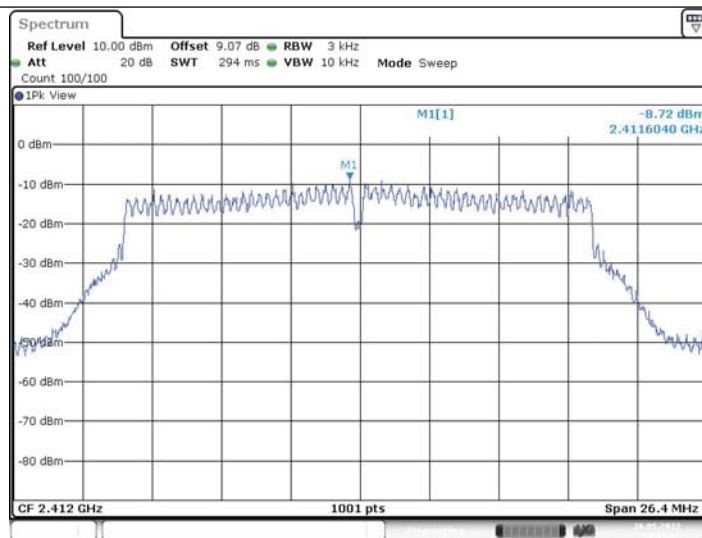
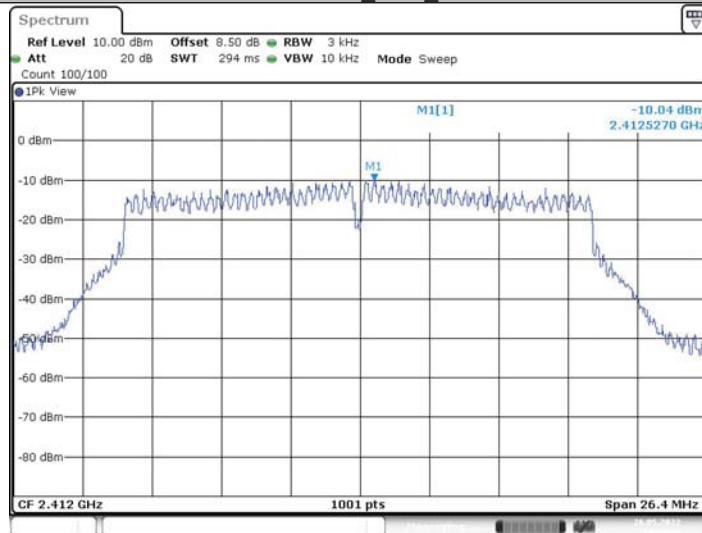




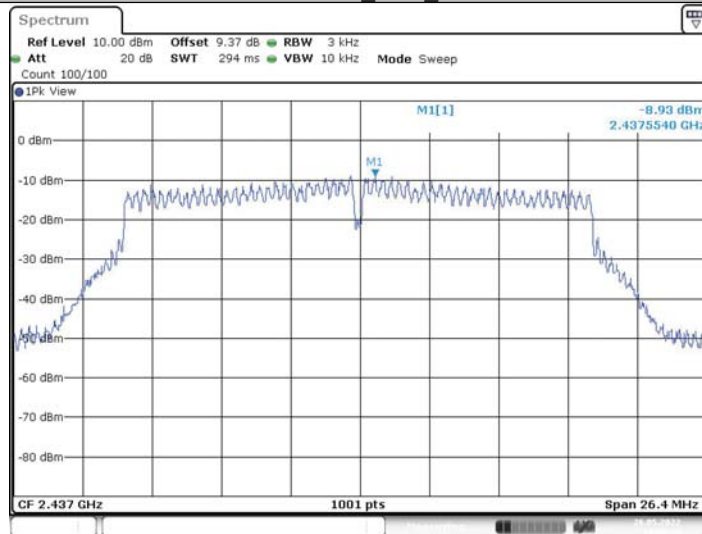
Date: 26.MAY.2022 14:31:28

11N20MIMO_Ant2_2412



Date: 26.MAY.2022 14:34:58

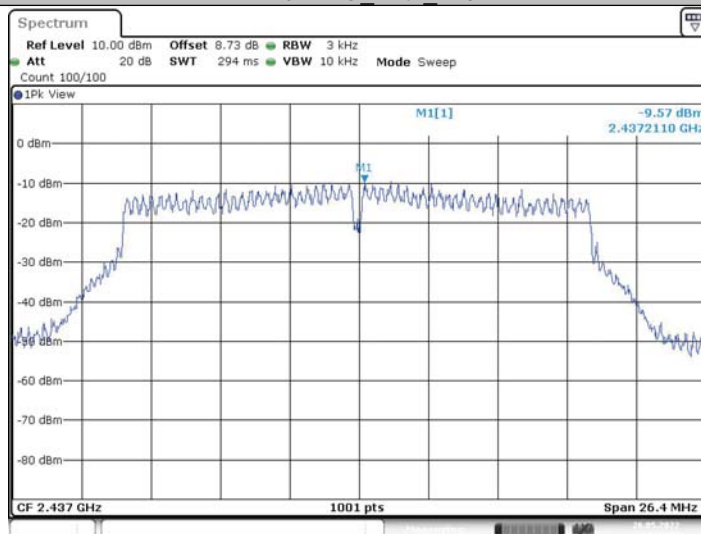
11N20MIMO_Ant1_2437



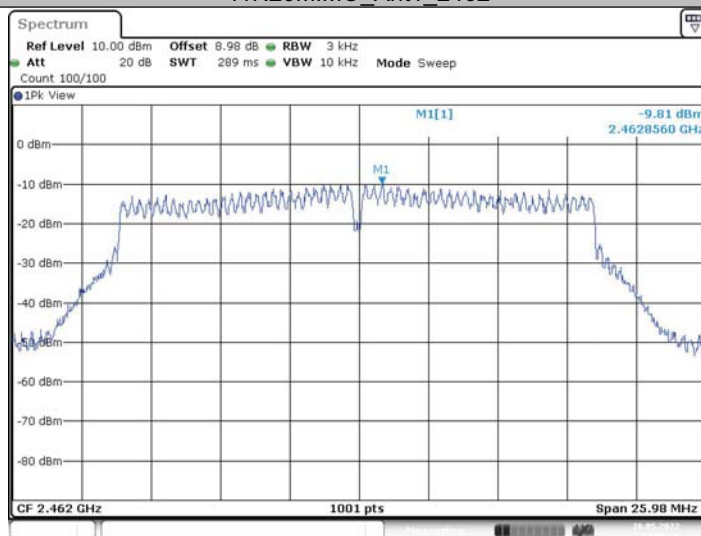
Date: 26.MAY.2022 14:38:44



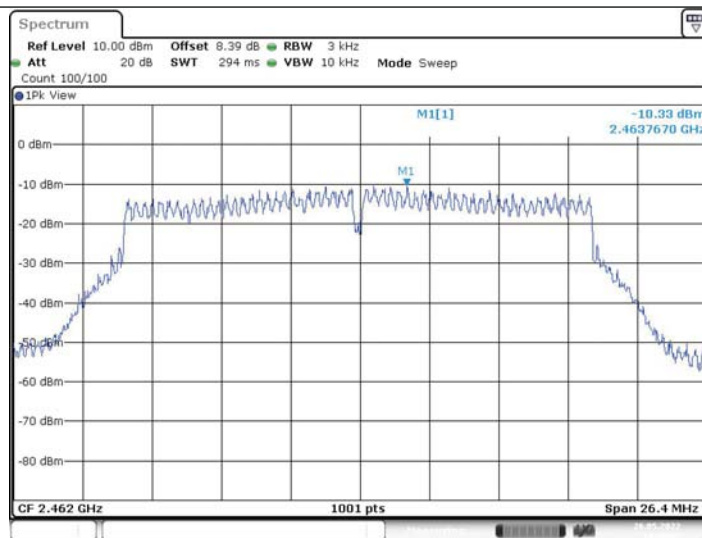
11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462

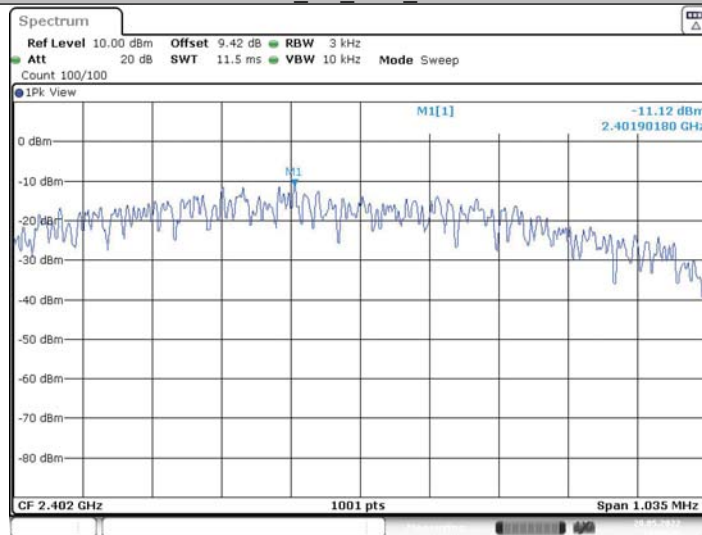


11N20MIMO_Ant2_2462



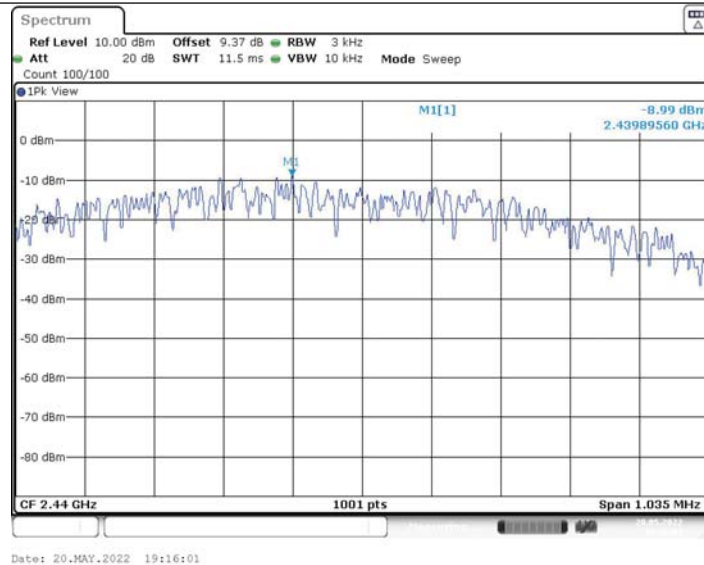
Date: 26.MAY.2022 14:48:55

BLE_1M_Ant1_2402

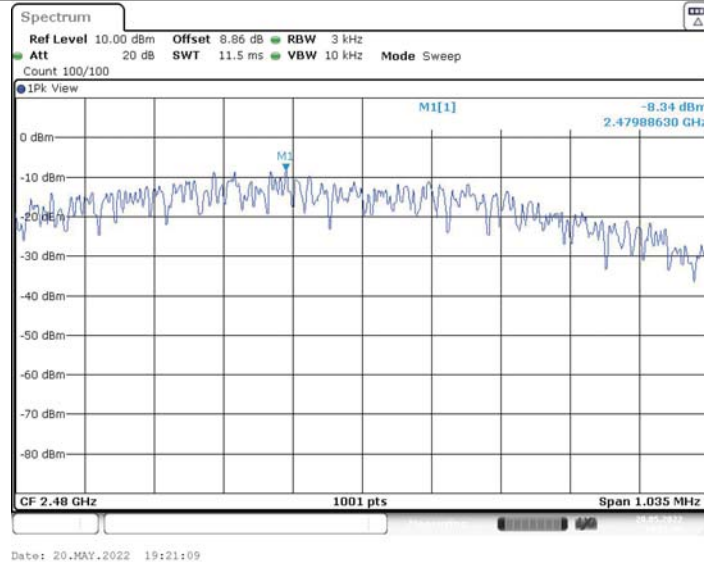


Date: 20.MAY.2022 18:44:20

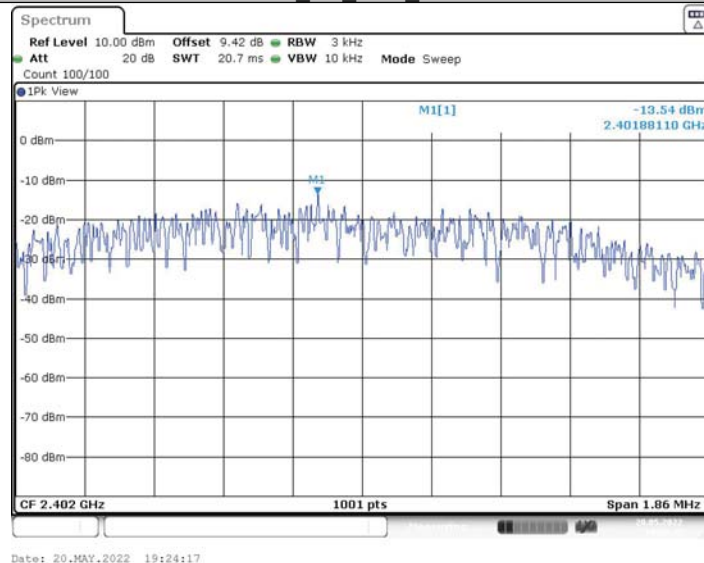
BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

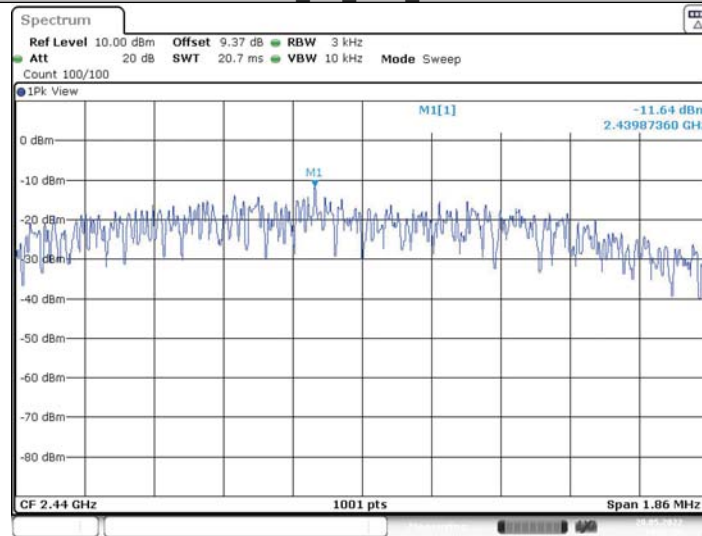


BLE_2M_Ant1_2402



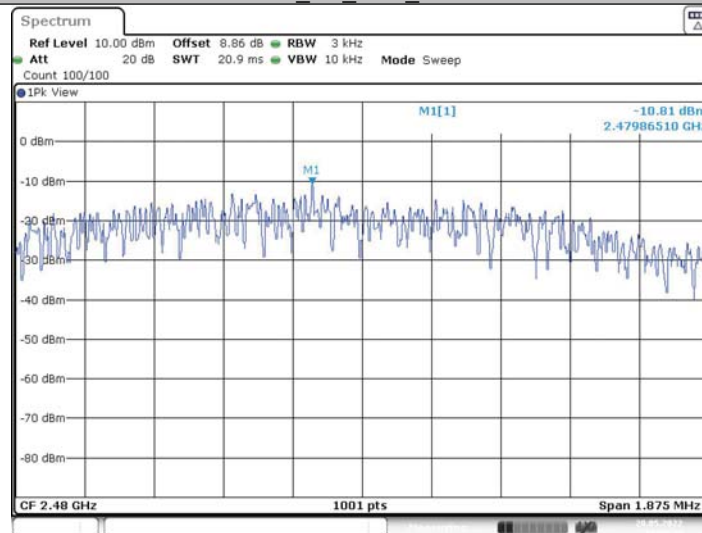


BLE_2M_Ant1_2440



Date: 20.MAY.2022 19:27:37

BLE_2M_Ant1_2480



Date: 20.MAY.2022 19:30:25



6.5 REFERENCE LEVEL MEASUREMENT

6.5.1 Test Result

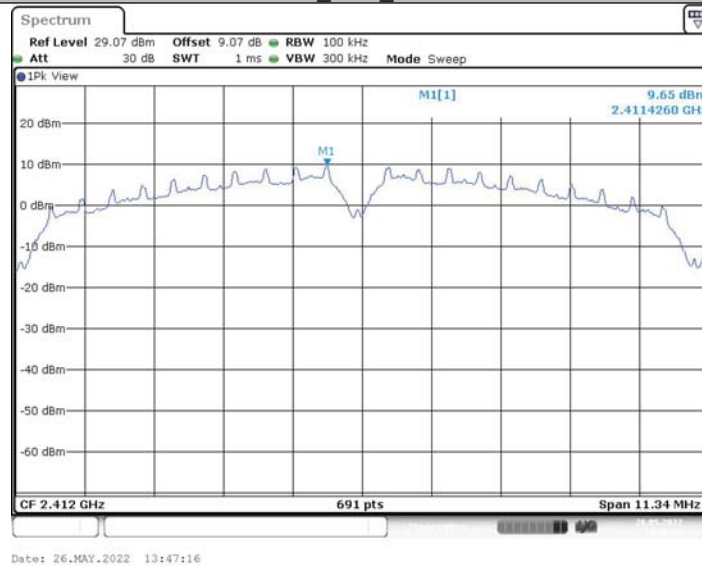
TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B	Ant1	2412	2411.43	9.65
	Ant2	2412	2411.43	9.21
	Ant1	2437	2437.42	10.63
	Ant2	2437	2437.41	9.50
	Ant1	2462	2462.42	9.85
	Ant2	2462	2462.42	8.83
11G	Ant1	2412	2414.42	2.55
	Ant2	2412	2414.42	2.12
	Ant1	2437	2430.68	2.93
	Ant2	2437	2435.69	1.87
	Ant1	2462	2469.42	2.47
	Ant2	2462	2469.42	1.46
11N20MIMO	Ant1	2412	2405.66	2.42
	Ant2	2412	2419.41	2.12
	Ant1	2437	2430.66	3.15
	Ant2	2437	2431.92	2.30
	Ant1	2462	2464.41	2.45
	Ant2	2462	2469.41	2.31

TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
BLE_1M	Ant1	2402	2401.92	3.87
		2440	2439.91	5.86
		2480	2479.90	6.50
BLE_2M	Ant1	2402	2401.91	3.41
		2440	2439.91	5.17
		2480	2479.90	5.97

