

RF Test Data for Bluetooth (BR+EDR) (Conducted Measurements)

General Description of EUT	
EUT Name:	STREAMING MEDIA PLAYER
Model:	MAG555
Sample ID:	HC-C-202406-0129-01-01
Test Standard:	FCC Part 15.247
Environmental Conditions	
Ambient Temperature:	23.9℃
Ambient Humidity:	47%RH
Test Power Supply:	DC 12V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202406-0129-121	

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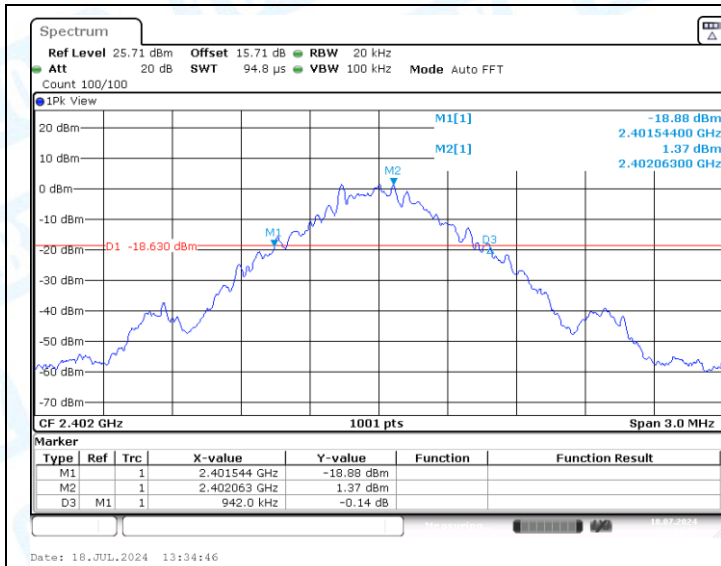
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Appendix 1: 20dB Emission Bandwidth

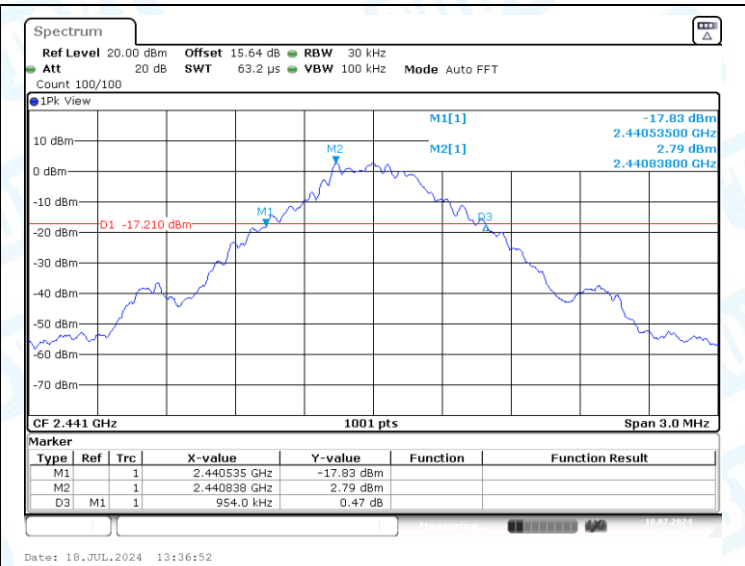
1.1 Test Result

Test Mode	Antenna	Frequency[MHz]	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.94	2401.54	2402.49	---	---
DH5	Ant1	2441	0.95	2440.54	2441.49	---	---
DH5	Ant1	2480	0.95	2479.54	2480.49	---	---
2DH5	Ant1	2402	1.28	2401.37	2402.65	---	---
2DH5	Ant1	2441	1.28	2440.37	2441.65	---	---
2DH5	Ant1	2480	1.28	2479.37	2480.65	---	---
3DH5	Ant1	2402	1.29	2401.36	2402.65	---	---
3DH5	Ant1	2441	1.29	2440.36	2441.65	---	---
3DH5	Ant1	2480	1.29	2479.36	2480.65	---	---

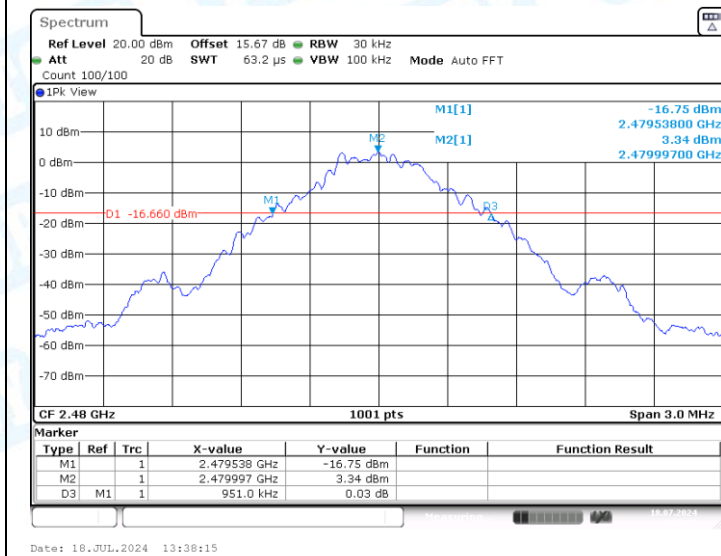
1.2 Test Graphs



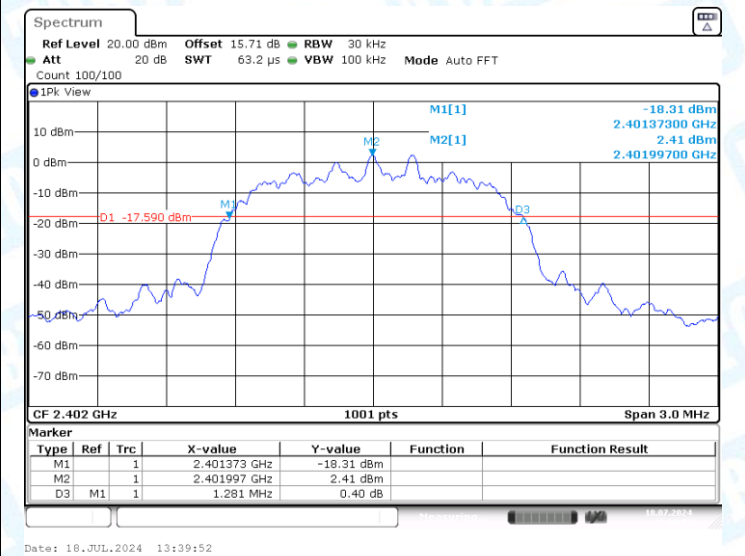
DH5-Ant1-2402



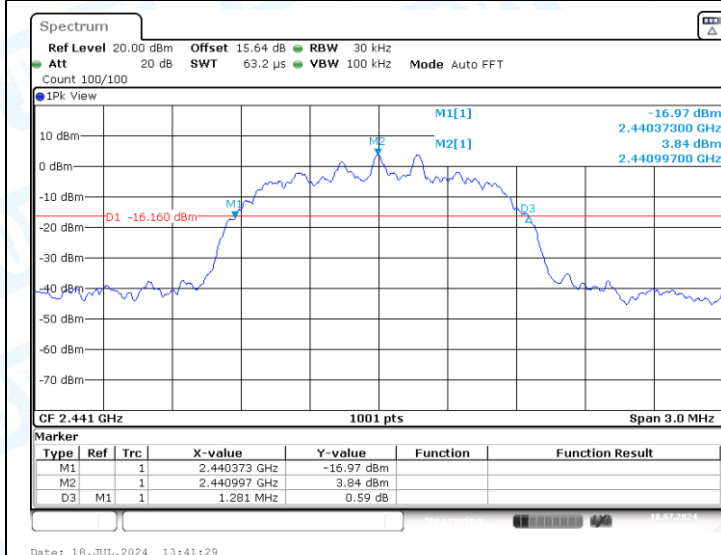
DH5-Ant1-2441



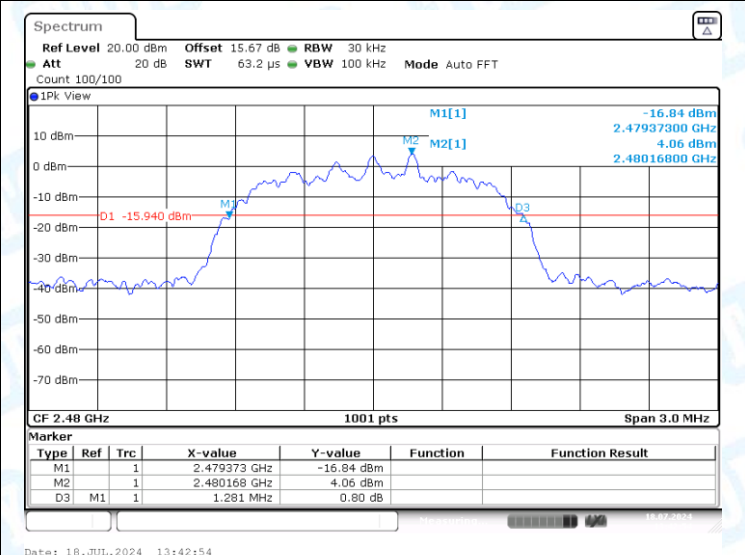
DH5-Ant1-2480



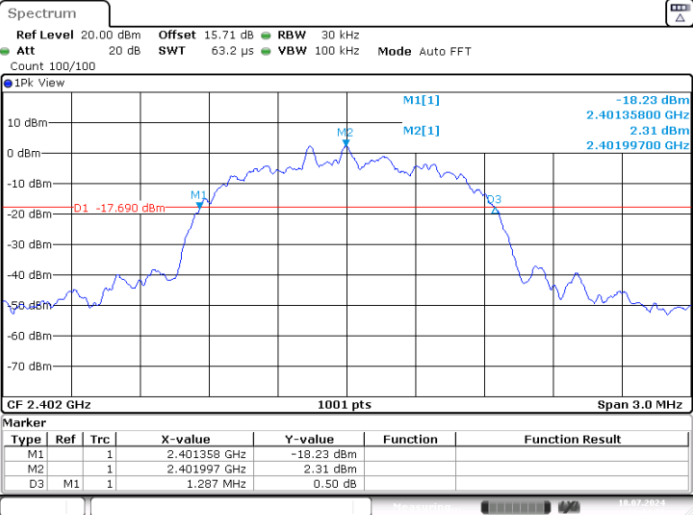
2DH5-Ant1-2402



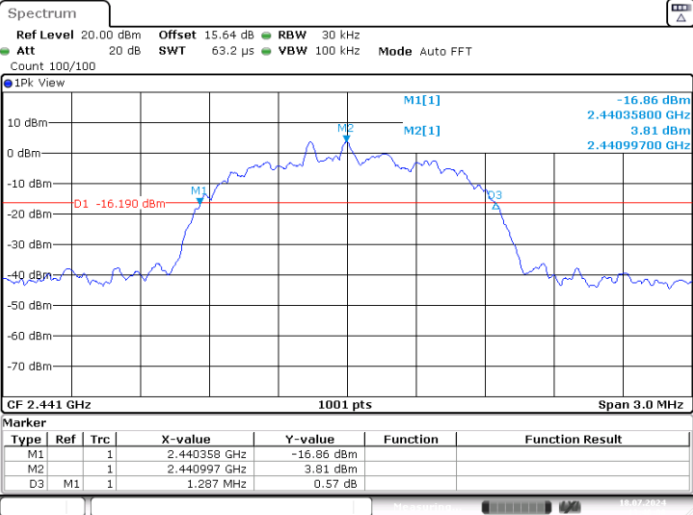
2DH5-Ant1-2441



2DH5-Ant1-2480

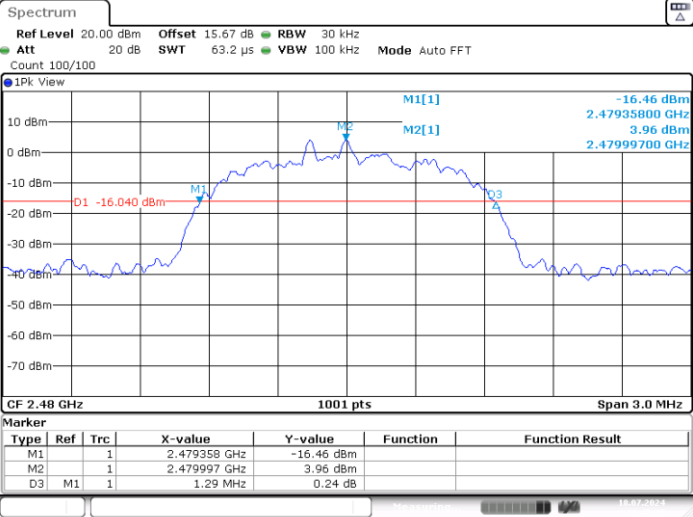


Date: 18.JUL.2024 13:44:29



Date: 18.JUL.2024 13:46:07

3DH5-Ant1-2402



Date: 18.JUL.2024 13:47:35

3DH5-Ant1-2480

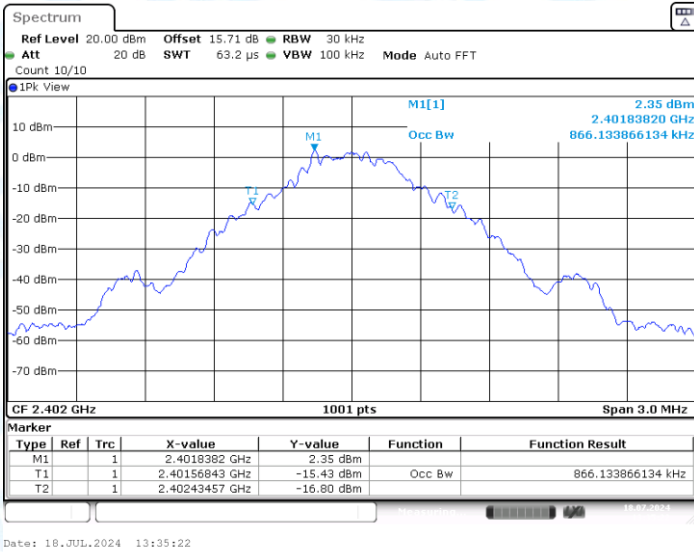
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Appendix 2: Occupied Channel Bandwidth

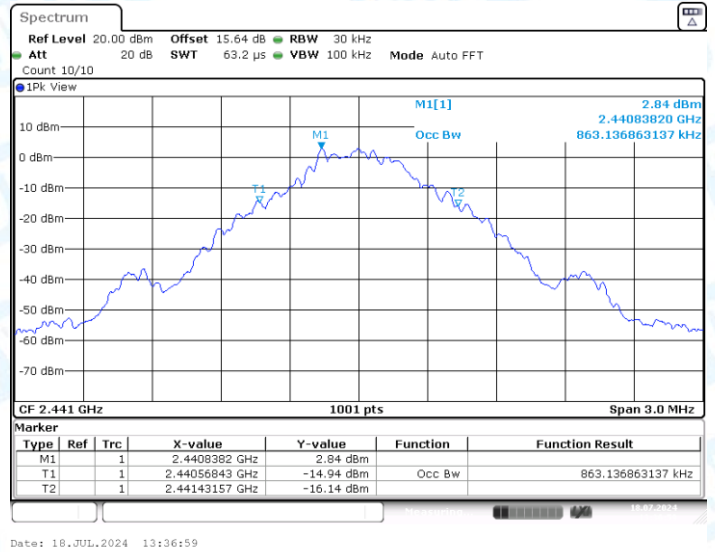
2.1 Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.866	2401.5684	2402.4346	---	---
DH5	Ant1	2441	0.863	2440.5684	2441.4316	---	---
DH5	Ant1	2480	0.863	2479.5684	2480.4316	---	---
2DH5	Ant1	2402	1.16	2401.4216	2402.5814	---	---
2DH5	Ant1	2441	1.163	2440.4186	2441.5814	---	---
2DH5	Ant1	2480	1.166	2479.4186	2480.5844	---	---
3DH5	Ant1	2402	1.169	2401.4216	2402.5904	---	---
3DH5	Ant1	2441	1.166	2440.4216	2441.5874	---	---
3DH5	Ant1	2480	1.166	2479.4216	2480.5874	---	---

