

## 1. Bandwidth

### 1.1 Test Result

#### 1.1.1 OBW

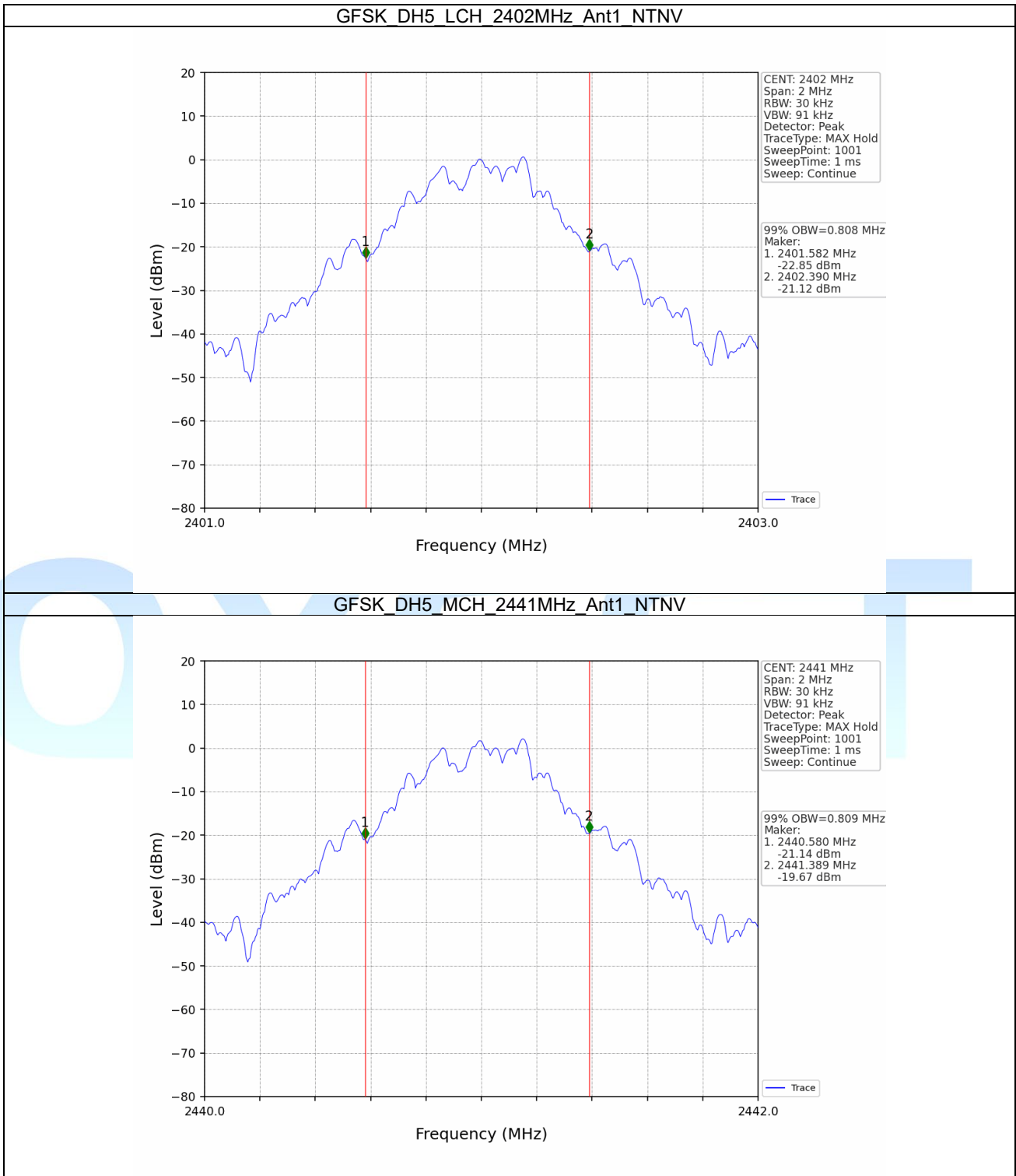
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.808	/	Pass
		2441	DH5	1	0.809	/	Pass
		2480	DH5	1	0.813	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.191	/	Pass
		2441	2DH5	1	1.189	/	Pass
		2480	2DH5	1	1.189	/	Pass
8DPSK	SISO	2402	3DH5	1	1.121	/	Pass
		2441	3DH5	1	1.121	/	Pass
		2480	3DH5	1	1.120	/	Pass

#### 1.1.2 20dB BW

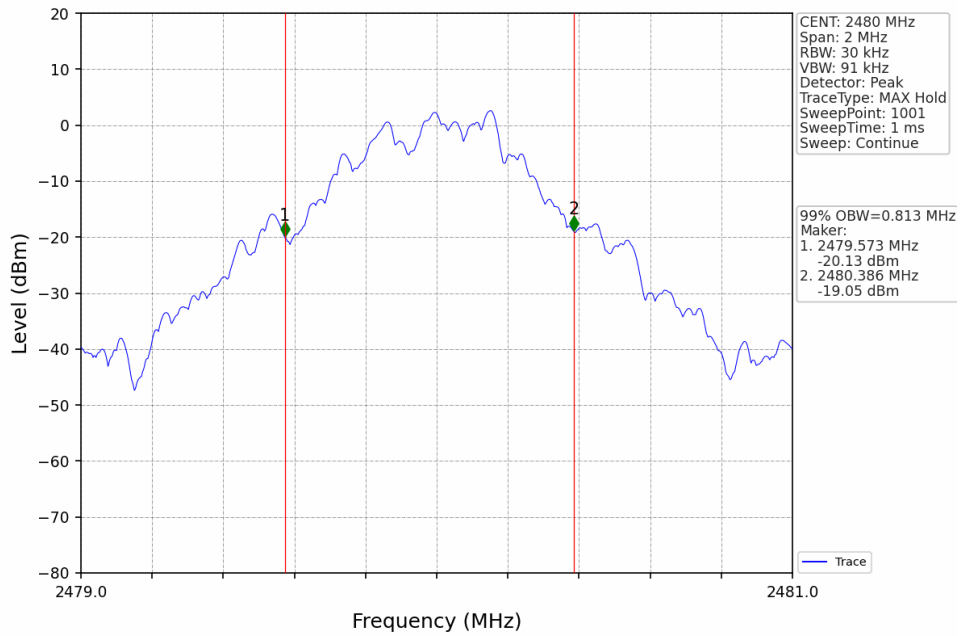
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.837	/	Pass
		2441	DH5	1	0.844	/	Pass
		2480	DH5	1	0.931	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.312	/	Pass
		2441	2DH5	1	1.312	/	Pass
		2480	2DH5	1	1.312	/	Pass
8DPSK	SISO	2402	3DH5	1	1.232	/	Pass
		2441	3DH5	1	1.231	/	Pass
		2480	3DH5	1	1.230	/	Pass

## 1.2 Test Graph

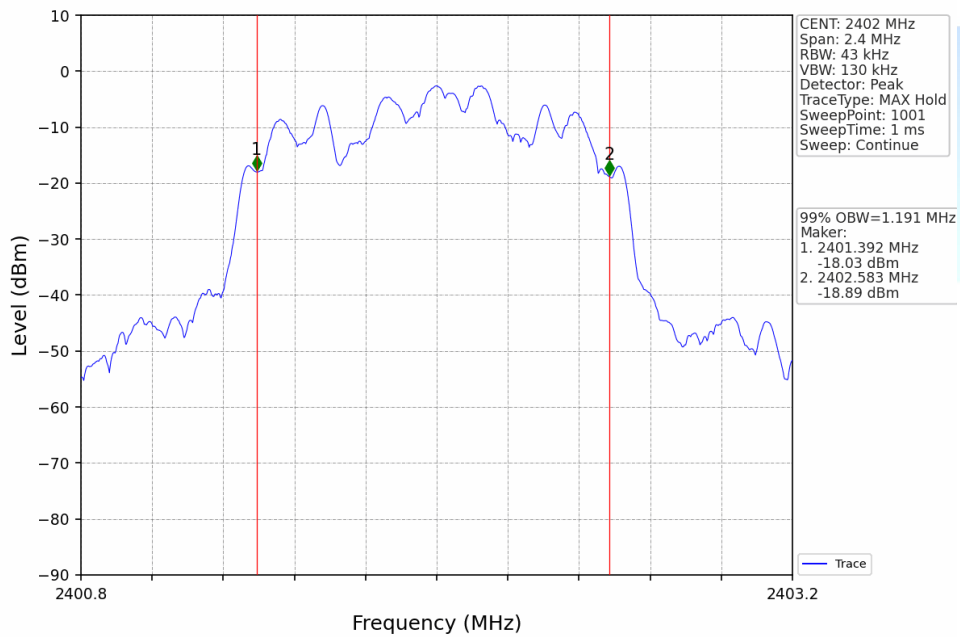
### 1.2.1 OBW



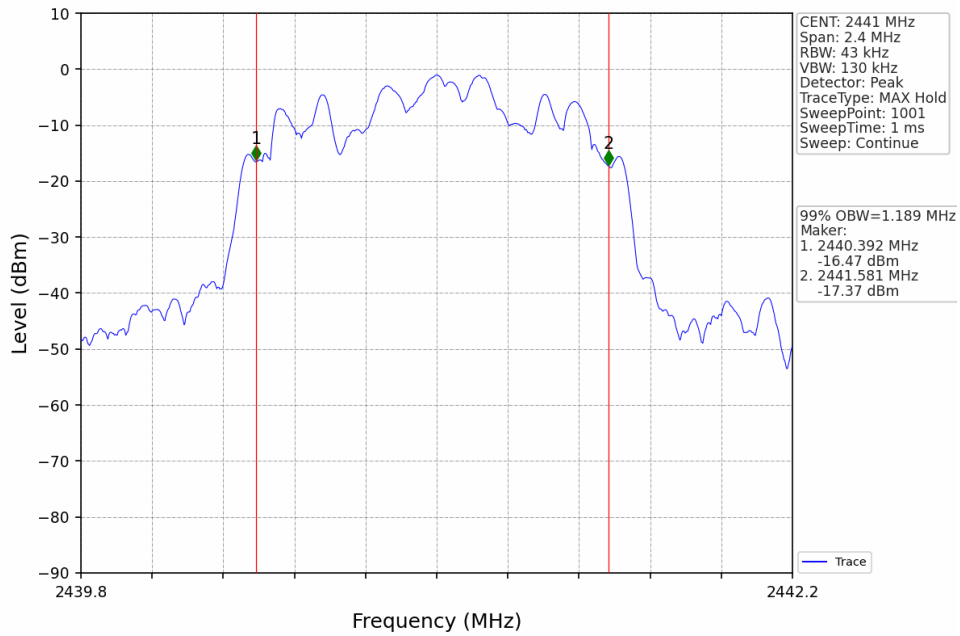
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



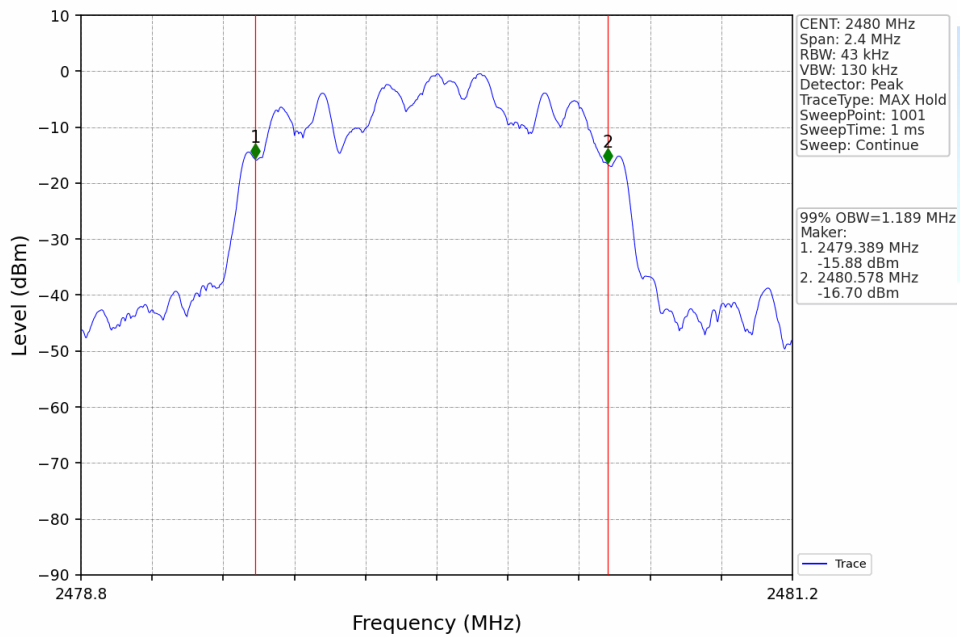
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



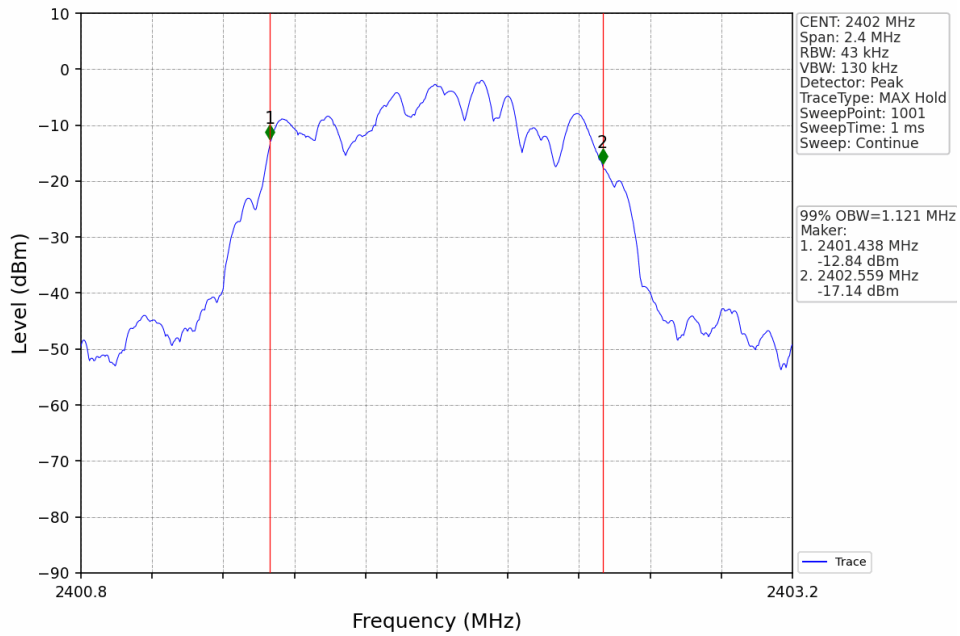
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



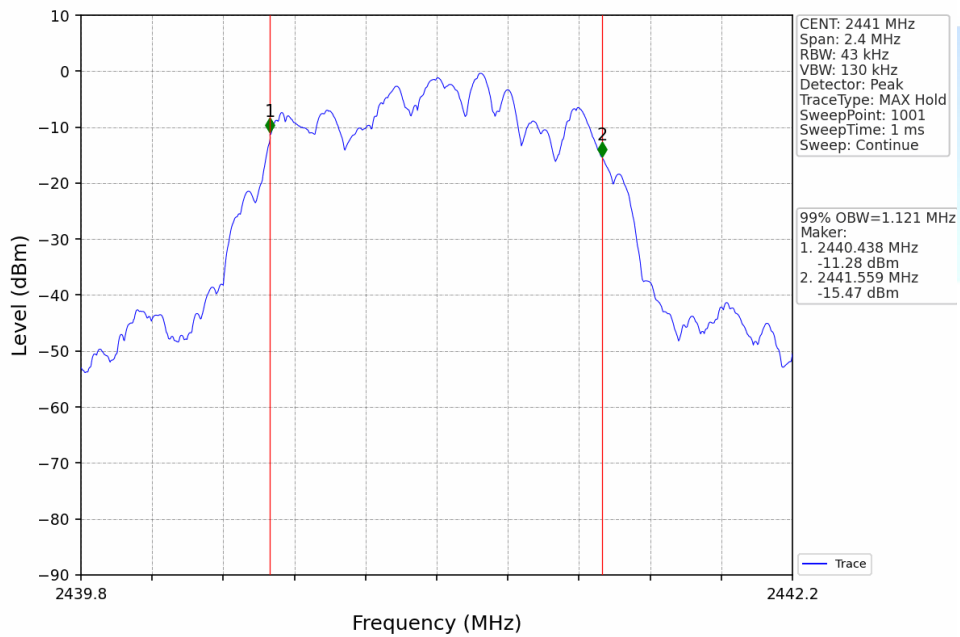
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

