

RF Test Data for 5G Wi-Fi (Conducted Measurements)

General Description of EUT	
Product Name:	projector
Test Model:	TS-3
Sample ID:	HC-C-202405-0346-01-02#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	AC 120V
Test Engineer:	Mike Yan
Note: For a more detailed features description, please refer to the report TBR-C-202405-0346-63	

Contents

1. Emission Bandwidth.....	3
1.1. Test Result.....	3
2.1. Test Graphs	4
2. Occupied channel bandwidth	17
2.1. Test Result.....	17
2.2. Test Graphs	18
3. Min emission bandwidth	31
3.1. Test Result.....	31
3.2. Test Graphs	32
4. Maximum conducted output power.....	39
4.1. Test Result.....	39
5. Maximum power spectral density	40
5.1. Test Result.....	40
5.2. Test Graphs	41
6. Band edge measurements	54
6.1. Test Result.....	54
6.2. Test Graphs	56
7. Emissions in Restricted Bands.....	66
7.1. Test Result.....	66
7.2. Test Graphs	71
8. Conducted Spurious Emission.....	90
8.1. Test Result.....	90
8.2. Test Graphs	92
9. Frequency Stability	117
9.1. Test Result.....	117
10. Duty Cycle	120
10.1. Test Result.....	120
10.2. Test Graphs.....	121

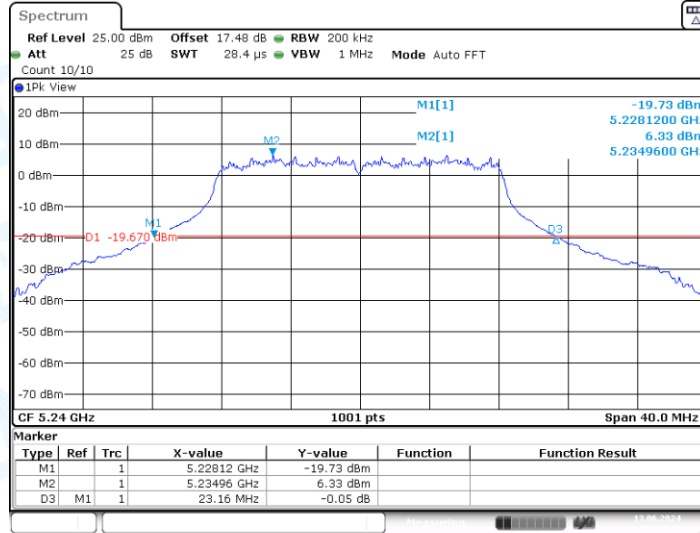
1. Emission Bandwidth

1.1. Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.56	5168.00	5191.56	---	---
		5200	23.72	5188.24	5211.96	---	---
		5240	23.16	5228.12	5251.28	---	---
		5745	24.56	5732.48	5757.04	---	---
		5785	23.44	5773.28	5796.72	---	---
		5825	23.76	5813.28	5837.04	---	---
11N20SISO	Ant1	5180	24.40	5167.96	5192.36	---	---
		5200	24.32	5188.00	5212.32	---	---
		5240	24.72	5227.96	5252.68	---	---
		5745	25.84	5731.64	5757.48	---	---
		5785	24.68	5772.76	5797.44	---	---
		5825	24.64	5812.68	5837.32	---	---
11N40SISO	Ant1	5190	45.20	5168.00	5213.20	---	---
		5230	47.20	5206.32	5253.52	---	---
		5755	47.92	5729.48	5777.40	---	---
		5795	48.80	5769.16	5817.96	---	---
11AC20SISO	Ant1	5180	24.48	5167.56	5192.04	---	---
		5200	24.88	5187.60	5212.48	---	---
		5240	24.20	5227.64	5251.84	---	---
		5745	25.28	5731.68	5756.96	---	---
		5785	23.56	5772.92	5796.48	---	---
		5825	23.84	5813.00	5836.84	---	---
11AC40SISO	Ant1	5190	45.92	5167.28	5213.20	---	---
		5230	47.12	5206.48	5253.60	---	---
		5755	46.00	5731.56	5777.56	---	---
		5795	46.80	5771.80	5818.60	---	---
11AX20SISO	Ant1	5180	24.20	5168.00	5192.20	---	---
		5200	25.16	5187.24	5212.40	---	---
		5240	24.56	5227.68	5252.24	---	---
		5745	25.88	5731.48	5757.36	---	---
		5785	24.92	5772.52	5797.44	---	---
		5825	24.00	5813.00	5837.00	---	---
11AX40SISO	Ant1	5190	44.80	5167.36	5212.16	---	---
		5230	44.40	5208.08	5252.48	---	---
		5755	44.88	5731.64	5776.52	---	---
		5795	45.68	5771.40	5817.08	---	---

