

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

General Description of EUT	
Product Name:	ETOE TV
Test Model:	D1221
Sample ID:	202302-0086_01-02
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 5V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202302-0086-5 The report only show the worst case data.	

Contents

1. 20dB Emission Bandwidth.....	3
1.1.Test Result	3
1.2.Test Graphs	4
2. Occupied Channel Bandwidth.....	7
2.1.Test Result	7
2.2.Test Graphs	8
3. Maximum conducted output power	11
3.1.Test Result	11
3.2.Test Graphs	12
4. Carrier frequency separation	15
4.1.Test Result	15
4.2.Test Graphs	16
5. Time of occupancy	17
5.1.Test Result	17
5.2.Test Graphs	18
6. Number of hopping channels.....	24
6.1.Test Result	24
6.2.Test Graphs	25
7.Band edge measurements	26
7.1.Test Result	26
7.2.Test Graphs	27
8. Conducted Spurious Emission	31
8.1.Test Result	31
8.2.Test Graphs	32
9. Duty Cycle.....	41
9.1.Test Result	41
9.2.Test Graphs	42
10. Emissions in Restricted Bands	46
10.1.Test Result	46
10.2.Test Graphs	48

1. 20dB Emission Bandwidth

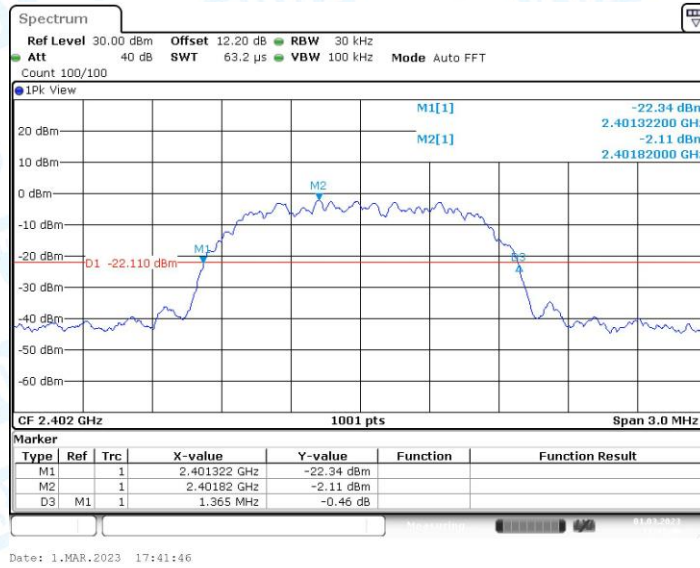
1.1. Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.96	---	---
		2441	0.96	---	---
		2480	0.96	---	---
2DH5	Ant1	2402	1.36	---	---
		2441	1.36	---	---
		2480	1.37	---	---
3DH5	Ant1	2402	1.35	---	---
		2441	1.35	---	---
		2480	1.35	---	---

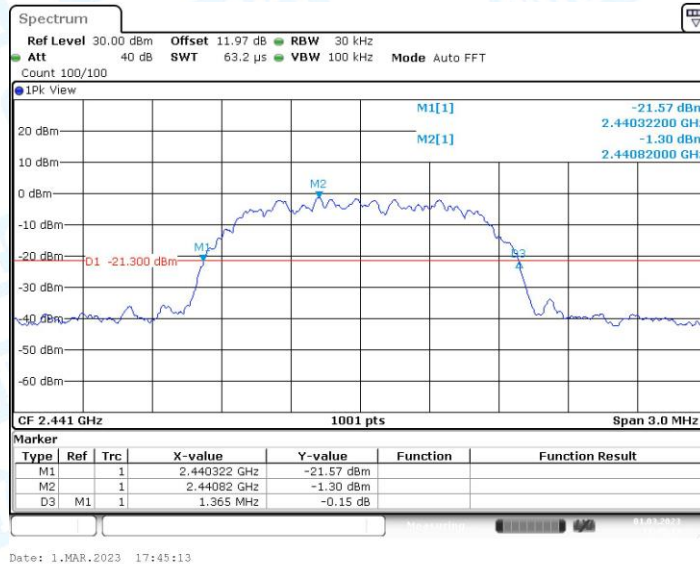
1.2.Test Graphs



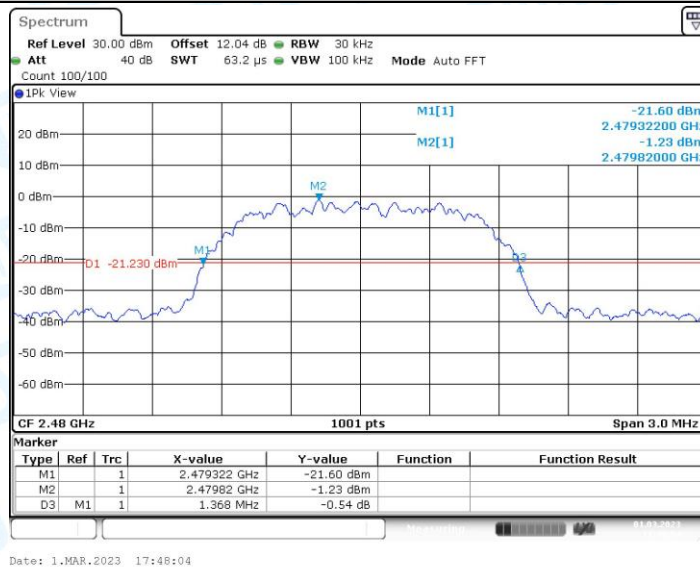
2DH5_Ant1_2402



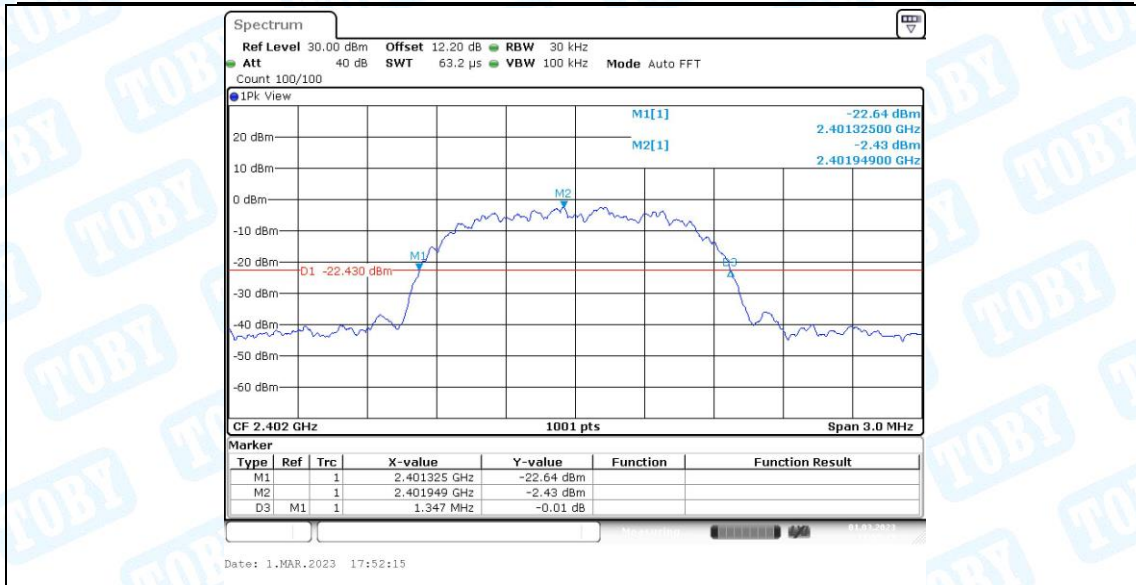
2DH5_Ant1_2441



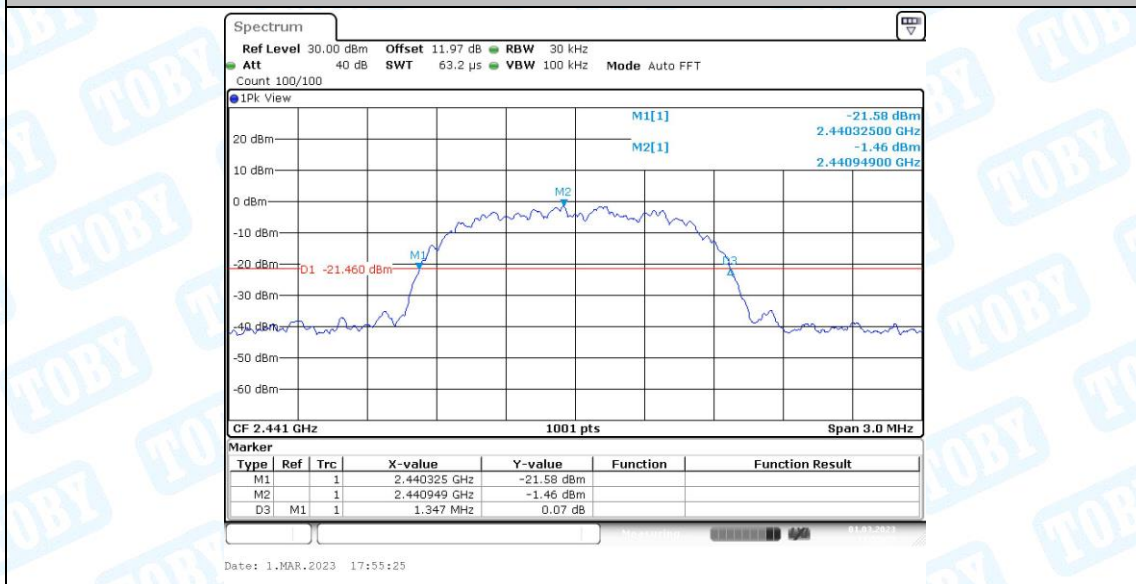
2DH5_Ant1_2480



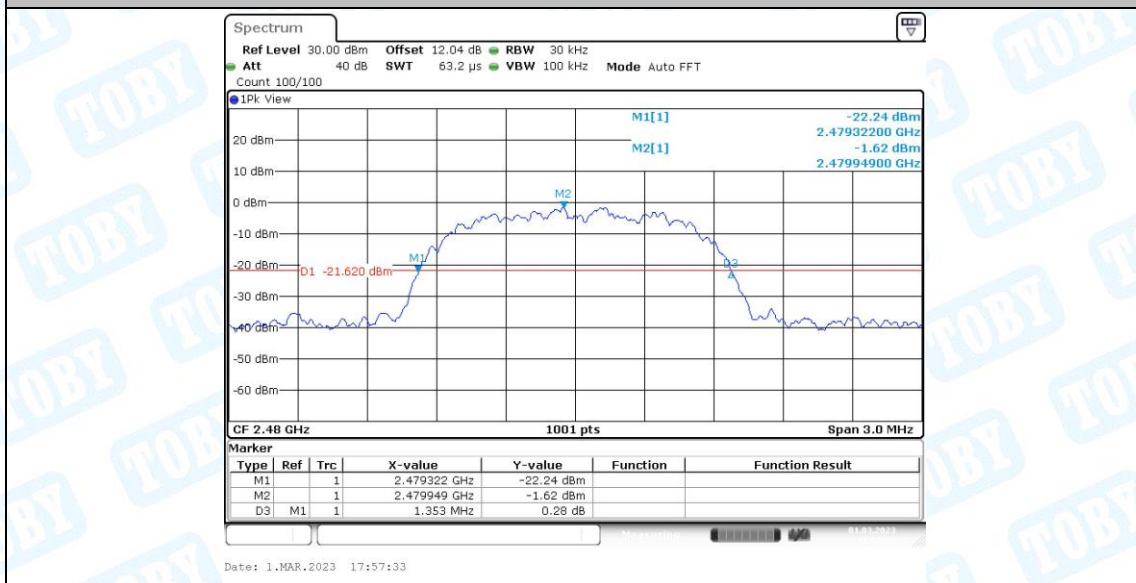
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



