

FCC Appendix RF Test Data for BT

FCC ID : 2BDO6-S18ML

Company : WITSLISM TECHNOLOGY CO.,LIMITED

EUT : BLUETOOTH SPEAKER

Model Number : S18ML

Report No. : CTA26052800601

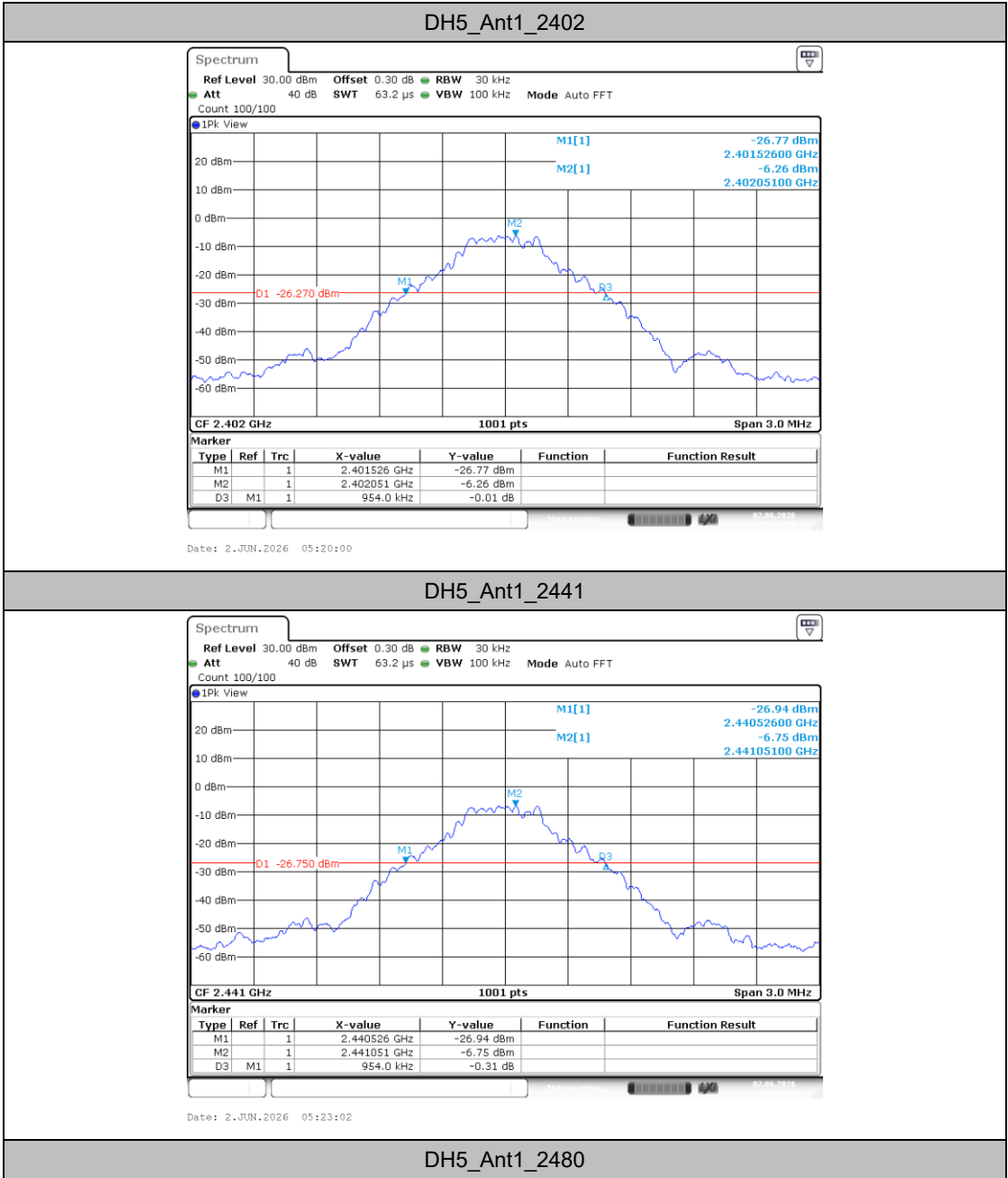
Reviewed By : Eric Wang

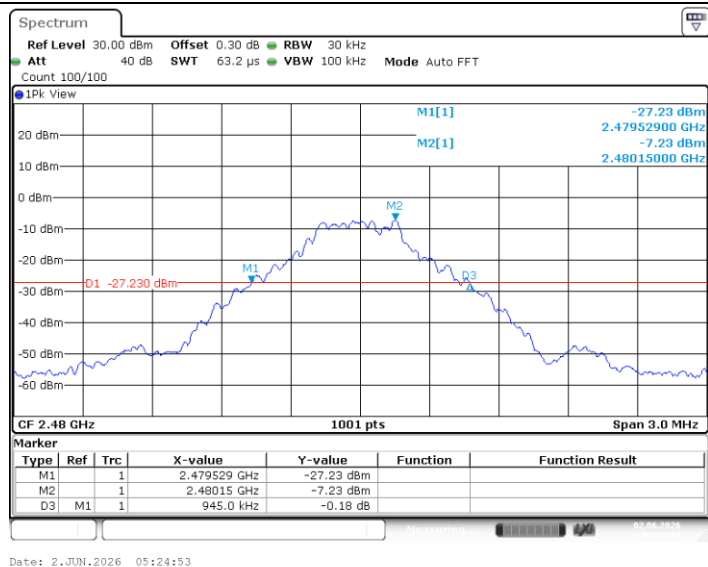
Appendix A: 20dB Emission Bandwidth

Test Result

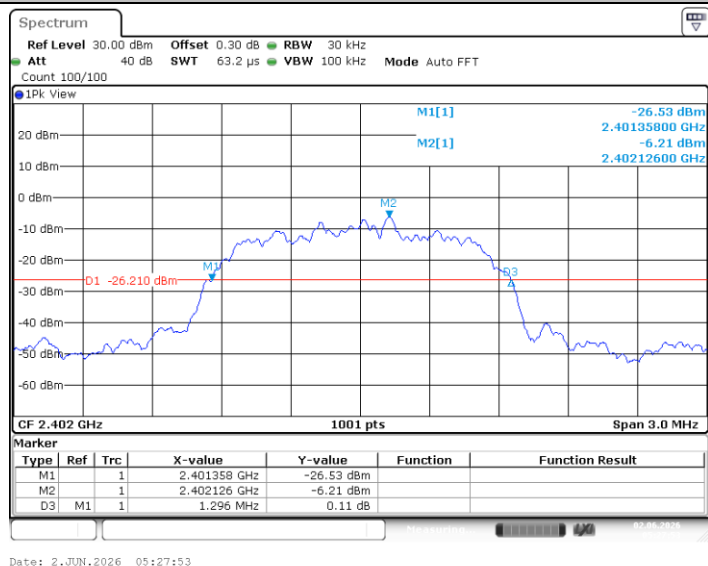
TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.95	2401.53	2402.48	---	---
		2441	0.95	2440.53	2441.48	---	---
		2480	0.95	2479.53	2480.47	---	---
2DH5	Ant1	2402	1.30	2401.36	2402.65	---	---
		2441	1.32	2440.33	2441.65	---	---
		2480	1.32	2479.33	2480.65	---	---

Test Graphs

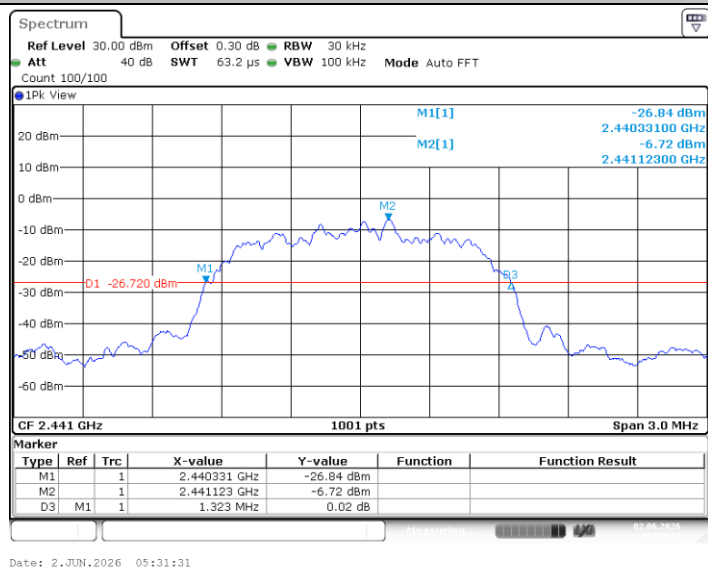




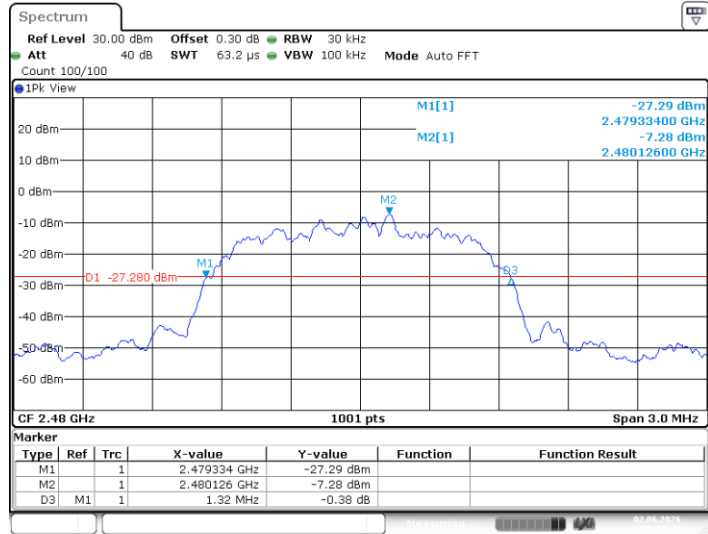
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Date: 2.JUN.2026 05:33:43

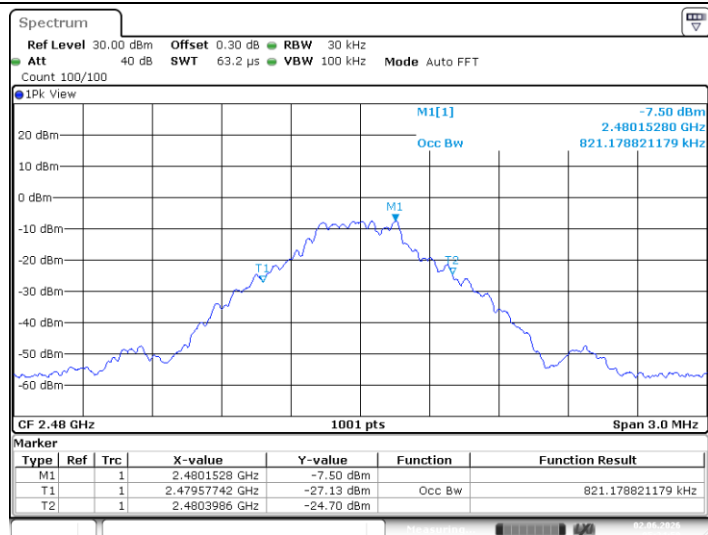
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.82418	2401.5774	2402.4016	---	---
		2441	0.81518	2440.5834	2441.3986	---	---
		2480	0.82118	2479.5774	2480.3986	---	---
2DH5	Ant1	2402	1.1688	2401.4066	2402.5754	---	---
		2441	1.1718	2440.4036	2441.5754	---	---
		2480	1.1718	2479.4036	2480.5754	---	---

