

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

General Description of EUT	
EUT Name:	Beamio
Model:	Beamio Pro
Sample ID:	HC-C-202510-0055-01-01
Test Standard:	FCC Part 15.407
Environmental Conditions	
Ambient Temperature:	25.6℃
Ambient Humidity:	46%RH
Test Power Supply:	DC 5V
Test Engineer:	Lily zhang
Note: For a more detailed features description, please refer to the report TBR-C-202510-0055-11	

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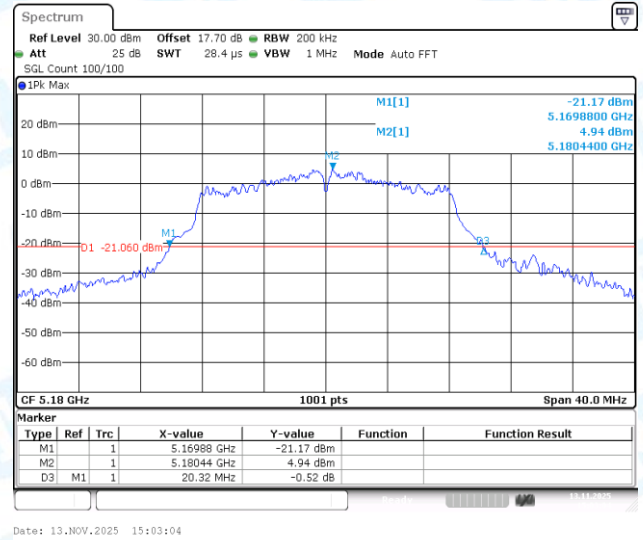
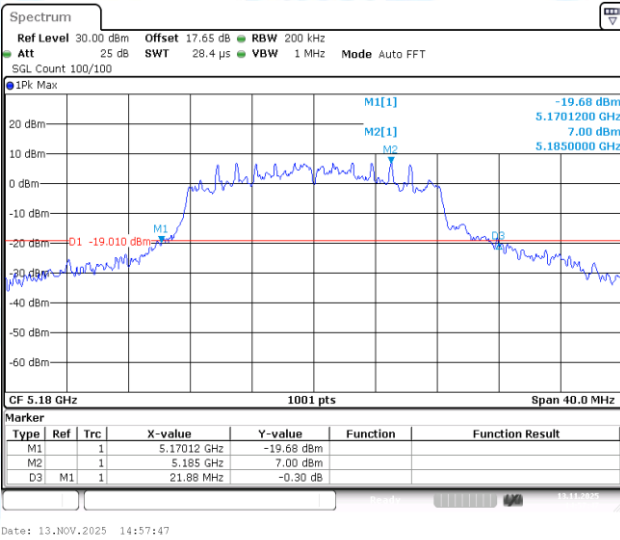
1: Emission Bandwidth

1.1 Test Result

TestMode	Antenna	Frequency[MHz]	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5180	21.88	5170.12	5192.00	---	---
11A-CDD	Ant2	5180	20.32	5169.88	5190.20	---	---
11A-CDD	Ant1	5200	20.24	5189.92	5210.16	---	---
11A-CDD	Ant2	5200	19.44	5190.16	5209.60	---	---
11A-CDD	Ant1	5240	19.92	5230.36	5250.28	---	---
11A-CDD	Ant2	5240	20.04	5230.20	5250.24	---	---
11N20MIMO	Ant1	5180	20.76	5169.72	5190.48	---	---
11N20MIMO	Ant2	5180	20.12	5170.16	5190.28	---	---
11N20MIMO	Ant1	5200	20.40	5189.84	5210.24	---	---
11N20MIMO	Ant2	5200	20.48	5189.92	5210.40	---	---
11N20MIMO	Ant1	5240	20.52	5229.76	5250.28	---	---
11N20MIMO	Ant2	5240	20.44	5229.76	5250.20	---	---
11N40MIMO	Ant1	5190	39.04	5170.32	5209.36	---	---
11N40MIMO	Ant2	5190	39.84	5169.92	5209.76	---	---
11N40MIMO	Ant1	5230	40.16	5210.24	5250.40	---	---
11N40MIMO	Ant2	5230	40.32	5209.84	5250.16	---	---
11AC20MIMO	Ant1	5180	20.80	5169.56	5190.36	---	---
11AC20MIMO	Ant2	5180	20.64	5169.80	5190.44	---	---
11AC20MIMO	Ant1	5200	20.48	5189.76	5210.24	---	---
11AC20MIMO	Ant2	5200	20.64	5189.56	5210.20	---	---
11AC20MIMO	Ant1	5240	20.52	5229.80	5250.32	---	---
11AC20MIMO	Ant2	5240	20.64	5229.64	5250.28	---	---
11AC40MIMO	Ant1	5190	40.00	5169.92	5209.92	---	---
11AC40MIMO	Ant2	5190	45.28	5169.84	5215.12	---	---
11AC40MIMO	Ant1	5230	40.00	5210.00	5250.00	---	---
11AC40MIMO	Ant2	5230	40.16	5210.00	5250.16	---	---
11AC80MIMO	Ant1	5210	97.12	5167.92	5265.04	---	---
11AC80MIMO	Ant2	5210	94.24	5169.84	5264.08	---	---
11AX20MIMO	Ant1	5180	20.60	5169.92	5190.52	---	---
11AX20MIMO	Ant2	5180	20.72	5169.76	5190.48	---	---
11AX20MIMO	Ant1	5200	20.64	5189.64	5210.28	---	---
11AX20MIMO	Ant2	5200	20.88	5189.76	5210.64	---	---
11AX20MIMO	Ant1	5240	21.28	5229.44	5250.72	---	---
11AX20MIMO	Ant2	5240	21.16	5229.48	5250.64	---	---
11AX40MIMO	Ant1	5190	39.76	5170.16	5209.92	---	---
11AX40MIMO	Ant2	5190	40.08	5170.00	5210.08	---	---
11AX40MIMO	Ant1	5230	40.00	5210.00	5250.00	---	---
11AX40MIMO	Ant2	5230	41.04	5209.68	5250.72	---	---
11AX80MIMO	Ant1	5210	80.80	5169.84	5250.64	---	---
11AX80MIMO	Ant2	5210	80.64	5169.84	5250.48	---	---

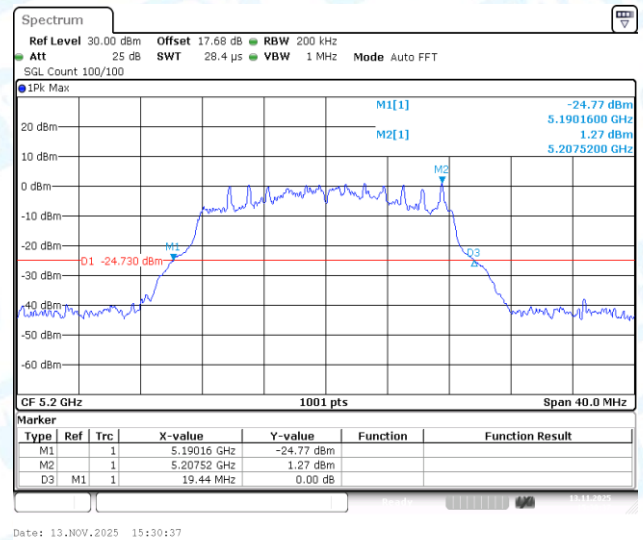
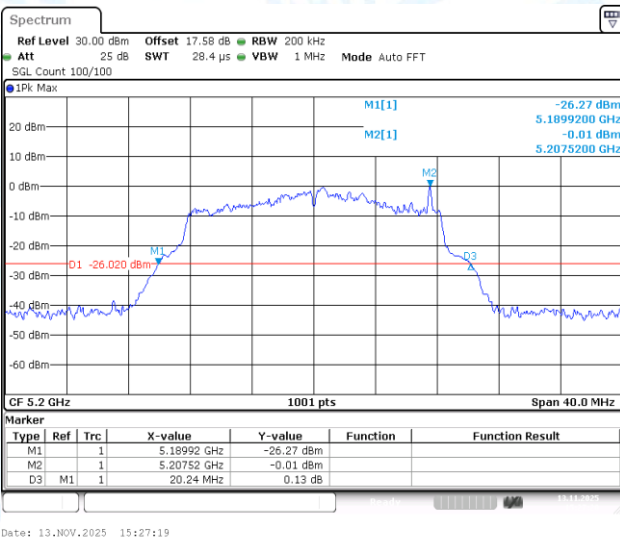
Note: RF Conducted test Offset= cable loss+ Attenuator(10dB).

1.2 Test Graphs



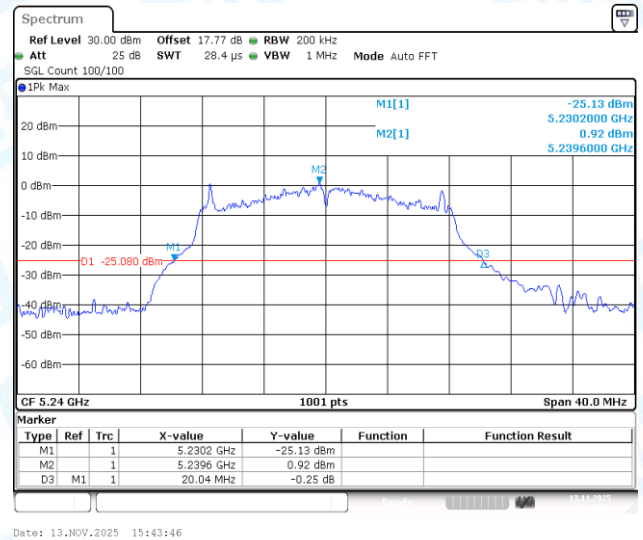
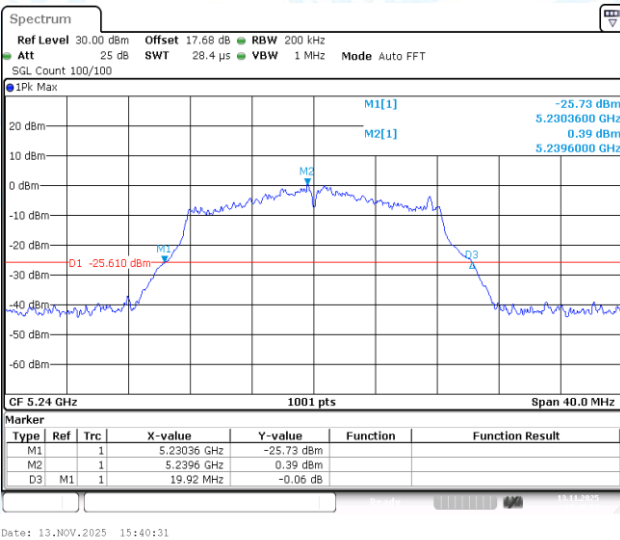
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11A-CDD-Ant2-5180



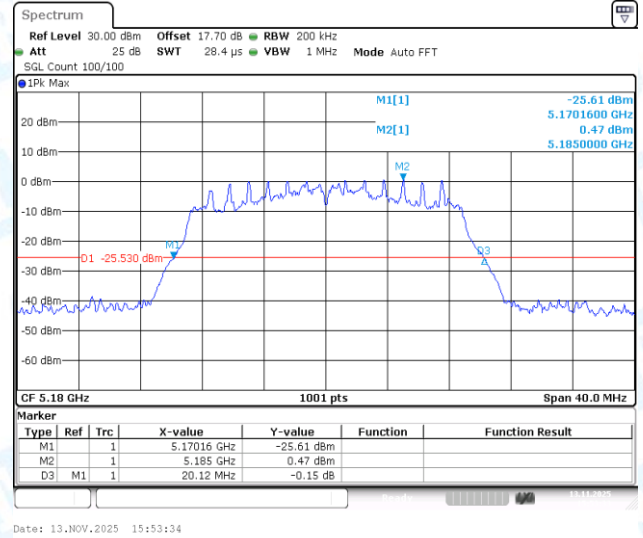
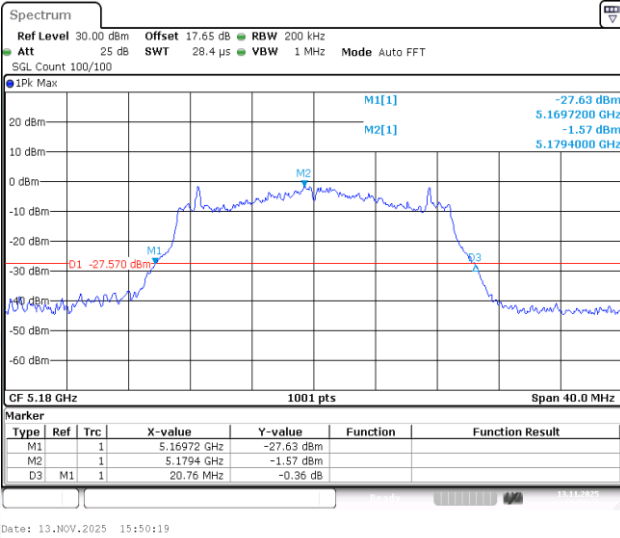
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11A-CDD-Ant2-5200



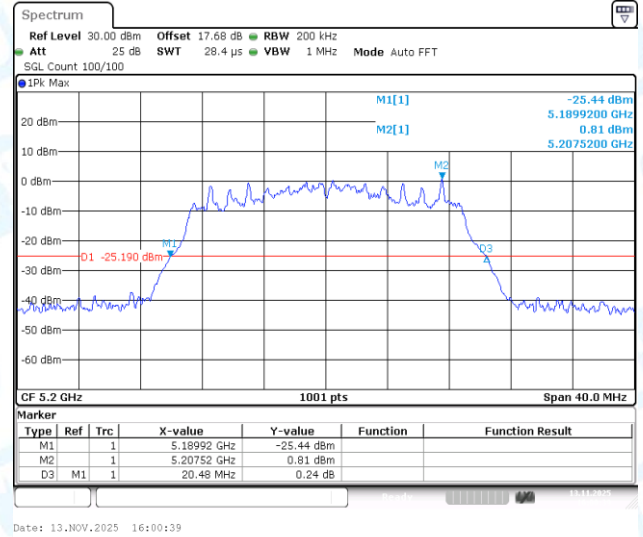
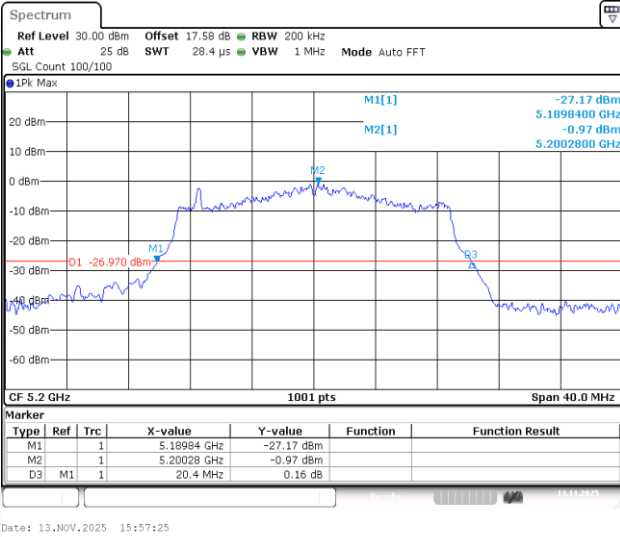
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11A-CDD-Ant2-5240



