Appendix: Bluetooth Classic

Contents

Appendix A: 20dB Emission Bandwidth 3
Test Result 3
Test Graphs 4
Appendix B: Occupied Channel Bandwidth 9
Test Result 9
Test Graphs 10
Appendix C: Maximum conducted output power 15
Test Result Peak 15
Test Graphs 16
Appendix D: Carrier frequency separation 21
Test Result 21
Test Graphs 22
Appendix E: Time of occupancy 24
Test Result 24
Test Graphs 25
Appendix F: Number of hopping channels 30
Test Result 30
Test Graphs 31
Appendix G: Band edge measurements 33
Test Result 33
Test Graphs 34
Appendix H: Conducted Spurious Emission 40
Test Result 40
Test Graphs 41
Appendix I: Duty Cycle 55
Test Result 55
Test Graphs 56

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.02	2401.45	2402.48	---	---
DH5	Ant1	2441	1.03	2440.45	2441.48	---	---
DH5	Ant1	2480	0.98	2479.49	2480.48	---	---
2DH5	Ant1	2402	1.35	2401.31	2402.66	---	---
2DH5	Ant1	2441	1.34	2440.31	2441.65	---	---
2DH5	Ant1	2480	1.34	2479.31	2480.65	---	---
3DH5	Ant1	2402	1.35	2401.30	2402.66	---	---
3DH5	Ant1	2441	1.35	2440.31	2441.65	---	---
3DH5	Ant1	2480	1.35	2479.31	2480.65	---	---

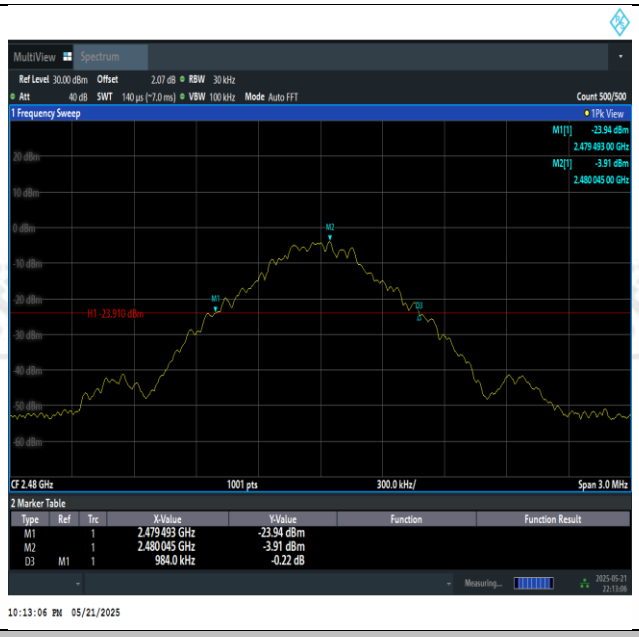
Test Graphs



DH5-Ant1-2402



DH5-Ant1-2441



DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441



2DH5-Ant1-2480



3DH5-Ant1-2402



3DH5-Ant1-2441



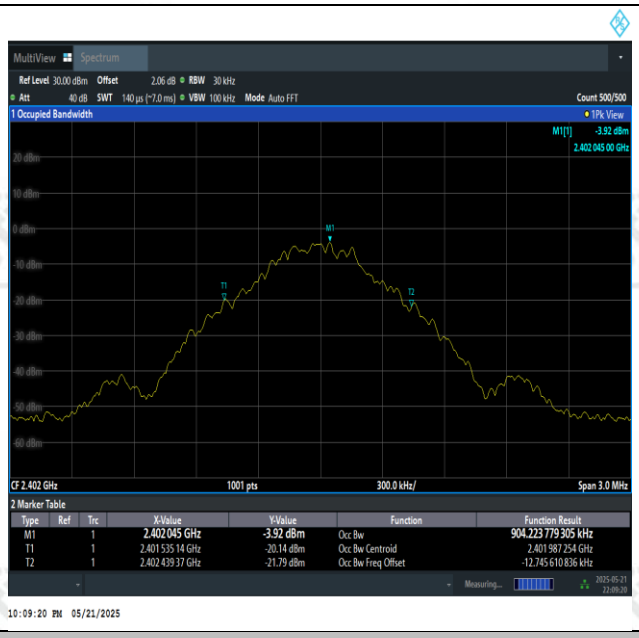
3DH5-Ant1-2480

Appendix B: Occupied Channel Bandwidth

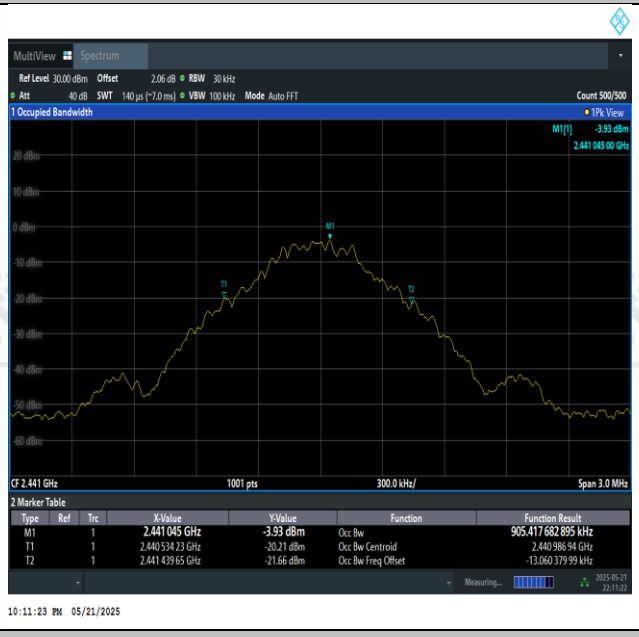
Test Result

TestMode	Antenna	Frequency [MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.904	2401.5351	2402.4394	---	---
DH5	Ant1	2441	0.905	2440.5342	2441.4396	---	---
DH5	Ant1	2480	0.908	2479.5331	2480.4406	---	---
2DH5	Ant1	2402	1.203	2401.3851	2402.5880	---	---
2DH5	Ant1	2441	1.204	2440.3846	2441.5888	---	---
2DH5	Ant1	2480	1.2	2479.3859	2480.5863	---	---
3DH5	Ant1	2402	1.203	2401.3831	2402.5860	---	---
3DH5	Ant1	2441	1.203	2440.3826	2441.5855	---	---
3DH5	Ant1	2480	1.205	2479.3817	2480.5866	---	---

Test Graphs



DH5-Ant1-2402



DH5-Ant1-2441



DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441



2DH5-Ant1-2480



3DH5-Ant1-2402



3DH5-Ant1-2441



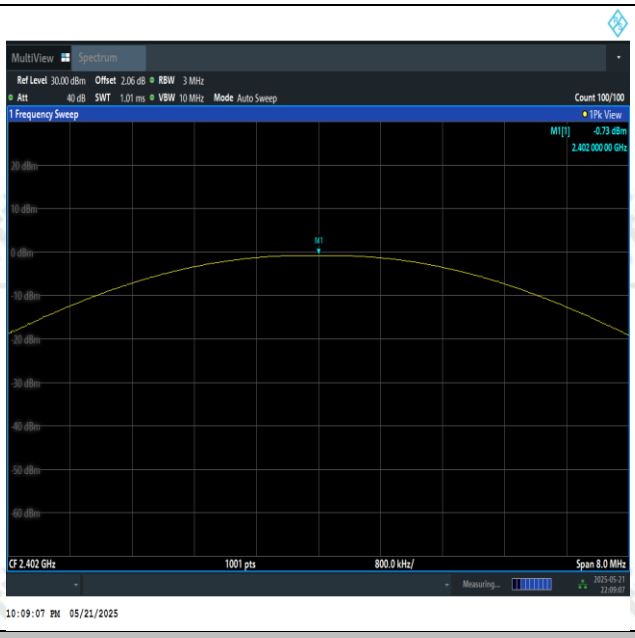
3DH5-Ant1-2480

Appendix C: Maximum conducted output power

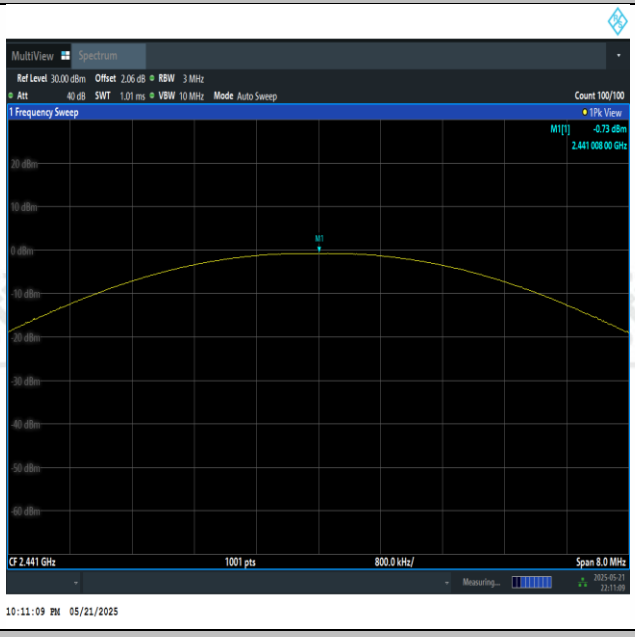
Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-0.73	≤30	PASS
DH5	Ant1	2441	-0.73	≤20.97	PASS
DH5	Ant1	2480	-0.73	≤20.97	PASS
2DH5	Ant1	2402	2.33	≤30	PASS
2DH5	Ant1	2441	2.25	≤20.97	PASS
2DH5	Ant1	2480	2.96	≤20.97	PASS
3DH5	Ant1	2402	2.89	≤30	PASS
3DH5	Ant1	2441	2.75	≤20.97	PASS
3DH5	Ant1	2480	3.60	≤20.97	PASS

