

Appendix RF Test Data for 5GWIFI

FCC ID : 2BLJ7-CHD09

Company : Zhuhai Chaohai Technology Co., Ltd

EUT : Wireless HDMI transmitter and receiver

Model Number : CHD09

Report No. : CTA25080500901

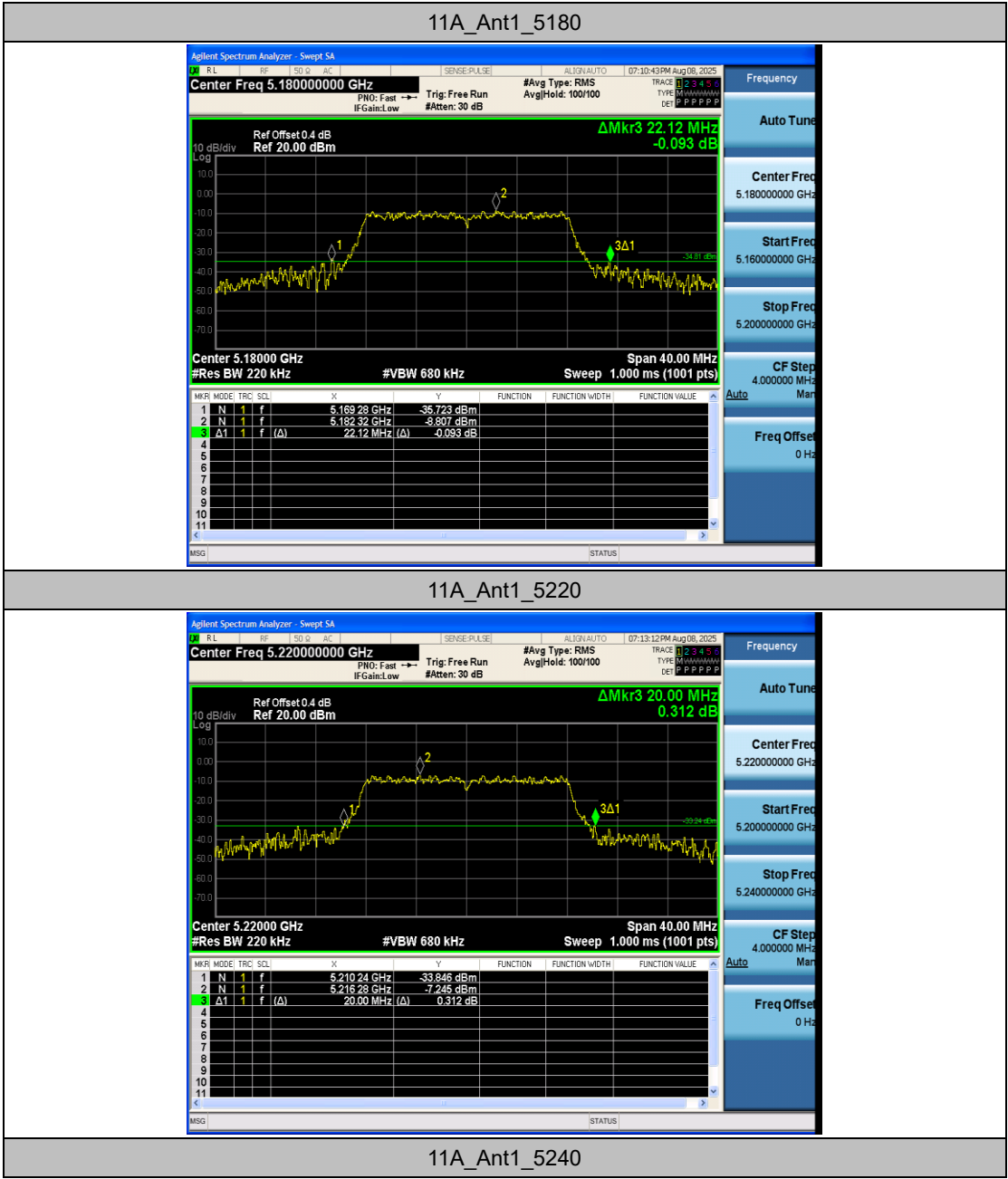
Reviewed By : Eric Wang

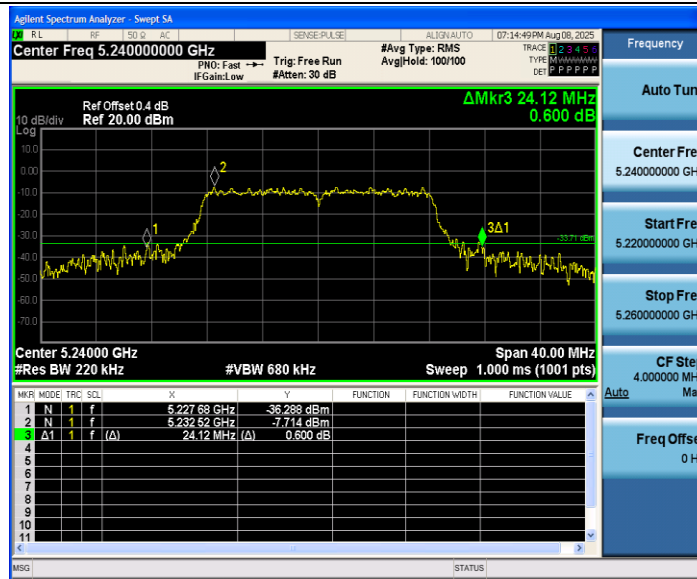
Appendix A1: Emission Bandwidth

Test Result

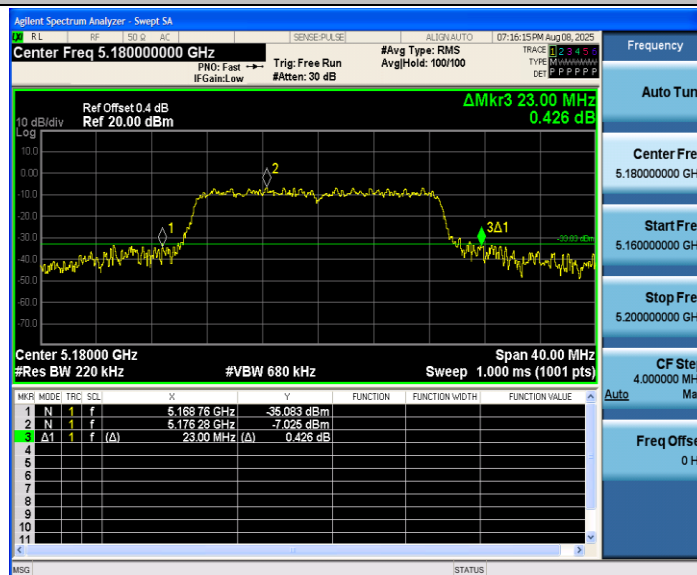
TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	22.120	5169.280	5191.400	---	---
		5220	20.000	5210.240	5230.240	---	---
		5240	24.120	5227.680	5251.800	---	---
11N20SISO	Ant1	5180	23.000	5168.760	5191.760	---	---
		5220	25.960	5208.200	5234.160	---	---
		5240	21.600	5228.400	5250.000	---	---
11N40SISO	Ant1	5190	39.440	5170.400	5209.840	---	---
		5230	39.120	5210.480	5249.600	---	---

Test Graphs





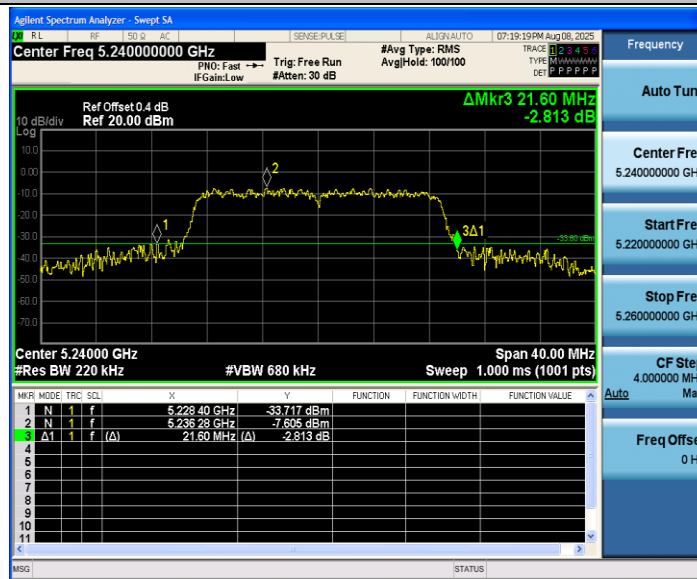
11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



