

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

General Description of EUT	
Product Name:	AC1200 Dual Band Mesh Router Dual Band Whole Home Mesh WiFi System AC1200 Dual Band WiFi Repeater
Test Model:	NM1217C
Sample ID:	20210719-04-2#
Environmental Conditions	
Temperature:	23.6℃
Relative Humidity:	52%
Test Voltage:	DC 12V
Test Engineer:	Hejingchang
Note: For a more detailed features description, please refer to the report TB-FCC182888.	

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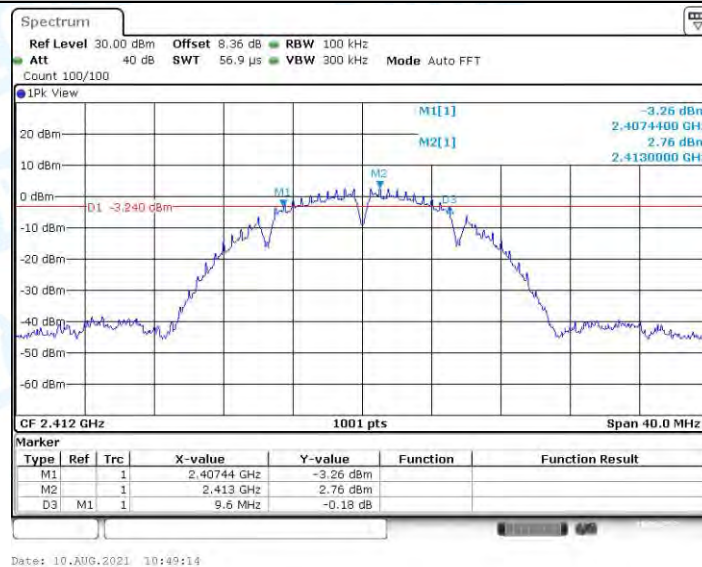
1. DTS Bandwidth

1.1. Test Result

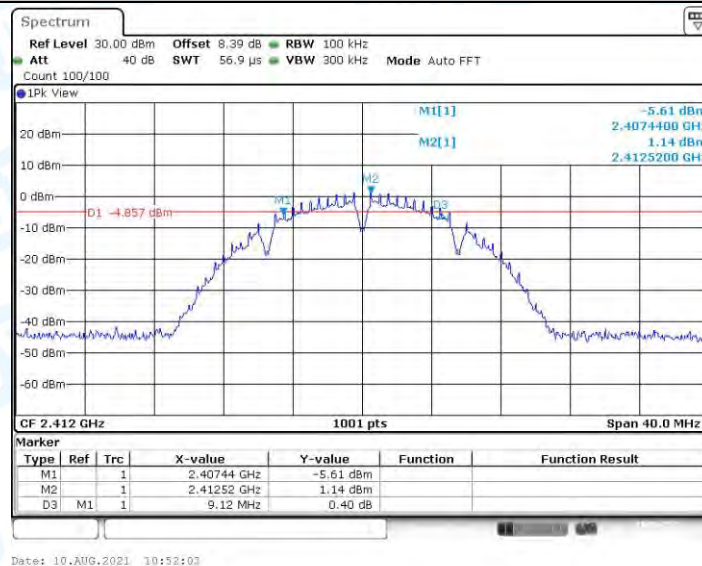
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant1	2412	9.600	2407.440	2417.040	0.5	PASS
	Ant2	2412	9.120	2407.440	2416.560	0.5	PASS
	Ant1	2437	9.600	2431.960	2441.560	0.5	PASS
	Ant2	2437	9.600	2431.960	2441.560	0.5	PASS
	Ant1	2462	9.160	2457.440	2466.600	0.5	PASS
	Ant2	2462	10.120	2456.960	2467.080	0.5	PASS
11G-CDD	Ant1	2412	16.160	2404.040	2420.200	0.5	PASS
	Ant2	2412	16.440	2403.800	2420.240	0.5	PASS
	Ant1	2437	16.360	2428.840	2445.200	0.5	PASS
	Ant2	2437	16.400	2428.800	2445.200	0.5	PASS
	Ant1	2462	16.360	2453.840	2470.200	0.5	PASS
	Ant2	2462	16.400	2453.800	2470.200	0.5	PASS
11N20MIMO	Ant1	2412	17.400	2403.440	2420.840	0.5	PASS
	Ant2	2412	16.960	2403.840	2420.800	0.5	PASS
	Ant1	2437	17.640	2428.200	2445.840	0.5	PASS
	Ant2	2437	17.640	2428.200	2445.840	0.5	PASS
	Ant1	2462	17.640	2453.200	2470.840	0.5	PASS
	Ant2	2462	17.640	2453.200	2470.840	0.5	PASS
11N40MIMO	Ant1	2422	30.080	2407.280	2437.360	0.5	PASS
	Ant2	2422	33.360	2405.040	2438.400	0.5	PASS
	Ant1	2437	35.840	2418.760	2454.600	0.5	PASS
	Ant2	2437	35.840	2418.760	2454.600	0.5	PASS
	Ant1	2452	36.480	2433.760	2470.240	0.5	PASS
	Ant2	2452	35.040	2434.640	2469.680	0.5	PASS

