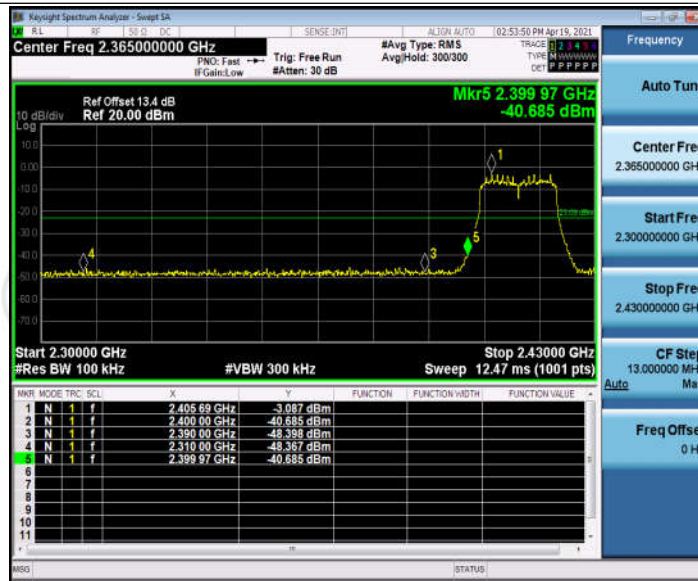


11G\_Ant1\_Low\_2412

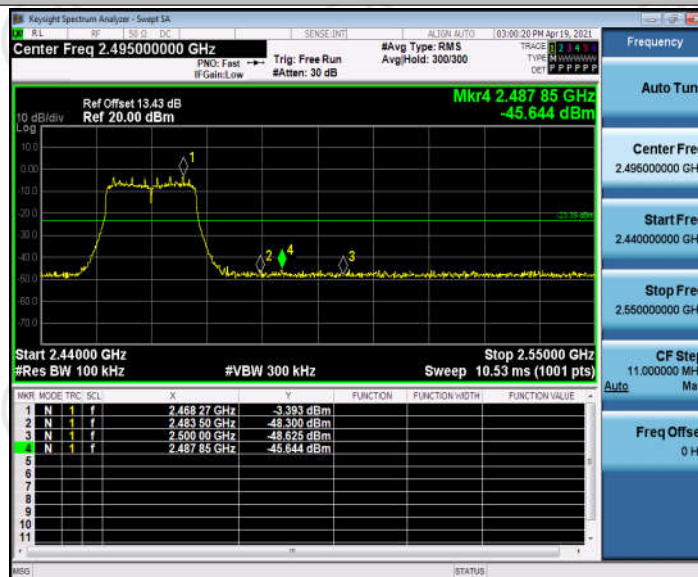


11G\_Ant1\_High\_2462



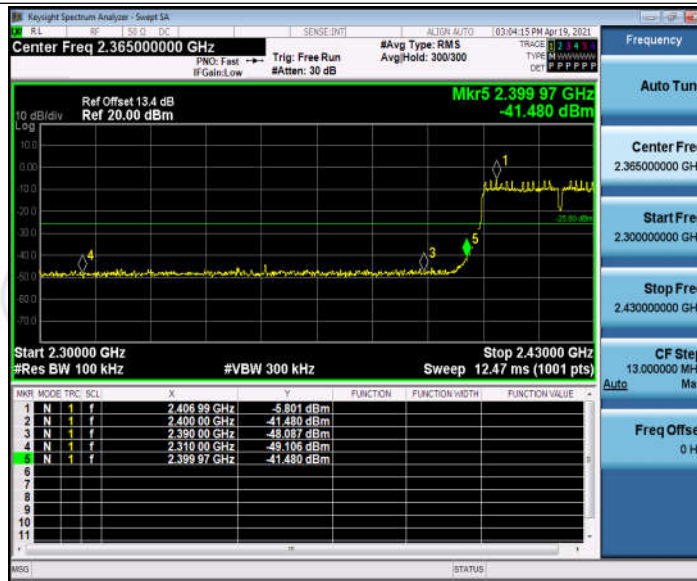


11N20SISO\_Ant1\_Low\_2412

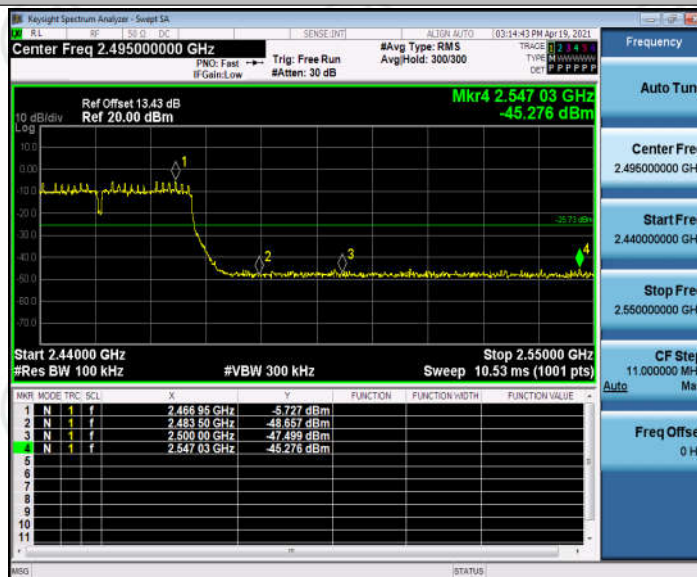


11N20SISO\_Ant1\_High\_2462





11N40SISO\_Ant1\_Low\_2422



11N40SISO\_Ant1\_High\_2452

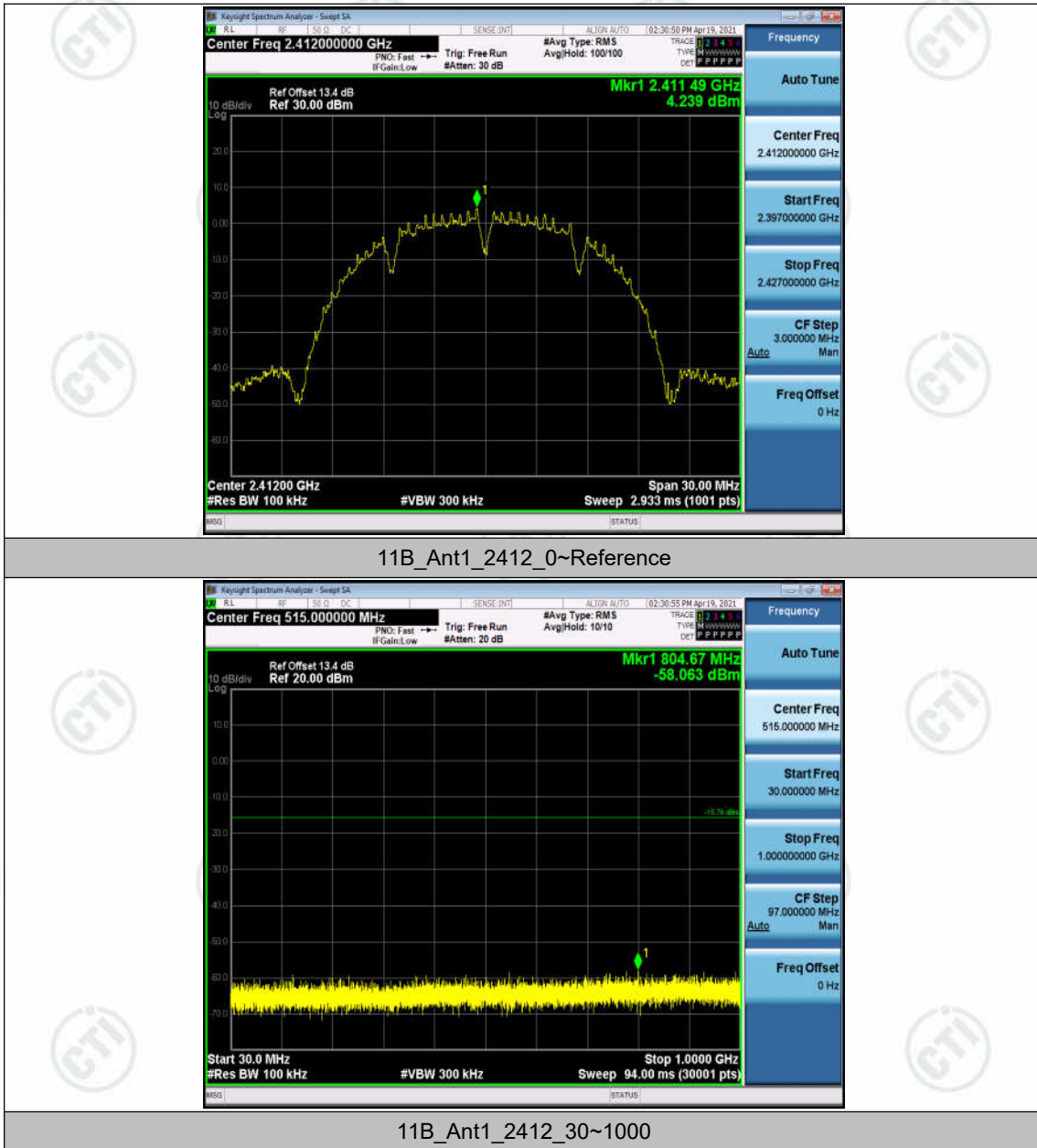
## Appendix F: Conducted Spurious Emission

