

FCC Appendix RF Test Data for BT

FCC ID : 2A7UF-TK-610

Company : QINGYUAN RUIMA ELECTRONICS CO.,LIMITED

EUT : Party speaker

Model Number : TK-610

Report No. : CTA26060300901

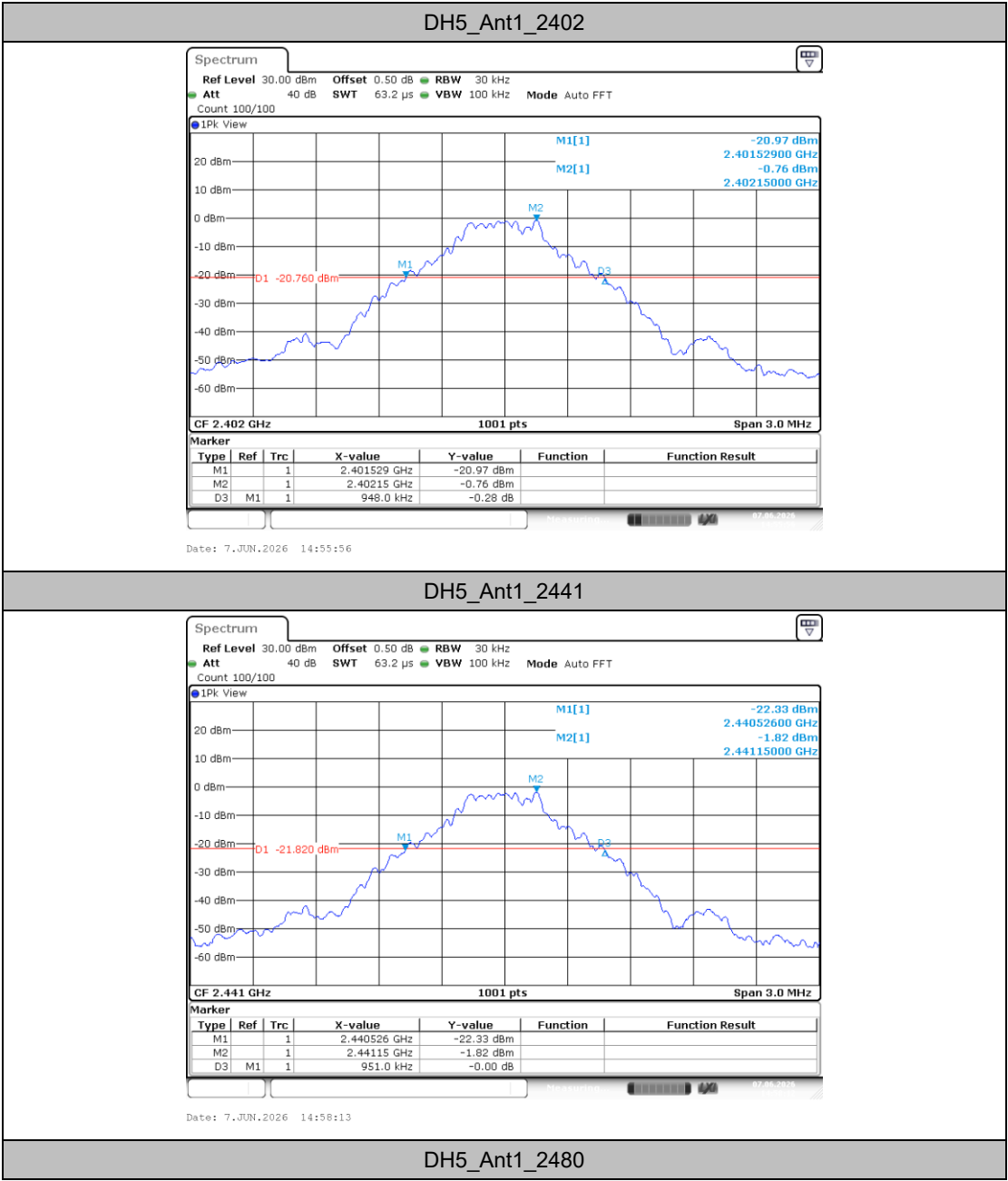
Reviewed By : Eric Wang

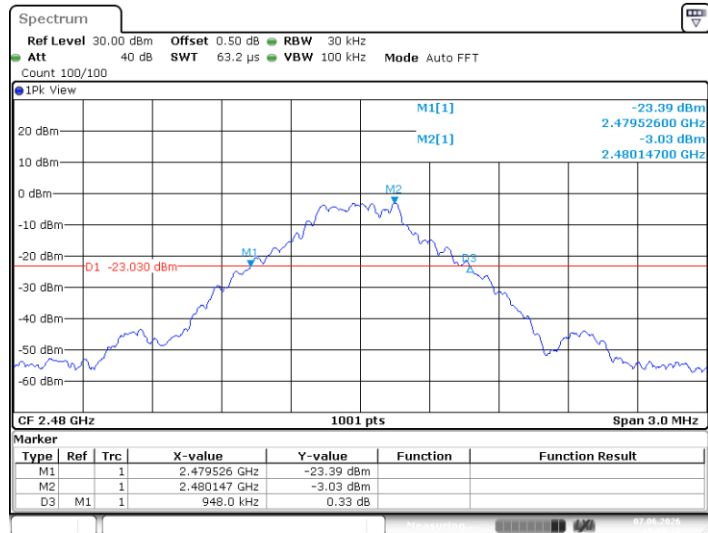
Appendix A: 20dB Emission Bandwidth

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	2441.48	---	---
		2480	0.95	2479.53	2480.47	---	---
2DH5	Ant1	2402	1.32	2401.34	2402.65	---	---
		2441	1.32	2440.33	2441.65	---	---
		2480	1.33	2479.33	2480.66	---	---

