

FCC Appendix RF Test Data for BT

FCC ID : 2AOMX-PBX-814

Company : QFX Inc.

EUT : Bluetooth speaker

Model Number : PBX-814

Report No. : CTA26060200801

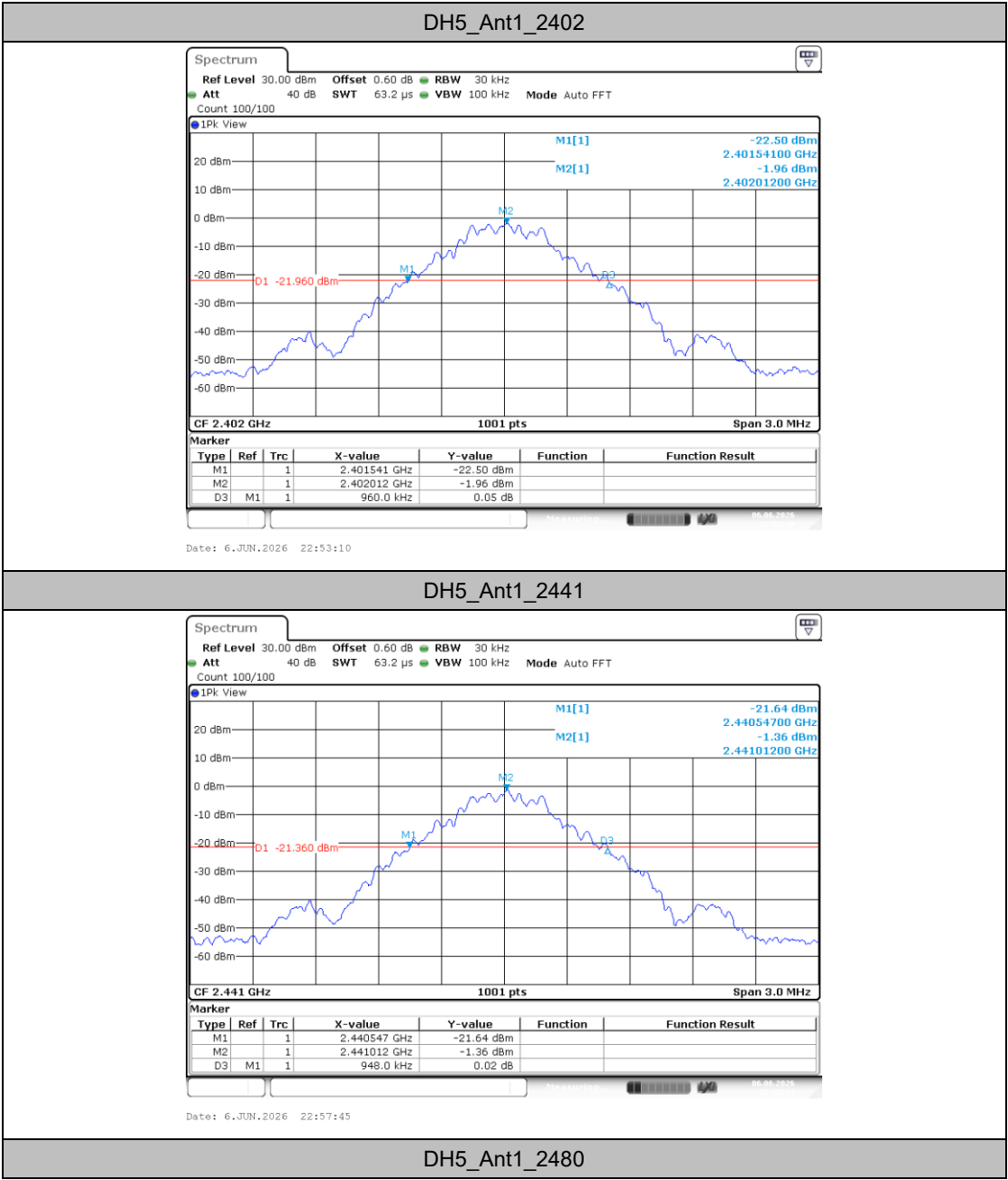
Reviewed By : Eric Wang

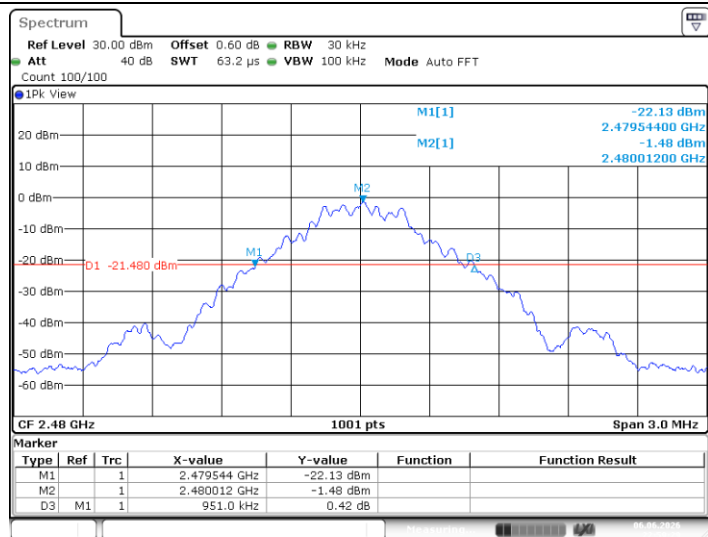
Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.96	2401.54	2402.50	---	---
		2441	0.95	2440.55	2441.50	---	---
		2480	0.95	2479.54	2480.50	---	---
2DH5	Ant1	2402	1.32	2401.35	2402.67	---	---
		2441	1.32	2440.36	2441.68	---	---
		2480	1.29	2479.38	2480.67	---	---
3DH5	Ant1	2402	1.29	2401.37	2402.65	---	---
		2441	1.29	2440.37	2441.65	---	---
		2480	1.29	2479.37	2480.65	---	---

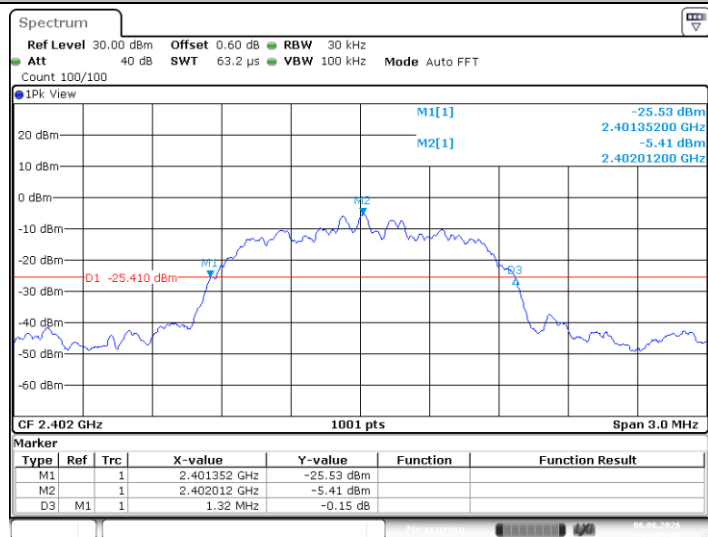
Test Graphs





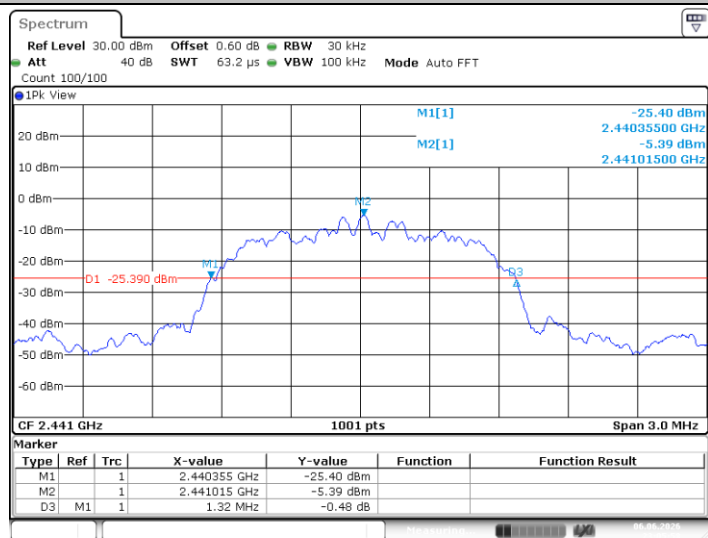
Date: 6.JUN.2026 22:59:30

2DH5_Ant1_2402



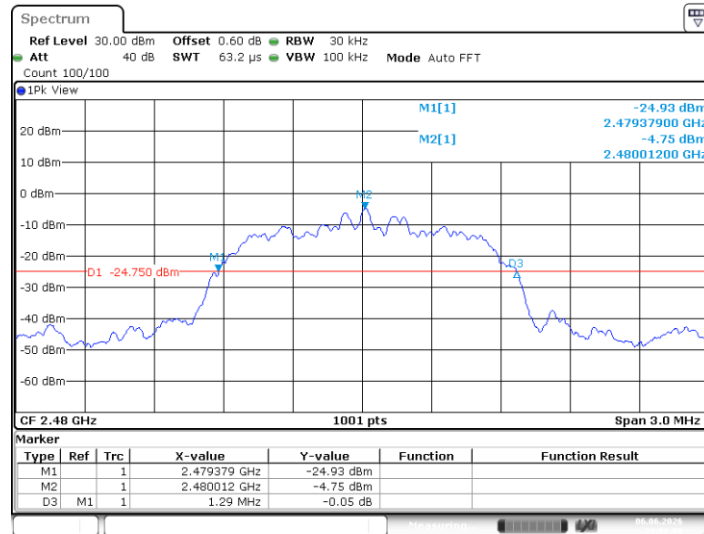
Date: 6.JUN.2026 23:03:00

2DH5_Ant1_2441



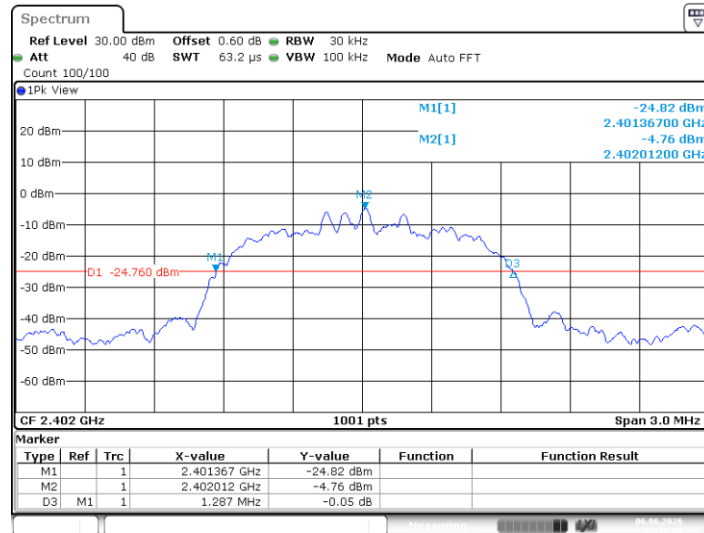
Date: 6.JUN.2026 23:05:58

2DH5_Ant1_2480



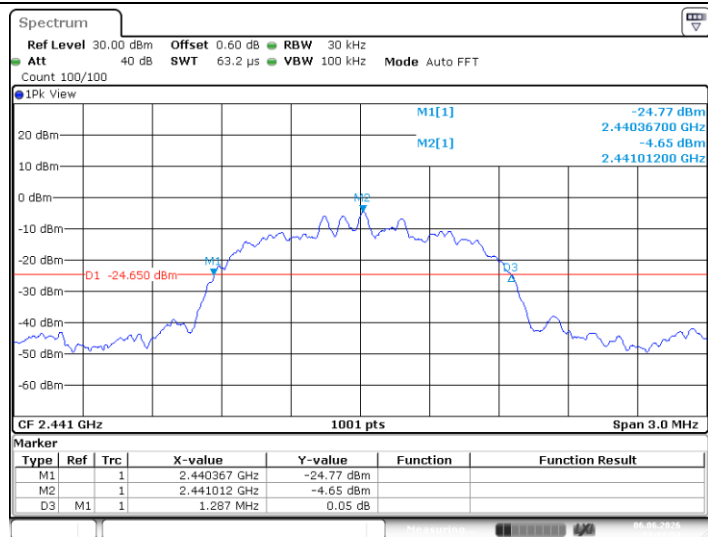
Date: 6.JUN.2026 23:08:00

3DH5_Ant1_2402



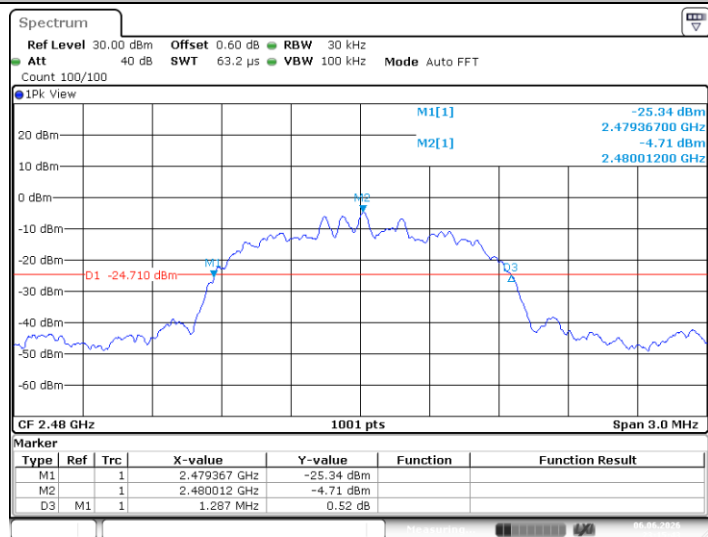
Date: 6.JUN.2026 23:10:58

3DH5_Ant1_2441



Date: 6.JUN.2026 23:13:55

3DH5_Ant1_2480



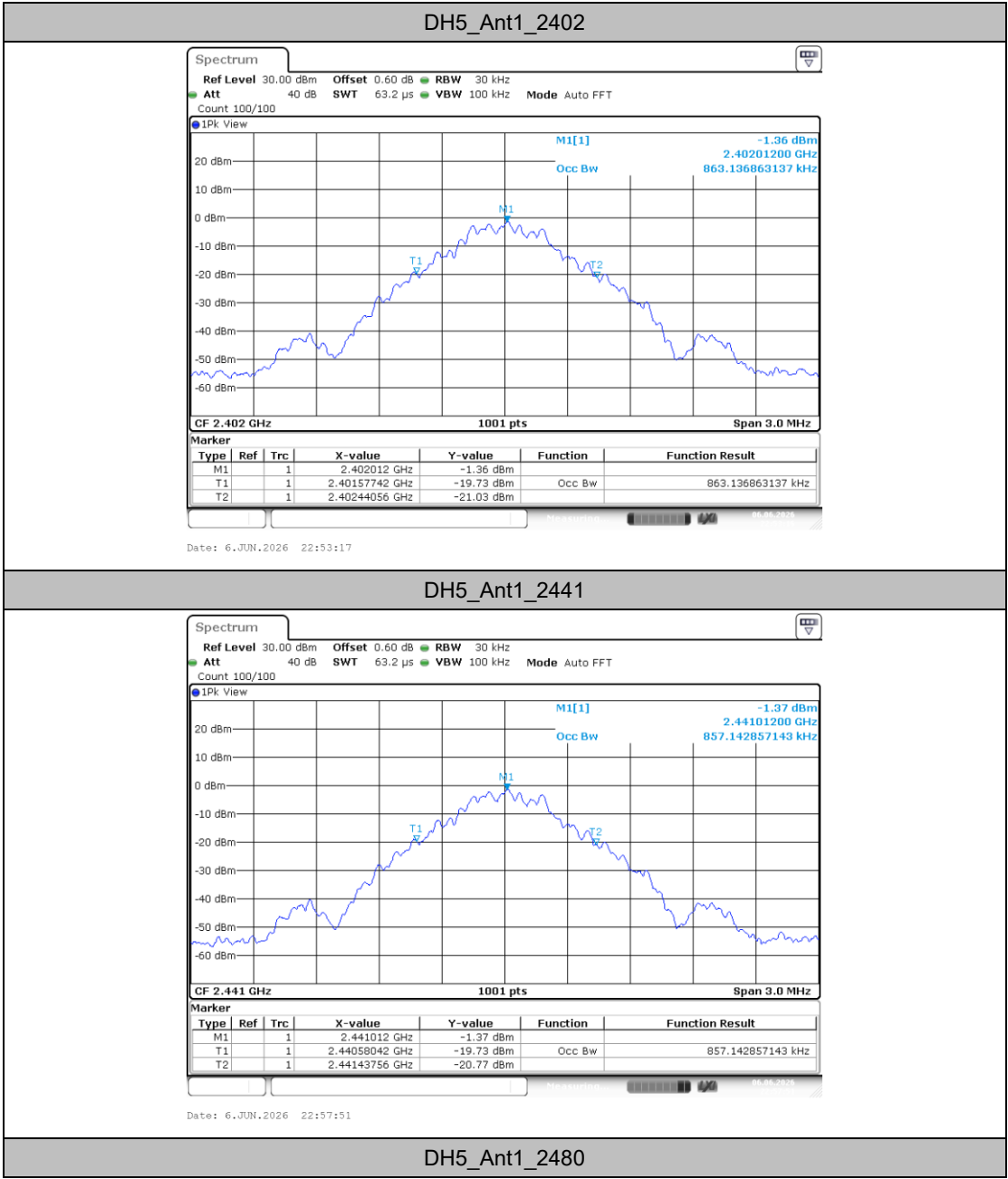
Date: 6.JUN.2026 23:15:43

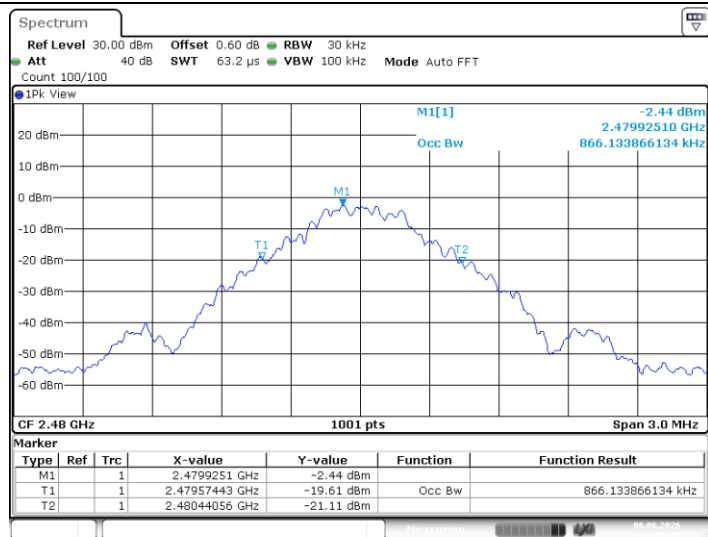
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86314	2401.5774	2402.4406	---	---
		2441	0.85714	2440.5804	2441.4376	---	---
		2480	0.86613	2479.5744	2480.4406	---	---
2DH5	Ant1	2402	1.1718	2401.4216	2402.5934	---	---
		2441	1.1748	2440.4216	2441.5964	---	---
		2480	1.1778	2479.4216	2480.5994	---	---
3DH5	Ant1	2402	1.1748	2401.4246	2402.5994	---	---
		2441	1.1748	2440.4246	2441.5994	---	---
		2480	1.1748	2479.4246	2480.5994	---	---

