

Appendix for WLAN 2.4G

Model: ANY-NX1

BTL-FCCP-3-2203G020

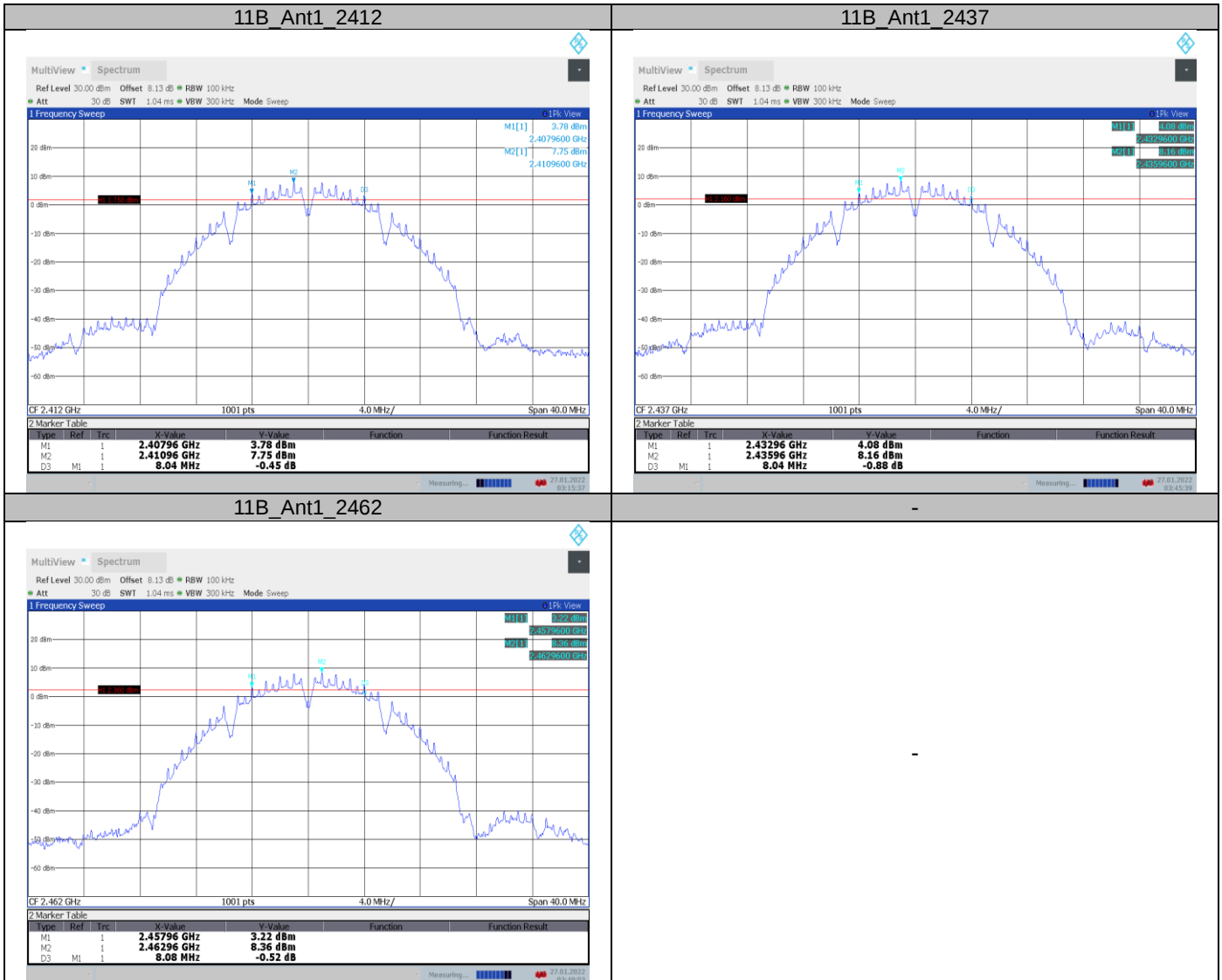
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1. APPENDIX A: 6 DB BANDWIDTH

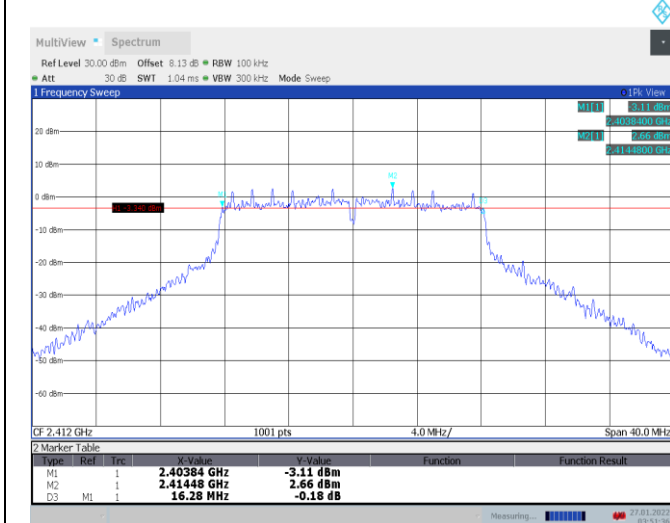
1.1 TEST RESULT

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	8.04	2407.96	2416.00	≥ 0.5	PASS
		2437	8.04	2432.96	2441.00	≥ 0.5	PASS
		2462	8.08	2457.96	2466.04	≥ 0.5	PASS
11G	Ant1	2412	16.28	2403.84	2420.12	≥ 0.5	PASS
		2417	16.04	2409.08	2425.12	≥ 0.5	PASS
		2422	15.72	2414.40	2430.12	≥ 0.5	PASS
		2437	15.32	2429.20	2444.52	≥ 0.5	PASS
		2452	15.92	2444.20	2460.12	≥ 0.5	PASS
		2457	15.00	2450.12	2465.12	≥ 0.5	PASS
		2462	15.40	2454.48	2469.88	≥ 0.5	PASS
11N20SISO	Ant1	2412	16.56	2403.56	2420.12	≥ 0.5	PASS
		2417	17.20	2408.56	2425.76	≥ 0.5	PASS
		2422	15.92	2414.48	2430.40	≥ 0.5	PASS
		2437	16.00	2428.56	2444.56	≥ 0.5	PASS
		2452	16.92	2443.60	2460.52	≥ 0.5	PASS
		2457	16.68	2449.08	2465.76	≥ 0.5	PASS
		2462	15.72	2454.40	2470.12	≥ 0.5	PASS
11N40SISO	Ant1	2422	35.12	2404.40	2439.52	≥ 0.5	PASS
		2427	35.12	2409.40	2444.52	≥ 0.5	PASS
		2432	35.04	2414.48	2449.52	≥ 0.5	PASS
		2437	35.12	2419.40	2454.52	≥ 0.5	PASS
		2442	35.04	2424.48	2459.52	≥ 0.5	PASS
		2447	36.32	2428.84	2465.16	≥ 0.5	PASS
		2452	36.32	2433.84	2470.16	≥ 0.5	PASS

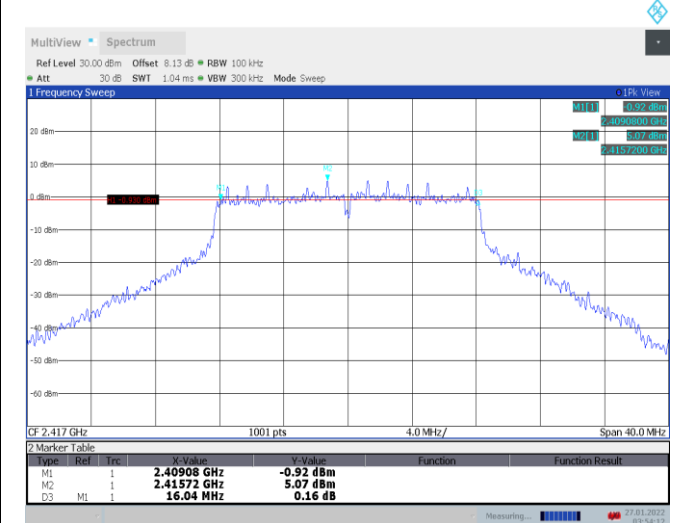
1.2 TEST GRAPHS



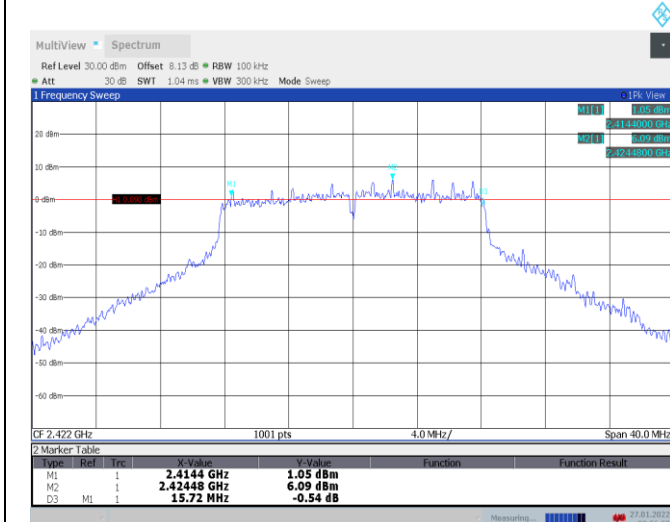
11G_Ant1_2412



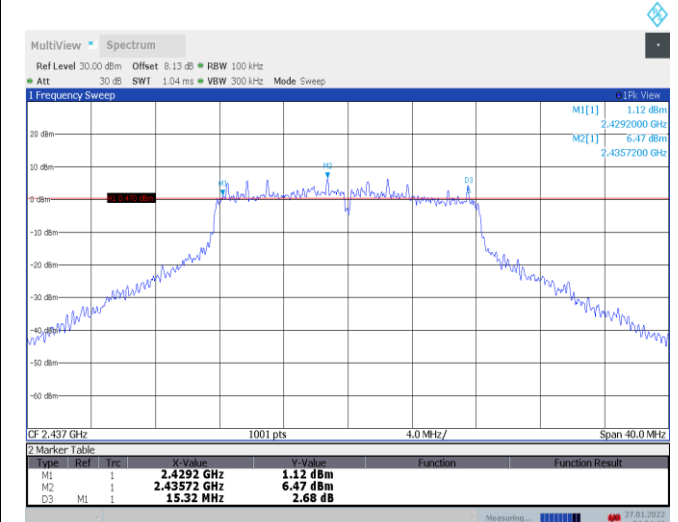
11G_Ant1_2417



11G_Ant1_2422

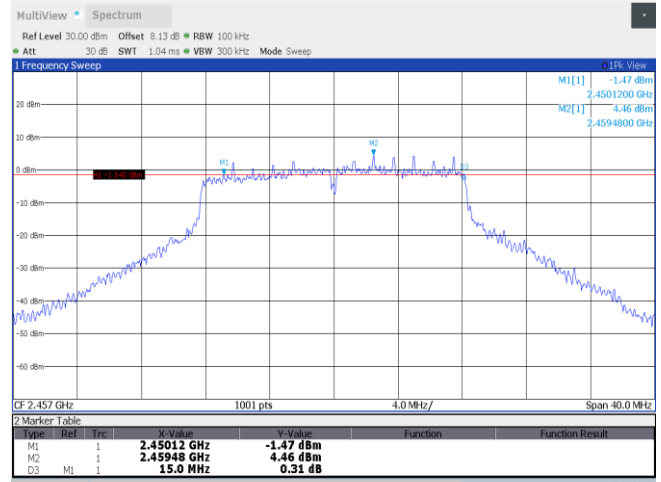
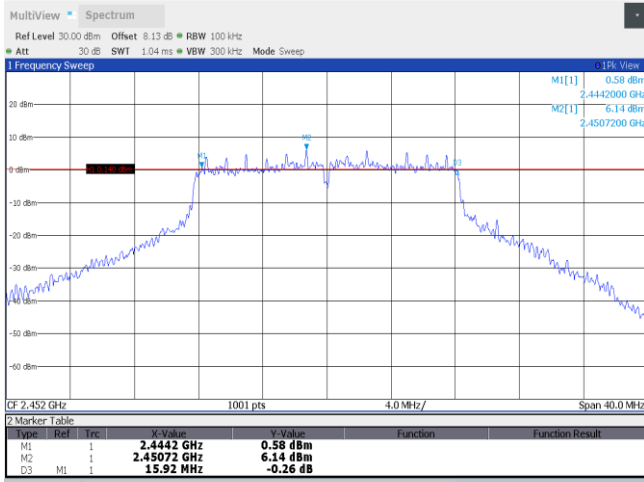


