

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

General Description of EUT	
Product Name:	Smart watch
Test Model:	FT10M
Sample ID:	HC-C-202307-0235-01-03-1#
Environmental Conditions	
Temperature:	23.6℃
Relative Humidity:	46%
Test Voltage:	DC 3.8V
Test Engineer:	Beryl.zhang
Note: For a more detailed features description, please refer to the report TBR-C-202307-0235-81.	

Contents

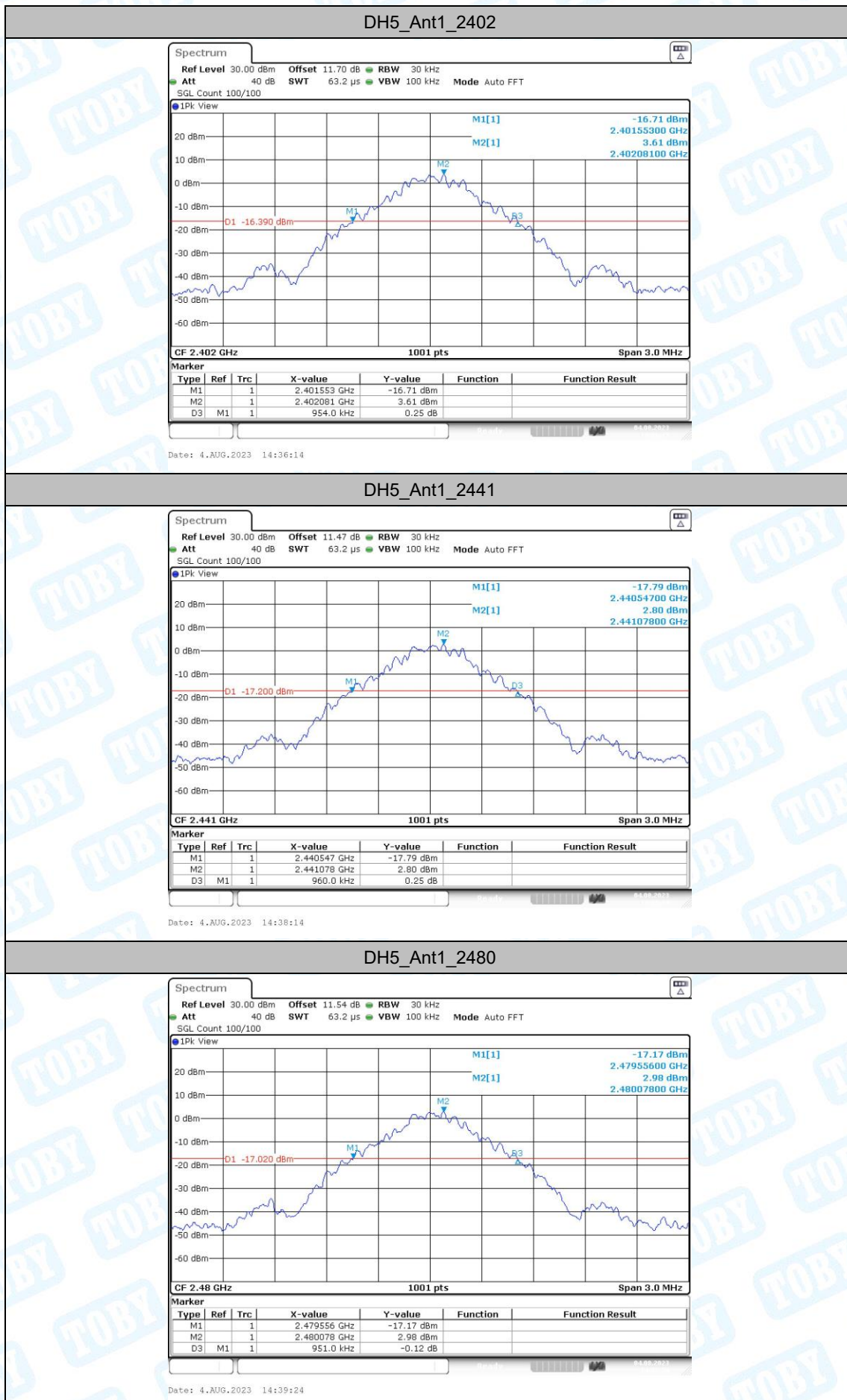
1. 20dB Emission Bandwidth	3
1.1. Test Result	3
1.2. Test Graphs	4
2. Occupied Channel Bandwidth	7
2.1. Test Result	7
2.2. Test Graphs	8
3. Maximum conducted output power	11
3.1. Test Result	11
3.2. Test Graphs	12
4. Carrier frequency separation	15
4.1. Test Result	15
4.2. Test Graphs	16
5. Time of occupancy	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	43

1. 20dB Emission Bandwidth

1.1. Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.95	---	---
		2441	0.96	---	---
		2480	0.95	---	---
2DH5	Ant1	2402	1.33	---	---
		2441	1.28	---	---
		2480	1.33	---	---
3DH5	Ant1	2402	1.30	---	---
		2441	1.29	---	---
		2480	1.30	---	---