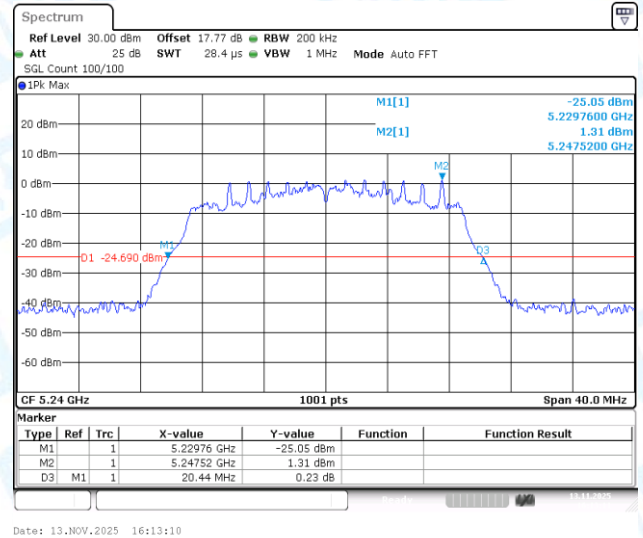
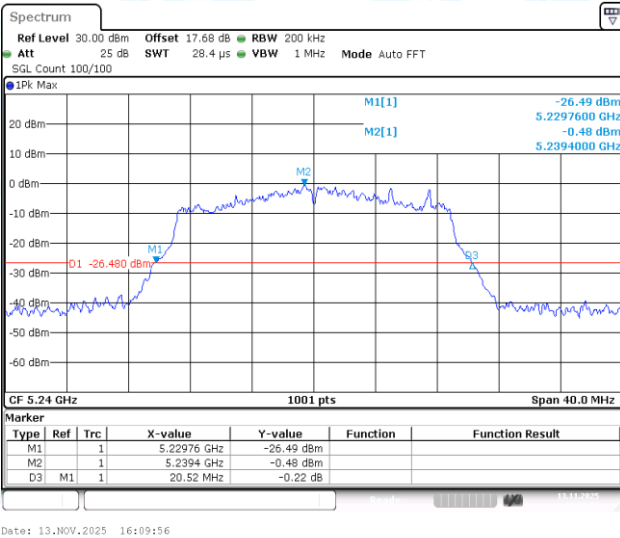
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11N20MIMO-Ant2-5180



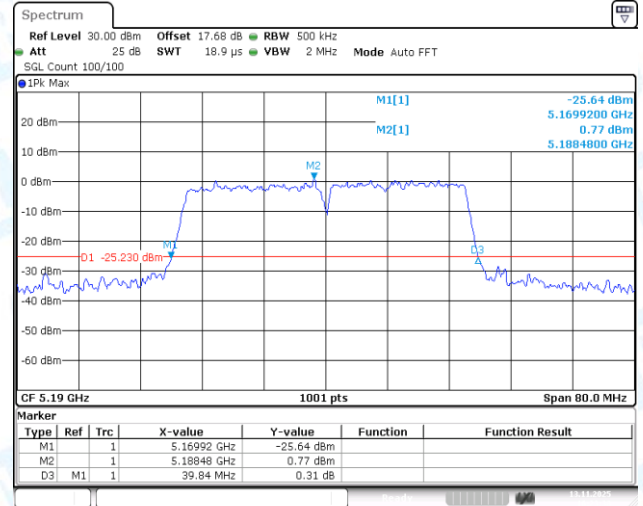
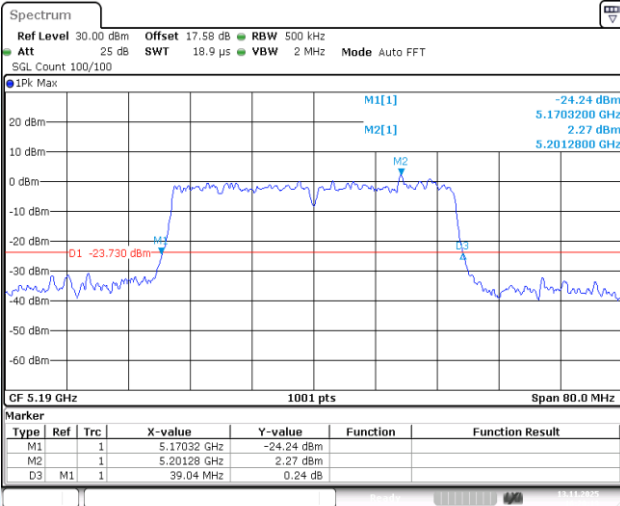
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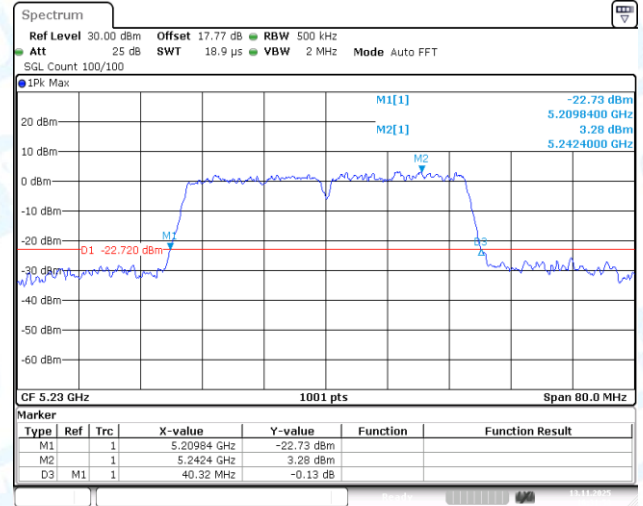
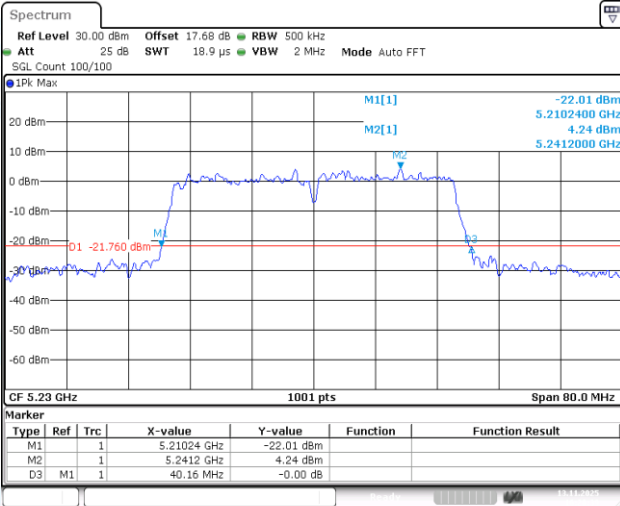


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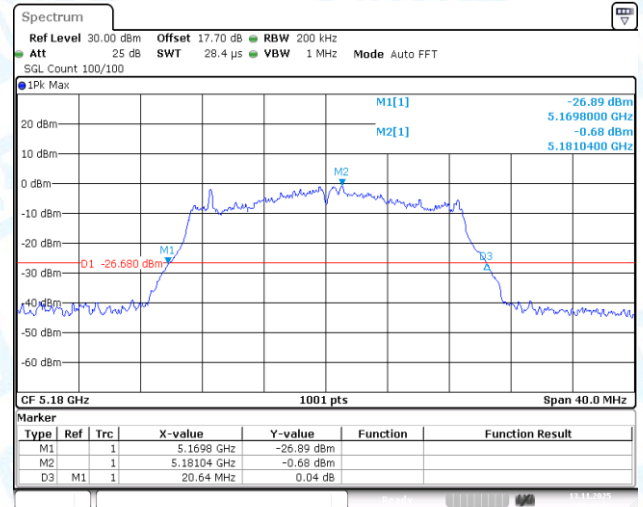
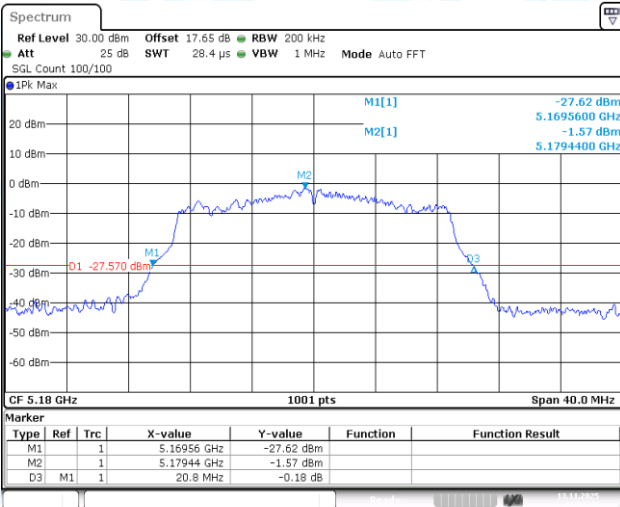
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11N40MIMO-Ant1-5190

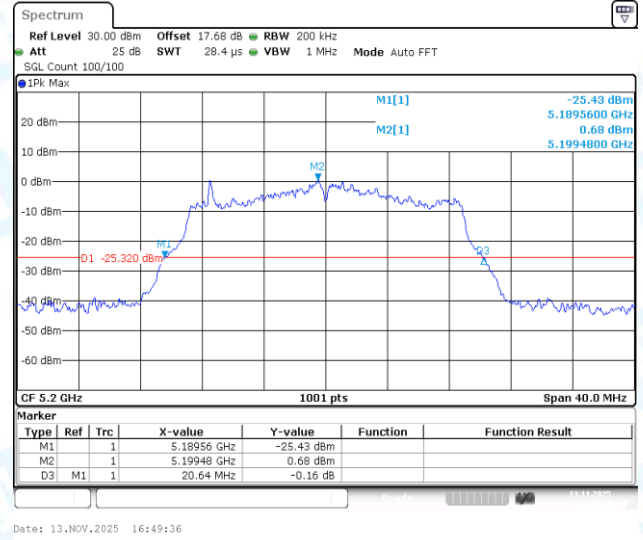
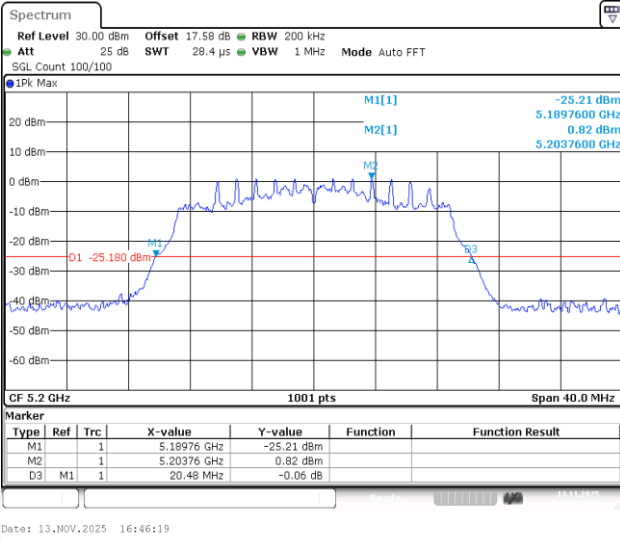


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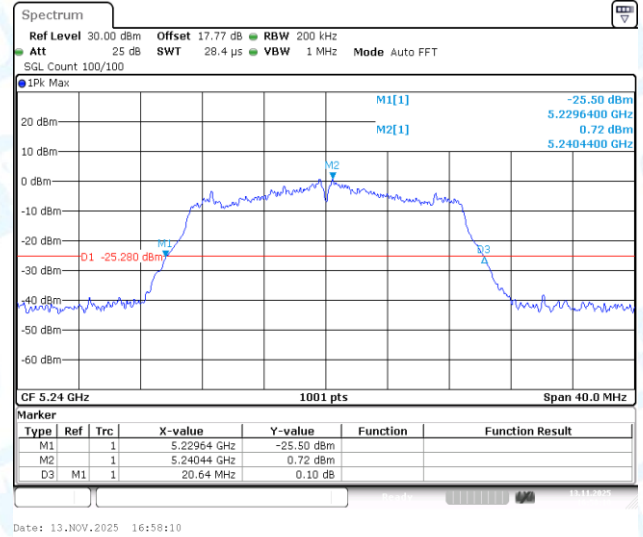
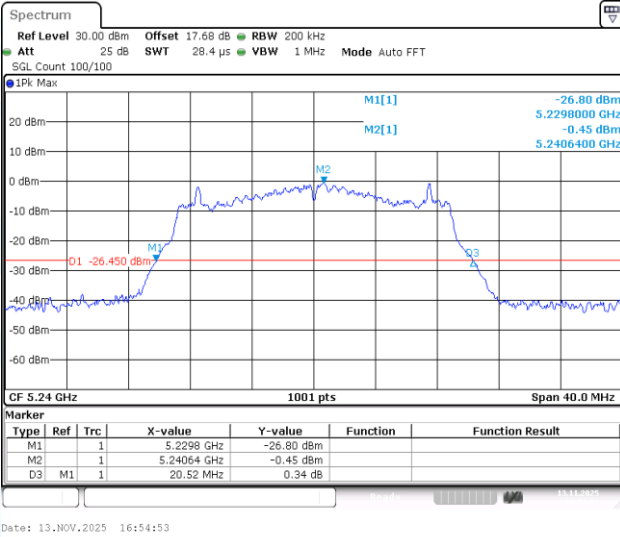
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11AC20MIMO-Ant2-5180



