

FCC Appendix RF Test Data for 5.2GWIFI

Company: : Shenzhen Vikcent Technology Co., Ltd.

EUT : Magic Mirror Appliance

Model Number : MMA21-4-A

FCC ID : 2BTT6-MMA21-4-A

Report No. : CTA25111301804

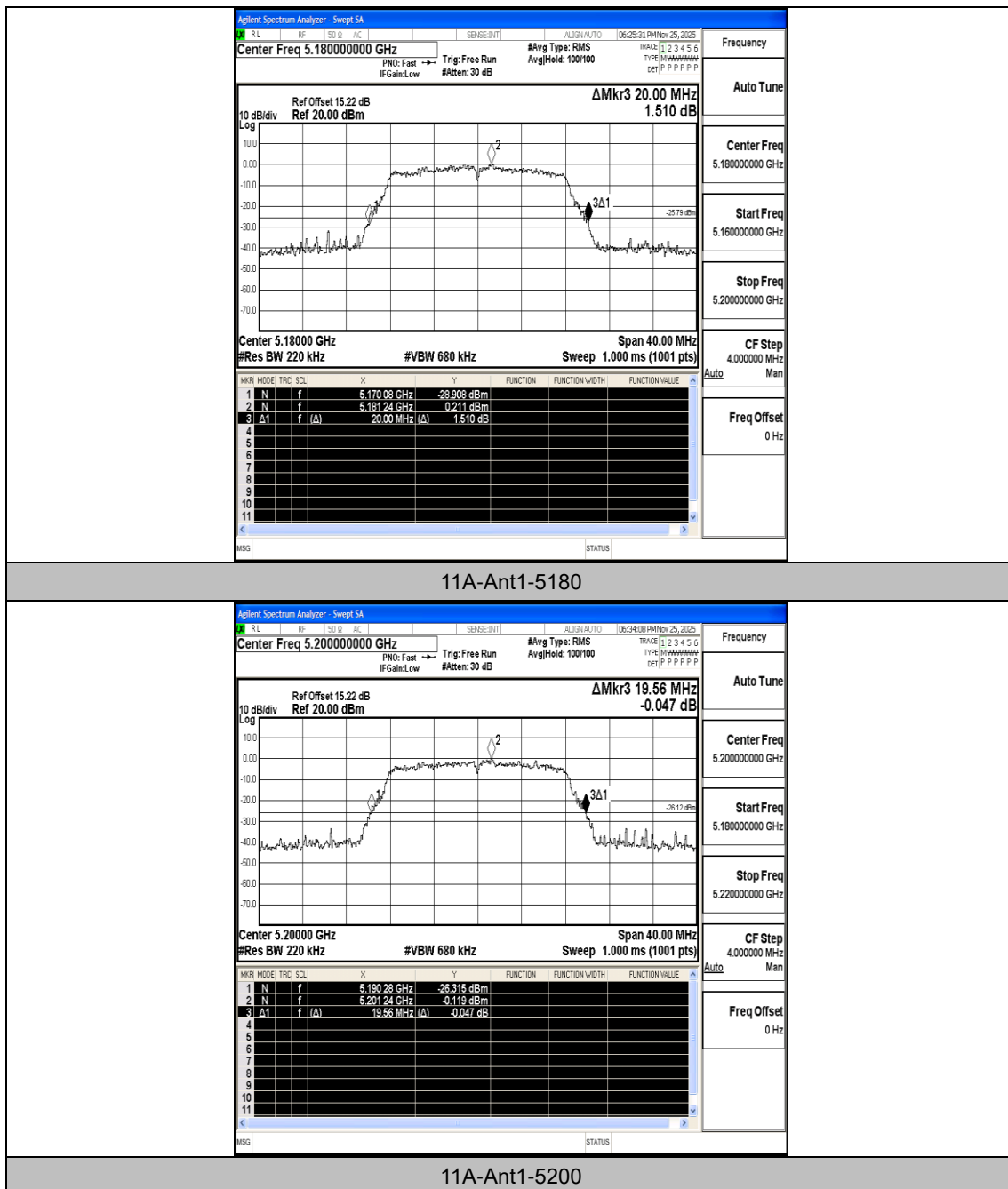
Reviewed By : Eric Wang

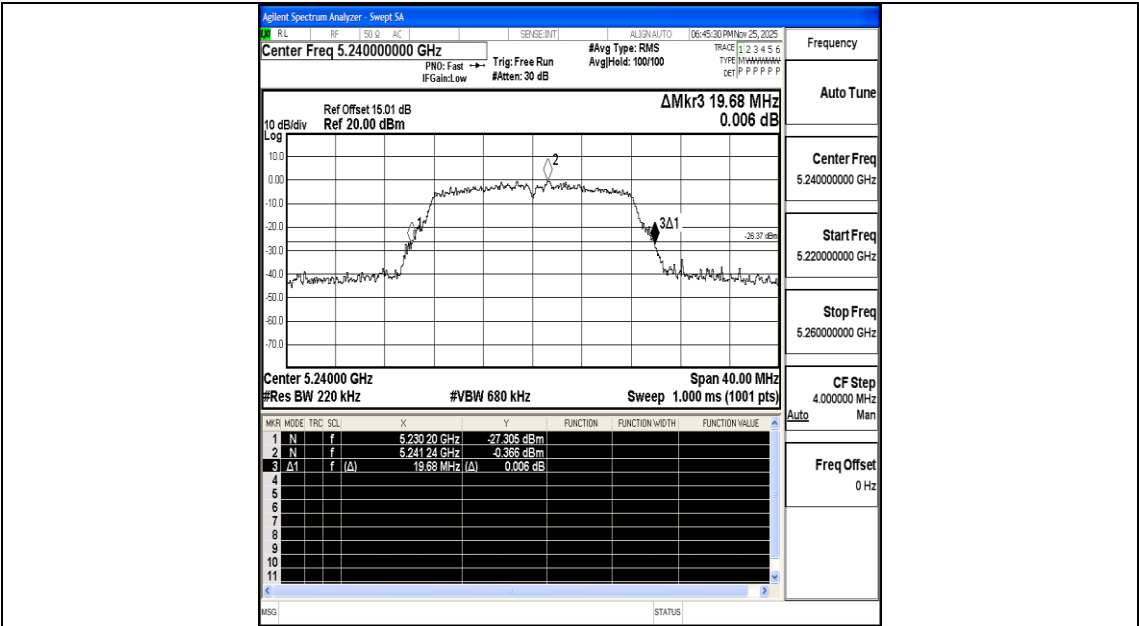
Appendix A1: Emission Bandwidth

Test Result

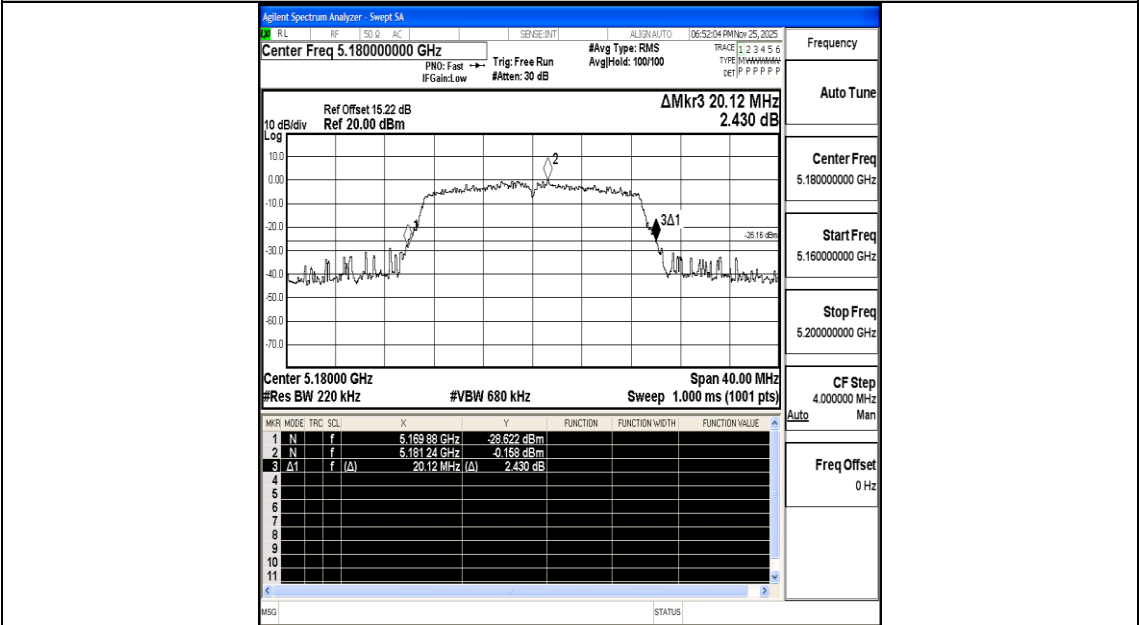
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.000	5170.080	5190.080	---	---
11A	Ant1	5200	19.560	5190.280	5209.840	---	---
11A	Ant1	5240	19.680	5230.200	5249.880	---	---
11N20SISO	Ant1	5180	20.120	5169.880	5190.000	---	---
11N20SISO	Ant1	5200	20.200	5189.920	5210.120	---	---
11N20SISO	Ant1	5240	20.160	5230.000	5250.160	---	---
11N40SISO	Ant1	5190	40.400	5169.760	5210.160	---	---
11N40SISO	Ant1	5230	40.160	5210.000	5250.160	---	---
11AC20SISO	Ant1	5180	19.880	5170.080	5189.960	---	---
11AC20SISO	Ant1	5200	20.240	5189.960	5210.200	---	---
11AC20SISO	Ant1	5240	20.200	5230.000	5250.200	---	---
11AC40SISO	Ant1	5190	40.080	5169.920	5210.000	---	---
11AC40SISO	Ant1	5230	40.480	5209.760	5250.240	---	---
11AX20SISO	Ant1	5180	20.080	5169.960	5190.040	---	---
11AX20SISO	Ant1	5200	20.200	5189.920	5210.120	---	---
11AX20SISO	Ant1	5240	20.000	5230.040	5250.040	---	---
11AX40SISO	Ant1	5190	40.880	5169.760	5210.640	---	---
11AX40SISO	Ant1	5230	39.840	5210.080	5249.920	---	---

