

FCC Appendix RF Test Data

FCC ID : 2BRB9-X100

Company : Shenzhen zhengqing Technology Co., Ltd.

EUT : ZICALSTAR

Model Number : X100

Report No. : CTA25071701202

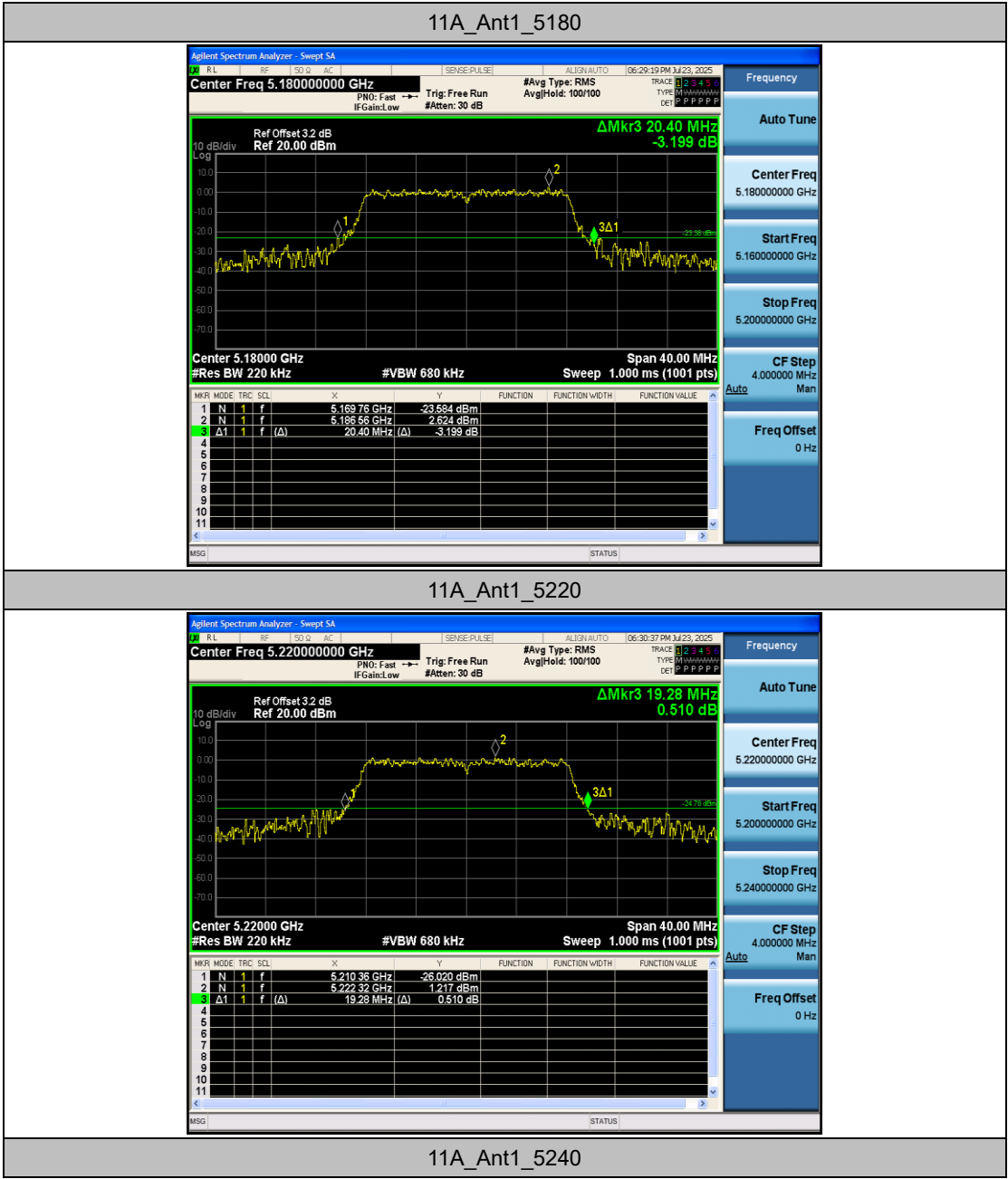
Reviewed By : Eric Wang

Appendix A1: Emission Bandwidth

Test Result

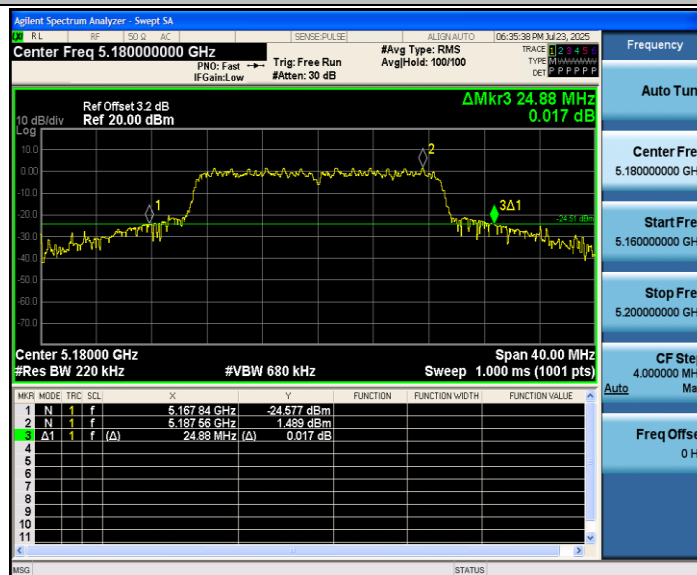
TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.400	5169.760	5190.160	---	---
		5220	19.280	5210.360	5229.640	---	---
		5240	24.120	5227.200	5251.320	---	---
11N20SISO	Ant1	5180	24.880	5167.840	5192.720	---	---
		5220	25.000	5207.680	5232.680	---	---
		5240	25.120	5227.360	5252.480	---	---
11N40SISO	Ant1	5190	44.480	5167.280	5211.760	---	---
		5230	43.120	5208.800	5251.920	---	---
11AC20SISO	Ant1	5180	23.680	5167.200	5190.880	---	---
		5220	21.360	5210.000	5231.360	---	---
		5240	25.000	5229.240	5254.240	---	---
11AC40SISO	Ant1	5190	41.040	5170.160	5211.200	---	---
		5230	41.840	5210.080	5251.920	---	---
11AX20SISO	Ant1	5180	21.880	5168.040	5189.920	---	---
		5220	24.000	5207.320	5231.320	---	---
		5240	22.800	5227.200	5250.000	---	---
11AX40SISO	Ant1	5190	43.840	5168.160	5212.000	---	---
		5230	44.160	5206.960	5251.120	---	---

