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

General Description of EUT	
Product Name:	Network Video Recorder
Test Model:	K8508-MW
Sample ID:	RW-C-202202-0074-2-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 12V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202202-0074-1	

Contents

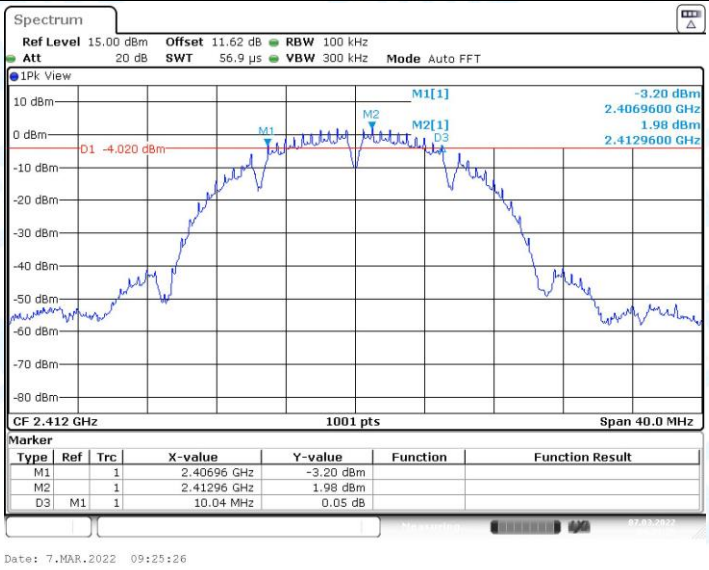
1. DTS Bandwidth

1.1.Test Result

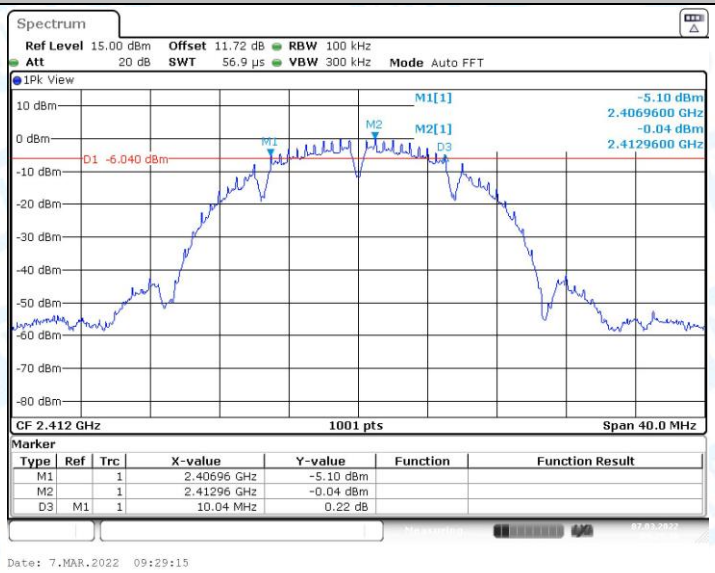
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11BMIMO	Ant1	2412	10.04	2406.96	2417.00	0.5	PASS
	Ant2	2412	10.04	2406.96	2417.00	0.5	PASS
	Ant1	2437	10.04	2431.96	2442.00	0.5	PASS
	Ant2	2437	10.04	2431.96	2442.00	0.5	PASS
	Ant1	2462	10.04	2456.96	2467.00	0.5	PASS
	Ant2	2462	10.04	2456.96	2467.00	0.5	PASS
11GMIMO	Ant1	2412	16.36	2403.80	2420.16	0.5	PASS
	Ant2	2412	16.36	2403.80	2420.16	0.5	PASS
	Ant1	2437	16.36	2428.80	2445.16	0.5	PASS
	Ant2	2437	16.36	2428.80	2445.16	0.5	PASS
	Ant1	2462	16.36	2453.80	2470.16	0.5	PASS
	Ant2	2462	16.36	2453.80	2470.16	0.5	PASS
11N20MIMO	Ant1	2412	17.32	2403.44	2420.76	0.5	PASS
	Ant2	2412	17.32	2403.44	2420.76	0.5	PASS
	Ant1	2437	17.56	2428.20	2445.76	0.5	PASS
	Ant2	2437	17.60	2428.16	2445.76	0.5	PASS
	Ant1	2462	17.56	2453.20	2470.76	0.5	PASS
	Ant2	2462	17.56	2453.20	2470.76	0.5	PASS

1.2.Test Graphs

11BMIMO_Ant1_2412



11BMIMO_Ant2_2412



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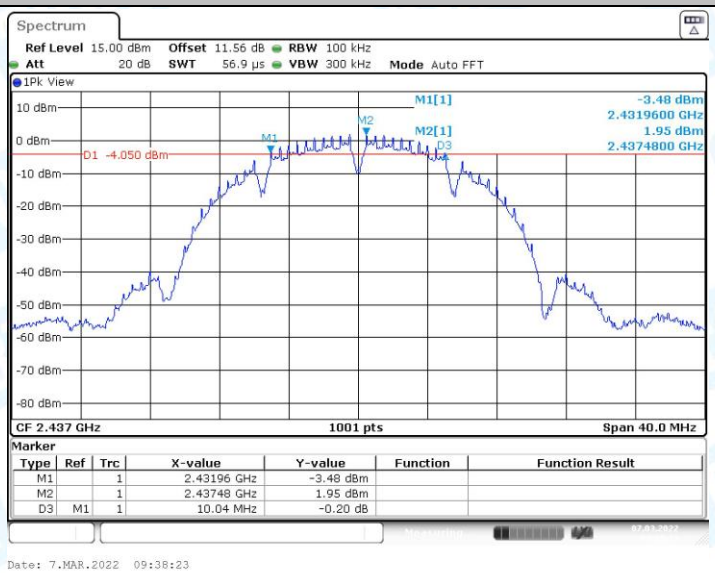

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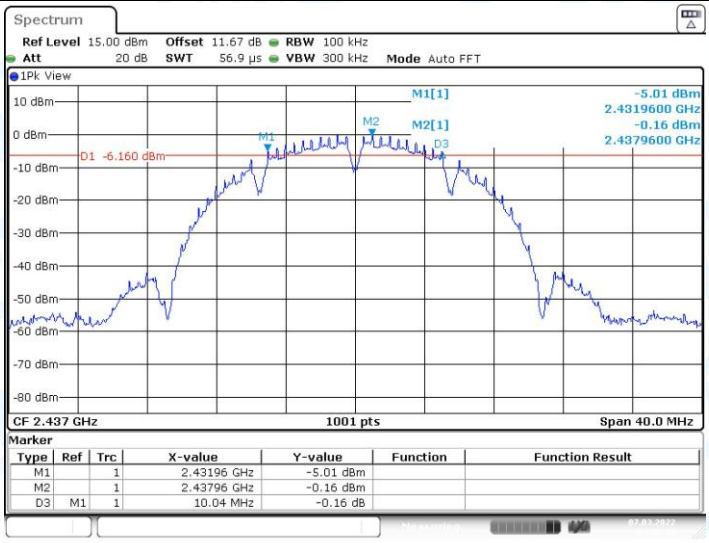
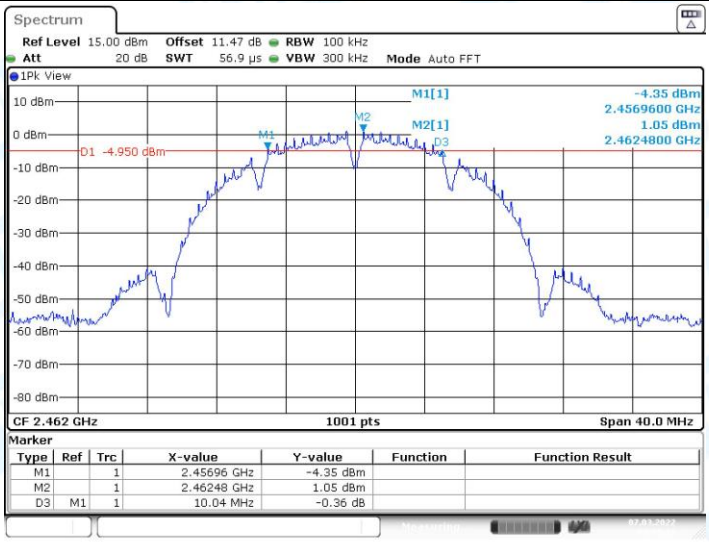


