

FCC Appendix RF Test Data for BT

FCC ID : 2BDO6-S08ML

Company : WITSLISM TECHNOLOGY CO.,LIMITED

EUT : BLUETOOTH SPEAKER

Model Number : S08ML

Report No. : CTA26052800401

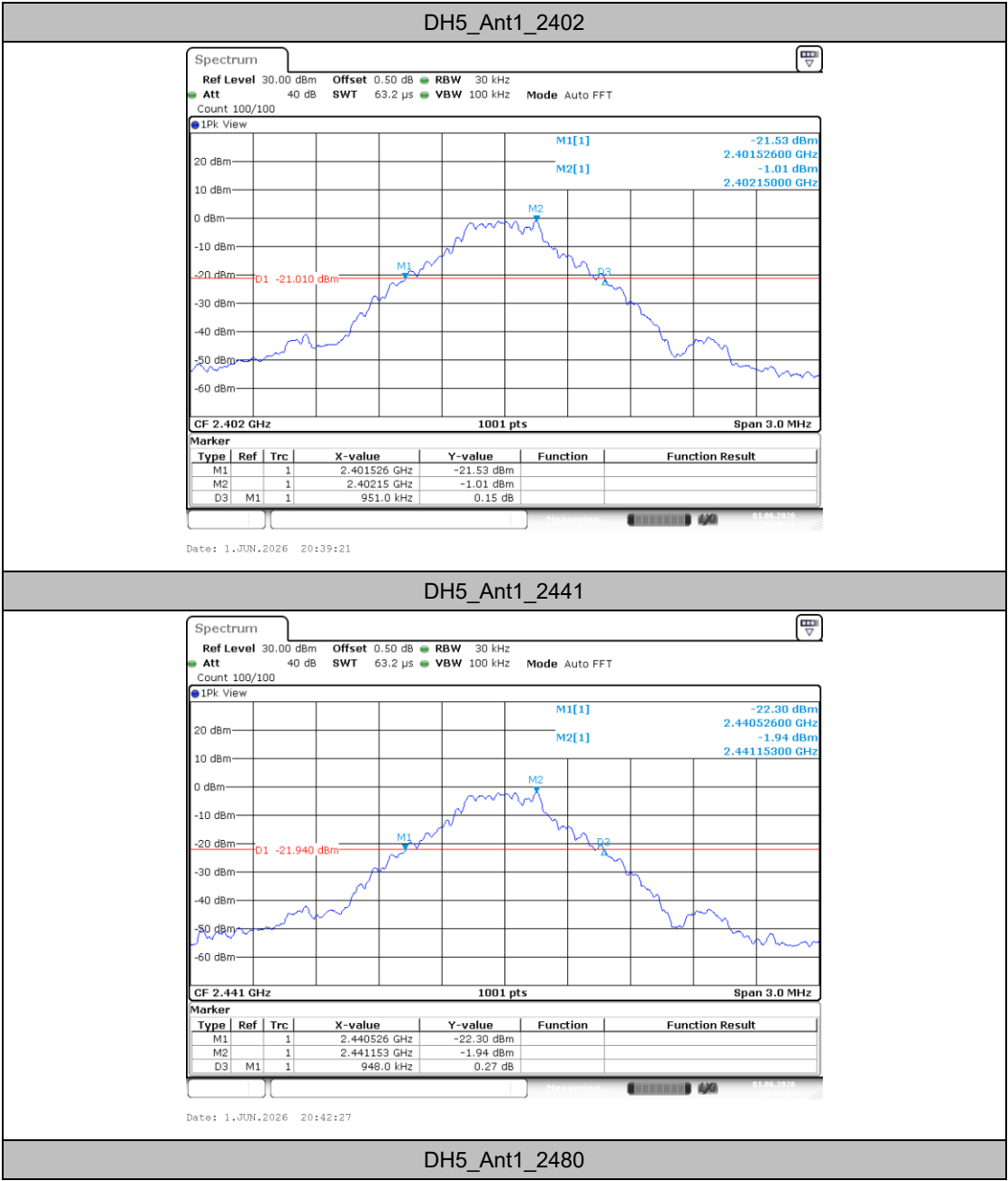
Reviewed By : Eric Wang

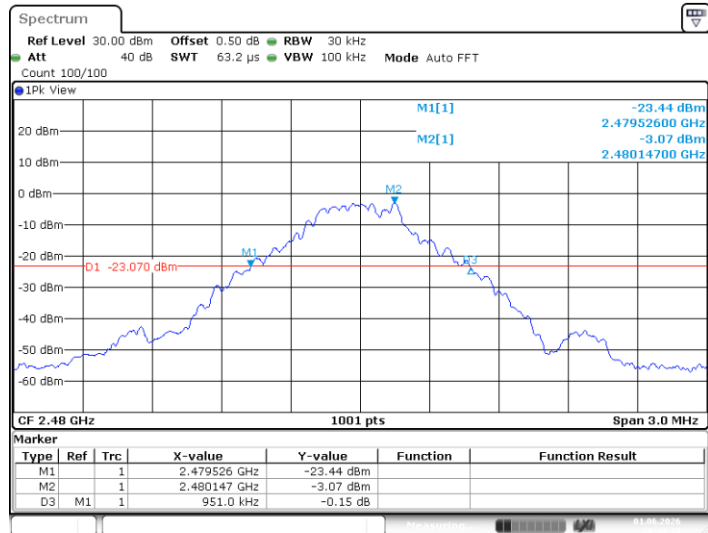
Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.95	2401.53	2402.48	---	---
		2441	0.95	2440.53	2441.47	---	---
		2480	0.95	2479.53	2480.48	---	---
2DH5	Ant1	2402	1.32	2401.33	2402.65	---	---
		2441	1.33	2440.33	2441.65	---	---
		2480	1.32	2479.33	2480.65	---	---

