

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

General Description of EUT	
EUT Name:	Temperature & Humidity Sensor with External Probe
Model:	ZY-T03Pro
Sample ID:	HC-C-202512-0008-02-01#
Environmental Conditions	
Ambient Temperature:	25℃
Ambient Humidity:	45%RH
Test Power Supply:	DC 3V
Test Engineer:	Kael Li
Note: For a more detailed features description, please refer to the report TBR-C-202512-0008-71	

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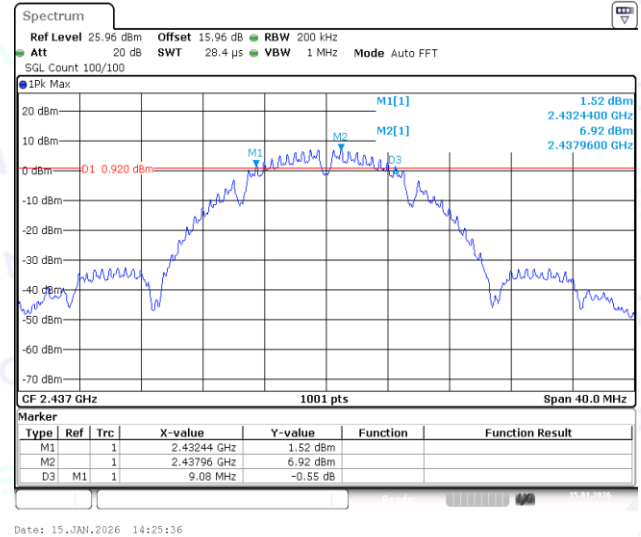
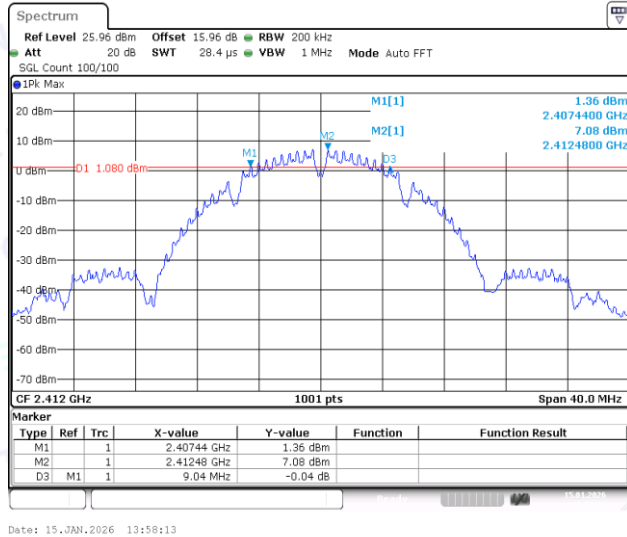
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1: DTS Bandwidth

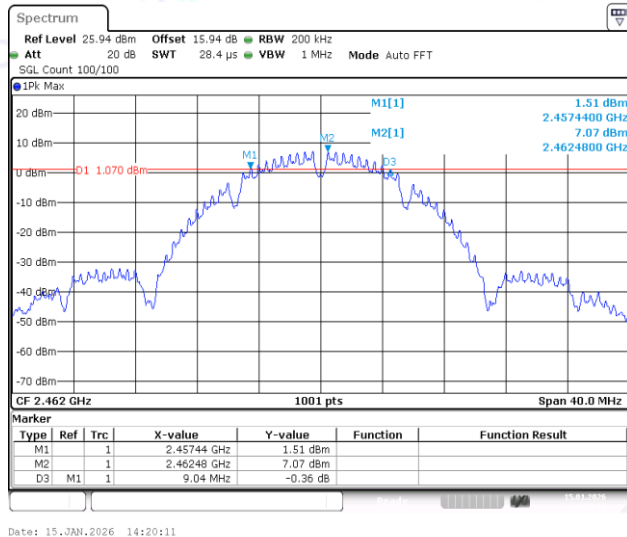
1.1 Test Result

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	9.08	2432.44	2441.52	0.5	PASS
11B	Ant1	2462	9.04	2457.44	2466.48	0.5	PASS
11G	Ant1	2412	17.24	2403.44	2420.68	0.5	PASS
11G	Ant1	2437	16.48	2428.48	2444.96	0.5	PASS
11G	Ant1	2462	15.56	2454.20	2469.76	0.5	PASS
11N20SISO	Ant1	2412	15.16	2404.40	2419.56	0.5	PASS
11N20SISO	Ant1	2437	15.20	2429.36	2444.56	0.5	PASS
11N20SISO	Ant1	2462	15.16	2454.40	2469.56	0.5	PASS

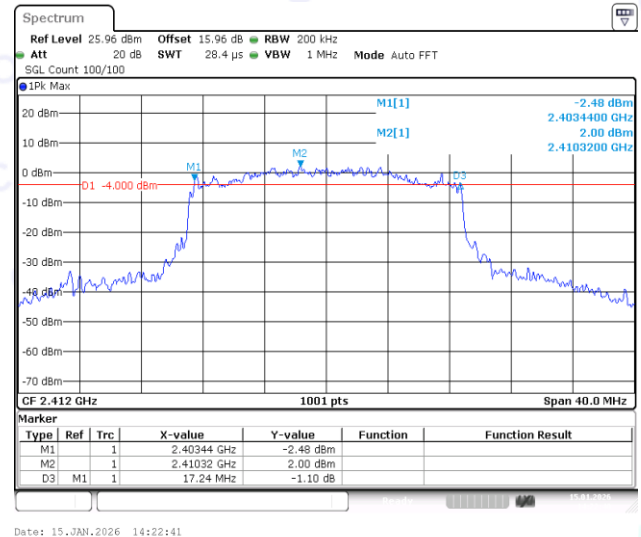
1.2 Test Graphs



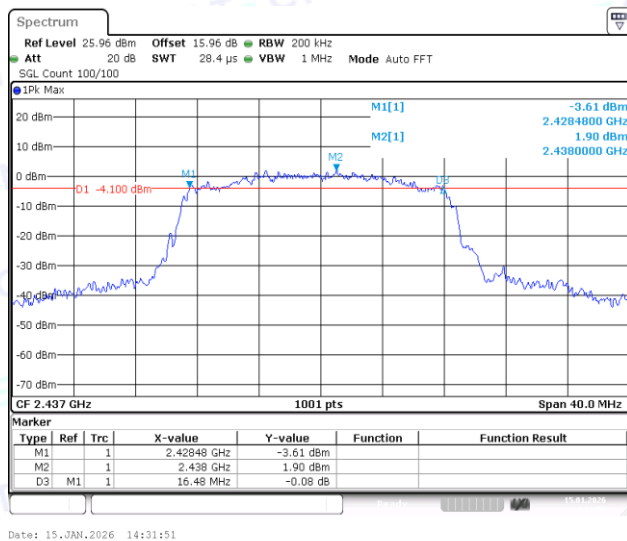
11B-Ant1-2412-PASS



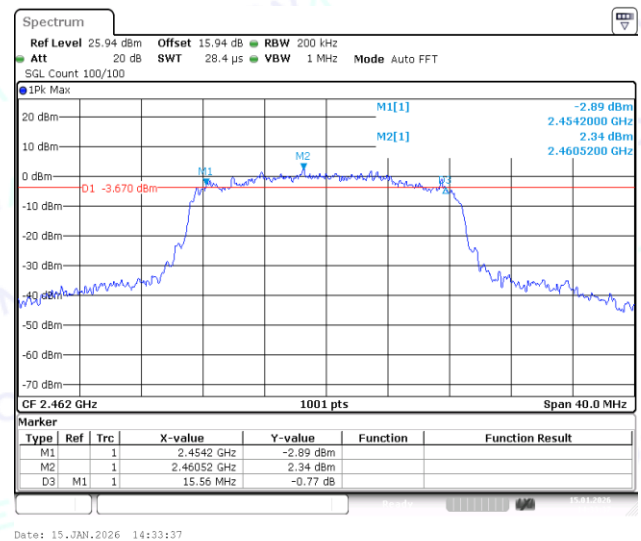
11B-Ant1-2437-PASS



11B-Ant1-2462-PASS

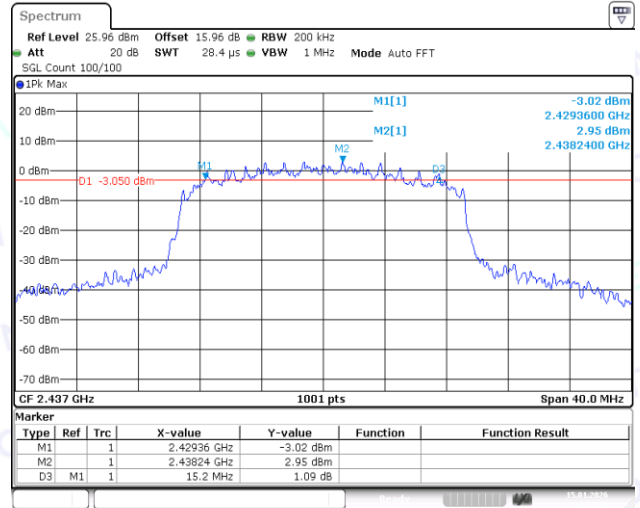
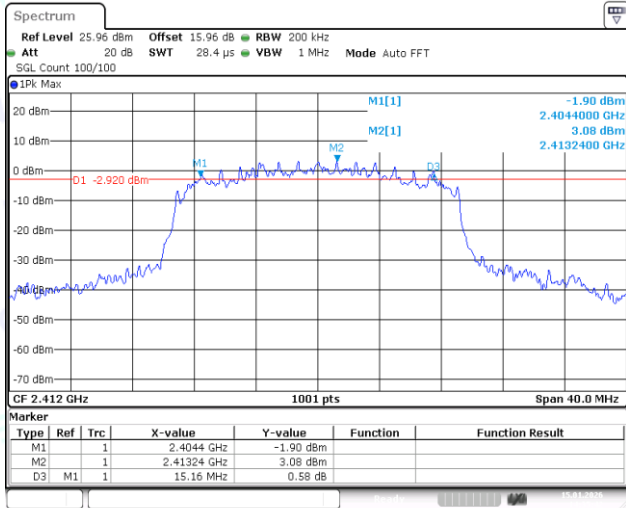


11G-Ant1-2412-PASS



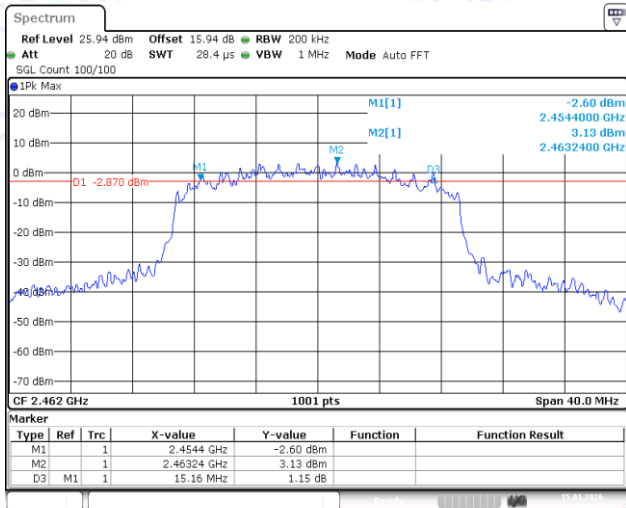
11G-Ant1-2437-PASS

11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS

11N20SISO-Ant1-2437-PASS



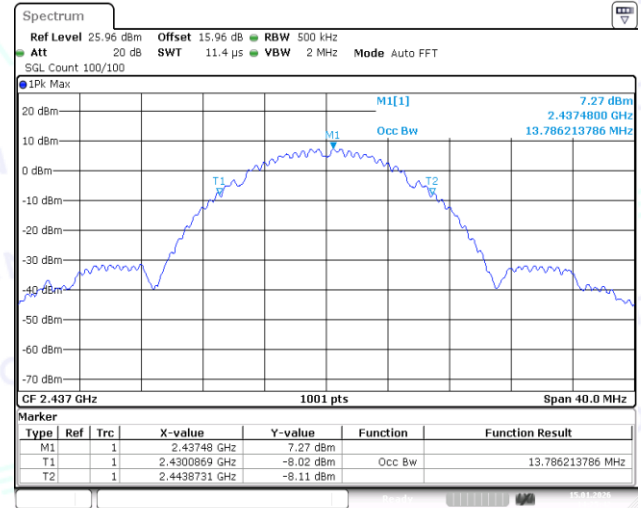
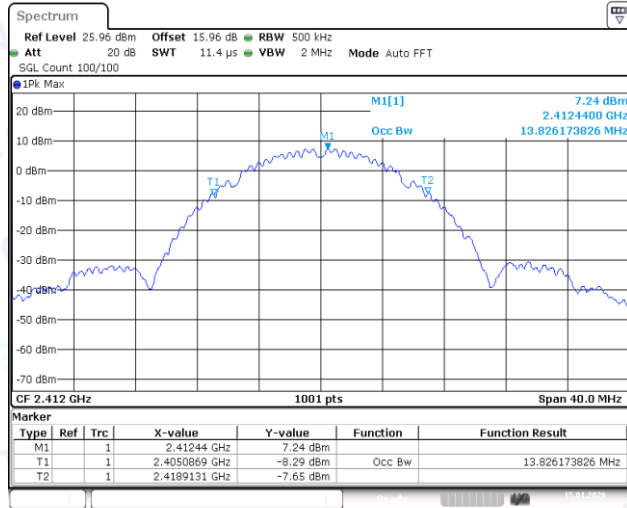
11N20SISO-Ant1-2462-PASS