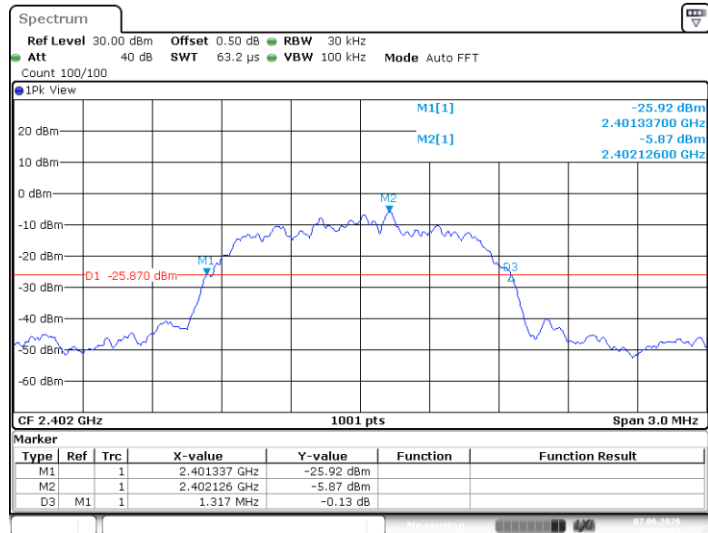
Test Graphs





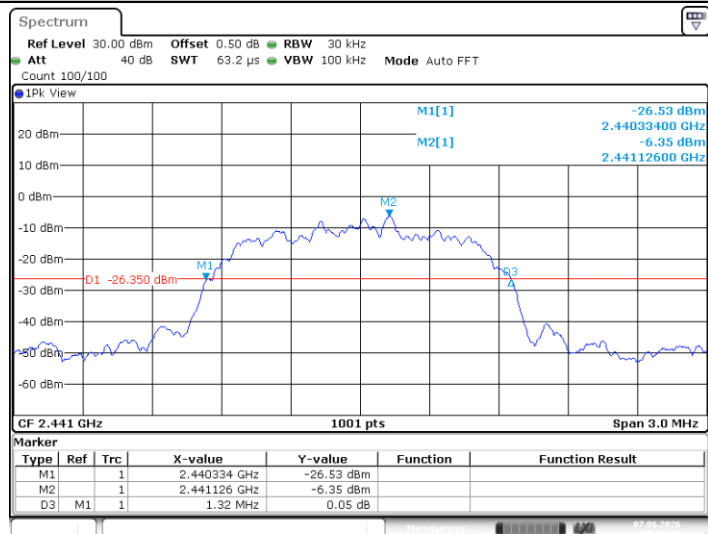
Date: 7.JUN.2026 15:00:18

2DH5_Ant1_2402



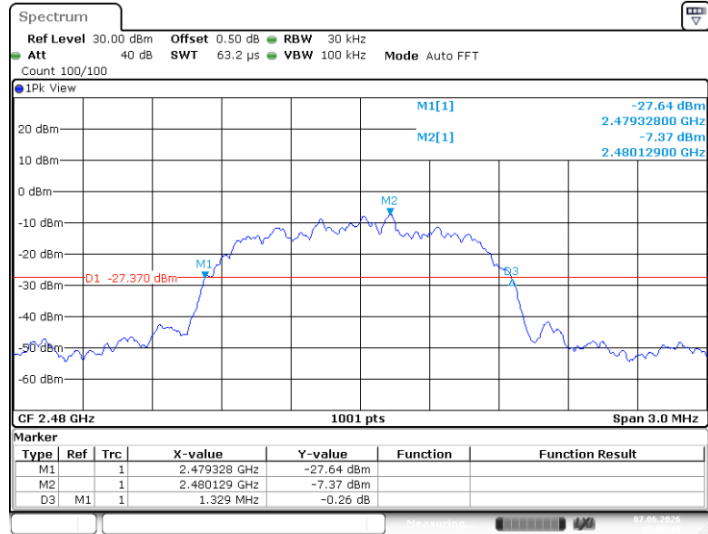
Date: 7.JUN.2026 15:03:24

2DH5_Ant1_2441



Date: 7.JUN.2026 15:06:31

2DH5_Ant1_2480



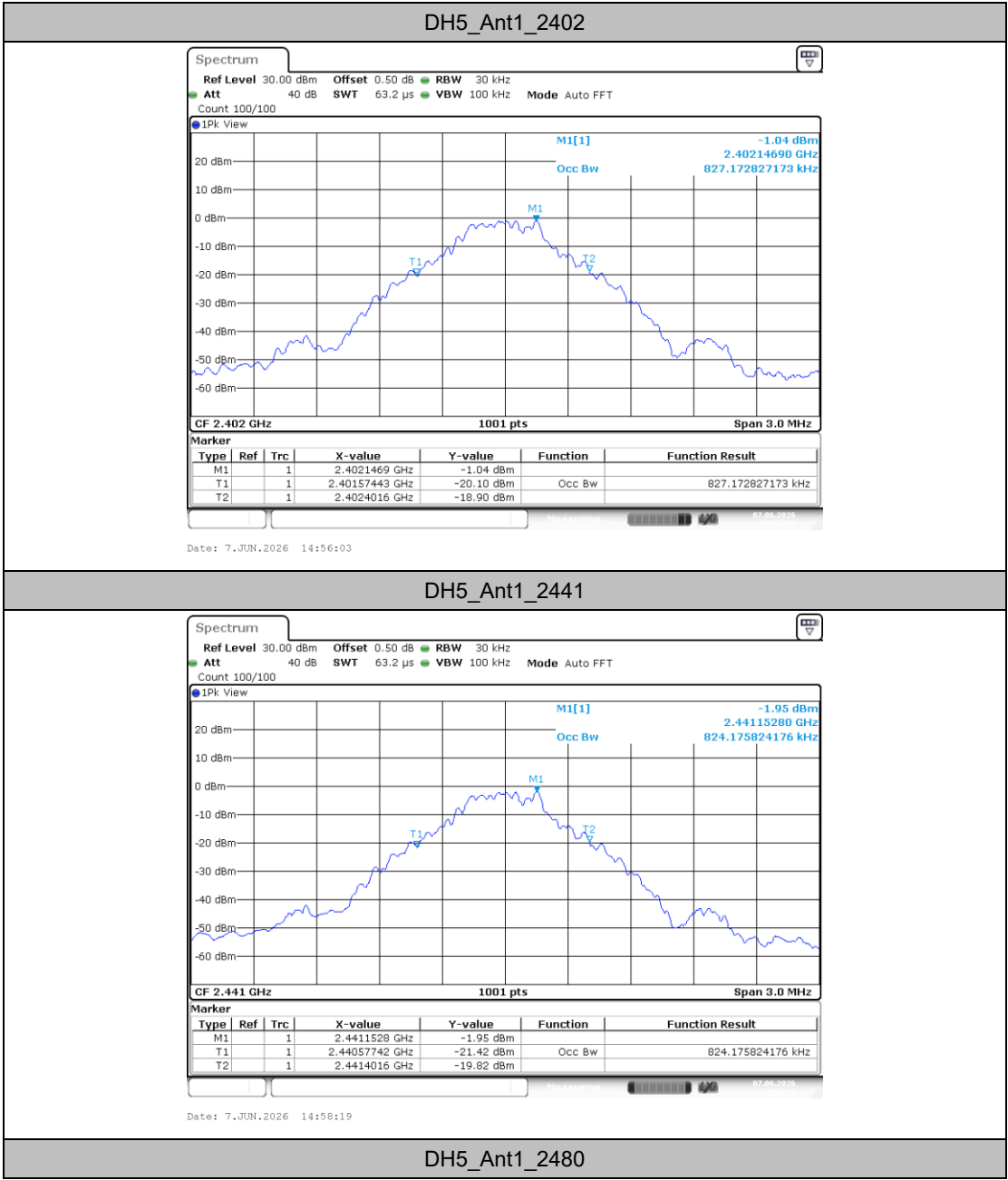
Date: 7.JUN.2026 15:08:19

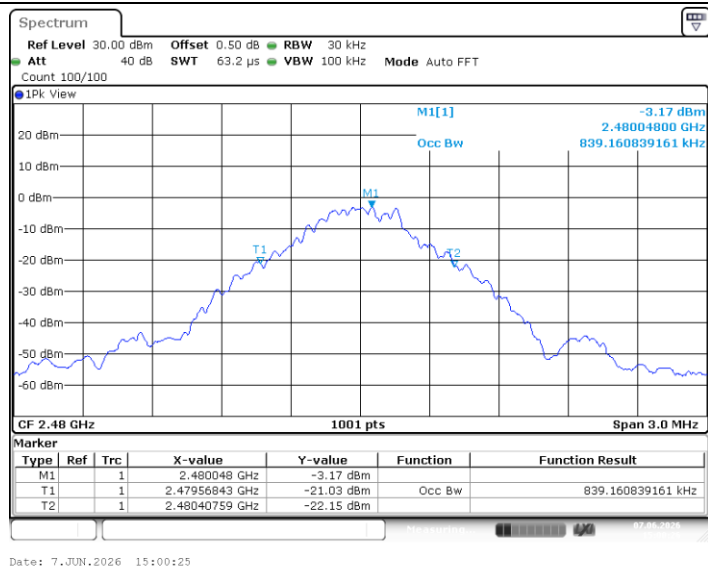
Appendix B: Occupied Channel Bandwidth

Test Result

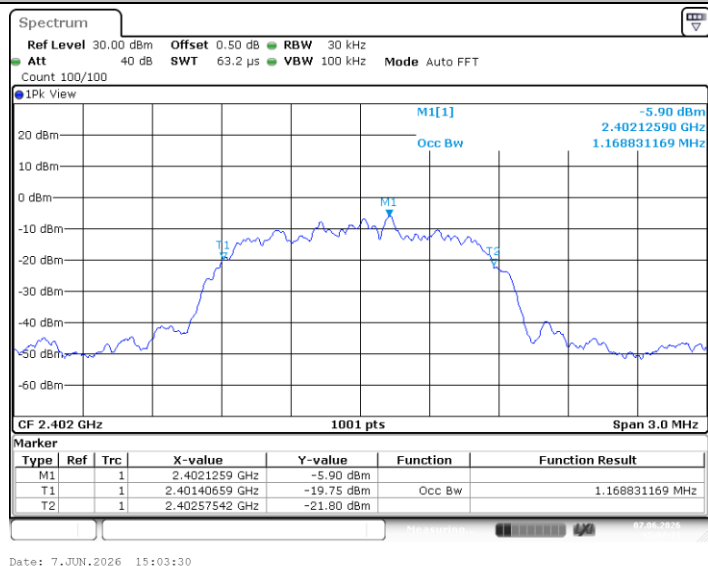
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.82717	2401.5744	2402.4016	---	---
		2441	0.82418	2440.5774	2441.4016	---	---
		2480	0.83916	2479.5684	2480.4076	---	---
2DH5	Ant1	2402	1.1688	2401.4066	2402.5754	---	---
		2441	1.1688	2440.4066	2441.5754	---	---
		2480	1.1748	2479.4036	2480.5784	---	---

Test Graphs

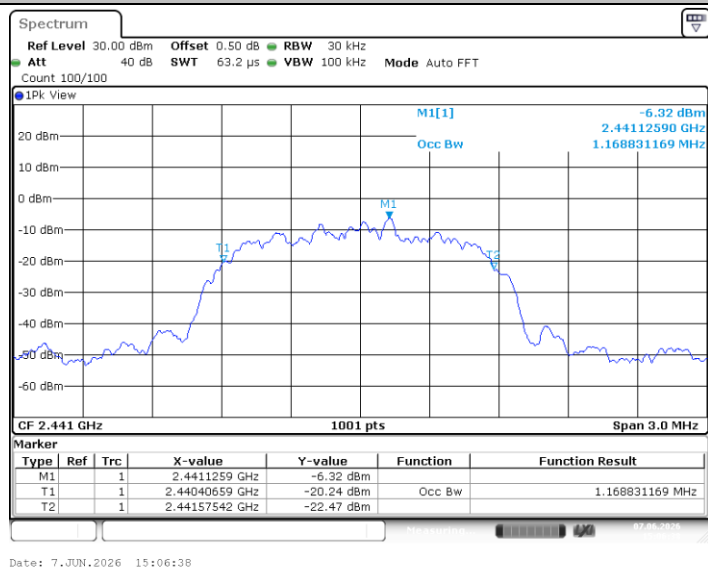




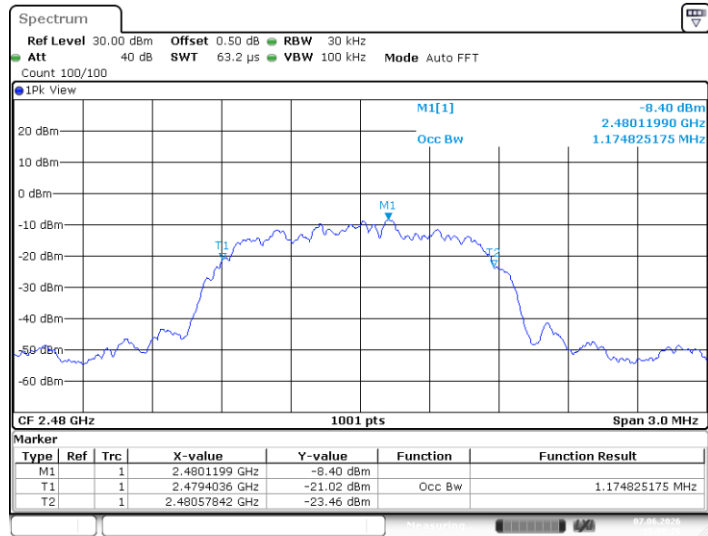
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Date: 7.JUN.2026 15:08:26

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	2.01	≤20.97	PASS
		2441	0.94	≤20.97	PASS
		2480	-0.03	≤20.97	PASS
2DH5	Ant1	2402	-0.56	≤20.97	PASS
		2441	-1.10	≤20.97	PASS
		2480	-1.95	≤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	1.325	≥ 0.887	PASS

Test Graphs

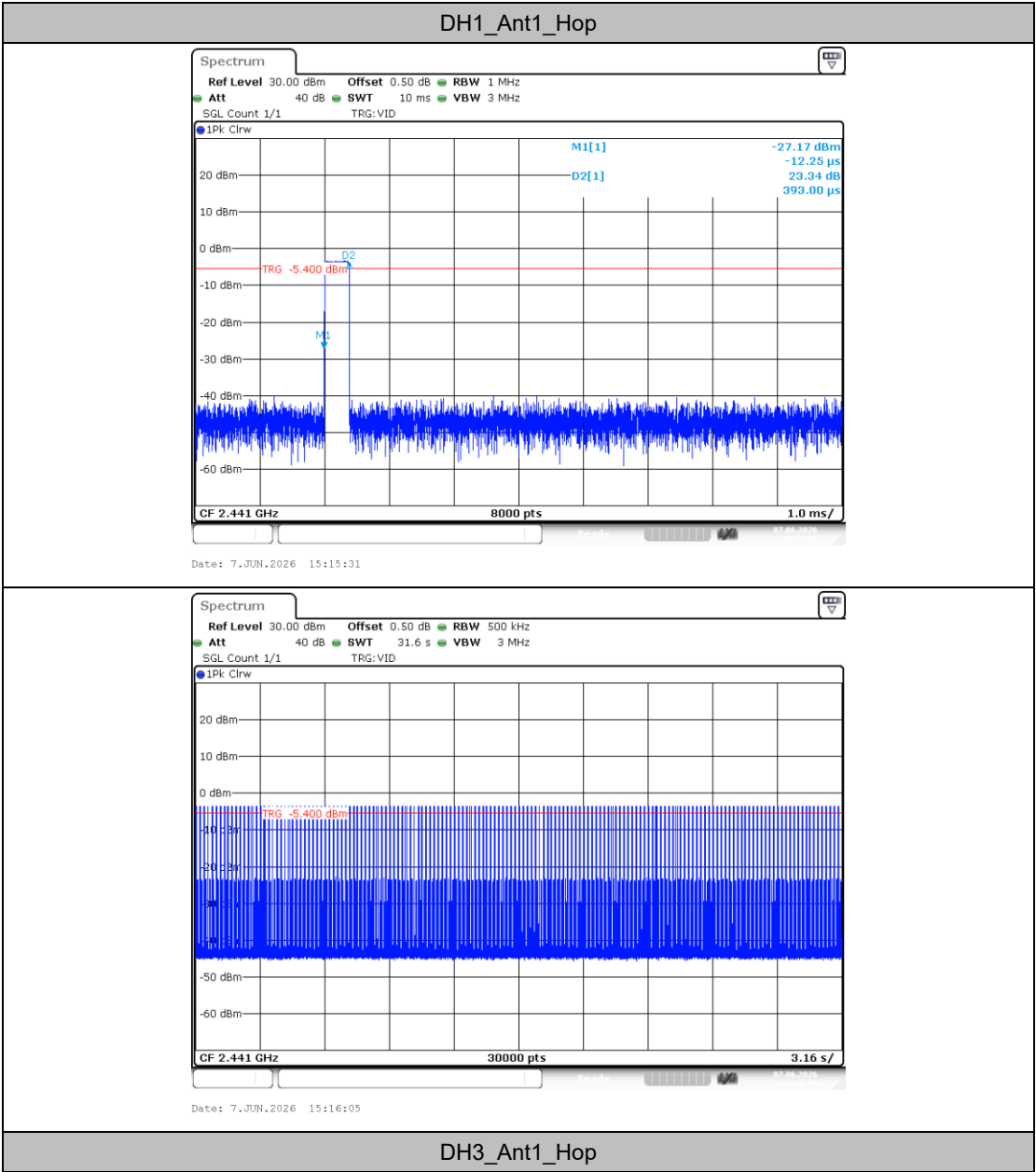


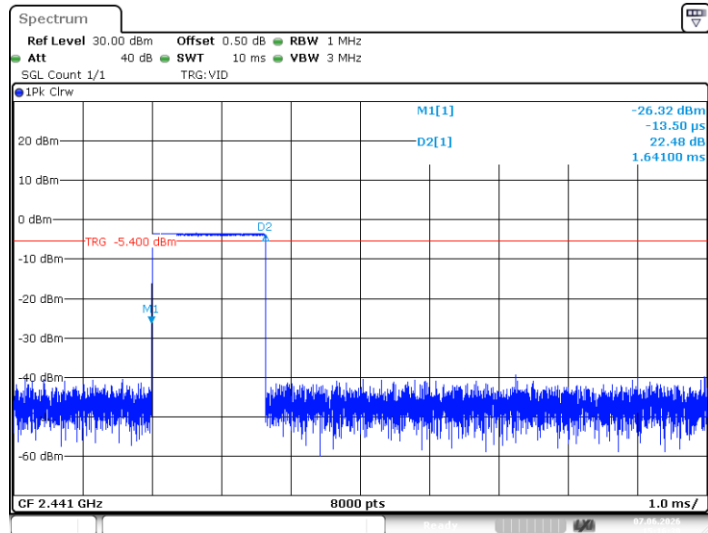
Appendix E: Time of occupancy

Test Result

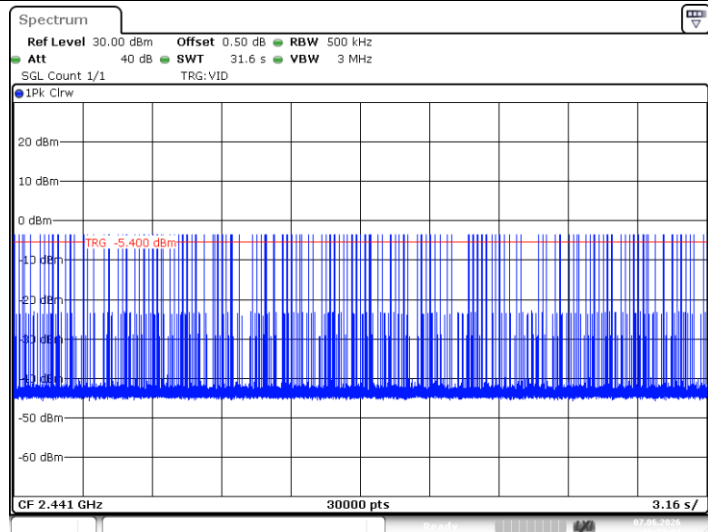
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.393	320	0.126	≤0.4	PASS
DH3	Ant1	Hop	1.641	173	0.284	≤0.4	PASS
DH5	Ant1	Hop	2.882	97	0.28	≤0.4	PASS
2DH1	Ant1	Hop	0.403	321	0.129	≤0.4	PASS
2DH3	Ant1	Hop	1.645	176	0.29	≤0.4	PASS
2DH5	Ant1	Hop	2.887	101	0.292	≤0.4	PASS