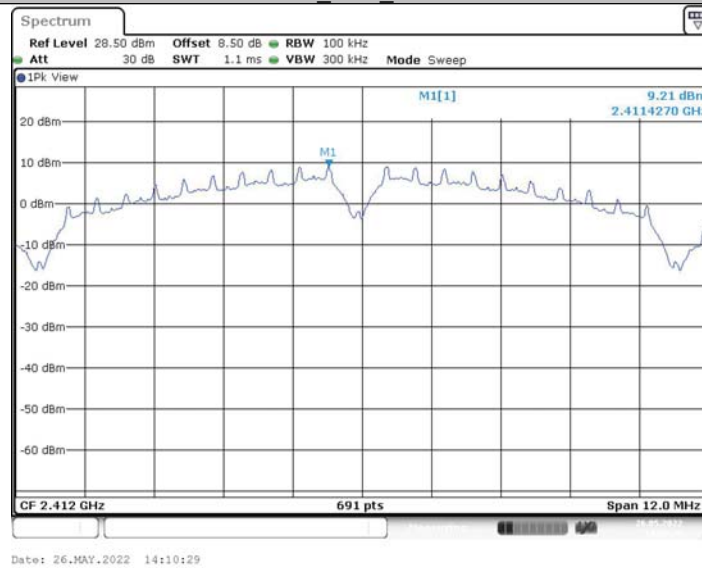


6.5.2 Test Graphs

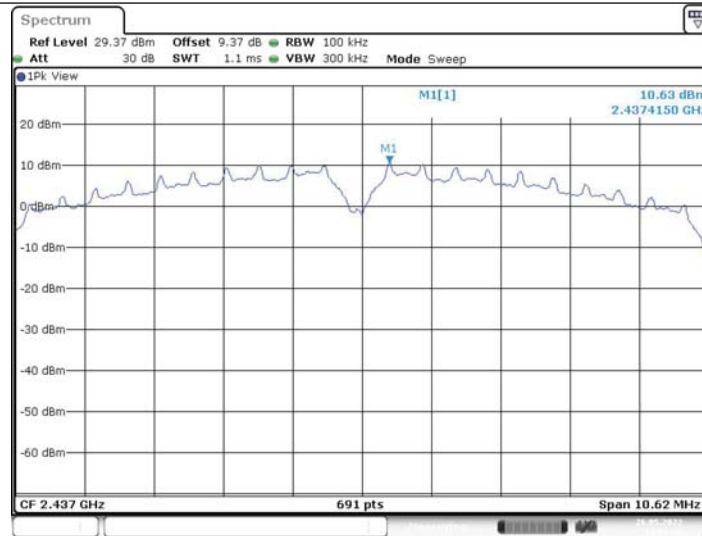
11B_Ant1_2412



11B_Ant2_2412

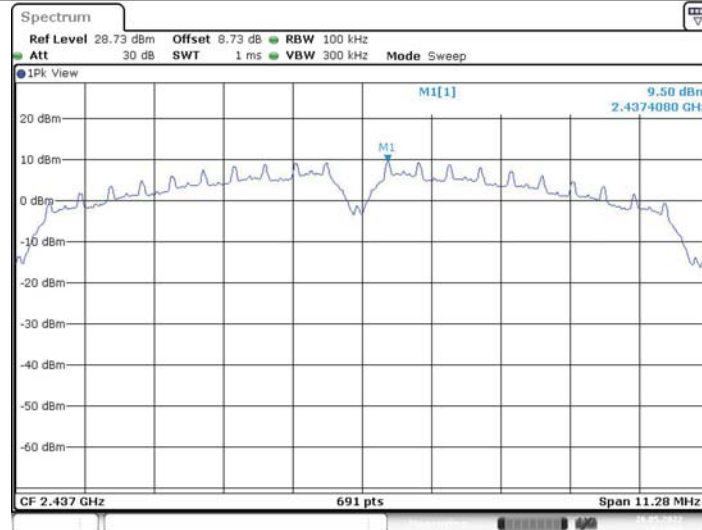


11B_Ant1_2437



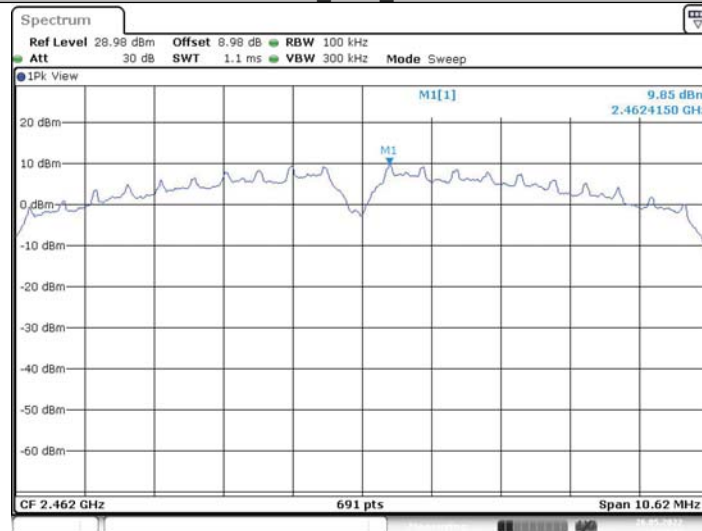
Date: 26.MAY.2022 13:51:19

11B_Ant2_2437



Date: 26.MAY.2022 14:13:59

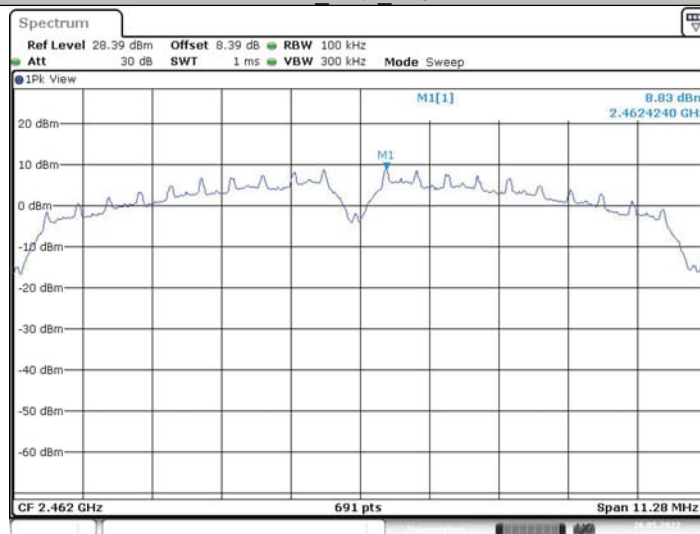
11B_Ant1_2462



Date: 26.MAY.2022 13:54:43

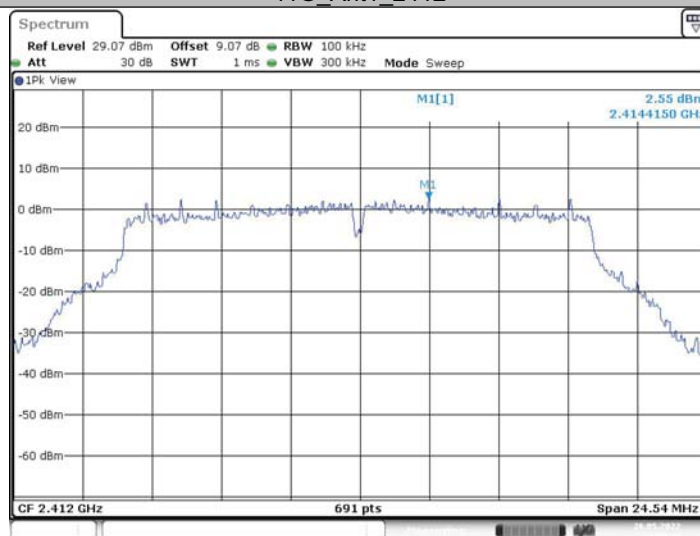


11B_Ant2_2462



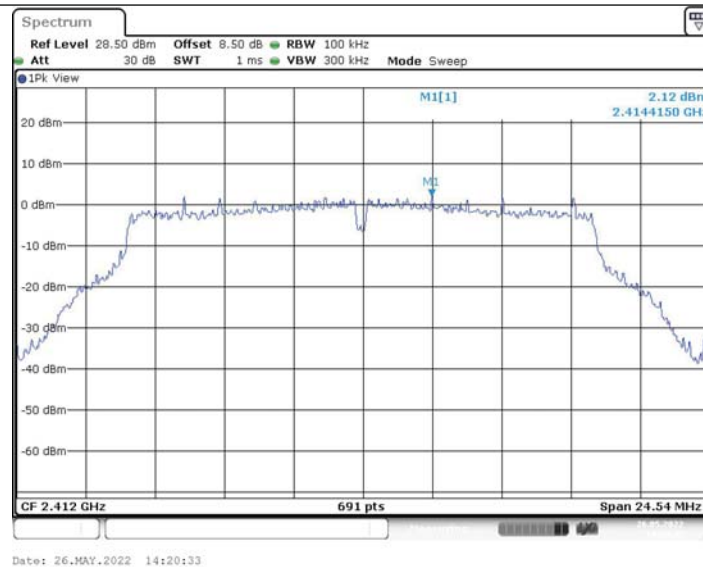
Date: 26.MAY.2022 14:17:03

11G_Ant1_2412

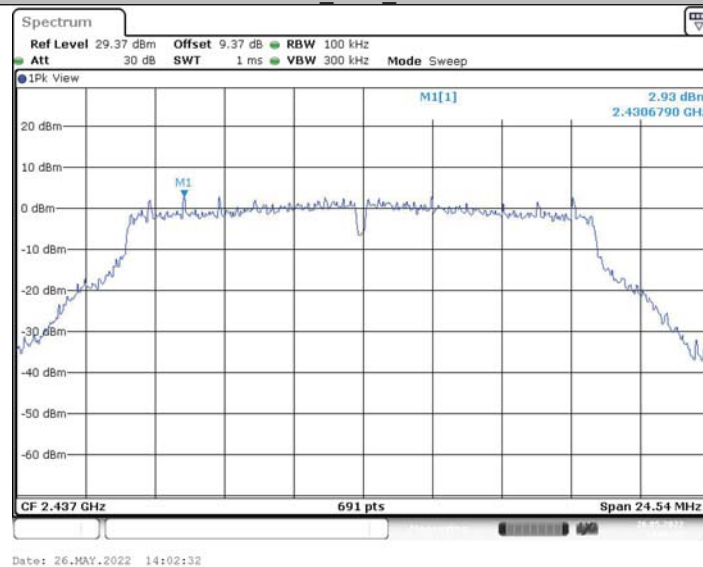


Date: 26.MAY.2022 13:58:44

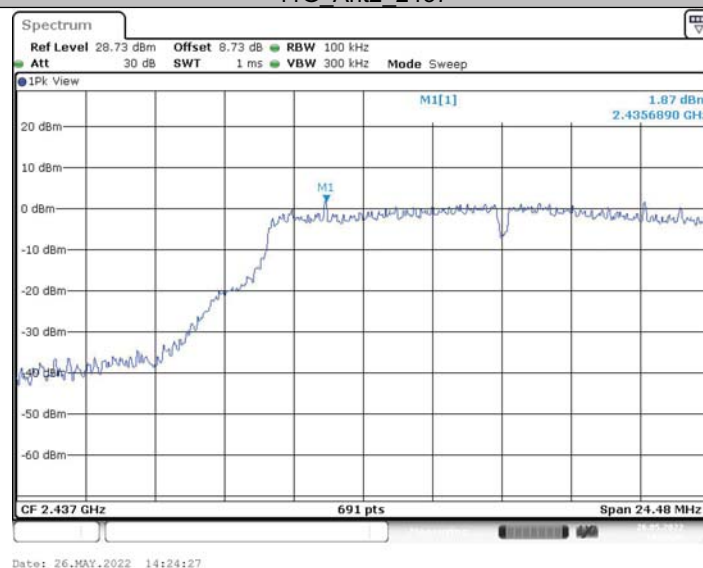
11G Ant2 2412



11G_Ant1_2437

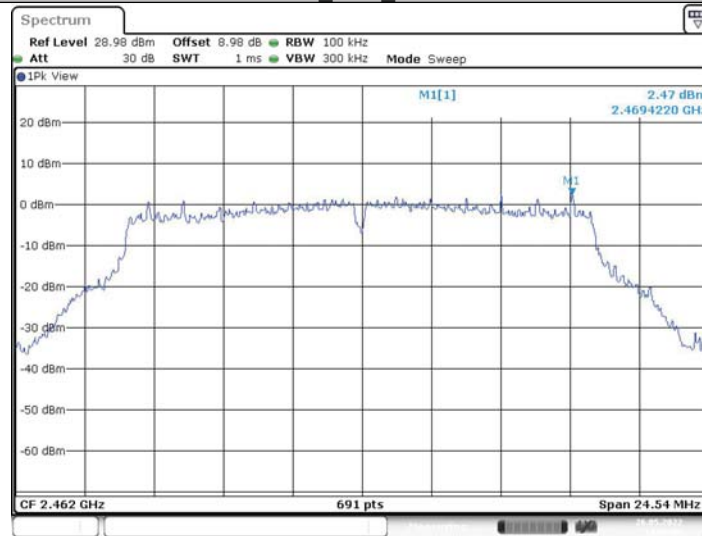


11G_Ant2_2437

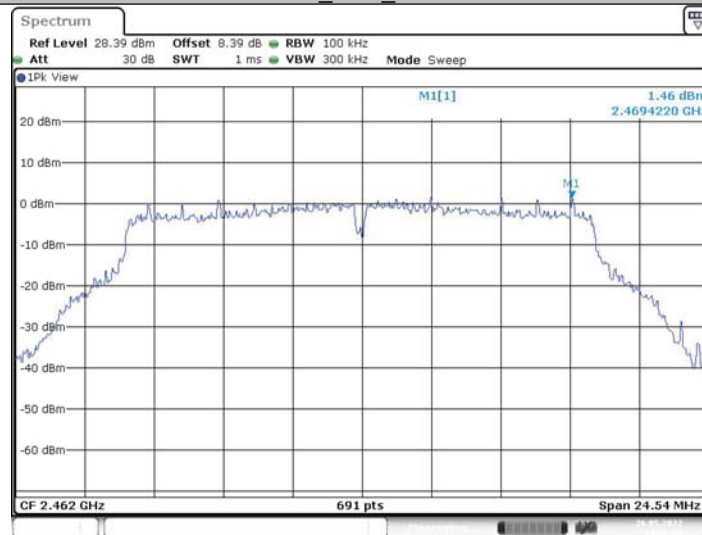




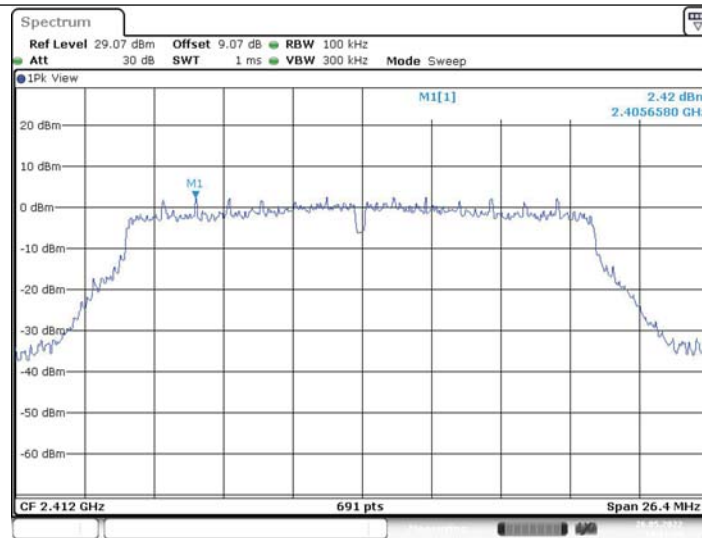
11G_Ant1_2462



11G_Ant2_2462

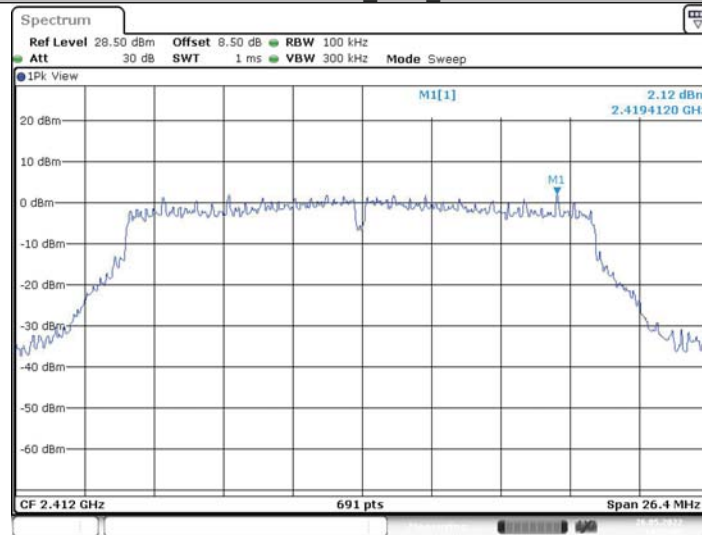


11N20MIMO_Ant1_2412



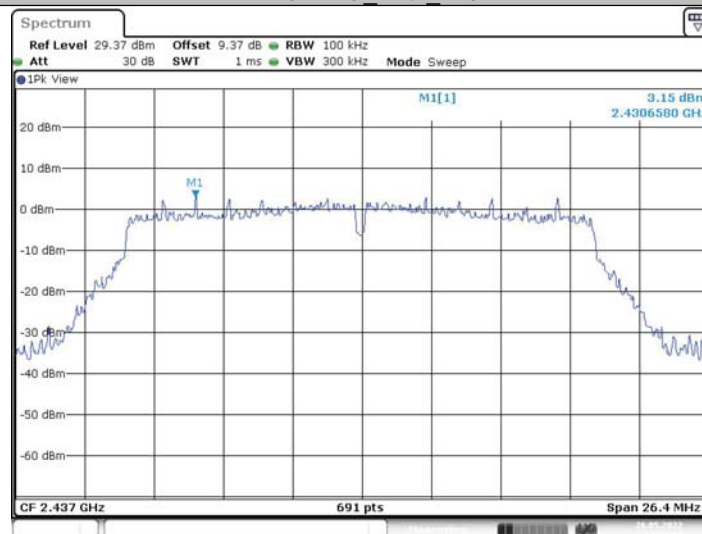
Date: 26.MAY.2022 14:31:35

11N20MIMO_Ant2_2412



Date: 26.MAY.2022 14:35:06

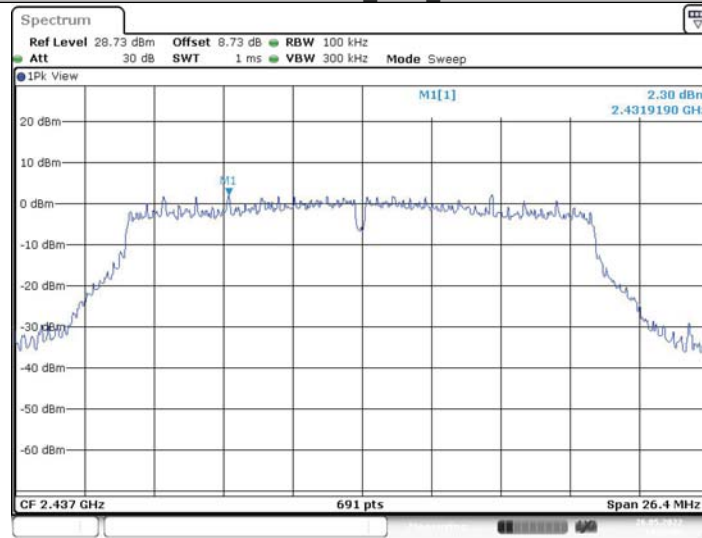
11N20MIMO_Ant1_2437



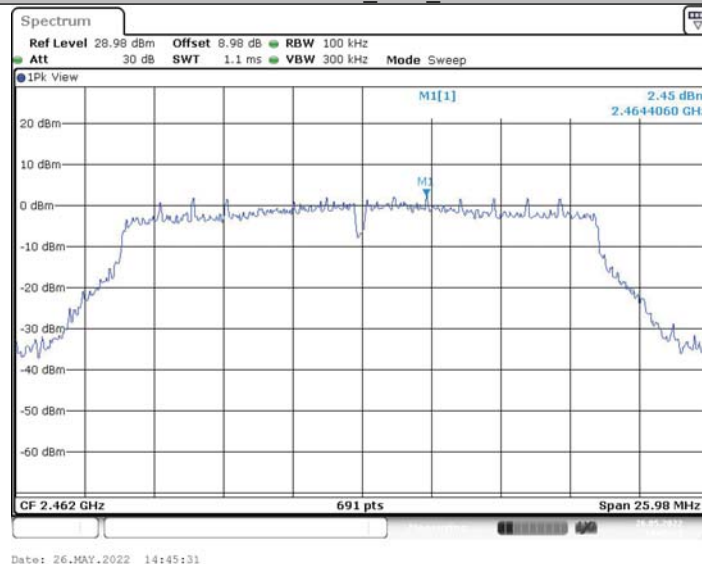
Date: 26.MAY.2022 14:38:51



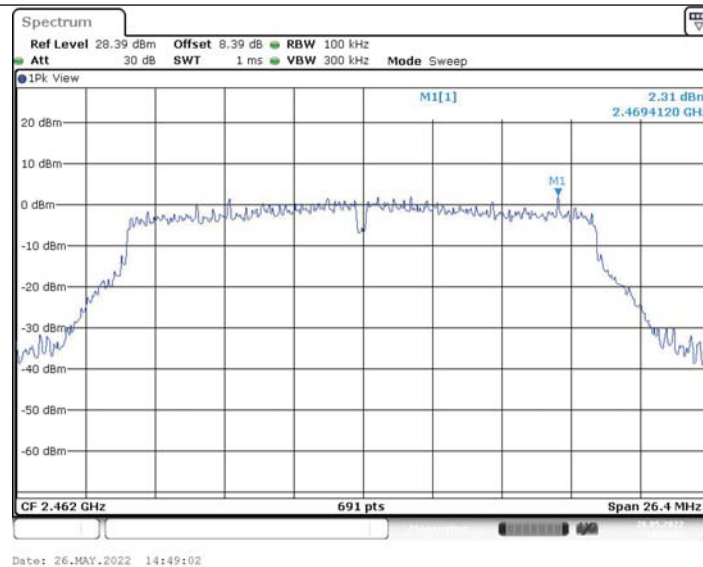
11N20MIMO_Ant2_2437