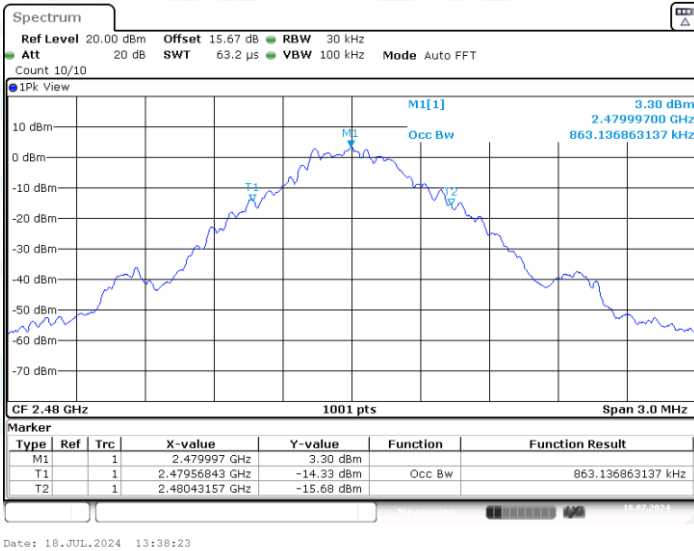
2.2 Test Graphs



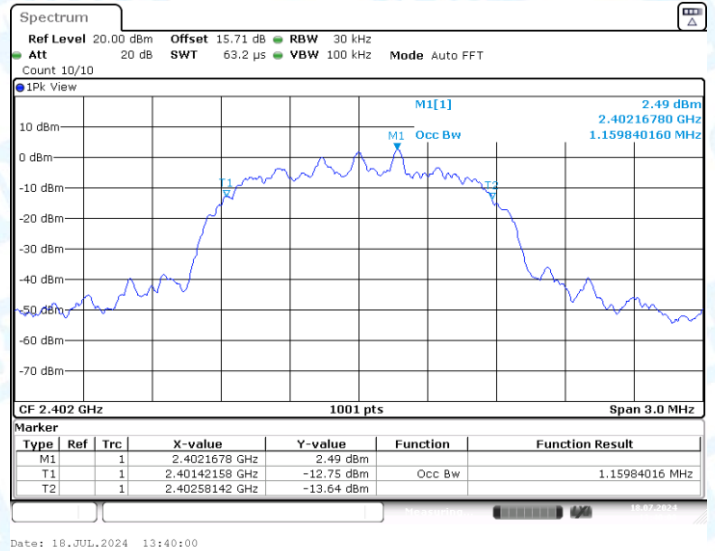
DH5-Ant1-2402



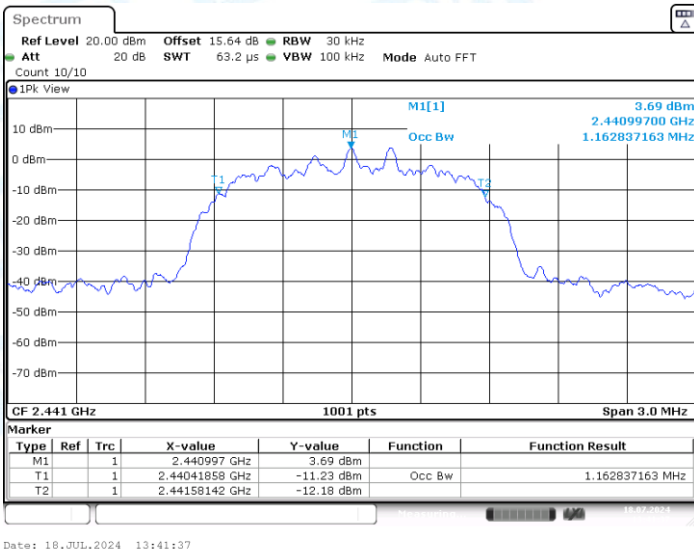
DH5-Ant1-2441



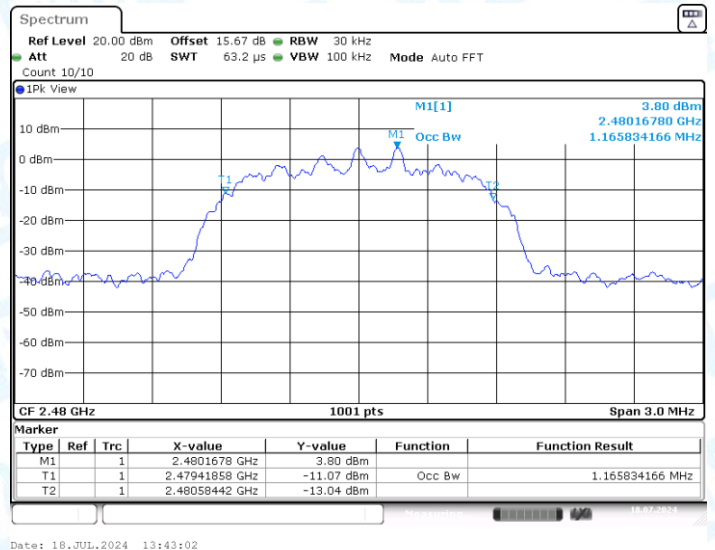
DH5-Ant1-2480



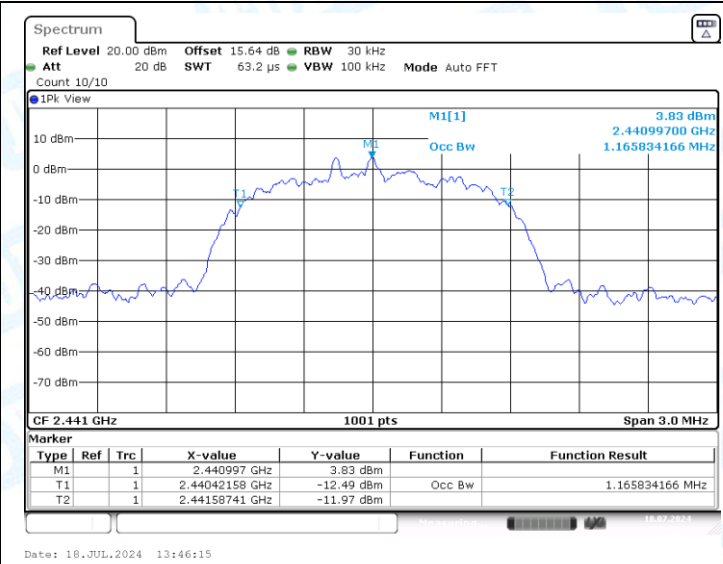
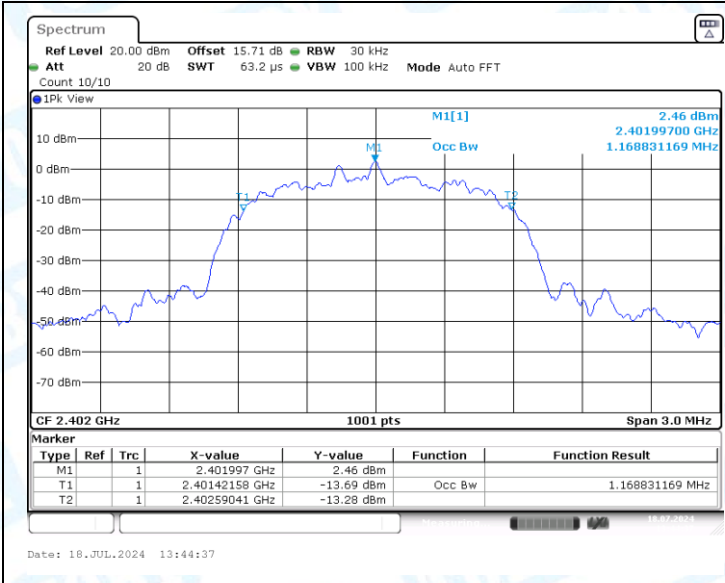
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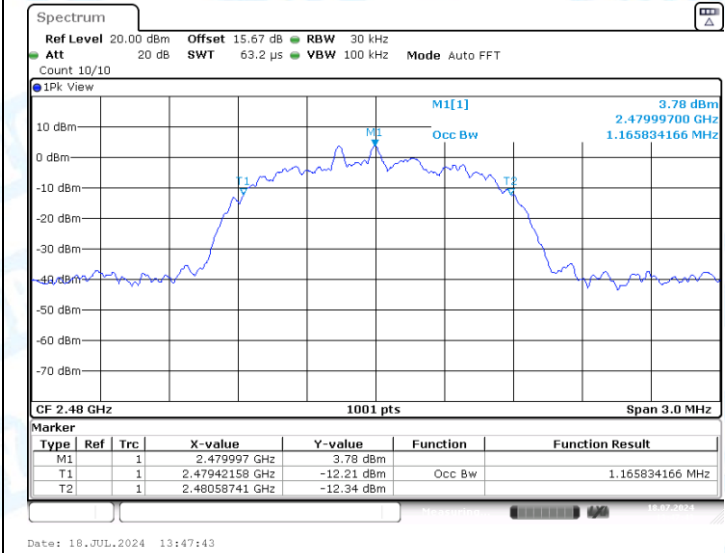
2DH5-Ant1-2441



2DH5-Ant1-2480



3DH5-Ant1-2402



3DH5-Ant1-2480

3DH5-Ant1-2441

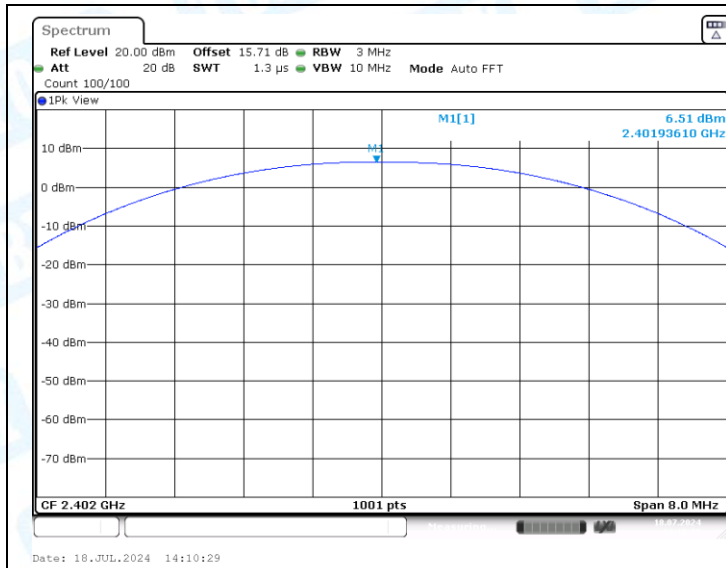


Appendix 3: Maximum conducted output power

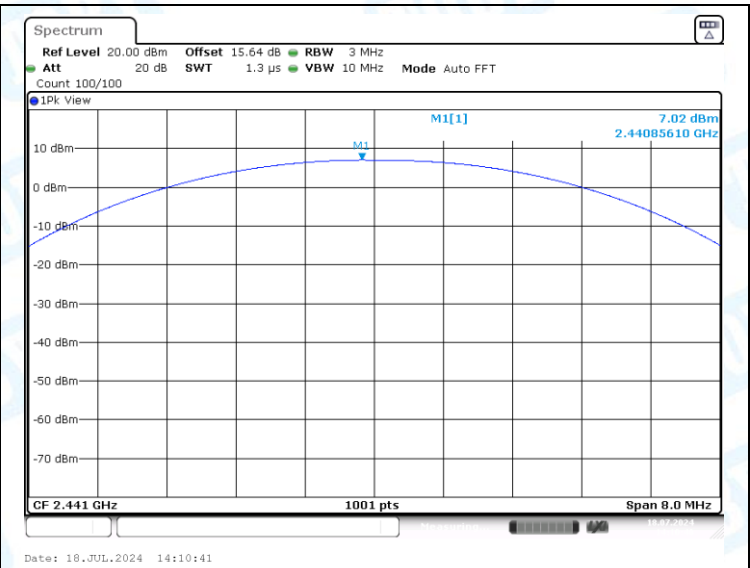
3.1 Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	6.51	≤21.00	PASS
DH5	Ant1	2441	7.02	≤21.00	PASS
DH5	Ant1	2480	7.23	≤21.00	PASS
2DH5	Ant1	2402	7.79	≤21.00	PASS
2DH5	Ant1	2441	8.63	≤21.00	PASS
2DH5	Ant1	2480	8.44	≤21.00	PASS
3DH5	Ant1	2402	8.92	≤21.00	PASS
3DH5	Ant1	2441	9.24	≤21.00	PASS
3DH5	Ant1	2480	8.79	≤21.00	PASS

