

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

General Description of EUT	
Product Name:	Bluetooth Adapter
Test Model:	M6
Sample ID:	202202-0190_02-02
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Huangjianping
Note: For a more detailed features description, please refer to the report TBR-C-202202-0190-1	

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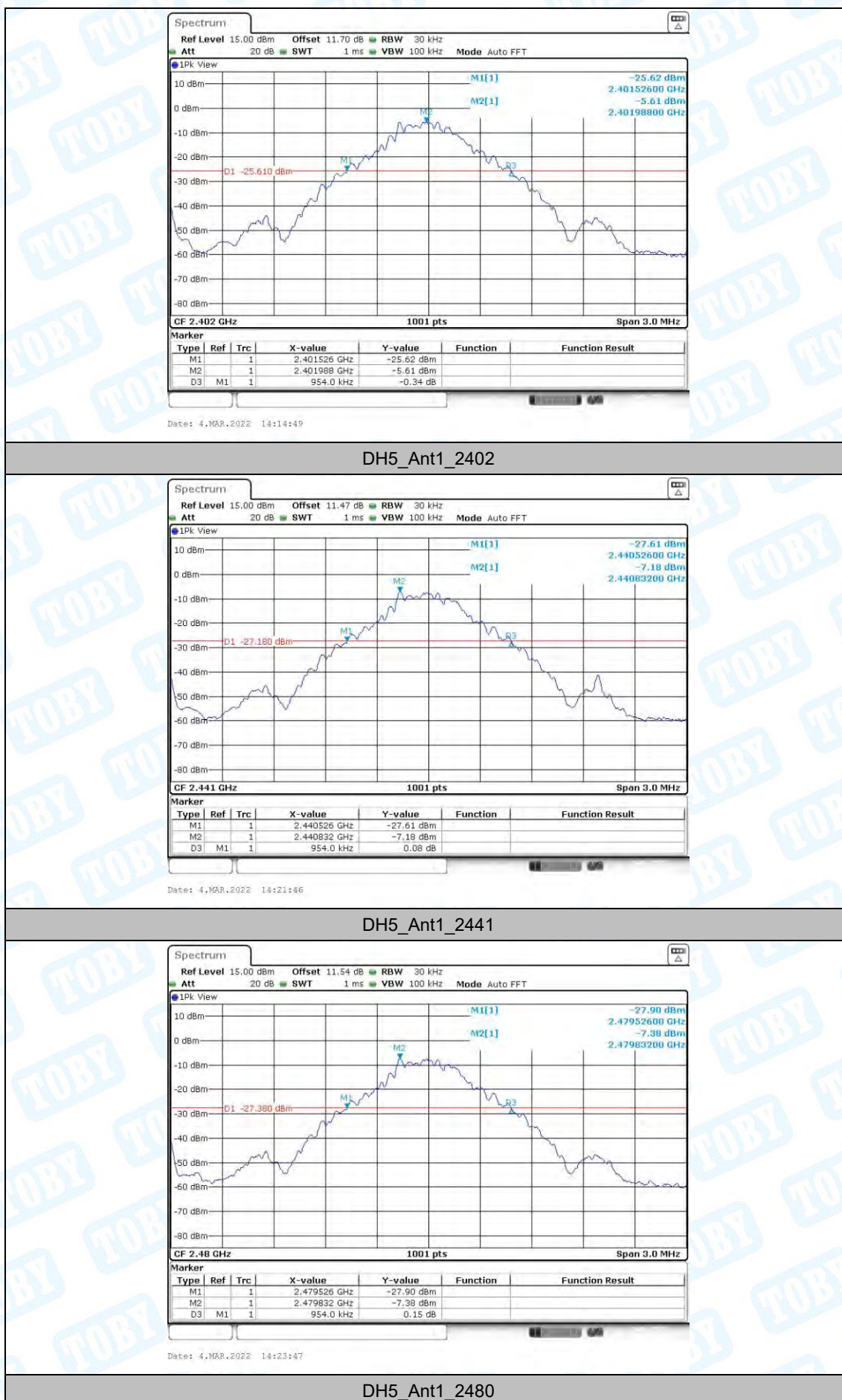
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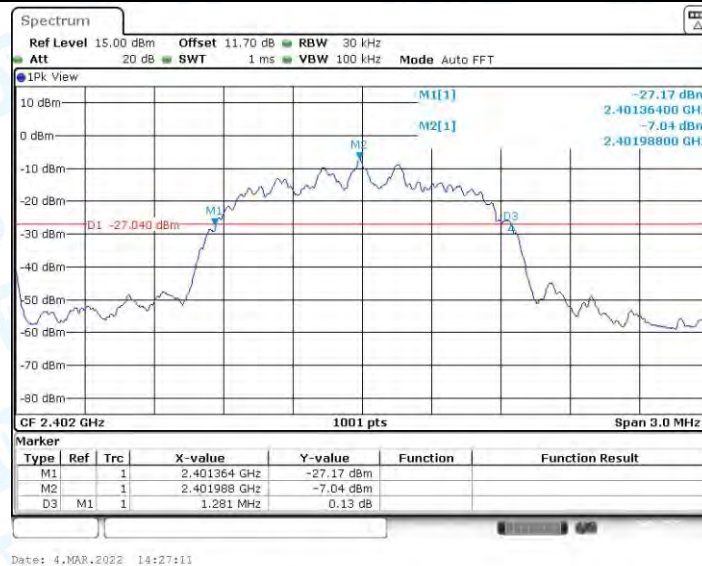
1. 20dB Emission Bandwidth

1.1. Test Result

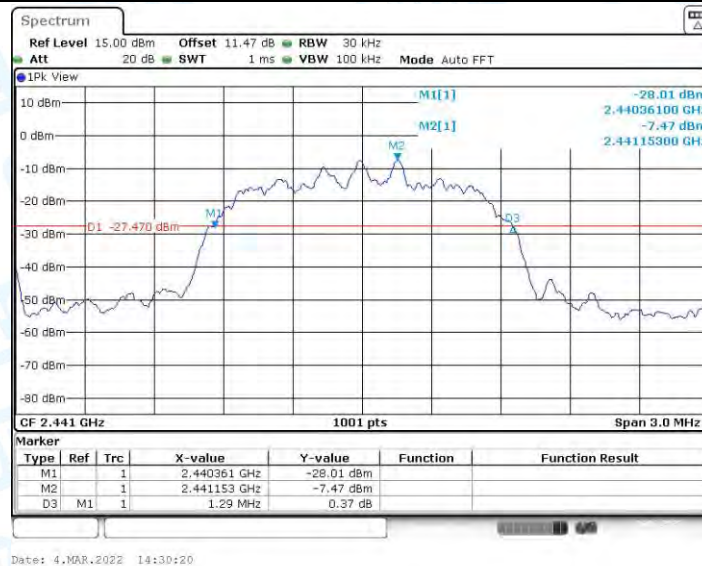
TestMode	Antenna	Channel	20db EBW[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.95	---	---
		2441	0.95	---	---
		2480	0.95	---	---
2DH5	Ant1	2402	1.28	---	---
		2441	1.29	---	---
		2480	1.29	---	---
3DH5	Ant1	2402	1.26	---	---
		2441	1.30	---	---
		2480	1.30	---	---

1.2. Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



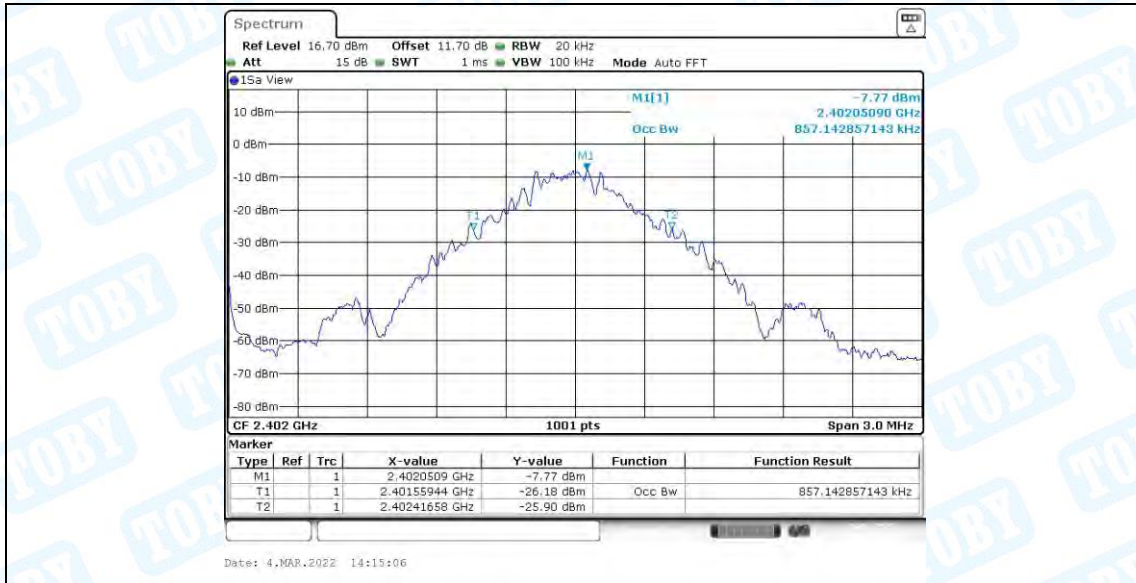
3DH5_Ant1_2480

2. Occupied Channel Bandwidth

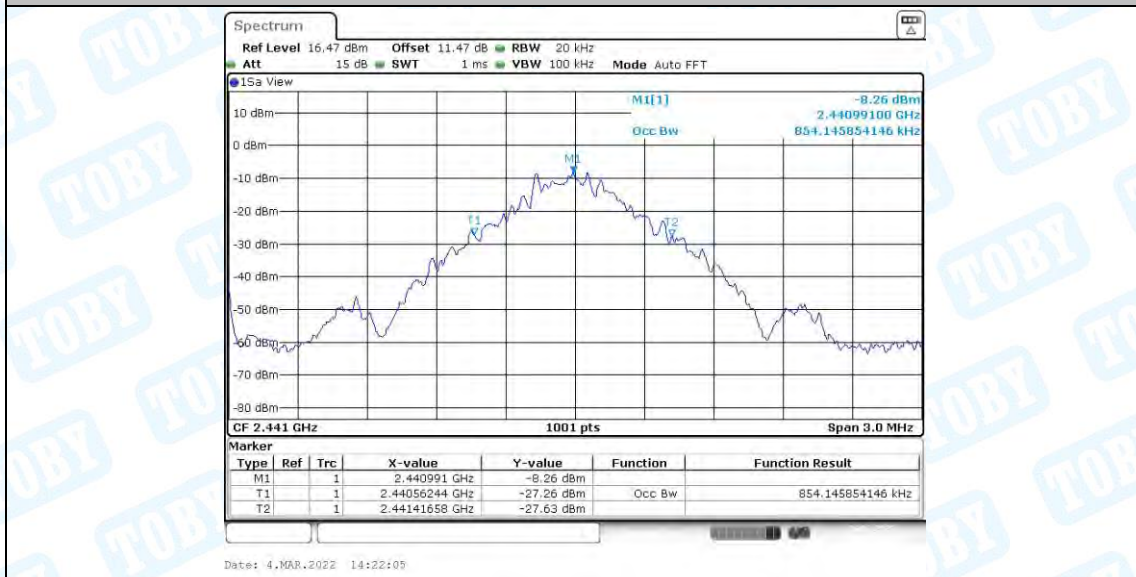
2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.857	2401.559	2402.417	---	---
		2441	0.854	2440.562	2441.417	---	---
		2480	0.854	2479.562	2480.417	---	---
2DH5	Ant1	2402	1.169	2401.407	2402.575	---	---
		2441	1.169	2440.407	2441.575	---	---
		2480	1.172	2479.407	2480.578	---	---
3DH5	Ant1	2402	1.181	2401.398	2402.578	---	---
		2441	1.184	2440.398	2441.581	---	---
		2480	1.178	2479.401	2480.578	---	---

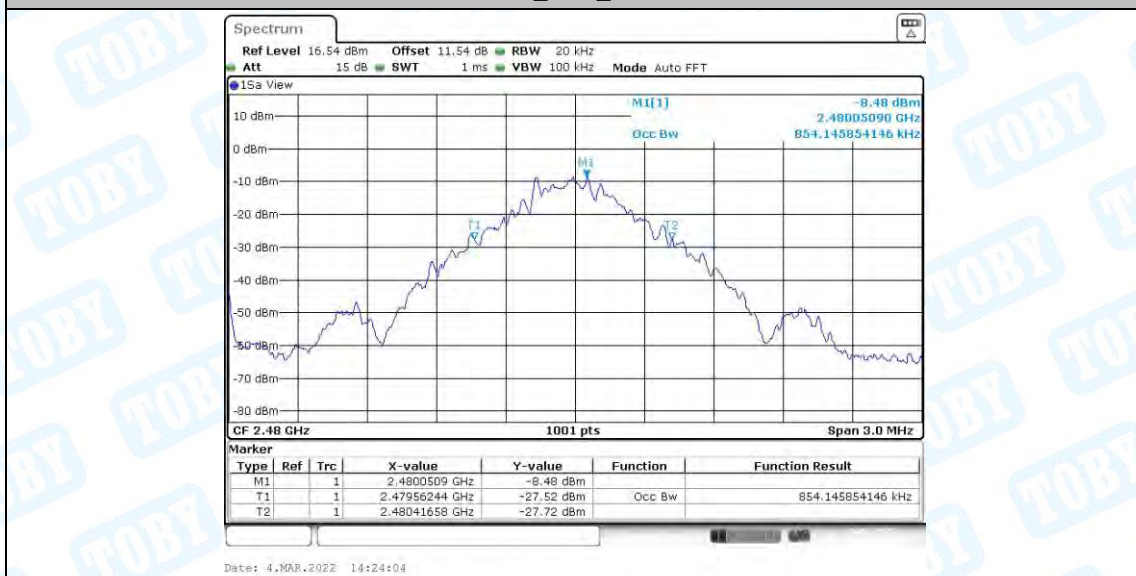
2.2. Test Graphs



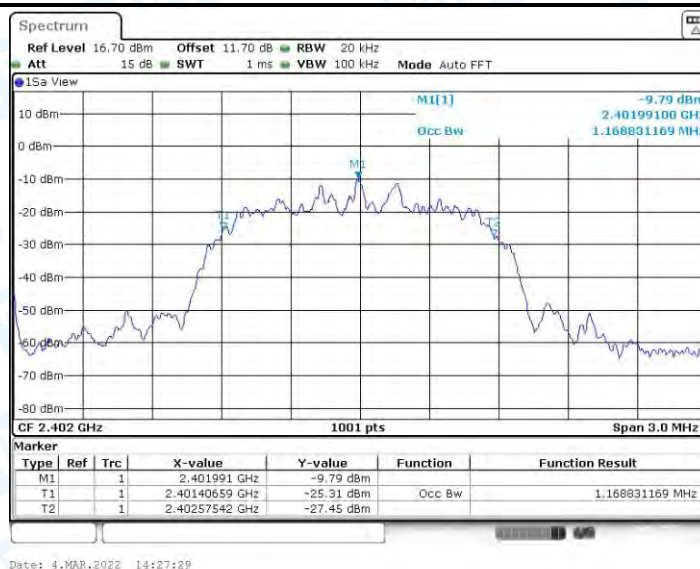
DH5_Ant1_2402



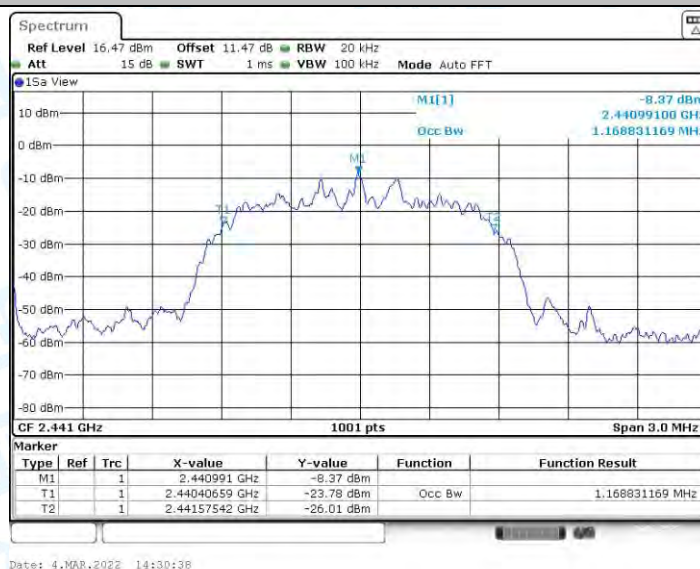
DH5_Ant1_2441



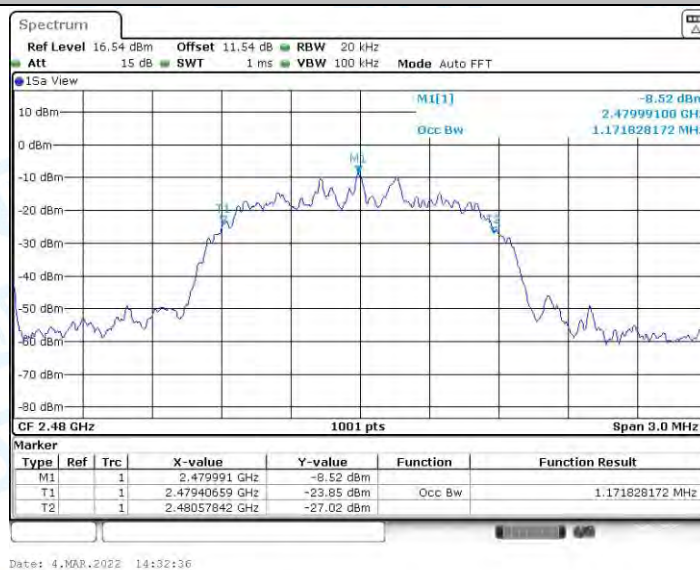
DH5_Ant1_2480



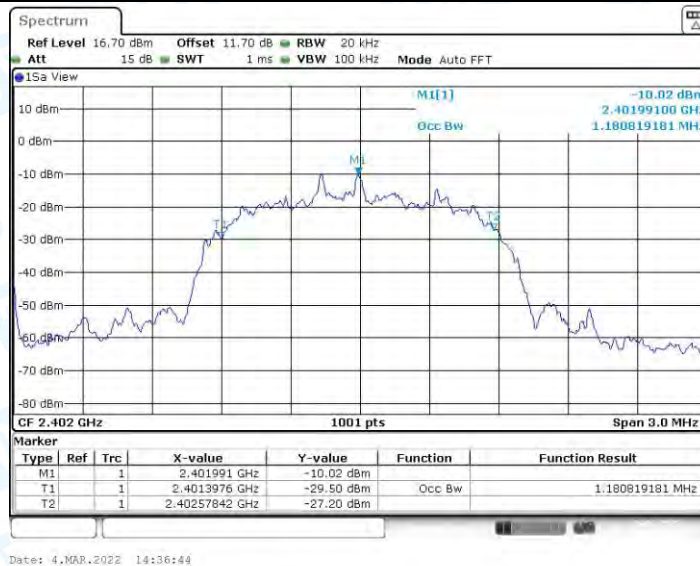
2DH5_Ant1_2402



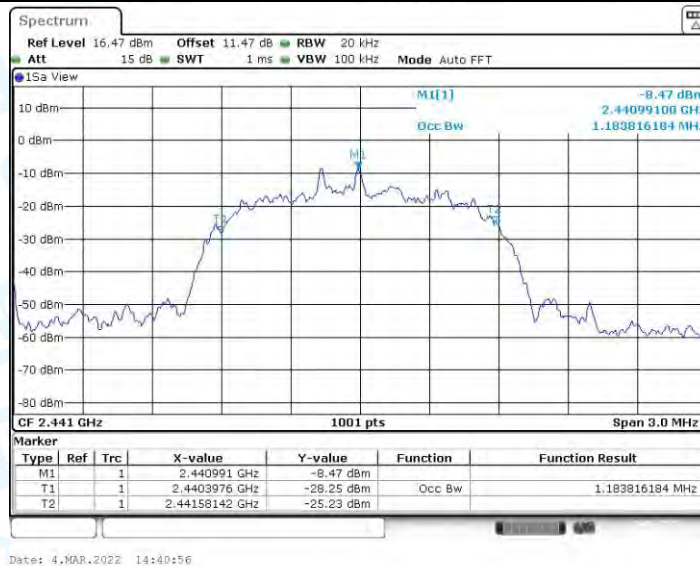
2DH5_Ant1_2441



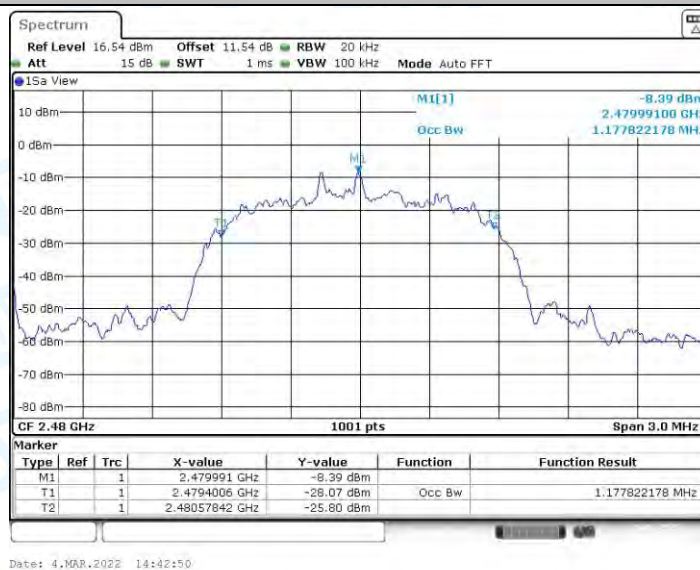
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