11BMIMO_Ant1_2462



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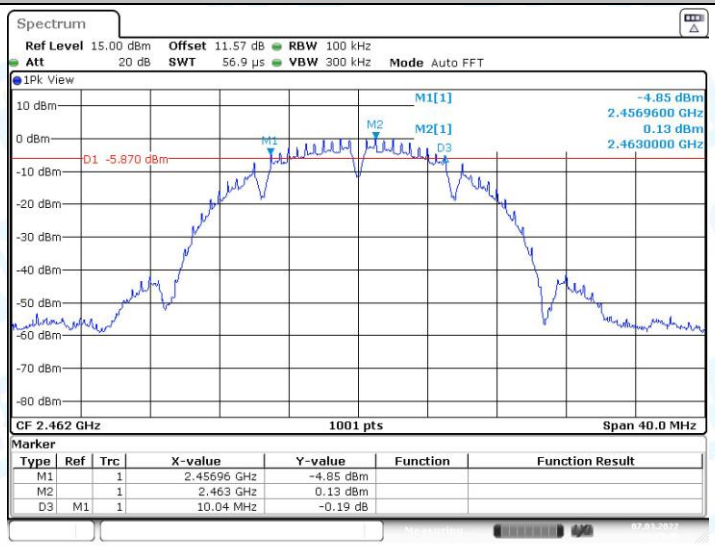

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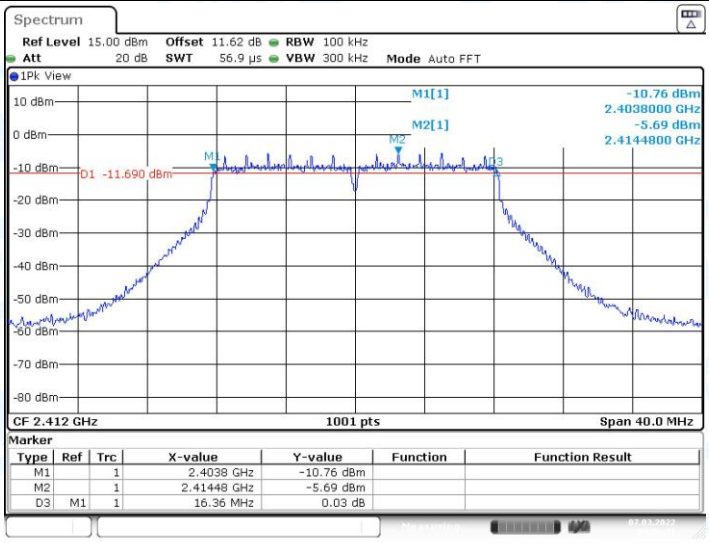

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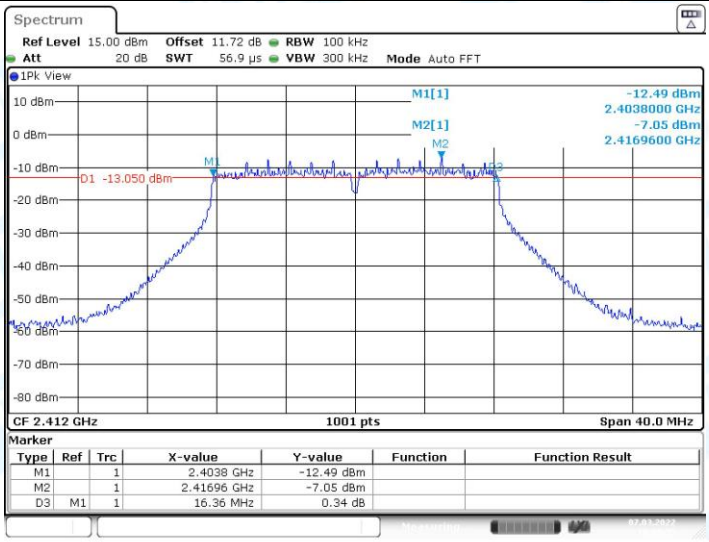

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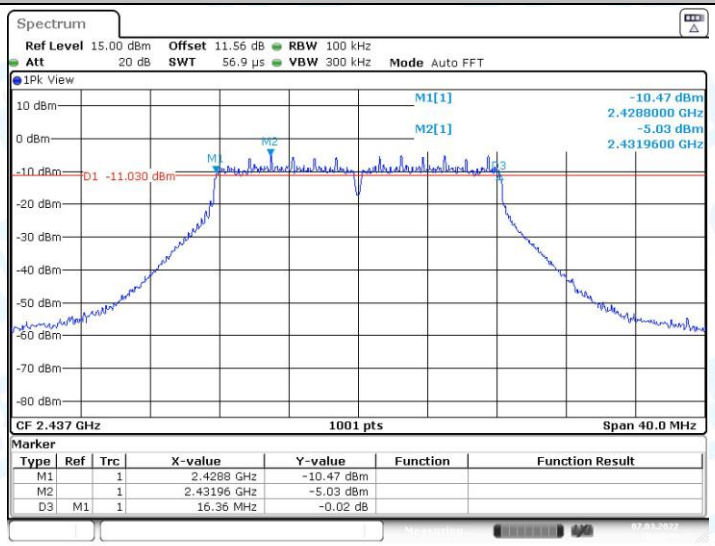

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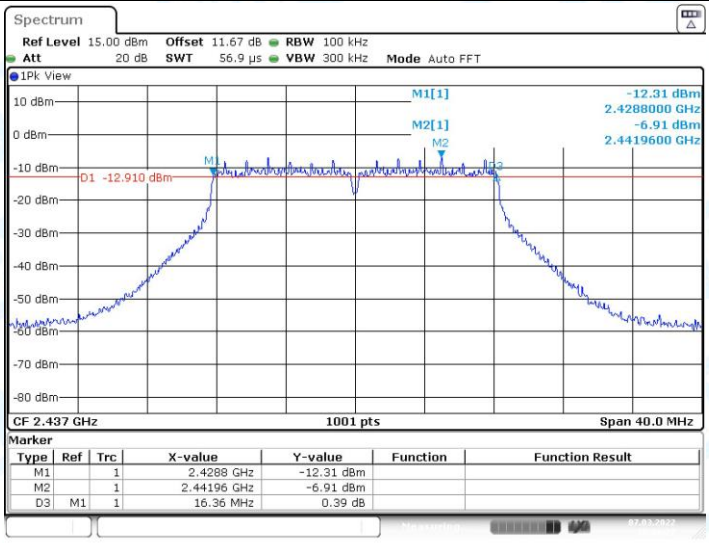