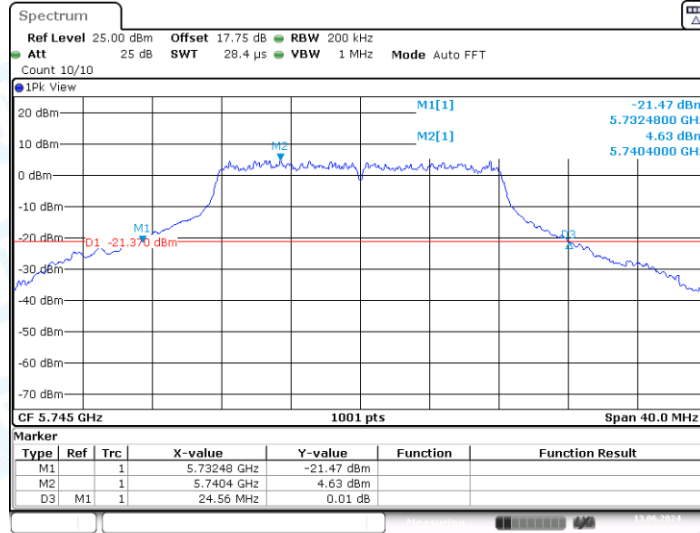
2.1.Test Graphs





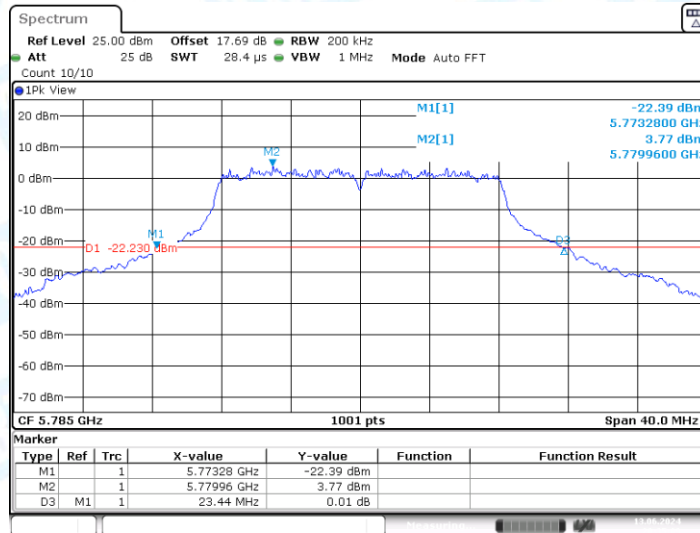
Date: 13.JUN.2024 20:24:44

11A_Ant1_5745



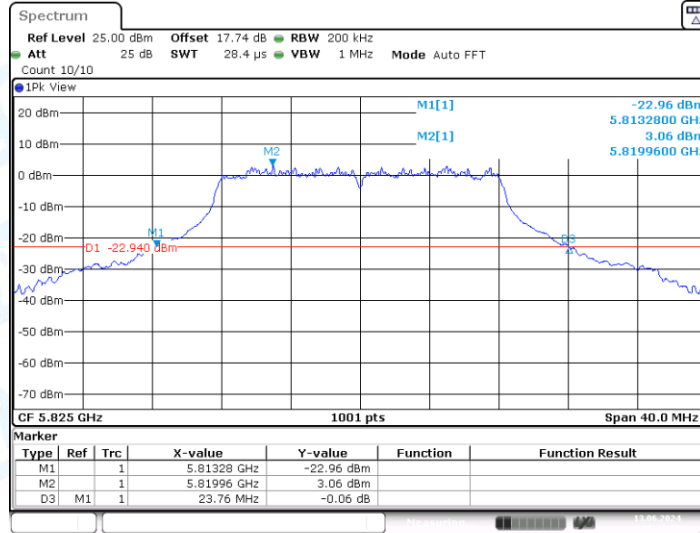
Date: 13.JUN.2024 20:29:56

11A_Ant1_5785



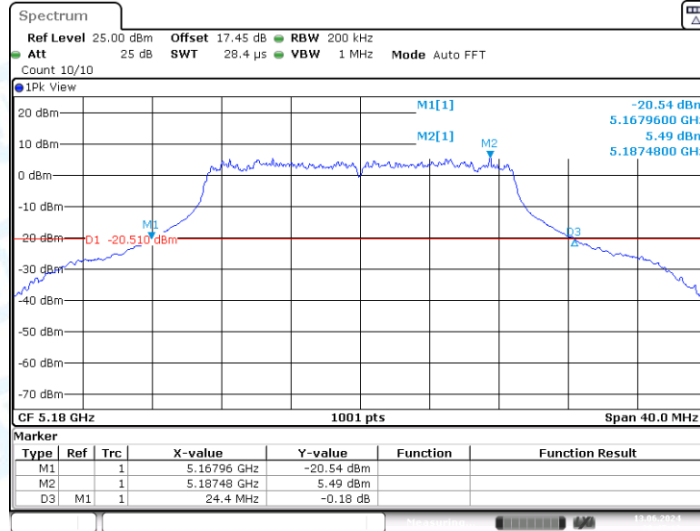
Date: 13.JUN.2024 20:35:09

11A_Ant1_5825



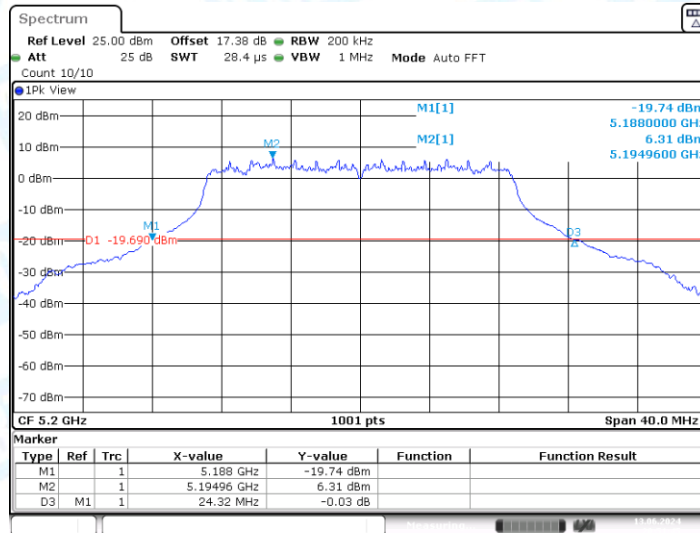
Date: 13.JUN.2024 20:38:59

11N20SISO_Ant1_5180



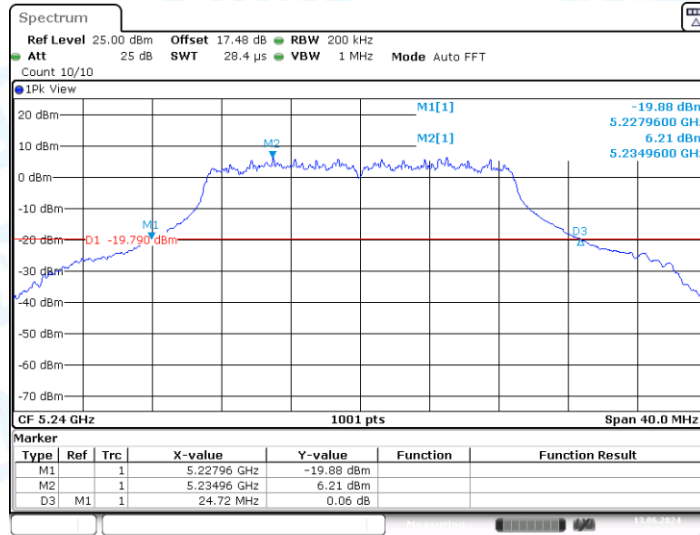
Date: 13.JUN.2024 20:47:12

11N20SISO_Ant1_5200



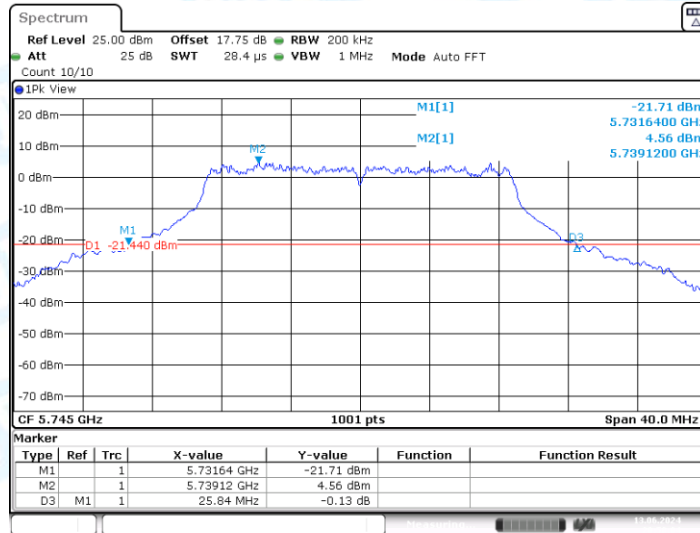
Date: 13.JUN.2024 20:51:45

11N20SISO_Ant1_5240



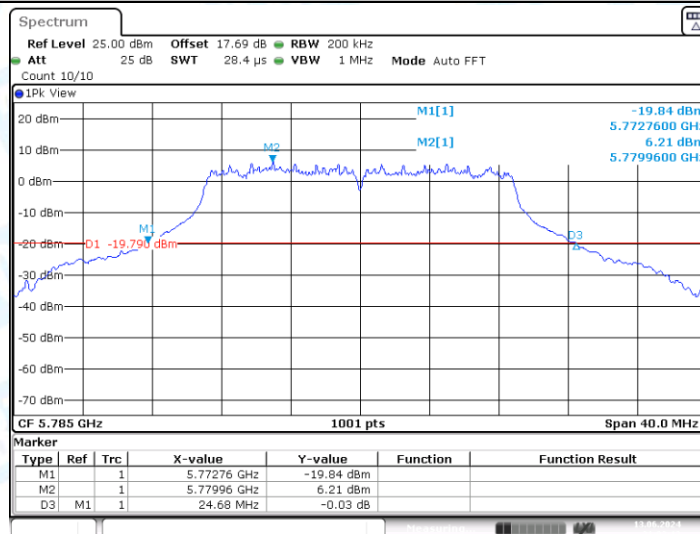
Date: 13.JUN.2024 20:54:06

11N20SISO_Ant1_5745



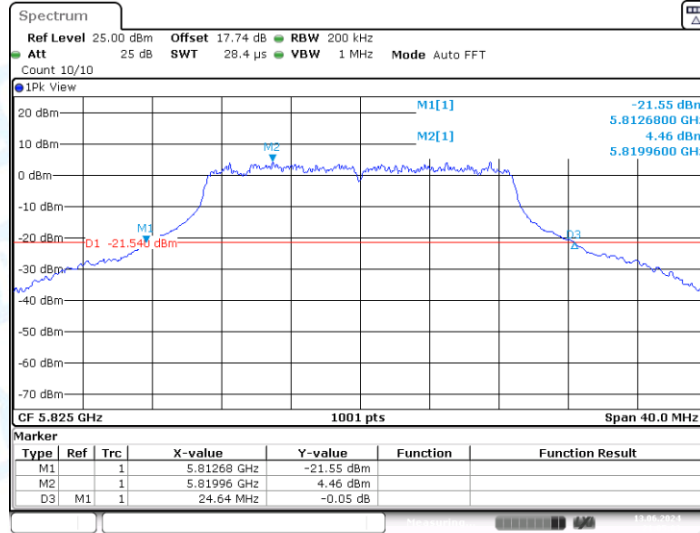
Date: 13.JUN.2024 20:58:04

11N20SISO_Ant1_5785



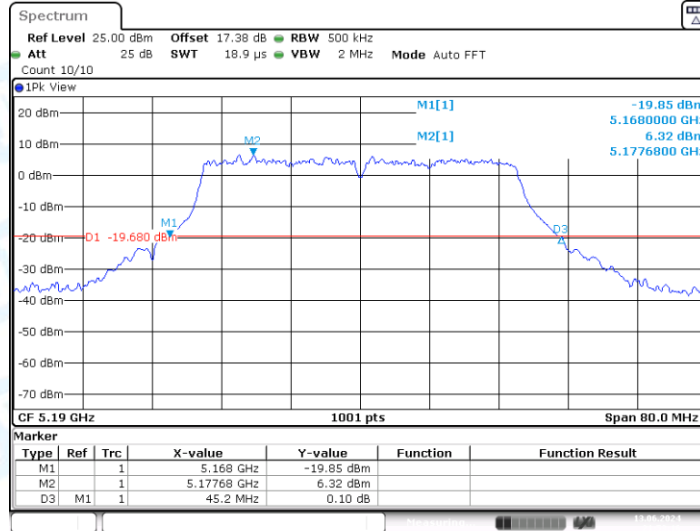
Date: 13.JUN.2024 21:02:13

11N20SISO_Ant1_5825



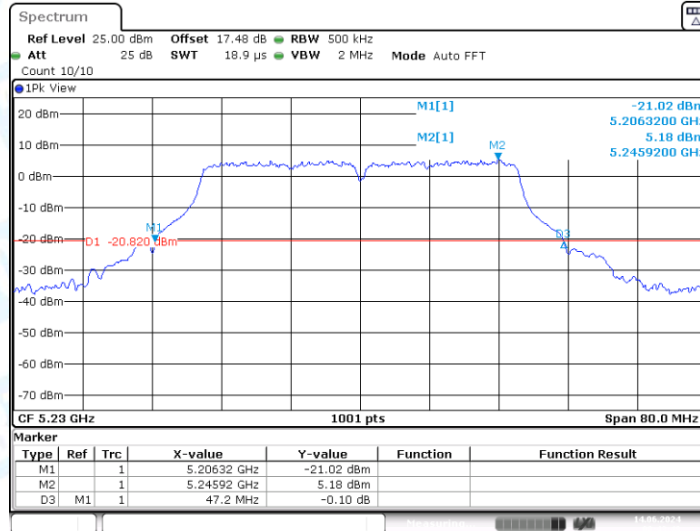
Date: 13.JUN.2024 21:05:02

11N40SISO_Ant1_5190



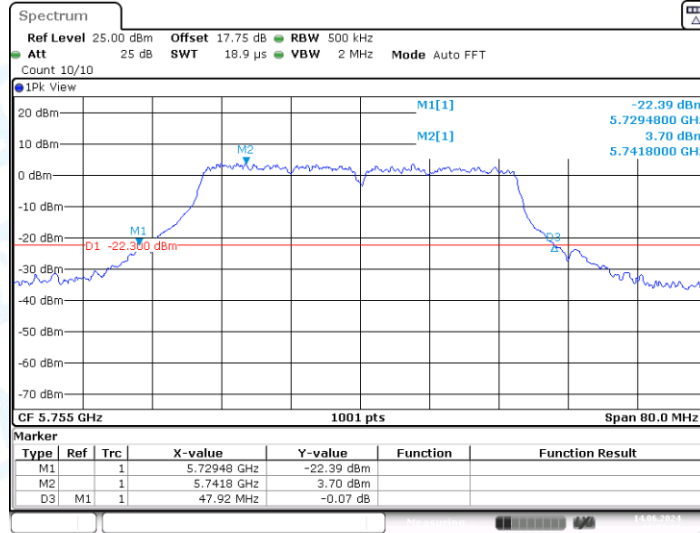
Date: 13.JUN.2024 21:53:16

11N40SISO_Ant1_5230



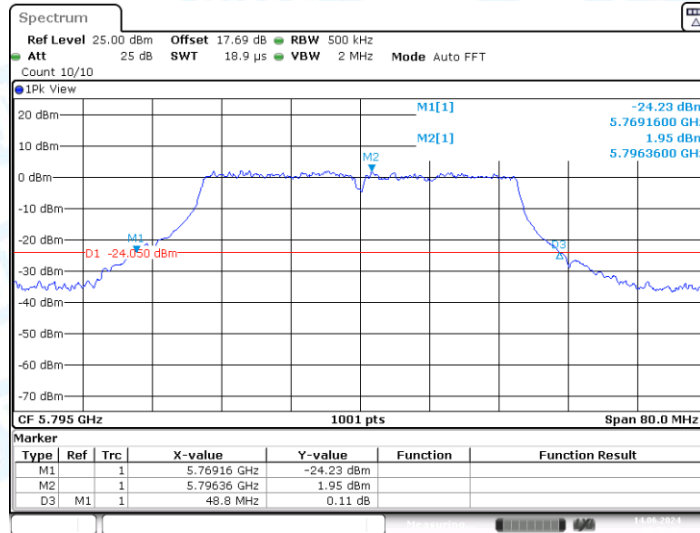
Date: 14.JUN.2024 08:43:48

11N40SISO_Ant1_5755



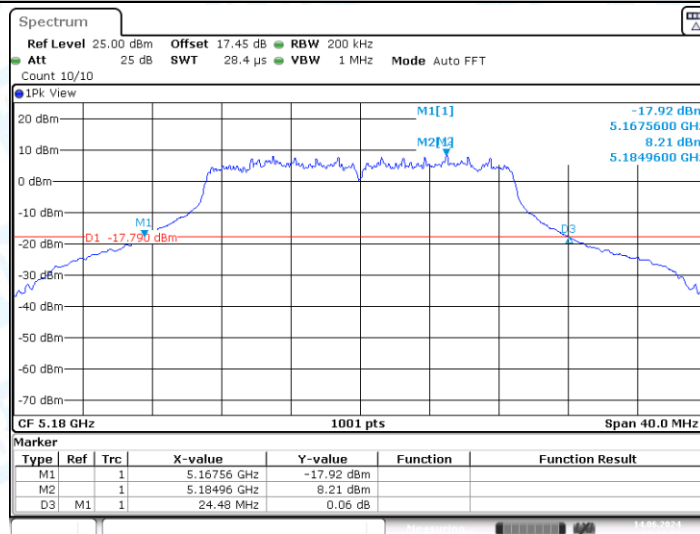
Date: 14.JUN.2024 08:52:31

11N40SISO_Ant1_5795



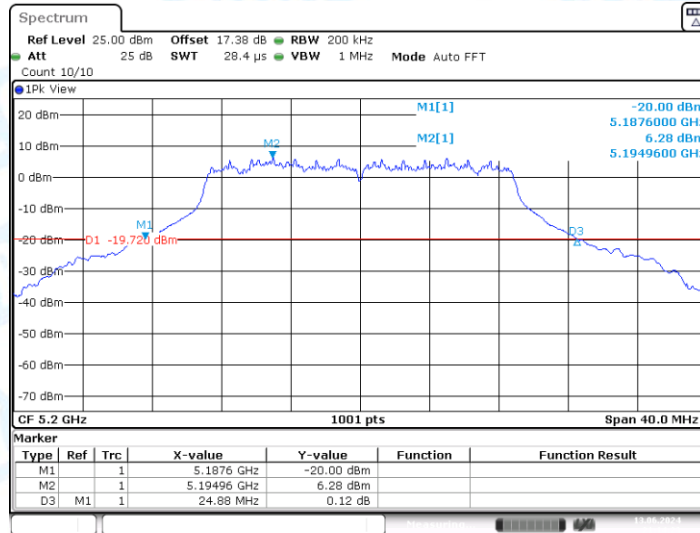
Date: 14.JUN.2024 08:58:02

11AC20SISO_Ant1_5180



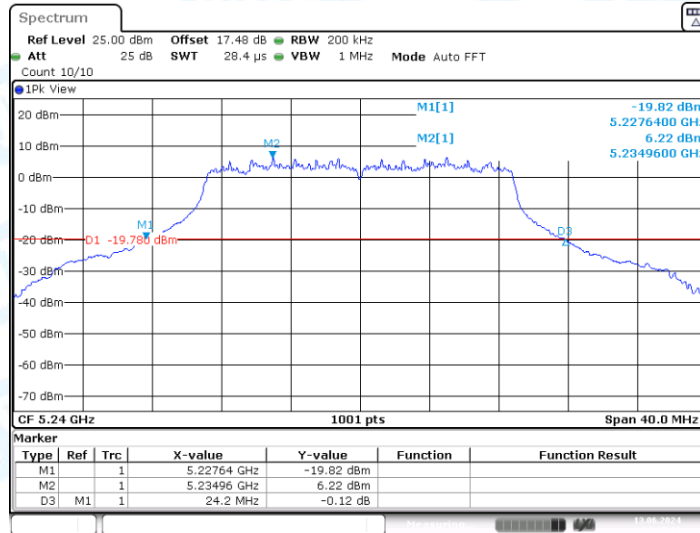
Date: 14.JUN.2024 09:28:50

11AC20SISO_Ant1_5200



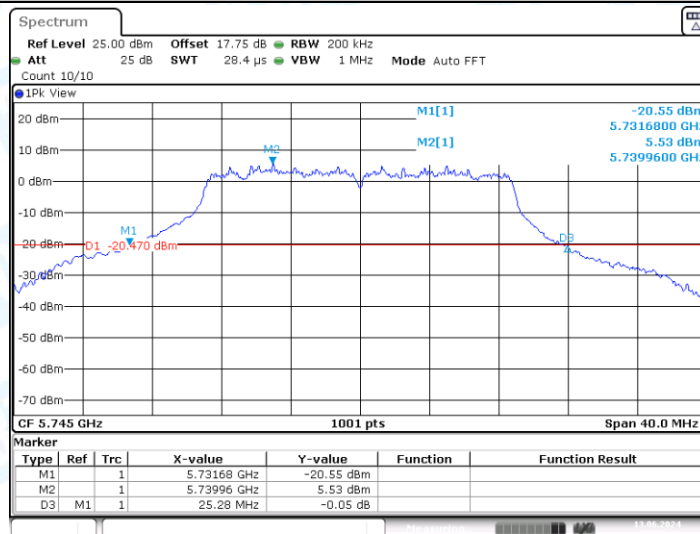
Date: 13.JUN.2024 21:14:23

11AC20SISO_Ant1_5240



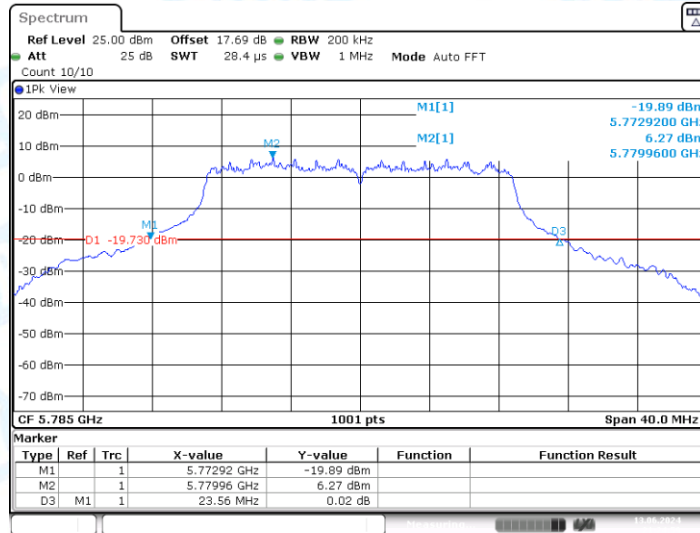
