

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

General Description of EUT	
Product Name:	Z1 Roma JR
Test Model:	Z1 Roma JR
Sample ID:	RW-C-202305-0096-1
Environmental Conditions	
Temperature:	24.12℃
Relative Humidity:	50.3%
Test Voltage:	DC 3.7V
Test Engineer:	Huangjianping
Note: For a more detailed features description, please refer to the report TBR-C-202305-0096-2	

Contents

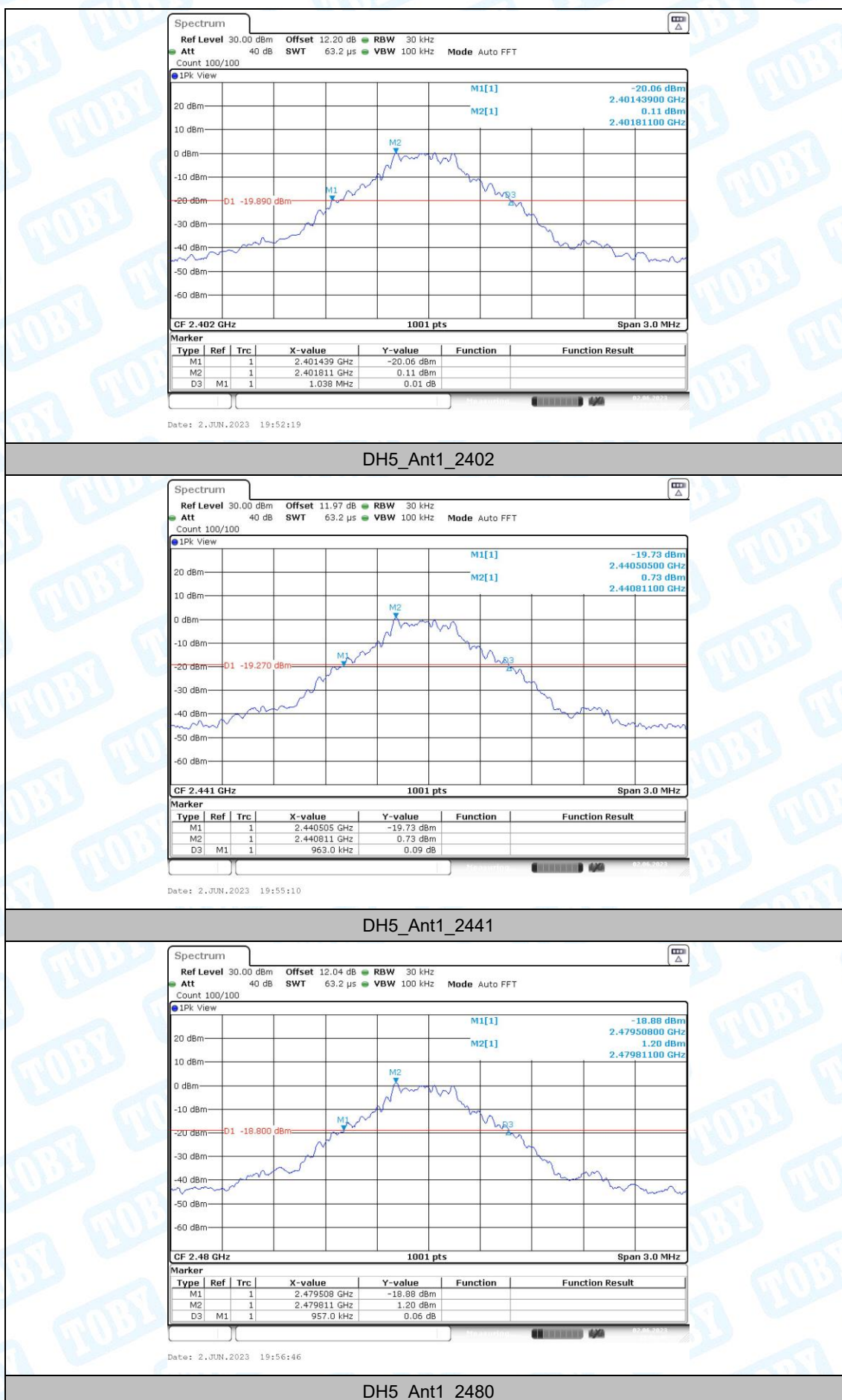
1. 20dB Emission Bandwidth.....	3
1.1. Test Result	3
1.2. Test Graphs	4
2. Occupied Channel Bandwidth.....	7
2.1. Test Result	7
2.2. Test Graphs	8
3. Maximum conducted output power	11
3.1. Test Result	11
3.2. Test Graphs	12
4. Carrier frequency separation	15
4.1. Test Result	15
4.2. Test Graphs	16
5. Time of occupancy	17
5.1. Test Result	17
5.2. Test Graphs	18
6. Number of hopping channels.....	21
6.1. Test Result	21
6.2. Test Graphs	22
7. Band edge measurements	23
7.1. Test Result	23
7.2. Test Graphs	24
8. Conducted Spurious Emission	28
8.1. Test Result	28
8.2. Test Graphs	29
9. Duty Cycle.....	38
9.1. Test Result	38
9.2. Test Graphs	39
10. Emissions in Restricted Bands	42
10.1. Test Result	42
10.2. Test Graphs	44

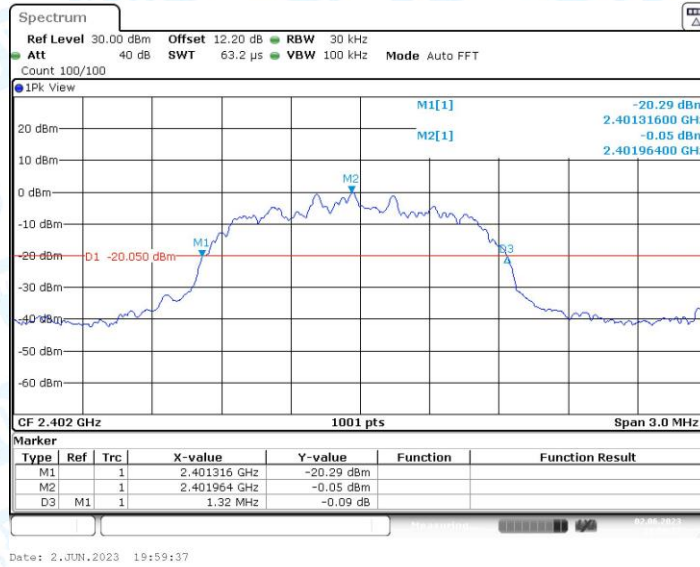
1. 20dB Emission Bandwidth

1.1. Test Result

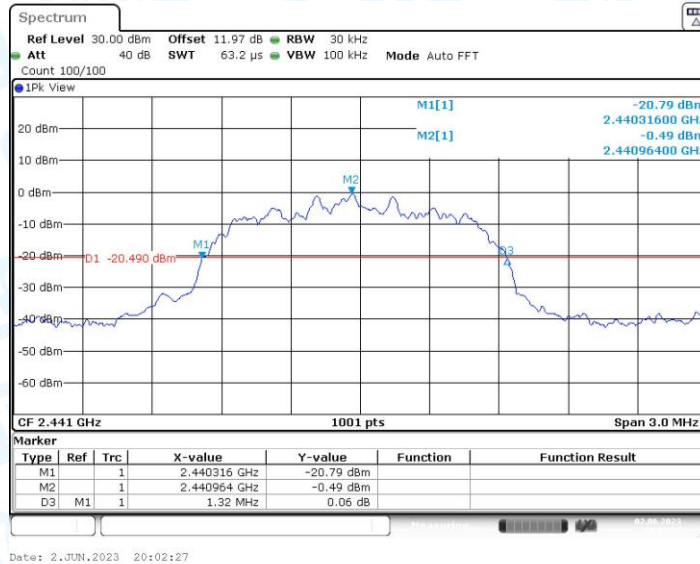
TestMode	Antenna	Channel	20db EBW[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.04	---	---
		2441	0.96	---	---
		2480	0.96	---	---
2DH5	Ant1	2402	1.32	---	---
		2441	1.32	---	---
		2480	1.32	---	---
3DH5	Ant1	2402	1.31	---	---
		2441	1.31	---	---
		2480	1.31	---	---