11G_Ant1_2437

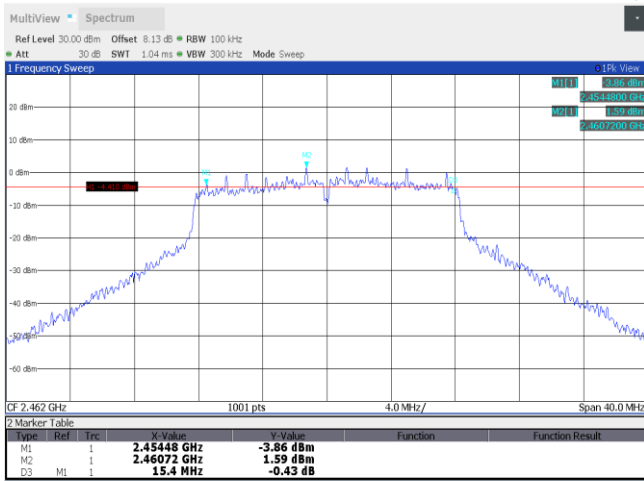


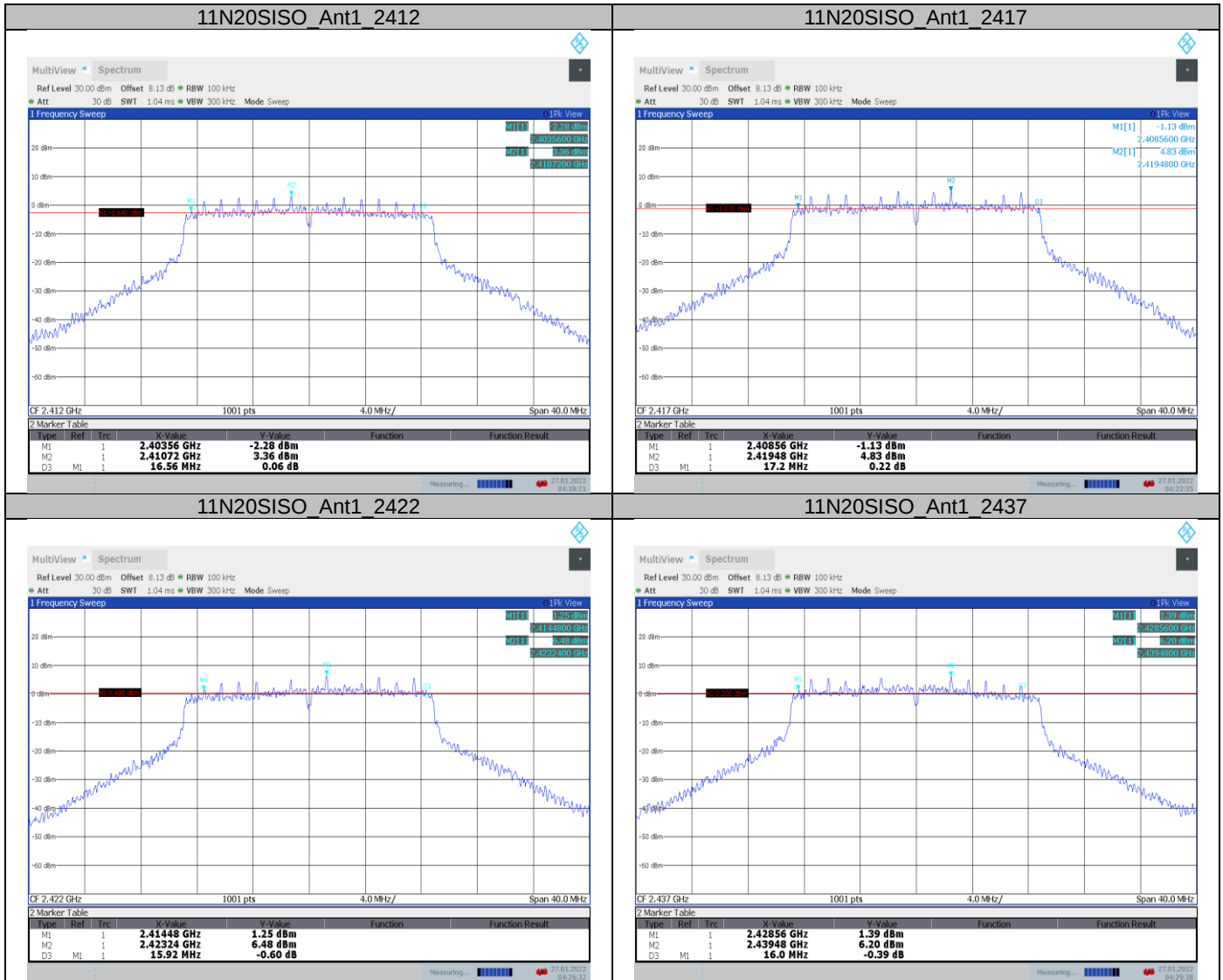
11G_Ant1_2452

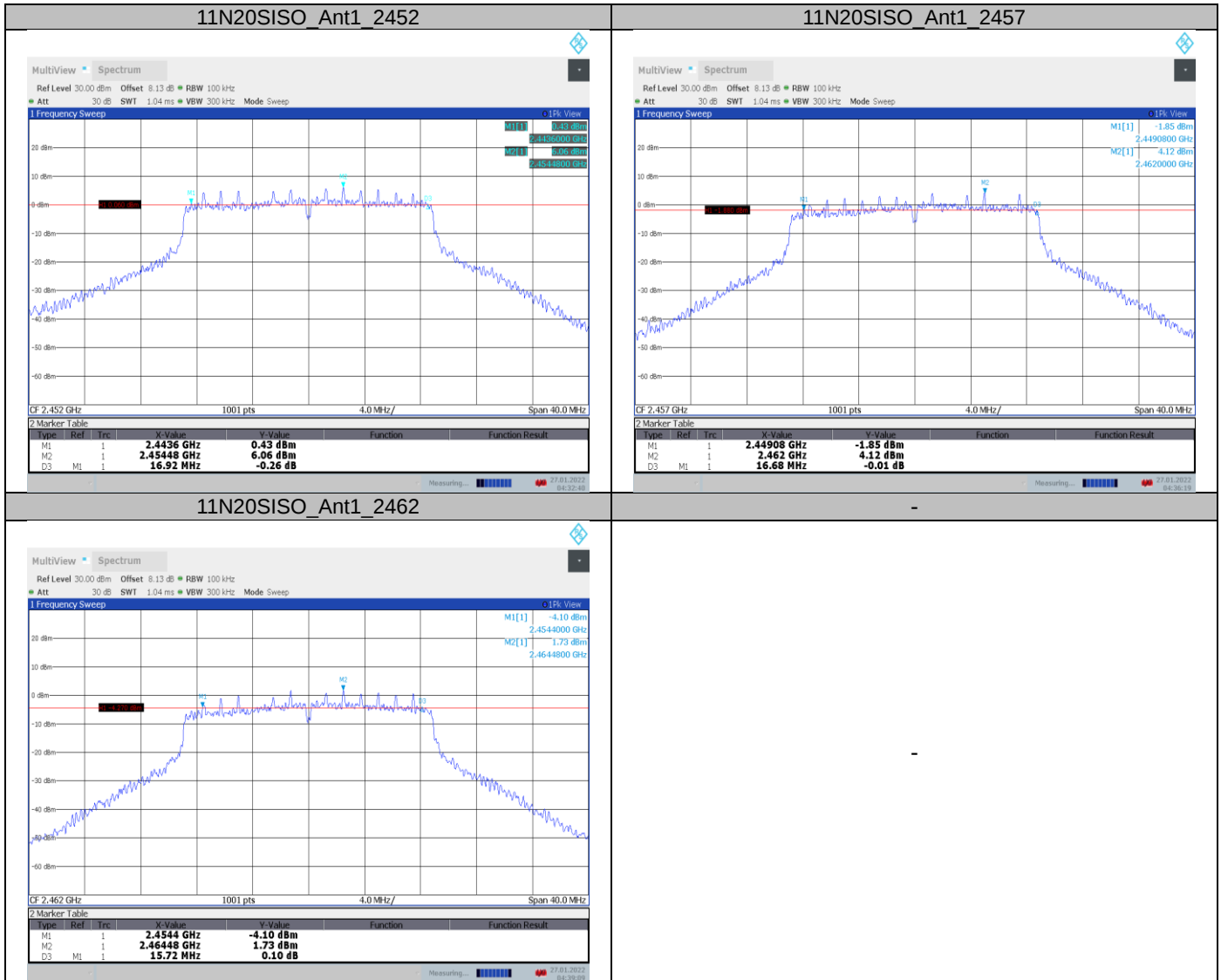
11G_Ant1_2457



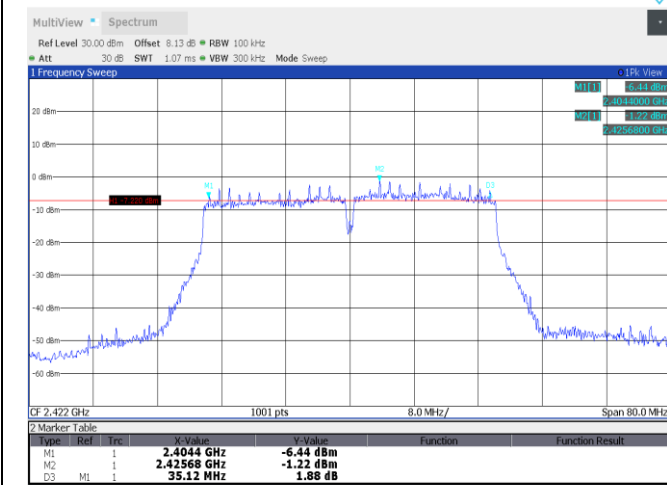
11G_Ant1_2462



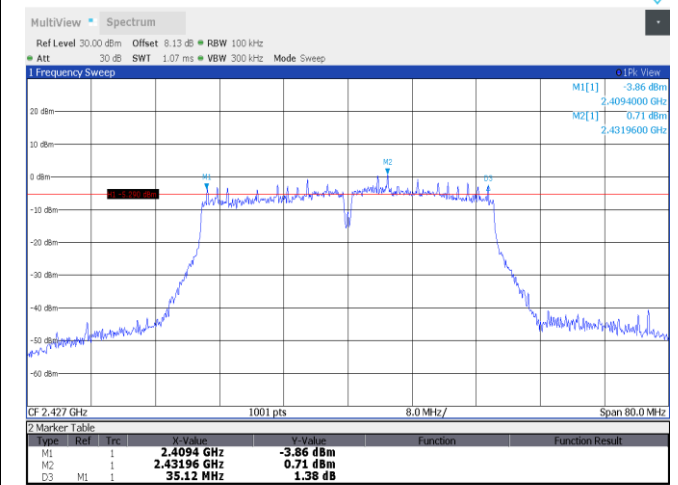




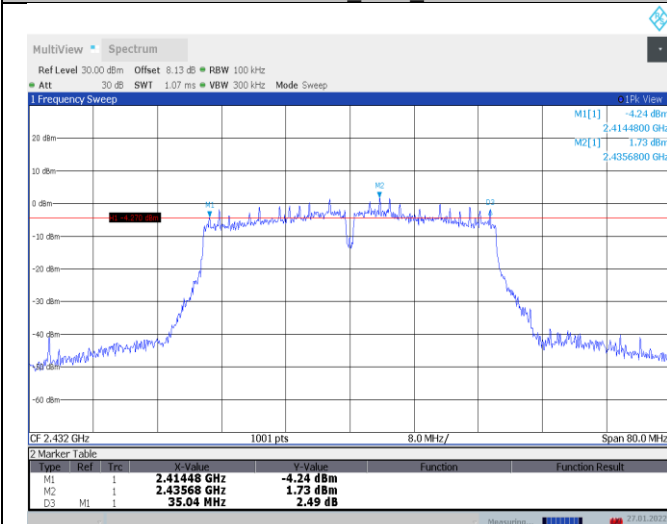
11N40SISO_Ant1_2422



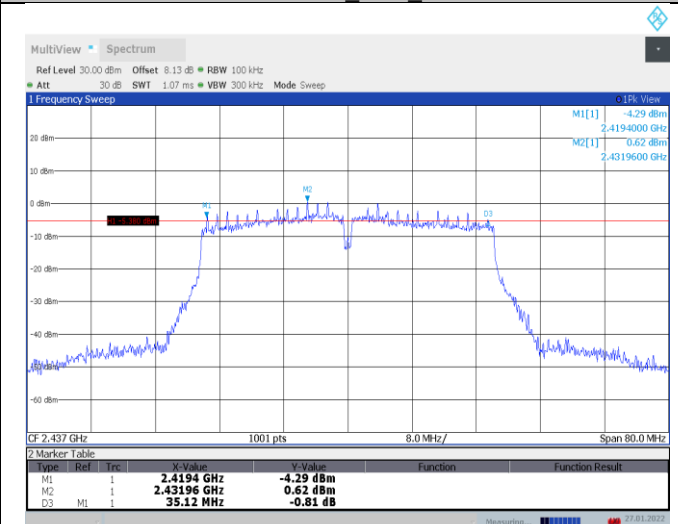
11N40SISO_Ant1_2427

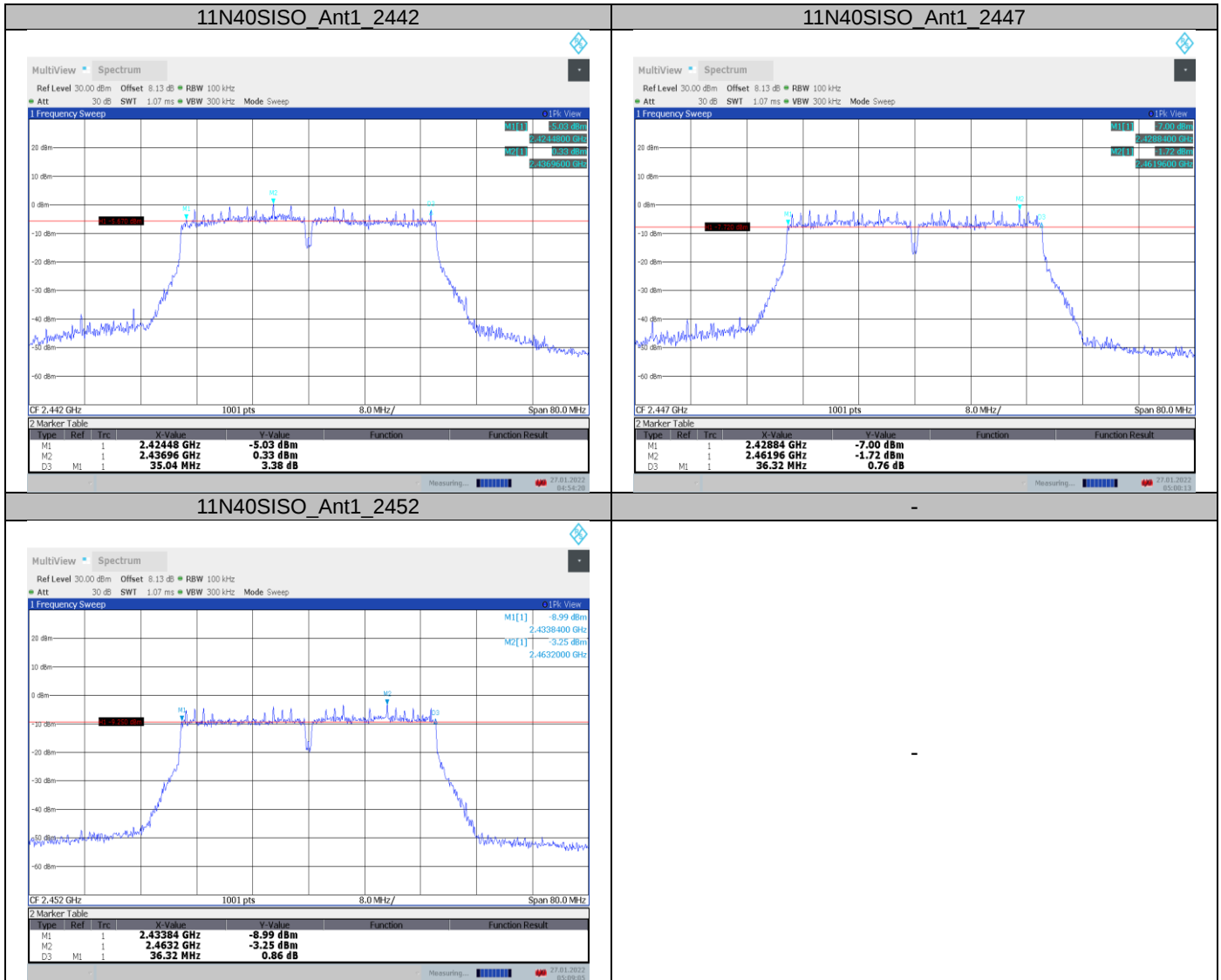


11N40SISO_Ant1_2432



11N40SISO_Ant1_2437



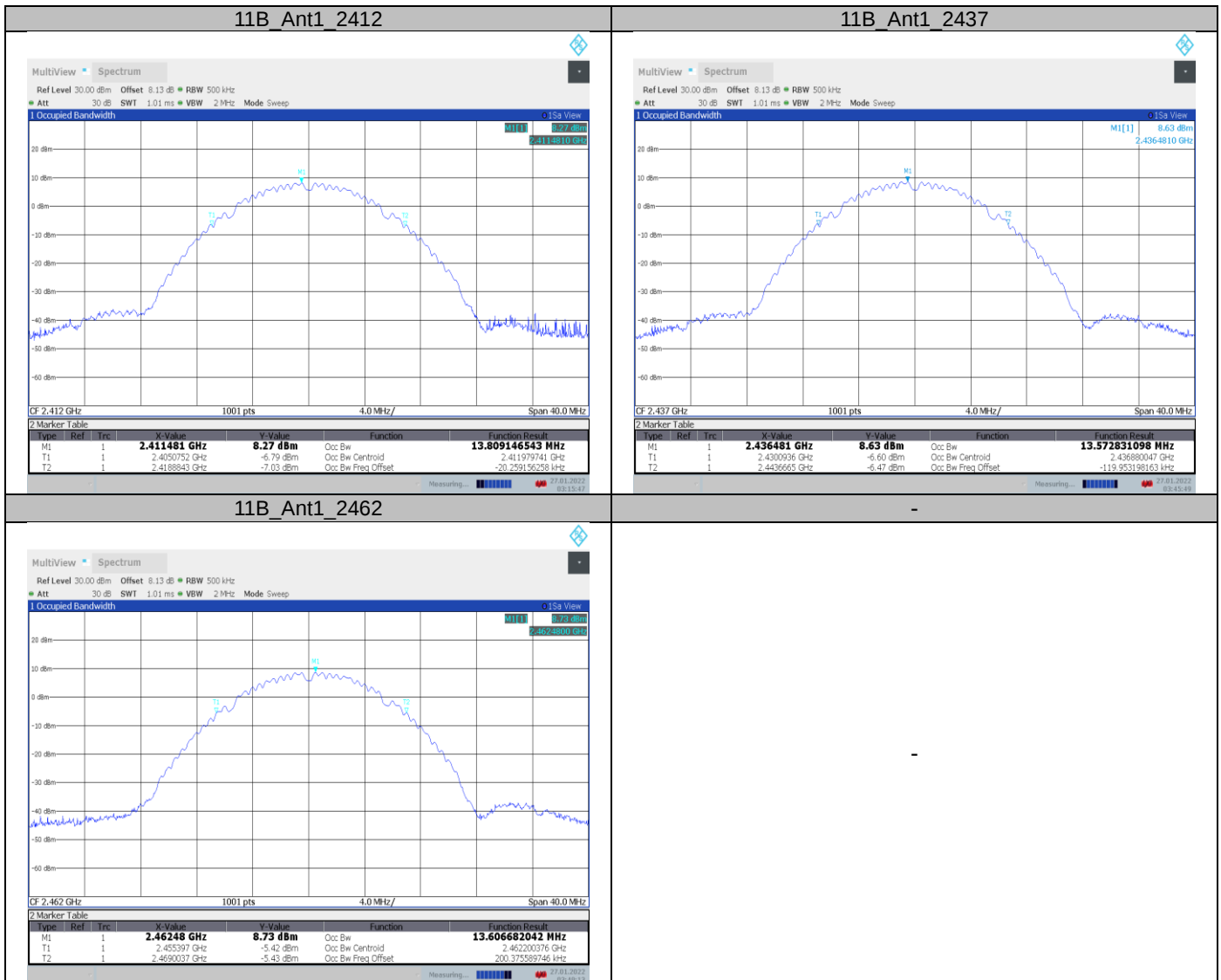


2. APPENDIX B: 99% EMISSION BANDWIDTH

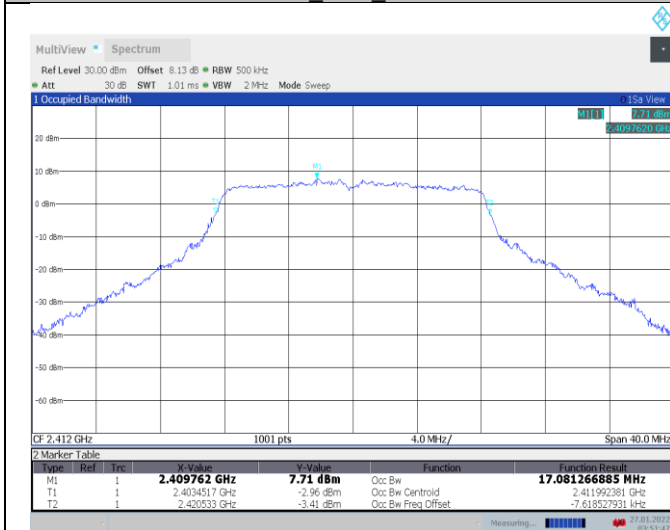
2.1 TEST RESULT

Test Mode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	13.809	2405.075	2418.884	---	Pass
		2437	13.573	2430.094	2443.666	---	Pass
		2462	13.607	2455.397	2469.004	---	Pass
11G	Ant1	2412	17.081	2403.452	2420.533	---	Pass
		2417	17.306	2408.395	2425.700	---	Pass
		2422	17.141	2413.544	2430.685	---	Pass
		2437	16.972	2428.421	2445.394	---	Pass
		2452	17.282	2443.412	2460.695	---	Pass
		2457	17.092	2448.584	2465.676	---	Pass
		2462	16.956	2453.624	2470.580	---	Pass
11N20SISO	Ant1	2412	18.267	2402.929	2421.196	---	Pass
		2417	18.427	2407.876	2426.303	---	Pass
		2422	18.301	2413.003	2431.304	---	Pass
		2437	18.111	2427.892	2446.003	---	Pass
		2452	18.458	2442.859	2461.316	---	Pass
		2457	18.276	2448.006	2466.282	---	Pass
		2462	18.127	2453.053	2471.180	---	Pass
11N40SISO	Ant1	2422	36.469	2403.865	2440.334	---	Pass
		2427	36.348	2408.873	2445.221	---	Pass
		2432	36.337	2413.918	2450.255	---	Pass
		2437	36.369	2418.918	2455.287	---	Pass
		2442	36.552	2423.837	2460.388	---	Pass
		2447	36.68	2428.761	2465.441	---	Pass
		2452	36.719	2433.728	2470.447	---	Pass