Date: 13.JUN.2024 21:17:28

11AC20SISO_Ant1_5745



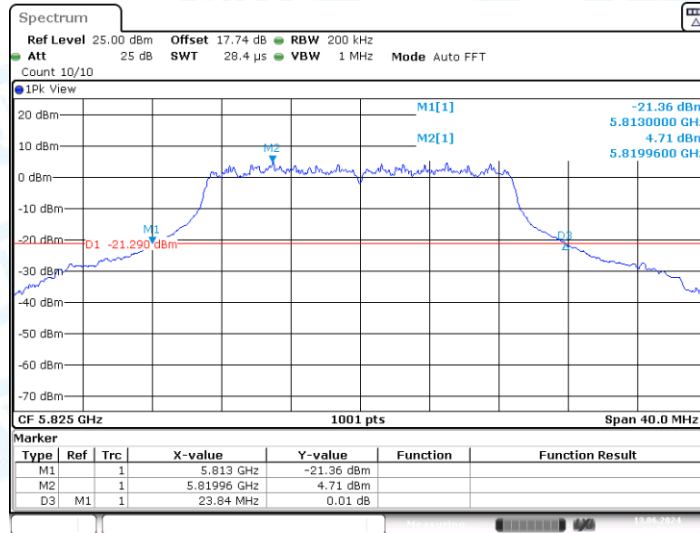
Date: 13.JUN.2024 21:21:08

11AC20SISO_Ant1_5785



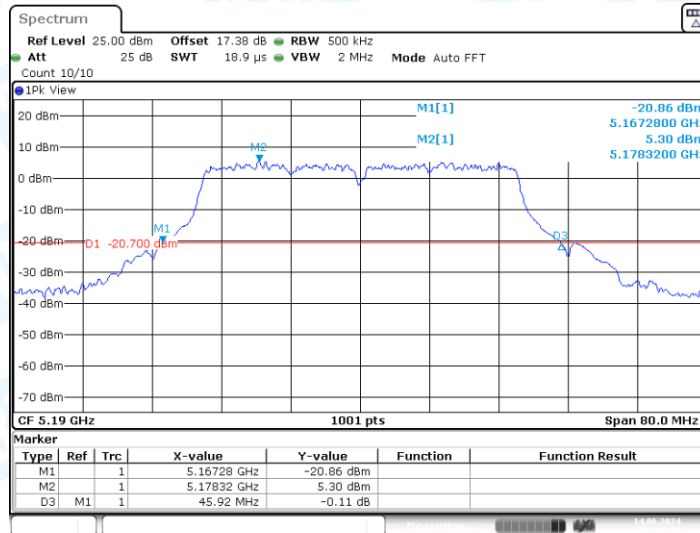
Date: 13.JUN.2024 21:24:59

11AC20SISO_Ant1_5825



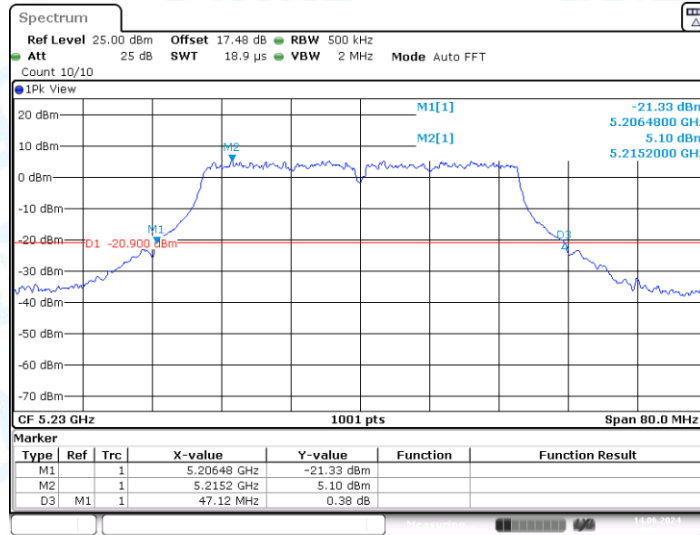
Date: 13.JUN.2024 21:27:33

11AC40SISO_Ant1_5190



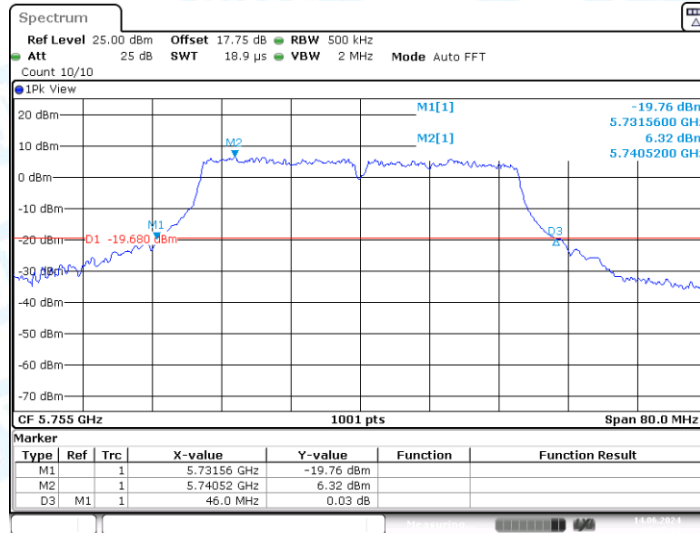
Date: 14.JUN.2024 09:29:53

11AC40SISO_Ant1_5230



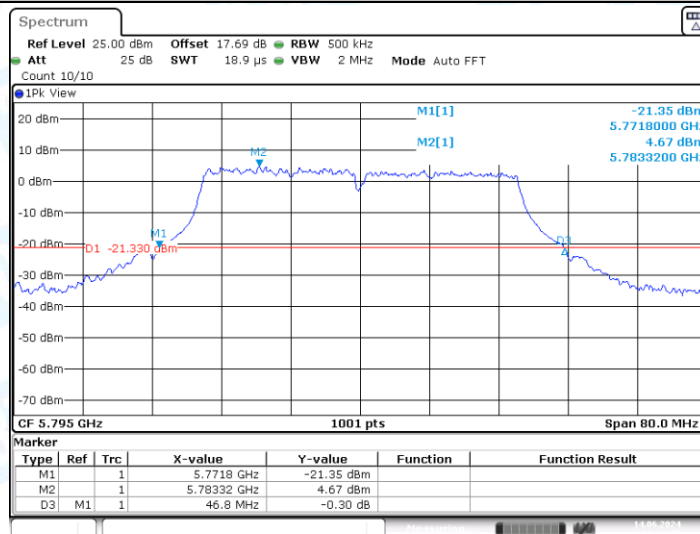
Date: 14.JUN.2024 09:33:56

11AC40SISO_Ant1_5755



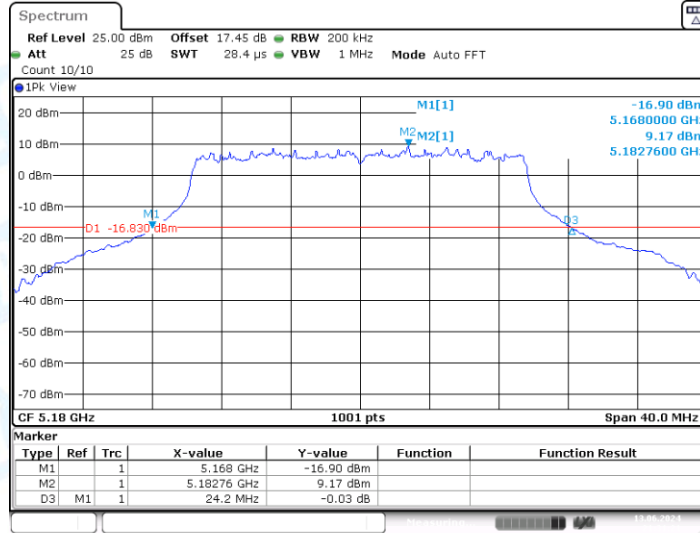
Date: 14.JUN.2024 09:05:14

11AC40SISO_Ant1_5795



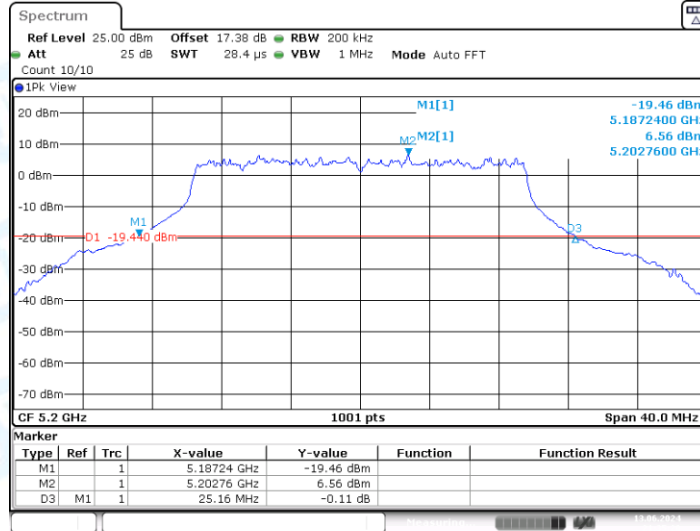
Date: 14.JUN.2024 09:12:47

11AX20SISO_Ant1_5180



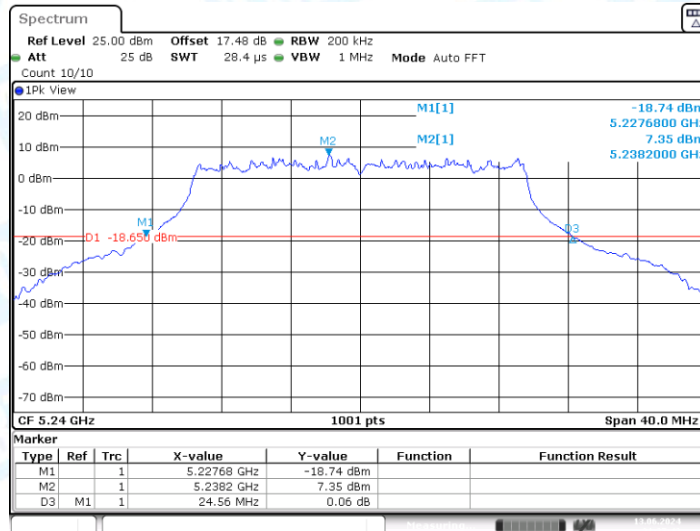
Date: 13.JUN.2024 21:31:21

11AX20SISO_Ant1_5200



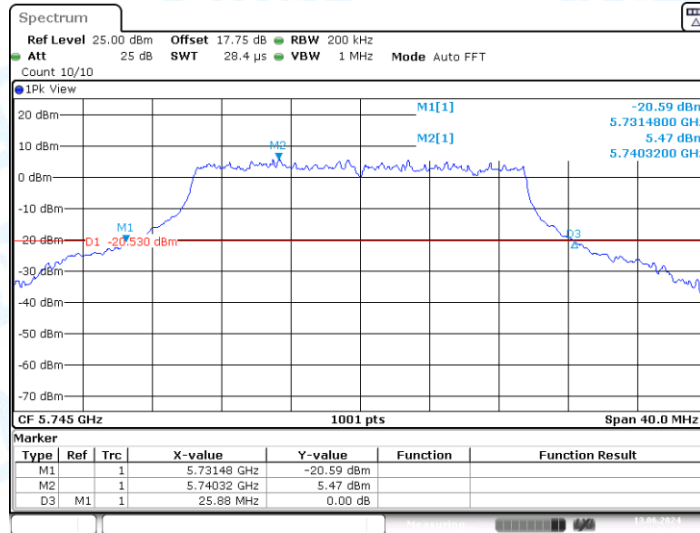
Date: 13.JUN.2024 21:35:20

11AX20SISO_Ant1_5240



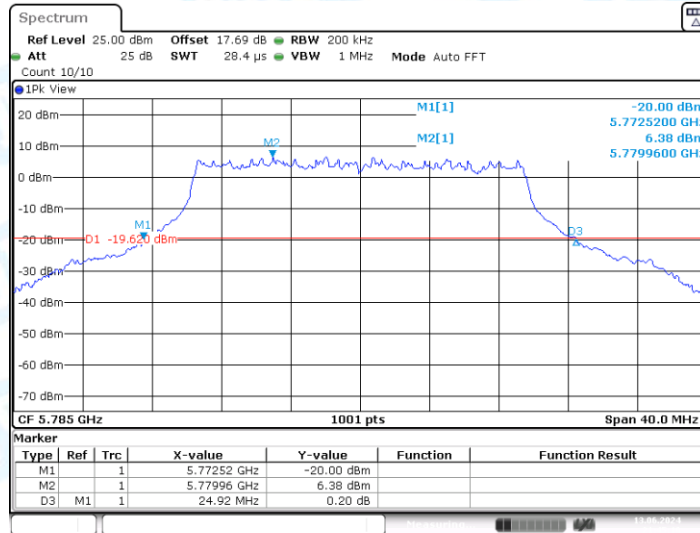
Date: 13.JUN.2024 21:37:42

11AX20SISO_Ant1_5745



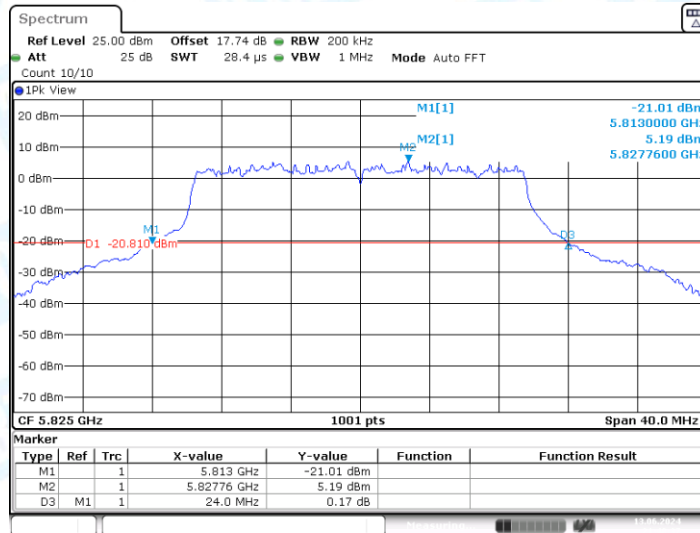
Date: 13.JUN.2024 21:41:19

11AX20SISO_Ant1_5785



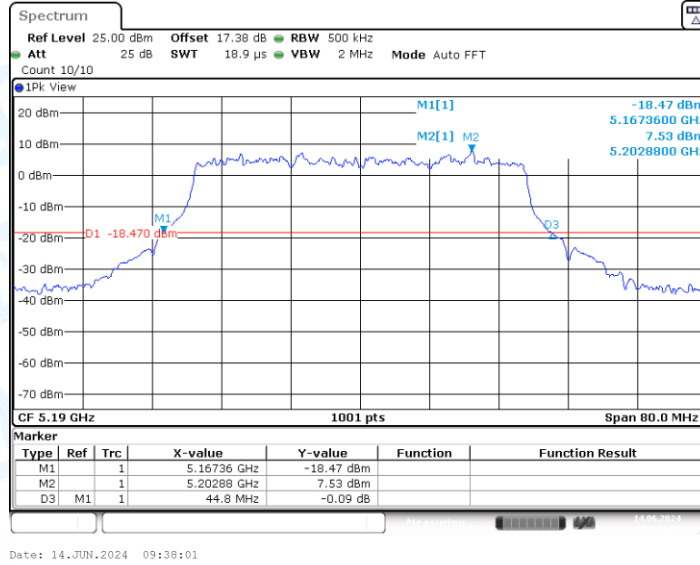
Date: 13.JUN.2024 21:45:10

11AX20SISO_Ant1_5825

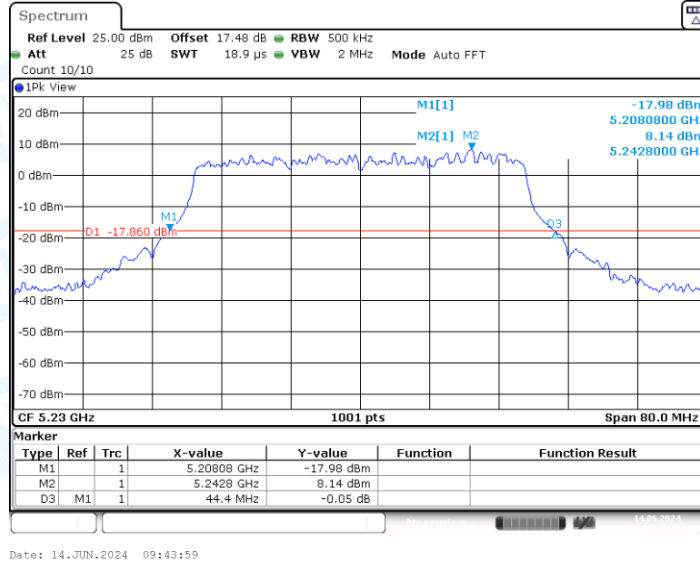


Date: 13.JUN.2024 21:48:37

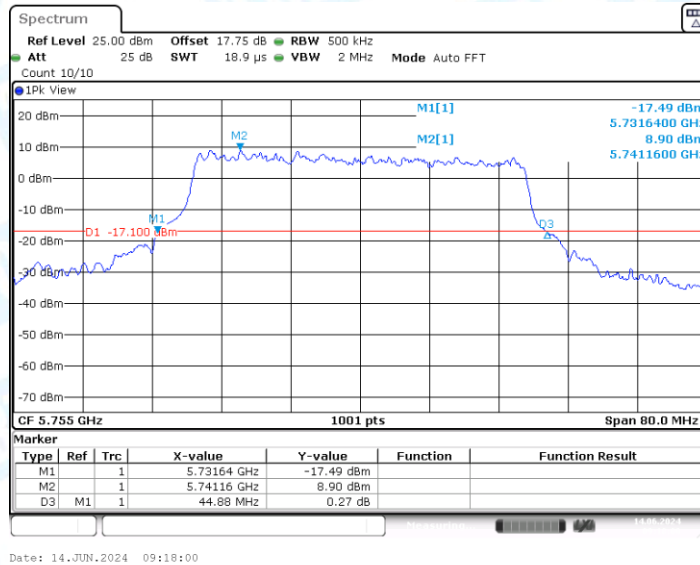
11AX40SISO_Ant1_5190



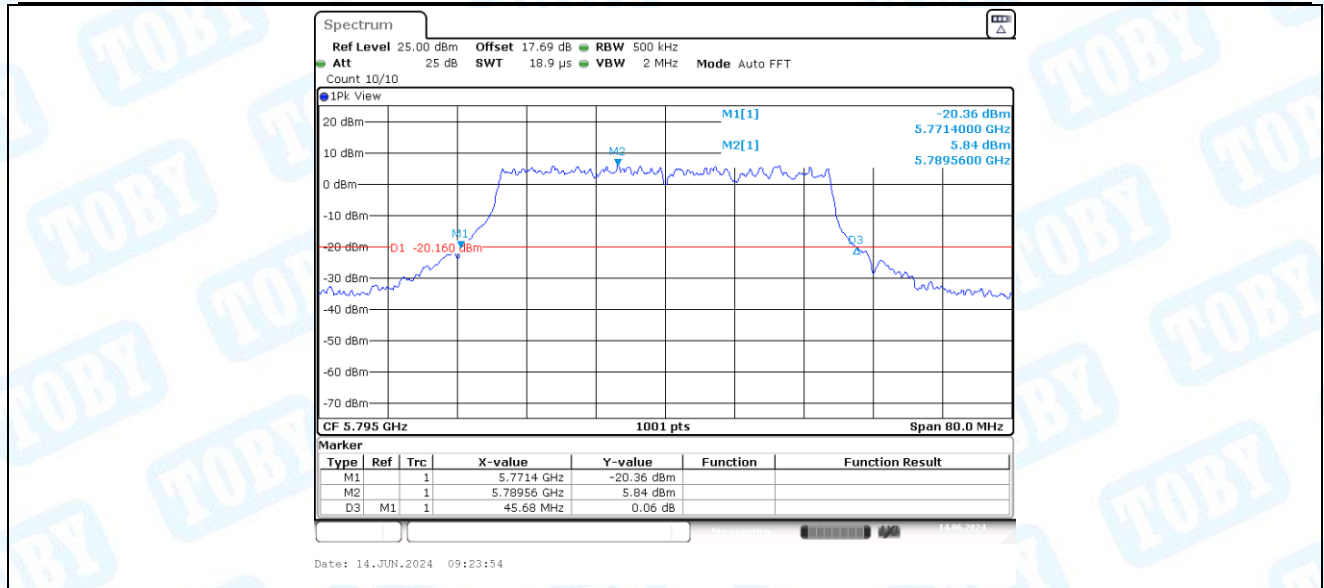
11AX40SISO_Ant1_5230



11AX40SISO_Ant1_5755



11AX40SISO_Ant1_5795



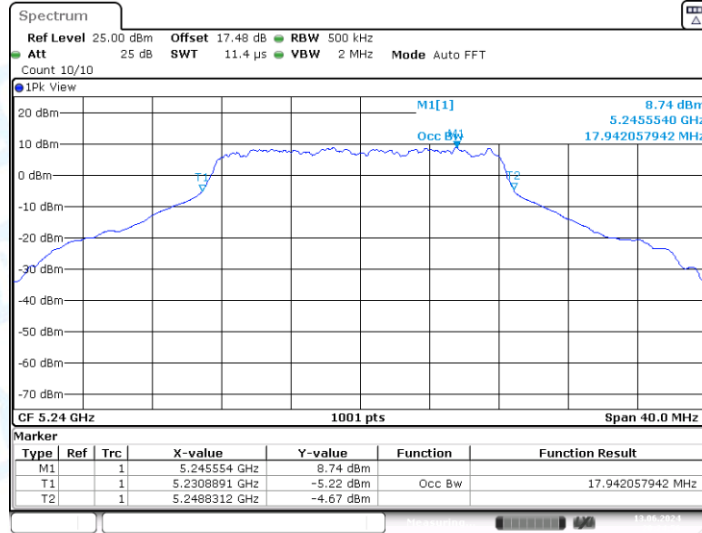
2. Occupied channel bandwidth

2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	18.262	5170.6094	5188.8711	---	---