1.2. Test Graphs

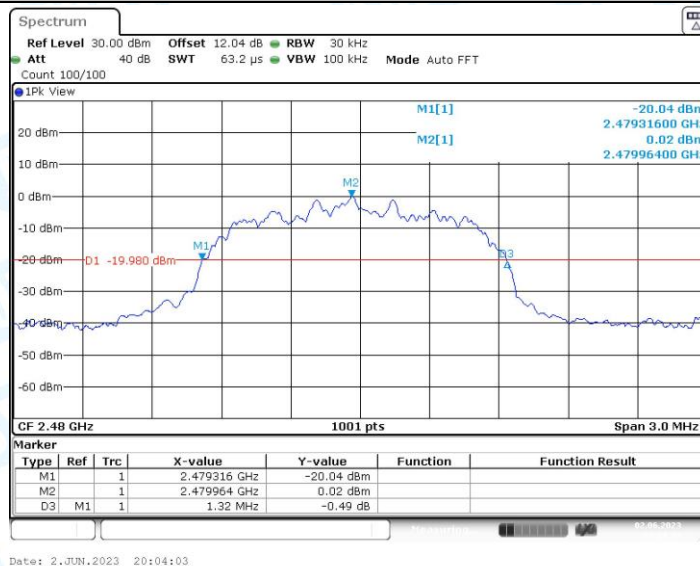




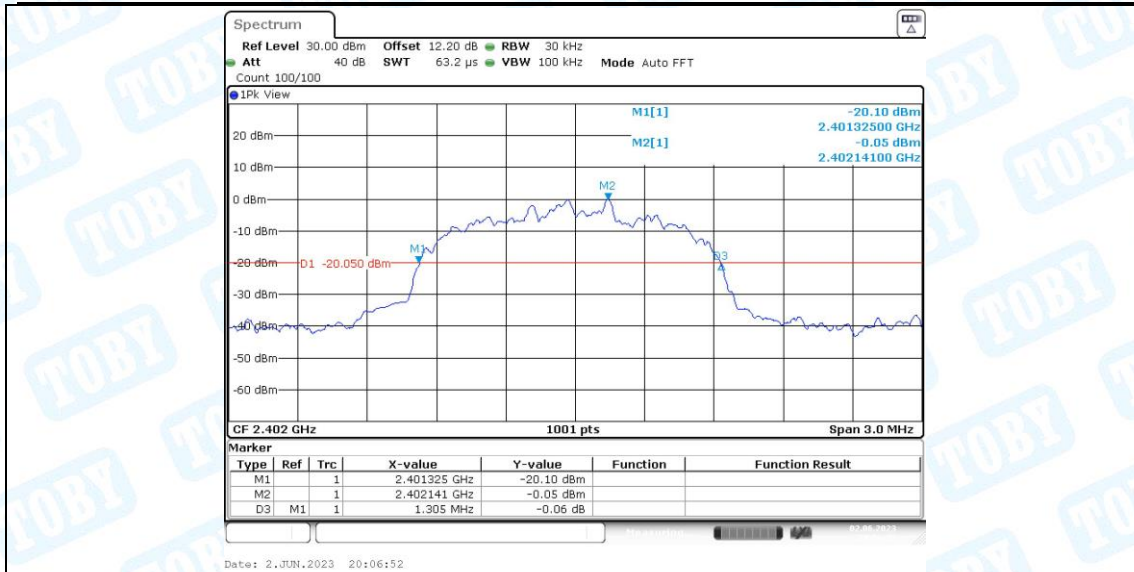
2DH5_Ant1_2402



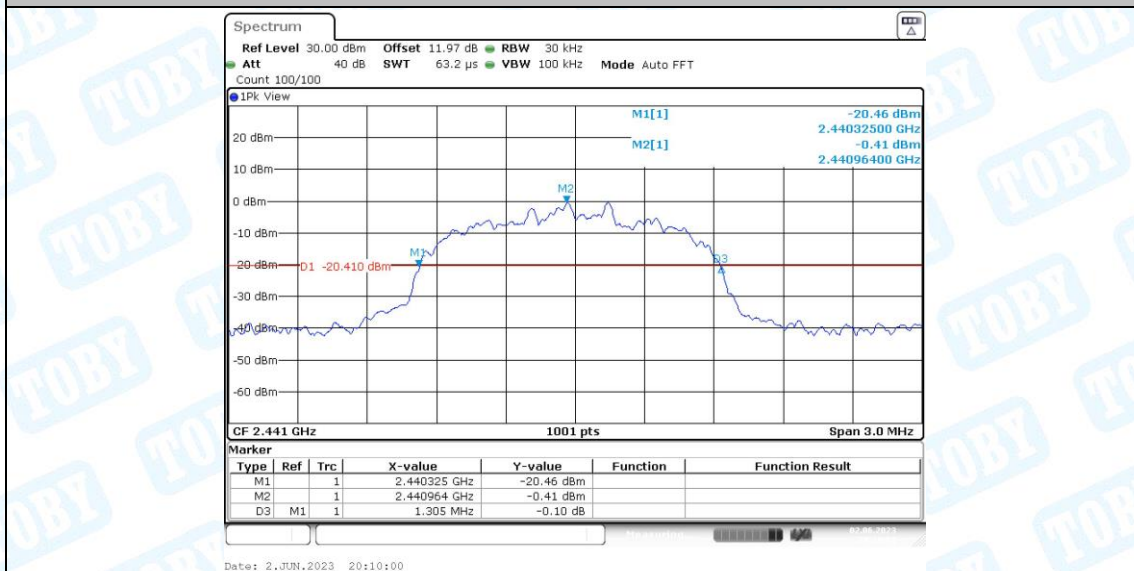
2DH5_Ant1_2441



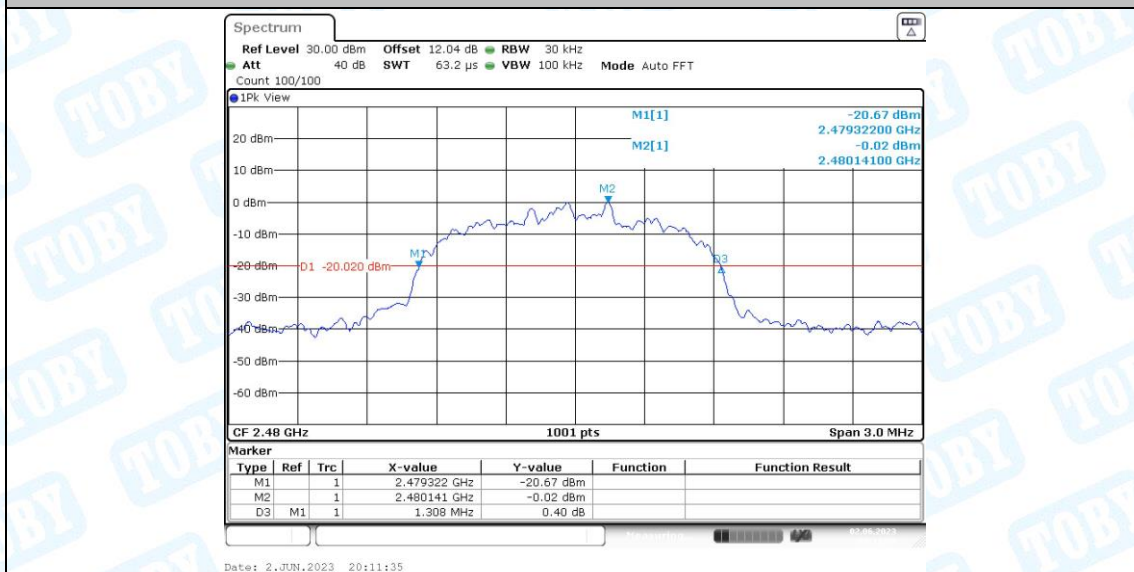
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



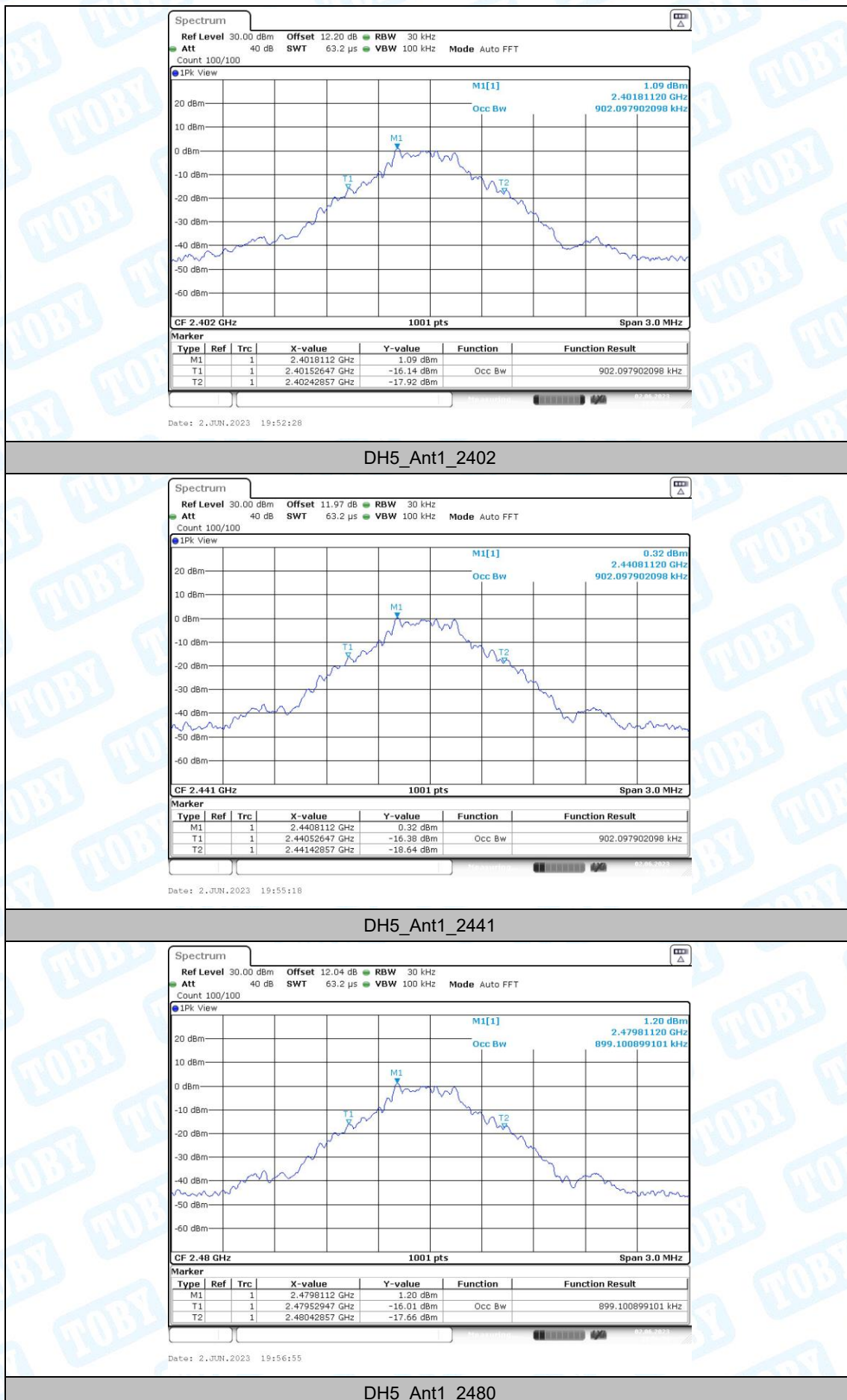
3DH5_Ant1_2480

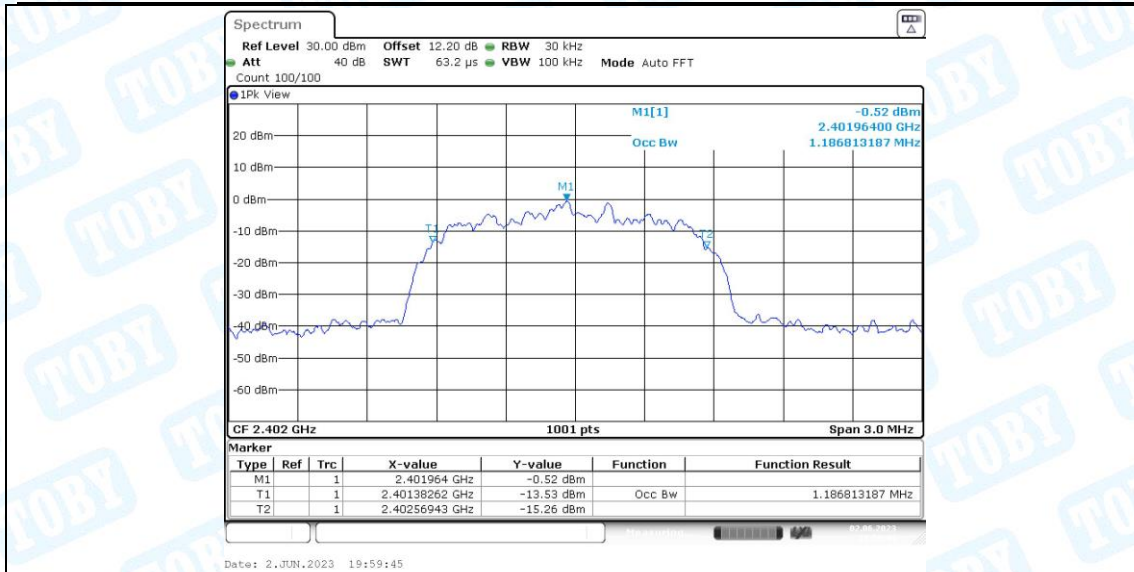
2. Occupied Channel Bandwidth

2.1. Test Result

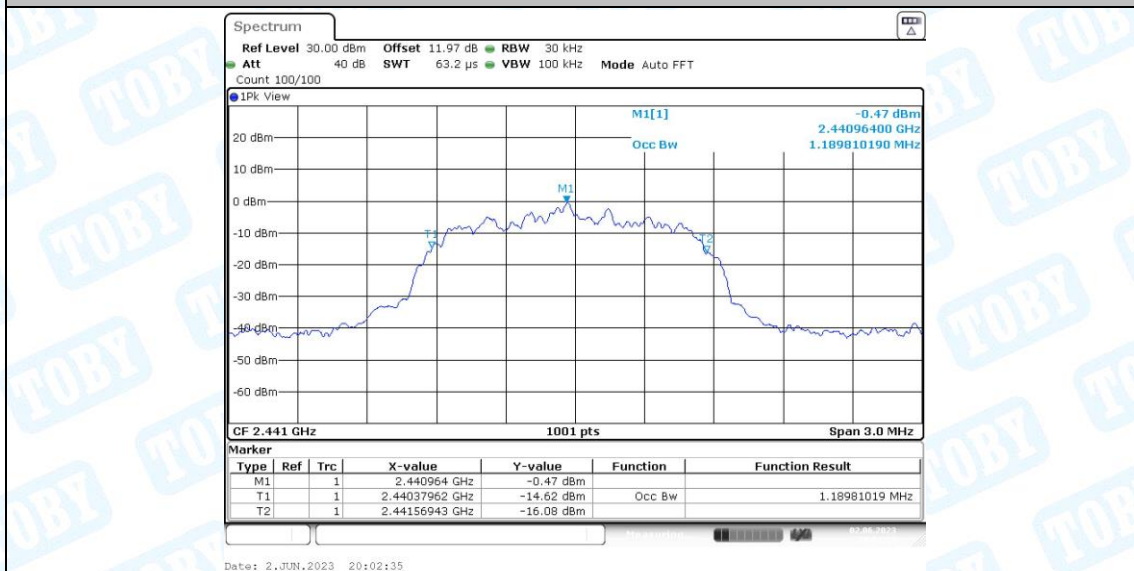
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.902	2401.5265	2402.4286	---	---
		2441	0.902	2440.5265	2441.4286	---	---
		2480	0.899	2479.5295	2480.4286	---	---
2DH5	Ant1	2402	1.187	2401.3826	2402.5694	---	---
		2441	1.19	2440.3796	2441.5694	---	---
		2480	1.19	2479.3796	2480.5694	---	---
3DH5	Ant1	2402	1.193	2401.3796	2402.5724	---	---
		2441	1.193	2440.3796	2441.5724	---	---
		2480	1.196	2479.3766	2480.5724	---	---