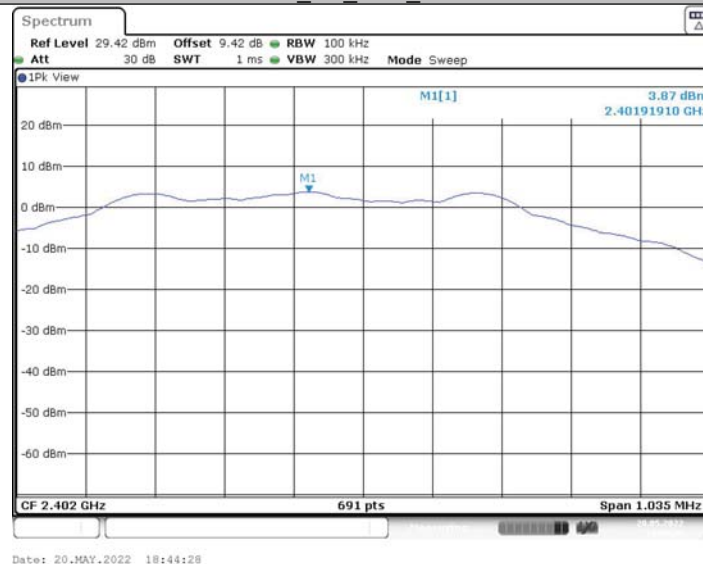
11N20MIMO_Ant1_2462



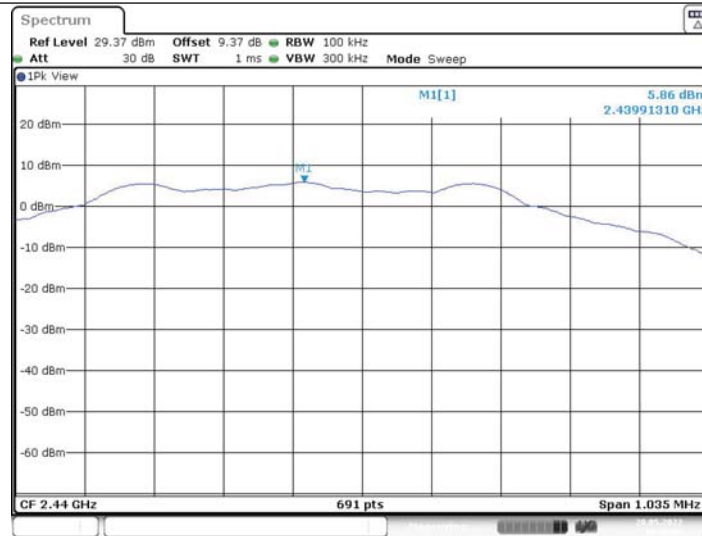
11N20MIMO_Ant2_2462



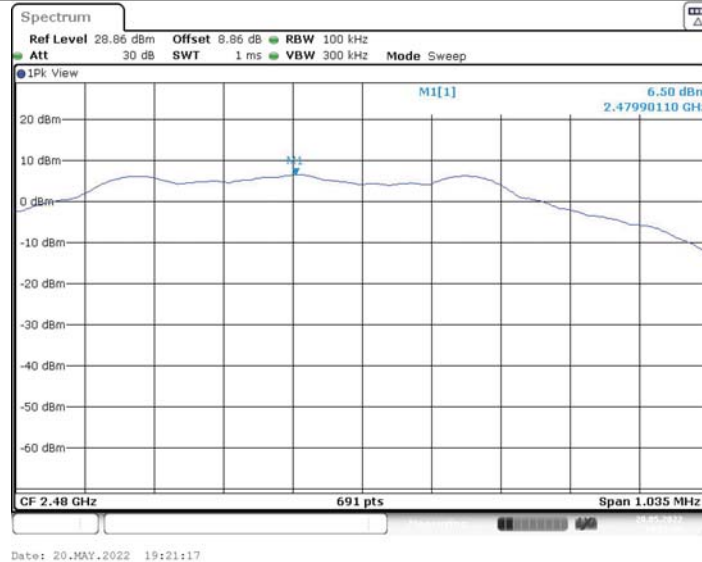
BLE_1M_Ant1_2402



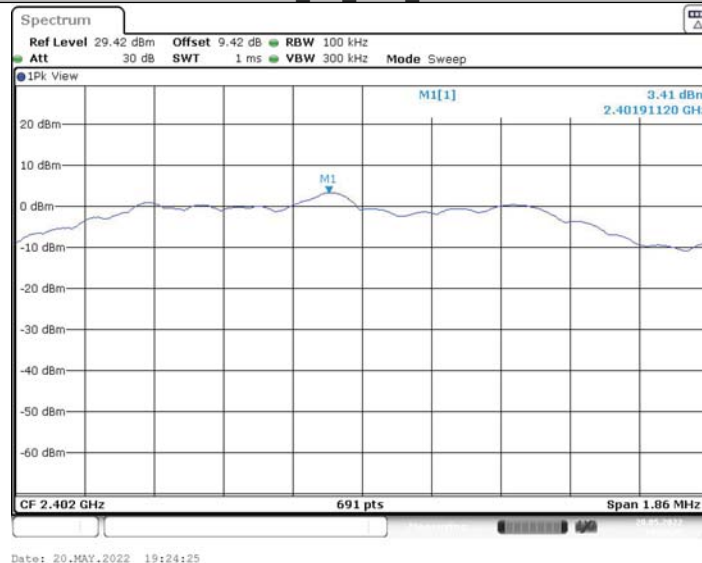
BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

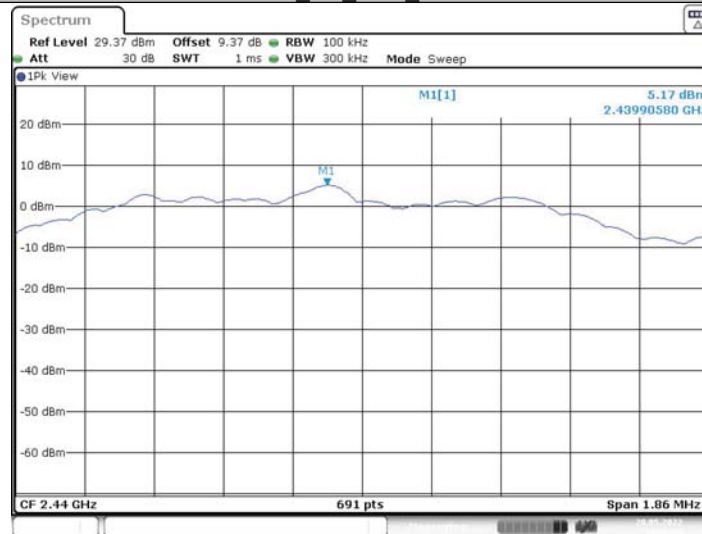


BLE_2M_Ant1_2402

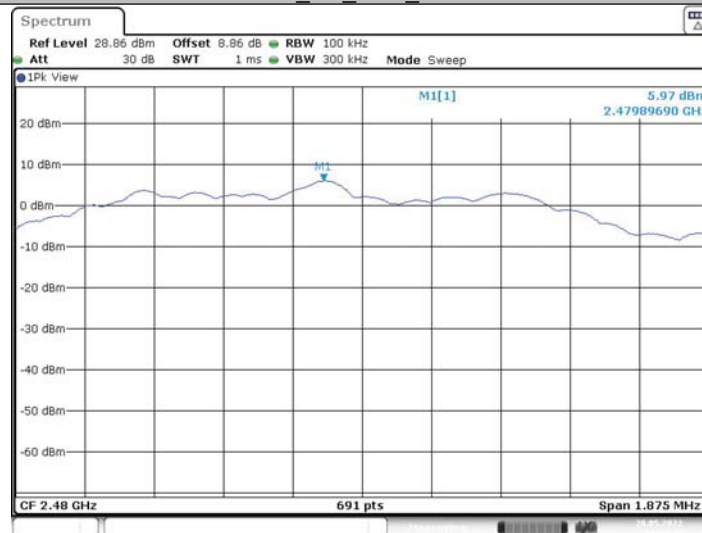




BLE_2M_Ant1_2440



BLE_2M_Ant1_2480





6.6 Band edge measurements

6.6.1 Test Result

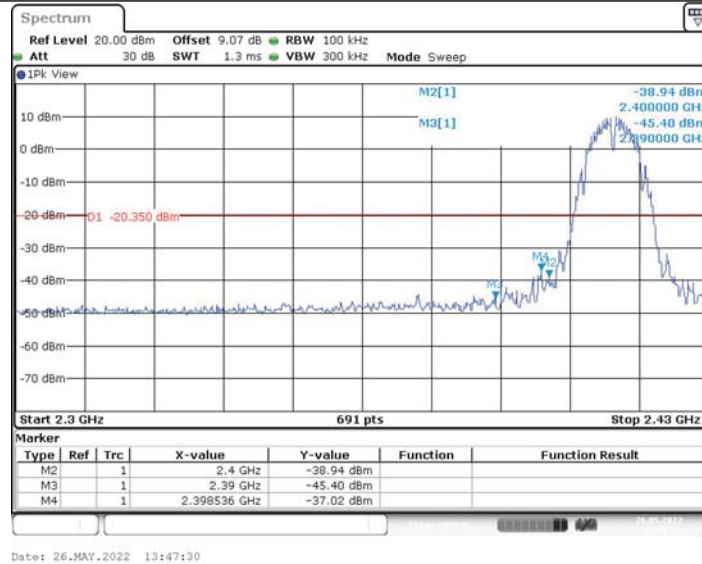
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	9.65	-37.02	≤-20.35	PASS
	Ant2	Low	2412	9.21	-40.73	≤-20.79	PASS
	Ant1	High	2462	9.85	-44.73	≤-20.15	PASS
	Ant2	High	2462	8.83	-45.91	≤-21.17	PASS
11G	Ant1	Low	2412	2.55	-31.68	≤-27.45	PASS
	Ant2	Low	2412	2.12	-34.98	≤-27.88	PASS
	Ant1	High	2462	2.47	-41.42	≤-27.53	PASS
	Ant2	High	2462	1.46	-42.8	≤-28.54	PASS
11N20MIMO	Ant1	Low	2412	2.42	-31.35	≤-27.58	PASS
	Ant2	Low	2412	2.12	-30.25	≤-27.88	PASS
	Ant1	High	2462	2.45	-40.45	≤-27.55	PASS
	Ant2	High	2462	2.31	-38.19	≤-27.69	PASS

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	3.87	-48.38	≤-16.13	PASS
		High	2480	6.50	-47.97	≤-13.5	PASS
BLE_2M	Ant1	Low	2402	3.41	-41.39	≤-16.59	PASS
		High	2480	5.97	-47.81	≤-14.03	PASS

