

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

General Description of EUT	
<b>Product Name:</b>	Smart call watch
<b>Test Model:</b>	K13
<b>Sample ID:</b>	HC-C-202306-0253-01-2-2#
Environmental Conditions	
<b>Temperature:</b>	24°C
<b>Relative Humidity:</b>	50%
<b>Test Voltage:</b>	DC 5V
<b>Test Engineer:</b>	Zhangchenxi
Note: For a more detailed features description, please refer to the report TBR-C-202306-0253-21	

## Contents

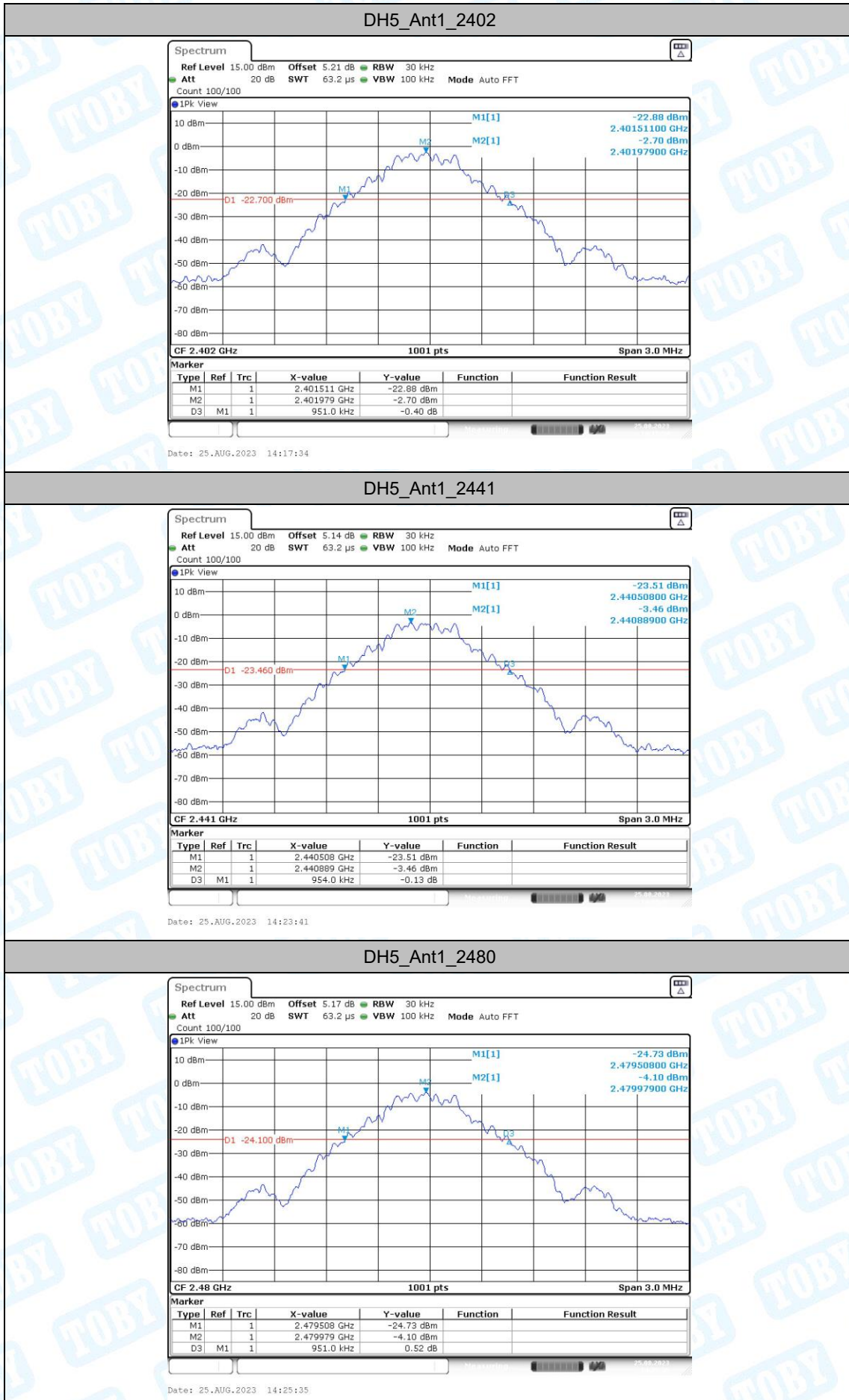
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## 1. 20dB Emission Bandwidth

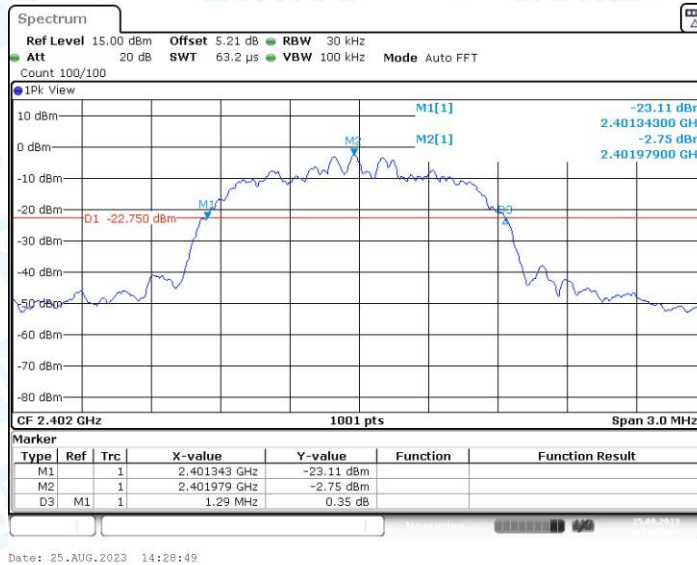
### 1.1. Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.95	---	---
		2441	0.95	---	---
		2480	0.95	---	---
2DH5	Ant1	2402	1.29	---	---
		2441	1.32	---	---
		2480	1.33	---	---
3DH5	Ant1	2402	1.30	---	---
		2441	1.30	---	---
		2480	1.30	---	---