2.2. Test Graphs

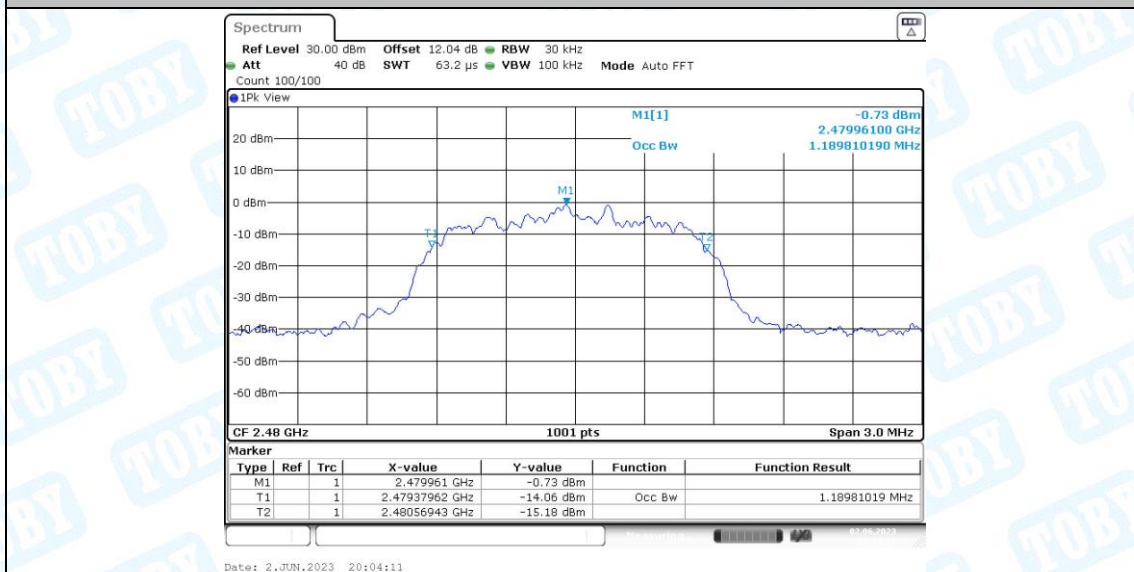




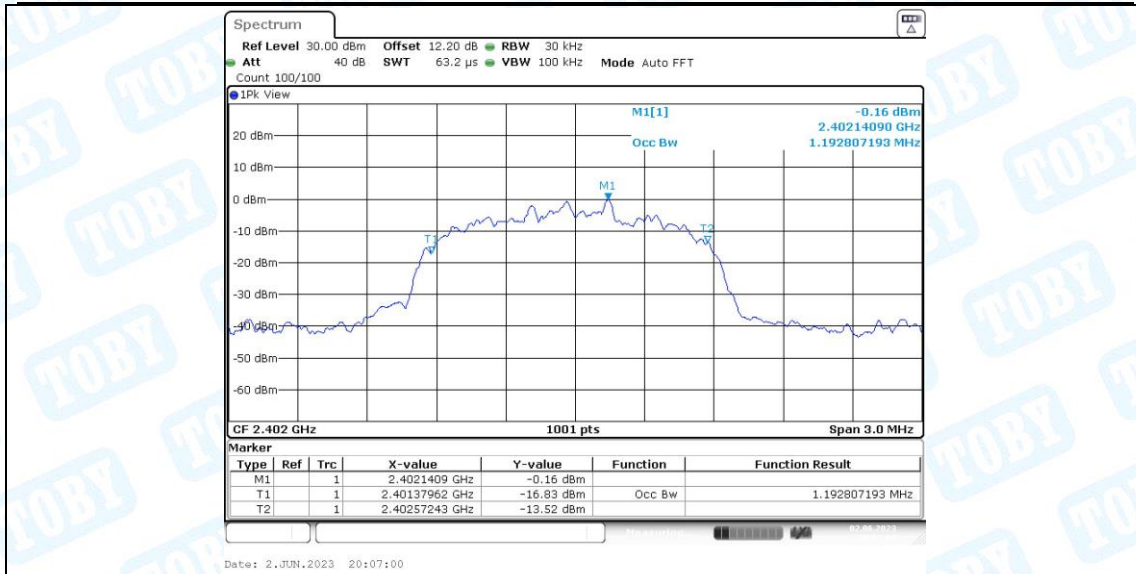
2DH5_Ant1_2402



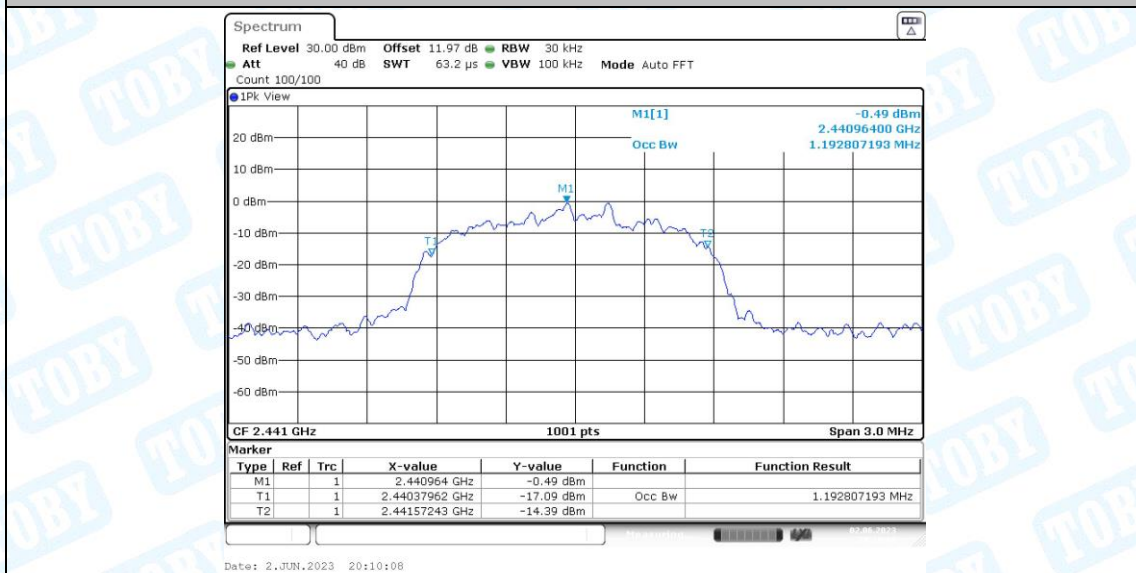
2DH5_Ant1_2441



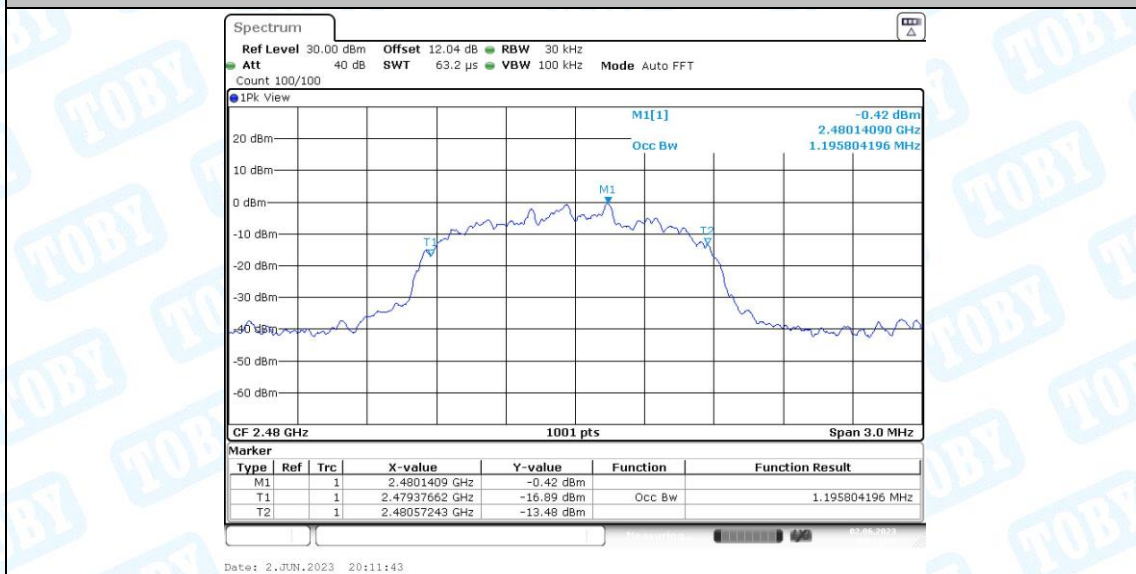
2DH5_Ant1_2480



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	3.4	≤20.97	PASS
		2441	2.98	≤20.97	PASS
		2480	3.45	≤20.97	PASS
2DH5	Ant1	2402	4.58	≤20.97	PASS
		2441	4.19	≤20.97	PASS
		2480	4.65	≤20.97	PASS
3DH5	Ant1	2402	4.85	≤20.97	PASS
		2441	4.54	≤20.97	PASS
		2480	5.12	≤20.97	PASS

3.2.Test Graphs







4. Carrier frequency separation

4.1. Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.997	≥ 0.693	PASS
2DH5	Ant1	Hop	1	≥ 0.880	PASS
3DH5	Ant1	Hop	1.165	≥ 0.873	PASS

