Appendix A: Test Results of 5GHz Wi-Fi

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Appendix A.1: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Channel	Result [dBm/MHz for U-NII-1, U-NII-2A, U-NII-2C; dBm/500KHz] for U-NII-3	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	2.3	≤11.00	PASS
	Ant2	5180	7	≤11.00	PASS
	Ant1	5200	2.67	≤11.00	PASS
	Ant2	5200	6.55	≤11.00	PASS
	Ant1	5240	2.54	≤11.00	PASS
	Ant2	5240	5.44	≤11.00	PASS
	Ant1	5260	1.83	≤11.00	PASS
	Ant2	5260	4.82	≤11.00	PASS
	Ant1	5280	1.98	≤11.00	PASS
	Ant2	5280	4.76	≤11.00	PASS
	Ant1	5320	-0.9	≤11.00	PASS
	Ant2	5320	1.5	≤11.00	PASS
	Ant1	5500	-4.18	≤11.00	PASS
	Ant2	5500	0.56	≤11.00	PASS
	Ant1	5580	-0.81	≤11.00	PASS
	Ant2	5580	4.08	≤11.00	PASS
	Ant1	5700	0.26	≤11.00	PASS
	Ant2	5700	5.8	≤11.00	PASS
	Ant1	5720	-2.33	≤11.00	PASS
	Ant2	5720	3.97	≤11.00	PASS
	Ant1	5745	0.65	≤30.00	PASS
	Ant2	5745	4.63	≤30.00	PASS
	Ant1	5785	-1.34	≤30.00	PASS
	Ant2	5785	2.62	≤30.00	PASS
	Ant1	5825	0.69	≤30.00	PASS
	Ant2	5825	4.31	≤30.00	PASS
11N20MIMO	Ant1	5180	1.39	≤11.00	PASS
	Ant2	5180	5.27	≤11.00	PASS
	total	5180	6.76	≤8.70	PASS
	Ant1	5200	1.53	≤11.00	PASS
	Ant2	5200	4.48	≤11.00	PASS
	total	5200	6.26	≤8.70	PASS
	Ant1	5240	1.13	≤11.00	PASS
	Ant2	5240	4.16	≤11.00	PASS
	total	5240	5.91	≤8.70	PASS
	Ant1	5260	0.54	≤11.00	PASS
	Ant2	5260	3.6	≤11.00	PASS
	total	5260	5.34	≤8.70	PASS
	Ant1	5280	-3.69	≤11.00	PASS
	Ant2	5280	-1.65	≤11.00	PASS
	total	5280	0.46	≤8.70	PASS
	Ant1	5320	-3.84	≤11.00	PASS
	Ant2	5320	-1.68	≤11.00	PASS
	total	5320	0.38	≤8.70	PASS
	Ant1	5500	-6.12	≤11.00	PASS
	Ant2	5500	-1	≤11.00	PASS
	total	5500	0.16	≤8.70	PASS
	Ant1	5580	-1.51	≤11.00	PASS
	Ant2	5580	3.11	≤11.00	PASS
	total	5580	4.40	≤8.70	PASS
	Ant1	5700	-0.33	≤11.00	PASS
	Ant2	5700	5.33	≤11.00	PASS
	total	5700	6.37	≤8.70	PASS
	Ant1	5720	-2.81	≤11.00	PASS
	Ant2	5720	3.44	≤11.00	PASS
	total	5720	4.36	≤8.70	PASS
	Ant1	5745	-0.5	≤30.00	PASS
	Ant2	5745	3.21	≤30.00	PASS

	total	5745	4.75	≤27.70	PASS
	Ant1	5785	-0.02	≤30.00	PASS
	Ant2	5785	3.64	≤30.00	PASS
	total	5785	5.19	≤27.70	PASS
	Ant1	5825	-0.05	≤30.00	PASS
	Ant2	5825	3.88	≤30.00	PASS
	total	5825	5.36	≤27.70	PASS
11N40MIMO	Ant1	5190	-2.37	≤11.00	PASS
	Ant2	5190	2	≤11.00	PASS
	total	5190	3.35	≤8.70	PASS
	Ant1	5230	-1.38	≤11.00	PASS
	Ant2	5230	1.83	≤11.00	PASS
	total	5230	3.53	≤8.70	PASS
	Ant1	5270	-2.23	≤11.00	PASS
	Ant2	5270	0.85	≤11.00	PASS
	total	5270	2.59	≤8.70	PASS
	Ant1	5310	-8.28	≤11.00	PASS
	Ant2	5310	-7.44	≤11.00	PASS
	total	5310	-4.83	≤8.70	PASS
	Ant1	5510	-11.44	≤11.00	PASS
	Ant2	5510	-5.76	≤11.00	PASS
	total	5510	-4.72	≤8.70	PASS
	Ant1	5550	-2.9	≤11.00	PASS
	Ant2	5550	2.08	≤11.00	PASS
	total	5550	3.28	≤8.70	PASS
	Ant1	5670	-1.68	≤11.00	PASS
	Ant2	5670	3.77	≤11.00	PASS
	total	5670	4.86	≤8.70	PASS
	Ant1	5710	-5.65	≤11.00	PASS
	Ant2	5710	0.51	≤11.00	PASS
	total	5710	1.45	≤8.70	PASS
	Ant1	5755	-3.31	≤30.00	PASS
	Ant2	5755	0.56	≤30.00	PASS
	total	5755	2.05	≤27.70	PASS
	Ant1	5795	-2.84	≤30.00	PASS
	Ant2	5795	1.28	≤30.00	PASS
	total	5795	2.7	≤27.70	PASS
11AC20MIMO	Ant1	5180	1.15	≤11.00	PASS
	Ant2	5180	6.04	≤11.00	PASS
	total	5180	7.26	≤8.70	PASS
	Ant1	5200	1.58	≤11.00	PASS
	Ant2	5200	5.15	≤11.00	PASS
	total	5200	6.73	≤8.70	PASS
	Ant1	5240	1.1	≤11.00	PASS
	Ant2	5240	4.49	≤11.00	PASS
	total	5240	6.13	≤8.70	PASS
	Ant1	5260	0.65	≤11.00	PASS
	Ant2	5260	3.64	≤11.00	PASS
	total	5260	5.41	≤8.70	PASS
	Ant1	5280	-3.43	≤11.00	PASS
	Ant2	5280	-0.9	≤11.00	PASS
	total	5280	1.03	≤8.70	PASS
	Ant1	5320	-3.86	≤11.00	PASS
	Ant2	5320	-0.9	≤11.00	PASS
	total	5320	0.88	≤8.70	PASS
	Ant1	5500	-5.95	≤11.00	PASS
	Ant2	5500	-0.35	≤11.00	PASS
	total	5500	0.71	≤8.70	PASS
	Ant1	5580	-1.43	≤11.00	PASS
	Ant2	5580	3.96	≤11.00	PASS
	total	5580	5.06	≤8.70	PASS
	Ant1	5700	0.13	≤11.00	PASS
	Ant2	5700	5.45	≤11.00	PASS