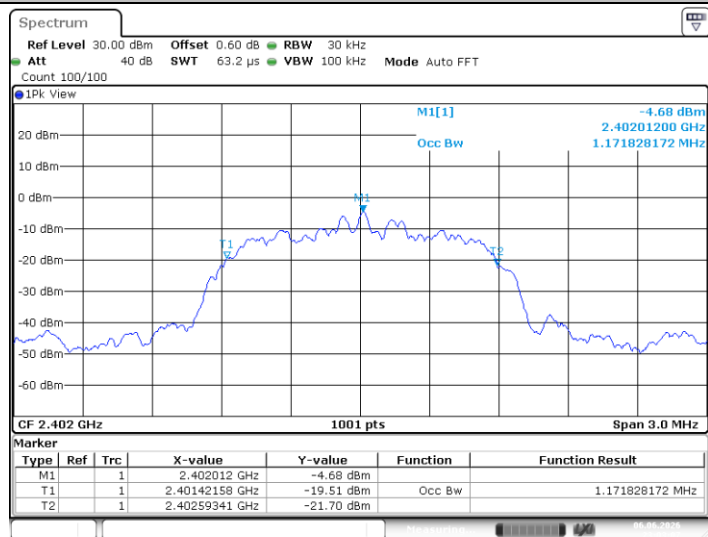
Test Graphs





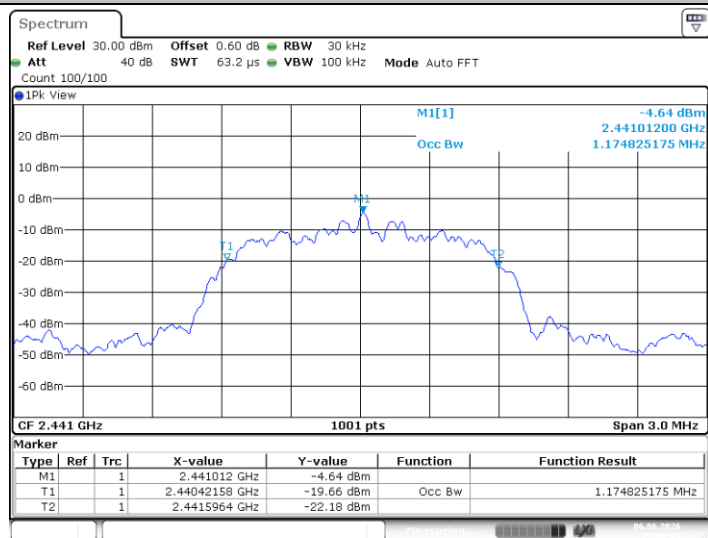
Date: 6.JUN.2026 22:59:36

2DH5_Ant1_2402



Date: 6.JUN.2026 23:03:07

2DH5_Ant1_2441



Date: 6.JUN.2026 23:06:05

2DH5_Ant1_2480



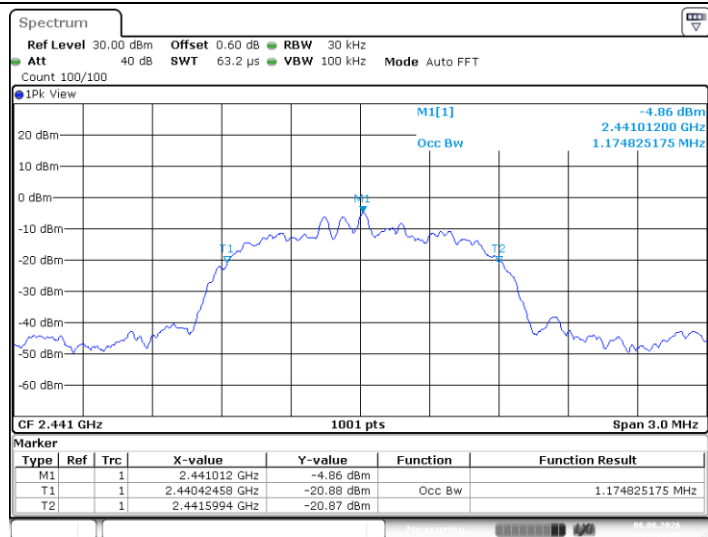
Date: 6.JUN.2026 23:08:07

3DH5_Ant1_2402



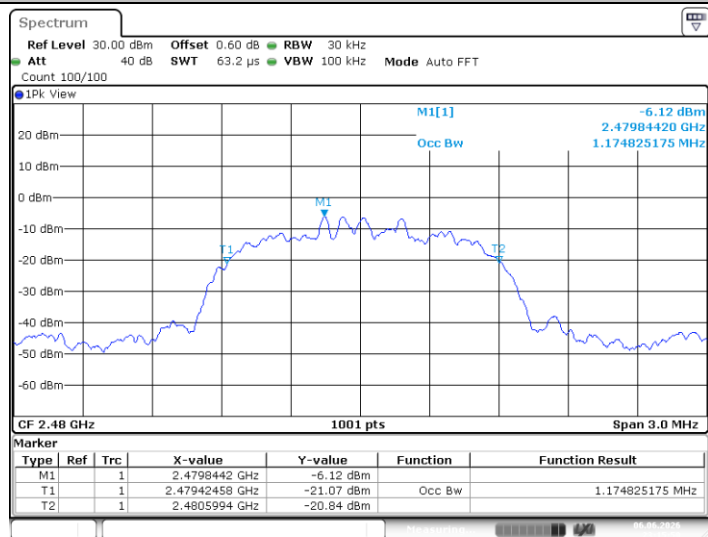
Date: 6.JUN.2026 23:11:05

3DH5_Ant1_2441



Date: 6.JUN.2026 23:14:01

3DH5_Ant1_2480



Date: 6.JUN.2026 23:15:50

Appendix C: Maximum conducted output power

Test Result Peak

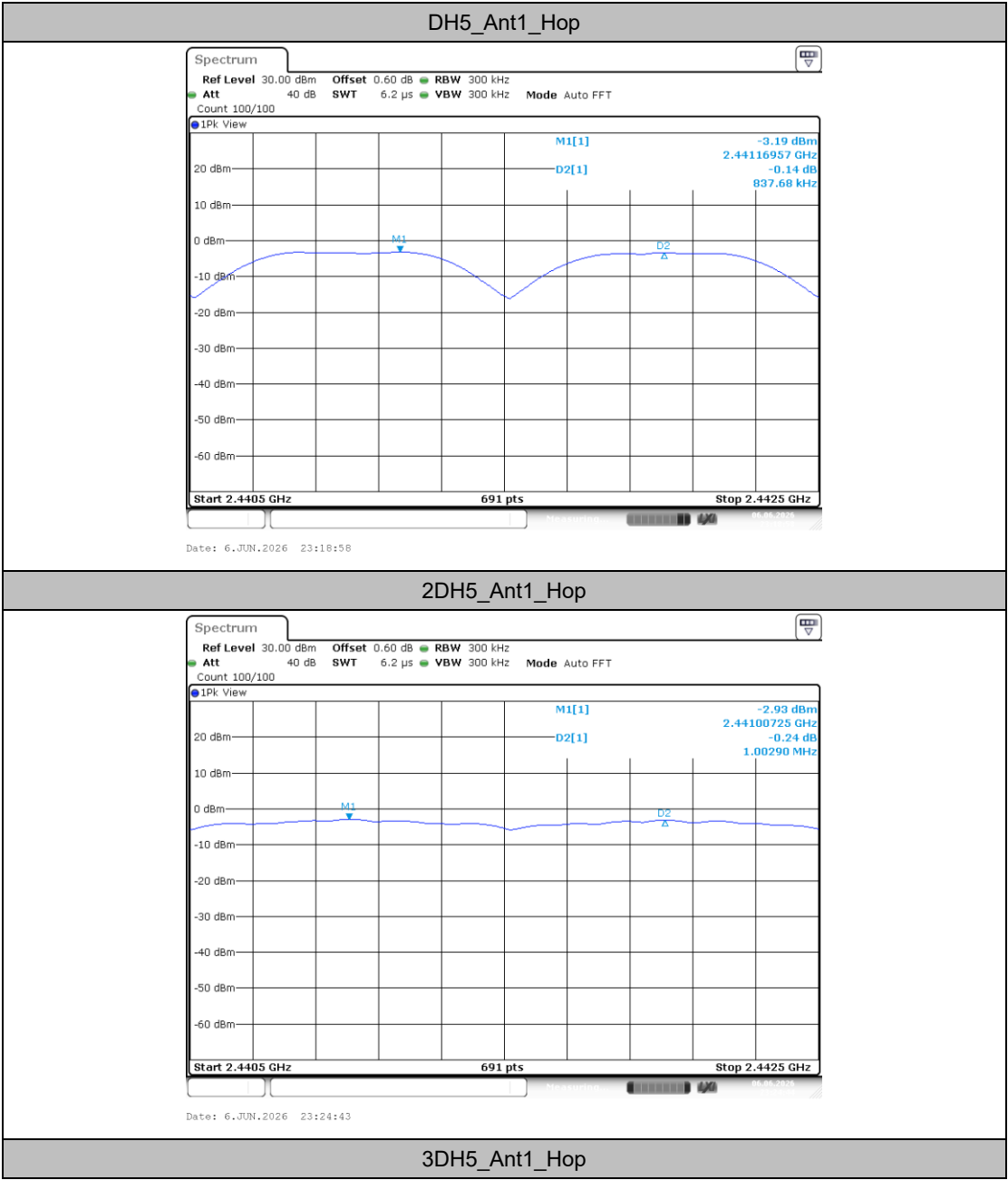
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.75	≤20.97	PASS
		2441	0.71	≤20.97	PASS
		2480	0.52	≤20.97	PASS
2DH5	Ant1	2402	-0.78	≤20.97	PASS
		2441	-0.34	≤20.97	PASS
		2480	-0.57	≤20.97	PASS
3DH5	Ant1	2402	-0.12	≤20.97	PASS
		2441	-0.08	≤20.97	PASS
		2480	-0.58	≤20.97	PASS

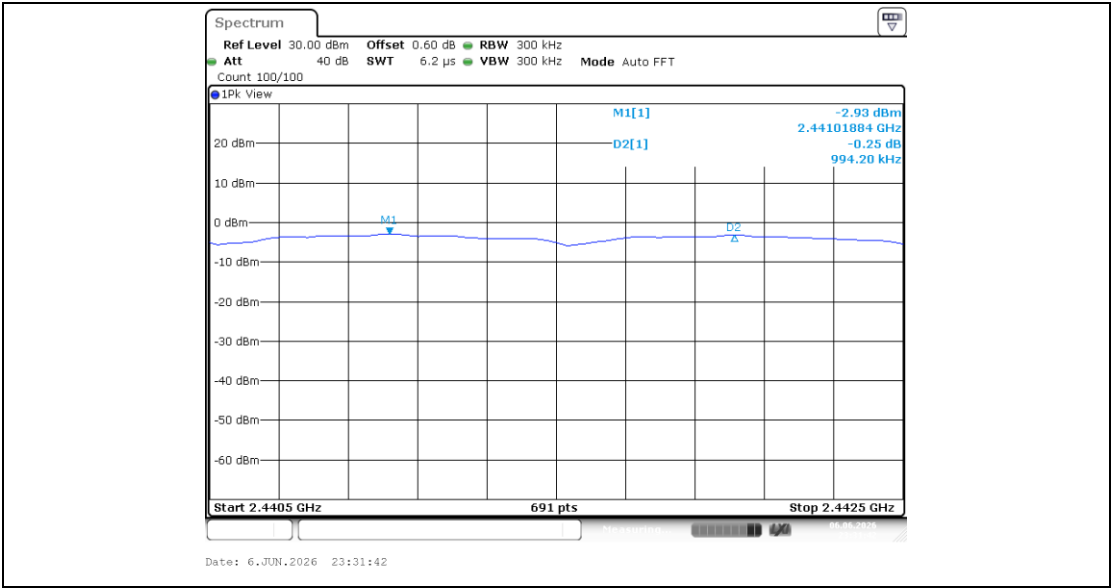
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.838	≥ 0.640	PASS
2DH5	Ant1	Hop	1.003	≥ 0.880	PASS
3DH5	Ant1	Hop	0.994	≥ 0.860	PASS

Test Graphs



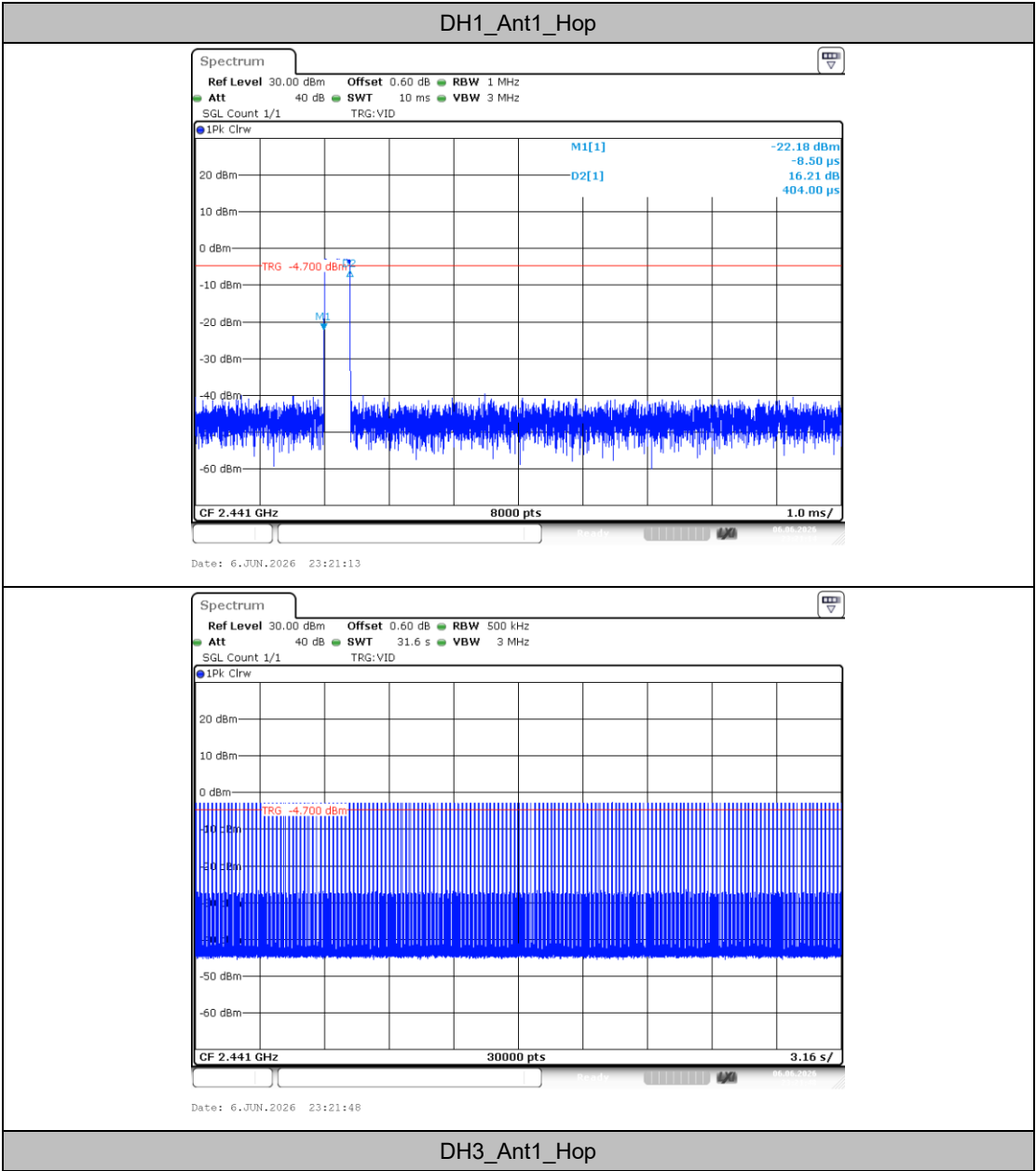


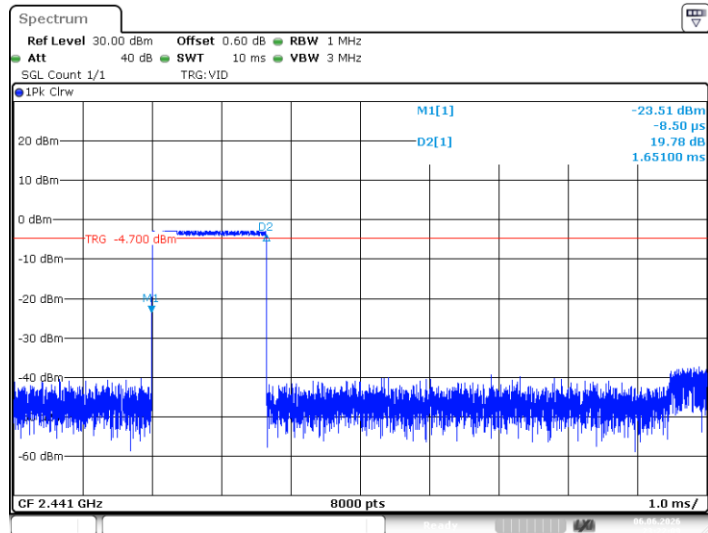
Appendix E: Time of occupancy

Test Result

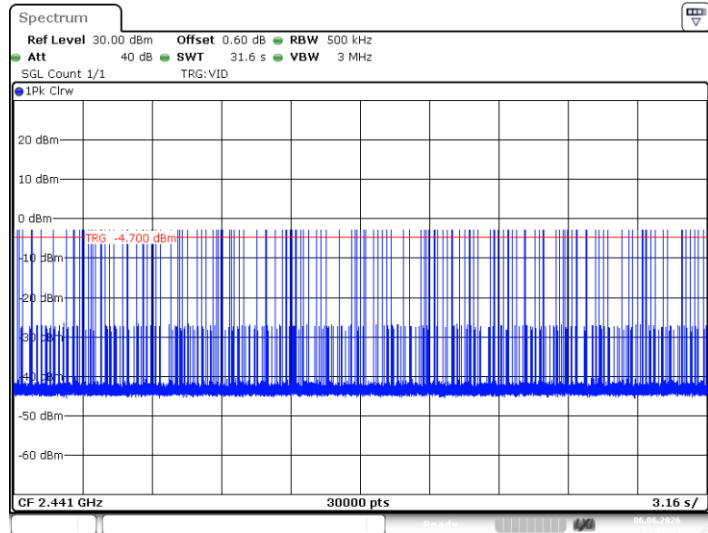
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.404	319	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.651	154	0.254	≤0.4	PASS
DH5	Ant1	Hop	2.892	104	0.301	≤0.4	PASS
2DH1	Ant1	Hop	0.413	317	0.131	≤0.4	PASS
2DH3	Ant1	Hop	1.658	167	0.277	≤0.4	PASS
2DH5	Ant1	Hop	2.898	109	0.316	≤0.4	PASS
3DH1	Ant1	Hop	0.413	317	0.131	≤0.4	PASS
3DH3	Ant1	Hop	1.655	158	0.261	≤0.4	PASS
3DH5	Ant1	Hop	2.899	110	0.319	≤0.4	PASS