		5200	18.062	5190.7692	5208.8312	---	---
		5240	17.942	5230.8891	5248.8312	---	---
		5745	18.182	5735.8891	5754.0709	---	---
		5785	18.182	5775.8492	5794.0310	---	---
		5825	18.781	5815.2498	5834.0310	---	---
11N20SISO	Ant1	5180	19.341	5170.0899	5189.4306	---	---
		5200	20.14	5189.3706	5209.5105	---	---
		5240	19.341	5230.4895	5249.8302	---	---
		5745	20.14	5734.3706	5754.5105	---	---
		5785	19.62	5774.8102	5794.4306	---	---
		5825	19.82	5815.2498	5835.0699	---	---
11N40SISO	Ant1	5190	37.243	5171.1389	5208.3816	---	---
		5230	37.003	5211.6184	5248.6214	---	---
		5755	36.843	5736.4585	5773.3017	---	---
		5795	38.122	5775.2597	5813.3816	---	---
11AC20SISO	Ant1	5180	19.021	5170.6094	5189.6304	---	---
		5200	19.54	5189.9700	5209.5105	---	---
		5240	19.74	5229.9700	5249.7103	---	---
		5745	19.62	5735.1299	5754.7502	---	---
		5785	18.821	5775.5295	5794.3506	---	---
		5825	19.261	5815.1698	5834.4306	---	---
11AC40SISO	Ant1	5190	37.083	5171.2987	5208.3816	---	---
		5230	37.403	5211.0589	5248.4615	---	---
		5755	37.323	5736.2188	5773.5415	---	---
		5795	37.562	5776.0589	5813.6214	---	---
11AX20SISO	Ant1	5180	19.78	5170.1299	5189.9101	---	---
		5200	19.98	5190.1698	5210.1499	---	---
		5240	19.66	5230.1698	5249.8302	---	---
		5745	20.02	5734.9301	5754.9500	---	---
		5785	20.18	5774.8901	5795.0699	---	---
		5825	20.26	5815.0500	5835.3097	---	---
11AX40SISO	Ant1	5190	38.122	5170.8991	5209.0210	---	---
		5230	38.442	5210.8192	5249.2607	---	---
		5755	38.282	5735.6593	5773.9411	---	---
		5795	38.282	5775.6593	5813.9411	---	---