Test Graphs



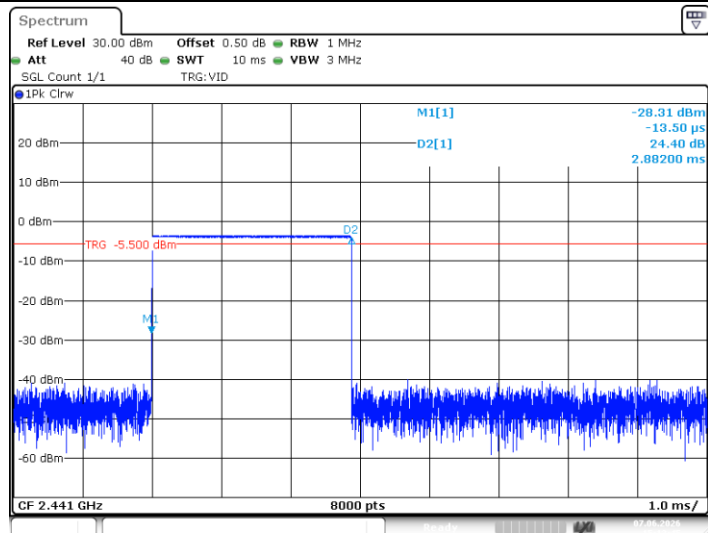


Date: 7.JUN.2026 15:16:30

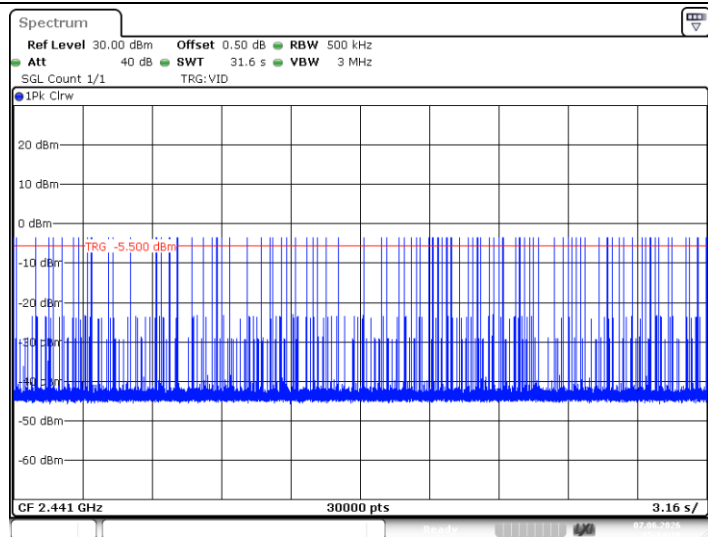


Date: 7.JUN.2026 15:17:05

DH5_Ant1_Hop

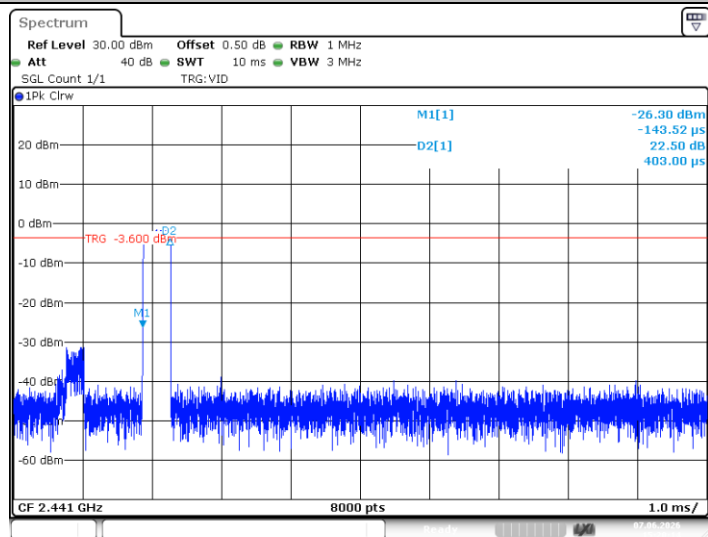


Date: 7.JUN.2026 15:13:45

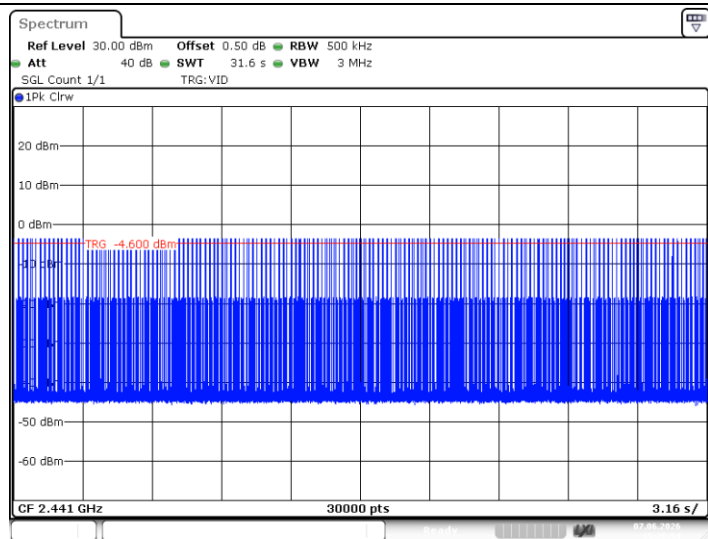


Date: 7.JUN.2026 15:14:19

2DH1_Ant1_Hop

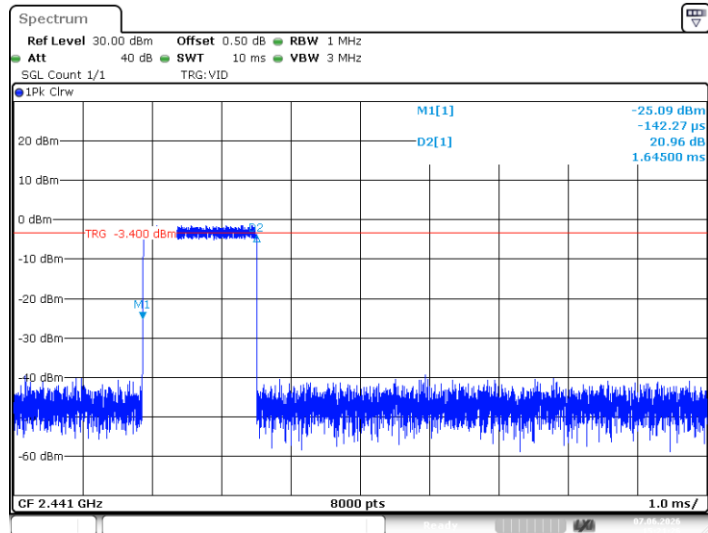


Date: 7.JUN.2026 15:20:14

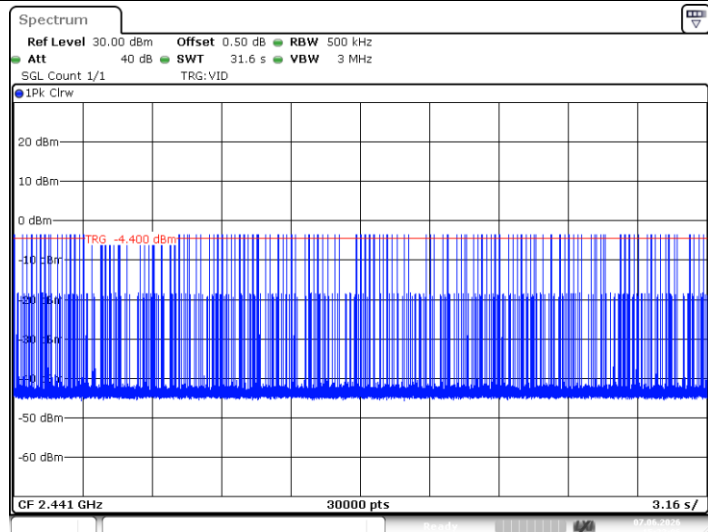


Date: 7.JUN.2026 15:20:54

2DH3_Ant1_Hop

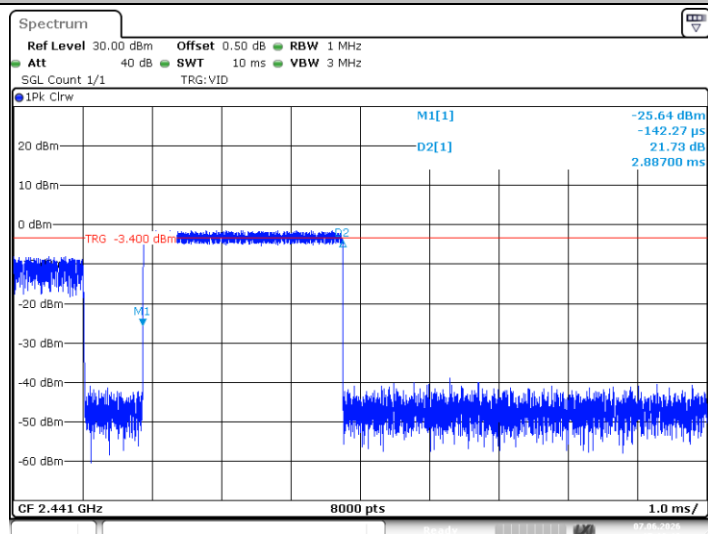


Date: 7.JUN.2026 15:21:26

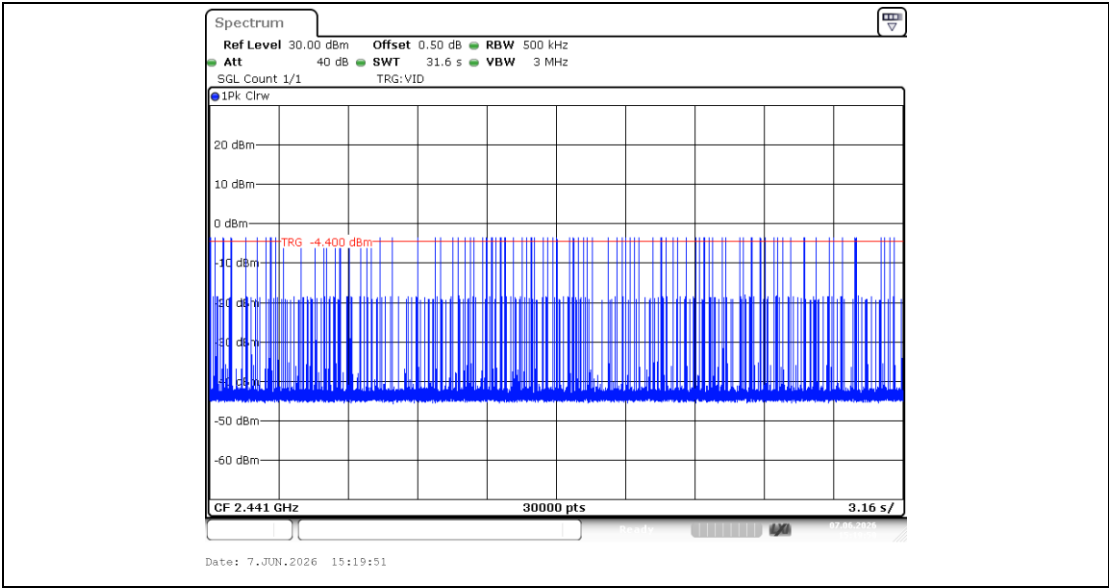


Date: 7.JUN.2026 15:22:06

2DH5_Ant1_Hop