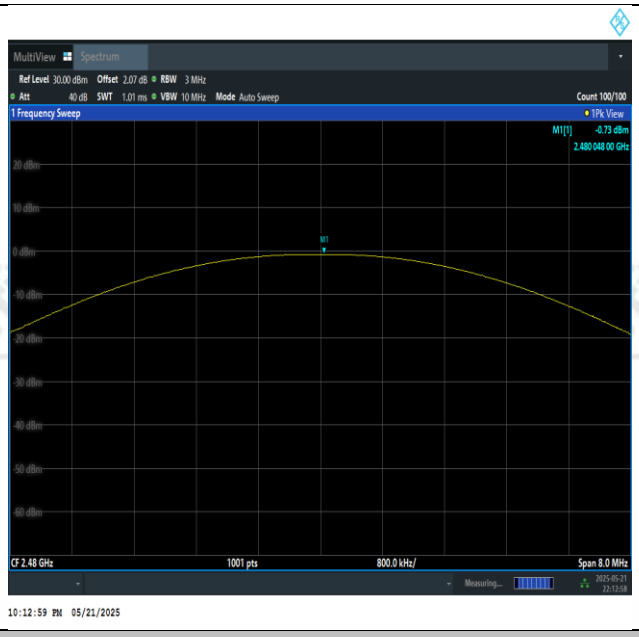
Test Graphs



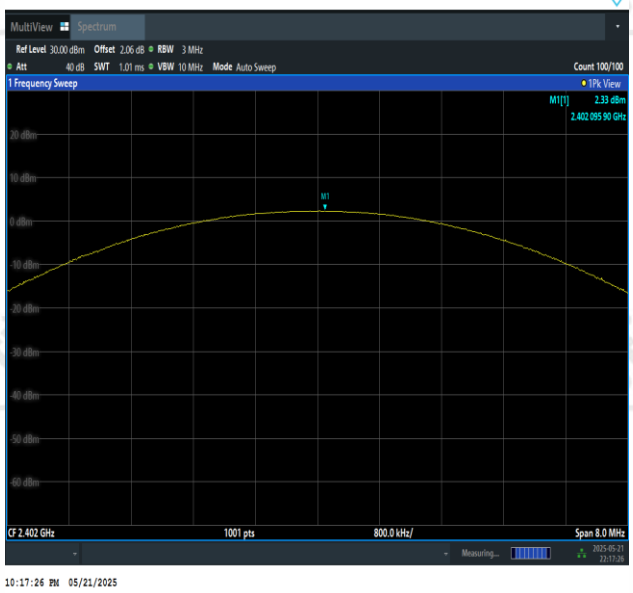
DH5-Ant1-2402-PASS



DH5-Ant1-2441-PASS



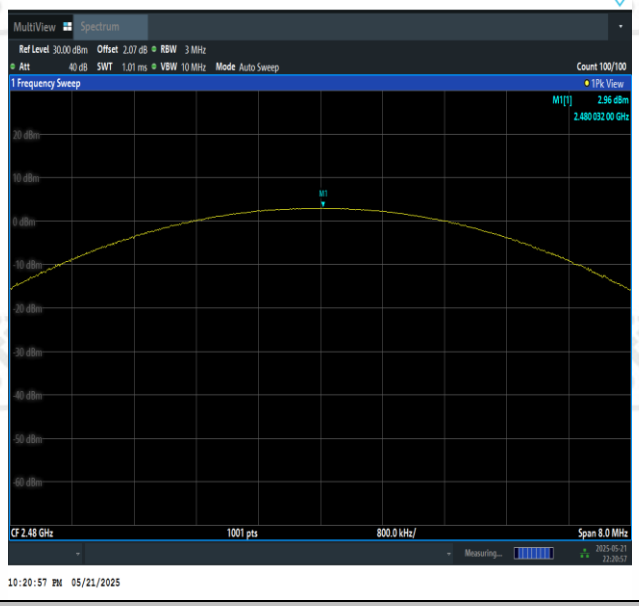
DH5-Ant1-2480-PASS



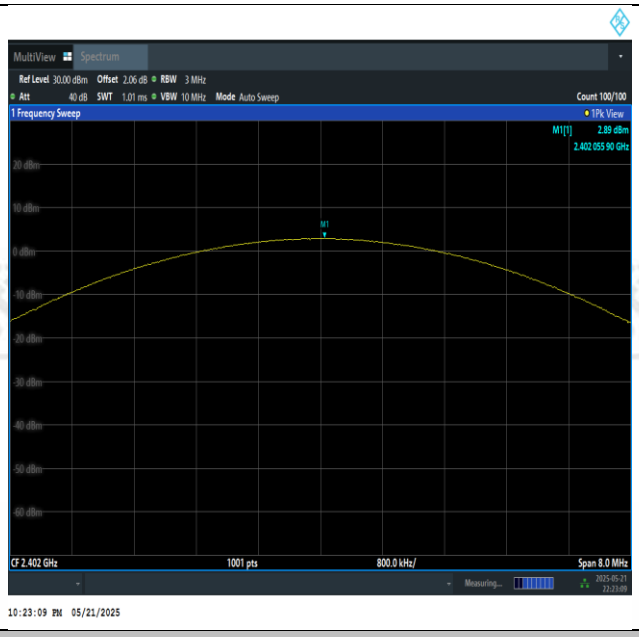
2DH5-Ant1-2402-PASS



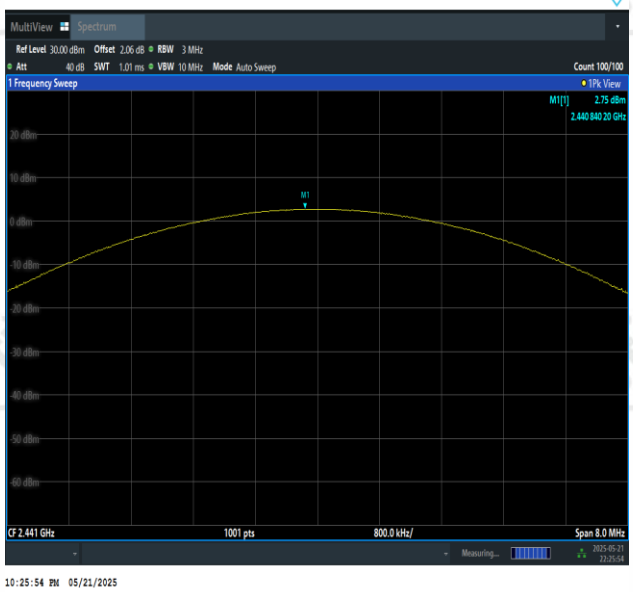
2DH5-Ant1-2441-PASS



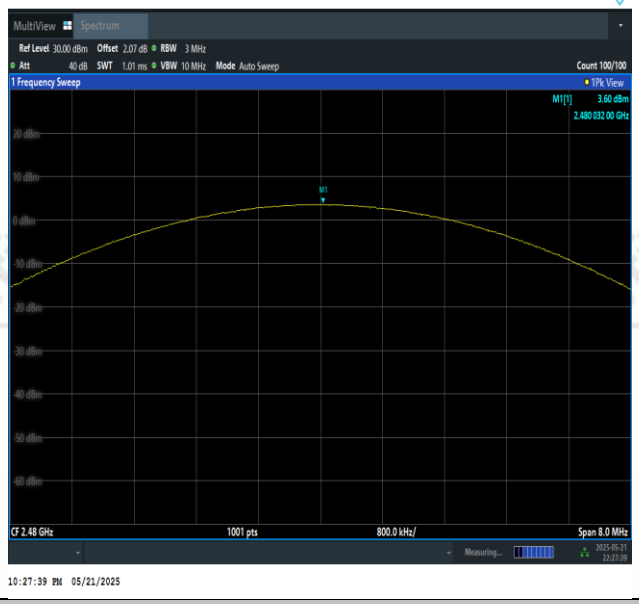
2DH5-Ant1-2480-PASS



3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS



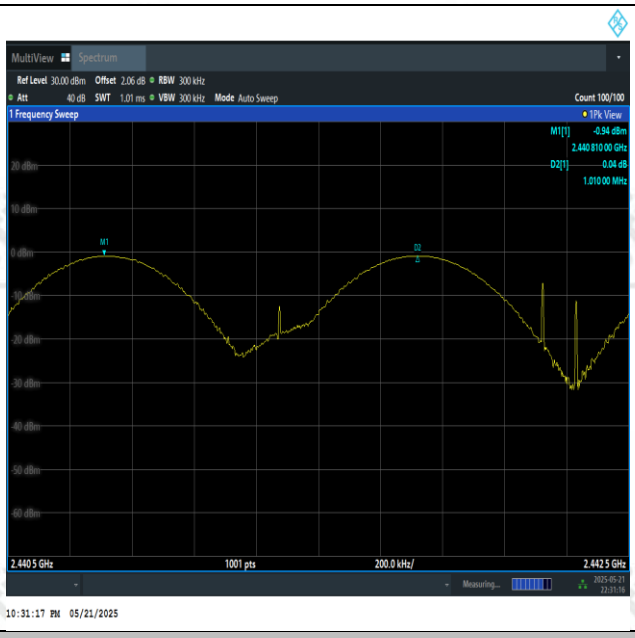
3DH5-Ant1-2480-PASS

Appendix D: Carrier frequency separation

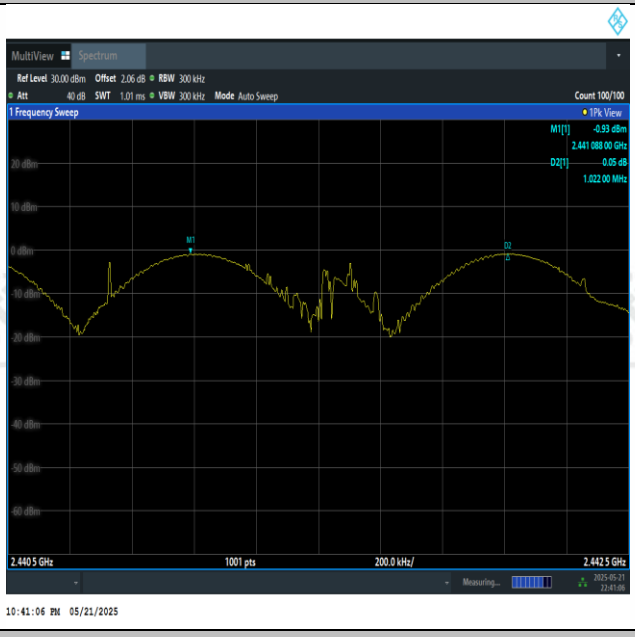
Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.01	≥0.687	PASS
2DH5	Ant1	Hop	1.022	≥0.900	PASS
3DH5	Ant1	Hop	1.006	≥0.900	PASS

Test Graphs



DH5-Ant1-Hop-PASS



2DH5-Ant1-Hop-PASS



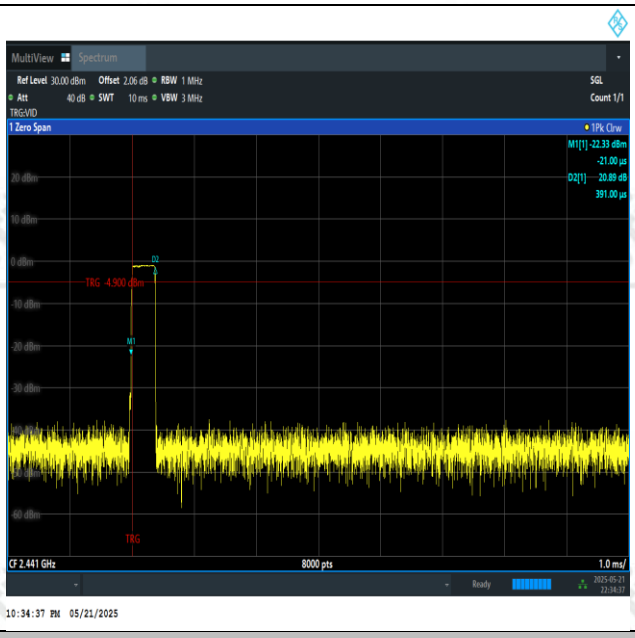
3DH5-Ant1-Hop-PASS

Appendix E: Time of occupancy

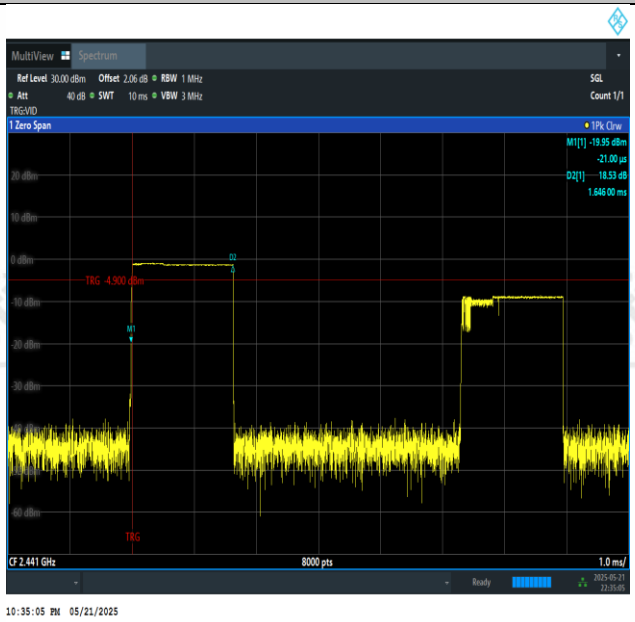
Test Result

TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.391	320	0.125	≤0.4	PASS
DH3	Ant1	Hop	1.646	160	0.263	≤0.4	PASS
DH5	Ant1	Hop	2.895	106.67	0.309	≤0.4	PASS
2DH1	Ant1	Hop	0.381	320	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.633	160	0.261	≤0.4	PASS
2DH5	Ant1	Hop	2.882	106.67	0.307	≤0.4	PASS
3DH1	Ant1	Hop	0.380	320	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.630	160	0.261	≤0.4	PASS
3DH5	Ant1	Hop	2.883	106.67	0.308	≤0.4	PASS