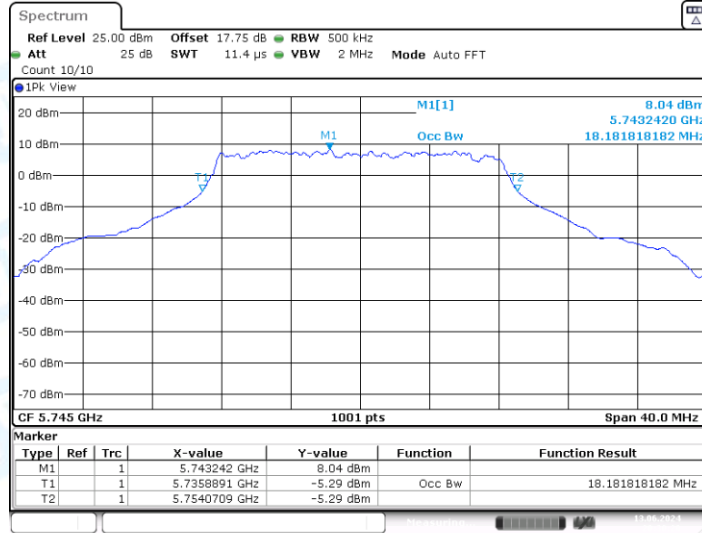
2.2.Test Graphs





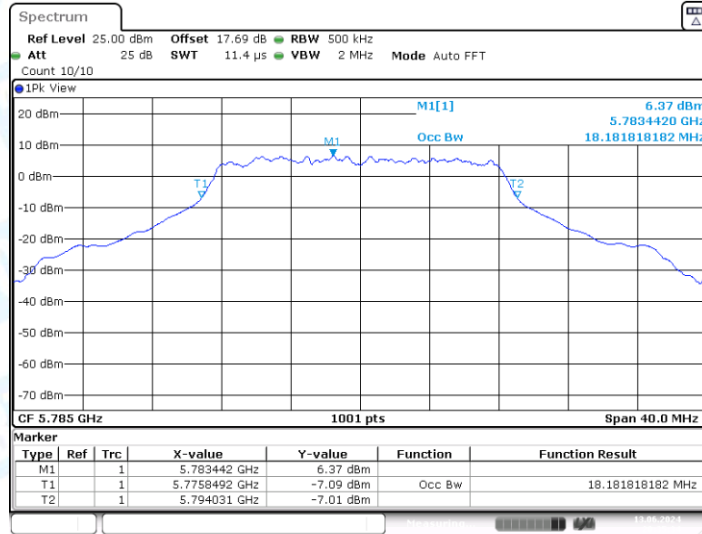
Date: 13.JUN.2024 20:24:57

11A_Ant1_5745



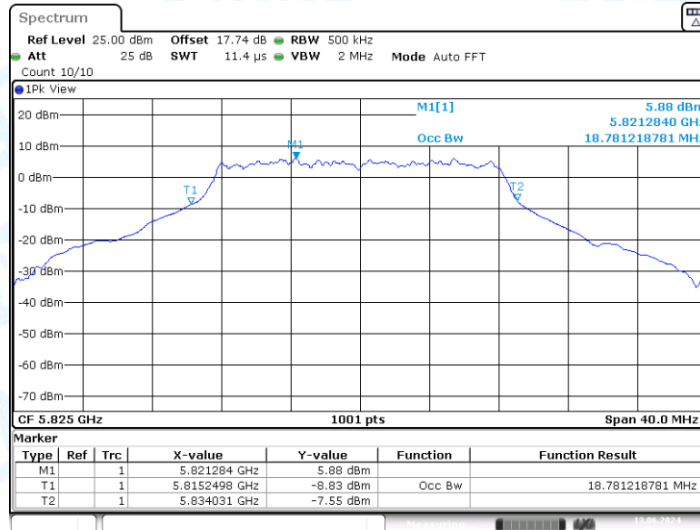
Date: 13.JUN.2024 20:30:20

11A_Ant1_5785



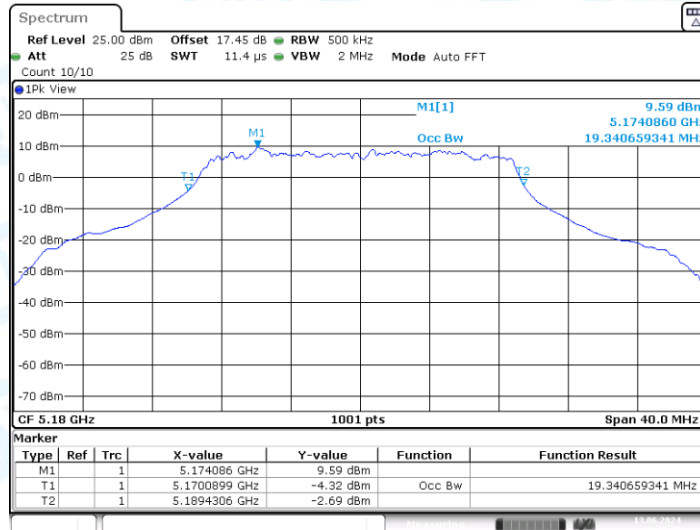
Date: 13.JUN.2024 20:35:34

11A_Ant1_5825



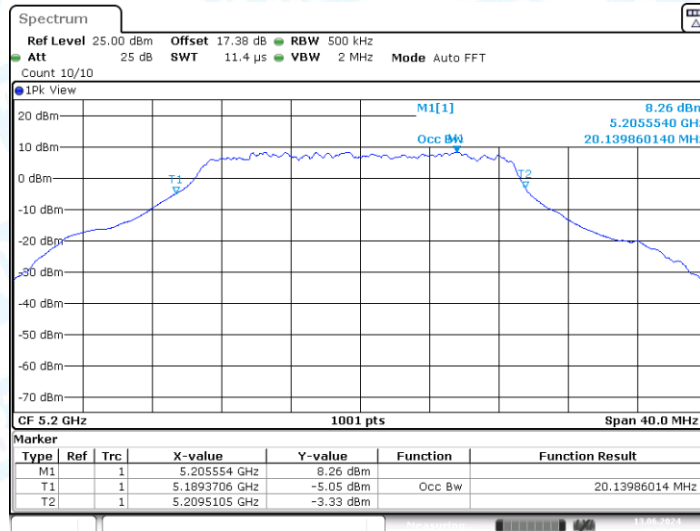
Date: 13.JUN.2024 20:39:23

11N20SISO_Ant1_5180



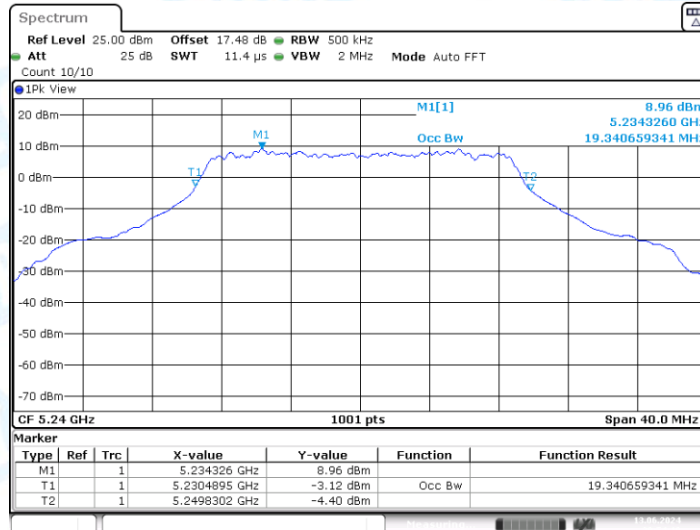
Date: 13.JUN.2024 20:47:26

11N20SISO_Ant1_5200



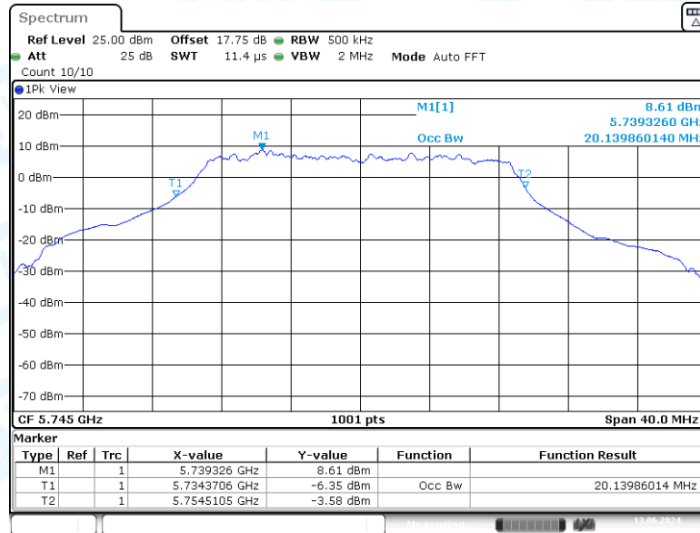
Date: 13.JUN.2024 20:51:58

11N20SISO_Ant1_5240



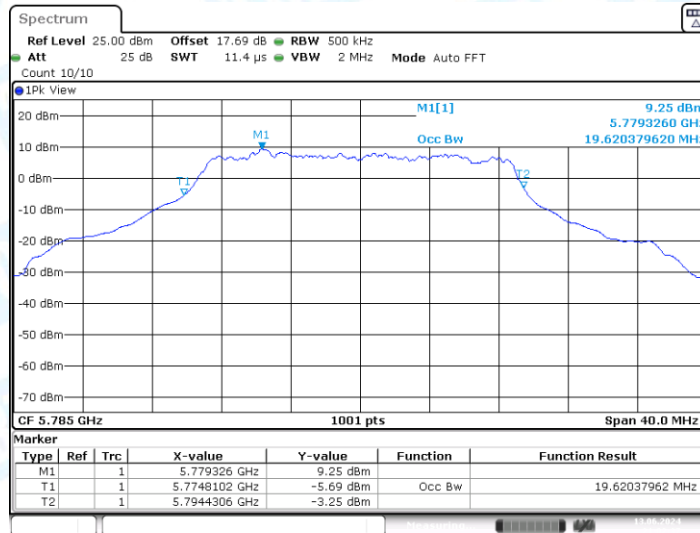
Date: 13.JUN.2024 20:54:19

11N20SISO_Ant1_5745



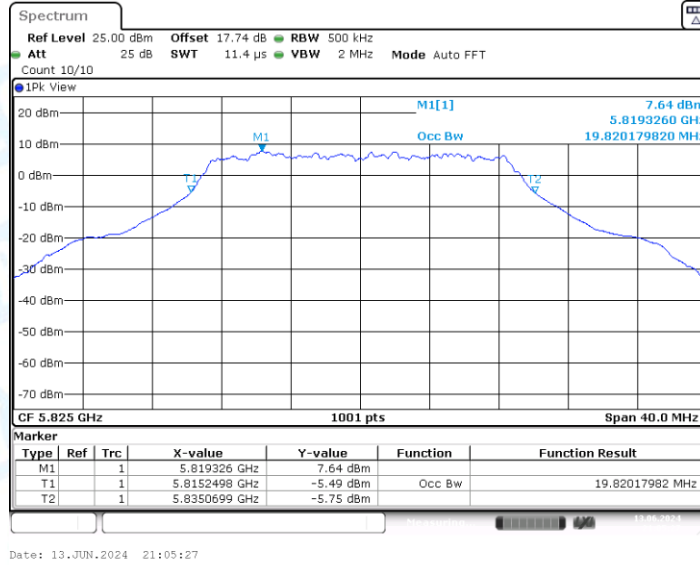
Date: 13.JUN.2024 20:58:28

11N20SISO_Ant1_5785

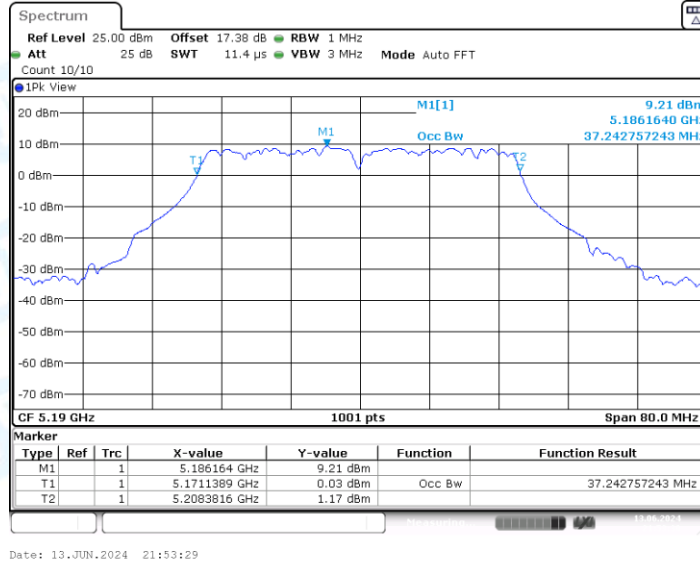


Date: 13.JUN.2024 21:02:37

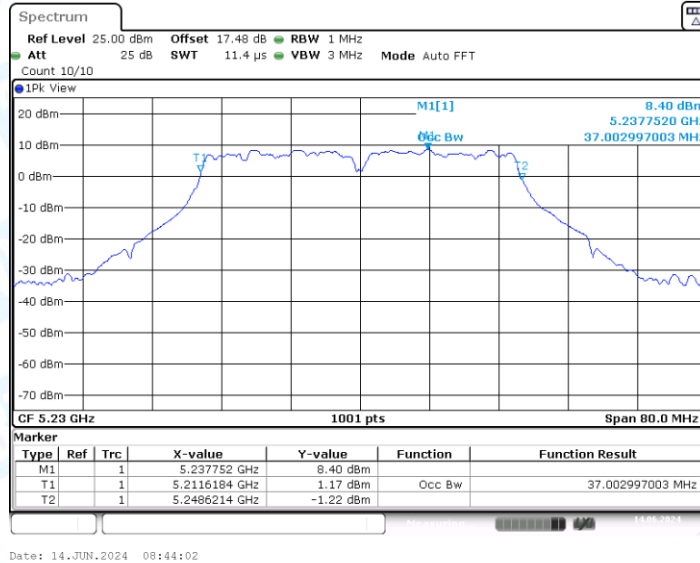
11N20SISO_Ant1_5825



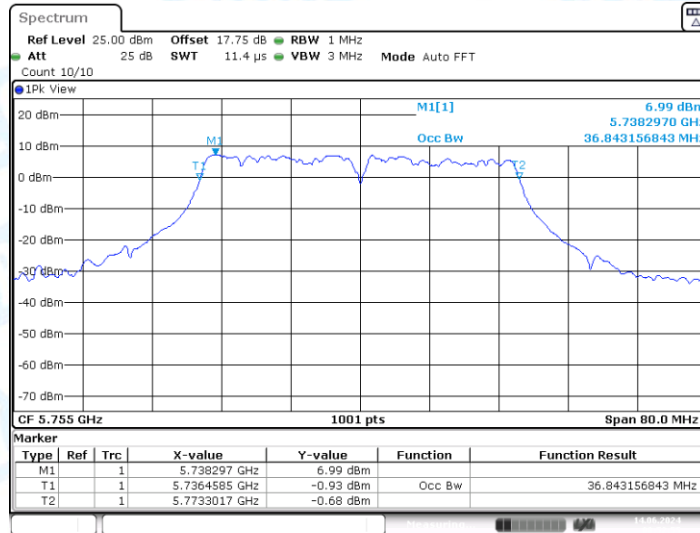
11N40SISO_Ant1_5190



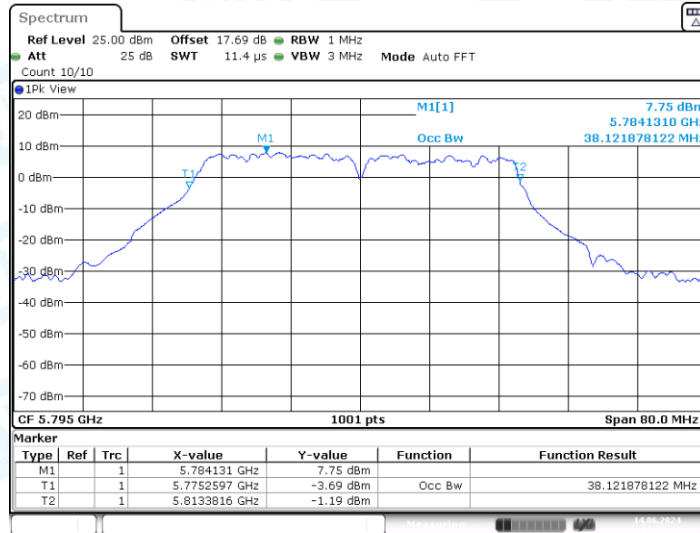
11N40SISO_Ant1_5230



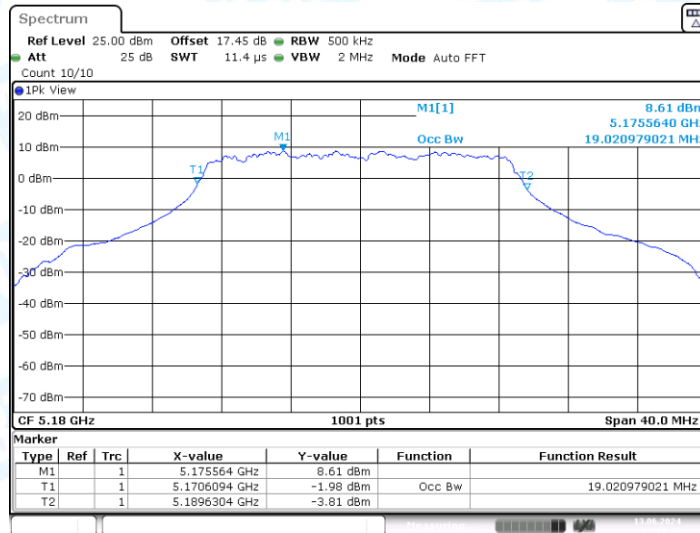
11N40SISO_Ant1_5755



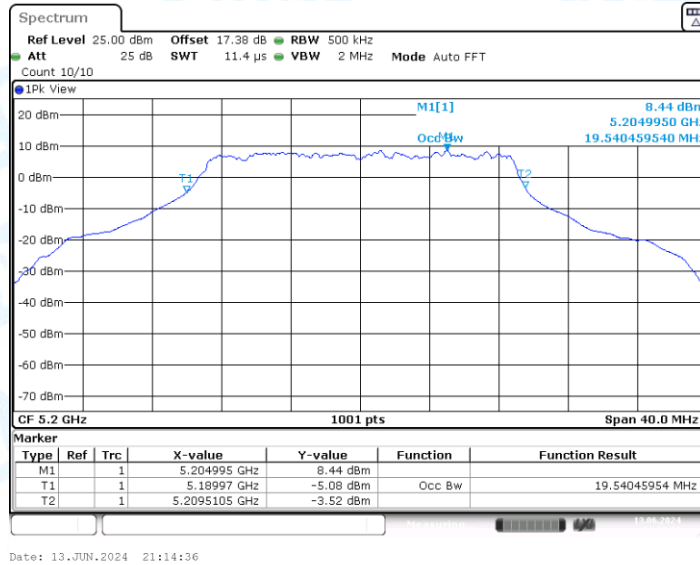
11N40SISO_Ant1_5795



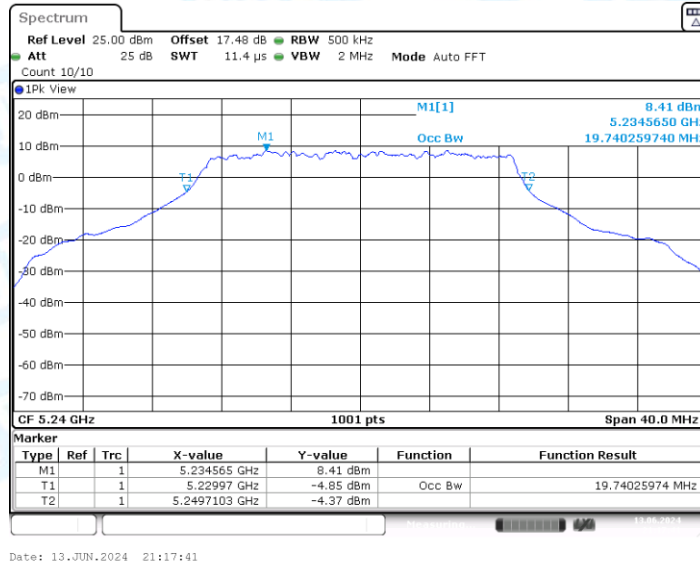
11AC20SISO_Ant1_5180



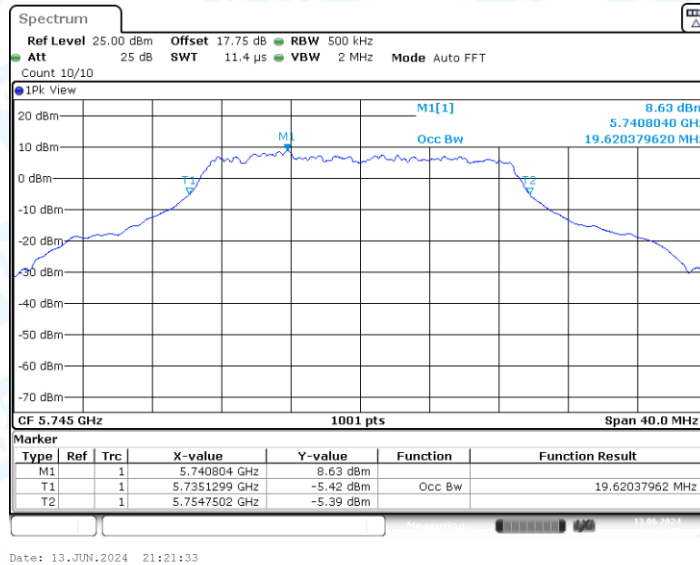
11AC20SISO_Ant1_5200



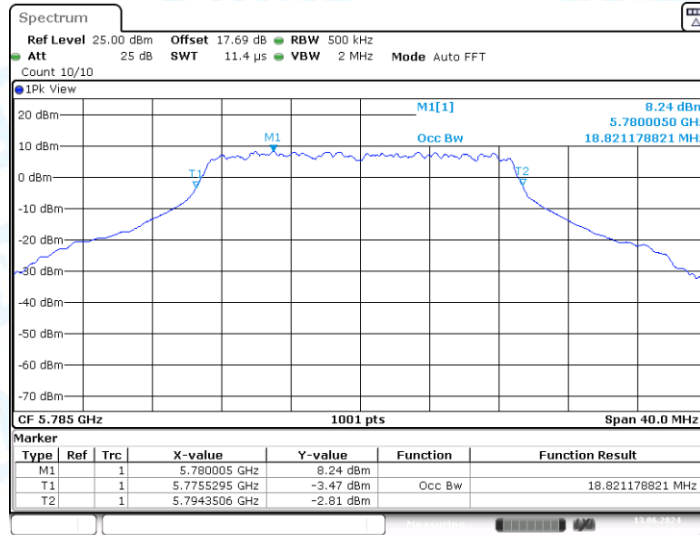
11AC20SISO_Ant1_5240