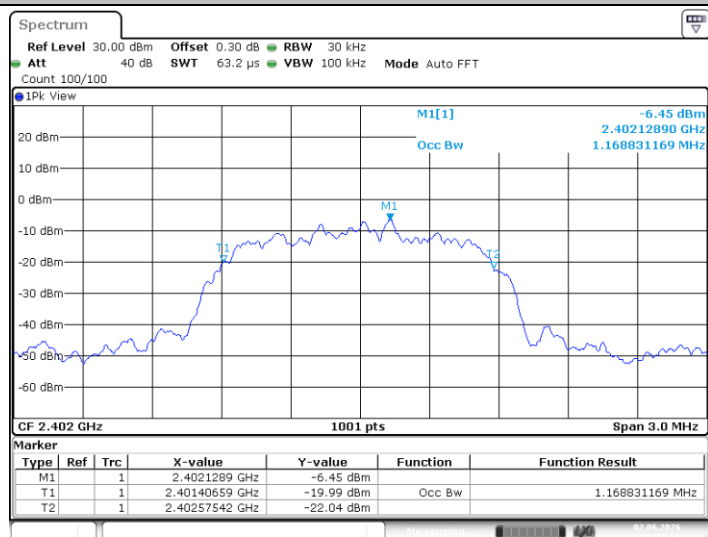
Test Graphs





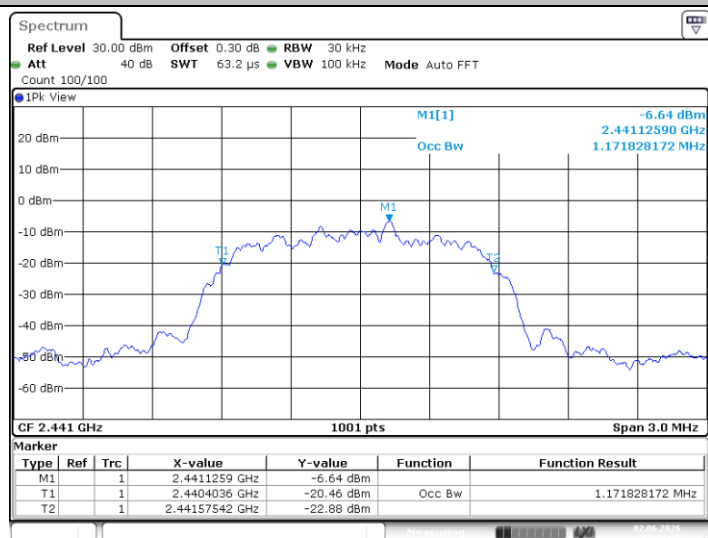
Date: 2.JUN.2026 05:24:59

2DH5_Ant1_2402



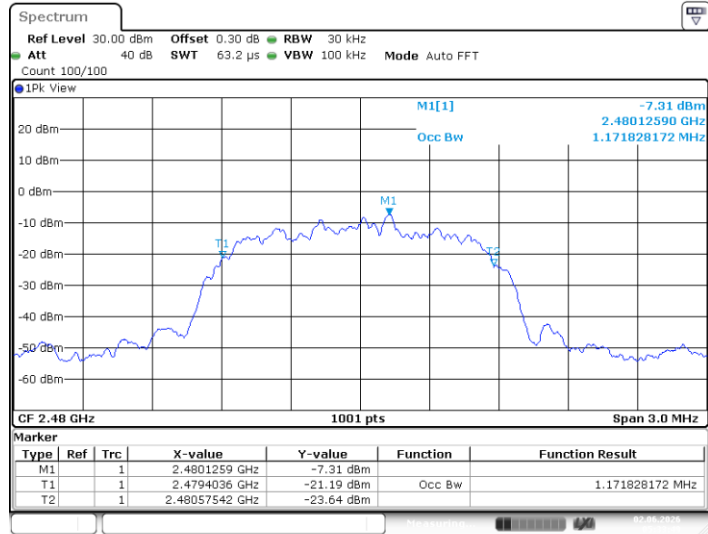
Date: 2.JUN.2026 05:28:00

2DH5_Ant1_2441



Date: 2.JUN.2026 05:31:38

2DH5_Ant1_2480



Date: 2.JUN.2026 05:33:49

Appendix C: Maximum conducted output power

Test Result Peak

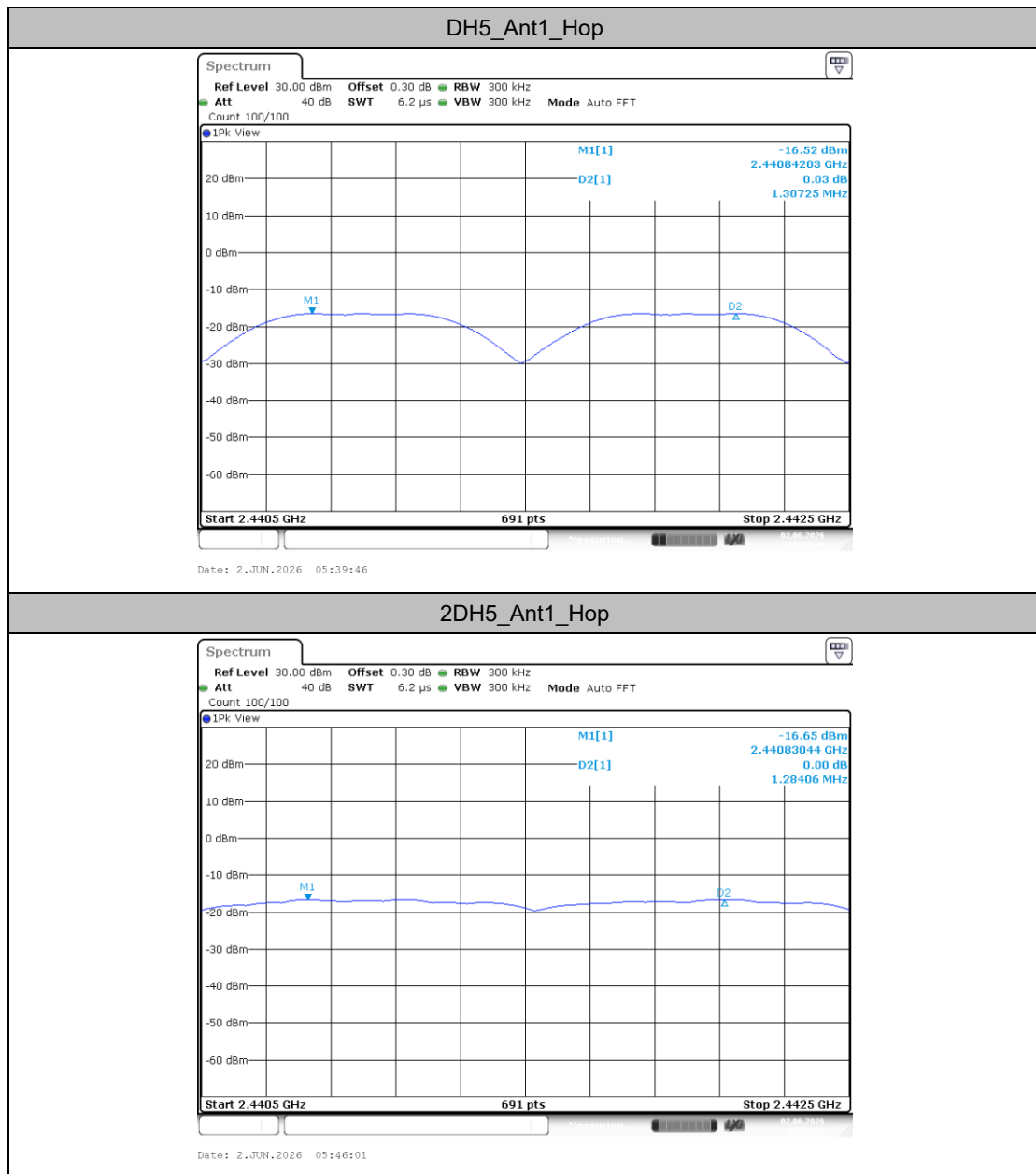
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-3.24	≤20.97	PASS
		2441	-3.66	≤20.97	PASS
		2480	-4.36	≤20.97	PASS
2DH5	Ant1	2402	-1.05	≤20.97	PASS
		2441	-1.60	≤20.97	PASS
		2480	-2.25	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.307	≥ 0.950	PASS
2DH5	Ant1	Hop	1.284	≥ 0.880	PASS

Test Graphs

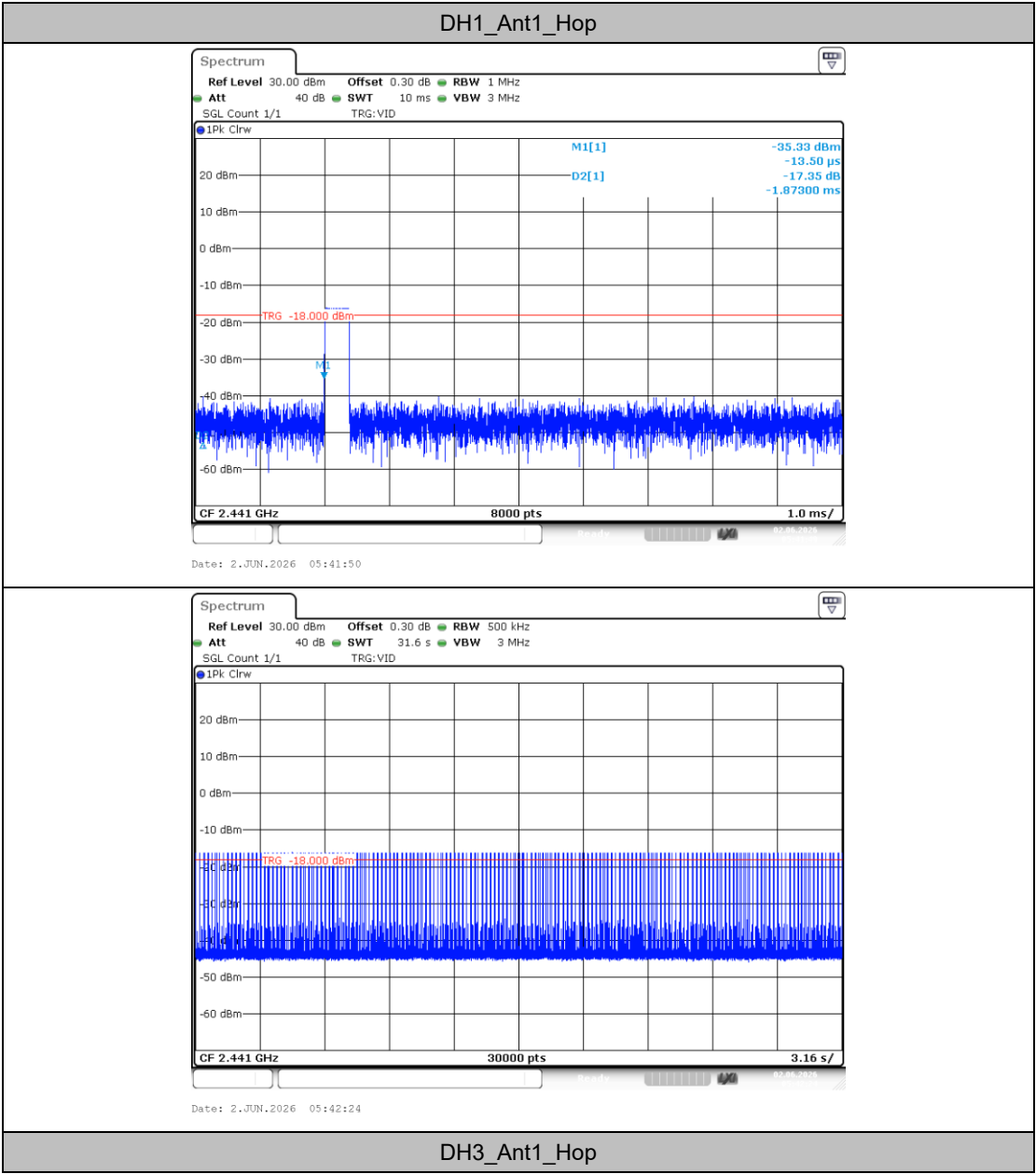


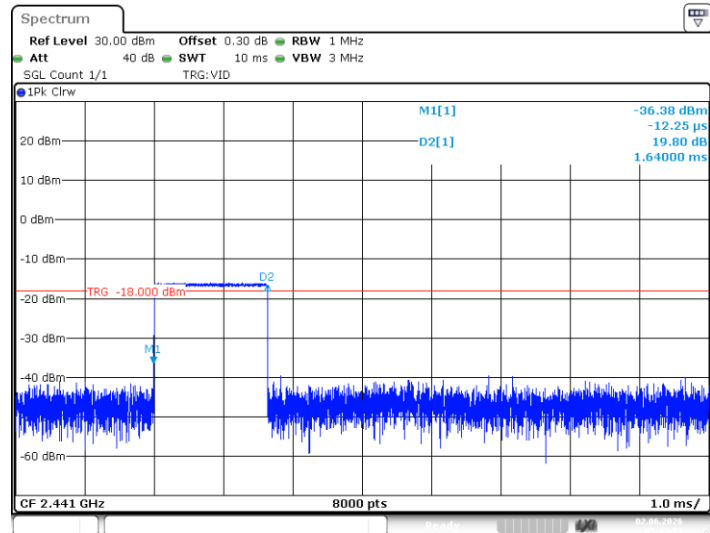
Appendix E: Time of occupancy

Test Result

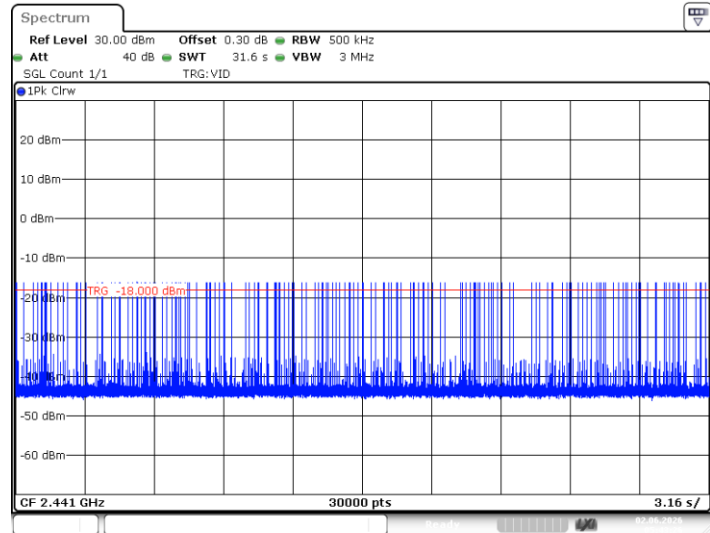
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	-1.873	320	-0.599	≤0.4	PASS
DH3	Ant1	Hop	1.640	173	0.284	≤0.4	PASS
DH5	Ant1	Hop	2.882	108	0.311	≤0.4	PASS
2DH1	Ant1	Hop	0.403	319	0.129	≤0.4	PASS
2DH3	Ant1	Hop	1.646	146	0.24	≤0.4	PASS
2DH5	Ant1	Hop	2.887	114	0.329	≤0.4	PASS

