



Shenzhen GUOREN Certification Technology Service Co., Ltd.
101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community,
Fenghuang Street, Guangming District, Shenzhen, China

FCC ID:2BK77-R-W42506

GRCTR250502038-01

Appendix A: DTS Bandwidth

Ant 1

Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.480	2407.480	2416.960	0.5	PASS
11B	Ant1	2437	9.560	2432.040	2441.600	0.5	PASS
11B	Ant1	2462	9.600	2457.440	2467.040	0.5	PASS
11G	Ant1	2412	16.400	2403.880	2420.280	0.5	PASS
11G	Ant1	2437	16.360	2428.840	2445.200	0.5	PASS
11G	Ant1	2462	16.360	2453.840	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.520	2420.800	0.5	PASS
11N20SISO	Ant1	2437	17.560	2428.240	2445.800	0.5	PASS
11N20SISO	Ant1	2462	17.280	2453.240	2470.520	0.5	PASS
11N40SISO	Ant1	2422	33.200	2406.960	2440.160	0.5	PASS
11N40SISO	Ant1	2437	34.000	2420.360	2454.360	0.5	PASS
11N40SISO	Ant1	2452	35.120	2434.240	2469.360	0.5	PASS



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Test Graphs



11B-Ant1-2412-PASS



11B-Ant1-2437-PASS



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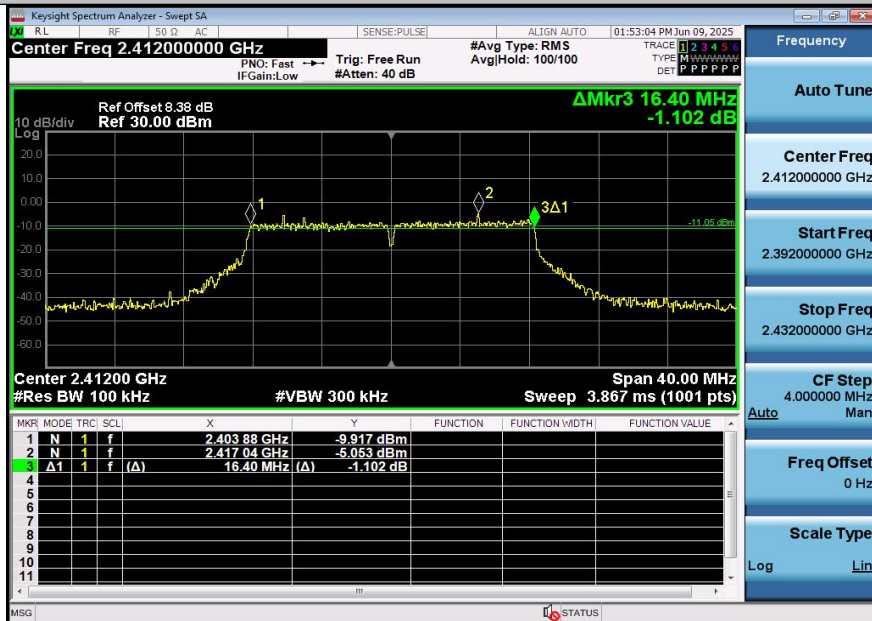
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11B-Ant1-2462-PASS



11G-Ant1-2412-PASS

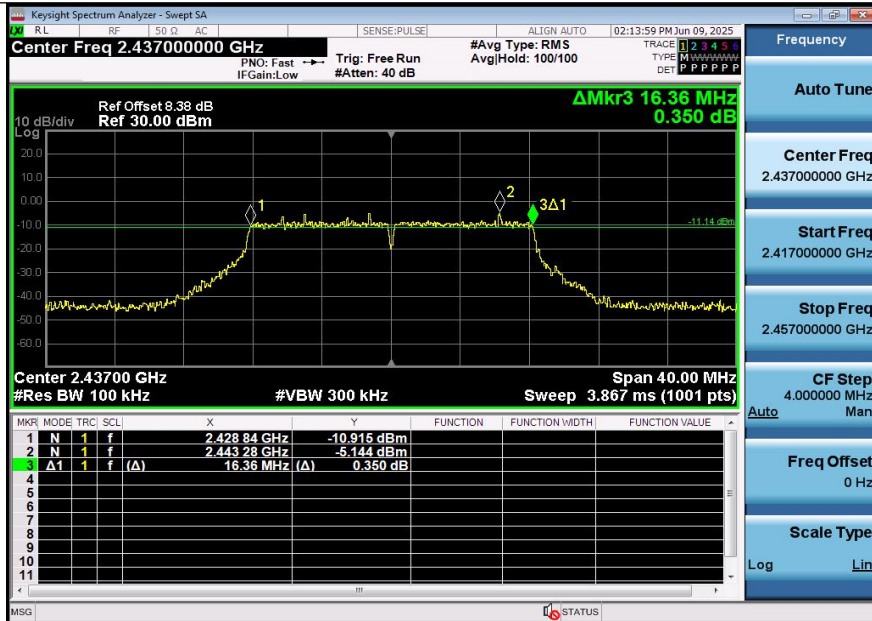


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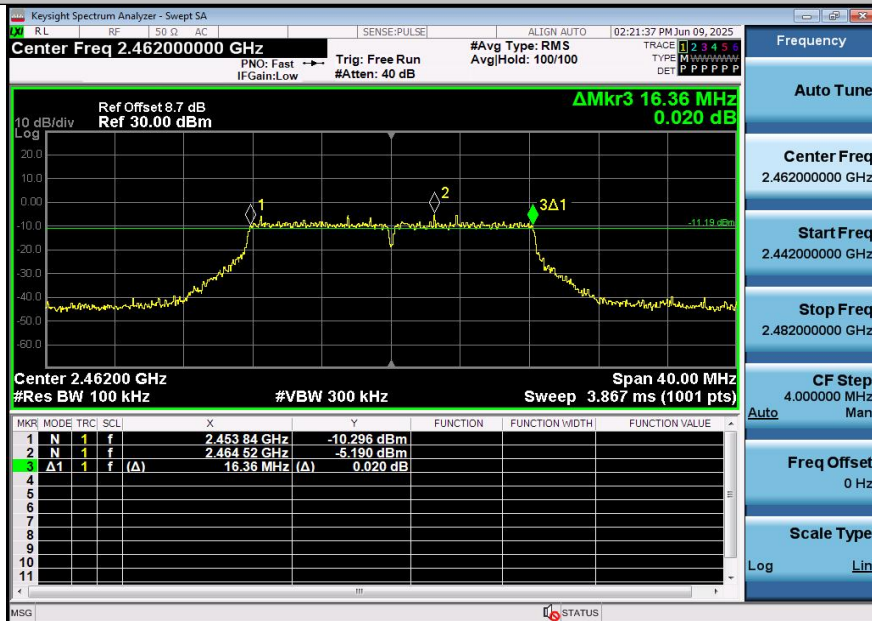
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11G-Ant1-2437-PASS