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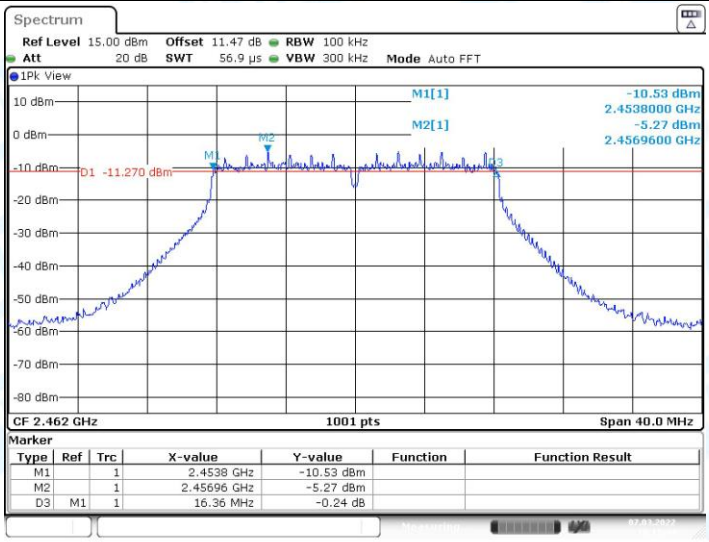

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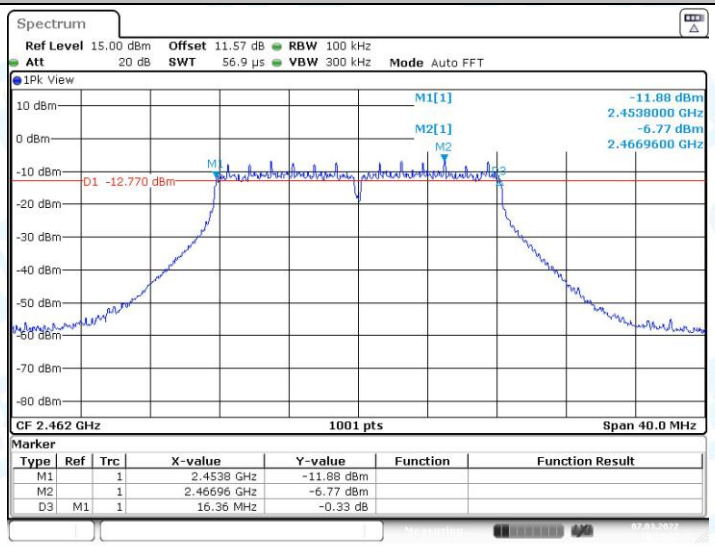

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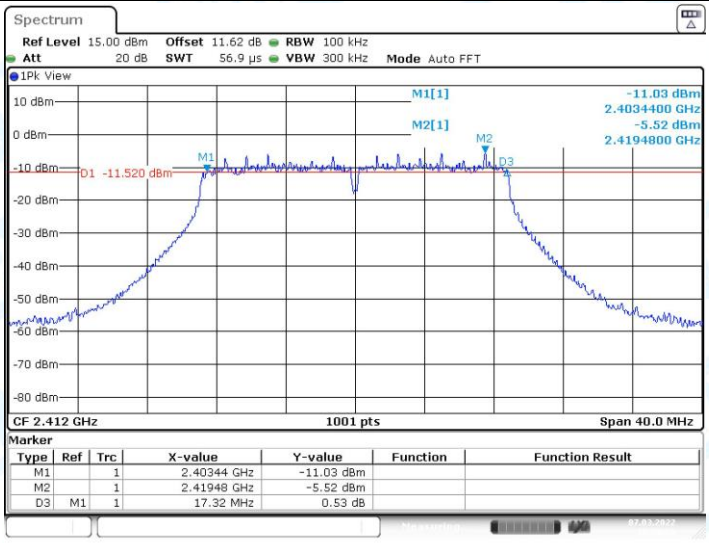

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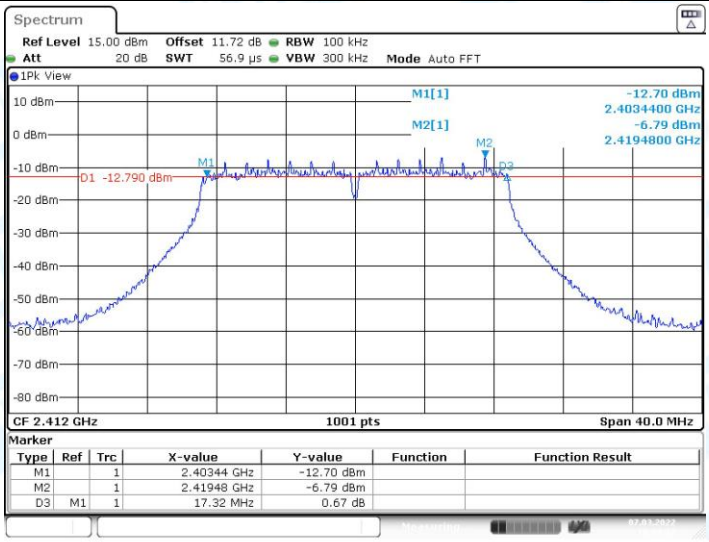

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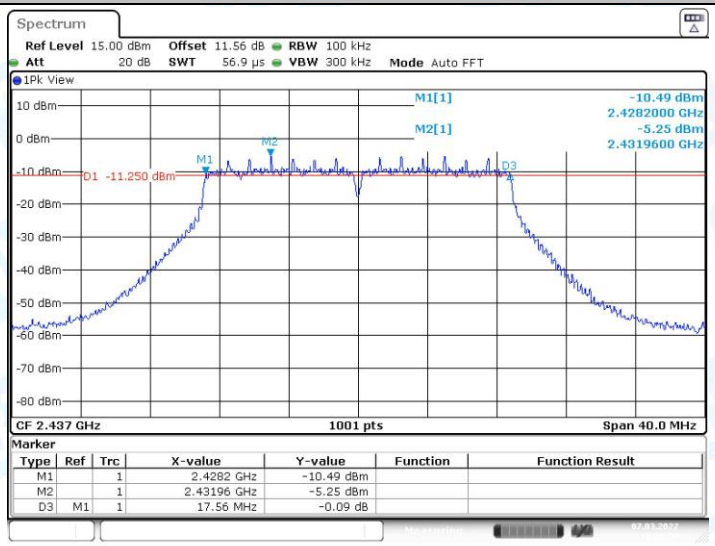

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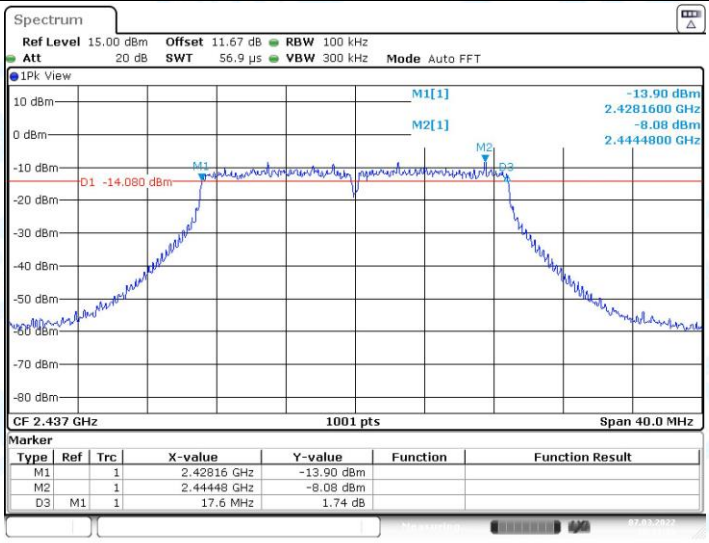