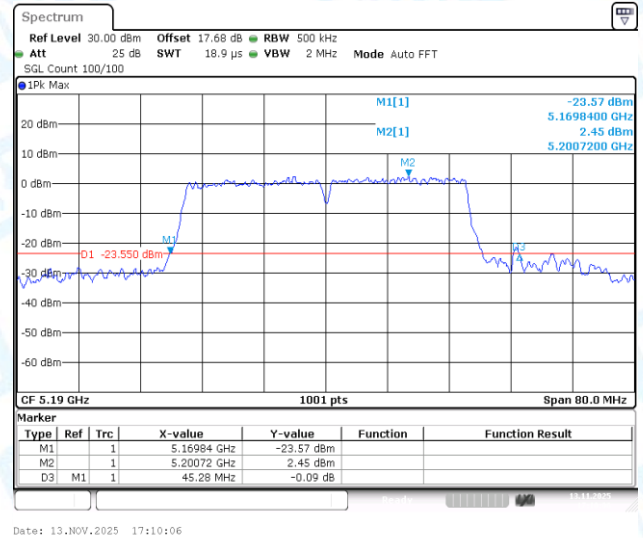
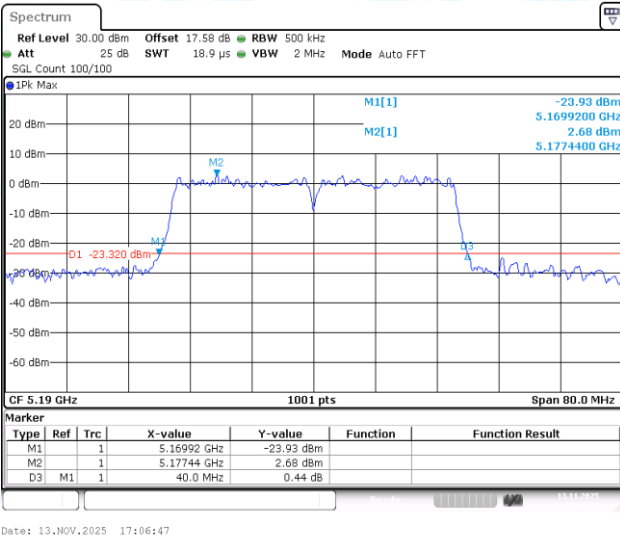
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11AC20MIMO-Ant2-5200



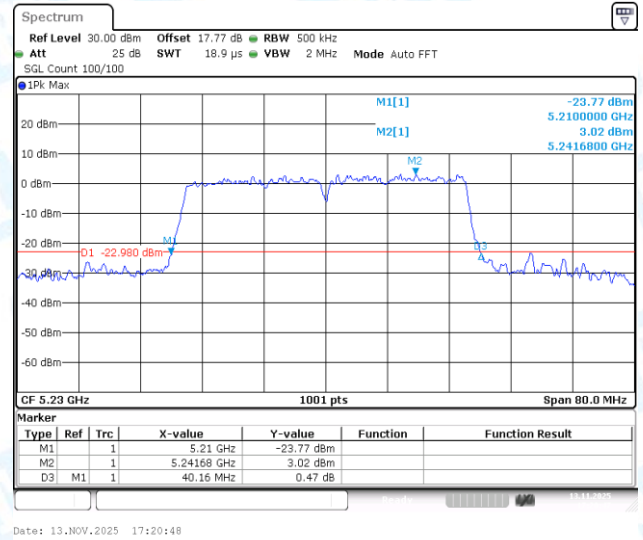
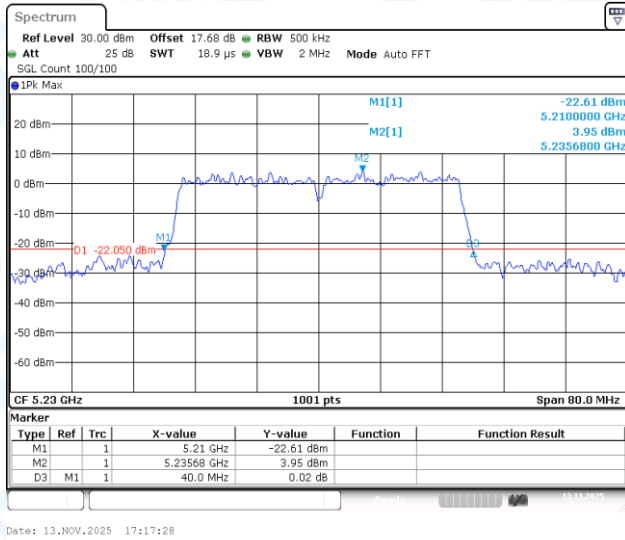
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11AC20MIMO-Ant2-5240



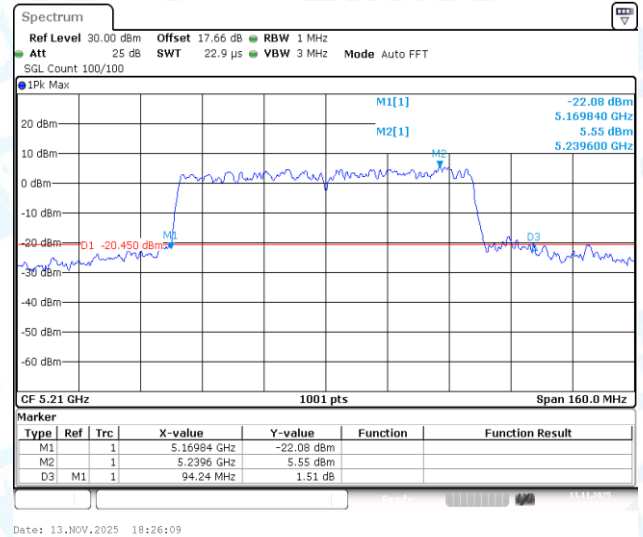
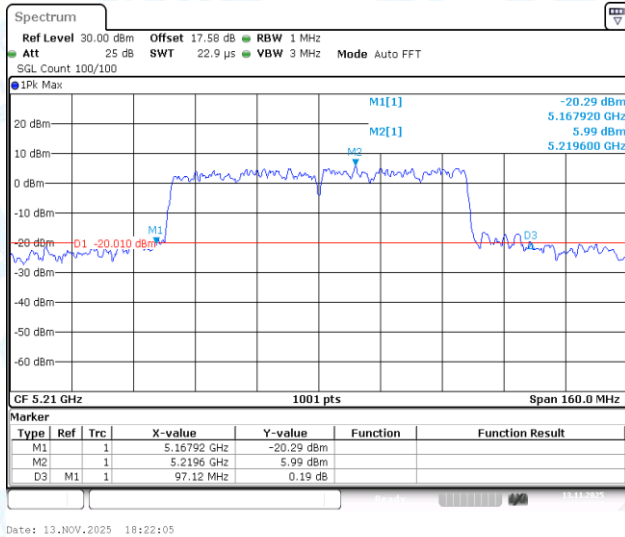
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11AC40MIMO-Ant2-5190



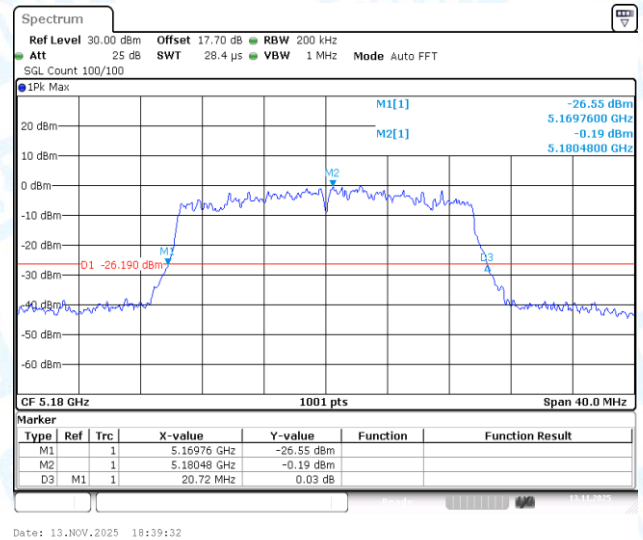
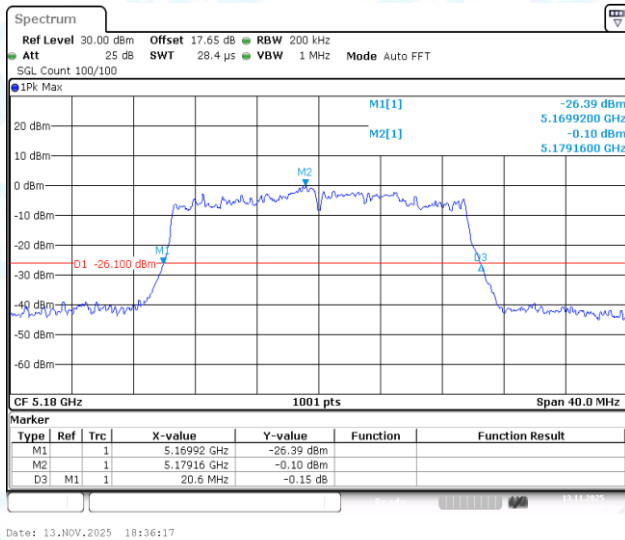
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11AC40MIMO-Ant2-5230



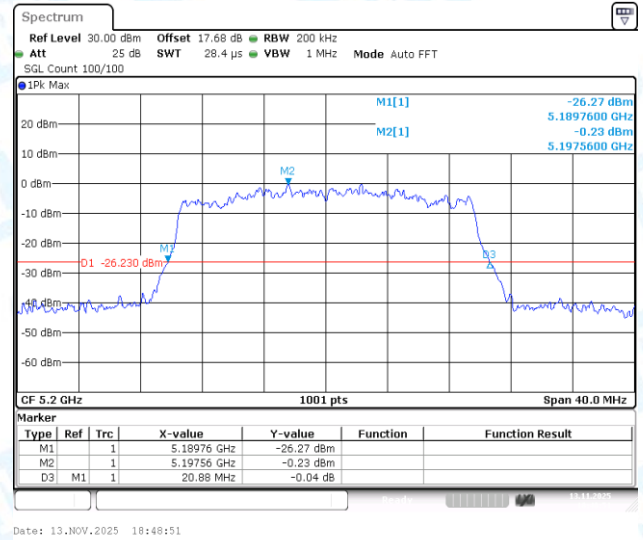
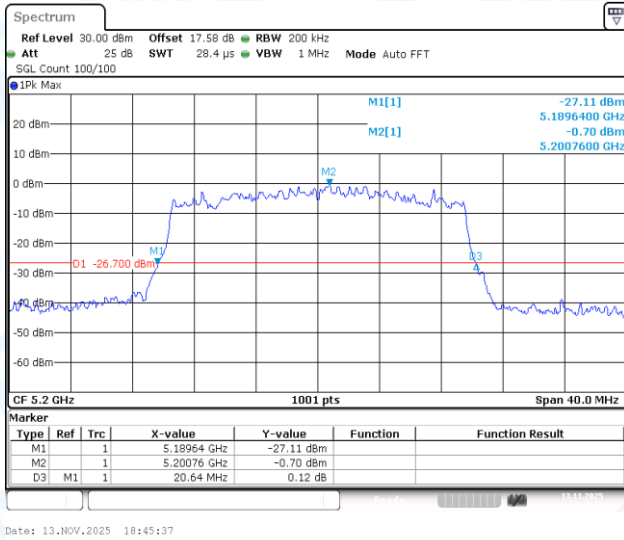
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11AC80MIMO-Ant2-5210



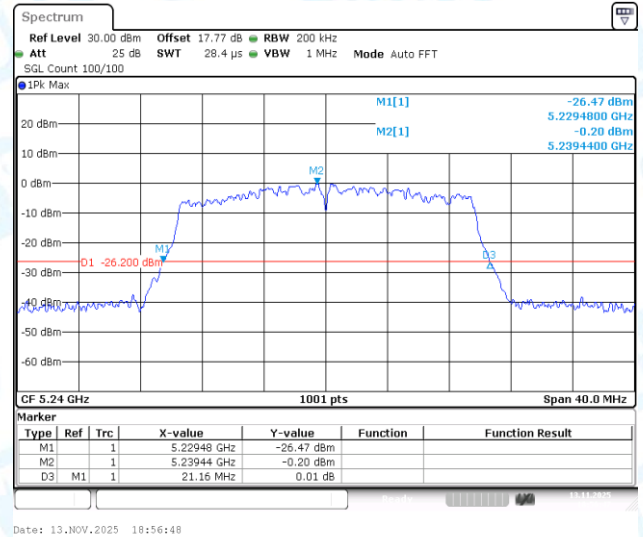
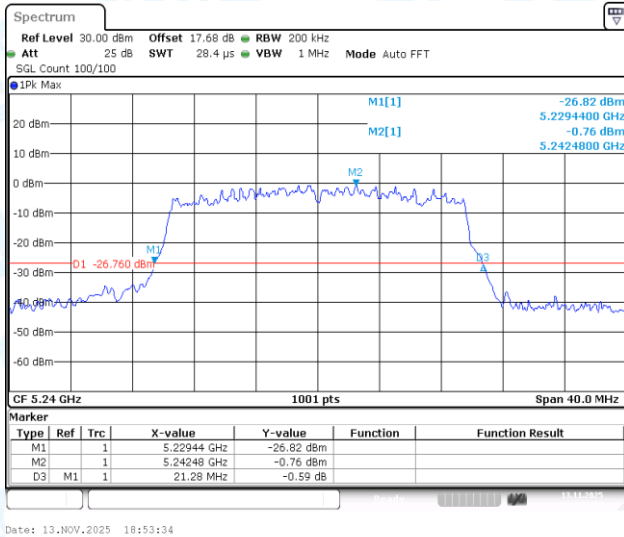
11AX20MIMO-Ant1-5180

11AX20MIMO-Ant2-5180



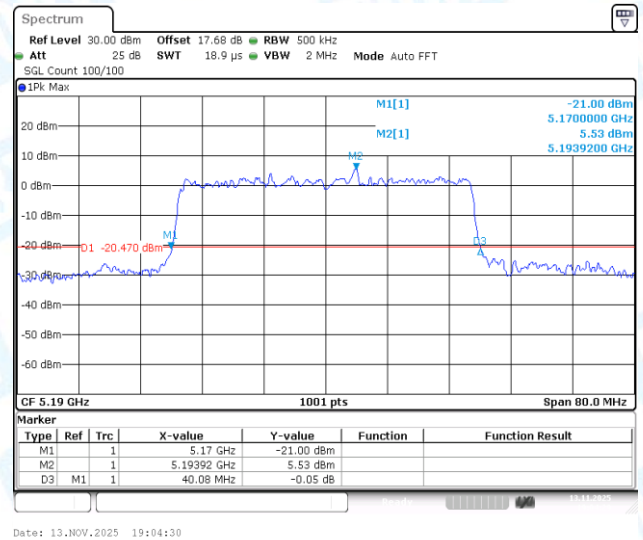
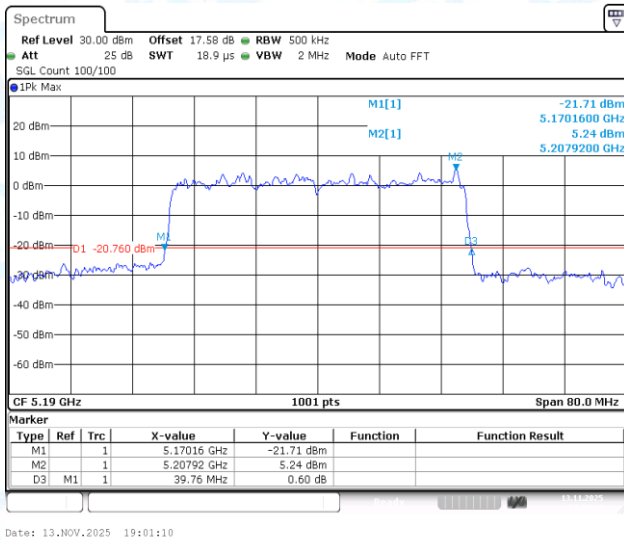
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11AX20MIMO-Ant2-5200



