

FCC Appendix RF Test Data for 5GWIFI

FCC ID : 2AOMX-KAR-990

Company : QFX Inc.

EUT : Speaker

Model Number : KAR-990

Report No. : CTA26060300503

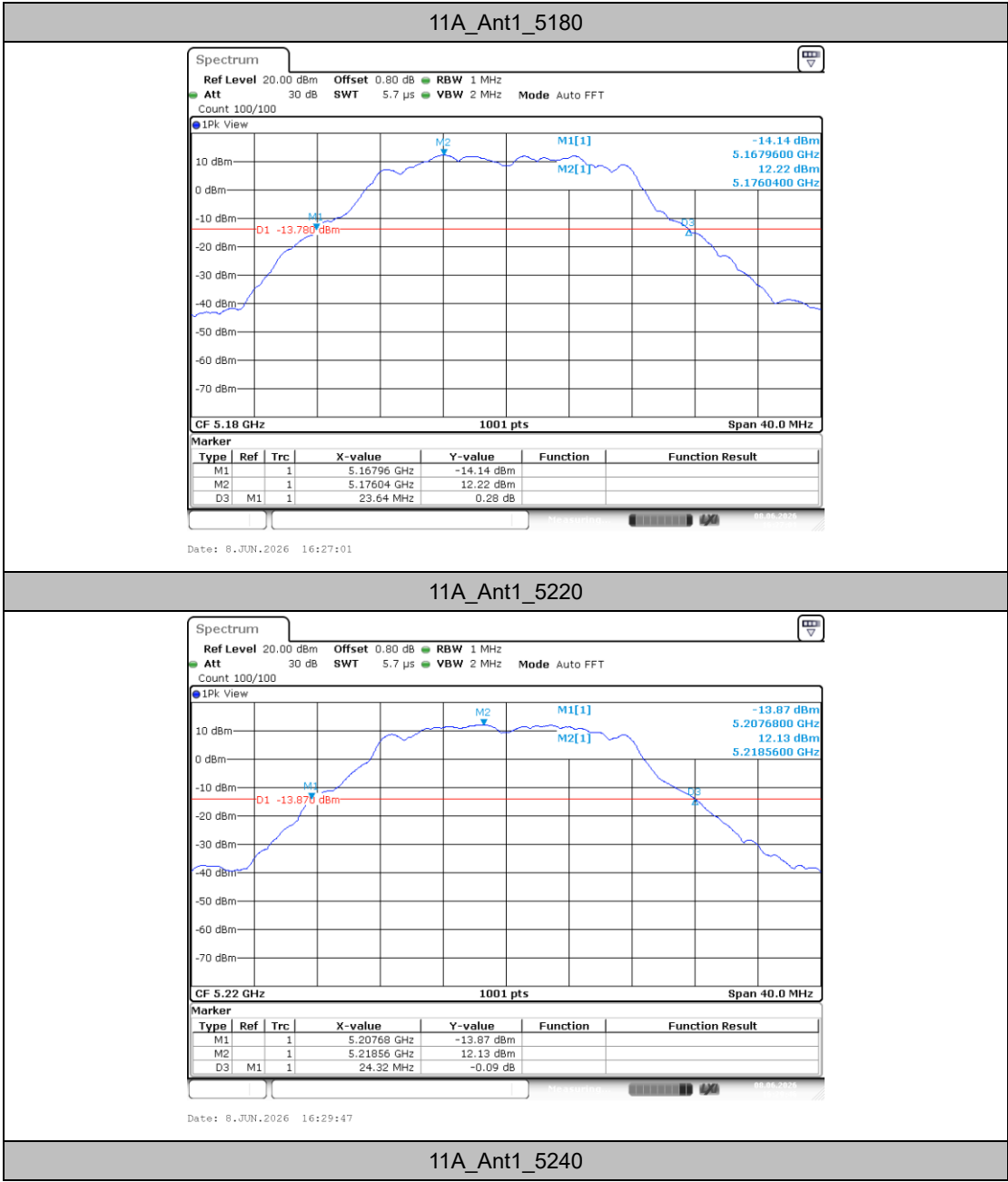
Reviewed By : Eric Wang

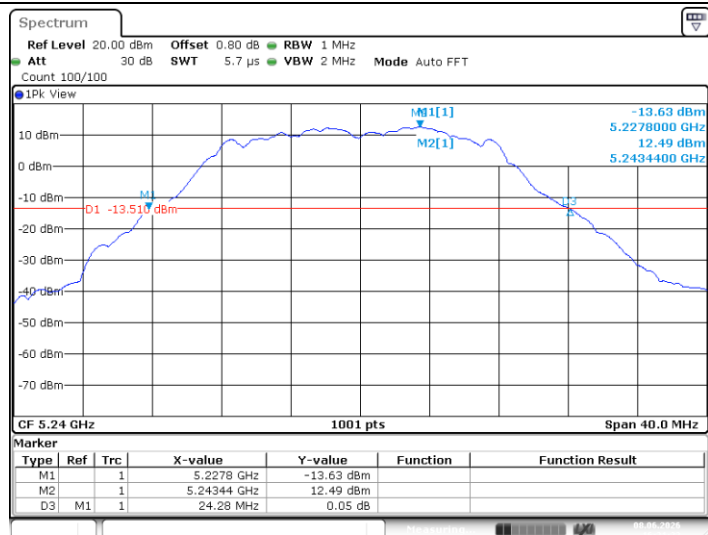
Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.64	5167.96	5191.60	---	---
		5220	24.32	5207.68	5232.00	---	---
		5240	24.28	5227.80	5252.08	---	---
		5745	24.36	5732.64	5757.00	---	---
		5785	24.44	5772.84	5797.28	---	---
		5825	23.72	5812.76	5836.48	---	---
11N20SISO	Ant1	5180	24.00	5167.88	5191.88	---	---
		5220	24.20	5208.36	5232.56	---	---
		5240	24.76	5227.04	5251.80	---	---
		5745	24.76	5732.20	5756.96	---	---
		5785	25.32	5772.32	5797.64	---	---
		5825	24.60	5812.36	5836.96	---	---
11N40SISO	Ant1	5190	44.88	5167.92	5212.80	---	---
		5230	44.24	5208.24	5252.48	---	---
		5755	46.40	5732.04	5778.44	---	---
		5795	46.00	5772.36	5818.36	---	---

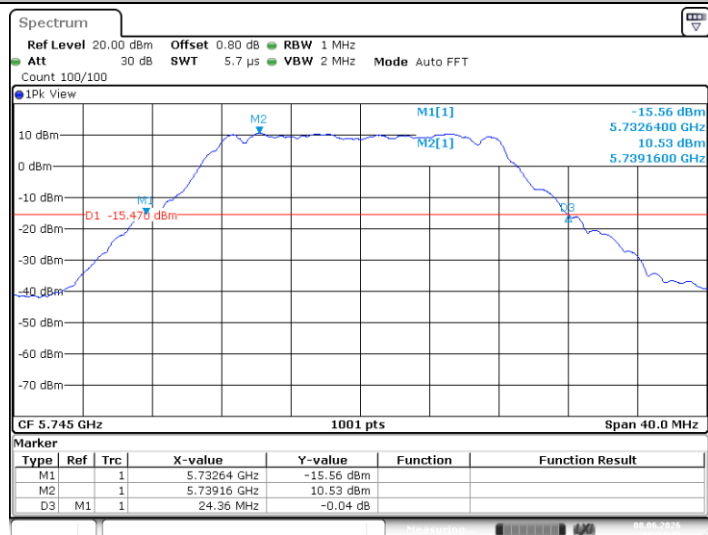
Test Graphs





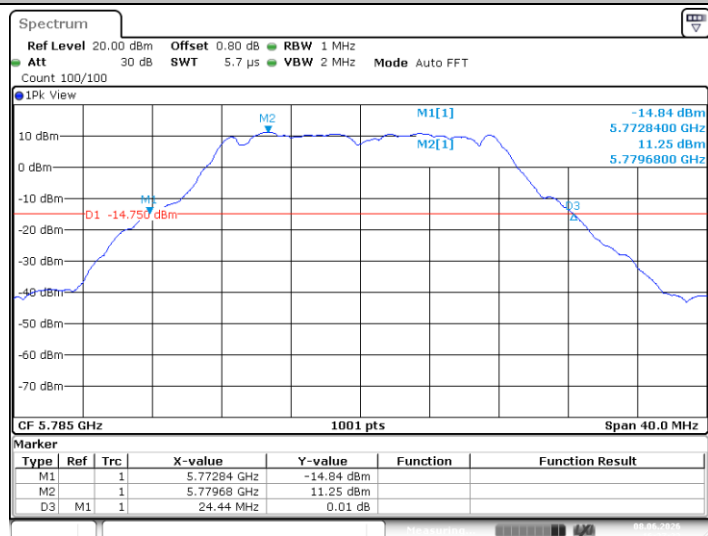
Date: 8.JUN.2026 16:31:23

11A_Ant1_5745



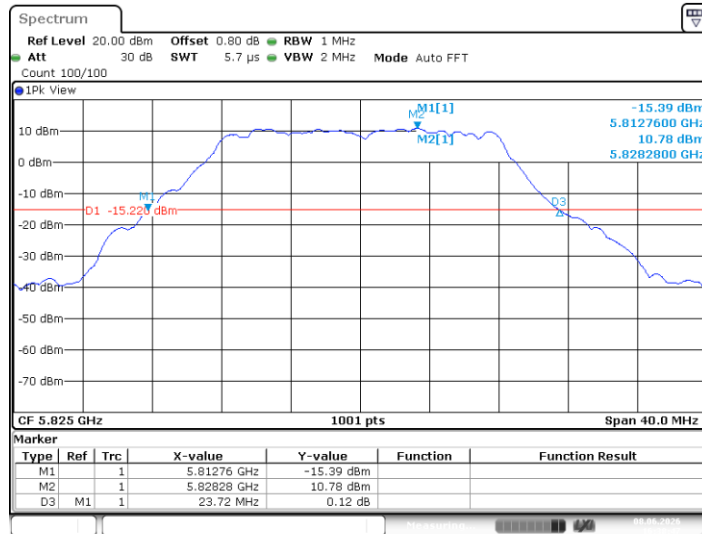
Date: 8.JUN.2026 16:34:42

11A_Ant1_5785

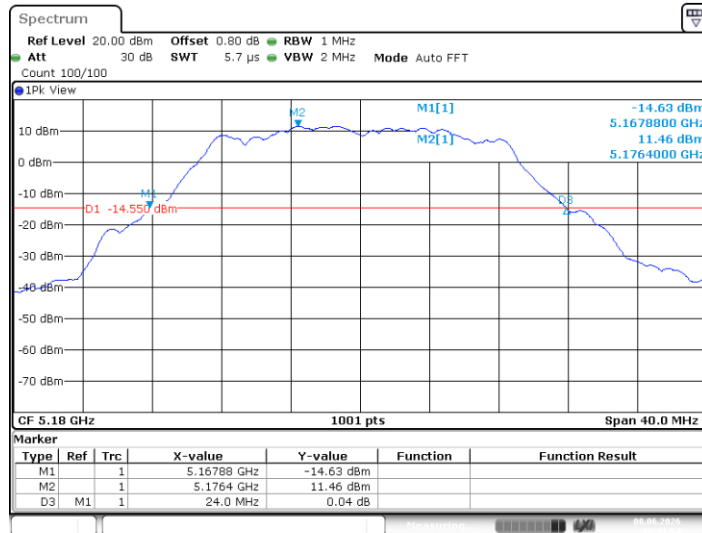


Date: 8.JUN.2026 16:37:22

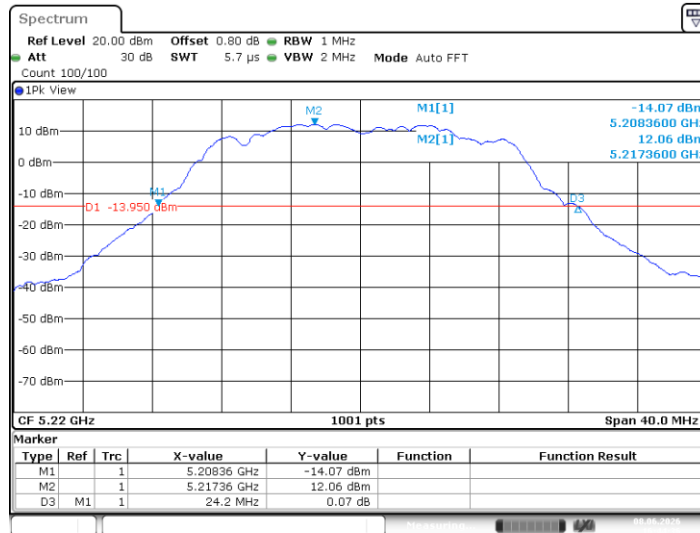
11A_Ant1_5825



11N20SISO_Ant1_5180

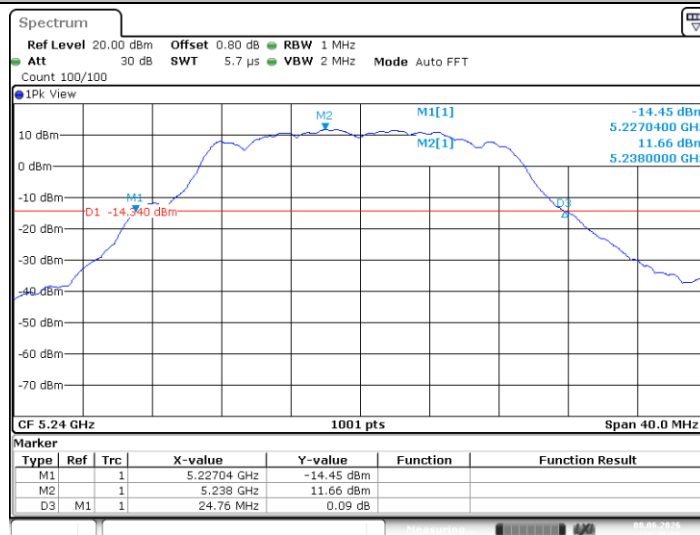


11N20SISO_Ant1_5220



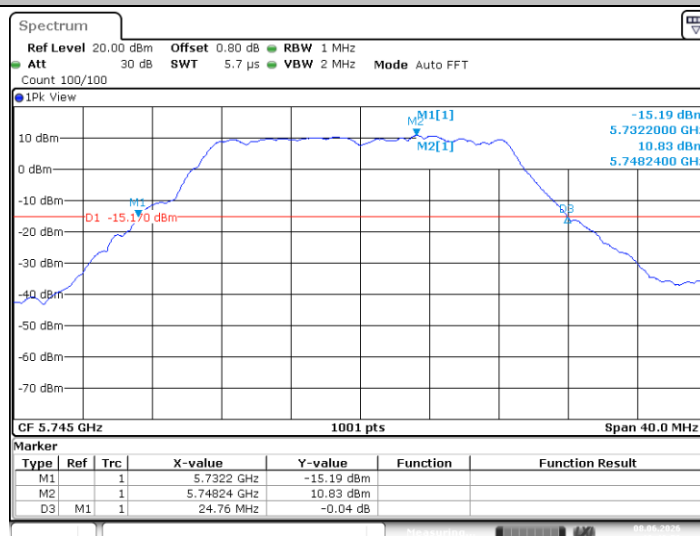
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11N20SISO_Ant1_5240



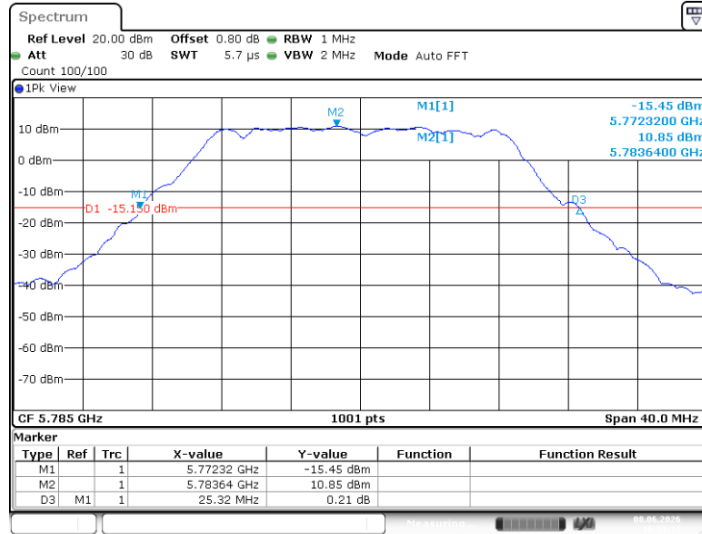
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11N20SISO_Ant1_5745