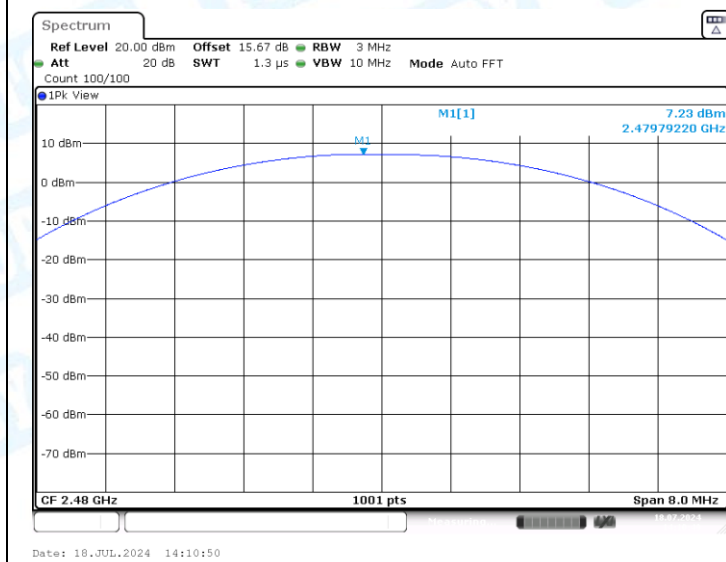
3.2 Test Graphs



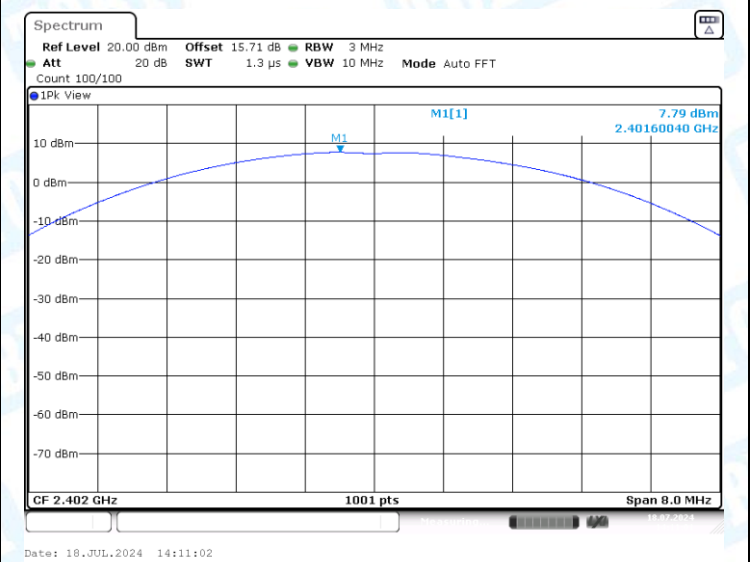
DH5-Ant1-2402-PASS



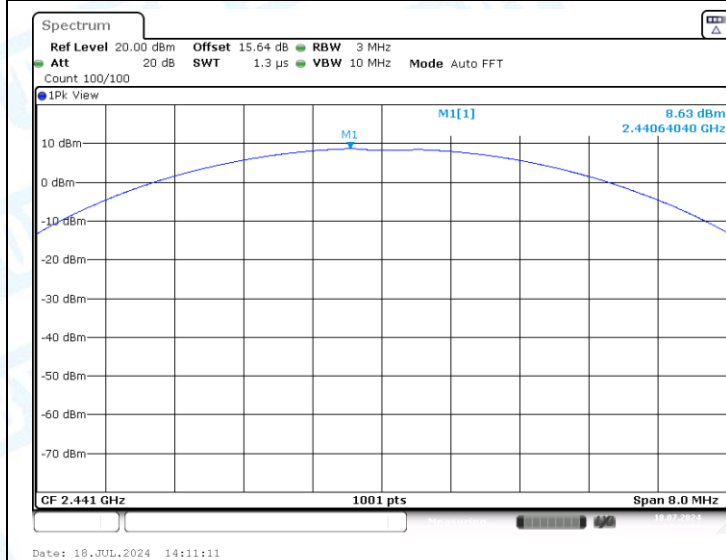
DH5-Ant1-2441-PASS



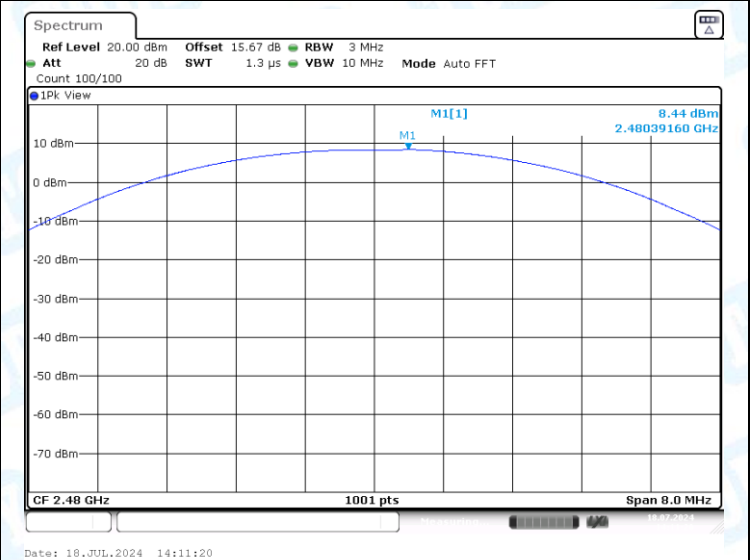
DH5-Ant1-2480-PASS



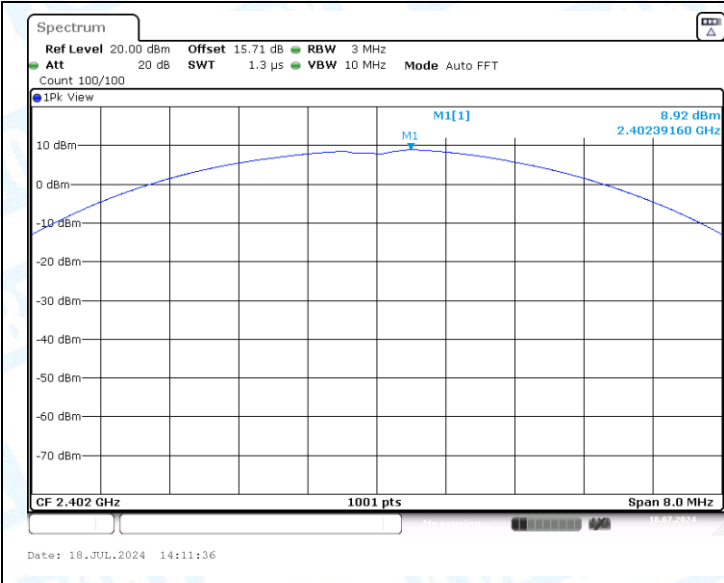
2DH5-Ant1-2402-PASS



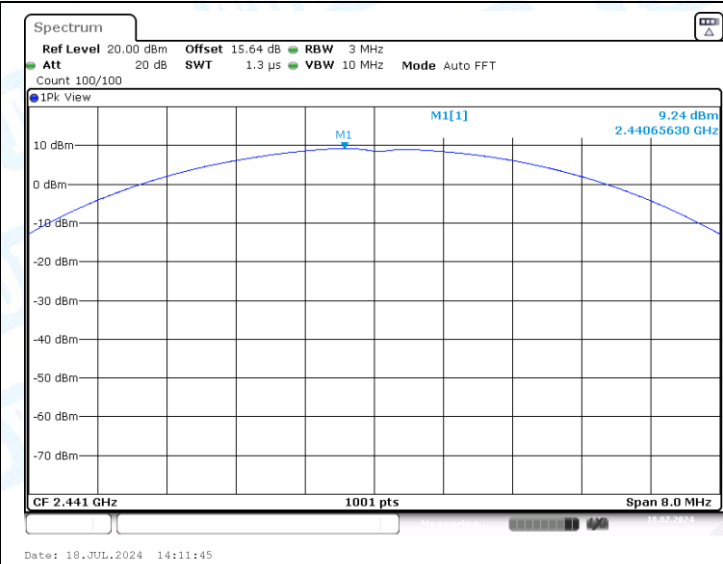
2DH5-Ant1-2441-PASS



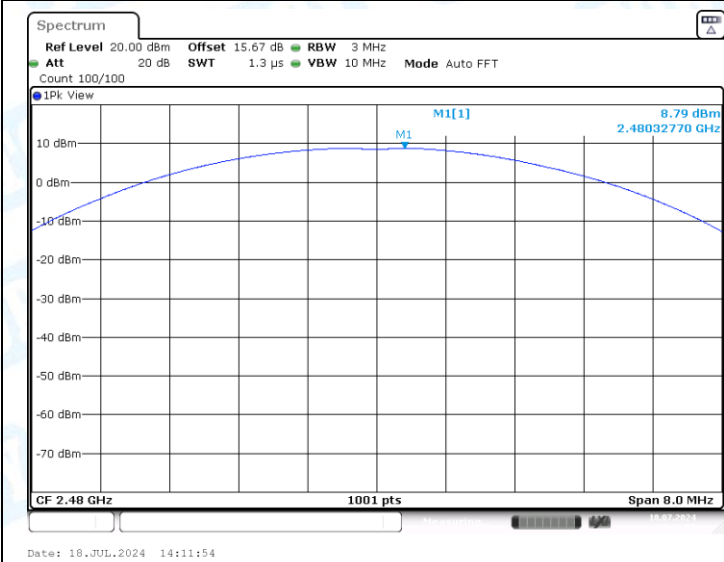
2DH5-Ant1-2480-PASS



3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS



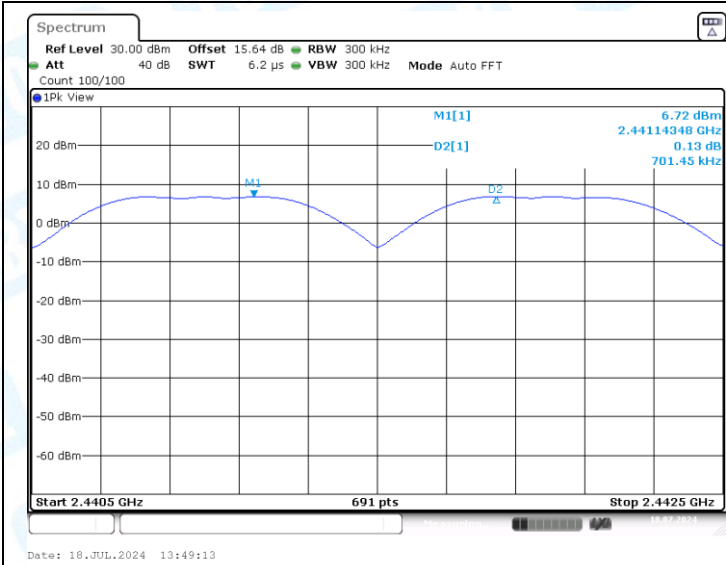
3DH5-Ant1-2480-PASS

Appendix 4: Carrier frequency separation

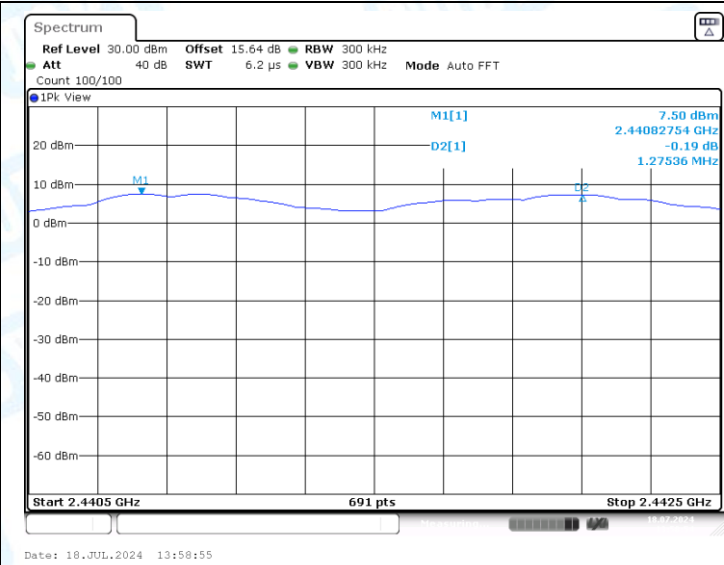
4.1 Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.701	≥ 0.633	PASS
2DH5	Ant1	Hop	1.275	≥ 0.853	PASS
3DH5	Ant1	Hop	1.116	≥ 0.860	PASS

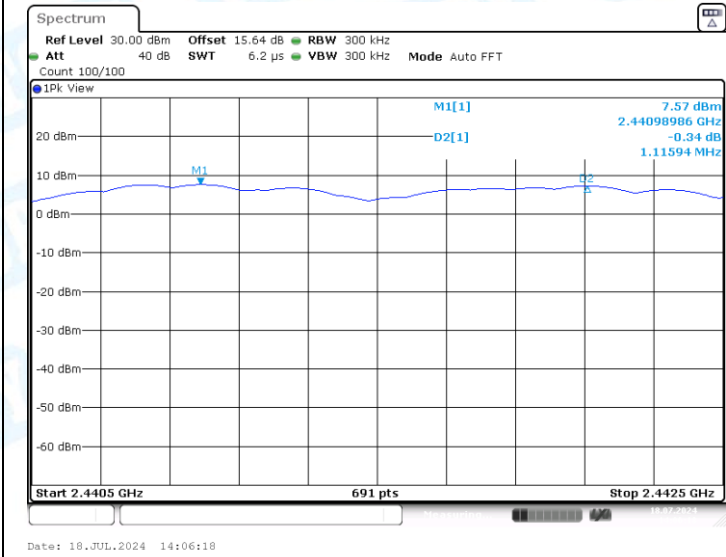
4.2 Test Graphs



DH5-Ant1-Hop-PASS



2DH5-Ant1-Hop-PASS



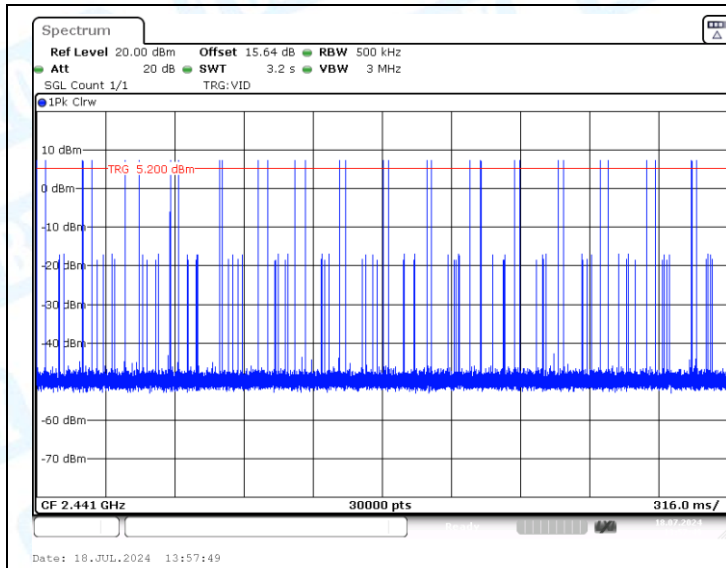
3DH5-Ant1-Hop-PASS

Appendix 5: Time of occupancy

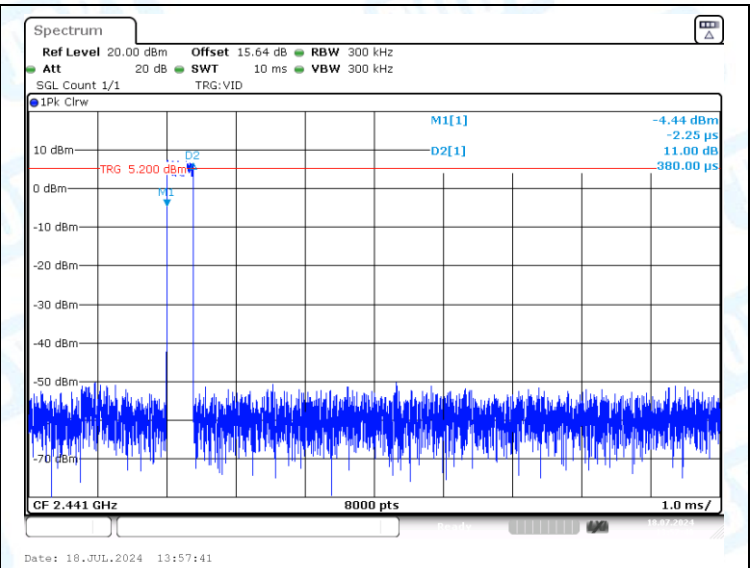
5.1 Test Result

TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.380	320	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.629	180	0.293	≤0.4	PASS
DH5	Ant1	Hop	2.869	70	0.201	≤0.4	PASS
2DH1	Ant1	Hop	2.869	80	0.23	≤0.4	PASS
2DH3	Ant1	Hop	0.389	320	0.124	≤0.4	PASS
2DH5	Ant1	Hop	1.633	170	0.278	≤0.4	PASS
3DH1	Ant1	Hop	0.389	330	0.128	≤0.4	PASS
3DH3	Ant1	Hop	1.633	200	0.327	≤0.4	PASS
3DH5	Ant1	Hop	2.877	60	0.173	≤0.4	PASS