Test Graphs



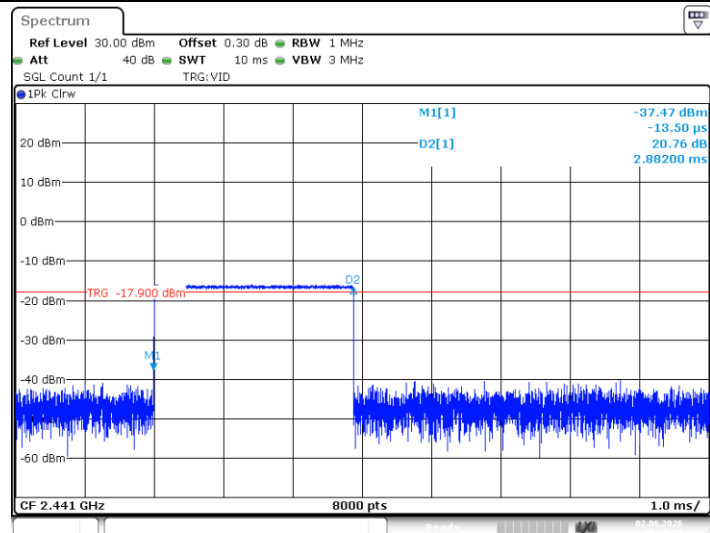


Date: 2.JUN.2026 05:42:51

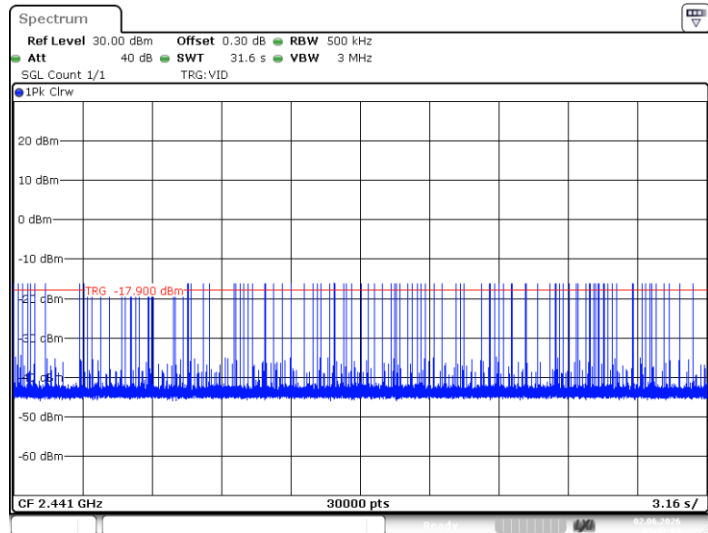


Date: 2.JUN.2026 05:43:25

DH5_Ant1_Hop

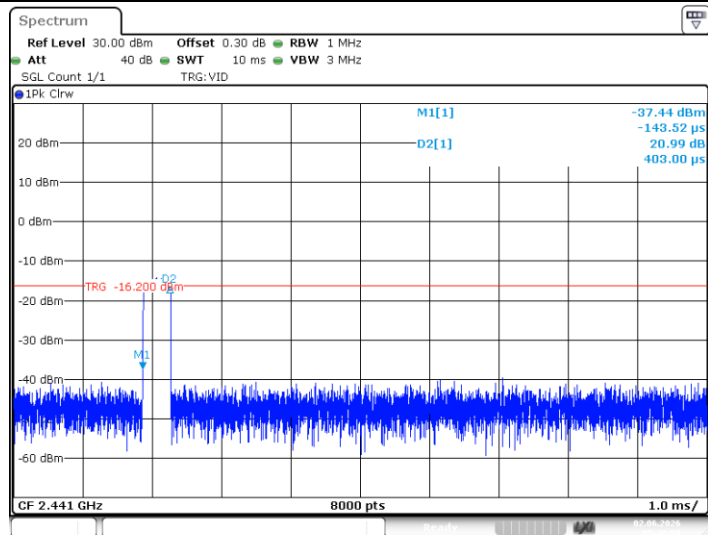


Date: 2.JUN.2026 05:40:30

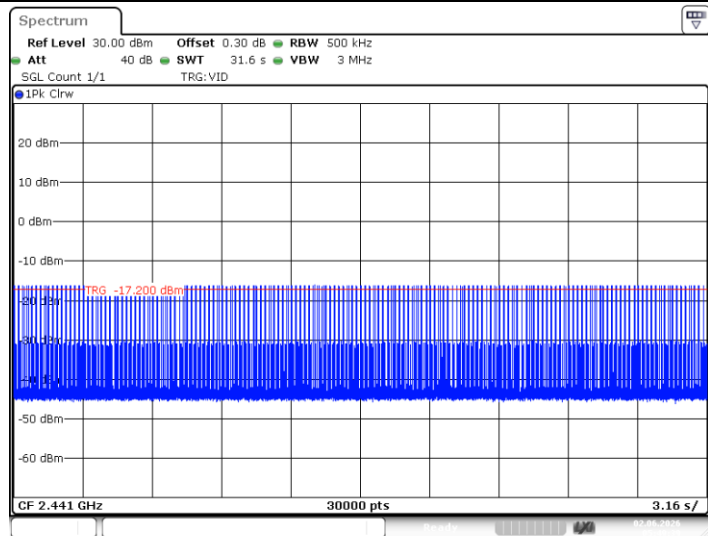


Date: 2.JUN.2026 05:41:04

2DH1_Ant1_Hop

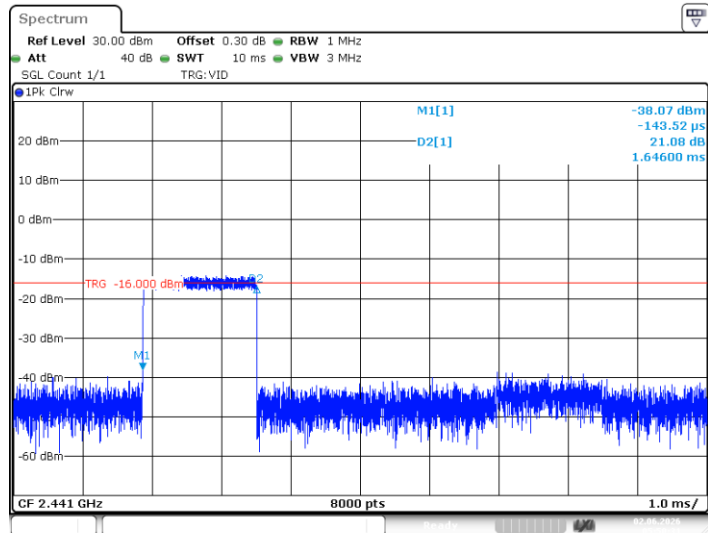


Date: 2.JUN.2026 05:48:58

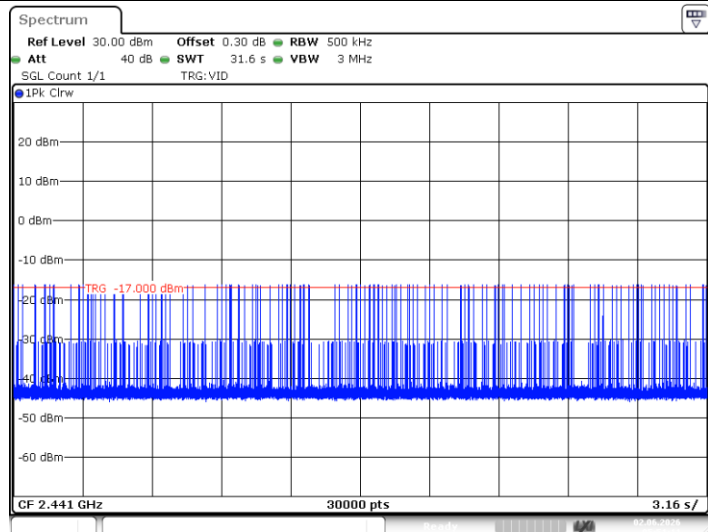


Date: 2.JUN.2026 05:49:38

2DH3_Ant1_Hop

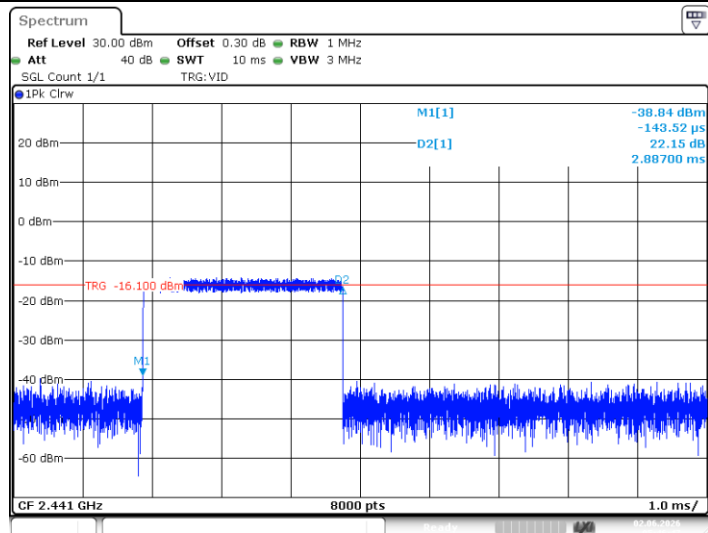


Date: 2.JUN.2026 05:50:31

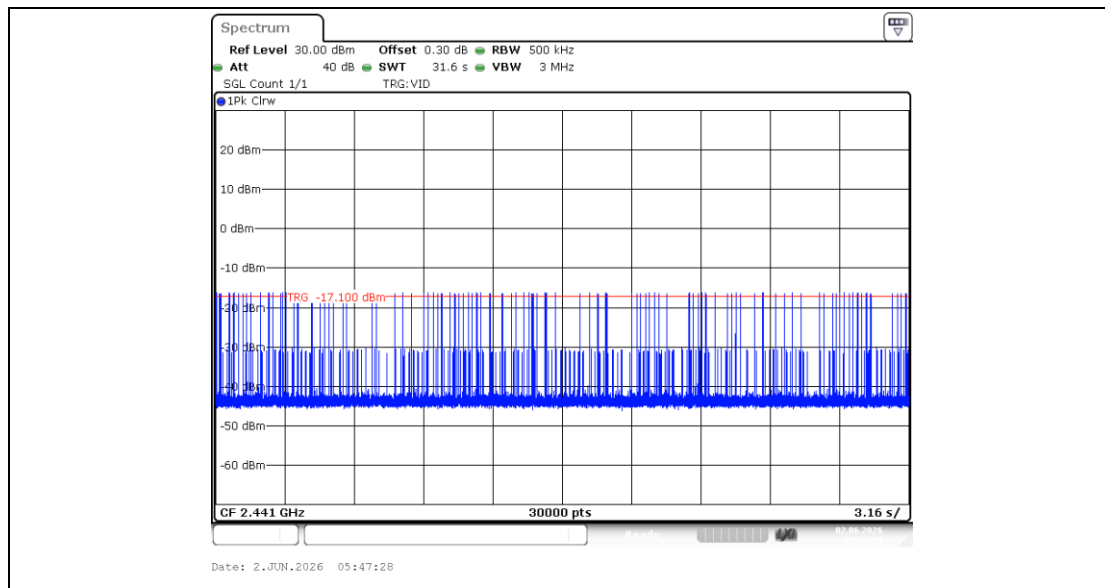


Date: 2.JUN.2026 05:51:11

2DH5_Ant1_Hop