2. Occupied Channel Bandwidth

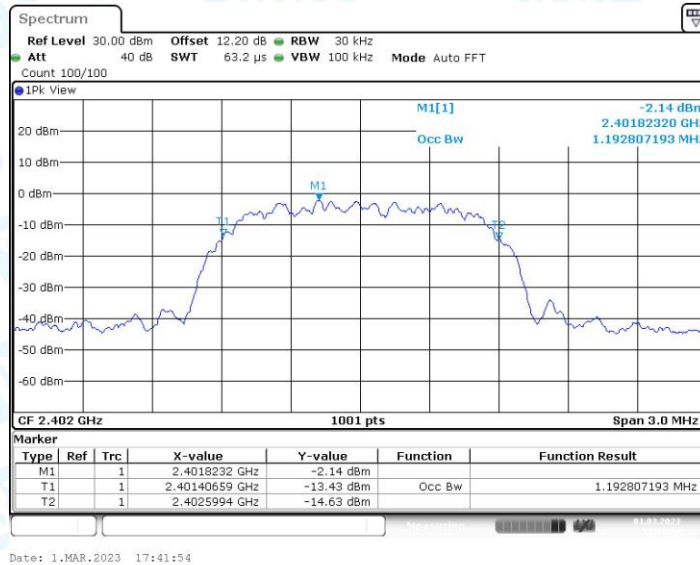
2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.899	2401.5564	2402.4555	---	---
		2441	0.896	2440.5564	2441.4525	---	---
		2480	0.896	2479.5564	2480.4525	---	---
2DH5	Ant1	2402	1.193	2401.4066	2402.5994	---	---
		2441	1.199	2440.4036	2441.6024	---	---
		2480	1.202	2479.4036	2480.6054	---	---
3DH5	Ant1	2402	1.196	2401.4036	2402.5994	---	---
		2441	1.202	2440.4006	2441.6024	---	---
		2480	1.208	2479.3946	2480.6024	---	---

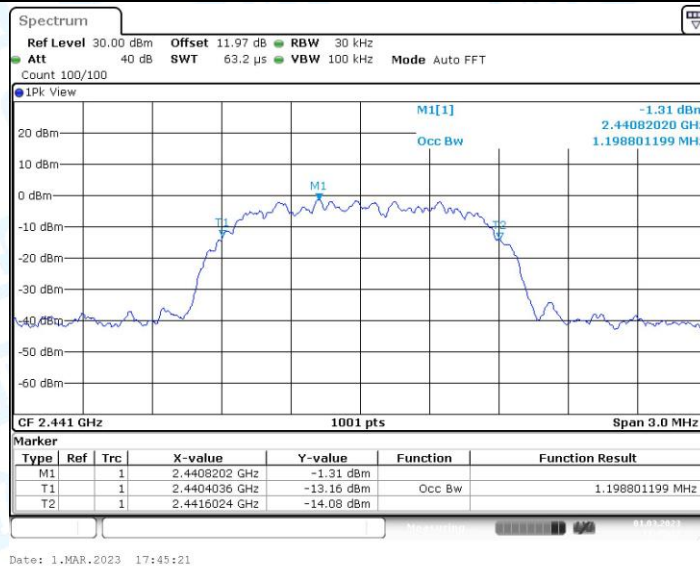
2.2.Test Graphs



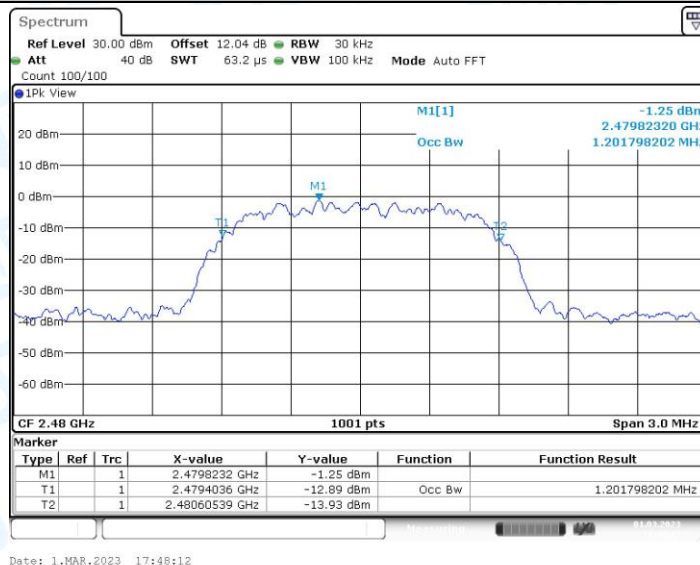
2DH5_Ant1_2402



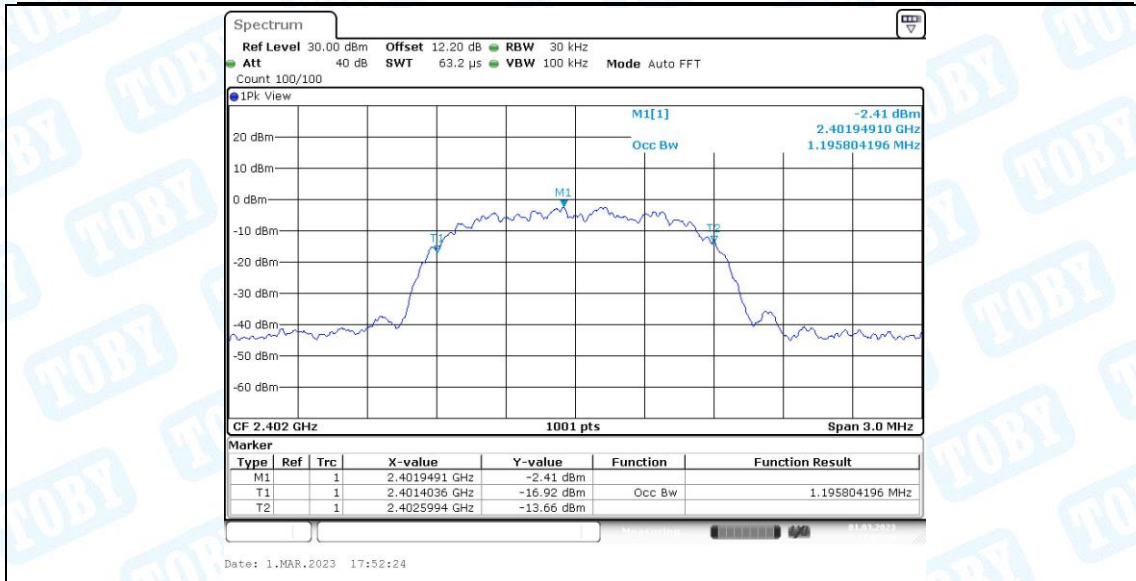
2DH5_Ant1_2441



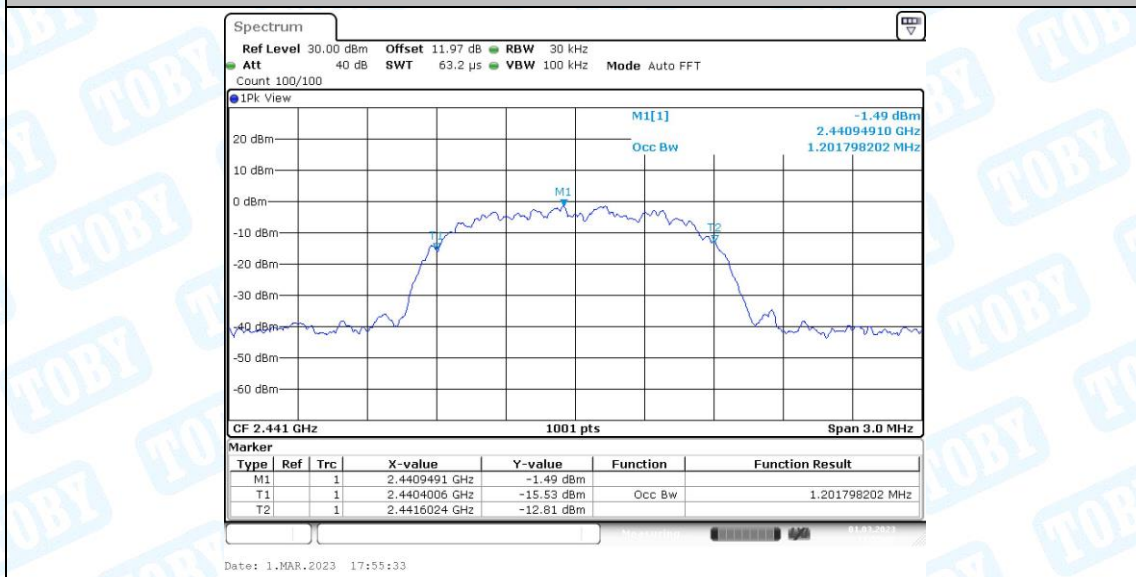
2DH5_Ant1_2480



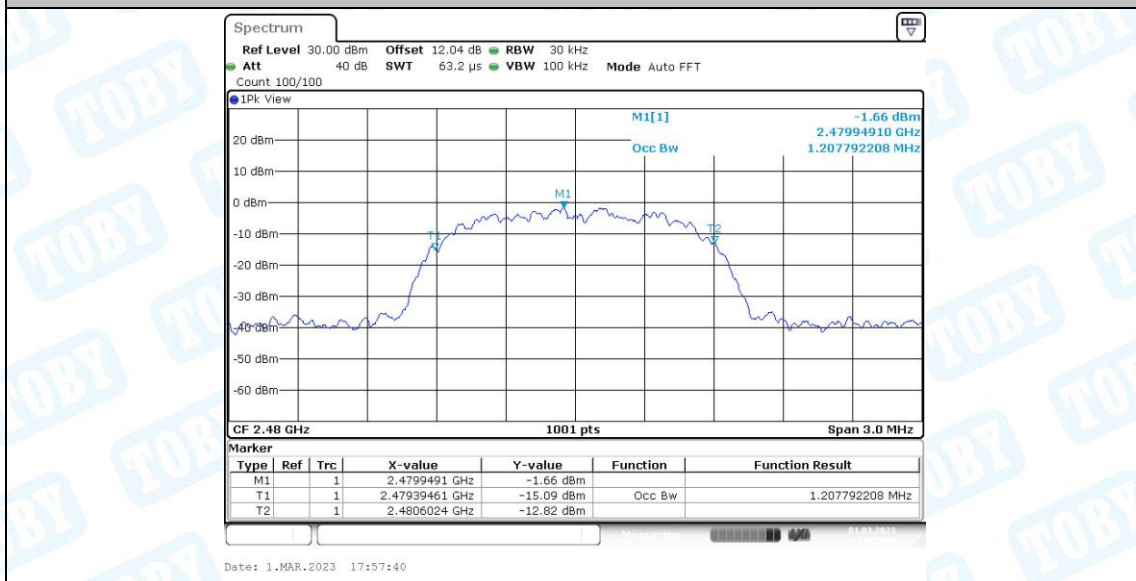
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