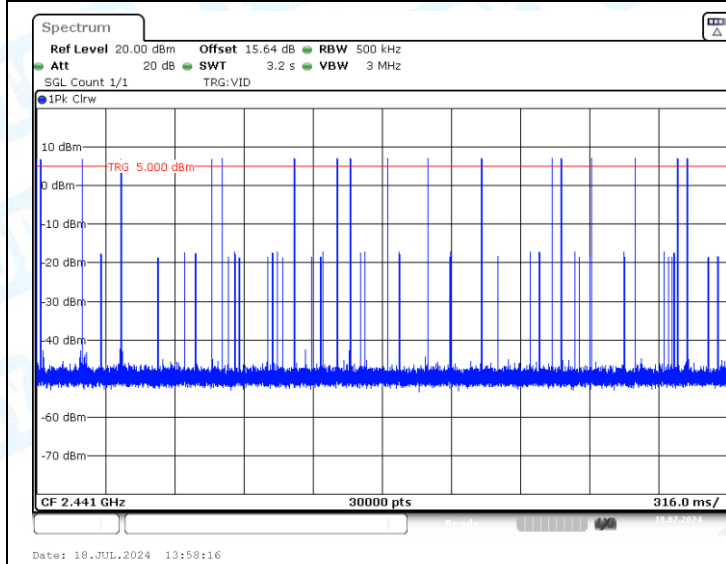
5.2 Test Graphs



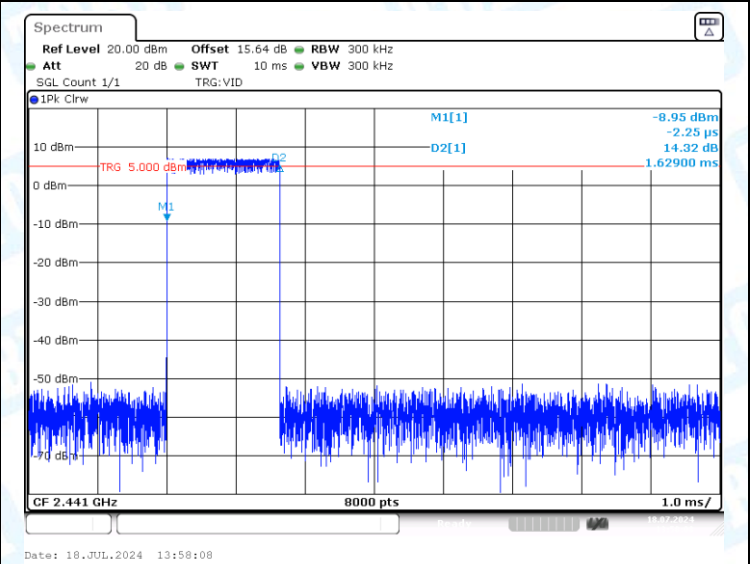
DH1-Ant1-Hop-PASS



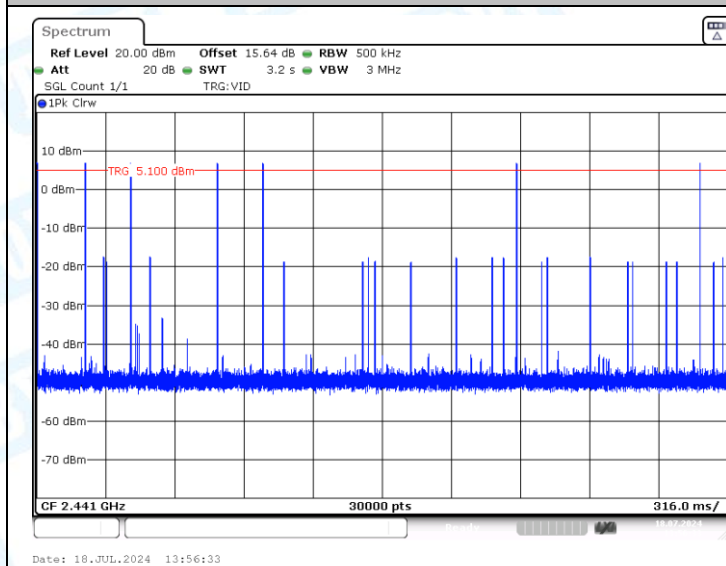
DH1-Ant1-Hop-PASS



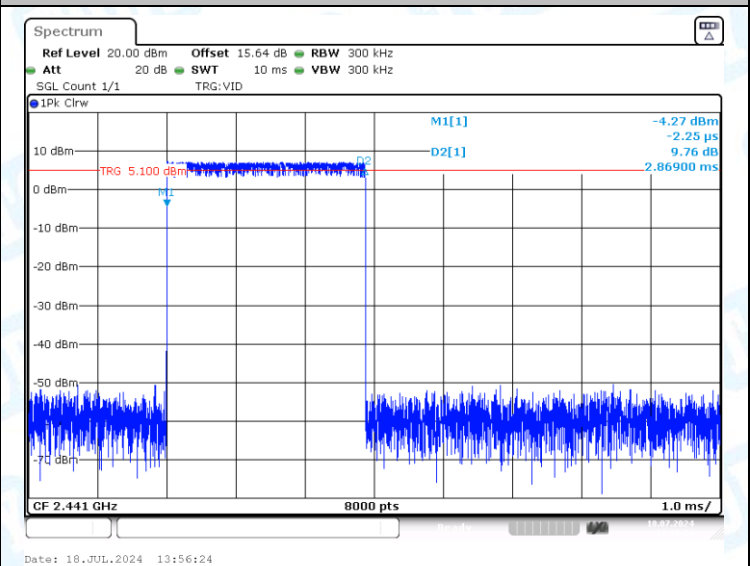
DH3-Ant1-Hop-PASS



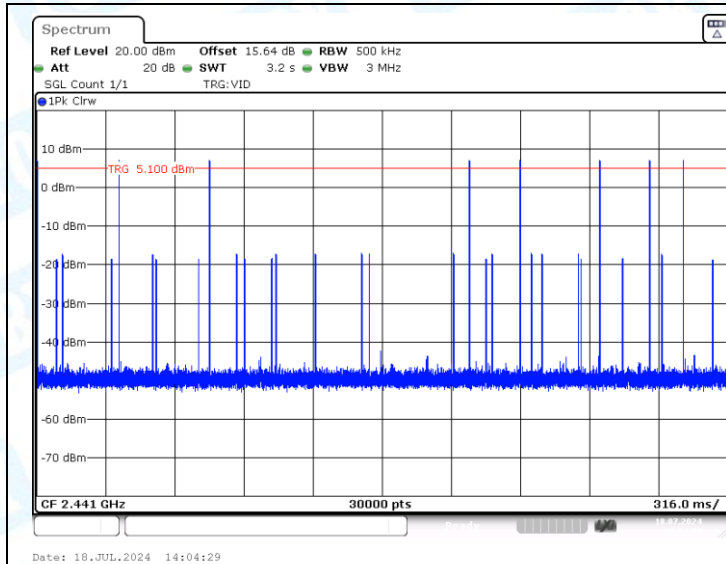
DH3-Ant1-Hop-PASS



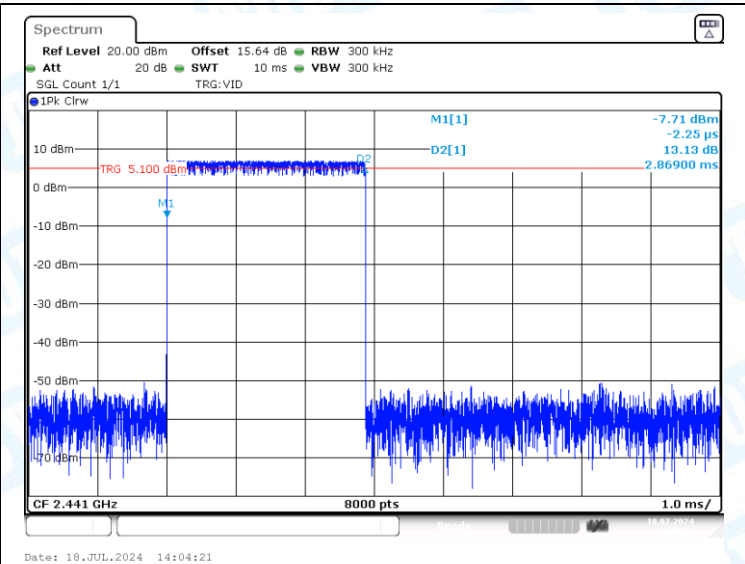
DH5-Ant1-Hop-PASS



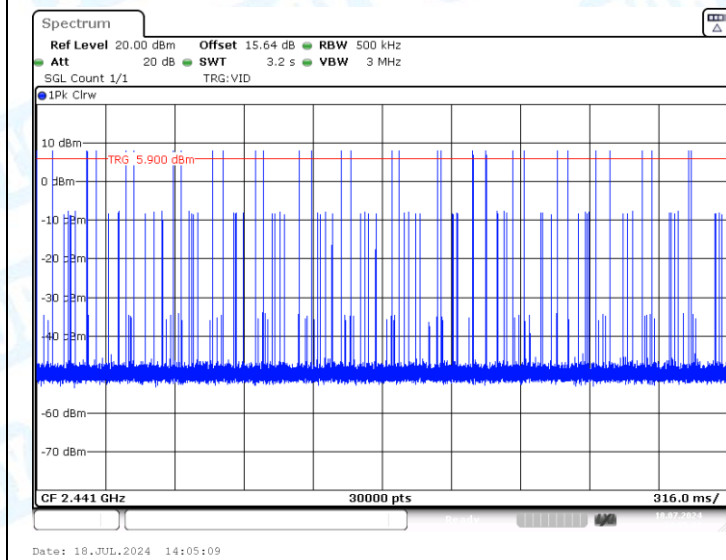
DH5-Ant1-Hop-PASS



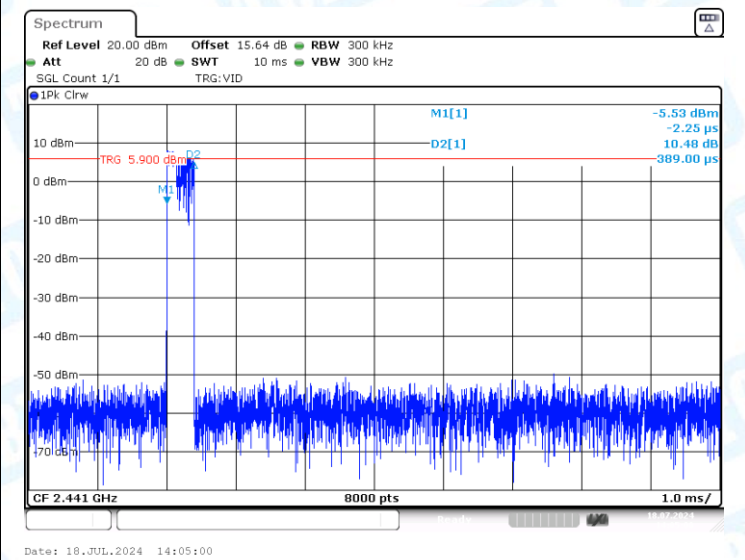
2DH1-Ant1-Hop-PASS



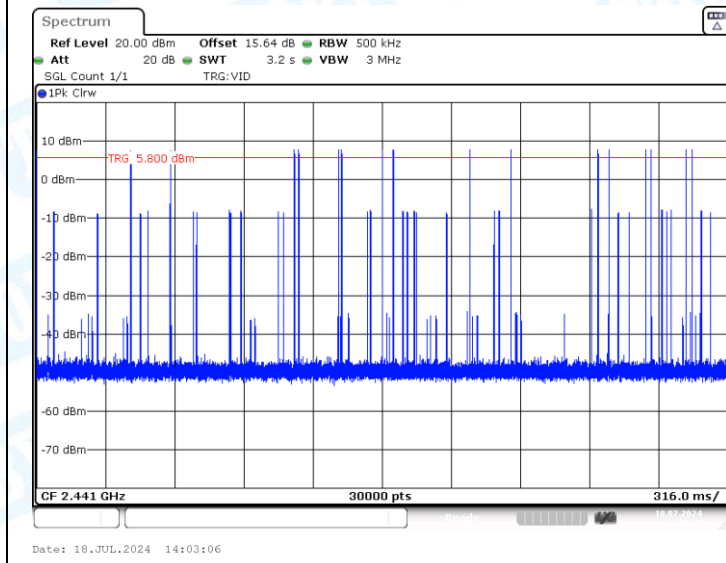
2DH1-Ant1-Hop-PASS



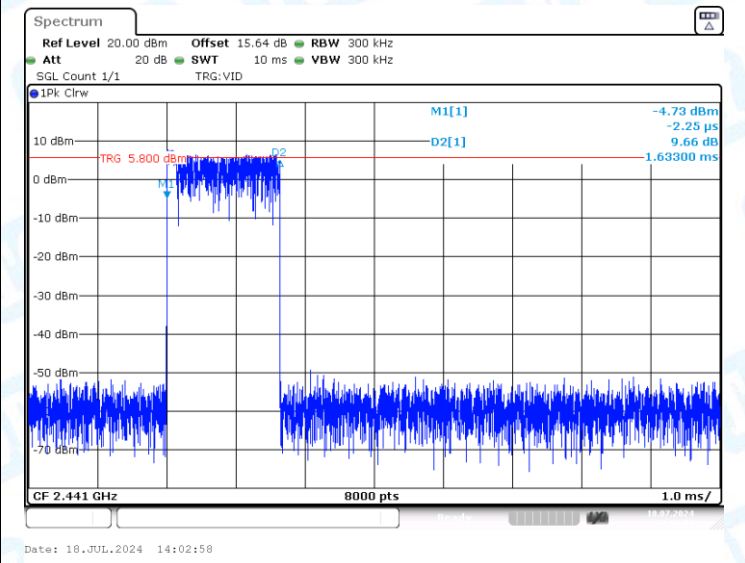
2DH3-Ant1-Hop-PASS



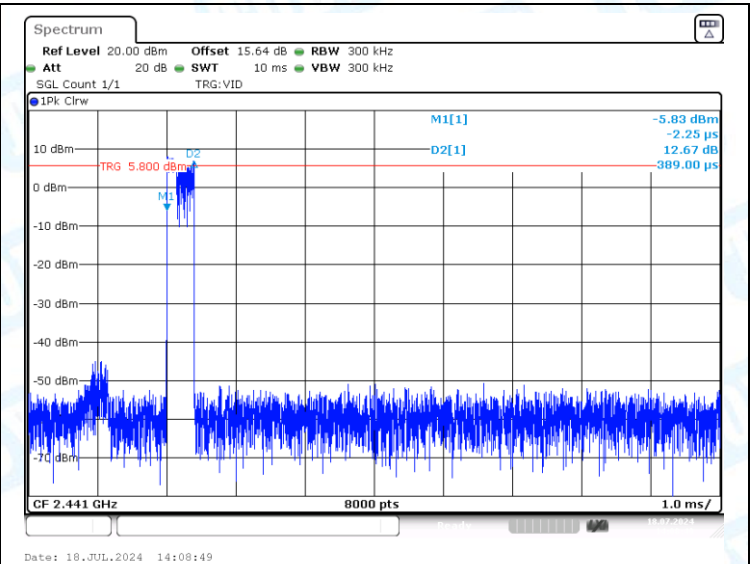
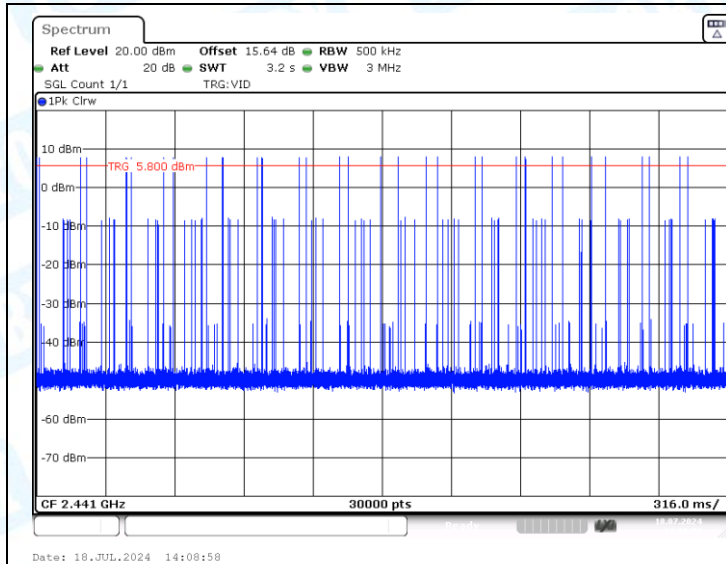
2DH3-Ant1-Hop-PASS



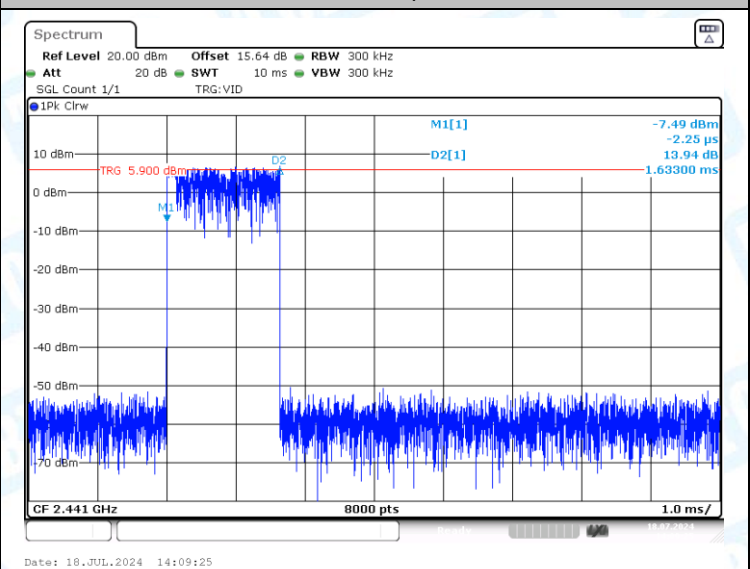
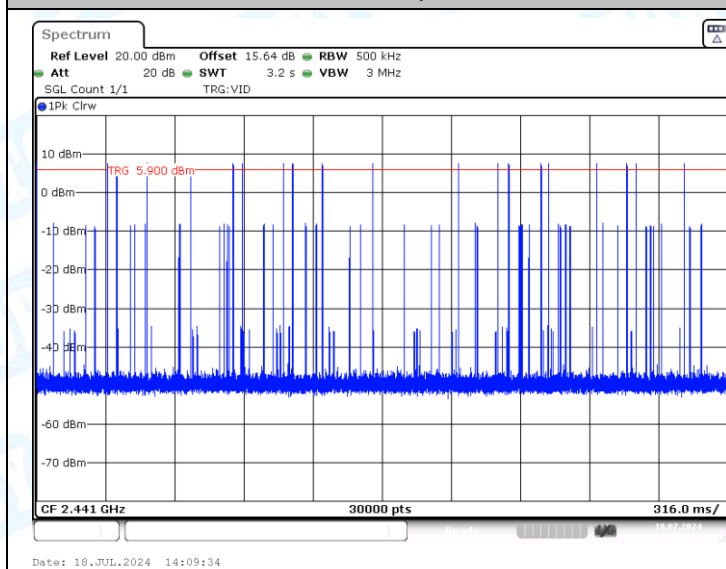
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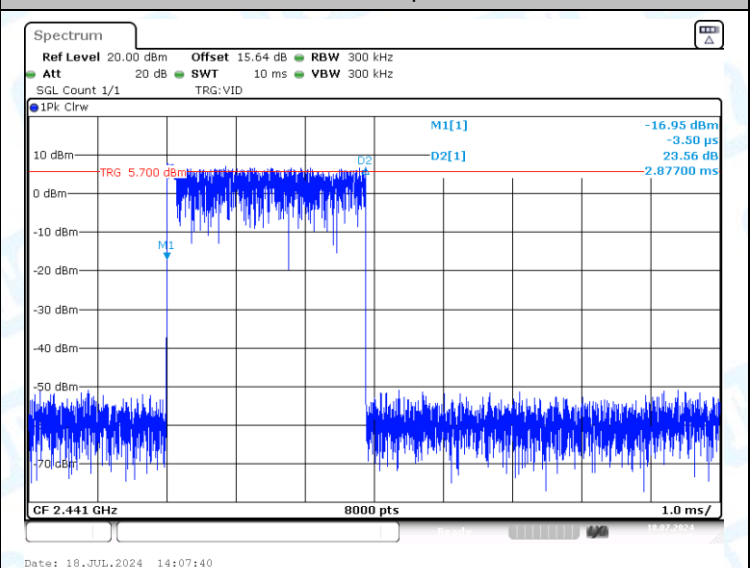
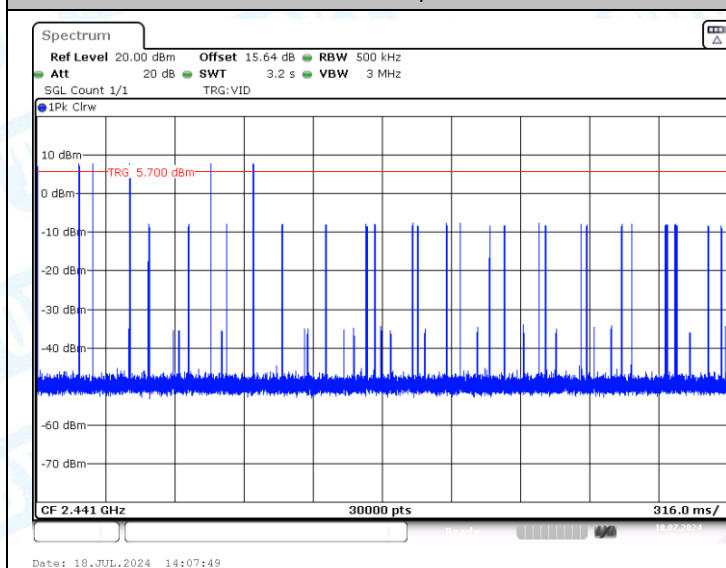
2DH5-Ant1-Hop-PASS