Date: 7.JUN.2026 15:19:10

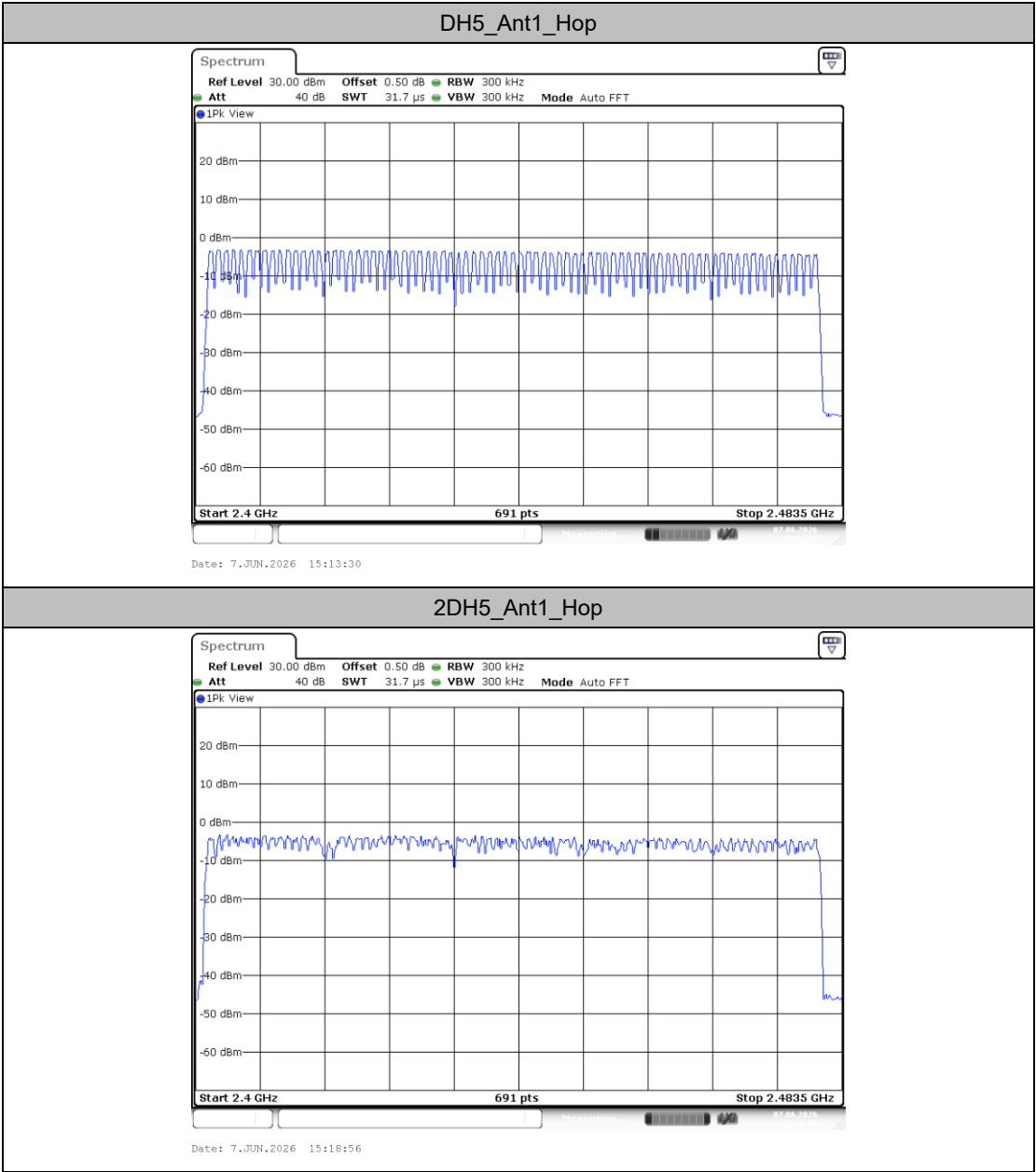


Appendix F: Number of hopping channels

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

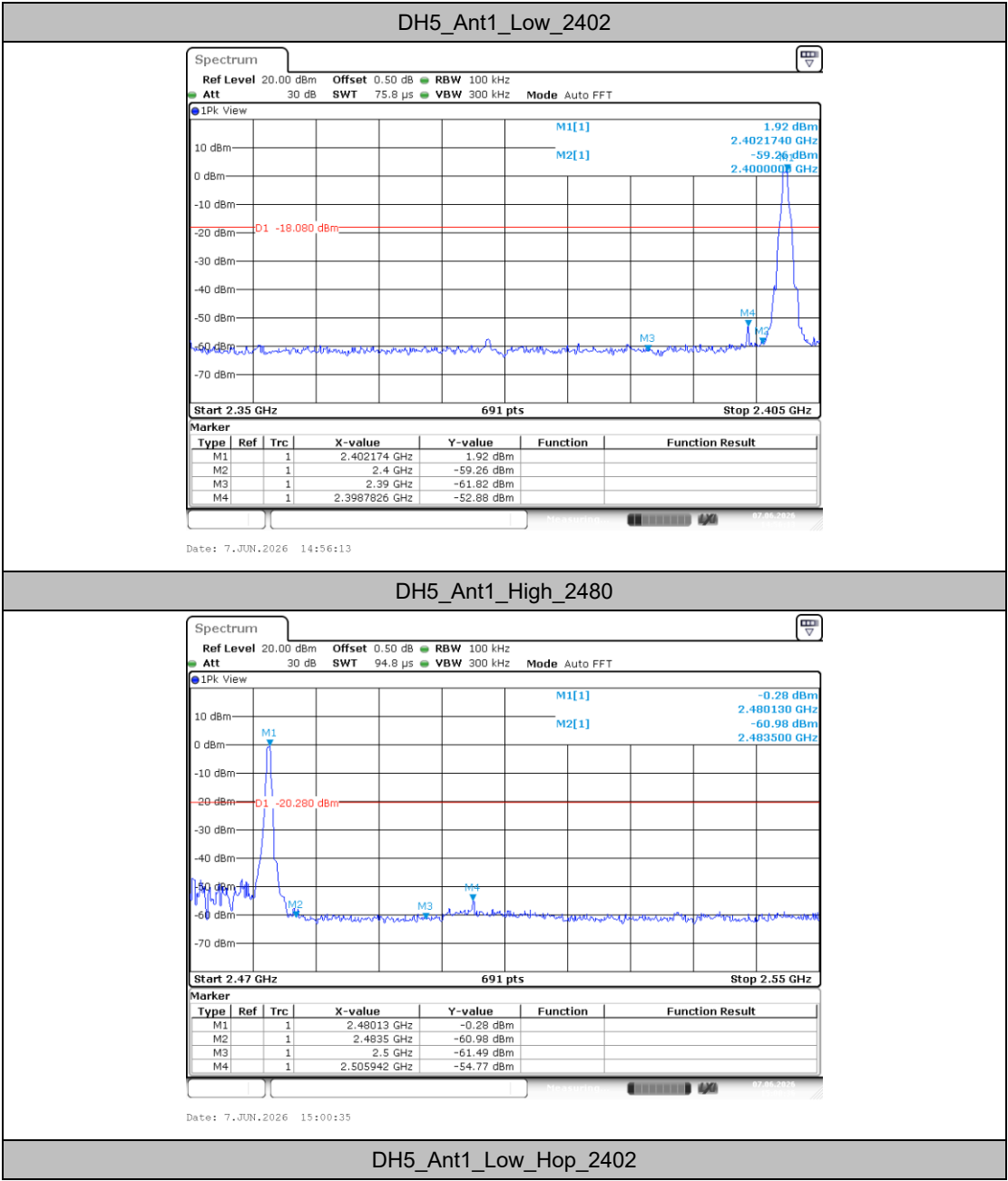


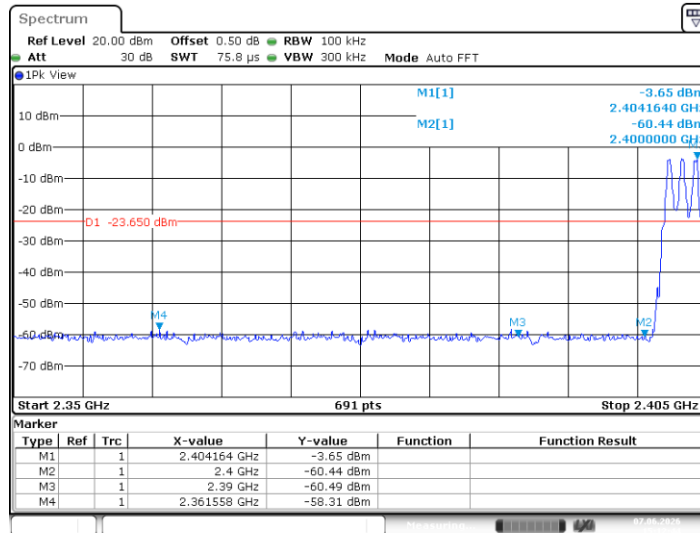
Appendix G: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.92	-52.88	≤-18.08	PASS
		High	2480	-0.28	-54.77	≤-20.28	PASS
		Low	Hop_2402	-3.65	-58.31	≤-23.65	PASS
		High	Hop_2480	-4.86	-56.34	≤-24.86	PASS
2DH5	Ant1	Low	2402	-3.40	-58.39	≤-23.4	PASS
		High	2480	-4.62	-57.57	≤-24.62	PASS
		Low	Hop_2402	-5.02	-58.43	≤-25.02	PASS
		High	Hop_2480	-4.82	-56.15	≤-24.82	PASS