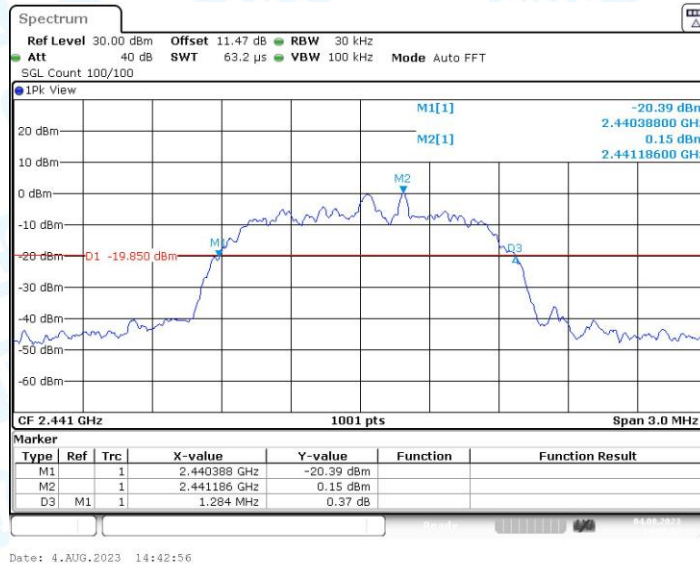
1.2. Test Graphs



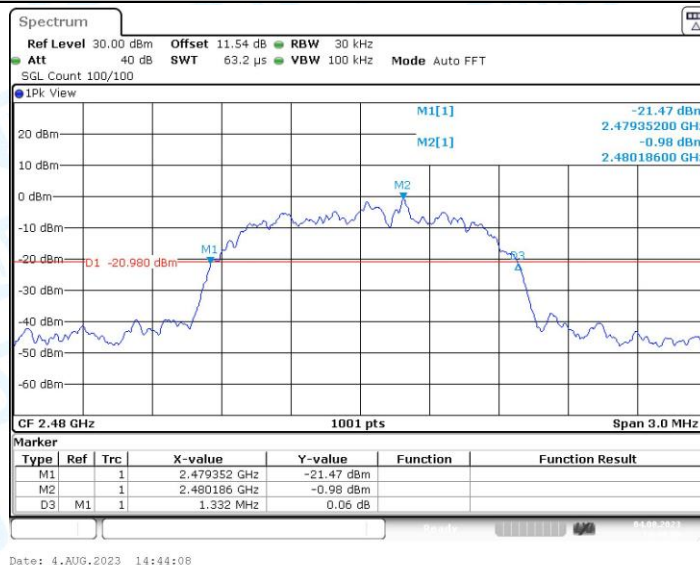
2DH5_Ant1_2402



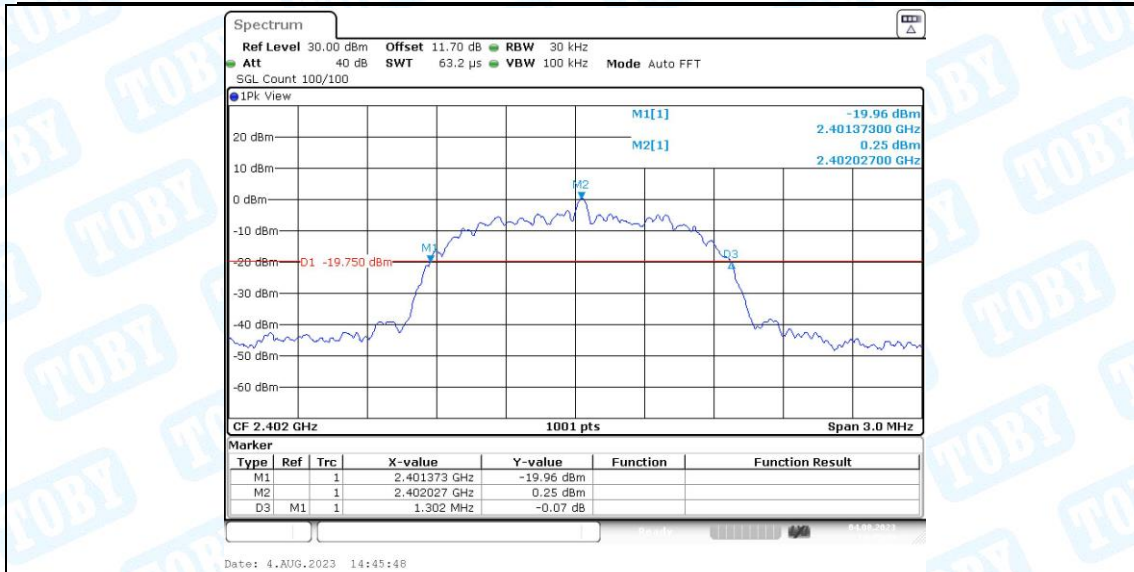
2DH5_Ant1_2441



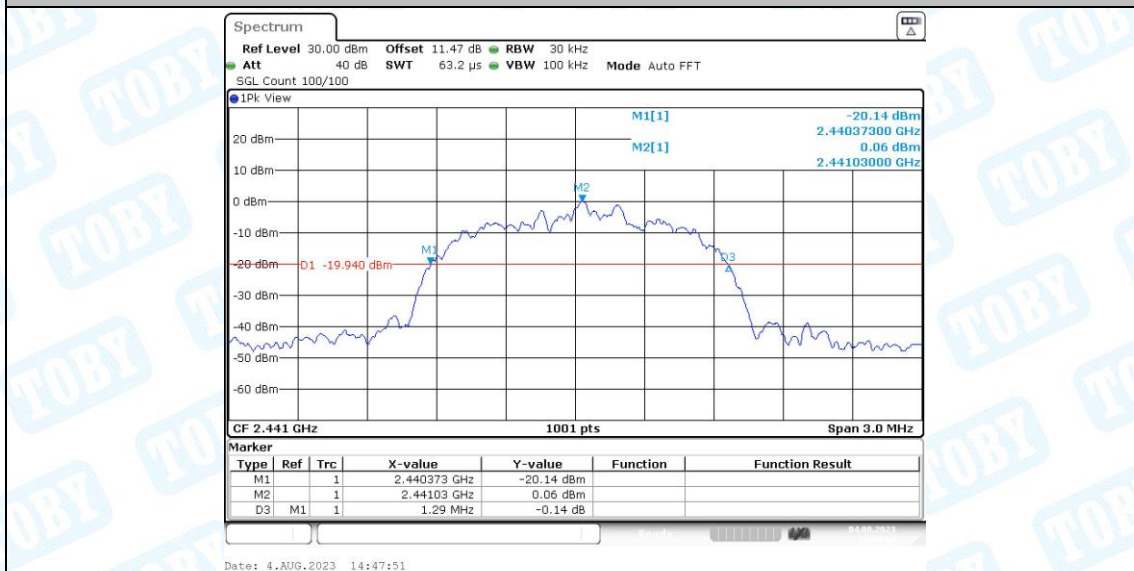
2DH5_Ant1_2480



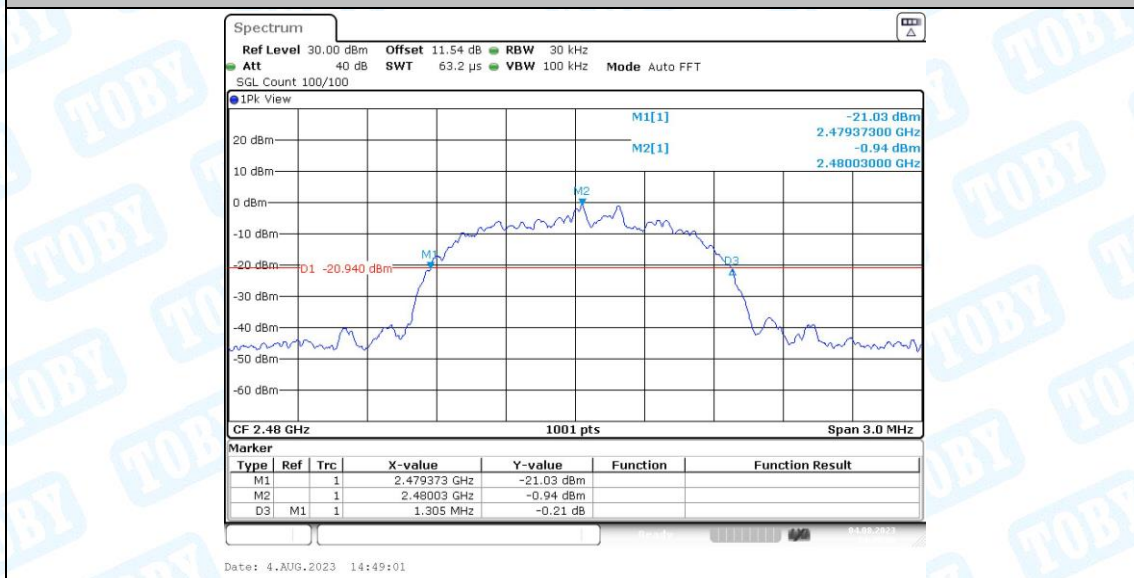
3DH5_Ant1_2402



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	0.884	2401.5774	2402.4615	---	---
		2441	0.881	2440.5804	2441.4615	---	---
		2480	0.908	2479.5684	2480.4765	---	---
2DH5	Ant1	2402	1.187	2401.4246	2402.6114	---	---
		2441	1.184	2440.4246	2441.6084	---	---
		2480	1.181	2479.4276	2480.6084	---	---
3DH5	Ant1	2402	1.208	2401.4126	2402.6204	---	---
		2441	1.19	2440.4246	2441.6144	---	---
		2480	1.178	2479.4276	2480.6054	---	---