Test Graphs

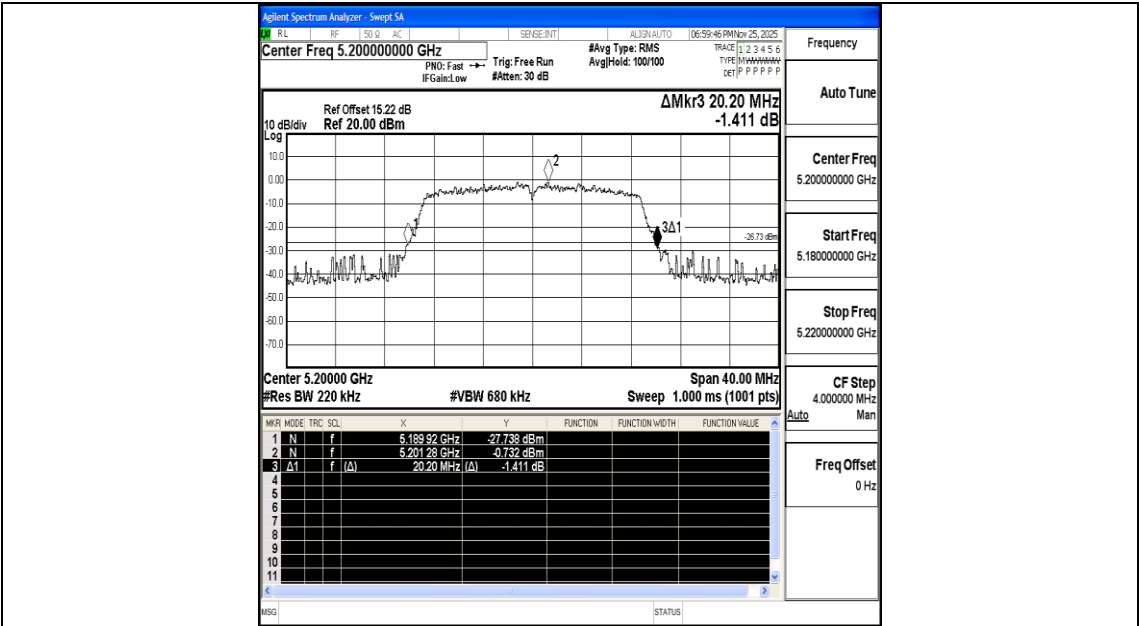




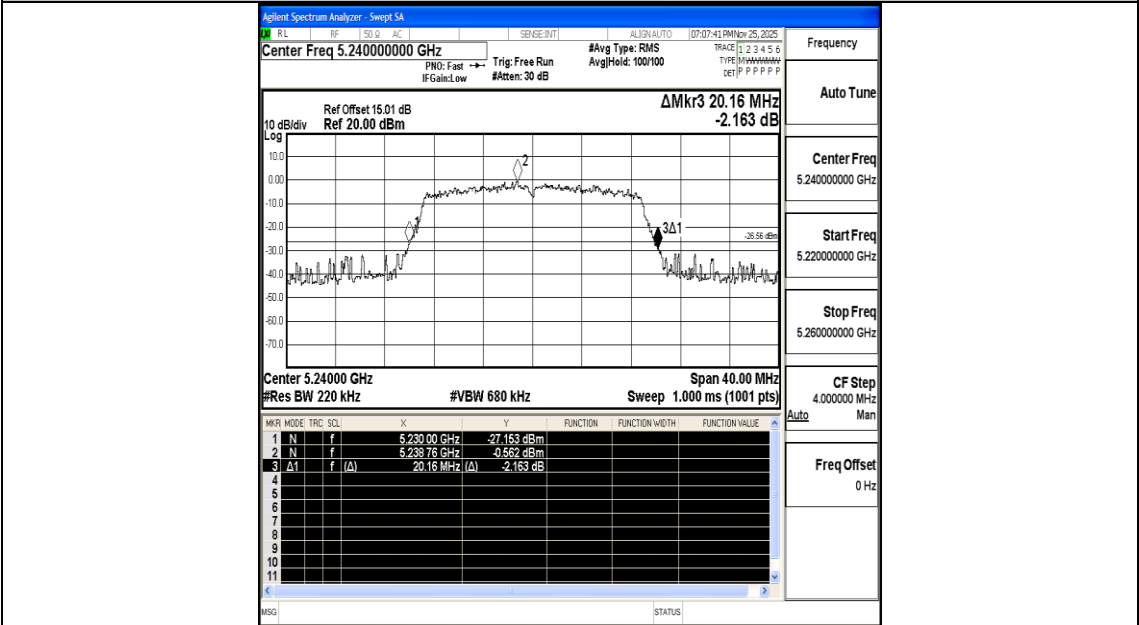
11A-Ant1-5240



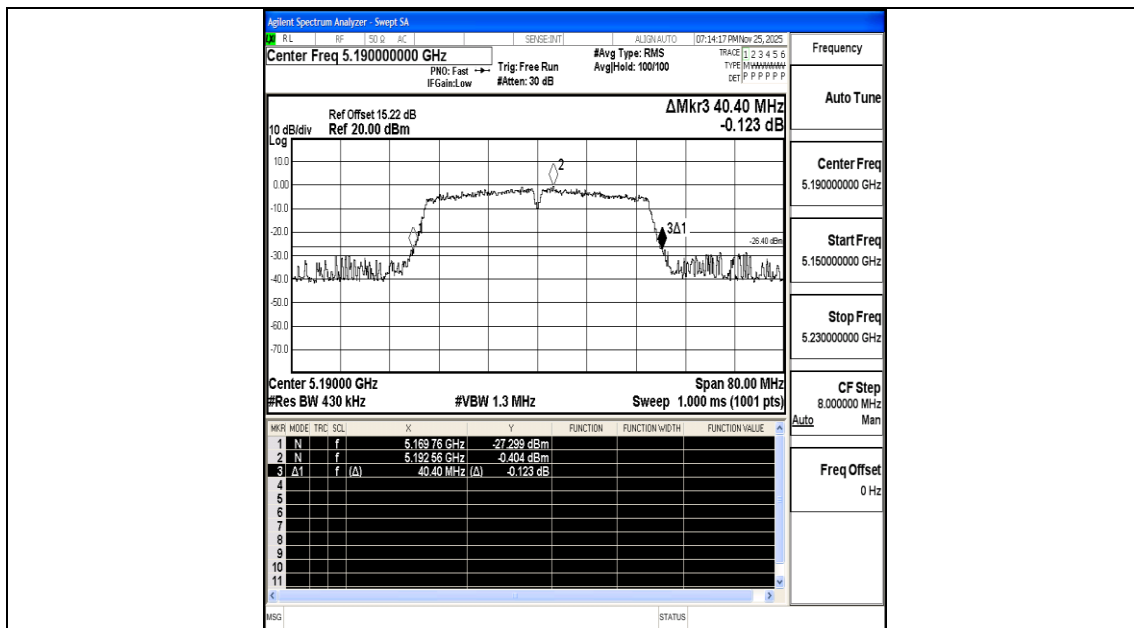
11N20SISO-Ant1-5180



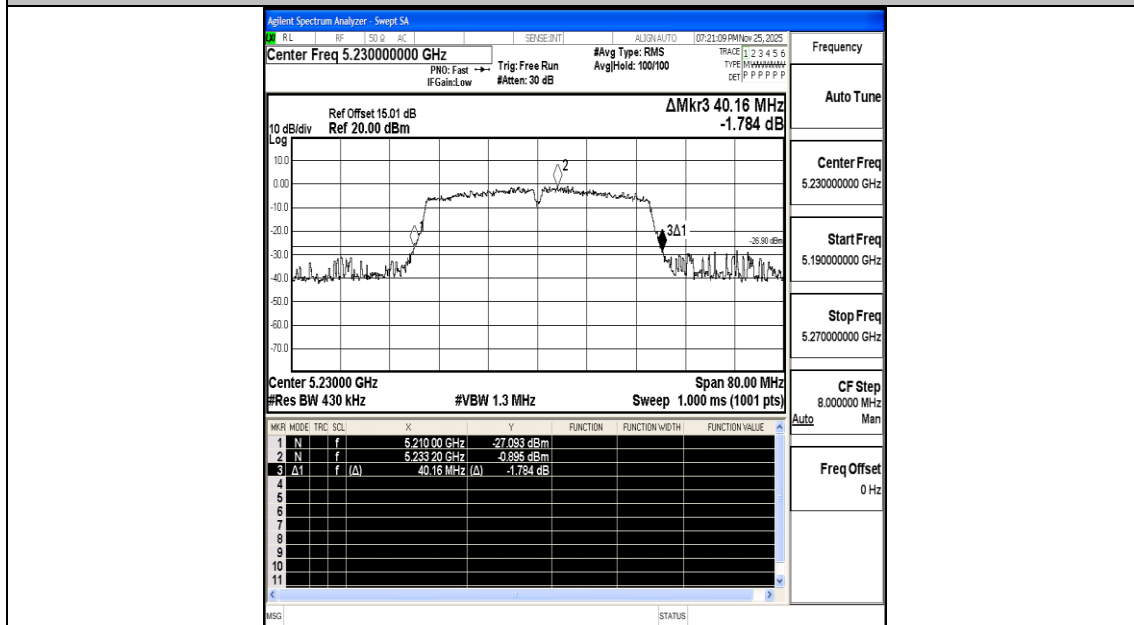
11N20SISO-Ant1-5200



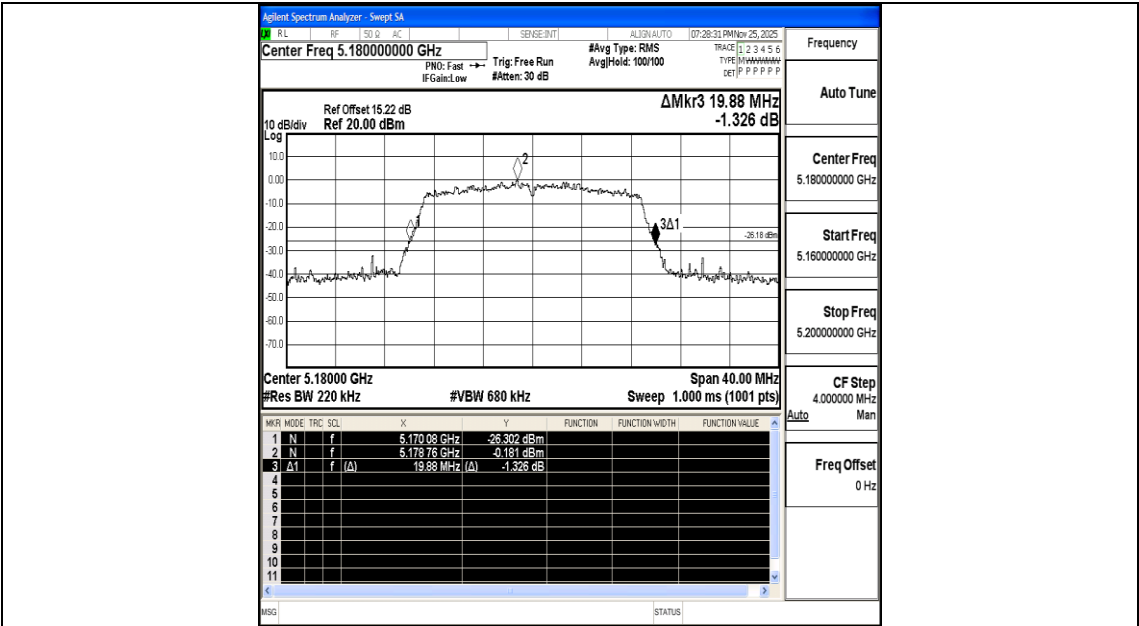
11N20SISO-Ant1-5240



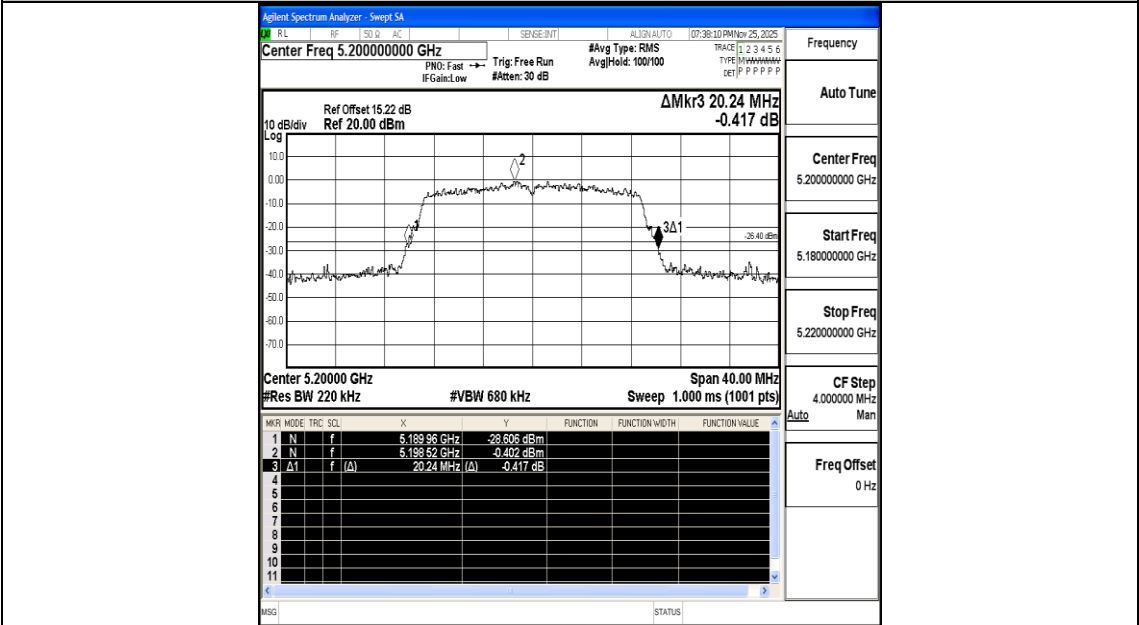
11N40SISO-Ant1-5190



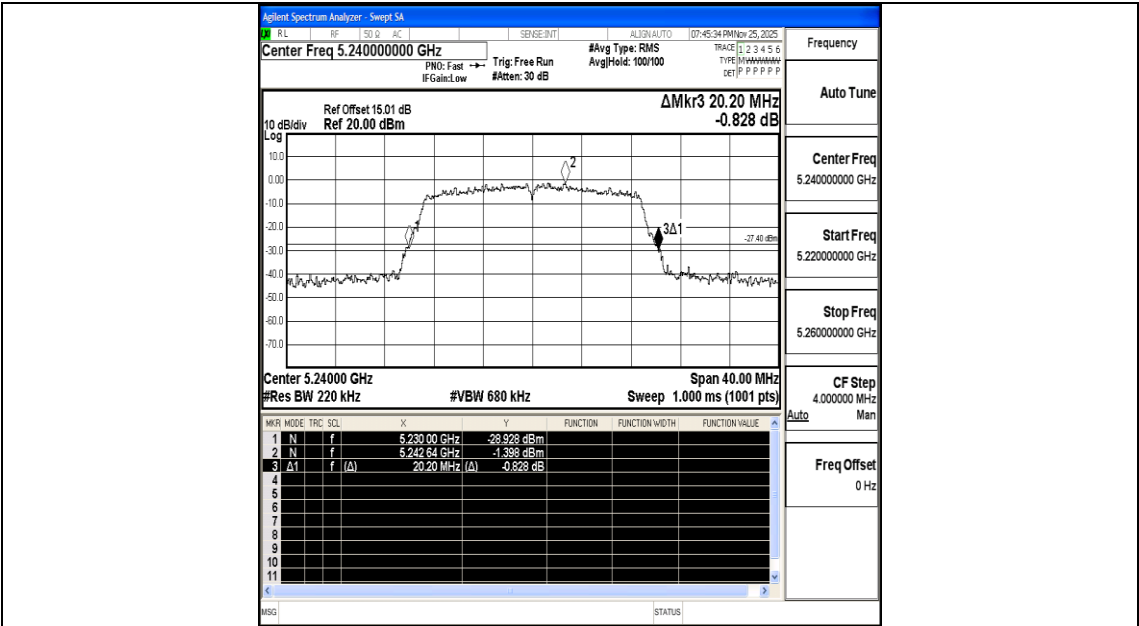
11N40SISO-Ant1-5230



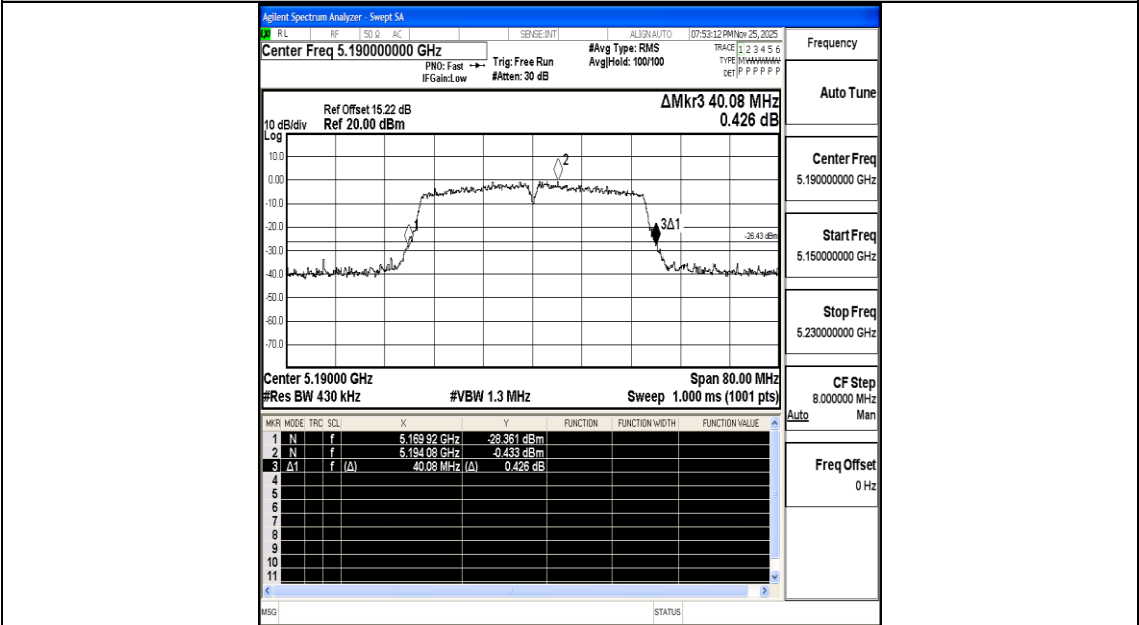
11AC20SISO-Ant1-5180



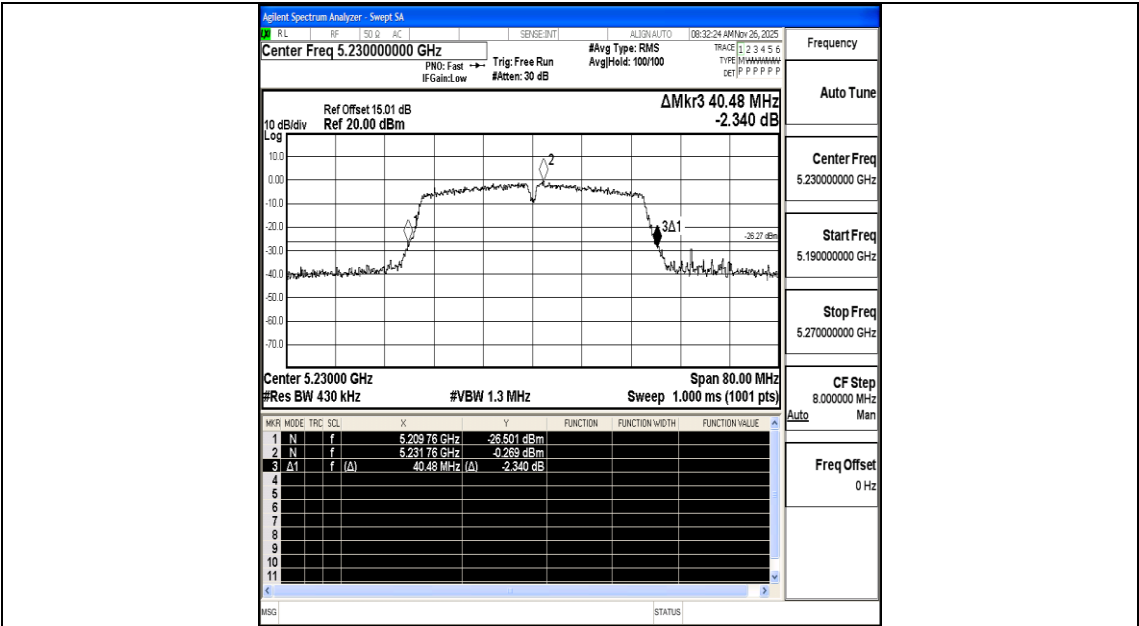
11AC20SISO-Ant1-5200



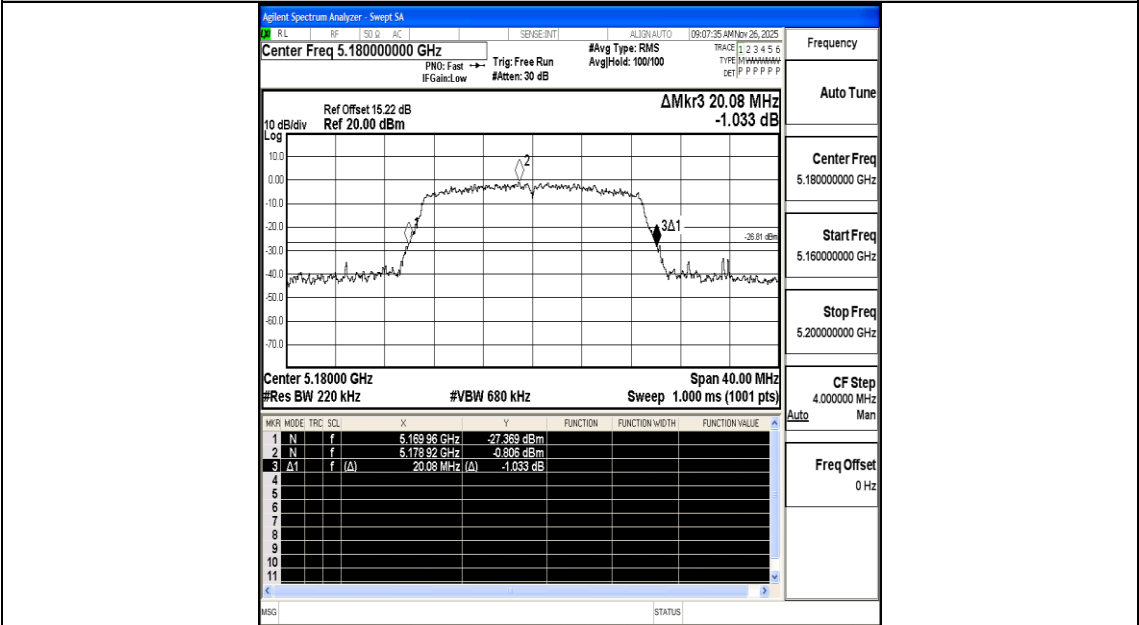
11AC20SISO-Ant1-5240



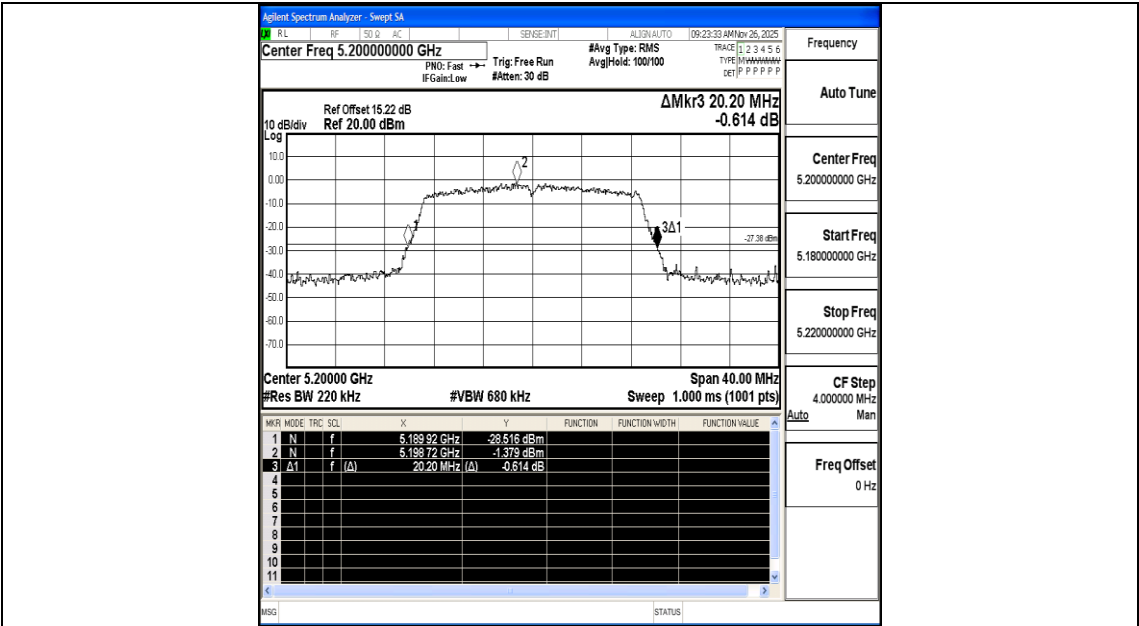
11AC40SISO-Ant1-5190



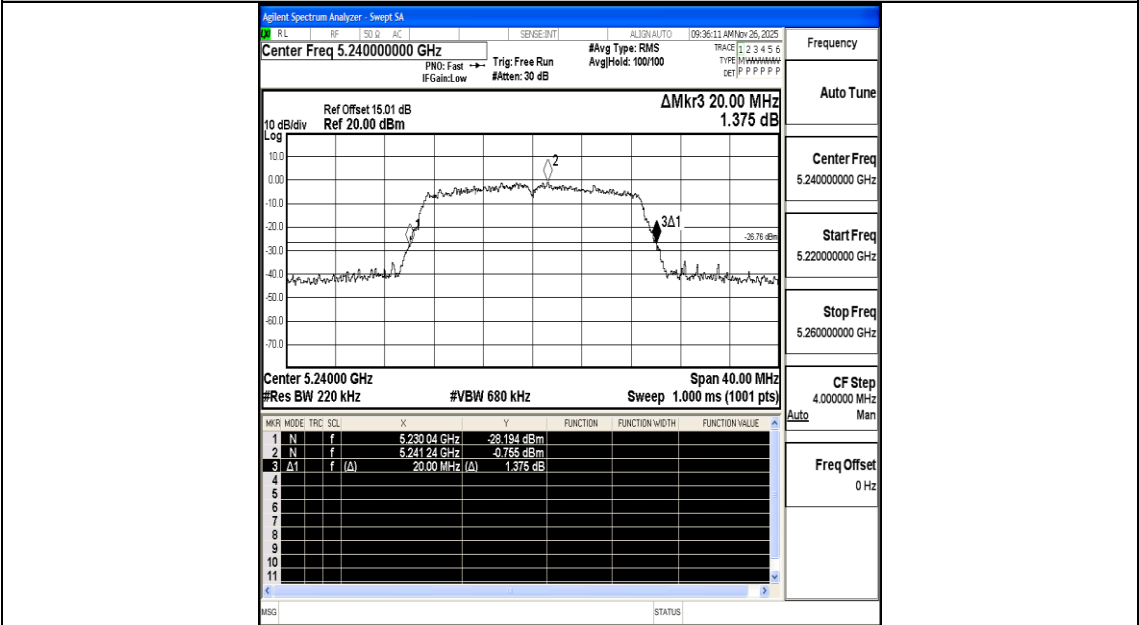
11AC40SISO-Ant1-5230



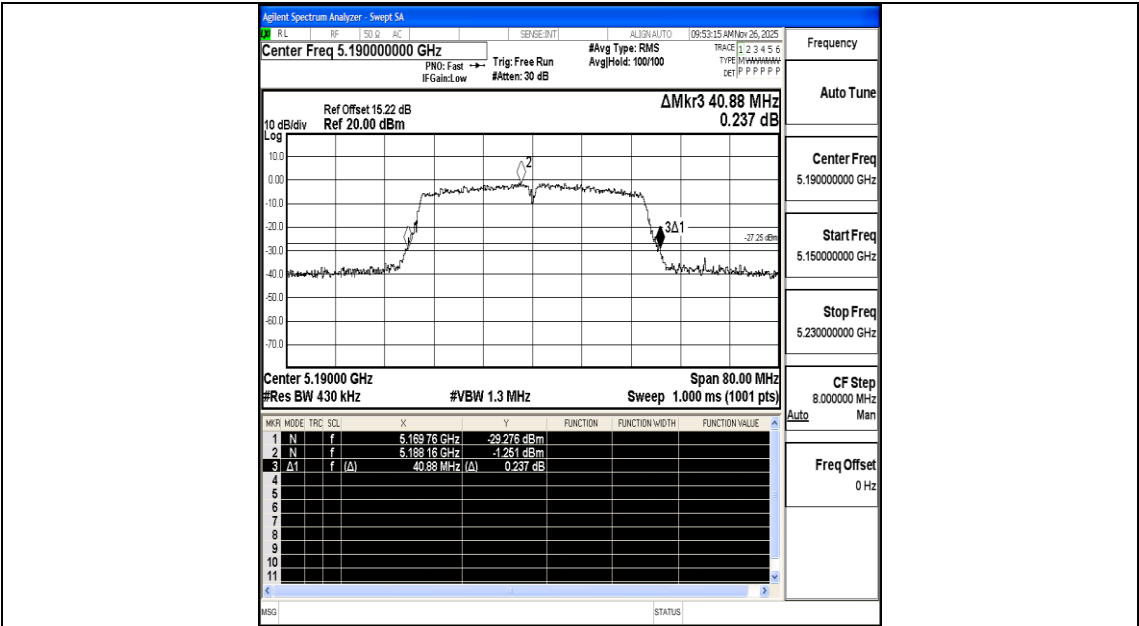
11AX20SISO-Ant1-5180



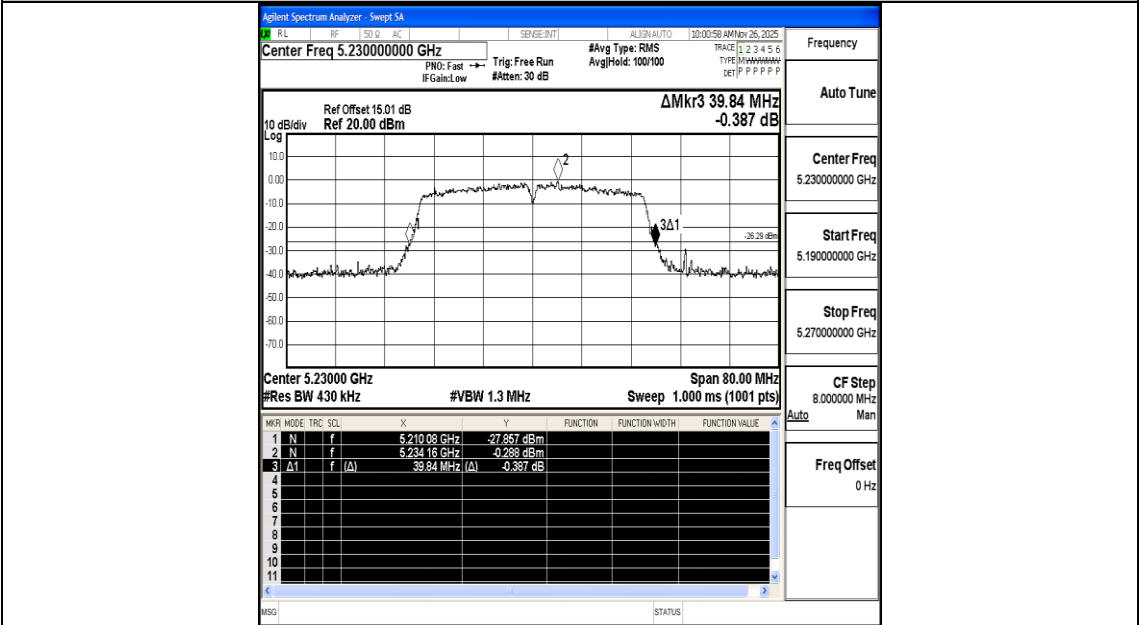
11AX20SISO-Ant1-5200



11AX20SISO-Ant1-5240



11AX40SISO-Ant1-5190



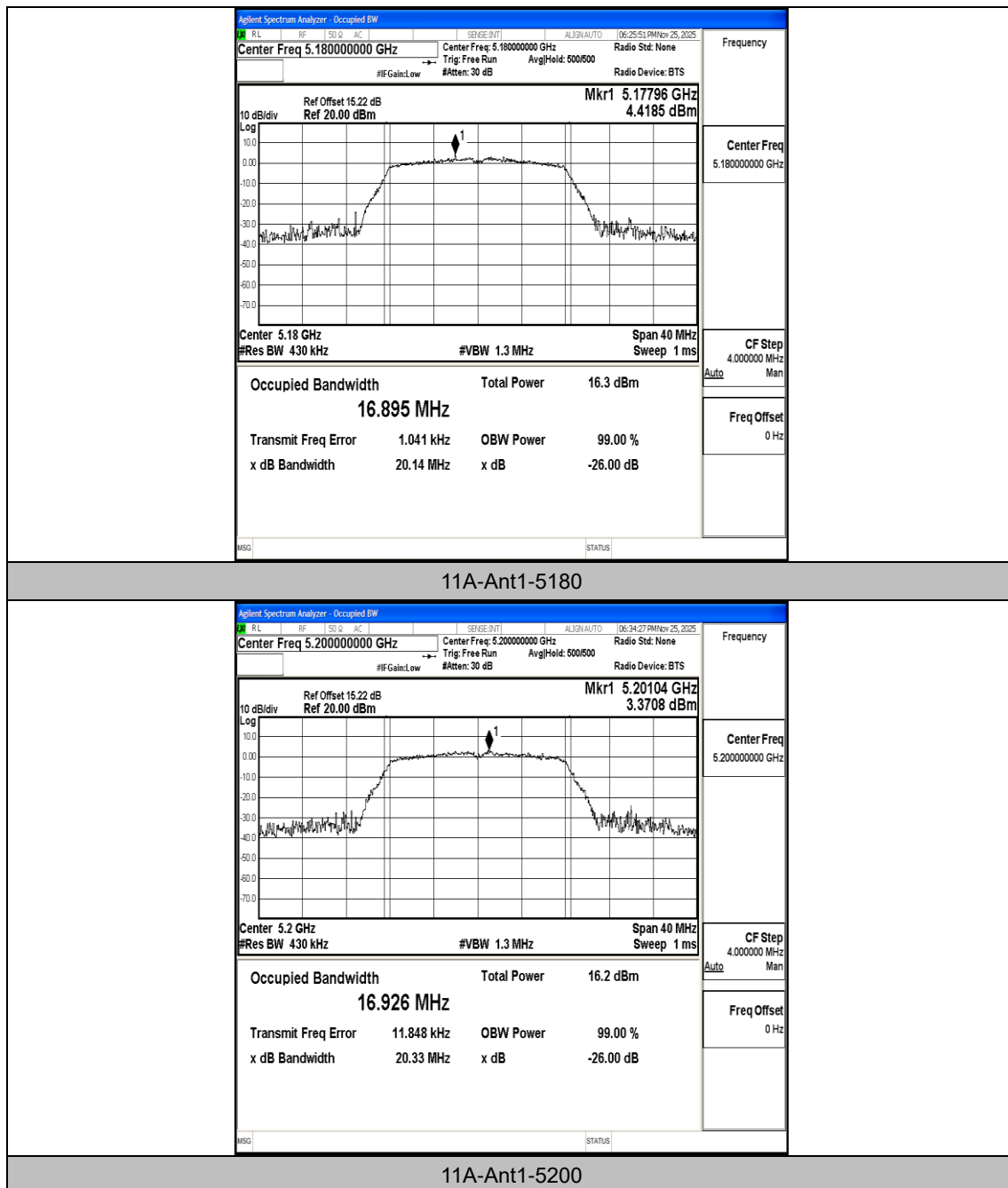
11AX40SISO-Ant1-5230

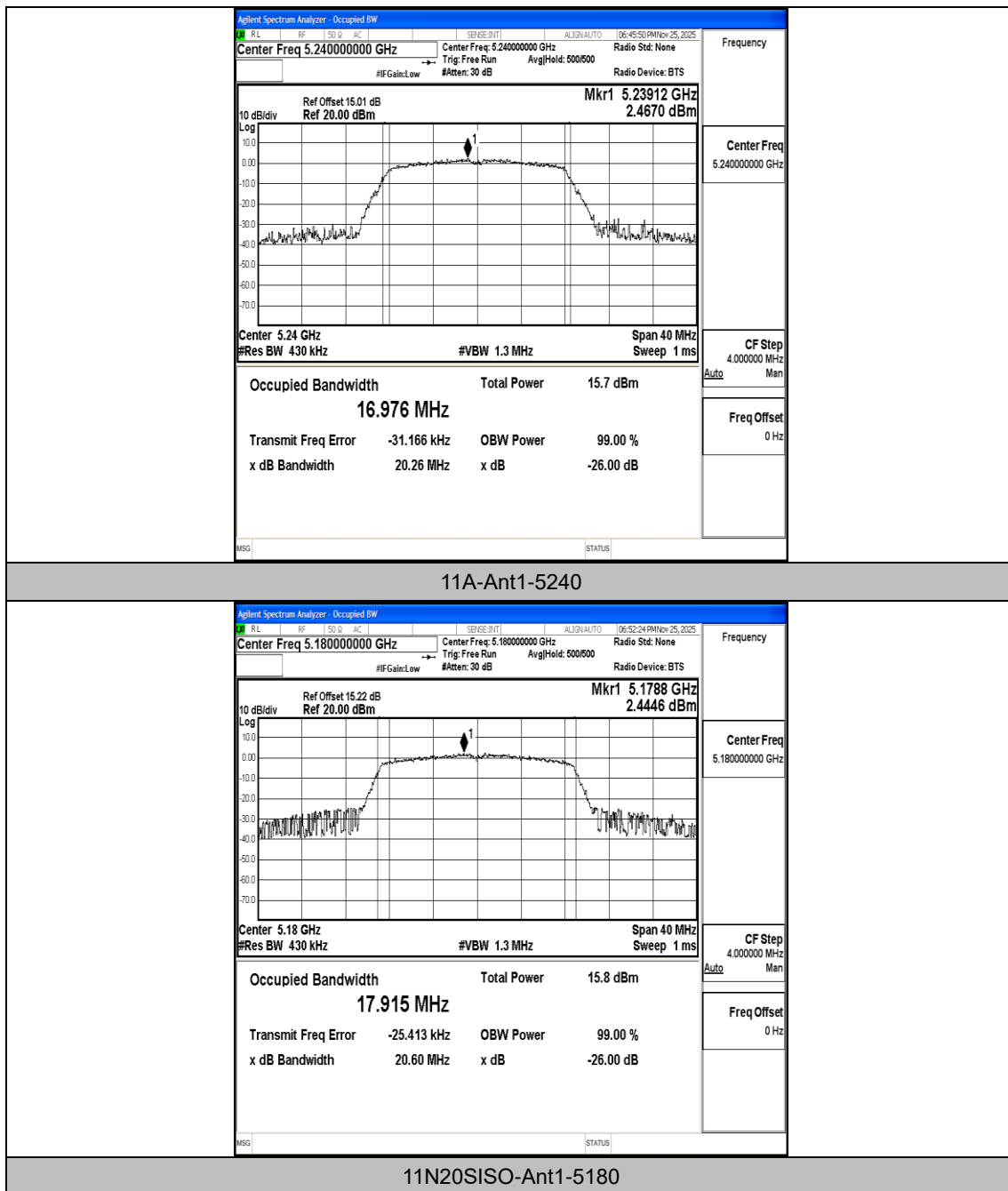
Appendix A2: Occupied channel bandwidth