1.2. Test Graphs

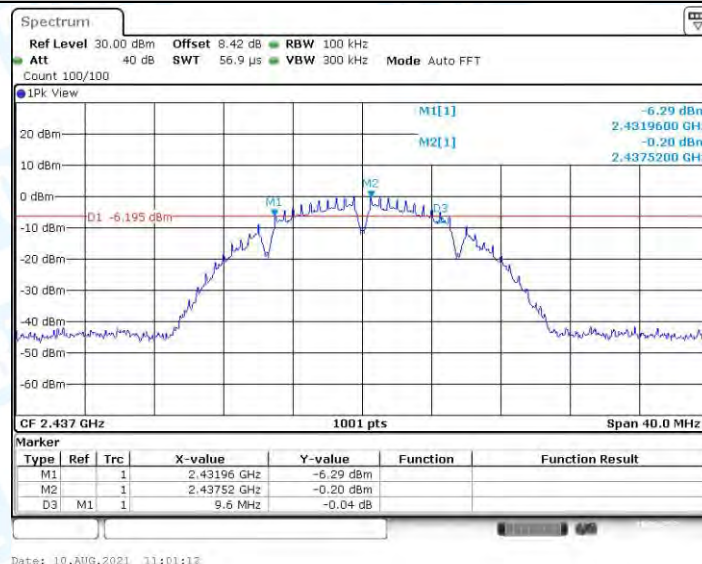
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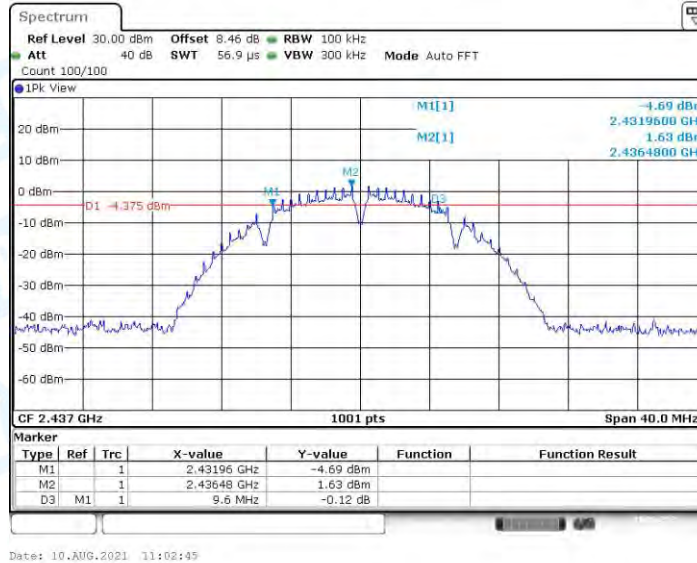
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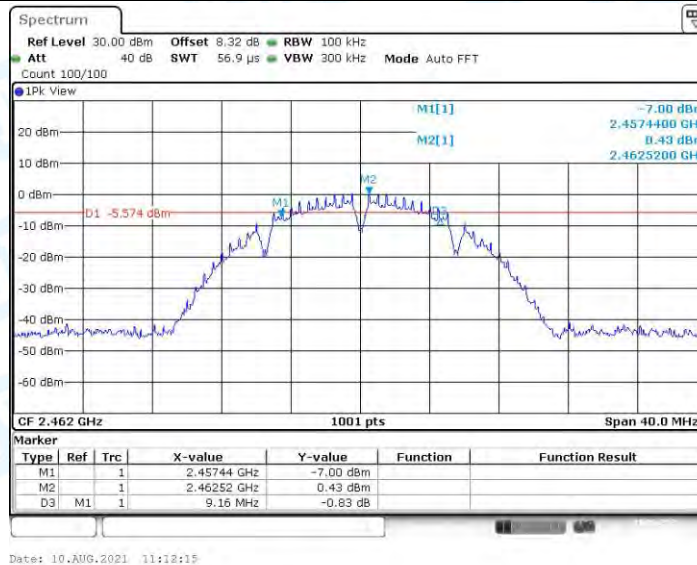
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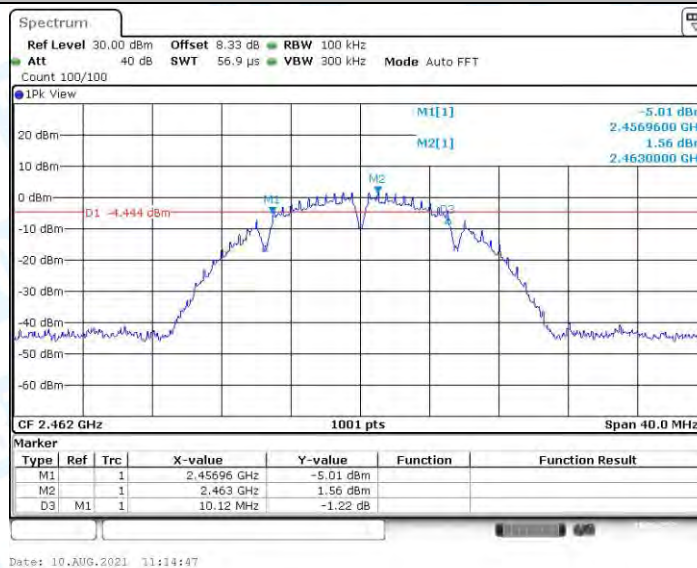
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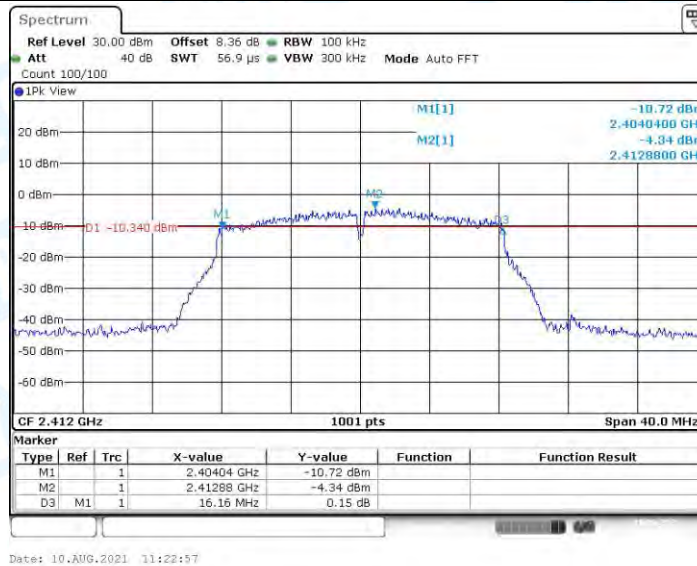
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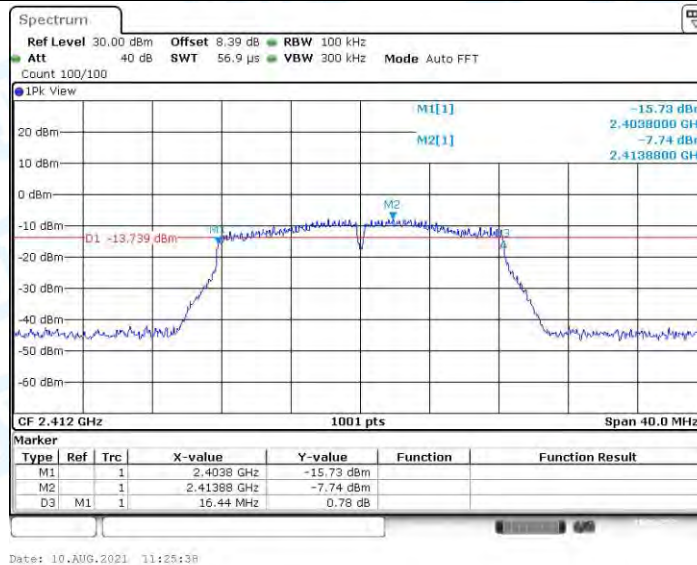
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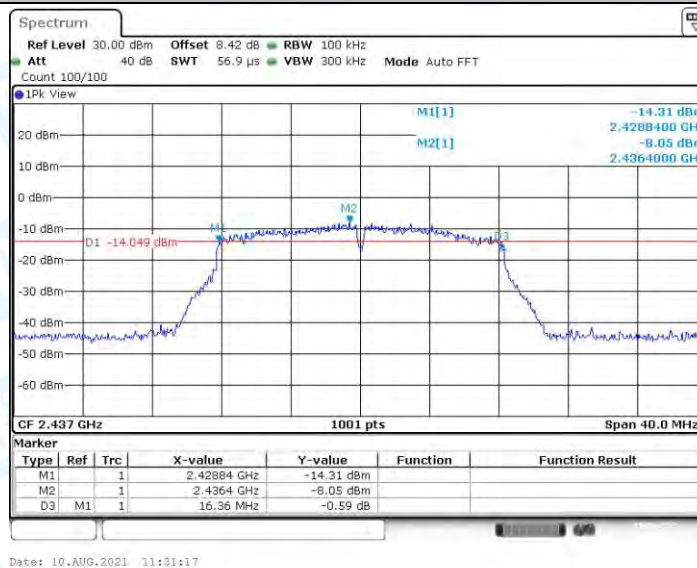
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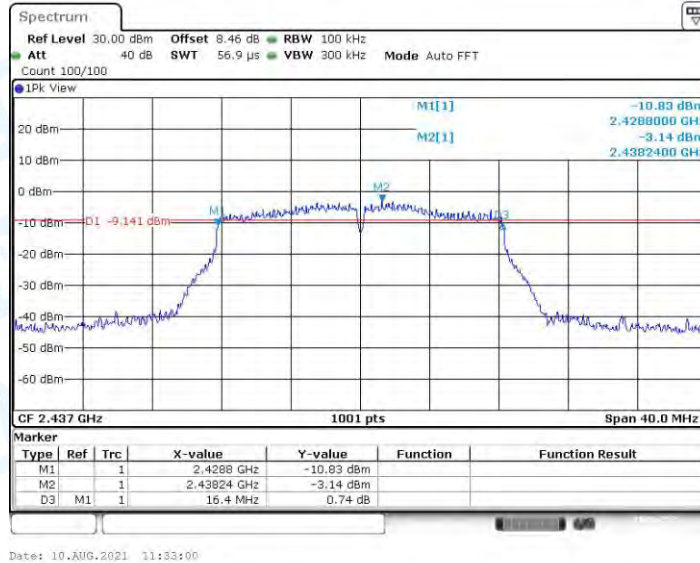
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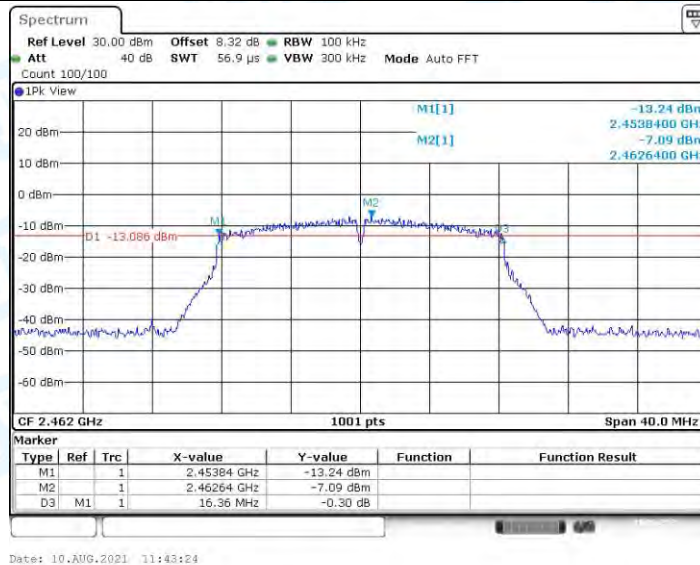
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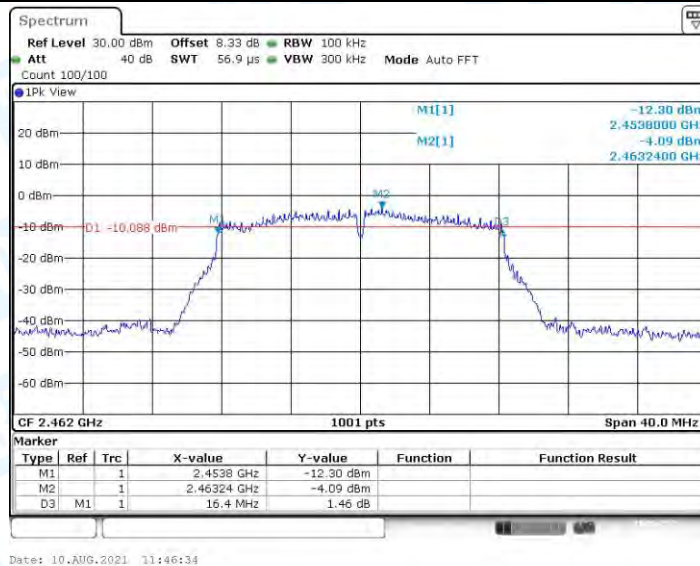
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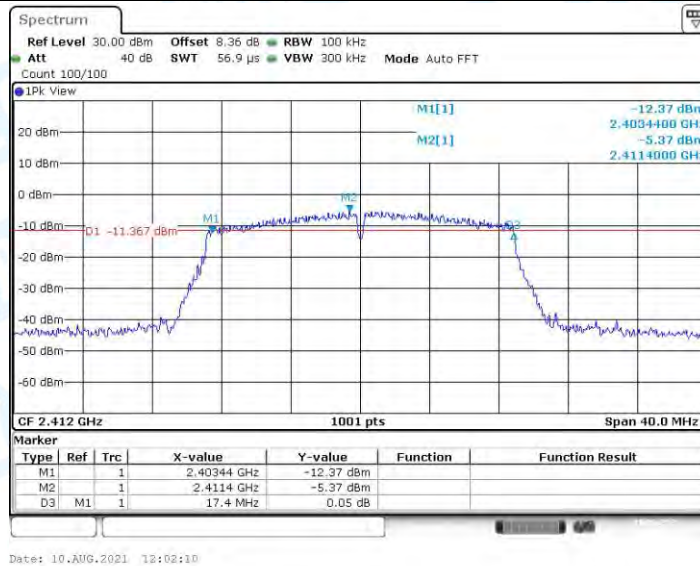
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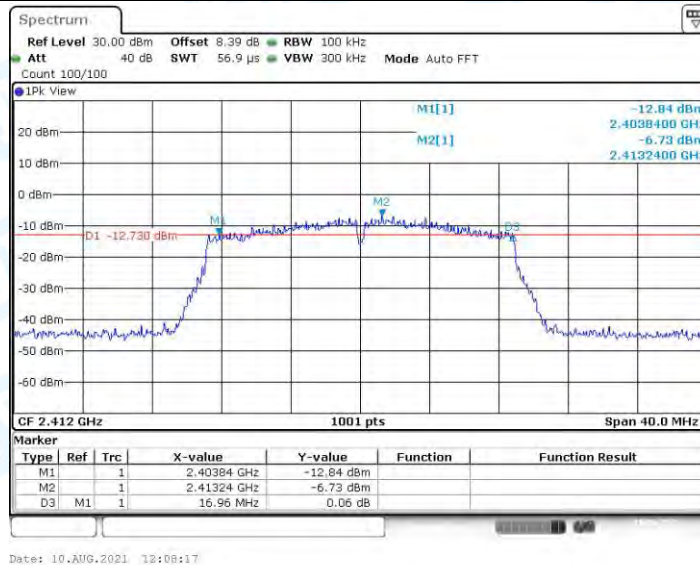
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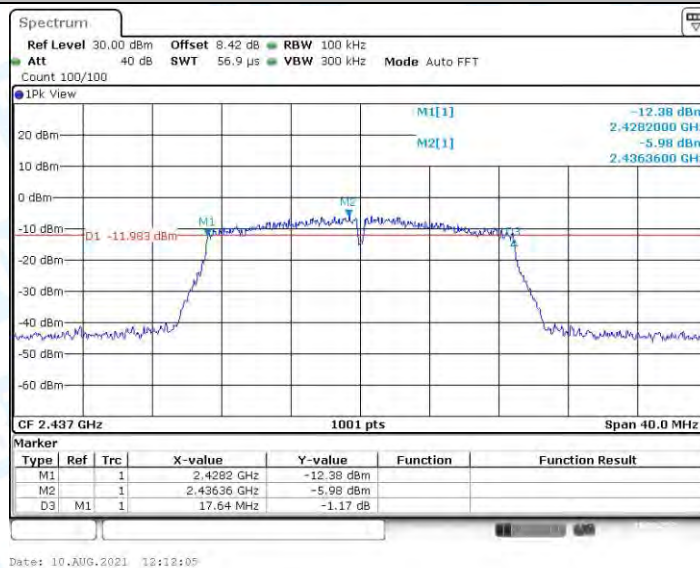
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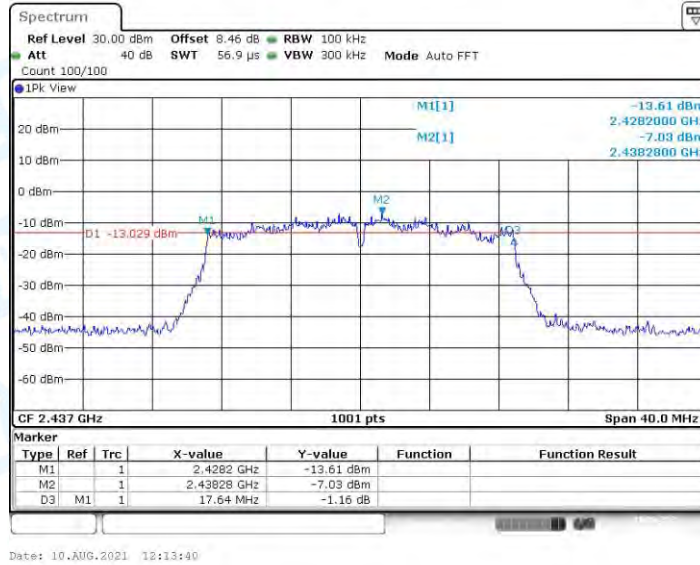
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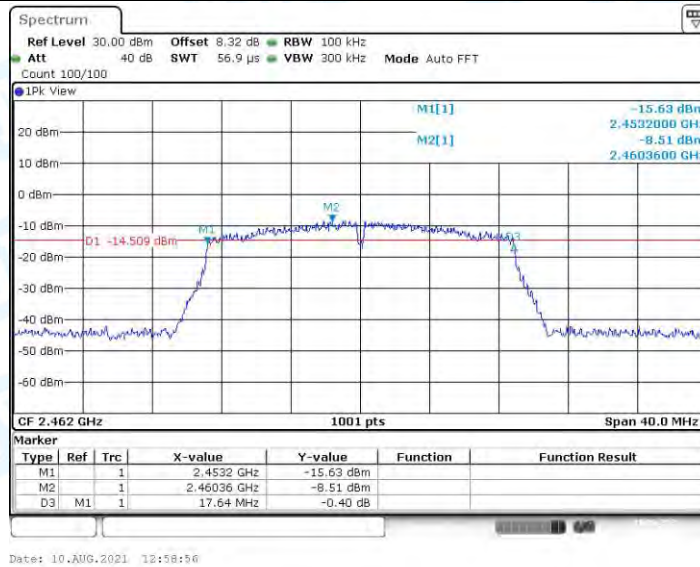
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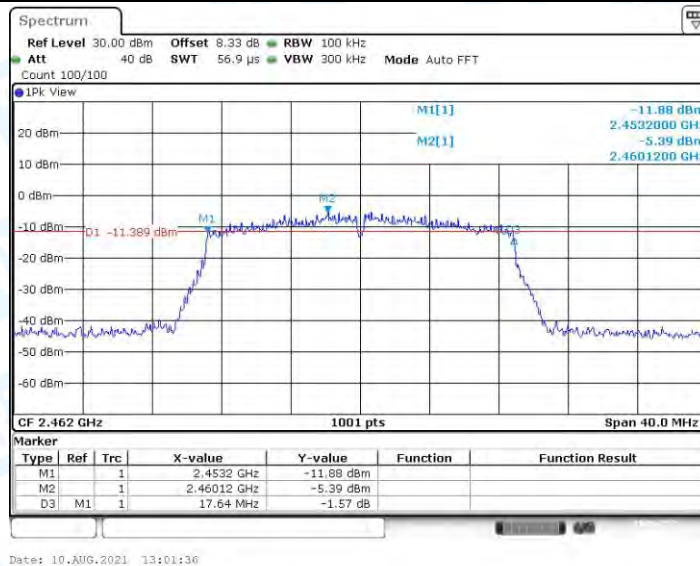
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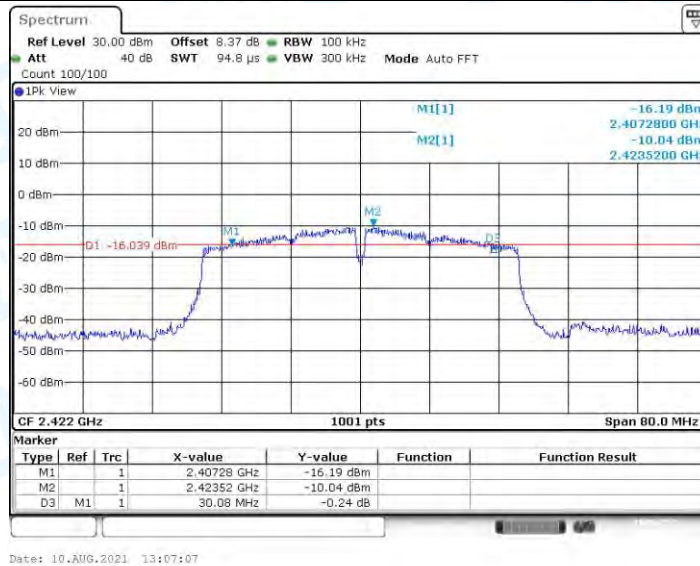
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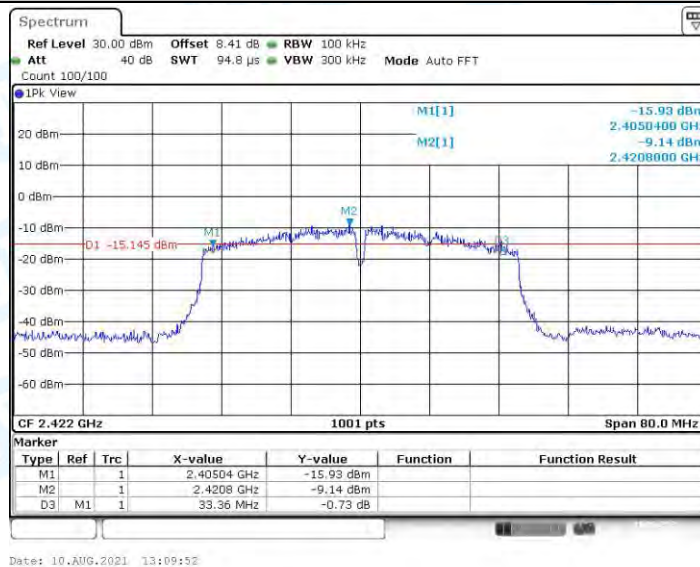
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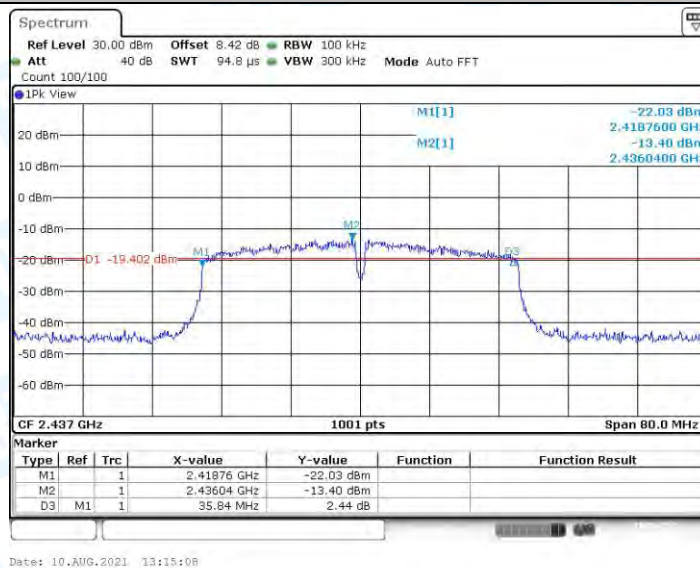
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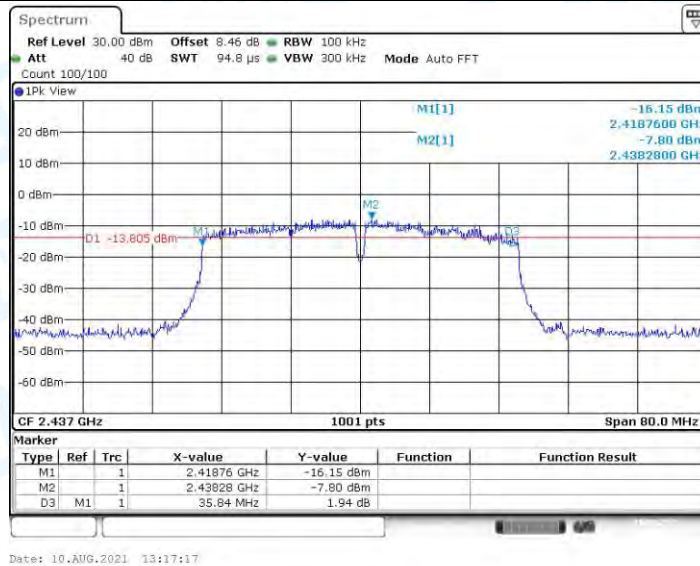
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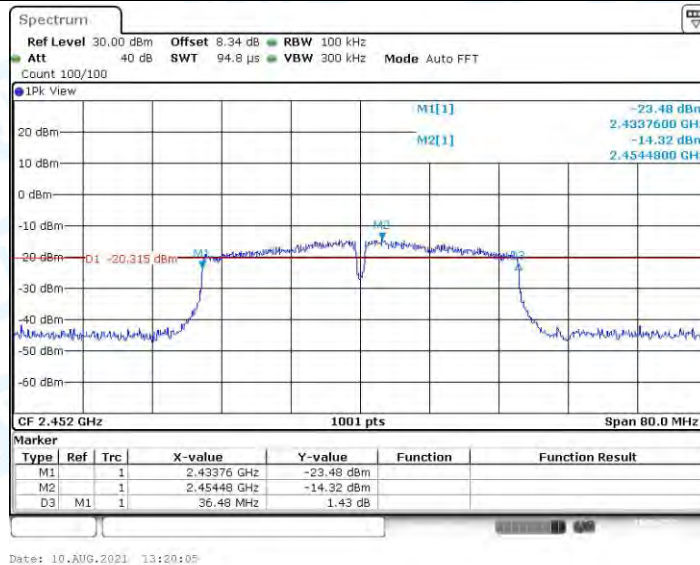
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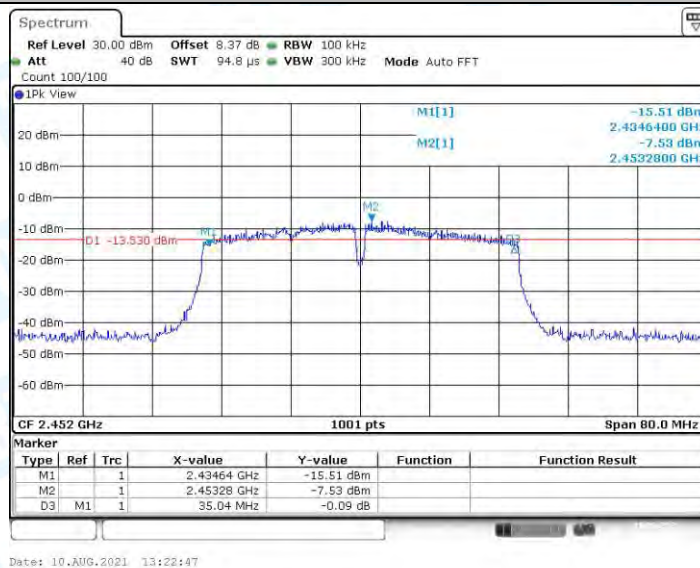
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