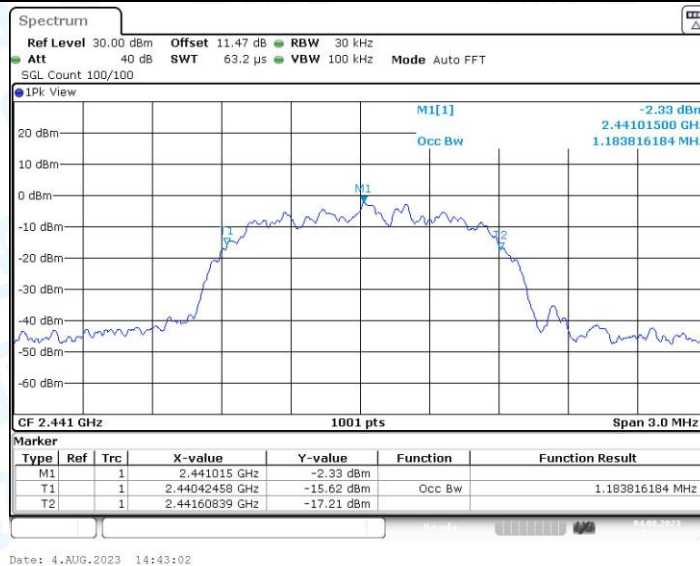
2.2.Test Graphs



2DH5_Ant1_2402



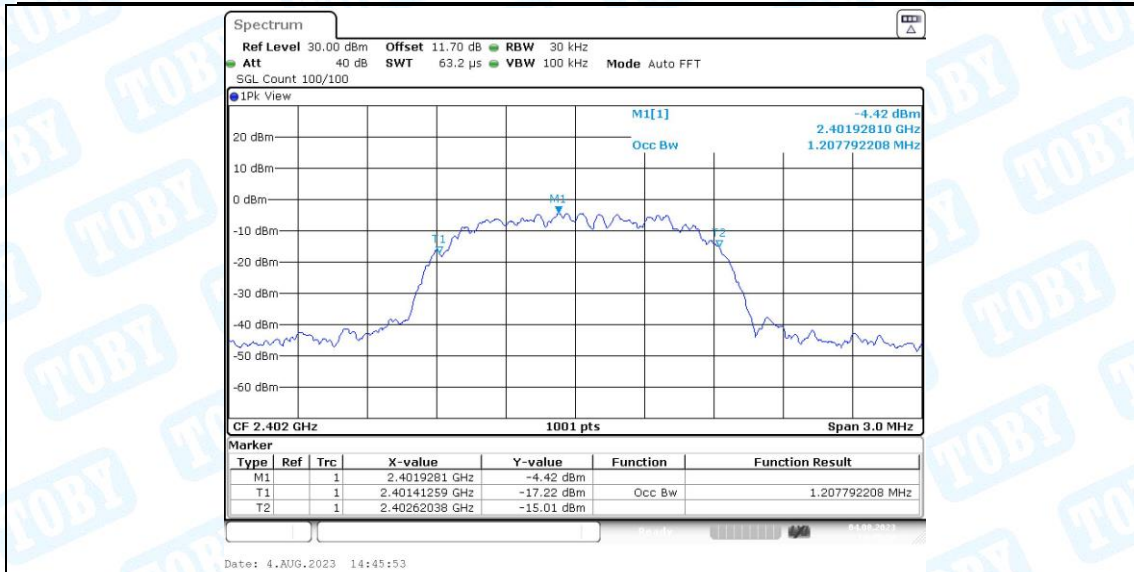
2DH5_Ant1_2441



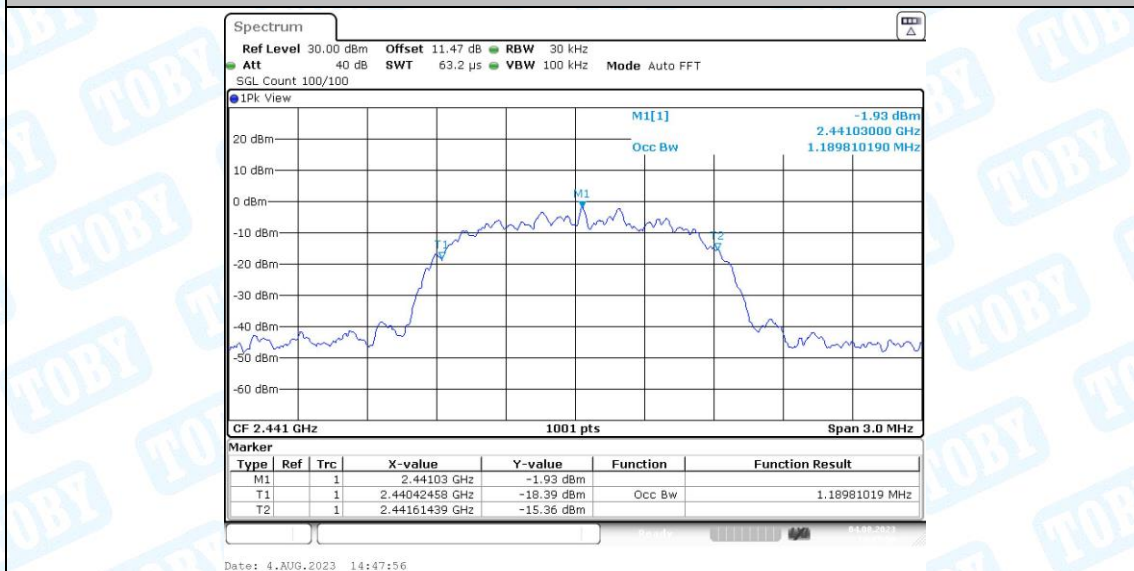
2DH5_Ant1_2480



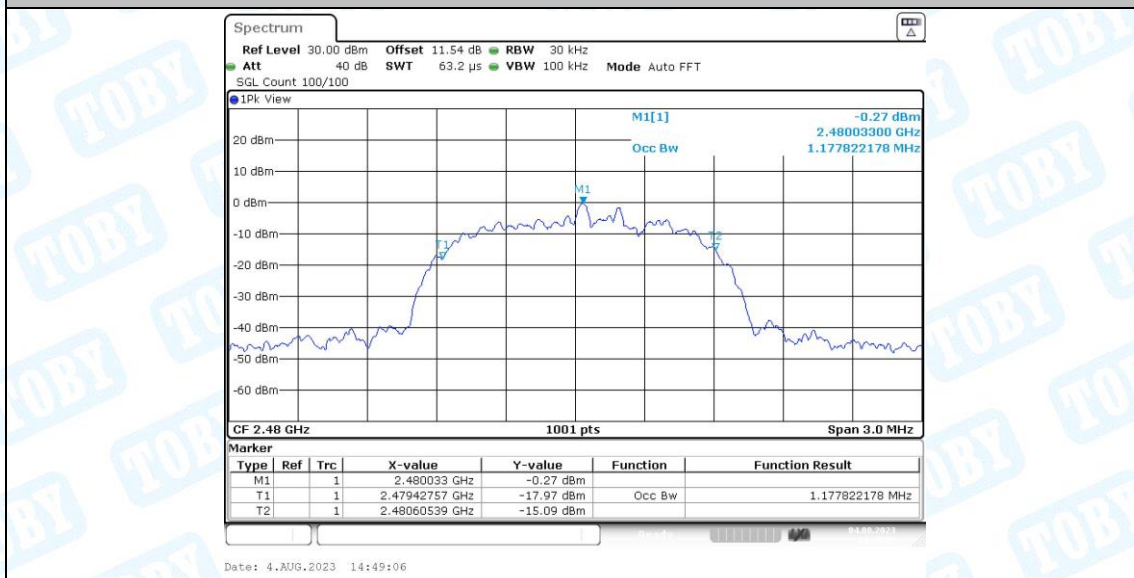
3DH5_Ant1_2402



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	6.72	≤21	PASS
		2441	6.08	≤21	PASS
		2480	6.14	≤21	PASS
2DH5	Ant1	2402	5.01	≤21	PASS
		2441	4.29	≤21	PASS
		2480	4.13	≤21	PASS
3DH5	Ant1	2402	4.81	≤21	PASS
		2441	4.43	≤21	PASS
		2480	4.35	≤21	PASS

