

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

General Description of EUT	
Product Name:	Bluetooth Adapter
Test Model:	K6
Sample ID:	202202-0190_02-08
Environmental Conditions	
Temperature:	25°C
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-202202-0190-4	

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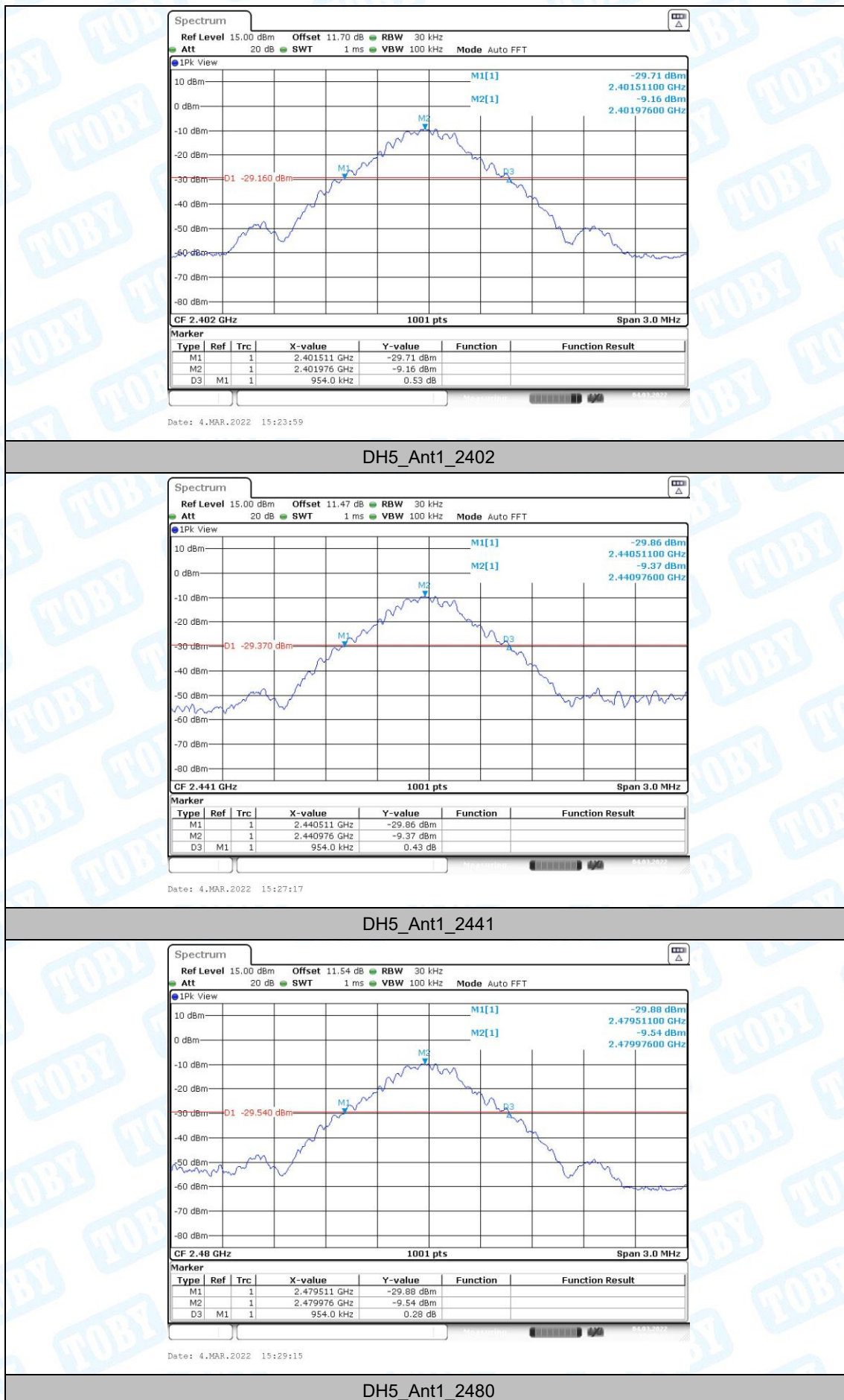
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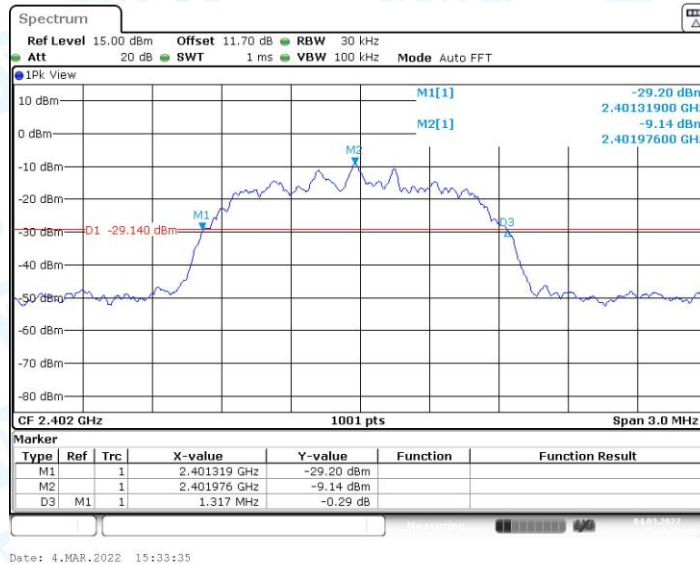
1. 20dB Emission Bandwidth

1.1. Test Result

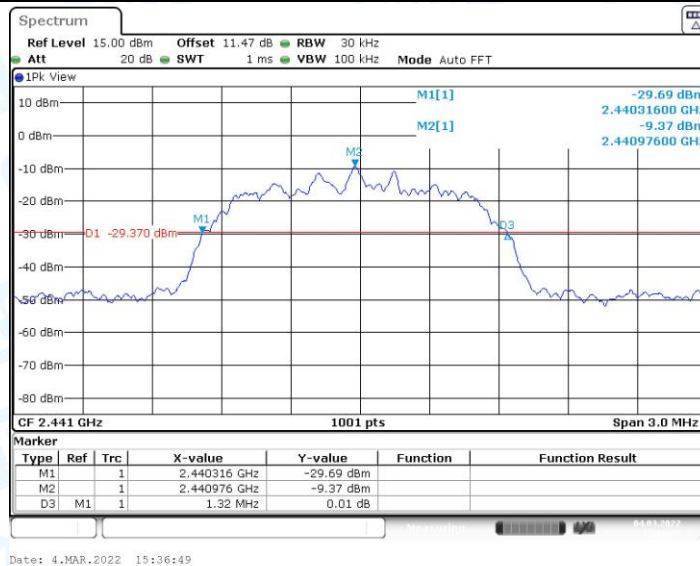
TestMode	Antenna	Channel	20db EBW[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.95	---	---
		2441	0.95	---	---
		2480	0.95	---	---
2DH5	Ant1	2402	1.32	---	---
		2441	1.32	---	---
		2480	1.32	---	---

1.2. Test Graphs

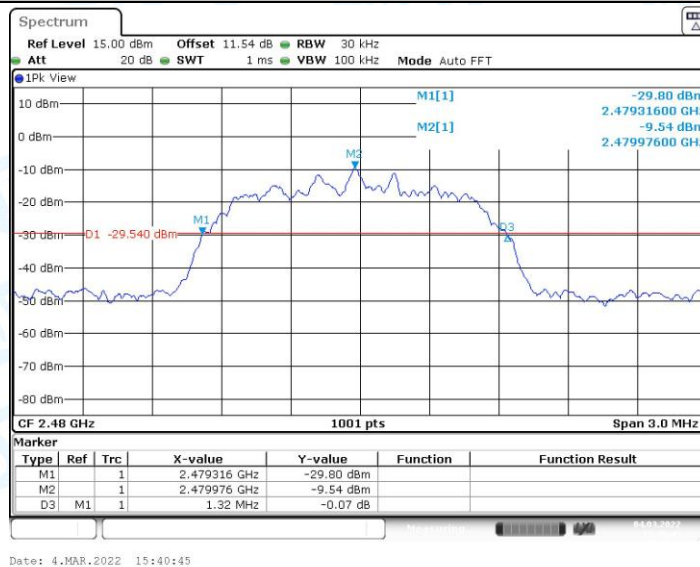




2DH5_Ant1_2402



2DH5_Ant1_2441



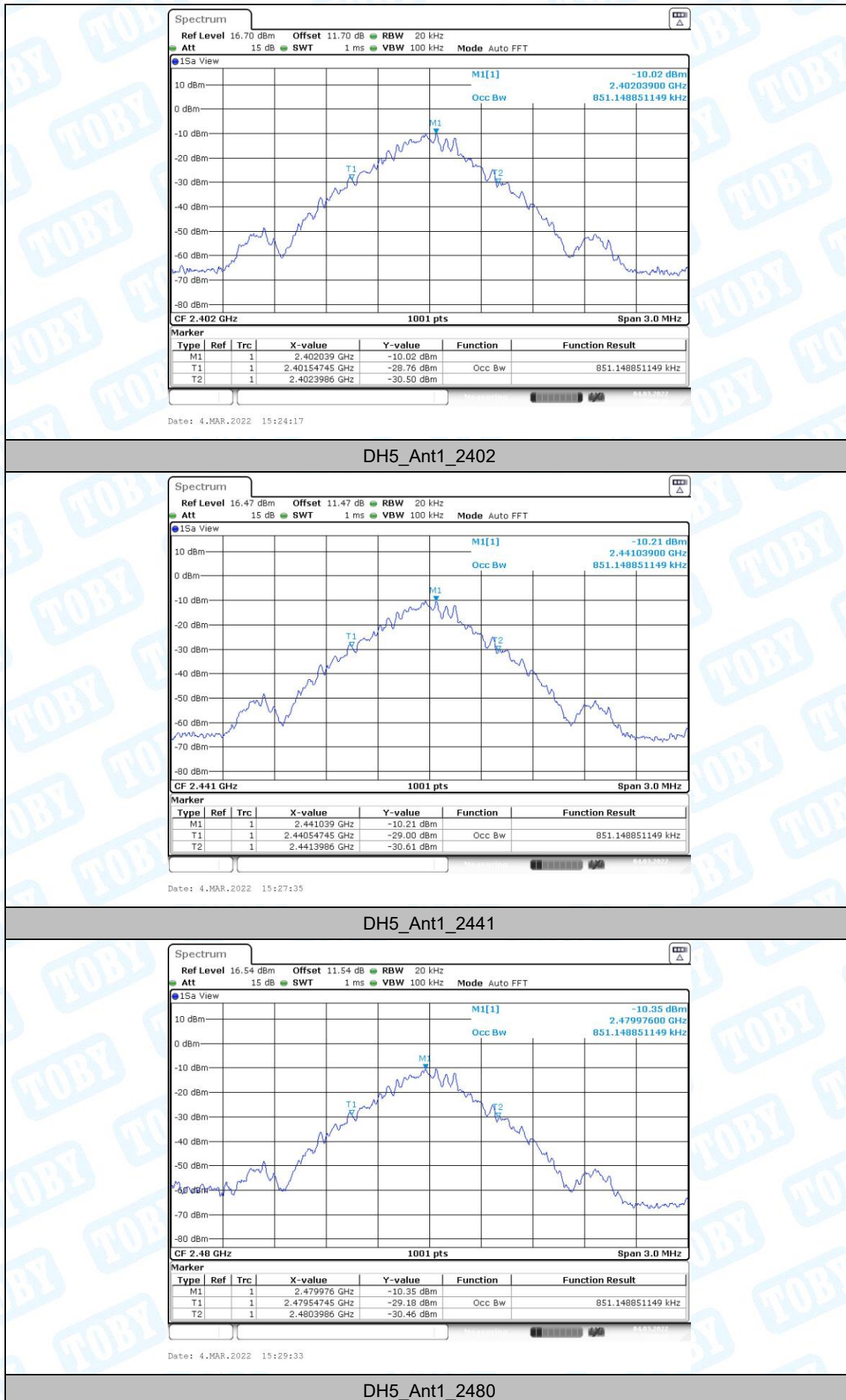
2DH5_Ant1_2480

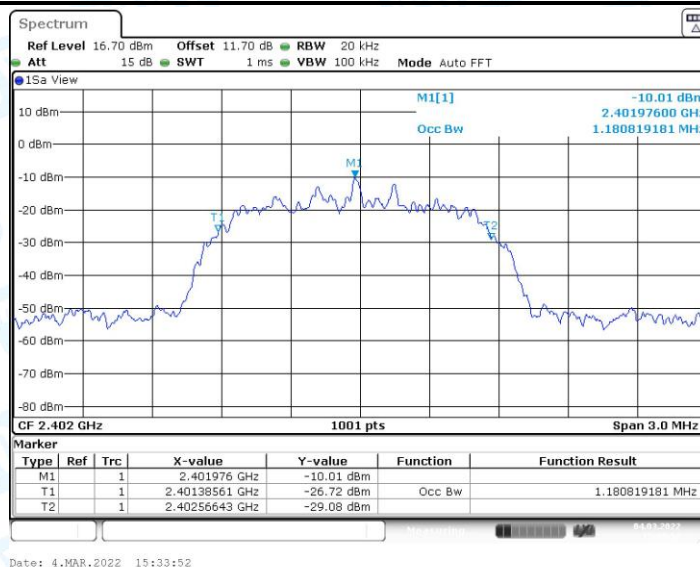
2. Occupied Channel Bandwidth

2.1. Test Result

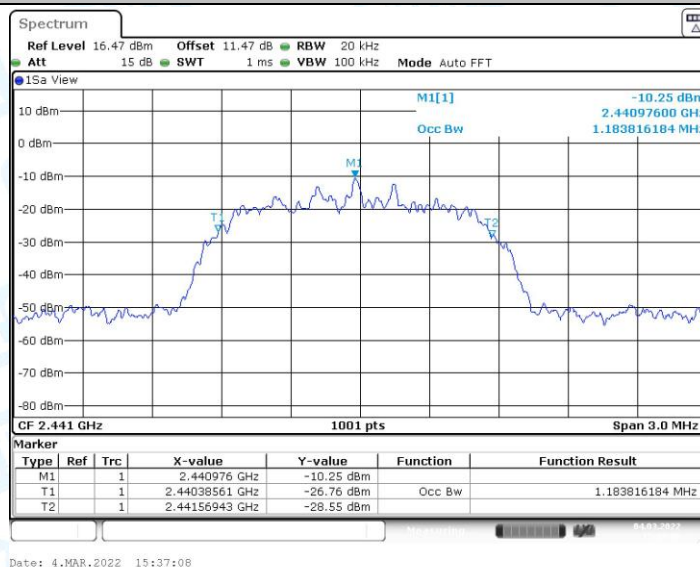
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.851	2401.547	2402.399	---	---
		2441	0.851	2440.547	2441.399	---	---
		2480	0.851	2479.547	2480.399	---	---
2DH5	Ant1	2402	1.181	2401.386	2402.566	---	---
		2441	1.184	2440.386	2441.569	---	---
		2480	1.187	2479.383	2480.569	---	---