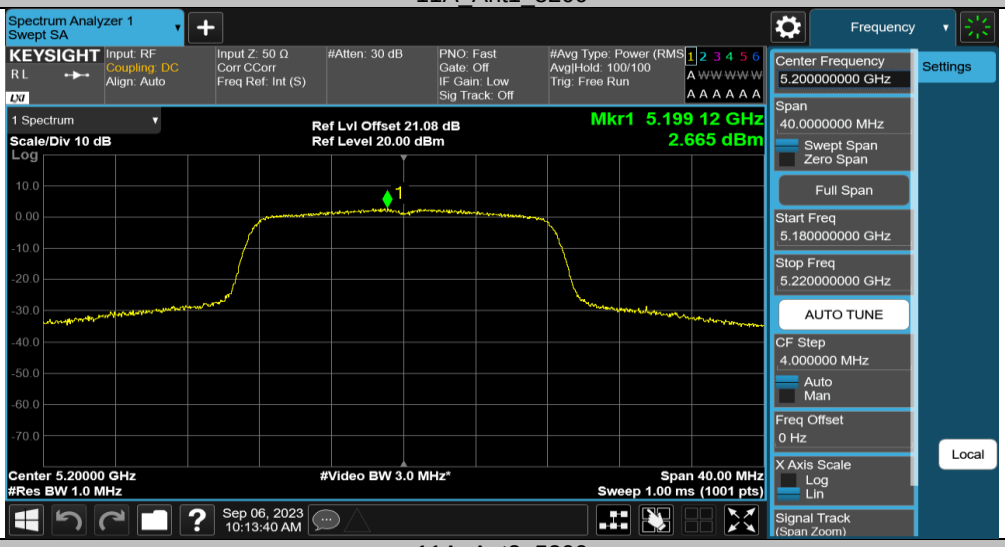
	total	5700	6.57	≤11.00	PASS
	Ant1	5720	-3.99	≤11.00	PASS
	Ant2	5720	2.28	≤8.70	PASS
	total	5720	3.20	≤11.00	PASS
	Ant1	5745	0.21	≤30.00	PASS
	Ant2	5745	3.19	≤30.00	PASS
	total	5745	4.96	≤27.70	PASS
	Ant1	5785	0.5	≤30.00	PASS
	Ant2	5785	4.62	≤30.00	PASS
	total	5785	6.04	≤27.70	PASS
	Ant1	5825	-0.04	≤30.00	PASS
	Ant2	5825	3.98	≤30.00	PASS
	total	5825	5.43	≤27.70	PASS
11AC40MIMO	Ant1	5190	-1.68	≤11.00	PASS
	Ant2	5190	1.54	≤11.00	PASS
	total	5190	3.23	≤8.70	PASS
	Ant1	5230	-1.47	≤11.00	PASS
	Ant2	5230	1.48	≤11.00	PASS
	total	5230	3.26	≤8.70	PASS
	Ant1	5270	-1.79	≤11.00	PASS
	Ant2	5270	0.9	≤11.00	PASS
	total	5270	2.77	≤8.70	PASS
	Ant1	5310	-8.21	≤11.00	PASS
	Ant2	5310	-6.05	≤11.00	PASS
	total	5310	-3.99	≤8.70	PASS
	Ant1	5510	-10.1	≤11.00	PASS
	Ant2	5510	-5.96	≤11.00	PASS
	total	5510	-4.54	≤8.70	PASS
	Ant1	5550	-3.15	≤11.00	PASS
	Ant2	5550	1.62	≤11.00	PASS
	total	5550	2.87	≤8.70	PASS
	Ant1	5670	-2.72	≤11.00	PASS
	Ant2	5670	2.37	≤11.00	PASS
	total	5670	3.54	≤8.70	PASS
	Ant1	5710	-5.74	≤11.00	PASS
	Ant2	5710	0.31	≤11.00	PASS
	total	5710	1.27	≤8.70	PASS
	Ant1	5755	-3.39	≤30.00	PASS
	Ant2	5755	-0.26	≤30.00	PASS
	total	5755	1.46	≤30.00	PASS
	Ant1	5795	-2.24	≤27.70	PASS
	Ant2	5795	0.32	≤30.00	PASS
	total	5795	2.24	≤30.00	PASS
11AC80MIMO	Ant1	5210	-5.66	≤11.00	PASS
	Ant2	5210	-2.73	≤11.00	PASS
	total	5210	-0.94	≤8.70	PASS
	Ant1	5290	-9.33	≤11.00	PASS
	Ant2	5290	-7.06	≤11.00	PASS
	total	5290	-5.04	≤8.70	PASS
	Ant1	5530	-13.99	≤11.00	PASS
	Ant2	5530	-9.17	≤11.00	PASS
	total	5530	-7.93	≤8.70	PASS
	Ant1	5610	-8.41	≤11.00	PASS
	Ant2	5610	-4.95	≤11.00	PASS
	total	5610	-3.33	≤8.70	PASS
	Ant1	5690	-5.62	≤11.00	PASS
	Ant2	5690	-1.68	≤11.00	PASS
	total	5690	-0.21	≤8.70	PASS
	Ant1	5775	-7.76	≤30.00	PASS
	Ant2	5775	-3.97	≤30.00	PASS
	total	5775	-2.45	≤27.70	PASS

*For the WLAN 5GHz 802.11n/802.11ac, the directional gain is 8.3dBi for MIMO mode, thus the power limit should be reduced by 2.3dB.
The Duty Cycle Factor is compensated in the tables.
A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW(27dBm).
As for the band 5.725–5.850 GHz, a narrower RBW used, thus a factor 10*log (500 kHz/RBW) added to the final results.

11A_Ant1_5180

11A_Ant2_5180

11A_Ant1_5200



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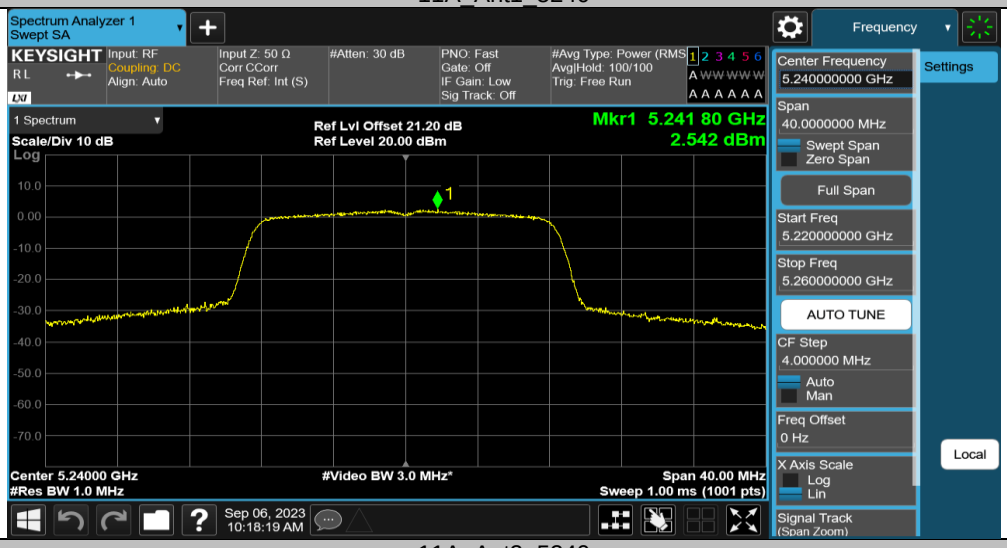
11A_Ant1_5240



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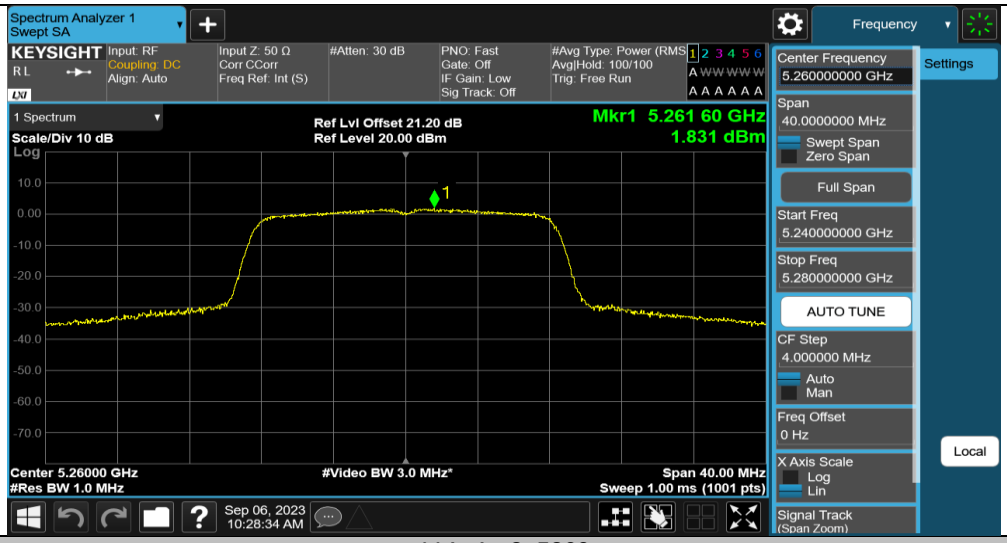

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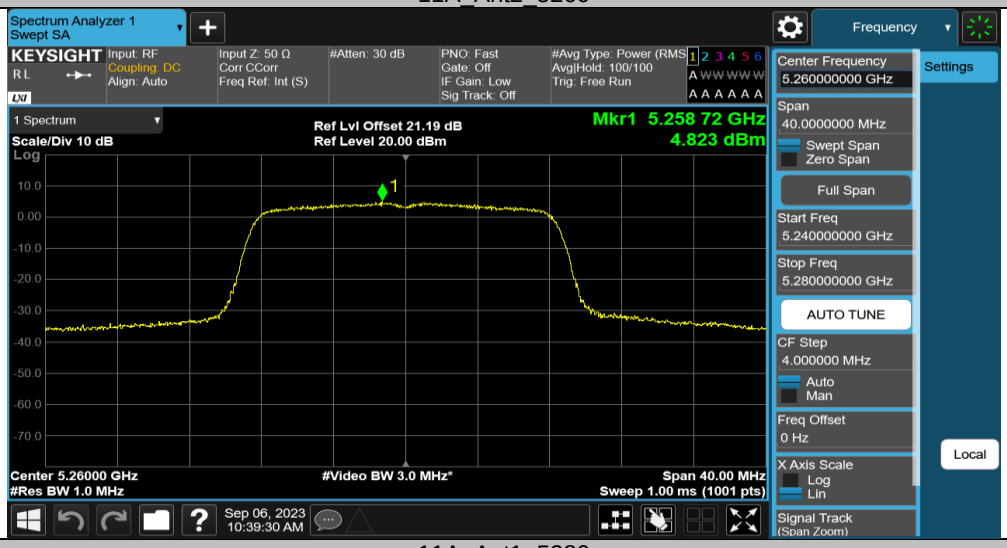