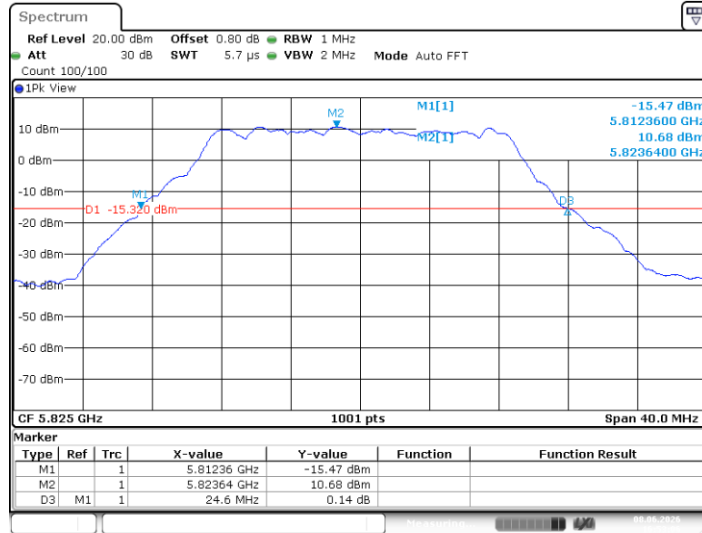
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11N20SISO_Ant1_5785



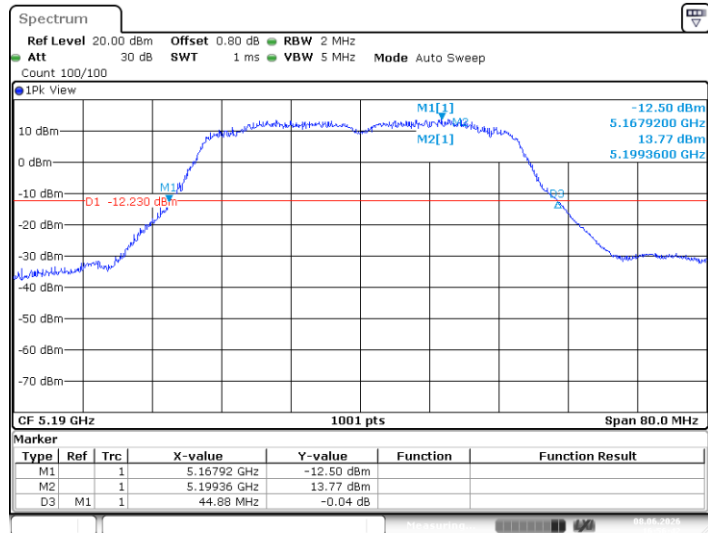
Date: 8.JUN.2026 16:51:32

11N20SISO_Ant1_5825



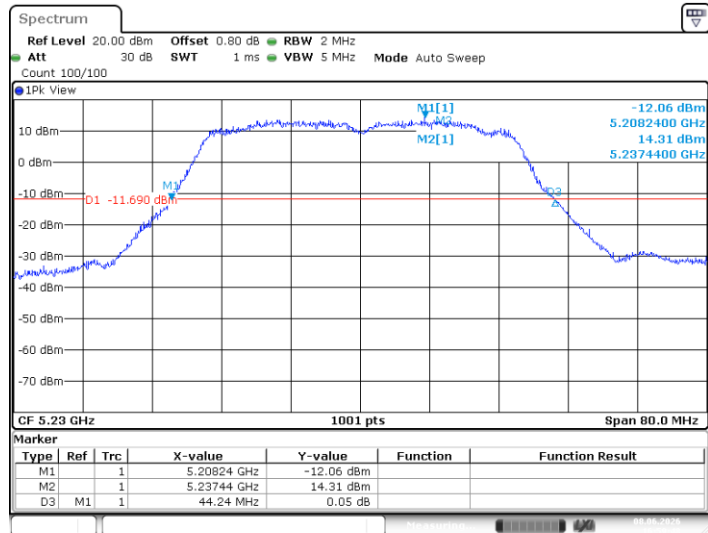
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11N40SISO_Ant1_5190



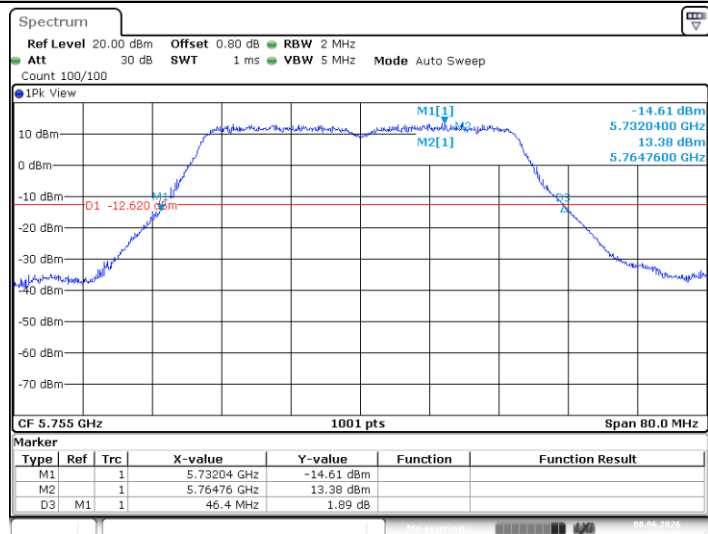
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11N40SISO_Ant1_5230



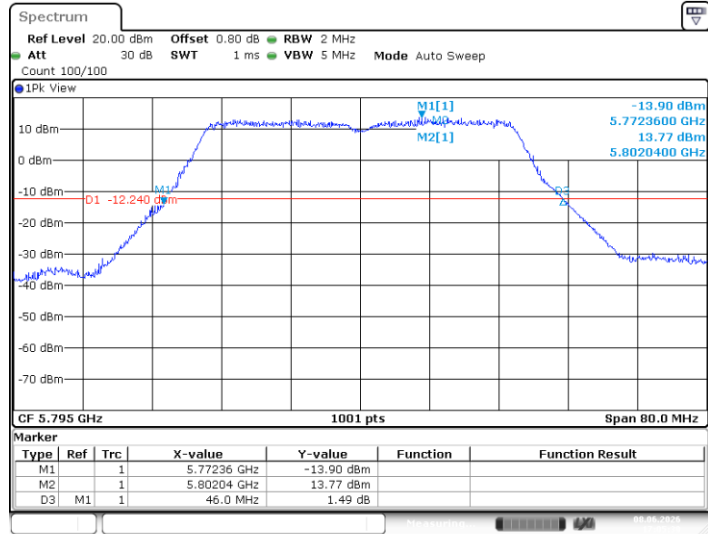
Date: 8.JUN.2026 16:59:48

11N40SISO_Ant1_5755



Date: 8.JUN.2026 17:02:44

11N40SISO_Ant1_5795



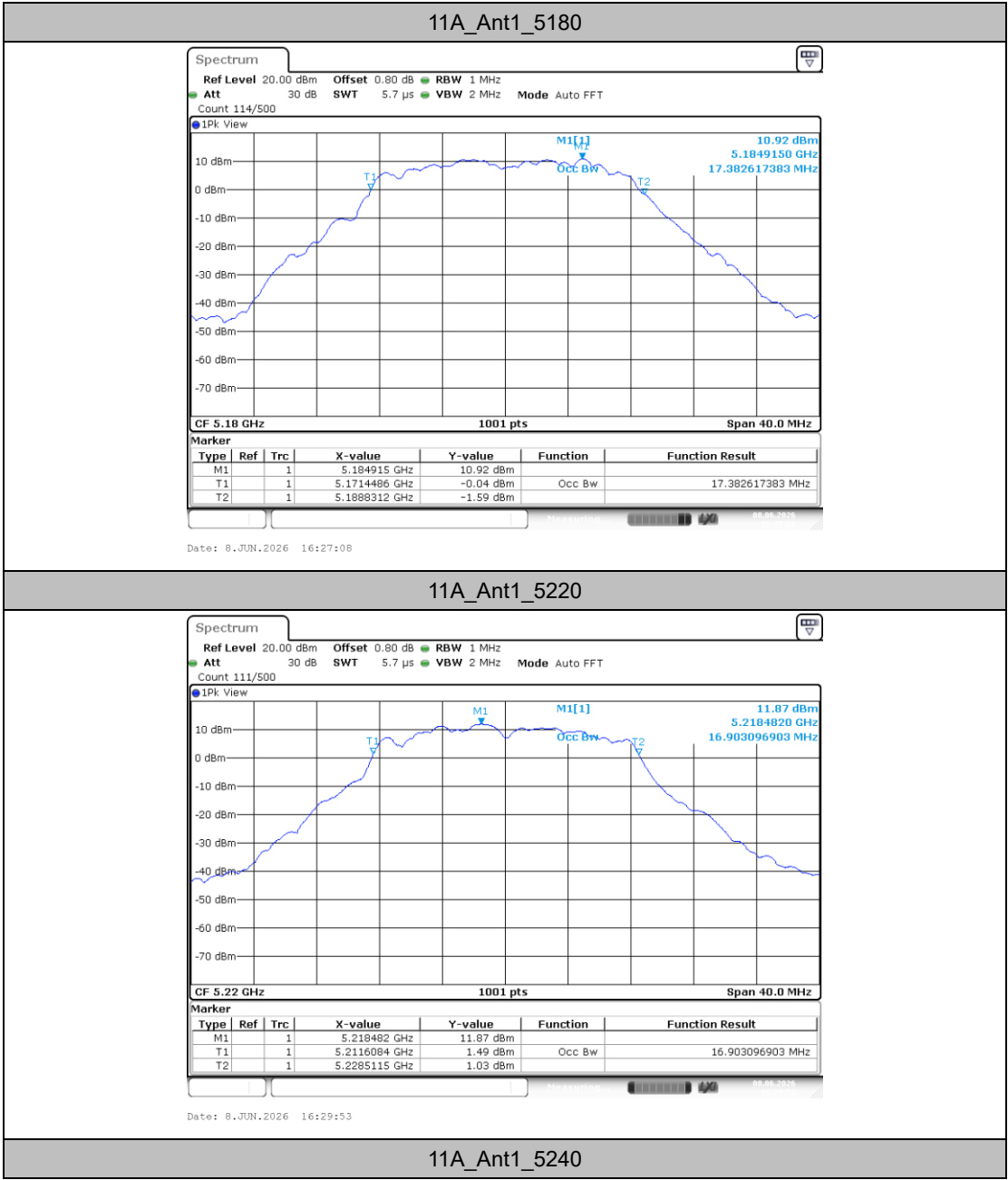
Date: 8.JUN.2026 17:05:30

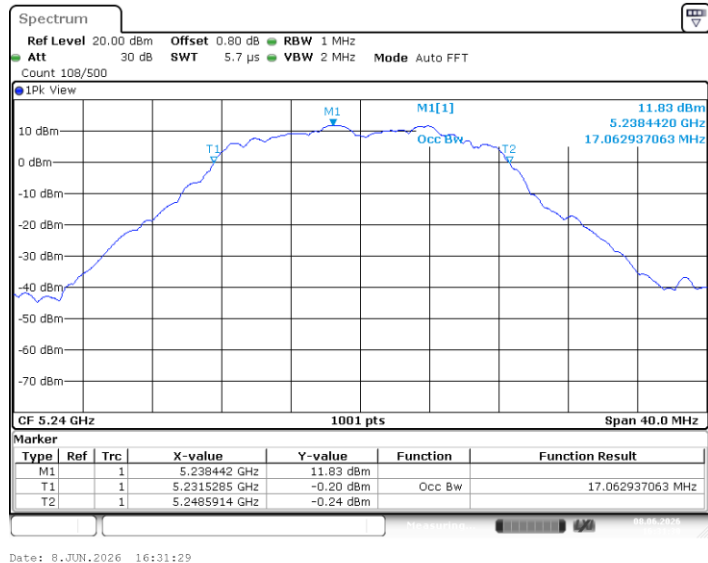
Appendix A2: Occupied channel bandwidth

Test Result

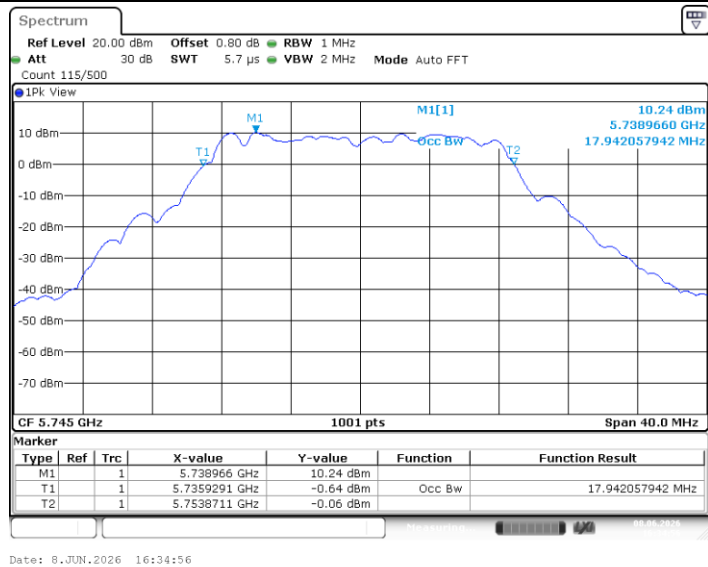
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.383	5171.4486	5188.8312	---	---
		5220	16.903	5211.6084	5228.5115	---	---
		5240	17.063	5231.5285	5248.5914	---	---
		5745	17.942	5735.9291	5753.8711	---	---
		5785	17.542	5776.2088	5793.7512	---	---
		5825	17.582	5816.0490	5833.6314	---	---
11N20SISO	Ant1	5180	18.262	5170.9291	5189.1908	---	---
		5220	18.102	5210.9291	5229.0310	---	---
		5240	18.302	5230.9690	5249.2707	---	---
		5745	18.941	5735.5295	5754.4705	---	---
		5785	18.861	5775.7692	5794.6304	---	---
		5825	18.541	5815.7692	5834.3107	---	---
11N40SISO	Ant1	5190	36.923	5171.6983	5208.6214	---	---
		5230	36.923	5211.6184	5248.5415	---	---
		5755	37.642	5736.2188	5773.8611	---	---
		5795	37.642	5776.2188	5813.8611	---	---