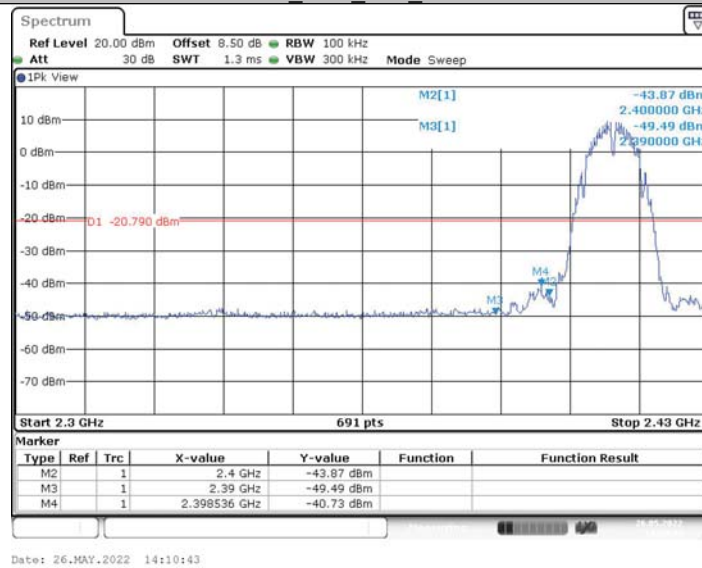


6.6.2 Test Graphs

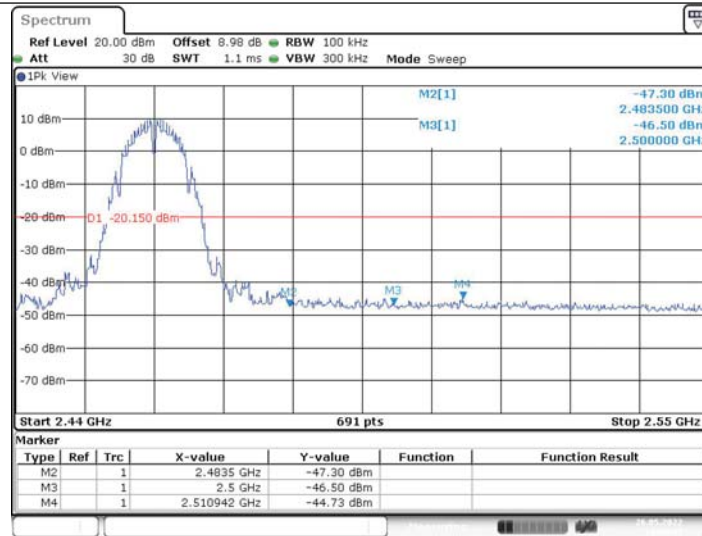
11B_Ant1_Low_2412



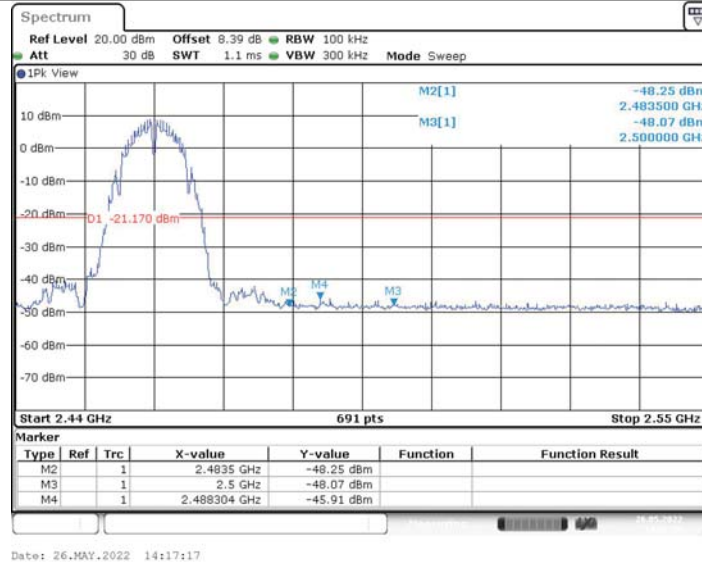
11B_Ant2_Low_2412



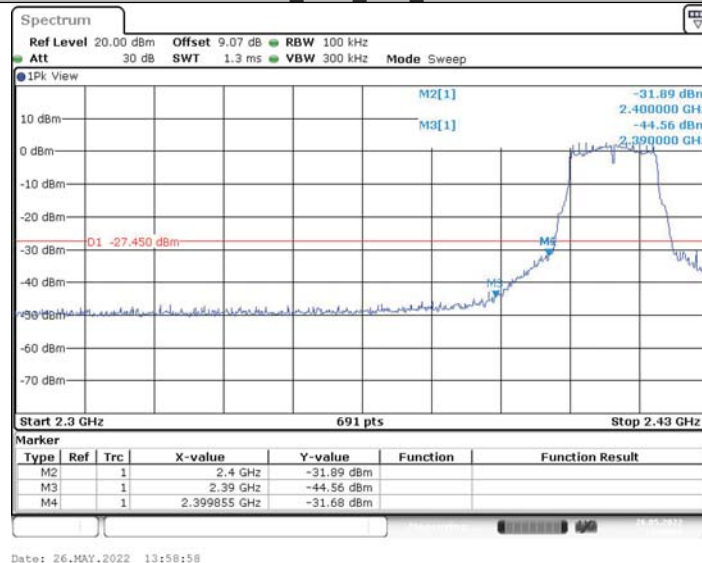
11B_Ant1_High_2462



11B_Ant2_High_2462

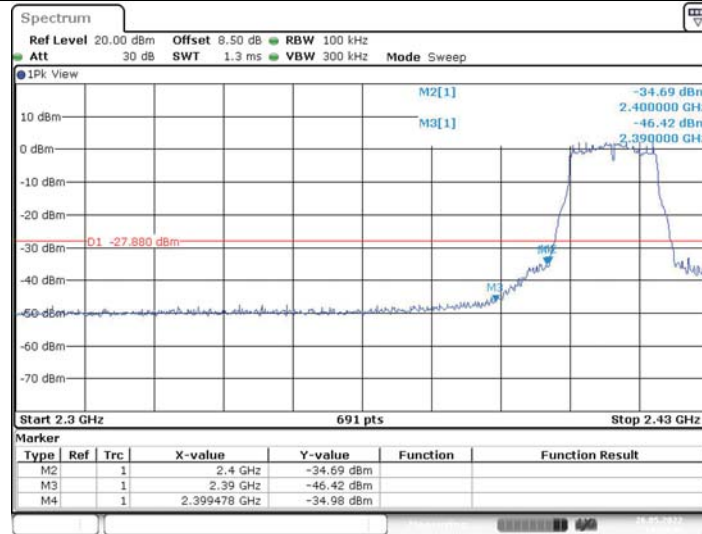


11G_Ant1_Low_2412

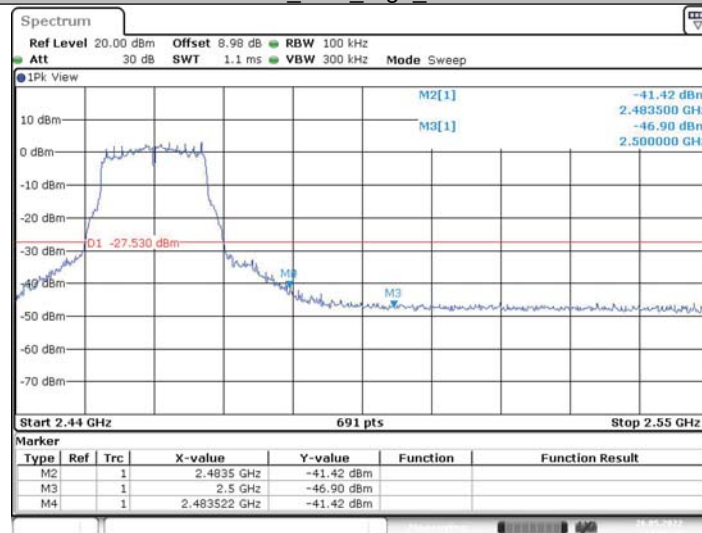




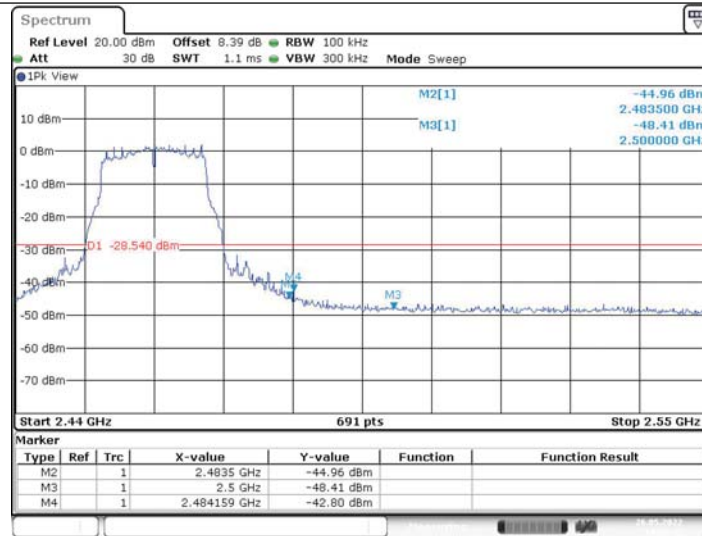
11G_Ant2_Low_2412



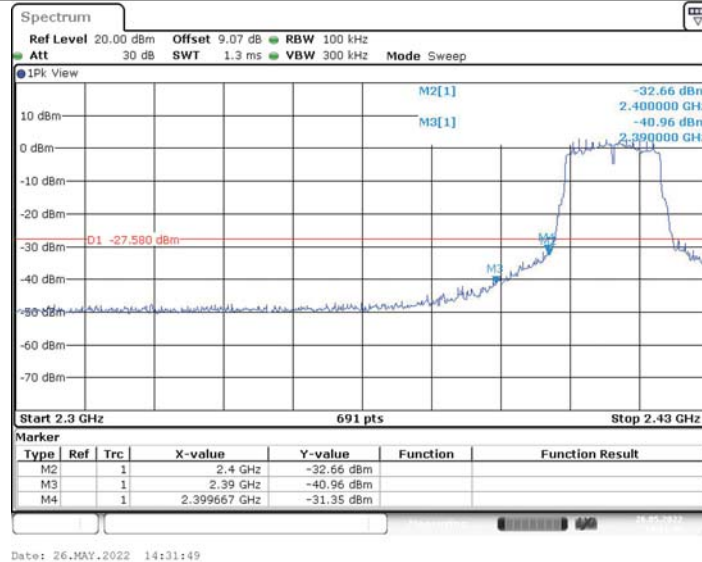
11G_Ant1_High_2462



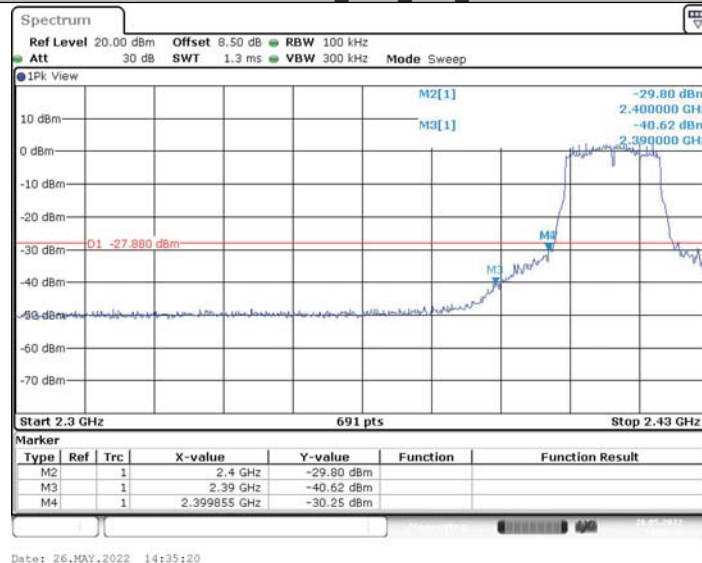
11G_Ant2_High_2462



11N20MIMO_Ant1_Low_2412

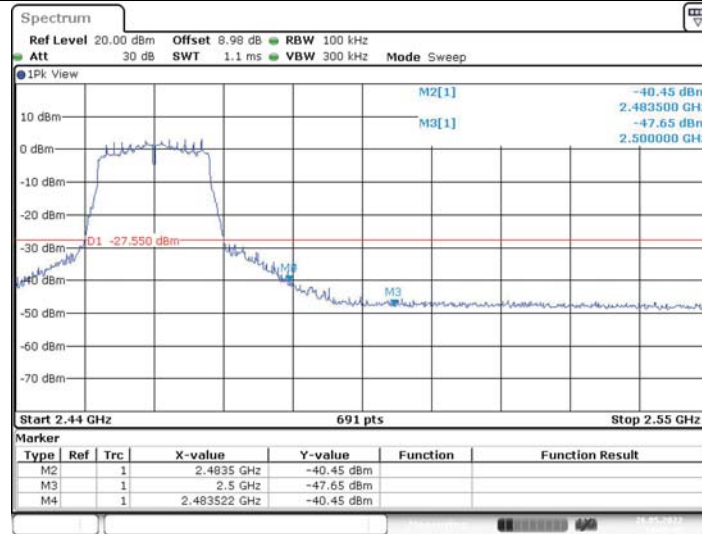


11N20MIMO_Ant2_Low_2412

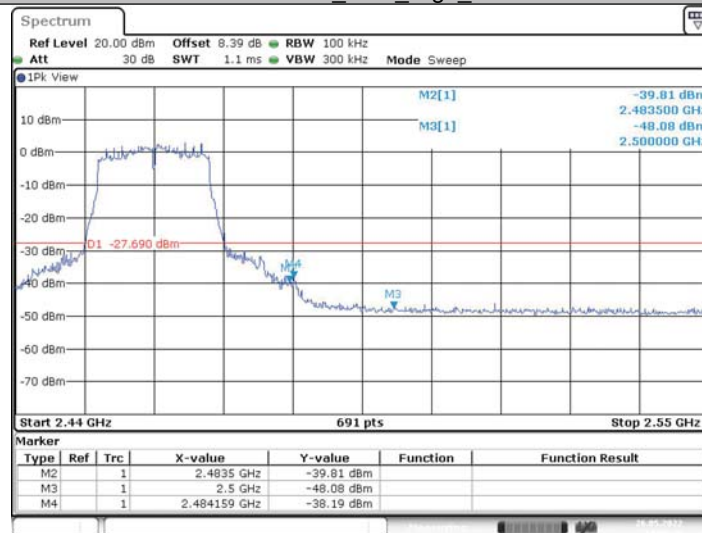




11N20MIMO_Ant1_High_2462

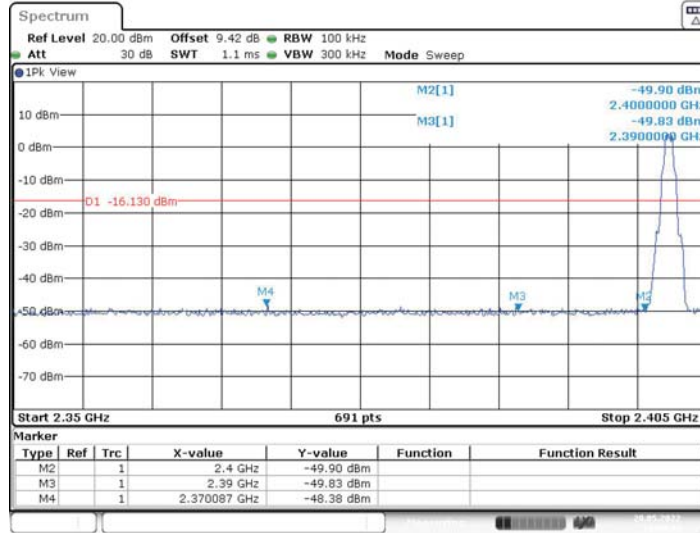


11N20MIMO_Ant2_High_2462

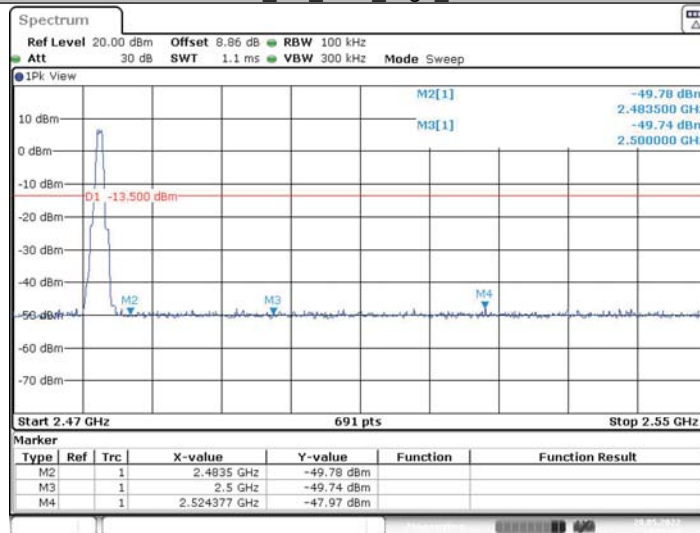




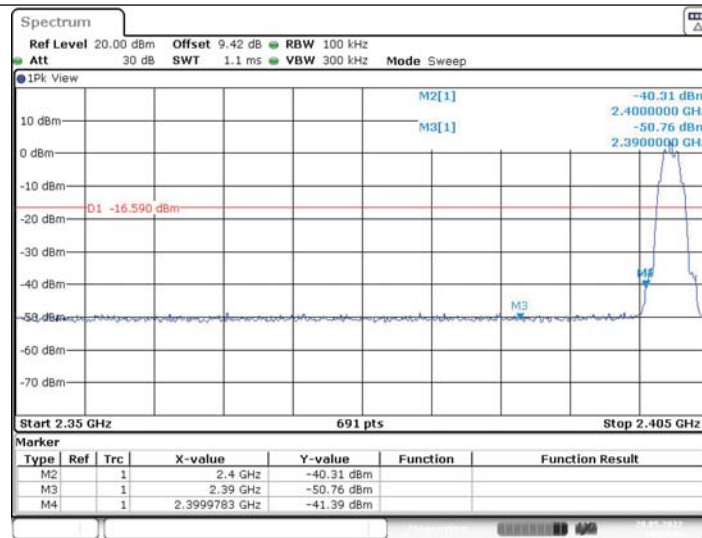
BLE_1M_Ant1_Low_2402



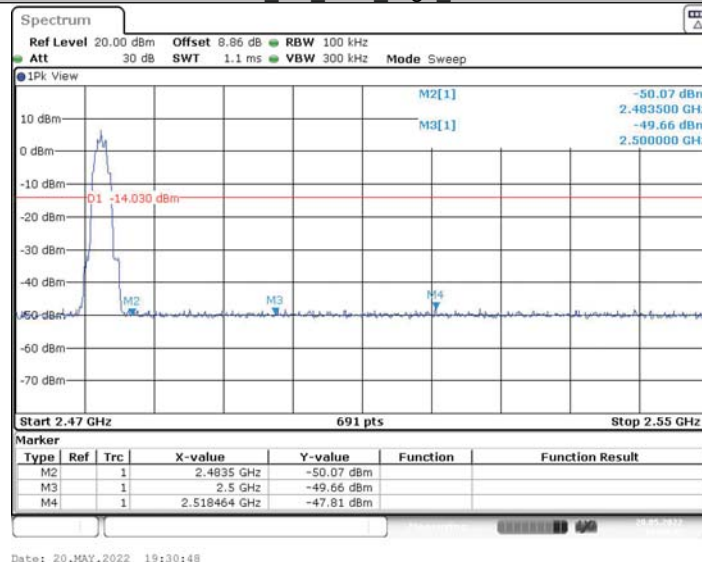
BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



BLE 2M Ant1_High_2480





6.7 OUT OF BAND EMISSION MEASUREMENT

6.7.1 Test Result

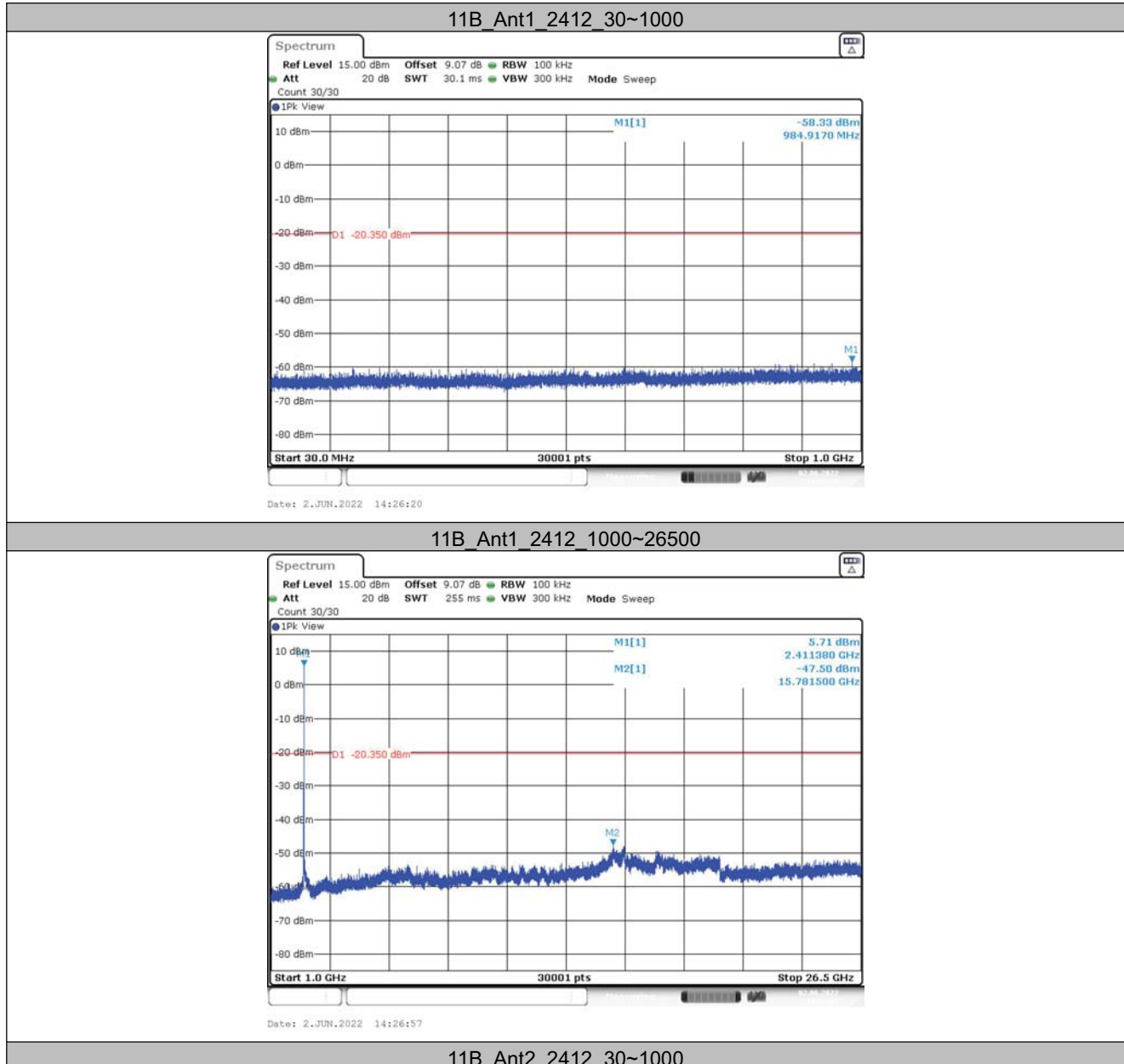
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	30~1000	9.65	-58.33	≤ -20.35	PASS
			1000~26500	9.65	-47.5	≤ -20.35	PASS
	Ant2	2412	30~1000	9.21	-58.49	≤ -20.79	PASS
			1000~26500	9.21	-47.88	≤ -20.79	PASS
	Ant1	2437	30~1000	10.63	-58.48	≤ -19.37	PASS
			1000~26500	10.63	-47.67	≤ -19.37	PASS
	Ant2	2437	30~1000	9.50	-58.57	≤ -20.5	PASS
			1000~26500	9.50	-48.16	≤ -20.5	PASS
	Ant1	2462	30~1000	9.85	-58.31	≤ -20.15	PASS
			1000~26500	9.85	-48.03	≤ -20.15	PASS
	Ant2	2462	30~1000	8.83	-59.01	≤ -21.17	PASS
			1000~26500	8.83	-48.78	≤ -21.17	PASS
11G	Ant1	2412	30~1000	2.55	-58.71	≤ -27.45	PASS
			1000~26500	2.55	-48.43	≤ -27.45	PASS
	Ant2	2412	30~1000	2.12	-59.08	≤ -27.88	PASS
			1000~26500	2.12	-49.28	≤ -27.88	PASS
	Ant1	2437	30~1000	2.93	-58.05	≤ -27.07	PASS
			1000~26500	2.93	-48.32	≤ -27.07	PASS
	Ant2	2437	30~1000	1.87	-58.65	≤ -28.13	PASS
			1000~26500	1.87	-48.8	≤ -28.13	PASS
	Ant1	2462	30~1000	2.47	-57.69	≤ -27.53	PASS
			1000~26500	2.47	-48.37	≤ -27.53	PASS
	Ant2	2462	30~1000	1.46	-59.3	≤ -28.54	PASS
			1000~26500	1.46	-48.46	≤ -28.54	PASS
11N20MIMO	Ant1	2412	30~1000	2.42	-58.45	≤ -27.58	PASS
			1000~26500	2.42	-48.42	≤ -27.58	PASS
	Ant2	2412	30~1000	2.12	-58.88	≤ -27.88	PASS
			1000~26500	2.12	-48.78	≤ -27.88	PASS
	Ant1	2437	30~1000	3.15	-57.67	≤ -26.85	PASS
			1000~26500	3.15	-47.56	≤ -26.85	PASS
	Ant2	2437	30~1000	2.30	-58.82	≤ -27.7	PASS
			1000~26500	2.30	-48.61	≤ -27.7	PASS
	Ant1	2462	30~1000	2.45	-59.01	≤ -27.55	PASS
			1000~26500	2.45	-47.79	≤ -27.55	PASS
	Ant2	2462	30~1000	2.31	-58.8	≤ -27.69	PASS
			1000~26500	2.31	-49.68	≤ -27.69	PASS