Test Graphs



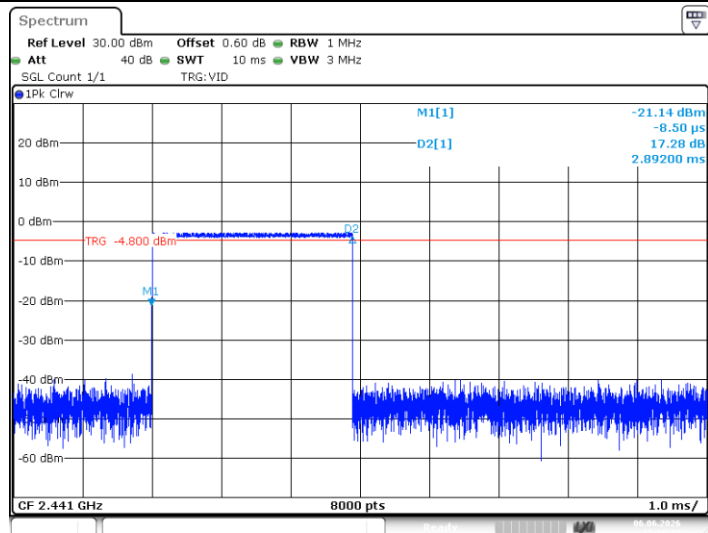


Date: 6.JUN.2026 23:22:09

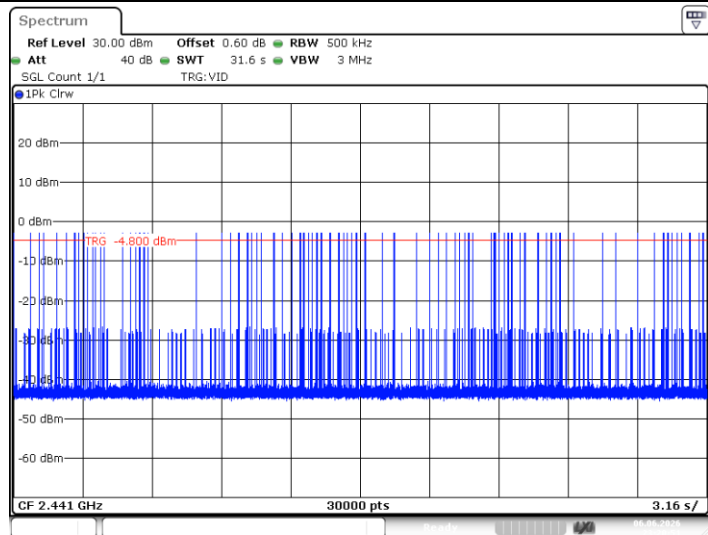


Date: 6.JUN.2026 23:22:43

DH5_Ant1_Hop

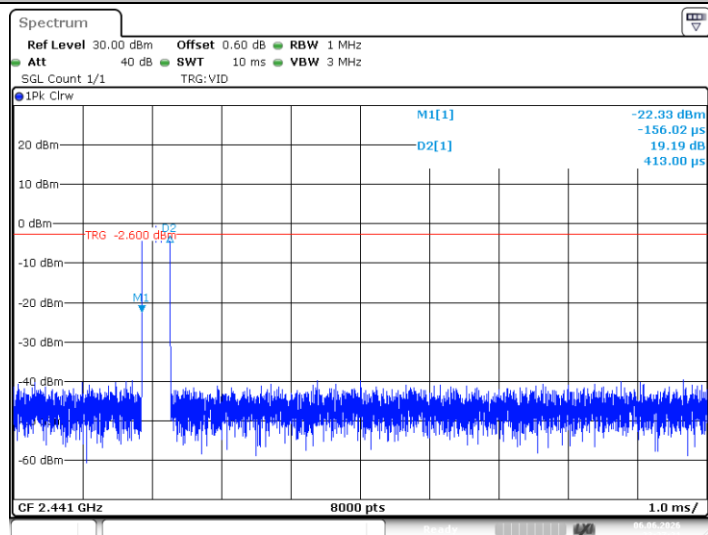


Date: 6.JUN.2026 23:20:17

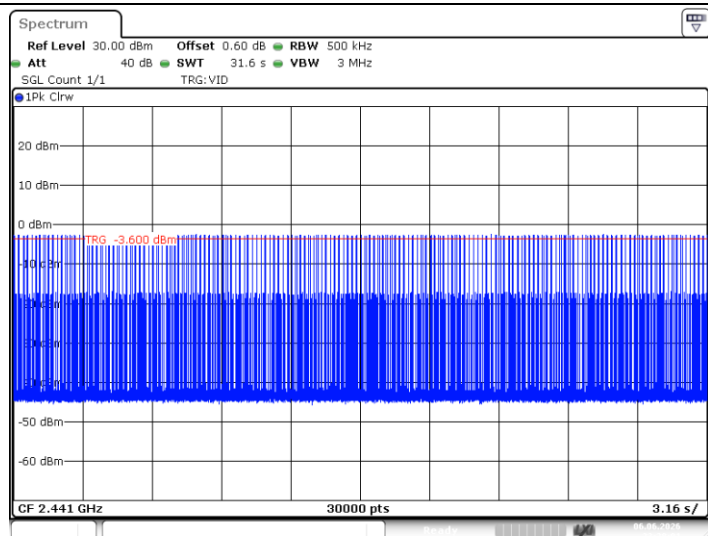


Date: 6.JUN.2026 23:20:51

2DH1_Ant1_Hop

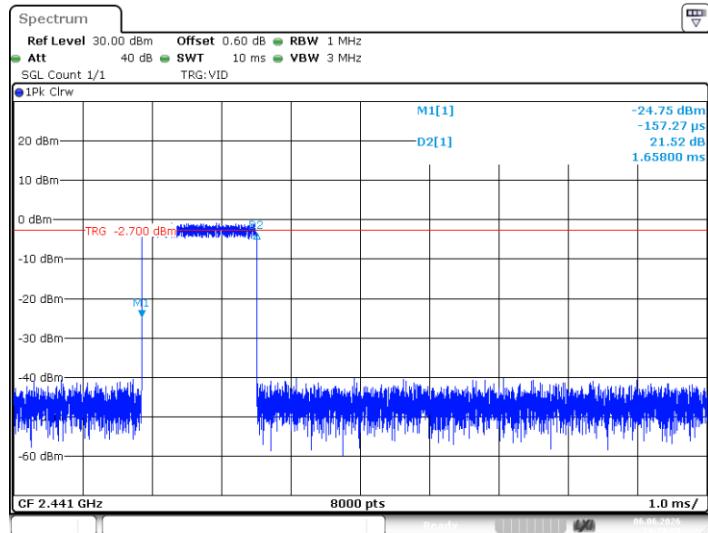


Date: 6.JUN.2026 23:27:21

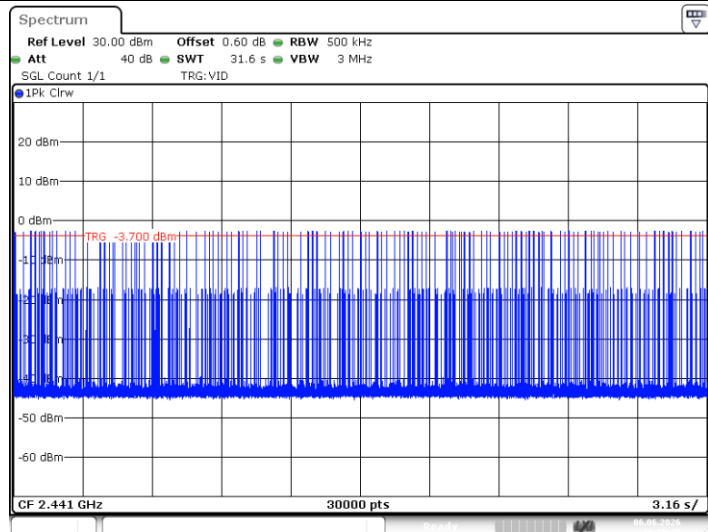


Date: 6.JUN.2026 23:28:01

2DH3_Ant1_Hop

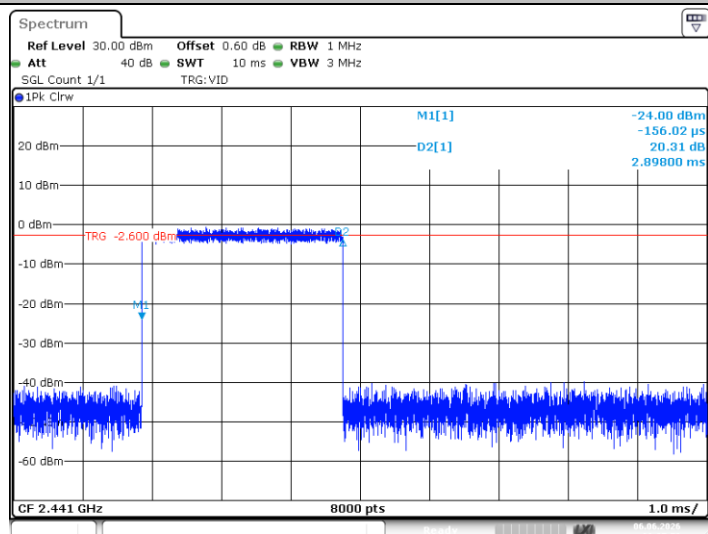


Date: 6.JUN.2026 23:28:59

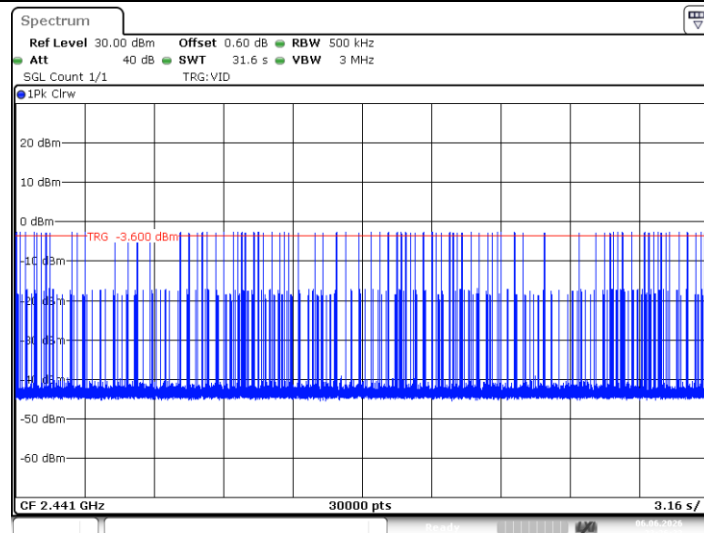


Date: 6.JUN.2026 23:29:39

2DH5_Ant1_Hop

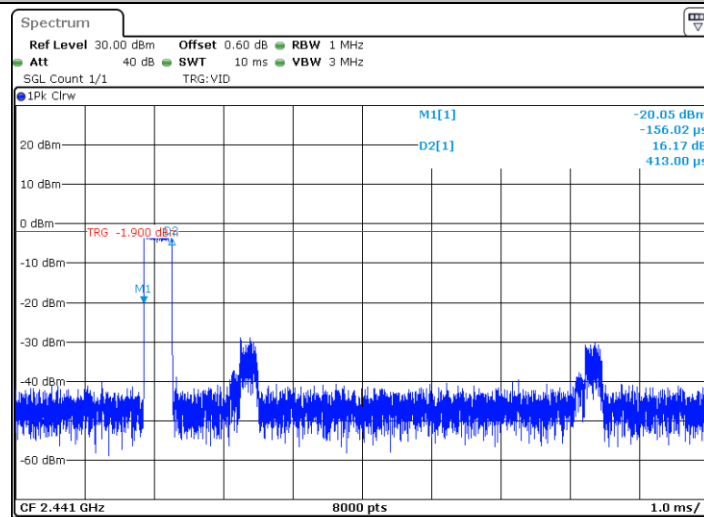


Date: 6.JUN.2026 23:25:52

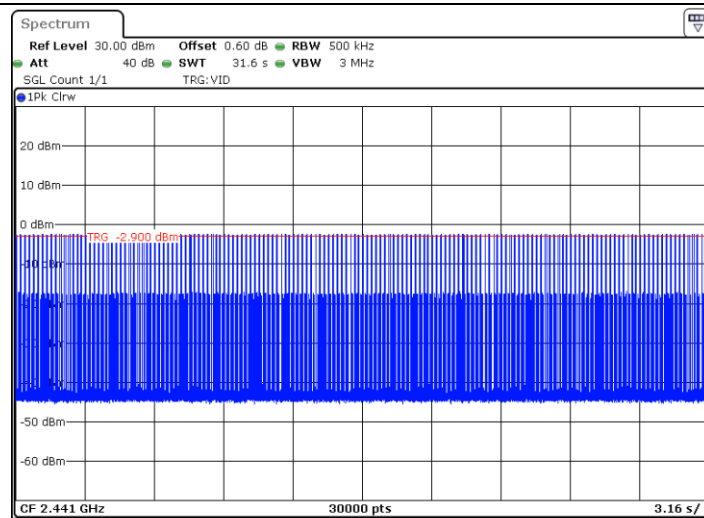


Date: 6.JUN.2026 23:26:33

3DH1_Ant1_Hop

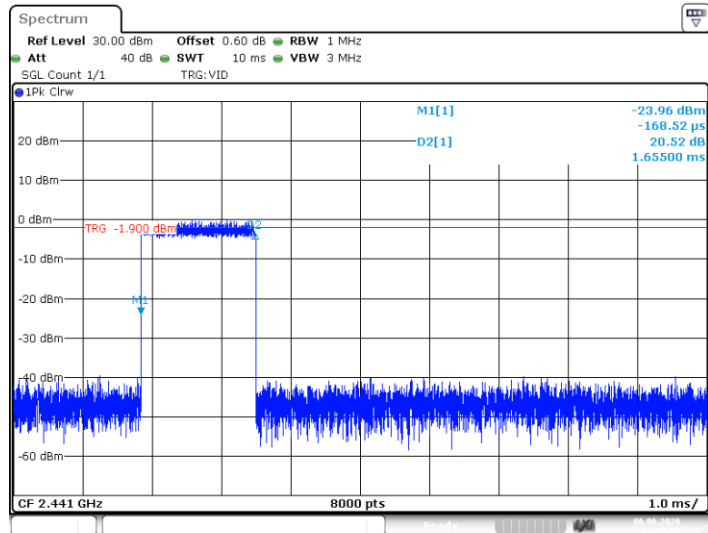


Date: 6.JUN.2026 23:34:51

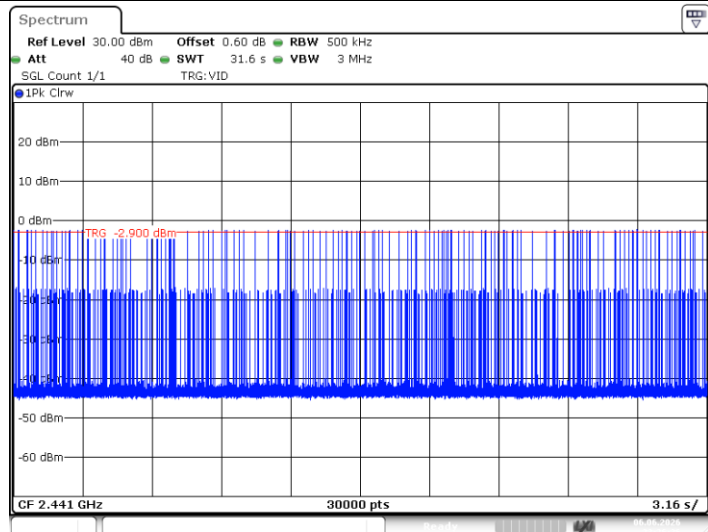


Date: 6.JUN.2026 23:35:31

3DH3_Ant1_Hop

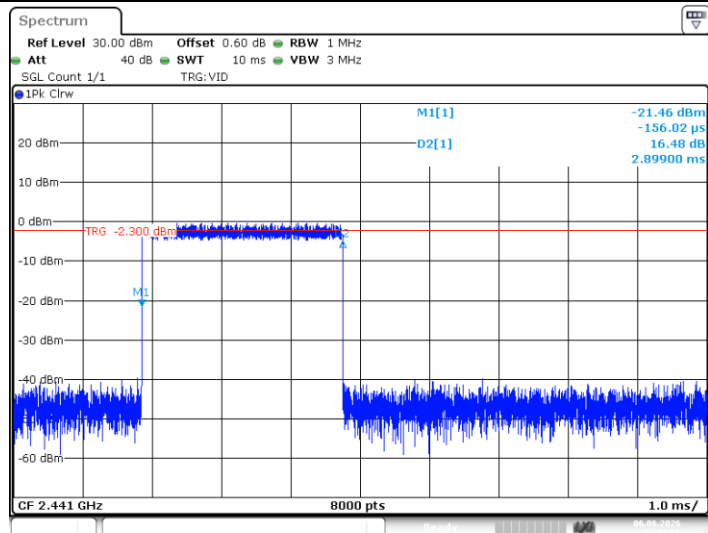


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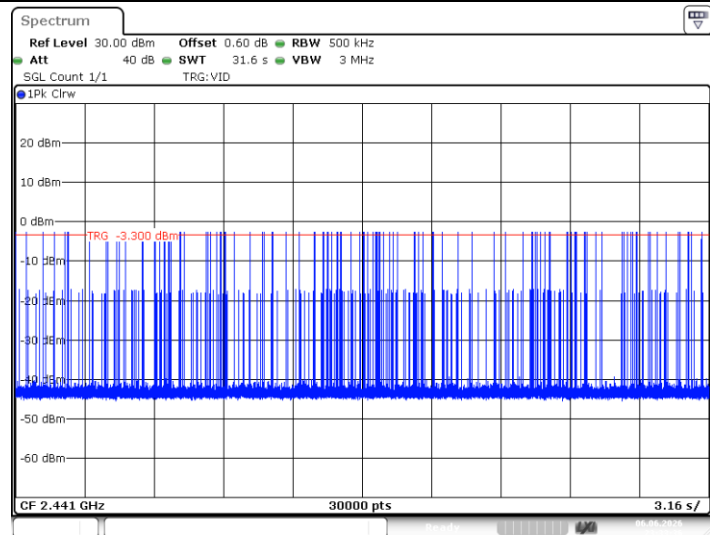