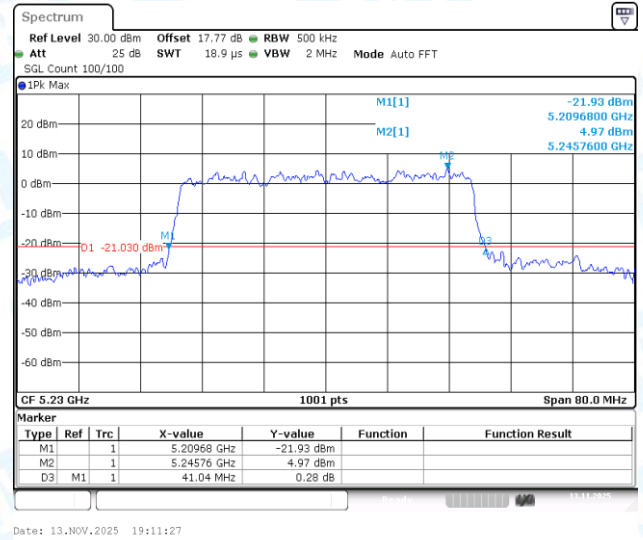
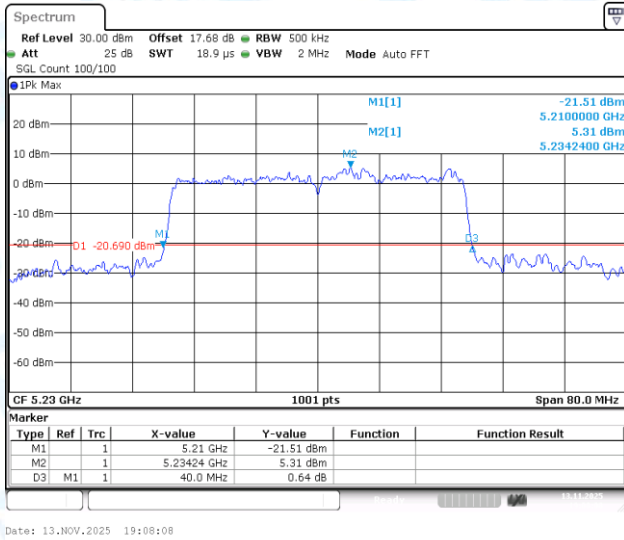
11AX20MIMO-Ant1-5240

11AX20MIMO-Ant2-5240



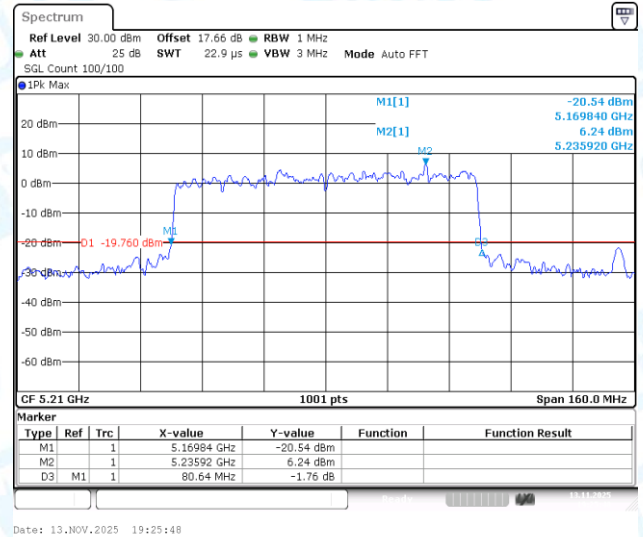
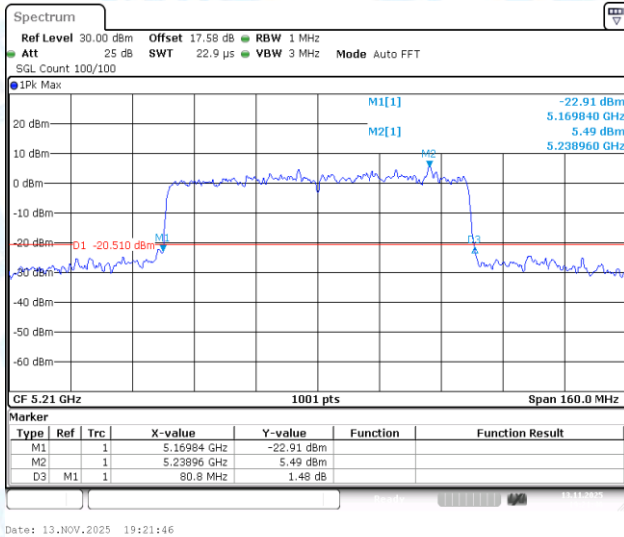
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11AX40MIMO-Ant2-5190



11AX40MIMO-Ant1-5230

11AX40MIMO-Ant2-5230



11AX80MIMO-Ant1-5210

11AX80MIMO-Ant2-5210

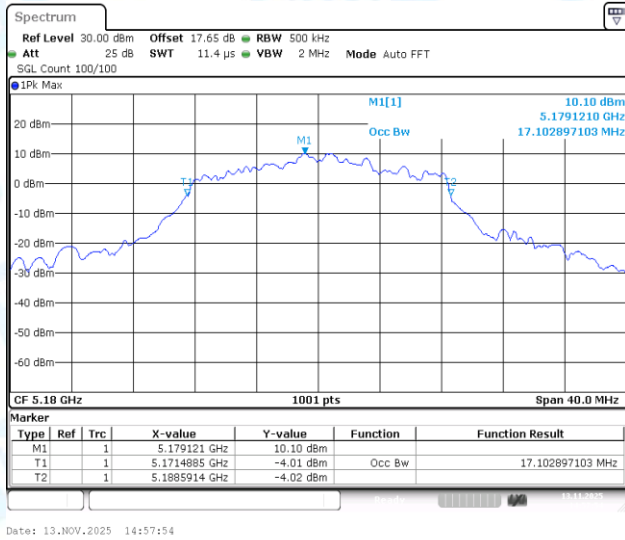
2: Occupied channel bandwidth

2.1 Test Result

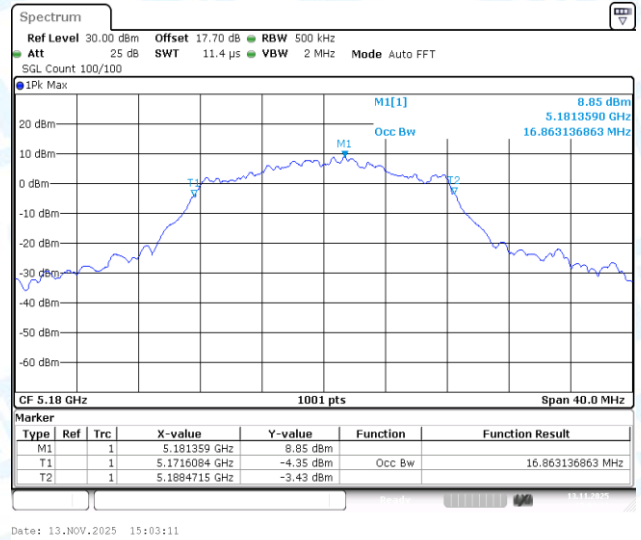
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5180	17.103	5171.4885	5188.5914	---	---
11A-CDD	Ant2	5180	16.863	5171.6084	5188.4715	---	---
11A-CDD	Ant1	5200	16.783	5191.6484	5208.4316	---	---
11A-CDD	Ant2	5200	16.623	5191.7682	5208.3916	---	---
11A-CDD	Ant1	5240	16.823	5231.8082	5248.6314	---	---
11A-CDD	Ant2	5240	16.623	5231.8482	5248.4715	---	---
11N20MIMO	Ant1	5180	17.902	5170.9690	5188.8711	---	---
11N20MIMO	Ant2	5180	17.822	5171.2088	5189.0310	---	---
11N20MIMO	Ant1	5200	17.902	5191.0889	5208.9910	---	---
11N20MIMO	Ant2	5200	17.822	5191.1289	5208.9510	---	---
11N20MIMO	Ant1	5240	17.742	5231.2088	5248.9510	---	---
11N20MIMO	Ant2	5240	17.822	5231.1688	5248.9910	---	---
11N40MIMO	Ant1	5190	36.683	5171.6184	5208.3017	---	---
11N40MIMO	Ant2	5190	36.444	5171.7782	5208.2218	---	---
11N40MIMO	Ant1	5230	36.683	5211.7782	5248.4615	---	---
11N40MIMO	Ant2	5230	36.683	5211.7782	5248.4615	---	---
11AC20MIMO	Ant1	5180	17.662	5171.2088	5188.8711	---	---
11AC20MIMO	Ant2	5180	17.662	5171.2088	5188.8711	---	---
11AC20MIMO	Ant1	5200	17.742	5191.0090	5208.7512	---	---
11AC20MIMO	Ant2	5200	17.902	5191.1289	5209.0310	---	---
11AC20MIMO	Ant1	5240	17.822	5231.0889	5248.9111	---	---
11AC20MIMO	Ant2	5240	17.902	5231.0490	5248.9510	---	---
11AC40MIMO	Ant1	5190	36.444	5171.7782	5208.2218	---	---
11AC40MIMO	Ant2	5190	36.923	5171.6983	5208.6214	---	---
11AC40MIMO	Ant1	5230	36.763	5211.6983	5248.4615	---	---
11AC40MIMO	Ant2	5230	36.763	5211.7782	5248.5415	---	---
11AC80MIMO	Ant1	5210	76.883	5171.7982	5248.6813	---	---
11AC80MIMO	Ant2	5210	76.244	5172.1179	5248.3616	---	---
11AX20MIMO	Ant1	5180	19.021	5170.5295	5189.5504	---	---
11AX20MIMO	Ant2	5180	19.101	5170.3696	5189.4705	---	---
11AX20MIMO	Ant1	5200	18.941	5190.5694	5209.5105	---	---
11AX20MIMO	Ant2	5200	19.061	5190.4496	5209.5105	---	---
11AX20MIMO	Ant1	5240	18.981	5230.5295	5249.5105	---	---
11AX20MIMO	Ant2	5240	19.021	5230.5694	5249.5904	---	---
11AX40MIMO	Ant1	5190	37.882	5171.1389	5209.0210	---	---
11AX40MIMO	Ant2	5190	38.042	5171.0589	5209.1009	---	---
11AX40MIMO	Ant1	5230	38.042	5211.1389	5249.1808	---	---
11AX40MIMO	Ant2	5230	37.882	5211.2188	5249.1009	---	---
11AX80MIMO	Ant1	5210	77.682	5171.3187	5249.0010	---	---
11AX80MIMO	Ant2	5210	77.363	5171.7982	5249.1608	---	---

Note: RF Conducted test Offset= cable loss+ Attenuator(10dB).