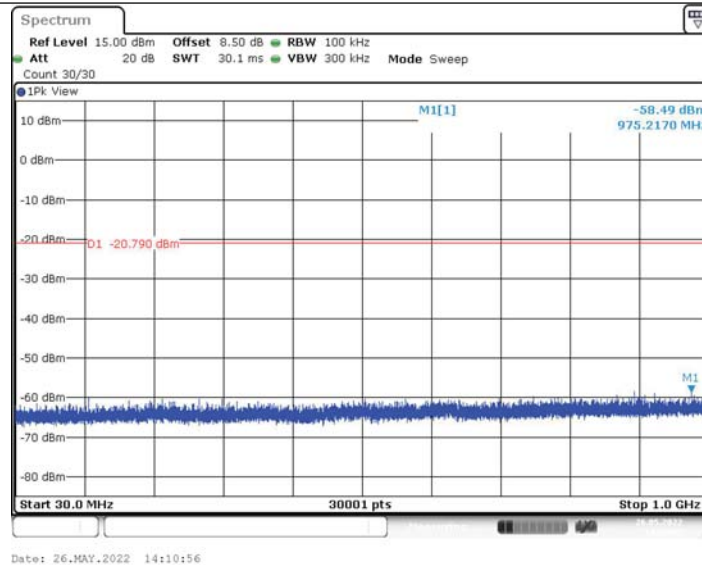


TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~1000	3.87	-59.41	≤-16.13	PASS
			1000~26500	3.87	-48.03	≤-16.13	PASS
		2440	30~1000	5.86	-58.46	≤-14.14	PASS
			1000~26500	5.86	-48.16	≤-14.14	PASS
		2480	30~1000	6.50	-59.98	≤-13.5	PASS
			1000~26500	6.50	-48.19	≤-13.5	PASS
BLE_2M	Ant1	2402	30~1000	3.41	-52.01	≤-16.59	PASS
			1000~26500	3.41	-47.95	≤-16.59	PASS
		2440	30~1000	5.17	-59.66	≤-14.83	PASS
			1000~26500	5.17	-47.08	≤-14.83	PASS
		2480	30~1000	5.97	-59.91	≤-14.03	PASS
			1000~26500	5.97	-49.31	≤-14.03	PASS

