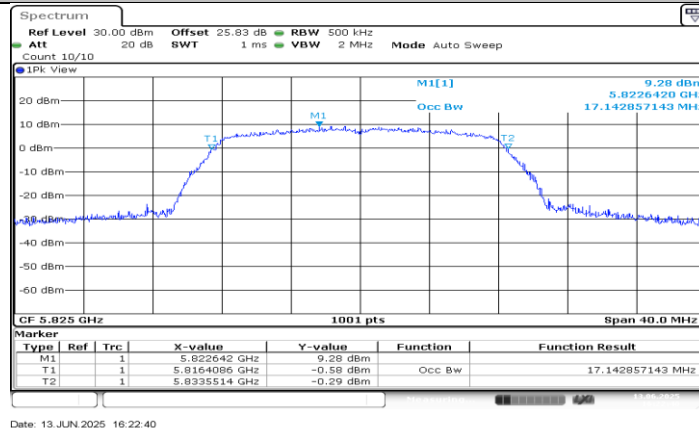
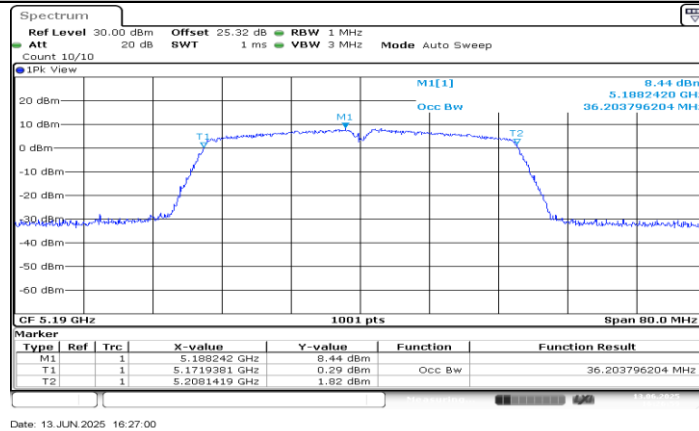