3. Maximum conducted output power

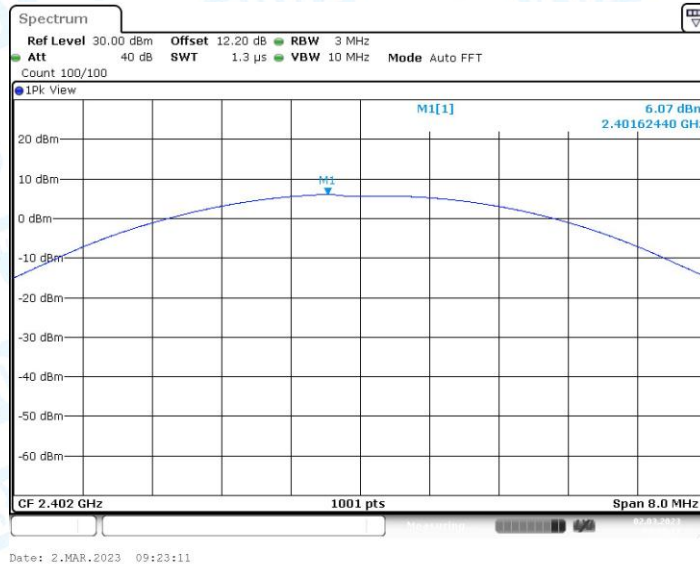
3.1. Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	4.73	≤20.97	PASS
		2441	5.66	≤20.97	PASS
		2480	5.13	≤20.97	PASS
2DH5	Ant1	2402	6.07	≤20.97	PASS
		2441	6.74	≤20.97	PASS
		2480	6.74	≤20.97	PASS
3DH5	Ant1	2402	6.16	≤20.97	PASS
		2441	6.92	≤20.97	PASS
		2480	6.37	≤20.97	PASS

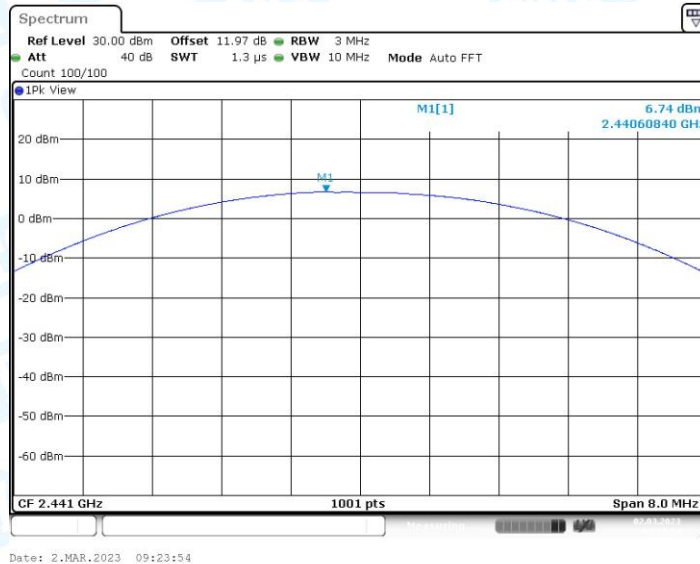
3.2.Test Graphs



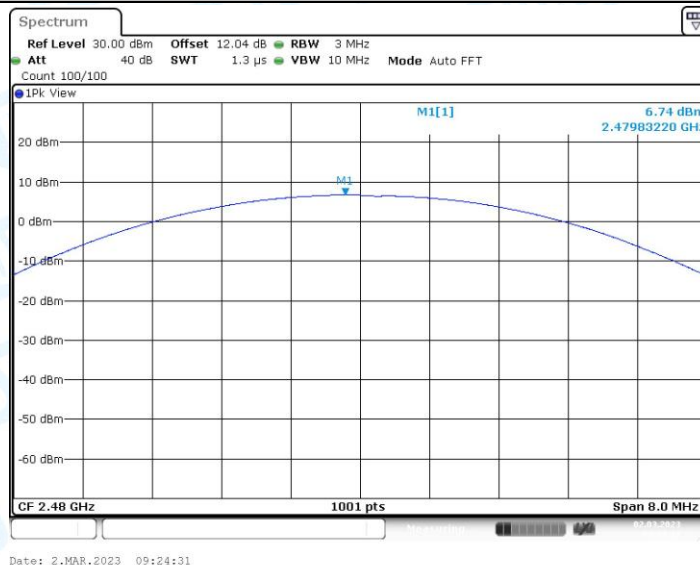
2DH5_Ant1_2402



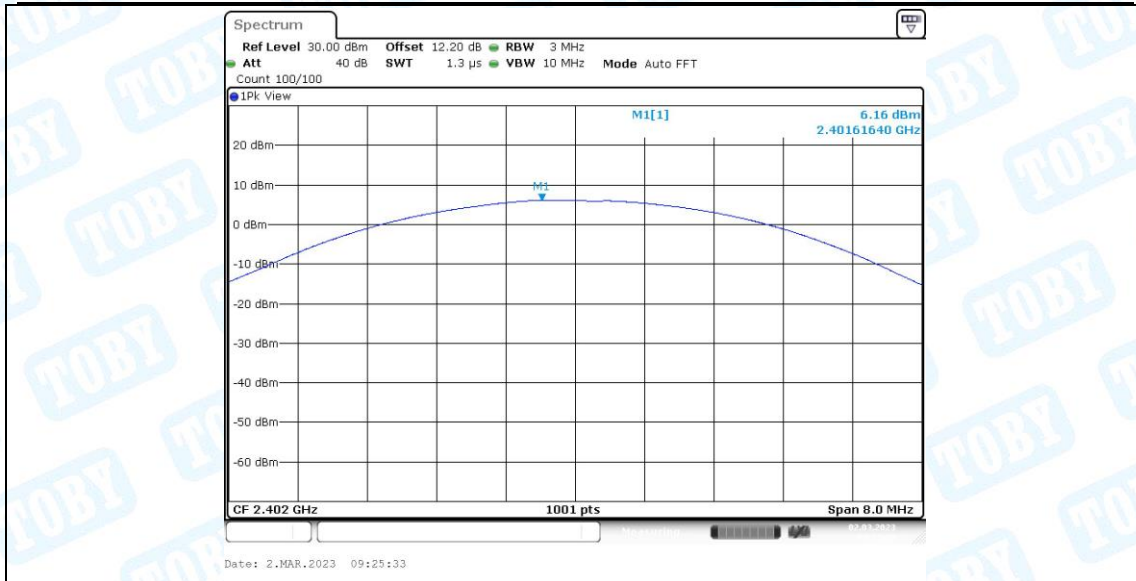
2DH5_Ant1_2441



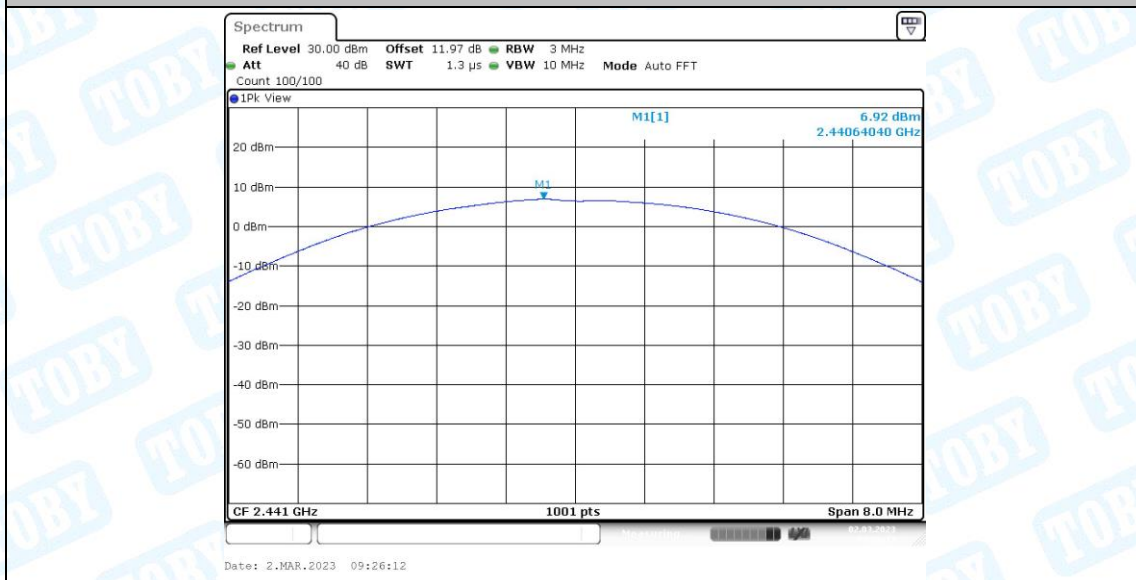
2DH5_Ant1_2480



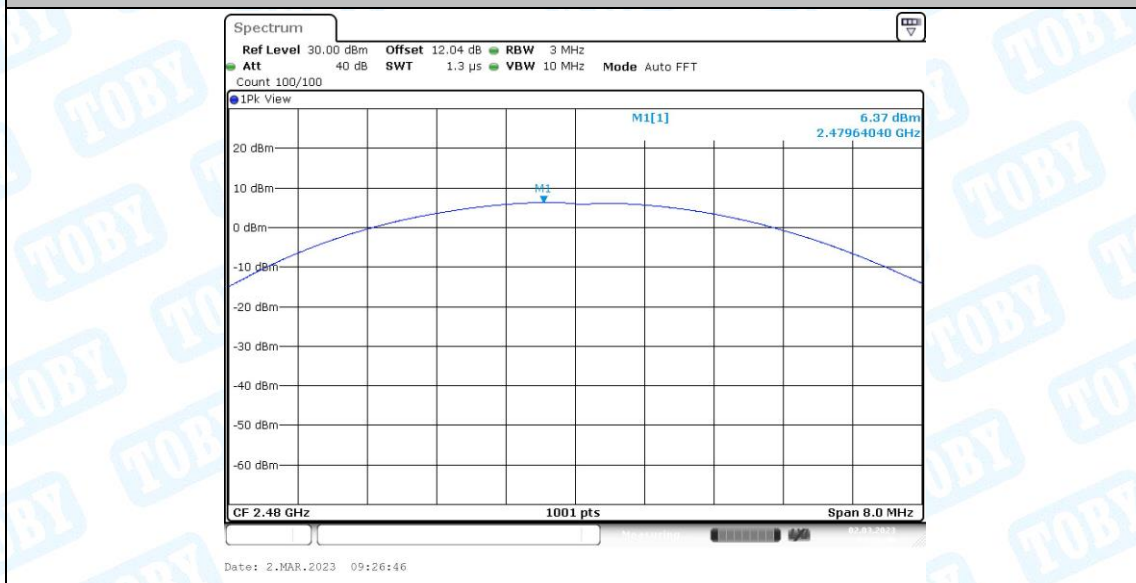
3DH5_Ant1_2402



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	1.336	≥0.96	PASS
2DH5	Ant1	Hop	1.33	≥0.913	PASS
3DH5	Ant1	Hop	1.165	≥0.900	PASS

