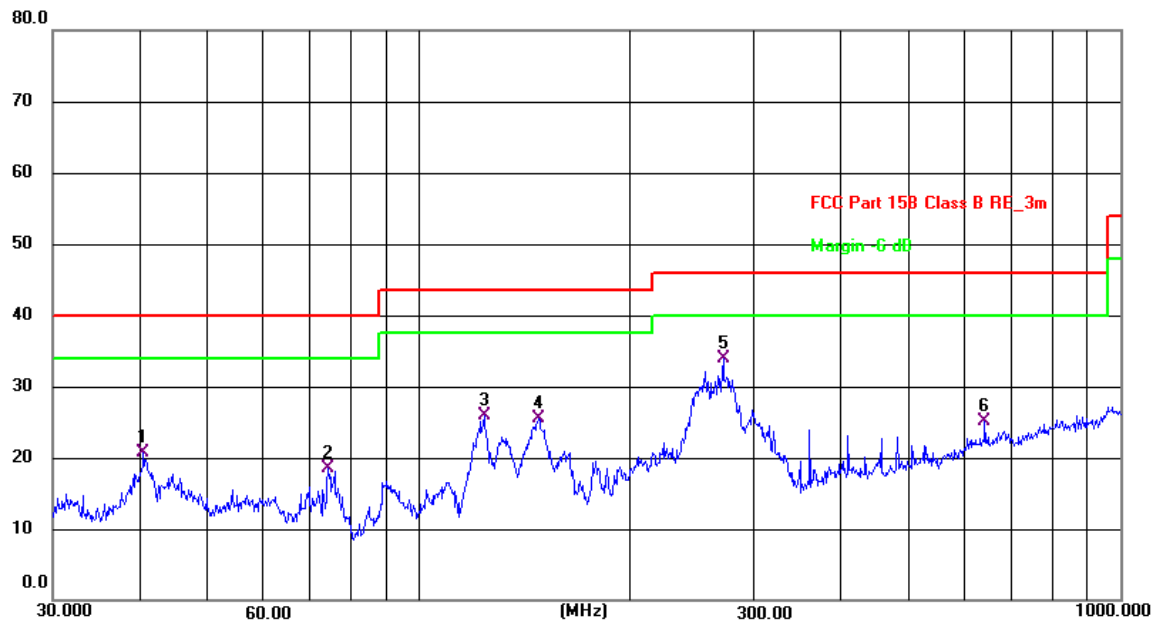


Test Mode	TX G Mode Channel 01	Polarization	Horizontal
-----------	----------------------	--------------	------------



No.	Frequency (MHz)	Reading ()	Factor (dB)	Level ()	Limit ()	Margin (dB)	Detector	P/F	Remark
1	40.4170	39.00	-18.36	20.64	40.00	-19.36	QP	P	
2	74.1350	39.51	-20.93	18.58	40.00	-21.42	QP	P	
3	123.6984	44.87	-18.94	25.93	43.50	-17.57	QP	P	
4	147.9214	43.04	-17.51	25.53	43.50	-17.97	QP	P	
5 *	271.3245	52.09	-18.18	33.91	46.00	-12.09	QP	P	
6	640.6109	33.93	-8.85	25.08	46.00	-20.92	QP	P	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIXD -RADIATED EMISSION- ABOVE 1000MHZ

Test Result of Radiated Spurious at Band edges.

Note: All test plots below include both horizontal and vertical

Test Results					PASS			
Frequency Range					2310MHz~2410MHz			
Test Mode					TX B Mode Channel 01 ANT1			
N o.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	75.20	-21.47	53.73	74.00	-20.27	Peak
2	2390	H	--	-21.47	--	54.00	--	Avg
3	2400	H	79.52	-26.12	53.40	74.00	-20.60	Peak
4	2400	H	--	-26.12	--	54.00	--	Avg
1	2390	V	74.45	-21.47	52.98	74.00	-21.02	Peak
2	2390	V	--	-21.47	--	54.00	--	Avg
3	2400	V	79.11	-26.12	52.99	74.00	-21.01	Peak
4	2400	V	--	-26.12	--	54.00	--	Avg
Test Results					PASS			
Frequency Range					2450MHz~2550MHz			
Test Mode					TX B Mode Channel 11 ANT1			
1	2483.5	H	79.20	-25.29	53.91	74.00	-20.09	Peak
2	2483.5	H	--	-25.29	--	54.00	--	Avg
1	2483.5	V	78.46	-25.29	53.17	74.00	-20.83	Peak
2	2483.5	V	--	-25.29	--	54.00	--	Avg

Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin.

2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain.
Result=Reading + Correct Factor.
Margin= Result-Limit.

3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.

Test Results					PASS			
Frequency Range					2310MHz~2410MHz			
Test Mode					TX G Mode Channel 01 ANT1			
N o.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	74.73	-21.47	53.26	74.00	-20.74	Peak
2	2390	H	--	-21.47	--	54.00	--	Avg
3	2400	H	79.15	-26.12	53.03	74.00	-20.97	Peak
4	2400	H	--	-26.12	--	54.00	--	Avg
1	2390	V	74.32	-21.47	52.85	74.00	-21.15	Peak
2	2390	V	--	-21.47	--	54.00	--	Avg
3	2400	V	78.64	-26.12	52.52	74.00	-21.48	Peak
4	2400	V	--	-26.12	--	54.00	--	Avg
Test Results					PASS			
Frequency Range					2450MHz~2550MHz			
Test Mode					TX G Mode Channel 11 ANT1			
1	2483.5	H	78.80	-25.29	53.51	74.00	-20.49	Peak
2	2483.5	H	--	-25.29	--	54.00	--	Avg
1	2483.5	V	78.67	-25.29	53.38	74.00	-20.62	Peak
2	2483.5	V	--	-25.29	--	54.00	--	Avg
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.								

Test Results					PASS			
Frequency Range					2310MHz~2410MHz			
Test Mode					TX N(HT20) Mode Channel 01 ANT1+ANT2			
N o.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	74.65	-21.47	53.18	74.00	-20.82	Peak
2	2390	H	--	-21.47	--	54.00	--	Avg
3	2400	H	79.26	-26.12	53.14	74.00	-20.86	Peak
4	2400	H	--	-26.12	--	54.00	--	Avg
1	2390	V	74.87	-21.47	53.40	74.00	-20.60	Peak
2	2390	V	--	-21.47	--	54.00	--	Avg
3	2400	V	78.98	-26.12	52.86	74.00	-21.14	Peak
4	2400	V	--	-26.12	--	54.00	--	Avg
Test Results					PASS			
Frequency Range					2450MHz~2550MHz			
Test Mode					TX N(HT20) Mode Channel 11 ANT1+ANT2			
1	2483.5	H	78.73	-25.29	53.44	74.00	-20.56	Peak
2	2483.5	H	--	-25.29	--	54.00	--	Avg
1	2483.5	V	78.76	-25.29	53.47	74.00	-20.53	Peak
2	2483.5	V	--	-25.29	--	54.00	--	Avg
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.								

Test Results					PASS			
Frequency Range					2310MHz~2410MHz			
Test Mode					TX N(HT40) Mode Channel 03 ANT1+ANT2			
N o.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	75.15	-21.47	53.68	74.00	-20.32	Peak
2	2390	H	--	-21.47	--	54.00	--	Avg
3	2400	H	79.21	-26.12	53.09	74.00	-20.91	Peak
4	2400	H	--	-26.12	--	54.00	--	Avg
1	2390	V	74.52	-21.47	53.05	74.00	-20.95	Peak
2	2390	V	--	-21.47	--	54.00	--	Avg
3	2400	V	79.51	-26.12	53.39	74.00	-20.61	Peak
4	2400	V	--	-26.12	--	54.00	--	Avg
Test Results					PASS			
Frequency Range					2450MHz~2550MHz			
Test Mode					TX N(HT40) Mode Channel 11 ANT1+ANT2			
1	2483.5	H	78.40	-25.29	53.11	74.00	-20.89	Peak
2	2483.5	H	--	-25.29	--	54.00	--	Avg
1	2483.5	V	79.17	-25.29	53.88	74.00	-20.12	Peak
2	2483.5	V	--	-25.29	--	54.00	--	Avg
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.								

ABOVE 1000 MHz

Note: All the modes have been tested and recorded worst mode in the report.

Modulation Type:802.11b

Channel 1 / 2412 MHz							
Freq MHz	Polarity	Reading	Correct Factor	Result	Limit	Margin	Remark
4824	V	88.10	-27.21	60.89	74	-13.11	Peak
4824	V	69.41	-27.21	42.20	54	-11.80	Avg
7236	--	--	--		--		--
9648	--	--	--		--		--
4824	H	90.88	-27.21	63.67	74	-10.33	Peak
4824	H	68.96	-27.21	41.75	54	-12.25	Avg
7236	--	--		--		--	--
9648	--	--		--		--	--
Channel 6 / 2437 MHz							
4874	V	90.41	-27.84	62.57	74	-11.43	Peak
4874	V	70.65	-27.84	42.81	54	-11.19	Avg
7311	--	--	--		--		--
9748	--	--	--		--		--
4874	H	90.96	-27.84	63.12	74	-10.88	Peak
4874	H	71.66	-27.84	43.82	54	-10.18	Avg
7311	--	--	--		--		--
9748	--	--	--		--		--
Channel 11 / 2462 MHz							
4924	V	90.51	-28.49	62.02	74	-11.98	Peak
4924	V	69.76	-28.49	41.27	54	-12.73	Avg
7386	--	--	--		--		--
9848	--	--	--		--		--
4924	H	91.55	-28.49	63.06	74	-10.94	Peak
4924	H	69.52	-28.49	41.03	54	-12.97	Avg
7386	--	--	--		--		--
9848	--	--	--		--	--	--

Note:

1, Result = Read level + Antenna factor + cable loss-Amp factor

2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

Notes:

1). Radiated emissions measured in frequency range from 9 KHz~10th harmonic or 26.5GHz (which is less) were made with an instrument using Peak detector mode.

2). Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

3). Worst case data at 1Mbps at IEEE 802.11b.

4). Measured Level = Reading Level + Factor, Margin = Measured Level – Limit

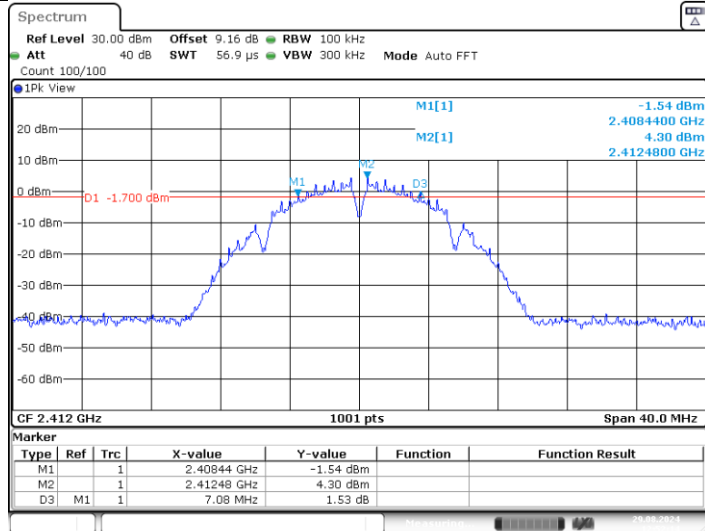
APPENDIXE - BANDWIDTH

1. DTS Bandwidth

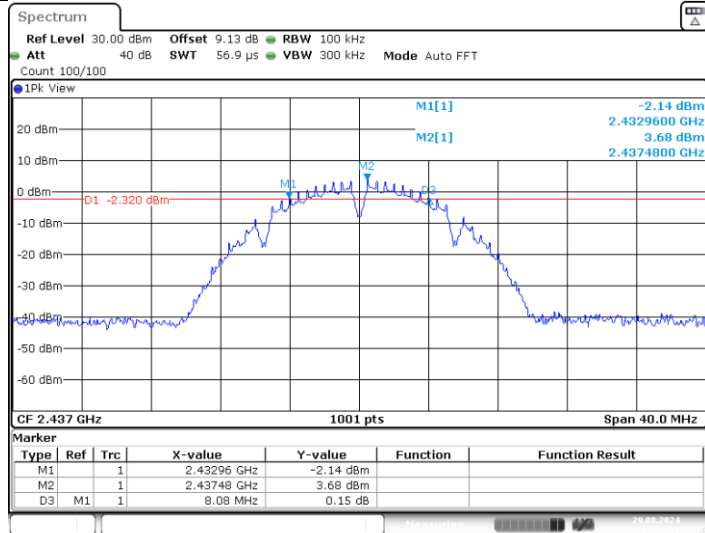
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	7.08	2408.44	2415.52	0.5	PASS
		2437	8.08	2432.96	2441.04	0.5	PASS
		2462	8.56	2457.48	2466.04	0.5	PASS
11G	Ant1	2412	14.84	2404.72	2419.56	0.5	PASS
		2437	15.04	2429.24	2444.28	0.5	PASS
		2462	13.60	2454.72	2468.32	0.5	PASS
11N20SISO	Ant1	2412	16.36	2404.44	2420.80	0.5	PASS
		2437	16.92	2428.52	2445.44	0.5	PASS
		2462	16.96	2453.20	2470.16	0.5	PASS
11N40SISO	Ant1	2422	33.92	2405.68	2439.60	0.5	PASS
		2437	35.44	2419.16	2454.60	0.5	PASS
		2452	28.80	2440.72	2469.52	0.5	PASS

