

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

General Description of EUT	
EUT Name:	WiFi Temp & Humidity Sensor with External Probe
Model:	T13
Sample ID:	HC-C-202512-0407-01-01#
Environmental Conditions	
Ambient Temperature:	25°C
Ambient Humidity:	45%RH
Test Power Supply:	DC 3V
Test Engineer:	Lily Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202512-0407-31	

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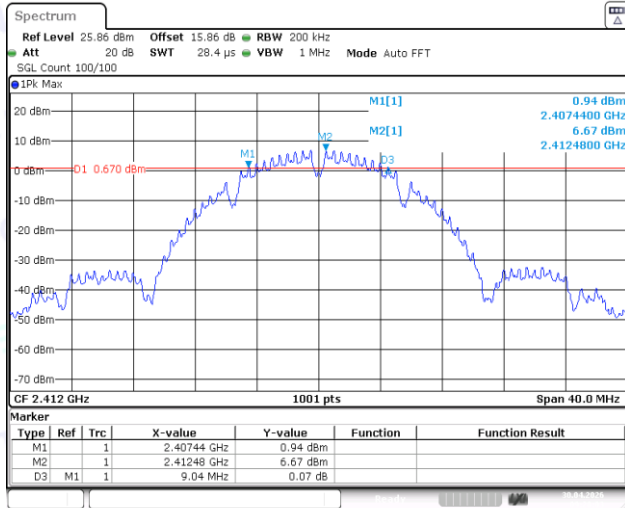
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1: DTS Bandwidth

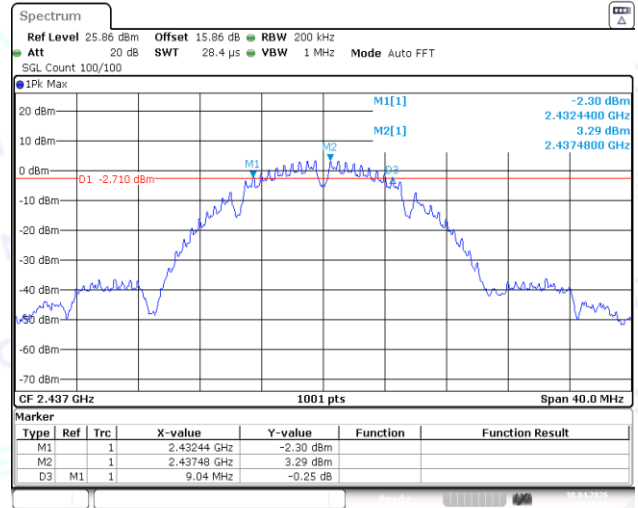
1.1 Test Result

TestMode	Ant.	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.04	2407.44	2416.48	0.5	PASS
11B	Ant1	2437	9.04	2432.44	2441.48	0.5	PASS
11B	Ant1	2462	9.04	2457.44	2466.48	0.5	PASS
11G	Ant1	2412	16.76	2404.00	2420.76	0.5	PASS
11G	Ant1	2437	17.16	2428.56	2445.72	0.5	PASS
11G	Ant1	2462	15.88	2454.00	2469.88	0.5	PASS
11N20SISO	Ant1	2412	14.88	2404.40	2419.28	0.5	PASS
11N20SISO	Ant1	2437	10.36	2432.12	2442.48	0.5	PASS
11N20SISO	Ant1	2462	17.00	2454.00	2471.00	0.5	PASS

1.2 Test Graphs



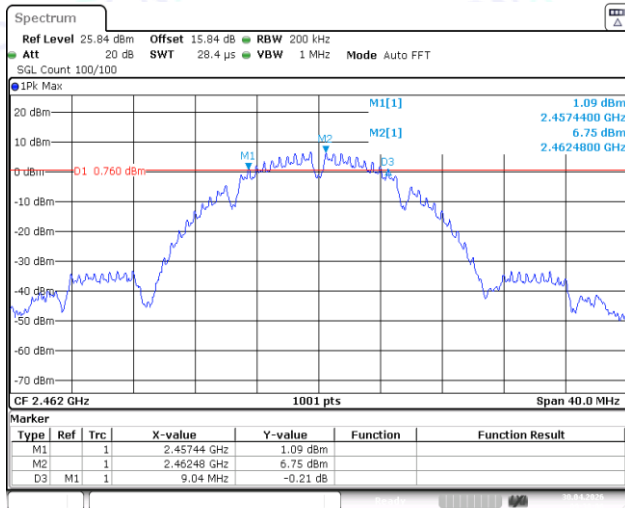
Date: 30.APR.2026 09:28:03



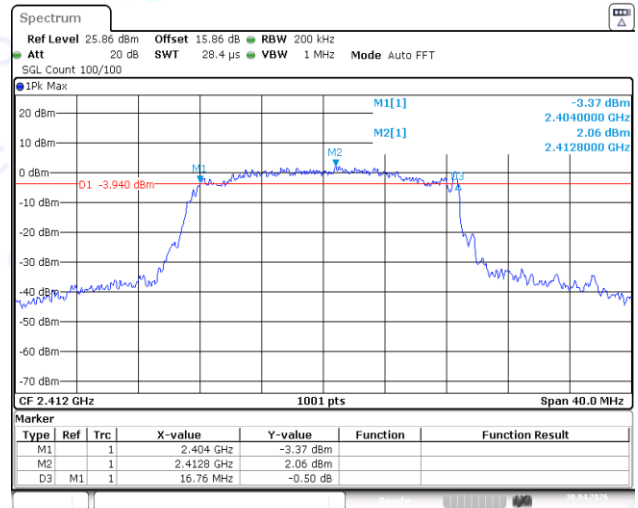
Date: 30.APR.2026 09:36:29

11B-Ant1-2412-PASS

11B-Ant1-2437-PASS



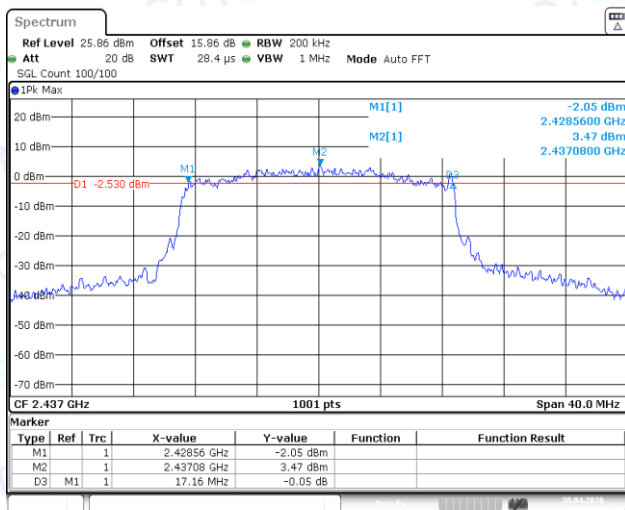
Date: 30.APR.2026 09:38:06



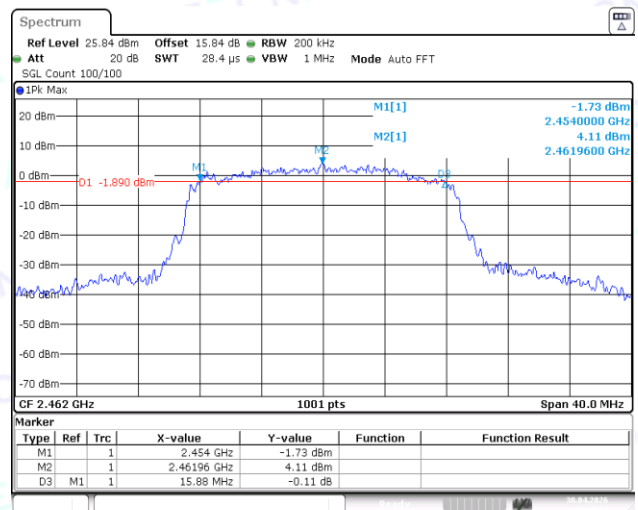
Date: 30.APR.2026 09:41:31

11B-Ant1-2462-PASS

11G-Ant1-2412-PASS



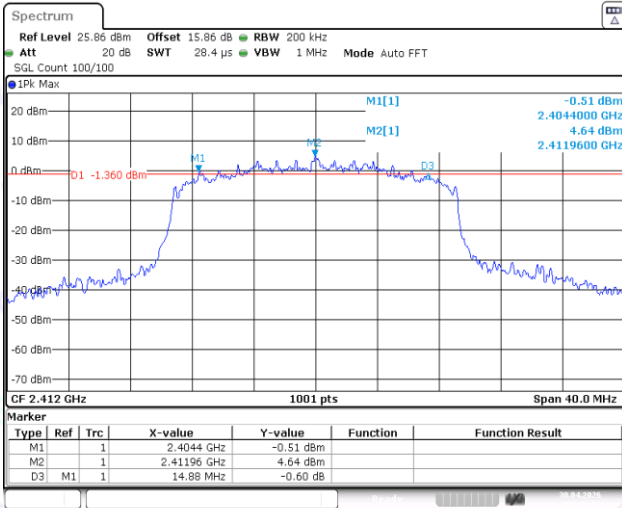
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Date: 30.APR.2026 09:49:38