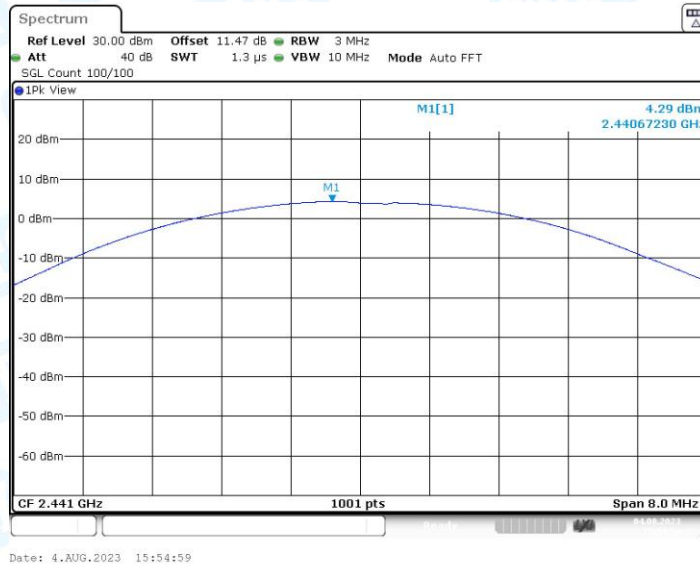
3.2. Test Graphs



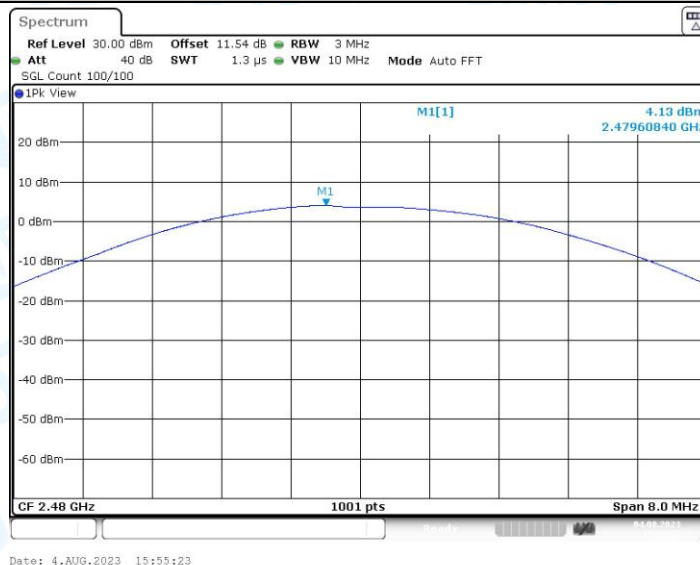
2DH5_Ant1_2402



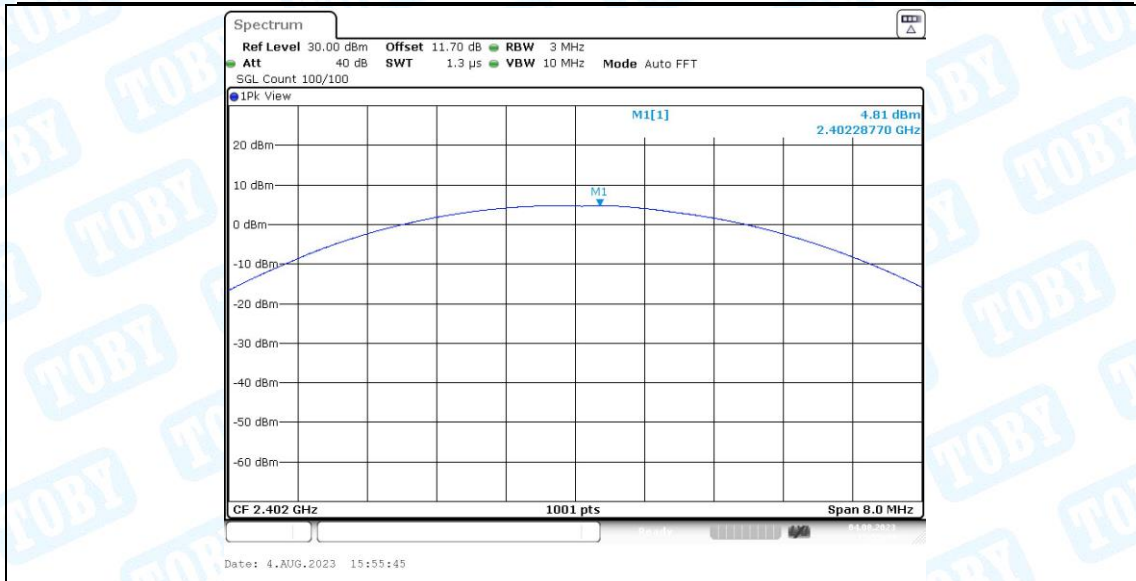
2DH5_Ant1_2441



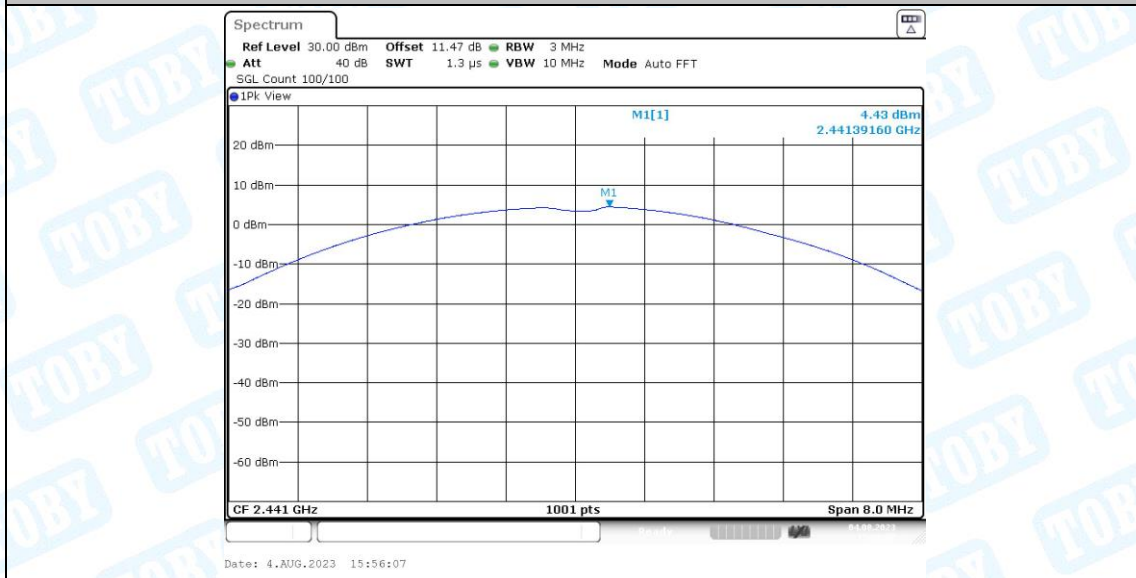
2DH5_Ant1_2480



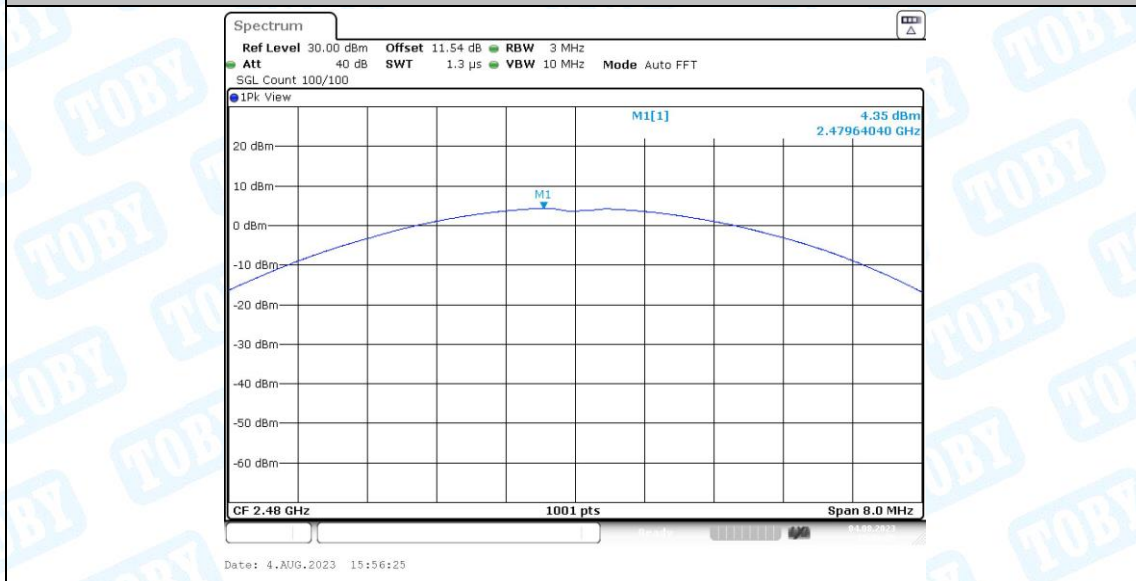
3DH5_Ant1_2402



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	1.171	≥ 0.960	PASS
2DH5	Ant1	Hop	0.942	≥ 0.887	PASS
3DH5	Ant1	Hop	1.165	≥ 0.867	PASS

