

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

General Description of EUT	
Product Name:	WiFi & BT combo module
Test Model:	EWN-8822CSE3AA
Sample ID:	HC-C-202308-0079-01-03-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.3V
Test Engineer:	Li Ying Jing
Note: For a more detailed features description, please refer to the report TBR-C-202308-0079-2 The report only show the worst case data.	

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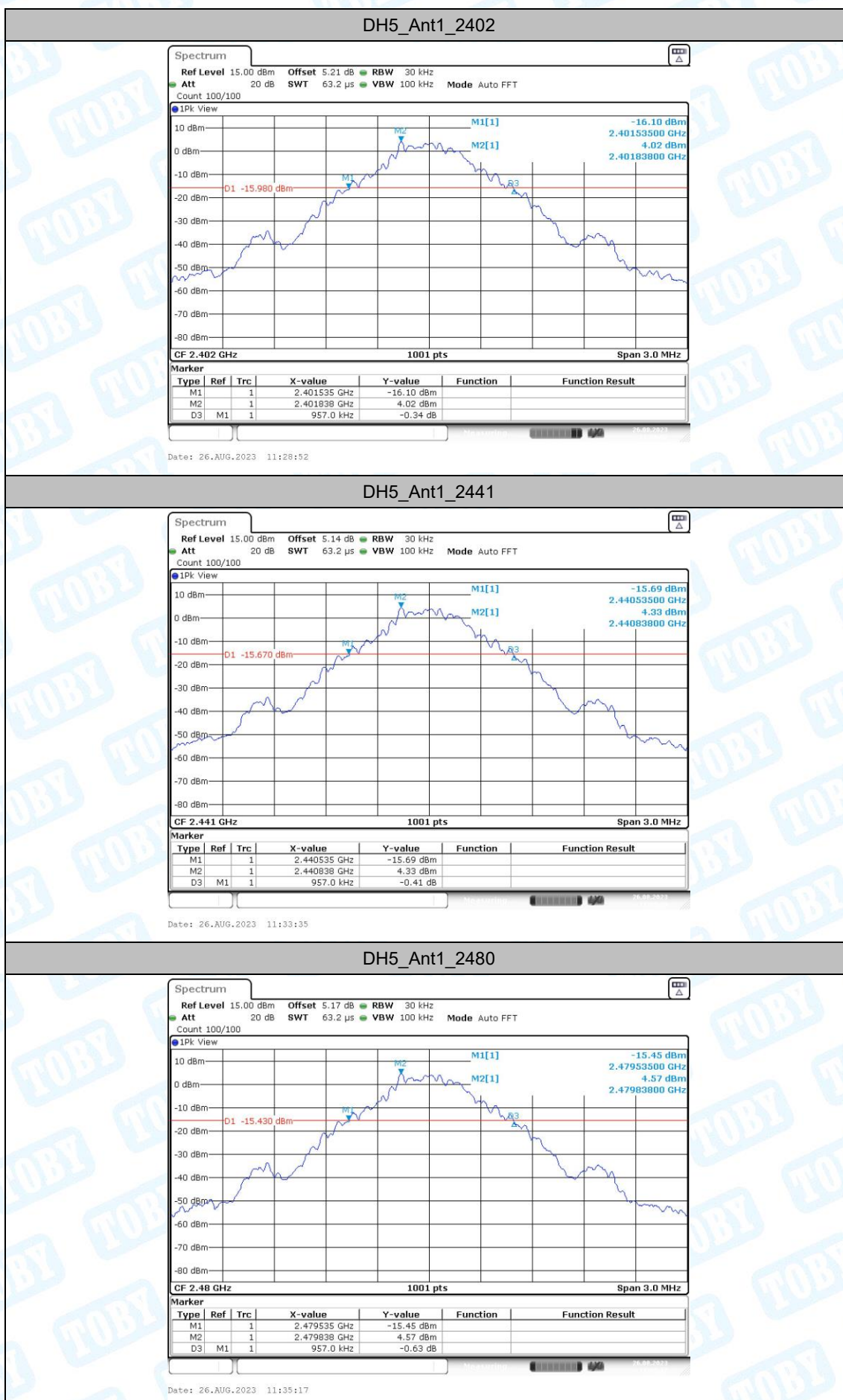
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1. -20dB Emission Bandwidth

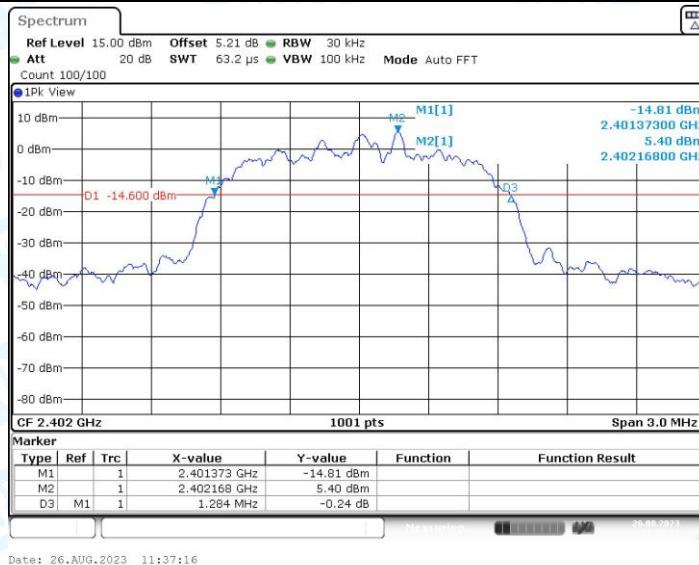
1.1. Test Result

TestMode	Antenna	Channel	-20db EBW[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.96	---	---
		2441	0.96	---	---
		2480	0.96	---	---
2DH5	Ant1	2402	1.28	---	---
		2441	1.28	---	---
		2480	1.28	---	---
3DH5	Ant1	2402	1.30	---	---
		2441	1.30	---	---
		2480	1.30	---	---
Note: Test data is kept to two decimal places only					