4.2. Test Graphs

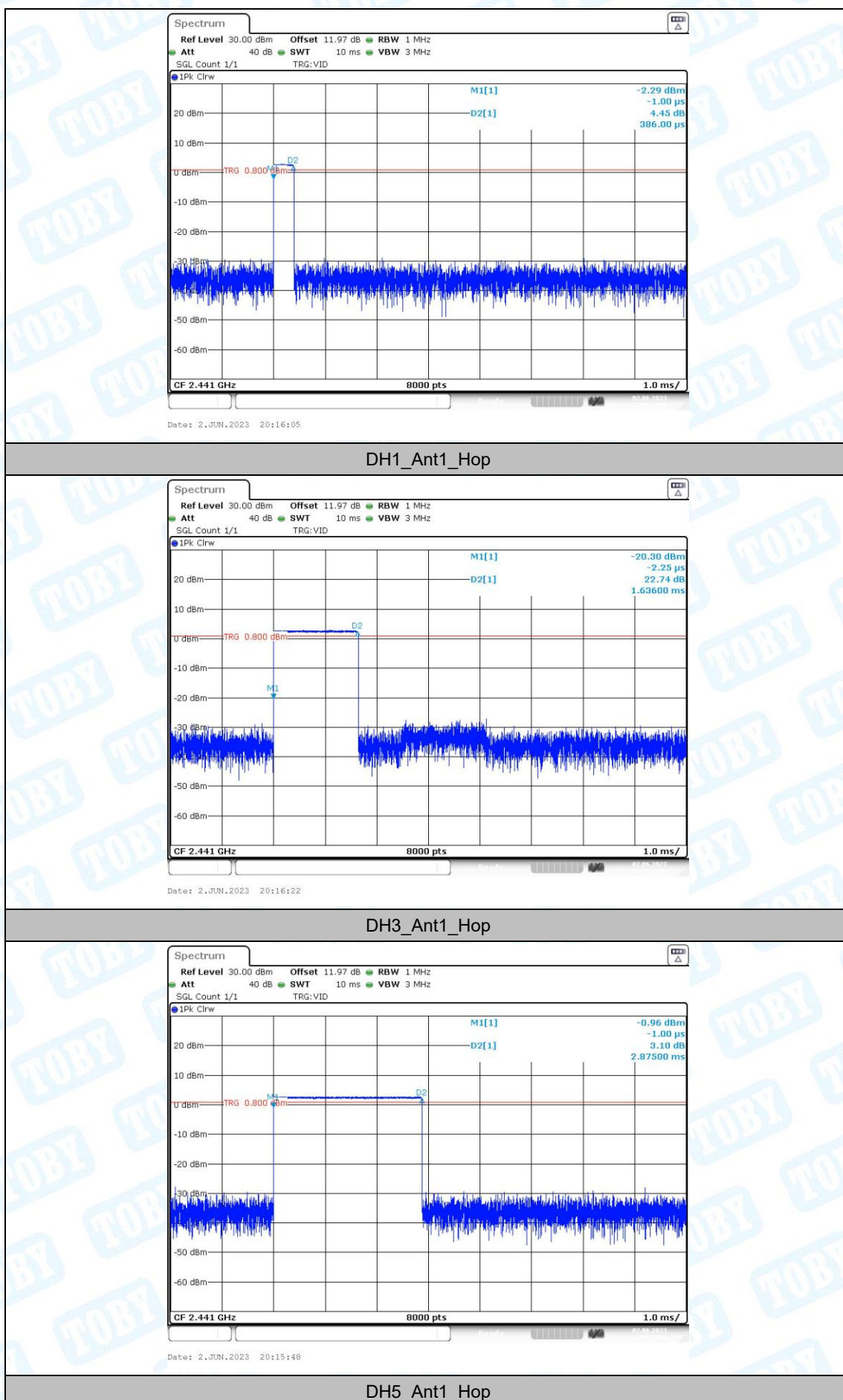


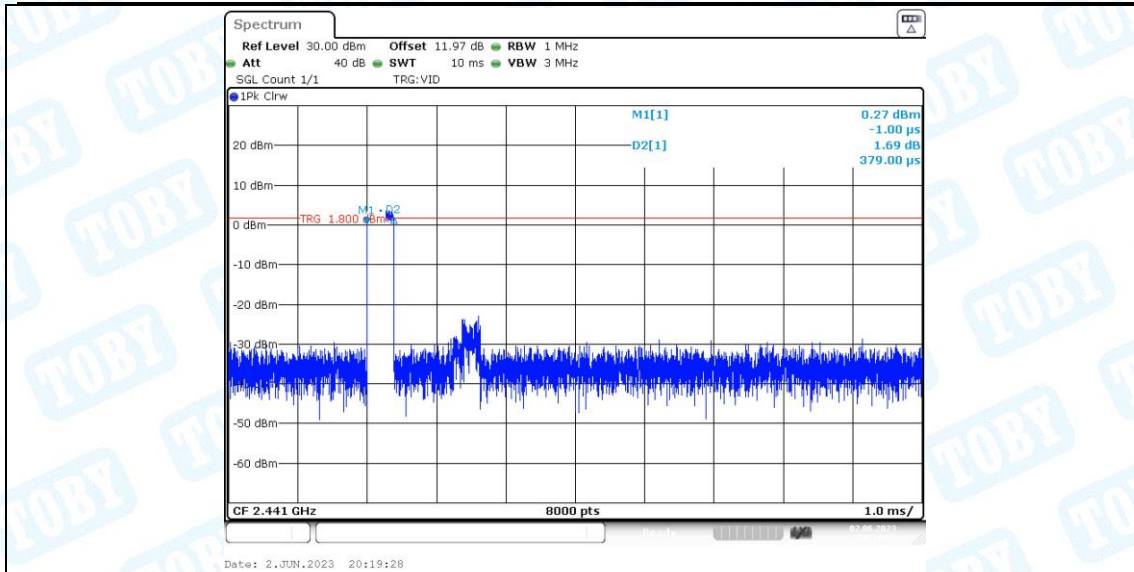
5. Time of occupancy

5.1. Test Result

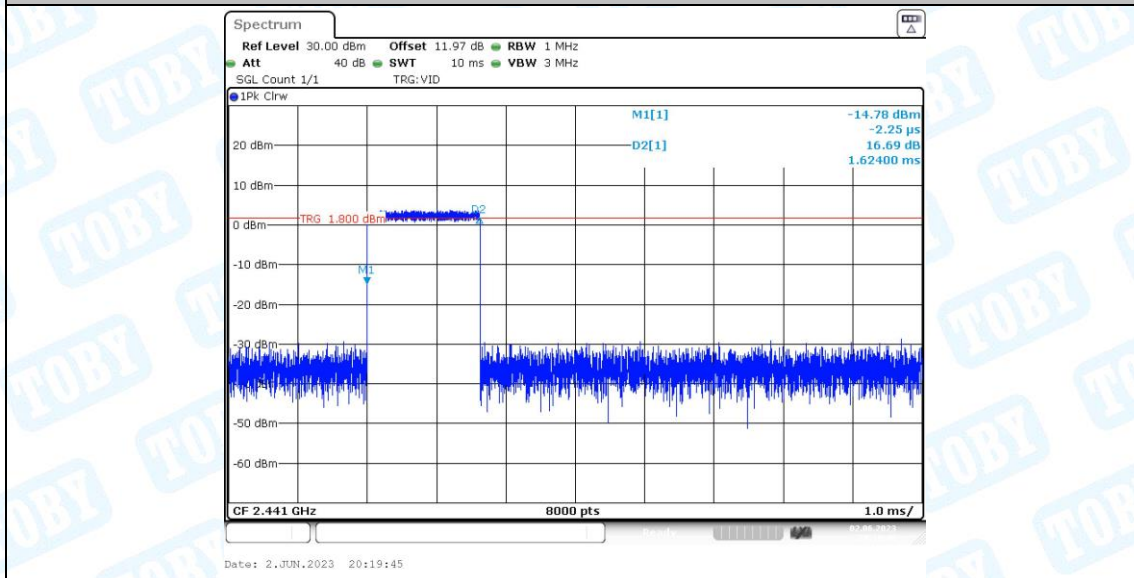
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.386	320	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.636	160	0.262	≤0.4	PASS
DH5	Ant1	Hop	2.875	106.67	0.307	≤0.4	PASS
2DH1	Ant1	Hop	0.379	320	0.121	≤0.4	PASS
2DH3	Ant1	Hop	1.624	160	0.26	≤0.4	PASS
2DH5	Ant1	Hop	2.865	106.67	0.306	≤0.4	PASS
3DH1	Ant1	Hop	0.378	320	0.121	≤0.4	PASS
3DH3	Ant1	Hop	1.620	160	0.259	≤0.4	PASS
3DH5	Ant1	Hop	2.863	106.67	0.305	≤0.4	PASS