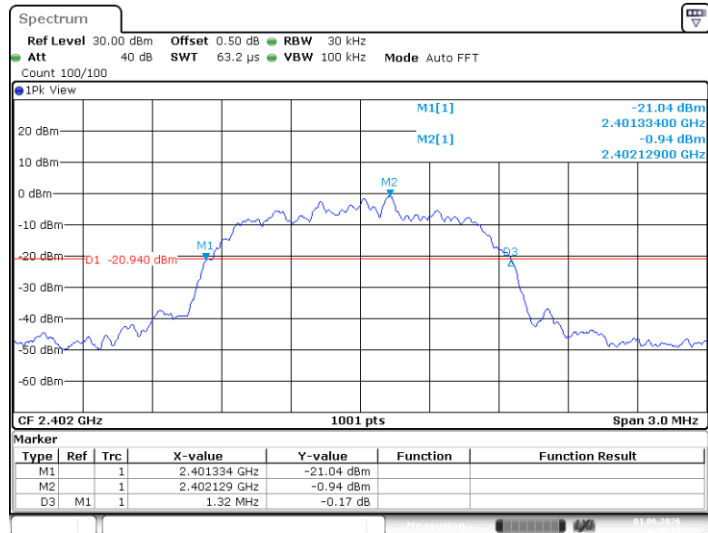
Test Graphs





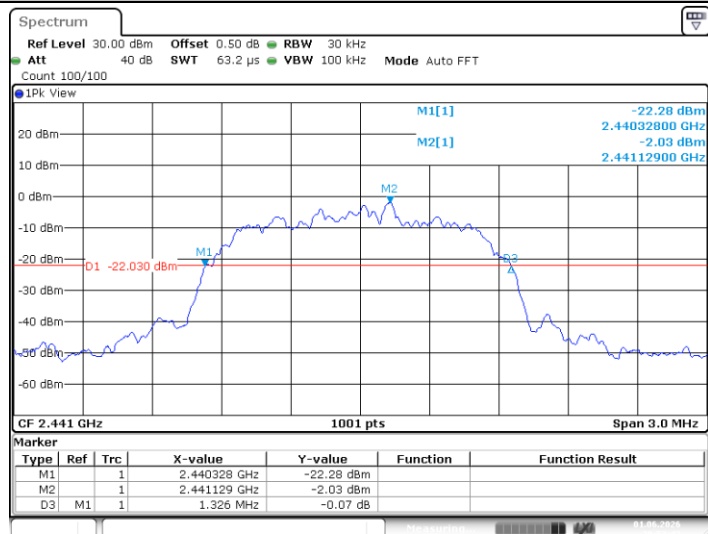
Date: 1.JUN.2026 20:44:18

2DH5_Ant1_2402



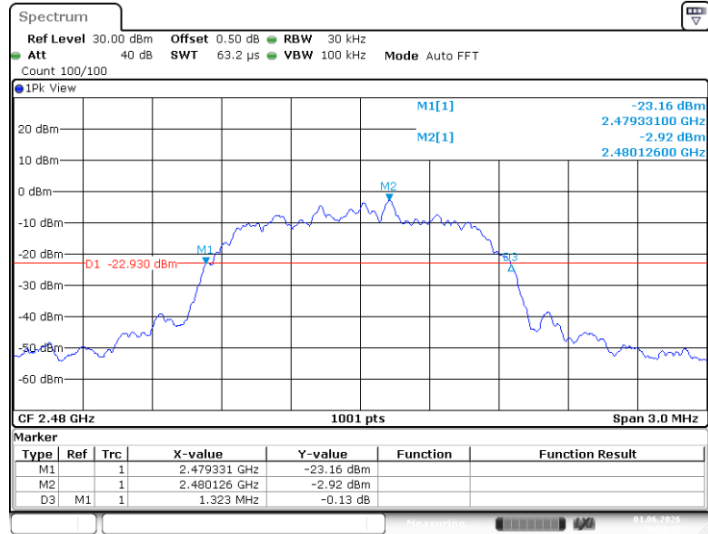
Date: 1.JUN.2026 20:49:38

2DH5_Ant1_2441



Date: 1.JUN.2026 20:52:43

2DH5_Ant1_2480



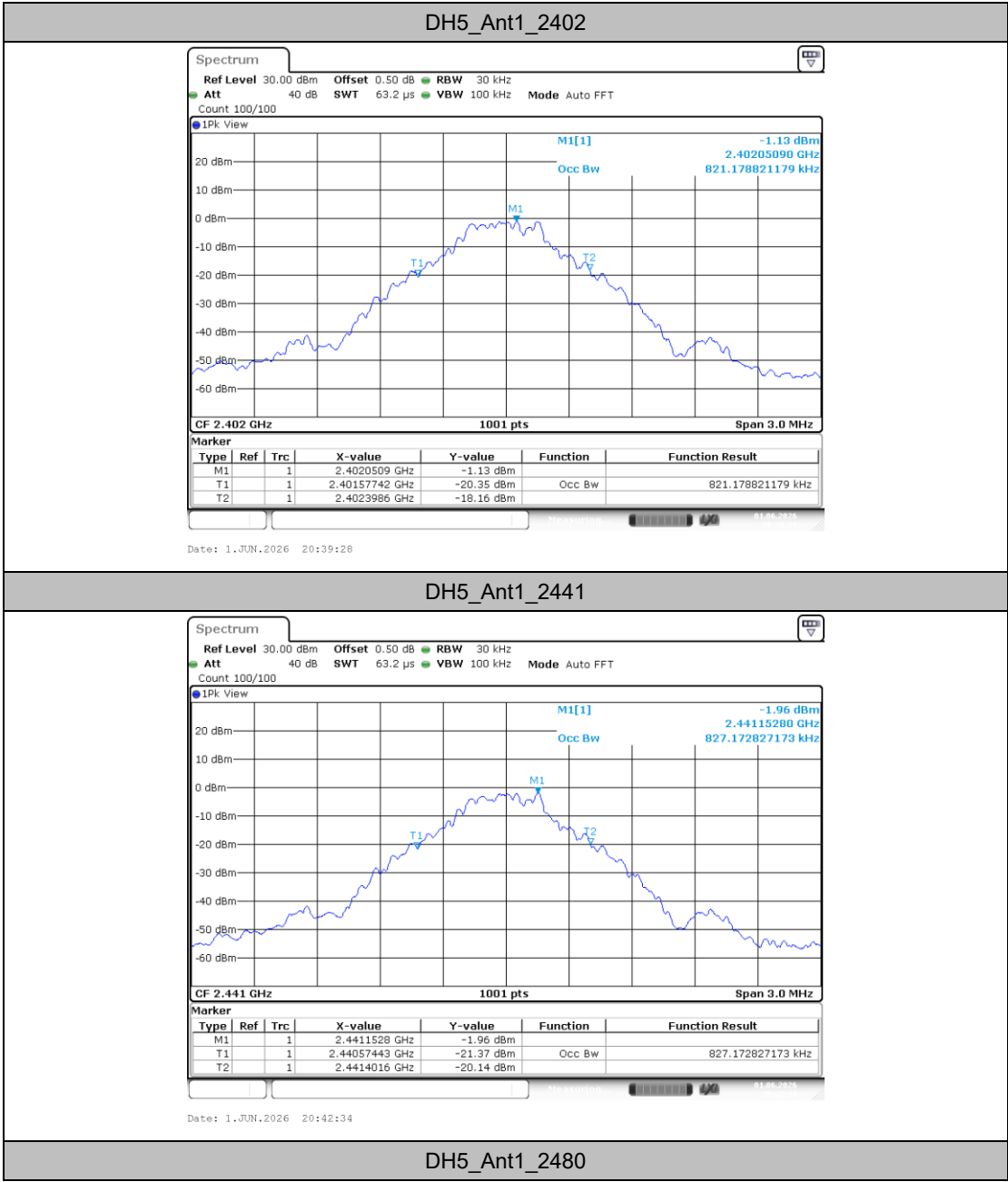
Date: 1.JUN.2026 20:54:37

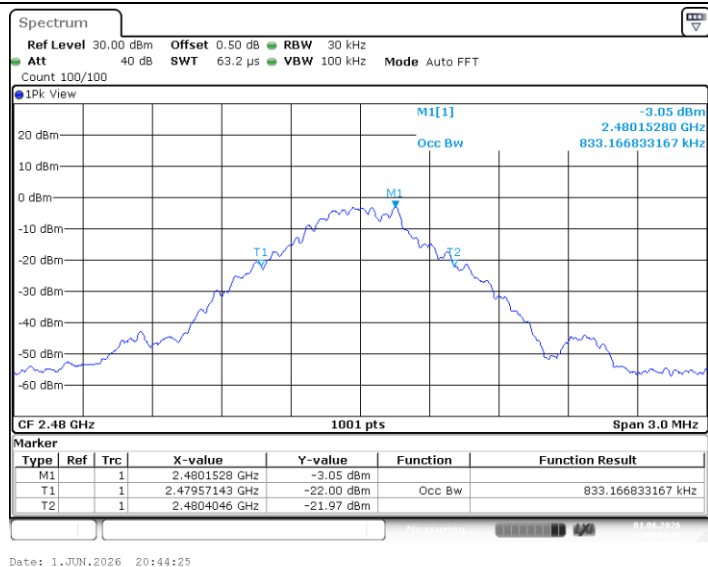
Appendix B: Occupied Channel Bandwidth

Test Result

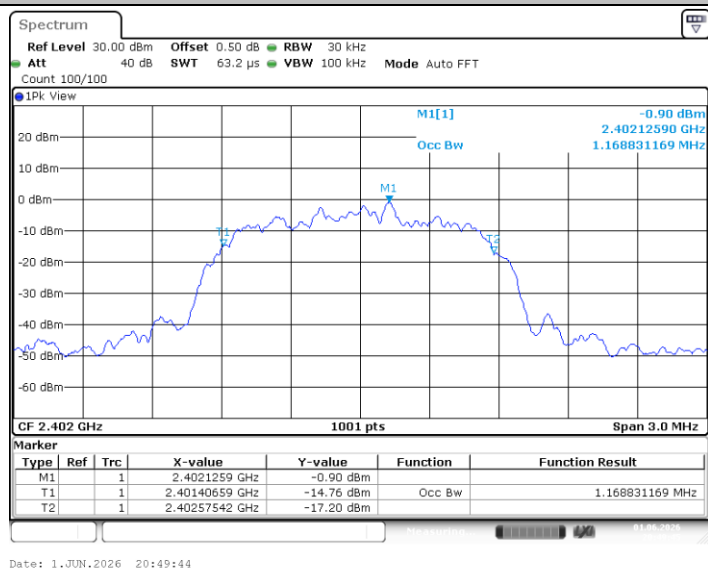
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.82118	2401.5774	2402.3986	---	---
		2441	0.82717	2440.5744	2441.4016	---	---
		2480	0.83317	2479.5714	2480.4046	---	---
2DH5	Ant1	2402	1.1688	2401.4066	2402.5754	---	---
		2441	1.1688	2440.4066	2441.5754	---	---
		2480	1.1688	2479.4066	2480.5754	---	---

Test Graphs

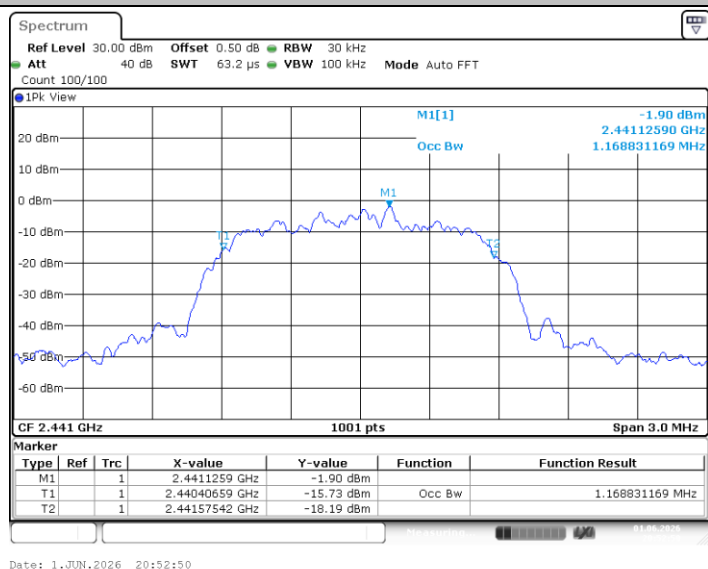




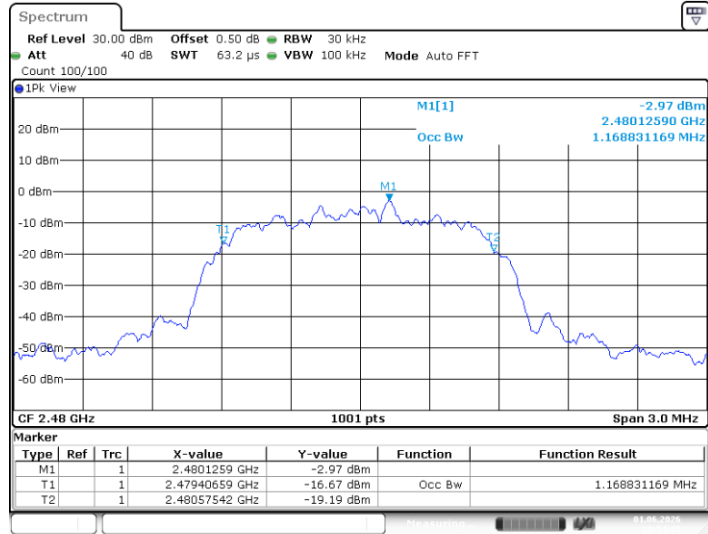
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Date: 1.JUN.2026 20:54:44

Appendix C: Maximum conducted output power

Test Result Peak

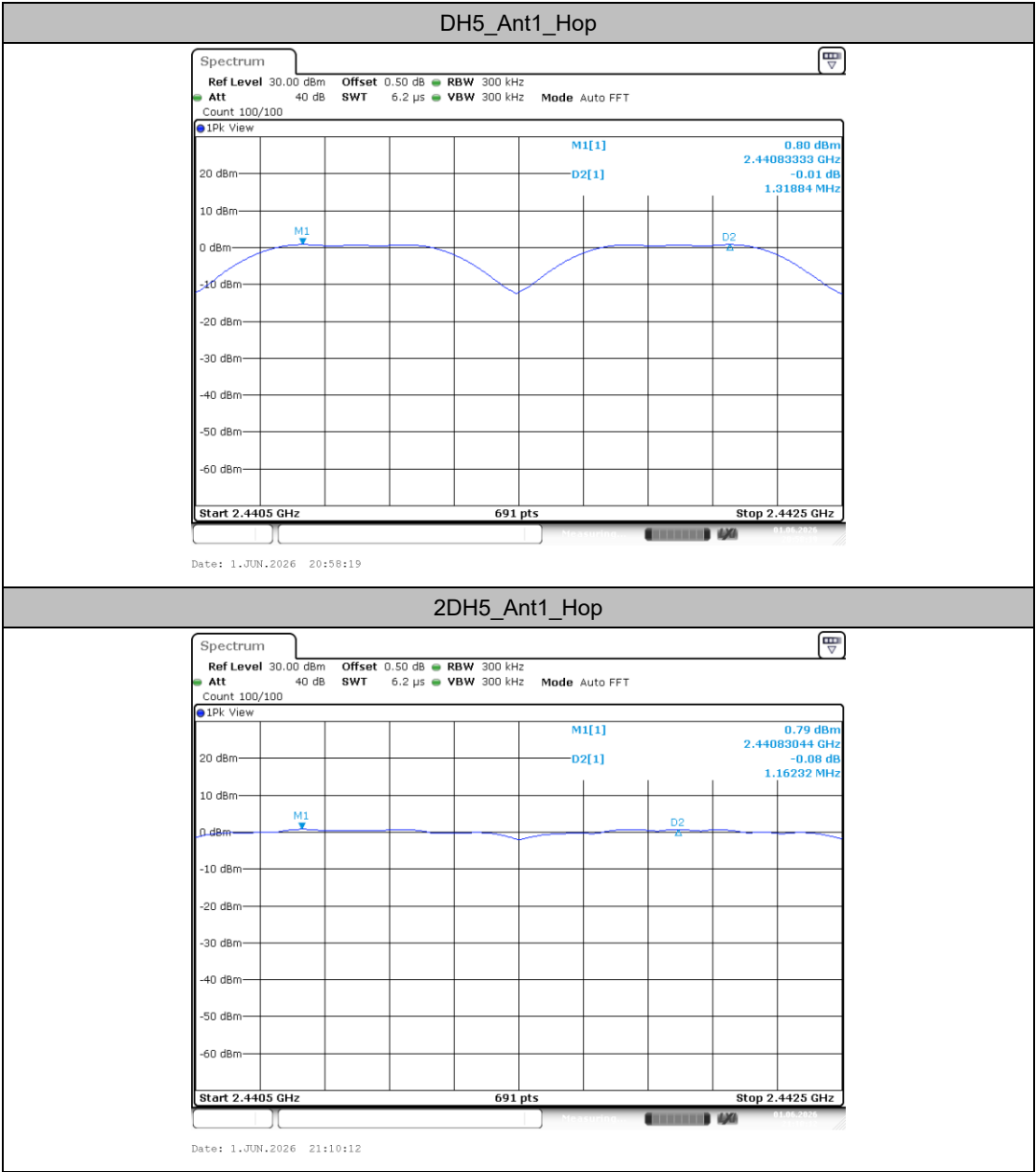
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	1.92	≤20.97	PASS
		2441	0.97	≤20.97	PASS
		2480	-0.13	≤20.97	PASS
2DH5	Ant1	2402	3.91	≤20.97	PASS
		2441	3.13	≤20.97	PASS
		2480	1.91	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.319	≥ 0.950	PASS
2DH5	Ant1	Hop	1.162	≥ 0.887	PASS