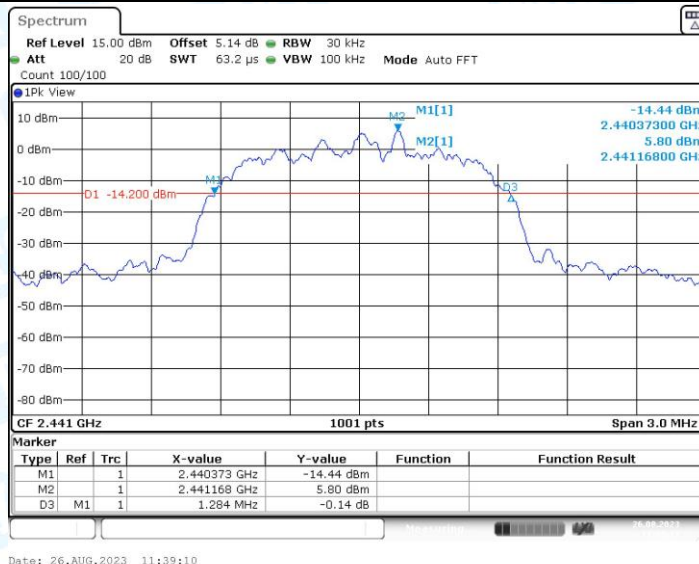
1.2. Test Graphs



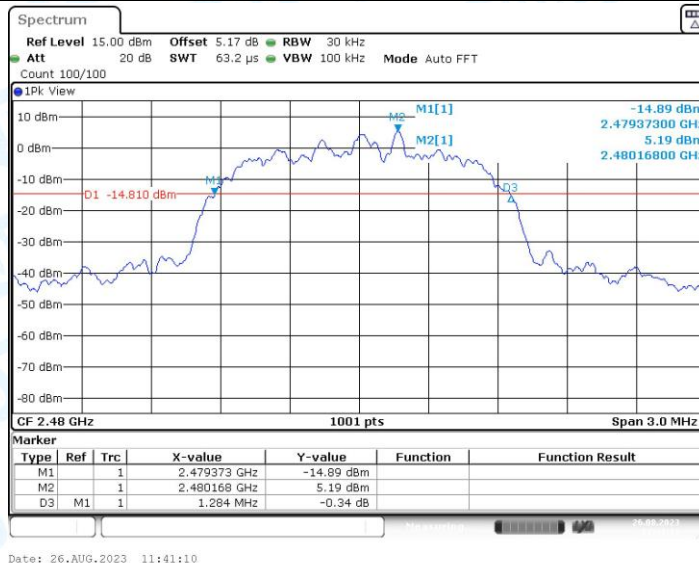
2DH5_Ant1_2402



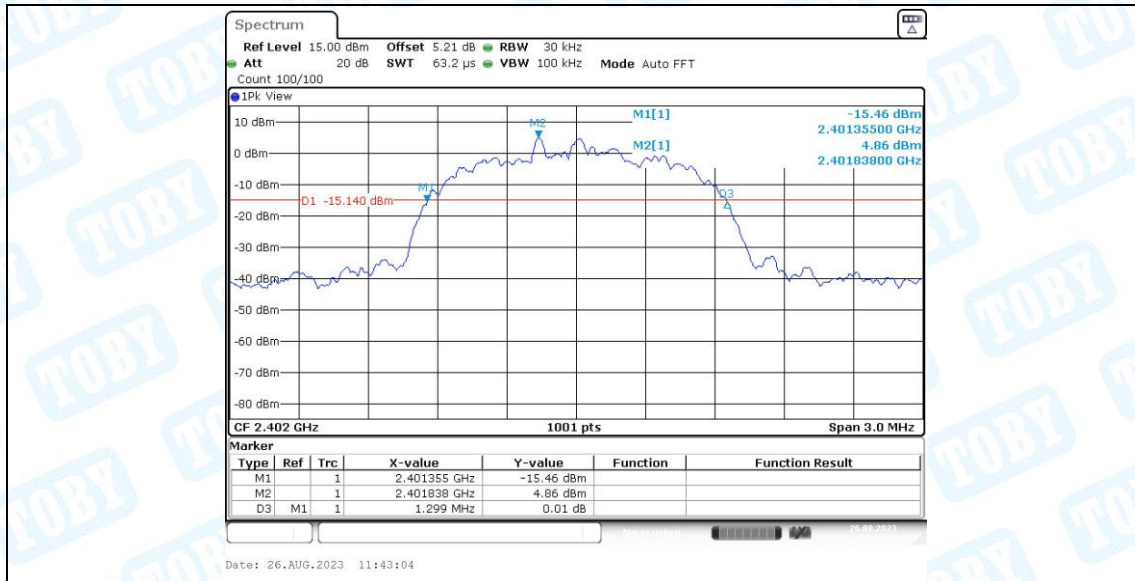
2DH5_Ant1_2441



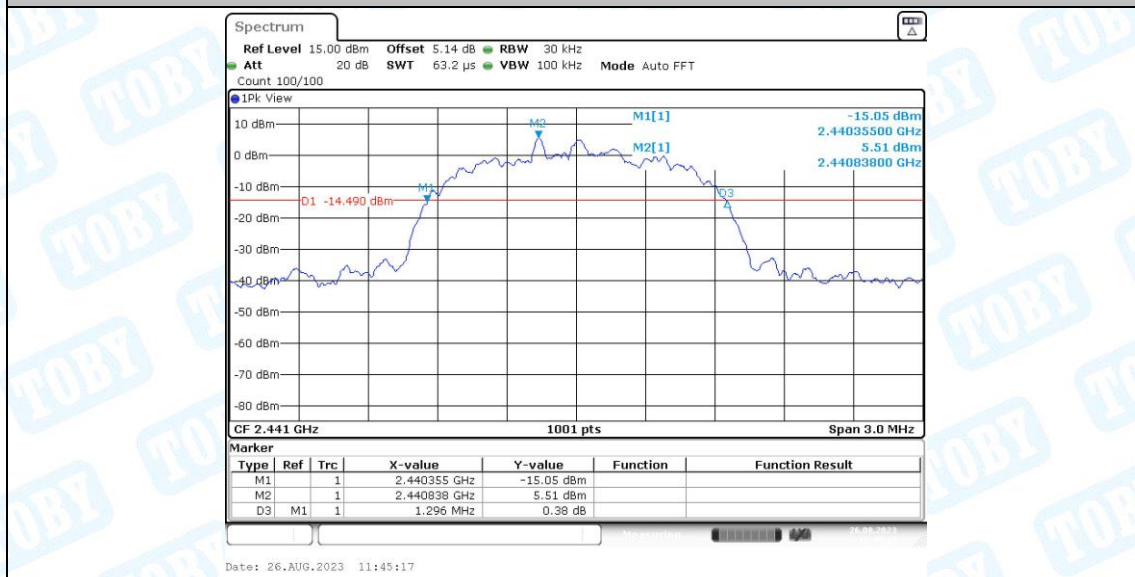
2DH5_Ant1_2480



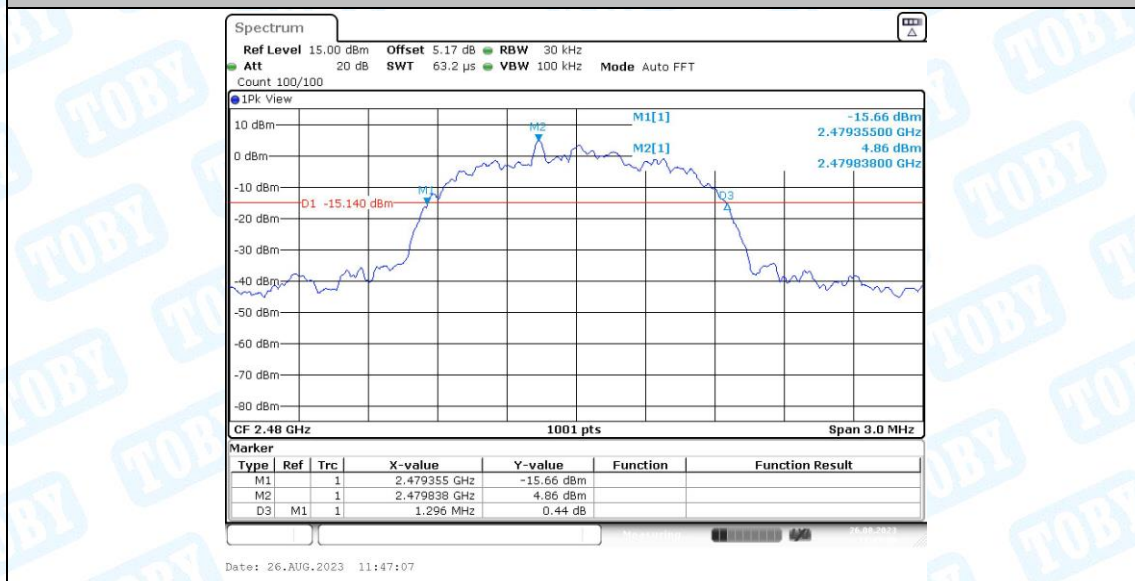
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