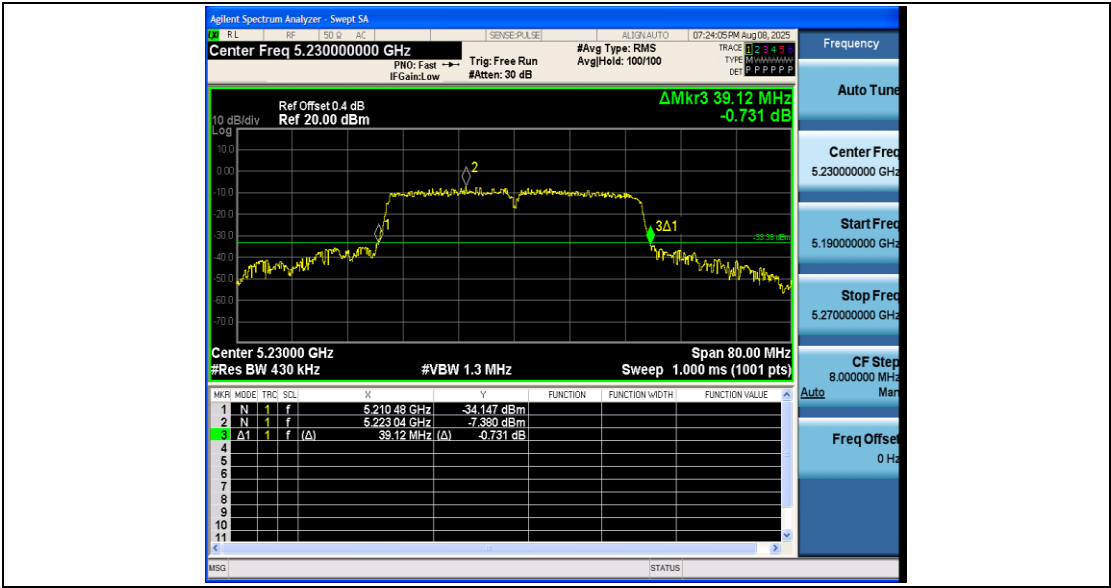
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230

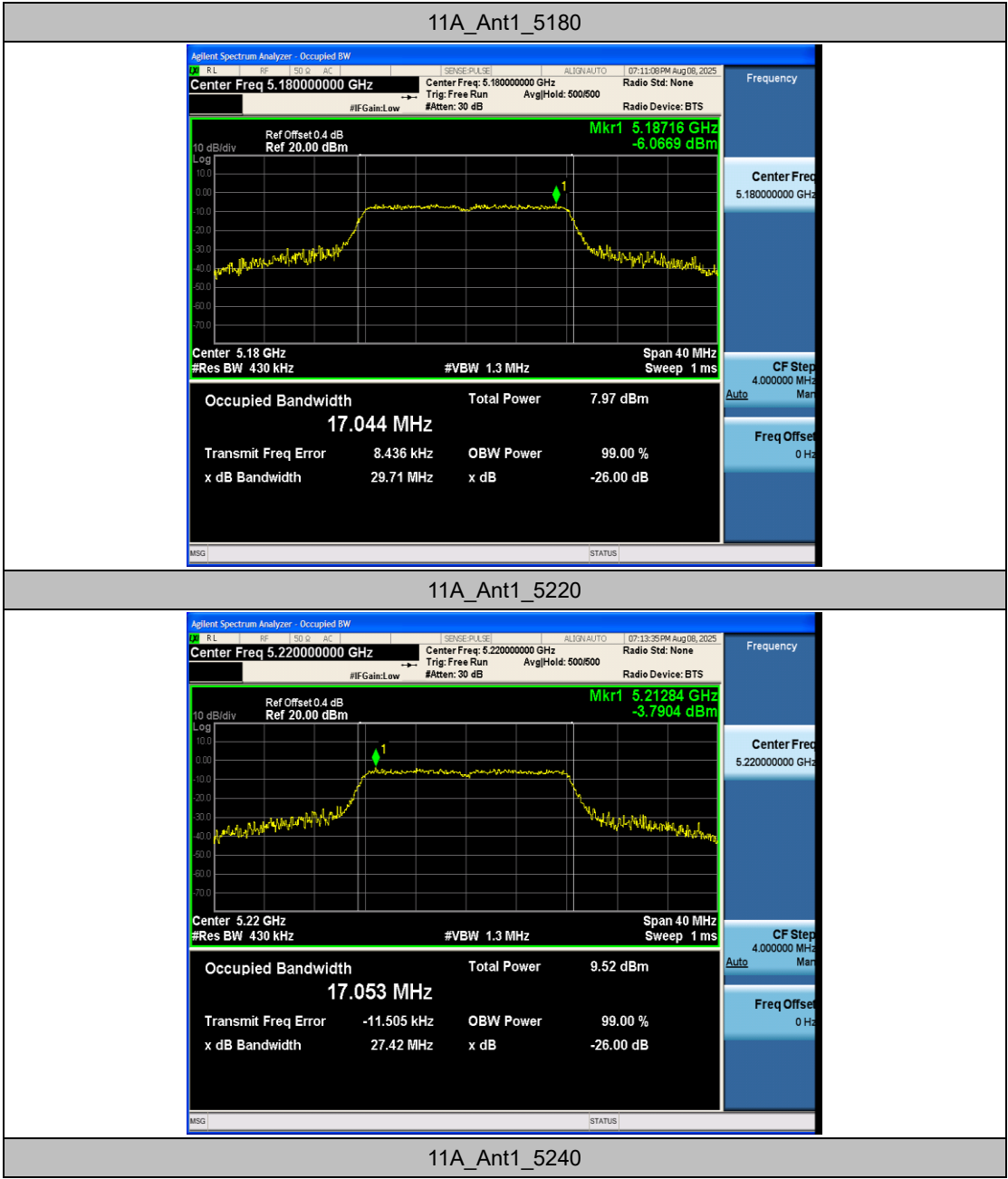


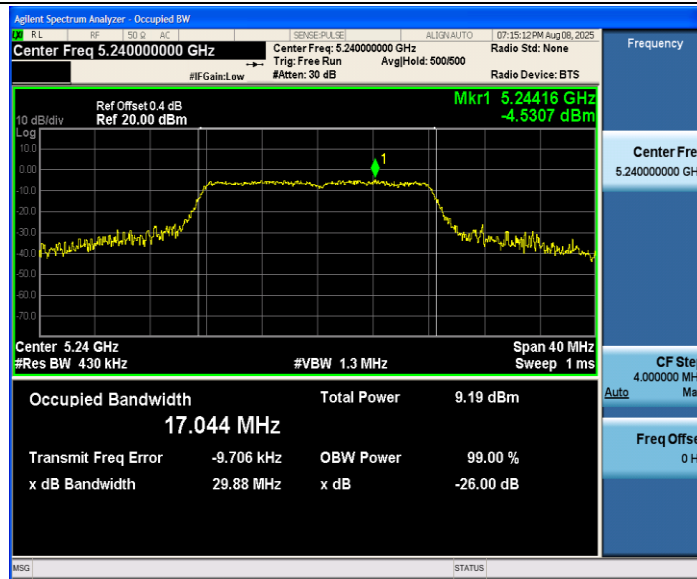
Appendix A2: Occupied channel bandwidth

Test Result

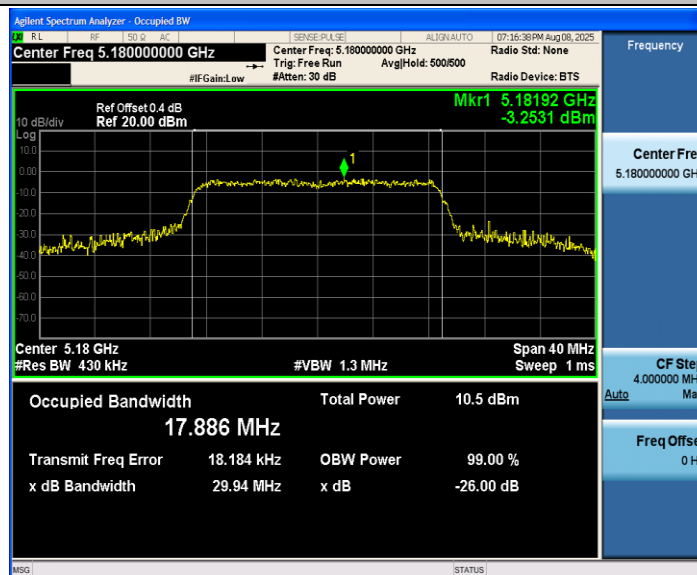
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.044	5171.4864	5188.5304	---	---
		5220	17.053	5211.4620	5228.5150	---	---
		5240	17.044	5231.4683	5248.5123	---	---
11N20SISO	Ant1	5180	17.886	5171.0752	5188.9612	---	---
		5220	17.895	5211.0528	5228.9478	---	---
		5240	17.865	5231.0650	5248.9300	---	---
11N40SISO	Ant1	5190	36.387	5171.8802	5208.2672	---	---
		5230	36.284	5211.8536	5248.1376	---	---

