

Appendix A: Test Results of 5GHz Wi-Fi

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Appendix A.1: Test Results of Maximum output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	Verdict
11A	Ant1	5180	16.77	73.12	1.36	18.13	≤23.98	2.57	20.70	PASS
11A	Ant1	5200	16.99	73.12	1.36	18.35	≤23.98	2.57	20.92	PASS
11A	Ant1	5240	16.37	73.12	1.36	17.73	≤23.98	2.57	20.30	PASS
11A	Ant1	5260	14.15	72.73	1.38	15.53	≤23.98	2.57	18.10	PASS
11A	Ant1	5280	14.13	73.12	1.36	15.49	≤23.98	2.57	18.06	PASS
11A	Ant1	5320	14.12	72.73	1.38	15.50	≤23.98	2.57	18.07	PASS
11A	Ant1	5500	14.08	73.12	1.36	15.44	≤23.98	2.57	18.01	PASS
11A	Ant1	5580	14.22	73.12	1.36	15.58	≤23.98	2.57	18.15	PASS
11A	Ant1	5700	14.41	73.12	1.36	15.77	≤23.98	2.57	18.34	PASS
11A	Ant1	5745	10.58	73.12	1.36	11.94	≤30.00	2.57	14.51	PASS
11A	Ant1	5785	10.34	73.12	1.36	11.70	≤30.00	2.57	14.27	PASS
11A	Ant1	5825	10.29	72.73	1.38	11.67	≤30.00	2.57	14.24	PASS
11N20SISO	Ant1	5180	16.89	71.35	1.47	18.36	≤23.98	2.57	20.93	PASS
11N20SISO	Ant1	5200	16.66	71.75	1.44	18.10	≤23.98	2.57	20.67	PASS
11N20SISO	Ant1	5240	16.73	71.35	1.47	18.20	≤23.98	2.57	20.77	PASS
11N20SISO	Ant1	5260	13.98	71.35	1.47	15.45	≤23.98	2.57	18.02	PASS
11N20SISO	Ant1	5280	13.98	71.35	1.47	15.45	≤23.98	2.57	18.02	PASS
11N20SISO	Ant1	5320	14.01	71.75	1.44	15.45	≤23.98	2.57	18.02	PASS
11N20SISO	Ant1	5500	13.74	71.35	1.47	15.21	≤23.98	2.57	17.78	PASS
11N20SISO	Ant1	5580	13.99	71.35	1.47	15.46	≤23.98	2.57	18.03	PASS
11N20SISO	Ant1	5700	13.61	71.75	1.44	15.05	≤23.98	2.57	17.62	PASS
11N20SISO	Ant1	5745	10.33	71.35	1.47	11.80	≤30.00	2.57	14.37	PASS
11N20SISO	Ant1	5785	10.12	71.35	1.47	11.59	≤30.00	2.57	14.16	PASS
11N20SISO	Ant1	5825	10.02	71.35	1.47	11.49	≤30.00	2.57	14.06	PASS
11N40SISO	Ant1	5190	16.09	55.75	2.54	18.63	≤23.98	2.57	21.20	PASS
11N40SISO	Ant1	5230	16.14	56.14	2.51	18.65	≤23.98	2.57	21.22	PASS
11N40SISO	Ant1	5270	13.06	55.26	2.58	15.64	≤23.98	2.57	18.21	PASS
11N40SISO	Ant1	5310	13.17	55.75	2.54	15.71	≤23.98	2.57	18.28	PASS
11N40SISO	Ant1	5510	12.87	55.26	2.58	15.45	≤23.98	2.57	18.02	PASS
11N40SISO	Ant1	5550	13.61	55.75	2.54	16.15	≤23.98	2.57	18.72	PASS
11N40SISO	Ant1	5670	13.09	55.75	2.54	15.63	≤23.98	2.57	18.20	PASS
11N40SISO	Ant1	5755	9.35	55.75	2.54	11.89	≤30.00	2.57	14.46	PASS
11N40SISO	Ant1	5795	9.08	55.26	2.58	11.66	≤30.00	2.57	14.23	PASS

Appendix A.2: Test Results of Conducted Power Spectral Density

Test Result

TestMode	Antenna	Frequency [MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	8.05	≤11.00	PASS
11A	Ant1	5200	8.00	≤11.00	PASS
11A	Ant1	5240	8.06	≤11.00	PASS
11A	Ant1	5260	5.00	≤11.00	PASS
11A	Ant1	5280	5.34	≤11.00	PASS
11A	Ant1	5320	5.35	≤11.00	PASS
11A	Ant1	5500	5.11	≤11.00	PASS
11A	Ant1	5580	5.44	≤11.00	PASS
11A	Ant1	5700	5.57	≤11.00	PASS
11A	Ant1	5745	-0.54	≤30.00	PASS
11A	Ant1	5785	-0.96	≤30.00	PASS
11A	Ant1	5825	-1.11	≤30.00	PASS
11N20SISO	Ant1	5180	8.04	≤11.00	PASS
11N20SISO	Ant1	5200	8.01	≤11.00	PASS
11N20SISO	Ant1	5240	7.69	≤11.00	PASS
11N20SISO	Ant1	5260	5.28	≤11.00	PASS
11N20SISO	Ant1	5280	5.10	≤11.00	PASS
11N20SISO	Ant1	5320	5.47	≤11.00	PASS
11N20SISO	Ant1	5500	4.48	≤11.00	PASS
11N20SISO	Ant1	5580	5.46	≤11.00	PASS
11N20SISO	Ant1	5700	5.16	≤11.00	PASS
11N20SISO	Ant1	5745	-0.84	≤30.00	PASS
11N20SISO	Ant1	5785	-1.18	≤30.00	PASS
11N20SISO	Ant1	5825	-1.22	≤30.00	PASS
11N40SISO	Ant1	5190	6.59	≤11.00	PASS
11N40SISO	Ant1	5230	6.05	≤11.00	PASS
11N40SISO	Ant1	5270	2.90	≤11.00	PASS
11N40SISO	Ant1	5310	2.99	≤11.00	PASS
11N40SISO	Ant1	5510	2.67	≤11.00	PASS
11N40SISO	Ant1	5550	2.99	≤11.00	PASS
11N40SISO	Ant1	5670	2.69	≤11.00	PASS
11N40SISO	Ant1	5755	-3.60	≤30.00	PASS
11N40SISO	Ant1	5795	-3.44	≤30.00	PASS

Note:

- 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
- 2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