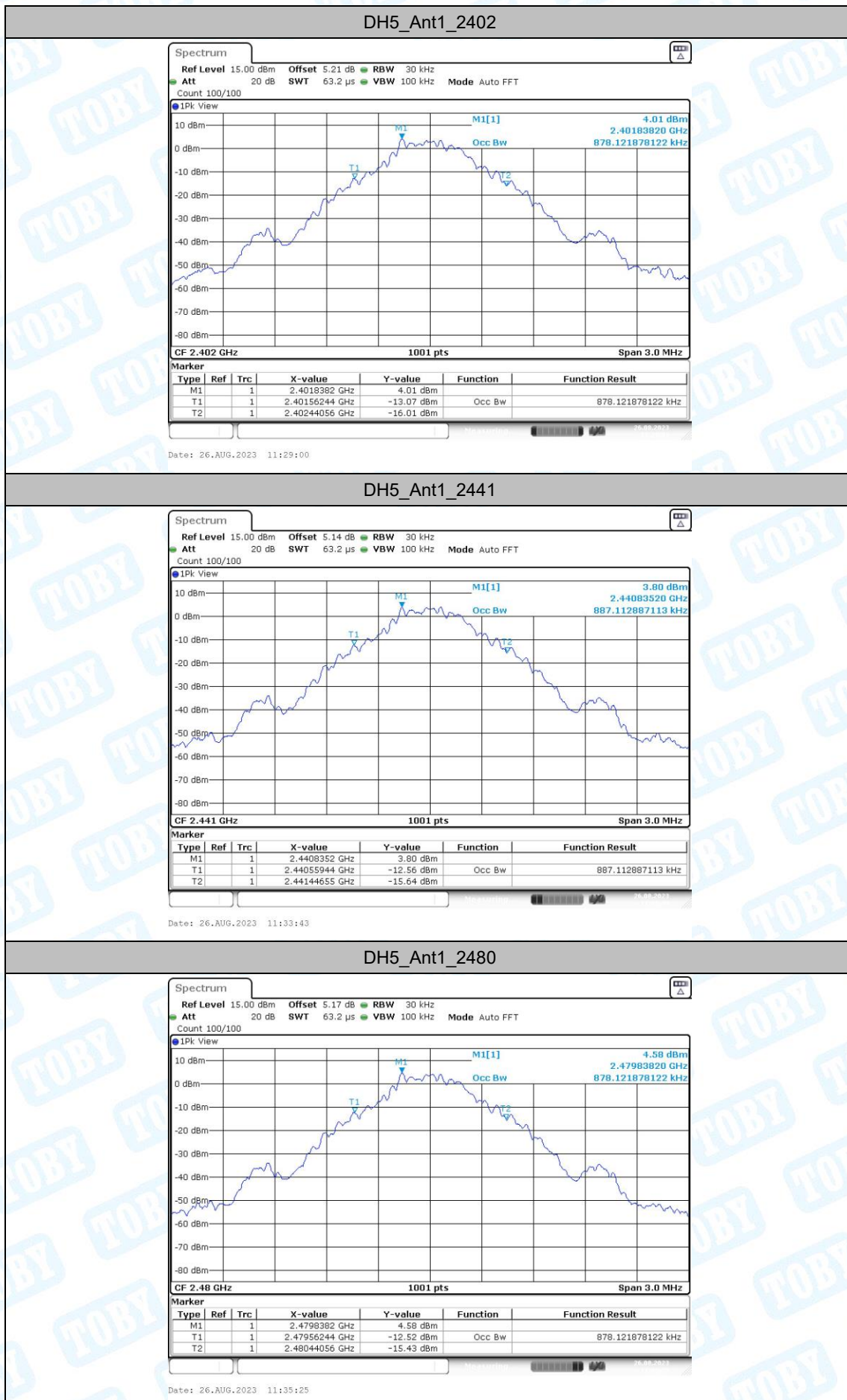


2. Occupied Channel Bandwidth

2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.878	2401.5624	2402.4406	---	---
		2441	0.887	2440.5594	2441.4466	---	---
		2480	0.878	2479.5624	2480.4406	---	---
2DH5	Ant1	2402	1.172	2401.4156	2402.5874	---	---
		2441	1.169	2440.4156	2441.5844	---	---
		2480	1.166	2479.4186	2480.5844	---	---
3DH5	Ant1	2402	1.172	2401.4186	2402.5904	---	---
		2441	1.172	2440.4186	2441.5904	---	---
		2480	1.169	2479.4186	2480.5874	---	---