Test Graphs

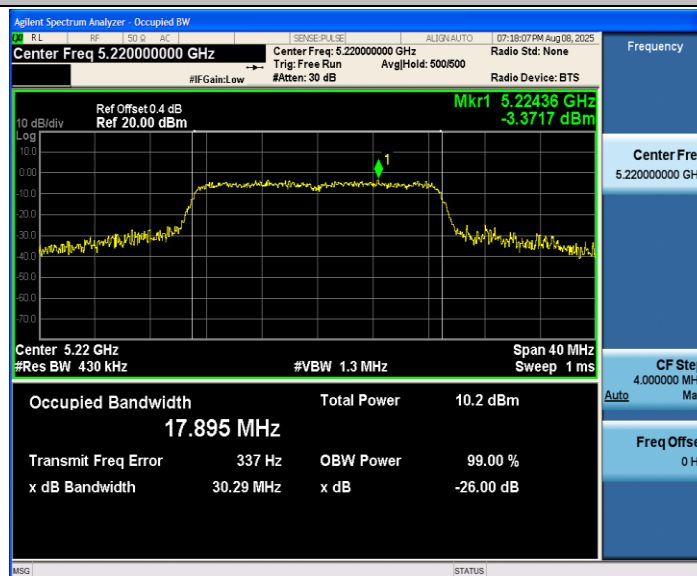




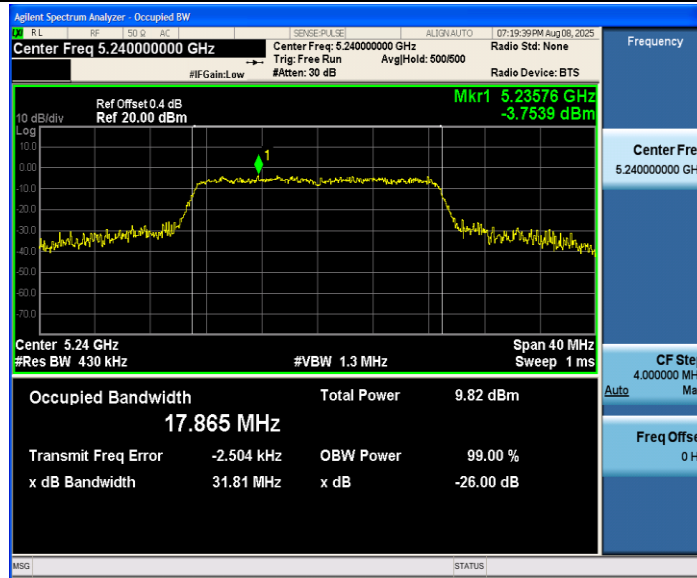
11N20SISO_Ant1_5180



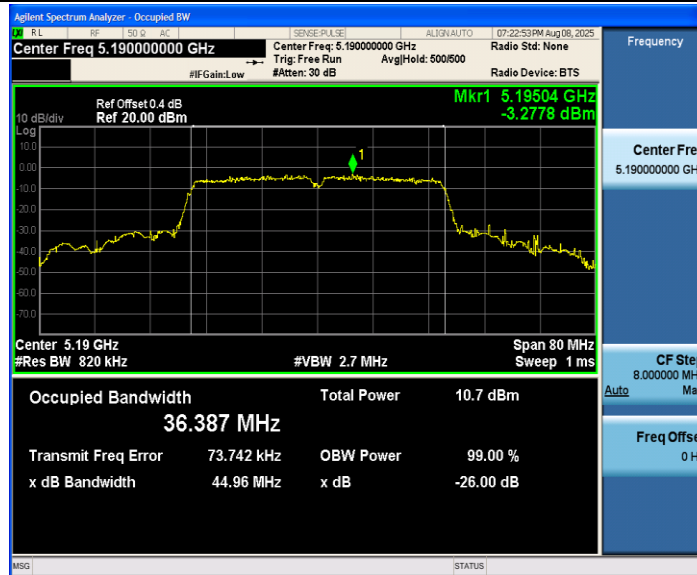
11N20SISO_Ant1_5220



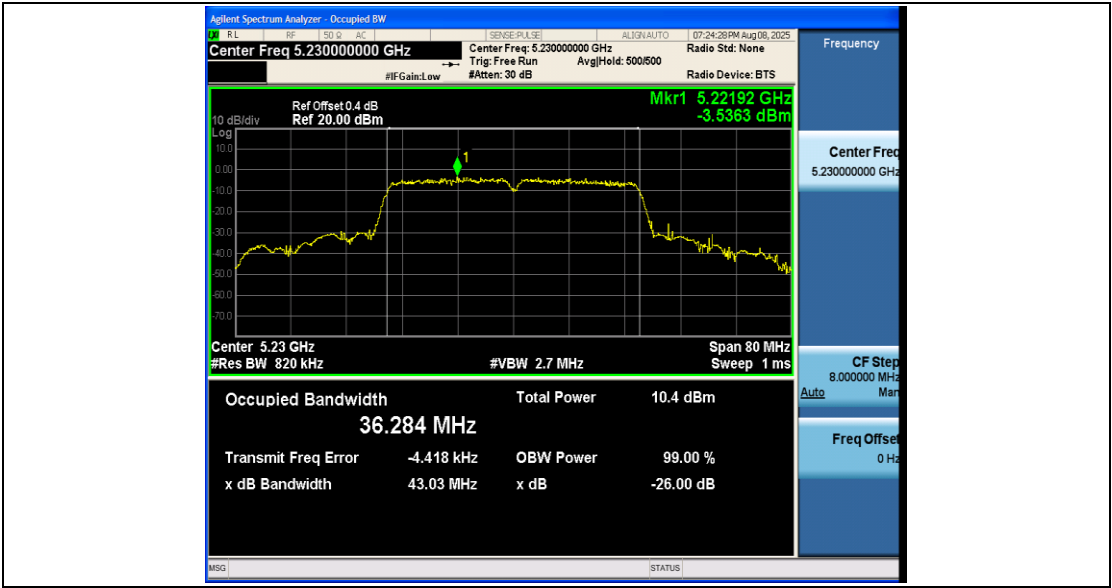
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230