11AC20SISO_Ant1_5745

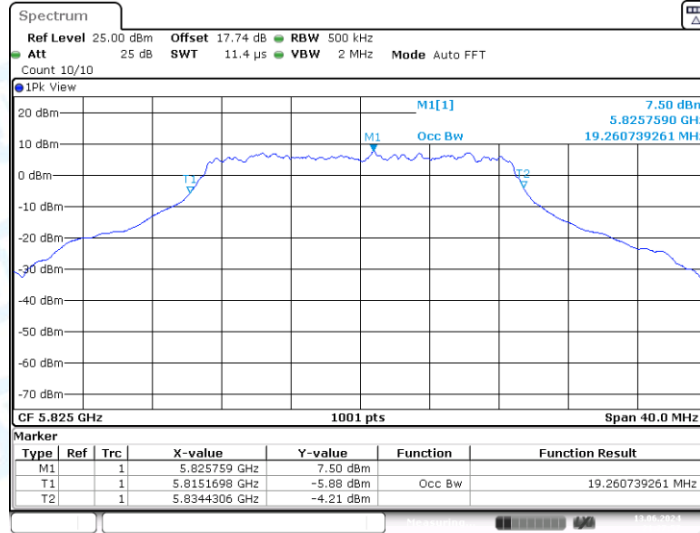


11AC20SISO_Ant1_5785



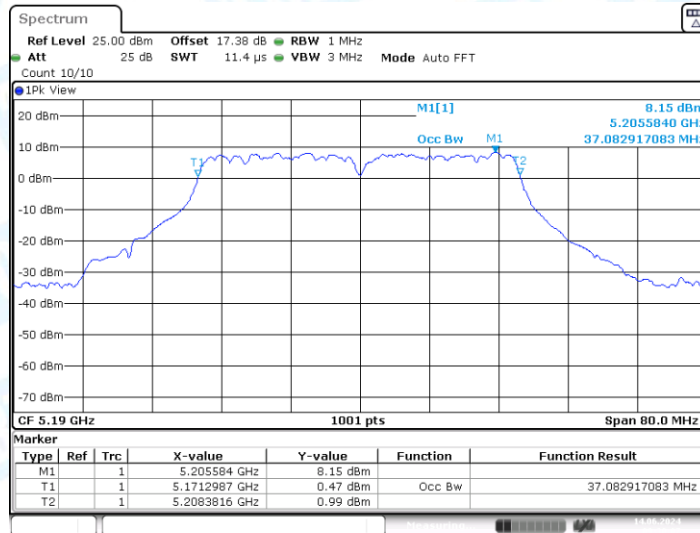
Date: 13.JUN.2024 21:25:23

11AC20SISO_Ant1_5825



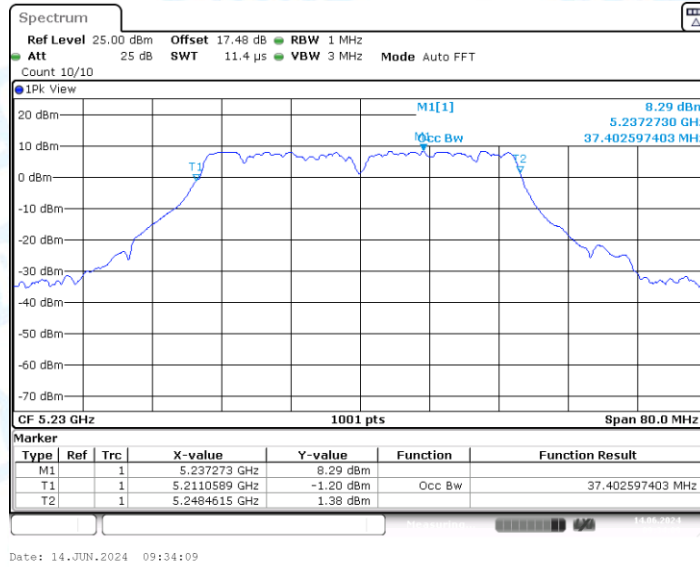
Date: 13.JUN.2024 21:27:57

11AC40SISO_Ant1_5190

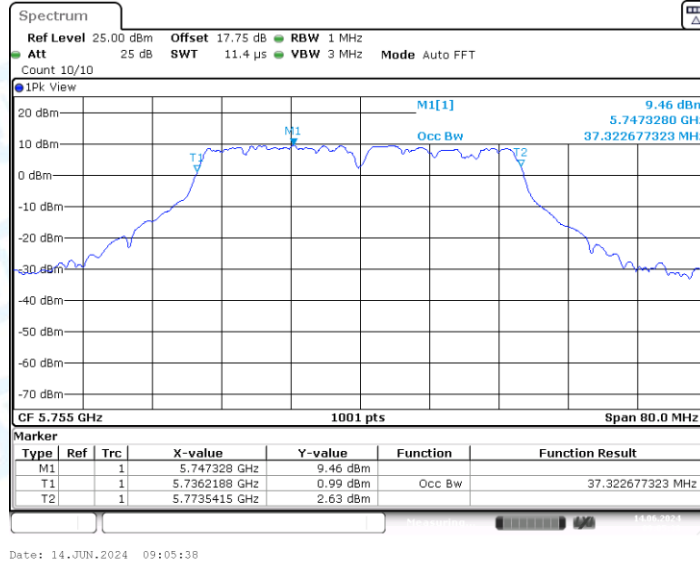


Date: 14.JUN.2024 09:30:07

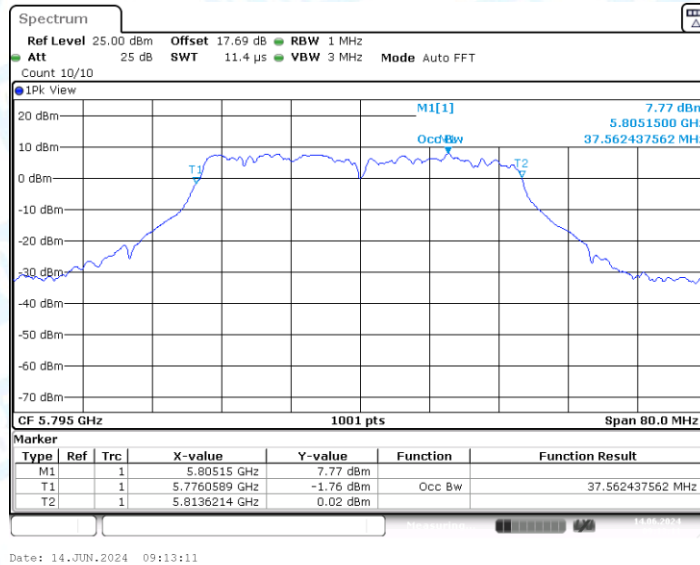
11AC40SISO_Ant1_5230



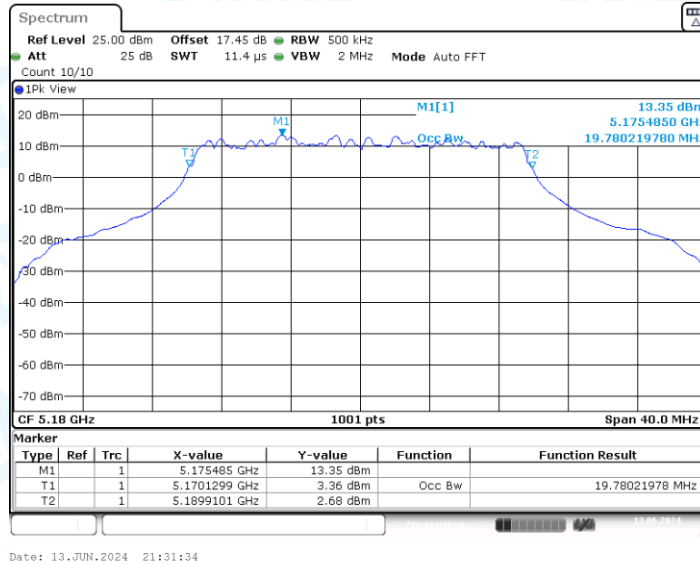
11AC40SISO_Ant1_5755



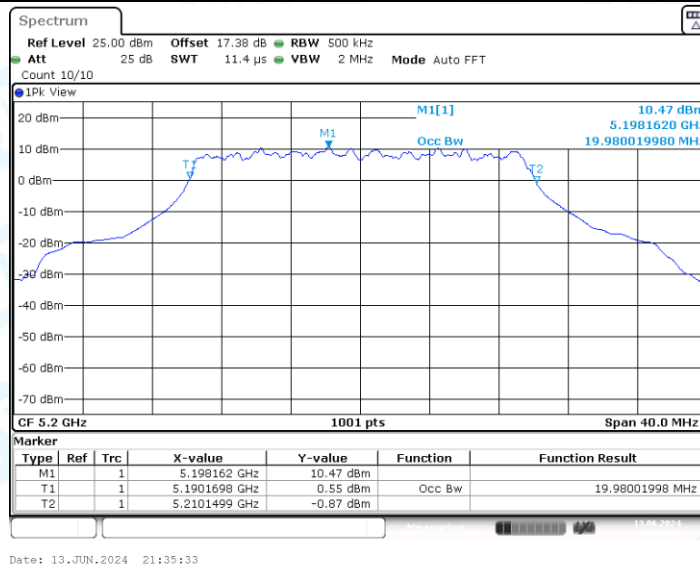
11AC40SISO_Ant1_5795



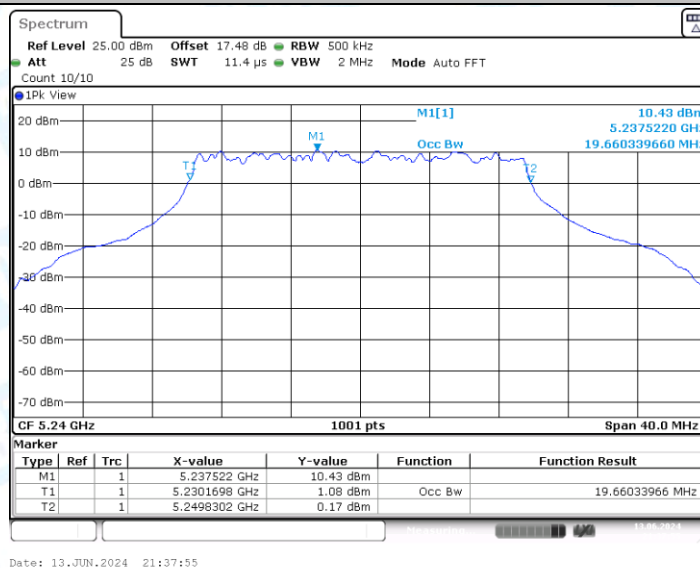
11AX20SISO_Ant1_5180



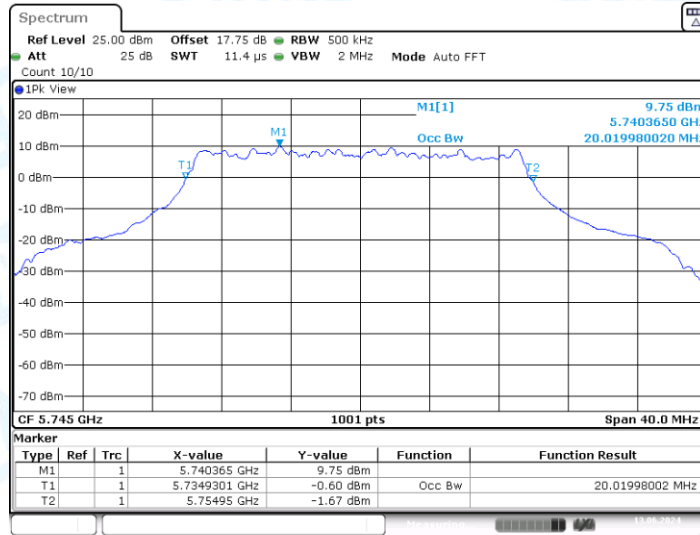
11AX20SISO_Ant1_5200



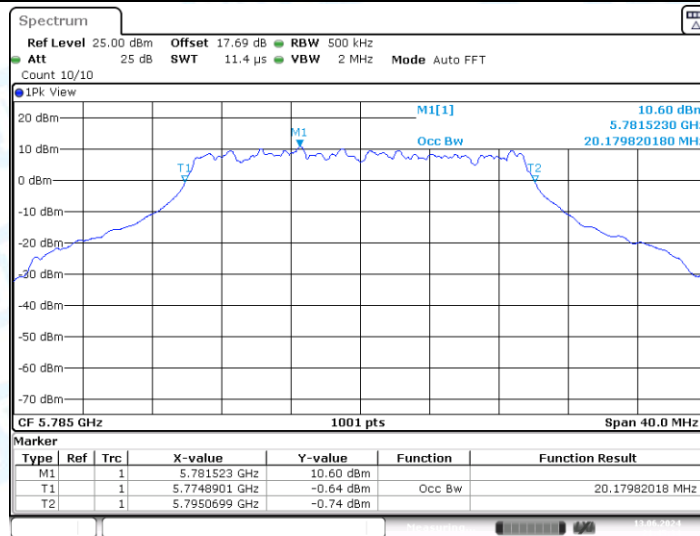
11AX20SISO_Ant1_5240



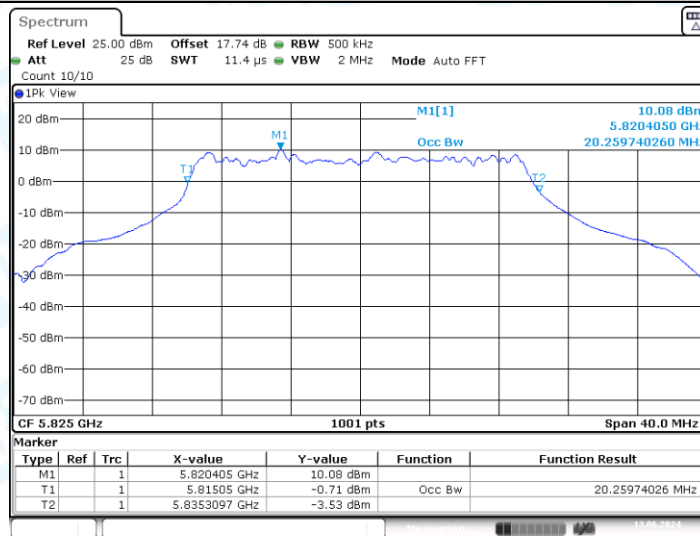
11AX20SISO_Ant1_5240



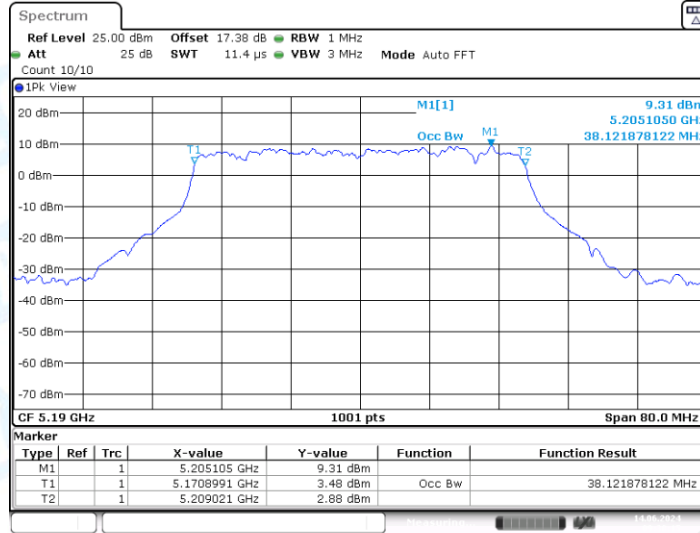
11AX20SISO_Ant1_5785



11AX20SISO_Ant1_5825

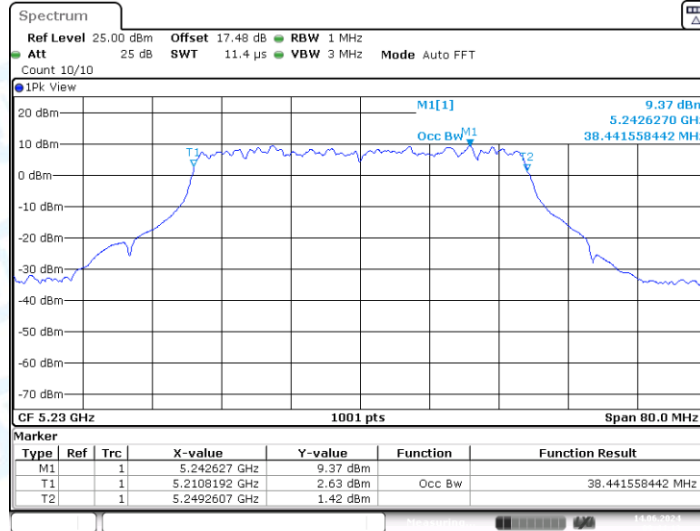


11AX40SISO_Ant1_5190



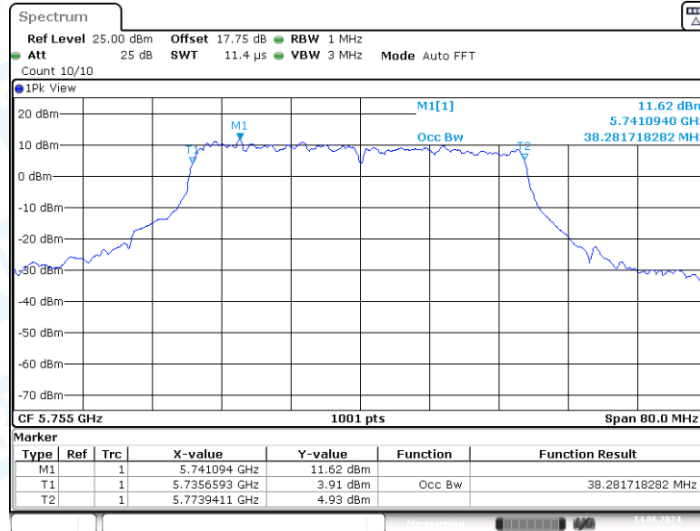
Date: 14.JUN.2024 09:38:15

11AX40SISO_Ant1_5230



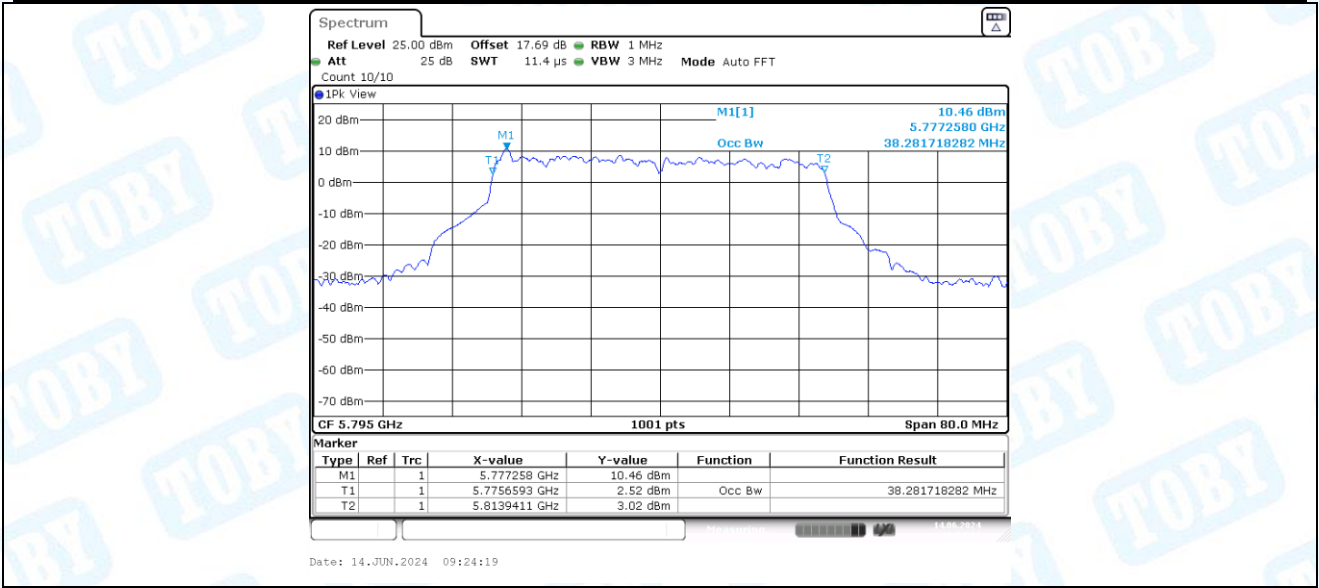
Date: 14.JUN.2024 09:44:13

11AX40SISO_Ant1_5755



Date: 14.JUN.2024 09:18:25

11AX40SISO_Ant1_5795



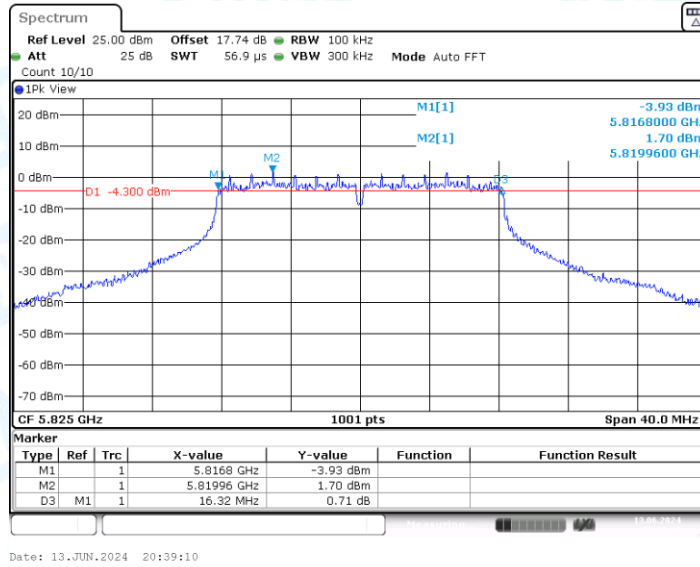
3. Min emission bandwidth

3.1. Test Result

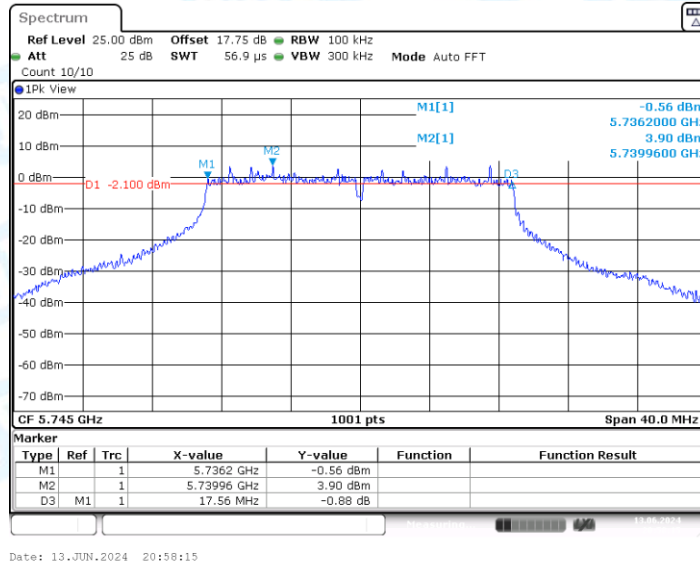
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.32	5736.80	5753.12	0.5	PASS