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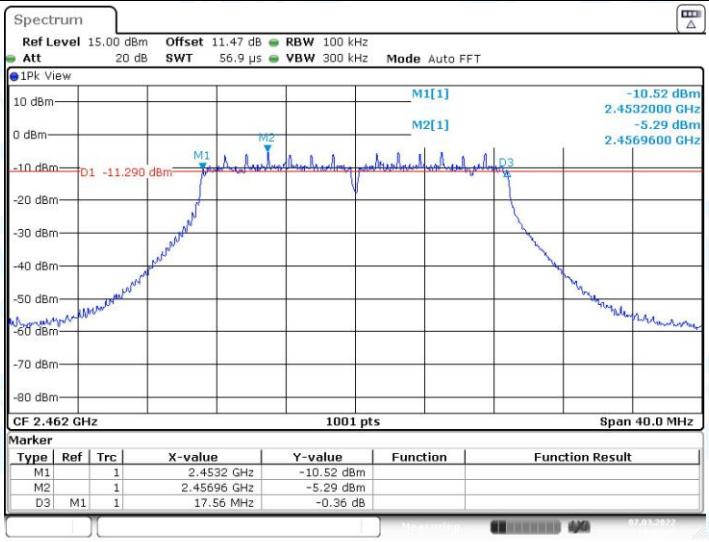

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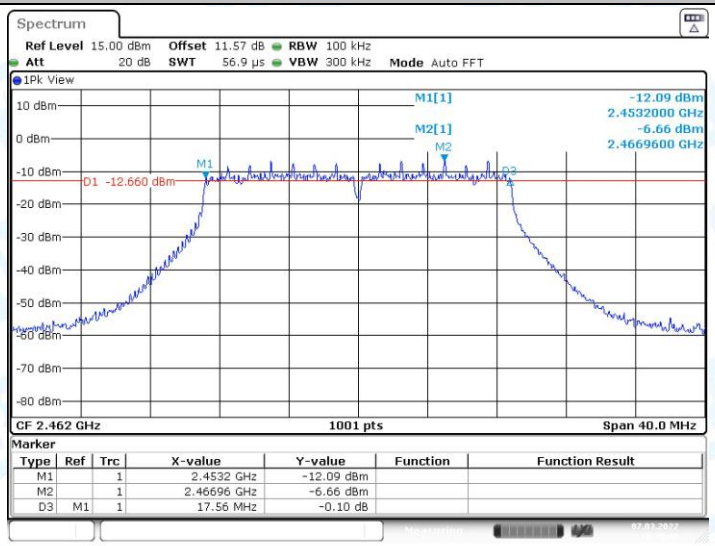


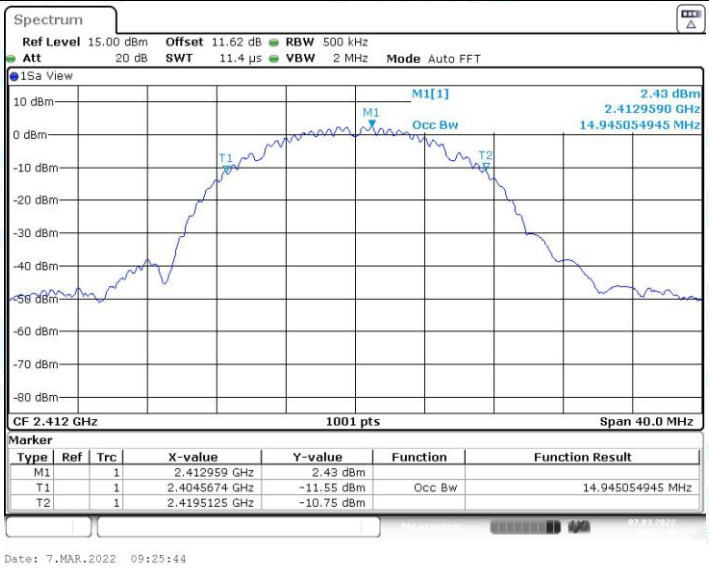
2. Occupied Channel Bandwidth

2.1.Test Result

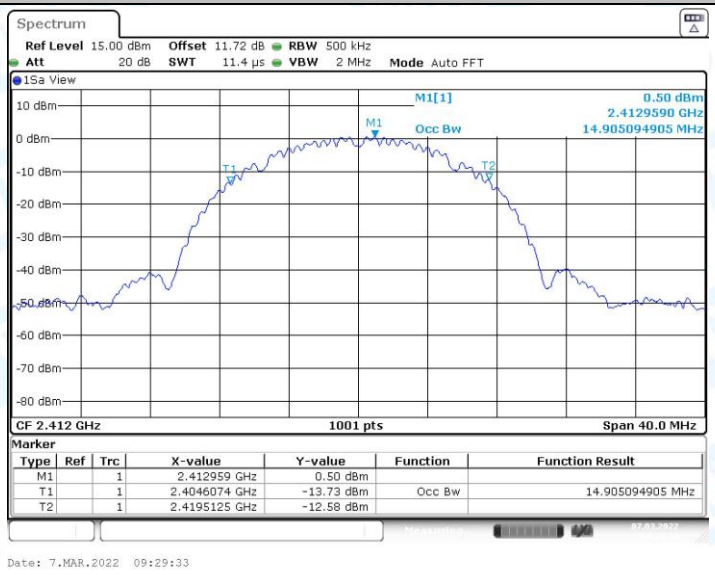
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11BMIMO	Ant1	2412	14.945	2404.567	2419.512	---	---
	Ant2	2412	14.905	2404.607	2419.512	---	---
	Ant1	2437	14.945	2429.527	2444.473	---	---
	Ant2	2437	14.945	2429.527	2444.473	---	---
	Ant1	2462	14.905	2454.527	2469.433	---	---
	Ant2	2462	14.945	2454.527	2469.473	---	---
11GMIMO	Ant1	2412	17.303	2403.369	2420.671	---	---
	Ant2	2412	17.263	2403.369	2420.631	---	---
	Ant1	2437	17.822	2428.169	2445.991	---	---
	Ant2	2437	17.303	2428.409	2445.711	---	---
	Ant1	2462	17.423	2453.129	2470.551	---	---
	Ant2	2462	17.143	2453.489	2470.631	---	---
11N20MIMO	Ant1	2412	18.302	2402.729	2421.031	---	---
	Ant2	2412	18.342	2402.809	2421.151	---	---
	Ant1	2437	18.422	2427.809	2446.231	---	---
	Ant2	2437	18.422	2427.809	2446.231	---	---
	Ant1	2462	18.382	2452.889	2471.271	---	---
	Ant2	2462	18.382	2452.729	2471.111	---	---

