

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

General Description of EUT	
EUT Name:	2K Wi-Fi Battery Camera
Model:	OC101A-BDW-AZ1
Sample ID:	HC-C-202505-0132-01-04#
Test Standard:	FCC Part 15.247 & RSS 247 Issue 3
Environmental Conditions	
Ambient Temperature:	25°C
Ambient Humidity:	45%RH
Test Power Supply:	DC 3.7V
Test Engineer:	Gold Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202505-0132-162	

Contents

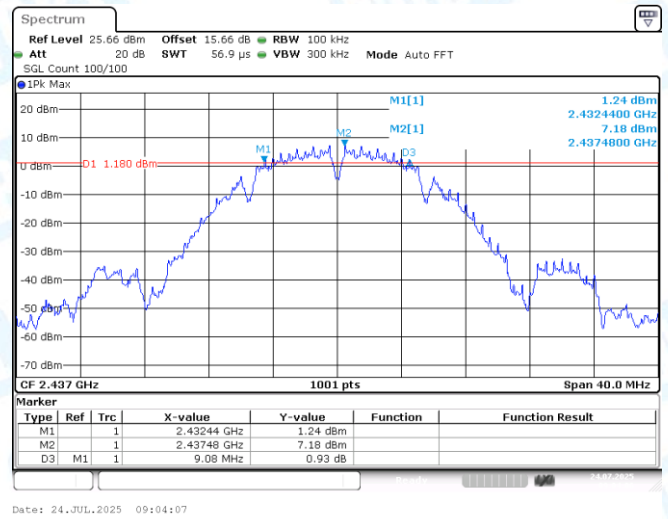
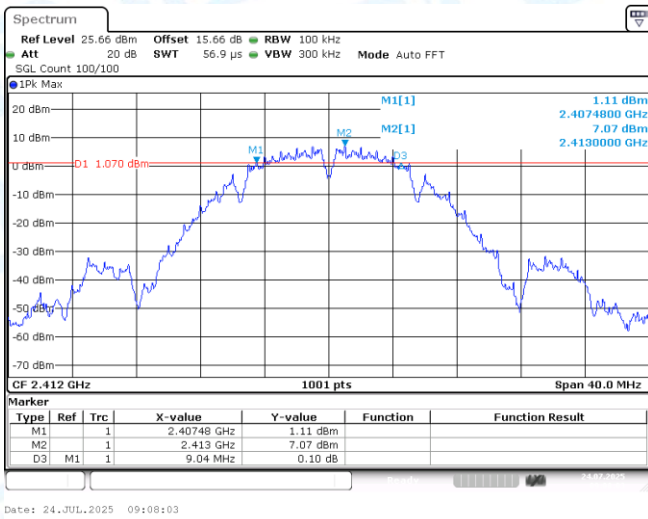
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1. DTS Bandwidth

1.1 Test Result

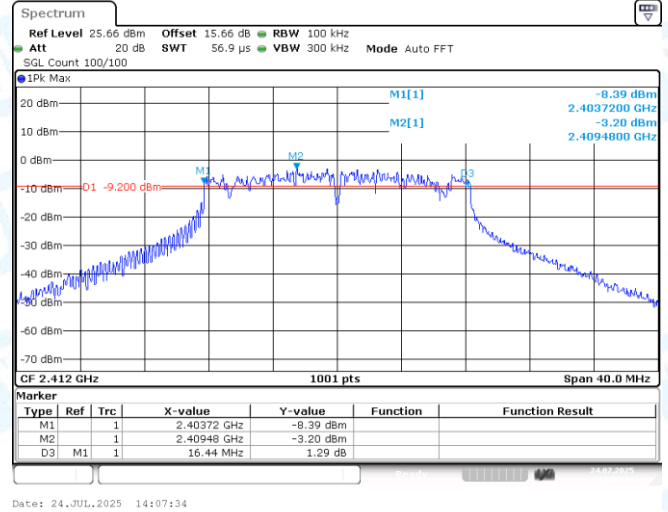
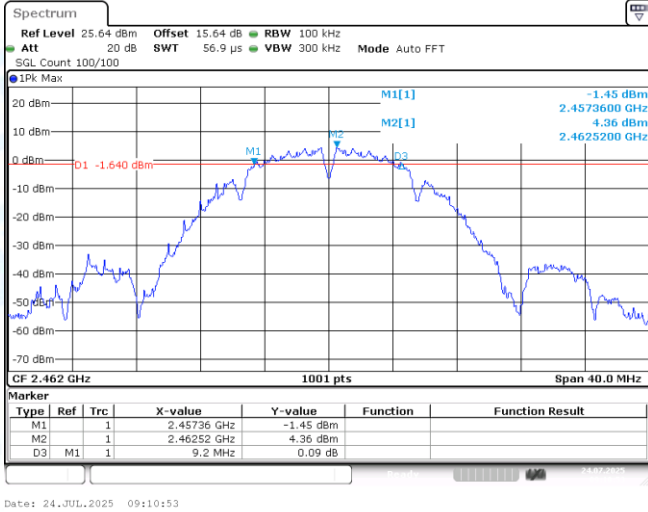
TestMode	Ant.	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.04	2407.48	2416.52	0.5	PASS
11B	Ant1	2437	9.08	2432.44	2441.52	0.5	PASS
11B	Ant1	2462	9.20	2457.36	2466.56	0.5	PASS
11G	Ant1	2412	16.44	2403.72	2420.16	0.5	PASS
11G	Ant1	2437	16.44	2428.76	2445.20	0.5	PASS
11G	Ant1	2462	15.40	2454.36	2469.76	0.5	PASS
11N20SISO	Ant1	2412	17.60	2403.20	2420.80	0.5	PASS
11N20SISO	Ant1	2437	17.60	2428.20	2445.80	0.5	PASS
11N20SISO	Ant1	2462	17.60	2453.20	2470.80	0.5	PASS
11N40SISO	Ant1	2422	36.40	2403.76	2440.16	0.5	PASS
11N40SISO	Ant1	2437	36.32	2418.84	2455.16	0.5	PASS
11N40SISO	Ant1	2452	36.32	2433.84	2470.16	0.5	PASS
11AX20SISO	Ant1	2412	18.96	2402.52	2421.48	0.5	PASS
11AX20SISO	Ant1	2437	19.08	2427.48	2446.56	0.5	PASS
11AX20SISO	Ant1	2462	18.92	2452.48	2471.40	0.5	PASS
11AX40SISO	Ant1	2422	37.12	2403.12	2440.24	0.5	PASS
11AX40SISO	Ant1	2437	37.68	2417.96	2455.64	0.5	PASS
11AX40SISO	Ant1	2452	37.92	2433.04	2470.96	0.5	PASS

1.2 Test Graphs



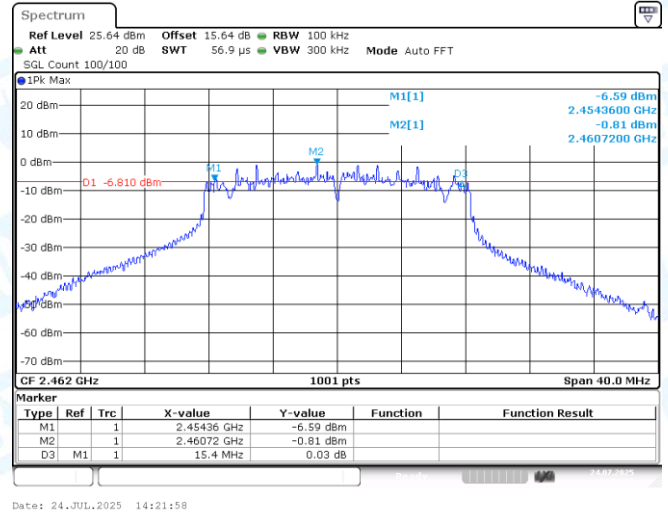
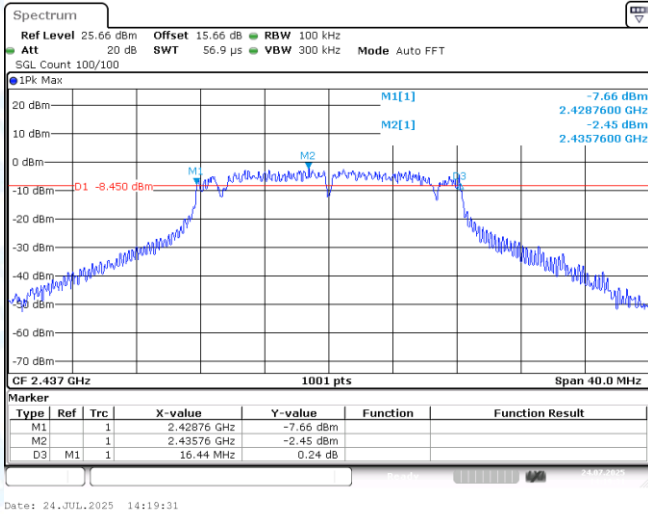
11B-Ant1-2412-PASS

11B-Ant1-2437-PASS



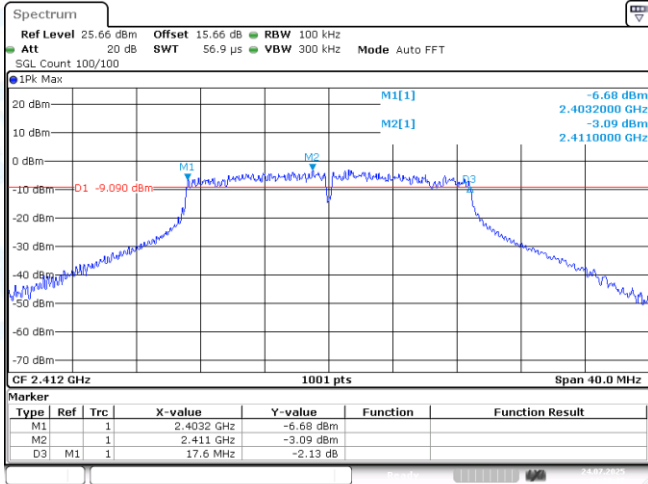
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11G-Ant1-2412-PASS