4.2.Test Graphs

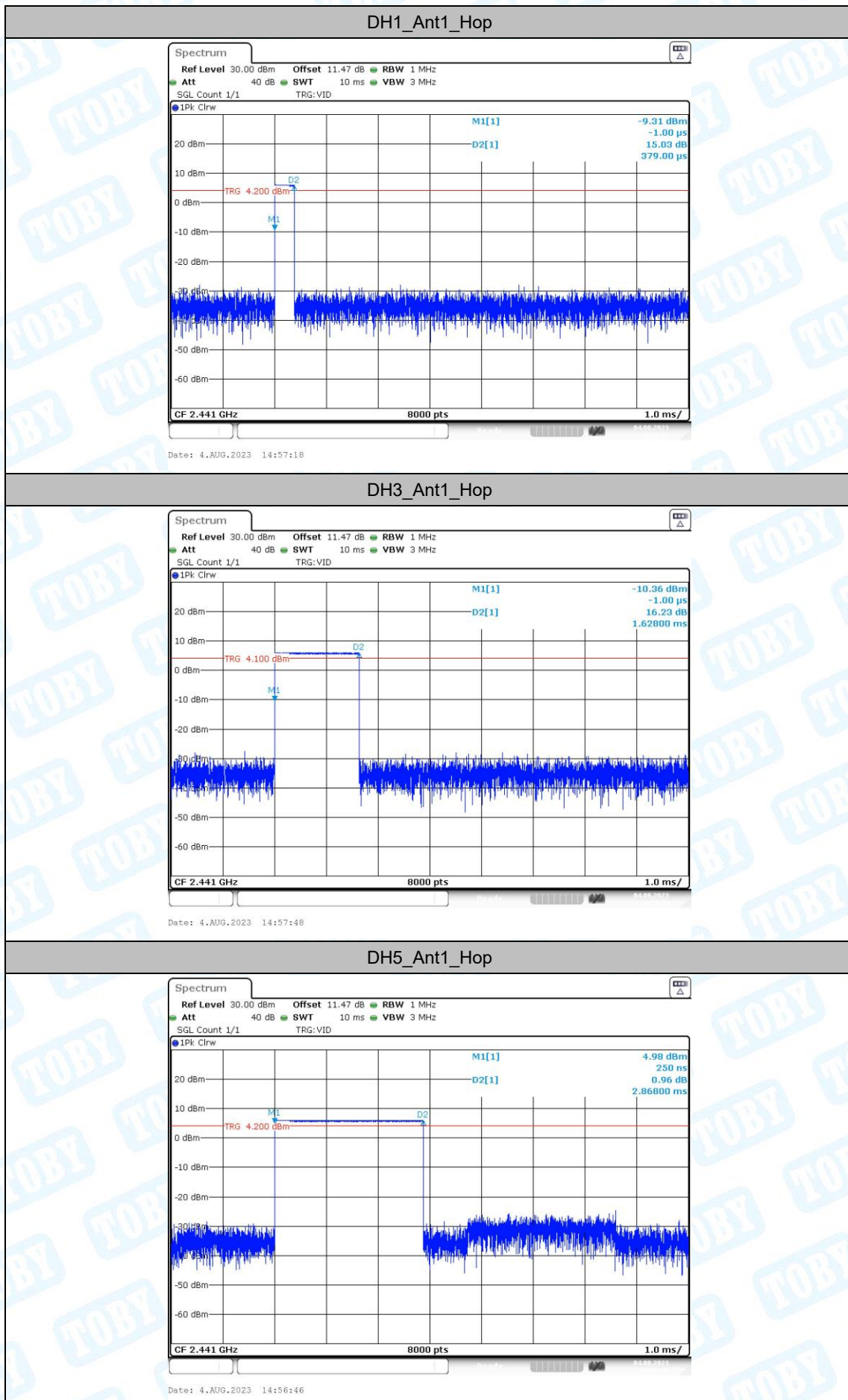


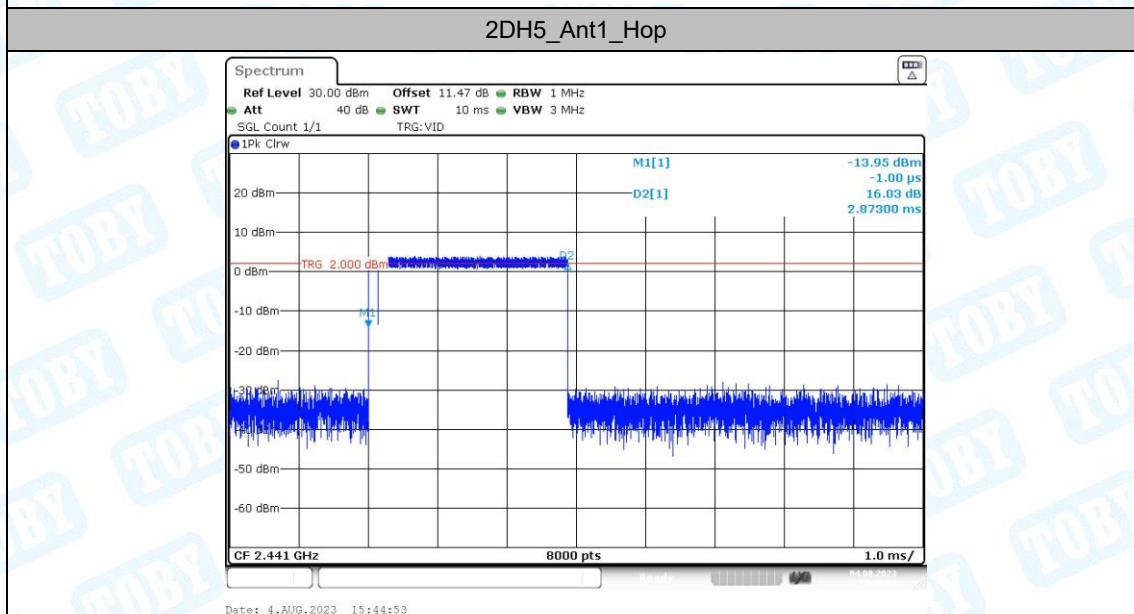
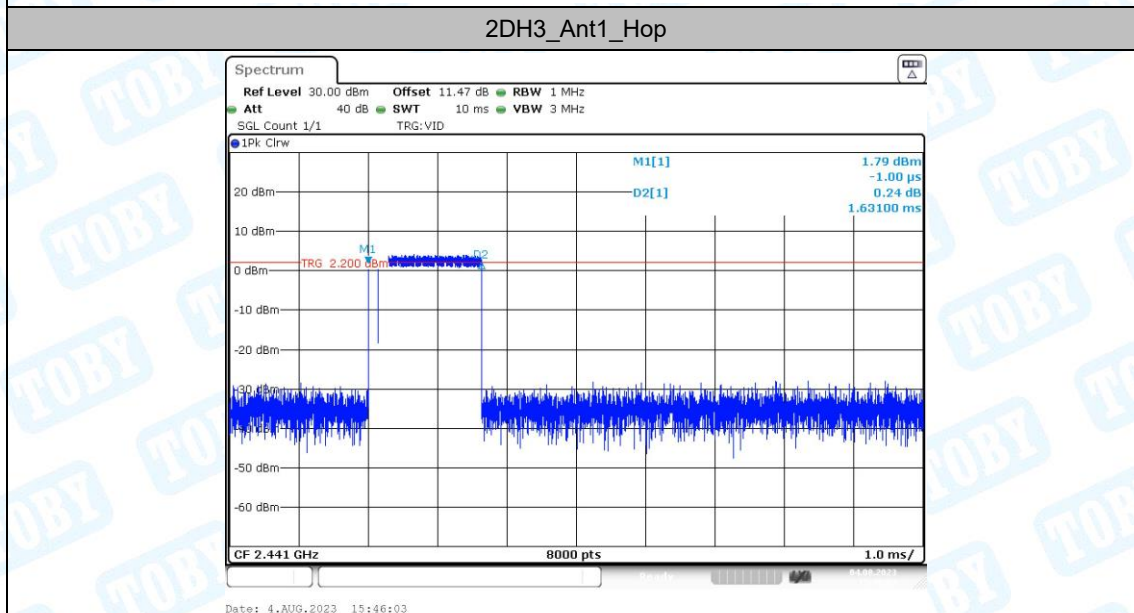
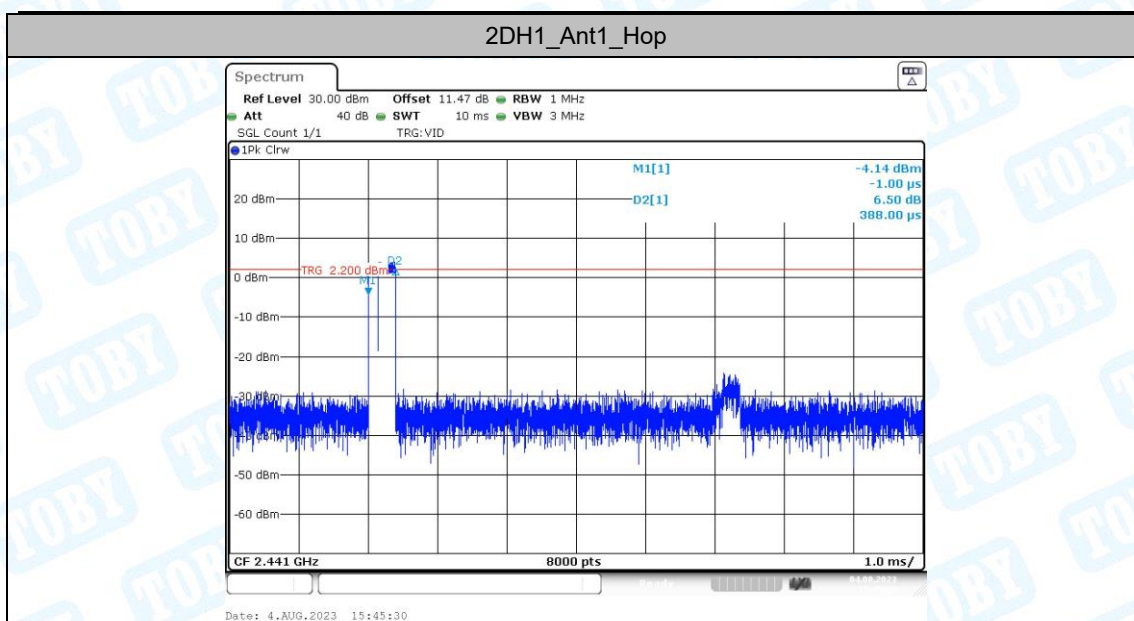
5. Time of occupancy