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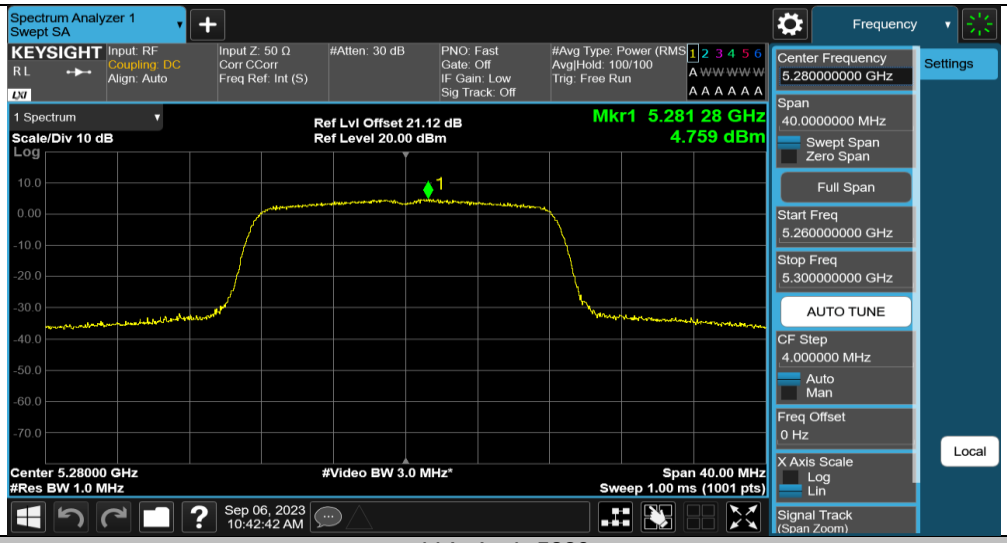
11A_Ant2_5280



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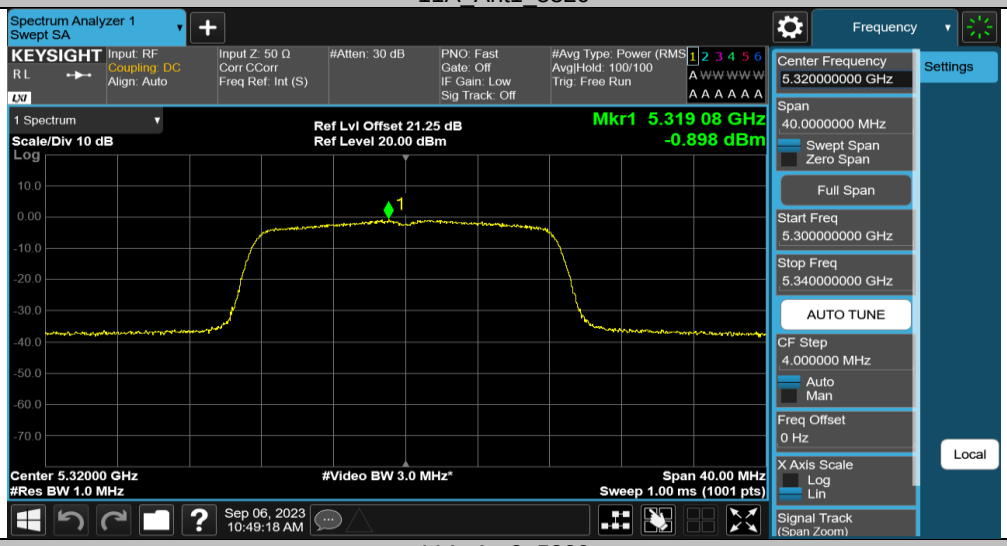

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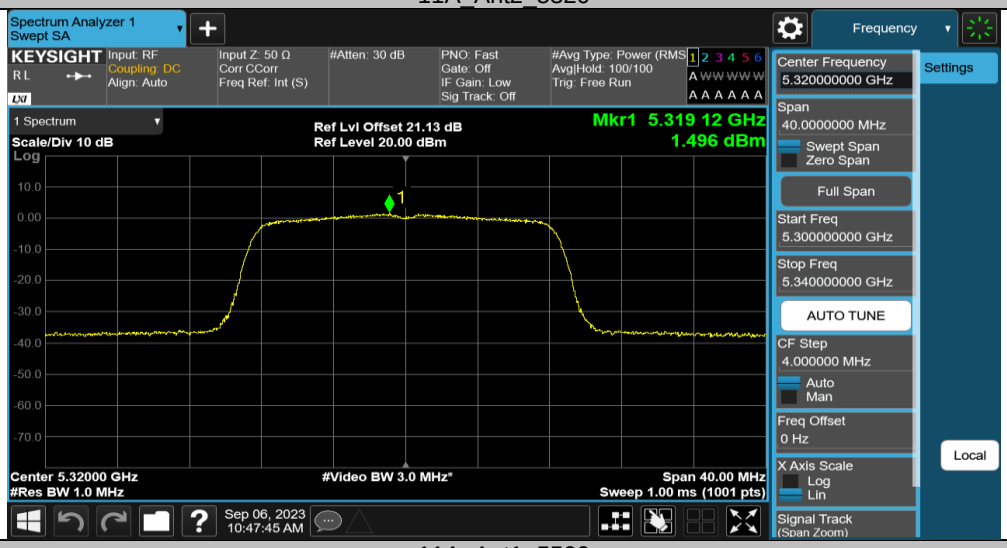

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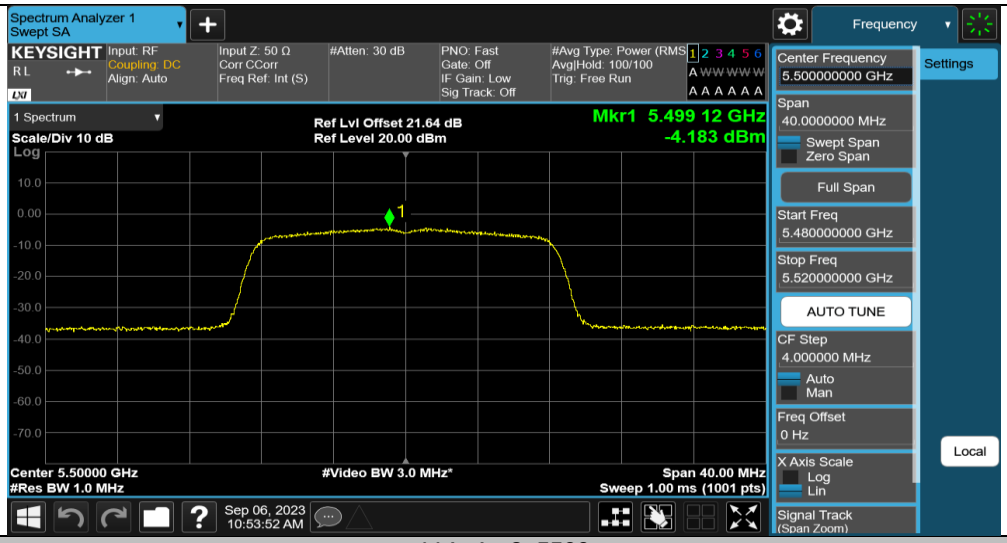

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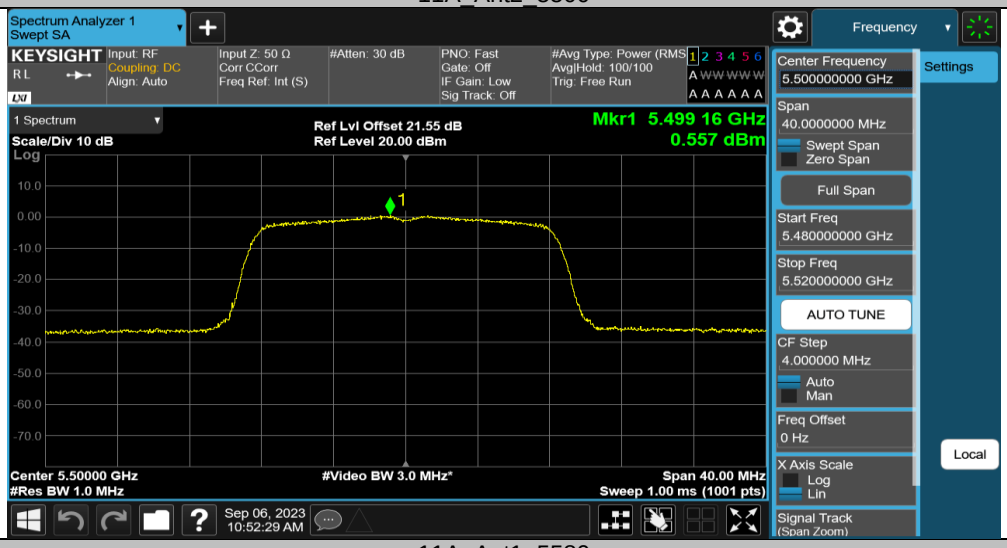