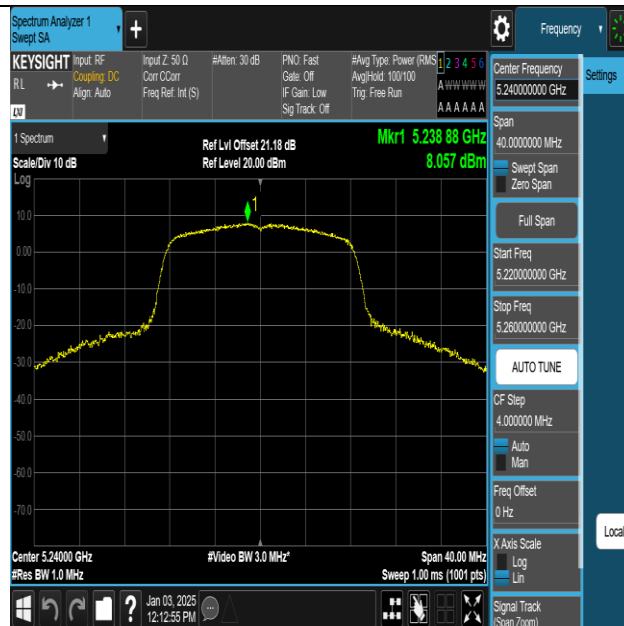
Test Graphs



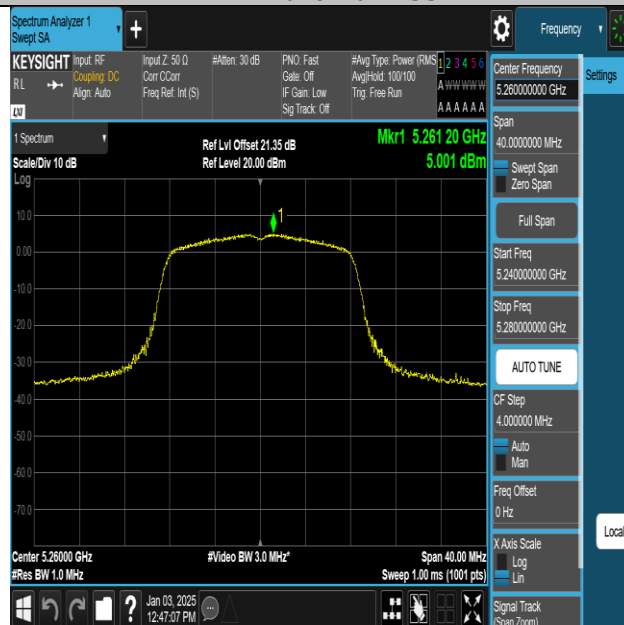
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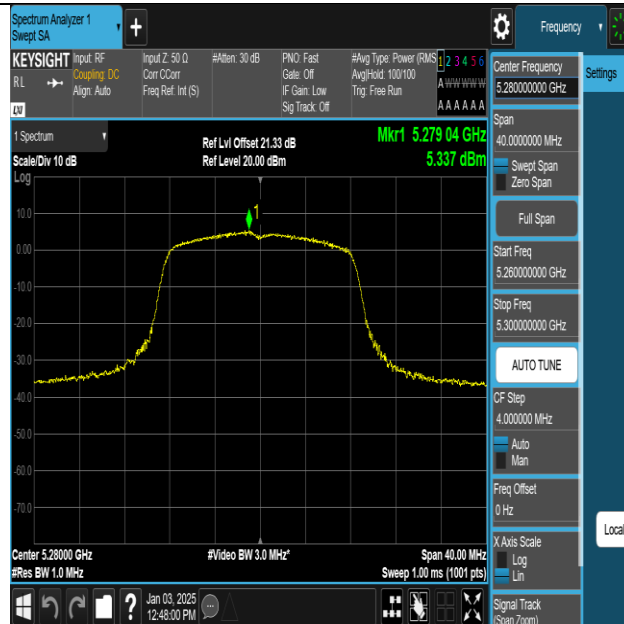
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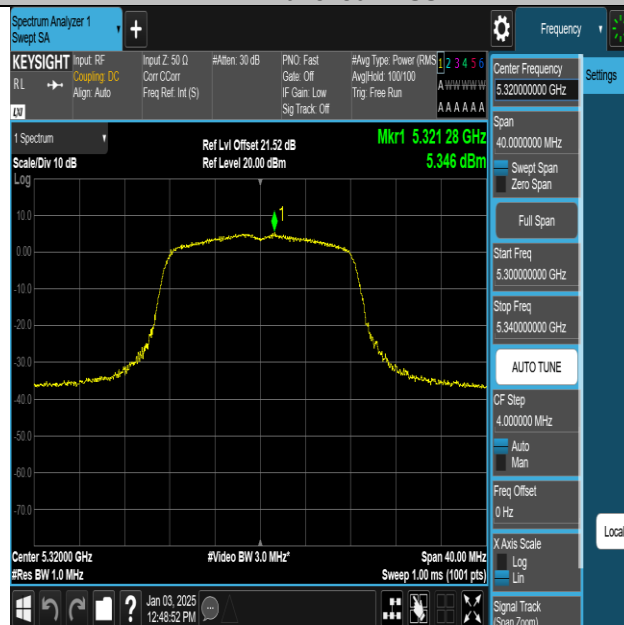
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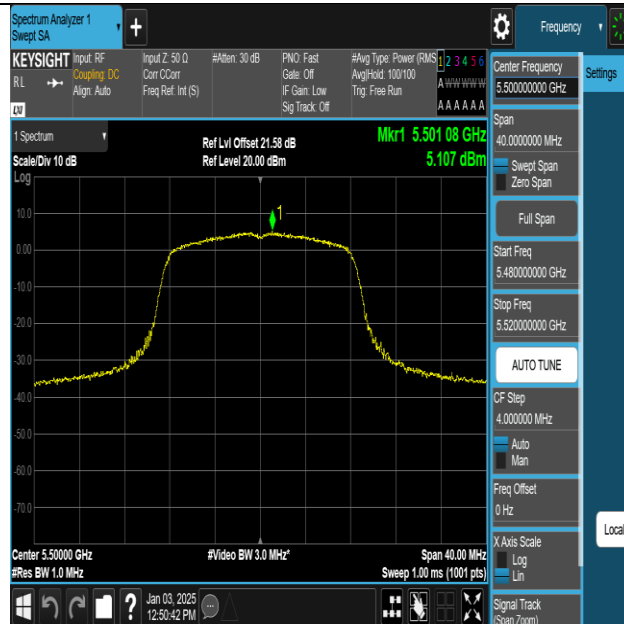
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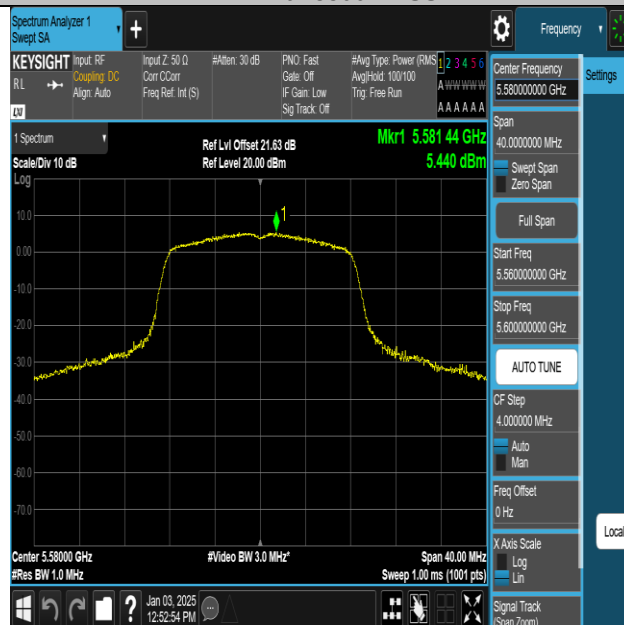
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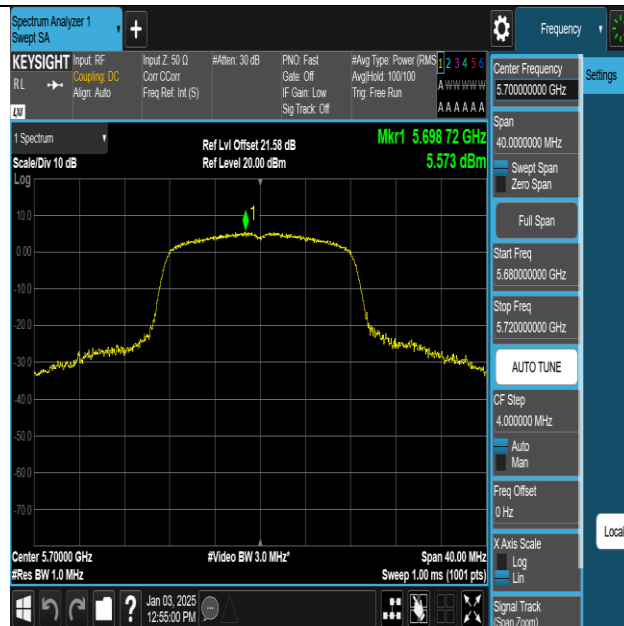