Test Graphs

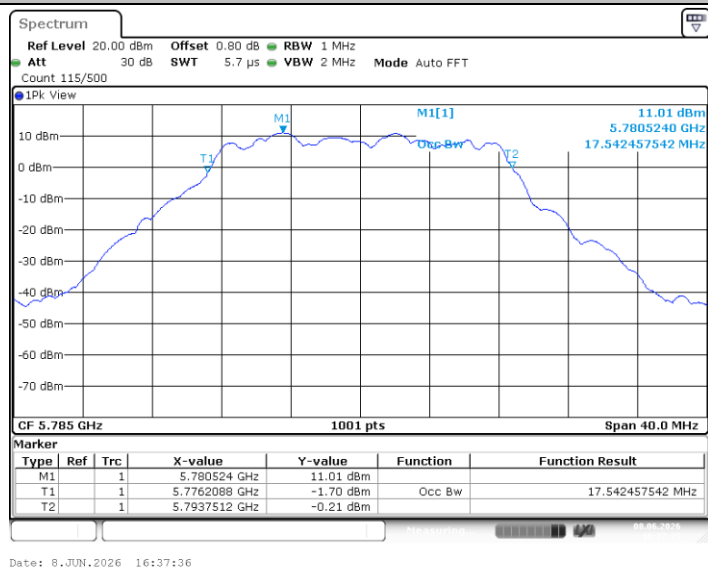




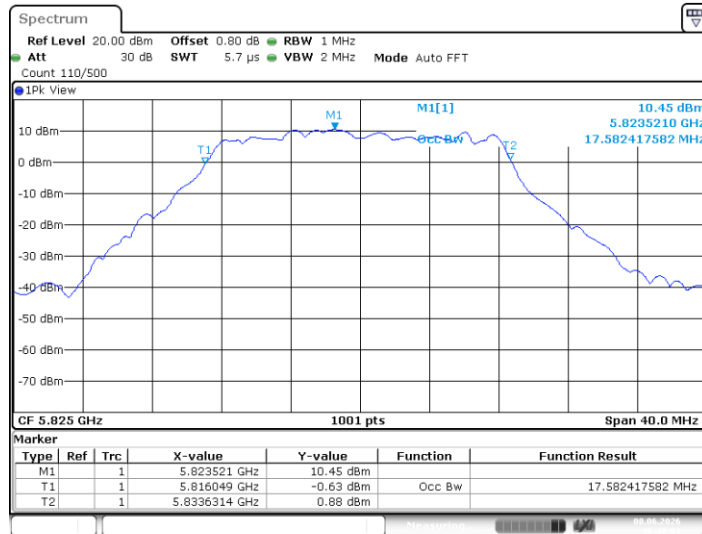
11A_Ant1_5745



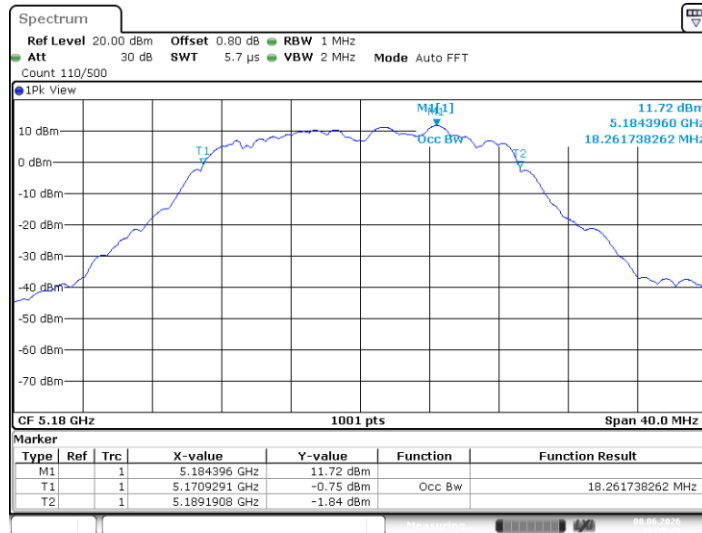
11A_Ant1_5785



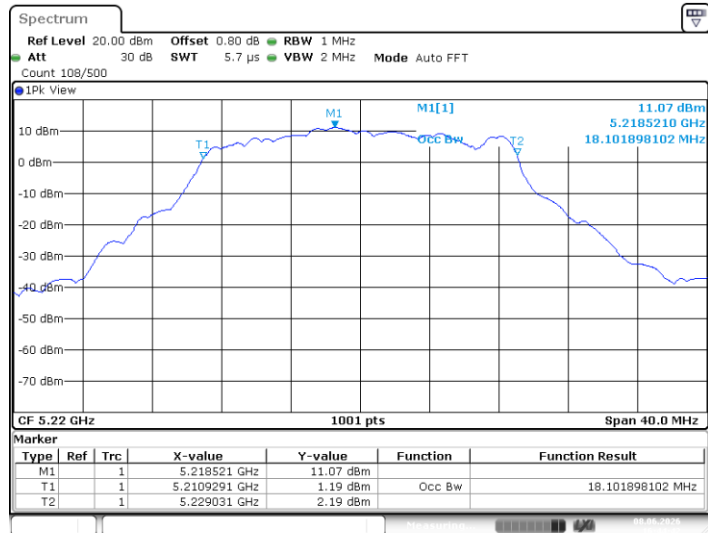
11A_Ant1_5825



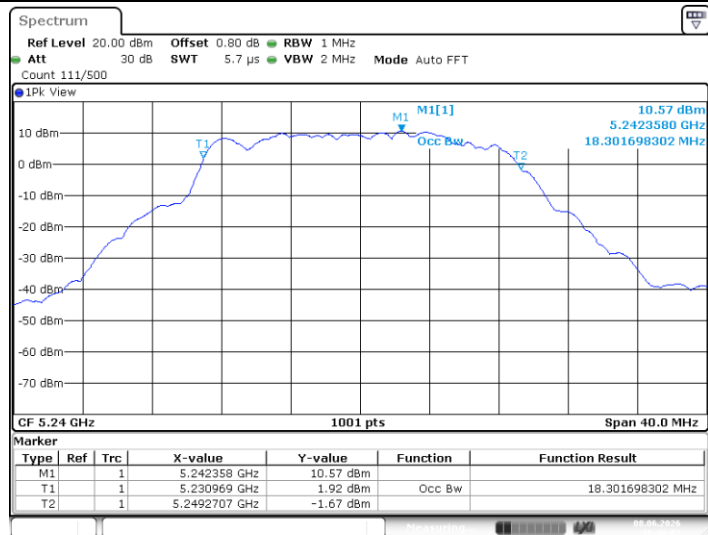
11N20SISO_Ant1_5180



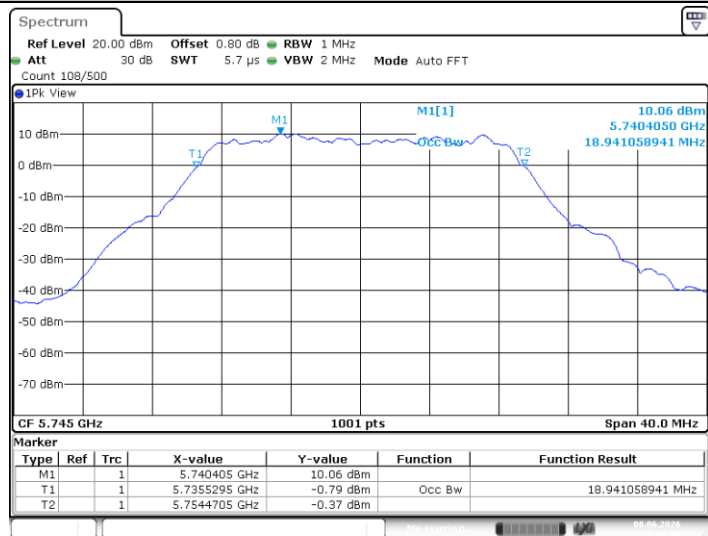
11N20SISO_Ant1_5220



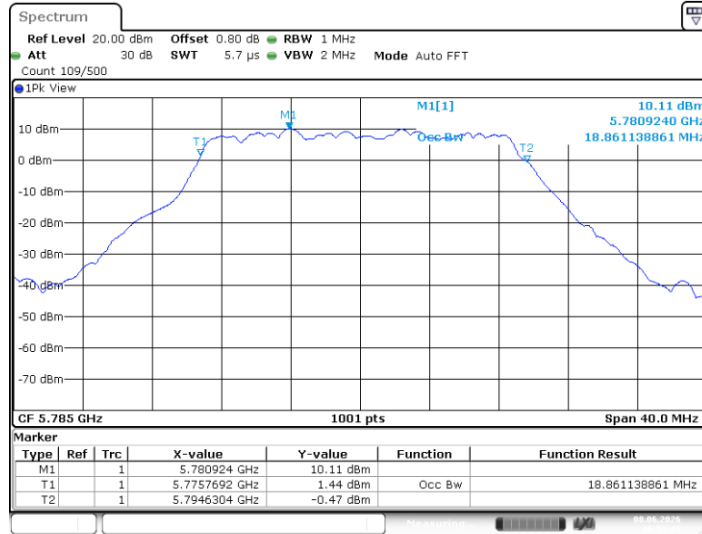
11N20SISO_Ant1_5240



11N20SISO_Ant1_5745

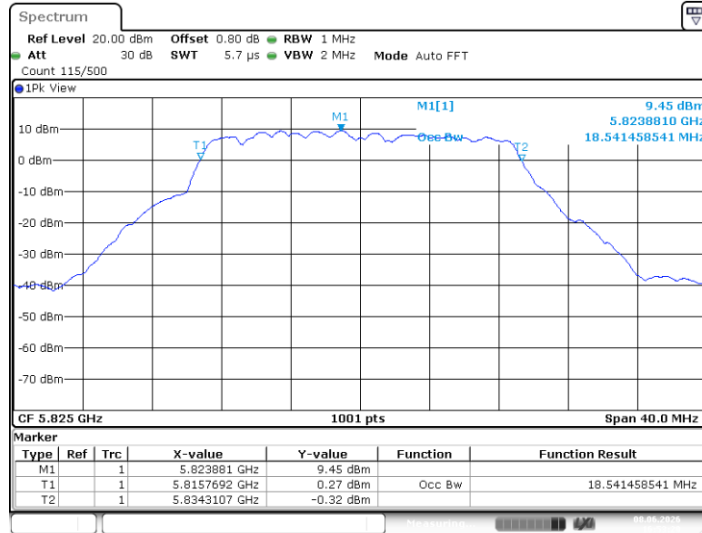


11N20SISO_Ant1_5785



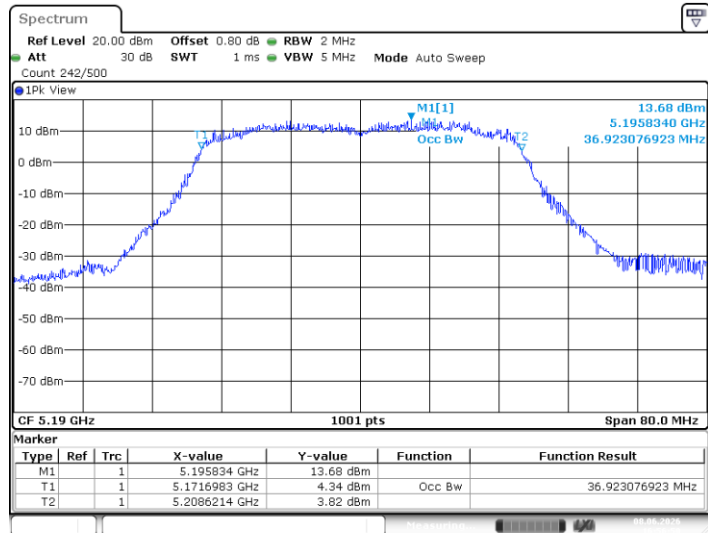
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11N20SISO_Ant1_5825



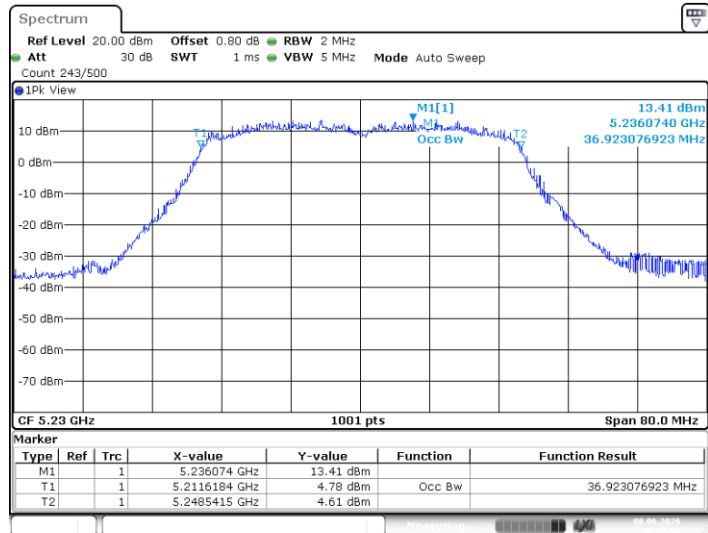
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11N40SISO_Ant1_5190



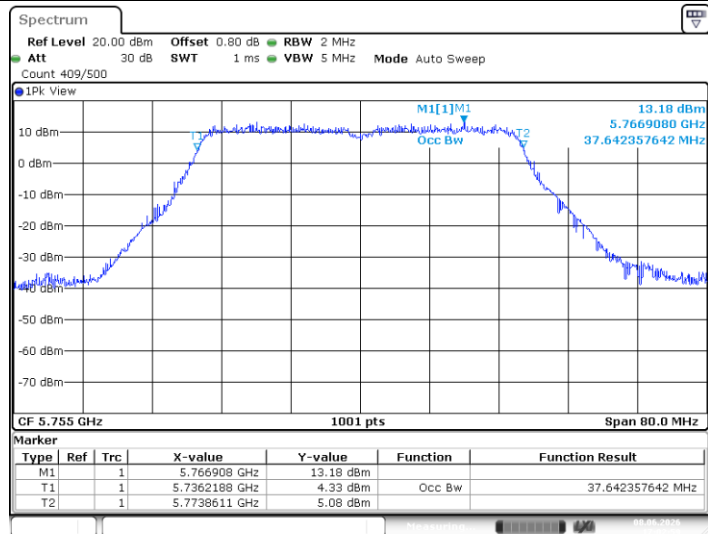
Date: 8.JUN.2026 16:56:49

11N40SISO_Ant1_5230



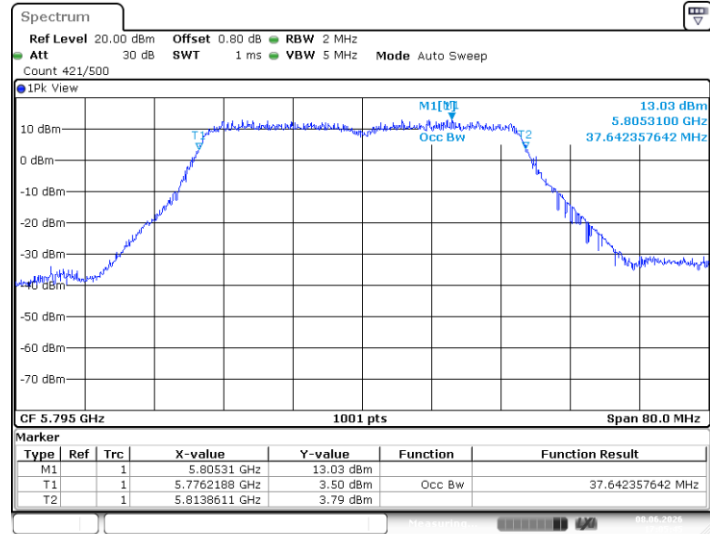
Date: 8.JUN.2026 16:59:56

11N40SISO_Ant1_5755



Date: 8.JUN.2026 17:02:59

11N40SISO_Ant1_5795



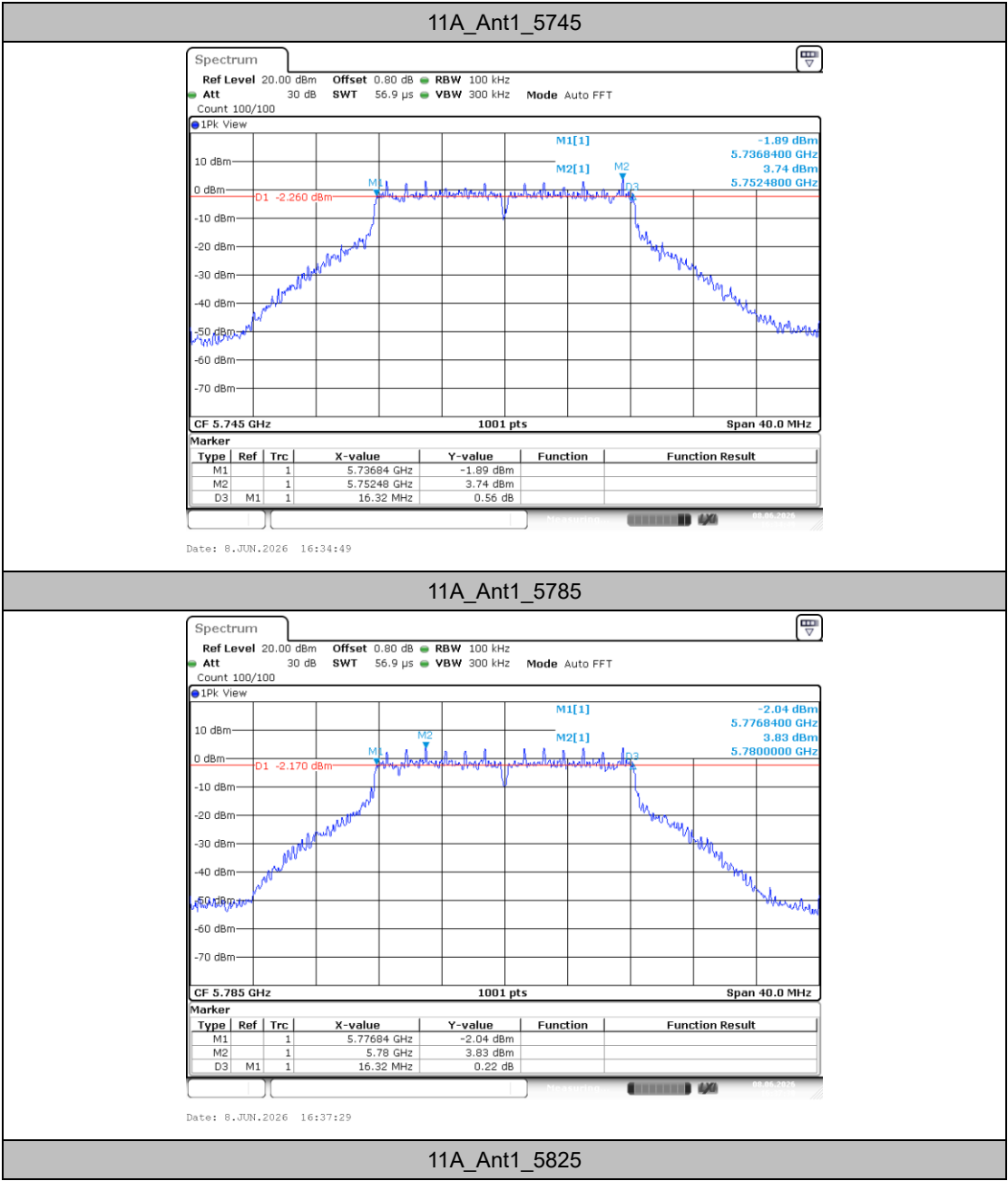
Date: 8.JUN.2026 17:05:45

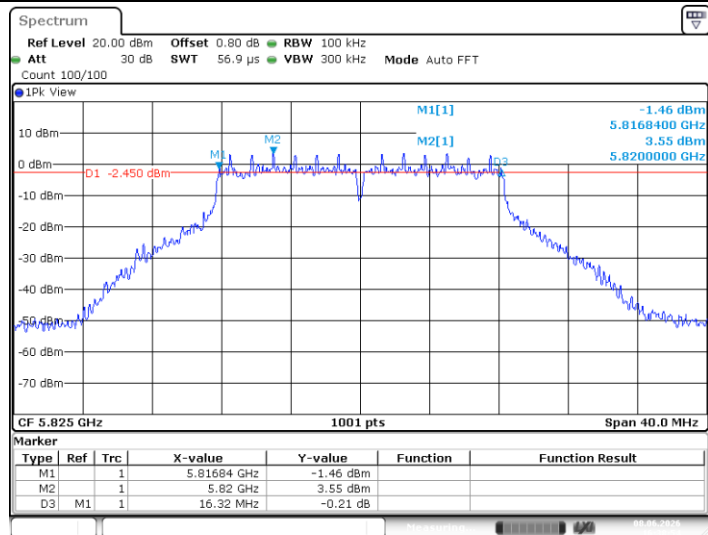
Appendix A3: Min emission bandwidth

Test Result B4

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.32	5736.84	5753.16	0.5	PASS
		5785	16.32	5776.84	5793.16	0.5	PASS
		5825	16.32	5816.84	5833.16	0.5	PASS
11N20SISO	Ant1	5745	17.56	5736.20	5753.76	0.5	PASS
		5785	17.56	5776.24	5793.80	0.5	PASS
		5825	17.52	5816.24	5833.76	0.5	PASS
11N40SISO	Ant1	5755	36.08	5736.84	5772.92	0.5	PASS
		5795	36.32	5776.84	5813.16	0.5	PASS