2.2. Test Graphs

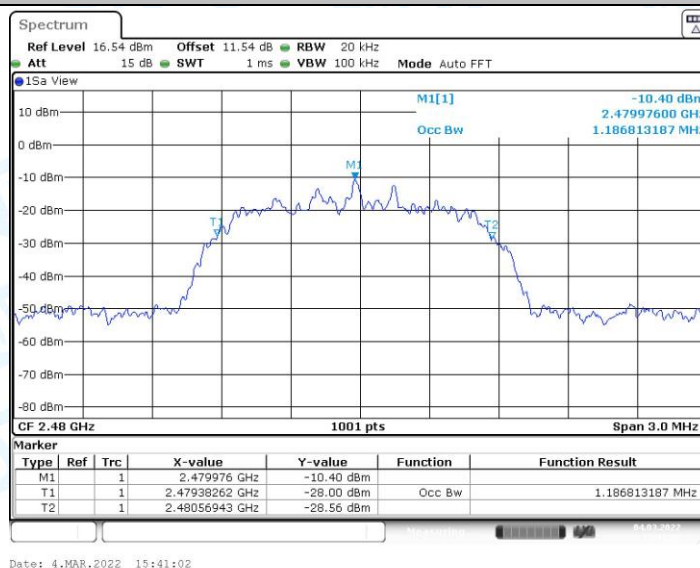




2DH5_Ant1_2402



2DH5_Ant1_2441



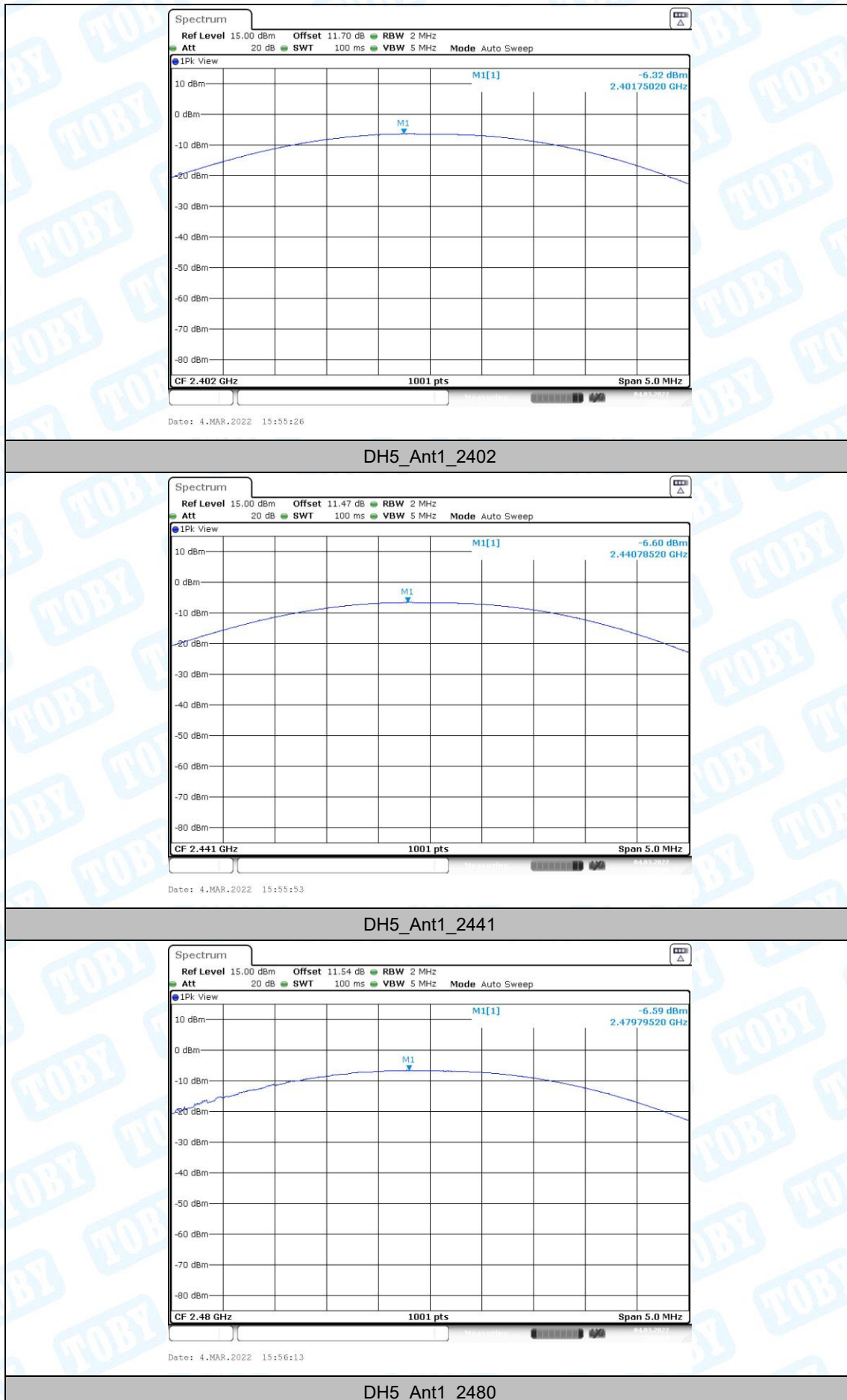
2DH5_Ant1_2480

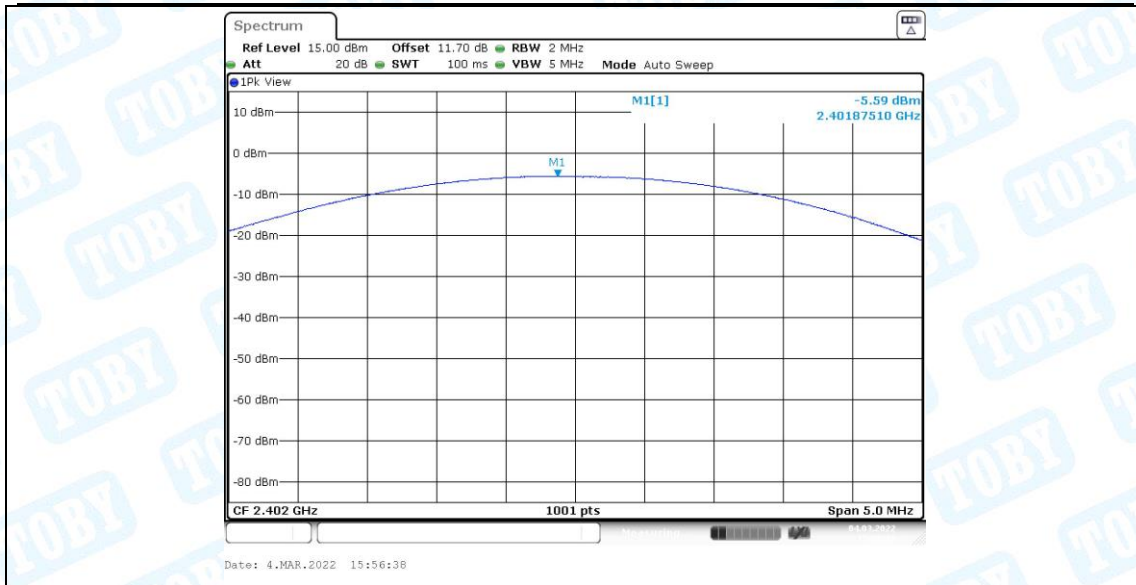
3. Maximum conducted output power

3.1. Test Result

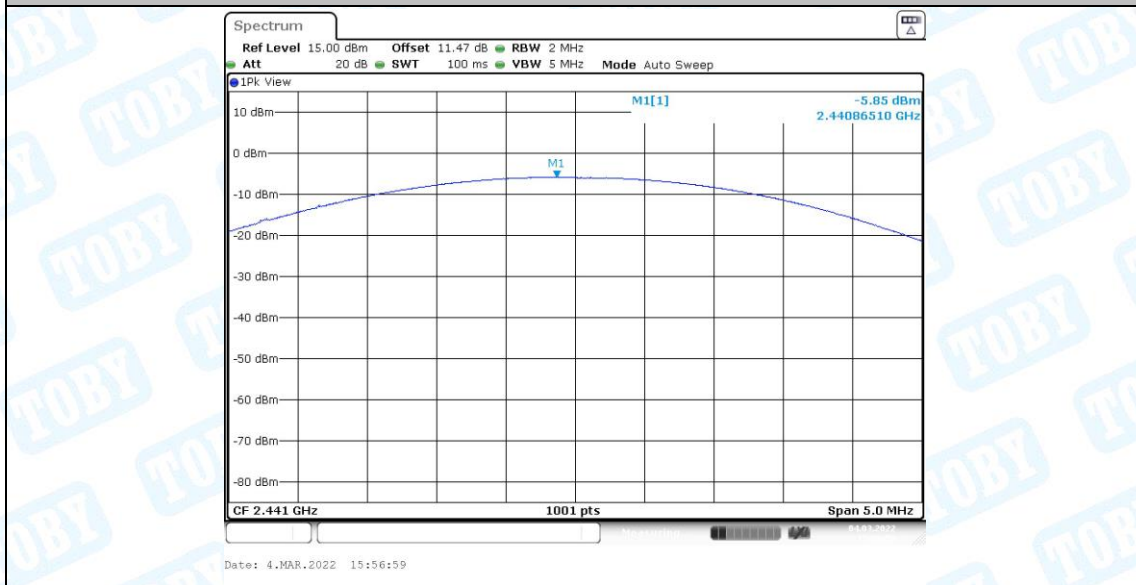
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-6.32	≤20.97	PASS
		2441	-6.6	≤20.97	PASS
		2480	-6.59	≤20.97	PASS
2DH5	Ant1	2402	-5.59	≤20.97	PASS
		2441	-5.85	≤20.97	PASS
		2480	-5.97	≤20.97	PASS