Test Graphs

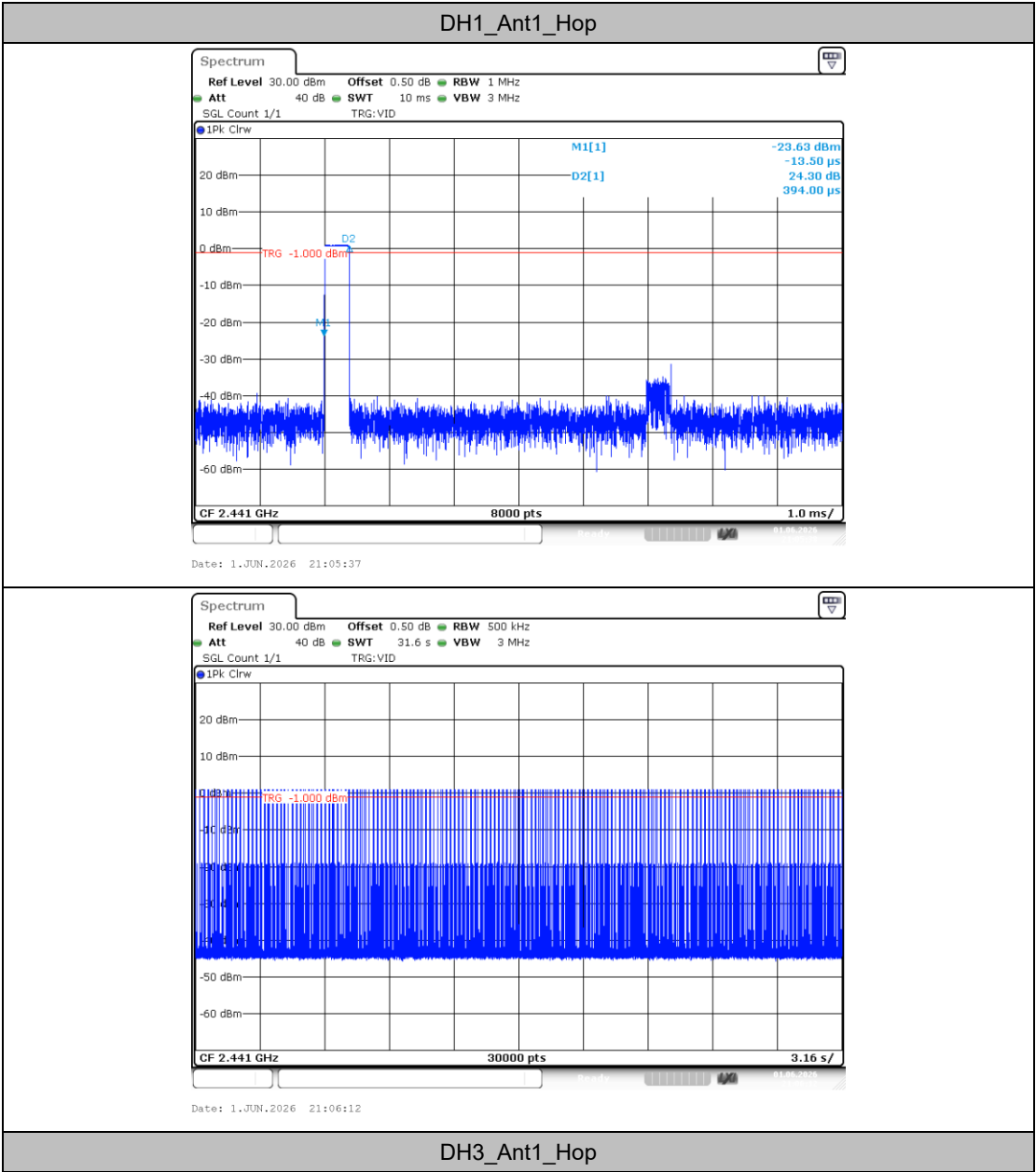


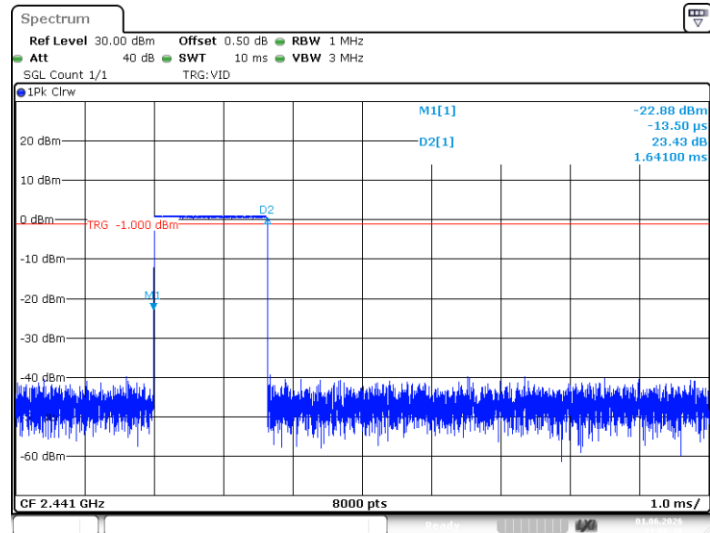
Appendix E: Time of occupancy

Test Result

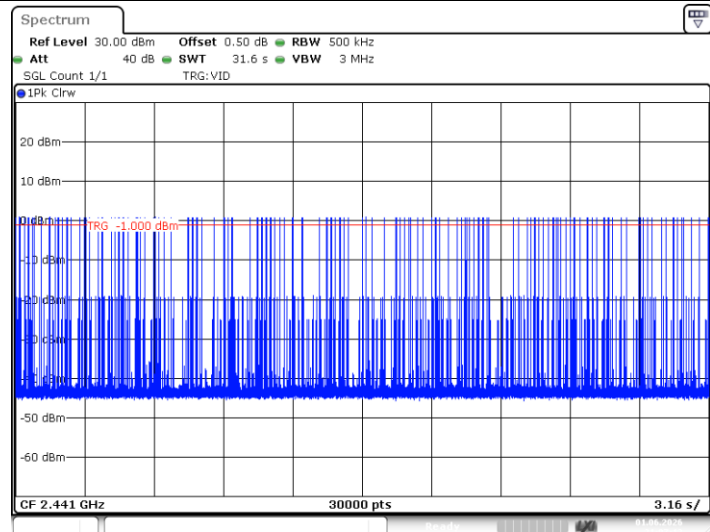
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.394	320	0.126	≤0.4	PASS
DH3	Ant1	Hop	1.641	150	0.246	≤0.4	PASS
DH5	Ant1	Hop	2.882	115	0.331	≤0.4	PASS
2DH1	Ant1	Hop	0.403	321	0.129	≤0.4	PASS
2DH3	Ant1	Hop	1.646	149	0.245	≤0.4	PASS
2DH5	Ant1	Hop	2.887	112	0.323	≤0.4	PASS