Test Graphs

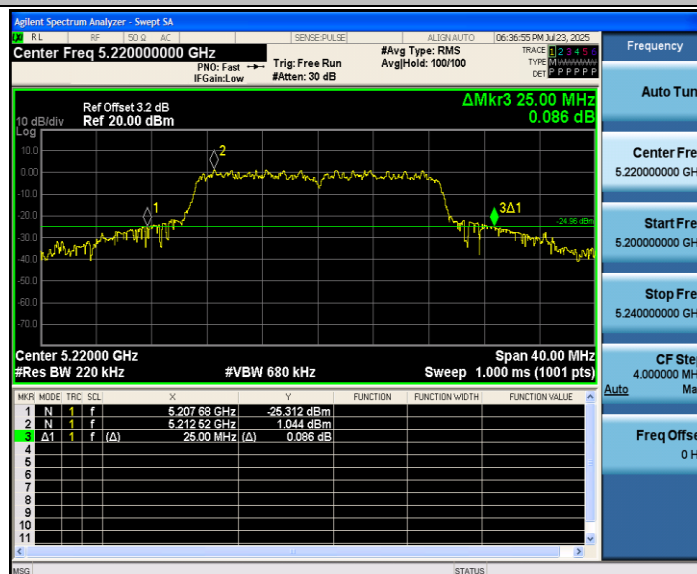




11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



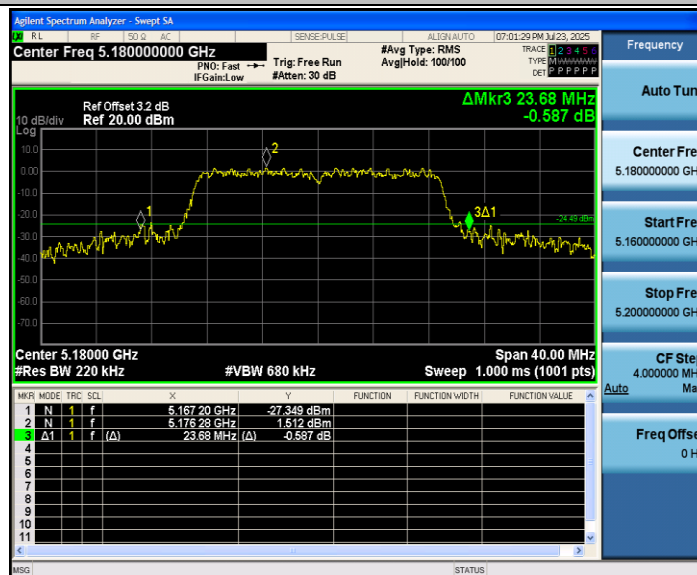
11N40SISO_Ant1_5190



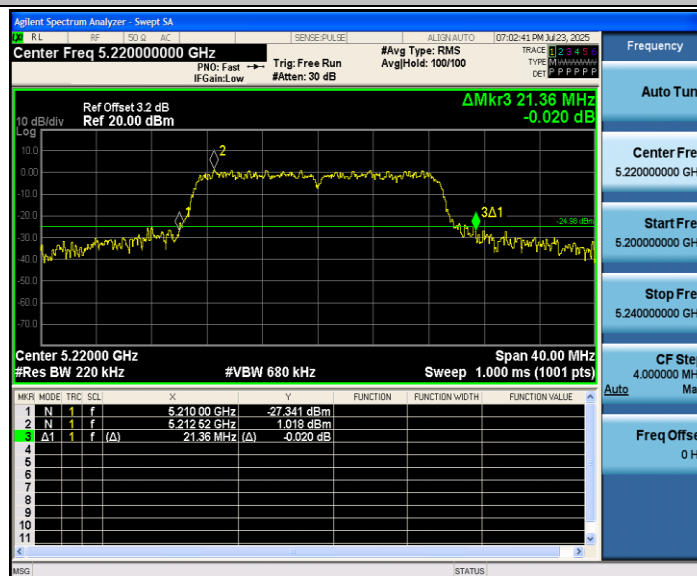
11N40SISO_Ant1_5230



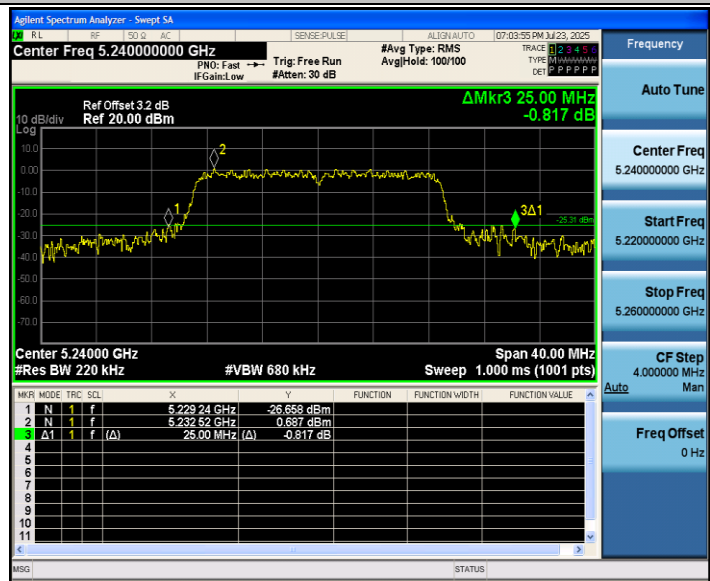
11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5220