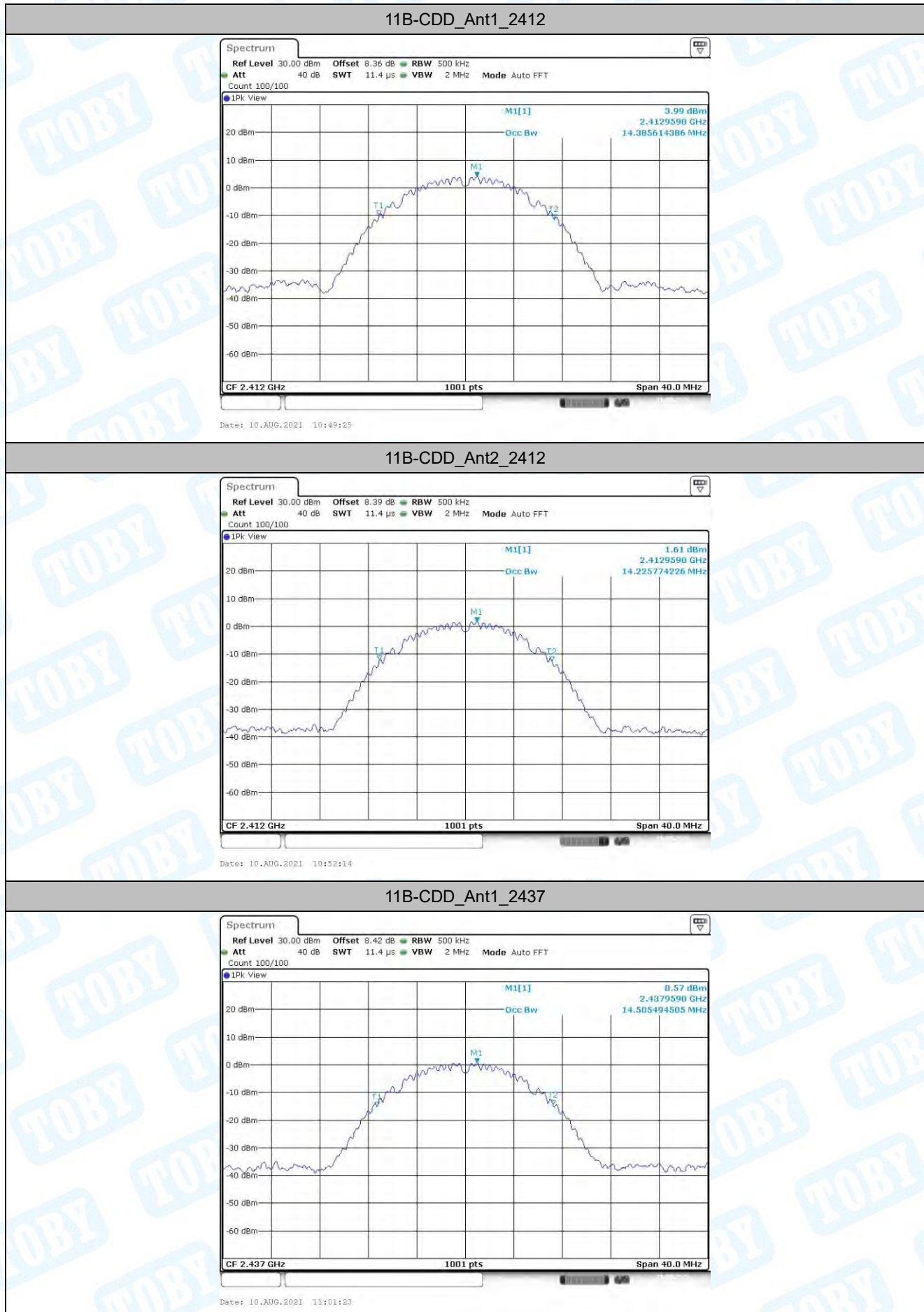


2. Occupied Channel Bandwidth

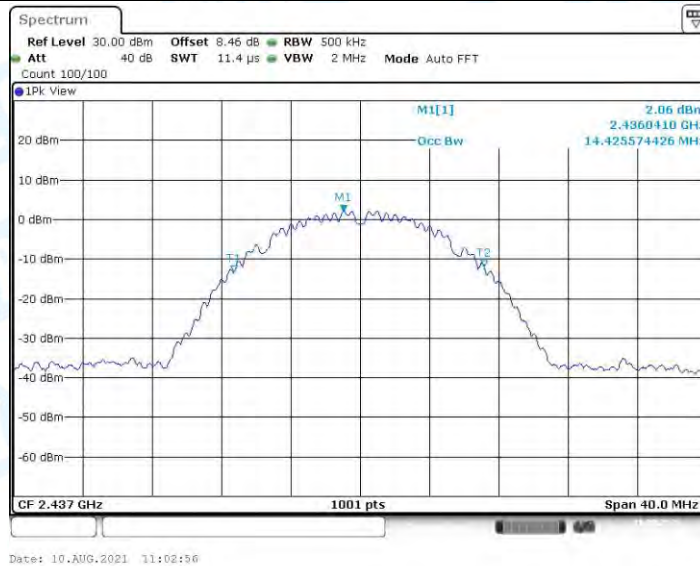
2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant1	2412	14.386	2404.887	2419.273	---	PASS
	Ant2	2412	14.226	2404.927	2419.153	---	PASS
	Ant1	2437	14.505	2429.727	2444.233	---	PASS
	Ant2	2437	14.426	2429.727	2444.153	---	PASS
	Ant1	2462	14.386	2454.847	2469.233	---	PASS
	Ant2	2462	14.346	2454.887	2469.233	---	PASS
11G-CDD	Ant1	2412	16.863	2403.568	2420.432	---	PASS
	Ant2	2412	16.743	2403.728	2420.472	---	PASS
	Ant1	2437	17.143	2428.489	2445.631	---	PASS
	Ant2	2437	16.823	2428.688	2445.511	---	PASS
	Ant1	2462	16.823	2453.728	2470.551	---	PASS
	Ant2	2462	16.703	2453.648	2470.352	---	PASS
11N20MIMO	Ant1	2412	17.782	2403.209	2420.991	---	PASS
	Ant2	2412	17.742	2403.129	2420.871	---	PASS
	Ant1	2437	17.822	2428.049	2445.871	---	PASS
	Ant2	2437	17.782	2428.169	2445.951	---	PASS
	Ant1	2462	17.822	2453.089	2470.911	---	PASS
	Ant2	2462	17.702	2453.129	2470.831	---	PASS
11N40MIMO	Ant1	2422	36.204	2403.778	2439.982	---	PASS
	Ant2	2422	36.044	2404.018	2440.062	---	PASS
	Ant1	2437	36.044	2418.938	2454.982	---	PASS
	Ant2	2437	36.124	2418.778	2454.902	---	PASS
	Ant1	2452	36.204	2434.018	2470.222	---	PASS
	Ant2	2452	35.964	2434.018	2469.982	---	PASS

2.2. Test Graphs



11B-CDD_Ant2_2437



11B-CDD_Ant1_2462



11B-CDD_Ant2_2462



11G-CDD_Ant1_2412



11G-CDD_Ant2_2412



11G-CDD_Ant1_2437



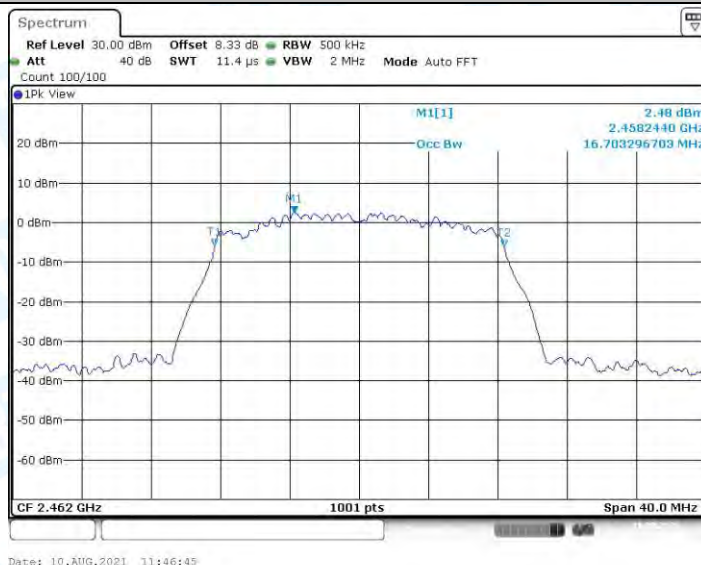
11G-CDD_Ant2_2437



11G-CDD_Ant1_2462



11G-CDD_Ant2_2462



11N20MIMO_Ant1_2412



11N20MIMO_Ant2_2412



11N20MIMO_Ant1_2437



11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462



11N20MIMO_Ant2_2462



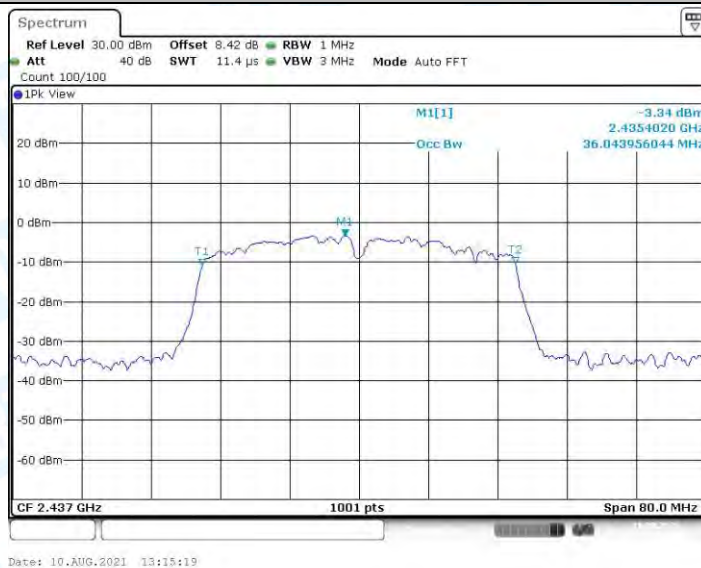
11N40MIMO_Ant1_2422



11N40MIMO_Ant2_2422



11N40MIMO_Ant1_2437



11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



3. Maximum conducted output power

3.1. Test Result

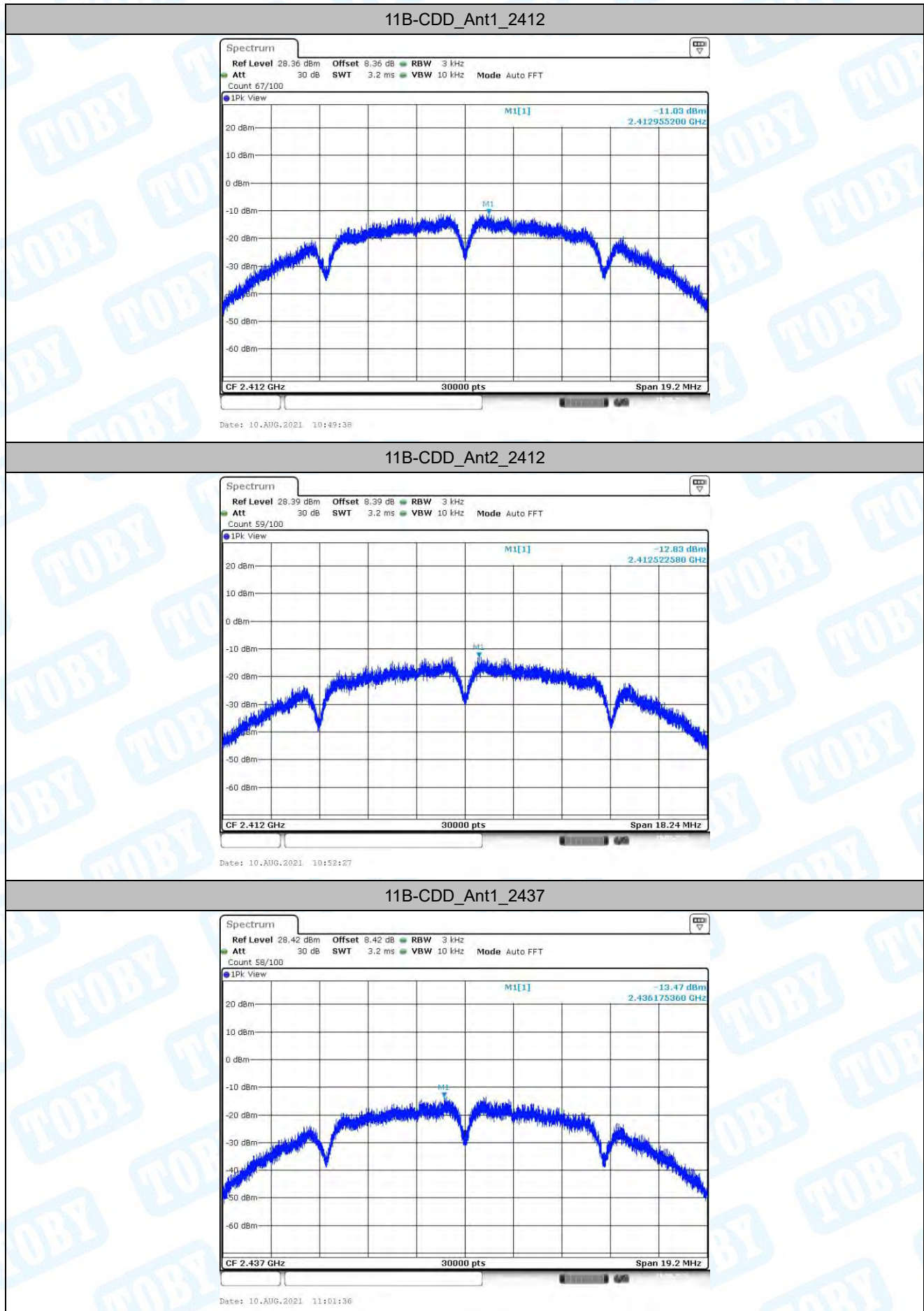
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B-CDD	Ant1	2412	15.22	<=30	PASS
	Ant2	2412	12.74	<=30	PASS
	total	2412	17.20	<=30	PASS
	Ant1	2437	10.98	<=30	PASS
	Ant2	2437	14.00	<=30	PASS
	total	2437	15.80	<=30	PASS
	Ant1	2462	11.94	<=30	PASS
	Ant2	2462	14.03	<=30	PASS
	total	2462	16.10	<=30	PASS
11G-CDD	Ant1	2412	15.46	<=30	PASS
	Ant2	2412	12.64	<=30	PASS
	total	2412	17.30	<=30	PASS
	Ant1	2437	11.69	<=30	PASS
	Ant2	2437	16.67	<=30	PASS
	total	2437	17.90	<=30	PASS
	Ant1	2462	12.90	<=30	PASS
	Ant2	2462	15.57	<=30	PASS
	total	2462	17.40	<=30	PASS
11N20MIMO	Ant1	2412	15.16	<=30	PASS
	Ant2	2412	12.63	<=30	PASS
	total	2412	17.10	<=29.99	PASS
	Ant1	2437	14.39	<=30	PASS
	Ant2	2437	11.92	<=30	PASS
	total	2437	16.30	<=29.99	PASS
	Ant1	2462	11.89	<=30	PASS
	Ant2	2462	14.34	<=30	PASS
	total	2462	16.30	<=29.99	PASS
11N40MIMO	Ant1	2422	12.52	<=30	PASS
	Ant2	2422	12.92	<=30	PASS
	total	2422	15.70	<=29.99	PASS
	Ant1	2437	9.82	<=30	PASS
	Ant2	2437	14.99	<=30	PASS
	total	2437	16.10	<=29.99	PASS
	Ant1	2452	8.92	<=30	PASS
	Ant2	2452	14.73	<=30	PASS
	total	2452	15.70	<=29.99	PASS

4. Maximum power spectral density

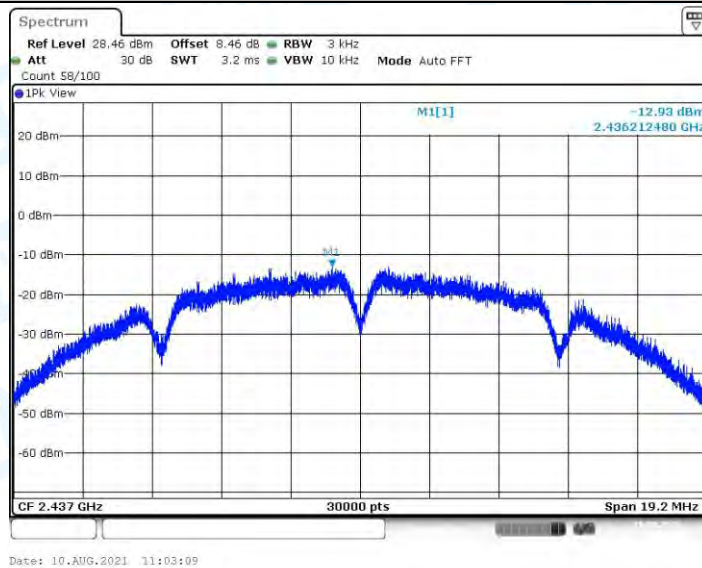
4.1. Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B-CDD	Ant1	2412	-11.03	<=8	PASS
	Ant2	2412	-12.83	<=8	PASS
	total	2412	-8.83	<=8	PASS
	Ant1	2437	-13.47	<=8	PASS
	Ant2	2437	-12.93	<=8	PASS
	total	2437	-10.18	<=8	PASS
	Ant1	2462	-14.17	<=8	PASS
	Ant2	2462	-11.7	<=8	PASS
	total	2462	-9.75	<=8	PASS
11G-CDD	Ant1	2412	-15.96	<=8	PASS
	Ant2	2412	-18.64	<=8	PASS
	total	2412	-14.09	<=8	PASS
	Ant1	2437	-19.39	<=8	PASS
	Ant2	2437	-14.47	<=8	PASS
	total	2437	-13.26	<=8	PASS
	Ant1	2462	-17.97	<=8	PASS
	Ant2	2462	-15.74	<=8	PASS
	total	2462	-13.70	<=8	PASS
11N20MIMO	Ant1	2412	-15.86	<=8	PASS
	Ant2	2412	-18.75	<=8	PASS
	total	2412	-14.06	<=7.99	PASS
	Ant1	2437	-17.12	<=8	PASS
	Ant2	2437	-19.56	<=8	PASS
	total	2437	-15.16	<=7.99	PASS
	Ant1	2462	-19.36	<=8	PASS
	Ant2	2462	-16.7	<=8	PASS
	total	2462	-14.82	<=7.99	PASS
11N40MIMO	Ant1	2422	-21.31	<=8	PASS
	Ant2	2422	-21.86	<=8	PASS
	total	2422	-18.57	<=7.99	PASS
	Ant1	2437	-24.22	<=8	PASS
	Ant2	2437	-19.62	<=8	PASS
	total	2437	-18.33	<=7.99	PASS
	Ant1	2452	-25.26	<=8	PASS
	Ant2	2452	-18.75	<=8	PASS
	total	2452	-17.87	<=7.99	PASS