Date: 6.JUN.2026 23:36:36

3DH5_Ant1_Hop



Date: 6.JUN.2026 23:32:56



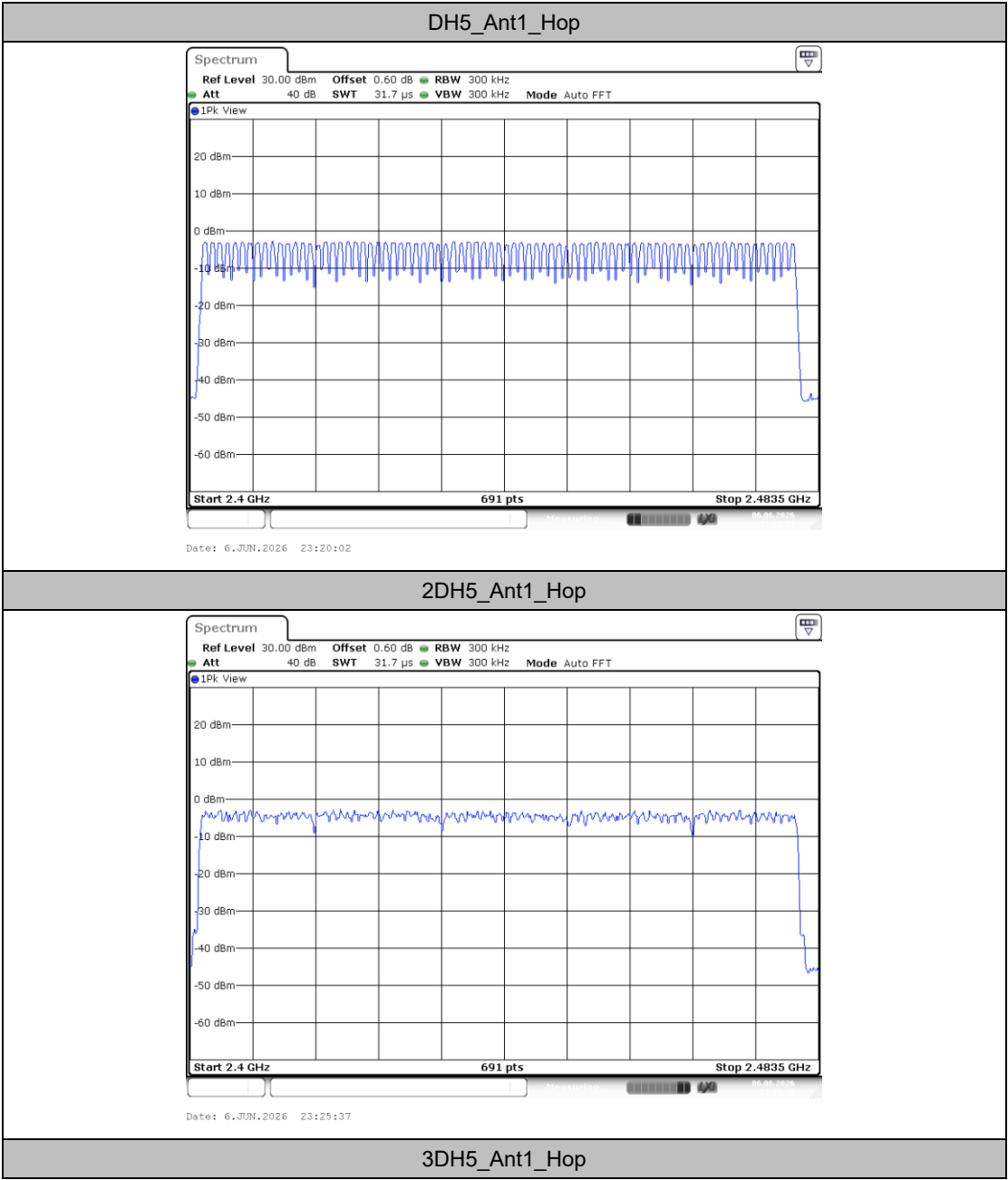
Date: 6.JUN.2026 23:33:37

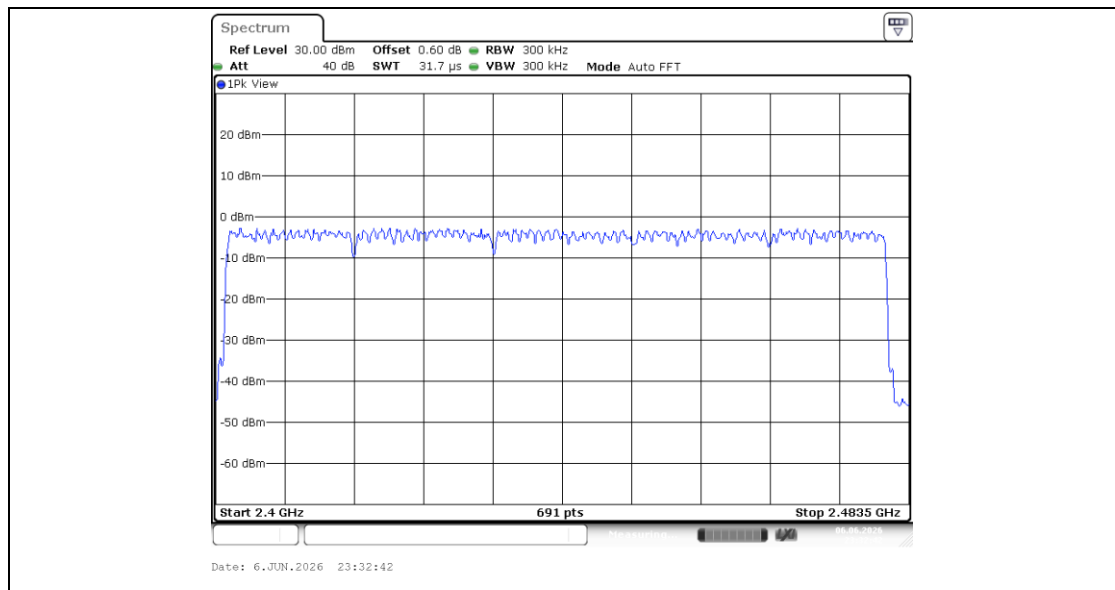
Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs



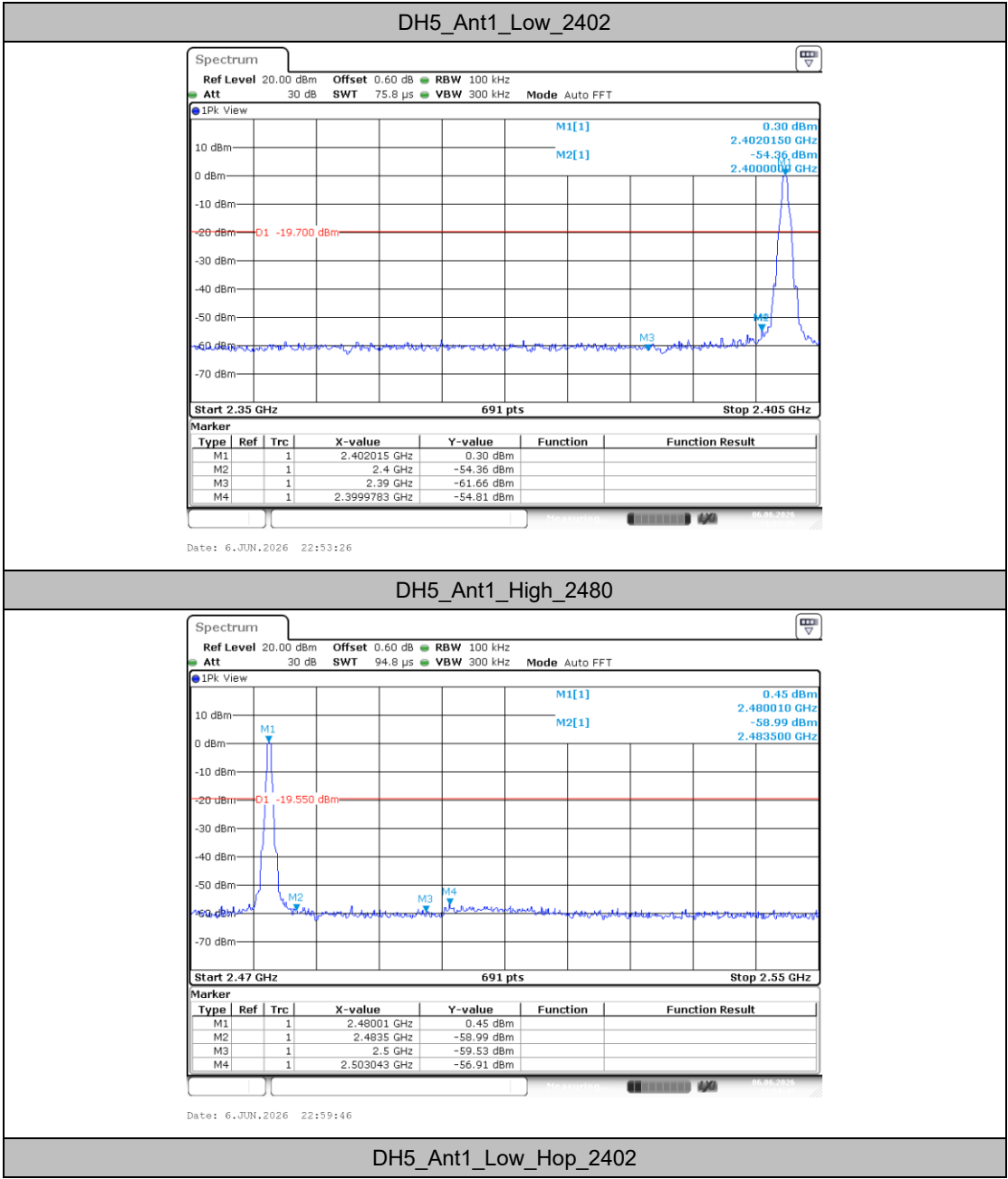


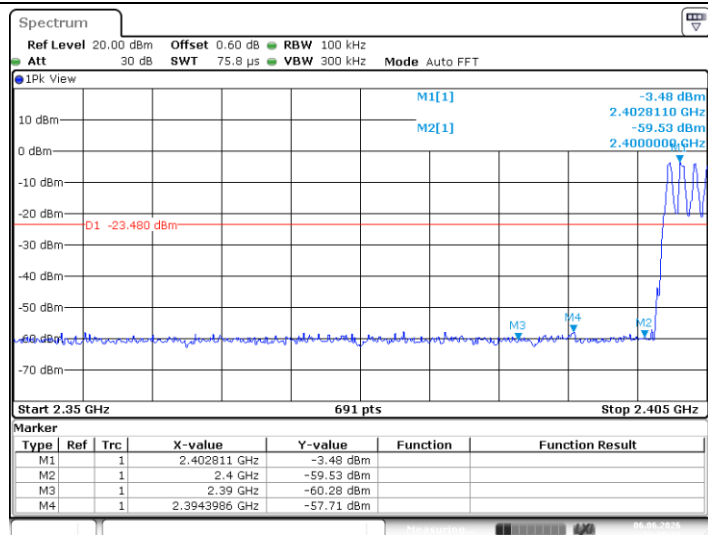
Appendix G: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.30	-54.81	≤-19.7	PASS
		High	2480	0.45	-56.91	≤-19.55	PASS
		Low	Hop_2402	-3.48	-57.71	≤-23.48	PASS
		High	Hop_2480	-3.29	-56.69	≤-23.29	PASS
2DH5	Ant1	Low	2402	-3.12	-57.1	≤-23.12	PASS
		High	2480	-3.85	-56.71	≤-23.85	PASS
		Low	Hop_2402	-4.14	-57.65	≤-24.14	PASS
		High	Hop_2480	-3.13	-56.43	≤-23.13	PASS
3DH5	Ant1	Low	2402	-2.77	-55.2	≤-22.77	PASS
		High	2480	-3.13	-56.67	≤-23.13	PASS
		Low	Hop_2402	-3.39	-56.85	≤-23.39	PASS
		High	Hop_2480	-4.46	-56.57	≤-24.46	PASS

