

RF Test Data for 2.4G Wi-Fi (Conducted Measurements)

General Description of EUT	
Product Name:	Deeper Connect Air
Test Model:	Air
Sample ID:	HC-C-202310-0075-03-01-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	Yan Zhen Ming
Note: For a more detailed features description, please refer to the report TBR-C-202310-0075-3	

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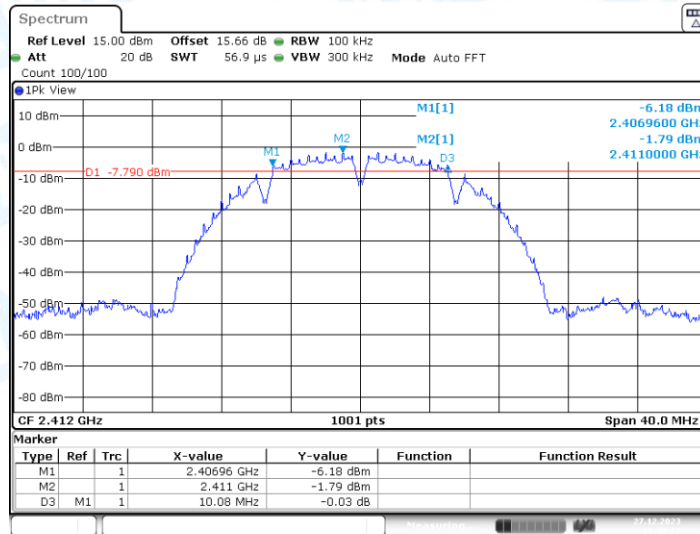
1. DTS Bandwidth

1.1. Test Result

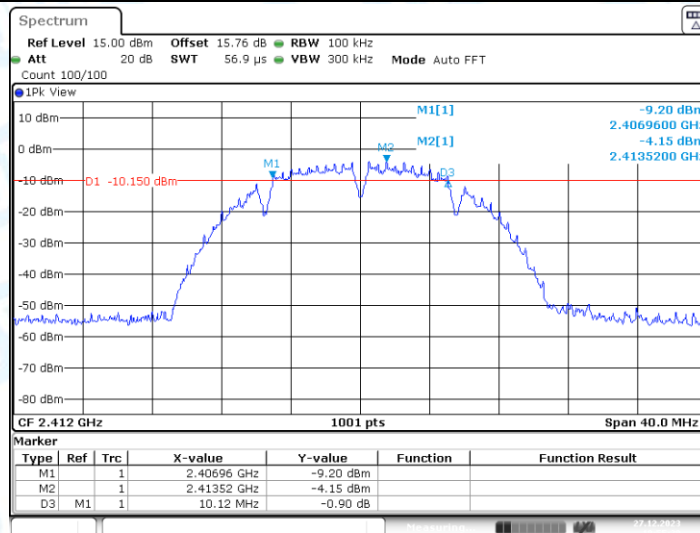
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant1	2412	10.08	2406.96	2417.04	0.5	PASS
	Ant2	2412	10.12	2406.96	2417.08	0.5	PASS
	Ant1	2437	10.08	2431.96	2442.04	0.5	PASS
	Ant2	2437	10.12	2431.96	2442.08	0.5	PASS
	Ant1	2462	10.12	2456.96	2467.08	0.5	PASS
	Ant2	2462	10.08	2456.96	2467.04	0.5	PASS
11G-CDD	Ant1	2412	16.36	2403.84	2420.20	0.5	PASS
	Ant2	2412	16.32	2403.84	2420.16	0.5	PASS
	Ant1	2437	16.28	2428.88	2445.16	0.5	PASS
	Ant2	2437	16.32	2428.84	2445.16	0.5	PASS
	Ant1	2462	15.80	2454.36	2470.16	0.5	PASS
	Ant2	2462	16.32	2453.84	2470.16	0.5	PASS
11N20MIMO	Ant1	2412	17.60	2403.20	2420.80	0.5	PASS
	Ant2	2412	17.56	2403.24	2420.80	0.5	PASS
	Ant1	2437	17.60	2428.20	2445.80	0.5	PASS
	Ant2	2437	17.56	2428.24	2445.80	0.5	PASS
	Ant1	2462	17.68	2453.12	2470.80	0.5	PASS
	Ant2	2462	15.76	2454.12	2469.88	0.5	PASS
11N40MIMO	Ant1	2422	34.48	2404.48	2438.96	0.5	PASS
	Ant2	2422	36.32	2403.84	2440.16	0.5	PASS
	Ant1	2437	35.68	2419.24	2454.92	0.5	PASS
	Ant2	2437	35.68	2419.24	2454.92	0.5	PASS
	Ant1	2452	35.20	2434.40	2469.60	0.5	PASS
	Ant2	2452	35.92	2433.84	2469.76	0.5	PASS

1.2. Test Graphs

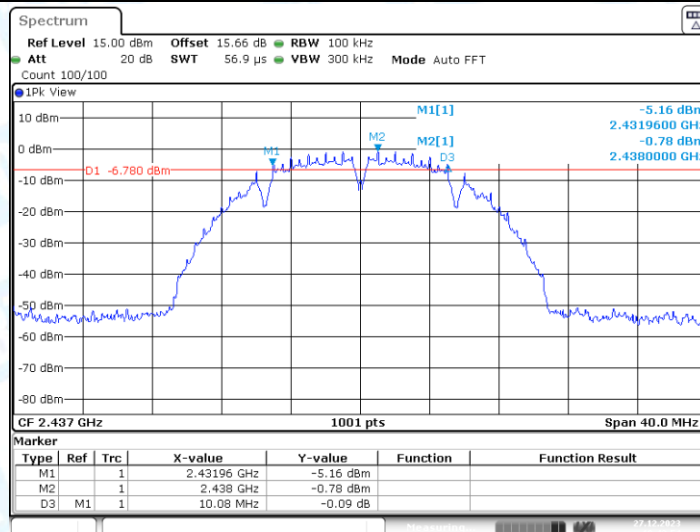
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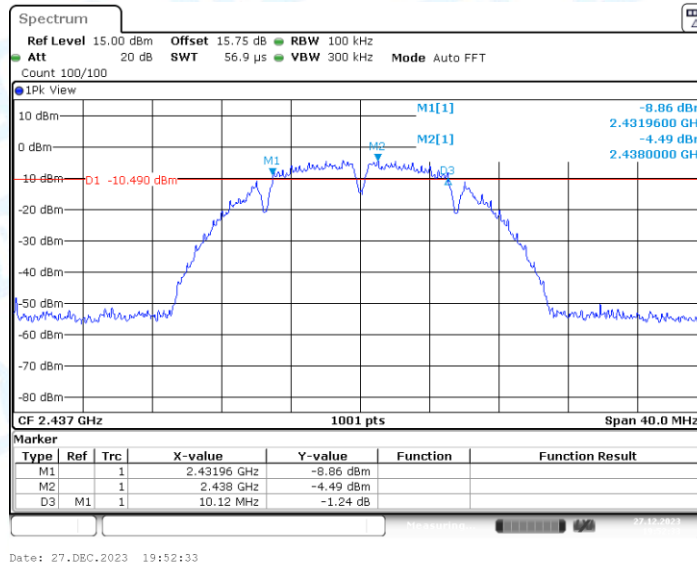
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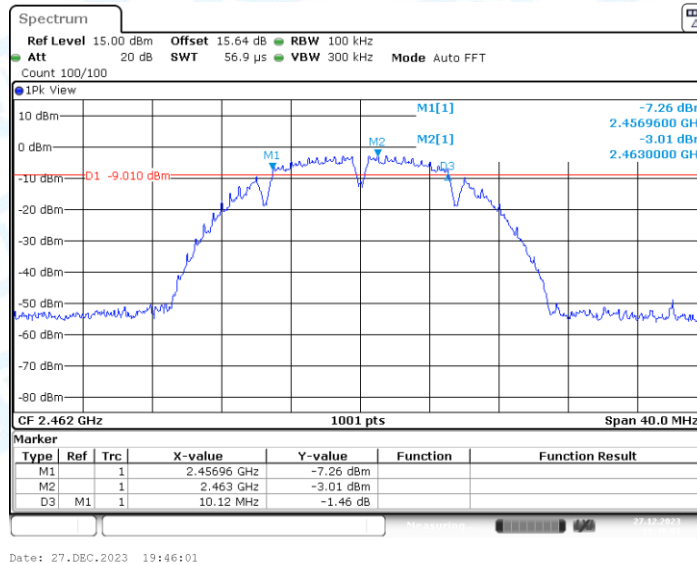
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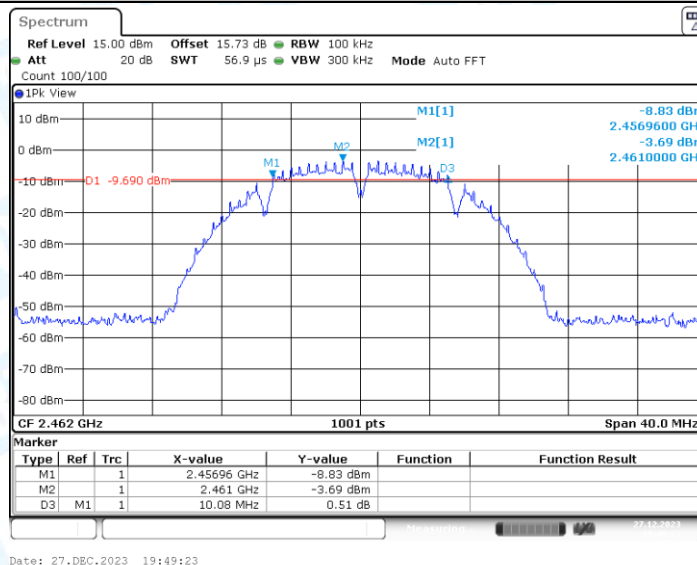
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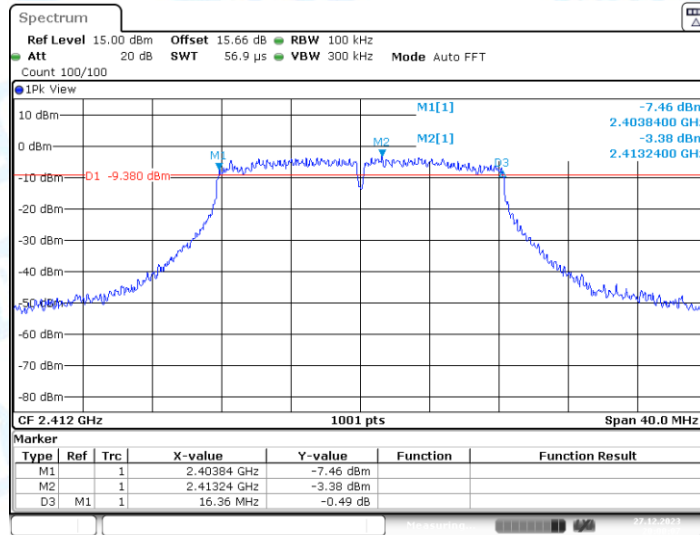
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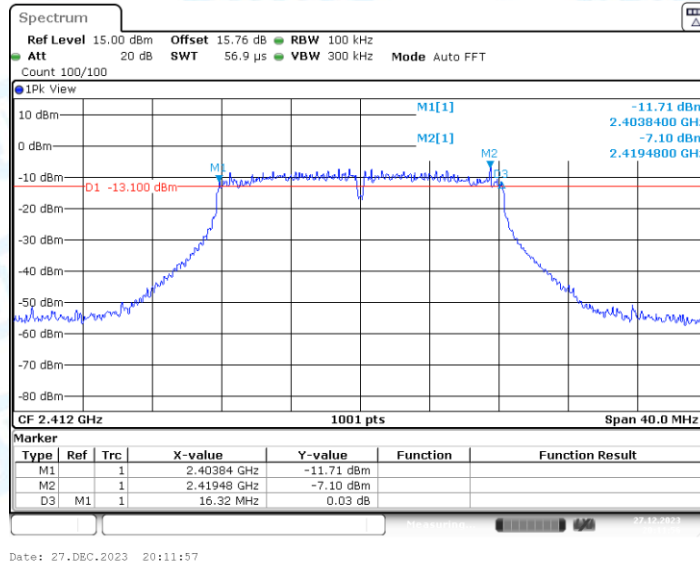
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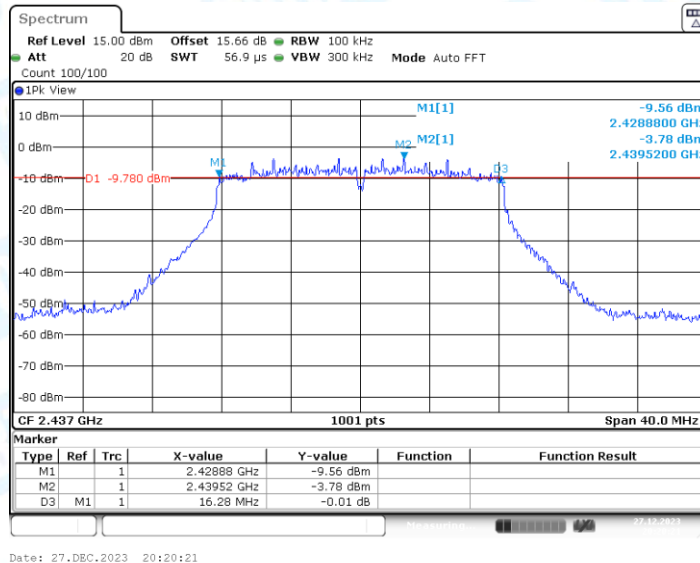
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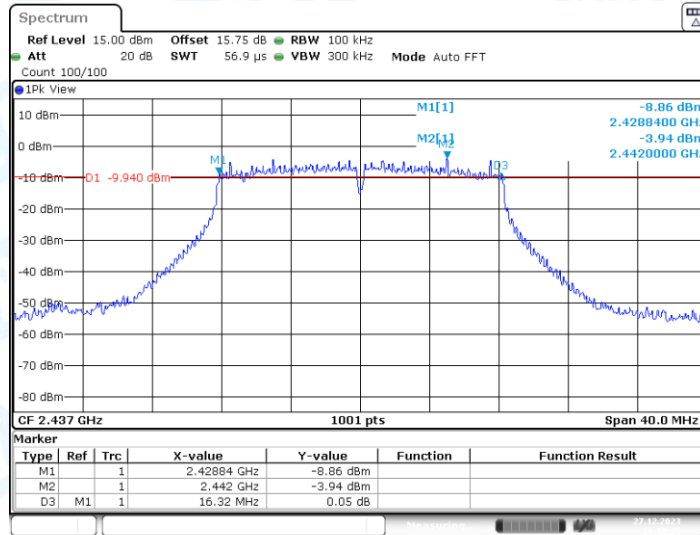
11G-CDD_Ant2_2412