2.2.Test Graphs

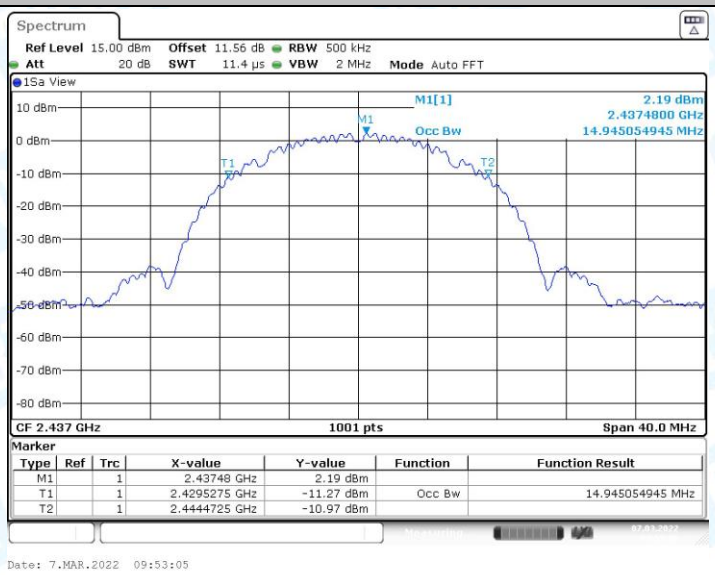
11BMIMO_Ant1_2412



11BMIMO_Ant2_2412



11BMIMO_Ant1_2437



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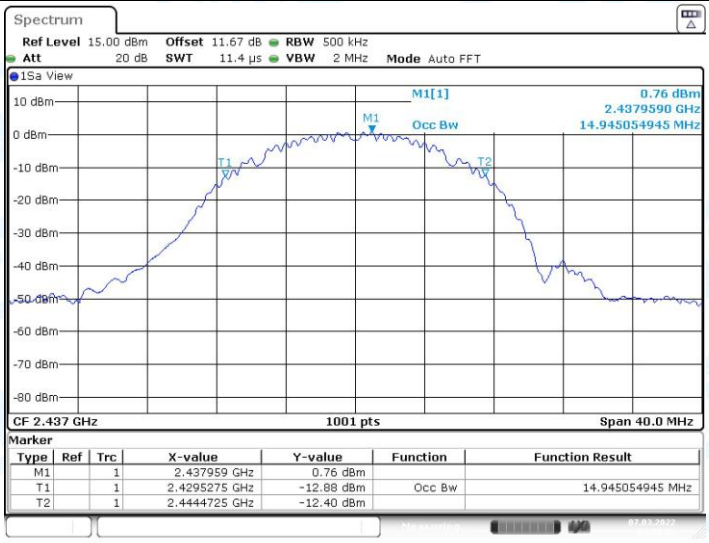

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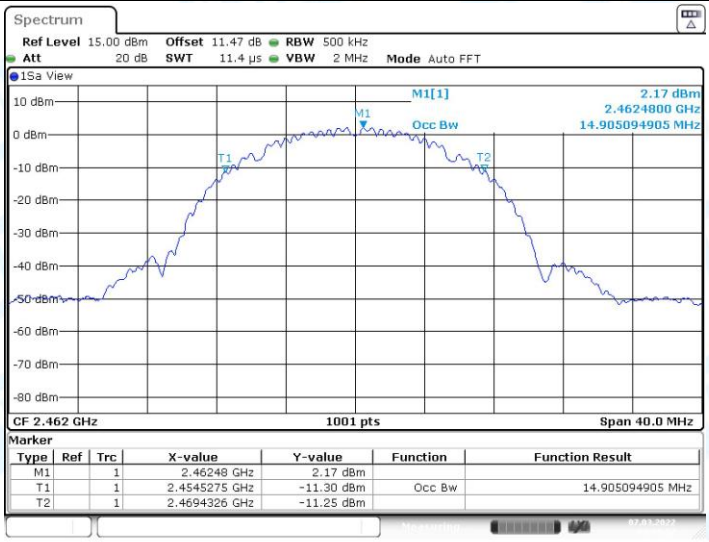
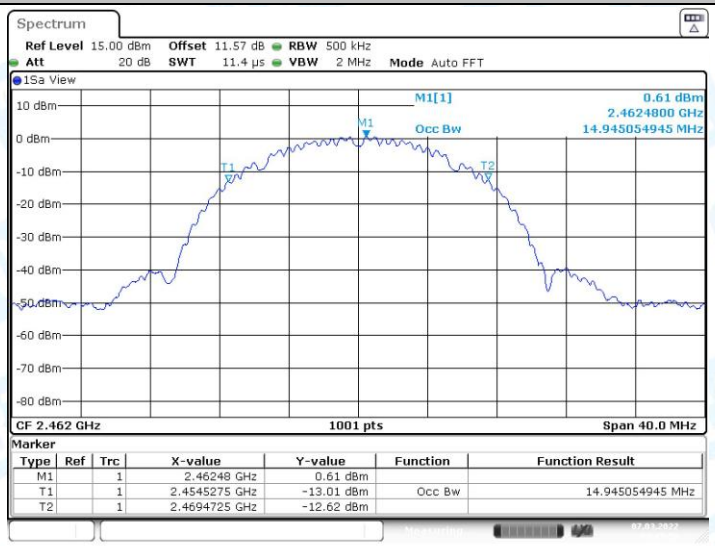
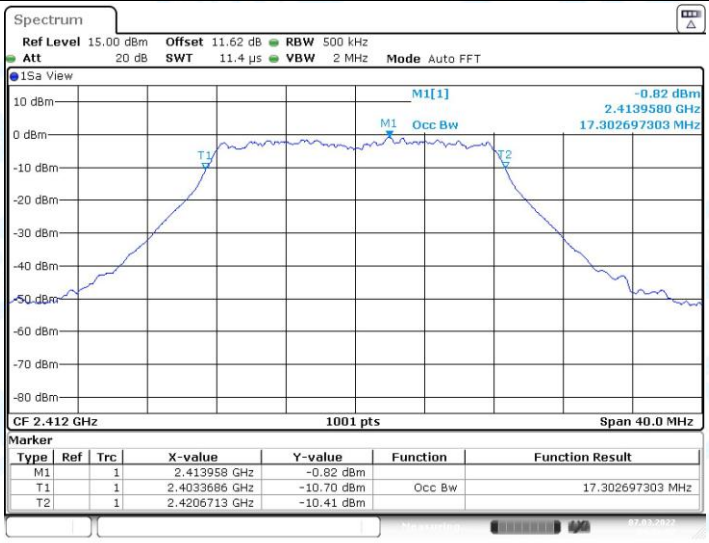