Test Graphs



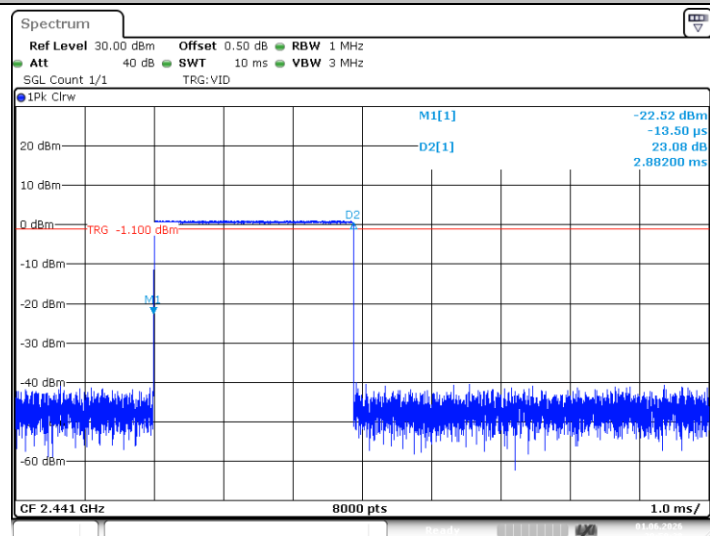


Date: 1.JUN.2026 21:06:39

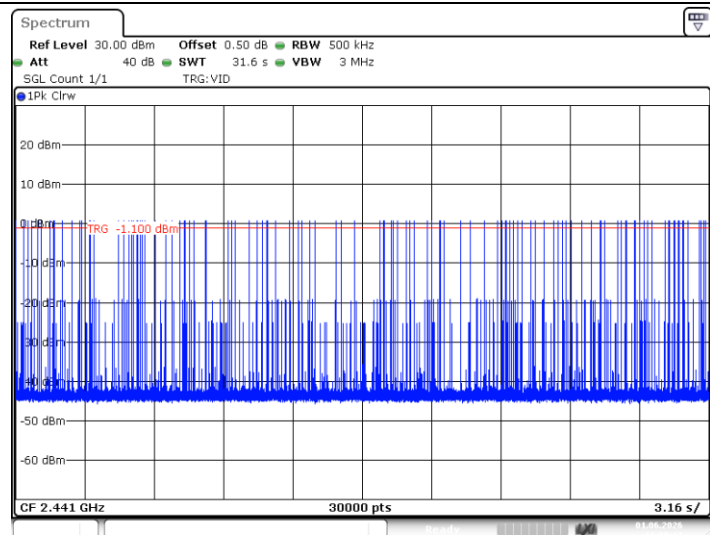


Date: 1.JUN.2026 21:07:13

DH5_Ant1_Hop

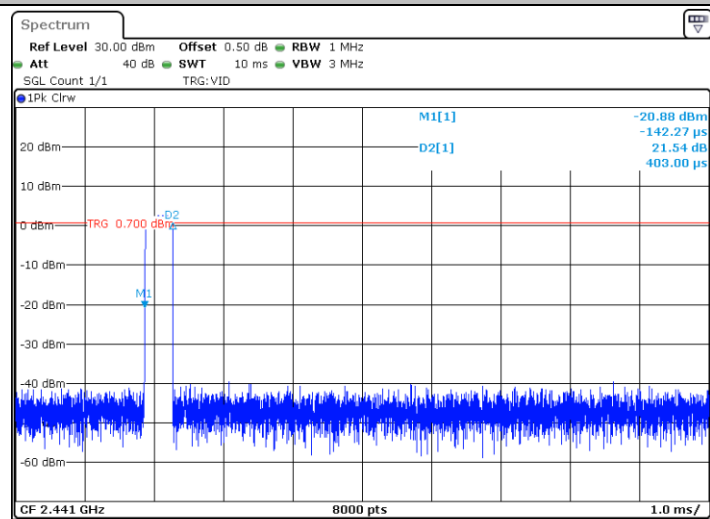


Date: 1.JUN.2026 20:59:38

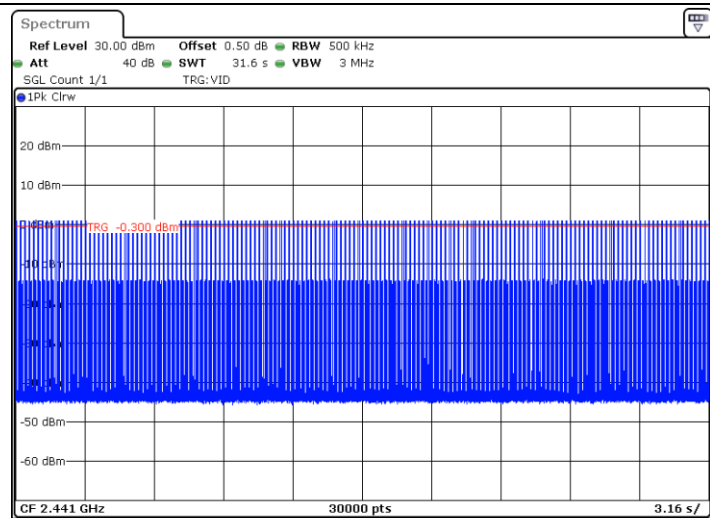


Date: 1.JUN.2026 21:00:12

2DH1_Ant1_Hop

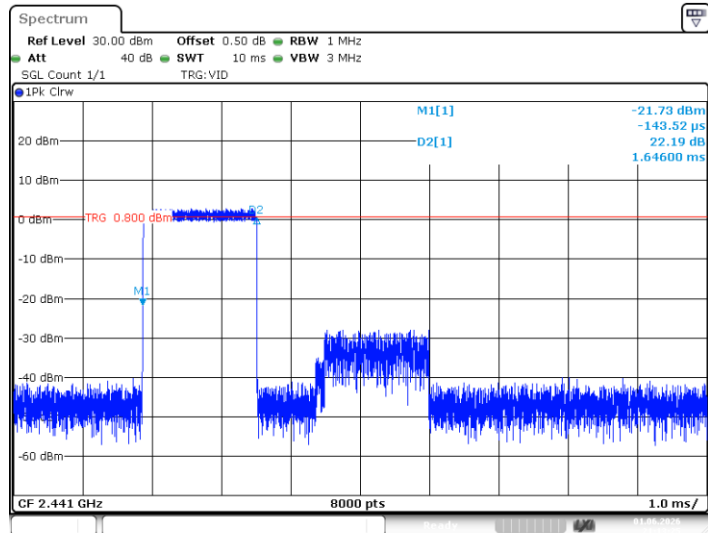


Date: 1.JUN.2026 21:12:11

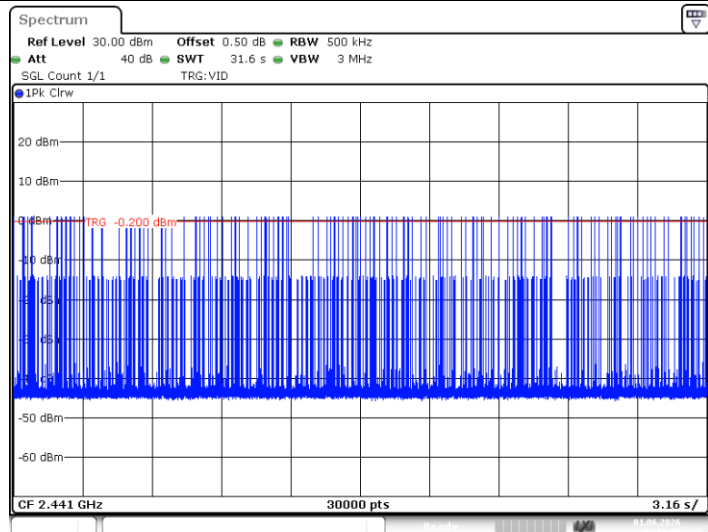


Date: 1.JUN.2026 21:12:52

2DH3_Ant1_Hop

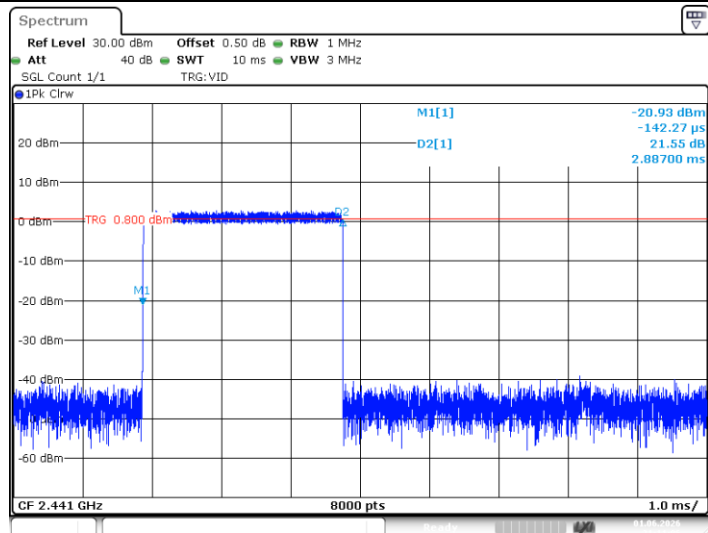


Date: 1.JUN.2026 21:13:24

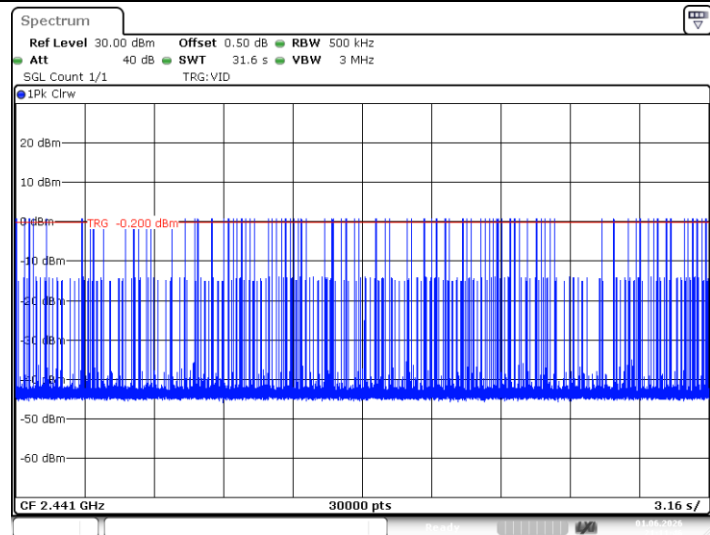


Date: 1.JUN.2026 21:14:05

2DH5_Ant1_Hop



Date: 1.JUN.2026 21:11:05



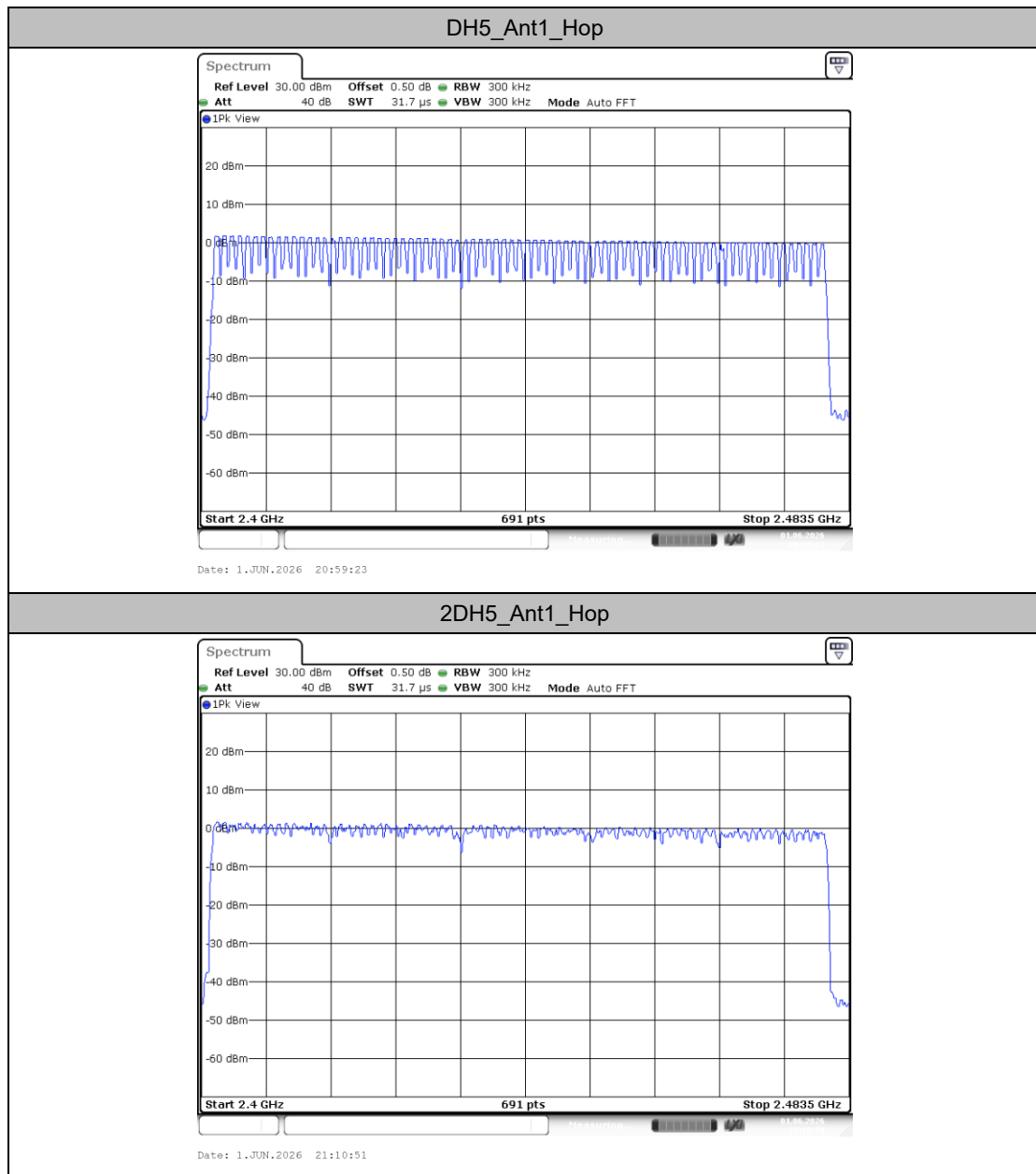
Date: 1.JUN.2026 21:11:46

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

Test Graphs

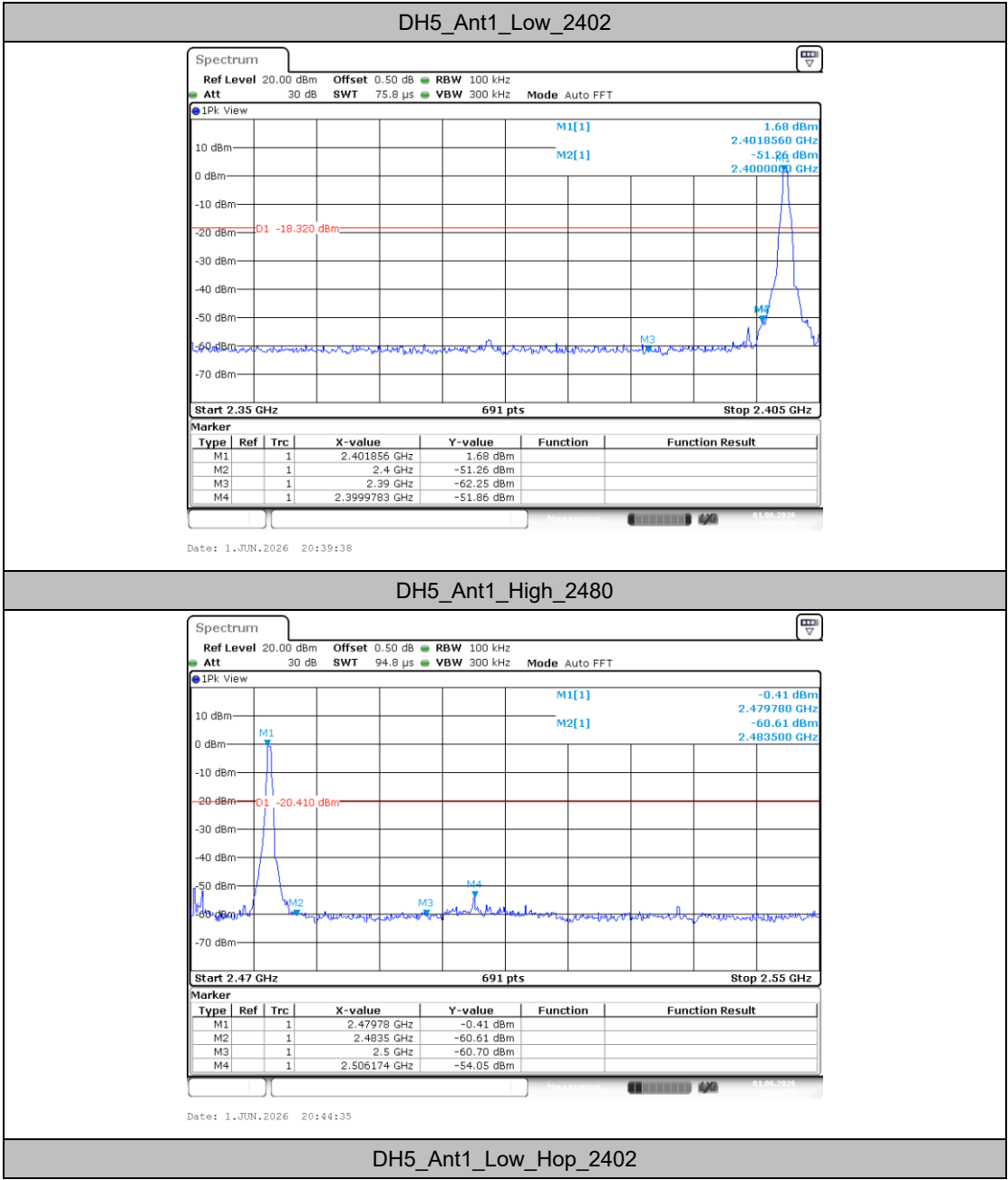


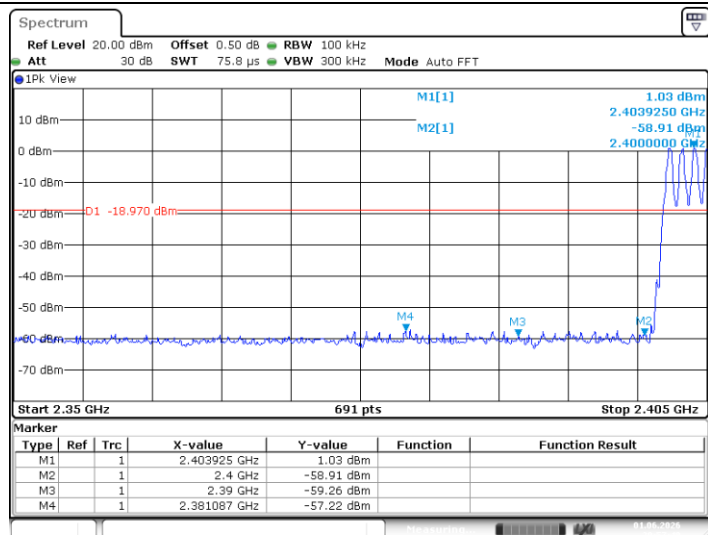
Appendix G: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.68	-51.86	≤-18.32	PASS
		High	2480	-0.41	-54.05	≤-20.41	PASS
		Low	Hop_2402	1.03	-57.22	≤-18.97	PASS
		High	Hop_2480	-0.12	-55.34	≤-20.12	PASS
2DH5	Ant1	Low	2402	1.62	-52.81	≤-18.38	PASS
		High	2480	-0.48	-35.37	≤-20.48	PASS
		Low	Hop_2402	1.45	-57.88	≤-18.55	PASS
		High	Hop_2480	-2.00	-55.56	≤-22	PASS