2: Occupied Channel Bandwidth

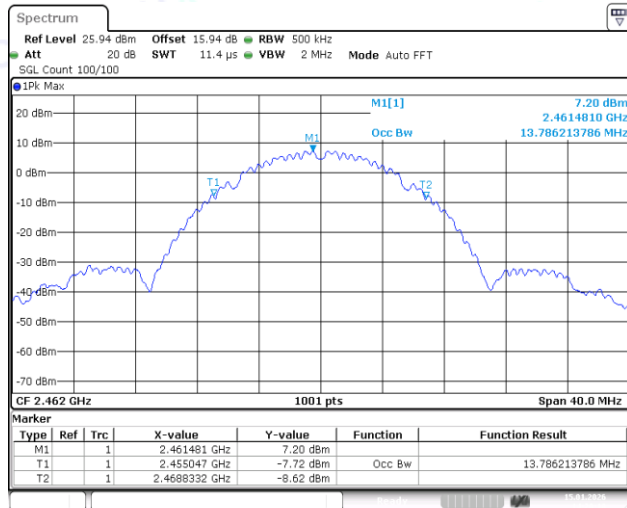
2.1 Test Result

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	13.786	2430.0869	2443.8731	---	---
11B	Ant1	2462	13.786	2455.0470	2468.8332	---	---
11G	Ant1	2412	17.143	2403.4885	2420.6314	---	---
11G	Ant1	2437	17.183	2428.3287	2445.5115	---	---
11G	Ant1	2462	17.263	2453.3686	2470.6314	---	---
11N20SISO	Ant1	2412	17.702	2403.2088	2420.9111	---	---
11N20SISO	Ant1	2437	17.742	2428.2088	2445.9510	---	---
11N20SISO	Ant1	2462	17.702	2453.1688	2470.8711	---	---

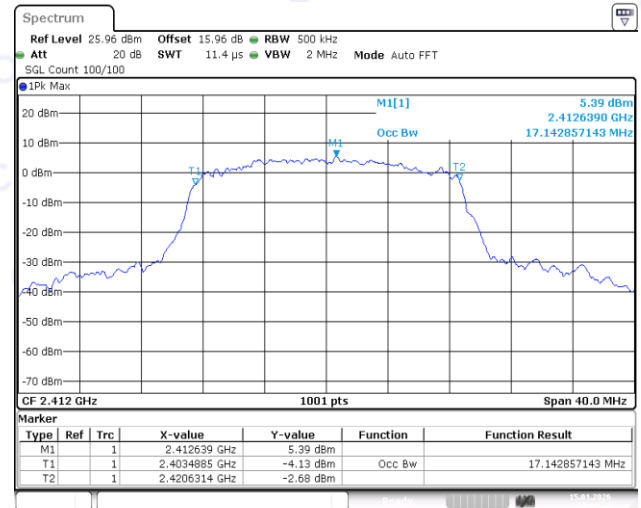
2.2 Test Graphs



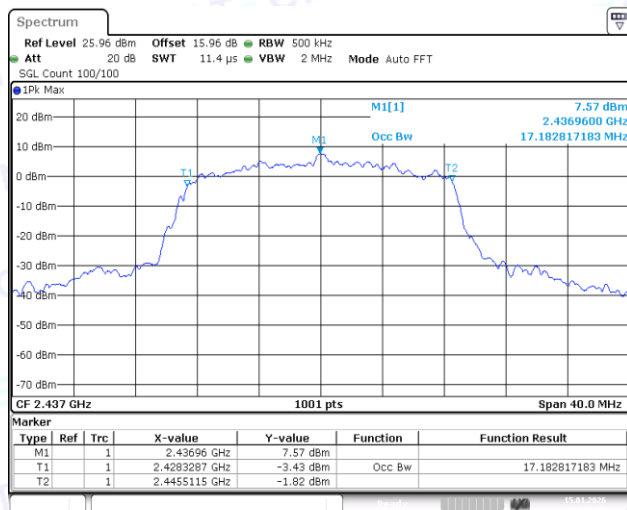
11B-Ant1-2412



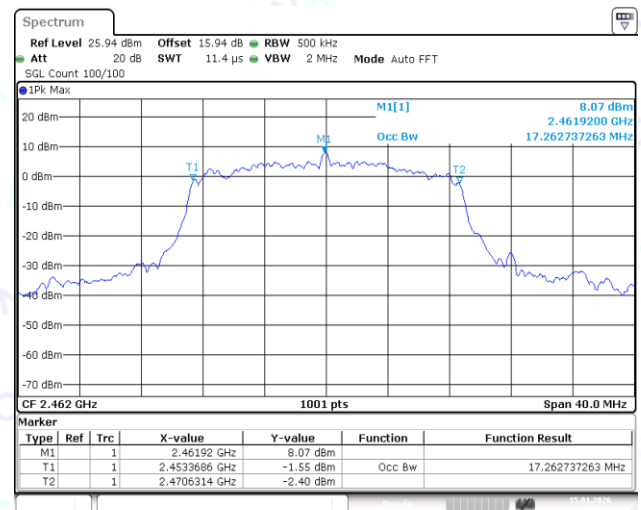
11B-Ant1-2437



11B-Ant1-2462

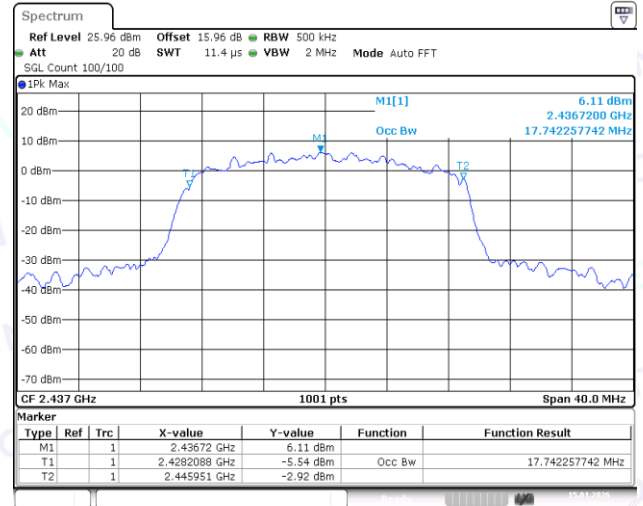
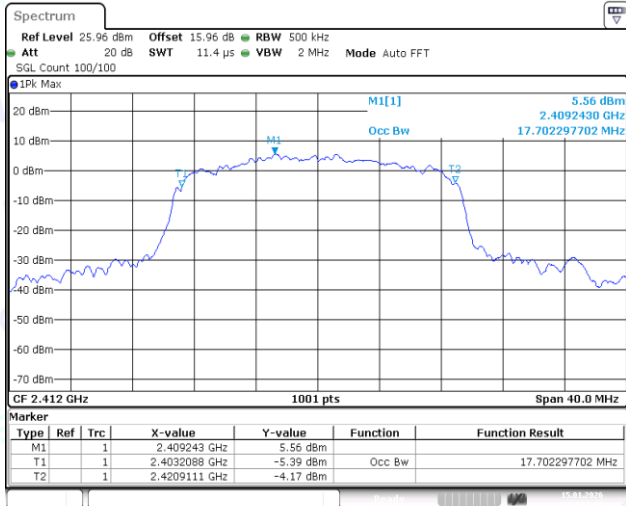


11G-Ant1-2412



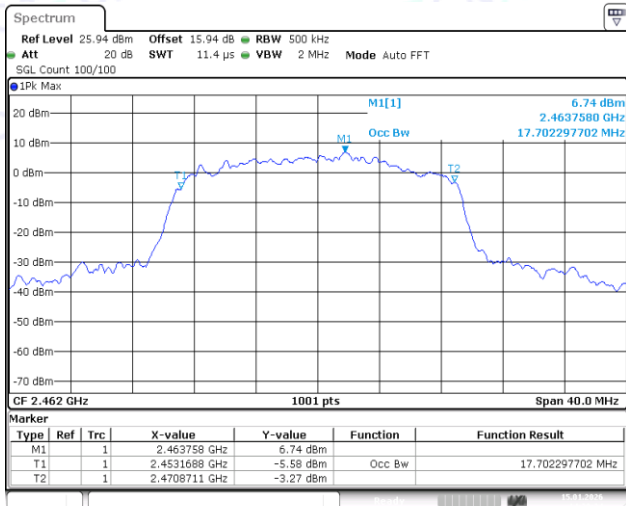
11G-Ant1-2437

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]	Verdict
11B	Ant1	2412	14.47	0.04	14.51	≤30.00	PASS
11B	Ant1	2437	14.43	0.04	14.47	≤30.00	PASS
11B	Ant1	2462	14.43	0.05	14.48	≤30.00	PASS
11G	Ant1	2412	11.89	0.04	11.93	≤30.00	PASS
11G	Ant1	2437	11.84	0.06	11.90	≤30.00	PASS
11G	Ant1	2462	12.03	0.05	12.08	≤30.00	PASS
11N20SISO	Ant1	2412	11.97	0.48	12.45	≤30.00	PASS
11N20SISO	Ant1	2437	11.85	0.48	12.33	≤30.00	PASS
11N20SISO	Ant1	2462	12.07	0.51	12.58	≤30.00	PASS

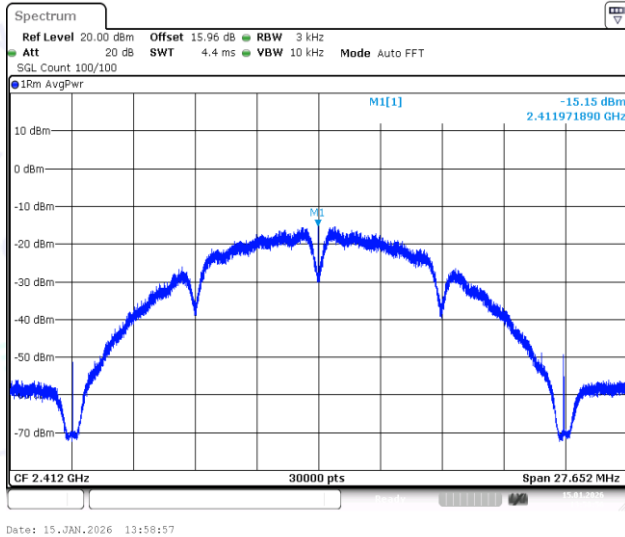
4: Maximum power spectral density

4.1 Test Result

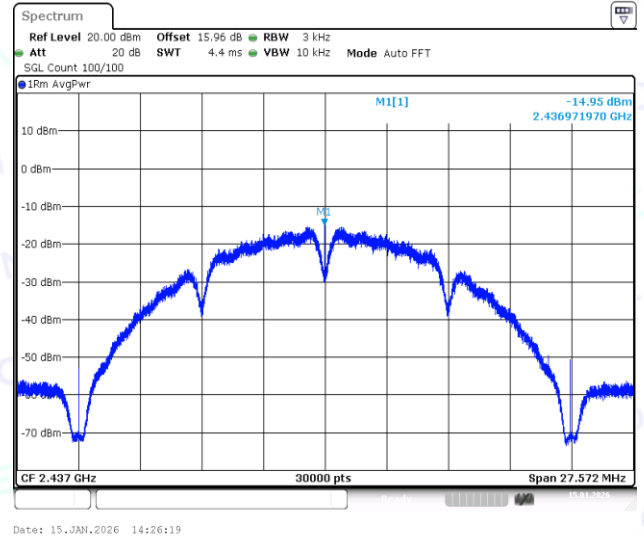
TestMode	Ant.	Frequency[MHz]	RawData [dBm/3kHz]	DC Factor	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-15.15	0.04	-15.11	≤8.00	PASS
11B	Ant1	2437	-14.95	0.04	-14.91	≤8.00	PASS
11B	Ant1	2462	-14.6	0.05	-14.55	≤8.00	PASS
11G	Ant1	2412	-10.98	0.04	-10.94	≤8.00	PASS
11G	Ant1	2437	-12.46	0.06	-12.40	≤8.00	PASS
11G	Ant1	2462	-11.71	0.05	-11.66	≤8.00	PASS
11N20SISO	Ant1	2412	-12.63	0.48	-12.15	≤8.00	PASS
11N20SISO	Ant1	2437	-12.81	0.48	-12.33	≤8.00	PASS
11N20SISO	Ant1	2462	-12.41	0.51	-11.90	≤8.00	PASS