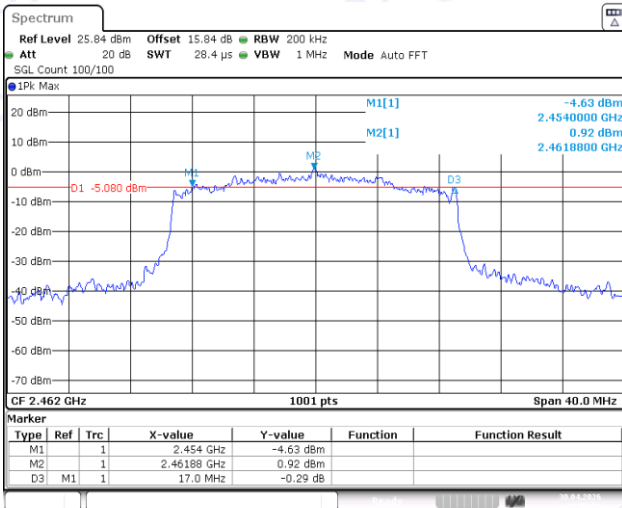
11G-Ant1-2437-PASS

11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS

11N20SISO-Ant1-2437-PASS



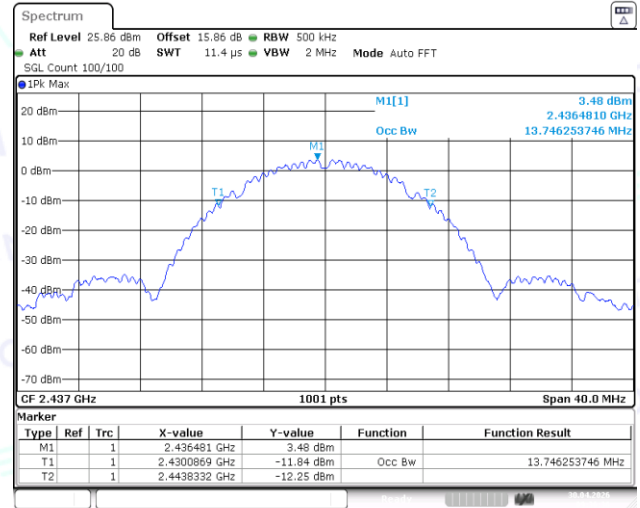
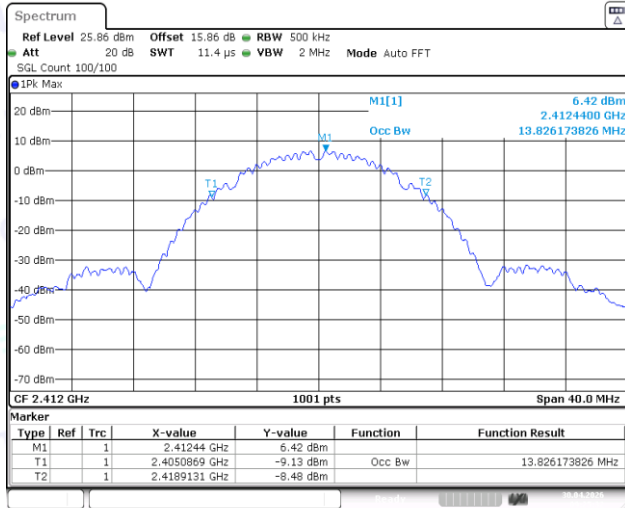
11N20SISO-Ant1-2462-PASS

2: Occupied Channel Bandwidth

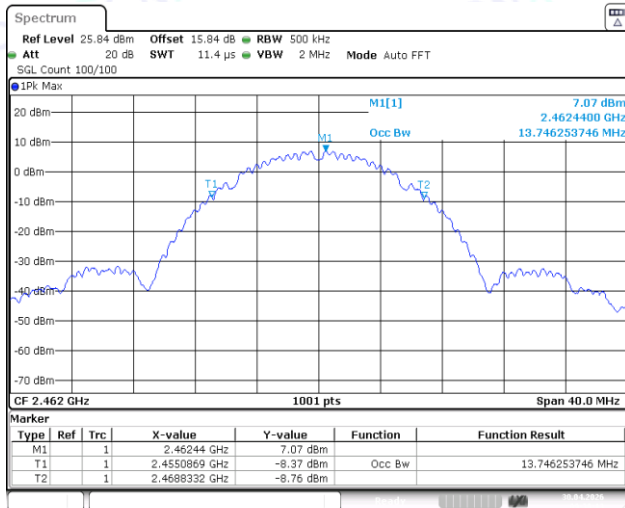
2.1 Test Result

TestMode	Ant.	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.826	2405.0869	2418.9131	---	---
11B	Ant1	2437	13.746	2430.0869	2443.8332	---	---
11B	Ant1	2462	13.746	2455.0869	2468.8332	---	---
11G	Ant1	2412	17.303	2403.2488	2420.5514	---	---
11G	Ant1	2437	17.183	2428.3287	2445.5115	---	---
11G	Ant1	2462	17.303	2453.2488	2470.5514	---	---
11N20SISO	Ant1	2412	18.342	2402.8492	2421.1908	---	---
11N20SISO	Ant1	2437	18.062	2428.1289	2446.1908	---	---
11N20SISO	Ant1	2462	18.222	2452.8891	2471.1109	---	---

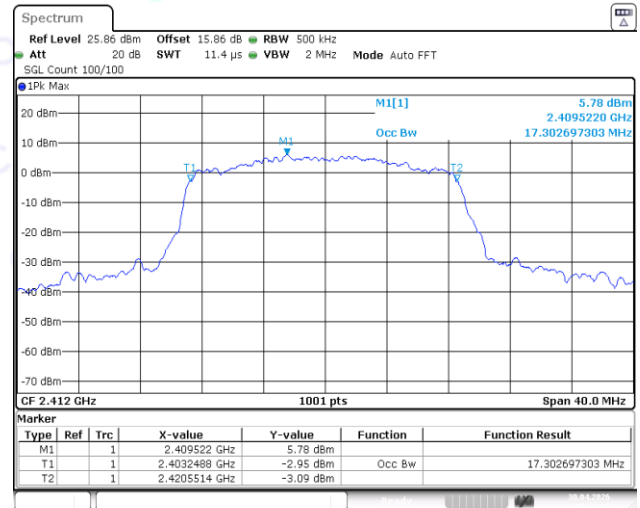
2.2 Test Graphs



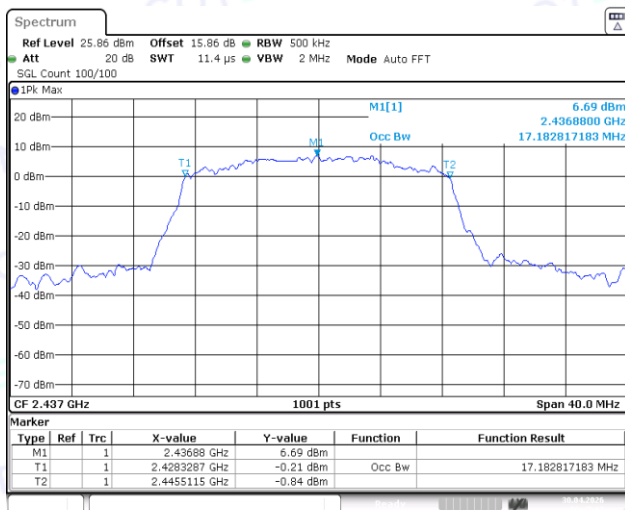
11B-Ant1-2412



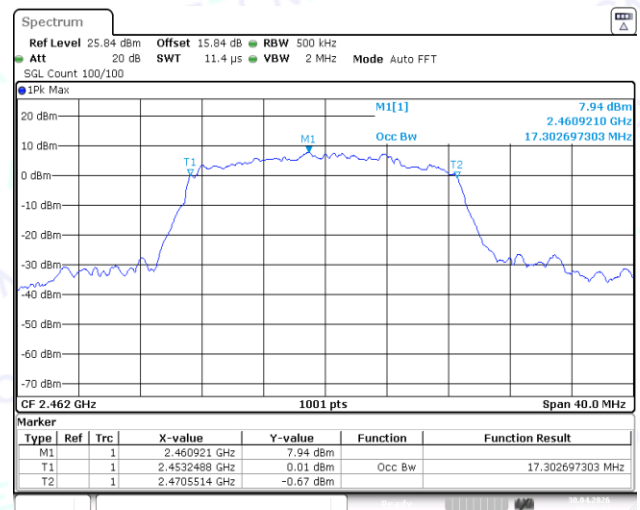
11B-Ant1-2437



11B-Ant1-2462

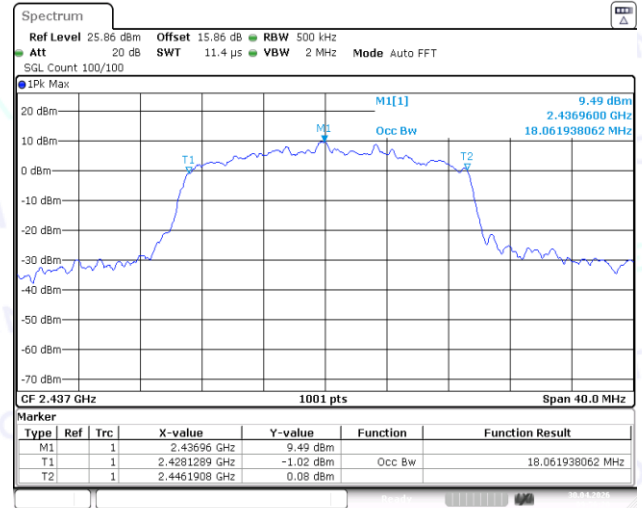
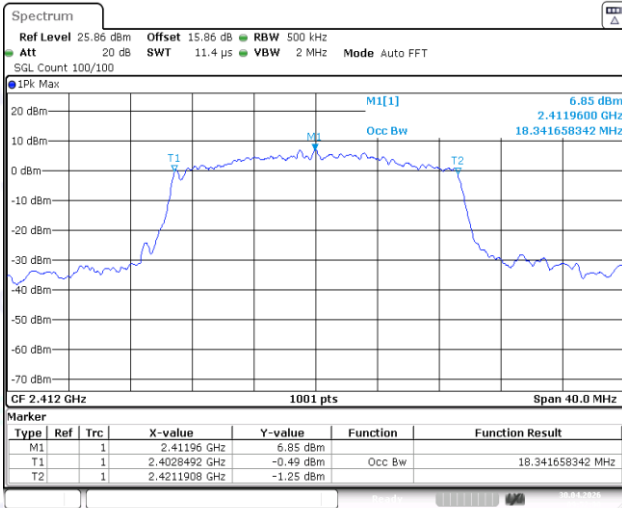


11G-Ant1-2412



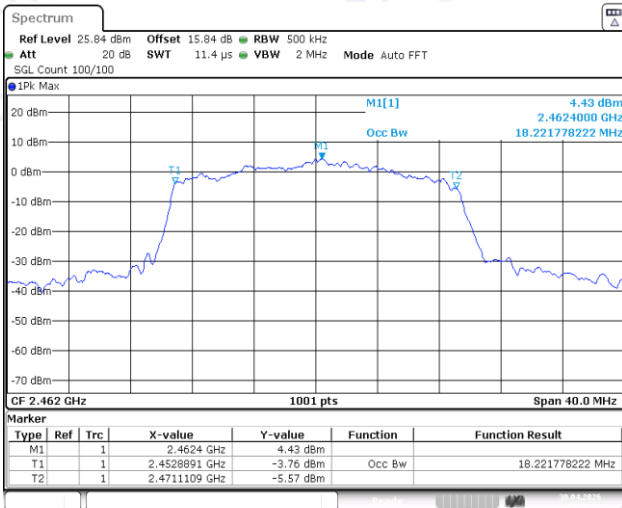
11G-Ant1-2437

11G-Ant1-2462



11N20SISO-Ant1-2412

11N20SISO-Ant1-2437



11N20SISO-Ant1-2462

3: Maximum conducted output power

3.1 Test Result Average

Test Mode	Ant.	Frequency [MHz]	Raw Power [dBm]	DC Factor	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	14.86	0.00	14.86	≤30.00	1.68	16.54	≤36.00	PASS
11B	Ant1	2437	14.79	0.00	14.79	≤30.00	1.68	16.47	≤36.00	PASS
11B	Ant1	2462	15.00	0.00	15.00	≤30.00	1.68	16.68	≤36.00	PASS
11G	Ant1	2412	14.46	0.00	14.46	≤30.00	1.68	16.14	≤36.00	PASS
11G	Ant1	2437	14.38	0.00	14.38	≤30.00	1.68	16.06	≤36.00	PASS
11G	Ant1	2462	14.60	0.00	14.60	≤30.00	1.68	16.28	≤36.00	PASS
11N20SISO	Ant1	2412	14.13	0.00	14.13	≤30.00	1.68	15.81	≤36.00	PASS
11N20SISO	Ant1	2437	14.00	0.00	14.00	≤30.00	1.68	15.68	≤36.00	PASS
11N20SISO	Ant1	2462	14.70	0.00	14.70	≤30.00	1.68	16.38	≤36.00	PASS