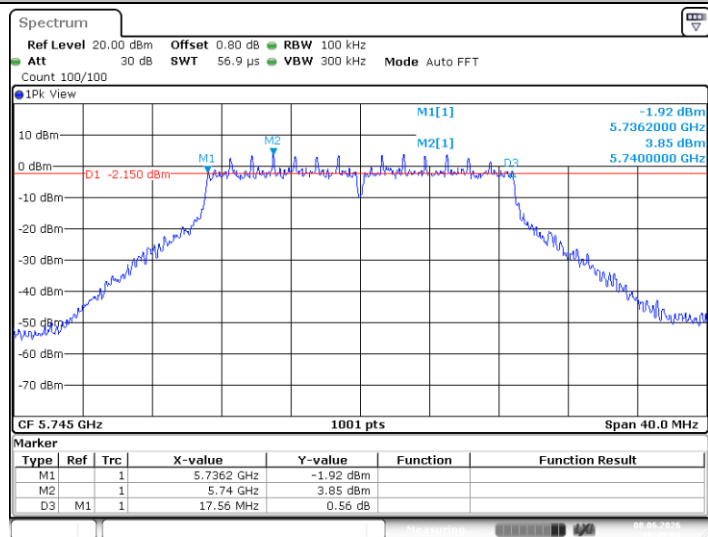
Test Graphs B4





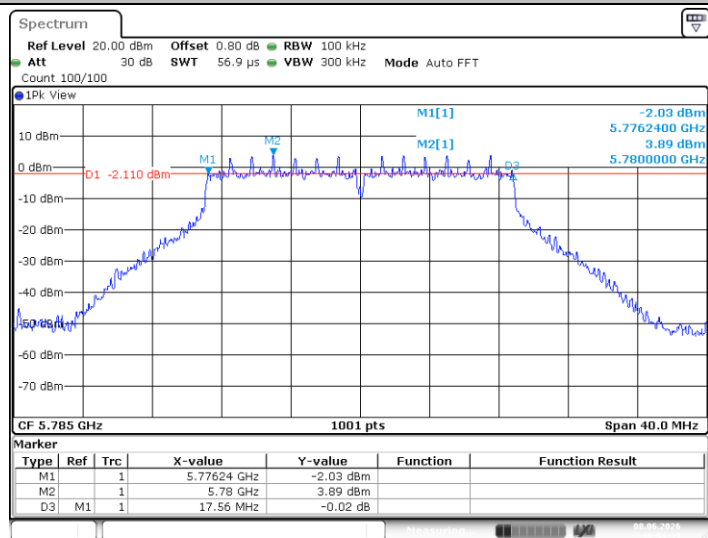
Date: 8.JUN.2026 16:38:55

11N20SISO_Ant1_5745



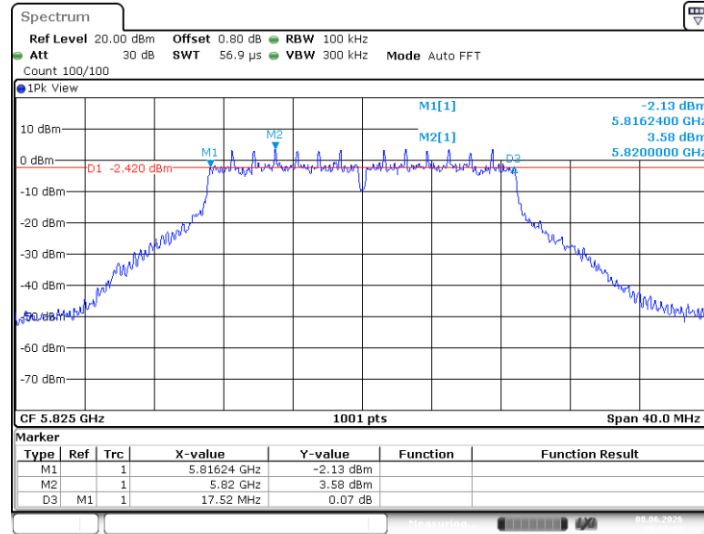
Date: 8.JUN.2026 16:49:00

11N20SISO_Ant1_5785



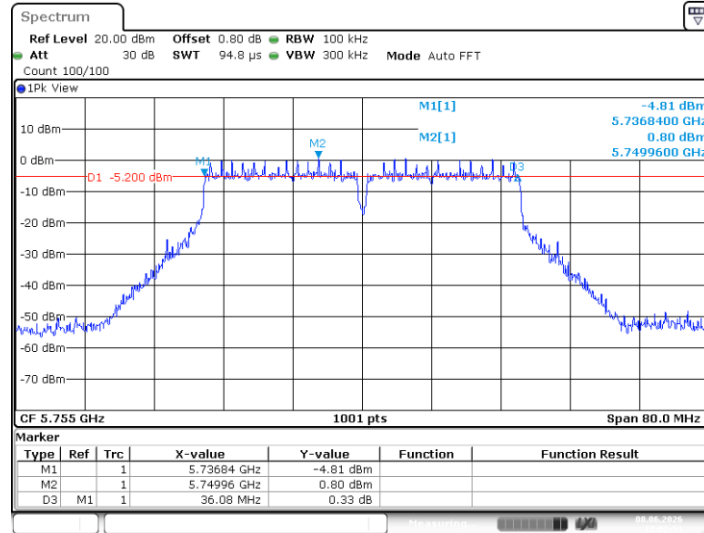
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11N20SISO_Ant1_5825



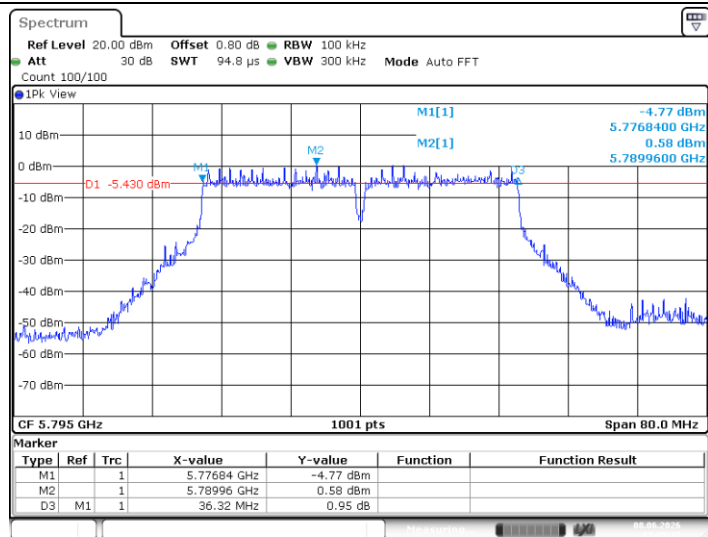
Date: 8.JUN.2026 16:53:13

11N40SISO_Ant1_5755



Date: 8.JUN.2026 17:02:51

11N40SISO_Ant1_5795



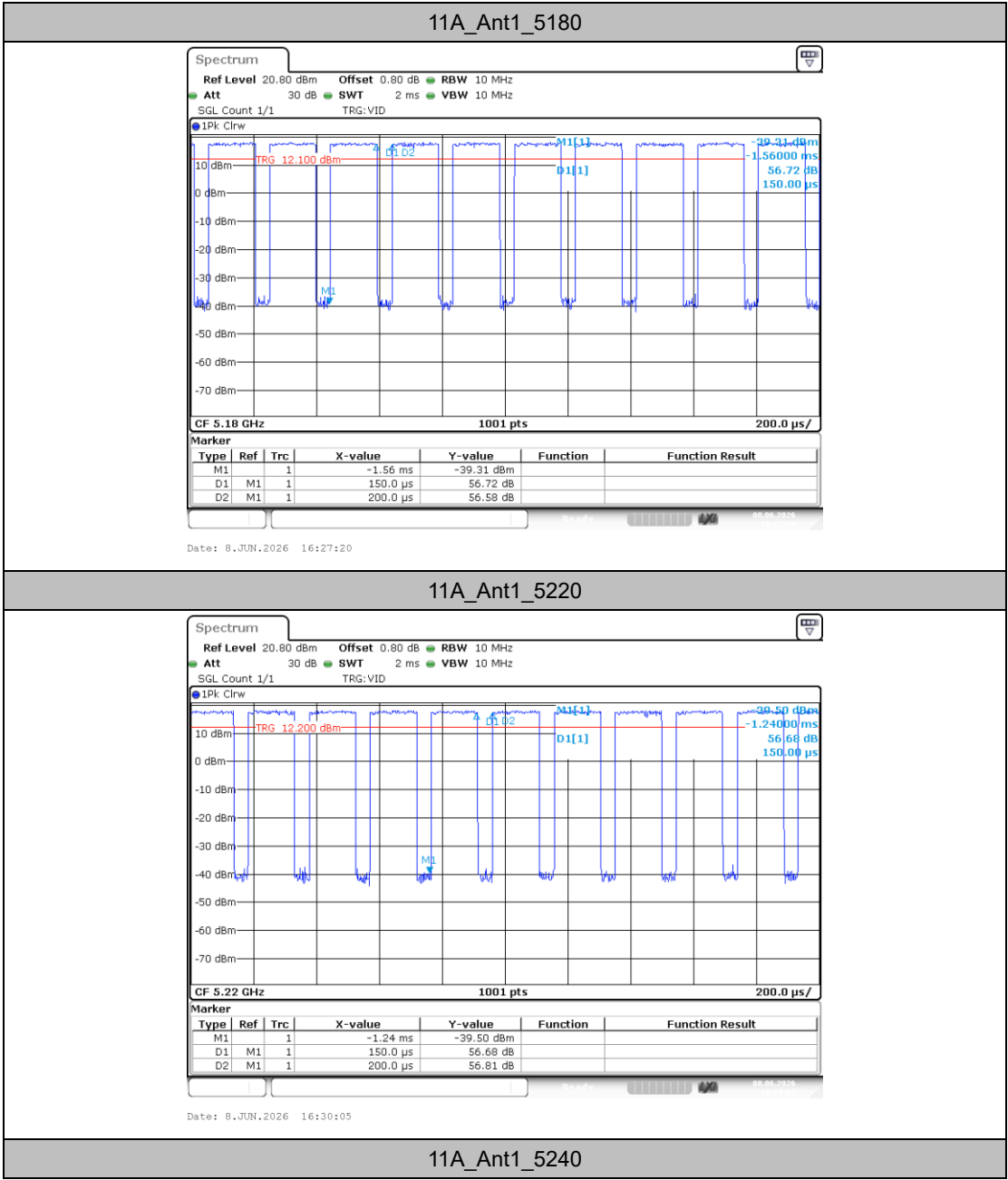
Date: 8.JUN.2026 17:05:37

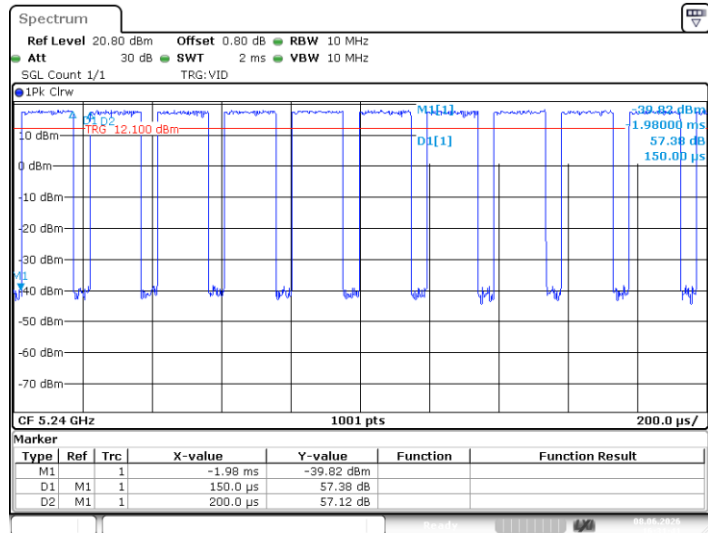
Appendix B: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	Limit	Verdict
11A	Ant1	5180	0.15	0.20	75.00	1.25	---	---
		5220	0.15	0.20	75.00	1.25	---	---
		5240	0.15	0.20	75.00	1.25	---	---
		5745	0.14	0.19	73.68	1.33	---	---
		5785	0.15	0.19	78.95	1.03	---	---
		5825	0.15	0.19	78.95	1.03	---	---
11N20SISO	Ant1	5180	0.18	0.22	81.82	0.87	---	---
		5220	0.18	0.23	78.26	1.06	---	---
		5240	0.18	0.23	78.26	1.06	---	---
		5745	0.18	0.22	81.82	0.87	---	---
		5785	0.17	0.22	77.27	1.12	---	---
		5825	0.18	0.23	78.26	1.06	---	---
11N40SISO	Ant1	5190	0.18	0.22	81.82	0.87	---	---
		5230	0.18	0.23	78.26	1.06	---	---
		5755	0.18	0.23	78.26	1.06	---	---
		5795	0.18	0.22	81.82	0.87	---	---