4.2.Test Graphs

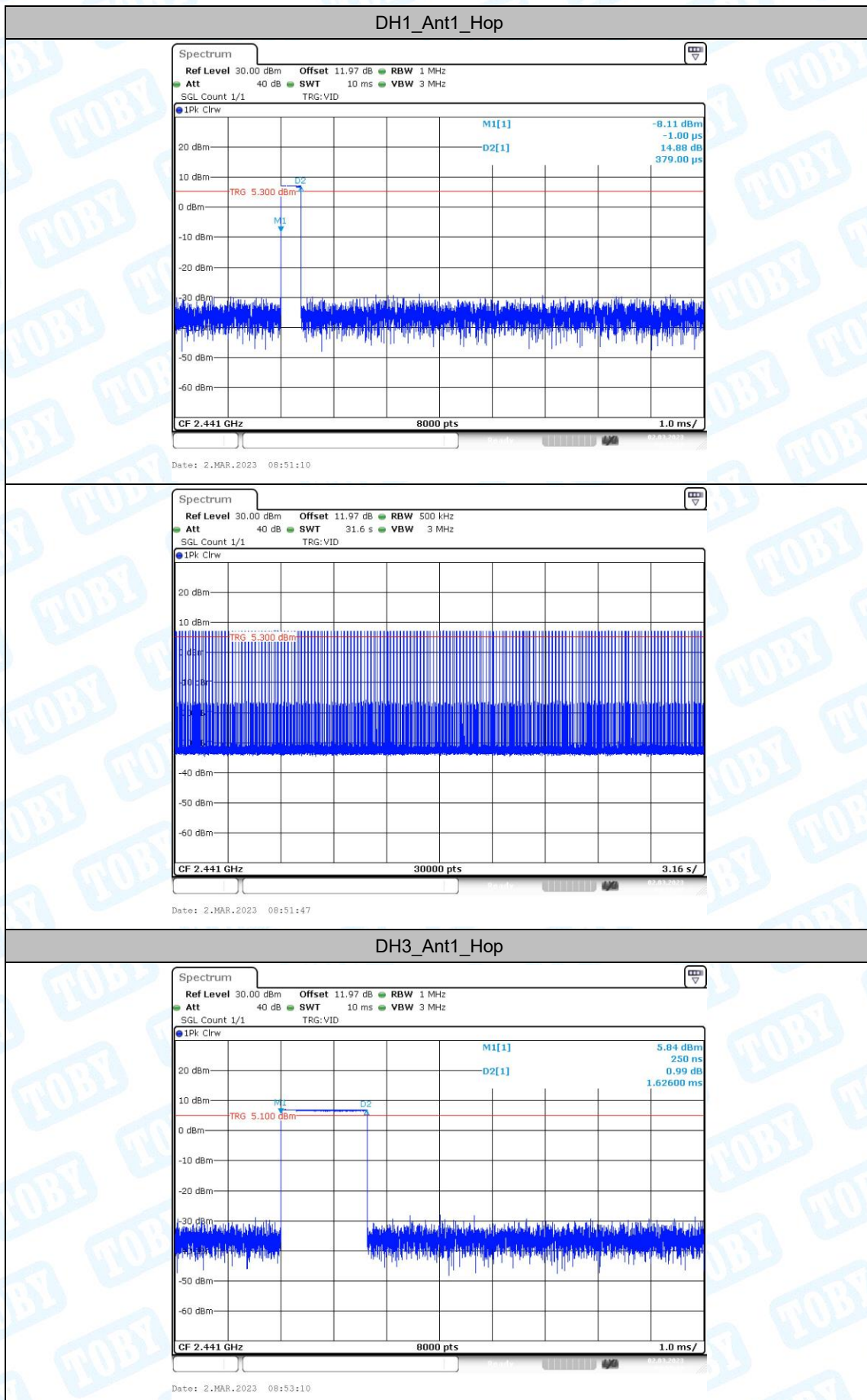


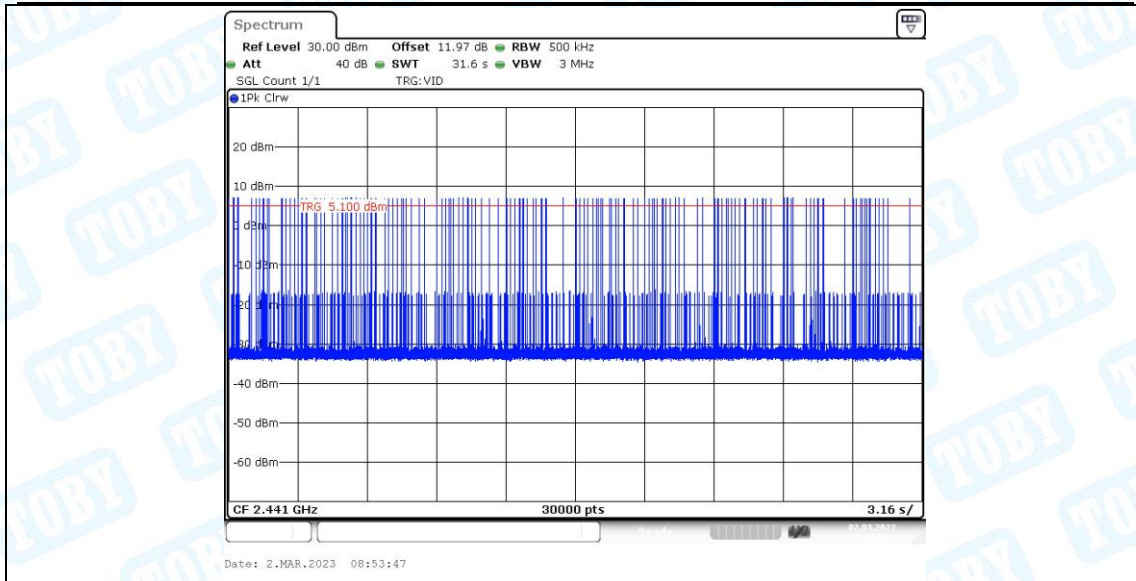
5. Time of occupancy

5.1. Test Result

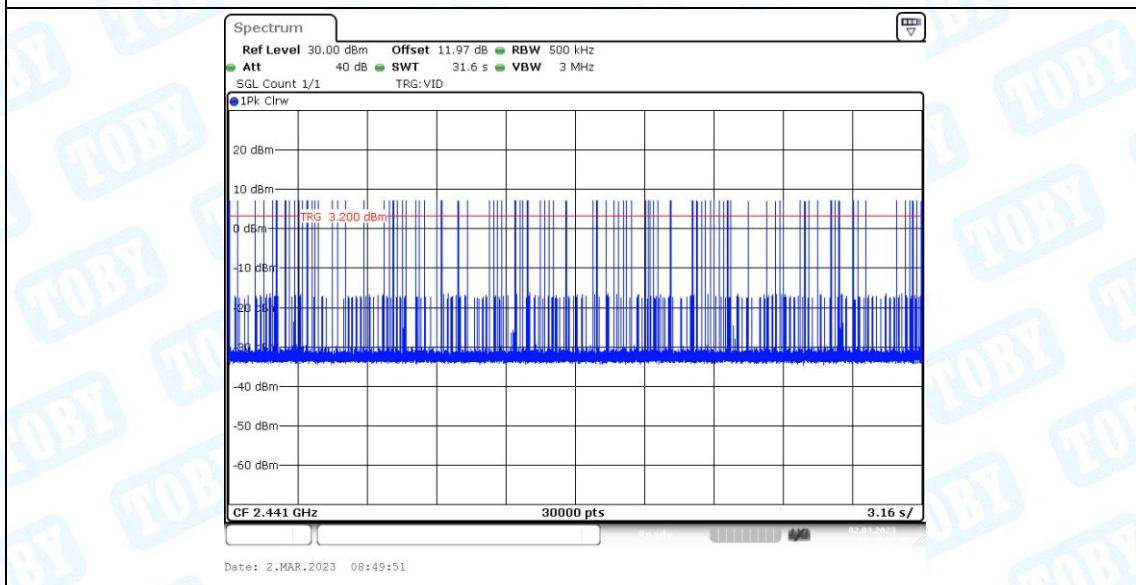
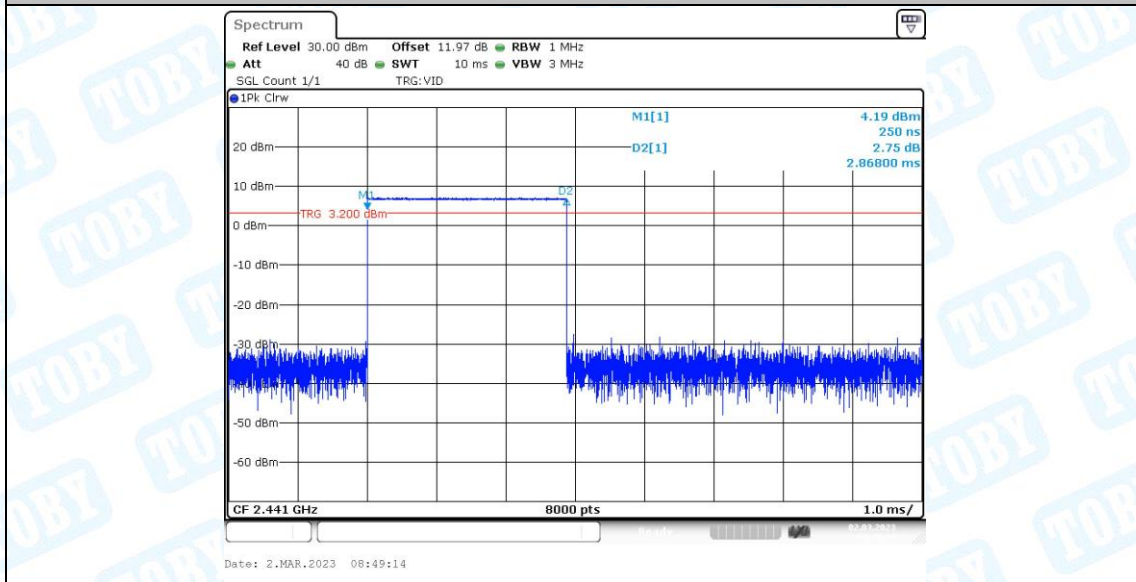
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.379	318	0.121	≤0.4	PASS
DH3	Ant1	Hop	1.626	162	0.263	≤0.4	PASS
DH5	Ant1	Hop	2.868	105	0.301	≤0.4	PASS
2DH1	Ant1	Hop	0.388	316	0.123	≤0.4	PASS
2DH3	Ant1	Hop	1.633	153	0.25	≤0.4	PASS
2DH5	Ant1	Hop	2.872	105	0.302	≤0.4	PASS
3DH1	Ant1	Hop	0.388	318	0.123	≤0.4	PASS
3DH3	Ant1	Hop	1.631	153	0.25	≤0.4	PASS
3DH5	Ant1	Hop	2.874	118	0.339	≤0.4	PASS