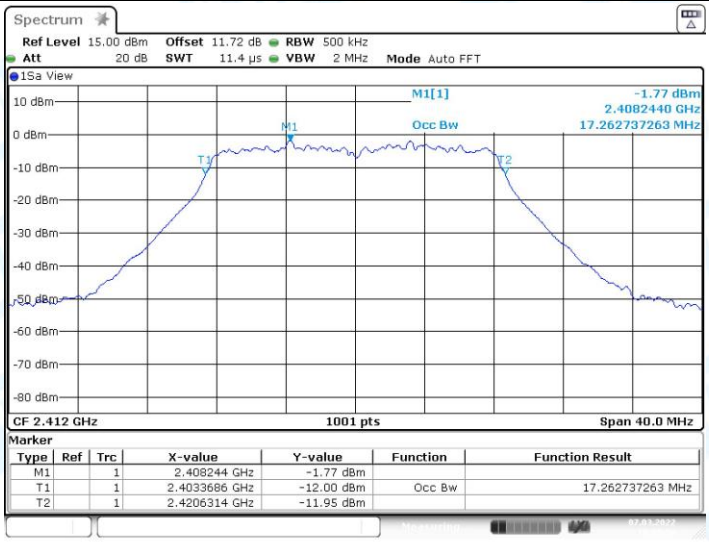
11BMIMO_Ant2_2462



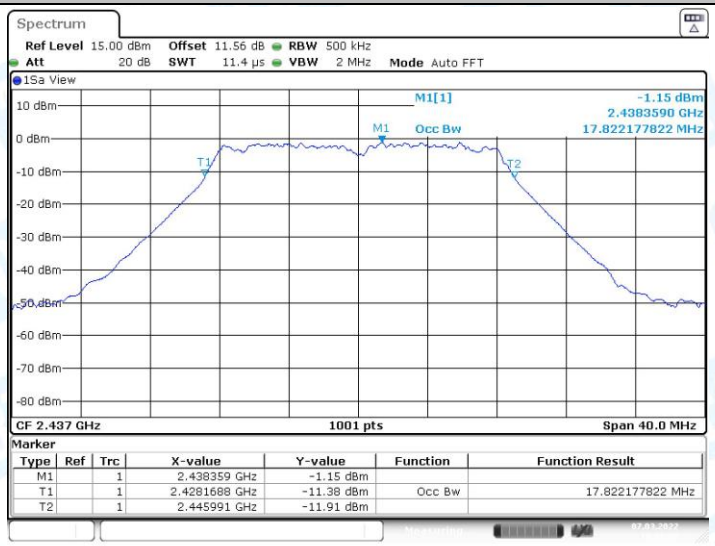
11GMIMO_Ant1_2412



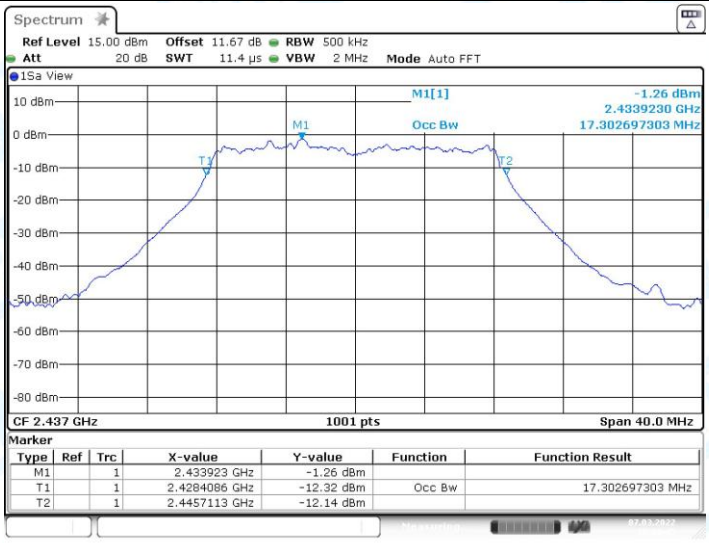
11GMIMO_Ant2_2412



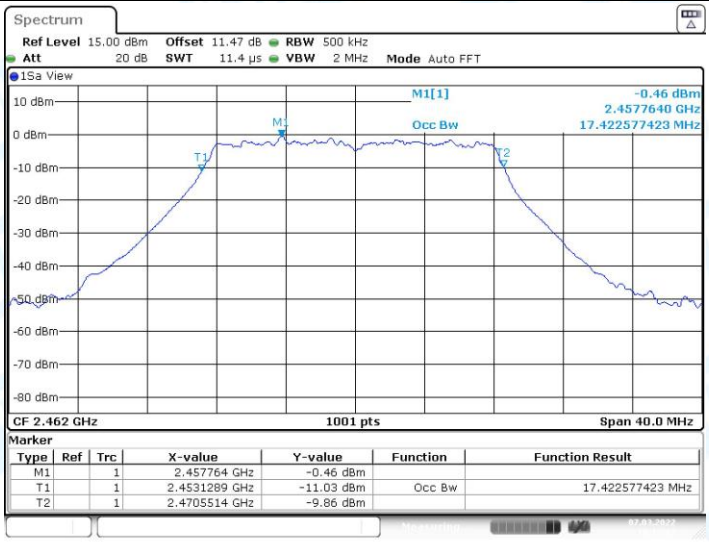
11GMIMO_Ant1_2437



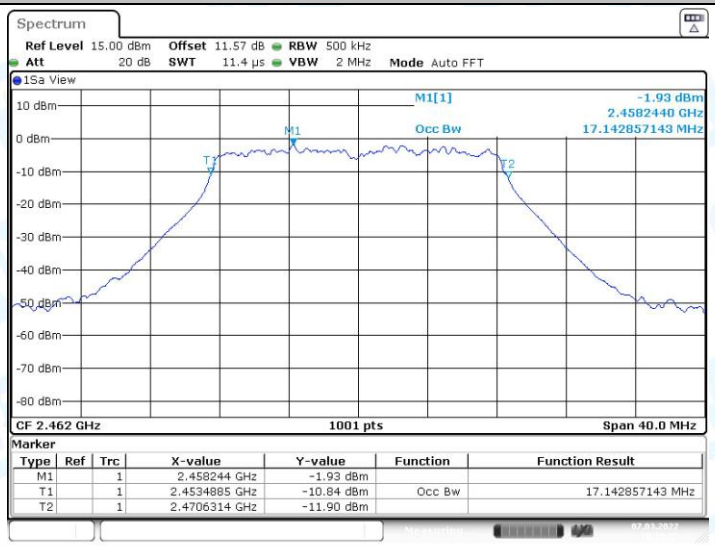
11GMIMO_Ant2_2437



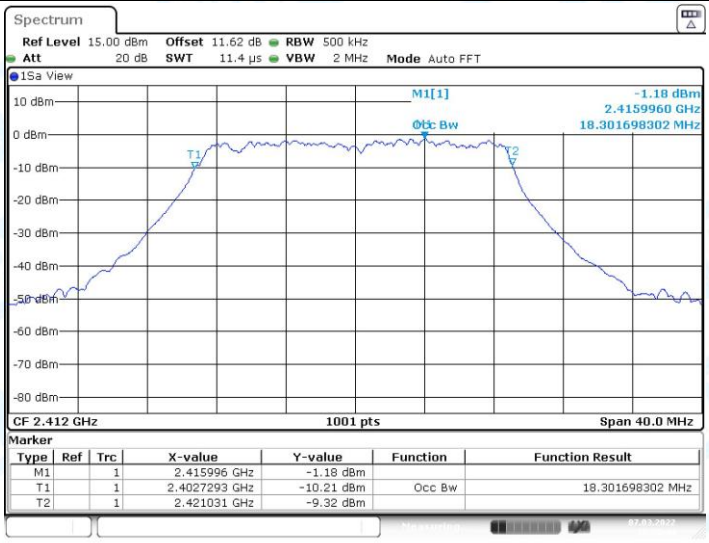
11GMIMO_Ant1_2462



11GMIMO_Ant2_2462



11N20MIMO_Ant1_2412



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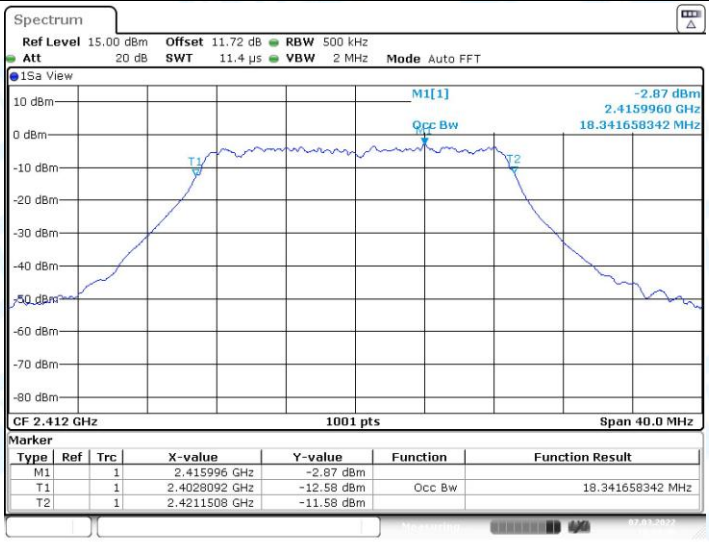

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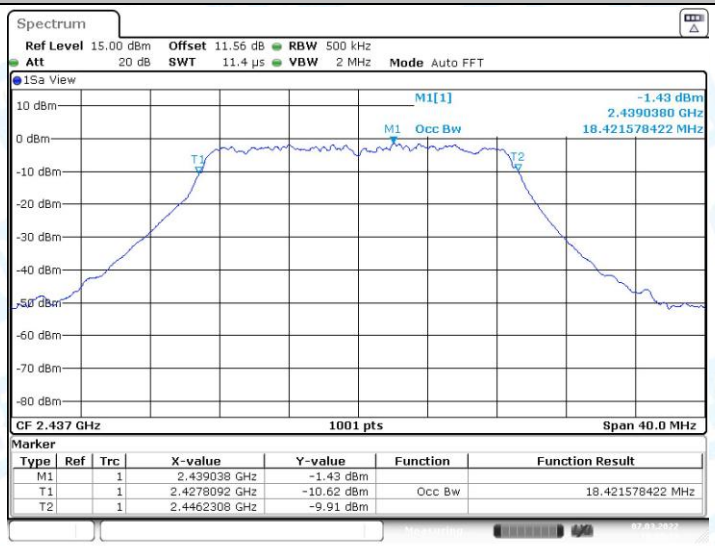