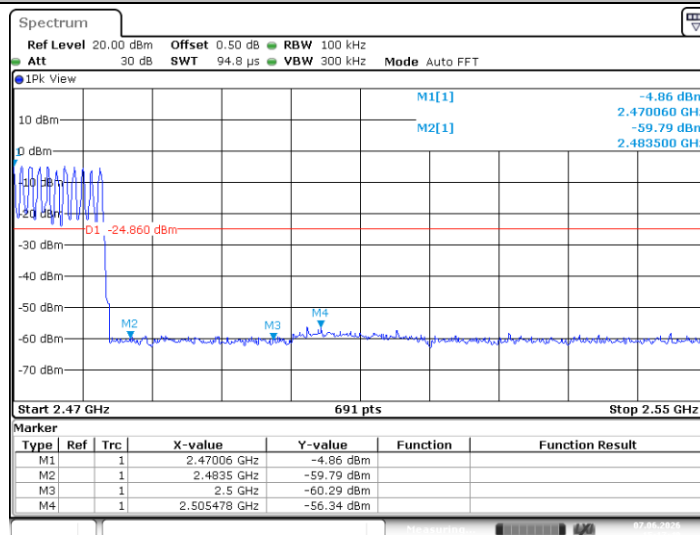
Test Graphs





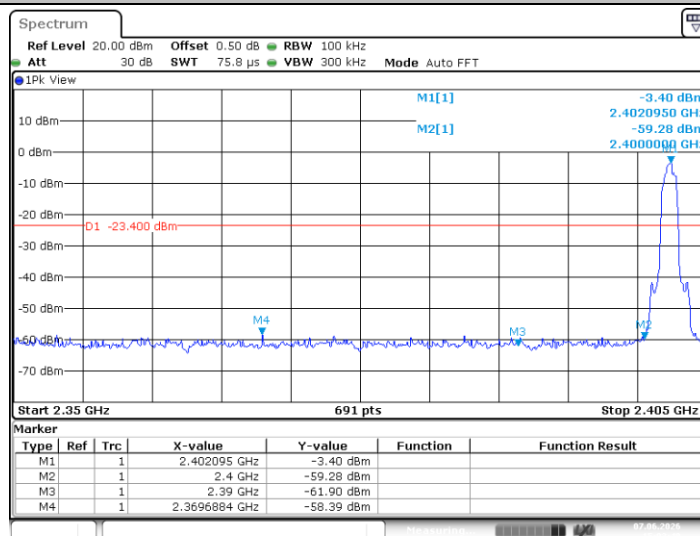
Date: 7.JUN.2026 15:12:44

DH5_Ant1_High_Hop_2480



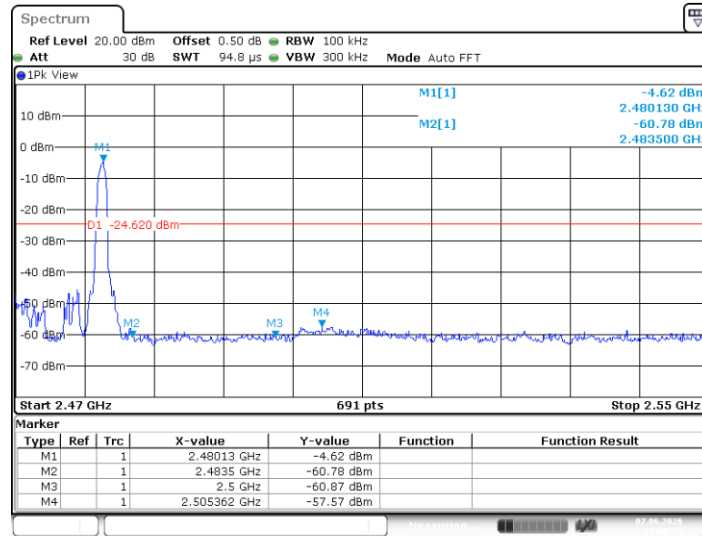
Date: 7.JUN.2026 15:17:40

2DH5_Ant1_Low_2402



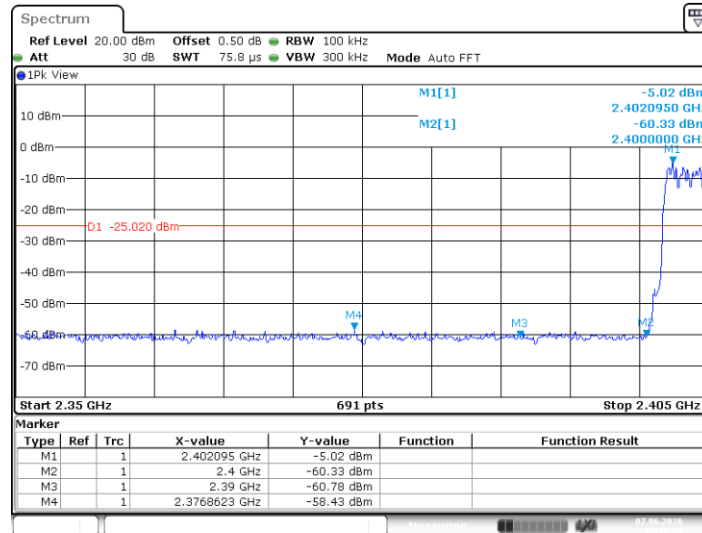
Date: 7.JUN.2026 15:03:40

2DH5_Ant1_High_2480



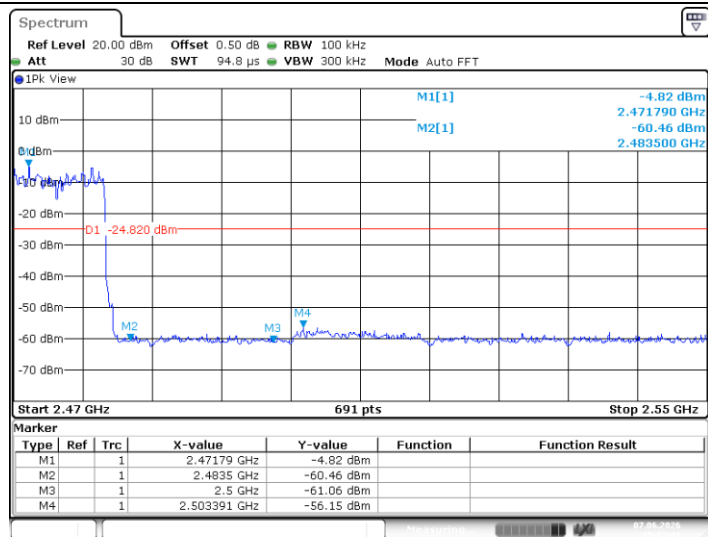
Date: 7.JUN.2026 15:08:36

2DH5_Ant1_Low_Hop_2402



Date: 7.JUN.2026 15:18:09

2DH5_Ant1_High_Hop_2480



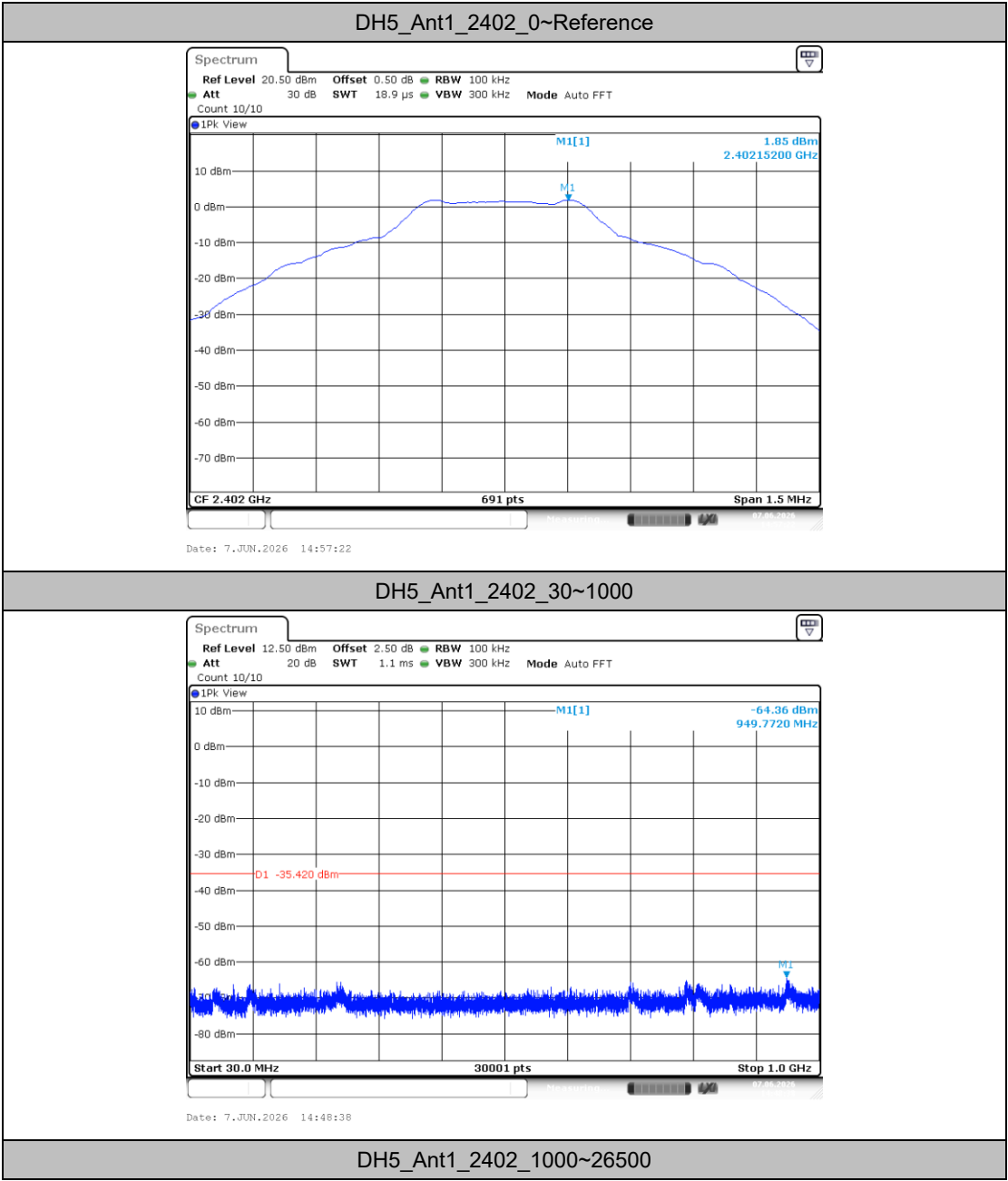
Date: 7.JUN.2026 15:22:42

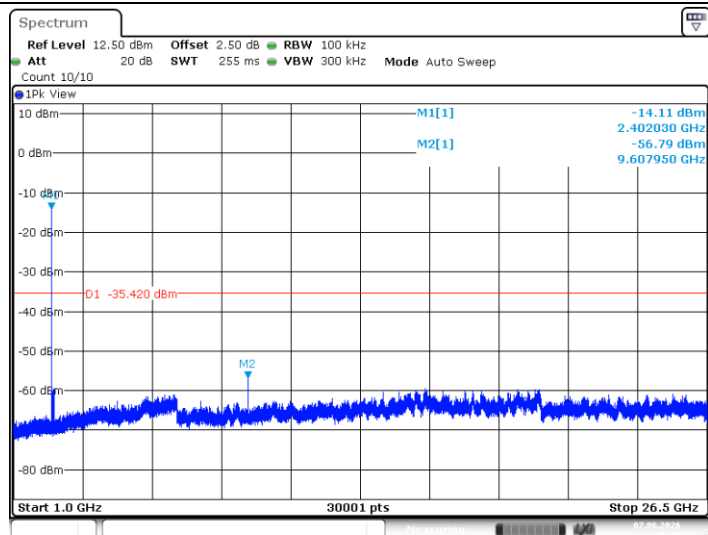
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.85	1.85	---	PASS
			30~1000	-15.42	-64.36	≤-35.42	PASS
			1000~26500	-15.42	-56.79	≤-35.42	PASS
		2441	Reference	0.76	0.76	---	PASS
			30~1000	0.76	-64.91	≤-19.24	PASS
			1000~26500	0.76	-50.74	≤-19.24	PASS
		2480	Reference	-0.30	-0.30	---	PASS
			30~1000	-0.30	-63.47	≤-20.3	PASS
			1000~26500	-0.30	-50.42	≤-20.3	PASS
2DH5	Ant1	2402	Reference	-3.47	-3.47	---	PASS
			30~1000	-3.47	-64.74	≤-23.47	PASS
			1000~26500	-3.47	-50.89	≤-23.47	PASS
		2441	Reference	-3.93	-3.93	---	PASS
			30~1000	-3.93	-64.65	≤-23.93	PASS
			1000~26500	-3.93	-51	≤-23.93	PASS
		2480	Reference	-4.61	-4.61	---	PASS
			30~1000	-4.61	-63.98	≤-24.61	PASS
			1000~26500	-4.61	-48.83	≤-24.61	PASS