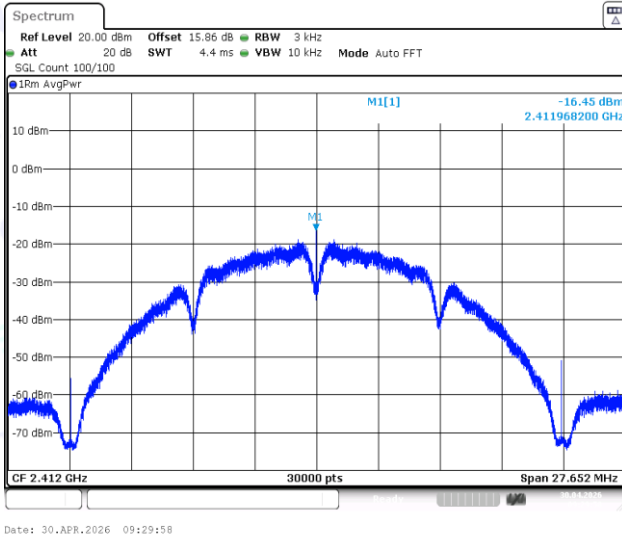
4: Maximum power spectral density

4.1 Test Result

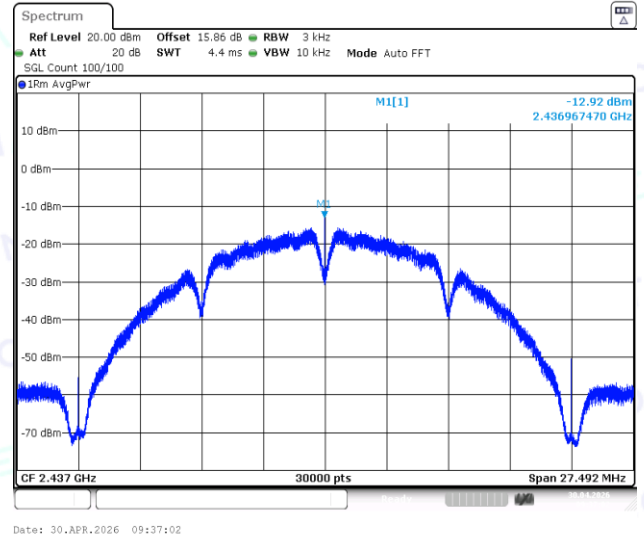
TestMode	Ant.	Frequency [MHz]	RawData [dBm/3kHz]	DC Factor	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-16.45	0.00	-16.45	≤8.00	PASS
11B	Ant1	2437	-12.92	0.00	-12.92	≤8.00	PASS
11B	Ant1	2462	-12.86	0.00	-12.86	≤8.00	PASS
11G	Ant1	2412	-13.14	0.00	-13.14	≤8.00	PASS
11G	Ant1	2437	-11.41	0.00	-11.41	≤8.00	PASS
11G	Ant1	2462	-11.94	0.00	-11.94	≤8.00	PASS
11N20SISO	Ant1	2412	-10.54	0.00	-10.54	≤8.00	PASS
11N20SISO	Ant1	2437	-15.13	0.00	-15.13	≤8.00	PASS
11N20SISO	Ant1	2462	-10.29	0.00	-10.29	≤8.00	PASS

Note: RF Conducted test Offset= cable loss+ Attenuator.

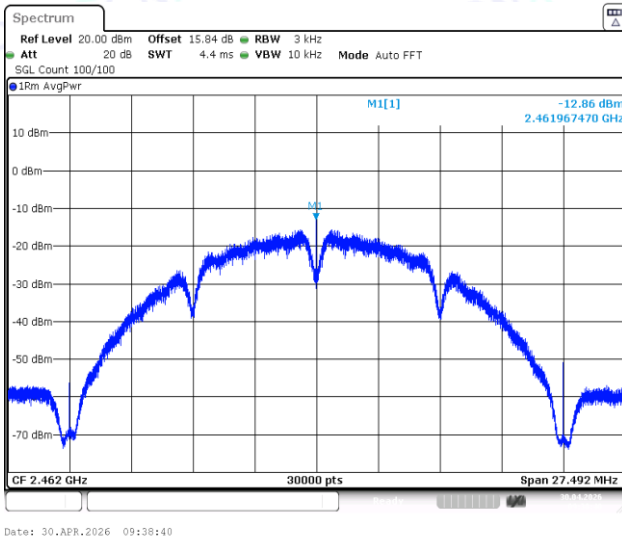
4.2 Test Graphs



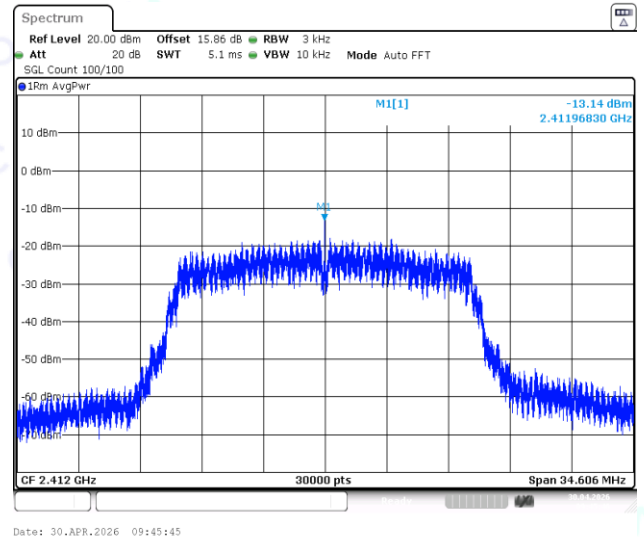
11B-Ant1-2412-PASS



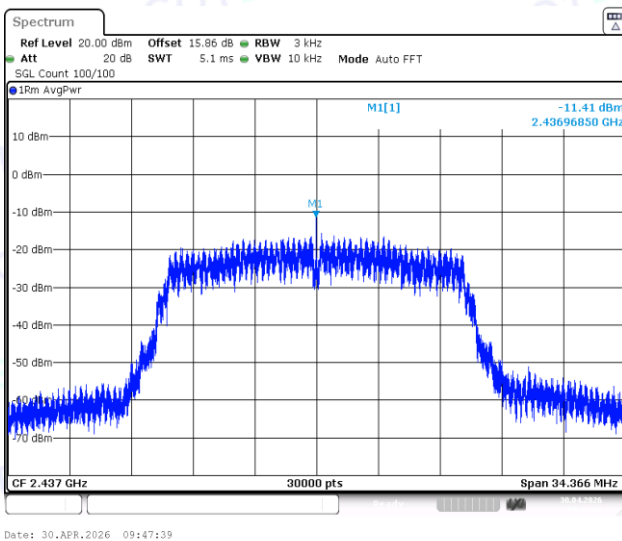
11B-Ant1-2437-PASS



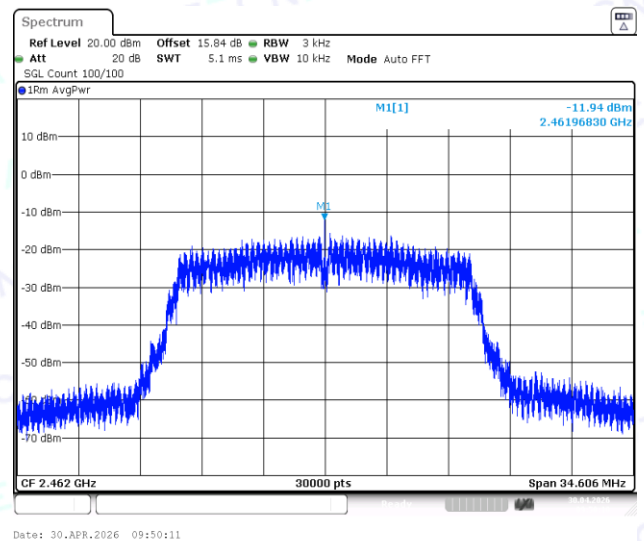
11B-Ant1-2462-PASS



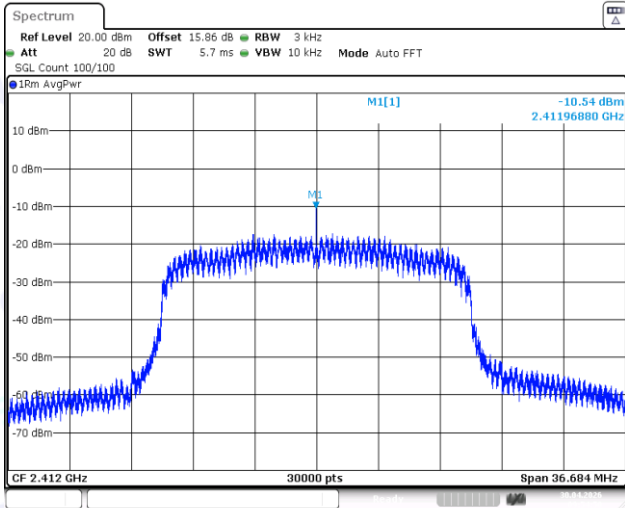
11G-Ant1-2412-PASS



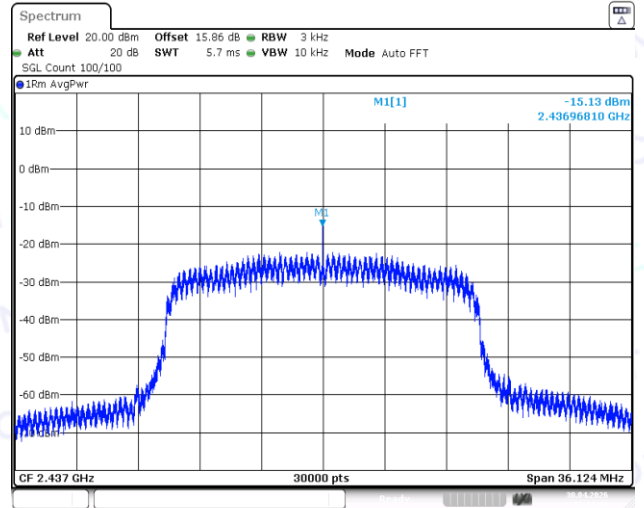
11G-Ant1-2437-PASS



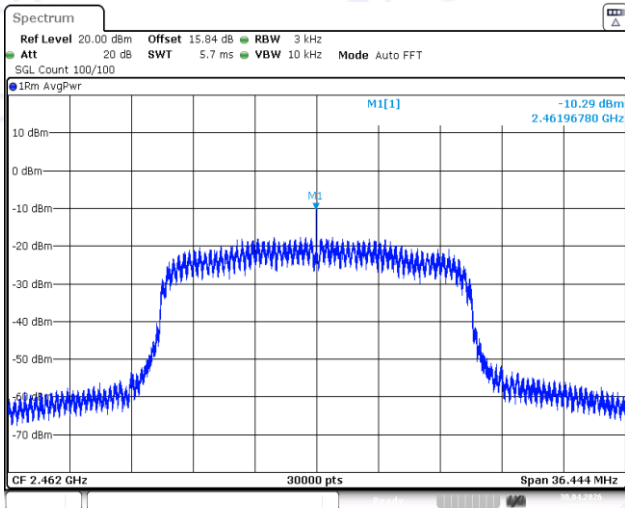
11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS



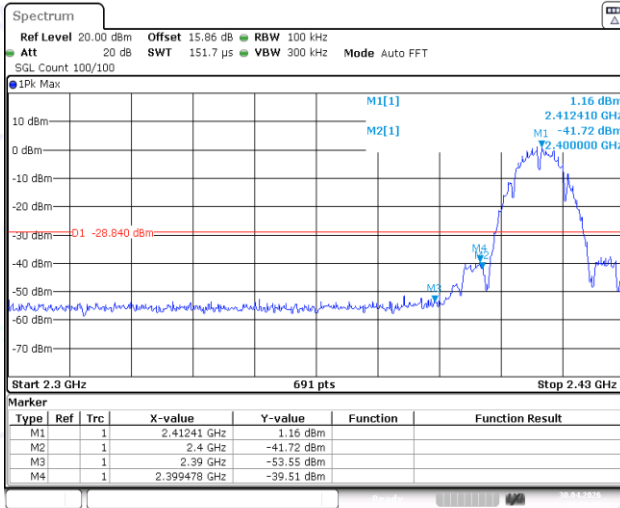
11N20SISO-Ant1-2462-PASS

5: Band edge measurements

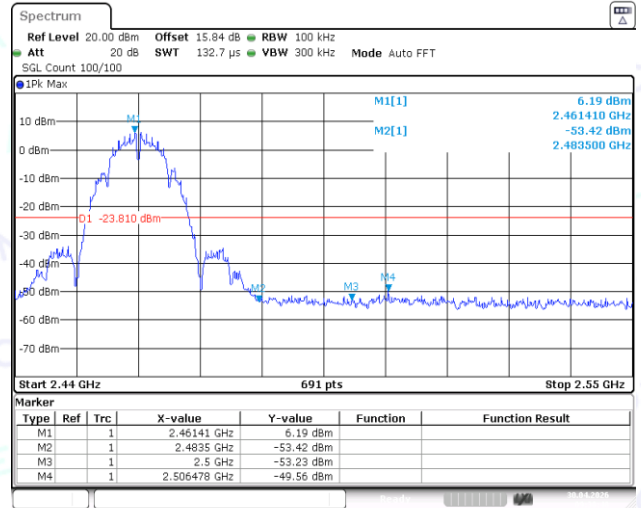
5.1 Test Result

TestMode	Ant.	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.16	-39.51	≤-28.84	PASS
11B	Ant1	High	2462	6.19	-49.56	≤-23.81	PASS
11G	Ant1	Low	2412	3.28	-36.25	≤-26.72	PASS
11G	Ant1	High	2462	1.48	-44.11	≤-28.52	PASS
11N20SISO	Ant1	Low	2412	3.00	-34.13	≤-27	PASS
11N20SISO	Ant1	High	2462	1.67	-41.87	≤-28.33	PASS

5.2 Test Graphs



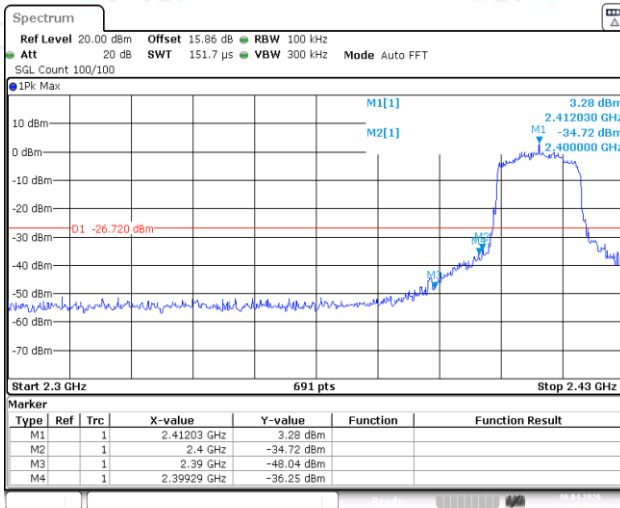
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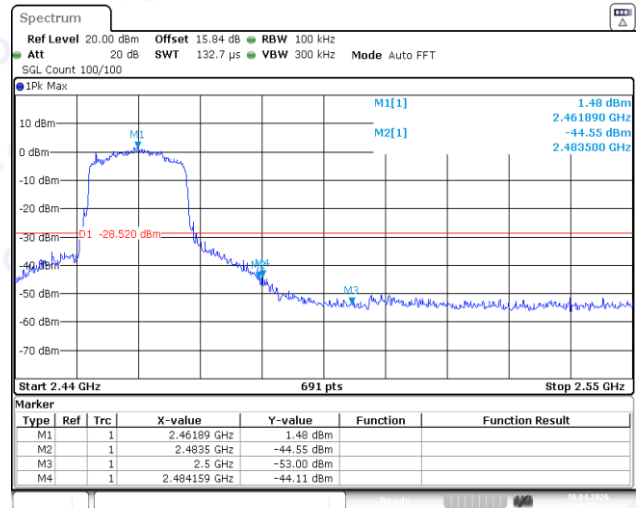
Date: 30.APR.2026 09:38:48

11B-Ant1-2412-PASS

11B-Ant1-2462-PASS



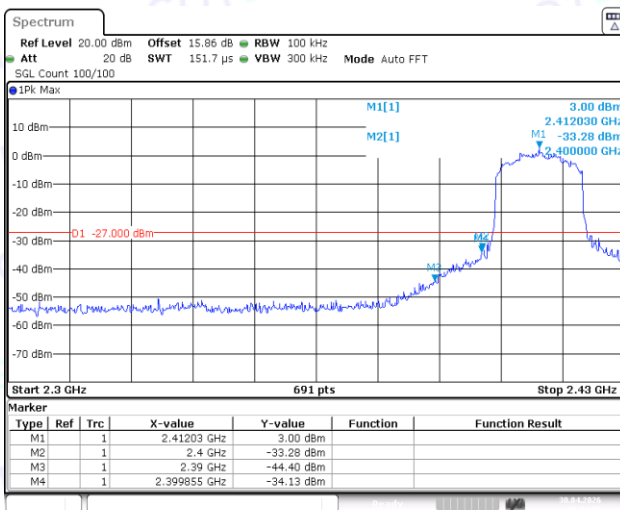
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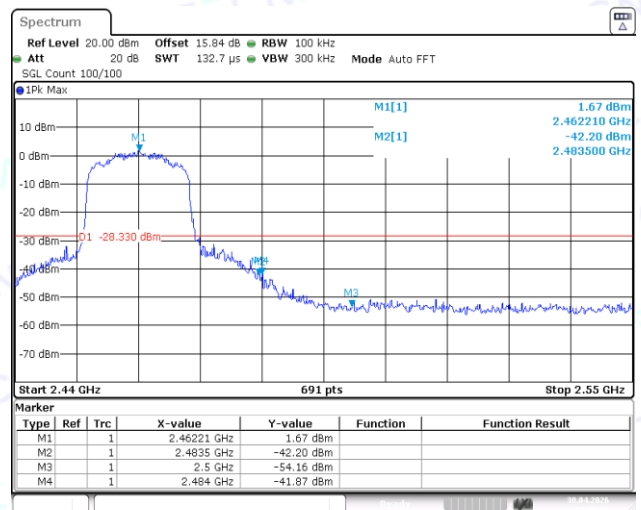
Date: 30.APR.2026 09:50:19

11G-Ant1-2412-PASS

11G-Ant1-2462-PASS



Date: 30.APR.2026 09:54:59



Date: 30.APR.2026 10:00:41

11N20SISO-Ant1-2412-PASS

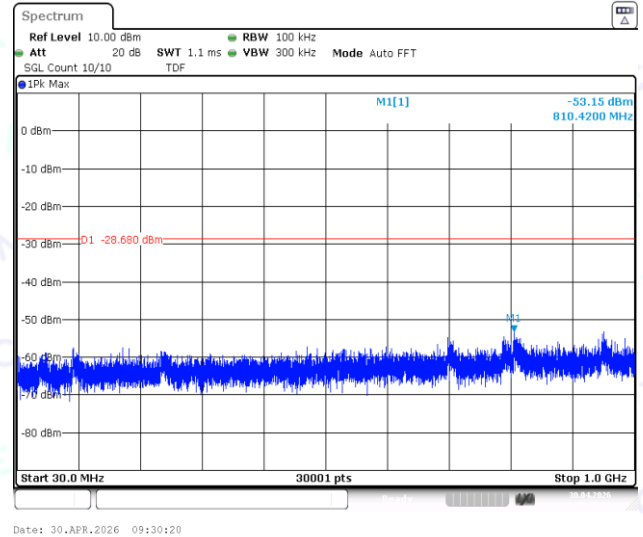
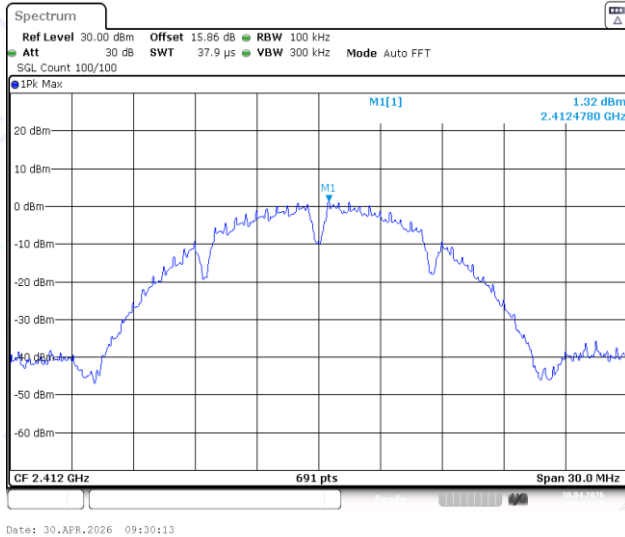
11N20SISO-Ant1-2462-PASS