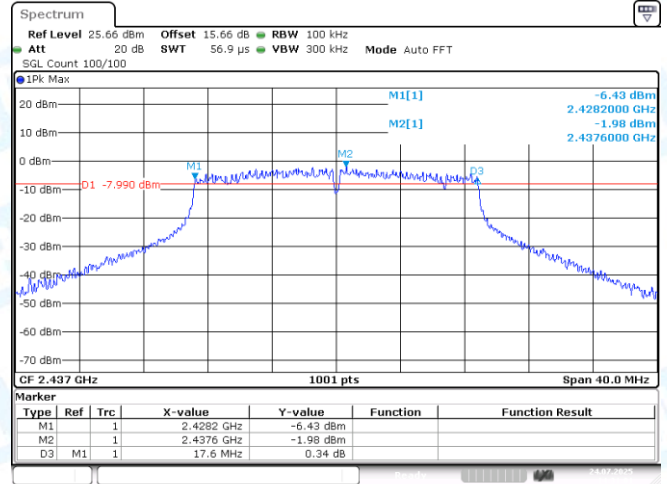
11G-Ant1-2437-PASS

11G-Ant1-2462-PASS



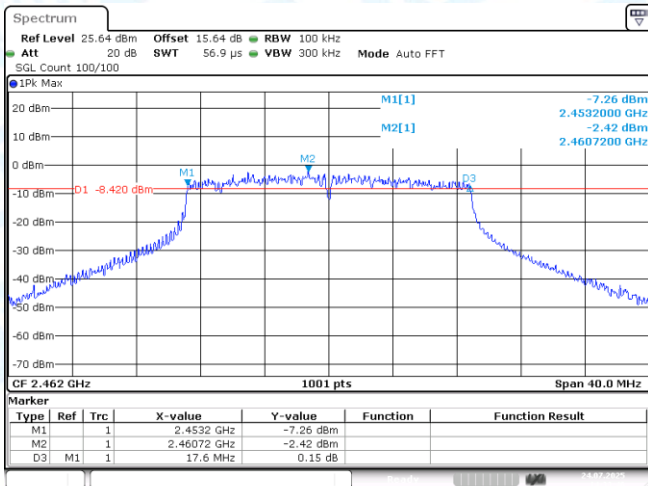
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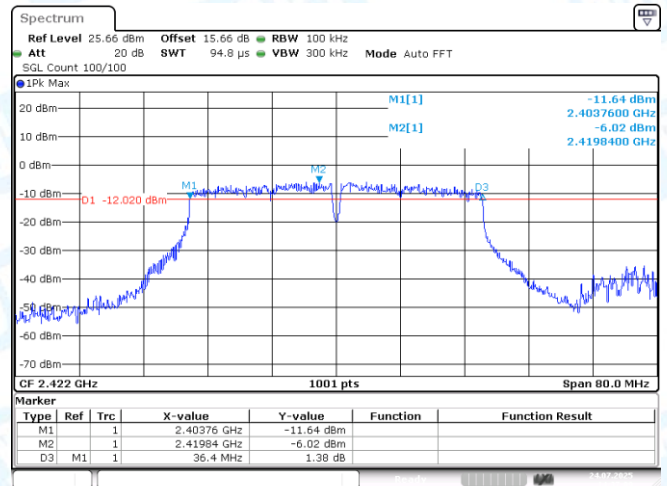
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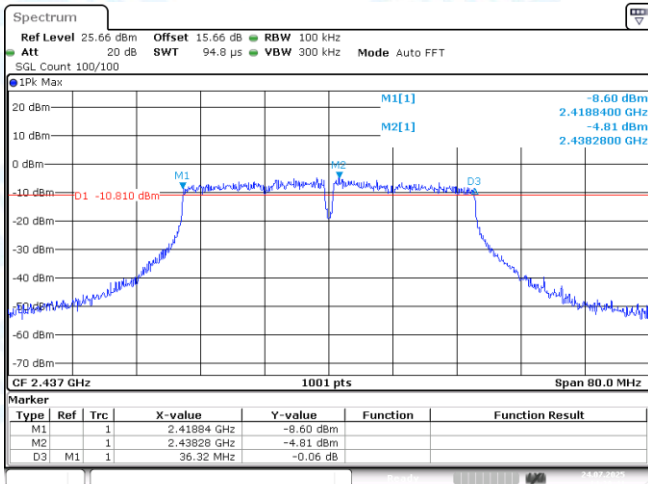
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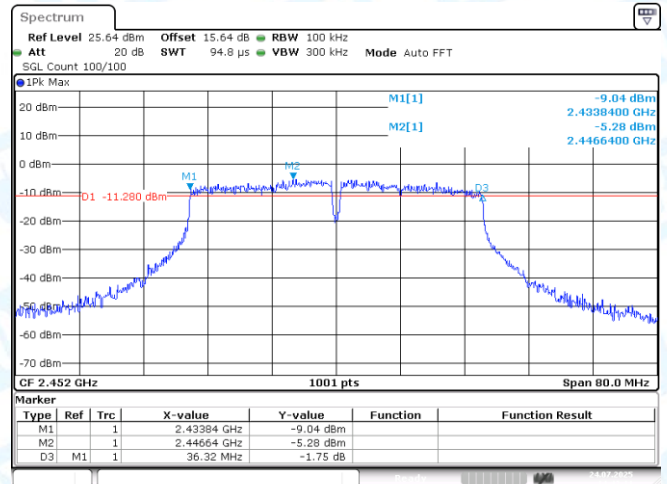
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11N40SISO-Ant1-2422-PASS



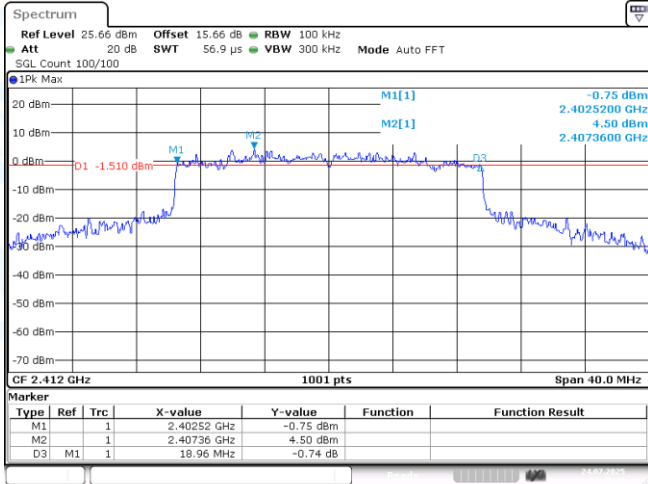
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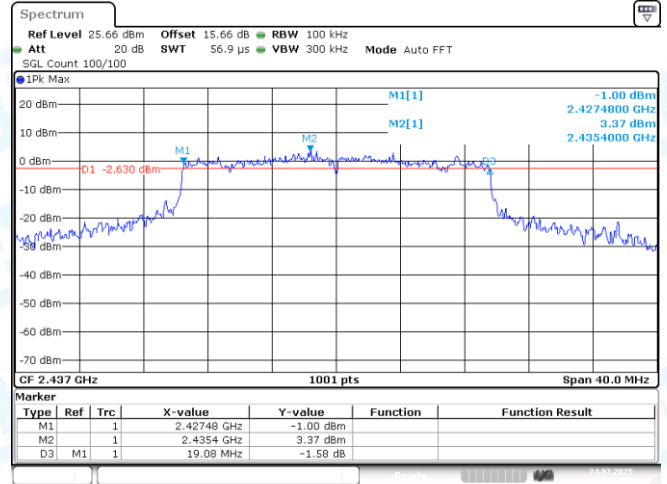


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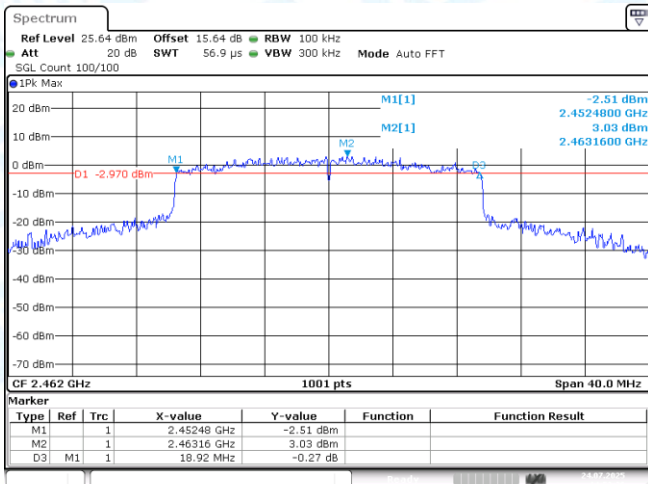
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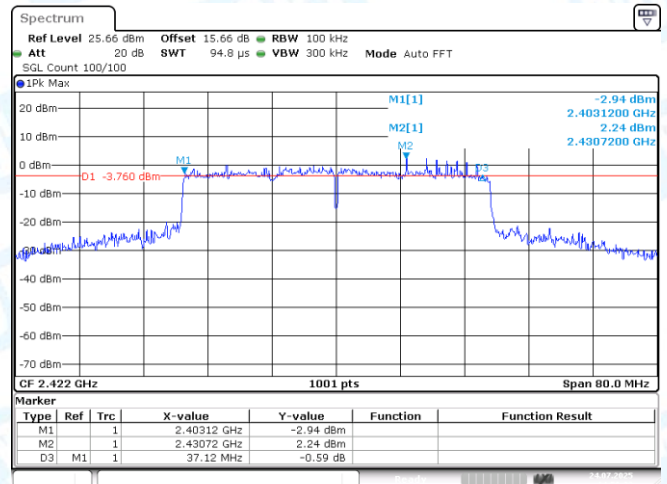
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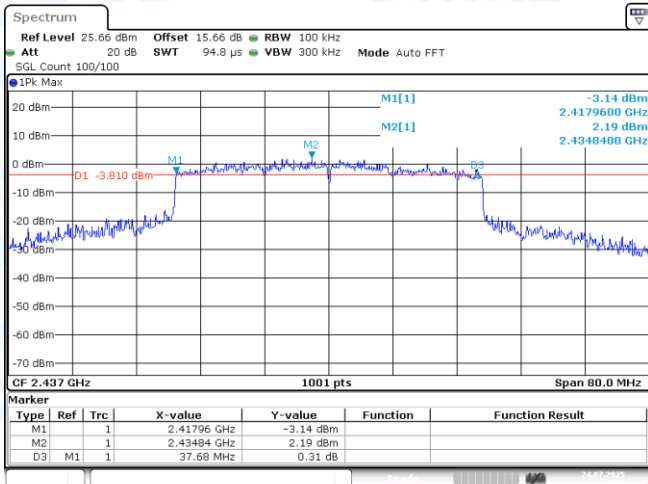
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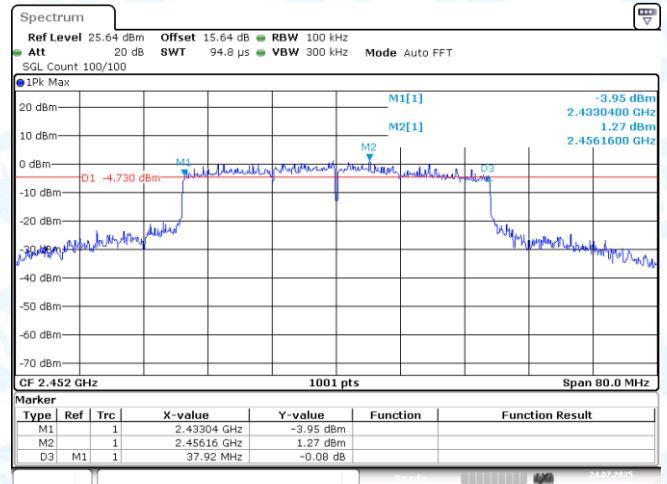
11AX20ISO-Ant1-2462-PASS