Date: 2.JUN.2026 05:46:48

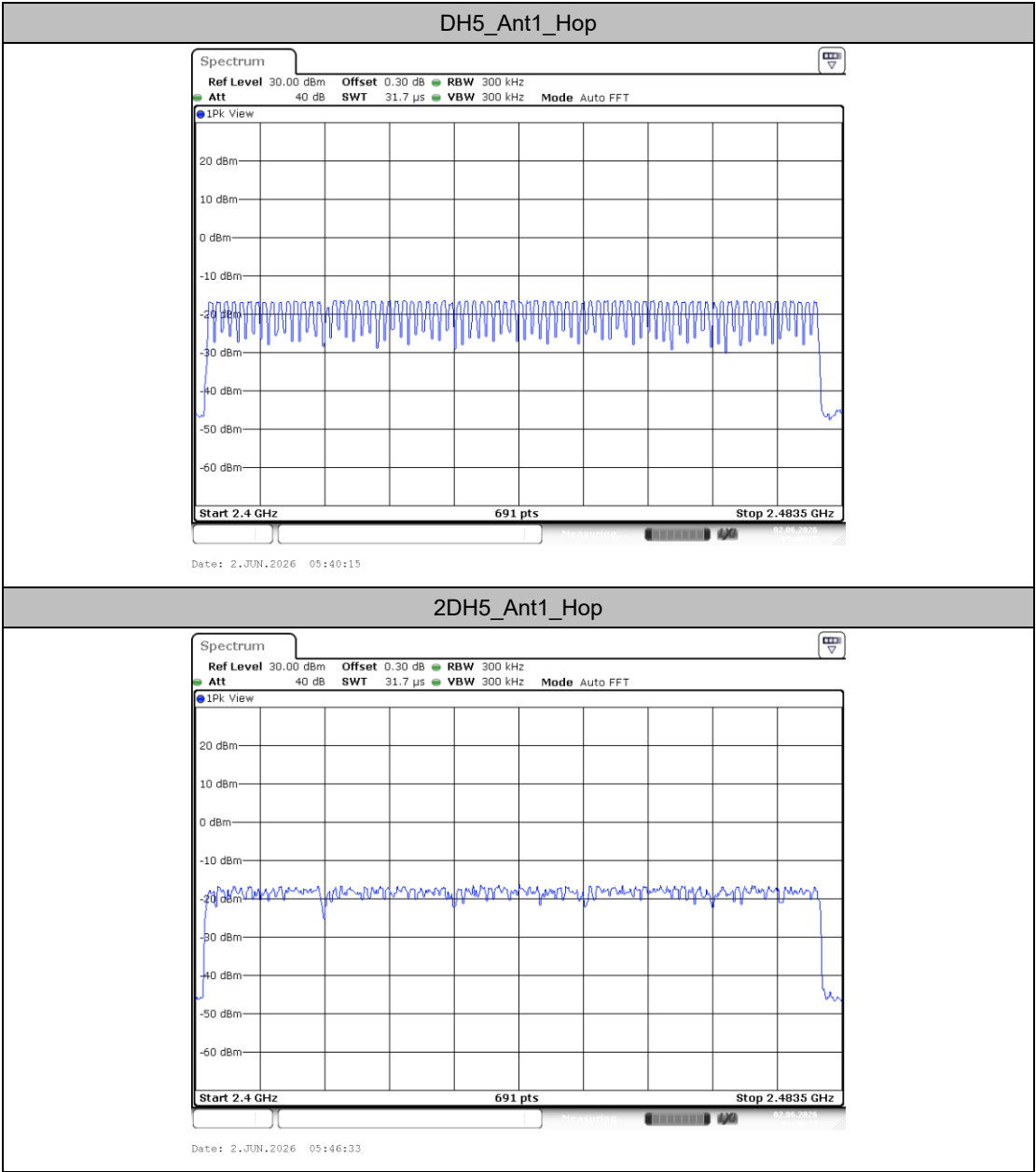


Appendix F: Number of hopping channels

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

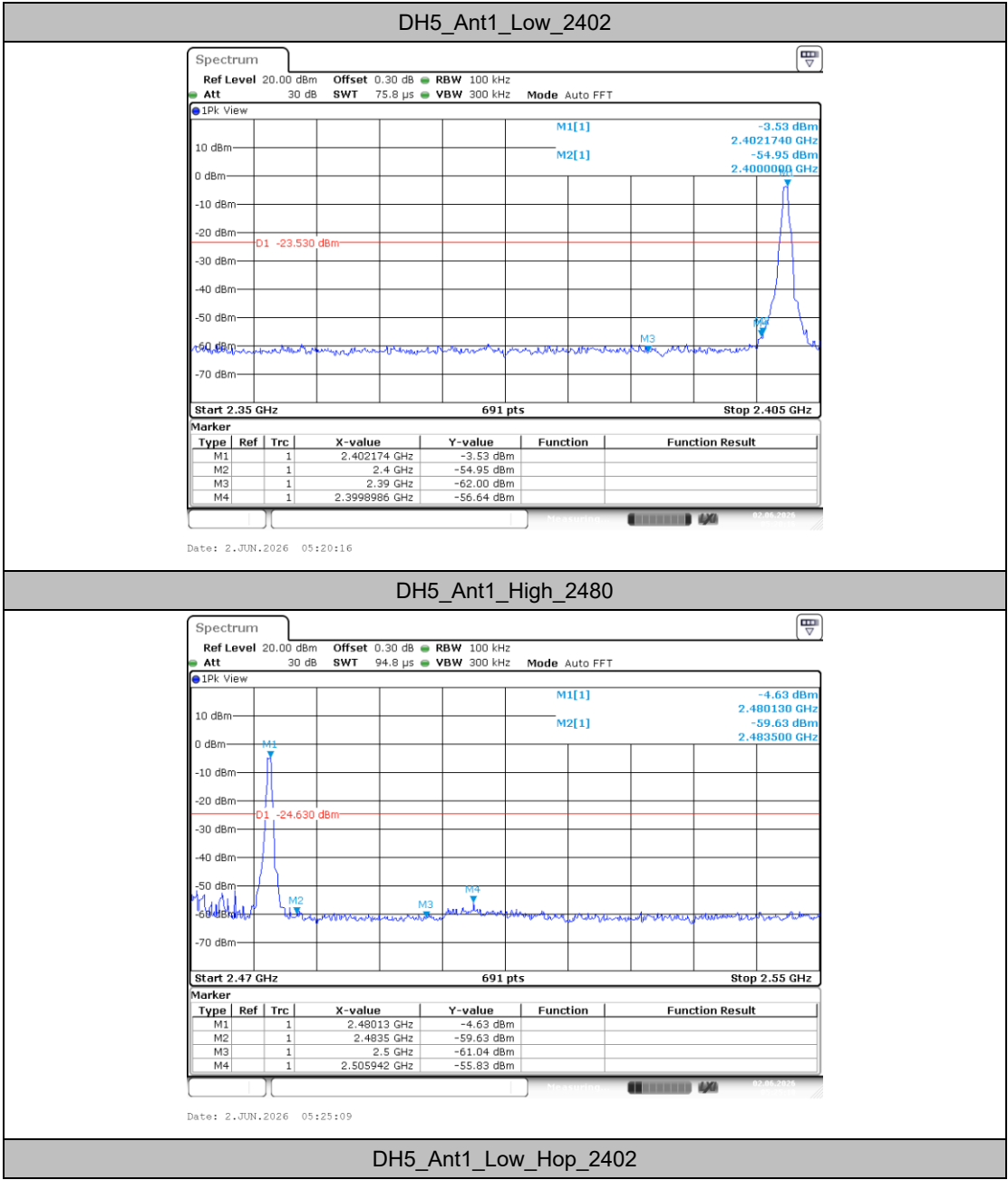


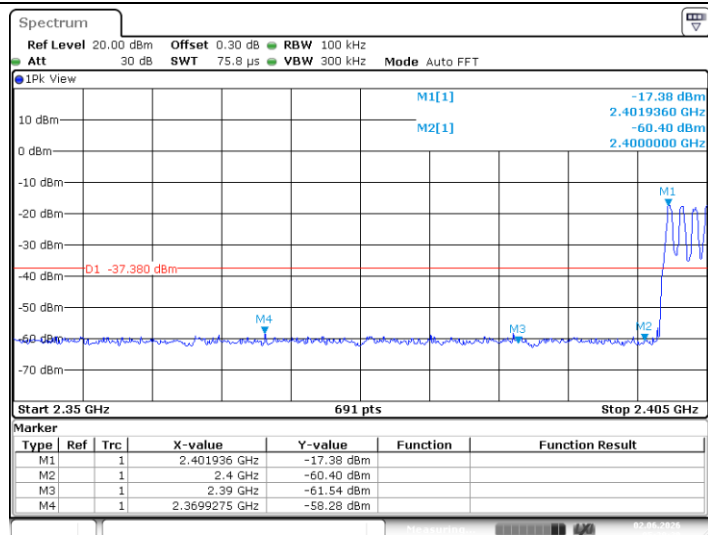
Appendix G: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.53	-56.64	≤-23.53	PASS
		High	2480	-4.63	-55.83	≤-24.63	PASS
		Low	Hop_2402	-17.38	-58.28	≤-37.38	PASS
		High	Hop_2480	-16.60	-56.45	≤-36.6	PASS
2DH5	Ant1	Low	2402	-3.79	-59.06	≤-23.79	PASS
		High	2480	-4.81	-57.13	≤-24.81	PASS
		Low	Hop_2402	-17.55	-58.3	≤-37.55	PASS
		High	Hop_2480	-17.74	-54.43	≤-37.74	PASS