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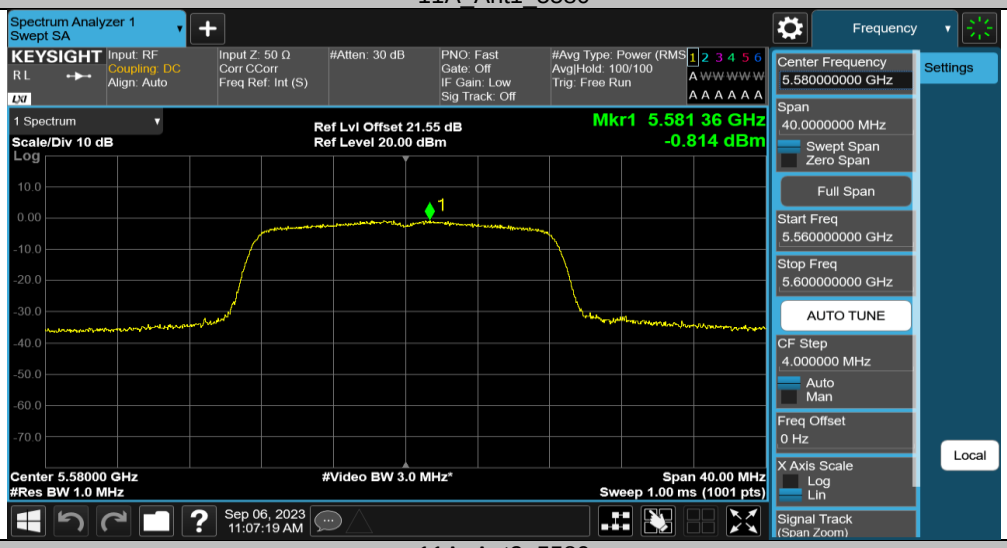

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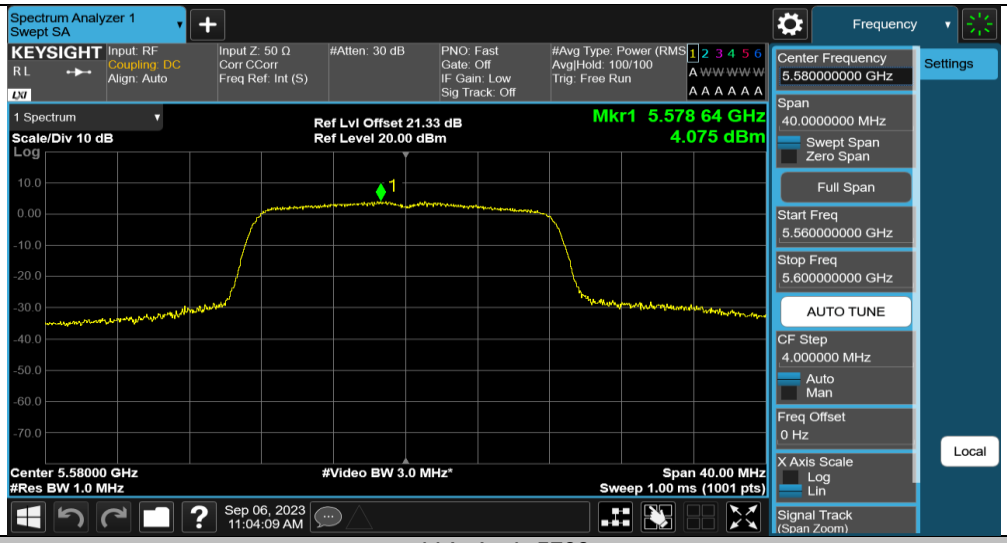

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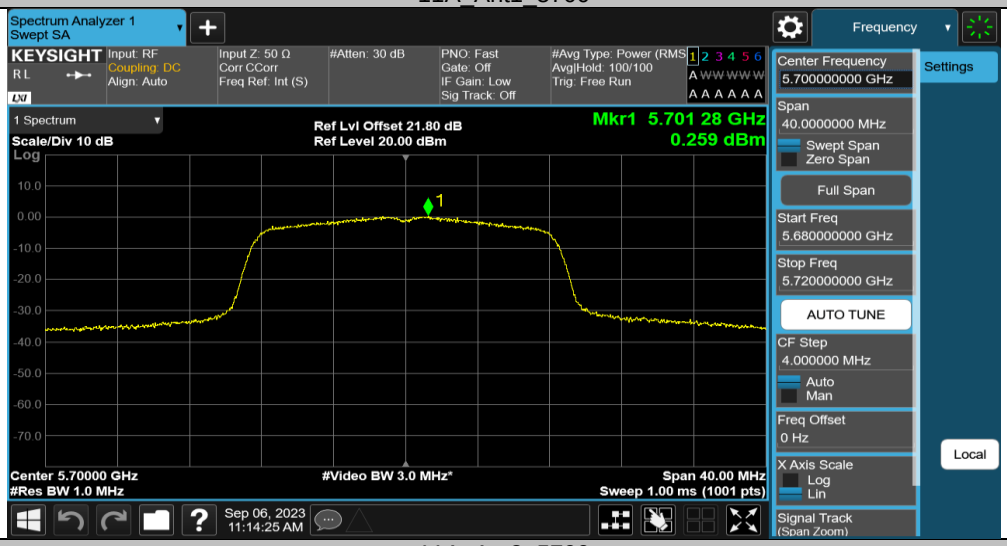

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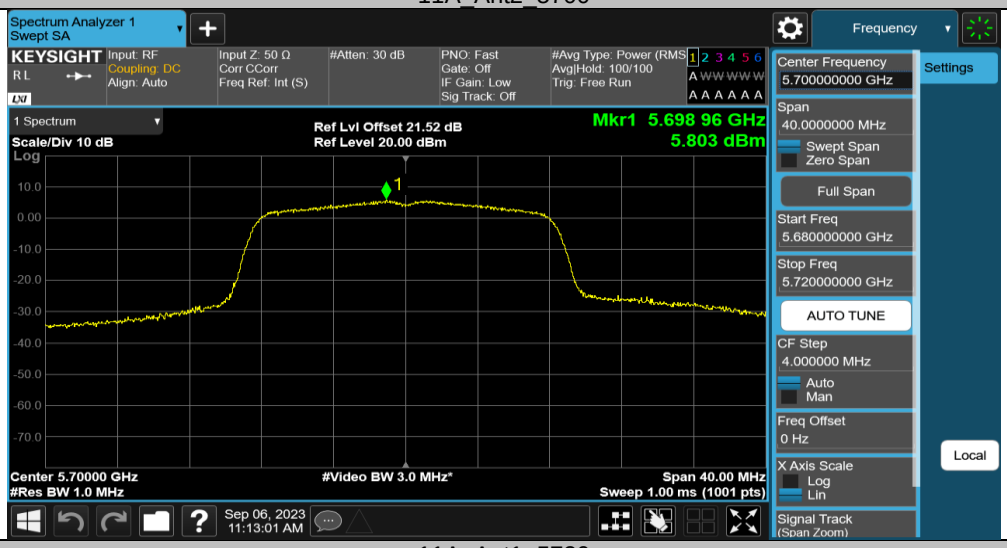

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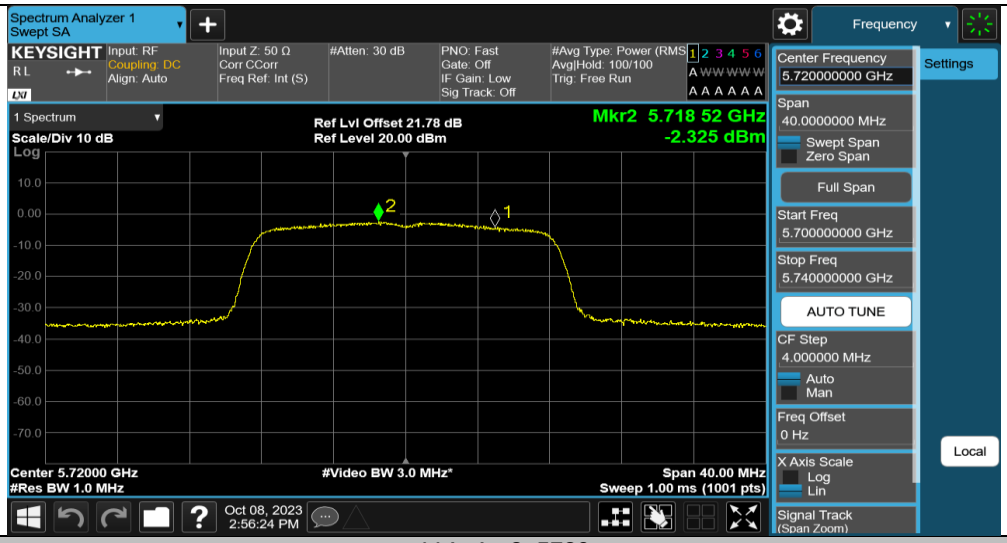