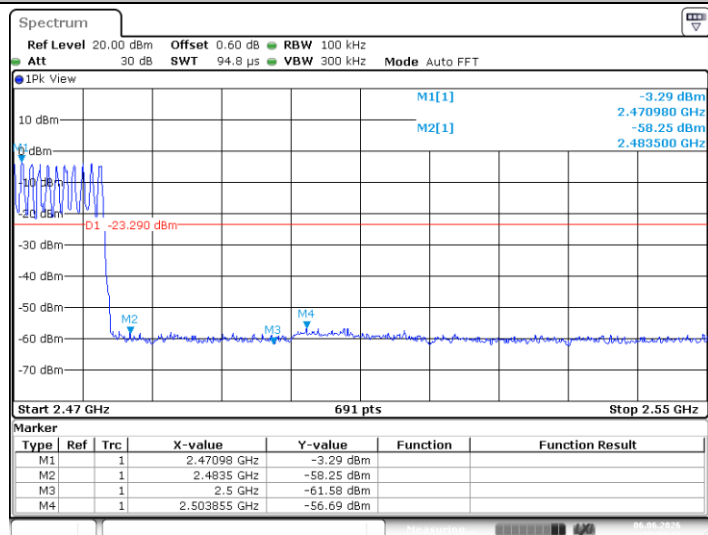
Test Graphs





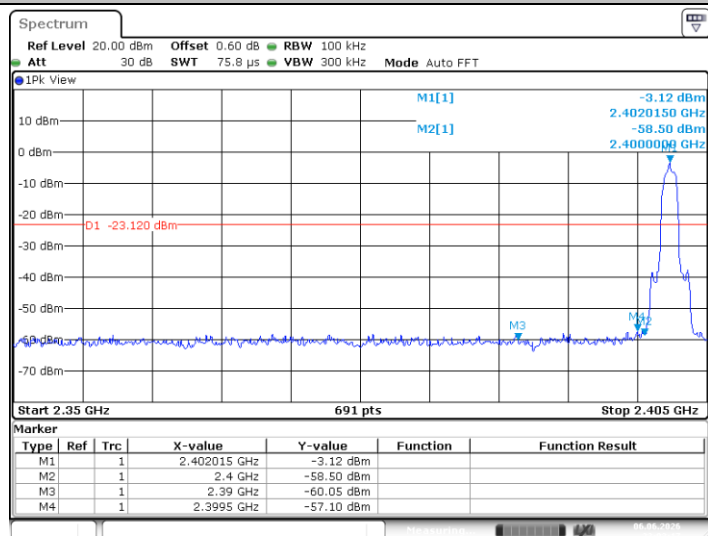
Date: 6.JUN.2026 23:18:38

DH5_Ant1_High_Hop_2480



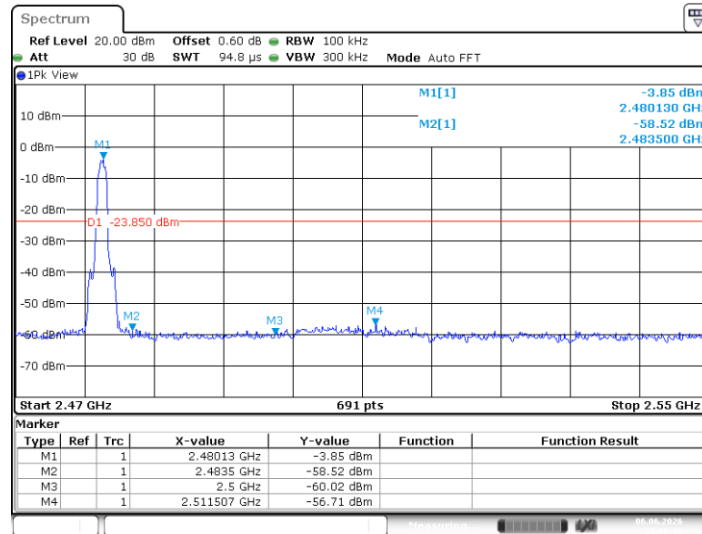
Date: 6.JUN.2026 23:23:11

2DH5_Ant1_Low_2402



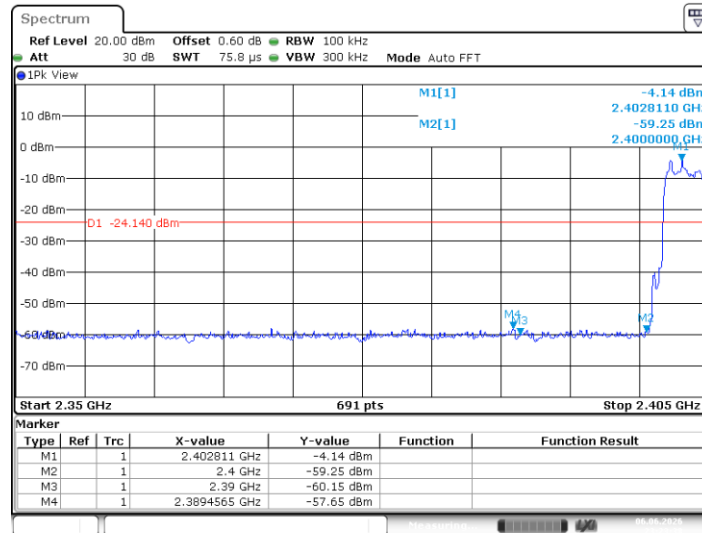
Date: 6.JUN.2026 23:03:17

2DH5_Ant1_High_2480



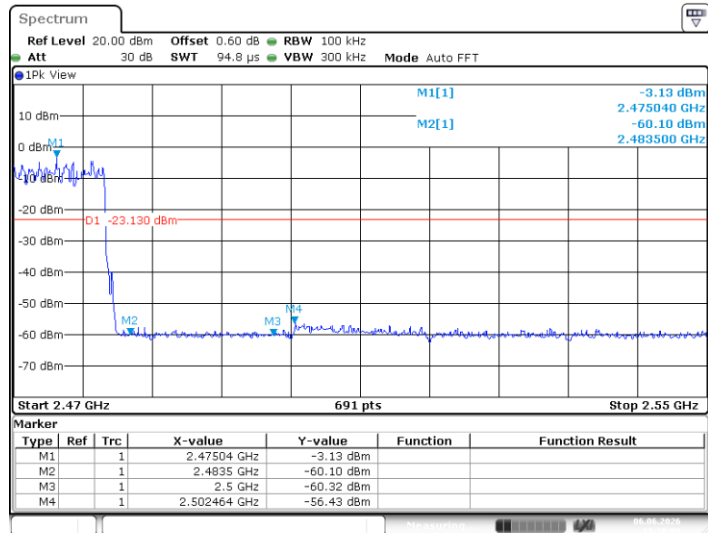
Date: 6.JUN.2026 23:08:16

2DH5_Ant1_Low_Hop_2402



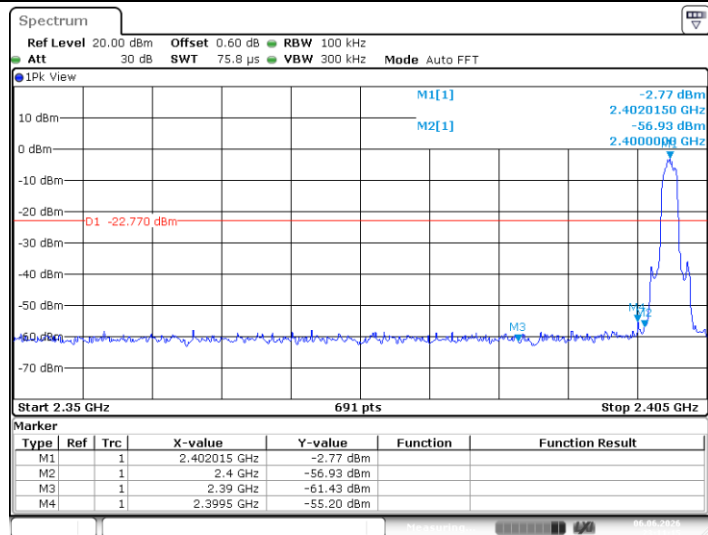
Date: 6.JUN.2026 23:23:39

2DH5_Ant1_High_Hop_2480



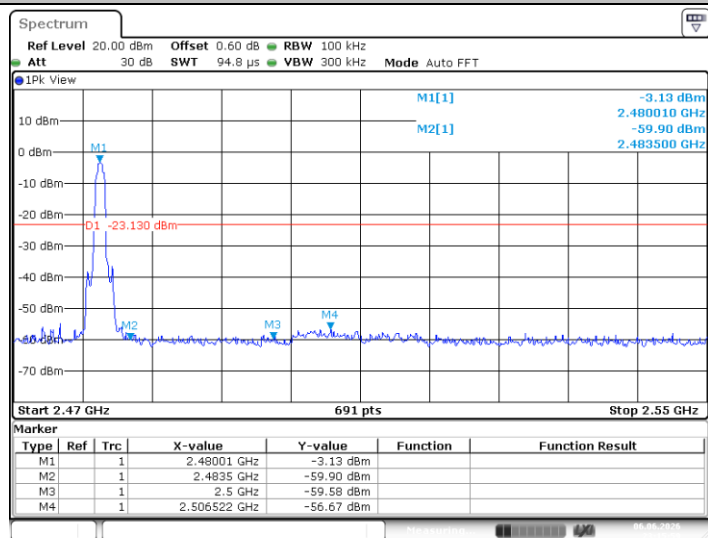
Date: 6.JUN.2026 23:30:10

3DH5_Ant1_Low_2402



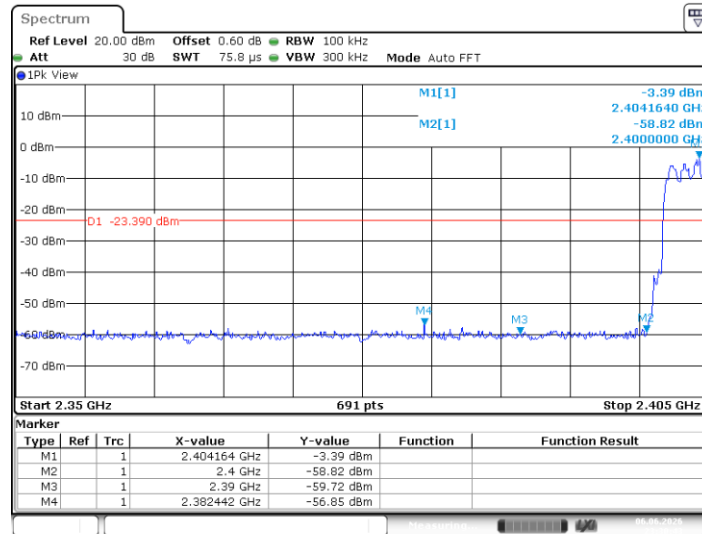
Date: 6.JUN.2026 23:11:15

3DH5_Ant1_High_2480



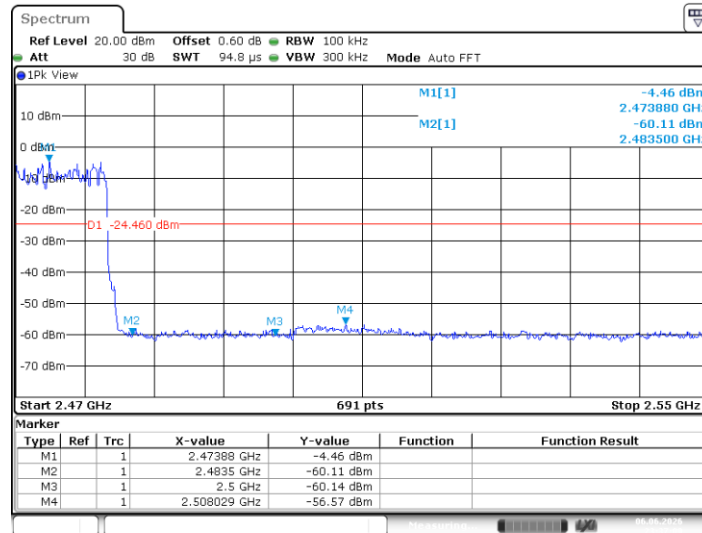
Date: 6.JUN.2026 23:16:00

3DH5_Ant1_Low_Hop_2402



Date: 6.JUN.2026 23:30:42

3DH5_Ant1_High_Hop_2480



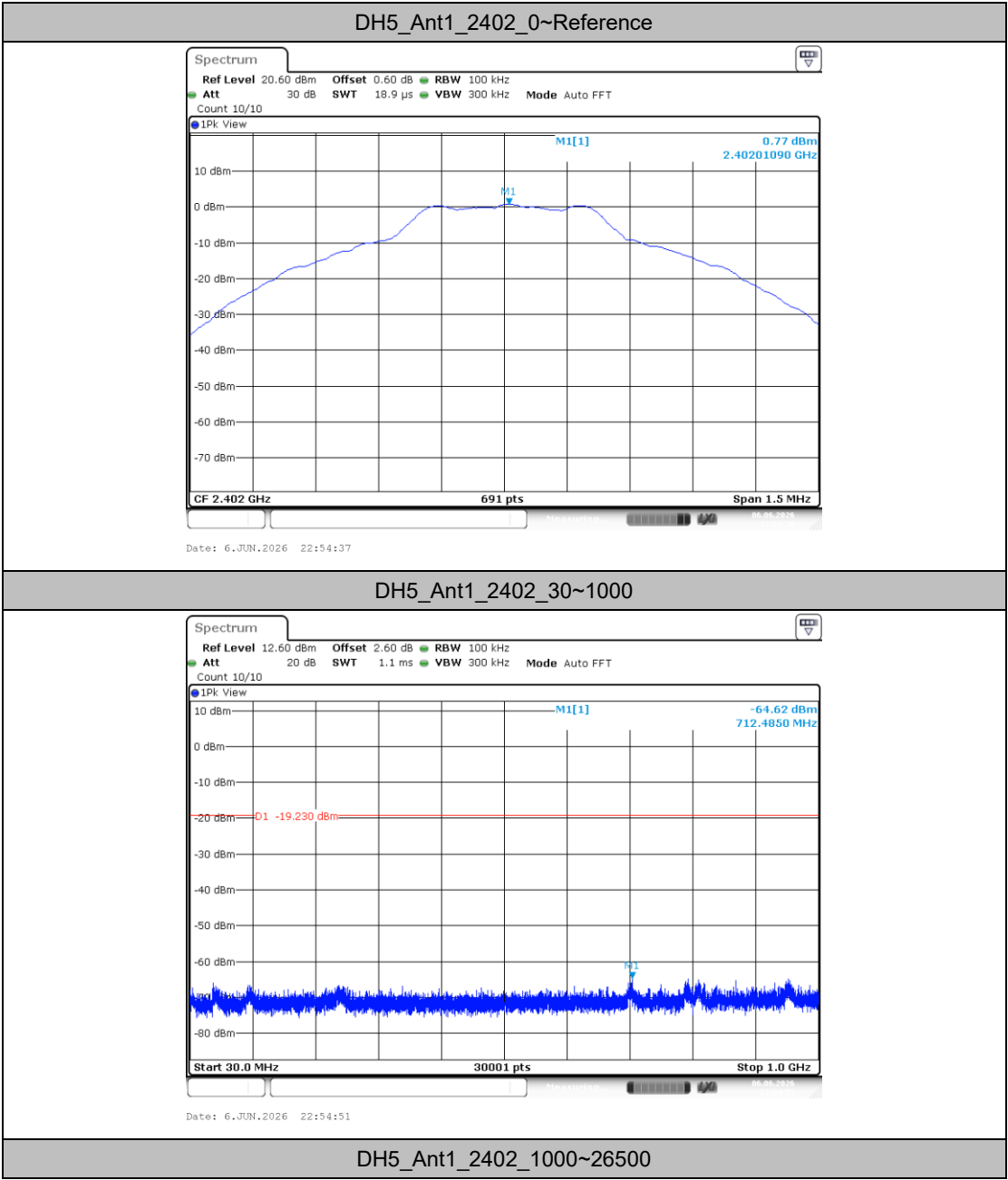
Date: 6.JUN.2026 23:37:00

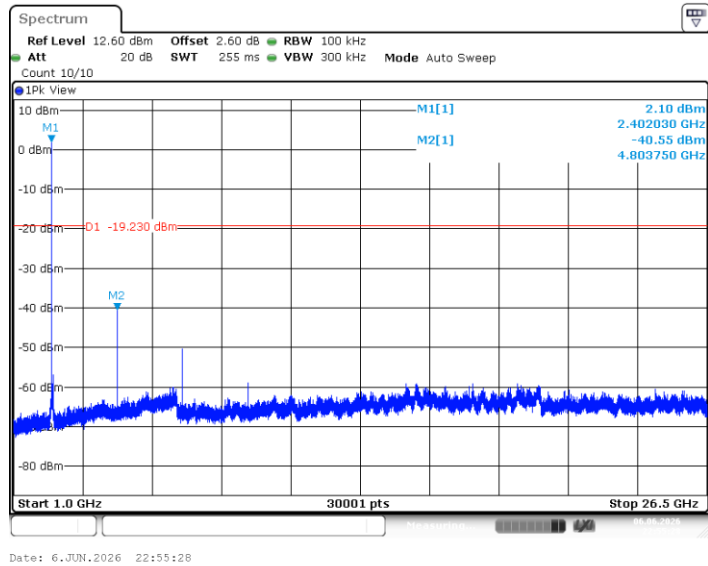
Appendix H: Conducted Spurious Emission

Test Result

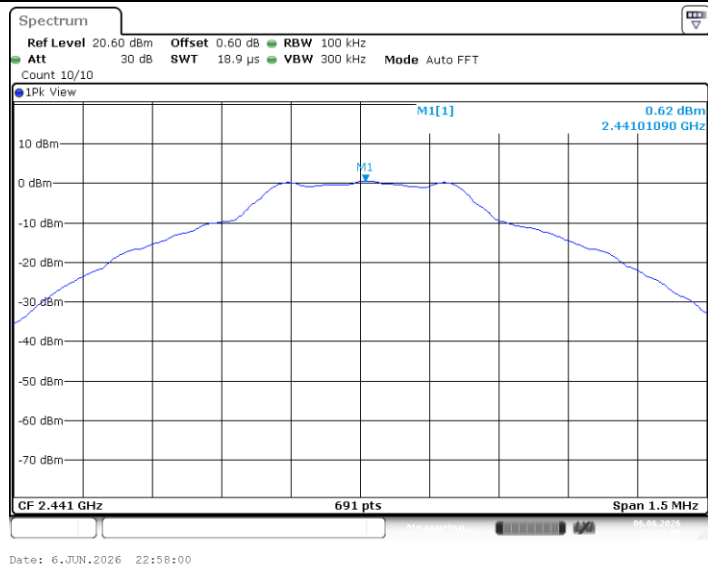
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.77	0.77	---	PASS
			30~1000	0.77	-64.62	≤-19.23	PASS
			1000~26500	0.77	-40.55	≤-19.23	PASS
		2441	Reference	0.62	0.62	---	PASS
			30~1000	0.62	-64.5	≤-19.38	PASS
			1000~26500	0.62	-39.87	≤-19.38	PASS
		2480	Reference	0.40	0.40	---	PASS
			30~1000	0.40	-64.14	≤-19.6	PASS
			1000~26500	0.40	-39.57	≤-19.6	PASS
2DH5	Ant1	2402	Reference	-2.87	-2.87	---	PASS
			30~1000	-2.87	-63.83	≤-22.87	PASS
			1000~26500	-2.87	-46.85	≤-22.87	PASS
		2441	Reference	-2.97	-2.97	---	PASS
			30~1000	-2.97	-64.6	≤-22.97	PASS
			1000~26500	-2.97	-44.53	≤-22.97	PASS
		2480	Reference	-3.14	-3.14	---	PASS
			30~1000	-3.14	-63.78	≤-23.14	PASS
			1000~26500	-3.14	-44.65	≤-23.14	PASS
3DH5	Ant1	2402	Reference	-2.86	-2.86	---	PASS
			30~1000	-2.86	-64.61	≤-22.86	PASS
			1000~26500	-2.86	-45.83	≤-22.86	PASS
		2441	Reference	-2.96	-2.96	---	PASS
			30~1000	-2.96	-64.45	≤-22.96	PASS
			1000~26500	-2.96	-43.28	≤-22.96	PASS
		2480	Reference	-3.16	-3.16	---	PASS
			30~1000	-3.16	-64.3	≤-23.16	PASS
			1000~26500	-3.16	-43.95	≤-23.16	PASS

Test Graphs

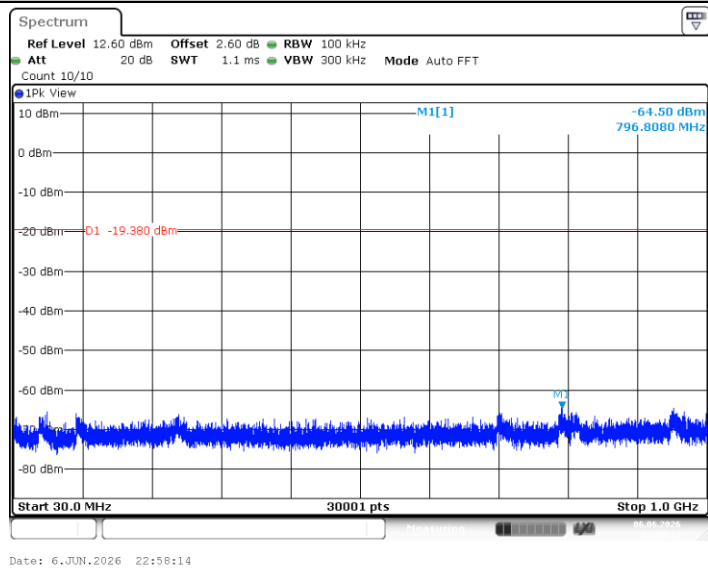




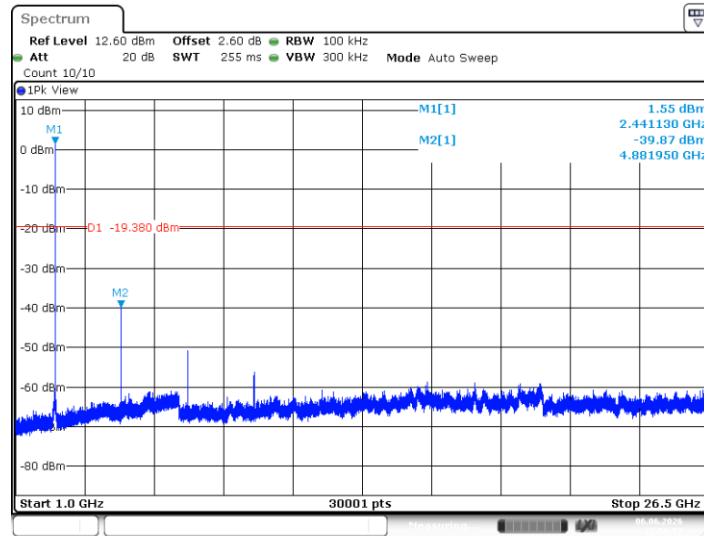
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000