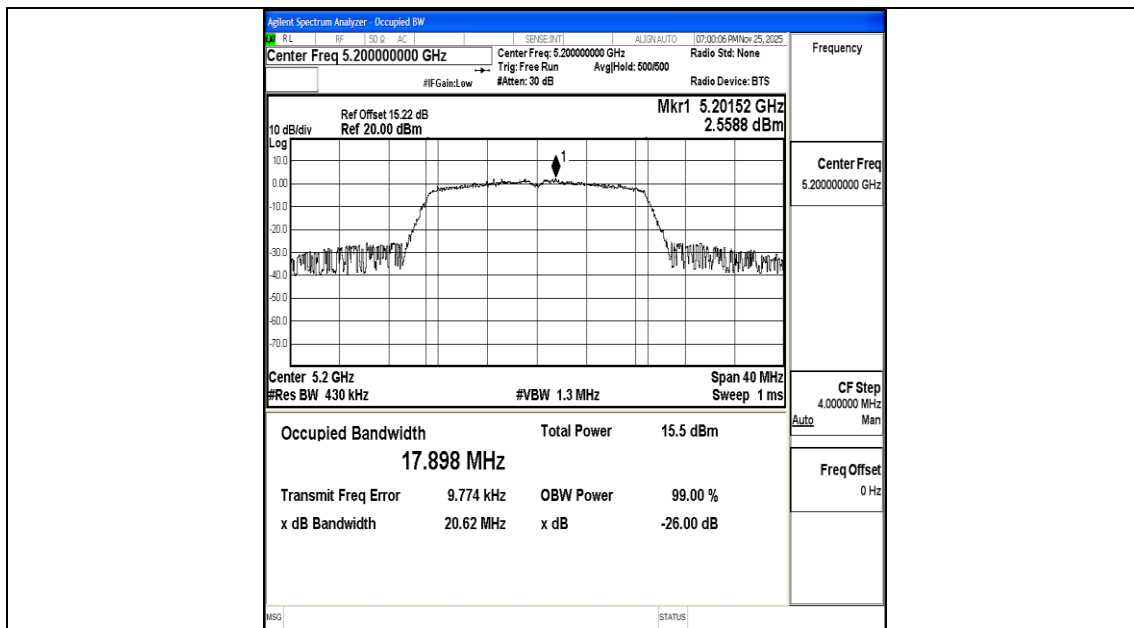
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.895	5171.5535	5188.4485	---	---
11A	Ant1	5200	16.926	5191.5489	5208.4749	---	---
11A	Ant1	5240	16.976	5231.4808	5248.4568	---	---
11N20SISO	Ant1	5180	17.915	5171.0171	5188.9321	---	---
11N20SISO	Ant1	5200	17.898	5191.0608	5208.9588	---	---
11N20SISO	Ant1	5240	17.901	5231.0499	5248.9509	---	---
11N40SISO	Ant1	5190	36.482	5171.7543	5208.2363	---	---
11N40SISO	Ant1	5230	36.392	5211.8286	5248.2206	---	---
11AC20SISO	Ant1	5180	17.815	5171.0890	5188.9040	---	---
11AC20SISO	Ant1	5200	17.862	5191.0513	5208.9133	---	---
11AC20SISO	Ant1	5240	17.867	5231.0623	5248.9293	---	---
11AC40SISO	Ant1	5190	36.317	5171.8551	5208.1721	---	---
11AC40SISO	Ant1	5230	36.251	5211.8959	5248.1469	---	---
11AX20SISO	Ant1	5180	17.820	5171.0740	5188.8940	---	---
11AX20SISO	Ant1	5200	17.819	5191.1119	5208.9309	---	---
11AX20SISO	Ant1	5240	17.879	5231.0696	5248.9486	---	---
11AX40SISO	Ant1	5190	36.272	5171.8725	5208.1445	---	---
11AX40SISO	Ant1	5230	36.216	5211.8990	5248.1150	---	---