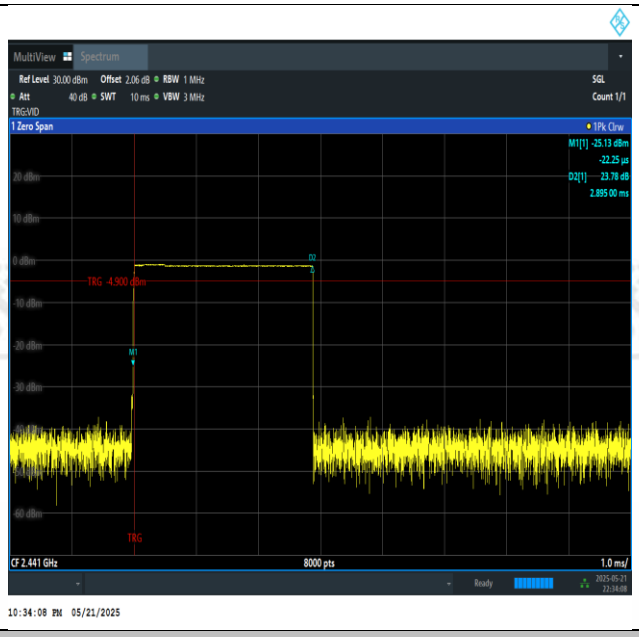
Test Graphs



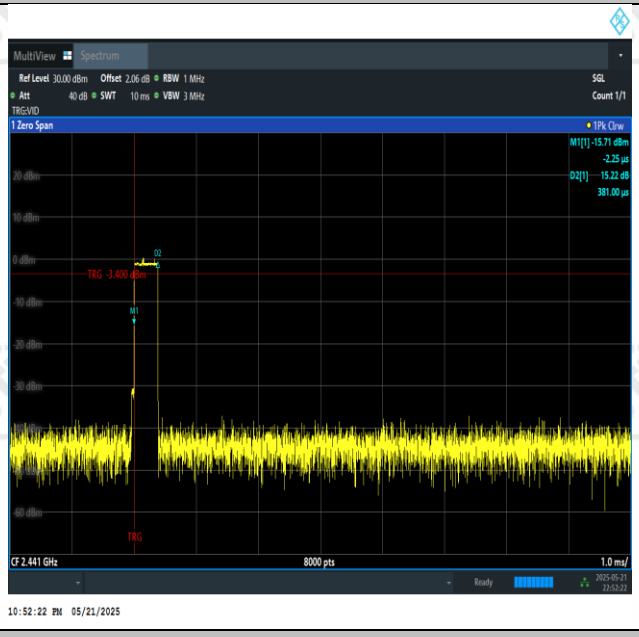
DH1-Ant1-Hop-PASS



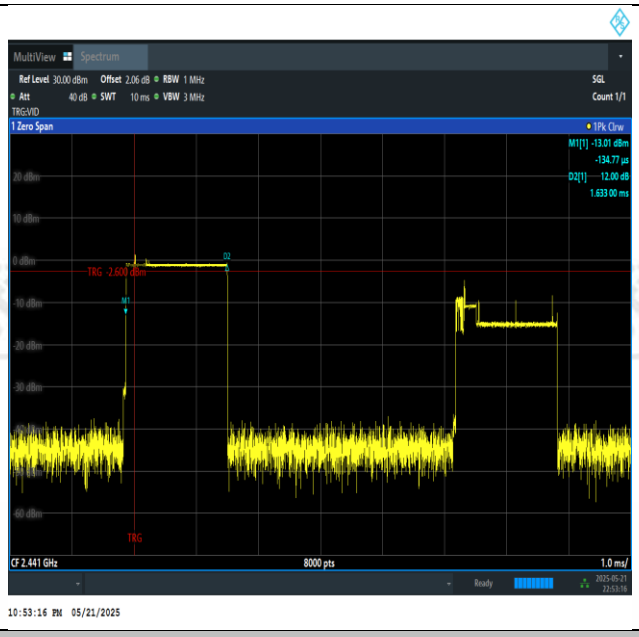
DH3-Ant1-Hop-PASS



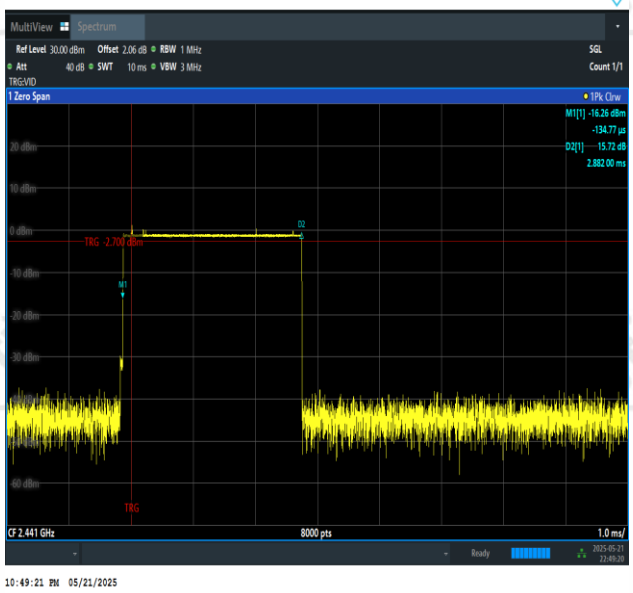
DH5-Ant1-Hop-PASS



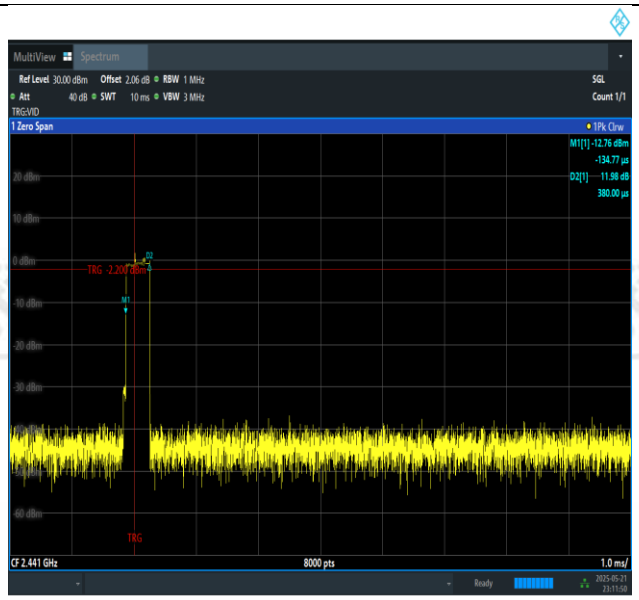
2DH1-Ant1-Hop-PASS



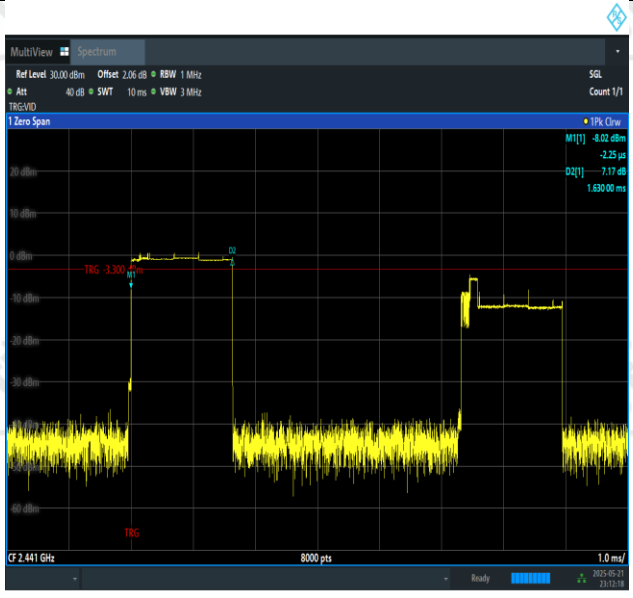
2DH3-Ant1-Hop-PASS



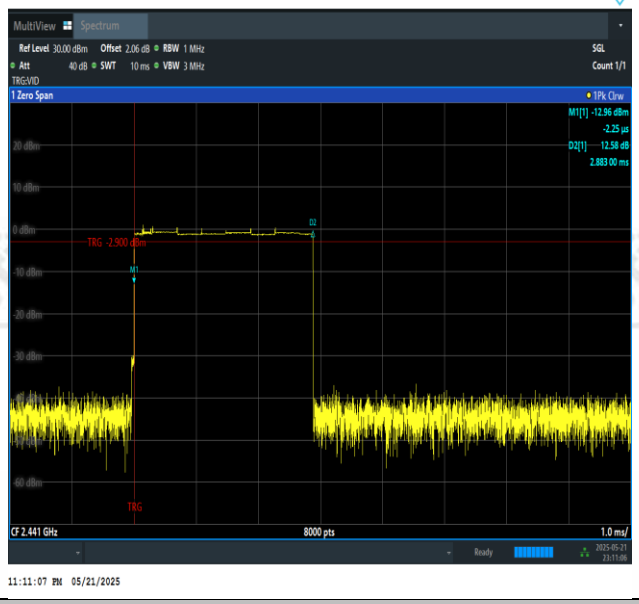
2DH5-Ant1-Hop-PASS



3DH1-Ant1-Hop-PASS



3DH3-Ant1-Hop-PASS



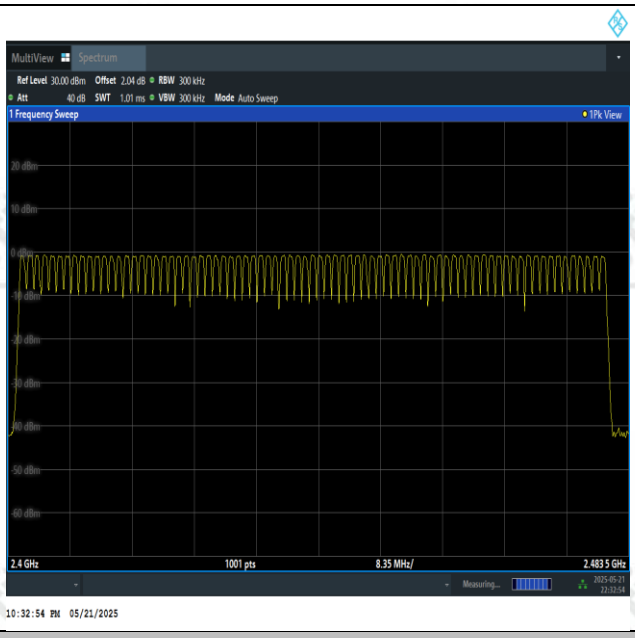
3DH5-Ant1-Hop-PASS

Appendix F: Number of hopping channels

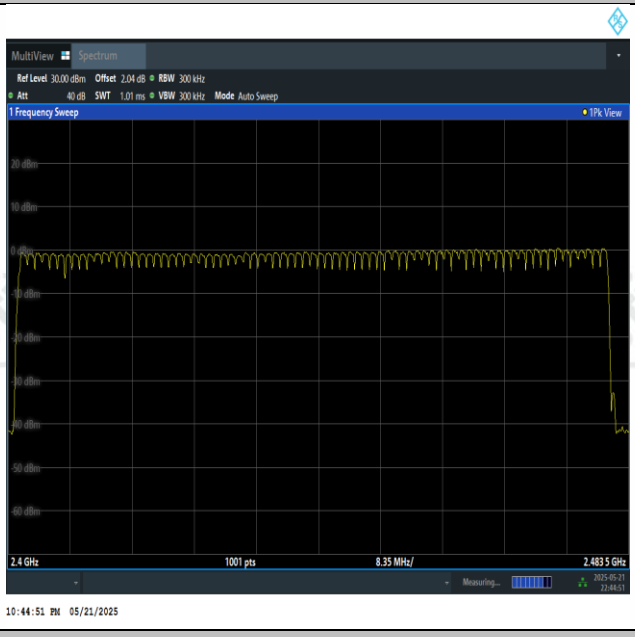
Test Result

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

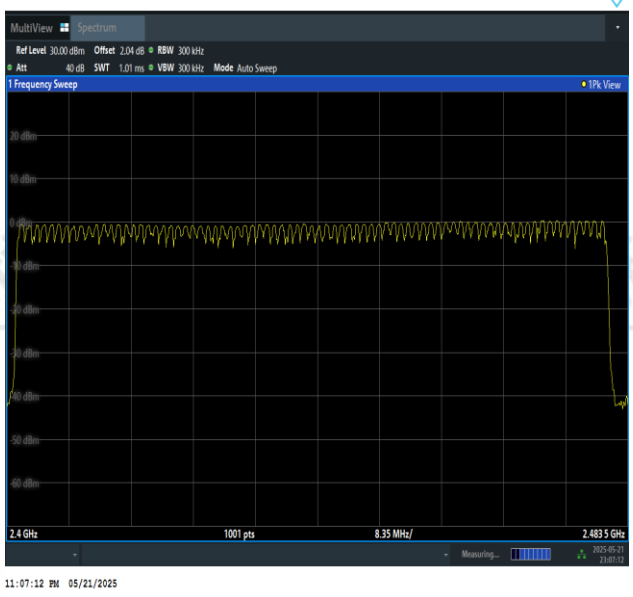
Test Graphs



DH5-Ant1-Hop-PASS