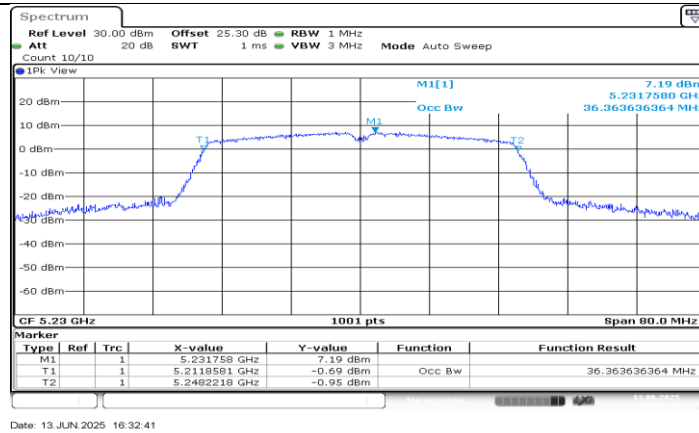
11N20SISO\_Ant1\_5785



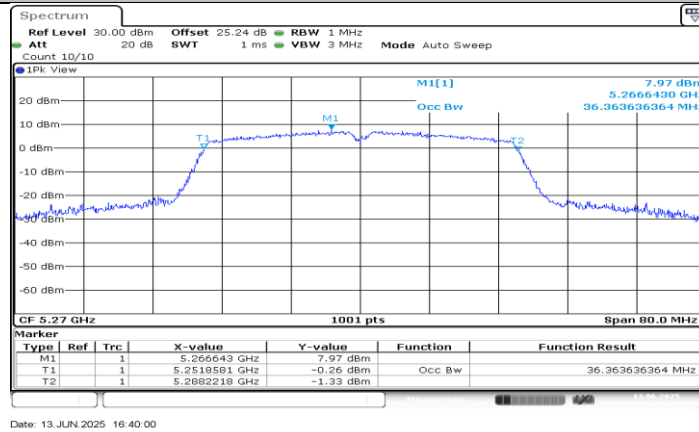
11N20SISO\_Ant1\_5825



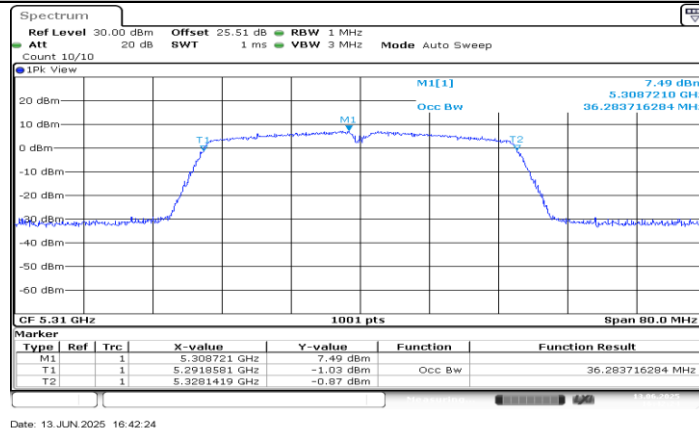
11N40SISO\_Ant1\_5190



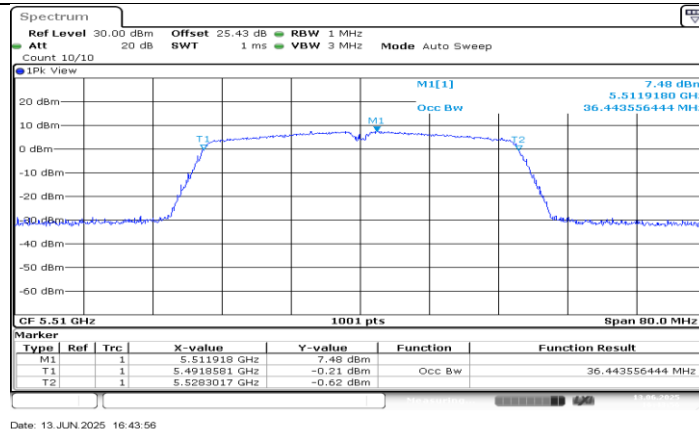
11N40SISO\_Ant1\_5230



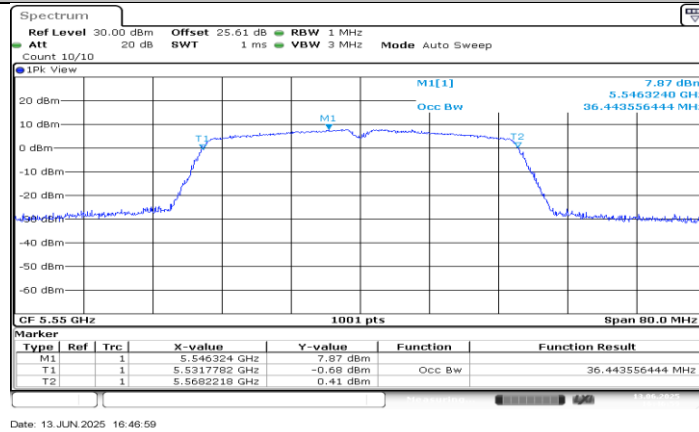
11N40SISO\_Ant1\_5270



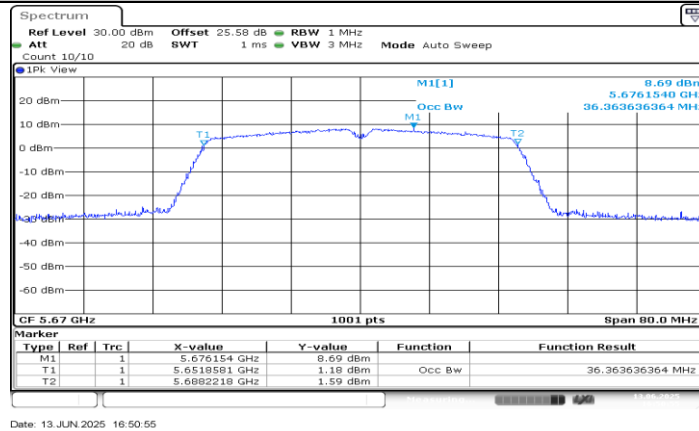
11N40SISO\_Ant1\_5310



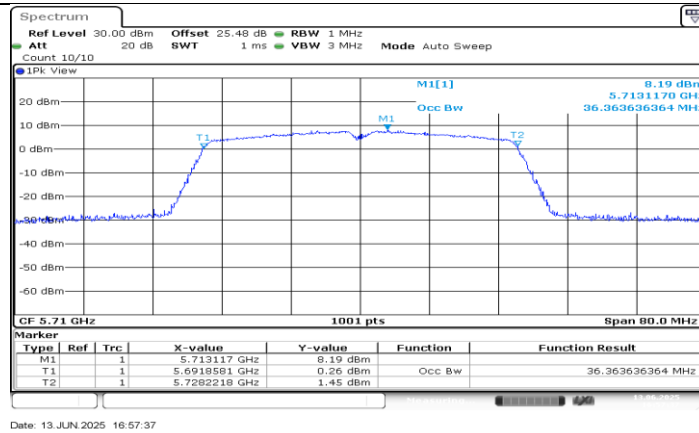
11N40SISO\_Ant1\_5510



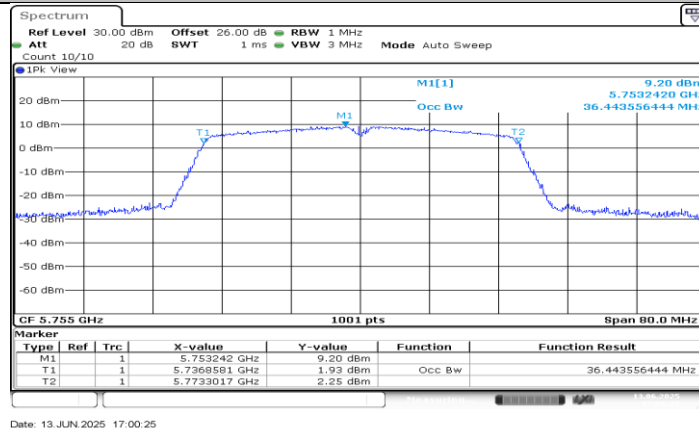
11N40SISO\_Ant1\_5550



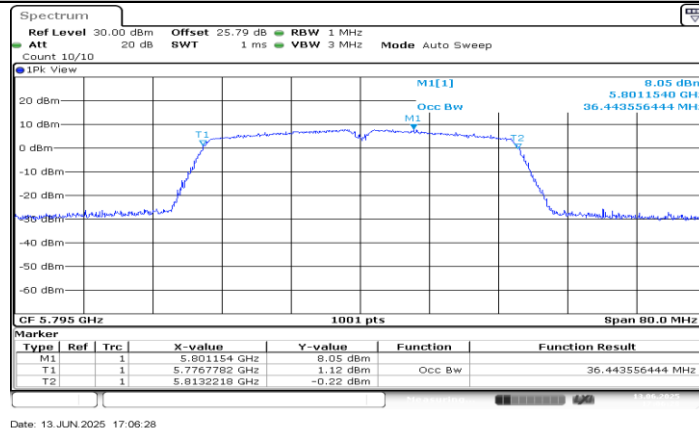
11N40SISO\_Ant1\_5670



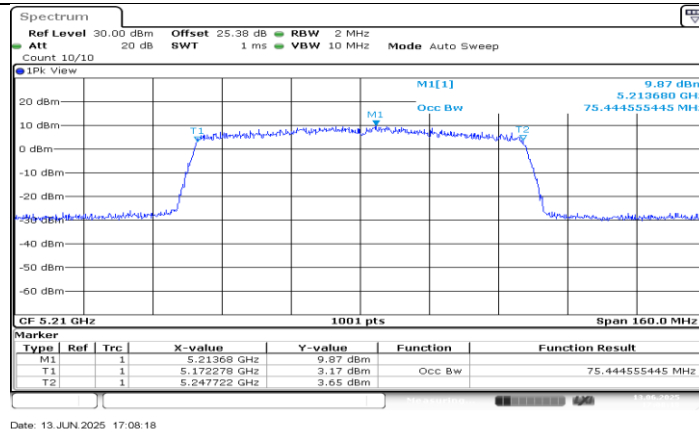
11N40SISO\_Ant1\_5710



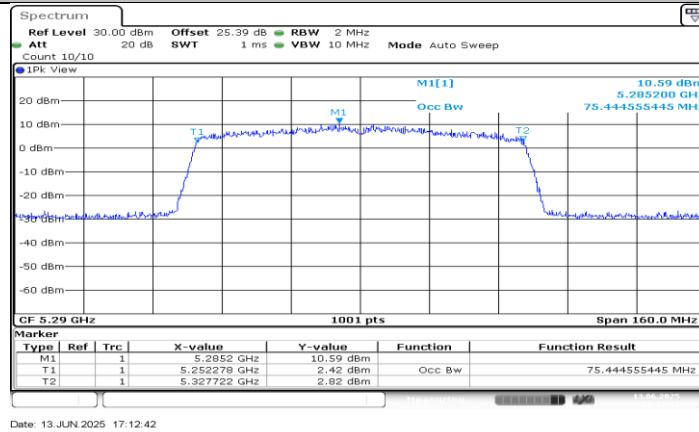
11N40SISO\_Ant1\_5755



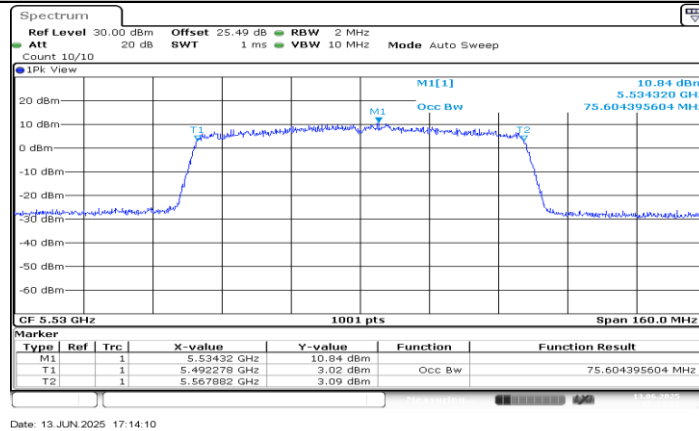
11N40SISO\_Ant1\_5795



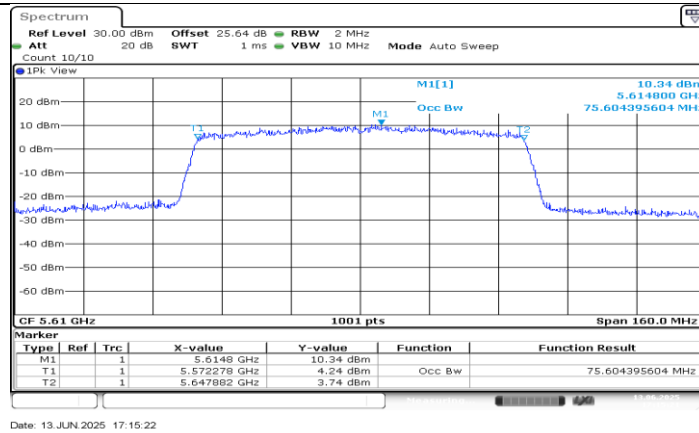
11AC80SISO\_Ant1\_5210



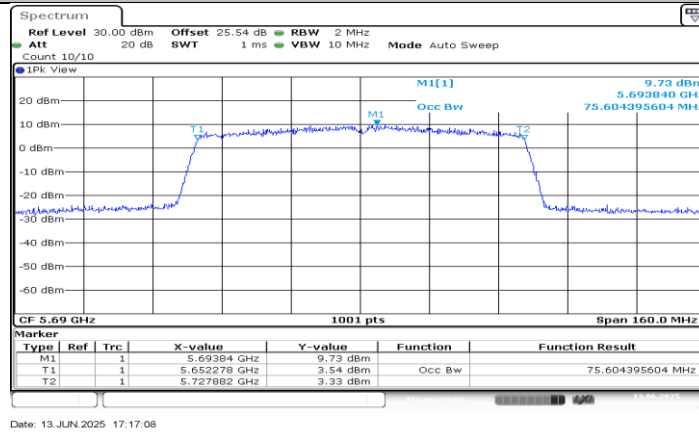
11AC80SISO\_Ant1\_5290



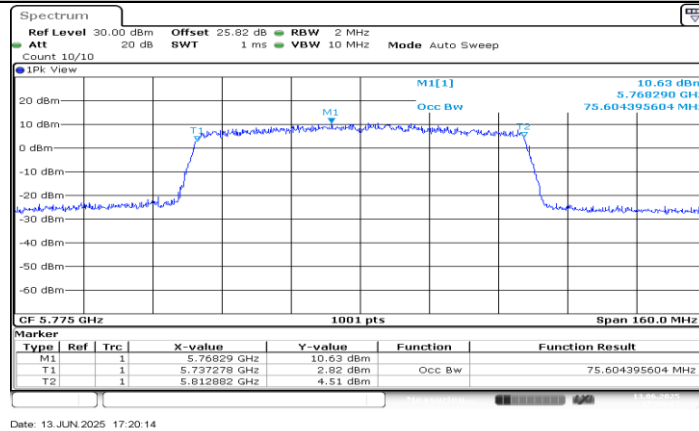
11AC80SISO\_Ant1\_5530



11AC80SISO\_Ant1\_5610



11AC80SISO\_Ant1\_5690



11AC80SISO\_Ant1\_5775

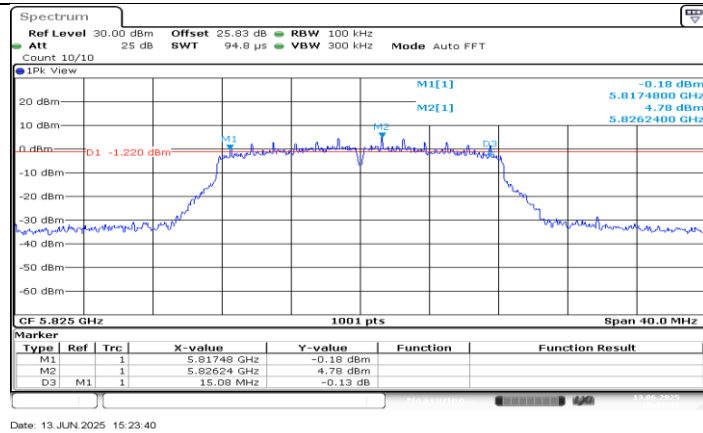
## 12.3. APPENDIX C2: MIN EMISSION BANDWIDTH

### 12.3.1. Test Result

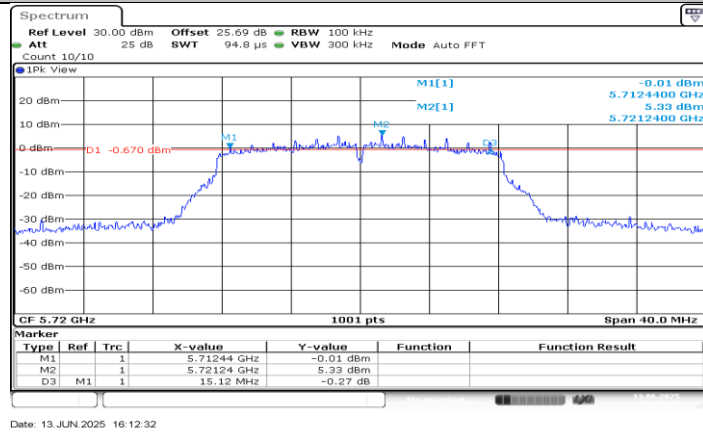
Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5720	15.12	5712.44	5727.56	---	---
		5720_UNII-2C	12.56	5712.44	5725	---	---
		5720_UNII-3	2.56	5725	5727.56	$\geq 0.5$	PASS
		5745	16.28	5736.84	5753.12	$\geq 0.5$	PASS
		5785	15.12	5777.40	5792.52	$\geq 0.5$	PASS
		5825	15.08	5817.48	5832.56	$\geq 0.5$	PASS
11N20SISO	Ant1	5720	15.12	5712.44	5727.56	---	---
		5720_UNII-2C	12.56	5712.44	5725	---	---
		5720_UNII-3	2.56	5725	5727.56	$\geq 0.5$	PASS
		5745	15.12	5737.44	5752.56	$\geq 0.5$	PASS
		5785	15.16	5777.40	5792.56	$\geq 0.5$	PASS
		5825	16.36	5816.80	5833.16	$\geq 0.5$	PASS
11N40SISO	Ant1	5710	35.20	5692.40	5727.60	---	---
		5710_UNII-2C	32.6	5692.40	5725	---	---
		5710_UNII-3	2.6	5725	5727.60	$\geq 0.5$	PASS
		5755	35.04	5737.48	5772.52	$\geq 0.5$	PASS
		5795	35.12	5777.48	5812.60	$\geq 0.5$	PASS
11AC80SISO	Ant1	5690	75.20	5652.40	5727.60	---	---
		5690_UNII-2C	72.6	5652.40	5725	---	---
		5690_UNII-3	2.6	5725	5727.60	$\geq 0.5$	PASS
		5775	75.04	5737.40	5812.44	$\geq 0.5$	PASS