3DH1-Ant1-Hop-PASS



3DH3-Ant1-Hop-PASS



3DH5-Ant1-Hop-PASS

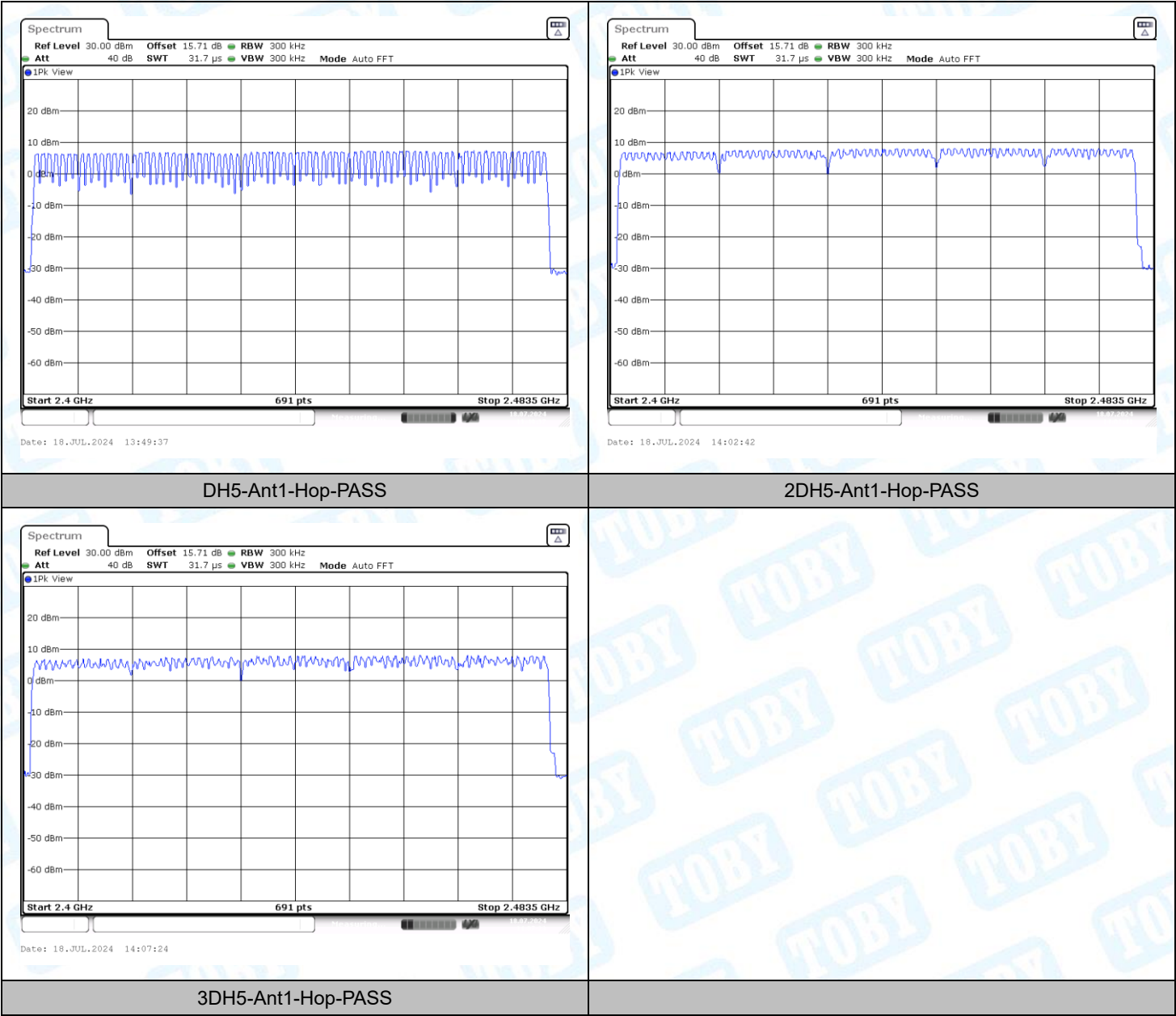
3DH5-Ant1-Hop-PASS

Appendix 6: Number of hopping channels

6.1 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

6.2 Test Graphs

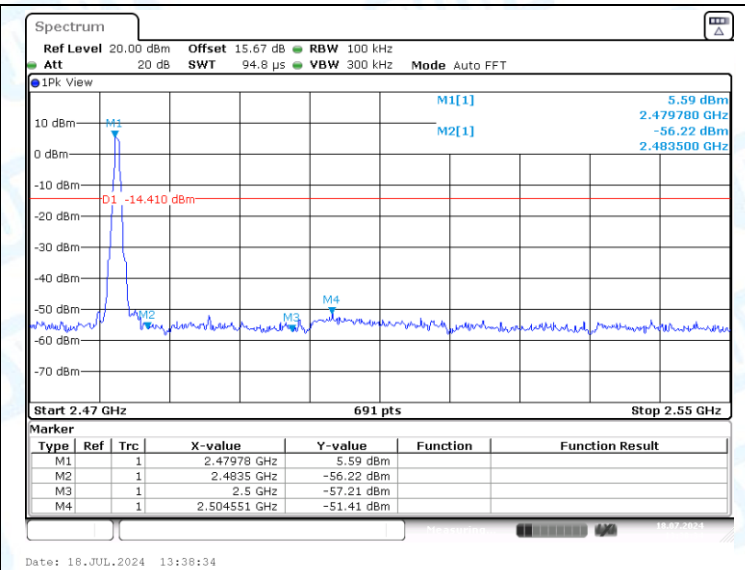
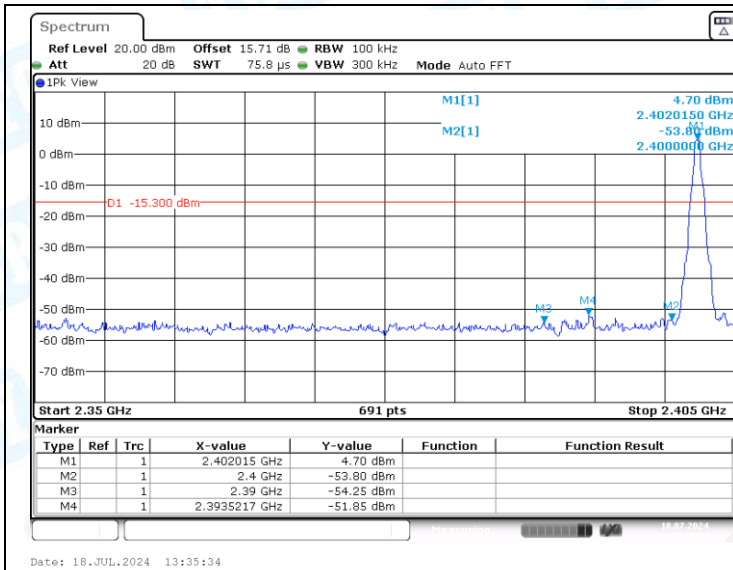


Appendix 7: Band edge measurements

7.1 Test Result

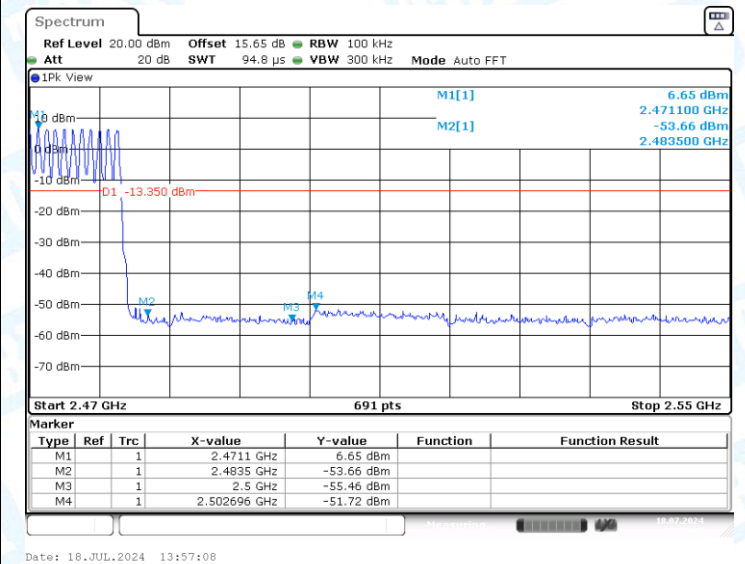
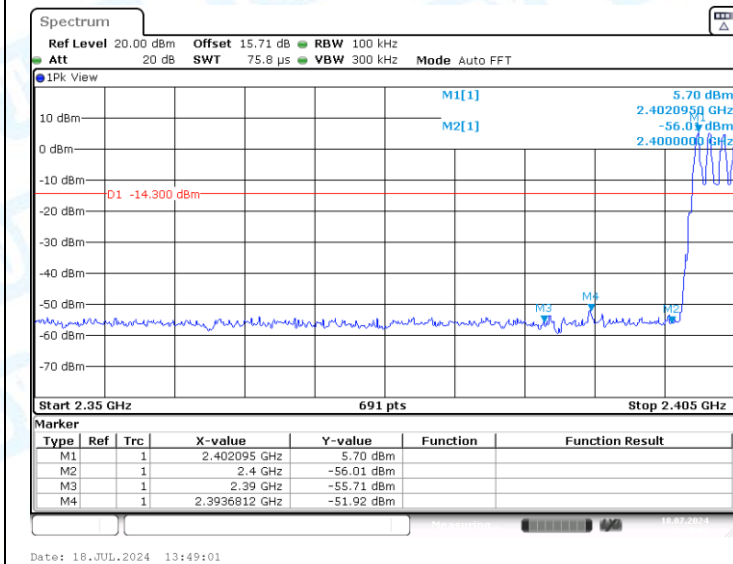
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	4.70	-51.85	≤-15.3	PASS
DH5	Ant1	High	2480	5.59	-51.41	≤-14.41	PASS
DH5	Ant1	Low	Hop_2402	5.70	-51.92	≤-14.3	PASS
DH5	Ant1	High	Hop_2480	6.65	-51.72	≤-13.35	PASS
2DH5	Ant1	Low	2402	4.67	-51.49	≤-15.33	PASS
2DH5	Ant1	High	2480	6.25	-51.99	≤-13.75	PASS
2DH5	Ant1	Low	Hop_2402	2.94	-52.04	≤-17.06	PASS
2DH5	Ant1	High	Hop_2480	7.66	-51.83	≤-12.34	PASS
3DH5	Ant1	Low	2402	4.99	-51.97	≤-15.01	PASS
3DH5	Ant1	High	2480	6.28	-51.23	≤-13.72	PASS
3DH5	Ant1	Low	Hop_2402	6.81	-49.89	≤-13.19	PASS
3DH5	Ant1	High	Hop_2480	7.96	-51.1	≤-12.04	PASS

7.2 Test Graphs



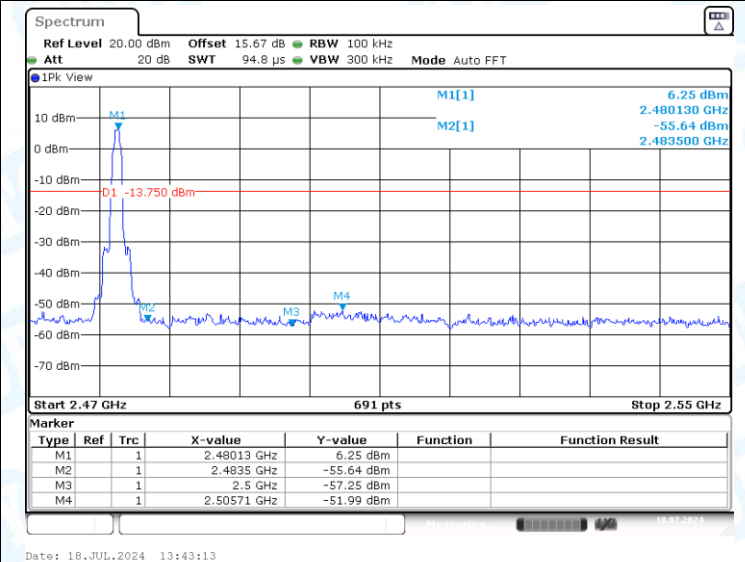
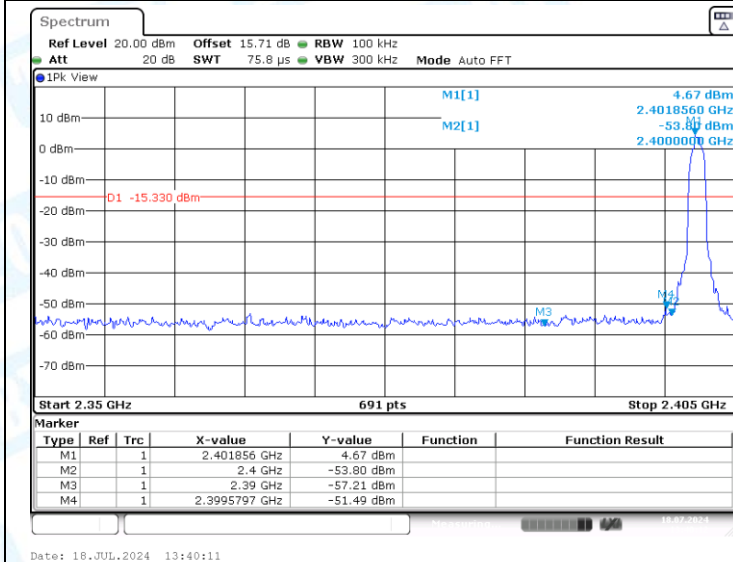
DH5-Ant1-2402-PASS

DH5-Ant1-2480-PASS



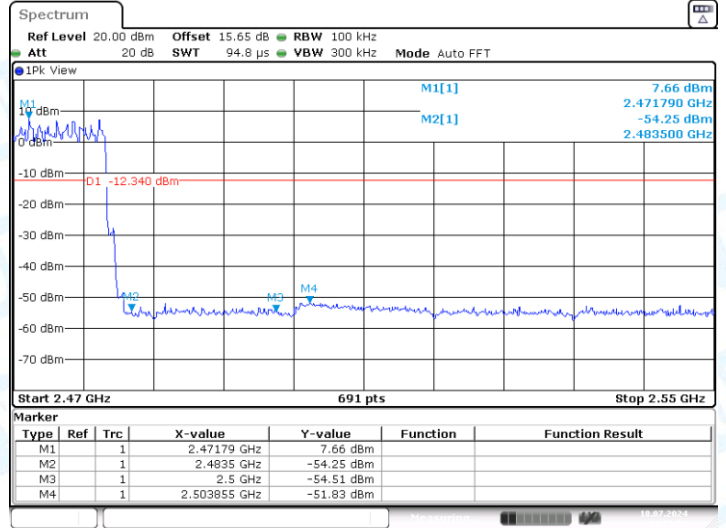
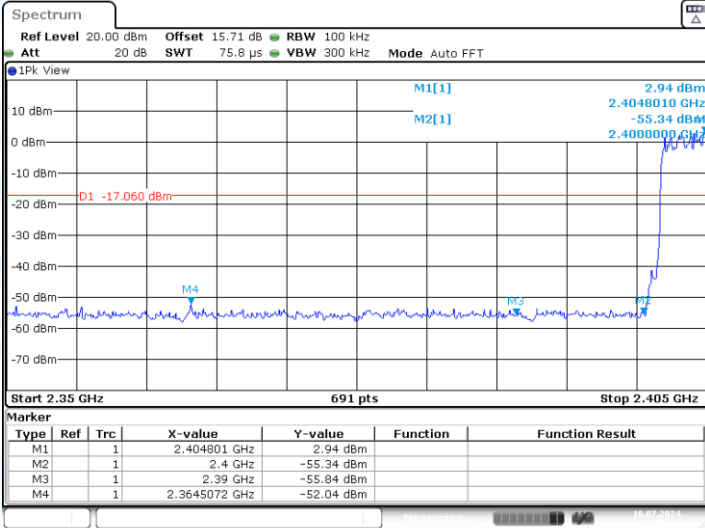
DH5-Ant1-Hop_2402-PASS