2DH5-Ant1-Hop-PASS



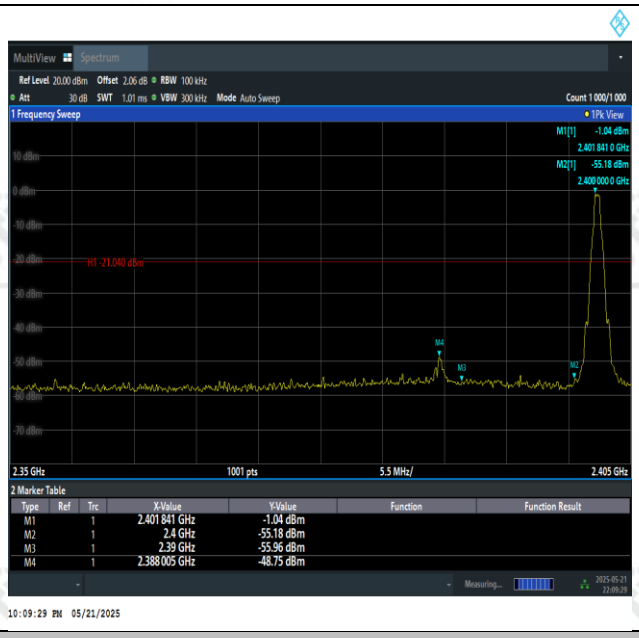
3DH5-Ant1-Hop-PASS

Appendix G: Band edge measurements

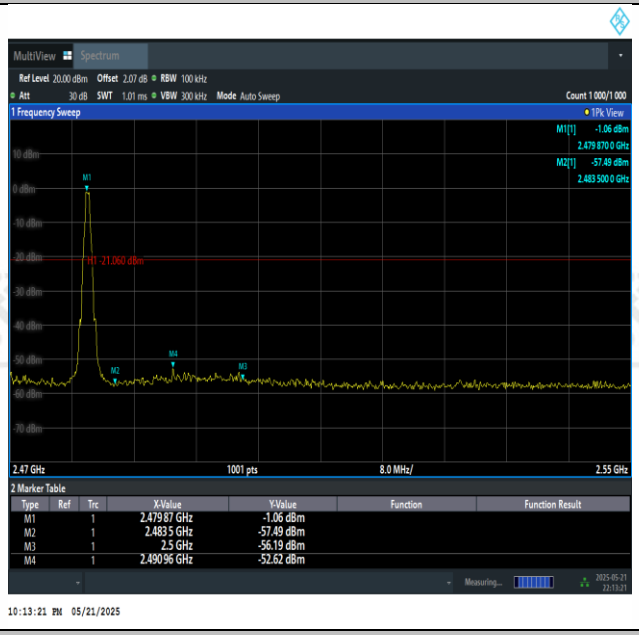
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.04	-48.75	≤-21.04	PASS
DH5	Ant1	High	2480	-1.06	-52.62	≤-21.06	PASS
DH5	Ant1	Low	Hop_2402	-0.93	-51.86	≤-20.93	PASS
DH5	Ant1	High	Hop_2480	-1.03	-51.65	≤-21.03	PASS
2DH5	Ant1	Low	2402	-0.76	-50.06	≤-20.76	PASS
2DH5	Ant1	High	2480	-0.21	-55.4	≤-20.21	PASS
2DH5	Ant1	Low	Hop_2402	-1.14	-53.96	≤-21.14	PASS
2DH5	Ant1	High	Hop_2480	-0.07	-54.07	≤-20.07	PASS
3DH5	Ant1	Low	2402	-0.73	-50.09	≤-20.73	PASS
3DH5	Ant1	High	2480	-0.59	-55	≤-20.59	PASS
3DH5	Ant1	Low	Hop_2402	-0.82	-54.64	≤-20.82	PASS
3DH5	Ant1	High	Hop_2480	0.21	-54.86	≤-19.79	PASS