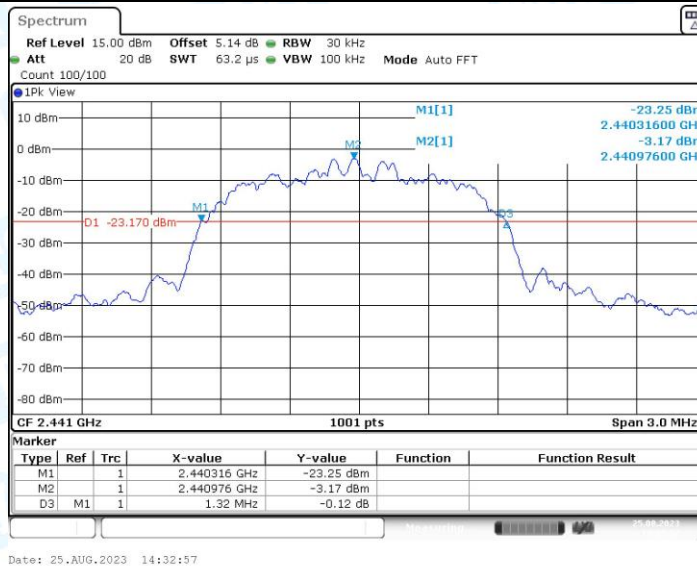
## 1.2. Test Graphs



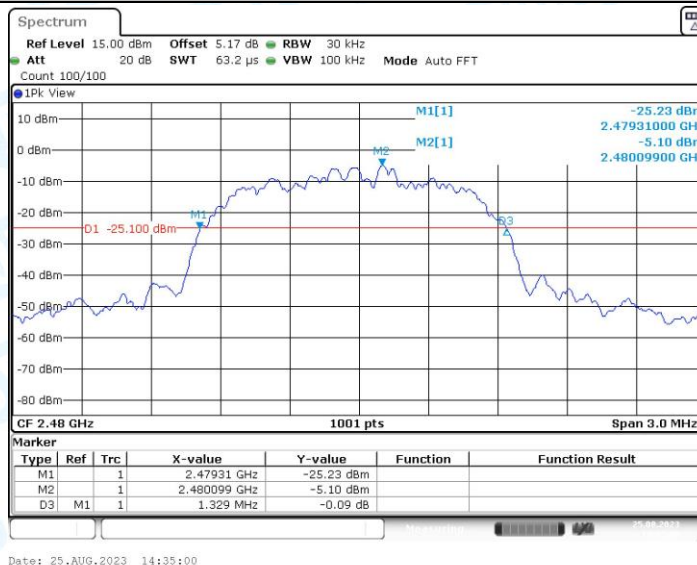
2DH5\_Ant1\_2402



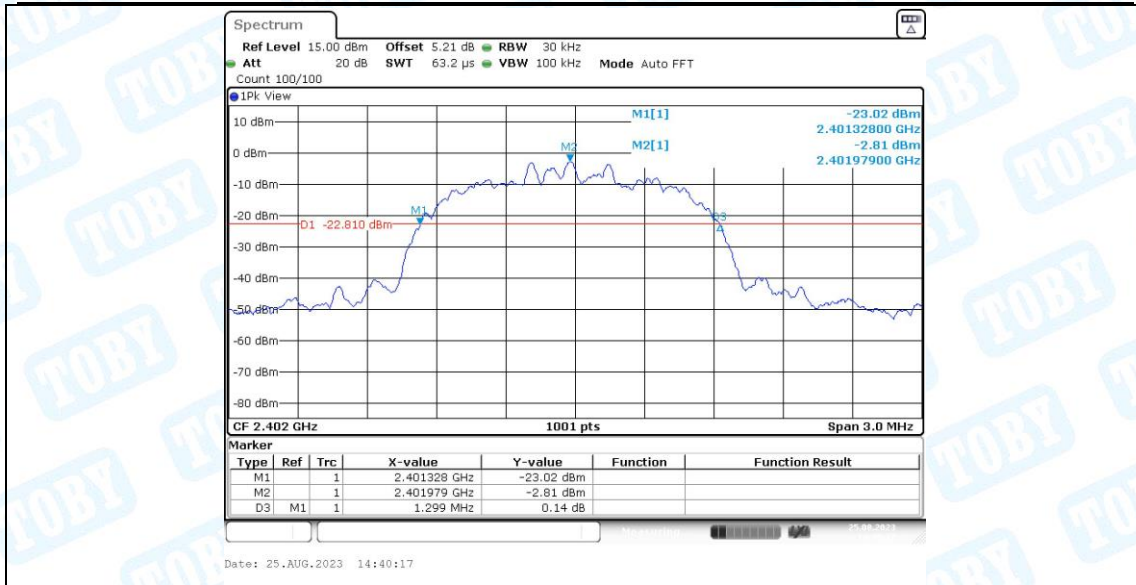
2DH5\_Ant1\_2441



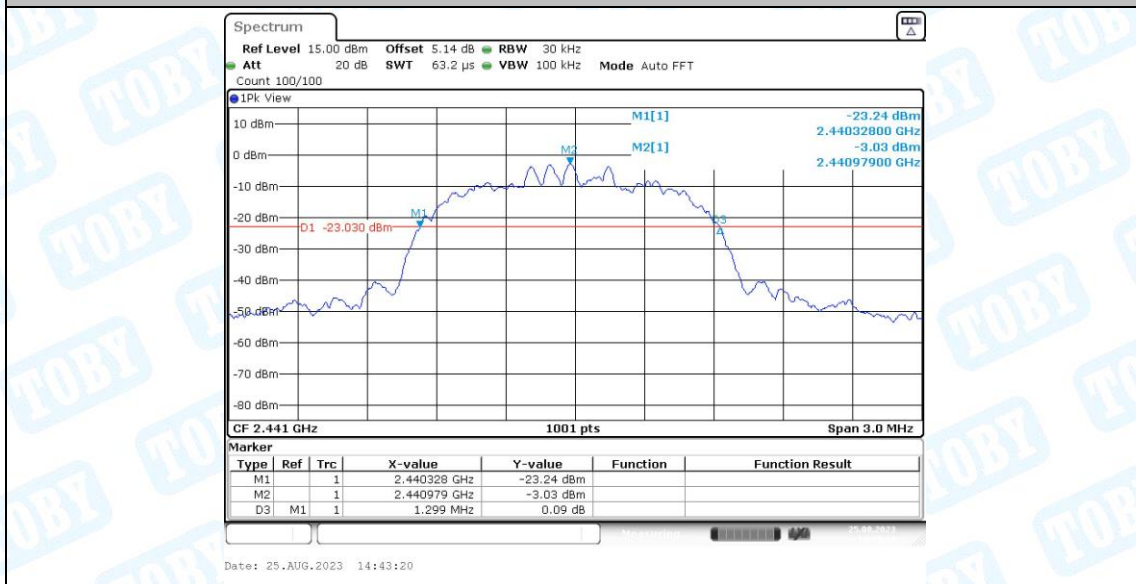
2DH5\_Ant1\_2480



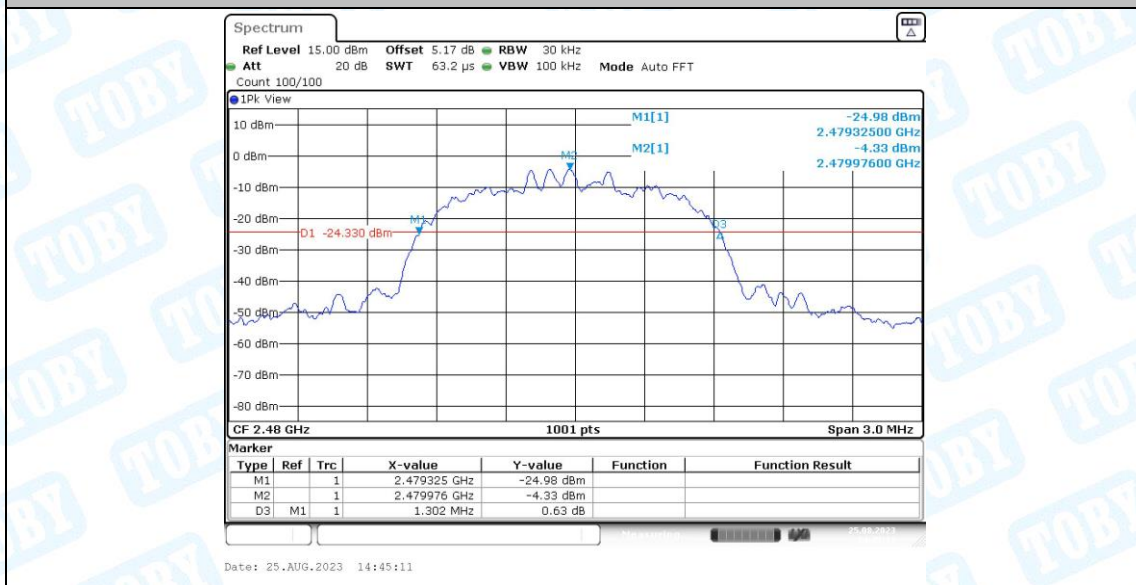
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



## 2. Occupied Channel Bandwidth

### 2.1. Test Result

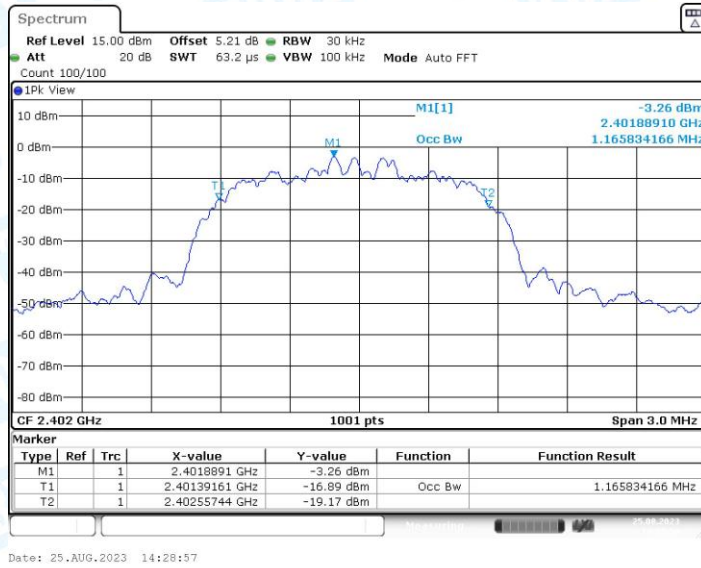
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.848	2401.5504	2402.3986	---	---
		2441	0.848	2440.5504	2441.3986	---	---
		2480	0.845	2479.5504	2480.3956	---	---
2DH5	Ant1	2402	1.166	2401.3916	2402.5574	---	---
		2441	1.163	2440.3916	2441.5544	---	---
		2480	1.169	2479.3886	2480.5574	---	---
3DH5	Ant1	2402	1.172	2401.3916	2402.5634	---	---
		2441	1.169	2440.3916	2441.5604	---	---
		2480	1.163	2479.3946	2480.5574	---	---