Note: RF Conducted test Offset= cable loss+ Attenuator

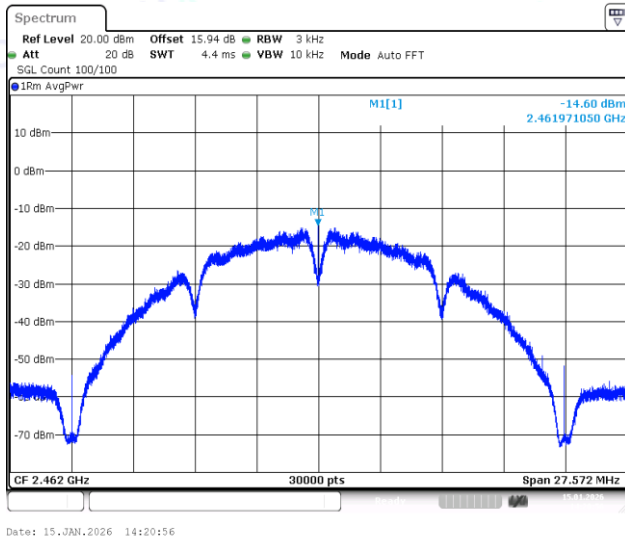
4.2 Test Graphs



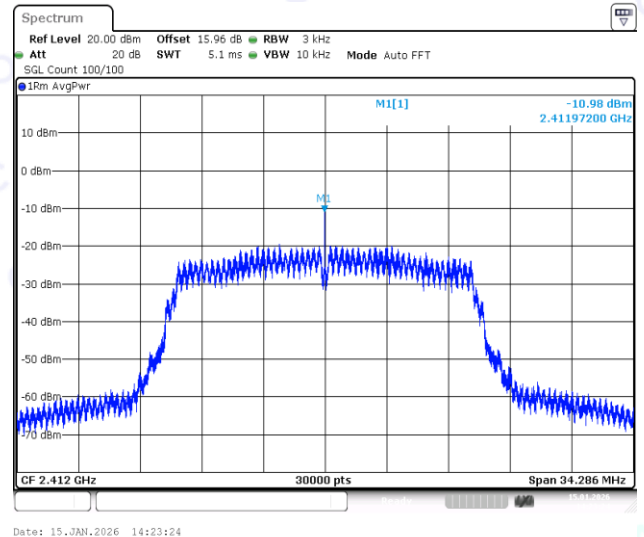
11B-Ant1-2412-PASS



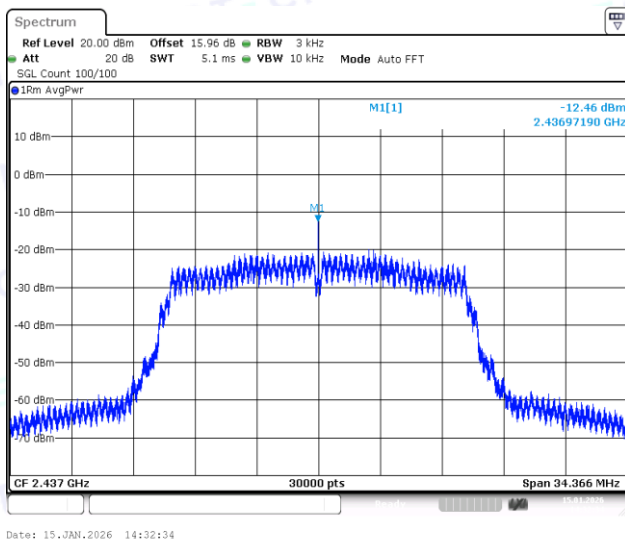
11B-Ant1-2437-PASS



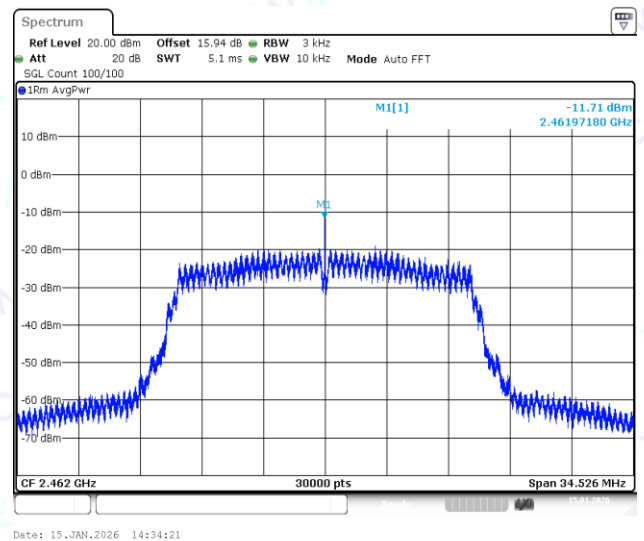
11B-Ant1-2462-PASS



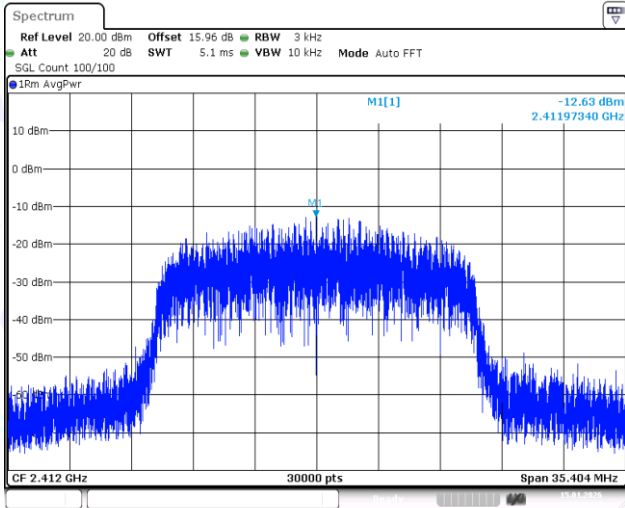
11G-Ant1-2412-PASS



11G-Ant1-2437-PASS

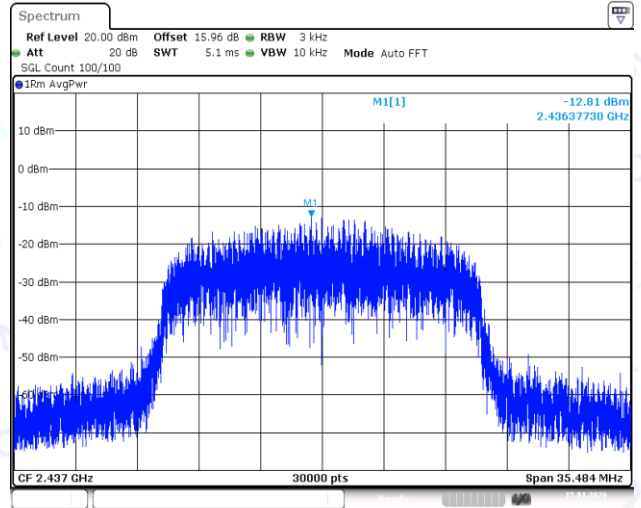


11G-Ant1-2462-PASS



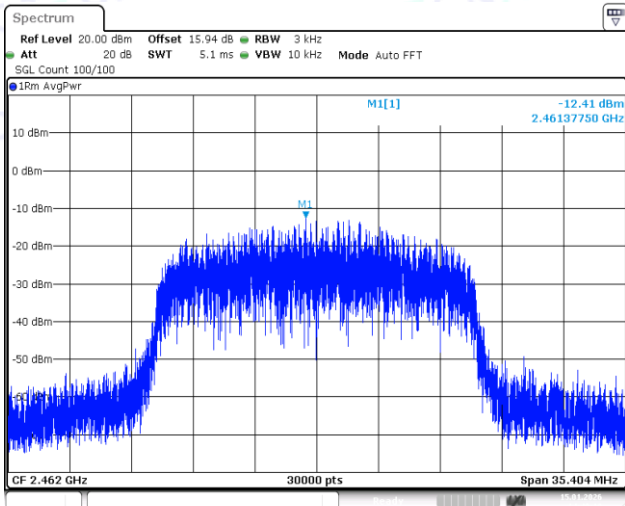
Date: 15.JAN.2026 14:36:27

11N20SISO-Ant1-2412-PASS



Date: 15.JAN.2026 14:38:23

11N20SISO-Ant1-2437-PASS



Date: 15.JAN.2026 14:40:10

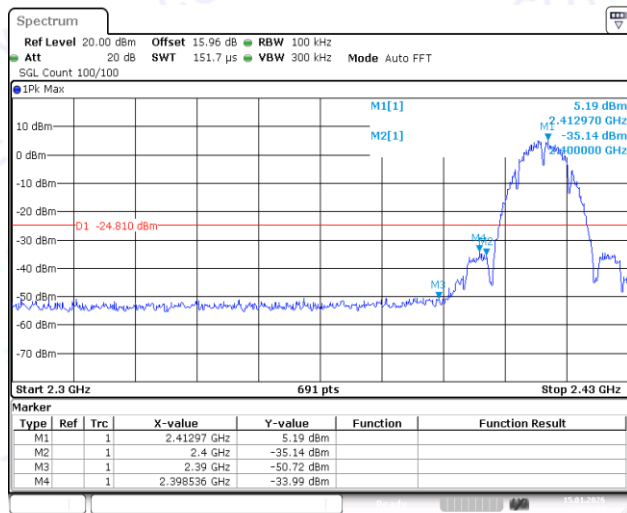
11N20SISO-Ant1-2462-PASS

5: Band edge measurements

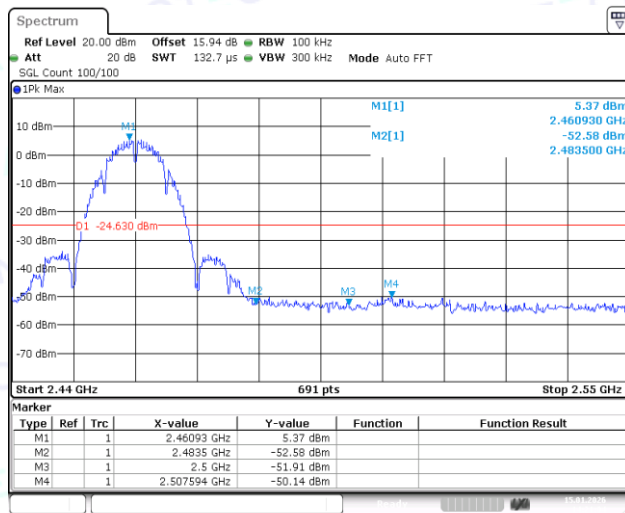
5.1 Test Result

TestMode	Ant.	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.19	-33.99	≤-24.81	PASS
11B	Ant1	High	2462	5.37	-50.14	≤-24.63	PASS
11G	Ant1	Low	2412	-1.10	-36.36	≤-31.1	PASS
11G	Ant1	High	2462	-0.58	-47.09	≤-30.58	PASS
11N20SISO	Ant1	Low	2412	1.76	-36.45	≤-28.24	PASS
11N20SISO	Ant1	High	2462	0.93	-46.81	≤-29.07	PASS

5.2 Test Graphs



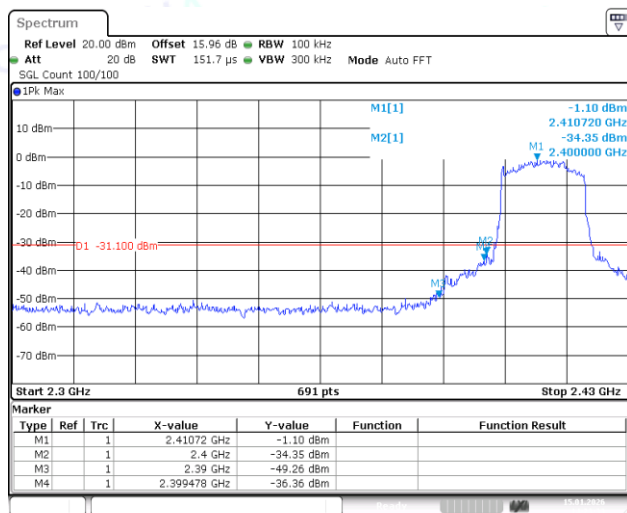
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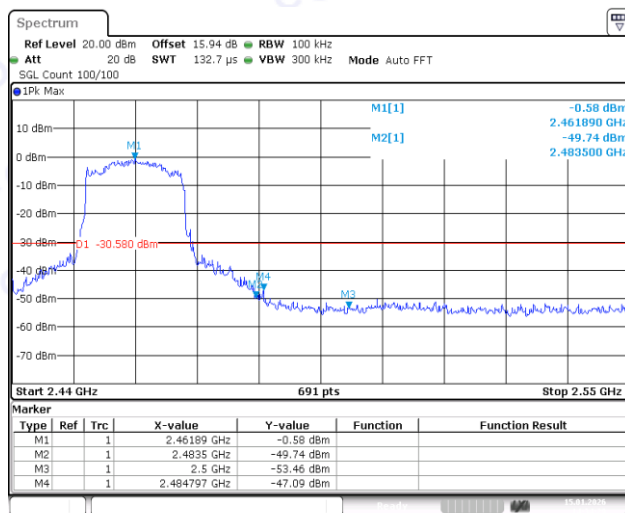
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11B-Ant1-2412-PASS