Test Graphs

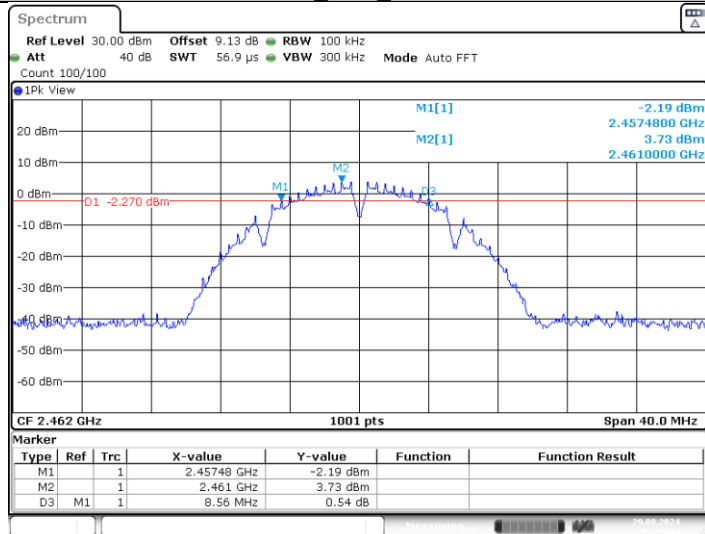
11B_Ant1_2412



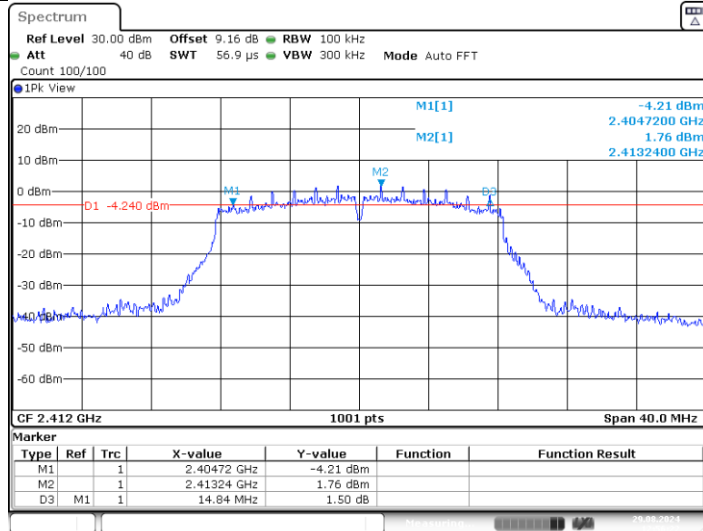
11B_Ant1_2437



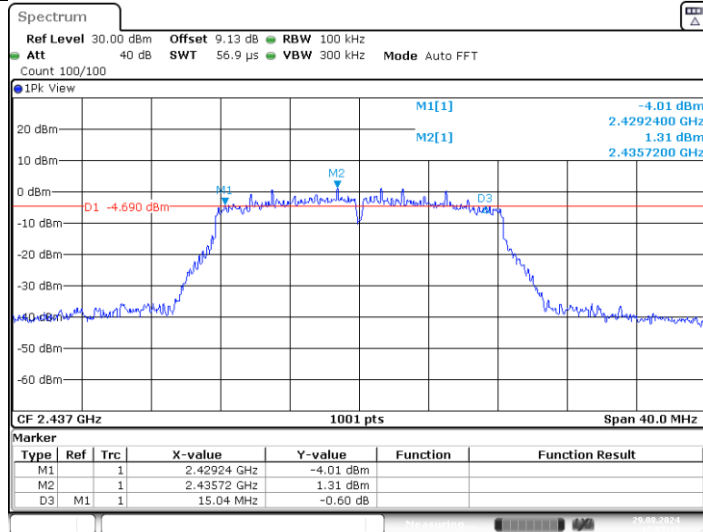
11B_Ant1_2462



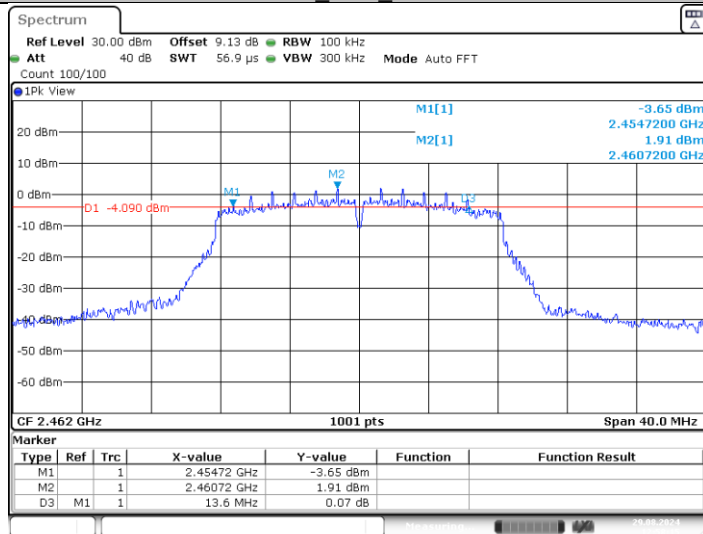
11G_Ant1_2412



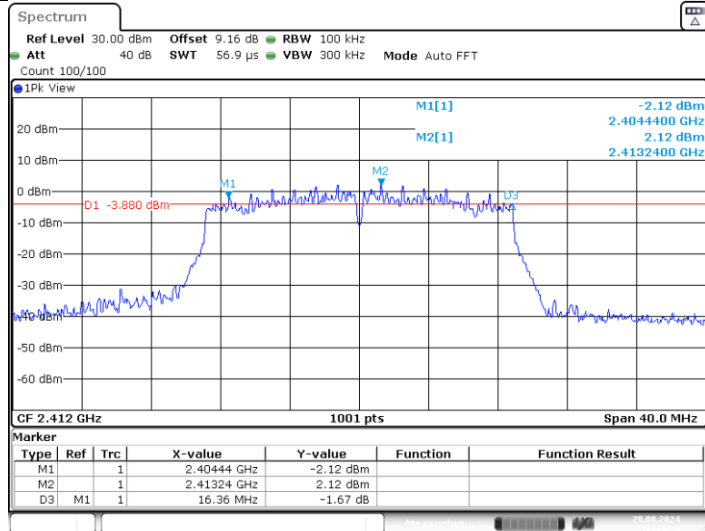
11G_Ant1_2437



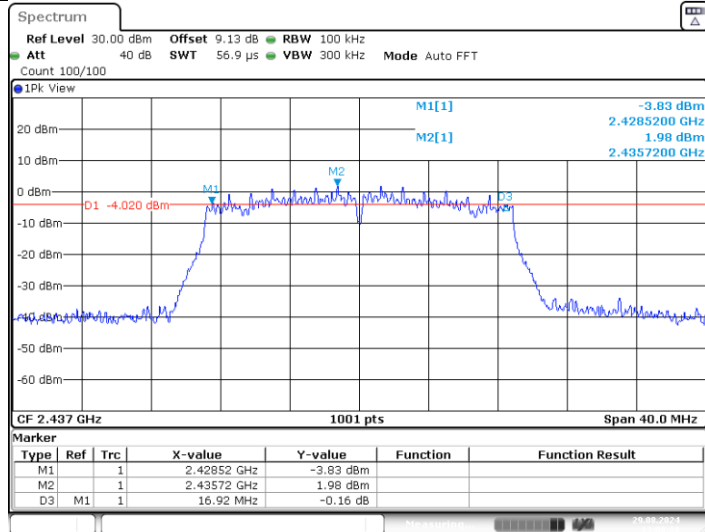
11G_Ant1_2462



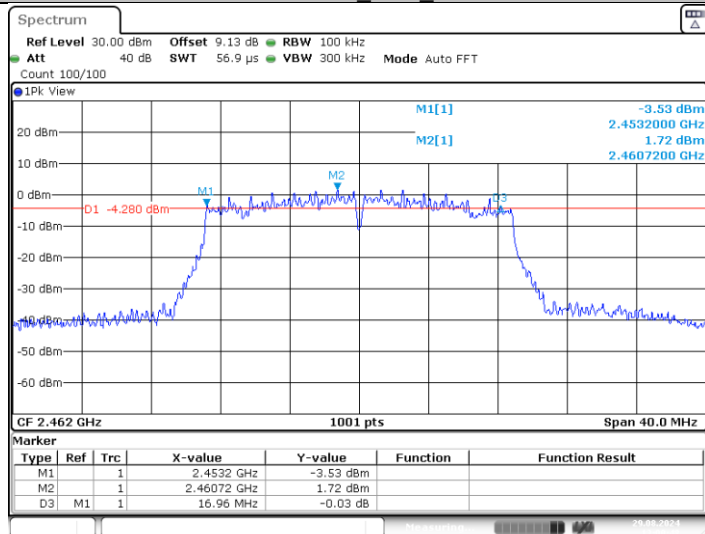
11N20SISO_Ant1_2412



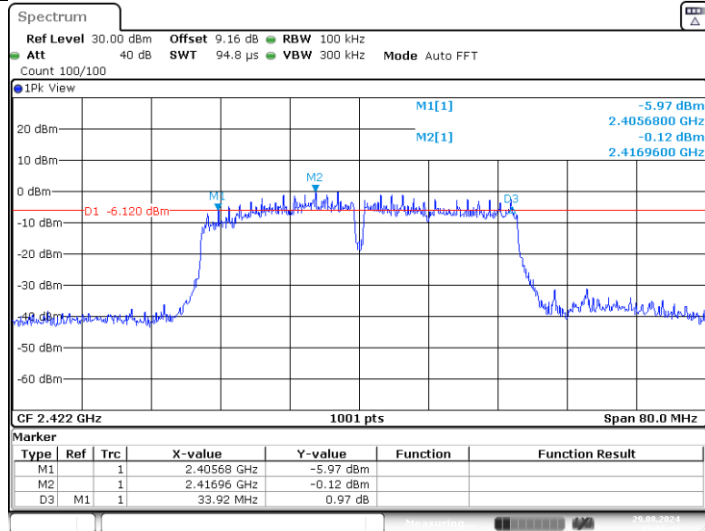
11N20SISO_Ant1_2437



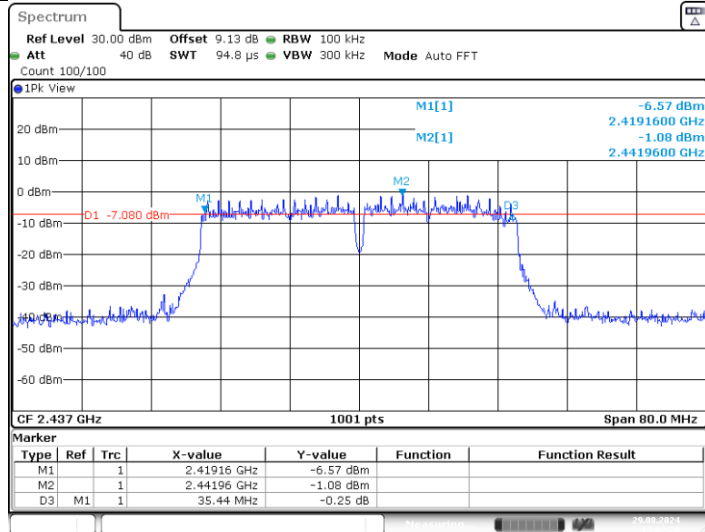
11N20SISO_Ant1_2462



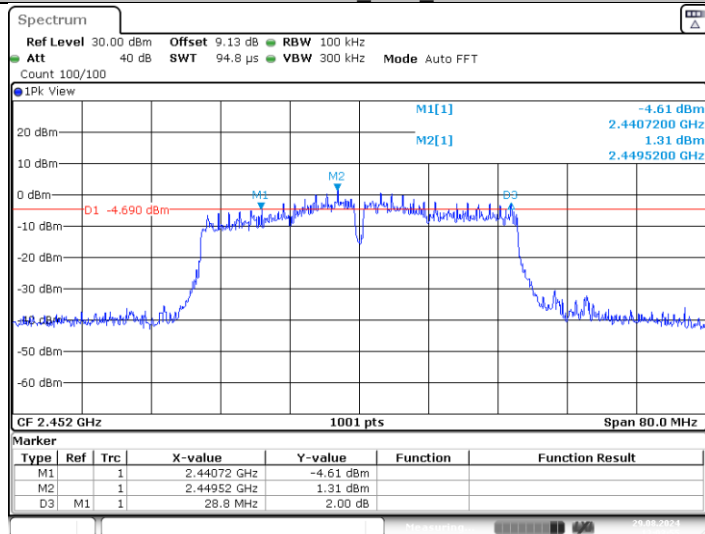
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