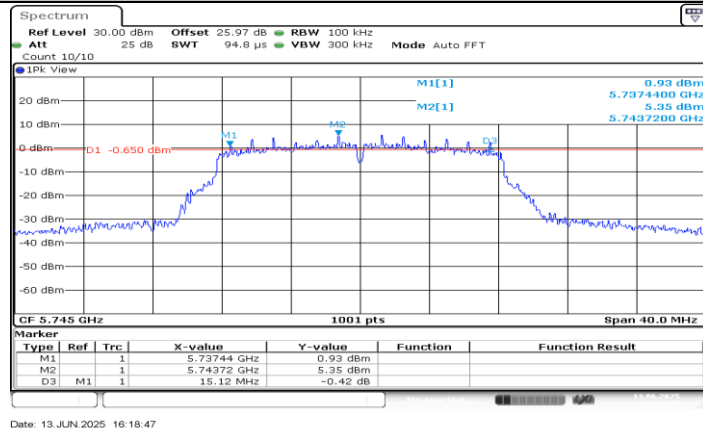




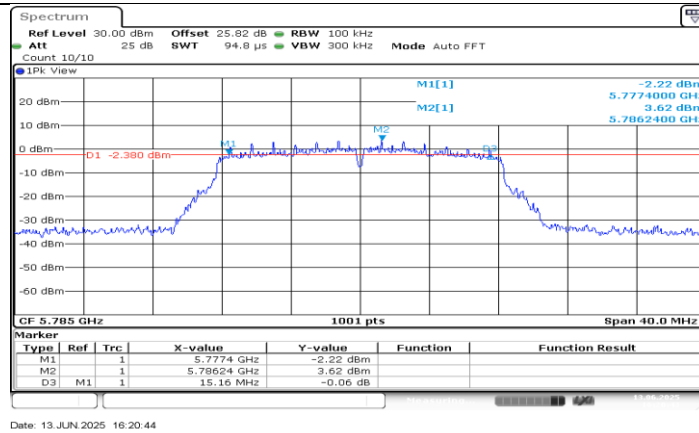
11A\_Ant1\_5825



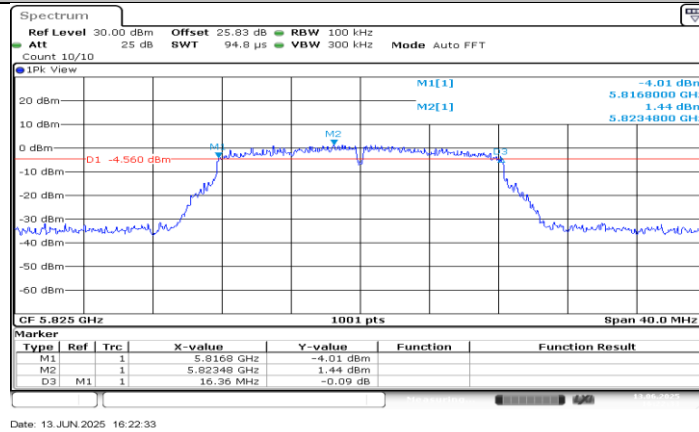
11N20SISO\_Ant1\_5720



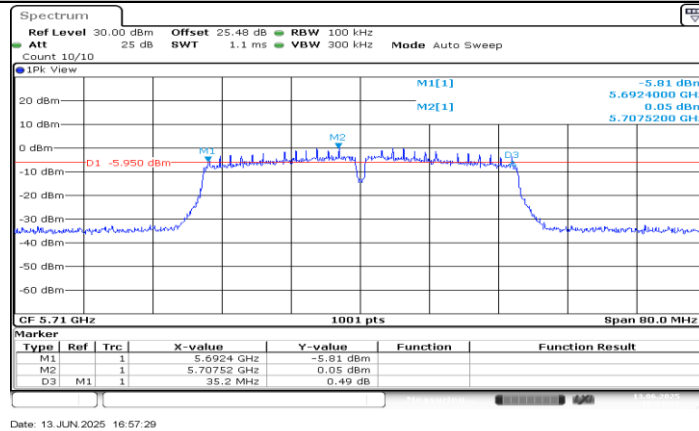
11N20SISO\_Ant1\_5745



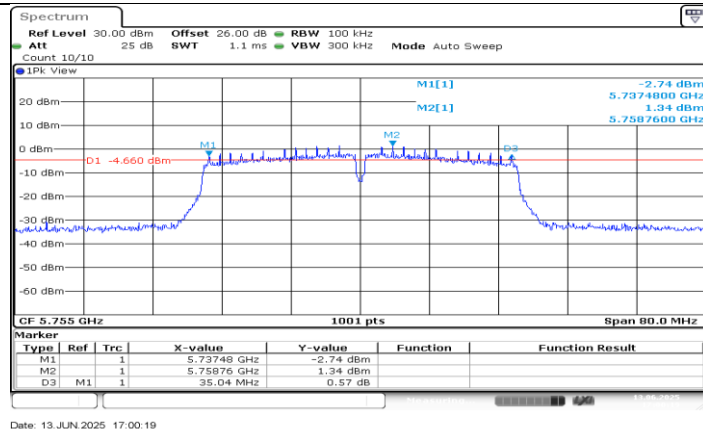
11N20SISO\_Ant1\_5785



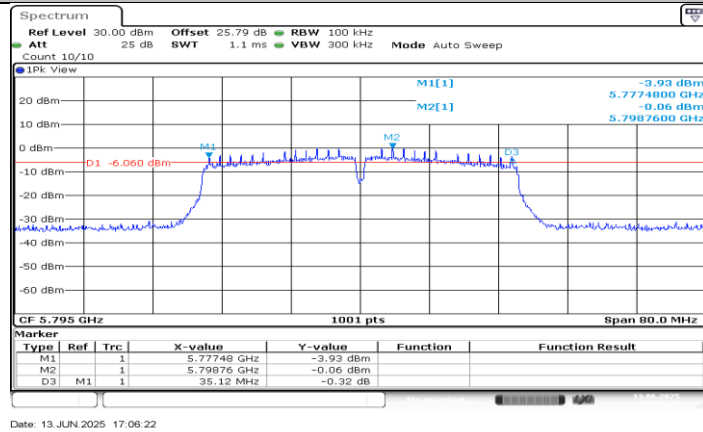
11N20SISO\_Ant1\_5825



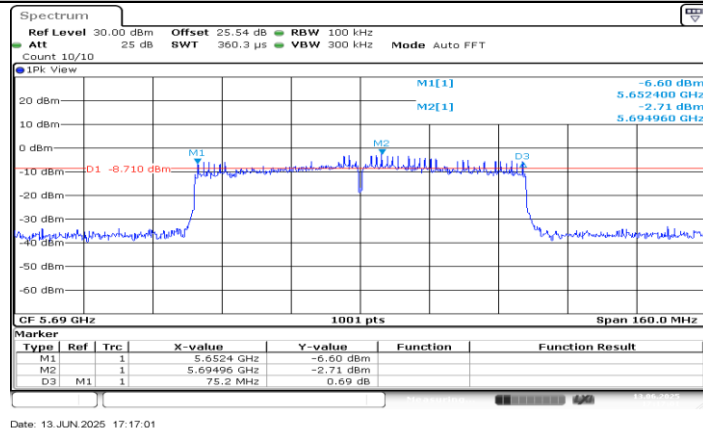
11N40SISO\_Ant1\_5710



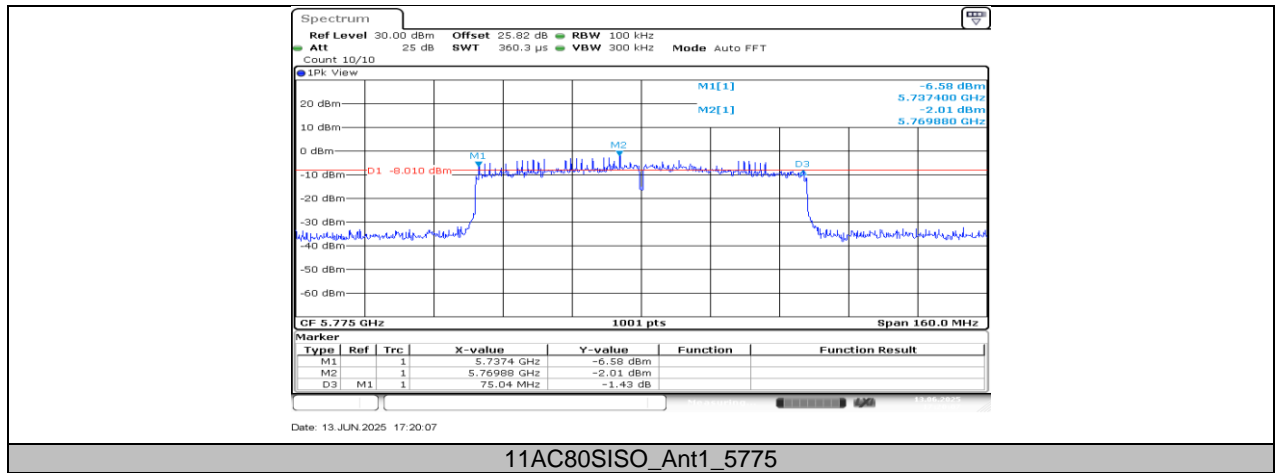
11N40SISO\_Ant1\_5755



11N40SISO\_Ant1\_5795



11AC80SISO\_Ant1\_5690



## 12.4. APPENDIX D2: MAXIMUM CONDUCTED OUTPUT POWER

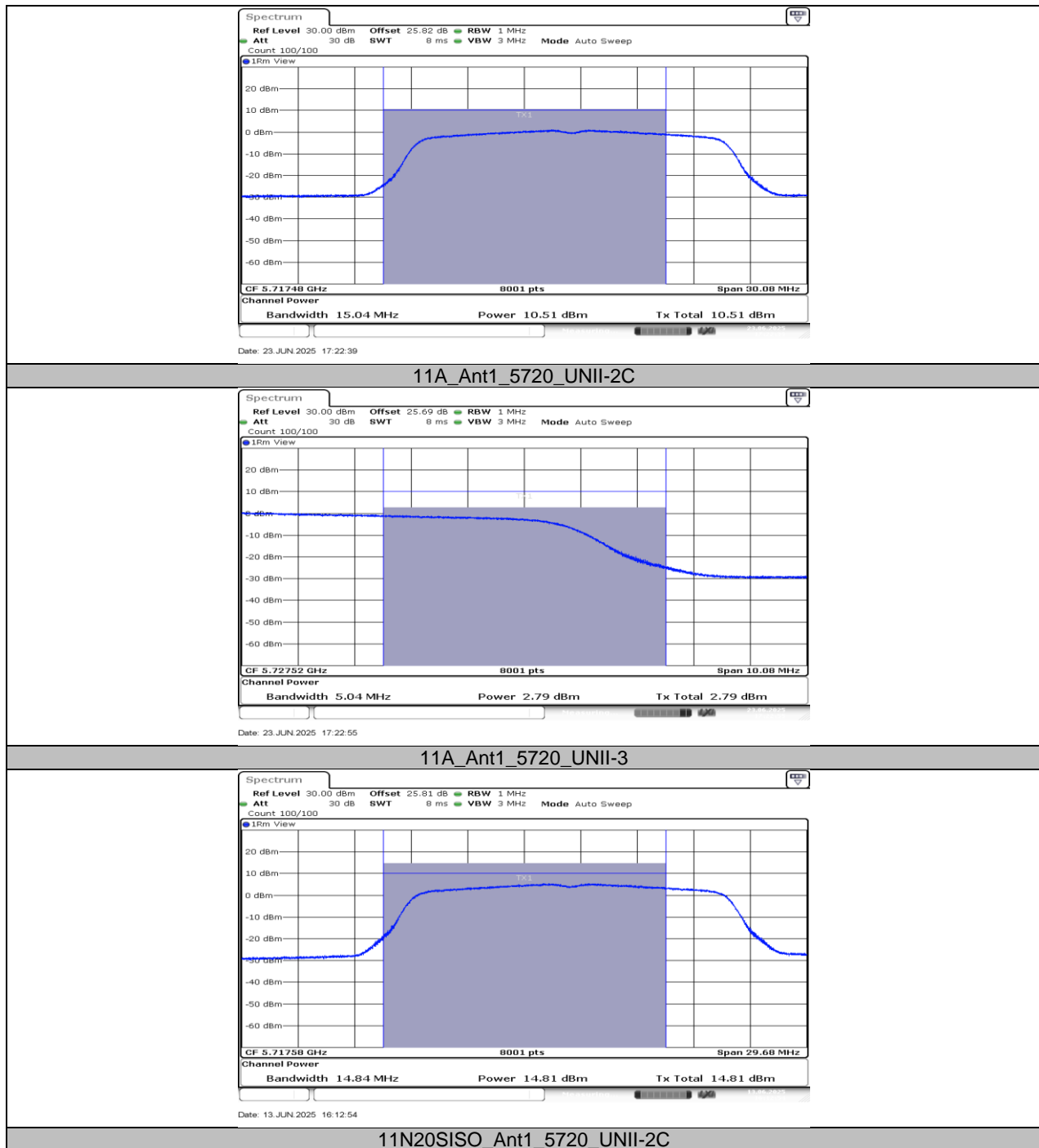
### 12.4.1. Test Result

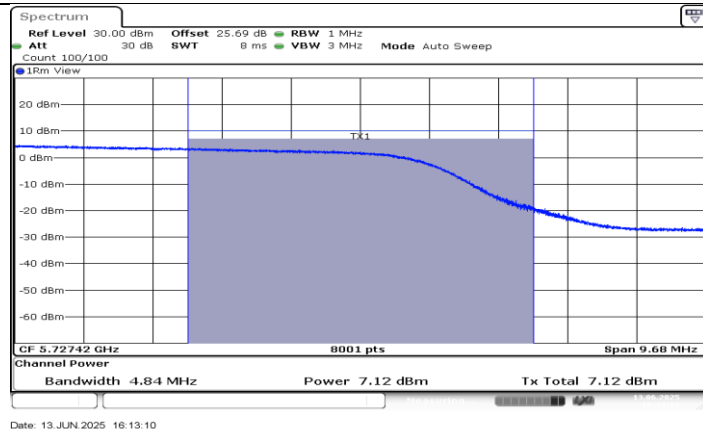
Test Mode	Antenna	Frequency[MHz]	Power [dBm]	FCC Limit [dBm]	ISED Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	13.15	≤23.98	---	15.95	≤22.33	PASS
		5200	13.52	≤23.98	---	16.32	≤22.39	PASS
		5240	13.72	≤23.98	---	16.52	≤22.46	PASS
		5260	11.29	≤23.98	≤23.39	14.09	≤29.39	PASS
		5280	11.72	≤23.98	≤23.45	14.52	≤29.45	PASS
		5320	12.11	≤23.98	≤23.35	14.91	≤29.35	PASS
		5500	11.83	≤23.98	≤23.34	14.63	≤29.34	PASS
		5580	11.47	≤23.98	≤23.37	14.27	≤29.37	PASS
		5700	10.96	≤23.98	≤23.39	13.76	≤29.39	PASS
		5720_UNII-2C	10.51	≤22.77	≤22.35	13.31	≤28.35	PASS
		5720_UNII-3	2.79	≤30.00	≤30.00	5.59	---	PASS
		5745	12.78	≤30.00	≤30.00	15.58	---	PASS
		5785	12.91	≤30.00	≤30.00	15.71	---	PASS
		5825	13.35	≤30.00	≤30.00	16.15	---	PASS
11N20SISO	Ant1	5180	14.02	≤23.98	---	16.82	≤22.33	PASS
		5200	13.98	≤23.98	---	16.78	≤22.38	PASS
		5240	14.09	≤23.98	---	16.89	≤22.42	PASS
		5260	11.60	≤23.98	≤23.41	14.40	≤29.41	PASS
		5280	12.07	≤23.98	≤23.40	14.87	≤29.40	PASS
		5320	12.53	≤23.95	≤23.34	15.33	≤29.34	PASS
		5500	14.87	≤23.97	≤23.33	17.67	≤29.33	PASS
		5580	15.01	≤23.98	≤23.36	17.81	≤29.36	PASS
		5700	15.22	≤23.98	≤23.36	18.02	≤29.36	PASS
		5720_UNII-2C	14.81	≤22.71	≤22.33	17.61	≤28.33	PASS
		5720_UNII-3	7.12	≤30.00	≤30.00	9.92	---	PASS
		5745	14.86	≤30.00	≤30.00	17.66	---	PASS
		5785	14.55	≤30.00	≤30.00	17.35	---	PASS
		5825	14.47	≤30.00	≤30.00	17.27	---	PASS
11N40SISO	Ant1	5190	14.24	≤23.98	---	17.04	≤23.00	PASS
		5230	13.97	≤23.98	---	16.77	≤23.00	PASS
		5270	12.93	≤23.98	≤23.98	15.73	≤30.00	PASS
		5310	13.60	≤23.98	≤23.98	16.40	≤30.00	PASS
		5510	12.80	≤23.98	≤23.98	15.60	≤30.00	PASS
		5550	12.82	≤23.98	≤23.98	15.62	≤30.00	PASS
		5670	12.66	≤23.98	≤23.98	15.46	≤30.00	PASS
		5710_UNII-2C	12.18	≤23.98	≤23.98	14.98	≤30.00	PASS
		5710_UNII-3	-0.26	≤30.00	≤30.00	2.54	---	PASS
		5755	14.99	≤30.00	≤30.00	17.79	---	PASS
		5795	14.48	≤30.00	≤30.00	17.28	---	PASS
11AC80SISO	Ant1	5210	13.62	≤23.98	---	16.42	≤23.00	PASS
		5290	13.55	≤23.98	≤23.98	16.35	≤30.00	PASS
		5530	13.85	≤23.98	≤23.98	16.65	≤30.00	PASS
		5610	14.29	≤23.98	≤23.98	17.09	≤30.00	PASS
		5690_UNII-2C	13.87	≤23.98	≤23.98	16.67	≤30.00	PASS
		5690_UNII-3	-1.77	≤30.00	≤30.00	1.03	---	PASS
		5775	13.86	≤30.00	≤30.00	16.66	---	PASS

Note: 1. Conducted Power=Meas. Level+ Correction Factor

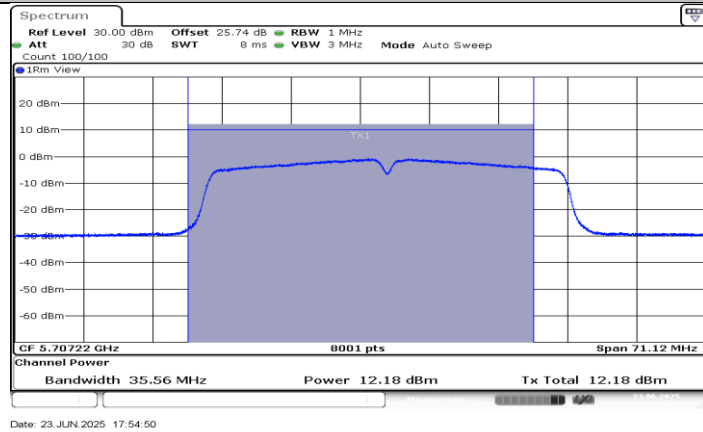
2. The Duty Cycle Factor (refer to section 7.1) had already compensated to the test data.