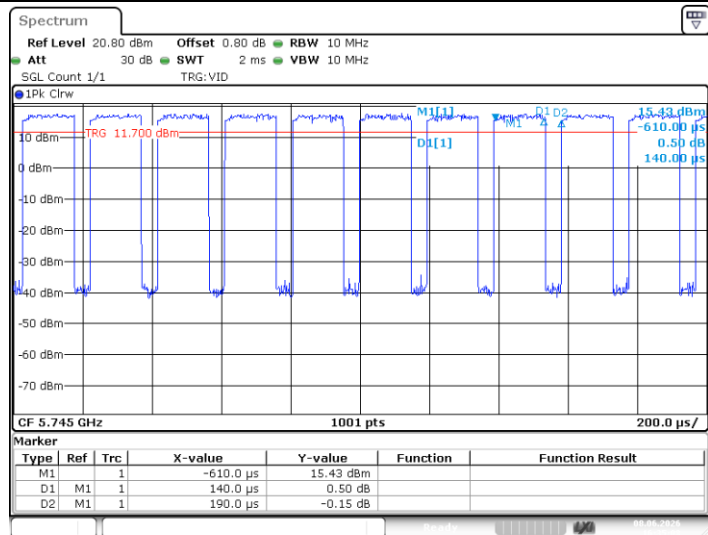
Test Graphs





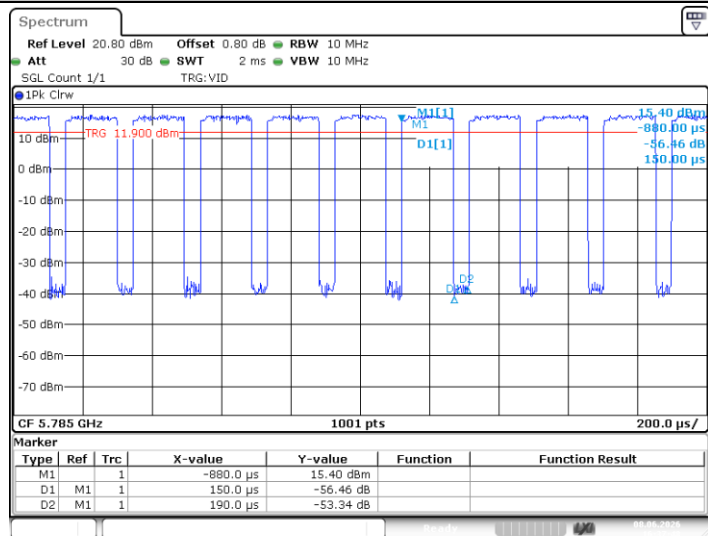
Date: 8.JUN.2026 16:31:42

11A_Ant1_5745



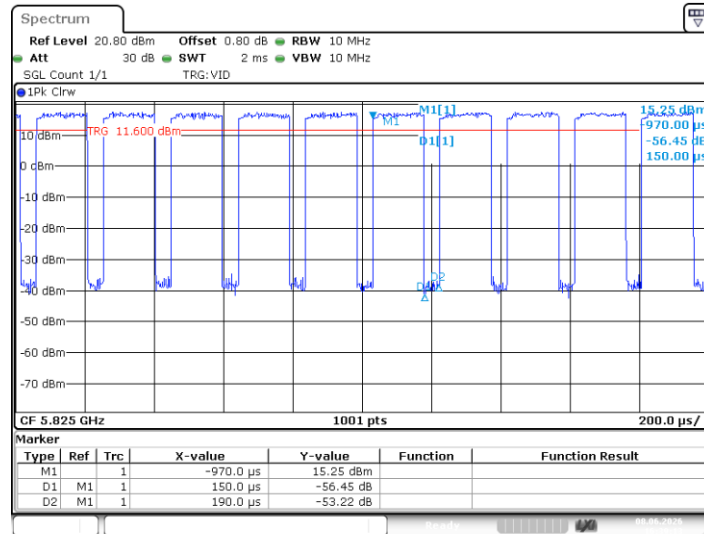
Date: 8.JUN.2026 16:35:08

11A_Ant1_5785

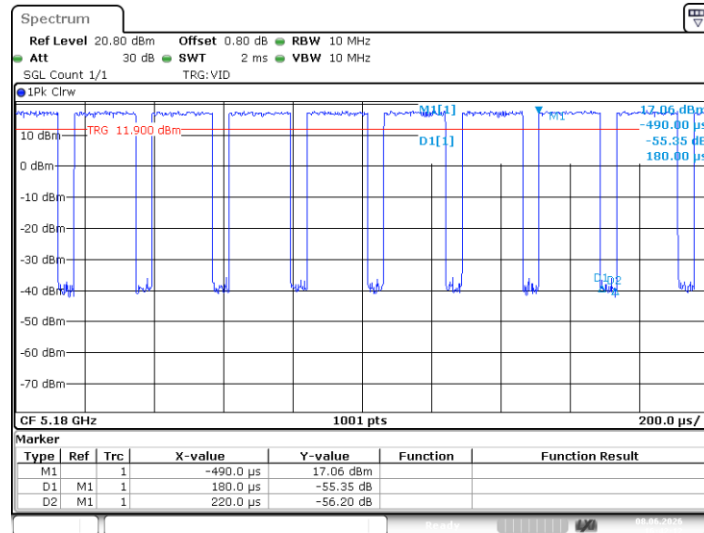


Date: 8.JUN.2026 16:37:48

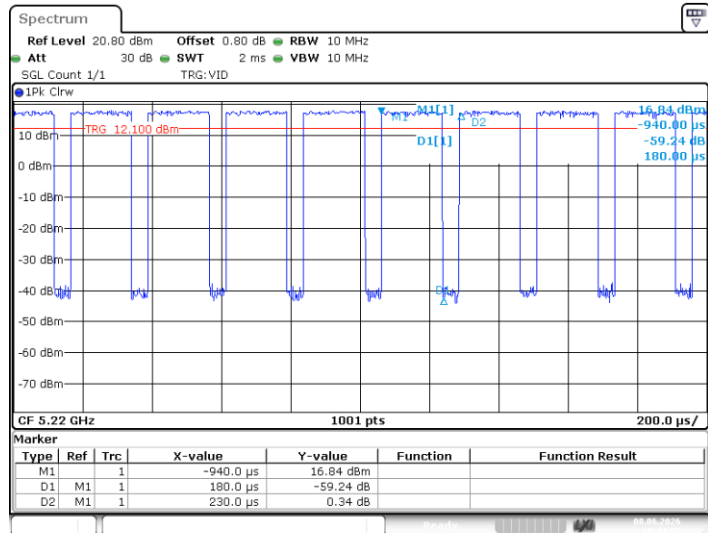
11A_Ant1_5825



11N20SISO_Ant1_5180

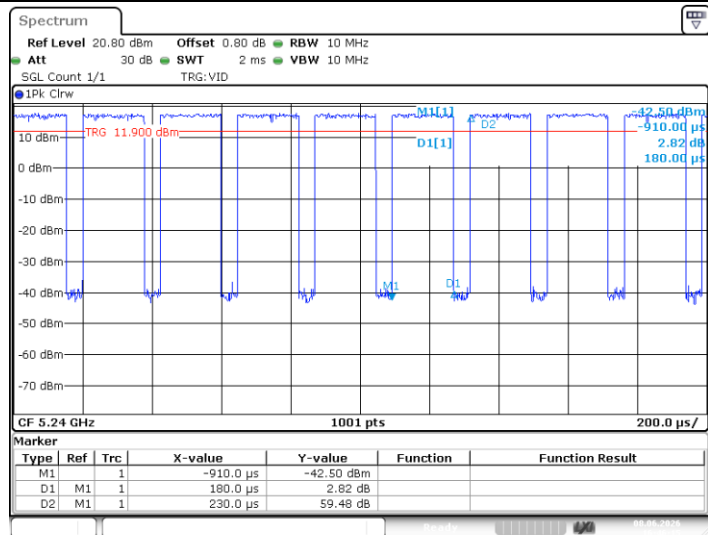


11N20SISO_Ant1_5220



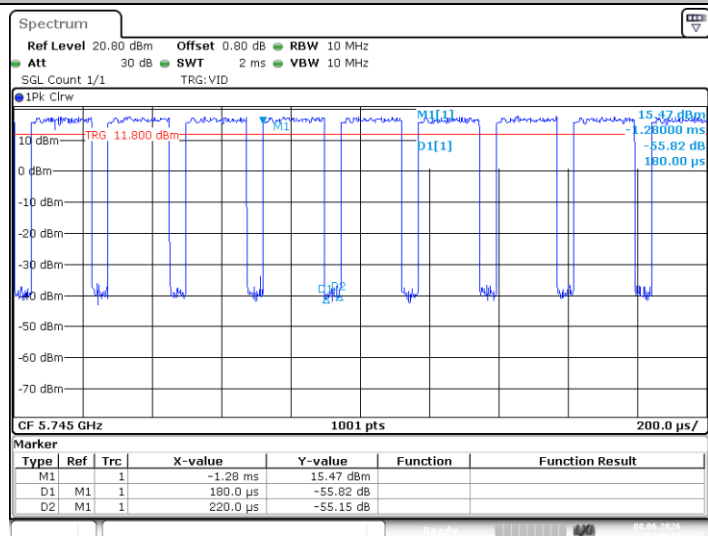
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11N20SISO_Ant1_5240



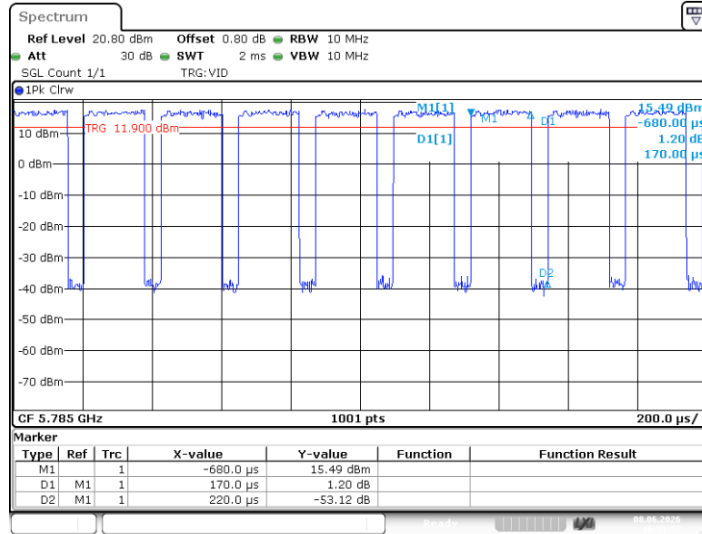
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11N20SISO_Ant1_5745



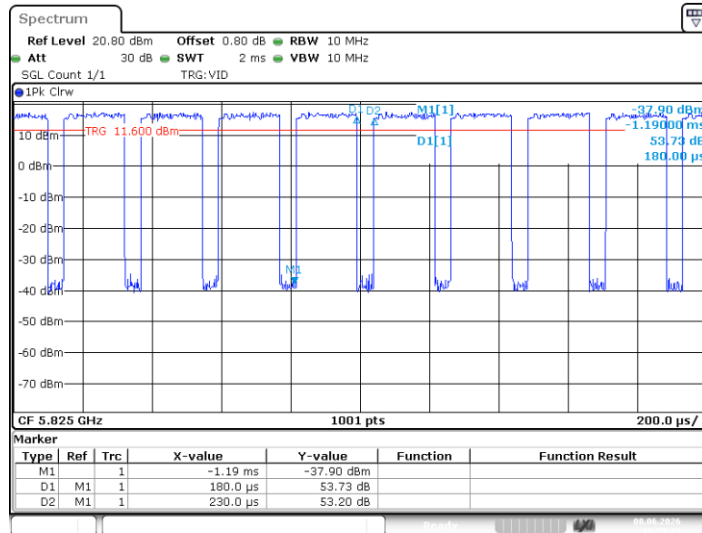
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11N20SISO_Ant1_5785



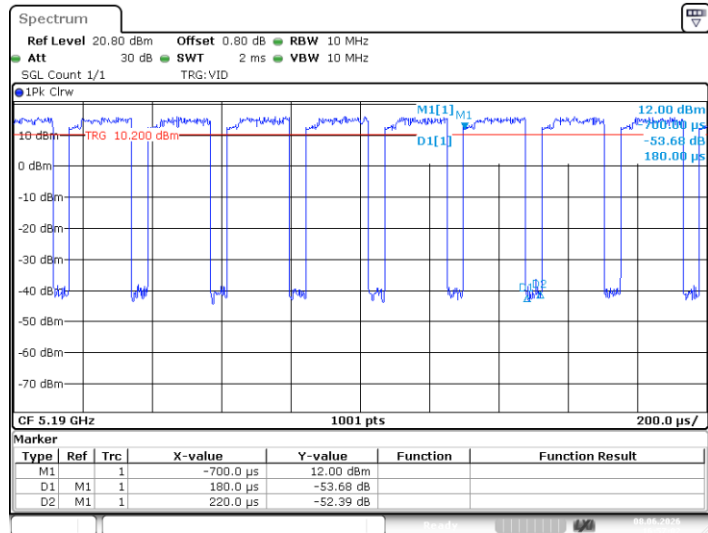
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11N20SISO_Ant1_5825



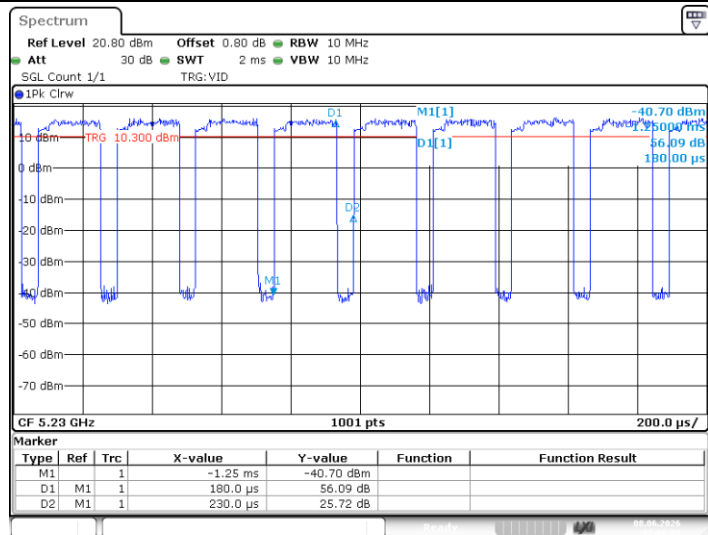
Date: 8.JUN.2026 16:53:32

11N40SISO_Ant1_5190



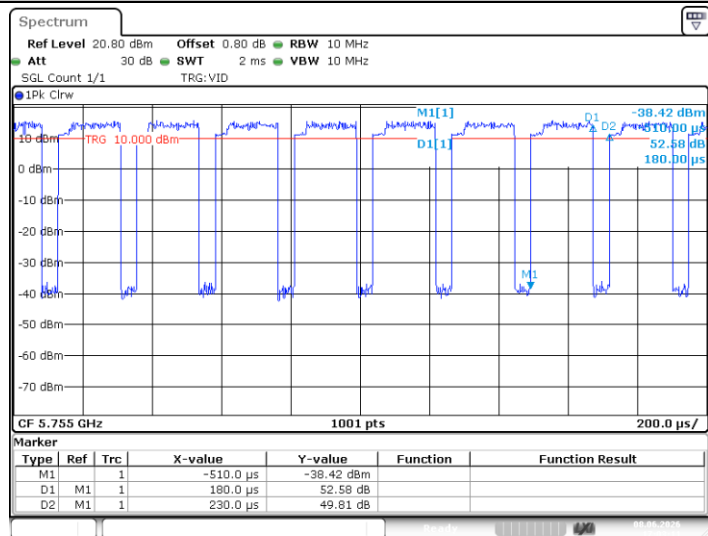
Date: 8.JUN.2026 16:57:02

11N40SISO_Ant1_5230



Date: 8.JUN.2026 17:00:08

11N40SISO_Ant1_5755



Date: 8.JUN.2026 17:03:12

Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	13.88	75.00	1.25	15.13	≤23.98	PASS
		5220	14.01	75.00	1.25	15.26	≤23.98	PASS
		5240	13.87	75.00	1.25	15.12	≤23.98	PASS
		5745	13.46	73.68	1.33	14.79	≤30.00	PASS
		5785	13.51	78.95	1.03	14.54	≤30.00	PASS
		5825	13.31	78.95	1.03	14.34	≤30.00	PASS
11N20SI SO	Ant1	5180	13.75	81.82	0.87	14.62	≤23.98	PASS
		5220	13.94	78.26	1.06	15.00	≤23.98	PASS
		5240	13.77	78.26	1.06	14.83	≤23.98	PASS
		5745	13.64	81.82	0.87	14.51	≤30.00	PASS
		5785	13.64	77.27	1.12	14.76	≤30.00	PASS
		5825	13.43	78.26	1.06	14.49	≤30.00	PASS
11N40SI SO	Ant1	5190	13.87	81.82	0.87	14.74	≤23.98	PASS
		5230	13.91	78.26	1.06	14.97	≤23.98	PASS
		5755	13.71	78.26	1.06	14.77	≤30.00	PASS
		5795	13.74	81.82	0.87	14.61	≤30.00	PASS

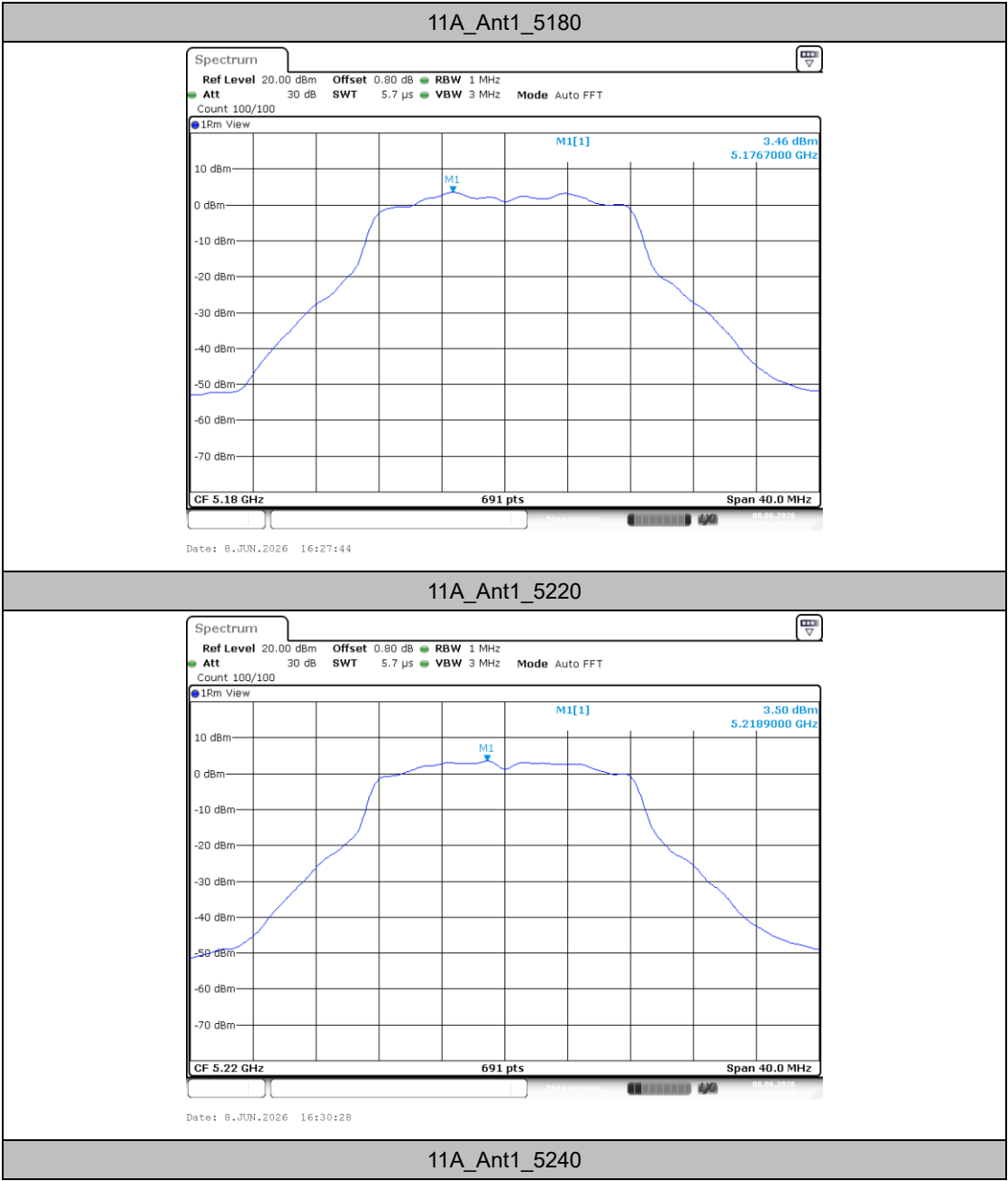
Appendix D: Maximum power spectral density