11G-CDD_Ant1_2437

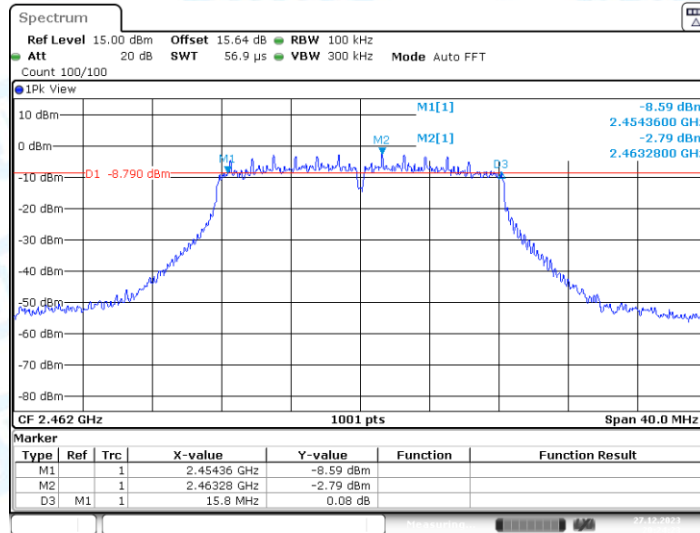


11G-CDD_Ant2_2437



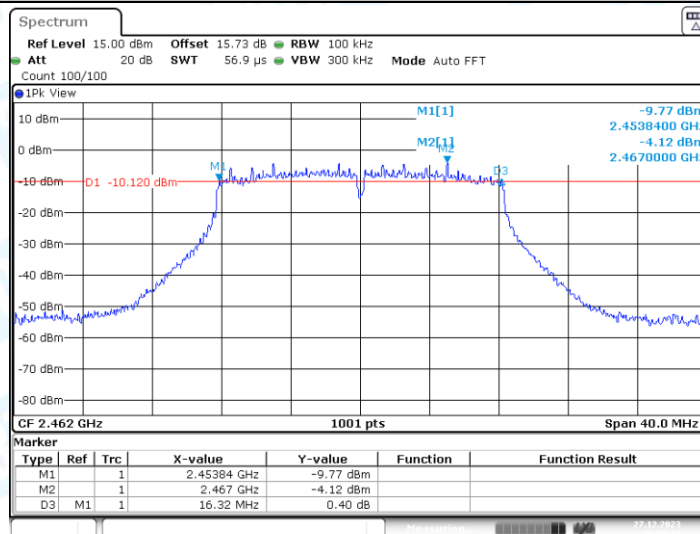
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11G-CDD_Ant1_2462



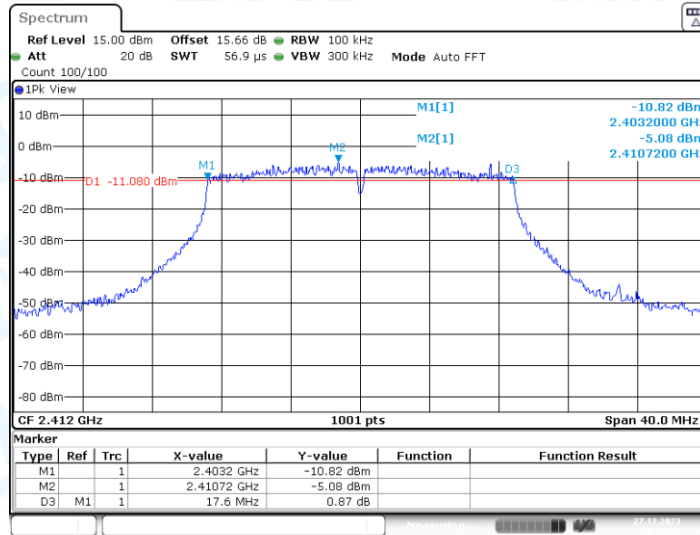
Date: 27.DEC.2023 20:24:22

11G-CDD_Ant2_2462



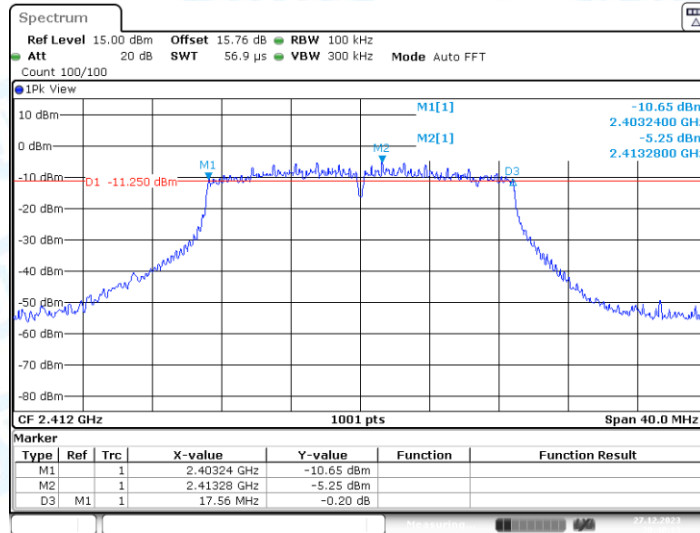
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11N20MIMO_Ant1_2412



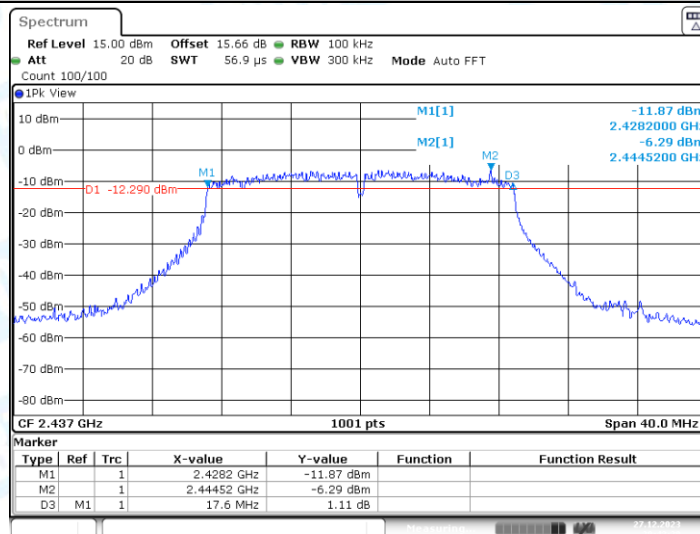
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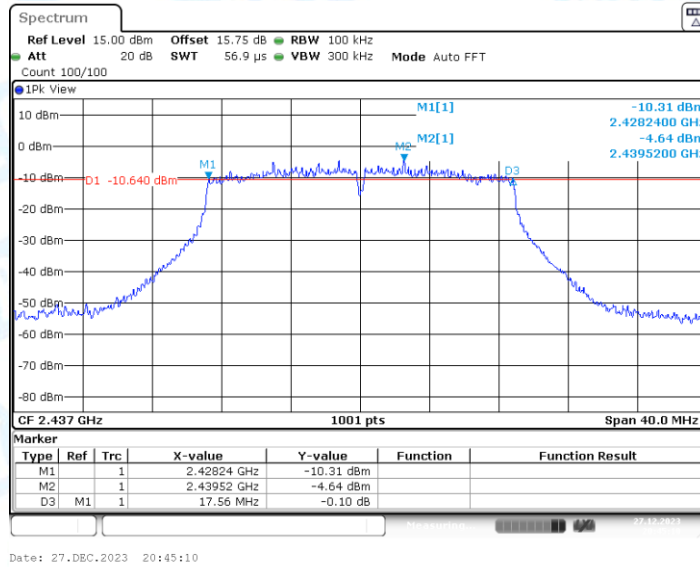
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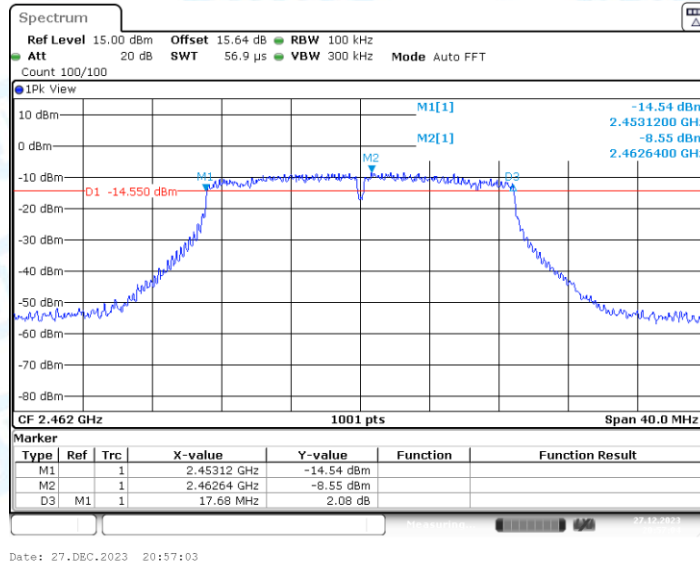