2.2. Test Graphs



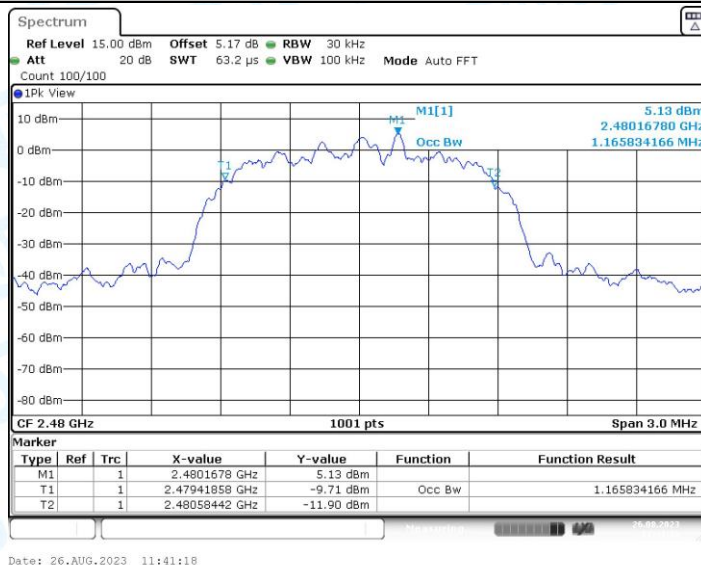
2DH5_Ant1_2402



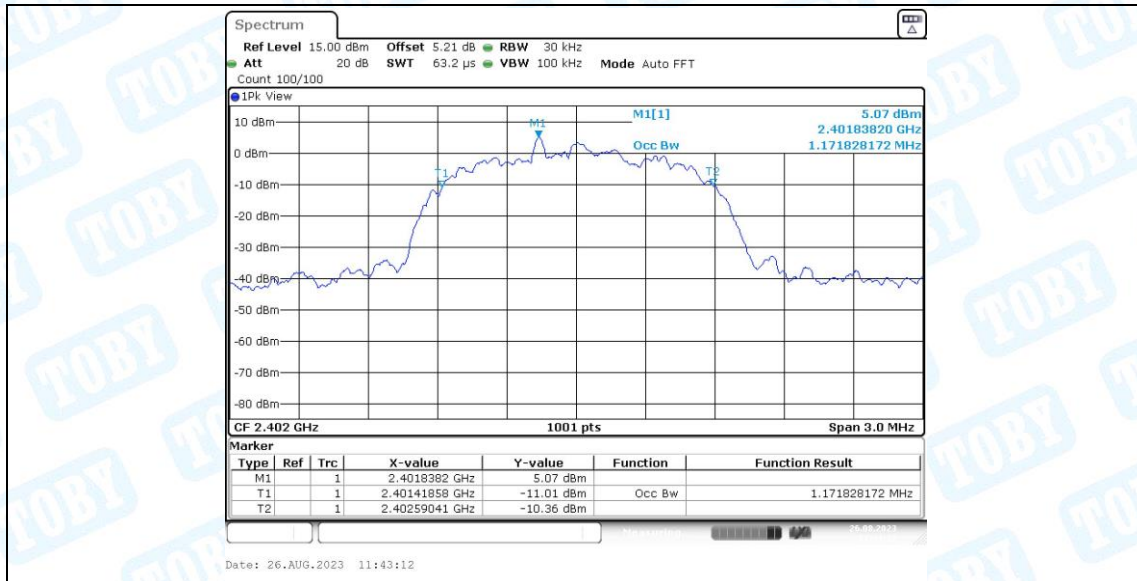
2DH5_Ant1_2441



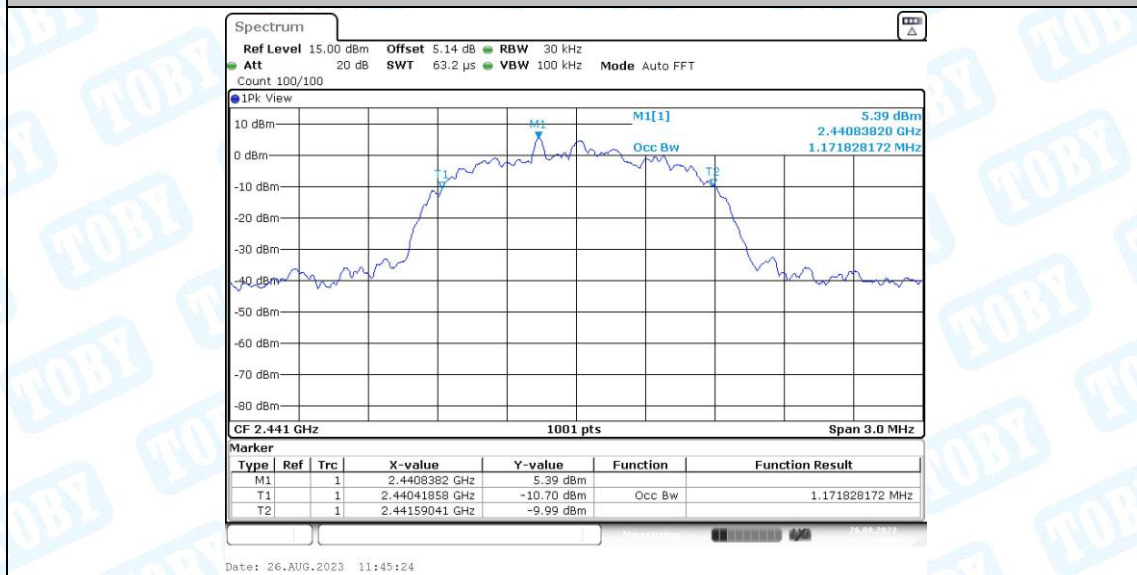
2DH5_Ant1_2480



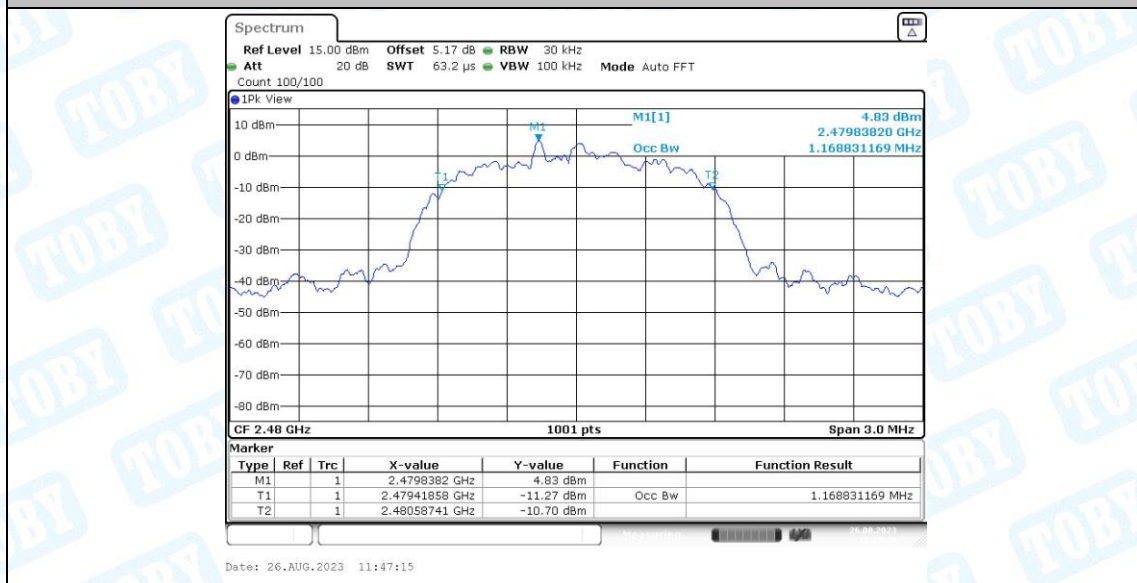
3DH5_Ant1_2402



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	6.87	≤21	PASS
		2441	6.83	≤21	PASS
		2480	6.59	≤21	PASS
2DH5	Ant1	2402	8.85	≤21	PASS
		2441	8.94	≤21	PASS
		2480	8.57	≤21	PASS
3DH5	Ant1	2402	8.97	≤21	PASS
		2441	9.11	≤21	PASS
		2480	8.65	≤21	PASS