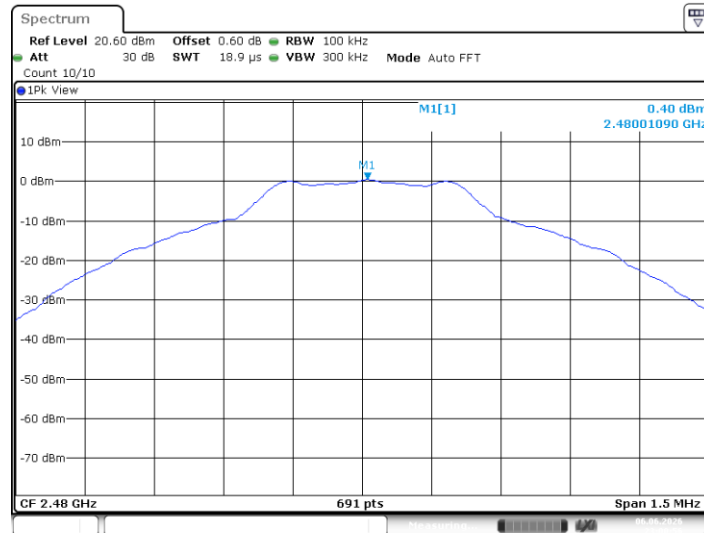


DH5_Ant1_2441_1000~26500



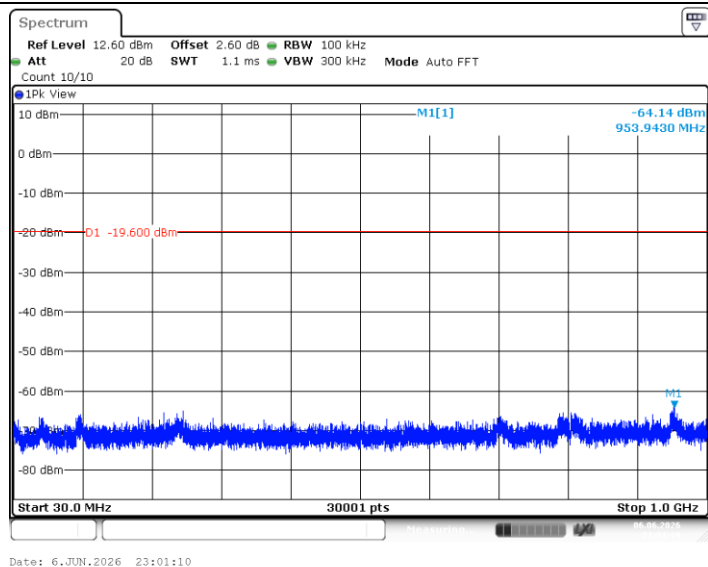
Date: 6.JUN.2026 22:58:52

DH5_Ant1_2480_0~Reference

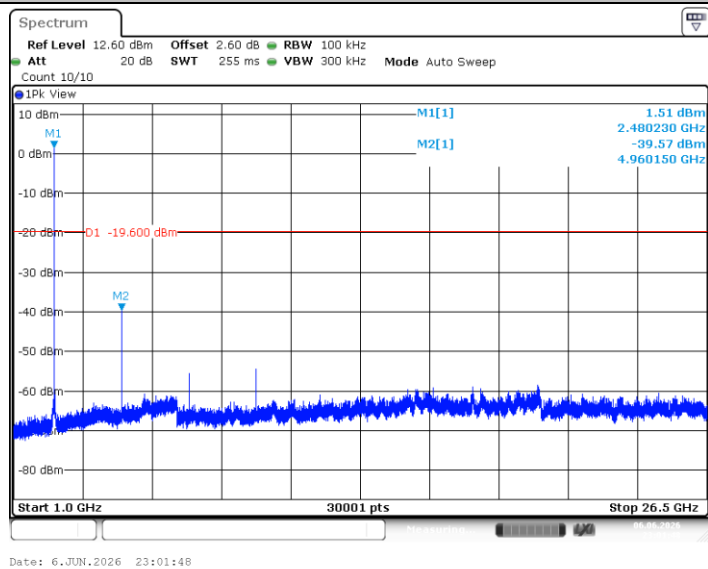


Date: 6.JUN.2026 23:00:56

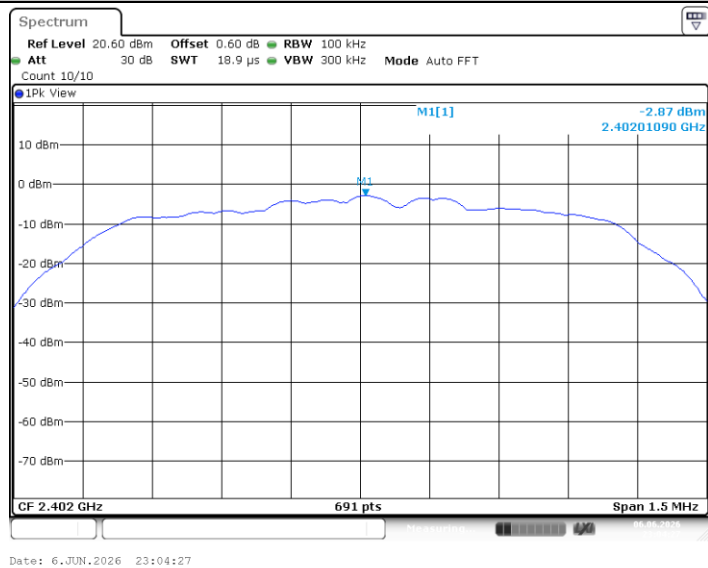
DH5_Ant1_2480_30~1000



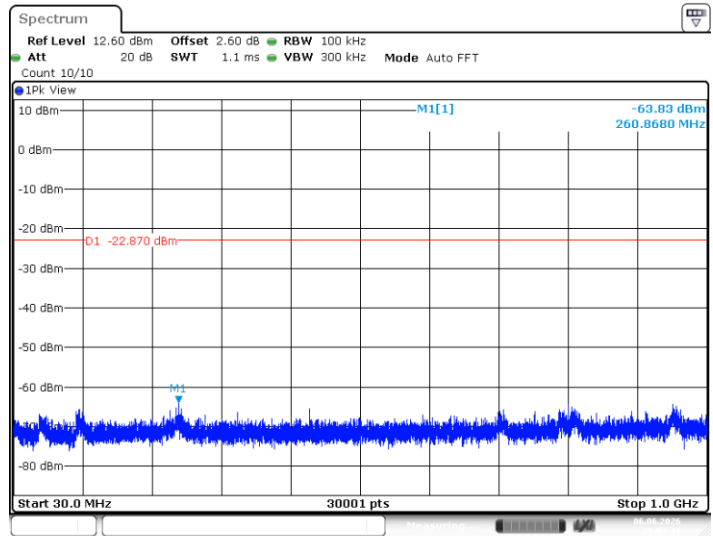
DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference

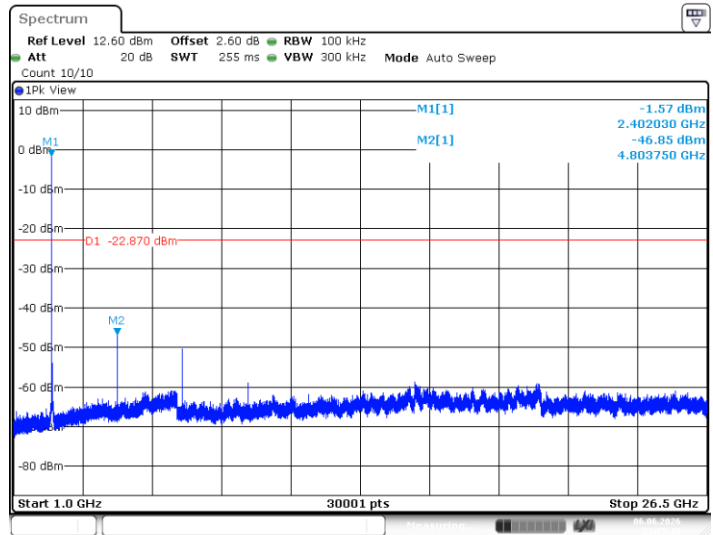


2DH5_Ant1_2402_30~1000



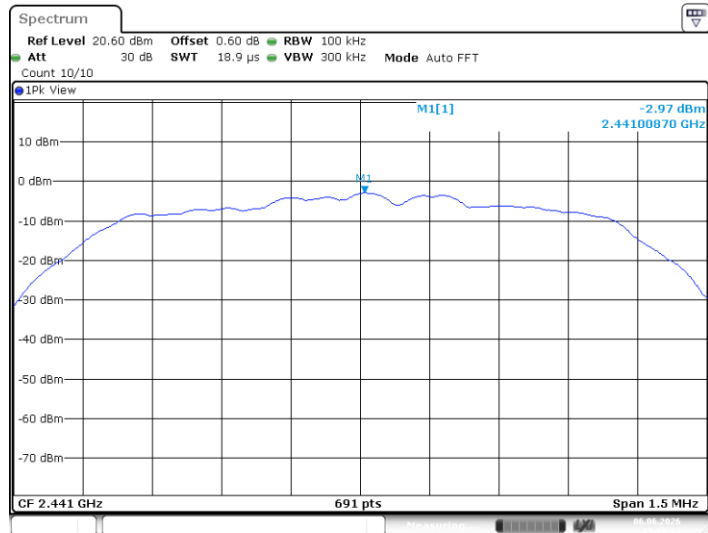
Date: 6.JUN.2026 23:04:41

2DH5_Ant1_2402_1000~26500



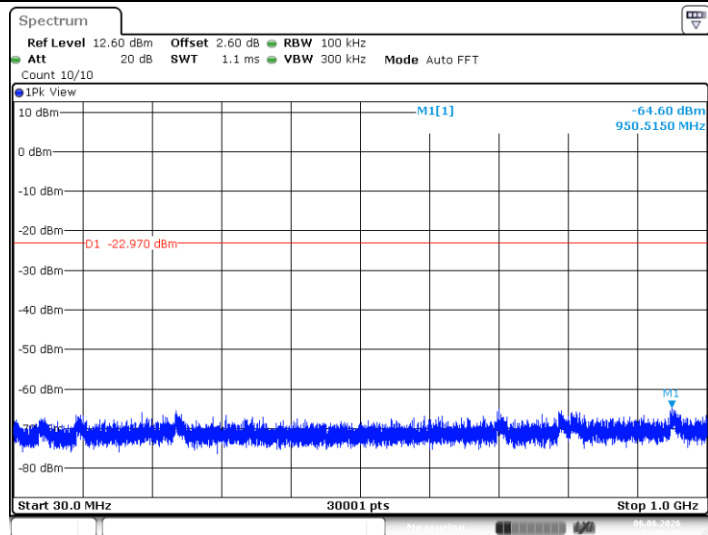
Date: 6.JUN.2026 23:05:18

2DH5_Ant1_2441_0~Reference



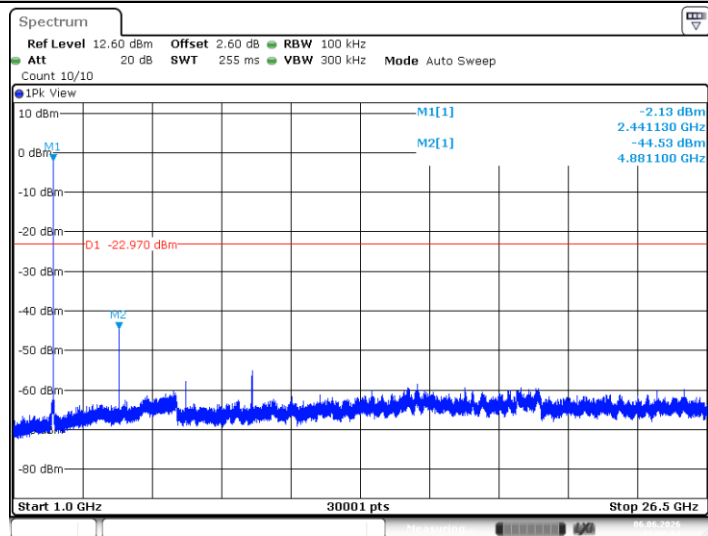
Date: 6.JUN.2026 23:06:13

2DH5_Ant1_2441_30~1000



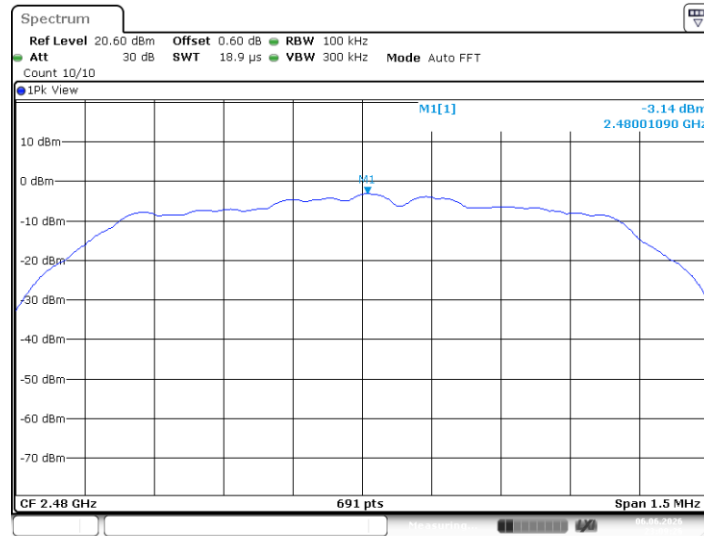
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2DH5_Ant1_2441_1000~26500



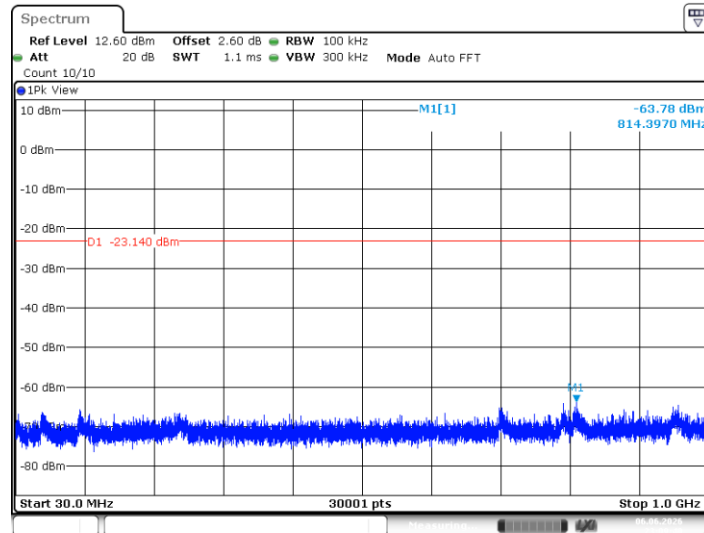
Date: 6.JUN.2026 23:07:05

2DH5_Ant1_2480_0~Reference



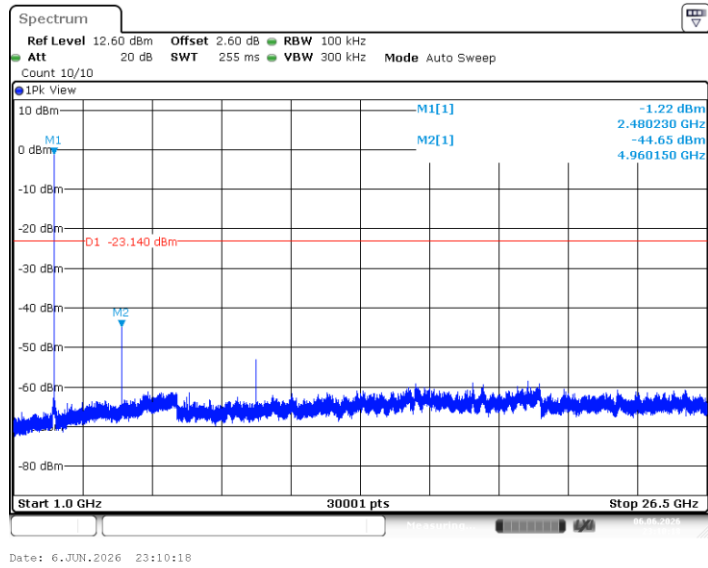
Date: 6.JUN.2026 23:09:26

2DH5_Ant1_2480_30~1000

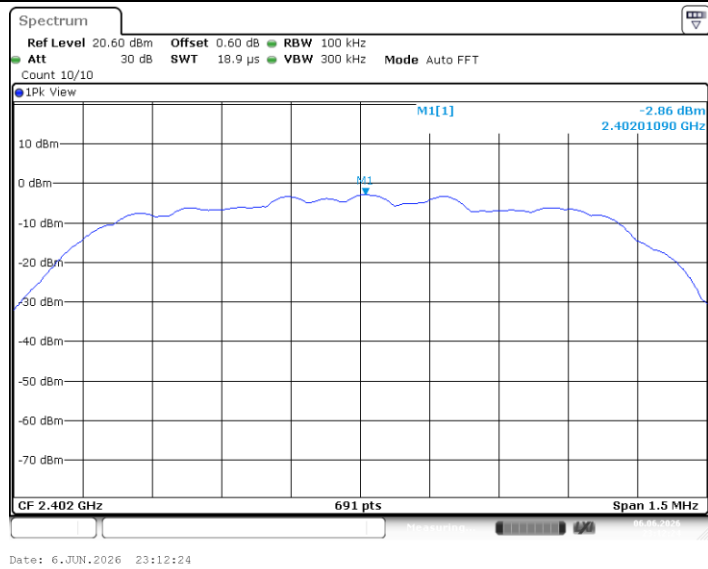


Date: 6.JUN.2026 23:09:41

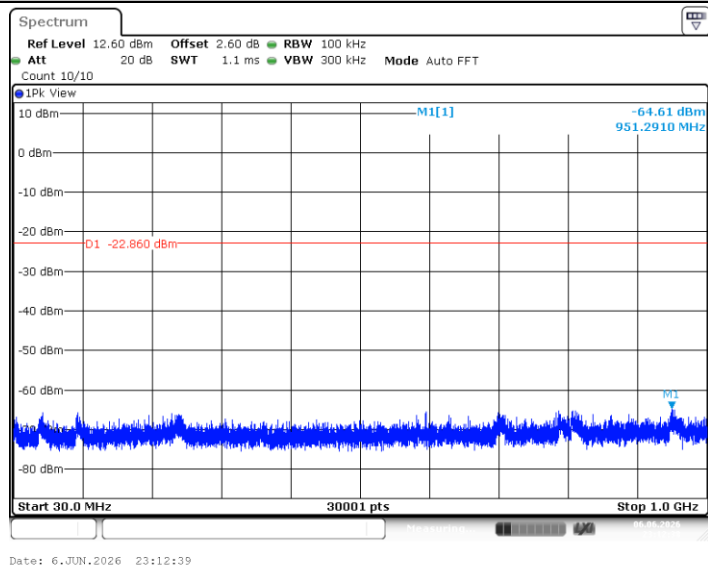
2DH5_Ant1_2480_1000~26500



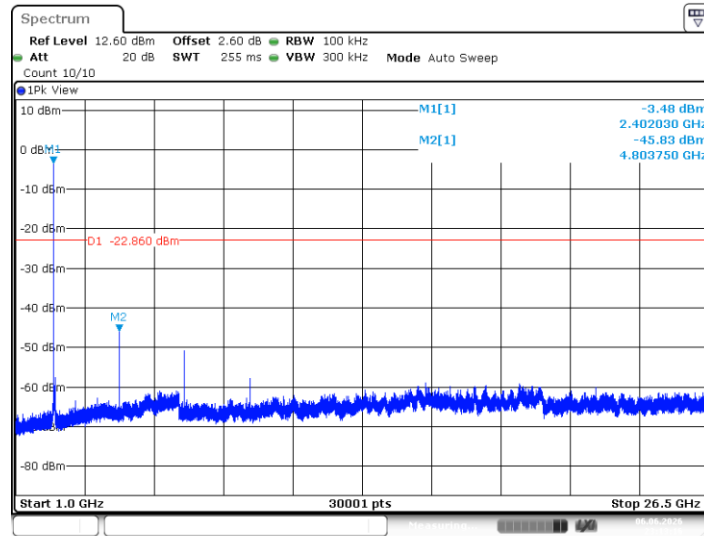
3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000