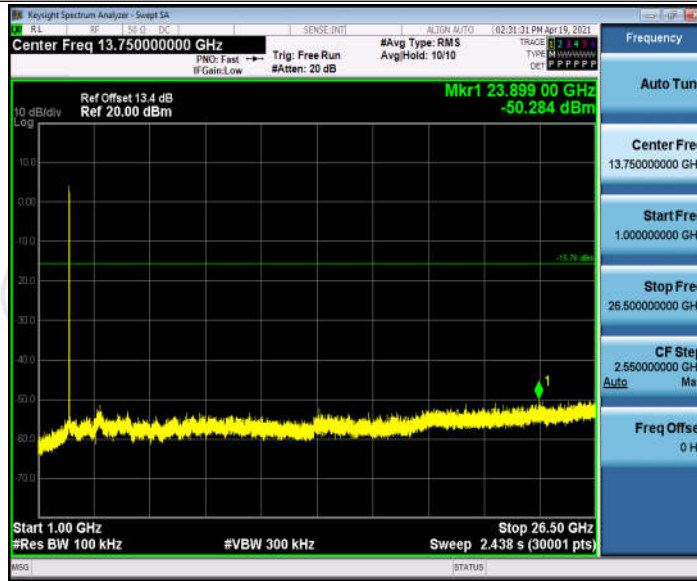
### Test Result

Test Mode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.24	4.24	---	PASS
			30~1000	30~1000	-58.063	<=-15.761	PASS
			1000~26500	1000~26500	-50.284	<=-15.761	PASS
		2437	Reference	3.55	3.55	---	PASS
			30~1000	30~1000	-58.114	<=-16.449	PASS
			1000~26500	1000~26500	-49.864	<=-16.449	PASS
		2462	Reference	3.85	3.85	---	PASS
			30~1000	30~1000	-57.827	<=-16.154	PASS
			1000~26500	1000~26500	-50.034	<=-16.154	PASS
11G	Ant1	2412	Reference	-3.50	-3.50	---	PASS
			30~1000	30~1000	-57.578	<=-23.502	PASS
			1000~26500	1000~26500	-49.446	<=-23.502	PASS
		2437	Reference	-3.35	-3.35	---	PASS
			30~1000	30~1000	-58.259	<=-23.351	PASS
			1000~26500	1000~26500	-49.116	<=-23.351	PASS
		2462	Reference	-3.00	-3.00	---	PASS
			30~1000	30~1000	-56.259	<=-23.003	PASS
			1000~26500	1000~26500	-50.066	<=-23.003	PASS
11N20SISO	Ant1	2412	Reference	-3.07	-3.07	---	PASS
			30~1000	30~1000	-57.386	<=-23.069	PASS
			1000~26500	1000~26500	-49.769	<=-23.069	PASS
		2437	Reference	-3.51	-3.51	---	PASS
			30~1000	30~1000	-58.131	<=-23.509	PASS
			1000~26500	1000~26500	-49.629	<=-23.509	PASS
		2462	Reference	-2.99	-2.99	---	PASS
			30~1000	30~1000	-57.734	<=-22.993	PASS
			1000~26500	1000~26500	-49.837	<=-22.993	PASS
11N40SISO	Ant1	2422	Reference	-5.75	-5.75	---	PASS
			30~1000	30~1000	-58.243	<=-25.754	PASS
			1000~26500	1000~26500	-49.835	<=-25.754	PASS
		2437	Reference	-5.95	-5.95	---	PASS
			30~1000	30~1000	-57.025	<=-25.945	PASS
			1000~26500	1000~26500	-49.49	<=-25.945	PASS
		2452	Reference	-5.78	-5.78	---	PASS
			30~1000	30~1000	-57.607	<=-25.782	PASS

			1000~26500	1000~26500	-49.55	<=-25.782	PASS
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**Test Graphs**