3.2. Test Graphs



2DH5_Ant1_2402



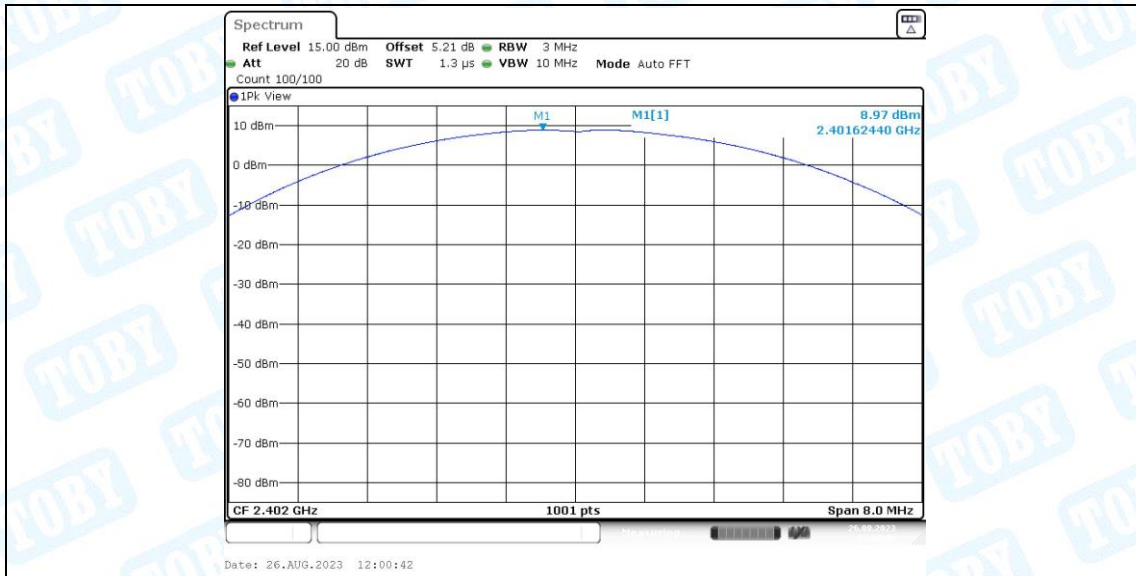
2DH5_Ant1_2441



2DH5_Ant1_2480



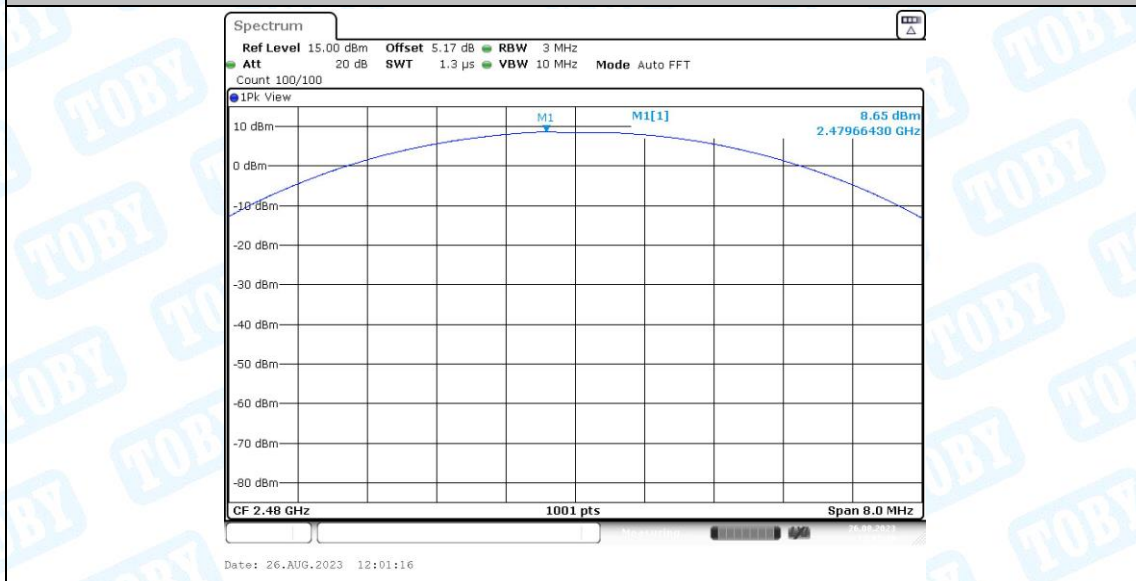
3DH5_Ant1_2402



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	≥ 0.640	PASS
2DH5	Ant1	Hop	1	≥ 0.853	PASS
3DH5	Ant1	Hop	1.136	≥ 0.867	PASS

4.2. Test Graphs

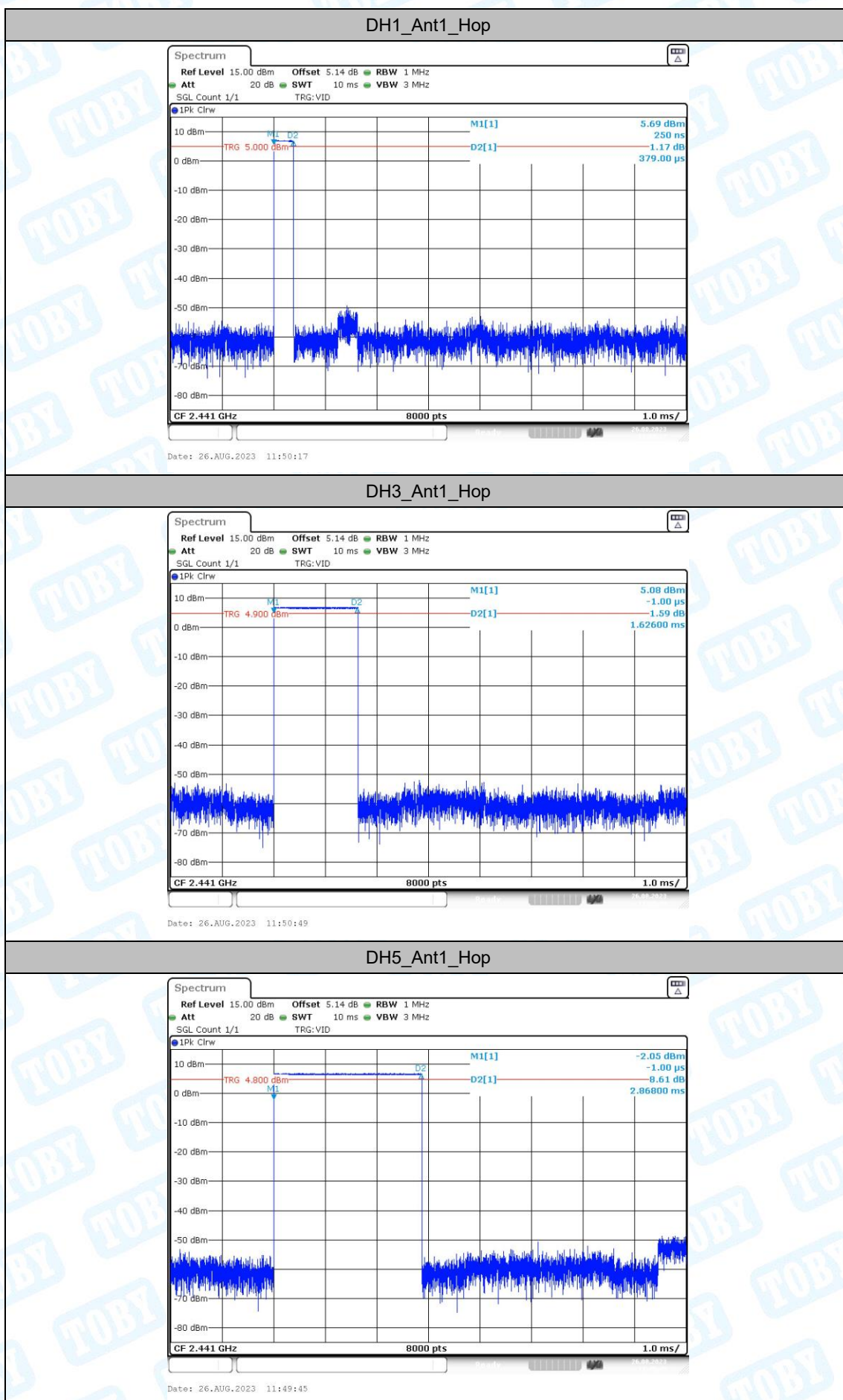


5. Time of occupancy

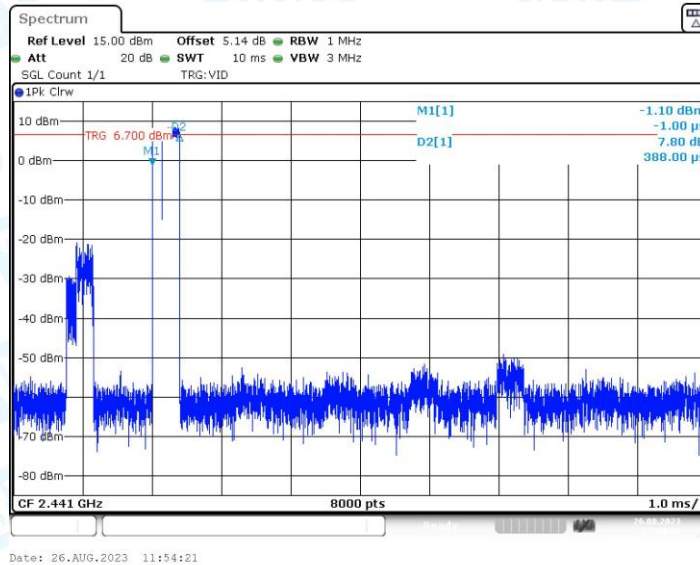
5.1. Test Result

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	1.626	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	1.633	160	0.261	≤0.4	PASS
2DH5	Ant1	Hop	2.873	106.67	0.306	≤0.4	PASS
3DH1	Ant1	Hop	0.389	320	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.631	160	0.261	≤0.4	PASS
3DH5	Ant1	Hop	2.874	106.67	0.307	≤0.4	PASS