3.2. Test Graphs

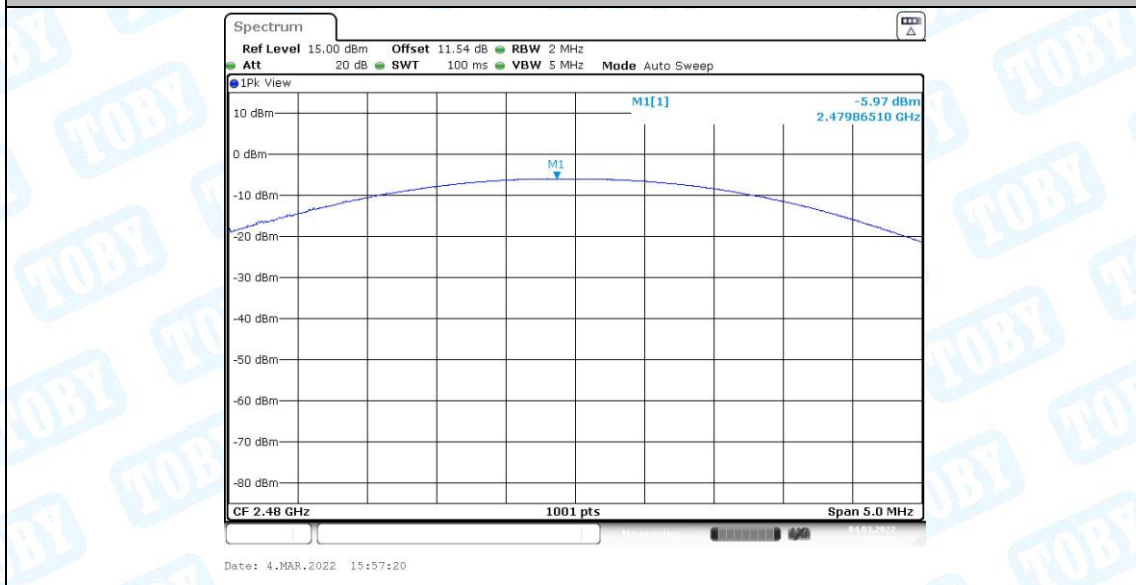




2DH5_Ant1_2402



2DH5_Ant1_2441



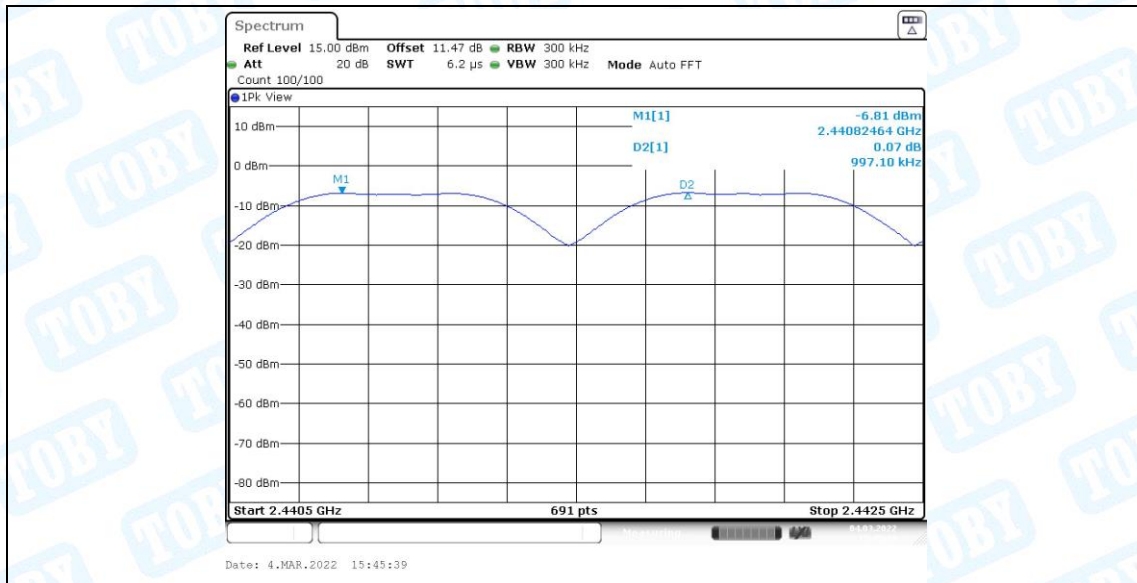
2DH5_Ant1_2480

4. Carrier frequency separation

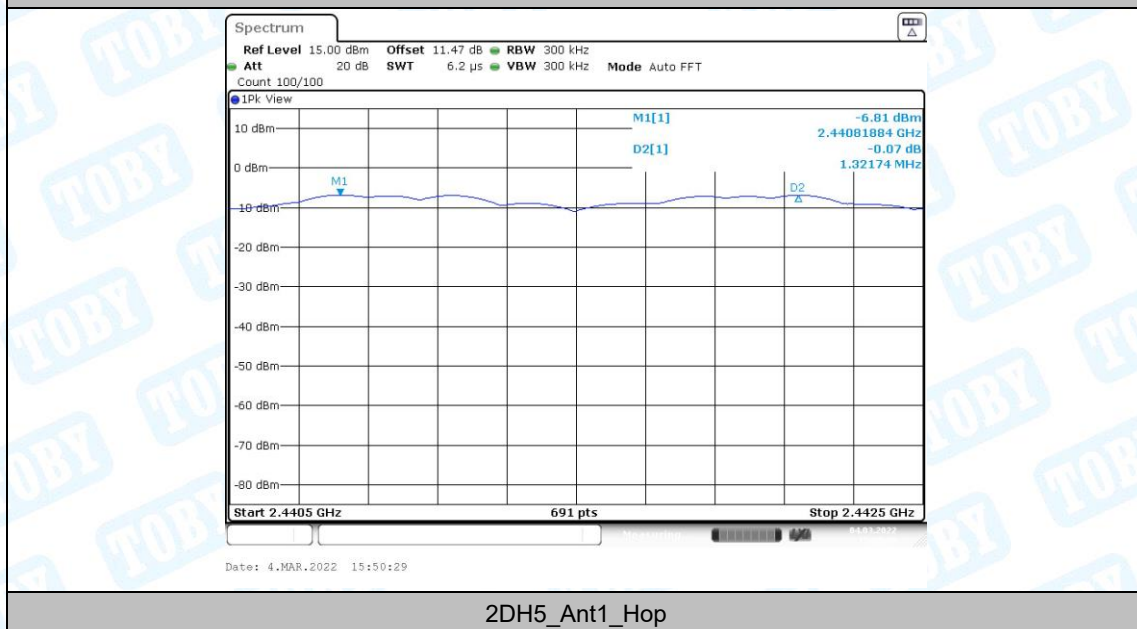
4.1. Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.997	≥ 0.950	PASS
2DH5	Ant1	Hop	1.322	≥ 1.320	PASS

4.2.Test Graphs



DH5_Ant1_Hop



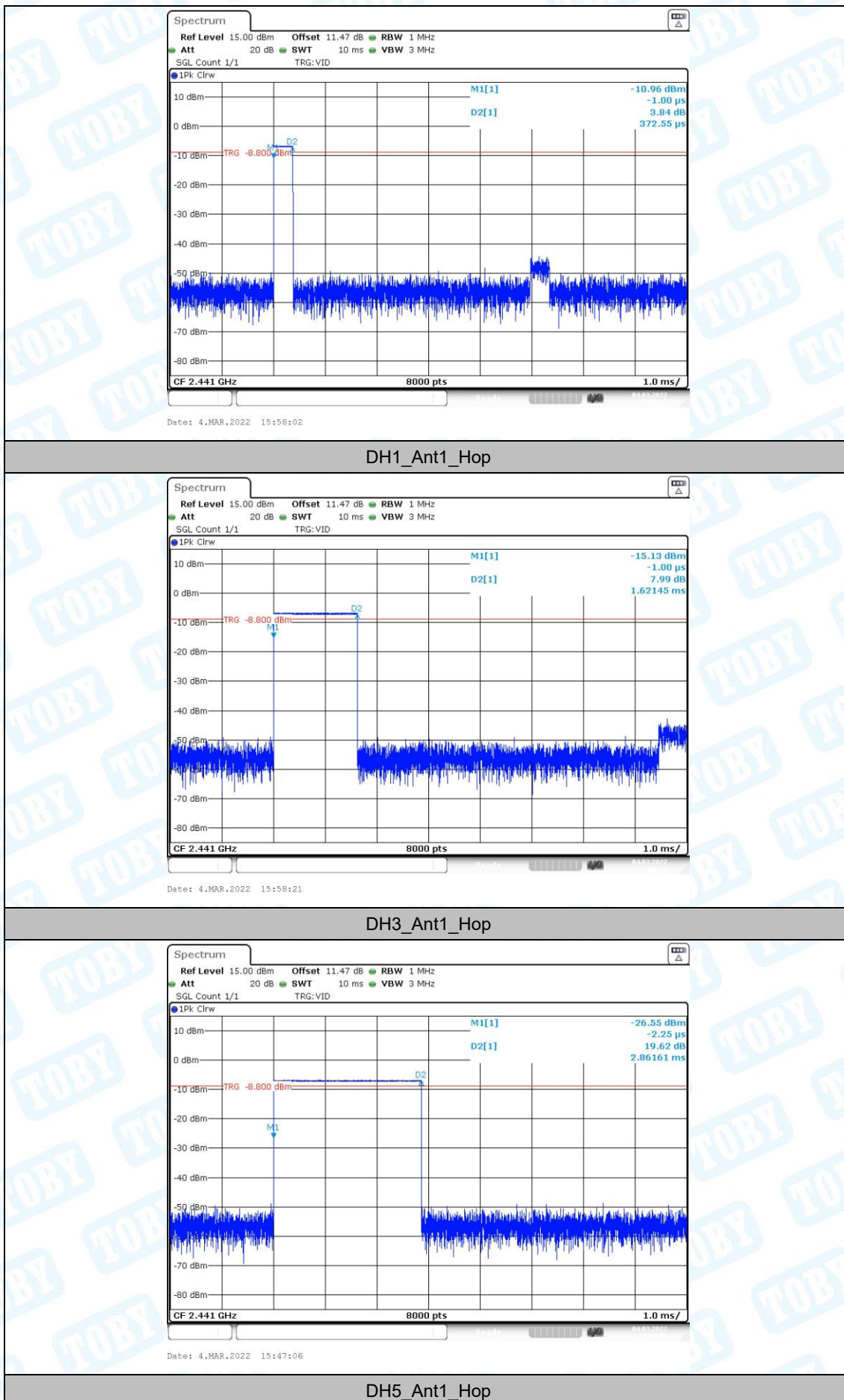
2DH5_Ant1_Hop

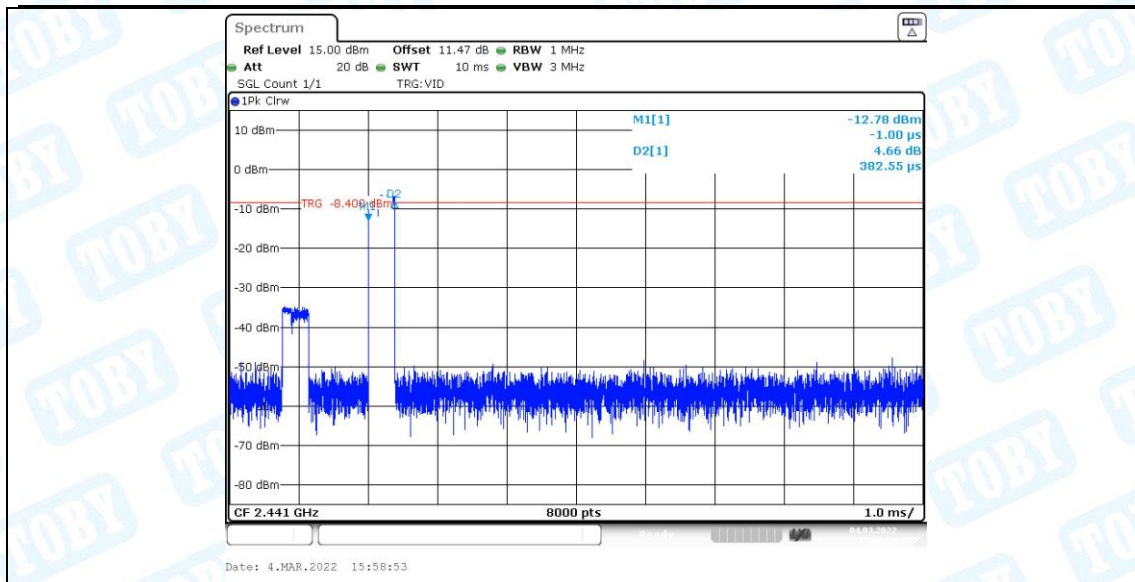
5. Time of occupancy

5.1. Test Result

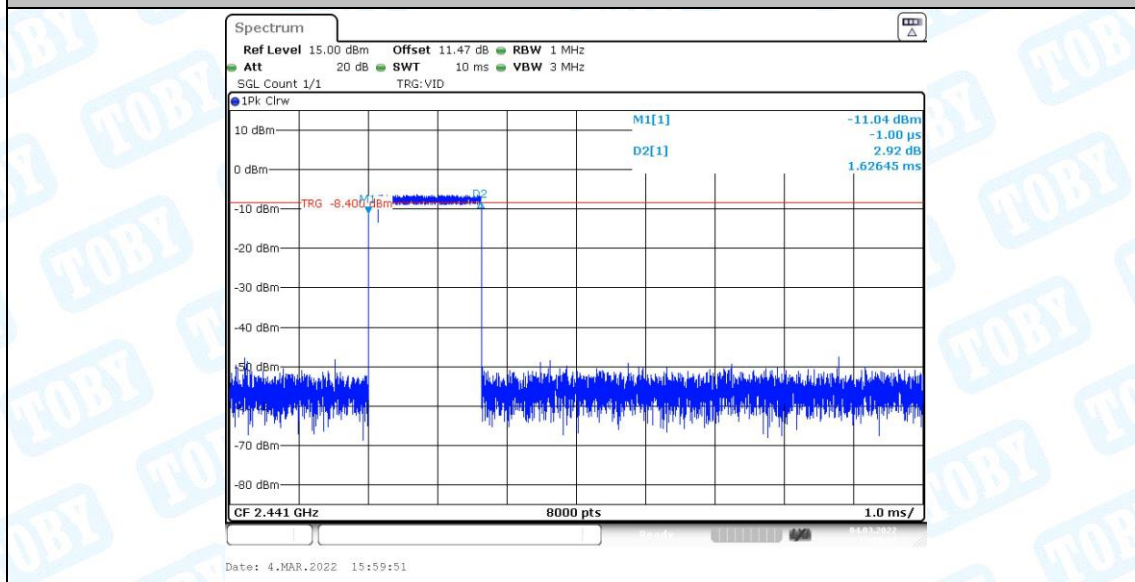
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	320	0.119	≤0.4	PASS
DH3	Ant1	Hop	1.62	160	0.259	≤0.4	PASS
DH5	Ant1	Hop	2.86	106.67	0.305	≤0.4	PASS
2DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.63	160	0.26	≤0.4	PASS
2DH5	Ant1	Hop	2.87	106.67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