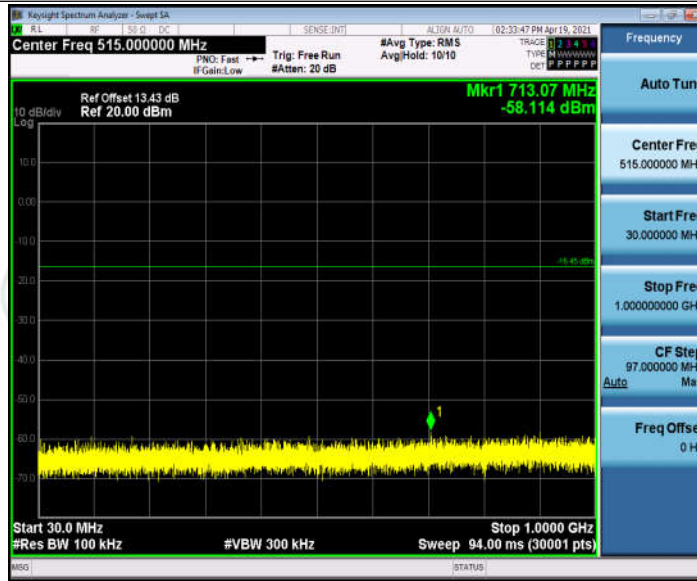


11B\_Ant1\_2412\_1000~26500

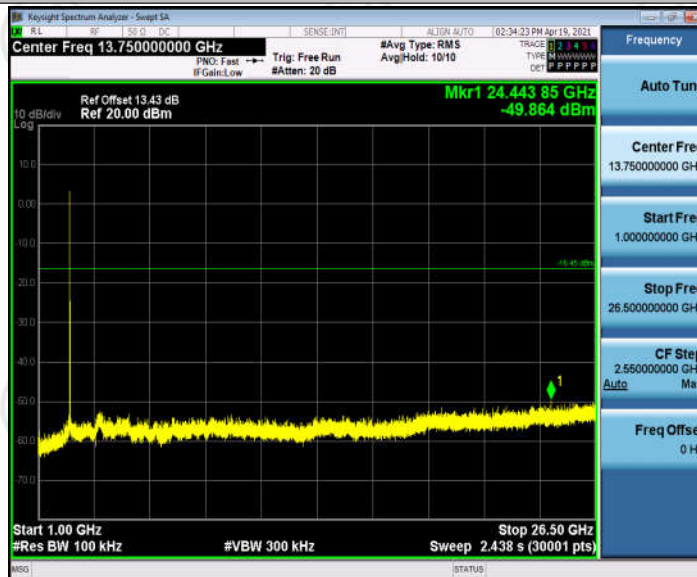


11B\_Ant1\_2437\_0~Reference





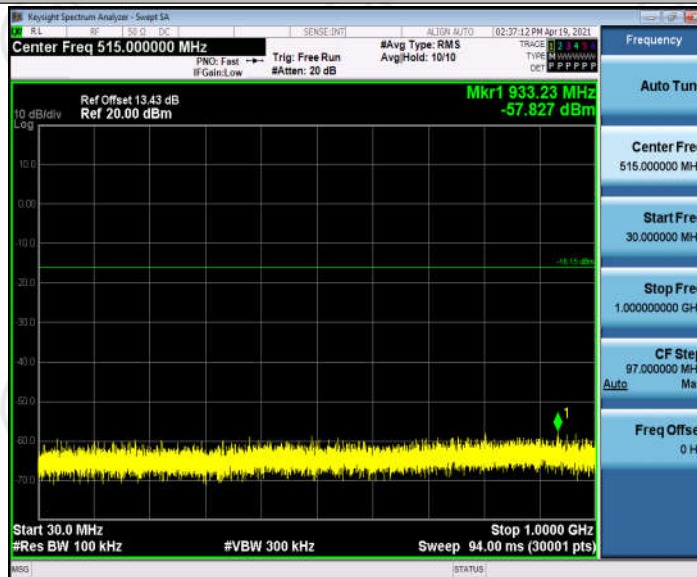
11B\_Ant1\_2437\_30~1000



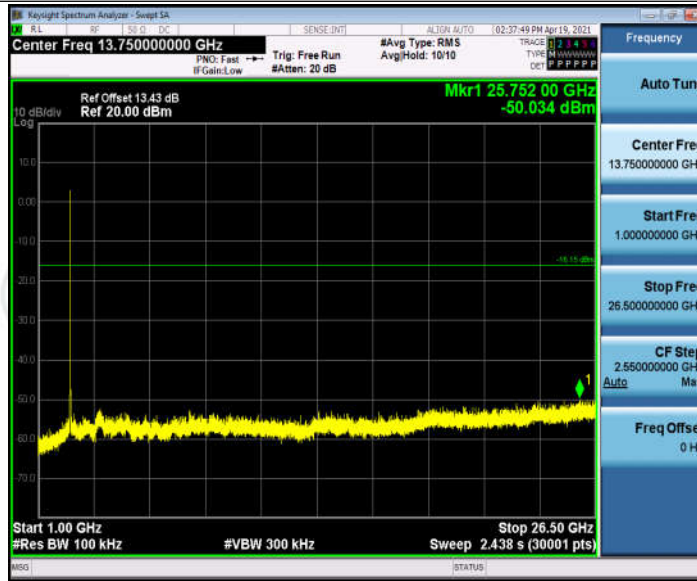
11B\_Ant1\_2437\_1000~26500



11B\_Ant1\_2462\_0~Reference



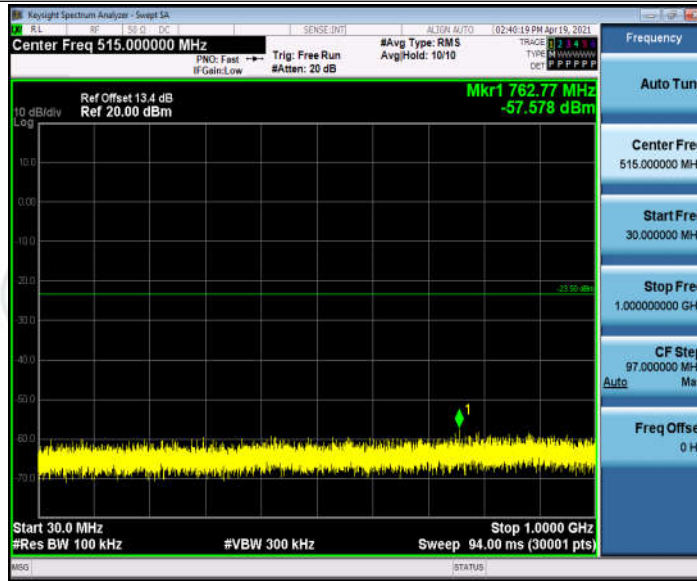
11B\_Ant1\_2462\_30~1000



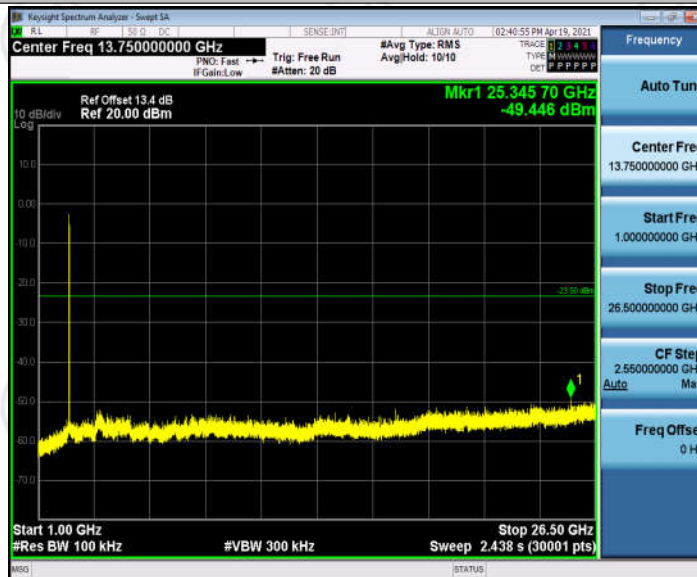
11B\_Ant1\_2462\_1000~26500



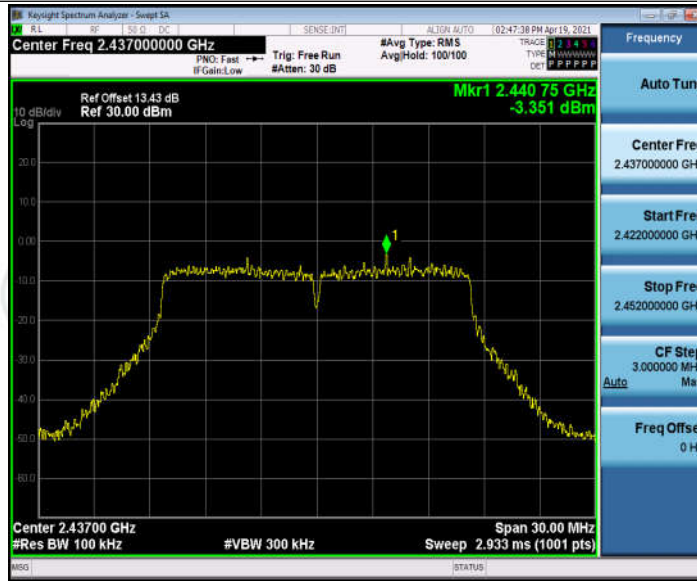
11G\_Ant1\_2412\_0~Reference



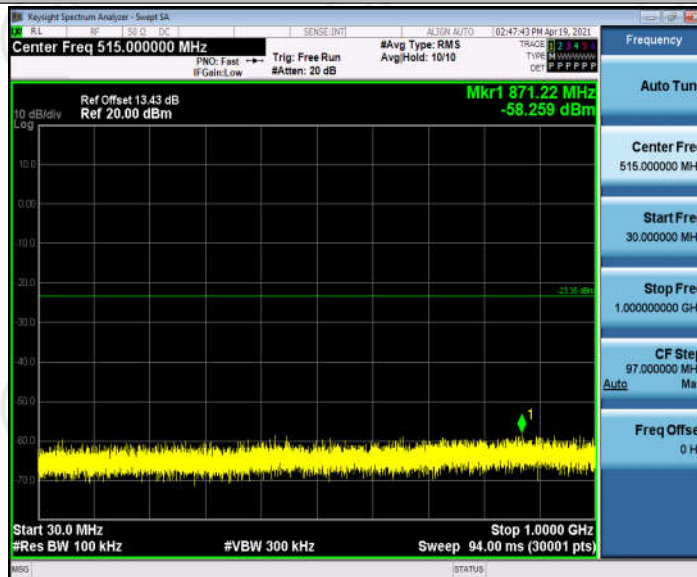
11G\_Ant1\_2412\_30~1000