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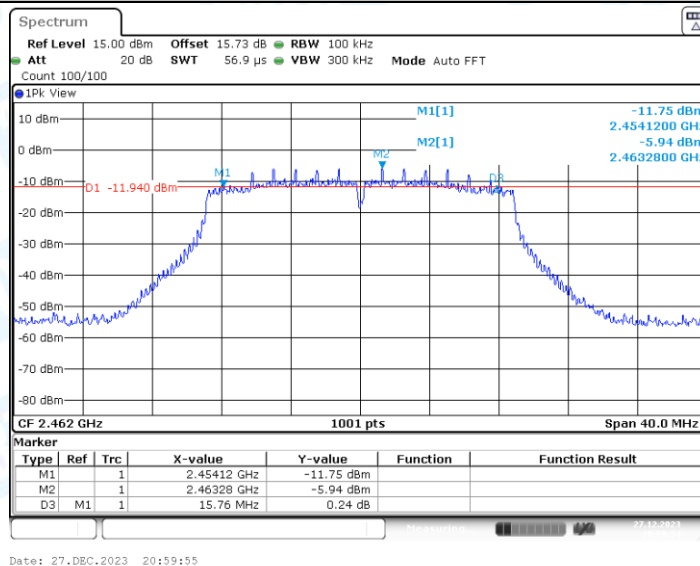
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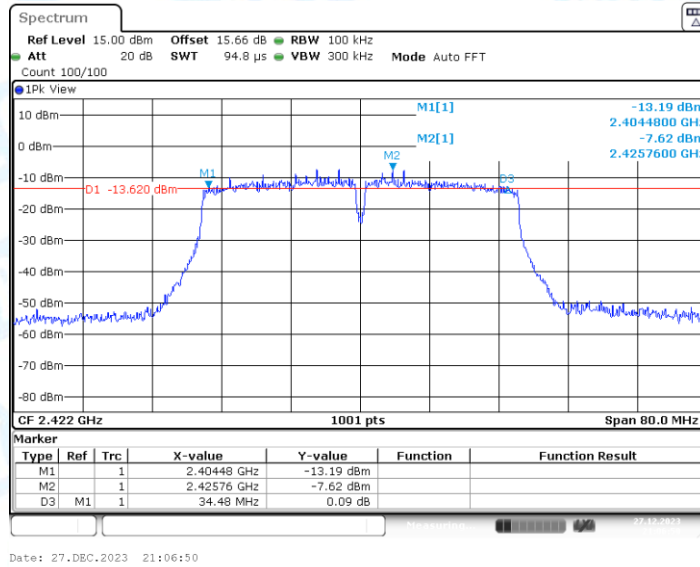
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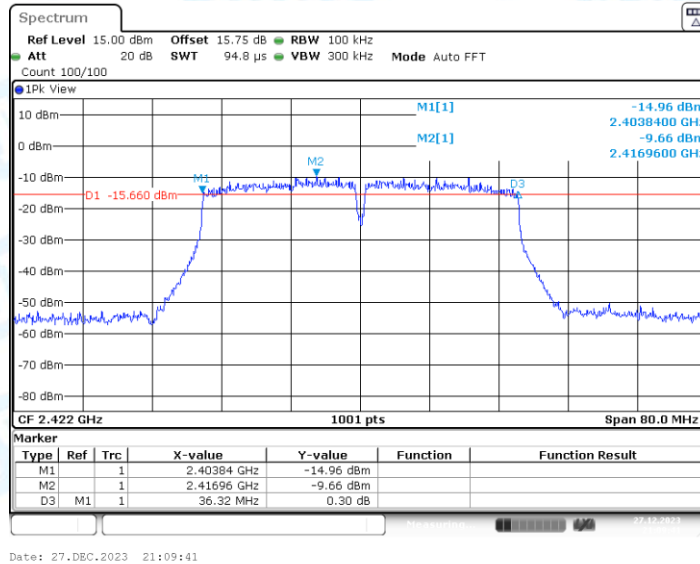
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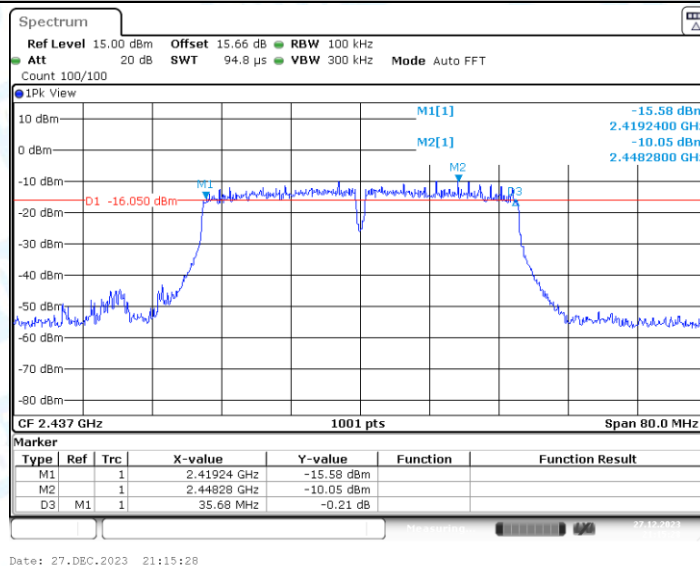
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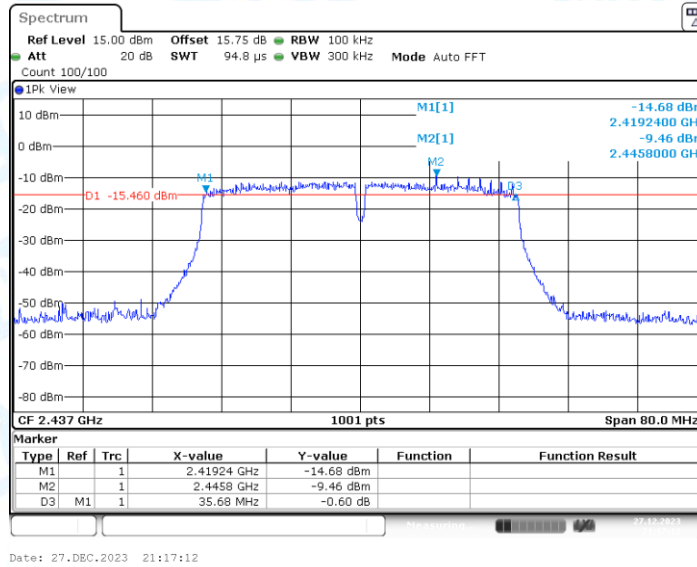
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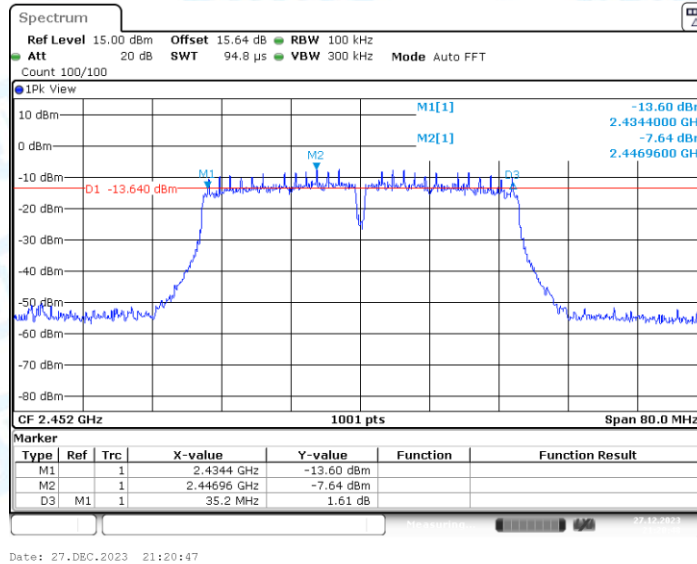
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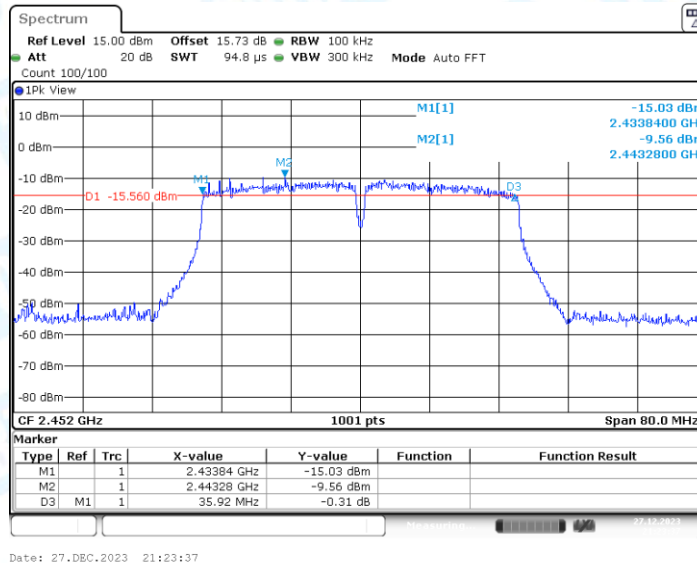
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



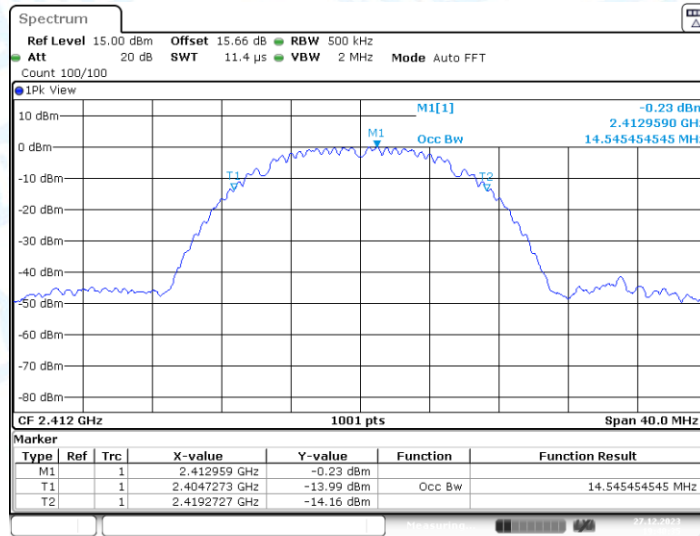
2. Occupied Channel Bandwidth

2.1. Test Result

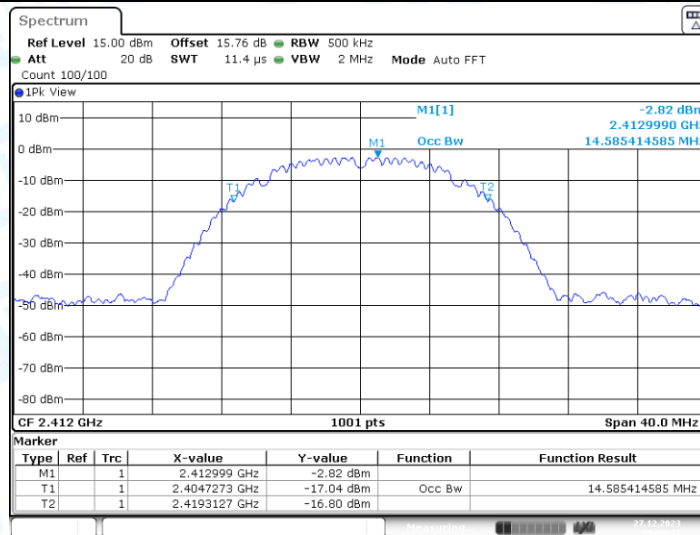
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant1	2412	14.545	2404.7273	2419.2727	---	---
	Ant2	2412	14.585	2404.7273	2419.3127	---	---
	Ant1	2437	14.585	2429.7273	2444.3127	---	---
	Ant2	2437	14.585	2429.7273	2444.3127	---	---
	Ant1	2462	14.585	2454.7273	2469.3127	---	---
	Ant2	2462	14.545	2454.7273	2469.2727	---	---
11G-CDD	Ant1	2412	16.543	2403.7682	2420.3117	---	---
	Ant2	2412	16.623	2403.6883	2420.3117	---	---
	Ant1	2437	17.143	2428.2887	2445.4316	---	---
	Ant2	2437	16.703	2428.5285	2445.2318	---	---
	Ant1	2462	16.863	2453.5684	2470.4316	---	---
	Ant2	2462	16.623	2453.6883	2470.3117	---	---
11N20MIMO	Ant1	2412	17.982	2402.9690	2420.9510	---	---
	Ant2	2412	17.982	2403.0090	2420.9910	---	---
	Ant1	2437	18.142	2427.9291	2446.0709	---	---
	Ant2	2437	17.942	2428.1289	2446.0709	---	---
	Ant1	2462	17.942	2453.0889	2471.0310	---	---
	Ant2	2462	17.862	2453.0889	2470.9510	---	---
11N40MIMO	Ant1	2422	36.364	2403.8581	2440.2218	---	---
	Ant2	2422	36.284	2403.8581	2440.1419	---	---
	Ant1	2437	36.523	2418.8581	2455.3816	---	---
	Ant2	2437	36.284	2418.8581	2455.1419	---	---
	Ant1	2452	36.364	2433.7782	2470.1419	---	---
	Ant2	2452	36.044	2433.9381	2469.9820	---	---