## 2.2. Test Graphs

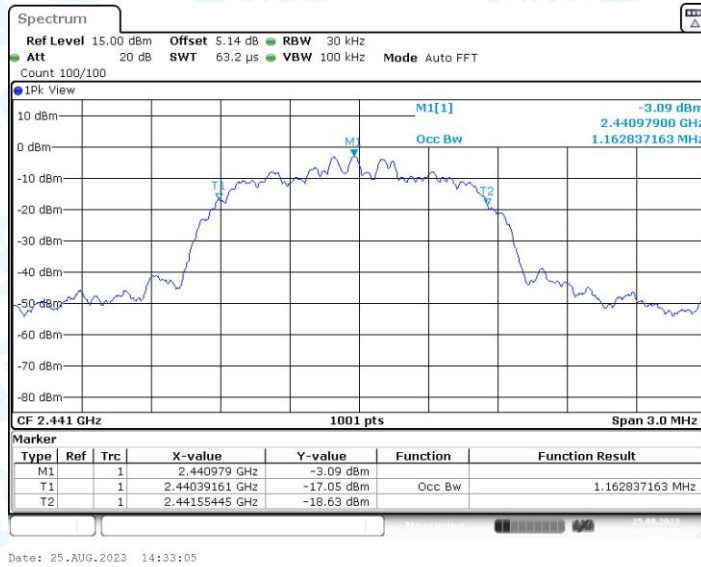




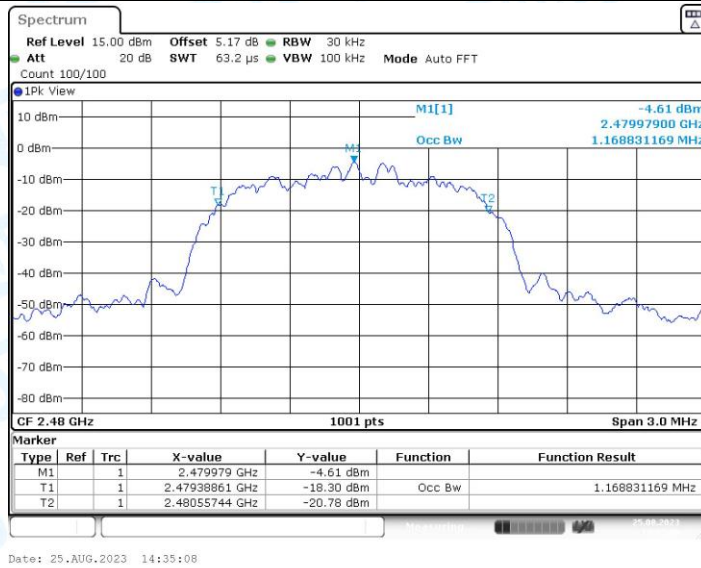
2DH5\_Ant1\_2402



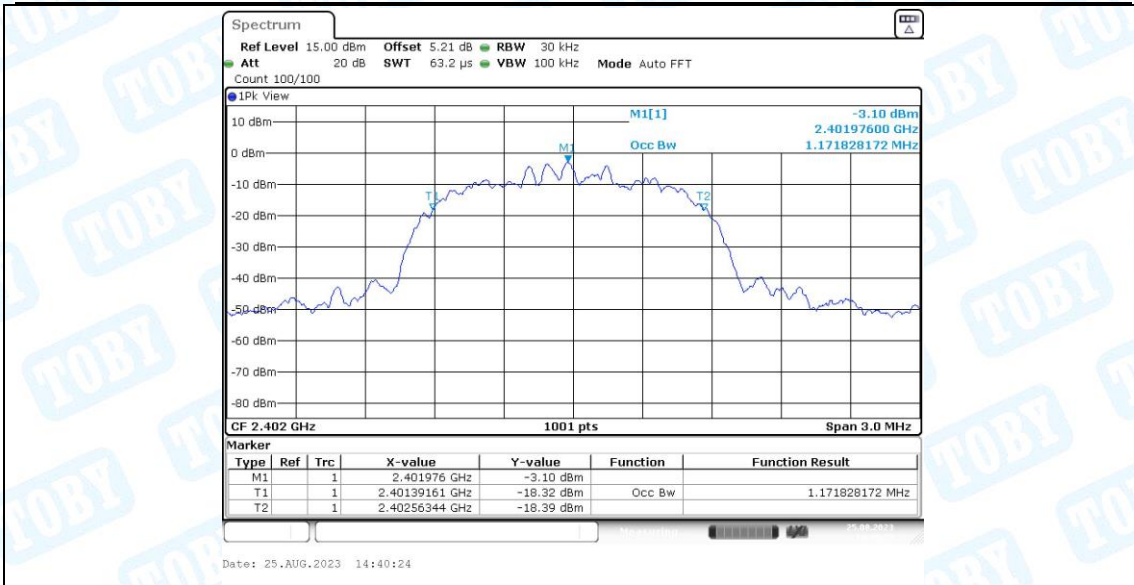
2DH5\_Ant1\_2441



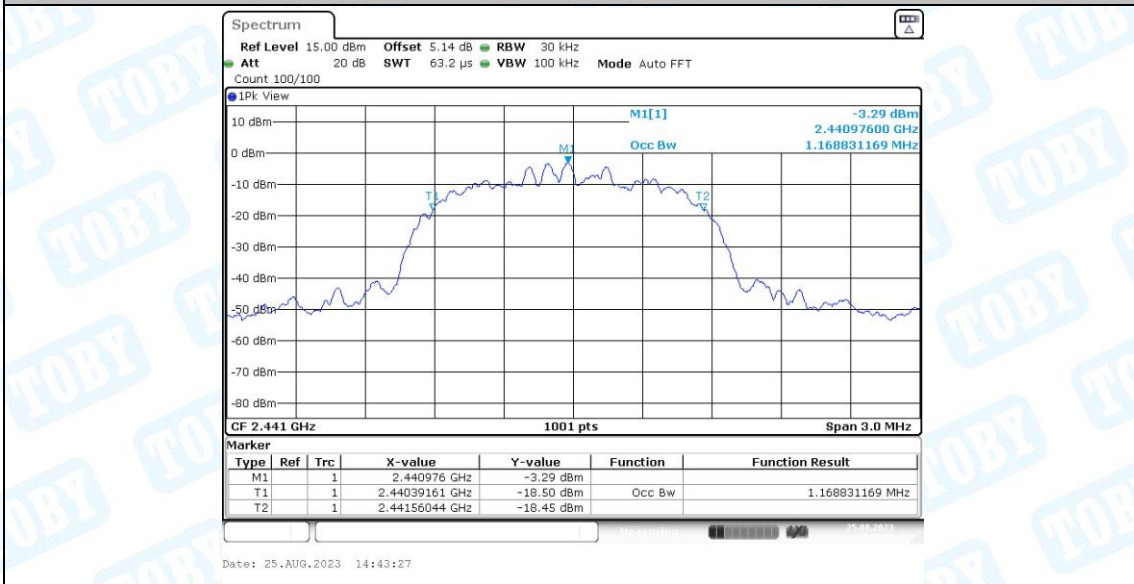
2DH5\_Ant1\_2480



3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



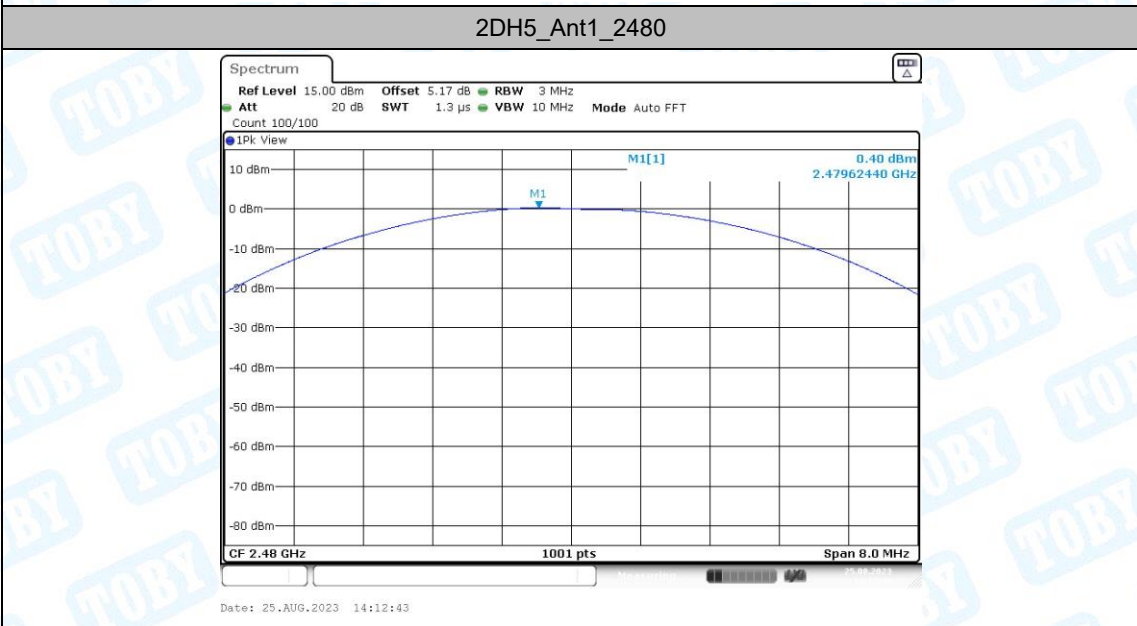
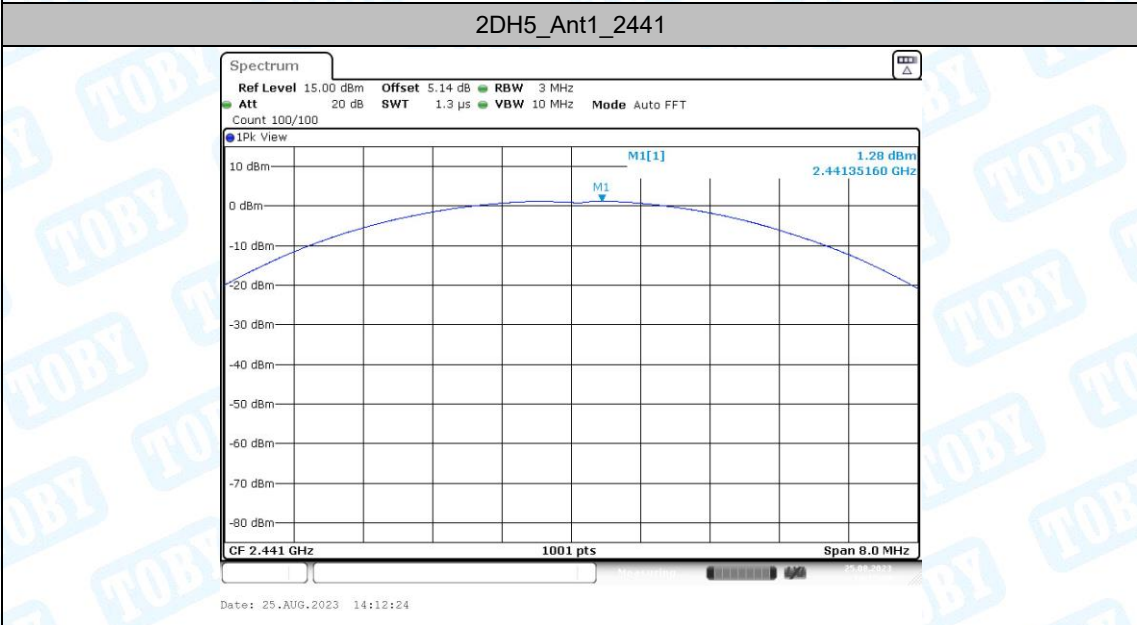
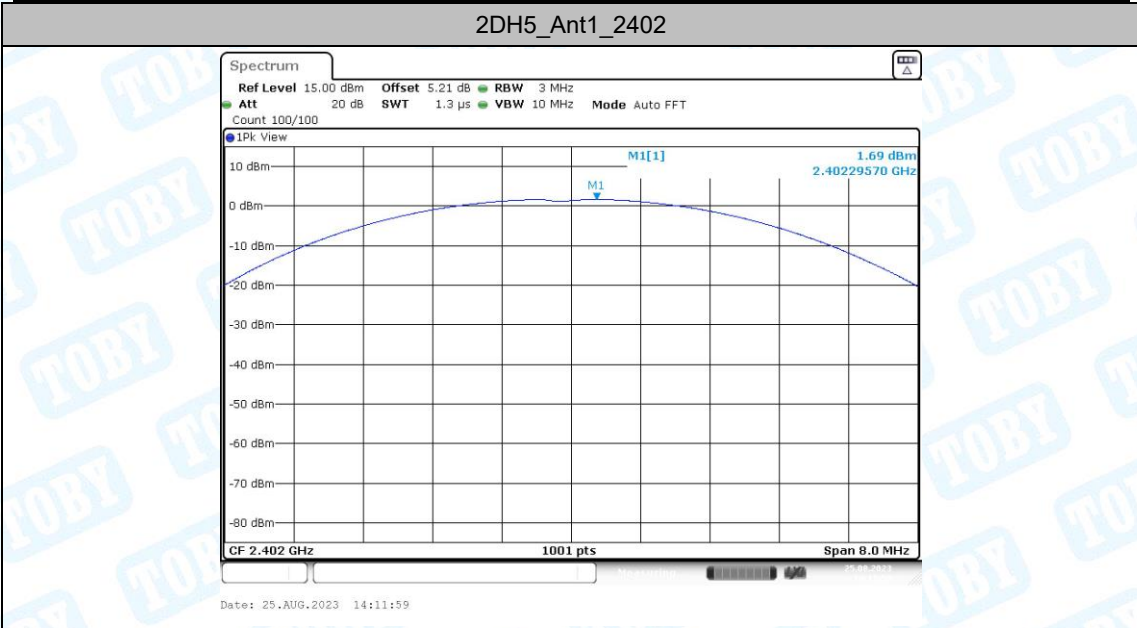
### 3. Maximum conducted output power