5.2.Test Graphs

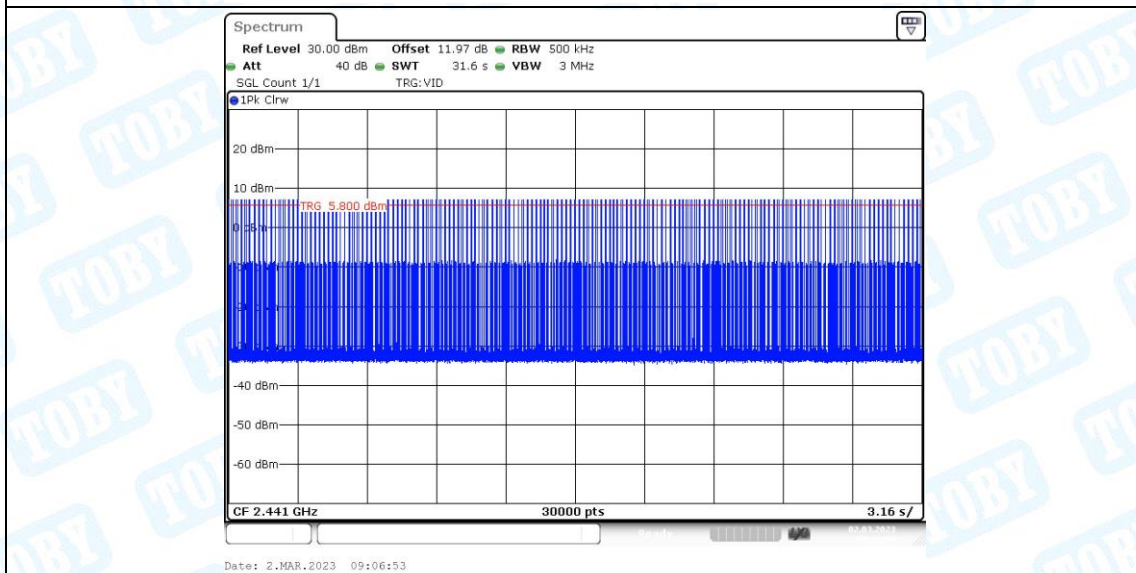
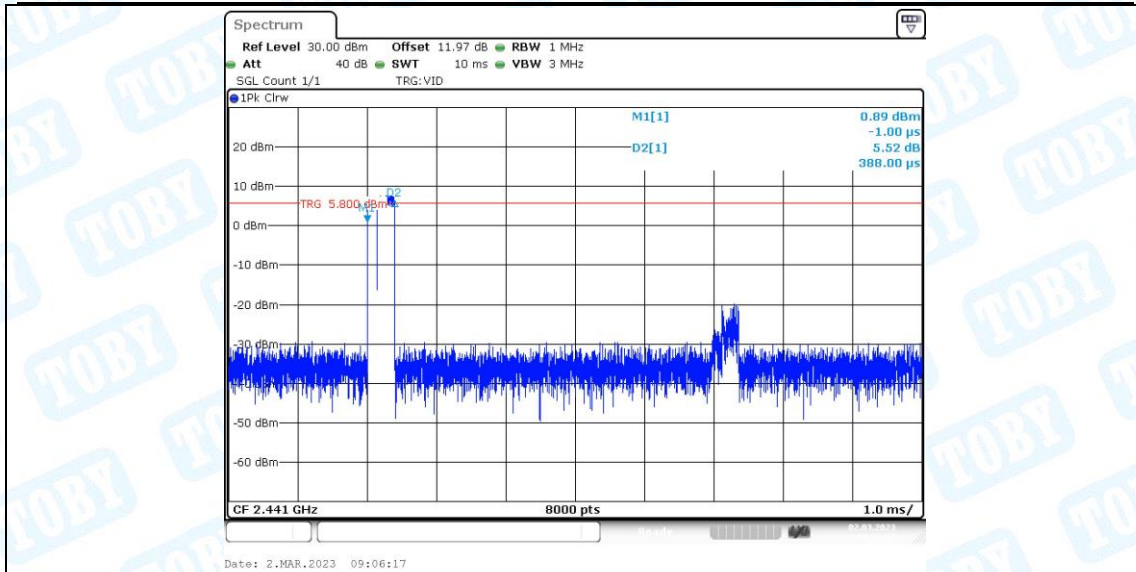




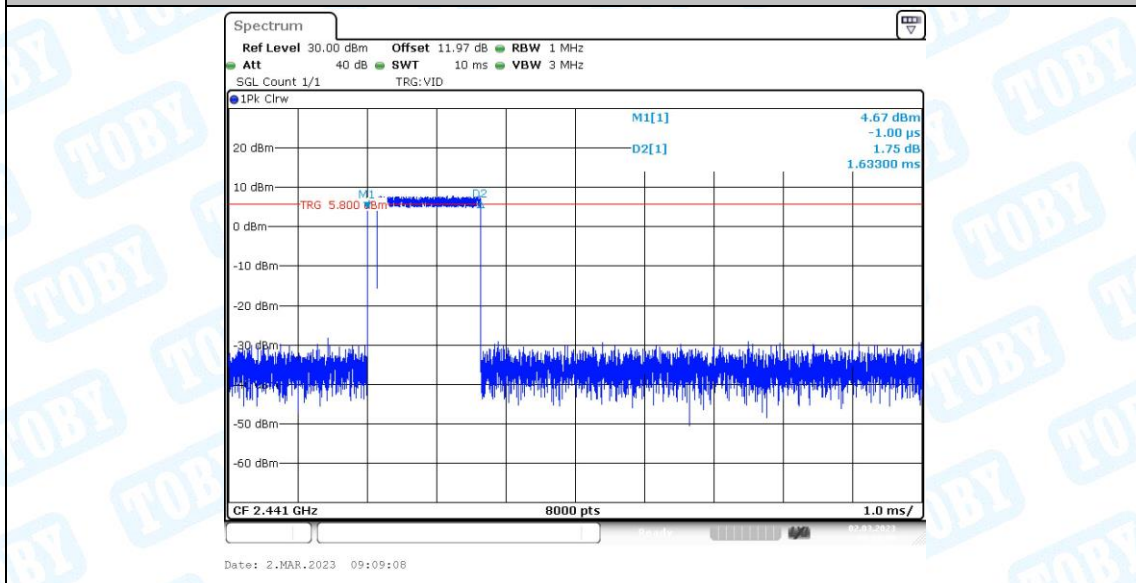
DH5_Ant1_Hop

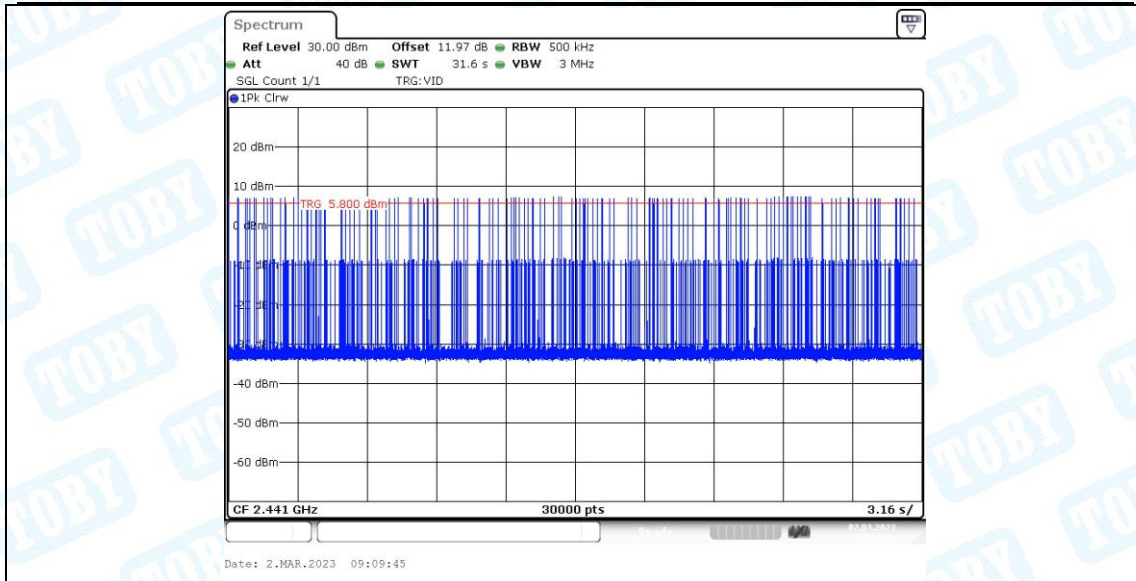


2DH1_Ant1_Hop

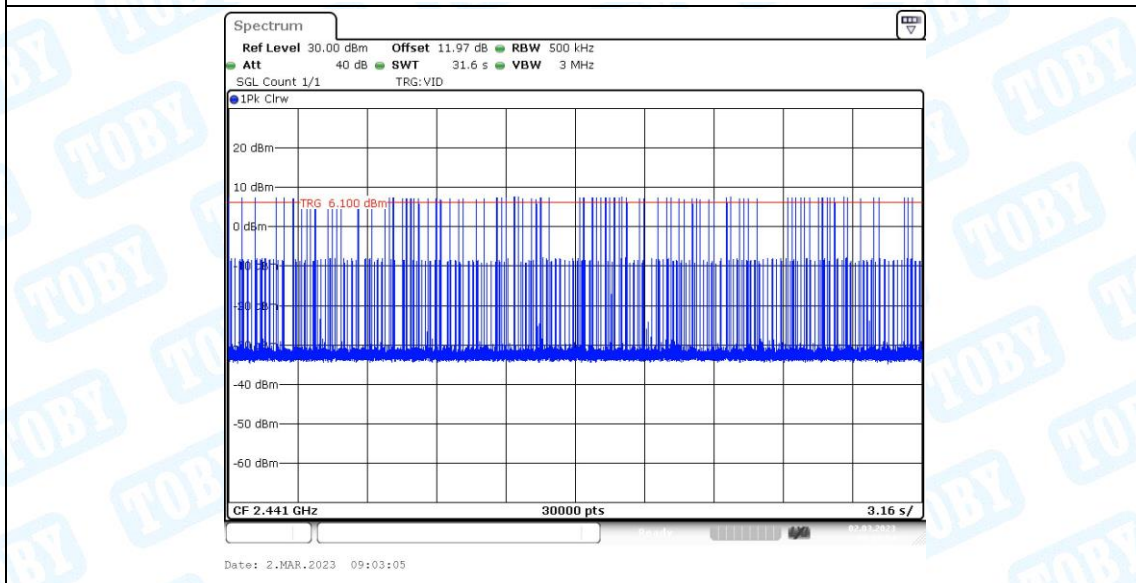
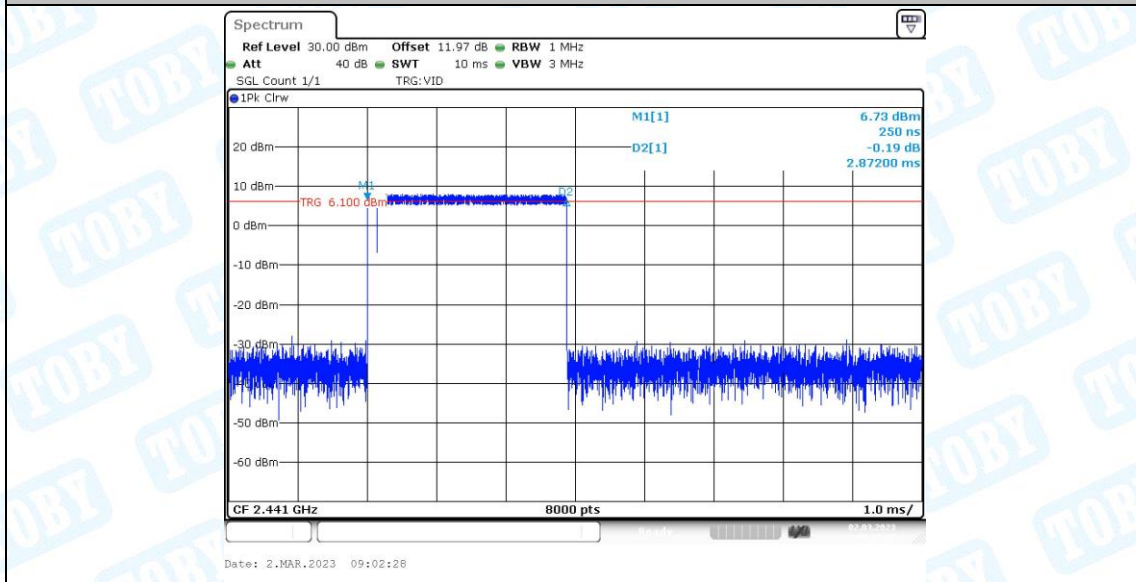