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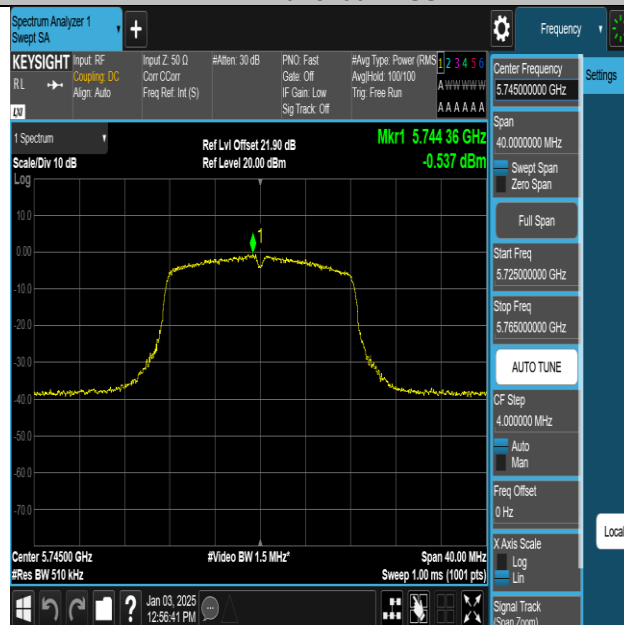
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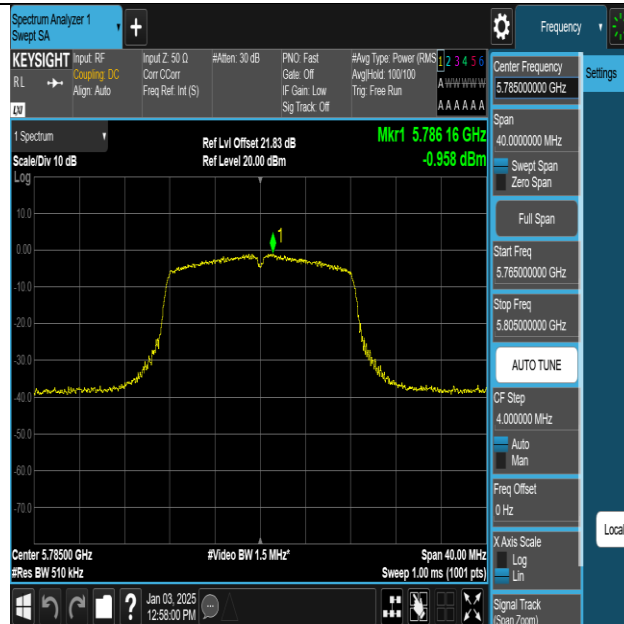
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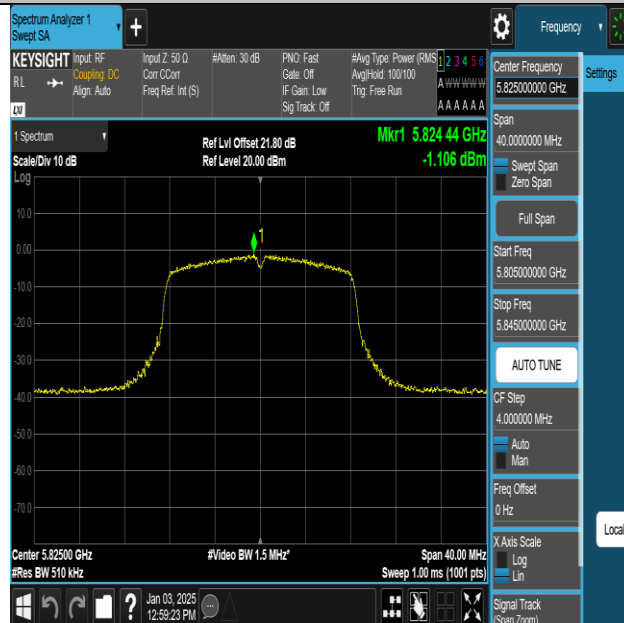
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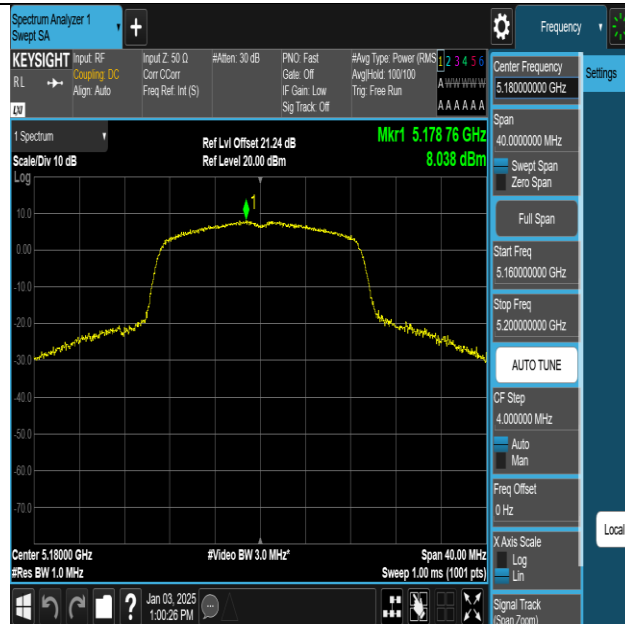
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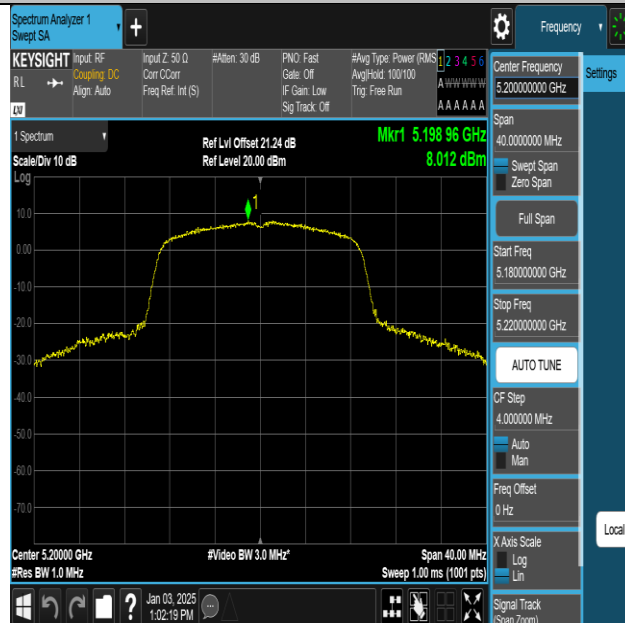
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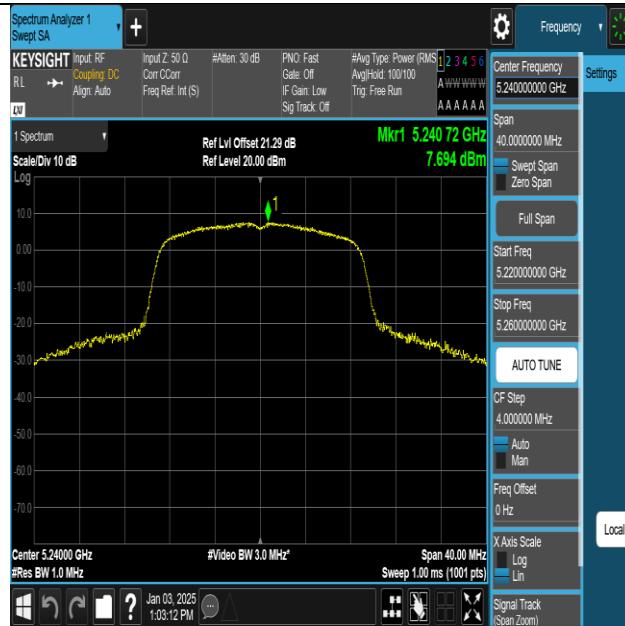