DH5-Ant1-Hop_2480-PASS

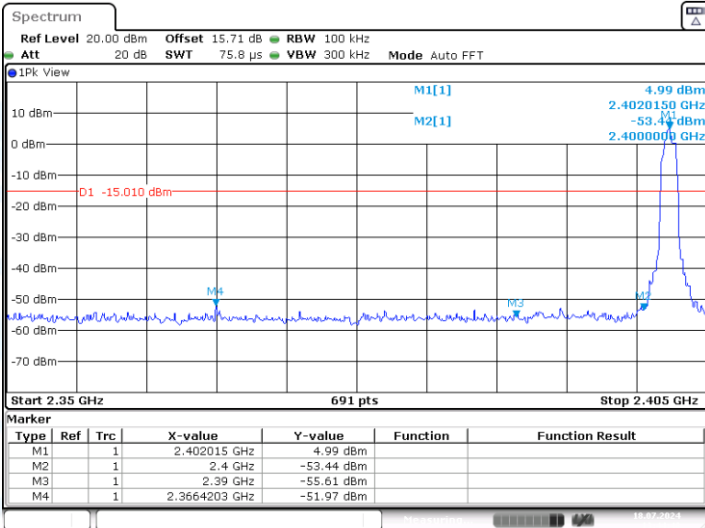


2DH5-Ant1-2402-PASS

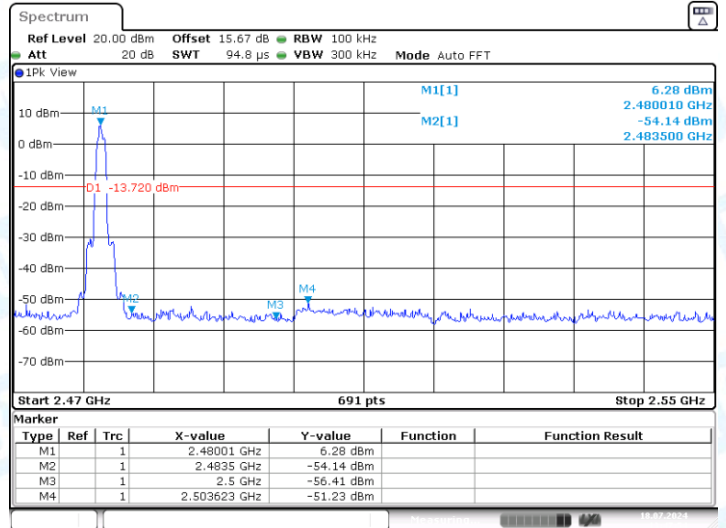
2DH5-Ant1-2480-PASS



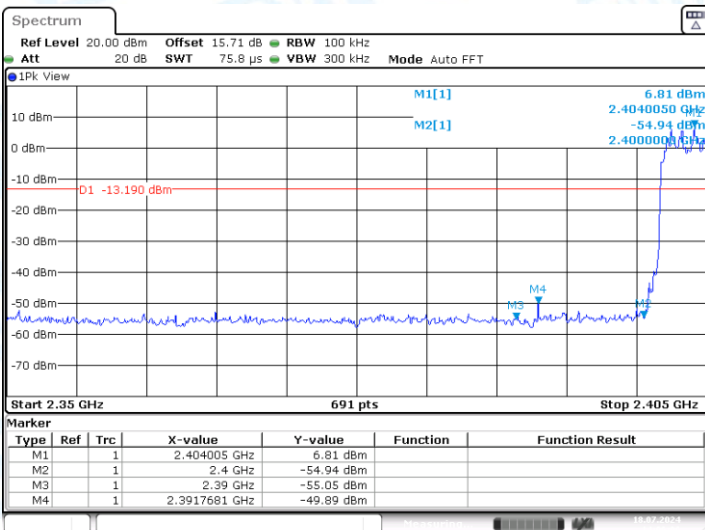
2DH5-Ant1-Hop_2402-PASS



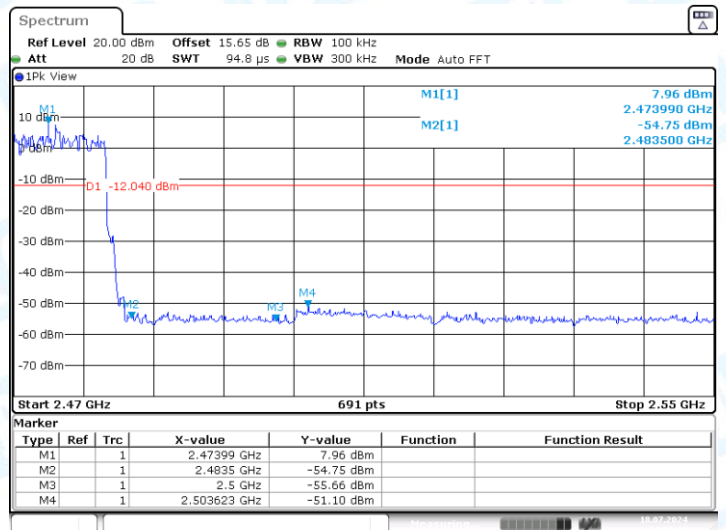
2DH5-Ant1-Hop_2480-PASS



3DH5-Ant1-2402-PASS



3DH5-Ant1-2480-PASS



3DH5-Ant1-Hop_2402-PASS

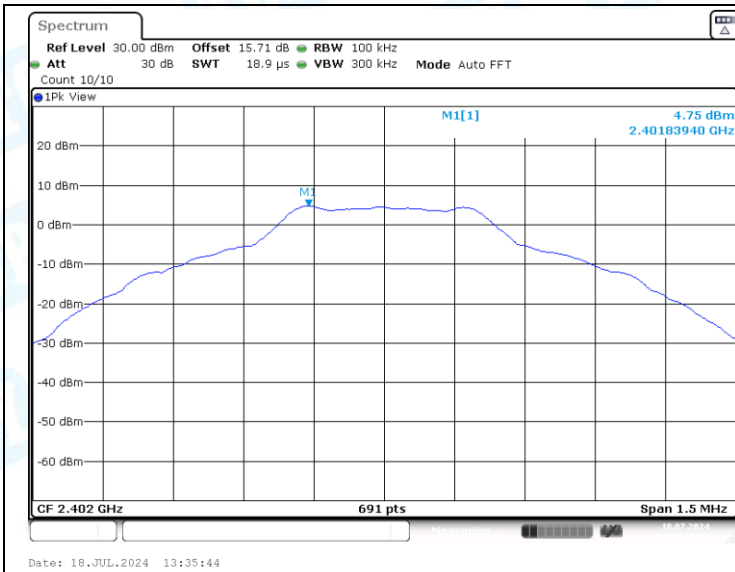
3DH5-Ant1-Hop_2480-PASS

Appendix 8: Conducted Spurious Emission

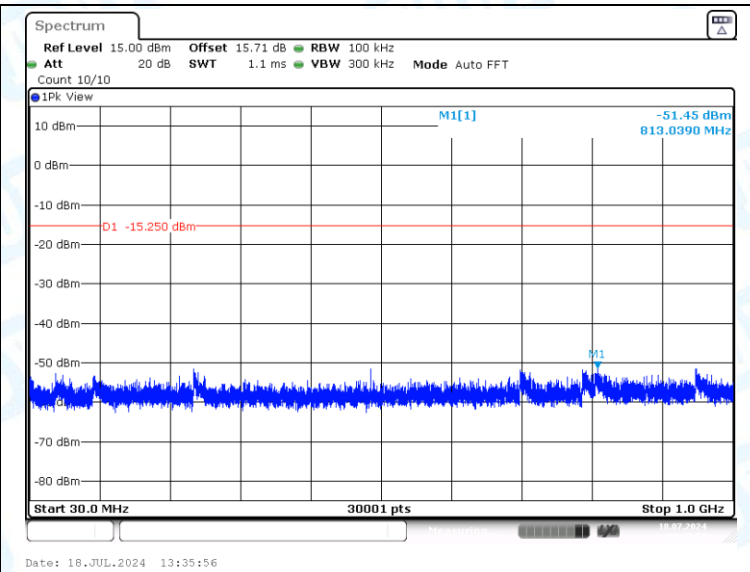
8.1 Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	4.75	4.75	---	PASS
DH5	Ant1	2402	30~1000	4.75	-51.45	≤-15.25	PASS
DH5	Ant1	2402	1000~26500	4.75	-45.07	≤-15.25	PASS
DH5	Ant1	2441	0~Reference	5.39	5.39	---	PASS
DH5	Ant1	2441	30~1000	5.39	-51.06	≤-14.61	PASS
DH5	Ant1	2441	1000~26500	5.39	-45.68	≤-14.61	PASS
DH5	Ant1	2480	0~Reference	5.51	5.51	---	PASS
DH5	Ant1	2480	30~1000	5.51	-50.77	≤-14.49	PASS
DH5	Ant1	2480	1000~26500	5.51	-44.24	≤-14.49	PASS
2DH5	Ant1	2402	0~Reference	4.73	4.73	---	PASS
2DH5	Ant1	2402	30~1000	4.73	-50.55	≤-15.27	PASS
2DH5	Ant1	2402	1000~26500	4.73	-45.61	≤-15.27	PASS
2DH5	Ant1	2441	0~Reference	6.06	6.06	---	PASS
2DH5	Ant1	2441	30~1000	6.06	-49.71	≤-13.94	PASS
2DH5	Ant1	2441	1000~26500	6.06	-45.63	≤-13.94	PASS
2DH5	Ant1	2480	0~Reference	6.16	6.16	---	PASS
2DH5	Ant1	2480	30~1000	6.16	-50.45	≤-13.84	PASS
2DH5	Ant1	2480	1000~26500	6.16	-45.05	≤-13.84	PASS
3DH5	Ant1	2402	0~Reference	4.97	4.97	---	PASS
3DH5	Ant1	2402	30~1000	4.97	-50.95	≤-15.03	PASS
3DH5	Ant1	2402	1000~26500	4.97	-45.63	≤-15.03	PASS
3DH5	Ant1	2441	0~Reference	6.07	6.07	---	PASS
3DH5	Ant1	2441	30~1000	6.07	-49.94	≤-13.93	PASS
3DH5	Ant1	2441	1000~26500	6.07	-45.87	≤-13.93	PASS
3DH5	Ant1	2480	0~Reference	6.20	6.20	---	PASS
3DH5	Ant1	2480	30~1000	6.20	-51	≤-13.8	PASS
3DH5	Ant1	2480	1000~26500	6.20	-45.7	≤-13.8	PASS

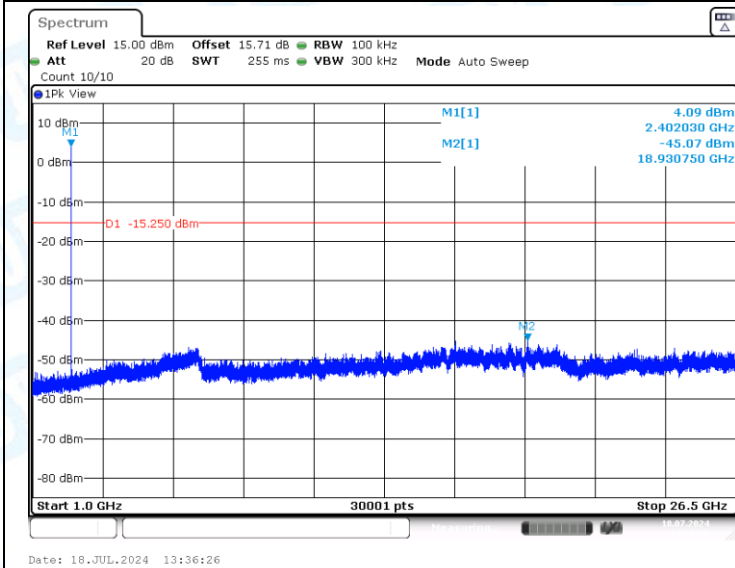
8.2 Test Graphs



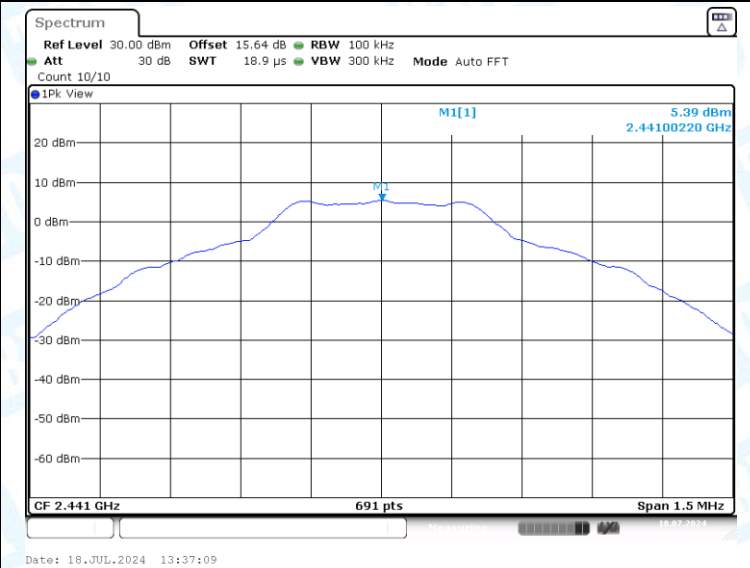
DH5-Ant1-2402-0~Reference-PASS



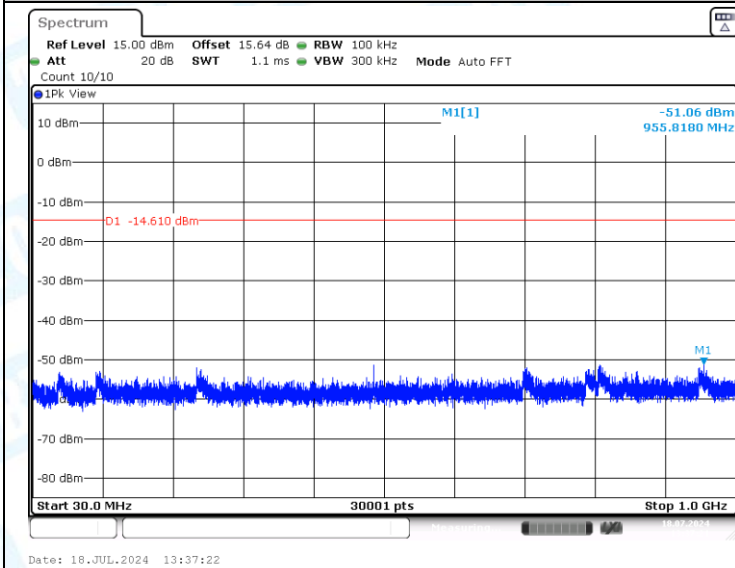
DH5-Ant1-2402-30~1000-PASS



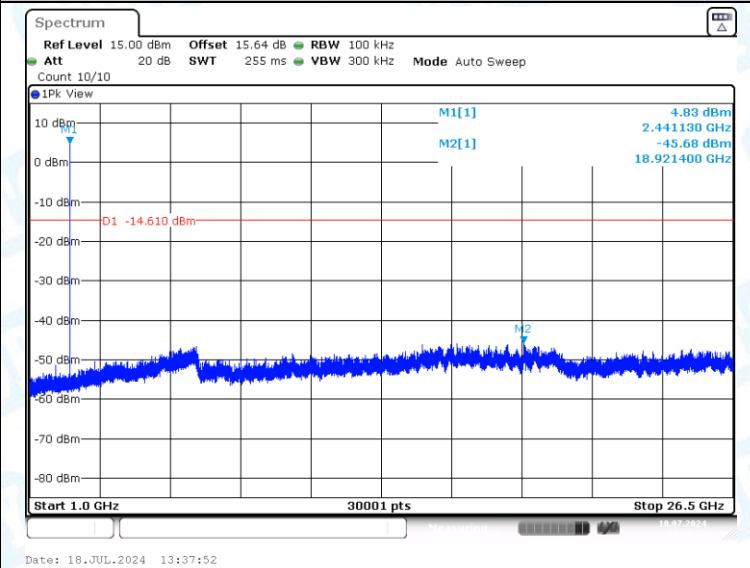
DH5-Ant1-2402-1000~26500-PASS



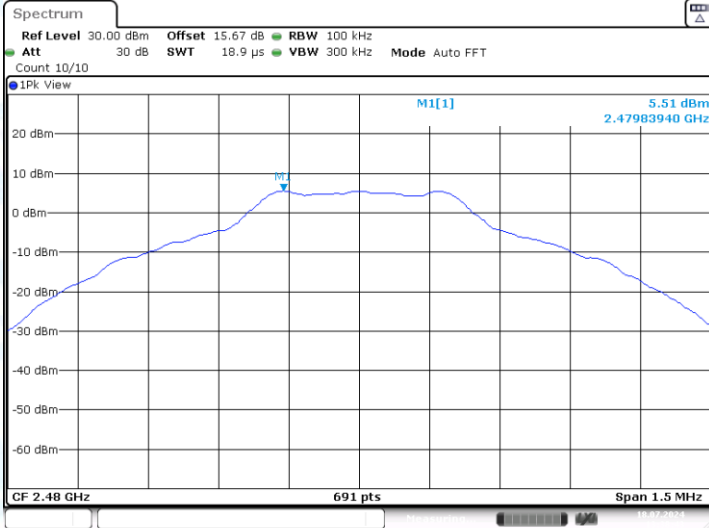
DH5-Ant1-2441-0~Reference-PASS



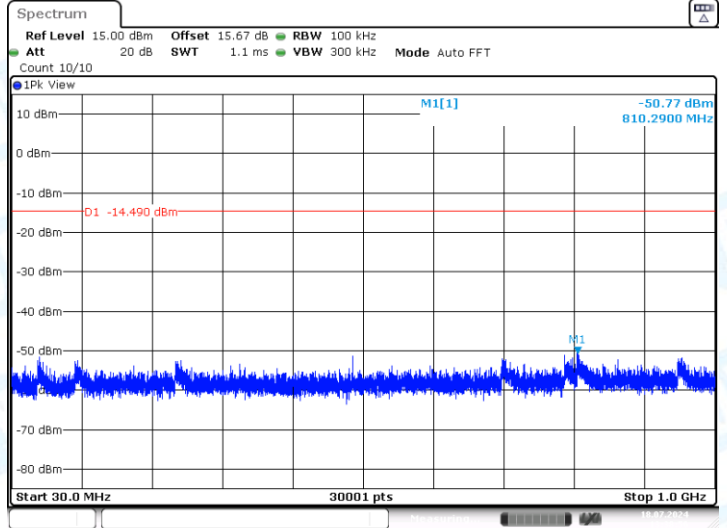
DH5-Ant1-2441-30~1000-PASS



DH5-Ant1-2441-1000~26500-PASS

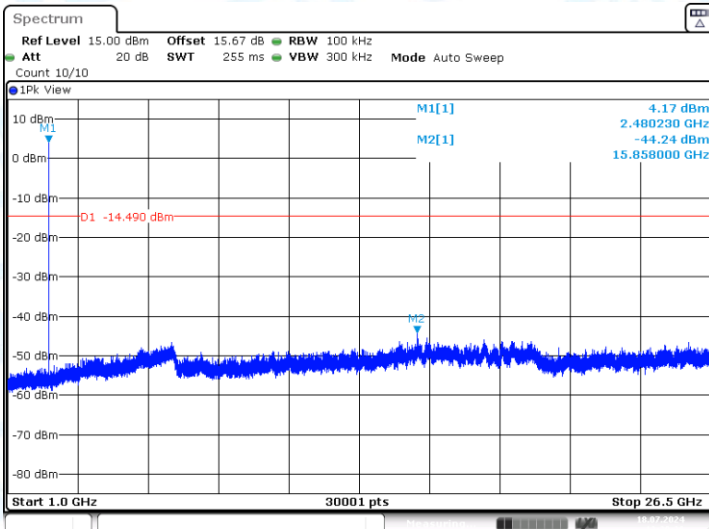


Date: 18.JUL.2024 13:38:44



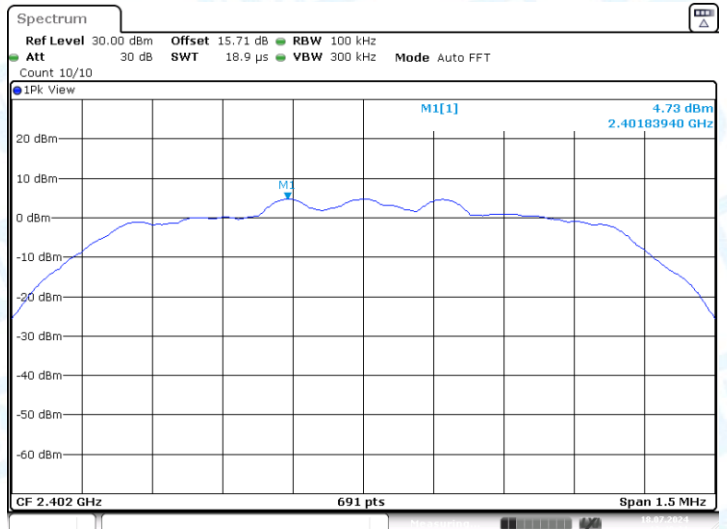
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DH5-Ant1-2480-0~Reference-PASS