11G-Ant1-2462-PASS

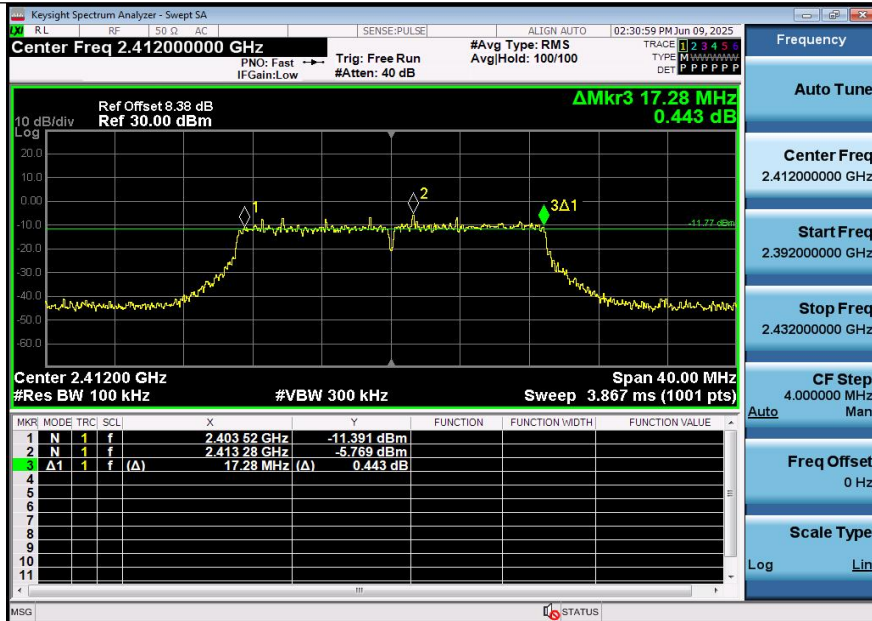


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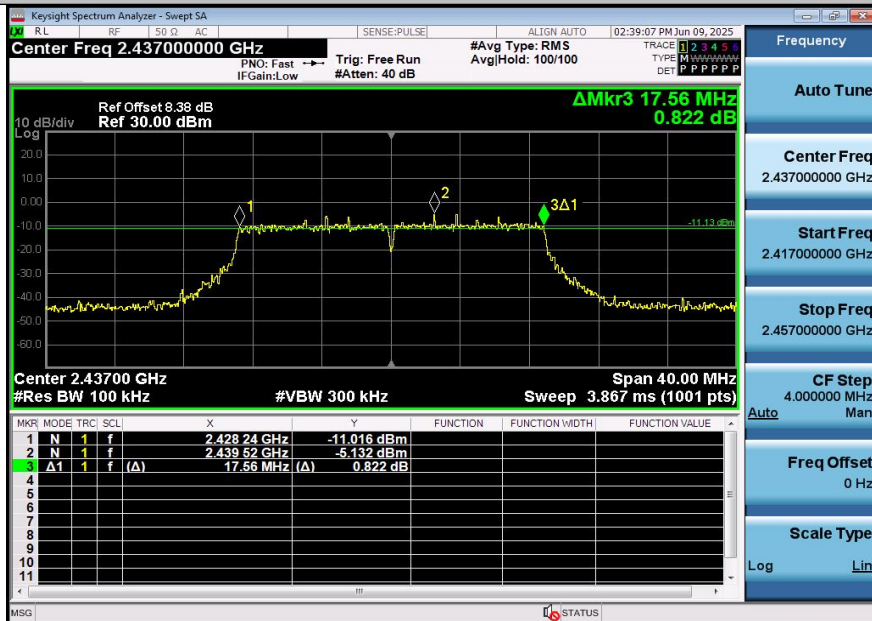
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11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS

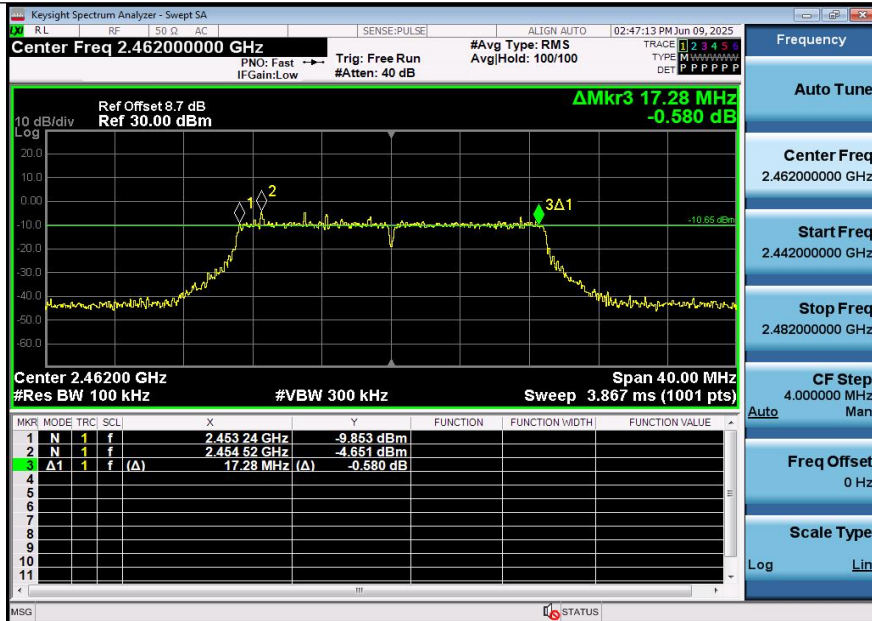


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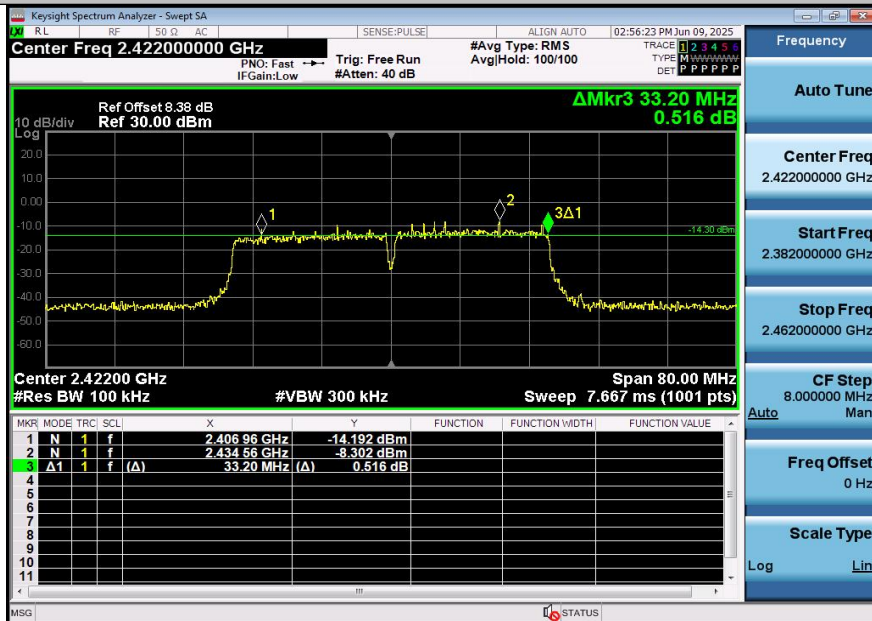
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11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS

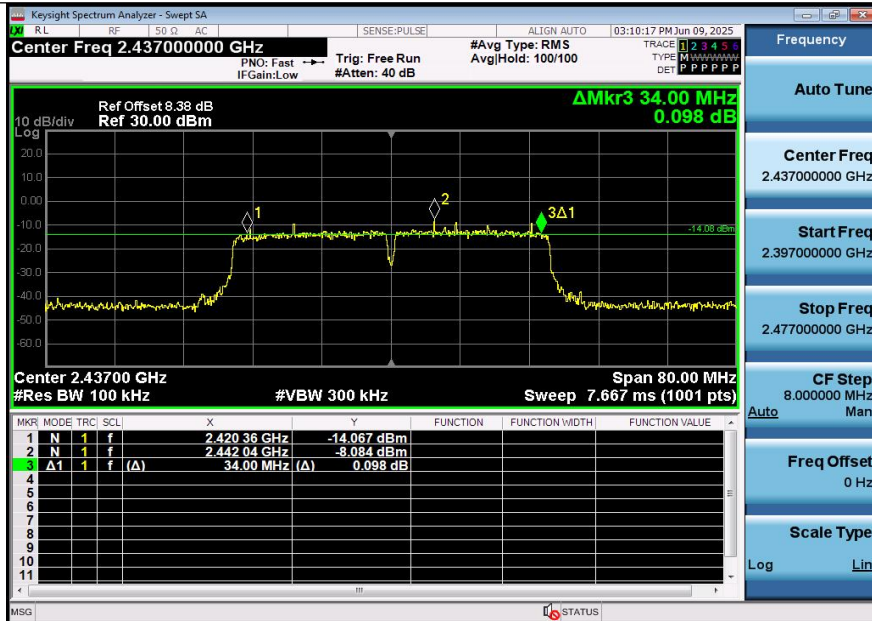


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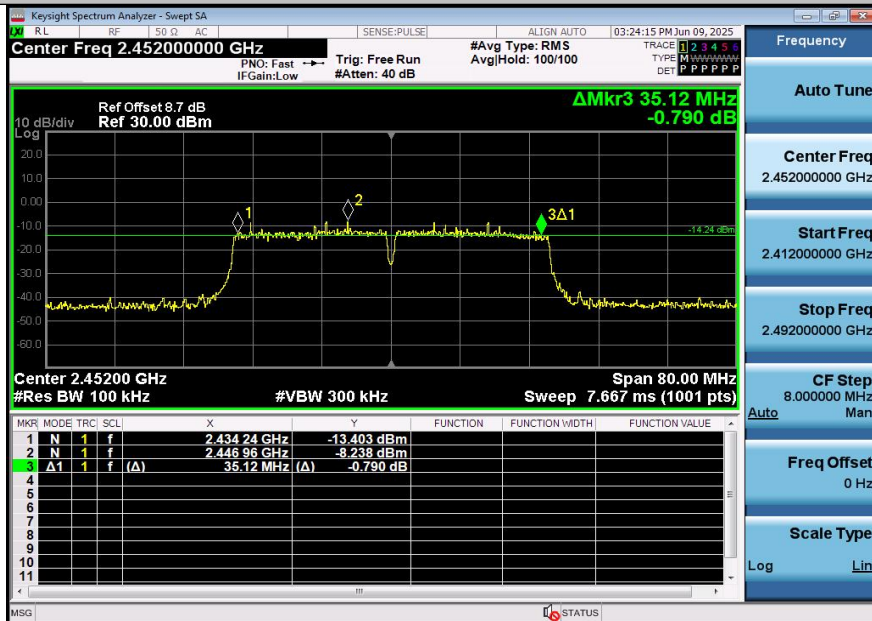
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11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS



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Ant 2

Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant2	2412	9.120	2407.480	2416.600	0.5	PASS
11B	Ant2	2437	9.080	2432.480	2441.560	0.5	PASS
11B	Ant2	2462	10.040	2457.000	2467.040	0.5	PASS
11G	Ant2	2412	16.360	2403.880	2420.240	0.5	PASS
11G	Ant2	2437	16.360	2428.840	2445.200	0.5	PASS
11G	Ant2	2462	16.360	2453.840	2470.200	0.5	PASS
11N20SISO	Ant2	2412	17.520	2403.280	2420.800	0.5	PASS
11N20SISO	Ant2	2437	17.560	2428.240	2445.800	0.5	PASS
11N20SISO	Ant2	2462	17.560	2453.240	2470.800	0.5	PASS
11N40SISO	Ant2	2422	35.680	2404.480	2440.160	0.5	PASS
11N40SISO	Ant2	2437	32.880	2421.720	2454.600	0.5	PASS
11N40SISO	Ant2	2452	35.280	2434.240	2469.520	0.5	PASS



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Test Graphs



11B-Ant2-2412-PASS



11B-Ant2-2437-PASS



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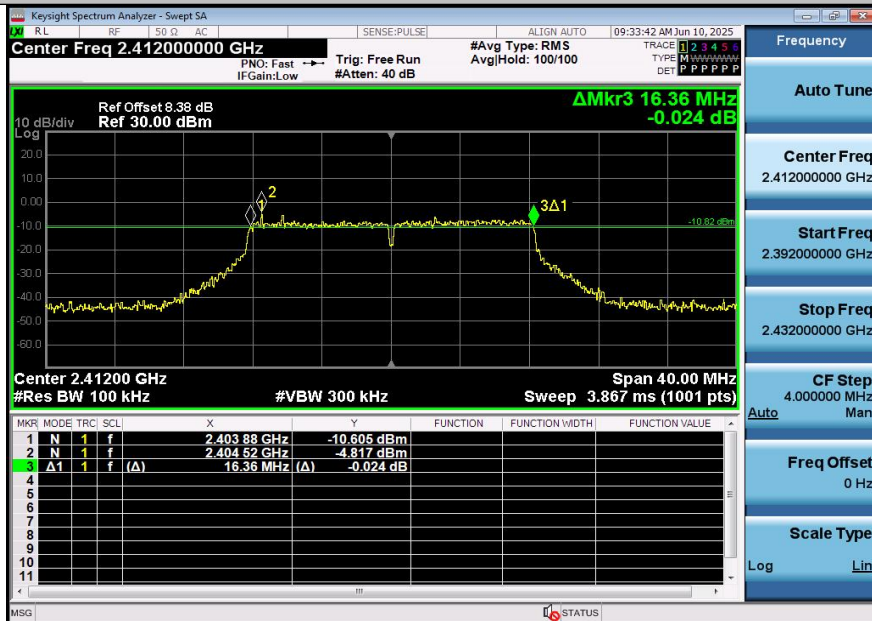
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11B-Ant2-2462-PASS



11G-Ant2-2412-PASS

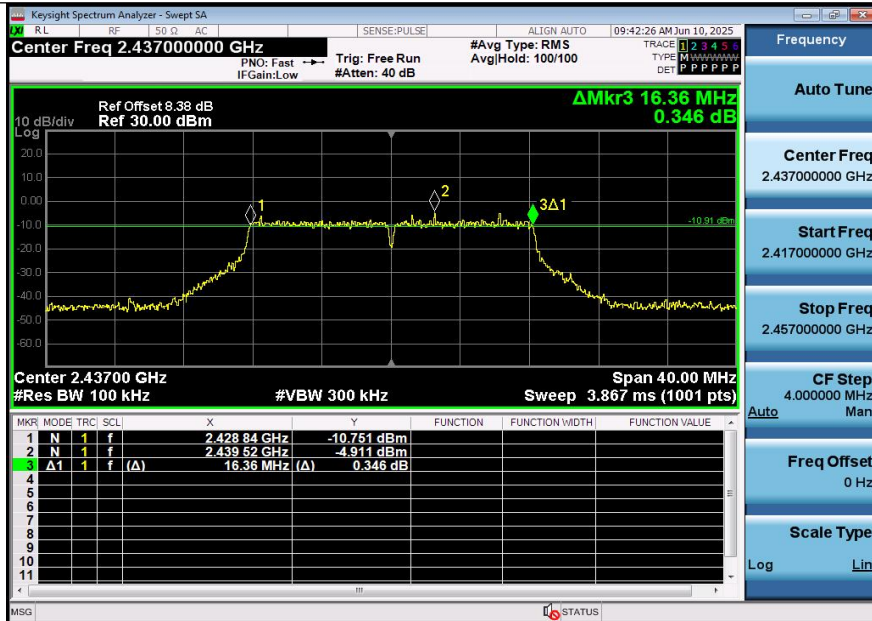


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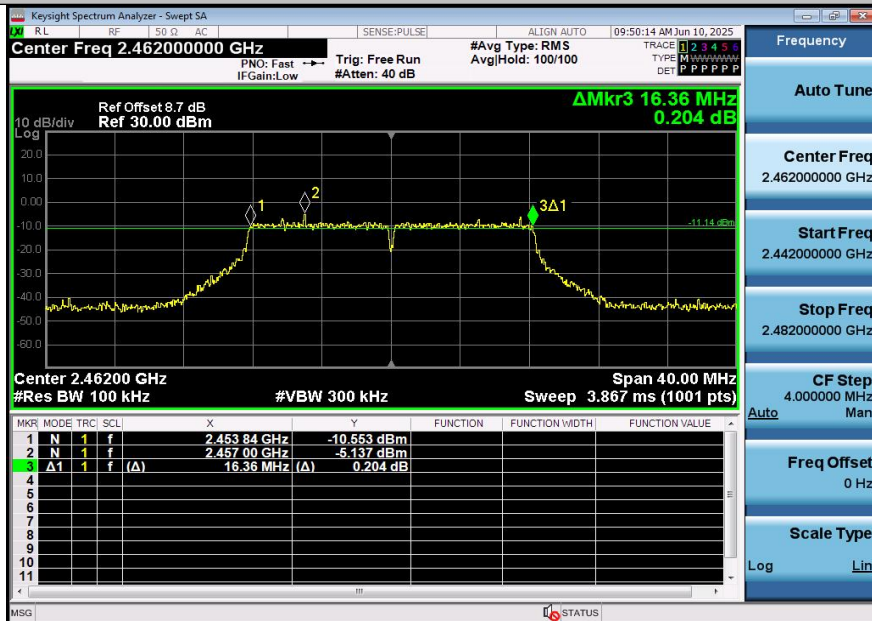
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11G-Ant2-2437-PASS