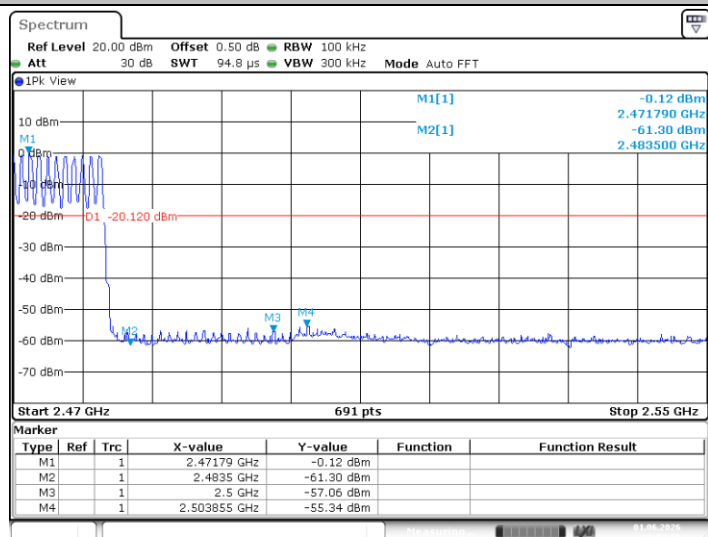
Test Graphs





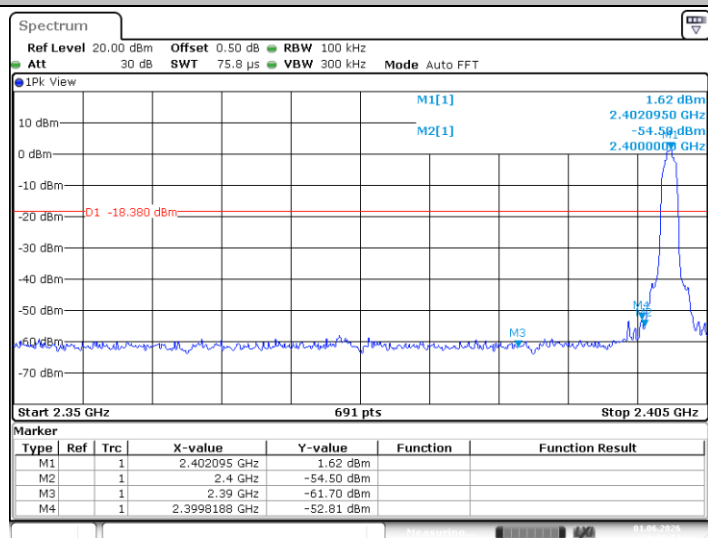
Date: 1.JUN.2026 20:57:39

DH5_Ant1_High_Hop_2480



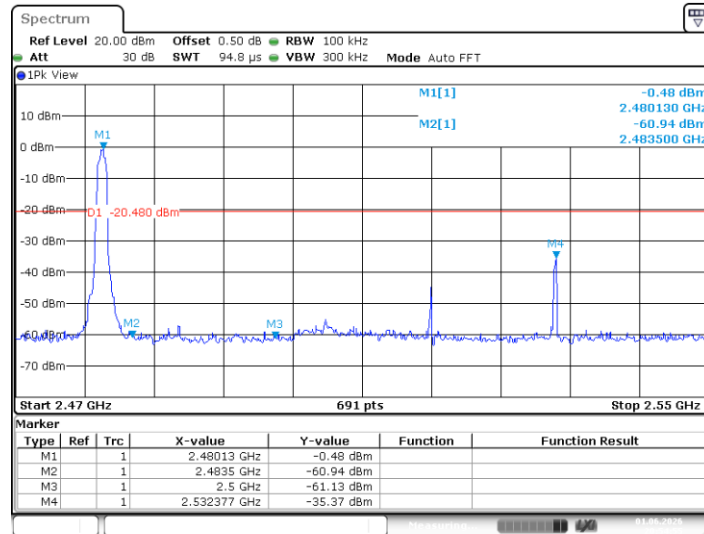
Date: 1.JUN.2026 21:07:58

2DH5_Ant1_Low_2402



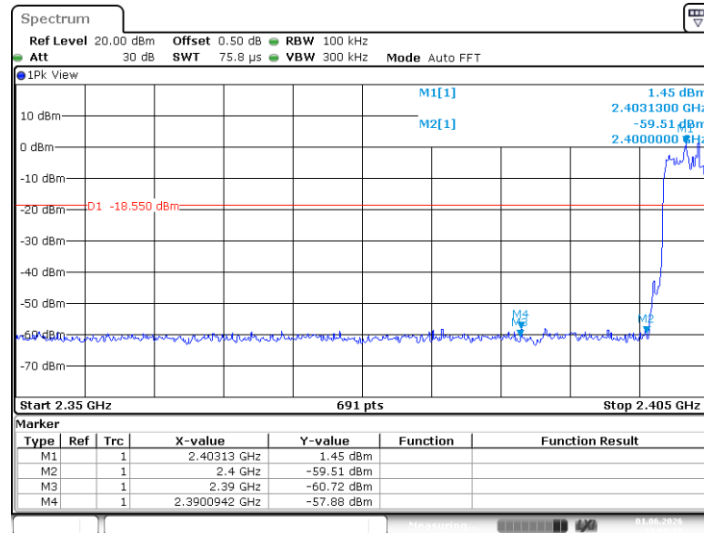
Date: 1.JUN.2026 20:49:54

2DH5_Ant1_High_2480



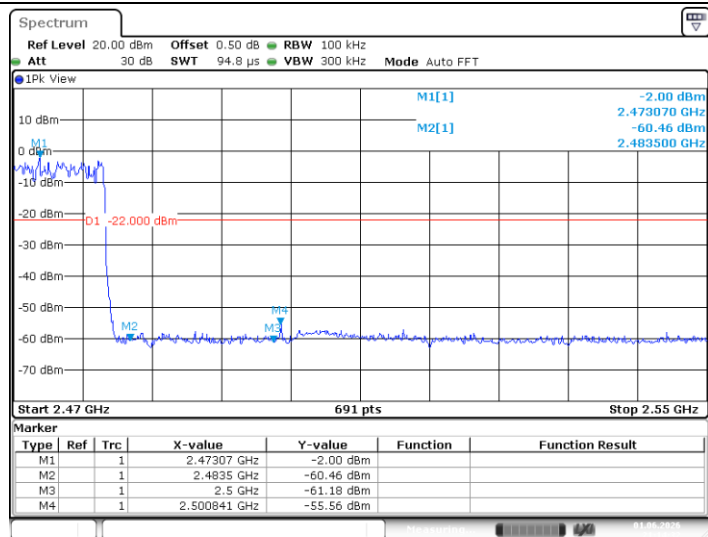
Date: 1.JUN.2026 20:54:54

2DH5_Ant1_Low_Hop_2402



Date: 1.JUN.2026 21:08:22

2DH5_Ant1_High_Hop_2480



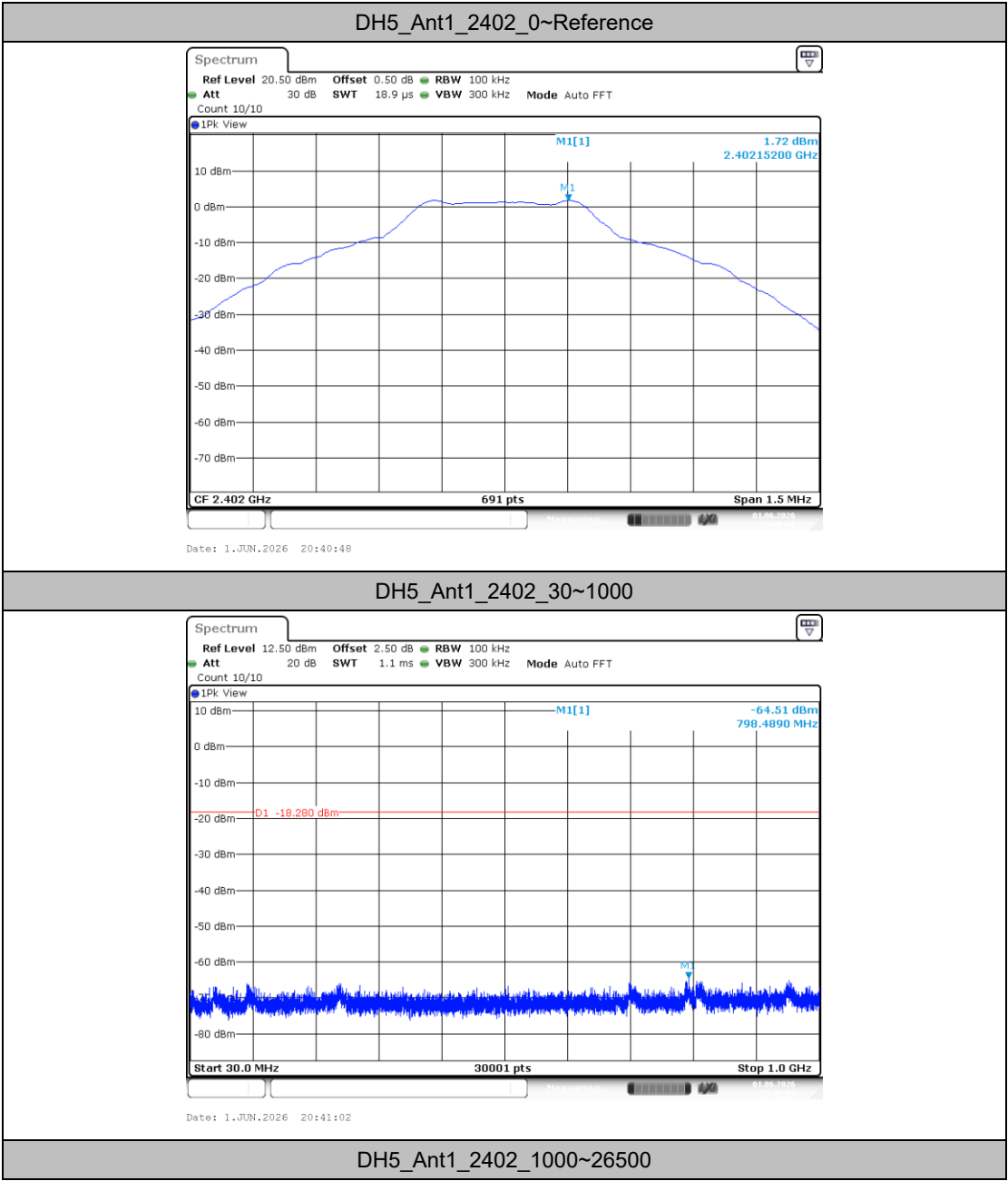
Date: 1.JUN.2026 21:14:32

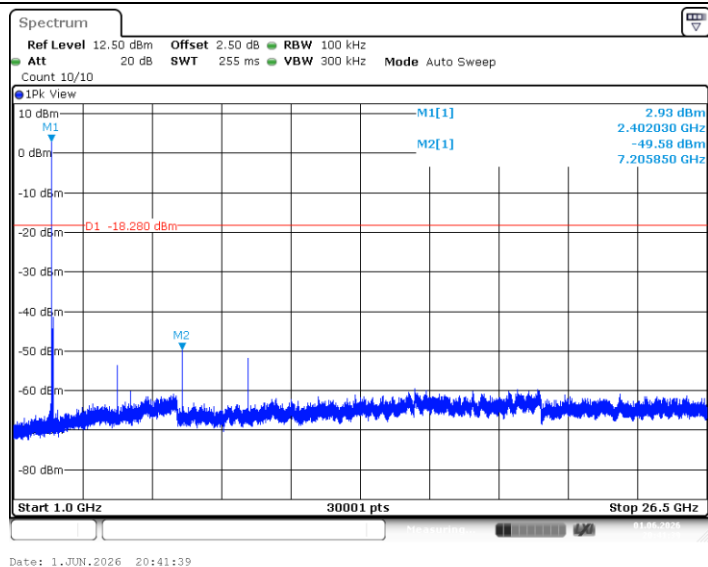
Appendix H: Conducted Spurious Emission

Test Result

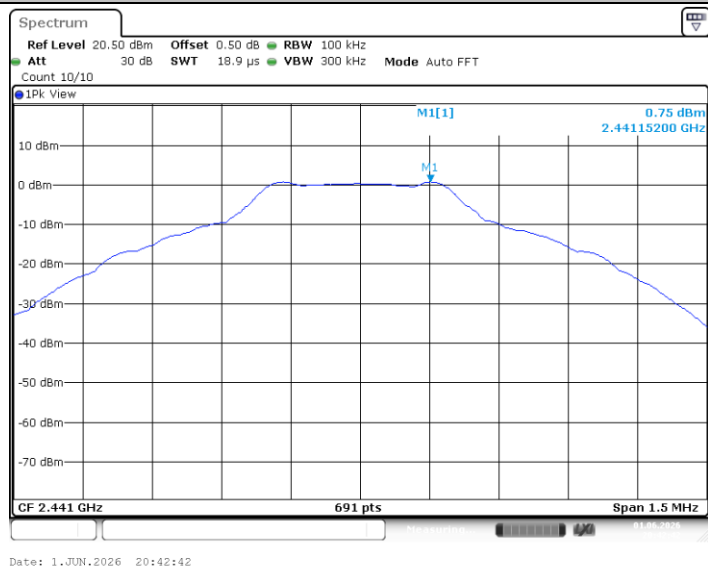
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.72	1.72	---	PASS
			30~1000	1.72	-64.51	≤-18.28	PASS
			1000~26500	1.72	-49.58	≤-18.28	PASS
		2441	Reference	0.75	0.75	---	PASS
			30~1000	0.75	-59.41	≤-19.25	PASS
			1000~26500	0.75	-50.95	≤-19.25	PASS
		2480	Reference	-0.36	-0.36	---	PASS
			30~1000	-0.36	-64.11	≤-20.36	PASS
			1000~26500	-0.36	-50.88	≤-20.36	PASS
2DH5	Ant1	2402	Reference	1.53	1.53	---	PASS
			30~1000	1.53	-37.44	≤-18.47	PASS
			1000~26500	1.53	-51.04	≤-18.47	PASS
		2441	Reference	0.60	0.60	---	PASS
			30~1000	0.60	-63.97	≤-19.4	PASS
			1000~26500	0.60	-52	≤-19.4	PASS
		2480	Reference	-0.51	-0.51	---	PASS
			30~1000	-0.51	-64.7	≤-20.51	PASS
			1000~26500	-0.51	-52.41	≤-20.51	PASS

Test Graphs

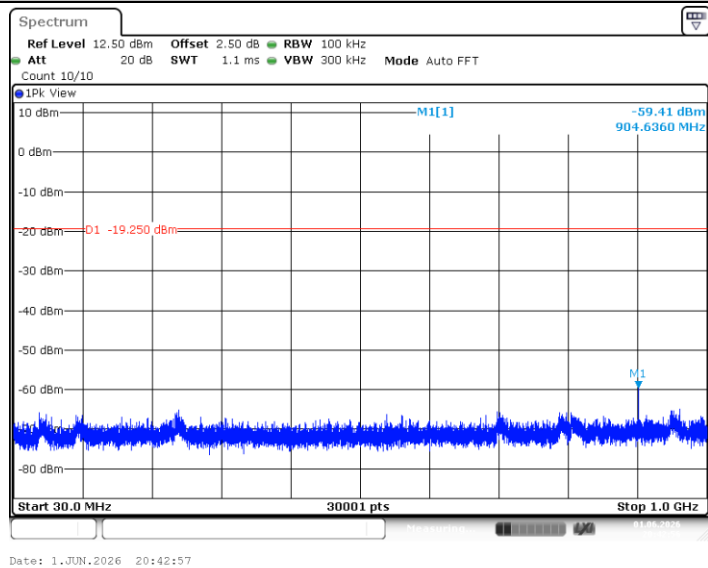




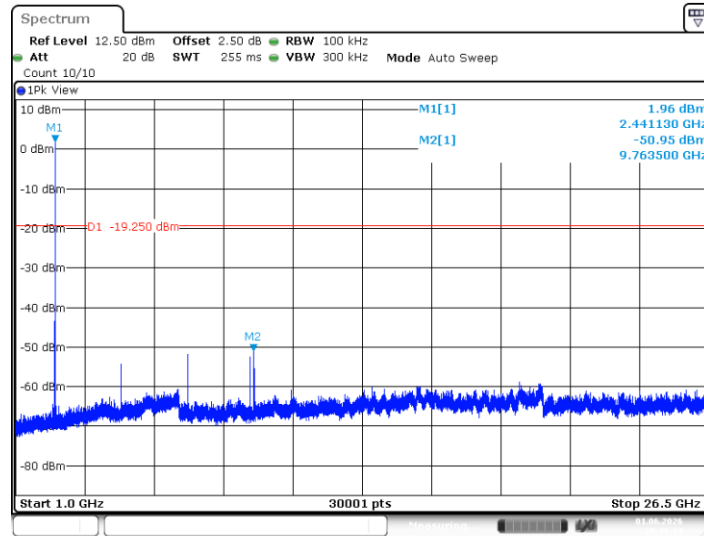
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000