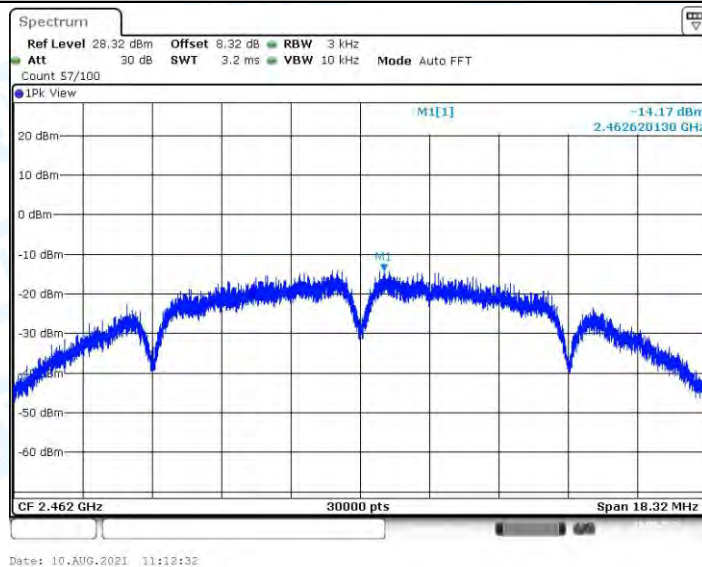
4.2. Test Graphs



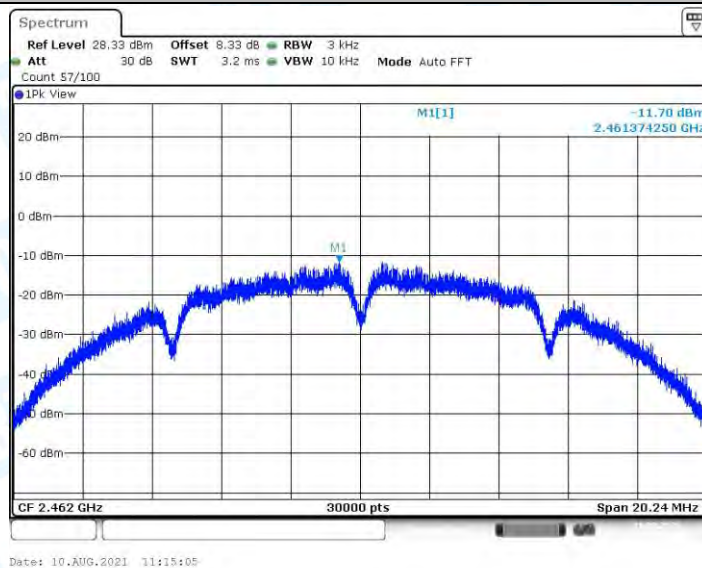
11B-CDD_Ant2_2437



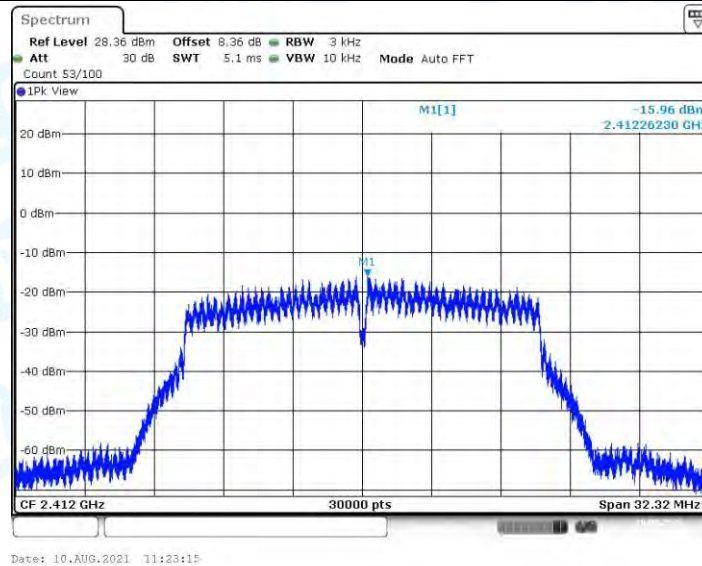
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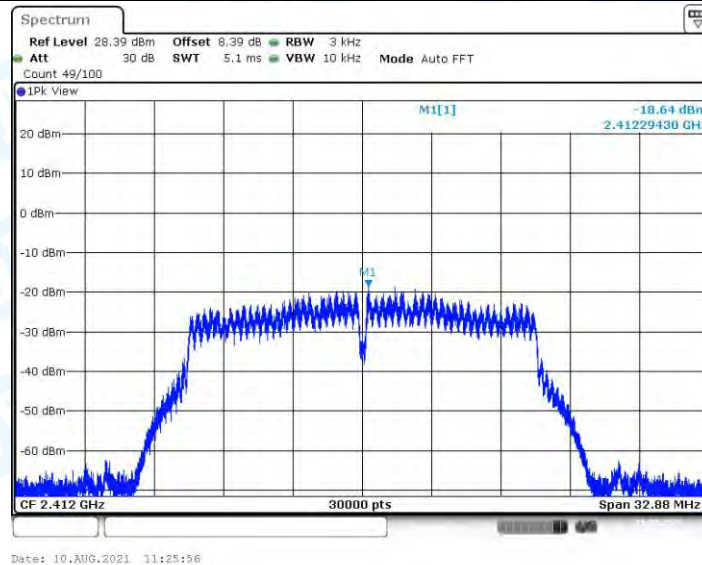
11B-CDD_Ant2_2462



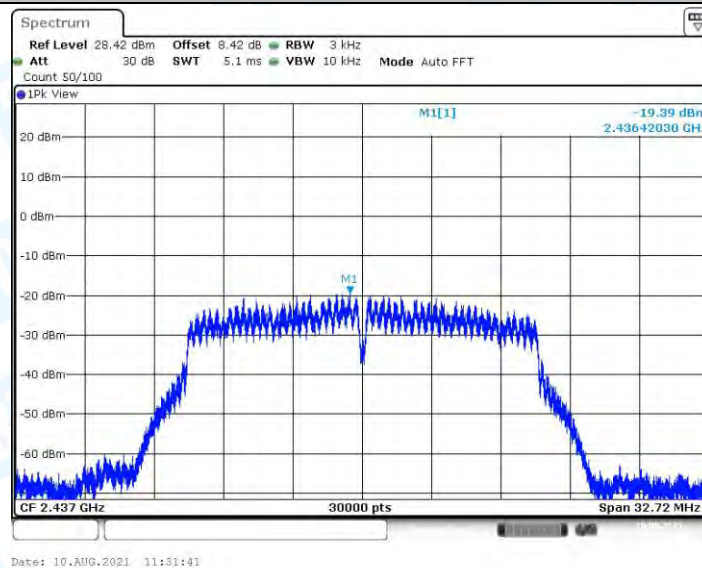
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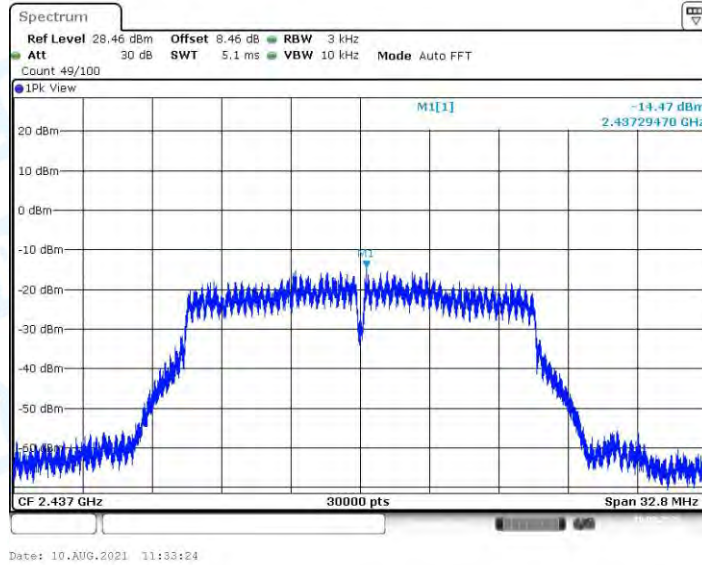
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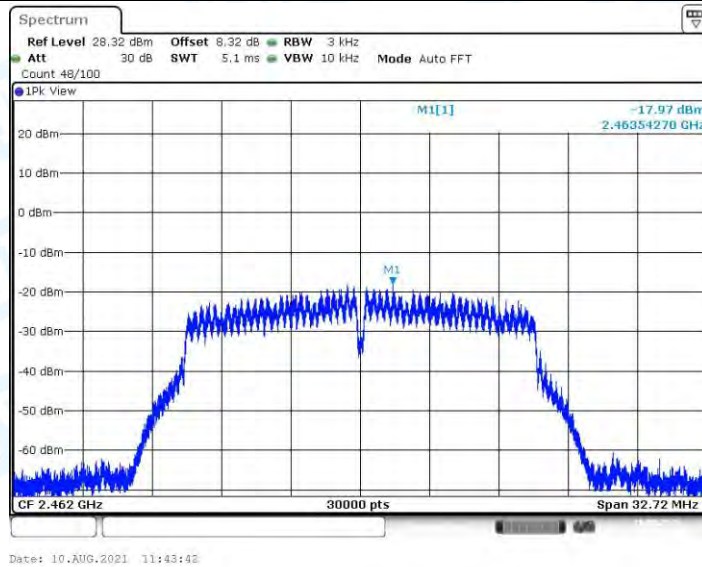
11G-CDD_Ant1_2437



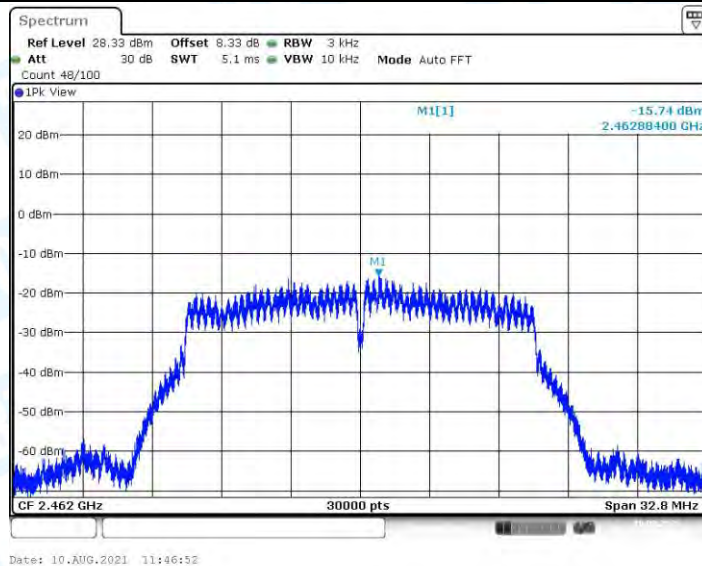
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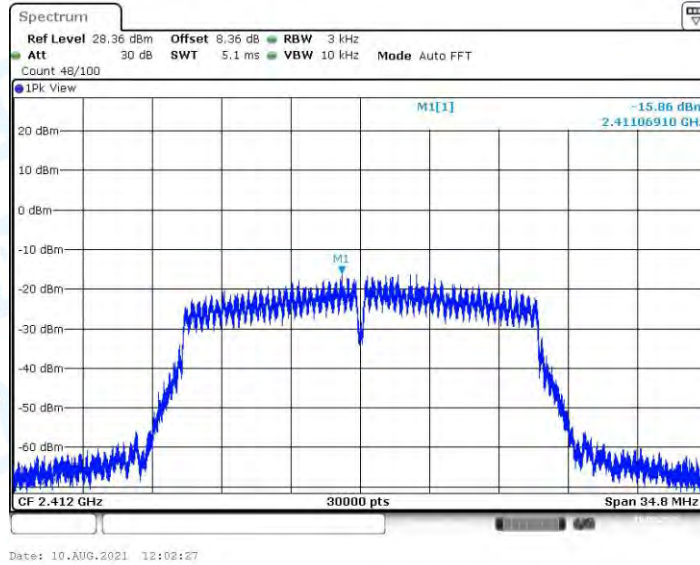
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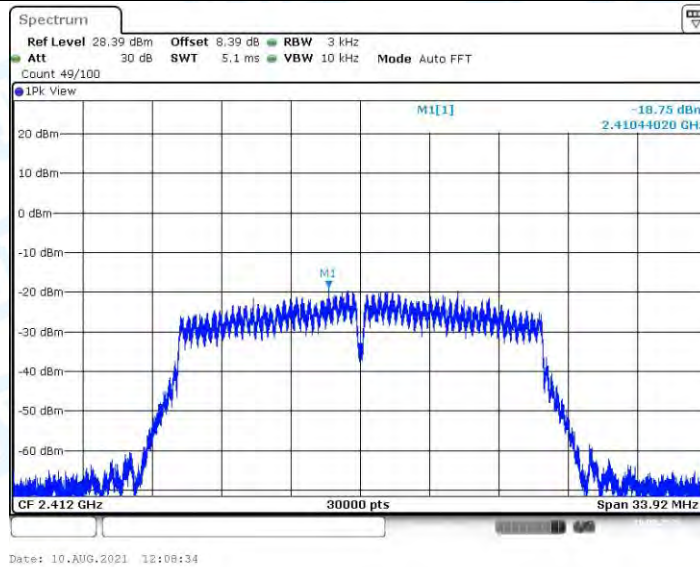
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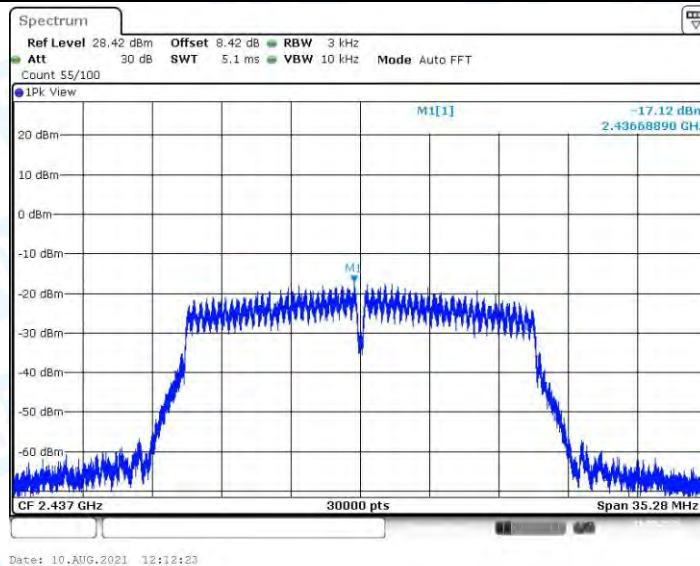
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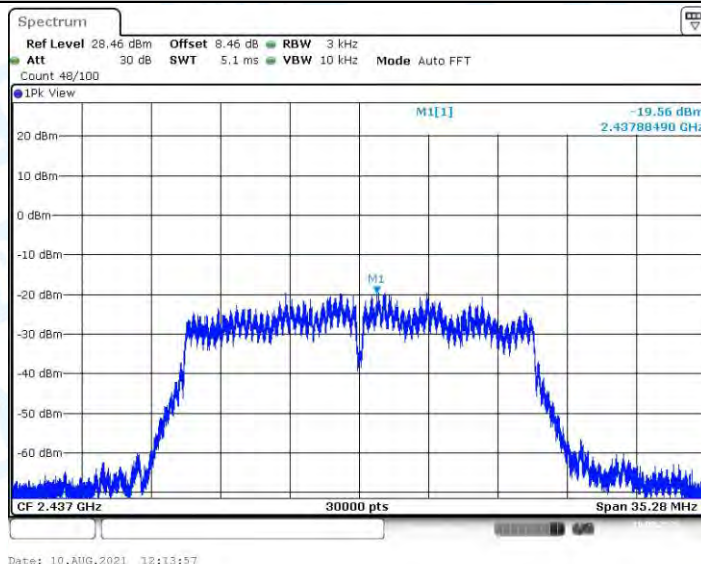
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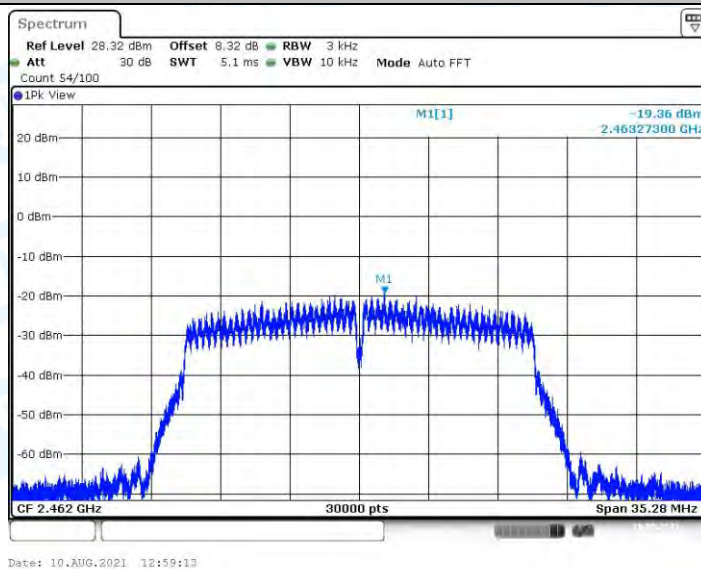
11N20MIMO_Ant1_2437