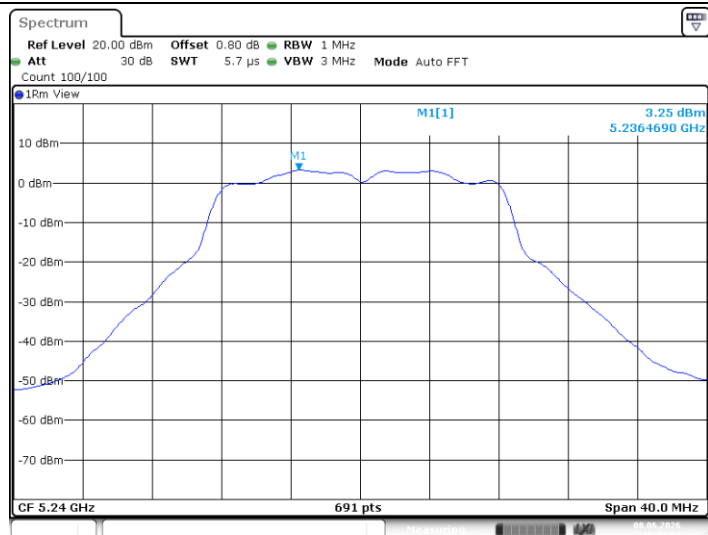
Test Result

TestMode	Antenna	Freq(MHz)	RawData [dBm/MHz]	DC Factor [dBm]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	3.46	1.25	4.71	≤11.00	PASS
		5220	3.5	1.25	4.75	≤11.00	PASS
		5240	3.25	1.25	4.50	≤11.00	PASS
		5745	-0.36	1.33	0.97	≤30.00	PASS
		5785	-0.92	1.03	0.11	≤30.00	PASS
		5825	-0.67	1.03	0.36	≤30.00	PASS
11N20SISO	Ant1	5180	2.96	0.87	3.83	≤11.00	PASS
		5220	3.04	1.06	4.10	≤11.00	PASS
		5240	3.43	1.06	4.49	≤11.00	PASS
		5745	-0.54	0.87	0.33	≤30.00	PASS
		5785	-0.5	1.12	0.62	≤30.00	PASS
		5825	-0.76	1.06	0.30	≤30.00	PASS
11N40SISO	Ant1	5190	0.31	0.87	1.18	≤11.00	PASS
		5230	0.07	1.06	1.13	≤11.00	PASS
		5755	-3.46	1.06	-2.40	≤30.00	PASS
		5795	-3.16	0.87	-2.29	≤30.00	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