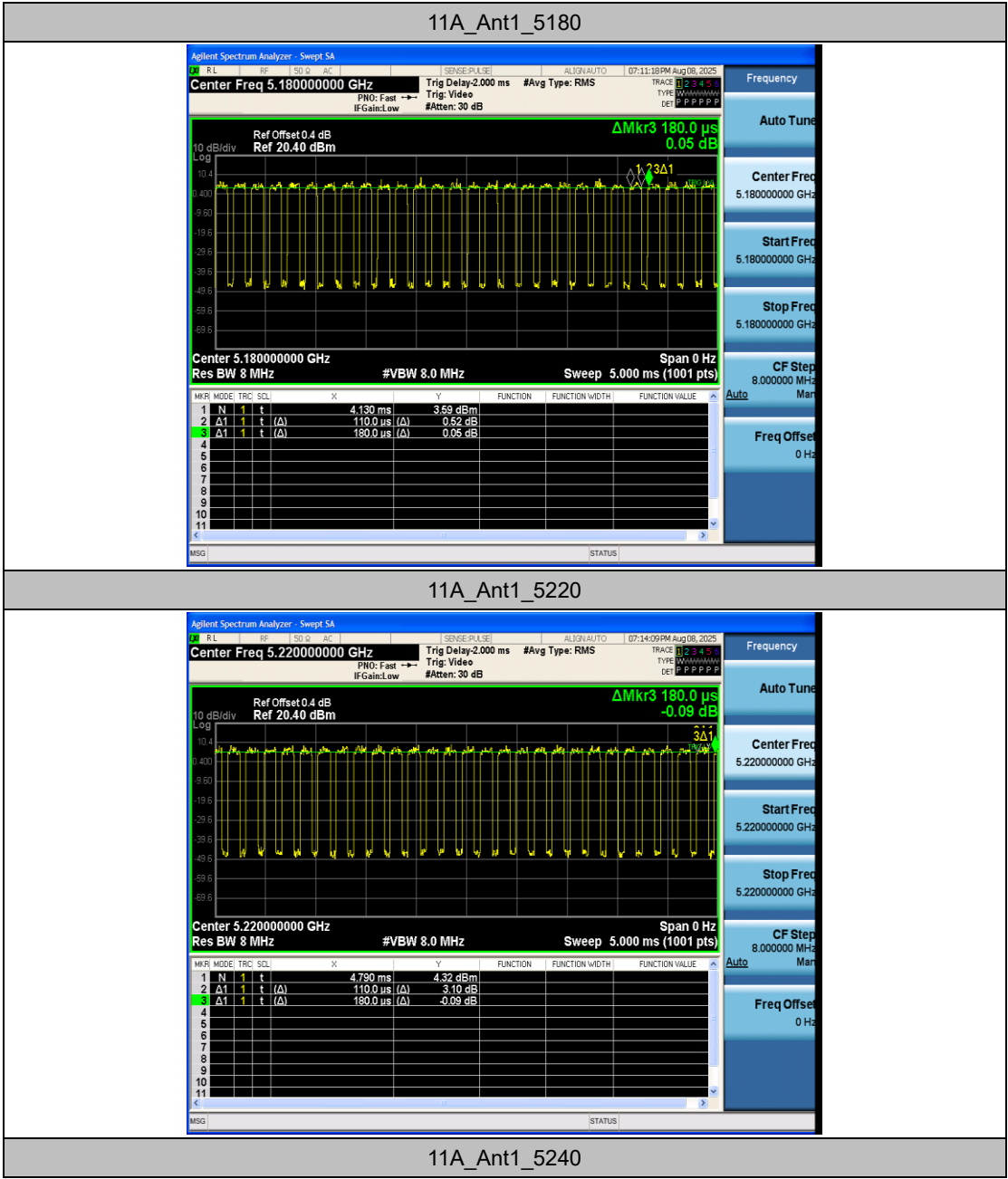


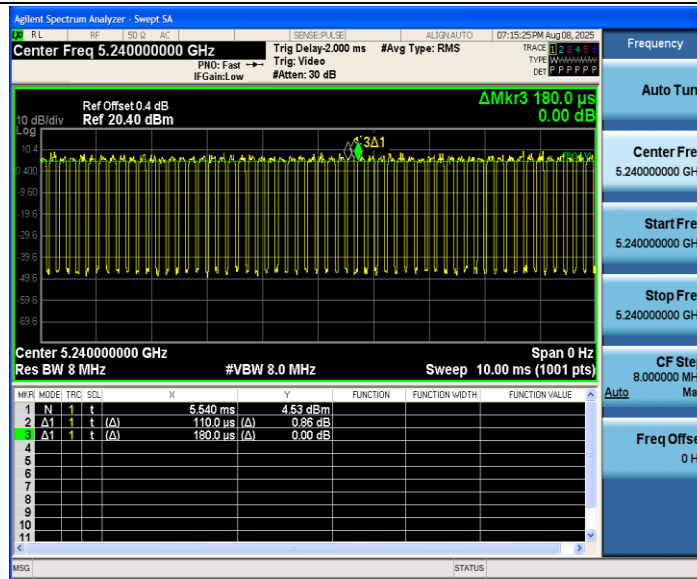
Appendix B: Duty Cycle

Test Result

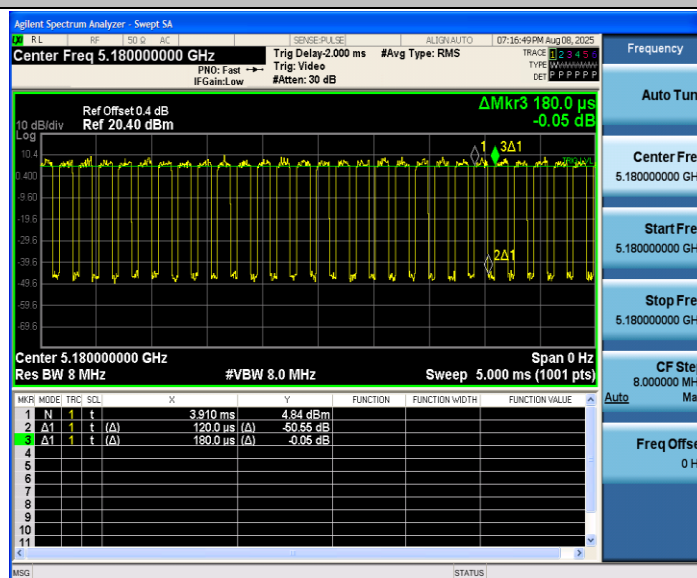
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty factor(dB)	Limit	Verdict
11A	Ant1	5180	0.11	0.18	61.11	2.14	---	---
		5220	0.11	0.18	61.11	2.14	---	---
		5240	0.11	0.18	61.11	2.14	---	---
11N20SISO	Ant1	5180	0.12	0.18	66.67	1.76	---	---
		5220	0.12	0.18	66.67	1.76	---	---
		5240	0.12	0.18	66.67	1.76	---	---
11N40SISO	Ant1	5190	0.08	0.14	57.14	2.43	---	---
		5230	0.08	0.14	57.14	2.43	---	---

Test Graphs

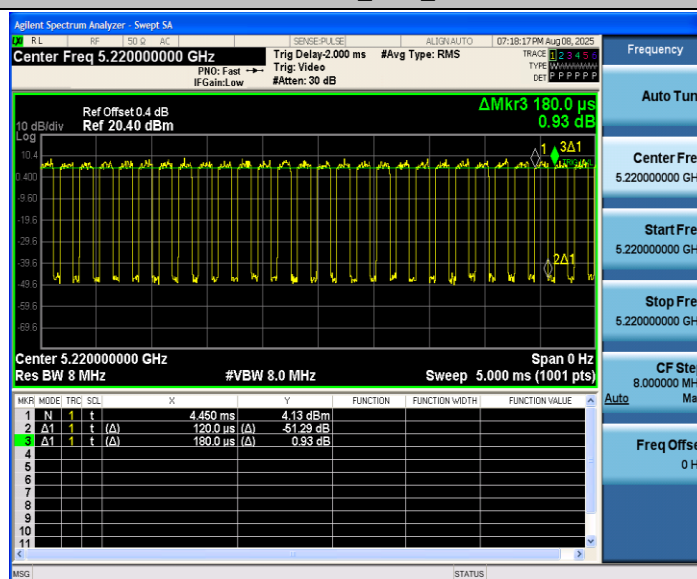




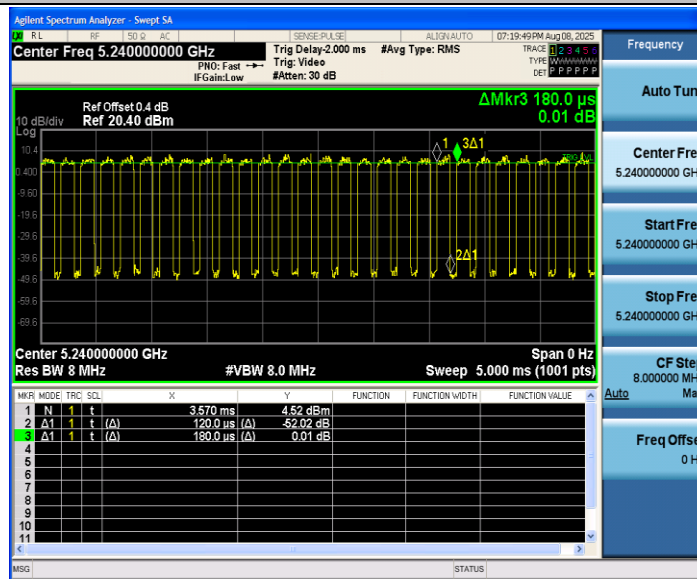
11N20SISO_Ant1_5180



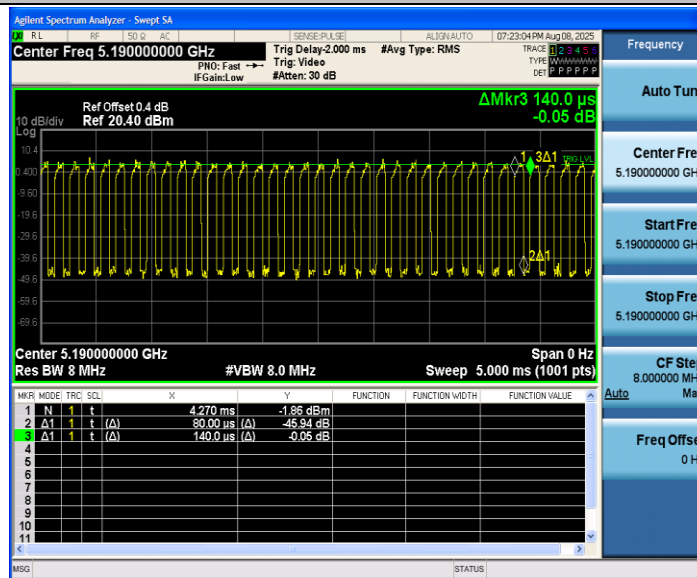
11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



Appendix C: Maximum conducted output power

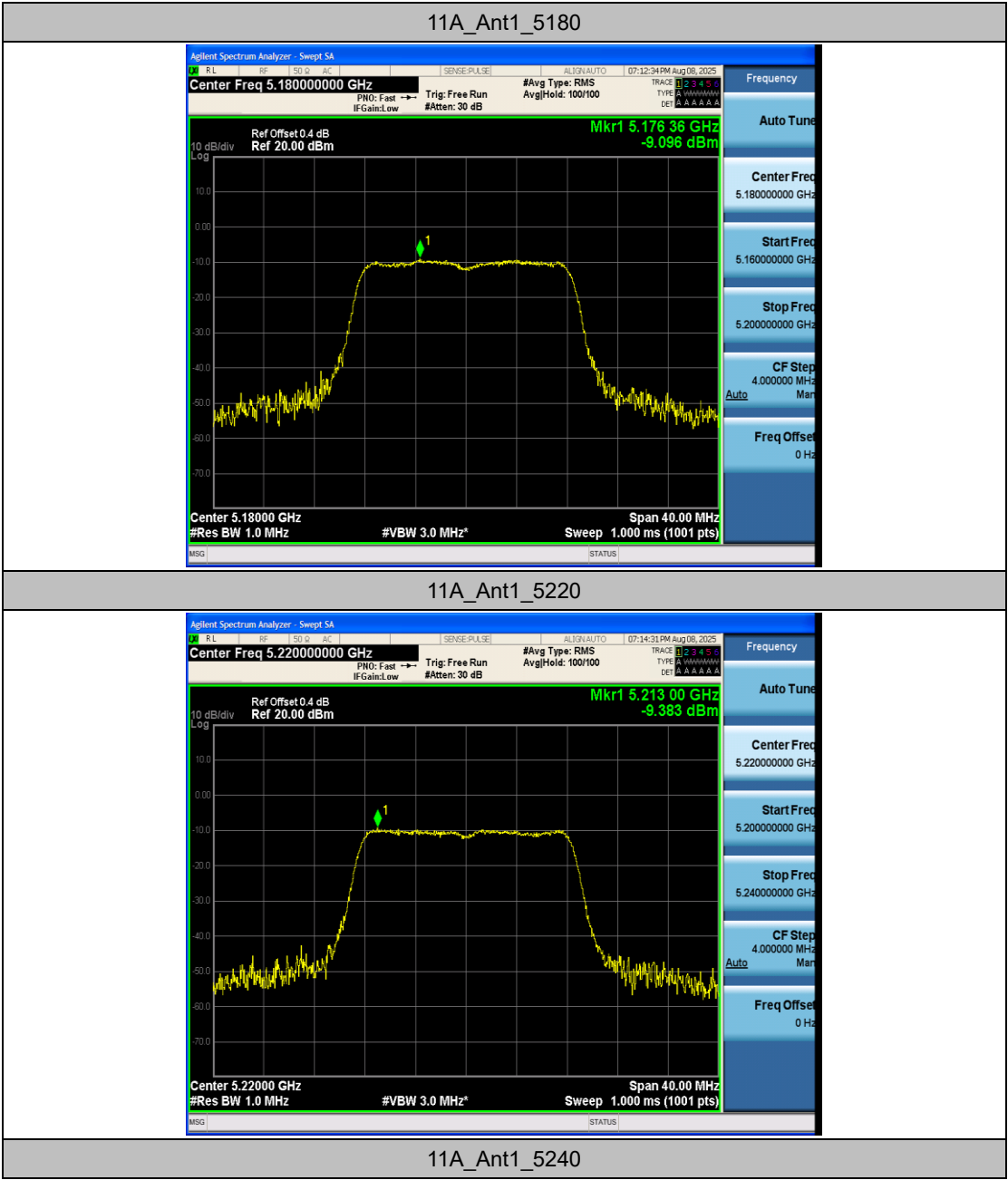
Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	1.46	2.14	3.60	≤23.98	PASS
		5220	1.16	2.14	3.30	≤23.98	PASS
		5240	0.86	2.14	3.00	≤23.98	PASS
11N20SISO	Ant1	5180	1.56	1.76	3.32	≤23.98	PASS
		5220	1.23	1.76	2.99	≤23.98	PASS
		5240	1.08	1.76	2.84	≤23.98	PASS
11N40SISO	Ant1	5190	0.54	2.43	2.97	≤23.98	PASS
		5230	0.07	2.43	2.50	≤23.98	PASS