5.2. Test Graphs

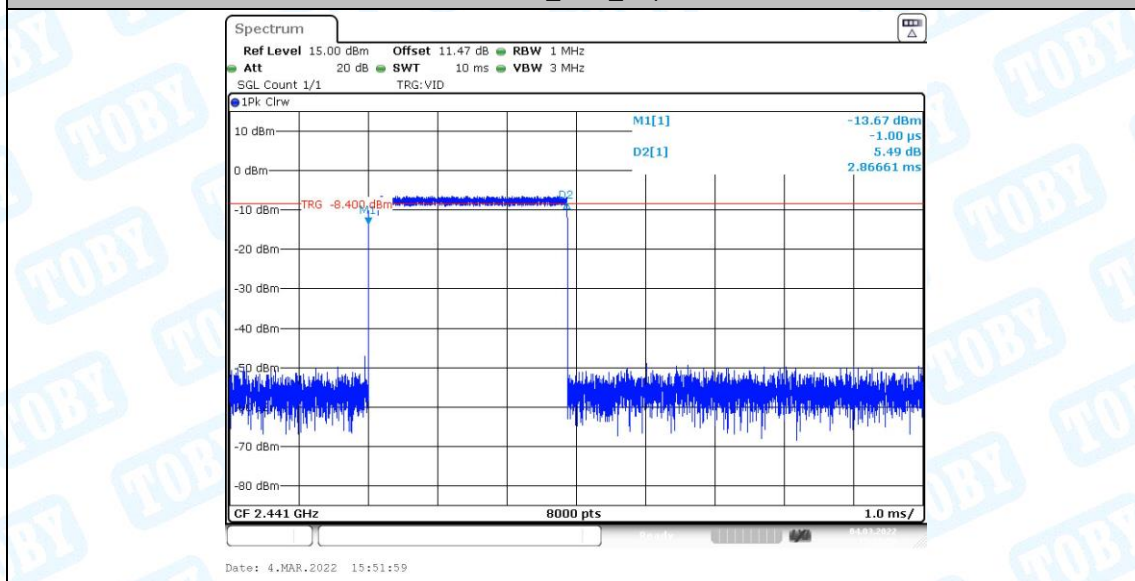




2DH1_Ant1_Hop



2DH3_Ant1_Hop



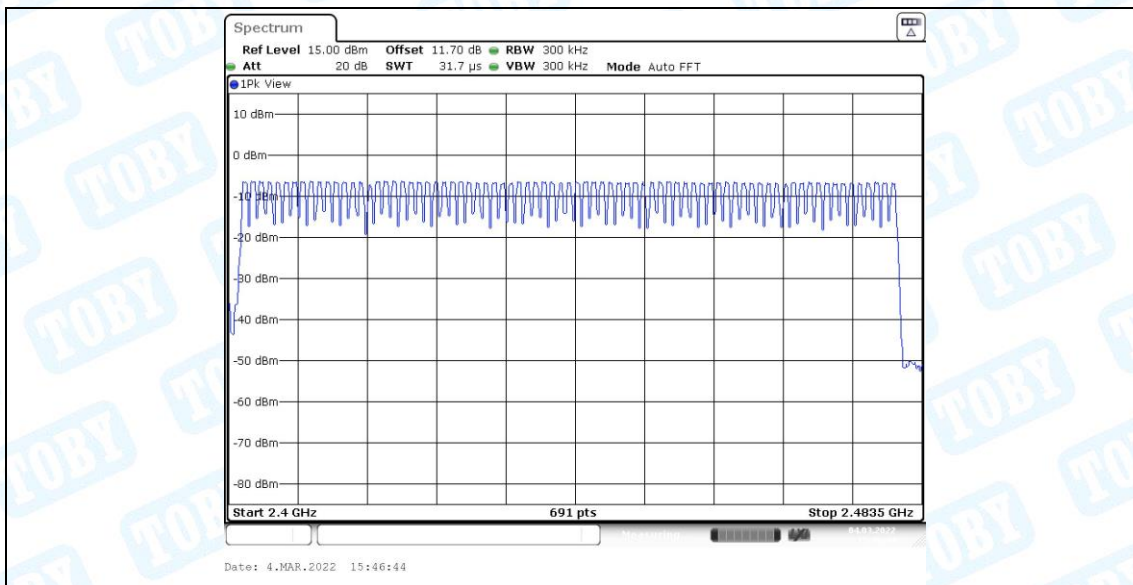
2DH5_Ant1_Hop

6. Number of hopping channels

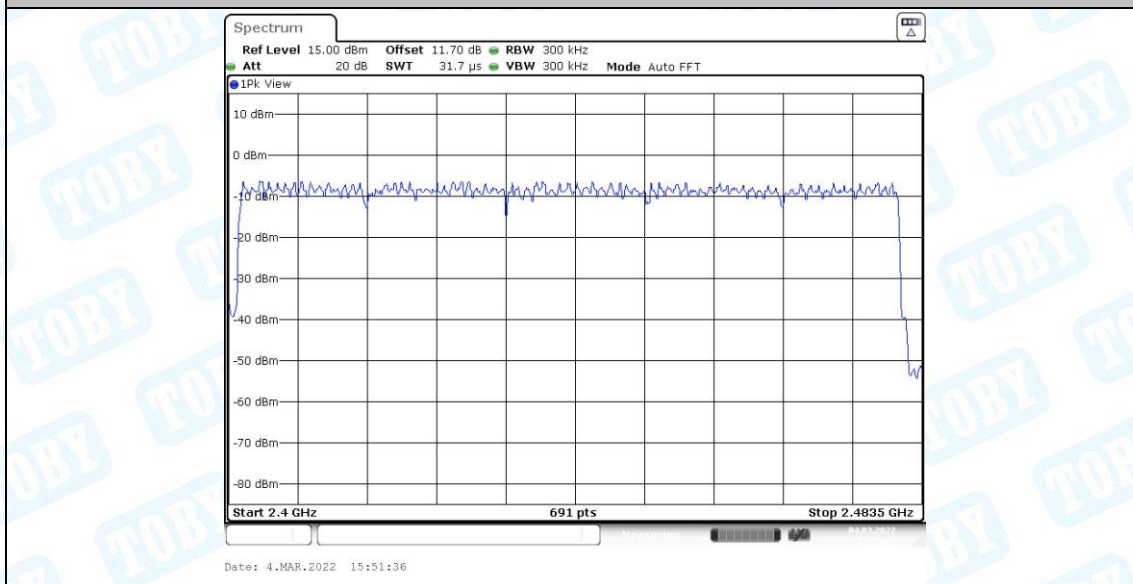
6.1. Test Result

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

6.2.Test Graphs



DH5_Ant1_Hop



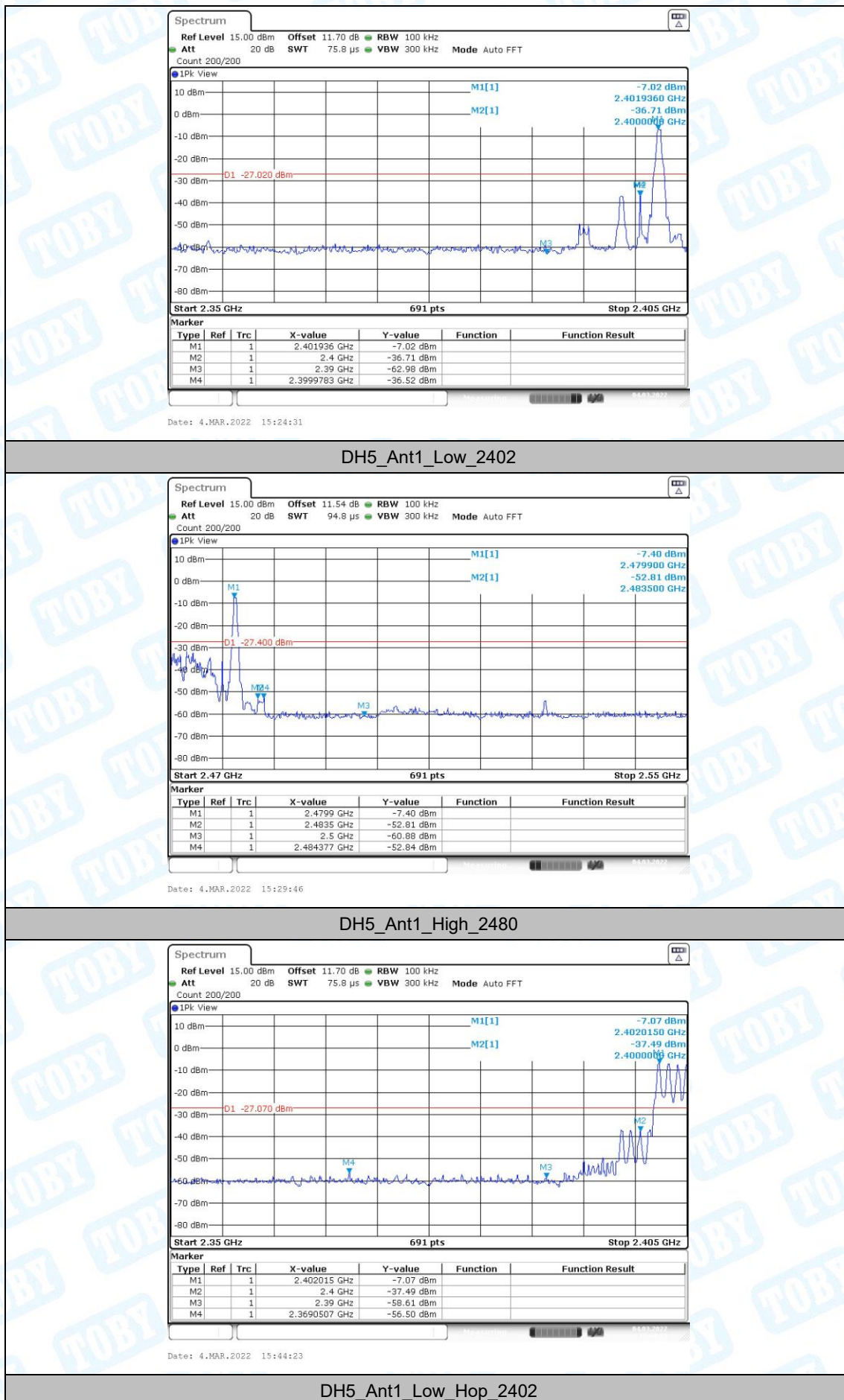
2DH5_Ant1_Hop

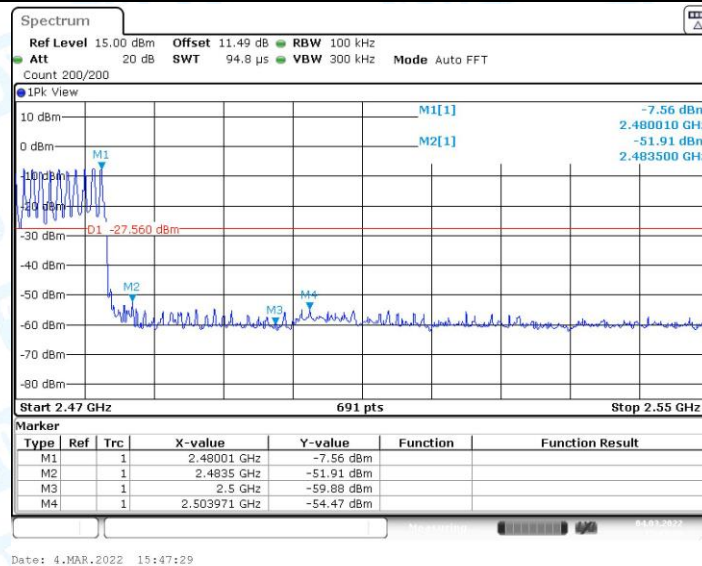
7. Band edge measurements

7.1. Test Result

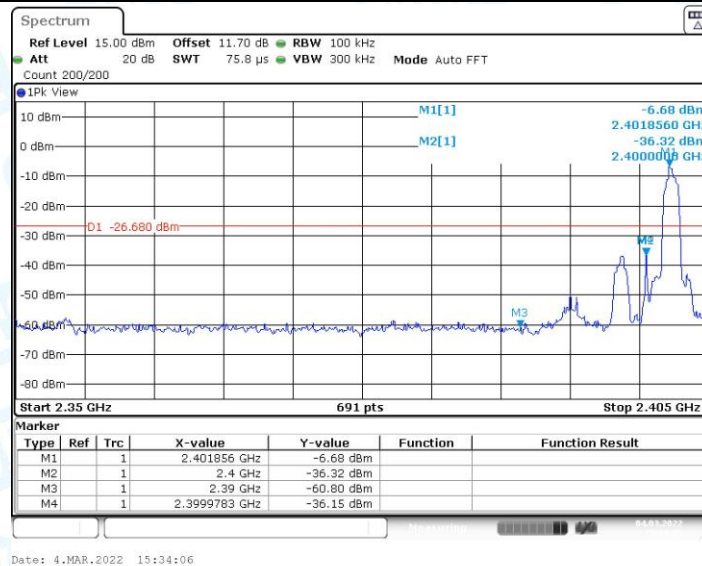
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-7.02	-36.52	≤ -27.02	PASS
		High	2480	-7.40	-52.84	≤ -27.4	PASS
		Low	Hop_2402	-7.07	-56.5	≤ -27.07	PASS
		High	Hop_2480	-7.56	-54.47	≤ -27.56	PASS
2DH5	Ant1	Low	2402	-6.68	-36.15	≤ -26.68	PASS
		High	2480	-7.01	-53.21	≤ -27.01	PASS
		Low	Hop_2402	-11.00	-58.06	≤ -31	PASS
		High	Hop_2480	-10.06	-52.64	≤ -30.06	PASS