11AX40ISO-Ant1-2422-PASS



11AX40ISO-Ant1-2437-PASS



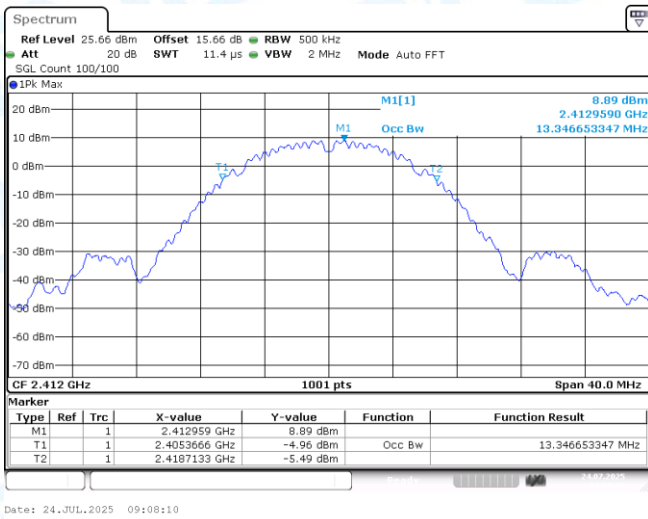
11AX40ISO-Ant1-2452-PASS

2. Occupied Channel Bandwidth

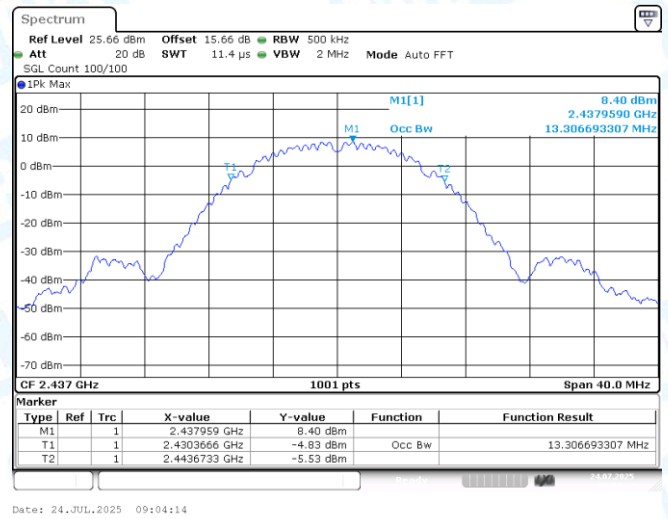
2.1 Test Result

TestMode	Ant.	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.347	2405.3666	2418.7133	---	---
11B	Ant1	2437	13.307	2430.3666	2443.6733	---	---
11B	Ant1	2462	13.307	2455.3666	2468.6733	---	---
11G	Ant1	2412	17.183	2403.3287	2420.5115	---	---
11G	Ant1	2437	16.823	2428.6084	2445.4316	---	---
11G	Ant1	2462	17.063	2453.5285	2470.5914	---	---
11N20SISO	Ant1	2412	18.022	2403.0090	2421.0310	---	---
11N20SISO	Ant1	2437	18.861	2427.3696	2446.2308	---	---
11N20SISO	Ant1	2462	17.582	2453.1688	2470.7512	---	---
11N40SISO	Ant1	2422	36.204	2403.8581	2440.0619	---	---
11N40SISO	Ant1	2437	37.003	2418.8581	2455.8611	---	---
11N40SISO	Ant1	2452	36.444	2433.5385	2469.9820	---	---
11AX20SISO	Ant1	2412	19.461	2402.1698	2421.6304	---	---
11AX20SISO	Ant1	2437	19.660	2427.1698	2446.8302	---	---
11AX20SISO	Ant1	2462	19.061	2452.4096	2471.4705	---	---
11AX40SISO	Ant1	2422	38.042	2403.0589	2441.1009	---	---
11AX40SISO	Ant1	2437	38.442	2417.4196	2455.8611	---	---
11AX40SISO	Ant1	2452	38.042	2432.8991	2470.9411	---	---

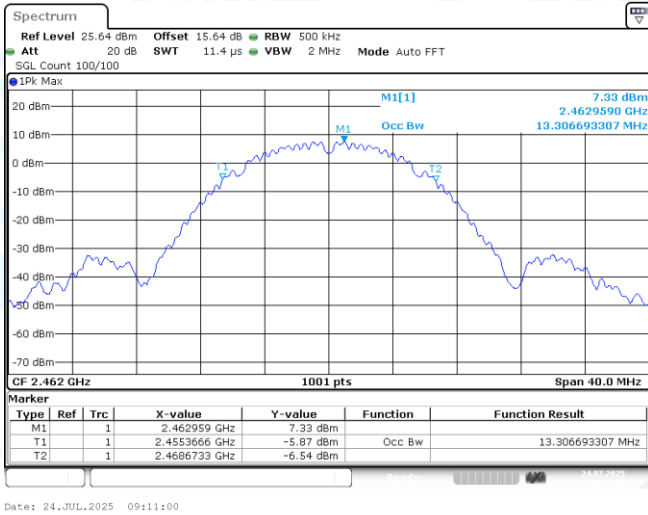
2.2 Test Graphs



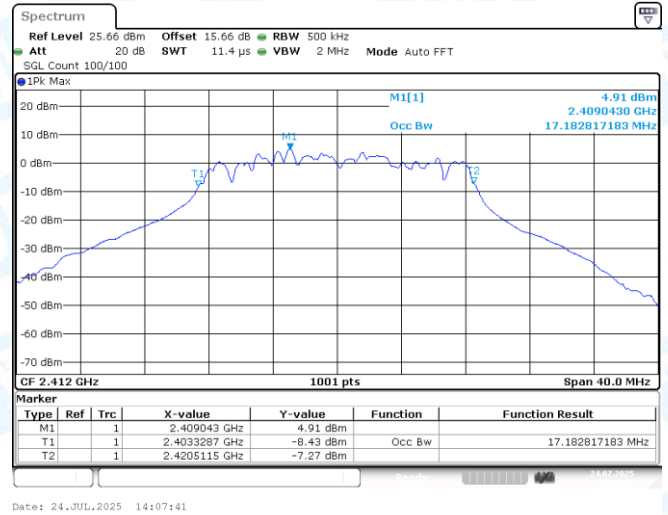
11B-Ant1-2412



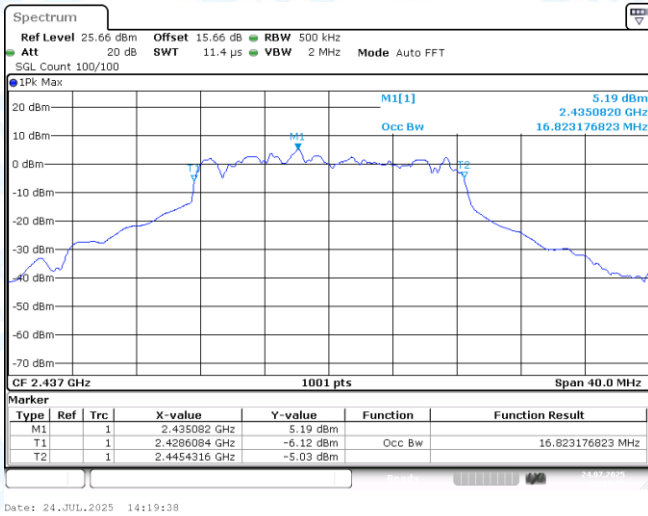
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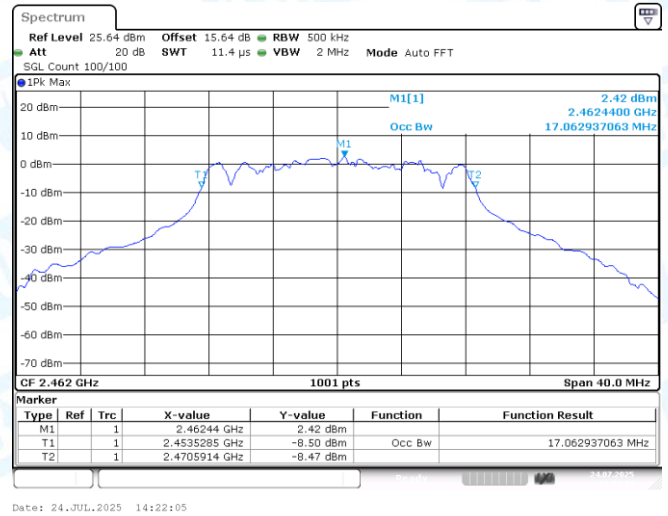
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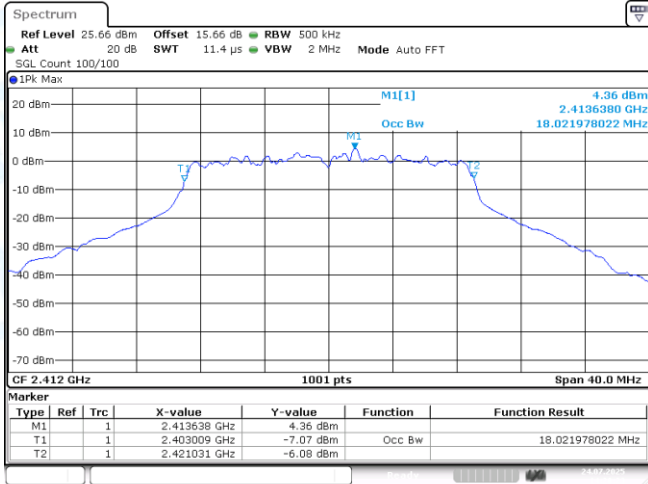
11G-Ant1-2412