11G\_Ant1\_2412\_1000~26500

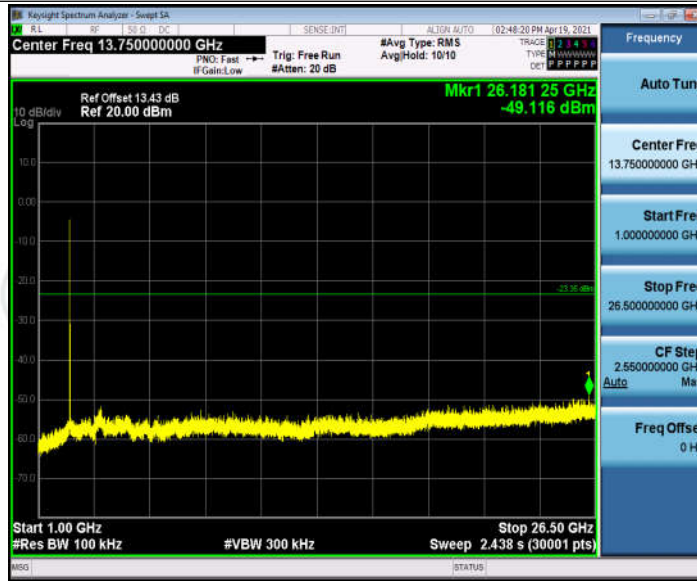


11G\_Ant1\_2437\_0~Reference



11G\_Ant1\_2437\_30~1000

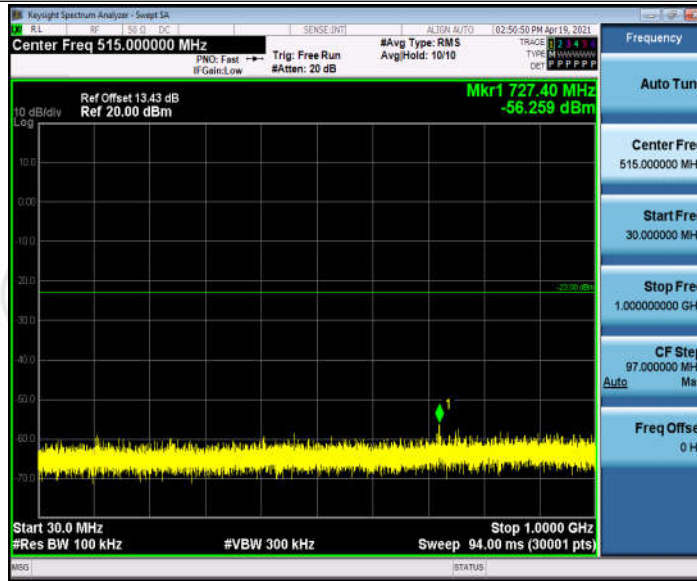




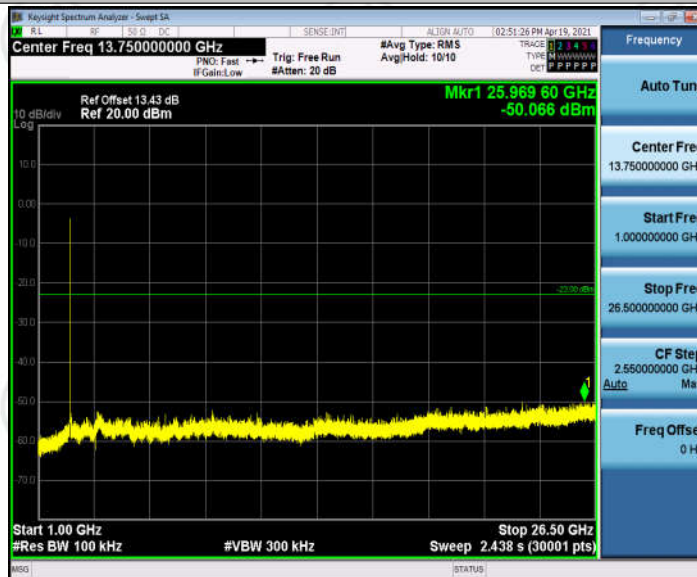
11G\_Ant1\_2437\_1000~26500



11G\_Ant1\_2462\_0~Reference



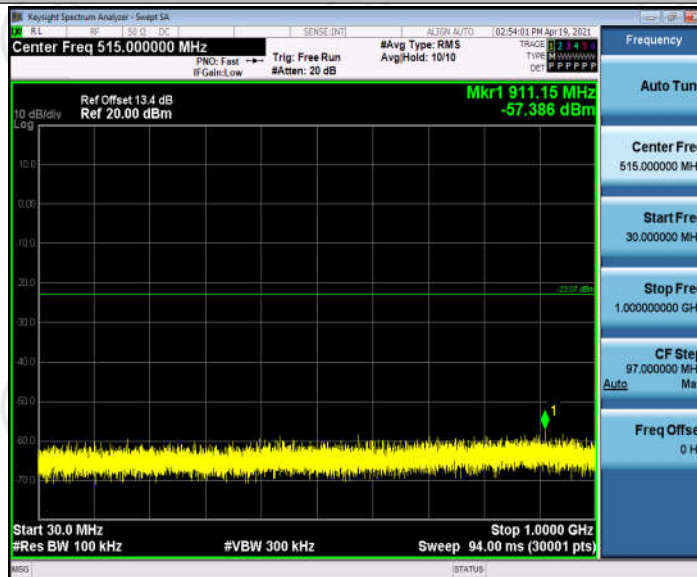
11G\_Ant1\_2462\_30~1000



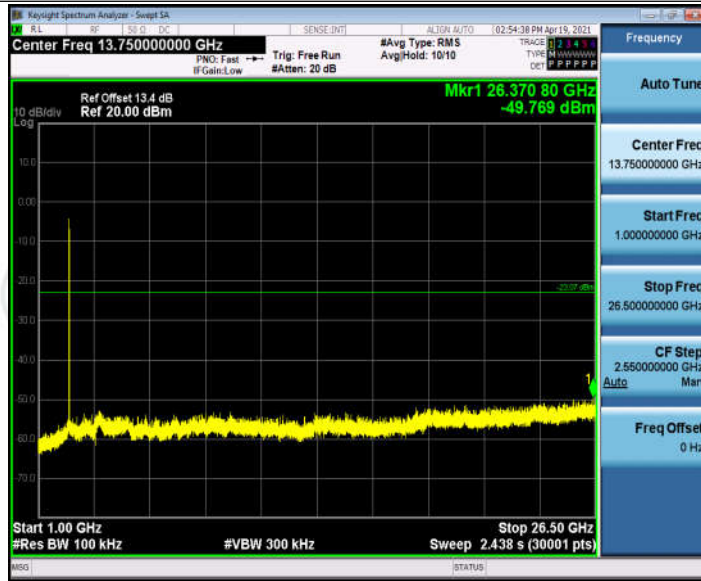
11G\_Ant1\_2462\_1000~26500



11N20SISO\_Ant1\_2412\_0~Reference



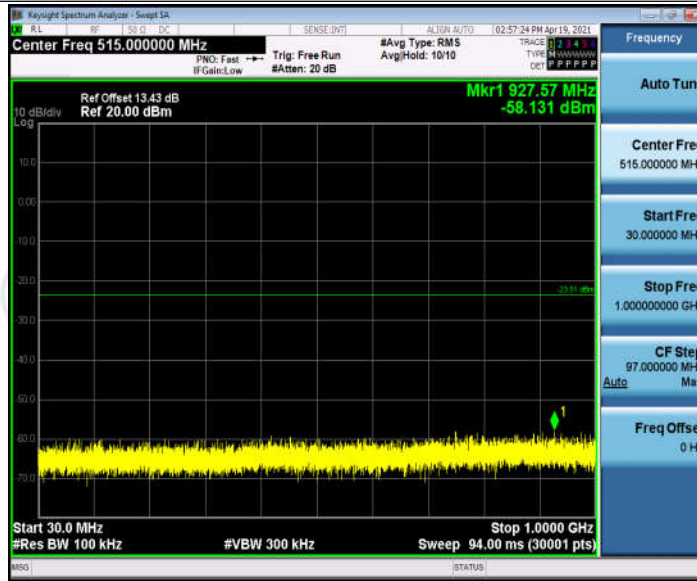
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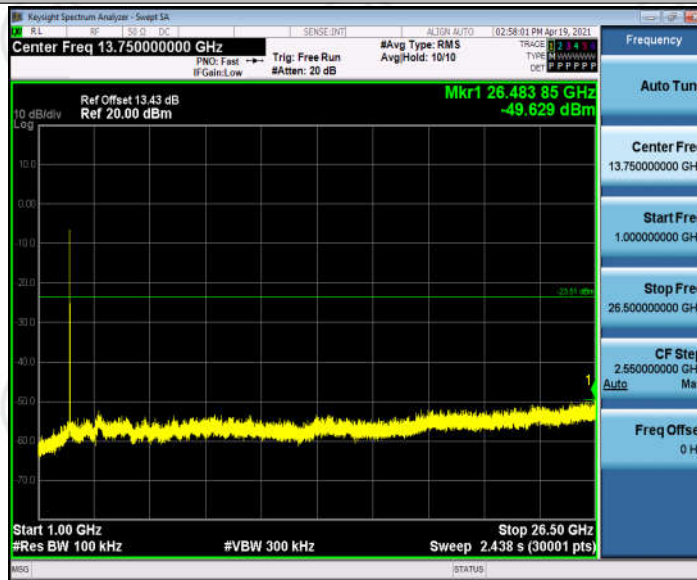
11N20SISO\_Ant1\_2412\_1000~26500