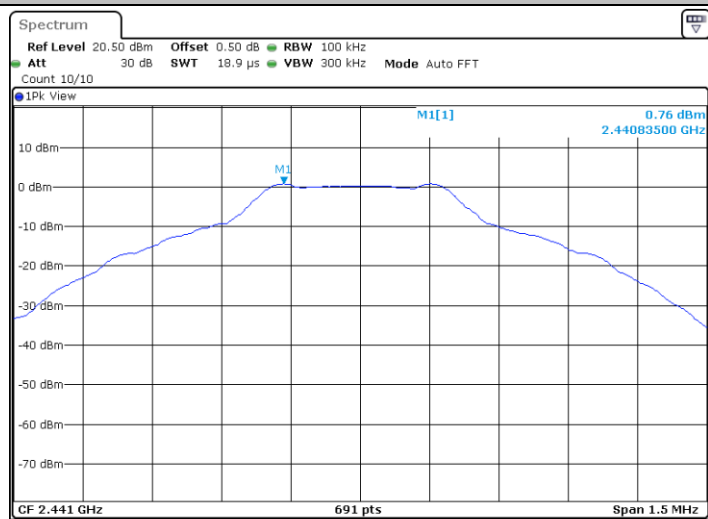
Test Graphs





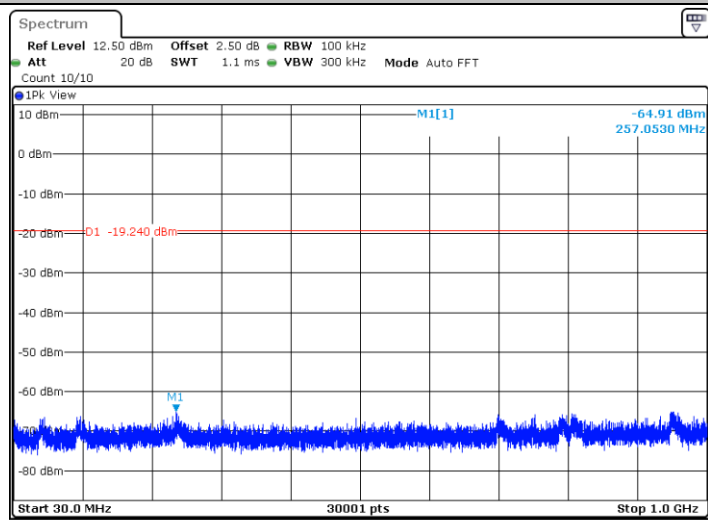
Date: 7.JUN.2026 14:49:15

DH5_Ant1_2441_0~Reference



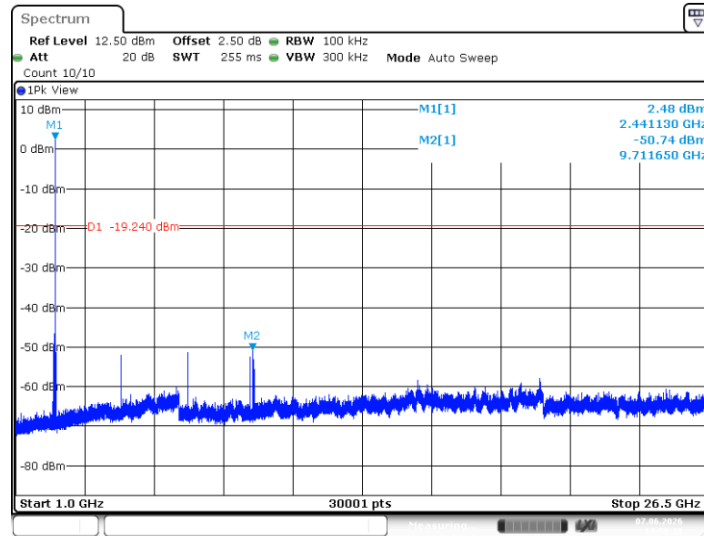
Date: 7.JUN.2026 14:58:27

DH5_Ant1_2441_30~1000



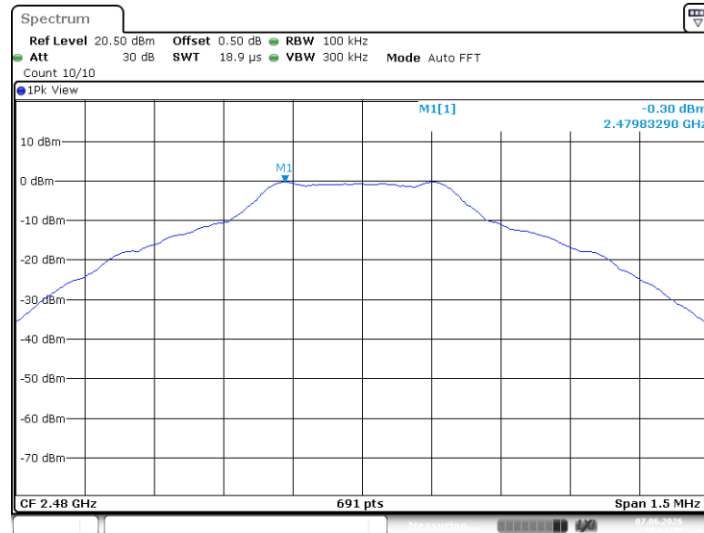
Date: 7.JUN.2026 14:58:42

DH5_Ant1_2441_1000~26500



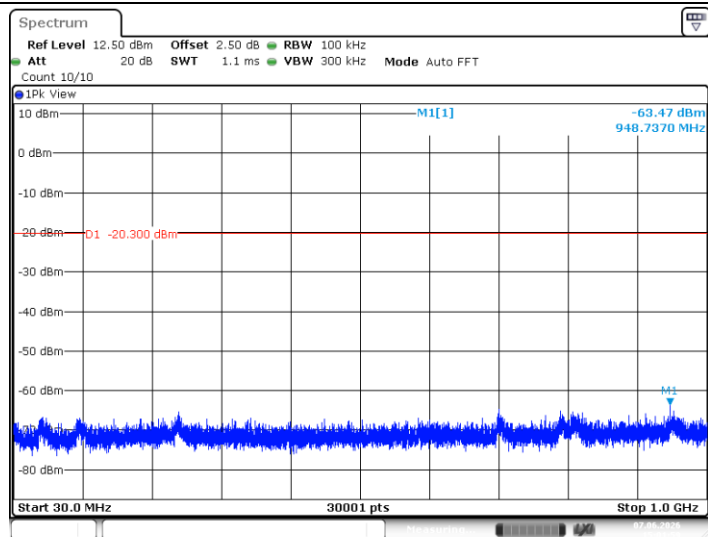
Date: 7.JUN.2026 14:59:19

DH5_Ant1_2480_0~Reference



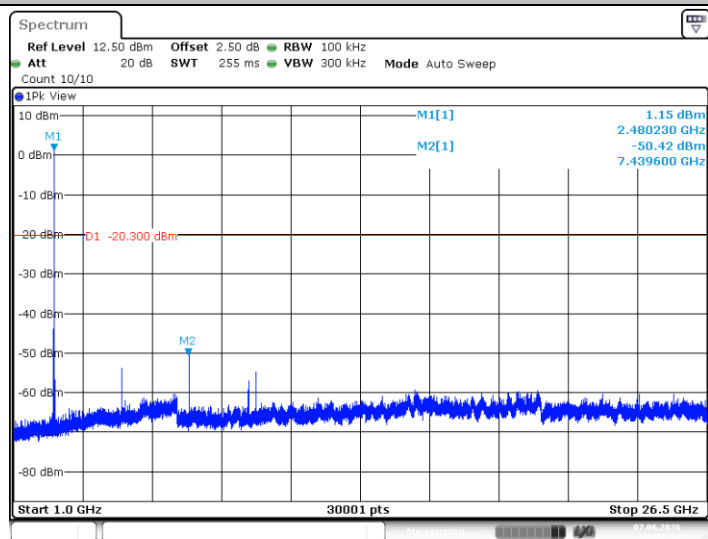
Date: 7.JUN.2026 15:01:45

DH5_Ant1_2480_30~1000



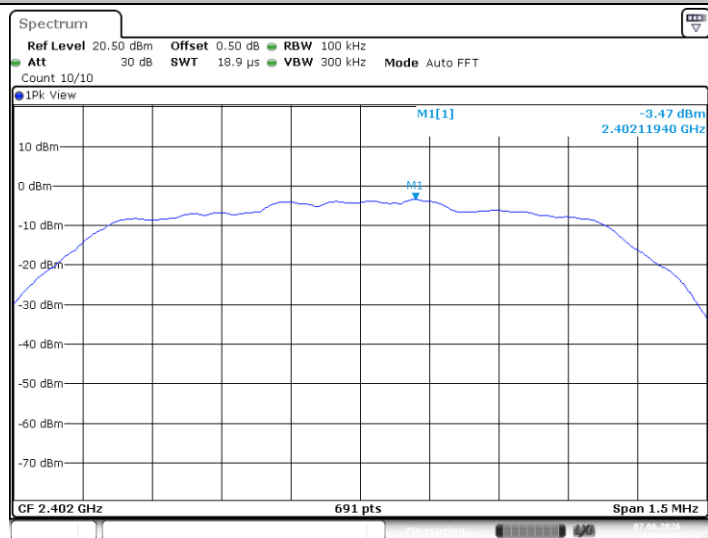
Date: 7.JUN.2026 15:01:59

DH5_Ant1_2480_1000~26500

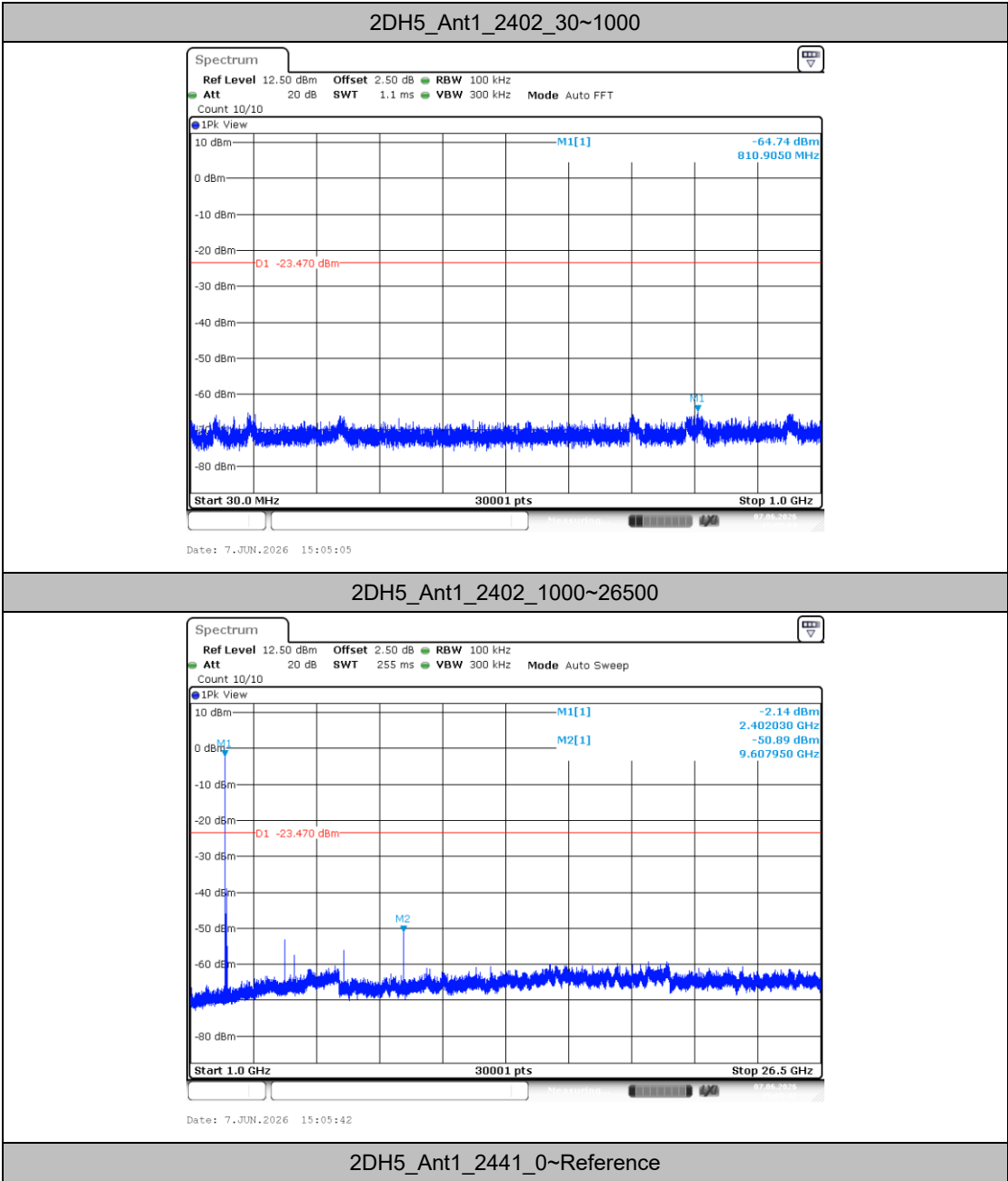


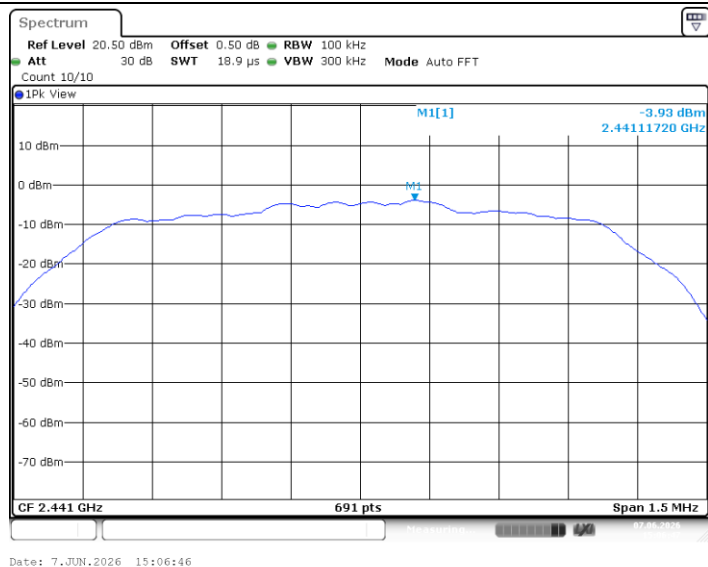
Date: 7.JUN.2026 15:02:37

2DH5_Ant1_2402_0~Reference

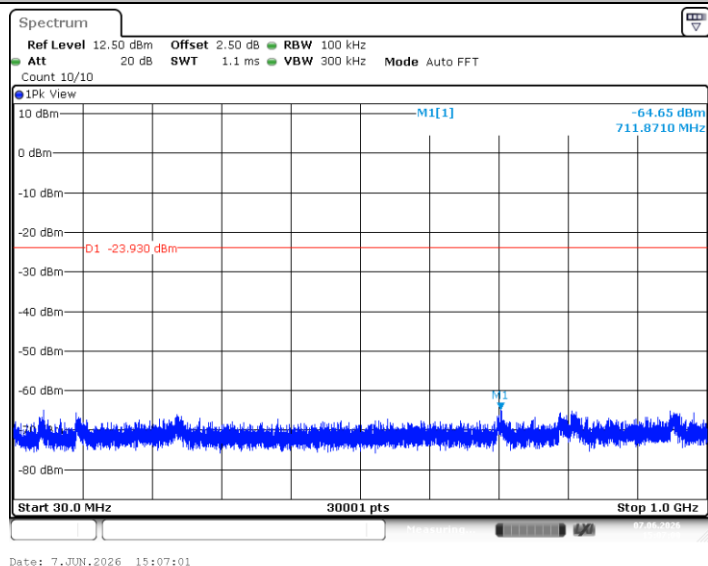