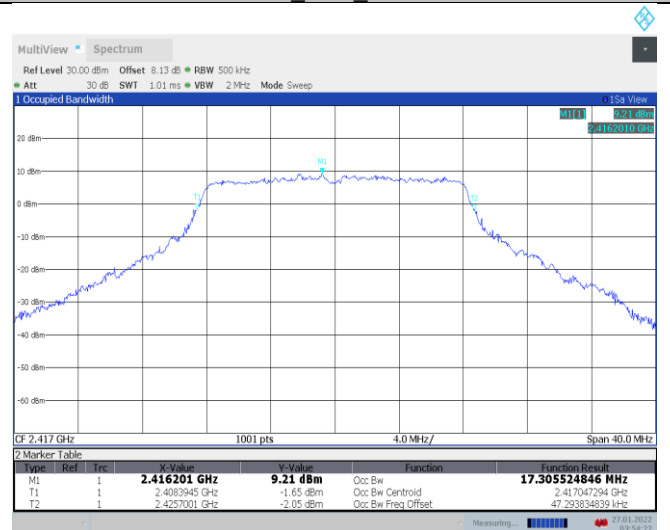
2.2 TEST GRAPHS



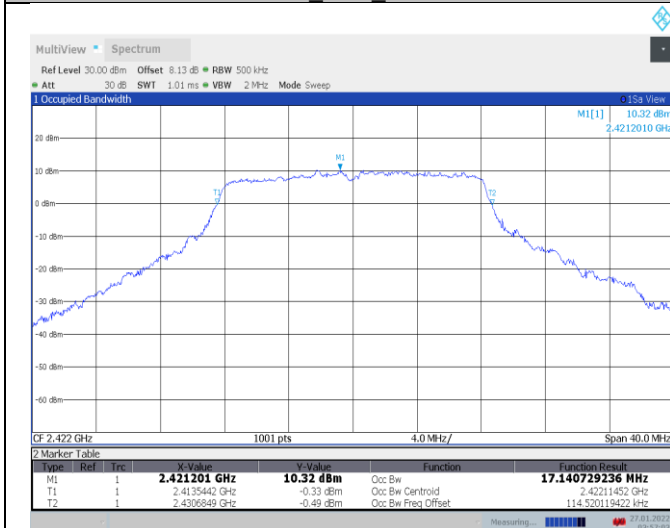
11G_Ant1_2412



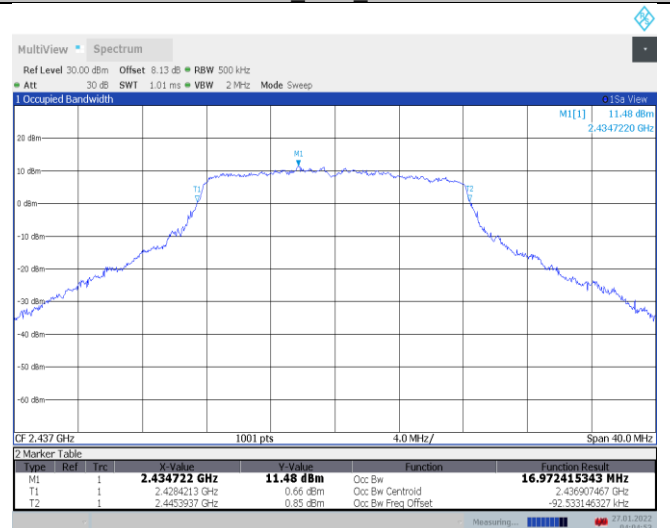
11G_Ant1_2417



11G_Ant1_2422

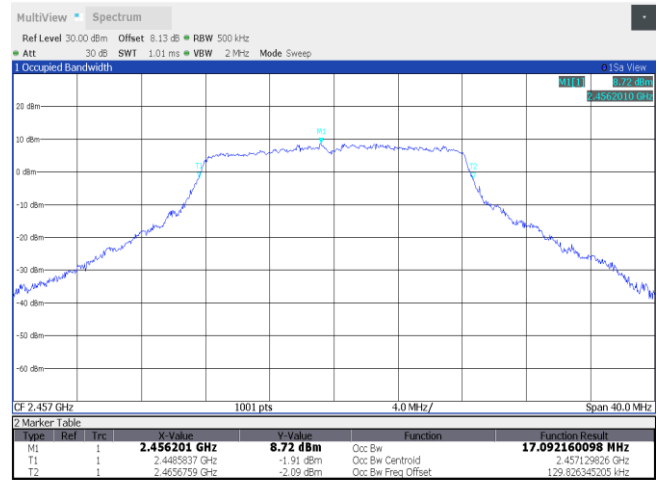
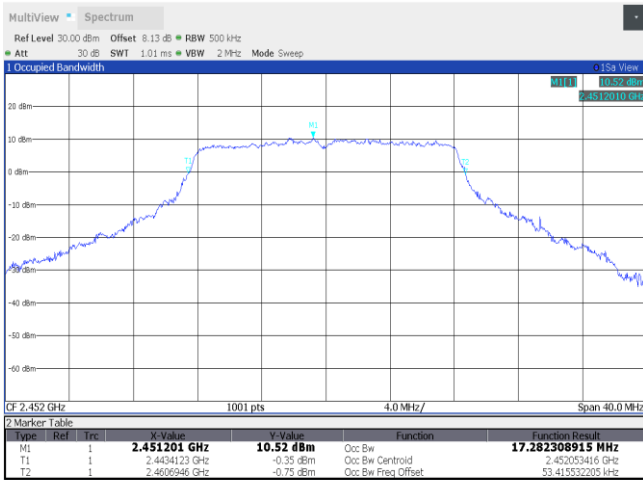