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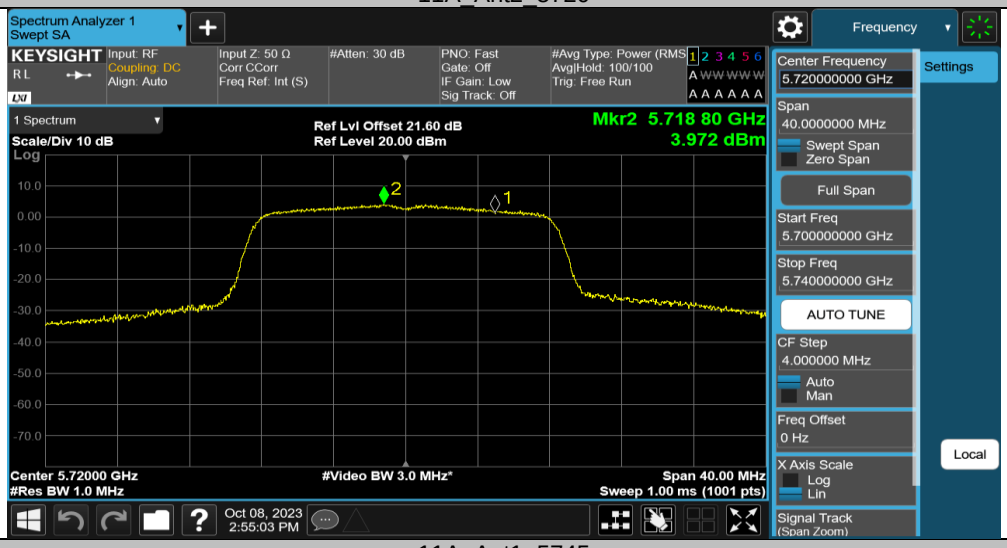

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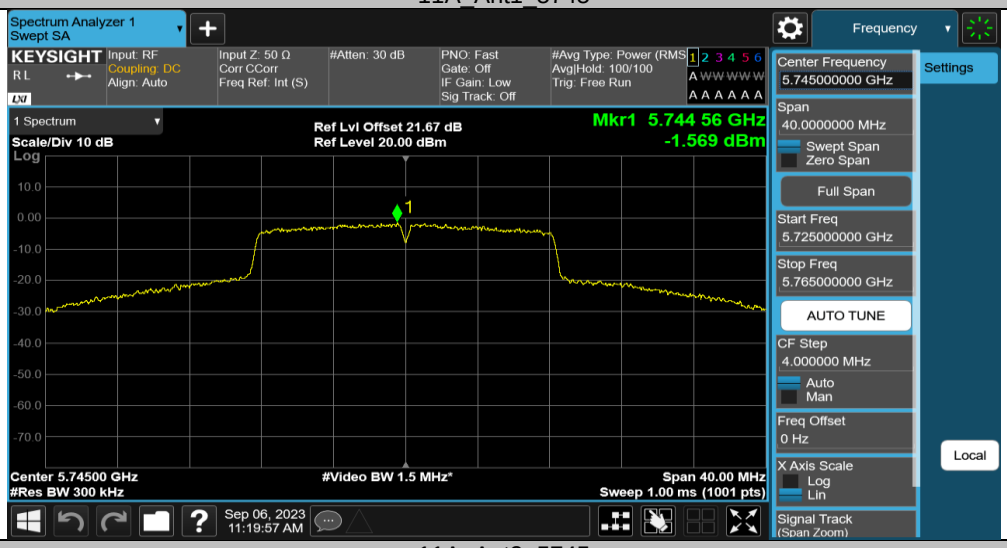

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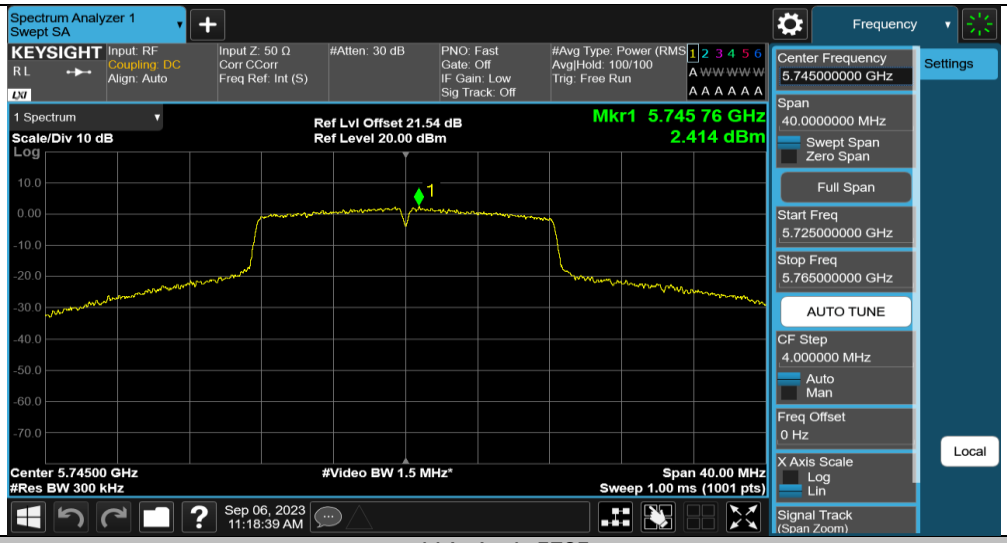

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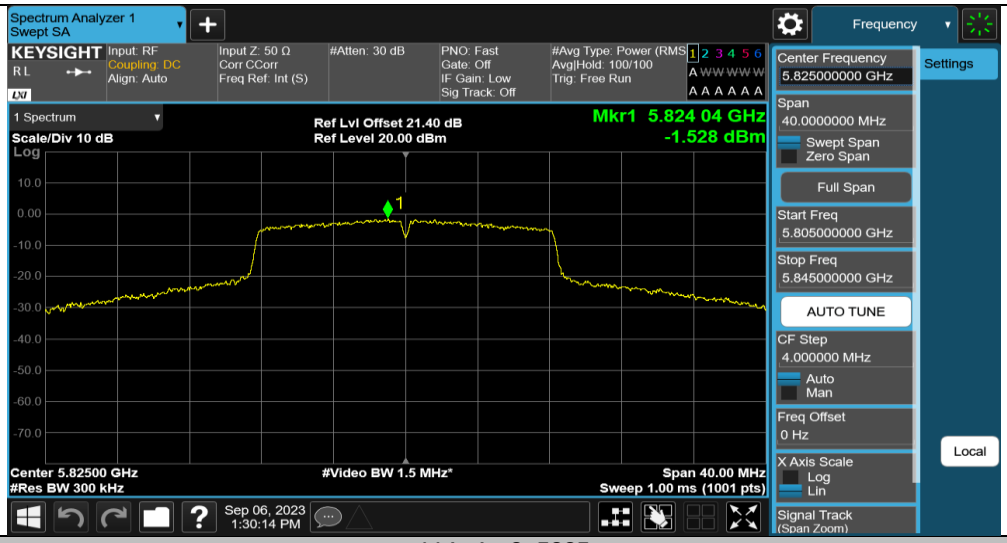
11A_Ant2_5785