11B-Ant1-2462-PASS



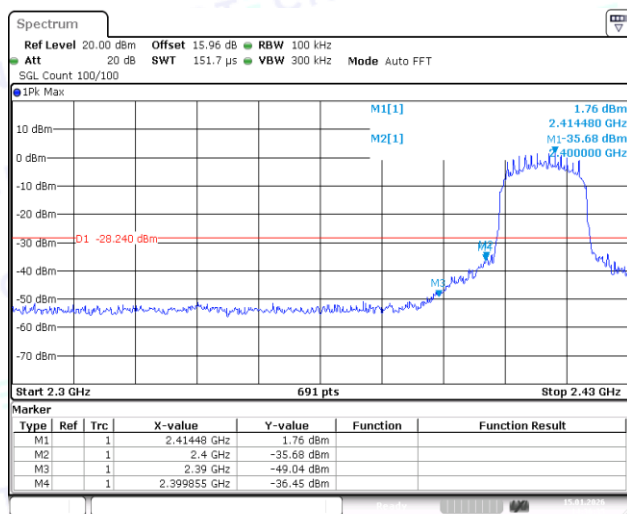
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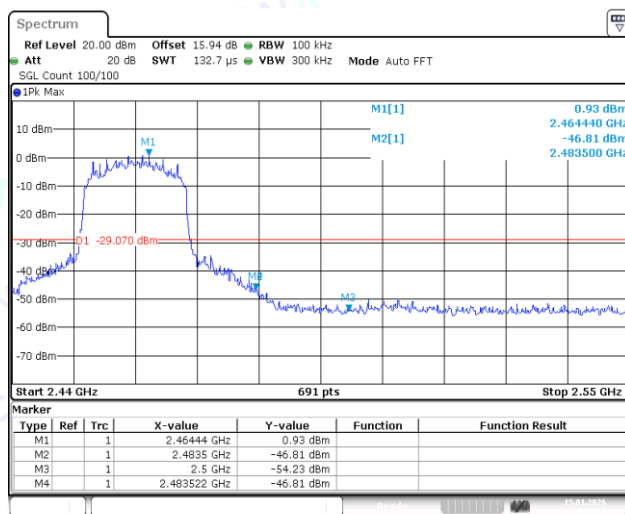
Date: 15.JAN.2026 14:34:29

11G-Ant1-2412-PASS

11G-Ant1-2462-PASS



Date: 15.JAN.2026 14:36:35



Date: 15.JAN.2026 14:40:18

11N20ISO-Ant1-2412-PASS

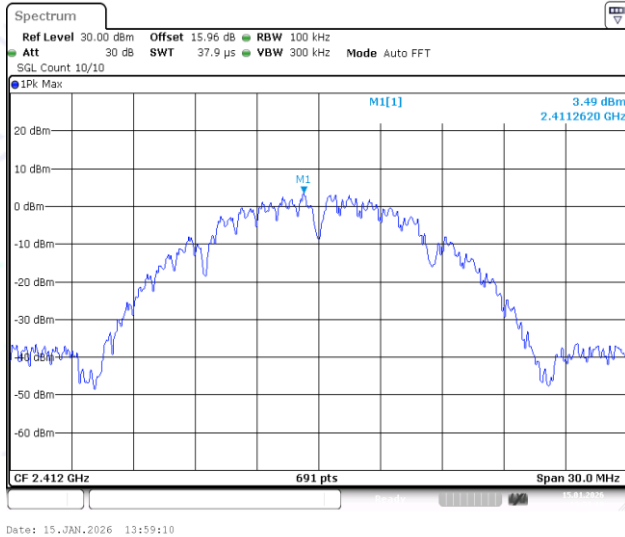
11N20ISO-Ant1-2462-PASS

6: Conducted Spurious Emission

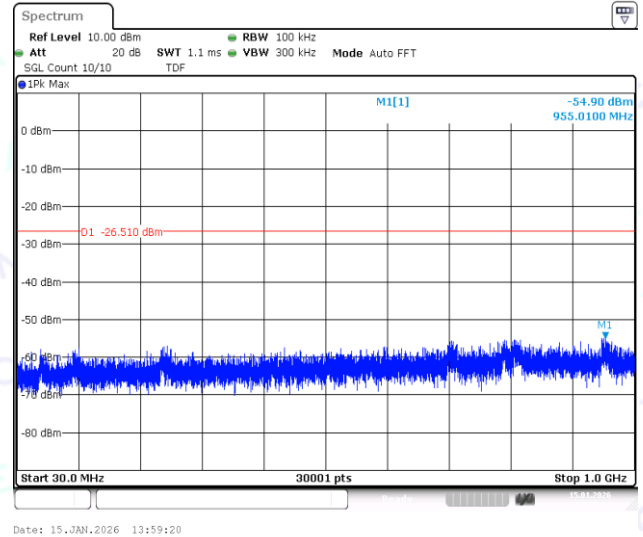
6.1 Test Result

TestMode	Ant.	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	3.49	3.49	---	PASS
11B	Ant1	2412	30~1000	3.49	-54.9	≤-26.51	PASS
11B	Ant1	2412	1000~26500	3.49	-47.3	≤-26.51	PASS
11B	Ant1	2437	0~Reference	4.69	4.69	---	PASS
11B	Ant1	2437	30~1000	4.69	-53.68	≤-25.31	PASS
11B	Ant1	2437	1000~26500	4.69	-46.41	≤-25.31	PASS
11B	Ant1	2462	0~Reference	3.39	3.39	---	PASS
11B	Ant1	2462	30~1000	3.39	-52.49	≤-26.61	PASS
11B	Ant1	2462	1000~26500	3.39	-46.66	≤-26.61	PASS
11G	Ant1	2412	0~Reference	-2.01	-2.01	---	PASS
11G	Ant1	2412	30~1000	-2.01	-54.07	≤-32.01	PASS
11G	Ant1	2412	1000~26500	-2.01	-47.55	≤-32.01	PASS
11G	Ant1	2437	0~Reference	-1.96	-1.96	---	PASS
11G	Ant1	2437	30~1000	-1.96	-52.45	≤-31.96	PASS
11G	Ant1	2437	1000~26500	-1.96	-46.31	≤-31.96	PASS
11G	Ant1	2462	0~Reference	-1.39	-1.39	---	PASS
11G	Ant1	2462	30~1000	-1.39	-52.48	≤-31.39	PASS
11G	Ant1	2462	1000~26500	-1.39	-47.7	≤-31.39	PASS
11N20SISO	Ant1	2412	0~Reference	1.45	1.45	---	PASS
11N20SISO	Ant1	2412	30~1000	1.45	-53.58	≤-28.55	PASS
11N20SISO	Ant1	2412	1000~26500	1.45	-47.41	≤-28.55	PASS
11N20SISO	Ant1	2437	0~Reference	1.82	1.82	---	PASS
11N20SISO	Ant1	2437	30~1000	1.82	-52.23	≤-28.18	PASS
11N20SISO	Ant1	2437	1000~26500	1.82	-47.73	≤-28.18	PASS
11N20SISO	Ant1	2462	0~Reference	1.78	1.78	---	PASS
11N20SISO	Ant1	2462	30~1000	1.78	-53.99	≤-28.22	PASS
11N20SISO	Ant1	2462	1000~26500	1.78	-47.4	≤-28.22	PASS