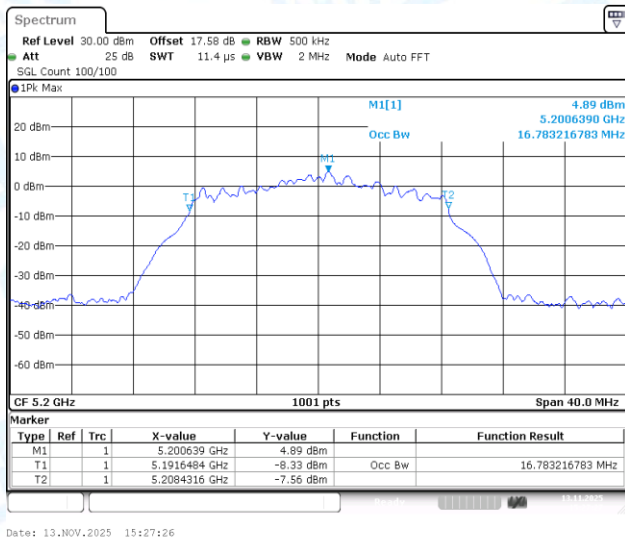
2.2 Test Graphs



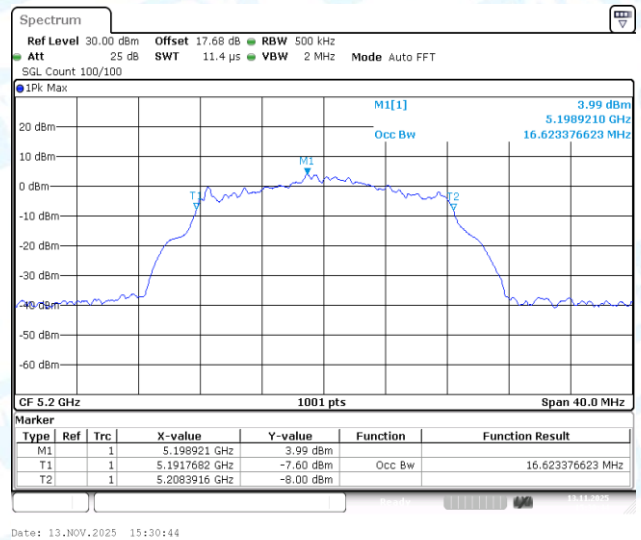
11A-CDD-Ant1-5180



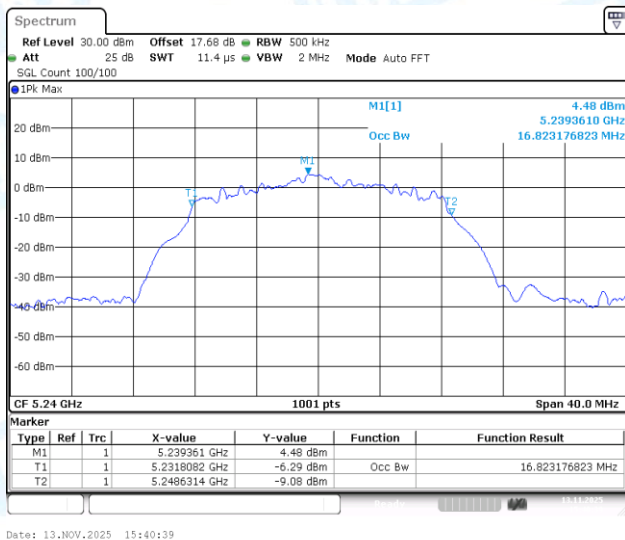
11A-CDD-Ant2-5180



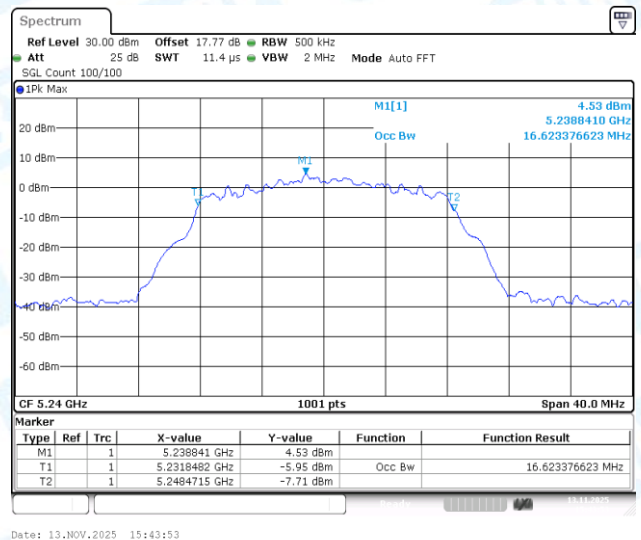
11A-CDD-Ant1-5200



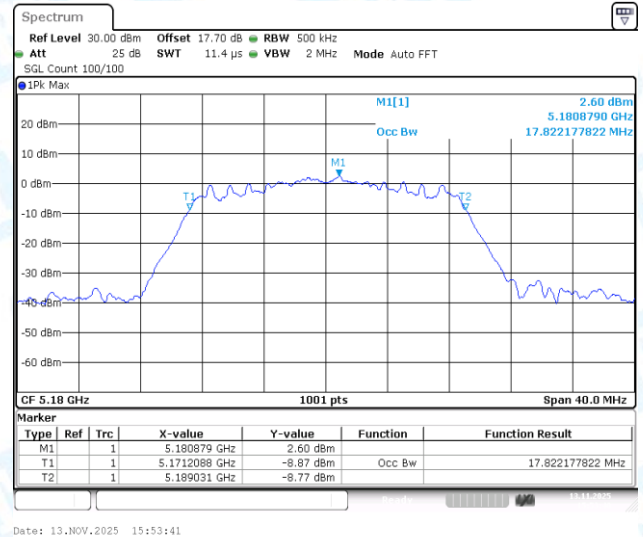
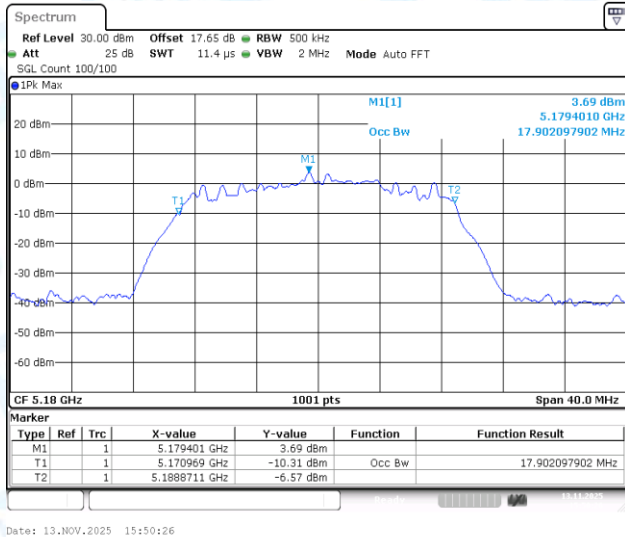
11A-CDD-Ant2-5200



11A-CDD-Ant1-5240

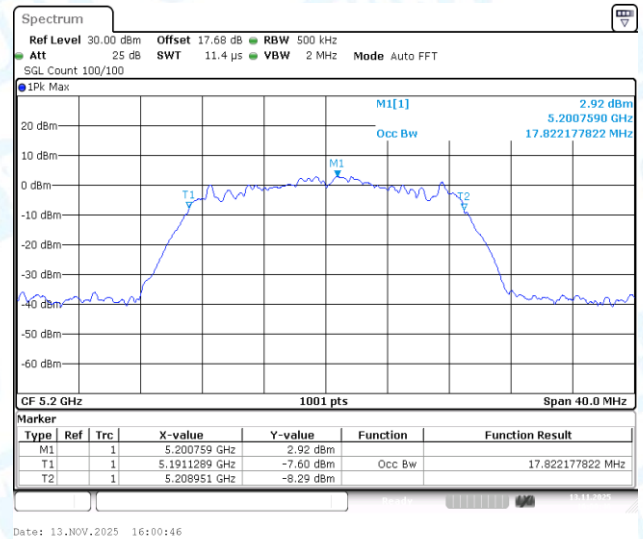
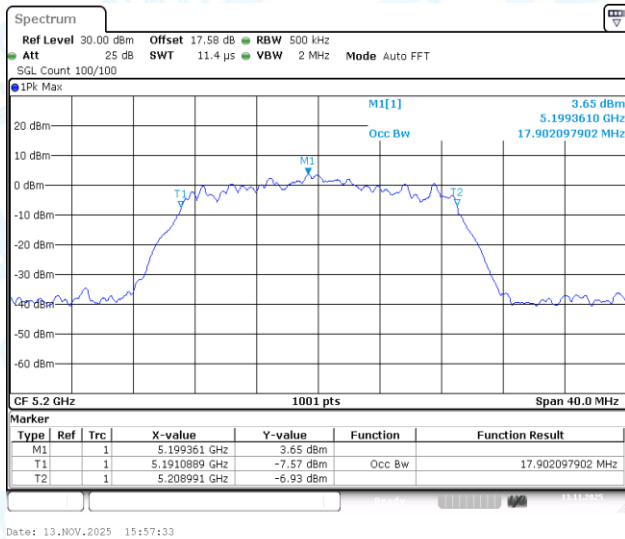


11A-CDD-Ant2-5240



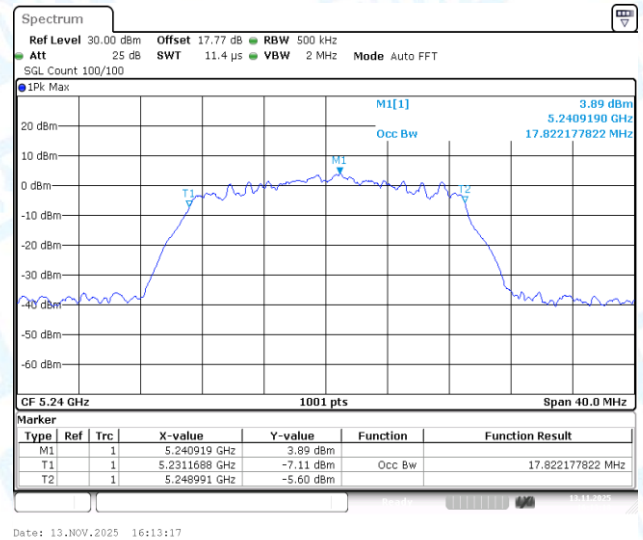
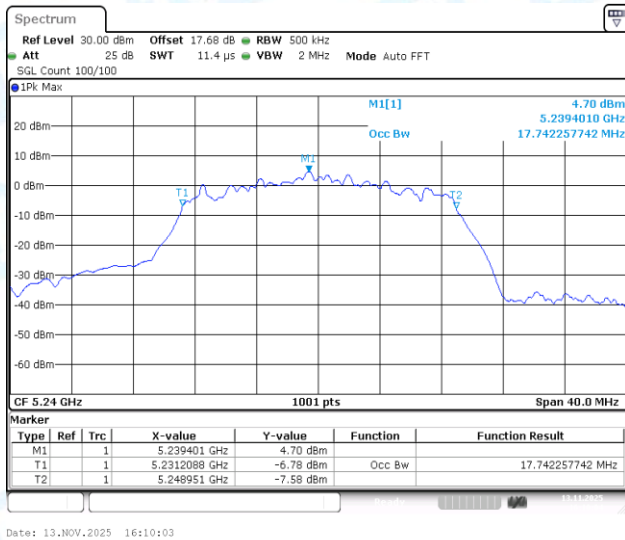
11N20MIMO-Ant1-5180

11N20MIMO-Ant2-5180



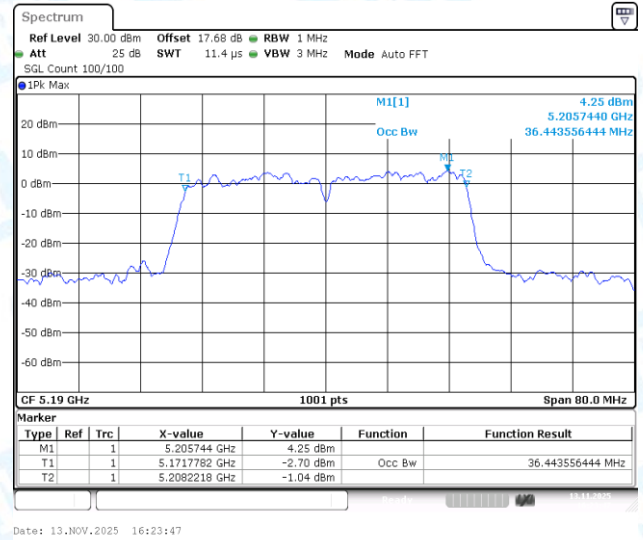
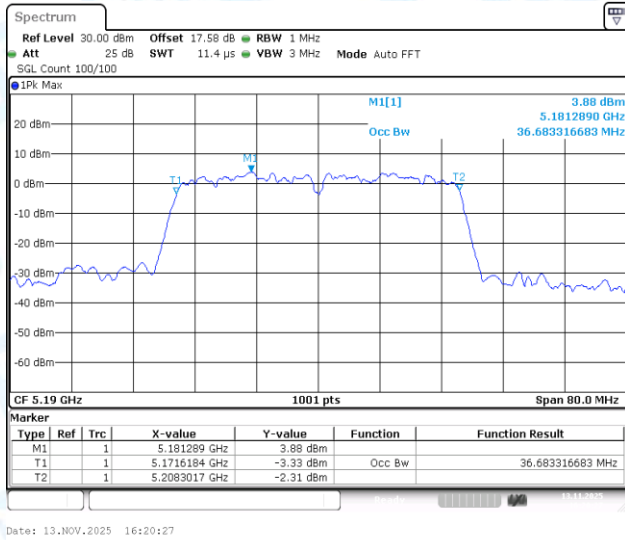
11N20MIMO-Ant1-5200

11N20MIMO-Ant2-5200



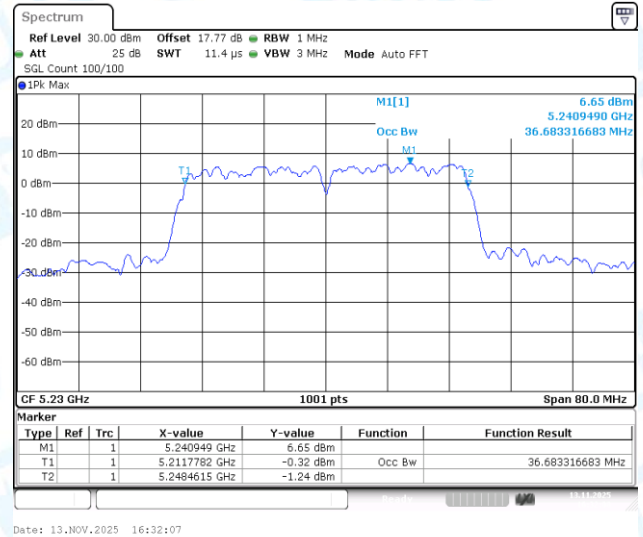
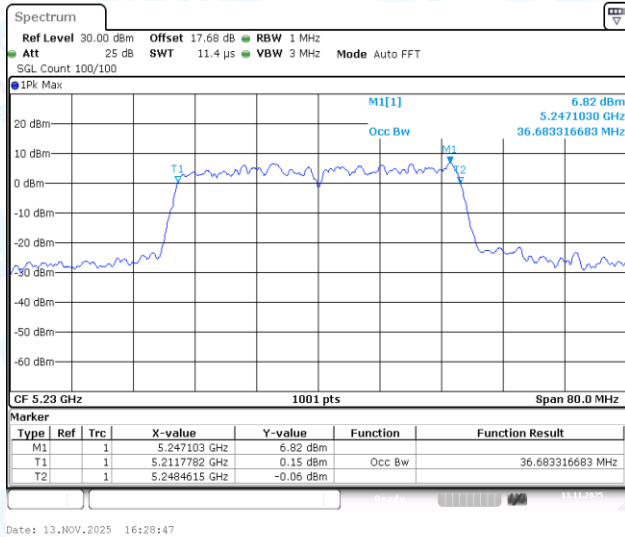
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11N20MIMO-Ant2-5240



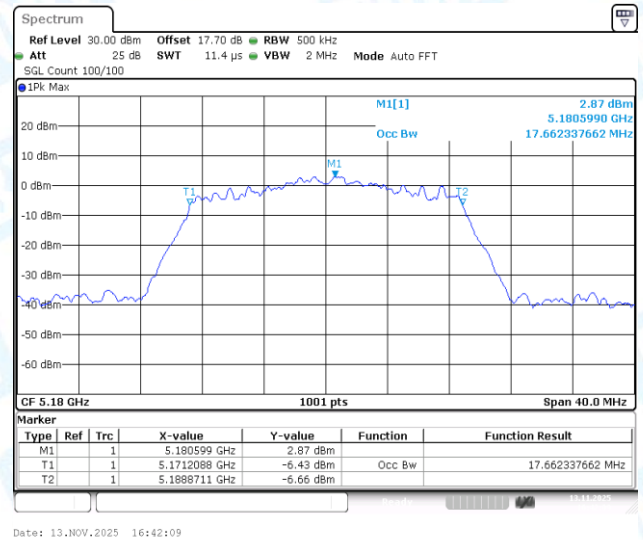
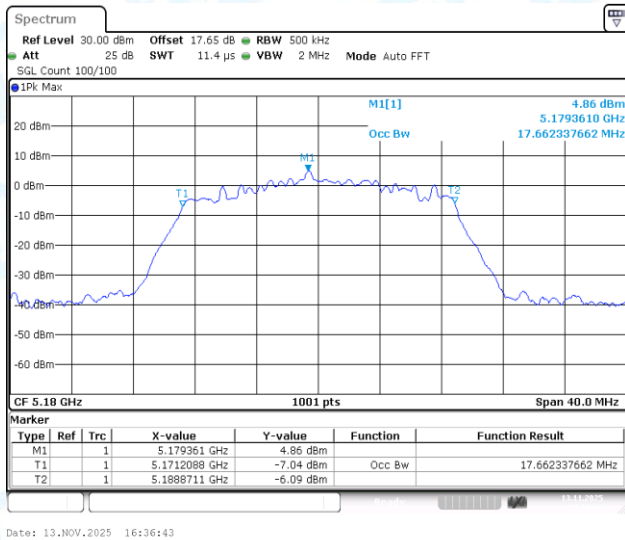
11N40MIMO-Ant1-5190