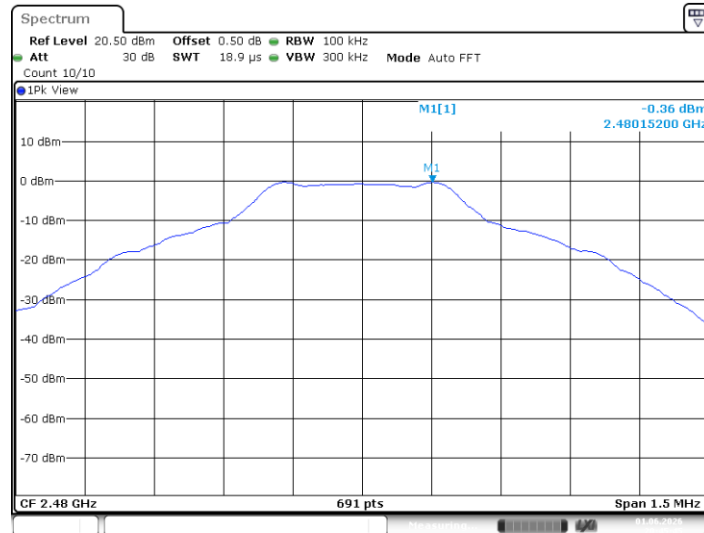


DH5_Ant1_2441_1000~26500



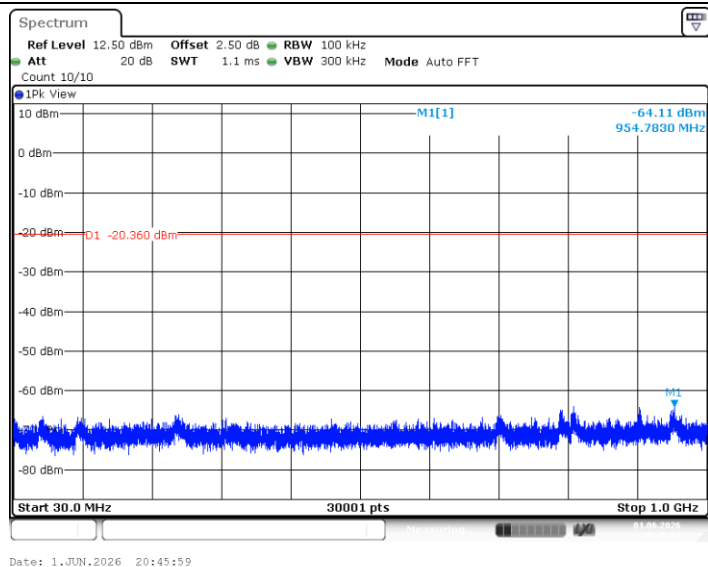
Date: 1.JUN.2026 20:43:34

DH5_Ant1_2480_0~Reference

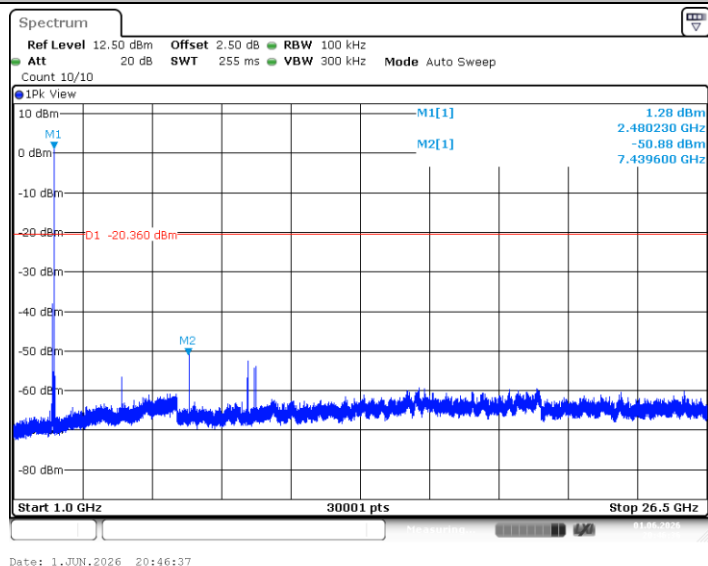


Date: 1.JUN.2026 20:45:45

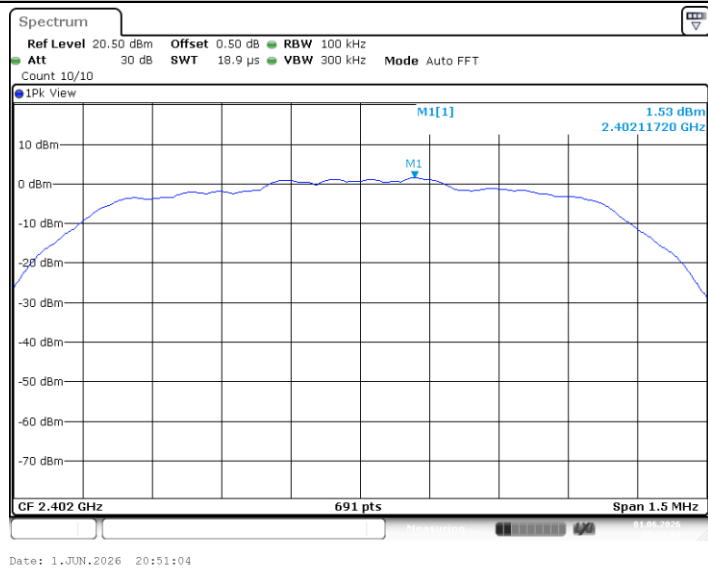
DH5_Ant1_2480_30~1000

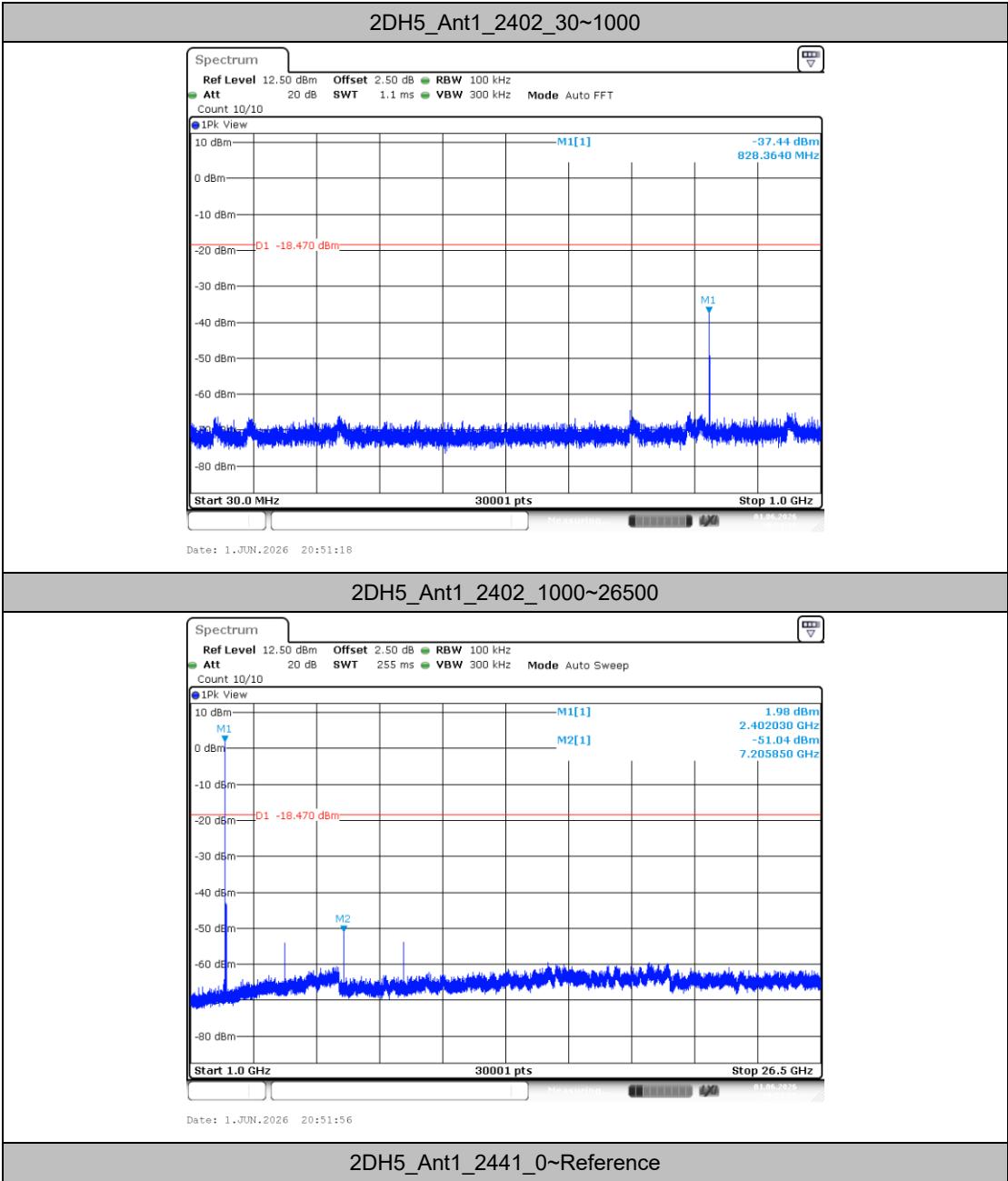


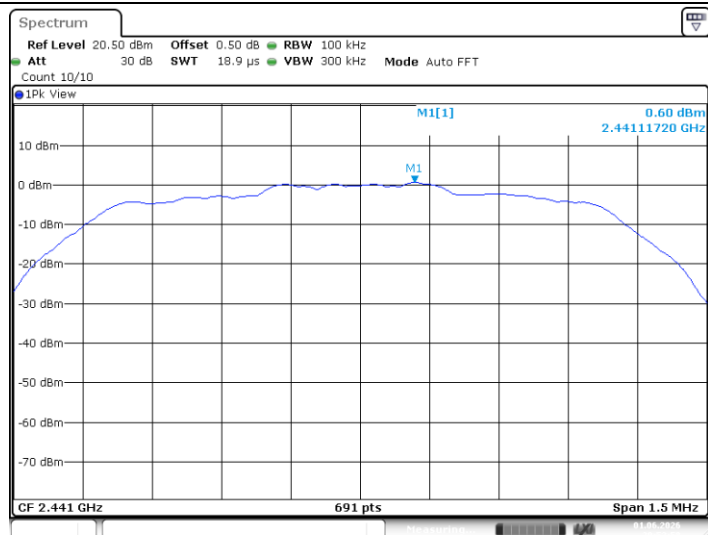
DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference

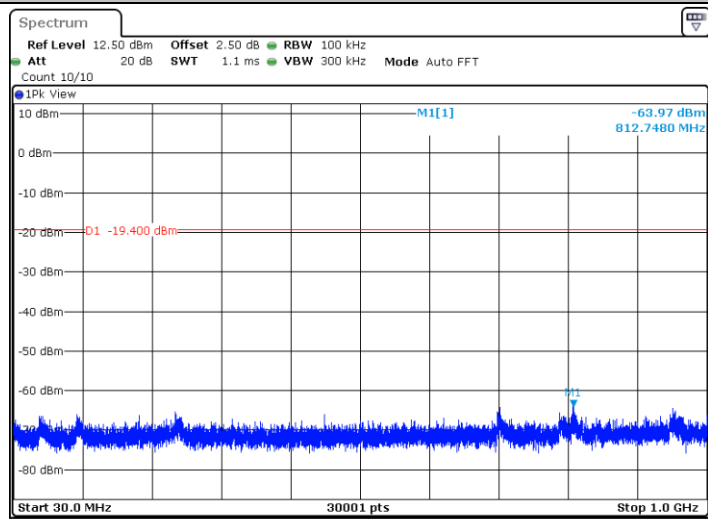






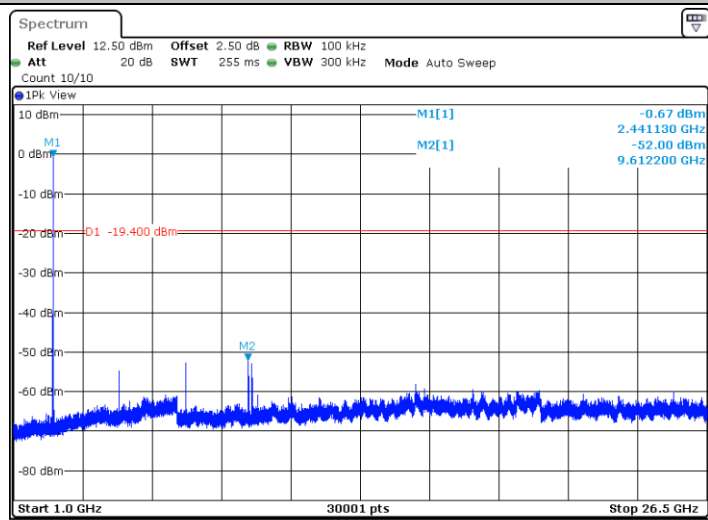
Date: 1.JUN.2026 20:52:58

2DH5_Ant1_2441_30~1000



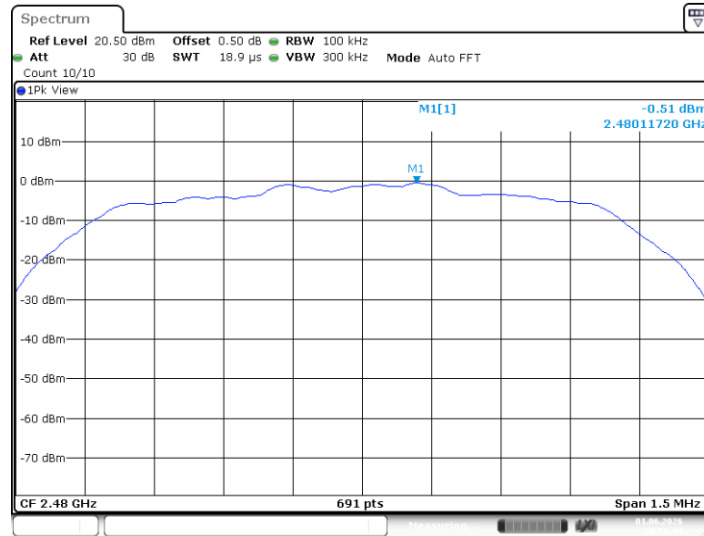
Date: 1.JUN.2026 20:53:13

2DH5_Ant1_2441_1000~26500



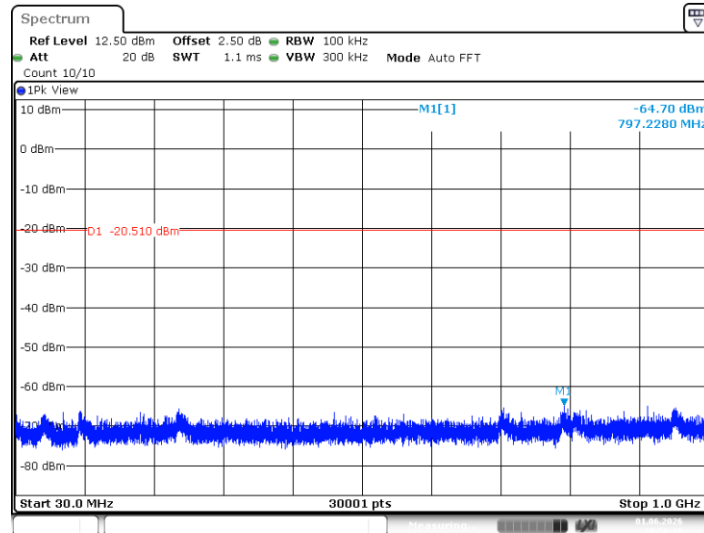
Date: 1.JUN.2026 20:53:50

2DH5_Ant1_2480_0~Reference



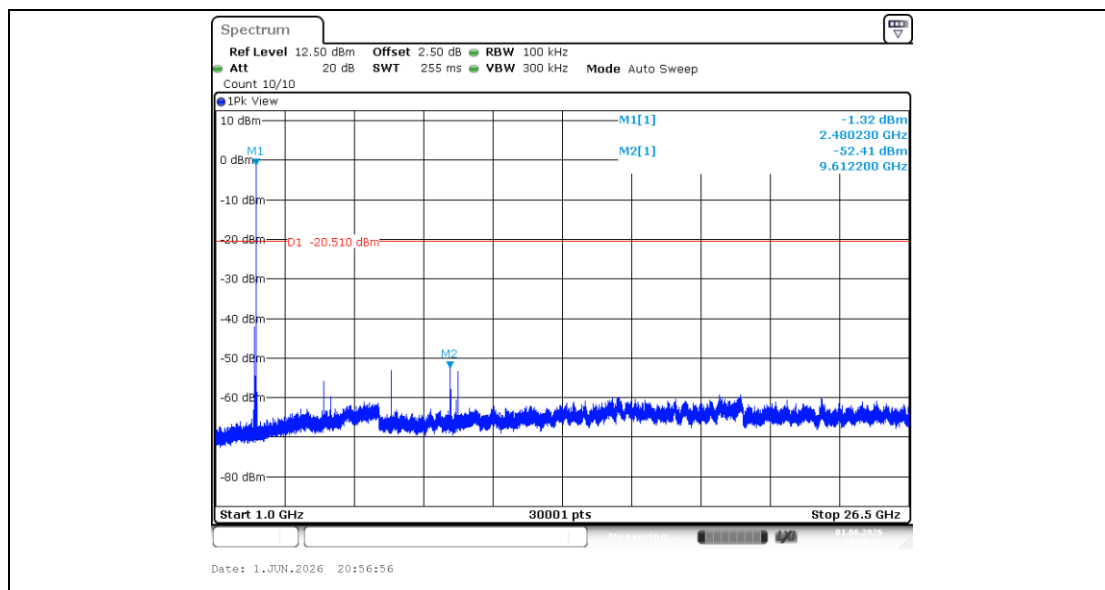
Date: 1.JUN.2026 20:56:04

2DH5_Ant1_2480_30~1000



Date: 1.JUN.2026 20:56:18

2DH5_Ant1_2480_1000~26500

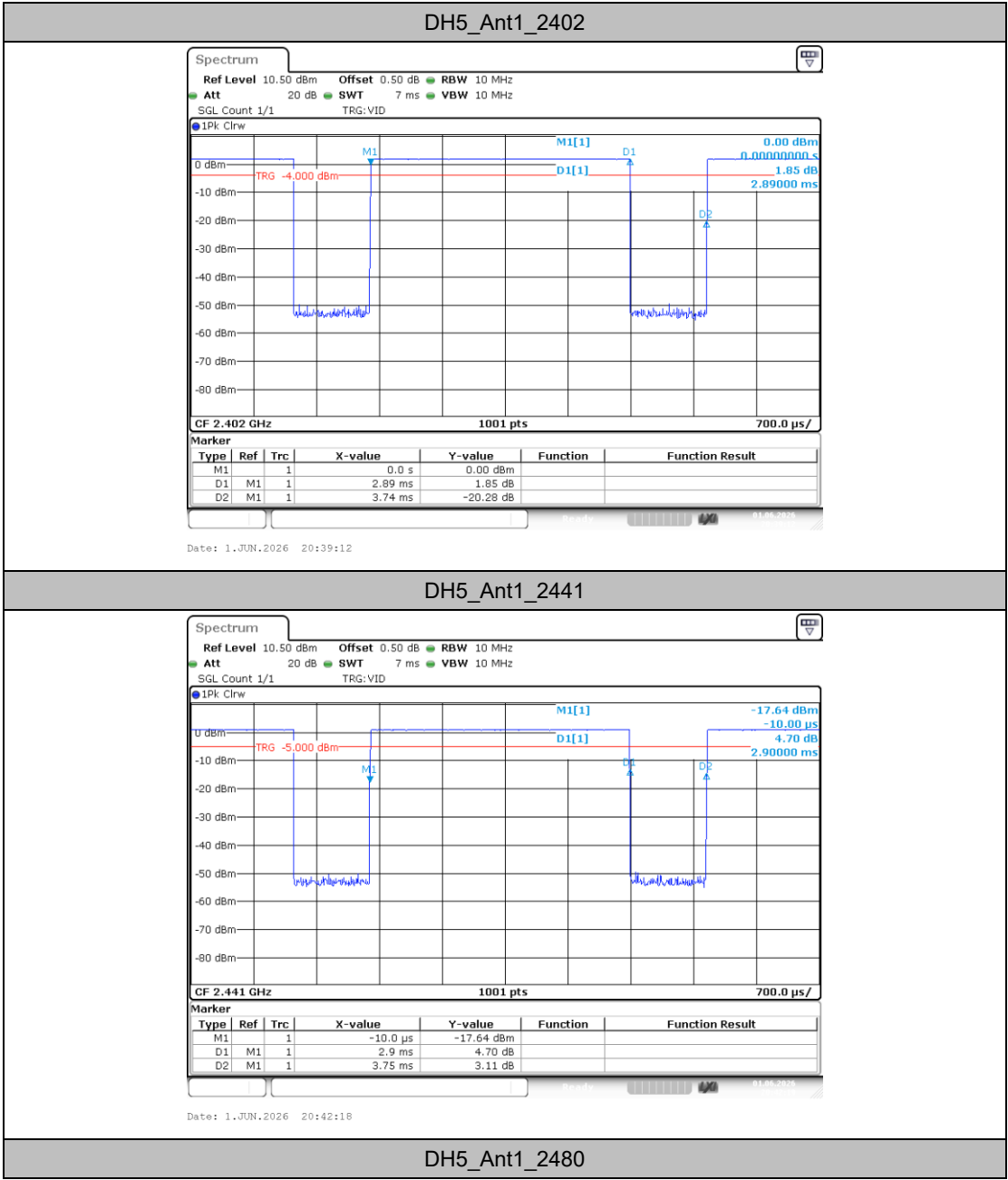


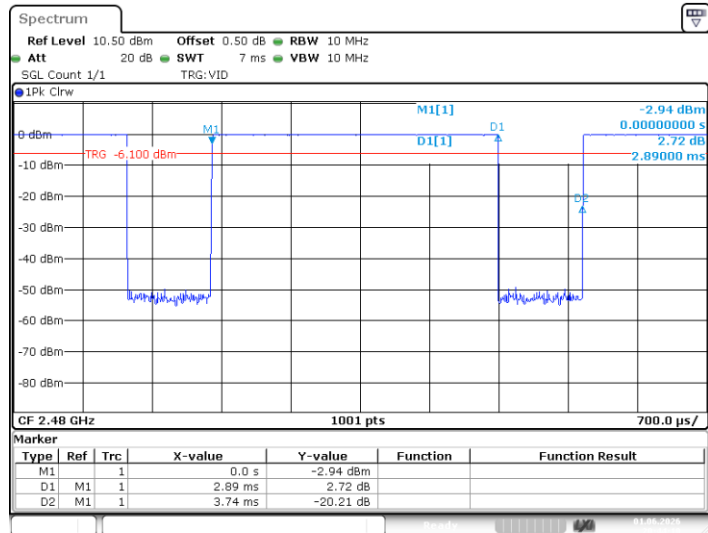
Appendix I: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.89	3.74	77.27	1.12	---	---
		2441	2.90	3.75	77.33	1.12	---	---
		2480	2.89	3.74	77.27	1.12	---	---
2DH5	Ant1	2402	2.90	3.75	77.33	1.12	---	---
		2441	2.90	3.75	77.33	1.12	---	---
		2480	2.91	3.75	77.60	1.10	---	---