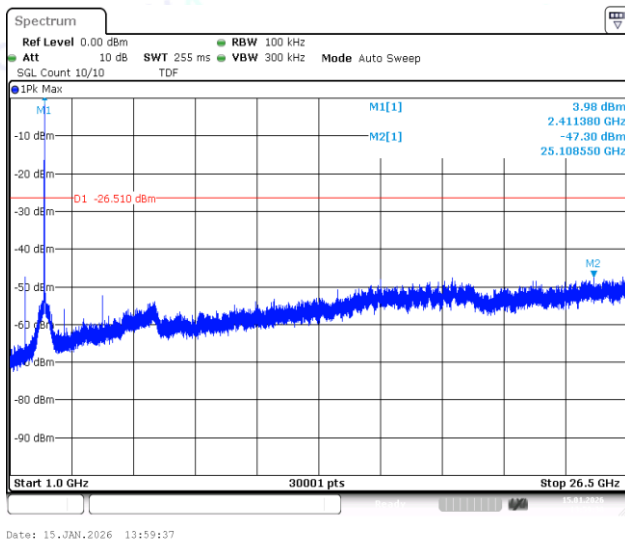
6.2 Test Graphs



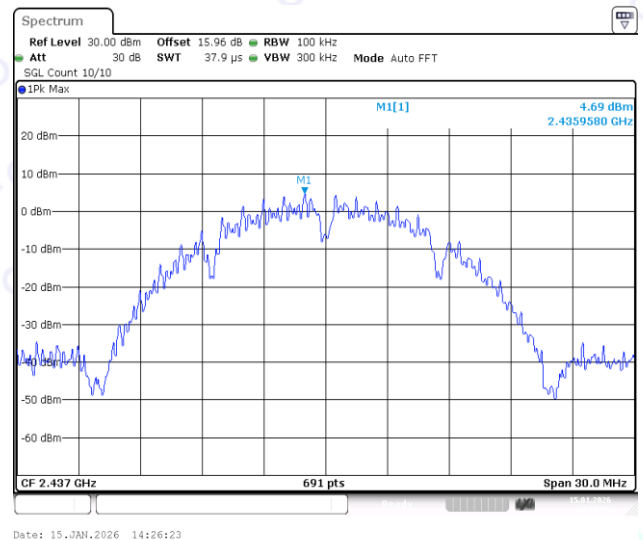
11B-Ant1-2412-0~Reference-PASS



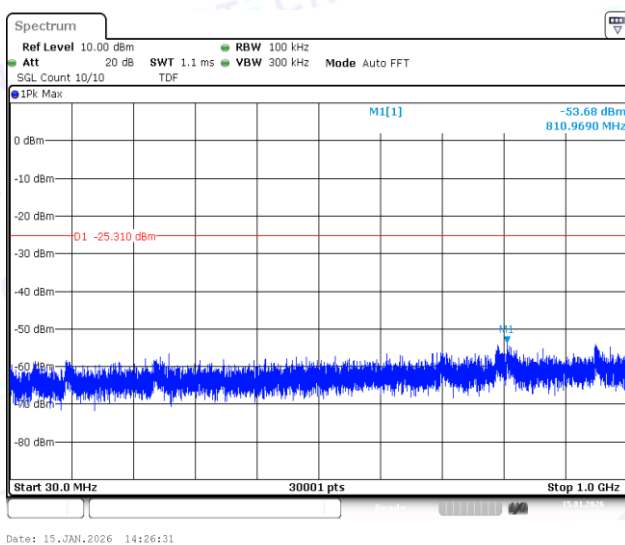
11B-Ant1-2412-30~1000-PASS



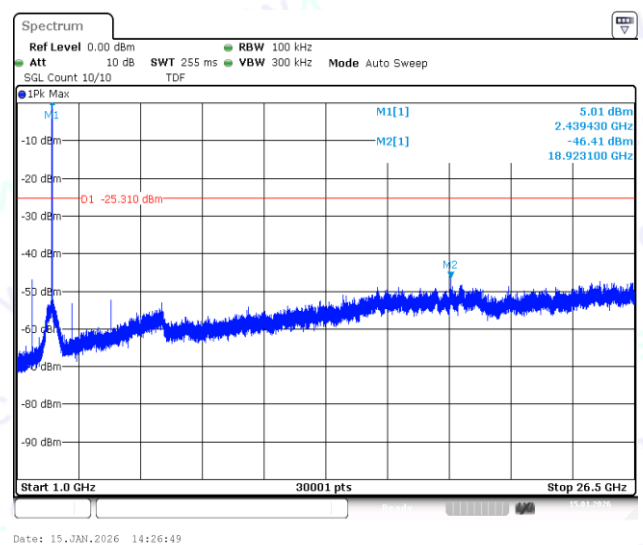
11B-Ant1-2412-1000~26500-PASS



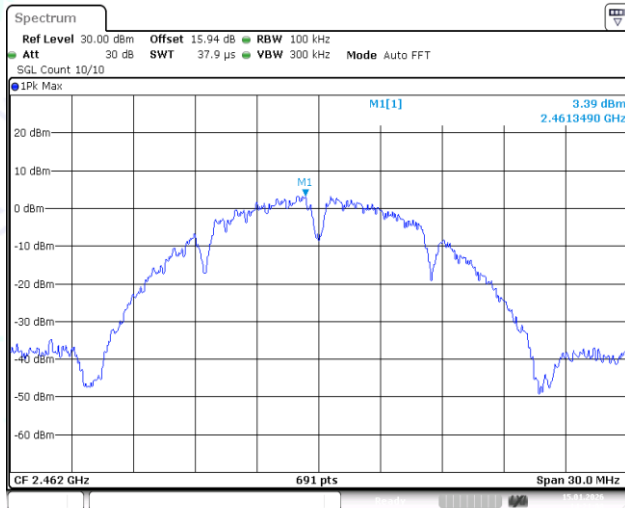
11B-Ant1-2437-0~Reference-PASS



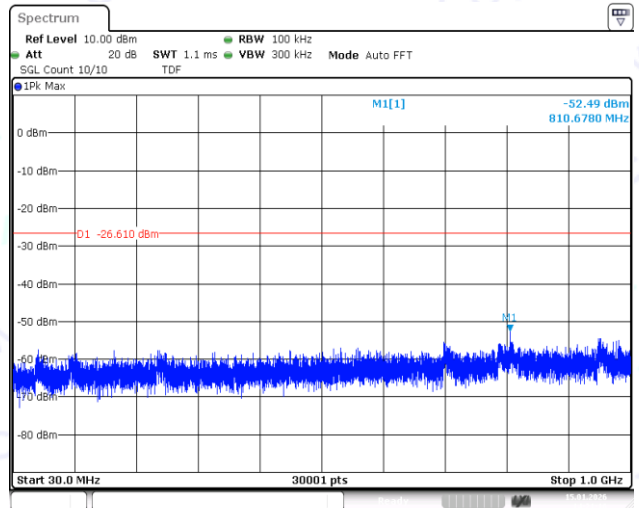
11B-Ant1-2437-30~1000-PASS



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



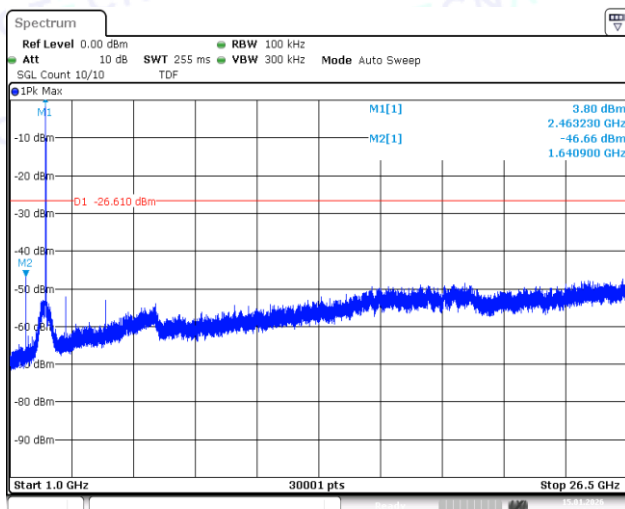
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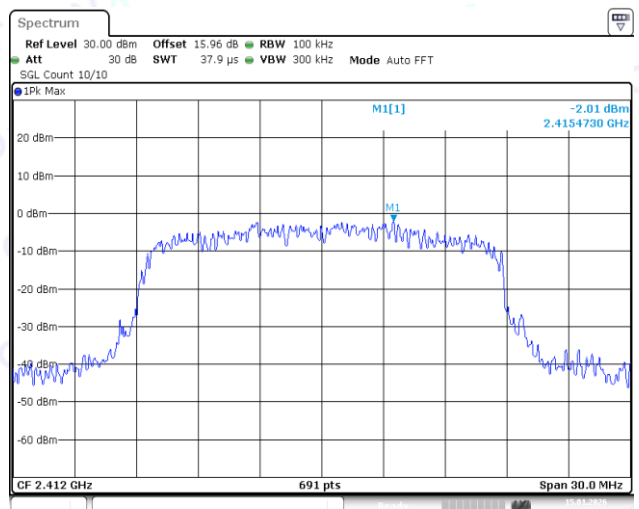
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11B-Ant1-2462-0~Reference-PASS

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



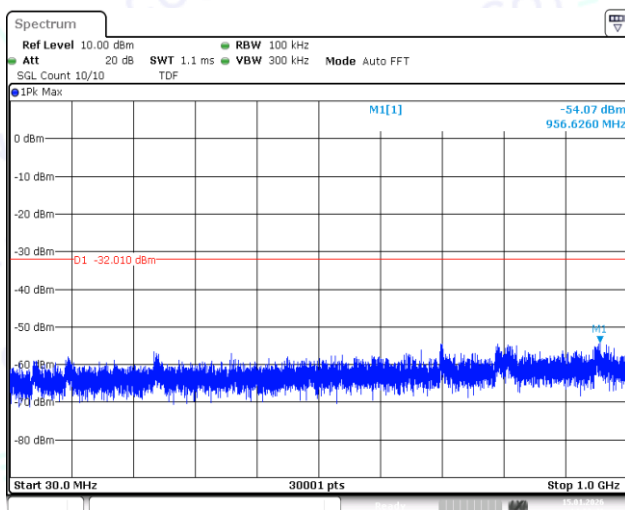
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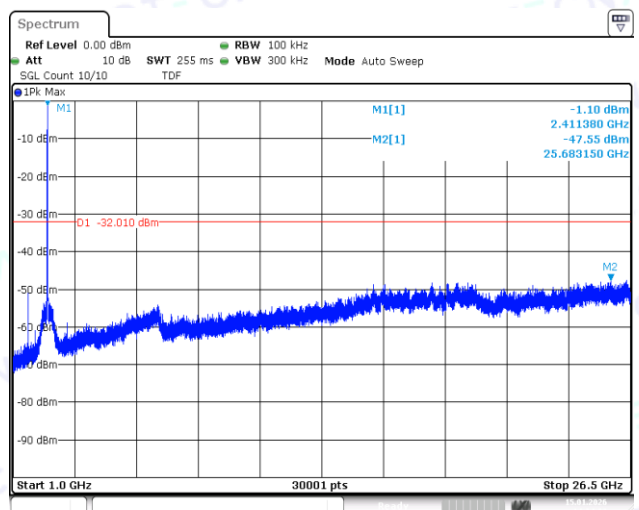
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11B-Ant1-2462-1000~26500-PASS

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



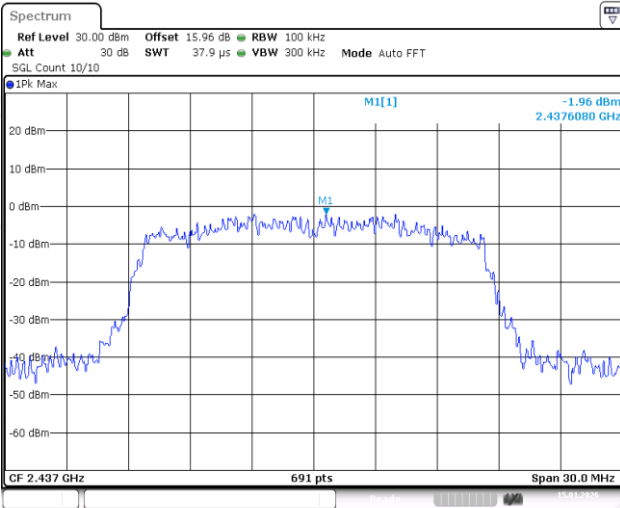
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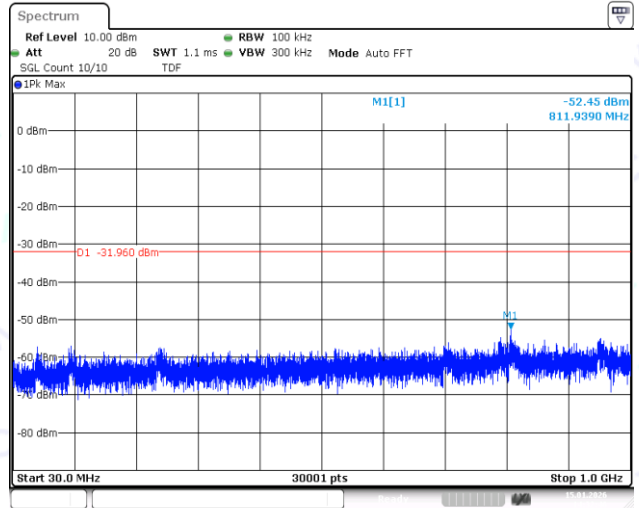
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11G-Ant1-2412-30~1000-PASS

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



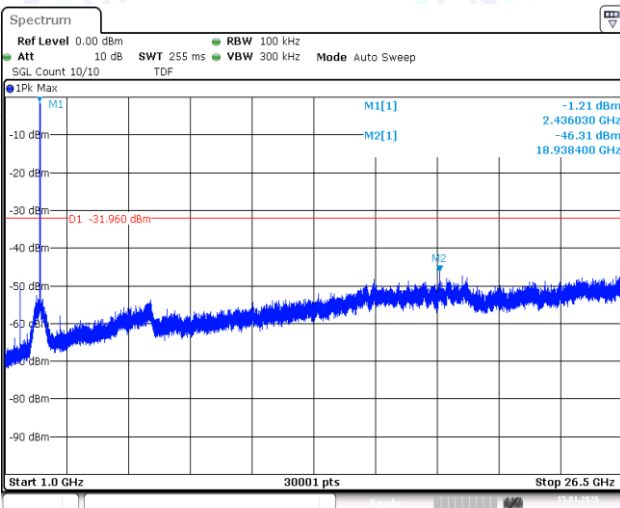
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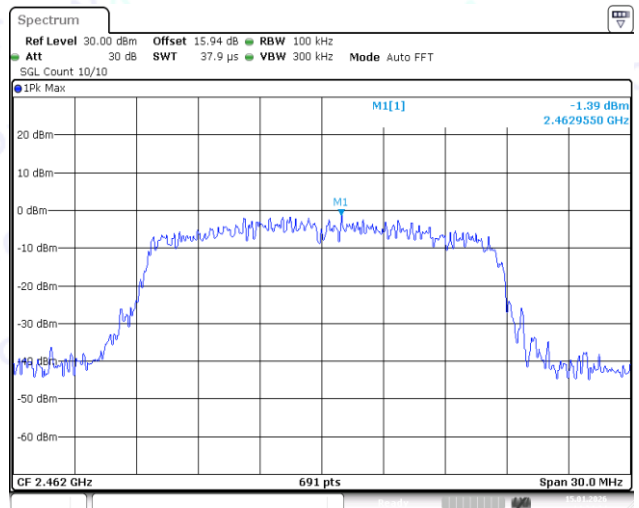
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11G-Ant1-2437-0~Reference-PASS

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



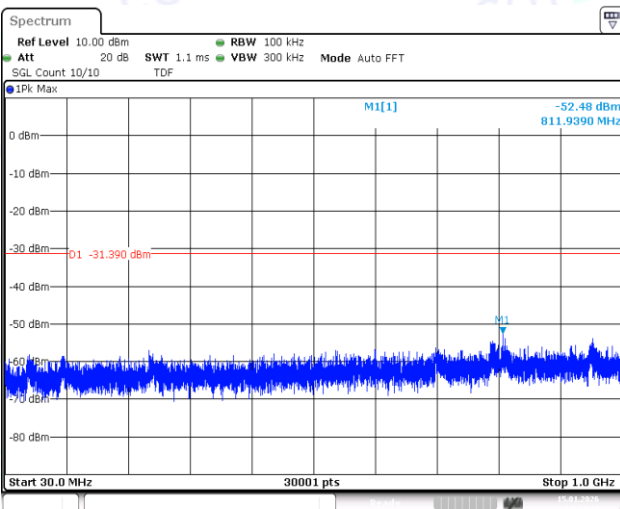
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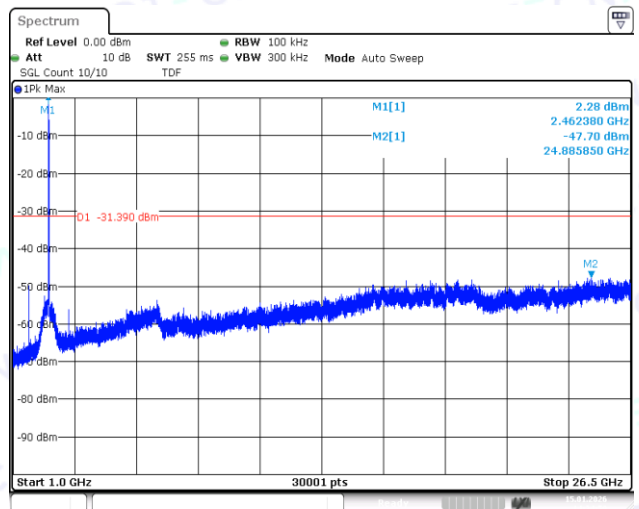
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11G-Ant1-2437-1000~26500-PASS