11AC20SISO_Ant1_5240



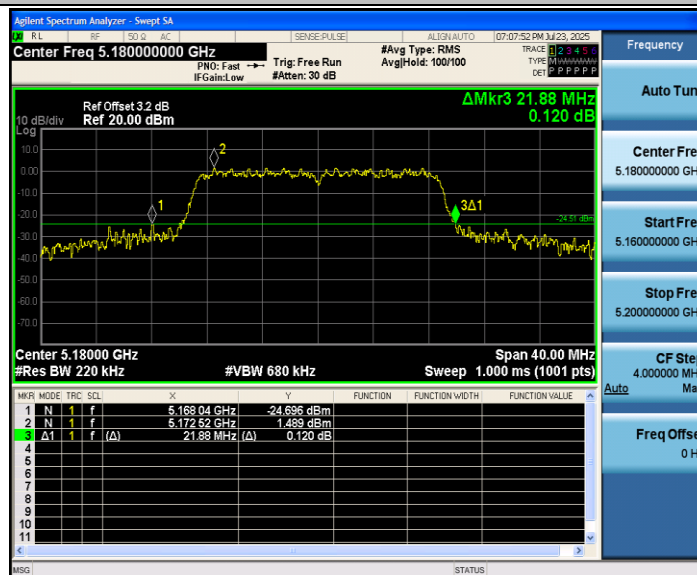
11AC40SISO_Ant1_5190



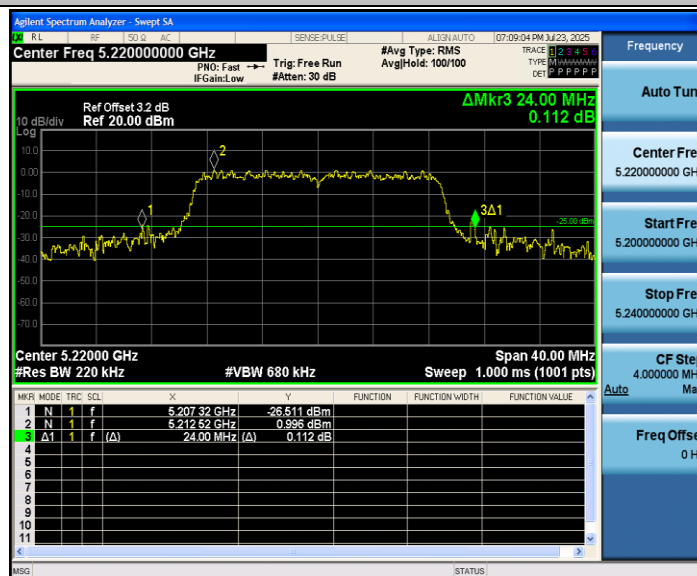
11AC40SISO_Ant1_5230



11AX20SISO_Ant1_5180



11AX20SISO_Ant1_5220



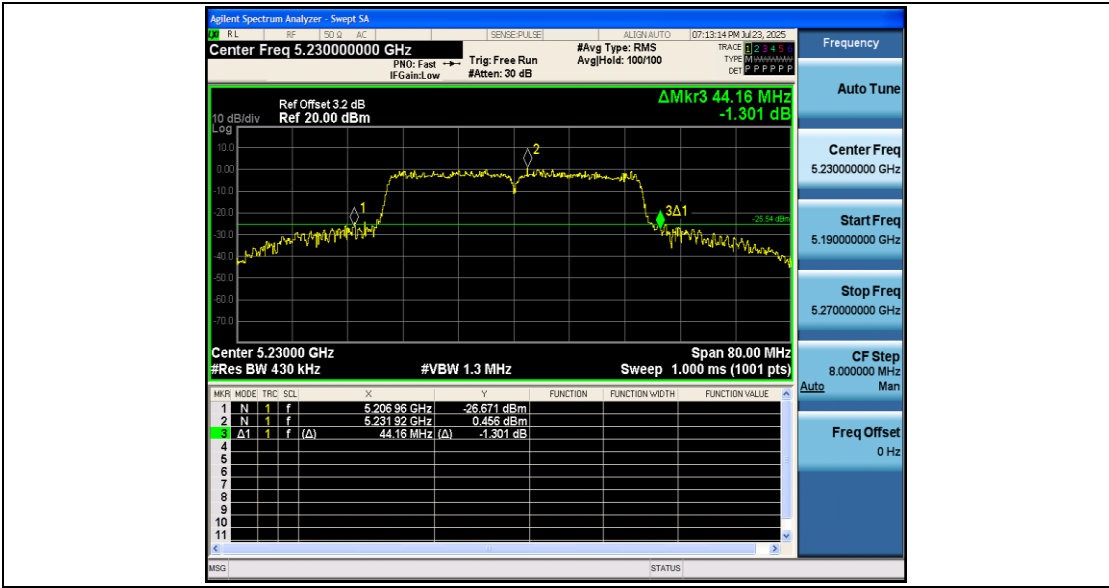
11AX20SISO_Ant1_5240



11AX40SISO_Ant1_5190



11AX40SISO_Ant1_5230



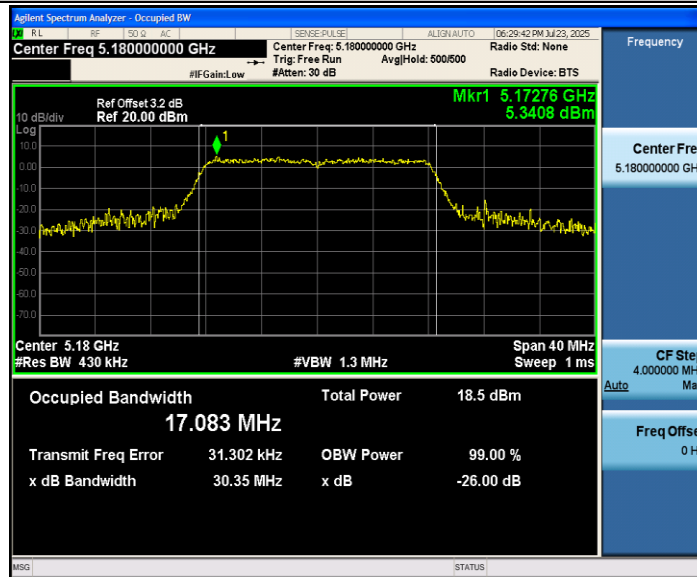
Appendix A2: Occupied channel bandwidth

Test Result

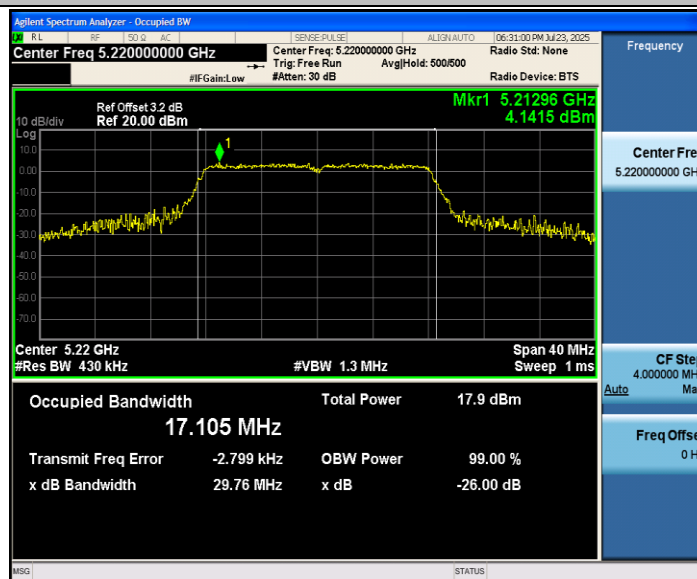
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.083	5171.4898	5188.5728	---	---
		5220	17.105	5211.4447	5228.5497	---	---
		5240	17.096	5231.4344	5248.5304	---	---
11N20SISO	Ant1	5180	18.069	5171.0117	5189.0807	---	---
		5220	18.055	5210.9963	5229.0513	---	---
		5240	18.111	5230.9713	5249.0823	---	---
11N40SISO	Ant1	5190	36.374	5171.8562	5208.2302	---	---
		5230	36.335	5211.8538	5248.1888	---	---
11AC20SISO	Ant1	5180	17.864	5171.0745	5188.9385	---	---
		5220	17.837	5211.1072	5228.9442	---	---
		5240	17.831	5231.0963	5248.9273	---	---
11AC40SISO	Ant1	5190	36.357	5171.8553	5208.2123	---	---
		5230	36.329	5211.8628	5248.1918	---	---
11AX20SISO	Ant1	5180	17.834	5171.1265	5188.9605	---	---
		5220	17.838	5211.1088	5228.9468	---	---
		5240	17.799	5231.1236	5248.9226	---	---
11AX40SISO	Ant1	5190	36.328	5171.8793	5208.2073	---	---
		5230	36.289	5211.8456	5248.1346	---	---