#### 3.1. Test Result

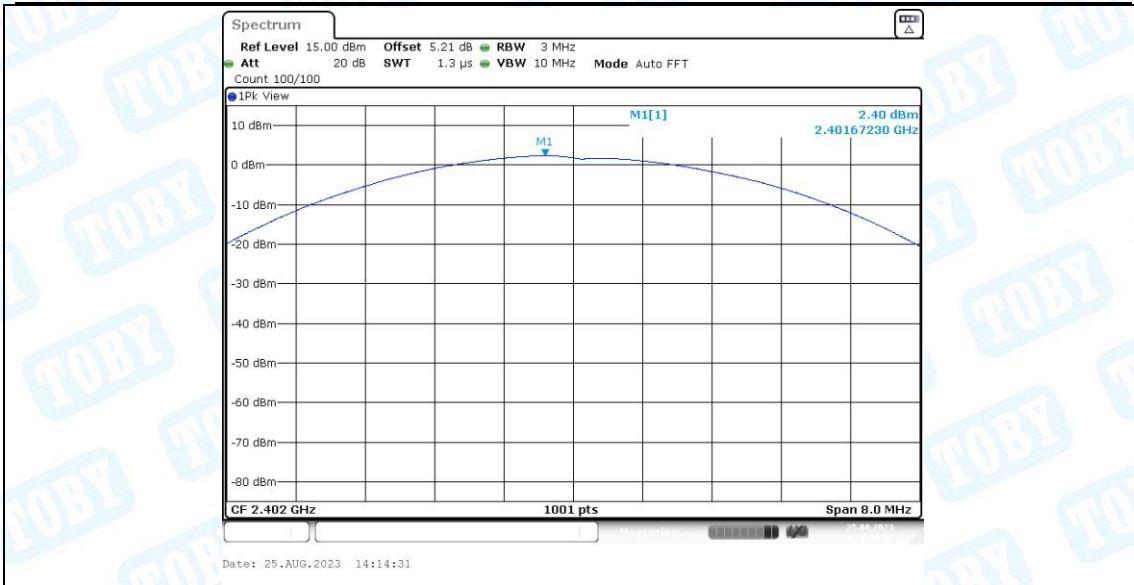
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-0.15	≤30	PASS
		2441	-0.31	≤30	PASS
		2480	-1.49	≤30	PASS
2DH5	Ant1	2402	1.69	≤30	PASS
		2441	1.28	≤30	PASS
		2480	0.4	≤30	PASS
3DH5	Ant1	2402	2.4	≤30	PASS
		2441	2.14	≤30	PASS
		2480	0.58	≤30	PASS

### 3.2.Test Graphs

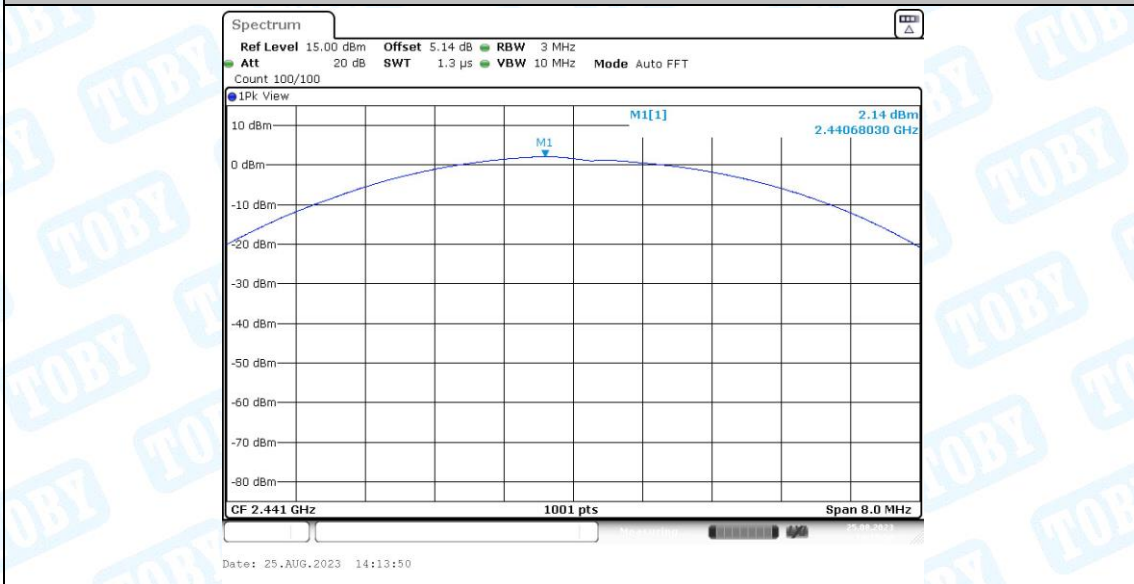




3DH5\_Ant1\_2402



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	0.852	≥0.633	PASS
2DH5	Ant1	Hop	0.997	≥0.887	PASS
3DH5	Ant1	Hop	0.962	≥0.867	PASS