11A_Ant1_5825



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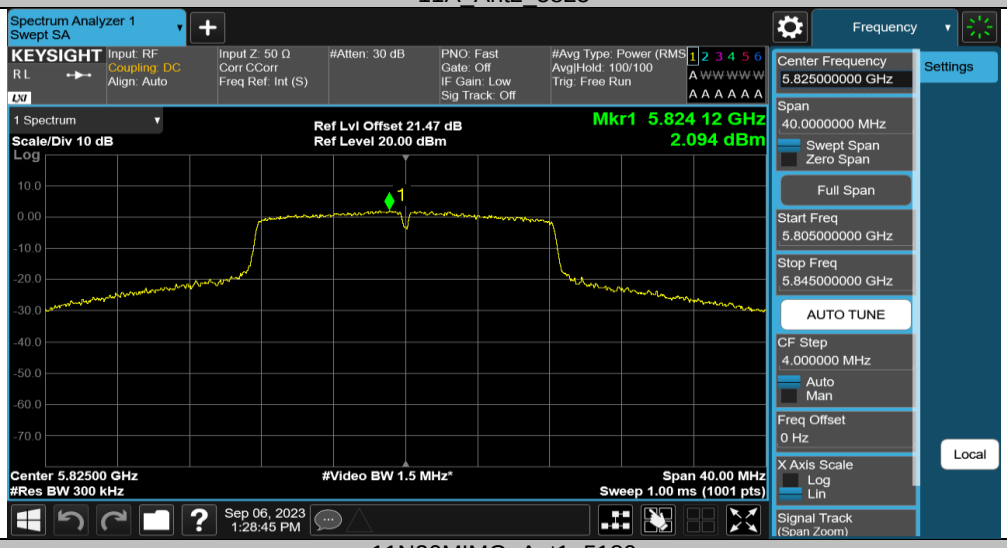

11N20MIMO_Ant1_5180

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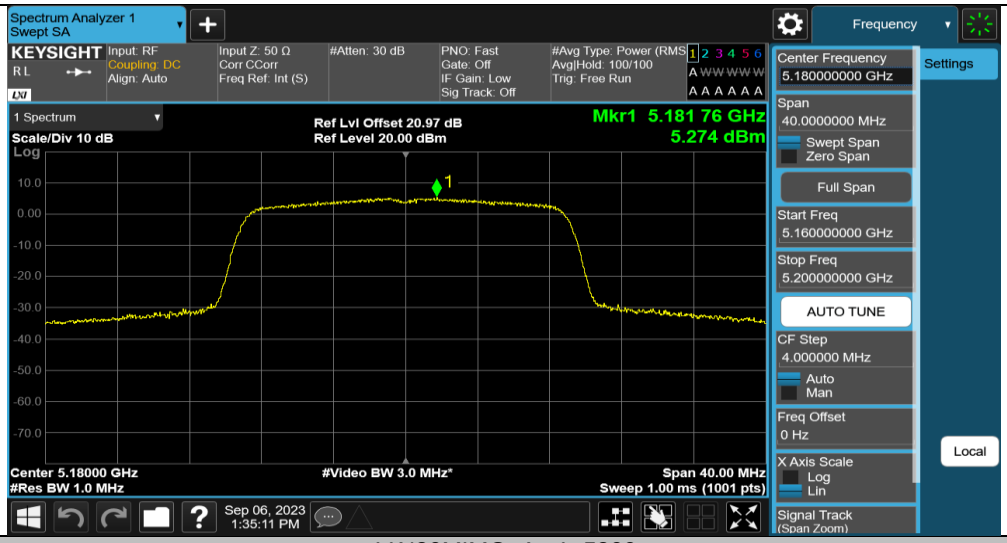

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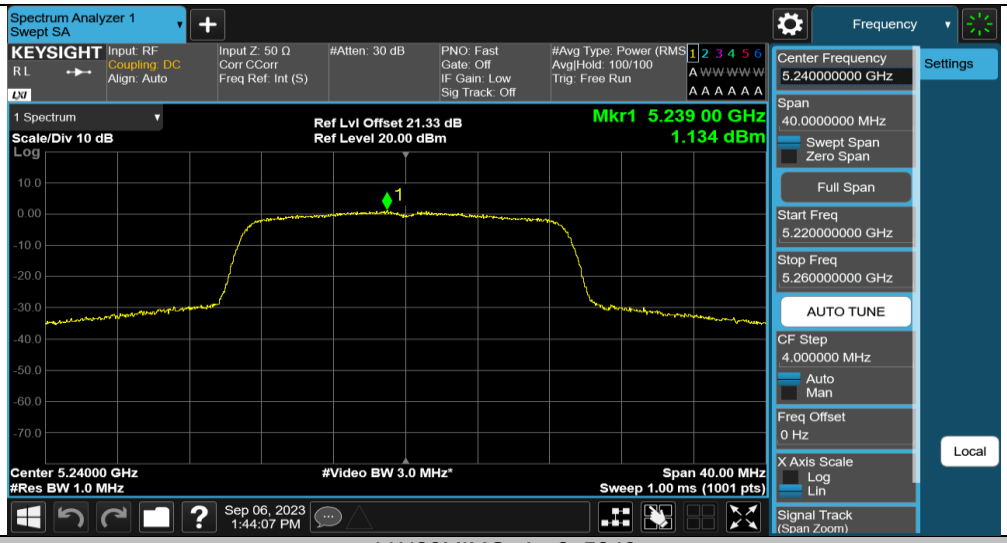
11N20MIMO_Ant2_5200

11N20MIMO_Ant1_5240



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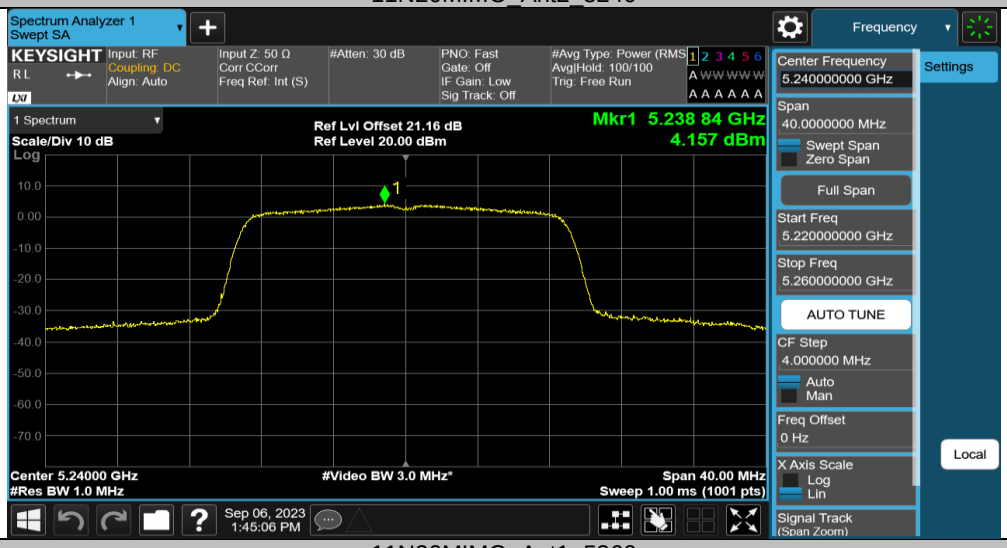

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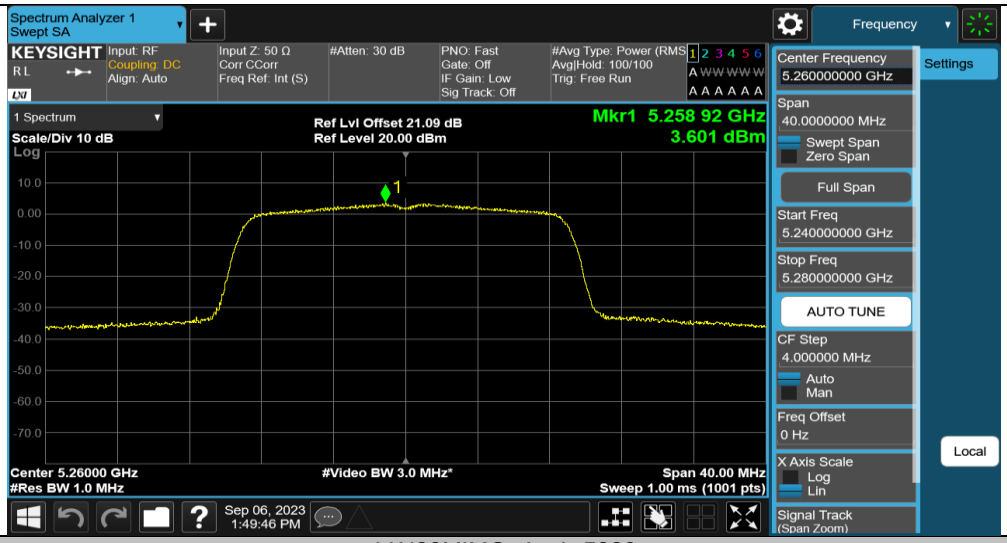