2DH3_Ant1_Hop

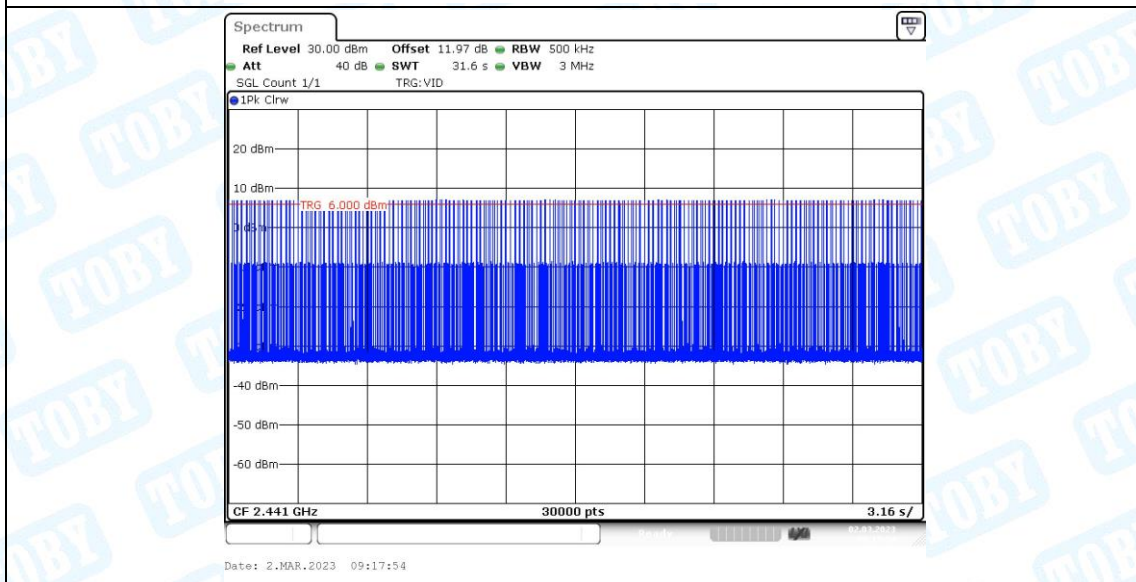
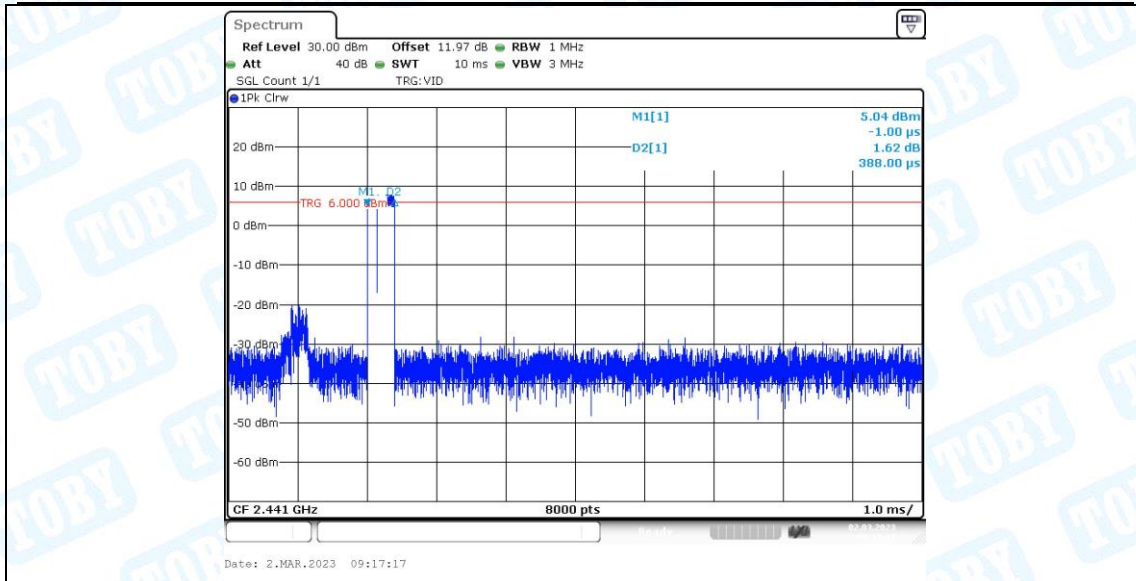