## 4.2. Test Graphs



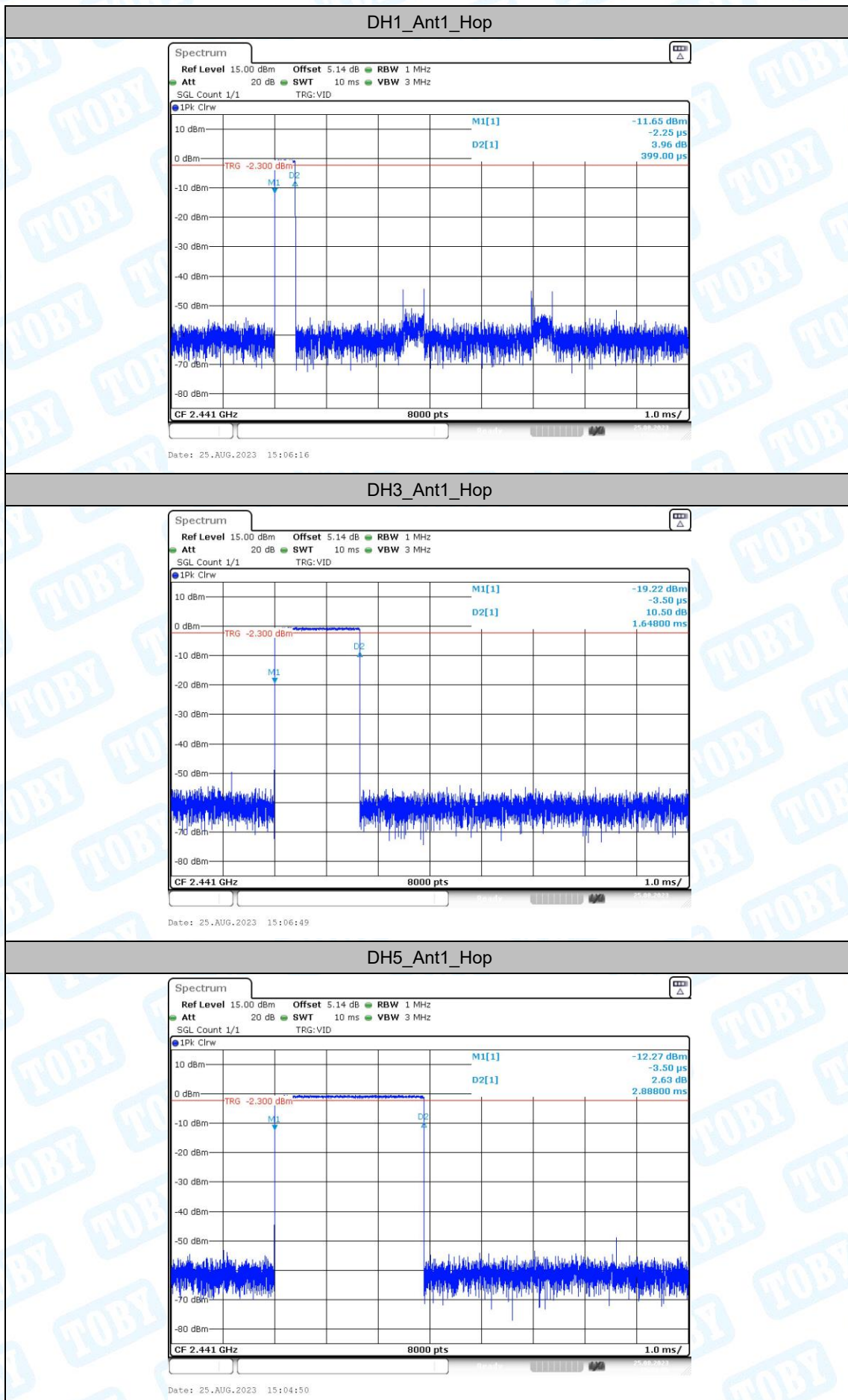


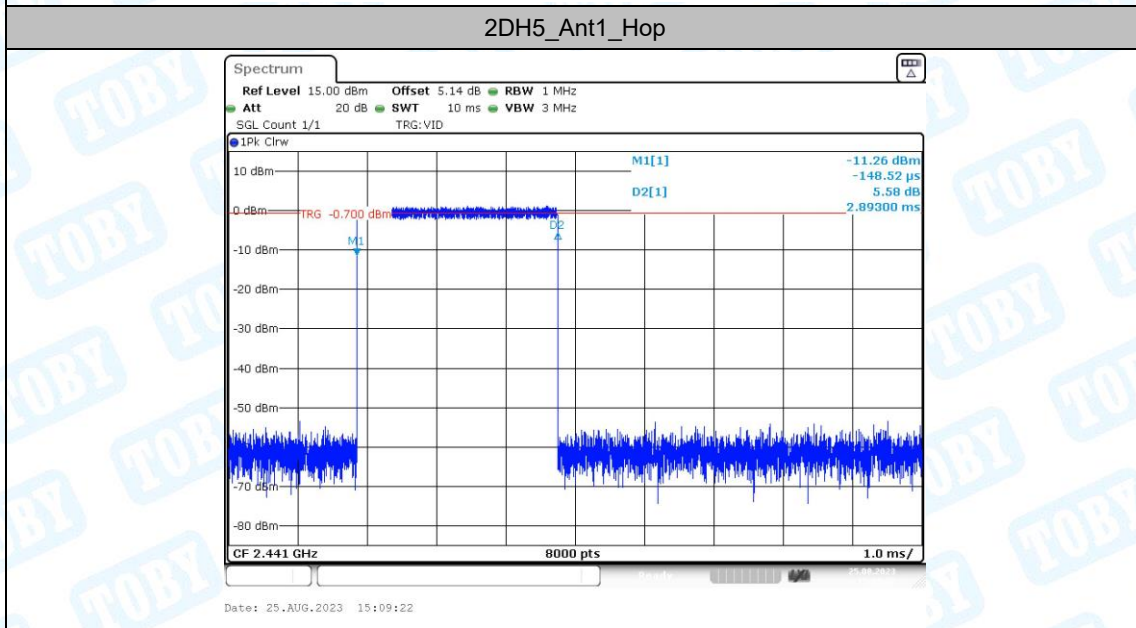
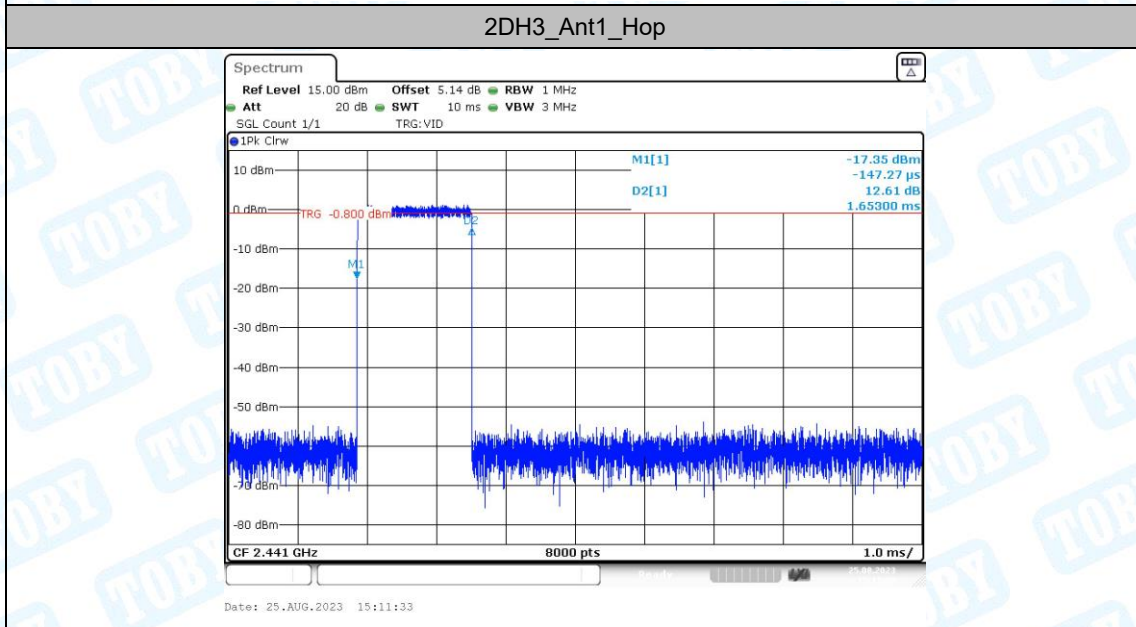
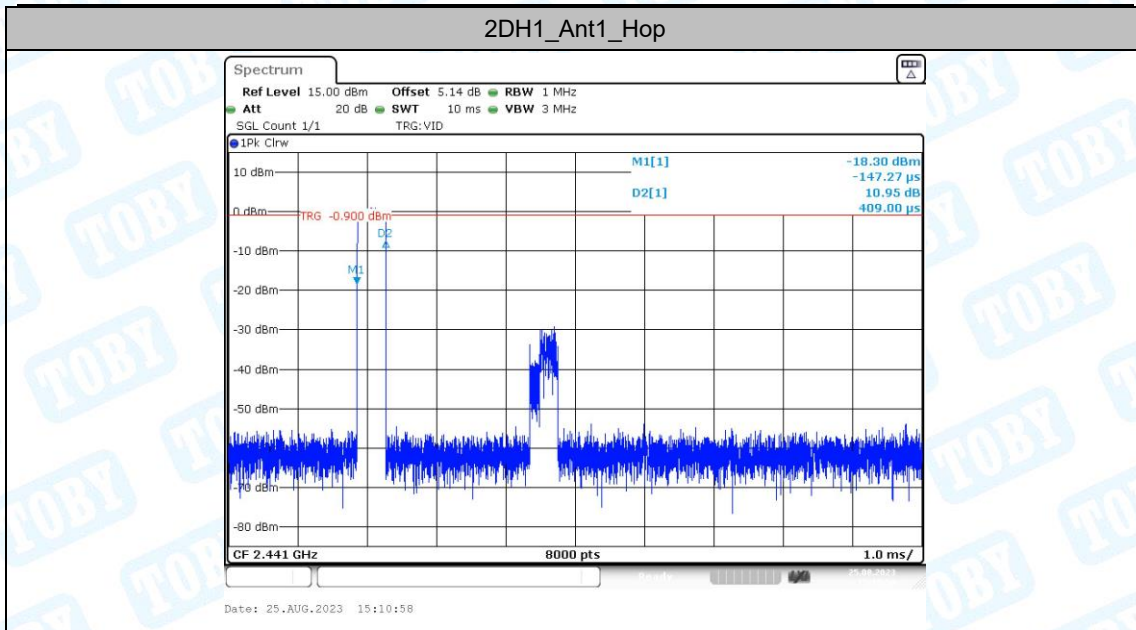
## 5. Time of occupancy

### 5.1. Test Result

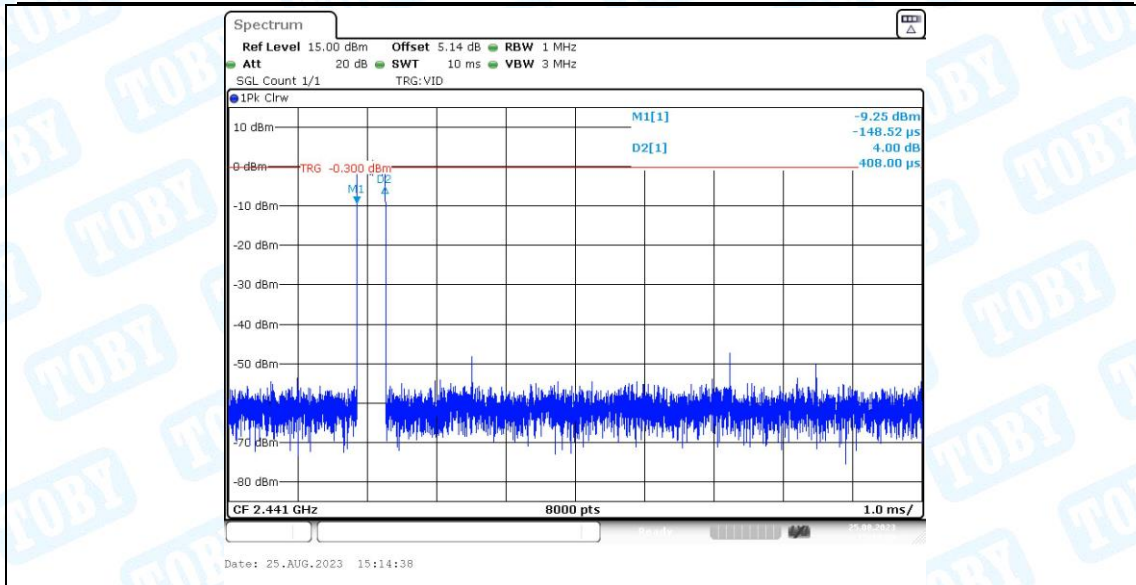
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.399	320	0.128	≤0.4	PASS
DH3	Ant1	Hop	1.648	160	0.264	≤0.4	PASS
DH5	Ant1	Hop	2.888	106.67	0.308	≤0.4	PASS
2DH1	Ant1	Hop	0.409	320	0.131	≤0.4	PASS
2DH3	Ant1	Hop	1.653	160	0.264	≤0.4	PASS
2DH5	Ant1	Hop	2.893	106.67	0.309	≤0.4	PASS
3DH1	Ant1	Hop	0.408	320	0.131	≤0.4	PASS
3DH3	Ant1	Hop	1.651	160	0.264	≤0.4	PASS
3DH5	Ant1	Hop	2.895	106.67	0.309	≤0.4	PASS