11G-Ant1-2437

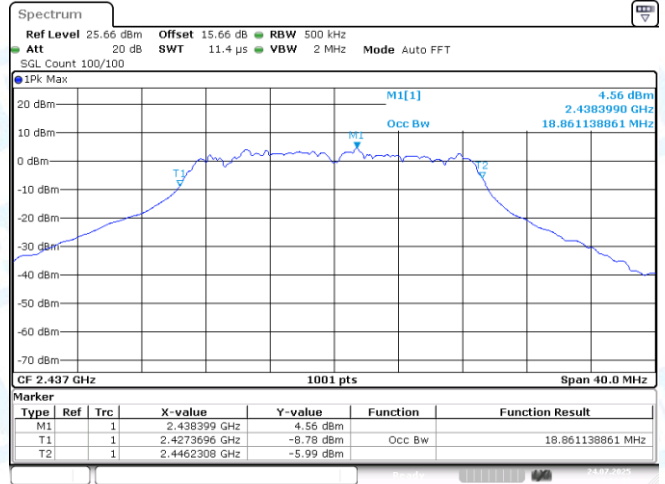


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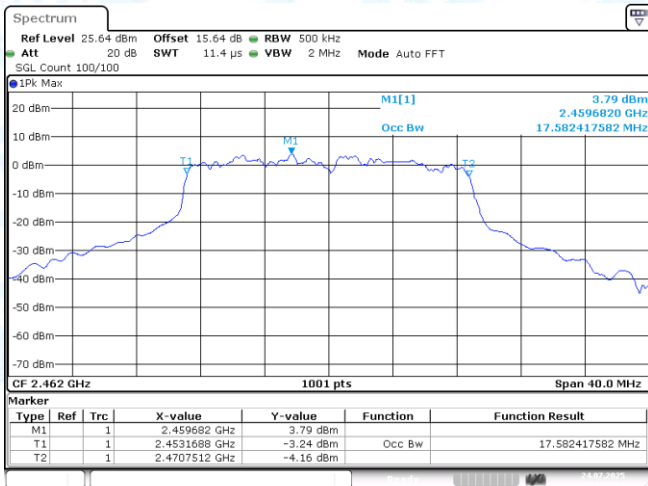
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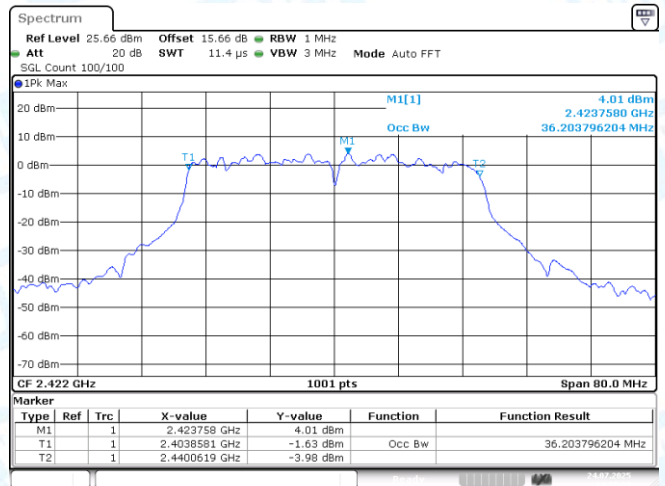
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11N20SISO-Ant1-2437



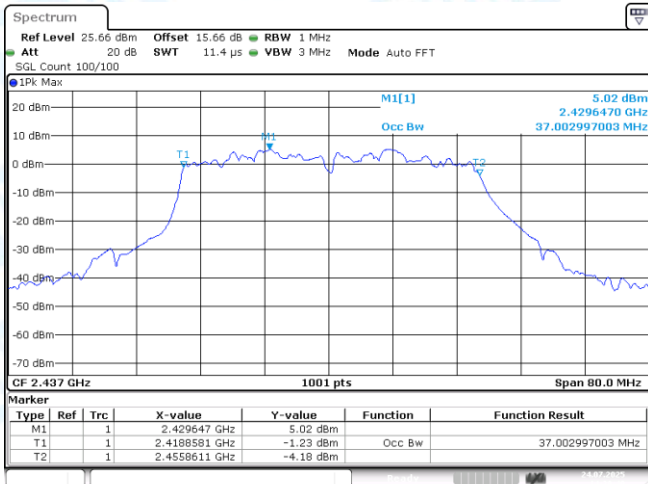
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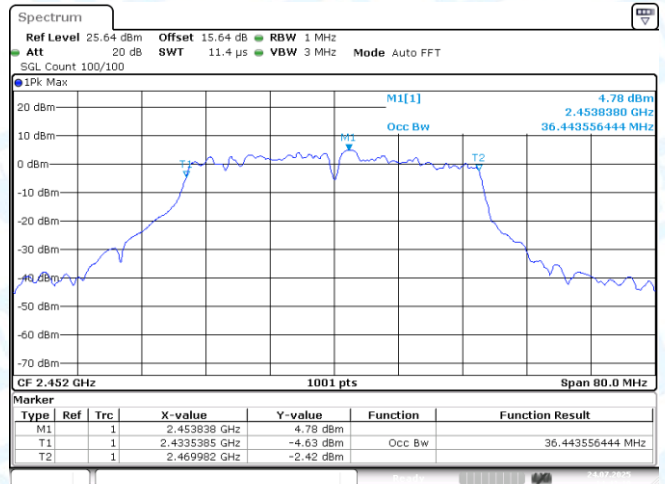
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11N40SISO-Ant1-2422



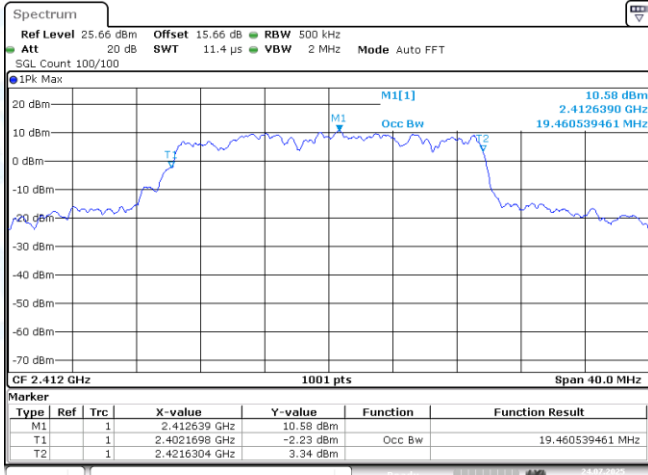
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11N40SISO-Ant1-2437



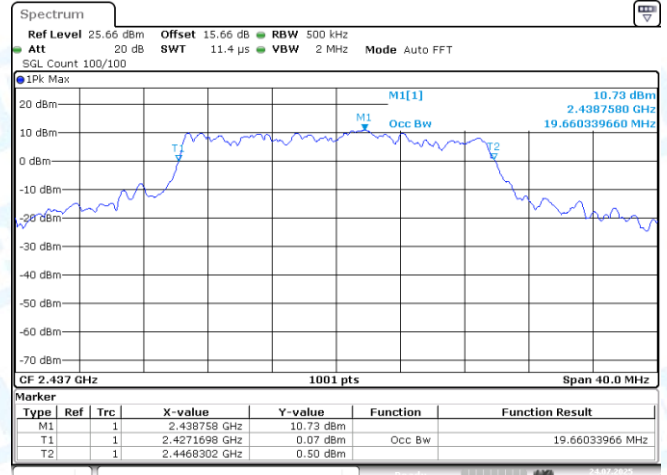
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11N40SISO-Ant1-2452



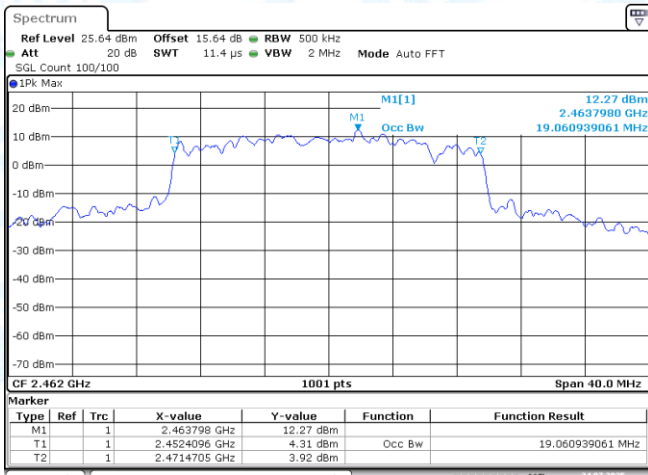
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11AX20SISO-Ant1-2412



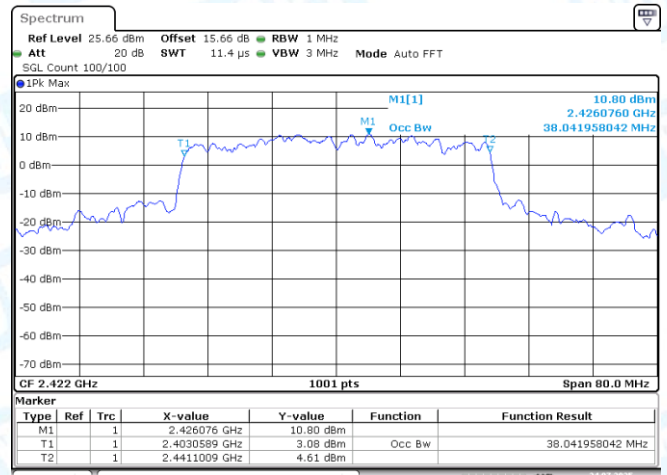
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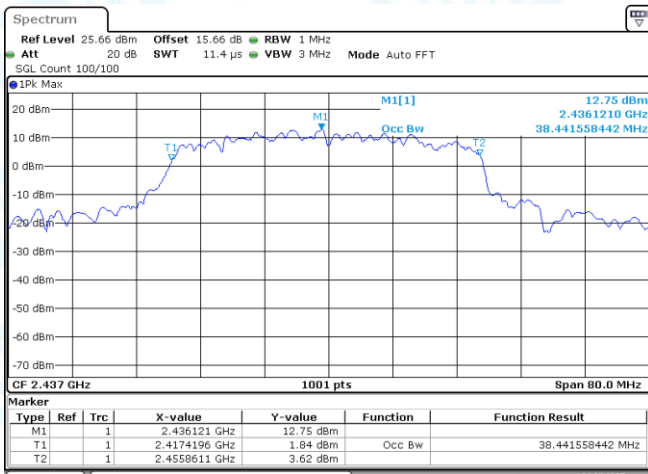
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11AX20SISO-Ant1-2462



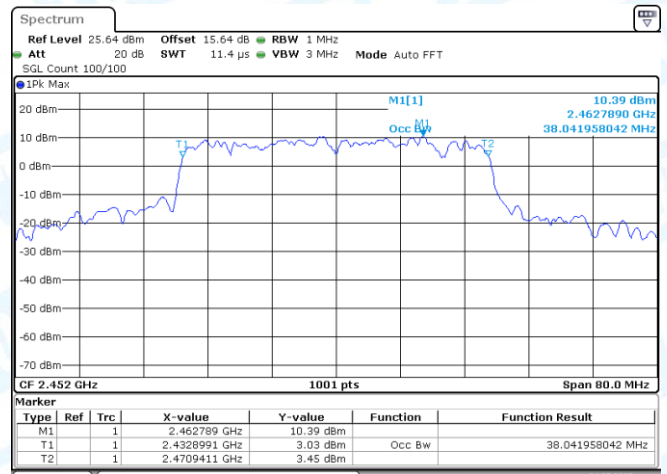
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11AX40SISO-Ant1-2422