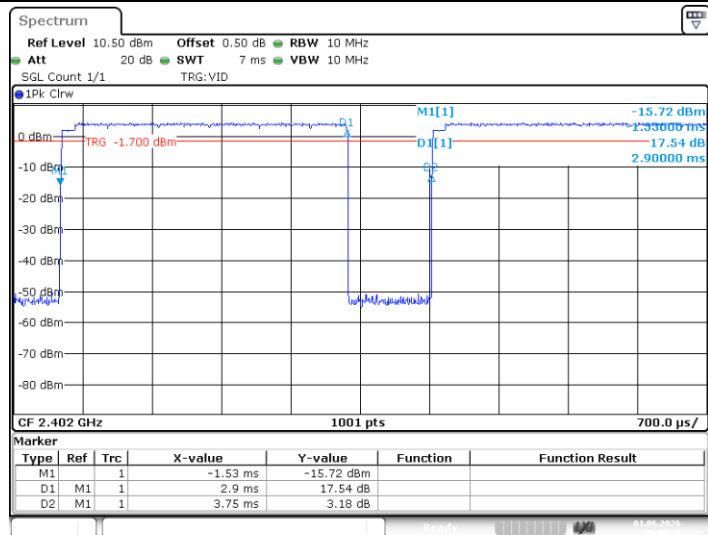
Test Graphs





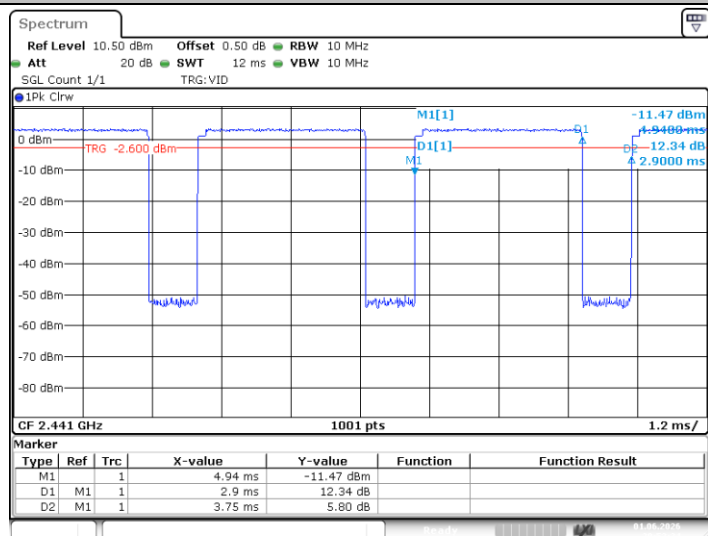
Date: 1.JUN.2026 20:44:10

2DH5_Ant1_2402



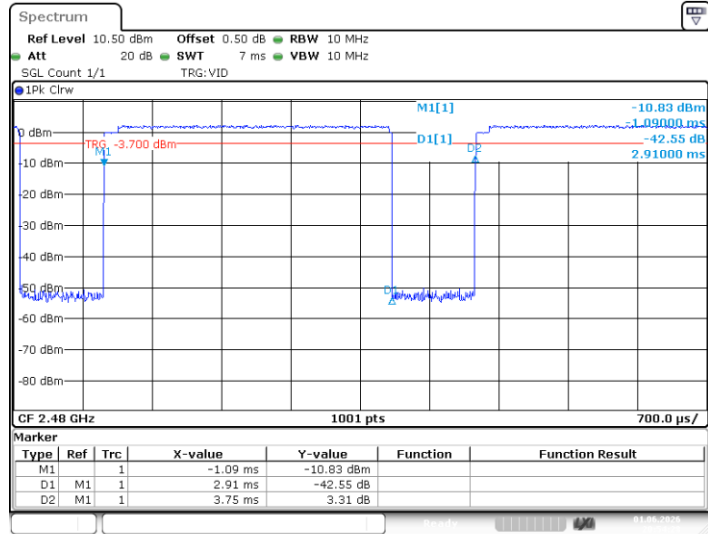
Date: 1.JUN.2026 20:49:29

2DH5_Ant1_2441



Date: 1.JUN.2026 20:52:34

2DH5_Ant1_2480



Date: 1.JUN.2026 20:54:29

Appendix J: Emissions in Restricted Bands

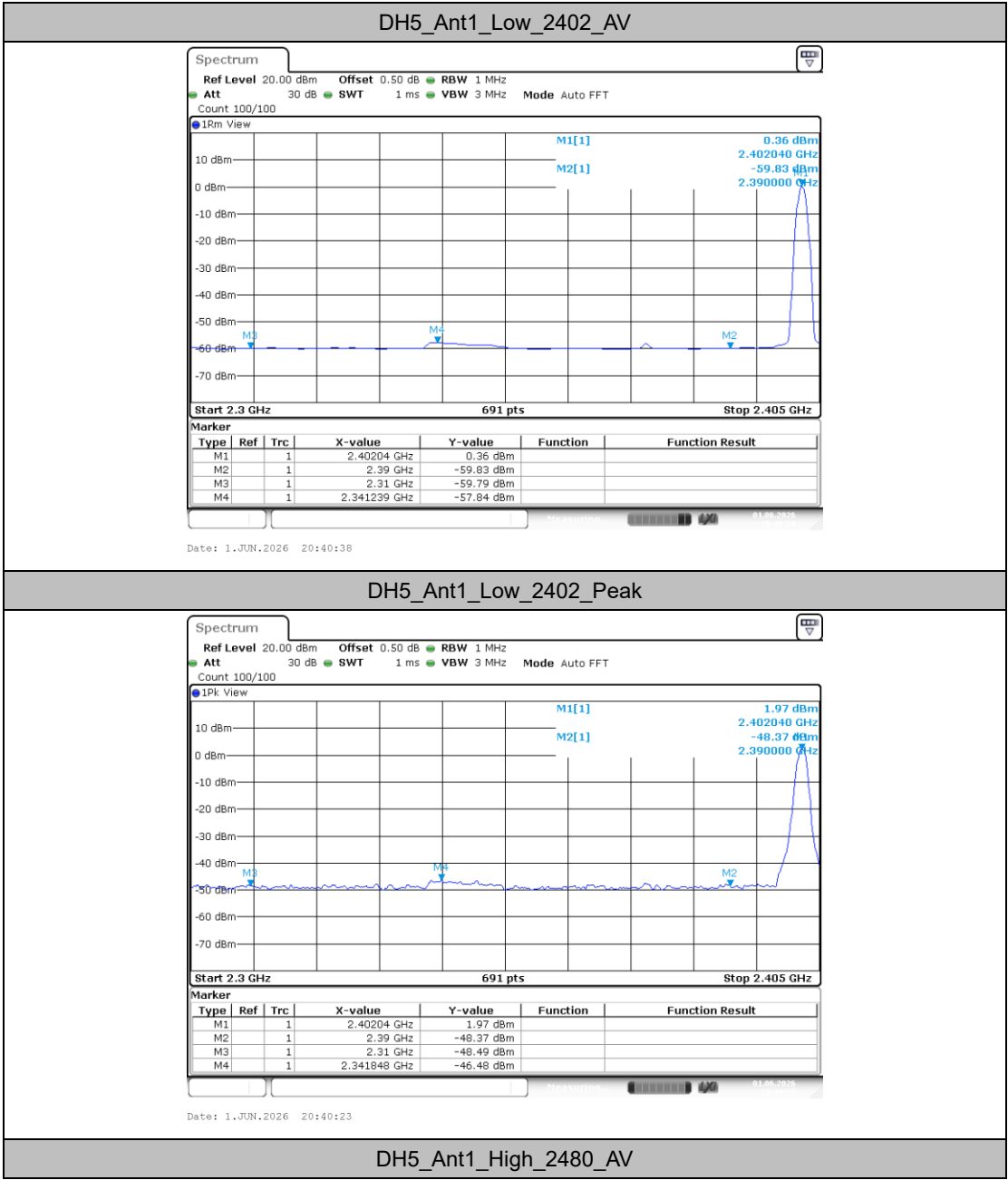
Test Result

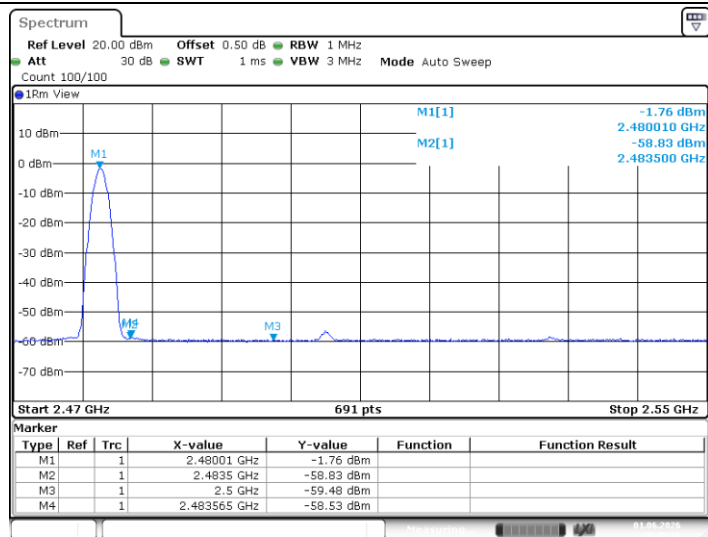
TestMod e	Antenn a	ChNam e	Freq(MH z)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-59.79	3.31	1.12	39.84	≤54	PASS
				AV	2341.239	-57.84	3.31	1.12	41.79	≤54	PASS
				AV	2390.000	-59.83	3.31	1.12	39.80	≤54	PASS
				Peak	2310.000	-48.49	3.31	0.00	50.02	≤74	PASS
				Peak	2341.848	-46.48	3.31	0.00	52.03	≤74	PASS
				Peak	2390.000	-48.37	3.31	0.00	50.14	≤74	PASS
		High	2480	AV	2483.500	-58.83	3.31	1.12	40.80	≤54	PASS
				AV	2483.565	-58.53	3.31	1.12	41.10	≤54	PASS
				AV	2500.000	-59.48	3.31	1.12	40.15	≤54	PASS
				Peak	2483.500	-45.55	3.31	0.00	52.96	≤74	PASS
				Peak	2483.565	-45.9	3.31	0.00	52.61	≤74	PASS
				Peak	2500.000	-48.41	3.31	0.00	50.10	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-59.84	3.31	1.12	39.79	≤54	PASS
				AV	2340.174	-57.87	3.31	1.12	41.76	≤54	PASS
				AV	2390.000	-59.85	3.31	1.12	39.78	≤54	PASS
				Peak	2310.000	-48.68	3.31	0.00	49.83	≤74	PASS
				Peak	2339.870	-46.56	3.31	0.00	51.95	≤74	PASS
				Peak	2390.000	-49.28	3.31	0.00	49.23	≤74	PASS
		High	2480	AV	2483.500	-58.85	3.31	1.10	40.76	≤54	PASS
				AV	2484.377	-58.79	3.31	1.10	40.82	≤54	PASS
				AV	2500.000	-59.7	3.31	1.10	39.91	≤54	PASS
				Peak	2483.500	-43.51	3.31	0.00	55.00	≤74	PASS
				Peak	2483.913	-45.41	3.31	0.00	53.10	≤74	PASS
				Peak	2500.000	-49.37	3.31	0.00	49.14	≤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.

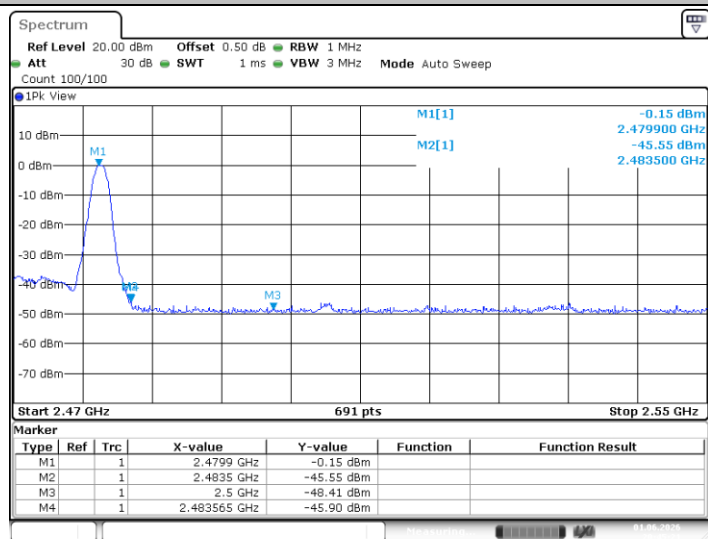
Test Graphs





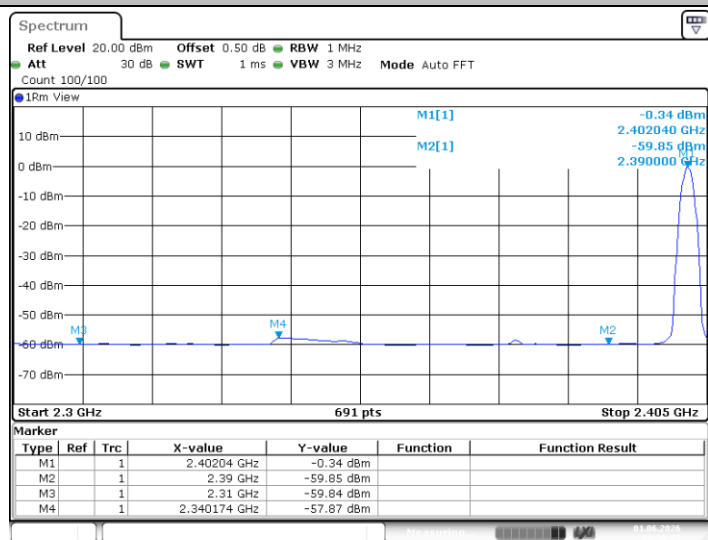
Date: 1.JUN.2026 20:45:35

DH5_Ant1_High_2480_Peak



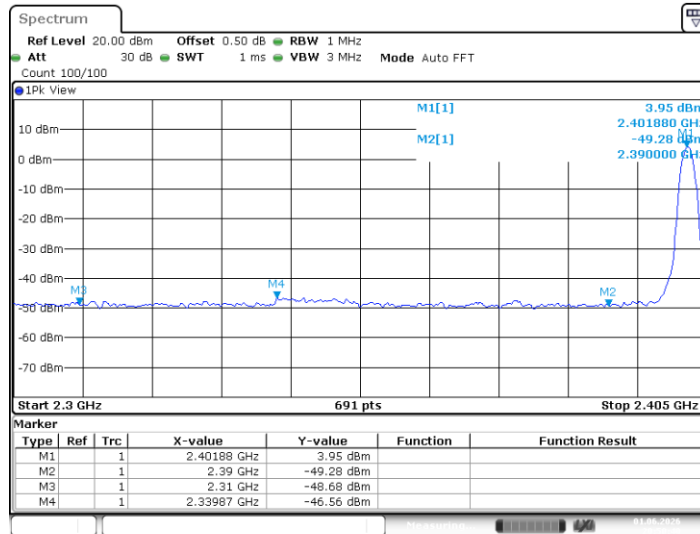
Date: 1.JUN.2026 20:45:20

2DH5_Ant1_Low_2402_AV



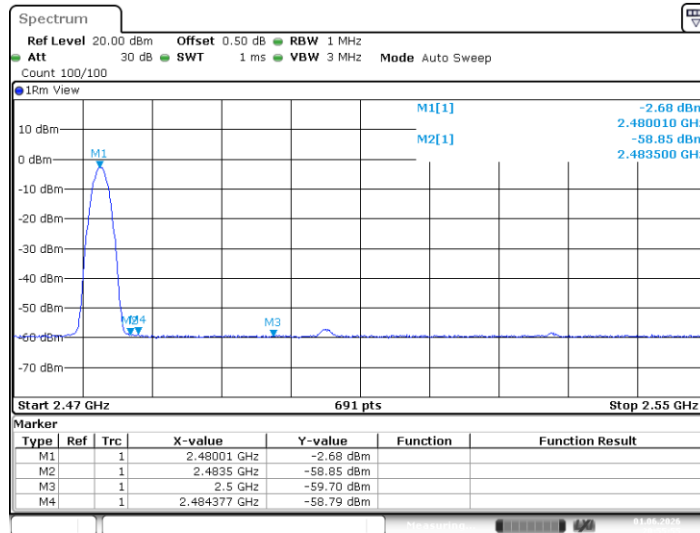
Date: 1.JUN.2026 20:50:55

2DH5_Ant1_Low_2402_Peak



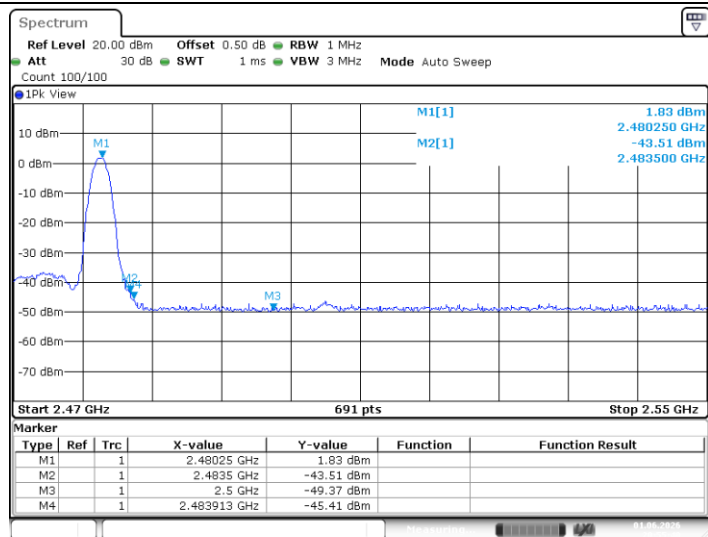
Date: 1.JUN.2026 20:50:40

2DH5_Ant1_High_2480_AV



Date: 1.JUN.2026 20:55:55

2DH5_Ant1_High_2480_Peak



Date: 1.JUN.2026 20:55:40