6: Conducted Spurious Emission

6.1 Test Result

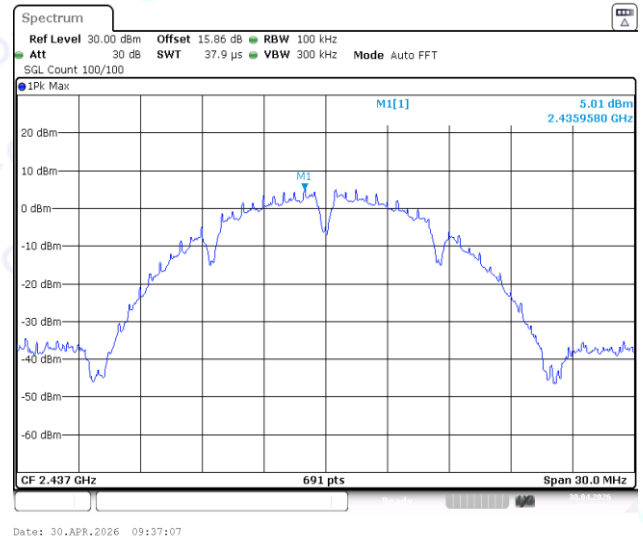
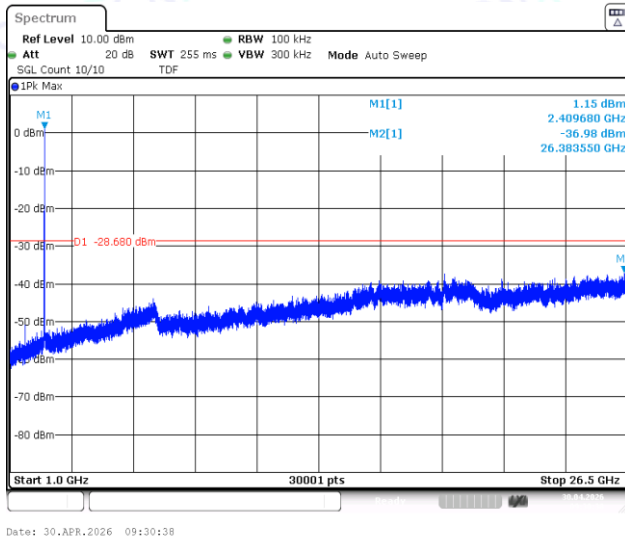
TestMode	Ant.	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	1.32	1.32	---	PASS
11B	Ant1	2412	30~1000	1.32	-53.15	≤-28.68	PASS
11B	Ant1	2412	1000~26500	1.32	-36.98	≤-28.68	PASS
11B	Ant1	2437	0~Reference	5.01	5.01	---	PASS
11B	Ant1	2437	30~1000	5.01	-53.27	≤-24.99	PASS
11B	Ant1	2437	1000~26500	5.01	-37.43	≤-24.99	PASS
11B	Ant1	2462	0~Reference	5.14	5.14	---	PASS
11B	Ant1	2462	30~1000	5.14	-51.74	≤-24.86	PASS
11B	Ant1	2462	1000~26500	5.14	-36.84	≤-24.86	PASS
11G	Ant1	2412	0~Reference	2.65	2.65	---	PASS
11G	Ant1	2412	30~1000	2.65	-54.62	≤-27.35	PASS
11G	Ant1	2412	1000~26500	2.65	-36.47	≤-27.35	PASS
11G	Ant1	2437	0~Reference	0.91	0.91	---	PASS
11G	Ant1	2437	30~1000	0.91	-54.11	≤-29.09	PASS
11G	Ant1	2437	1000~26500	0.91	-37.46	≤-29.09	PASS
11G	Ant1	2462	0~Reference	3.71	3.71	---	PASS
11G	Ant1	2462	30~1000	3.71	-54.01	≤-26.29	PASS
11G	Ant1	2462	1000~26500	3.71	-37.66	≤-26.29	PASS
11N20SISO	Ant1	2412	0~Reference	1.55	1.55	---	PASS
11N20SISO	Ant1	2412	30~1000	1.55	-54.67	≤-28.45	PASS
11N20SISO	Ant1	2412	1000~26500	1.55	-37.07	≤-28.45	PASS
11N20SISO	Ant1	2437	0~Reference	-0.93	-0.93	---	PASS
11N20SISO	Ant1	2437	30~1000	-0.93	-52.15	≤-30.93	PASS
11N20SISO	Ant1	2437	1000~26500	-0.93	-37.15	≤-30.93	PASS
11N20SISO	Ant1	2462	0~Reference	1.83	1.83	---	PASS
11N20SISO	Ant1	2462	30~1000	1.83	-53.82	≤-28.17	PASS
11N20SISO	Ant1	2462	1000~26500	1.83	-36.74	≤-28.17	PASS

6.2 Test Graphs



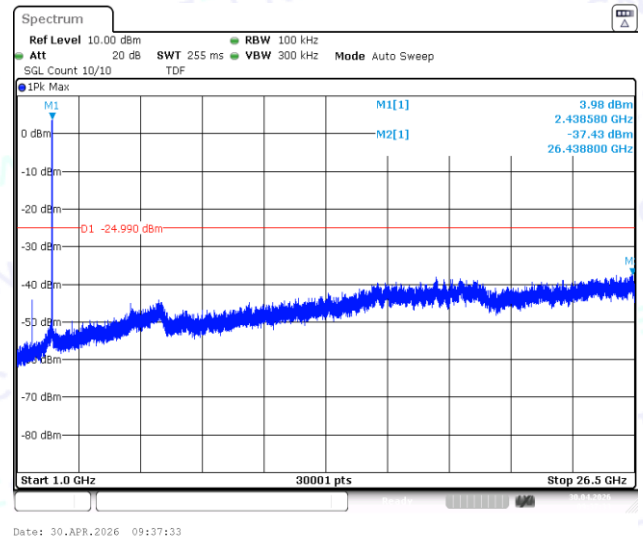
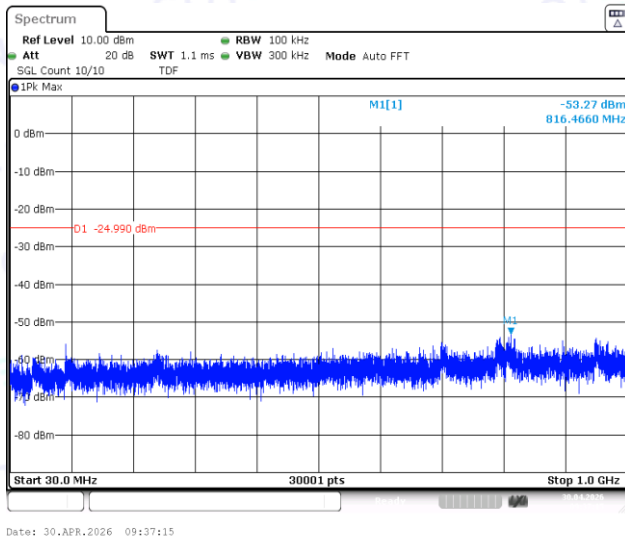
11B-Ant1-2412-0~Reference-PASS

11B-Ant1-2412-30~1000-PASS



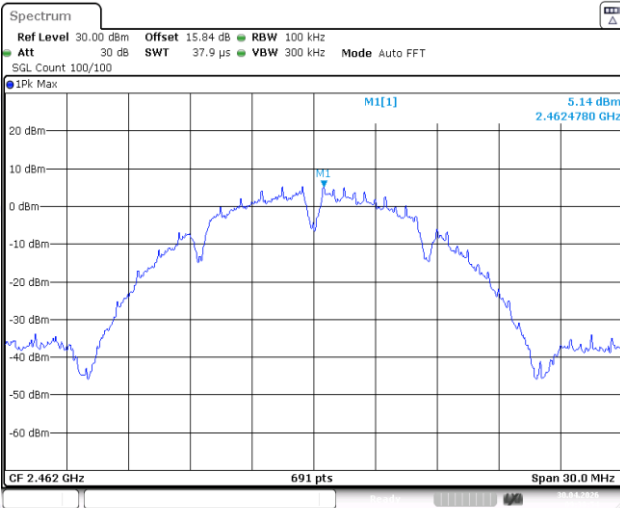
11B-Ant1-2412-1000~26500-PASS

11B-Ant1-2437-0~Reference-PASS

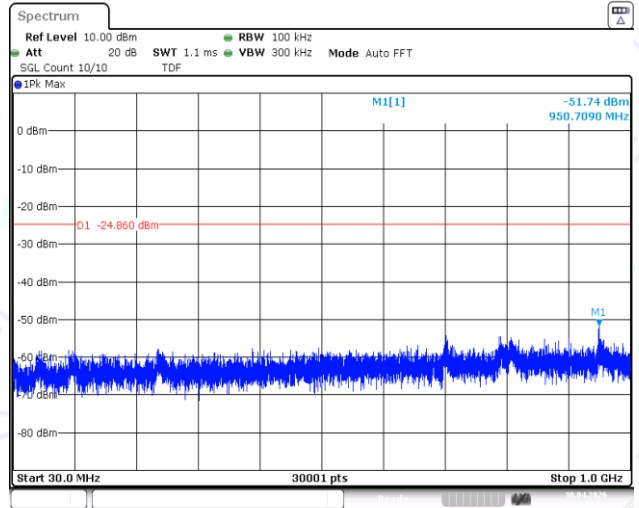


11B-Ant1-2437-30~1000-PASS

11B-Ant1-2437-1000~26500-PASS



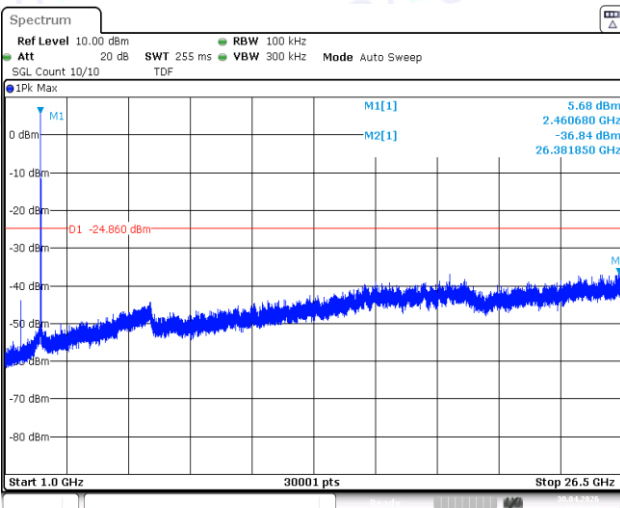
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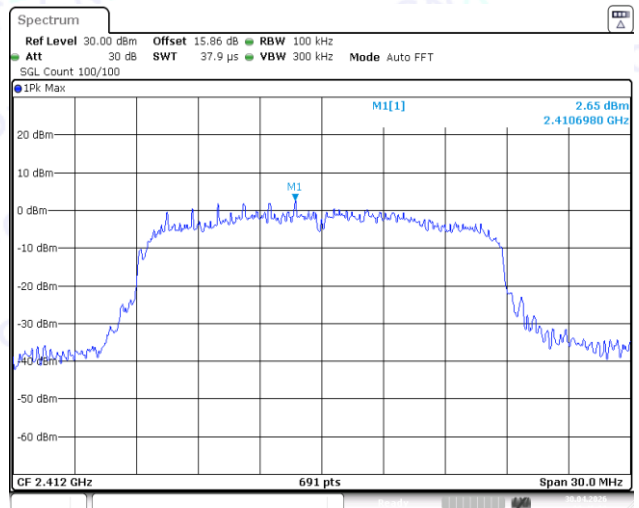
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11B-Ant1-2462-0~Reference-PASS