Test Graphs

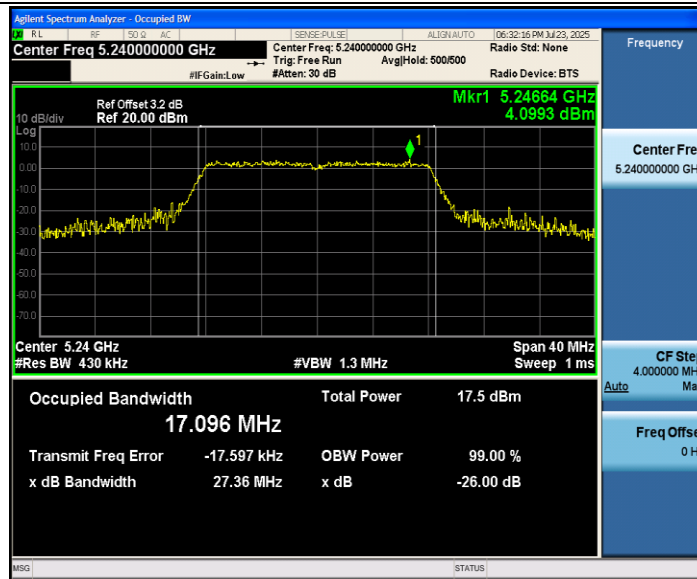
11A_Ant1_5180



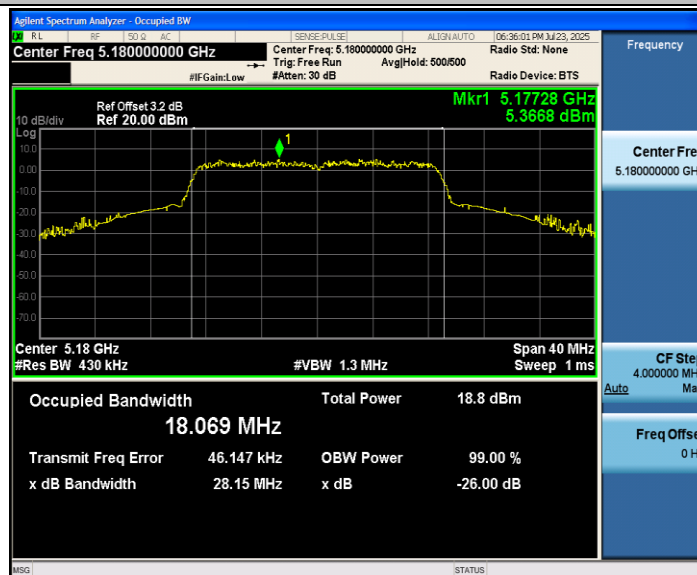
11A_Ant1_5220



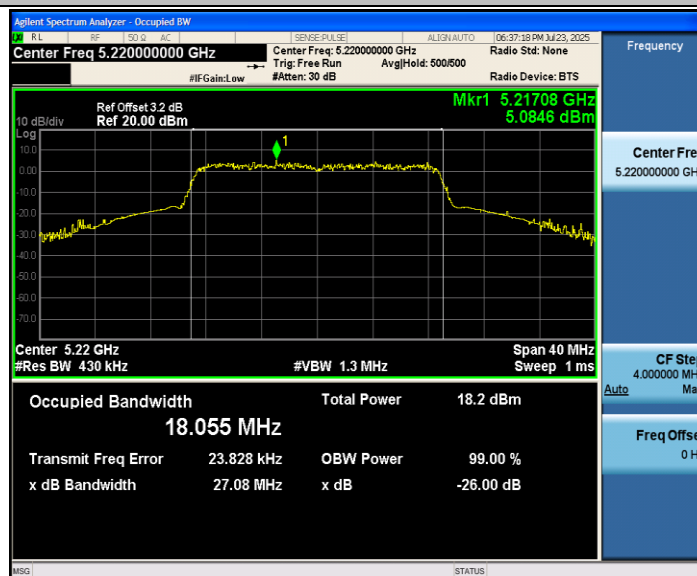
11A_Ant1_5240



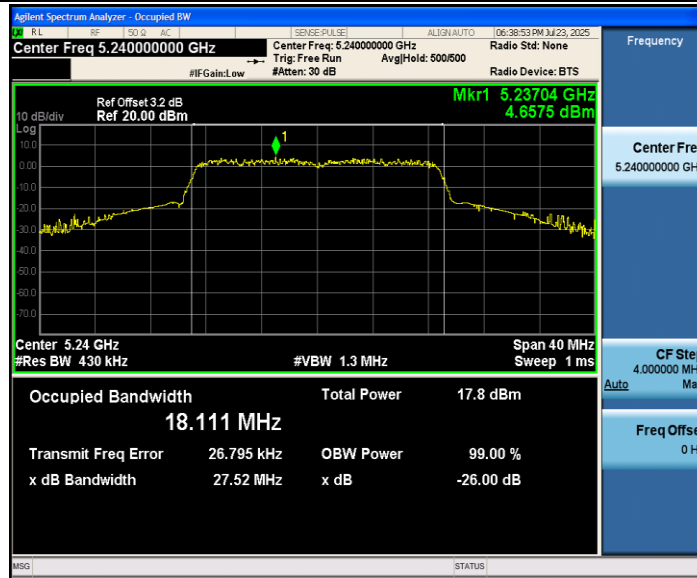
11N20SISO_Ant1_5180



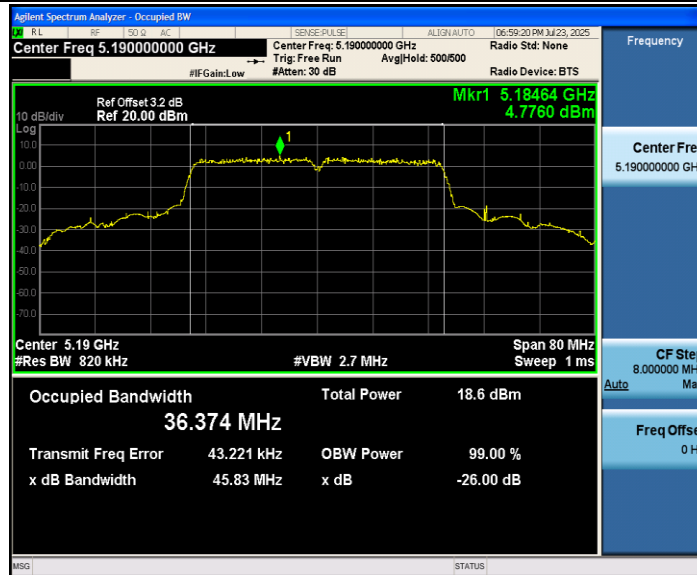
11N20SISO_Ant1_5220



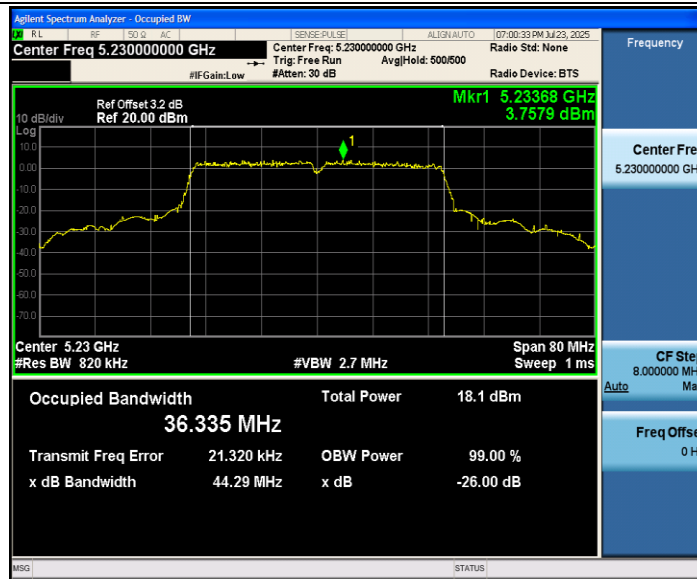
11N20SISO_Ant1_5240



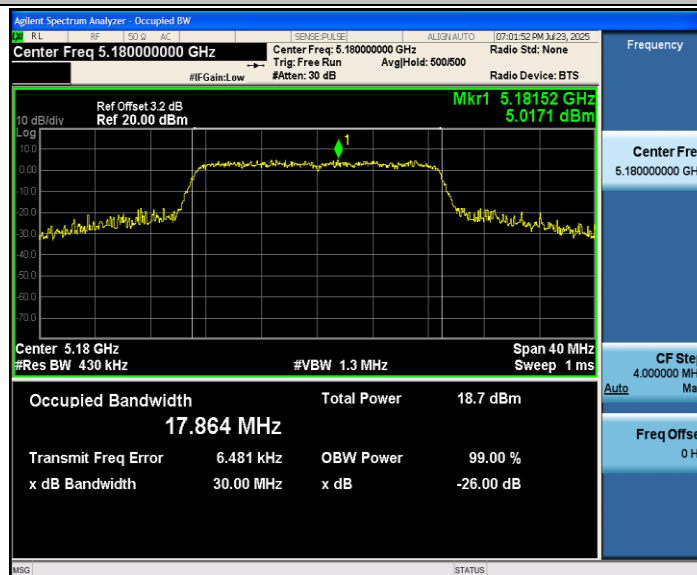
11N40SISO_Ant1_5190



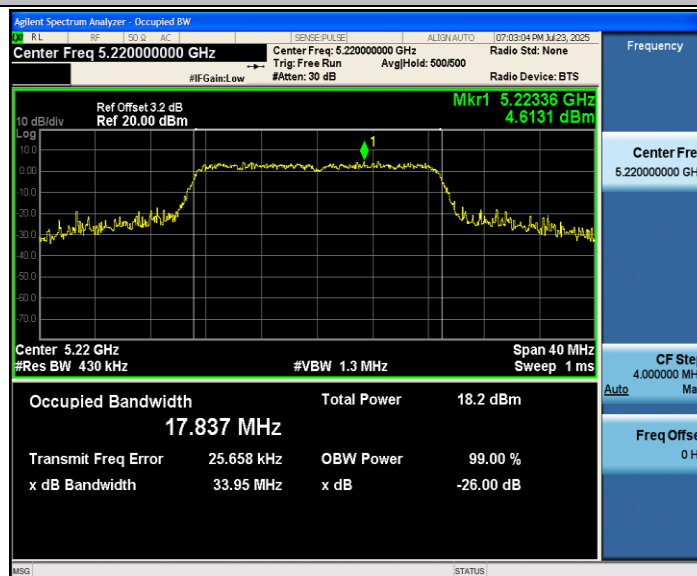
11N40SISO_Ant1_5230



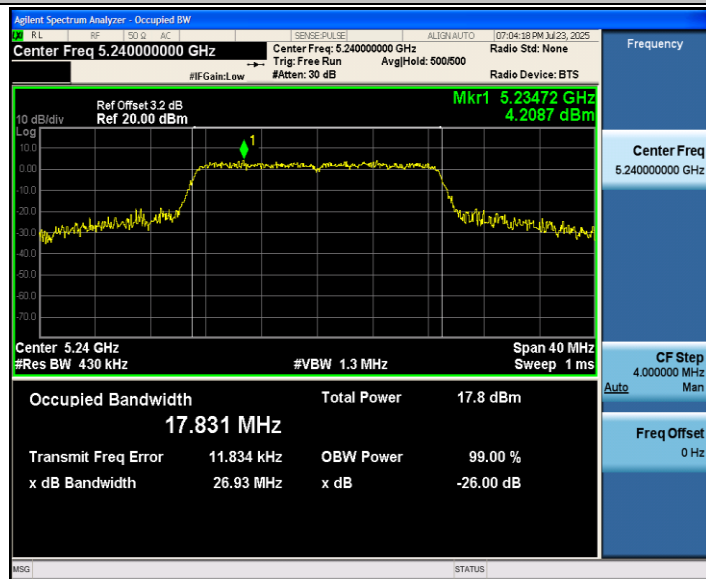
11AC20SISO_Ant1_5180



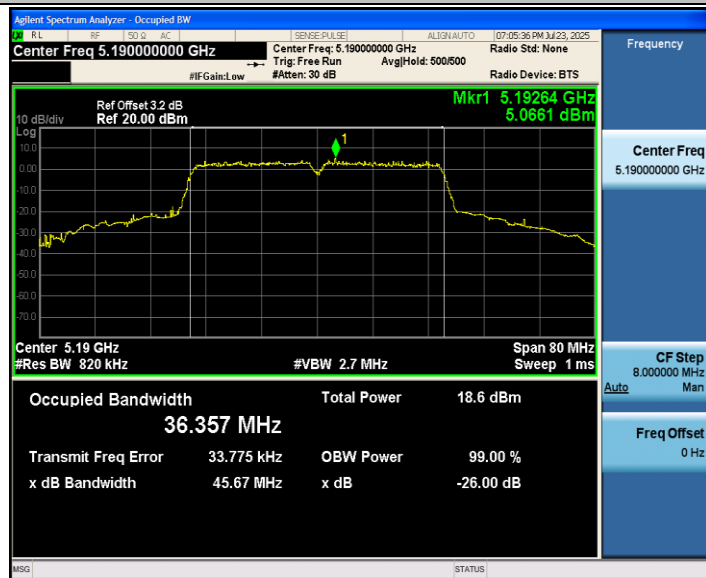