## 5.2.Test Graphs

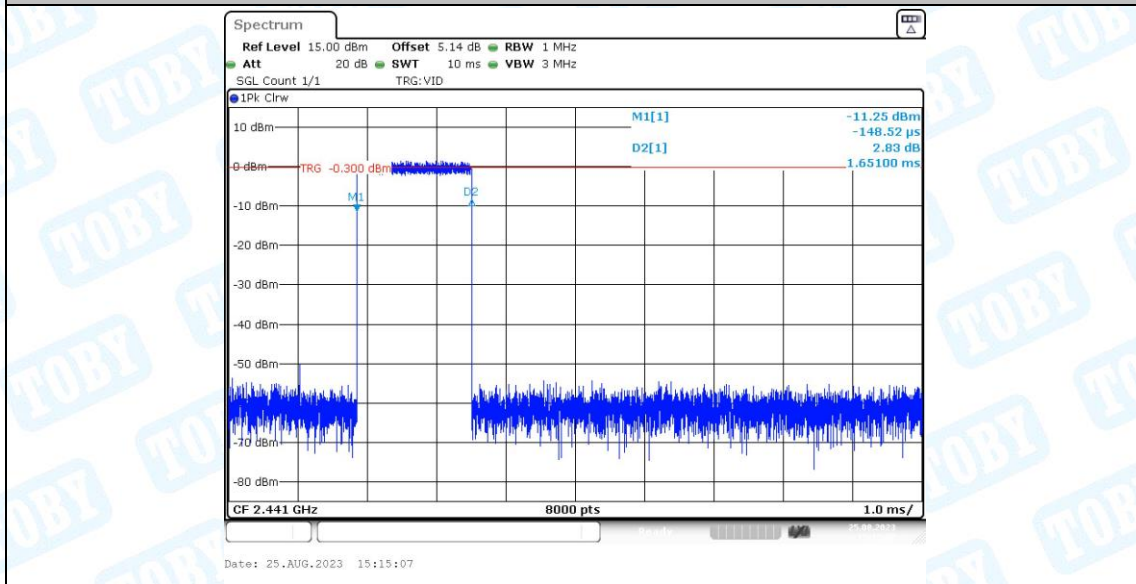




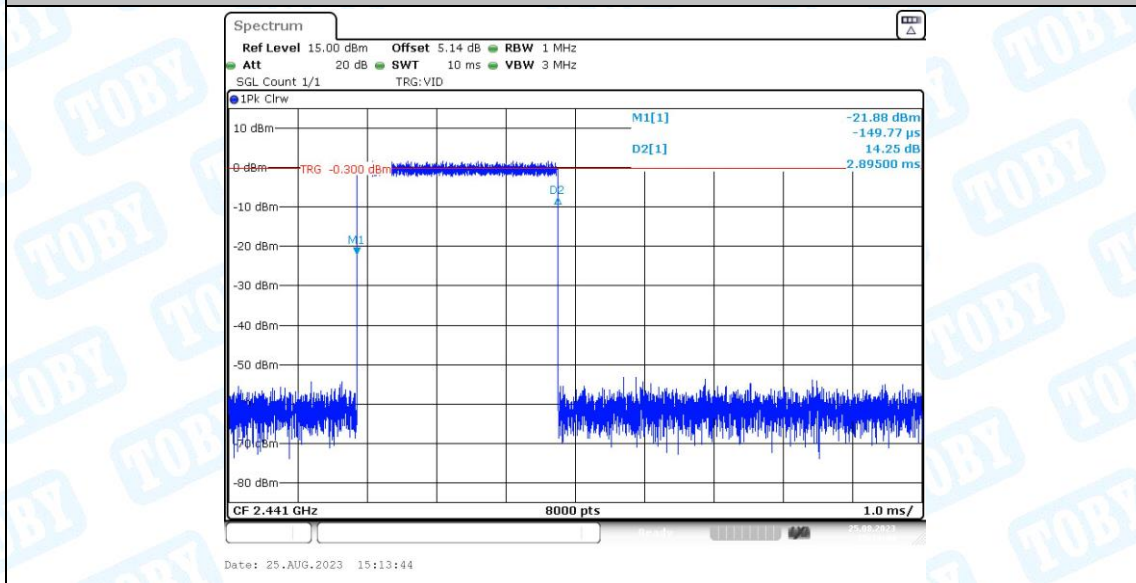
### 3DH1\_Ant1\_Hop



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

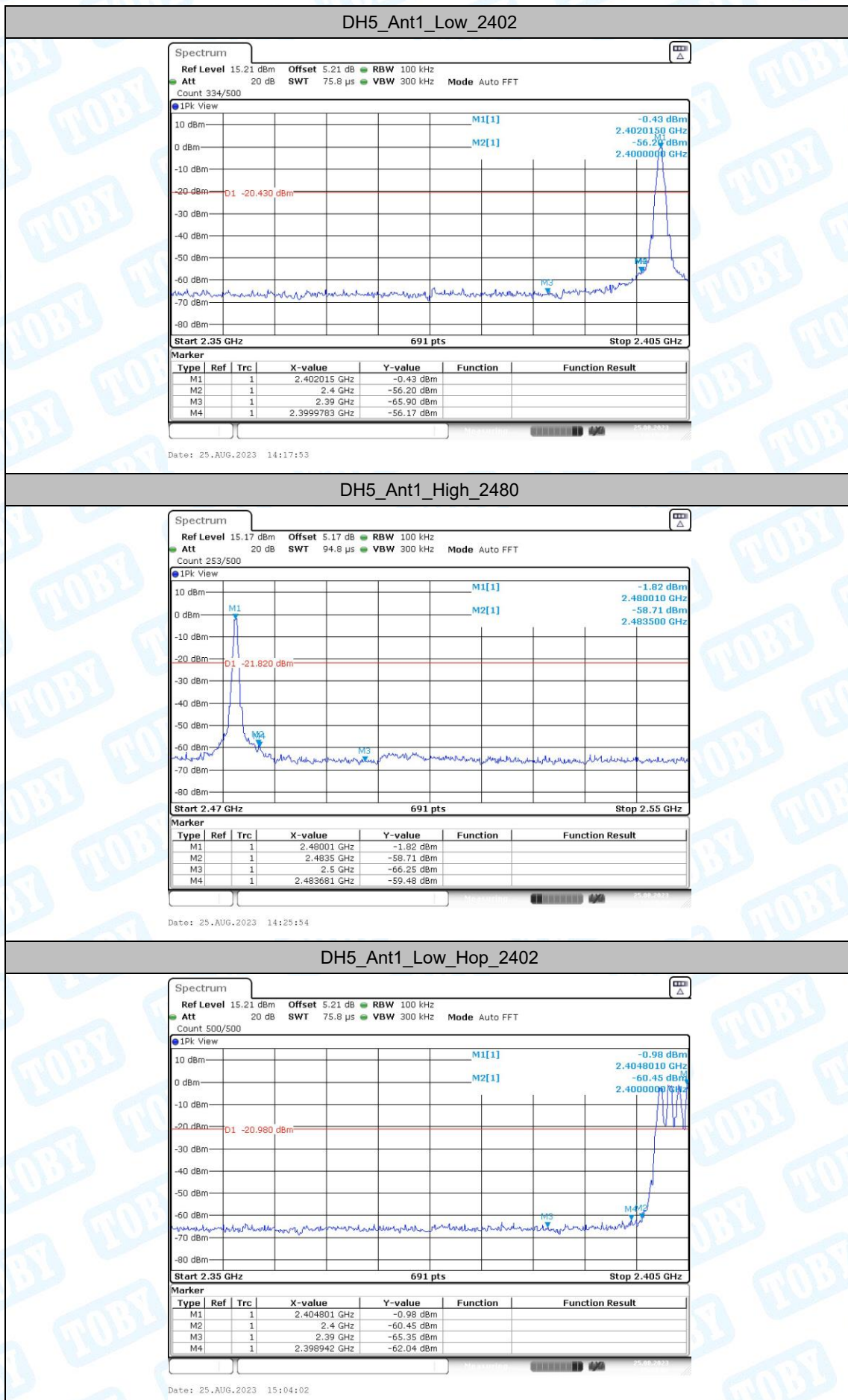


## 7. Band edge measurements

### 7.1. Test Result

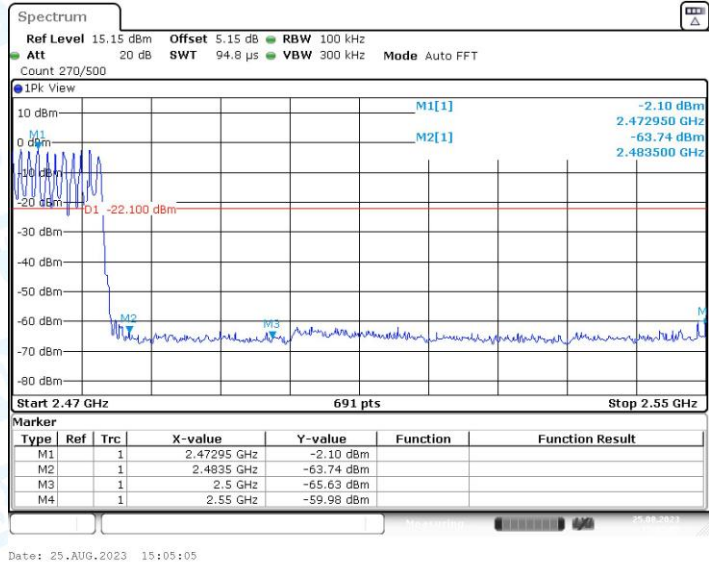
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.43	-56.17	≤-20.43	PASS
		High	2480	-1.82	-59.48	≤-21.82	PASS
		Low	Hop_2402	-0.98	-62.04	≤-20.98	PASS
		High	Hop_2480	-2.10	-59.98	≤-22.1	PASS
2DH5	Ant1	Low	2402	-0.37	-54.62	≤-20.37	PASS
		High	2480	-1.71	-60.78	≤-21.71	PASS
		Low	Hop_2402	-3.03	-57	≤-23.03	PASS
		High	Hop_2480	-4.42	-59.86	≤-24.42	PASS
3DH5	Ant1	Low	2402	-0.60	-54.57	≤-20.6	PASS
		High	2480	-1.77	-61.49	≤-21.77	PASS
		Low	Hop_2402	-3.61	-58.07	≤-23.61	PASS
		High	Hop_2480	-3.89	-59.8	≤-23.89	PASS