## 12.4.2. Test Graphs

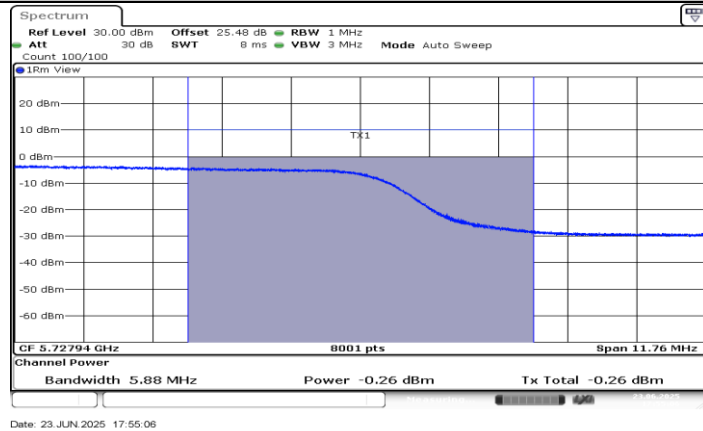




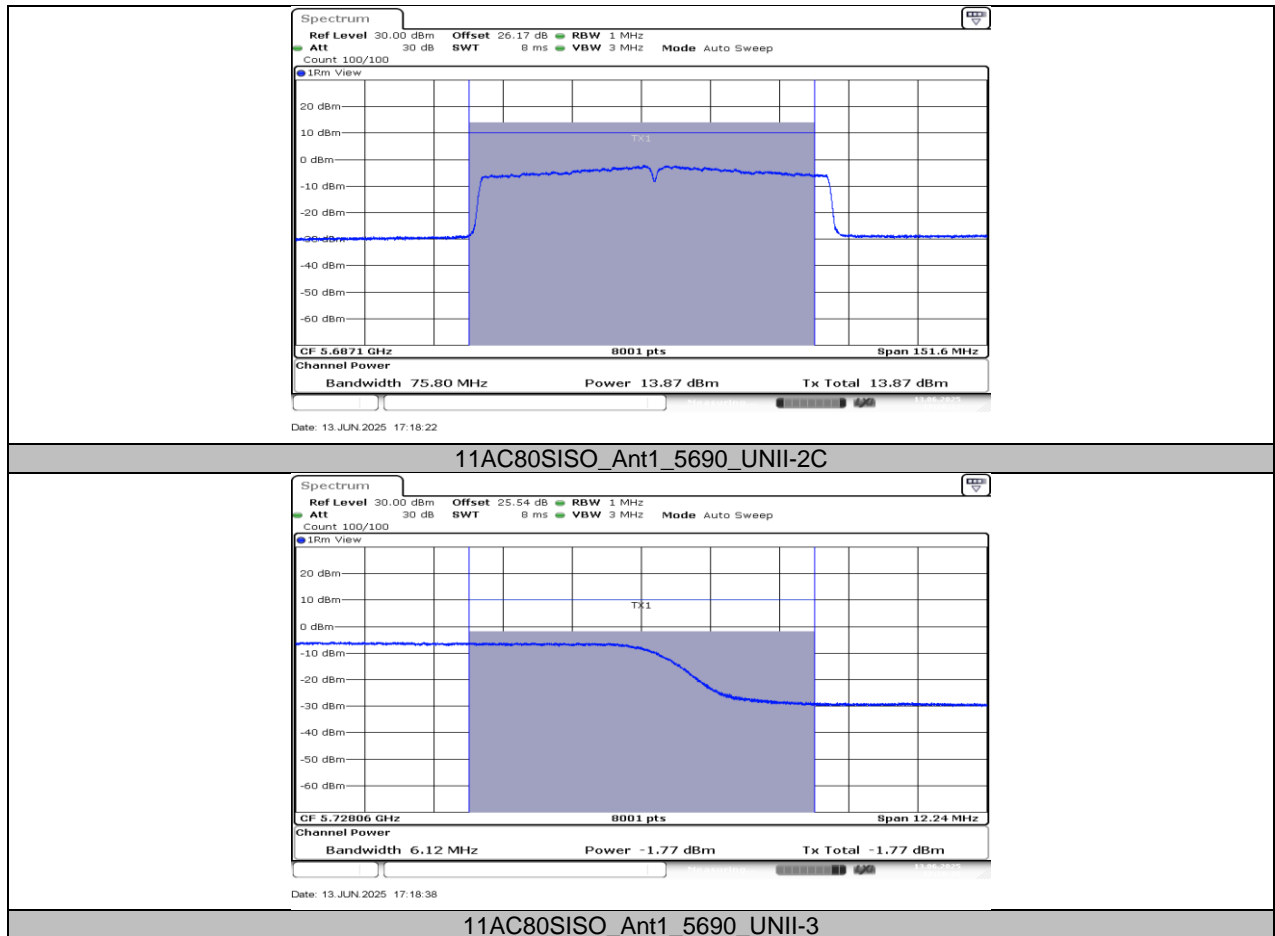
11N20SISO\_Ant1\_5720\_UNII-3



11N40SISO\_Ant1\_5710\_UNII-2C



11N40SISO\_Ant1\_5710\_UNII-3





## 12.5. APPENDIX E2: MAXIMUM POWER SPECTRAL DENSITY

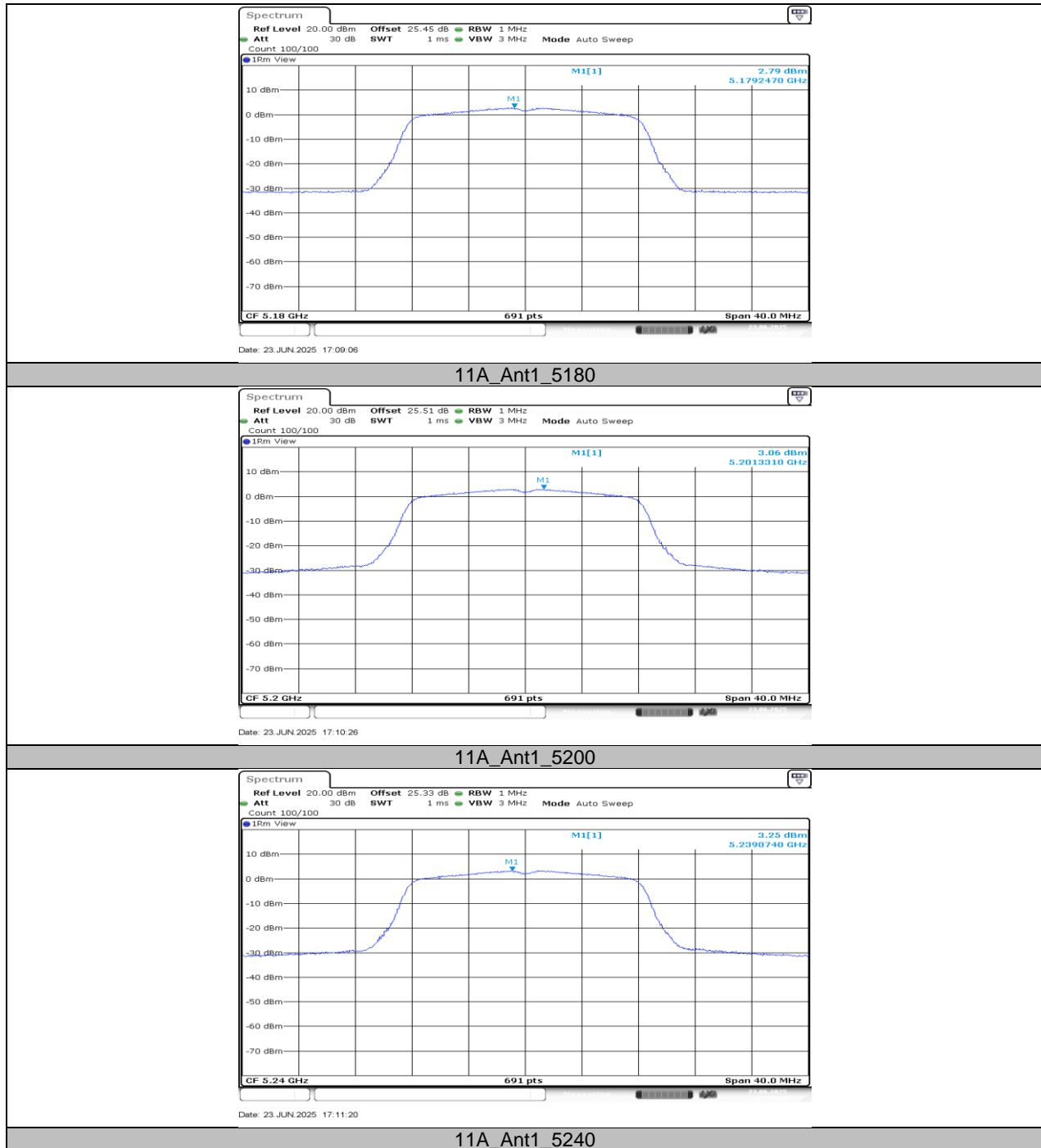
### 12.5.1. Test Result

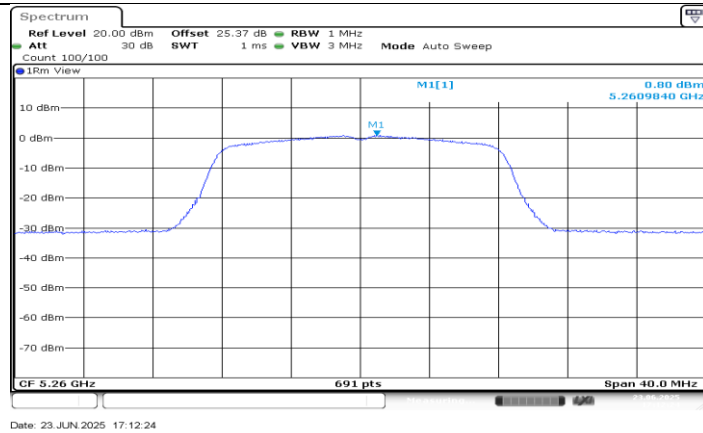
Test Mode	Antenna	Frequency[MHz]	Power [dBm/MHz]	Limit [dBm/MHz]	EIRP [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	2.79	≤11.00	5.59	≤10.00	PASS
		5200	3.06	≤11.00	5.86	≤10.00	PASS
		5240	3.25	≤11.00	6.05	≤10.00	PASS
		5260	0.80	≤11.00	3.60	---	PASS
		5280	1.20	≤11.00	4.00	---	PASS
		5320	1.68	≤11.00	4.48	---	PASS
		5500	1.38	≤11.00	4.18	---	PASS
		5580	1.05	≤11.00	3.85	---	PASS
		5700	0.60	≤11.00	3.40	---	PASS
		5720_UNII-2C	0.96	≤11.00	3.76	---	PASS
		5720_UNII-3	-3.91	≤30.00	-1.11	---	PASS
		5745	-0.29	≤30.00	2.51	---	PASS
		5785	-0.21	≤30.00	2.59	---	PASS
		5825	0.14	≤30.00	2.94	---	PASS
11N20SISO	Ant1	5180	3.84	≤11.00	6.64	≤10.00	PASS
		5200	3.76	≤11.00	6.56	≤10.00	PASS
		5240	3.83	≤11.00	6.63	≤10.00	PASS
		5260	1.15	≤11.00	3.95	---	PASS
		5280	1.51	≤11.00	4.31	---	PASS
		5320	1.99	≤11.00	4.79	---	PASS
		5500	4.57	≤11.00	7.37	---	PASS
		5580	4.50	≤11.00	7.30	---	PASS
		5700	4.86	≤11.00	7.66	---	PASS
		5720_UNII-2C	5.16	≤11.00	7.96	---	PASS
		5720_UNII-3	0.37	≤30.00	3.17	---	PASS
		5745	1.80	≤30.00	4.60	---	PASS
		5785	1.50	≤30.00	4.30	---	PASS
		5825	1.35	≤30.00	4.15	---	PASS
11N40SISO	Ant1	5190	0.63	≤11.00	3.43	≤10.00	PASS
		5230	0.40	≤11.00	3.20	≤10.00	PASS
		5270	-0.61	≤11.00	2.19	---	PASS
		5310	0.40	≤11.00	3.20	---	PASS
		5510	-0.64	≤11.00	2.16	---	PASS
		5550	-0.58	≤11.00	2.22	---	PASS
		5670	-0.94	≤11.00	1.86	---	PASS
		5710_UNII-2C	-1.02	≤11.00	1.78	---	PASS
		5710_UNII-3	-6.89	≤30.00	-4.09	---	PASS
		5755	-1.49	≤30.00	1.31	---	PASS
		5795	-1.82	≤30.00	0.98	---	PASS
		5210	-2.86	≤11.00	-0.06	≤10.00	PASS
11AC80SISO	Ant1	5290	-2.94	≤11.00	-0.14	---	PASS
		5530	-2.55	≤11.00	0.25	---	PASS
		5610	-2.24	≤11.00	0.56	---	PASS
		5690_UNII-2C	-2.53	≤11.00	0.27	---	PASS
		5690_UNII-3	-8.73	≤30.00	-5.93	---	PASS
		5775	-5.18	≤30.00	-2.38	---	PASS

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

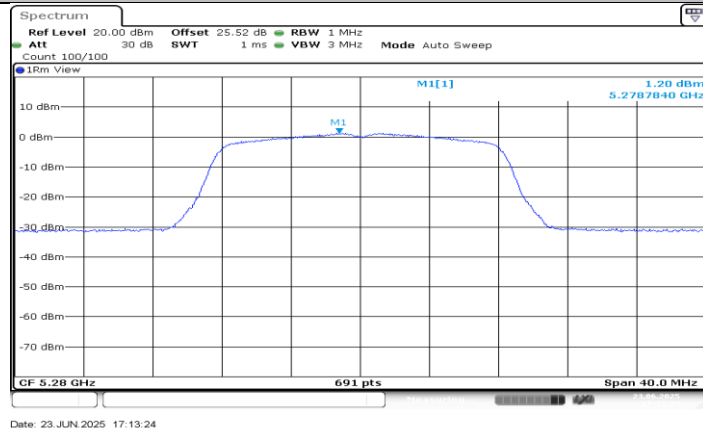
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