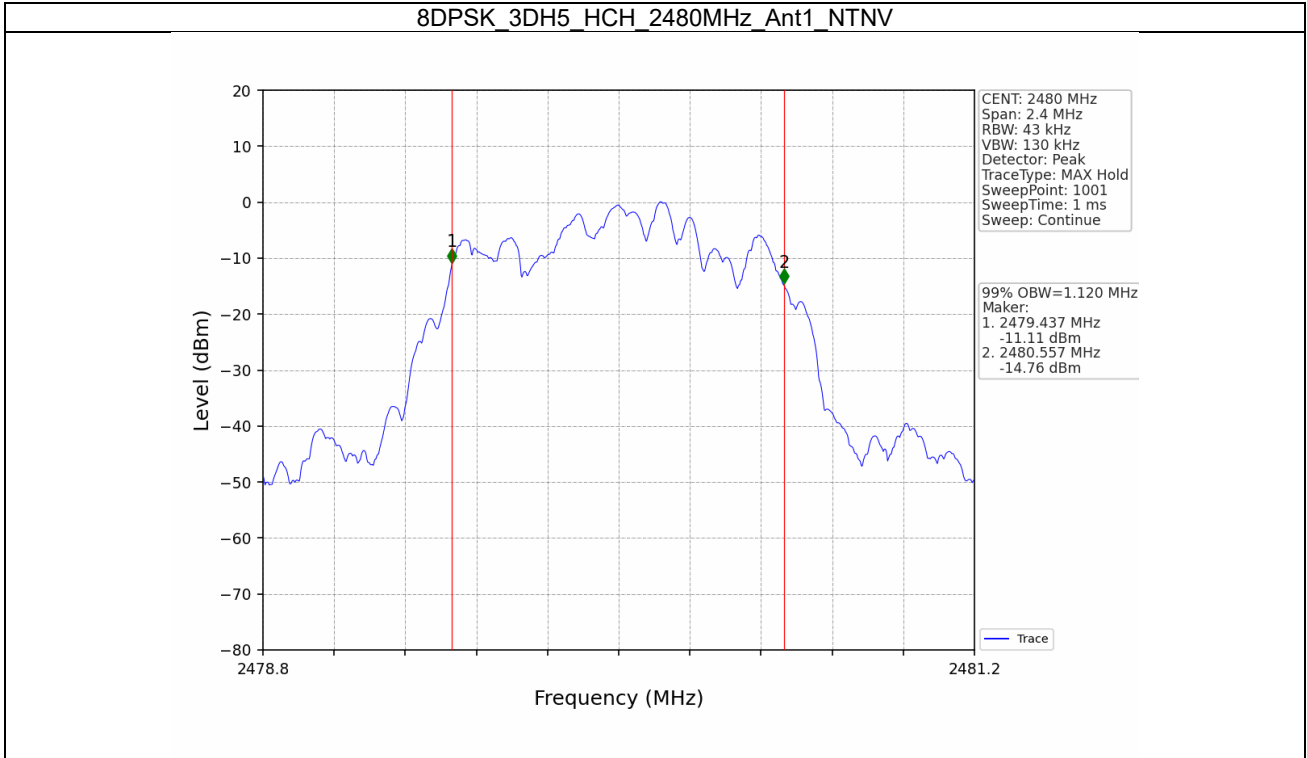


8DPSK 3DH5\_LCH\_2402MHz\_Ant1\_NTNV

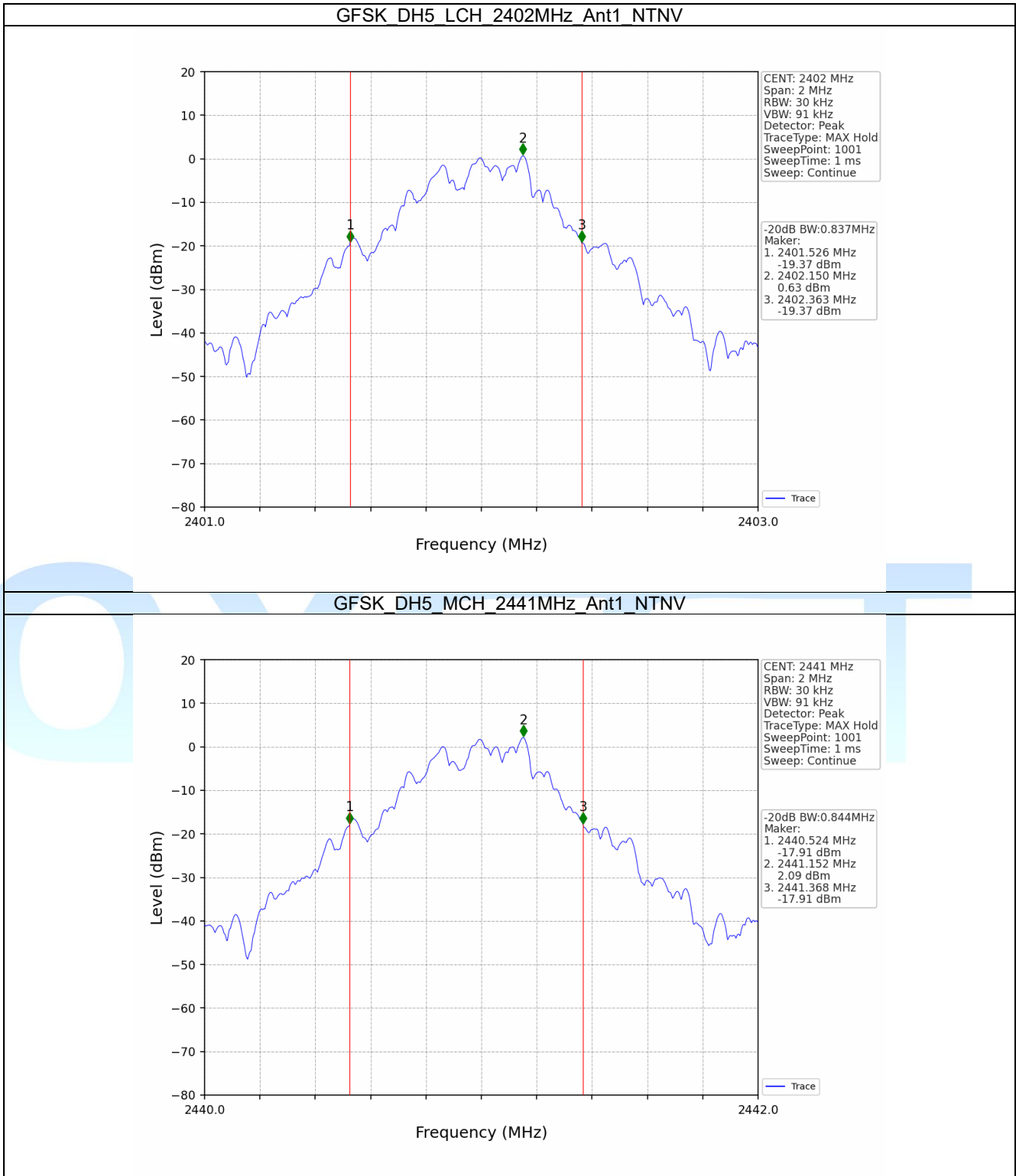


8DPSK 3DH5\_MCH\_2441MHz\_Ant1\_NTNV

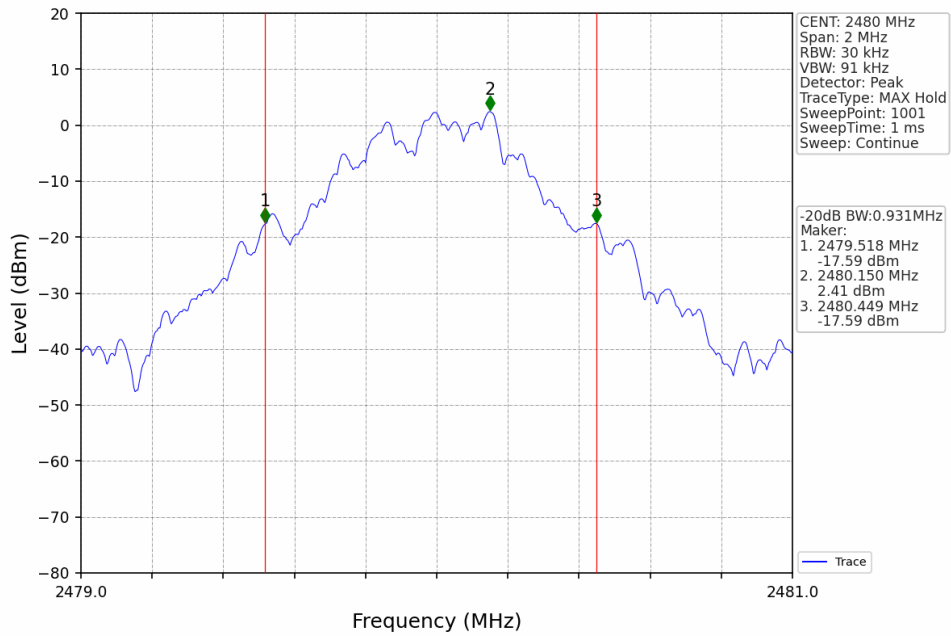




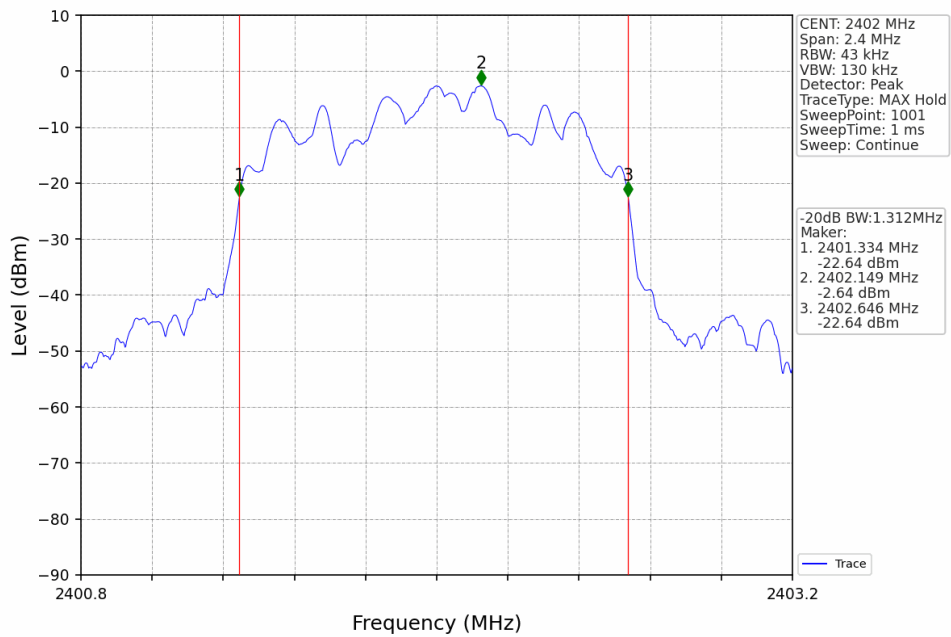
1.2.2 20dB BW



GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV

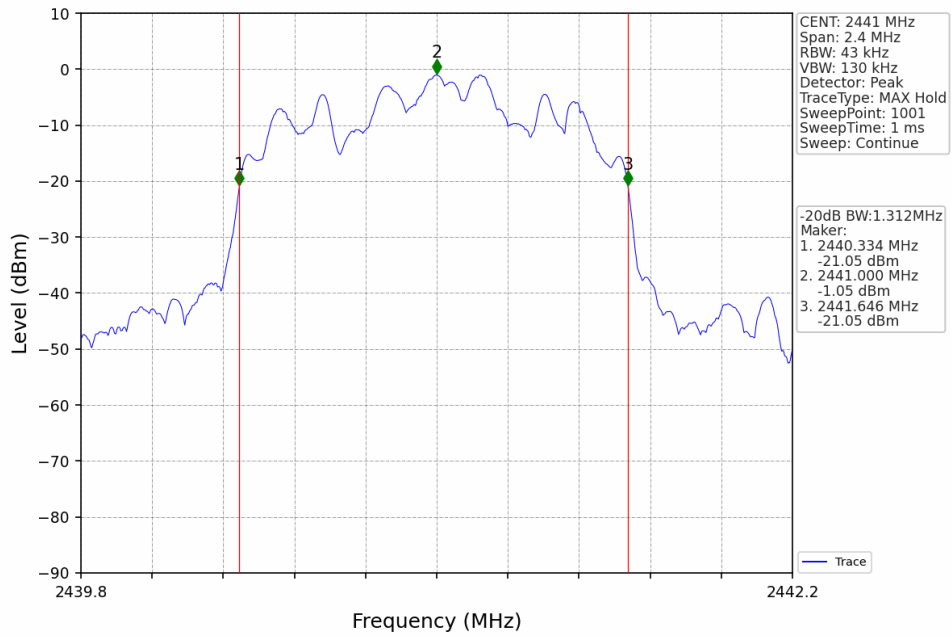


Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV

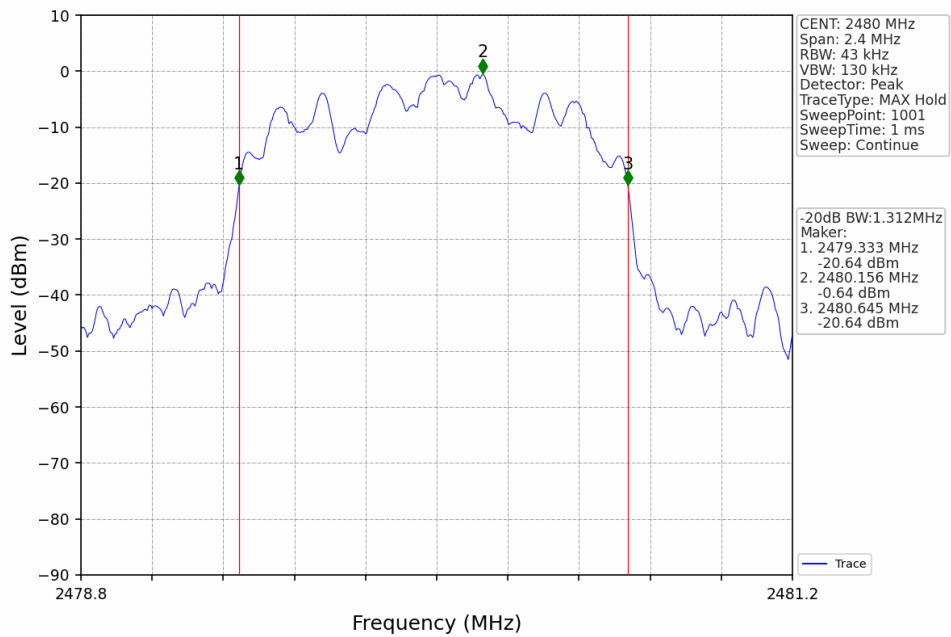




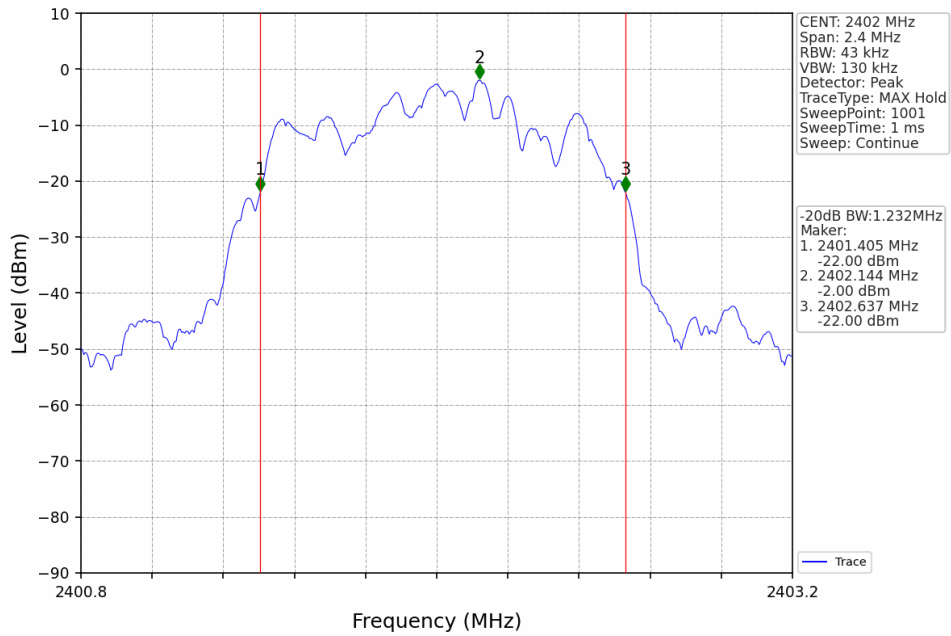
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



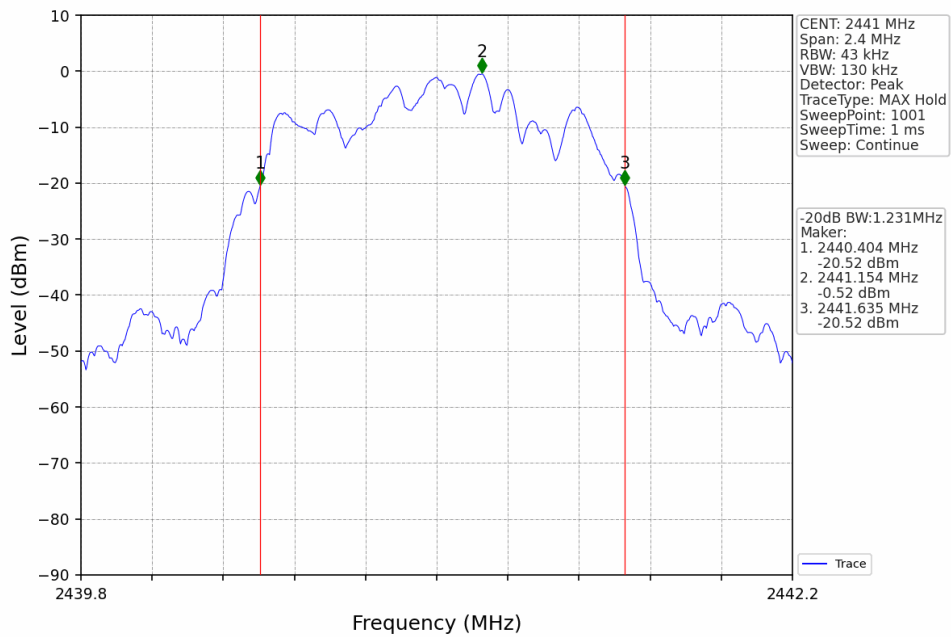
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

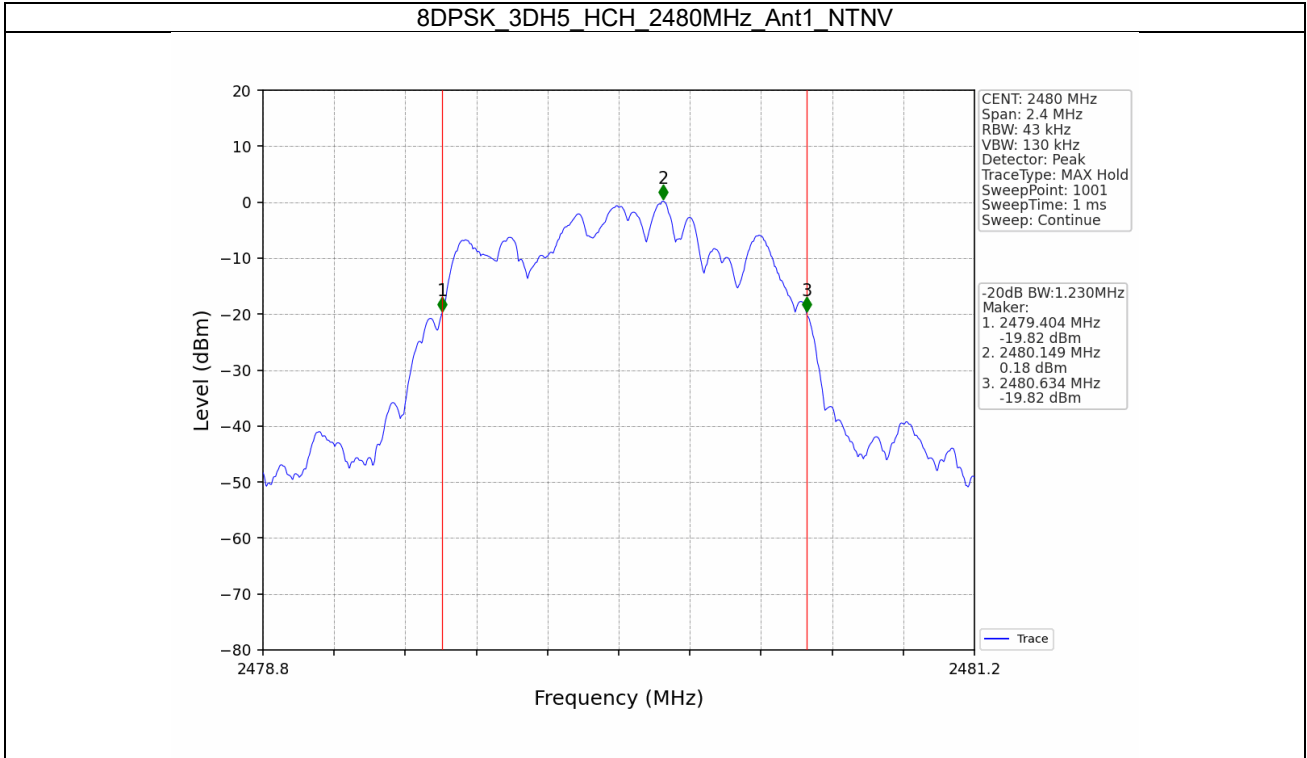


8DPSK 3DH5\_LCH\_2402MHz\_Ant1\_NTNV



8DPSK 3DH5\_MCH\_2441MHz\_Ant1\_NTNV





## 2. Maximum Conducted Output Power

### 2.1 Test Result

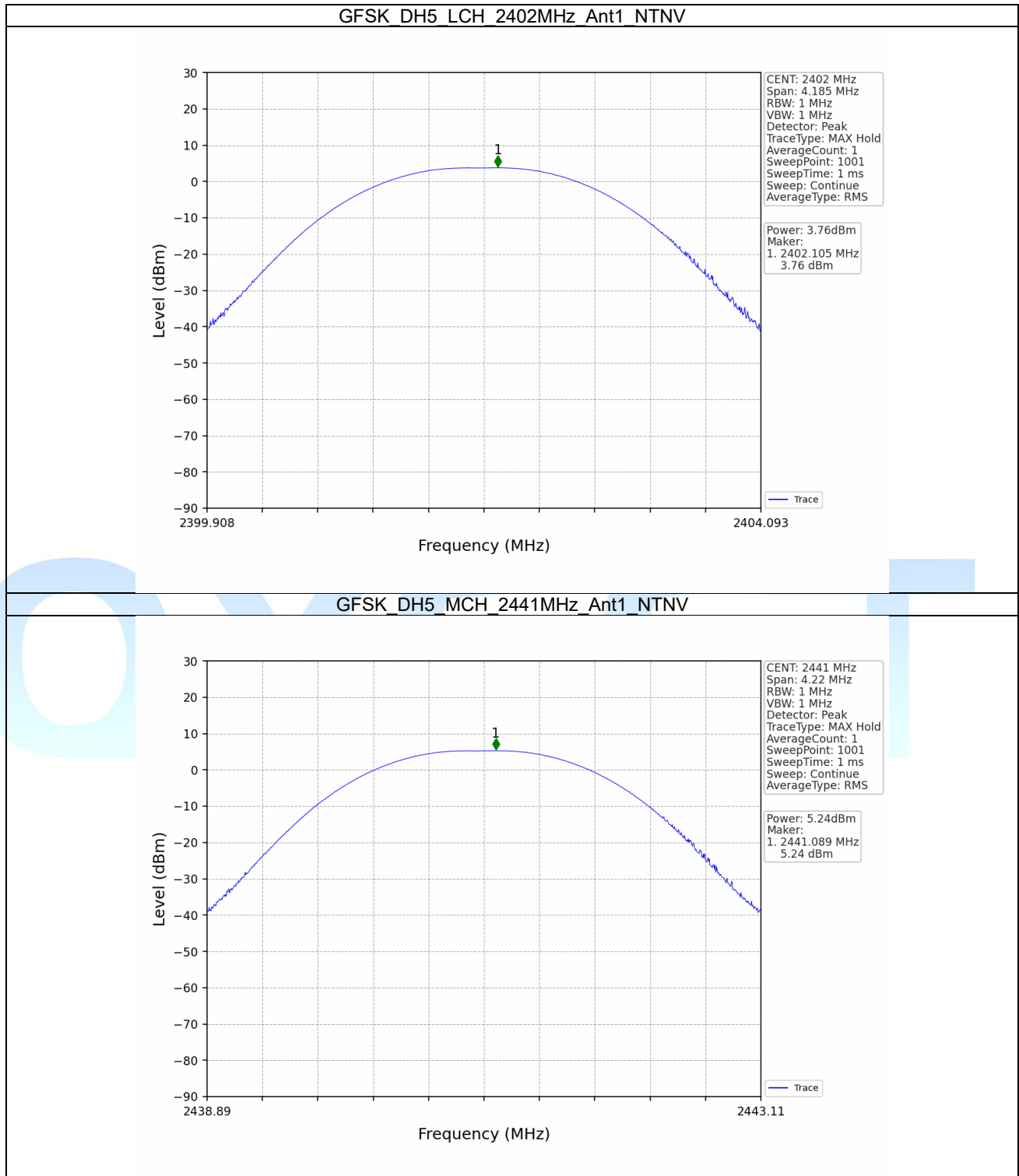
#### 2.1.1 Power

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	3.76	<=20.97	Pass
		2441	DH5	5.24	<=20.97	Pass
		2480	DH5	5.79	<=20.97	Pass
Pi/4DQPSK	SISO	2402	2DH5	1.98	<=20.97	Pass
		2441	2DH5	3.52	<=20.97	Pass
		2480	2DH5	4.08	<=20.97	Pass
8DPSK	SISO	2402	3DH5	2.96	<=20.97	Pass
		2441	3DH5	4.50	<=20.97	Pass
		2480	3DH5	5.06	<=20.97	Pass