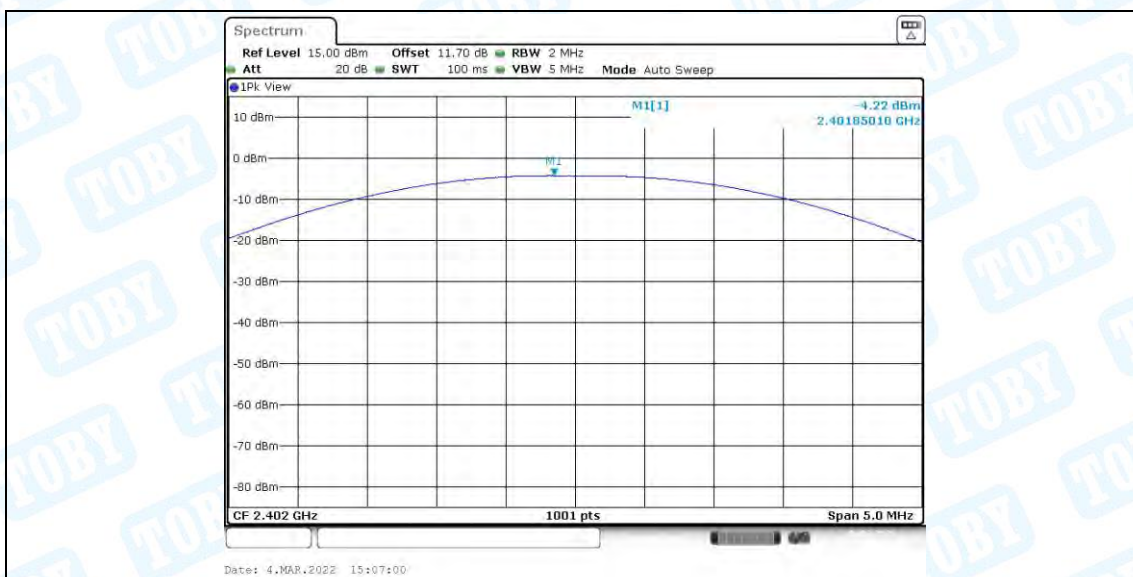
3DH5_Ant1_2480

3. Maximum conducted output power

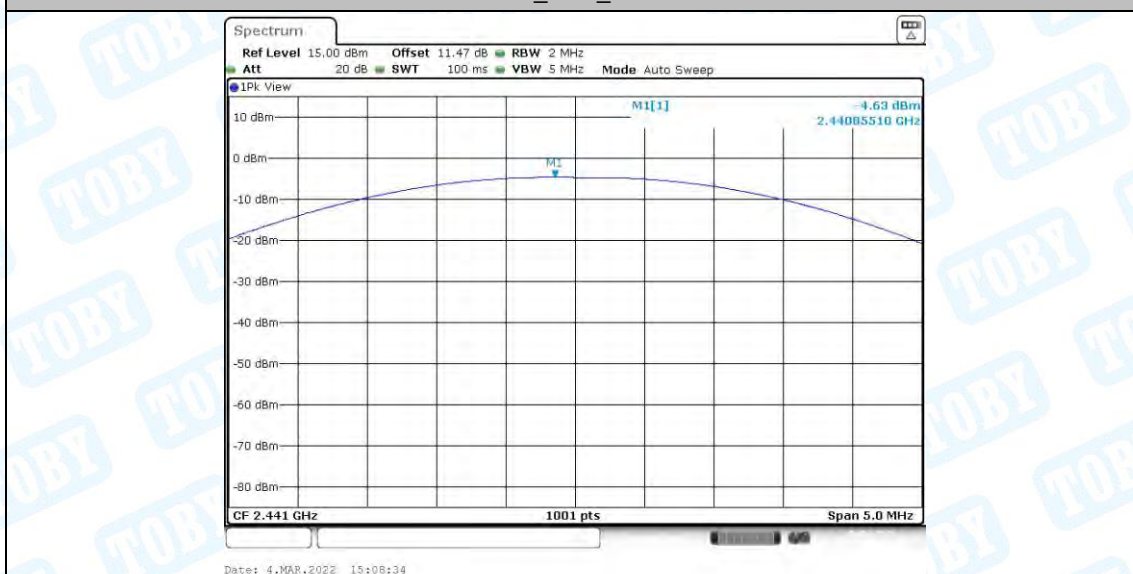
3.1. Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-4.22	≤20.97	PASS
		2441	-4.63	≤20.97	PASS
		2480	-4.66	≤20.97	PASS
2DH5	Ant1	2402	-3.48	≤20.97	PASS
		2441	-3.4	≤20.97	PASS
		2480	-3.86	≤20.97	PASS
3DH5	Ant1	2402	-3.07	≤20.97	PASS
		2441	-3.46	≤20.97	PASS
		2480	-3.48	≤20.97	PASS

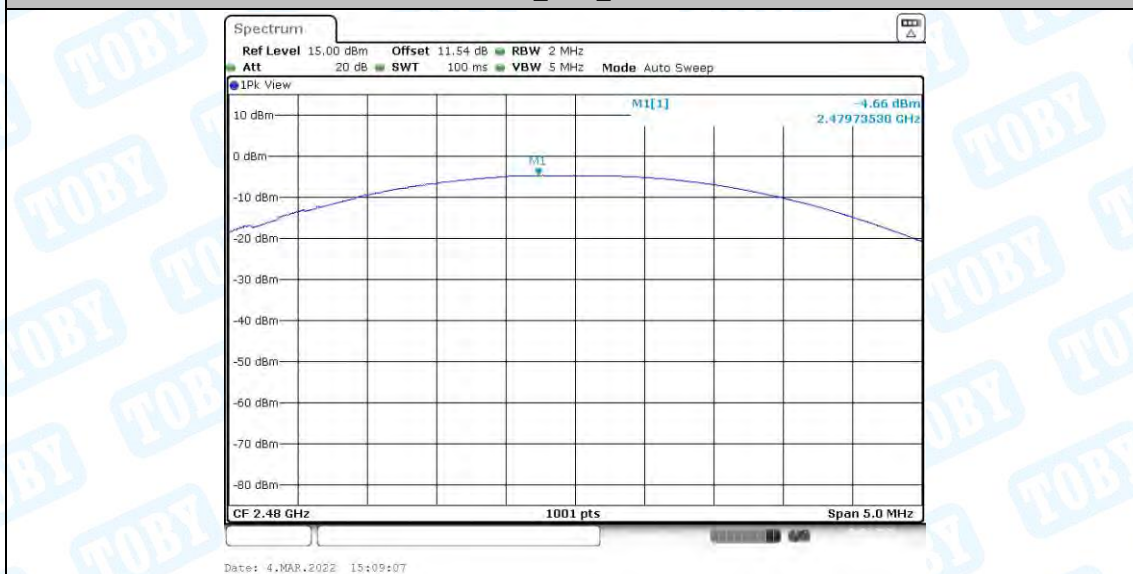
3.2. Test Graphs



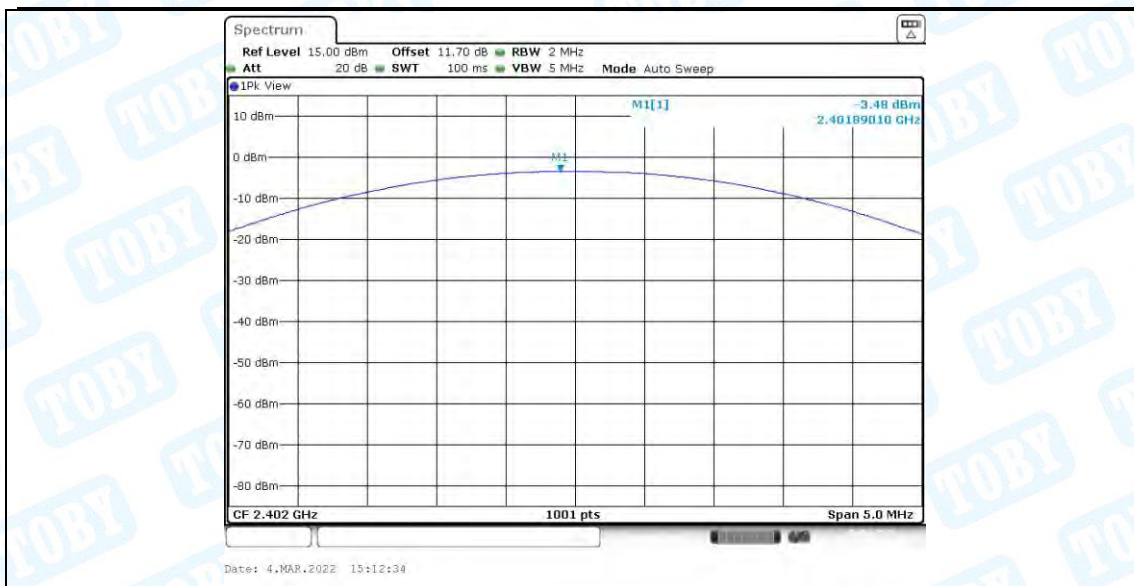
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



2DH5_Ant1_2402



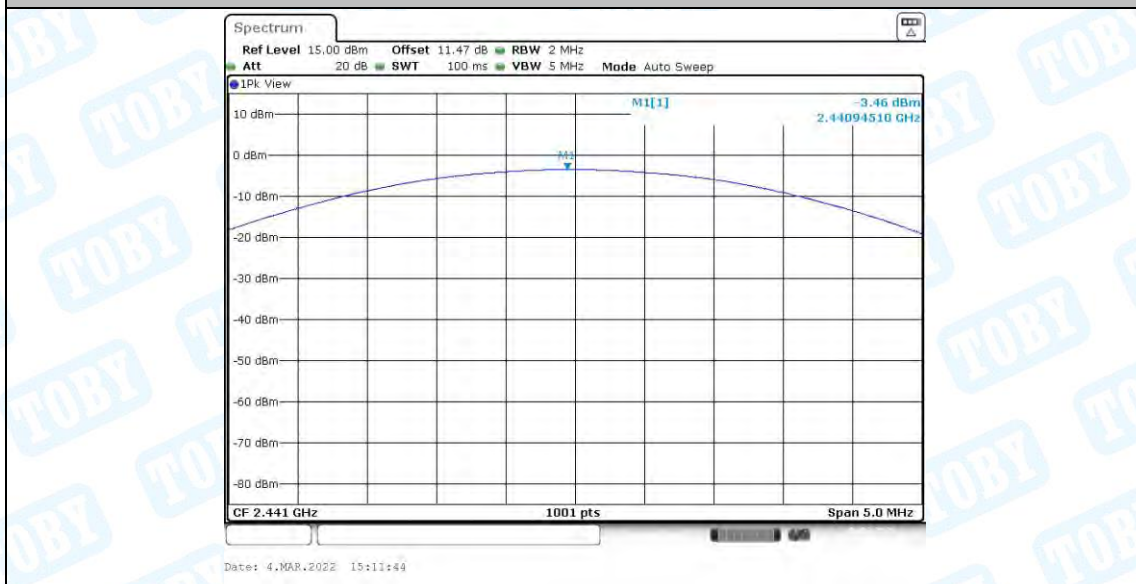
2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



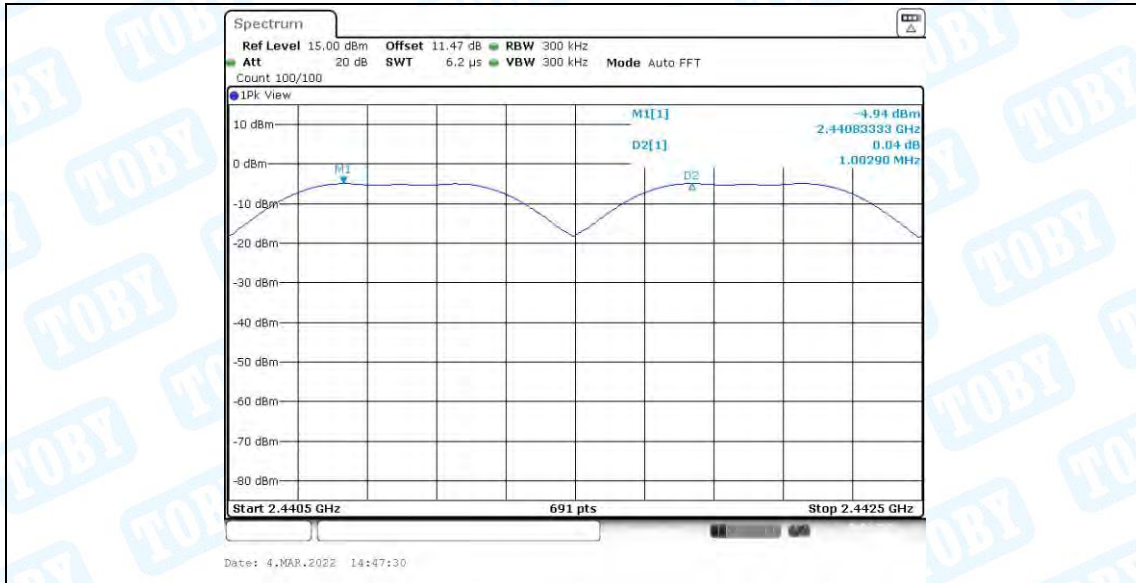
3DH5_Ant1_2480

4. Carrier frequency separation

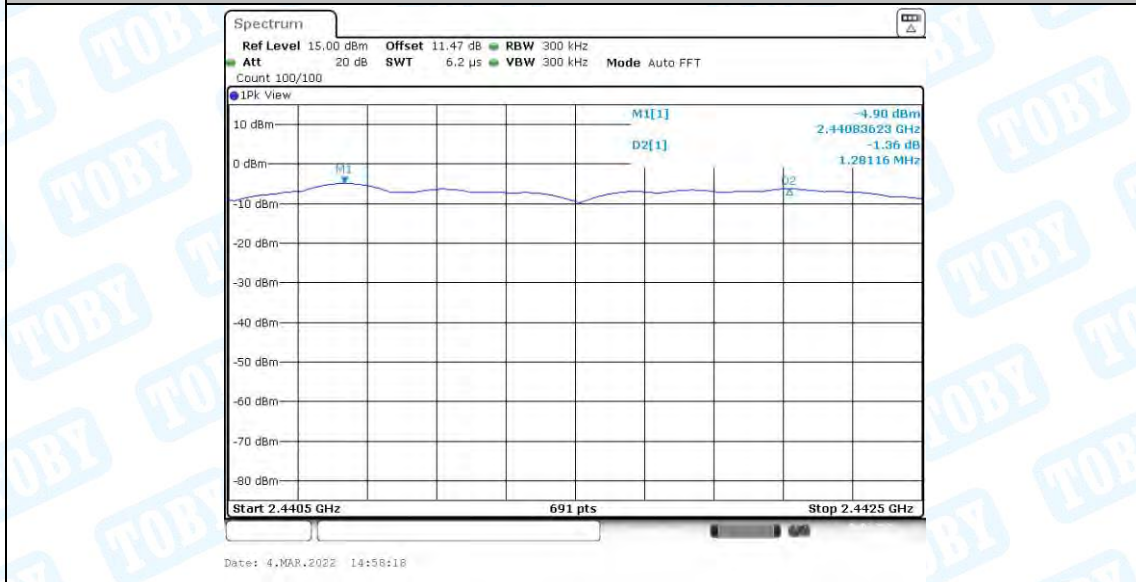
4.1. Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.003	≥ 0.950	PASS
2DH5	Ant1	Hop	1.281	≥ 0.860	PASS
3DH5	Ant1	Hop	0.997	≥ 0.867	PASS

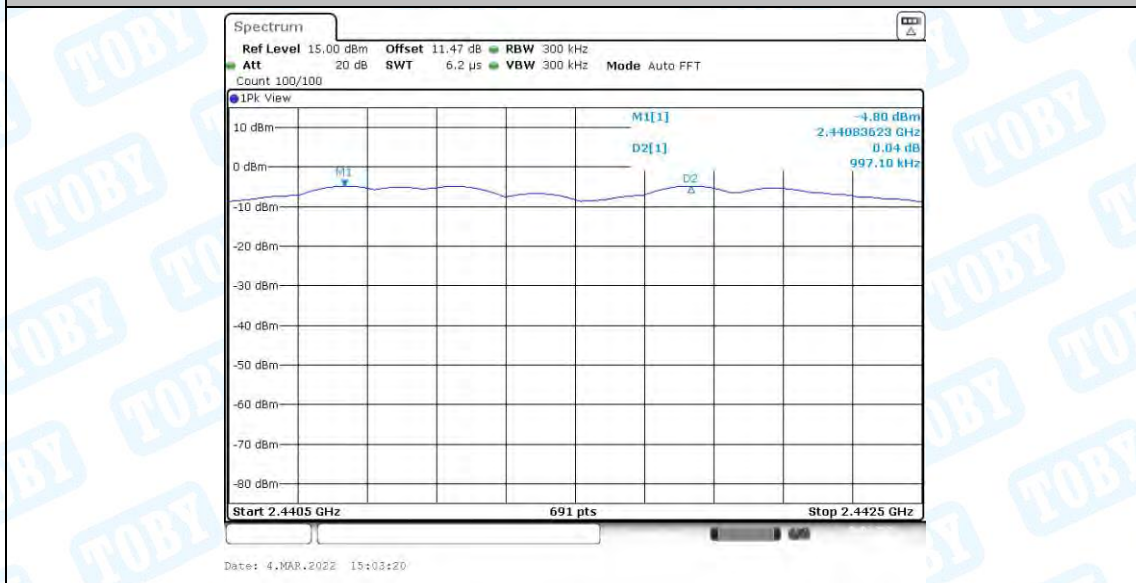
4.2. Test Graphs



DH5_Ant1_Hop



2DH5_Ant1_Hop



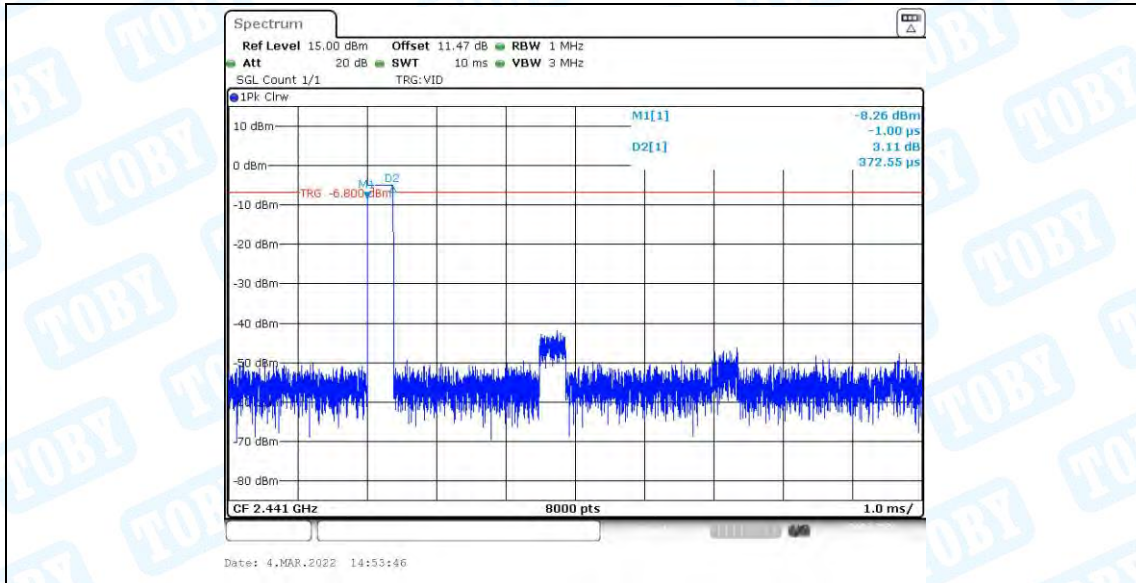
3DH5_Ant1_Hop

5. Time of occupancy

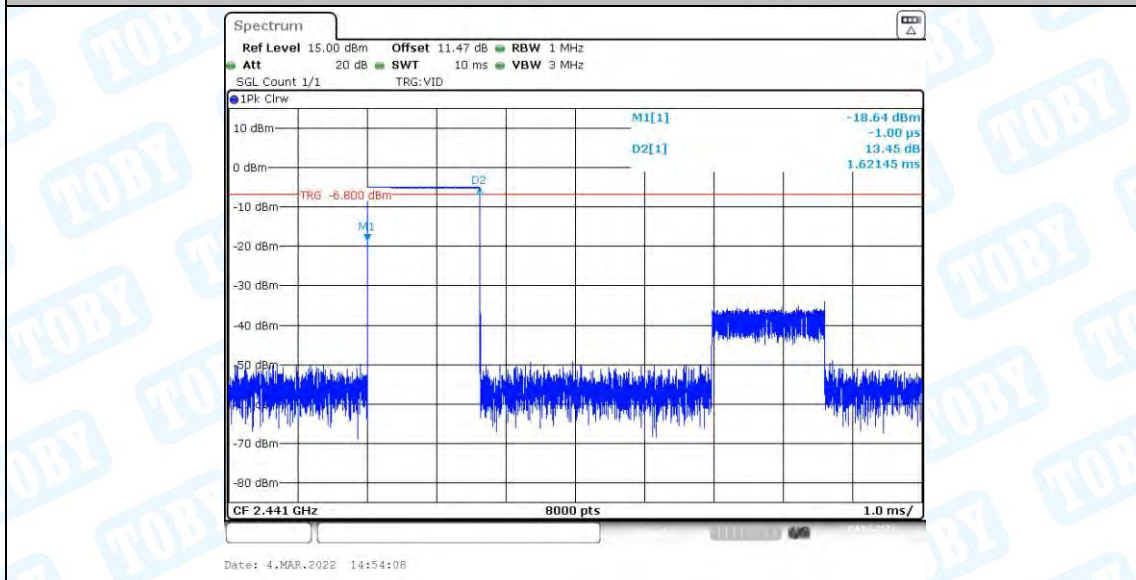
5.1. Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	320	0.119	≤0.4	PASS
DH3	Ant1	Hop	1.62	160	0.259	≤0.4	PASS
DH5	Ant1	Hop	2.86	106.67	0.305	≤0.4	PASS
2DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.63	160	0.26	≤0.4	PASS
2DH5	Ant1	Hop	2.87	106.67	0.306	≤0.4	PASS
3DH1	Ant1	Hop	0.38	320	0.123	≤0.4	PASS
3DH3	Ant1	Hop	1.63	160	0.26	≤0.4	PASS
3DH5	Ant1	Hop	2.87	106.67	0.306	≤0.4	PASS