11AC20SISO_Ant1_5220



11AC20SISO_Ant1_5240



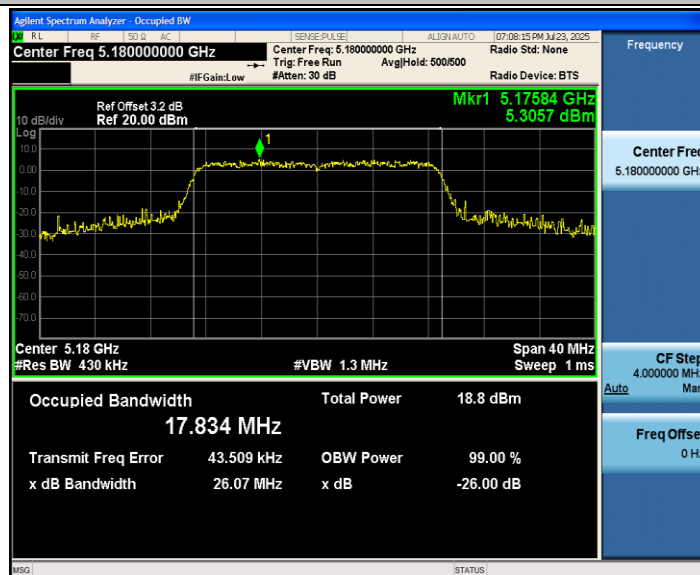
11AC40SISO_Ant1_5190



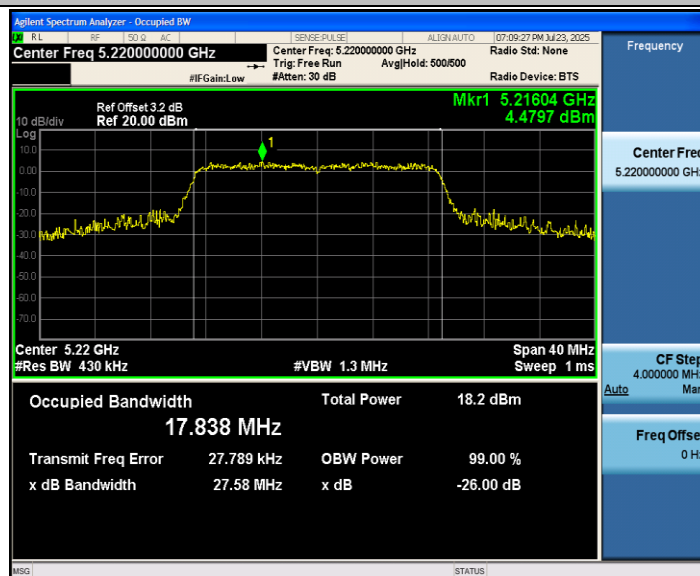
11AC40SISO_Ant1_5230



11AX20ISO_Ant1_5180



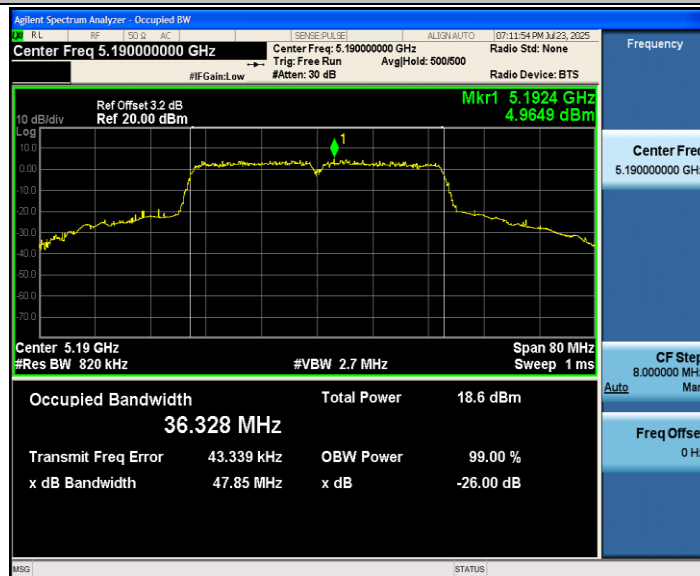
11AX20ISO_Ant1_5220



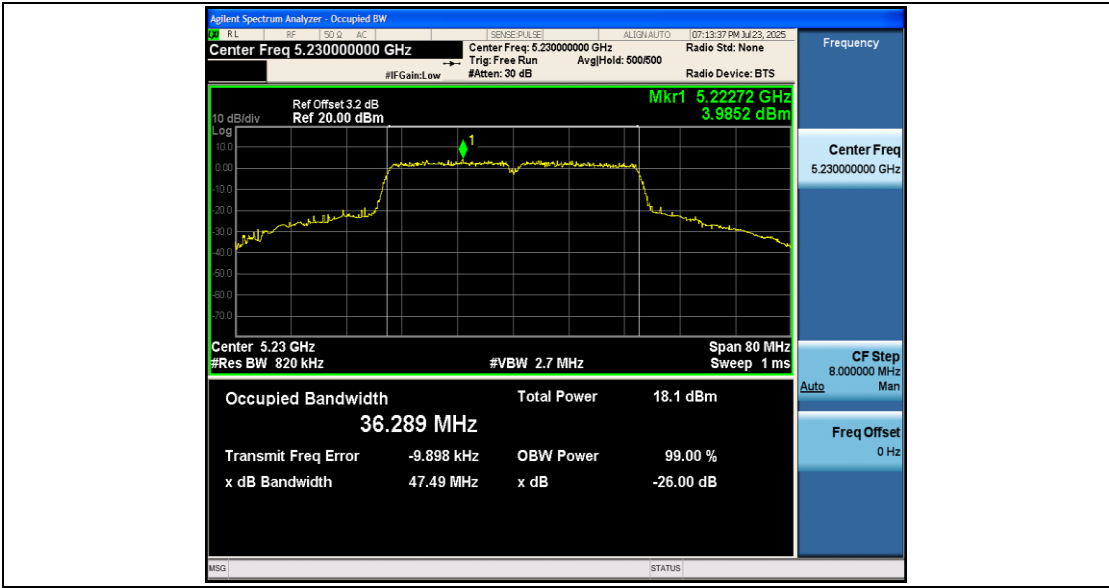
11AX20SISO_Ant1_5240



11AX40SISO_Ant1_5190



11AX40SISO_Ant1_5230

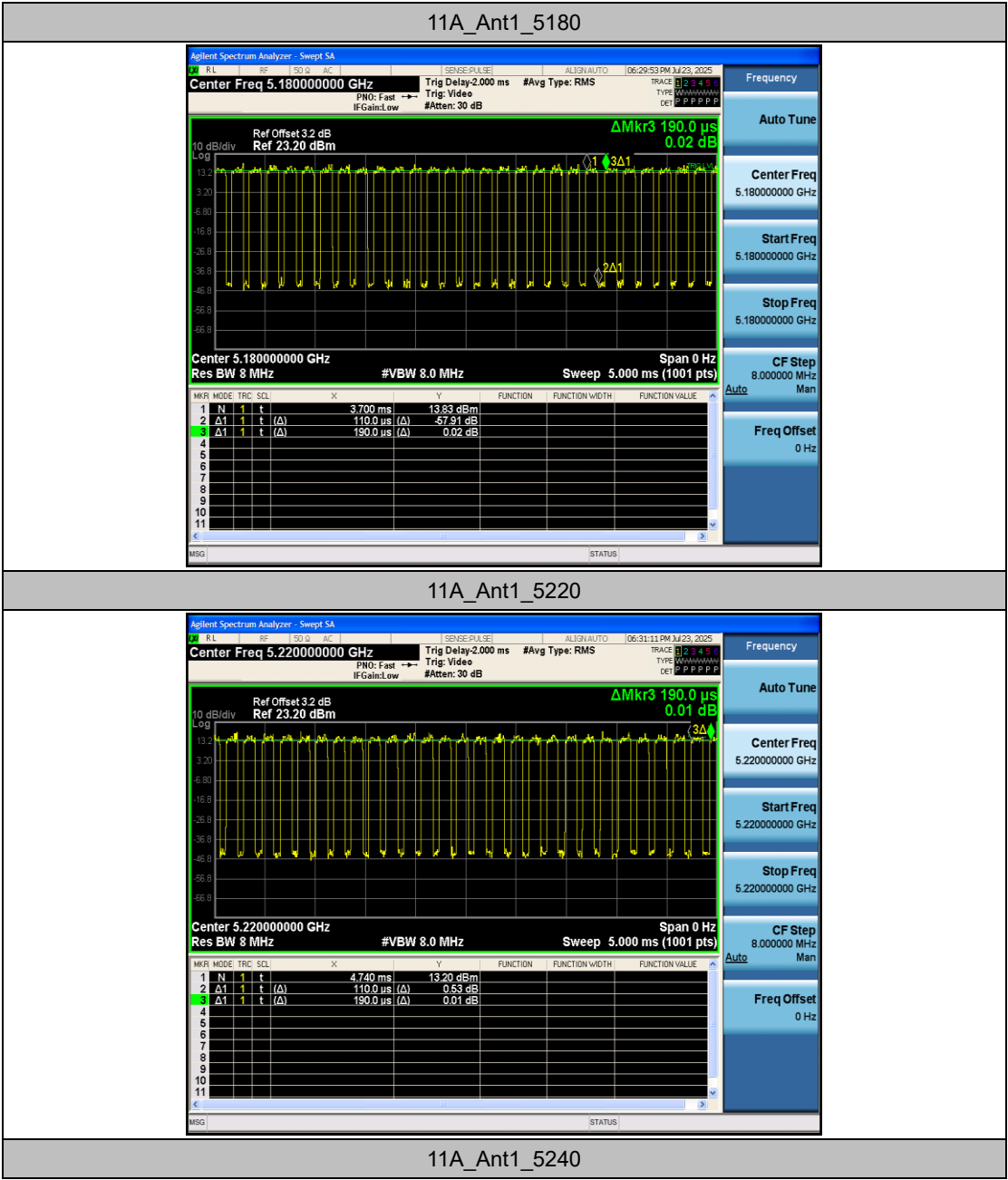


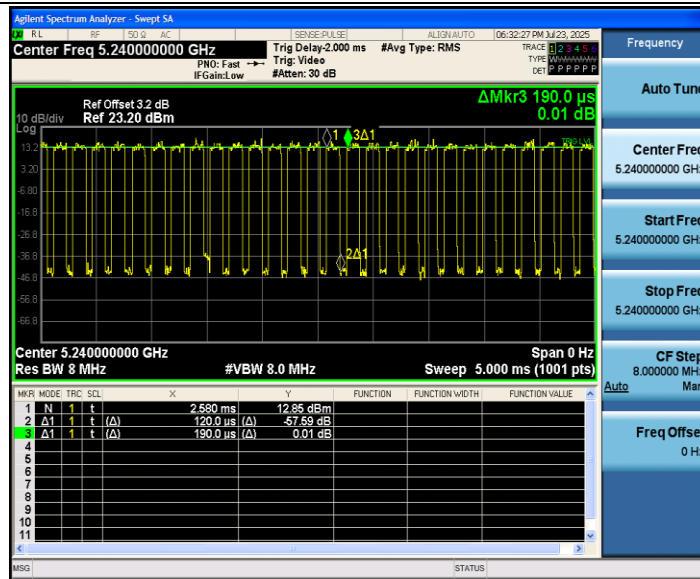
Appendix B: Duty Cycle

Test Result

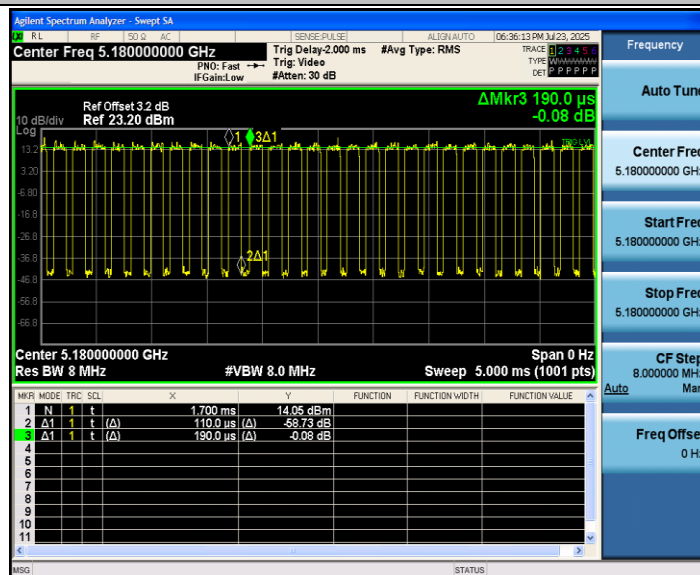
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant1	5180	0.11	0.19	57.89	---	---
		5220	0.11	0.19	57.89	---	---
		5240	0.12	0.19	63.16	---	---
11N20SISO	Ant1	5180	0.11	0.19	57.89	---	---
		5220	0.11	0.18	61.11	---	---
		5240	0.11	0.19	57.89	---	---
11N40SISO	Ant1	5190	0.07	0.13	53.85	---	---
		5230	0.07	0.15	46.67	---	---
11AC20SISO	Ant1	5180	0.12	0.19	63.16	---	---
		5220	0.11	0.19	57.89	---	---
		5240	0.12	0.21	57.14	---	---
11AC40SISO	Ant1	5190	0.08	0.15	53.33	---	---
		5230	0.08	0.16	50.00	---	---
11AX20SISO	Ant1	5180	0.12	0.22	54.55	---	---
		5220	0.12	0.20	60.00	---	---
		5240	0.11	0.19	57.89	---	---
11AX40SISO	Ant1	5190	0.07	0.15	46.67	---	---
		5230	0.08	0.15	53.33	---	---