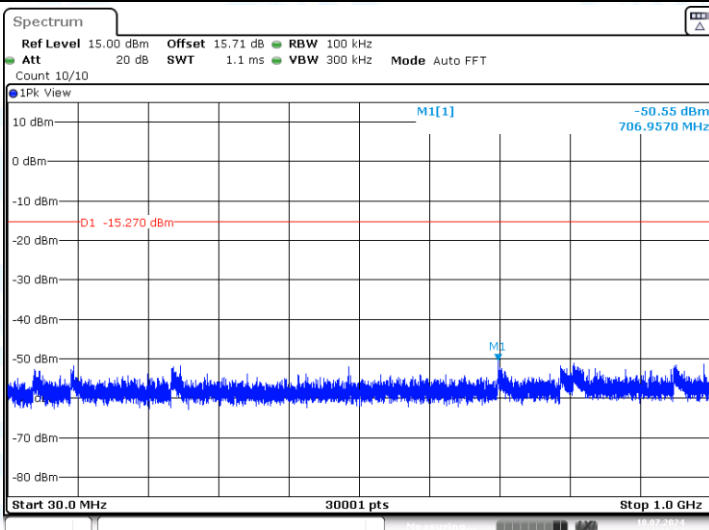
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DH5-Ant1-2480-30~1000-PASS



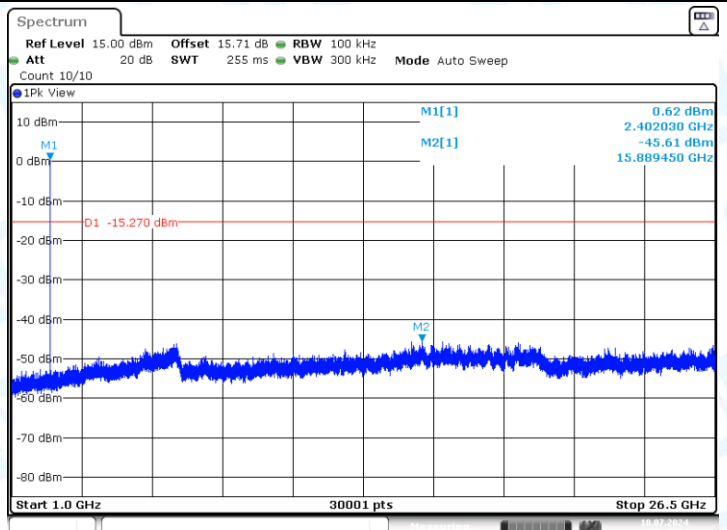
Date: 18.JUL.2024 13:40:21

DH5-Ant1-2480-1000~26500-PASS



Date: 18.JUL.2024 13:40:34

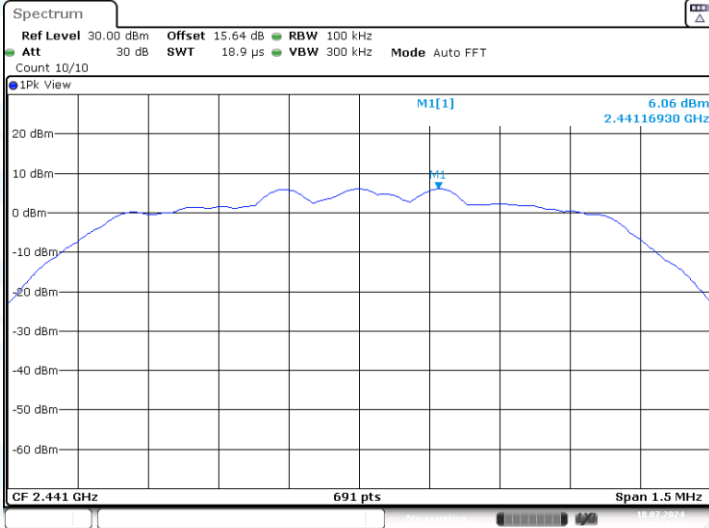
2DH5-Ant1-2402-0~Reference-PASS



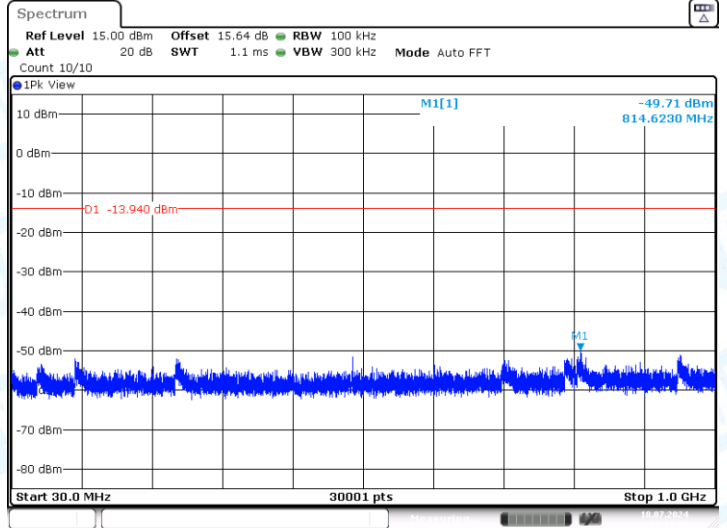
Date: 18.JUL.2024 13:41:04

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

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

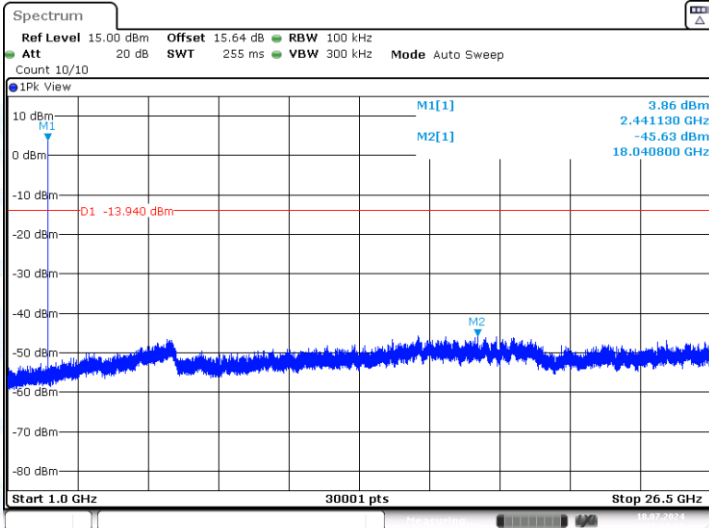


Date: 18.JUL.2024 13:41:46



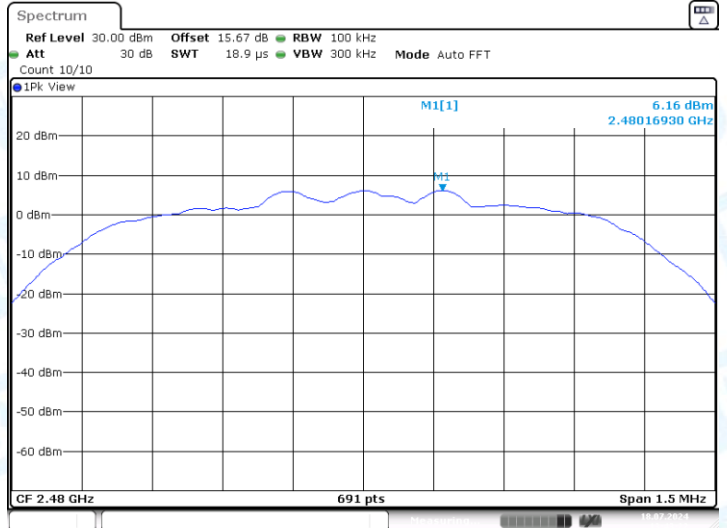
Date: 18.JUL.2024 13:41:59

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



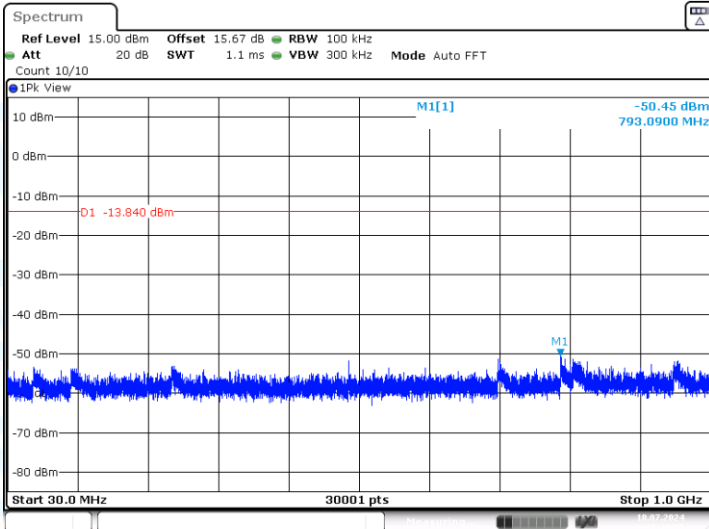
Date: 18.JUL.2024 13:42:29

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



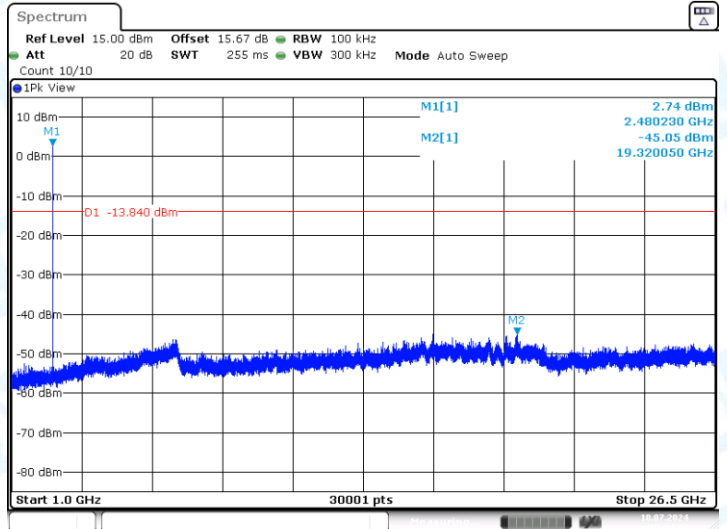
Date: 18.JUL.2024 13:43:22

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



Date: 18.JUL.2024 13:43:35

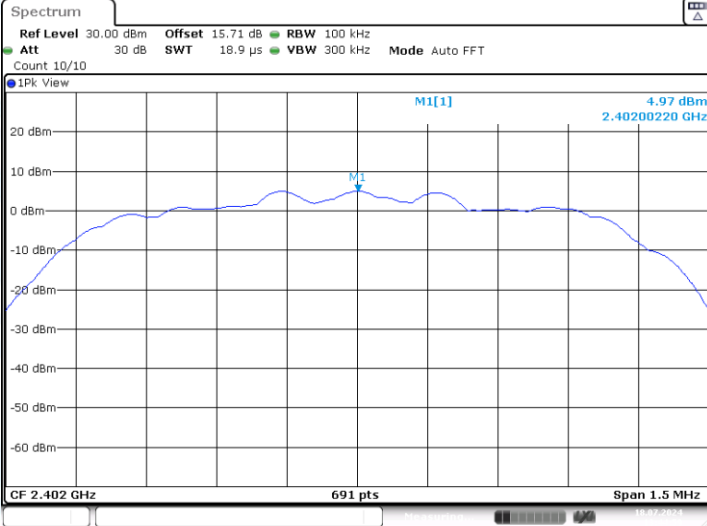
2DH5-Ant1-2480-0~Reference-PASS



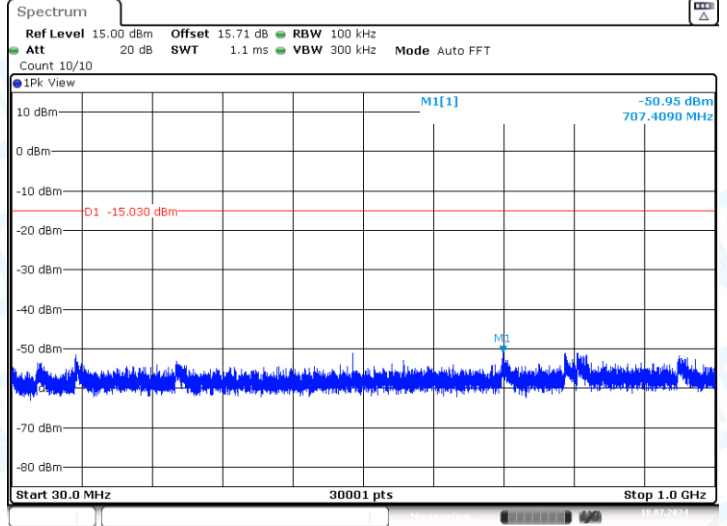
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2DH5-Ant1-2480-30~1000-PASS

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

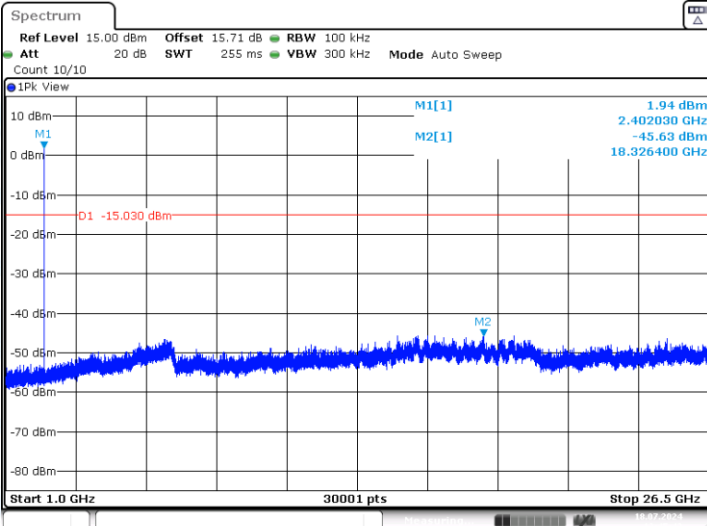


Date: 18.JUL.2024 13:44:58



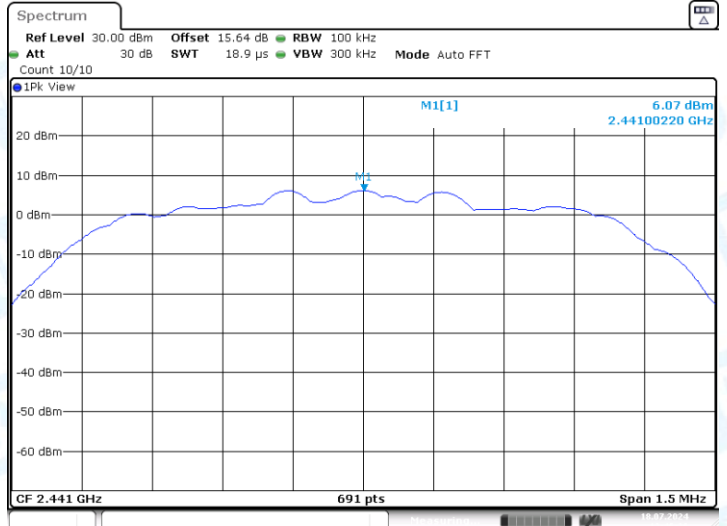
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3DH5-Ant1-2402-0~Reference-PASS