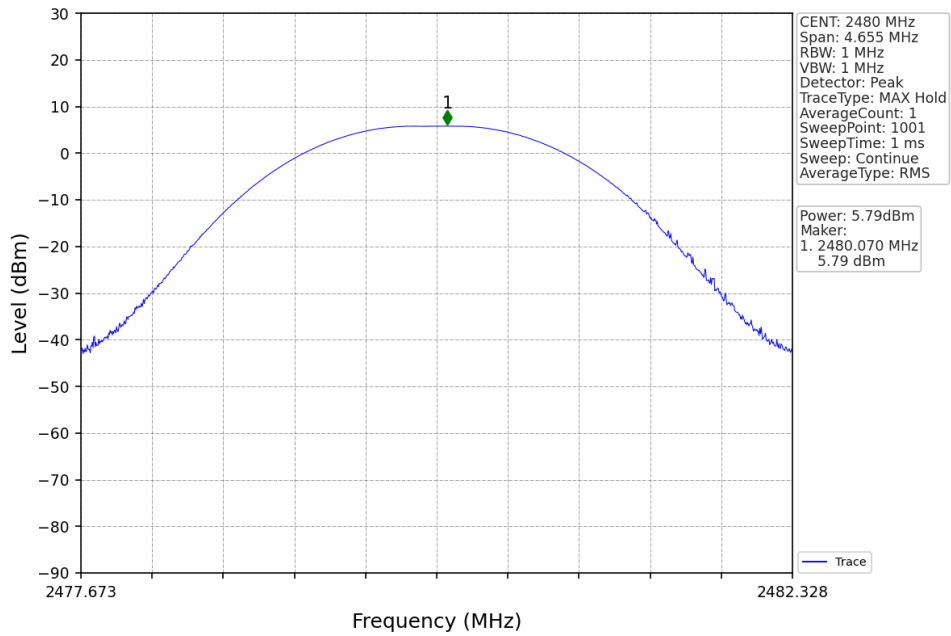
Note1: Antenna Gain: Ant1: 1.67dBi;

## 2.2 Test Graph

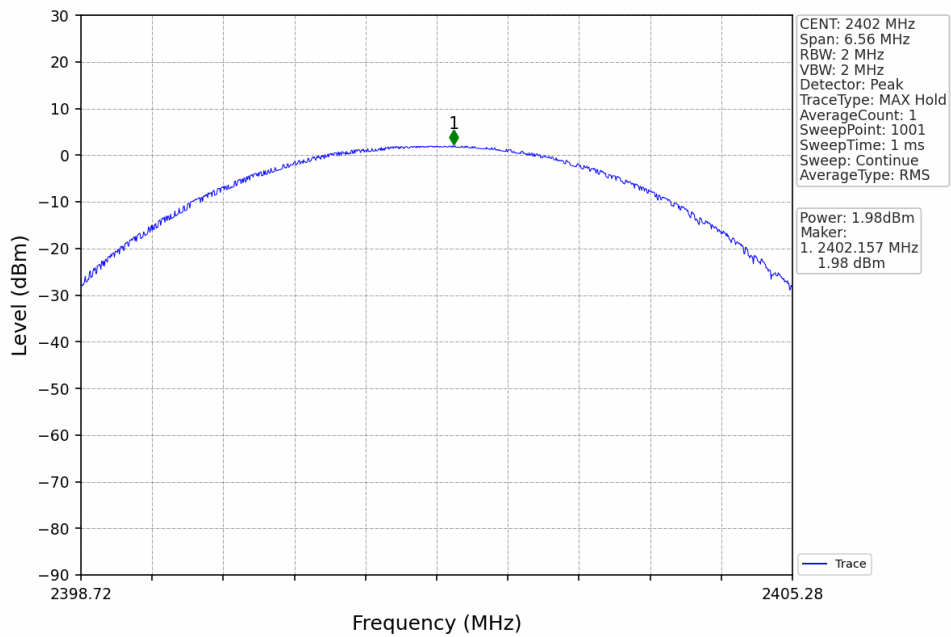
### 2.2.1 Power



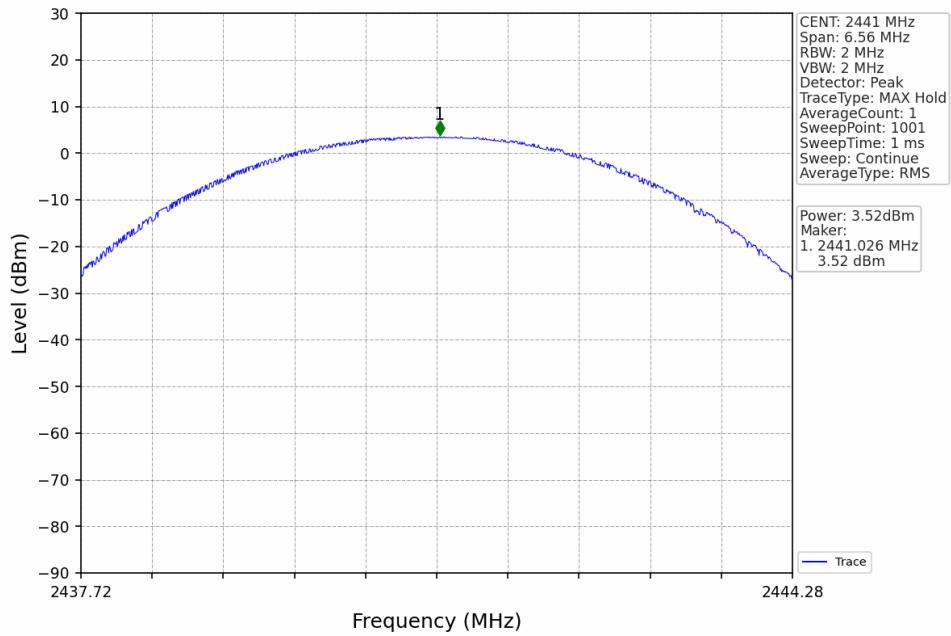
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



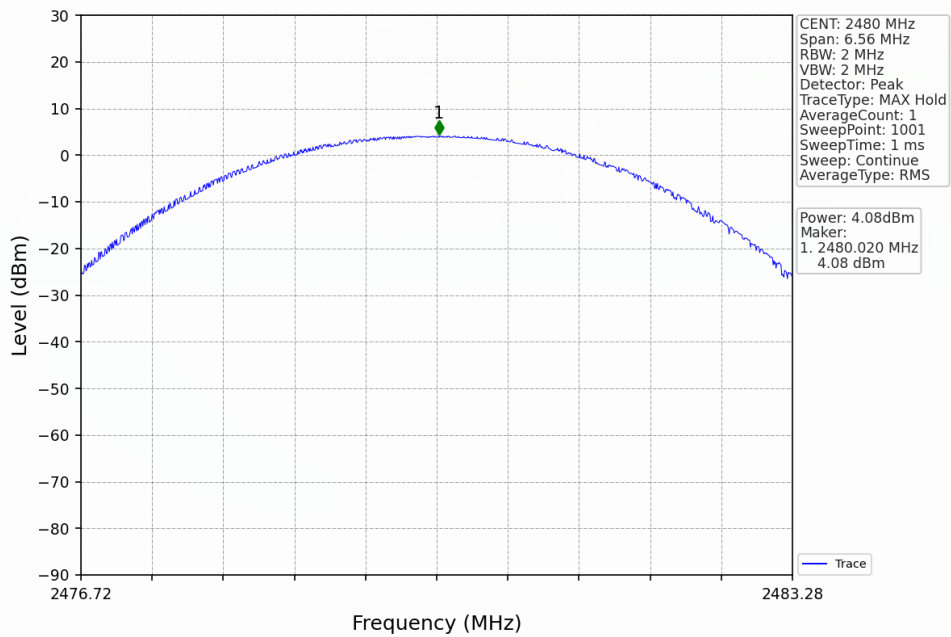
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



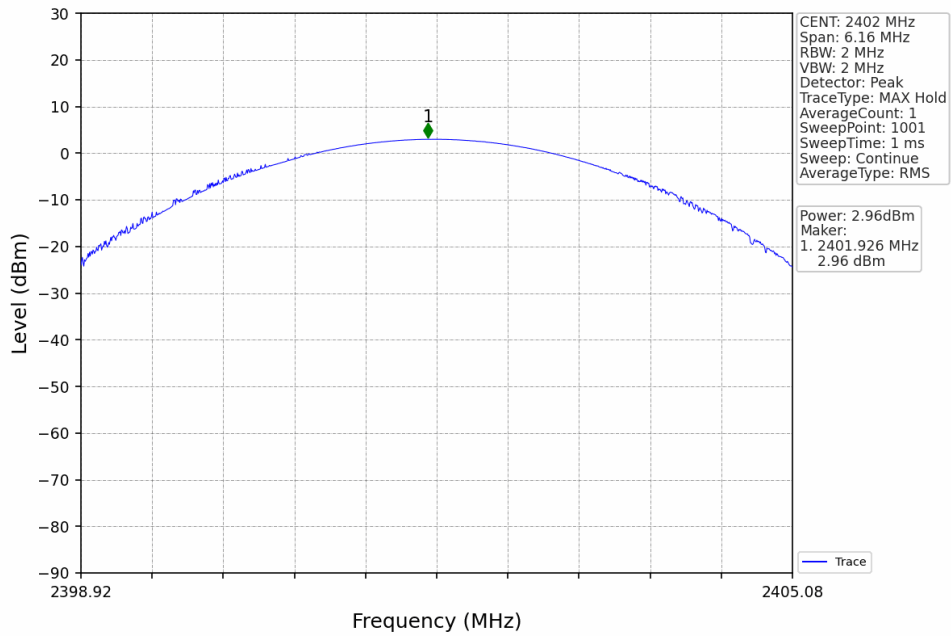
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



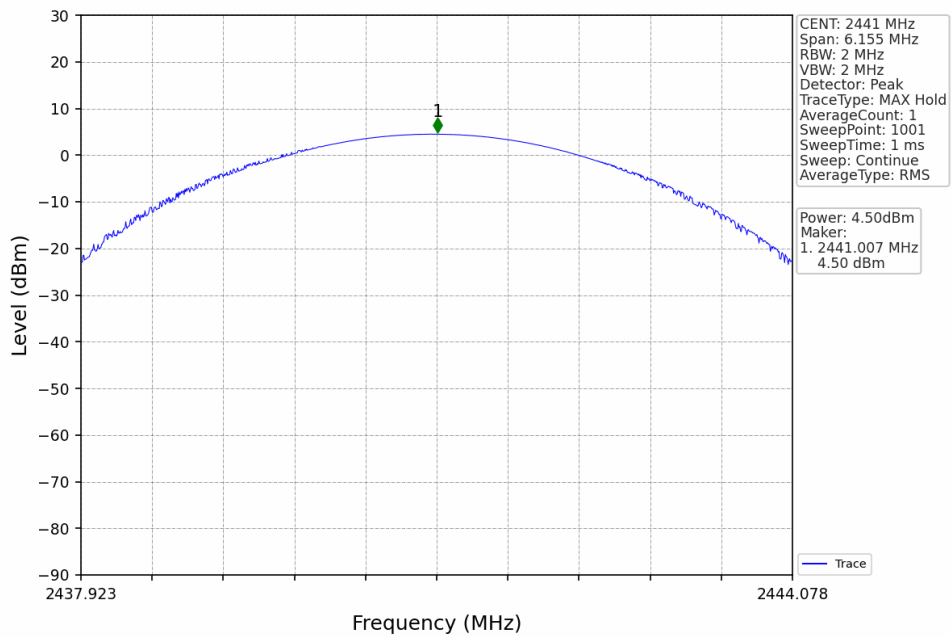
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



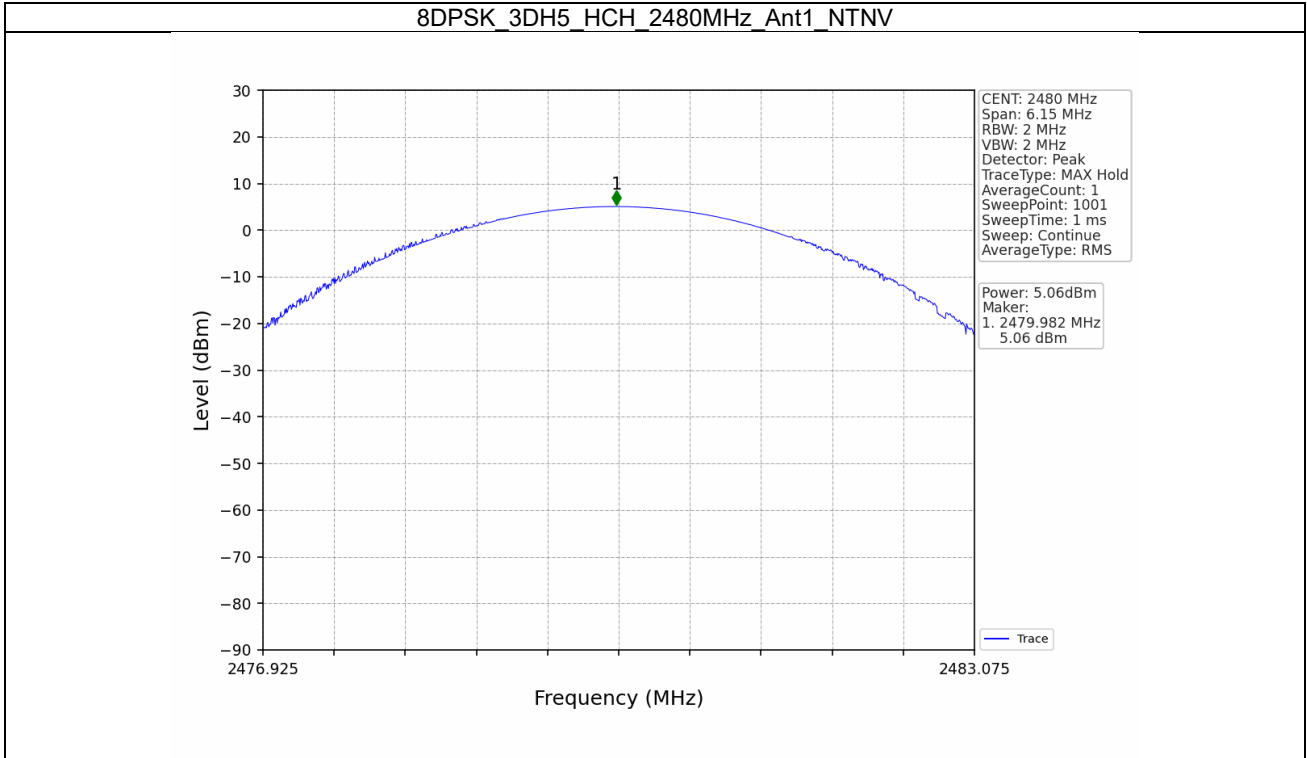
8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV







### 3. Carrier Frequency Separation

#### 3.1 Test Result

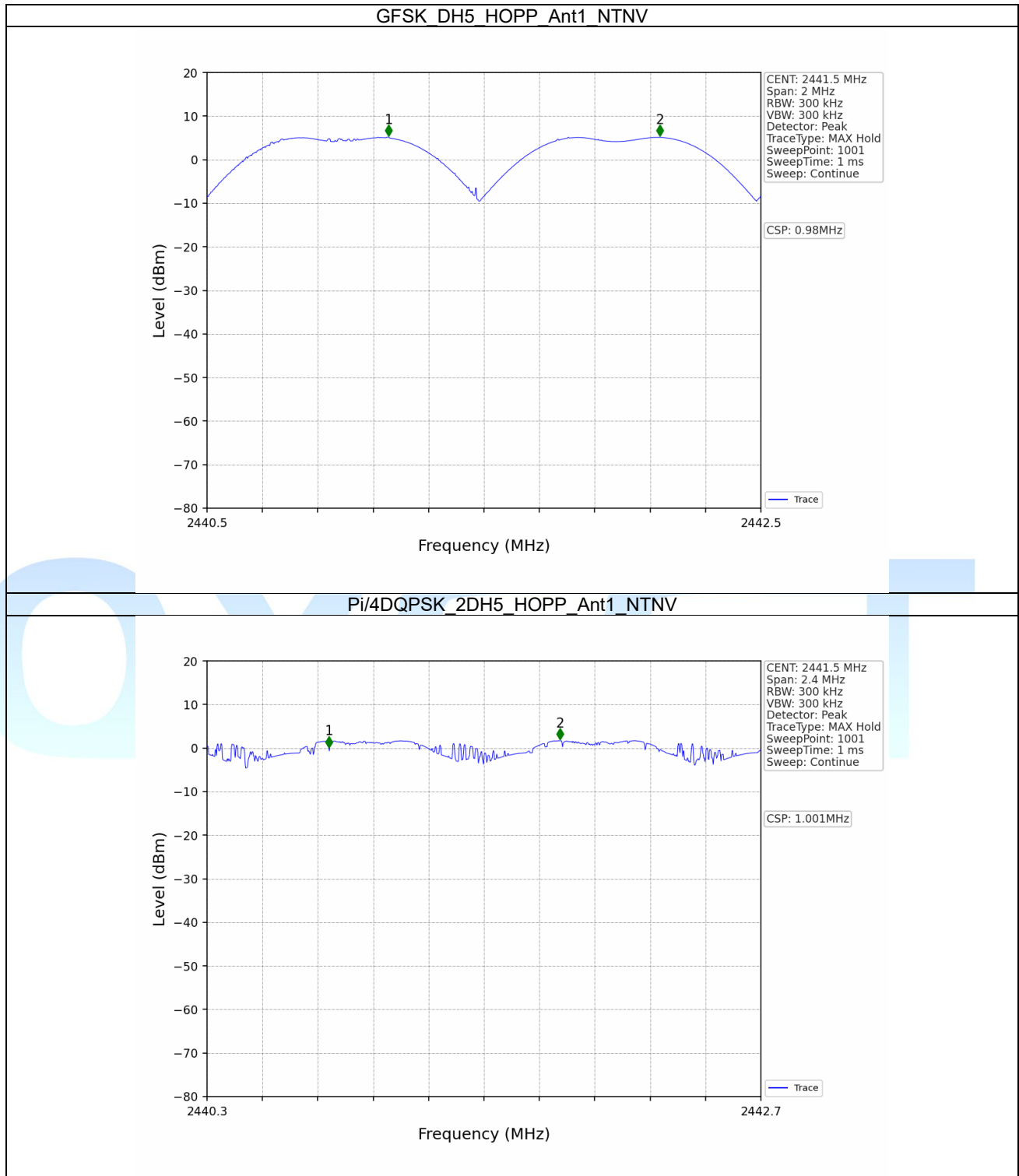
##### 3.1.1 Ant1

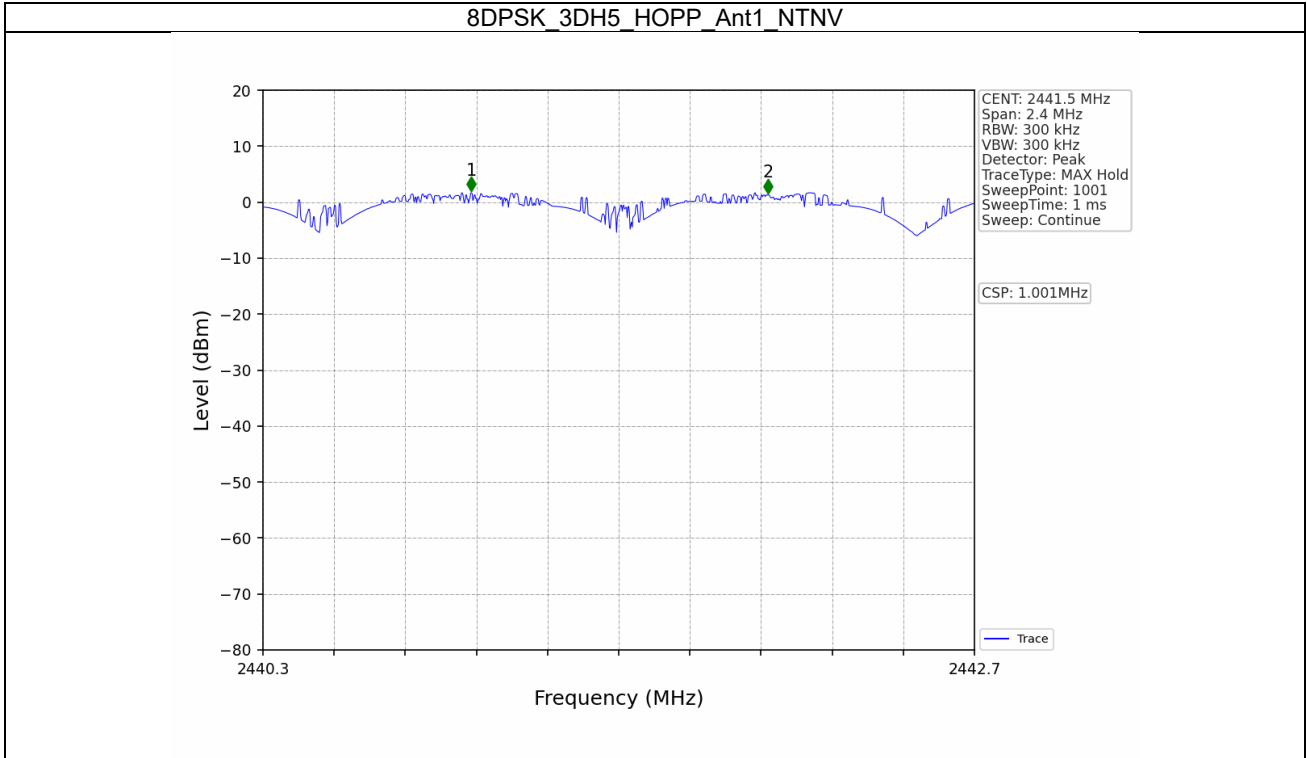
Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	0.980	0.931	$\geq 0.62$	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.001	1.312	$\geq 0.875$	Pass
8DPSK	SISO	HOPP	3DH5	1.001	1.232	$\geq 0.821$	Pass



### 3.2 Test Graph

#### 3.2.1 Ant1



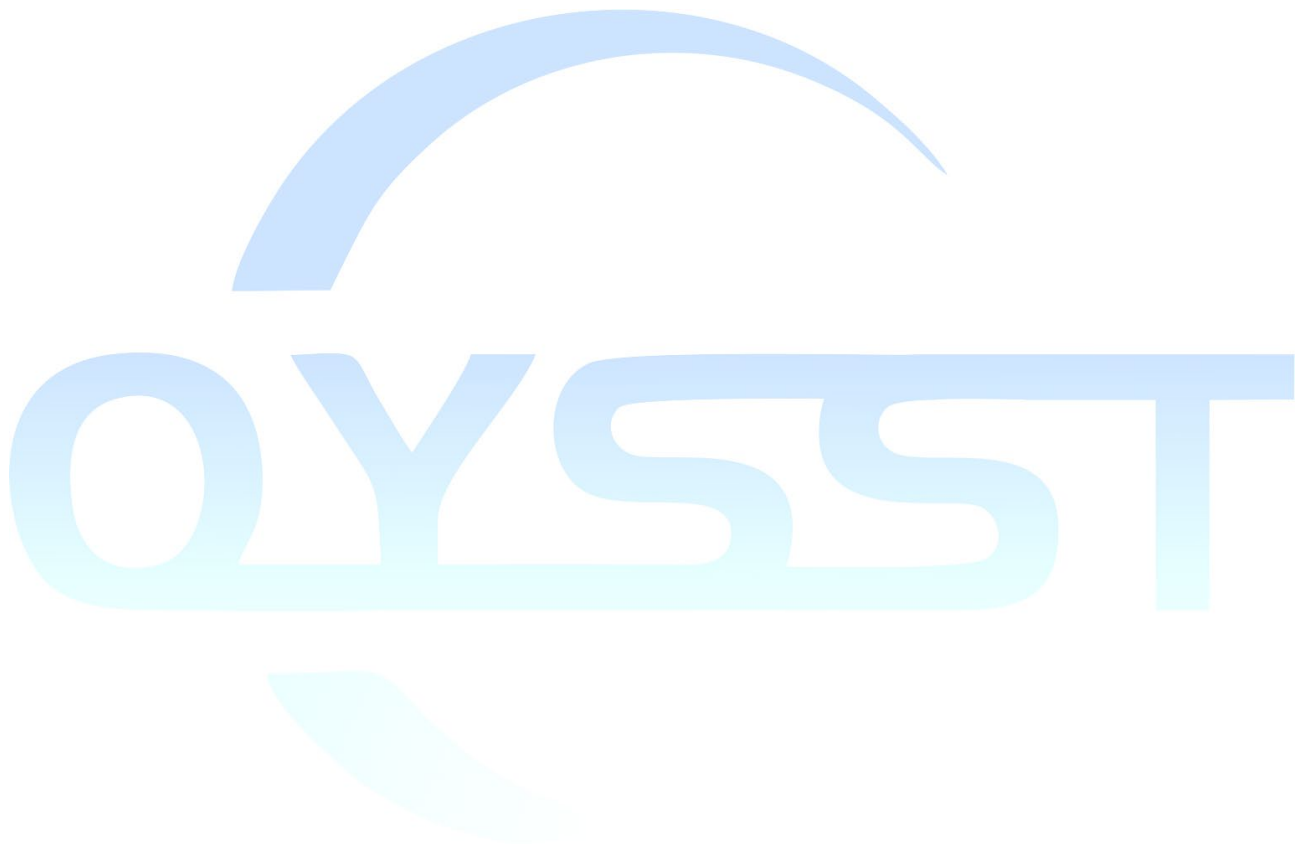


## 4. Number of Hopping Frequencies

### 4.1 Test Result

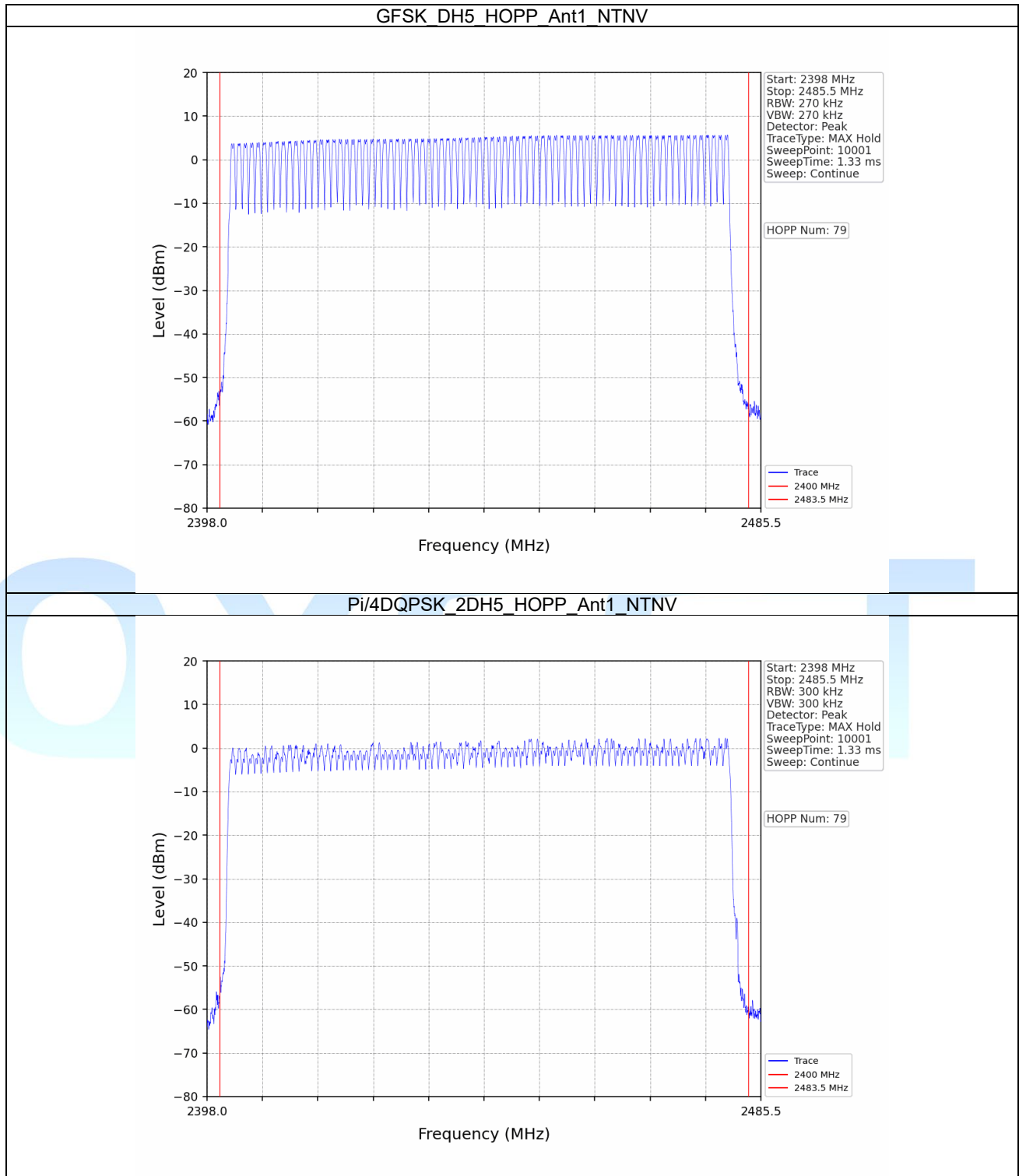
#### 4.1.1 HoppNum

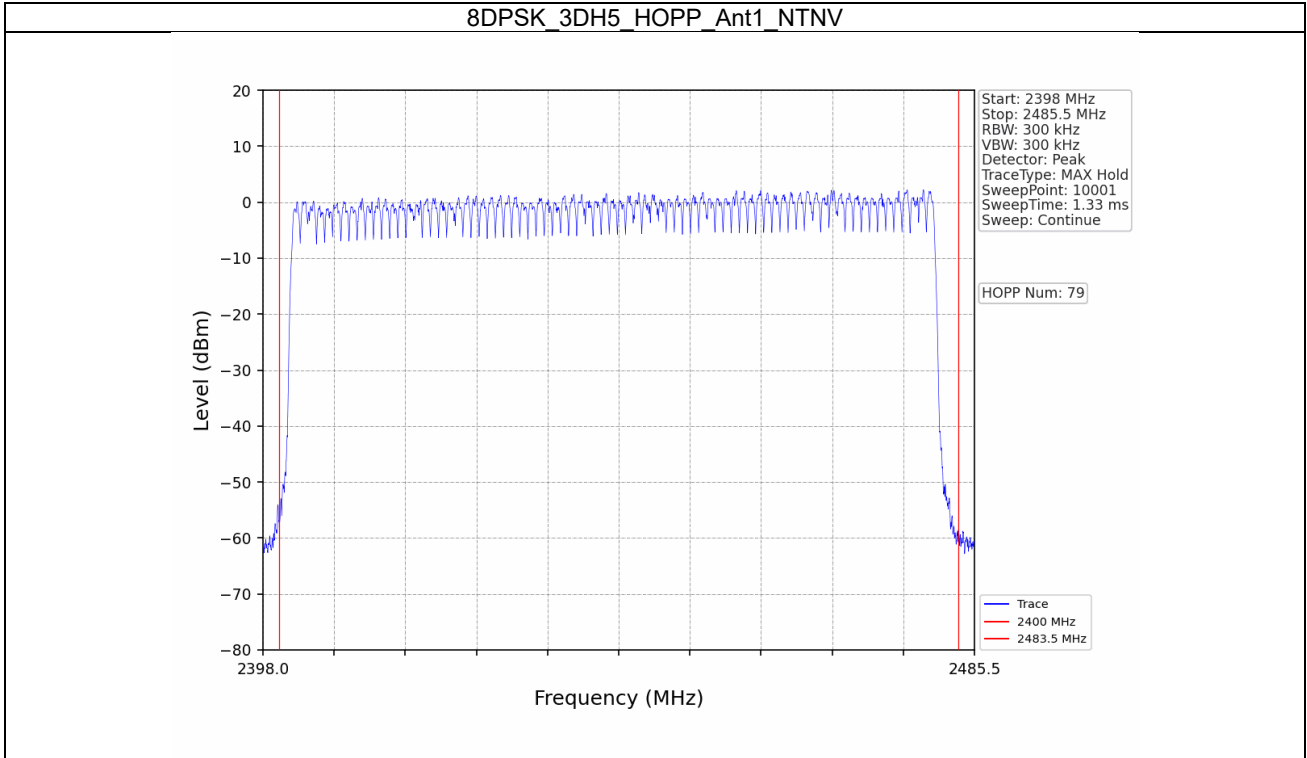
Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	$\geq 15$	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	$\geq 15$	Pass
8DPSK	SISO	HOPP	3DH5	79	$\geq 15$	Pass



## 4.2 Test Graph

### 4.2.1 HoppNum





## 5. Time of Occupancy (Dwell Time)

### 5.1 Test Result

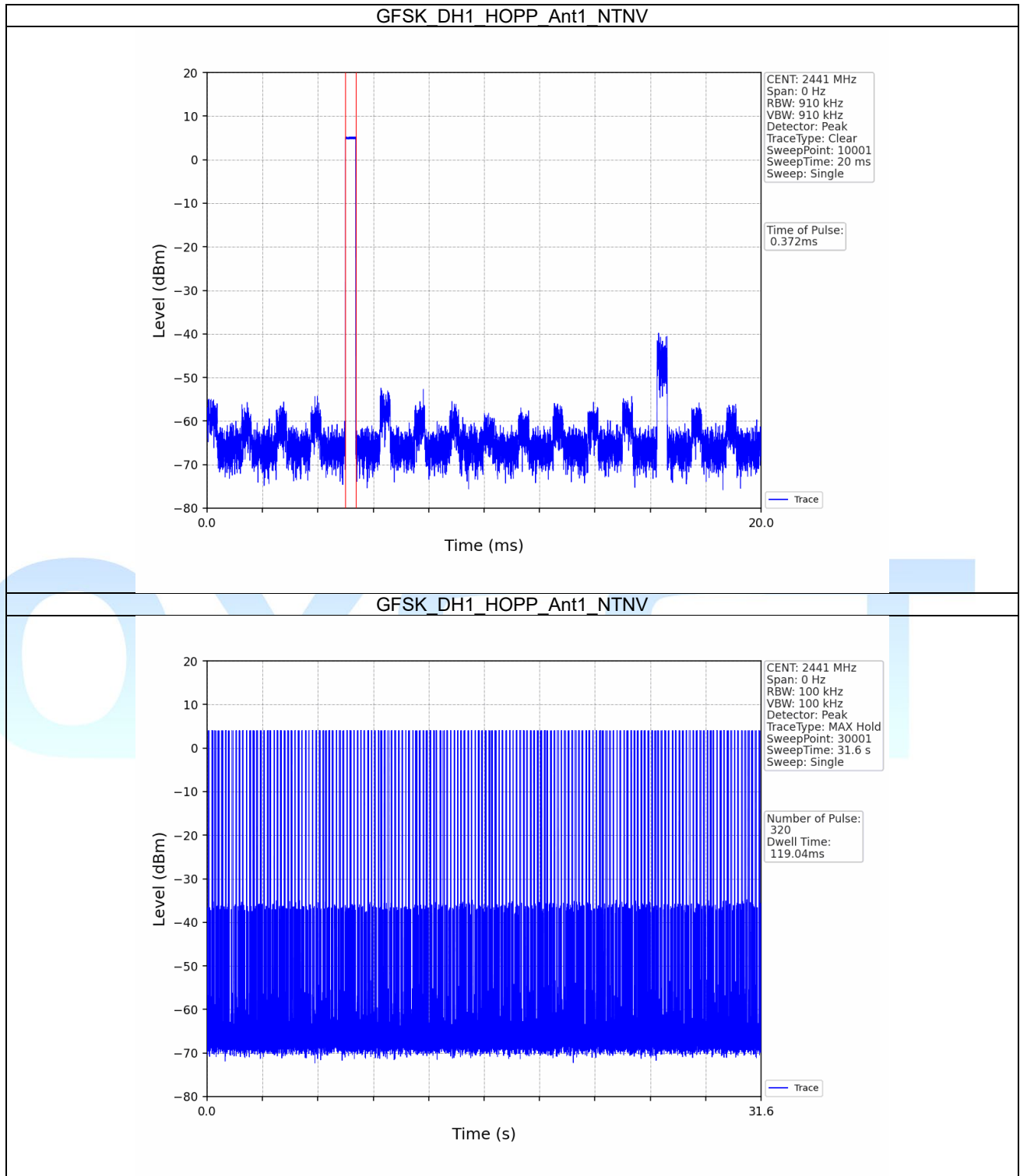
#### 5.1.1 Ant1

Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.372	31.600	320	119.040	<=400	Pass
			DH3	1.630	31.600	150	244.500	<=400	Pass
			DH5	2.878	31.600	111	319.458	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.382	31.600	320	122.240	<=400	Pass
			2DH3	1.634	31.600	147	240.198	<=400	Pass
			2DH5	2.882	31.600	109	314.138	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.382	31.600	320	122.240	<=400	Pass
			3DH3	1.632	31.600	171	279.072	<=400	Pass
			3DH5	2.884	31.600	113	325.892	<=400	Pass