		5785	16.36	5776.80	5793.16	0.5	PASS
		5825	16.32	5816.80	5833.12	0.5	PASS
11N20SISO	Ant1	5745	17.56	5736.20	5753.76	0.5	PASS
		5785	17.52	5776.20	5793.72	0.5	PASS
		5825	17.56	5816.20	5833.76	0.5	PASS
11N40SISO	Ant1	5755	36.00	5736.76	5772.76	0.5	PASS
		5795	36.40	5776.76	5813.16	0.5	PASS
11AC20SISO	Ant1	5745	17.60	5736.16	5753.76	0.5	PASS
		5785	17.56	5776.20	5793.76	0.5	PASS
		5825	17.56	5816.20	5833.76	0.5	PASS
11AC40SISO	Ant1	5755	35.76	5736.76	5772.52	0.5	PASS
		5795	36.32	5776.76	5813.08	0.5	PASS
11AX20SISO	Ant1	5745	18.16	5735.68	5753.84	0.5	PASS
		5785	18.72	5775.60	5794.32	0.5	PASS
		5825	18.88	5815.60	5834.48	0.5	PASS
11AX40SISO	Ant1	5755	37.92	5735.88	5773.80	0.5	PASS
		5795	38.00	5775.88	5813.88	0.5	PASS

3.2.Test Graphs

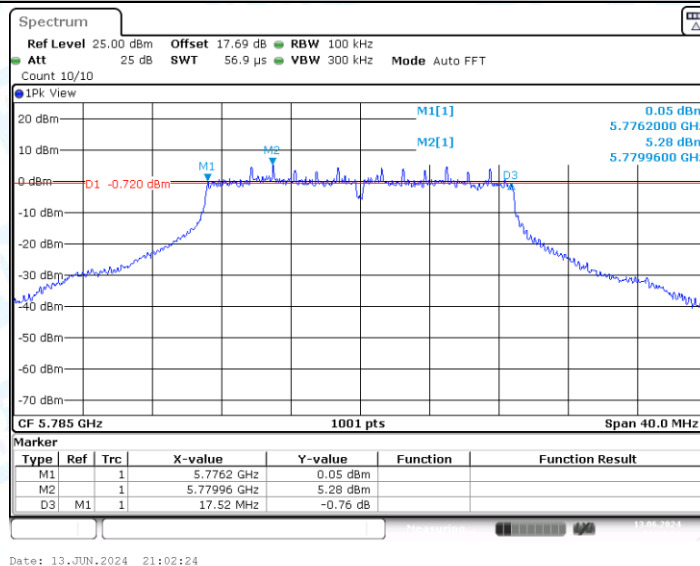




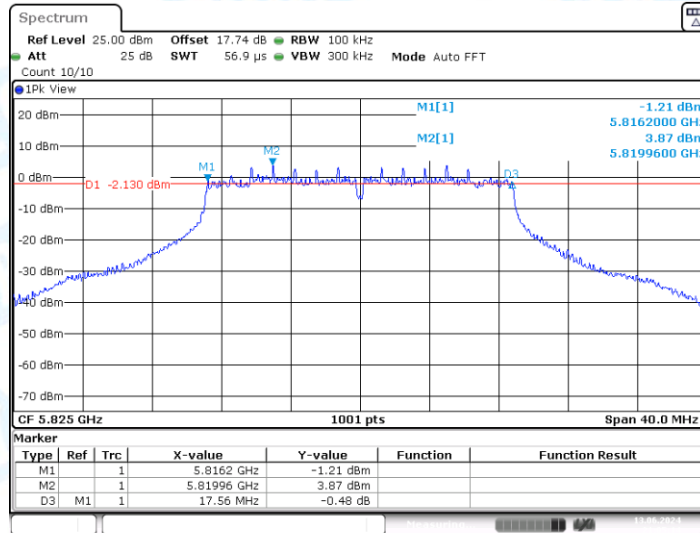
11N20SISO_Ant1_5745



11N20SISO_Ant1_5785

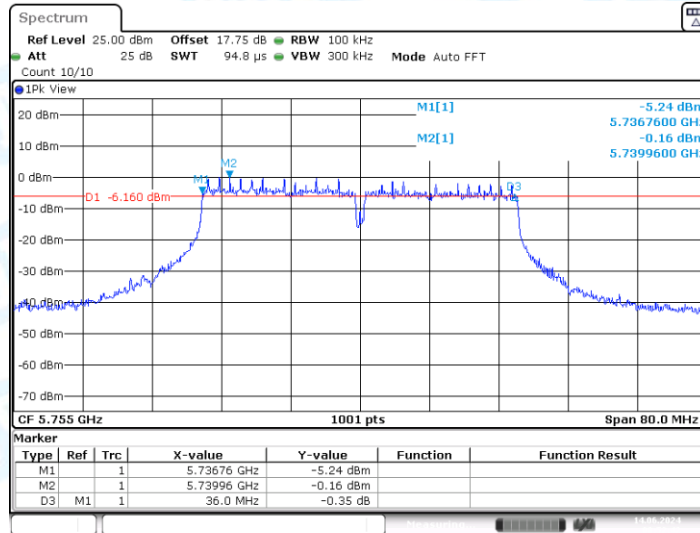


11N20SISO_Ant1_5825



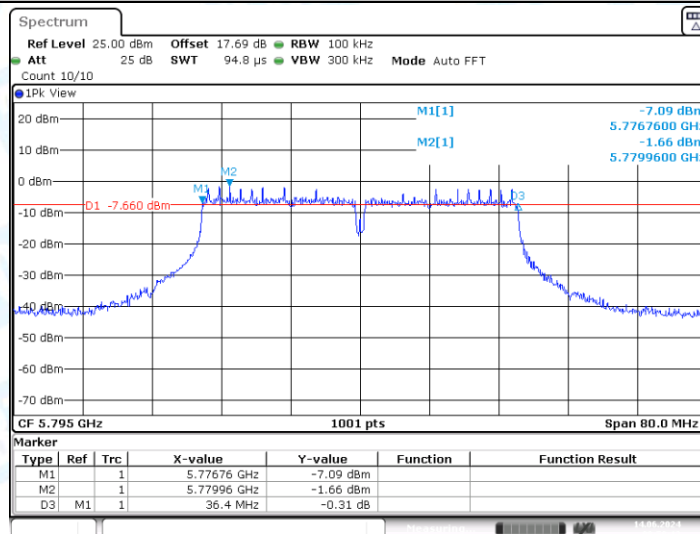
Date: 13.JUN.2024 21:05:14

11N40SISO_Ant1_5755



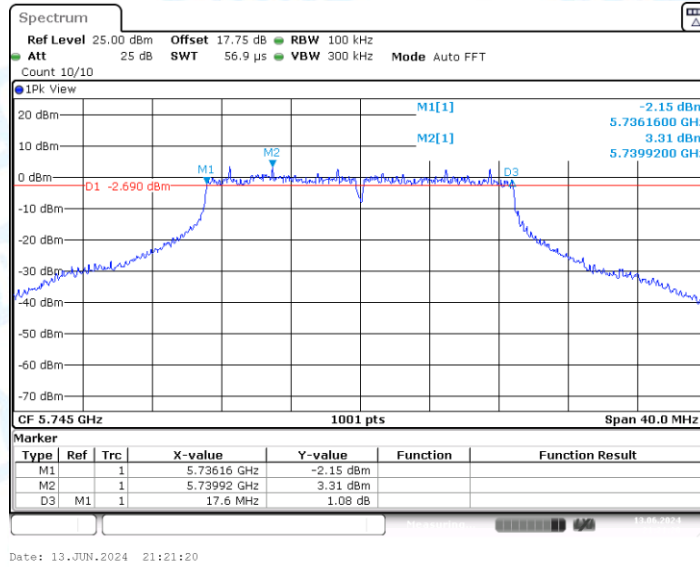
Date: 14.JUN.2024 08:52:42

11N40SISO_Ant1_5795

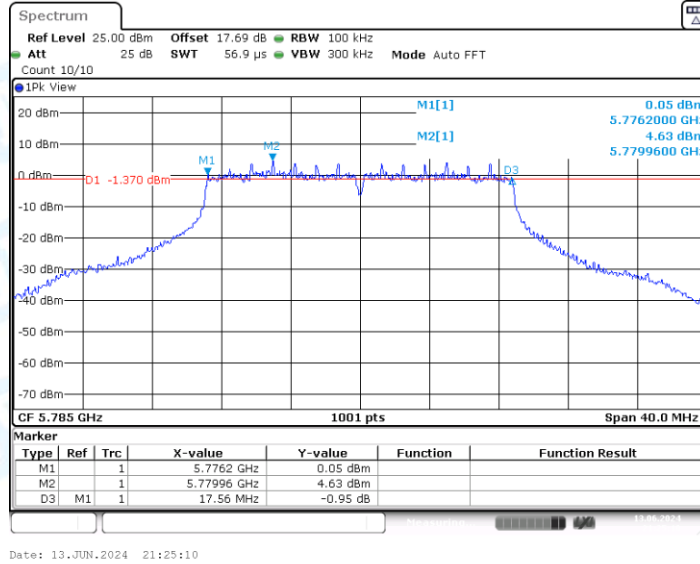


Date: 14.JUN.2024 08:58:13

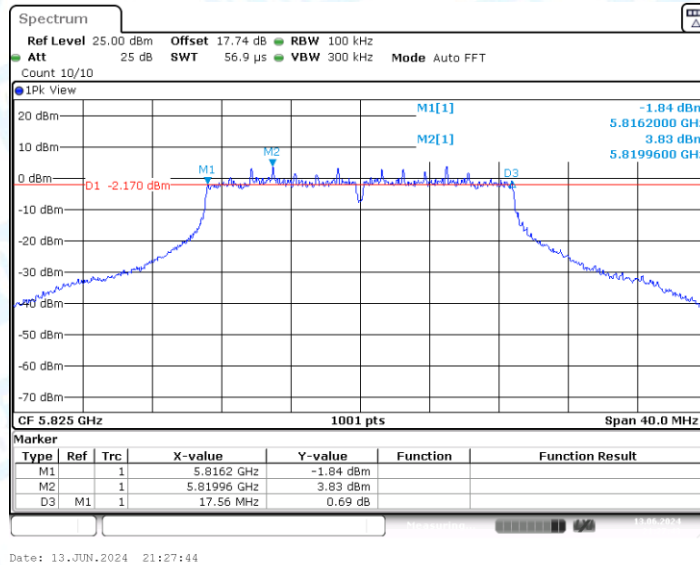
11AC20SISO_Ant1_5745



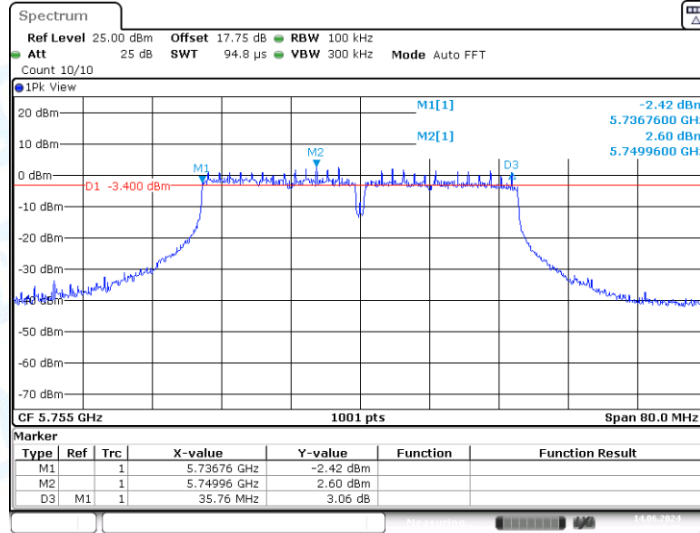
11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825