11N40MIMO-Ant2-5190



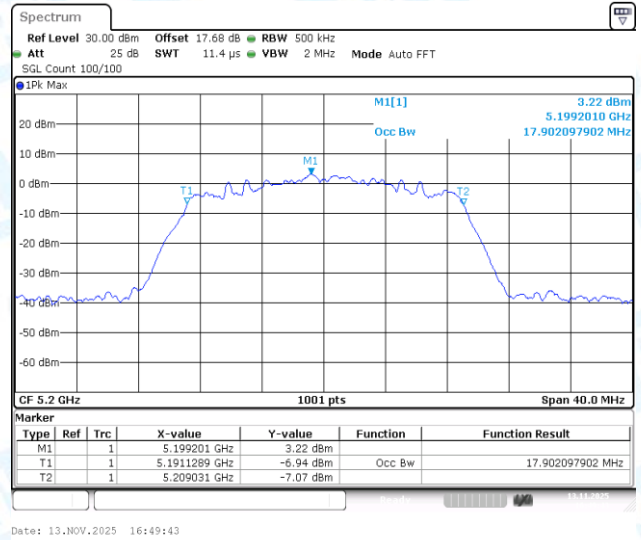
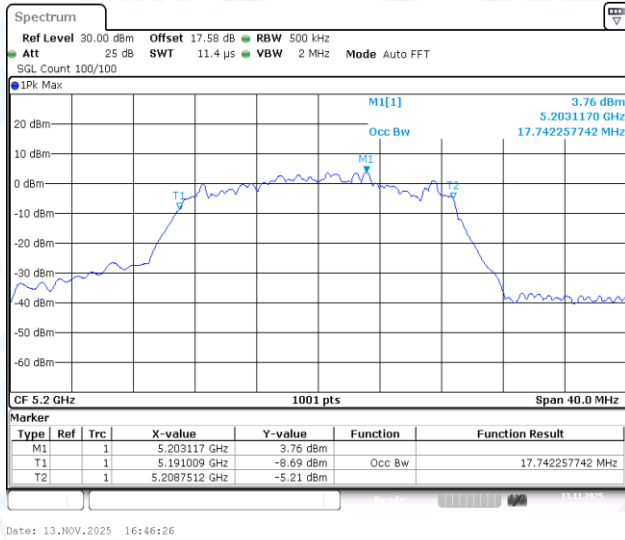
11N40MIMO-Ant1-5230

11N40MIMO-Ant2-5230



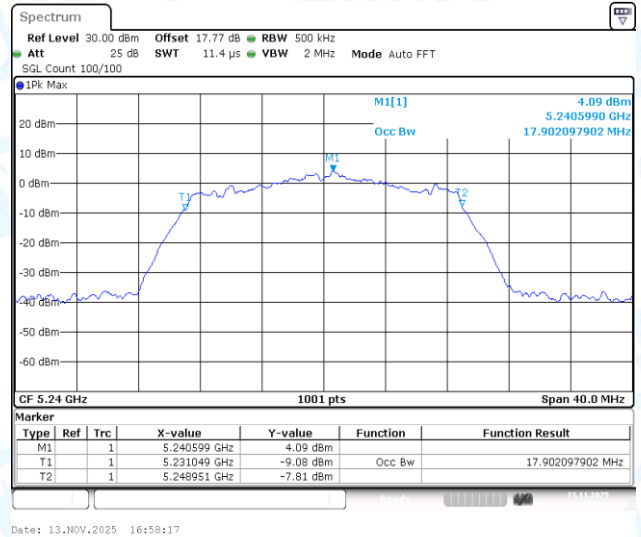
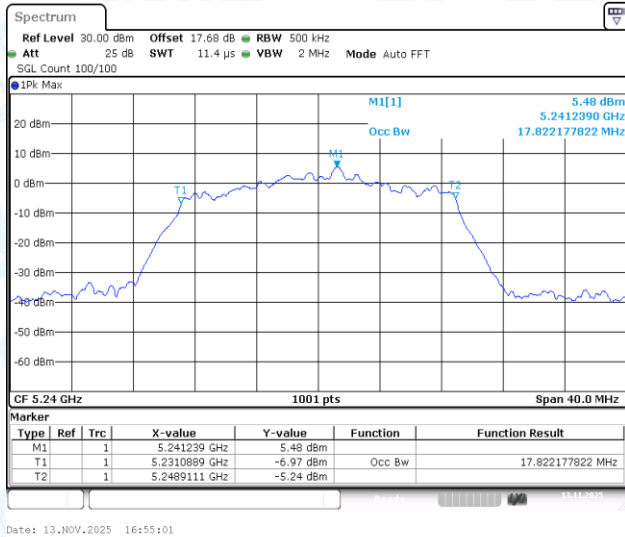
11AC20MIMO-Ant1-5180

11AC20MIMO-Ant2-5180



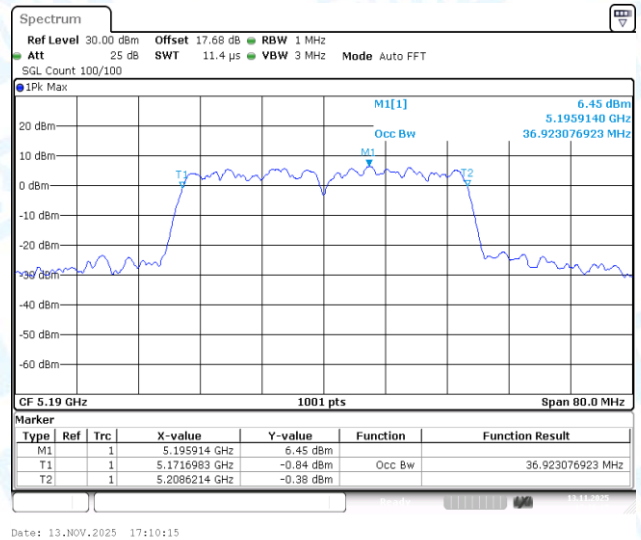
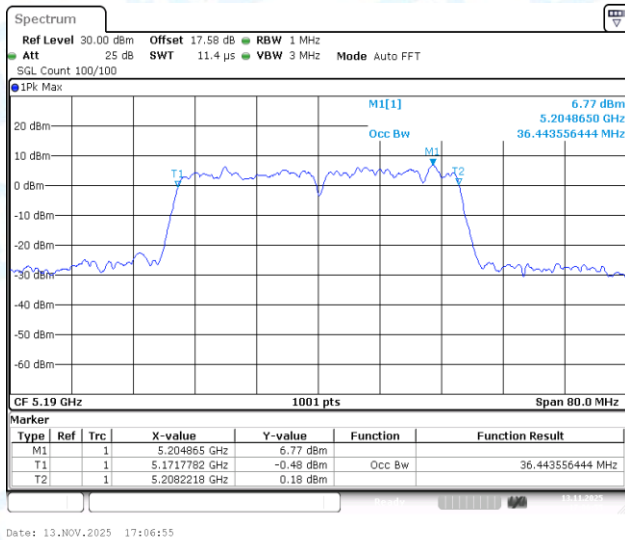
11AC20MIMO-Ant1-5200

11AC20MIMO-Ant2-5200



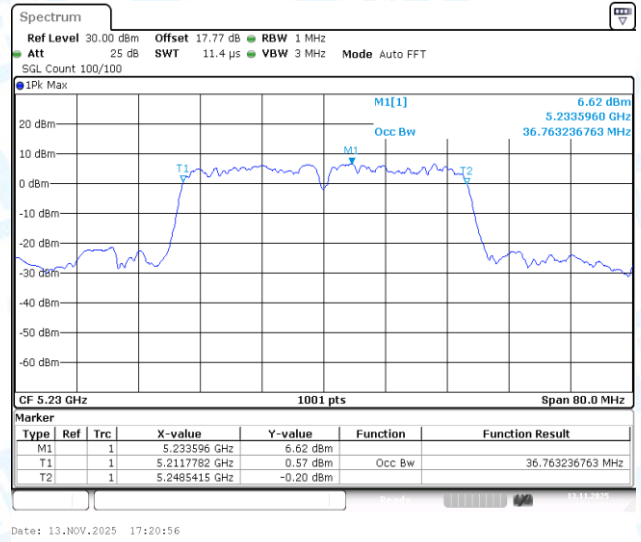
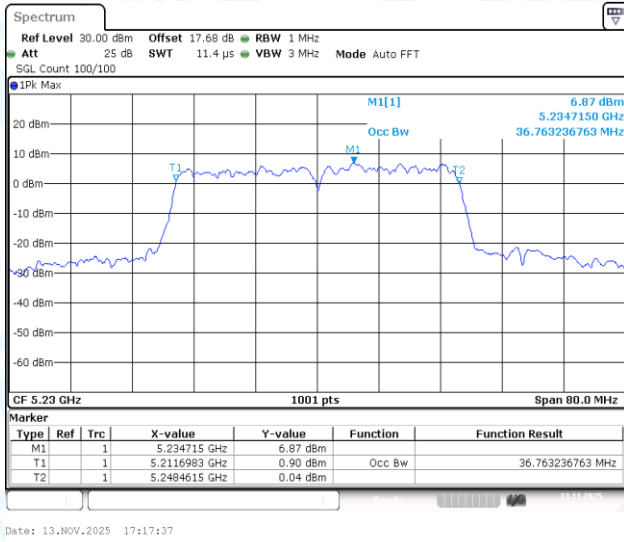
11AC20MIMO-Ant1-5240

11AC20MIMO-Ant2-5240



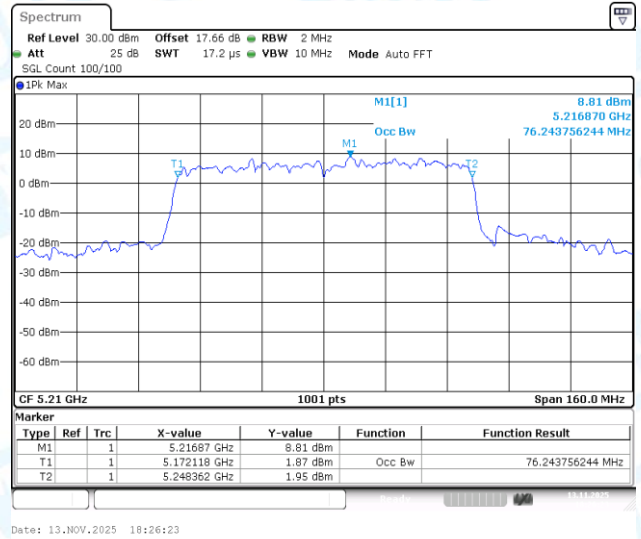
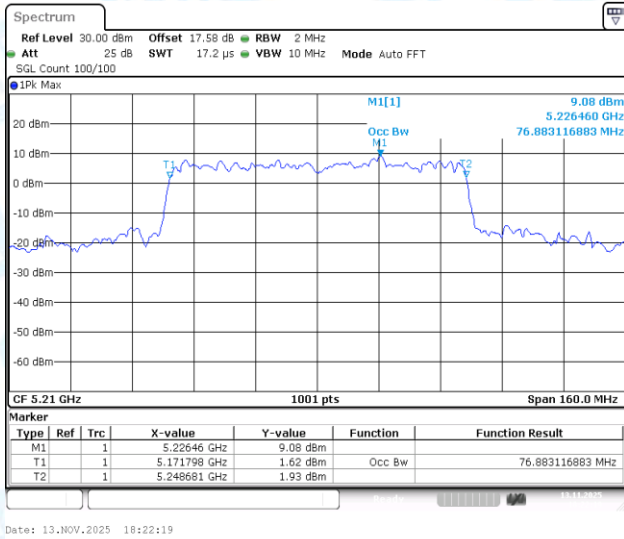
11AC40MIMO-Ant1-5190

11AC40MIMO-Ant2-5190



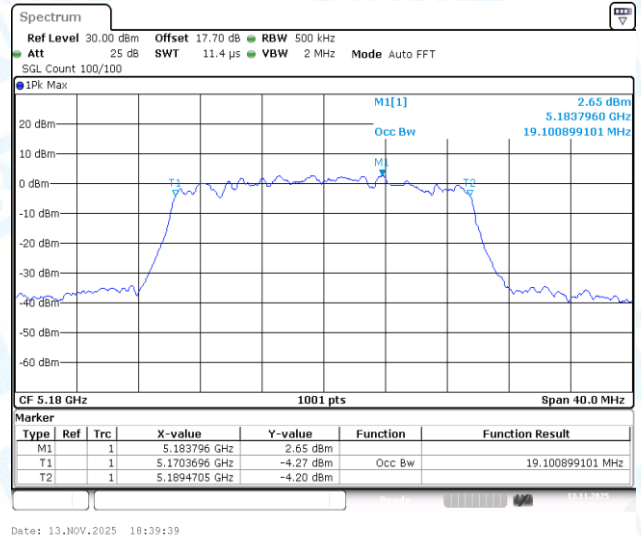
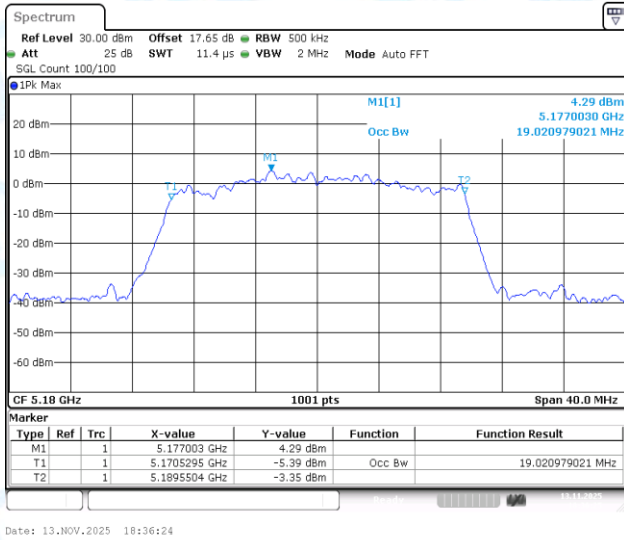
11AC40MIMO-Ant1-5230