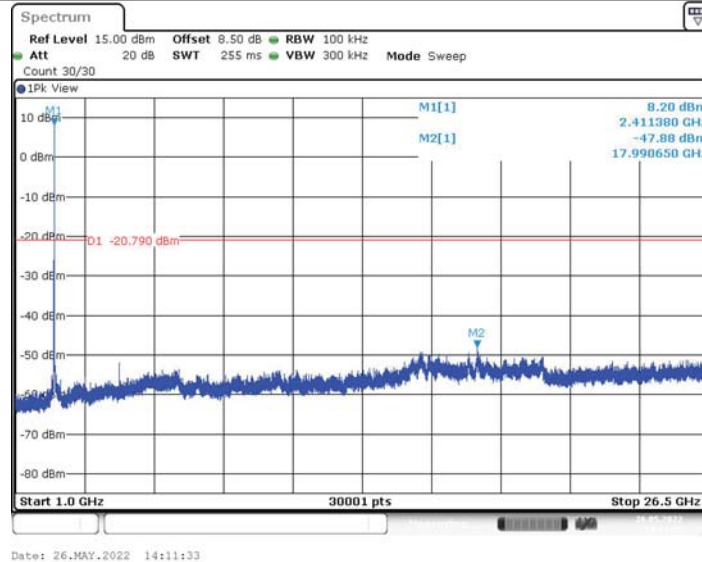


6.7.2 Test Graphs

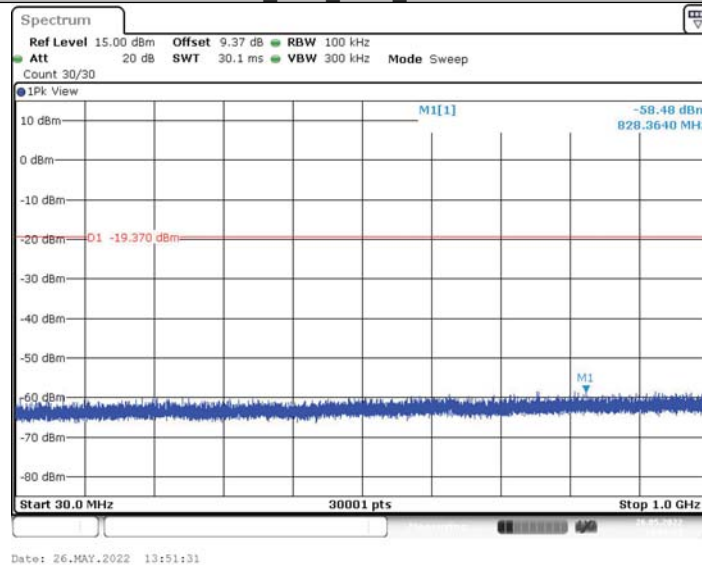




11B_Ant2_2412_1000~26500

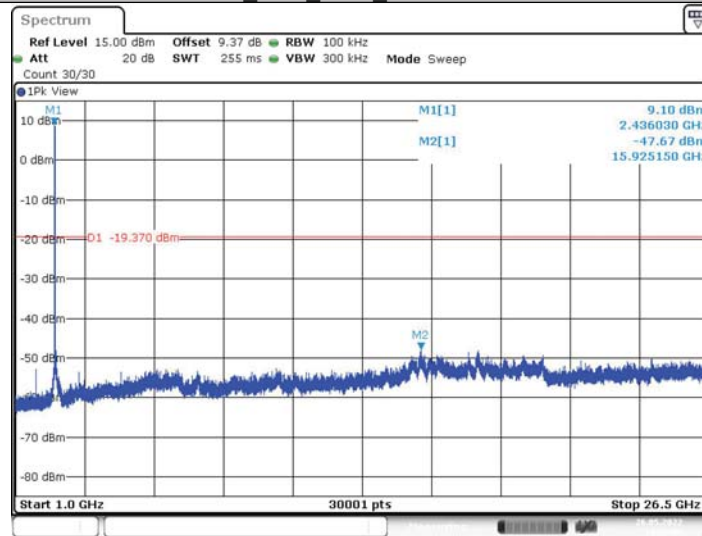


11B_Ant1_2437_30~1000



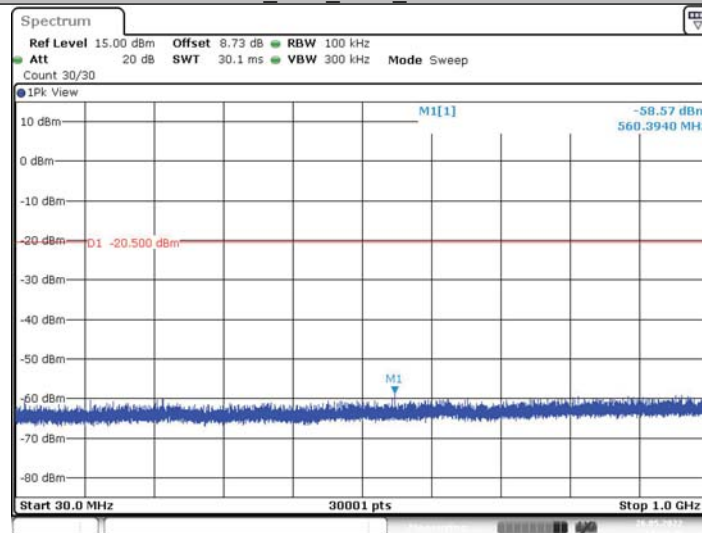


11B_Ant1_2437_1000~26500



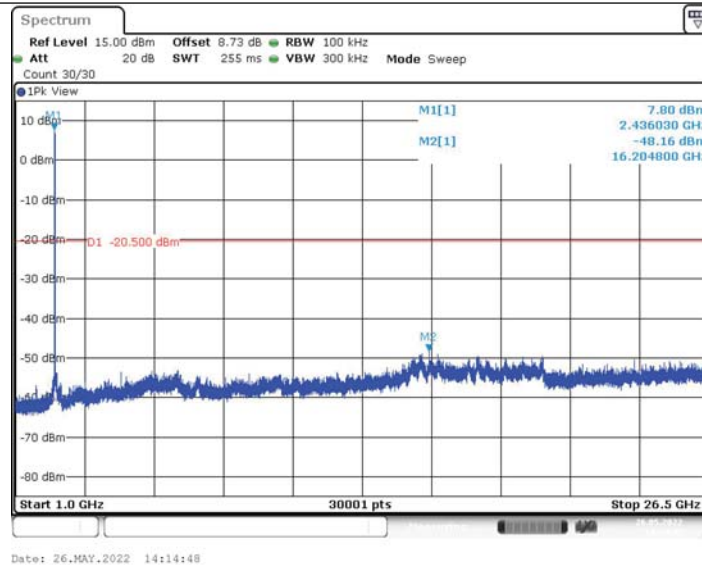
Date: 26.MAY.2022 13:52:08

11B_Ant2_2437_30~1000

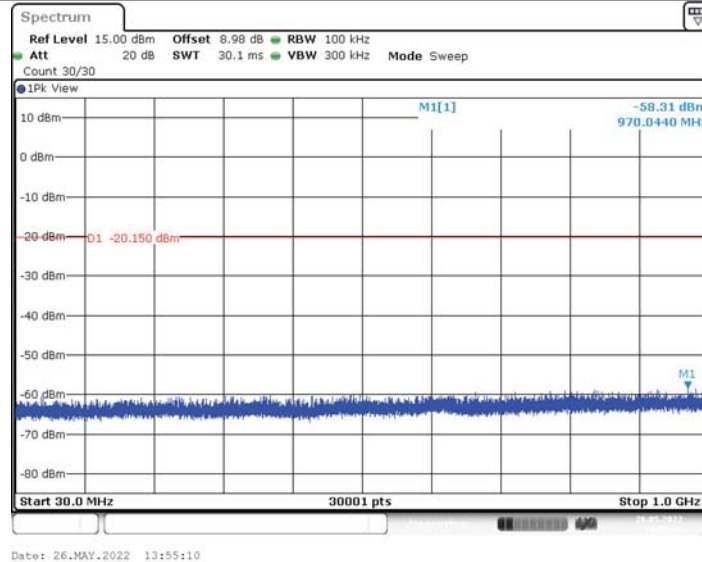


Date: 26.MAY.2022 14:14:11

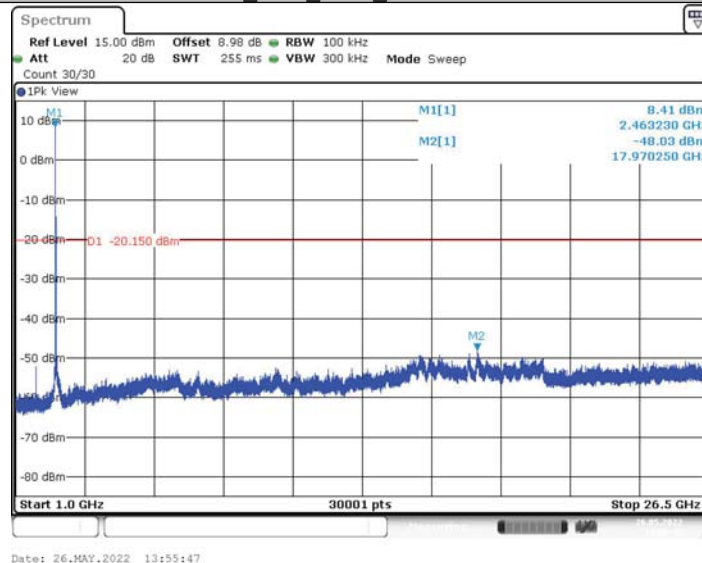
11B_Ant2_2437_1000~26500



11B_Ant1_2462_30~1000

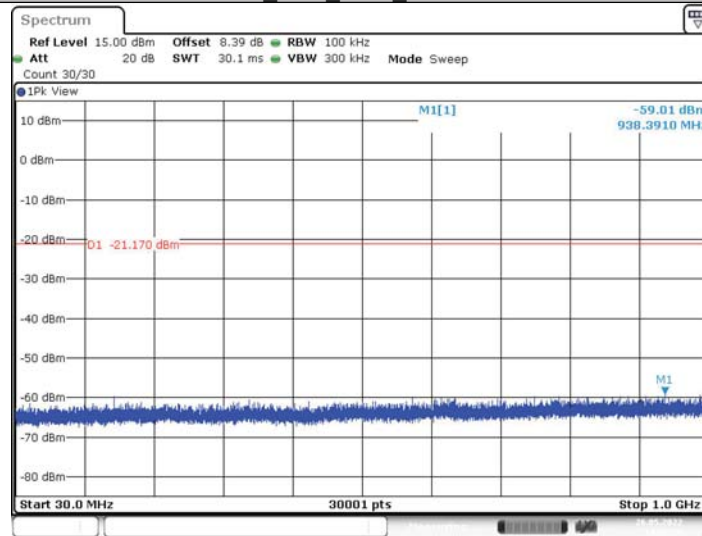


11B_Ant1_2462_1000~26500



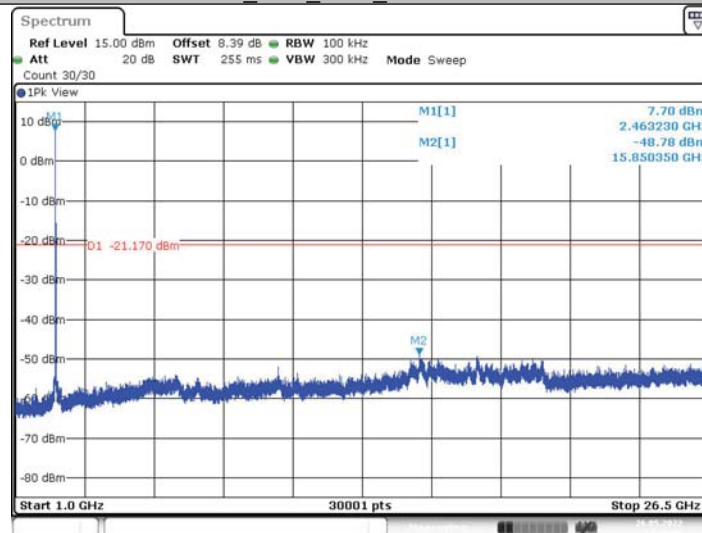


11B_Ant2_2462_30~1000



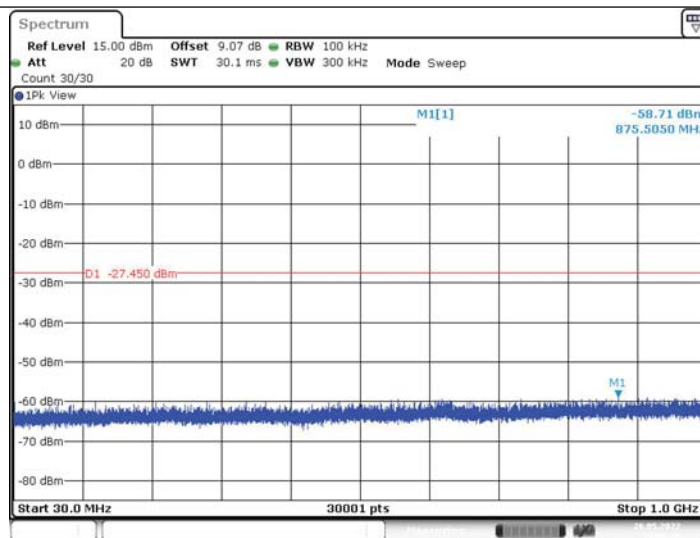
Date: 26.MAY.2022 14:17:30

11B_Ant2_2462_1000~26500



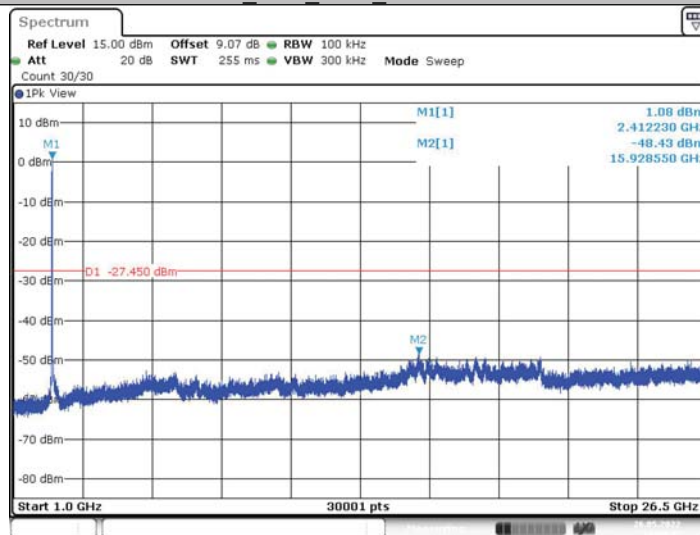
Date: 26.MAY.2022 14:18:07

11G_Ant1_2412_30~1000



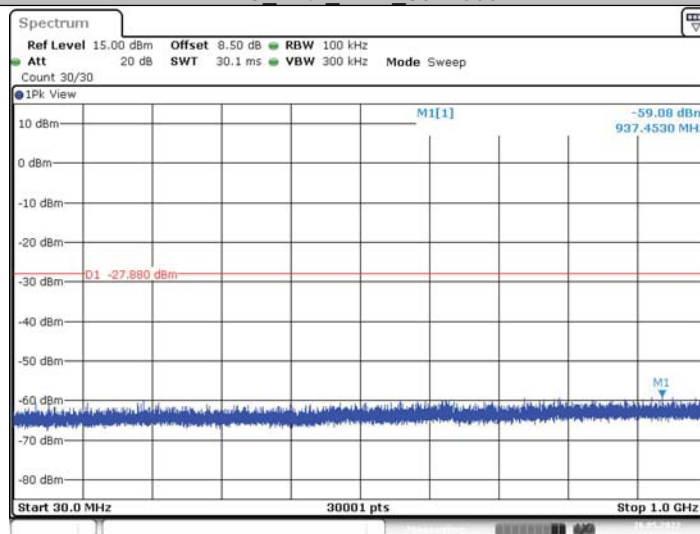
Date: 26.MAY.2022 13:59:10

11G_Ant1_2412_1000~26500



Date: 26.MAY.2022 13:59:47

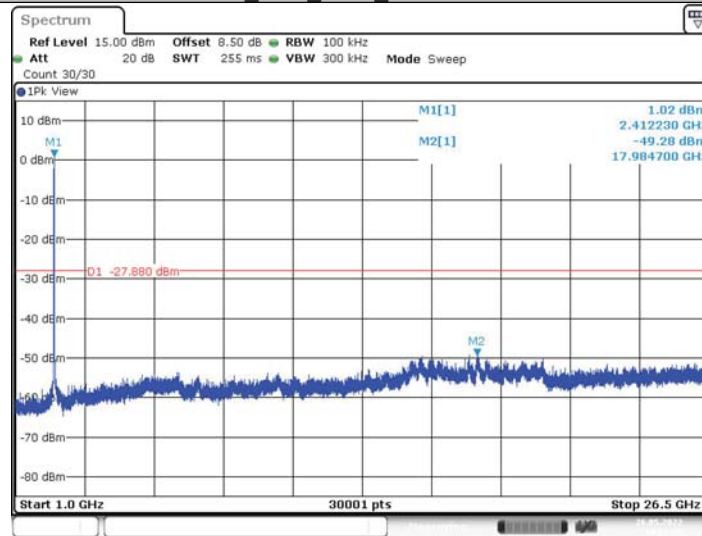
11G_Ant2_2412_30~1000



Date: 26.MAY.2022 14:20:59

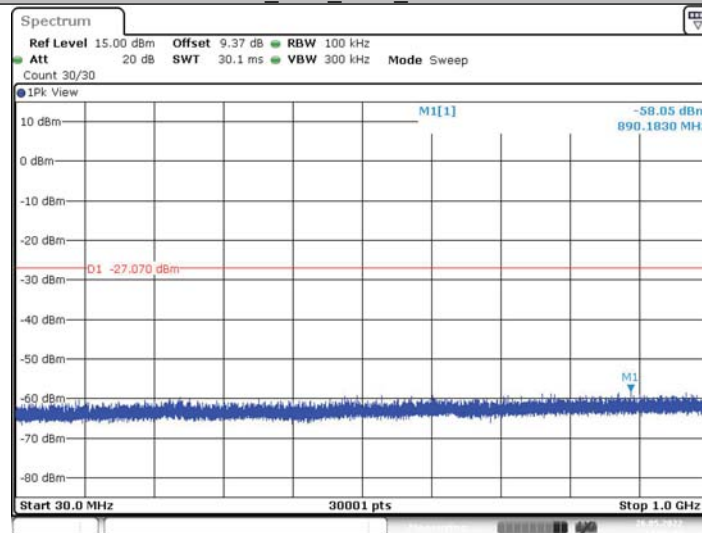


11G_Ant2_2412_1000~26500



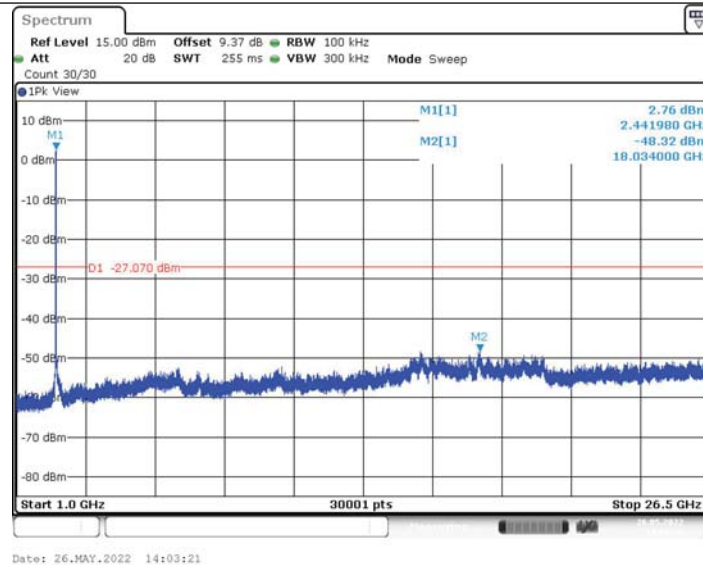
Date: 26.MAY.2022 14:21:36

11G_Ant1_2437_30~1000

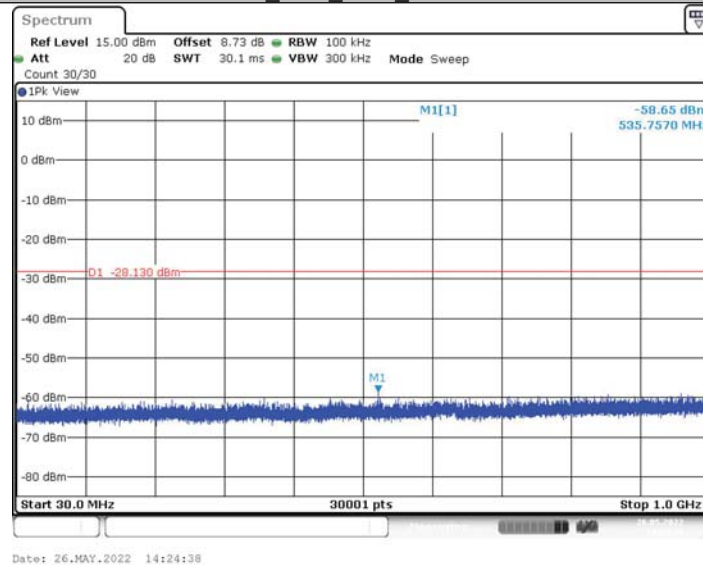


Date: 26.MAY.2022 14:02:44

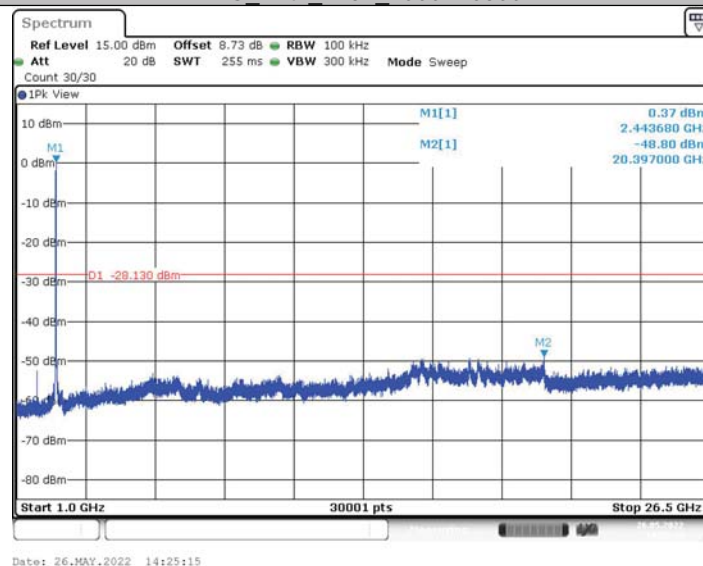
11G_Ant1_2437_1000~26500



11G_Ant2_2437_30~1000

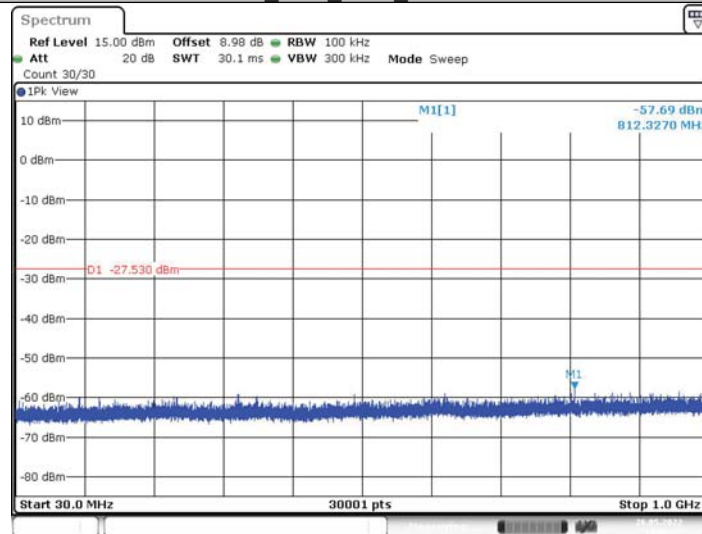


11G_Ant2_2437_1000~26500



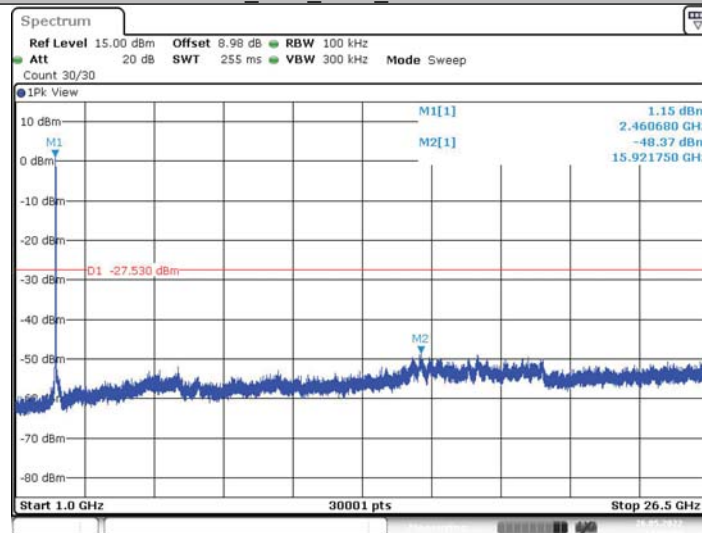


11G_Ant1_2462_30~1000



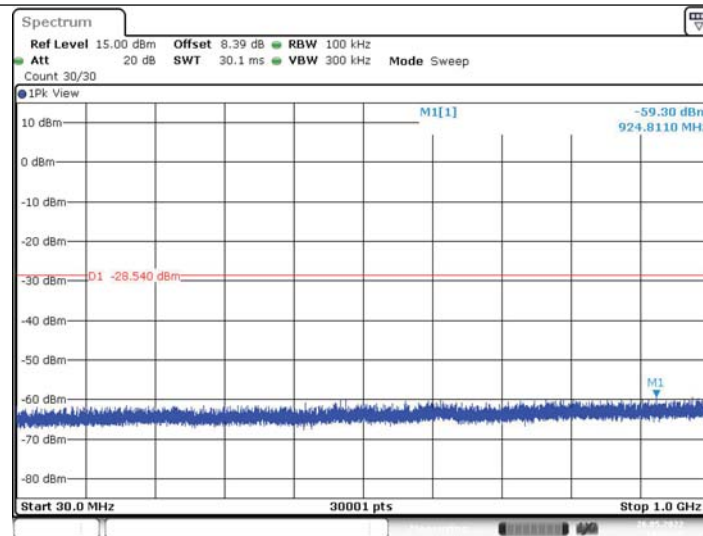