Date: 24.JUL.2025 14:59:04

11AX40SISO-Ant1-2437



Date: 24.JUL.2025 15:09:00

11AX40SISO-Ant1-2452

3. Maximum conducted output power

3.1 Test Result Peak

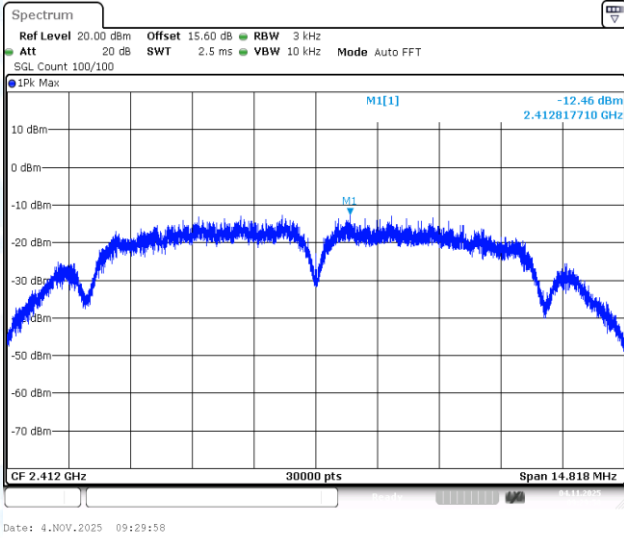
Test Mode	Ant.	Frequency [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	13.43	≤30.00	1.19	14.62	≤36.00	PASS
11B	Ant1	2437	15.54	≤30.00	1.19	16.73	≤36.00	PASS
11B	Ant1	2462	12.29	≤30.00	1.19	13.48	≤36.00	PASS
11G	Ant1	2412	17.39	≤30.00	1.19	18.58	≤36.00	PASS
11G	Ant1	2437	18.11	≤30.00	1.19	19.30	≤36.00	PASS
11G	Ant1	2462	16.76	≤30.00	1.19	17.95	≤36.00	PASS
11N20SISO	Ant1	2412	18.24	≤30.00	1.19	19.43	≤36.00	PASS
11N20SISO	Ant1	2437	18.81	≤30.00	1.19	20.00	≤36.00	PASS
11N20SISO	Ant1	2462	17.99	≤30.00	1.19	19.18	≤36.00	PASS
11N40SISO	Ant1	2422	17.99	≤30.00	1.19	19.18	≤36.00	PASS
11N40SISO	Ant1	2437	18.73	≤30.00	1.19	19.92	≤36.00	PASS
11N40SISO	Ant1	2452	18.50	≤30.00	1.19	19.69	≤36.00	PASS
11AX20SISO	Ant1	2412	25.23	≤30.00	1.19	26.42	≤36.00	PASS
11AX20SISO	Ant1	2437	25.11	≤30.00	1.19	26.30	≤36.00	PASS
11AX20SISO	Ant1	2462	25.12	≤30.00	1.19	26.31	≤36.00	PASS
11AX40SISO	Ant1	2422	25.10	≤30.00	1.19	26.29	≤36.00	PASS
11AX40SISO	Ant1	2437	26.07	≤30.00	1.19	27.26	≤36.00	PASS
11AX40SISO	Ant1	2452	24.90	≤30.00	1.19	26.09	≤36.00	PASS

4. Maximum power spectral density

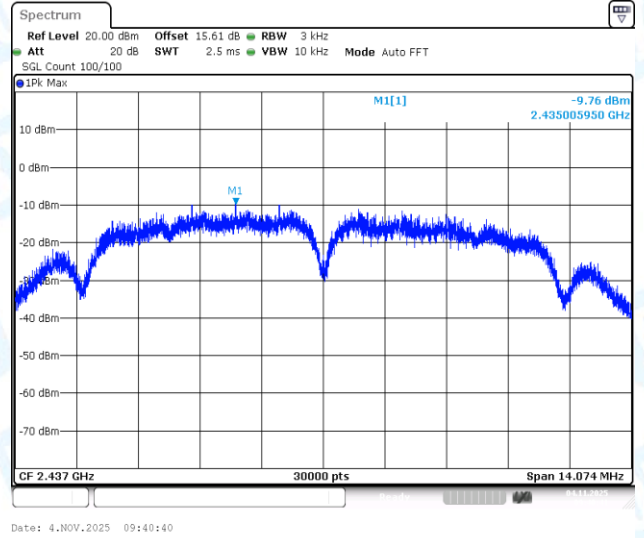
4.1 Test Result

TestMode	Ant.	Frequency [MHz]	RawData [dBm/3kHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-12.46	-12.46	≤8.00	PASS
11B	Ant1	2437	-9.76	-9.76	≤8.00	PASS
11B	Ant1	2462	-14.35	-14.35	≤8.00	PASS
11G	Ant1	2412	-13.57	-13.57	≤8.00	PASS
11G	Ant1	2437	-13.43	-13.43	≤8.00	PASS
11G	Ant1	2462	-14.28	-14.28	≤8.00	PASS
11N20SISO	Ant1	2412	-13.58	-13.58	≤8.00	PASS
11N20SISO	Ant1	2437	-12.49	-12.49	≤8.00	PASS
11N20SISO	Ant1	2462	-13.62	-13.62	≤8.00	PASS
11N40SISO	Ant1	2422	-16.02	-16.02	≤8.00	PASS
11N40SISO	Ant1	2437	-15.66	-15.66	≤8.00	PASS
11N40SISO	Ant1	2452	-16.14	-16.14	≤8.00	PASS
11AX20SISO	Ant1	2412	-6.31	-6.31	≤8.00	PASS
11AX20SISO	Ant1	2437	-7.47	-7.47	≤8.00	PASS
11AX20SISO	Ant1	2462	-6.98	-6.98	≤8.00	PASS
11AX40SISO	Ant1	2422	-10.64	-10.64	≤8.00	PASS
11AX40SISO	Ant1	2437	-9.32	-9.32	≤8.00	PASS
11AX40SISO	Ant1	2452	-9.27	-9.27	≤8.00	PASS

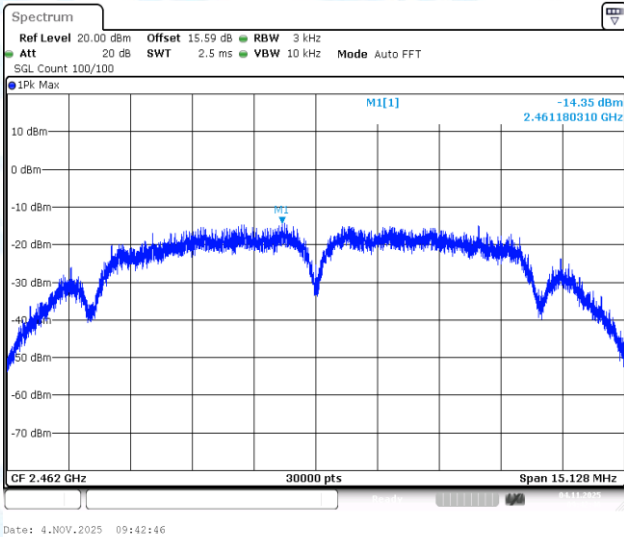
4.2 Test Graphs



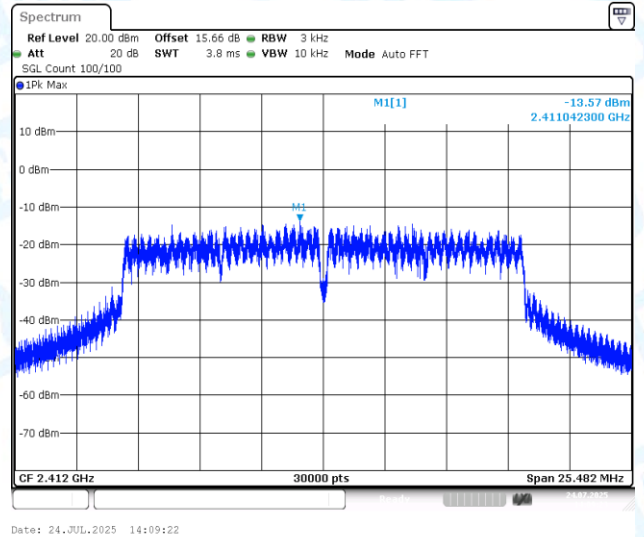
11B-Ant1-2412-PASS



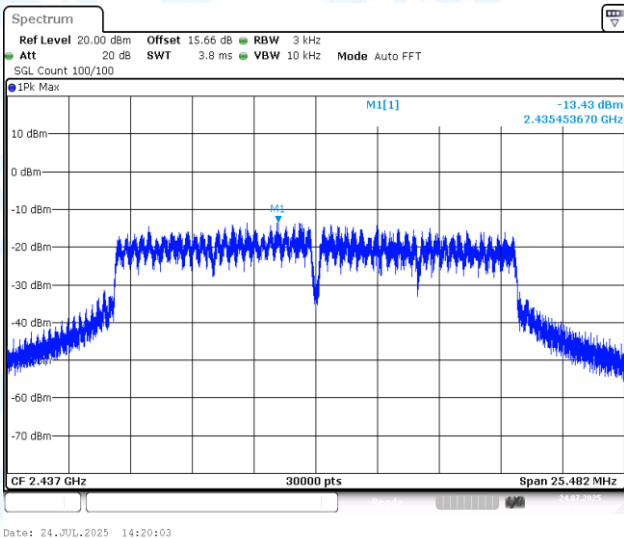
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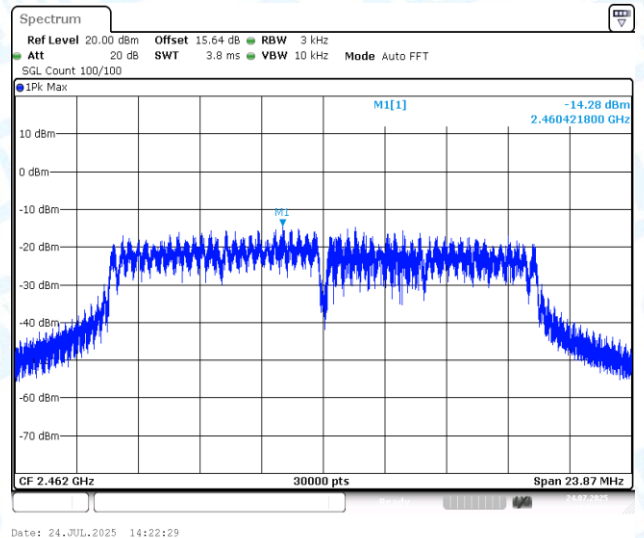
11B-Ant1-2462-PASS