5.2. Test Graphs

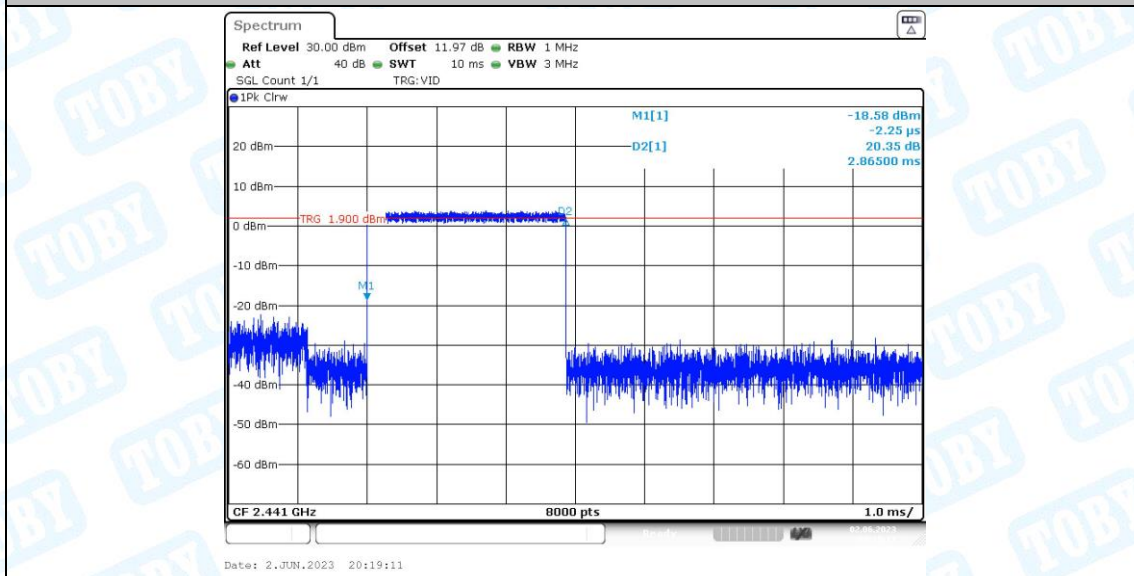




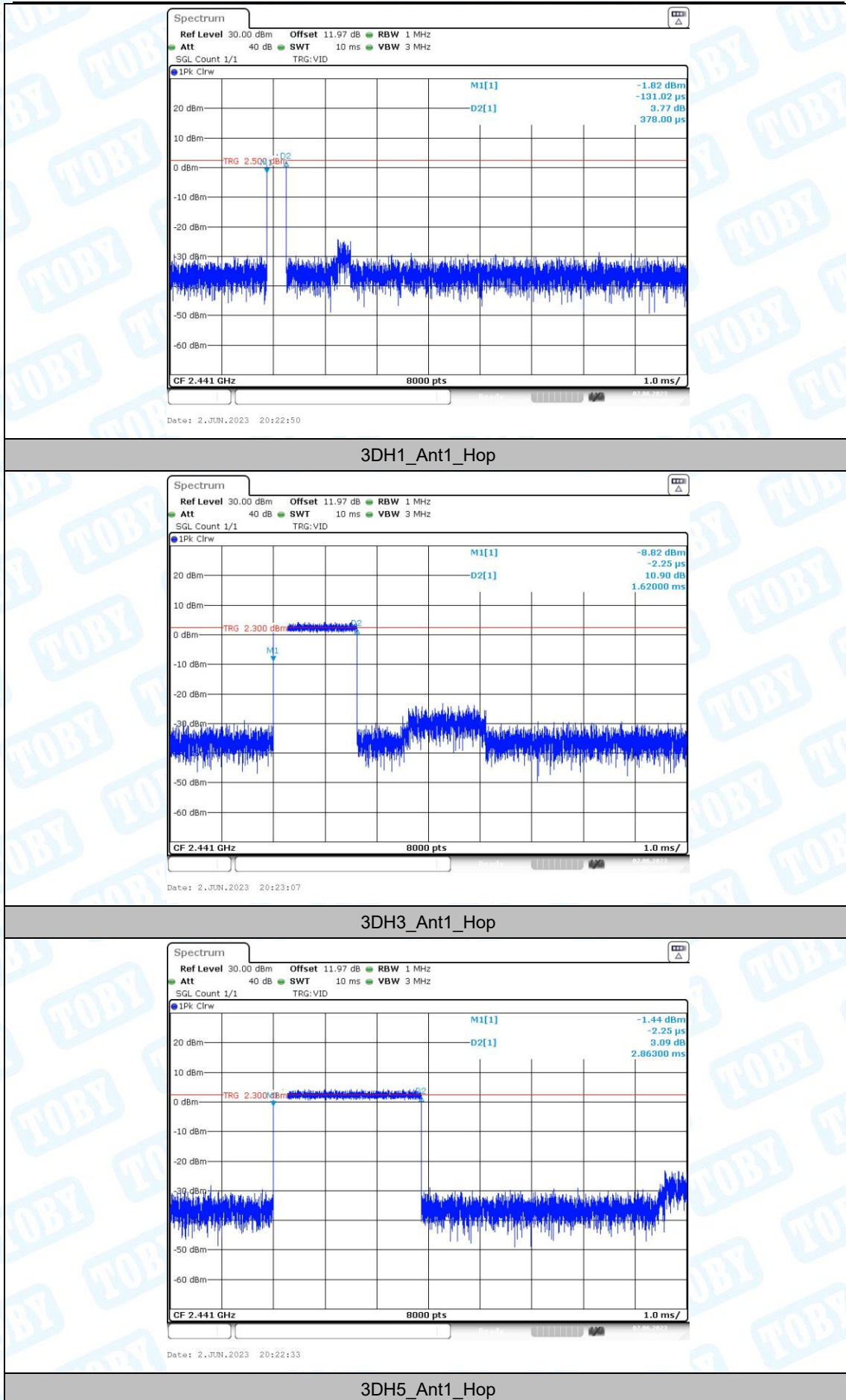
2DH1_Ant1_Hop



2DH3_Ant1_Hop



2DH5_Ant1_Hop

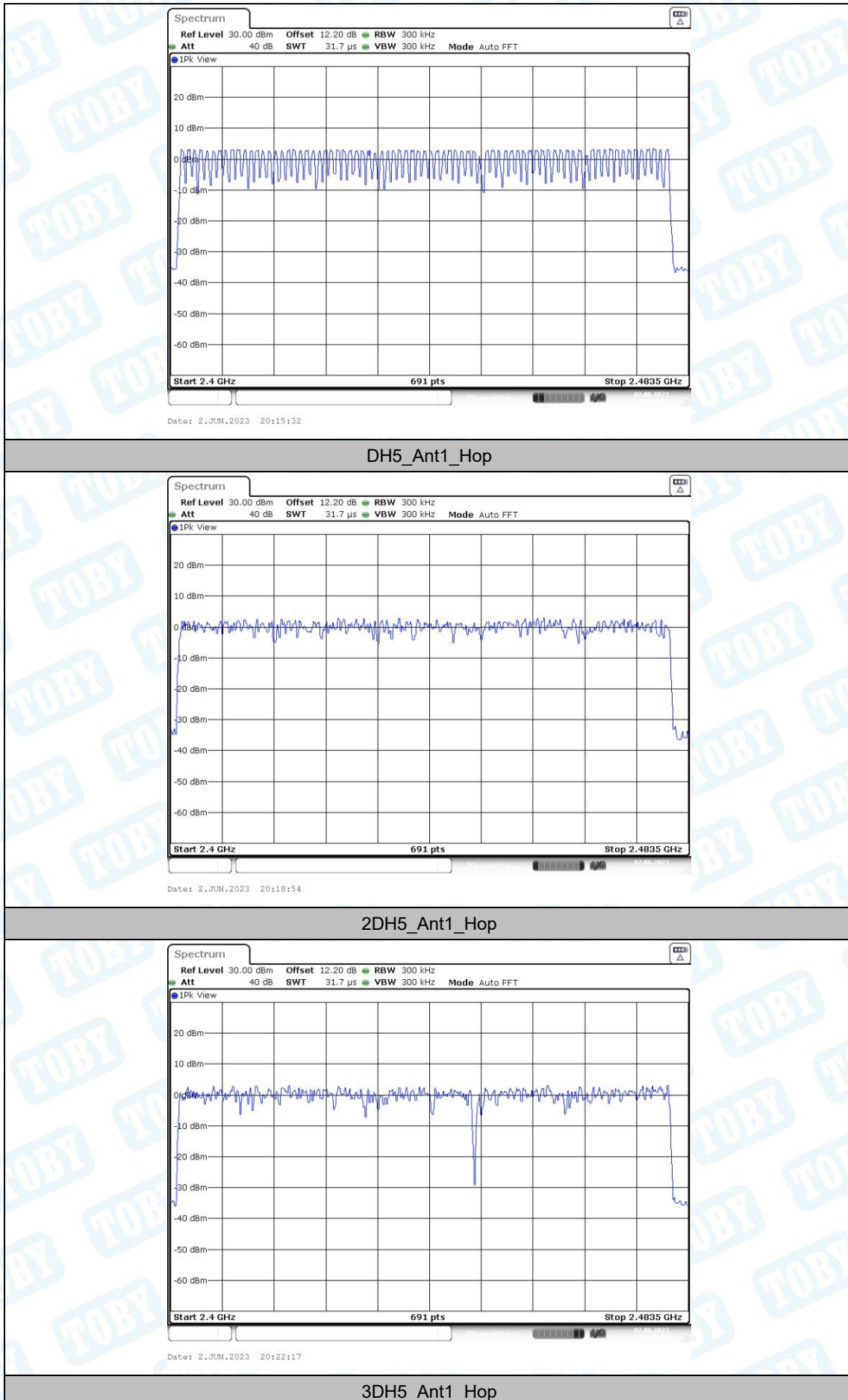


6. Number of hopping channels

6.1. Test Result

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

6.2.Test Graphs

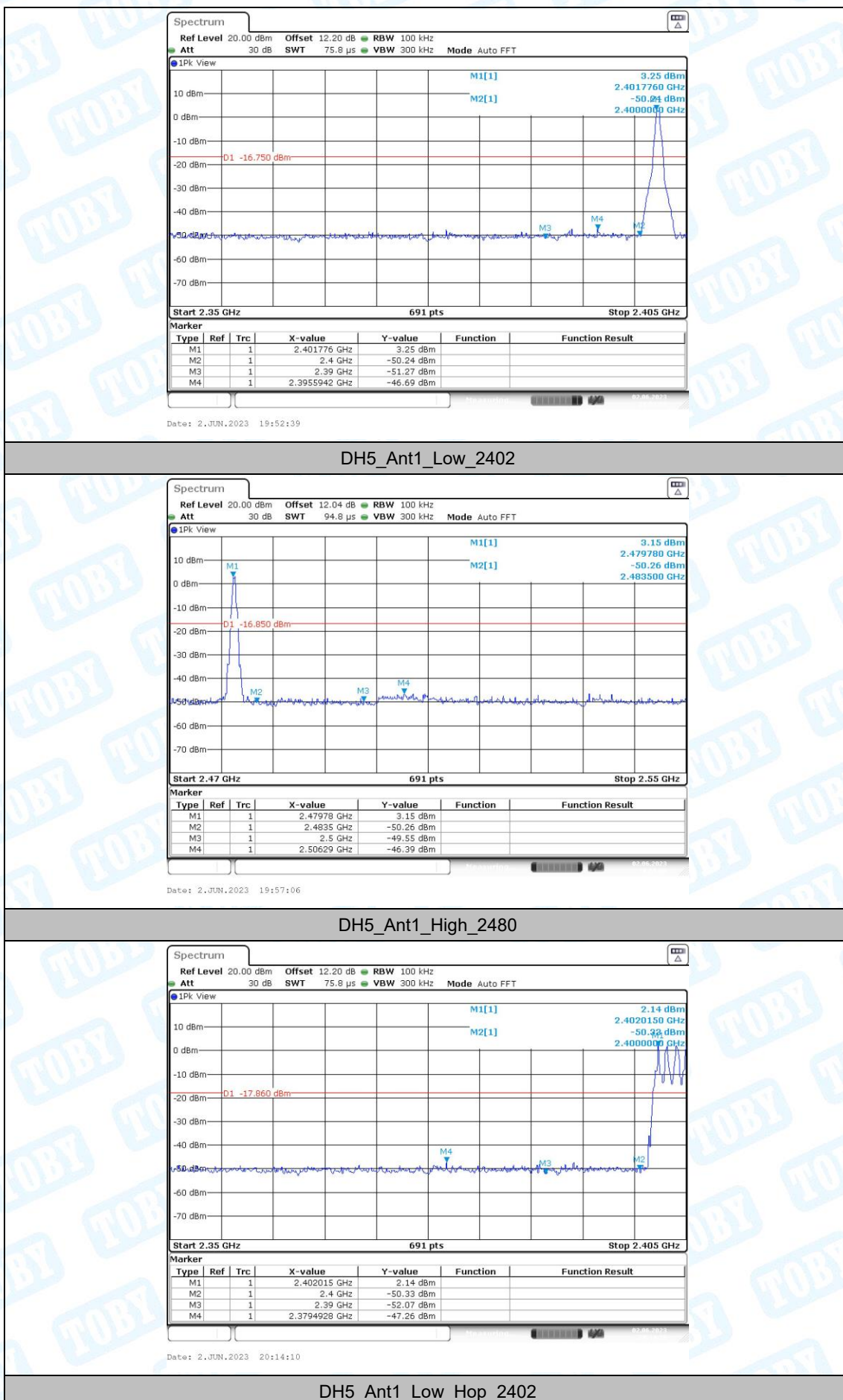


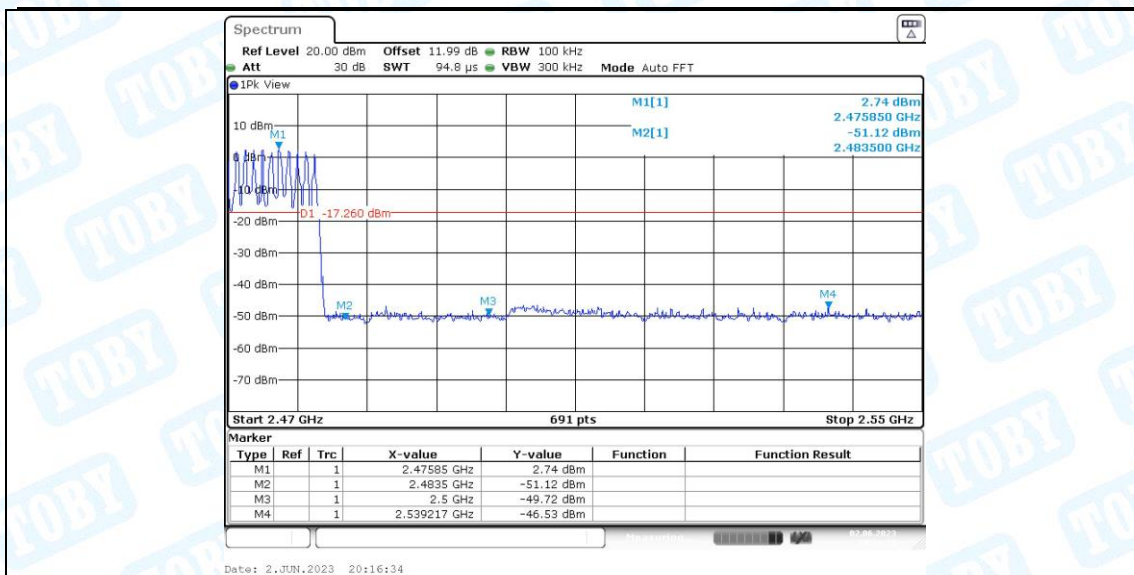
7. Band edge measurements

7.1. Test Result

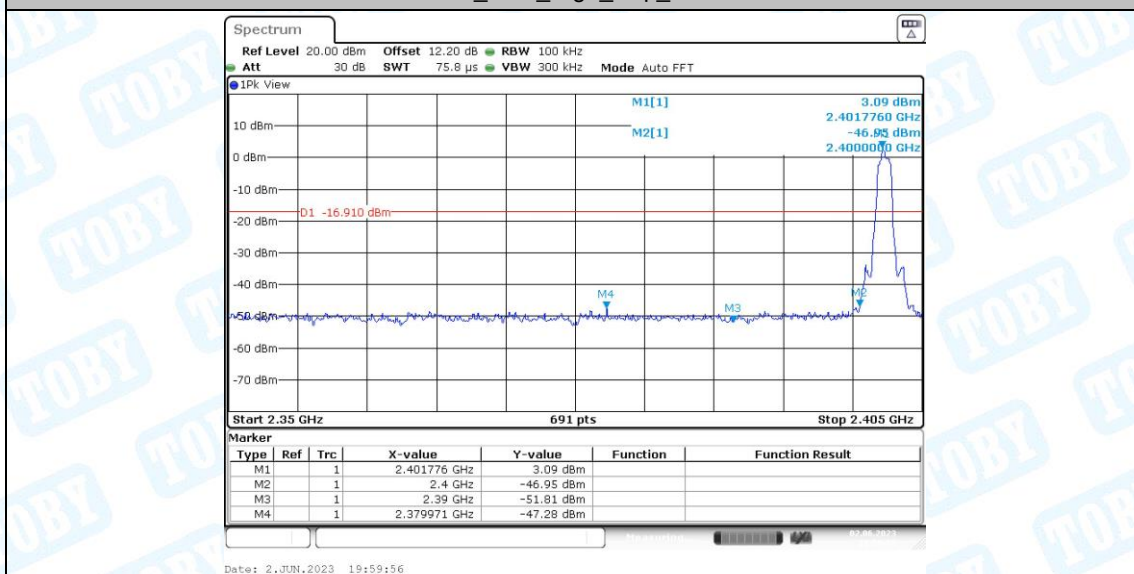
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	3.25	-46.69	≤-16.75	PASS
		High	2480	3.15	-46.39	≤-16.85	PASS
		Low	Hop_2402	2.14	-47.26	≤-17.86	PASS
		High	Hop_2480	2.74	-46.53	≤-17.26	PASS
2DH5	Ant1	Low	2402	3.09	-47.28	≤-16.91	PASS
		High	2480	3.04	-45.55	≤-16.96	PASS
		Low	Hop_2402	1.77	-48	≤-18.23	PASS
		High	Hop_2480	-0.30	-46.6	≤-20.3	PASS
3DH5	Ant1	Low	2402	3.14	-47.17	≤-16.86	PASS
		High	2480	2.02	-46.32	≤-17.98	PASS
		Low	Hop_2402	0.47	-48.08	≤-19.53	PASS
		High	Hop_2480	1.16	-46.19	≤-18.84	PASS