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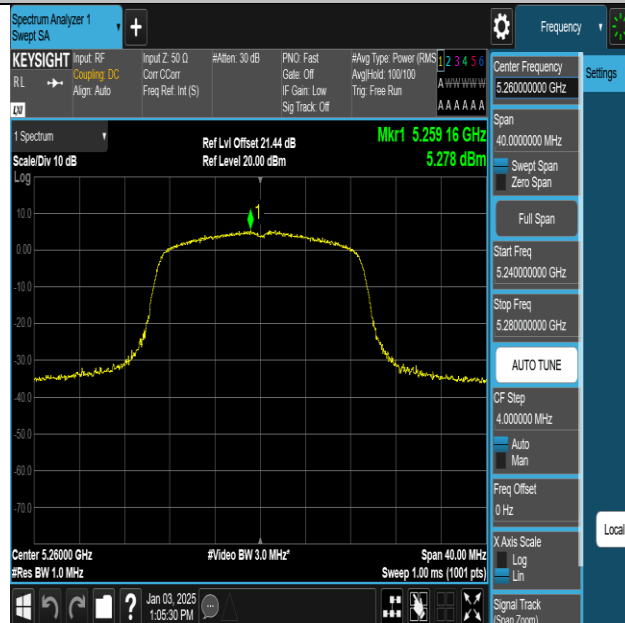
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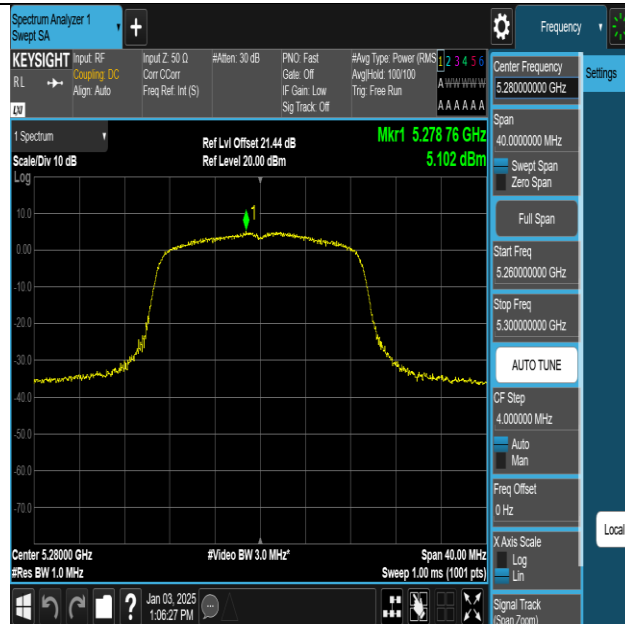
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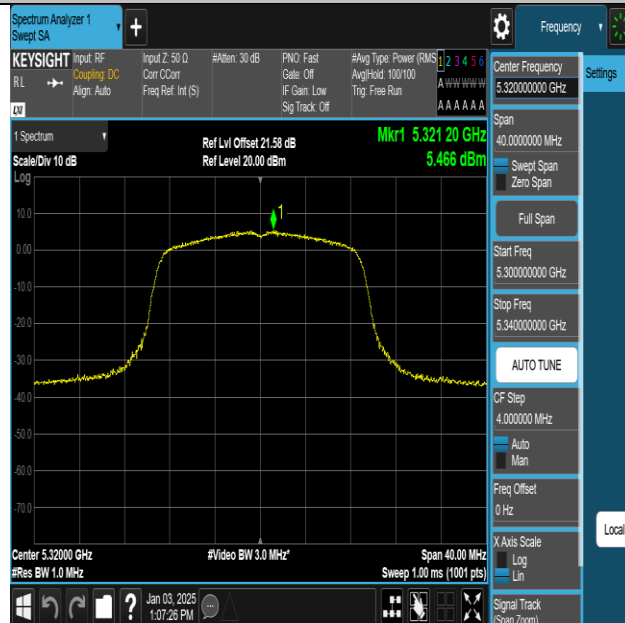
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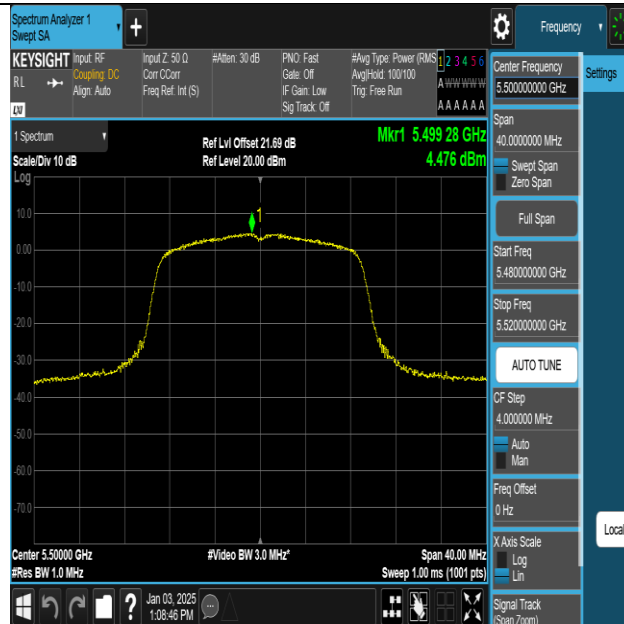
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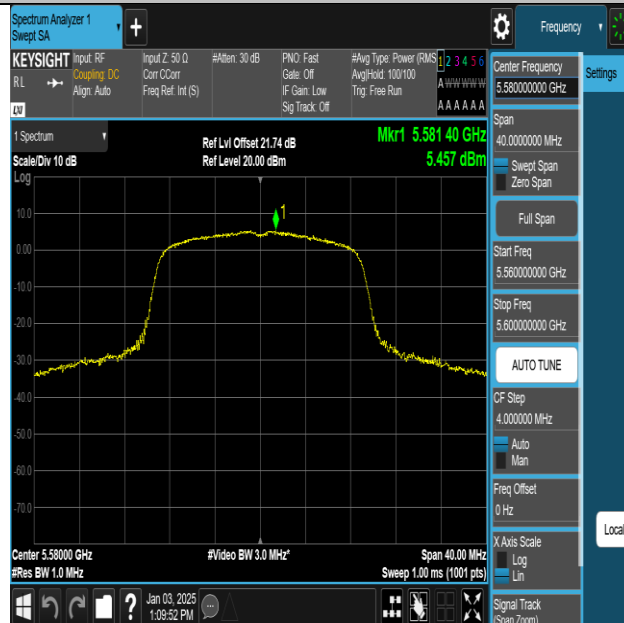
11N20SISO-Ant1-5280-PASS