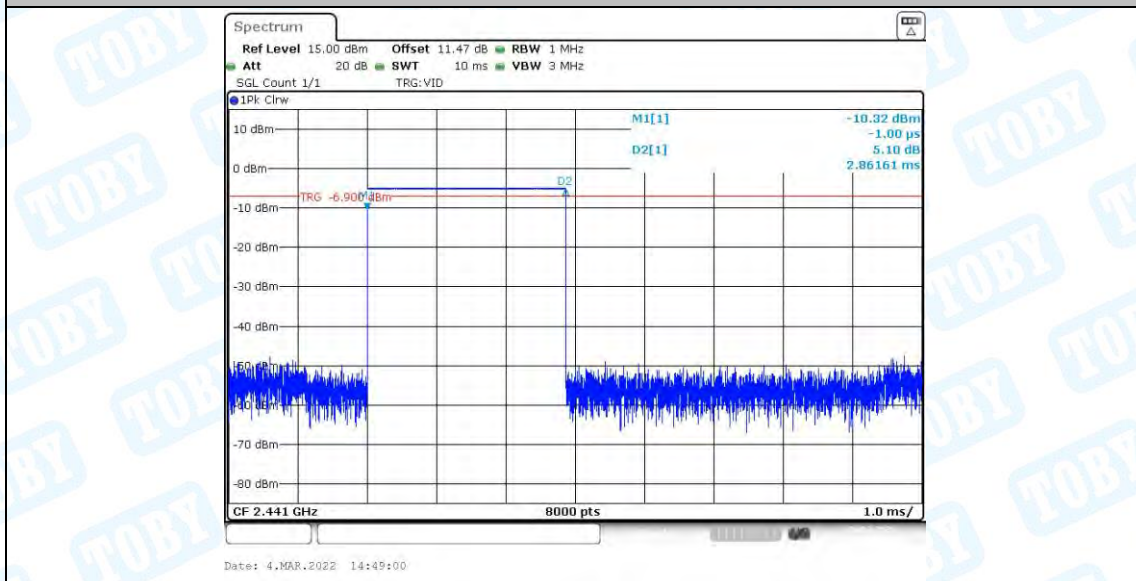
5.2.Test Graphs



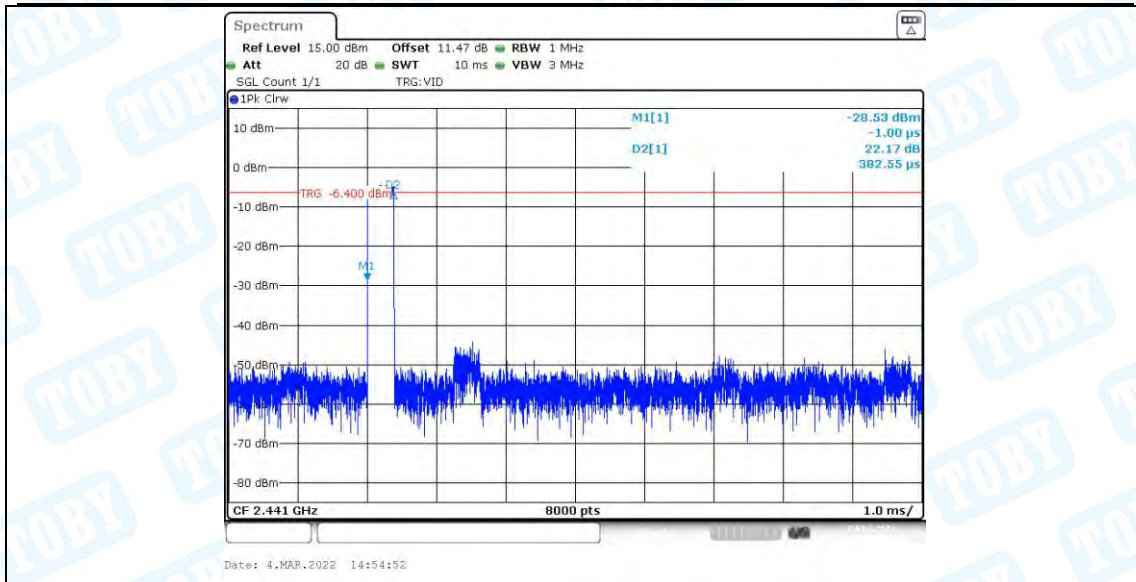
DH1_Ant1_Hop



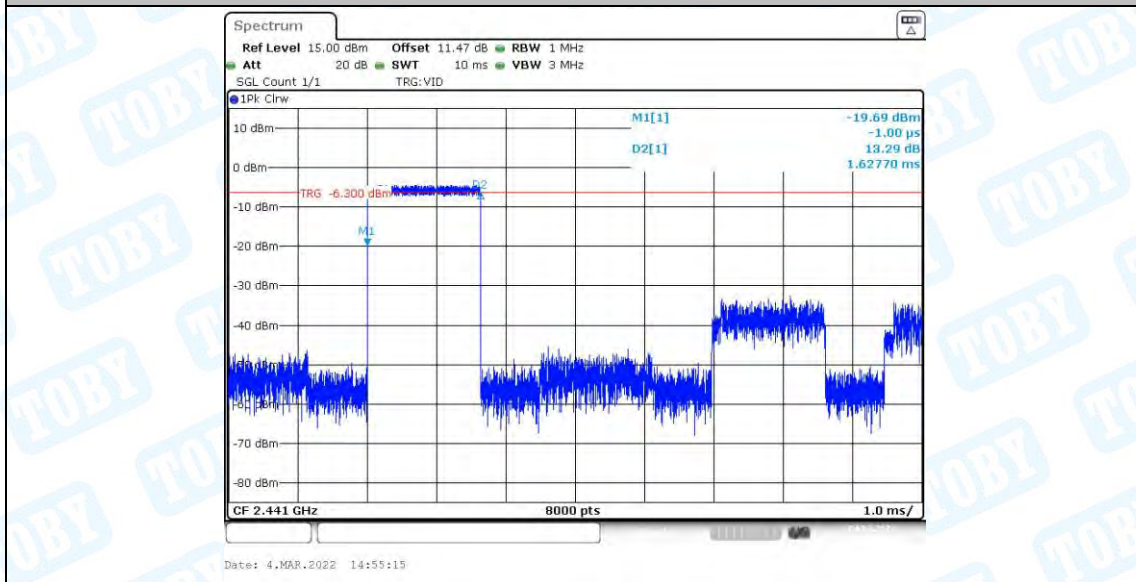
DH3_Ant1_Hop



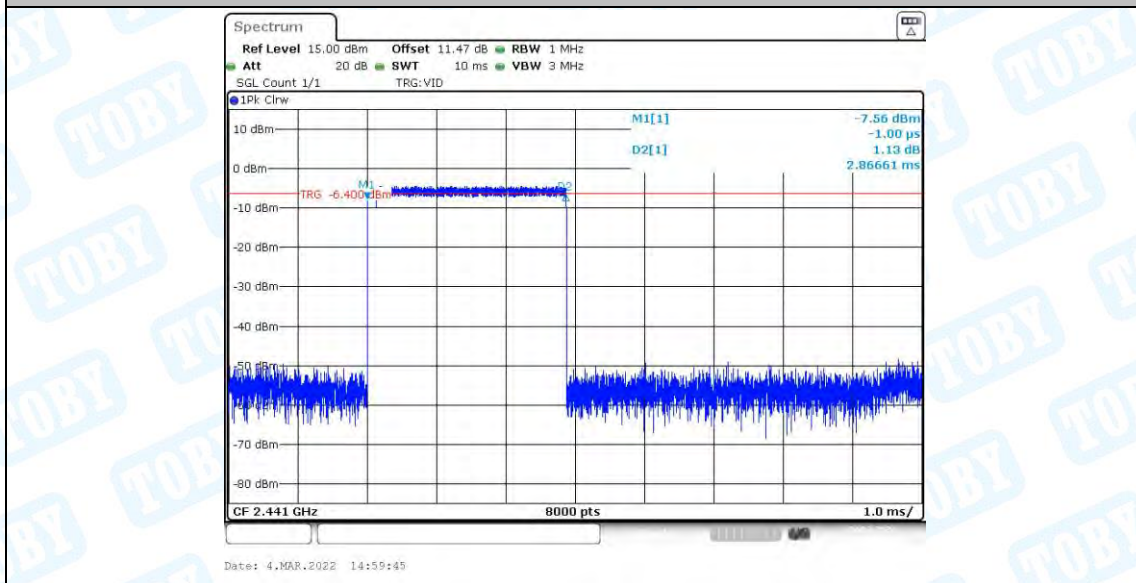
DH5_Ant1_Hop



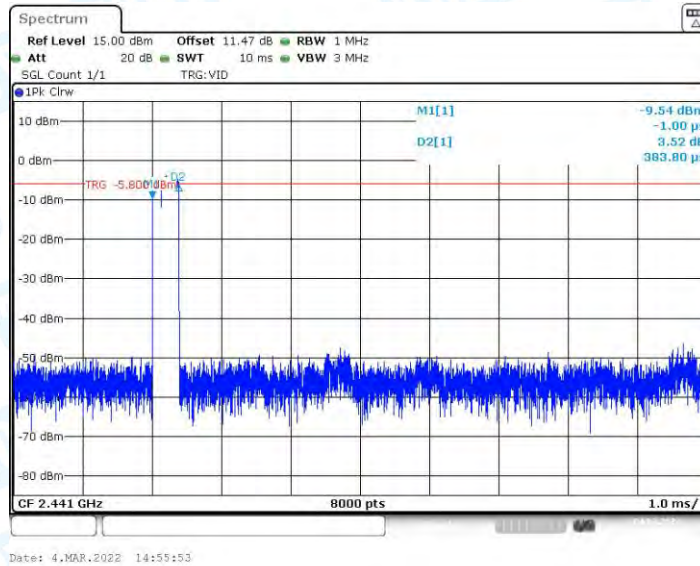
2DH1_Ant1_Hop



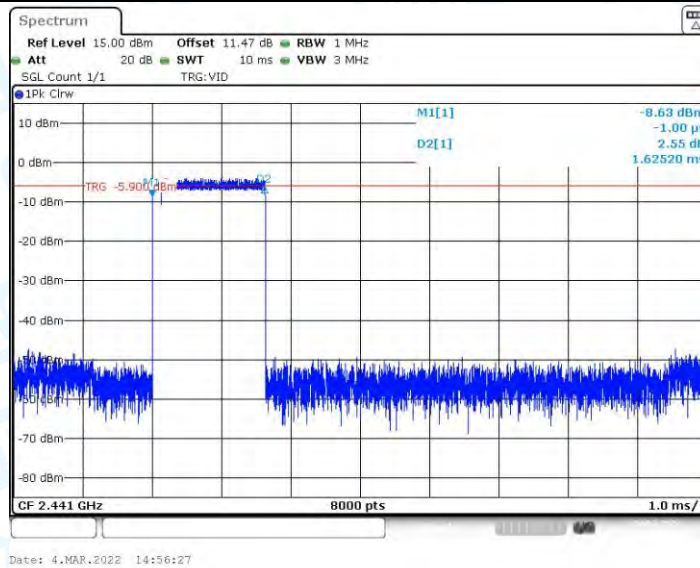
2DH3_Ant1_Hop



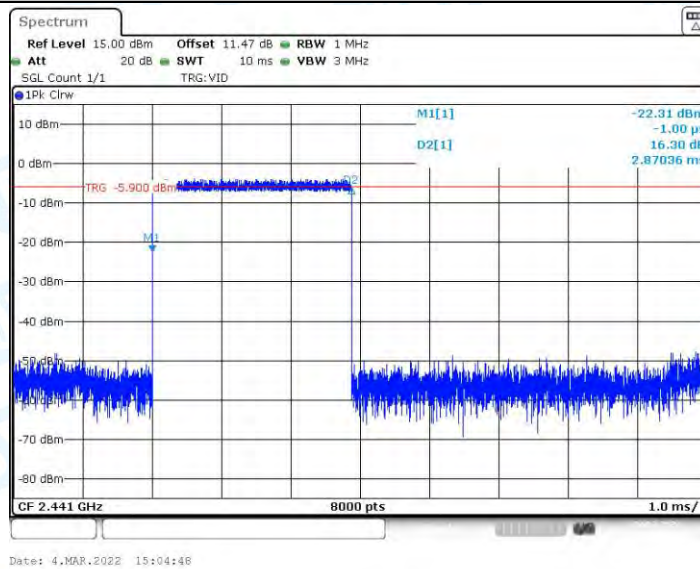
2DH5_Ant1_Hop



3DH1_Ant1_Hop



3DH3_Ant1_Hop



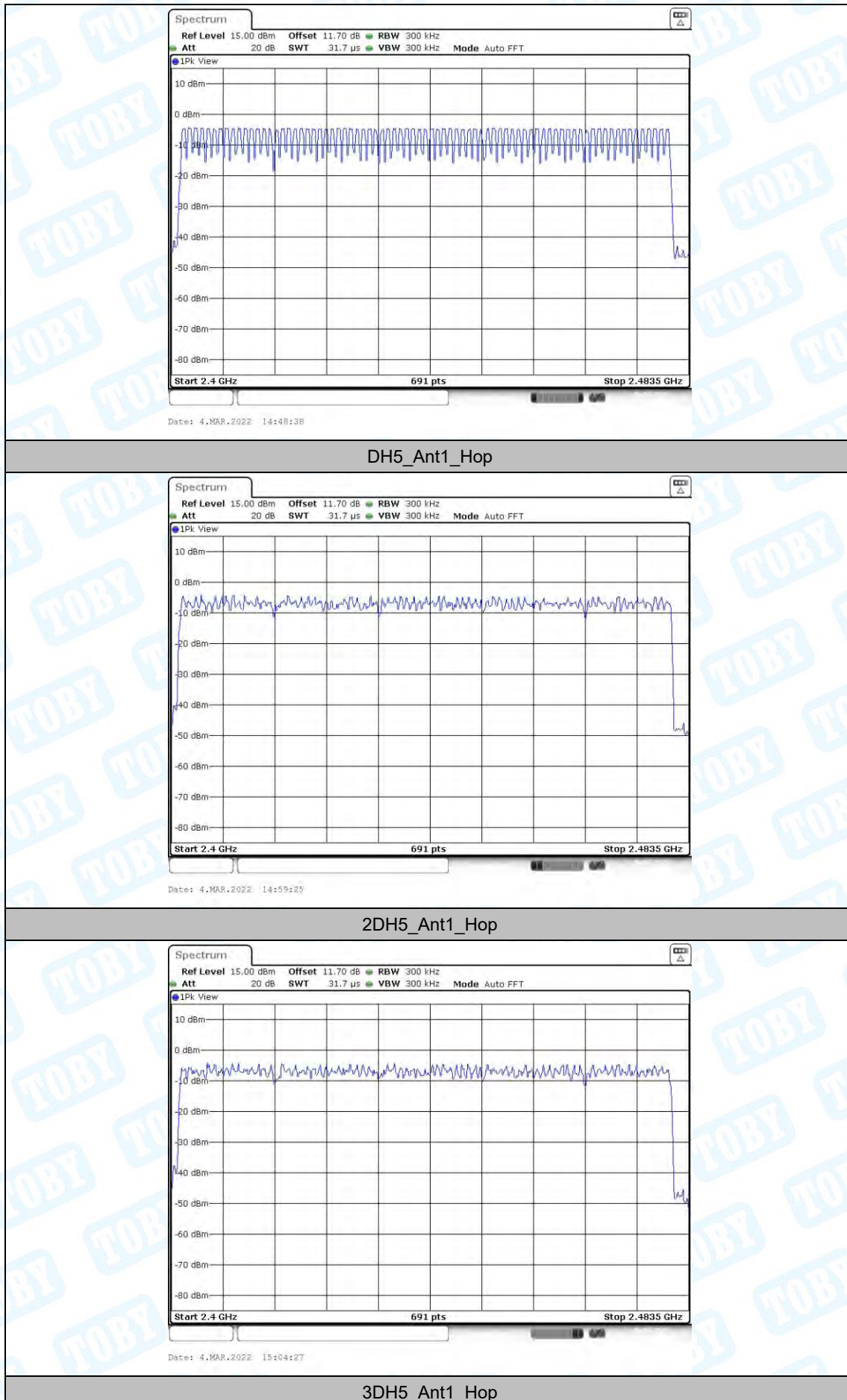
3DH5_Ant1_Hop

6. Number of hopping channels

6.1. Test Result

TestMode	Antenna	Channel	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

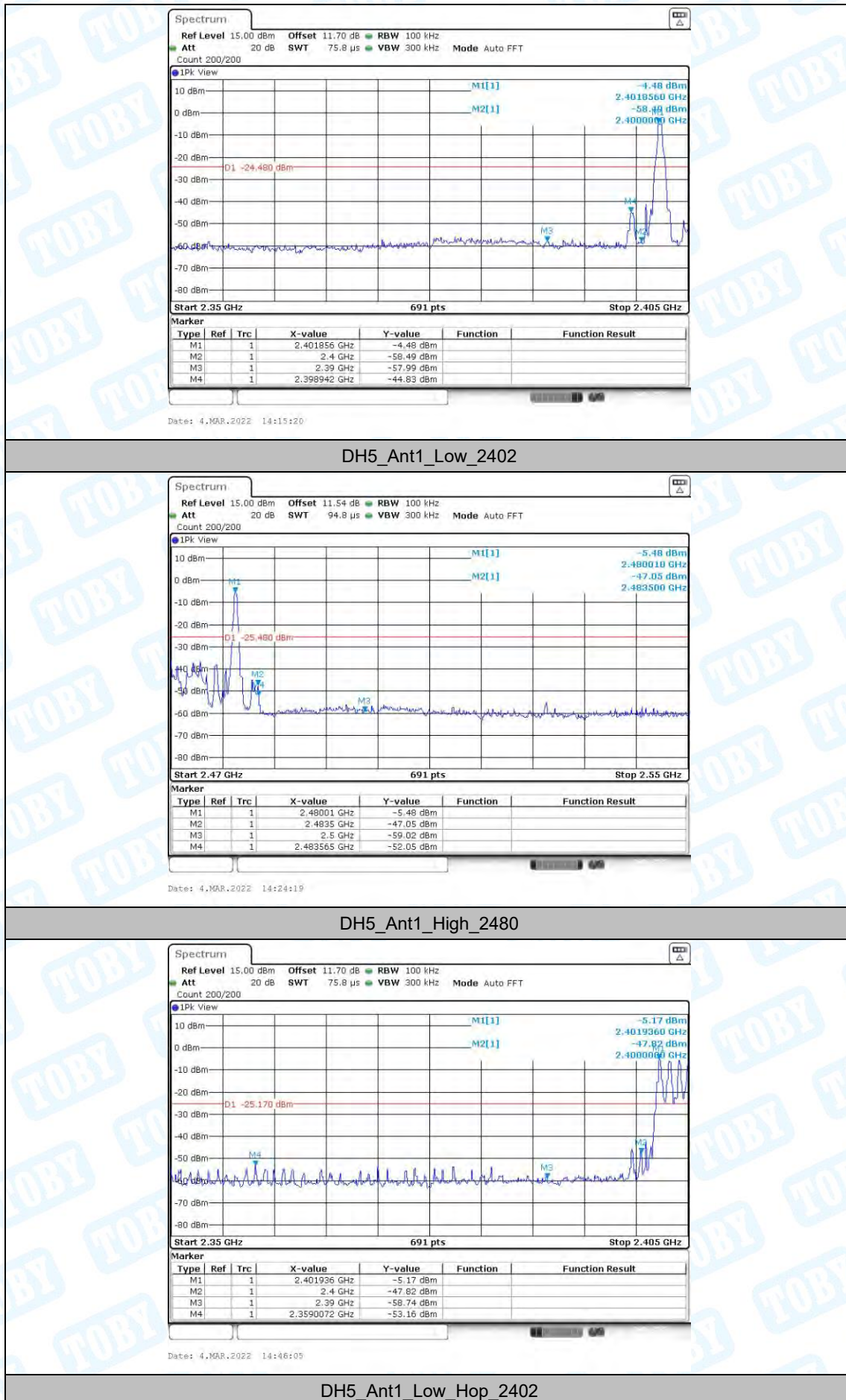


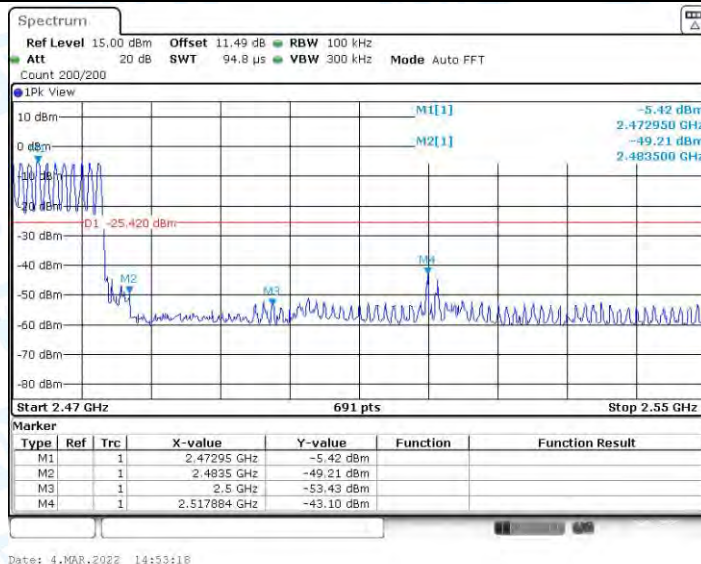
7. Band edge measurements

7.1. Test Result

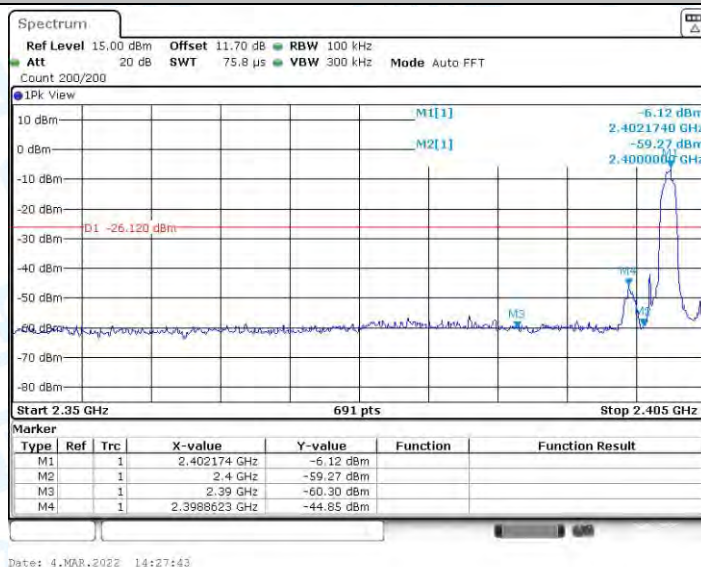
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-4.48	-44.83	≤ -24.48	PASS
		High	2480	-5.48	-52.05	≤ -25.48	PASS
		Low	Hop_2402	-5.17	-53.16	≤ -25.17	PASS
		High	Hop_2480	-5.42	-43.1	≤ -25.42	PASS
2DH5	Ant1	Low	2402	-6.12	-44.85	≤ -26.12	PASS
		High	2480	-4.84	-52.12	≤ -24.84	PASS
		Low	Hop_2402	-6.91	-57.09	≤ -26.91	PASS
		High	Hop_2480	-6.09	-51.09	≤ -26.09	PASS
3DH5	Ant1	Low	2402	-6.97	-46.77	≤ -26.97	PASS
		High	2480	-4.83	-51.27	≤ -24.83	PASS
		Low	Hop_2402	-9.44	-55.22	≤ -29.44	PASS
		High	Hop_2480	-8.33	-55.13	≤ -28.33	PASS

7.2. Test Graphs

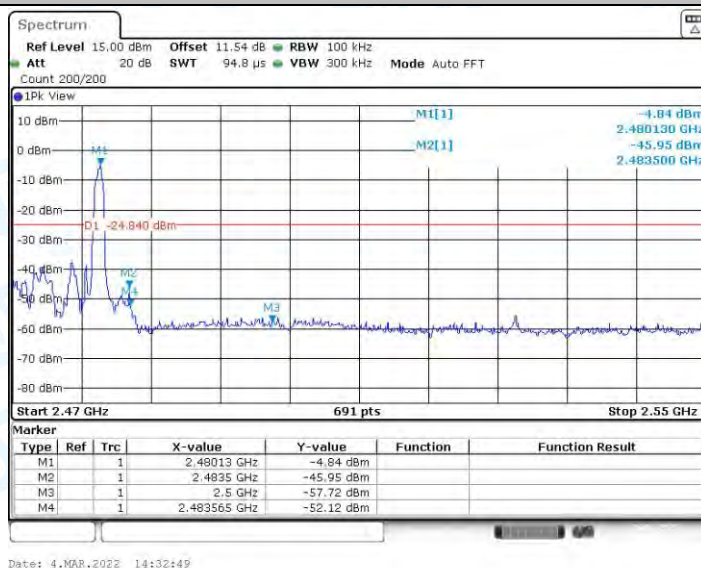




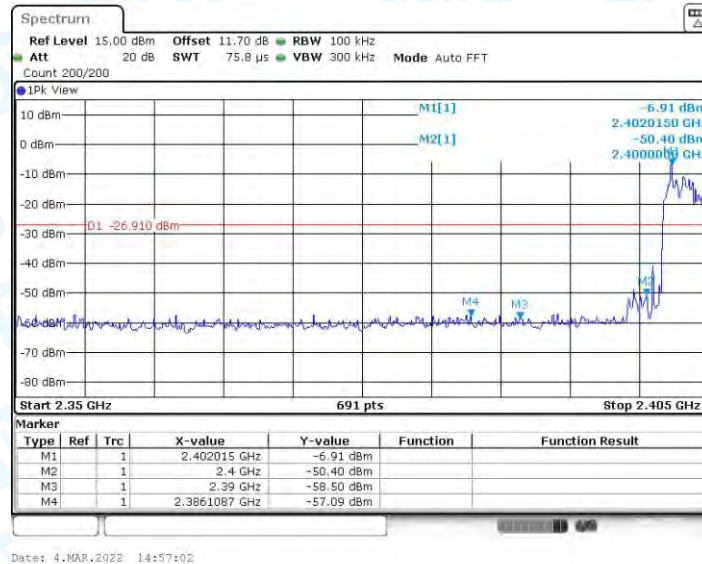
DH5_Ant1_High_Hop_2480



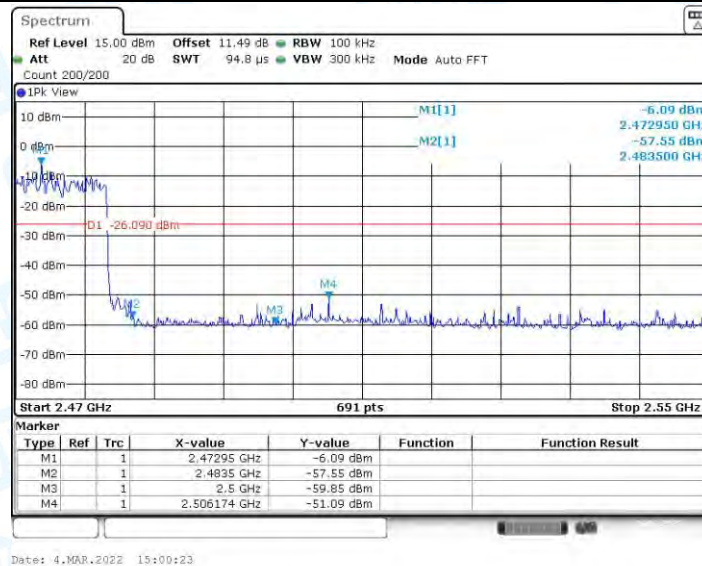
2DH5_Ant1_Low_2402