11B-Ant1-2462-30~1000-PASS



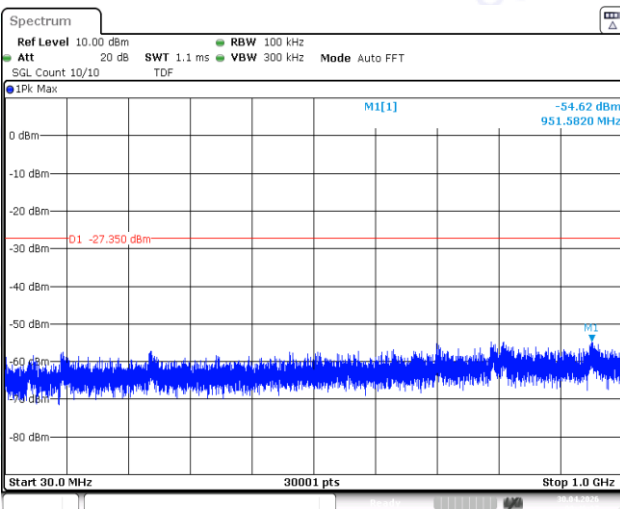
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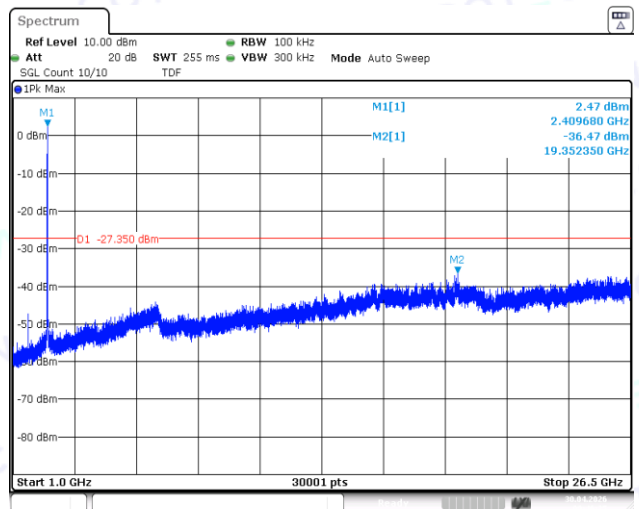
Date: 30.APR.2026 09:46:00

11B-Ant1-2462-1000~26500-PASS

11G-Ant1-2412-0~Reference-PASS



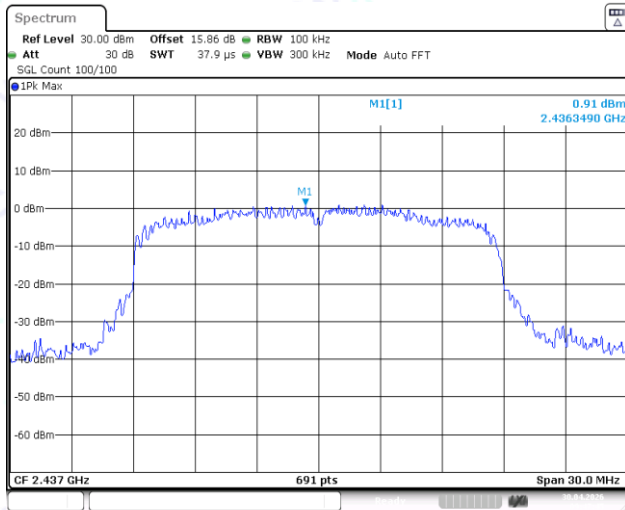
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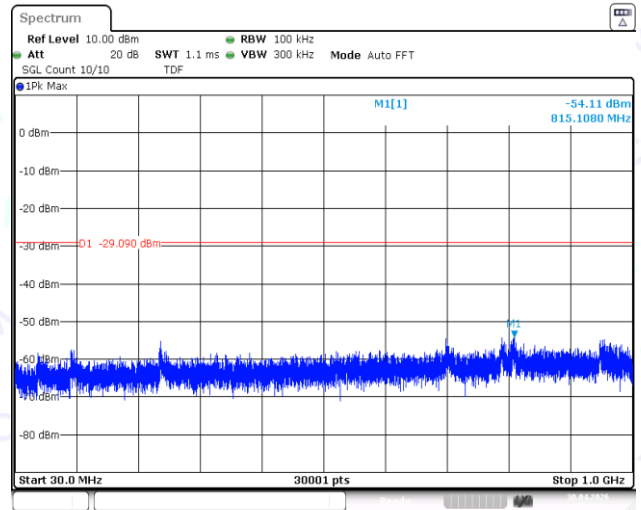
Date: 30.APR.2026 09:46:25

11G-Ant1-2412-30~1000-PASS

11G-Ant1-2412-1000~26500-PASS



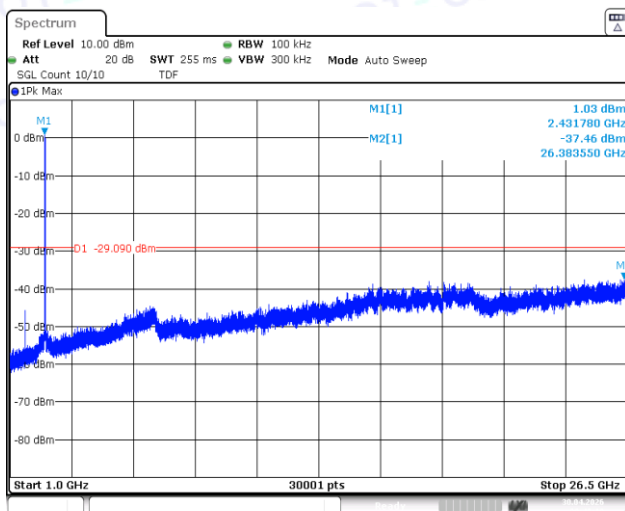
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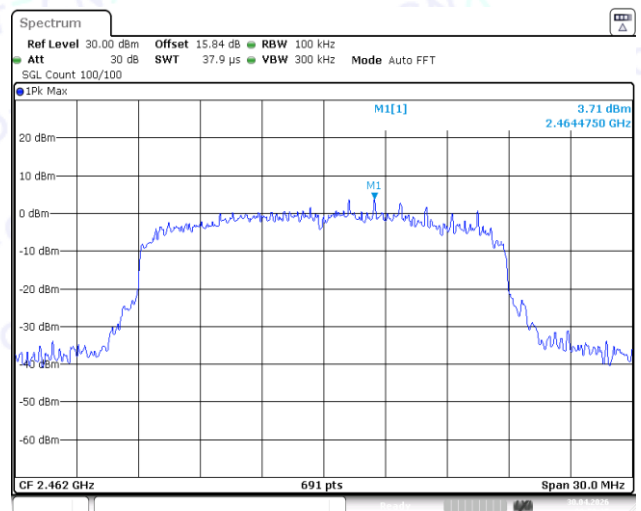
Date: 30.APR.2026 09:47:52

11G-Ant1-2437-0~Reference-PASS

11G-Ant1-2437-30~1000-PASS



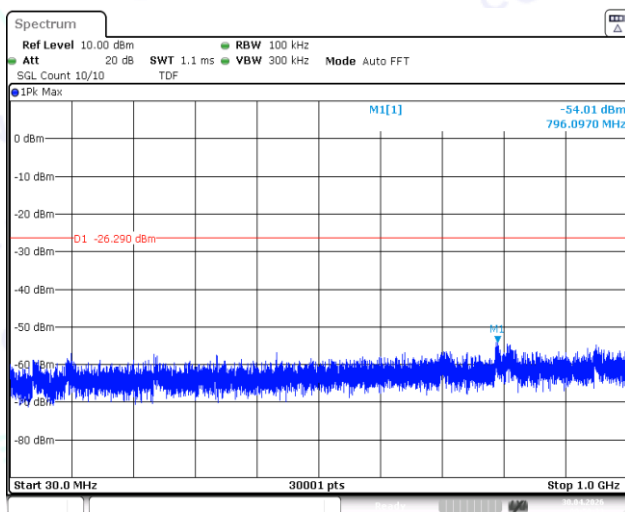
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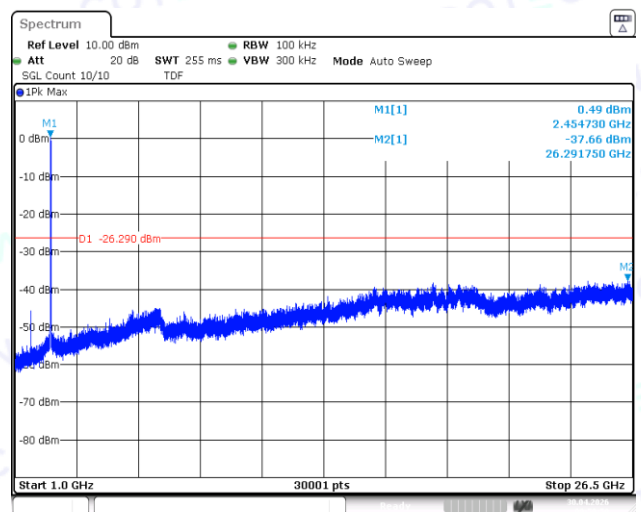
Date: 30.APR.2026 09:50:25