11G_Ant1_2437

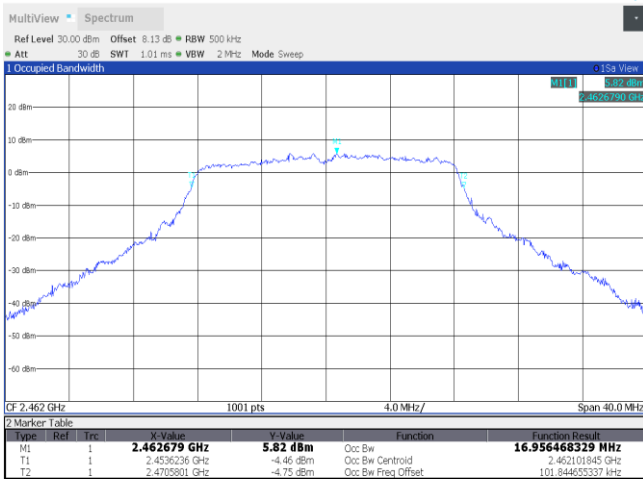


11G_Ant1_2452

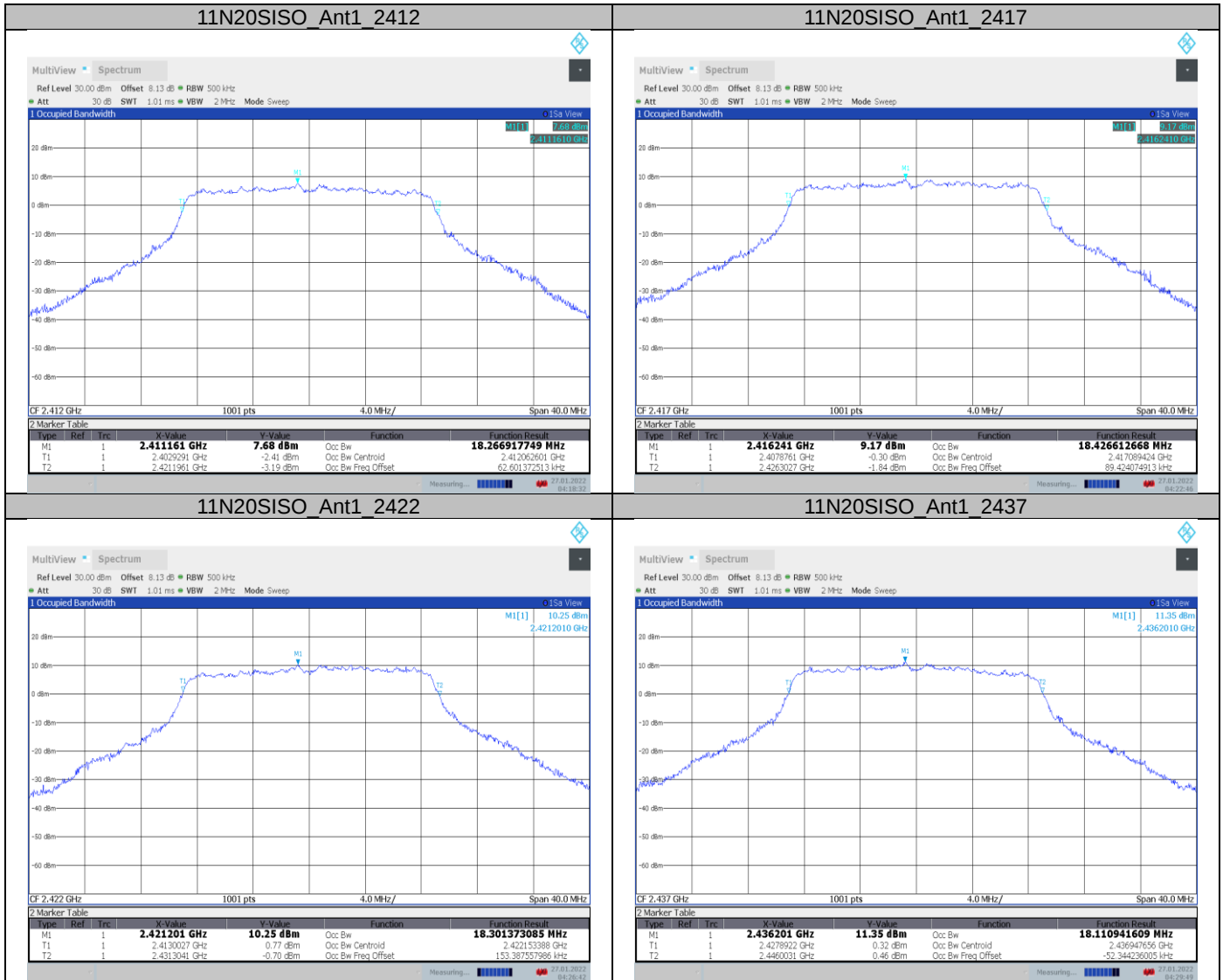
11G_Ant1_2457

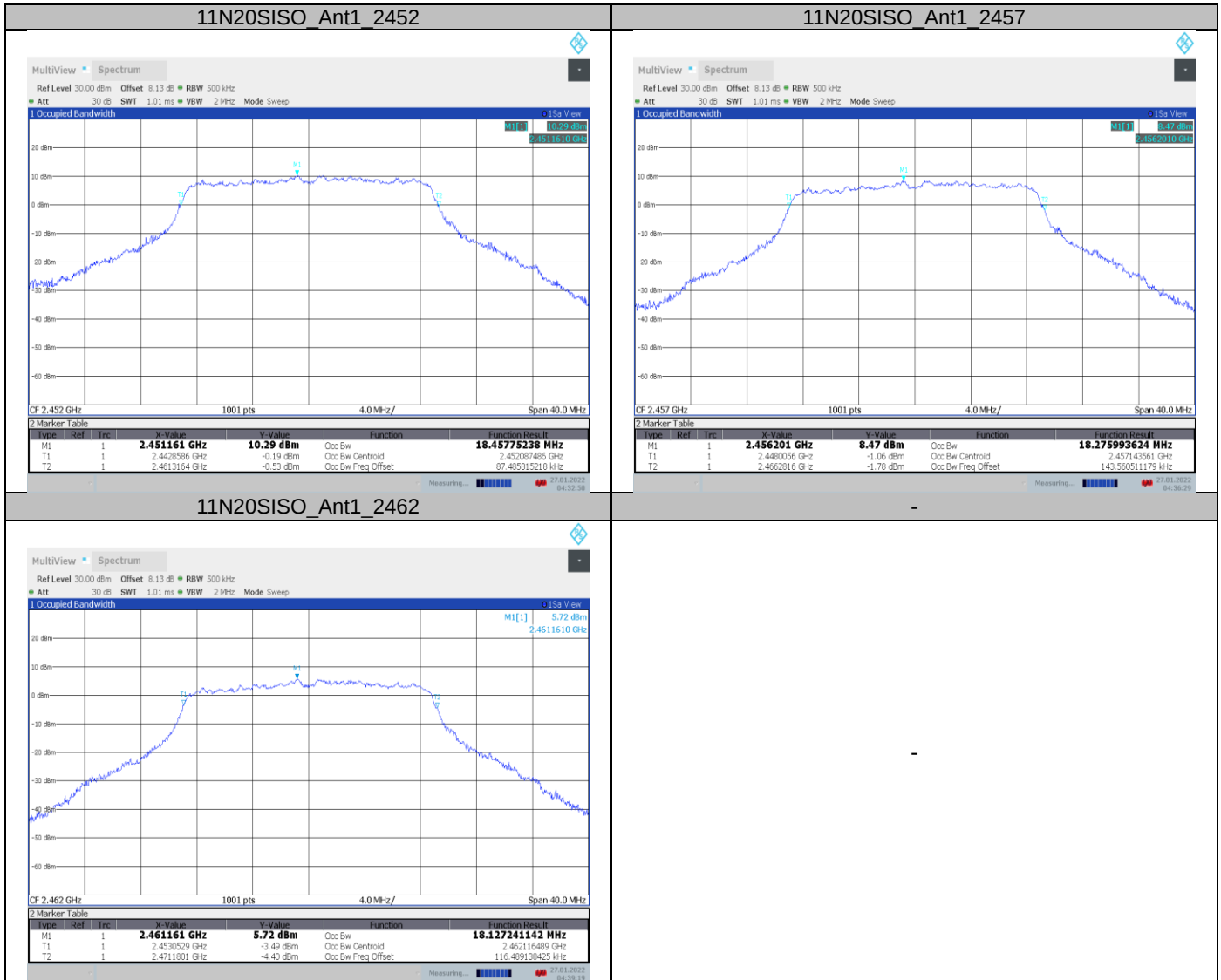


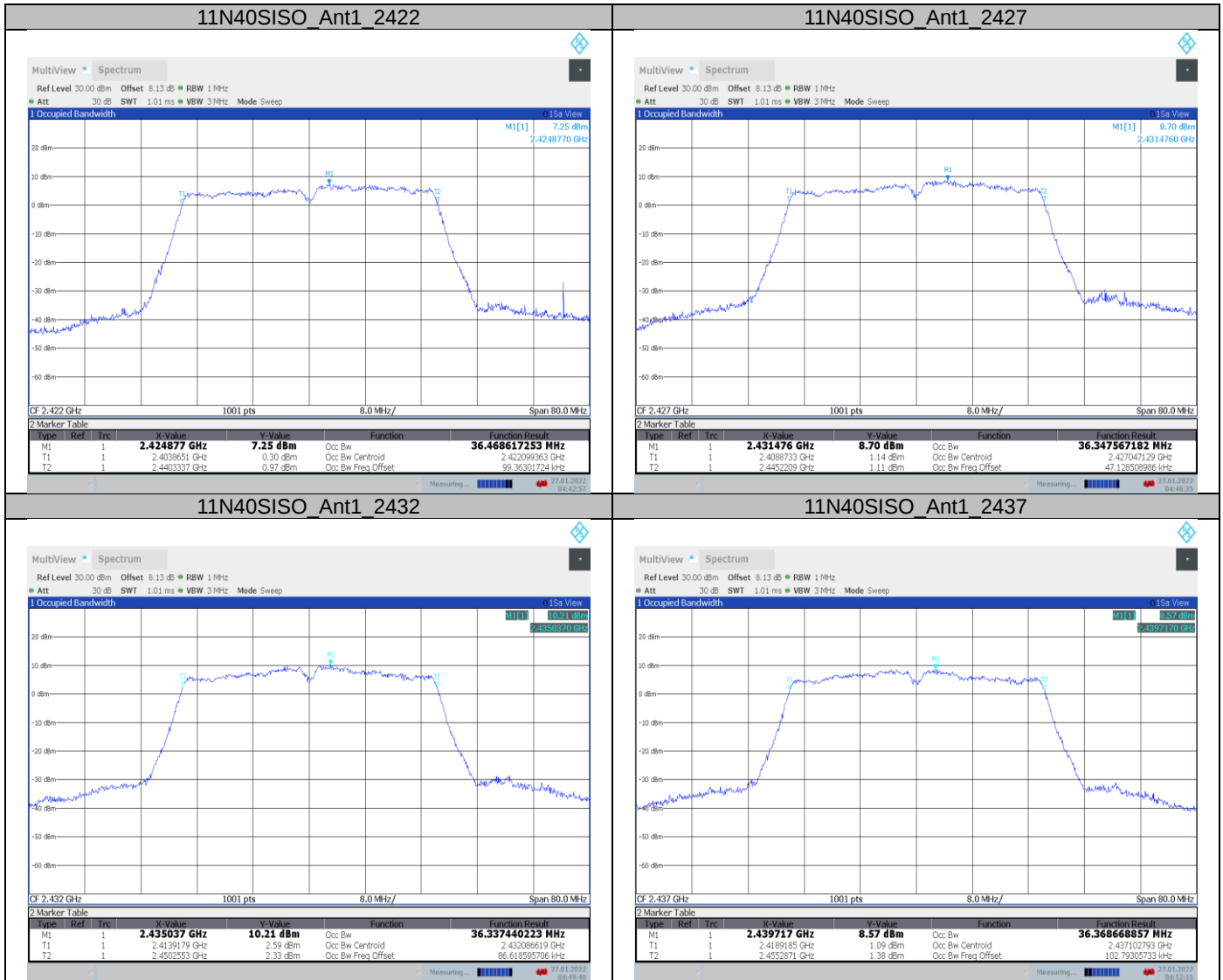
11G_Ant1_2462



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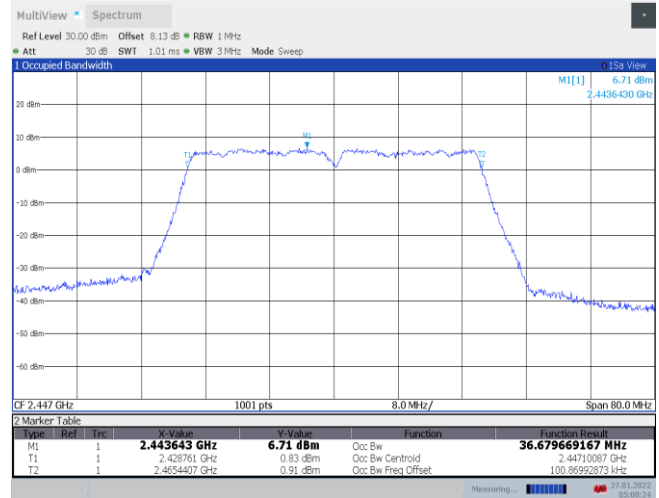
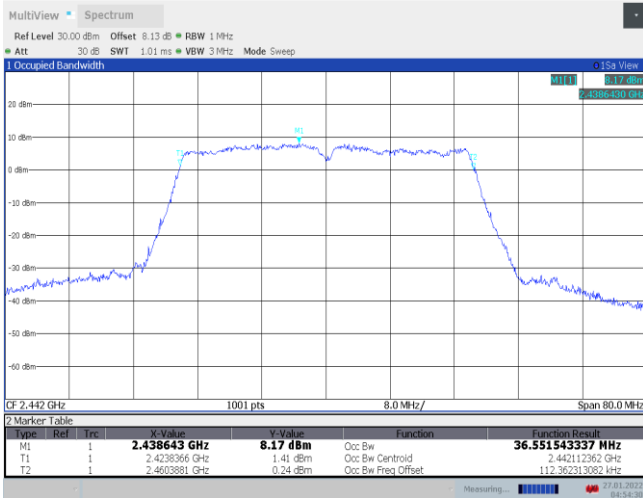




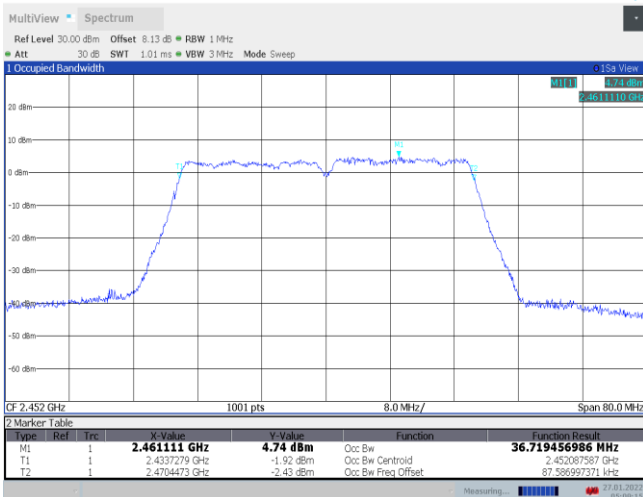


11N40SISO_Ant1_2442

11N40SISO_Ant1_2447



11N40SISO_Ant1_2452



3. APPENDIX C: MAXIMUM OUTPUT POWER

3.1 TEST RESULT- PEAK POWER

Test Mode	Antenna	Frequency [MHz]	Set Power	Peak Power [dBm]	Conducted Peak Power Limit [dBm]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	17	18.60	≤30.00	17.40	≤36.00	PASS
		2437	17	18.88	≤30.00	17.68	≤36.00	PASS
		2462	17	19.02	≤30.00	17.82	≤36.00	PASS
11G	Ant1	2412	14.5	19.80	≤30.00	18.60	≤36.00	PASS
		2417	16.5	21.46	≤30.00	20.26	≤36.00	PASS
		2422	17.5	22.58	≤30.00	21.38	≤36.00	PASS
		2437	18	23.04	≤30.00	21.84	≤36.00	PASS
		2452	17.5	22.73	≤30.00	21.53	≤36.00	PASS
		2457	15.5	20.80	≤30.00	19.60	≤36.00	PASS
		2462	12.5	17.85	≤30.00	16.65	≤36.00	PASS
11N20SISO	Ant1	2412	14.5	19.62	≤30.00	18.42	≤36.00	PASS
		2417	16.5	21.49	≤30.00	20.29	≤36.00	PASS
		2422	17.5	22.45	≤30.00	21.25	≤36.00	PASS
		2437	18	22.87	≤30.00	21.67	≤36.00	PASS
		2452	17.5	22.76	≤30.00	21.56	≤36.00	PASS
		2457	15.5	20.80	≤30.00	19.60	≤36.00	PASS
		2462	12.5	17.67	≤30.00	16.47	≤36.00	PASS
11N40SISO	Ant1	2422	12.5	18.55	≤30.00	17.35	≤36.00	PASS
		2427	14	19.59	≤30.00	18.39	≤36.00	PASS
		2432	15.5	20.77	≤30.00	19.57	≤36.00	PASS
		2437	14	19.72	≤30.00	18.52	≤36.00	PASS
		2442	13.5	19.80	≤30.00	18.60	≤36.00	PASS
		2447	12	18.94	≤30.00	17.74	≤36.00	PASS
		2452	10	16.74	≤30.00	15.54	≤36.00	PASS

3.2 TEST RESULT-AVERAGE POWER

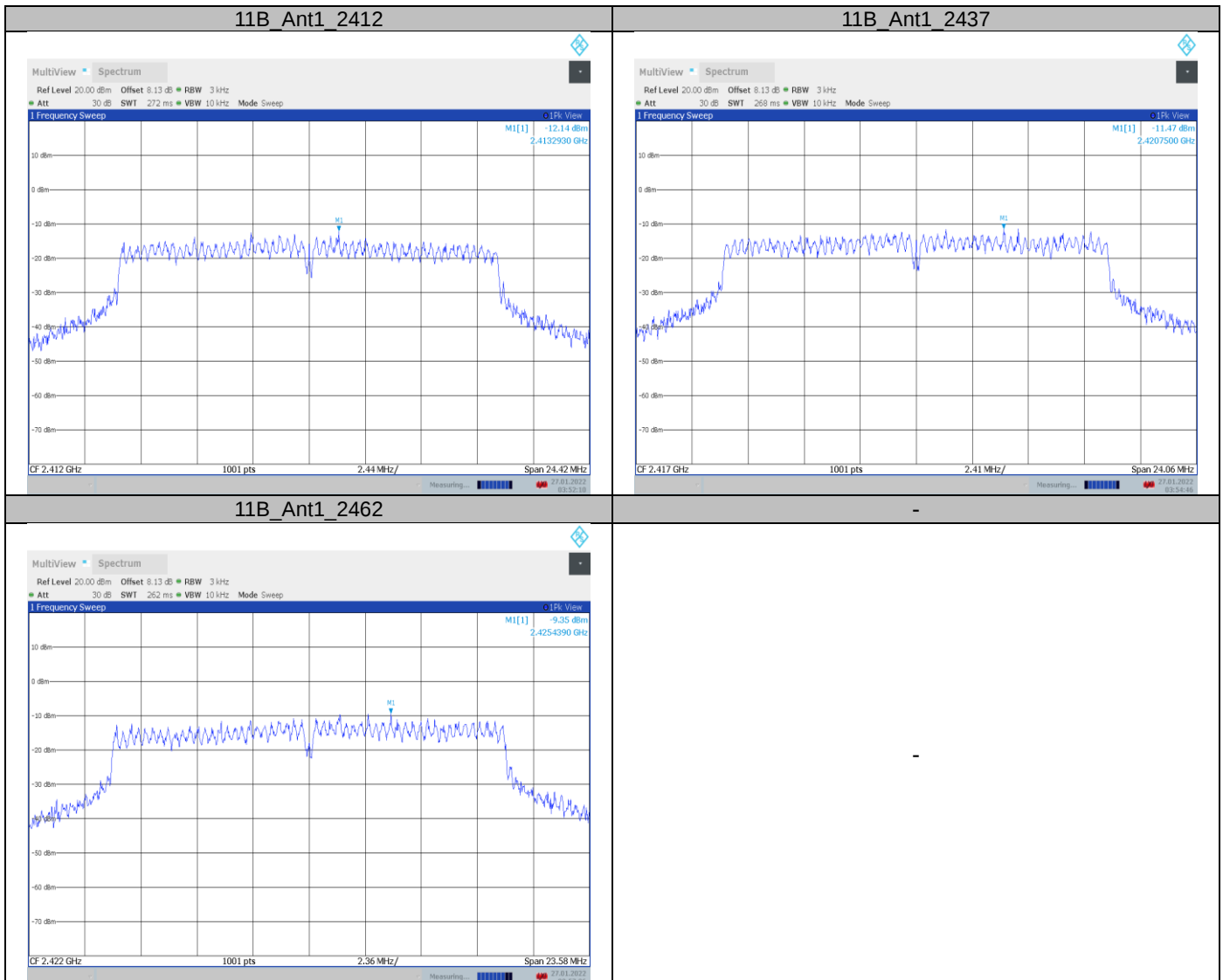
Test Mode	Antenna	Frequency [MHz]	Set Power	Peak Power [dBm]	Conducted Peak Power Limit [dBm]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	17	16.03	≤30.00	14.83	≤36.00	PASS
		2437	17	16.03	≤30.00	14.83	≤36.00	PASS
		2462	17	16.41	≤30.00	15.21	≤36.00	PASS
11G	Ant1	2412	14.5	13.41	≤30.00	12.21	≤36.00	PASS
		2417	16.5	15.16	≤30.00	13.96	≤36.00	PASS
		2422	17.5	16.24	≤30.00	15.04	≤36.00	PASS
		2437	18	16.55	≤30.00	15.35	≤36.00	PASS
		2452	17.5	16.38	≤30.00	15.18	≤36.00	PASS
		2457	15.5	14.55	≤30.00	13.35	≤36.00	PASS
		2462	12.5	11.56	≤30.00	10.36	≤36.00	PASS
11N20SISO	Ant1	2412	14.5	13.20	≤30.00	12.00	≤36.00	PASS
		2417	16.5	14.95	≤30.00	13.75	≤36.00	PASS
		2422	17.5	16.05	≤30.00	14.85	≤36.00	PASS
		2437	18	16.37	≤30.00	15.17	≤36.00	PASS
		2452	17.5	16.25	≤30.00	15.05	≤36.00	PASS
		2457	15.5	14.39	≤30.00	13.19	≤36.00	PASS
11N40SISO	Ant1	2422	12.5	11.40	≤30.00	10.20	≤36.00	PASS
		2427	14	11.98	≤30.00	10.78	≤36.00	PASS
		2432	15.5	13.04	≤30.00	11.84	≤36.00	PASS
		2437	14	14.36	≤30.00	13.16	≤36.00	PASS
		2437	14	13.13	≤30.00	11.93	≤36.00	PASS
		2442	13.5	13.32	≤30.00	12.12	≤36.00	PASS
		2447	12	12.38	≤30.00	11.18	≤36.00	PASS
	Ant1	2452	10	10.26	≤30.00	9.06	≤36.00	PASS

4. APPENDIX D: POWER SPECTRAL DENSITY

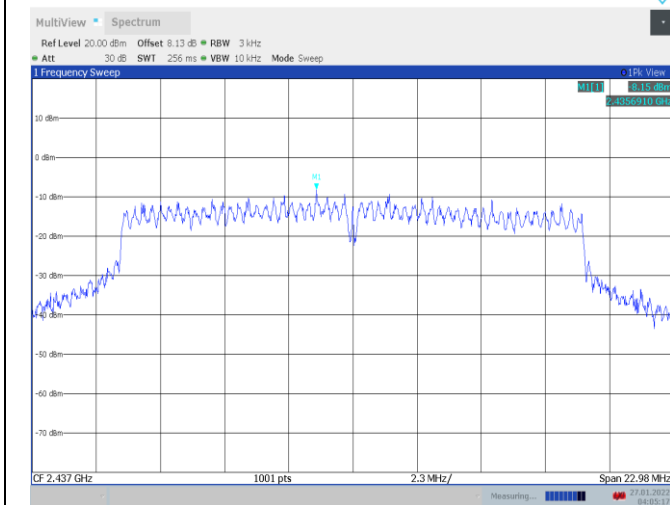
4.1 TEST RESULT

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-5.48	≤8.00	PASS
		2437	-6.30	≤8.00	PASS
		2462	-5.27	≤8.00	PASS
11G	Ant1	2412	-12.14	≤8.00	PASS
		2417	-11.47	≤8.00	PASS
		2422	-9.35	≤8.00	PASS
		2437	-8.15	≤8.00	PASS
		2452	-9.89	≤8.00	PASS
		2457	-11.7	≤8.00	PASS
		2462	-15.11	≤8.00	PASS
11N20SISO	Ant1	2412	-12.32	≤8.00	PASS
		2417	-10.95	≤8.00	PASS
		2422	-10.13	≤8.00	PASS
		2437	-9.16	≤8.00	PASS
		2452	-9.83	≤8.00	PASS
		2457	-10.81	≤8.00	PASS
		2462	-13.46	≤8.00	PASS
11N40SISO	Ant1	2422	-17.55	≤8.00	PASS
		2427	-14.46	≤8.00	PASS
		2432	-14.91	≤8.00	PASS
		2437	-15.12	≤8.00	PASS
		2442	-14.52	≤8.00	PASS
		2447	-16.44	≤8.00	PASS
		2452	-18.57	≤8.00	PASS