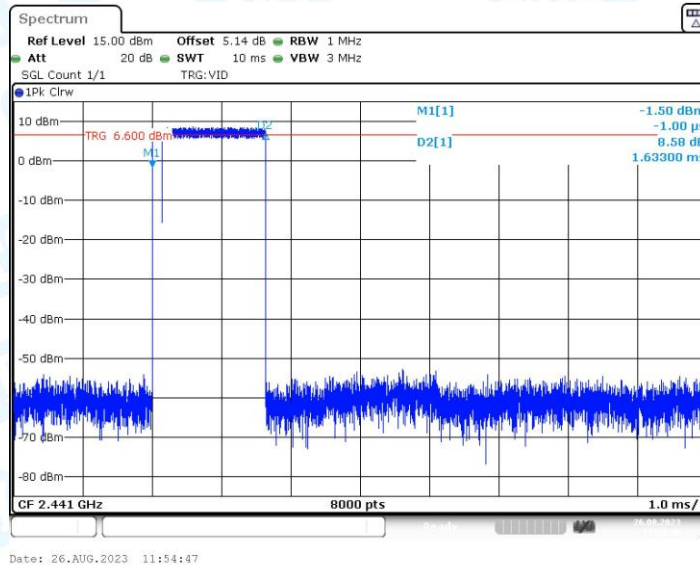
5.2.Test Graphs



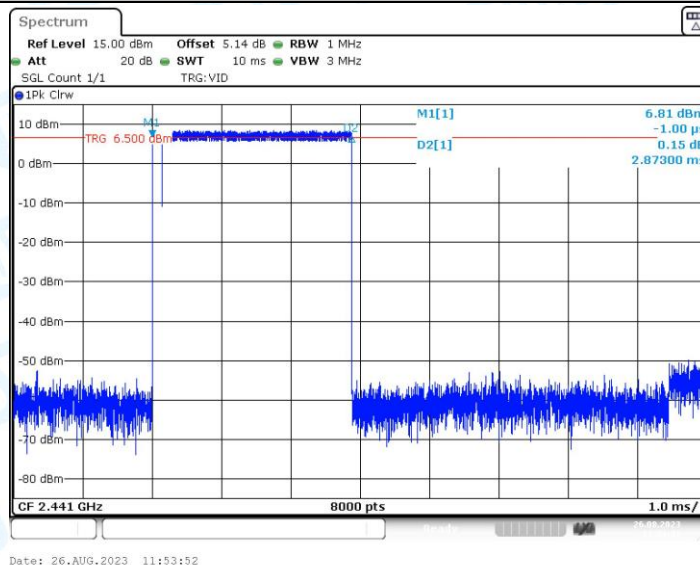
2DH1_Ant1_Hop



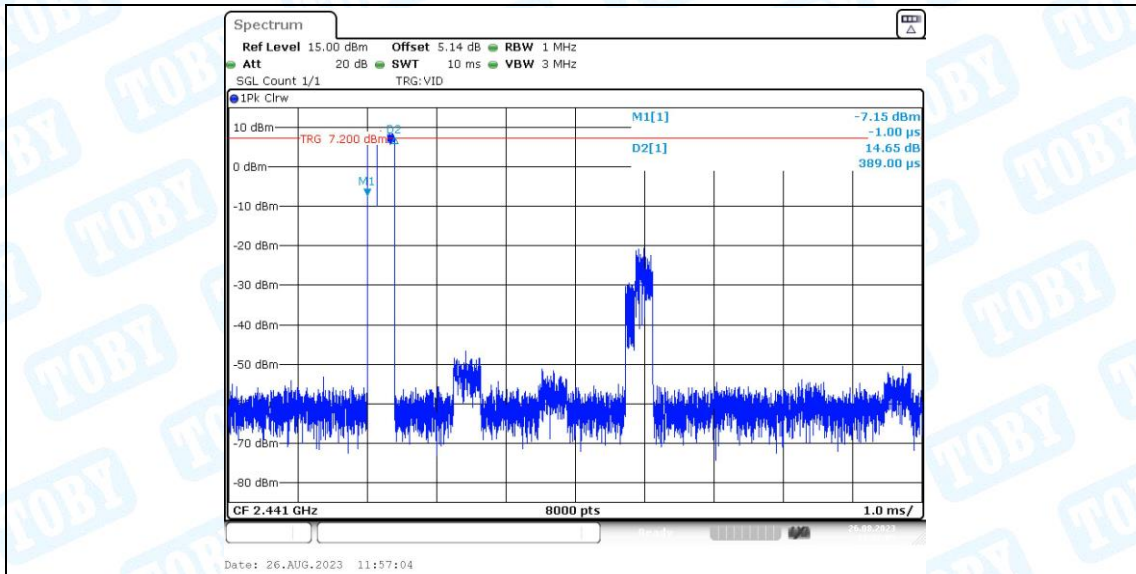
2DH3_Ant1_Hop



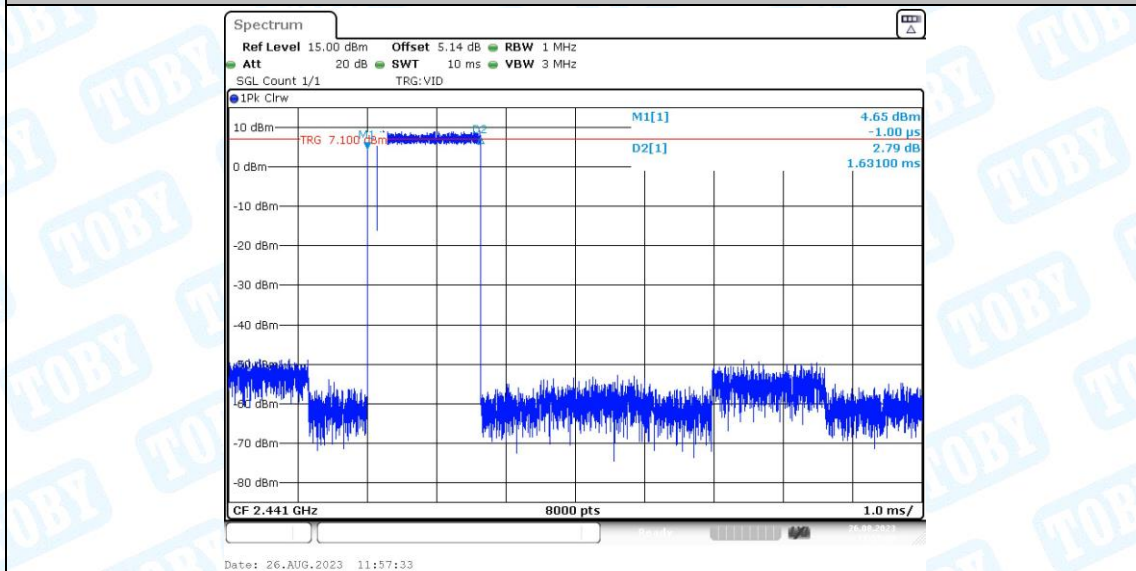
2DH5_Ant1_Hop



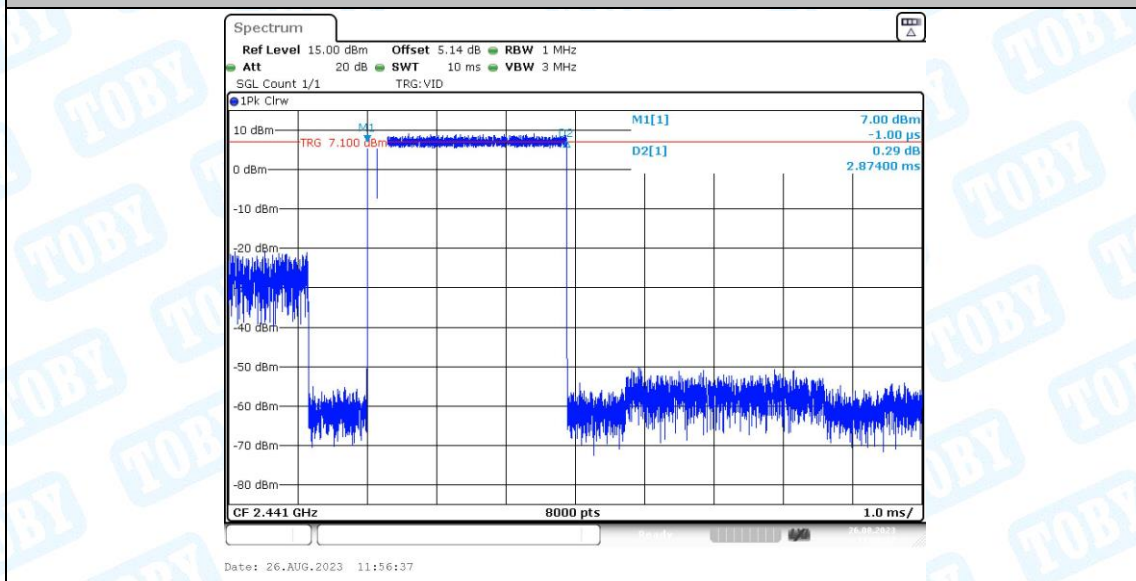
3DH1_Ant1_Hop



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

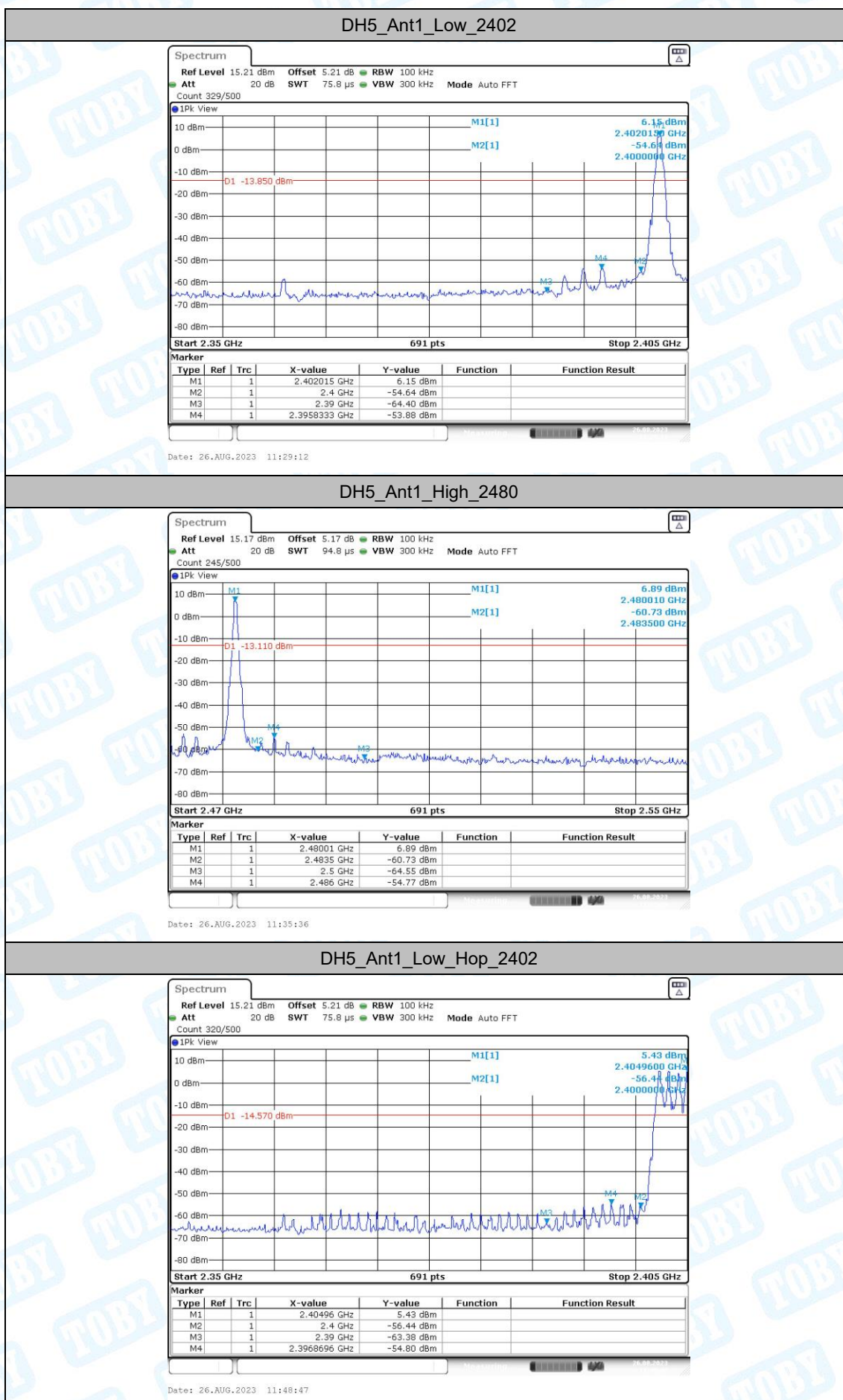