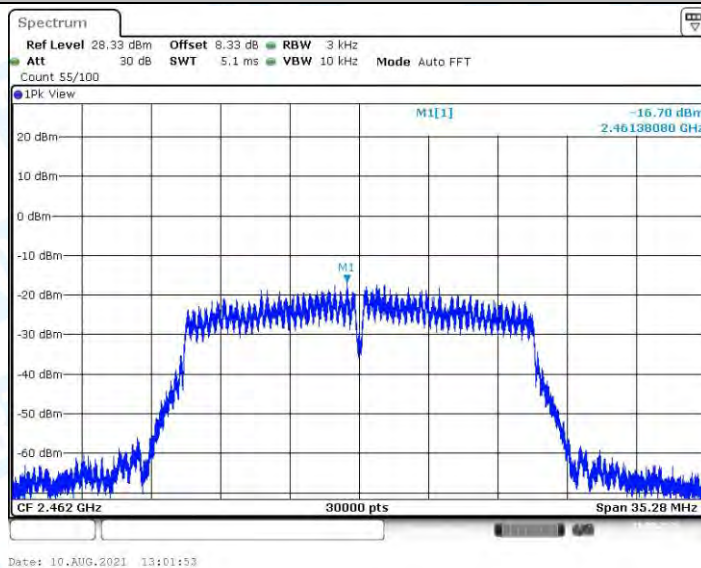
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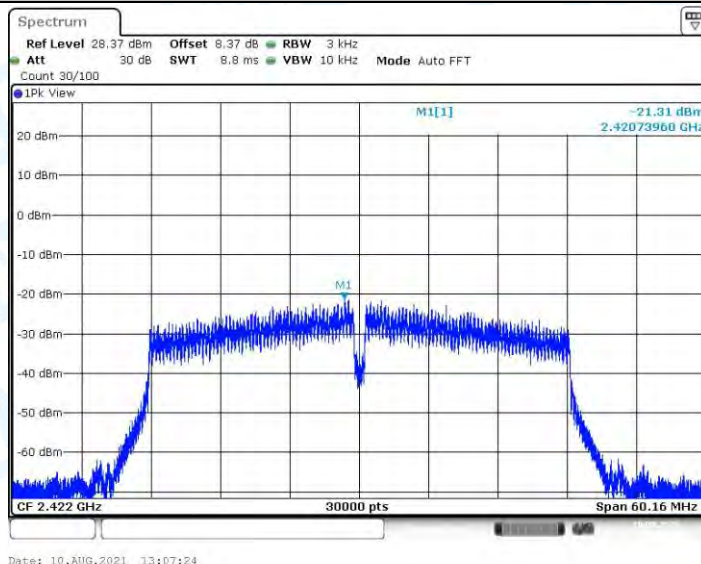
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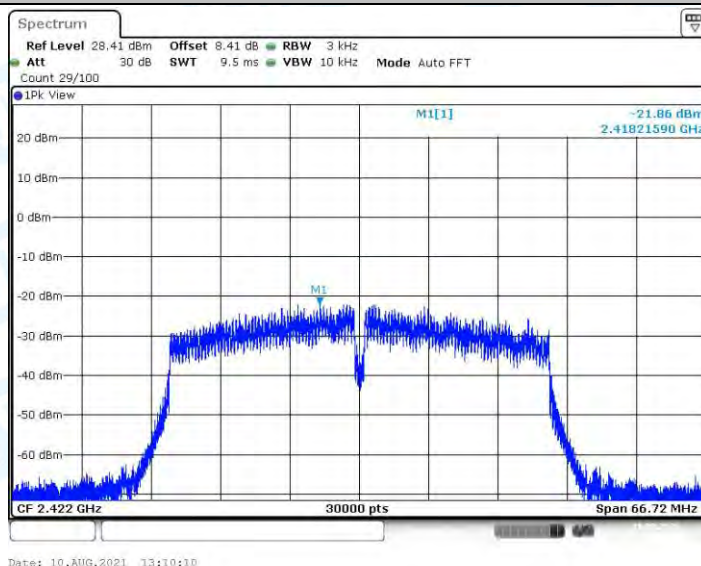
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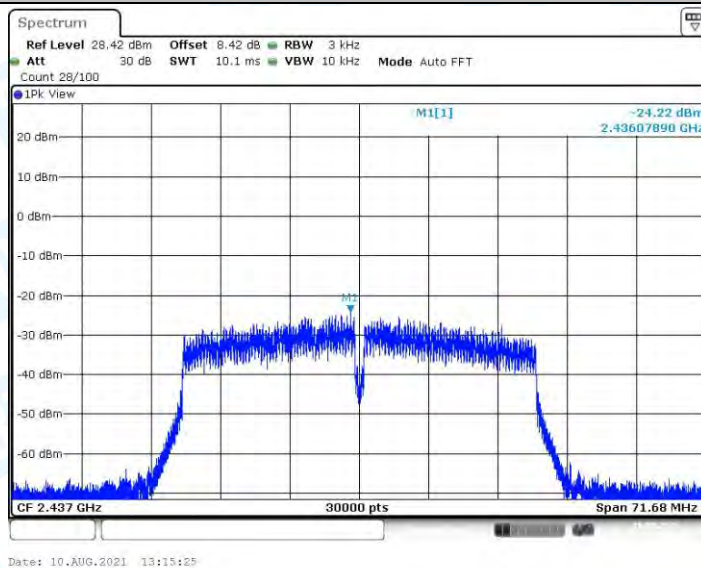
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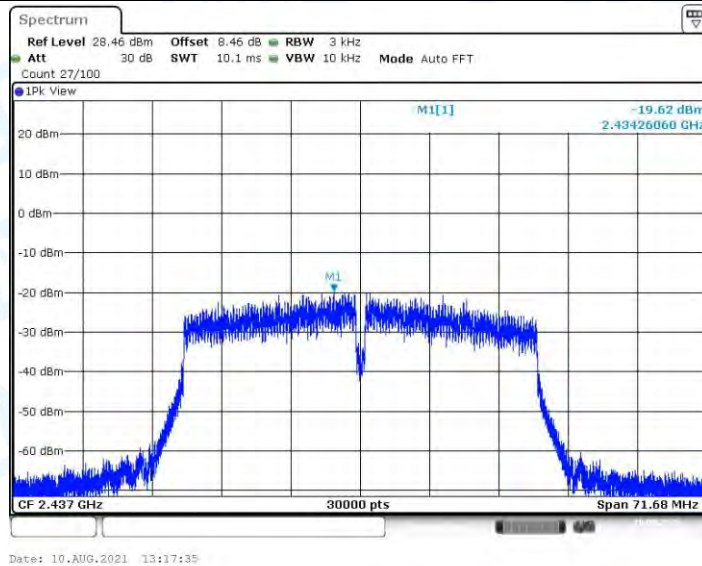
11N40MIMO_Ant2_2422



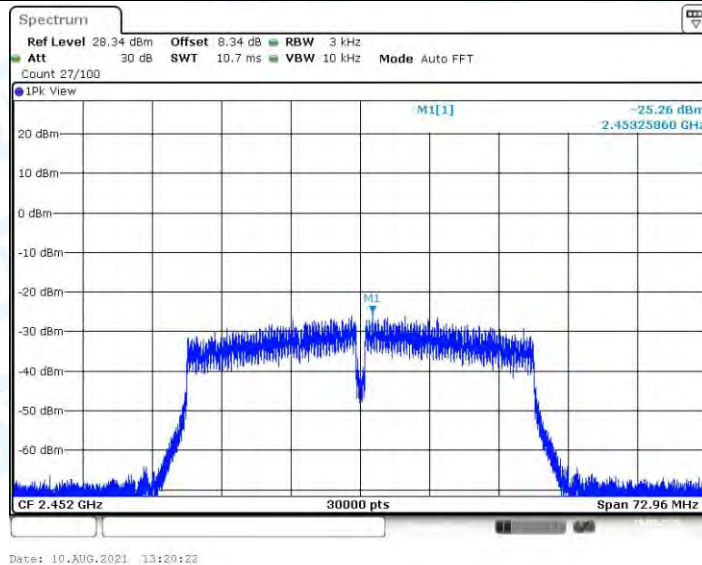
11N40MIMO_Ant1_2437



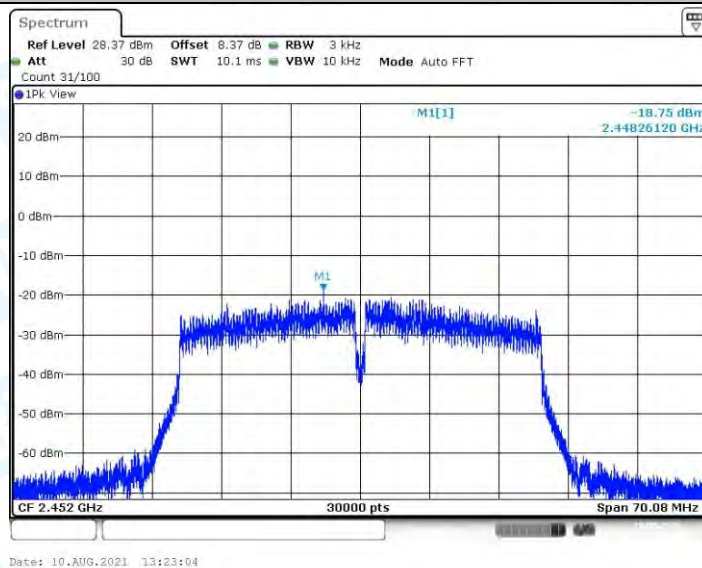
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



5. Band edge measurements

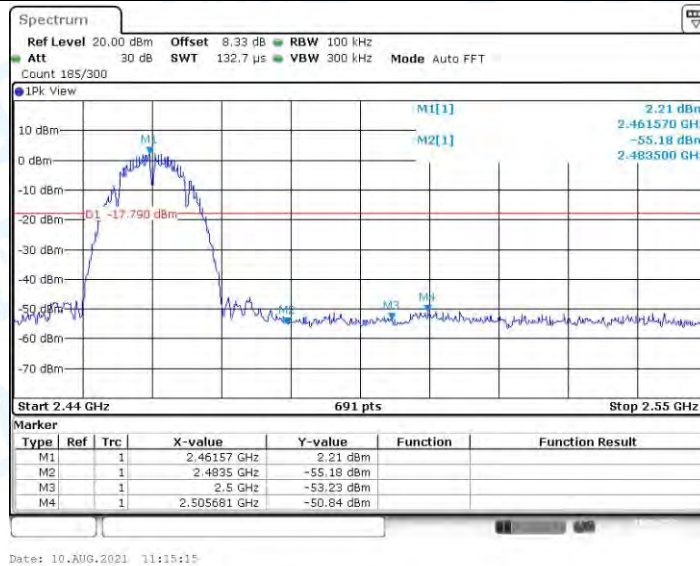
5.1. Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B-CDD	Ant1	Low	2412	1.98	-40.32	<=-18.02	PASS
	Ant2	Low	2412	0.75	-49.14	<=-19.25	PASS
	Ant1	High	2462	0.36	-50.68	<=-19.64	PASS
	Ant2	High	2462	2.21	-50.84	<=-17.79	PASS
11G-CDD	Ant1	Low	2412	-4.73	-43.92	<=-24.73	PASS
	Ant2	Low	2412	-7.77	-49.07	<=-27.77	PASS
	Ant1	High	2462	-7.47	-49.11	<=-27.47	PASS
	Ant2	High	2462	-4.31	-49.84	<=-24.31	PASS
11N20MIMO	Ant1	Low	2412	-5.10	-44.14	<=-25.1	PASS
	Ant2	Low	2412	-5.83	-48.63	<=-25.83	PASS
	Ant1	High	2462	-8.75	-50.17	<=-28.75	PASS
	Ant2	High	2462	-5.31	-50.22	<=-25.31	PASS
11N40MIMO	Ant1	Low	2422	-10.42	-47.78	<=-30.42	PASS
	Ant2	Low	2422	-9.80	-48.1	<=-29.8	PASS
	Ant1	High	2452	-14.28	-49.83	<=-34.28	PASS
	Ant2	High	2452	-7.44	-50.7	<=-27.44	PASS