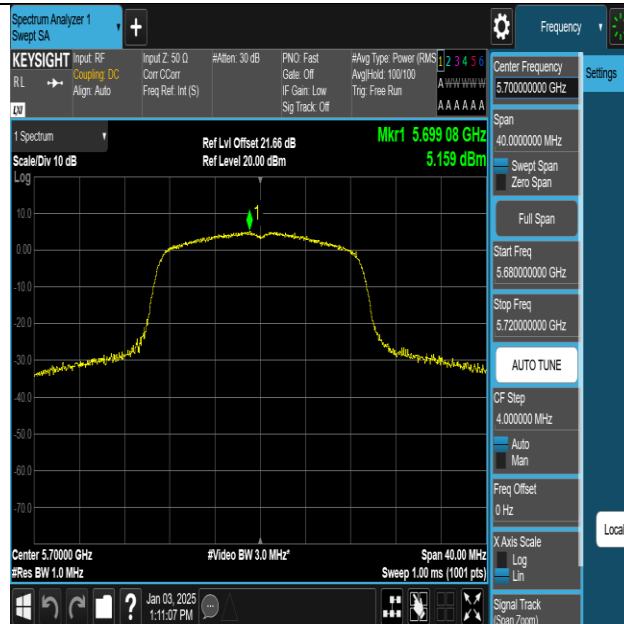
11N20SISO-Ant1-5320-PASS



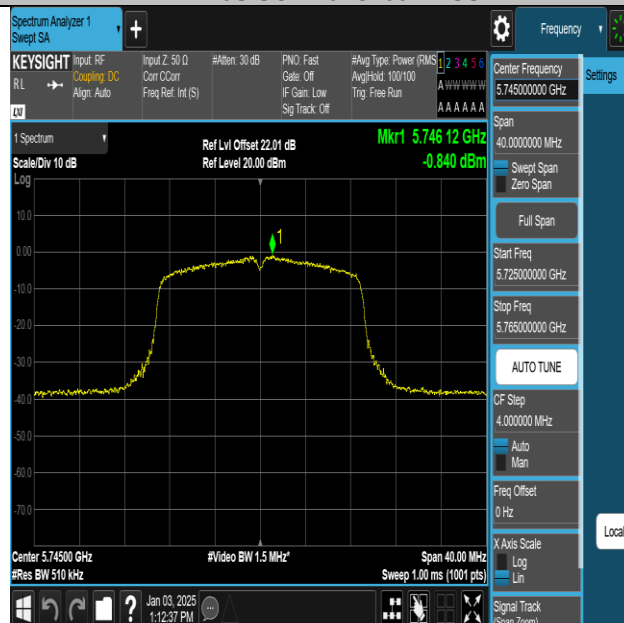
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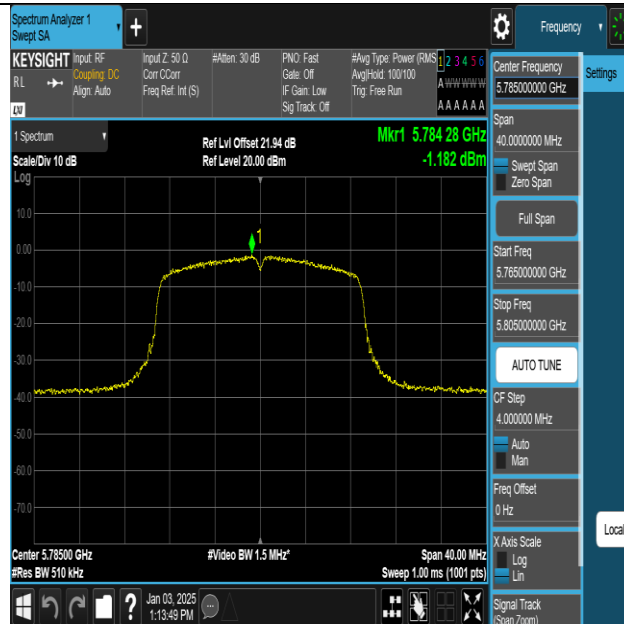
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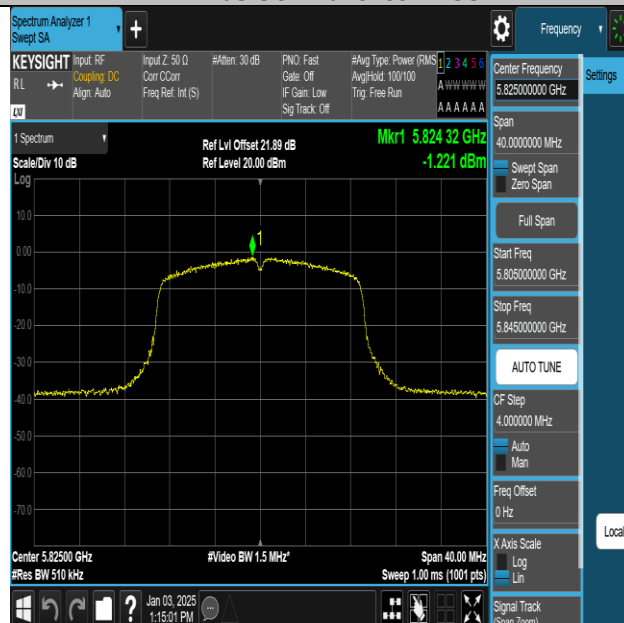
11N20SISO-Ant1-5700-PASS



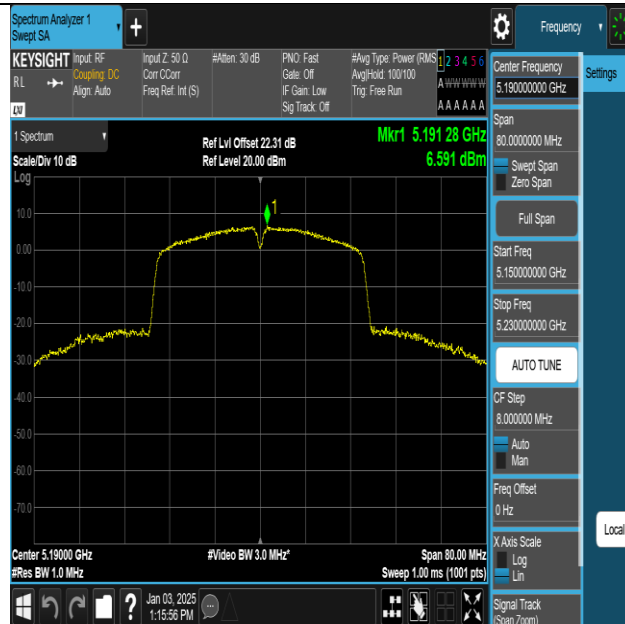
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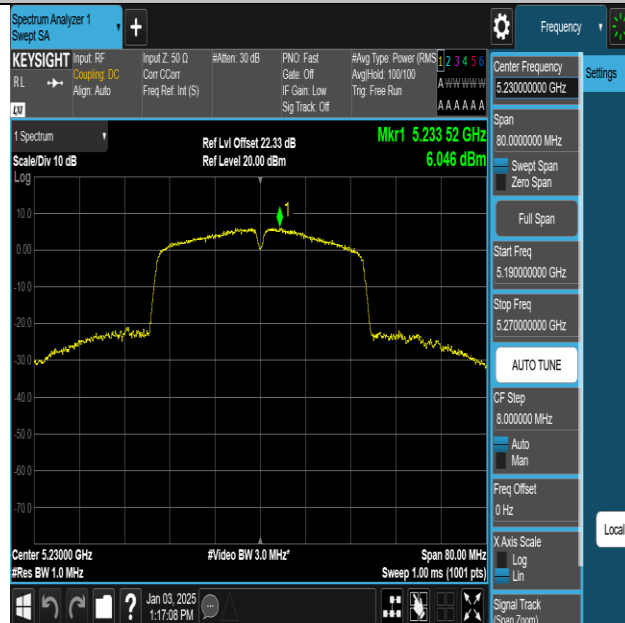
11N20SISO-Ant1-5785-PASS