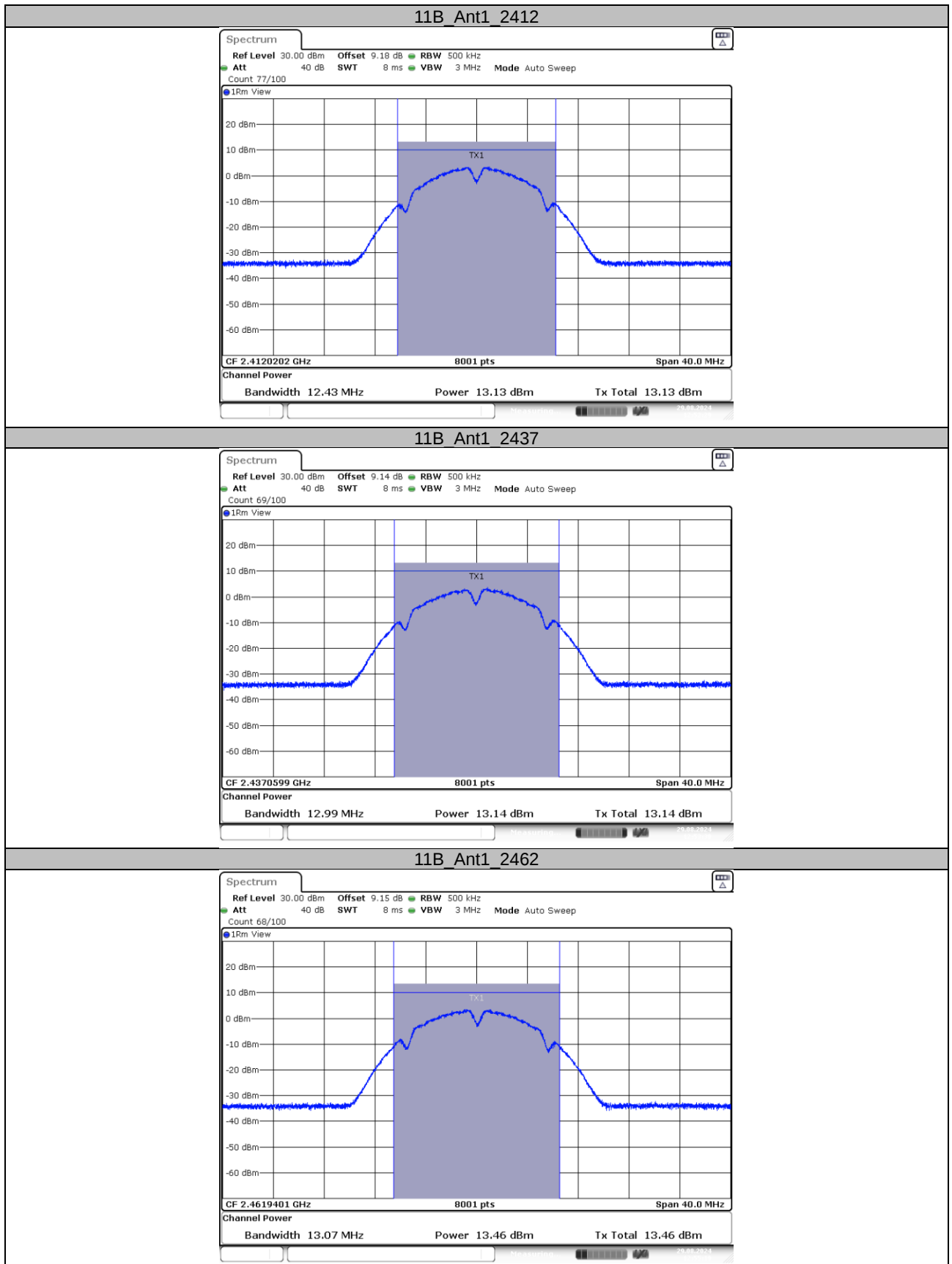


APPENDIX F - MAXIMUM OUTPUT POWER

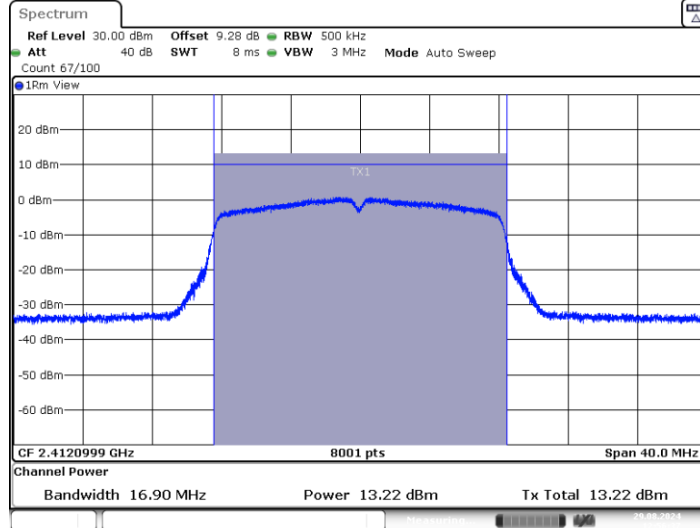
Test Mode	Antenna	Frequency[MHz]	Average power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	13.11	99.53	0.02	13.13	≤30.00	PASS
		2437	13.13	99.76	0.01	13.14	≤30.00	PASS
		2462	13.44	99.64	0.02	13.46	≤30.00	PASS
11G	Ant1	2412	13.10	97.20	0.12	13.22	≤30.00	PASS
		2437	13.04	97.20	0.12	13.16	≤30.00	PASS
		2462	13.15	97.20	0.12	13.27	≤30.00	PASS
11N20SISO	Ant1	2412	12.46	80.00	0.97	13.43	≤30.00	PASS
		2437	12.39	85.00	0.71	13.10	≤30.00	PASS
		2462	12.56	85.00	0.71	13.27	≤30.00	PASS
11N40SISO	Ant1	2422	12.15	71.43	1.46	13.61	≤30.00	PASS
		2437	12.14	71.43	1.46	13.60	≤30.00	PASS
		2452	12.24	71.43	1.46	13.70	≤30.00	PASS

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

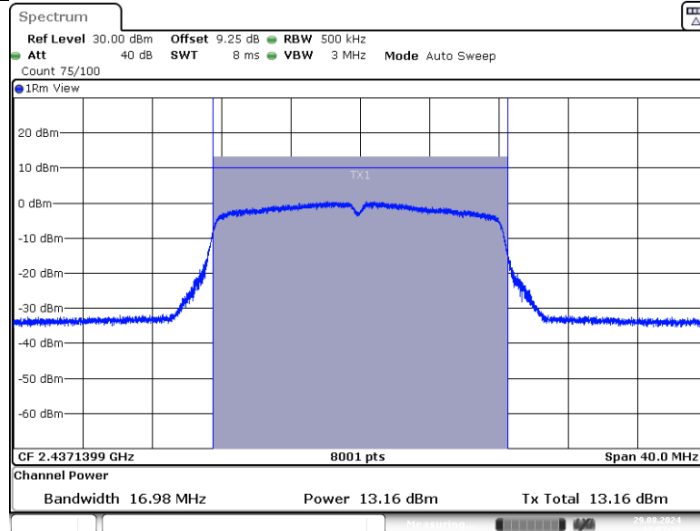
TEST GRAPHS AVERAGE



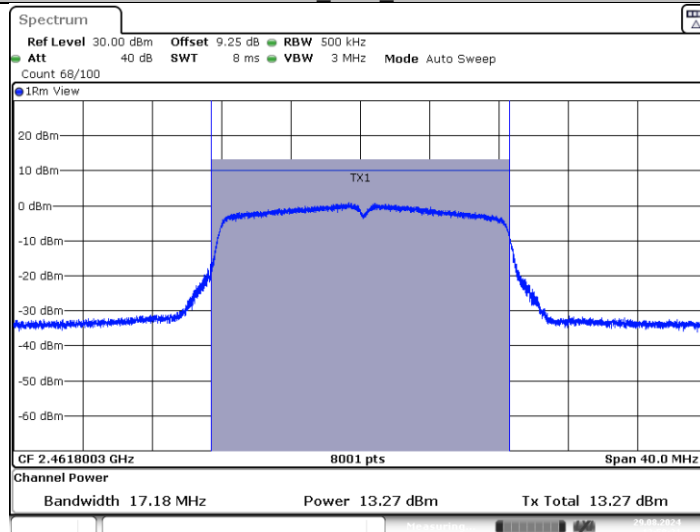
11G_Ant1_2412



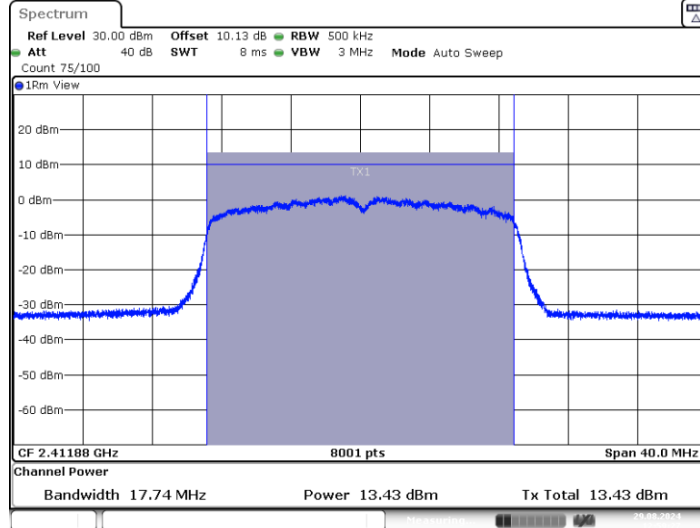
11G_Ant1_2437



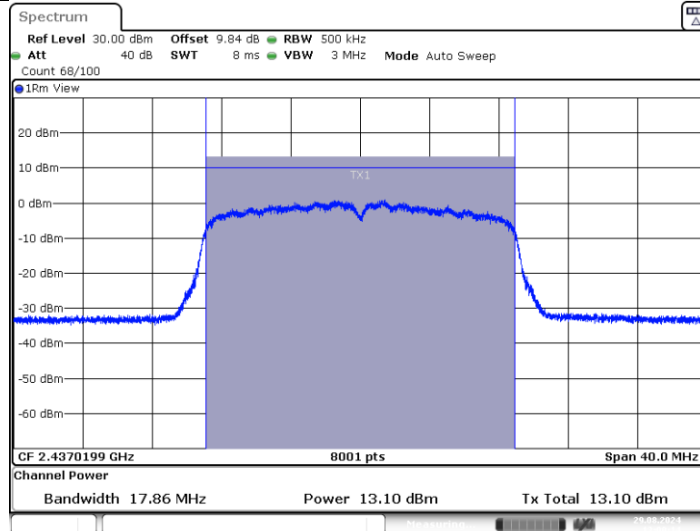
11G_Ant1_2462



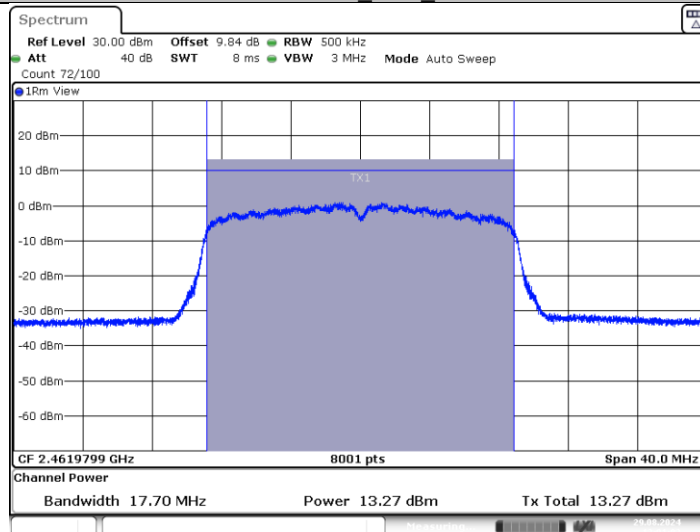
11N20SISO_Ant1_2412



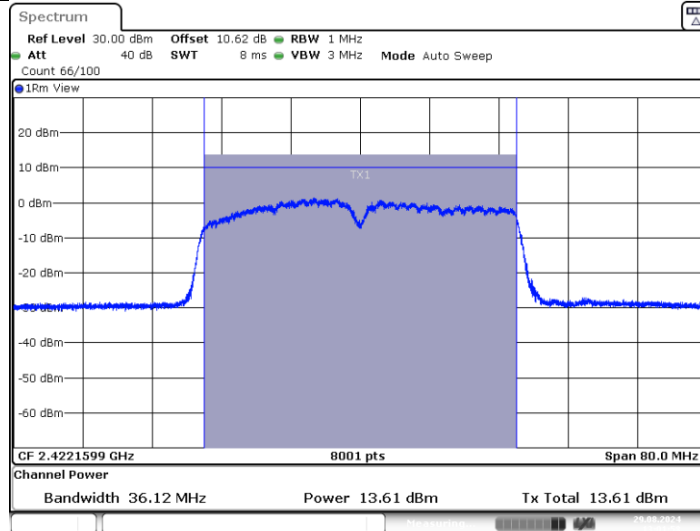
11N20SISO_Ant1_2437



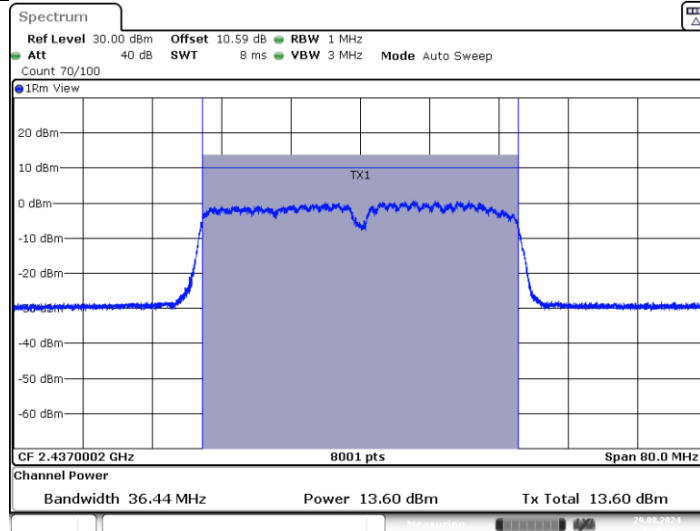
11N20SISO_Ant1_2462



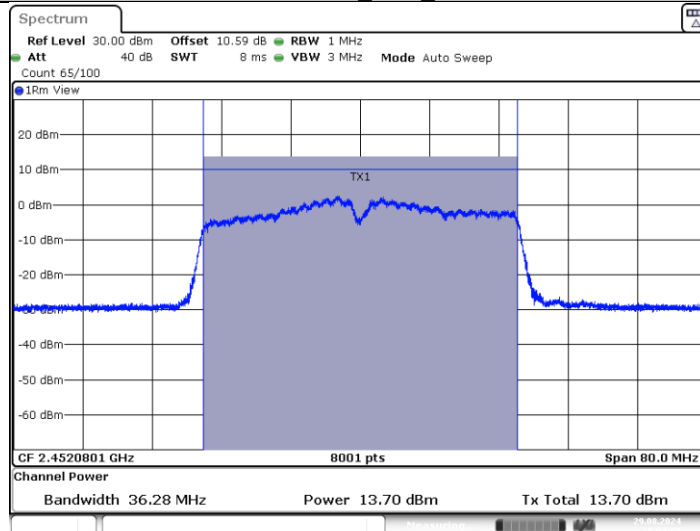
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



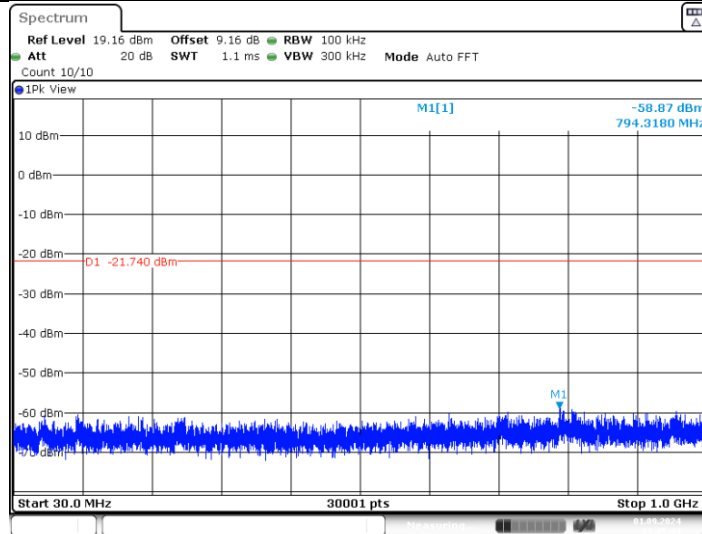
APPENDIXG - CONDUCTED SPURIOUS EMISSIONS