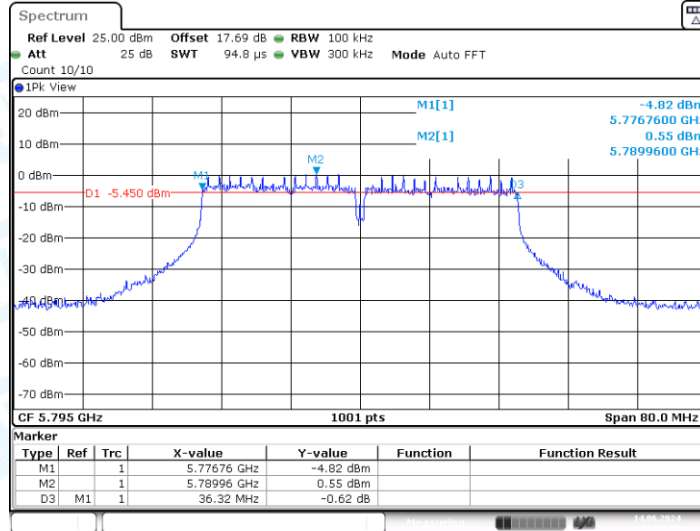


11AC40SISO_Ant1_5755



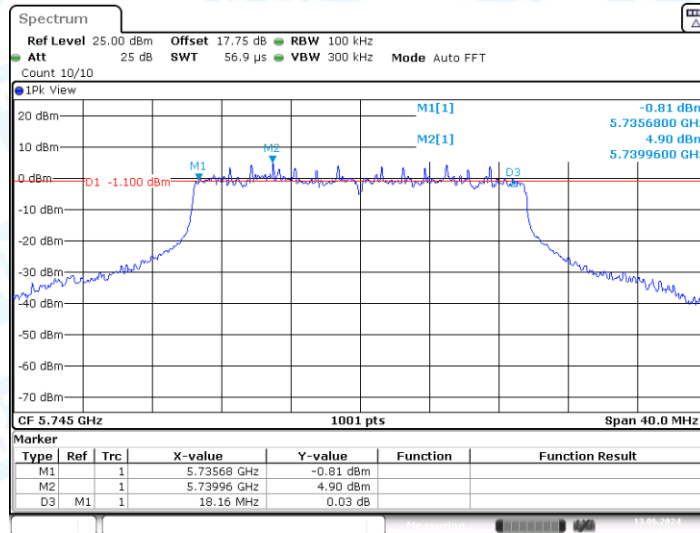
Date: 14.JUN.2024 09:05:25

11AC40SISO_Ant1_5795



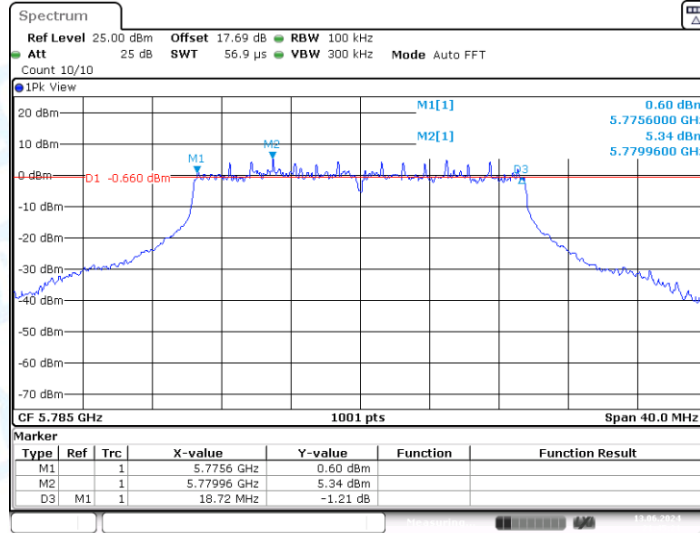
Date: 14.JUN.2024 09:12:58

11AX20SISO_Ant1_5745



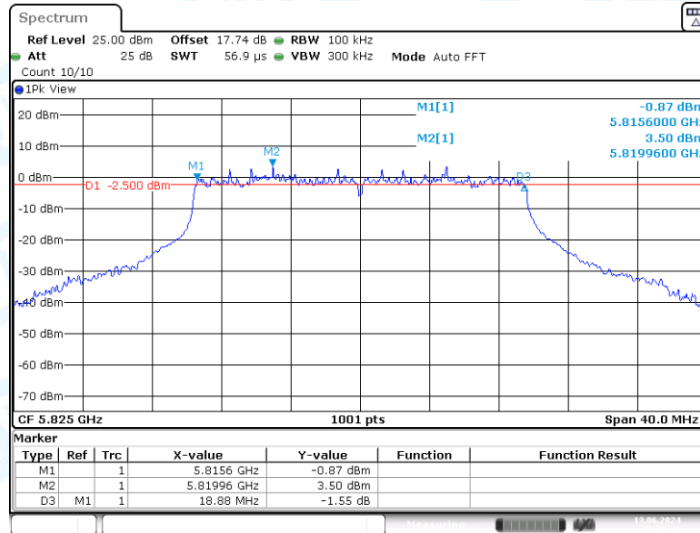
Date: 13.JUN.2024 21:41:30

11AX20SISO_Ant1_5785



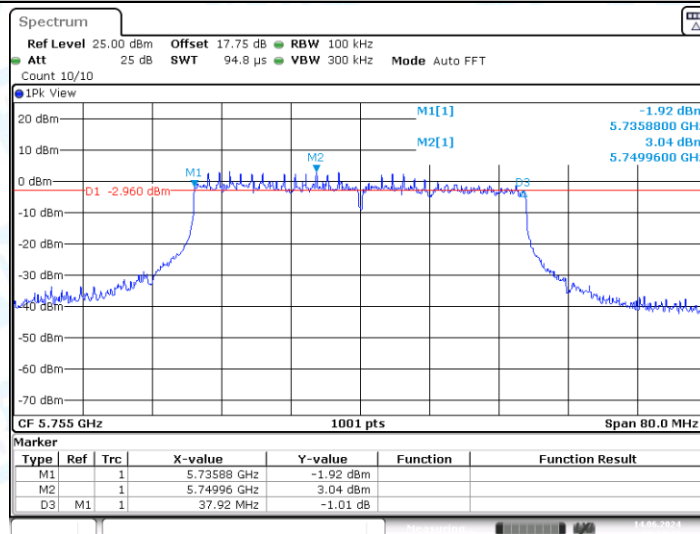
Date: 13.JUN.2024 21:45:21

11AX20SISO_Ant1_5825



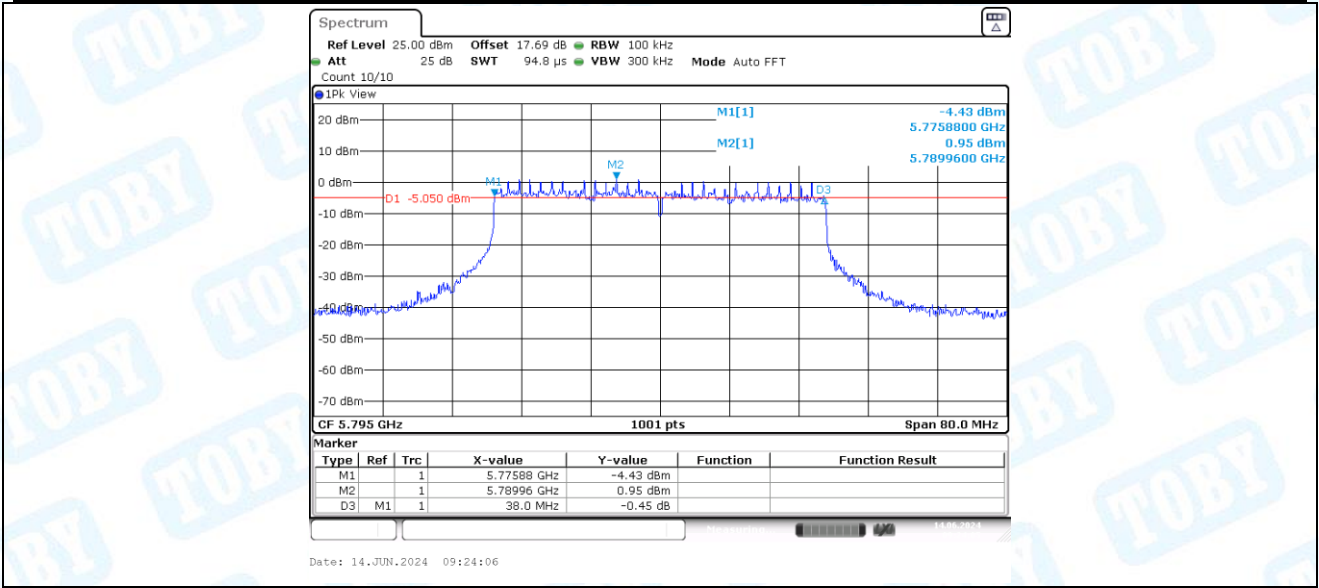
Date: 13.JUN.2024 21:48:48

11AX40SISO_Ant1_5755



Date: 14.JUN.2024 09:18:12

11AX40SISO_Ant1_5795



4. Maximum conducted output power

4.1. Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	14.92	≤23.98	PASS
		5200	15.18	≤23.98	PASS
		5240	15.22	≤23.98	PASS
		5745	14.27	≤30.00	PASS
		5785	14.97	≤30.00	PASS
		5825	13.95	≤30.00	PASS
11N20SISO	Ant1	5180	15.01	≤23.98	PASS
		5200	15.23	≤23.98	PASS
		5240	14.81	≤23.98	PASS
		5745	14.21	≤30.00	PASS
		5785	14.72	≤30.00	PASS
		5825	13.75	≤30.00	PASS
11N40SISO	Ant1	5190	15.24	≤23.98	PASS
		5230	15.03	≤23.98	PASS
		5755	13.29	≤30.00	PASS
		5795	14.77	≤30.00	PASS
11AC20SISO	Ant1	5180	14.71	≤23.98	PASS
		5200	15.08	≤23.98	PASS
		5240	15.03	≤23.98	PASS
		5745	14.17	≤30.00	PASS
		5785	14.93	≤30.00	PASS
		5825	13.95	≤30.00	PASS
11AC40SISO	Ant1	5190	14.39	≤23.98	PASS
		5230	14.94	≤23.98	PASS
		5755	16.09	≤30.00	PASS
		5795	14.21	≤30.00	PASS
11AX20SISO	Ant1	5180	14.78	≤23.98	PASS
		5200	15.14	≤23.98	PASS
		5240	15.44	≤23.98	PASS
		5745	14.06	≤30.00	PASS
		5785	14.93	≤30.00	PASS
		5825	14.23	≤30.00	PASS
11AX40SISO	Ant1	5190	15.06	≤23.98	PASS
		5230	15.51	≤23.98	PASS
		5755	16.52	≤30.00	PASS
		5795	14.86	≤30.00	PASS

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

5. Maximum power spectral density

5.1. Test Result

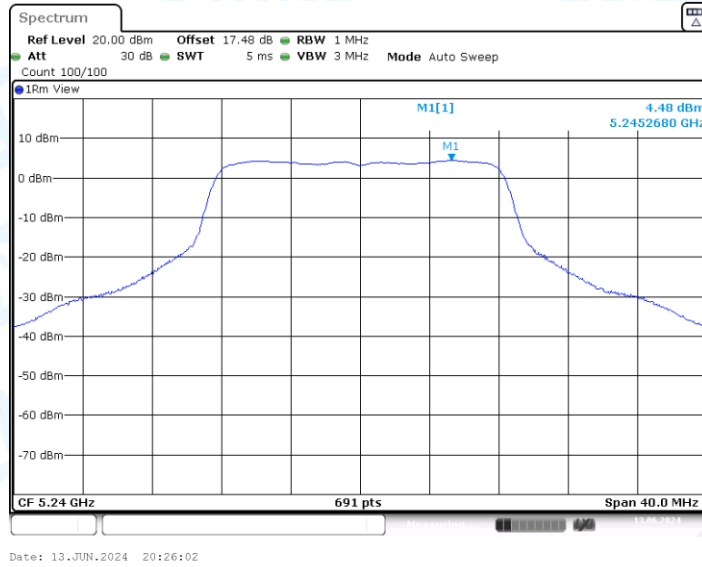
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	5.15	≤11.00	PASS
		5200	4.66	≤11.00	PASS
		5240	4.67	≤11.00	PASS
		5745	1.01	≤30.00	PASS
		5785	1.73	≤30.00	PASS
		5825	0.33	≤30.00	PASS
11N20SISO	Ant1	5180	4.34	≤11.00	PASS
		5200	4.47	≤11.00	PASS
		5240	4.20	≤11.00	PASS
		5745	0.99	≤30.00	PASS
		5785	1.32	≤30.00	PASS
		5825	0.10	≤30.00	PASS
11N40SISO	Ant1	5190	1.24	≤11.00	PASS
		5230	0.45	≤11.00	PASS
		5755	-3.66	≤30.00	PASS
		5795	-2.47	≤30.00	PASS
11AC20SISO	Ant1	5180	4.07	≤11.00	PASS
		5200	4.28	≤11.00	PASS
		5240	4.29	≤11.00	PASS
		5745	0.61	≤30.00	PASS
		5785	1.34	≤30.00	PASS
		5825	-0.01	≤30.00	PASS
11AC40SISO	Ant1	5190	0.04	≤11.00	PASS
		5230	0.61	≤11.00	PASS
		5755	-0.55	≤30.00	PASS
		5795	-2.88	≤30.00	PASS
11AX20SISO	Ant1	5180	3.93	≤11.00	PASS
		5200	4.09	≤11.00	PASS
		5240	4.24	≤11.00	PASS
		5745	0.55	≤30.00	PASS
		5785	1.20	≤30.00	PASS
		5825	0.10	≤30.00	PASS
11AX40SISO	Ant1	5190	0.56	≤11.00	PASS
		5230	0.81	≤11.00	PASS
		5755	-0.24	≤30.00	PASS
		5795	-2.43	≤30.00	PASS

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

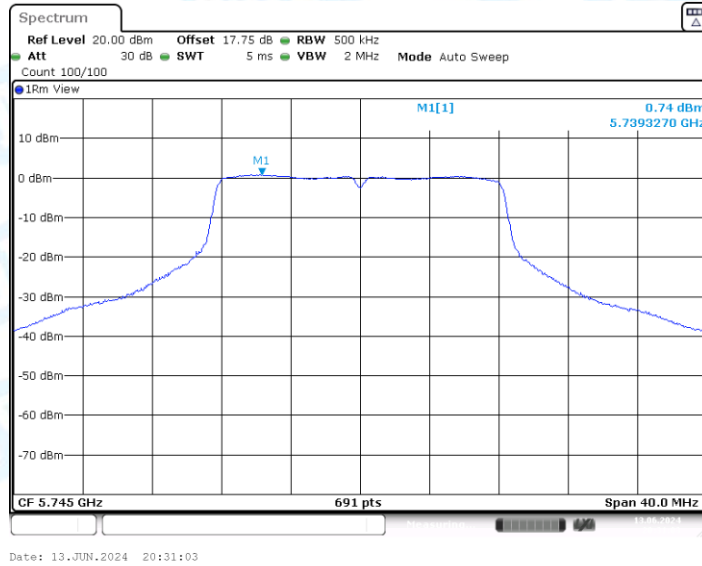
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

5.2.Test Graphs

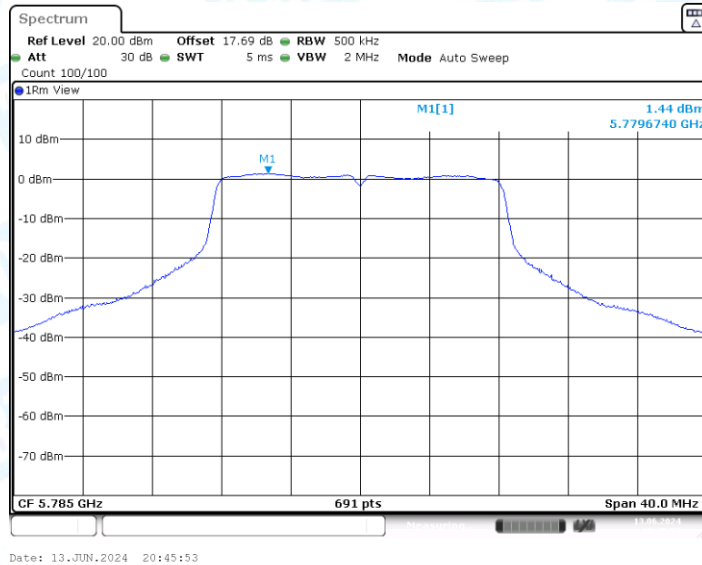




11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825