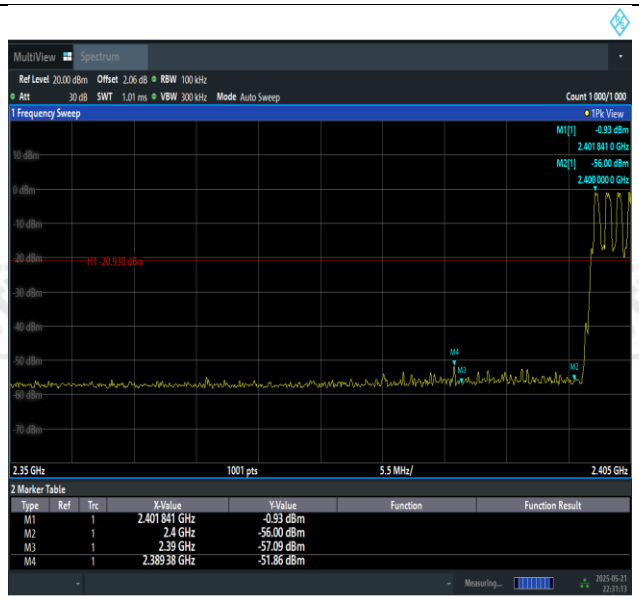
Test Graphs



DH5-Ant1-2402-PASS



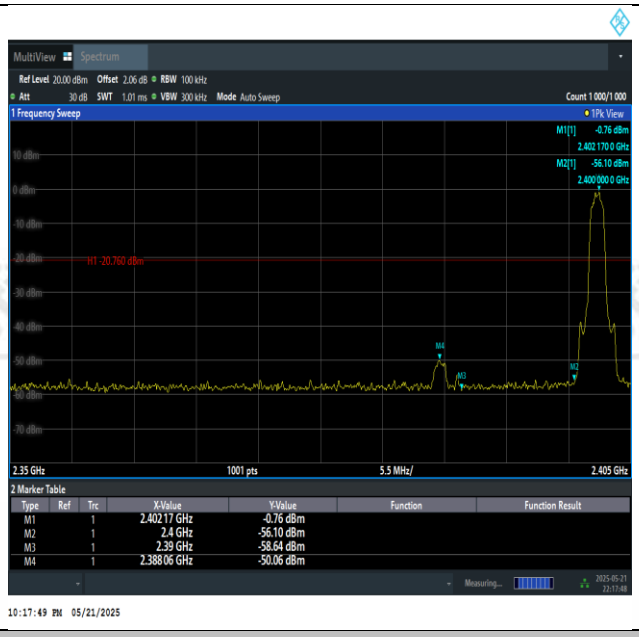
DH5-Ant1-2480-PASS



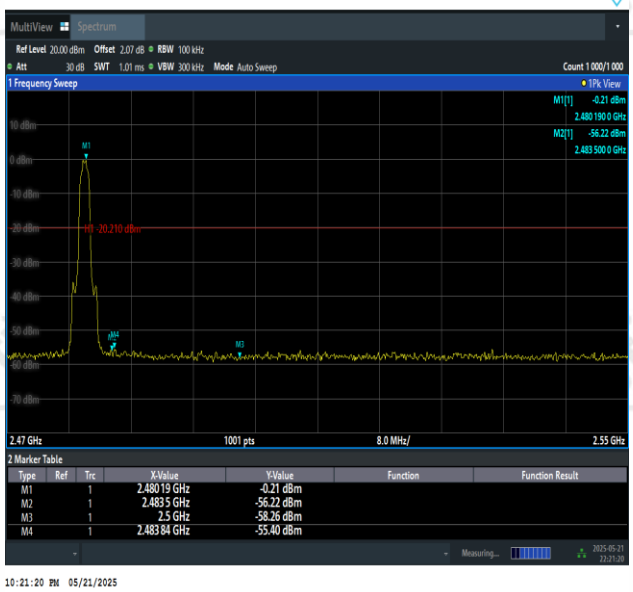
DH5-Ant1-Hop_2402-PASS



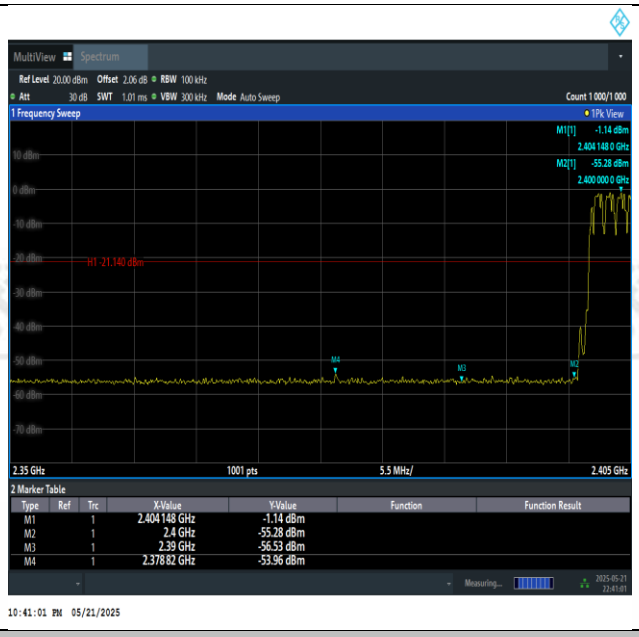
DH5-Ant1-Hop_2480-PASS



2DH5-Ant1-2402-PASS



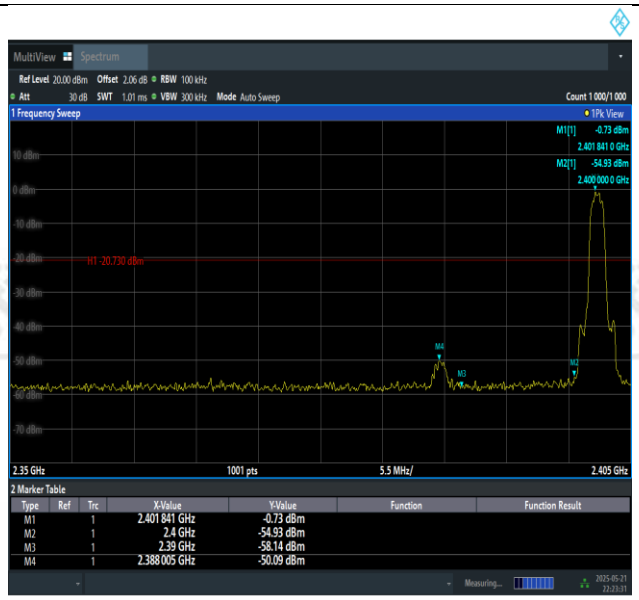
2DH5-Ant1-2480-PASS



2DH5-Ant1-Hop_2402-PASS

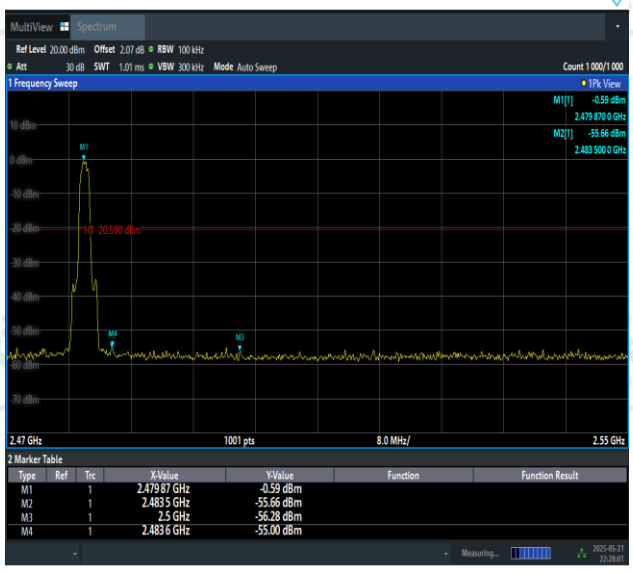


2DH5-Ant1-Hop_2480-PASS



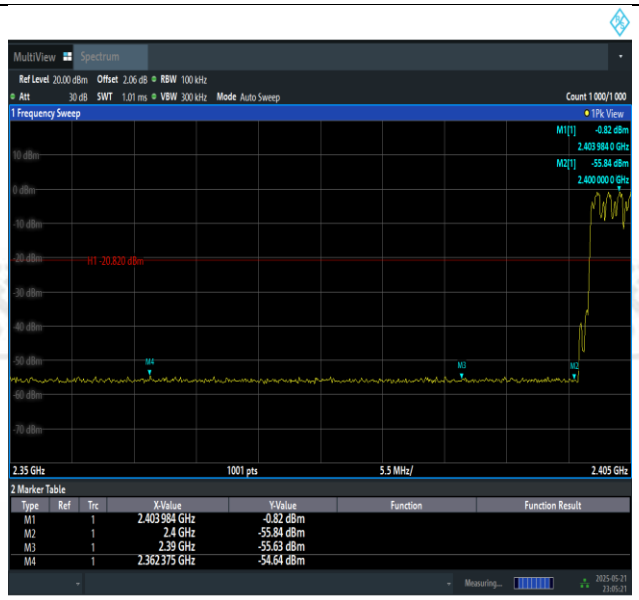
10:23:31 PM 05/21/2025

3DH5-Ant1-2402-PASS



10:28:02 PM 05/21/2025

3DH5-Ant1-2480-PASS



3DH5-Ant1-Hop_2402-PASS



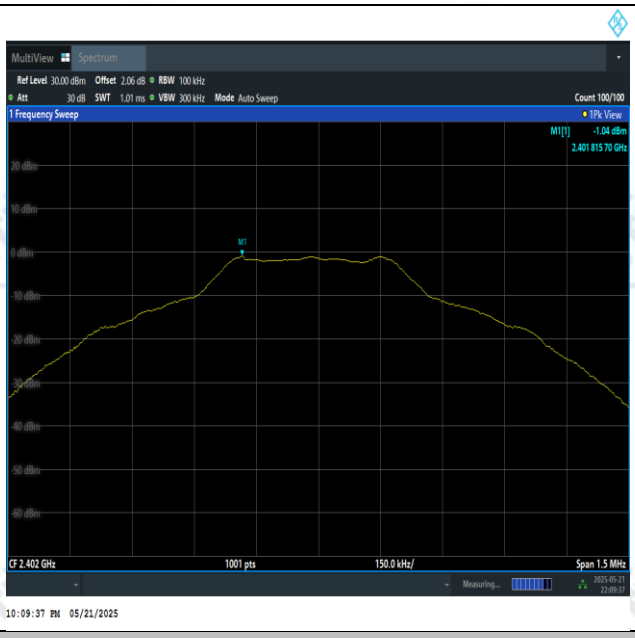
3DH5-Ant1-Hop_2480-PASS

Appendix H: Conducted Spurious Emission

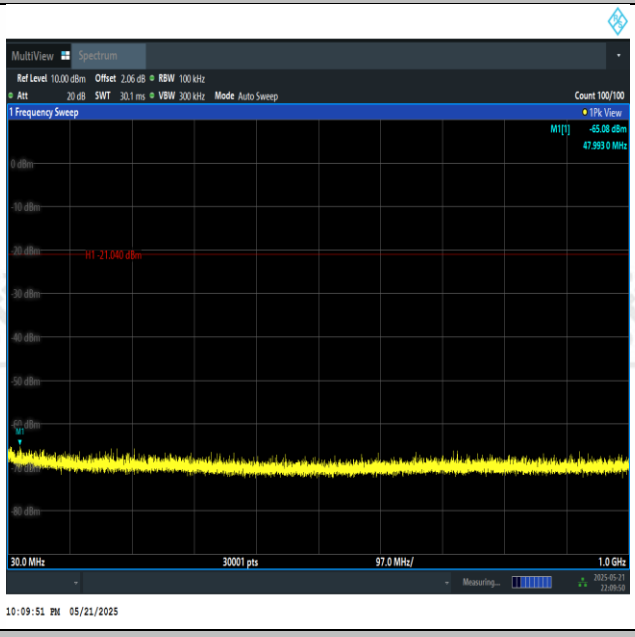
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-1.04	-1.04	---	PASS
DH5	Ant1	2402	30~1000	-1.04	-65.08	≤-21.04	PASS
DH5	Ant1	2402	1000~26500	-1.04	-36.43	≤-21.04	PASS
DH5	Ant1	2441	0~Reference	-1.07	-1.07	---	PASS
DH5	Ant1	2441	30~1000	-1.07	-64.34	≤-21.07	PASS
DH5	Ant1	2441	1000~26500	-1.07	-36.87	≤-21.07	PASS
DH5	Ant1	2480	0~Reference	-1.02	-1.02	---	PASS
DH5	Ant1	2480	30~1000	-1.02	-64.52	≤-21.02	PASS
DH5	Ant1	2480	1000~26500	-1.02	-37.92	≤-21.02	PASS
2DH5	Ant1	2402	0~Reference	-0.75	-0.75	---	PASS
2DH5	Ant1	2402	30~1000	-0.75	-65.22	≤-20.75	PASS
2DH5	Ant1	2402	1000~26500	-0.75	-50.03	≤-20.75	PASS
2DH5	Ant1	2441	0~Reference	-0.83	-0.83	---	PASS
2DH5	Ant1	2441	30~1000	-0.83	-64.49	≤-20.83	PASS
2DH5	Ant1	2441	1000~26500	-0.83	-48.61	≤-20.83	PASS
2DH5	Ant1	2480	0~Reference	-0.13	-0.13	---	PASS
2DH5	Ant1	2480	30~1000	-0.13	-65.02	≤-20.13	PASS
2DH5	Ant1	2480	1000~26500	-0.13	-49.58	≤-20.13	PASS
3DH5	Ant1	2402	0~Reference	-0.73	-0.73	---	PASS
3DH5	Ant1	2402	30~1000	-0.73	-63.28	≤-20.73	PASS
3DH5	Ant1	2402	1000~26500	-0.73	-49.7	≤-20.73	PASS
3DH5	Ant1	2441	0~Reference	-0.84	-0.84	---	PASS
3DH5	Ant1	2441	30~1000	-0.84	-61.67	≤-20.84	PASS
3DH5	Ant1	2441	1000~26500	-0.84	-49.62	≤-20.84	PASS
3DH5	Ant1	2480	0~Reference	-0.10	-0.10	---	PASS
3DH5	Ant1	2480	30~1000	-0.10	-64.6	≤-20.1	PASS
3DH5	Ant1	2480	1000~26500	-0.10	-48.97	≤-20.1	PASS