1. Conducted Spurious Emission

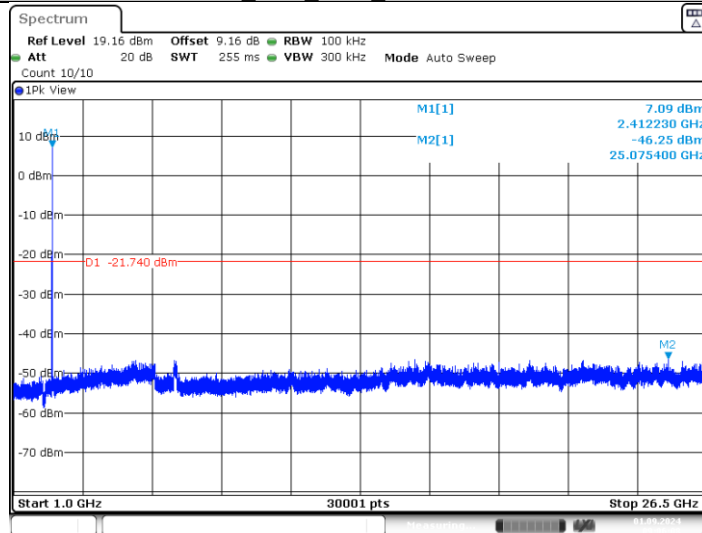
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	30~1000	8.26	-58.87	≤-21.74	PASS
			1000~26500	8.26	-46.25	≤-21.74	PASS
		2437	30~1000	7.74	-59.56	≤-22.26	PASS
			1000~26500	7.74	-43.8	≤-22.26	PASS
		2462	30~1000	7.77	-58.51	≤-22.23	PASS
			1000~26500	7.77	-45.63	≤-22.23	PASS
11G	Ant1	2412	30~1000	3.23	-58.71	≤-26.77	PASS
			1000~26500	3.23	-45.61	≤-26.77	PASS
		2437	30~1000	2.82	-58.73	≤-27.18	PASS
			1000~26500	2.82	-46.46	≤-27.18	PASS
		2462	30~1000	3.44	-58.74	≤-26.56	PASS
			1000~26500	3.44	-46.52	≤-26.56	PASS
11N20SISO	Ant1	2412	30~1000	3.12	-58.99	≤-26.88	PASS
			1000~26500	3.12	-39.54	≤-26.88	PASS
		2437	30~1000	2.98	-58.27	≤-27.02	PASS
			1000~26500	2.98	-45.35	≤-27.02	PASS
		2462	30~1000	3.31	-57.95	≤-26.69	PASS
			1000~26500	3.31	-45.88	≤-26.69	PASS
11N40SISO	Ant1	2422	30~1000	0.94	-58.33	≤-29.06	PASS
			1000~26500	0.94	-45.51	≤-29.06	PASS
		2437	30~1000	-1.63	-58.63	≤-31.63	PASS
			1000~26500	-1.63	-45.25	≤-31.63	PASS
		2452	30~1000	0.93	-58.27	≤-29.07	PASS
			1000~26500	0.93	-45.79	≤-29.07	PASS

Test Graphs

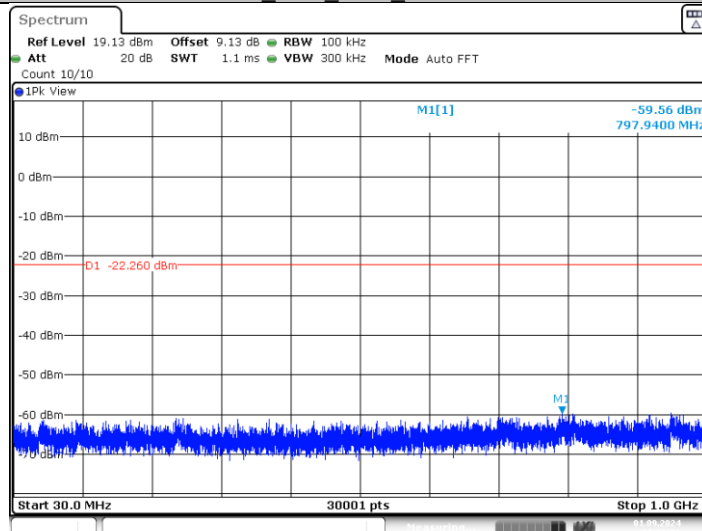
11B_Ant1_2412_30~1000

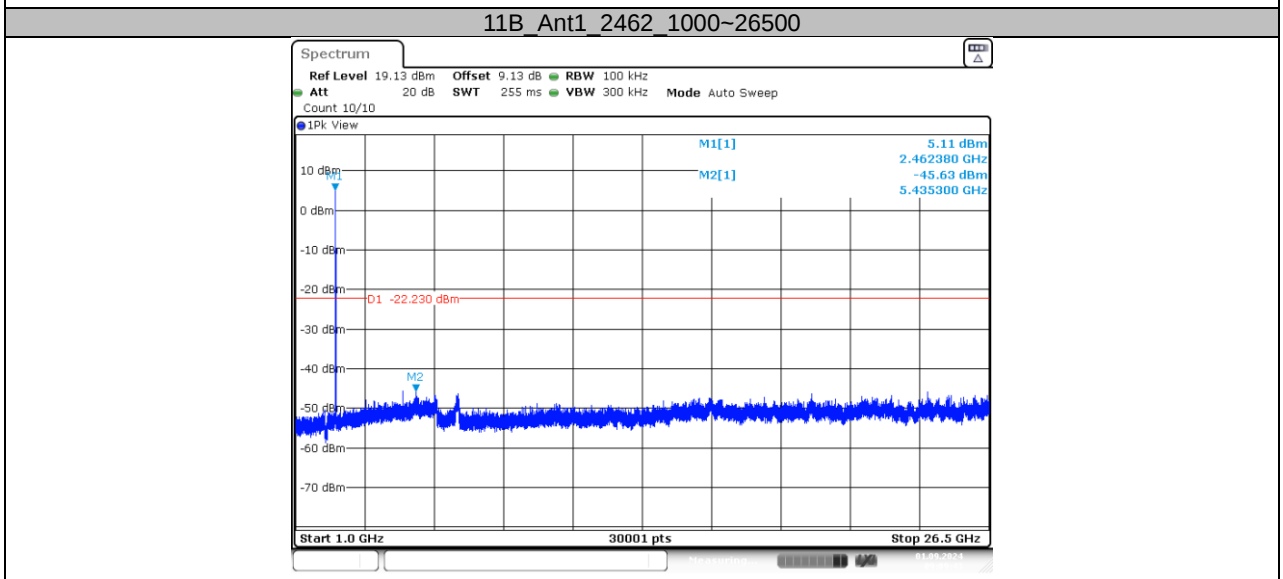
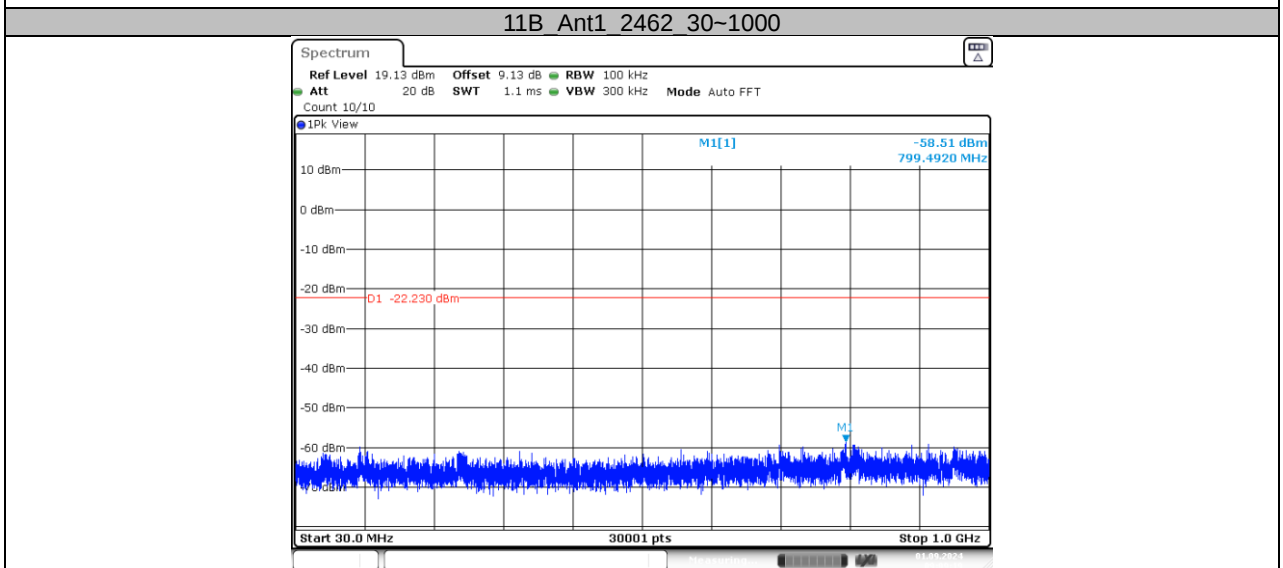
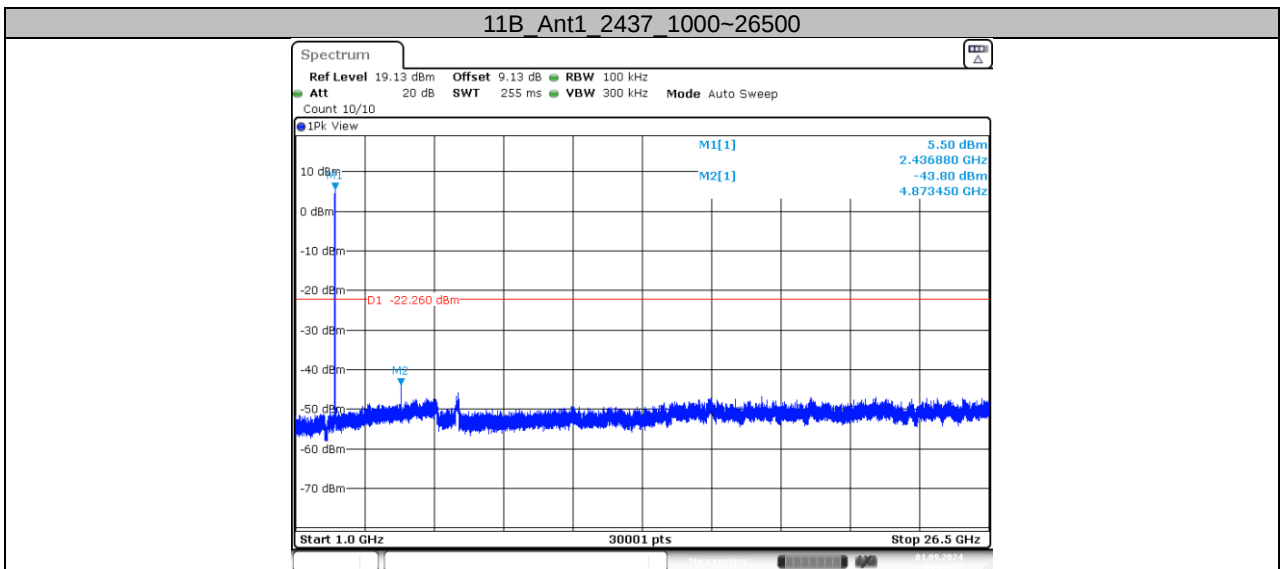