## 7.2. Test Graphs

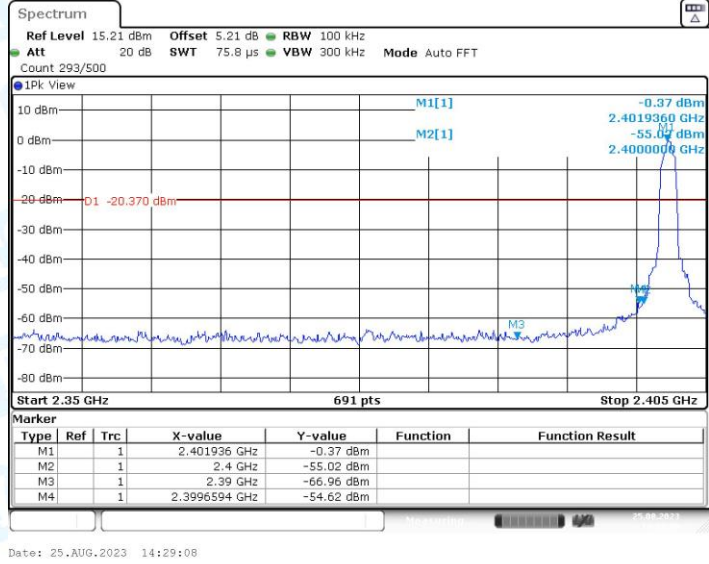




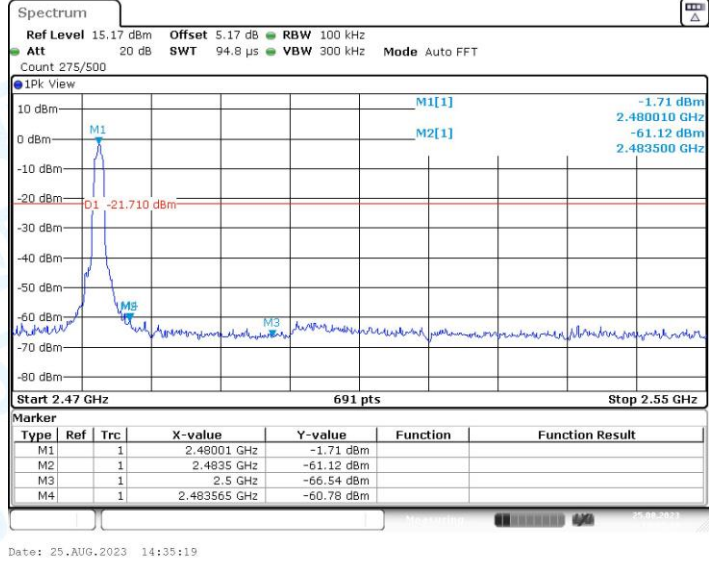
DH5\_Ant1\_High\_Hop\_2480



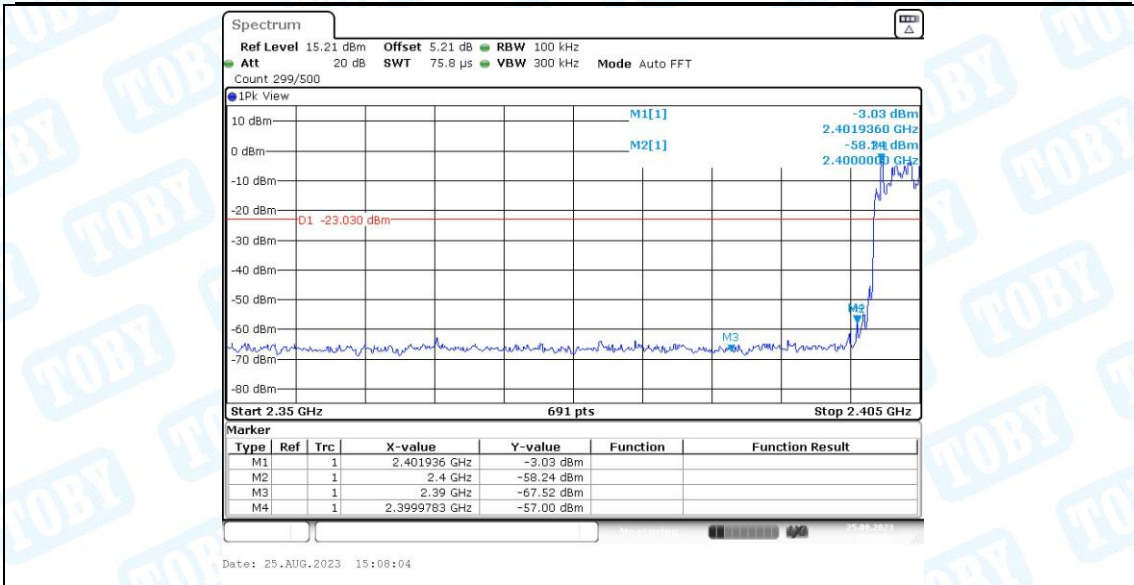
2DH5\_Ant1\_Low\_2402



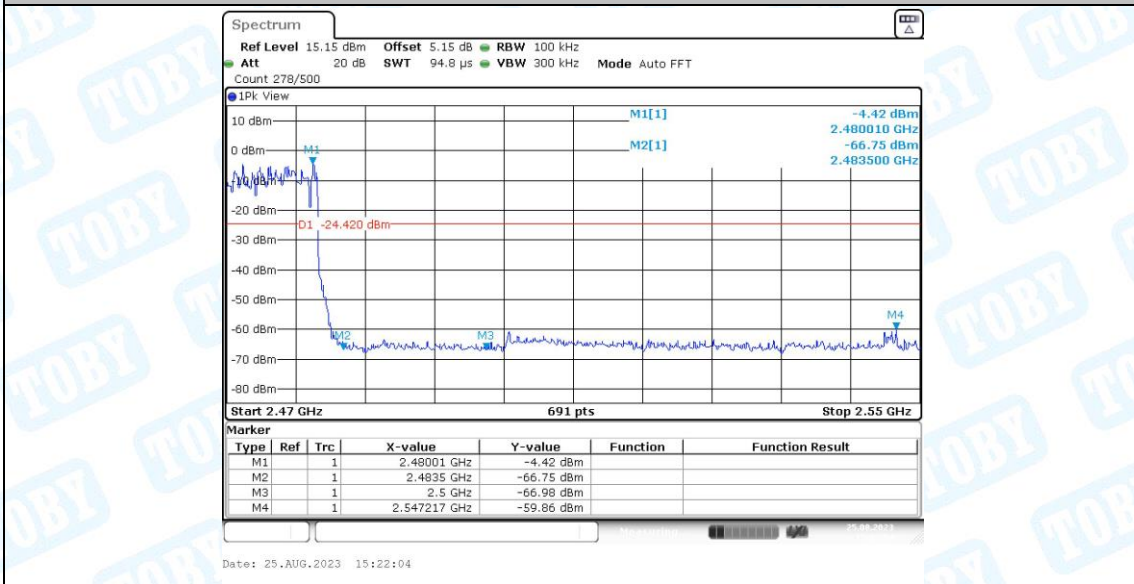
2DH5\_Ant1\_High\_2480



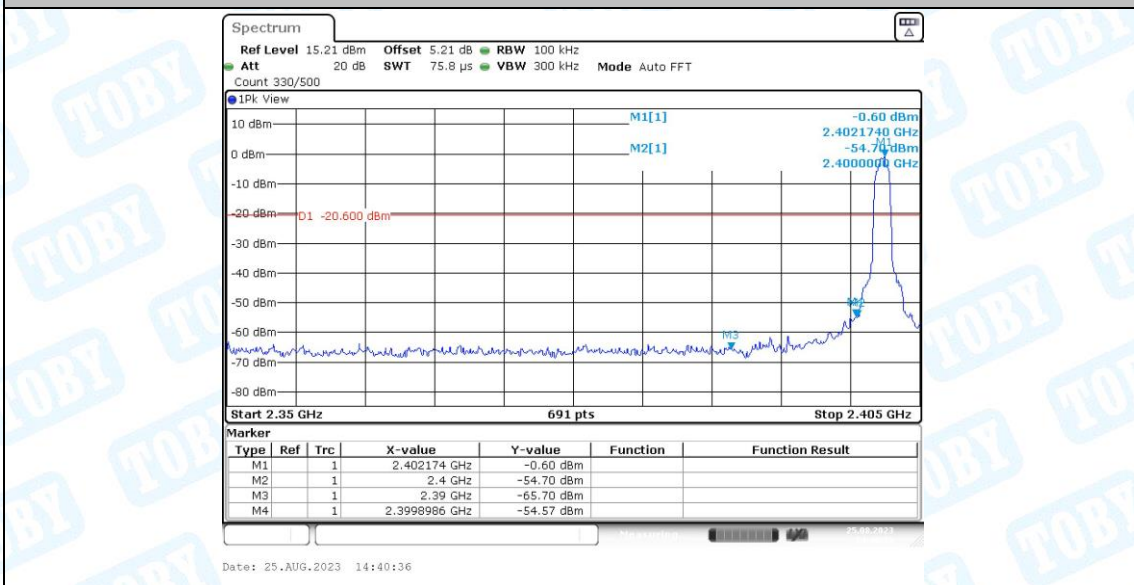
2DH5\_Ant1\_Low\_Hop\_2402



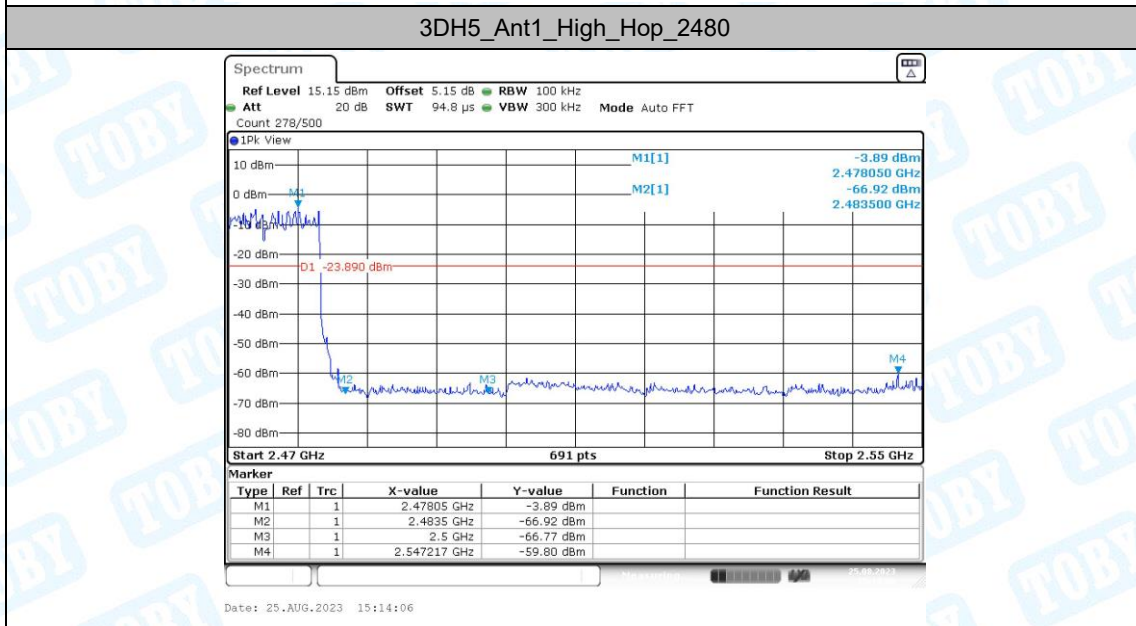
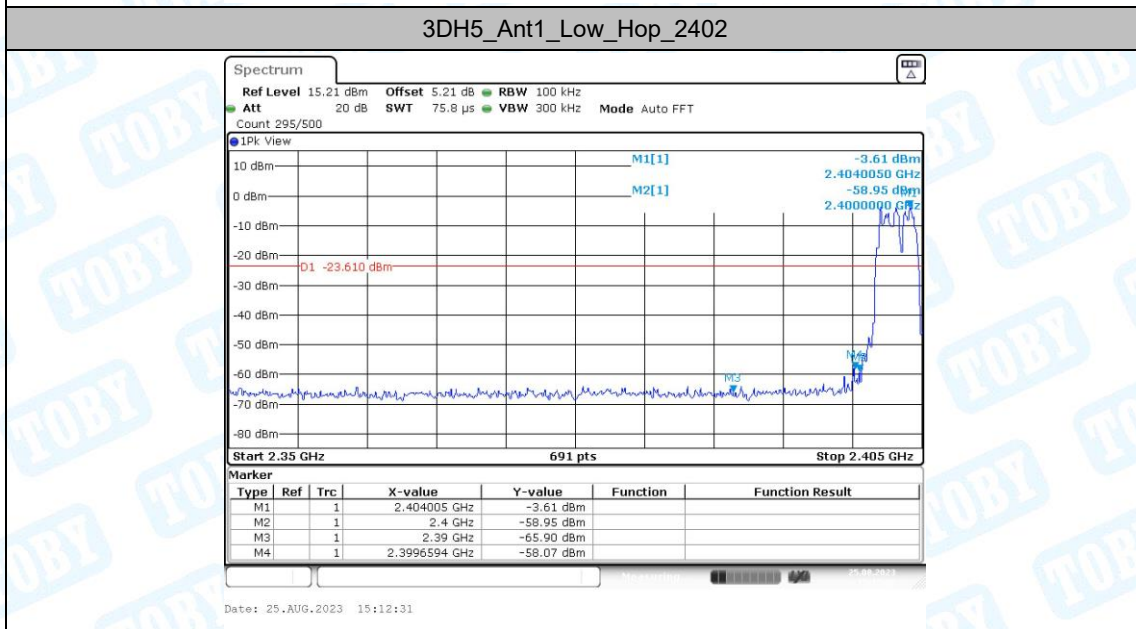
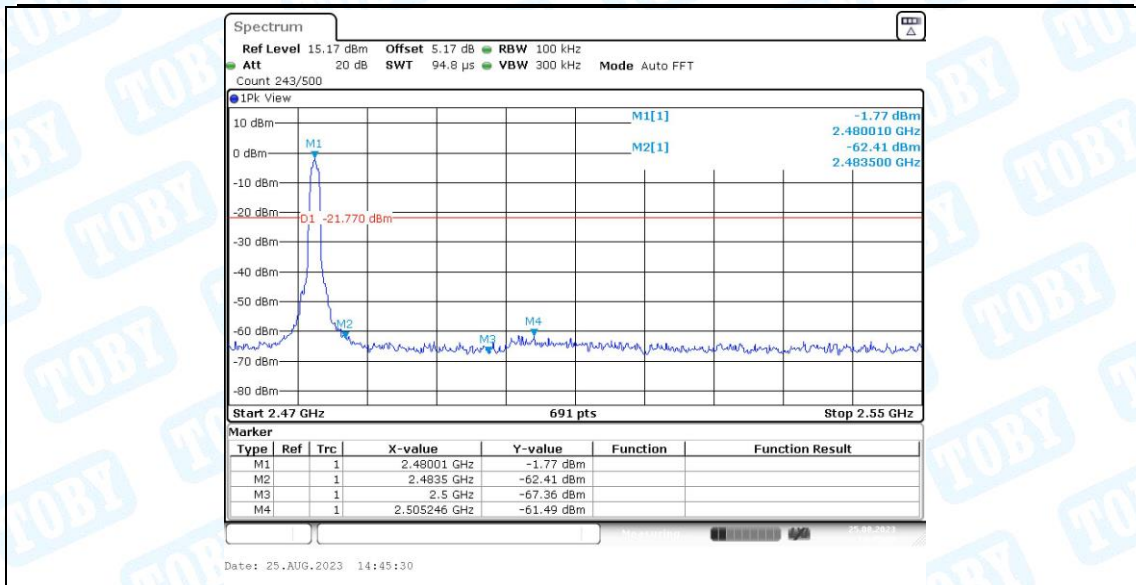
2DH5\_Ant1\_High\_Hop\_2480



3DH5\_Ant1\_Low\_2402



3DH5\_Ant1\_High\_2480



## 8. Conducted Spurious Emission

### 8.1. Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.33	-0.33	---	PASS
			30~1000	-0.33	-63.15	≤-20.33	PASS
			1000~26500	-0.33	-41.29	≤-20.33	PASS
		2441	Reference	-0.55	-0.55	---	PASS
			30~1000	-0.55	-64.32	≤-20.55	PASS
			1000~26500	-0.55	-41.04	≤-20.55	PASS