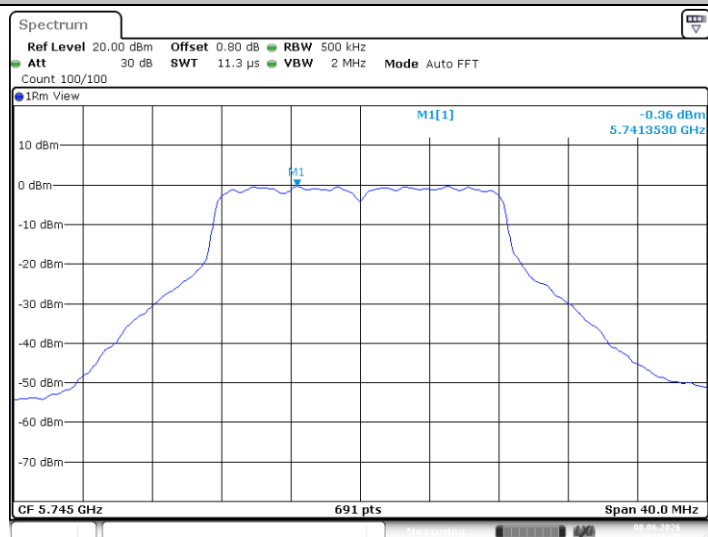
Test Graphs





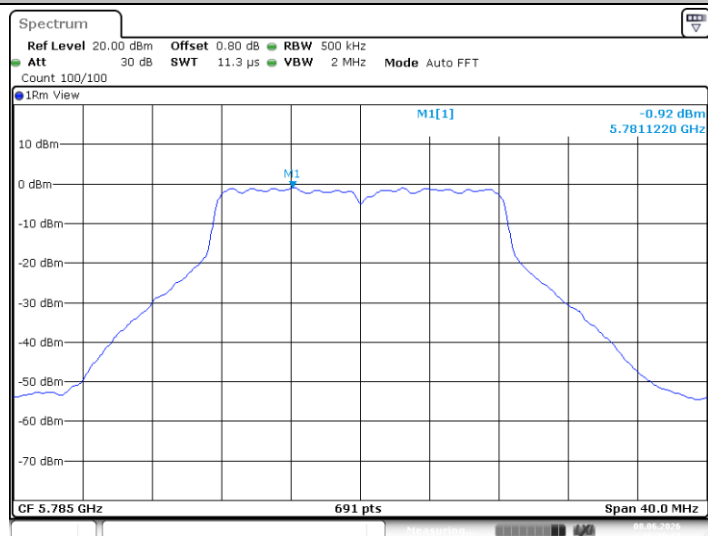
Date: 8.JUN.2026 16:32:05

11A_Ant1_5745



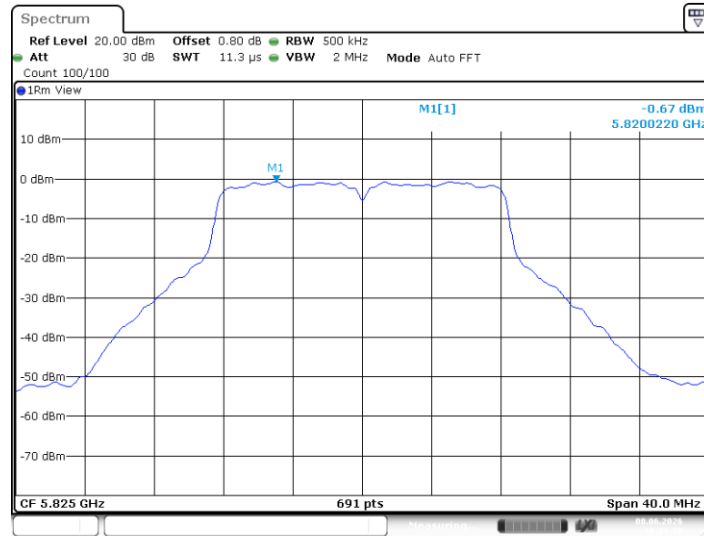
Date: 8.JUN.2026 16:35:32

11A_Ant1_5785



Date: 8.JUN.2026 16:38:12

11A_Ant1_5825



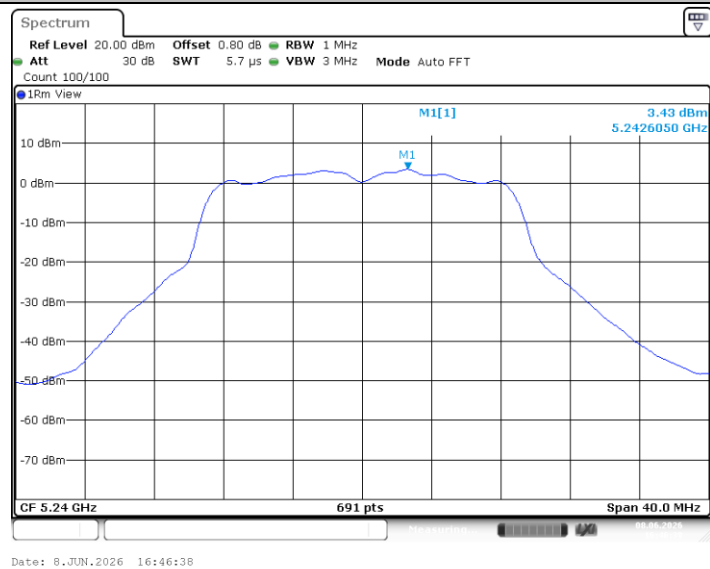
11N20SISO_Ant1_5180



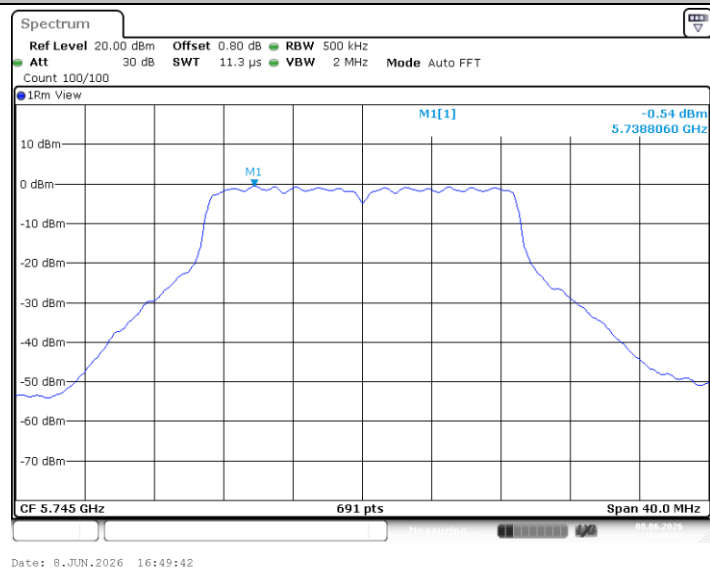
11N20SISO_Ant1_5220



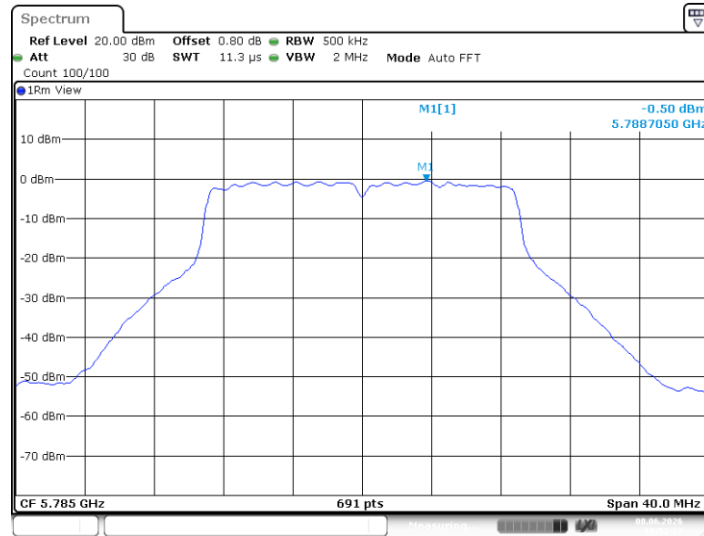
11N20SISO_Ant1_5240



11N20SISO_Ant1_5745

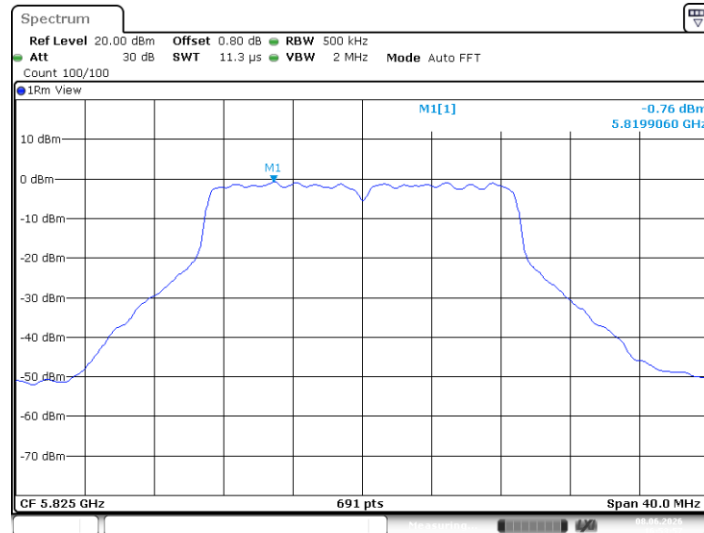


11N20SISO_Ant1_5785



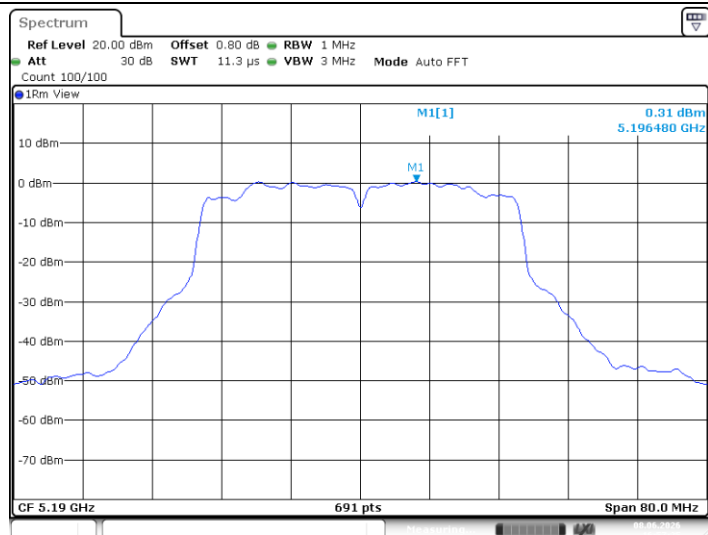
Date: 8.JUN.2026 16:52:21

11N20SISO_Ant1_5825



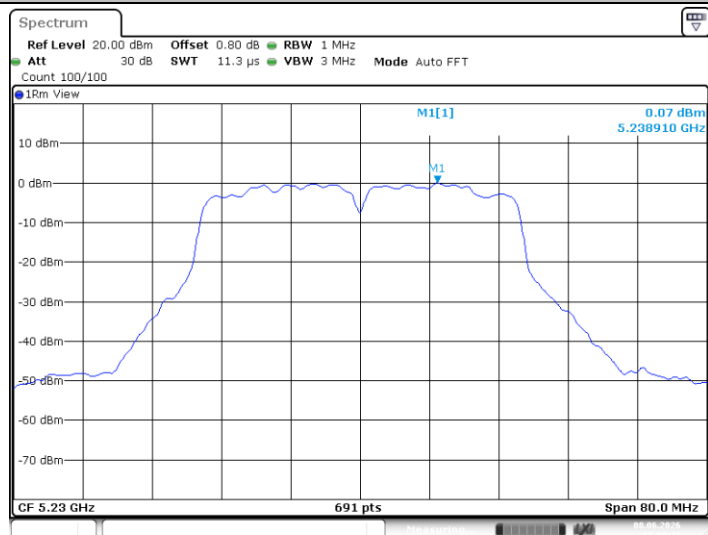
Date: 8.JUN.2026 16:53:56

11N40SISO_Ant1_5190



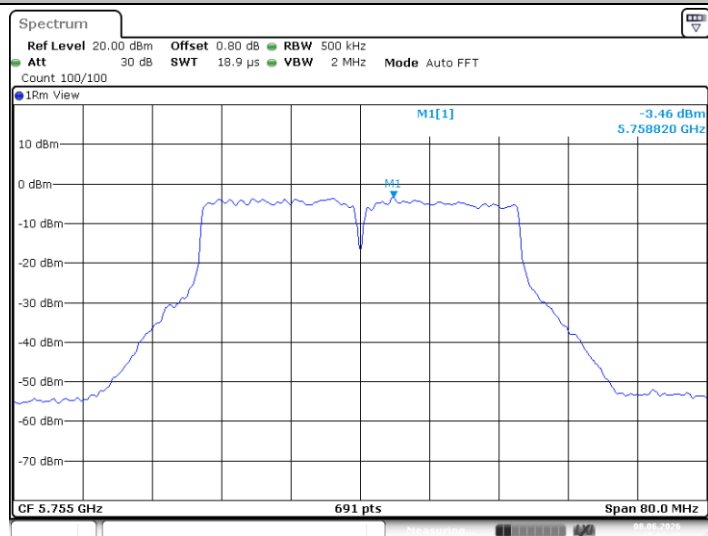
Date: 8.JUN.2026 16:57:25

11N40SISO_Ant1_5230



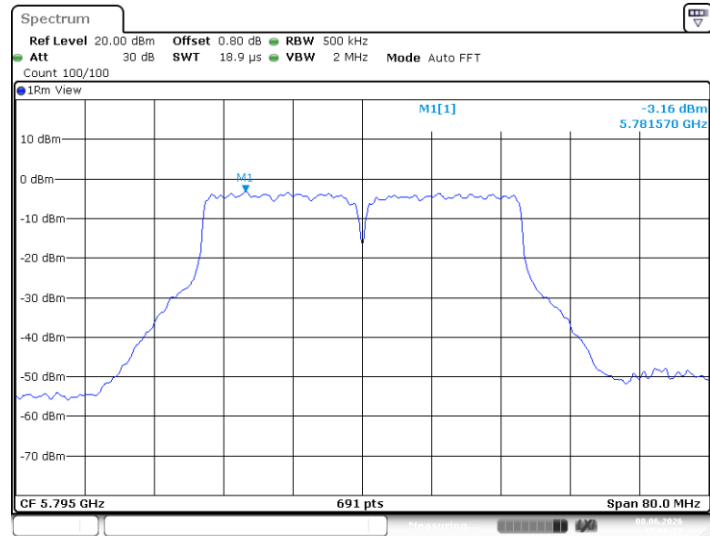
Date: 8.JUN.2026 17:00:31

11N40SISO_Ant1_5755



Date: 8.JUN.2026 17:03:35

11N40SISO_Ant1_5795



Date: 8.JUN.2026 17:06:21

Appendix E: Band edge measurements

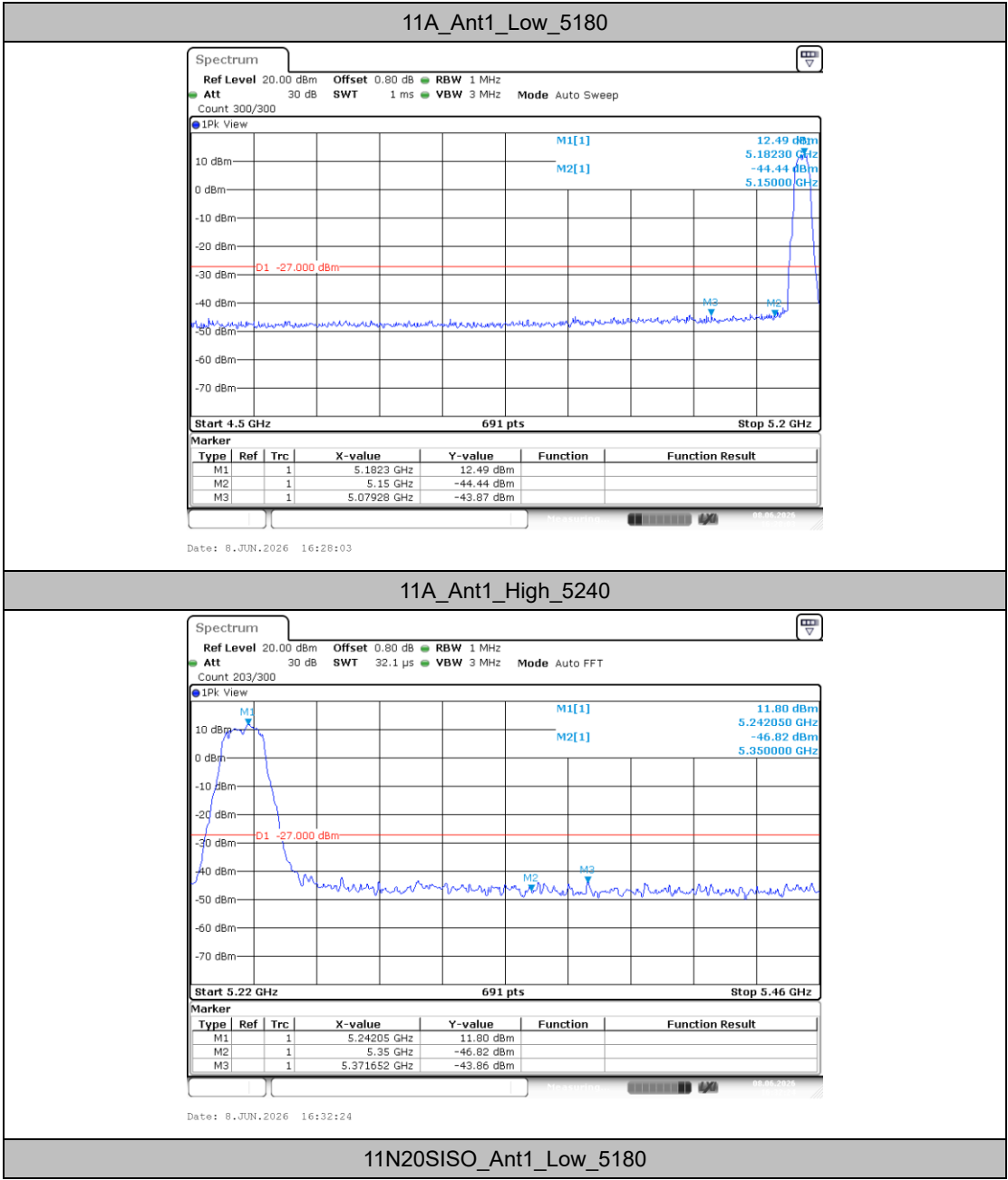
Test Result B1

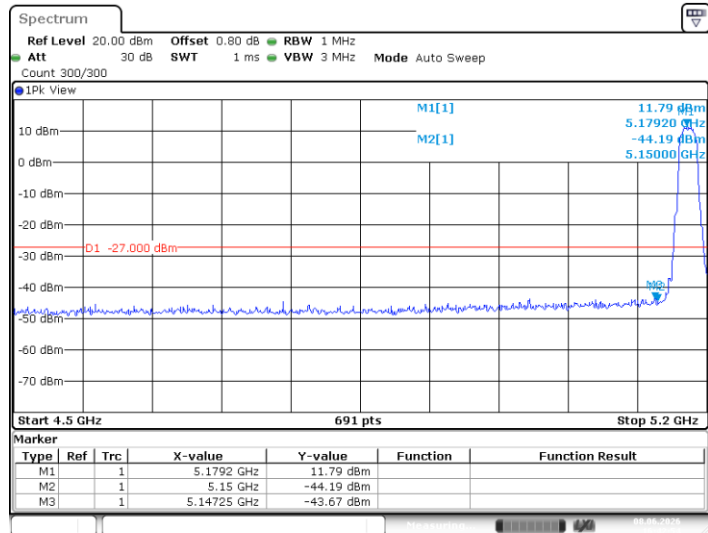
TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-43.87	≤ -27	PASS
		High	5240	-43.86	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-43.67	≤ -27	PASS
		High	5240	-43.37	≤ -27	PASS
11N40SISO	Ant1	Low	5190	-40.91	≤ -27	PASS
		High	5230	-44	≤ -27	PASS

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5645~5650	-46.19	≤ -27	PASS
				5650~5700	-46.56	≤ -26.88	PASS
				5700~5720	-44.67	≤ 11.49	PASS
				5720~5725	-45.1	≤ 15.98	PASS
		High	5825	5850~5855	-42.24	≤ 15.65	PASS
				5855~5875	-43.91	≤ 10.18	PASS
				5875~5925	-46.05	≤ -26.87	PASS
				5925~5935	-44.27	≤ -27	PASS
11N20SISO	Ant1	Low	5745	5645~5650	-45.51	≤ -27	PASS
				5650~5700	-45.69	≤ -26.01	PASS
				5700~5720	-44.56	≤ 10.33	PASS
				5720~5725	-44.79	≤ 15.98	PASS
		High	5825	5850~5855	-42.78	≤ 15.65	PASS
				5855~5875	-44.29	≤ 10.07	PASS
				5875~5925	-43.76	≤ -25.42	PASS
				5925~5935	-44.44	≤ -27	PASS
11N40SISO	Ant1	Low	5755	5645~5650	-44.84	≤ -27	PASS
				5650~5700	-46.21	≤ -26.94	PASS
				5700~5720	-43.53	≤ 10.05	PASS
				5720~5725	-44.94	≤ 15.90	PASS
		High	5795	5850~5855	-44.96	≤ 15.85	PASS
				5855~5875	-43.22	≤ 10.01	PASS
				5875~5925	-46.87	≤ -26.97	PASS
				5925~5935	-44.76	≤ -27	PASS