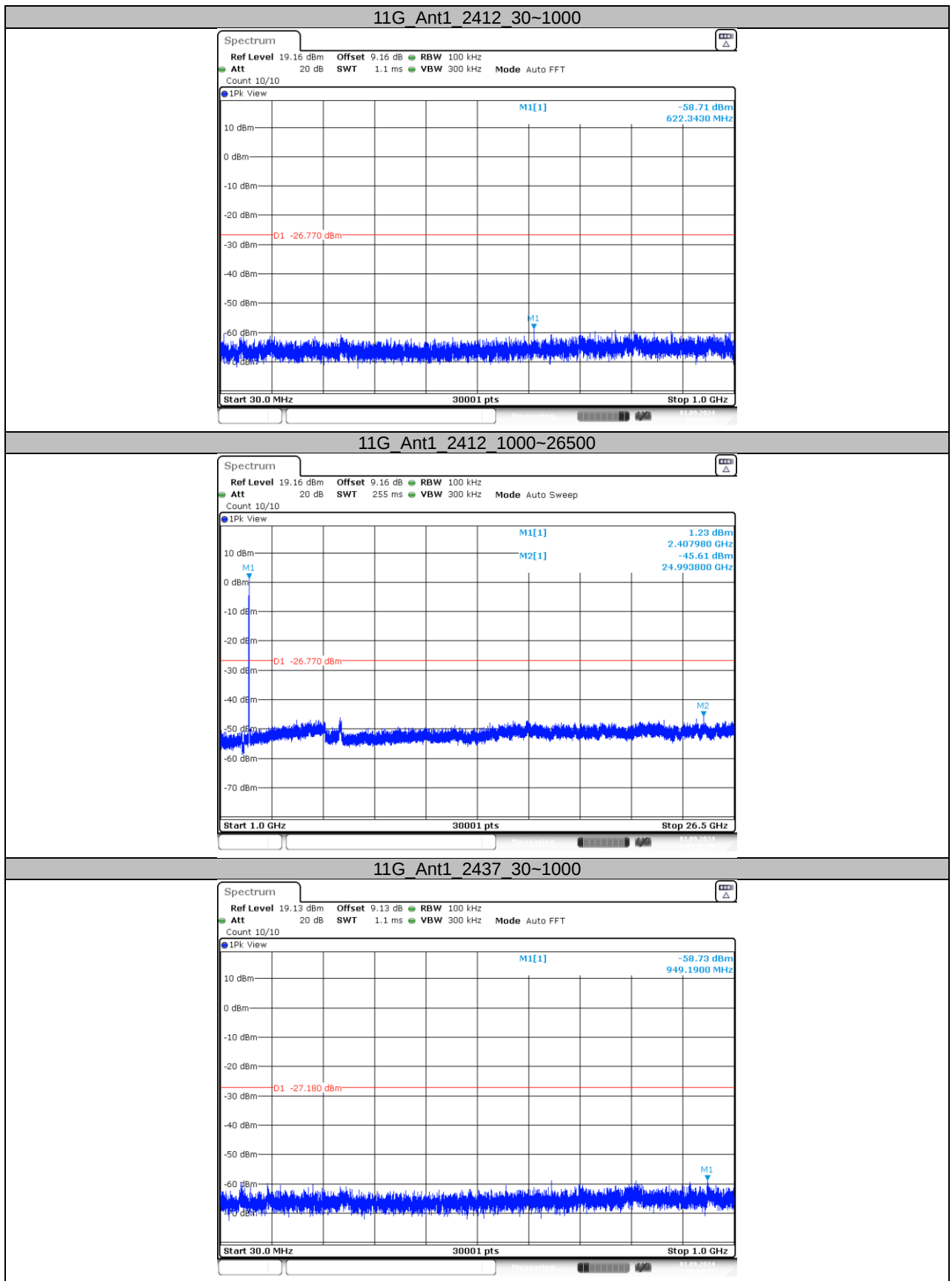
11B_Ant1_2412_1000~26500

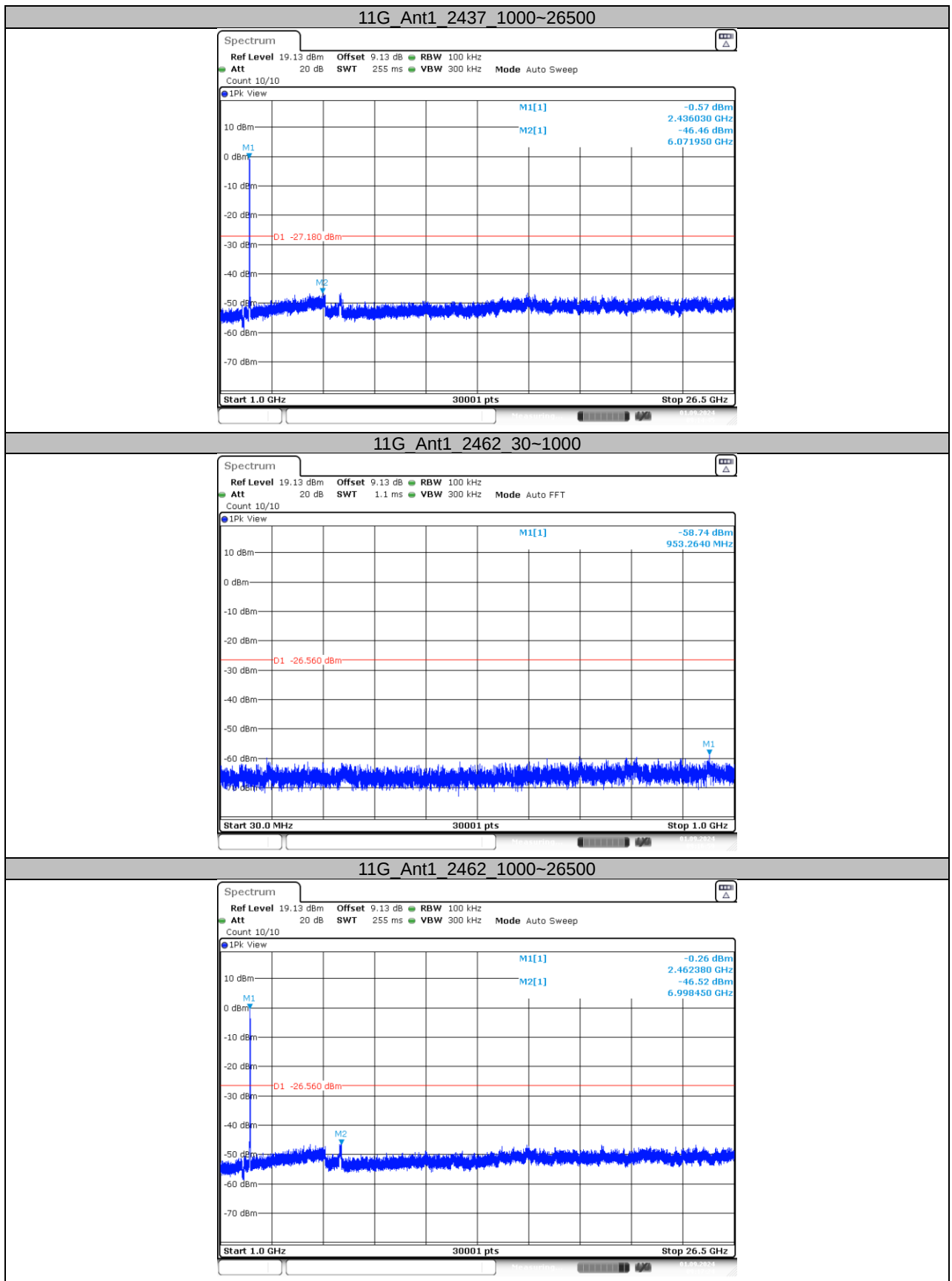


11B_Ant1_2437_30~1000

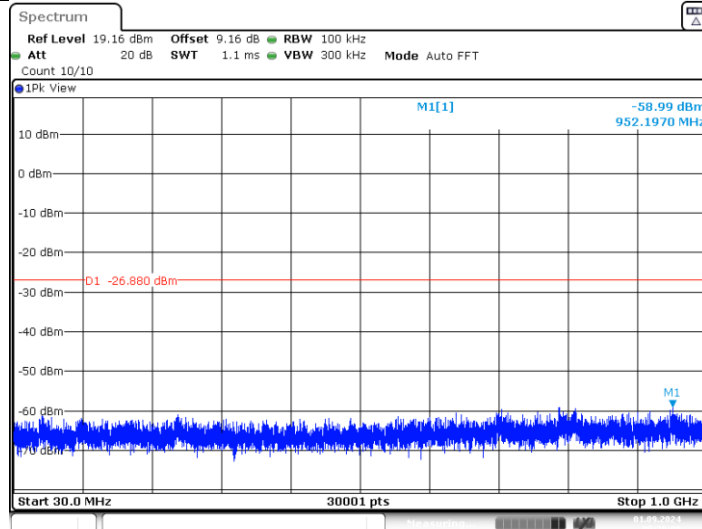




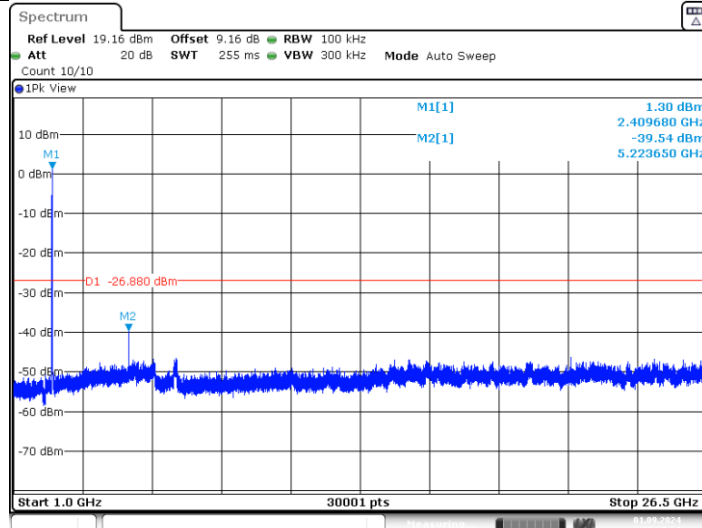




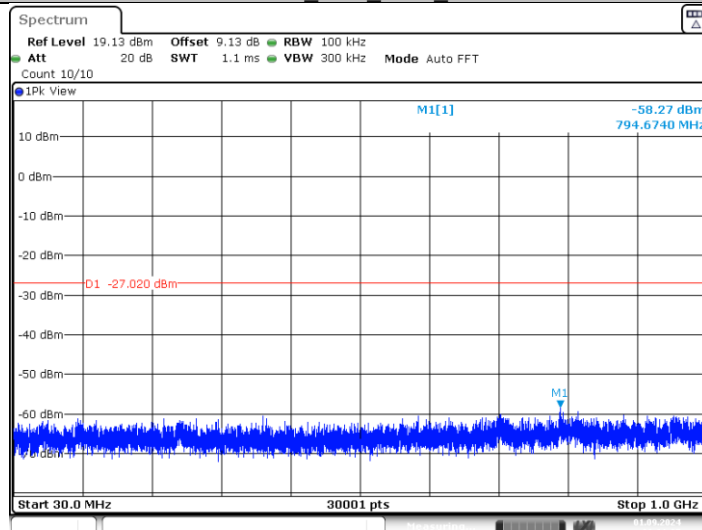
11N20SISO_Ant1_2412_30~1000

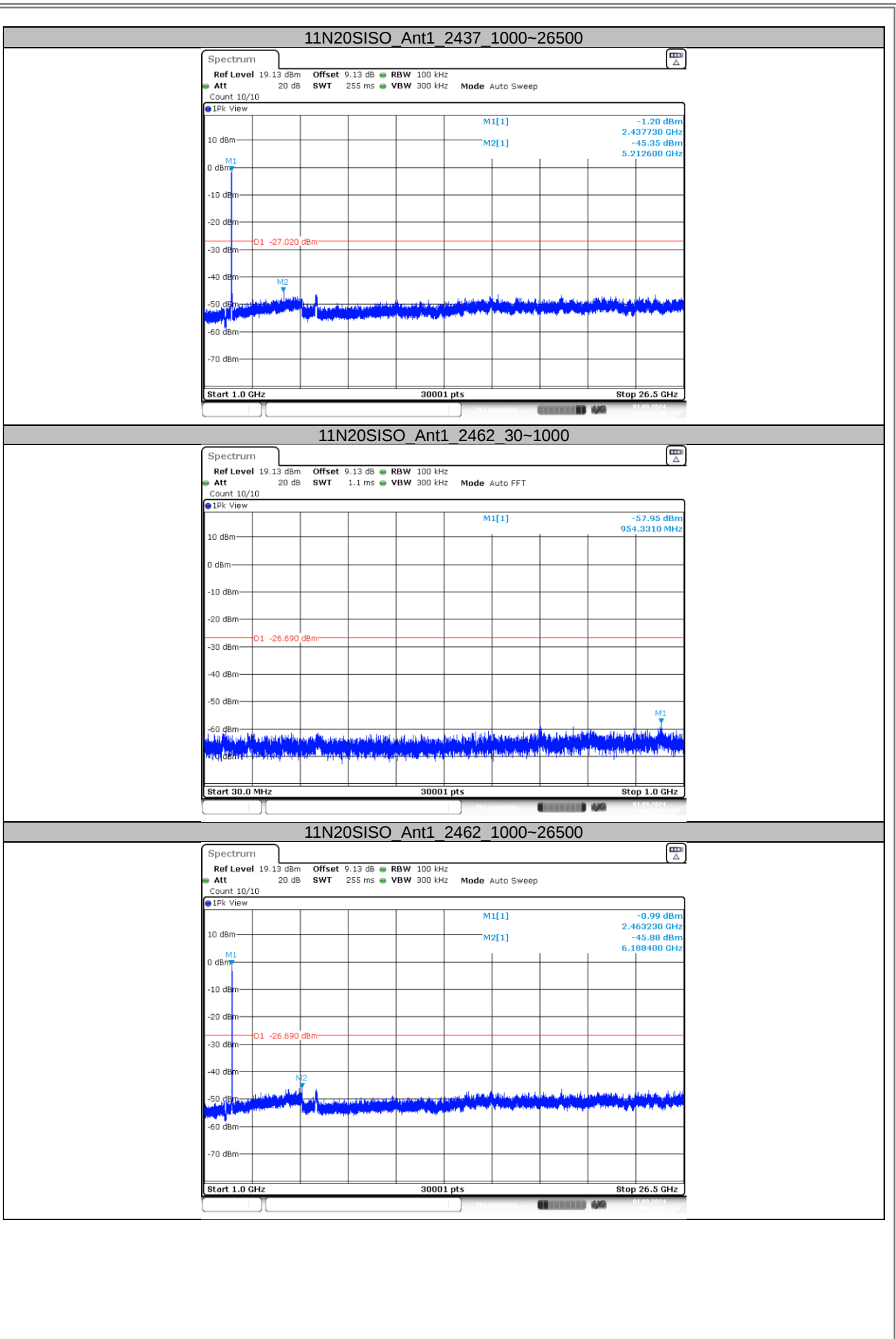


11N20SISO_Ant1_2412_1000~26500

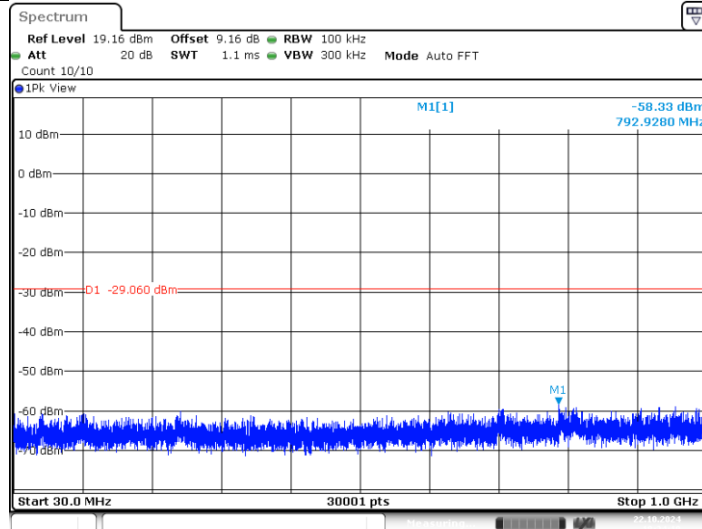


11N20SISO_Ant1_2437_30~1000

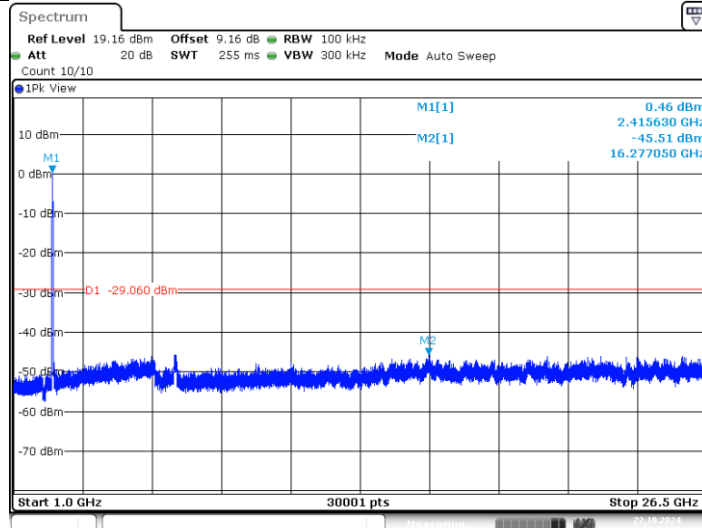




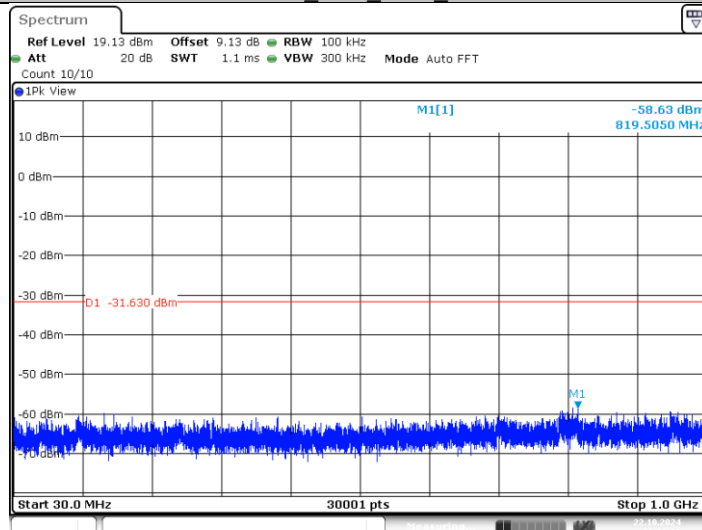
11N40SISO_Ant1_2422_30~1000