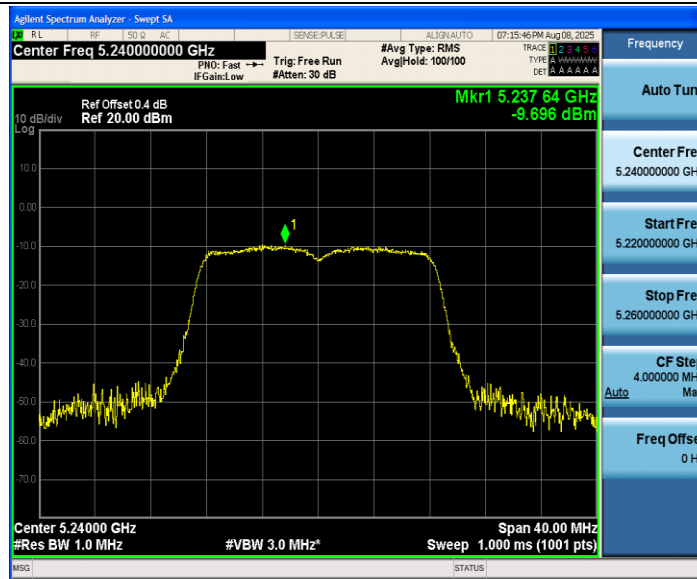
Appendix D: Maximum power spectral density

Test Result

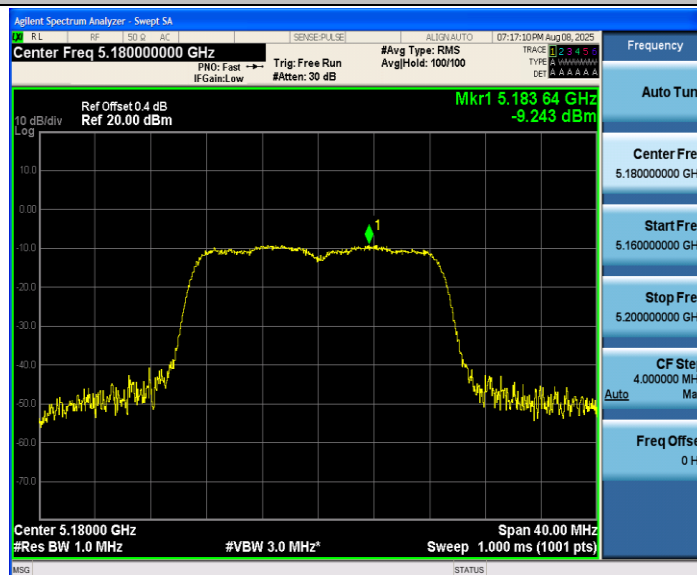
TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-6.96	≤11.00	PASS
		5220	-7.24	≤11.00	PASS
		5240	-7.56	≤11.00	PASS
11N20SISO	Ant1	5180	-7.48	≤11.00	PASS
		5220	-7.59	≤11.00	PASS
		5240	-8.23	≤11.00	PASS
11N40SISO	Ant1	5190	-10.39	≤11.00	PASS
		5230	-10.98	≤11.00	PASS

Test Graphs

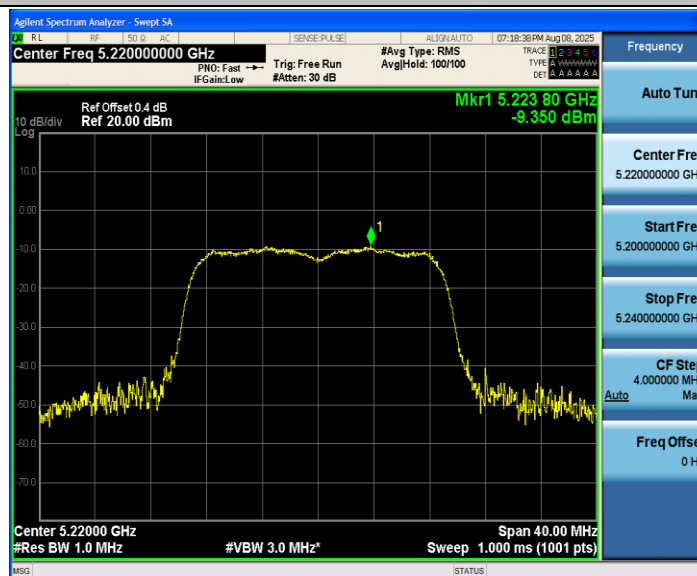




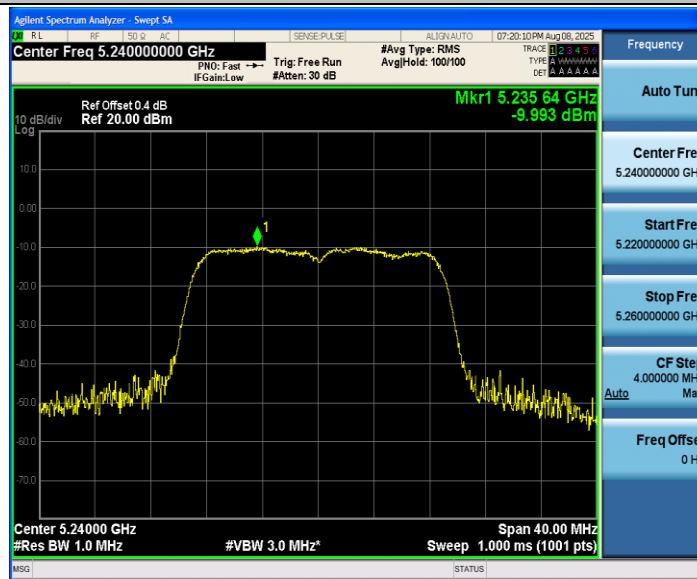
11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