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



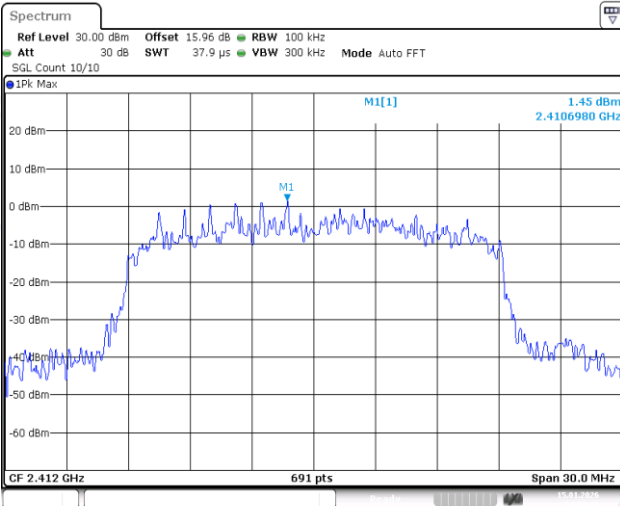
Date: 15.JAN.2026 14:34:41



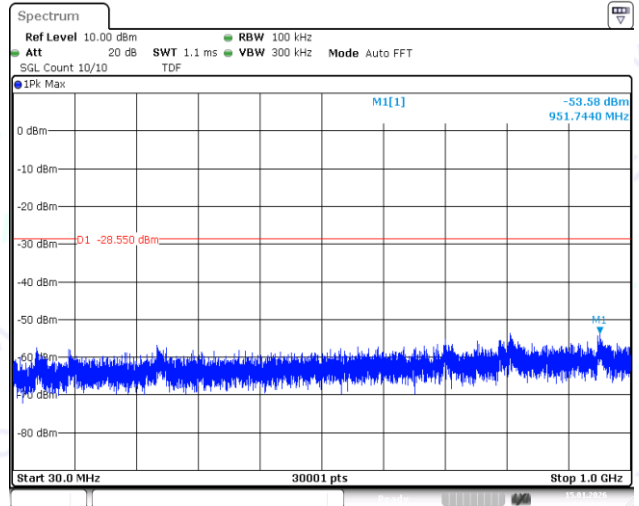
Date: 15.JAN.2026 14:34:59

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

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



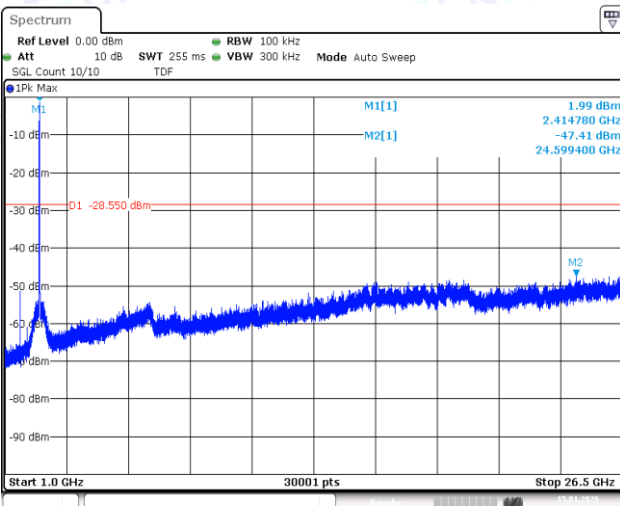
Date: 15.JAN.2026 14:36:40



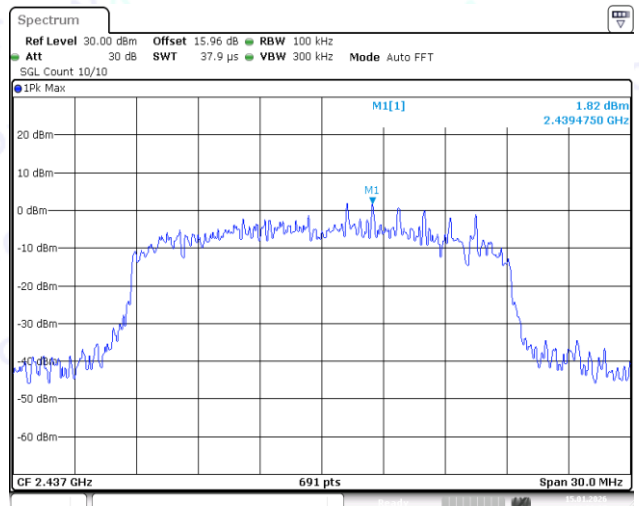
Date: 15.JAN.2026 14:36:48

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

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



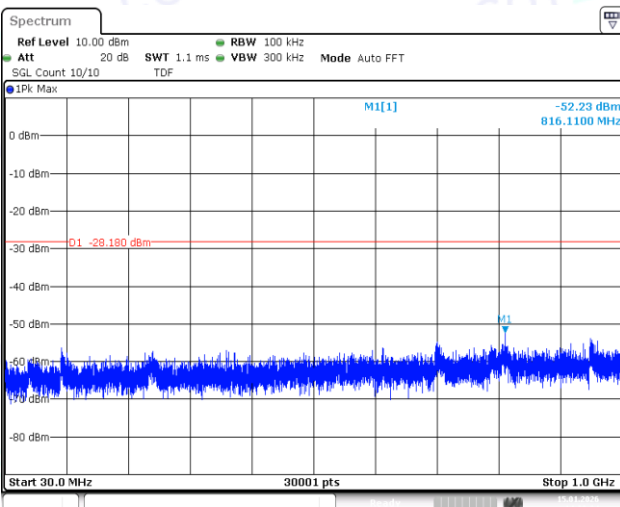
Date: 15.JAN.2026 14:37:05



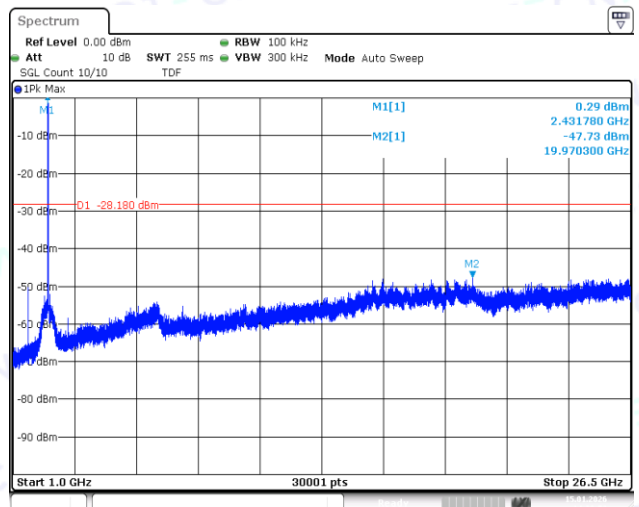
Date: 15.JAN.2026 14:38:27

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

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



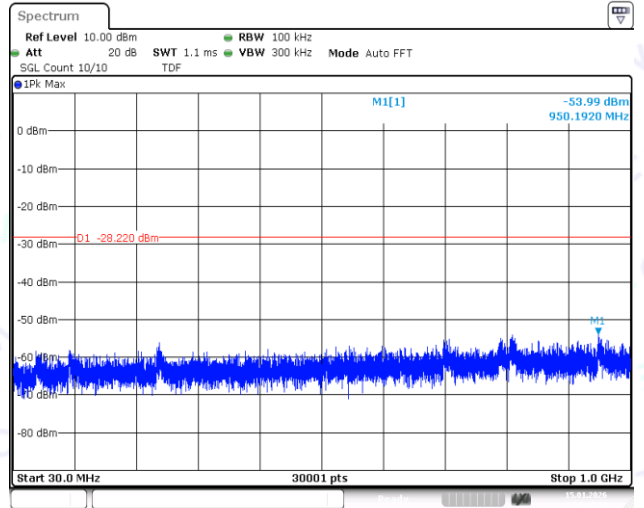
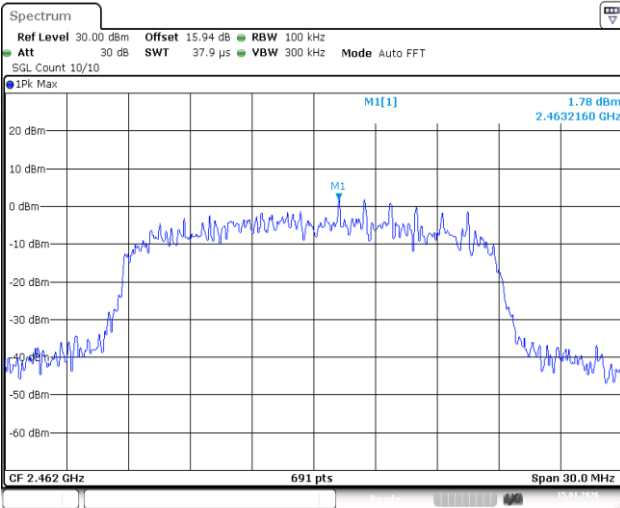
Date: 15.JAN.2026 14:38:35



Date: 15.JAN.2026 14:38:52

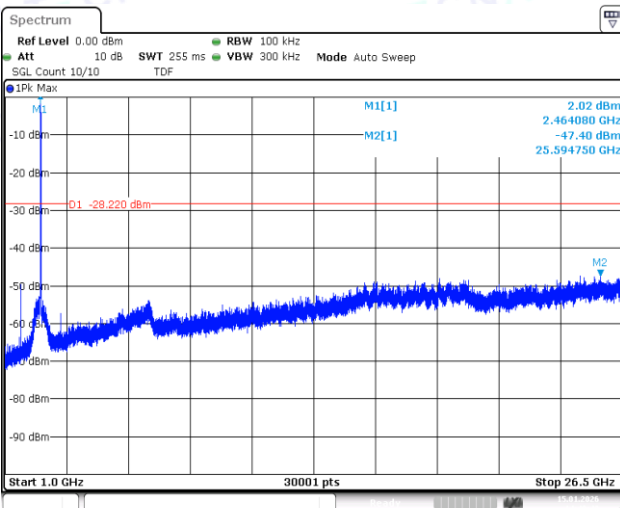
11N20SISO-Ant1-2437-30~1000-PASS

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



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

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



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

7: Duty Cycle

7.1 Test Result

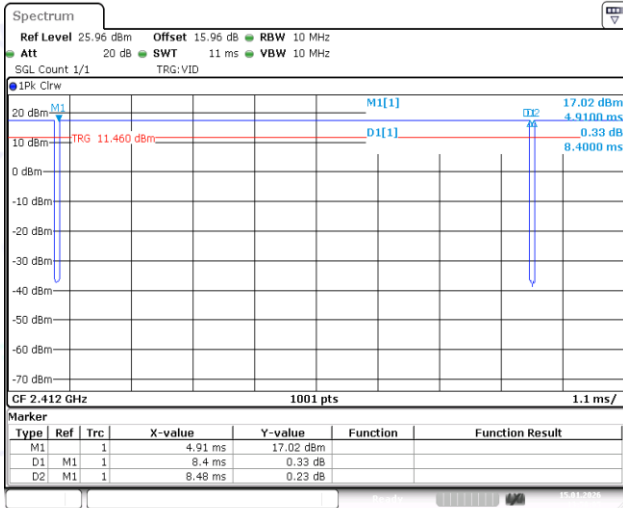
TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	1/T [kHz]
11B	Ant1	2412	8.40	8.48	99.06	0.04	0.12
11B	Ant1	2437	8.40	8.48	99.06	0.04	0.12
11B	Ant1	2462	8.39	8.48	98.94	0.05	0.12
11G	Ant1	2412	5.49	5.54	99.10	0.04	0.18
11G	Ant1	2437	5.48	5.55	98.74	0.06	0.18
11G	Ant1	2462	5.49	5.55	98.92	0.05	0.18
11N20SISO	Ant1	2412	0.17	0.19	89.47	0.48	5.88
11N20SISO	Ant1	2437	0.17	0.19	89.47	0.48	5.88
11N20SISO	Ant1	2462	0.16	0.18	88.89	0.51	6.25

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

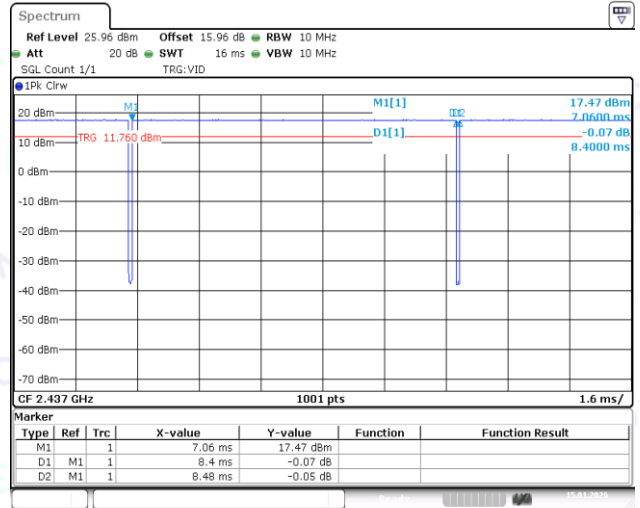
2, DC Factor= $10 \cdot \log_{10}(1/\text{Duty Cycle})$