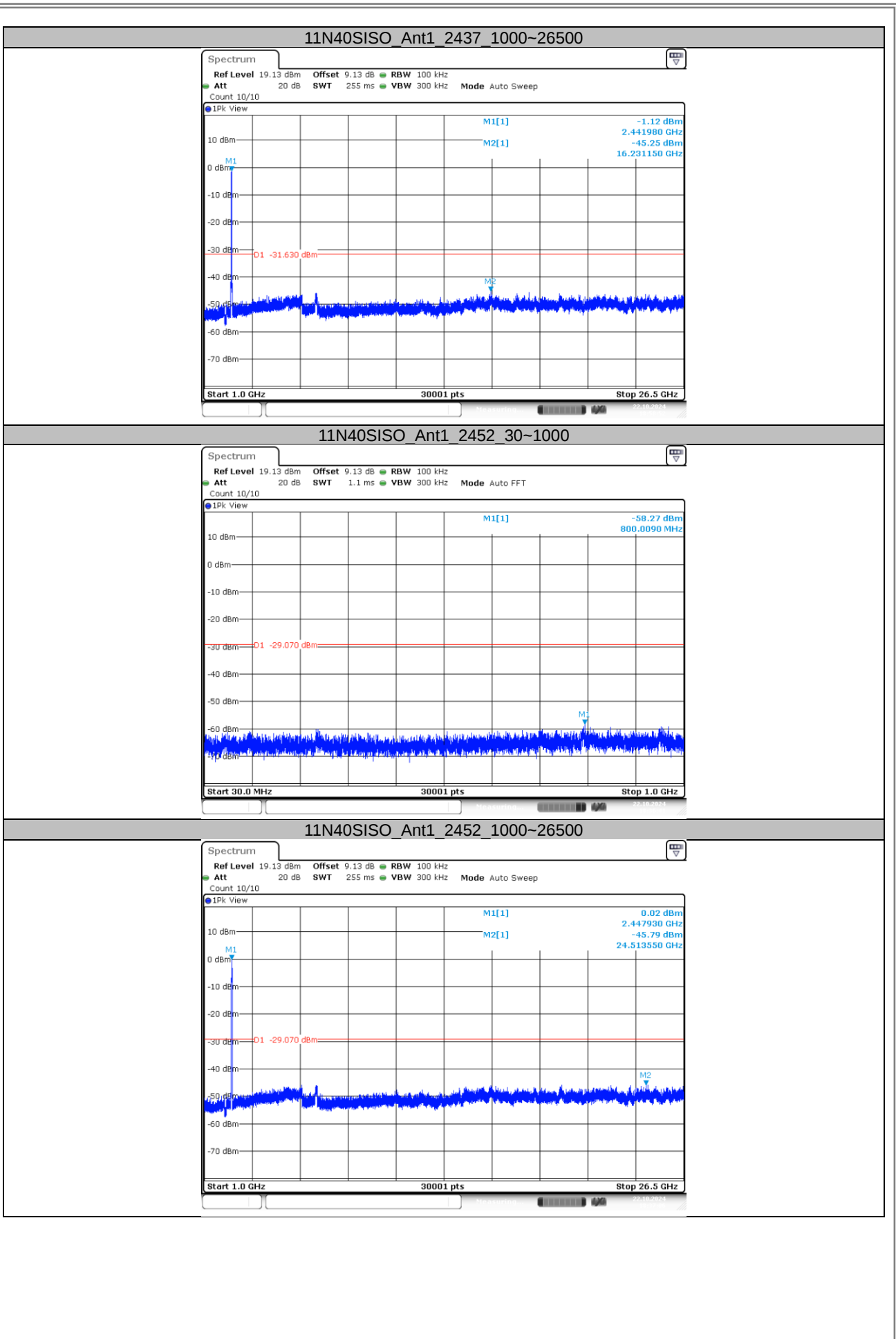


11N40SISO_Ant1_2422_1000~26500



11N40SISO_Ant1_2437_30~1000





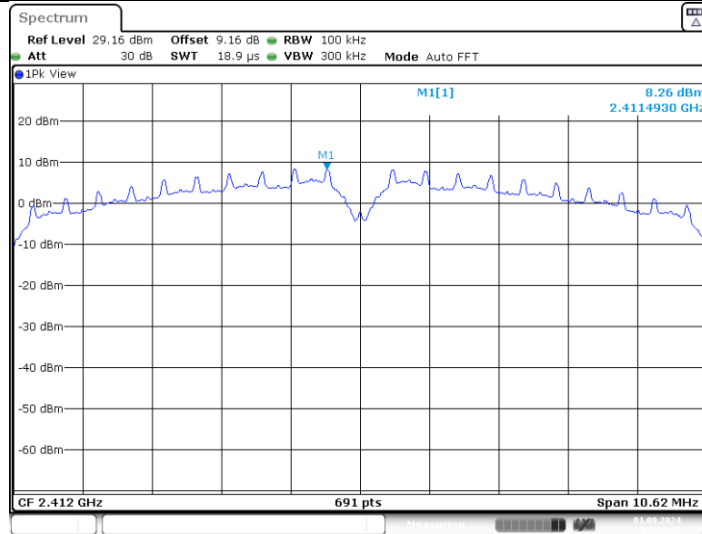
2. Band edge measurements

Reference level measurement

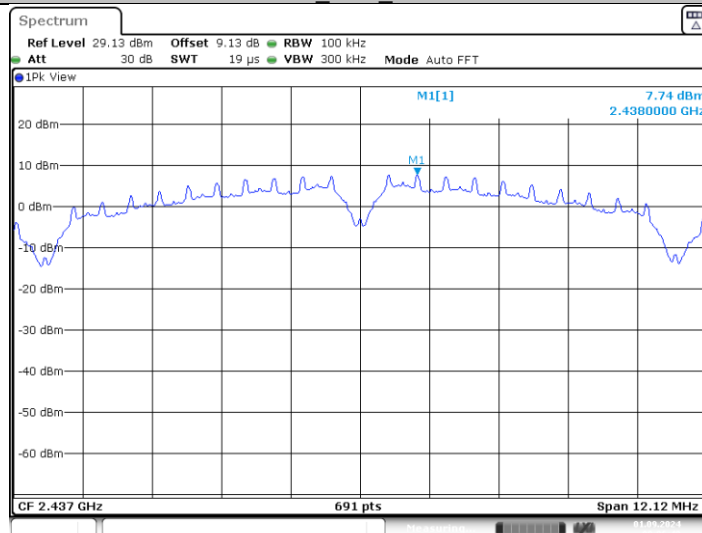
TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B	Ant1	2412	2411.49	8.26
		2437	2438.00	7.74
		2462	2461.00	7.77
11G	Ant1	2412	2410.71	3.23
		2437	2435.73	2.82
		2462	2463.24	3.44
11N20SISO	Ant1	2412	2410.72	3.12
		2437	2438.25	2.98
		2462	2460.71	3.31
11N40SISO	Ant1	2422	2416.99	0.94
		2437	2448.23	-1.63
		2452	2449.50	0.93