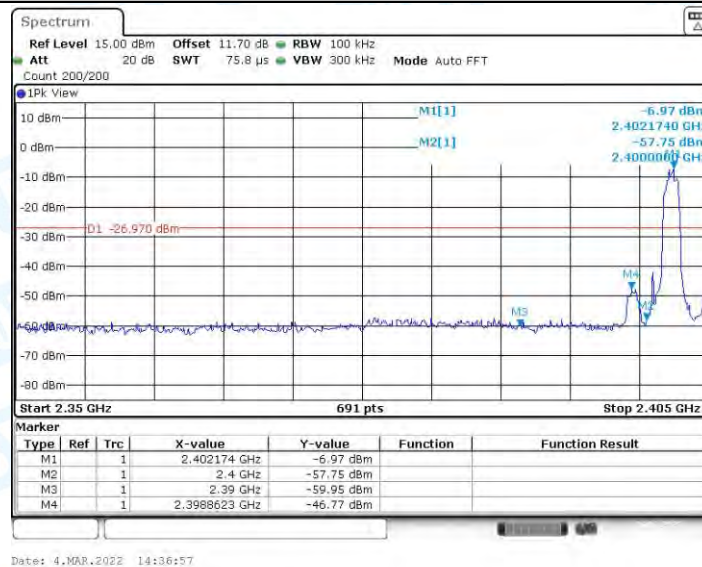
2DH5_Ant1_High_2480



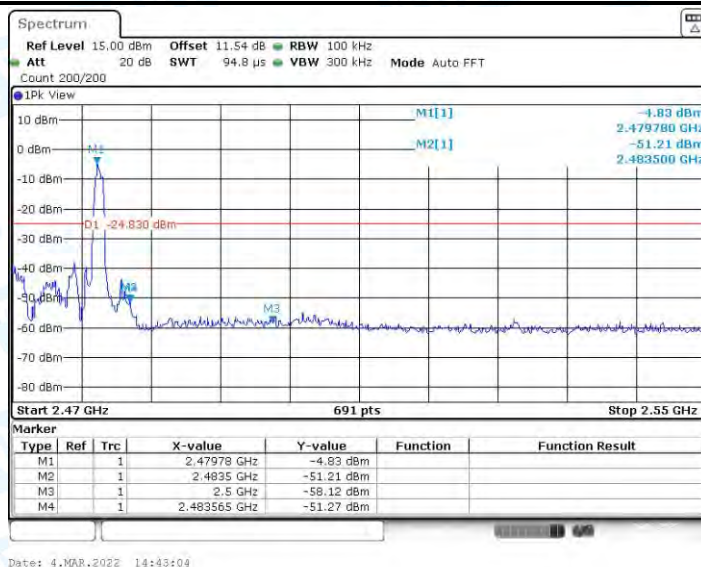
2DH5_Ant1_Low_Hop_2402



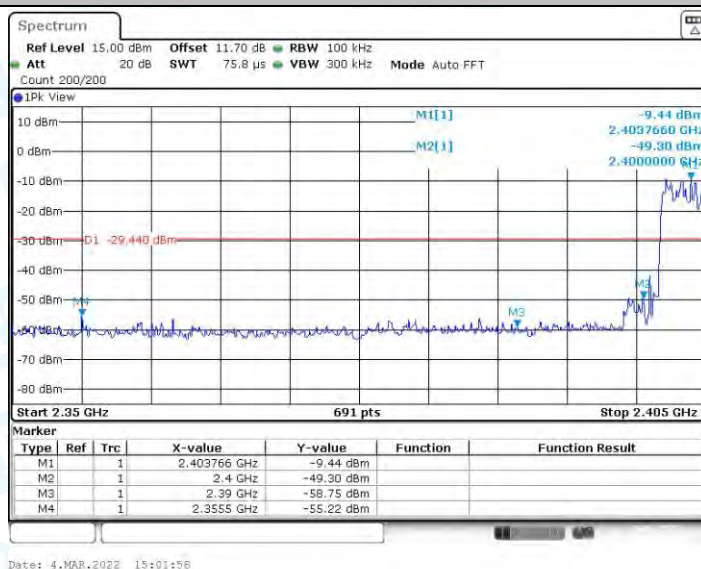
2DH5_Ant1_High_Hop_2480



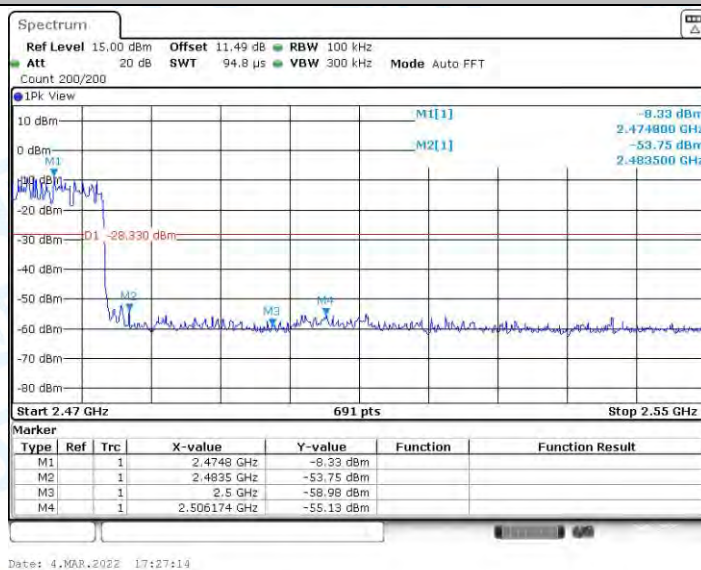
3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



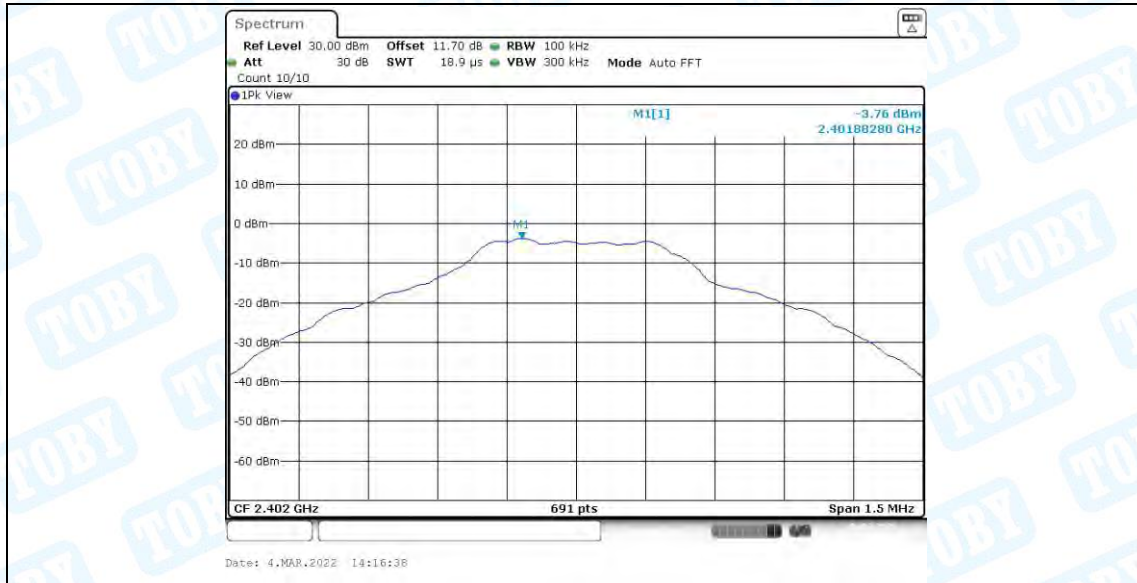
3DH5_Ant1_High_Hop_2480

8. Conducted Spurious Emission

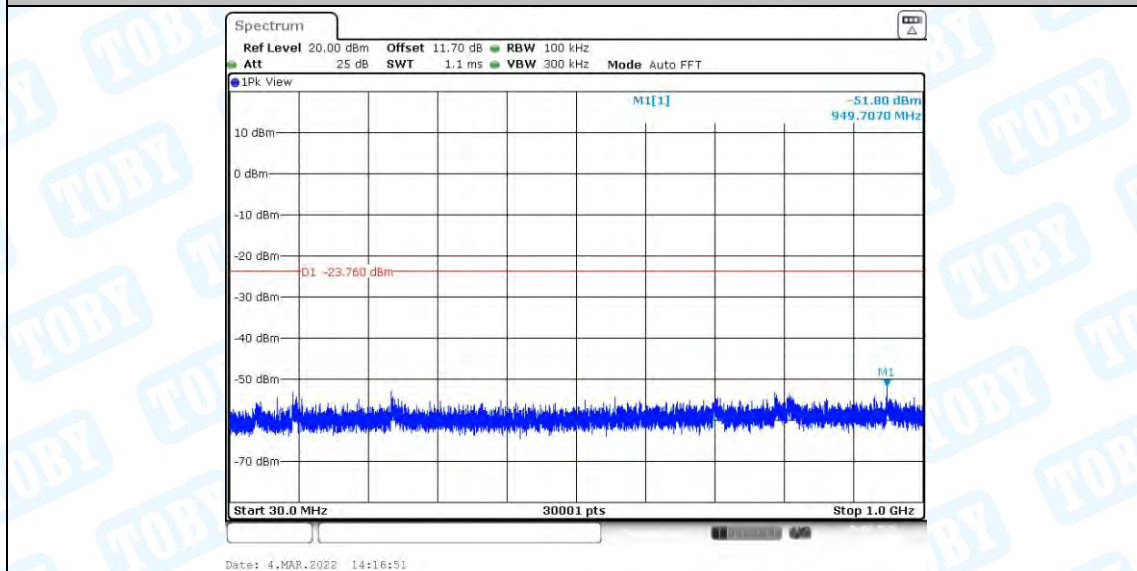
8.1. Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-3.76	-3.76	---	PASS
			30~1000	-3.76	-51.8	≤-23.76	PASS
			1000~26500	-3.76	-46.12	≤-23.76	PASS
		2441	Reference	-4.80	-4.80	---	PASS
			30~1000	-4.80	-52.77	≤-24.8	PASS
			1000~26500	-4.80	-46.75	≤-24.8	PASS
		2480	Reference	-5.00	-5.00	---	PASS
			30~1000	-5.00	-53.19	≤-25	PASS
			1000~26500	-5.00	-46.51	≤-25	PASS
2DH5	Ant1	2402	Reference	-6.23	-6.23	---	PASS
			30~1000	-6.23	-52.99	≤-26.23	PASS
			1000~26500	-6.23	-47.06	≤-26.23	PASS
		2441	Reference	-4.90	-4.90	---	PASS
			30~1000	-4.90	-52.77	≤-24.9	PASS
			1000~26500	-4.90	-45.94	≤-24.9	PASS
		2480	Reference	-4.88	-4.88	---	PASS
			30~1000	-4.88	-52.21	≤-24.88	PASS
			1000~26500	-4.88	-46.93	≤-24.88	PASS
3DH5	Ant1	2402	Reference	-5.84	-5.84	---	PASS
			30~1000	-5.84	-50.79	≤-25.84	PASS
			1000~26500	-5.84	-45.94	≤-25.84	PASS
		2441	Reference	-4.93	-4.93	---	PASS
			30~1000	-4.93	-50.48	≤-24.93	PASS
			1000~26500	-4.93	-47.06	≤-24.93	PASS
		2480	Reference	-4.90	-4.90	---	PASS
			30~1000	-4.90	-50.96	≤-24.9	PASS
			1000~26500	-4.90	-45.69	≤-24.9	PASS