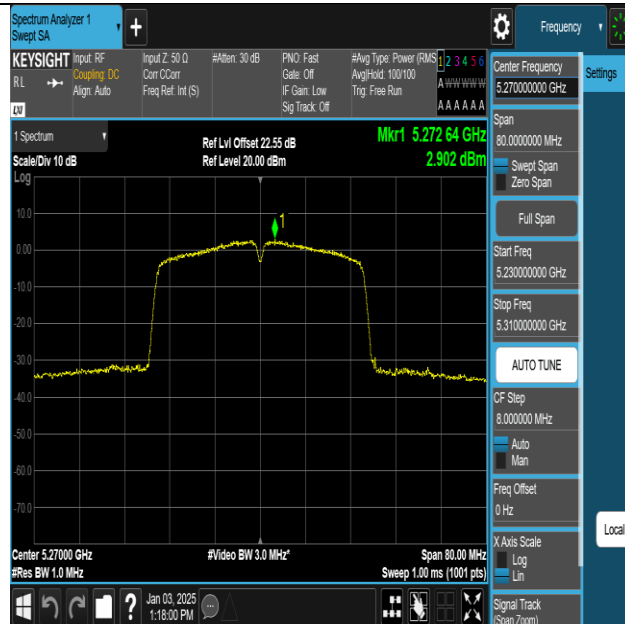
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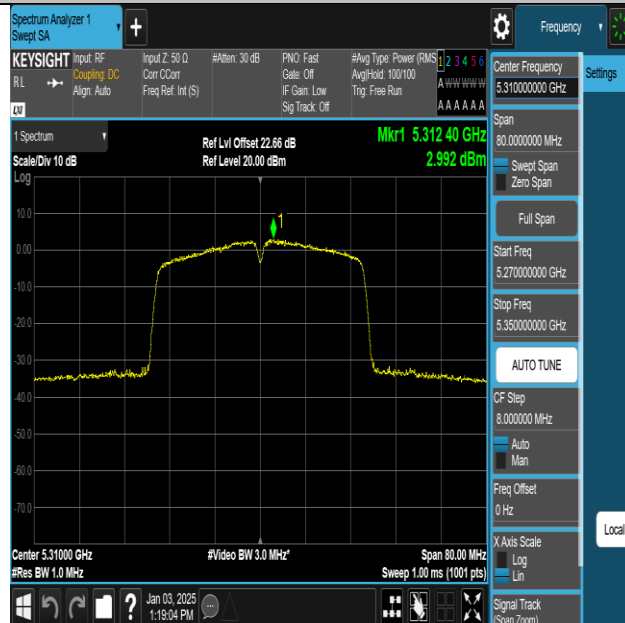
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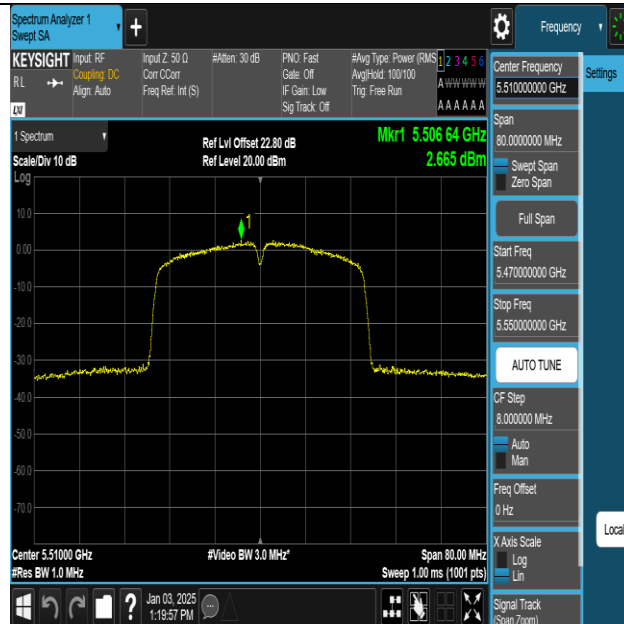
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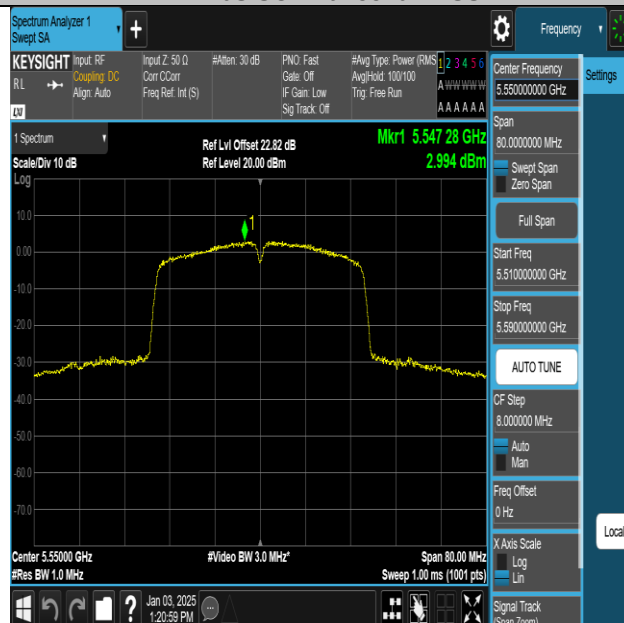
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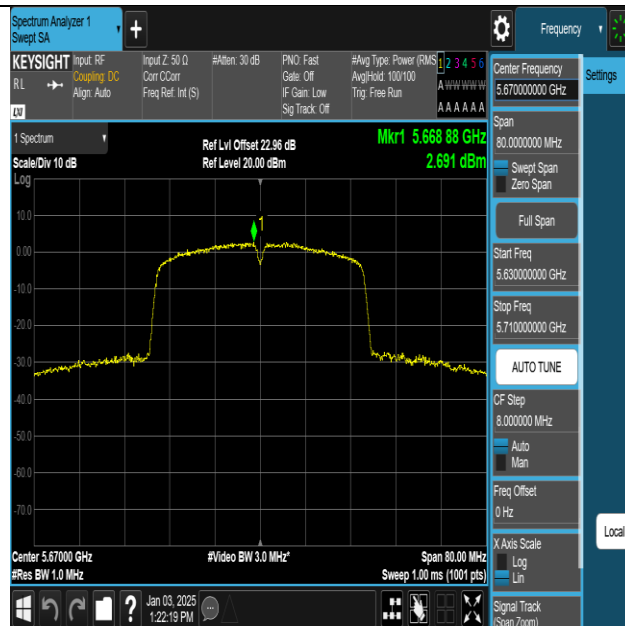
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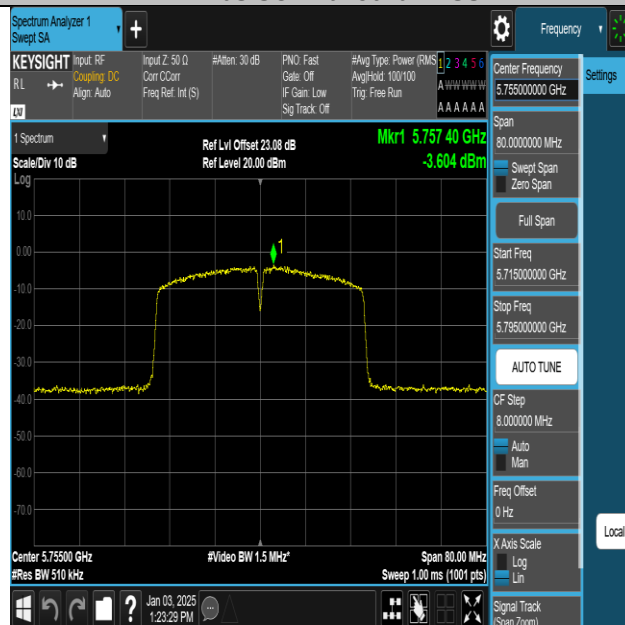
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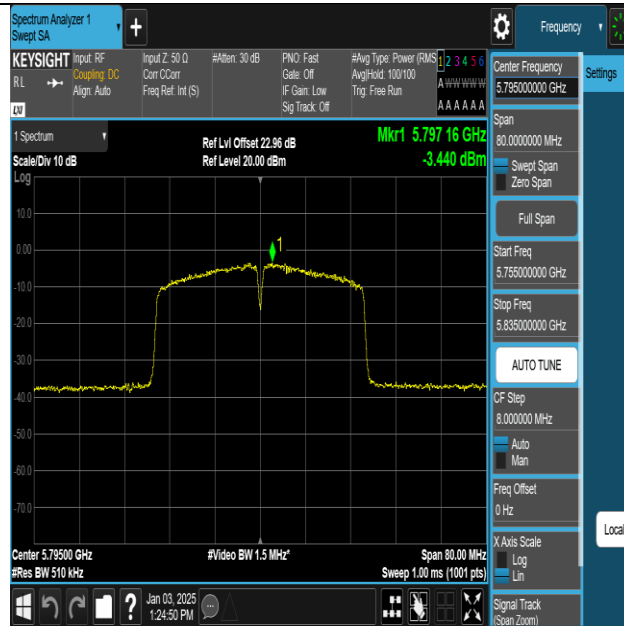
11N40ISO-Ant1-5550-PASS