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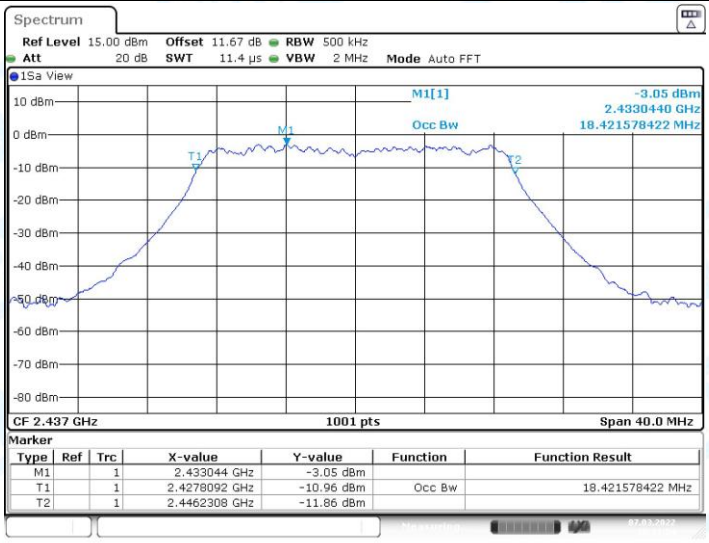
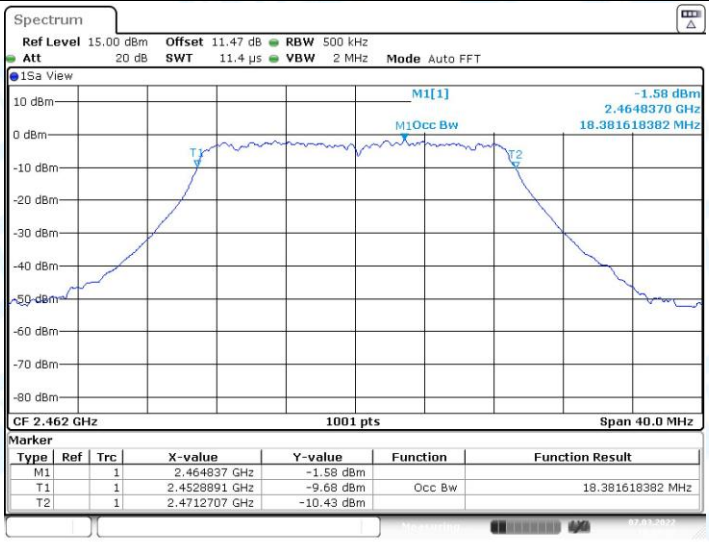


11N20MIMO_Ant1_2462



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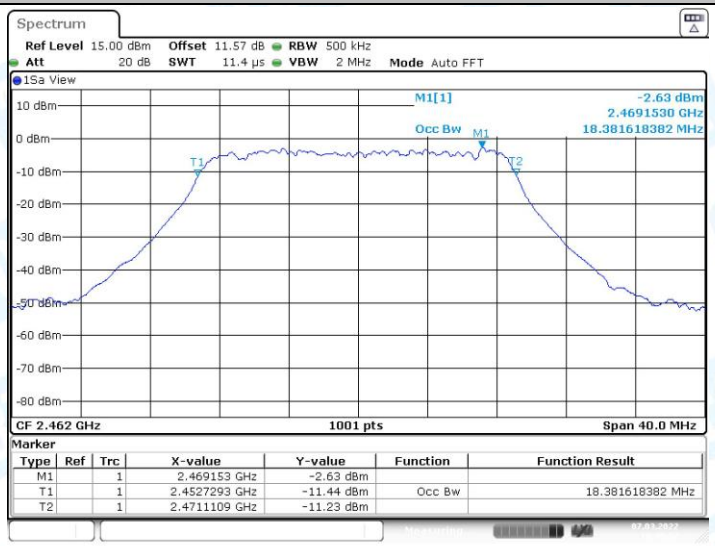


3. Maximum conducted output power

3.1.Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11BMIMO	Ant1	2412	14.00	≤30.00	PASS
	Ant2	2412	12.08	≤30.00	PASS
	total	**2412**	**16.16**	**≤27.99**	PASS
	Ant1	2437	13.91	≤30.00	PASS
	Ant2	2437	12.35	≤30.00	PASS
	total	**2437**	**16.21**	**≤27.99**	PASS
	Ant1	2462	13.76	≤30.00	PASS
	Ant2	2462	12.19	≤30.00	PASS
	total	**2462**	**16.06**	**≤27.99**	PASS
11GMIMO	Ant1	2412	13.87	≤30.00	PASS
	Ant2	2412	12.34	≤30.00	PASS
	total	**2412**	**16.18**	**≤27.99**	PASS
	Ant1	2437	14.26	≤30.00	PASS
	Ant2	2437	12.58	≤30.00	PASS
	total	**2437**	**16.51**	**≤27.99**	PASS
	Ant1	2462	14.07	≤30.00	PASS
	Ant2	2462	12.68	≤30.00	PASS
	total	**2462**	**16.44**	**≤27.99**	PASS
11N20MIMO	Ant1	2412	13.89	≤30.00	PASS
	Ant2	2412	12.31	≤30.00	PASS
	total	**2412**	**16.18**	**≤27.99**	PASS
	Ant1	2437	14.02	≤30.00	PASS
	Ant2	2437	12.43	≤30.00	PASS
	total	**2437**	**16.31**	**≤27.99**	PASS
	Ant1	2462	14.00	≤30.00	PASS
	Ant2	2462	12.56	≤30.00	PASS
	total	**2462**	**16.35**	**≤27.99**	PASS

Note:
The ANT. 1 and ANT. 2 will transmitting simultaneously for the 802.11g/n(HT20) Mode,
the T Directional Gain =Ant. Gain + 10*LOG(N_{ANT}) =8.01 dBi＞6 dBi.
So P_{out} = P_{limit}-(G_{TX}-6)]=30-2.01=27.99dBm