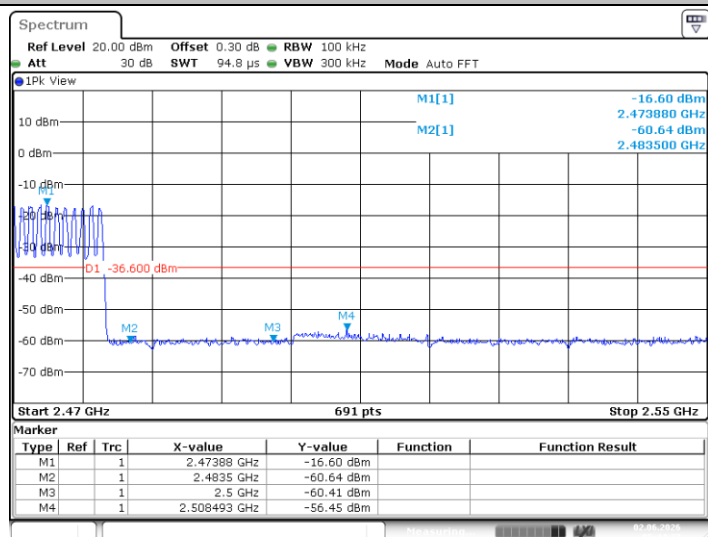
Test Graphs





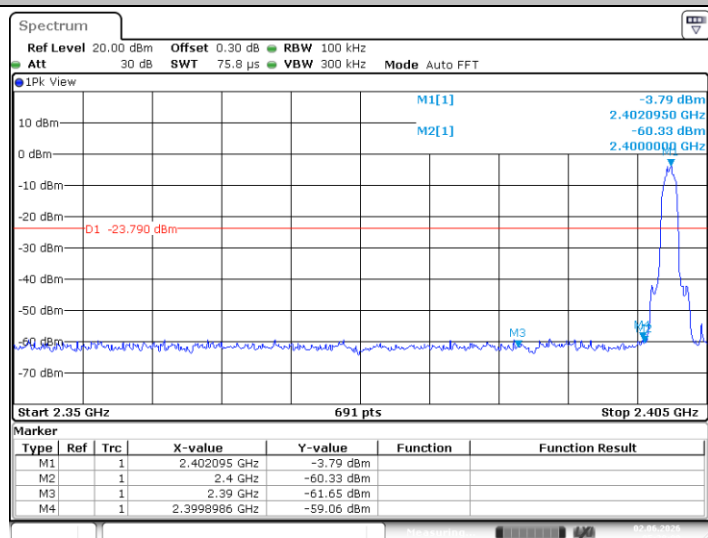
Date: 2.JUN.2026 05:39:30

DH5_Ant1_High_Hop_2480



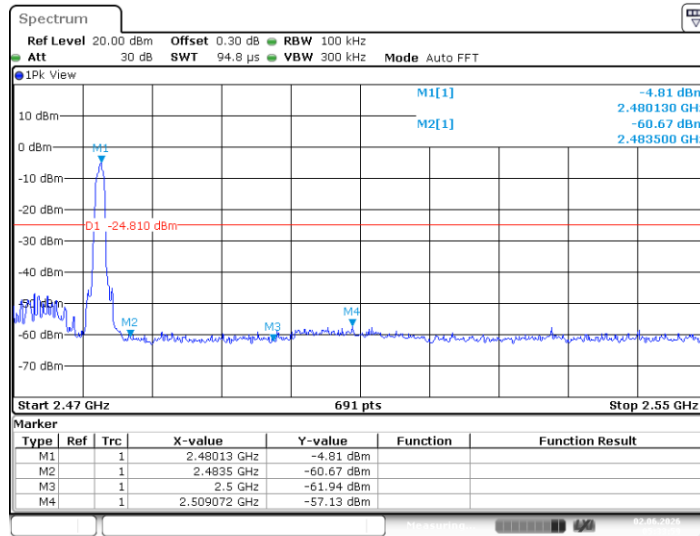
Date: 2.JUN.2026 05:44:37

2DH5_Ant1_Low_2402



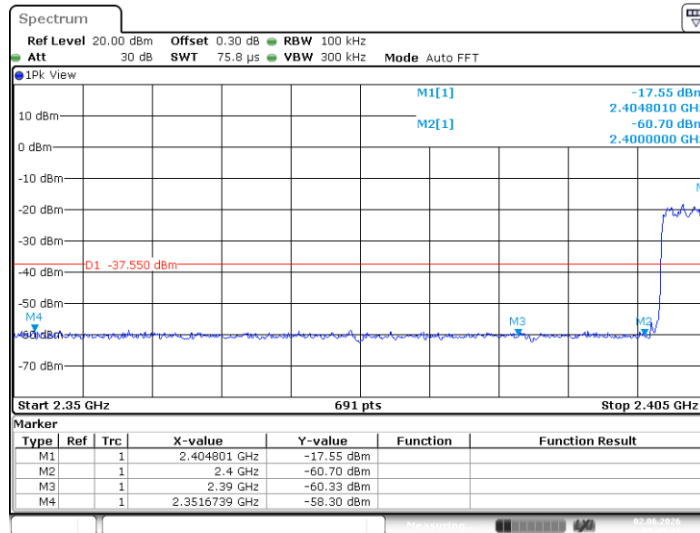
Date: 2.JUN.2026 05:28:09

2DH5_Ant1_High_2480



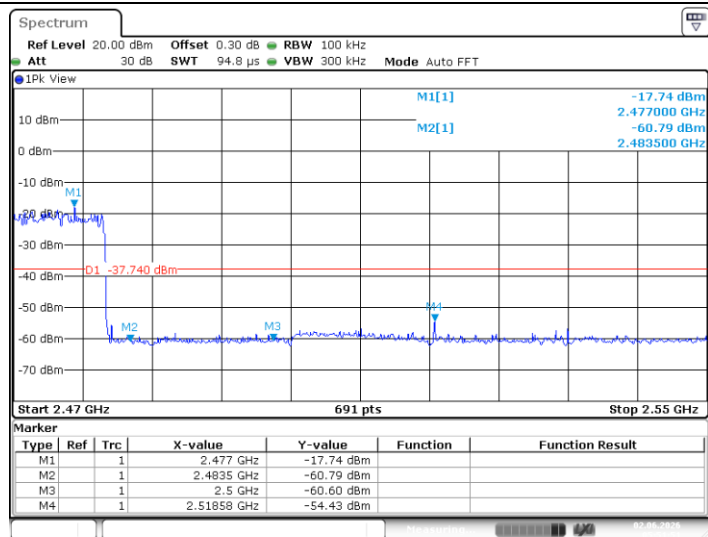
Date: 2.JUN.2026 05:33:59

2DH5_Ant1_Low_Hop_2402



Date: 2.JUN.2026 05:45:41

2DH5_Ant1_High_Hop_2480



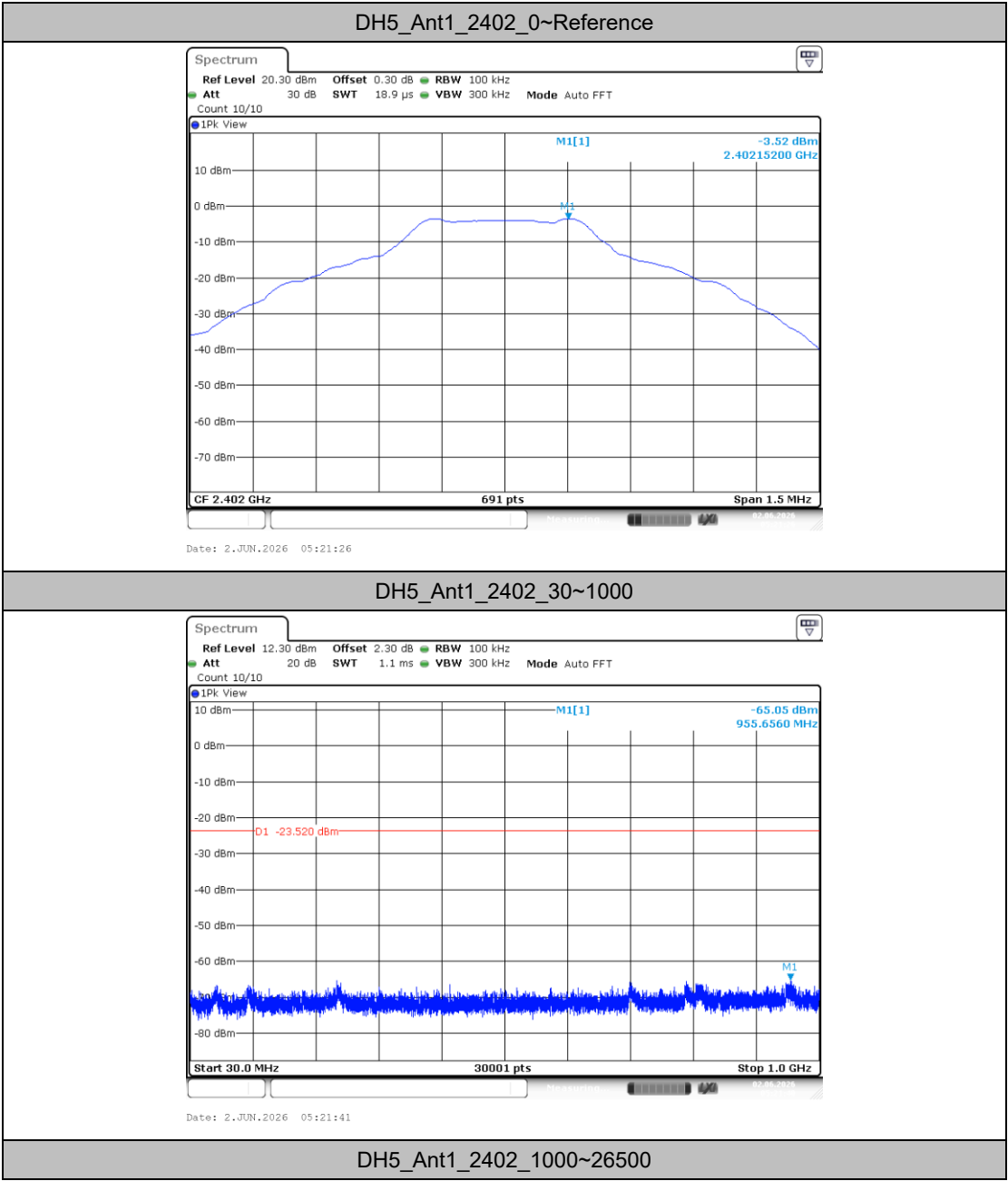
Date: 2.JUN.2026 05:51:51

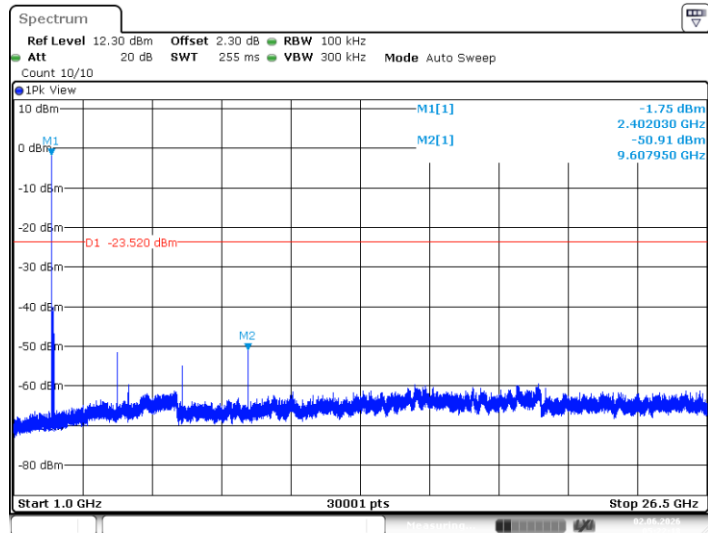
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-3.52	-3.52	---	PASS
			30~1000	-3.52	-65.05	≤-23.52	PASS
			1000~26500	-3.52	-50.91	≤-23.52	PASS
		2441	Reference	-3.95	-3.95	---	PASS
			30~1000	-3.95	-63.54	≤-23.95	PASS
			1000~26500	-3.95	-50.57	≤-23.95	PASS
		2480	Reference	-4.66	-4.66	---	PASS
			30~1000	-4.66	-63.39	≤-24.66	PASS
			1000~26500	-4.66	-51.27	≤-24.66	PASS
2DH5	Ant1	2402	Reference	-3.75	-3.75	---	PASS
			30~1000	-3.75	-64.45	≤-23.75	PASS
			1000~26500	-3.75	-51.53	≤-23.75	PASS
		2441	Reference	-4.16	-4.16	---	PASS
			30~1000	-4.16	-30.62	≤-24.16	PASS
			1000~26500	-4.16	-50.88	≤-24.16	PASS
		2480	Reference	-4.84	-4.84	---	PASS
			30~1000	-4.84	-64.62	≤-24.84	PASS
			1000~26500	-4.84	-52.38	≤-24.84	PASS