TEST GRAPHS

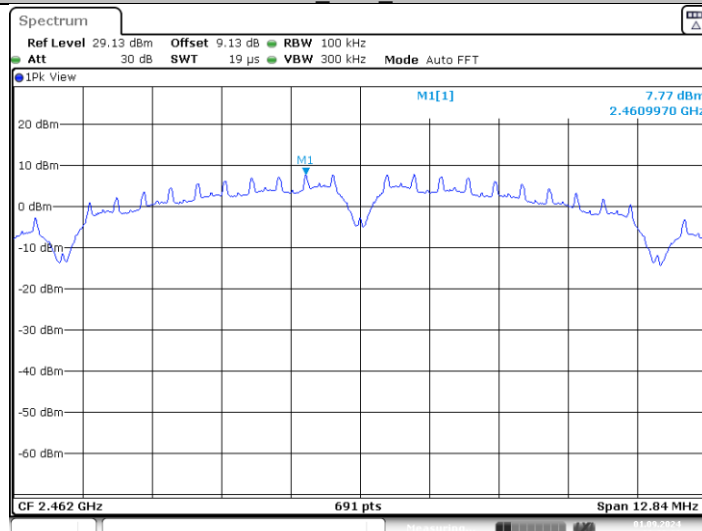
11B_Ant1_2412



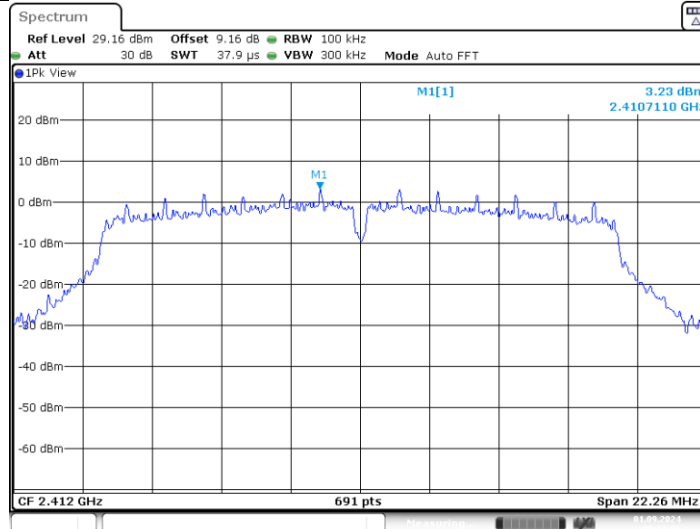
11B_Ant1_2437



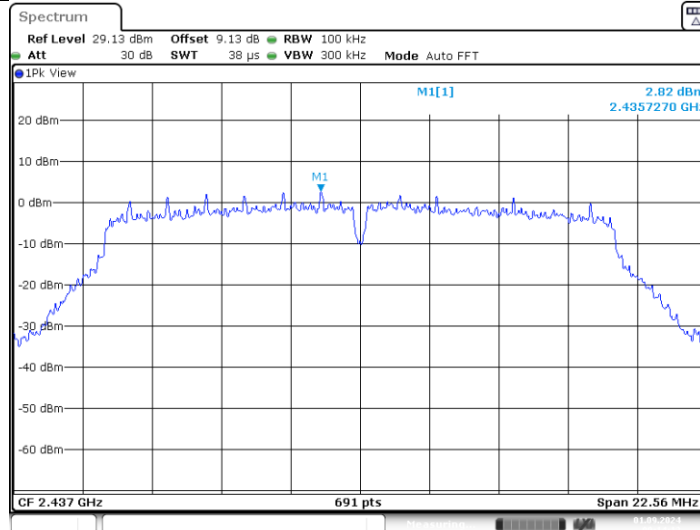
11B_Ant1_2462



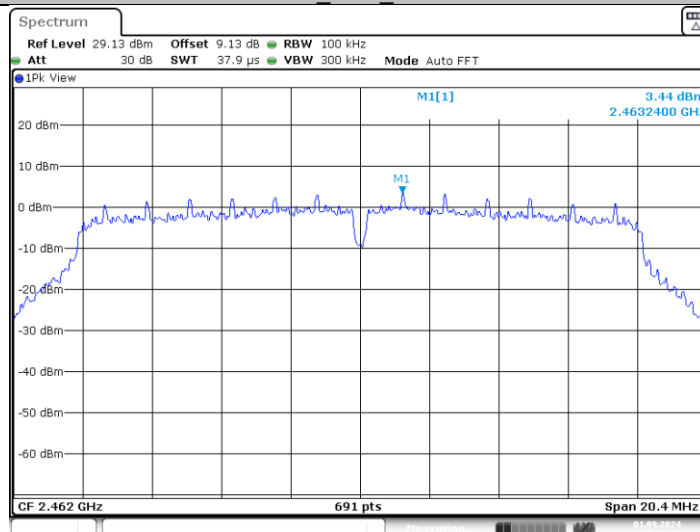
11G_Ant1_2412



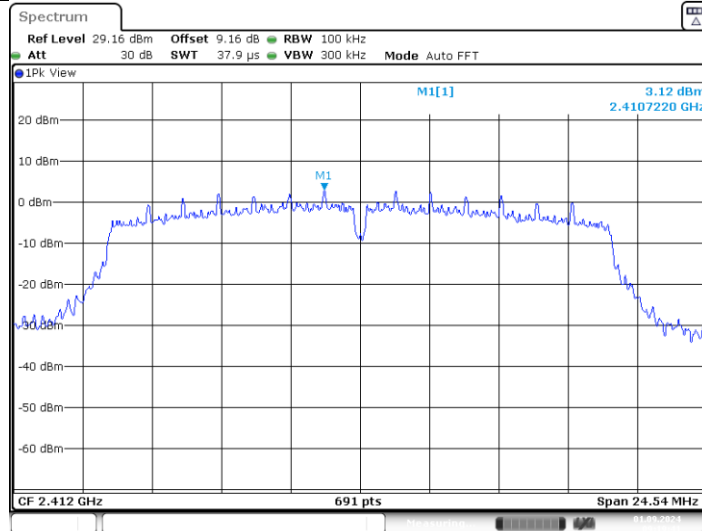
11G_Ant1_2437



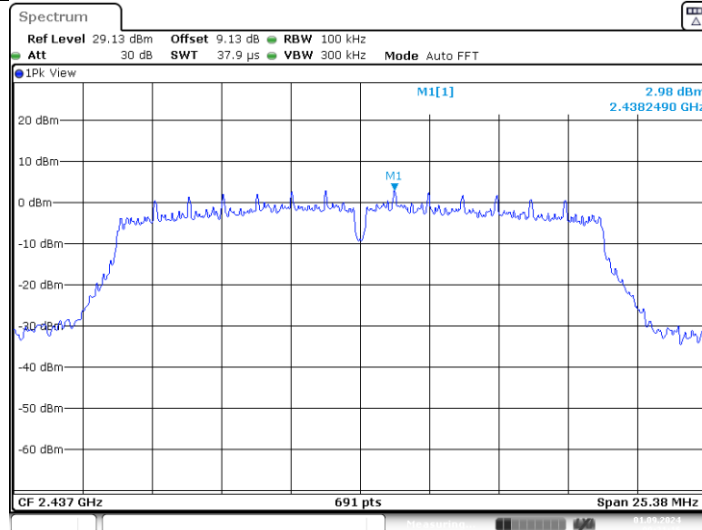
11G_Ant1_2462



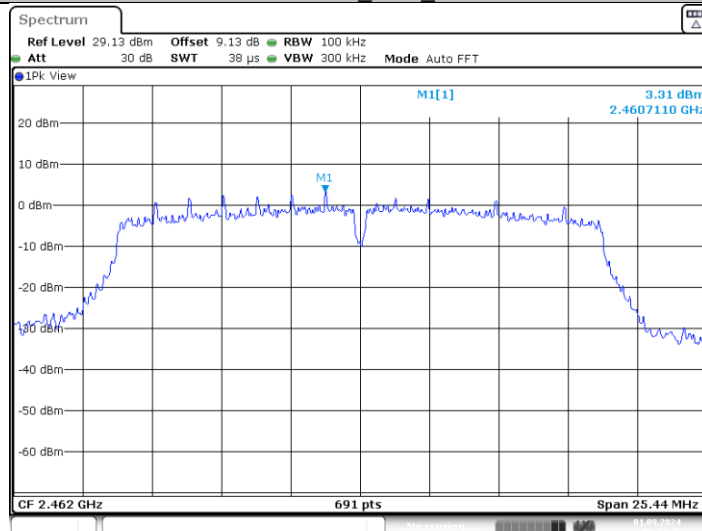
11N20SISO_Ant1_2412



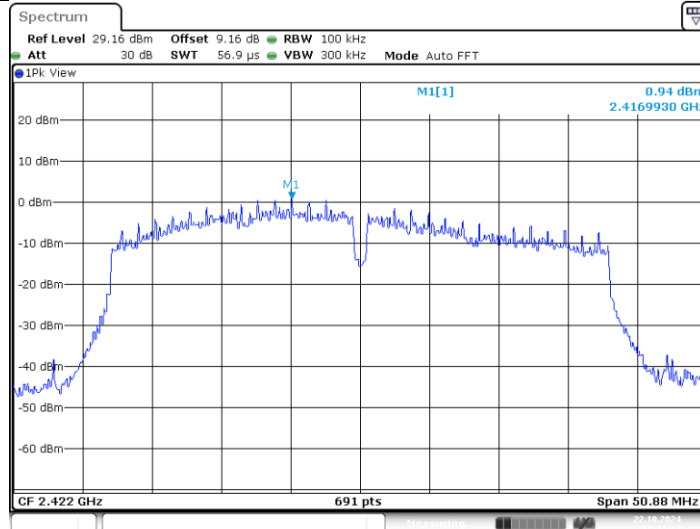
11N20SISO_Ant1_2437



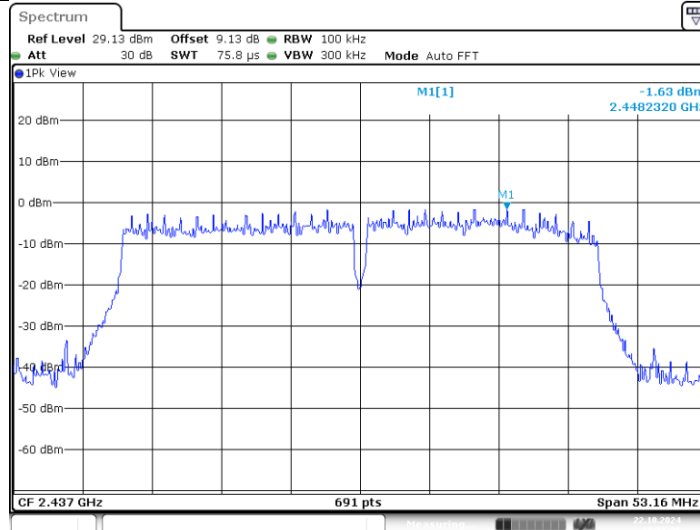
11N20SISO_Ant1_2462



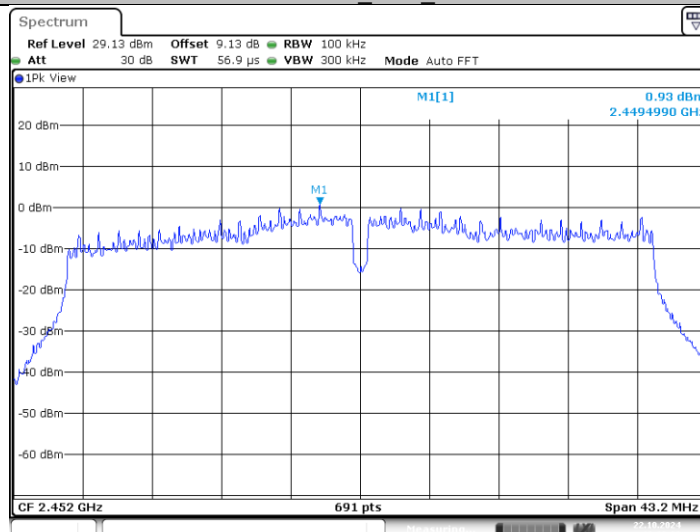
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



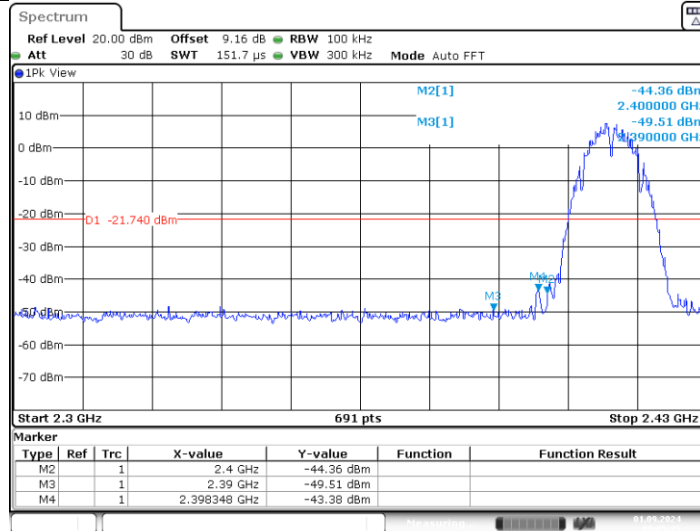
Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

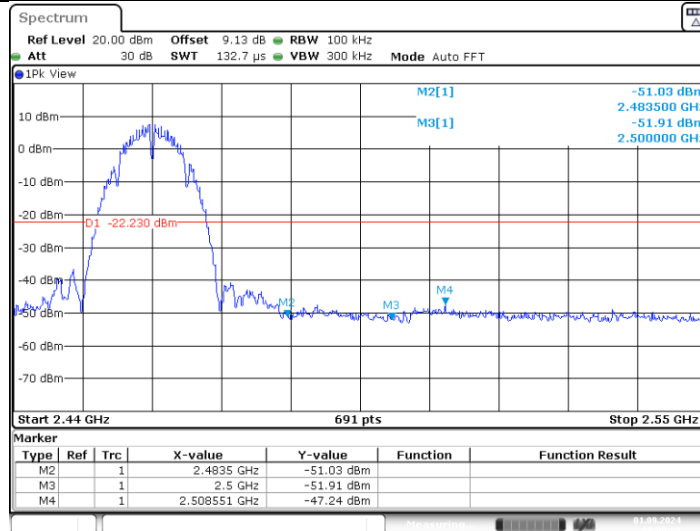
Band edge measurements

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.26	-43.38	≤-21.74	PASS
		High	2462	7.77	-47.24	≤-22.23	PASS
11G	Ant1	Low	2412	3.23	-30.81	≤-26.77	PASS
		High	2462	3.44	-44.29	≤-26.56	PASS
11N20SISO	Ant1	Low	2412	3.12	-29.48	≤-26.88	PASS
		High	2462	3.31	-43.88	≤-26.69	PASS
11N40SISO	Ant1	Low	2422	3.54	-30.48	≤-26.46	PASS
		High	2452	3.78	-46.74	≤-26.22	PASS

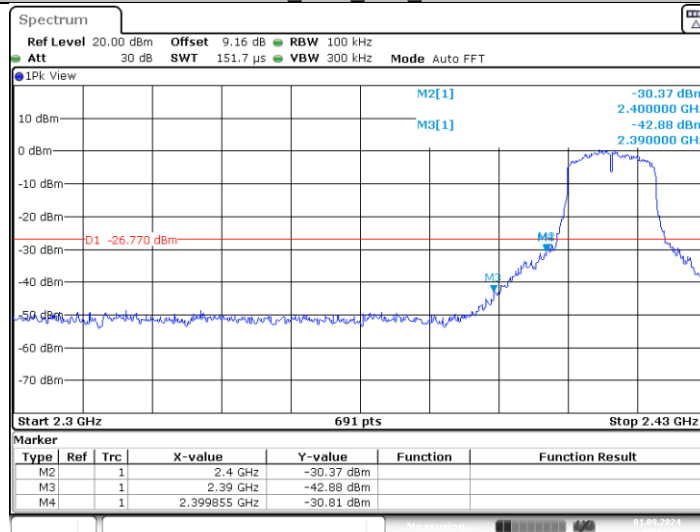
11B_Ant1_Low_2412



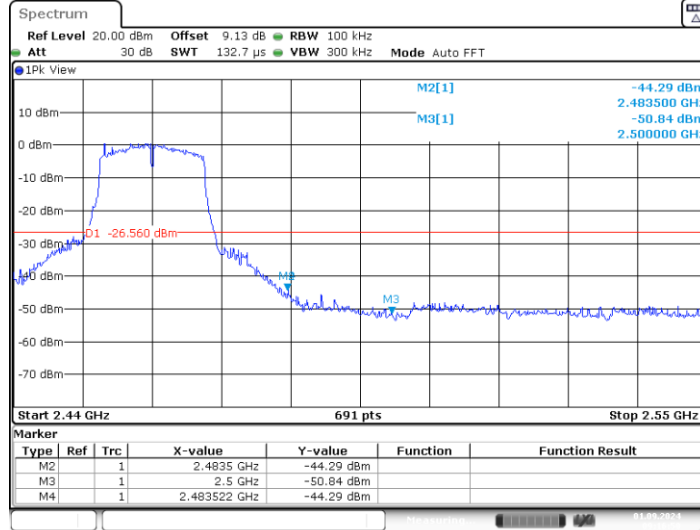
11B_Ant1_High_2462



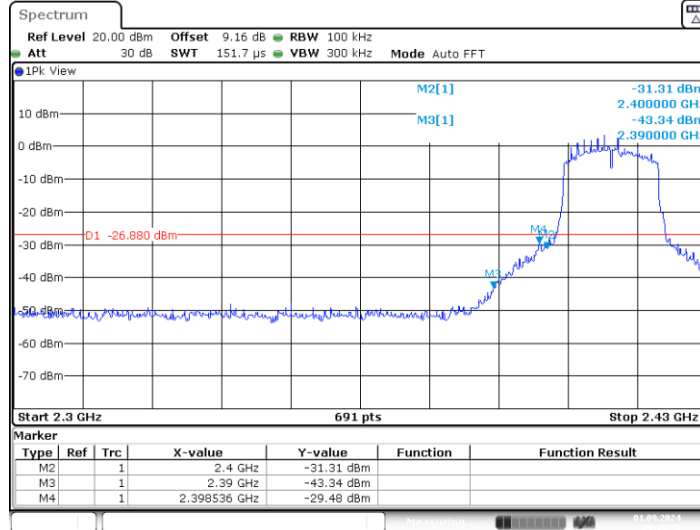
11G_Ant1_Low_2412



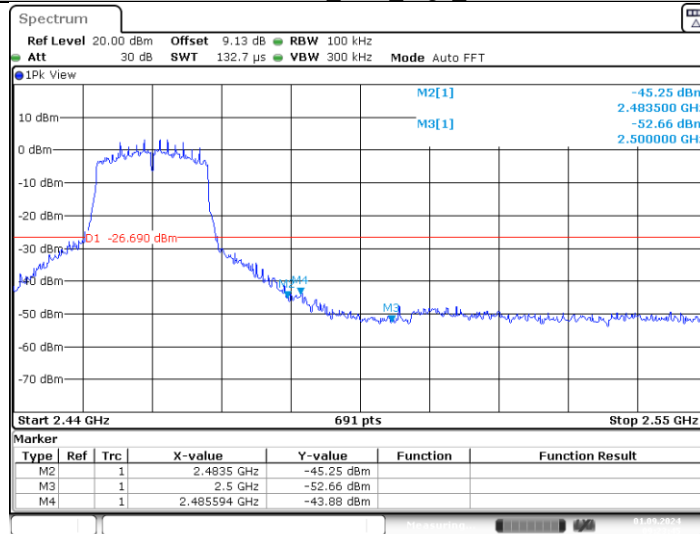
11G Ant1 High 2462



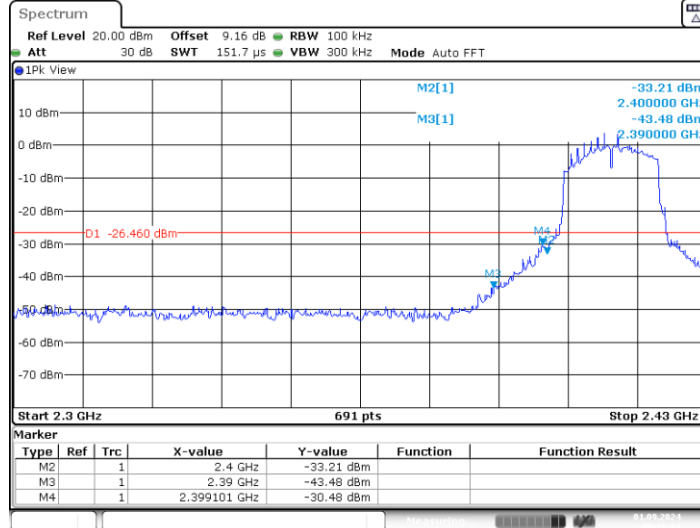
11N20SISO Ant1 Low 2412



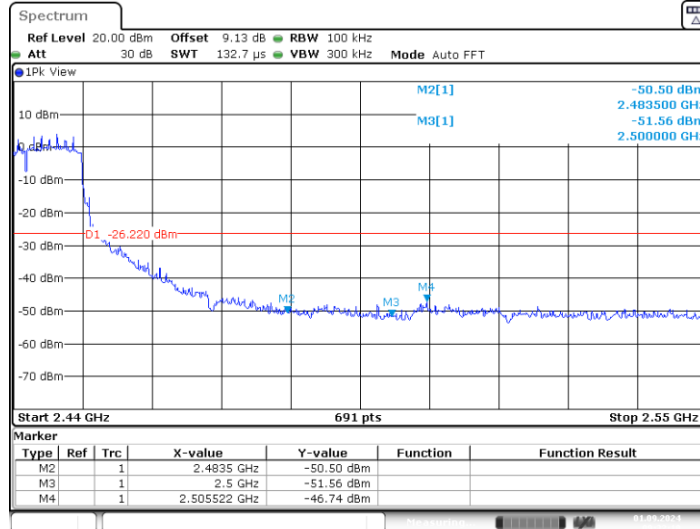
11N20SISO Ant1 High 2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