11G-Ant1-2437-1000~26500-PASS

11G-Ant1-2462-0~Reference-PASS



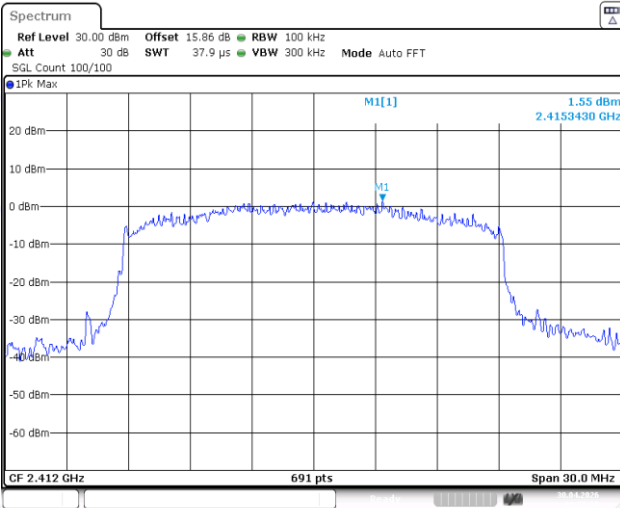
Date: 30.APR.2026 09:50:33



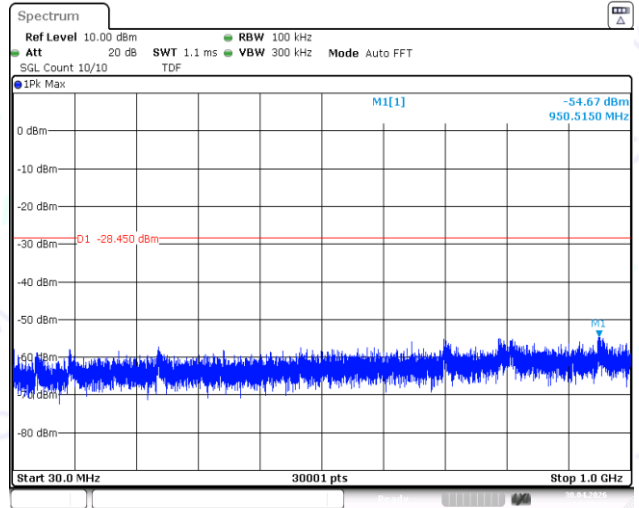
Date: 30.APR.2026 09:50:50

11G-Ant1-2462-30~1000-PASS

11G-Ant1-2462-1000~26500-PASS



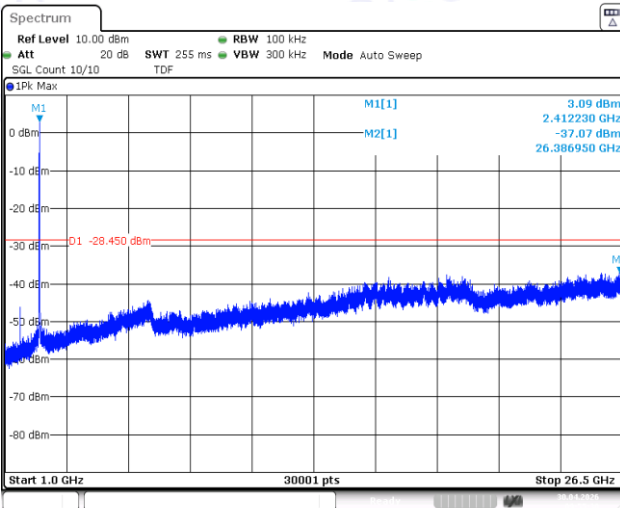
Date: 30.APR.2026 09:55:05



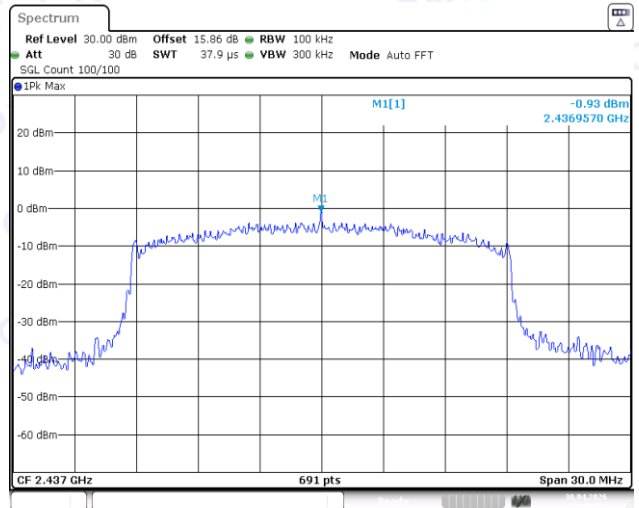
Date: 30.APR.2026 09:55:12

11N20SISO-Ant1-2412-0~Reference-PASS

11N20SISO-Ant1-2412-30~1000-PASS



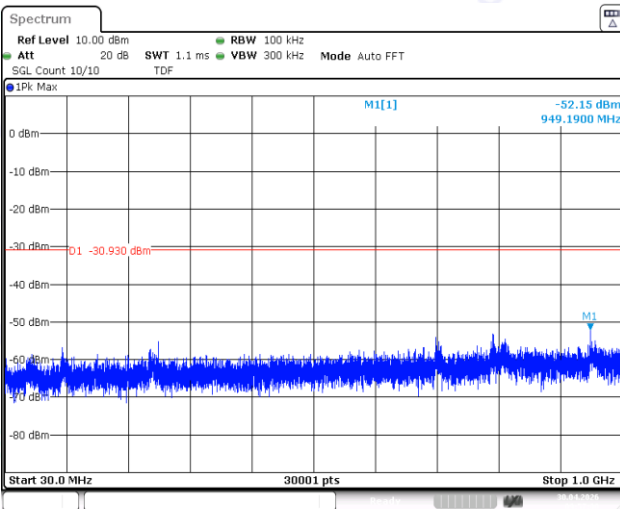
Date: 30.APR.2026 09:55:30



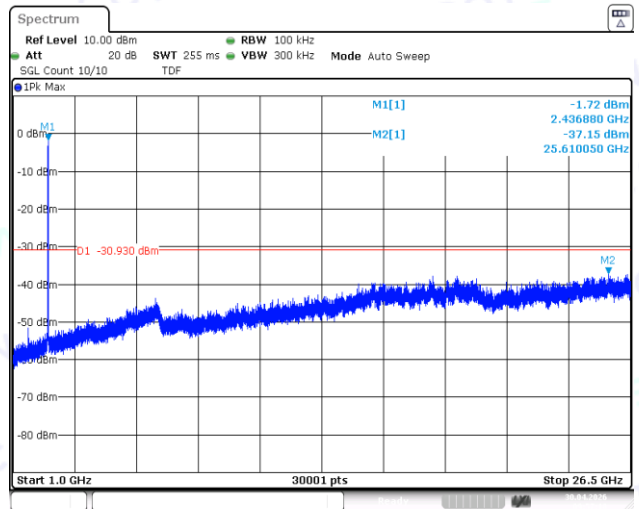
Date: 30.APR.2026 09:56:52

11N20SISO-Ant1-2412-1000~26500-PASS

11N20SISO-Ant1-2437-0~Reference-PASS



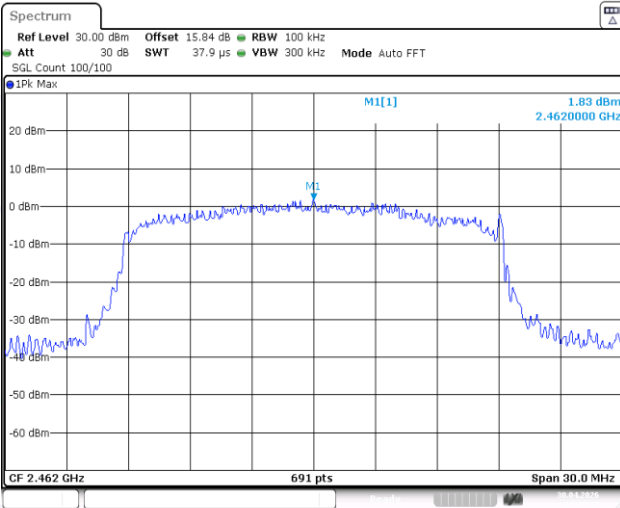
Date: 30.APR.2026 09:57:00



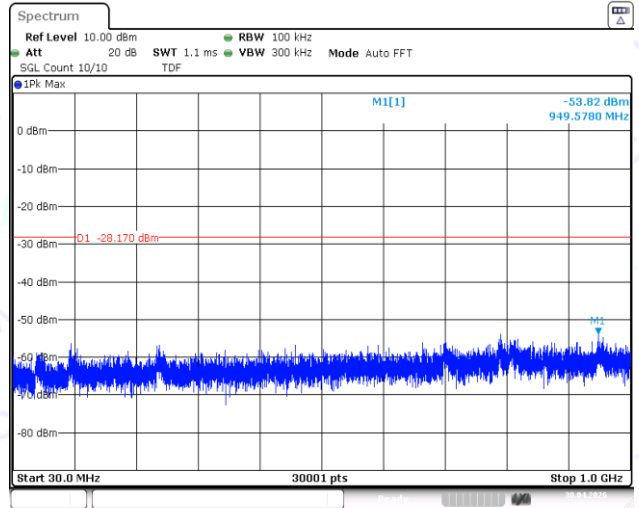
Date: 30.APR.2026 09:57:18

11N20SISO-Ant1-2437-30~1000-PASS

11N20SISO-Ant1-2437-1000~26500-PASS



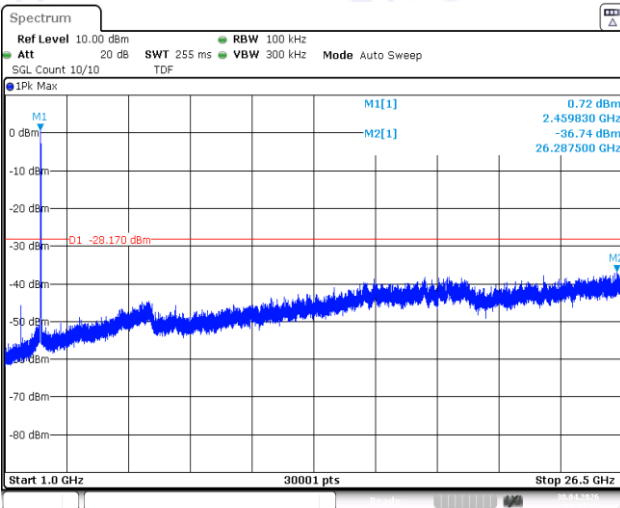
Date: 30.APR.2026 10:00:47



Date: 30.APR.2026 10:00:55

11N20SISO-Ant1-2462-0~Reference-PASS

11N20SISO-Ant1-2462-30~1000-PASS



Date: 30.APR.2026 10:01:12

11N20SISO-Ant1-2462-1000~26500-PASS

7: Duty Cycle

7.1 Test Result

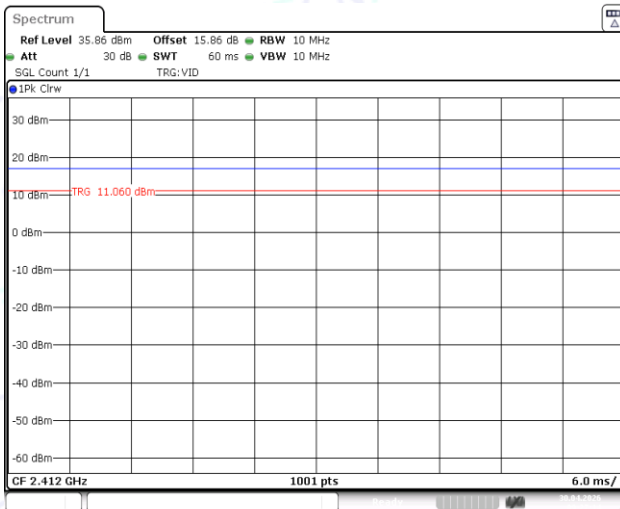
TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	1/T [kHz]
11B	Ant1	2412	60.00	60.00	100.00	0.00	0.02
11B	Ant1	2437	60.00	60.00	100.00	0.00	0.02
11B	Ant1	2462	60.00	60.00	100.00	0.00	0.02
11G	Ant1	2412	60.00	60.00	100.00	0.00	0.02
11G	Ant1	2437	60.00	60.00	100.00	0.00	0.02
11G	Ant1	2462	60.00	60.00	100.00	0.00	0.02
11N20SISO	Ant1	2412	60.00	60.00	100.00	0.00	0.02
11N20SISO	Ant1	2437	60.00	60.00	100.00	0.00	0.02
11N20SISO	Ant1	2462	60.00	60.00	100.00	0.00	0.02