2.2. Test Graphs

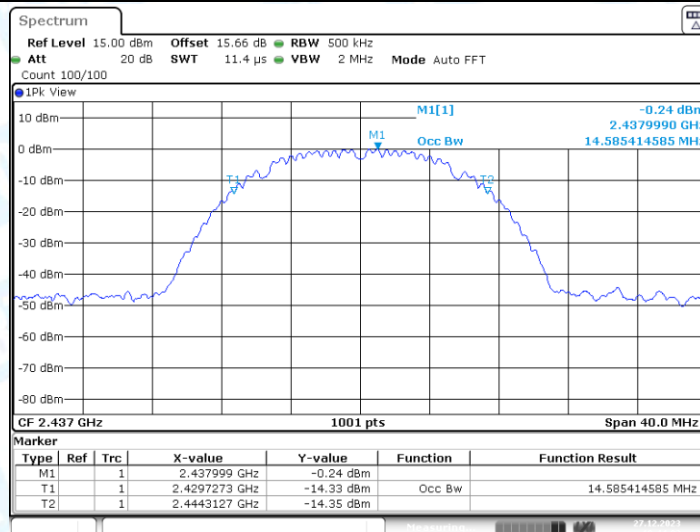
11B-CDD_Ant1_2412



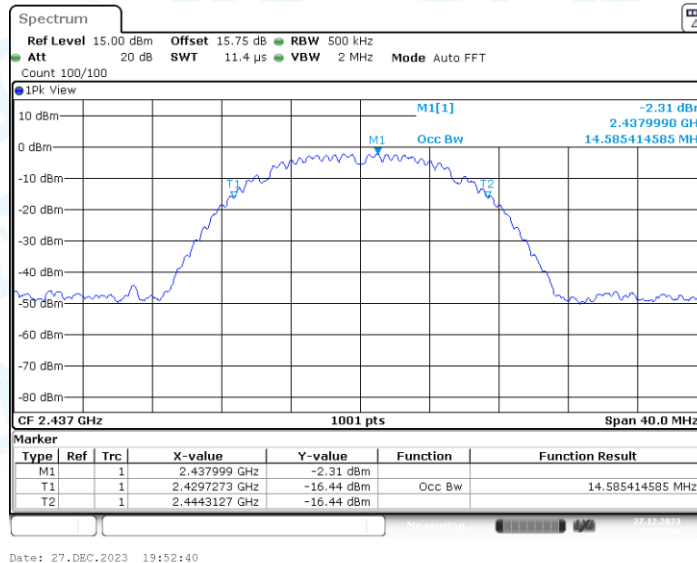
11B-CDD_Ant2_2412



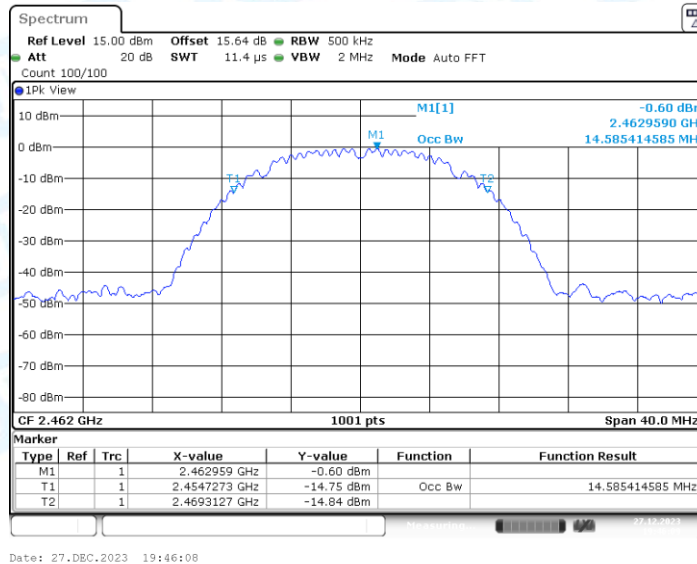
11B-CDD_Ant1_2437



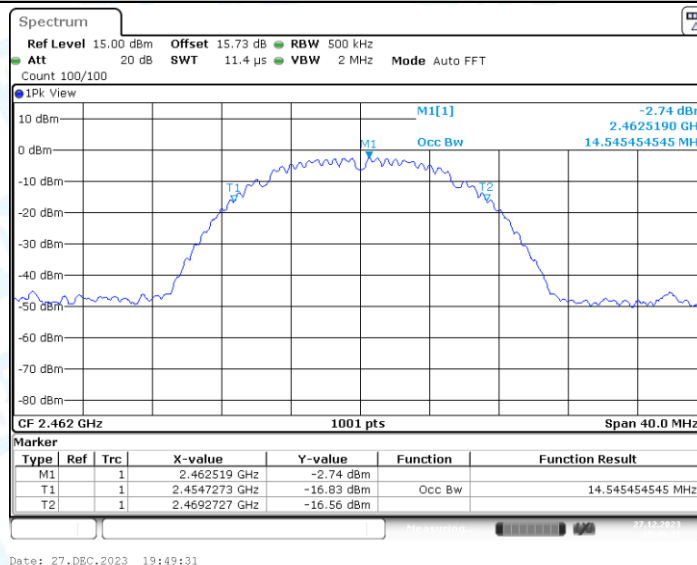
11B-CDD_Ant2_2437



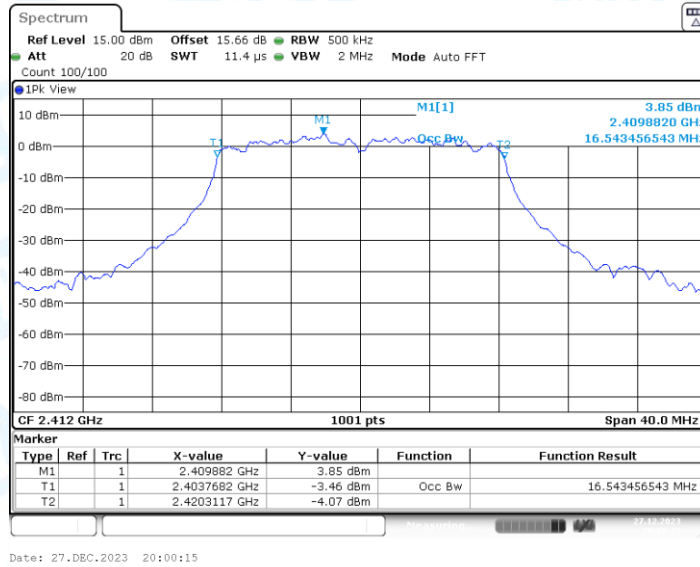
11B-CDD_Ant1_2462



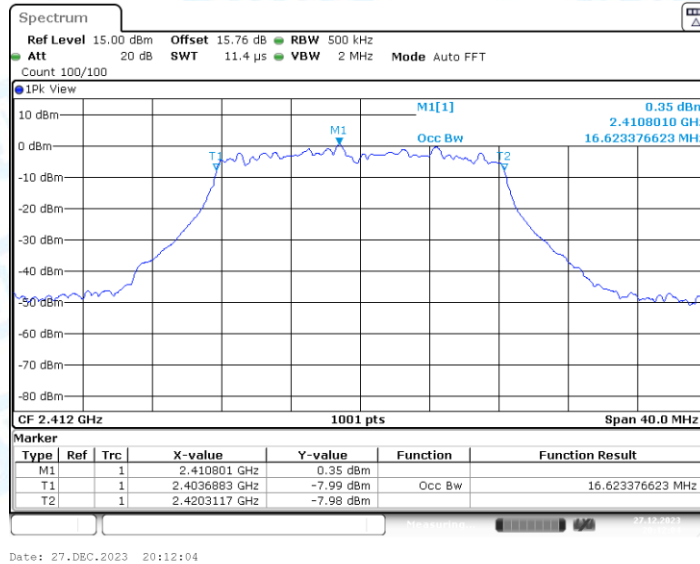
11B-CDD_Ant2_2462



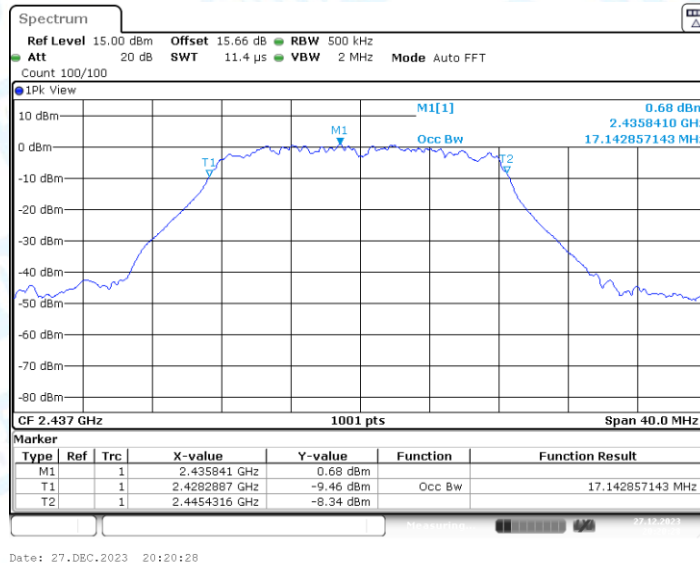
11G-CDD_Ant1_2412



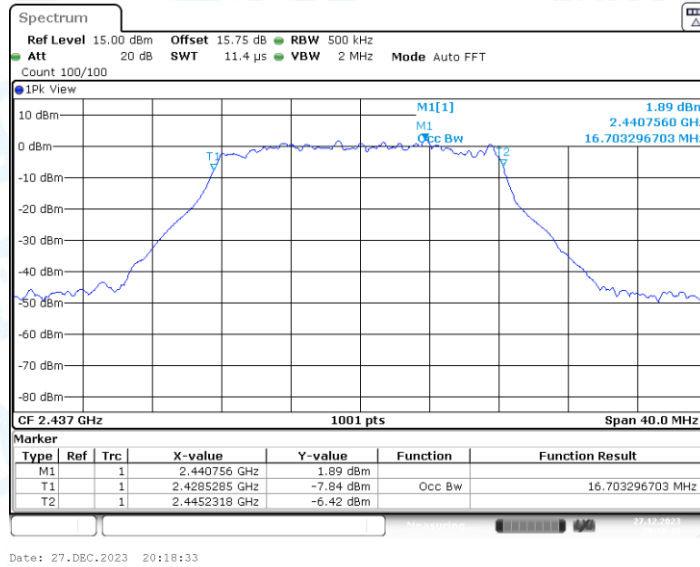
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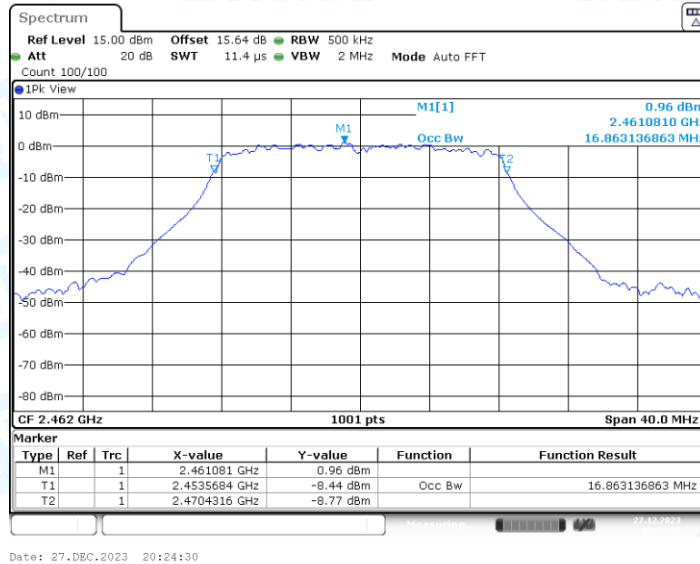
11G-CDD_Ant1_2437