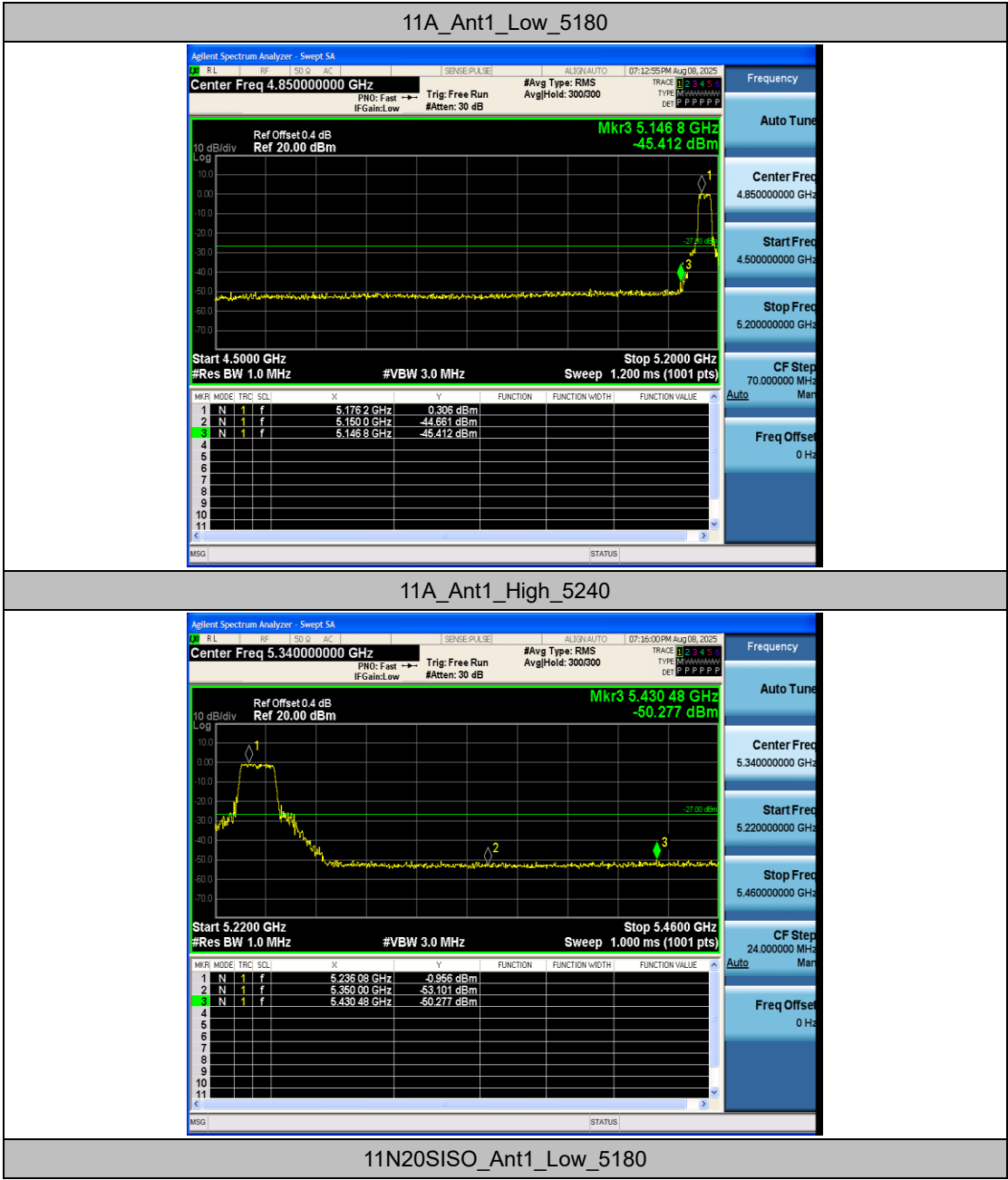
11N40SISO_Ant1_5230

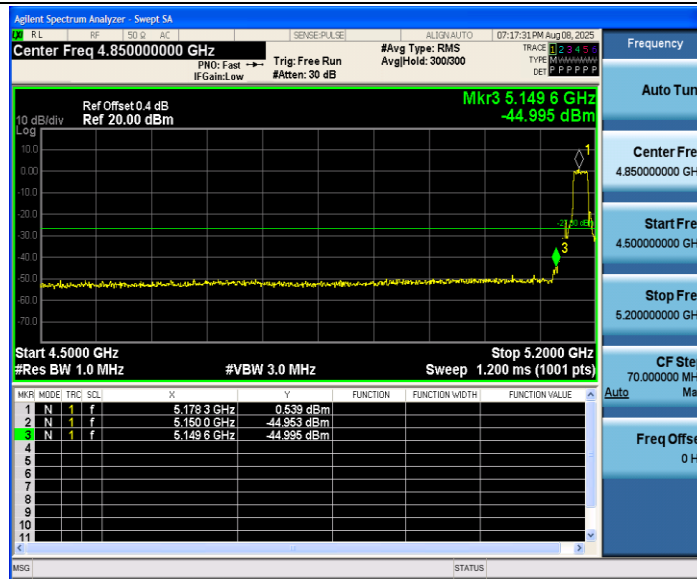
Appendix E: Band edge measurements

Test Result B1

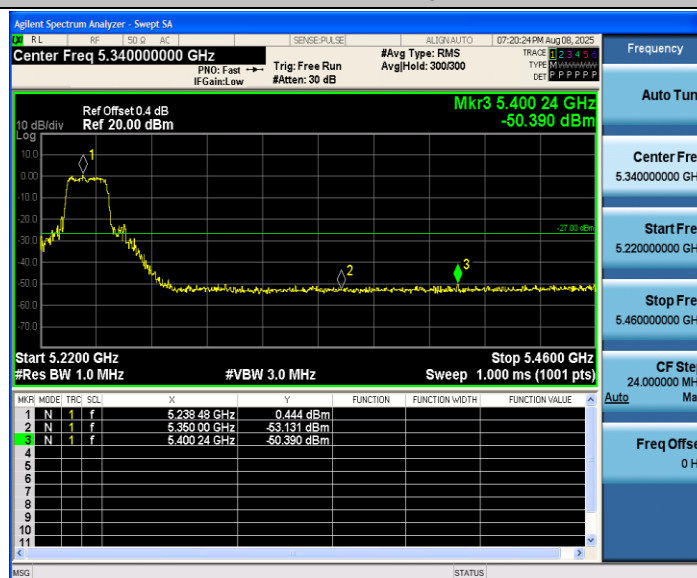
TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-45.41	≤-27	PASS
		High	5240	-50.28	≤-27	PASS
11N20SISO	Ant1	Low	5180	-45	≤-27	PASS
		High	5240	-50.39	≤-27	PASS
11N40SISO	Ant1	Low	5190	-42.71	≤-27	PASS
		High	5230	-49.48	≤-27	PASS