## 12.5.2. Test Graphs

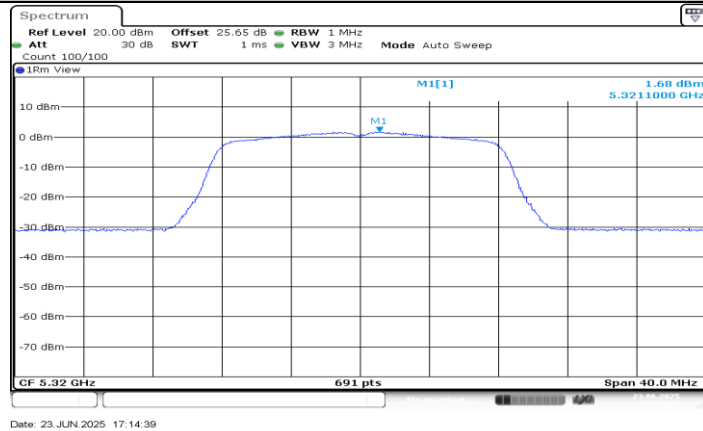




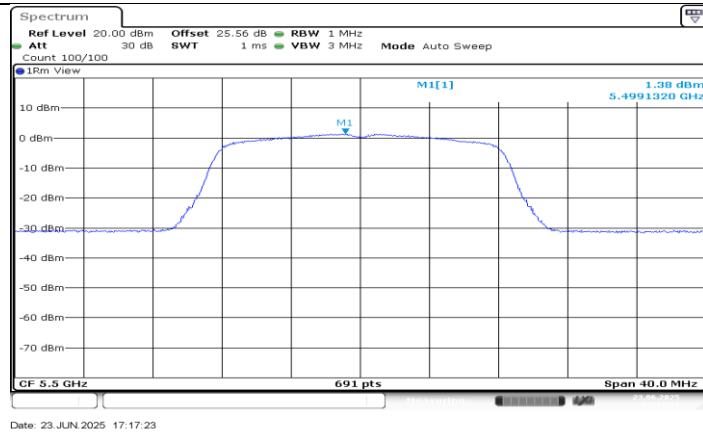
11A\_Ant1\_5260



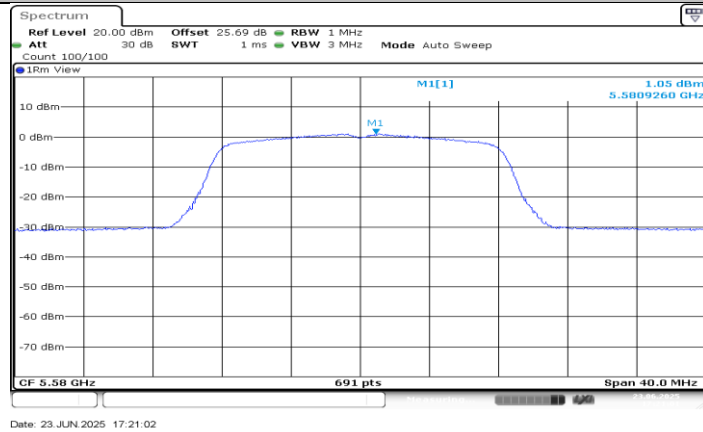
11A\_Ant1\_5280



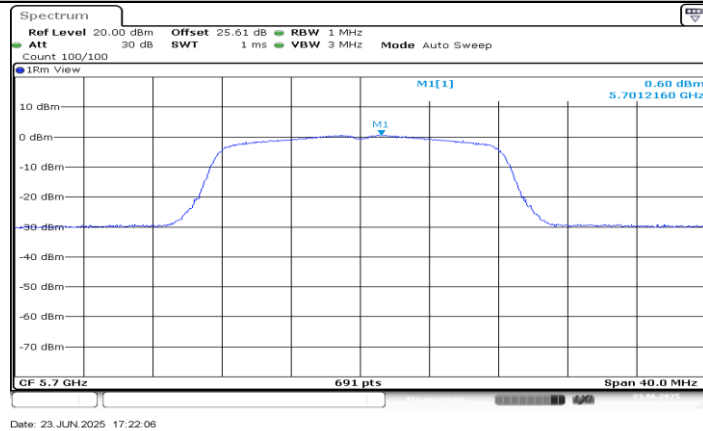
11A\_Ant1\_5320



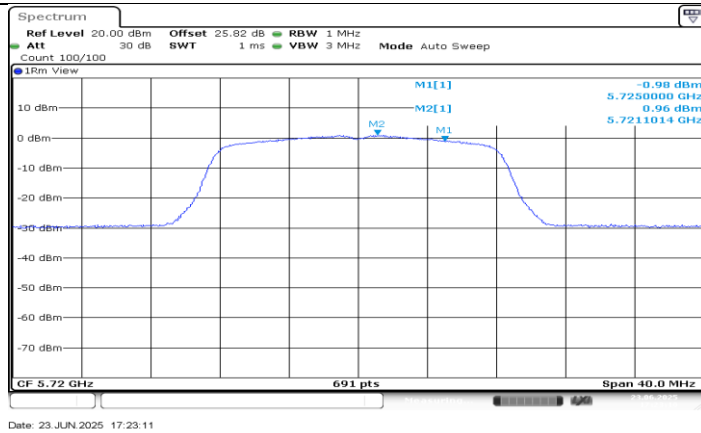
11A\_Ant1\_5500



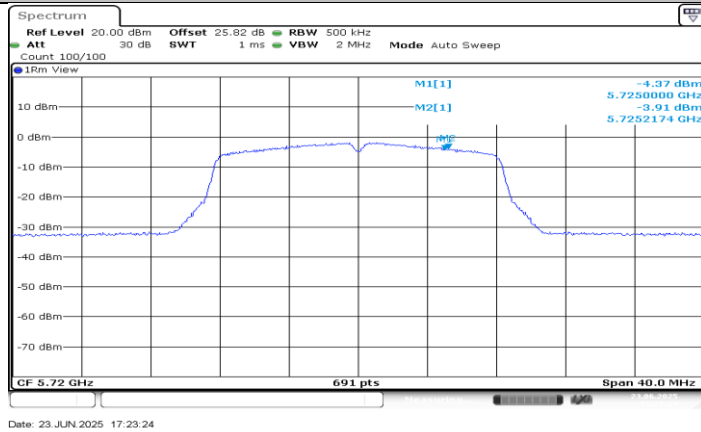
11A\_Ant1\_5580



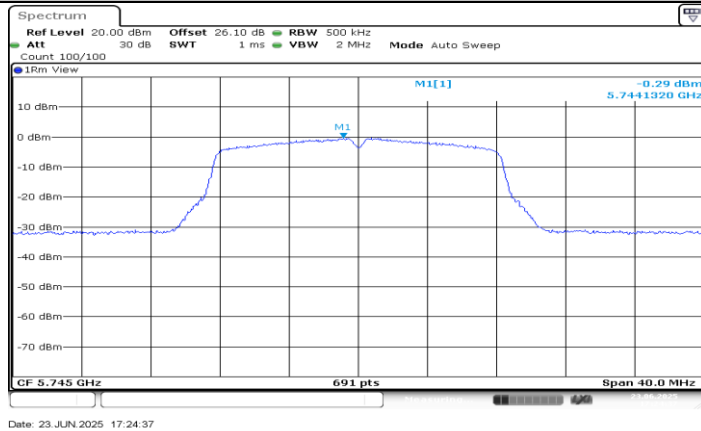
11A\_Ant1\_5700



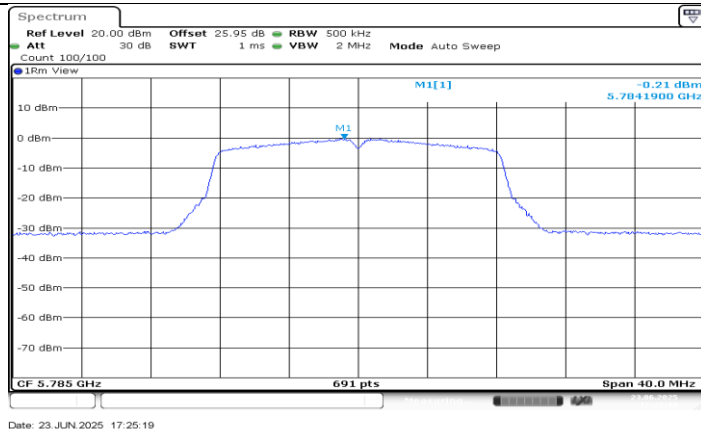
11A\_Ant1\_5720\_UNII-2C



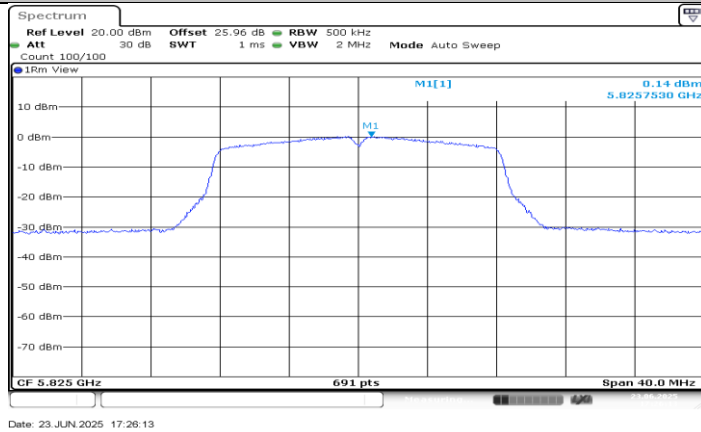
11A\_Ant1\_5720\_UNII-3



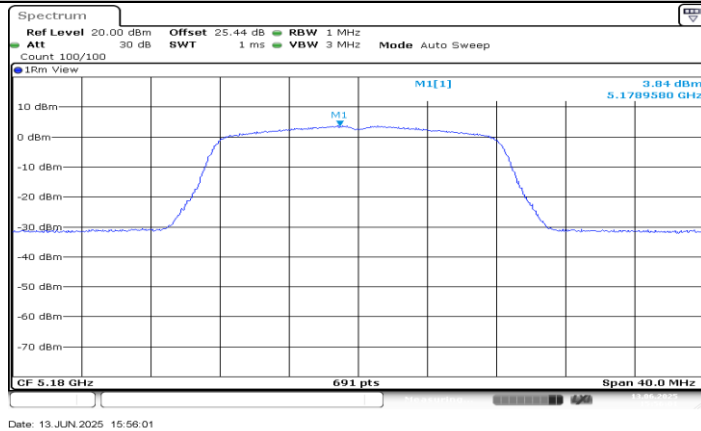
11A\_Ant1\_5745



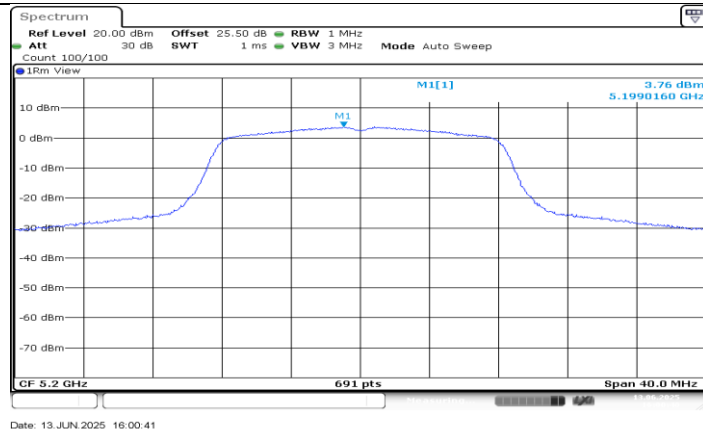
11A\_Ant1\_5785



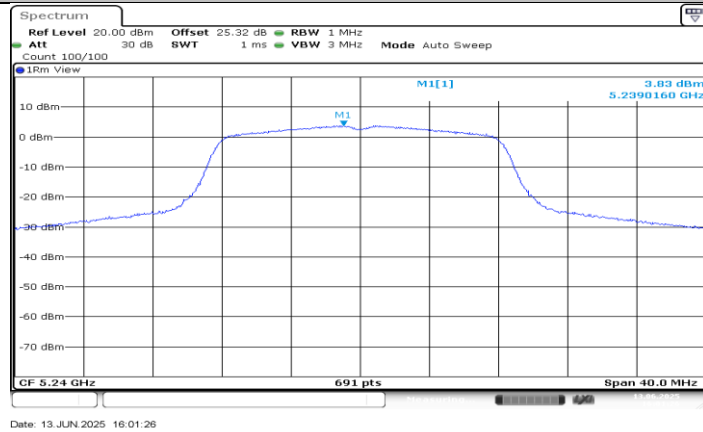
11A\_Ant1\_5825



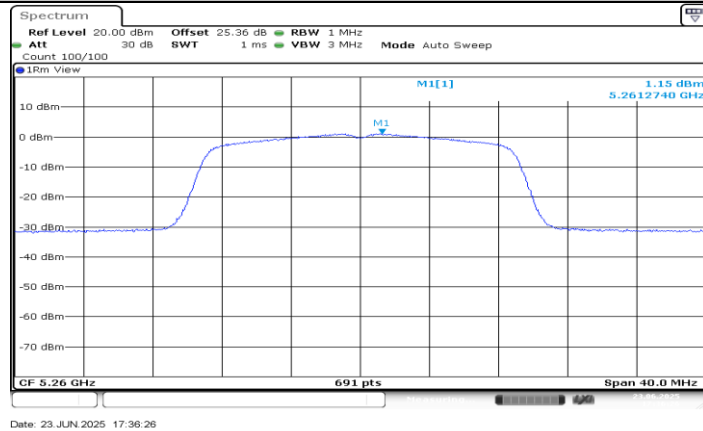
11N20SISO\_Ant1\_5180



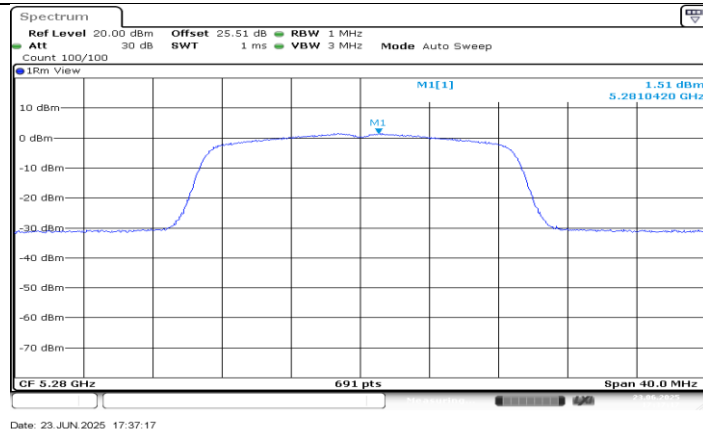
11N20SISO\_Ant1\_5200



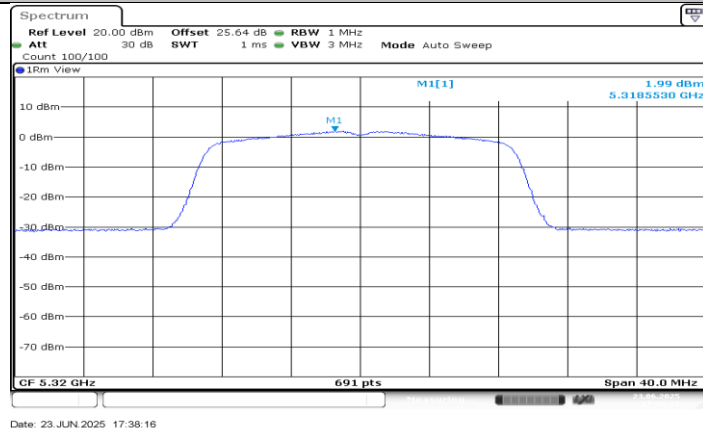
11N20SISO\_Ant1\_5240



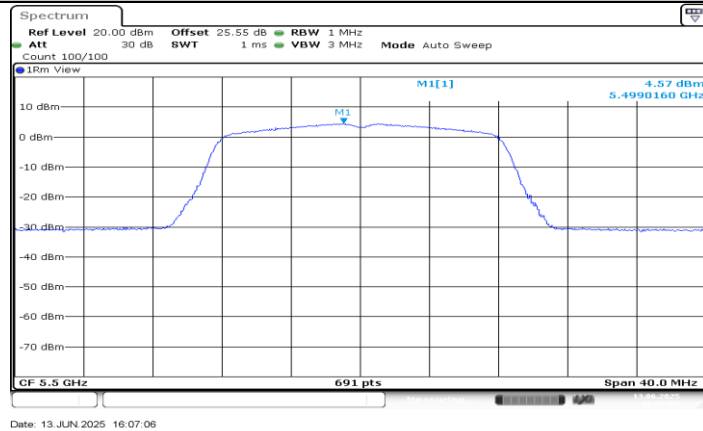
11N20SISO\_Ant1\_5260



11N20SISO\_Ant1\_5280

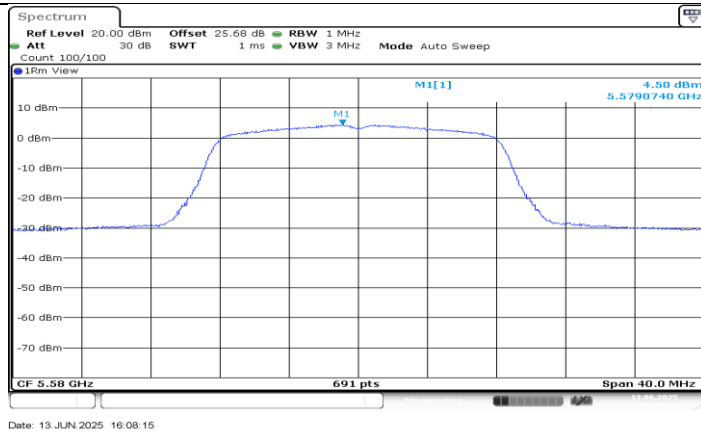


11N20SISO\_Ant1\_5320

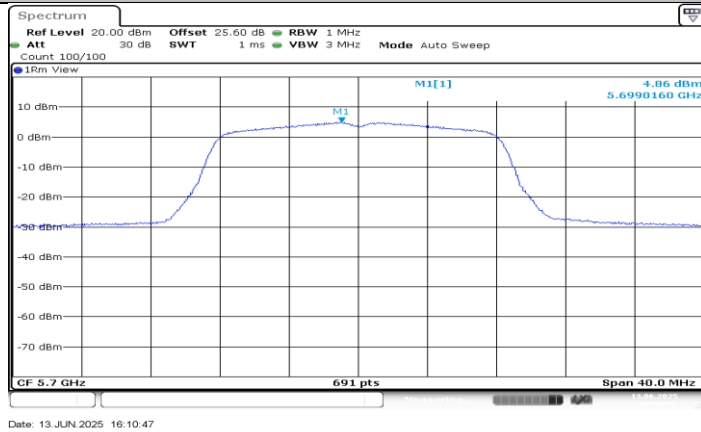


11N20SISO\_Ant1\_5500

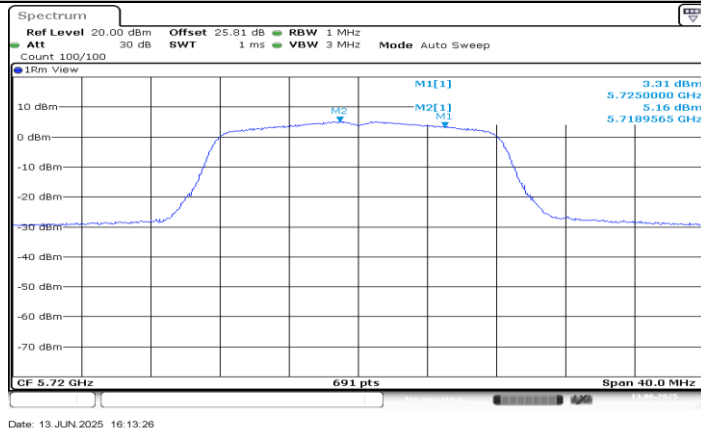




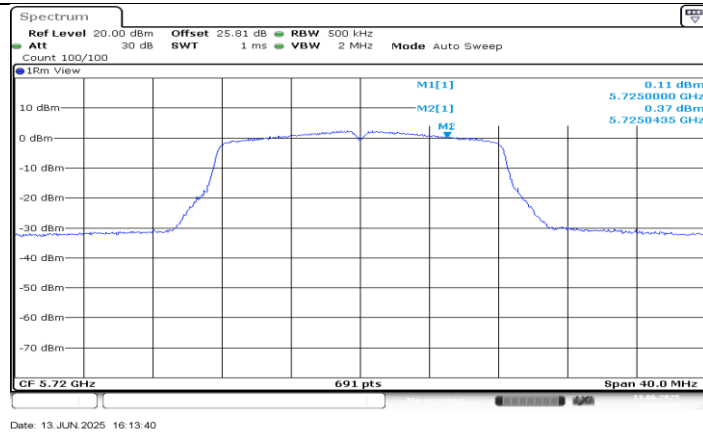
11N20SISO\_Ant1\_5580



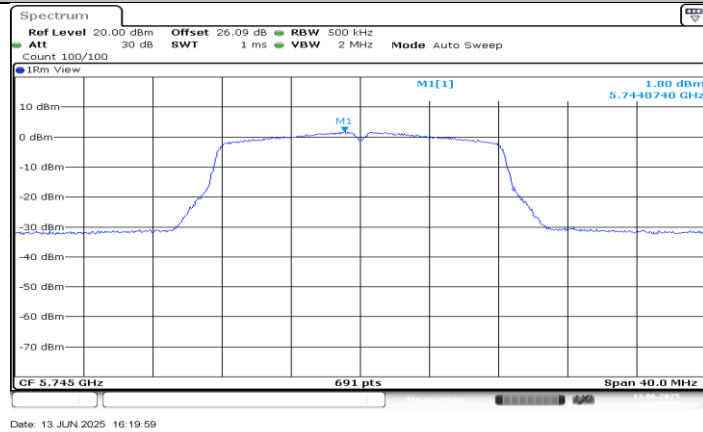
11N20SISO\_Ant1\_5700



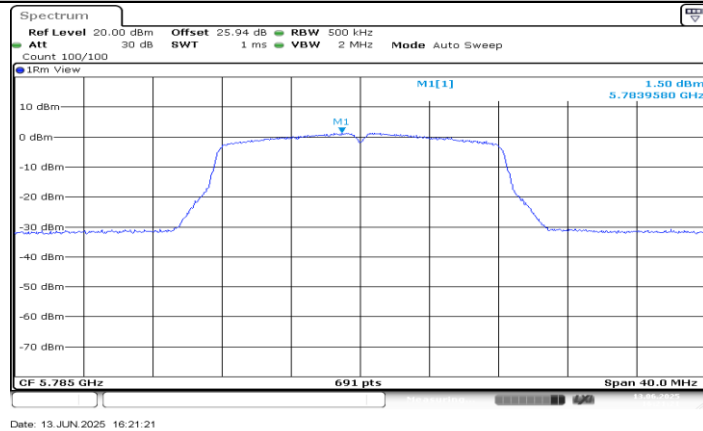