Test Graphs

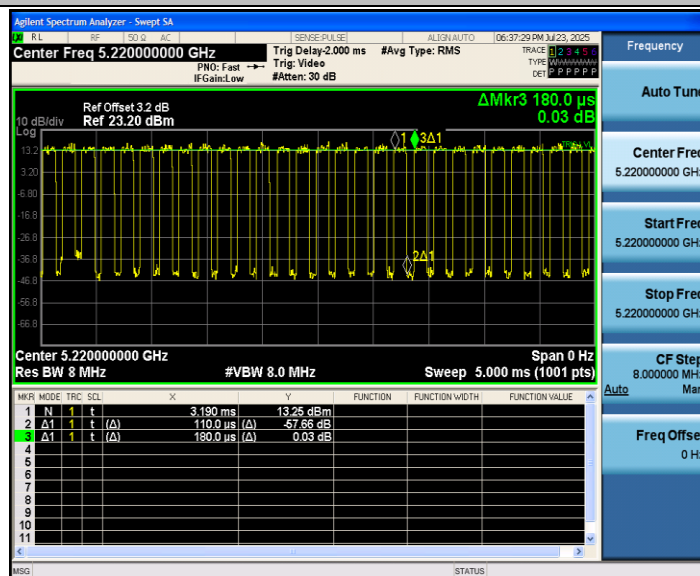




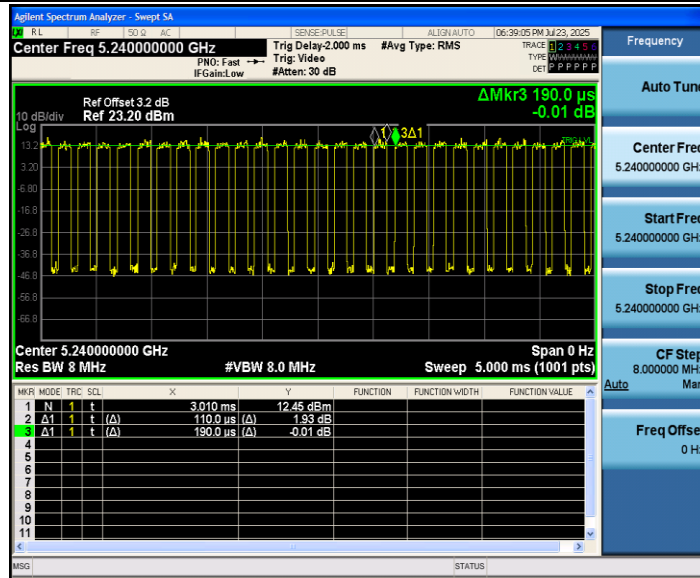
11N20SISO_Ant1_5180



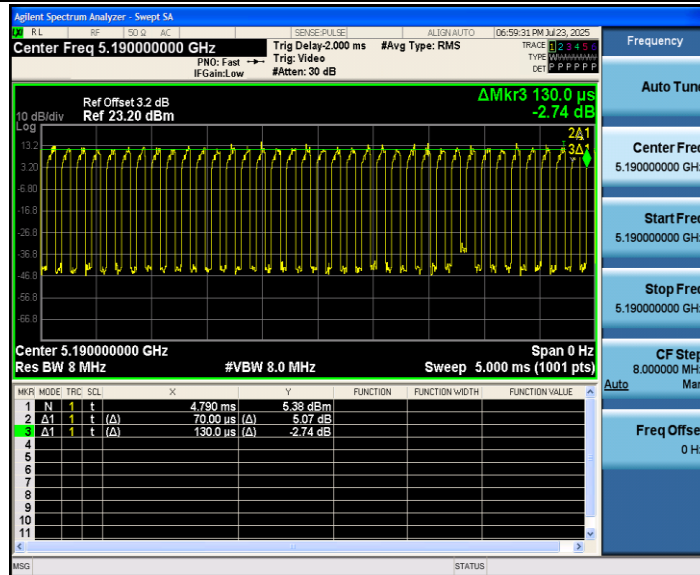
11N20SISO_Ant1_5220



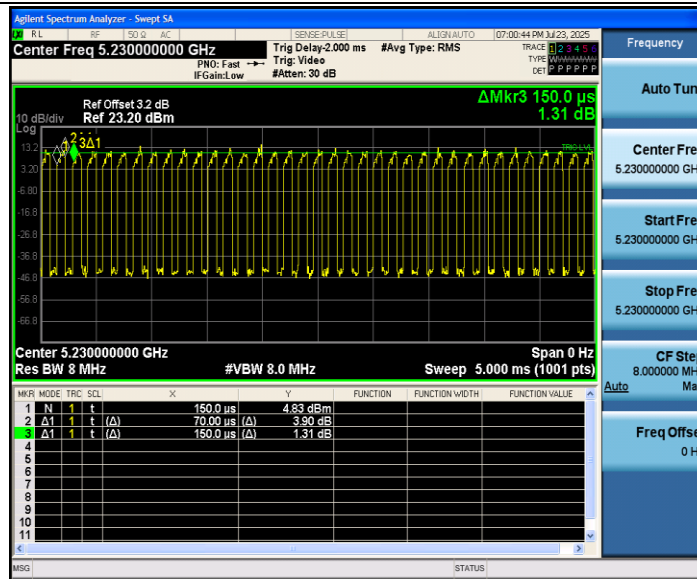
11N20SISO_Ant1_5240



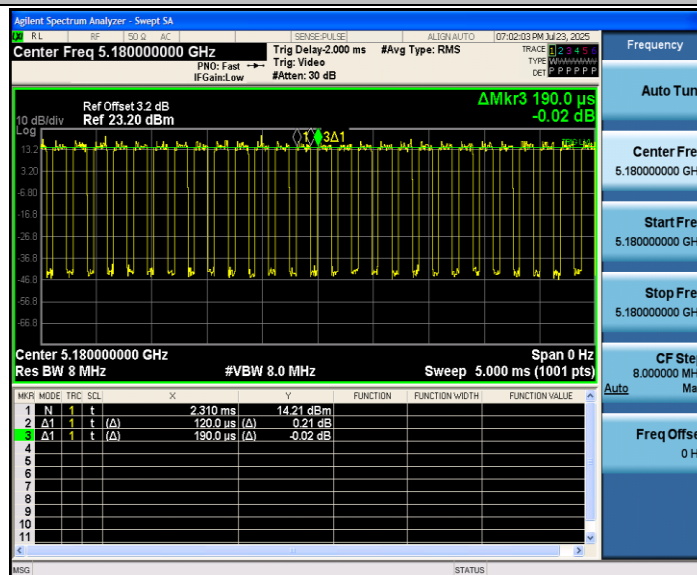
11N40SISO_Ant1_5190



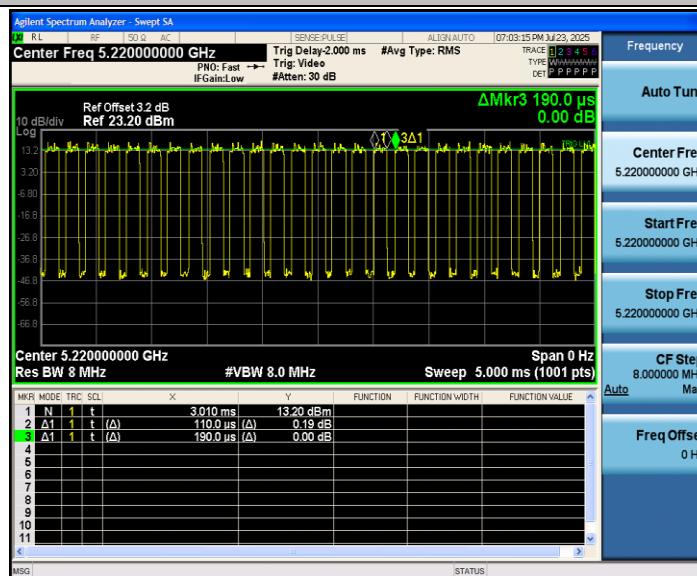
11N40SISO_Ant1_5230



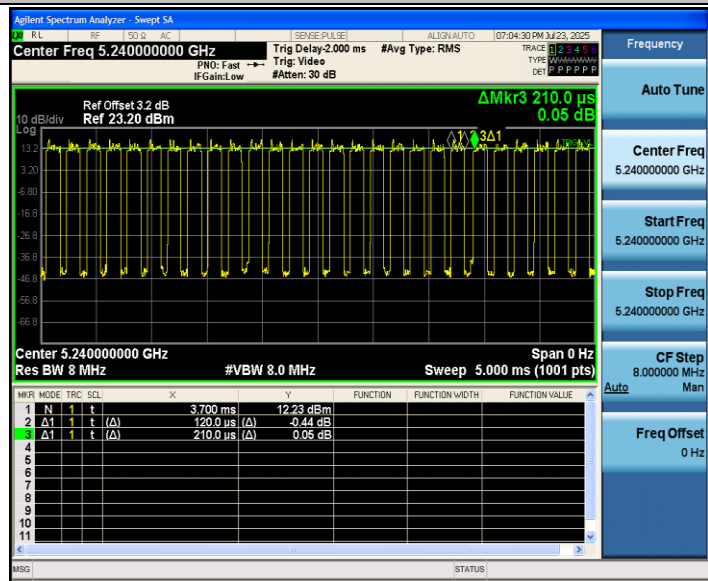
11AC20SISO_Ant1_5180



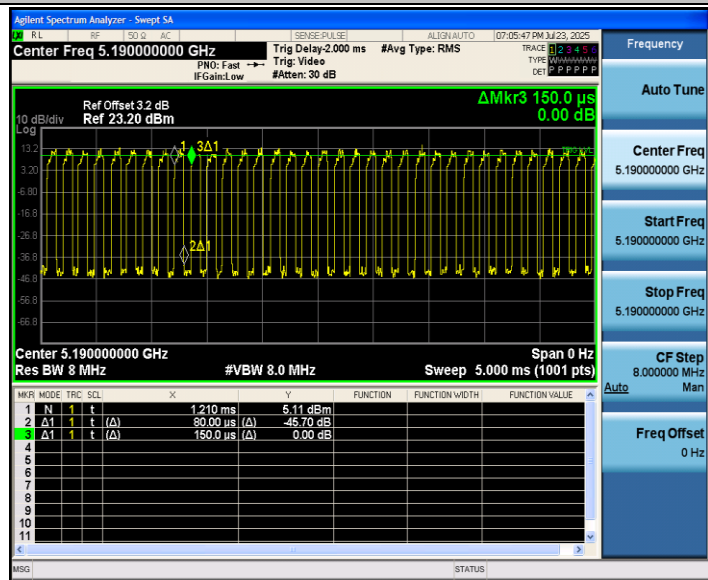
11AC20SISO_Ant1_5220



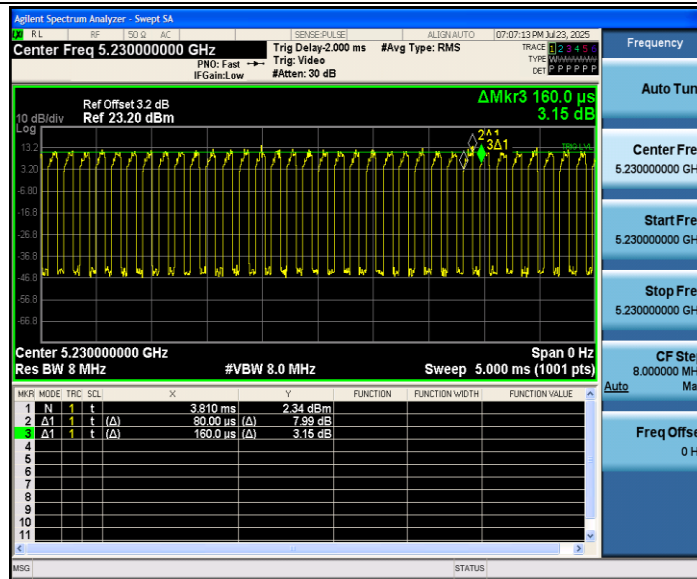
11AC20SISO_Ant1_5240



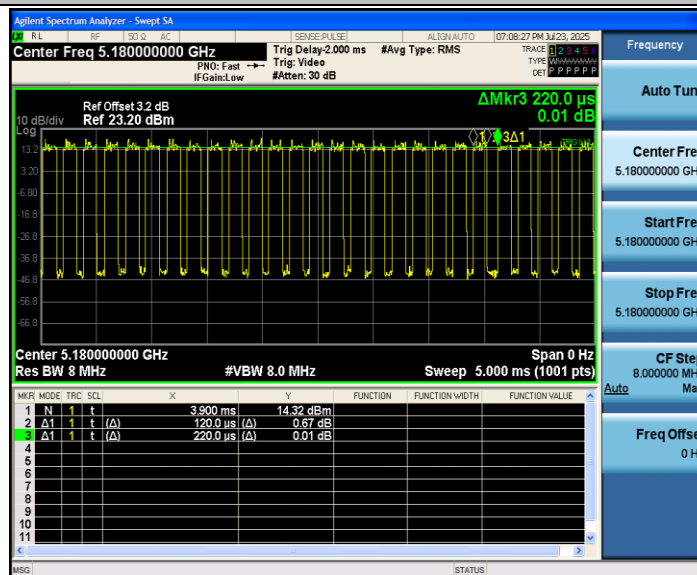
11AC40SISO_Ant1_5190



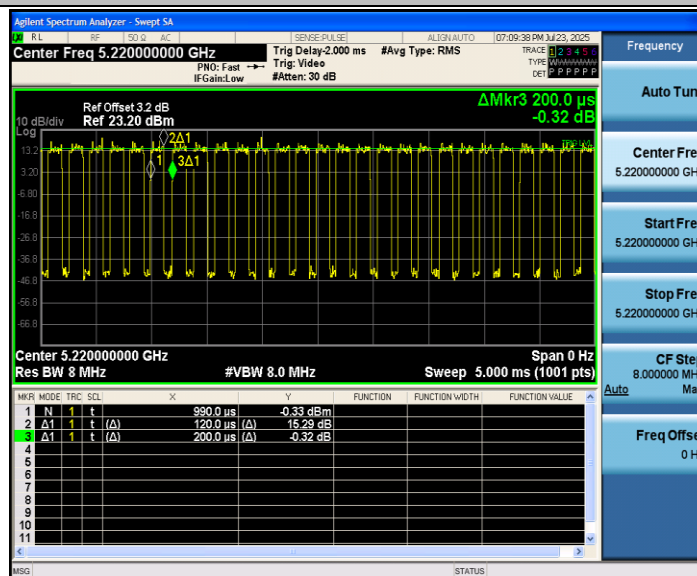
11AC40SISO_Ant1_5230

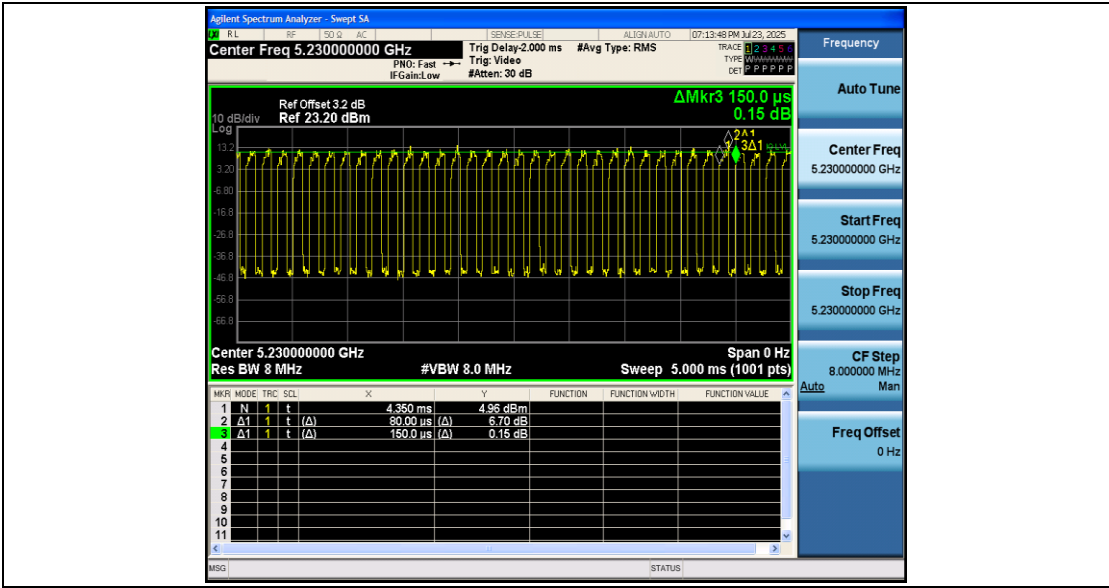


11AX20SISO_Ant1_5180



11AX20SISO_Ant1_5220