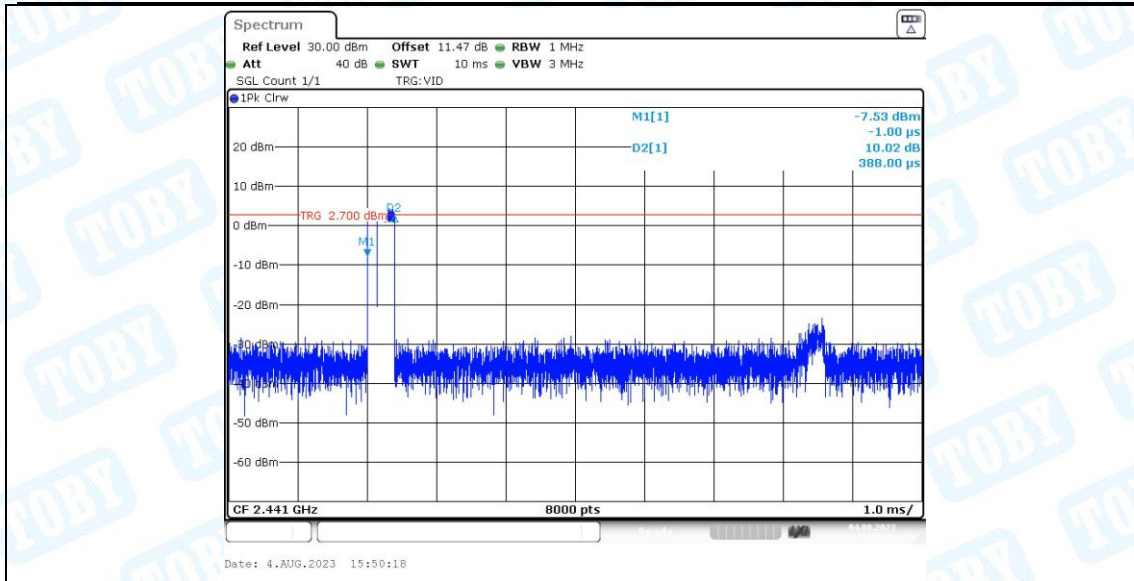
5.1. Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.379	320	0.121	≤0.4	PASS
DH3	Ant1	Hop	1.628	160	0.26	≤0.4	PASS
DH5	Ant1	Hop	2.868	106.67	0.306	≤0.4	PASS
2DH1	Ant1	Hop	0.388	320	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.631	160	0.261	≤0.4	PASS
2DH5	Ant1	Hop	2.873	106.67	0.306	≤0.4	PASS
3DH1	Ant1	Hop	0.388	320	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.630	160	0.261	≤0.4	PASS
3DH5	Ant1	Hop	2.874	106.67	0.307	≤0.4	PASS