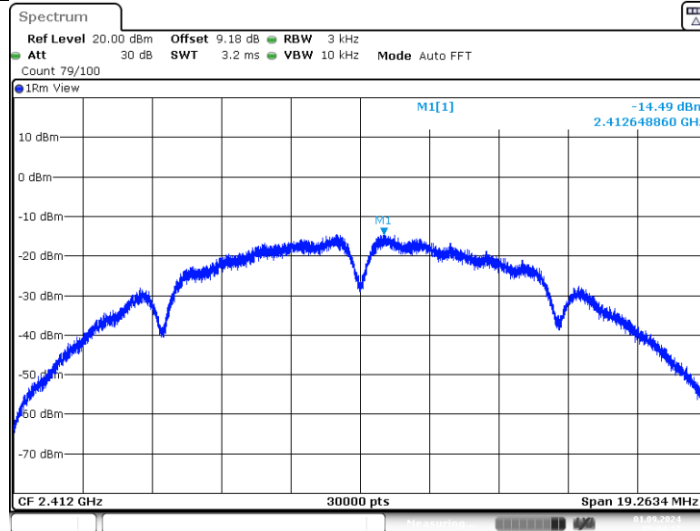
APPENDIXH - POWER SPECTRAL DENSITY

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-14.49	≤8.00	PASS
		2437	-14.29	≤8.00	PASS
		2462	-14.63	≤8.00	PASS
11G	Ant1	2412	-18.24	≤8.00	PASS
		2437	-19.25	≤8.00	PASS
		2462	-18.44	≤8.00	PASS
11N20SISO	Ant1	2412	-18.11	≤8.00	PASS
		2437	-18.23	≤8.00	PASS
		2462	-18.21	≤8.00	PASS
11N40SISO	Ant1	2422	-16.70	≤8.00	PASS
		2437	-15.43	≤8.00	PASS
		2452	-17.17	≤8.00	PASS

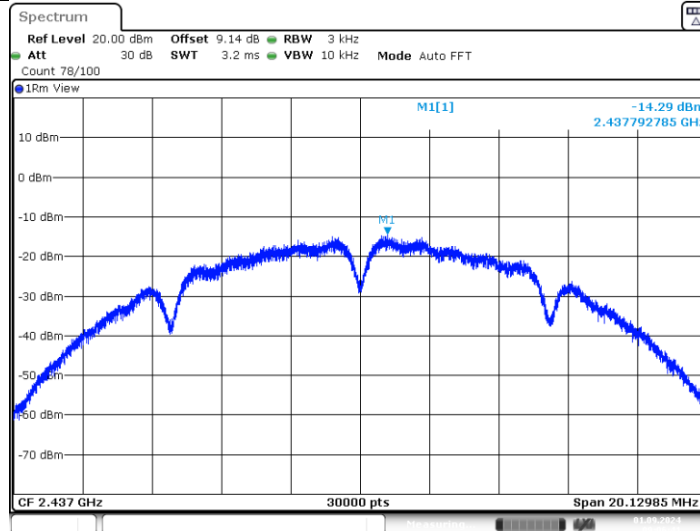
DC Factor=10*log(1/ Duty Cycle)

Test Graphs

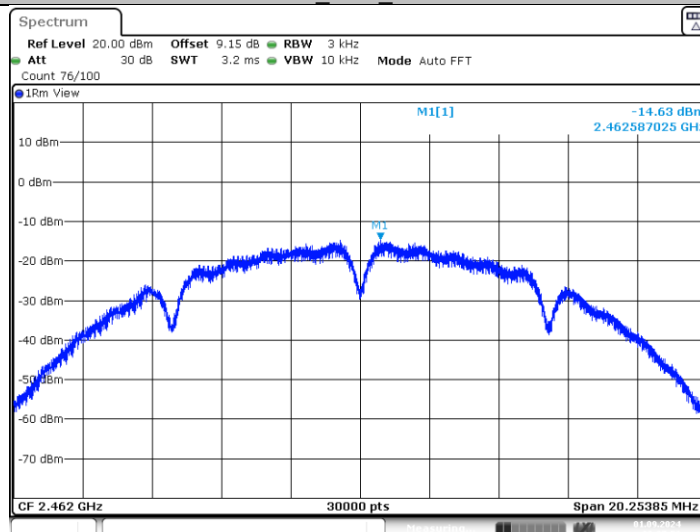
11B_Ant1_2412



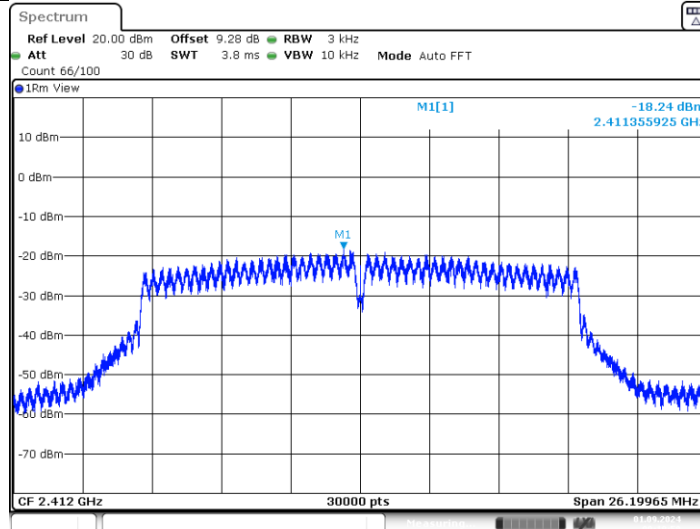
11B_Ant1_2437



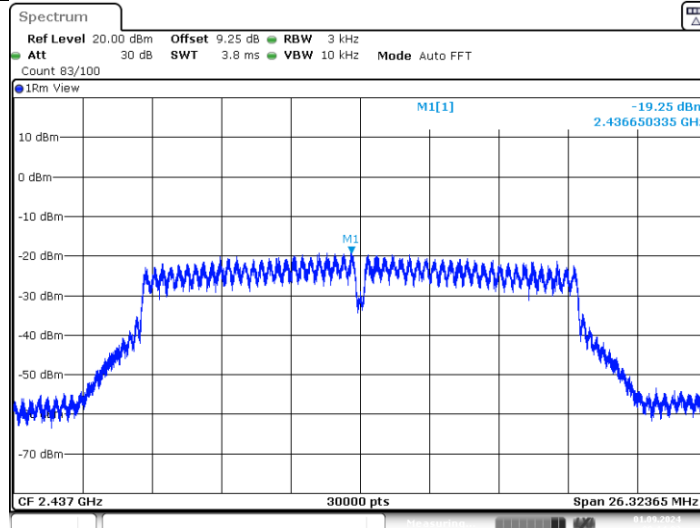
11B_Ant1_2462



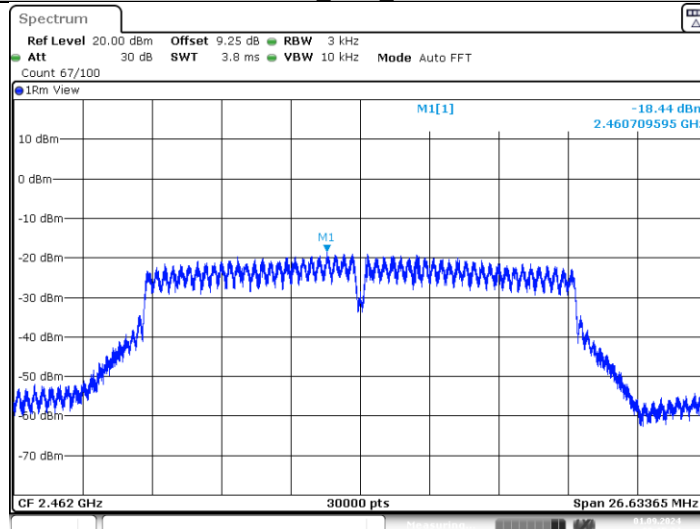
11G_Ant1_2412



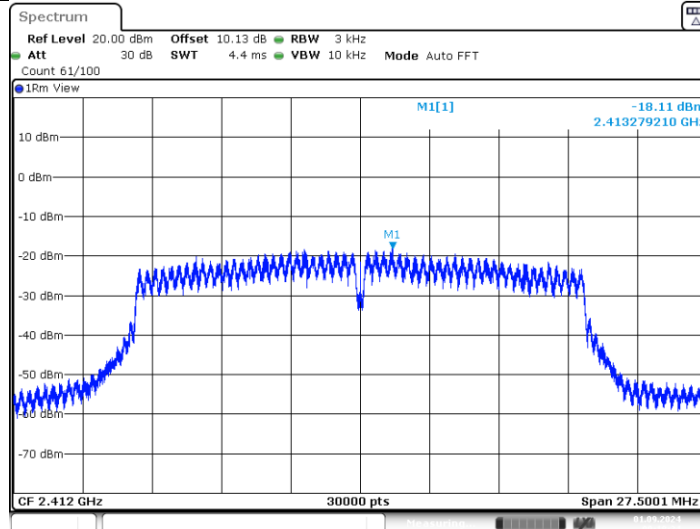
11G_Ant1_2437



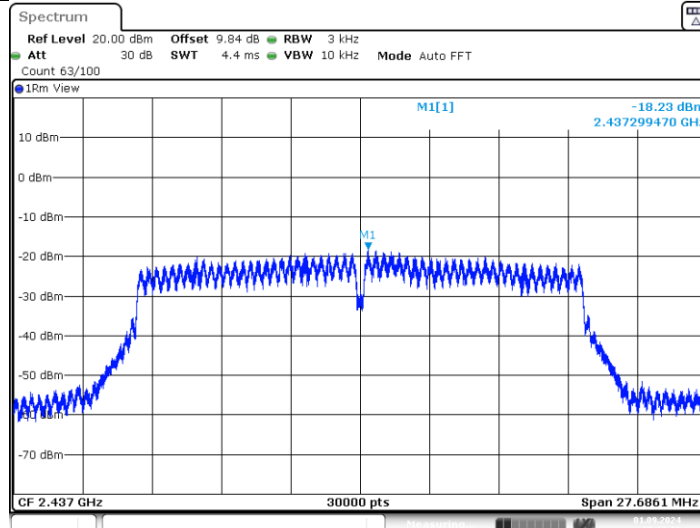
11G_Ant1_2462



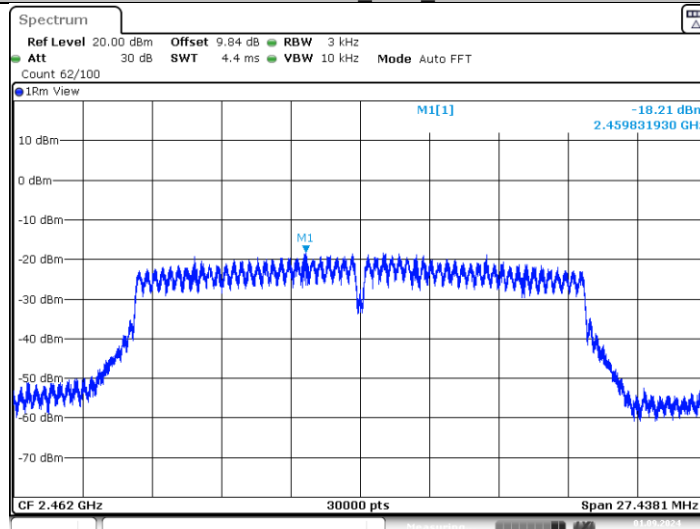
11N20SISO_Ant1_2412



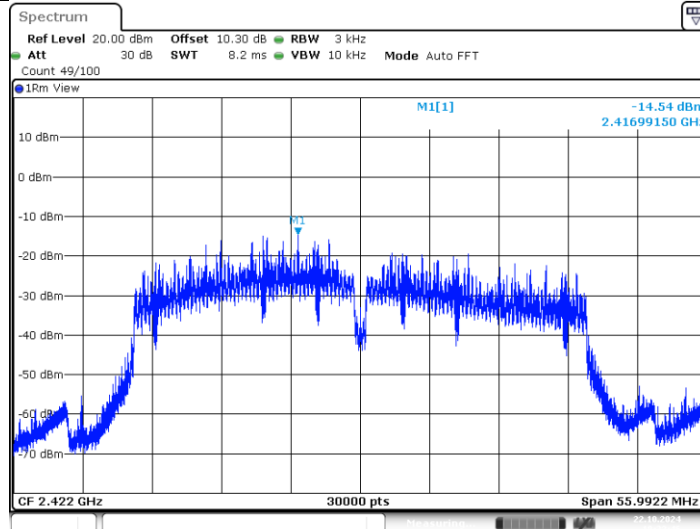
11N20SISO_Ant1_2437



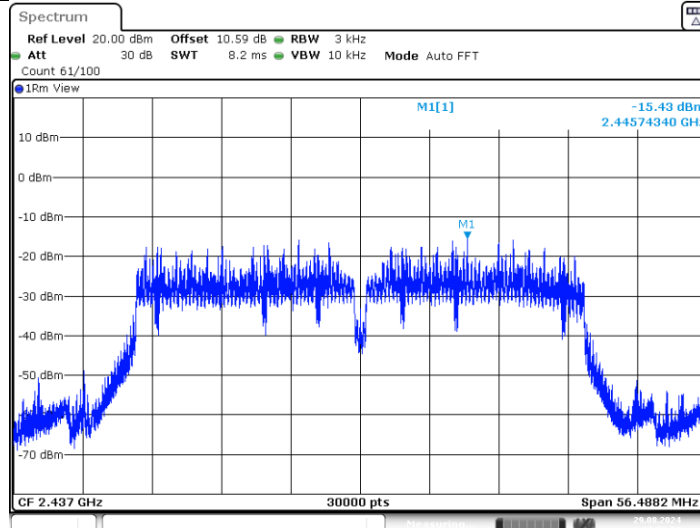
11N20SISO_Ant1_2462



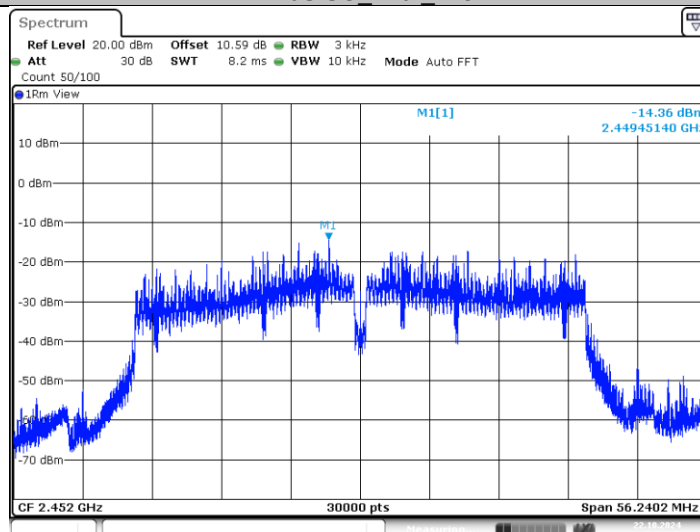
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



End of Test Report