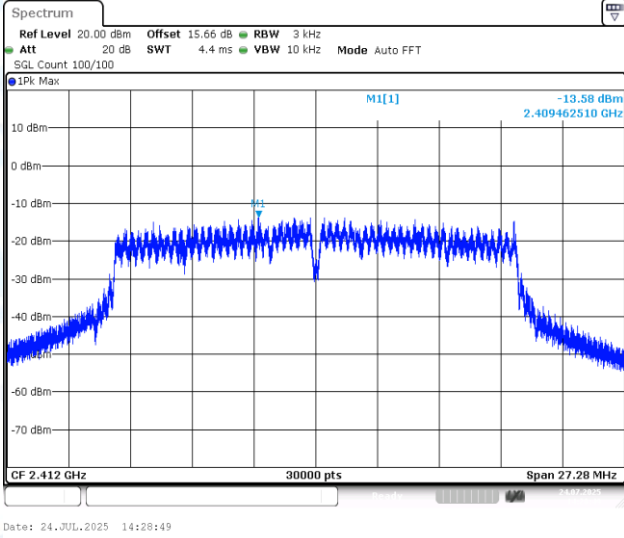
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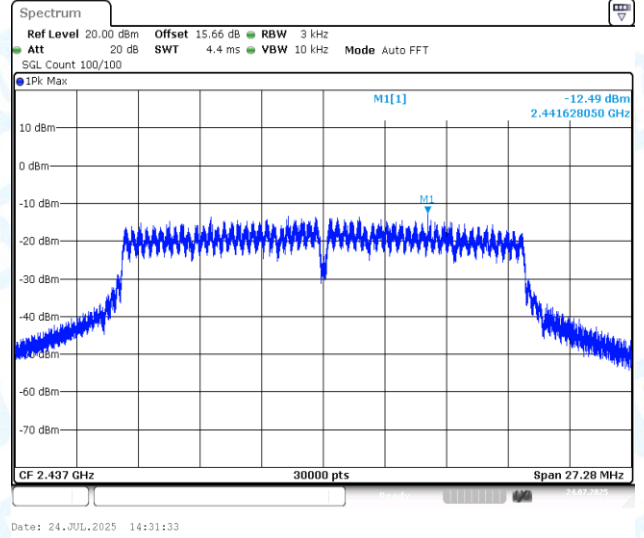
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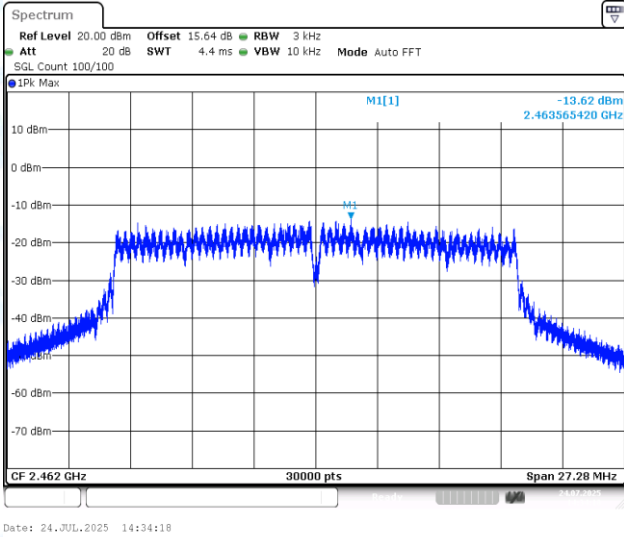
11G-Ant1-2462-PASS



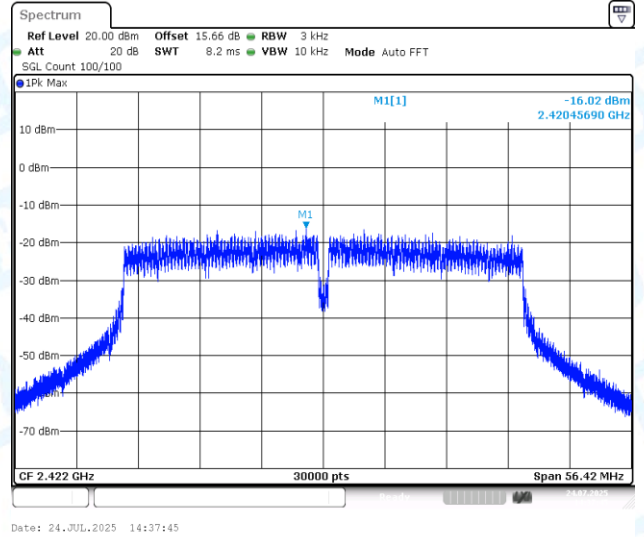
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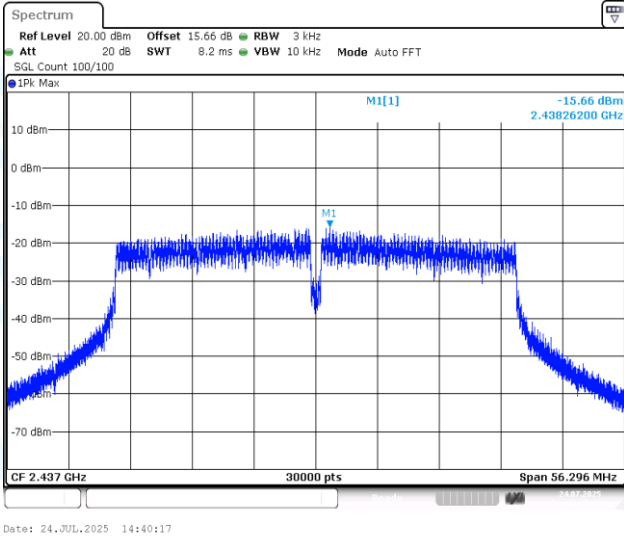
11N20SISO-Ant1-2437-PASS



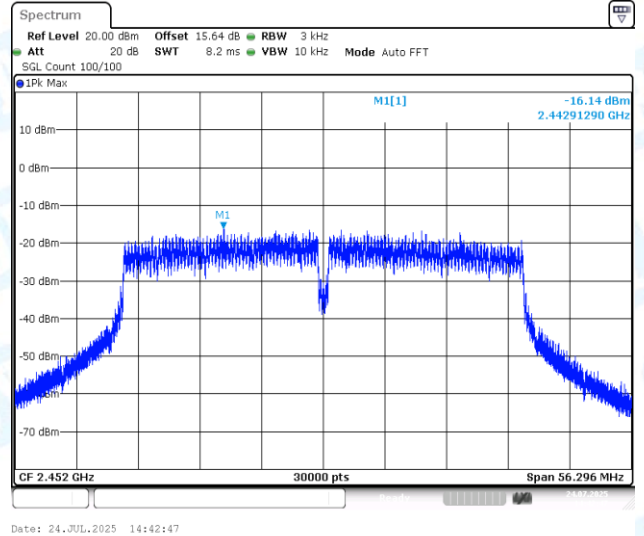
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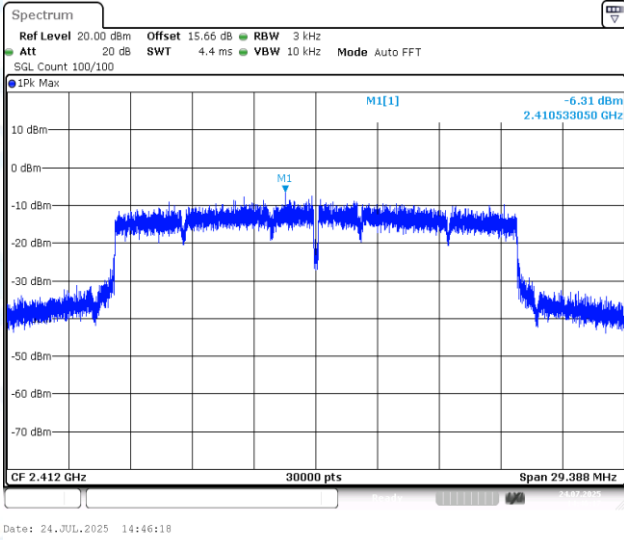
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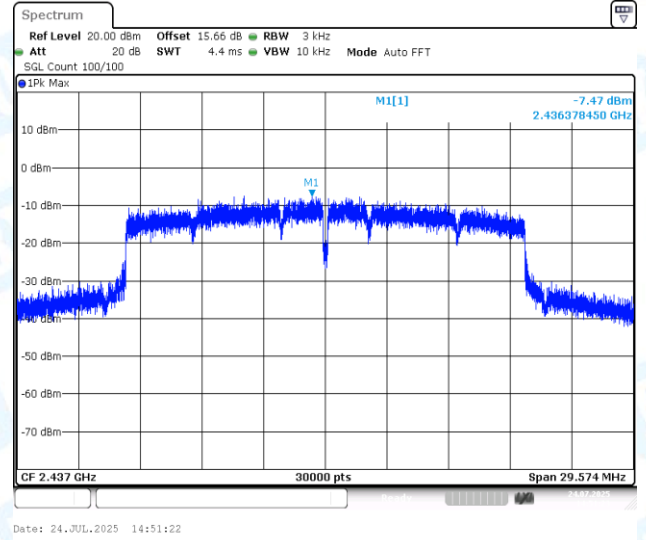
11N40SISO-Ant1-2437-PASS



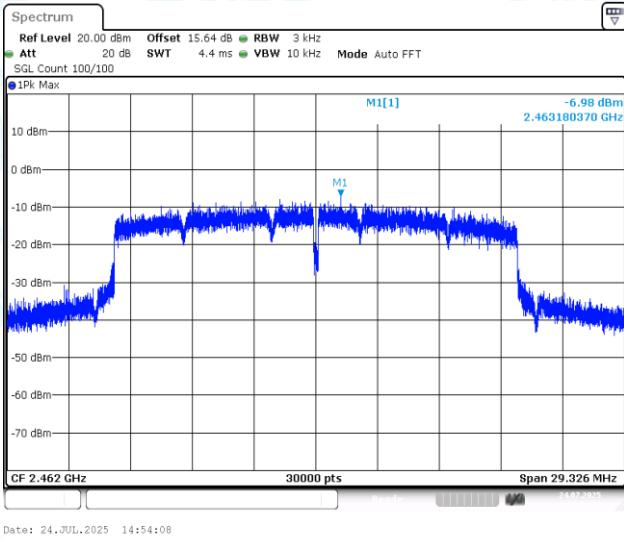
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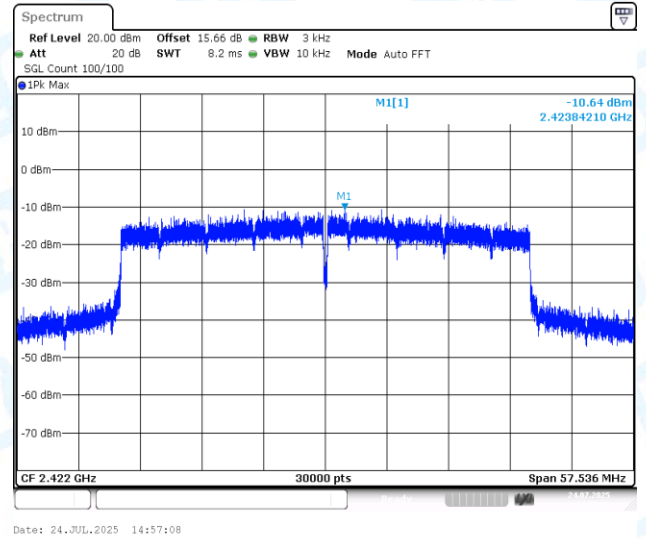
11AX20SISO-Ant1-2412-PASS