7.2. Test Graphs

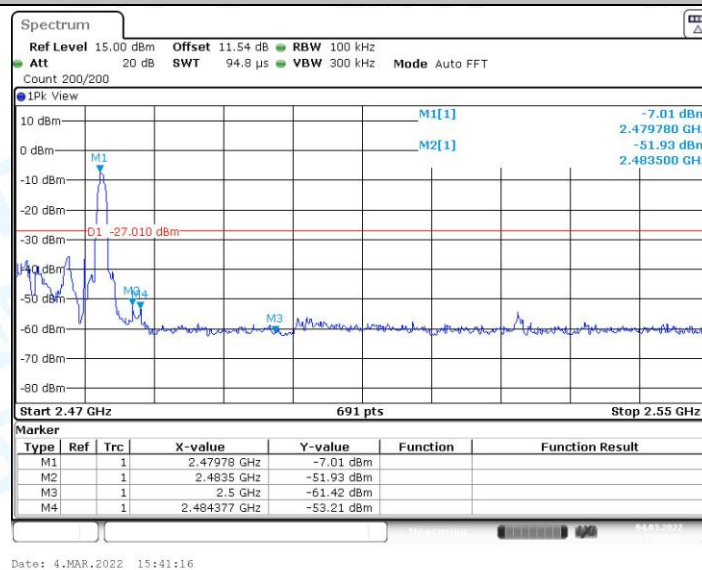




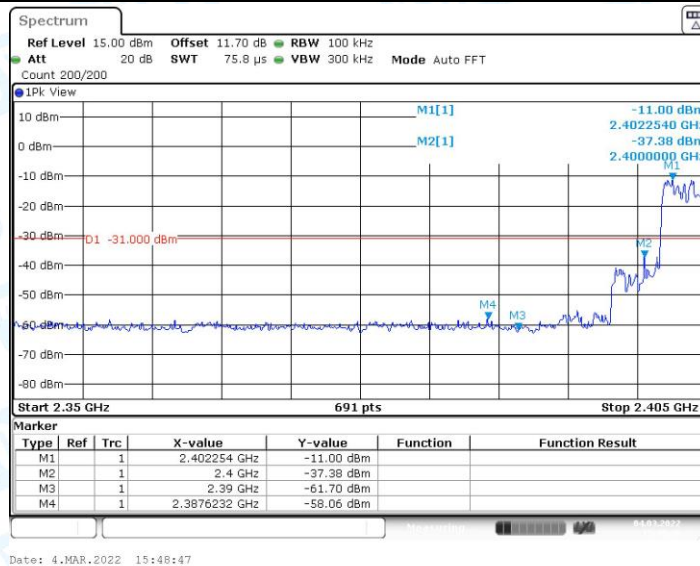
DH5_Ant1_High_Hop_2480



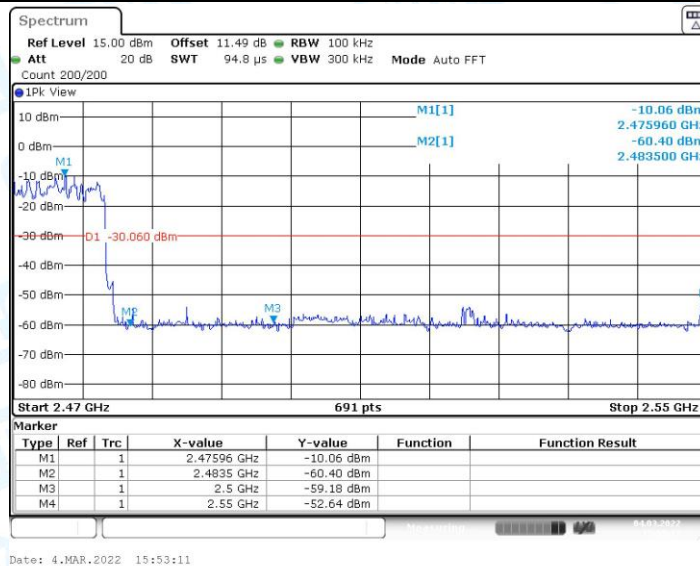
2DH5_Ant1_Low_2402



2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



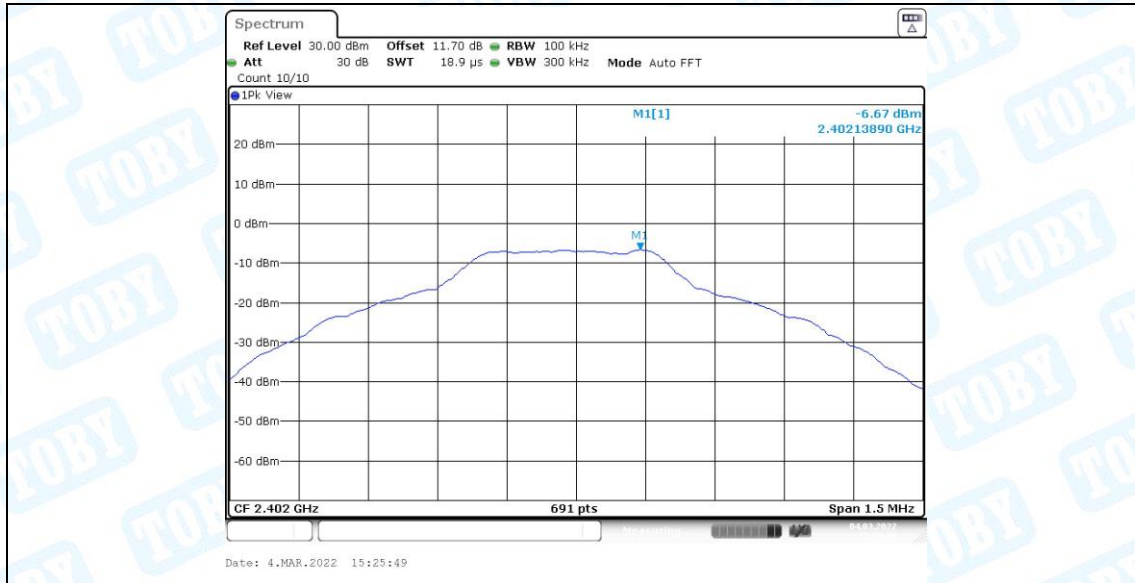
2DH5_Ant1_High_Hop_2480

8. Conducted Spurious Emission

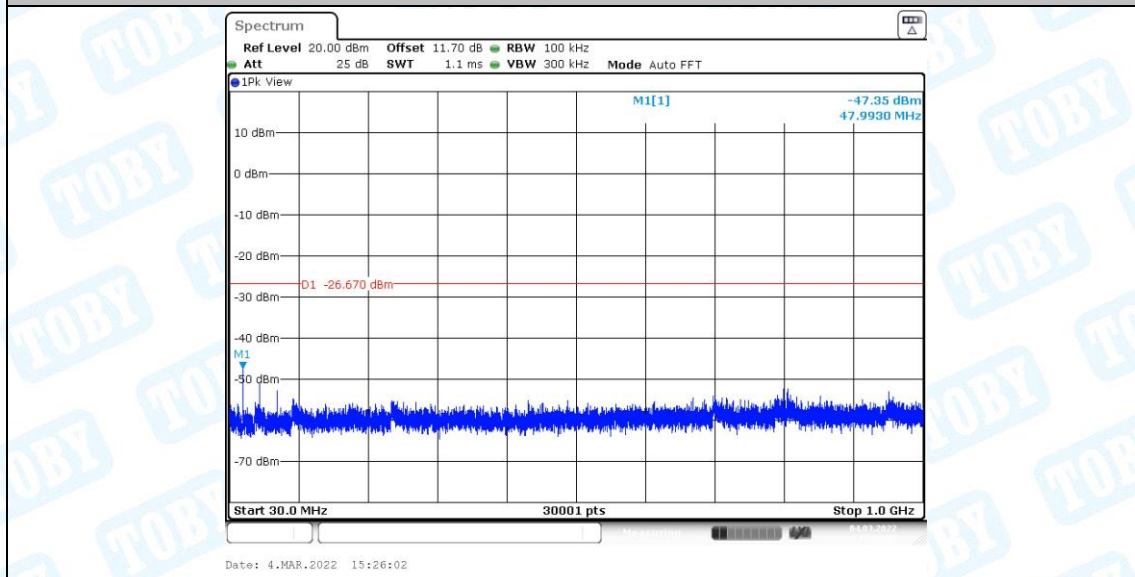
8.1. Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-6.67	-6.67	---	PASS
			30~1000	-6.67	-47.35	≤-26.67	PASS
			1000~26500	-6.67	-46.18	≤-26.67	PASS
		2441	Reference	-6.91	-6.91	---	PASS
			30~1000	-6.91	-47.03	≤-26.91	PASS
			1000~26500	-6.91	-47.11	≤-26.91	PASS
		2480	Reference	-7.07	-7.07	---	PASS
			30~1000	-7.07	-45.88	≤-27.07	PASS
			1000~26500	-7.07	-46.97	≤-27.07	PASS
2DH5	Ant1	2402	Reference	-6.57	-6.57	---	PASS
			30~1000	-6.57	-46.52	≤-26.57	PASS
			1000~26500	-6.57	-46.9	≤-26.57	PASS
		2441	Reference	-6.74	-6.74	---	PASS
			30~1000	-6.74	-48.1	≤-26.74	PASS
			1000~26500	-6.74	-47.29	≤-26.74	PASS
		2480	Reference	-6.93	-6.93	---	PASS
			30~1000	-6.93	-46.61	≤-26.93	PASS
			1000~26500	-6.93	-46.11	≤-26.93	PASS