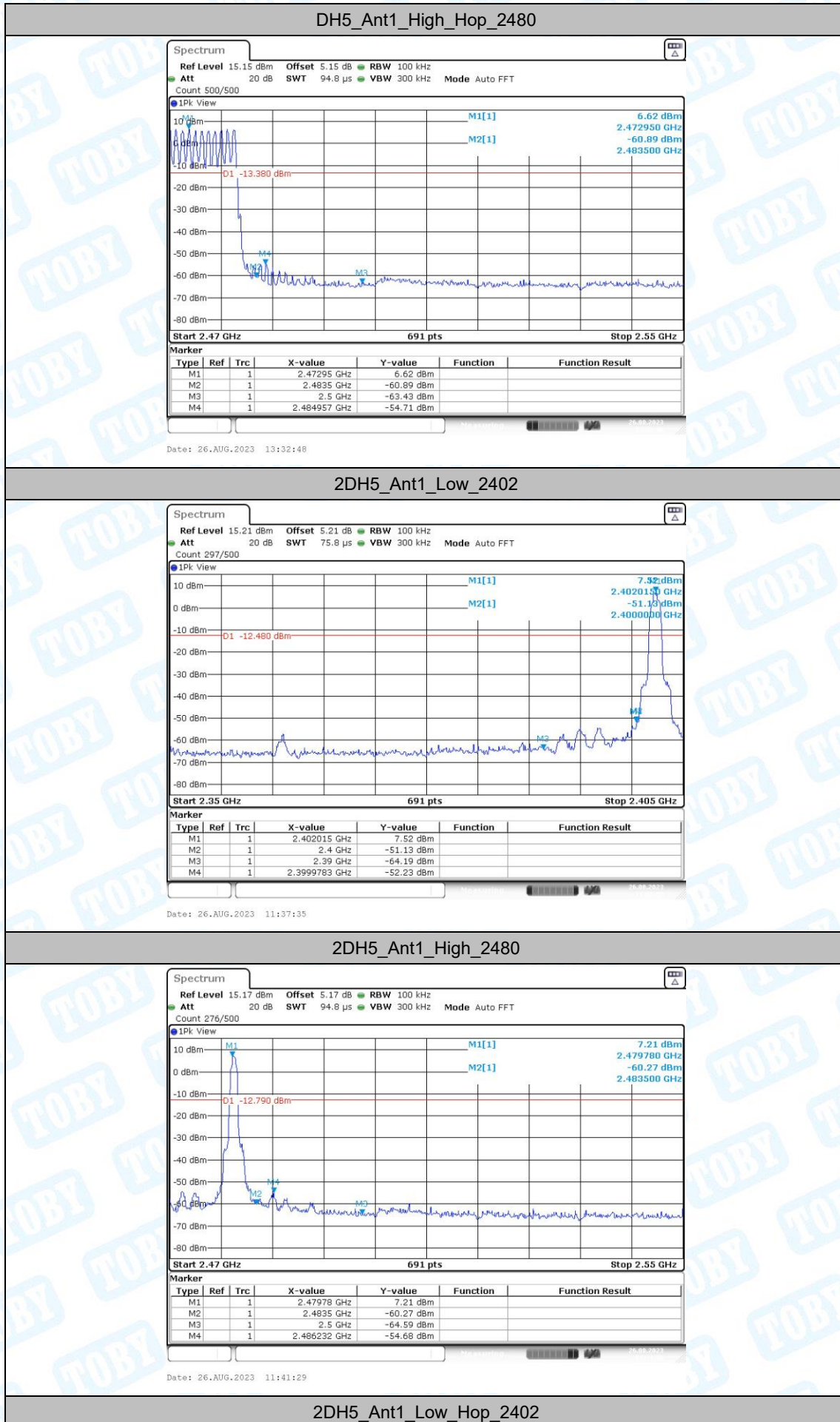
7. Band edge measurements

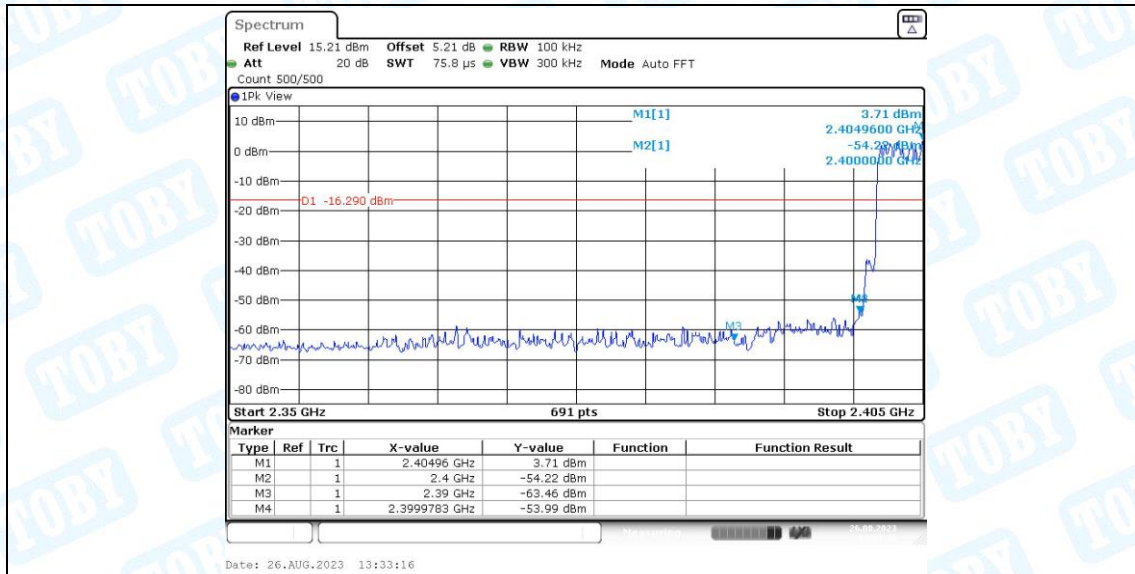
7.1. Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	6.15	-53.88	≤-13.85	PASS
		High	2480	6.89	-54.77	≤-13.11	PASS
		Low	Hop_2402	5.43	-54.8	≤-14.57	PASS
		High	Hop_2480	6.62	-54.71	≤-13.38	PASS
2DH5	Ant1	Low	2402	7.52	-52.23	≤-12.48	PASS
		High	2480	7.21	-54.68	≤-12.79	PASS