Note: 1, Duty Cycle= Transmission Duration/ Transmission Period

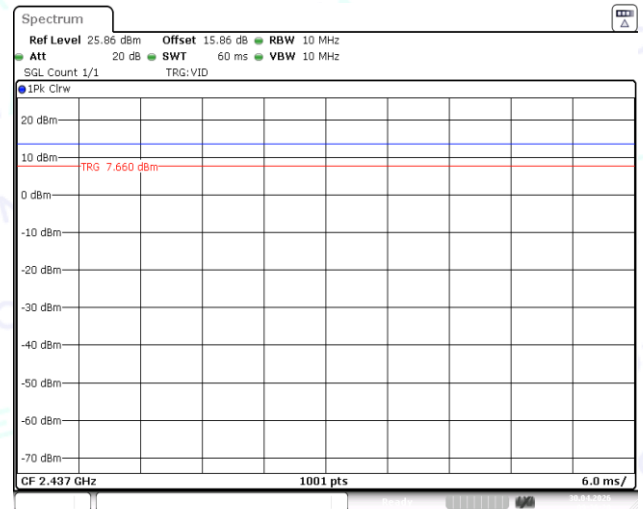
2, DC Factor= $10 \cdot \log_{10}(1/\text{Duty Cycle})$

3, $1/T=1/\text{Transmission Duration}$

7.2 Test Graphs



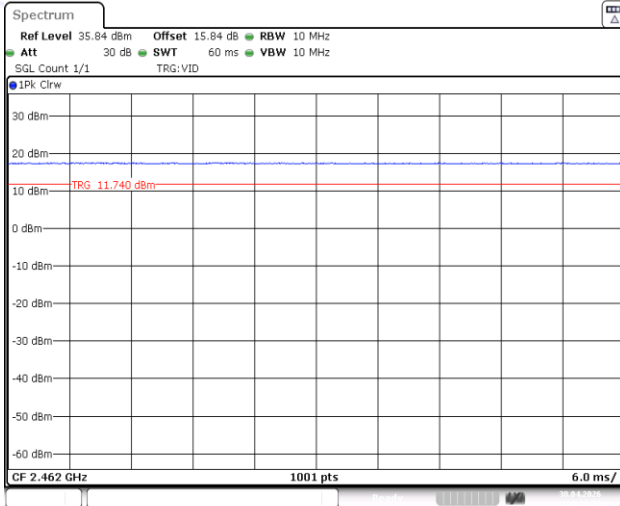
Date: 30.APR.2026 09:27:14



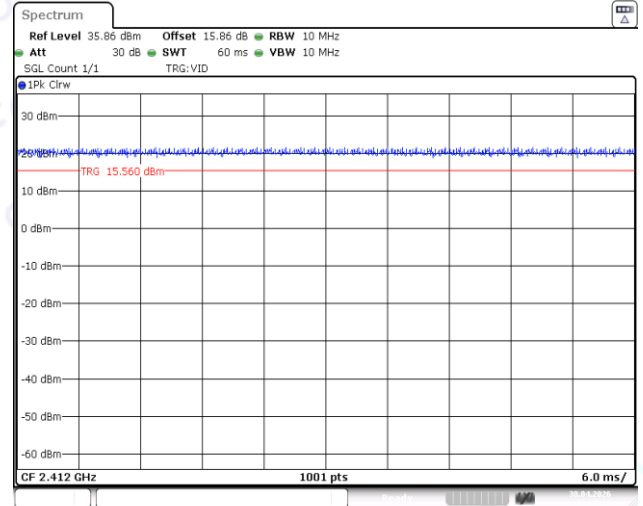
Date: 30.APR.2026 09:36:21

NTNV-11B-Ant1-2412

NTNV-11B-Ant1-2437



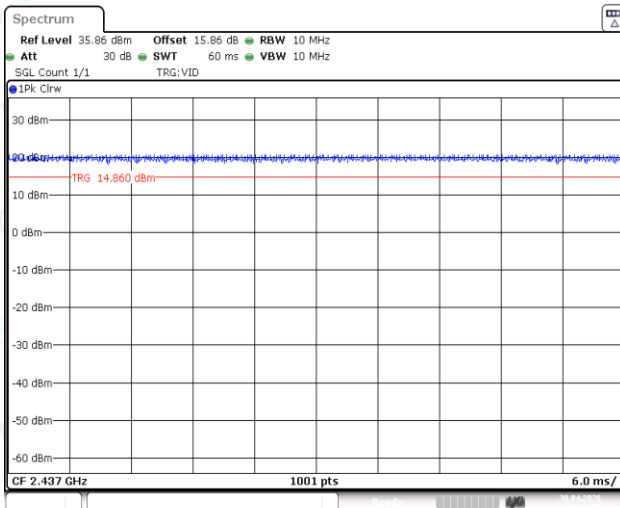
Date: 30.APR.2026 10:32:53



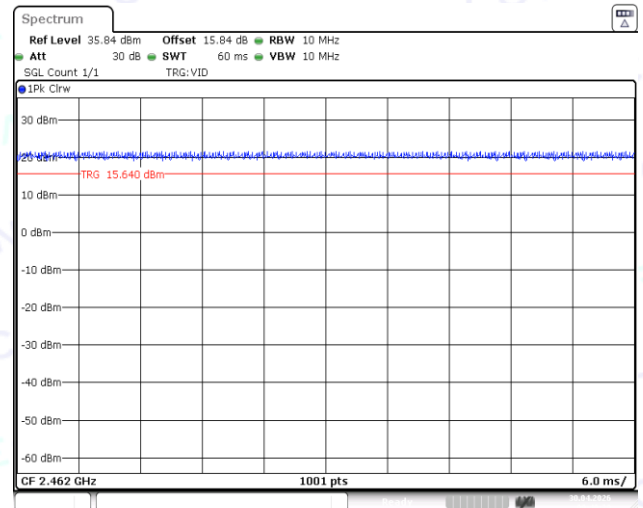
Date: 30.APR.2026 09:45:19

NTNV-11B-Ant1-2462

NTNV-11G-Ant1-2412

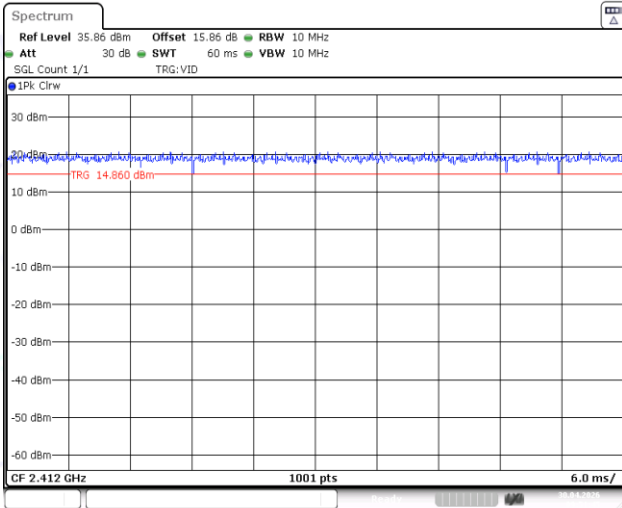


Date: 30.APR.2026 09:46:58

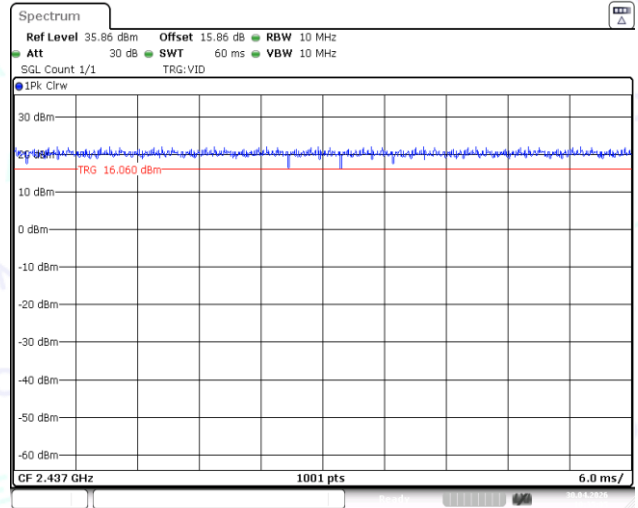


Date: 30.APR.2026 09:49:30

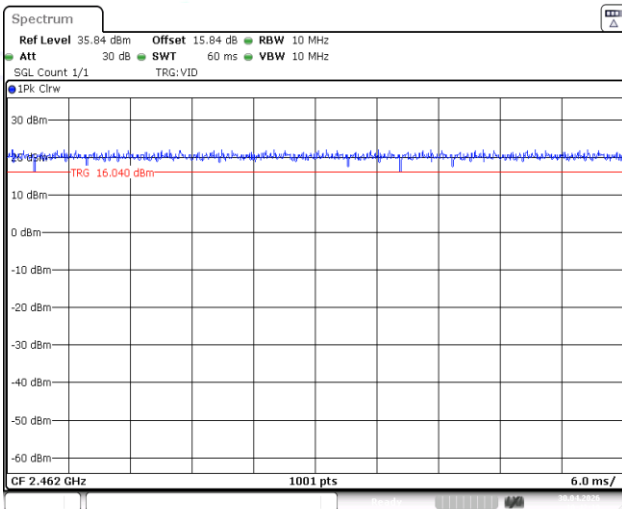
NTNV-11G-Ant1-2437



NTNV-11G-Ant1-2462



NTNV-11N20SISO-Ant1-2412



NTNV-11N20SISO-Ant1-2437

NTNV-11N20SISO-Ant1-2462

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