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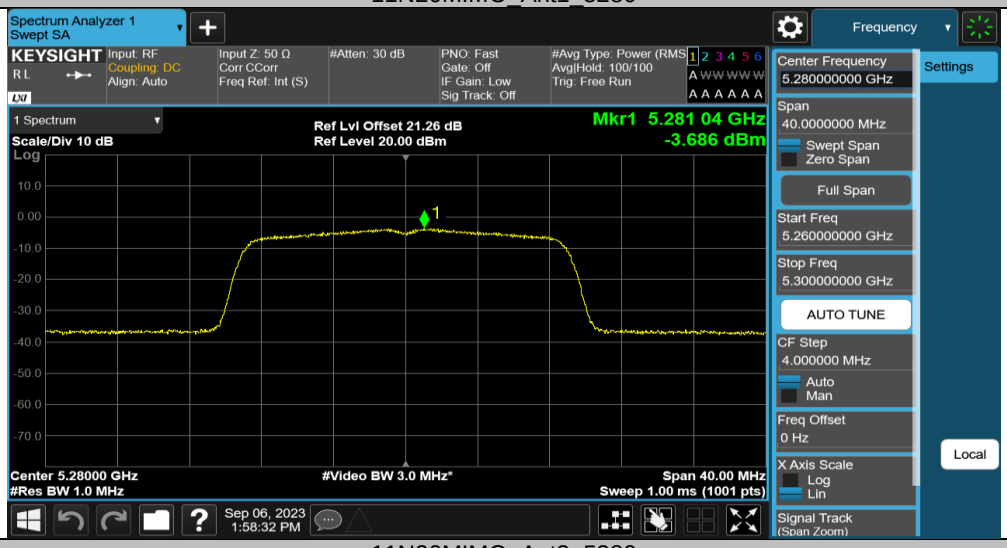

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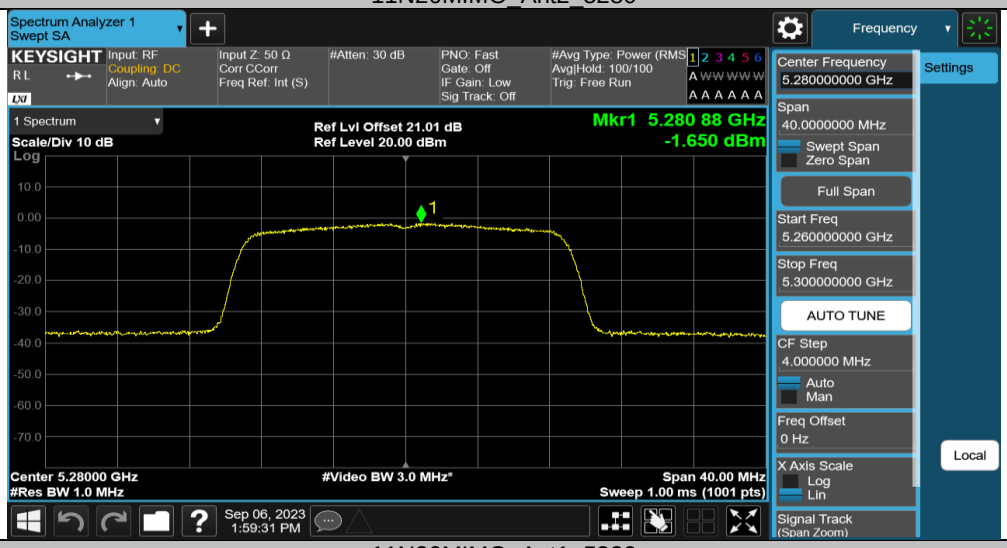

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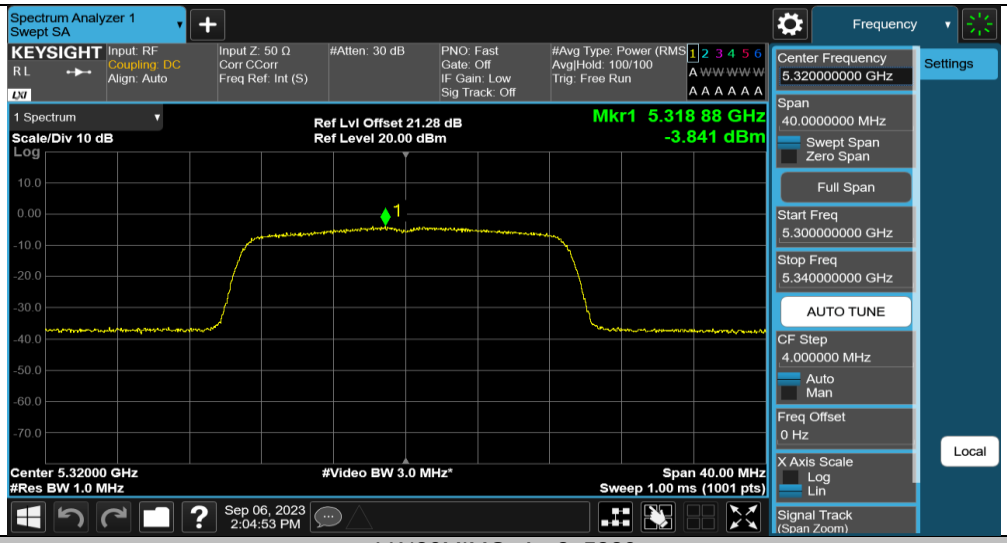
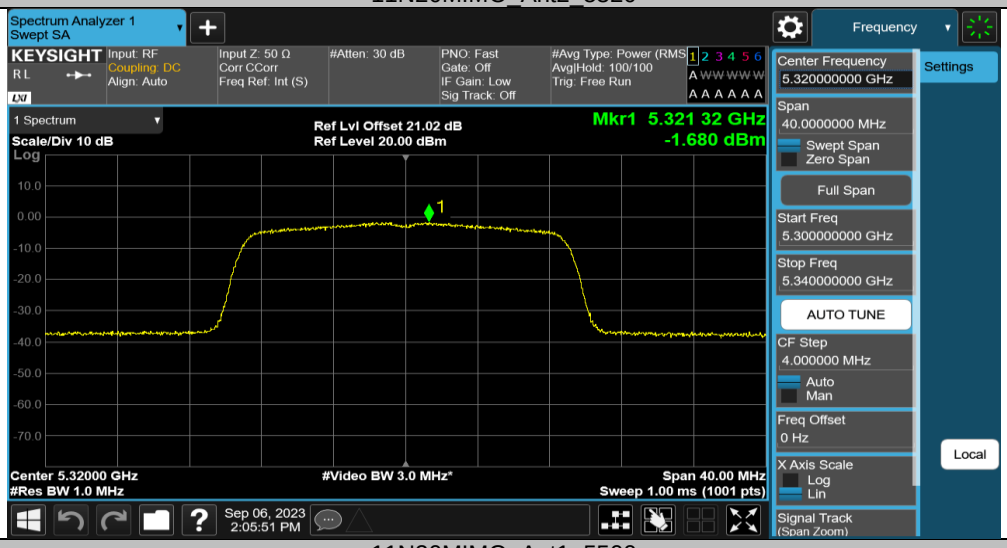
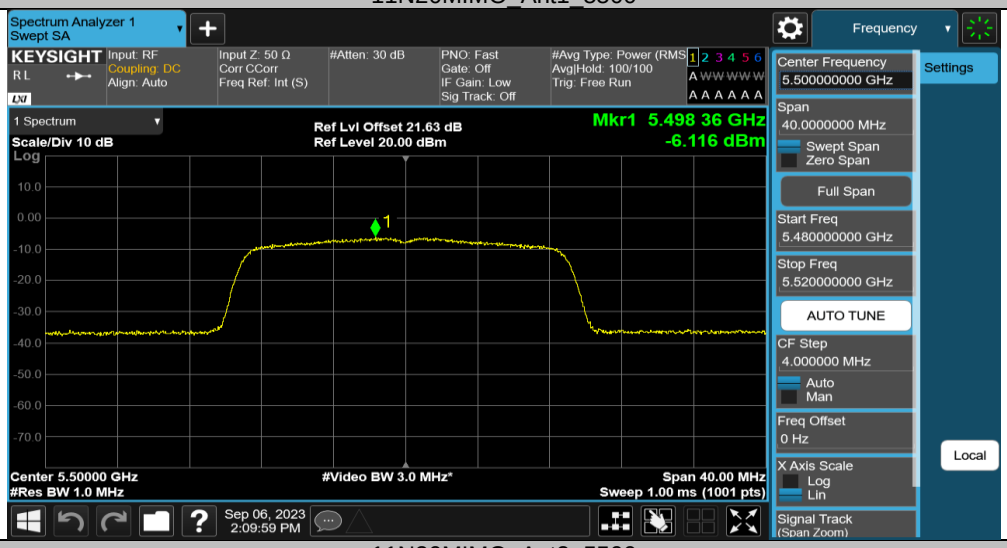