11N20SISO\_Ant1\_2437\_0~Reference

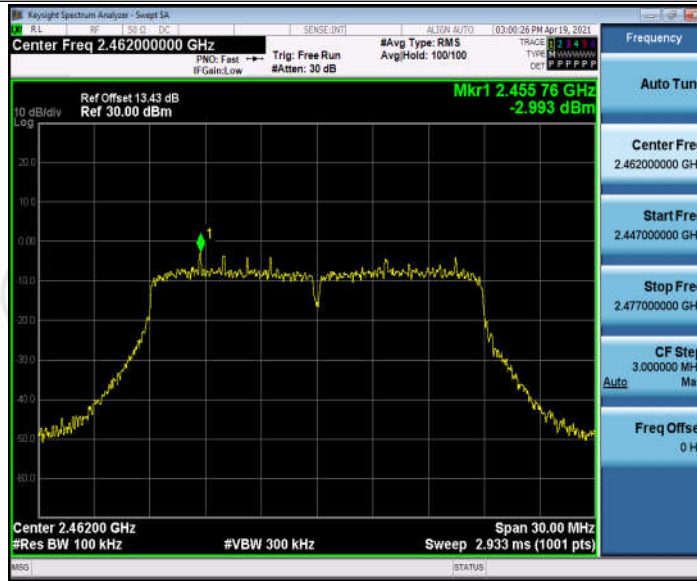


11N20SISO\_Ant1\_2437\_30~1000

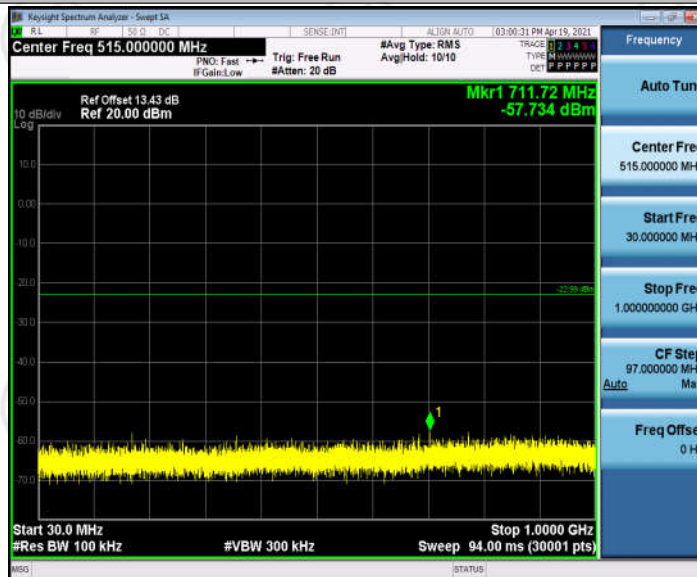


11N20SISO\_Ant1\_2437\_1000~26500

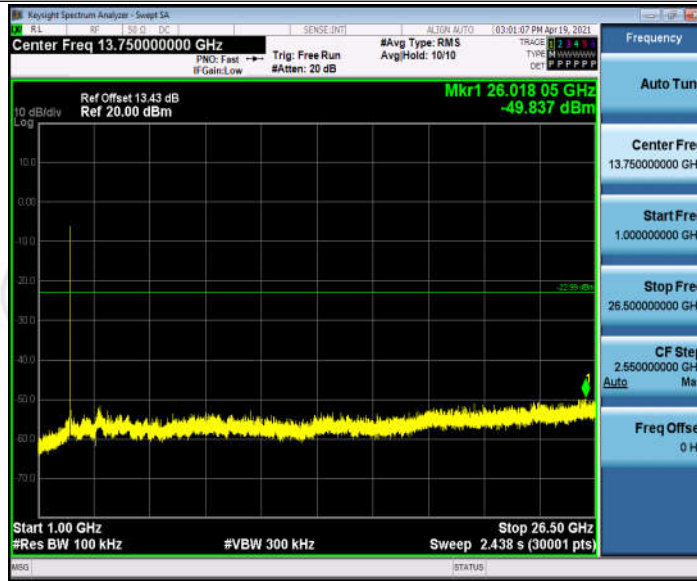




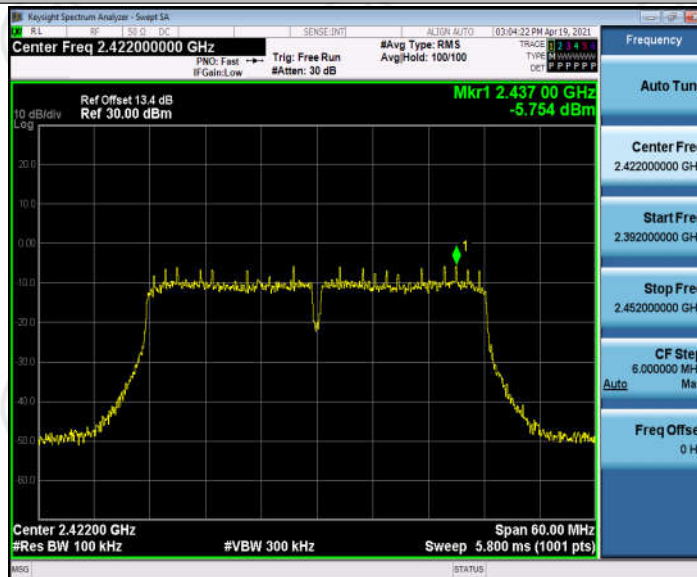
11N20SISO\_Ant1\_2462\_0~Reference



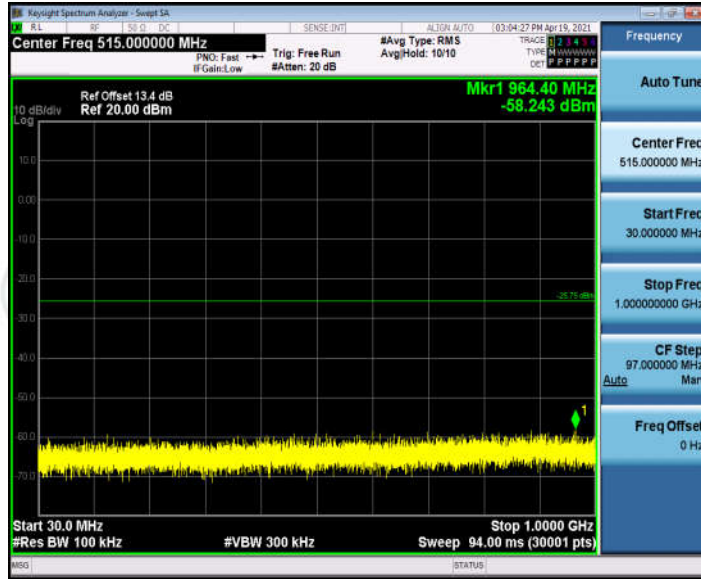
11N20SISO\_Ant1\_2462\_30~1000



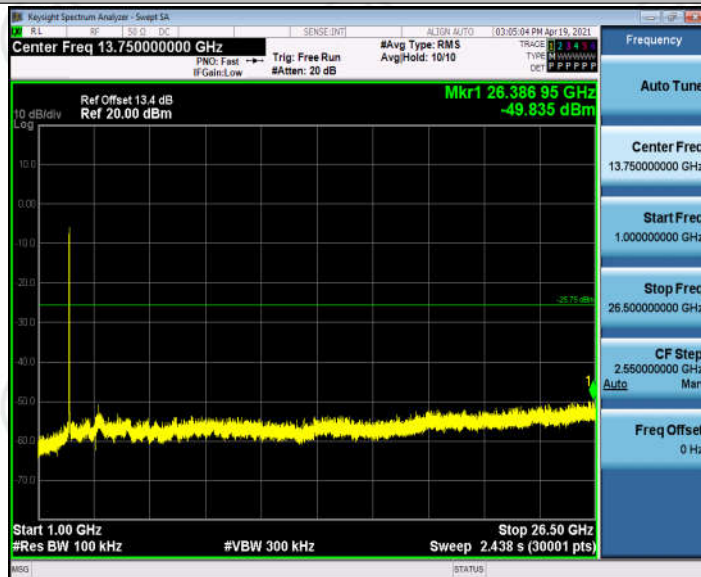
11N20SISO\_Ant1\_2462\_1000~26500



11N40SISO\_Ant1\_2422\_0~Reference



11N40SISO\_Ant1\_2422\_30~1000



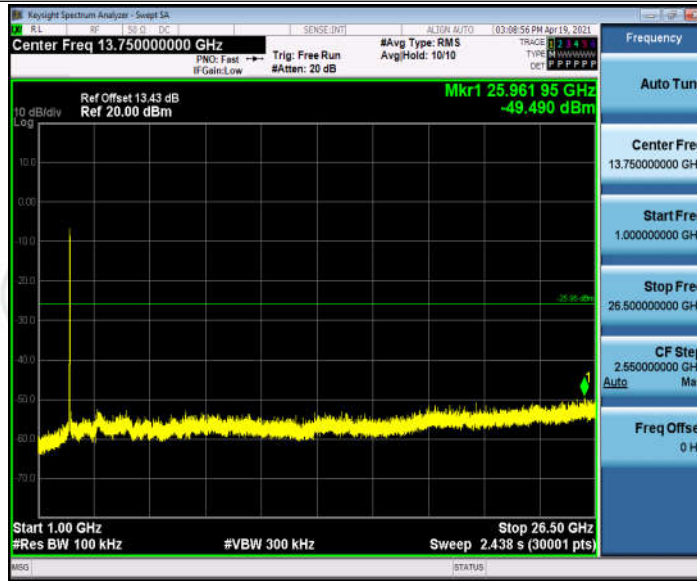
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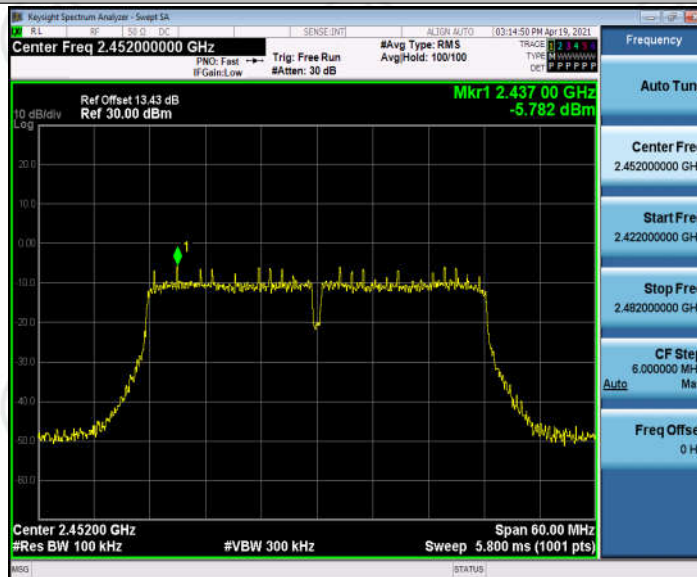
11N40SISO\_Ant1\_2437\_0~Reference