11G-Ant2-2462-PASS

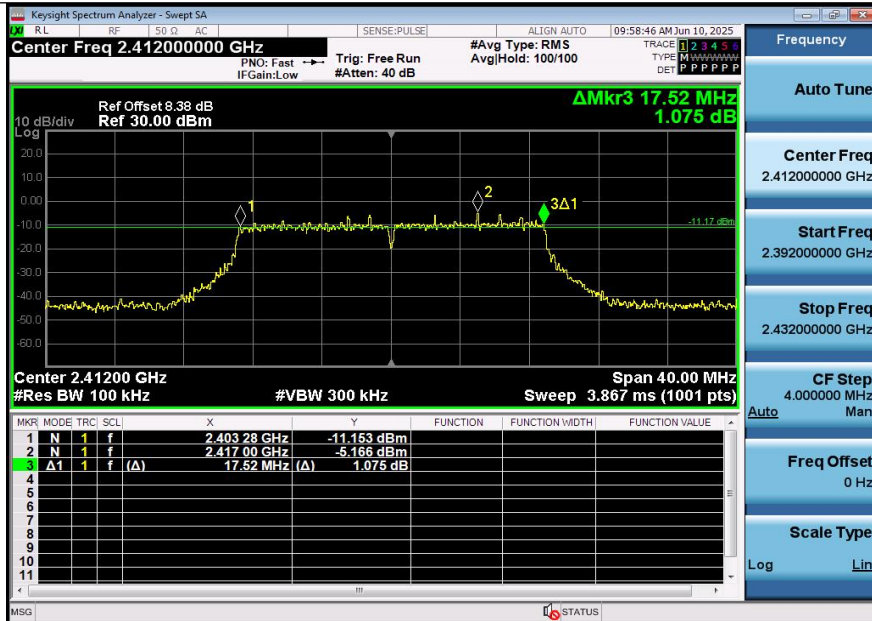


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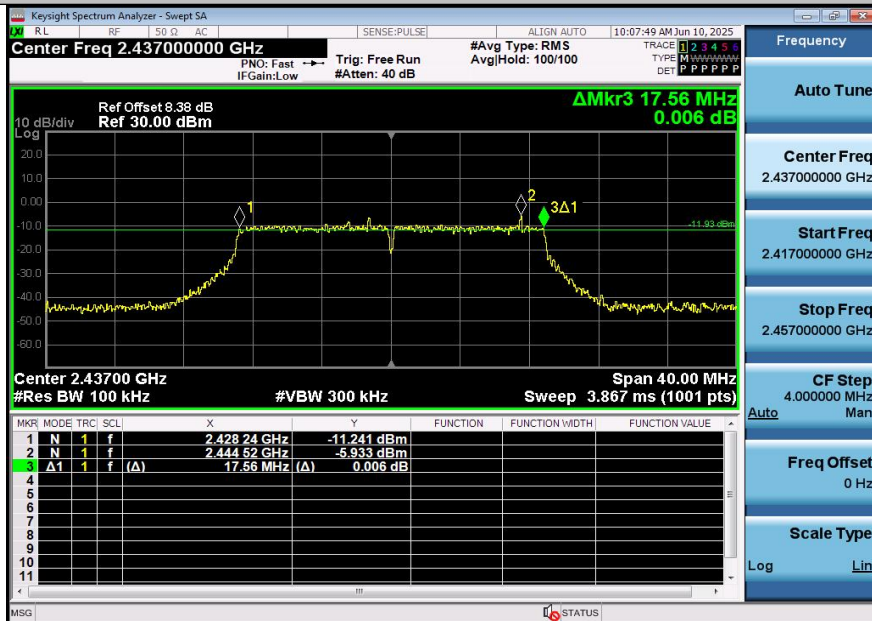
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11N20SISO-Ant2-2412-PASS



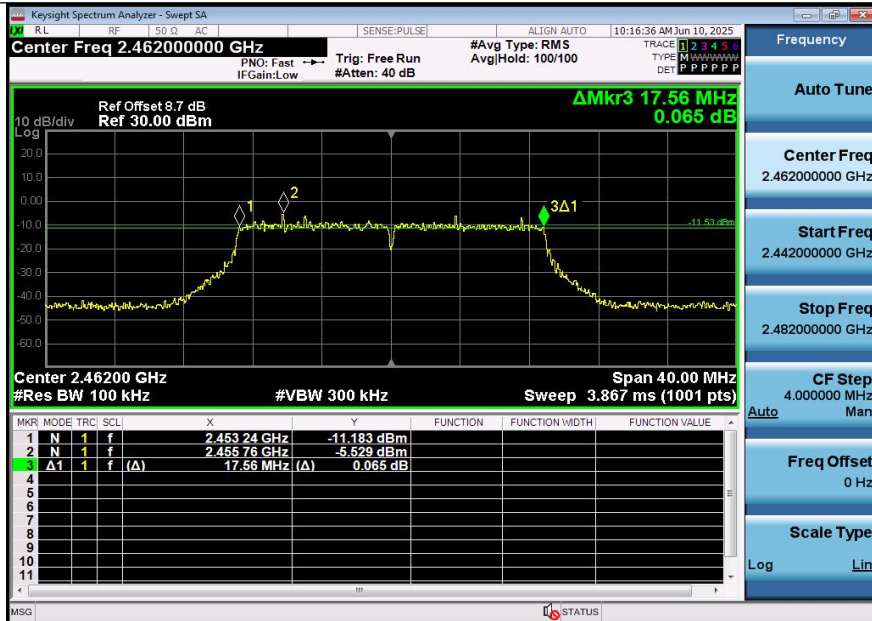
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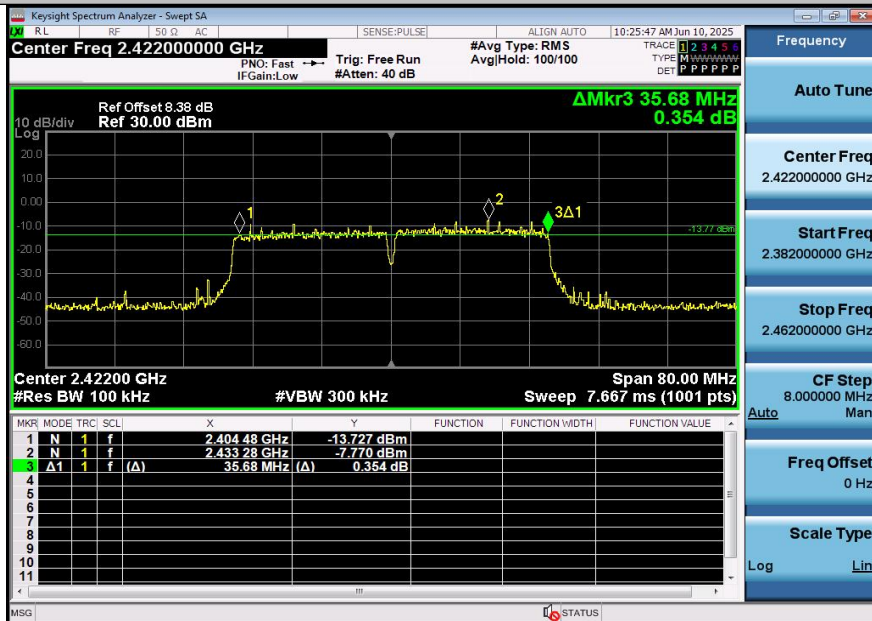
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11N20SISO-Ant2-2462-PASS