Appendix C: Maximum conducted output power

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	10.07	2.37	12.44	≤23.98	PASS
		5220	9.52	2.37	11.89	≤23.98	PASS
		5240	9.09	2.00	11.09	≤23.98	PASS
11N20SISO	Ant1	5180	9.94	2.37	12.31	≤23.98	PASS
		5220	9.46	2.14	11.60	≤23.98	PASS
		5240	9.04	2.37	11.41	≤23.98	PASS
11N40SISO	Ant1	5190	8.39	2.69	11.08	≤23.98	PASS
		5230	7.94	3.31	11.25	≤23.98	PASS
11AC20SISO	Ant1	5180	10.01	2.00	12.01	≤23.98	PASS
		5220	9.52	2.37	11.89	≤23.98	PASS
		5240	9.08	2.43	11.51	≤23.98	PASS
11AC40SISO	Ant1	5190	8.51	2.73	11.24	≤23.98	PASS
		5230	8.06	3.01	11.07	≤23.98	PASS
11AX20SISO	Ant1	5180	9.98	2.63	12.61	≤23.98	PASS
		5220	9.47	2.22	11.69	≤23.98	PASS
		5240	9.11	2.37	11.48	≤23.98	PASS
11AX40SISO	Ant1	5190	8.46	3.31	11.77	≤23.98	PASS
		5230	8.00	2.73	10.73	≤23.98	PASS