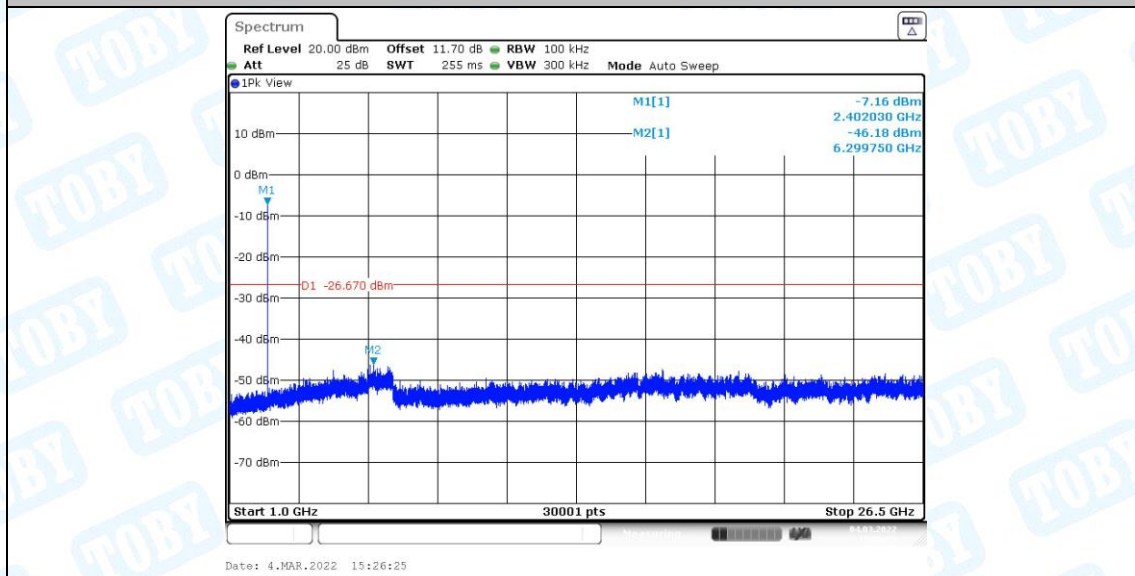
8.2.Test Graphs



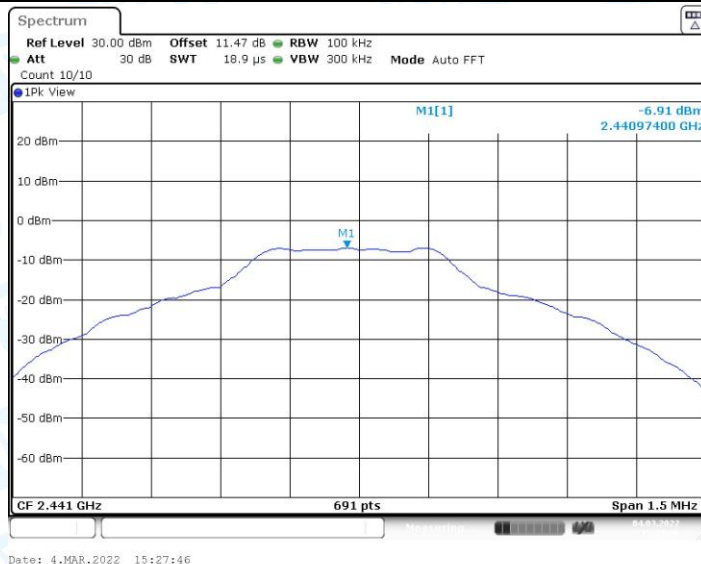
DH5_Ant1_2402_0~Reference



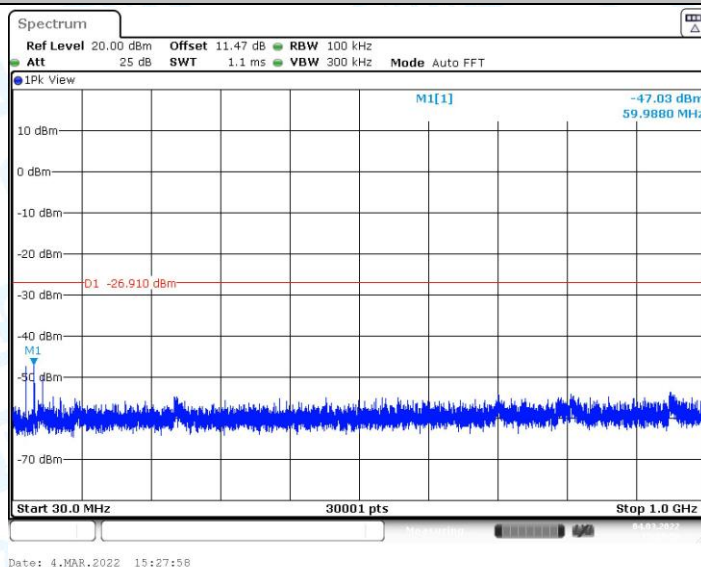
DH5_Ant1_2402_30~1000



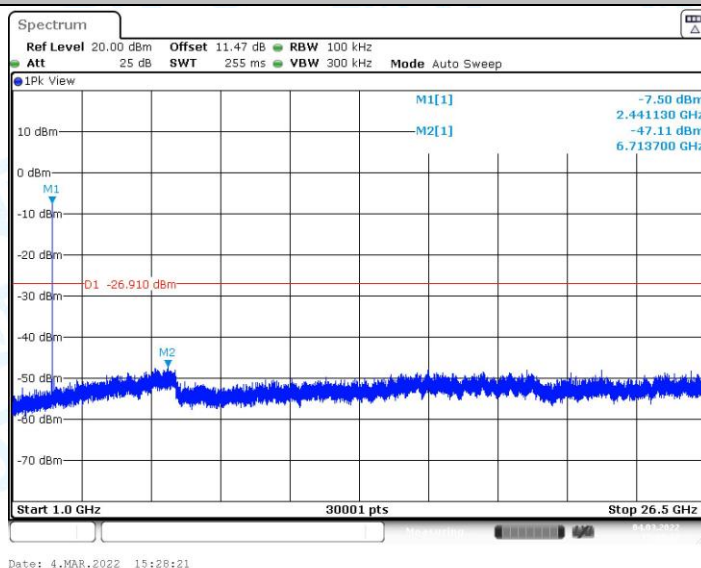
DH5_Ant1_2402_1000~26500



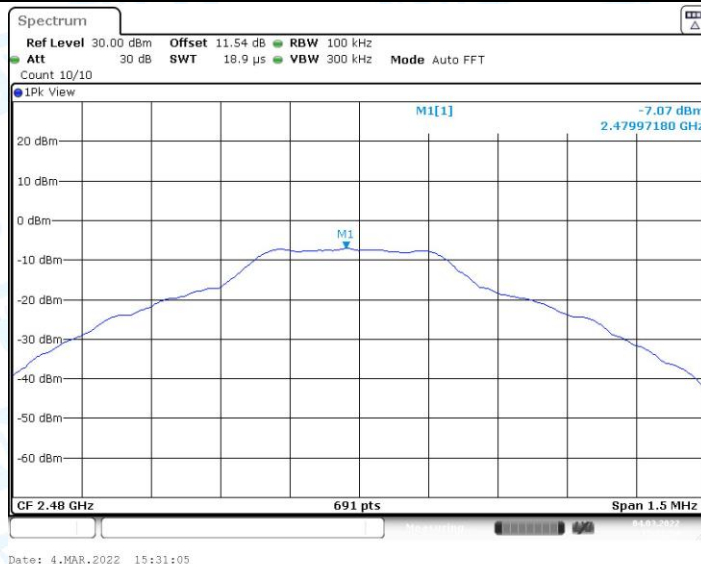
DH5_Ant1_2441_0~Reference



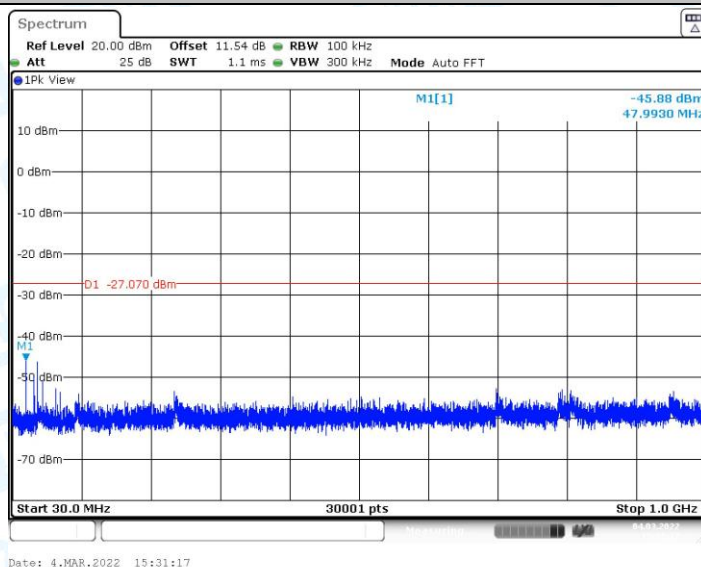
DH5_Ant1_2441_30~1000



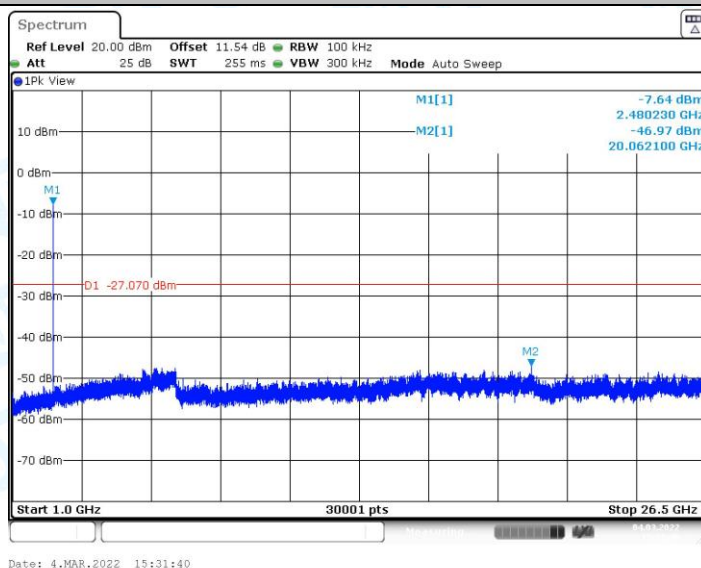
DH5_Ant1_2441_1000~26500



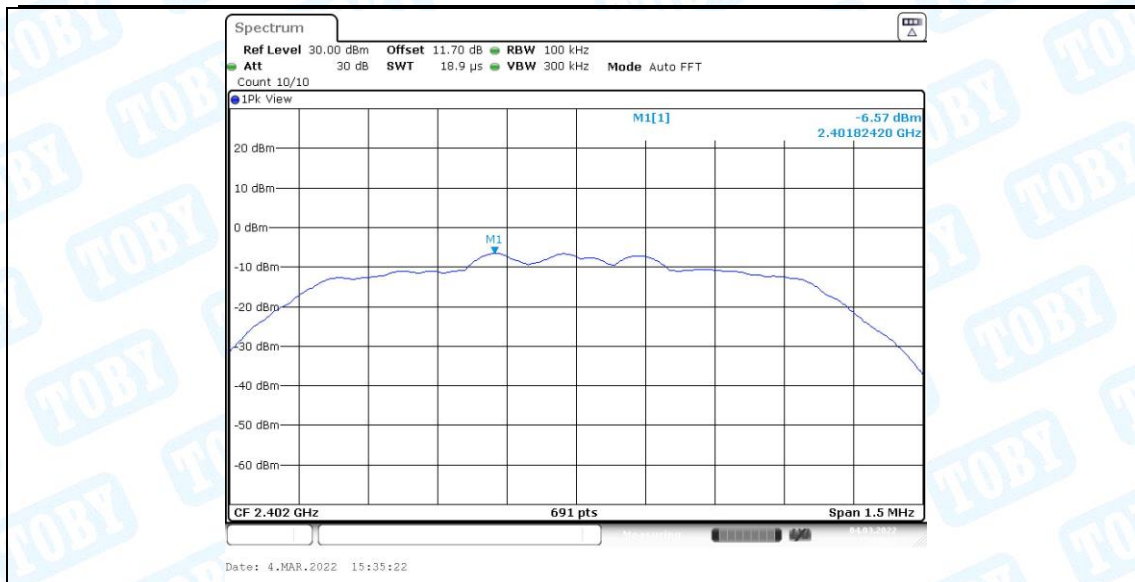
DH5_Ant1_2480_0~Reference



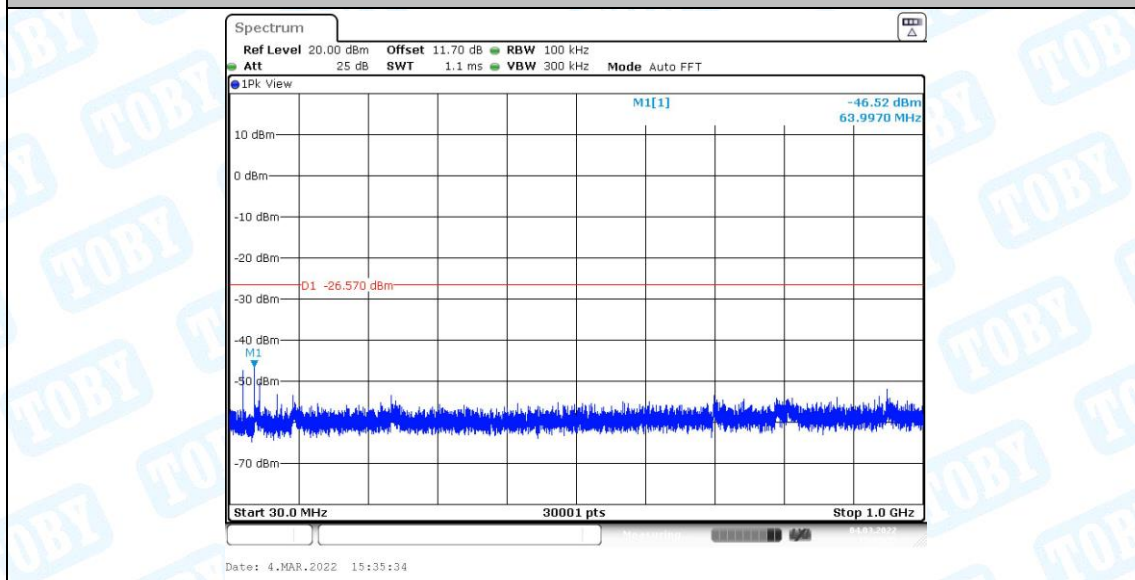
DH5_Ant1_2480_30~1000



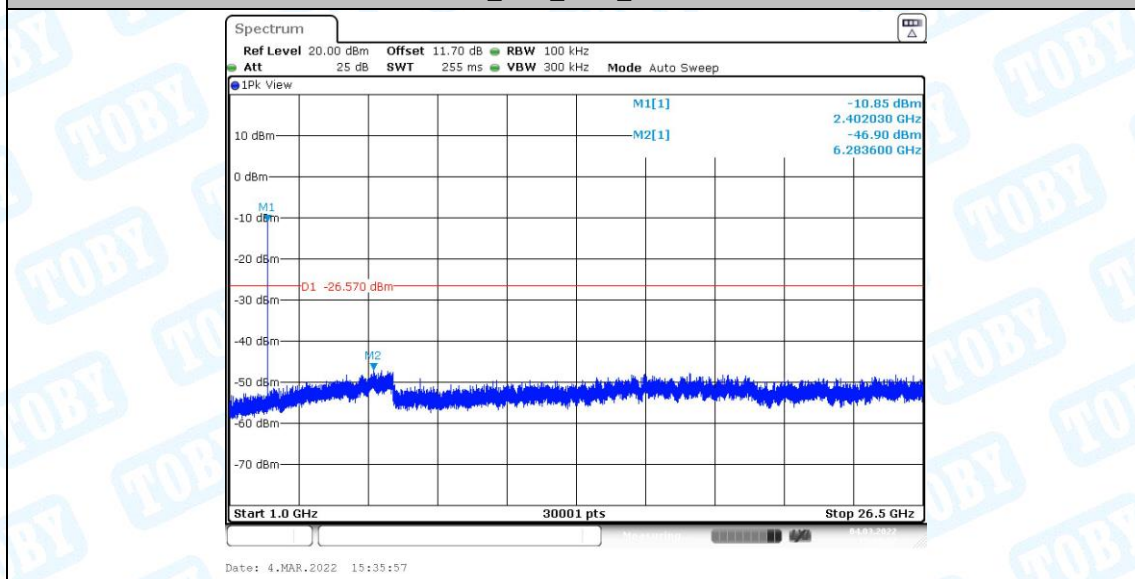
DH5_Ant1_2480_1000~26500



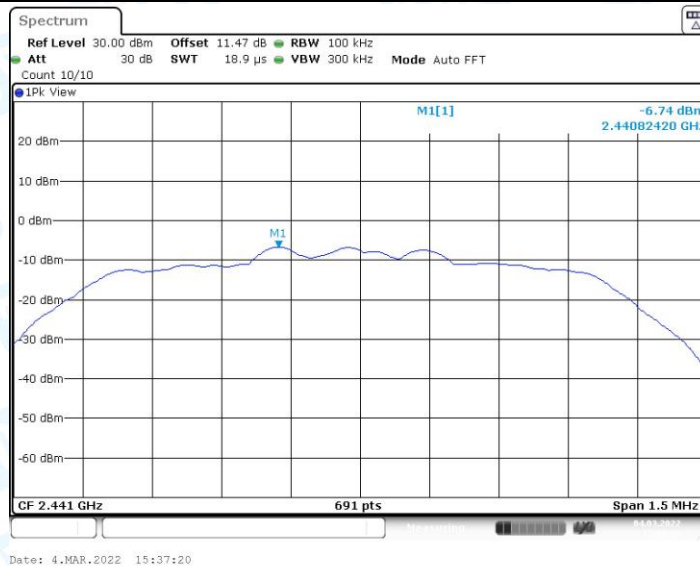
2DH5_Ant1_2402_0~Reference



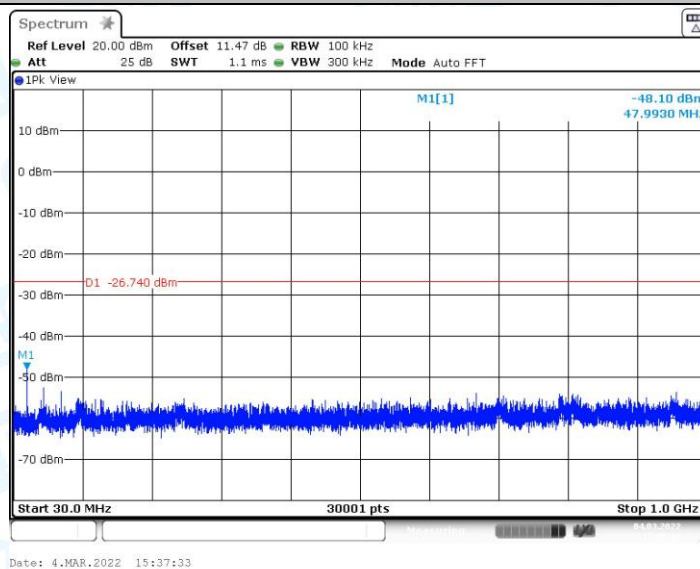