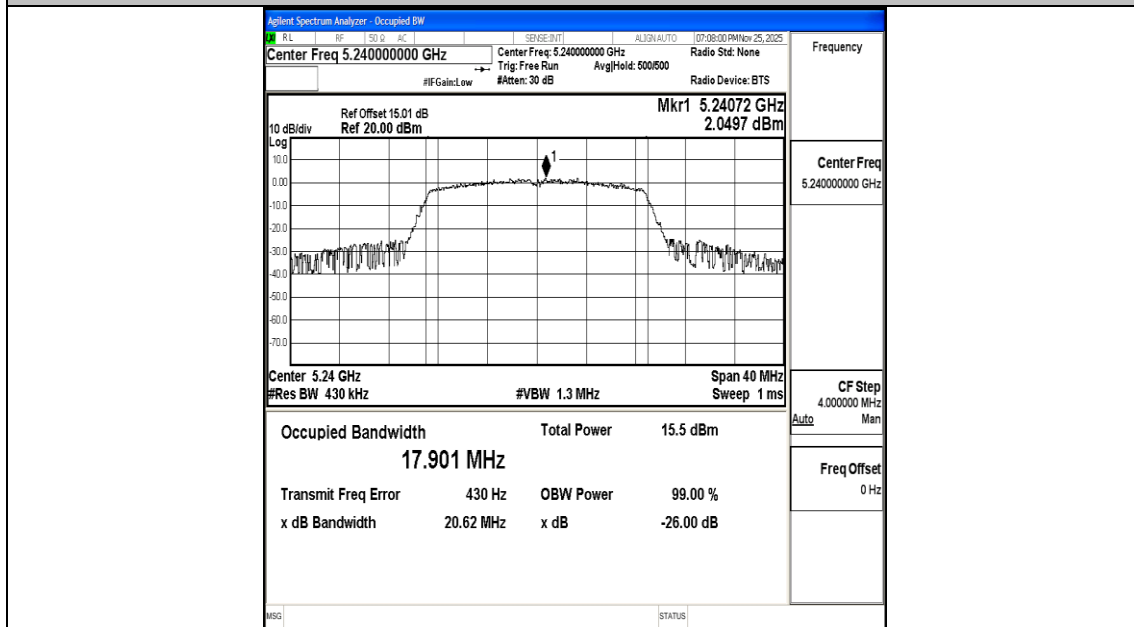
Test Graphs



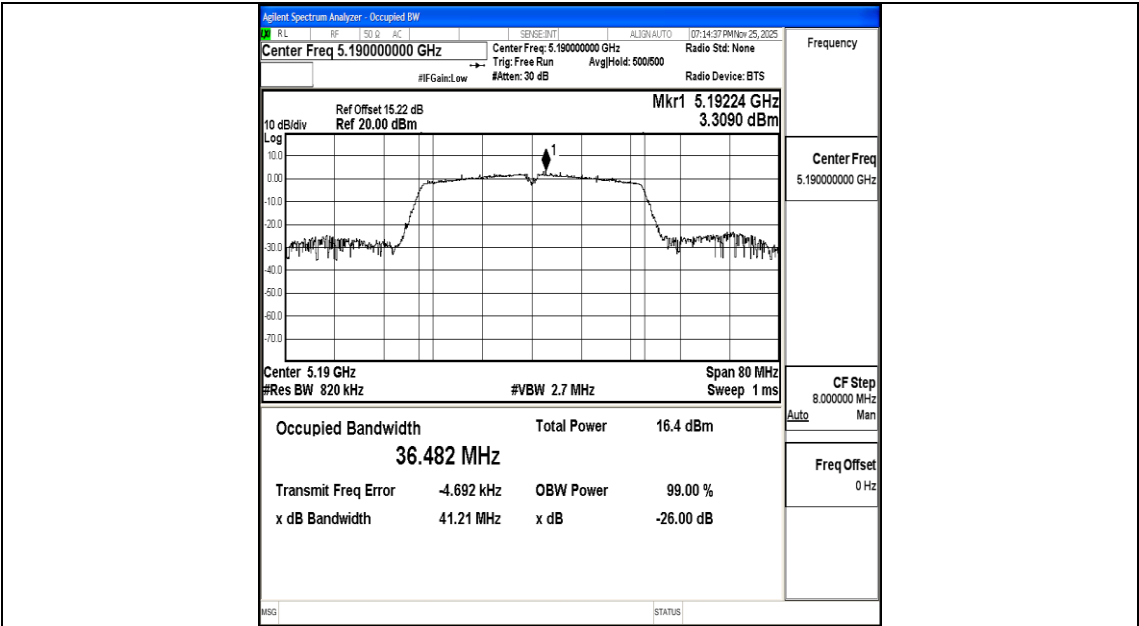




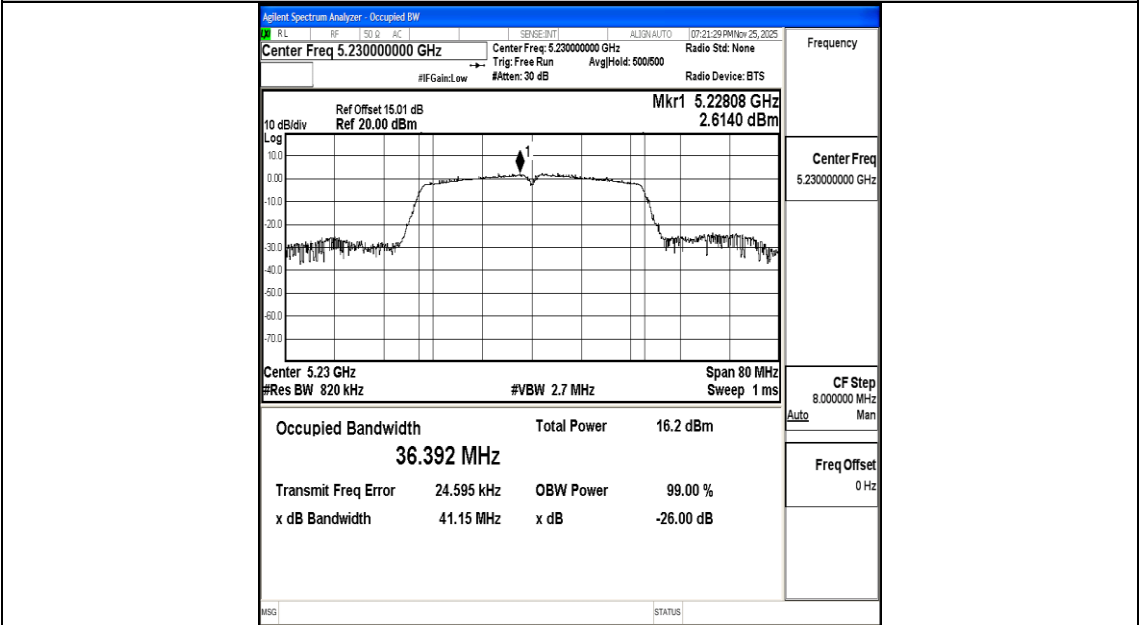
11N20SISO-Ant1-5200



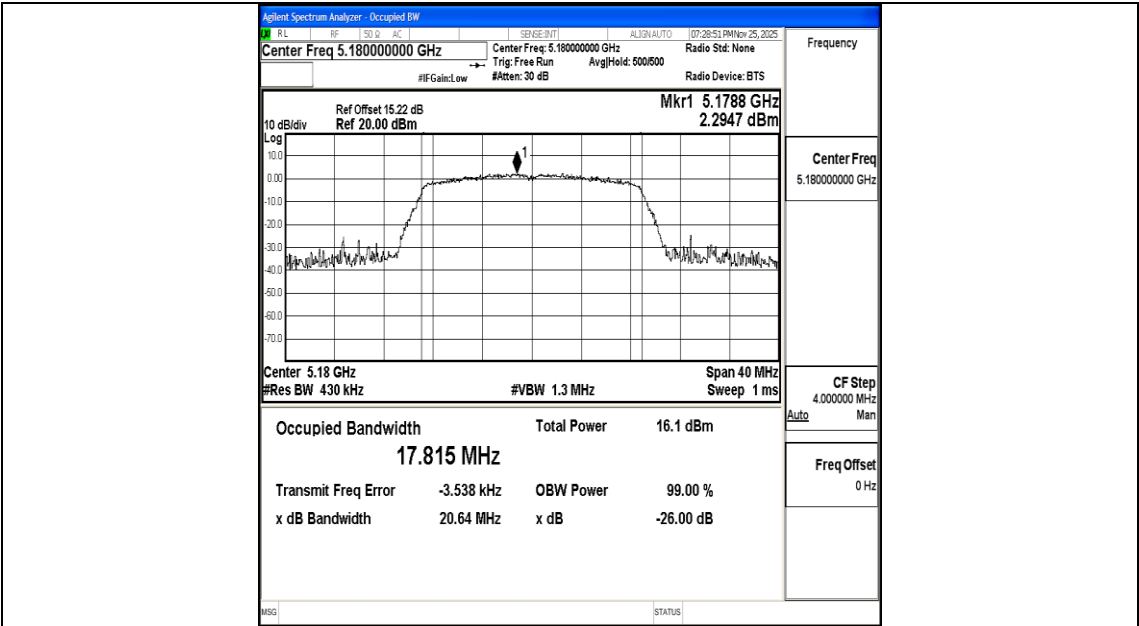
11N20SISO-Ant1-5240



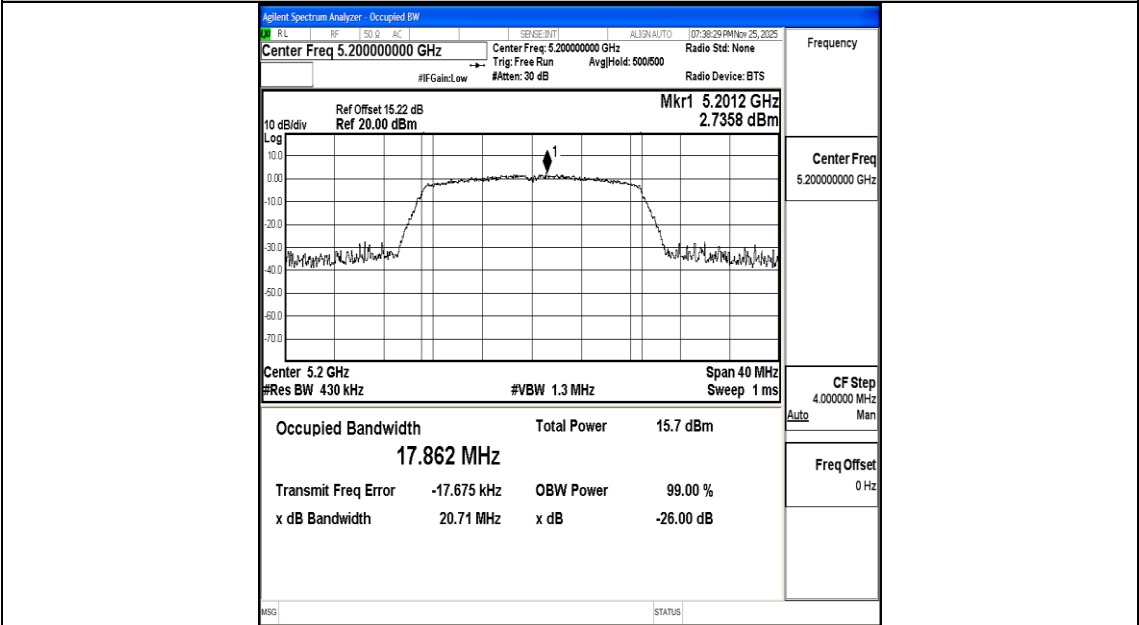
11N40SISO-Ant1-5190



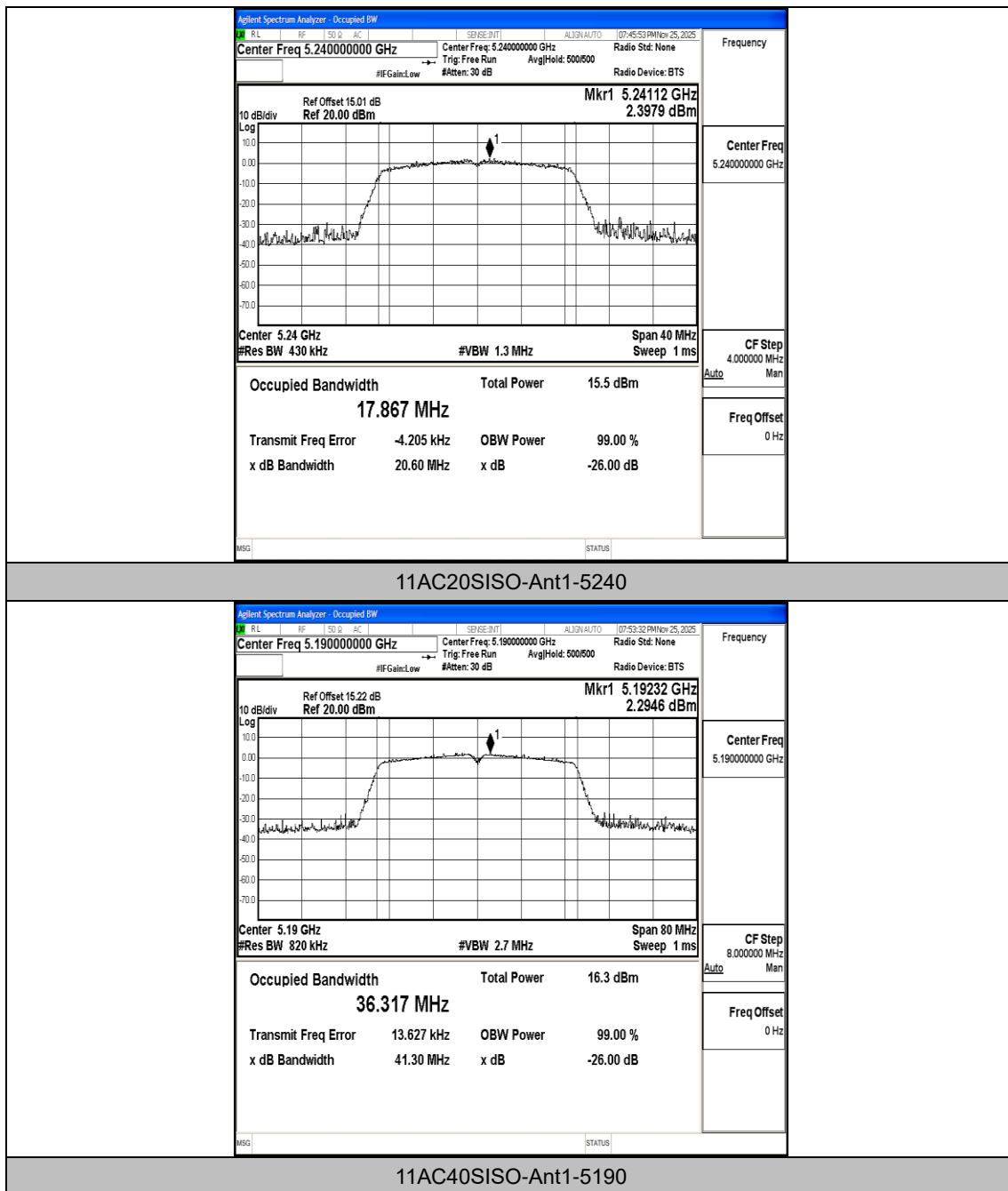
11N40SISO-Ant1-5230

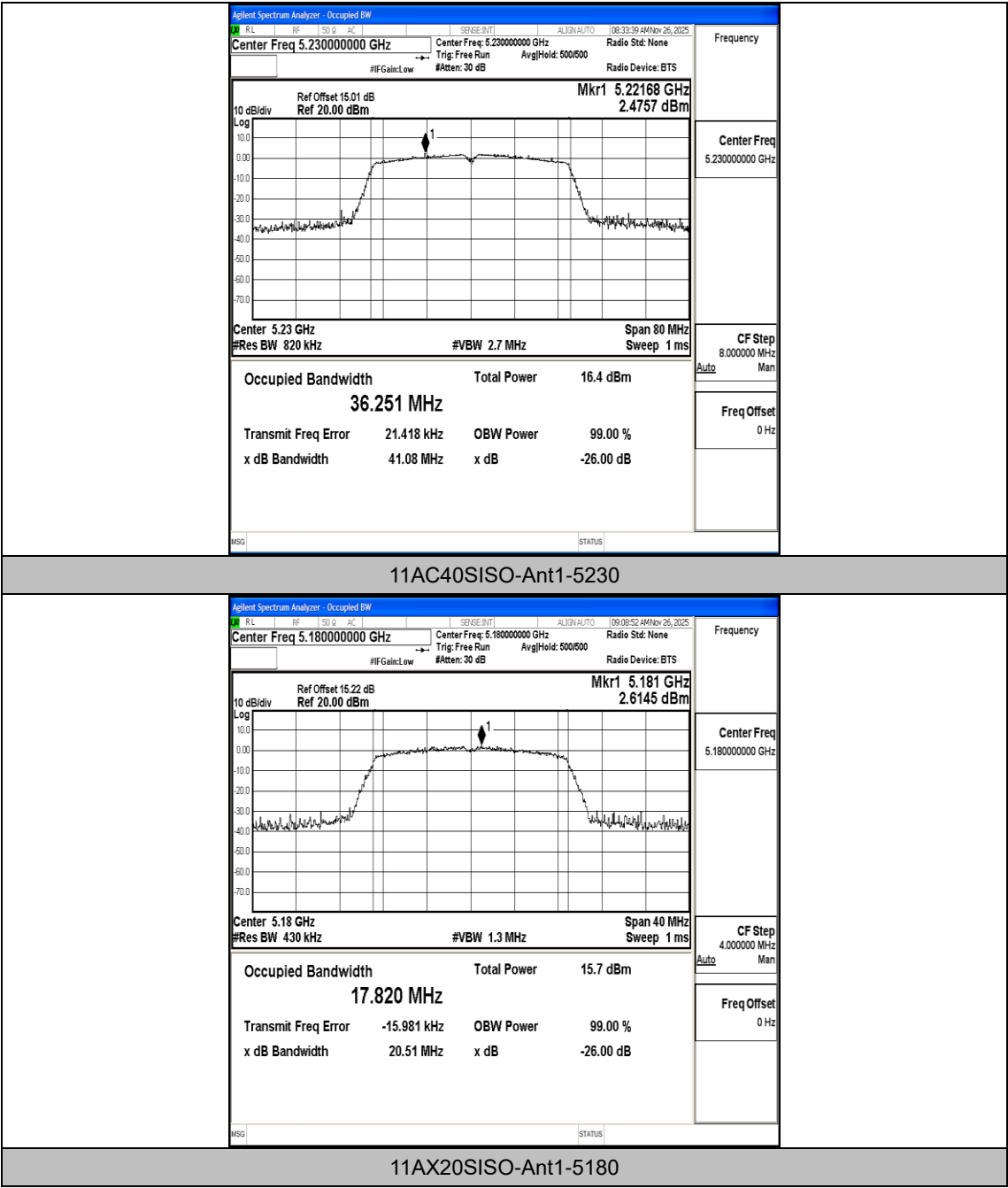


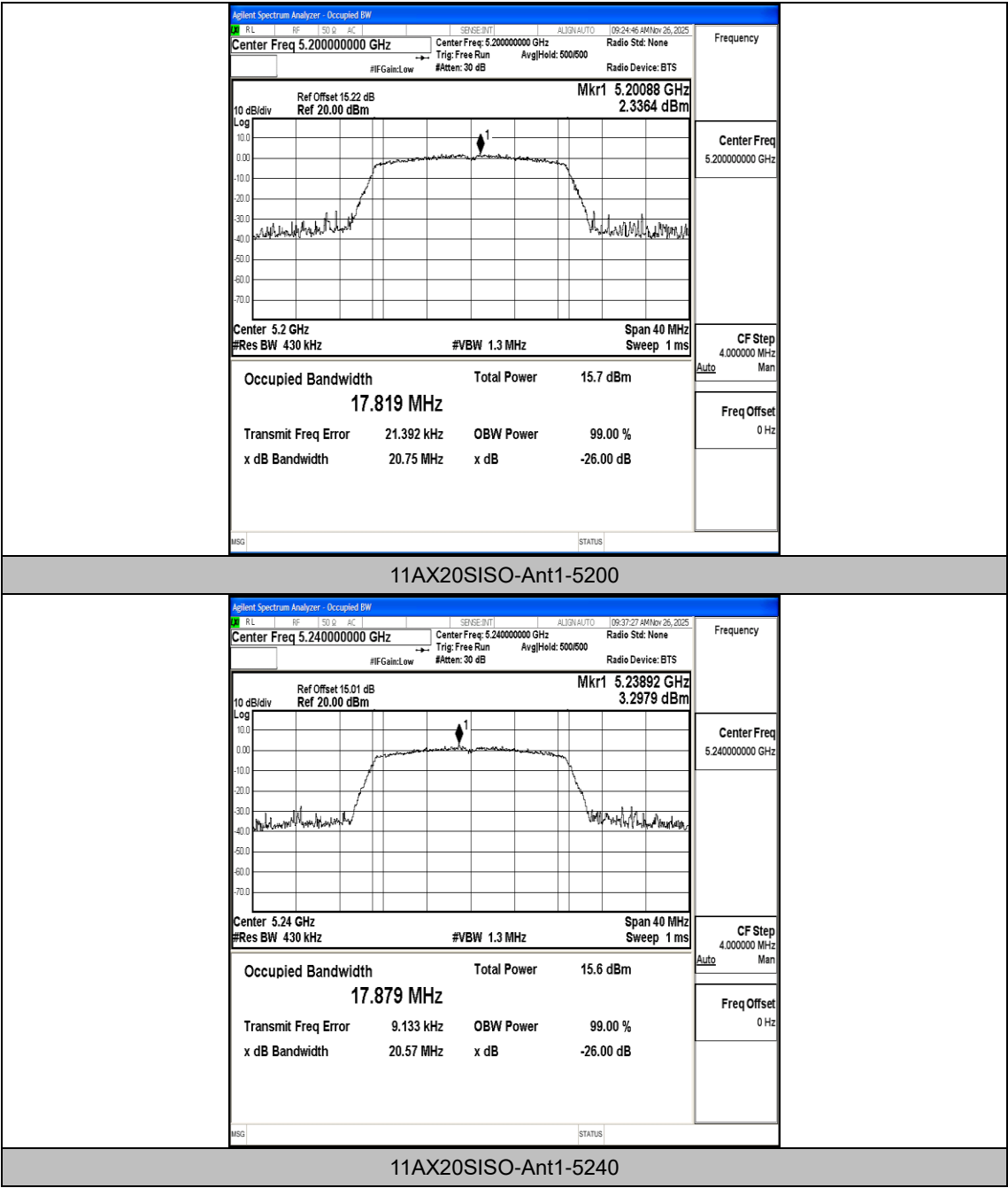
11AC20SISO-Ant1-5180



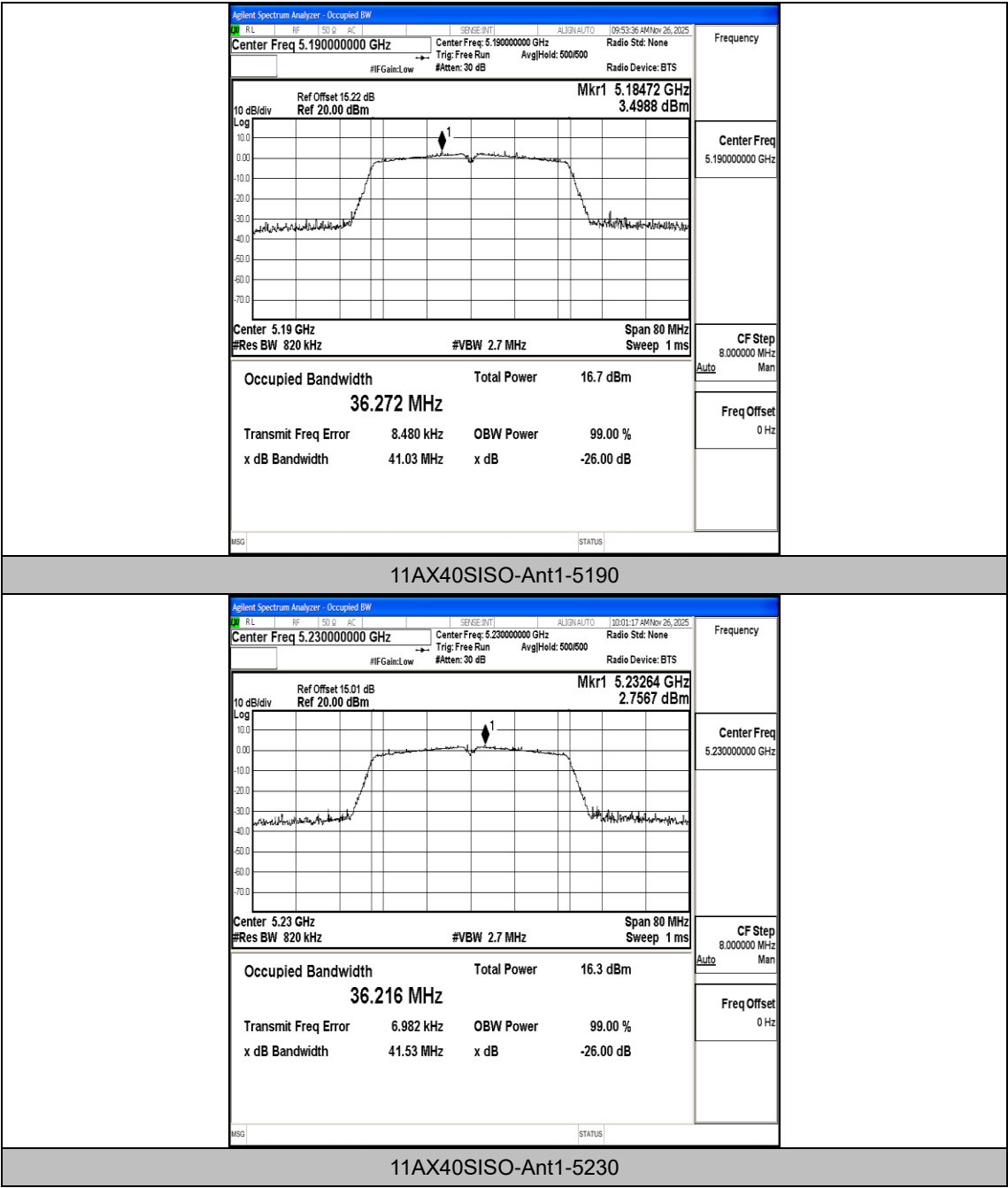
11AC20SISO-Ant1-5200







11AX20SISO-Ant1-5240



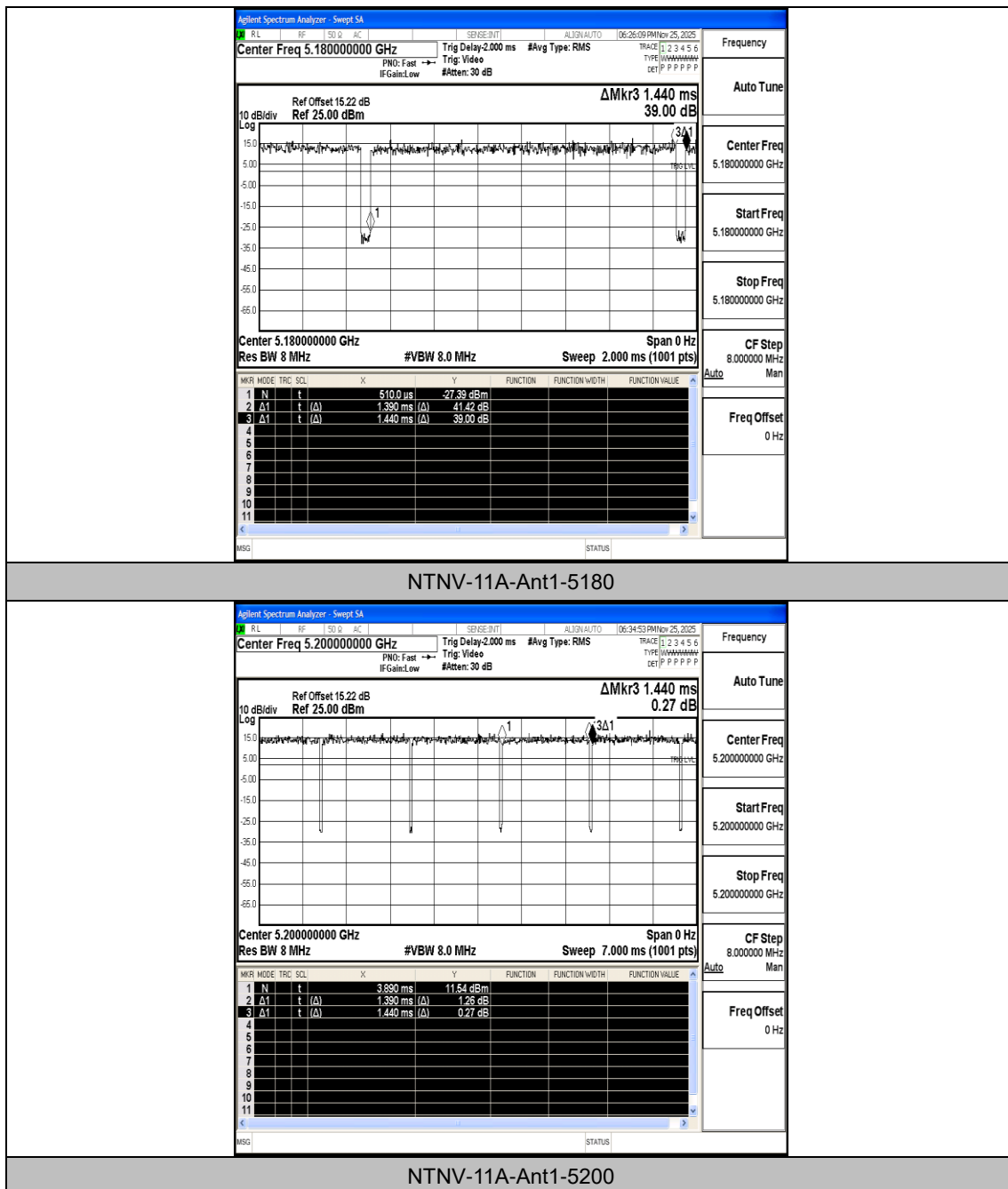
11AX40SISO-Ant1-5230

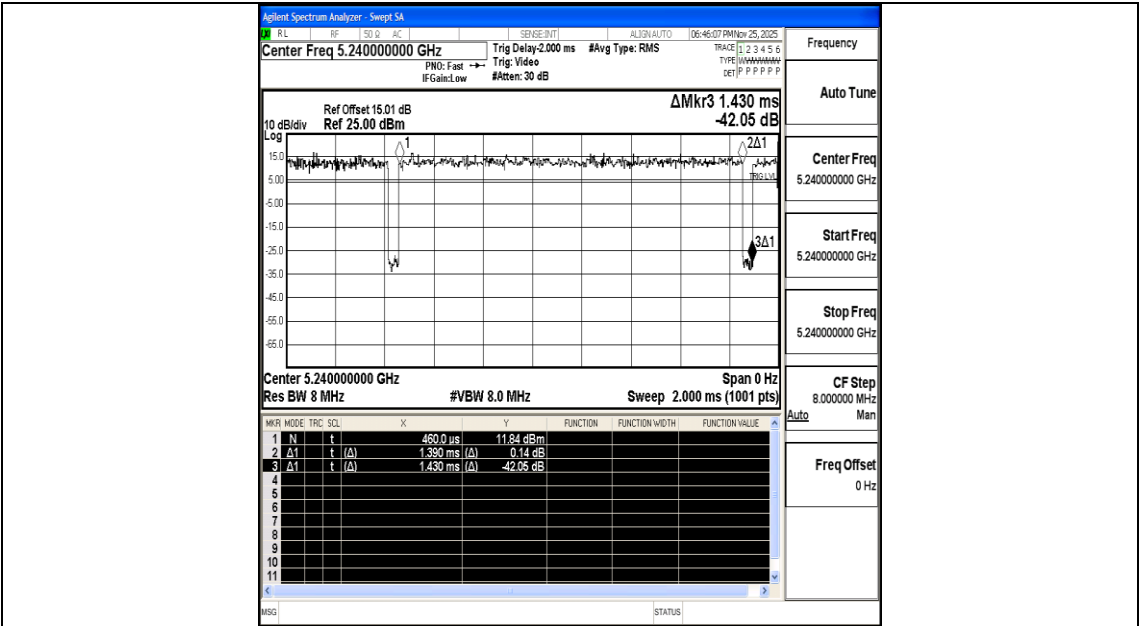
Appendix B: Duty Cycle

Test Result

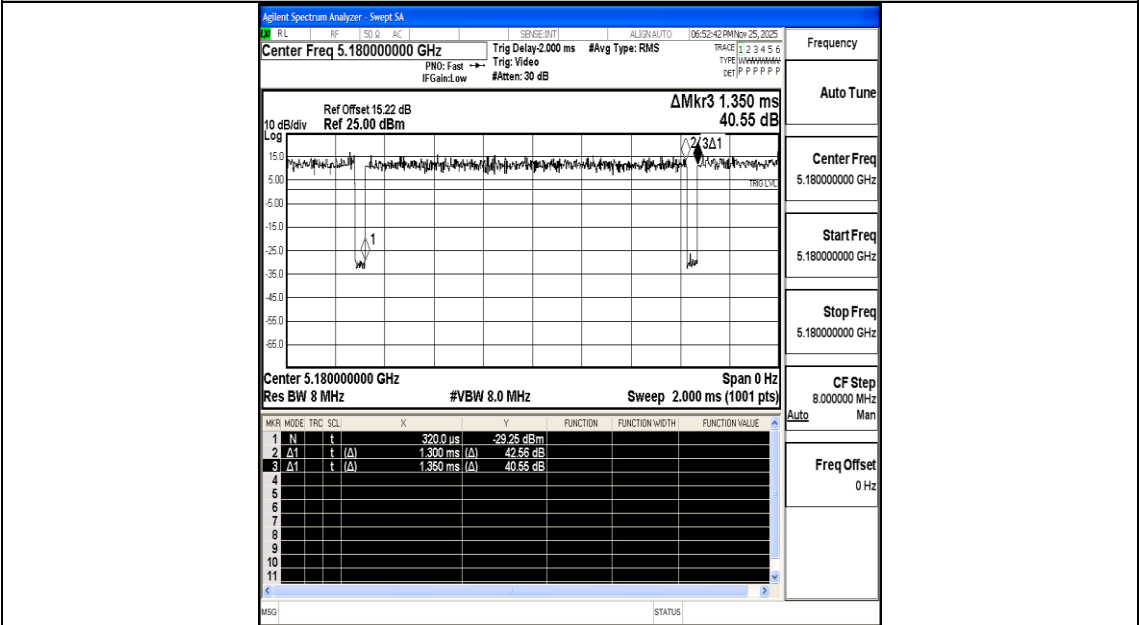
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Dc Factor [%]	1/T
11A	Ant1	5180	1.39	1.44	96.53	0.15	0.72
11A	Ant1	5200	1.39	1.44	96.53	0.15	0.72
11A	Ant1	5240	1.39	1.43	97.20	0.12	0.72
11N20SISO	Ant1	5180	1.30	1.35	96.30	0.16	0.77
11N20SISO	Ant1	5200	1.30	1.34	97.01	0.13	0.77
11N20SISO	Ant1	5240	1.30	1.35	96.30	0.16	0.77
11N40SISO	Ant1	5190	0.64	0.69	92.75	0.33	1.56
11N40SISO	Ant1	5230	0.65	0.70	92.86	0.32	1.54
11AC20SISO	Ant1	5180	1.31	1.36	96.32	0.16	0.76
11AC20SISO	Ant1	5200	1.31	1.36	96.32	0.16	0.76
11AC20SISO	Ant1	5240	1.31	1.35	97.04	0.13	0.76
11AC40SISO	Ant1	5190	0.65	0.70	92.86	0.32	1.54
11AC40SISO	Ant1	5230	0.65	0.70	92.86	0.32	1.54
11AX20SISO	Ant1	5180	1.31	1.36	96.32	0.16	0.76
11AX20SISO	Ant1	5200	1.31	1.36	96.32	0.16	0.76
11AX20SISO	Ant1	5240	1.31	1.36	96.32	0.16	0.76
11AX40SISO	Ant1	5190	0.66	0.70	94.29	0.26	1.52
11AX40SISO	Ant1	5230	0.66	0.70	94.29	0.26	1.52