Date: 26.MAY.2022 14:06:28

11G_Ant1_2462_1000~26500



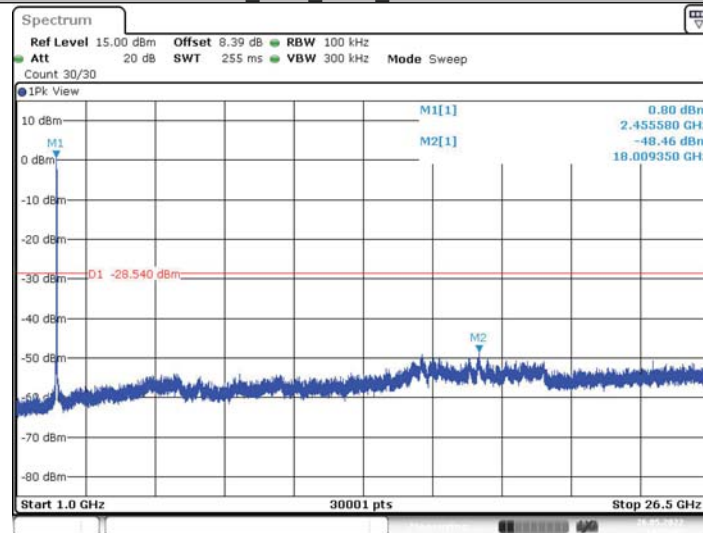
Date: 26.MAY.2022 14:07:04

11G_Ant2_2462_30~1000



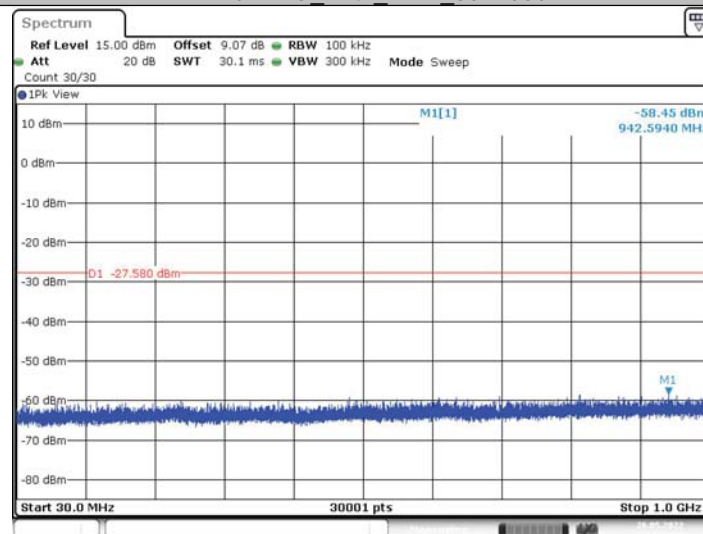
Date: 26.MAY.2022 14:28:25

11G_Ant2_2462_1000~26500



Date: 26.MAY.2022 14:29:02

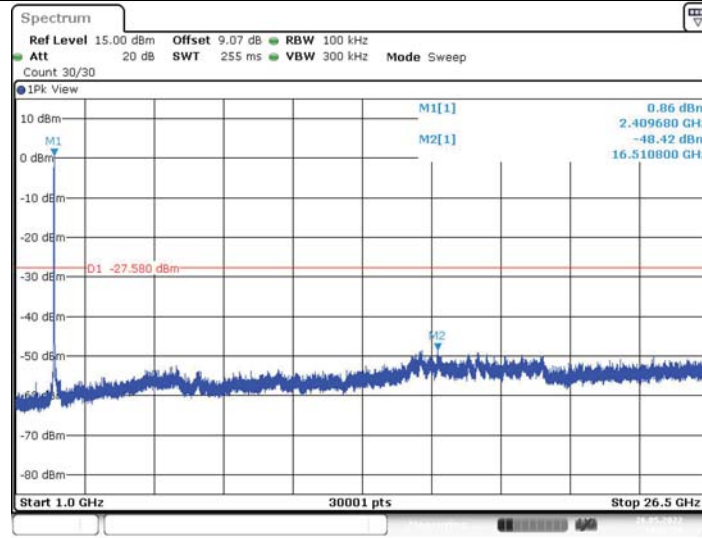
11N20MIMO_Ant1_2412_30~1000



Date: 26.MAY.2022 14:32:01

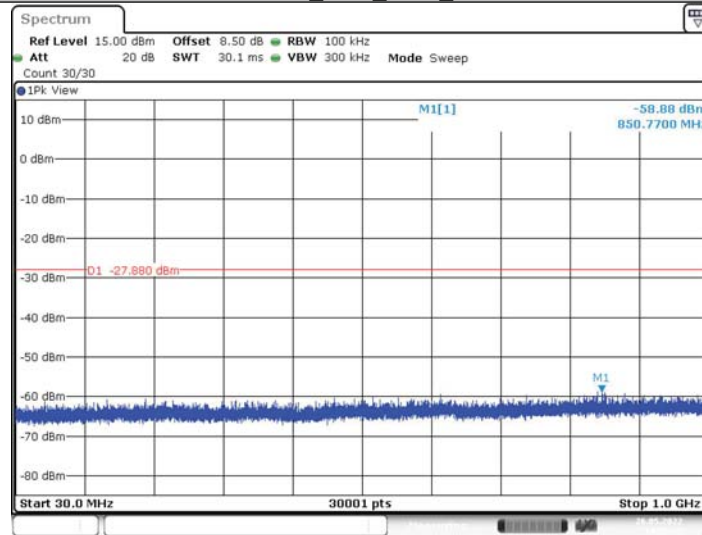


11N20MIMO_Ant1_2412_1000~26500



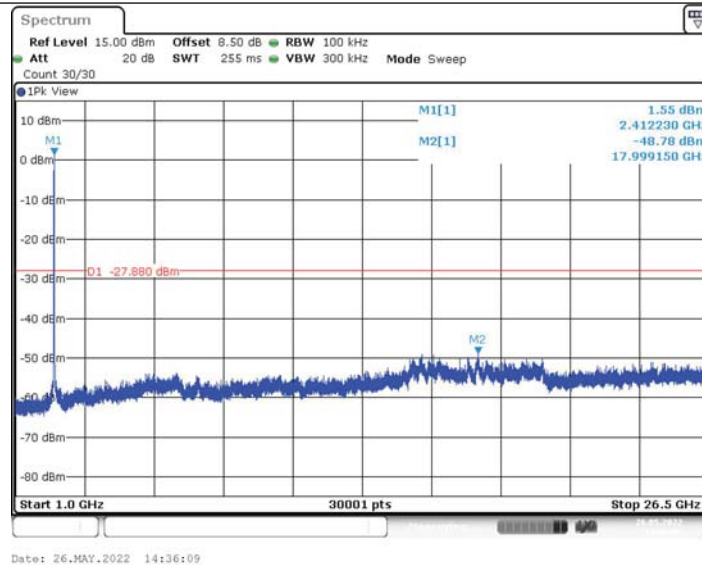
Date: 26.MAY.2022 14:32:38

11N20MIMO_Ant2_2412_30~1000

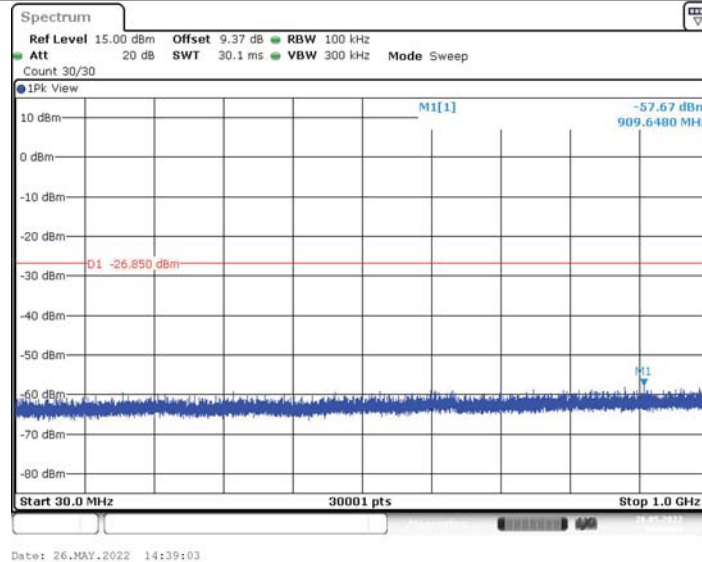


Date: 26.MAY.2022 14:35:32

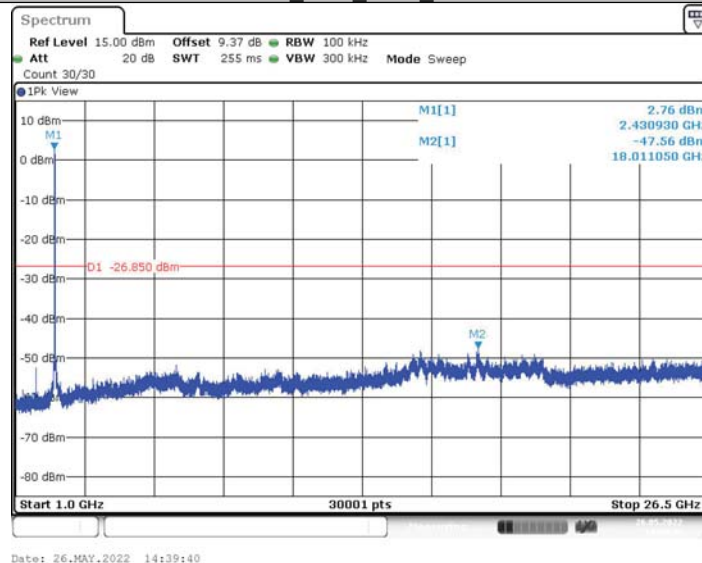
11N20MIMO_Ant2_2412_1000~26500



11N20MIMO_Ant1_2437_30~1000

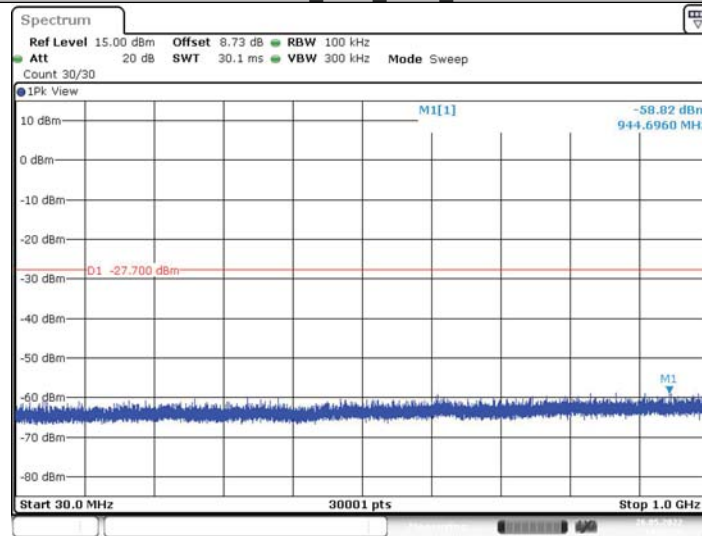


11N20MIMO_Ant1_2437_1000~26500



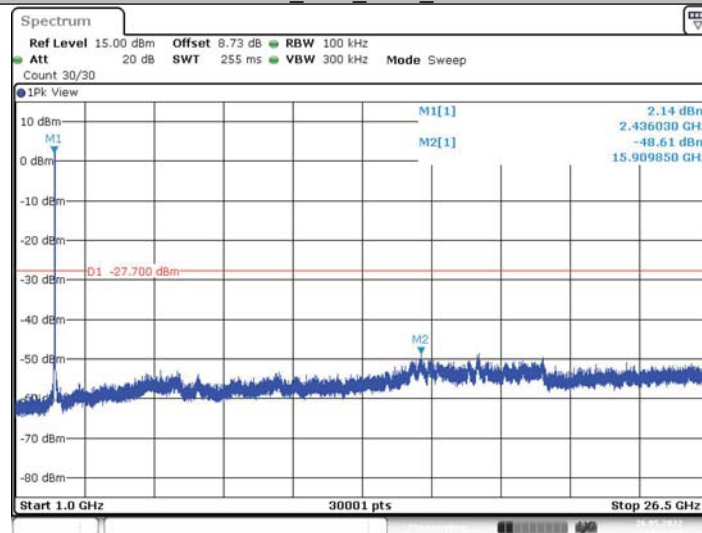


11N20MIMO_Ant2_2437_30~1000



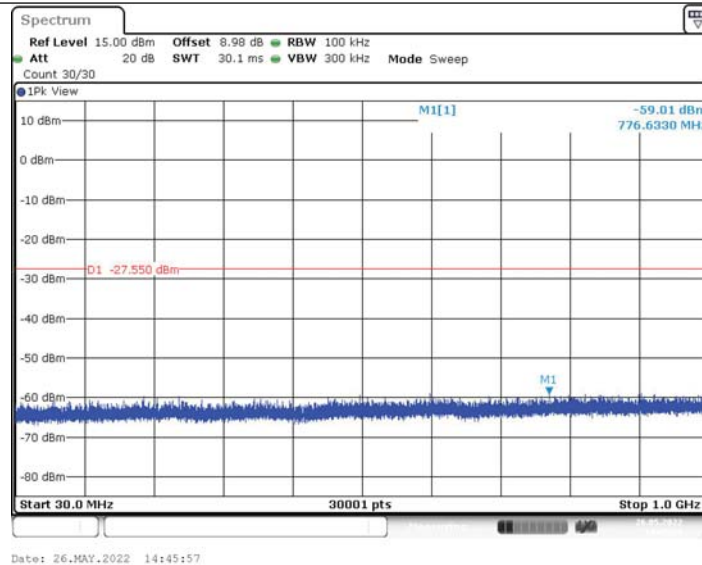
Date: 26.MAY.2022 14:42:20

11N20MIMO_Ant2_2437_1000~26500

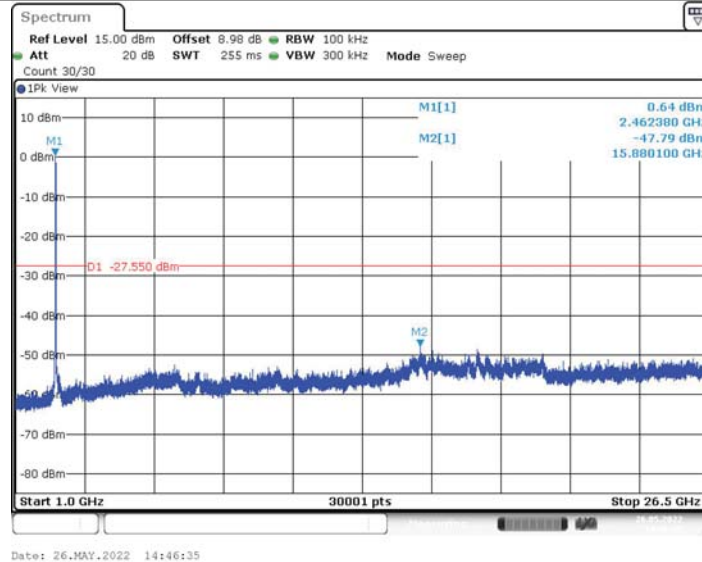


Date: 26.MAY.2022 14:42:57

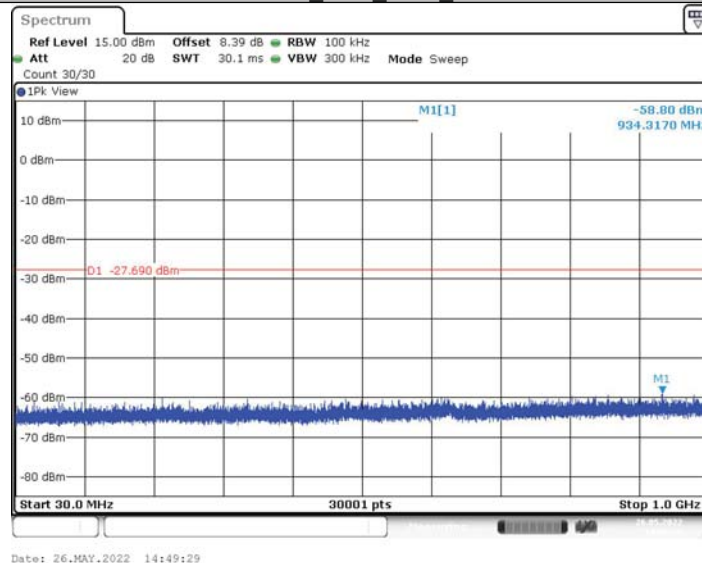
11N20MIMO_Ant1_2462_30~1000



11N20MIMO_Ant1_2462_1000~26500

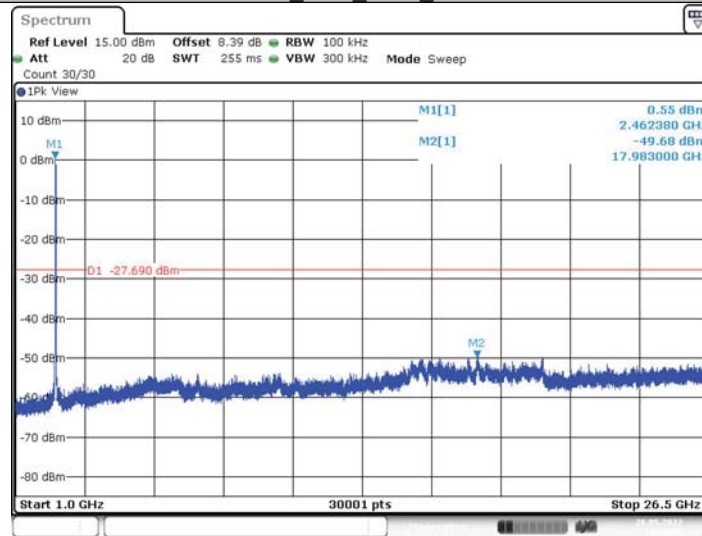


11N20MIMO_Ant2_2462_30~1000



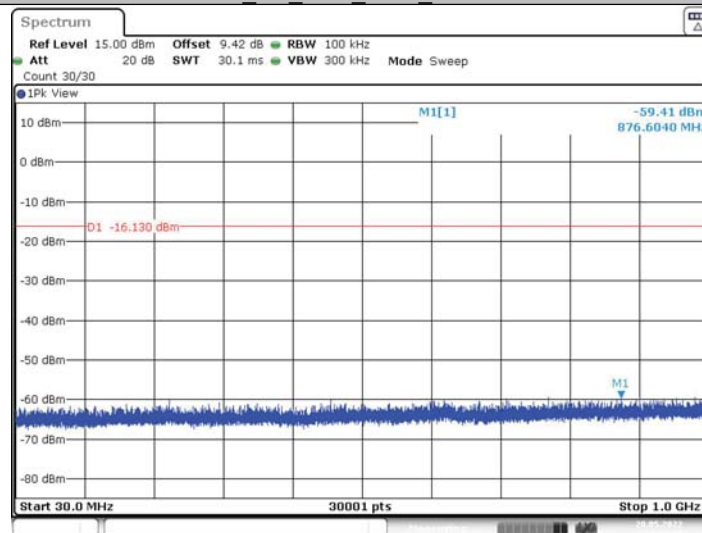


11N20MIMO_Ant2_2462_1000~26500



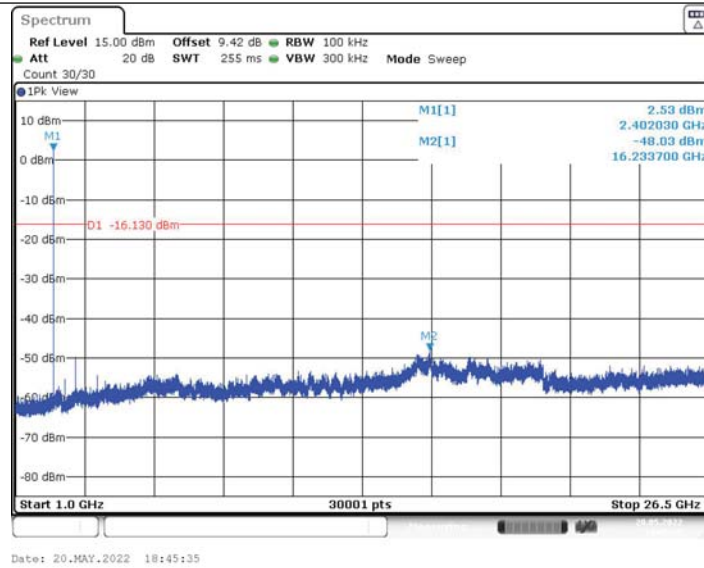
Date: 26.MAY.2022 14:50:05

BLE_1M_Ant1_2402_30~1000

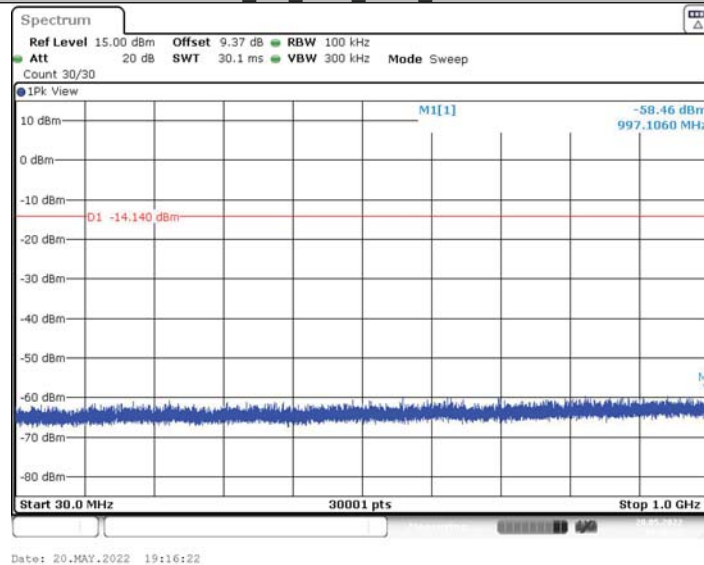


Date: 20.MAY.2022 18:44:58

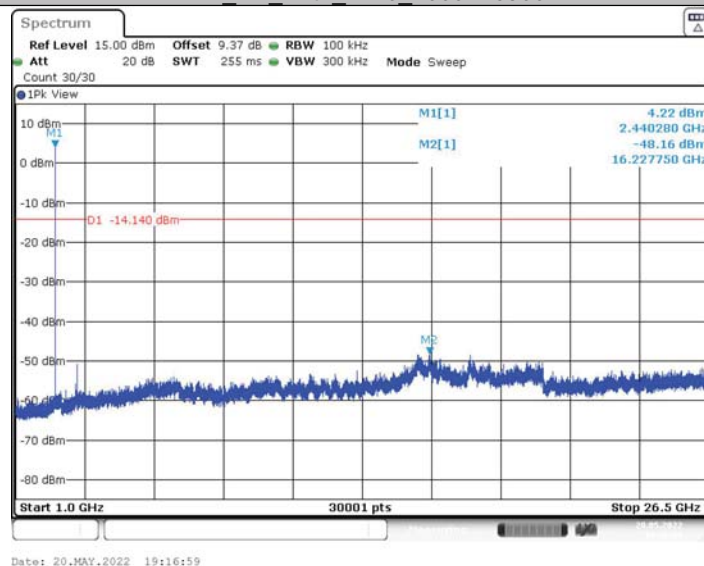
BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_30~1000