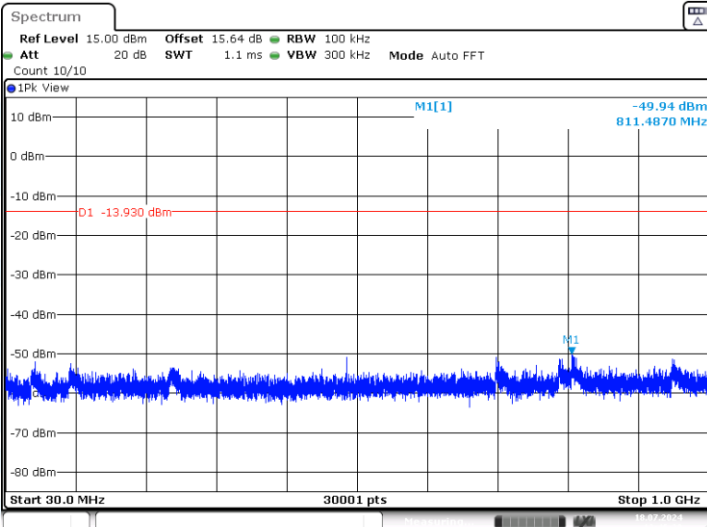
Date: 18.JUL.2024 13:45:42

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



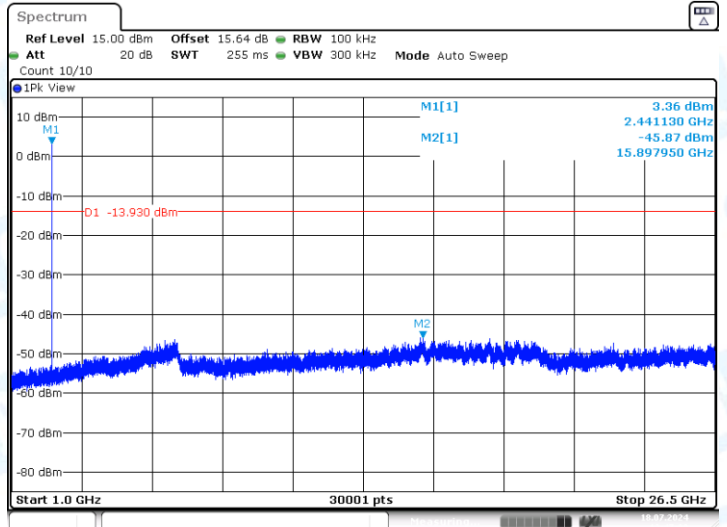
Date: 18.JUL.2024 13:46:25

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



Date: 18.JUL.2024 13:46:38

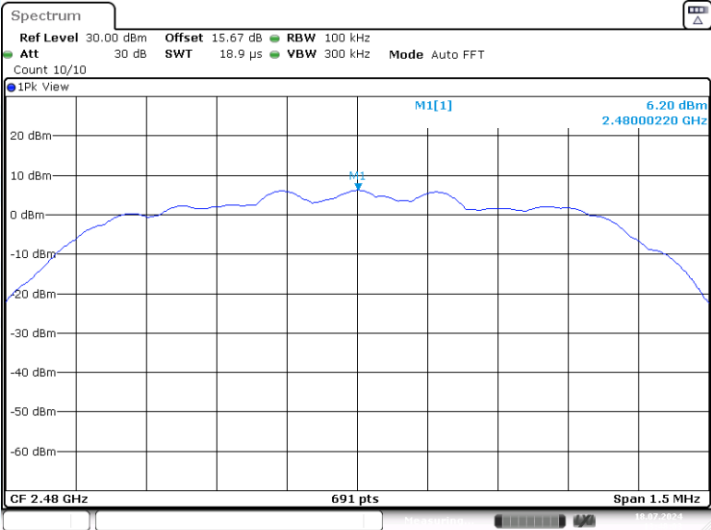
3DH5-Ant1-2441-0~Reference-PASS



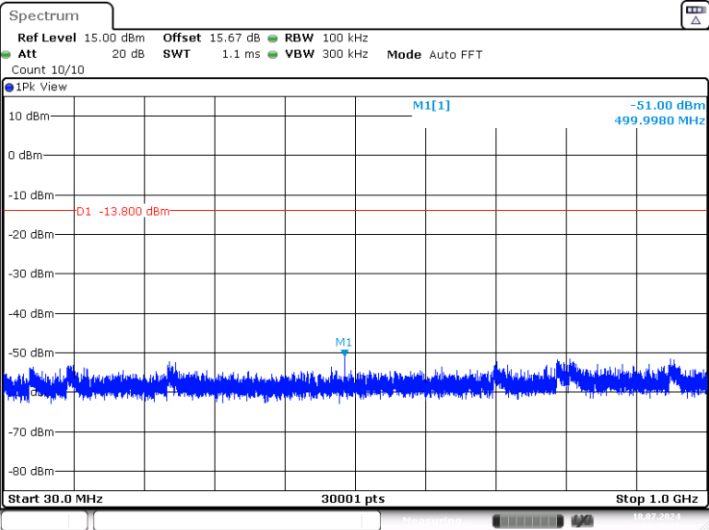
Date: 18.JUL.2024 13:47:08

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

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

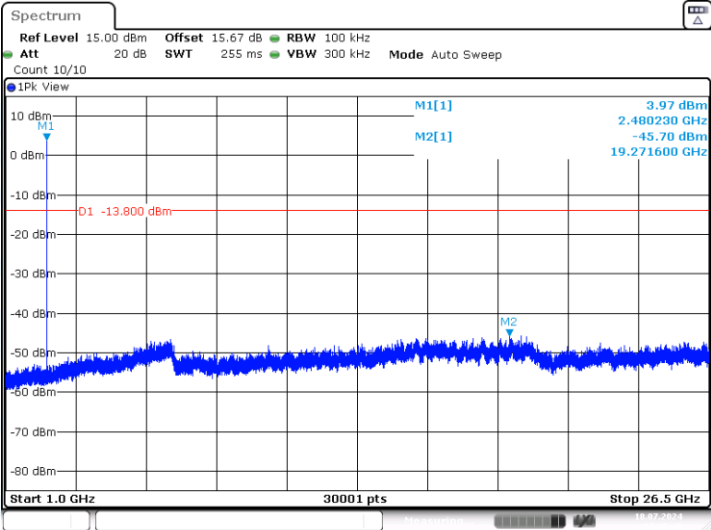


Date: 18.JUL.2024 13:48:04



Date: 18.JUL.2024 13:48:17

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



Date: 18.JUL.2024 13:48:47

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

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

Appendix 9: Duty Cycle

9.1 Test Result

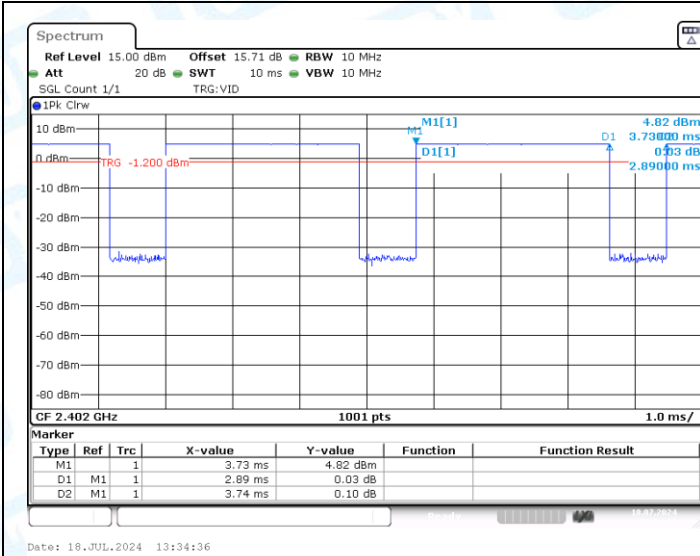
TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factory	1/T [kHz]
DH5	Ant1	2402	2.89	3.74	77.27	1.12	0.35
DH5	Ant1	2441	2.88	3.73	77.21	1.12	0.35
DH5	Ant1	2480	2.88	3.73	77.21	1.12	0.35
2DH5	Ant1	2402	2.89	3.74	77.27	1.12	0.35
2DH5	Ant1	2441	2.89	3.74	77.27	1.12	0.35
2DH5	Ant1	2480	2.89	3.73	77.48	1.11	0.35
3DH5	Ant1	2402	2.89	3.74	77.27	1.12	0.35
3DH5	Ant1	2441	2.90	3.74	77.54	1.10	0.34
3DH5	Ant1	2480	2.89	3.74	77.27	1.12	0.35

Note: 1, Duty Cycle= Transmission Duration/ Transmission Period

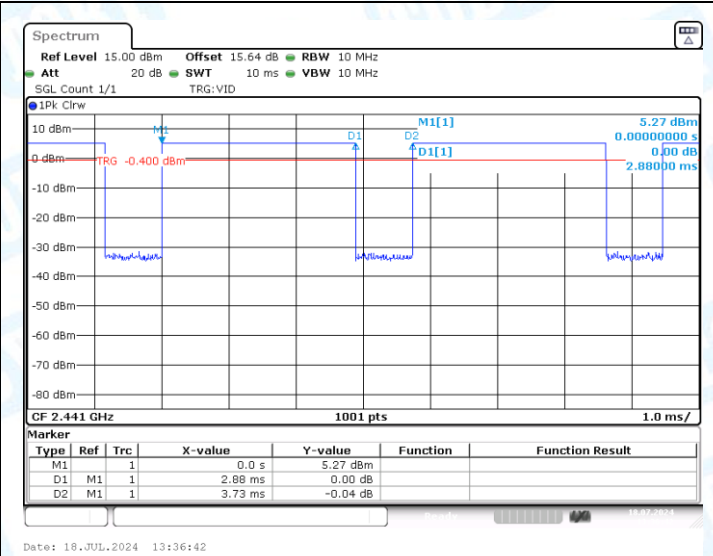
2, DC Factory=10*10LOG(1/Duty Cycle)

3, 1/T=1/ Transmission Duration

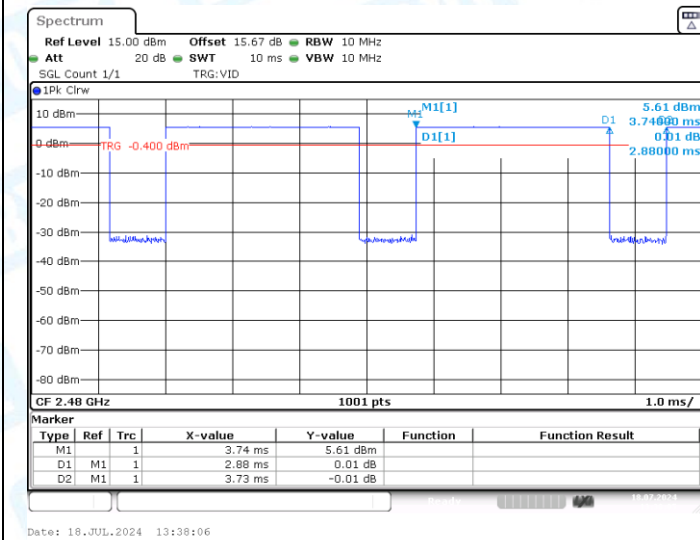
9.2 Test Graphs



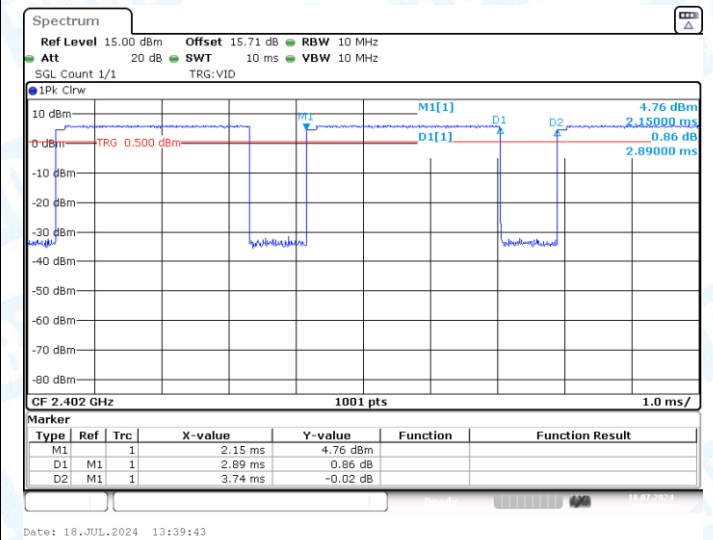
NTNV-DH5-Ant1-2402



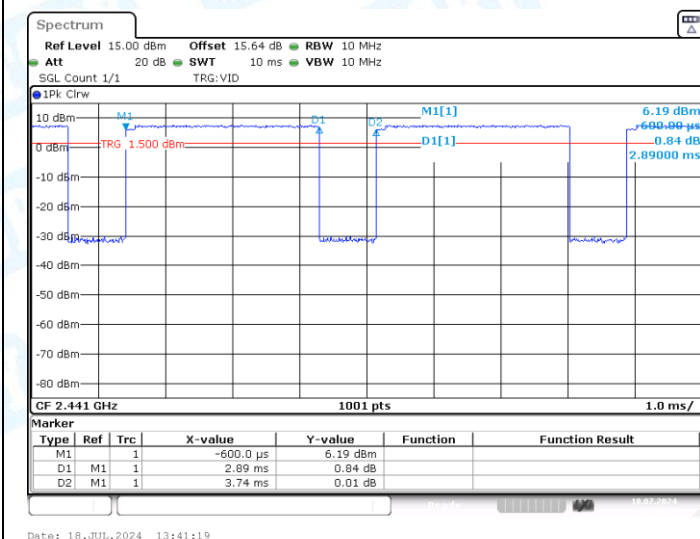
NTNV-DH5-Ant1-2441



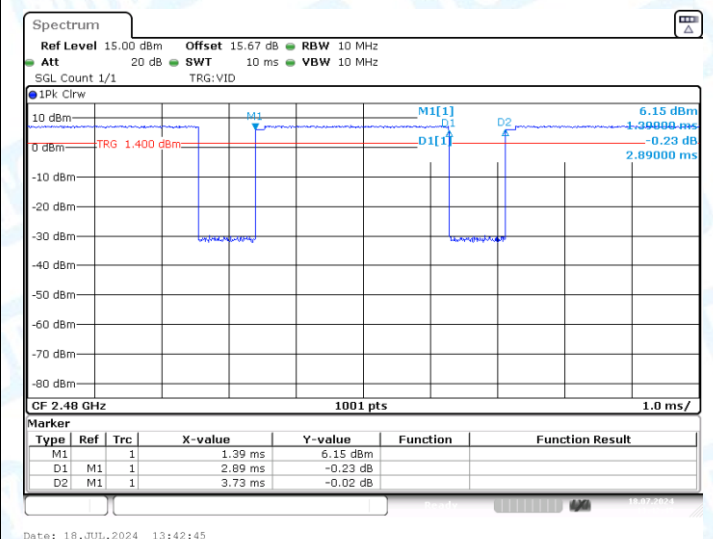
NTNV-DH5-Ant1-2480



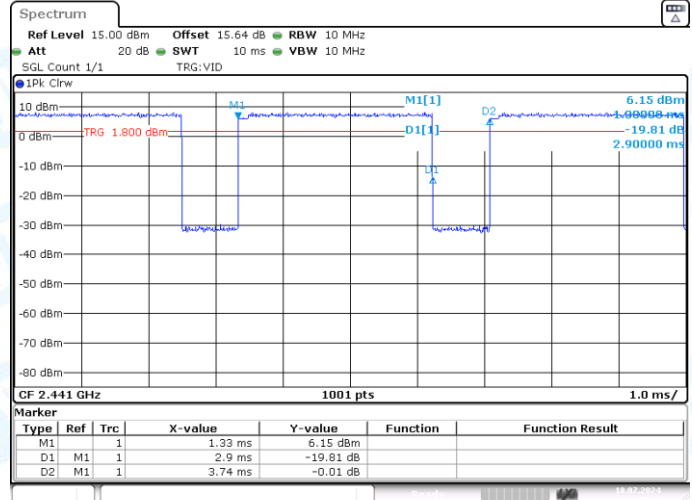
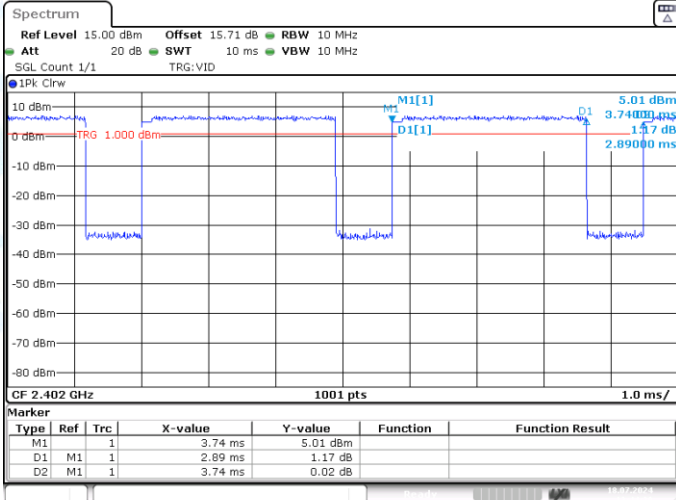
NTNV-2DH5-Ant1-2402



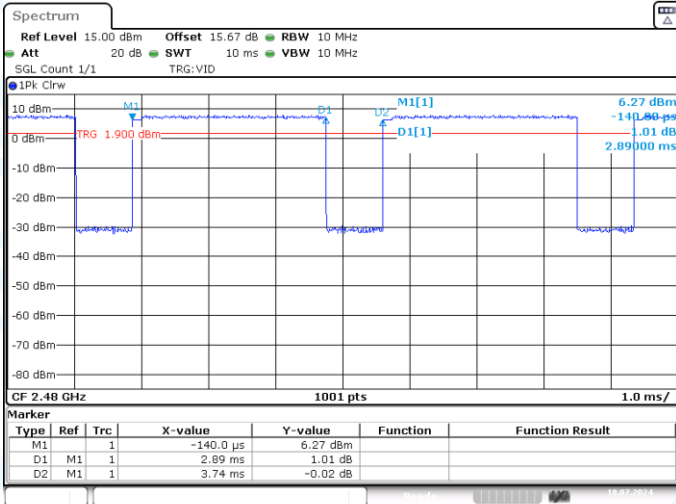
NTNV-2DH5-Ant1-2441



NTNV-2DH5-Ant1-2480



NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2480

NTNV-3DH5-Ant1-2441

-----END OF THE REPORT-----