Test Graphs B1

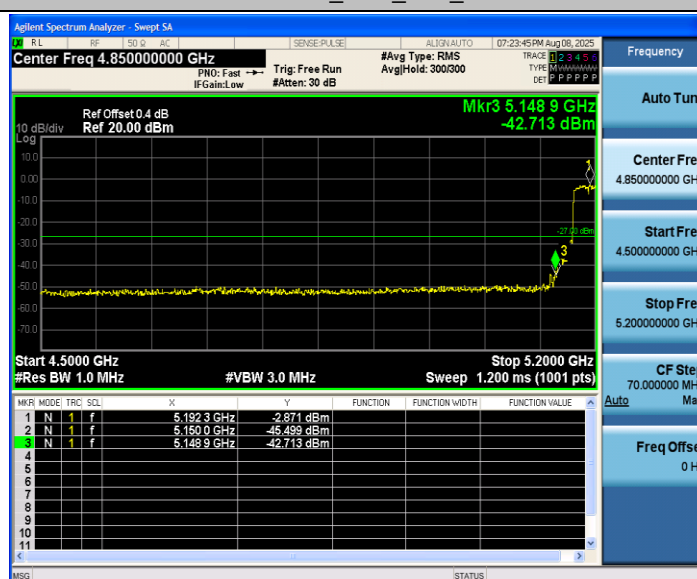




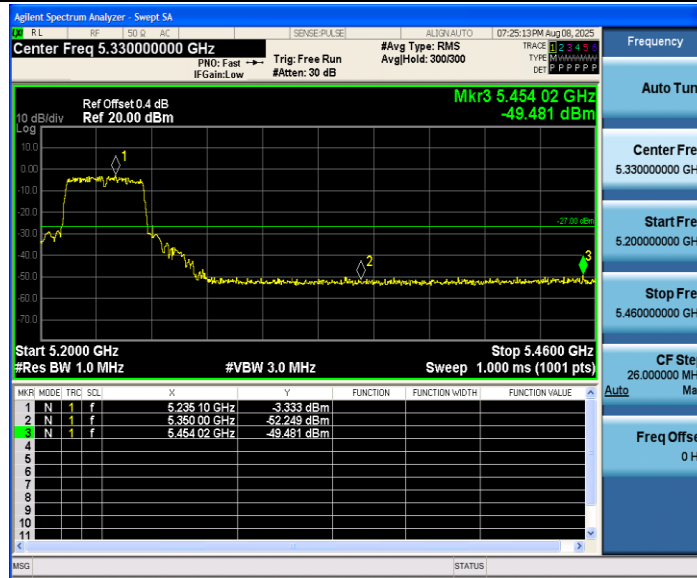
11N20ISO_Ant1_High_5240



11N40ISO_Ant1_Low_5190



11N40SISO_Ant1_High_5230



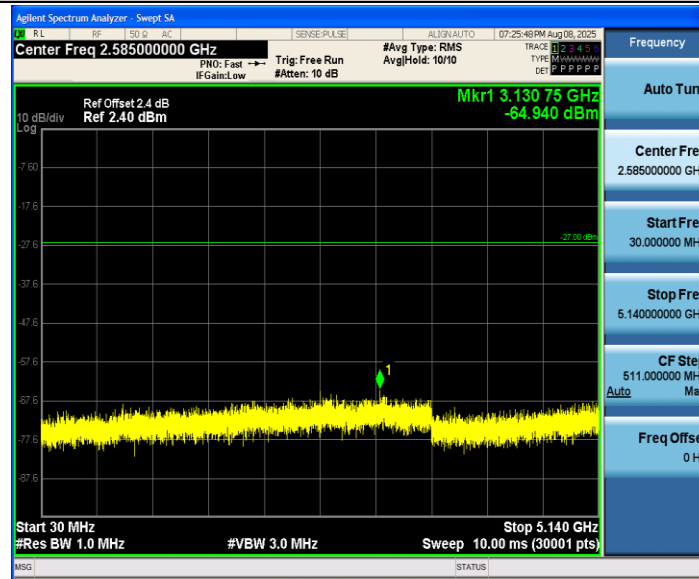
Appendix F: Conducted Spurious Emission

Test Result

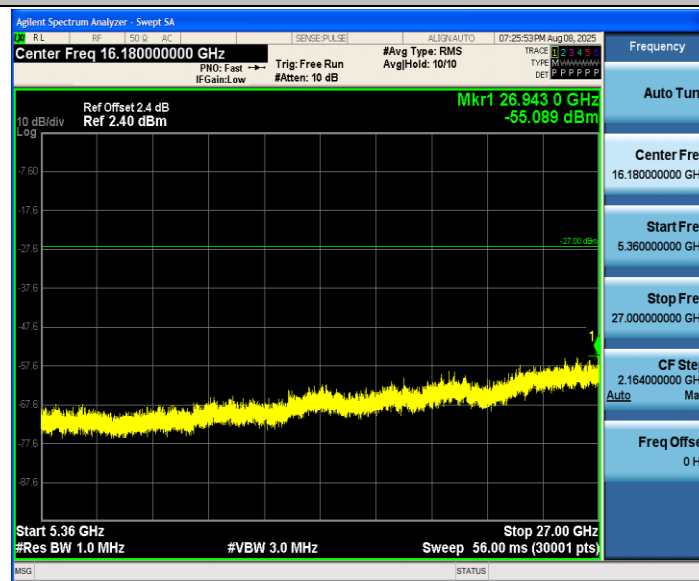
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	3130.75	-64.94	≤-27	PASS
			5360~40000	26943.01	-55.09	≤-27	PASS
		5220	30~5140	3155.96	-65.65	≤-27	PASS
			5360~40000	25671.3	-56.08	≤-27	PASS
		5240	30~5140	2697.93	-65.44	≤-27	PASS
			5360~40000	26117.09	-55.47	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	3047.28	-64.98	≤-27	PASS
			5360~40000	26190.66	-55.99	≤-27	PASS
		5220	30~5140	3199.9	-65.78	≤-27	PASS
			5360~40000	26570.81	-55.37	≤-27	PASS
		5240	30~5140	2637.46	-65.58	≤-27	PASS
			5360~40000	26356.57	-56.14	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	2750.22	-65.31	≤-27	PASS
			5360~40000	26819.67	-56.44	≤-27	PASS
		5230	30~5140	2621.79	-64.53	≤-27	PASS
			5360~40000	26241.88	-55.6	≤-27	PASS