Test Graphs

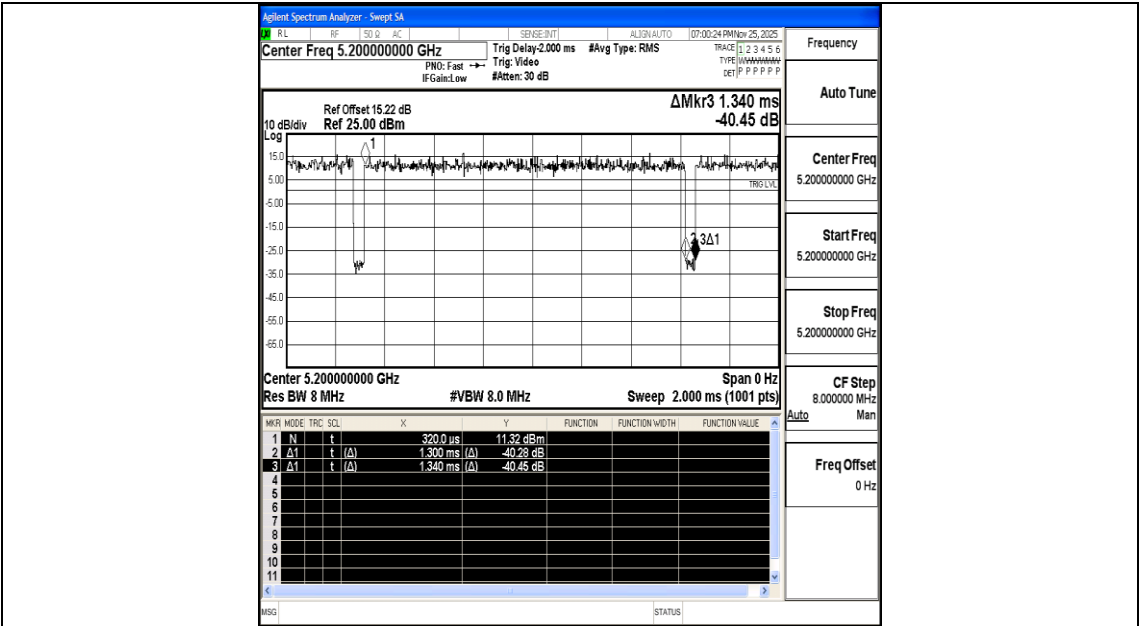




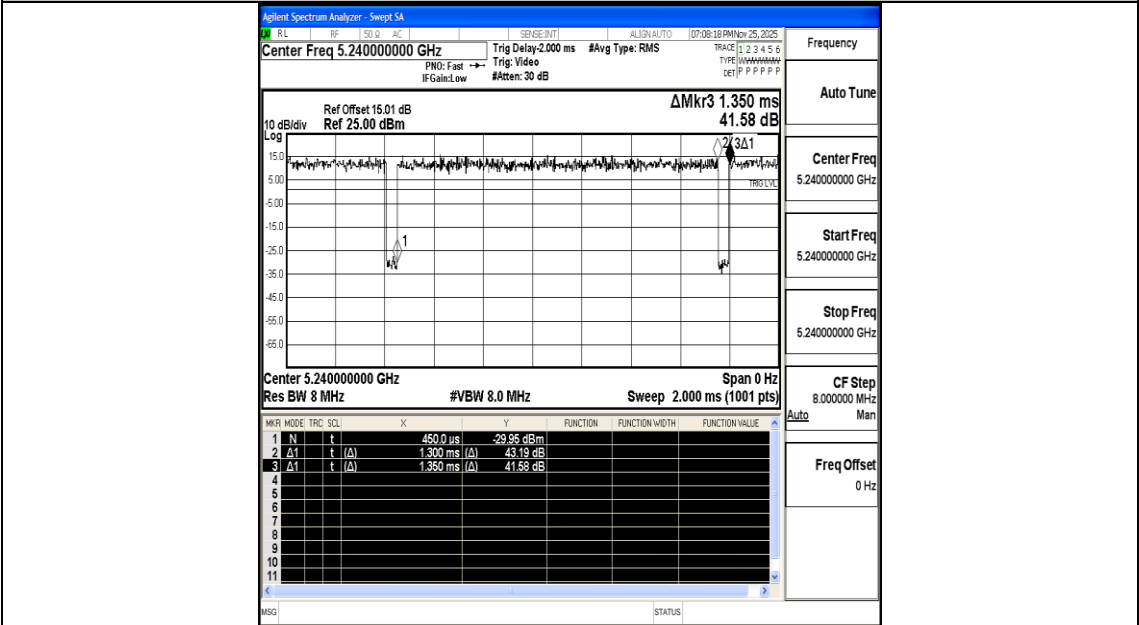
NTNV-11A-Ant1-5240



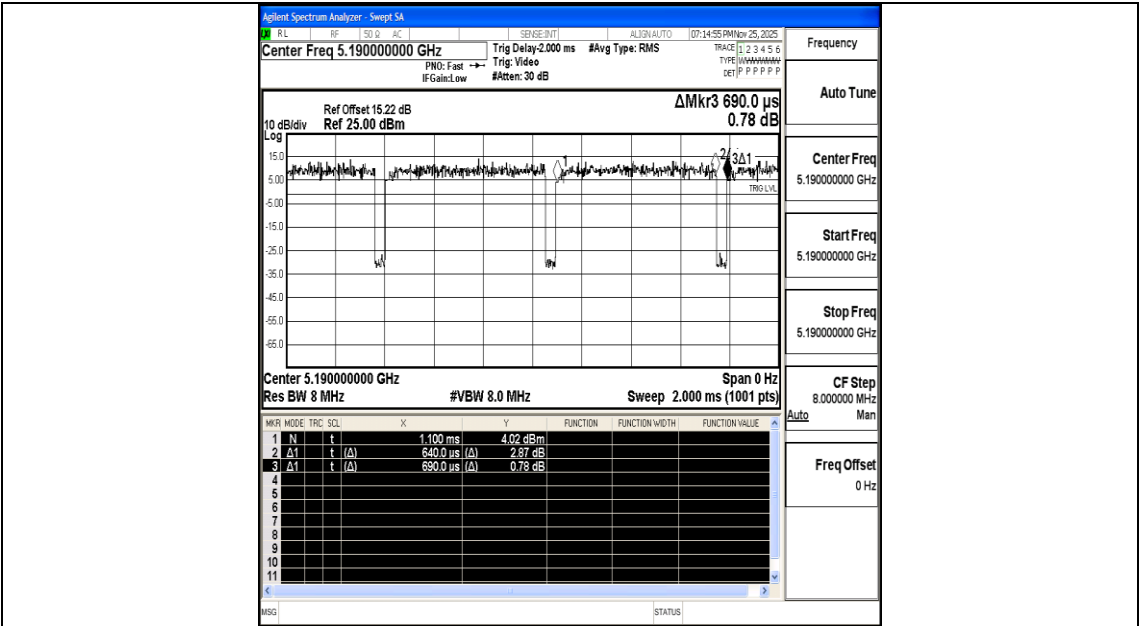
NTNV-11N20SISO-Ant1-5180



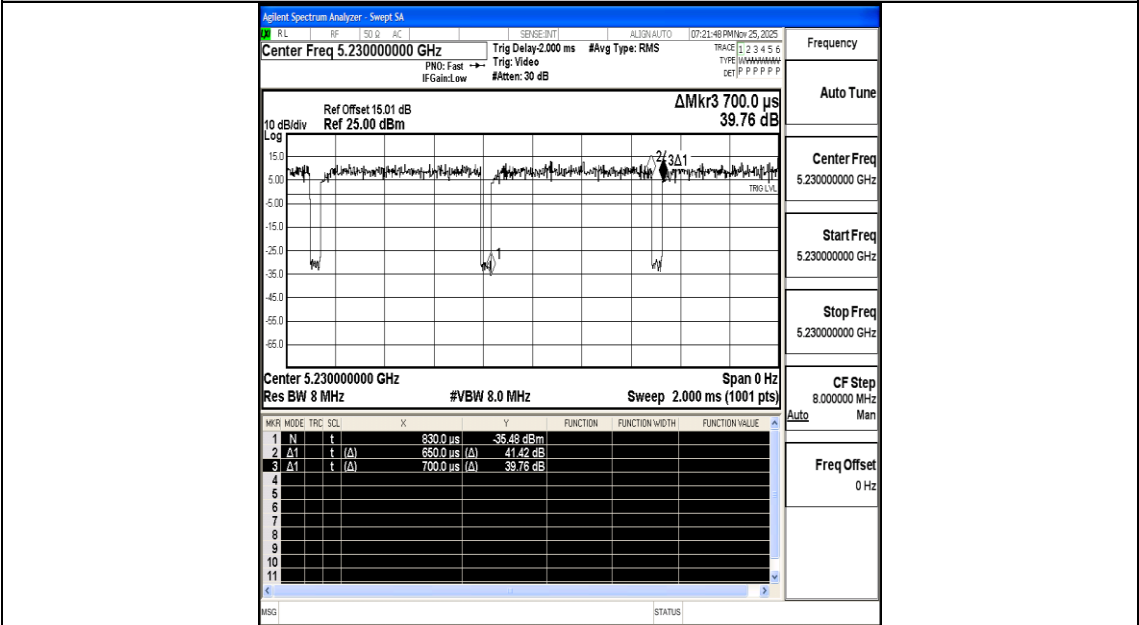
NTNV-11N20SISO-Ant1-5200



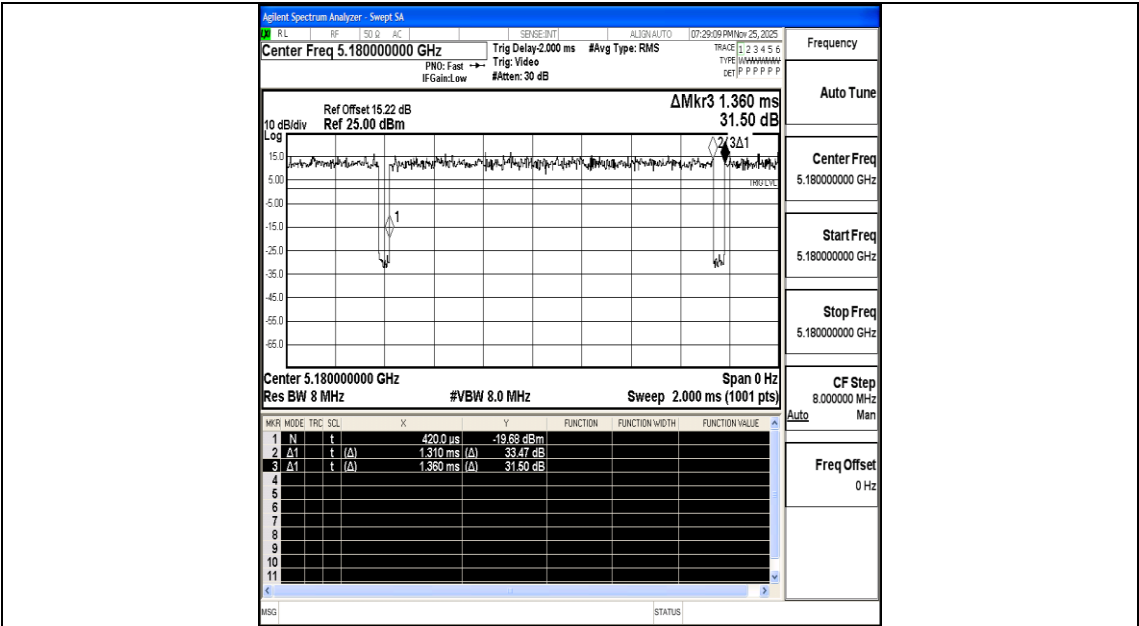
NTNV-11N20SISO-Ant1-5240



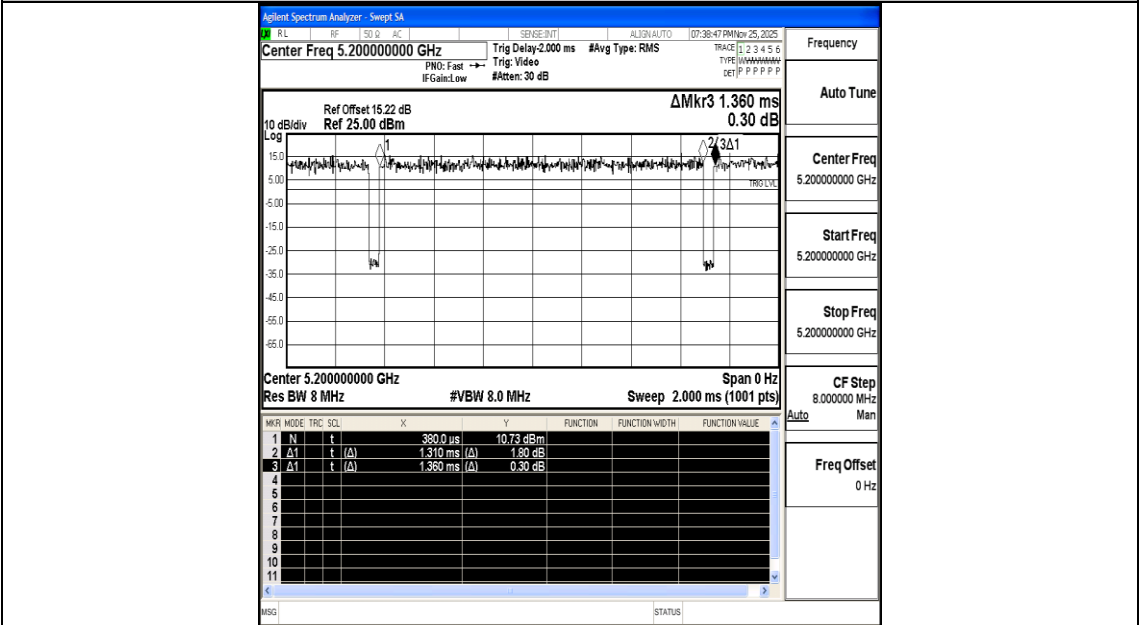
NTNV-11N40SISO-Ant1-5190



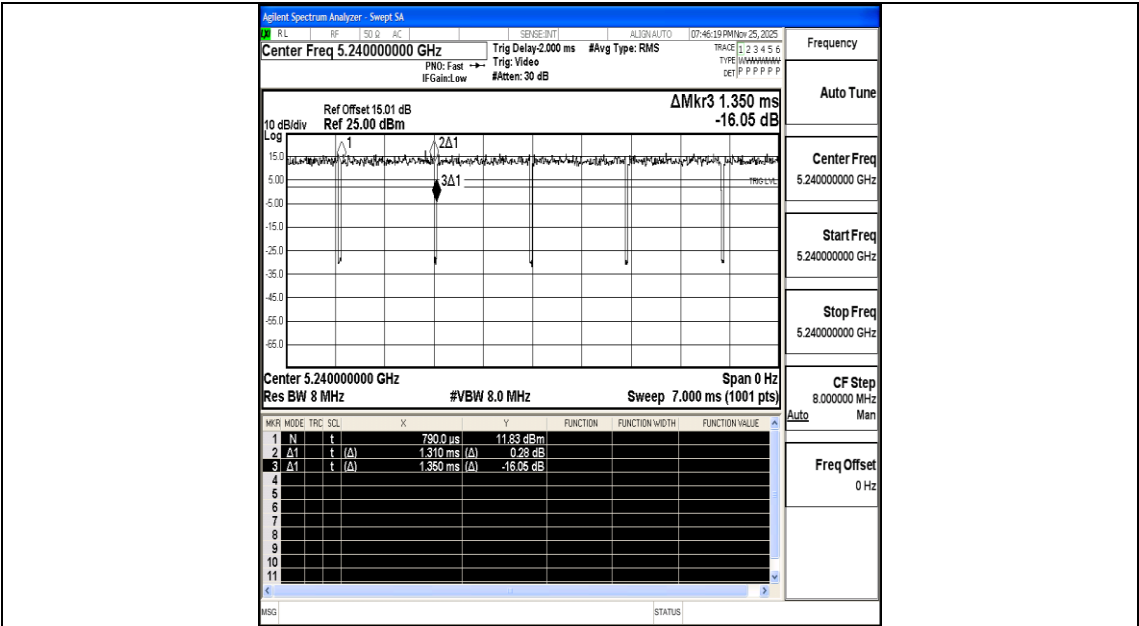
NTNV-11N40SISO-Ant1-5230



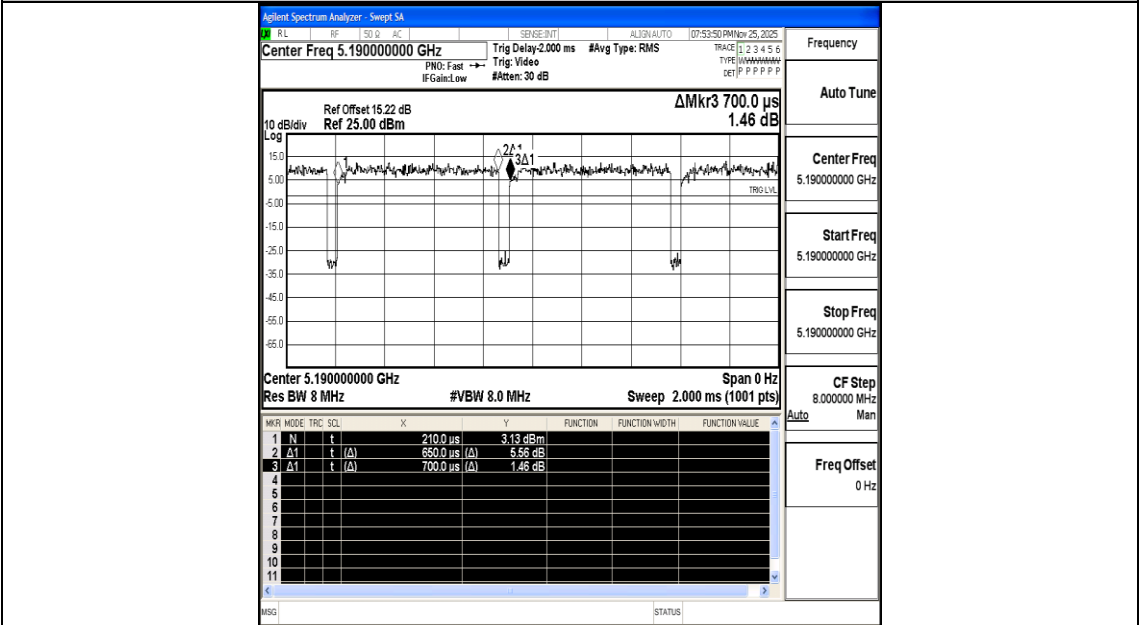
NTNV-11AC20SISO-Ant1-5180



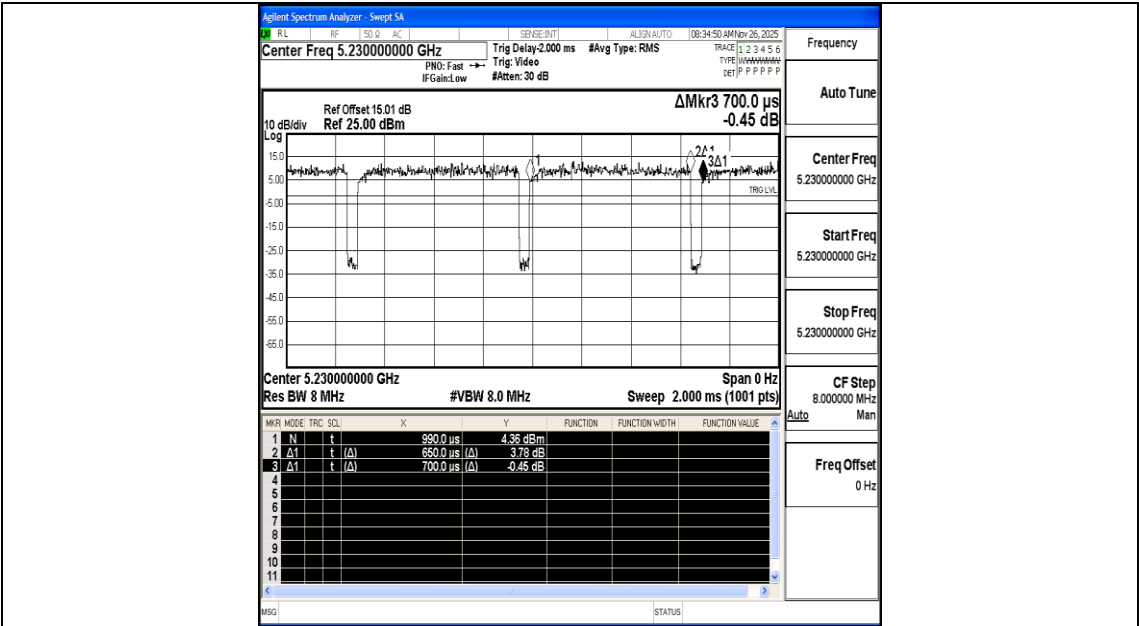
NTNV-11AC20SISO-Ant1-5200



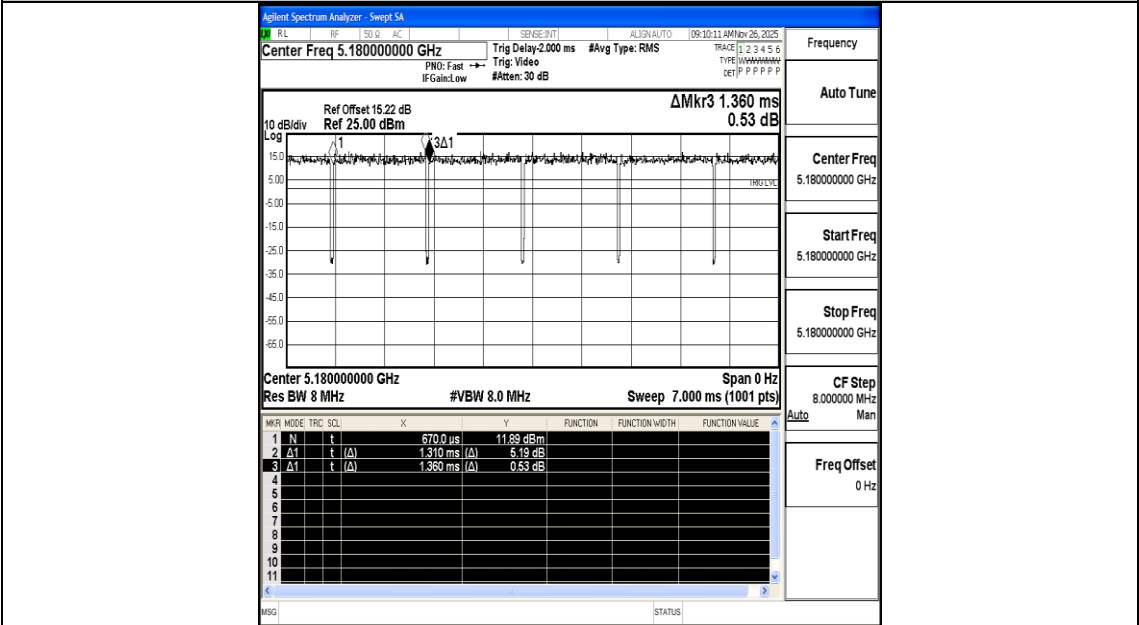
NTNV-11AC20SISO-Ant1-5240



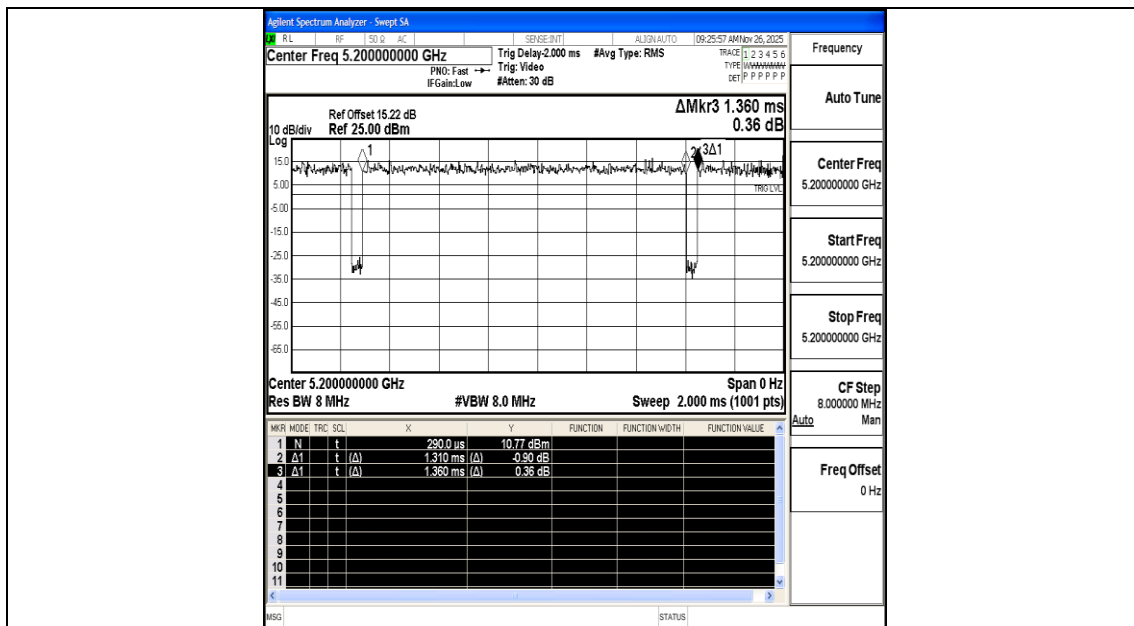
NTNV-11AC40SISO-Ant1-5190



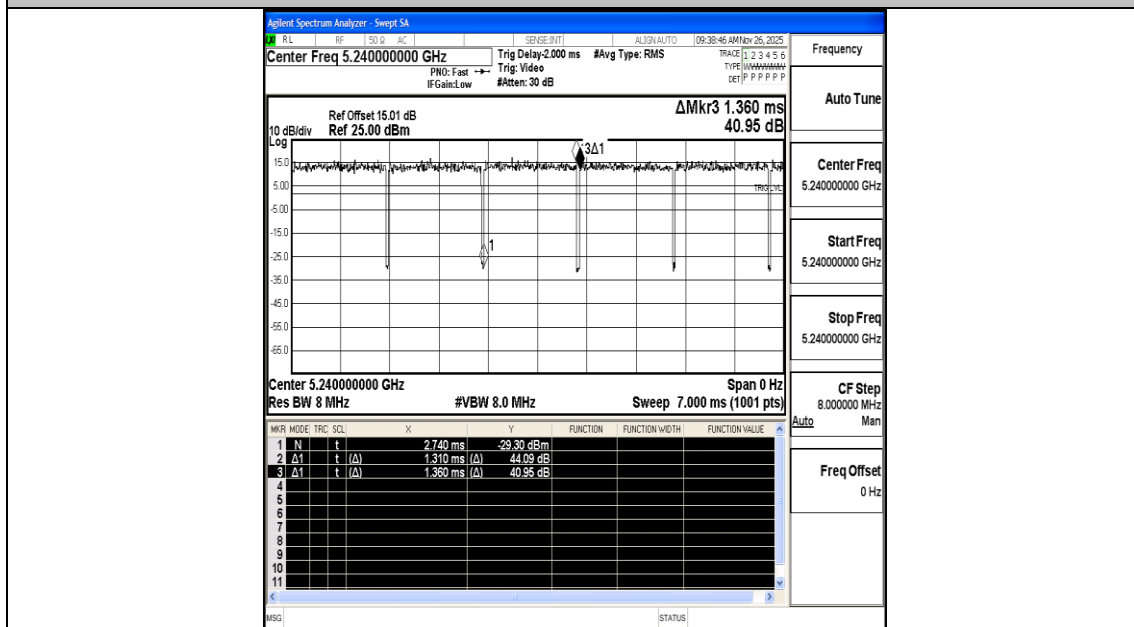
NTNV-11AC40SISO-Ant1-5230



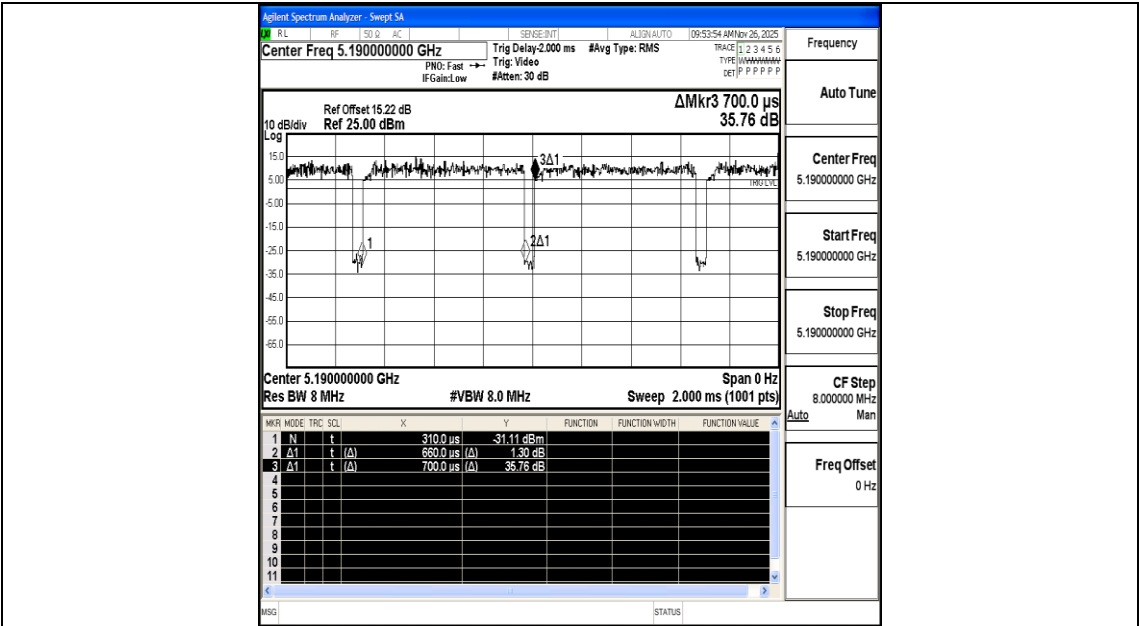
NTNV-11AX20SISO-Ant1-5180



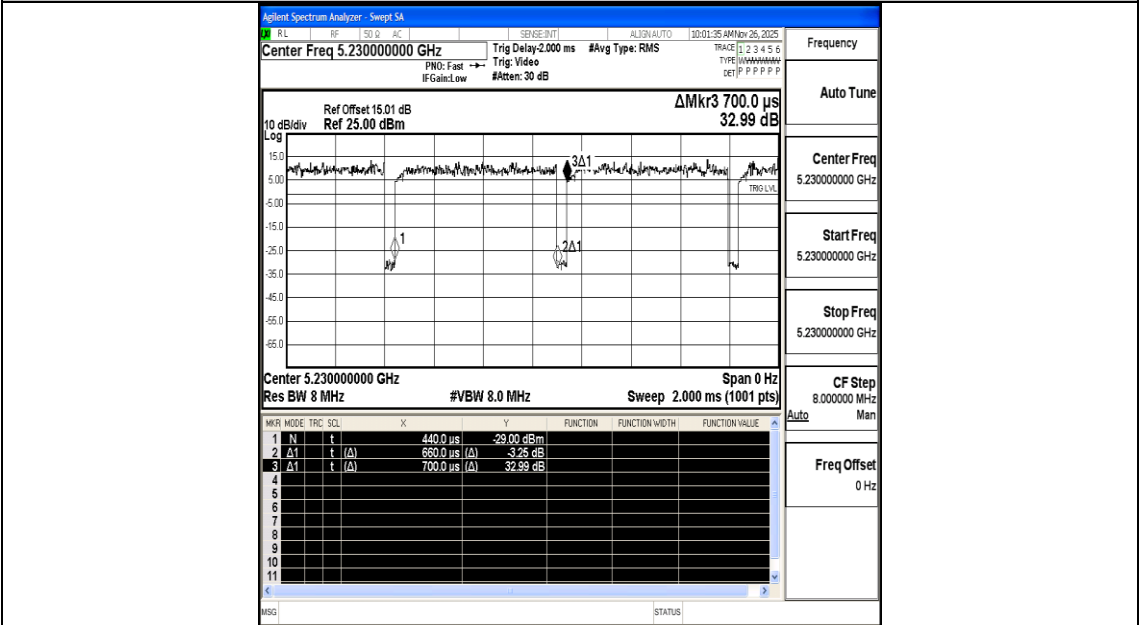
NTNV-11AX20SISO-Ant1-5200



NTNV-11AX20SISO-Ant1-5240



NTNV-11AX40SISO-Ant1-5190



NTNV-11AX40SISO-Ant1-5230

Appendix C: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Frequency [MHz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	9.24	96.53	0.15	9.39	≤23.98	PASS
11A	Ant1	5200	9.30	96.53	0.15	9.45	≤23.98	PASS
11A	Ant1	5240	8.71	97.20	0.12	8.83	≤23.98	PASS
11N20SISO	Ant1	5180	8.84	96.30	0.16	9.00	≤23.98	PASS
11N20SISO	Ant1	5200	8.46	97.01	0.13	8.59	≤23.98	PASS
11N20SISO	Ant1	5240	8.68	96.30	0.16	8.84	≤23.98	PASS
11N40SISO	Ant1	5190	8.69	92.75	0.33	9.02	≤23.98	PASS