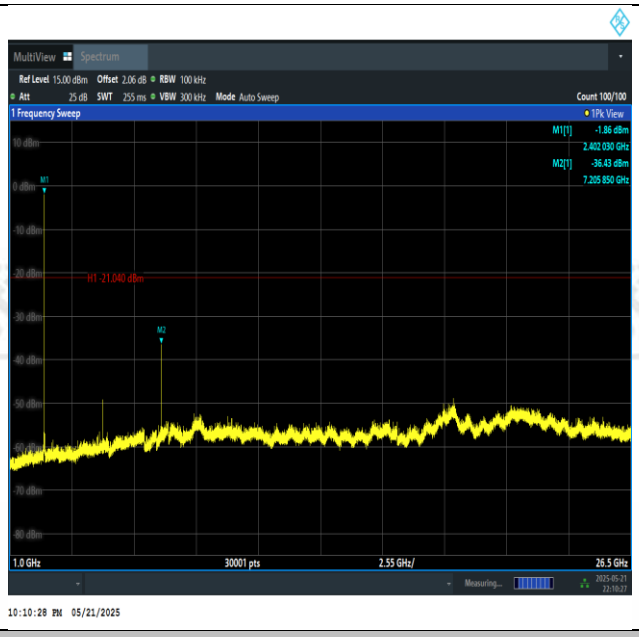
Test Graphs



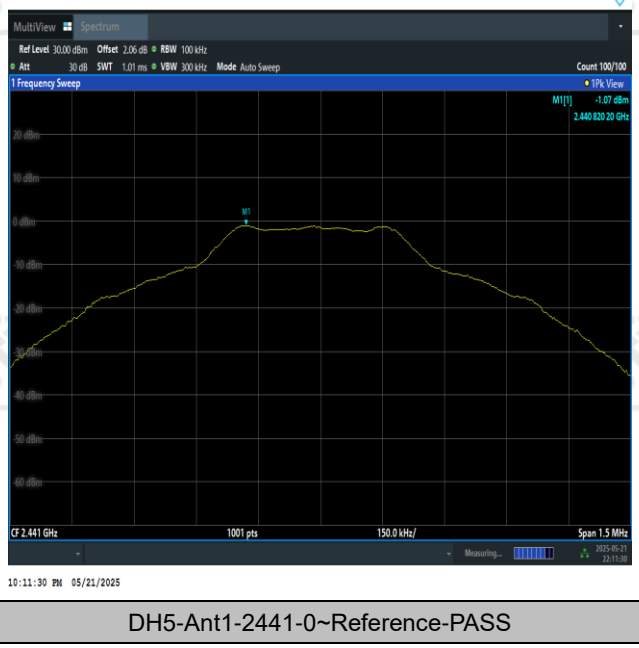
DH5-Ant1-2402-0~Reference-PASS



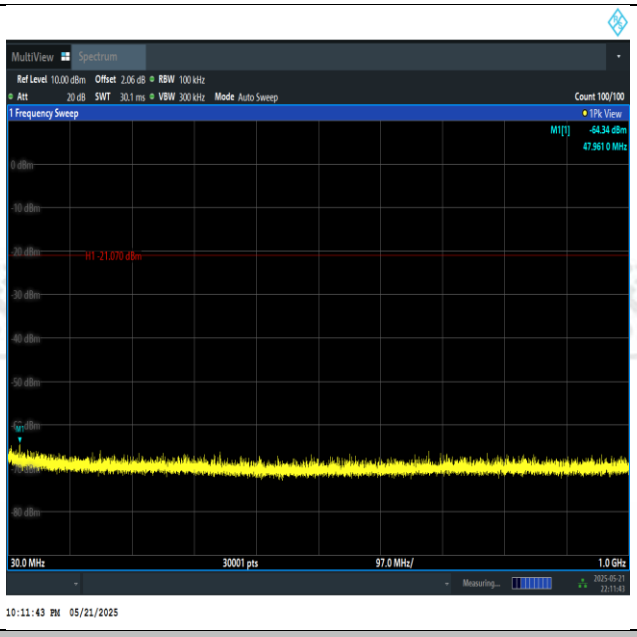
DH5-Ant1-2402-30~1000-PASS



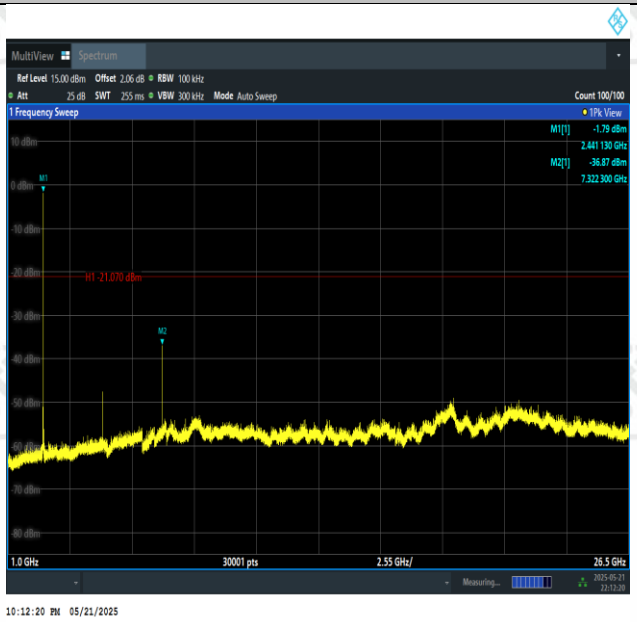
DH5-Ant1-2402-1000~26500-PASS



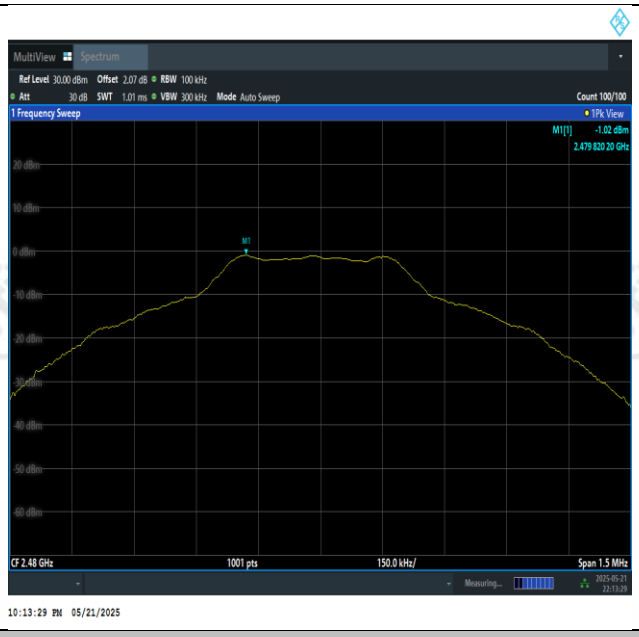
DH5-Ant1-2441-0~Reference-PASS



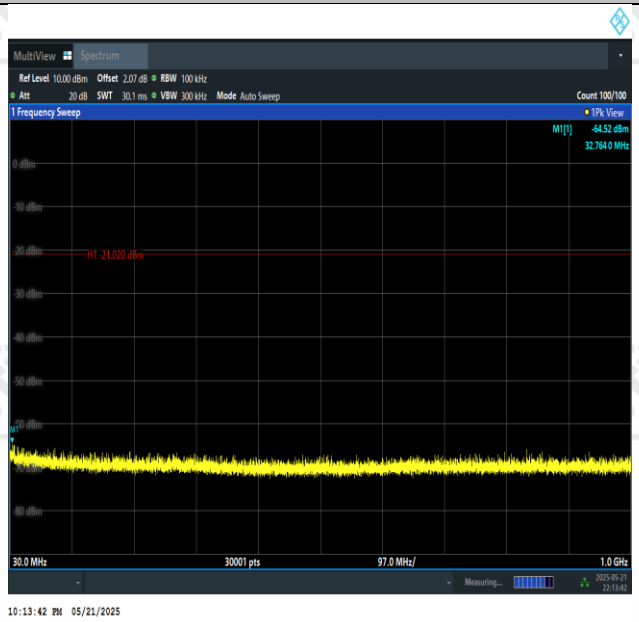
DH5-Ant1-2441-30~1000-PASS



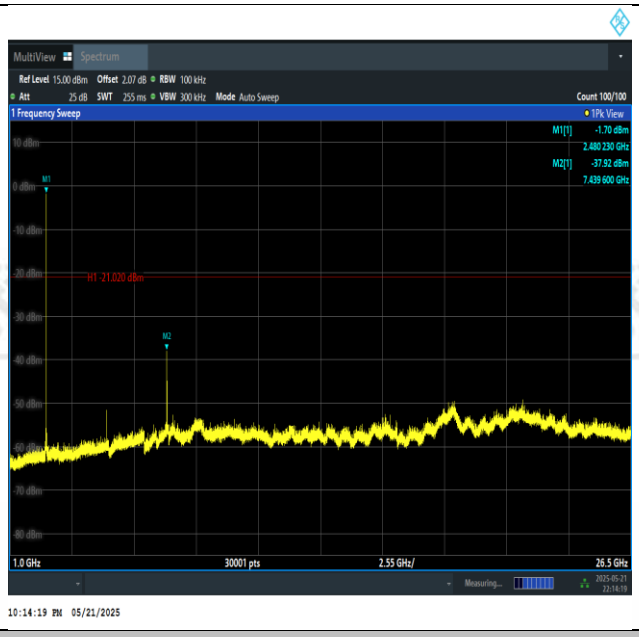
DH5-Ant1-2441-1000~26500-PASS



DH5-Ant1-2480-0~Reference-PASS



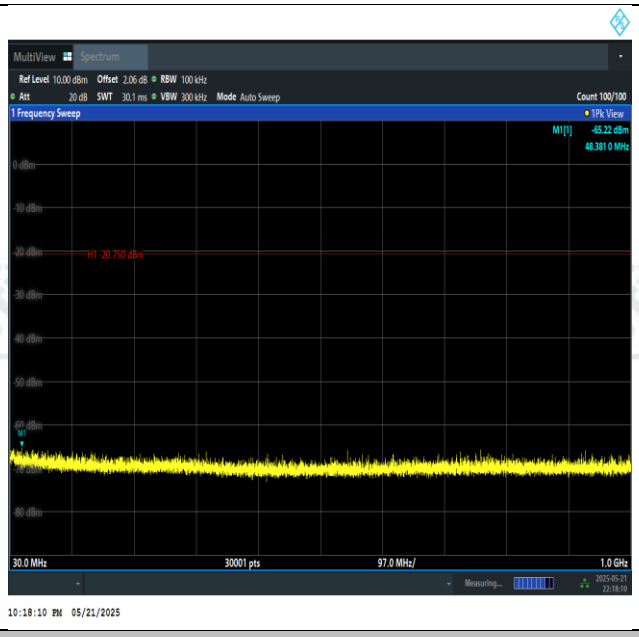
DH5-Ant1-2480-30~1000-PASS



DH5-Ant1-2480-1000~26500-PASS



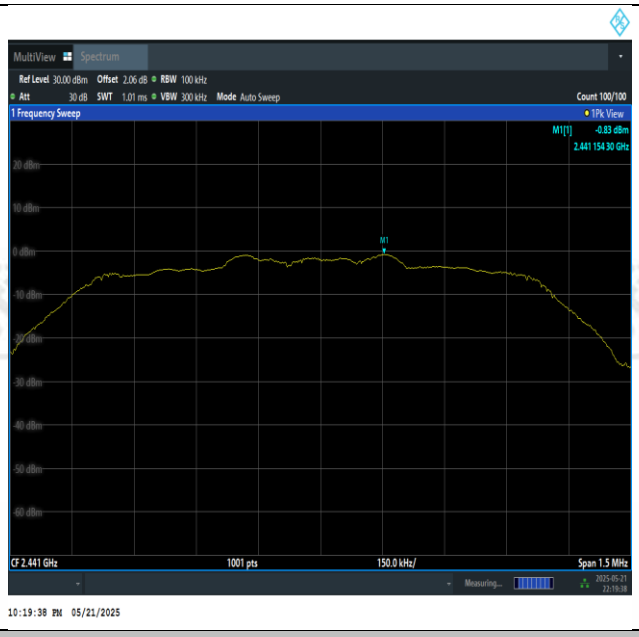
2DH5-Ant1-2402-0~Reference-PASS



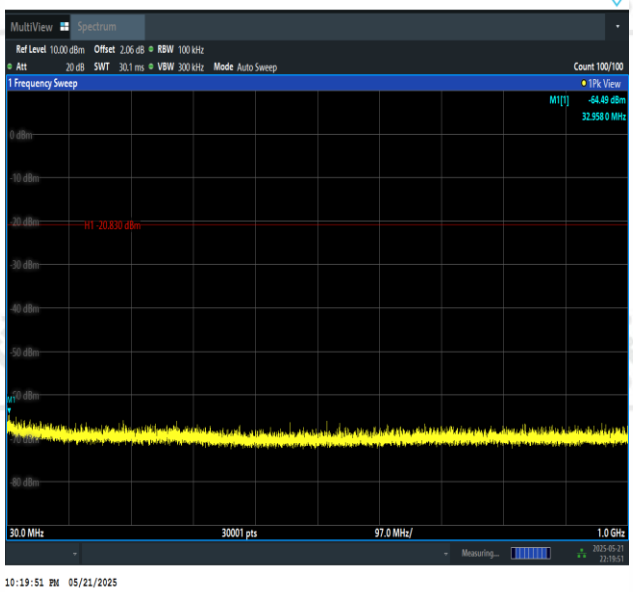
2DH5-Ant1-2402-30~1000-PASS



2DH5-Ant1-2402-1000~26500-PASS



2DH5-Ant1-2441-0~Reference-PASS