11AC40MIMO-Ant2-5230



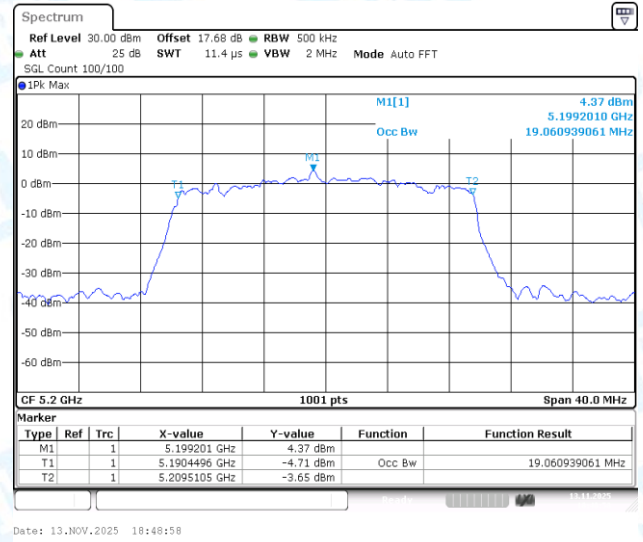
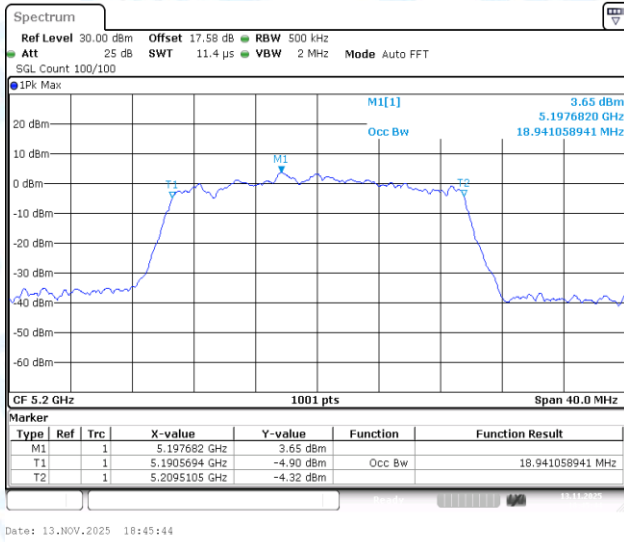
11AC80MIMO-Ant1-5210

11AC80MIMO-Ant2-5210



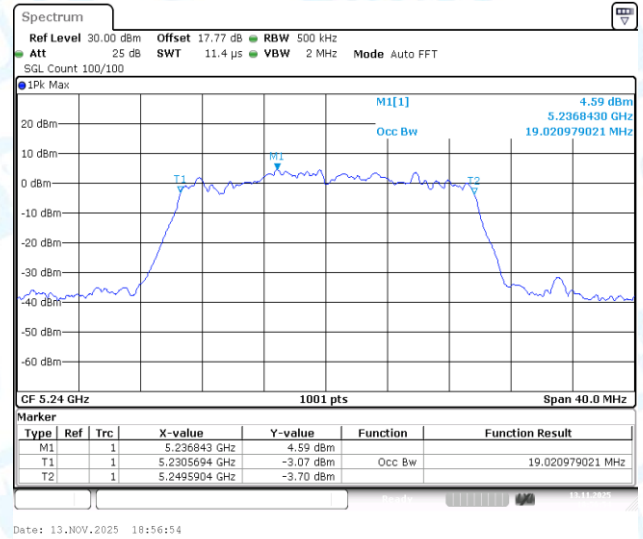
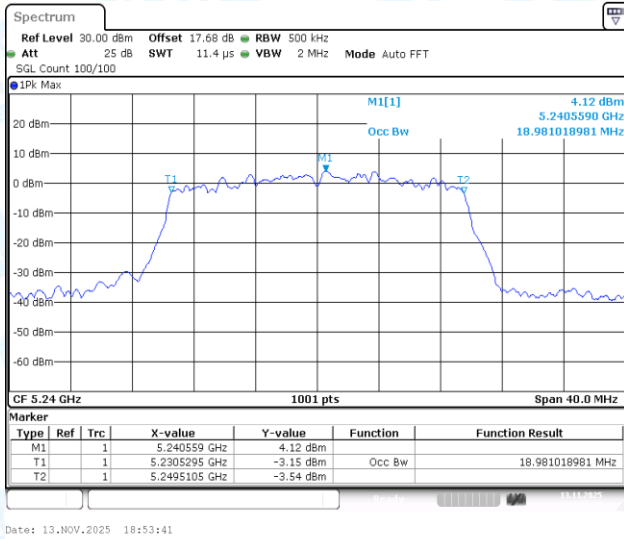
11AX20MIMO-Ant1-5180

11AX20MIMO-Ant2-5180



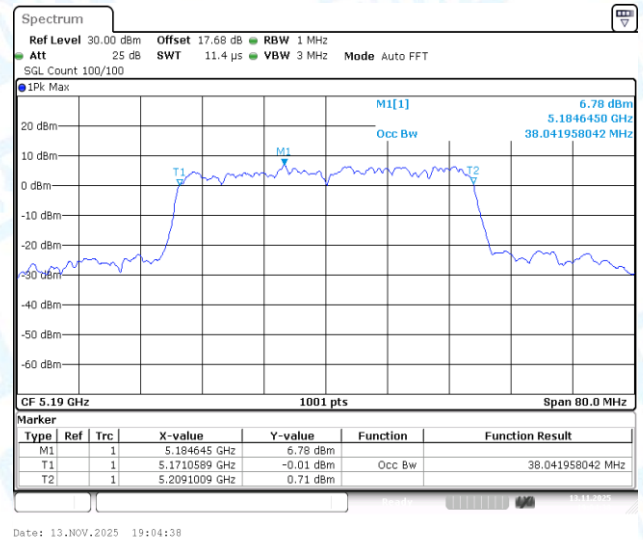
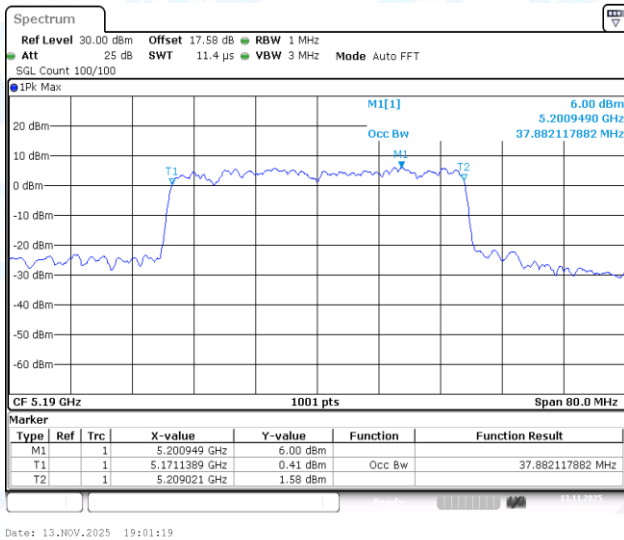
11AX20MIMO-Ant1-5200

11AX20MIMO-Ant2-5200



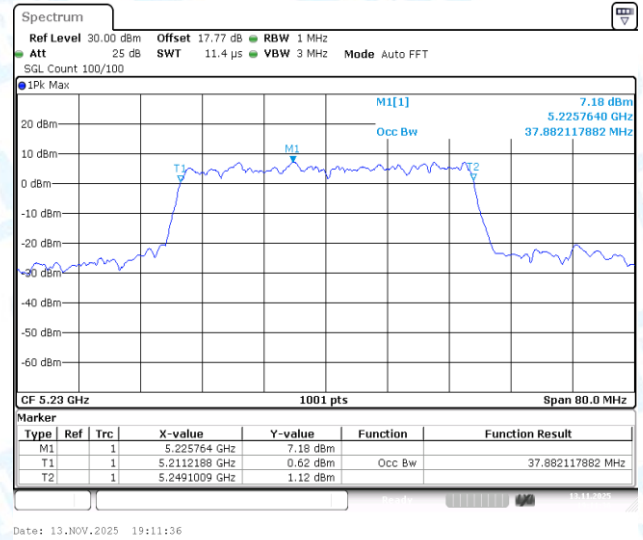
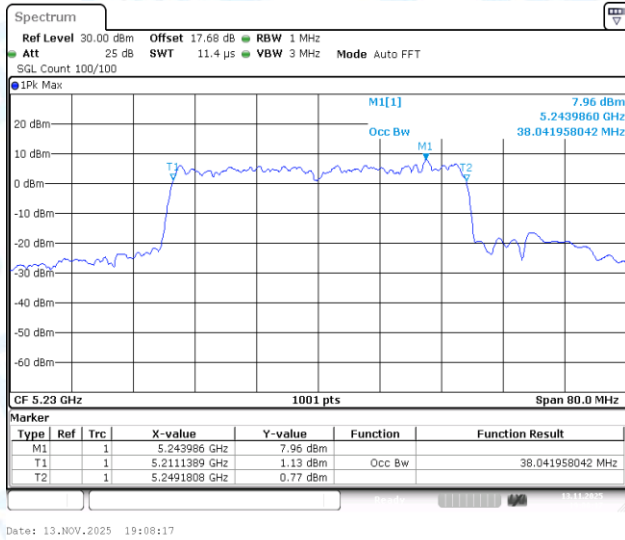
11AX20MIMO-Ant1-5240

11AX20MIMO-Ant2-5240



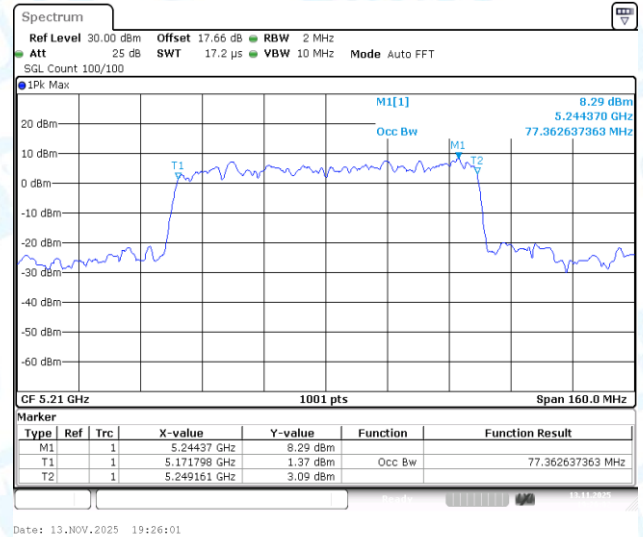
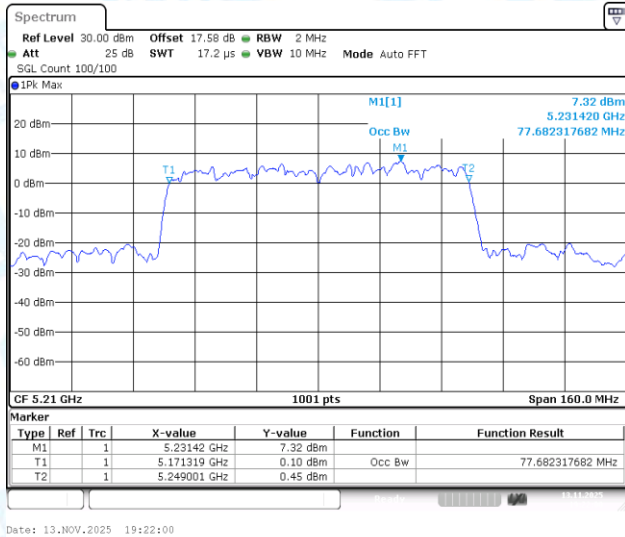
11AX40MIMO-Ant1-5190

11AX40MIMO-Ant2-5190



11AX40MIMO-Ant1-5230

11AX40MIMO-Ant2-5230



11AX80MIMO-Ant1-5210

11AX80MIMO-Ant2-5210

3: Duty Cycle

3.1 Test Result

TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	1/T [kHz]
11A-CDD	Ant1	5180	1.40	1.49	93.96	0.27	0.71
11A-CDD	Ant2	5180	1.39	1.49	93.29	0.30	0.72
11A-CDD	Ant1	5200	1.39	1.49	93.29	0.30	0.72
11A-CDD	Ant2	5200	1.39	1.49	93.29	0.30	0.72
11A-CDD	Ant1	5240	1.40	1.50	93.33	0.30	0.71
11A-CDD	Ant2	5240	1.40	1.50	93.33	0.30	0.71
11N20MIMO	Ant1	5180	1.31	1.41	92.91	0.32	0.76
11N20MIMO	Ant2	5180	1.31	1.41	92.91	0.32	0.76
11N20MIMO	Ant1	5200	1.31	1.41	92.91	0.32	0.76
11N20MIMO	Ant2	5200	1.31	1.41	92.91	0.32	0.76
11N20MIMO	Ant1	5240	1.31	1.41	92.91	0.32	0.76
11N20MIMO	Ant2	5240	1.30	1.40	92.86	0.32	0.77
11N40MIMO	Ant1	5190	0.65	0.75	86.67	0.62	1.54
11N40MIMO	Ant2	5190	0.65	0.75	86.67	0.62	1.54
11N40MIMO	Ant1	5230	0.65	0.75	86.67	0.62	1.54
11N40MIMO	Ant2	5230	0.65	0.75	86.67	0.62	1.54
11AC20MIMO	Ant1	5180	1.93	1.95	98.97	0.04	0.52
11AC20MIMO	Ant2	5180	1.93	1.95	98.97	0.04	0.52
11AC20MIMO	Ant1	5200	1.93	1.95	98.97	0.04	0.52
11AC20MIMO	Ant2	5200	1.93	1.95	98.97	0.04	0.52
11AC20MIMO	Ant1	5240	1.93	1.96	98.47	0.07	0.52
11AC20MIMO	Ant2	5240	1.93	1.95	98.97	0.04	0.52
11AC40MIMO	Ant1	5190	1.54	1.56	98.72	0.06	0.65
11AC40MIMO	Ant2	5190	1.54	1.57	98.09	0.08	0.65
11AC40MIMO	Ant1	5230	1.54	1.56	98.72	0.06	0.65
11AC40MIMO	Ant2	5230	1.54	1.56	98.72	0.06	0.65
11AC80MIMO	Ant1	5210	2.24	2.26	99.12	0.04	0.45
11AC80MIMO	Ant2	5210	2.24	2.27	98.68	0.06	0.45
11AX20MIMO	Ant1	5180	0.82	0.85	96.47	0.16	1.22
11AX20MIMO	Ant2	5180	0.82	0.85	96.47	0.16	1.22
11AX20MIMO	Ant1	5200	1.49	1.52	98.03	0.09	0.67
11AX20MIMO	Ant2	5200	1.49	1.52	98.03	0.09	0.67
11AX20MIMO	Ant1	5240	1.48	1.51	98.01	0.09	0.68
11AX20MIMO	Ant2	5240	1.49	1.52	98.03	0.09	0.67
11AX40MIMO	Ant1	5190	0.44	0.47	93.62	0.29	2.27
11AX40MIMO	Ant2	5190	0.44	0.47	93.62	0.29	2.27
11AX40MIMO	Ant1	5230	0.45	0.48	93.75	0.28	2.22
11AX40MIMO	Ant2	5230	0.45	0.48	93.75	0.28	2.22
11AX80MIMO	Ant1	5210	0.40	0.43	93.02	0.31	2.50
11AX80MIMO	Ant2	5210	0.40	0.43	93.02	0.31	2.50