11N40SISO	Ant1	5230	8.51	92.86	0.32	8.83	≤23.98	PASS
11AC20SISO	Ant1	5180	9.01	96.32	0.16	9.17	≤23.98	PASS
11AC20SISO	Ant1	5200	8.65	96.32	0.16	8.81	≤23.98	PASS
11AC20SISO	Ant1	5240	8.49	97.04	0.13	8.62	≤23.98	PASS
11AC40SISO	Ant1	5190	8.48	92.86	0.32	8.80	≤23.98	PASS
11AC40SISO	Ant1	5230	8.83	92.86	0.32	9.15	≤23.98	PASS
11AX20SISO	Ant1	5180	8.95	96.32	0.16	9.11	≤23.98	PASS
11AX20SISO	Ant1	5200	8.66	96.32	0.16	8.82	≤23.98	PASS
11AX20SISO	Ant1	5240	8.54	96.32	0.16	8.70	≤23.98	PASS
11AX40SISO	Ant1	5190	8.88	94.29	0.26	9.14	≤23.98	PASS
11AX40SISO	Ant1	5230	8.50	94.29	0.26	8.76	≤23.98	PASS

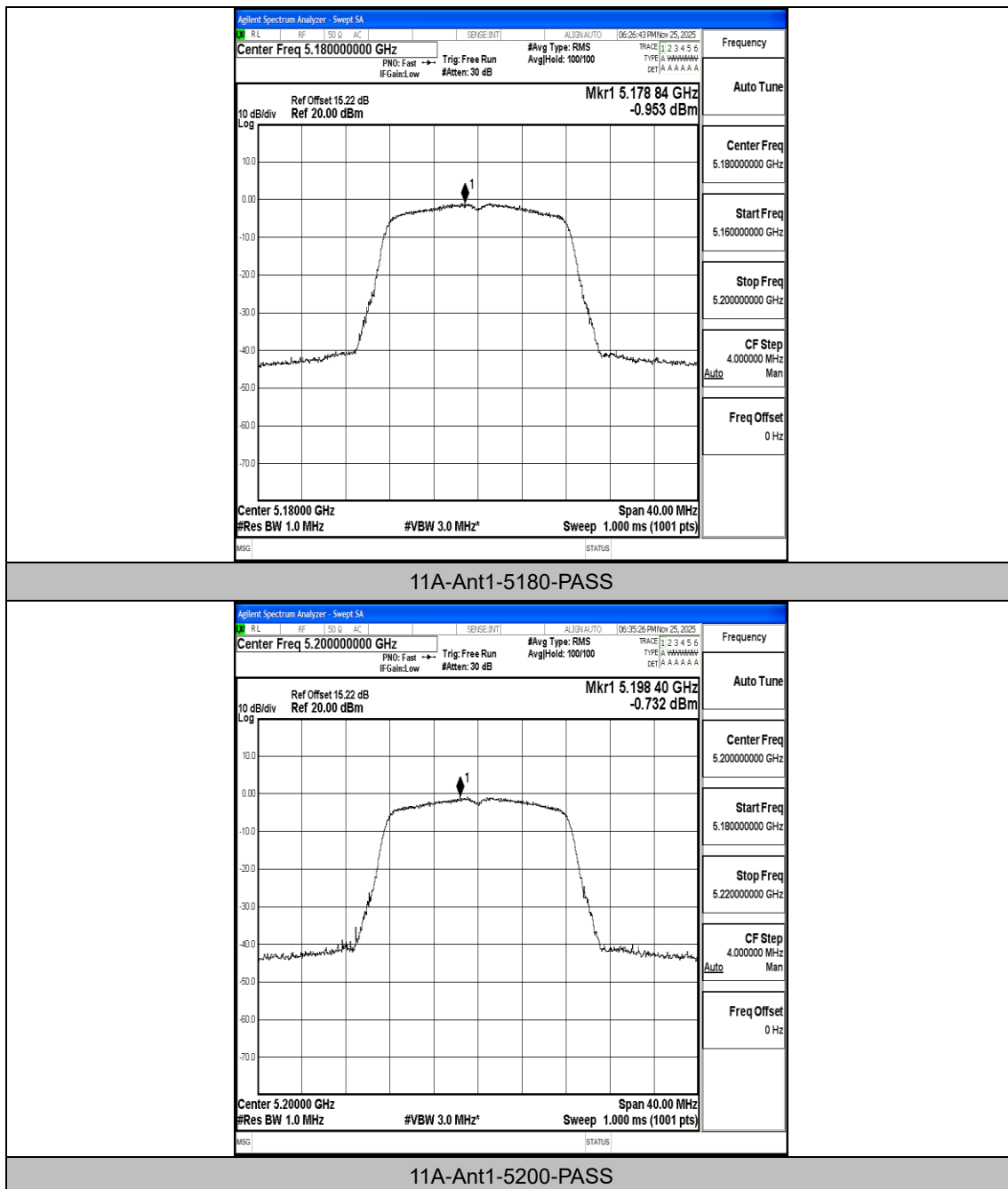
Appendix D: Maximum power spectral density

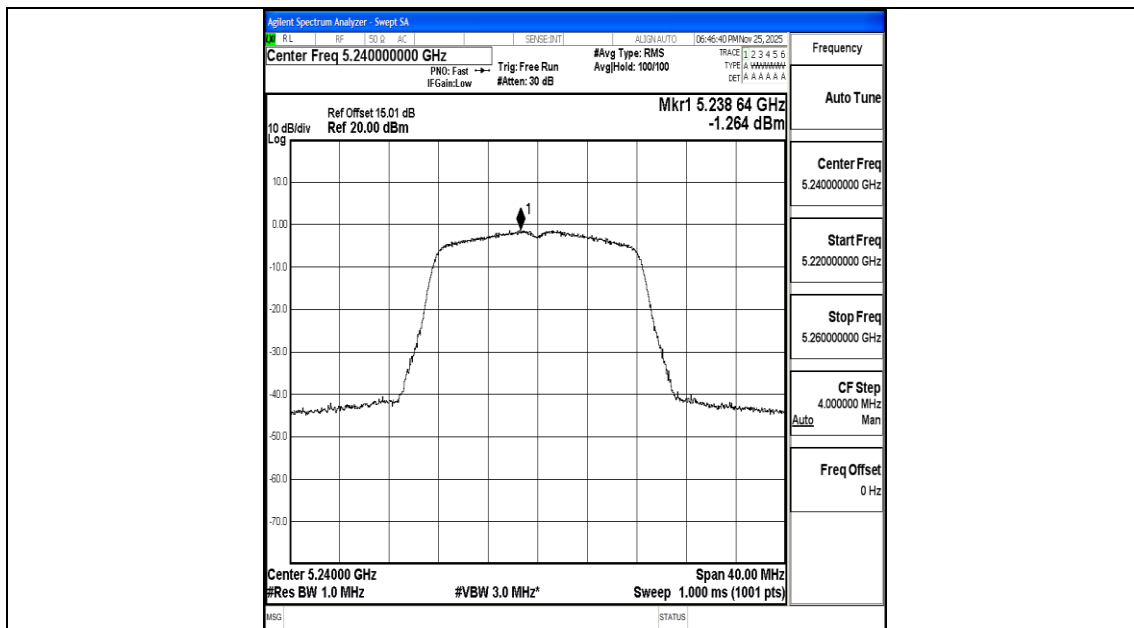
Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-0.80	≤11.00	PASS
11A	Ant1	5200	-0.58	≤11.00	PASS
11A	Ant1	5240	-1.14	≤11.00	PASS
11N20SISO	Ant1	5180	-1.20	≤11.00	PASS
11N20SISO	Ant1	5200	-1.33	≤11.00	PASS
11N20SISO	Ant1	5240	-1.46	≤11.00	PASS
11N40SISO	Ant1	5190	-4.19	≤11.00	PASS
11N40SISO	Ant1	5230	-4.29	≤11.00	PASS
11AC20SISO	Ant1	5180	-1.32	≤11.00	PASS
11AC20SISO	Ant1	5200	-1.41	≤11.00	PASS
11AC20SISO	Ant1	5240	-1.66	≤11.00	PASS
11AC40SISO	Ant1	5190	-4.48	≤11.00	PASS
11AC40SISO	Ant1	5230	-4.10	≤11.00	PASS
11AX20SISO	Ant1	5180	-1.04	≤11.00	PASS
11AX20SISO	Ant1	5200	-1.14	≤11.00	PASS
11AX20SISO	Ant1	5240	-1.31	≤11.00	PASS
11AX40SISO	Ant1	5190	-4.04	≤11.00	PASS
11AX40SISO	Ant1	5230	-4.19	≤11.00	PASS

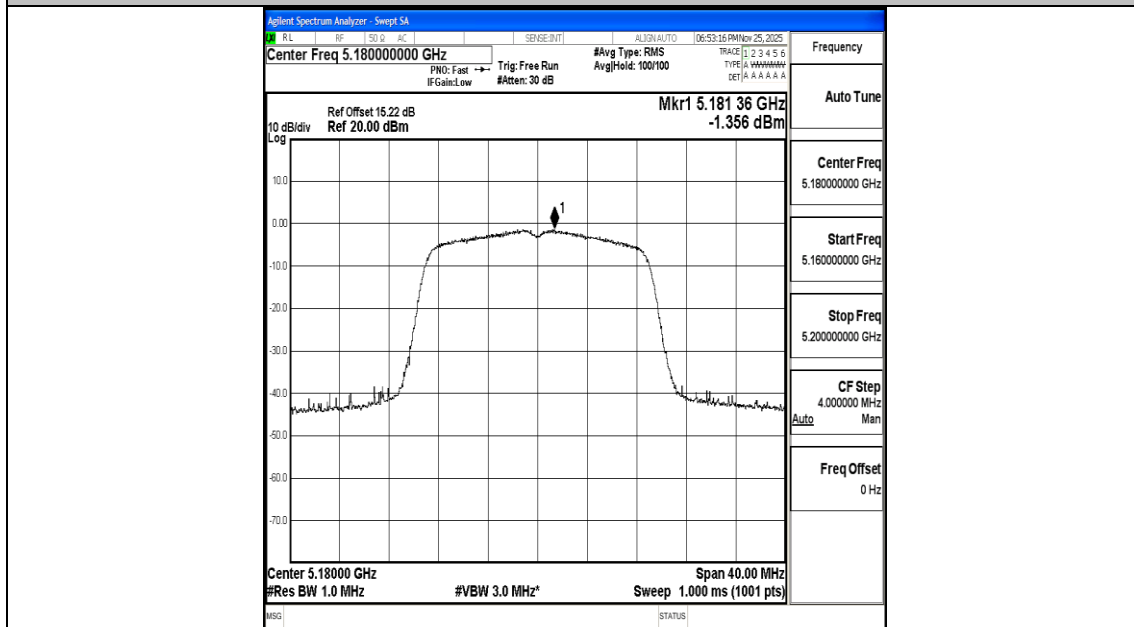
Note:1.The Duty Cycle Factor is compensated in the graph.