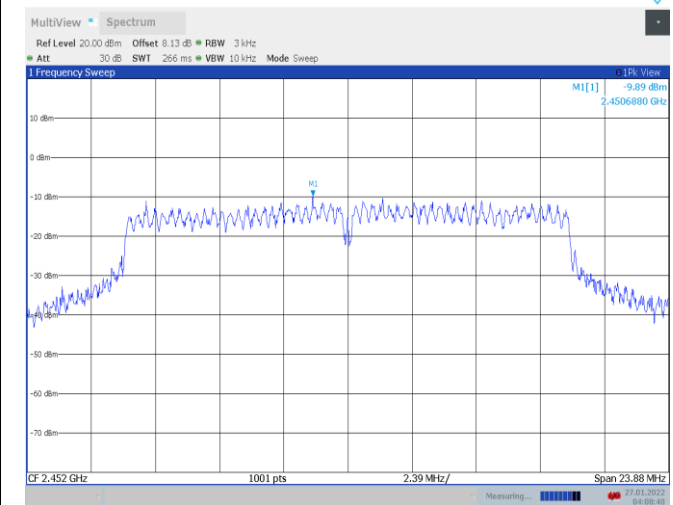
4.2 TEST GRAPHS



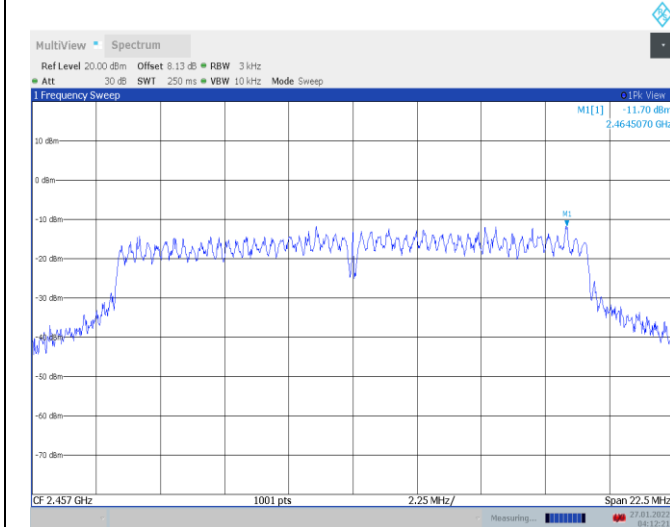
11G_Ant1_2412



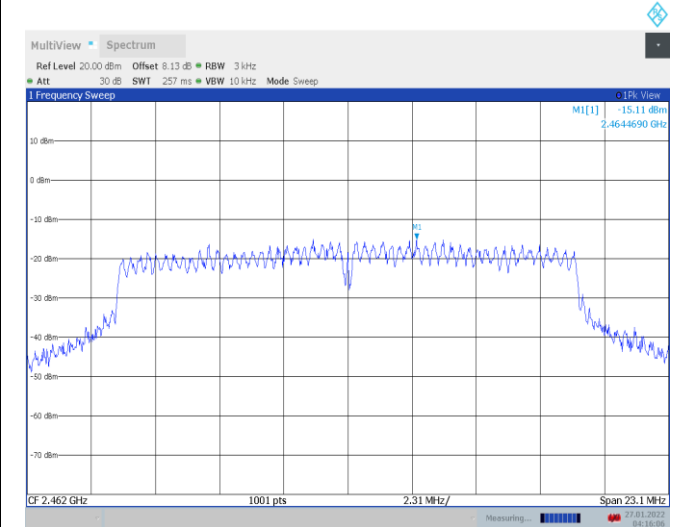
11G_Ant1_2417



11G_Ant1_2422

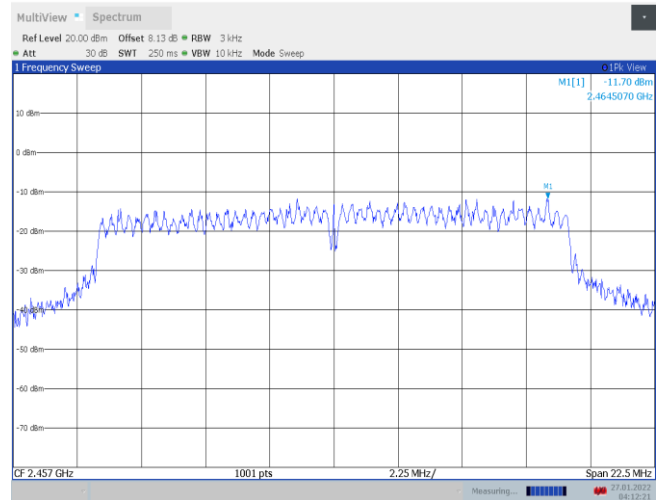
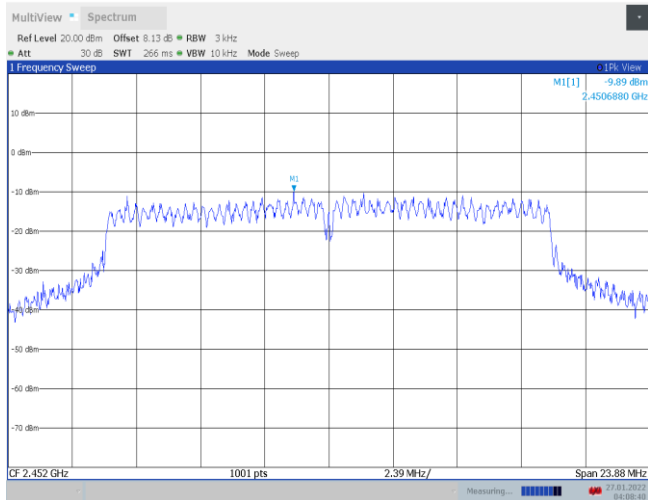