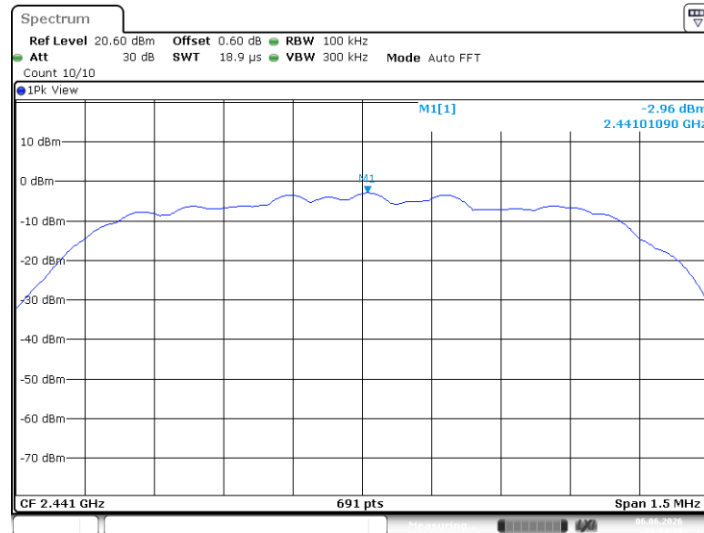


3DH5_Ant1_2402_1000~26500



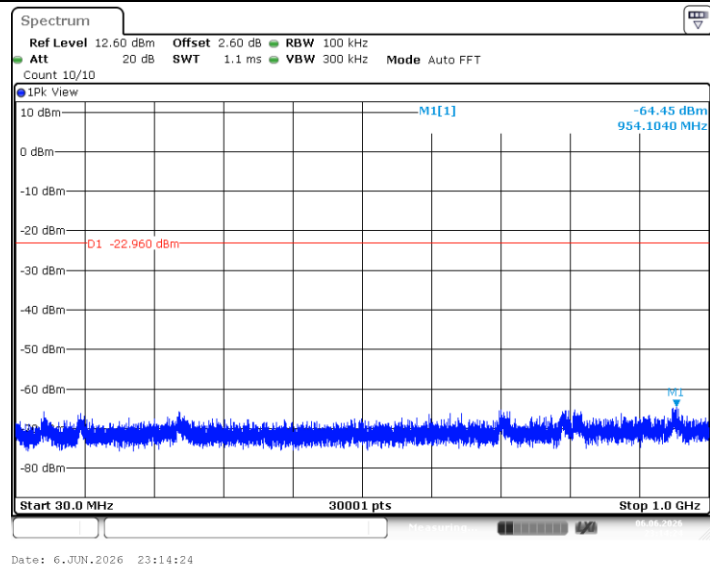
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3DH5_Ant1_2441_0~Reference

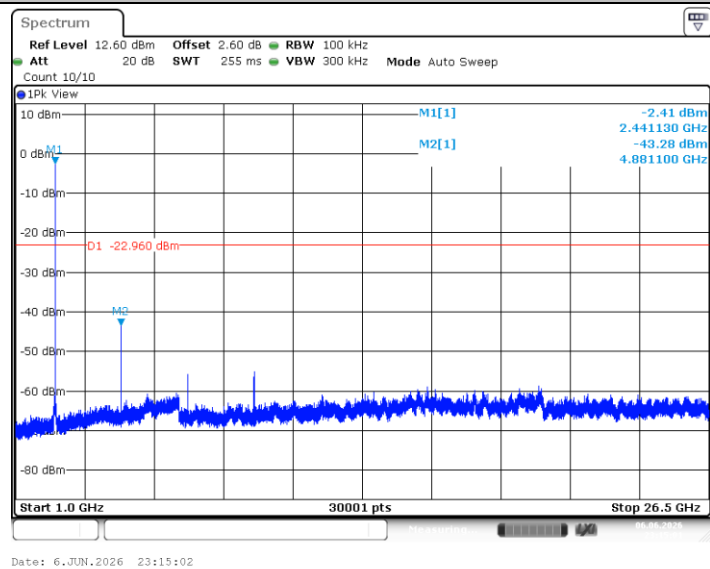


Date: 6.JUN.2026 23:14:10

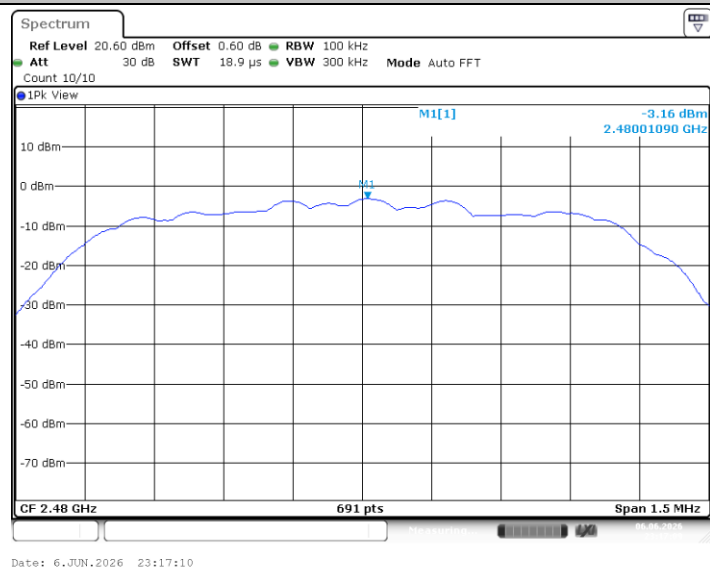
3DH5_Ant1_2441_30~1000



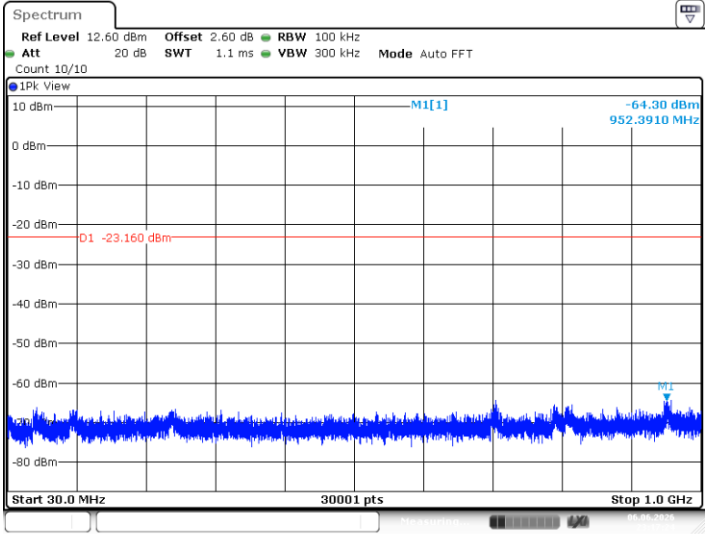
3DH5_Ant1_2441_1000~26500



3DH5_Ant1_2480_0~Reference

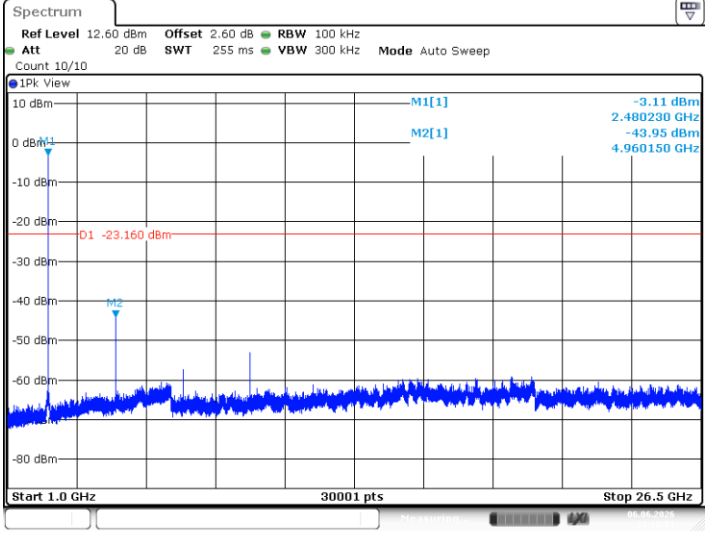


3DH5_Ant1_2480_30~1000



Date: 6.JUN.2026 23:17:24

3DH5_Ant1_2480_1000~26500



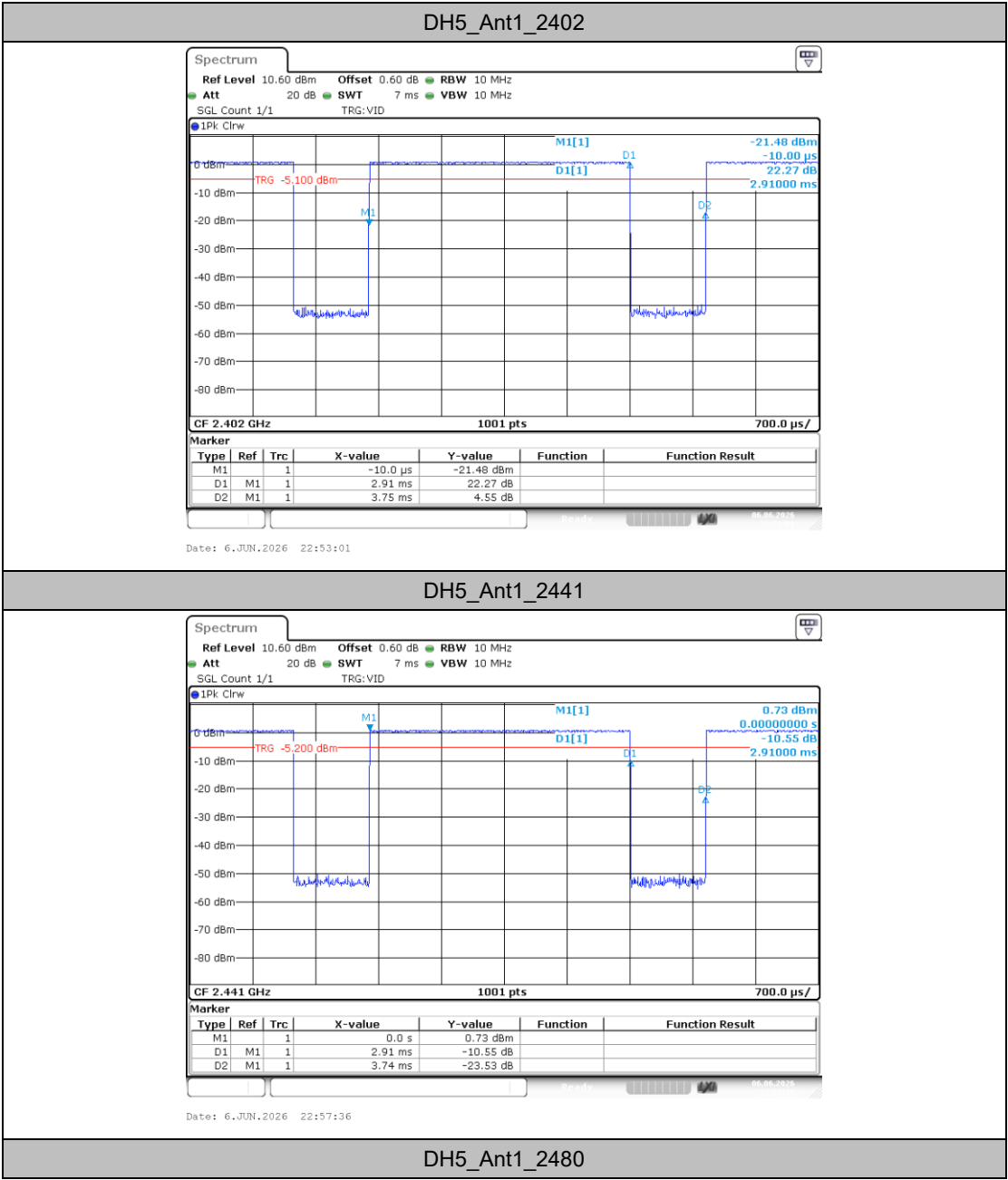
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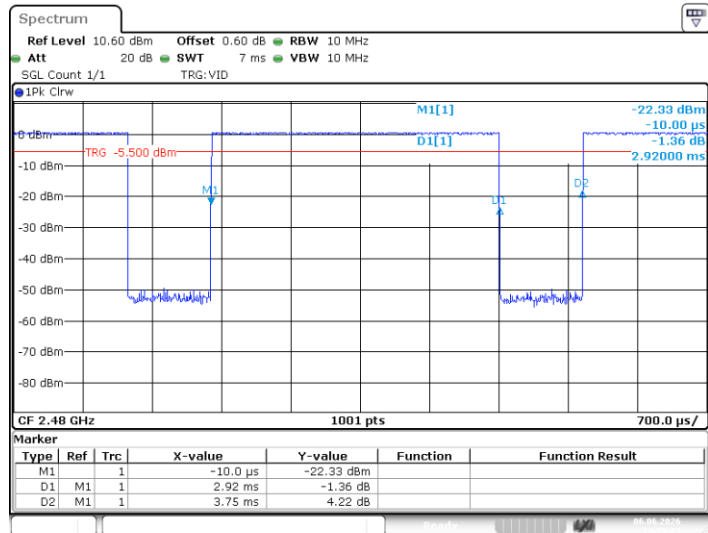
Appendix I: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.91	3.74	77.81	1.09	---	---
		2480	2.92	3.75	77.87	1.09	---	---
2DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.92	3.76	77.66	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---
3DH5	Ant1	2402	2.93	3.76	77.93	1.08	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---