Date: 7.JUN.2026 15:04:50

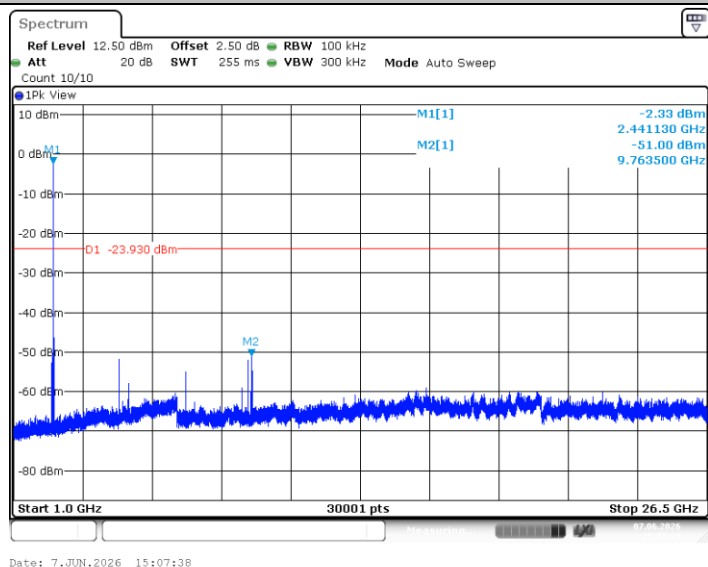




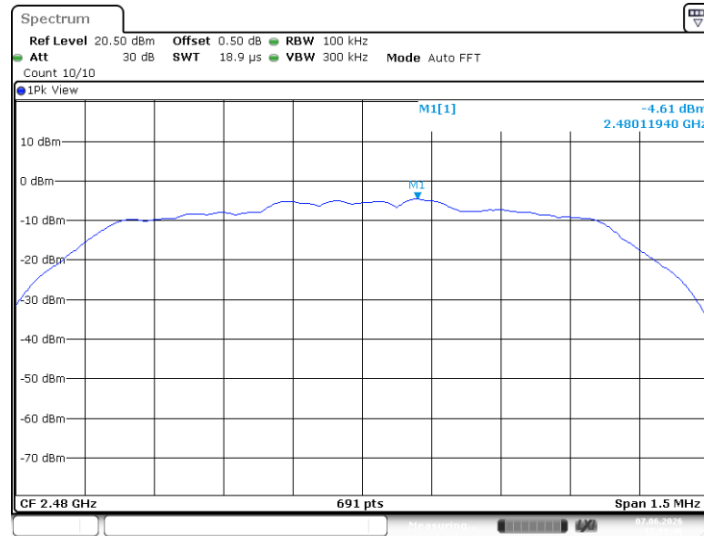
2DH5_Ant1_2441_30~1000



2DH5_Ant1_2441_1000~26500

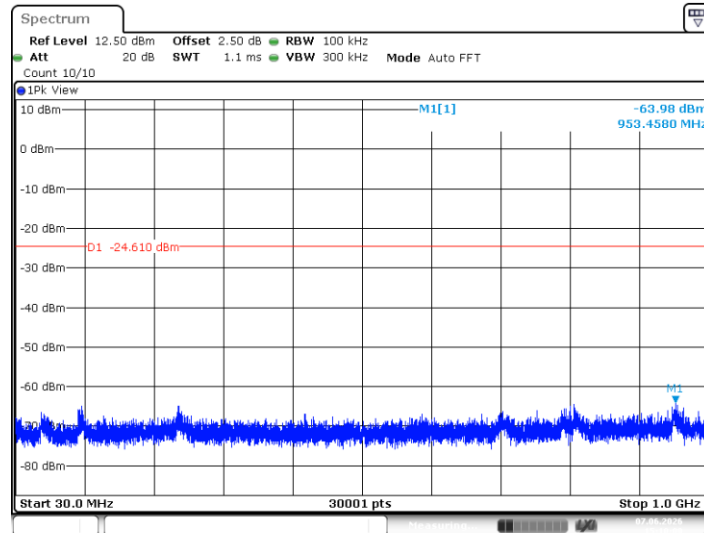


2DH5_Ant1_2480_0~Reference



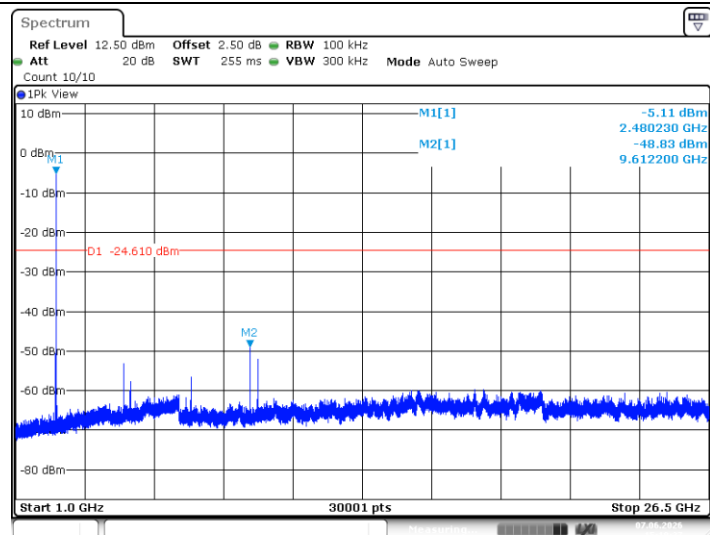
Date: 7.JUN.2026 15:09:46

2DH5_Ant1_2480_30~1000



Date: 7.JUN.2026 15:10:00

2DH5_Ant1_2480_1000~26500



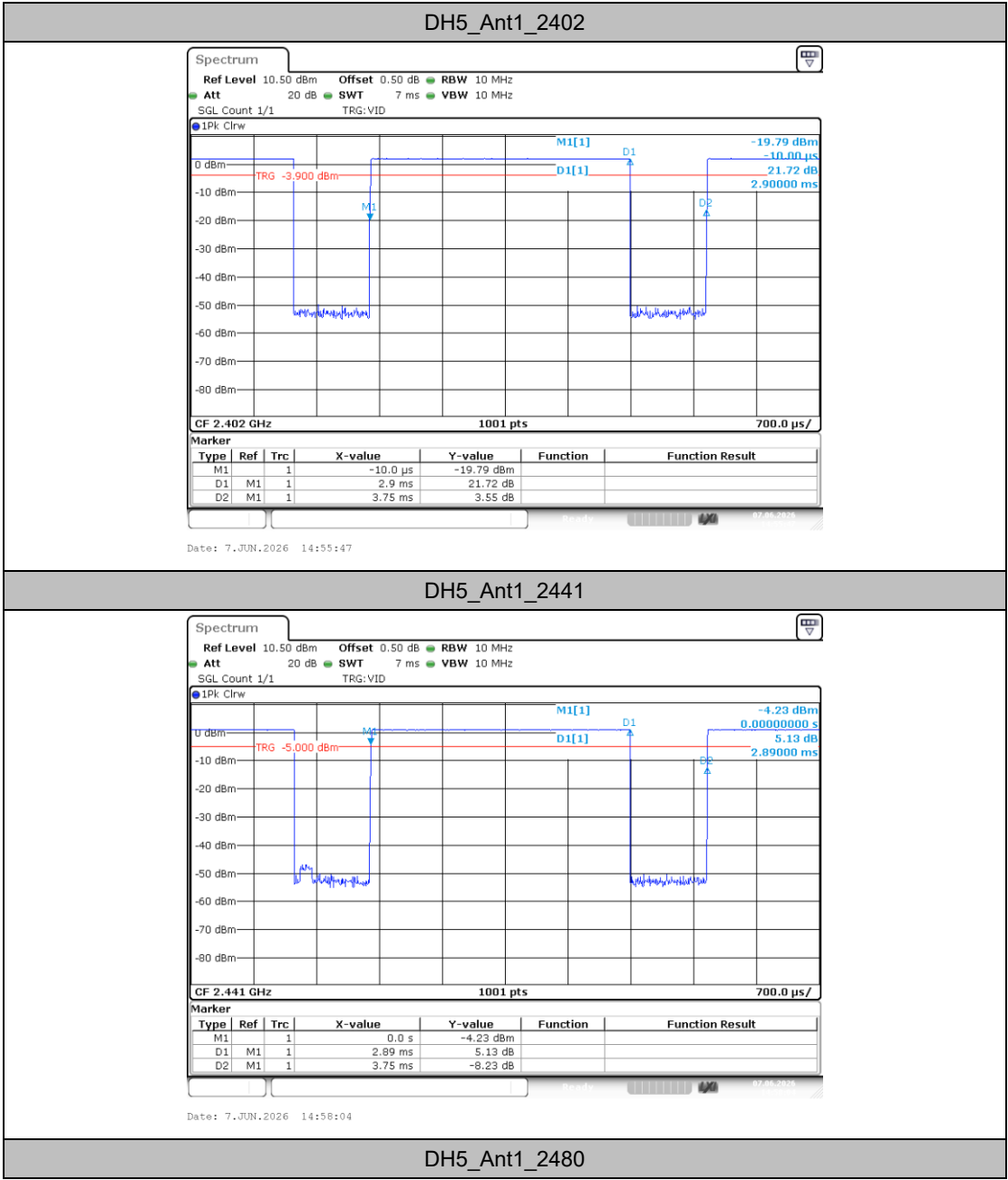
Date: 7.JUN.2026 15:10:38

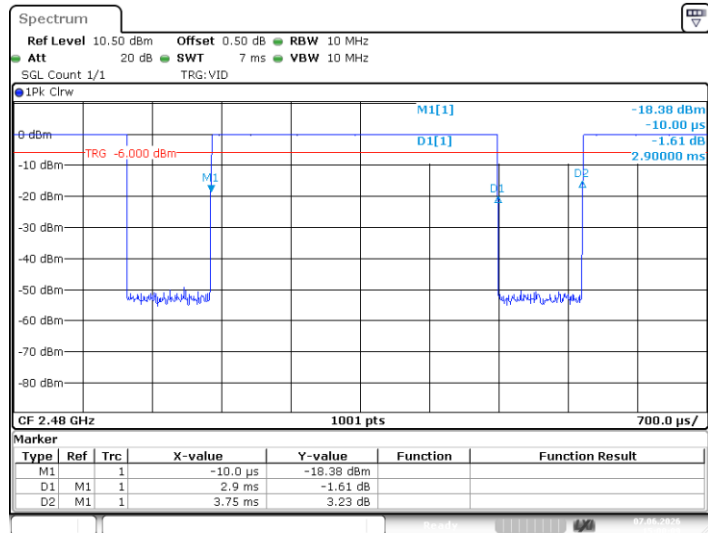
Appendix I: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.90	3.75	77.33	1.12	---	---
		2441	2.89	3.75	77.07	1.13	---	---
		2480	2.90	3.75	77.33	1.12	---	---
2DH5	Ant1	2402	2.90	3.74	77.54	1.10	---	---
		2441	2.90	3.75	77.33	1.12	---	---
		2480	2.90	3.75	77.33	1.12	---	---