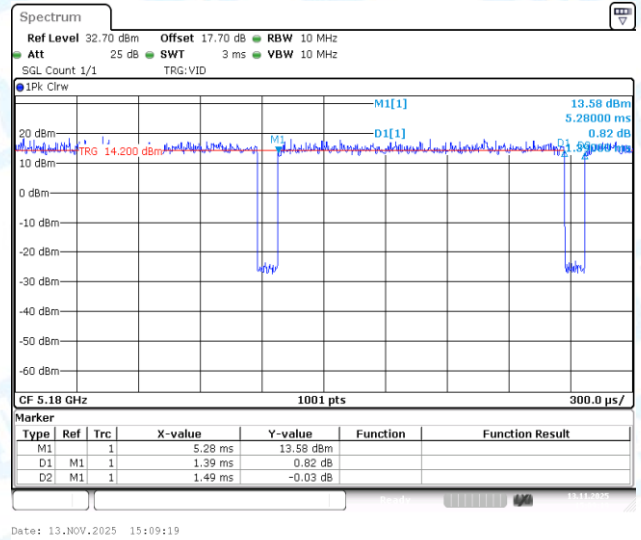
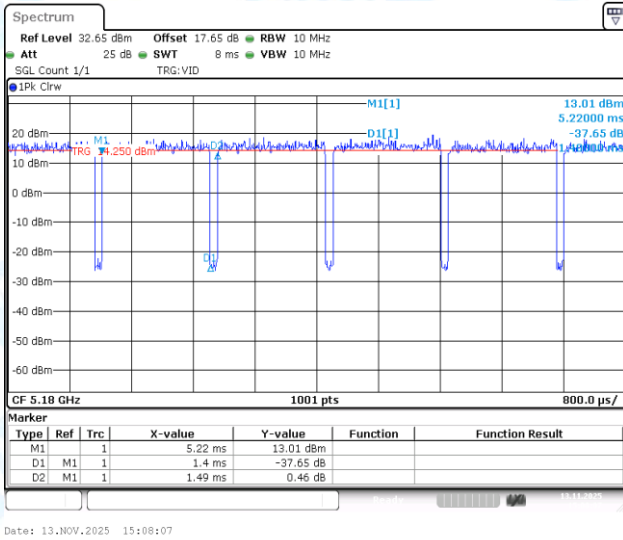
Note: 1, Duty Cycle= Transmission Duration/ Transmission Period

2, DC Factor= $10 \cdot \log_{10}(1/\text{Duty Cycle})$

3, $1/T = 1/\text{Transmission Duration}$

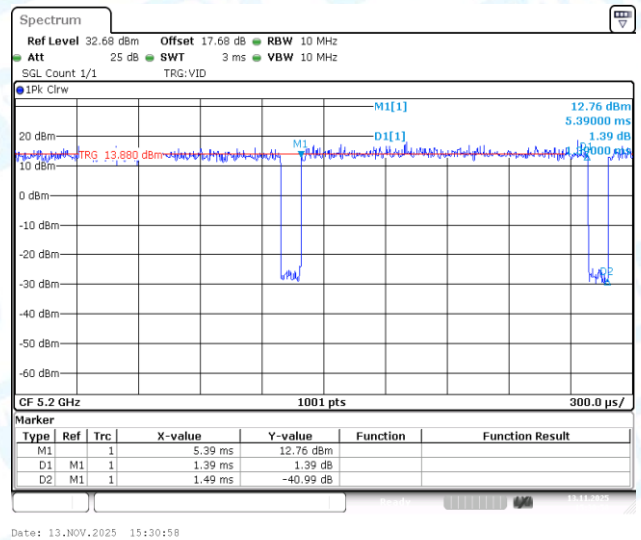
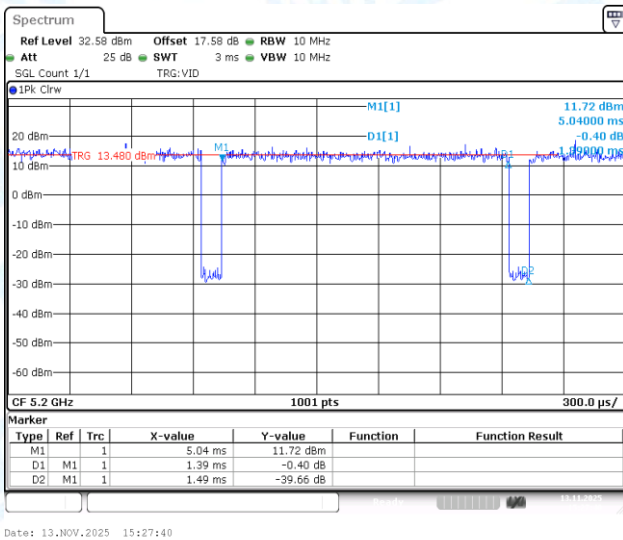
4 RF Conducted test Offset= cable loss+ Attenuator(10dB).

3.2 Test Graphs



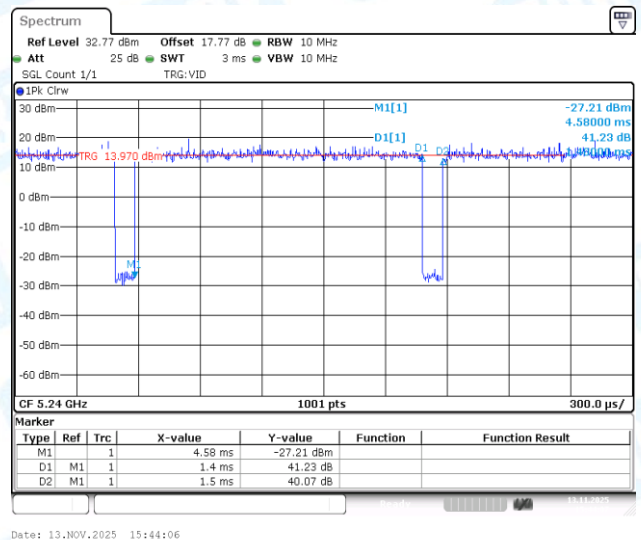
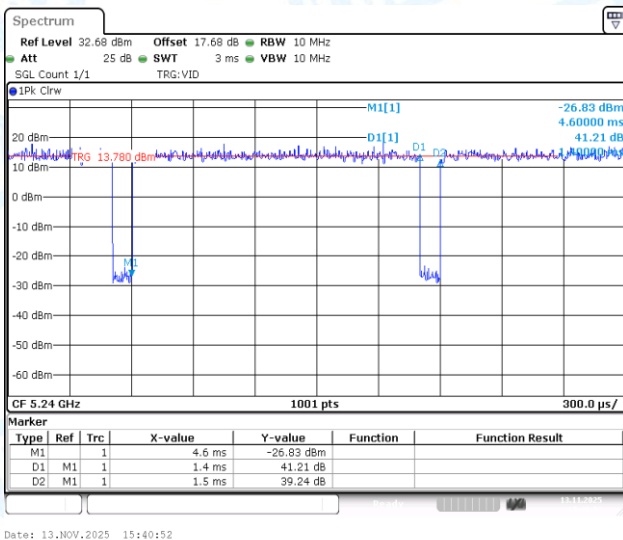
NTNV-11A-CDD-Ant1-5180

NTNV-11A-CDD-Ant2-5180



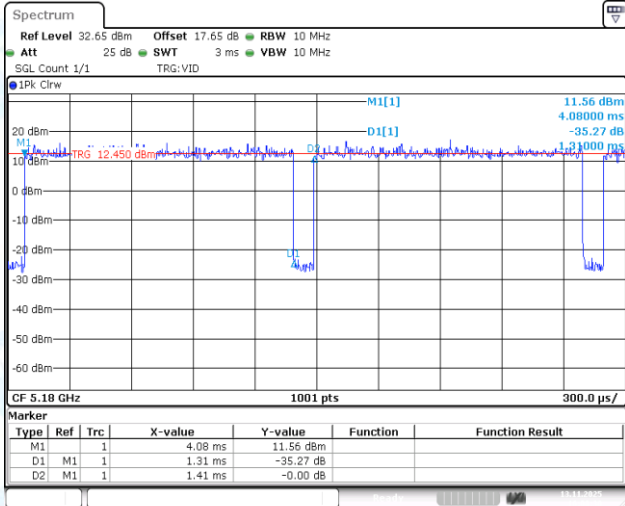
NTNV-11A-CDD-Ant1-5200

NTNV-11A-CDD-Ant2-5200

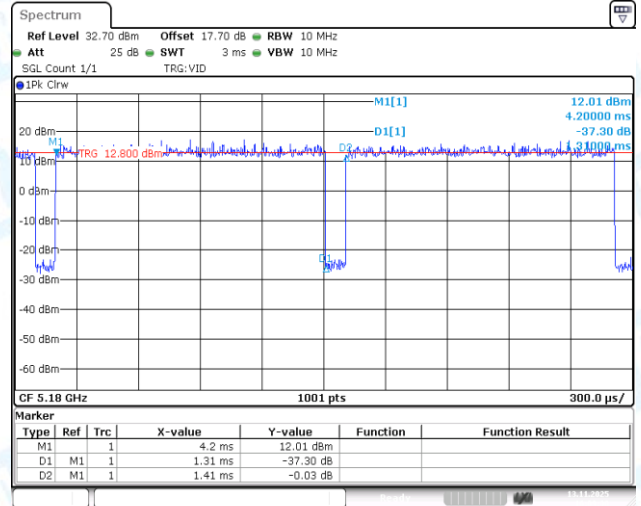


NTNV-11A-CDD-Ant1-5240

NTNV-11A-CDD-Ant2-5240



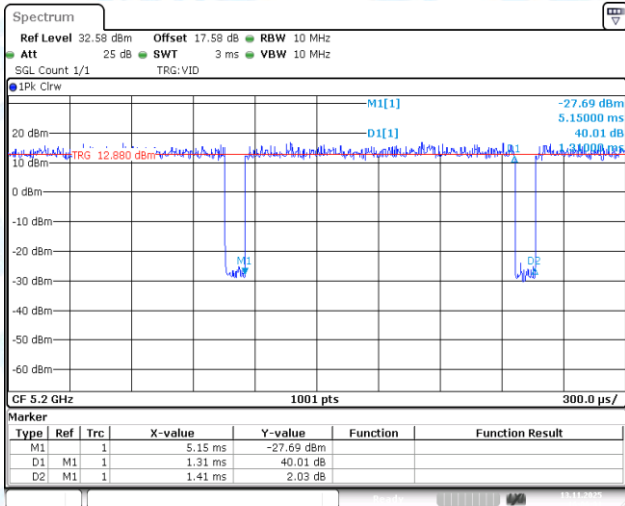
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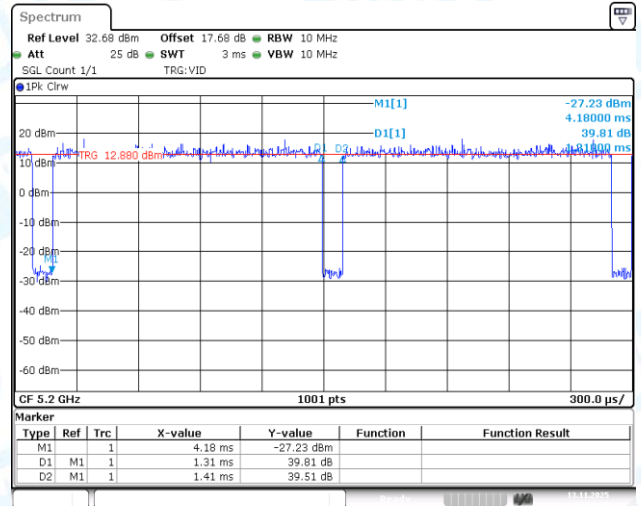
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NTNV-11N20MIMO-Ant1-5180

NTNV-11N20MIMO-Ant2-5180



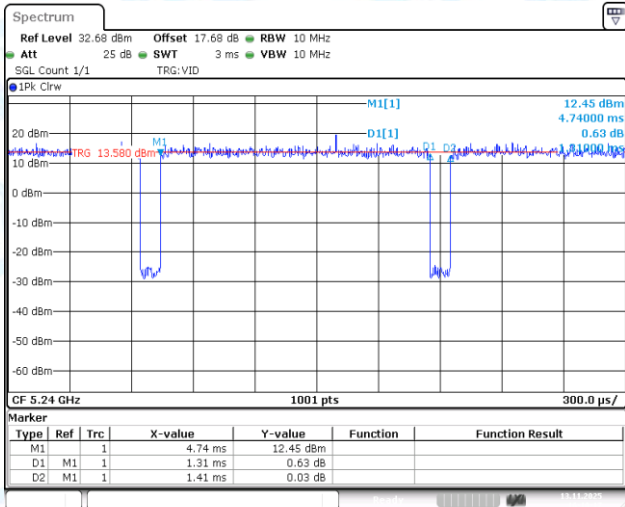
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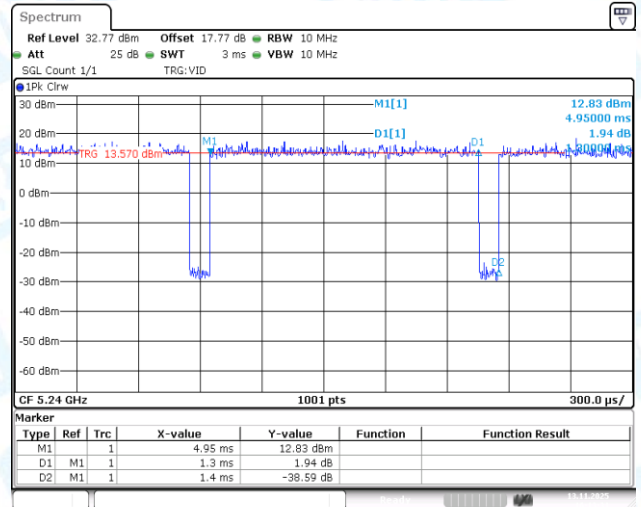
Date: 13.NOV.2025 16:06:30

NTNV-11N20MIMO-Ant1-5200

NTNV-11N20MIMO-Ant2-5200



Date: 13.NOV.2025 16:10:16



Date: 13.NOV.2025 16:13:30

NTNV-11N20MIMO-Ant1-5240

NTNV-11N20MIMO-Ant2-5240