11N40SISO-Ant1-5670-PASS



11N40SISO-Ant1-5755-PASS



11N40SISO-Ant1-5795-PASS

Appendix A.3: Test Results of Frequency Stability

Test Result

TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11N20SISO	Ant1	5180	NV	NT	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5180	LV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5180	HV	NT	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5200	NV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5200	LV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5200	HV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5240	NV	NT	-20000.00	-3.816794	20	PASS
11N20SISO	Ant1	5240	LV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5240	HV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5260	NV	NT	-20000.00	-3.802281	20	PASS
11N20SISO	Ant1	5260	LV	NT	-20000.00	-3.802281	20	PASS
11N20SISO	Ant1	5260	HV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5280	NV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5280	LV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5280	HV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5320	NV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5320	LV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5320	HV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5500	NV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5500	LV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5500	HV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5580	NV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5580	LV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5580	HV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5700	NV	NT	-20000.00	-3.508772	20	PASS
11N20SISO	Ant1	5700	LV	NT	-20000.00	-3.508772	20	PASS
11N20SISO	Ant1	5700	HV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5745	NV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5745	LV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5745	HV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5785	NV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5785	LV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5785	HV	NT	20000.00	3.457217	20	PASS
11N20SISO	Ant1	5825	NV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5825	LV	NT	20000.00	3.433476	20	PASS
11N20SISO	Ant1	5825	HV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5190	NV	NT	-80000.00	-15.414258	20	PASS
11N40SISO	Ant1	5190	LV	NT	-80000.00	-15.414258	20	PASS
11N40SISO	Ant1	5190	HV	NT	80000.00	15.414258	20	PASS
11N40SISO	Ant1	5230	NV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	LV	NT	-40000.00	-7.648184	20	PASS
11N40SISO	Ant1	5230	HV	NT	-40000.00	-7.648184	20	PASS
11N40SISO	Ant1	5270	NV	NT	-80000.00	-15.180266	20	PASS
11N40SISO	Ant1	5270	LV	NT	40000.00	7.590133	20	PASS
11N40SISO	Ant1	5270	HV	NT	-80000.00	-15.180266	20	PASS
11N40SISO	Ant1	5310	NV	NT	-40000.00	-7.532957	20	PASS
11N40SISO	Ant1	5310	LV	NT	40000.00	7.532957	20	PASS
11N40SISO	Ant1	5310	HV	NT	80000.00	15.065913	20	PASS
11N40SISO	Ant1	5510	NV	NT	-40000.00	-7.259528	20	PASS
11N40SISO	Ant1	5510	LV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5510	HV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5550	NV	NT	-40000.00	-7.207207	20	PASS
11N40SISO	Ant1	5550	LV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5550	HV	NT	-40000.00	-7.207207	20	PASS
11N40SISO	Ant1	5670	NV	NT	-80000.00	-14.109347	20	PASS
11N40SISO	Ant1	5670	LV	NT	-80000.00	-14.109347	20	PASS
11N40SISO	Ant1	5670	HV	NT	-40000.00	-7.054674	20	PASS

11N40SISO	Ant1	5755	NV	NT	80000.00	13.900956	20	PASS
11N40SISO	Ant1	5755	LV	NT	-80000.00	-13.900956	20	PASS
11N40SISO	Ant1	5755	HV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5795	NV	NT	80000.00	13.805004	20	PASS
11N40SISO	Ant1	5795	LV	NT	-80000.00	-13.805004	20	PASS
11N40SISO	Ant1	5795	HV	NT	-80000.00	-13.805004	20	PASS