7.2. Test Graphs

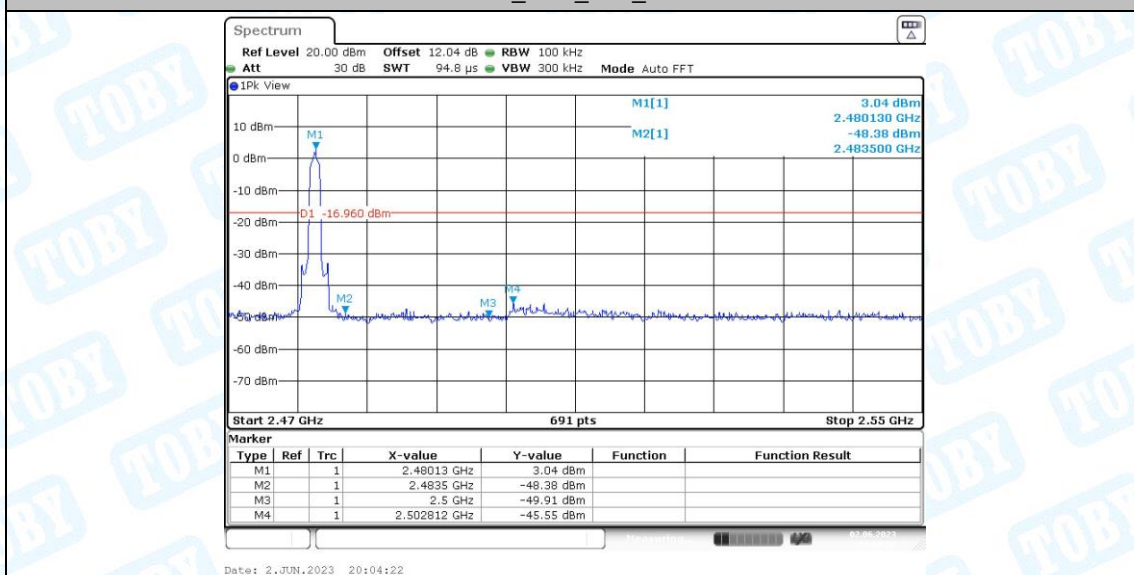




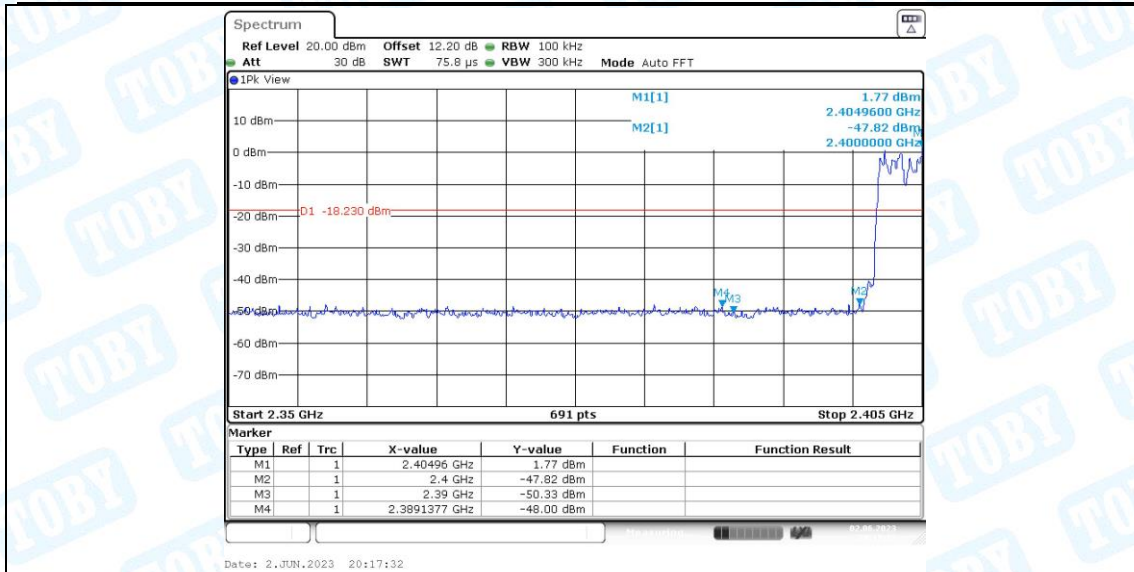
DH5_Ant1_High_Hop_2480



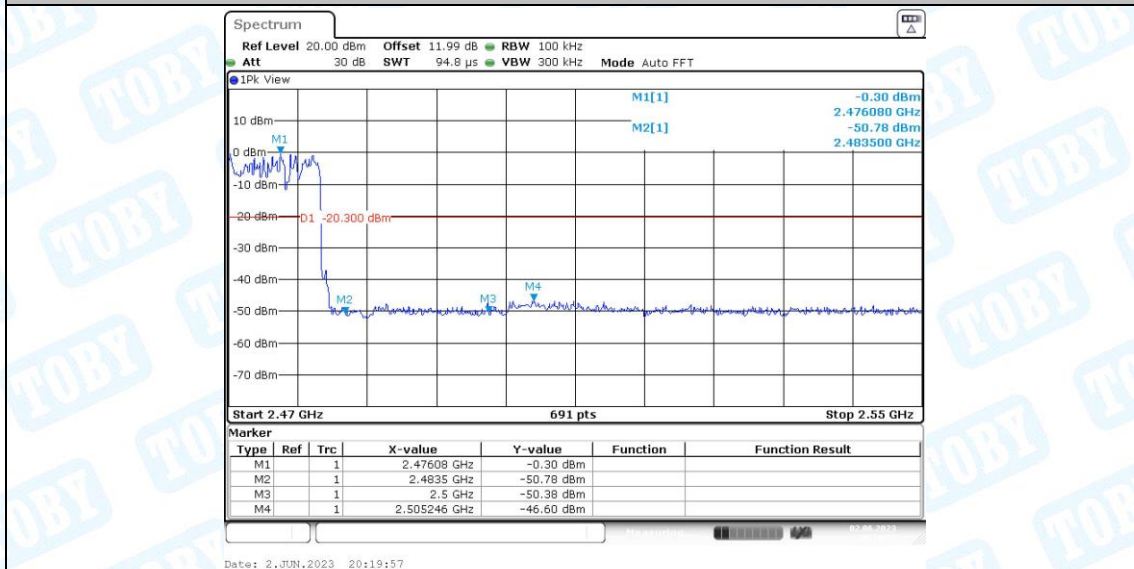
2DH5_Ant1_Low_2402



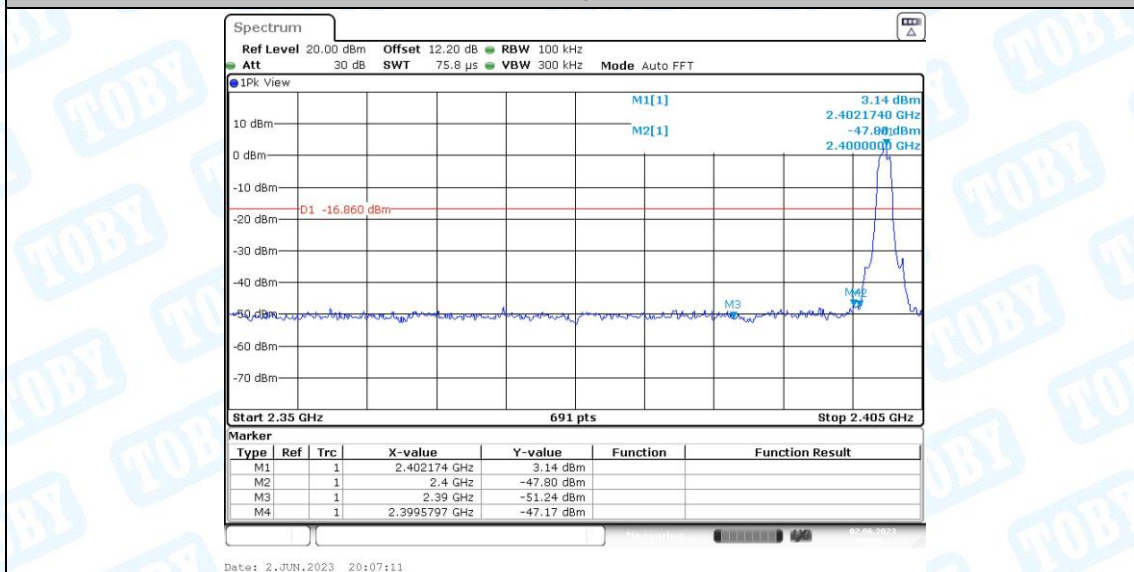
2DH5_Ant1_High_2480



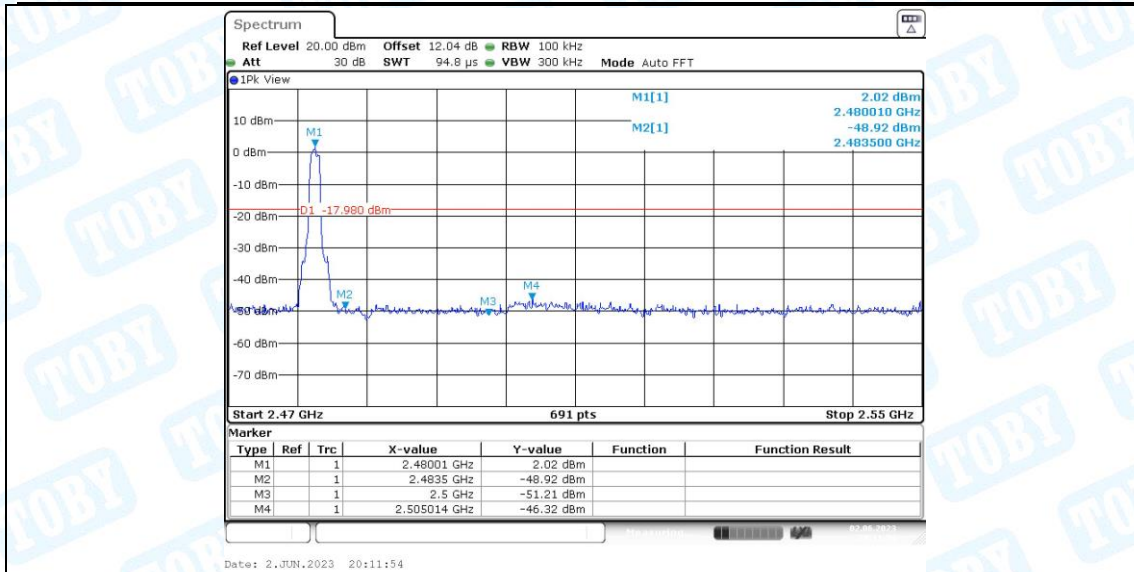
2DH5_Ant1_Low_Hop_2402



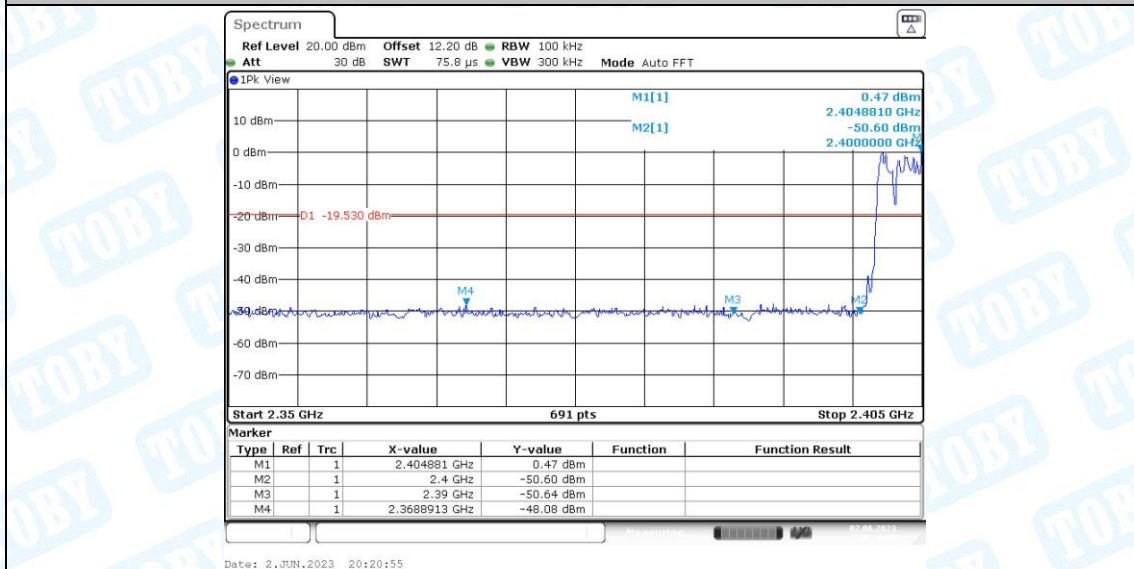
2DH5_Ant1_High_Hop_2480



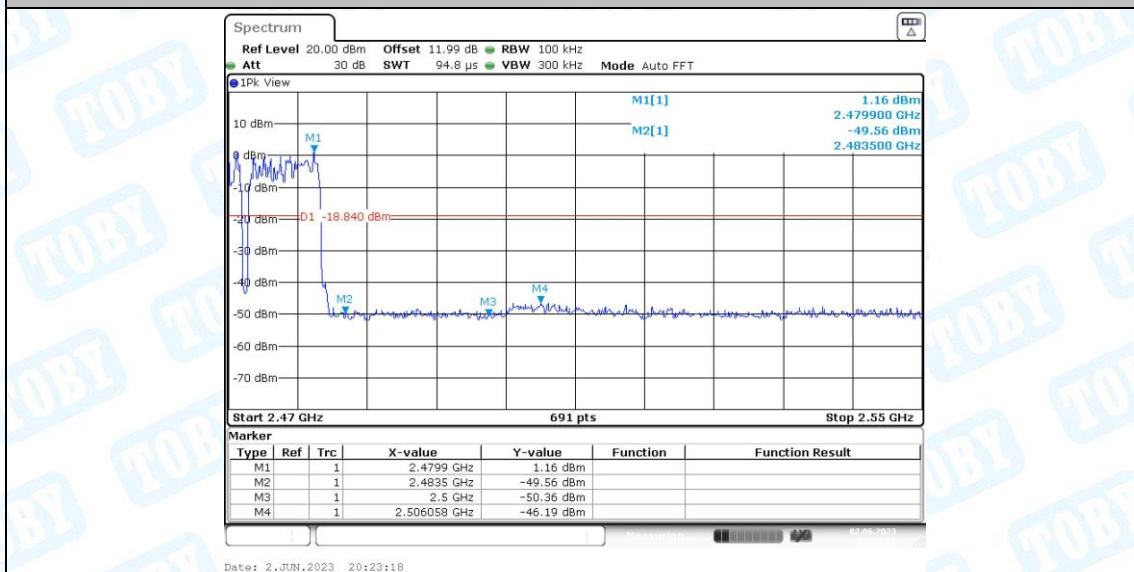
3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