2DH5_Ant1_2402_30~1000



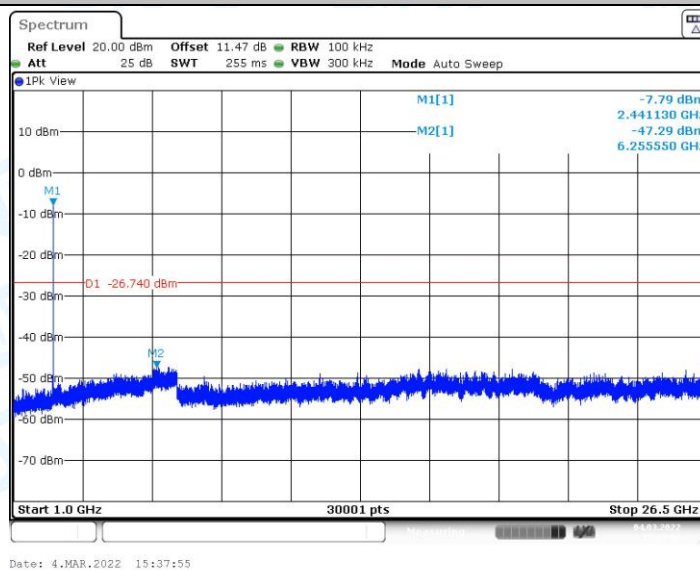
2DH5_Ant1_2402_1000~26500



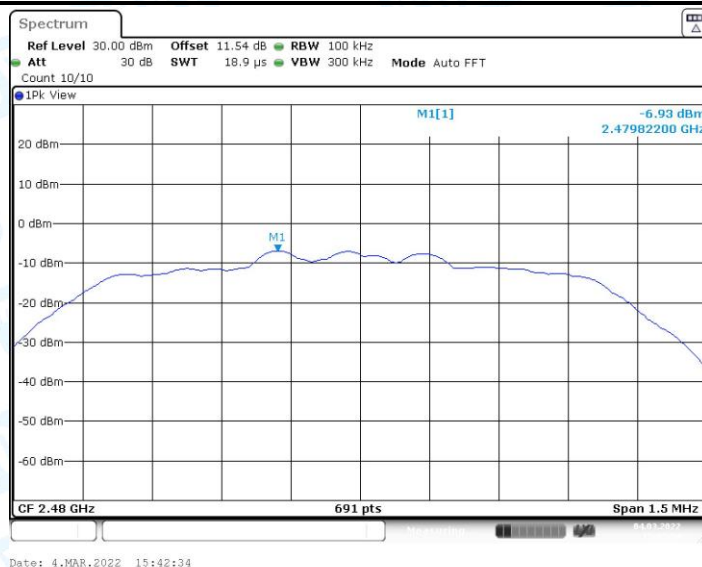
2DH5_Ant1_2441_0~Reference



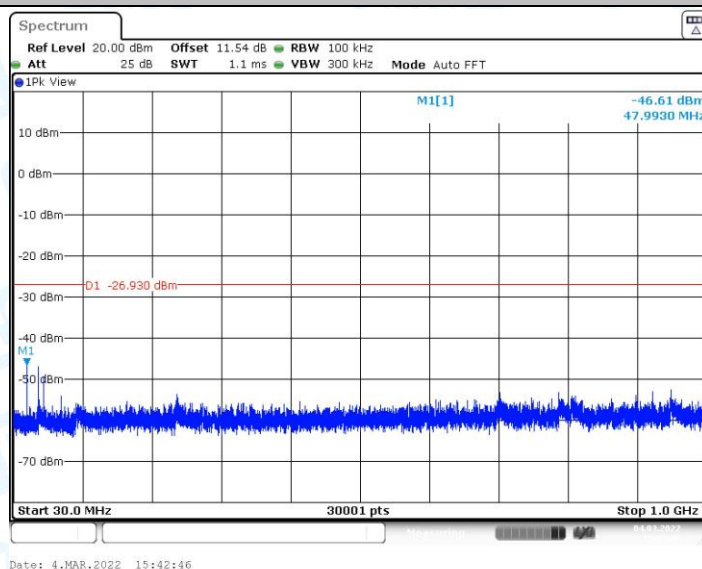
2DH5_Ant1_2441_30~1000



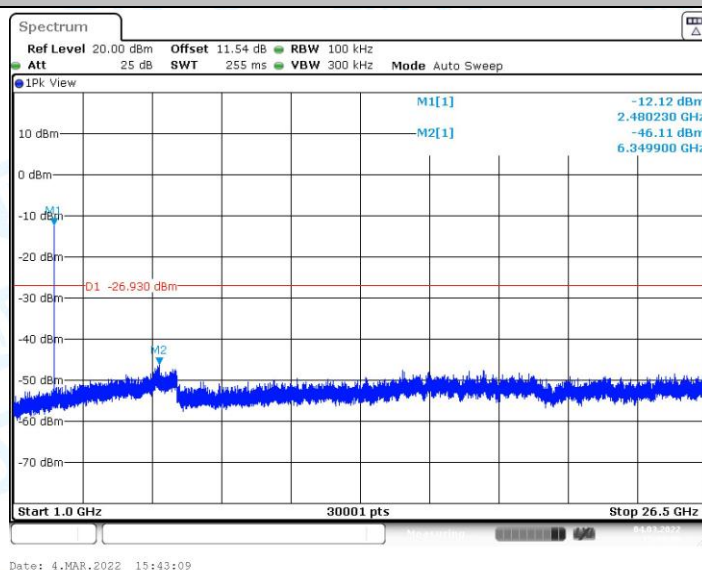
2DH5_Ant1_2441_1000~26500



2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



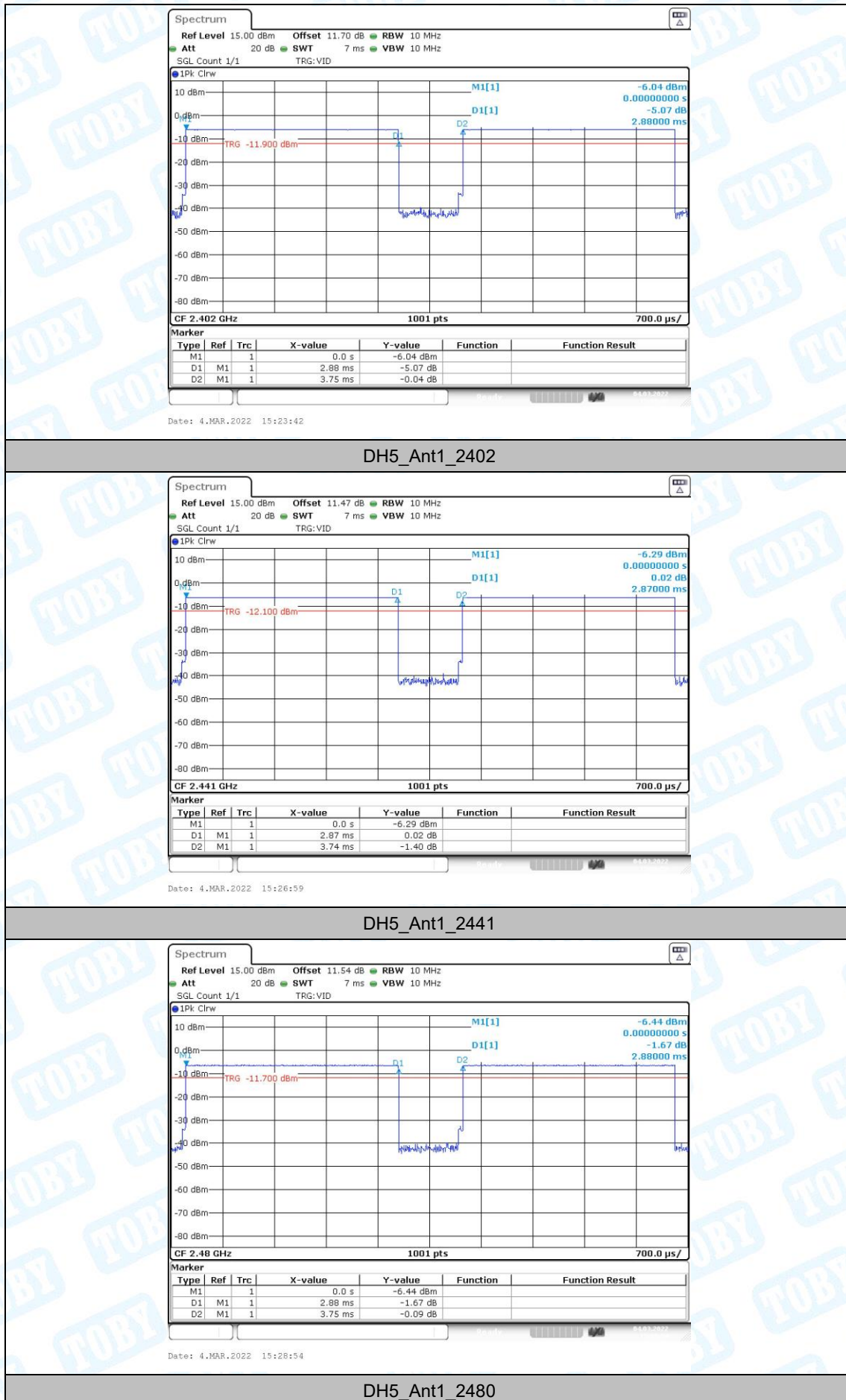
2DH5_Ant1_2480_1000~26500

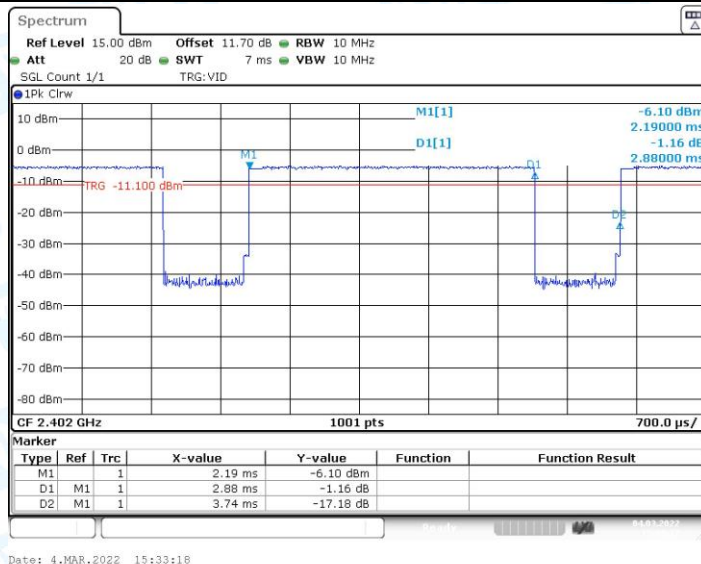
9. Duty Cycle

9.1. Test Result

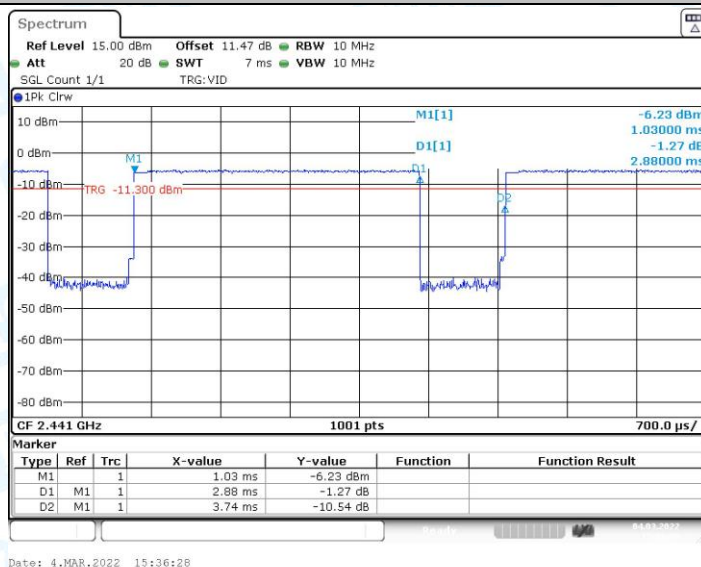
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
DH5	Ant1	2402	2.88	3.75	76.80	---	---
		2441	2.87	3.74	76.74	---	---
		2480	2.88	3.75	76.80	---	---
2DH5	Ant1	2402	2.88	3.74	77.01	---	---
		2441	2.88	3.74	77.01	---	---
		2480	2.89	3.75	77.07	---	---