Test Graphs

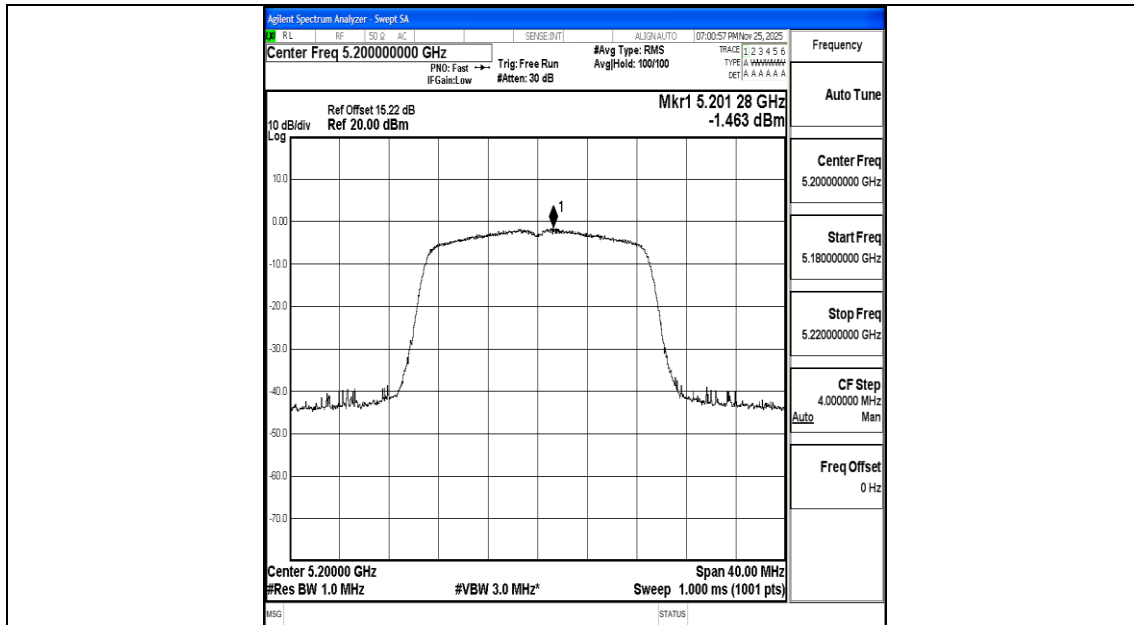




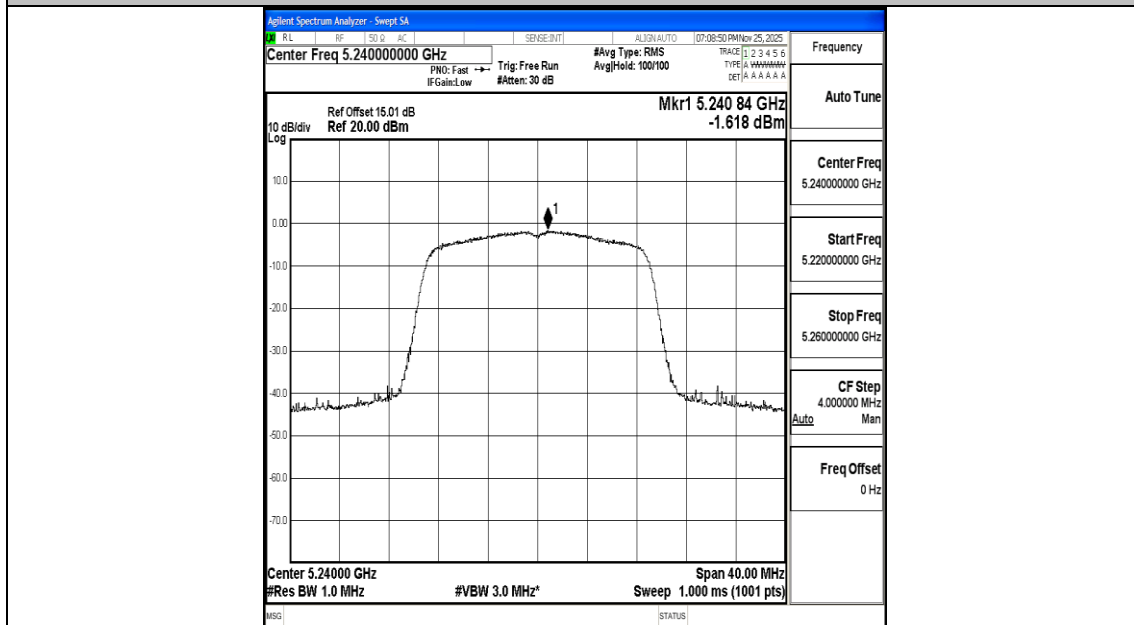
11A-Ant1-5240-PASS



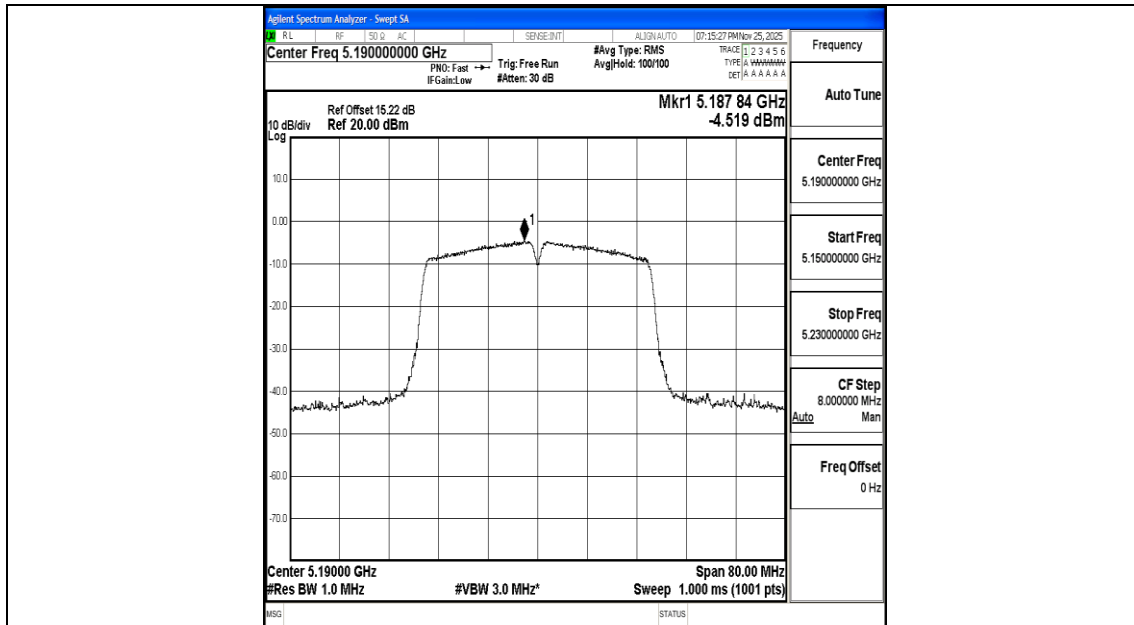
11N20SISO-Ant1-5180-PASS



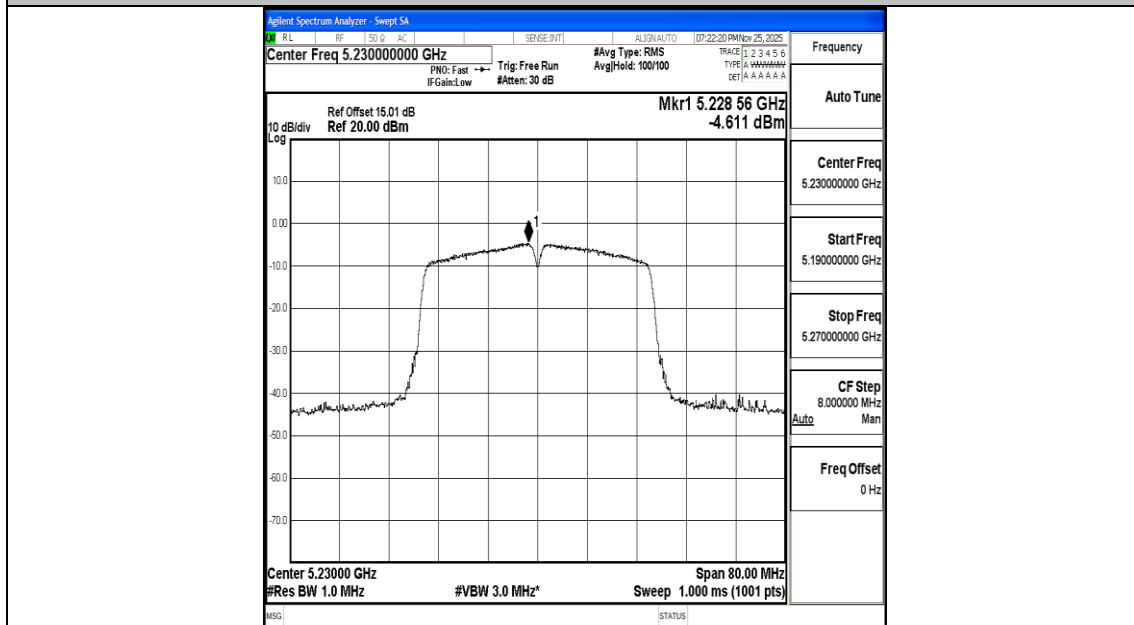
11N20SISO-Ant1-5200-PASS



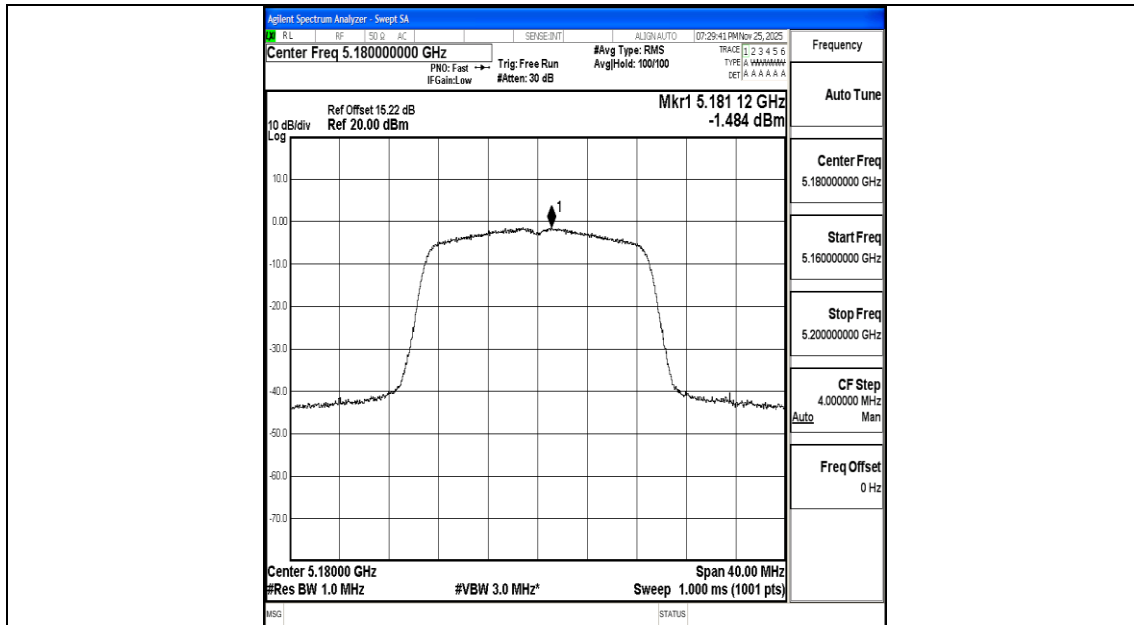
11N20SISO-Ant1-5240-PASS



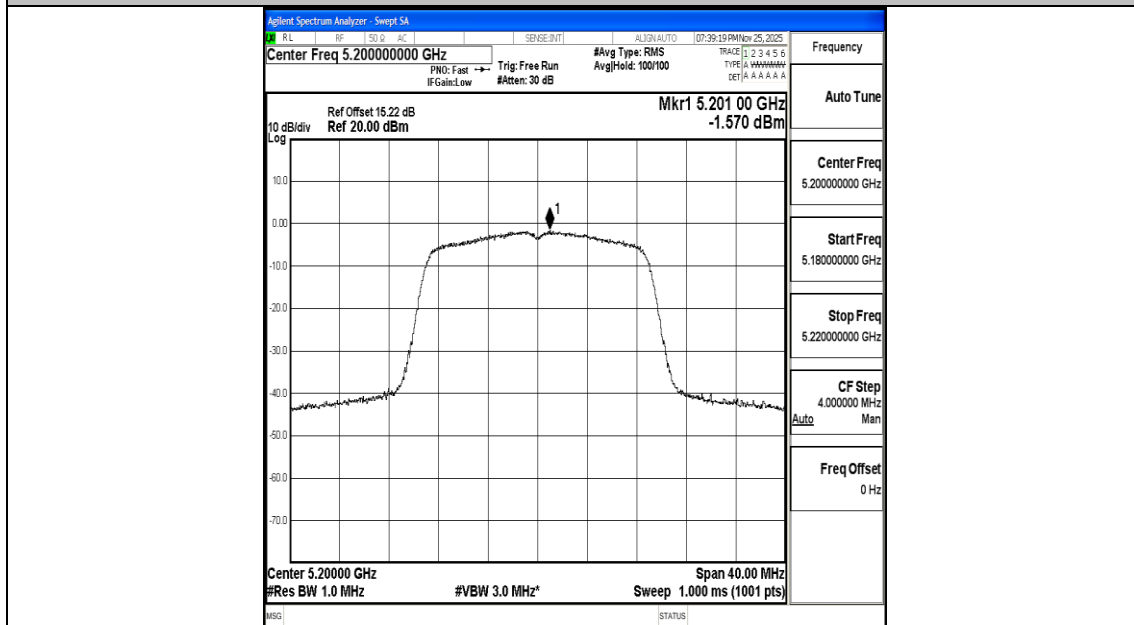
11N40SISO-Ant1-5190-PASS



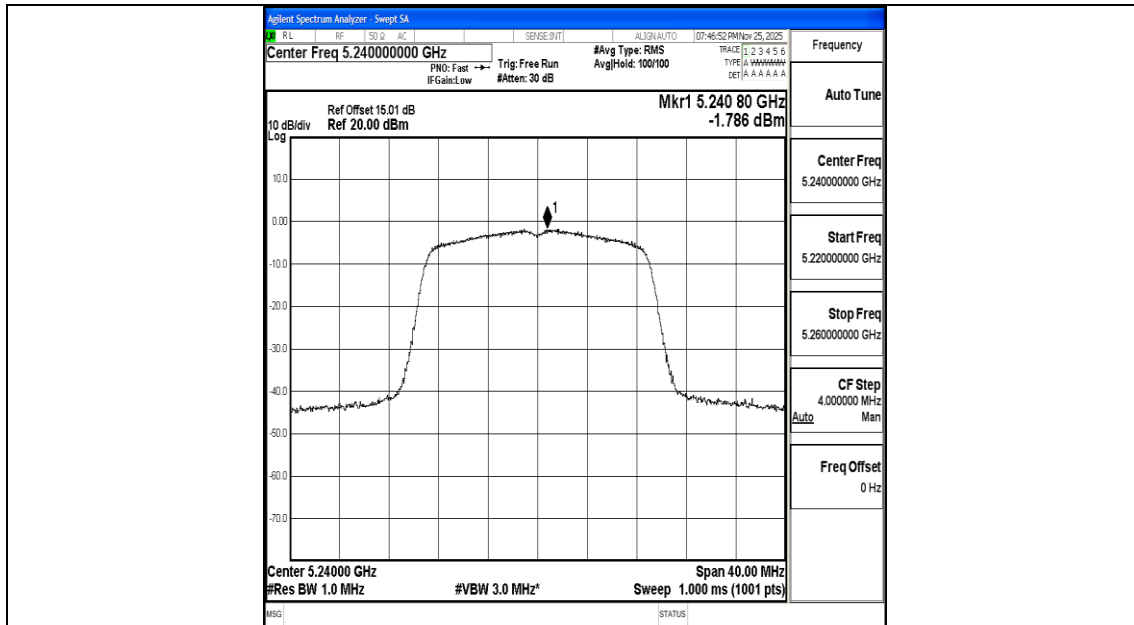
11N40SISO-Ant1-5230-PASS



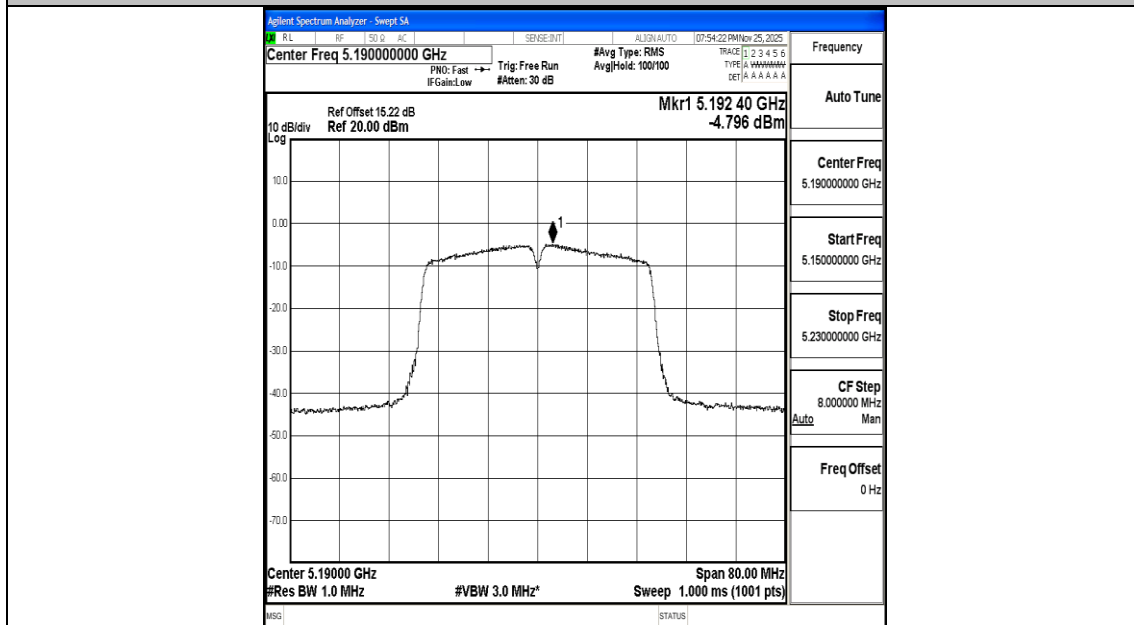
11AC20SISO-Ant1-5180-PASS



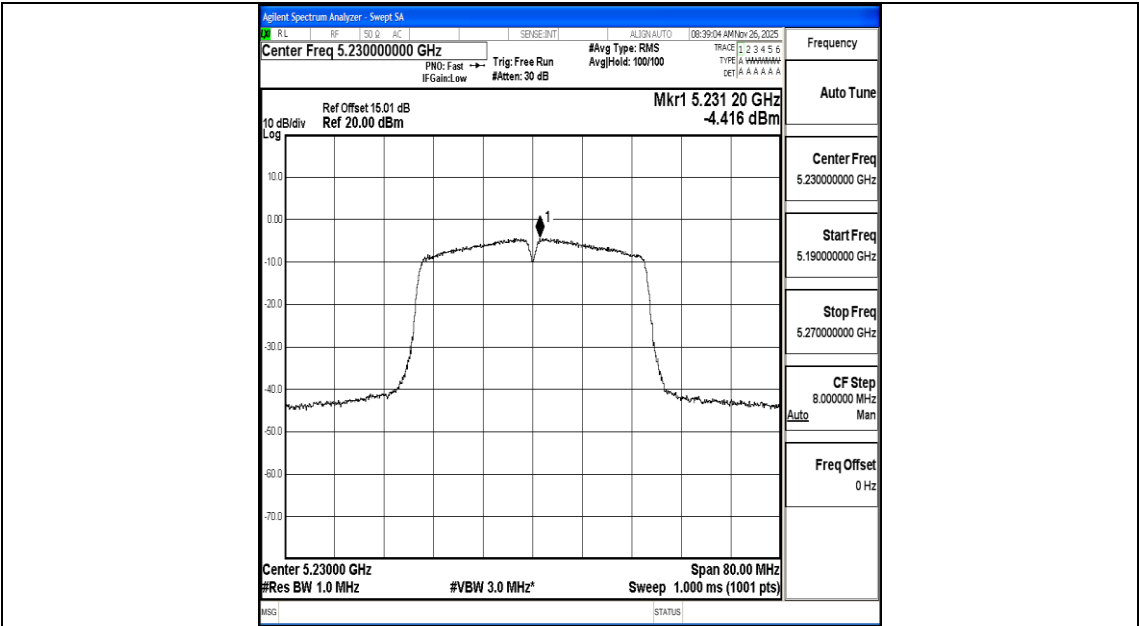
11AC20SISO-Ant1-5200-PASS



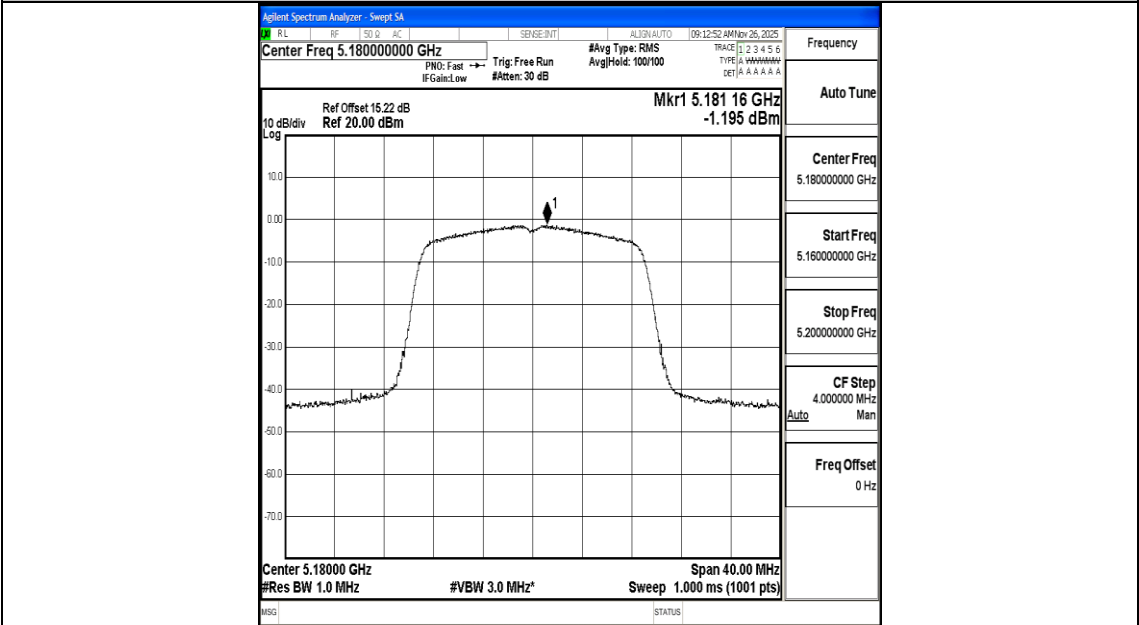
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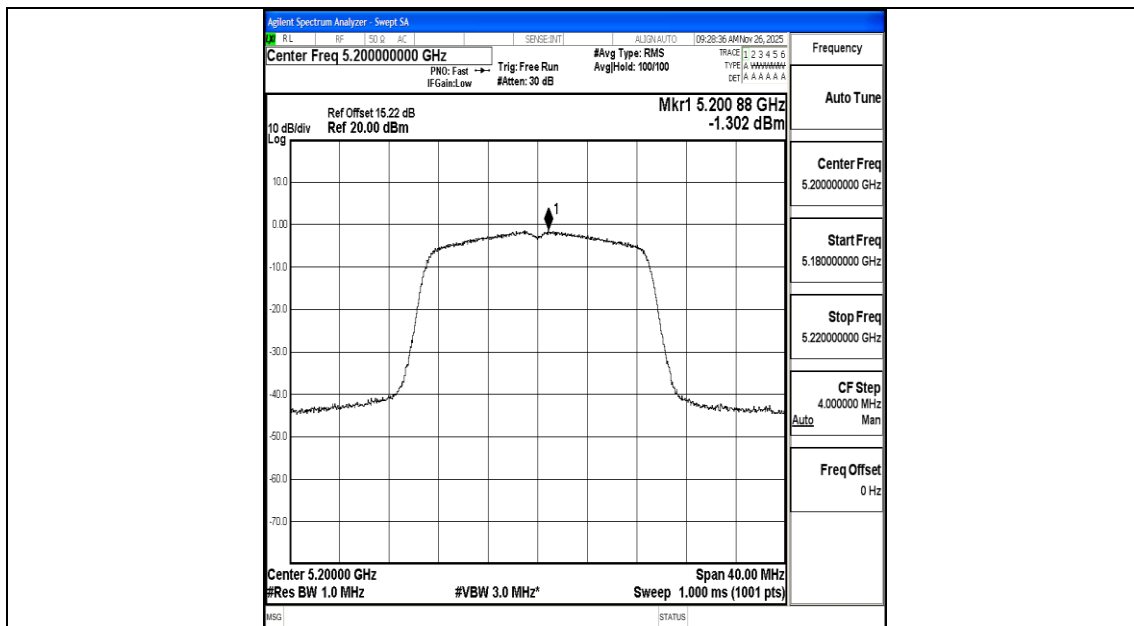
11AC40SISO-Ant1-5190-PASS



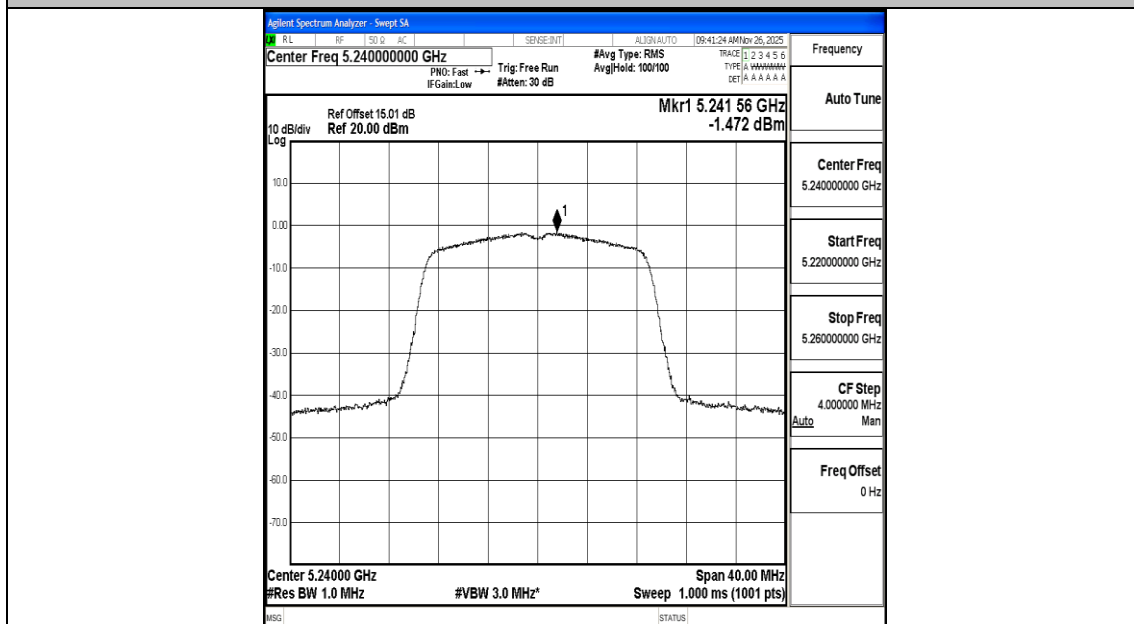
11AC40SISO-Ant1-5230-PASS



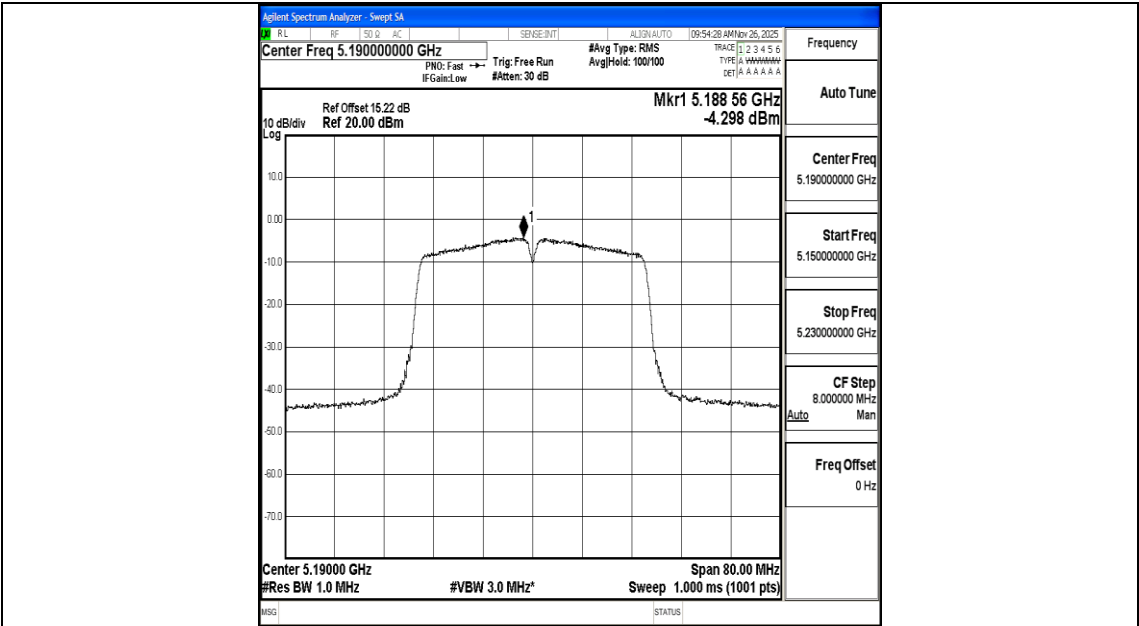
11AX20SISO-Ant1-5180-PASS



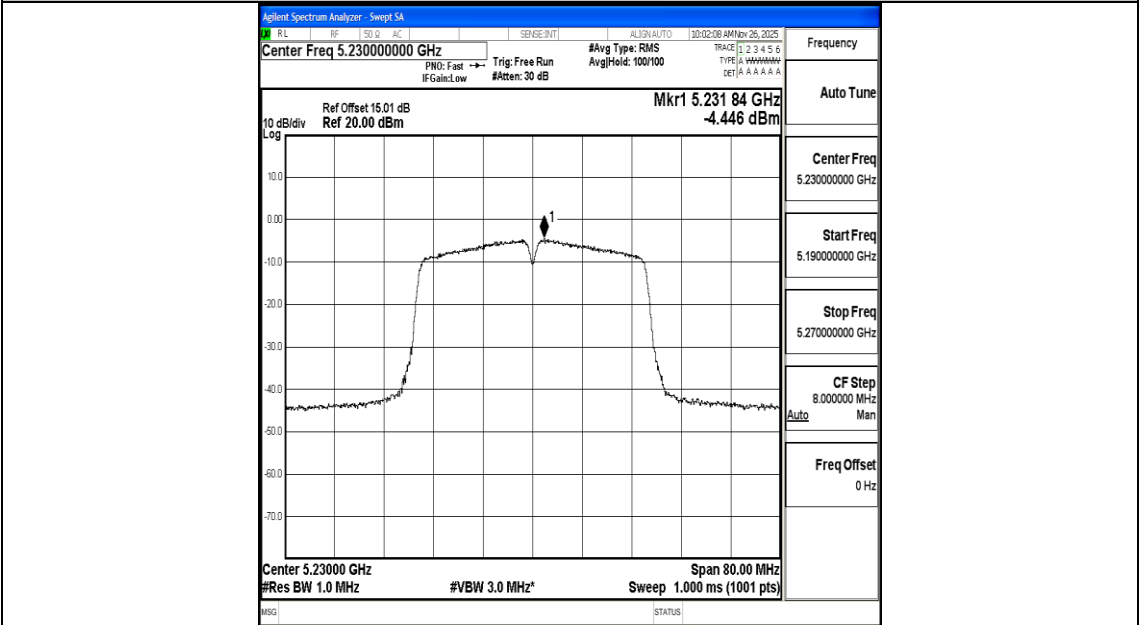
11AX20SISO-Ant1-5200-PASS