11N40SISO-Ant2-2422-PASS

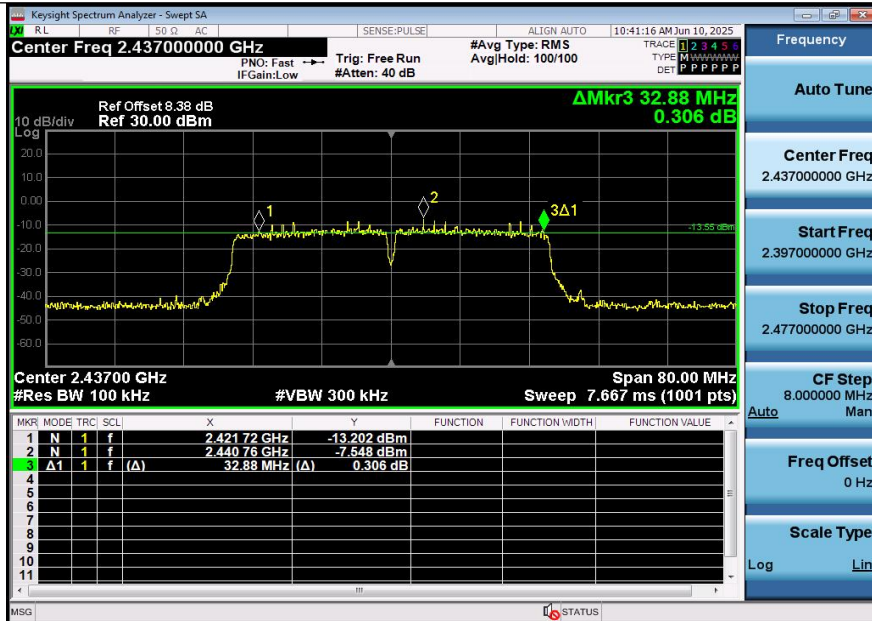


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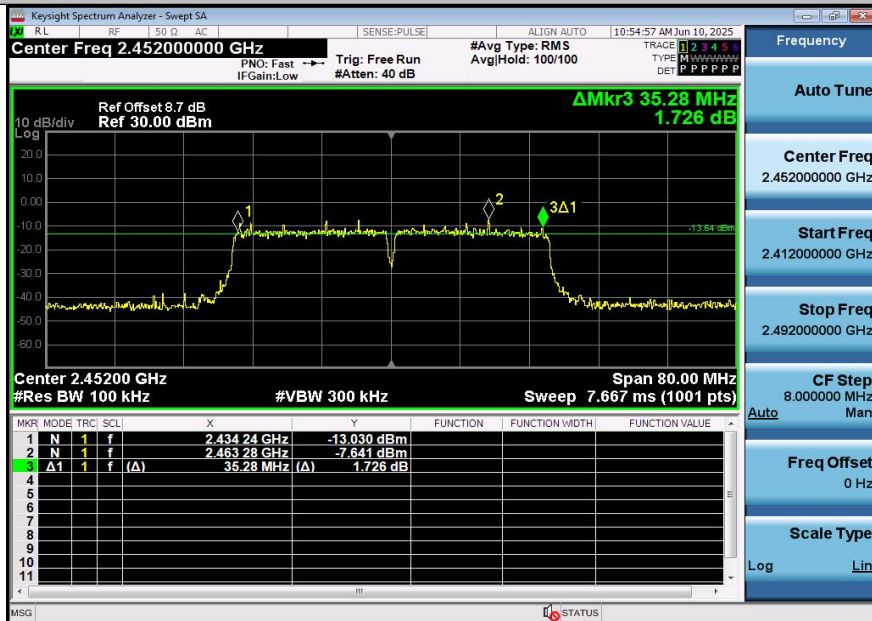
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11N40SISO-Ant2-2437-PASS



11N40SISO-Ant2-2452-PASS



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Appendix B: Maximum conducted output power

Ant 1

Test Result

Test Mode	Antenna	Frequency[MHz]	Output power PK (dBm)	Limit [dBm]	Result
11B	Ant1	2412	13.22	≤30.00	PASS
11B	Ant1	2437	12.94	≤30.00	PASS
11B	Ant1	2462	13.00	≤30.00	PASS
11G	Ant1	2412	12.68	≤30.00	PASS
11G	Ant1	2437	12.63	≤30.00	PASS
11G	Ant1	2462	12.67	≤30.00	PASS
11N20SISO	Ant1	2412	12.17	≤30.00	PASS
11N20SISO	Ant1	2437	12.98	≤30.00	PASS
11N20SISO	Ant1	2462	13.37	≤30.00	PASS
11N40SISO	Ant1	2422	11.43	≤30.00	PASS
11N40SISO	Ant1	2437	11.71	≤30.00	PASS
11N40SISO	Ant1	2452	12.29	≤30.00	PASS

Ant 2

Test Result

Test Mode	Antenna	Frequency[MHz]	Output power PK (dBm)	Limit [dBm]	Result
11B	Ant2	2412	13.09	≤30.00	PASS
11B	Ant2	2437	12.52	≤30.00	PASS
11B	Ant2	2462	13.39	≤30.00	PASS
11G	Ant2	2412	13.32	≤30.00	PASS
11G	Ant2	2437	13.23	≤30.00	PASS
11G	Ant2	2462	12.79	≤30.00	PASS
11N20SISO	Ant2	2412	12.86	≤30.00	PASS
11N20SISO	Ant2	2437	12.47	≤30.00	PASS
11N20SISO	Ant2	2462	12.81	≤30.00	PASS
11N40SISO	Ant1	2422	12.54	≤30.00	PASS
11N40SISO	Ant1	2437	12.14	≤30.00	PASS
11N40SISO	Ant1	2452	12.57	≤30.00	PASS



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MIMO

Type	Channel	Output power PK(dBm) ANT1	Output power PK(dBm) ANT2	Output power PK(dBm) MIMO	Limit (dBm)	Result
802.11n HT20	01	12.17	12.86	15.54	29.00	Pass
	06	12.98	12.47	15.74		
	11	13.37	12.81	16.11		
802.11n HT40	03	11.43	12.54	15.03	29.00	Pass
	06	11.71	12.14	14.94		
	09	12.29	12.57	15.44		



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Appendix C: Maximum power spectral density

Ant 1

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.81	≤8.00	PASS
11B	Ant1	2437	-14.07	≤8.00	PASS
11B	Ant1	2462	-14.02	≤8.00	PASS
11G	Ant1	2412	-19.57	≤8.00	PASS
11G	Ant1	2437	-20.63	≤8.00	PASS
11G	Ant1	2462	-20.10	≤8.00	PASS
11N20SISO	Ant1	2412	-21.31	≤8.00	PASS
11N20SISO	Ant1	2437	-20.60	≤8.00	PASS
11N20SISO	Ant1	2462	-20.50	≤8.00	PASS
11N40SISO	Ant1	2422	-22.85	≤8.00	PASS
11N40SISO	Ant1	2437	-23.67	≤8.00	PASS
11N40SISO	Ant1	2452	-23.42	≤8.00	PASS