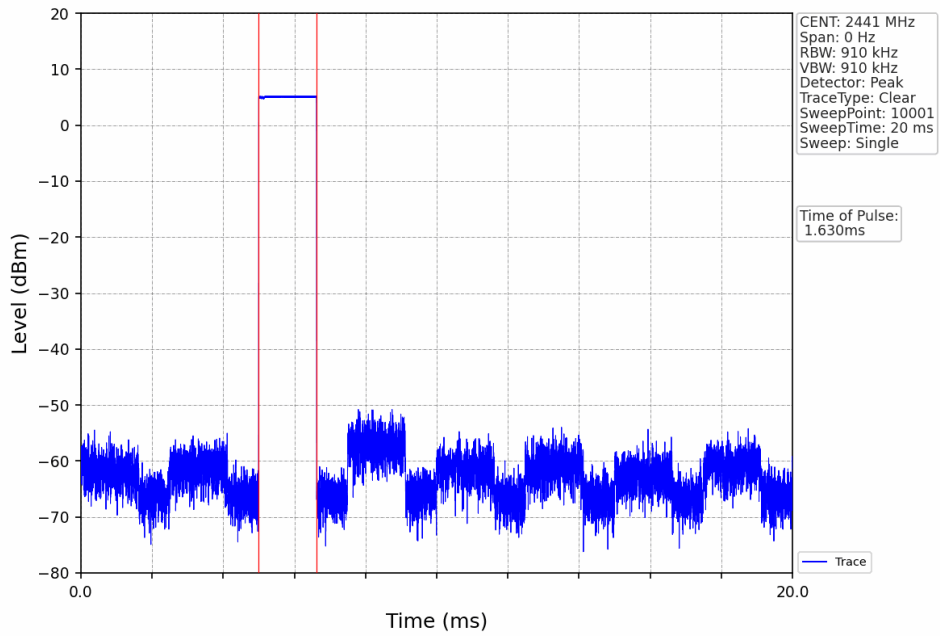


## 5.2 Test Graph

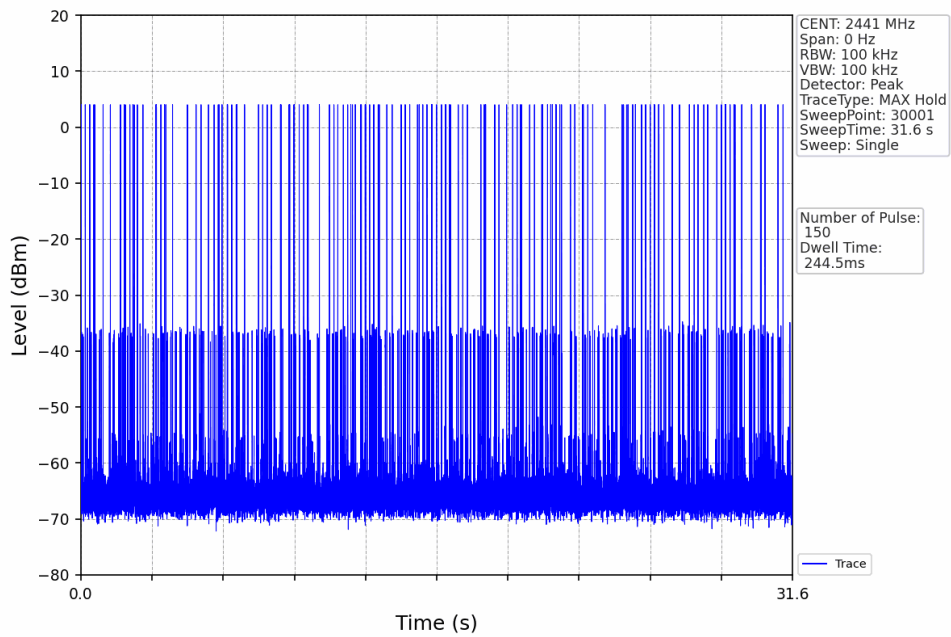
### 5.2.1 Ant1



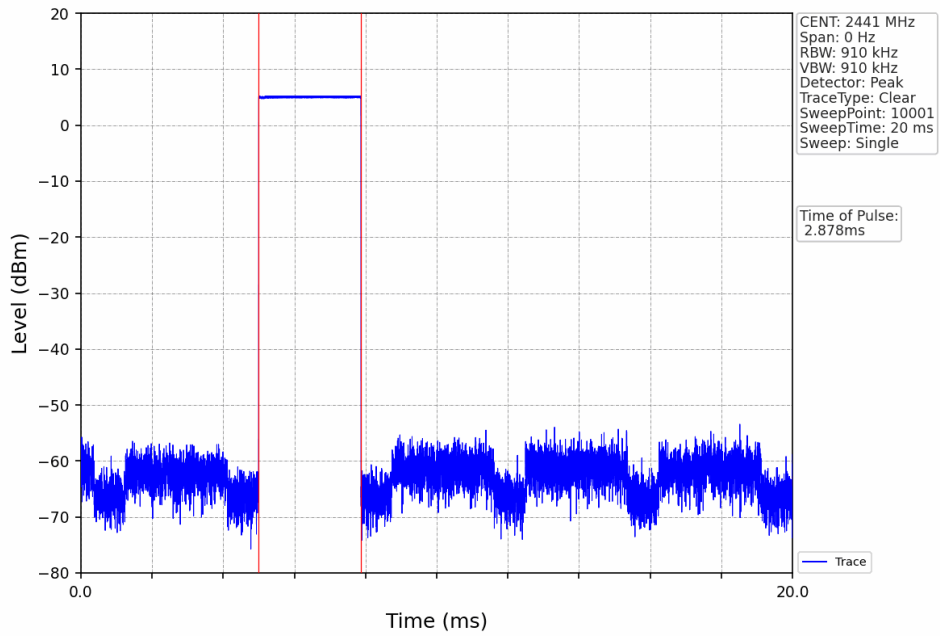
GFSK DH3\_HOPP\_Ant1\_NTNV



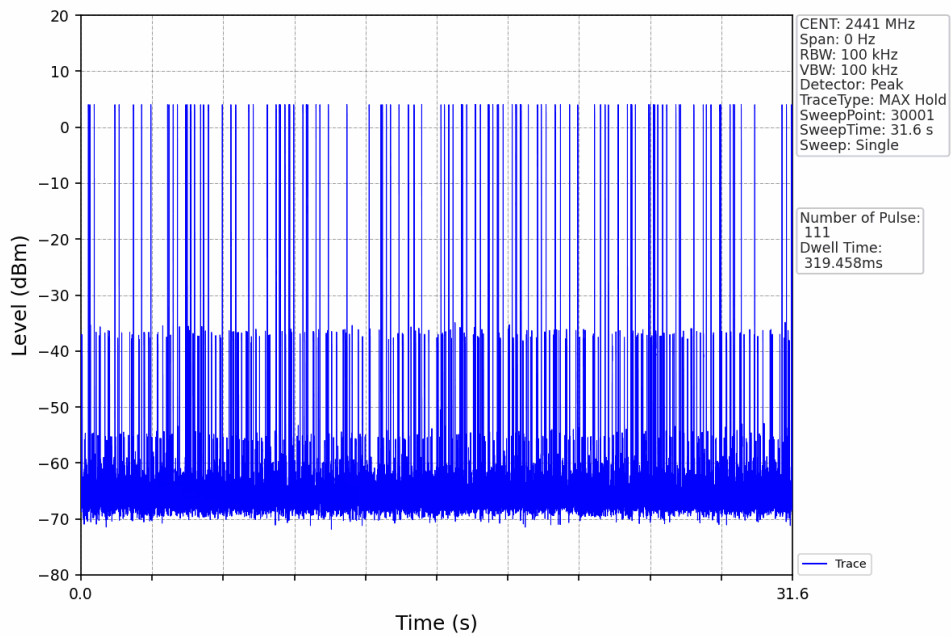
GFSK DH3\_HOPP\_Ant1\_NTNV

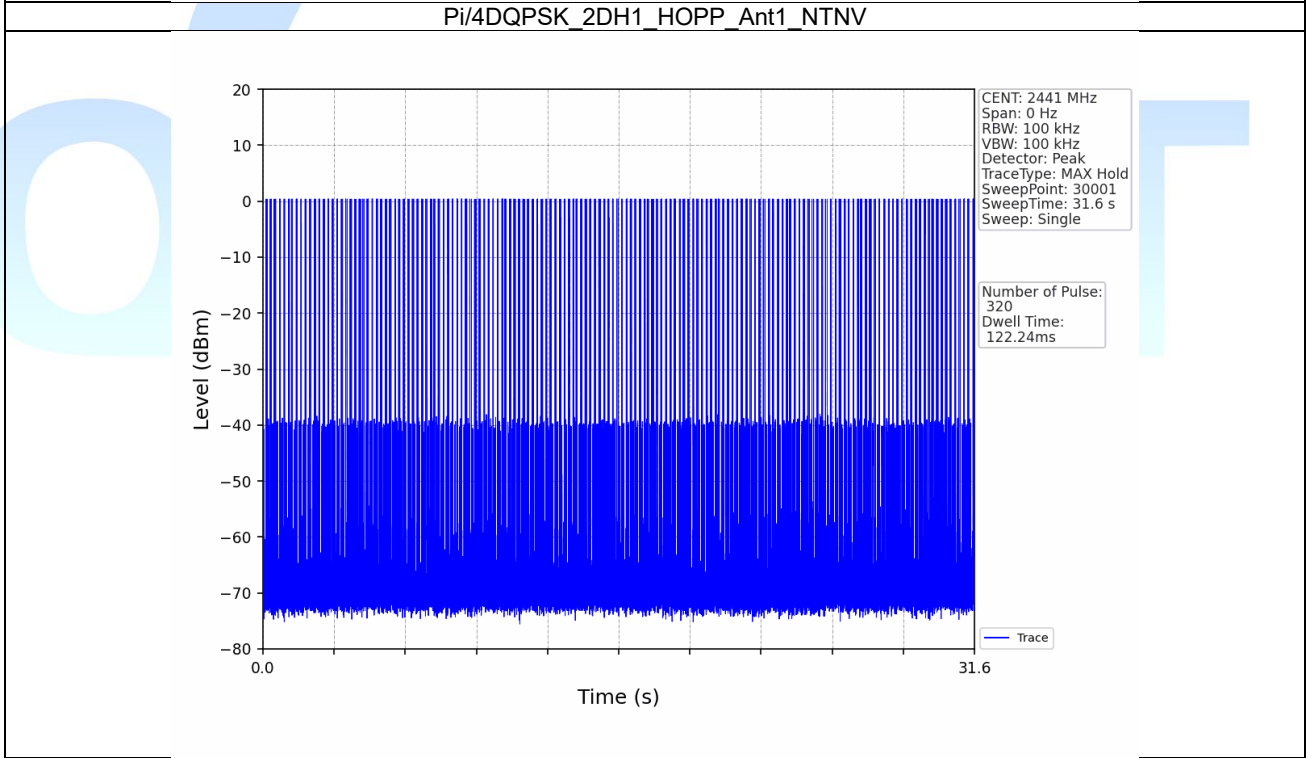
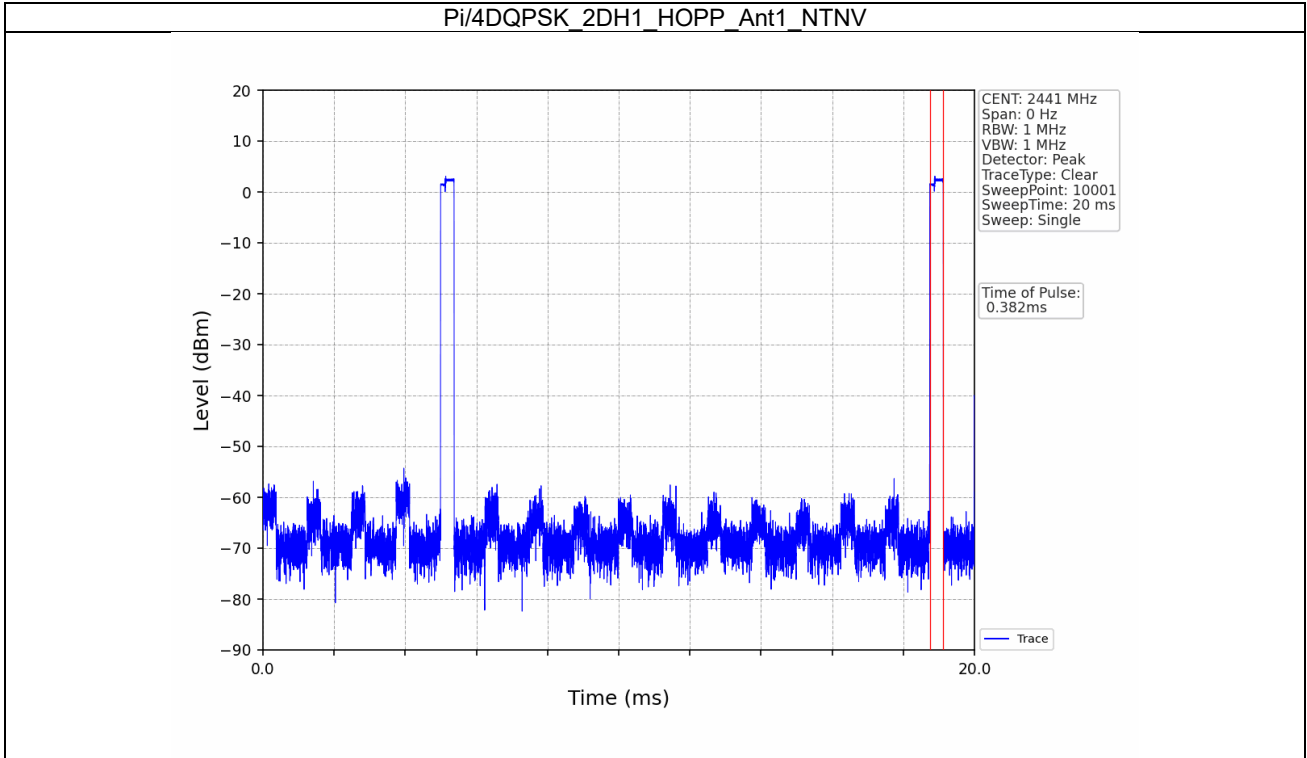


GFSK DH5\_HOPP\_Ant1\_NTNV

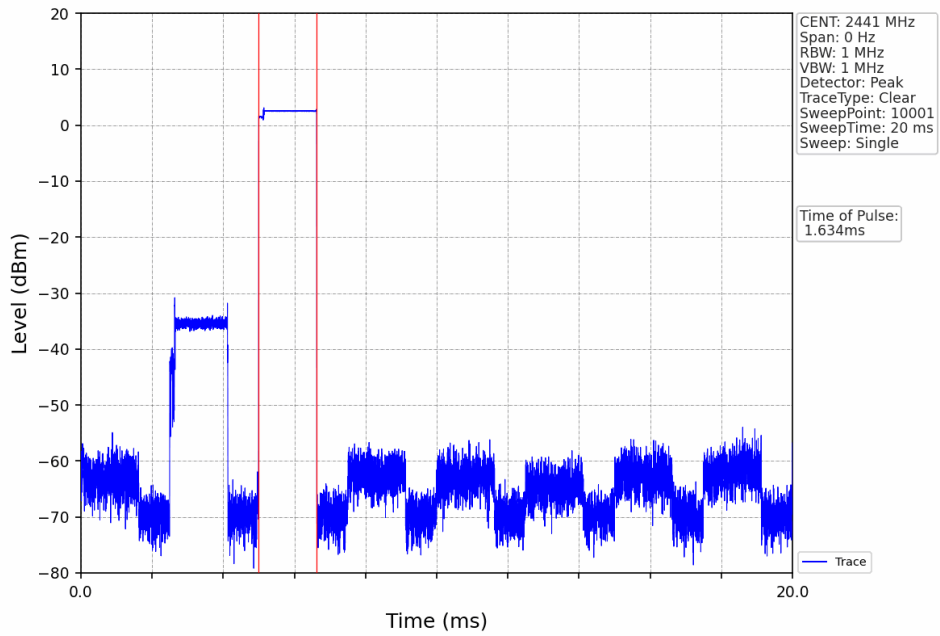


GFSK DH5\_HOPP\_Ant1\_NTNV

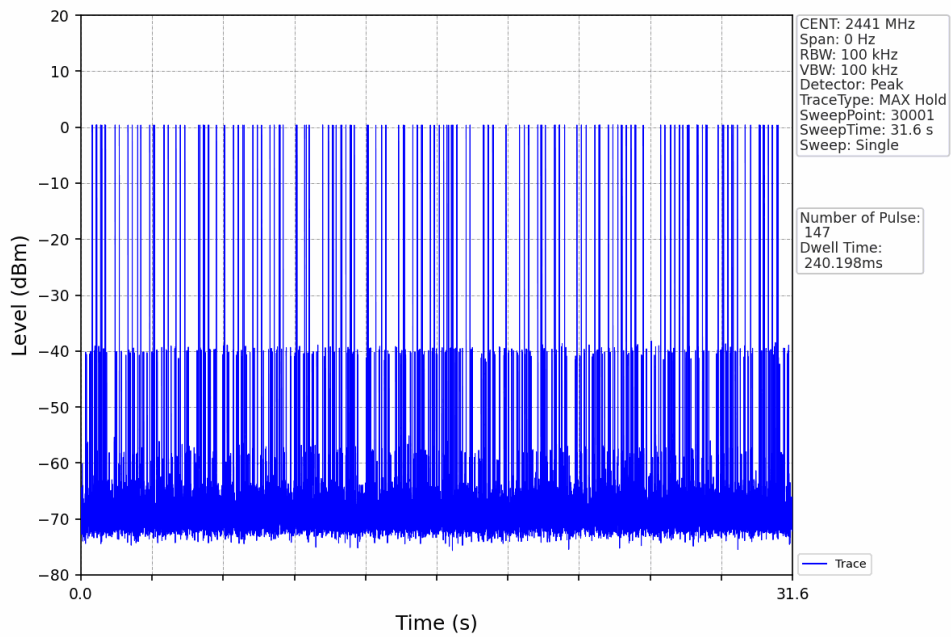




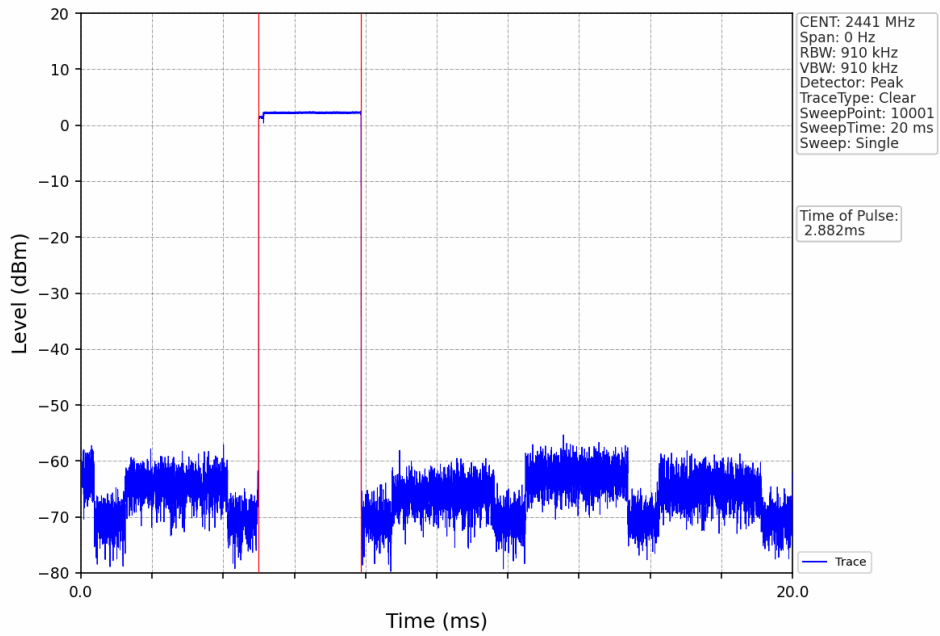
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



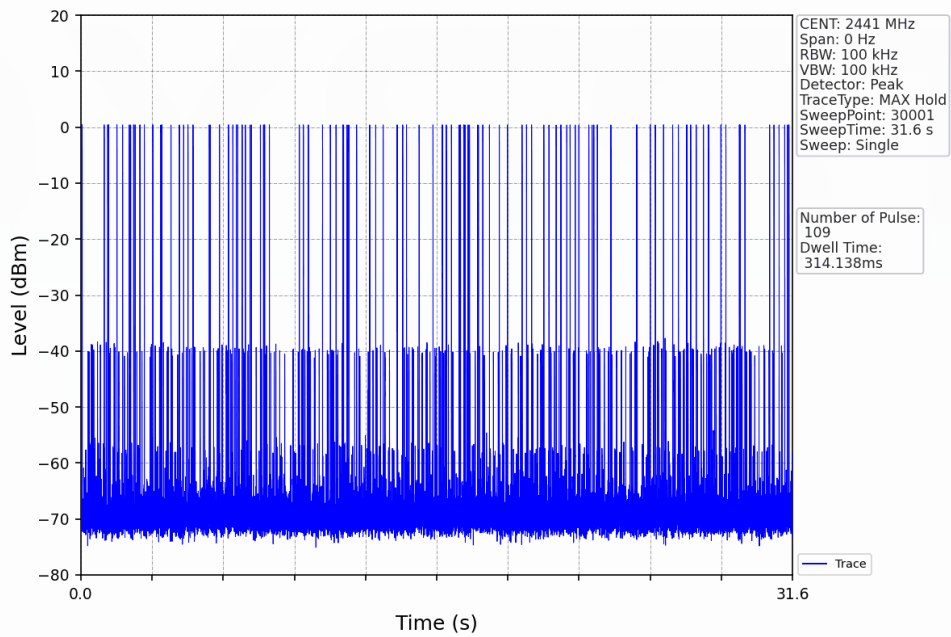
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