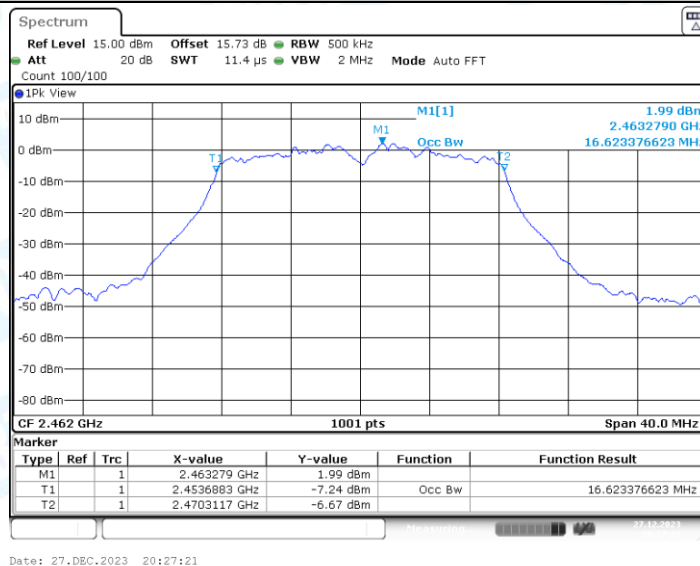
11G-CDD_Ant2_2437



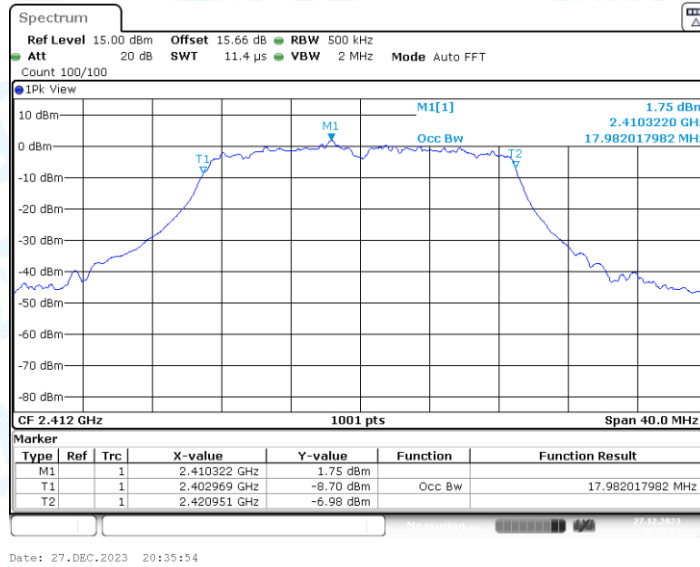
11G-CDD_Ant1_2462



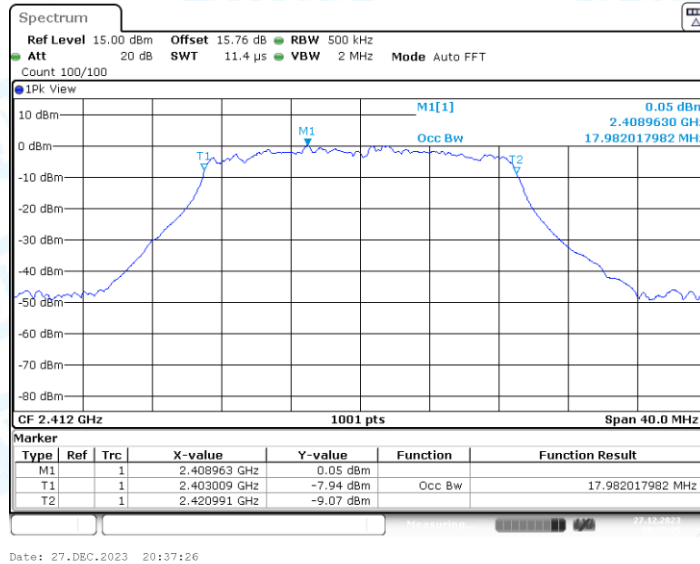
11G-CDD_Ant2_2462



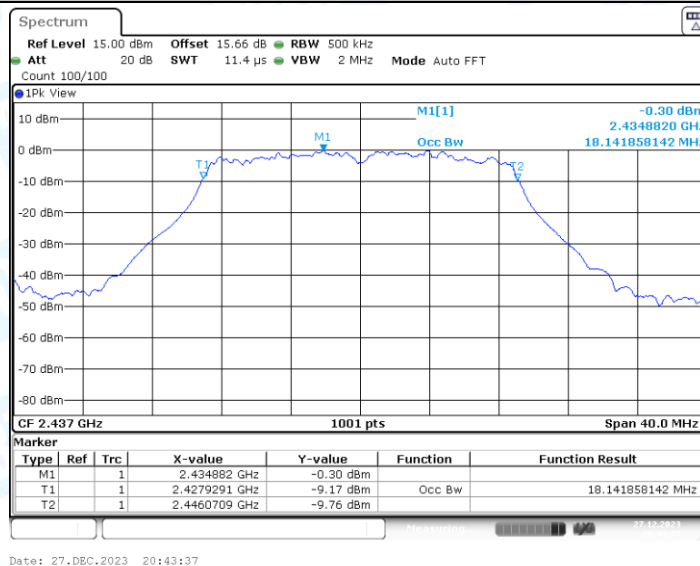
11N20MIMO_Ant1_2412



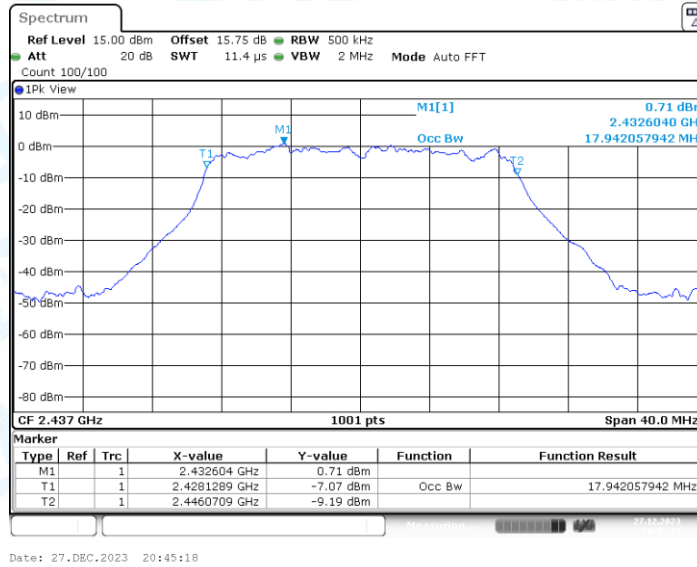
11N20MIMO_Ant2_2412



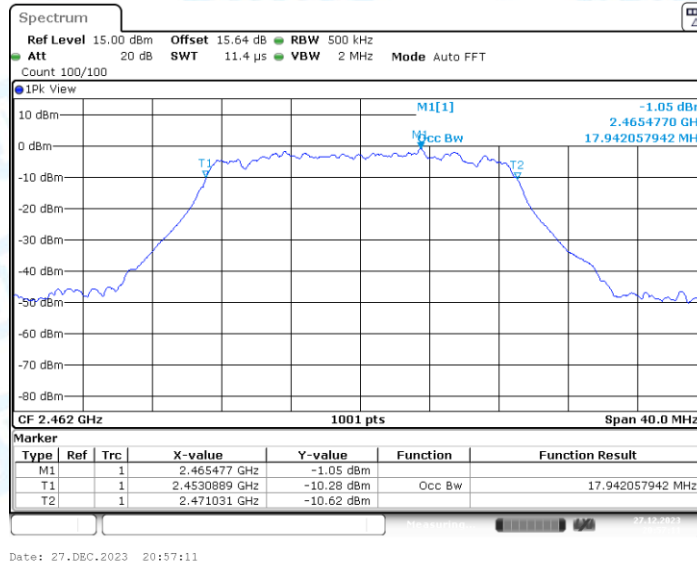
11N20MIMO_Ant1_2437



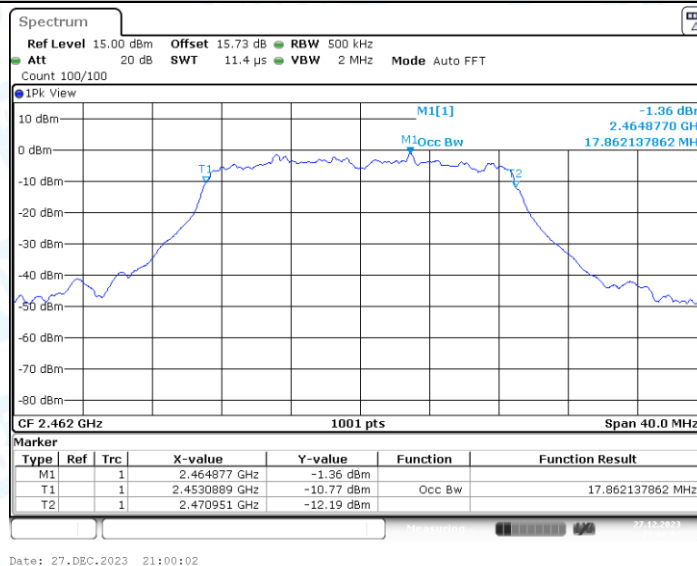
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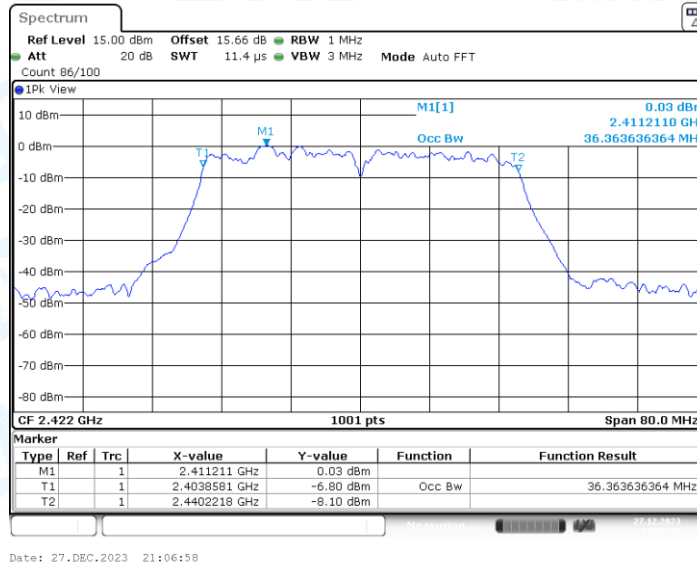
11N20MIMO_Ant1_2462



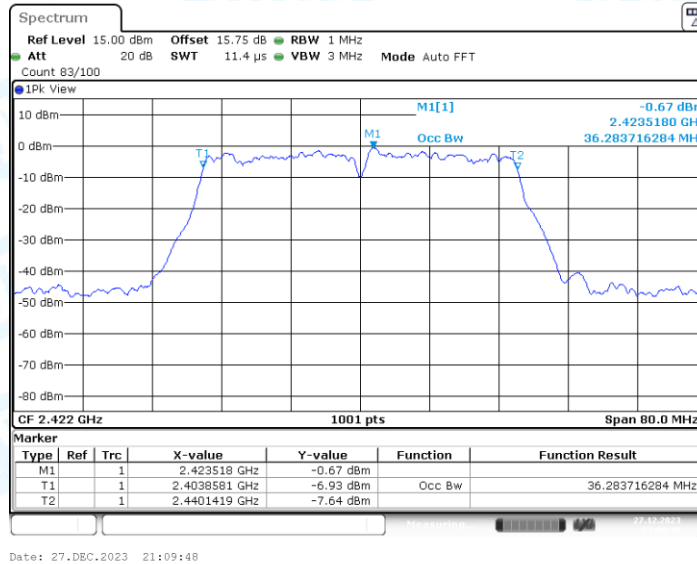
11N20MIMO_Ant2_2462



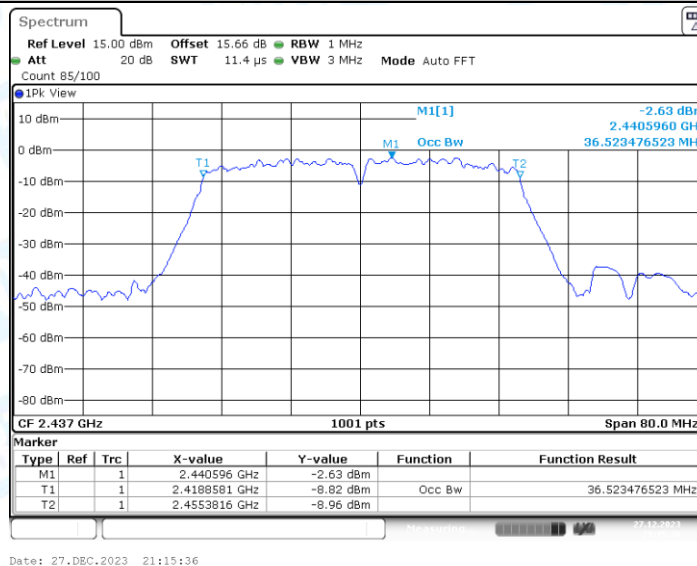
11N40MIMO_Ant1_2422



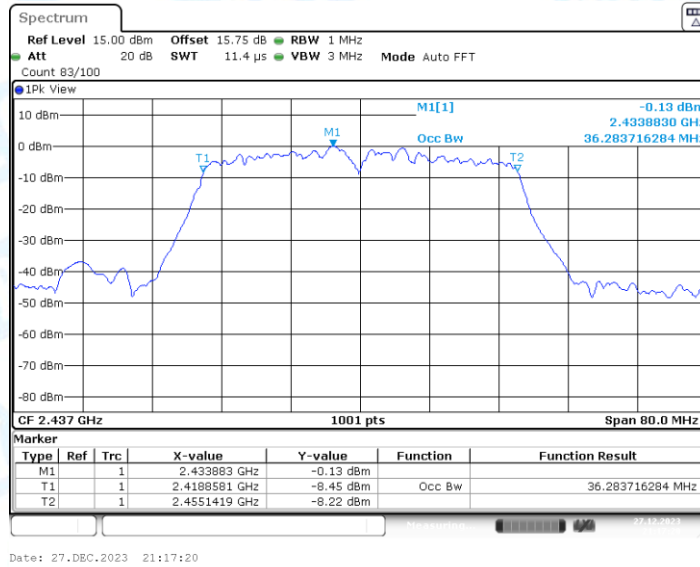
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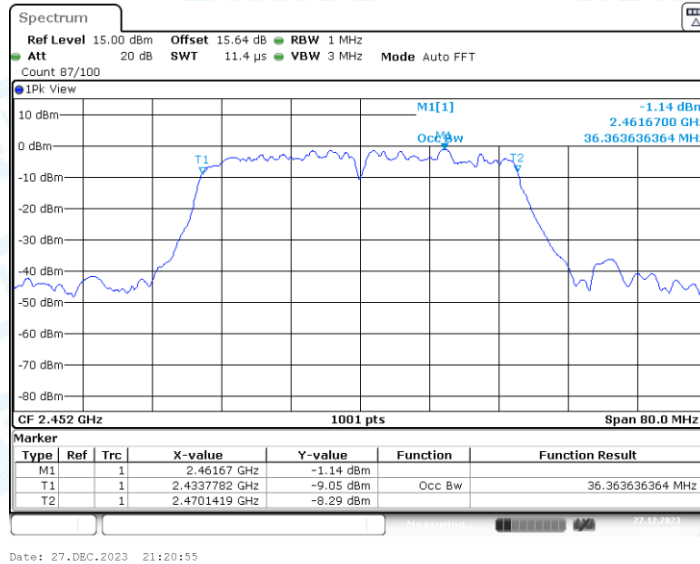
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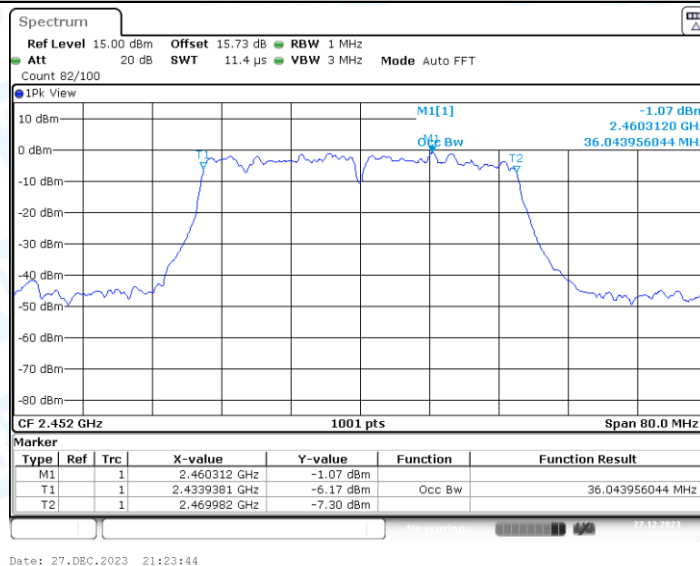
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