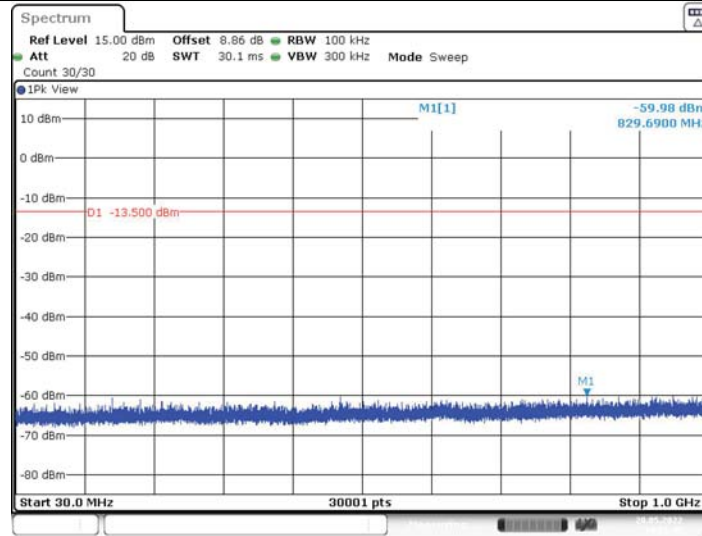


BLE_1M_Ant1_2440_1000~26500

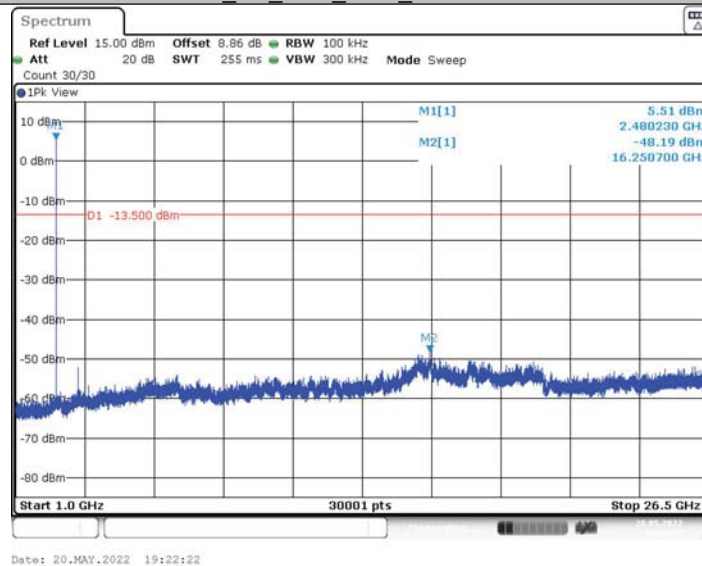




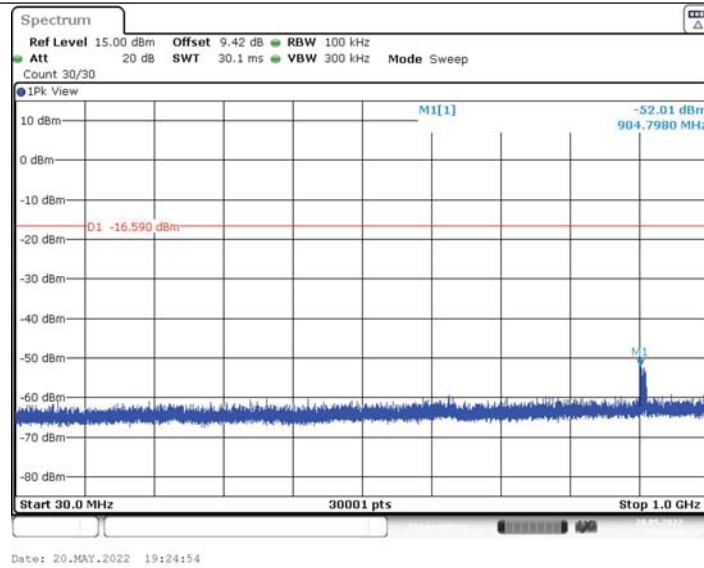
BLE_1M_Ant1_2480_30~1000



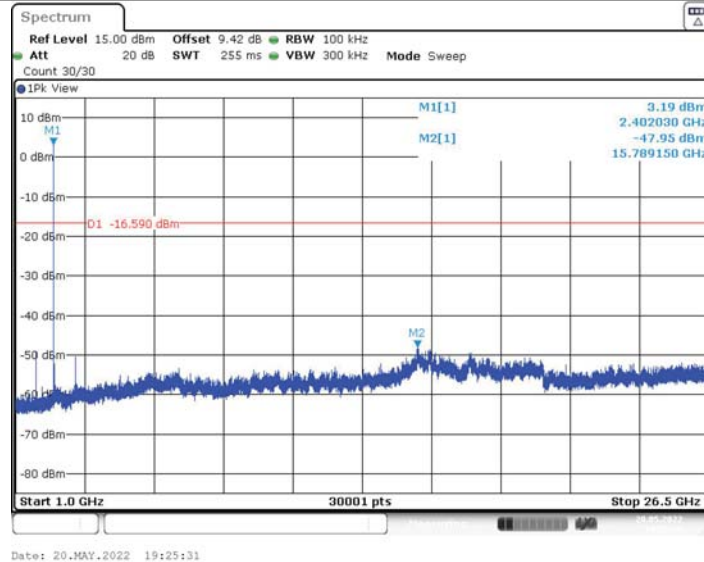
BLE_1M_Ant1_2480_1000~26500



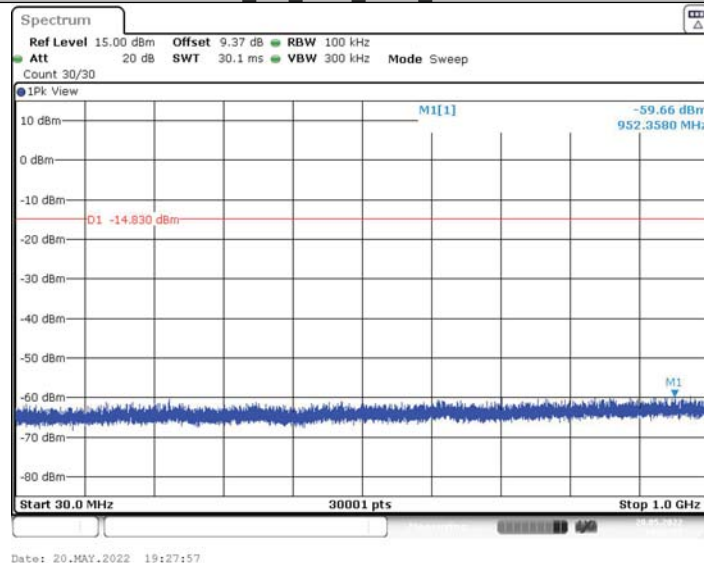
BLE_2M_Ant1_2402_30~1000



BLE_2M_Ant1_2402_1000~26500

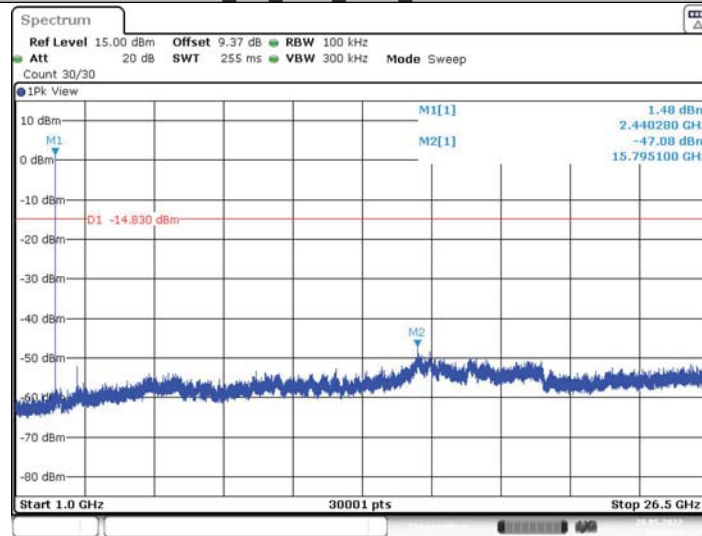


BLE_2M_Ant1_2440_30~1000

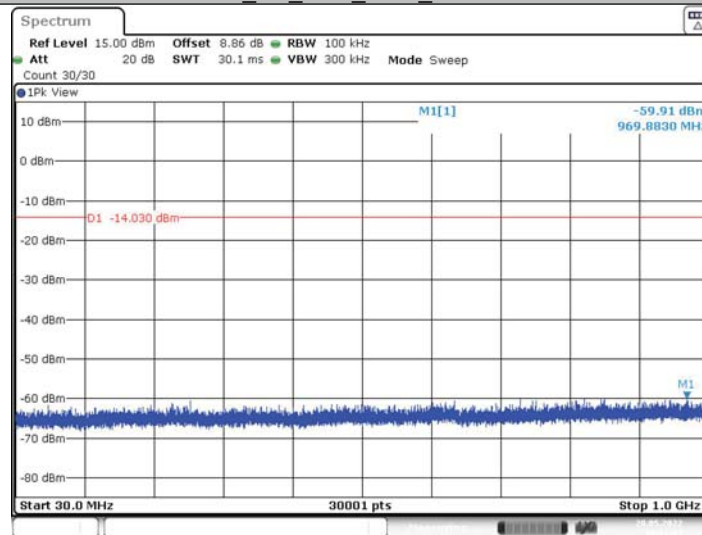




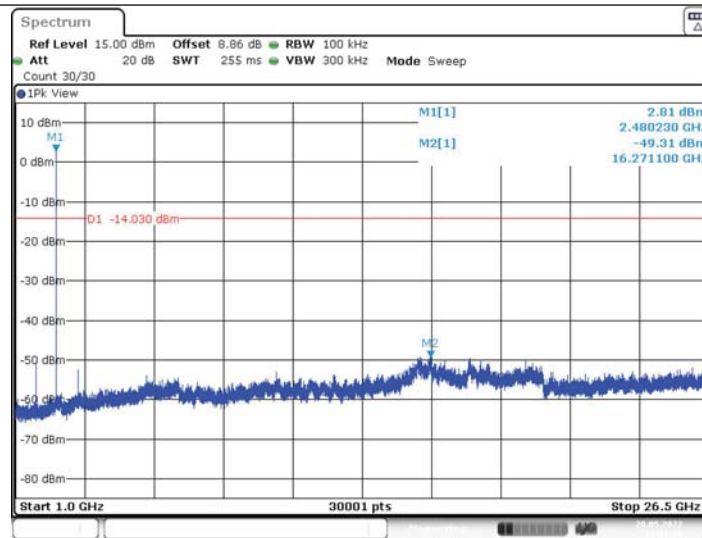
BLE_2M_Ant1_2440_1000~26500



BLE_2M_Ant1_2480_30~1000



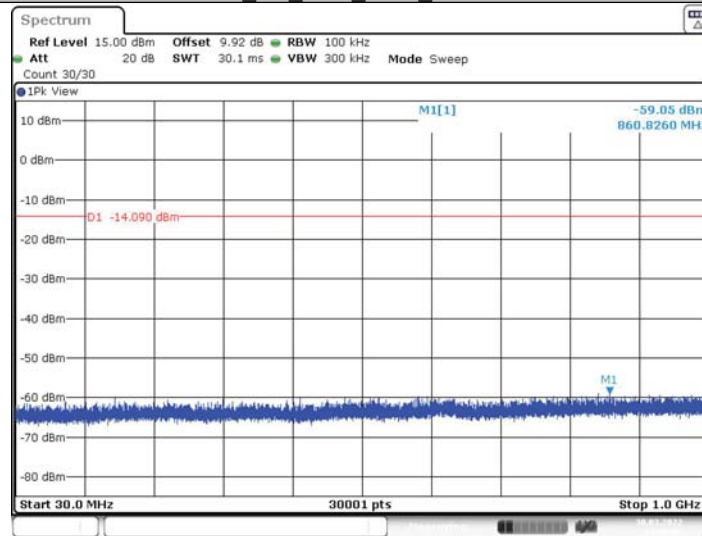
BLE_2M_Ant1_2480_1000~26500



Date: 20.MAY.2022 19:31:38

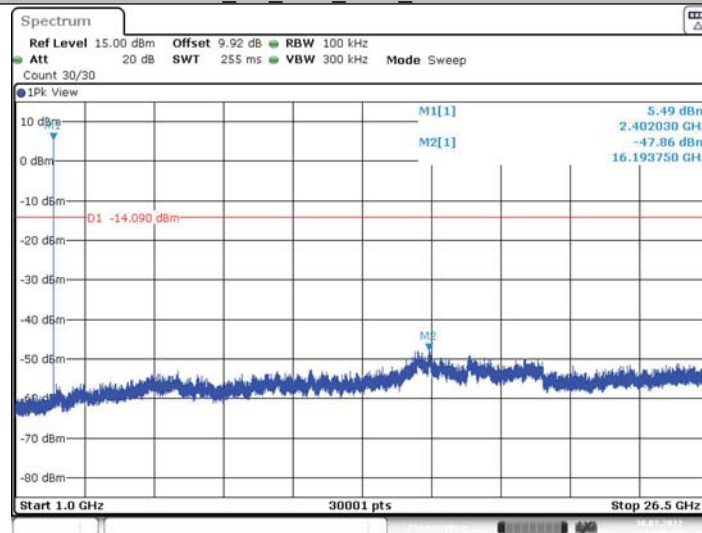


BLE_1M_Ant1_2402_30~1000



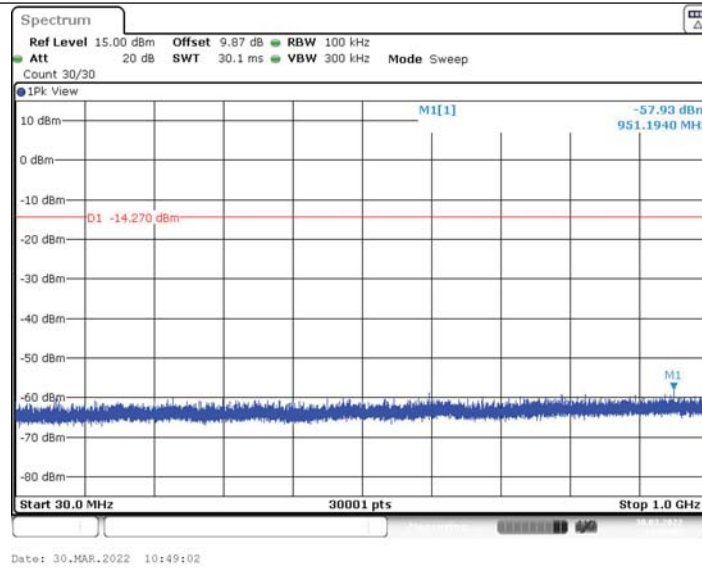
Date: 30.MAR.2022 10:46:00

BLE_1M_Ant1_2402_1000~26500

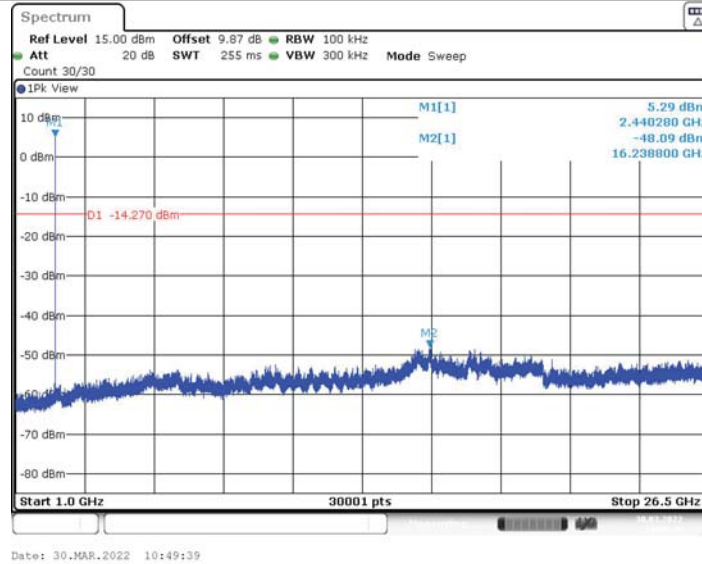


Date: 30.MAR.2022 10:46:37

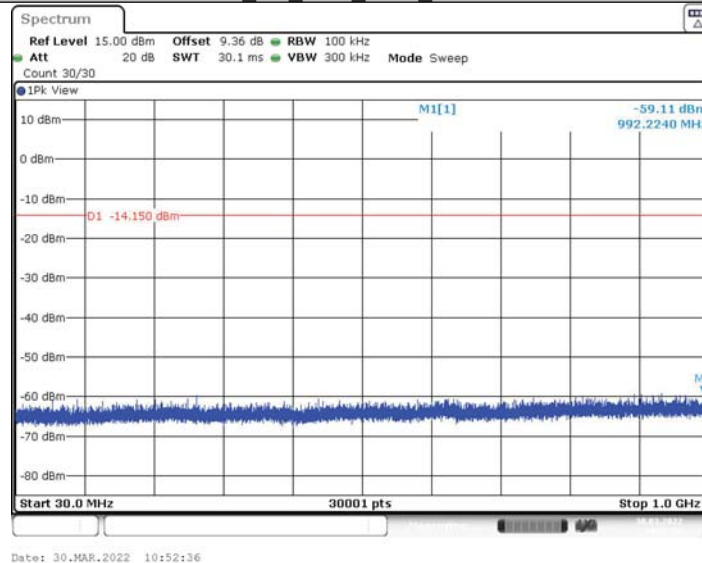
BLE_1M_Ant1_2440_30~1000

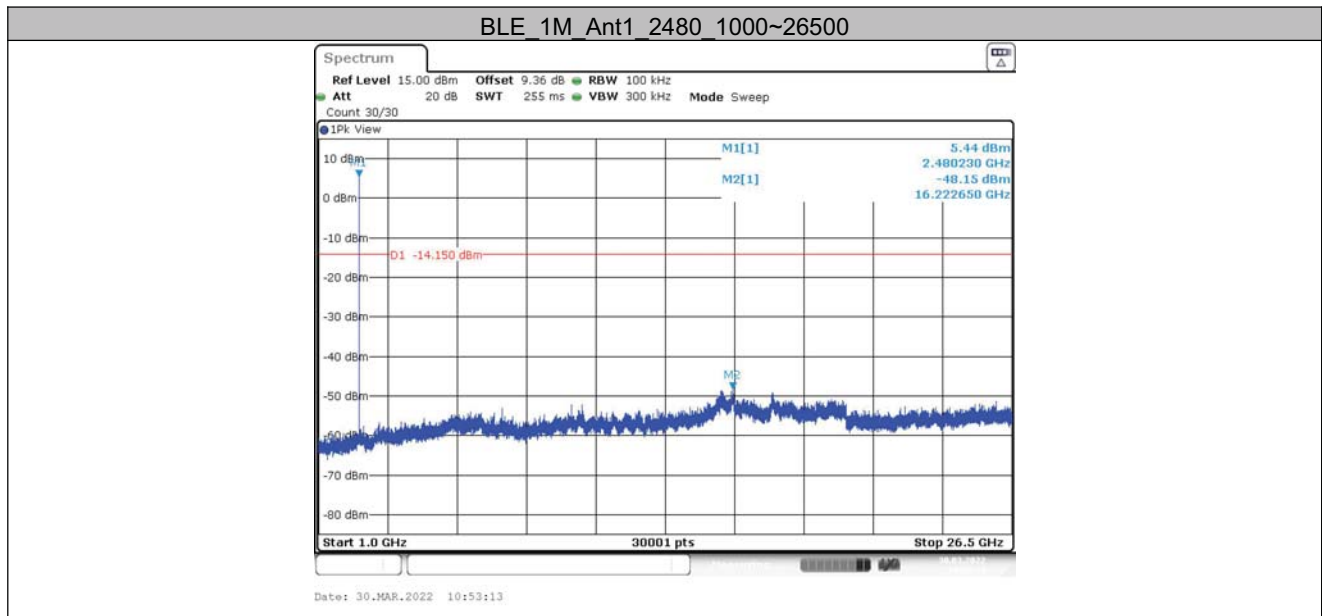


BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_30~1000







Important

- (1) The test report is valid with the official seal of the laboratory and the signatures of Test engineer, Author and Reviewer simultaneously.
- (2) The test report is invalid if altered.
- (3) Any photocopies or part photocopies in the test report are forbidden without the written permission from the laboratory.
- (4) Objections to the test report must be submitted to the laboratory within 15 days.
- (5) Generally, commission test is responsible for the tested samples only.

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