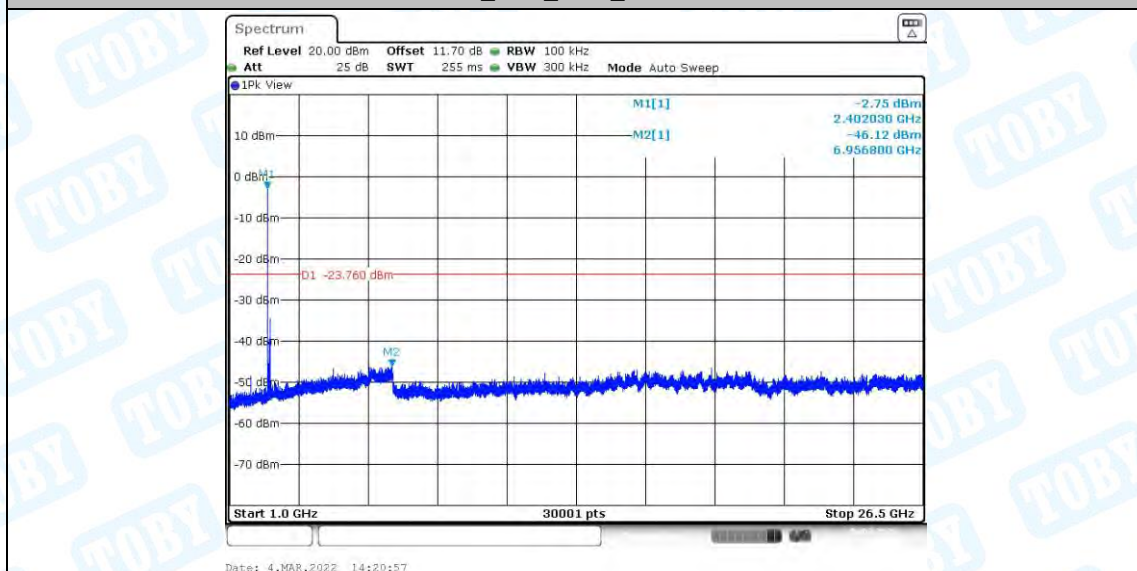
8.2.Test Graphs



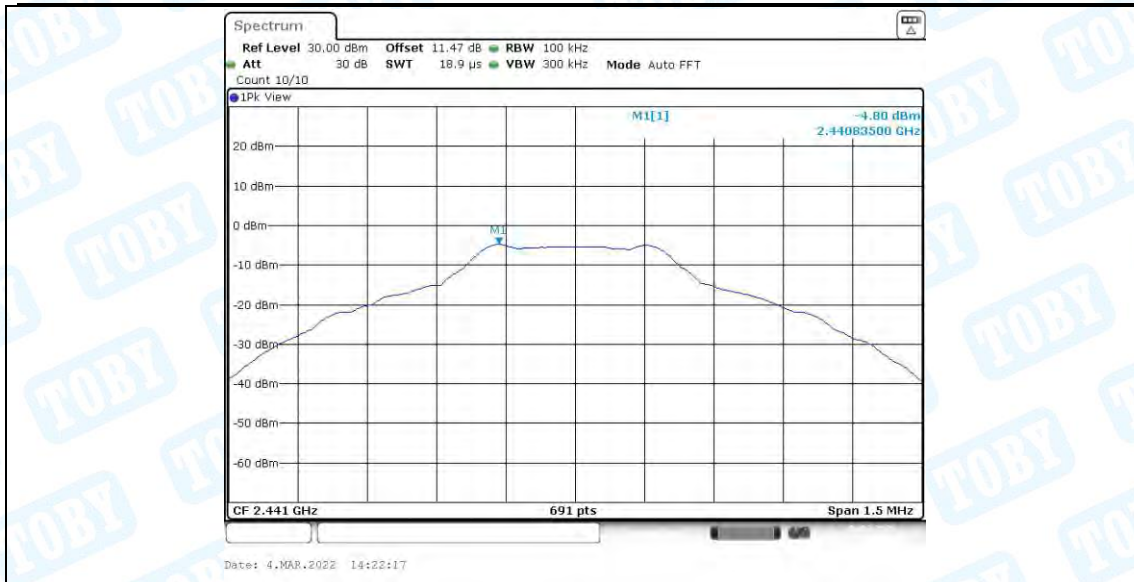
DH5_Ant1_2402_0~Reference



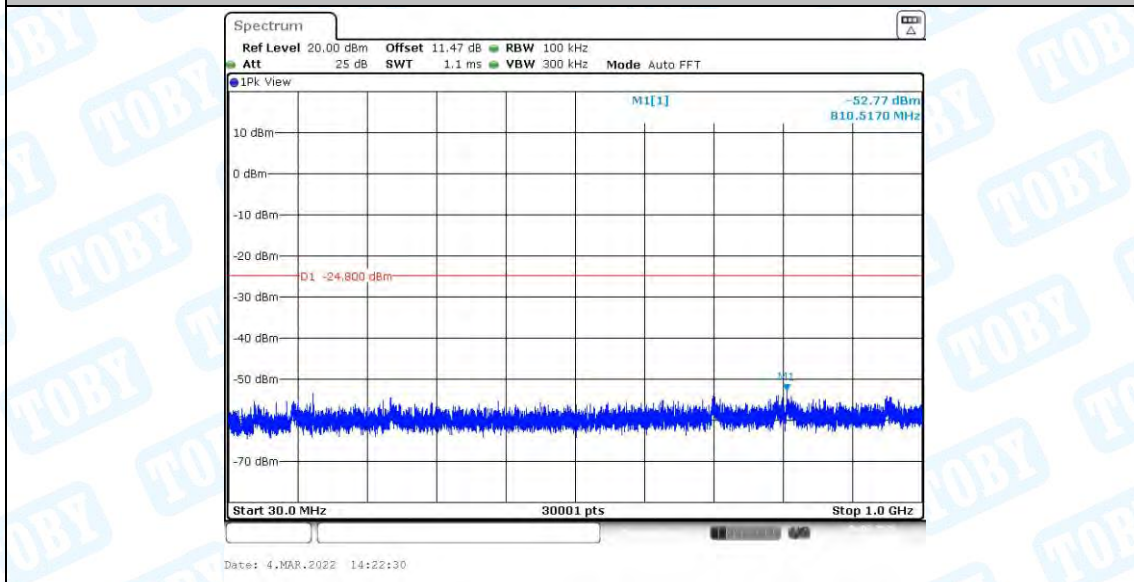
DH5_Ant1_2402_30~1000



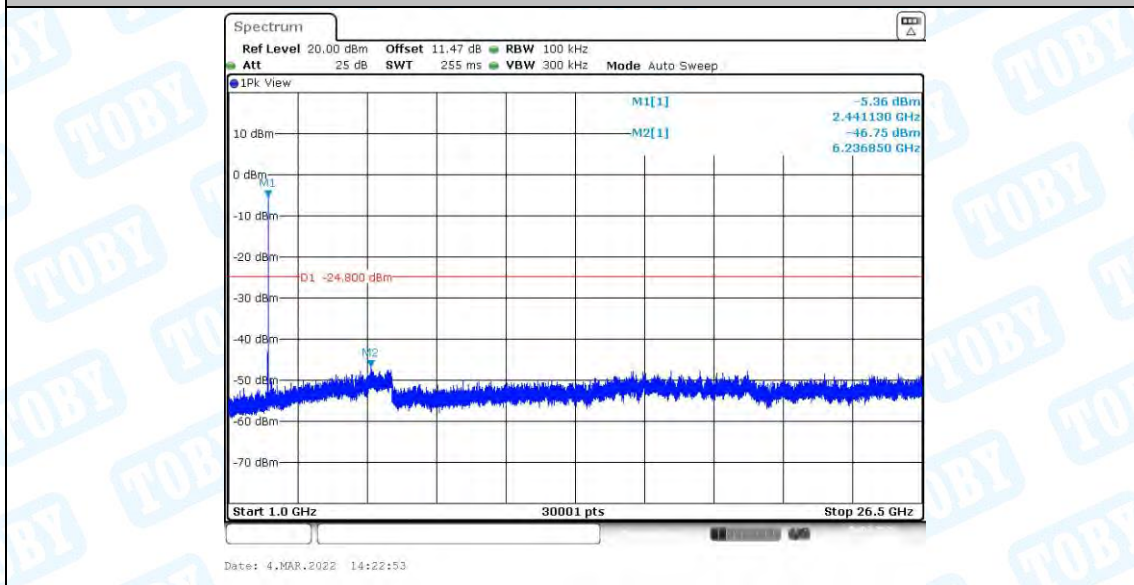
DH5_Ant1_2402_1000~26500



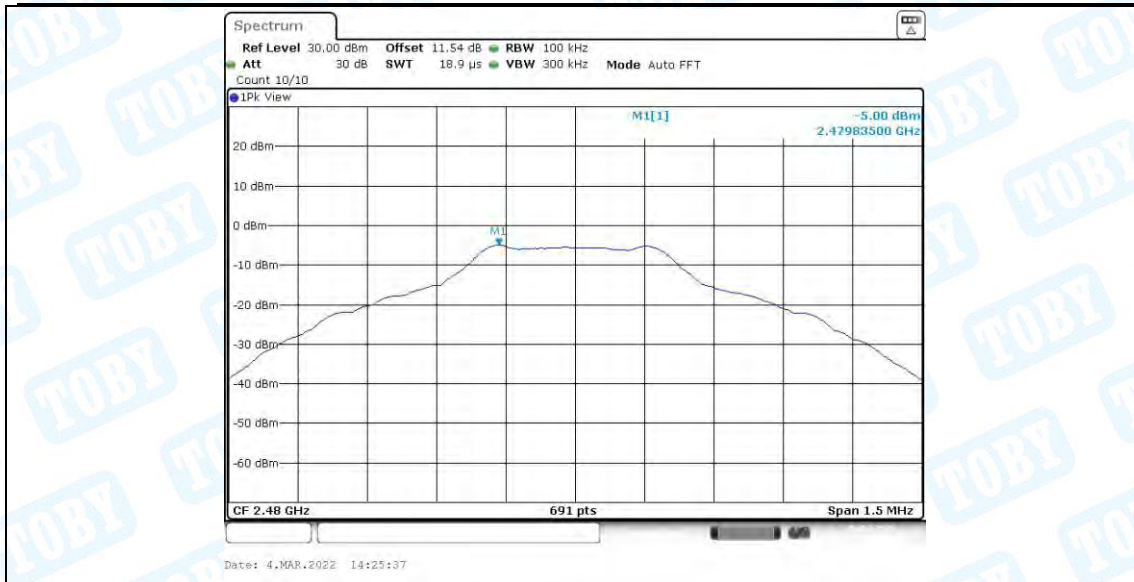
DH5_Ant1_2441_0~Reference



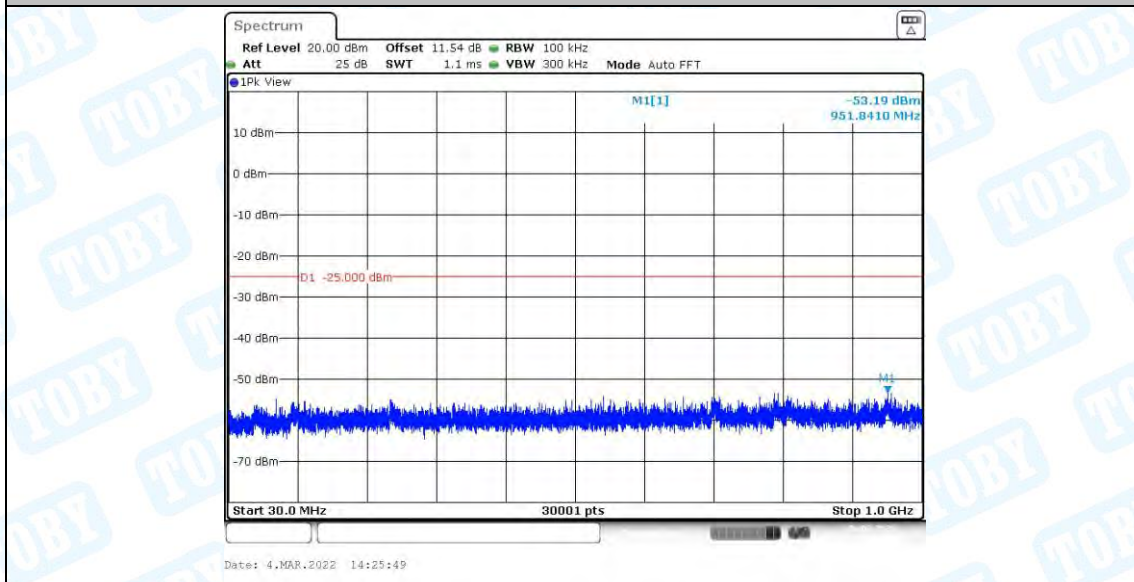
DH5_Ant1_2441_30~1000



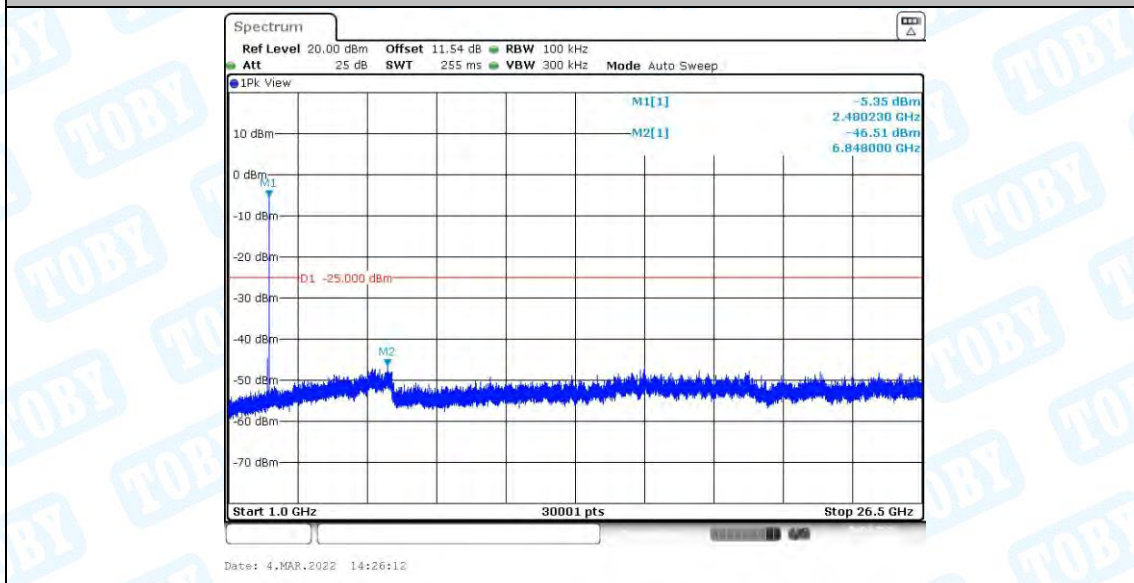
DH5_Ant1_2441_1000~26500



DH5_Ant1_2480_0~Reference



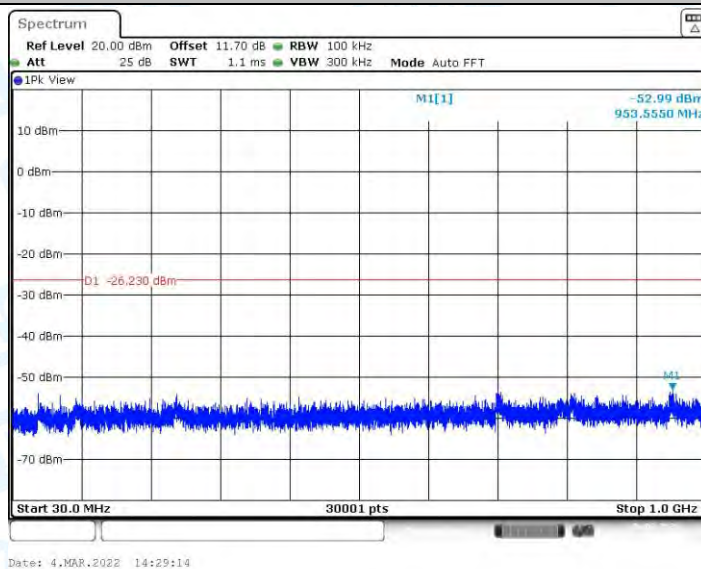
DH5_Ant1_2480_30~1000



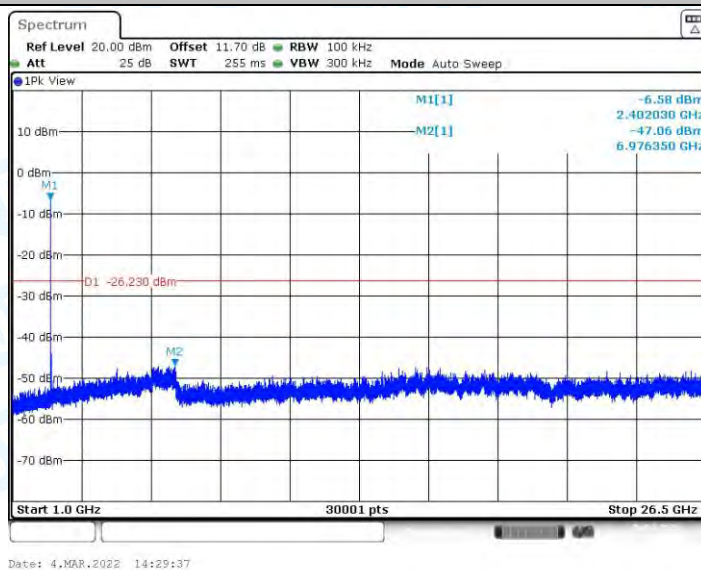
DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference



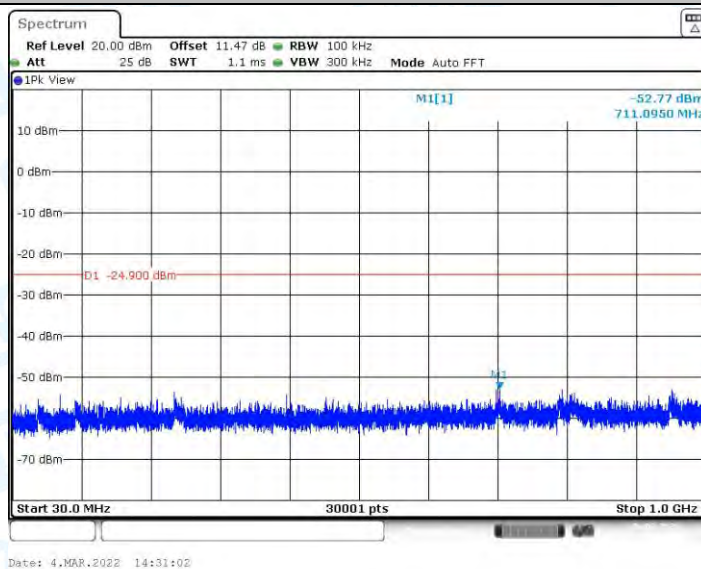
2DH5_Ant1_2402_30~1000



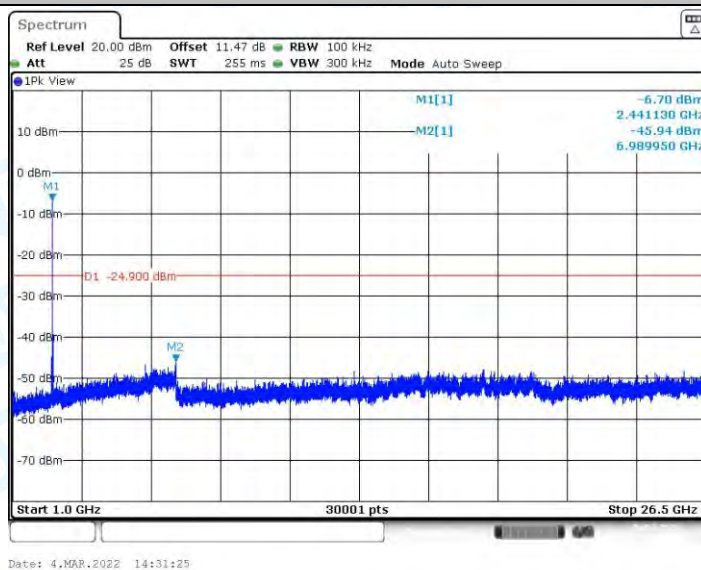
2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference



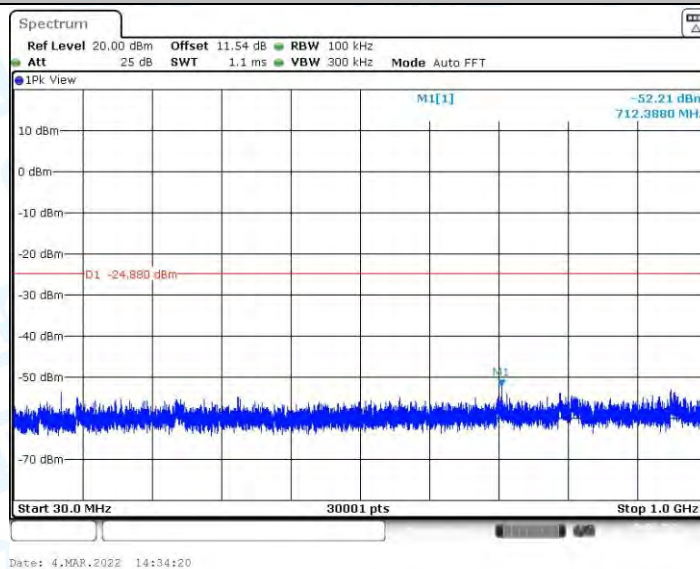
2DH5_Ant1_2441_30~1000



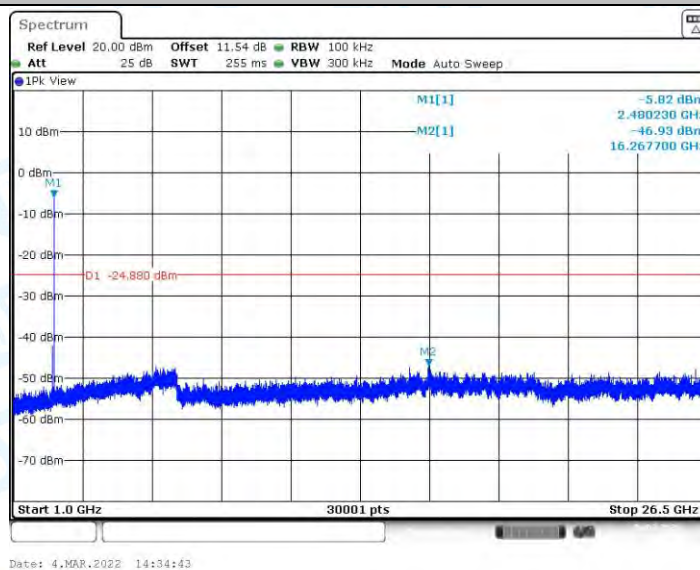
2DH5_Ant1_2441_1000~26500



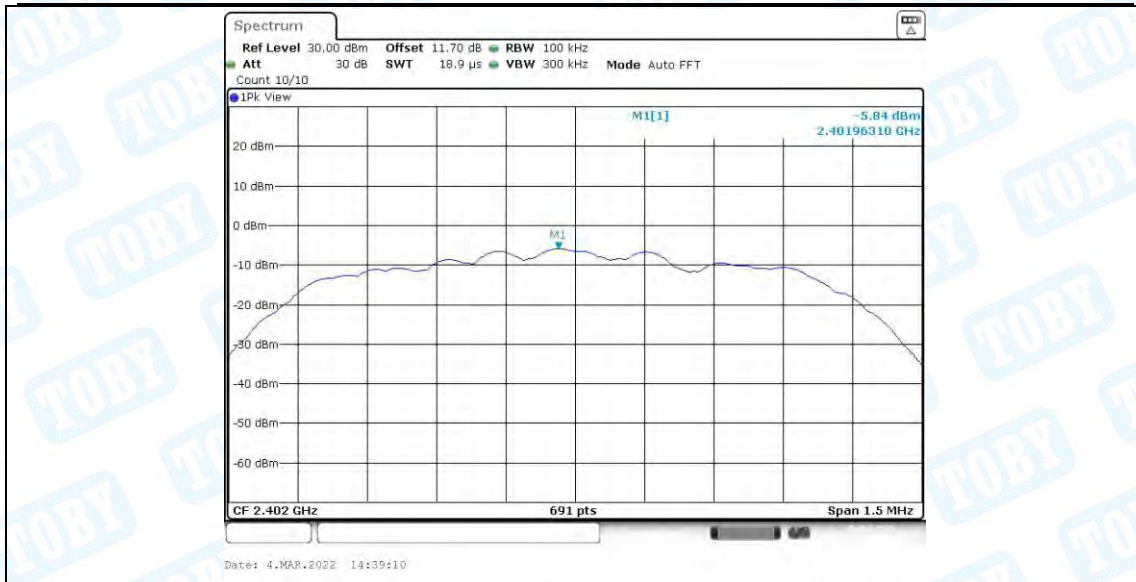
2DH5_Ant1_2480_0~Reference



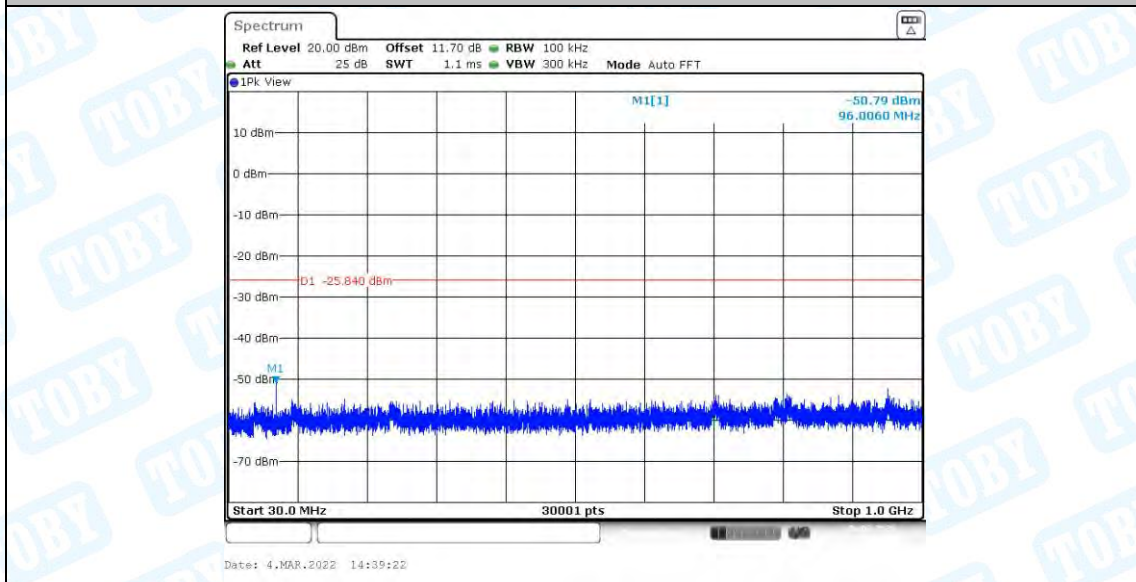
2DH5_Ant1_2480_30~1000



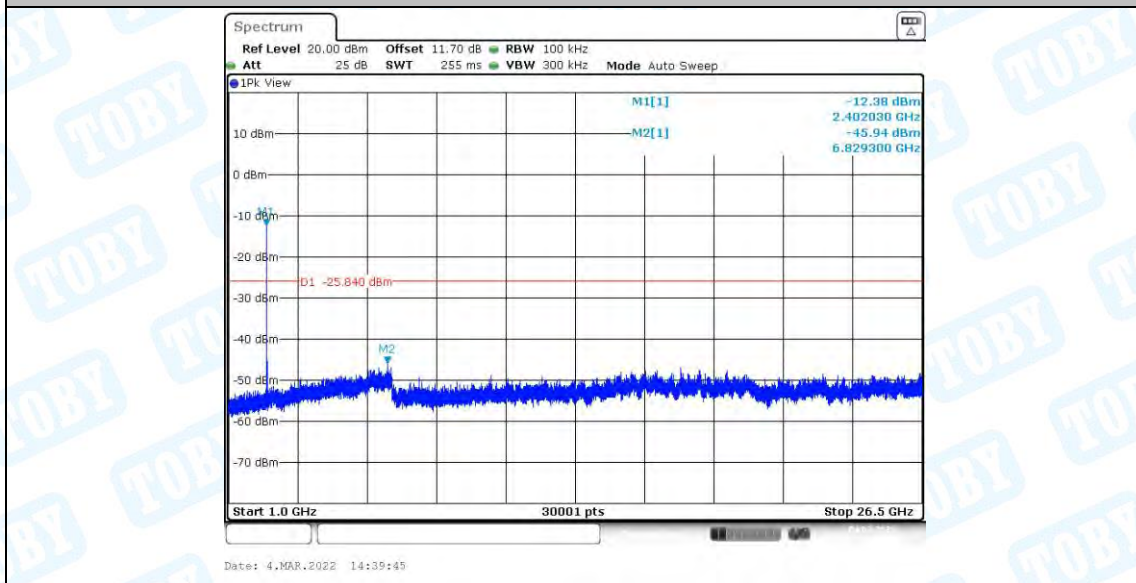
2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference



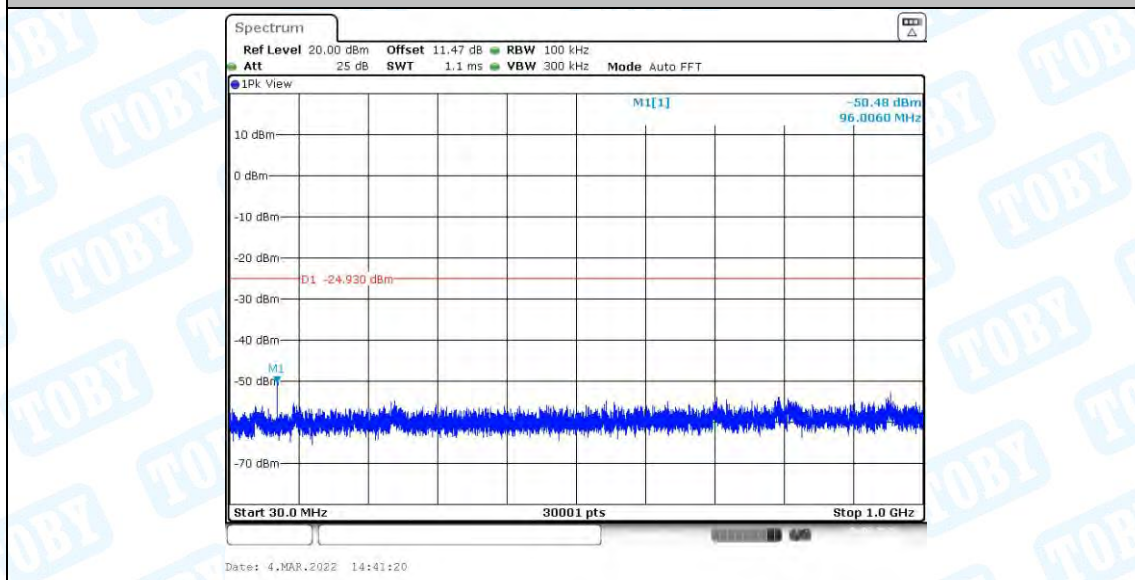
3DH5_Ant1_2402_30~1000



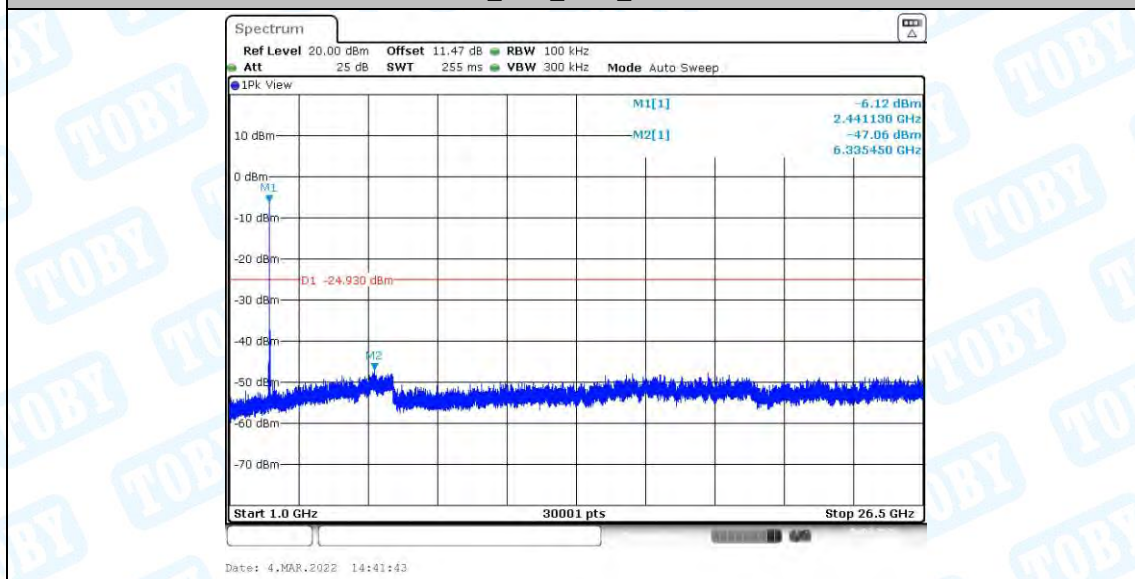
3DH5_Ant1_2402_1000~26500



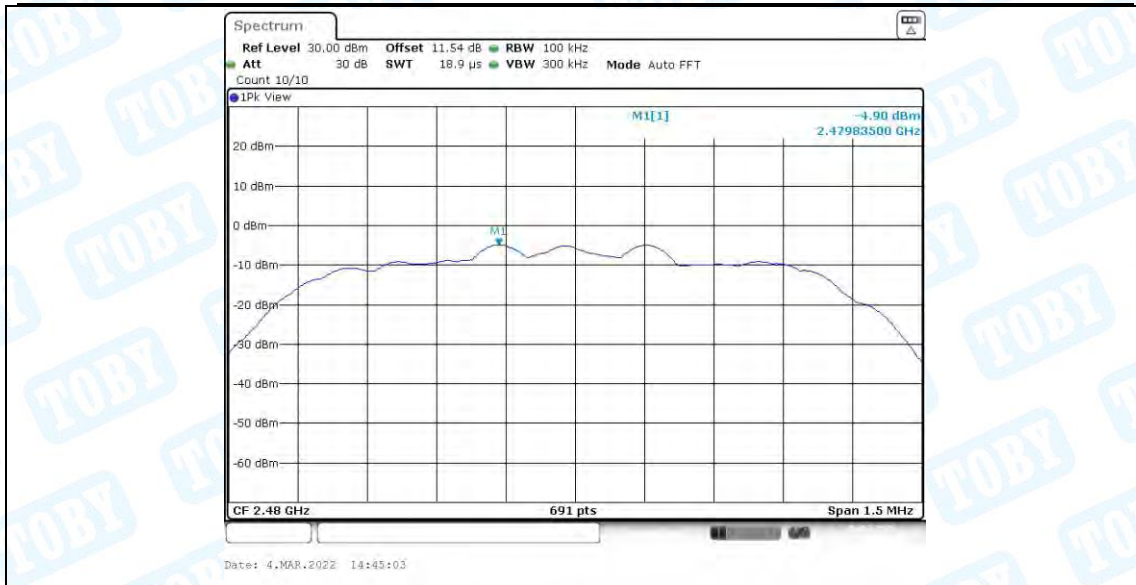
3DH5_Ant1_2441_0~Reference



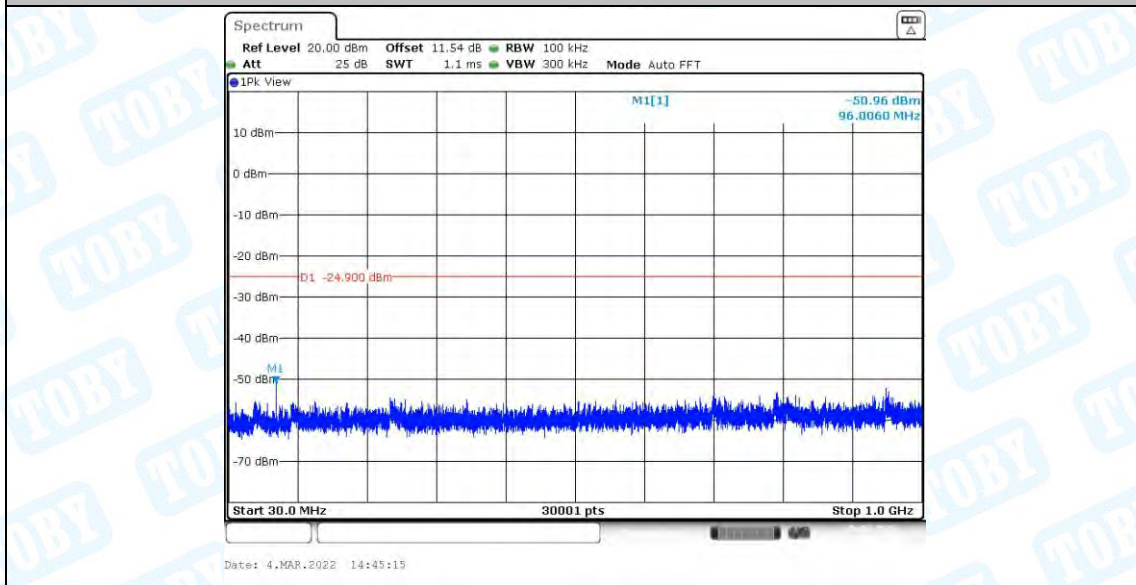
3DH5_Ant1_2441_30~1000



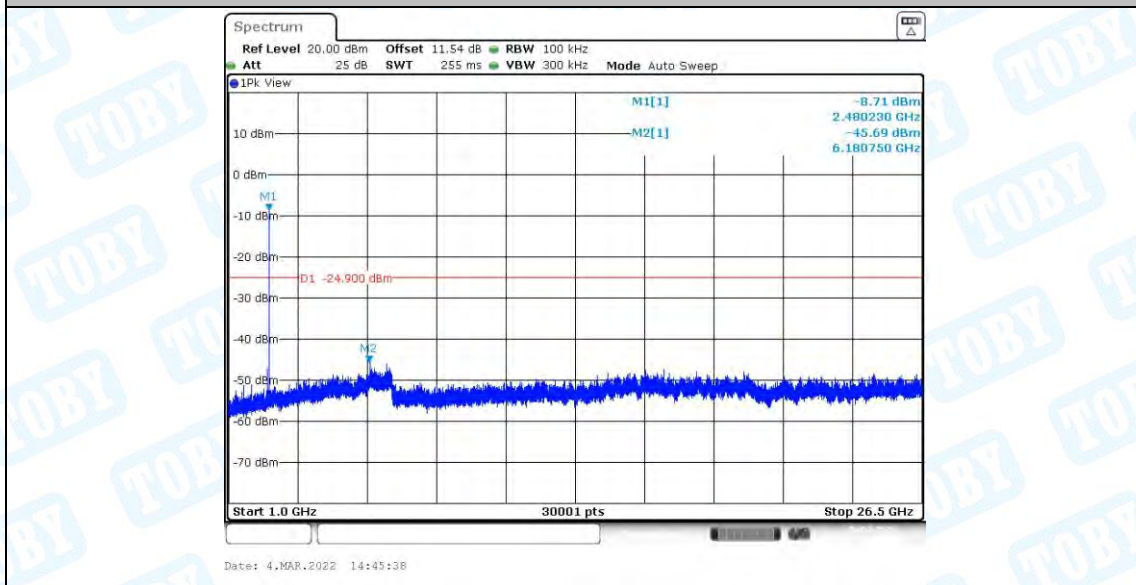
3DH5_Ant1_2441_1000~26500



3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



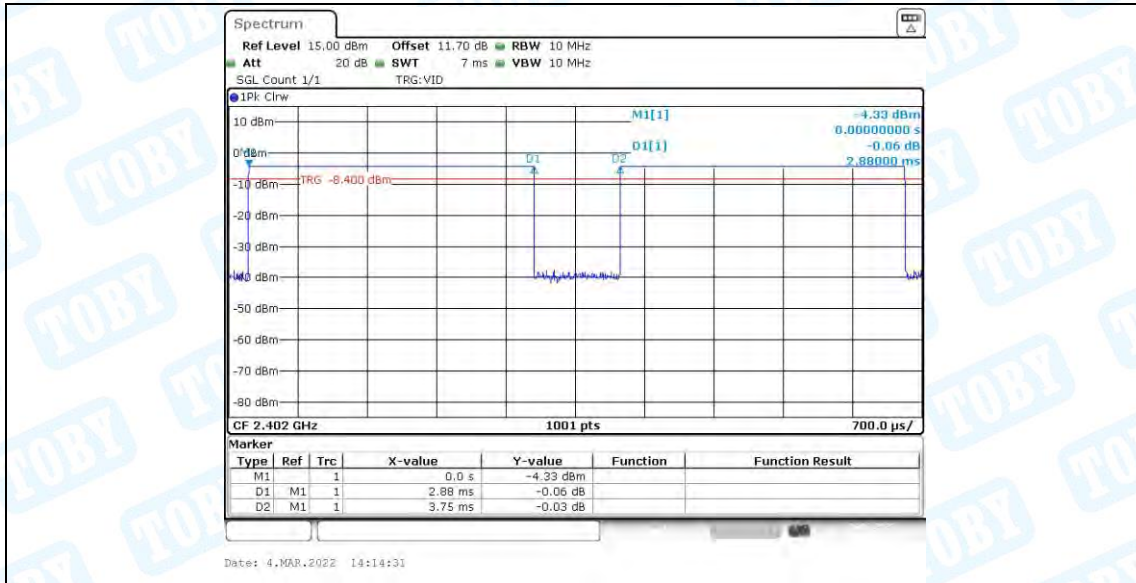
3DH5_Ant1_2480_1000~26500

9. Duty Cycle

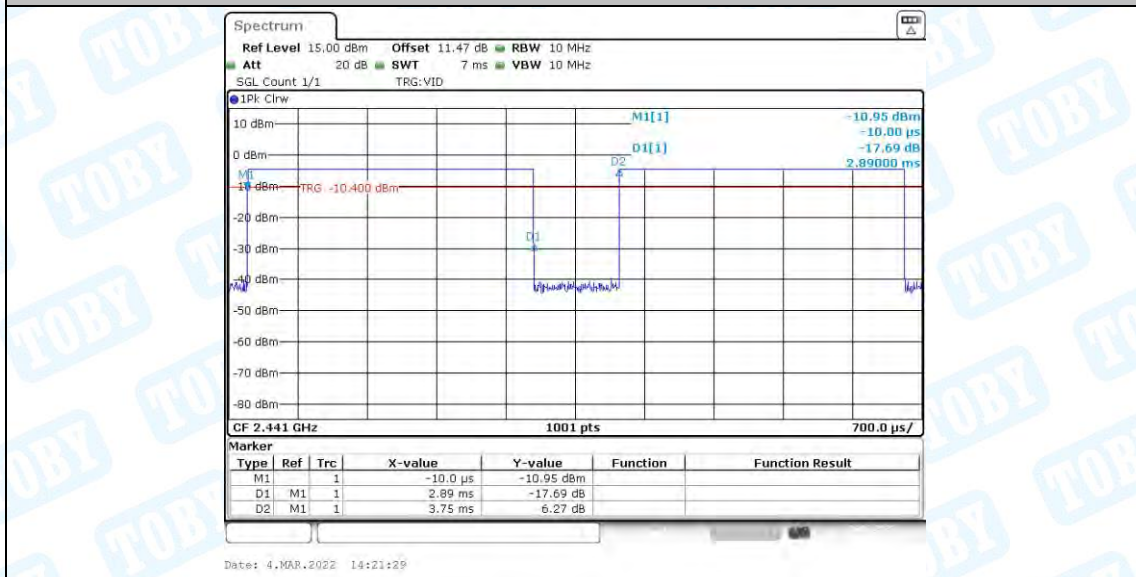
9.1. Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
DH5	Ant1	2402	2.88	3.75	76.80	---	---
		2441	2.89	3.75	77.07	---	---
		2480	2.88	3.75	76.80	---	---
2DH5	Ant1	2402	2.89	3.75	77.07	---	---
		2441	2.88	3.75	76.80	---	---
		2480	2.89	3.75	77.07	---	---
3DH5	Ant1	2402	0.00	0.86	100	---	---
		2441	2.90	3.75	77.33	---	---
		2480	0.00	0.85	100	---	---

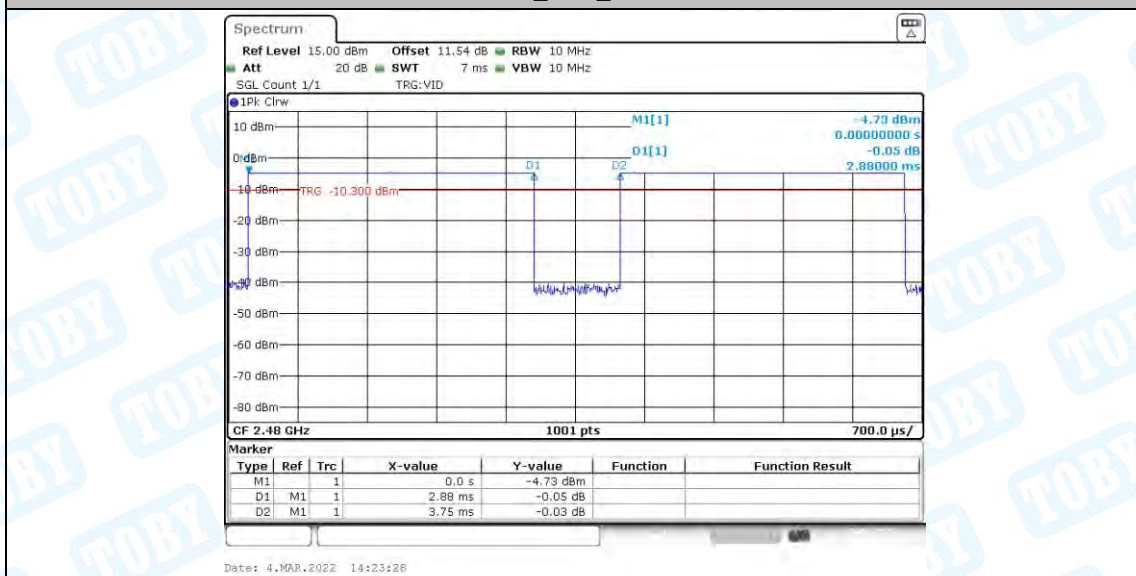
9.2.Test Graphs



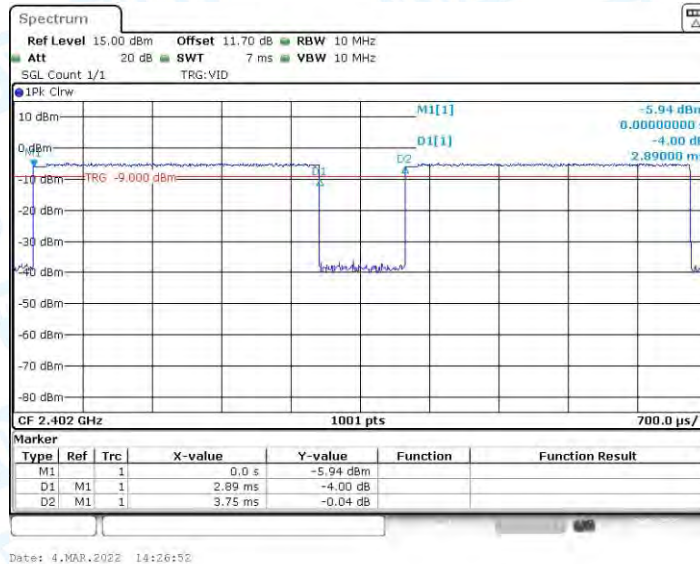
DH5_Ant1_2402



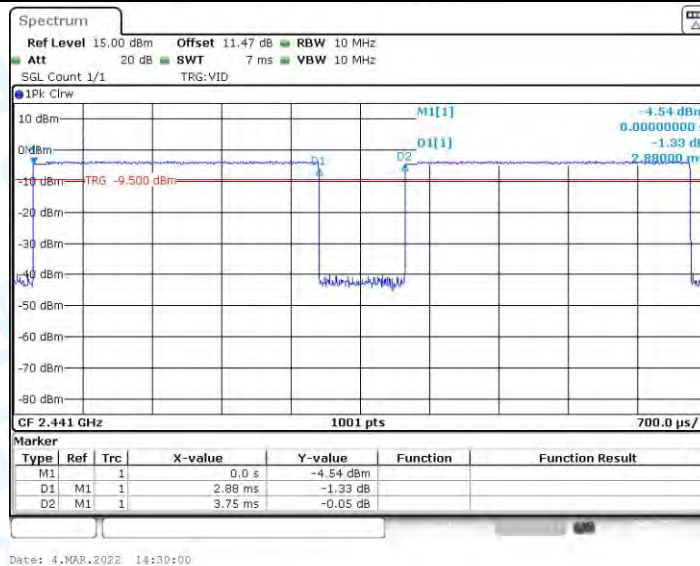
DH5_Ant1_2441



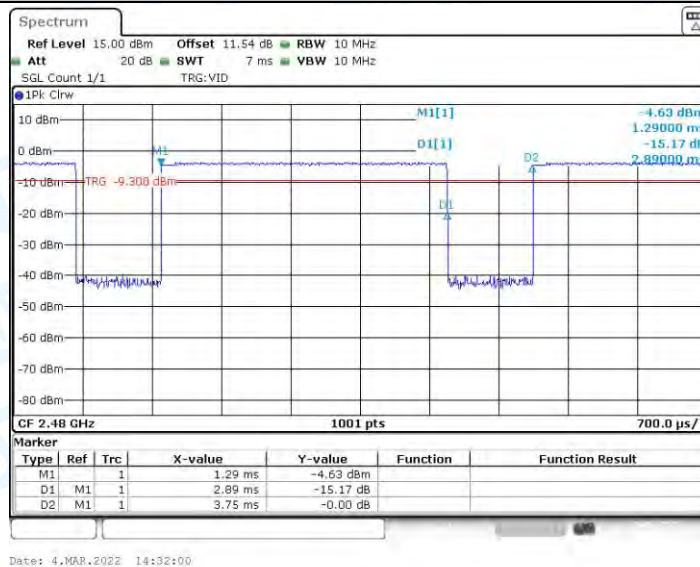
DH5_Ant1_2480



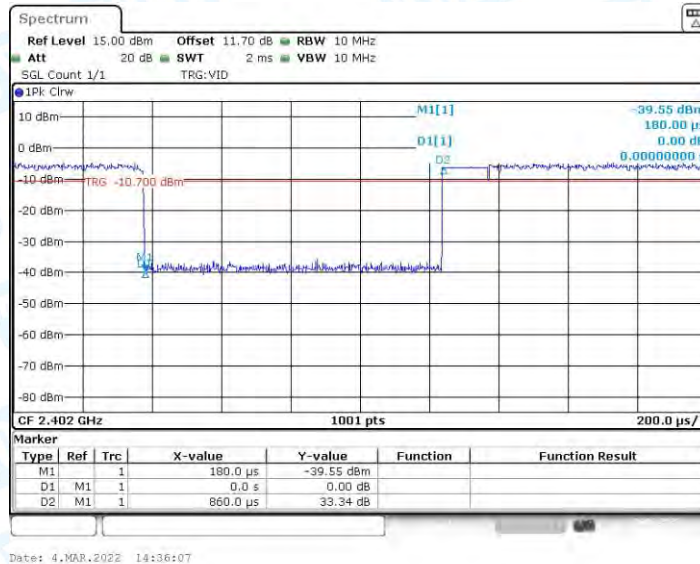
2DH5_Ant1_2402



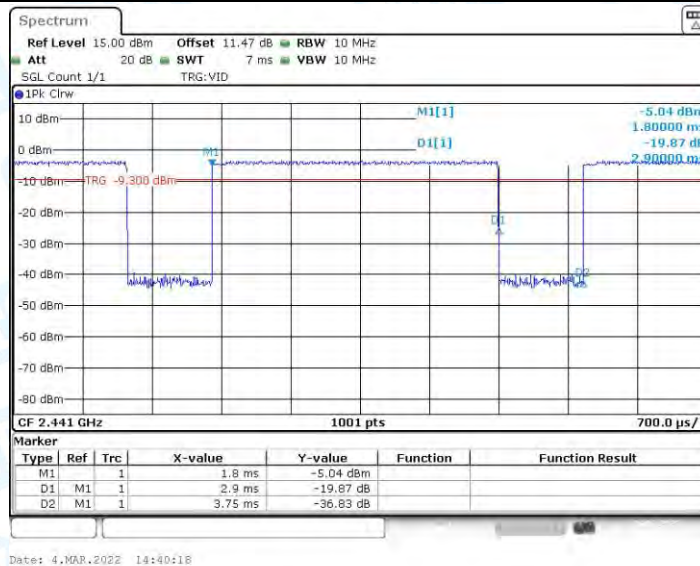
2DH5_Ant1_2441



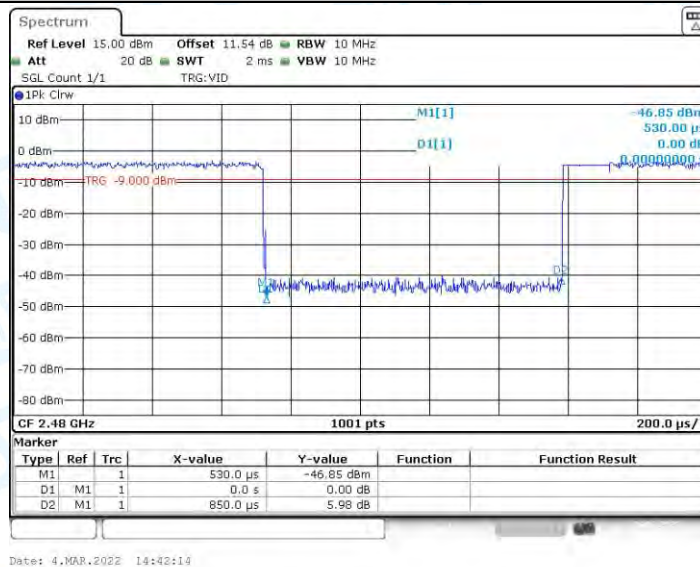
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

10. Emissions in Restricted Bands

10.1. Test Result

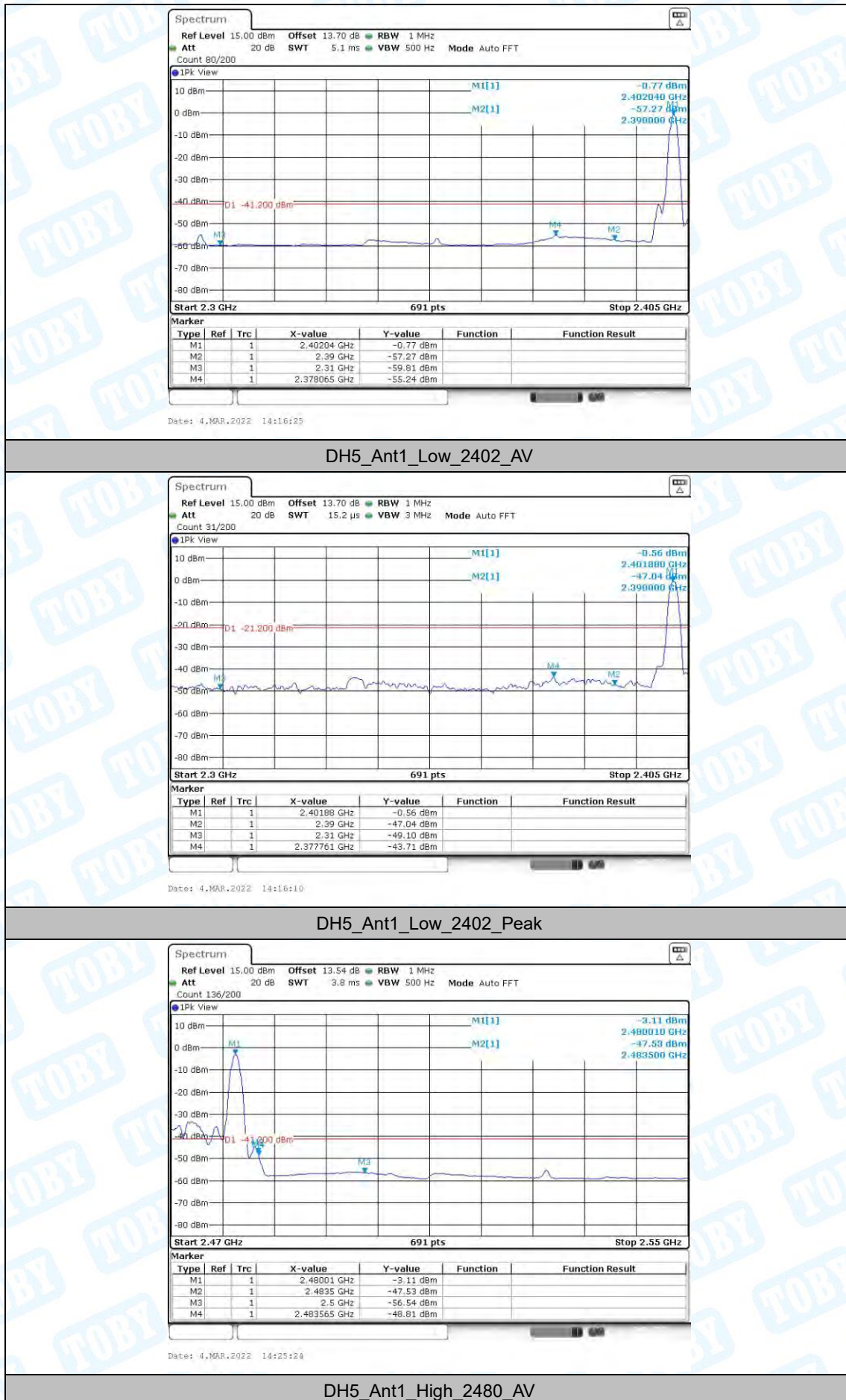
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-59.81	≤-41.20	PASS
				AV	2378.065	-55.24	≤-41.20	PASS
				AV	2390.000	-57.27	≤-41.20	PASS
				Peak	2310.000	-49.1	≤-21.20	PASS
				Peak	2377.761	-43.71	≤-21.20	PASS
				Peak	2390.000	-47.04	≤-21.20	PASS
		High	2480	AV	2483.500	-47.53	≤-41.20	PASS
				AV	2483.565	-48.81	≤-41.20	PASS
				AV	2500.000	-56.54	≤-41.20	PASS
				Peak	2483.500	-40.09	≤-21.20	PASS
				Peak	2483.565	-40.1	≤-21.20	PASS
				Peak	2500.000	-46.73	≤-21.20	PASS
		Low	Hop_240 2	Peak	2310.000	-48.33	≤-21.20	PASS
				Peak	2348.239	-45.66	≤-21.20	PASS
				Peak	2390.000	-48.48	≤-21.20	PASS
		High	Hop_248 0	Peak	2483.500	-45.36	≤-21.20	PASS
				Peak	2497.478	-43.32	≤-21.20	PASS
				Peak	2500.000	-46.72	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-59.81	≤-41.20	PASS
				AV	2380.500	-56.84	≤-41.20	PASS
				AV	2390.000	-57.88	≤-41.20	PASS
				Peak	2310.000	-48.53	≤-21.20	PASS
				Peak	2337.739	-43.31	≤-21.20	PASS
				Peak	2390.000	-47.86	≤-21.20	PASS
		High	2480	AV	2483.500	-50.62	≤-41.20	PASS
				AV	2483.565	-51.41	≤-41.20	PASS
				AV	2500.000	-56.44	≤-41.20	PASS
				Peak	2483.500	-42.56	≤-21.20	PASS
				Peak	2483.797	-41.3	≤-21.20	PASS
				Peak	2500.000	-45.95	≤-21.20	PASS
		Low	Hop_240 2	Peak	2310.000	-48.96	≤-21.20	PASS
				Peak	2342.000	-44.63	≤-21.20	PASS
				Peak	2390.000	-46.75	≤-21.20	PASS
		High	Hop_248 0	Peak	2483.500	-46.46	≤-21.20	PASS
				Peak	2489.014	-44.6	≤-21.20	PASS
				Peak	2500.000	-46.61	≤-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-60.2	≤-41.20	PASS
				AV	2340.935	-57.93	≤-41.20	PASS
				AV	2390.000	-58.88	≤-41.20	PASS
				Peak	2310.000	-48.91	≤-21.20	PASS
				Peak	2336.826	-45.15	≤-21.20	PASS