11G_Ant1_2437

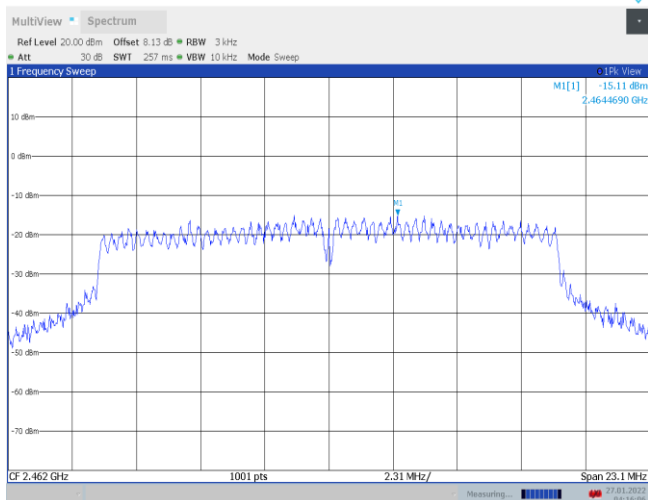


11G_Ant1_2452

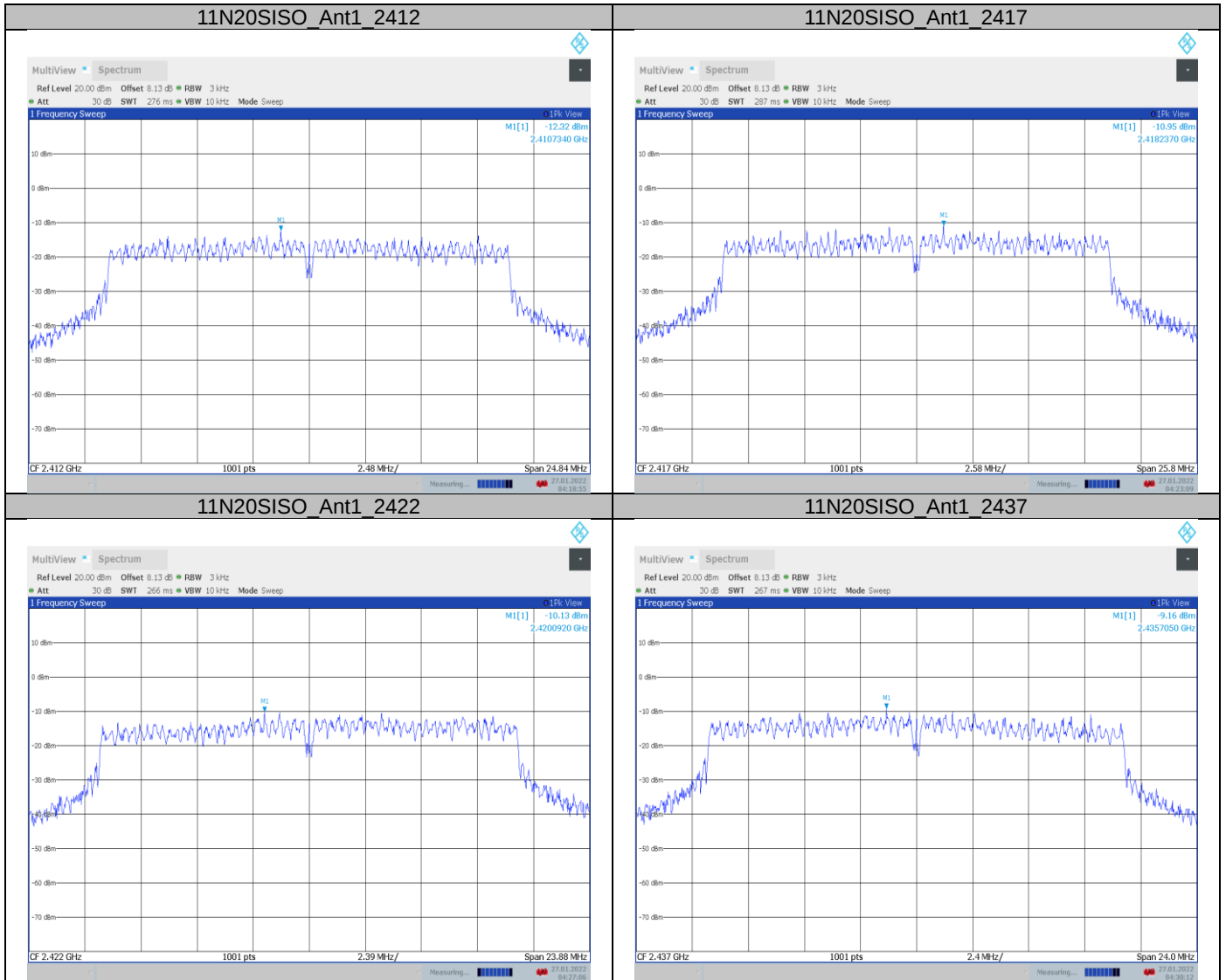
11G_Ant1_2457

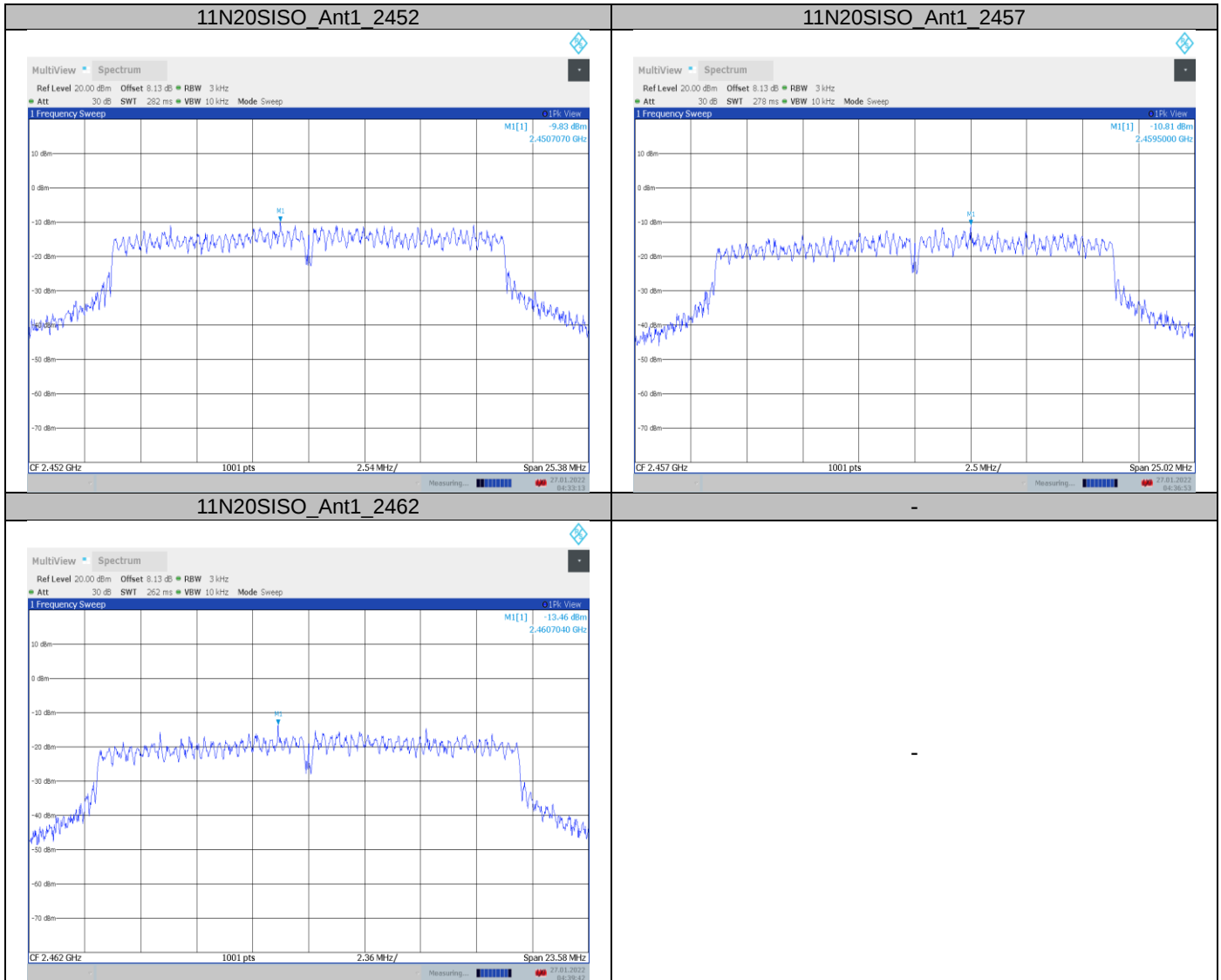


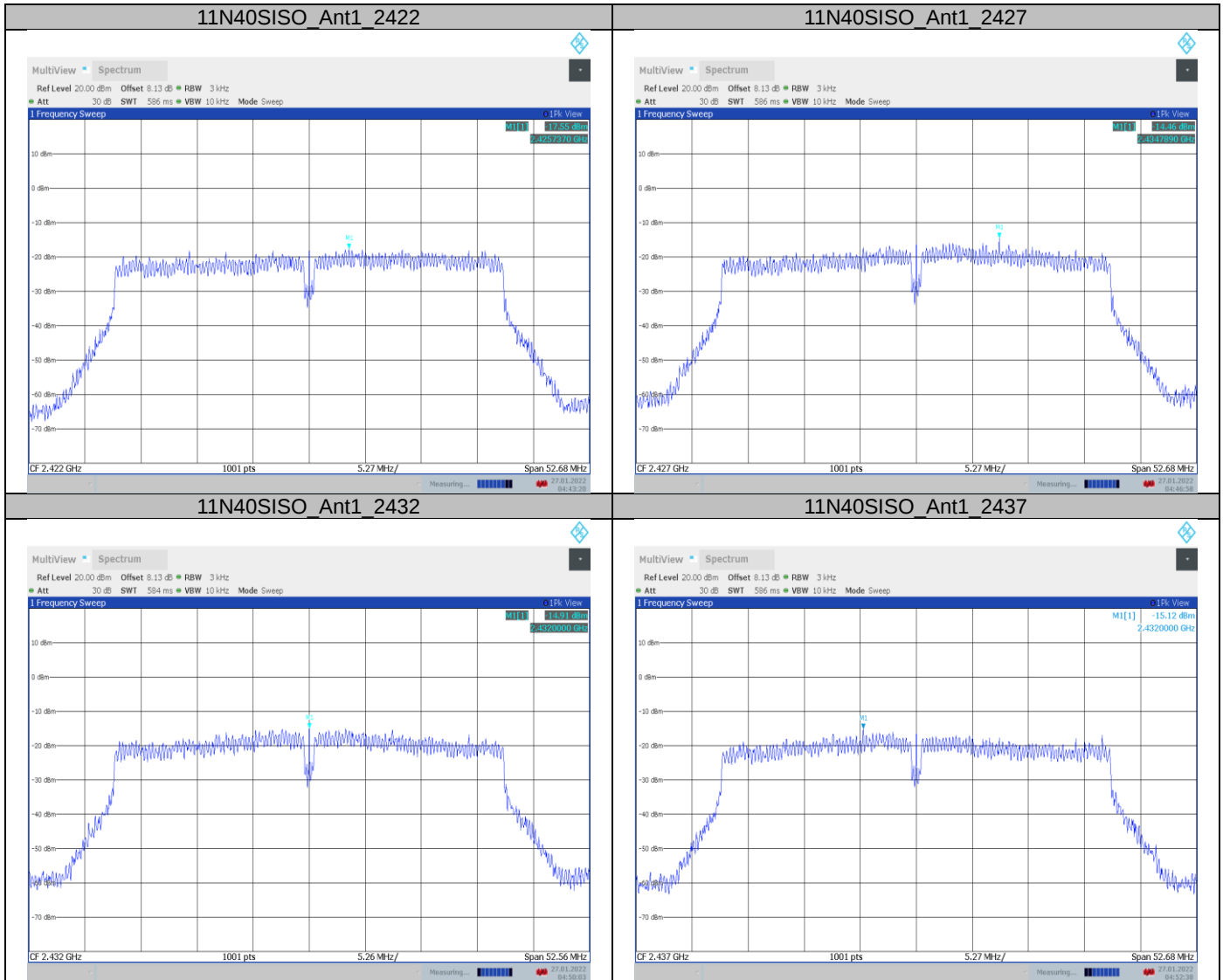
11G_Ant1_2462

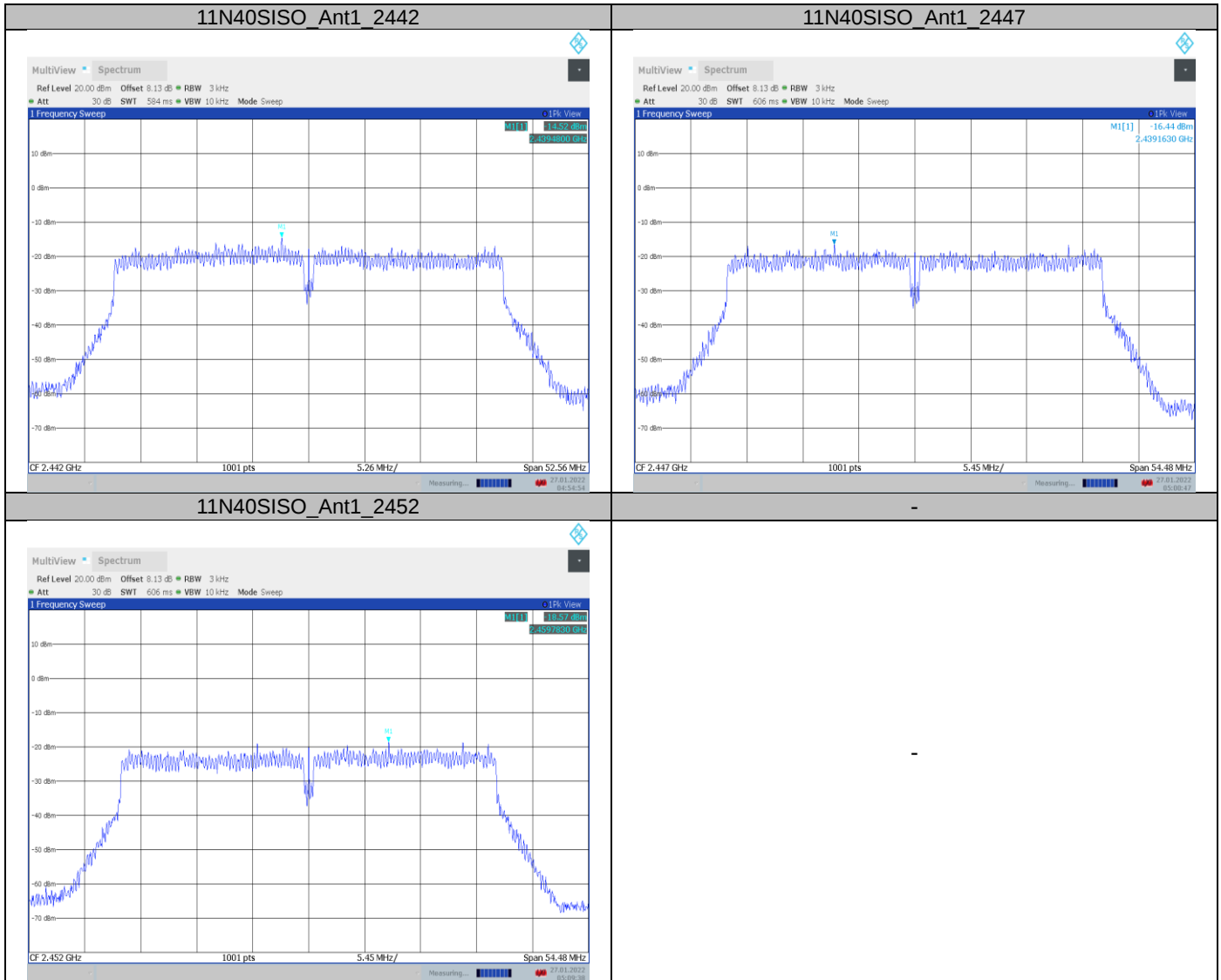


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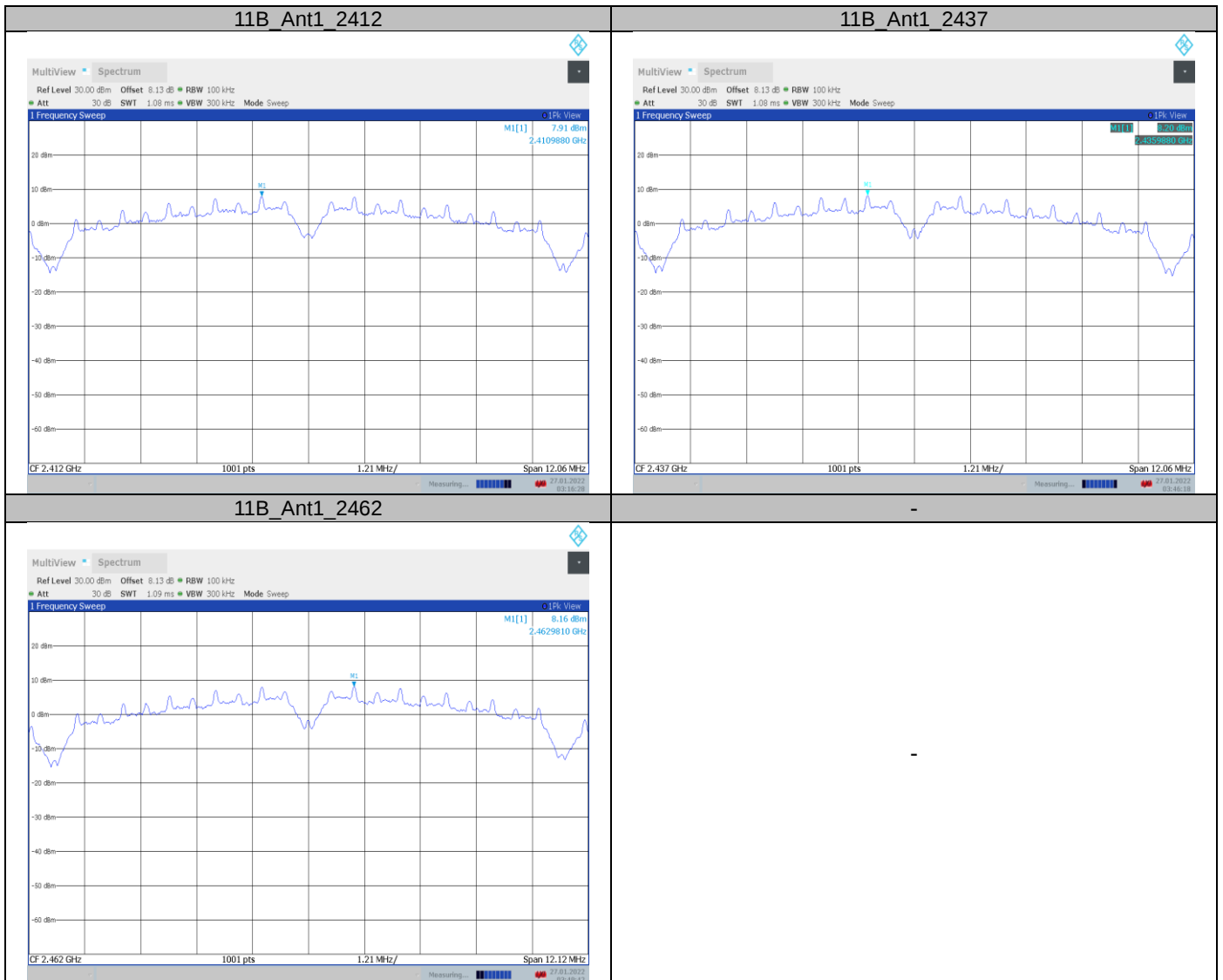


5. APPENDIX E: REFERENCE LEVEL MEASUREMENT

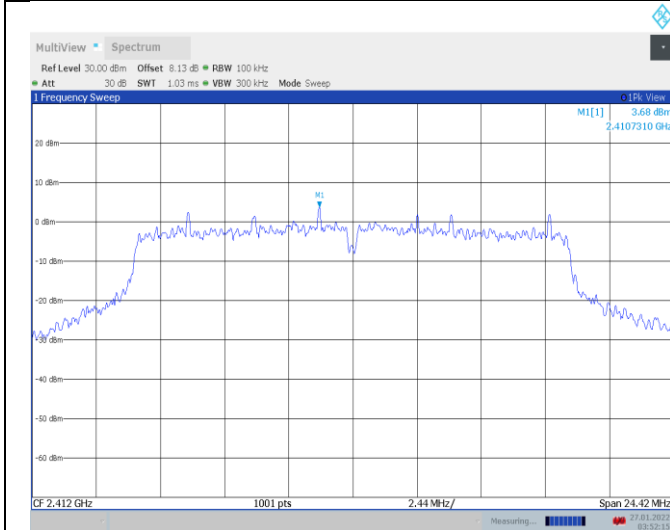
5.1 TEST RESULT

Test Mode	Antenna	Freq. (MHz)	Max.Point [MHz]	Result [dBm]
11B	Ant1	2412	2410.99	7.91
		2437	2435.99	8.20
		2462	2462.98	8.16
11G	Ant1	2412	2410.73	3.68
		2417	2418.23	5.01
		2422	2429.47	5.89
		2437	2438.22	6.63
		2452	2453.24	6.35
		2457	2460.73	3.90
		2462	2463.25	1.96
11N20SISO	Ant1	2412	2414.48	2.94
		2417	2419.47	4.59
		2422	2429.49	5.88
		2437	2435.71	7.20
		2452	2454.46	6.11
		2457	2458.23	4.50
		2462	2463.25	1.94
11N40SISO	Ant1	2422	2426.95	-0.80
		2427	2429.47	-0.53
		2432	2435.73	1.33
		2437	2432.00	0.67
		2442	2436.96	0.29
		2447	2441.94	-1.68
		2452	2466.97	-3.44

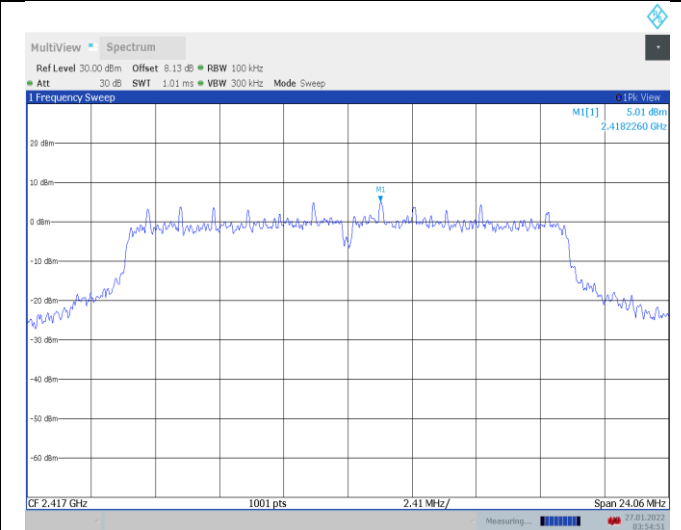
5.2 TEST GRAPHS



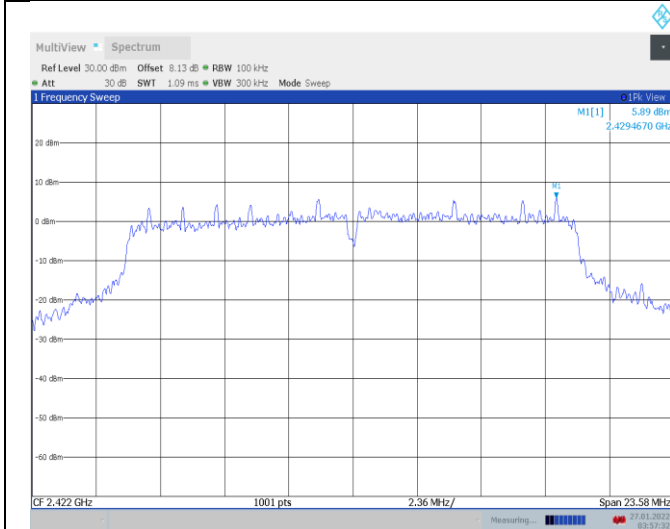
11G_Ant1_2412



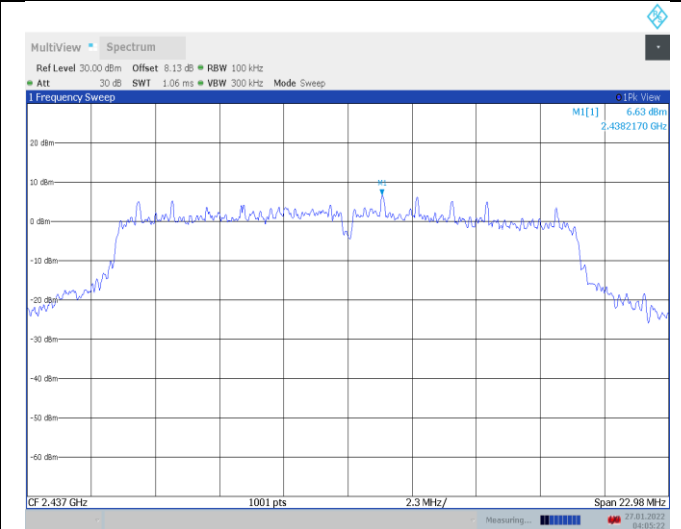
11G_Ant1_2417



11G_Ant1_2422

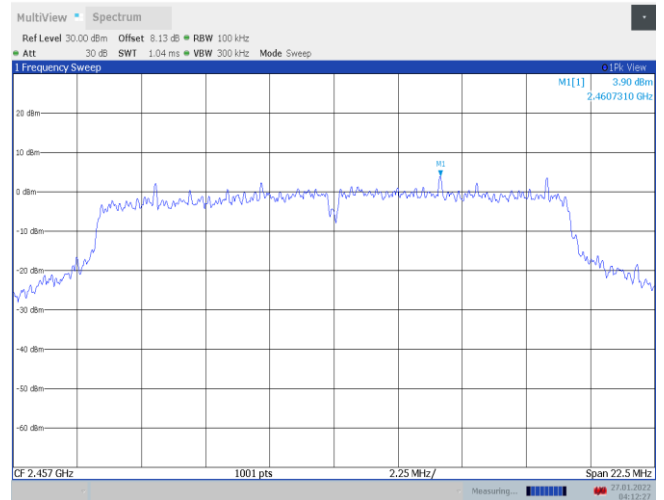
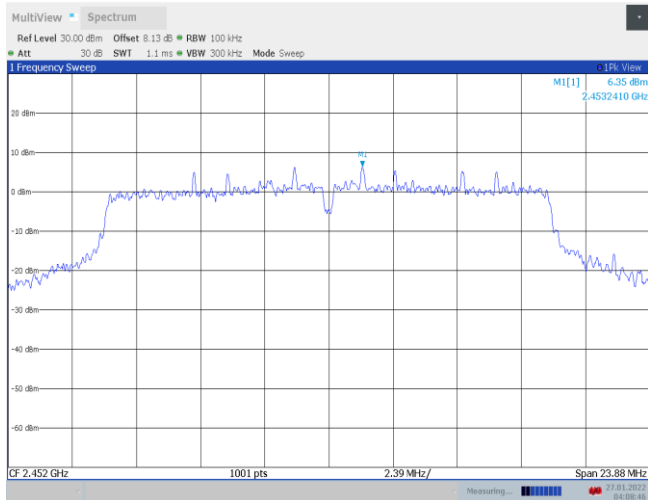