3. Maximum conducted output power

3.1. Test Result

TestMode	Antenna	Channel	Power [dBm]	Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11B-CDD	Ant1	2412	3.67	≤30.00	-0.04	≤36.00	PASS
	Ant2	2412	2.77	≤30.00	-0.94	≤36.00	PASS
	total	2412	6.25	≤30.00	2.54	≤36.00	PASS
	Ant1	2437	3.21	≤30.00	-0.5	≤36.00	PASS
	Ant2	2437	1.85	≤30.00	-1.86	≤36.00	PASS
	total	2437	5.59	≤30.00	1.88	≤36.00	PASS
	Ant1	2462	3.71	≤30.00	0	≤36.00	PASS
	Ant2	2462	1.89	≤30.00	-1.82	≤36.00	PASS
	total	2462	5.9	≤30.00	2.19	≤36.00	PASS
11G-CDD	Ant1	2412	4.02	≤30.00	0.31	≤36.00	PASS
	Ant2	2412	3.27	≤30.00	-0.44	≤36.00	PASS
	total	2412	6.67	≤30.00	2.96	≤36.00	PASS
	Ant1	2437	2.6	≤30.00	-1.11	≤36.00	PASS
	Ant2	2437	3.14	≤30.00	-0.57	≤36.00	PASS
	total	2437	5.89	≤30.00	2.18	≤36.00	PASS
	Ant1	2462	3.45	≤30.00	-0.26	≤36.00	PASS
	Ant2	2462	2.4	≤30.00	-1.31	≤36.00	PASS
	total	2462	5.97	≤30.00	2.26	≤36.00	PASS
11N20MIMO	Ant1	2412	3.56	≤30.00	-0.15	≤36.00	PASS
	Ant2	2412	3.78	≤30.00	0.07	≤36.00	PASS
	total	2412	6.68	≤30.00	2.97	≤36.00	PASS
	Ant1	2437	3.15	≤30.00	-0.56	≤36.00	PASS
	Ant2	2437	4.05	≤30.00	0.34	≤36.00	PASS
	total	2437	6.63	≤30.00	2.92	≤36.00	PASS
	Ant1	2462	2.66	≤30.00	-1.05	≤36.00	PASS
	Ant2	2462	2.17	≤30.00	-1.54	≤36.00	PASS
	total	2462	5.43	≤30.00	1.72	≤36.00	PASS
11N40MIMO	Ant1	2422	3.83	≤30.00	0.12	≤36.00	PASS
	Ant2	2422	3.48	≤30.00	-0.23	≤36.00	PASS
	total	2422	6.67	≤30.00	2.96	≤36.00	PASS
	Ant1	2437	2.48	≤30.00	-1.23	≤36.00	PASS
	Ant2	2437	3.66	≤30.00	-0.05	≤36.00	PASS
	total	2437	6.12	≤30.00	2.41	≤36.00	PASS
	Ant1	2452	3.16	≤30.00	-0.55	≤36.00	PASS
	Ant2	2452	2.36	≤30.00	-1.35	≤36.00	PASS
	total	2452	5.79	≤30.00	2.08	≤36.00	PASS

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

4. Maximum power spectral density

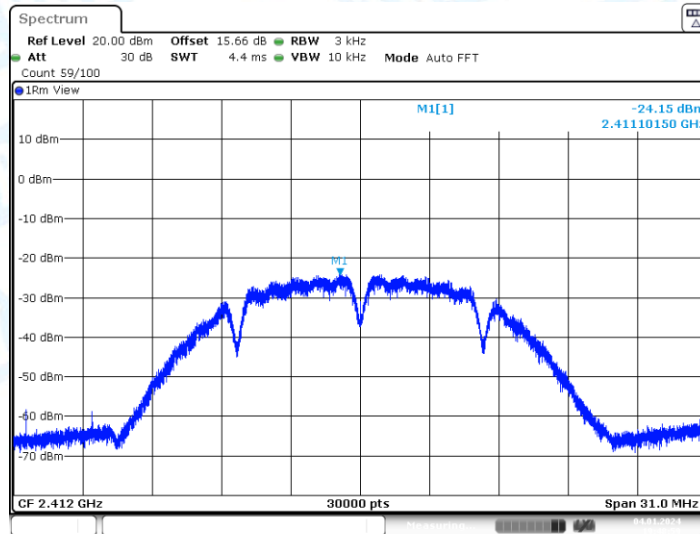
4.1. Test Result

TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B-CDD	Ant1	2412	-24.00	≤8.00	PASS
	Ant2	2412	-24.00	≤8.00	PASS
	total	2412	-20.99	≤8.00	PASS
	Ant1	2437	-23.62	≤8.00	PASS
	Ant2	2437	-25.21	≤8.00	PASS
	total	2437	-21.33	≤8.00	PASS
	Ant1	2462	-23.50	≤8.00	PASS
	Ant2	2462	-25.40	≤8.00	PASS
	total	2462	-21.34	≤8.00	PASS
11G-CDD	Ant1	2412	-22.43	≤8.00	PASS
	Ant2	2412	-23.59	≤8.00	PASS
	total	2412	-19.96	≤8.00	PASS
	Ant1	2437	-24.20	≤8.00	PASS
	Ant2	2437	-24.38	≤8.00	PASS
	total	2437	-21.28	≤8.00	PASS
	Ant1	2462	-23.76	≤8.00	PASS
	Ant2	2462	-24.59	≤8.00	PASS
	total	2462	-21.14	≤8.00	PASS
11N20MIMO	Ant1	2412	-23.08	≤8.00	PASS
	Ant2	2412	-23.82	≤8.00	PASS
	total	2412	-20.42	≤8.00	PASS
	Ant1	2437	-22.71	≤8.00	PASS
	Ant2	2437	-23.27	≤8.00	PASS
	total	2437	-19.97	≤8.00	PASS
	Ant1	2462	-24.35	≤8.00	PASS
	Ant2	2462	-24.99	≤8.00	PASS
	total	2462	-21.65	≤8.00	PASS
11N40MIMO	Ant1	2422	-25.41	≤8.00	PASS
	Ant2	2422	-25.70	≤8.00	PASS
	total	2422	-22.54	≤8.00	PASS
	Ant1	2437	-27.19	≤8.00	PASS
	Ant2	2437	-24.80	≤8.00	PASS
	total	2437	-22.82	≤8.00	PASS
	Ant1	2452	-24.49	≤8.00	PASS
	Ant2	2452	-27.18	≤8.00	PASS
	total	2452	-22.62	≤8.00	PASS

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

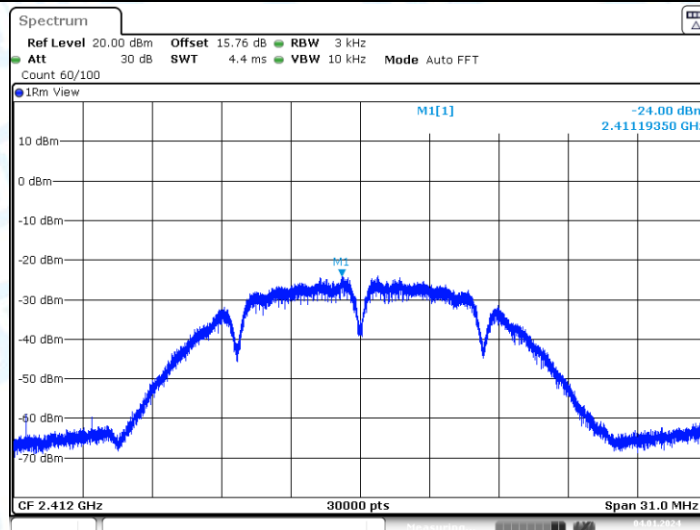
4.2. Test Graphs

11B-CDD_Ant1_2412



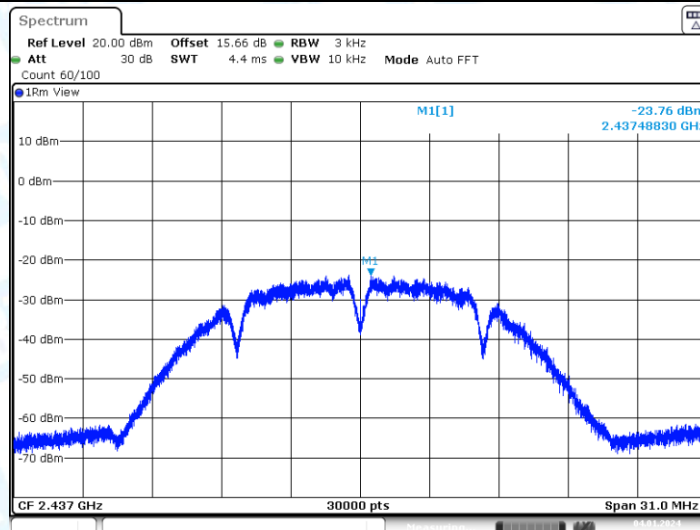
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11B-CDD_Ant2_2412



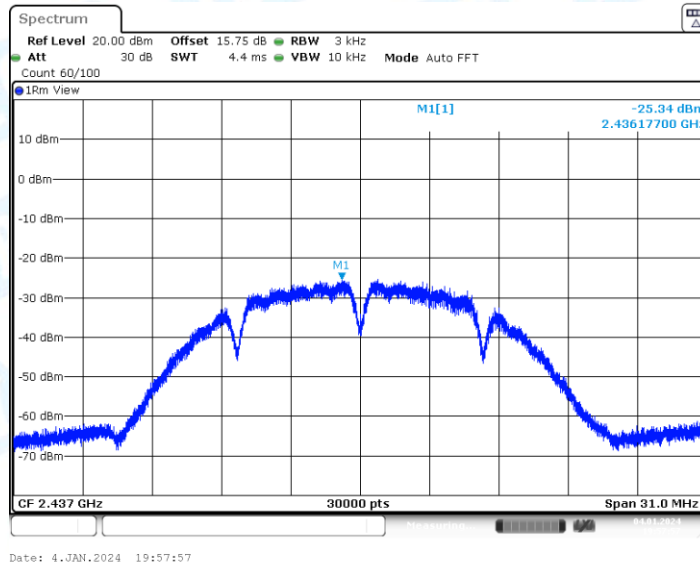
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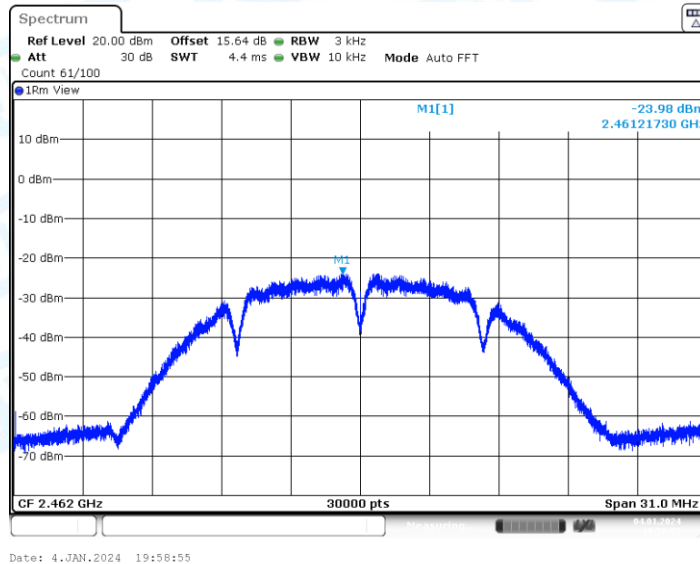