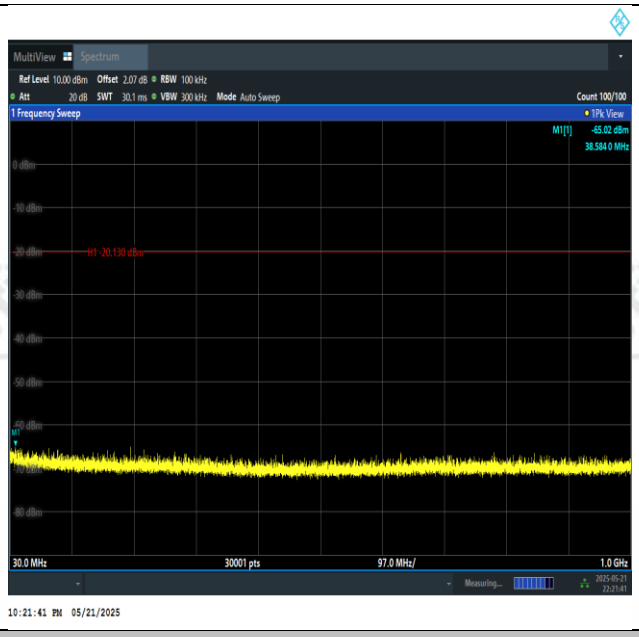
2DH5-Ant1-2441-30~1000-PASS



2DH5-Ant1-2441-1000~26500-PASS



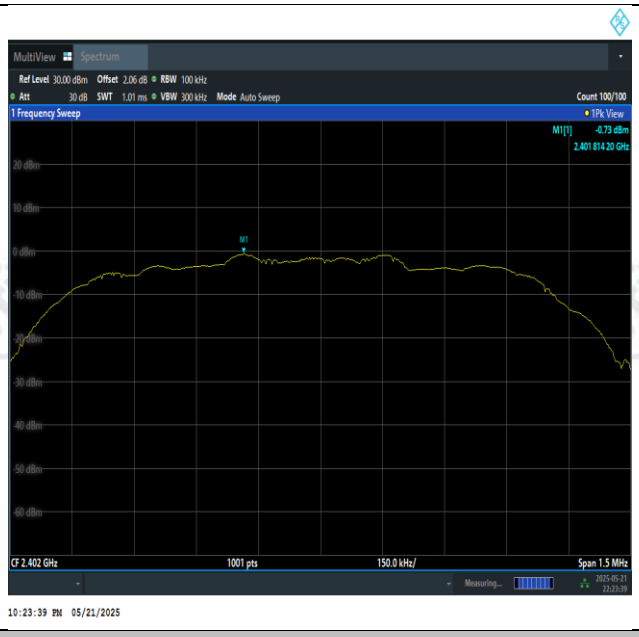
2DH5-Ant1-2480-0~Reference-PASS



2DH5-Ant1-2480-30~1000-PASS



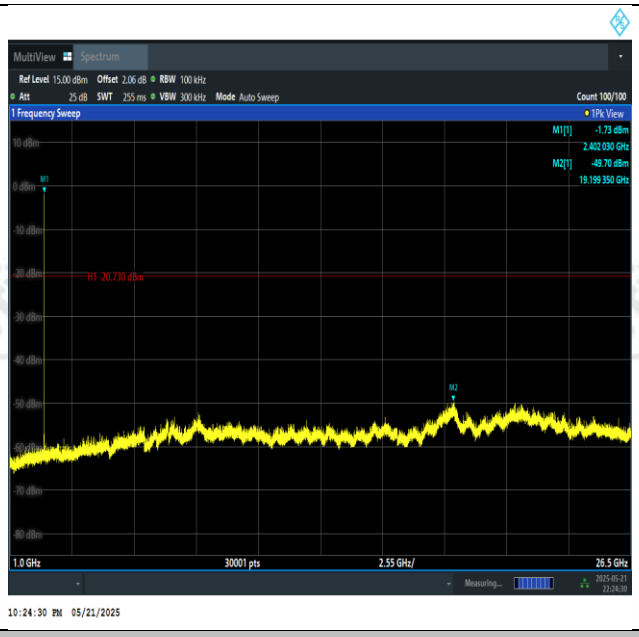
2DH5-Ant1-2480-1000~26500-PASS



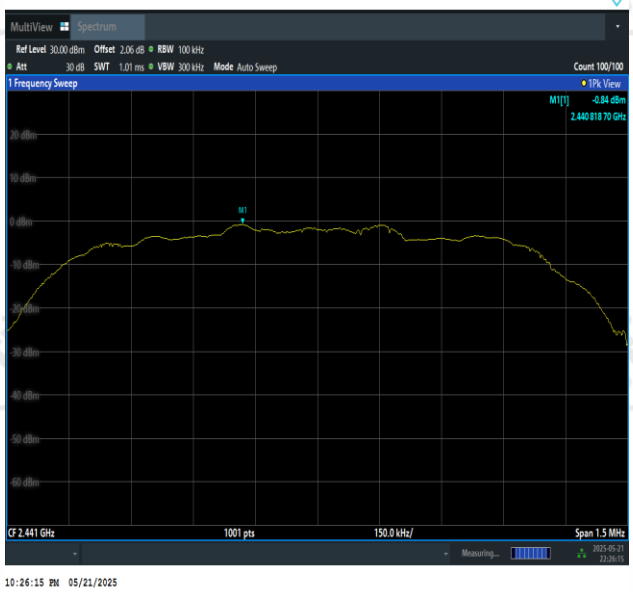
3DH5-Ant1-2402-0~Reference-PASS



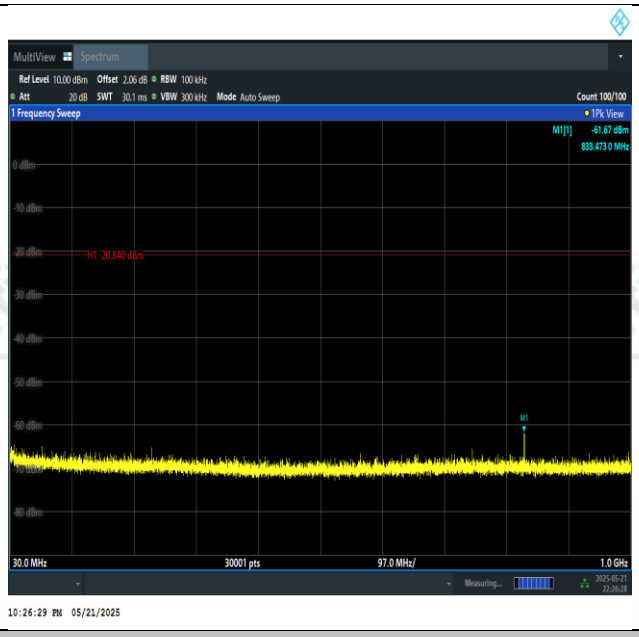
3DH5-Ant1-2402-30~1000-PASS



3DH5-Ant1-2402-1000~26500-PASS



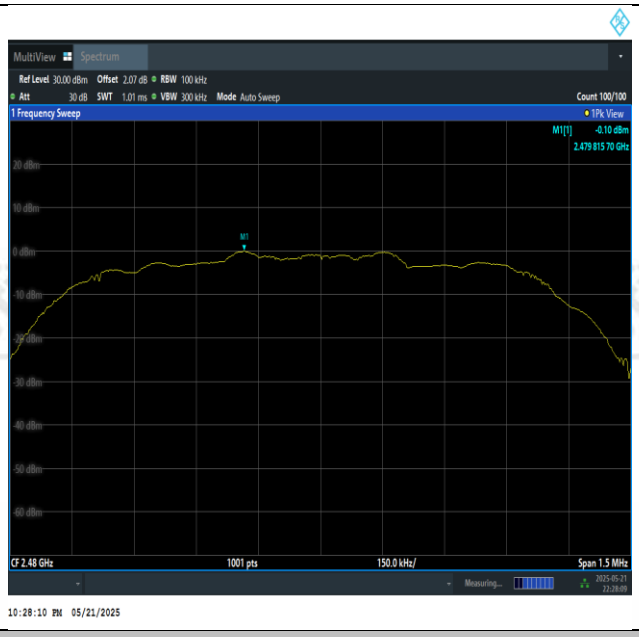
3DH5-Ant1-2441-0~Reference-PASS



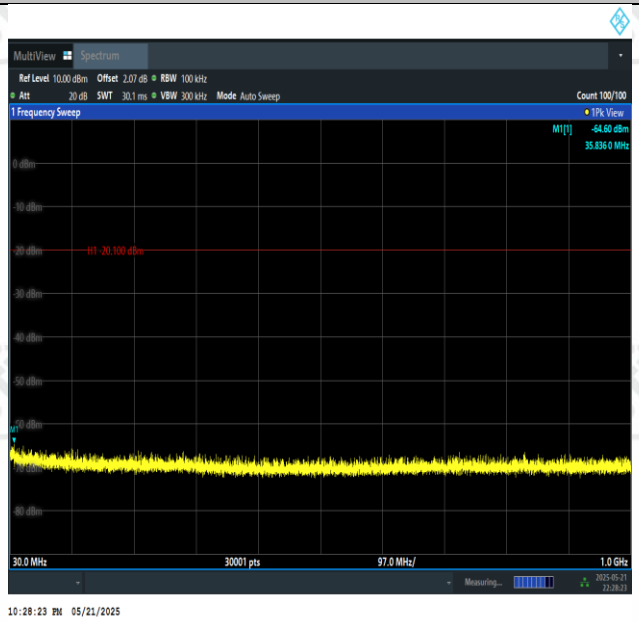
3DH5-Ant1-2441-30~1000-PASS



3DH5-Ant1-2441-1000~26500-PASS



3DH5-Ant1-2480-0~Reference-PASS



3DH5-Ant1-2480-30~1000-PASS



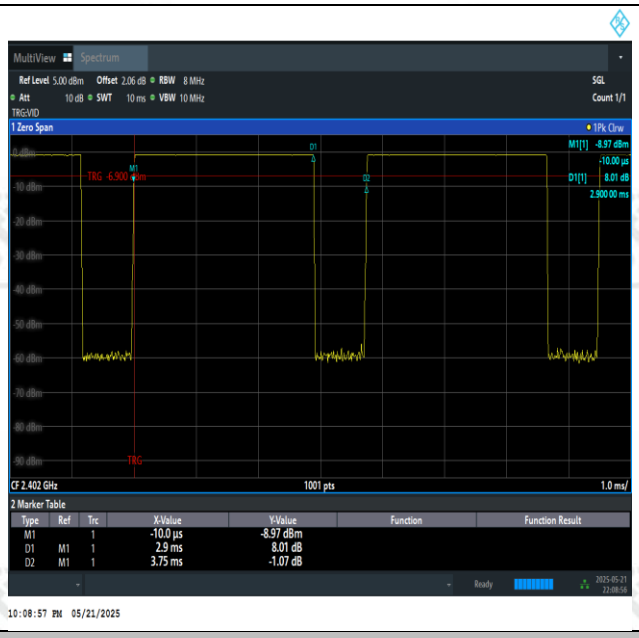
3DH5-Ant1-2480-1000~26500-PASS

Appendix I: Duty Cycle

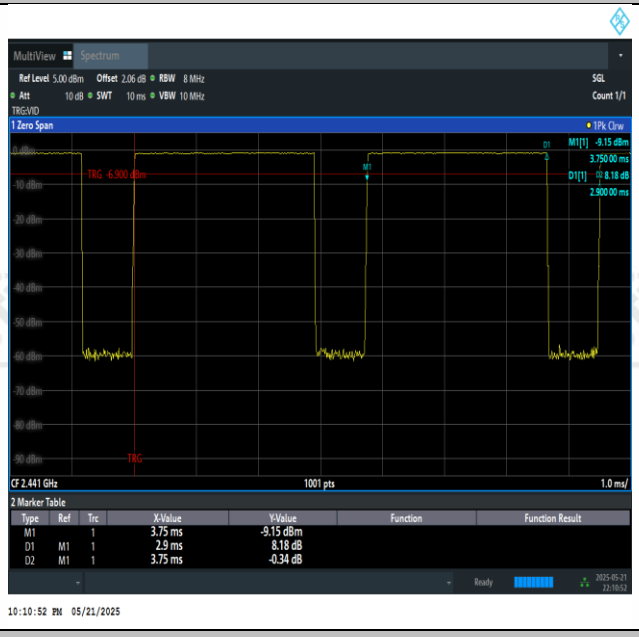