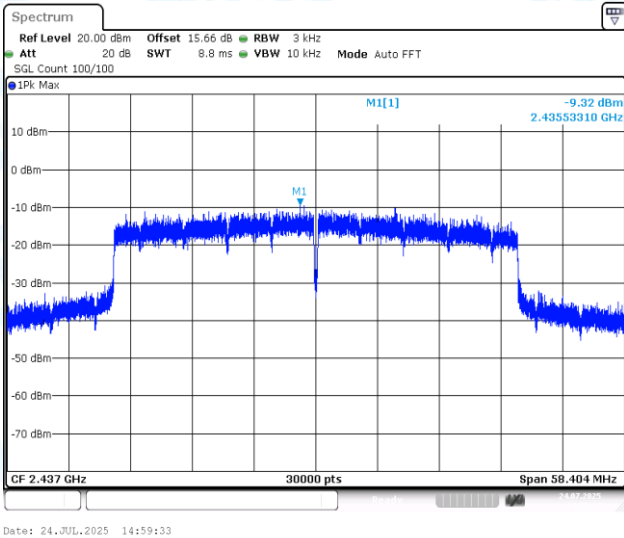
11AX20SISO-Ant1-2437-PASS



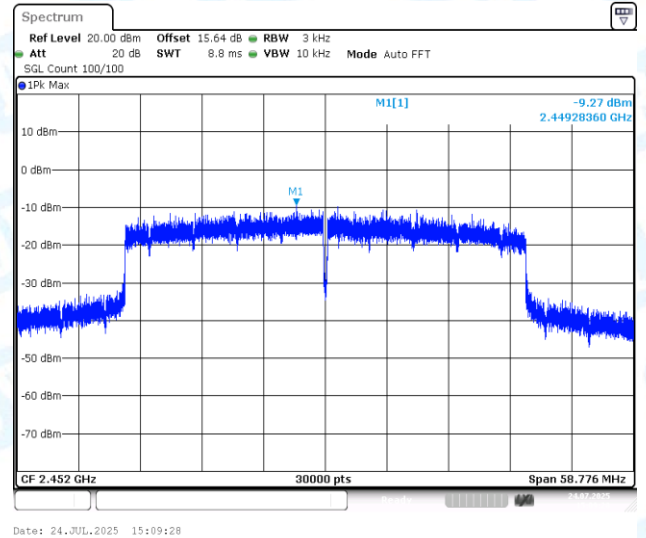
11AX20SISO-Ant1-2462-PASS



11AX40SISO-Ant1-2422-PASS



11AX40SISO-Ant1-2437-PASS



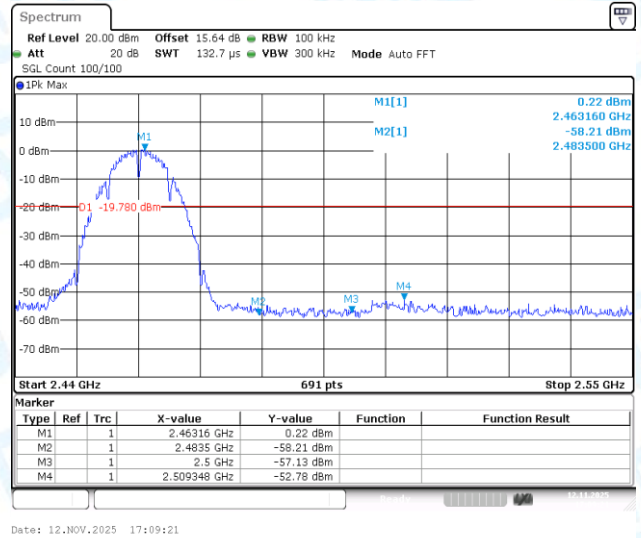
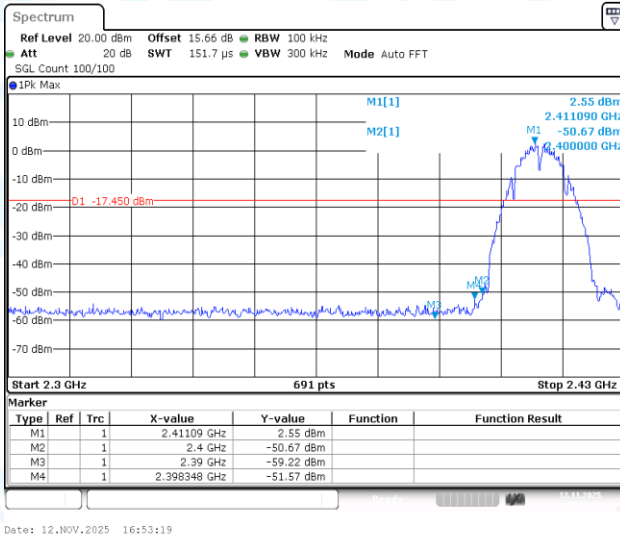
11AX40SISO-Ant1-2452-PASS

5. Band edge measurements

5.1 Test Result

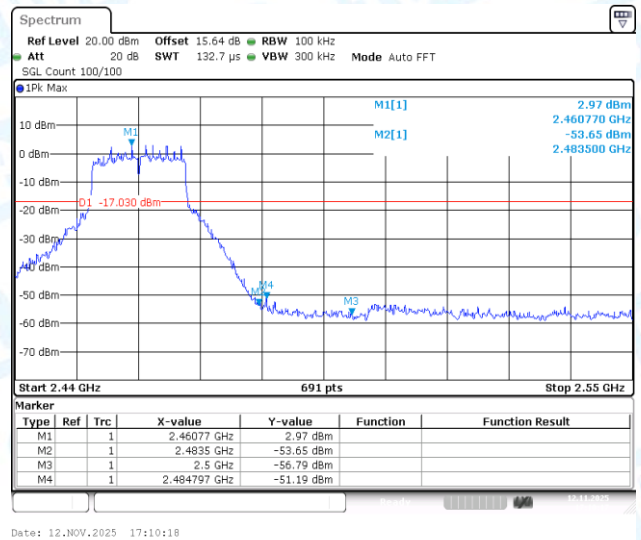
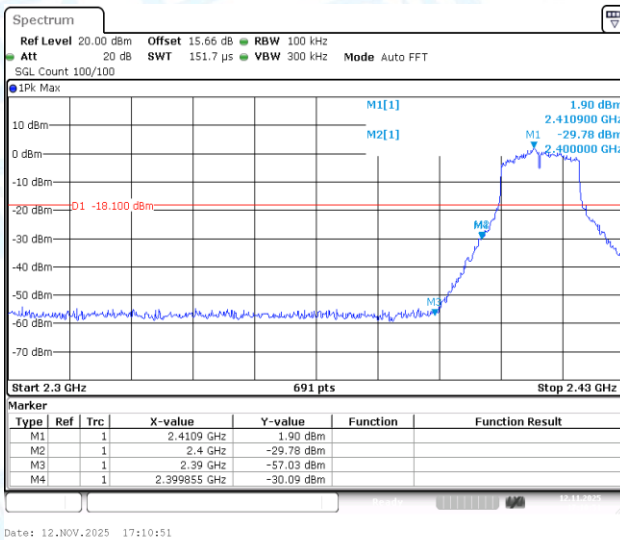
TestMode	Ant.	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.55	-51.57	≤-17.45	PASS
11B	Ant1	High	2462	0.22	-52.78	≤-19.78	PASS
11G	Ant1	Low	2412	1.90	-30.09	≤-18.1	PASS
11G	Ant1	High	2462	2.97	-51.19	≤-17.03	PASS
11N20SISO	Ant1	Low	2412	1.52	-29.93	≤-18.48	PASS
11N20SISO	Ant1	High	2462	0.96	-52.48	≤-19.04	PASS
11N40SISO	Ant1	Low	2422	1.23	-35.32	≤-18.77	PASS
11N40SISO	Ant1	High	2452	2.47	-40.2	≤-17.53	PASS
11AX20SISO	Ant1	Low	2412	4.33	-28.78	≤-15.67	PASS
11AX20SISO	Ant1	High	2462	1.64	-52.37	≤-18.36	PASS
11AX40SISO	Ant1	Low	2422	2.20	-35.01	≤-17.8	PASS
11AX40SISO	Ant1	High	2452	1.67	-39.96	≤-18.33	PASS

5.2 Test Graphs



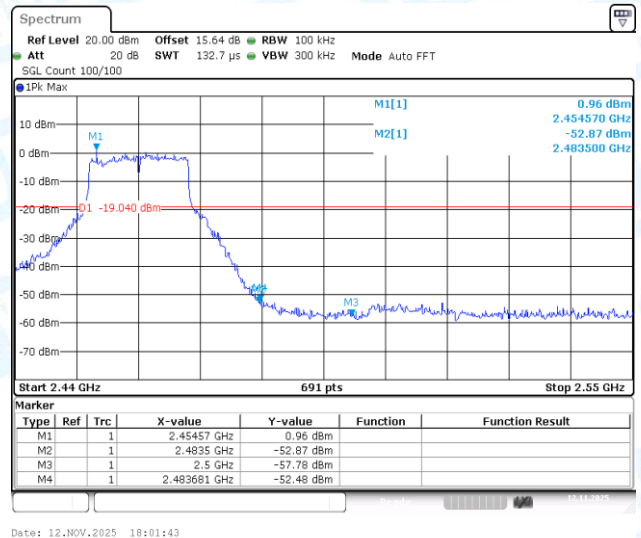
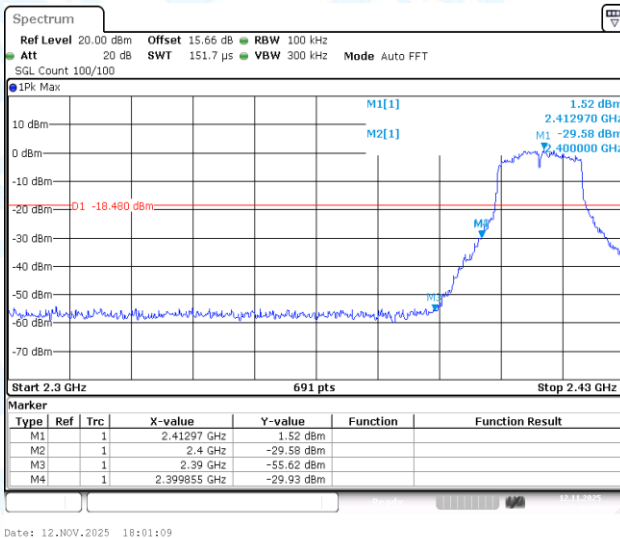
11B-Ant1-2412-PASS