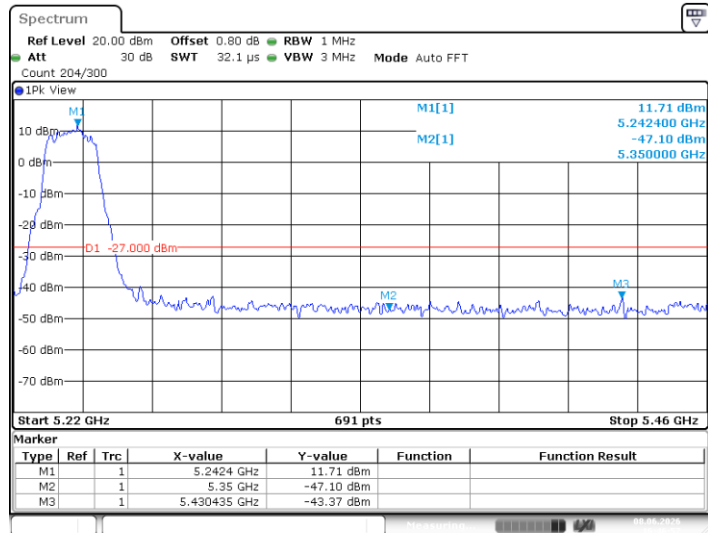
Test Graphs B1





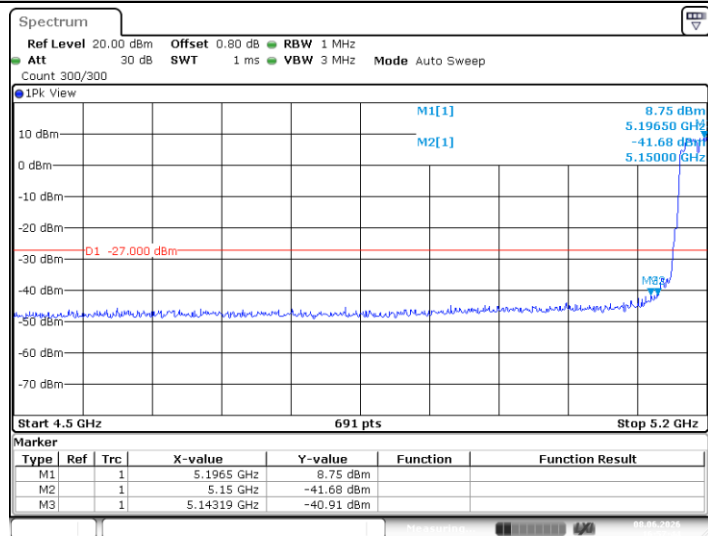
Date: 8.JUN.2026 16:42:54

11N20SISO_Ant1_High_5240



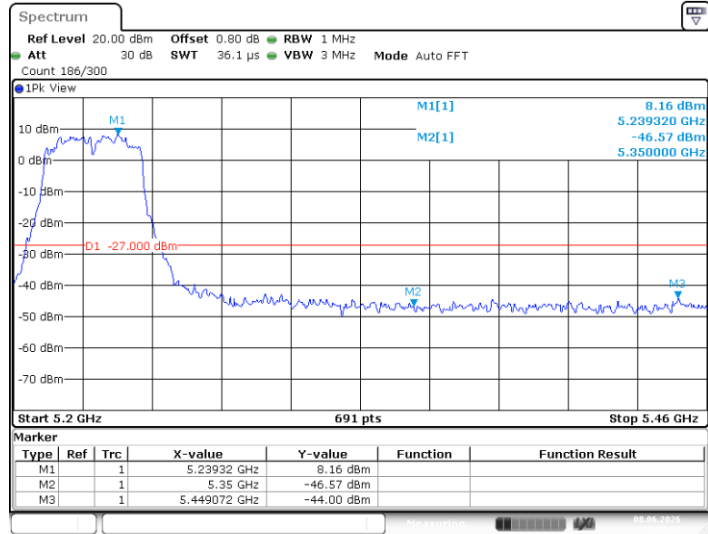
Date: 8.JUN.2026 16:46:57

11N40SISO_Ant1_Low_5190



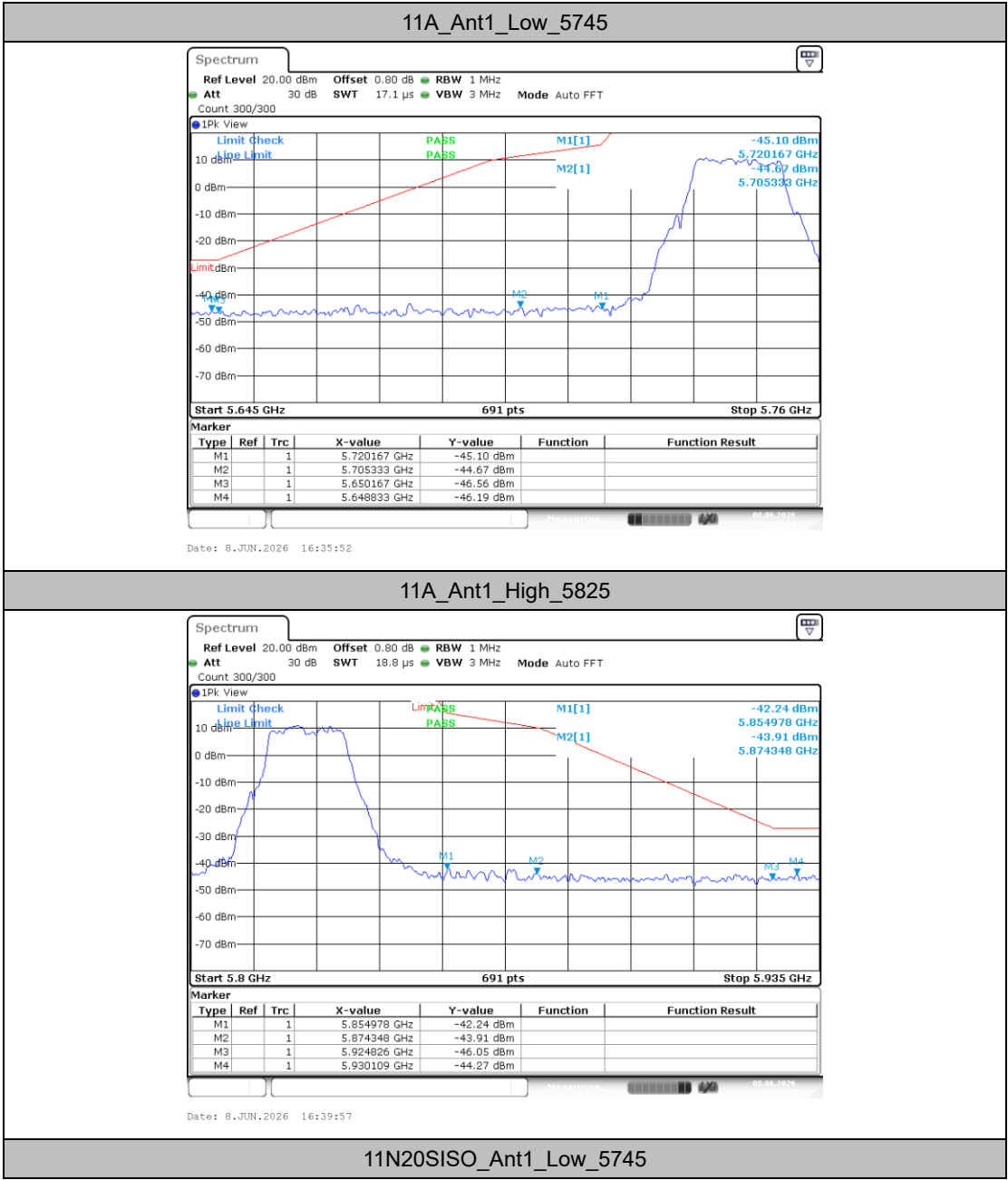
Date: 8.JUN.2026 16:57:44

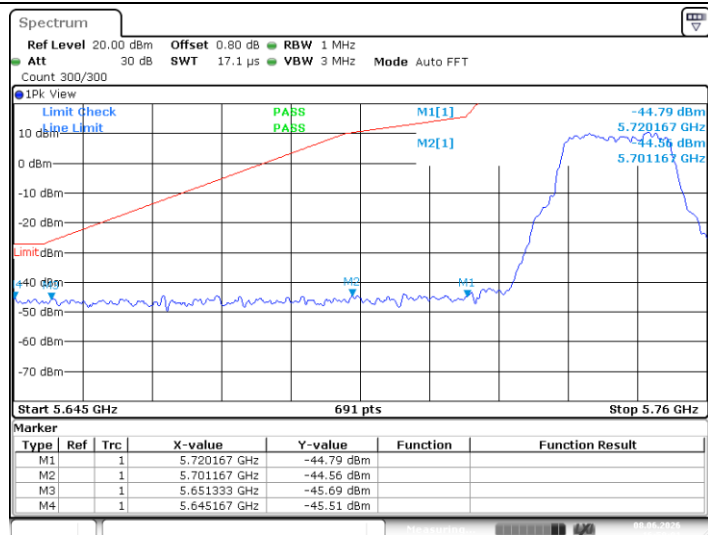
11N40SISO_Ant1_High_5230



Date: 8.JUN.2026 17:00:51

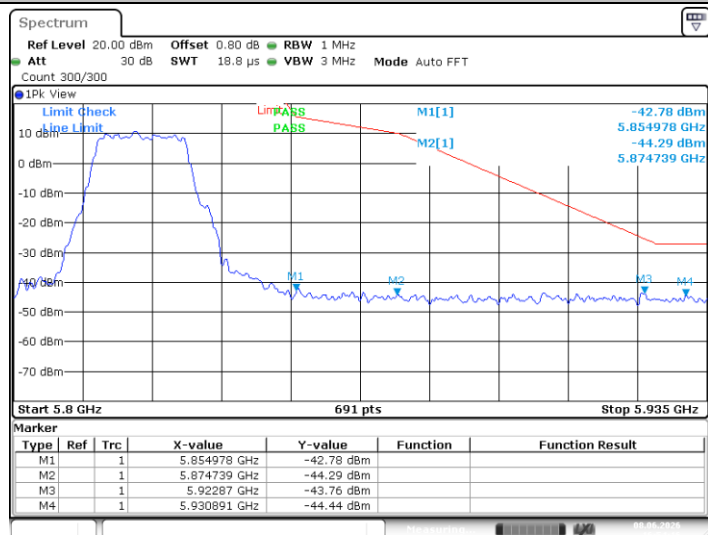
Test Graphs B4





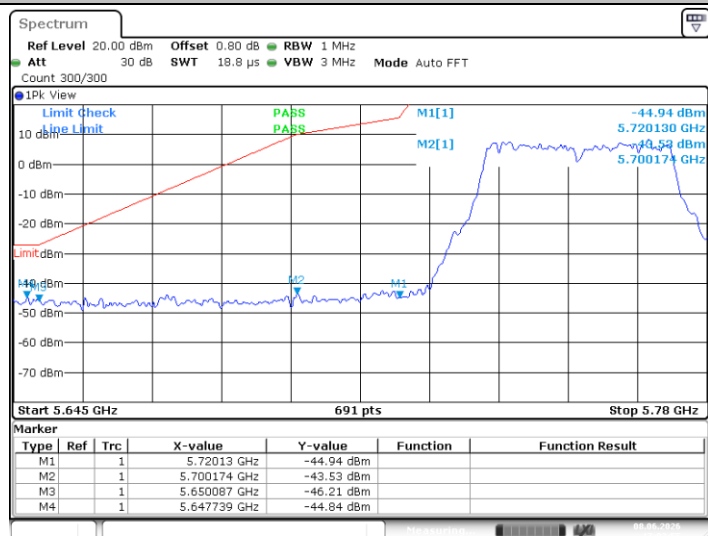
Date: 8.JUN.2026 16:50:01

11N20SISO_Ant1_High_5825



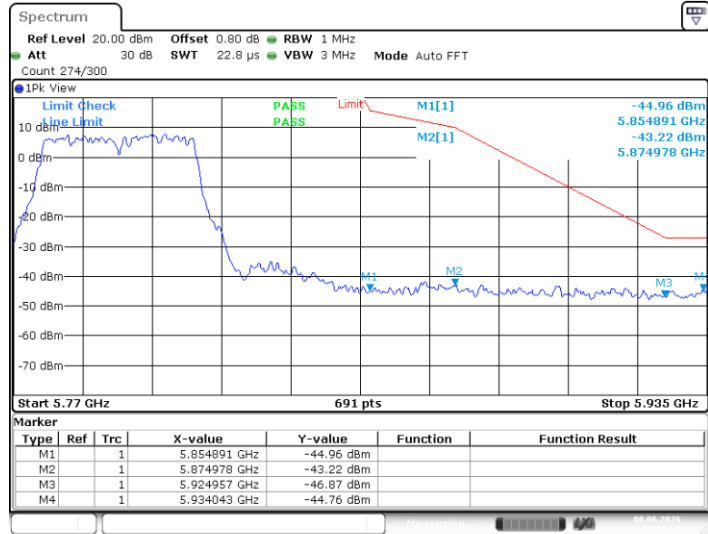
Date: 8.JUN.2026 16:54:16

11N40SISO_Ant1_Low_5755



Date: 8.JUN.2026 17:03:55

11N40SISO_Ant1_High_5795



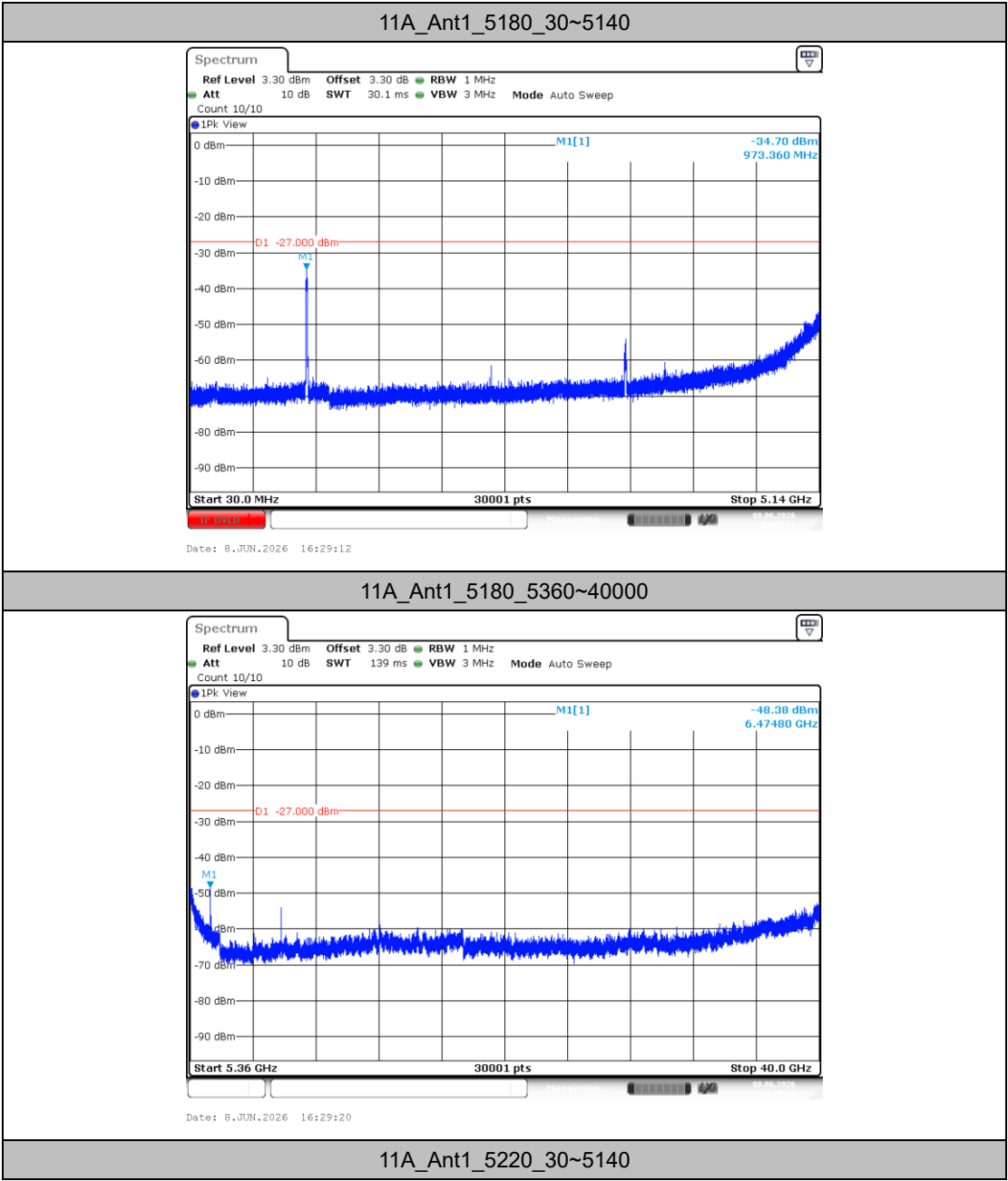
Date: 8.JUN.2026 17:06:41

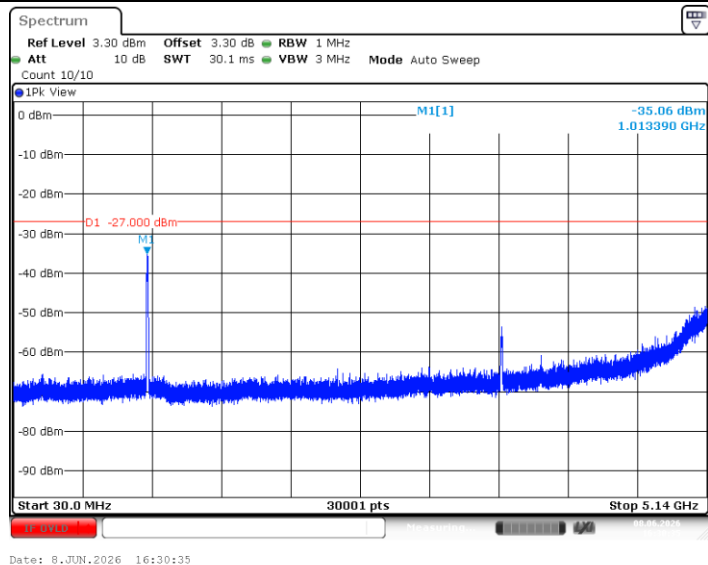
Appendix F: Conducted Spurious Emission

Test Result

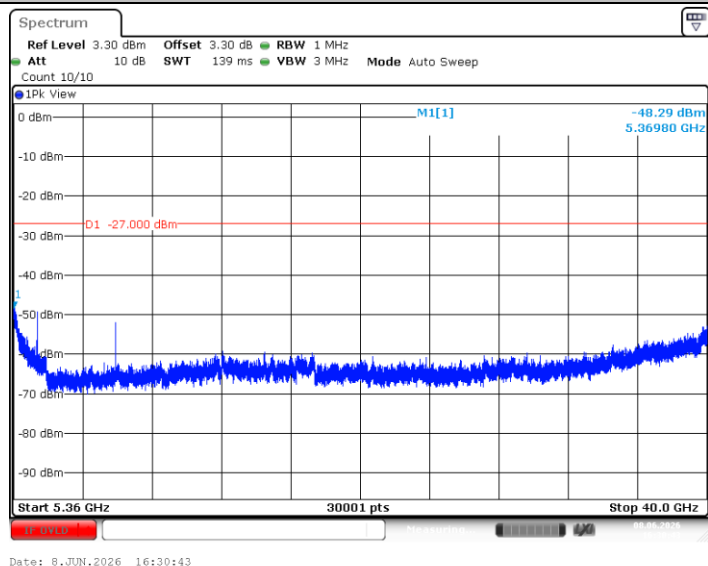
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	973.36	-34.7	≤-27	PASS
			5360~40000	6474.8	-48.38	≤-27	PASS
		5220	30~5140	1013.39	-35.06	≤-27	PASS
			5360~40000	5369.8	-48.29	≤-27	PASS
		5240	30~5140	1034.85	-33.54	≤-27	PASS
			5360~40000	5371	-47.44	≤-27	PASS
		5745	30~5650	1542.39	-46.05	≤-27	PASS
			5925~40000	11495.5	-45.38	≤-27	PASS
		5785	30~5650	1583.41	-45.48	≤-27	PASS
			5925~40000	11572.7	-48.12	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	974.72	-35.82	≤-27	PASS
			5360~40000	6474.8	-47.9	≤-27	PASS
		5220	30~5140	1014.07	-34.58	≤-27	PASS
			5360~40000	5380.2	-45.79	≤-27	PASS
		5240	30~5140	1033.14	-35.49	≤-27	PASS
			5360~40000	5367.5	-47.21	≤-27	PASS
		5745	30~5650	1539.01	-45.87	≤-27	PASS
			5925~40000	11488.7	-44.71	≤-27	PASS
		5785	30~5650	540.93	-45.97	≤-27	PASS
			5925~40000	11568.2	-47.54	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	983.41	-35.9	≤-27	PASS
			5360~40000	5392.9	-48.1	≤-27	PASS
		5230	30~5140	1024.63	-38.49	≤-27	PASS
			5360~40000	5361.7	-46.99	≤-27	PASS
		5755	30~5650	1548.19	-48.31	≤-27	PASS
			5925~40000	11516	-48.45	≤-27	PASS
		5795	30~5650	1593.15	-46.4	≤-27	PASS
			5925~40000	11587.5	-48.35	≤-27	PASS

Test Graphs

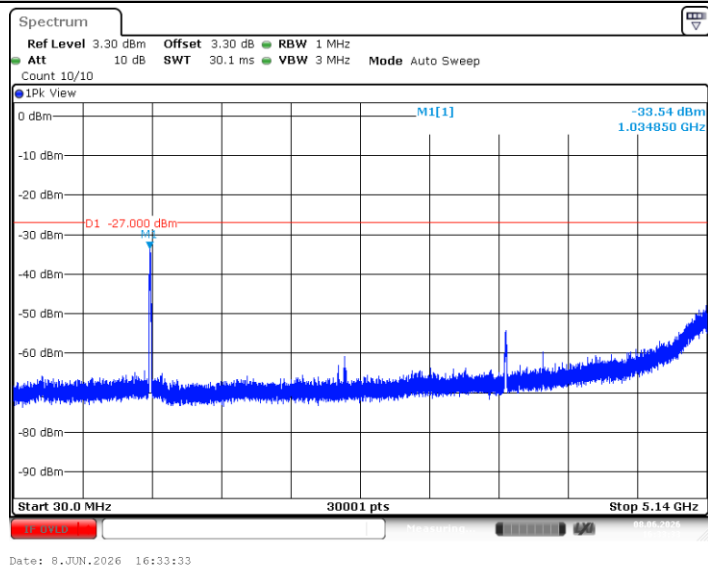




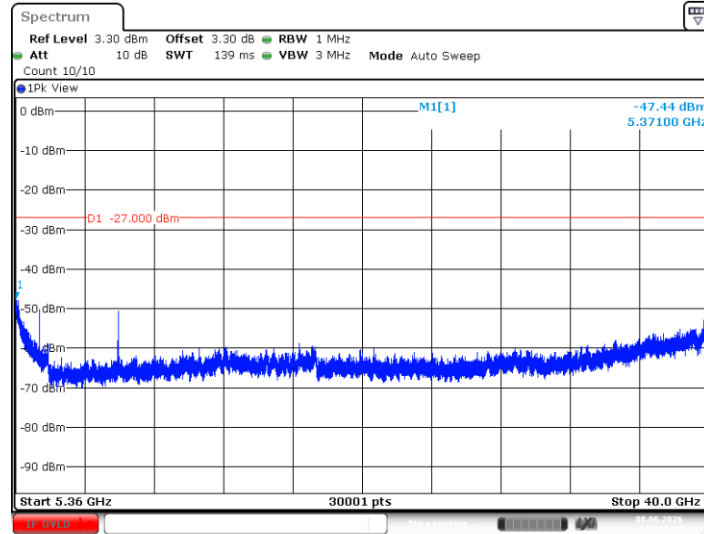
11A_Ant1_5220_5360~40000



11A_Ant1_5240_30~5140

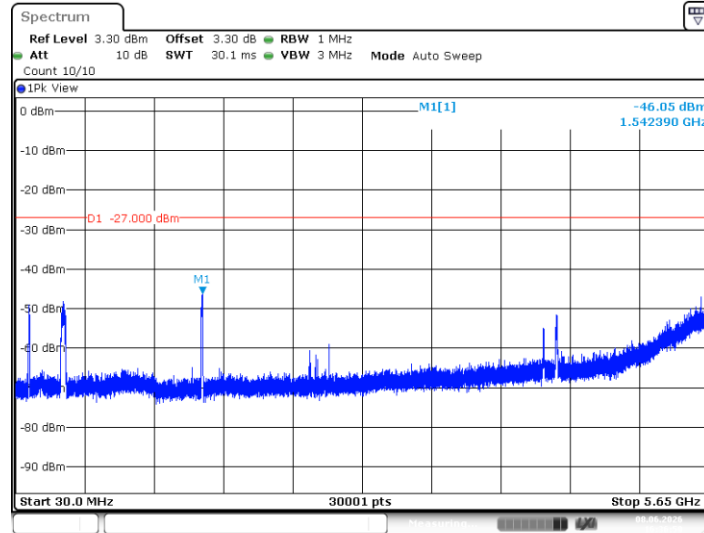


11A_Ant1_5240_5360~40000



Date: 8.JUN.2026 16:33:41

11A_Ant1_5745_30~5650



Date: 8.JUN.2026 16:36:50

11A_Ant1_5745_5925~40000