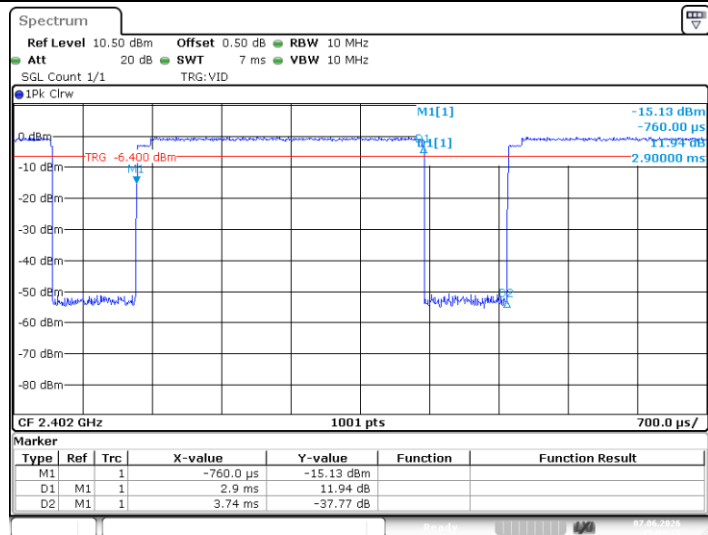
Test Graphs





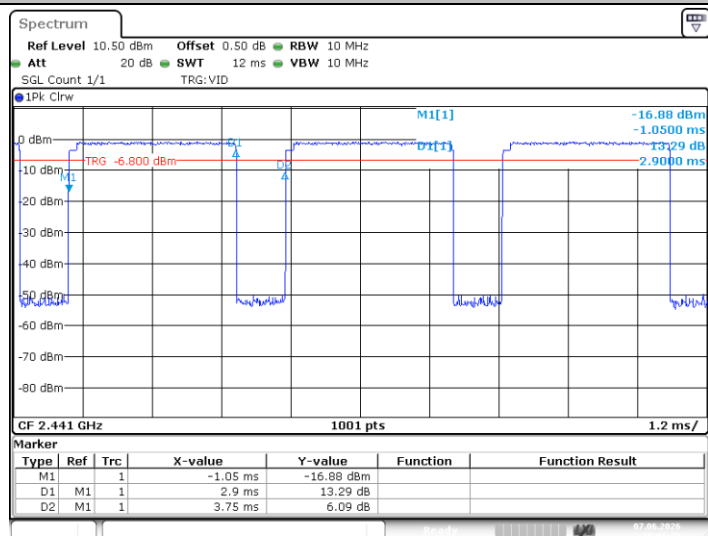
Date: 7.JUN.2026 15:00:10

2DH5_Ant1_2402



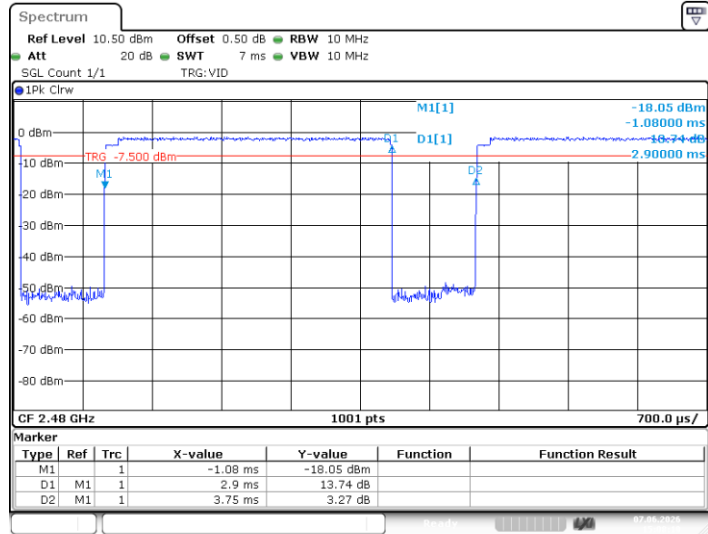
Date: 7.JUN.2026 15:03:15

2DH5_Ant1_2441



Date: 7.JUN.2026 15:06:22

2DH5_Ant1_2480



Date: 7.JUN.2026 15:08:10

Appendix J: Emissions in Restricted Bands

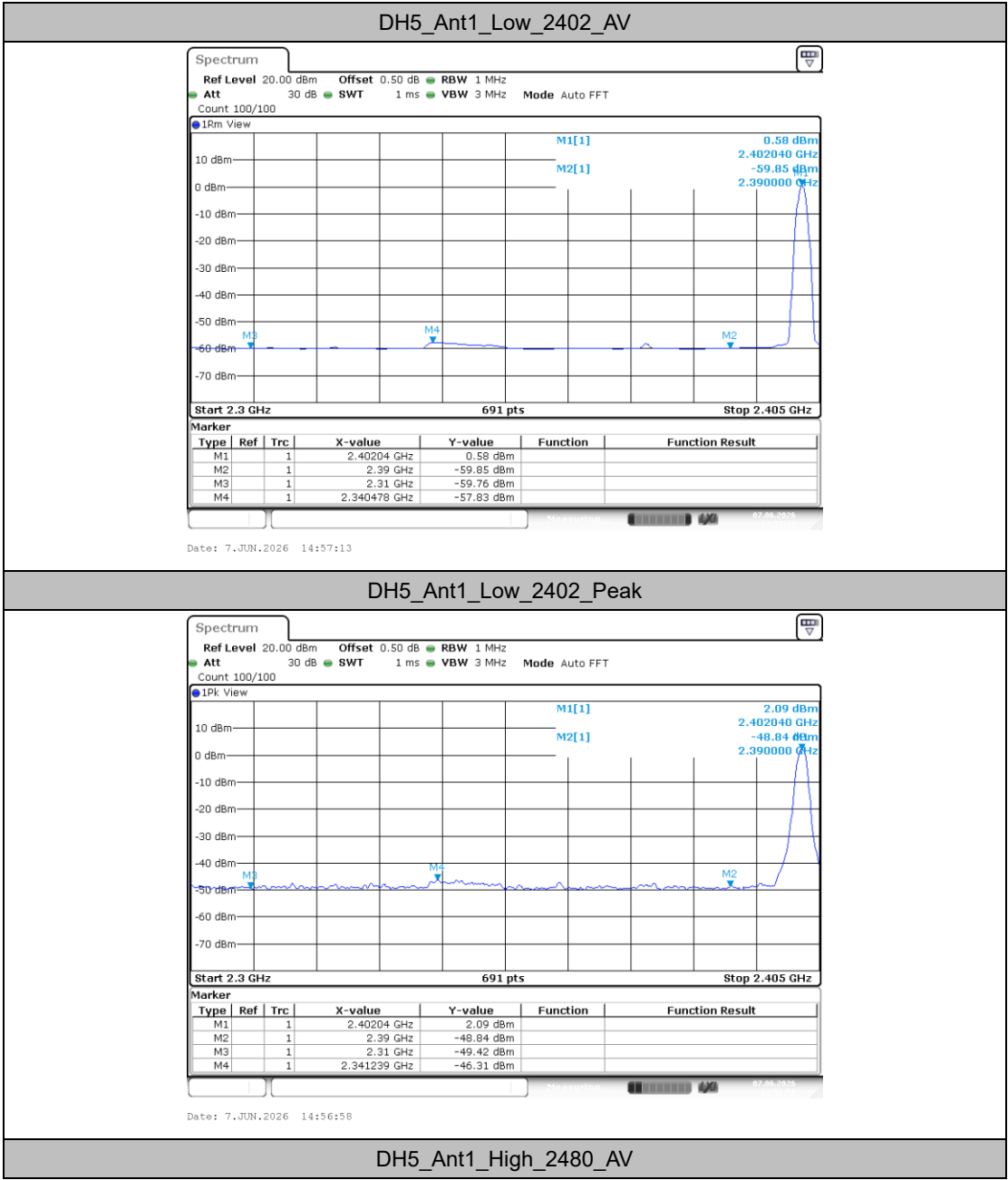
Test Result

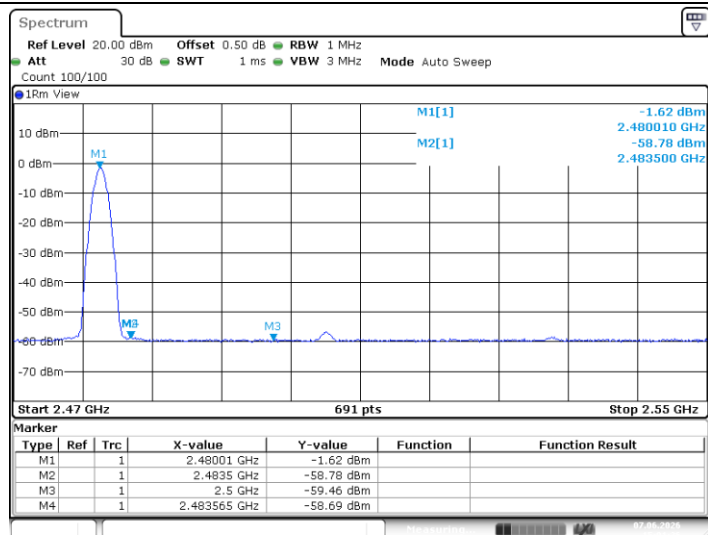
TestMod e	Antenn a	ChNam e	Freq(MH z)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-59.76	2.499	1.12	39.059	≤54	PASS
				AV	2340.478	-57.83	2.499	1.12	40.989	≤54	PASS
				AV	2390.000	-59.85	2.499	1.12	38.969	≤54	PASS
				Peak	2310.000	-49.42	2.499	0.00	48.279	≤74	PASS
				Peak	2341.239	-46.31	2.499	0.00	51.389	≤74	PASS
				Peak	2390.000	-48.84	2.499	0.00	48.859	≤74	PASS
		High	2480	AV	2483.500	-58.78	2.499	1.12	40.039	≤54	PASS
				AV	2483.565	-58.69	2.499	1.12	40.129	≤54	PASS
				AV	2500.000	-59.46	2.499	1.12	39.359	≤54	PASS
				Peak	2483.500	-44.91	2.499	0.00	52.789	≤74	PASS
				Peak	2483.565	-46.36	2.499	0.00	51.339	≤74	PASS
				Peak	2500.000	-49.14	2.499	0.00	48.559	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-59.84	2.499	1.10	38.959	≤54	PASS
				AV	2342.304	-57.88	2.499	1.10	40.919	≤54	PASS
				AV	2390.000	-59.91	2.499	1.10	38.889	≤54	PASS
				Peak	2310.000	-48.01	2.499	0.00	49.689	≤74	PASS
				Peak	2343.370	-45.66	2.499	0.00	52.039	≤74	PASS
				Peak	2390.000	-48.68	2.499	0.00	49.019	≤74	PASS
		High	2480	AV	2483.500	-59.29	2.499	1.12	39.529	≤54	PASS
				AV	2497.710	-59.25	2.499	1.12	39.569	≤54	PASS
				AV	2500.000	-59.6	2.499	1.12	39.219	≤54	PASS
				Peak	2483.500	-47.44	2.499	0.00	50.259	≤74	PASS
				Peak	2487.855	-47.38	2.499	0.00	50.319	≤74	PASS
				Peak	2500.000	-49.24	2.499	0.00	48.459	≤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.

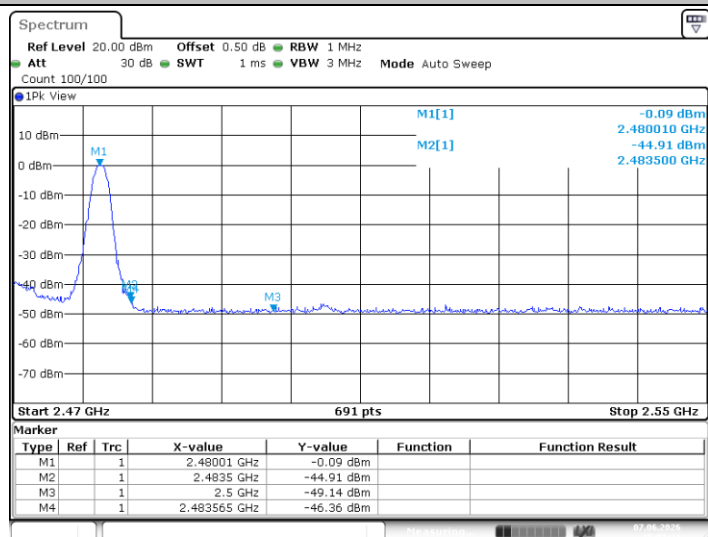
Test Graphs





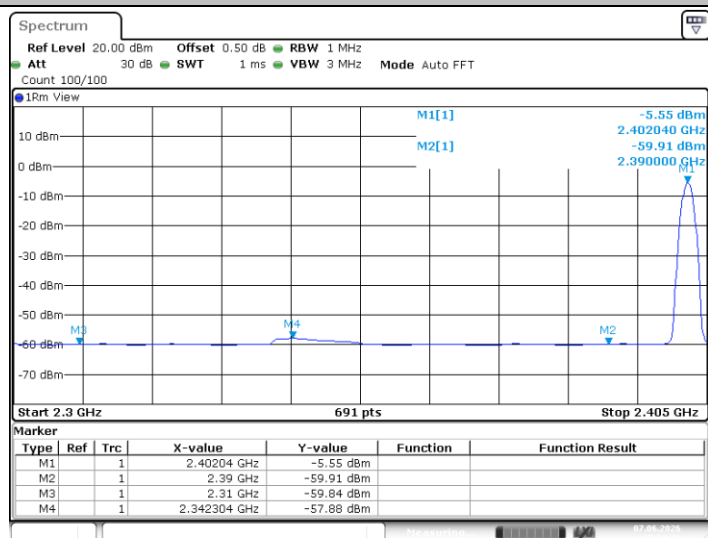
Date: 7.JUN.2026 15:01:36

DH5_Ant1_High_2480_Peak



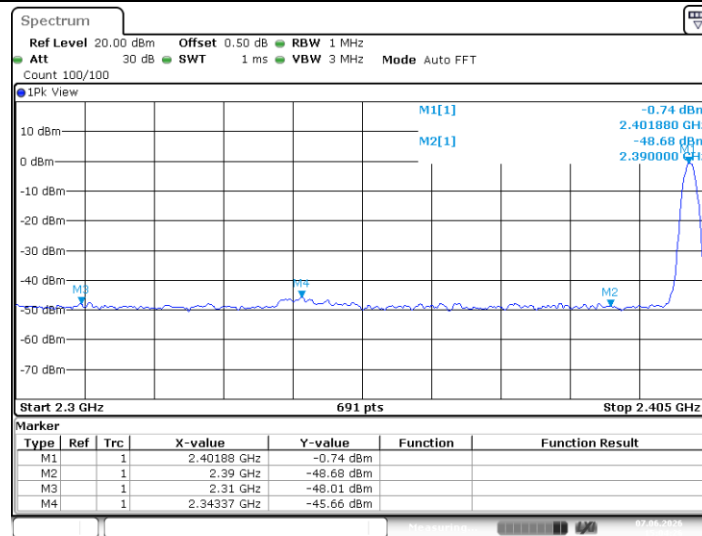
Date: 7.JUN.2026 15:01:21

2DH5_Ant1_Low_2402_AV



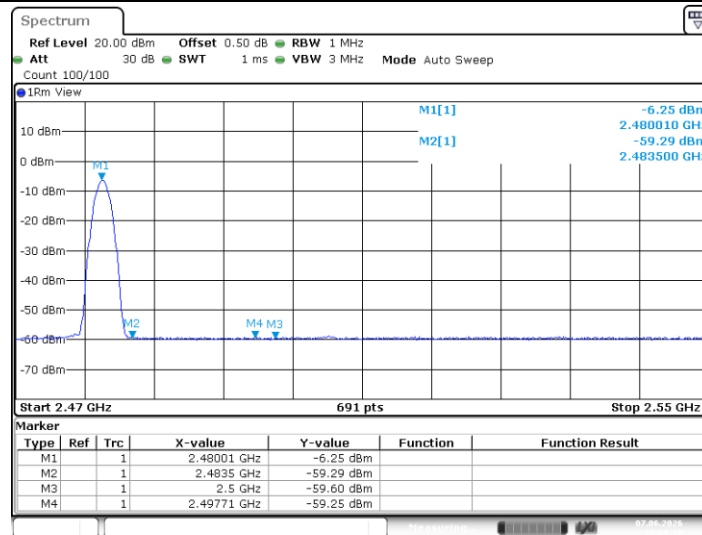
Date: 7.JUN.2026 15:04:41

2DH5_Ant1_Low_2402_Peak



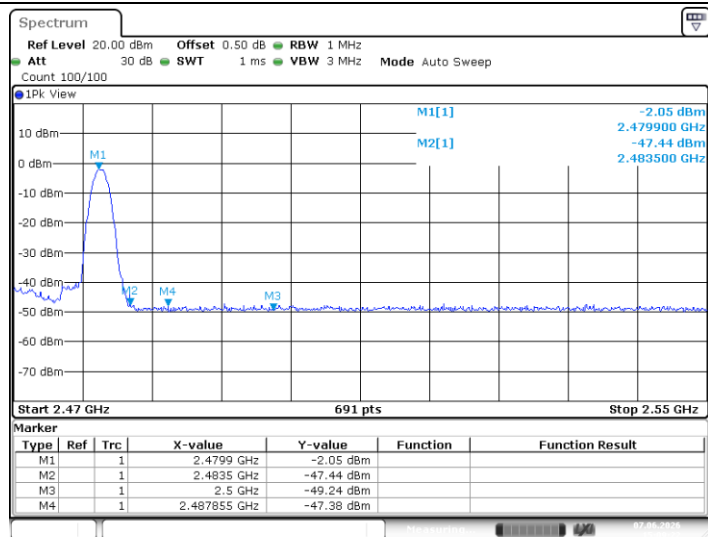
Date: 7.JUN.2026 15:04:26

2DH5_Ant1_High_2480_AV



Date: 7.JUN.2026 15:09:37

2DH5_Ant1_High_2480_Peak



Date: 7.JUN.2026 15:09:22