11N20SISO\_Ant1\_5720\_UNII-2C



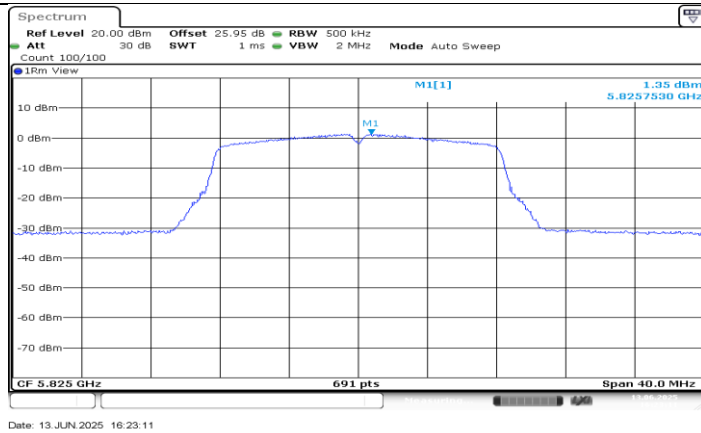
11N20SISO\_Ant1\_5720\_UNII-3



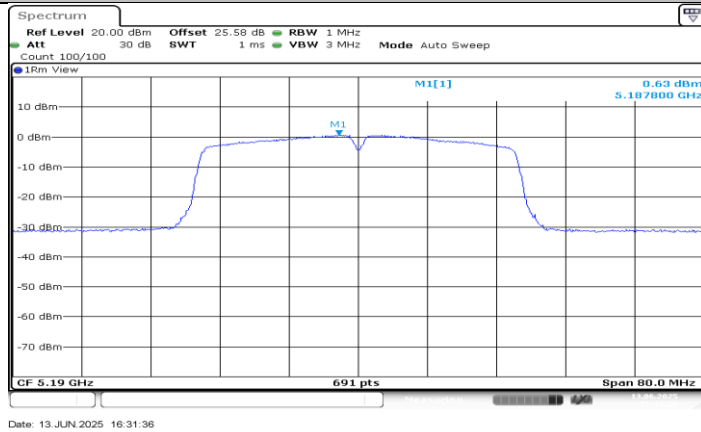
11N20SISO\_Ant1\_5745



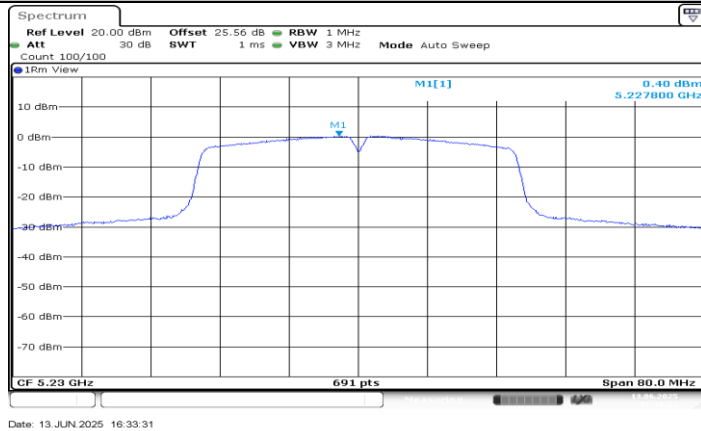
11N20SISO\_Ant1\_5785



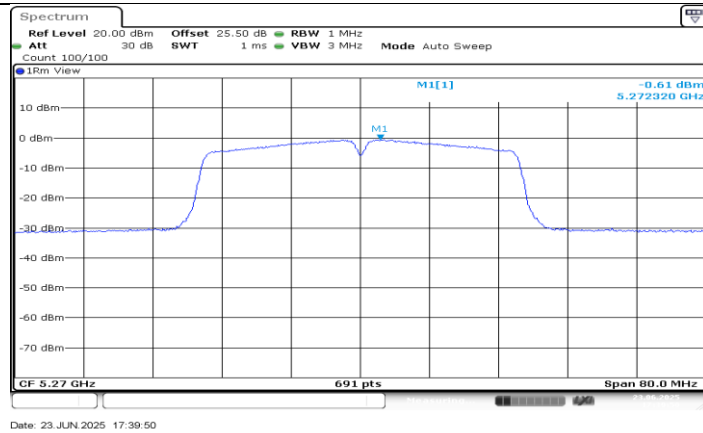
11N20SISO\_Ant1\_5825



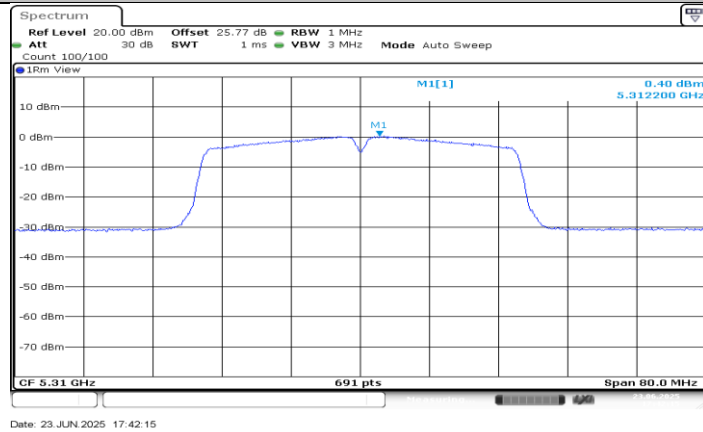
11N40SISO\_Ant1\_5190



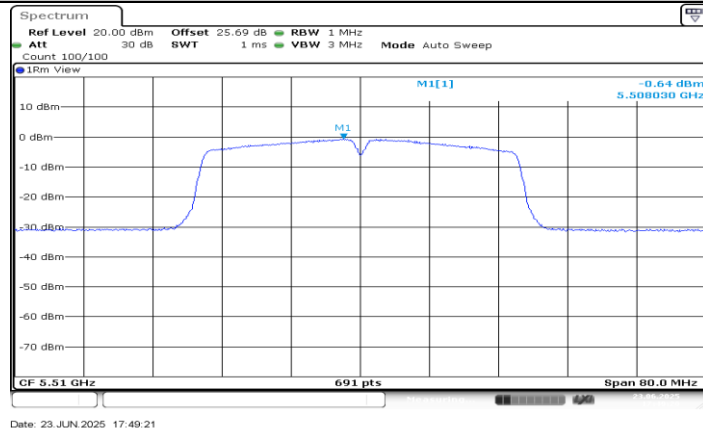
11N40SISO\_Ant1\_5230



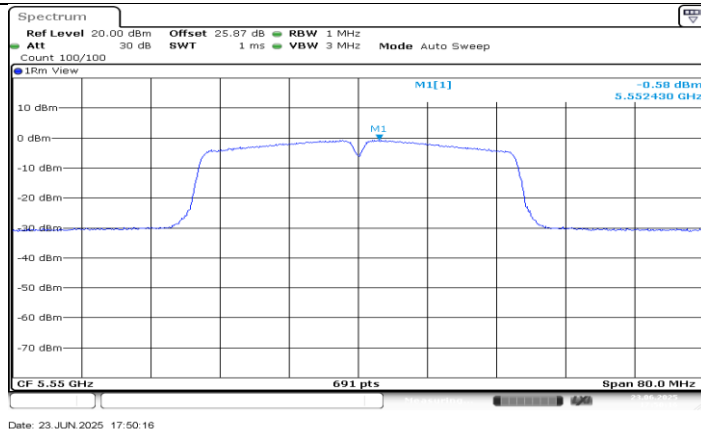
11N40SISO\_Ant1\_5270



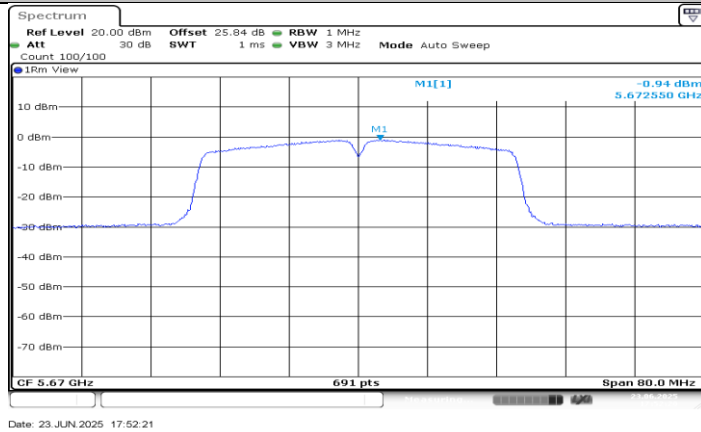
11N40SISO\_Ant1\_5310



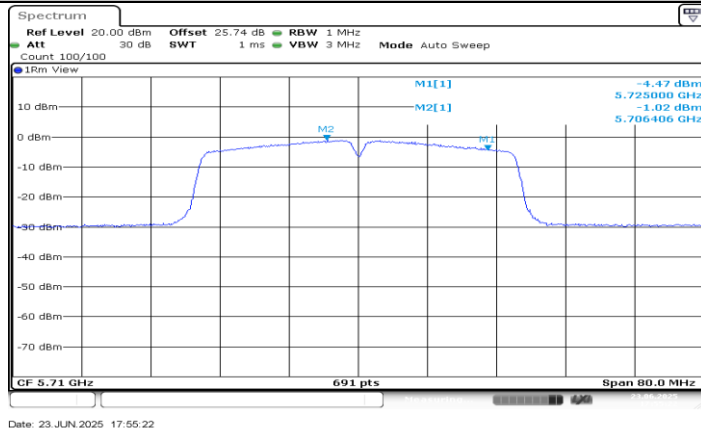
11N40SISO\_Ant1\_5510



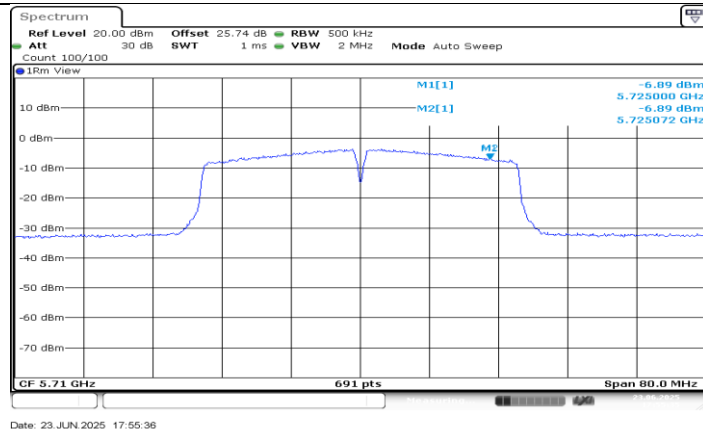
11N40SISO\_Ant1\_5550



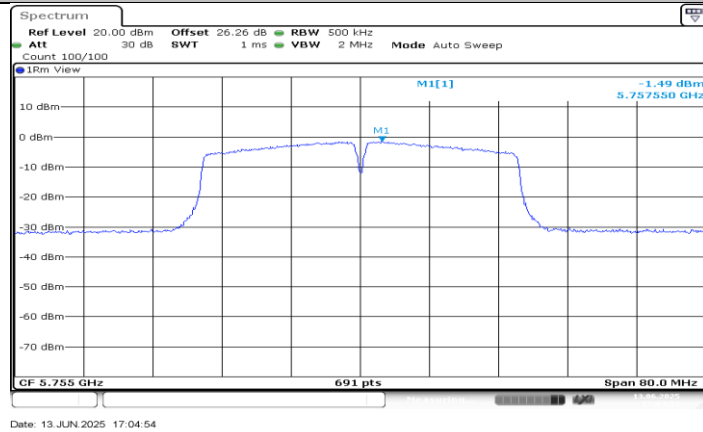
11N40SISO\_Ant1\_5670



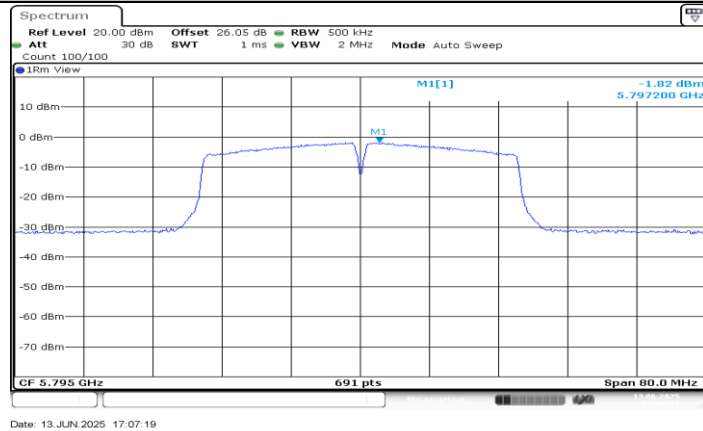
11N40SISO\_Ant1\_5710\_UNII-2C



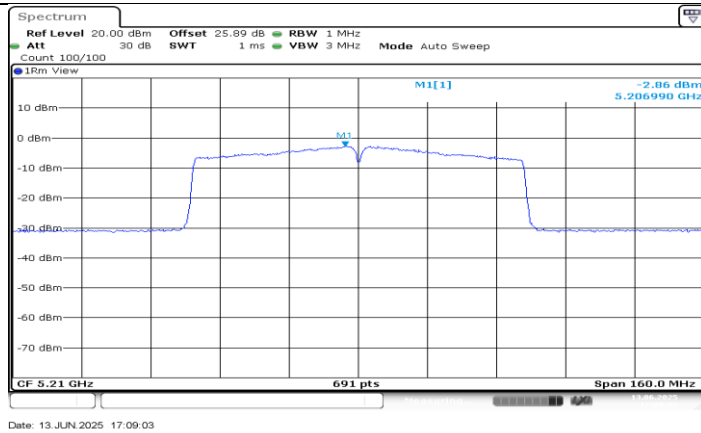
11N40SISO\_Ant1\_5710\_UNII-3



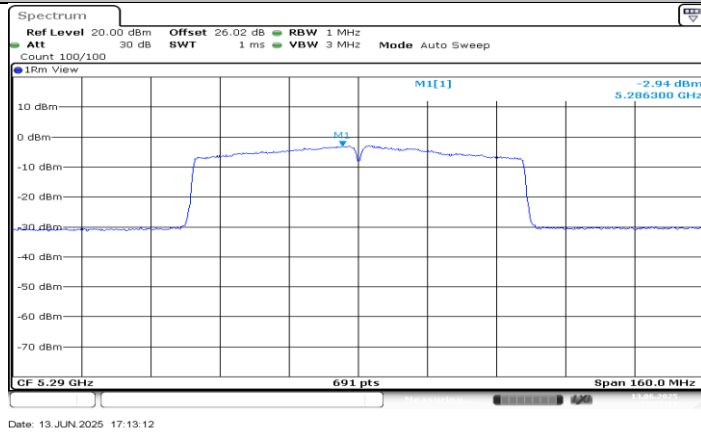
11N40SISO\_Ant1\_5755



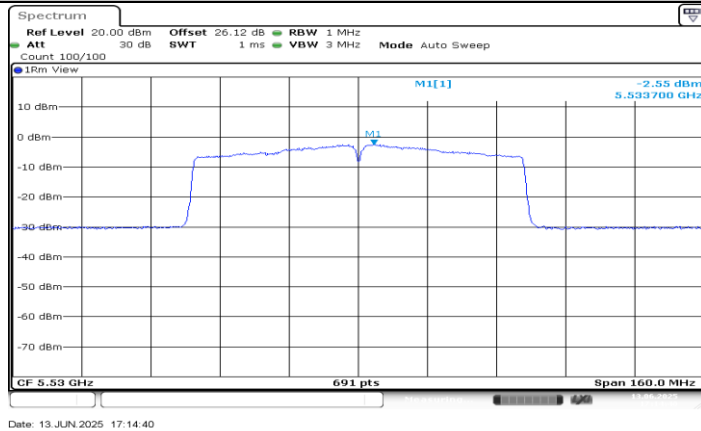
11N40SISO\_Ant1\_5795



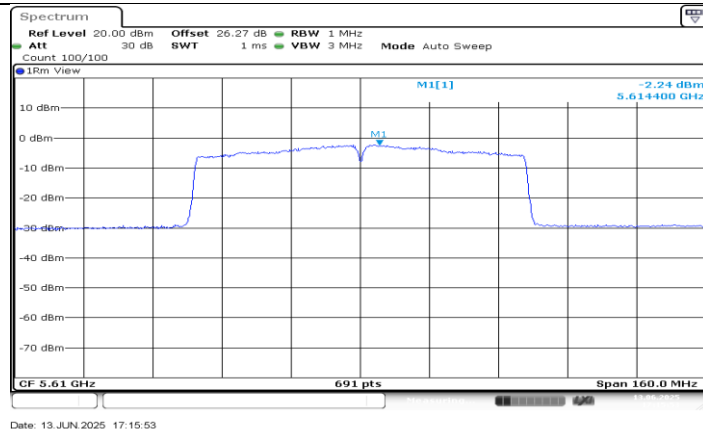
11AC80SISO\_Ant1\_5210



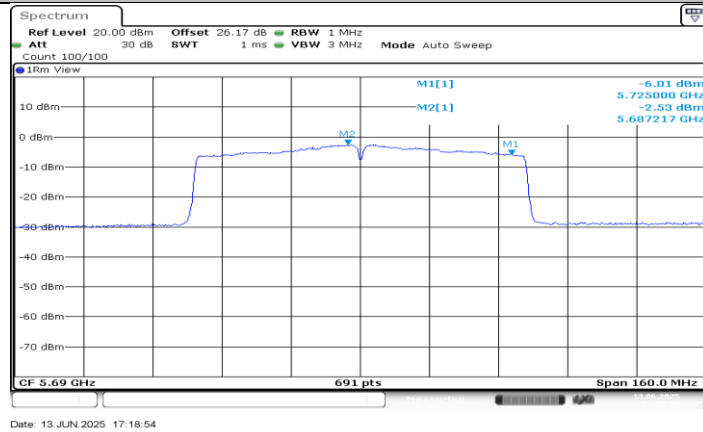
11AC80SISO\_Ant1\_5290



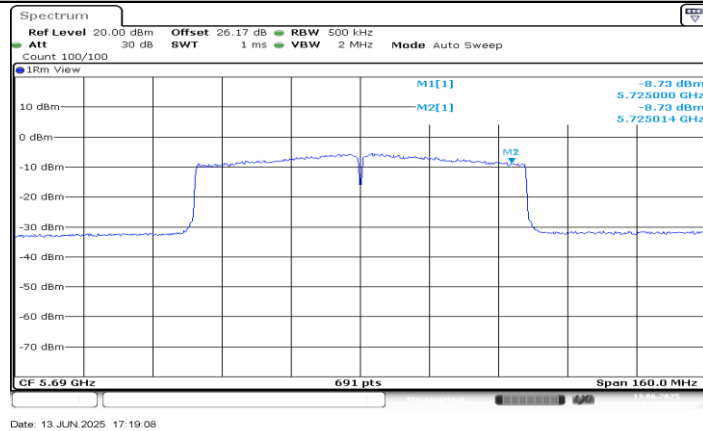
11AC80SISO\_Ant1\_5530



11AC80SISO\_Ant1\_5610



11AC80SISO\_Ant1\_5690\_UNII-2C



11AC80SISO\_Ant1\_5690\_UNII-3