11N40SISO\_Ant1\_2437\_30~1000

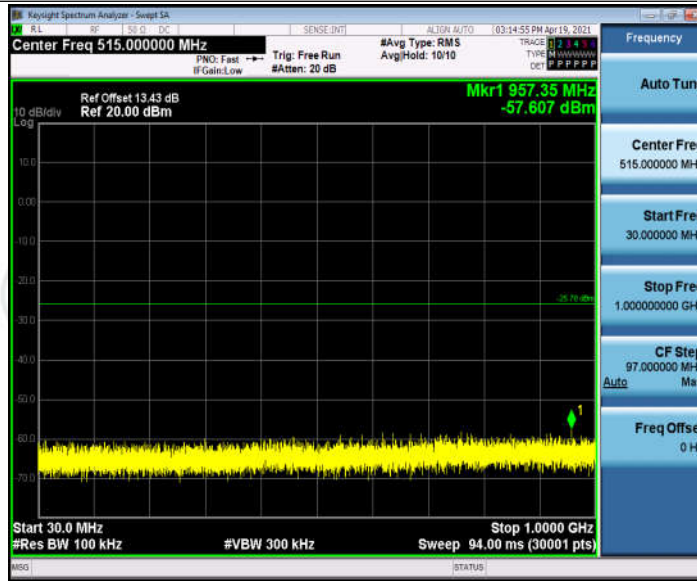


11N40SISO\_Ant1\_2437\_1000~26500



11N40SISO\_Ant1\_2452\_0~Reference





11N40SISO\_Ant1\_2452\_30~1000



11N40SISO\_Ant1\_2452\_1000~26500

## Appendix G: DutyCycle

### Test Result

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	12.42	12.50	99.31	---	PASS
		2437	12.42	12.55	98.97	---	PASS
		2462	12.42	12.48	99.45	---	PASS
11G	Ant1	2412	2.06	2.17	94.93	---	PASS
		2437	2.06	2.10	98.19	---	PASS
		2462	2.06	2.15	96.11	---	PASS
11N20SISO	Ant1	2412	1.92	2.07	92.89	---	PASS
		2437	1.92	2.01	95.40	---	PASS
		2462	1.92	1.97	97.55	---	PASS
11N40SISO	Ant1	2422	0.94	1.12	84.47	---	PASS
		2437	0.94	0.99	95.27	---	PASS
		2452	0.94	0.99	95.15	---	PASS