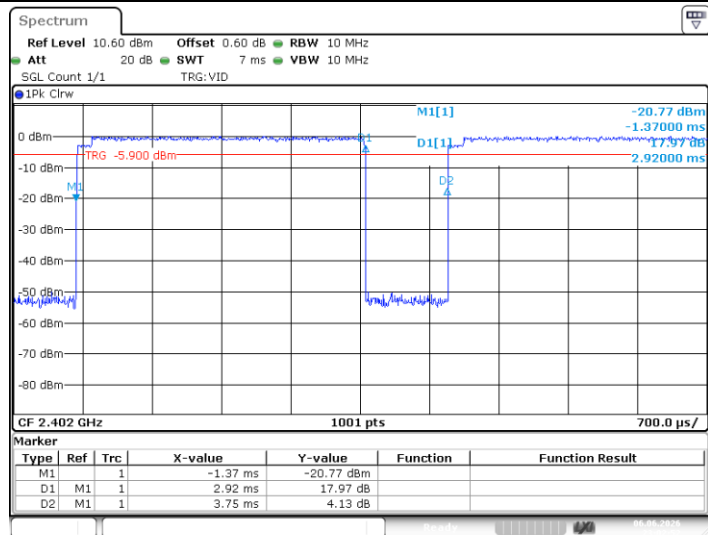
Test Graphs





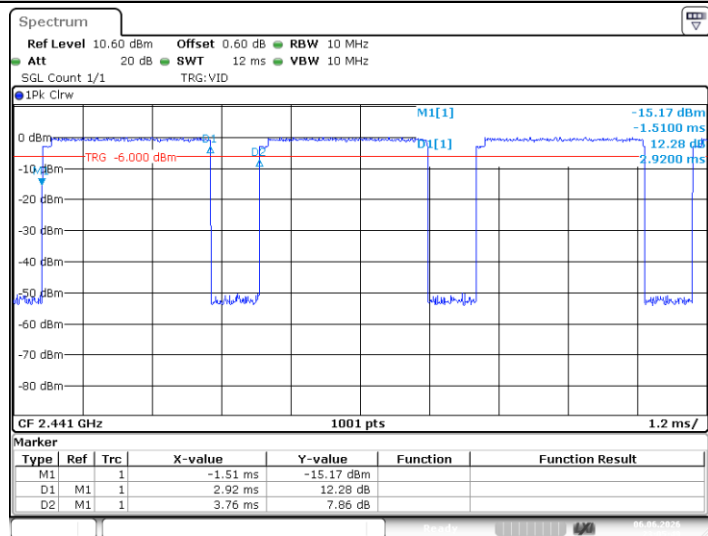
Date: 6.JUN.2026 22:59:21

2DH5_Ant1_2402



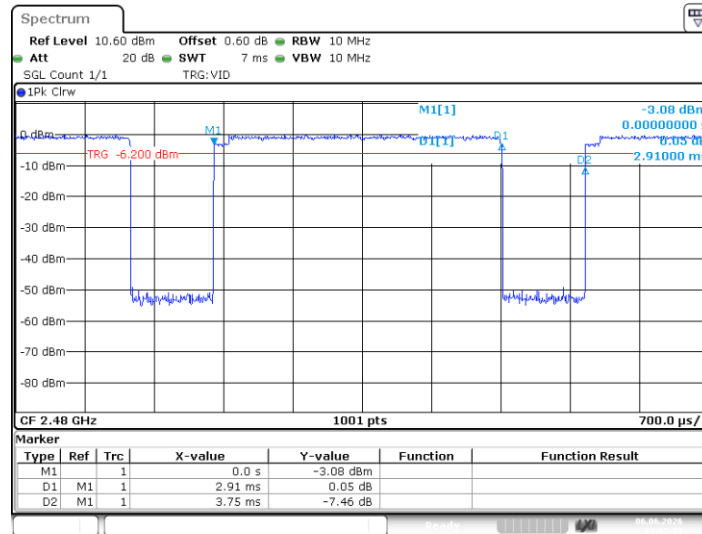
Date: 6.JUN.2026 23:02:52

2DH5_Ant1_2441



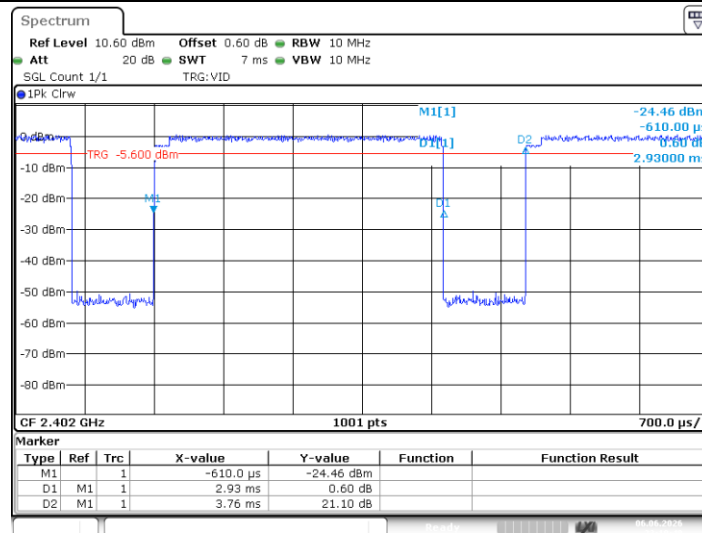
Date: 6.JUN.2026 23:05:49

2DH5_Ant1_2480



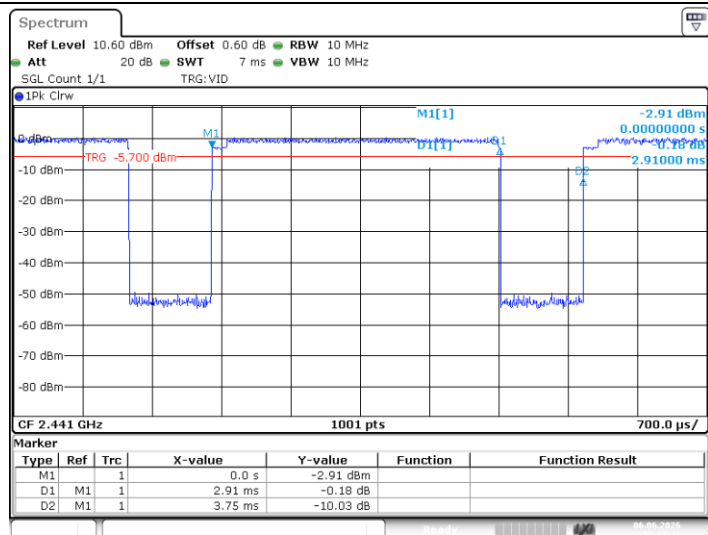
Date: 6.JUN.2026 23:07:51

3DH5_Ant1_2402



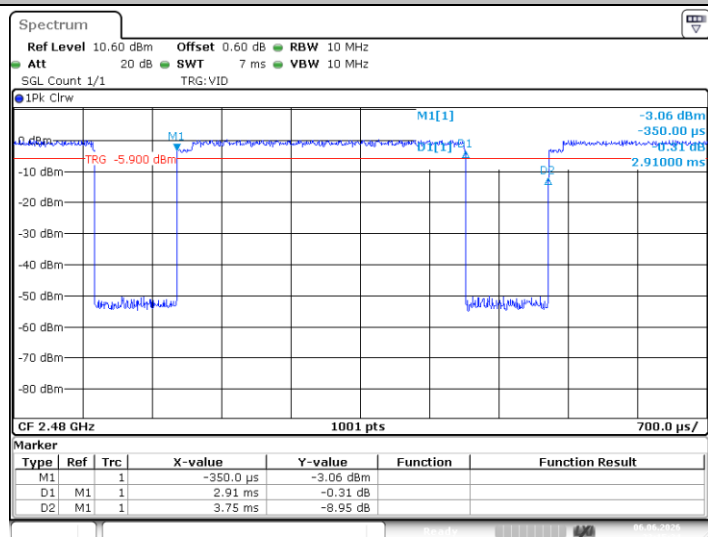
Date: 6.JUN.2026 23:10:49

3DH5_Ant1_2441



Date: 6.JUN.2026 23:13:46

3DH5_Ant1_2480



Date: 6.JUN.2026 23:15:34

Appendix J: Emissions in Restricted Bands

Test Result

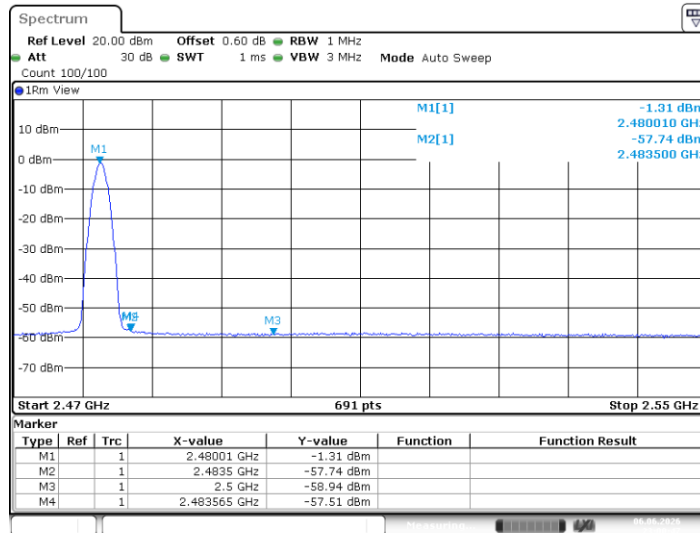
TestMod e	Antenn a	ChNam e	Freq(MH z)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-59.65	2.00	1.10	38.65	≤54	PASS
				AV	2340.935	-57.61	2.00	1.10	40.69	≤54	PASS
				AV	2390.000	-59.03	2.00	1.10	39.27	≤54	PASS
				Peak	2310.000	-48.81	2.00	0.00	48.39	≤74	PASS
				Peak	2340.935	-46.25	2.00	0.00	50.95	≤74	PASS
				Peak	2390.000	-48.65	2.00	0.00	48.55	≤74	PASS
		High	2480	AV	2483.500	-57.74	2.00	1.09	40.55	≤54	PASS
				AV	2483.565	-57.51	2.00	1.09	40.78	≤54	PASS
				AV	2500.000	-58.94	2.00	1.09	39.35	≤54	PASS
				Peak	2483.500	-45.82	2.00	0.00	51.38	≤74	PASS
				Peak	2484.029	-41.95	2.00	0.00	55.25	≤74	PASS
				Peak	2500.000	-47.87	2.00	0.00	49.33	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-59.65	2.00	1.09	38.64	≤54	PASS
				AV	2340.478	-57.65	2.00	1.09	40.64	≤54	PASS
				AV	2390.000	-59.23	2.00	1.09	39.06	≤54	PASS
				Peak	2310.000	-49.5	2.00	0.00	47.70	≤74	PASS
				Peak	2340.783	-45.67	2.00	0.00	51.53	≤74	PASS
				Peak	2390.000	-48.43	2.00	0.00	48.77	≤74	PASS
		High	2480	AV	2483.500	-58.39	2.00	1.10	39.91	≤54	PASS
				AV	2484.145	-58.17	2.00	1.10	40.13	≤54	PASS
				AV	2500.000	-59.14	2.00	1.10	39.16	≤54	PASS
				Peak	2483.500	-45.52	2.00	0.00	51.68	≤74	PASS
				Peak	2484.261	-44.7	2.00	0.00	52.50	≤74	PASS
				Peak	2500.000	-48.55	2.00	0.00	48.65	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-59.65	2.00	1.08	38.63	≤54	PASS
				AV	2342.152	-57.65	2.00	1.08	40.63	≤54	PASS
				AV	2390.000	-59.18	2.00	1.08	39.10	≤54	PASS
				Peak	2310.000	-48.4	2.00	0.00	48.80	≤74	PASS
				Peak	2341.543	-45.52	2.00	0.00	51.68	≤74	PASS
				Peak	2390.000	-48.35	2.00	0.00	48.85	≤74	PASS
		High	2480	AV	2483.500	-58.34	2.00	1.10	39.96	≤54	PASS
				AV	2484.493	-57.92	2.00	1.10	40.38	≤54	PASS
				AV	2500.000	-59.18	2.00	1.10	39.12	≤54	PASS
				Peak	2483.500	-47.45	2.00	0.00	49.75	≤74	PASS
				Peak	2484.377	-45.79	2.00	0.00	51.41	≤74	PASS
				Peak	2500.000	-48.55	2.00	0.00	48.65	≤74	PASS

Note:

1. 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.

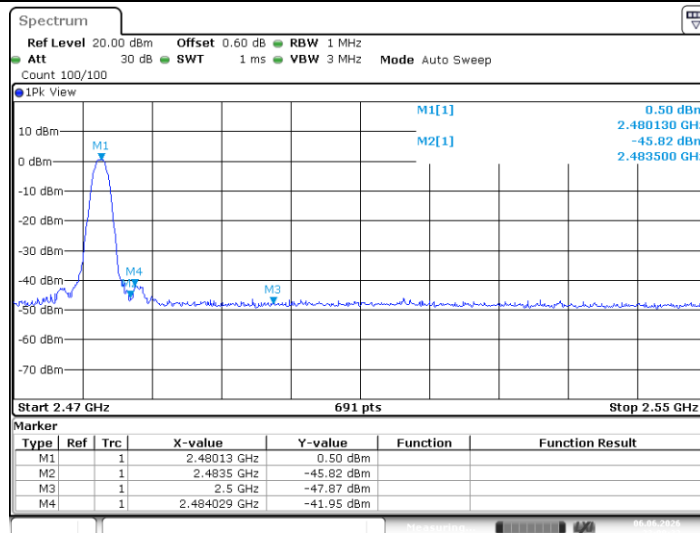
Test Graphs





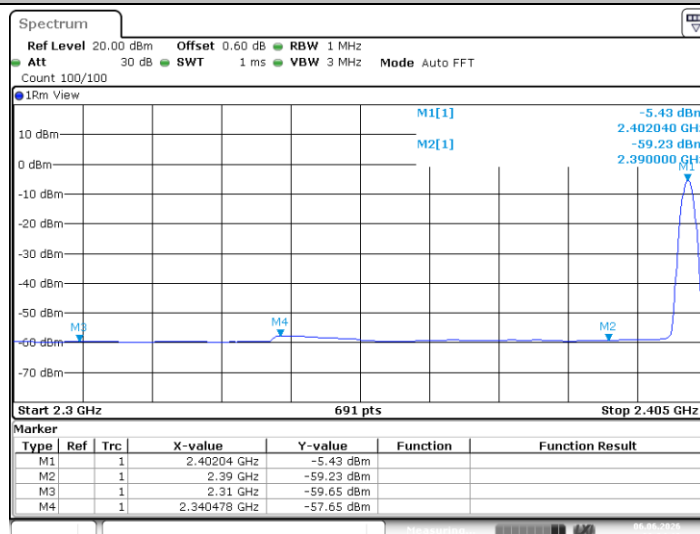
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DH5_Ant1_High_2480_Peak



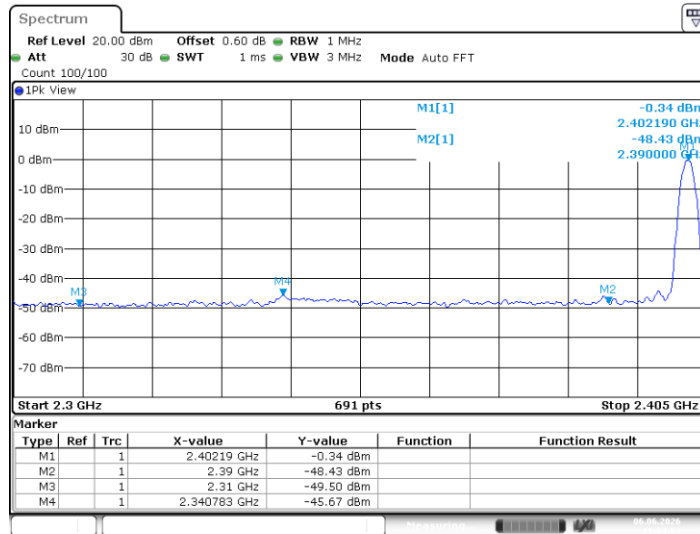
Date: 6.JUN.2026 23:00:32

2DH5_Ant1_Low_2402_AV



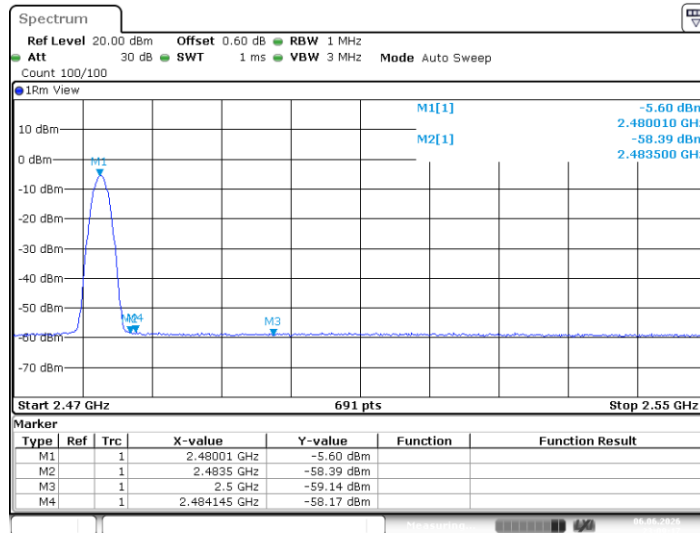
Date: 6.JUN.2026 23:04:17

2DH5_Ant1_Low_2402_Peak



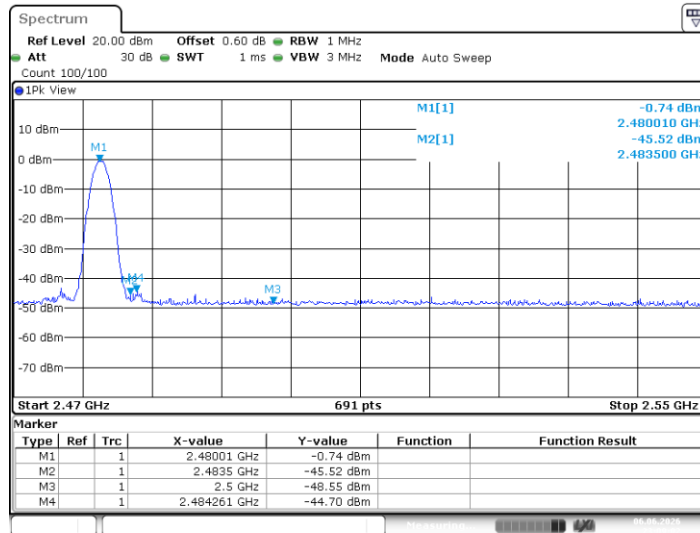
Date: 6.JUN.2026 23:04:02

2DH5_Ant1_High_2480_AV



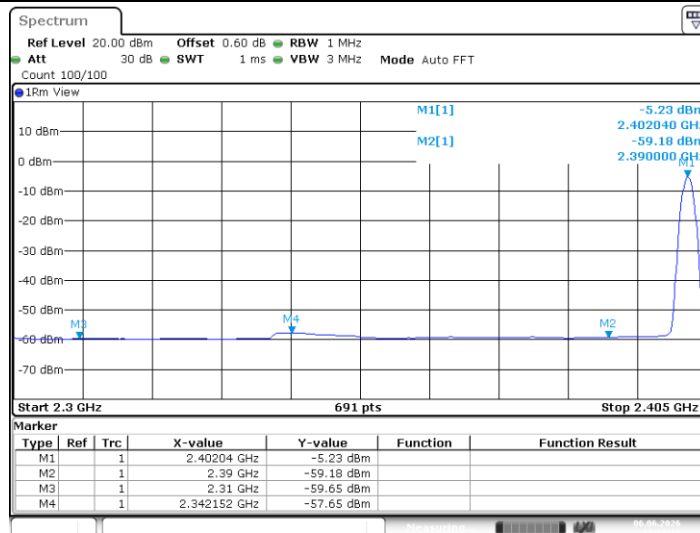
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2DH5_Ant1_High_2480_Peak



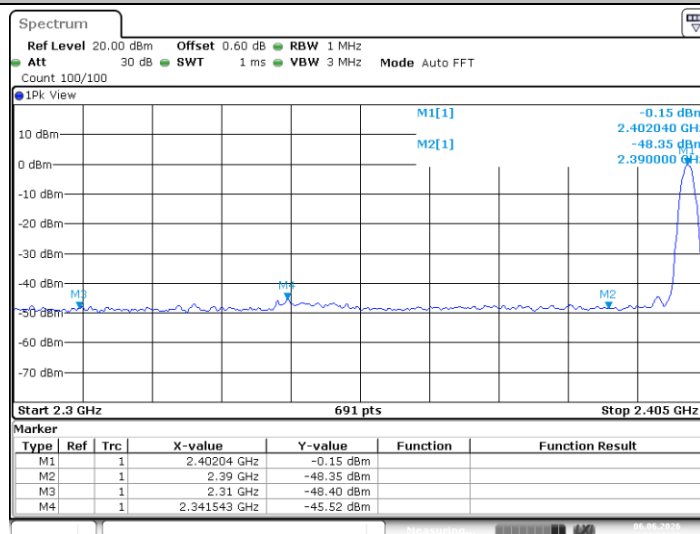
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3DH5_Ant1_Low_2402_AV



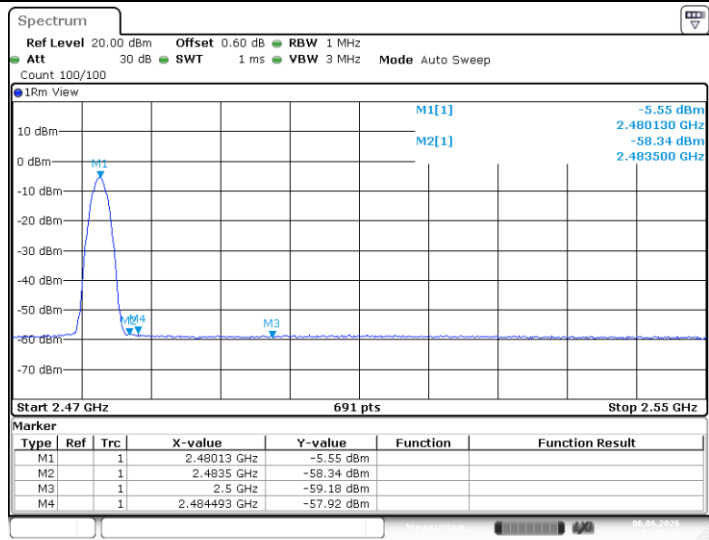
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3DH5_Ant1_Low_2402_Peak



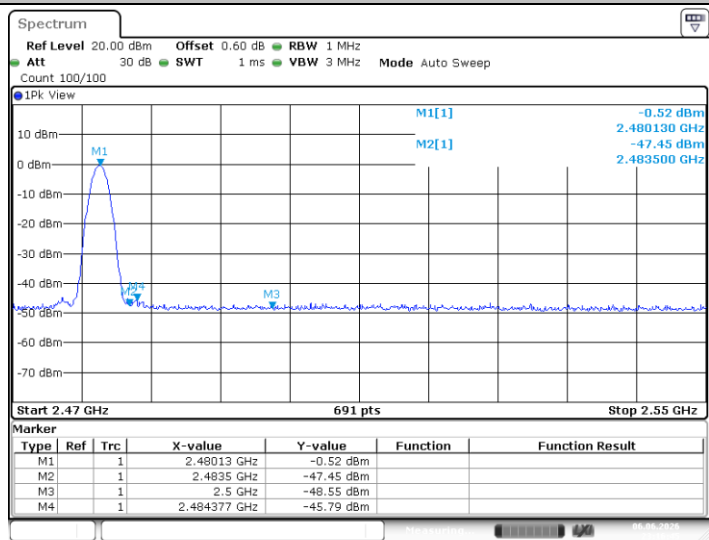
Date: 6.JUN.2026 23:12:00

3DH5_Ant1_High_2480_AV



Date: 6.JUN.2026 23:17:00

3DH5_Ant1_High_2480_Peak



Date: 6.JUN.2026 23:16:45