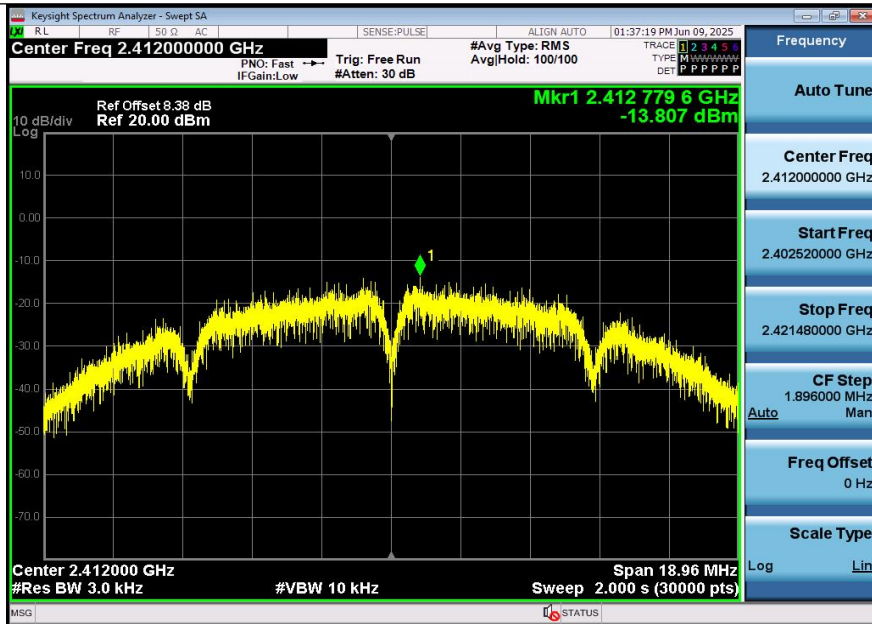


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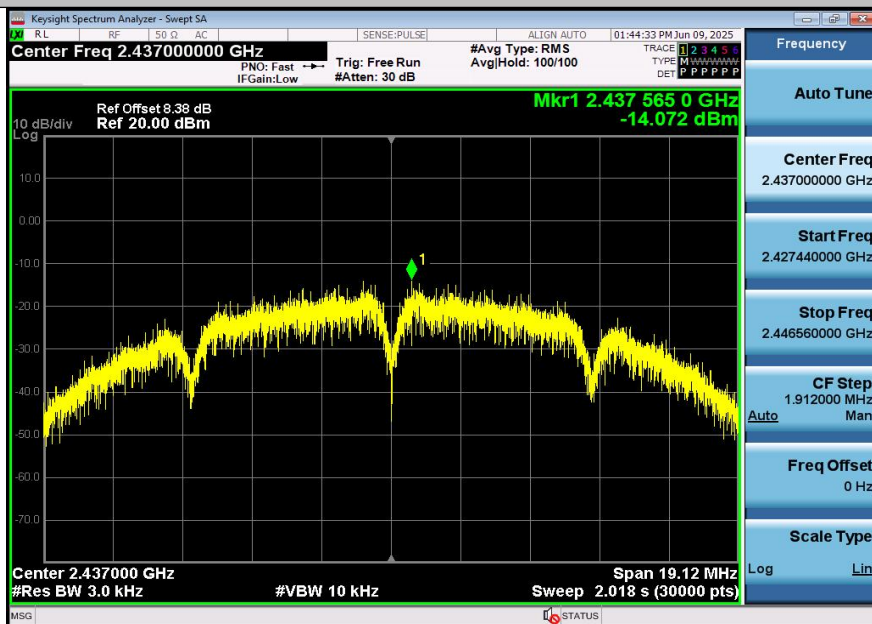
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Test Graphs



11B-Ant1-2412-PASS



11B-Ant1-2437-PASS

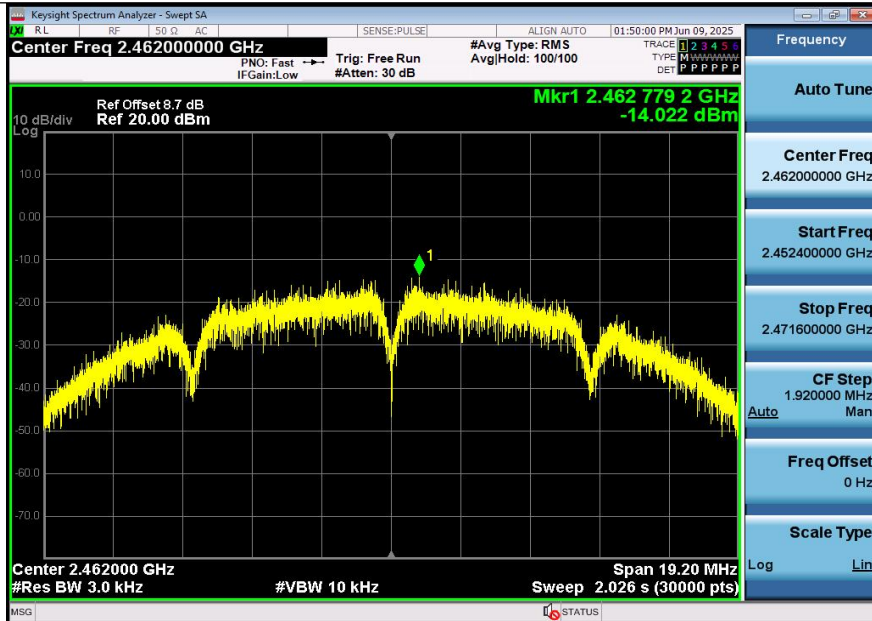


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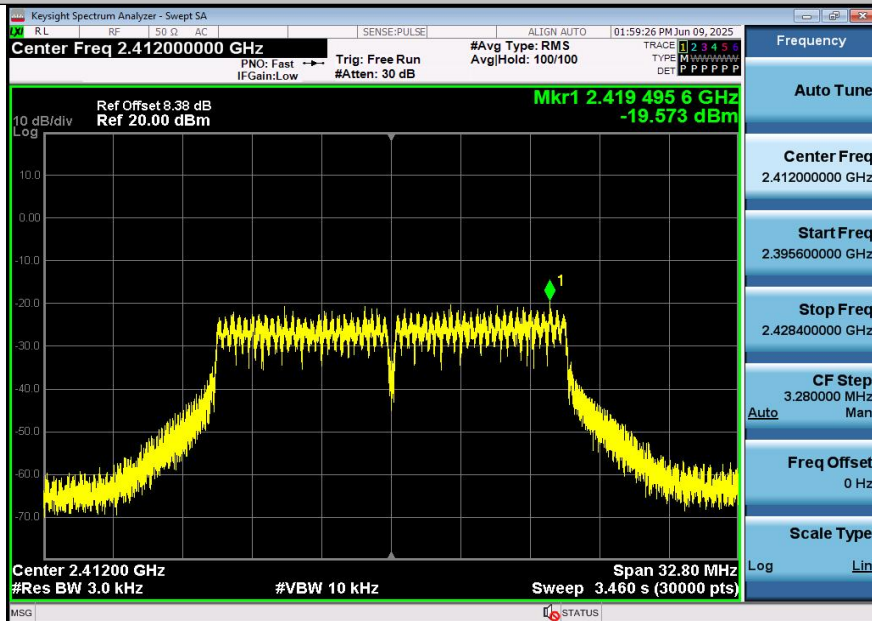
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11B-Ant1-2462-PASS



11G-Ant1-2412-PASS

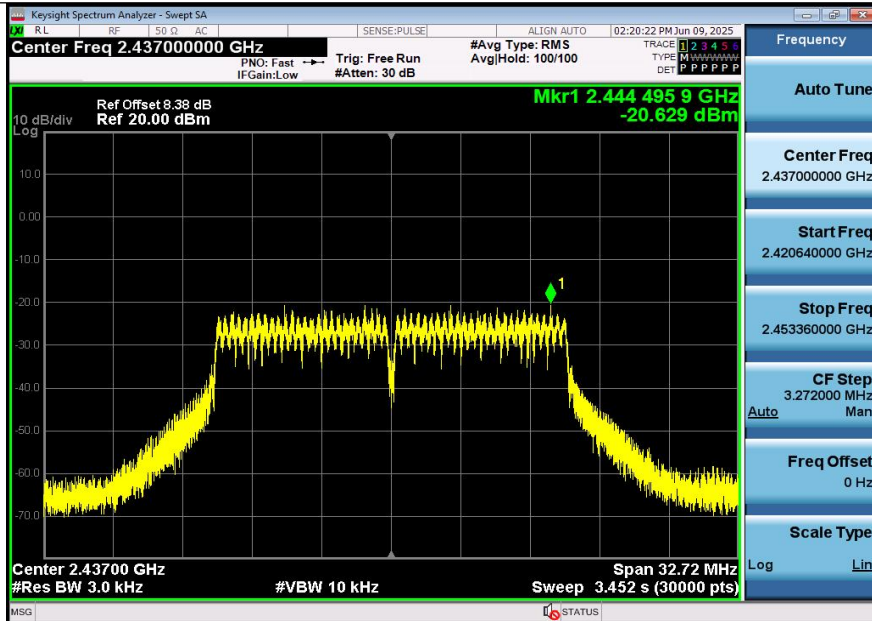


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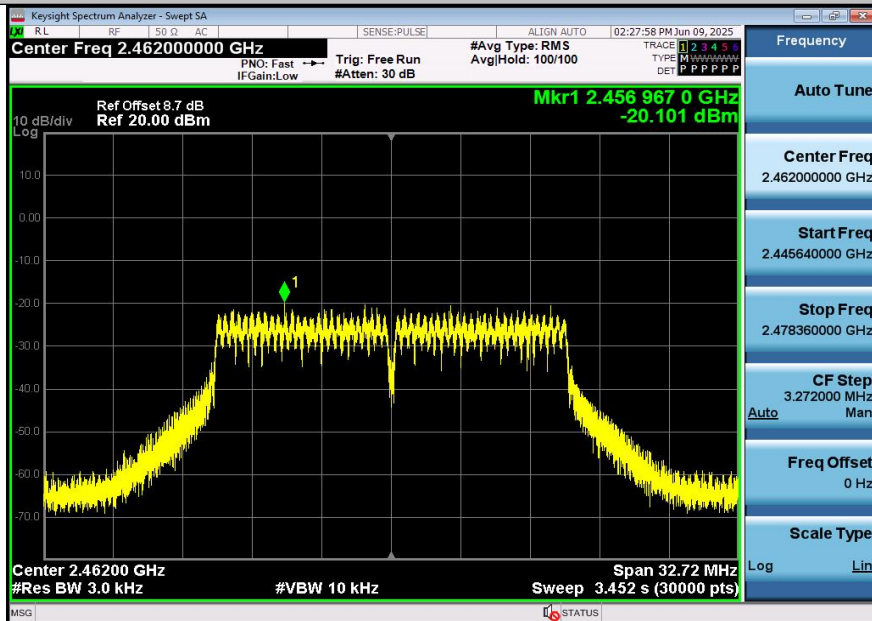
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11G-Ant1-2437-PASS