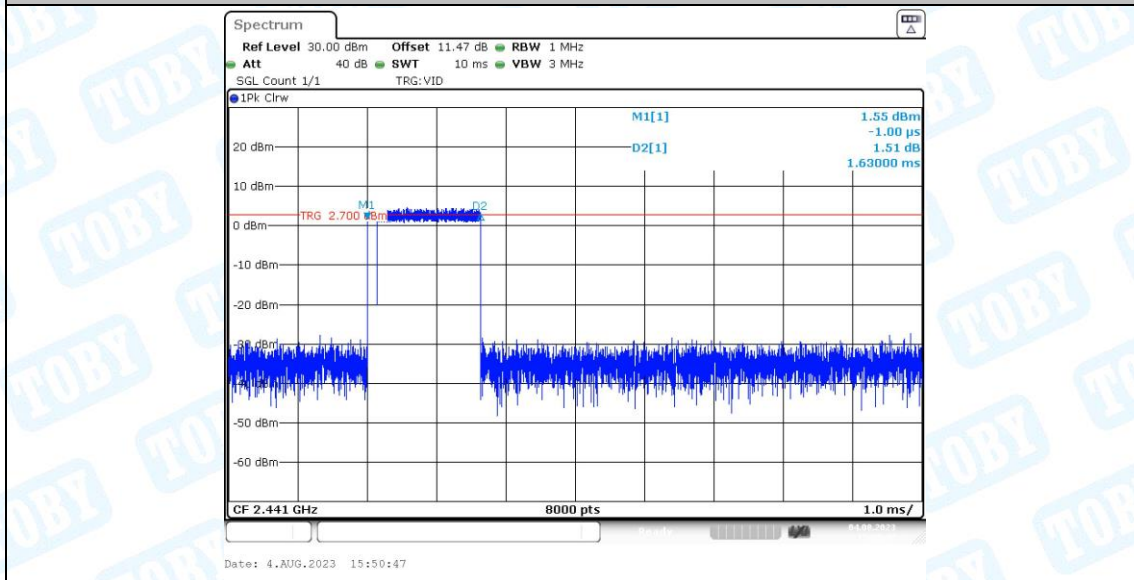
5.2. Test Graphs



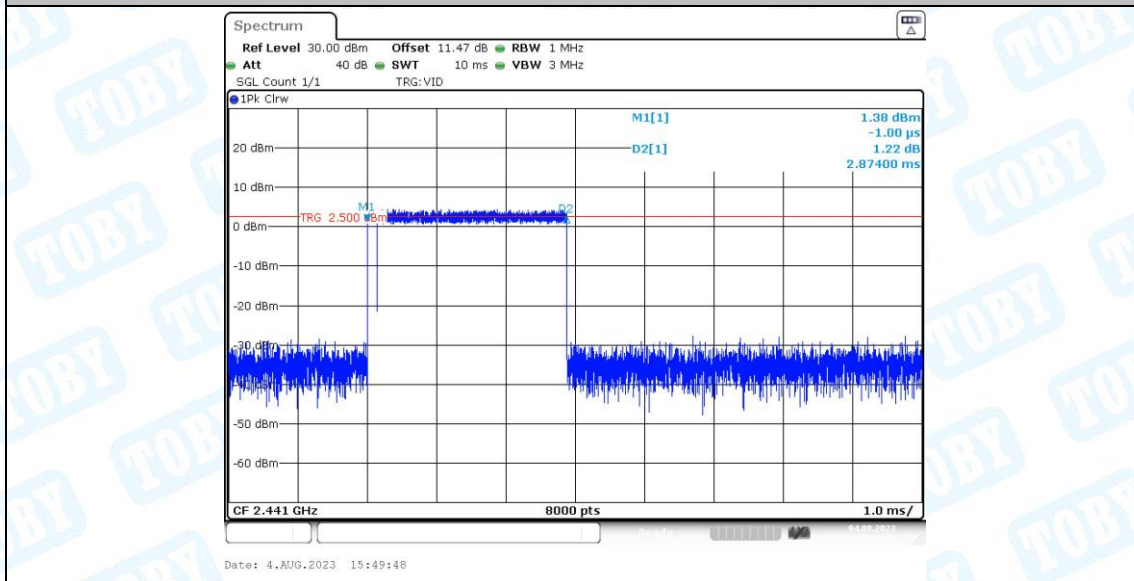




3DH3_Ant1_Hop



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

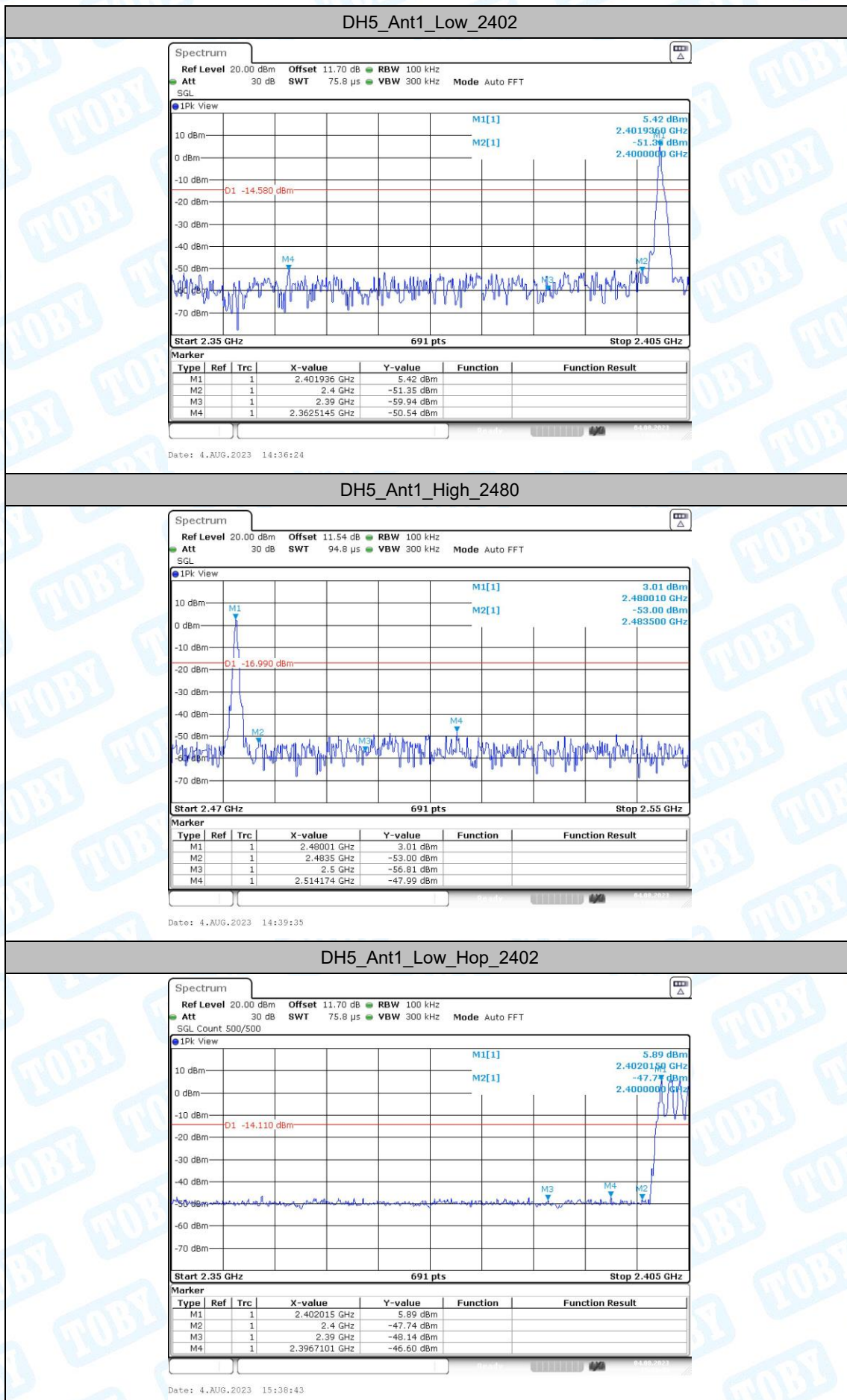


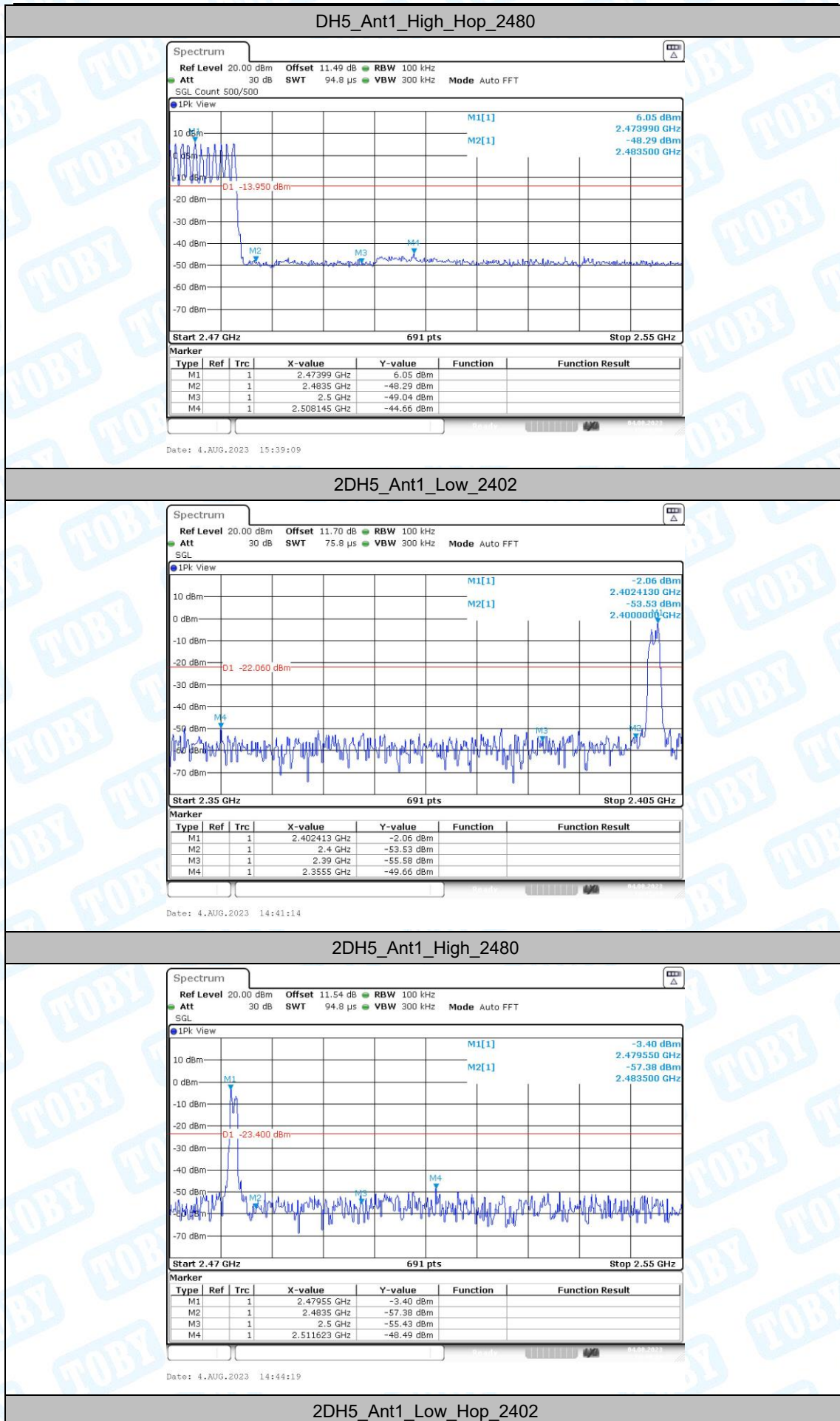
7. Band edge measurements

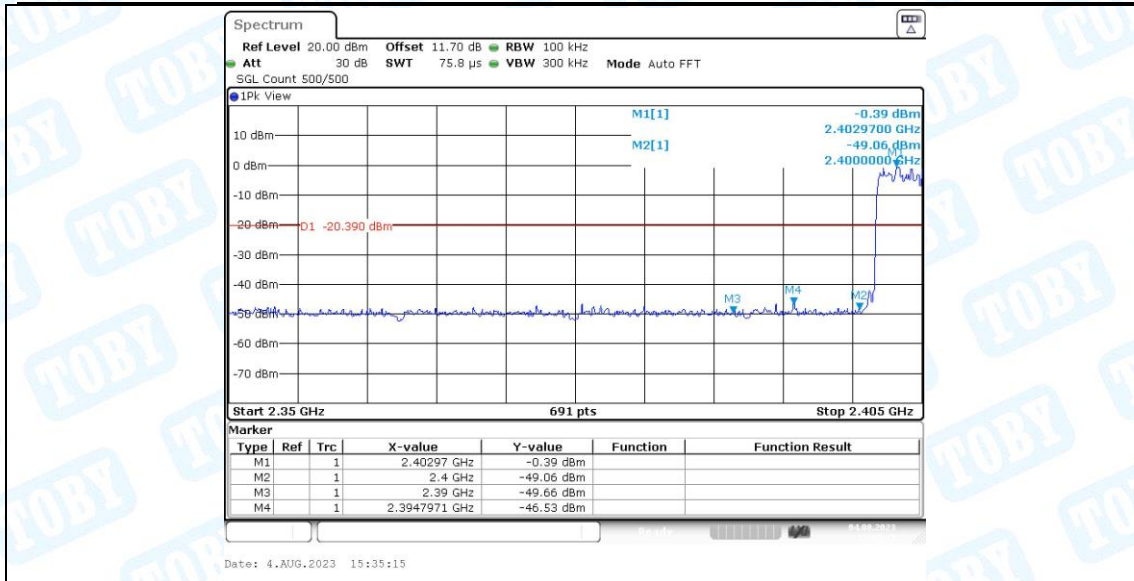
7.1. Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	5.42	-50.54	≤-14.58	PASS
		High	2480	3.01	-47.99	≤-16.99	PASS
		Low	Hop_2402	5.89	-46.6	≤-14.11	PASS
		High	Hop_2480	6.05	-44.66	≤-13.95	PASS