11AX20SISO-Ant1-5240-PASS



11AX40SISO-Ant1-5190-PASS



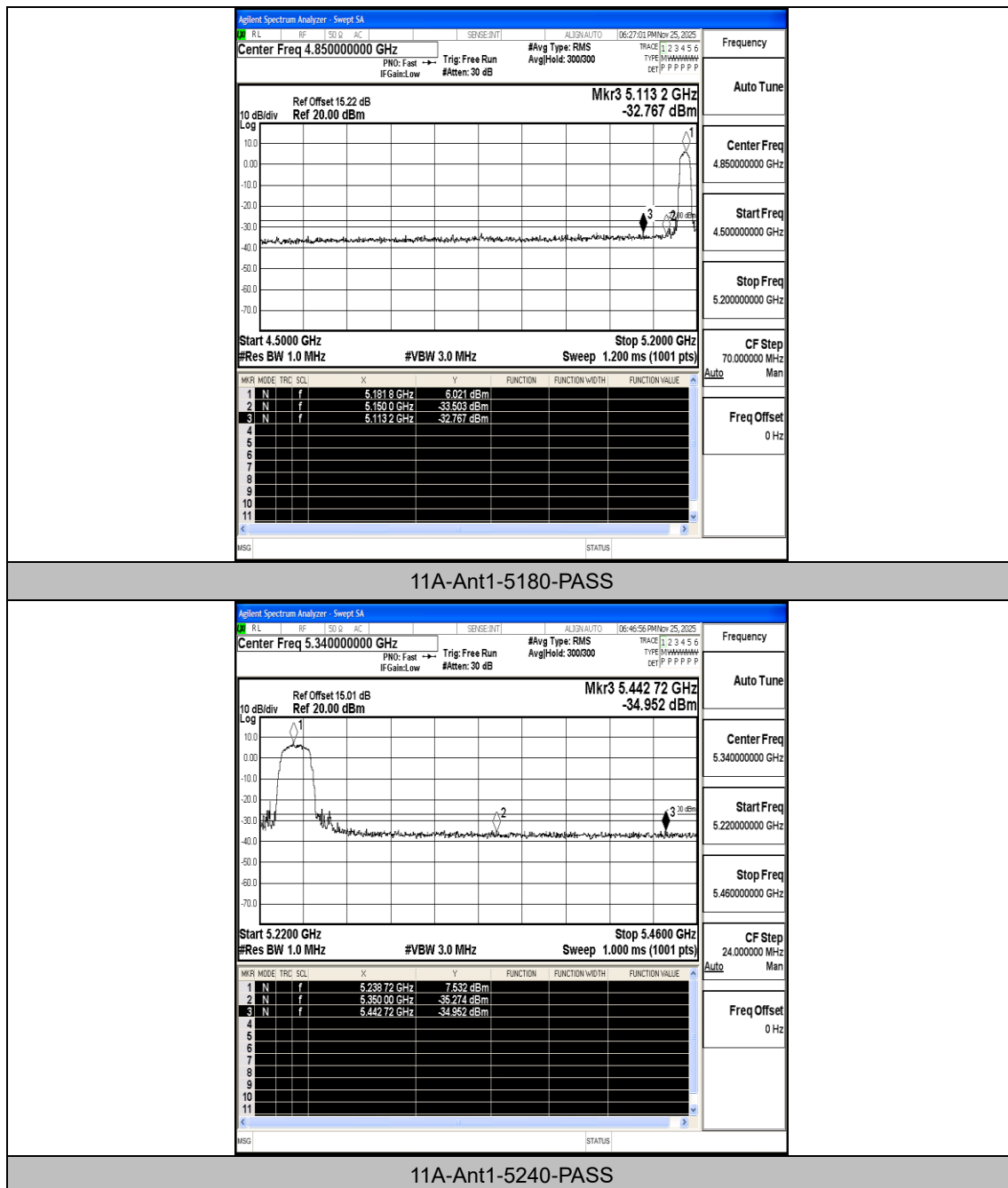
11AX40SISO-Ant1-5230-PASS

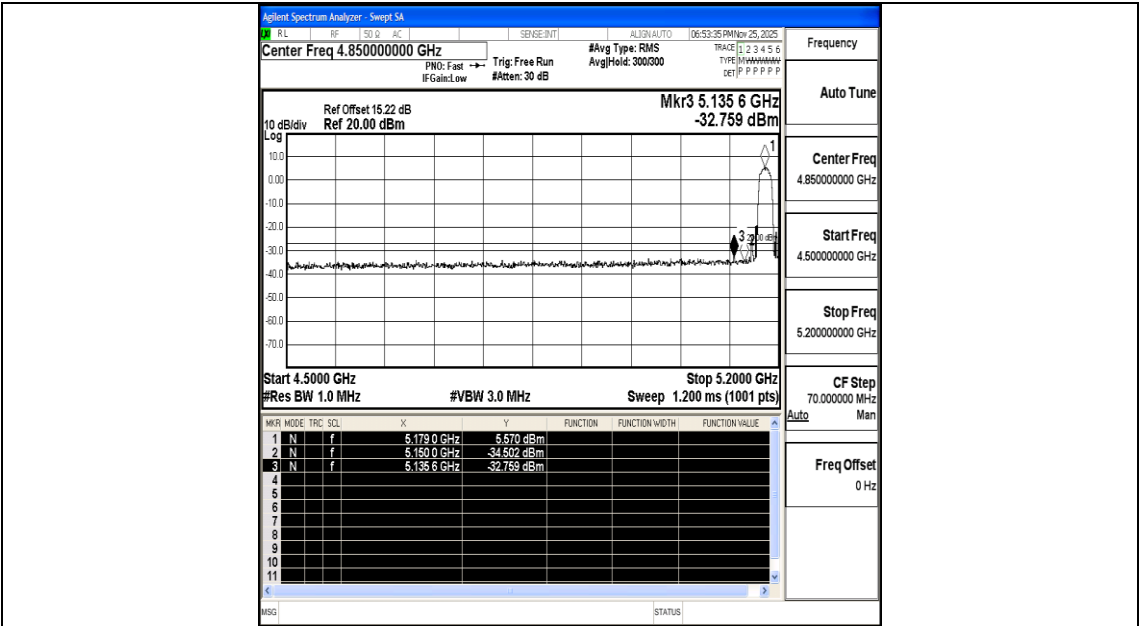
Appendix E: Band edge measurements

Test Result B1/2/3

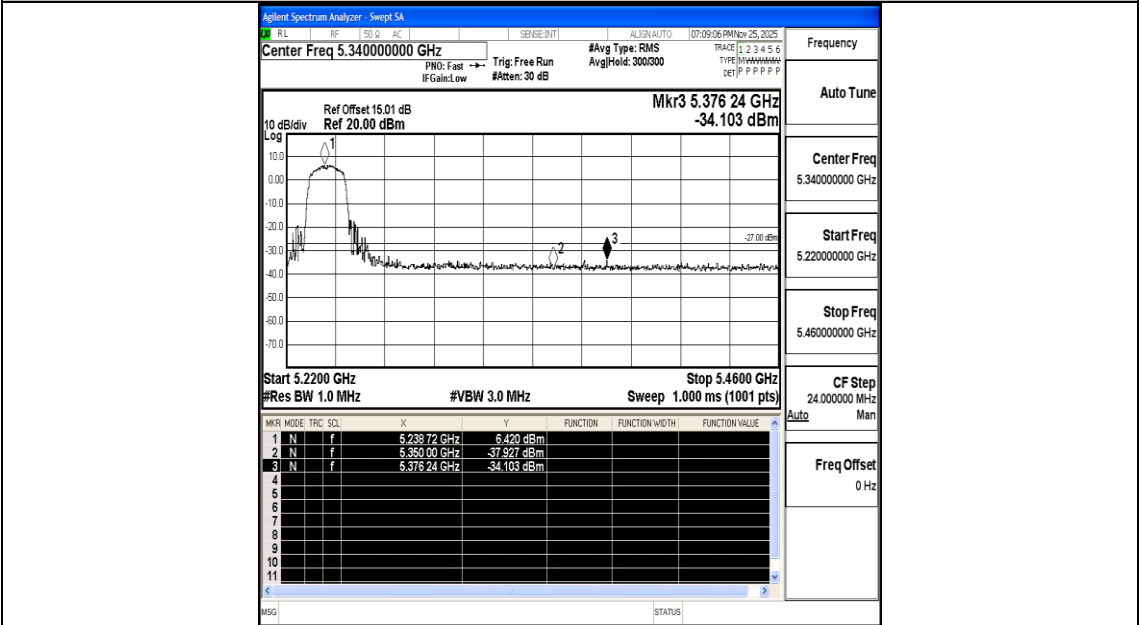
TestMode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-32.77	≤-27	PASS
11A	Ant1	High	5240	-34.95	≤-27	PASS
11N20SISO	Ant1	Low	5180	-32.76	≤-27	PASS
11N20SISO	Ant1	High	5240	-34.1	≤-27	PASS
11N40SISO	Ant1	Low	5190	-30.77	≤-27	PASS
11N40SISO	Ant1	High	5230	-34.37	≤-27	PASS
11AC20SISO	Ant1	Low	5180	-32.15	≤-27	PASS
11AC20SISO	Ant1	High	5240	-34.68	≤-27	PASS
11AC40SISO	Ant1	Low	5190	-31.6	≤-27	PASS
11AC40SISO	Ant1	High	5230	-34.28	≤-27	PASS
11AX20SISO	Ant1	Low	5180	-32.55	≤-27	PASS
11AX20SISO	Ant1	High	5240	-34.13	≤-27	PASS
11AX40SISO	Ant1	Low	5190	-31.44	≤-27	PASS
11AX40SISO	Ant1	High	5230	-34.21	≤-27	PASS

Test Graphs B1/2/3





11N20SISO-Ant1-5180-PASS



11N20SISO-Ant1-5240-PASS