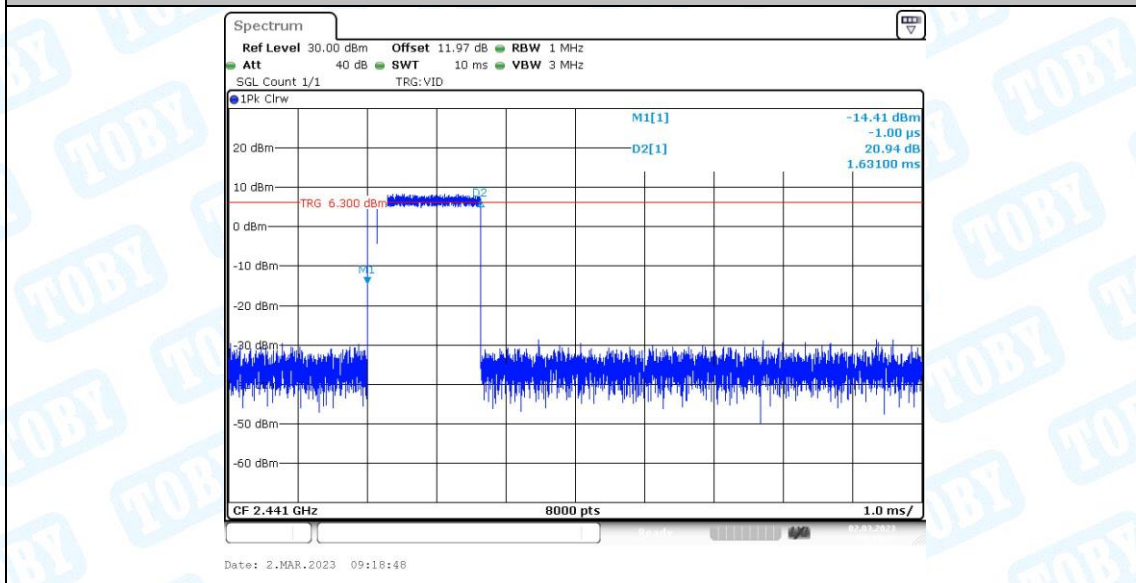
2DH5_Ant1_Hop

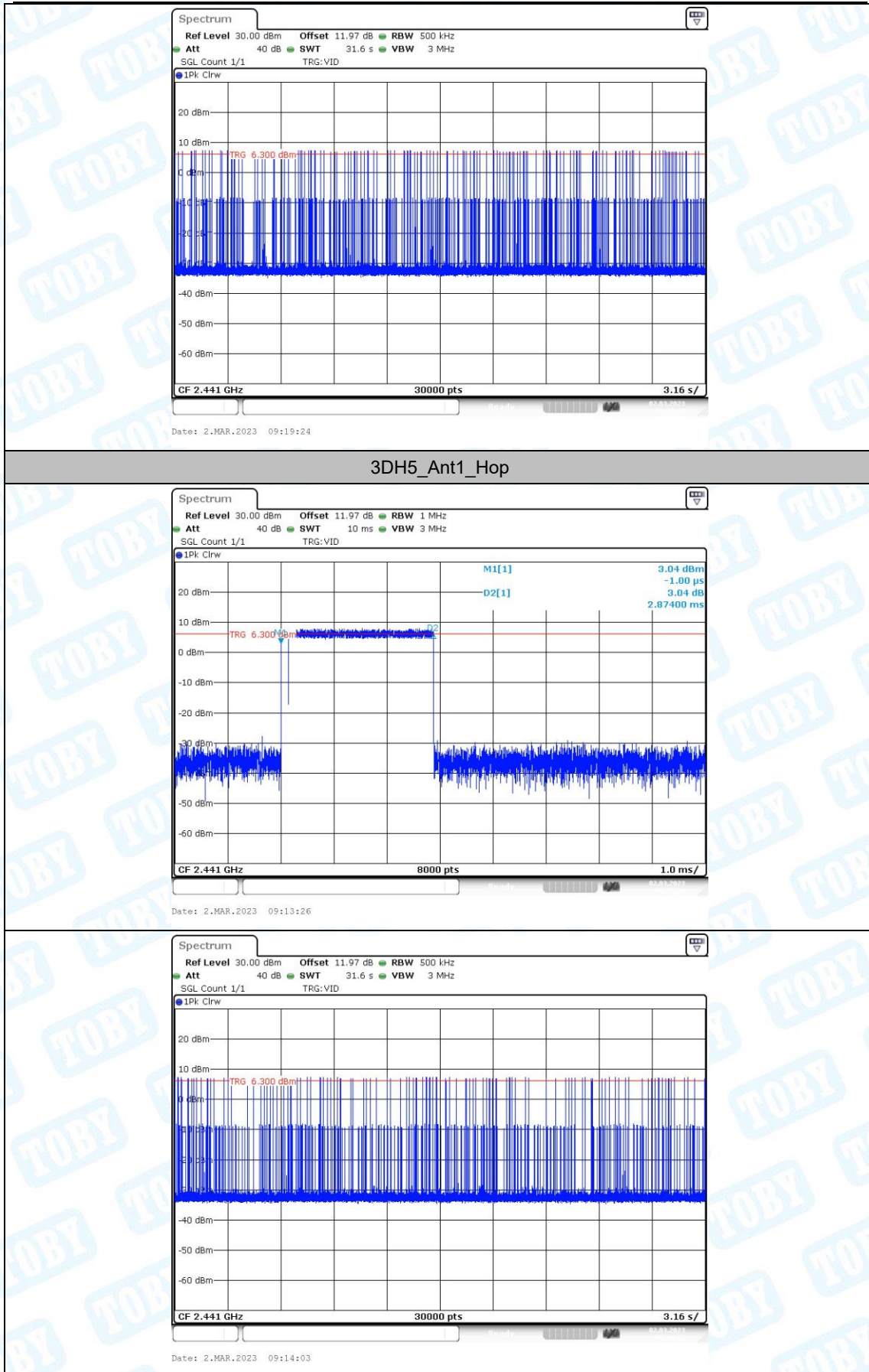


3DH1_Ant1_Hop



3DH3_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

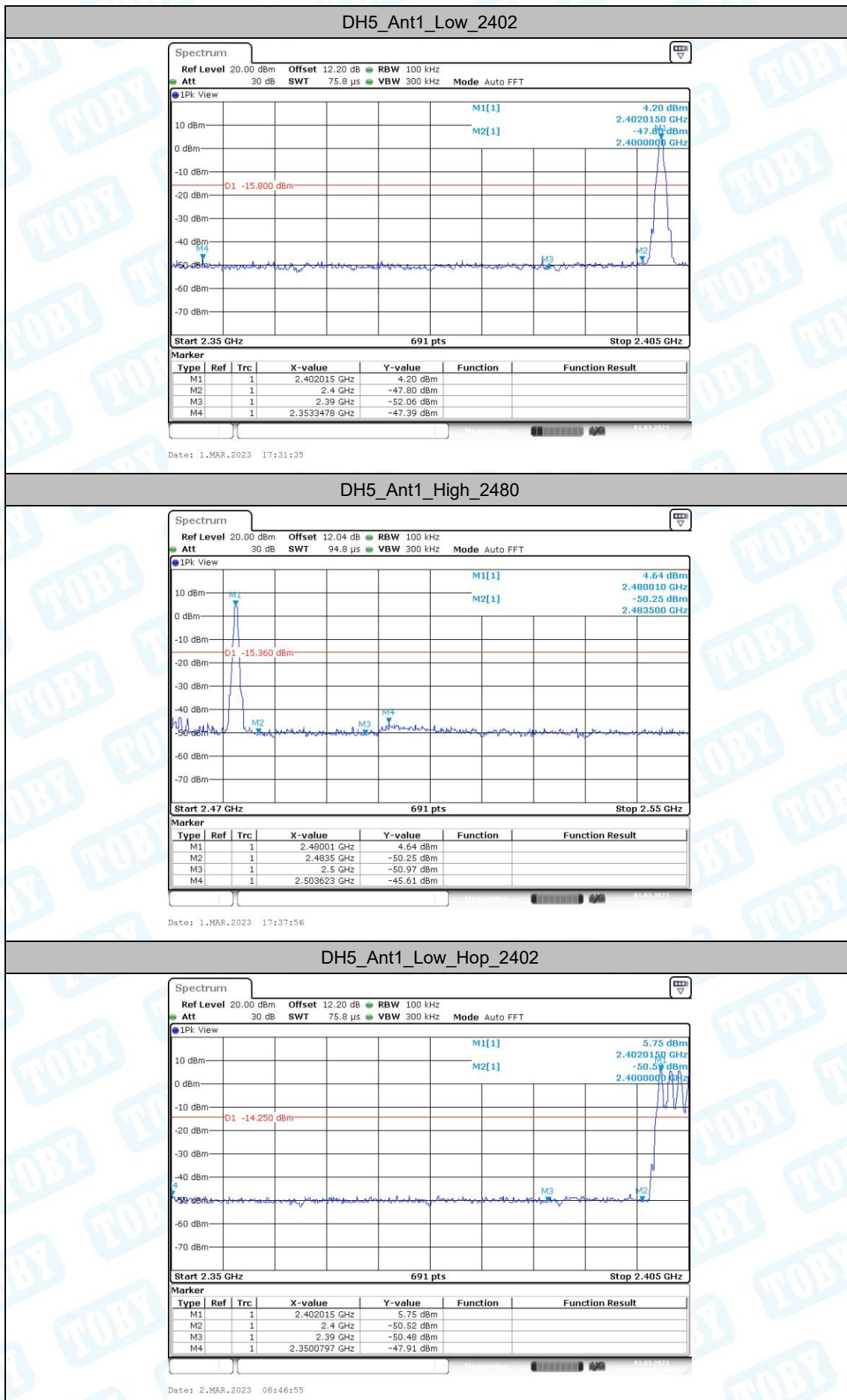


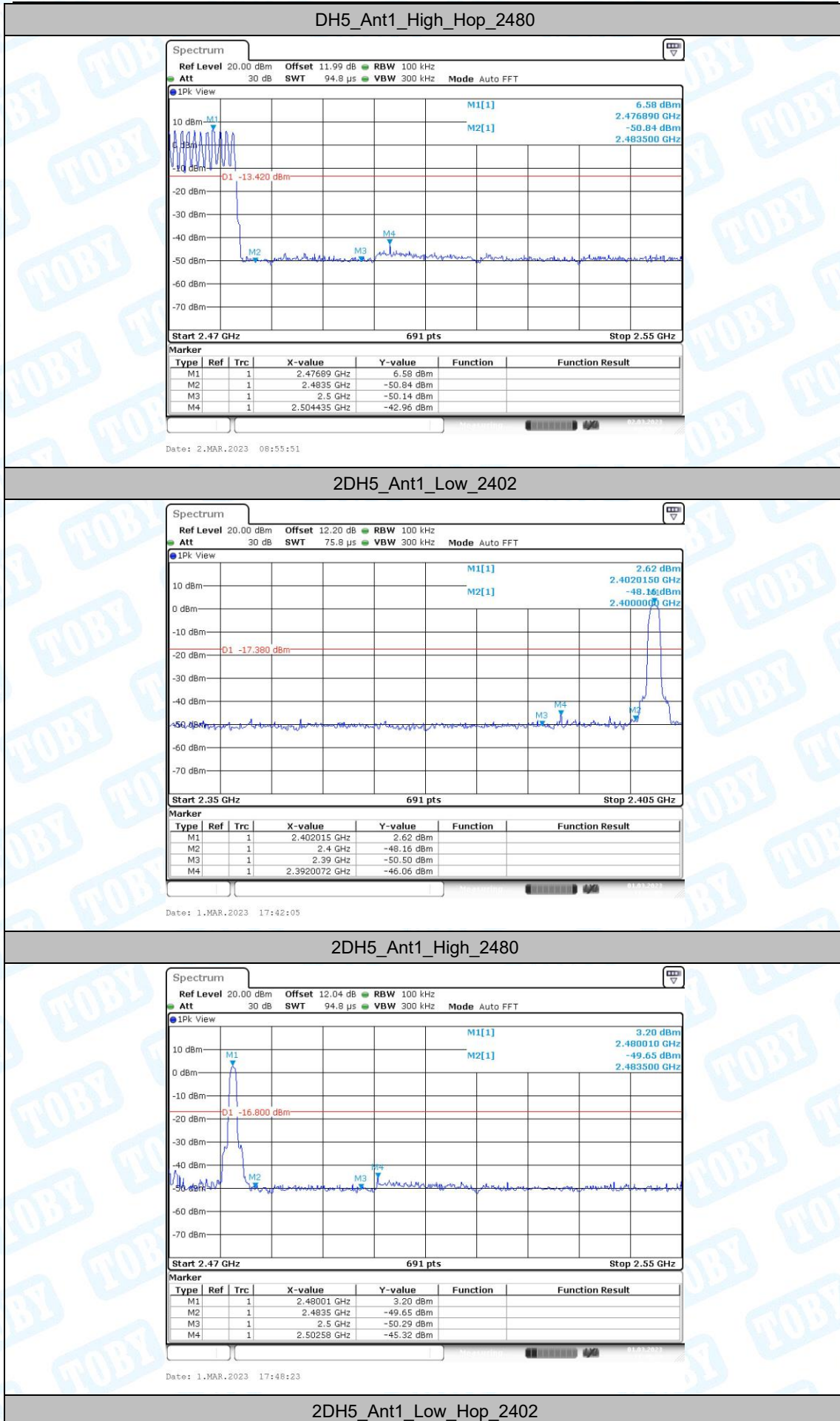
7. Band edge measurements

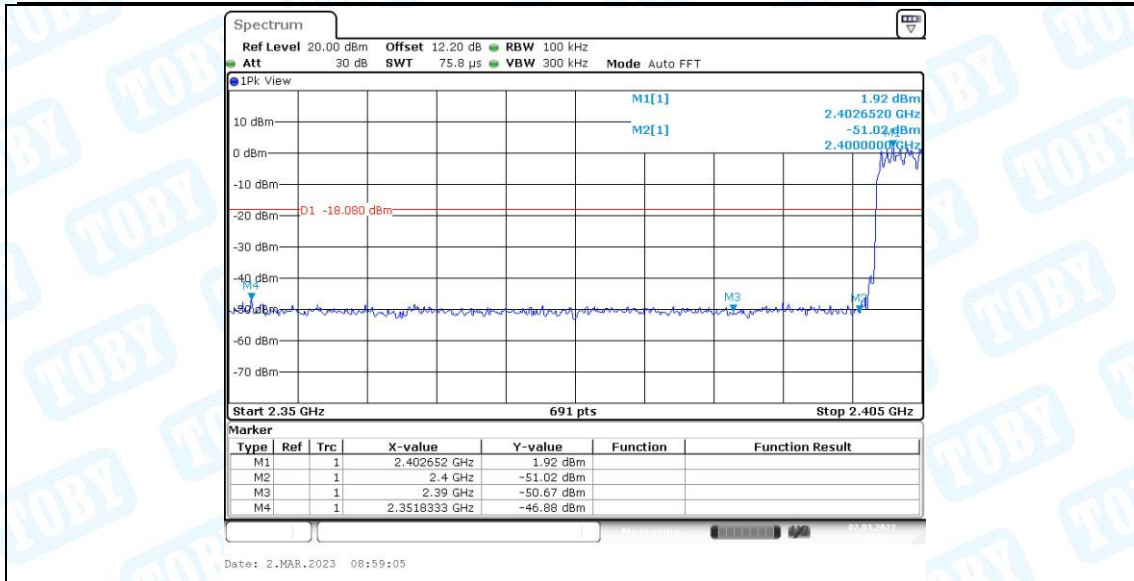
7.1. Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	4.20	-47.39	≤-15.8	PASS
		High	2480	4.64	-45.61	≤-15.36	PASS
		Low	Hop_2402	5.75	-47.91	≤-14.25	PASS
		High	Hop_2480	6.58	-42.96	≤-13.42	PASS
2DH5	Ant1	Low	2402	2.62	-46.06	≤-17.38	PASS
		High	2480	3.20	-45.32	≤-16.8	PASS
		Low	Hop_2402	1.92	-46.88	≤-18.08	PASS
		High	Hop_2480	3.86	-45.62	≤-16.14	PASS
3DH5	Ant1	Low	2402	2.02	-47.45	≤-17.98	PASS
		High	2480	2.74	-45.94	≤-17.26	PASS
		Low	Hop_2402	6.23	-46.99	≤-13.77	PASS
		High	Hop_2480	7.24	-44.89	≤-12.76	PASS