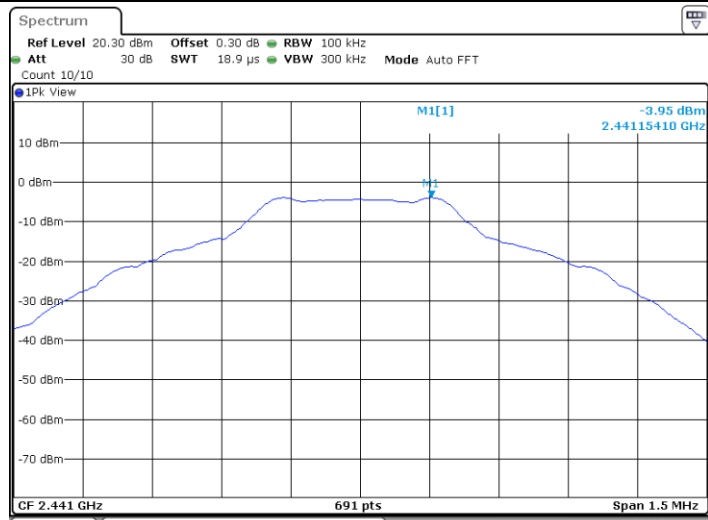
Test Graphs





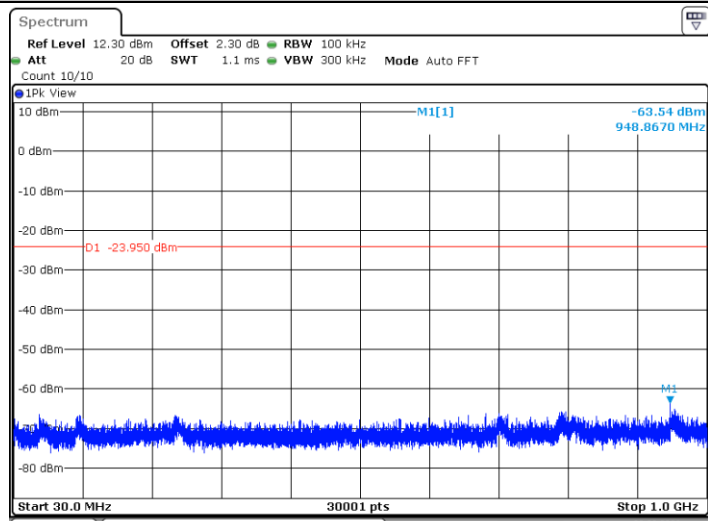
Date: 2.JUN.2026 05:22:18

DH5_Ant1_2441_0~Reference



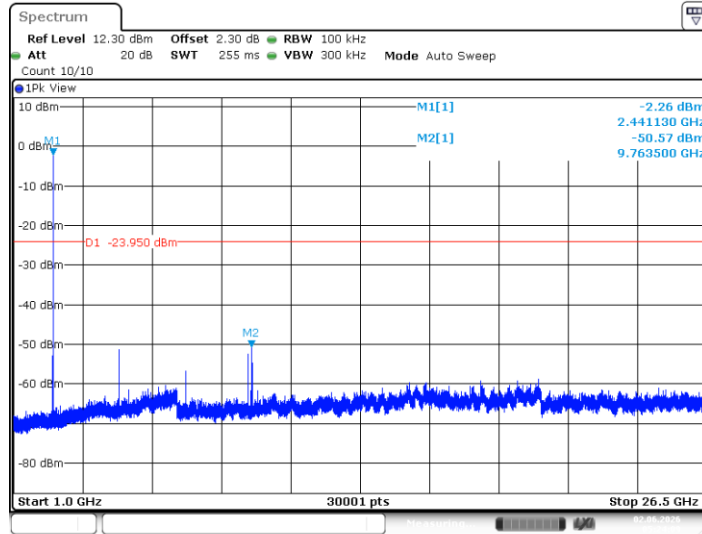
Date: 2.JUN.2026 05:23:17

DH5_Ant1_2441_30~1000



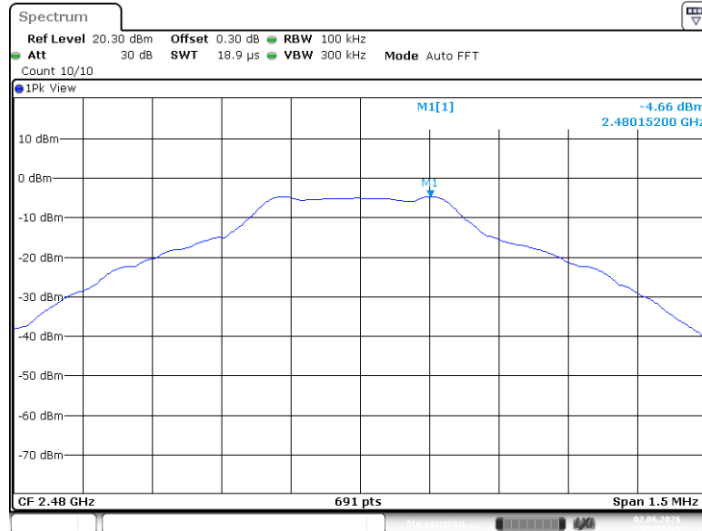
Date: 2.JUN.2026 05:23:32

DH5_Ant1_2441_1000~26500



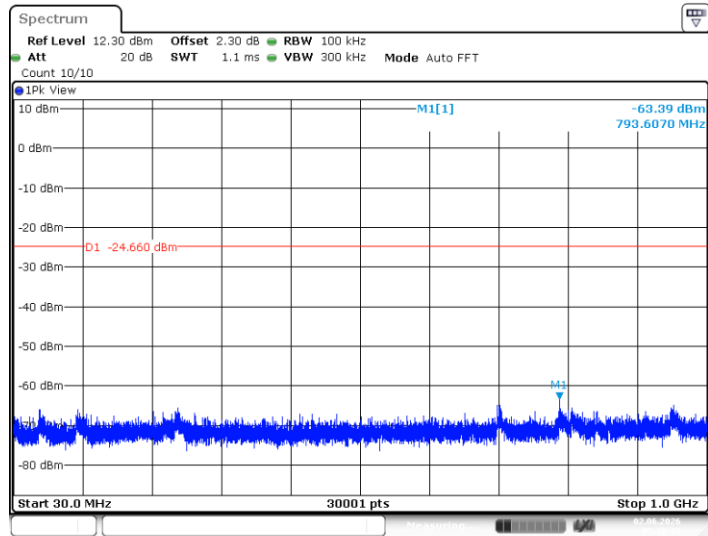
Date: 2.JUN.2026 05:24:09

DH5_Ant1_2480_0~Reference



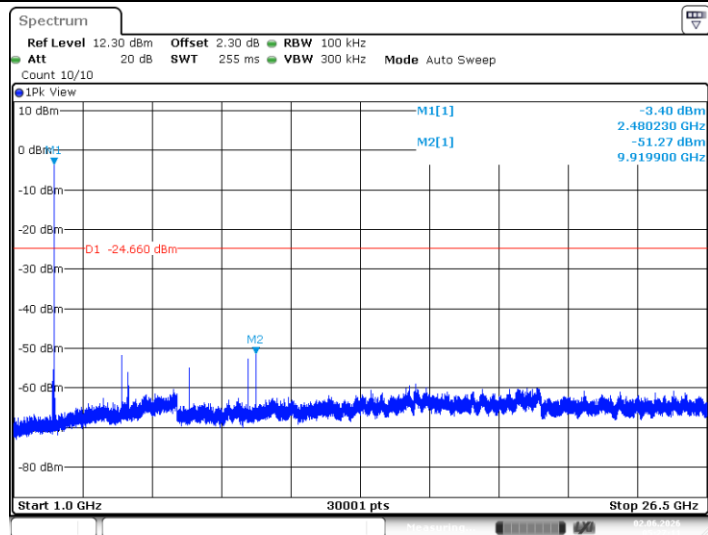
Date: 2.JUN.2026 05:26:19

DH5_Ant1_2480_30~1000



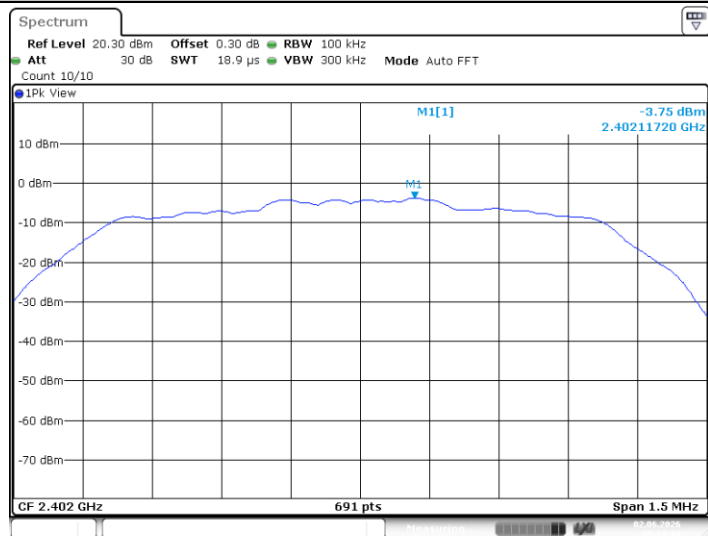
Date: 2.JUN.2026 05:26:34

DH5_Ant1_2480_1000~26500



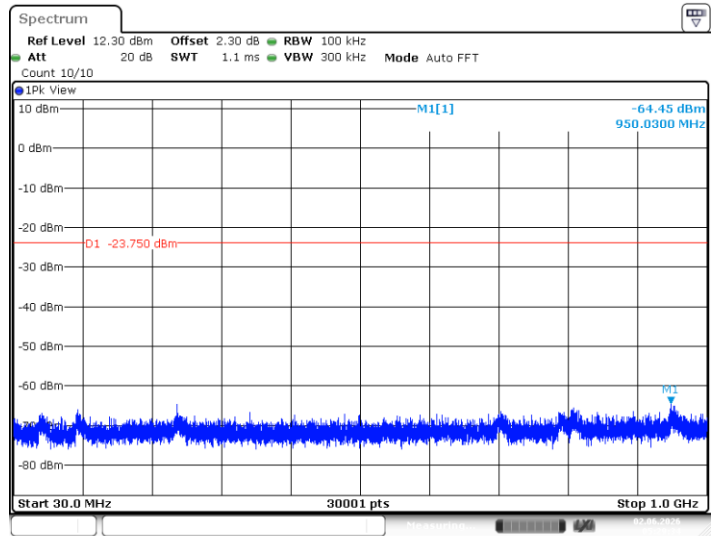
Date: 2.JUN.2026 05:27:11

2DH5_Ant1_2402_0~Reference

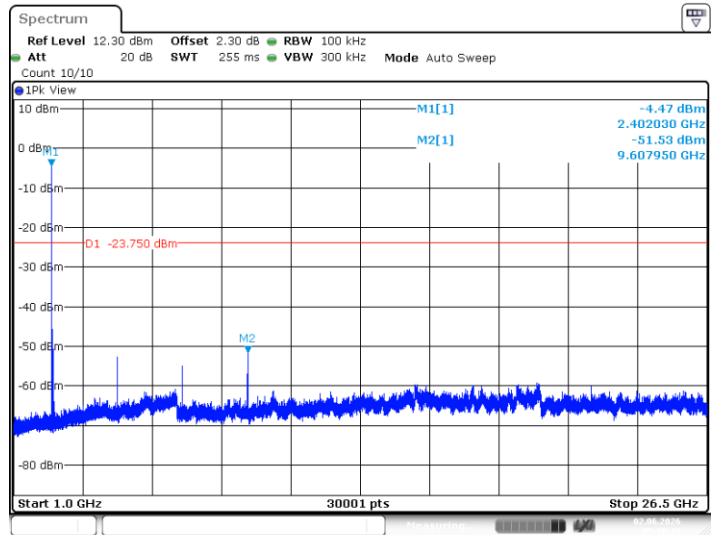


Date: 2.JUN.2026 05:29:19

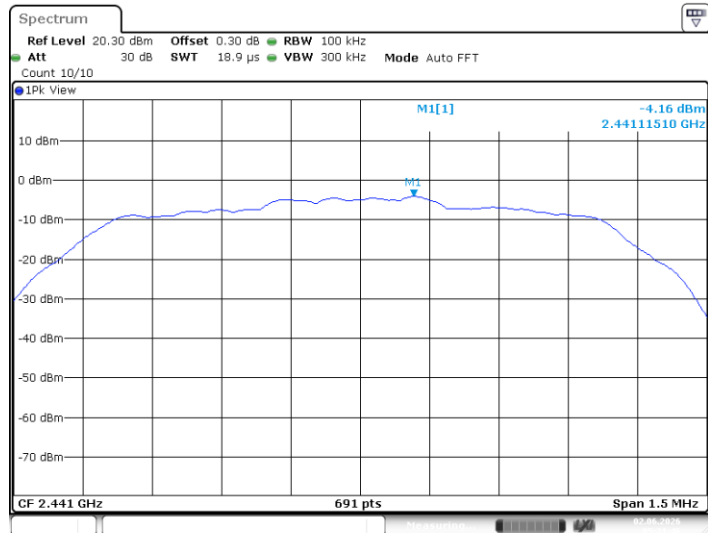
2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500