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

7.2 Test Graphs



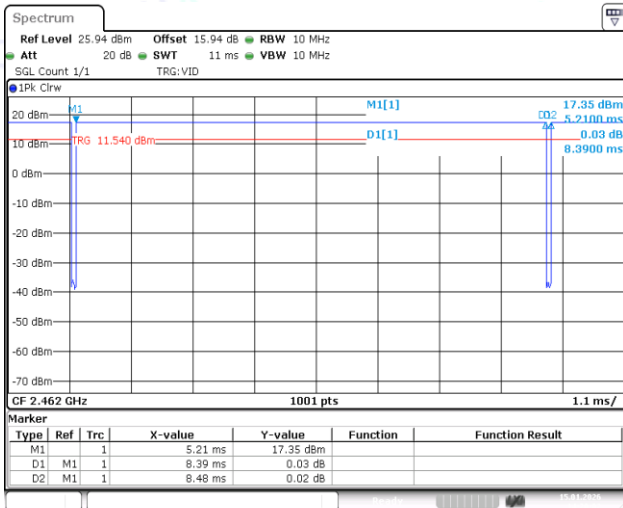
Date: 15.JAN.2026 13:58:05



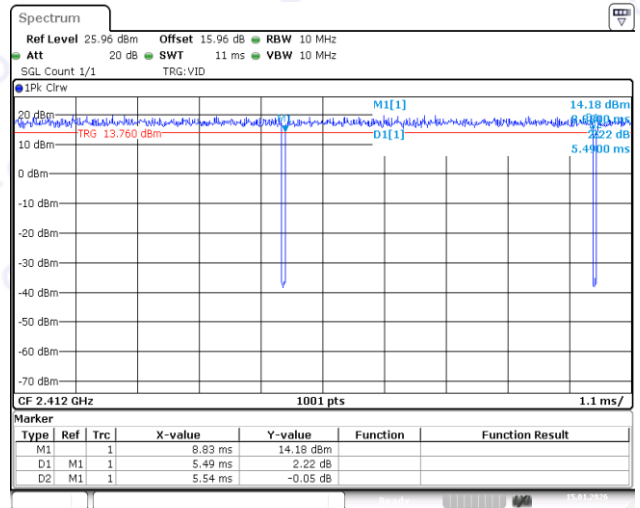
Date: 15.JAN.2026 14:25:28

NTNV-11B-Ant1-2412

NTNV-11B-Ant1-2437



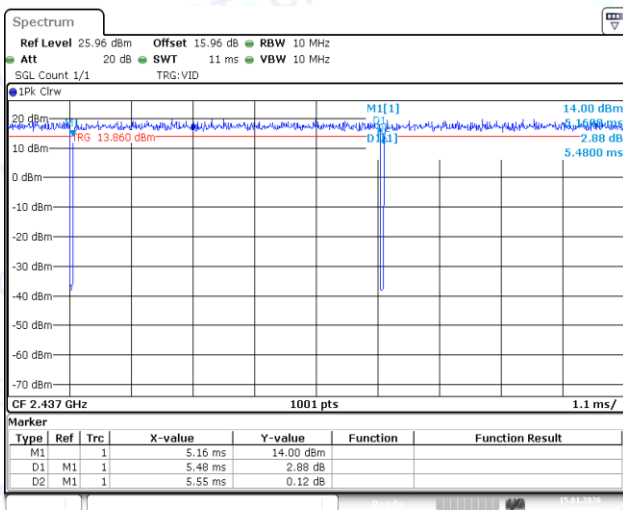
Date: 15.JAN.2026 14:20:03



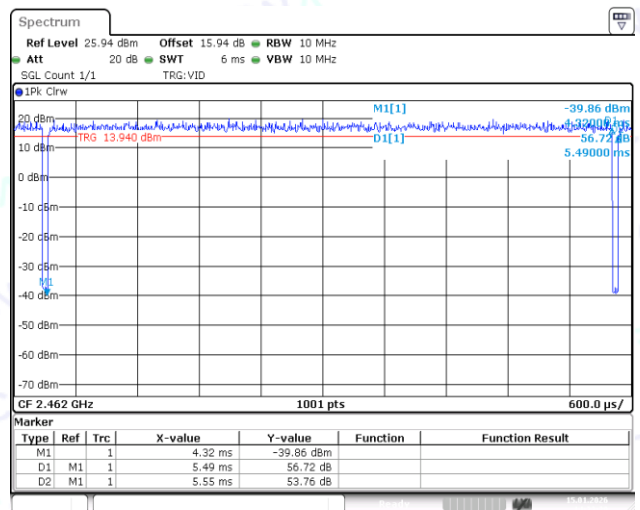
Date: 15.JAN.2026 14:22:32

NTNV-11B-Ant1-2462

NTNV-11G-Ant1-2412



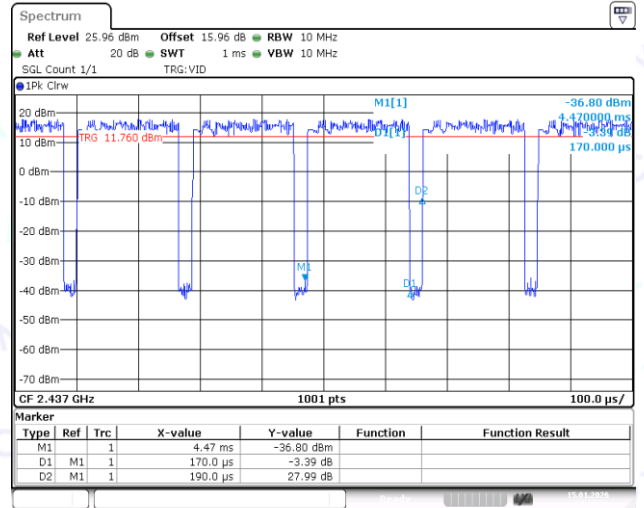
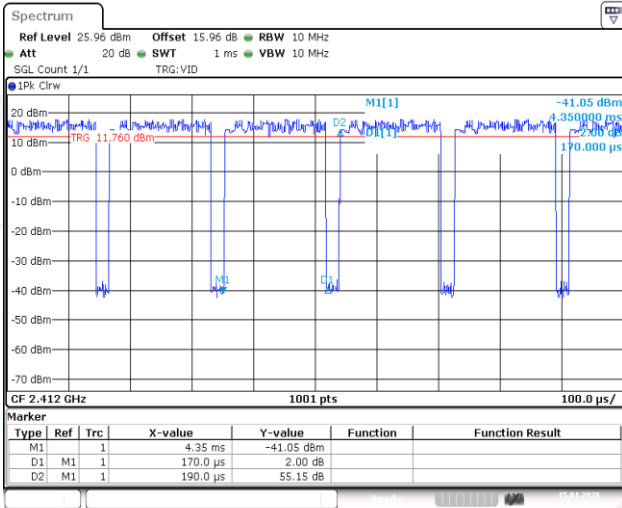
Date: 15.JAN.2026 14:31:43



Date: 15.JAN.2026 14:33:29

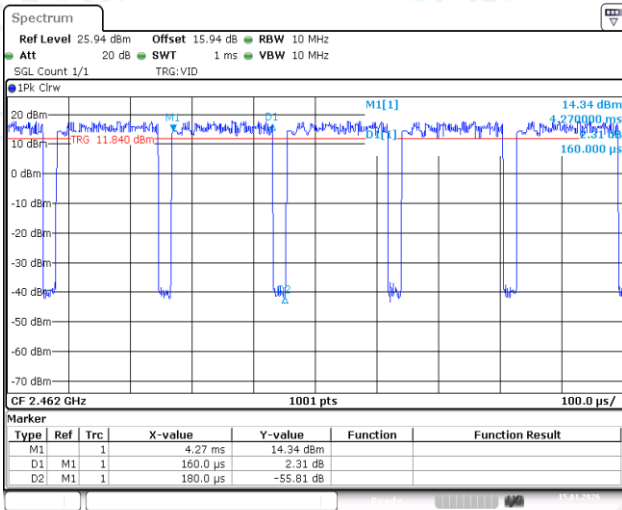
NTNV-11G-Ant1-2437

NTNV-11G-Ant1-2462



NTNV-11N20SISO-Ant1-2412

NTNV-11N20SISO-Ant1-2437



NTNV-11N20SISO-Ant1-2462

8: Emissions in Restricted Bands

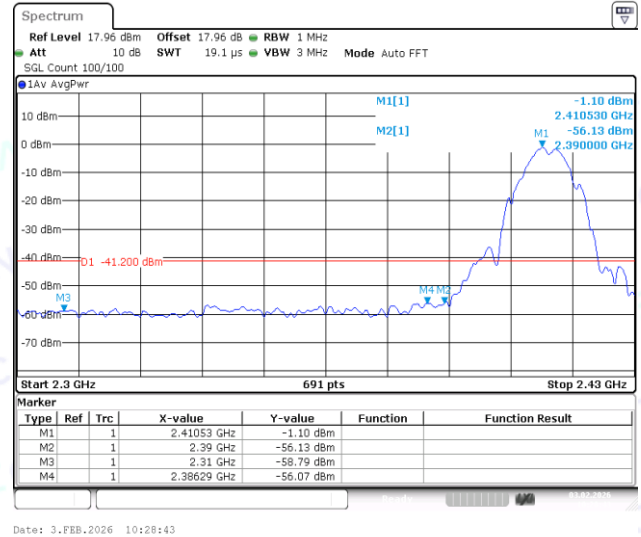
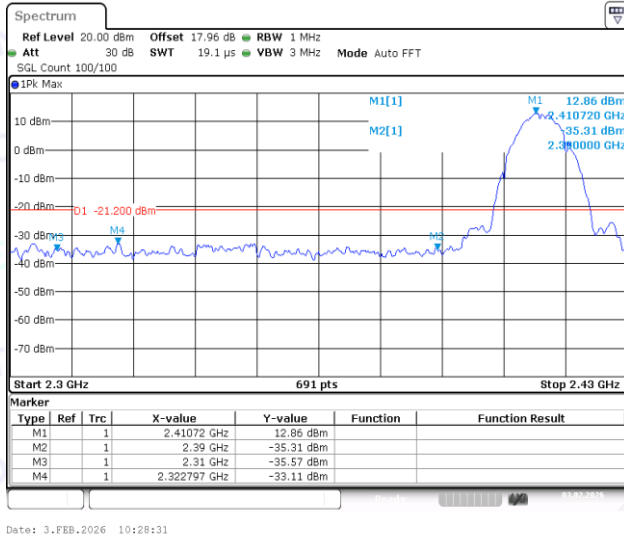
8.1 Test Result

TestMode	Ant.	ChName	Freq. [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	Peak	2390.000	-35.31	≤-21.20	59.89	≤74	PASS
11B	Ant1	Low	2412	Peak	2310.000	-35.57	≤-21.20	59.63	≤74	PASS
11B	Ant1	Low	2412	Peak	2322.797	-33.11	≤-21.20	62.09	≤74	PASS
11B	Ant1	Low	2412	AV	2390.000	-56.13	≤-41.20	39.07	≤54	PASS
11B	Ant1	Low	2412	AV	2310.000	-58.79	≤-41.20	36.41	≤54	PASS
11B	Ant1	Low	2412	AV	2386.290	-56.07	≤-41.20	39.13	≤54	PASS
11B	Ant1	High	2462	Peak	2483.500	-36.08	≤-21.20	59.12	≤74	PASS
11B	Ant1	High	2462	Peak	2500.000	-36.52	≤-21.20	58.68	≤74	PASS
11B	Ant1	High	2462	Peak	2484.319	-34.22	≤-21.20	60.98	≤74	PASS
11B	Ant1	High	2462	AV	2483.500	-54.65	≤-41.20	40.55	≤54	PASS
11B	Ant1	High	2462	AV	2500.000	-59.42	≤-41.20	35.78	≤54	PASS
11B	Ant1	High	2462	AV	2483.522	-54.65	≤-41.20	40.55	≤54	PASS
11G	Ant1	Low	2412	Peak	2390.000	-36.49	≤-21.20	58.71	≤74	PASS
11G	Ant1	Low	2412	Peak	2310.000	-36.46	≤-21.20	58.74	≤74	PASS
11G	Ant1	Low	2412	Peak	2340.507	-31.59	≤-21.20	63.61	≤74	PASS
11G	Ant1	Low	2412	AV	2390.000	-58.96	≤-41.20	36.24	≤54	PASS
11G	Ant1	Low	2412	AV	2310.000	-59.86	≤-41.20	35.34	≤54	PASS
11G	Ant1	Low	2412	AV	2388.928	-55.22	≤-41.20	39.98	≤54	PASS
11G	Ant1	High	2462	Peak	2483.500	-35.36	≤-21.20	59.84	≤74	PASS
11G	Ant1	High	2462	Peak	2500.000	-36.24	≤-21.20	58.96	≤74	PASS
11G	Ant1	High	2462	Peak	2485.116	-33.94	≤-21.20	61.26	≤74	PASS
11G	Ant1	High	2462	AV	2483.500	-57.06	≤-41.20	38.14	≤54	PASS
11G	Ant1	High	2462	AV	2500.000	-59.69	≤-41.20	35.51	≤54	PASS
11G	Ant1	High	2462	AV	2484.159	-55	≤-41.20	40.20	≤54	PASS
11N20SISO	Ant1	Low	2412	Peak	2390.000	-36.01	≤-21.20	59.19	≤74	PASS
11N20SISO	Ant1	Low	2412	Peak	2310.000	-36.02	≤-21.20	59.18	≤74	PASS
11N20SISO	Ant1	Low	2412	Peak	2339.942	-31.05	≤-21.20	64.15	≤74	PASS
11N20SISO	Ant1	Low	2412	AV	2390.000	-52.49	≤-41.20	42.71	≤54	PASS
11N20SISO	Ant1	Low	2412	AV	2310.000	-60.28	≤-41.20	34.92	≤54	PASS
11N20SISO	Ant1	Low	2412	AV	2389.116	-52.16	≤-41.20	43.04	≤54	PASS
11N20SISO	Ant1	High	2462	Peak	2483.500	-34.21	≤-21.20	60.99	≤74	PASS
11N20SISO	Ant1	High	2462	Peak	2500.000	-35.81	≤-21.20	59.39	≤74	PASS
11N20SISO	Ant1	High	2462	Peak	2484.797	-29.31	≤-21.20	65.89	≤74	PASS
11N20SISO	Ant1	High	2462	AV	2483.500	-52.65	≤-41.20	42.55	≤54	PASS
11N20SISO	Ant1	High	2462	AV	2500.000	-58.88	≤-41.20	36.32	≤54	PASS
11N20SISO	Ant1	High	2462	AV	2484.000	-51.7	≤-41.20	43.50	≤54	PASS