5.2. Test Graphs



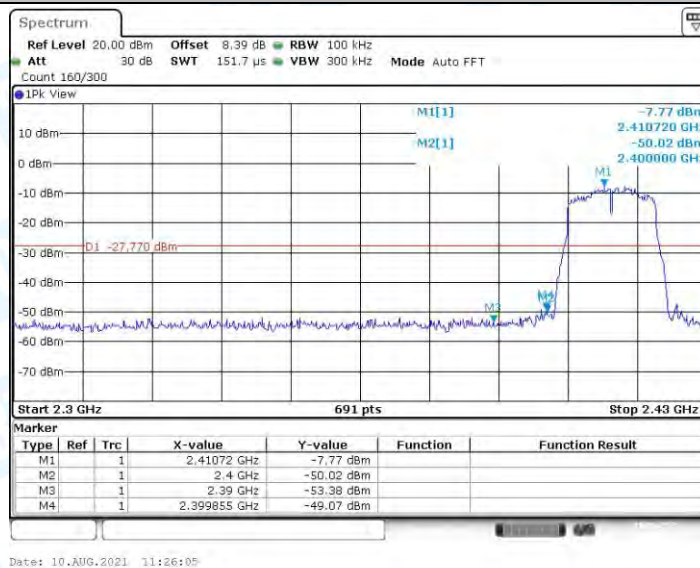
11B-CDD_Ant2_High_2462



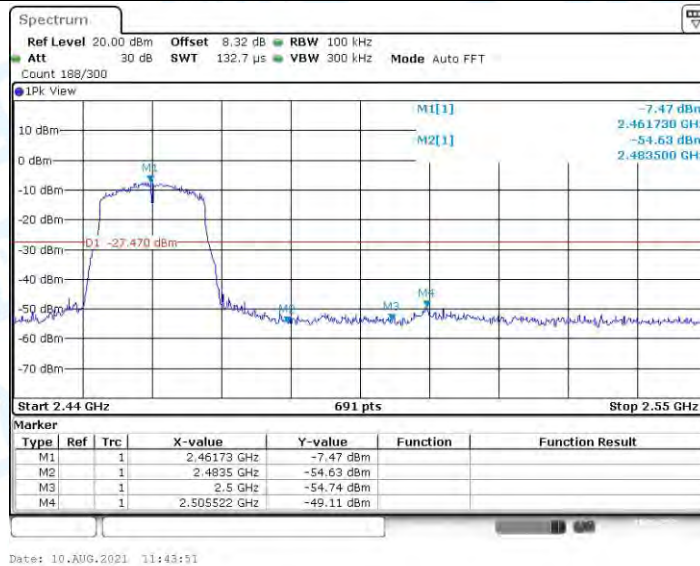
11G-CDD_Ant1_Low_2412



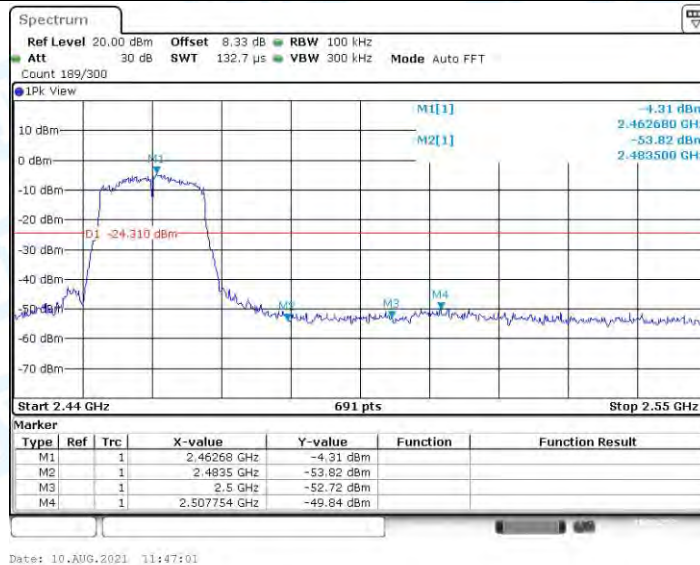
11G-CDD_Ant2_Low_2412



11G-CDD_Ant1_High_2462



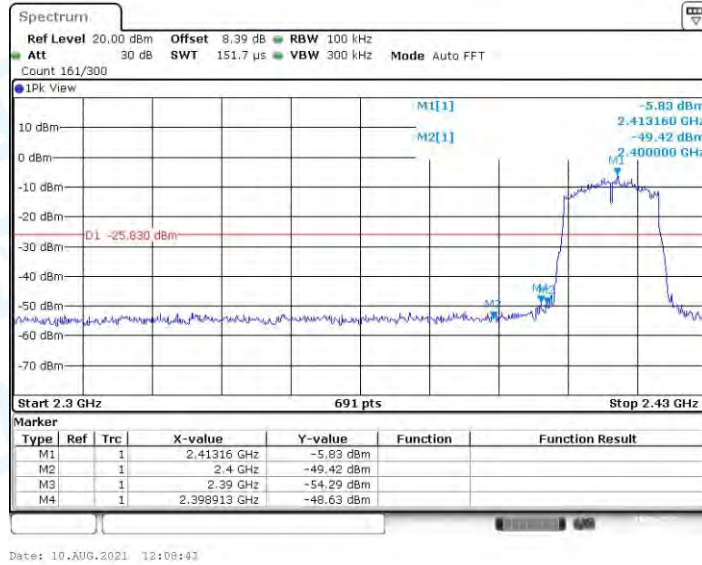
11G-CDD_Ant2_High_2462



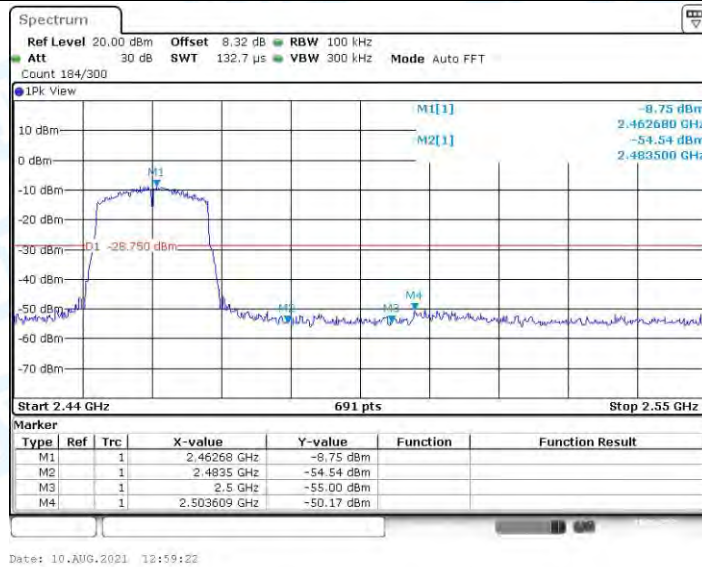
11N20MIMO_Ant1_Low_2412



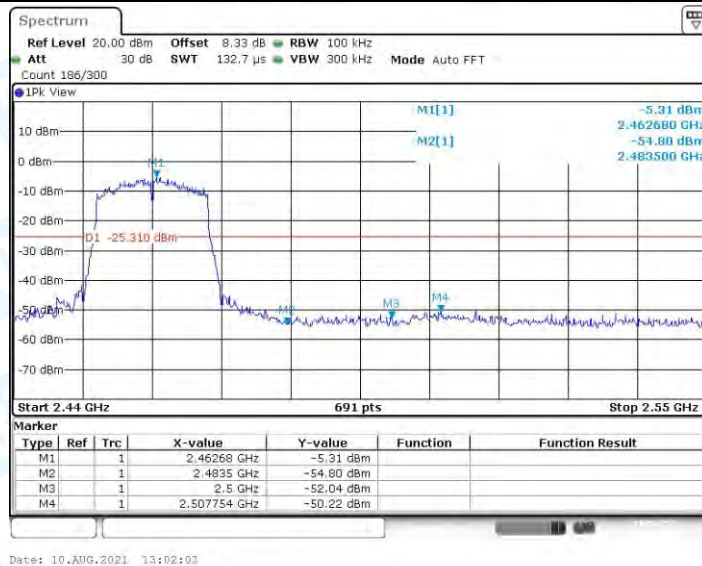
11N20MIMO_Ant2_Low_2412



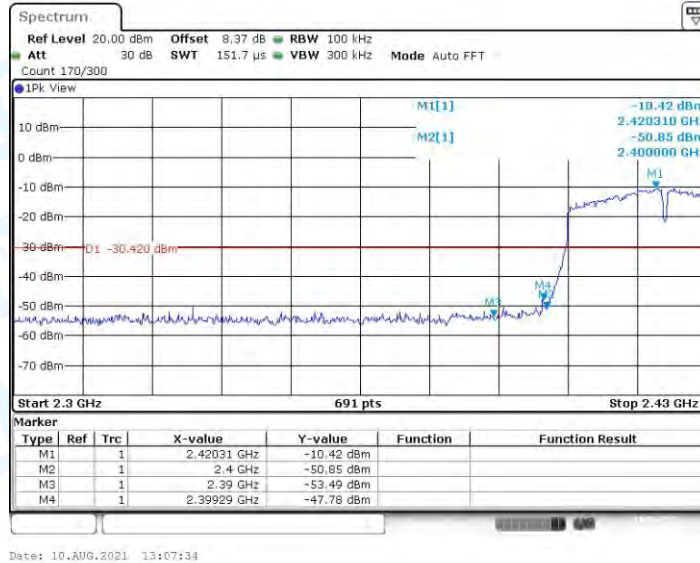
11N20MIMO_Ant1_High_2462



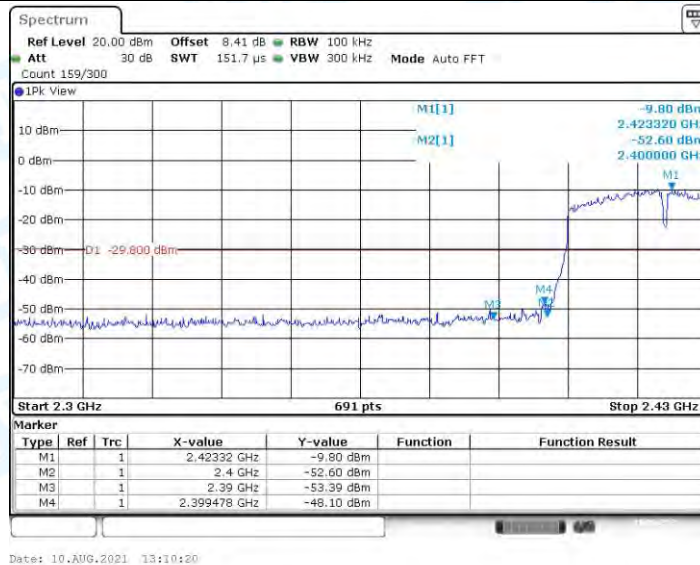
11N20MIMO_Ant2_High_2462



11N40MIMO_Ant1_Low_2422

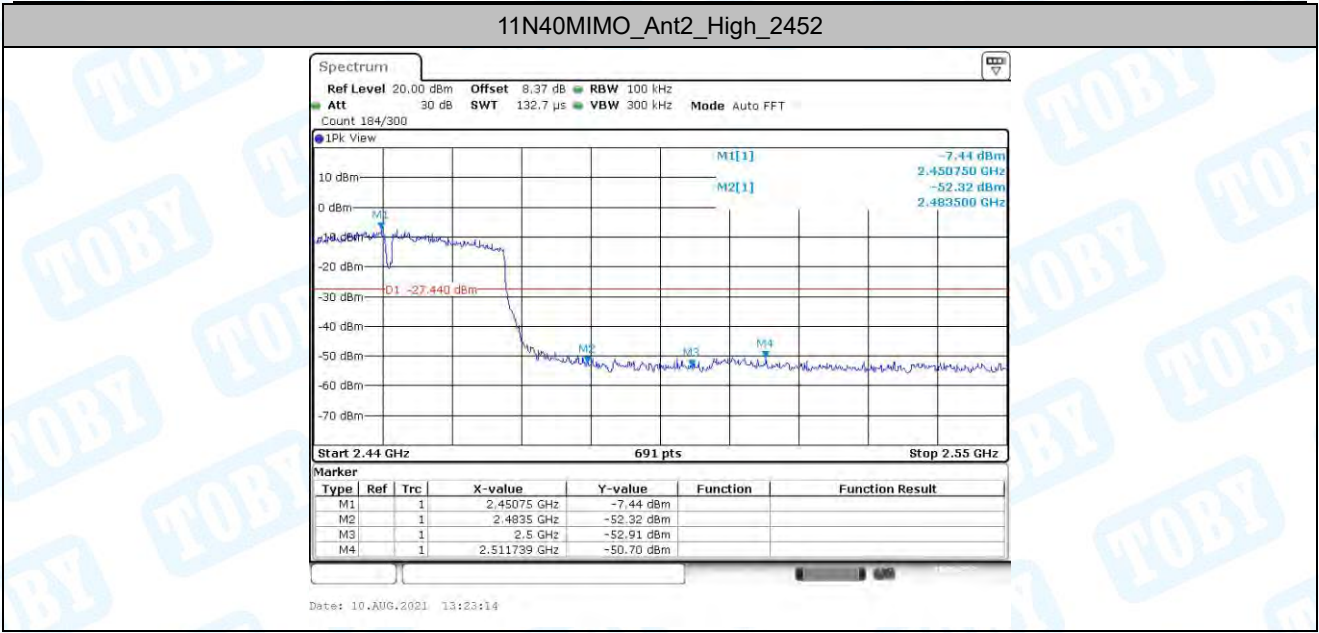


11N40MIMO_Ant2_Low_2422



11N40MIMO_Ant1_High_2452





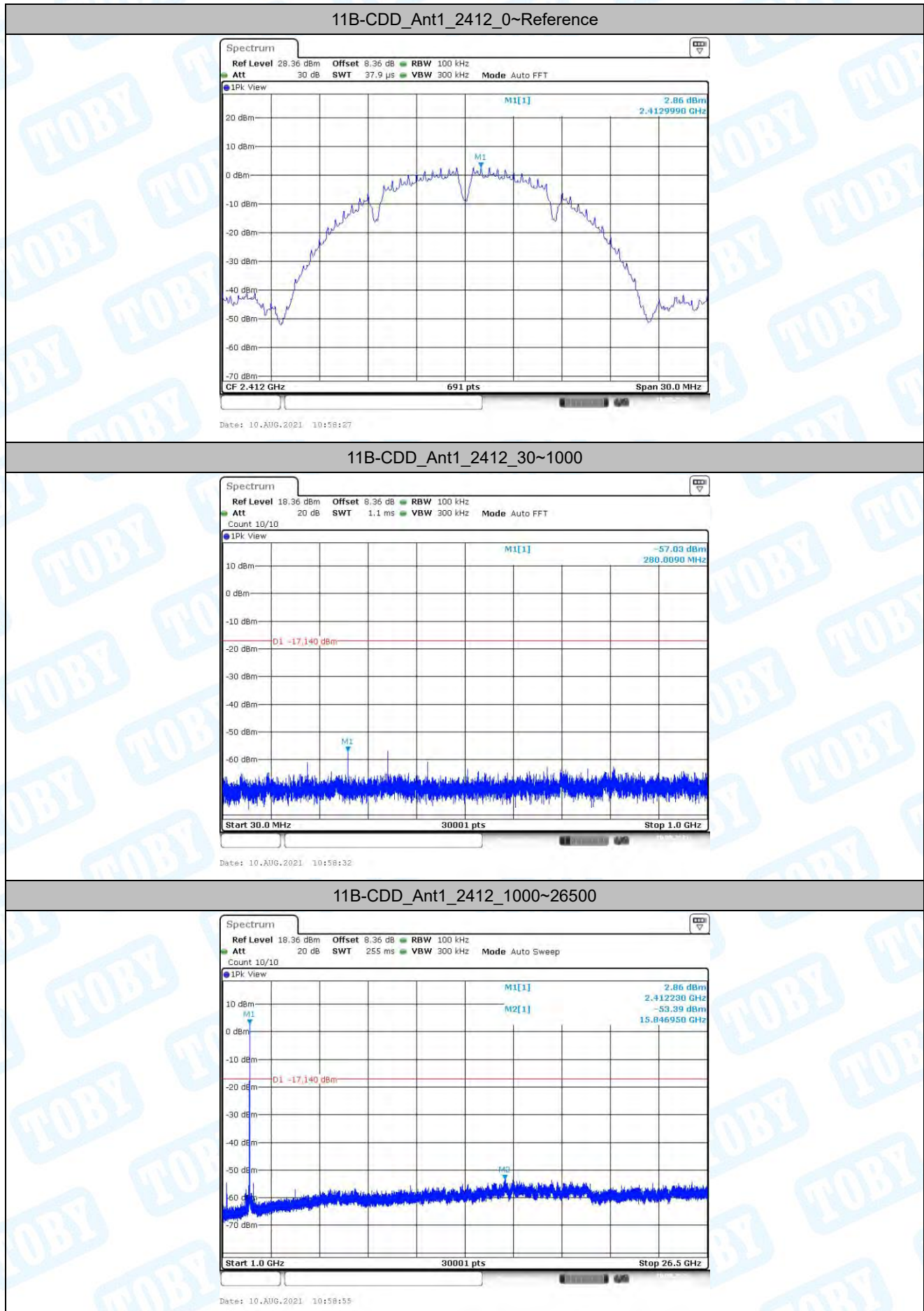
6. Conducted Spurious Emission

6.1. Test Result

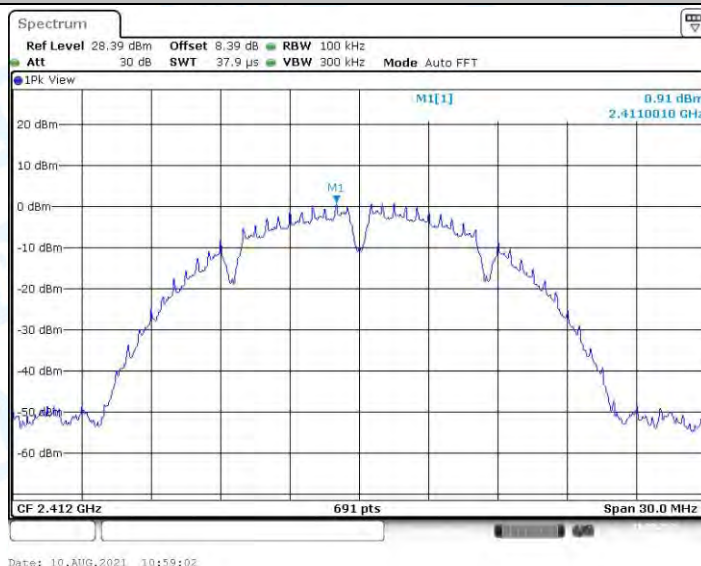
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B-CDD	Ant1	2412	Reference	2.86	2.86	---	PASS
			30~1000	2.86	-57.03	<=-17.14	PASS
			1000~26500	2.86	-53.39	<=-17.14	PASS
	Ant2	2412	Reference	0.91	0.91	---	PASS
			30~1000	0.91	-59.89	<=-19.09	PASS
			1000~26500	0.91	-53.06	<=-19.09	PASS
	Ant1	2437	Reference	-0.38	-0.38	---	PASS
			30~1000	-0.38	-56.9	<=-20.38	PASS
			1000~26500	-0.38	-53.23	<=-20.38	PASS
	Ant2	2437	Reference	1.62	1.62	---	PASS
			30~1000	1.62	-59.04	<=-18.38	PASS
			1000~26500	1.62	-52.76	<=-18.38	PASS
	Ant1	2462	Reference	0.26	0.26	---	PASS
			30~1000	0.26	-56.66	<=-19.74	PASS
			1000~26500	0.26	-53.29	<=-19.74	PASS
	Ant2	2462	Reference	1.98	1.98	---	PASS
			30~1000	1.98	-59.88	<=-18.02	PASS
			1000~26500	1.98	-52.44	<=-18.02	PASS
11G-CDD	Ant1	2412	Reference	-3.47	-3.47	---	PASS
			30~1000	-3.47	-55.88	<=-23.47	PASS
			1000~26500	-3.47	-53.41	<=-23.47	PASS
	Ant2	2412	Reference	-7.13	-7.13	---	PASS
			30~1000	-7.13	-57.58	<=-27.13	PASS
			1000~26500	-7.13	-53.47	<=-27.13	PASS
	Ant1	2437	Reference	-8.02	-8.02	---	PASS
			30~1000	-8.02	-55.89	<=-28.02	PASS
			1000~26500	-8.02	-53.35	<=-28.02	PASS
	Ant2	2437	Reference	-3.19	-3.19	---	PASS
			30~1000	-3.19	-57.19	<=-23.19	PASS
			1000~26500	-3.19	-53.05	<=-23.19	PASS
	Ant1	2462	Reference	-6.80	-6.80	---	PASS
			30~1000	-6.80	-56.45	<=-26.8	PASS
			1000~26500	-6.80	-52.86	<=-26.8	PASS
	Ant2	2462	Reference	-3.46	-3.46	---	PASS
			30~1000	-3.46	-59.03	<=-23.46	PASS
			1000~26500	-3.46	-53.06	<=-23.46	PASS
11N20MIMO	Ant1	2412	Reference	-4.75	-4.75	---	PASS
			30~1000	-4.75	-55.85	<=-24.75	PASS
			1000~26500	-4.75	-53.28	<=-24.75	PASS
	Ant2	2412	Reference	-7.29	-7.29	---	PASS
			30~1000	-7.29	-58.28	<=-27.29	PASS