		Low	Hop_2402	3.71	-53.99	≤-16.29	PASS
		High	Hop_2480	6.33	-56.9	≤-13.67	PASS
3DH5	Ant1	Low	2402	7.55	-52.08	≤-12.45	PASS
		High	2480	7.13	-56.82	≤-12.87	PASS
		Low	Hop_2402	4.39	-53.95	≤-15.61	PASS
		High	Hop_2480	6.61	-58.91	≤-13.39	PASS

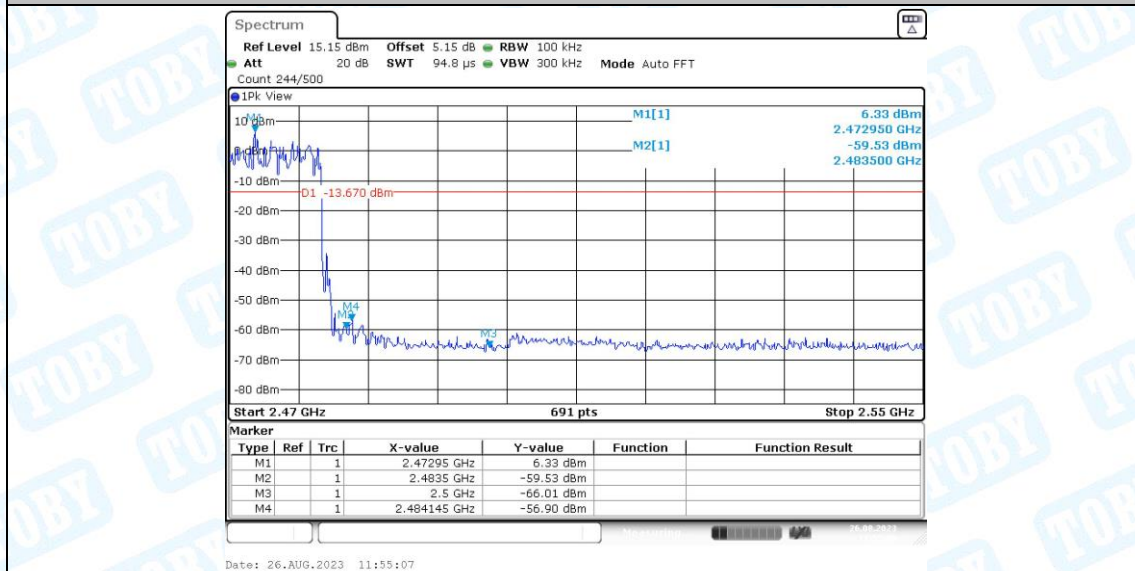
7.2. Test Graphs



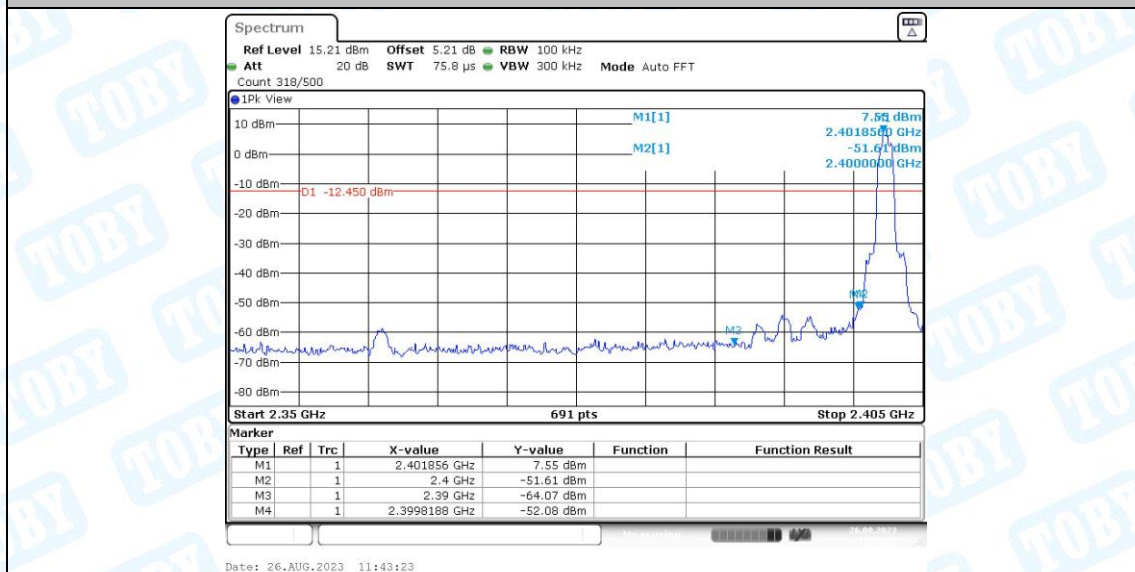




2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480