11G_Ant1_2437

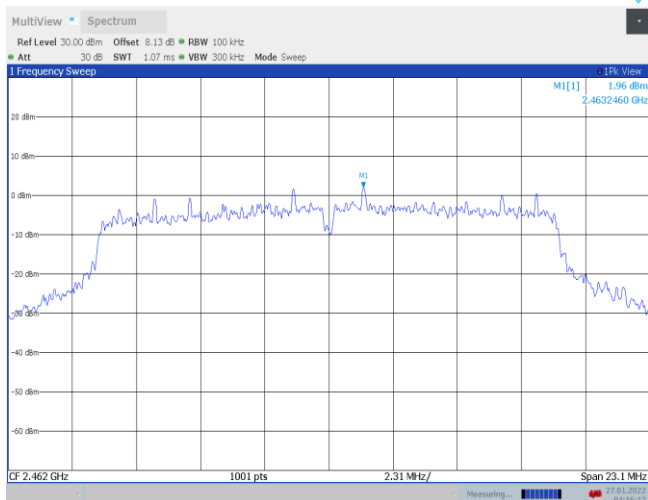


11G_Ant1_2452

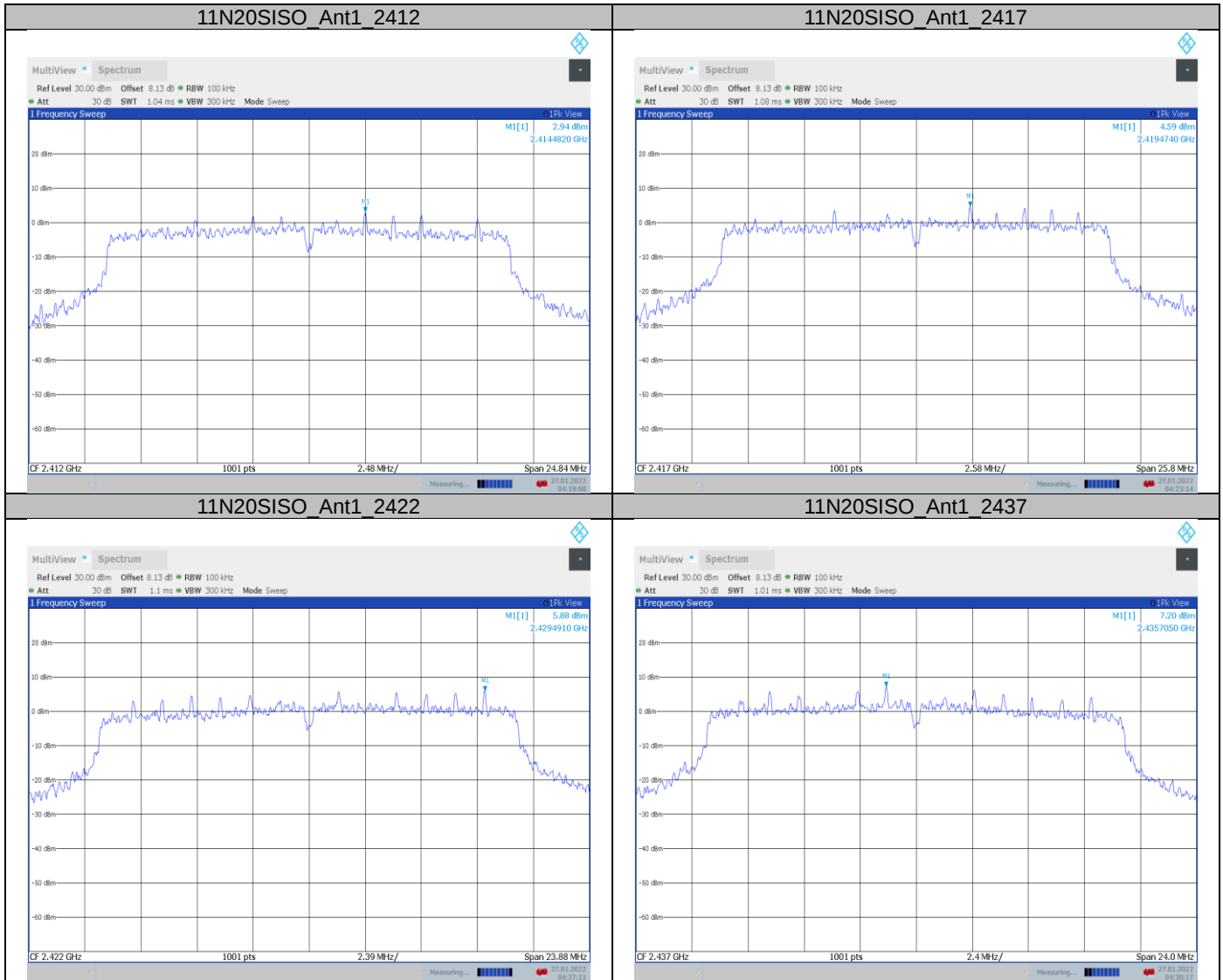
11G_Ant1_2457



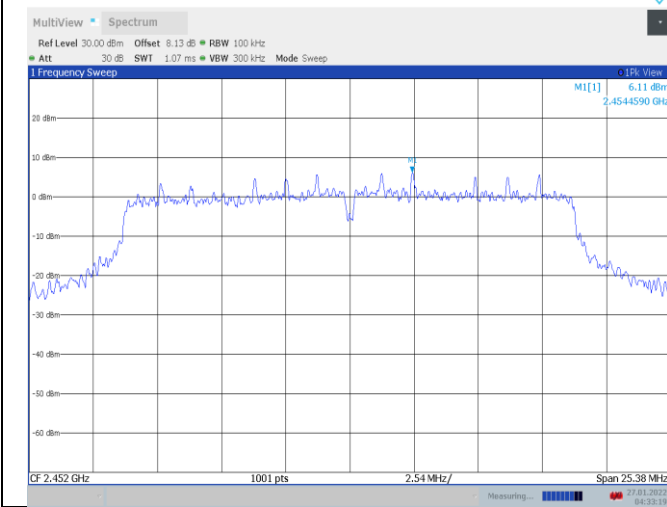
11G_Ant1_2462



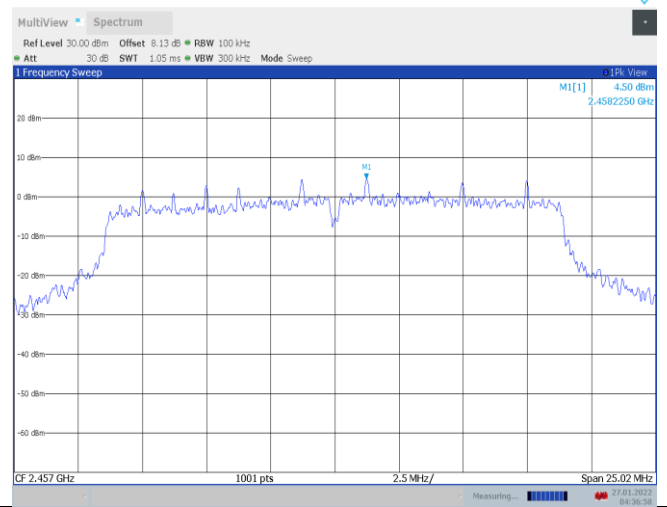
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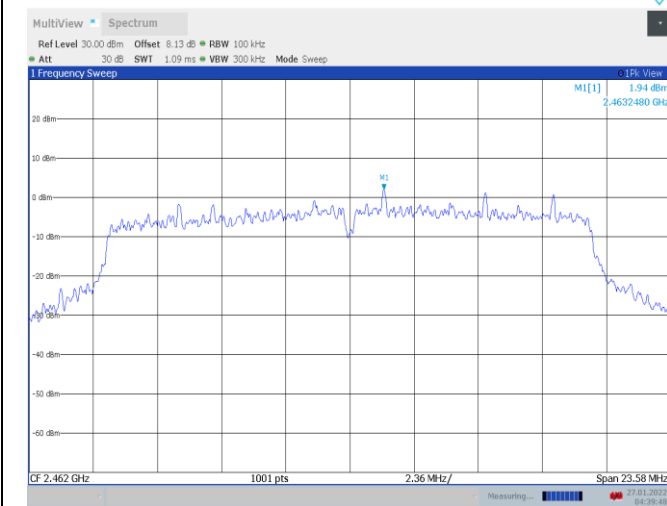
11N20SISO_Ant1_2452



11N20SISO_Ant1_2457

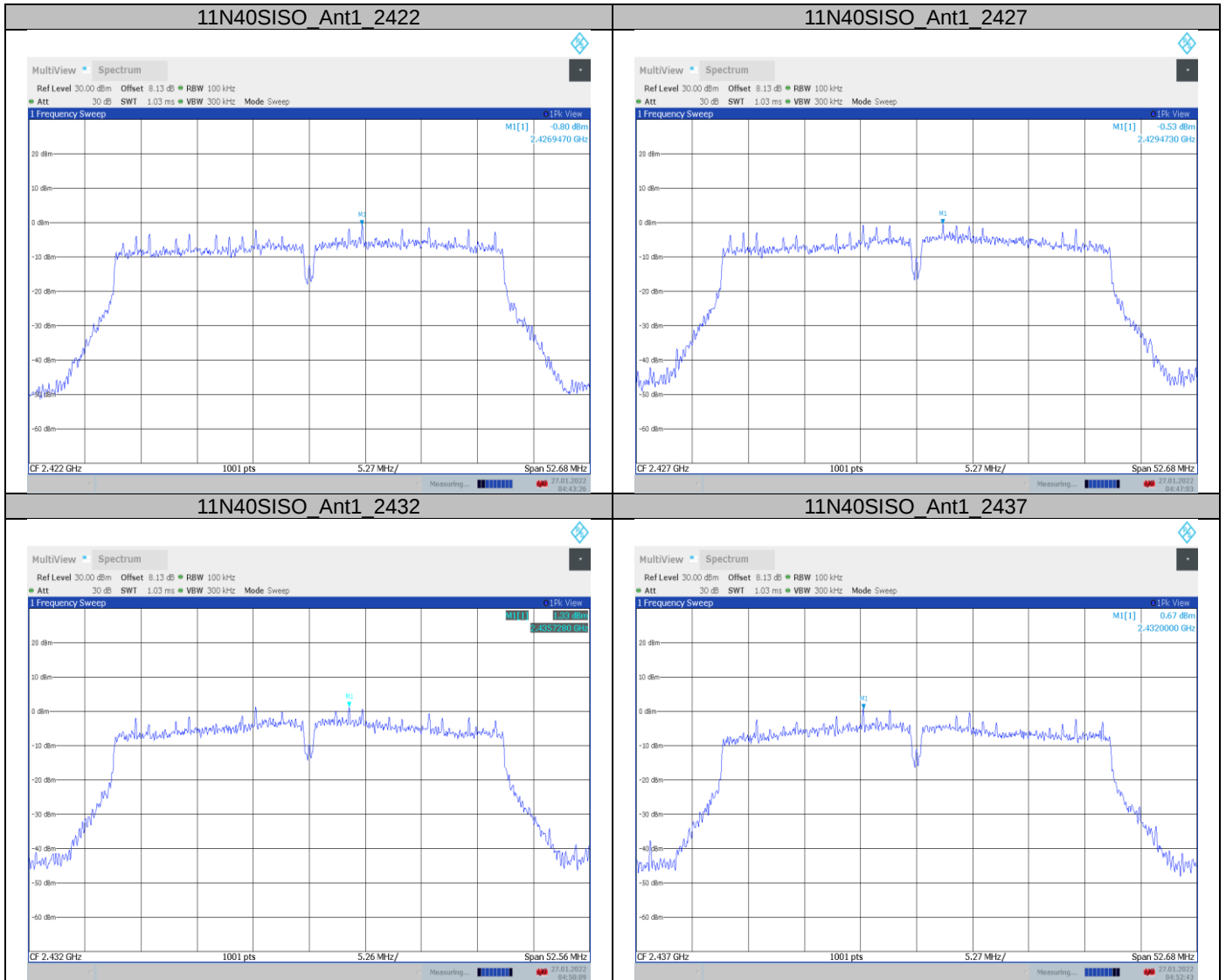


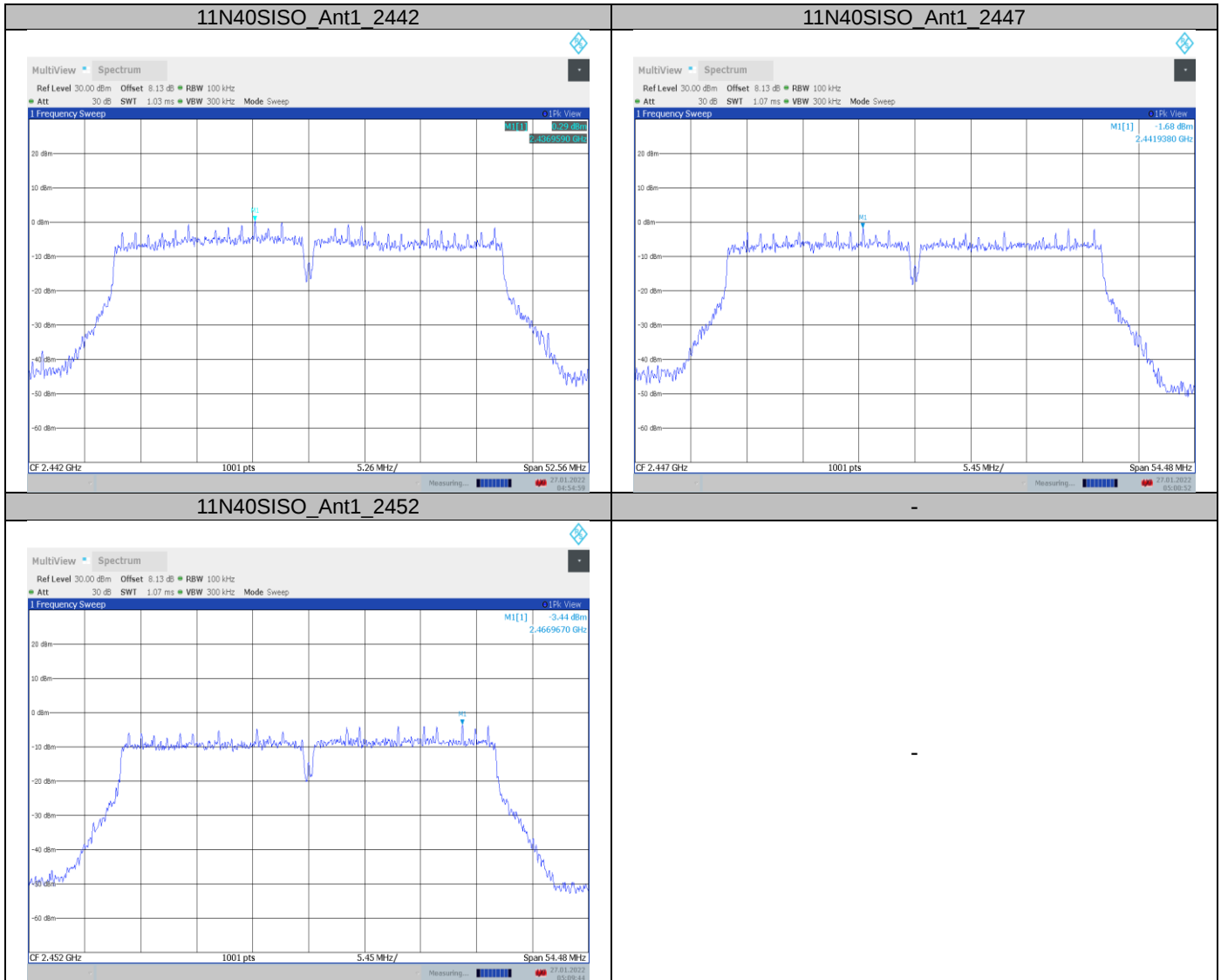
11N20SISO_Ant1_2462



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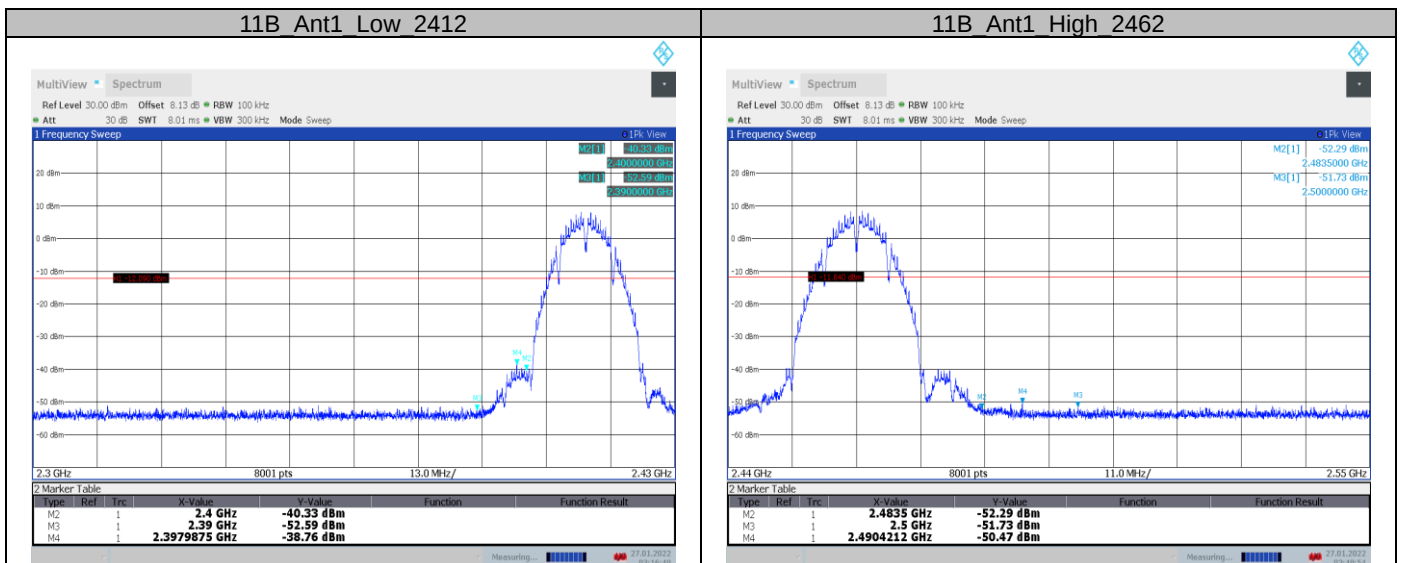