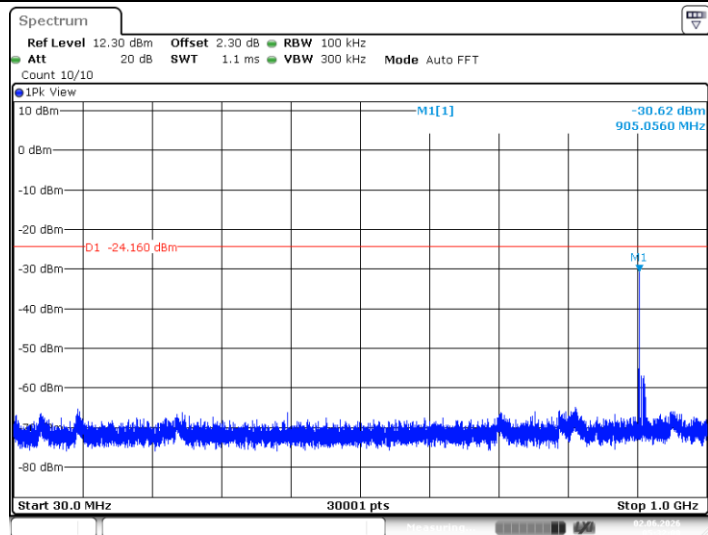


2DH5_Ant1_2441_0~Reference



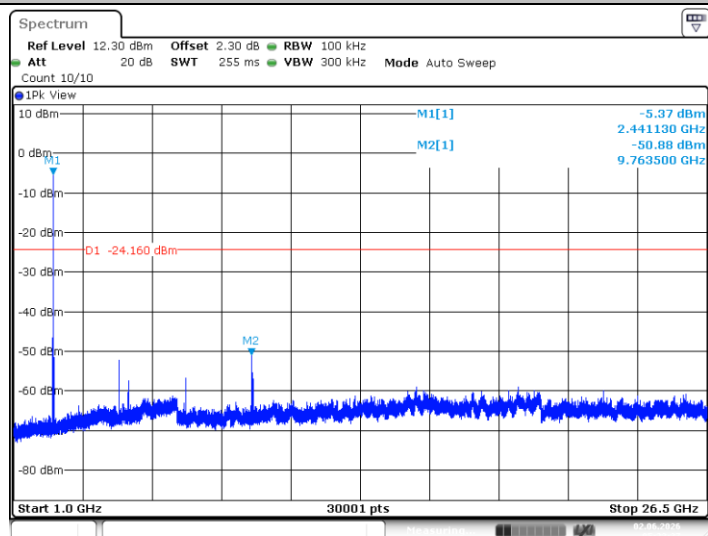
Date: 2.JUN.2026 05:31:46

2DH5_Ant1_2441_30~1000



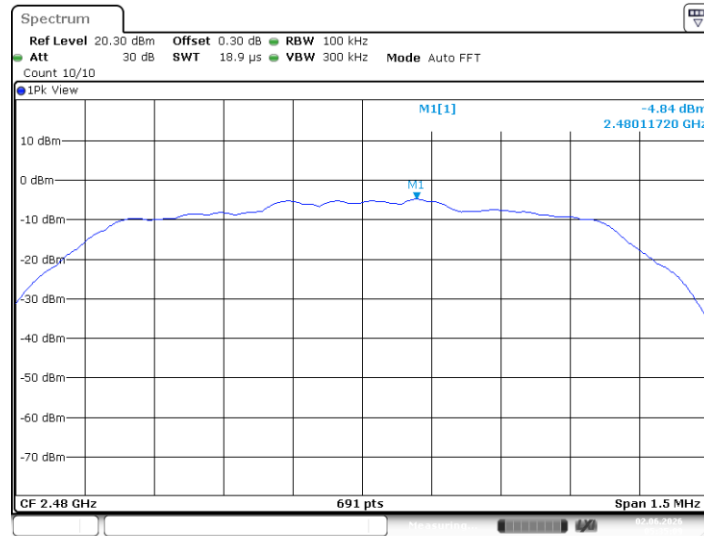
Date: 2.JUN.2026 05:32:00

2DH5_Ant1_2441_1000~26500



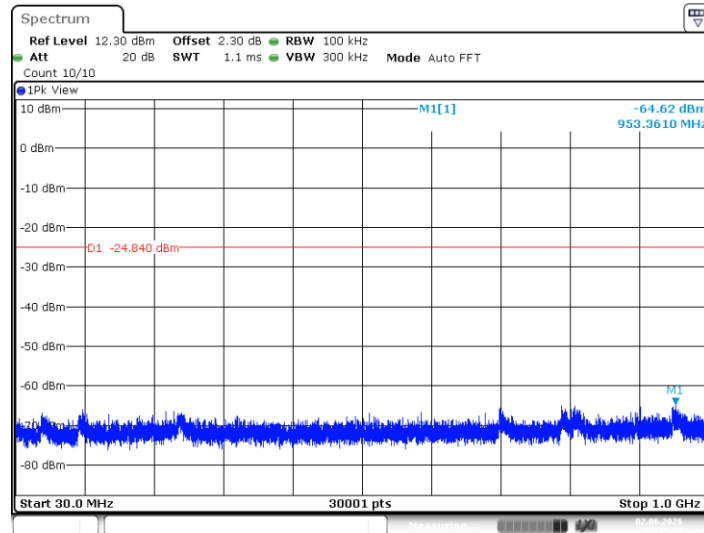
Date: 2.JUN.2026 05:32:38

2DH5_Ant1_2480_0~Reference



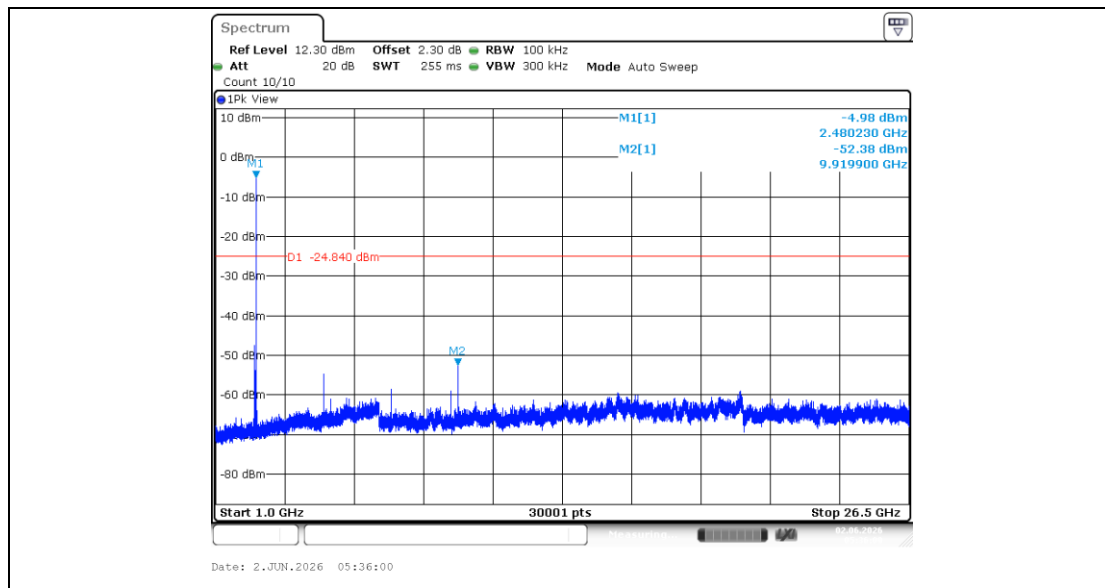
Date: 2.JUN.2026 05:35:09

2DH5_Ant1_2480_30~1000



Date: 2.JUN.2026 05:35:23

2DH5_Ant1_2480_1000~26500

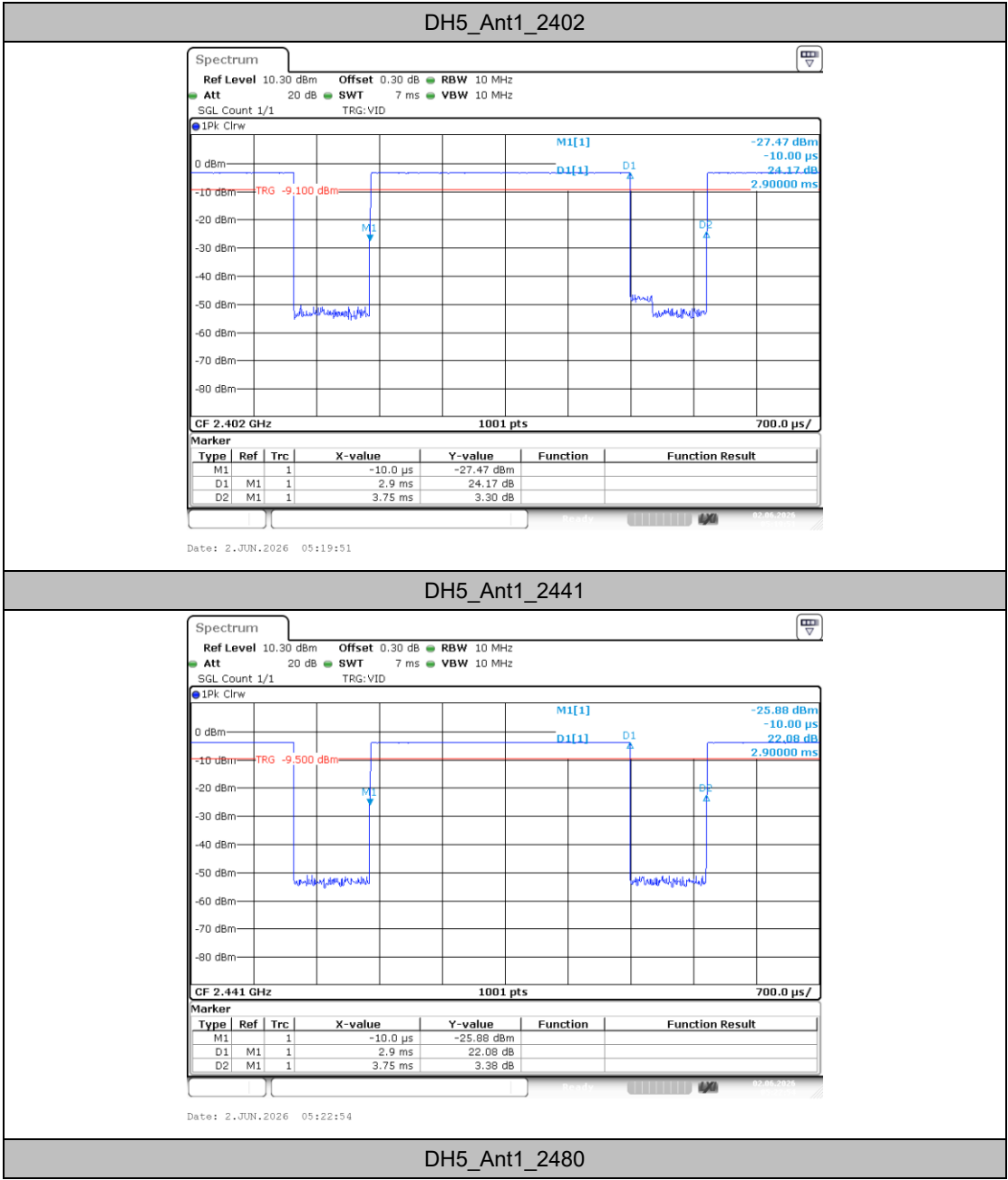


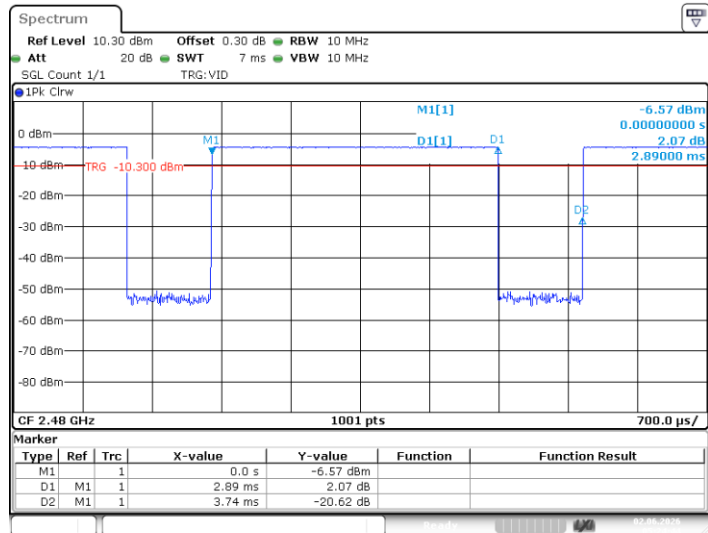
Appendix I: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.90	3.75	77.33	1.12	---	---
		2441	2.90	3.75	77.33	1.12	---	---
		2480	2.89	3.74	77.27	1.12	---	---
2DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.90	3.74	77.54	1.10	---	---