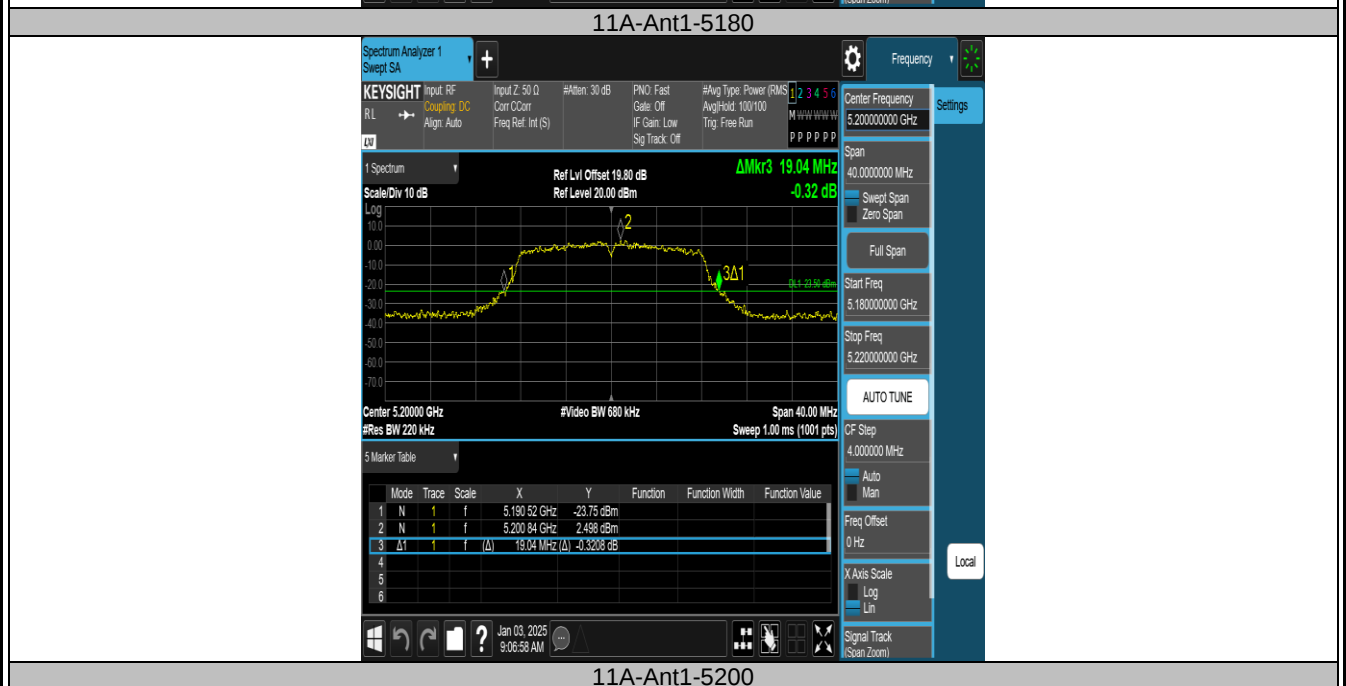
TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11N20SISO	Ant1	5180	NV	0	0.00	0.000000	20	PASS
11N20SISO	Ant1	5180	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5200	NV	0	0.00	0.000000	20	PASS
11N20SISO	Ant1	5200	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5240	NV	0	-20000.00	-3.816794	20	PASS
11N20SISO	Ant1	5240	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5260	NV	0	0.00	0.000000	20	PASS
11N20SISO	Ant1	5260	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5280	NV	0	0.00	0.000000	20	PASS
11N20SISO	Ant1	5280	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5320	NV	0	0.00	0.000000	20	PASS
11N20SISO	Ant1	5320	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5500	NV	0	0.00	0.000000	20	PASS
11N20SISO	Ant1	5500	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5580	NV	0	-20000.00	-3.584229	20	PASS
11N20SISO	Ant1	5580	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5700	NV	0	0.00	0.000000	20	PASS
11N20SISO	Ant1	5700	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5745	NV	0	0.00	0.000000	20	PASS
11N20SISO	Ant1	5745	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5785	NV	0	0.00	0.000000	20	PASS
11N20SISO	Ant1	5785	NV	40	20000.00	3.457217	20	PASS
11N20SISO	Ant1	5825	NV	0	20000.00	3.433476	20	PASS
11N20SISO	Ant1	5825	NV	40	20000.00	3.433476	20	PASS
11N40SISO	Ant1	5190	NV	0	-80000.00	-15.414258	20	PASS
11N40SISO	Ant1	5190	NV	40	-80000.00	-15.414258	20	PASS
11N40SISO	Ant1	5230	NV	40	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	NV	0	-40000.00	-7.648184	20	PASS
11N40SISO	Ant1	5270	NV	40	-40000.00	-7.590133	20	PASS
11N40SISO	Ant1	5270	NV	0	-80000.00	-15.180266	20	PASS
11N40SISO	Ant1	5310	NV	40	80000.00	15.065913	20	PASS
11N40SISO	Ant1	5310	NV	0	-40000.00	-7.532957	20	PASS
11N40SISO	Ant1	5510	NV	0	0.00	0.000000	20	PASS
11N40SISO	Ant1	5510	NV	40	0.00	0.000000	20	PASS
11N40SISO	Ant1	5550	NV	40	-40000.00	-7.207207	20	PASS
11N40SISO	Ant1	5550	NV	0	0.00	0.000000	20	PASS
11N40SISO	Ant1	5670	NV	40	-80000.00	-14.109347	20	PASS
11N40SISO	Ant1	5670	NV	0	-80000.00	-14.109347	20	PASS
11N40SISO	Ant1	5755	NV	0	-80000.00	-13.900956	20	PASS
11N40SISO	Ant1	5755	NV	40	-80000.00	-13.900956	20	PASS
11N40SISO	Ant1	5795	NV	0	80000.00	13.805004	20	PASS
11N40SISO	Ant1	5795	NV	40	80000.00	13.805004	20	PASS

Appendix A.4: Test Results of 26dB Bandwidth

Test Result

TestMode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.560	5170.360	5189.920	---	PASS
11A	Ant1	5200	19.040	5190.520	5209.560	---	PASS
11A	Ant1	5240	19.200	5230.360	5249.560	---	PASS
11A	Ant1	5260	19.560	5250.280	5269.840	---	PASS
11A	Ant1	5280	19.360	5270.400	5289.760	---	PASS
11A	Ant1	5320	19.680	5310.200	5329.880	---	PASS
11A	Ant1	5500	19.720	5490.320	5510.040	---	PASS
11A	Ant1	5580	19.120	5570.640	5589.760	---	PASS
11A	Ant1	5700	19.160	5690.600	5709.760	---	PASS
11A	Ant1	5745	19.680	5735.120	5754.800	---	PASS
11A	Ant1	5785	19.880	5775.320	5795.200	---	PASS
11A	Ant1	5825	19.280	5815.280	5834.560	---	PASS
11N20SISO	Ant1	5180	19.960	5170.000	5189.960	---	PASS
11N20SISO	Ant1	5200	20.200	5189.800	5210.000	---	PASS
11N20SISO	Ant1	5240	20.480	5229.800	5250.280	---	PASS
11N20SISO	Ant1	5260	20.360	5249.720	5270.080	---	PASS
11N20SISO	Ant1	5280	19.640	5270.240	5289.880	---	PASS
11N20SISO	Ant1	5320	19.840	5310.080	5329.920	---	PASS
11N20SISO	Ant1	5500	19.840	5490.120	5509.960	---	PASS
11N20SISO	Ant1	5580	20.440	5569.720	5590.160	---	PASS
11N20SISO	Ant1	5700	20.360	5689.960	5710.320	---	PASS
11N20SISO	Ant1	5745	19.880	5735.000	5754.880	---	PASS
11N20SISO	Ant1	5785	20.440	5774.520	5794.960	---	PASS
11N20SISO	Ant1	5825	20.560	5814.560	5835.120	---	PASS
11N40SISO	Ant1	5190	38.080	5171.040	5209.120	---	PASS
11N40SISO	Ant1	5230	38.000	5211.040	5249.040	---	PASS
11N40SISO	Ant1	5270	38.000	5251.040	5289.040	---	PASS
11N40SISO	Ant1	5310	37.760	5291.200	5328.960	---	PASS
11N40SISO	Ant1	5510	38.160	5490.960	5529.120	---	PASS
11N40SISO	Ant1	5550	38.000	5531.040	5569.040	---	PASS
11N40SISO	Ant1	5670	38.080	5650.880	5688.960	---	PASS
11N40SISO	Ant1	5755	38.560	5735.560	5774.120	---	PASS
11N40SISO	Ant1	5795	38.160	5776.040	5814.200	---	PASS

Test Graphs



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Prüfbericht - Produkte
Test Report - Products



11A-Ant1-5240



11A-Ant1-5260



11A-Ant1-5280



11A-Ant1-5320



11A-Ant1-5500



11A-Ant1-5580



11A-Ant1-5700



11A-Ant1-5745



11A-Ant1-5825



11N20SISO-Ant1-5180



11N20SISO-Ant1-5200