6. APPENDIX F: BAND EDGE MEASUREMENTS

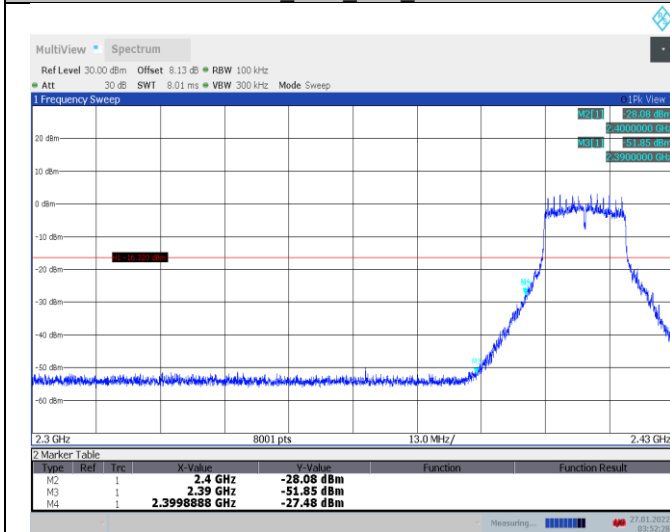
6.1 TEST RESULT

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	7.91	-38.76	≤-12.09	PASS
		High	2462	8.16	-50.47	≤-11.84	PASS
11G	Ant1	Low	2412	3.68	-27.48	≤-16.32	PASS
			2417	5.01	-35.39	≤-14.99	PASS
			2422	5.89	-46.82	≤-14.11	PASS
		High	2452	6.35	-49.02	≤-13.65	PASS
			2457	3.90	-49.97	≤-16.1	PASS
			2462	1.96	-50.75	≤-18.04	PASS
11N20SISO	Ant1	Low	2412	2.94	-25.76	≤-17.06	PASS
			2417	4.59	-36.71	≤-15.41	PASS
			2422	5.88	-45.22	≤-14.12	PASS
		High	2452	6.11	-48.9	≤-13.89	PASS
			2457	4.50	-48.73	≤-15.5	PASS
			2462	1.94	-49.46	≤-18.06	PASS
11N40SISO	Ant1	Low	2422	-0.80	-39.28	≤-20.8	PASS
			2427	-0.53	-43.4	≤-20.53	PASS
			2432	1.33	-40.9	≤-18.67	PASS
		High	2442	0.29	-50.18	≤-19.71	PASS
			2447	-1.68	-49.65	≤-21.68	PASS
			2452	-3.44	-50.26	≤-23.44	PASS

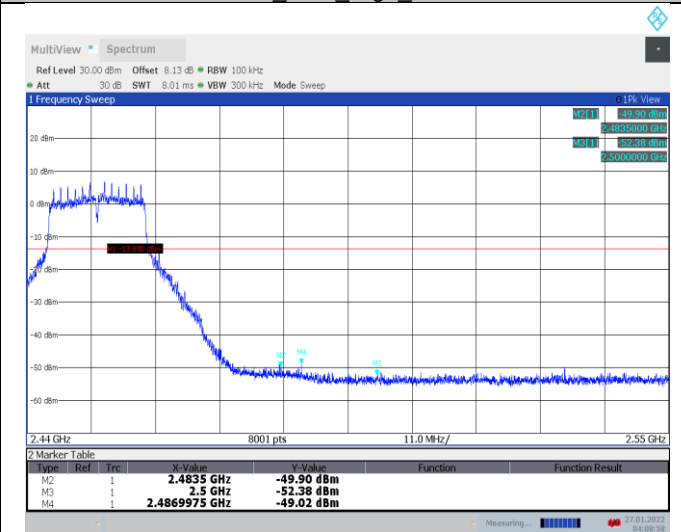
6.2 TEST GRAPHS



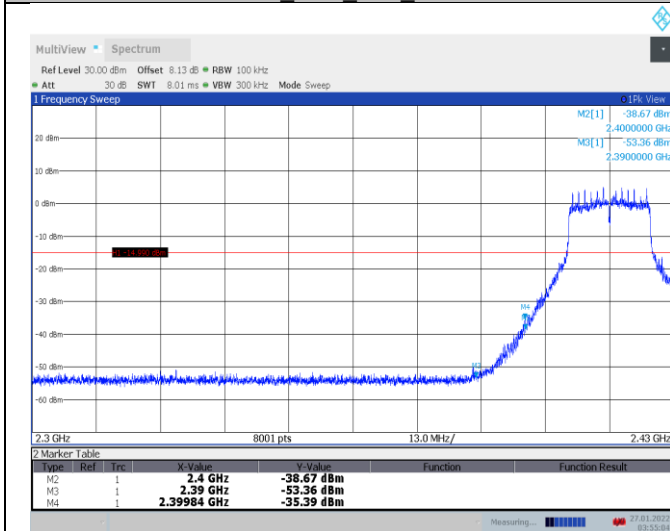
11G_Ant1_Low_2412



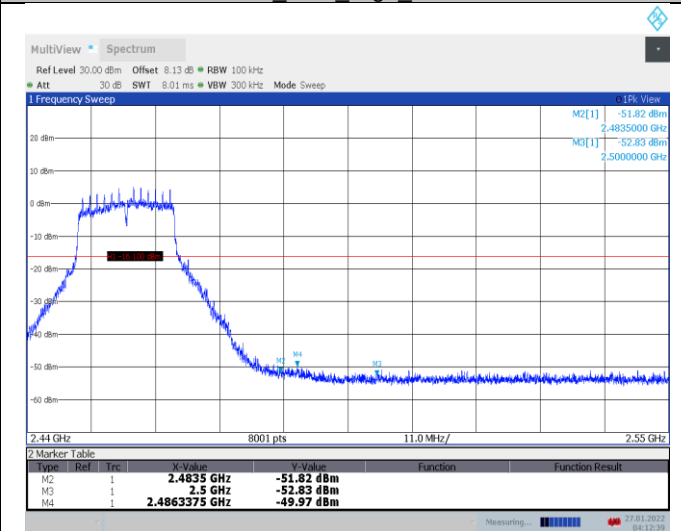
11G_Ant1_High_2452



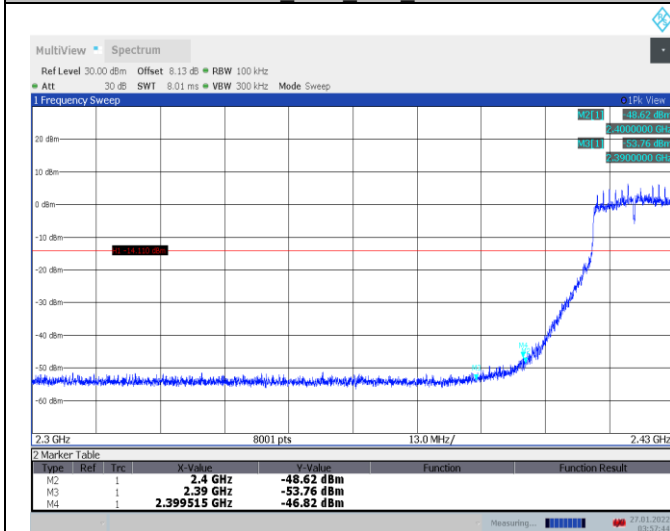
11G_Ant1_Low_2417



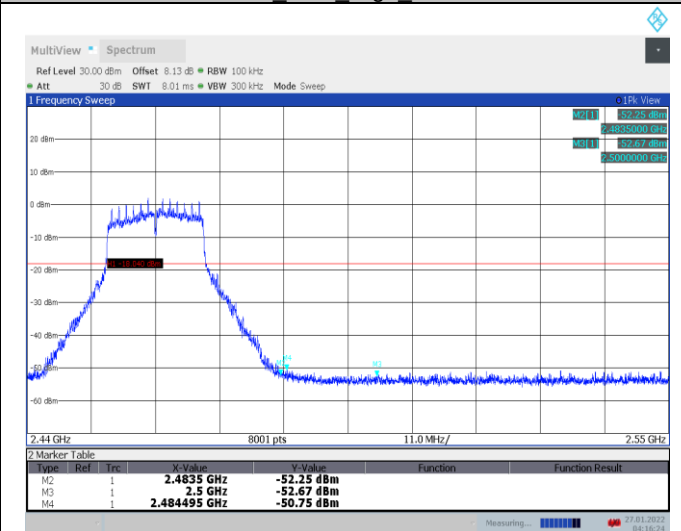
11G_Ant1_High_2457



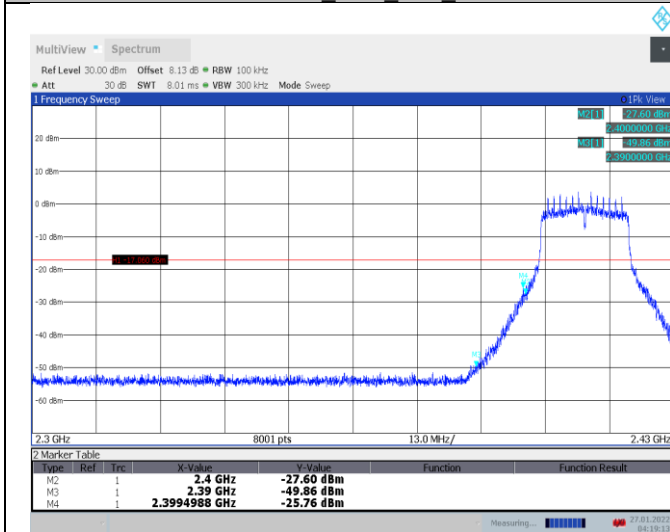
11G_Ant1_Low_2422



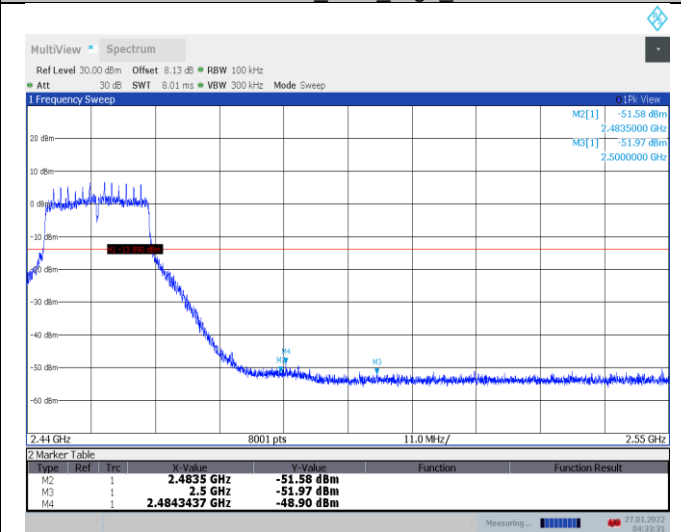
11G_Ant1_High_2462



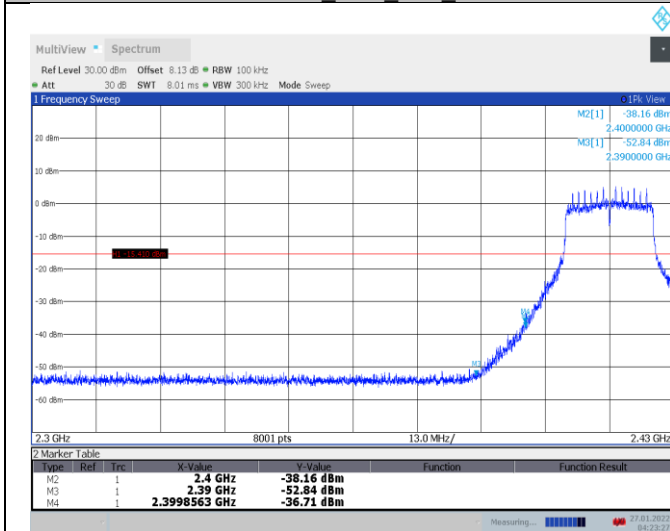
11N20SISO_Ant1_Low_2412



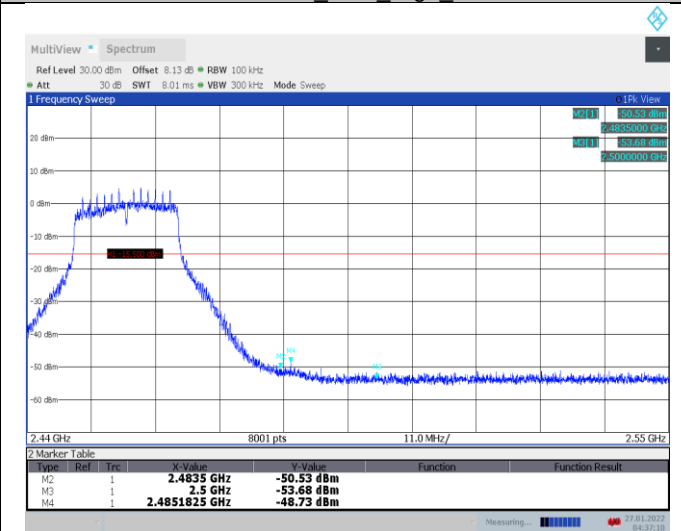
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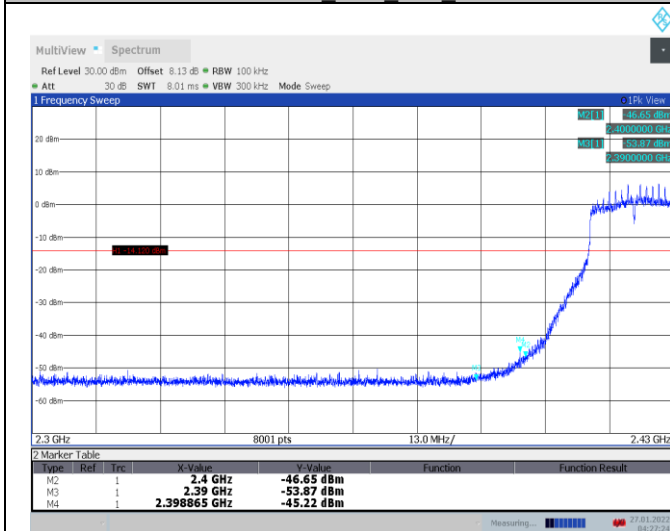
11N20SISO_Ant1_Low_2417



11N20SISO_Ant1_High_2457



11N20SISO_Ant1_Low_2422



11N20SISO_Ant1_High_2462