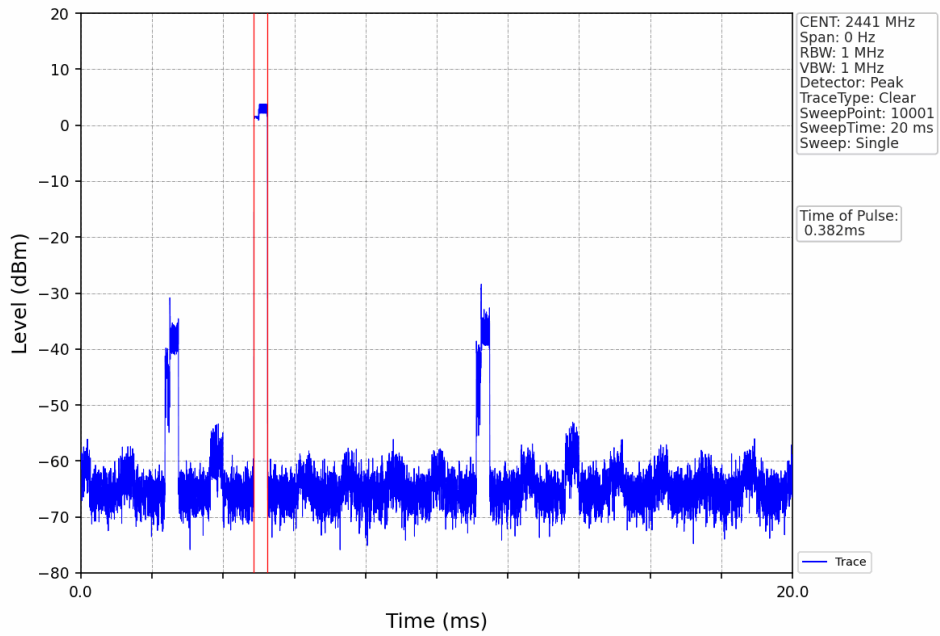
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



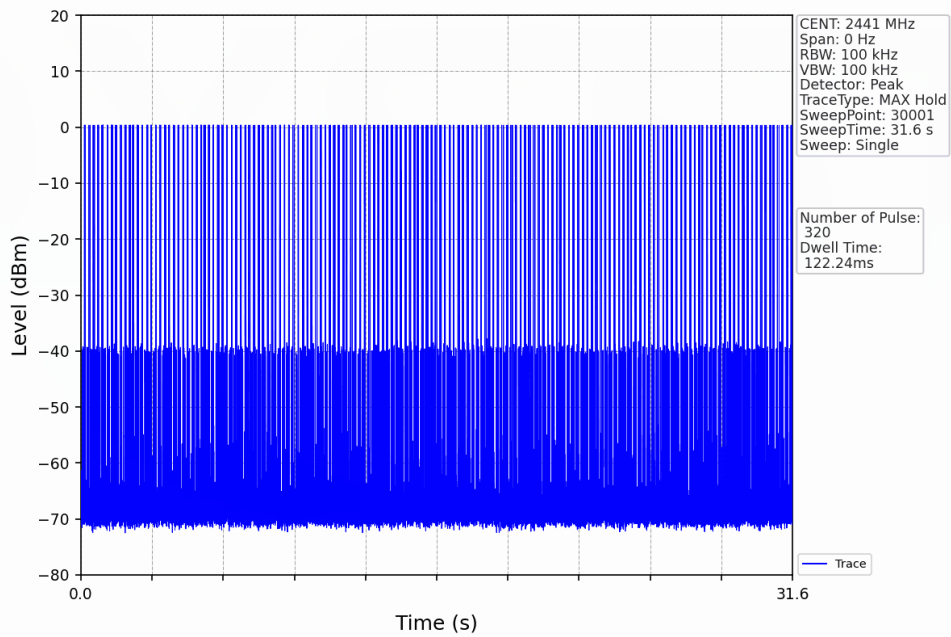
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



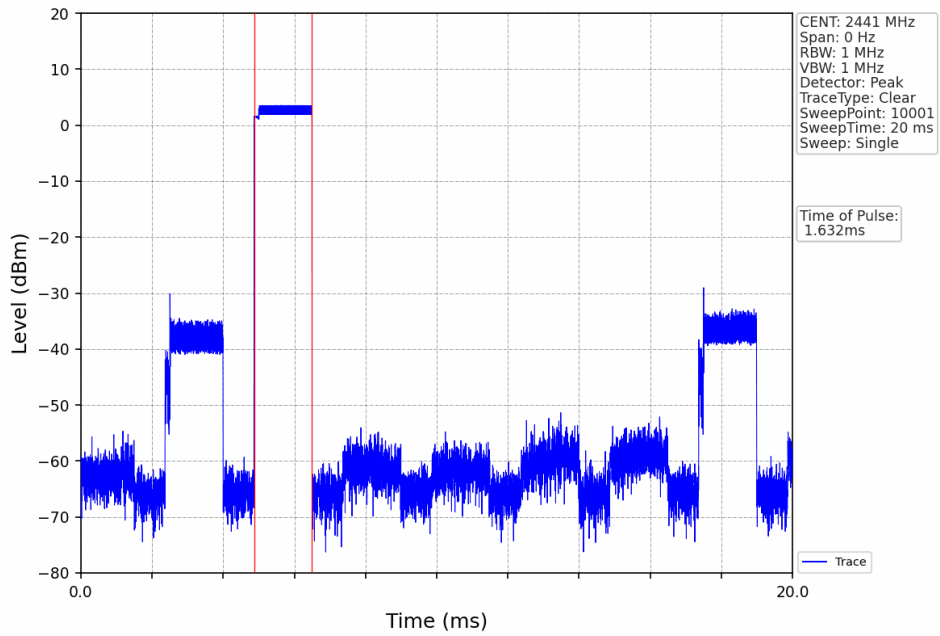
8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



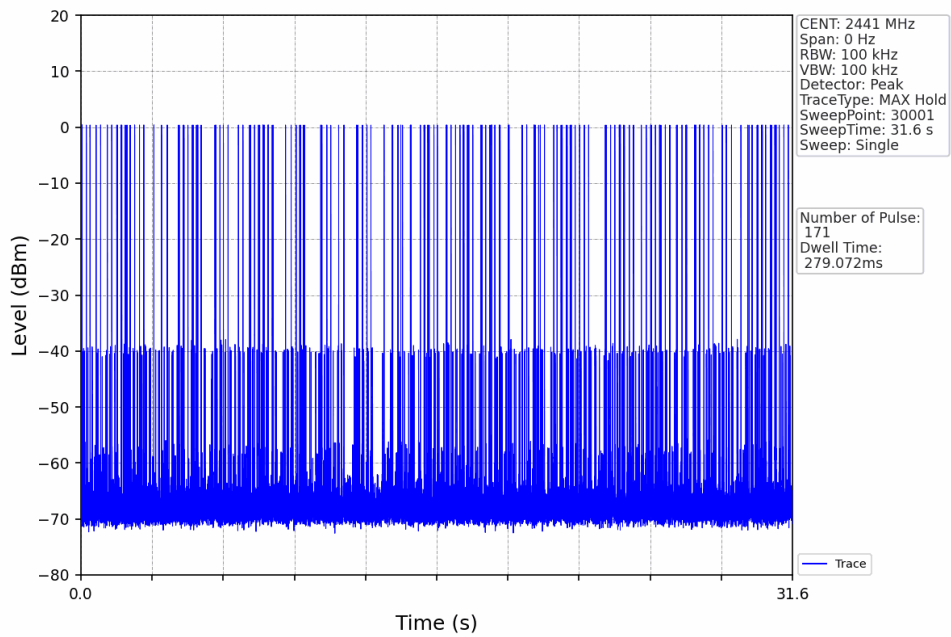
8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



8DPSK 3DH3 HOPP Ant1 NTN

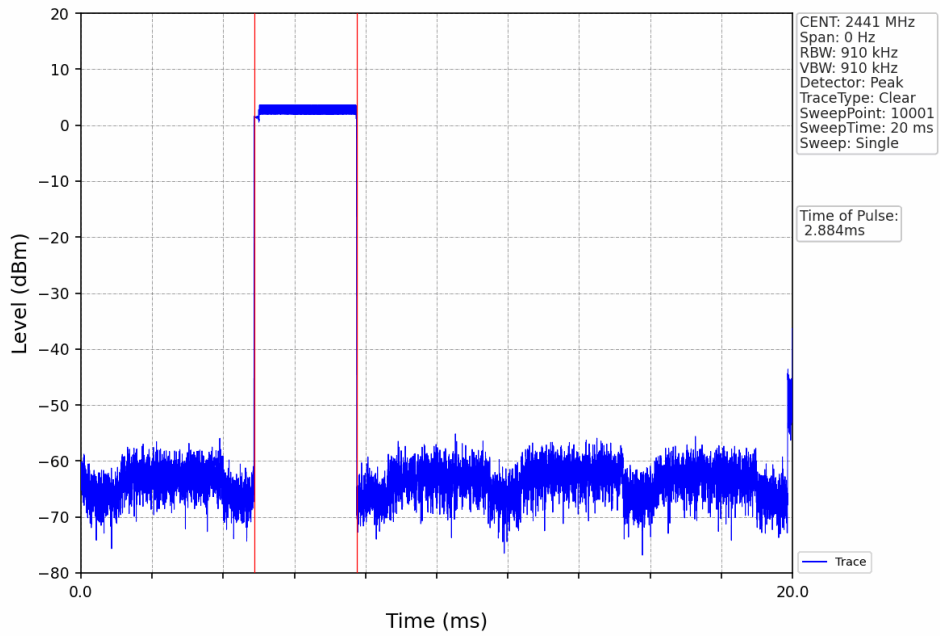


8DPSK 3DH3 HOPP Ant1 NTN

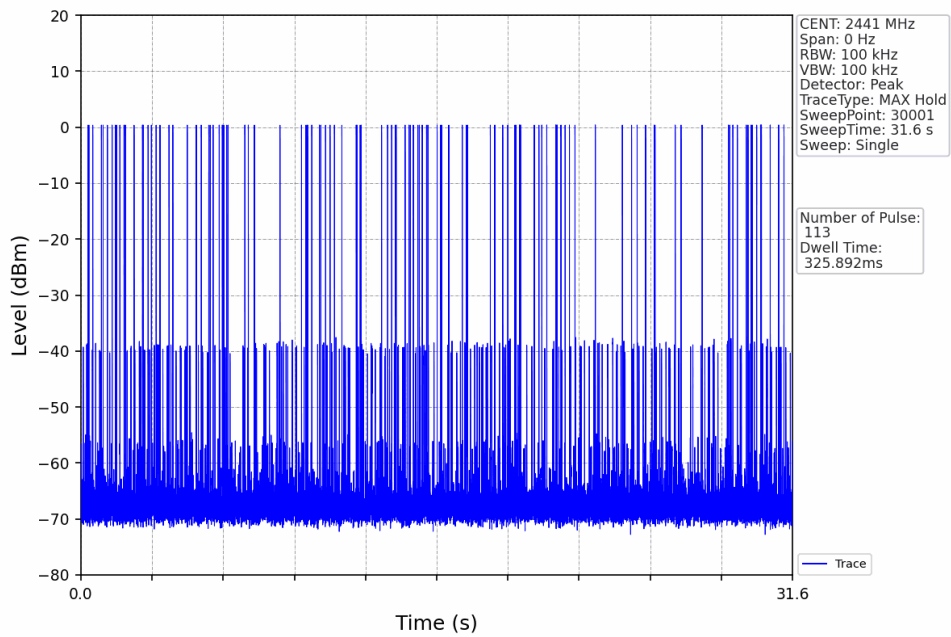




8DPSK 3DH5\_HOPP\_Ant1\_NTNV



8DPSK 3DH5\_HOPP\_Ant1\_NTNV



## 6. Unwanted Emissions In Non-restricted Frequency Bands

### 6.1 Test Result

#### 6.1.1 Ref

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	3.51
		2441	DH5	1	5.00
		2480	DH5	1	5.58
Pi/4DQPSK	SISO	2402	2DH5	1	-0.08
		2441	2DH5	1	1.49
		2480	2DH5	1	2.14
8DPSK	SISO	2402	3DH5	1	-0.11
		2441	3DH5	1	1.44
		2480	3DH5	1	2.04

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

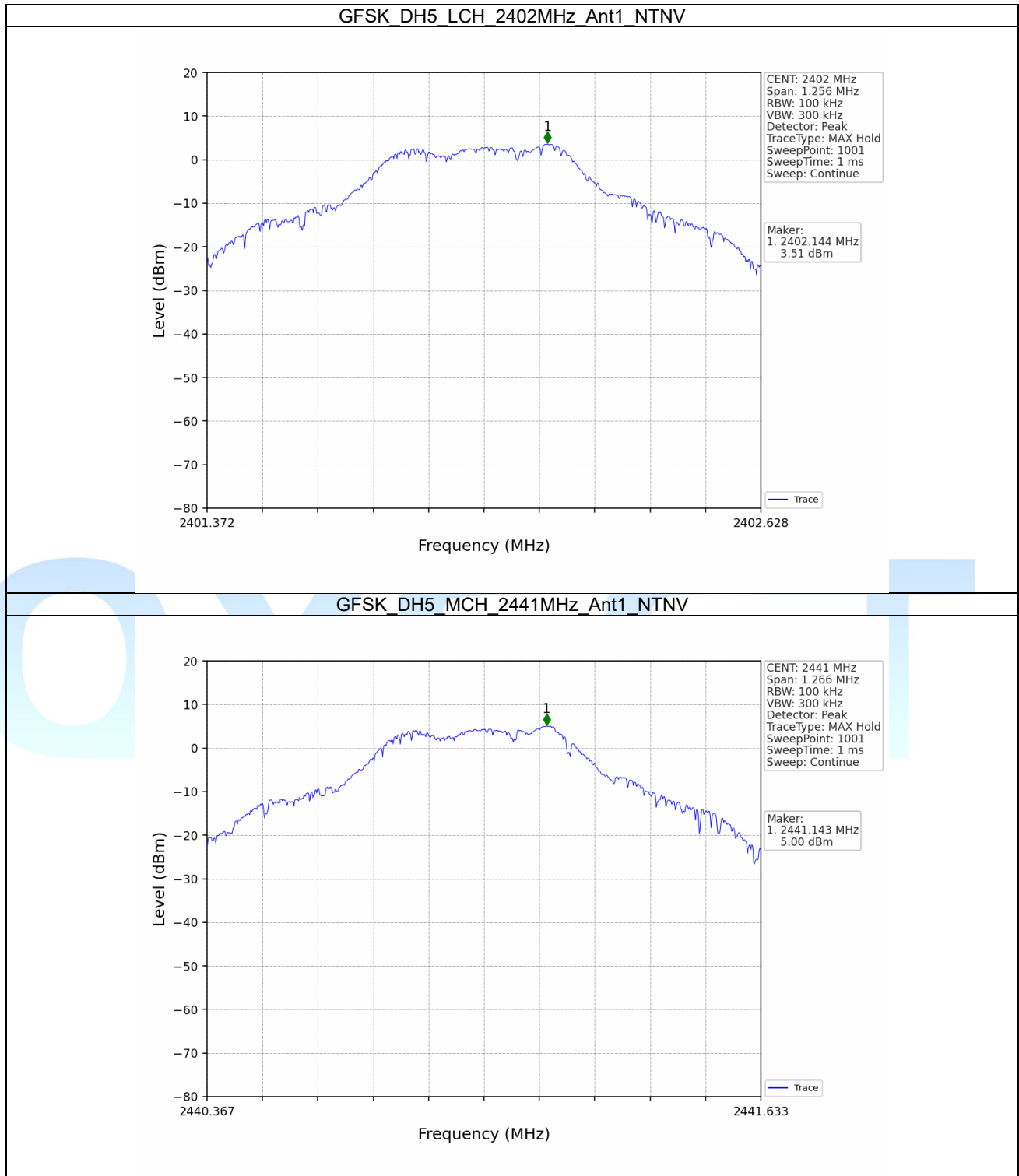
#### 6.1.2 CSE

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	5.58	-14.42	Pass
		2441	DH5	1	5.58	-14.42	Pass
		2480	DH5	1	5.58	-14.42	Pass
		HOPP	DH5	1	5.58	-14.42	Pass
					5.58	-14.42	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	2.14	-17.86	Pass
		2441	2DH5	1	2.14	-17.86	Pass
		2480	2DH5	1	2.14	-17.86	Pass
		HOPP	2DH5	1	2.14	-17.86	Pass
					2.14	-17.86	Pass
8DPSK	SISO	2402	3DH5	1	2.04	-17.96	Pass
		2441	3DH5	1	2.04	-17.96	Pass
		2480	3DH5	1	2.04	-17.96	Pass
		HOPP	3DH5	1	2.04	-17.96	Pass
					2.04	-17.96	Pass

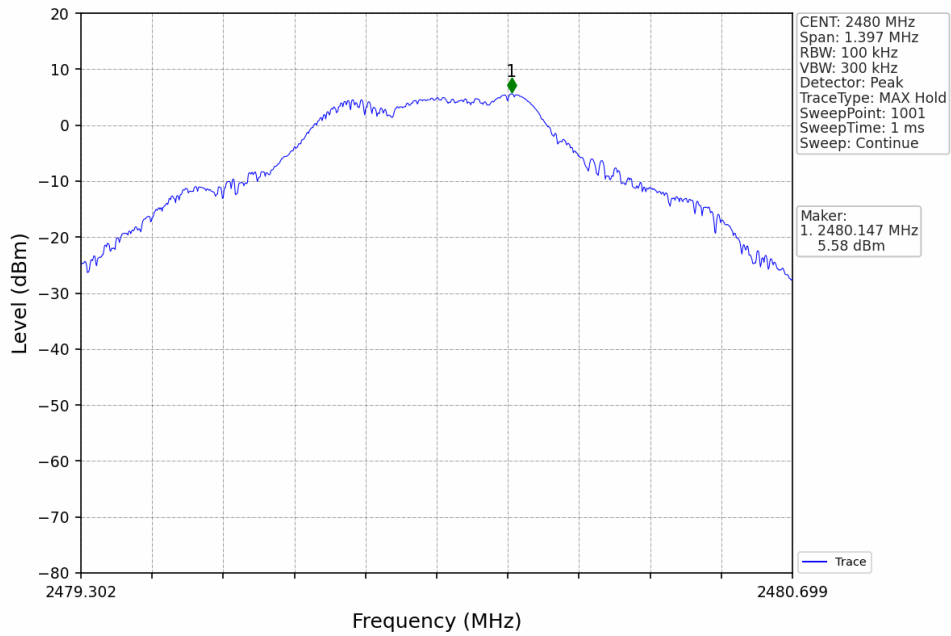
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