## 12.6. APPENDIX F2: FREQUENCY STABILITY

### 12.6.1. Test Result

Frequency Error vs. Voltage									
802.11a:5180MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5180.0192	3.71	5179.9993	-0.14	5179.9821	-3.45	5179.9928	-1.39
TN	VN	5180.0205	3.97	5180.0071	1.37	5179.9833	-3.23	5179.9922	-1.50
TN	VH	5180.0085	1.64	5179.9829	-3.30	5179.9948	-1.01	5180.0205	3.96
Frequency Error vs. Temperature									
802.11a:5180MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
70	VN	5180.0105	2.03	5180.0134	2.58	5179.9809	-3.68	5180.0213	4.11
60	VN	5180.0041	0.79	5179.9780	-4.24	5179.9790	-4.05	5179.9899	-1.96
50	VN	5180.0131	2.53	5179.9865	-2.60	5179.9955	-0.87	5180.0142	2.74
40	VN	5179.9994	-0.11	5179.9861	-2.69	5179.9992	-0.16	5180.0226	4.36
30	VN	5179.9949	-0.98	5180.0219	4.24	5180.0218	4.21	5179.9933	-1.30
20	VN	5180.0182	3.52	5180.0003	0.05	5180.0198	3.83	5179.9753	-4.76
10	VN	5179.9961	-0.75	5180.0021	0.41	5180.0078	1.50	5179.9872	-2.46
0	VN	5179.9841	-3.07	5180.0153	2.95	5180.0076	1.47	5180.0002	0.04

Note:

1. All antennas, test modes and test channels have been tested, only the worst data record in the report.
2. For the detail Test Conditions, please refer to section 7.5 TEST ENVIRONMENT.

Frequency Error vs. Voltage									
802.11a:5825MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5824.9873	-2.19	5825.0177	3.03	5824.9774	-3.87	5825.0123	2.12
TN	VN	5824.9823	-3.03	5825.0163	2.81	5825.0151	2.59	5825.0079	1.36