		2480	Reference	-1.76	-1.76	---	PASS
			30~1000	-1.76	-62.82	≤-21.76	PASS
			1000~26500	-1.76	-40.18	≤-21.76	PASS
2DH5	Ant1	2402	Reference	-0.32	-0.32	---	PASS
			30~1000	-0.32	-64	≤-20.32	PASS
			1000~26500	-0.32	-44.11	≤-20.32	PASS
		2441	Reference	-0.60	-0.60	---	PASS
			30~1000	-0.60	-63.33	≤-20.6	PASS
			1000~26500	-0.60	-39.58	≤-20.6	PASS
		2480	Reference	-1.79	-1.79	---	PASS
			30~1000	-1.79	-63.53	≤-21.79	PASS
			1000~26500	-1.79	-41.43	≤-21.79	PASS
3DH5	Ant1	2402	Reference	-0.03	-0.03	---	PASS
			30~1000	-0.03	-62.93	≤-20.03	PASS
			1000~26500	-0.03	-43.68	≤-20.03	PASS
		2441	Reference	-0.39	-0.39	---	PASS
			30~1000	-0.39	-63.45	≤-20.39	PASS
			1000~26500	-0.39	-38.34	≤-20.39	PASS
		2480	Reference	-1.53	-1.53	---	PASS
			30~1000	-1.53	-59.54	≤-21.53	PASS
			1000~26500	-1.53	-40.96	≤-21.53	PASS

## 8.2. Test Graphs