Test Graphs

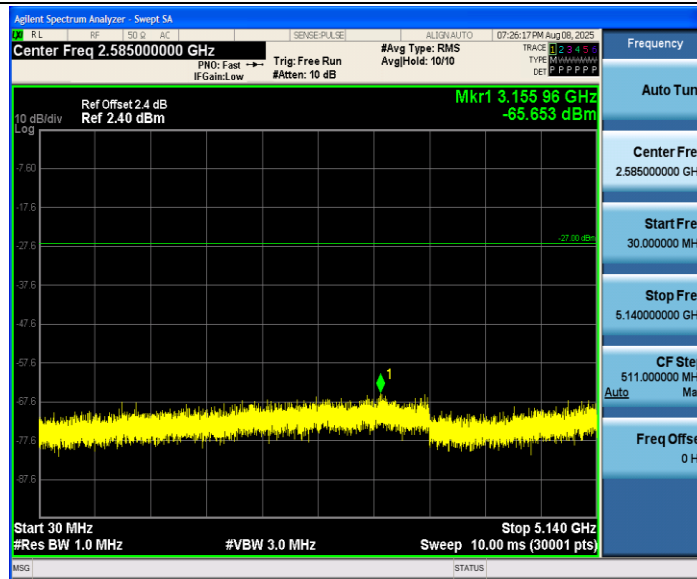
11A_Ant1_5180_30~5140



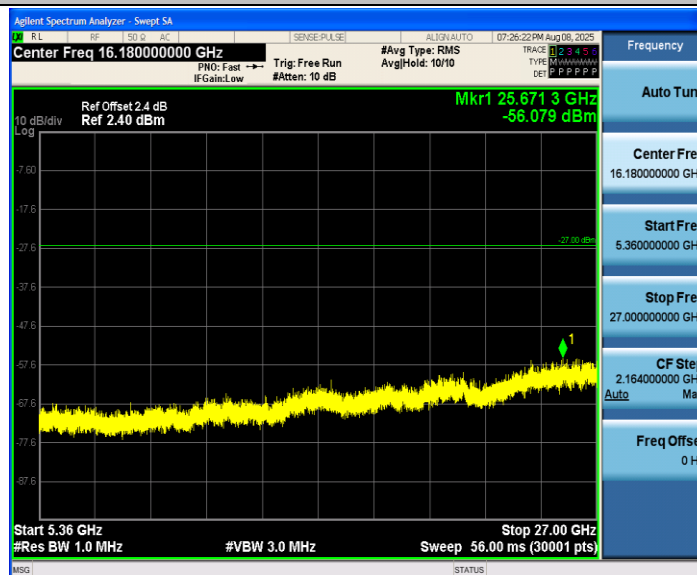
11A_Ant1_5180_5360~40000



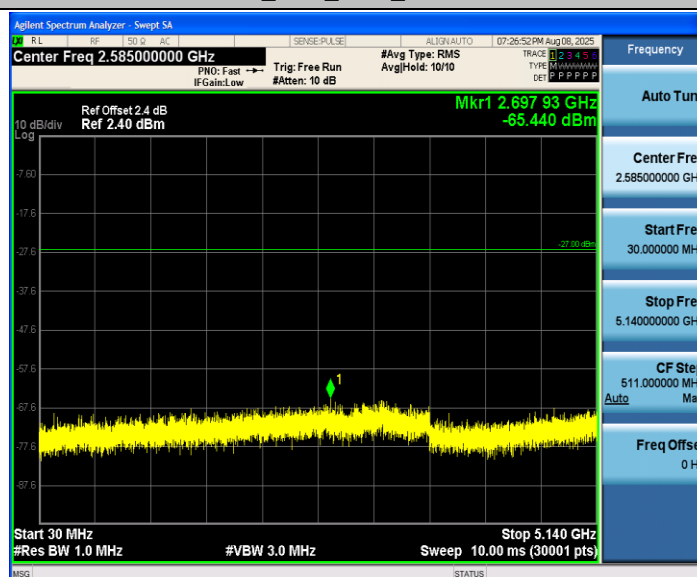
11A_Ant1_5220_30~5140



11A_Ant1_5220_5360~40000



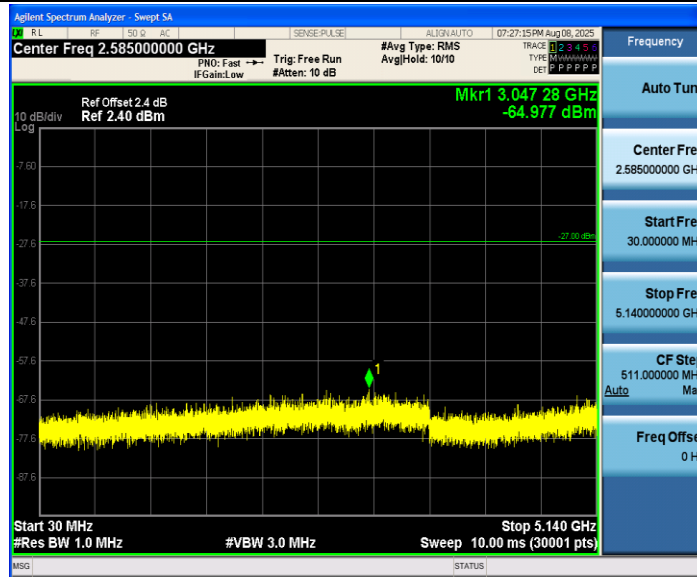
11A_Ant1_5240_30~5140



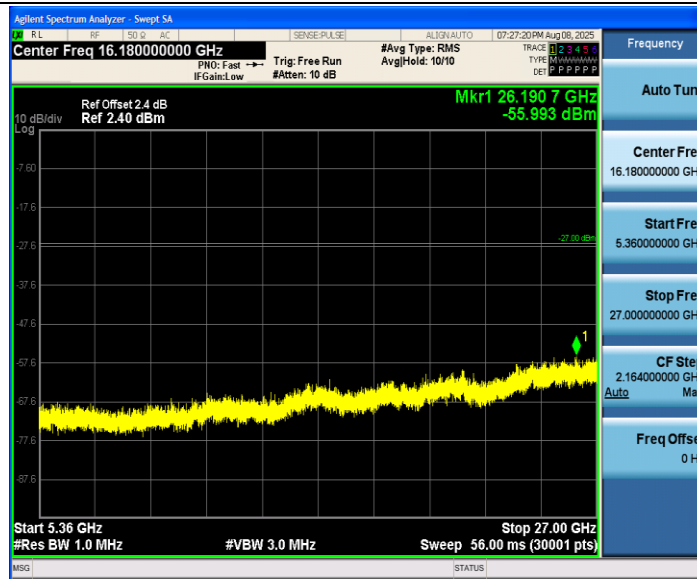
11A_Ant1_5240_5360~40000



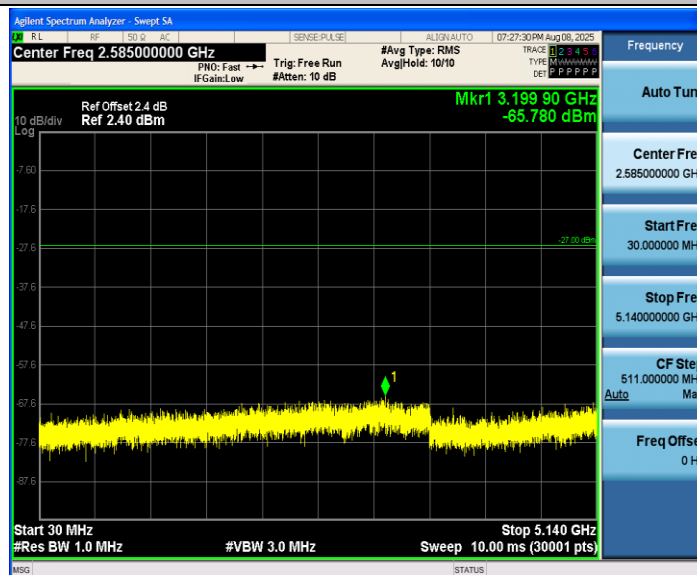
11N20SISO_Ant1_5180_30~5140



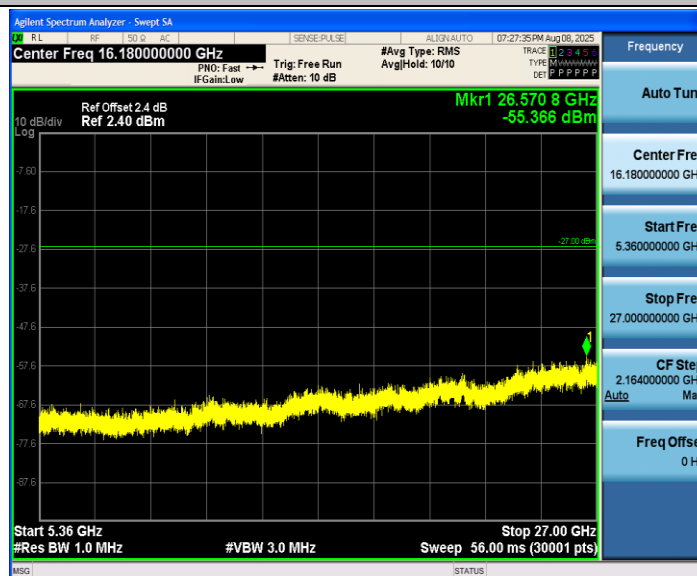
11N20SISO_Ant1_5180_5360~40000



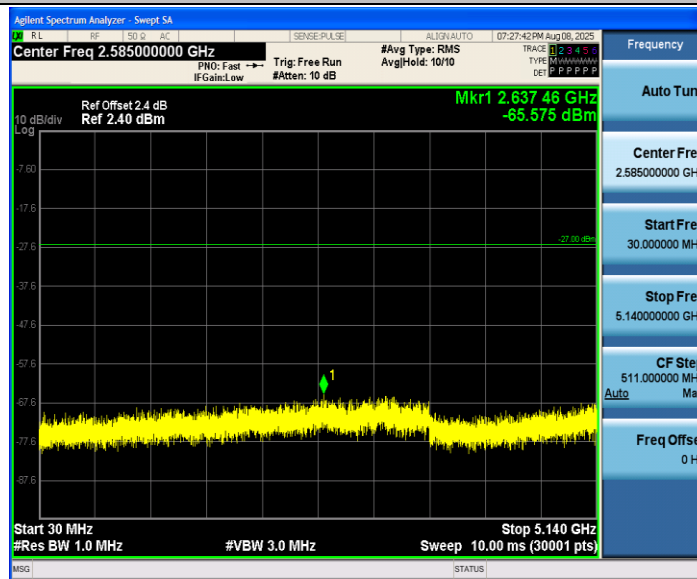
11N20SISO_Ant1_5220_30~5140



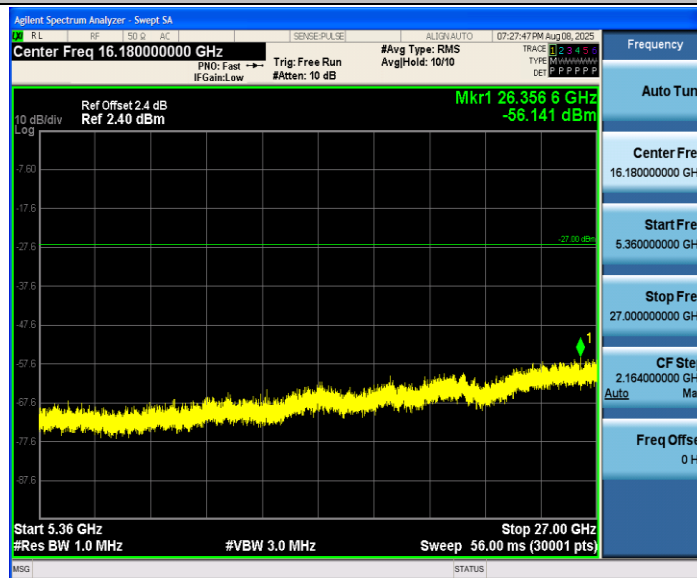
11N20SISO_Ant1_5220_5360~40000



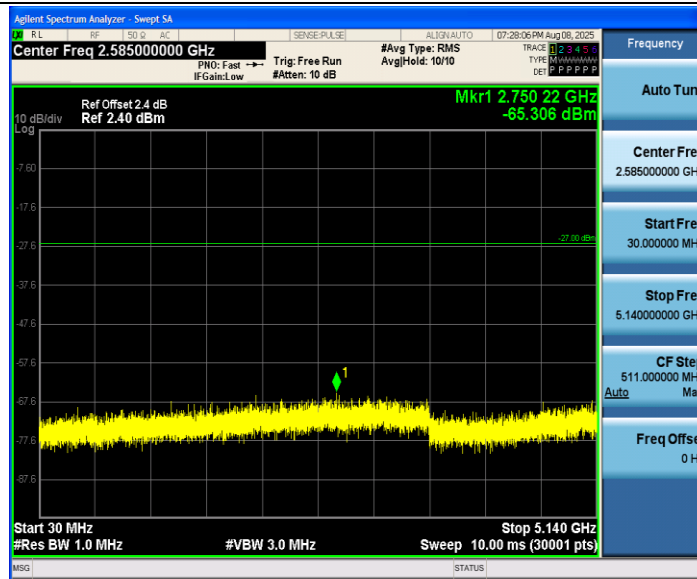
11N20SISO_Ant1_5240_30~5140



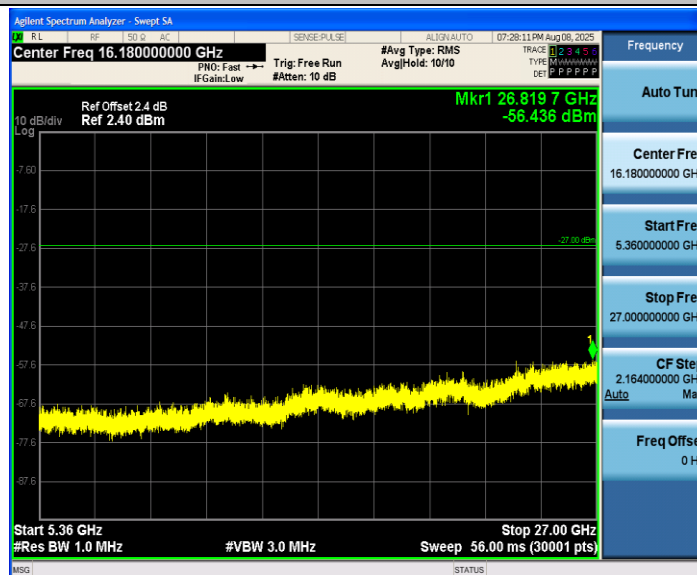
11N20SISO_Ant1_5240_5360~40000



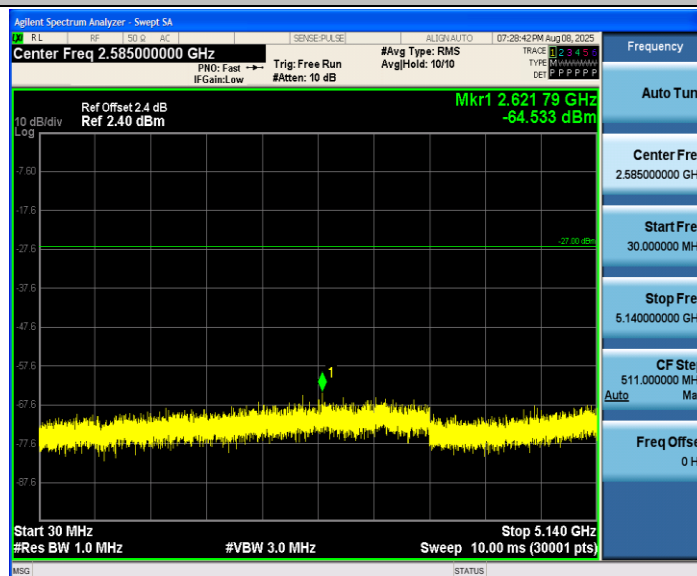
11N40SISO_Ant1_5190_30~5140



11N40SISO_Ant1_5190_5360~40000



11N40SISO_Ant1_5230_30~5140



11N40SISO_Ant1_5230_5360~40000