	Ant1	2437	1000~26500	-7.29	-52.96	<=-27.29	PASS
			Reference	-5.85	-5.85	---	PASS
			30~1000	-5.85	-55.42	<=-25.85	PASS
			1000~26500	-5.85	-52.45	<=-25.85	PASS
	Ant2	2437	Reference	-7.08	-7.08	---	PASS
			30~1000	-7.08	-57.95	<=-27.08	PASS
			1000~26500	-7.08	-53.54	<=-27.08	PASS
	Ant1	2462	Reference	-8.21	-8.21	---	PASS
			30~1000	-8.21	-56.1	<=-28.21	PASS
			1000~26500	-8.21	-52.5	<=-28.21	PASS
	Ant2	2462	Reference	-5.11	-5.11	---	PASS
			30~1000	-5.11	-58.06	<=-25.11	PASS
			1000~26500	-5.11	-53.41	<=-25.11	PASS
11N40MIMO	Ant1	2422	Reference	-10.34	-10.34	---	PASS
			30~1000	-10.34	-55.63	<=-30.34	PASS
			1000~26500	-10.34	-53.7	<=-30.34	PASS
	Ant2	2422	Reference	-9.66	-9.66	---	PASS
			30~1000	-9.66	-58.11	<=-29.66	PASS
			1000~26500	-9.66	-53.63	<=-29.66	PASS
	Ant1	2437	Reference	-13.47	-13.47	---	PASS
			30~1000	-13.47	-55.26	<=-33.47	PASS
			1000~26500	-13.47	-52.91	<=-33.47	PASS
	Ant2	2437	Reference	-7.57	-7.57	---	PASS
			30~1000	-7.57	-58.3	<=-27.57	PASS
			1000~26500	-7.57	-52.67	<=-27.57	PASS
	Ant1	2452	Reference	-14.67	-14.67	---	PASS
			30~1000	-14.67	-55.11	<=-34.67	PASS
			1000~26500	-14.67	-52.04	<=-34.67	PASS
	Ant2	2452	Reference	-6.91	-6.91	---	PASS
			30~1000	-6.91	-58.41	<=-26.91	PASS
			1000~26500	-6.91	-52.67	<=-26.91	PASS