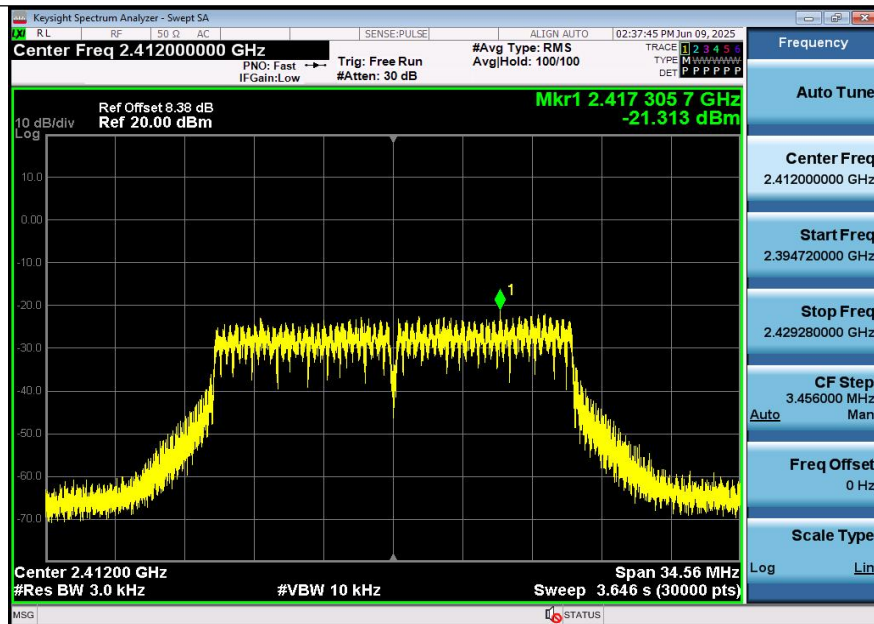
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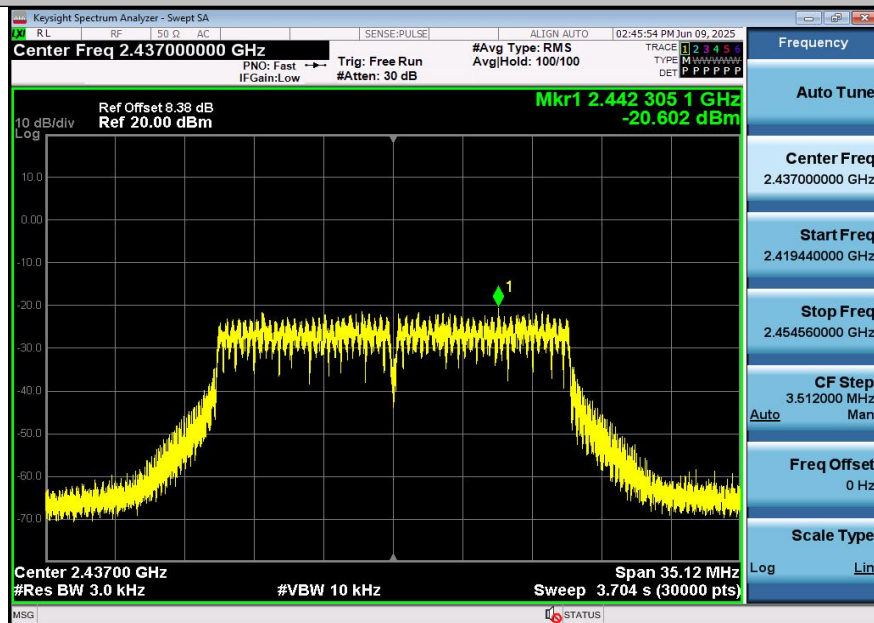
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11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS

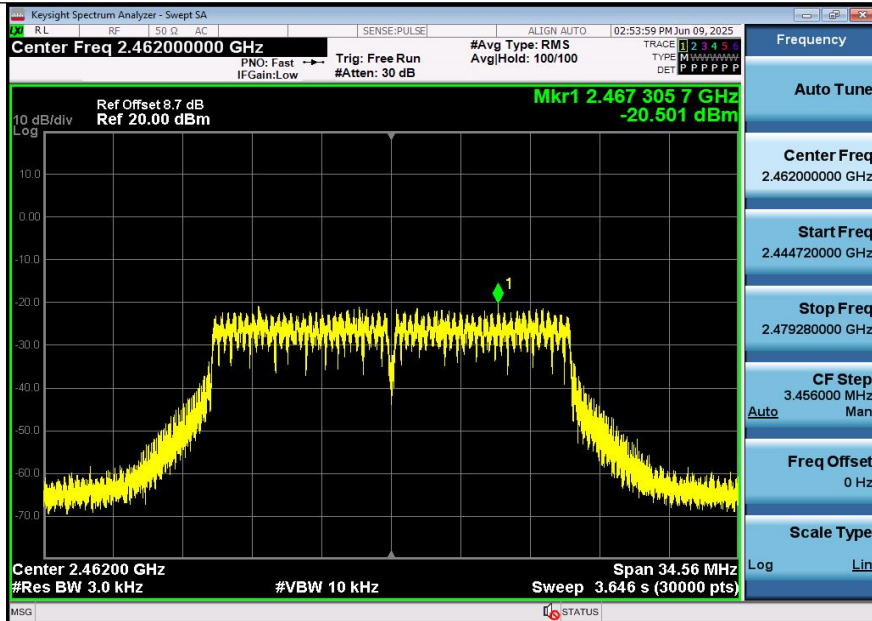


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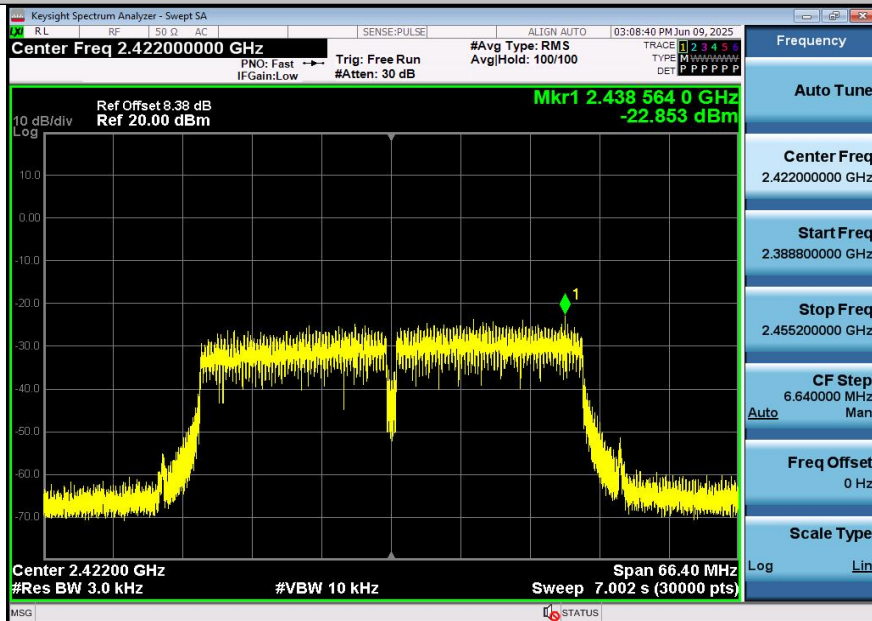
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11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS

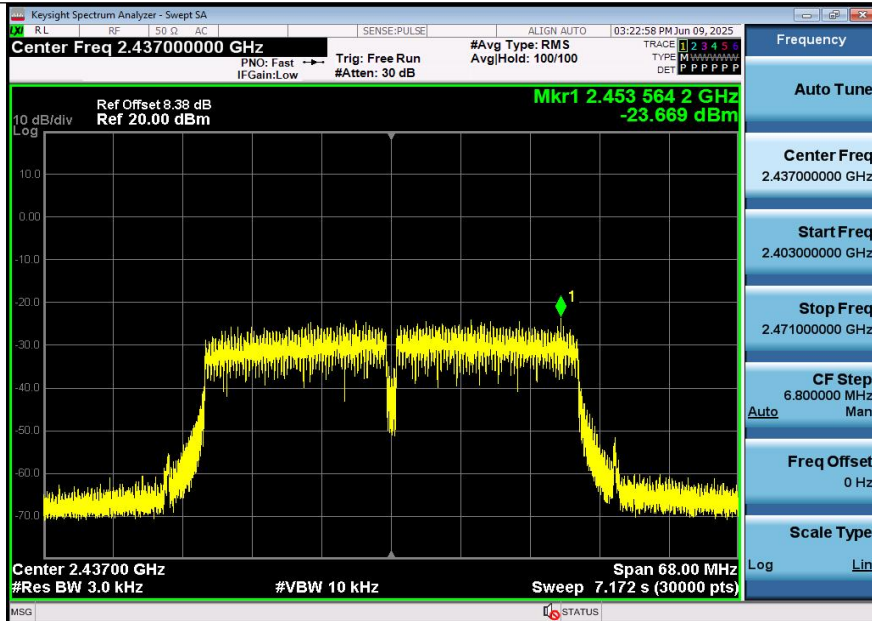


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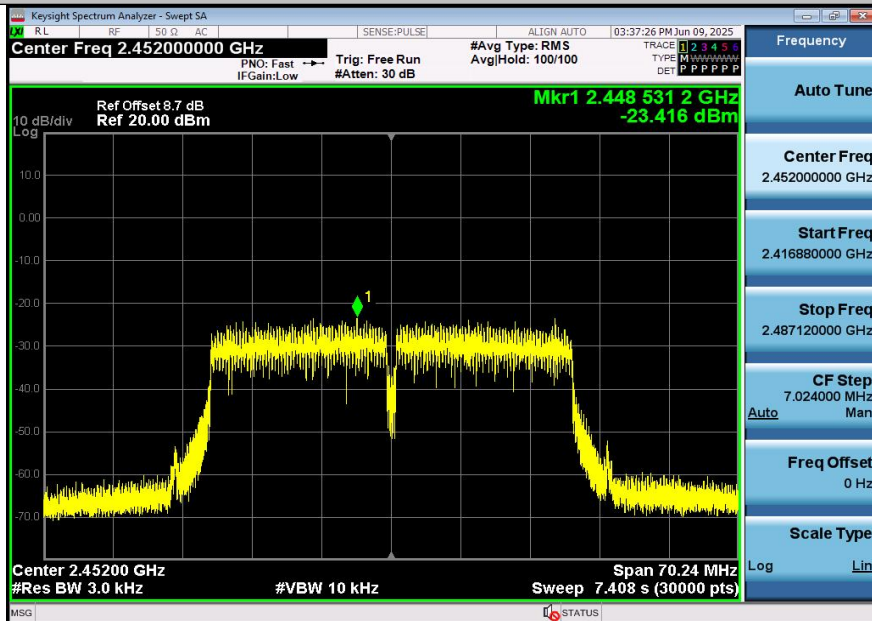
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11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS



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Ant 2

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant2	2412	-14.21	≤8.00	PASS
11B	Ant2	2437	-14.48	≤8.00	PASS
11B	Ant2	2462	-13.63	≤8.00	PASS
11G	Ant2	2412	-19.60	≤8.00	PASS
11G	Ant2	2437	-20.36	≤8.00	PASS
11G	Ant2	2462	-20.49	≤8.00	PASS
11N20SISO	Ant2	2412	-20.75	≤8.00	PASS
11N20SISO	Ant2	2437	-21.50	≤8.00	PASS
11N20SISO	Ant2	2462	-21.30	≤8.00	PASS
11N40SISO	Ant2	2422	-22.60	≤8.00	PASS
11N40SISO	Ant2	2437	-23.36	≤8.00	PASS
11N40SISO	Ant2	2452	-23.10	≤8.00	PASS

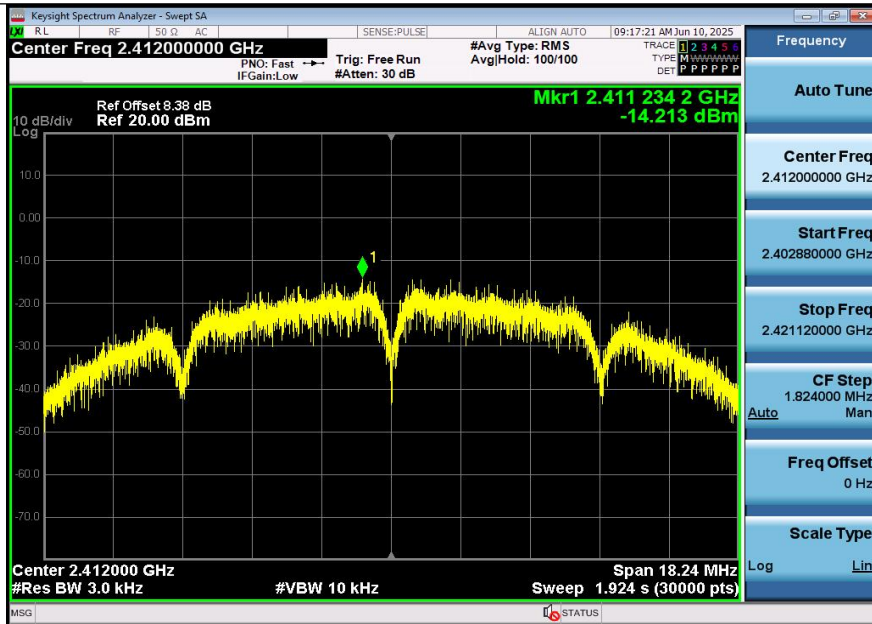


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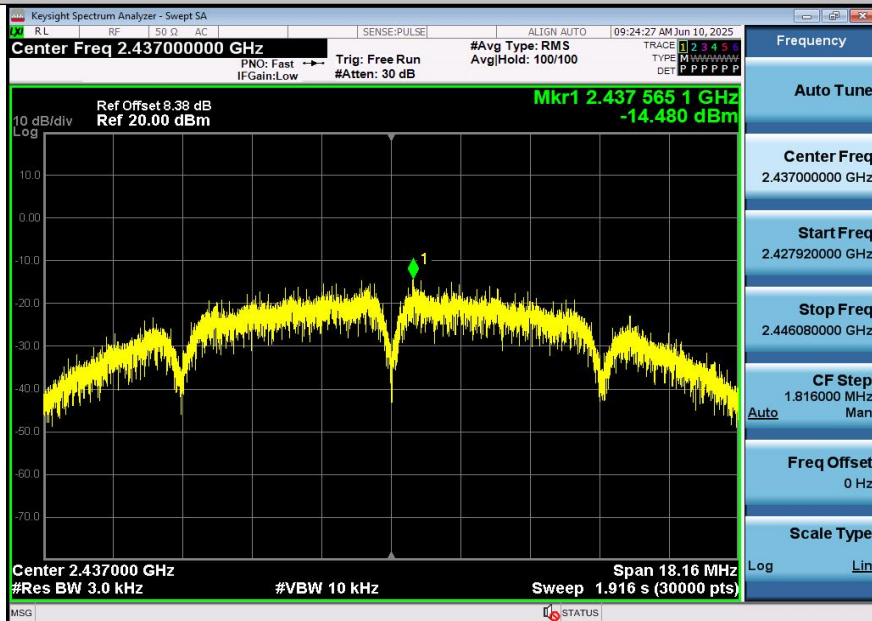
FCC ID:2BK77-R-W42506

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Test Graphs



11B-Ant2-2412-PASS



11B-Ant2-2437-PASS