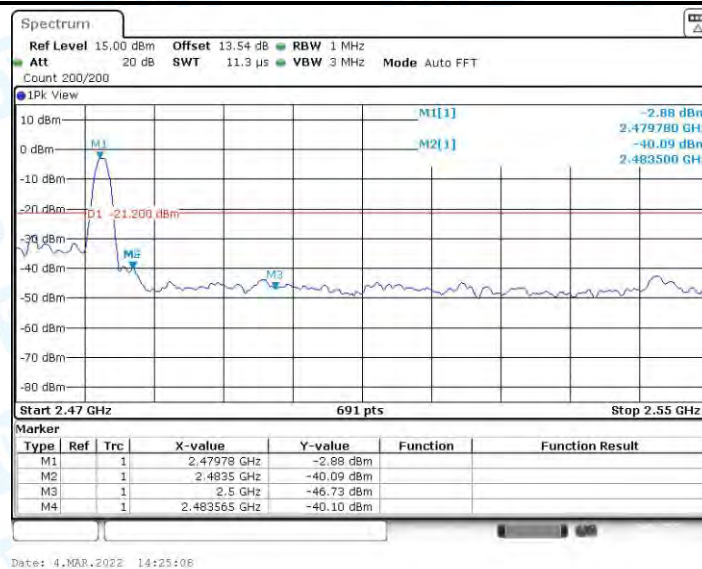
				Peak	2390.000	-48.46	≤-21.20	PASS
		High	2480	AV	2483.500	-52.66	≤-41.20	PASS
				AV	2483.565	-53.14	≤-41.20	PASS
				AV	2500.000	-57.39	≤-41.20	PASS
				Peak	2483.500	-42.4	≤-21.20	PASS
				Peak	2483.913	-41.57	≤-21.20	PASS
				Peak	2500.000	-46.66	≤-21.20	PASS
		Low	Hop_240 2	Peak	2310.000	-48.53	≤-21.20	PASS
				Peak	2385.674	-45.16	≤-21.20	PASS
				Peak	2390.000	-47.56	≤-21.20	PASS
		High	Hop_248 0	Peak	2483.500	-46.76	≤-21.20	PASS
				Peak	2483.913	-43.18	≤-21.20	PASS
				Peak	2500.000	-46.94	≤-21.20	PASS

Note:

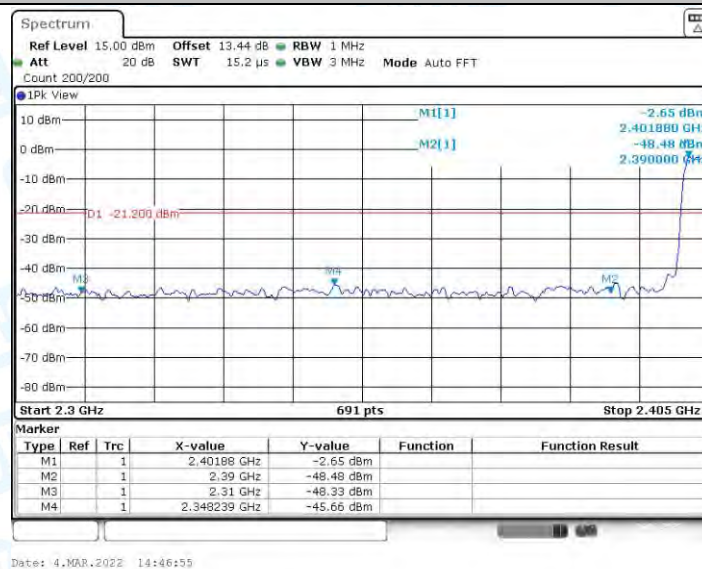
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

10.2. Test Graphs

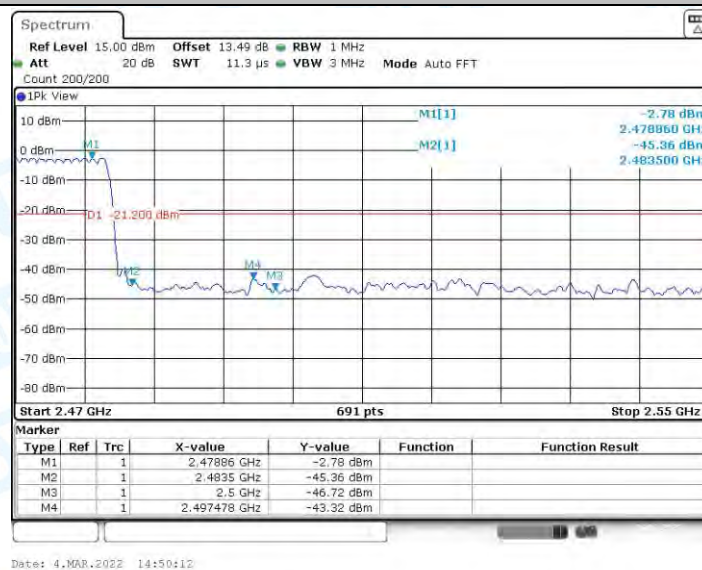




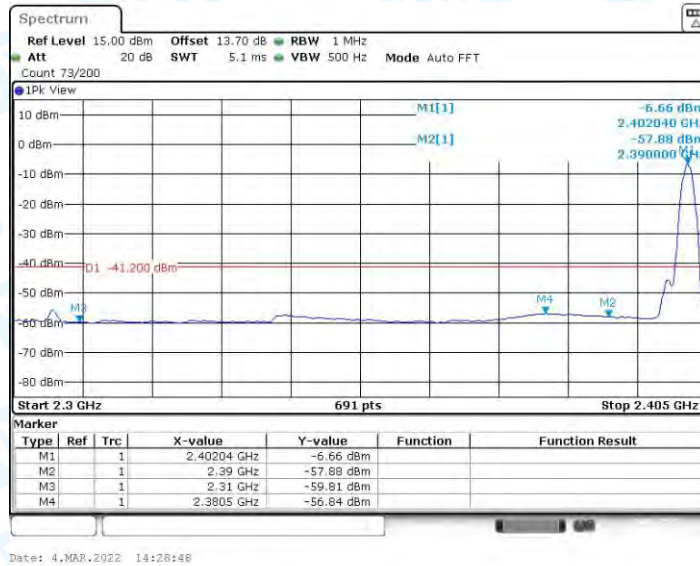
DH5_Ant1_High_2480_Peak



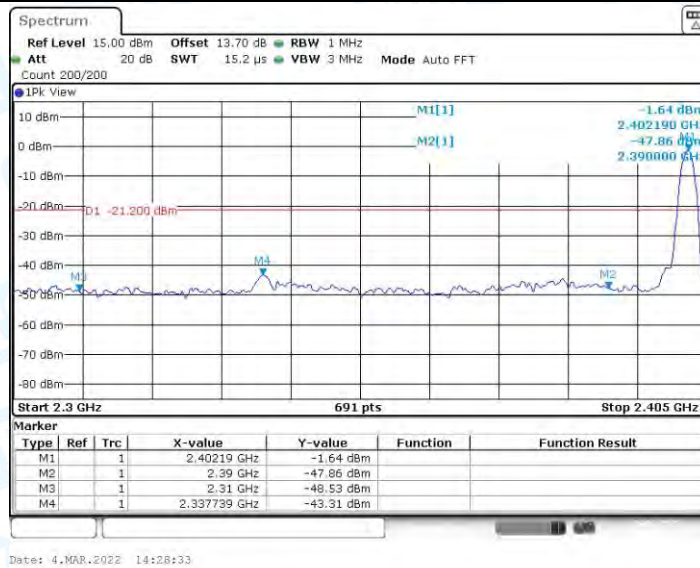
DH5_Ant1_Low_Hop_2402_Peak



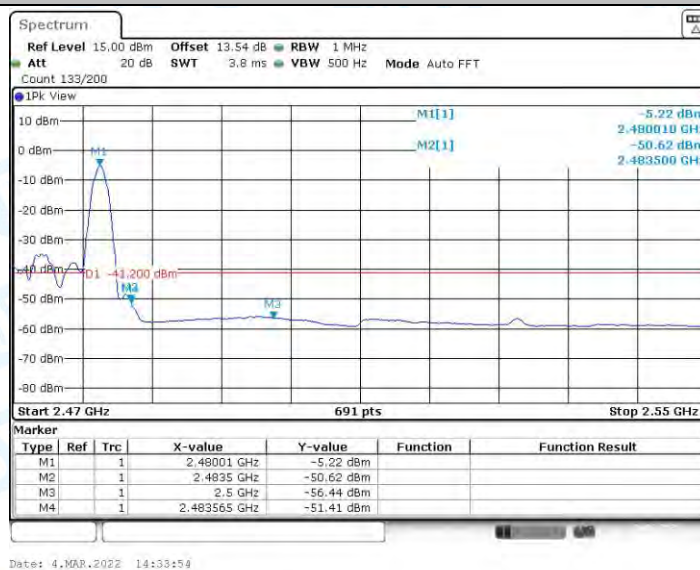
DH5_Ant1_High_Hop_2480_Peak



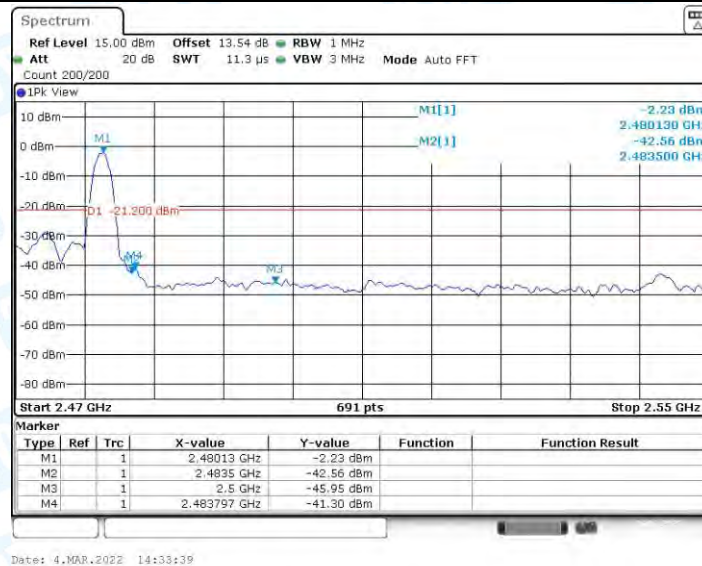
2DH5_Ant1_Low_2402_AV



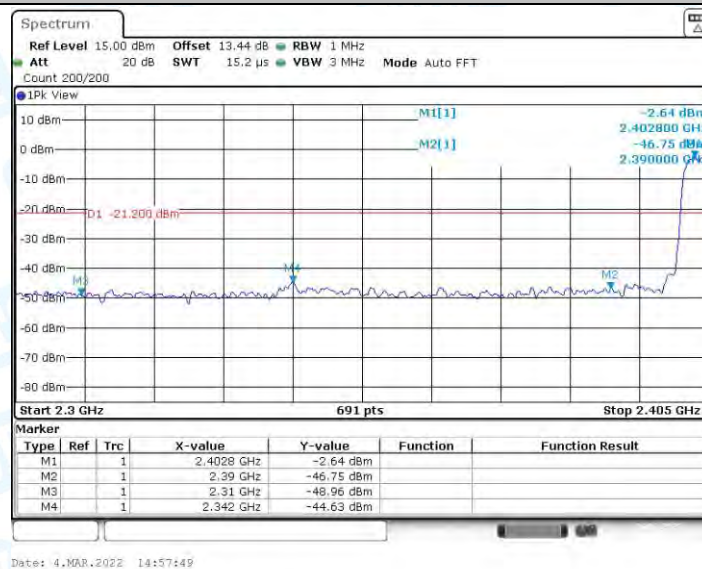
2DH5_Ant1_Low_2402_Peak



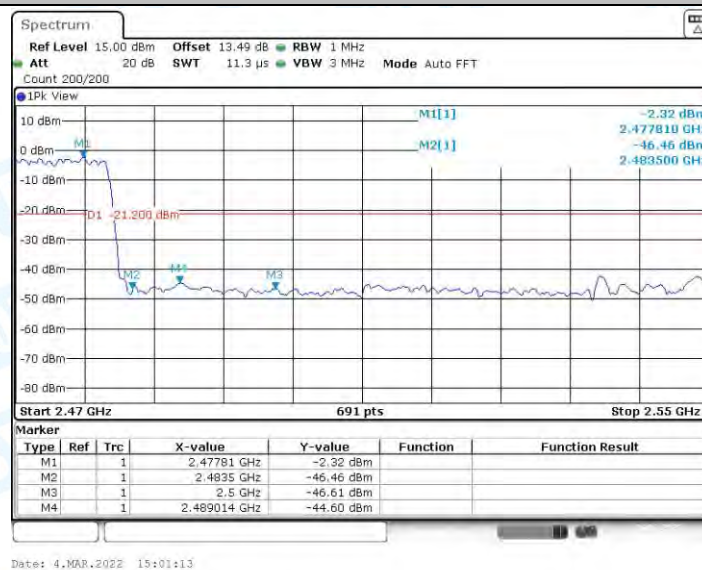
2DH5_Ant1_High_2480_AV



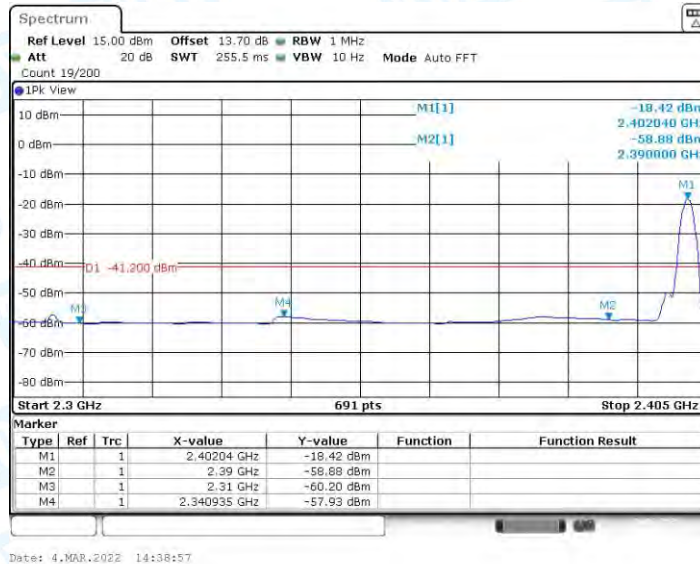
2DH5_Ant1_High_2480_Peak



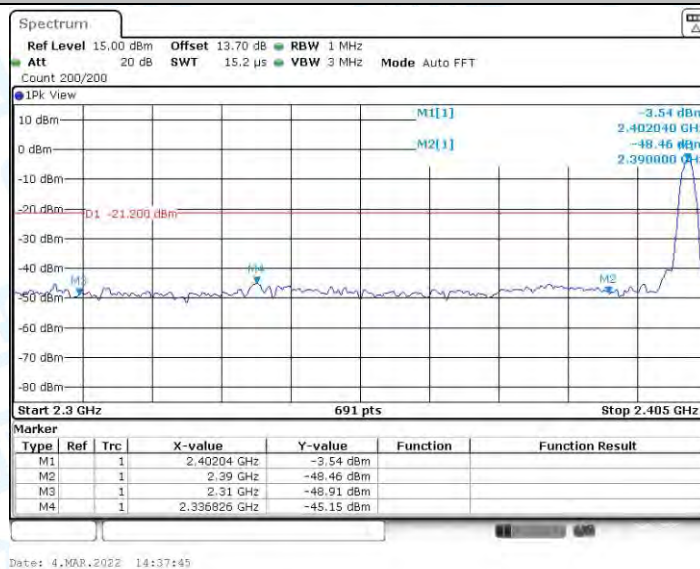
2DH5_Ant1_Low_Hop_2402_Peak



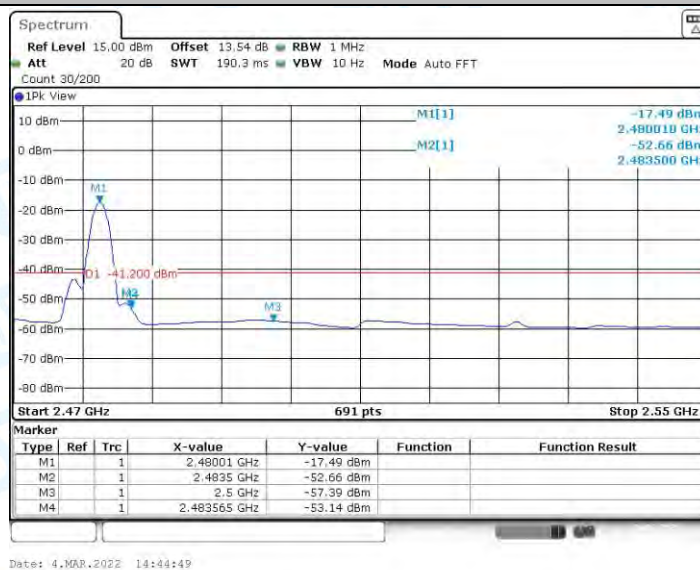
2DH5_Ant1_High_Hop_2480_Peak



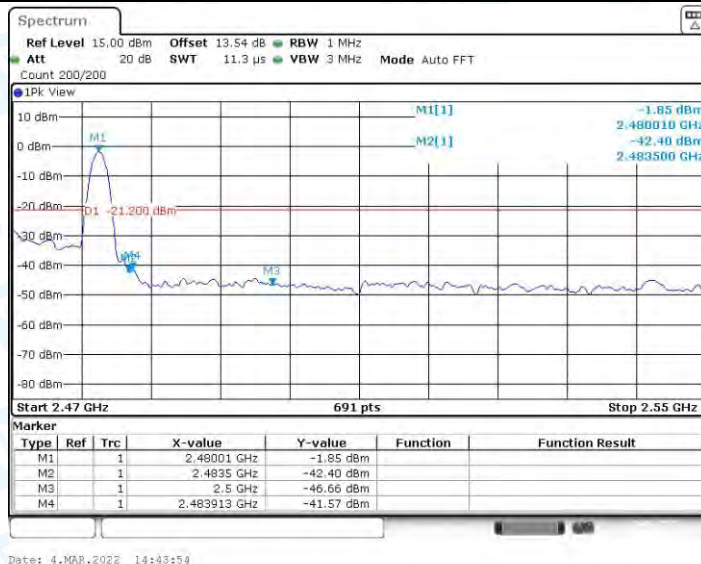
3DH5_Ant1_Low_2402_AV



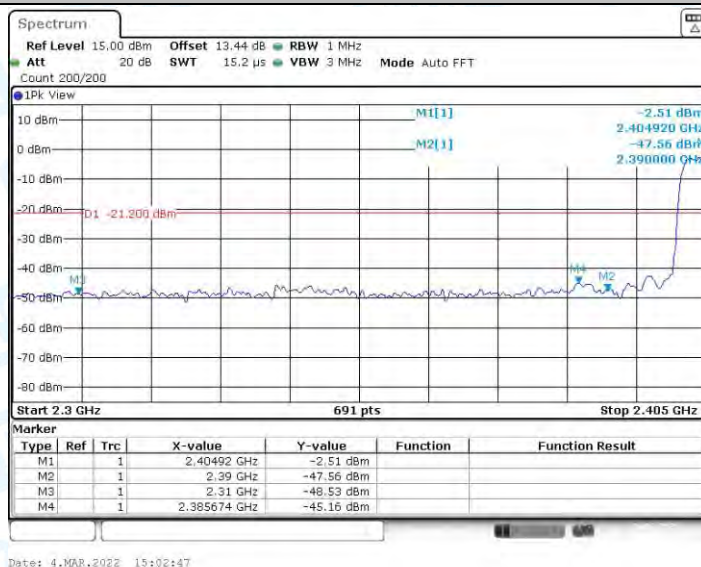
3DH5_Ant1_Low_2402_Peak



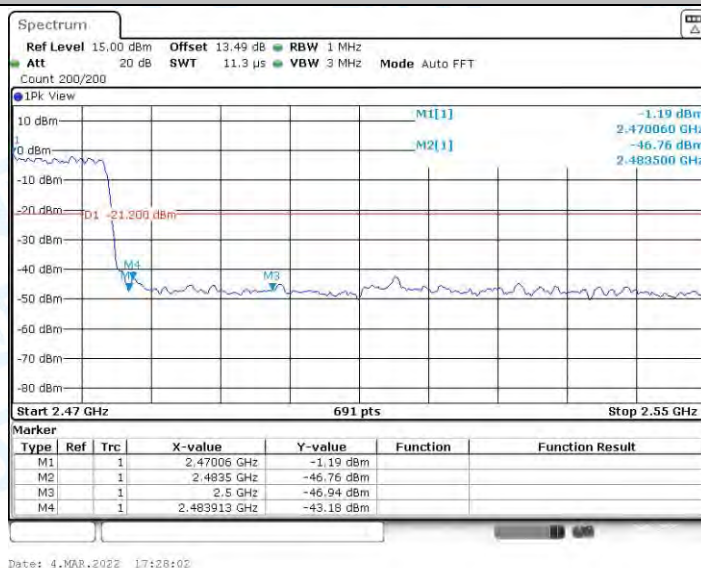
3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak



3DH5_Ant1_Low_Hop_2402_Peak



3DH5_Ant1_High_Hop_2480_Peak

-----End of the report-----