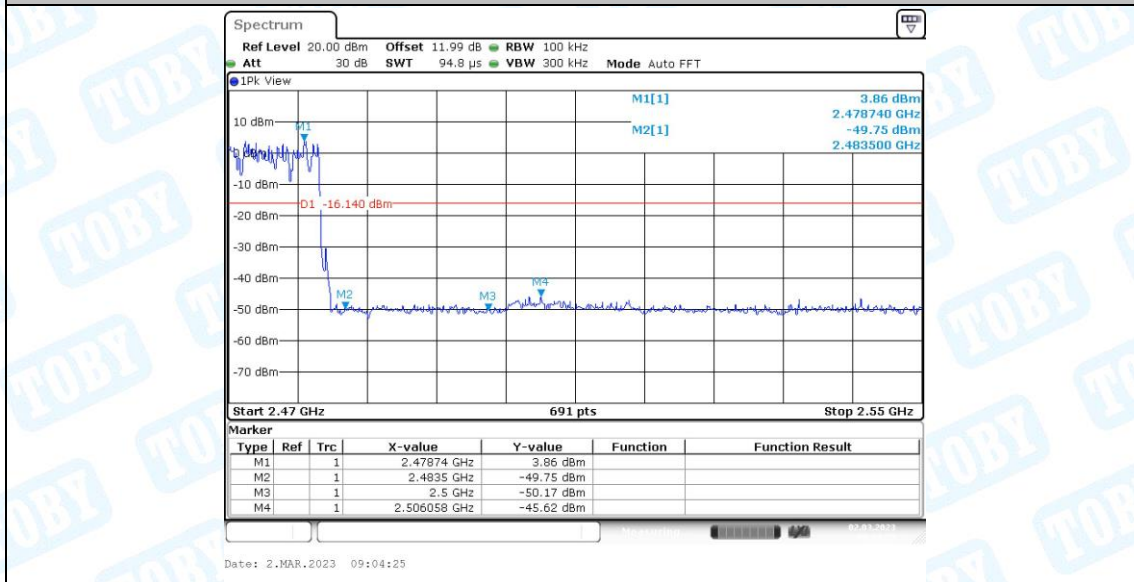
7.2.Test Graphs



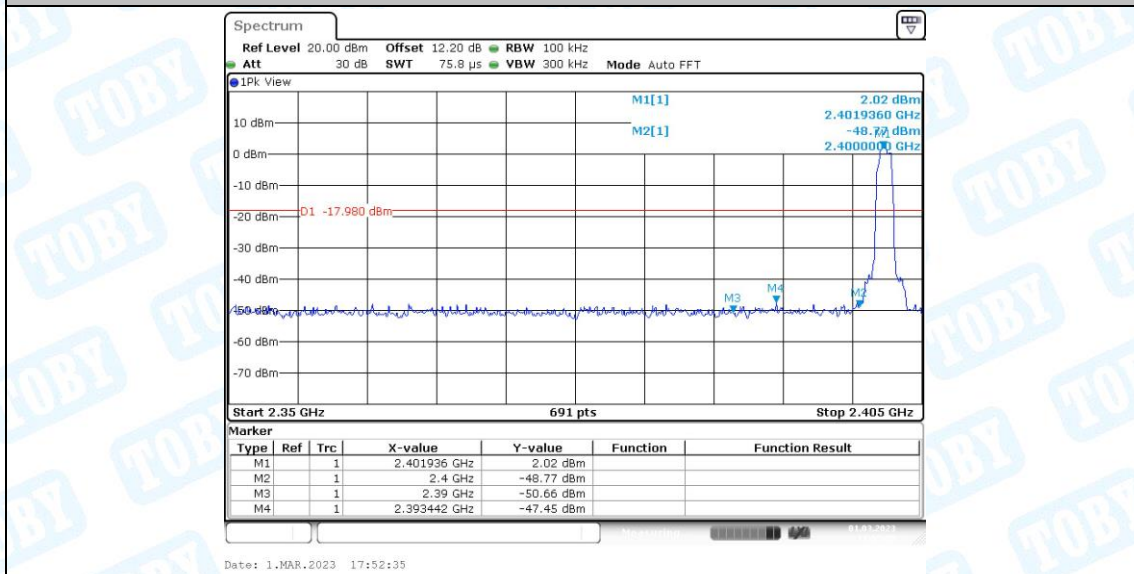




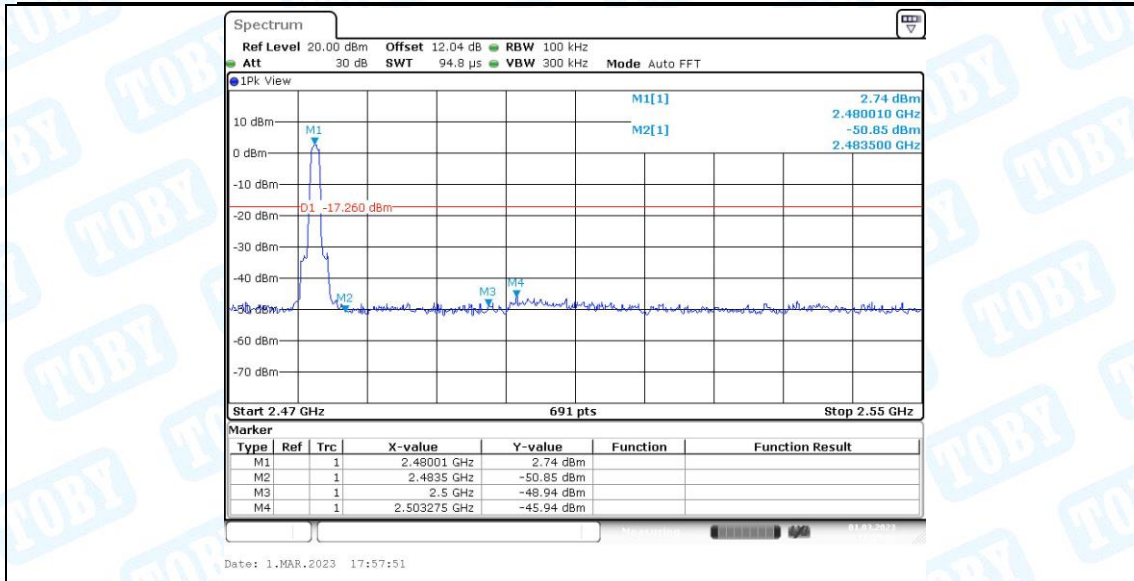
2DH5_Ant1_High_Hop_2480



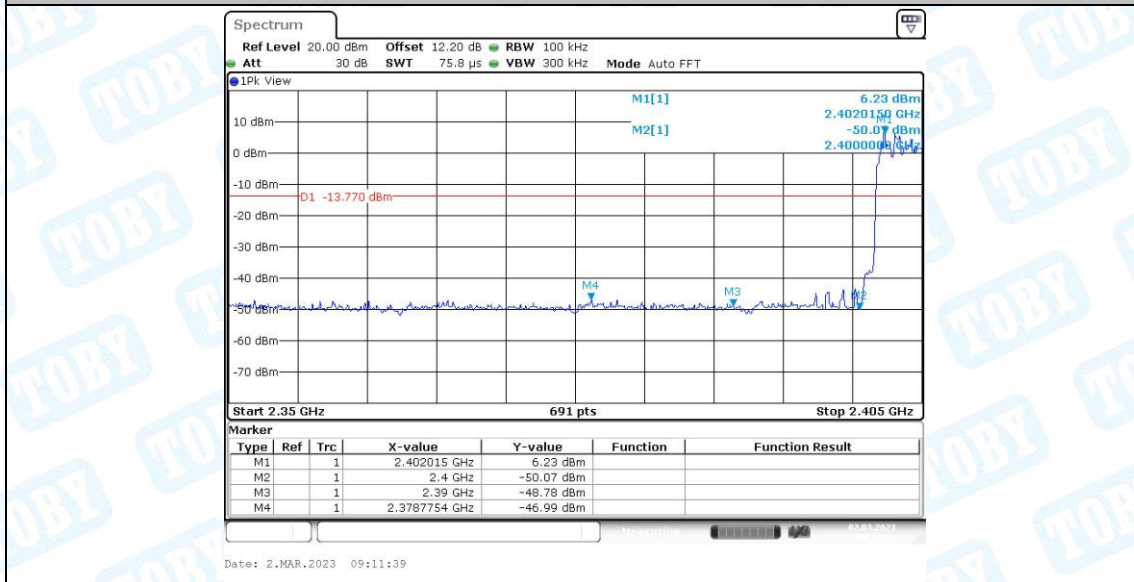
3DH5_Ant1_Low_2402



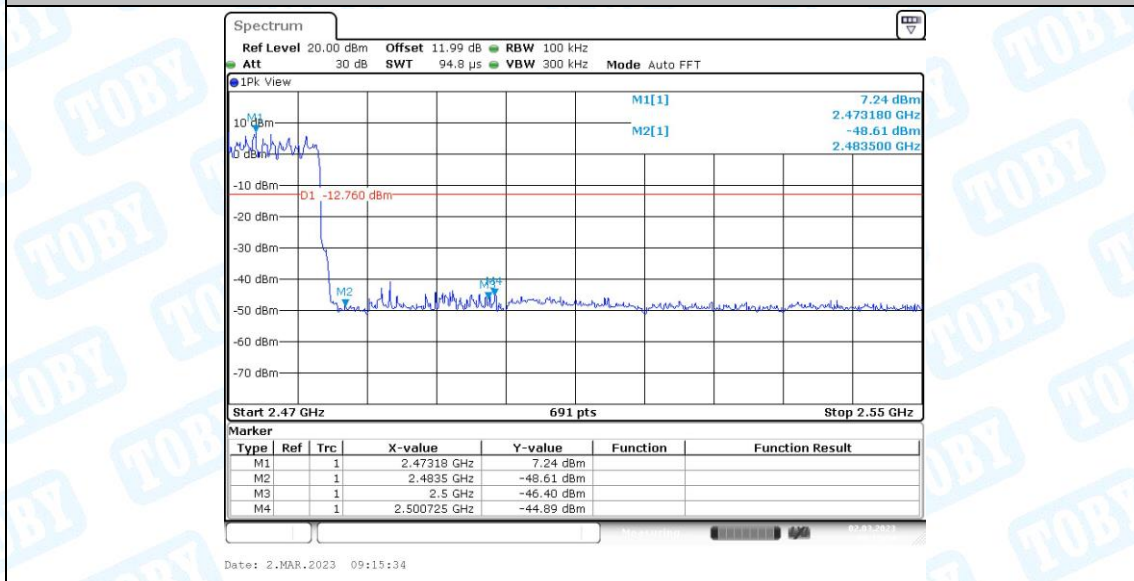
3DH5_Ant1_High_2480



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	4.08	4.08	---	PASS
			30~1000	4.08	-57.12	≤-15.92	PASS
			1000~26500	4.08	-48.67	≤-15.92	PASS
		2441	Reference	5.18	5.18	---	PASS
			30~1000	5.18	-57.72	≤-14.82	PASS
			1000~26500	5.18	-48.96	≤-14.82	PASS
		2480	Reference	4.53	4.53	---	PASS
			30~1000	4.53	-57.6	≤-15.47	PASS
			1000~26500	4.53	-49.13	≤-15.47	PASS
2DH5	Ant1	2402	Reference	2.54	2.54	---	PASS
			30~1000	2.54	-53.9	≤-17.46	PASS
			1000~26500	2.54	-48.5	≤-17.46	PASS
		2441	Reference	3.46	3.46	---	PASS
			30~1000	3.46	-56.58	≤-16.54	PASS
			1000~26500	3.46	-48.7	≤-16.54	PASS
		2480	Reference	3.42	3.42	---	PASS
			30~1000	3.42	-55.79	≤-16.58	PASS
			1000~26500	3.42	-49.24	≤-16.58	PASS
3DH5	Ant1	2402	Reference	2.11	2.11	---	PASS
			30~1000	2.11	-57.12	≤-17.89	PASS
			1000~26500	2.11	-48.67	≤-17.89	PASS
		2441	Reference	2.95	2.95	---	PASS
			30~1000	2.95	-56.89	≤-17.05	PASS
			1000~26500	2.95	-44.96	≤-17.05	PASS
		2480	Reference	2.75	2.75	---	PASS
			30~1000	2.75	-57	≤-17.25	PASS
			1000~26500	2.75	-49.02	≤-17.25	PASS

8.2.Test Graphs