TN	VH	5825.0175	3.00	5825.0206	3.54	5824.9972	-0.48	5825.0135	2.31
Frequency Error vs. Temperature									
802.11a:5825MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
70	VN	5824.9982	-0.31	5825.0183	3.14	5824.9863	-2.35	5825.0138	2.36
60	VN	5825.0033	0.57	5825.0022	0.37	5825.0229	3.94	5824.9899	-1.74
50	VN	5825.0223	3.83	5824.9999	-0.01	5825.0198	3.39	5825.0207	3.56
40	VN	5824.9864	-2.33	5824.9813	-3.21	5825.0207	3.56	5825.0231	3.96
30	VN	5825.0054	0.93	5824.9924	-1.30	5825.0039	0.67	5824.9885	-1.98
20	VN	5825.0215	3.68	5825.0061	1.04	5824.9960	-0.68	5825.0076	1.31
10	VN	5824.9825	-3.01	5824.9888	-1.93	5824.9824	-3.02	5825.0122	2.10
0	VN	5824.9810	-3.26	5824.9922	-1.34	5824.9775	-3.86	5824.9862	-2.38

Note:

1. All antennas, test modes and test channels have been tested, only the worst data record in the report.
2. For the detail Test Conditions, please refer to section 7.5 TEST ENVIRONMENT.

## 12.7. APPENDIX G2: DUTY CYCLE

### 12.7.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A	1.37	1.41	0.9716	97.16	0.12	0.73	1
11N20SISO	1.38	1.42	0.9718	97.18	0.12	0.72	1
11N40SISO	0.64	0.68	0.9412	94.12	0.26	1.56	2
11AC80SISO	0.32	0.37	0.8649	86.49	0.63	3.13	4

Note:

Duty Cycle Correction Factor= $10\log(1/x)$ .

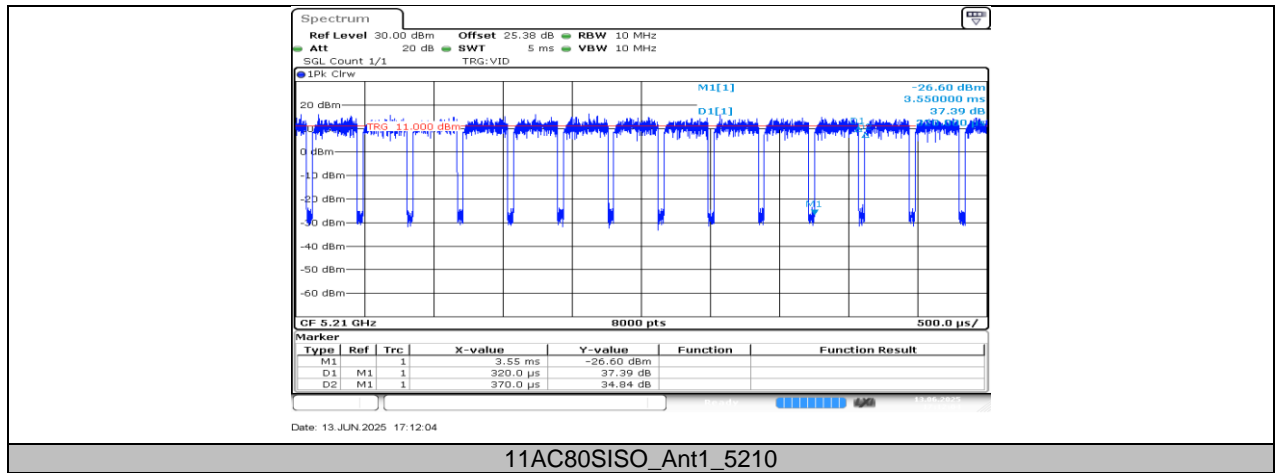
Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

## 12.7.2. Test Graphs





END OF REPORT