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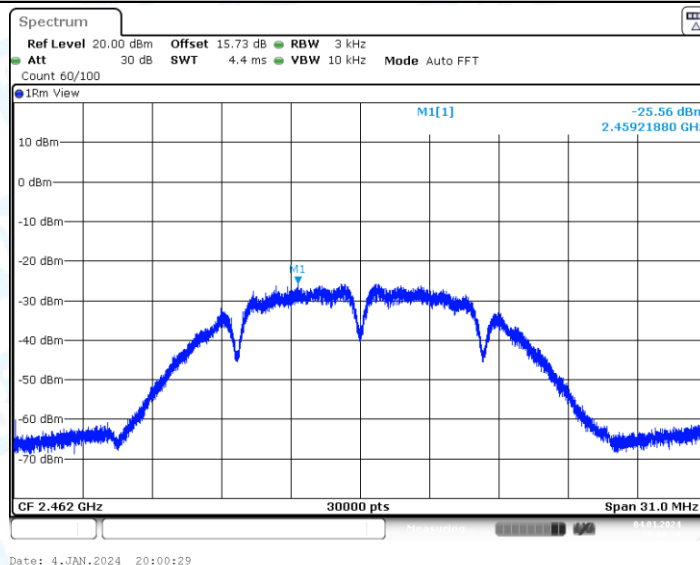
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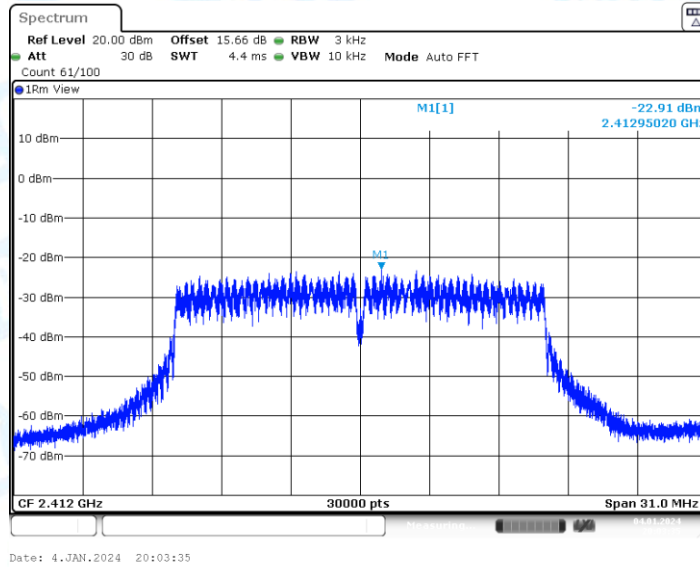
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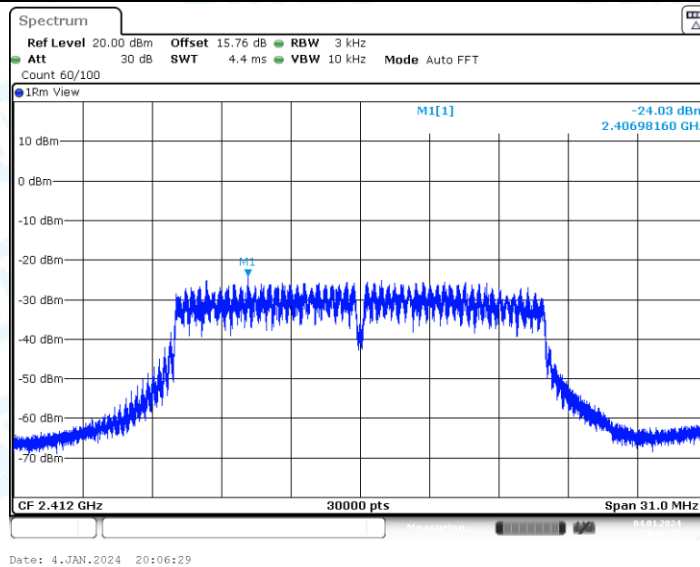
11B-CDD_Ant2_2462



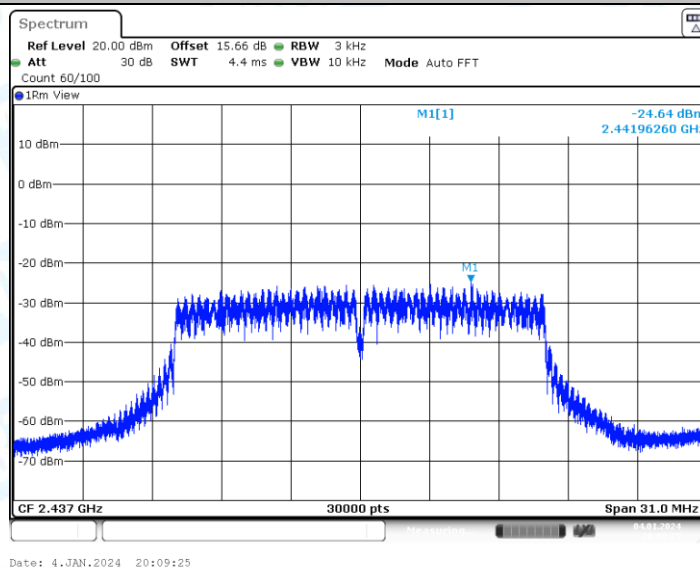
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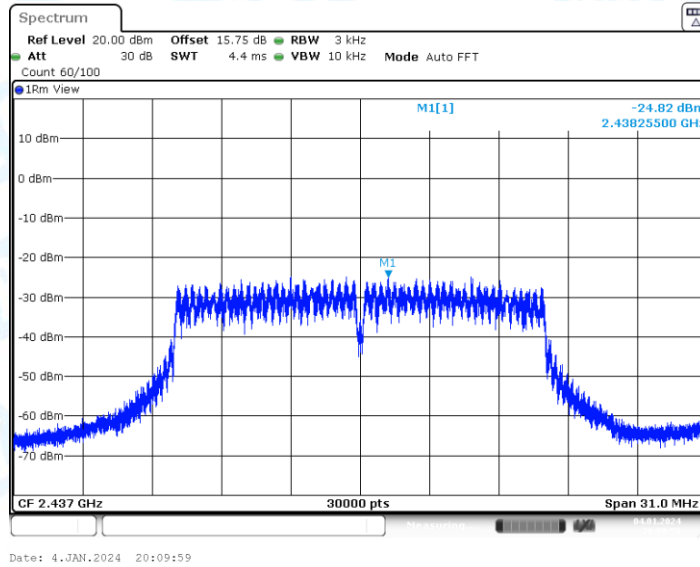
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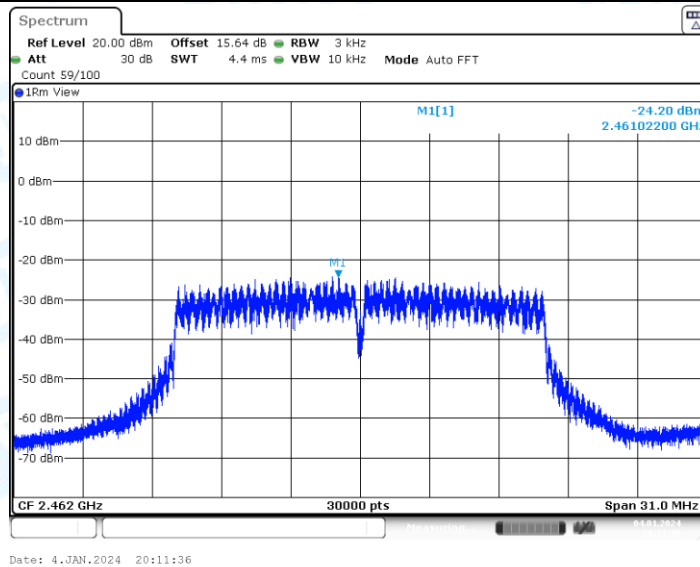
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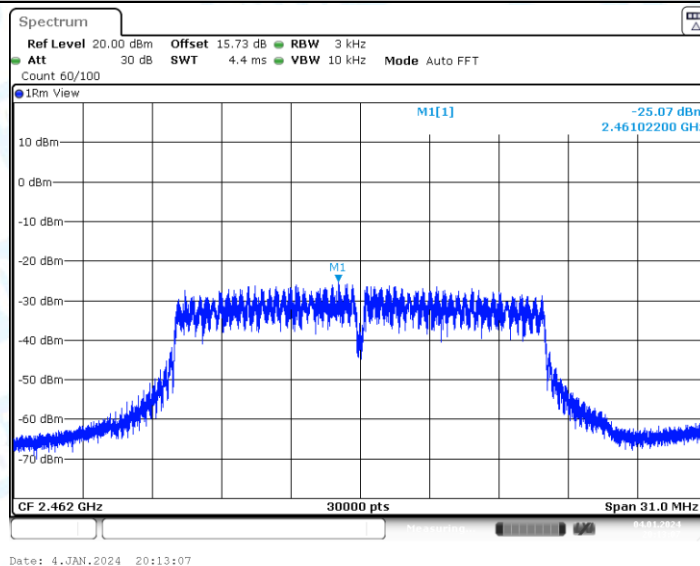
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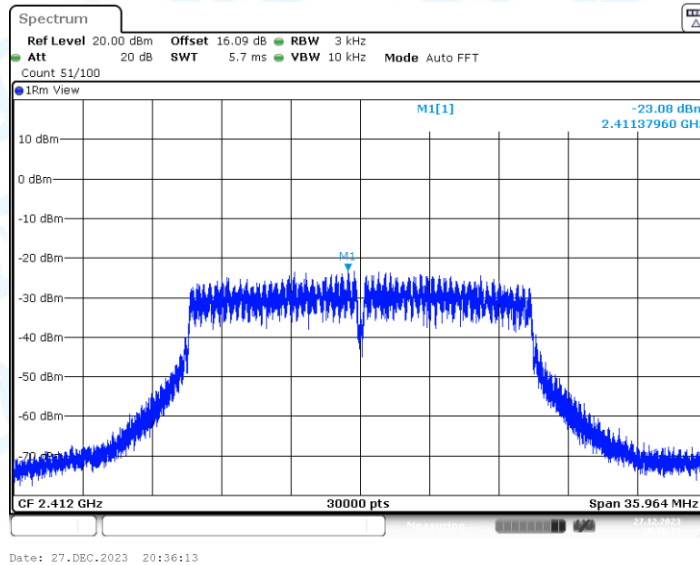
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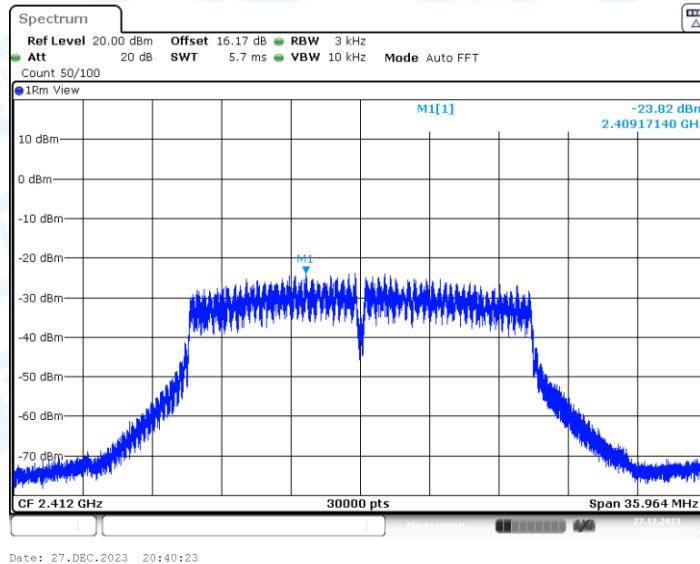
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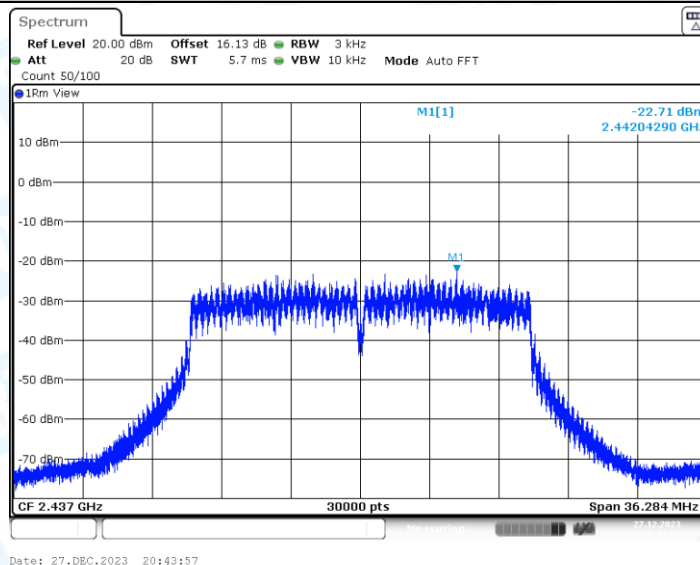
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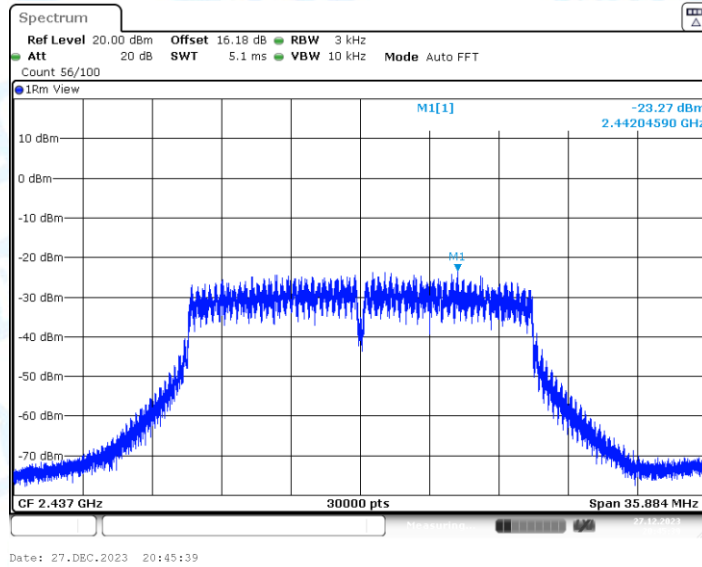
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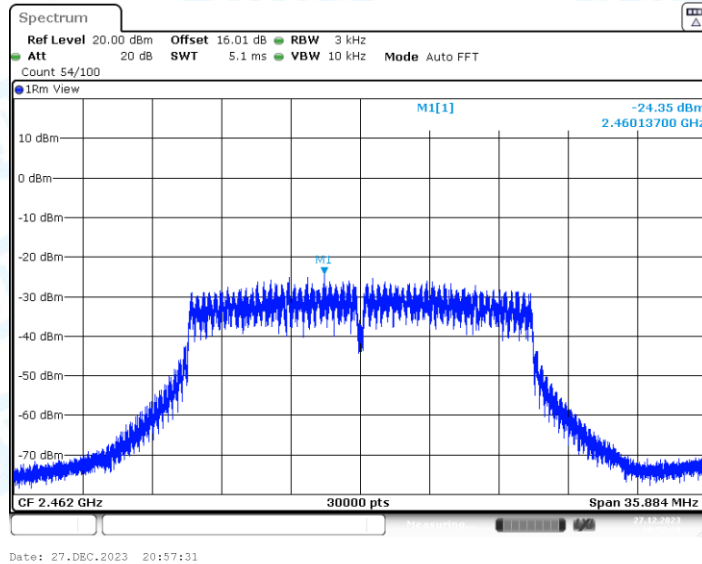
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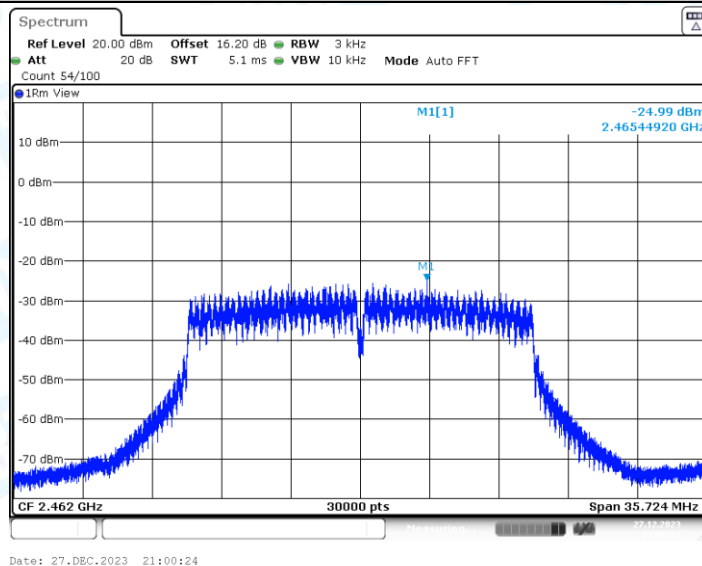
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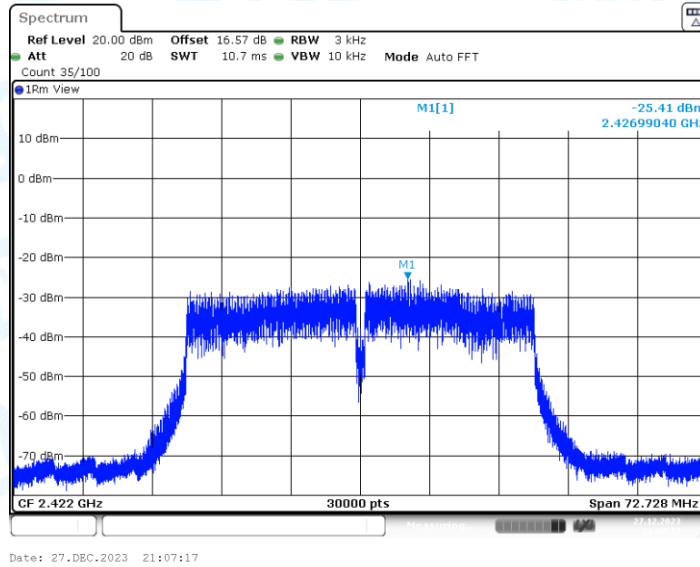
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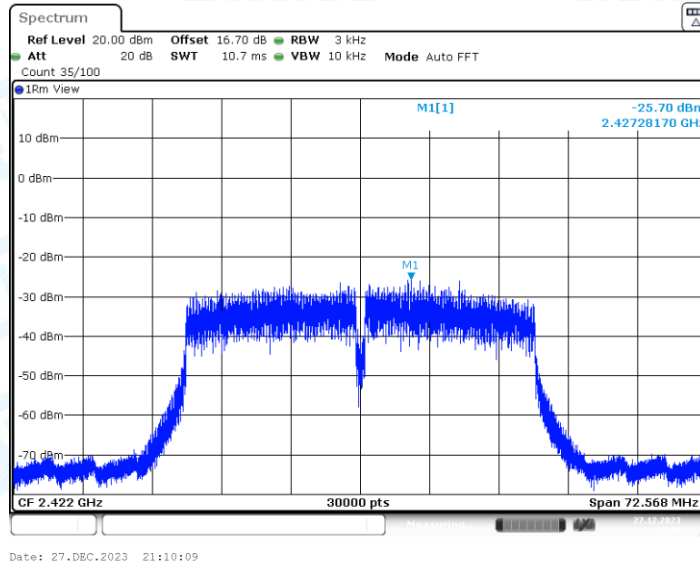
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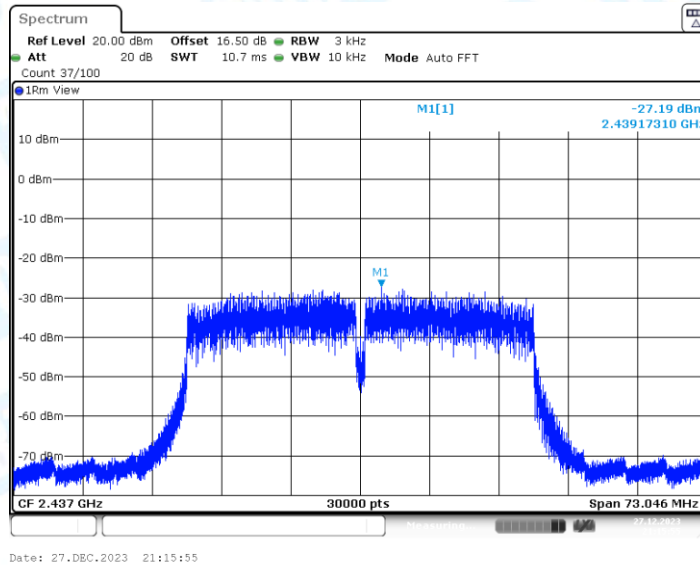
11N40MIMO_Ant1_2422