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
DH5	Ant1	2402	2.90	3.75	77.33	1.12
DH5	Ant1	2441	2.90	3.75	77.33	1.12
DH5	Ant1	2480	2.91	3.75	77.60	1.10
2DH5	Ant1	2402	2.89	3.75	77.07	1.13
2DH5	Ant1	2441	2.88	3.75	76.80	1.15
2DH5	Ant1	2480	2.88	3.75	76.80	1.15
3DH5	Ant1	2402	2.88	3.75	76.80	1.15
3DH5	Ant1	2441	2.89	3.76	76.86	1.14
3DH5	Ant1	2480	2.88	3.75	76.80	1.15

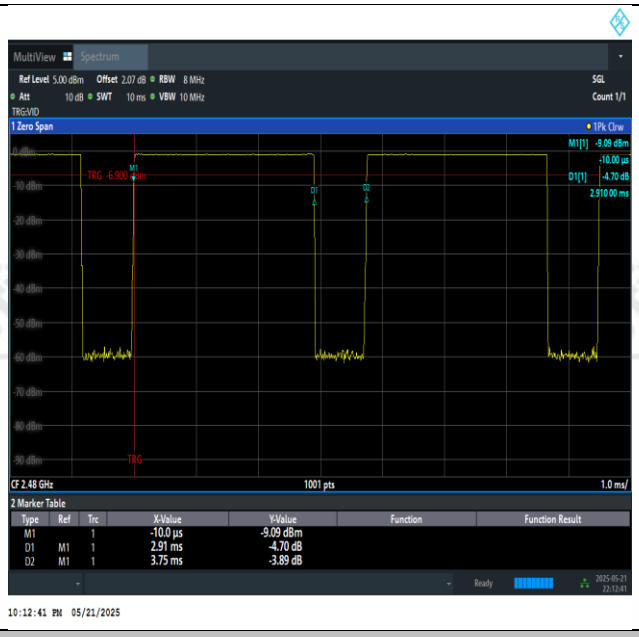
Test Graphs



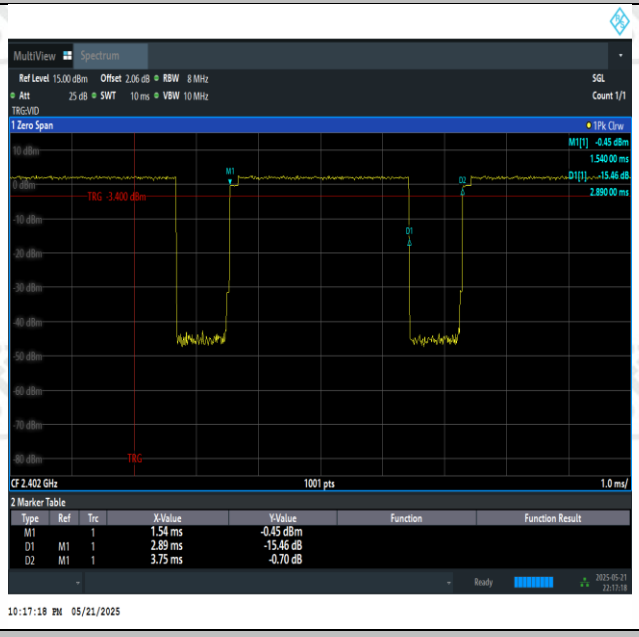
NTNV-DH5-Ant1-2402



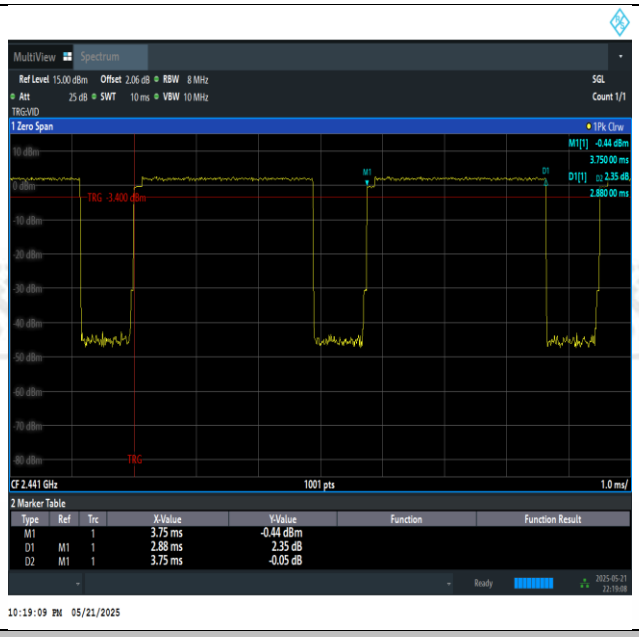
NTNV-DH5-Ant1-2441



NTNV-DH5-Ant1-2480



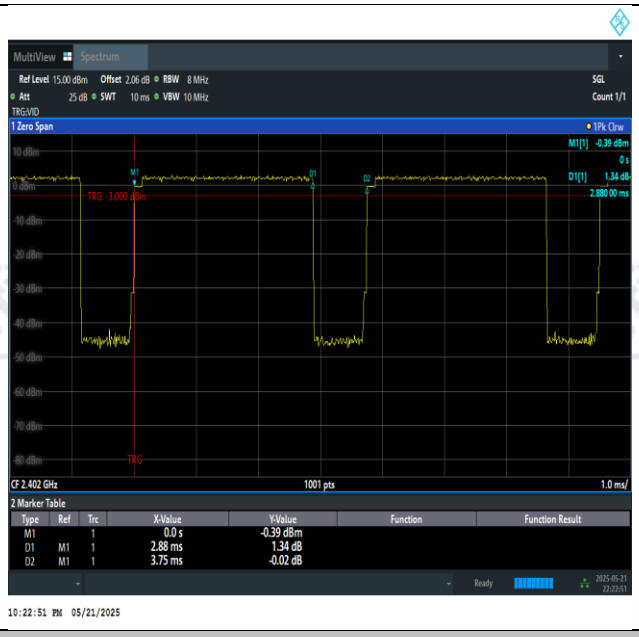
NTNV-2DH5-Ant1-2402



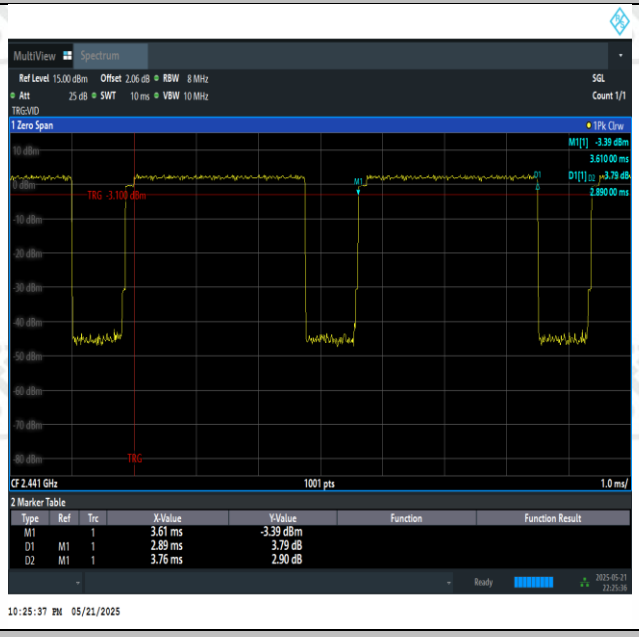
NTNV-2DH5-Ant1-2441



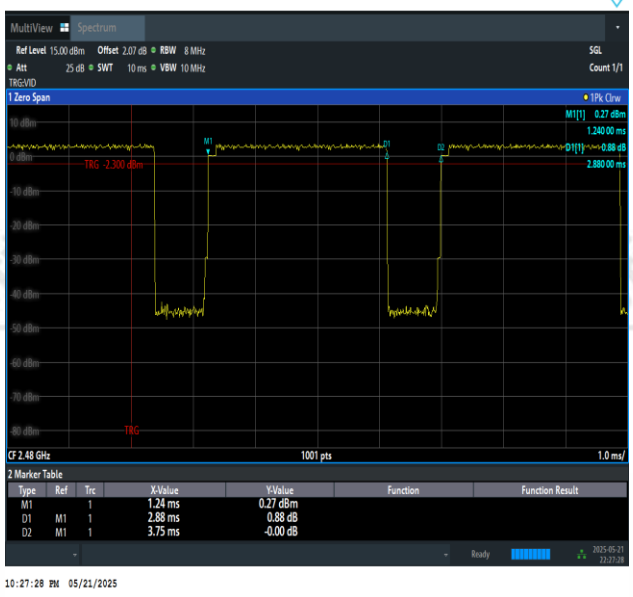
NTNV-2DH5-Ant1-2480



NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2441



NTNV-3DH5-Ant1-2480

*** End of Report ***