**Test Graphs**



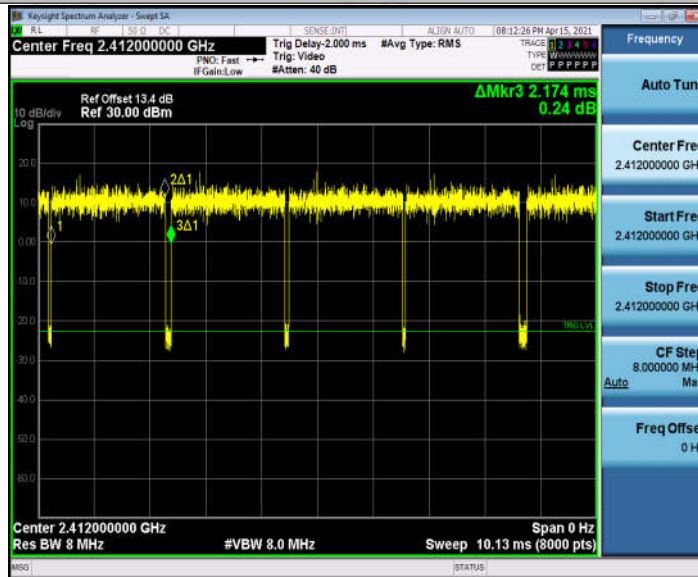
11B\_Ant1\_2412



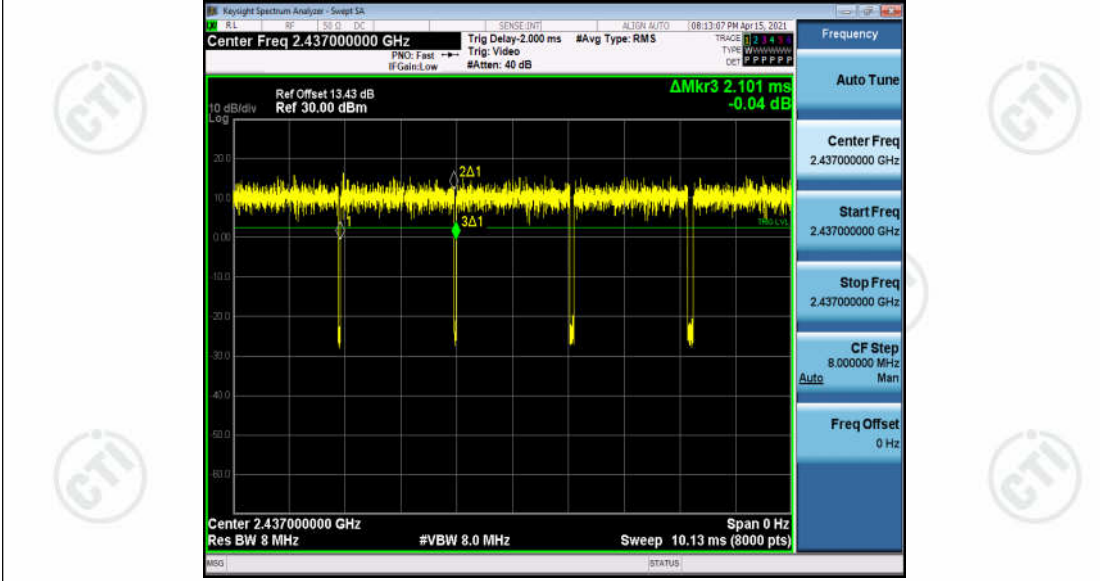
11B\_Ant1\_2437



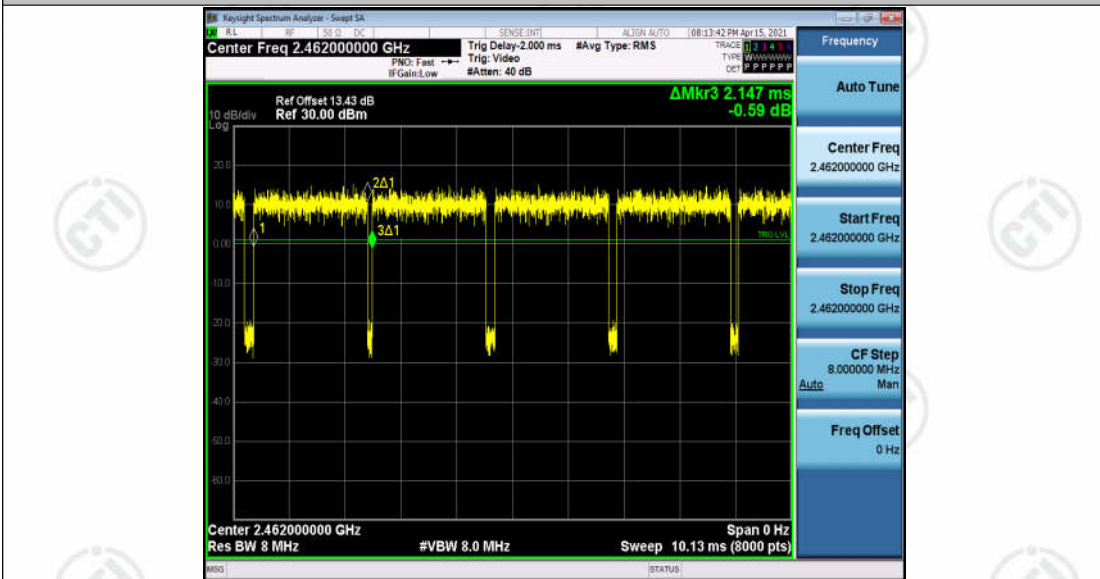
11B\_Ant1\_2462



11G\_Ant1\_2412

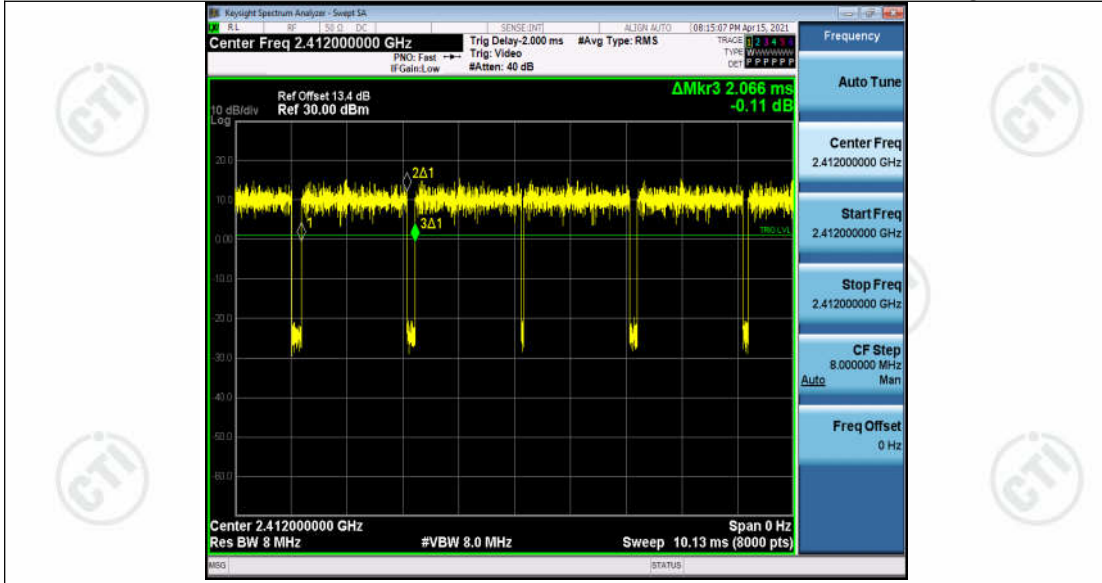


11G\_Ant1\_2437

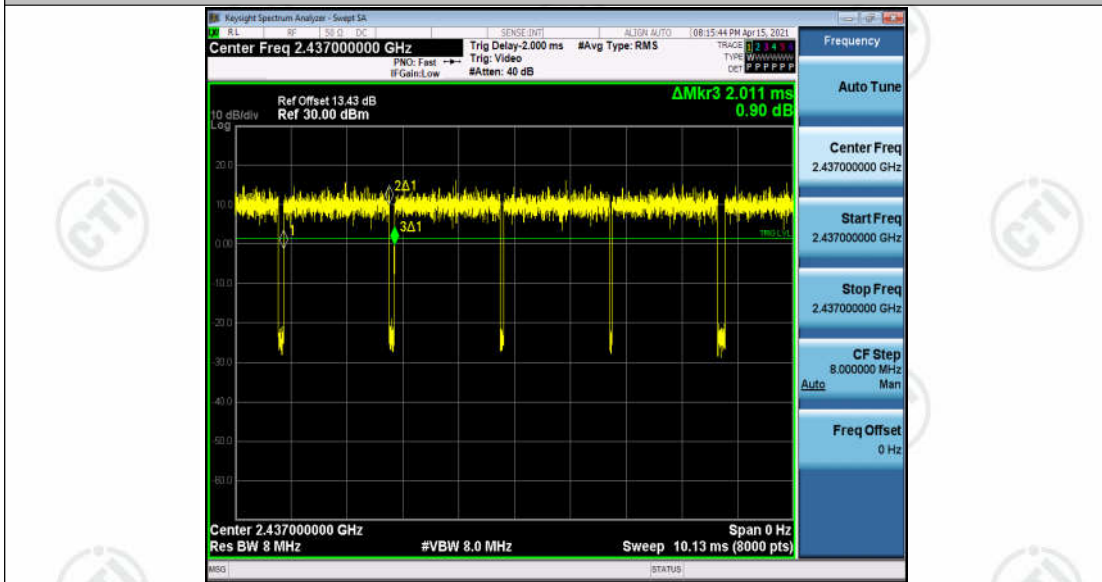


11G\_Ant1\_2462