2DH5	Ant1	Low	2402	-2.06	-49.66	≤-22.06	PASS
		High	2480	-3.40	-48.49	≤-23.4	PASS
		Low	Hop_2402	-0.39	-46.53	≤-20.39	PASS
		High	Hop_2480	3.13	-44.37	≤-16.87	PASS
3DH5	Ant1	Low	2402	-1.96	-49.39	≤-21.96	PASS
		High	2480	-2.64	-47.89	≤-22.64	PASS
		Low	Hop_2402	0.01	-47.1	≤-19.99	PASS
		High	Hop_2480	3.15	-43.91	≤-16.85	PASS

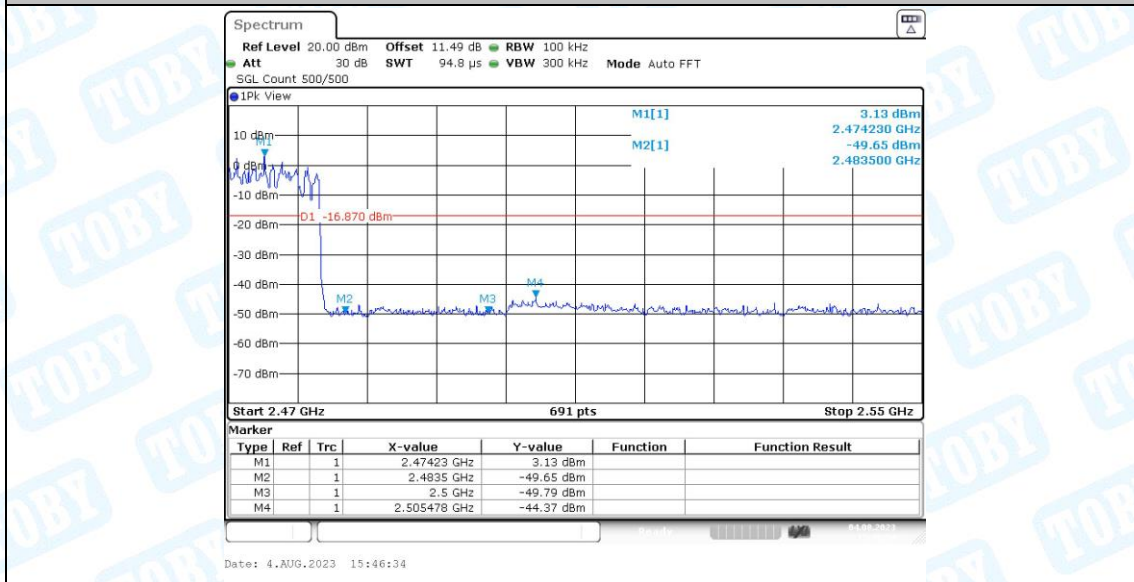
7.2. Test Graphs



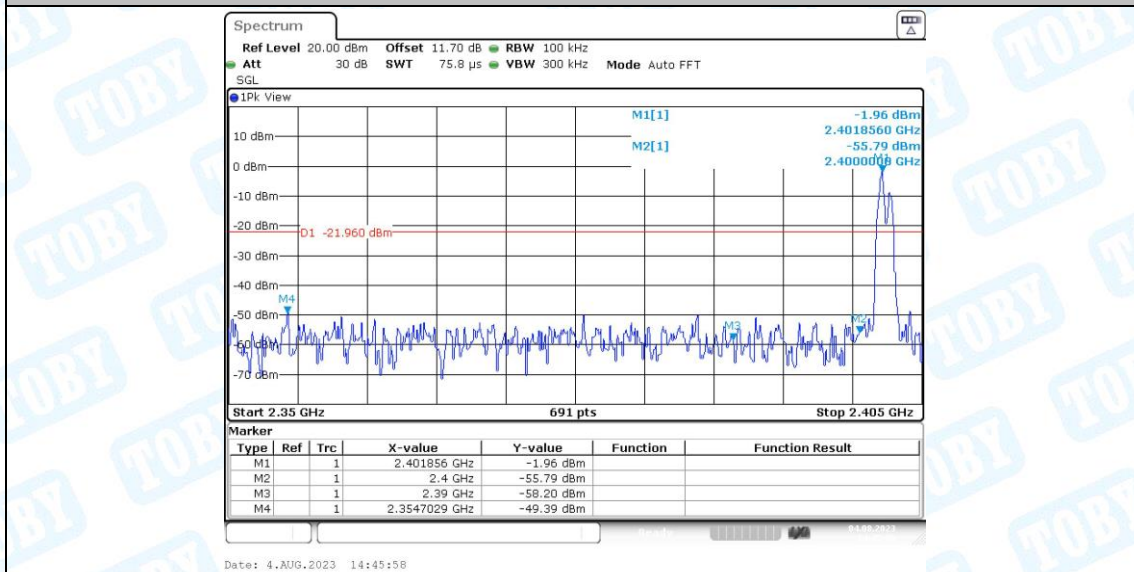




2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480