9.2. Test Graphs

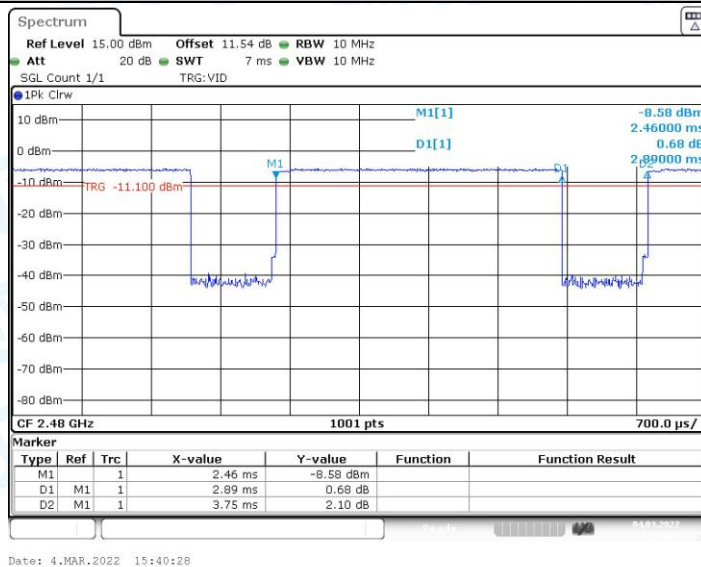




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

10. Emissions in Restricted Bands

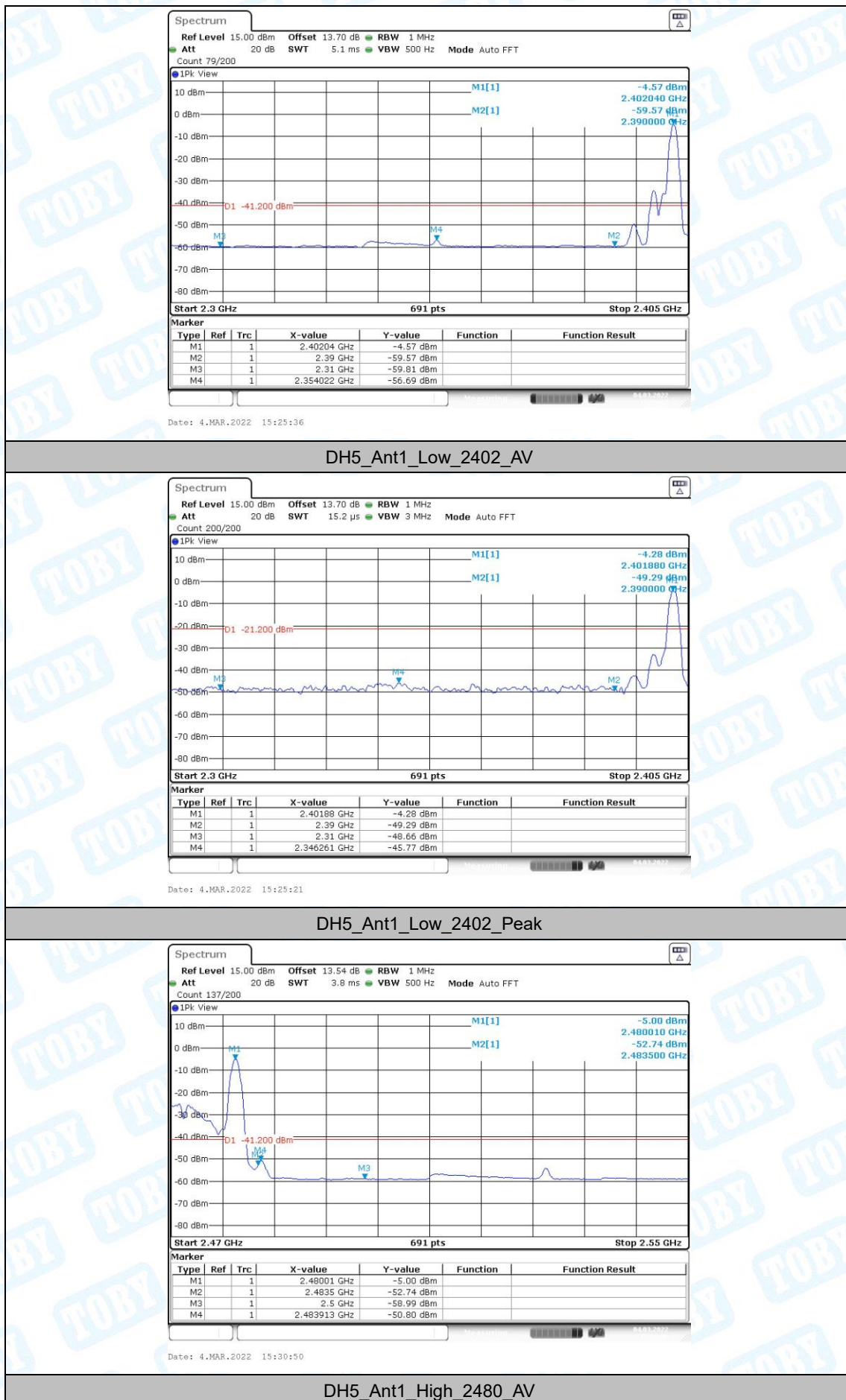
10.1. Test Result

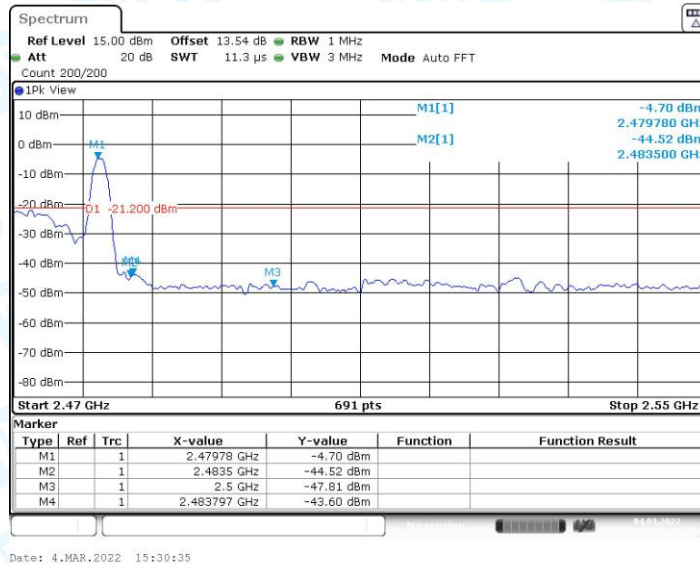
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-59.81	≤-41.20	PASS
				AV	2354.022	-56.69	≤-41.20	PASS
				AV	2390.000	-59.57	≤-41.20	PASS
				Peak	2310.000	-48.66	≤-21.20	PASS
				Peak	2346.261	-45.77	≤-21.20	PASS
				Peak	2390.000	-49.29	≤-21.20	PASS
		High	2480	AV	2483.500	-52.74	≤-41.20	PASS
				AV	2483.913	-50.8	≤-41.20	PASS
				AV	2500.000	-58.99	≤-41.20	PASS
				Peak	2483.500	-44.52	≤-21.20	PASS
				Peak	2483.797	-43.6	≤-21.20	PASS
				Peak	2500.000	-47.81	≤-21.20	PASS
		Low	Hop_240 2	Peak	2310.000	-49.41	≤-21.20	PASS
				Peak	2342.457	-46.32	≤-21.20	PASS
				Peak	2390.000	-49.85	≤-21.20	PASS
		High	Hop_248 0	Peak	2483.500	-46.6	≤-21.20	PASS
				Peak	2500.000	-46	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-59.75	≤-41.20	PASS
				AV	2341.087	-57.38	≤-41.20	PASS
				AV	2390.000	-59.69	≤-41.20	PASS
				Peak	2310.000	-48.35	≤-21.20	PASS
				Peak	2346.413	-45.84	≤-21.20	PASS
				Peak	2390.000	-48.43	≤-21.20	PASS
		High	2480	AV	2483.500	-54.65	≤-41.20	PASS
				AV	2483.913	-53.75	≤-41.20	PASS
				AV	2500.000	-58.98	≤-41.20	PASS
				Peak	2483.500	-46.04	≤-21.20	PASS
				Peak	2484.029	-42.58	≤-21.20	PASS
				Peak	2500.000	-48.06	≤-21.20	PASS
		Low	Hop_240 2	Peak	2310.000	-49.85	≤-21.20	PASS
				Peak	2349.913	-45.89	≤-21.20	PASS
				Peak	2390.000	-48.91	≤-21.20	PASS
		High	Hop_248 0	Peak	2483.500	-48.41	≤-21.20	PASS
				Peak	2491.449	-46.34	≤-21.20	PASS
				Peak	2500.000	-47.83	≤-21.20	PASS

Note:

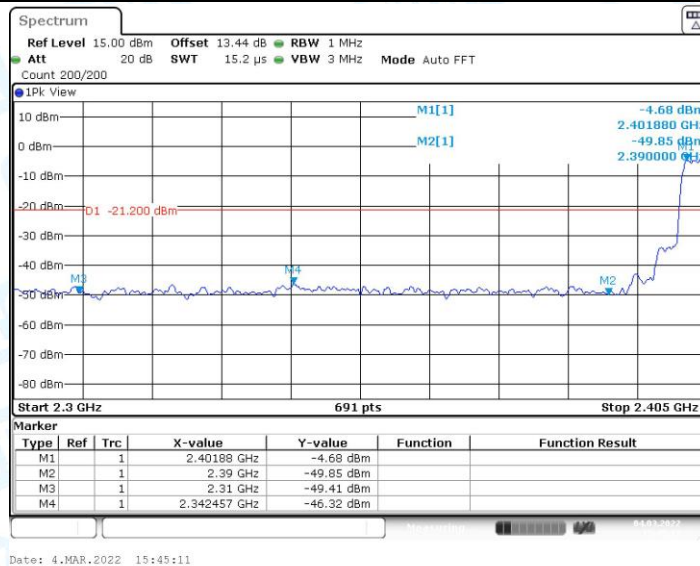
- The Antenna Gain is compensated in the graph.
- The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

10.2. Test Graphs

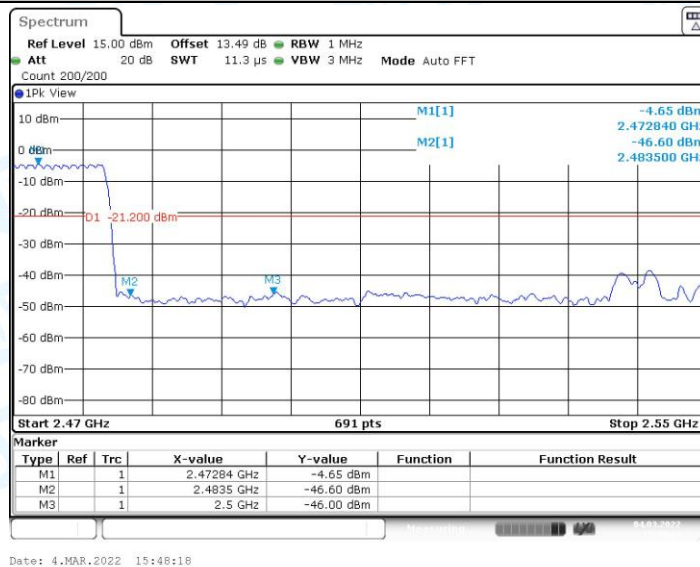




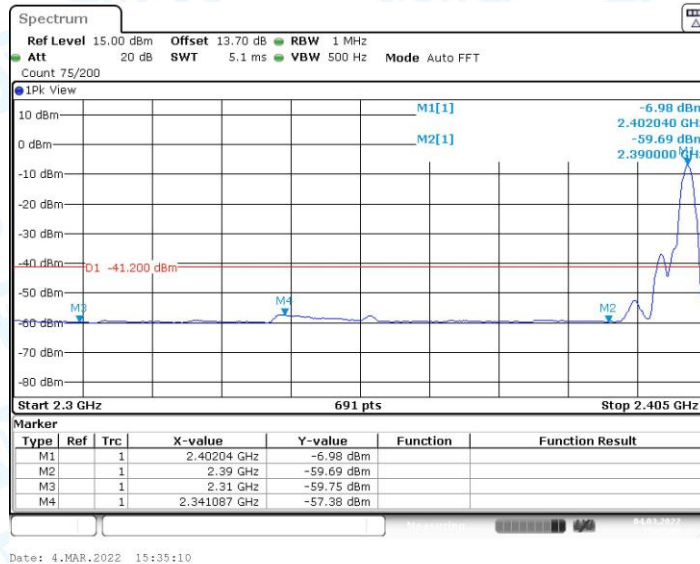
DH5_Ant1_High_2480_Peak



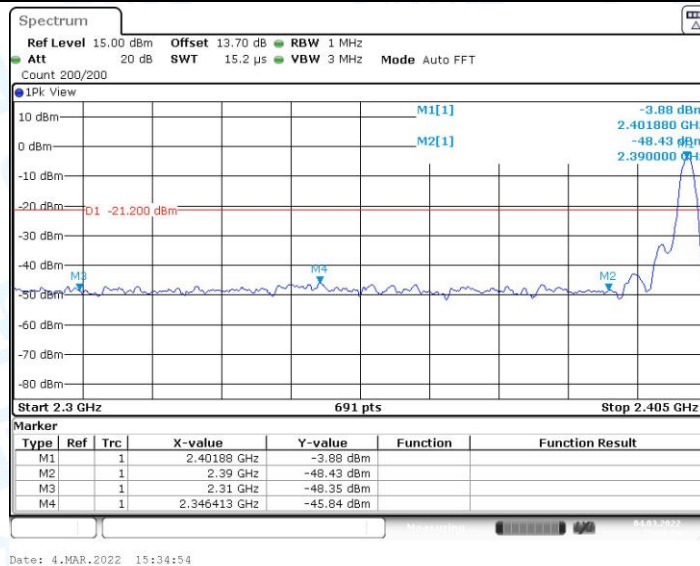
DH5_Ant1_Low_Hop_2402_Peak



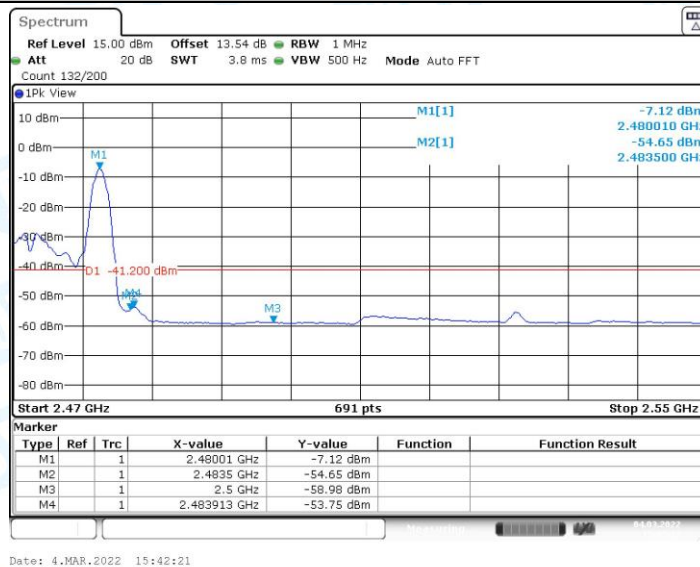
DH5_Ant1_High_Hop_2480_Peak



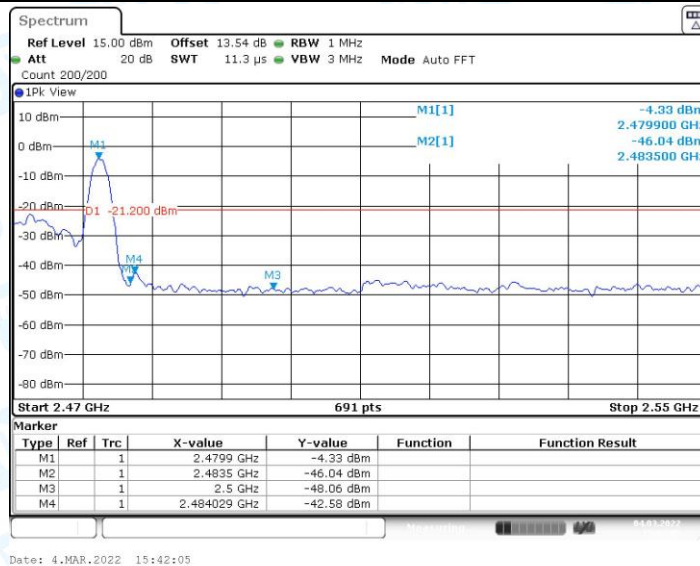
2DH5_Ant1_Low_2402_AV



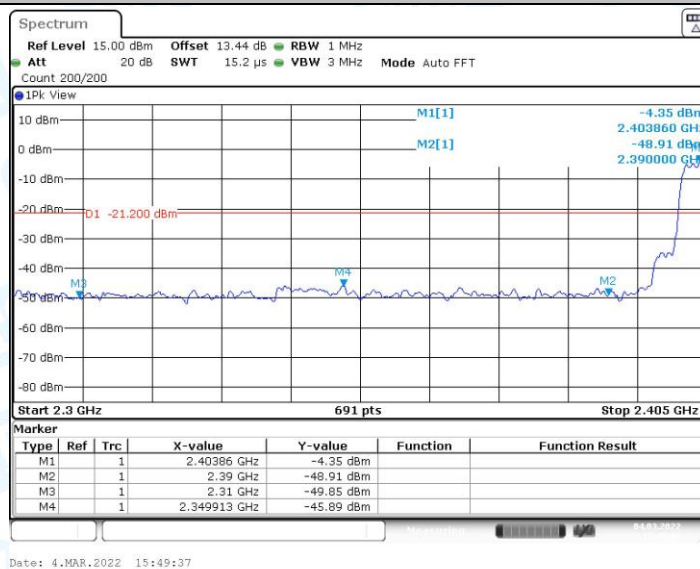
2DH5_Ant1_Low_2402_Peak



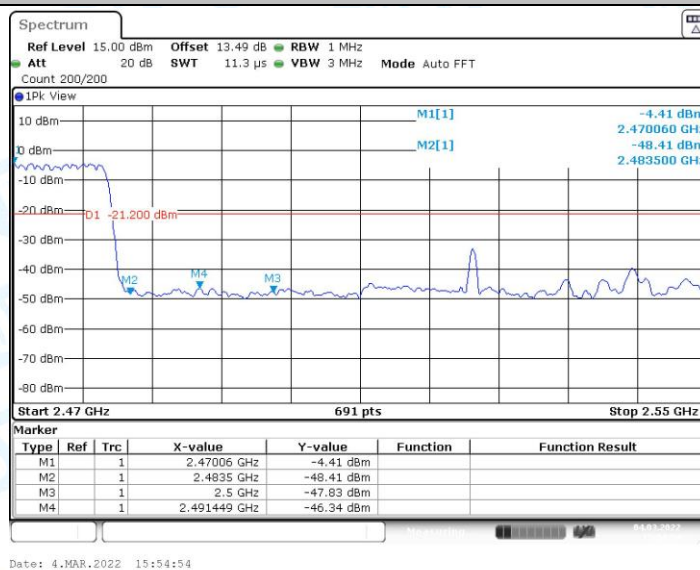
2DH5_Ant1_High_2480_AV



2DH5_Ant1_High_2480_Peak



2DH5_Ant1_Low_Hop_2402_Peak



2DH5_Ant1_High_Hop_2480_Peak

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