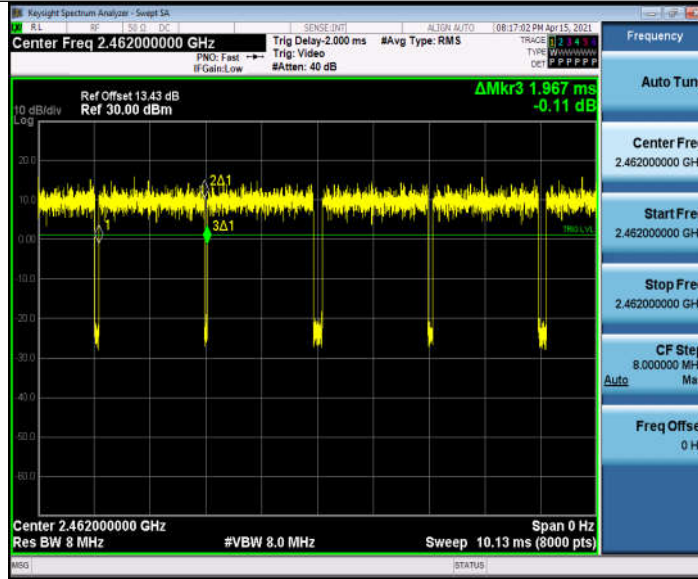




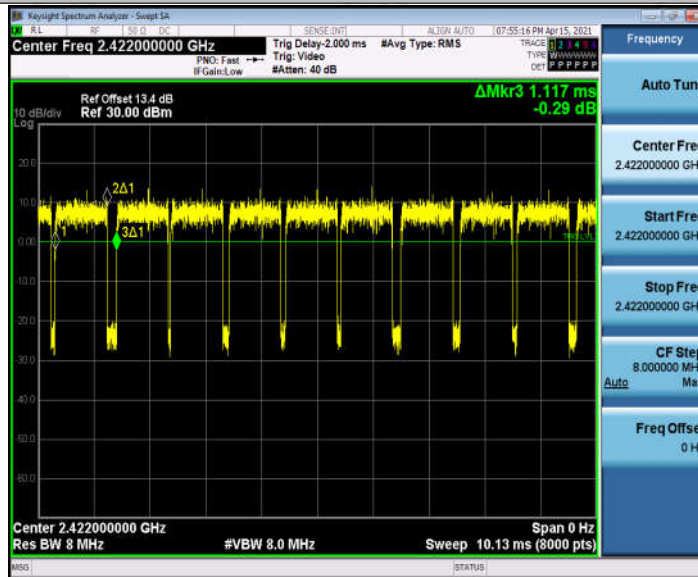
11N20SISO\_Ant1\_2412



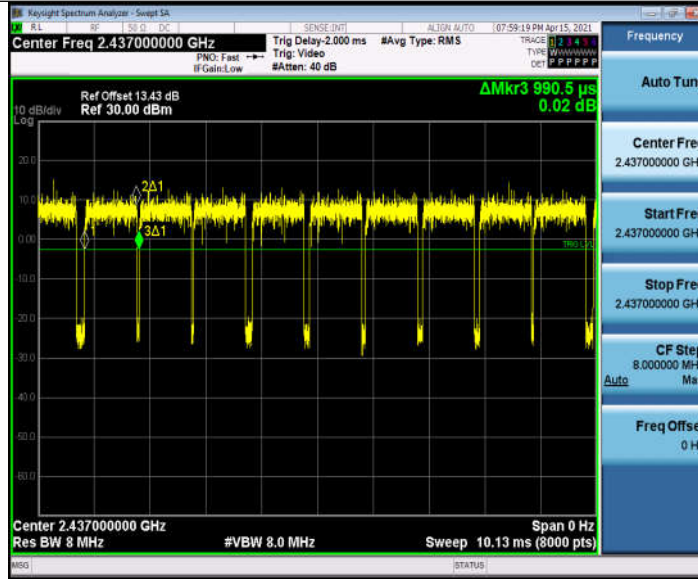
11N20SISO\_Ant1\_2437



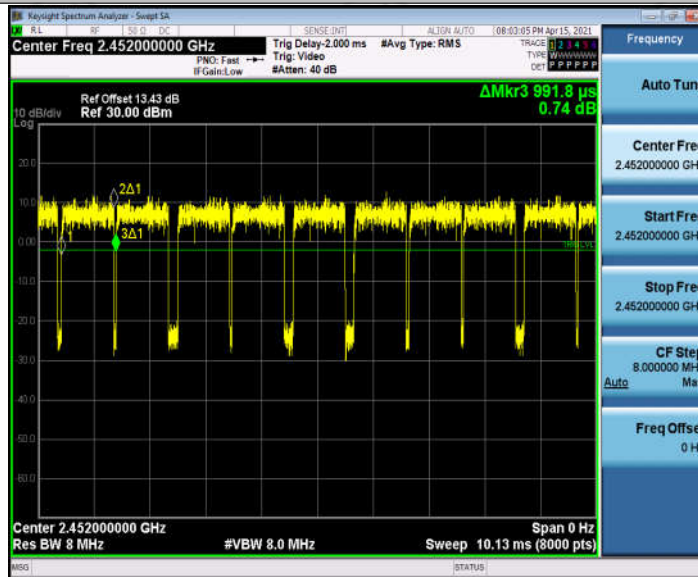
11N20SISO\_Ant1\_2462



11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452

\*\*\* End of Report \*\*\*