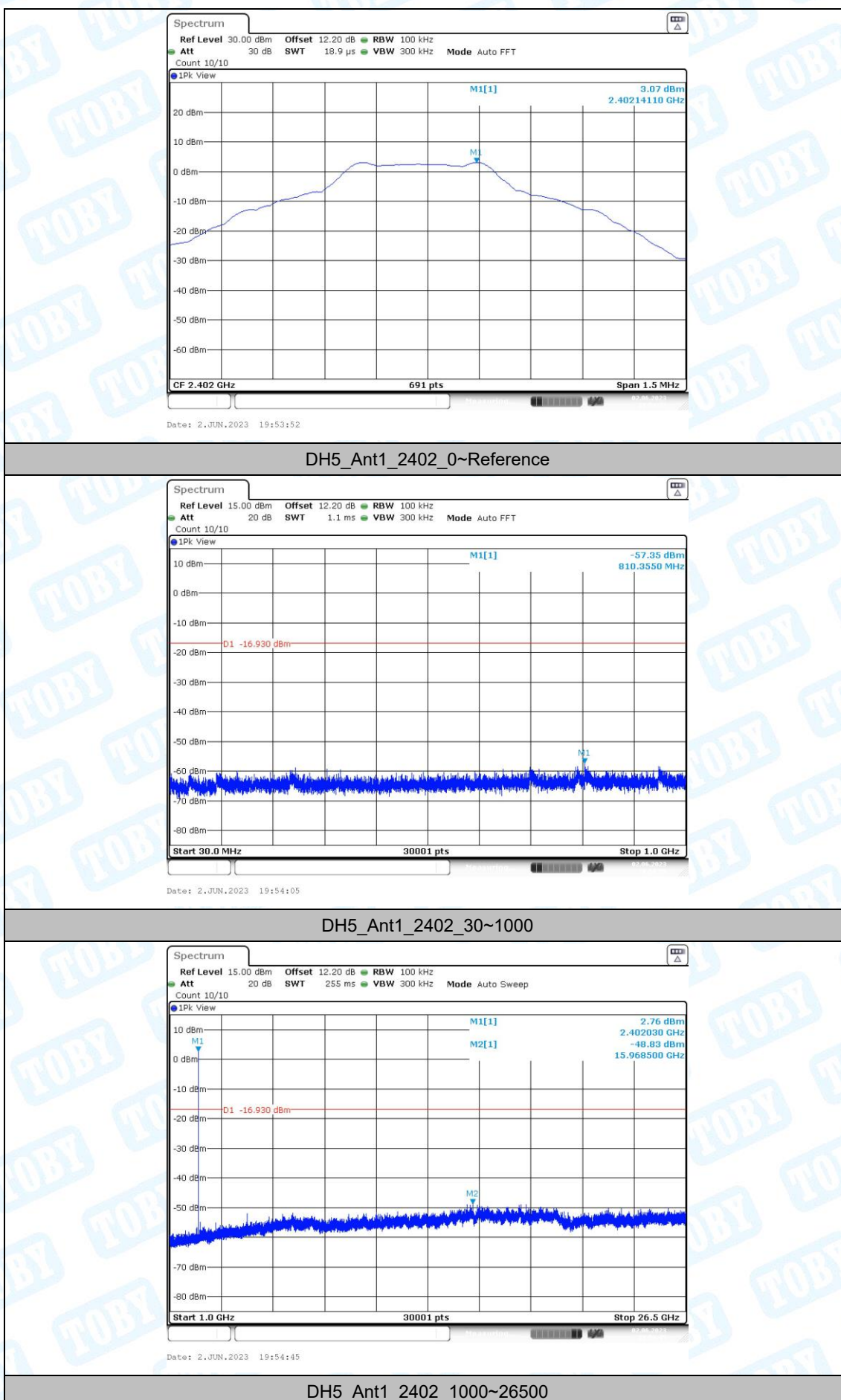
3DH5_Ant1_High_Hop_2480

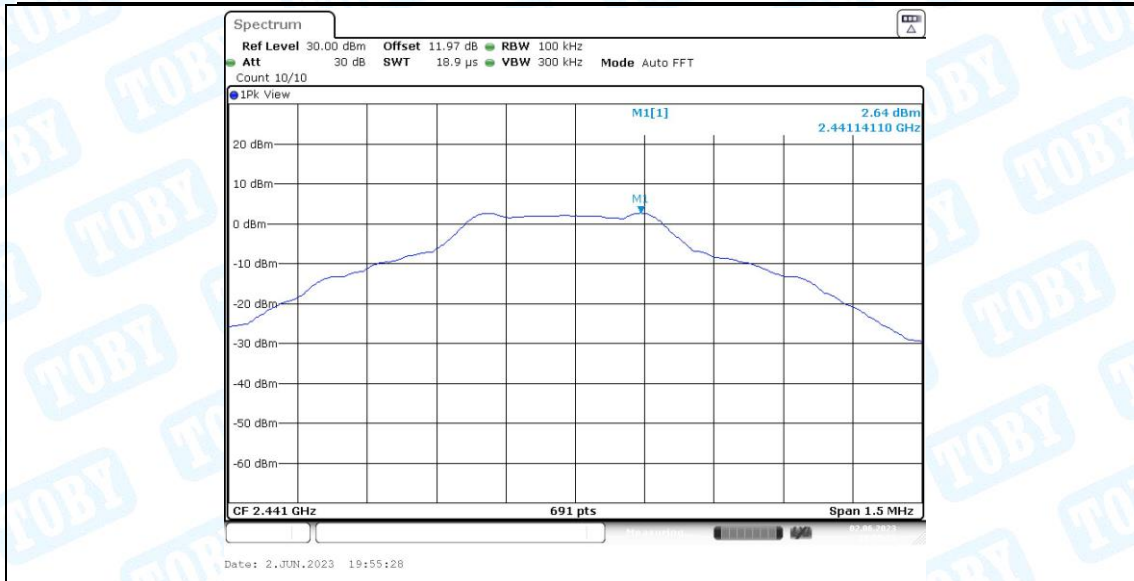
8. Conducted Spurious Emission

8.1. Test Result

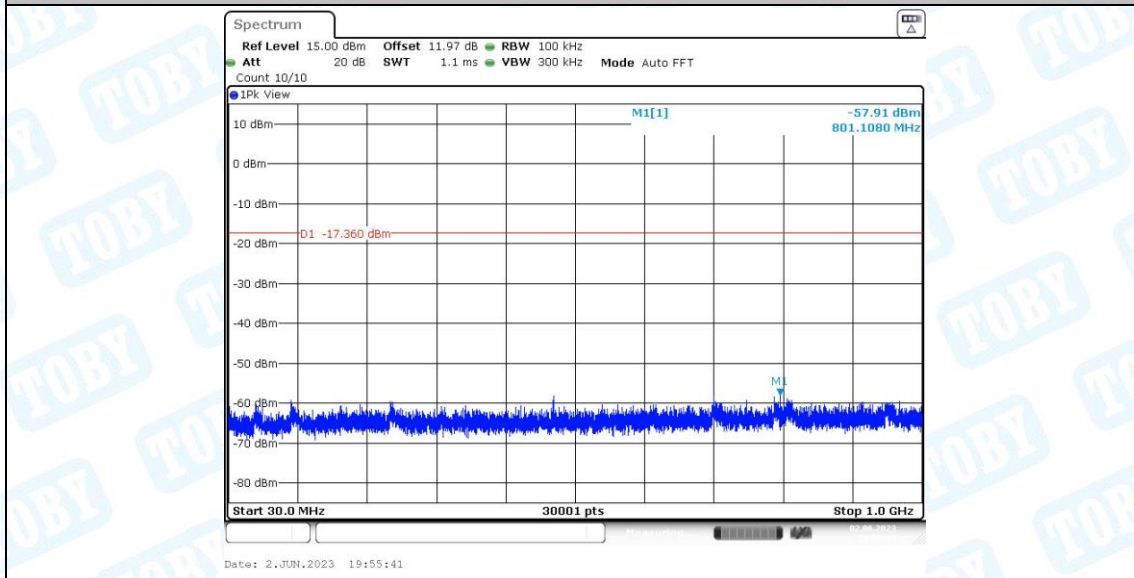
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	3.07	3.07	---	PASS
			30~1000	3.07	-57.35	≤-16.93	PASS
			1000~26500	3.07	-48.83	≤-16.93	PASS
		2441	Reference	2.64	2.64	---	PASS
			30~1000	2.64	-57.91	≤-17.36	PASS
			1000~26500	2.64	-48.65	≤-17.36	PASS
		2480	Reference	3.11	3.11	---	PASS
			30~1000	3.11	-58.09	≤-16.89	PASS
			1000~26500	3.11	-48.47	≤-16.89	PASS
2DH5	Ant1	2402	Reference	2.93	2.93	---	PASS
			30~1000	2.93	-57.76	≤-17.07	PASS
			1000~26500	2.93	-48.45	≤-17.07	PASS
		2441	Reference	2.50	2.50	---	PASS
			30~1000	2.50	-58.43	≤-17.5	PASS
			1000~26500	2.50	-49.02	≤-17.5	PASS
		2480	Reference	2.95	2.95	---	PASS
			30~1000	2.95	-57.76	≤-17.05	PASS
			1000~26500	2.95	-49.24	≤-17.05	PASS
3DH5	Ant1	2402	Reference	3.05	3.05	---	PASS
			30~1000	3.05	-56.87	≤-16.95	PASS
			1000~26500	3.05	-48.81	≤-16.95	PASS
		2441	Reference	2.64	2.64	---	PASS
			30~1000	2.64	-58.67	≤-17.36	PASS
			1000~26500	2.64	-49.06	≤-17.36	PASS
		2480	Reference	3.05	3.05	---	PASS
			30~1000	3.05	-58.24	≤-16.95	PASS
			1000~26500	3.05	-48.31	≤-16.95	PASS