4. Maximum power spectral density

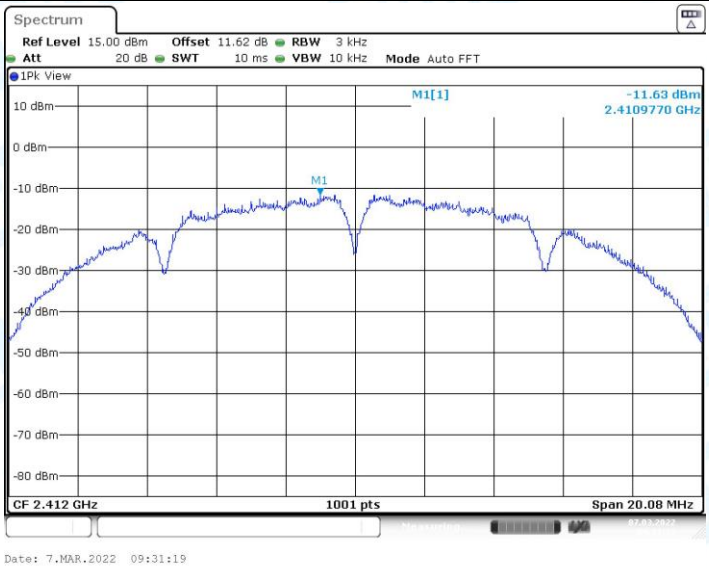
4.1.Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11BMIMO	Ant1	2412	-11.63	≤8.00	PASS
	Ant2	2412	-12.9	≤8.00	PASS
	total	**2412**	**-9.21**	**≤5.99**	PASS
	Ant1	2437	-11.48	≤8.00	PASS
	Ant2	2437	-12.55	≤8.00	PASS
	total	**2437**	**-8.97**	**≤5.99**	PASS
	Ant1	2462	-11.95	≤8.00	PASS
	Ant2	2462	-11.96	≤8.00	PASS
	total	**2462**	**-8.94**	**≤5.99**	PASS
11GMIMO	Ant1	2412	-18.88	≤8.00	PASS
	Ant2	2412	-20.71	≤8.00	PASS
	total	**2412**	**-16.69**	**≤5.99**	PASS
	Ant1	2437	-19.08	≤8.00	PASS
	Ant2	2437	-21.12	≤8.00	PASS
	total	**2437**	**-16.97**	**≤5.99**	PASS
	Ant1	2462	-18.77	≤8.00	PASS
	Ant2	2462	-20.04	≤8.00	PASS
	total	**2462**	**-16.35**	**≤5.99**	PASS
11N20MIMO	Ant1	2412	-19.42	≤8.00	PASS
	Ant2	2412	-21.31	≤8.00	PASS
	total	**2412**	**-17.25**	**≤5.99**	PASS
	Ant1	2437	-19.4	≤8.00	PASS
	Ant2	2437	-21.31	≤8.00	PASS
	total	**2437**	**-17.24**	**≤5.99**	PASS
	Ant1	2462	-18.77	≤8.00	PASS
	Ant2	2462	-20.28	≤8.00	PASS
	total	**2462**	**-16.45**	**≤5.99**	PASS

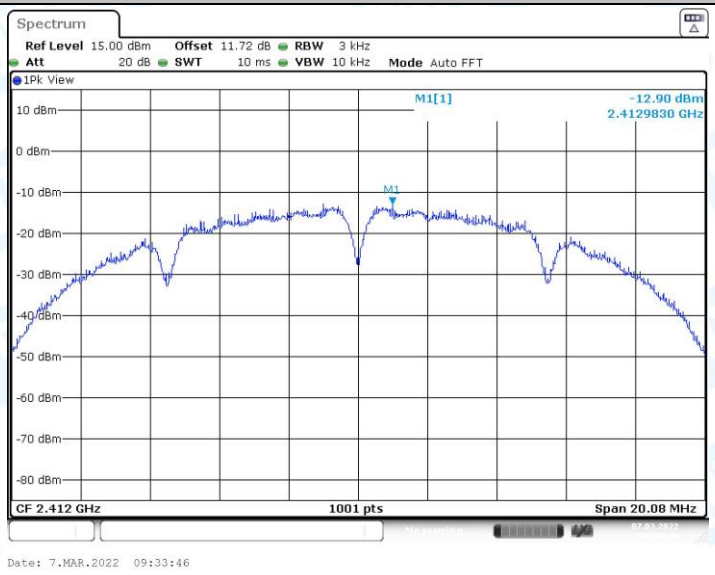
Note:
The ANT. 1 and ANT. 2 will transmitting simultaneously for the 802.11g/n(HT20) Mode,
the T Directional Gain =Ant. Gain + 10*LOG(N_{ANT}) =8.01 dBi＞6 dBi.
So P_{out} = P_{limit}-(G_{TX}-6)]=8-2.01=5.99dBm

4.2.Test Graphs

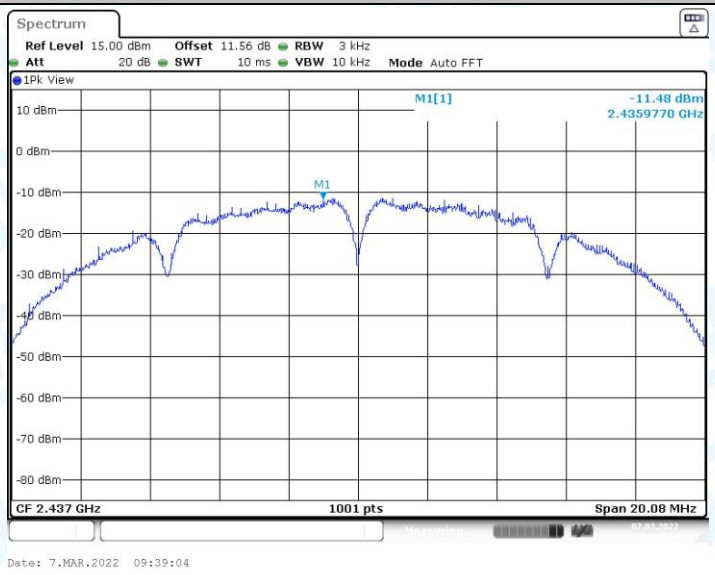
11BMIMO_Ant1_2412



11BMIMO_Ant2_2412



11BMIMO_Ant1_2437



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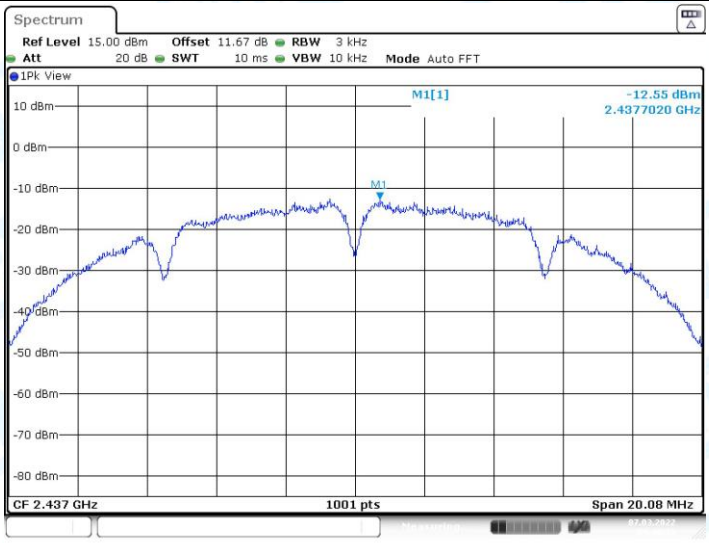

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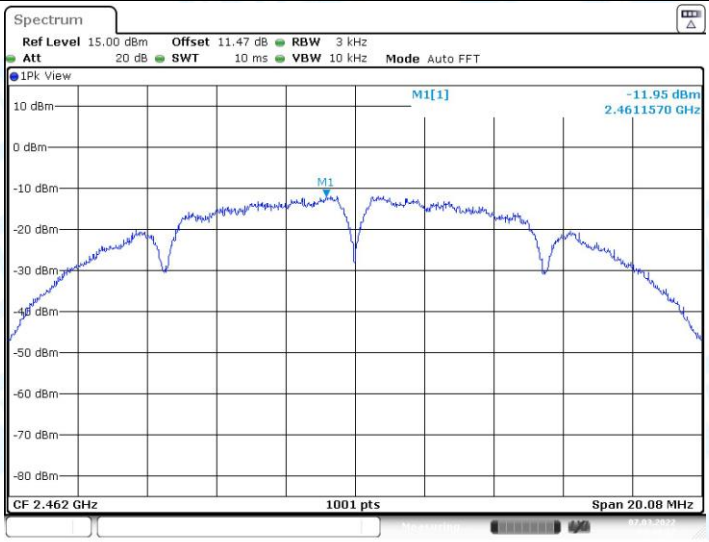

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