11B-Ant1-2462-PASS



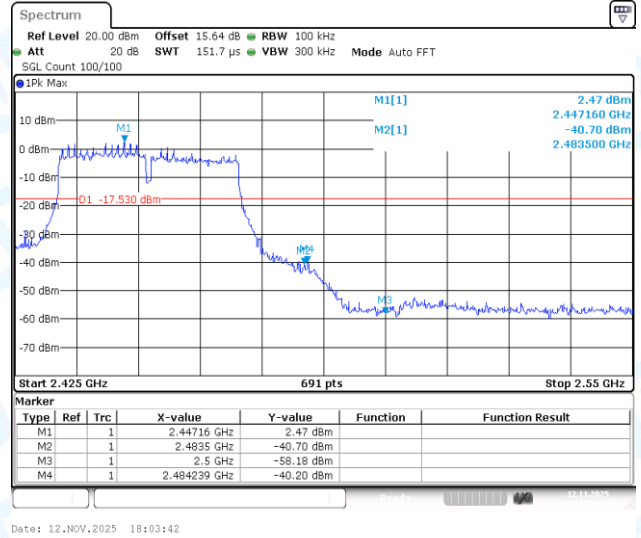
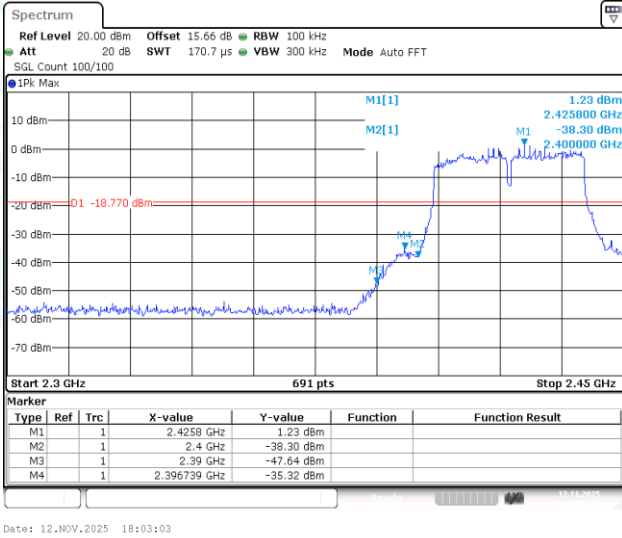
11G-Ant1-2412-PASS

11G-Ant1-2462-PASS



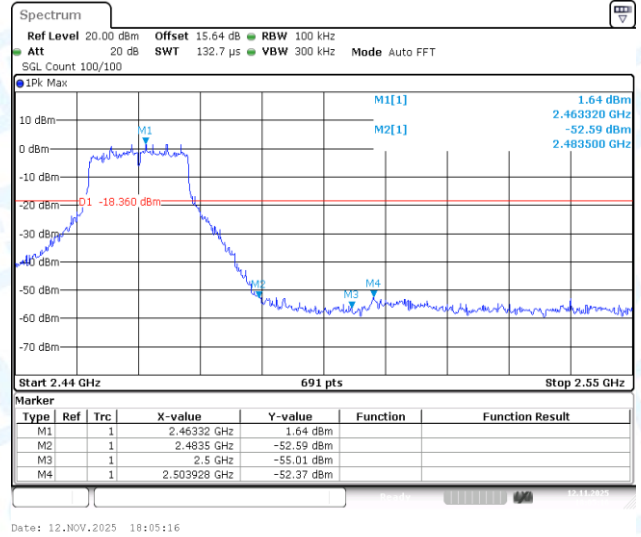
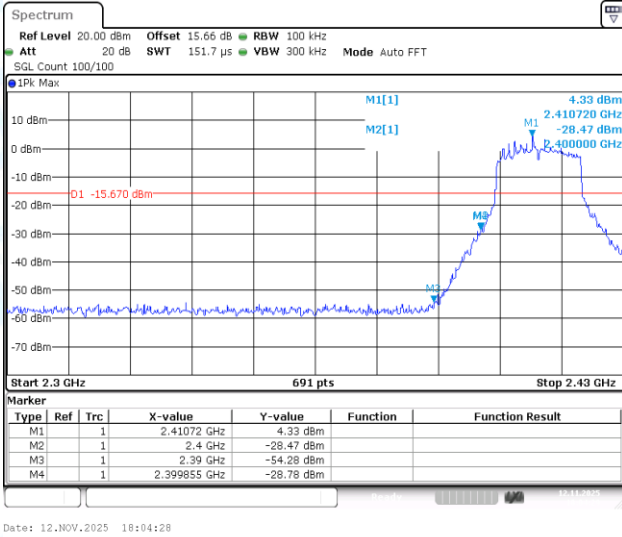
11N20SISO-Ant1-2412-PASS

11N20SISO-Ant1-2462-PASS



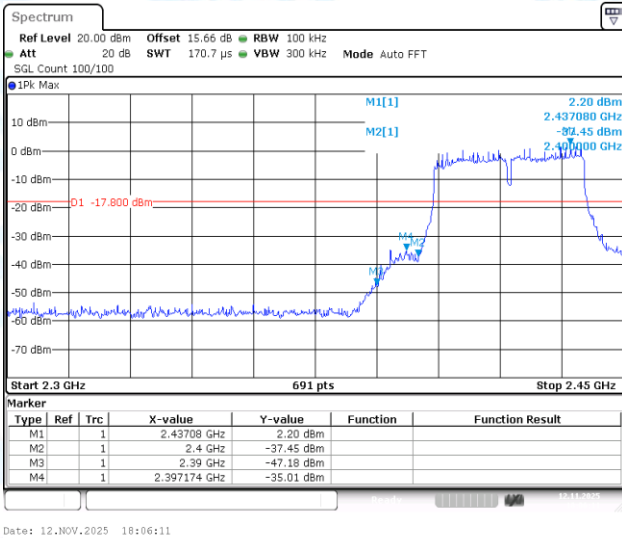
11N40SISO-Ant1-2422-PASS

11N40SISO-Ant1-2452-PASS



11AX20SISO-Ant1-2412-PASS

11AX20SISO-Ant1-2462-PASS



11AX40SISO-Ant1-2422-PASS

11AX40SISO-Ant1-2452-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	4.72	4.72	---	PASS
11B	Ant1	2412	30~1000	4.72	-43.31	≤-15.28	PASS
11B	Ant1	2412	1000~26500	4.72	-27.2	≤-15.28	PASS
11B	Ant1	2437	0~Reference	7.42	7.42	---	PASS
11B	Ant1	2437	30~1000	7.42	-44.27	≤-12.58	PASS
11B	Ant1	2437	1000~26500	7.42	-27.26	≤-12.58	PASS
11B	Ant1	2462	0~Reference	4.29	4.29	---	PASS
11B	Ant1	2462	30~1000	4.29	-43.04	≤-15.71	PASS
11B	Ant1	2462	1000~26500	4.29	-27.84	≤-15.71	PASS
11G	Ant1	2412	0~Reference	5.43	5.43	---	PASS
11G	Ant1	2412	30~1000	5.43	-44.11	≤-14.57	PASS
11G	Ant1	2412	1000~26500	5.43	-27.63	≤-14.57	PASS
11G	Ant1	2437	0~Reference	8.49	8.49	---	PASS
11G	Ant1	2437	30~1000	8.49	-44.07	≤-11.51	PASS
11G	Ant1	2437	1000~26500	8.49	-26.74	≤-11.51	PASS
11G	Ant1	2462	0~Reference	3.21	3.21	---	PASS
11G	Ant1	2462	30~1000	3.21	-43.55	≤-16.79	PASS
11G	Ant1	2462	1000~26500	3.21	-28.08	≤-16.79	PASS
11N20SISO	Ant1	2412	0~Reference	5.31	5.31	---	PASS
11N20SISO	Ant1	2412	30~1000	5.31	-43.97	≤-14.69	PASS
11N20SISO	Ant1	2412	1000~26500	5.31	-27.41	≤-14.69	PASS
11N20SISO	Ant1	2437	0~Reference	8.43	8.43	---	PASS
11N20SISO	Ant1	2437	30~1000	8.43	-43.78	≤-11.57	PASS
11N20SISO	Ant1	2437	1000~26500	8.43	-27.58	≤-11.57	PASS
11N20SISO	Ant1	2462	0~Reference	6.32	6.32	---	PASS
11N20SISO	Ant1	2462	30~1000	6.32	-43.87	≤-13.68	PASS
11N20SISO	Ant1	2462	1000~26500	6.32	-27.45	≤-13.68	PASS
11N40SISO	Ant1	2422	0~Reference	1.82	1.82	---	PASS
11N40SISO	Ant1	2422	30~1000	1.82	-44.77	≤-18.18	PASS
11N40SISO	Ant1	2422	1000~26500	1.82	-27.44	≤-18.18	PASS
11N40SISO	Ant1	2437	0~Reference	4.07	4.07	---	PASS
11N40SISO	Ant1	2437	30~1000	4.07	-43.3	≤-15.93	PASS
11N40SISO	Ant1	2437	1000~26500	4.07	-27.82	≤-15.93	PASS
11N40SISO	Ant1	2452	0~Reference	4.30	4.30	---	PASS
11N40SISO	Ant1	2452	30~1000	4.30	-42.67	≤-15.7	PASS
11N40SISO	Ant1	2452	1000~26500	4.30	-27.82	≤-15.7	PASS
11AX20SISO	Ant1	2412	0~Reference	8.84	8.84	---	PASS
11AX20SISO	Ant1	2412	30~1000	8.84	-43.46	≤-11.16	PASS
11AX20SISO	Ant1	2412	1000~26500	8.84	-27.76	≤-11.16	PASS
11AX20SISO	Ant1	2437	0~Reference	8.94	8.94	---	PASS

11AX20SISO	Ant1	2437	30~1000	8.94	-43.52	≤-11.06	PASS
11AX20SISO	Ant1	2437	1000~26500	8.94	-27.65	≤-11.06	PASS
11AX20SISO	Ant1	2462	0~Reference	3.33	3.33	---	PASS
11AX20SISO	Ant1	2462	30~1000	3.33	-44.66	≤-16.67	PASS
11AX20SISO	Ant1	2462	1000~26500	3.33	-27.56	≤-16.67	PASS
11AX40SISO	Ant1	2422	0~Reference	5.51	5.51	---	PASS
11AX40SISO	Ant1	2422	30~1000	5.51	-44.07	≤-14.49	PASS
11AX40SISO	Ant1	2422	1000~26500	5.51	-27.49	≤-14.49	PASS
11AX40SISO	Ant1	2437	0~Reference	7.29	7.29	---	PASS
11AX40SISO	Ant1	2437	30~1000	7.29	-44.31	≤-12.71	PASS
11AX40SISO	Ant1	2437	1000~26500	7.29	-27.99	≤-12.71	PASS
11AX40SISO	Ant1	2452	0~Reference	4.26	4.26	---	PASS
11AX40SISO	Ant1	2452	30~1000	4.26	-43.71	≤-15.74	PASS
11AX40SISO	Ant1	2452	1000~26500	4.26	-26.78	≤-15.74	PASS