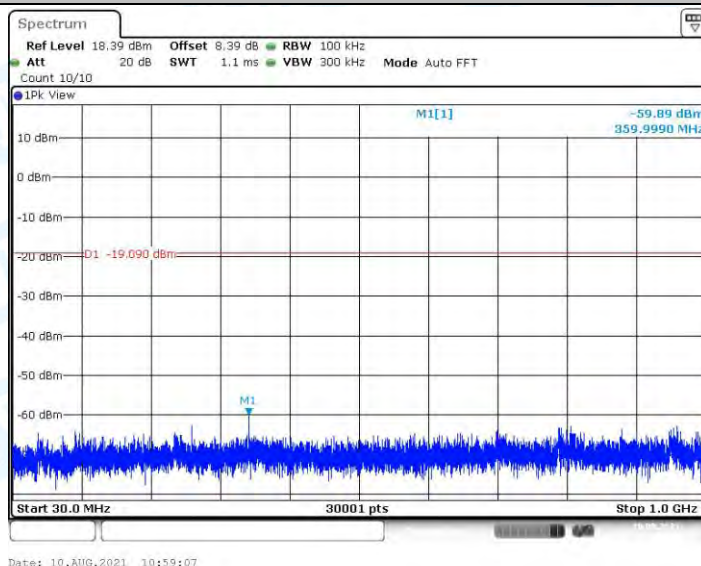
6.2. Test Graphs



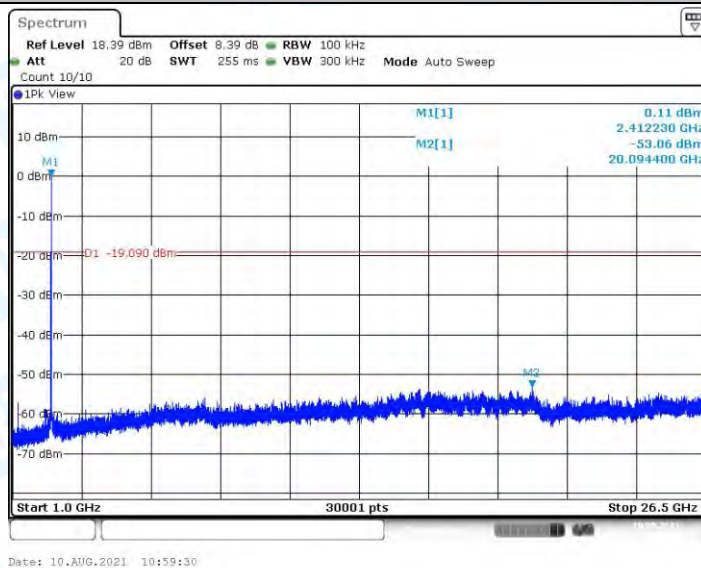
11B-CDD_Ant2_2412_0~Reference



11B-CDD_Ant2_2412_30~1000



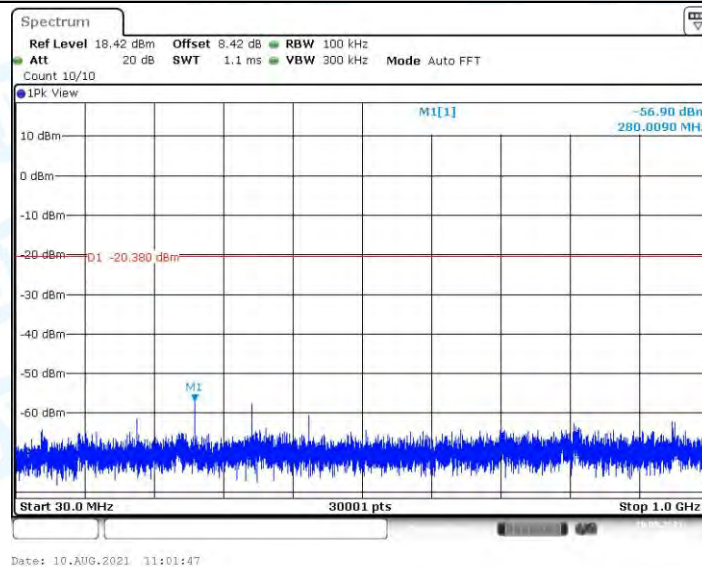
11B-CDD_Ant2_2412_1000~26500



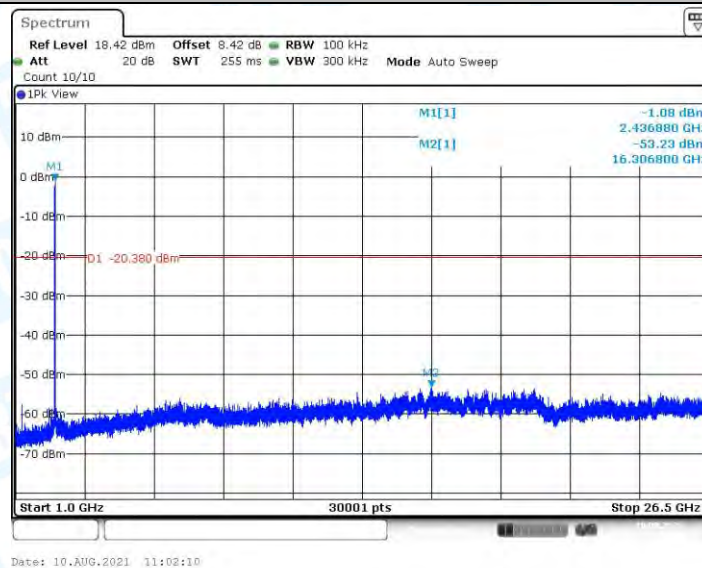
11B-CDD_Ant1_2437_0~Reference



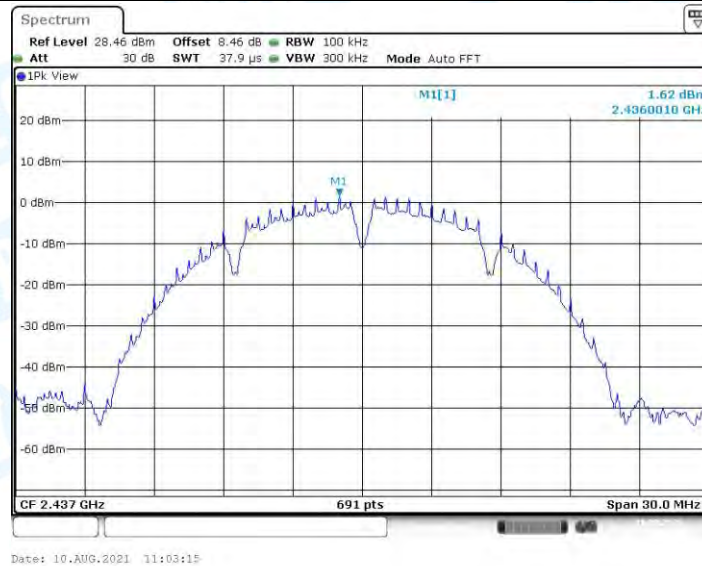
11B-CDD_Ant1_2437_30~1000



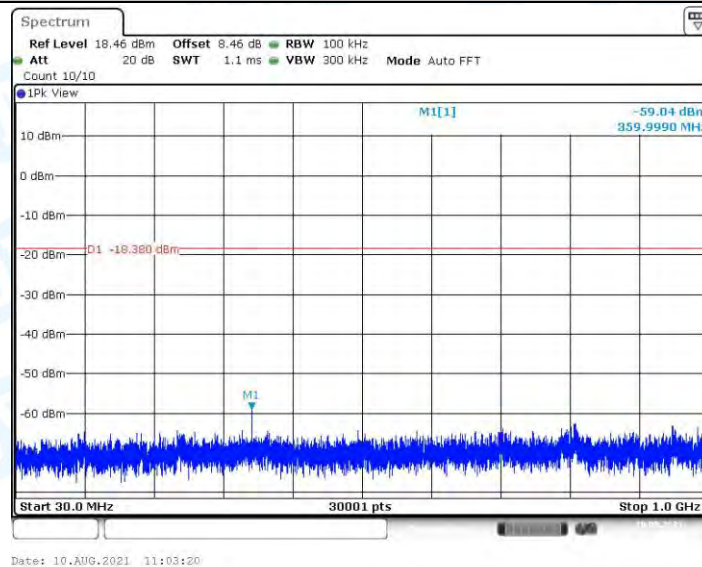
11B-CDD_Ant1_2437_1000~26500



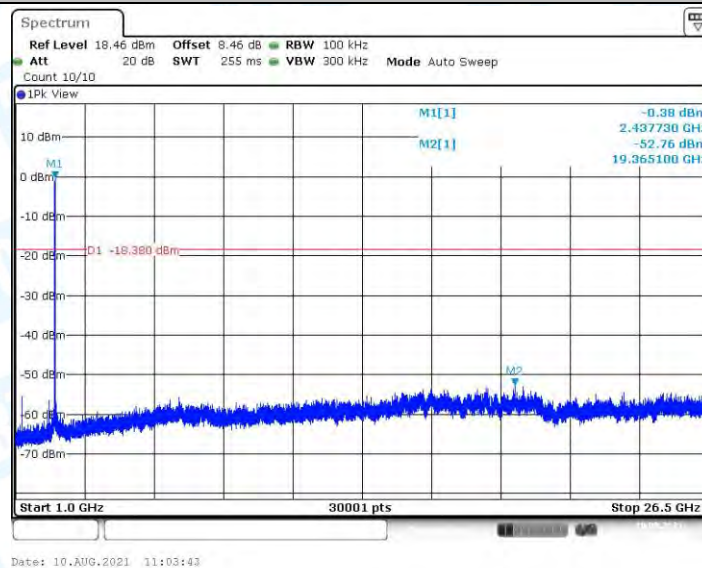
11B-CDD_Ant2_2437_0~Reference



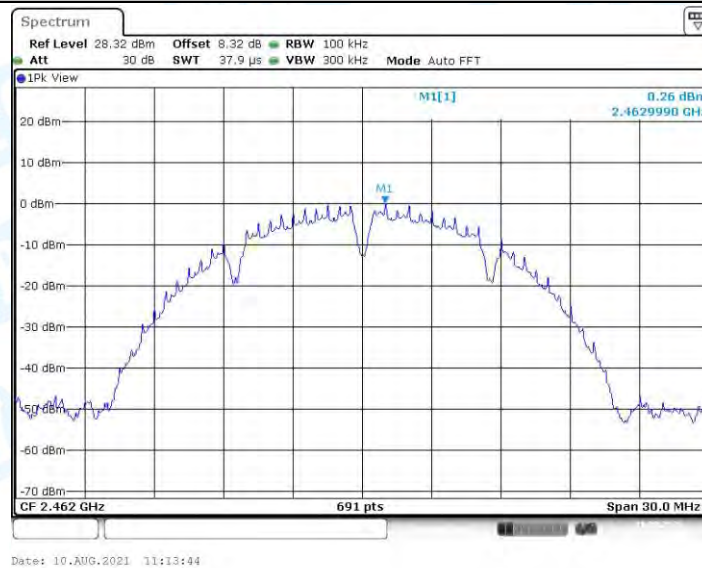
11B-CDD_Ant2_2437_30~1000



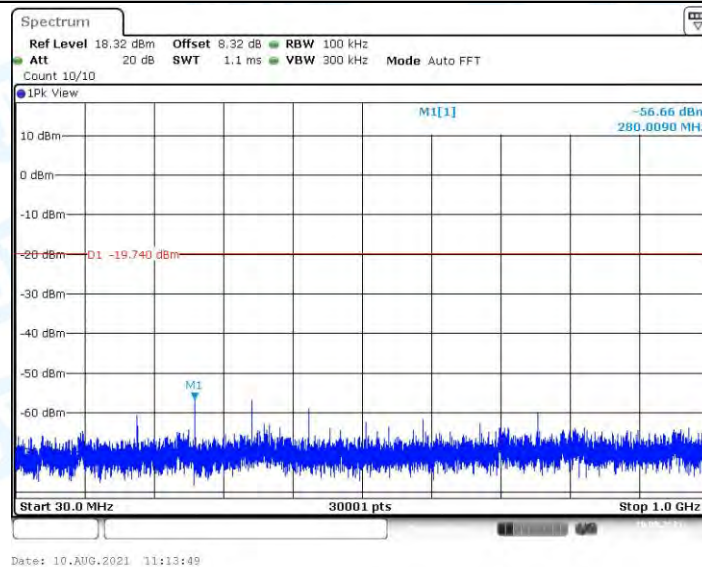
11B-CDD_Ant2_2437_1000~26500



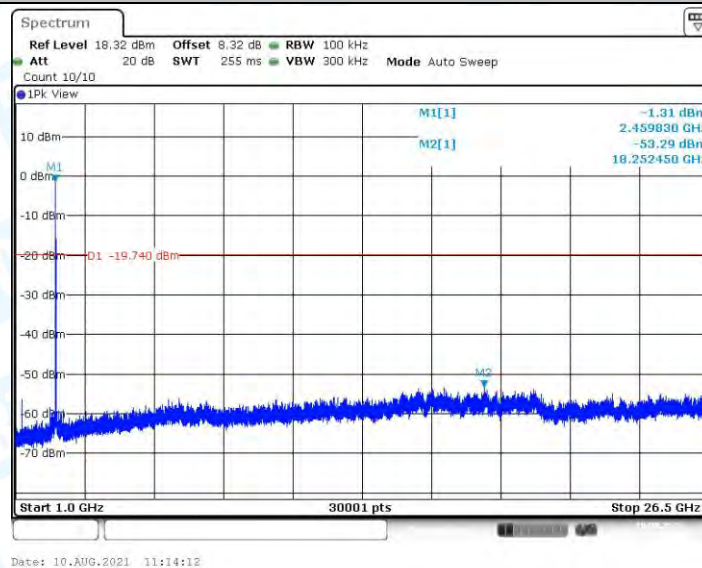
11B-CDD_Ant1_2462_0~Reference



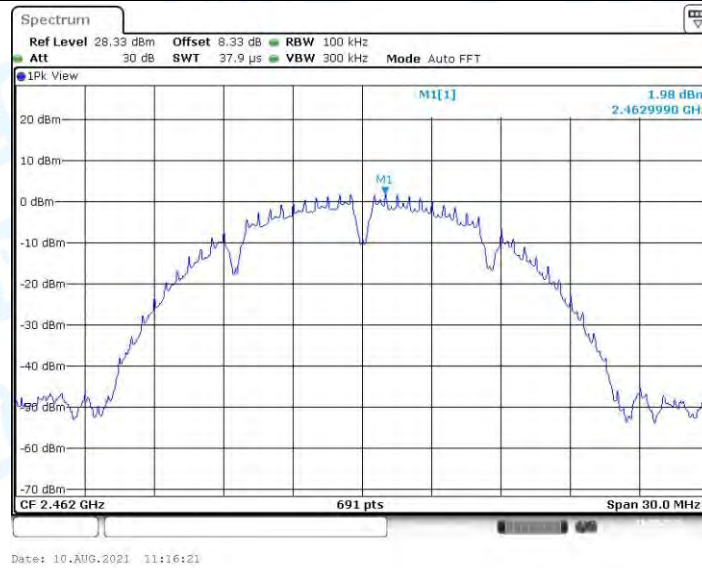
11B-CDD_Ant1_2462_30~1000



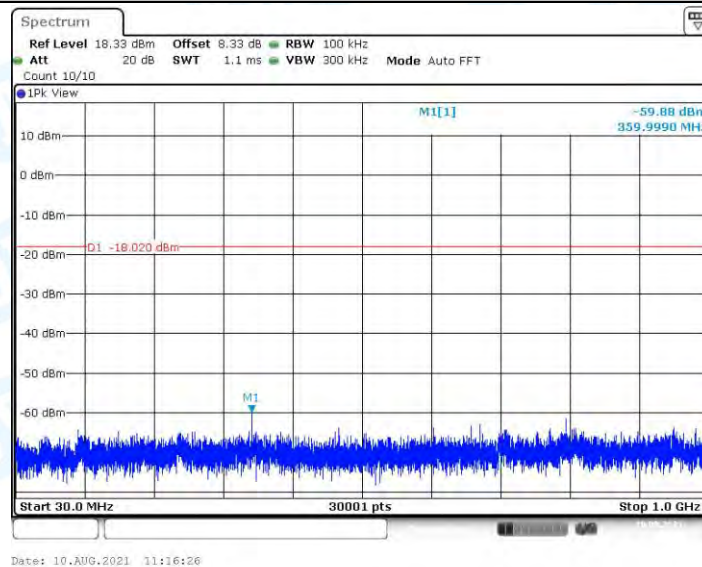
11B-CDD_Ant1_2462_1000~26500



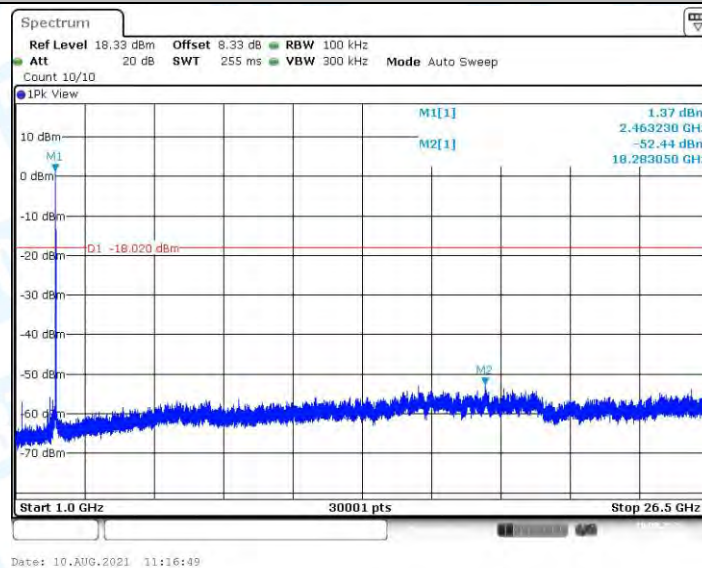
11B-CDD_Ant2_2462_0~Reference



11B-CDD_Ant2_2462_30~1000



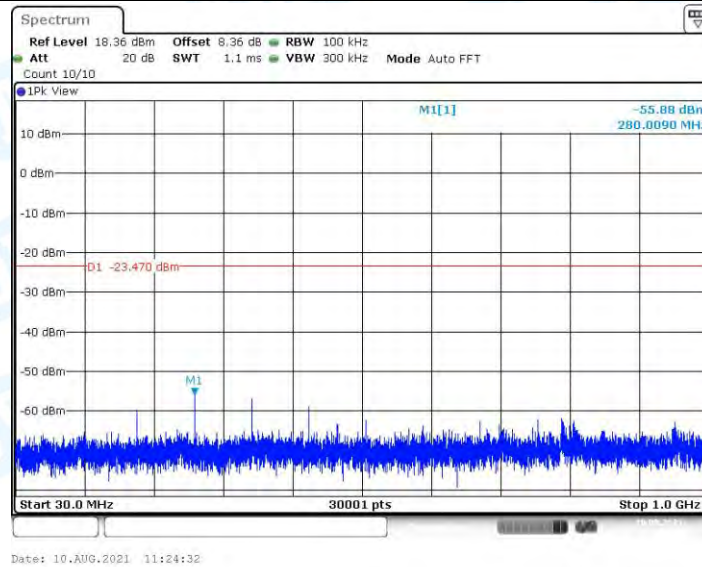
11B-CDD_Ant2_2462_1000~26500



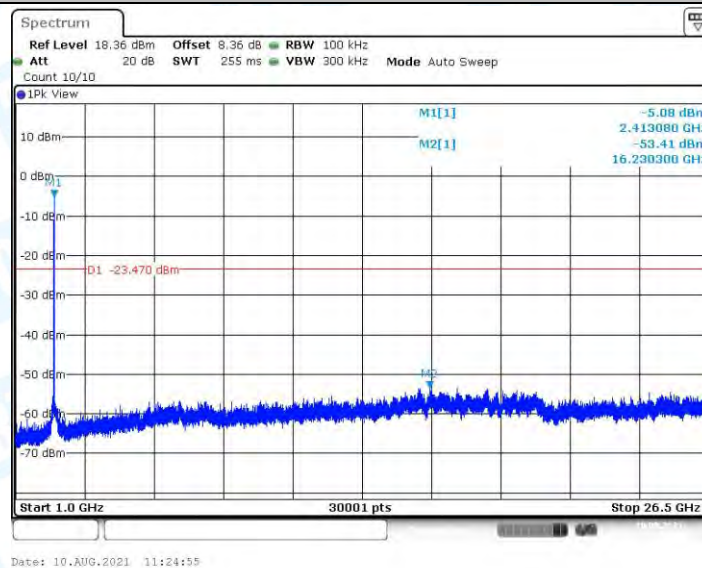
11G-CDD_Ant1_2412_0~Reference



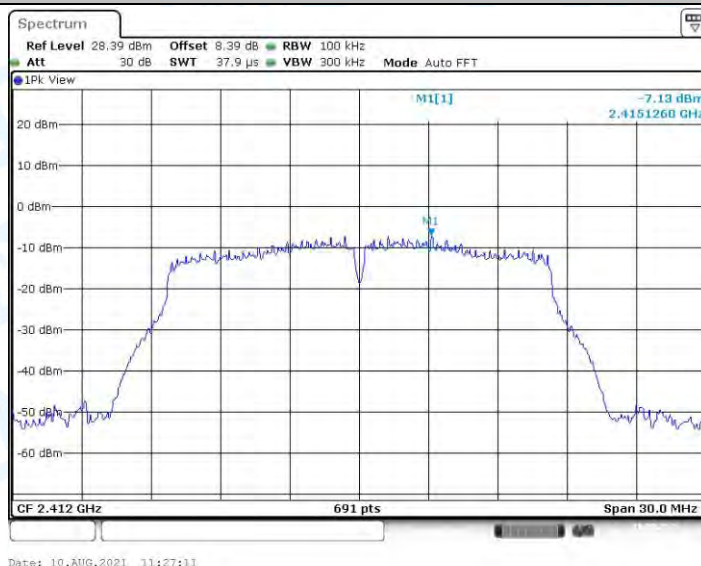
11G-CDD_Ant1_2412_30~1000



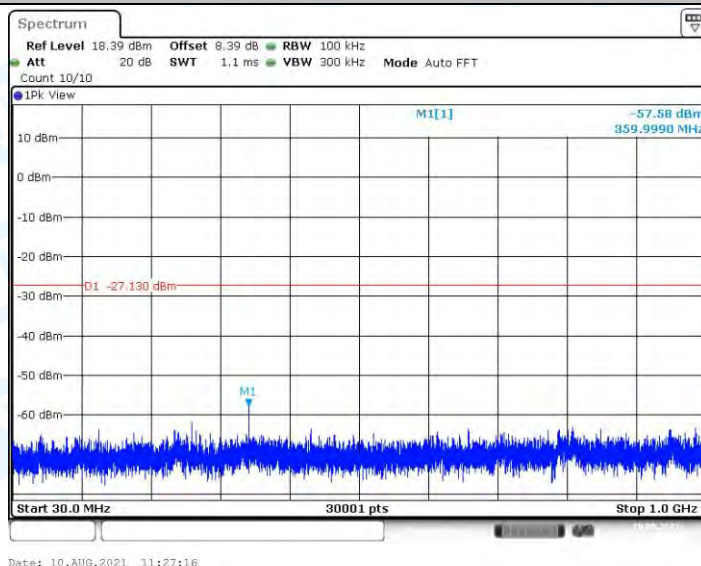
11G-CDD_Ant1_2412_1000~26500



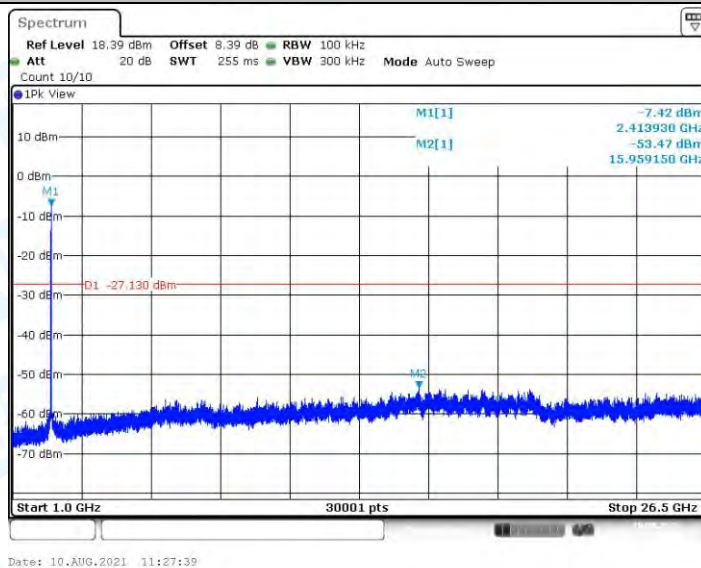
11G-CDD_Ant2_2412_0~Reference



11G-CDD_Ant2_2412_30~1000



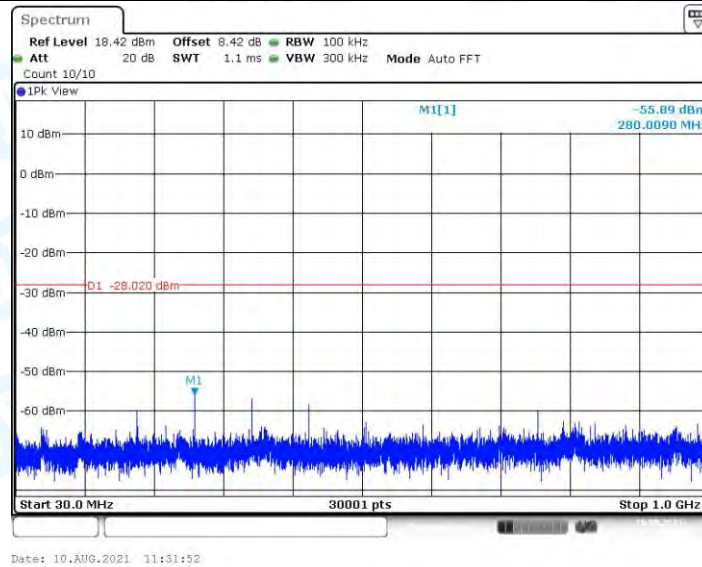
11G-CDD_Ant2_2412_1000~26500



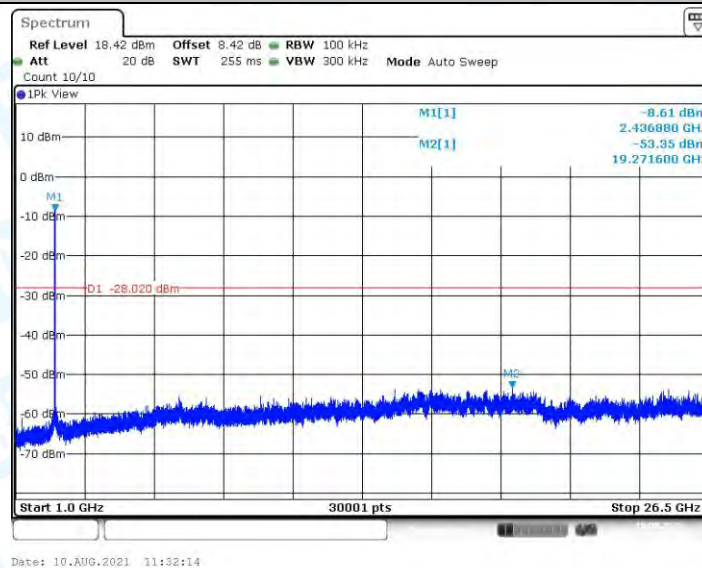
11G-CDD_Ant1_2437_0~Reference



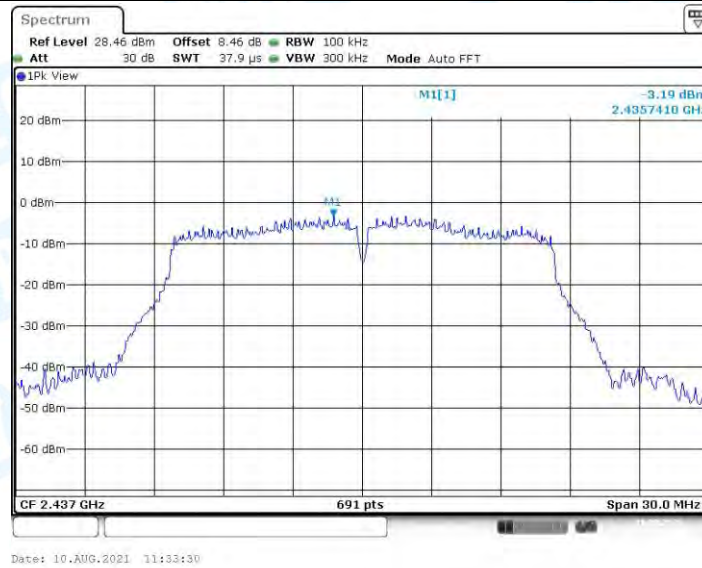
11G-CDD_Ant1_2437_30~1000



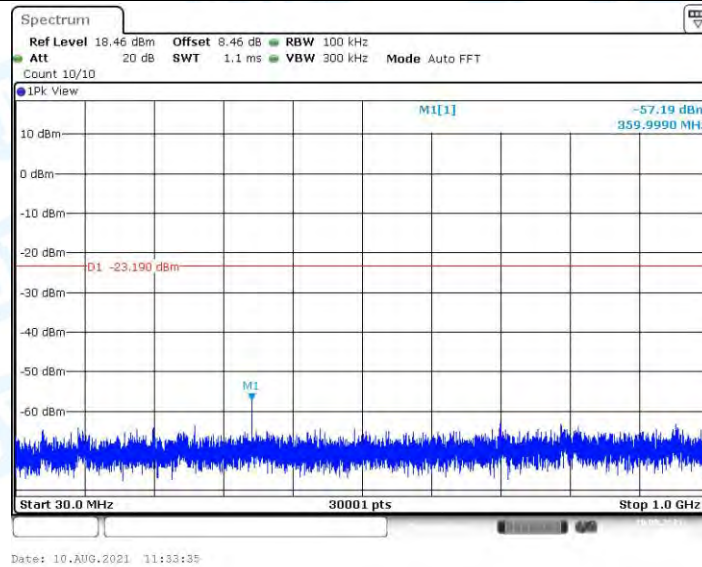
11G-CDD_Ant1_2437_1000~26500



11G-CDD_Ant2_2437_0~Reference



11G-CDD_Ant2_2437_30~1000



11G-CDD_Ant2_2437_1000~26500