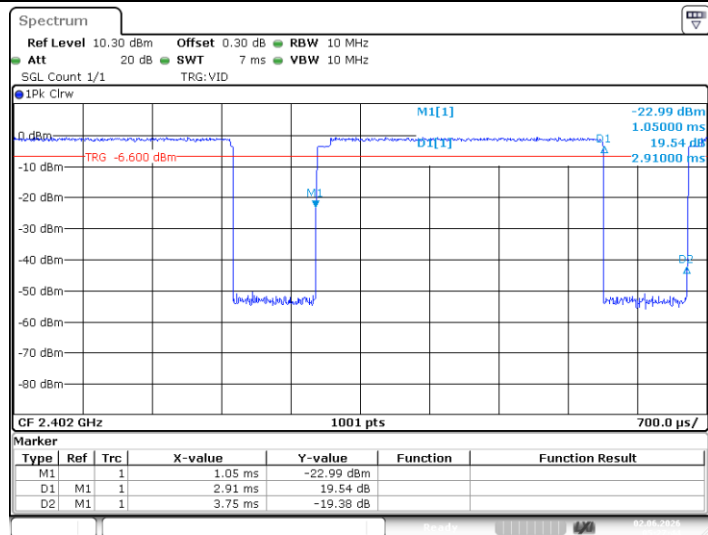
Test Graphs





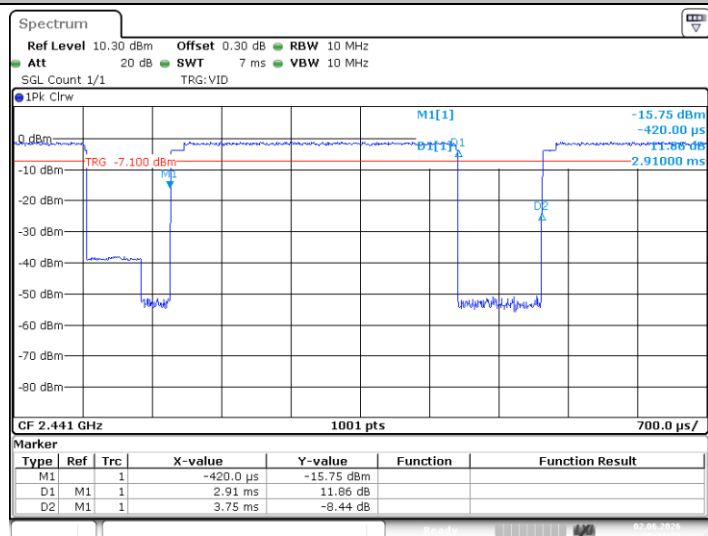
Date: 2.JUN.2026 05:24:44

2DH5_Ant1_2402



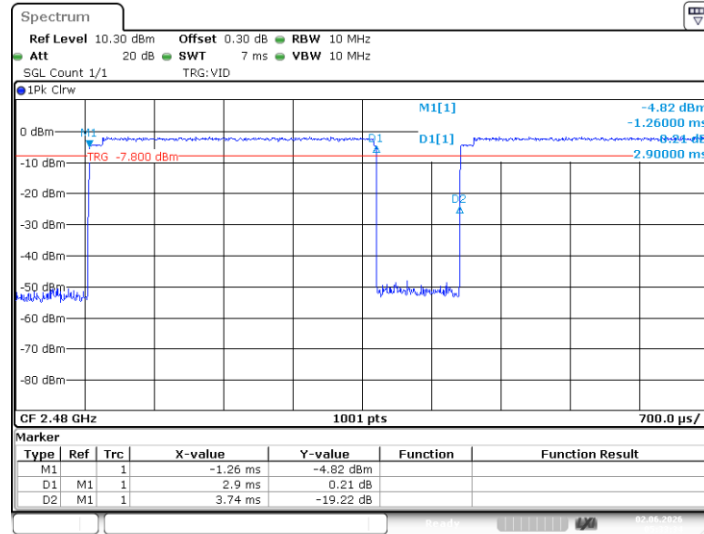
Date: 2.JUN.2026 05:27:44

2DH5_Ant1_2441



Date: 2.JUN.2026 05:31:22

2DH5_Ant1_2480



Date: 2.JUN.2026 05:33:34

Appendix J: Emissions in Restricted Bands

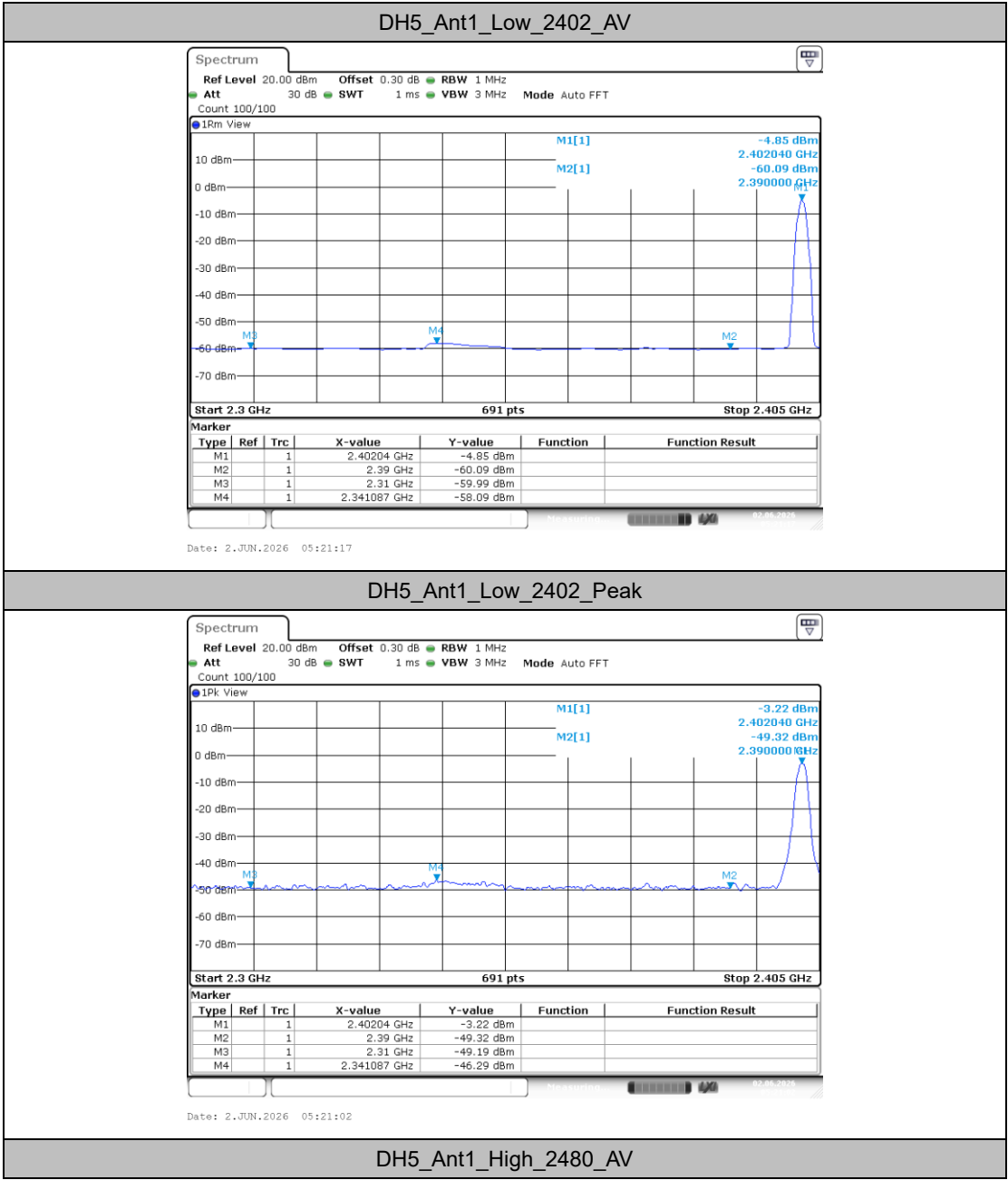
Test Result

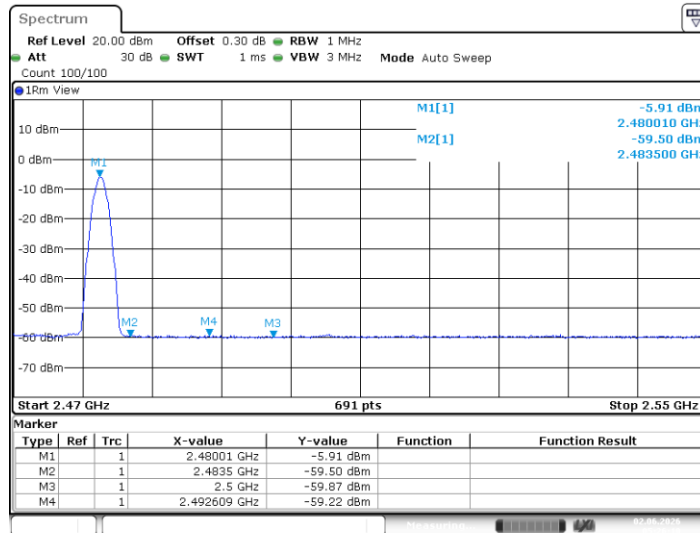
TestMod e	Antenn a	ChNam e	Freq(MH z)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-59.99	3.31	1.12	39.64	≤54	PASS
				AV	2341.087	-58.09	3.31	1.12	41.54	≤54	PASS
				AV	2390.000	-60.09	3.31	1.12	39.54	≤54	PASS
				Peak	2310.000	-49.19	3.31	0.00	49.32	≤74	PASS
				Peak	2341.087	-46.29	3.31	0.00	52.22	≤74	PASS
				Peak	2390.000	-49.32	3.31	0.00	49.19	≤74	PASS
		High	2480	AV	2483.500	-59.5	3.31	1.12	40.13	≤54	PASS
				AV	2492.609	-59.22	3.31	1.12	40.41	≤54	PASS
				AV	2500.000	-59.87	3.31	1.12	39.76	≤54	PASS
				Peak	2483.500	-46.61	3.31	0.00	51.9	≤74	PASS
				Peak	2484.145	-46.73	3.31	0.00	51.78	≤74	PASS
				Peak	2500.000	-49.65	3.31	0.00	48.86	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-59.99	3.31	1.10	39.62	≤54	PASS
				AV	2341.391	-58.06	3.31	1.10	41.55	≤54	PASS
				AV	2390.000	-60.06	3.31	1.10	39.55	≤54	PASS
				Peak	2310.000	-49.07	3.31	0.00	49.44	≤74	PASS
				Peak	2343.370	-46.85	3.31	0.00	51.66	≤74	PASS
				Peak	2390.000	-49.2	3.31	0.00	49.31	≤74	PASS
		High	2480	AV	2483.500	-59.25	3.31	1.10	40.36	≤54	PASS
				AV	2489.362	-58.98	3.31	1.10	40.63	≤54	PASS
				AV	2500.000	-59.6	3.31	1.10	40.01	≤54	PASS
				Peak	2483.500	-47.87	3.31	0.00	50.64	≤74	PASS
				Peak	2483.565	-47.49	3.31	0.00	51.02	≤74	PASS
				Peak	2500.000	-49.5	3.31	0.00	49.01	≤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.

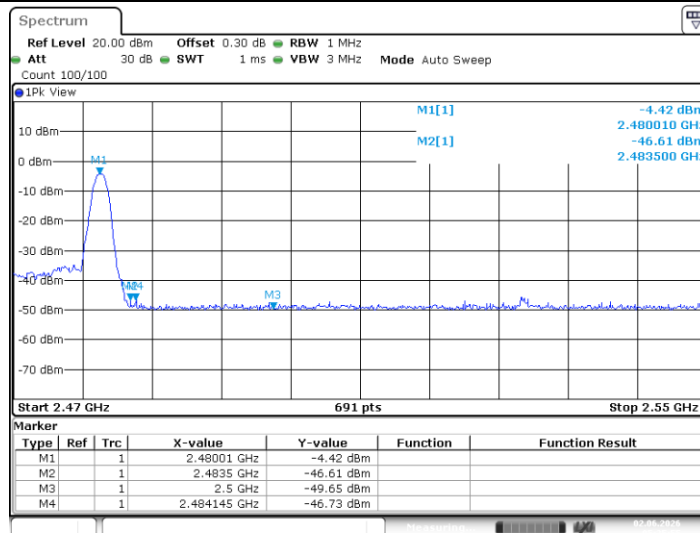
Test Graphs





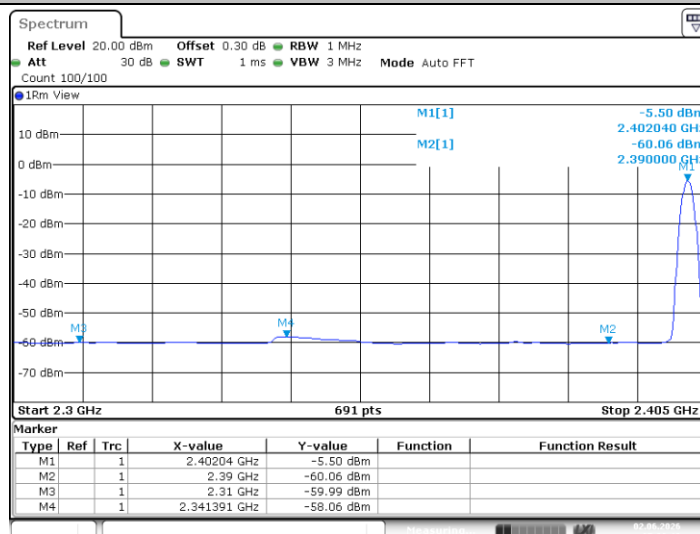
Date: 2.JUN.2026 05:26:10

DH5_Ant1_High_2480_Peak



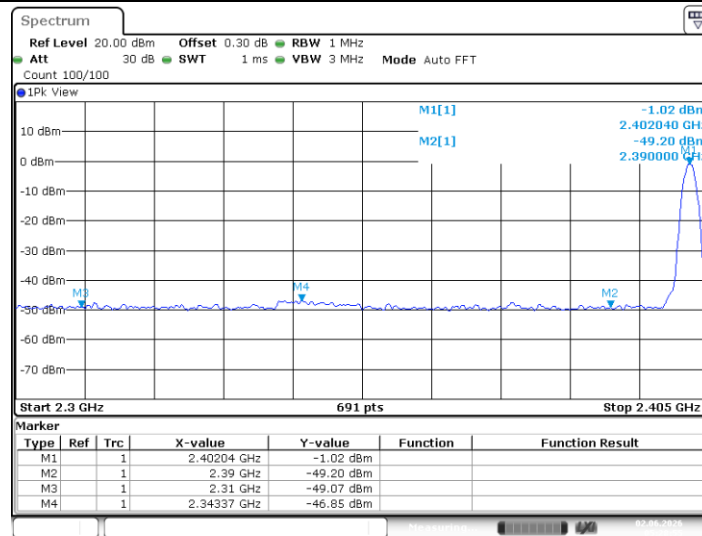
Date: 2.JUN.2026 05:25:55

2DH5_Ant1_Low_2402_AV



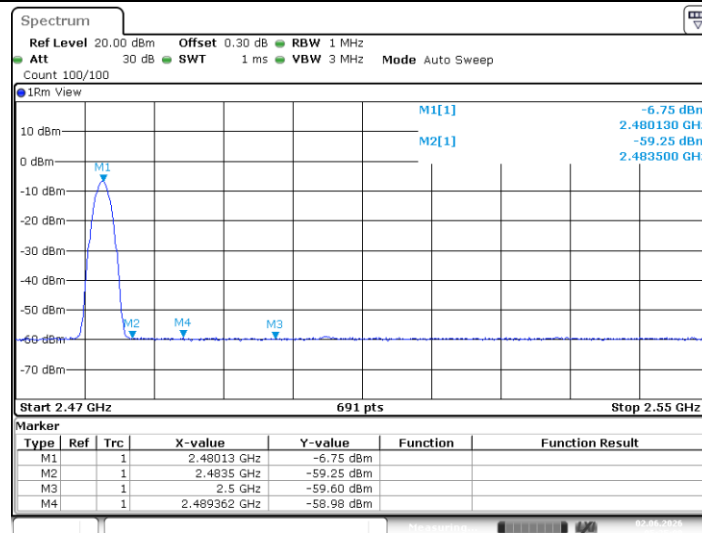
Date: 2.JUN.2026 05:29:10

2DH5_Ant1_Low_2402_Peak



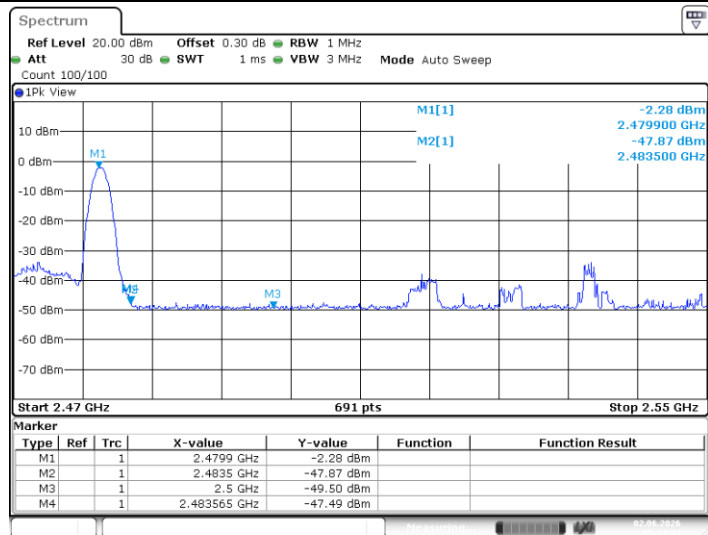
Date: 2.JUN.2026 05:28:55

2DH5_Ant1_High_2480_AV



Date: 2.JUN.2026 05:34:59

2DH5_Ant1_High_2480_Peak



Date: 2.JUN.2026 05:34:44