11N20MIMO_Ant2_5320



11N20MIMO_Ant1_5500



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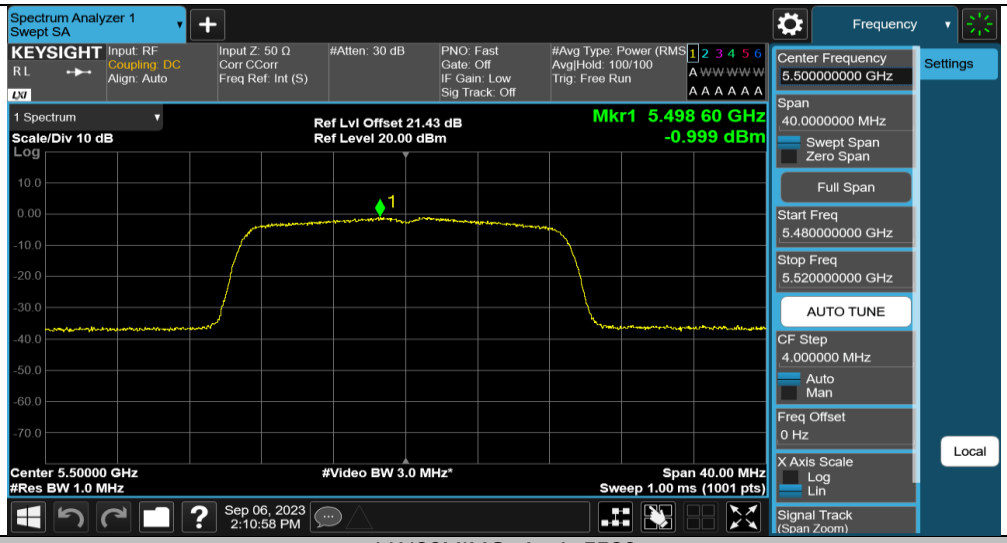

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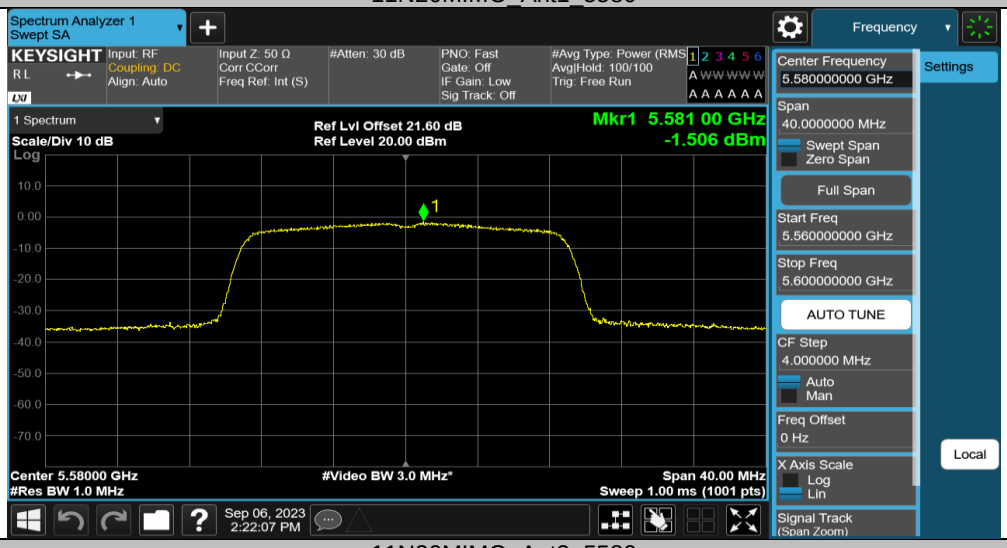

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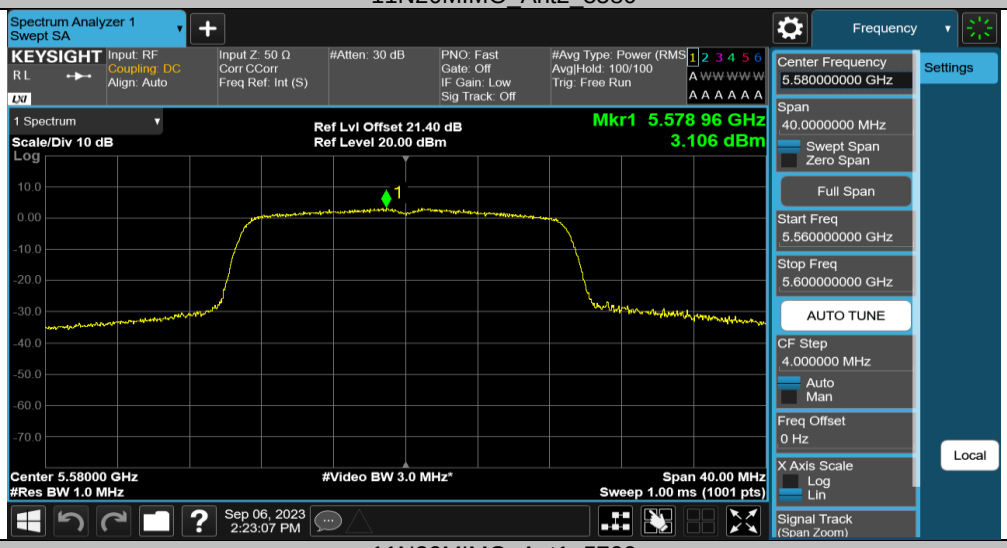

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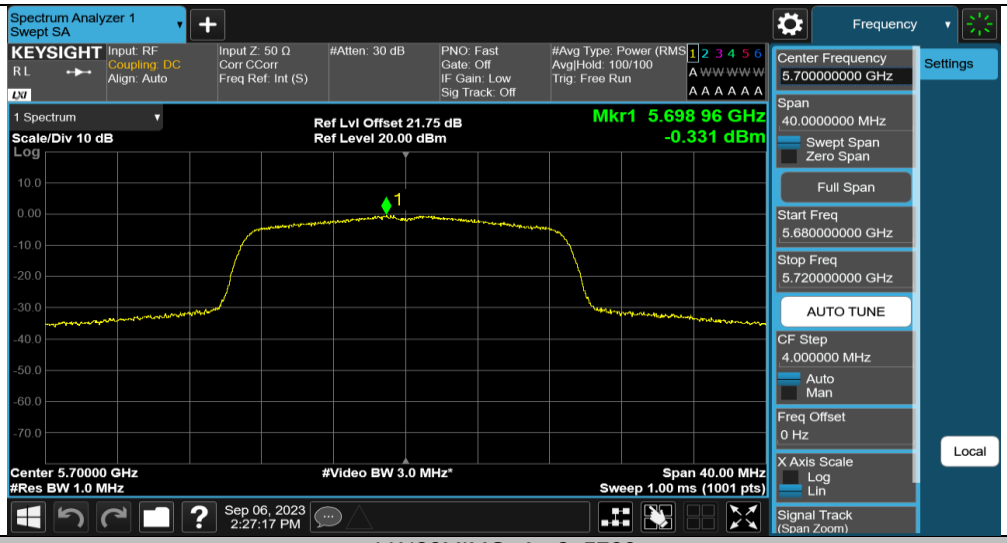

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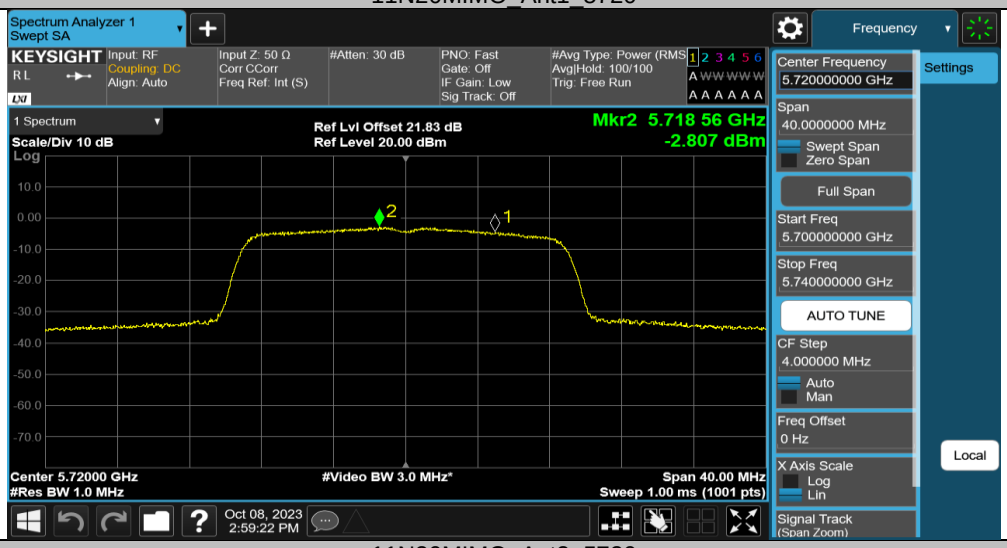

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