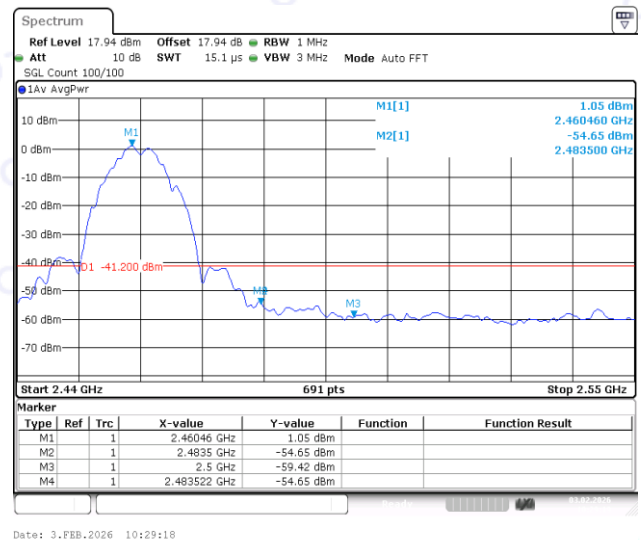
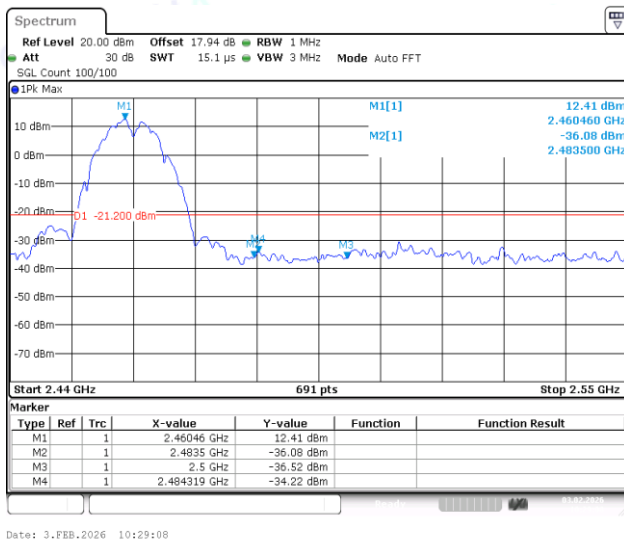
Note:

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.

8.2 Test Graphs

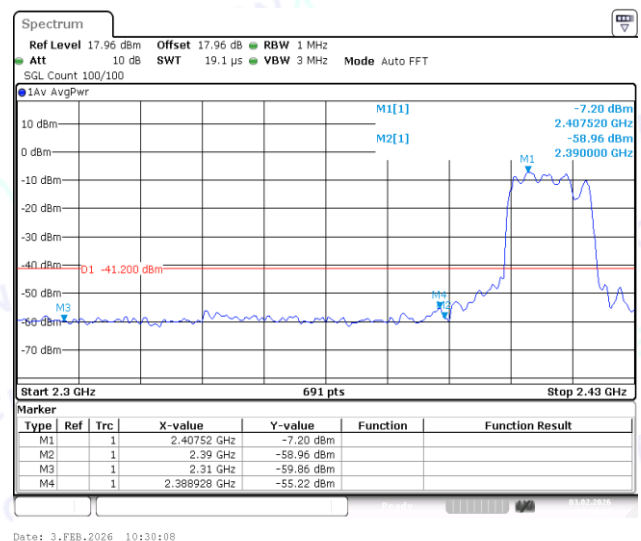
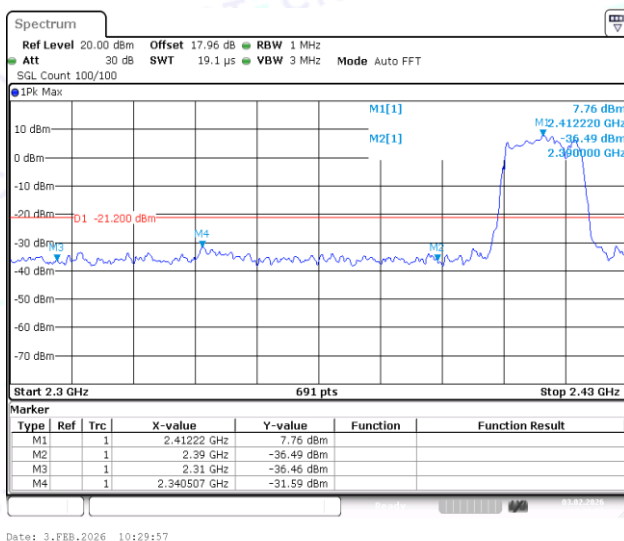


11B-Ant1-2412-PASS



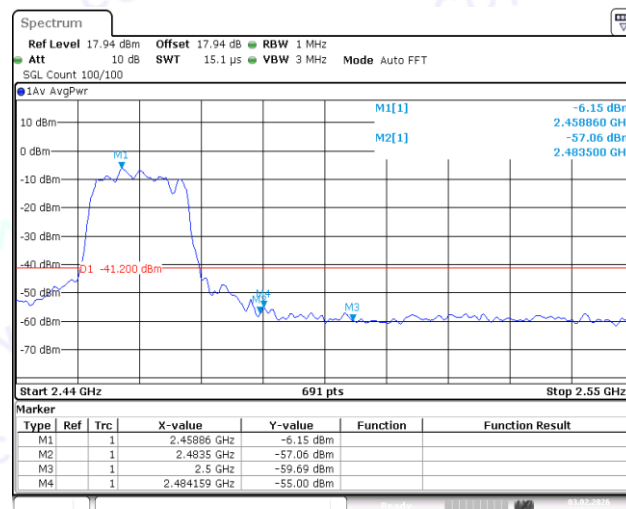
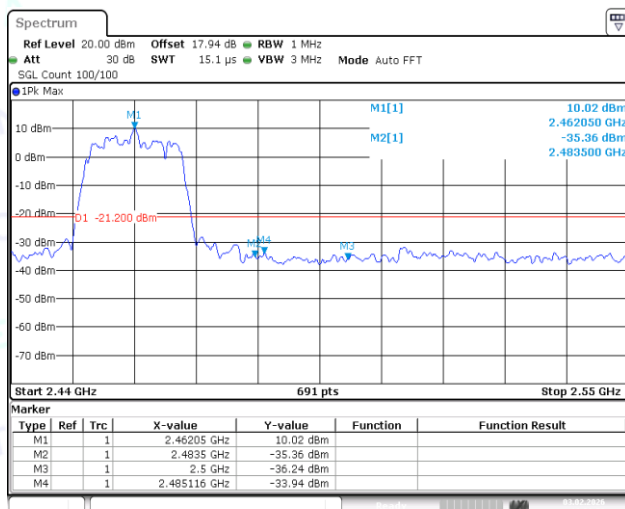
11B-Ant1-2462-PASS

11B-Ant1-2462-PASS



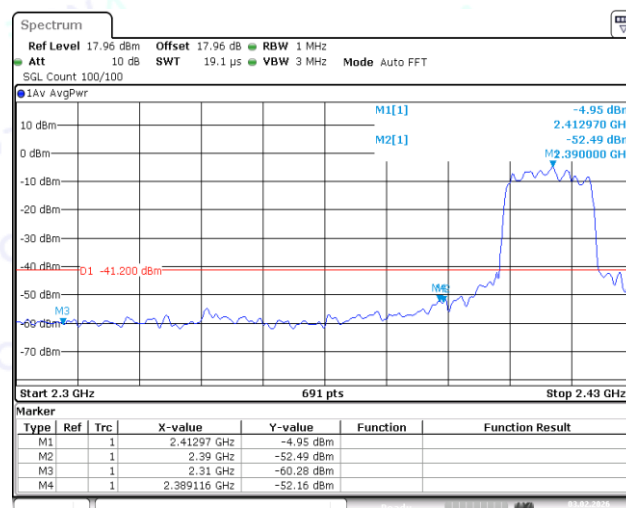
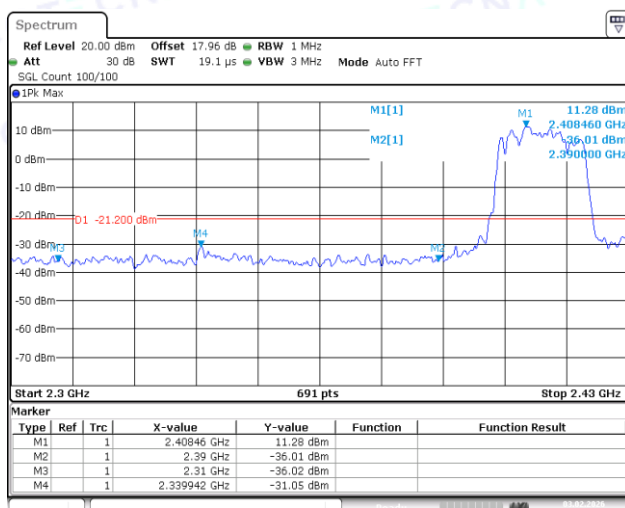
11G-Ant1-2412-PASS

11G-Ant1-2412-PASS



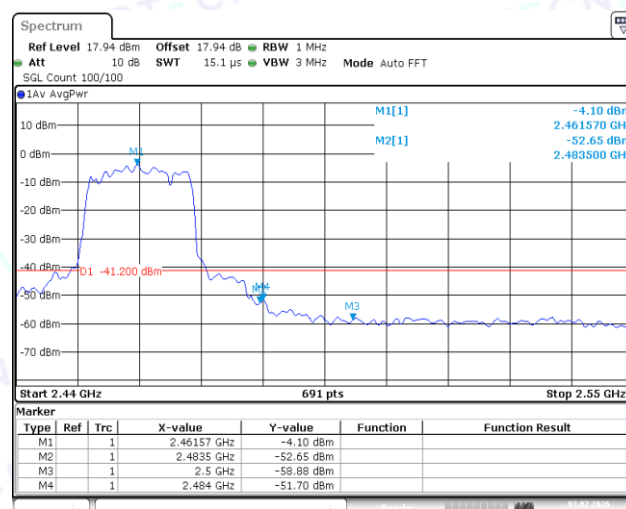
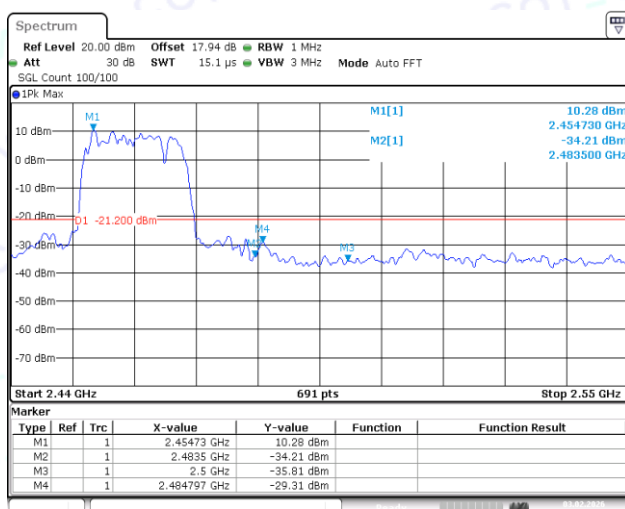
11G-Ant1-2462-PASS

11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS

11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2462-PASS

11N20SISO-Ant1-2462-PASS

-----END OF THE REPORT-----