8.2.Test Graphs

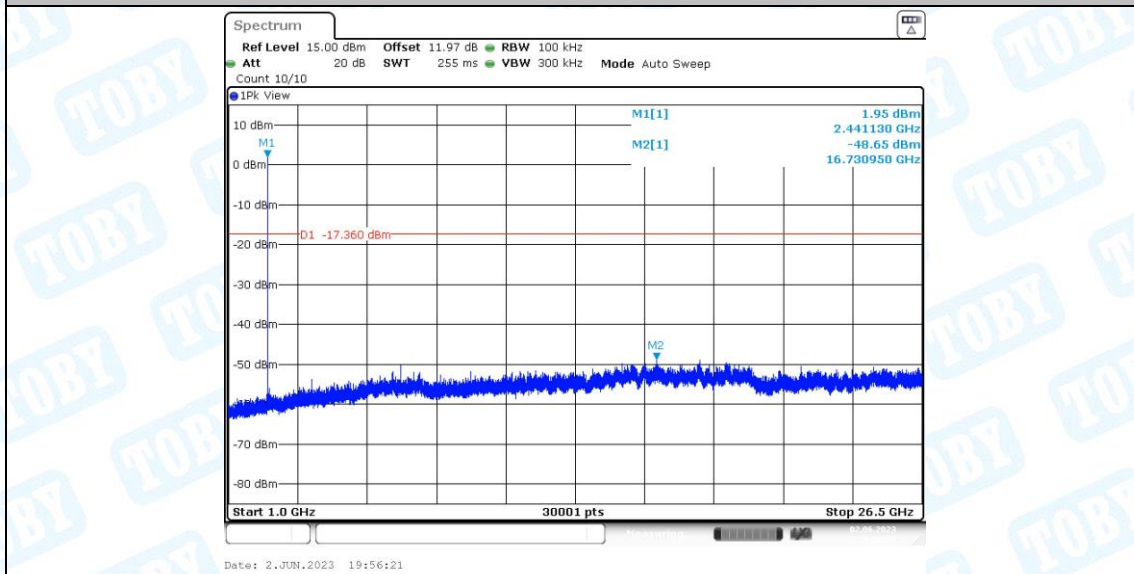




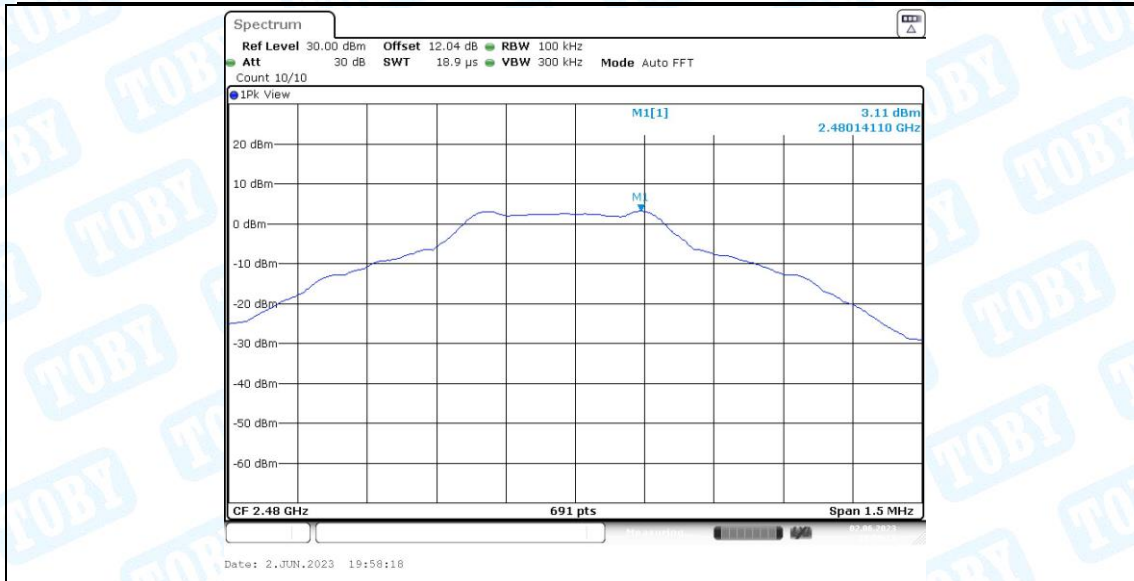
DH5_Ant1_2441_0~Reference



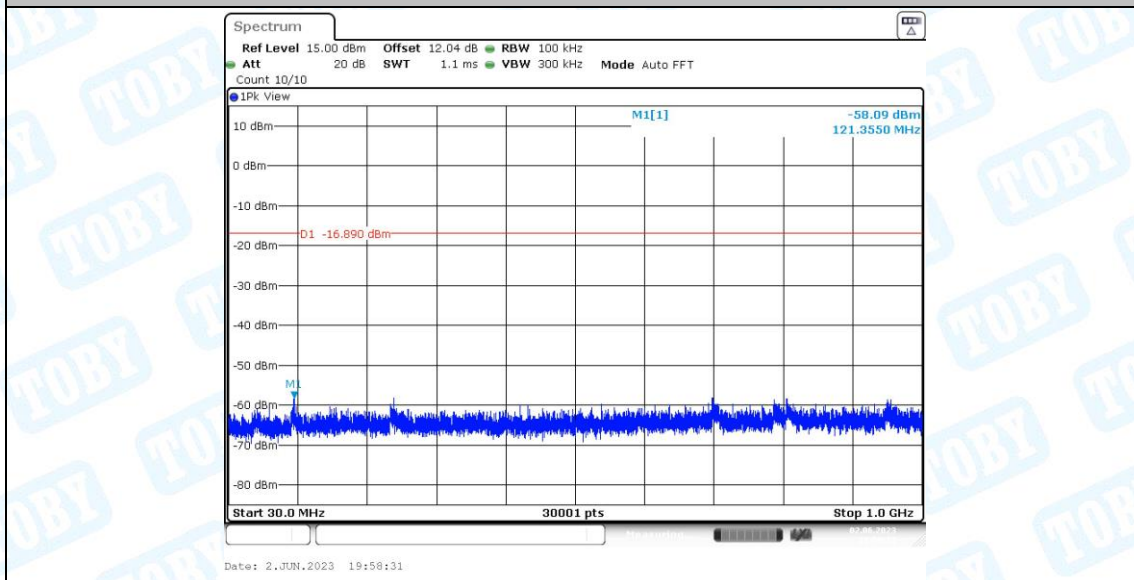
DH5_Ant1_2441_30~1000



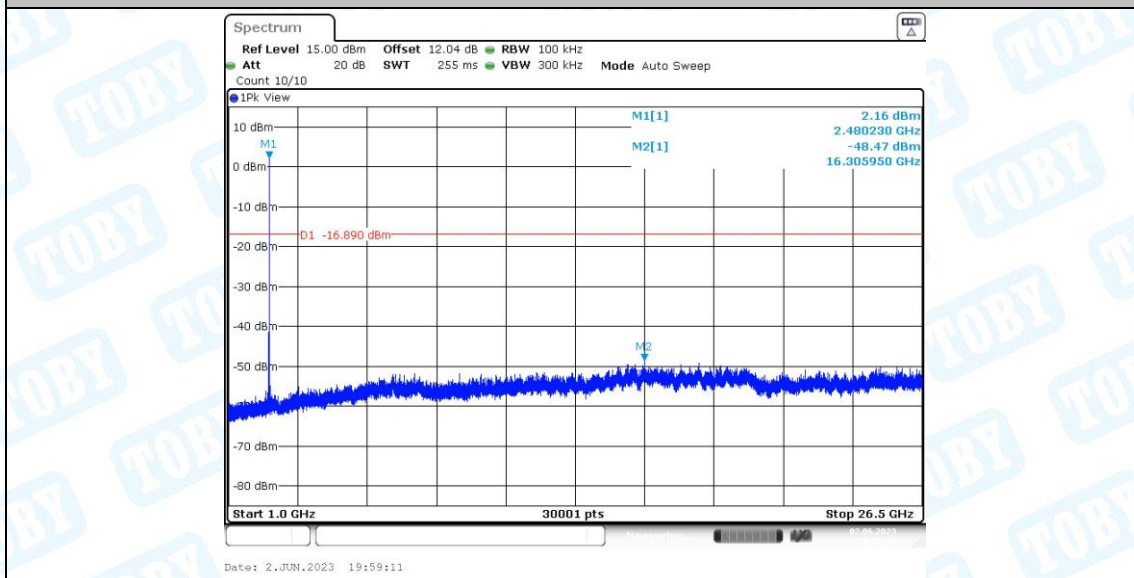
DH5_Ant1_2441_1000~26500



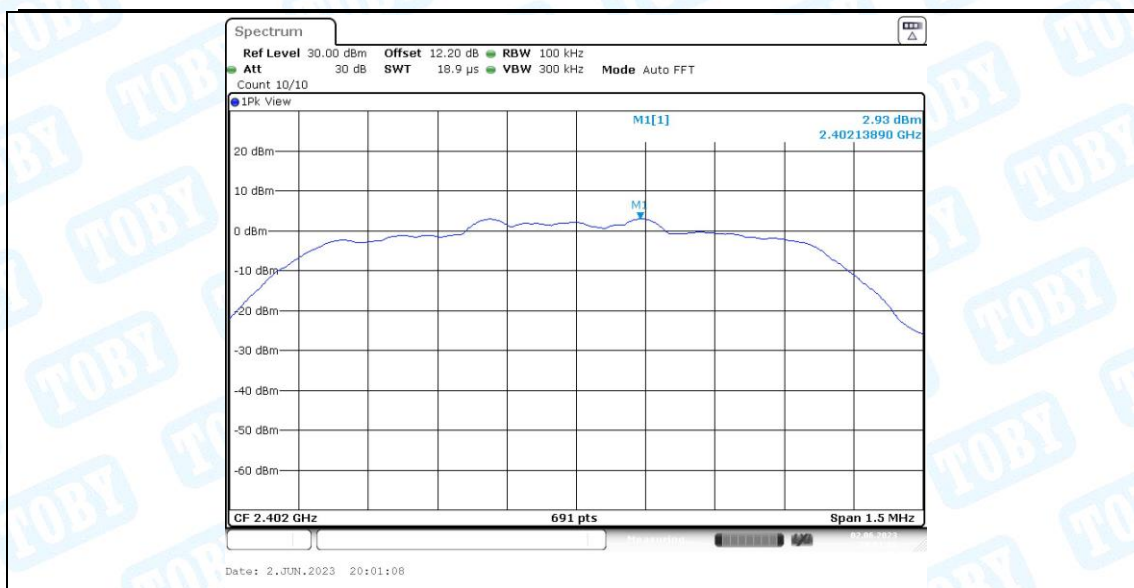
DH5_Ant1_2480_0~Reference



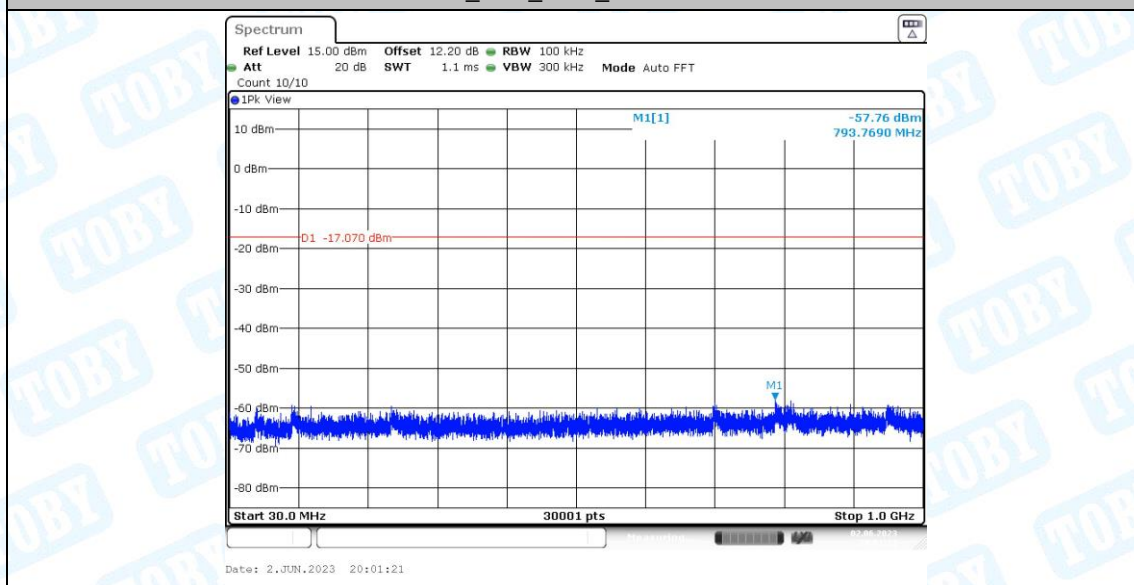
DH5_Ant1_2480_30~1000



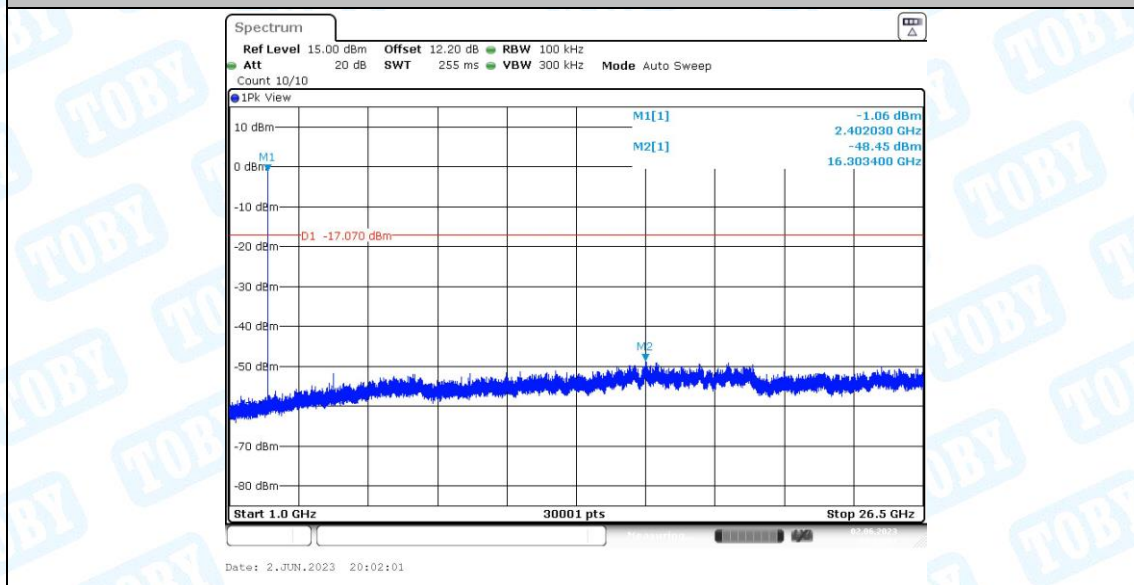
DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500