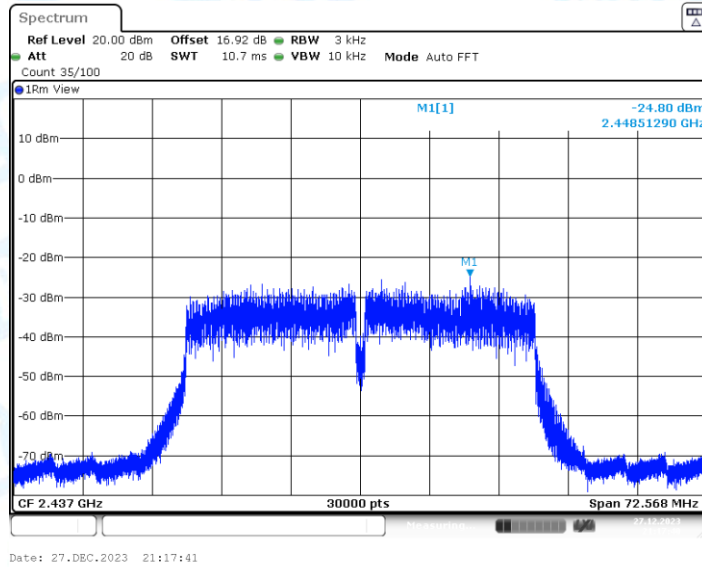
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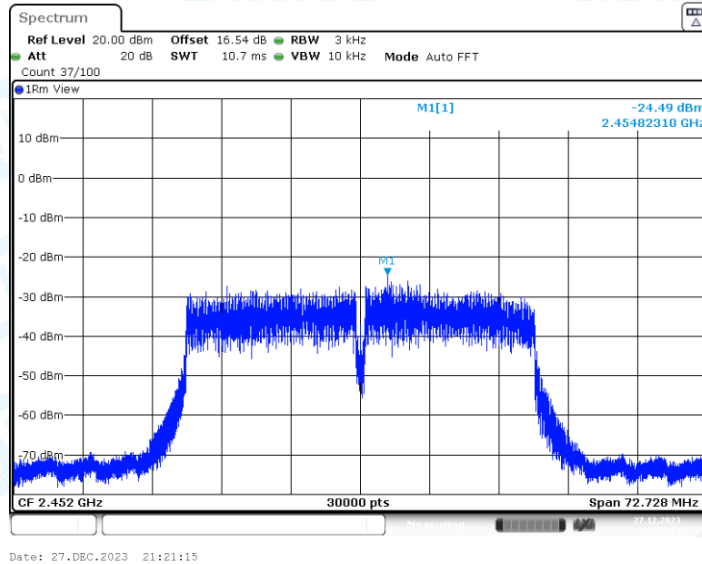
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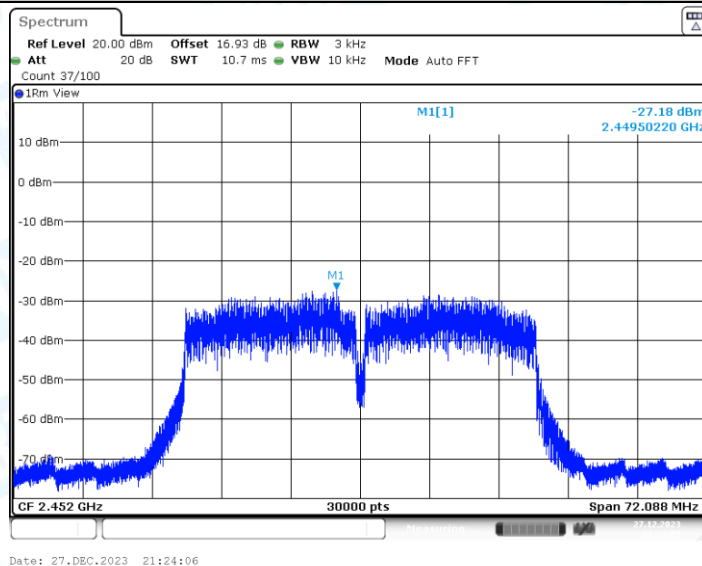
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



5. Band edge measurements

5.1. Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B-CDD	Ant1	Low	2412	-1.12	-49.36	≤ -31.12	PASS
	Ant2	Low	2412	-1.62	-48.49	≤ -31.62	PASS
	Ant1	High	2462	-2.13	-50.7	≤ -32.13	PASS
	Ant2	High	2462	-3.90	-50.4	≤ -33.9	PASS
11G-CDD	Ant1	Low	2412	-1.81	-40.3	≤ -31.81	PASS
	Ant2	Low	2412	-2.76	-44.74	≤ -32.76	PASS
	Ant1	High	2462	-5.19	-51.01	≤ -35.19	PASS
	Ant2	High	2462	-4.97	-51.09	≤ -34.97	PASS
11N20MIMO	Ant1	Low	2412	-5.23	-39.72	≤ -35.23	PASS
	Ant2	Low	2412	-5.32	-41.65	≤ -35.32	PASS
	Ant1	High	2462	-8.30	-50.09	≤ -38.3	PASS
	Ant2	High	2462	-6.01	-50.04	≤ -36.01	PASS
11N40MIMO	Ant1	Low	2422	-7.23	-47.75	≤ -37.23	PASS
	Ant2	Low	2422	-7.48	-45.63	≤ -37.48	PASS
	Ant1	High	2452	-7.77	-51.08	≤ -37.77	PASS
	Ant2	High	2452	-7.58	-51.87	≤ -37.58	PASS