## 6.2 Test Graph

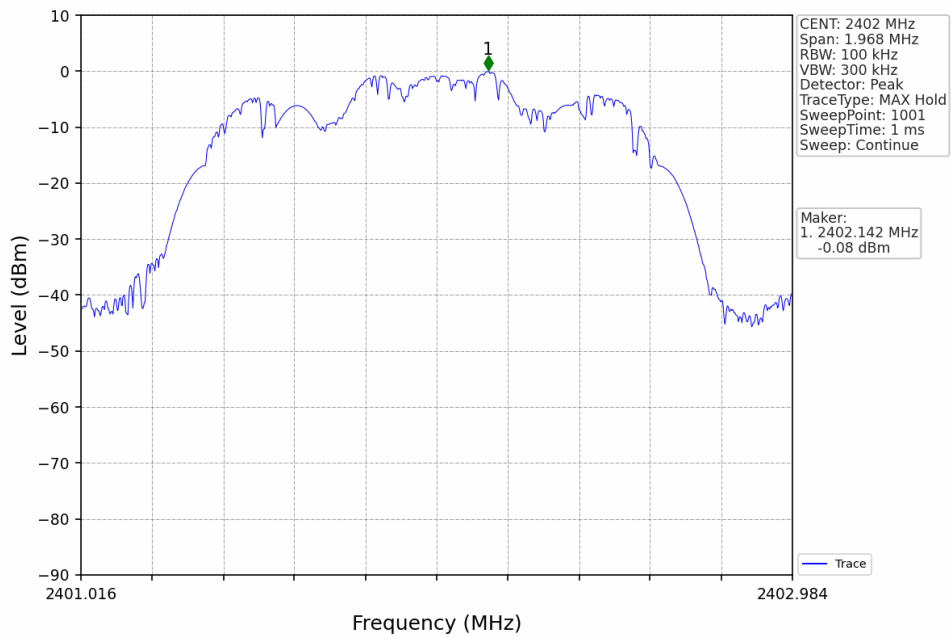
### 6.2.1 Ref



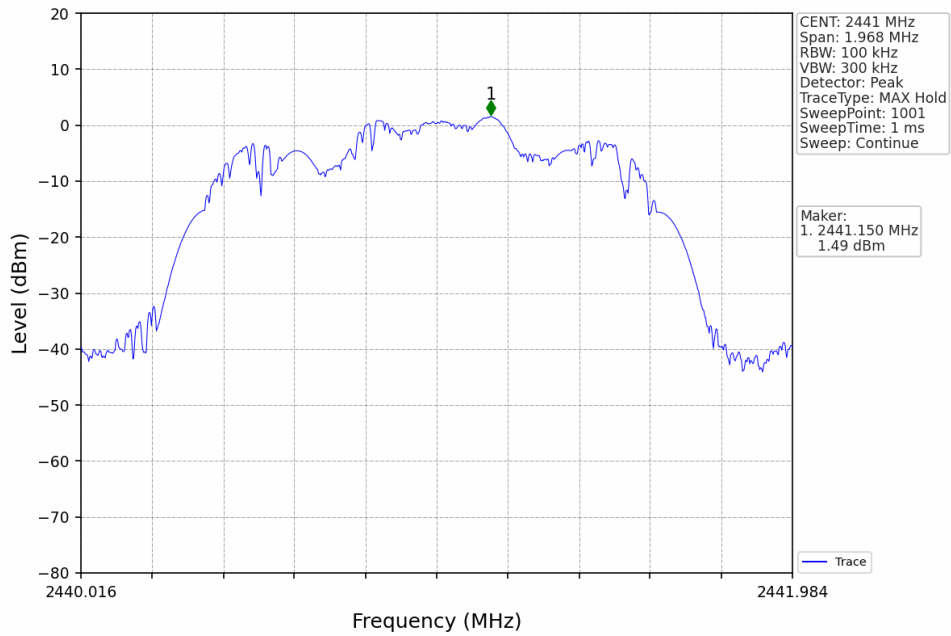
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



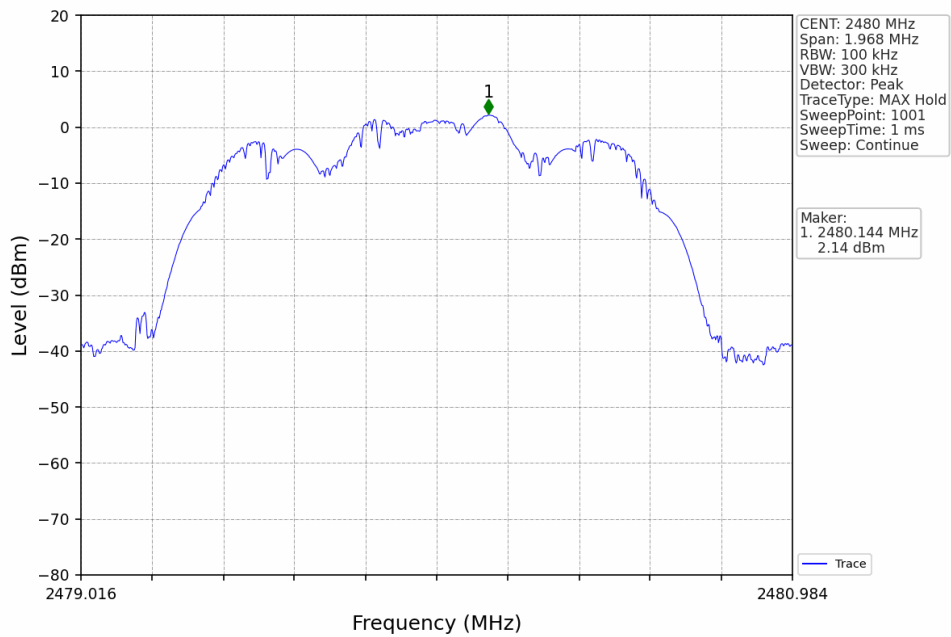
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



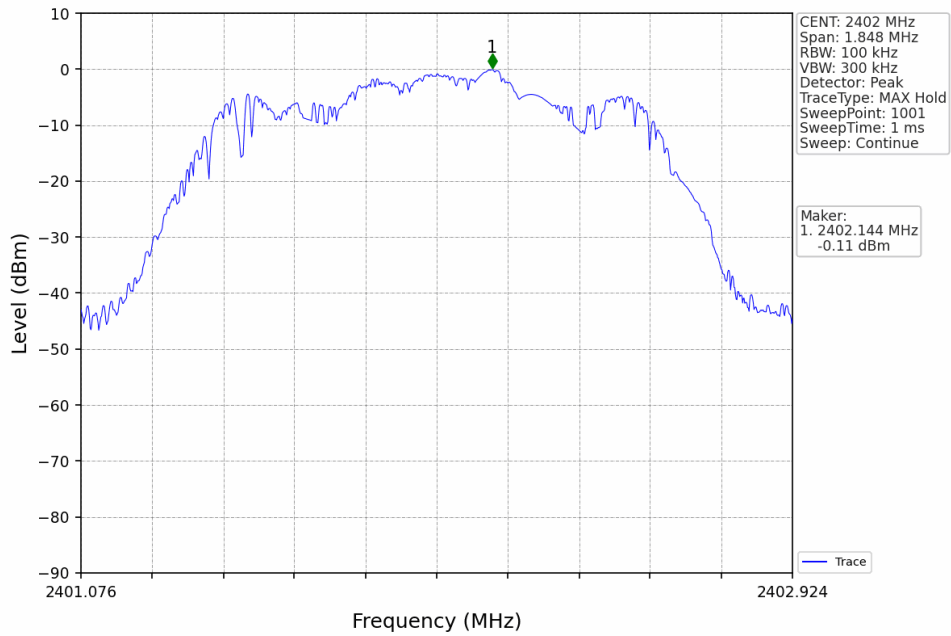
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



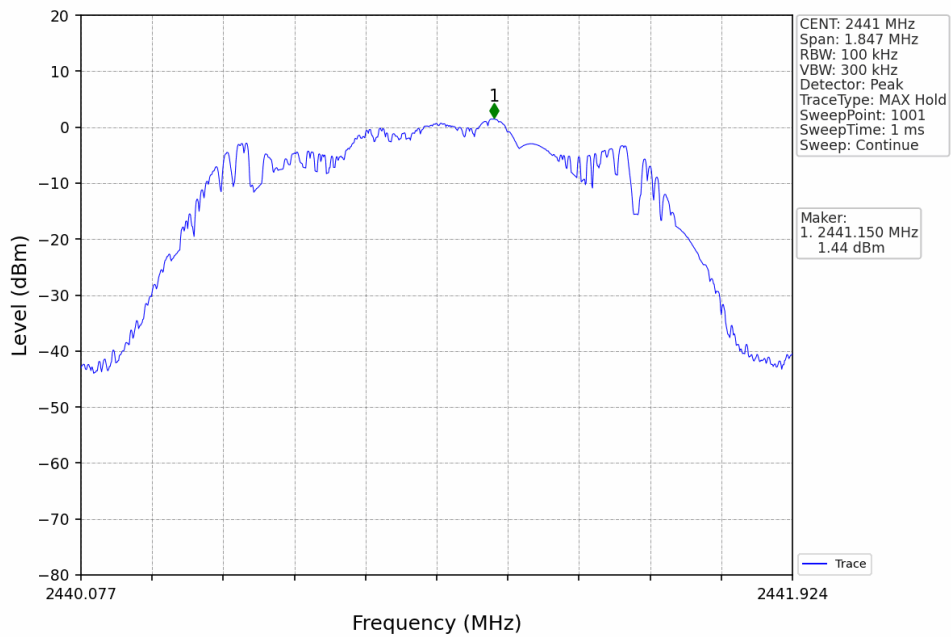
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

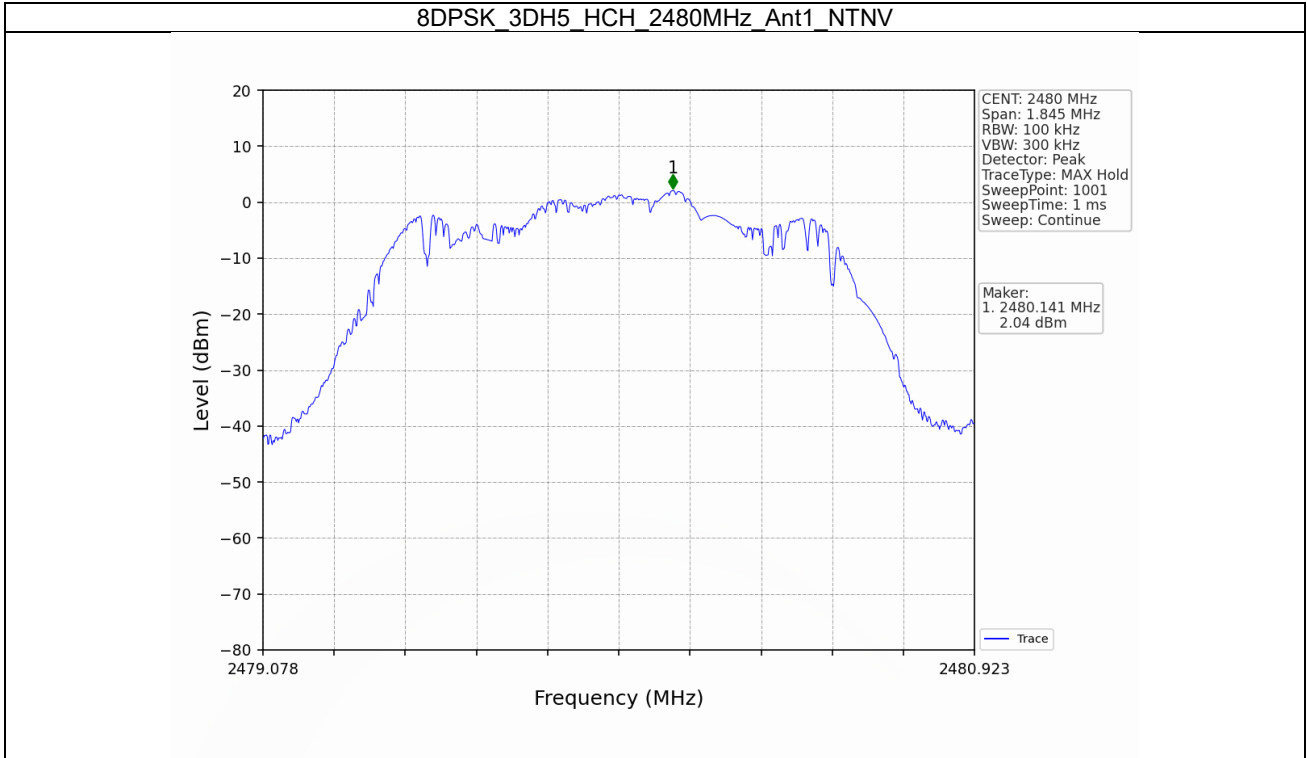


8DPSK 3DH5\_LCH\_2402MHz\_Ant1\_NTNV

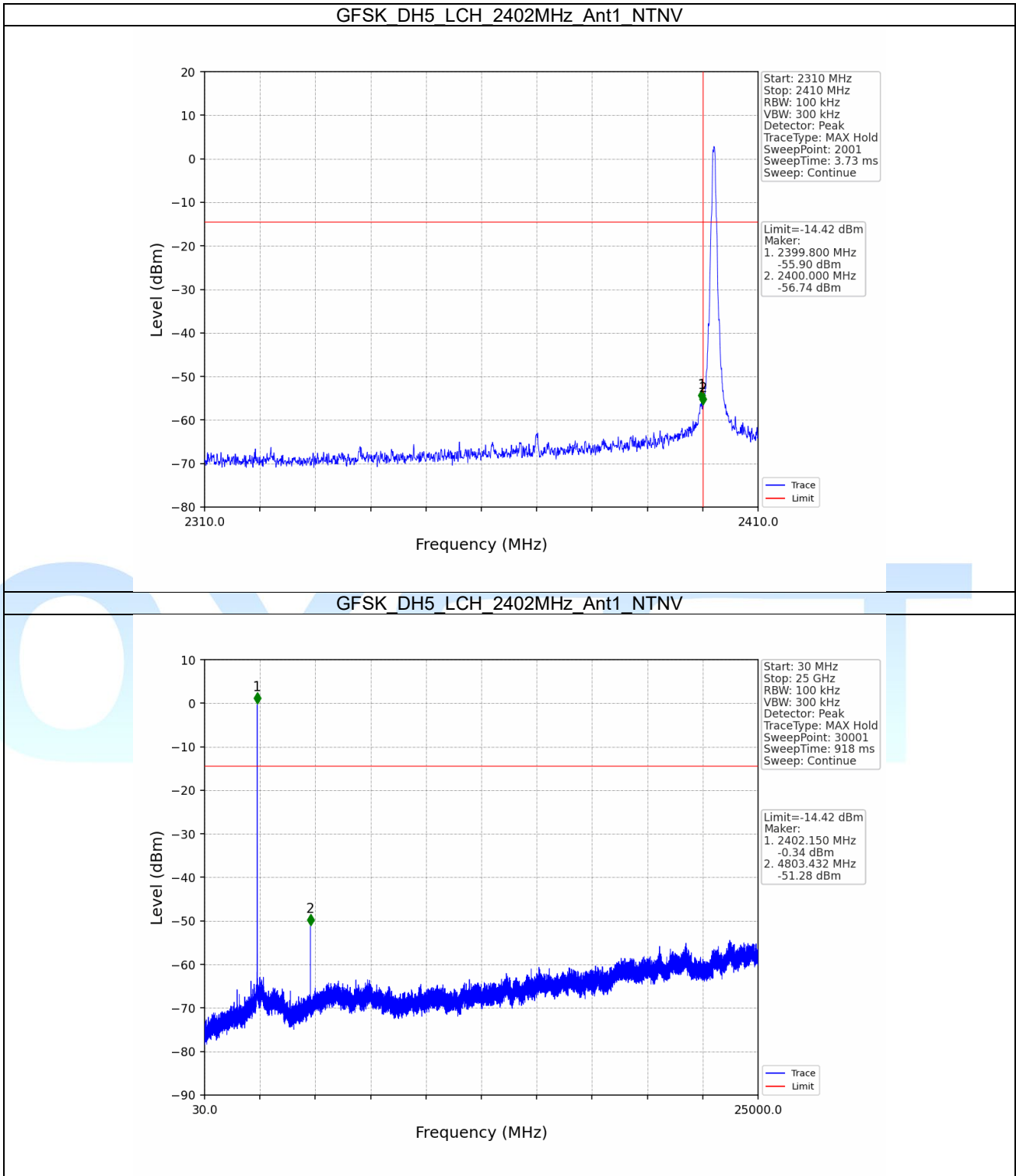


8DPSK 3DH5\_MCH\_2441MHz\_Ant1\_NTNV



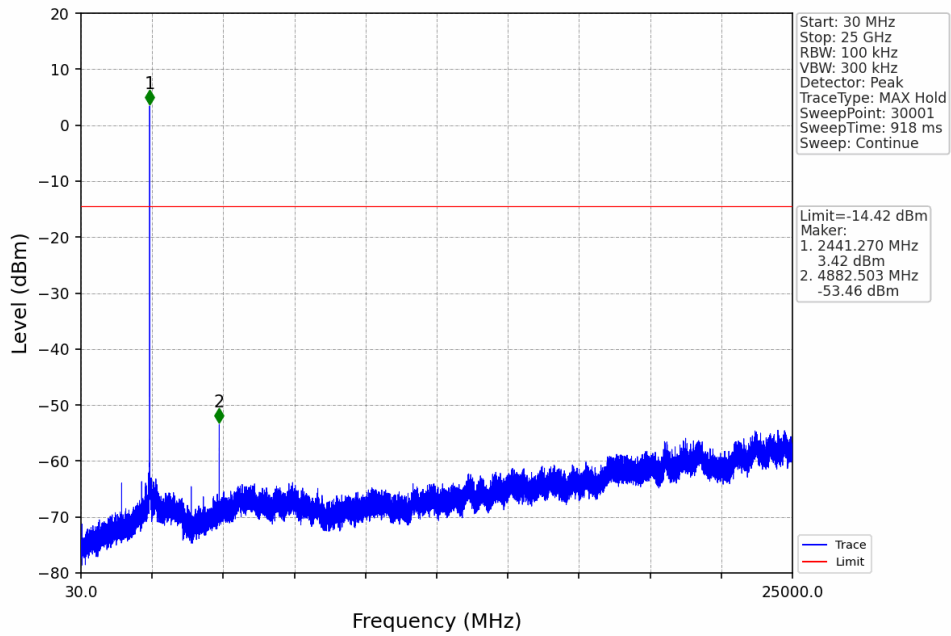


### 6.2.2 CSE

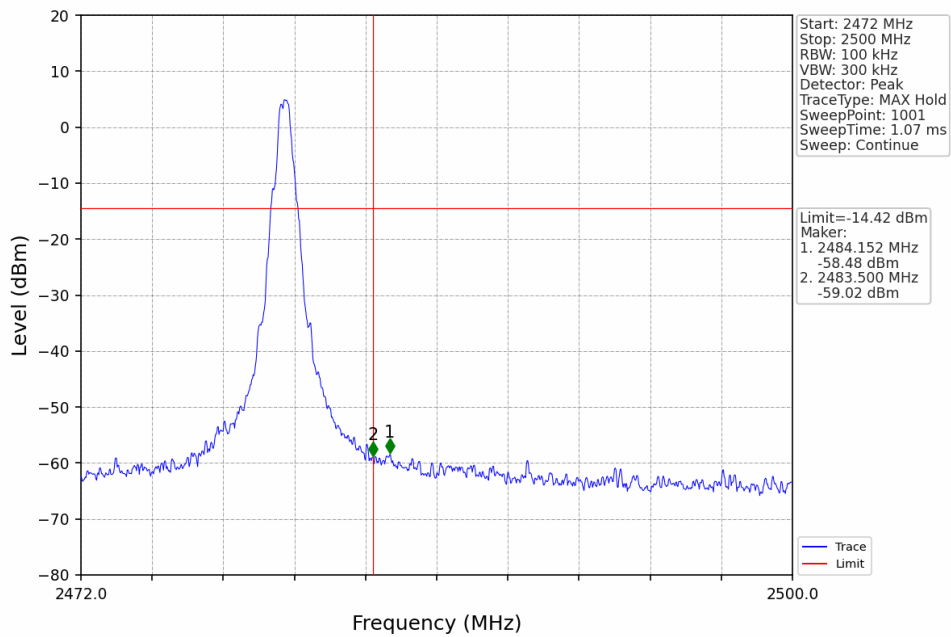




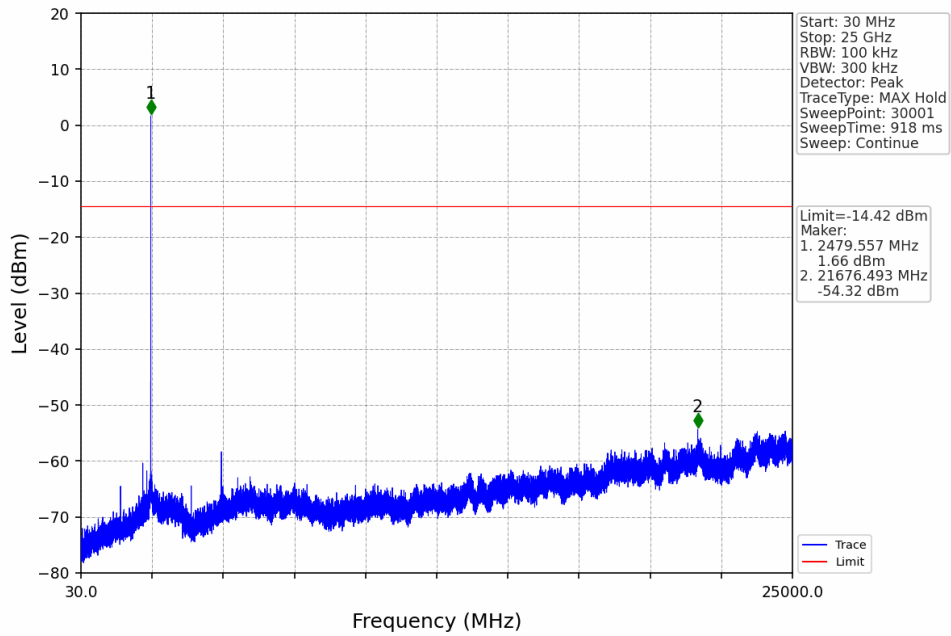
GFSK\_DH5\_MCH\_2441MHz\_Ant1\_NTNV



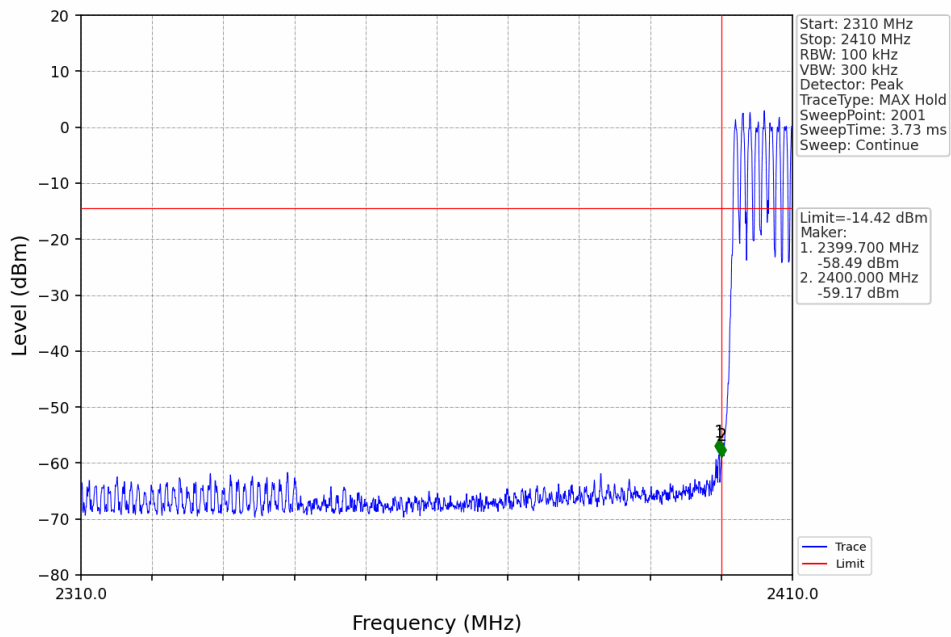
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV

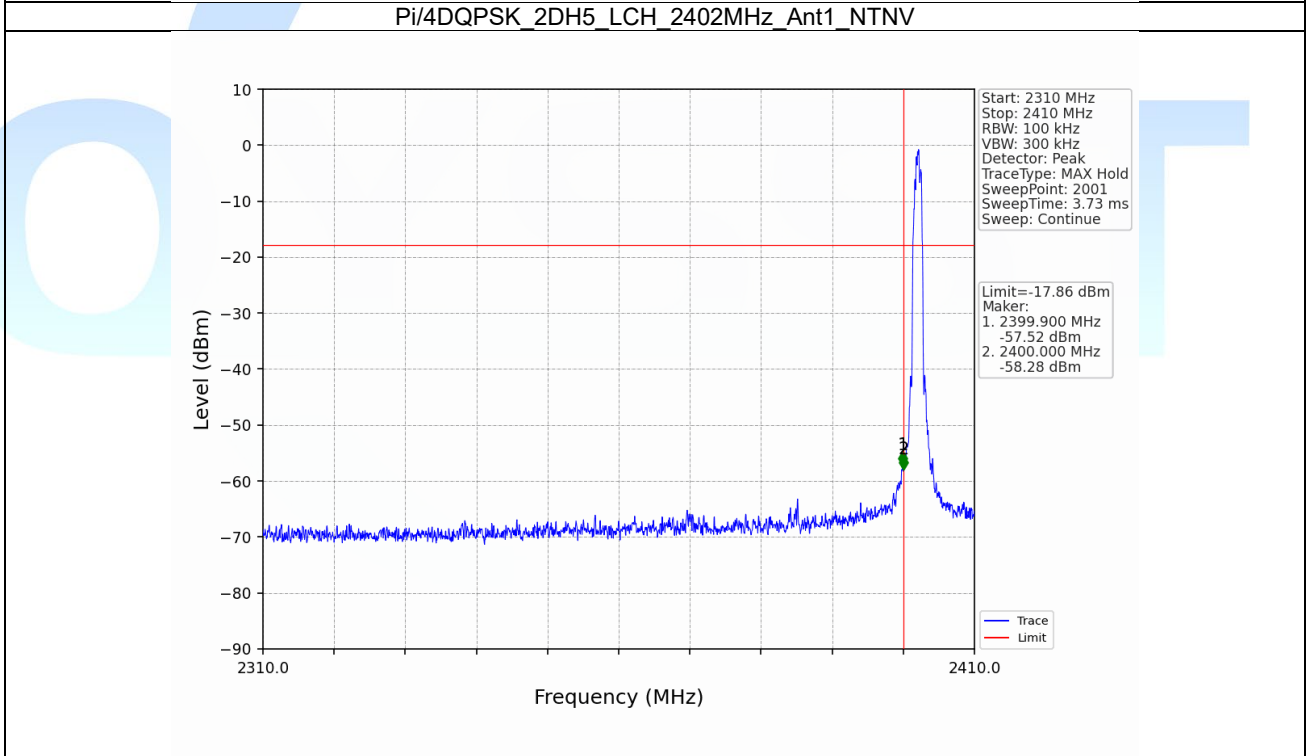
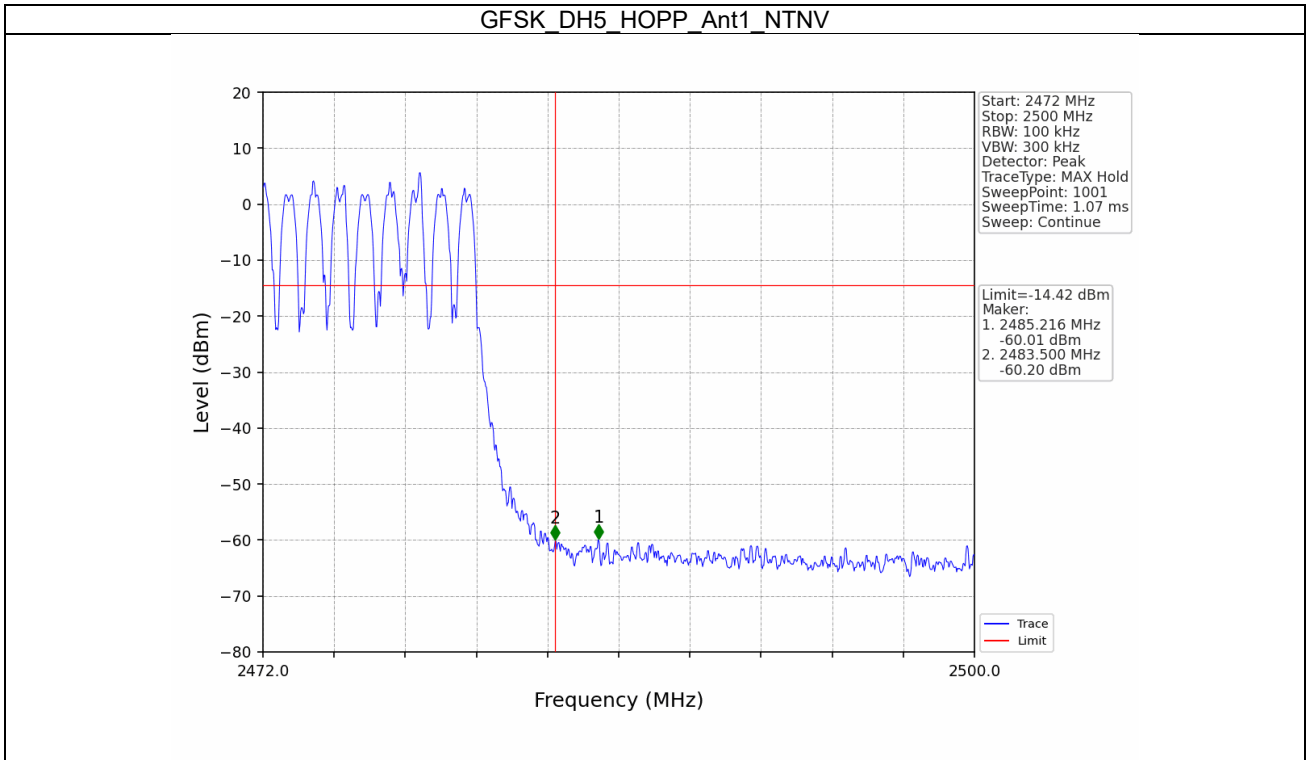


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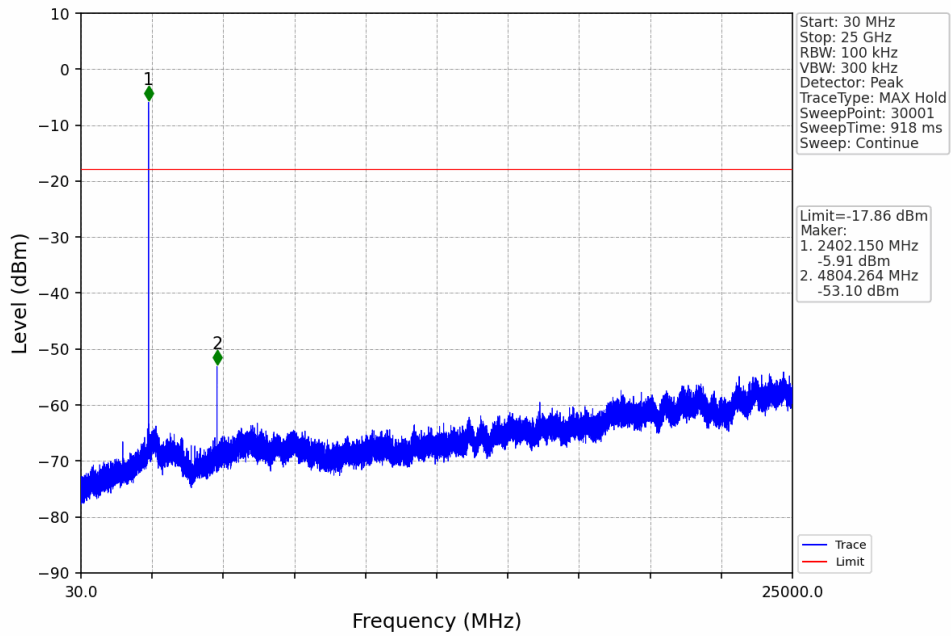


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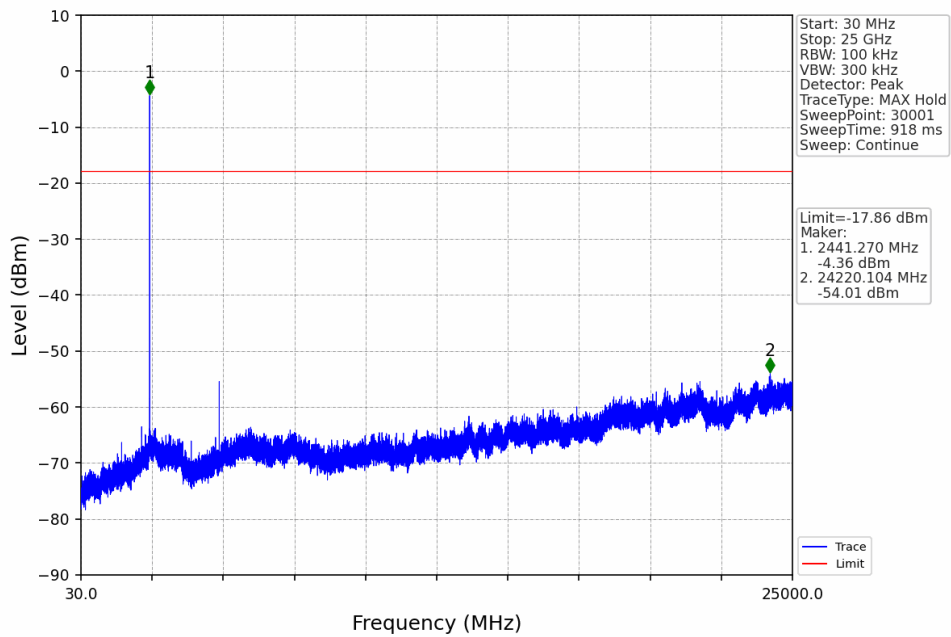




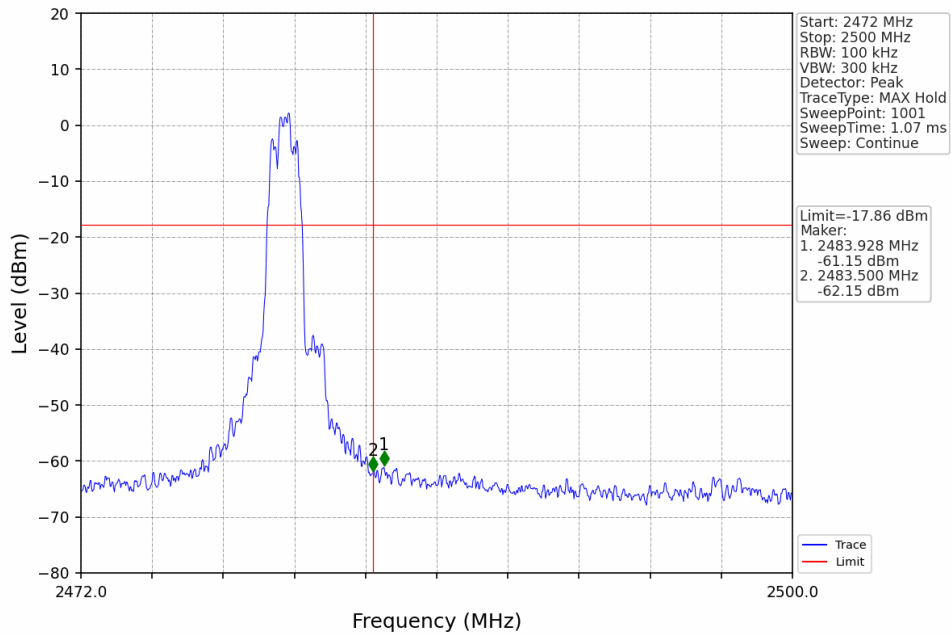
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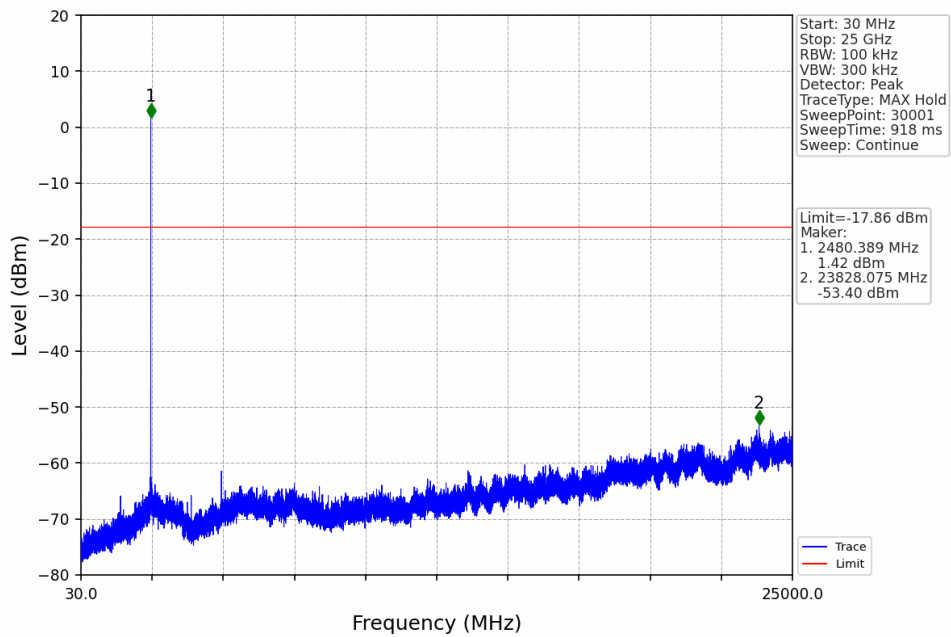
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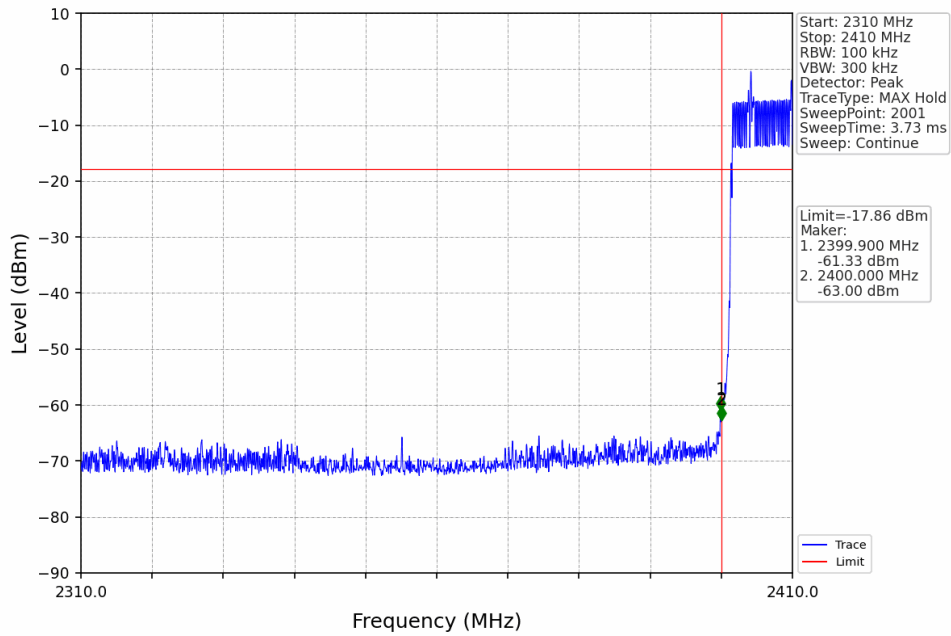
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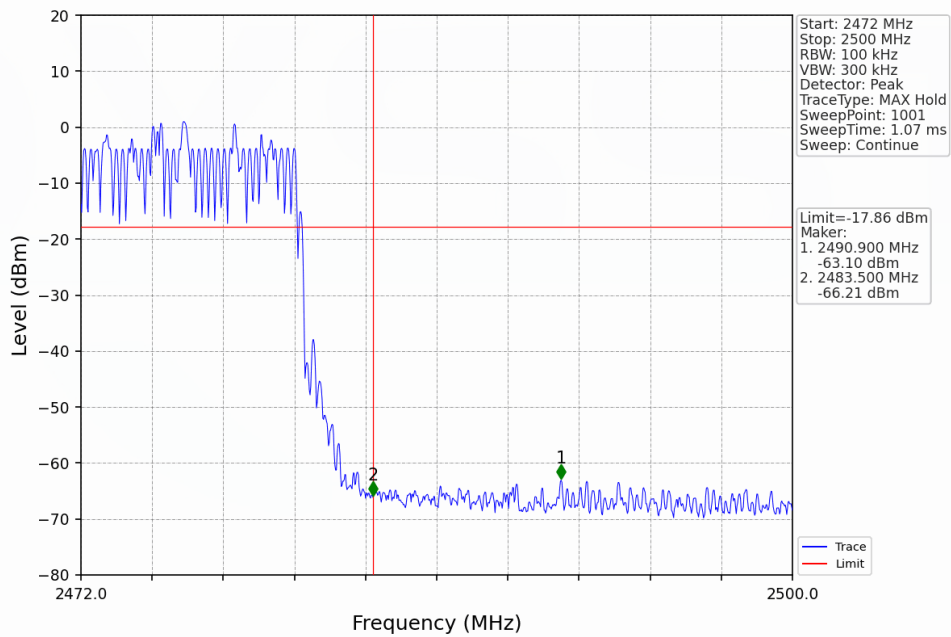
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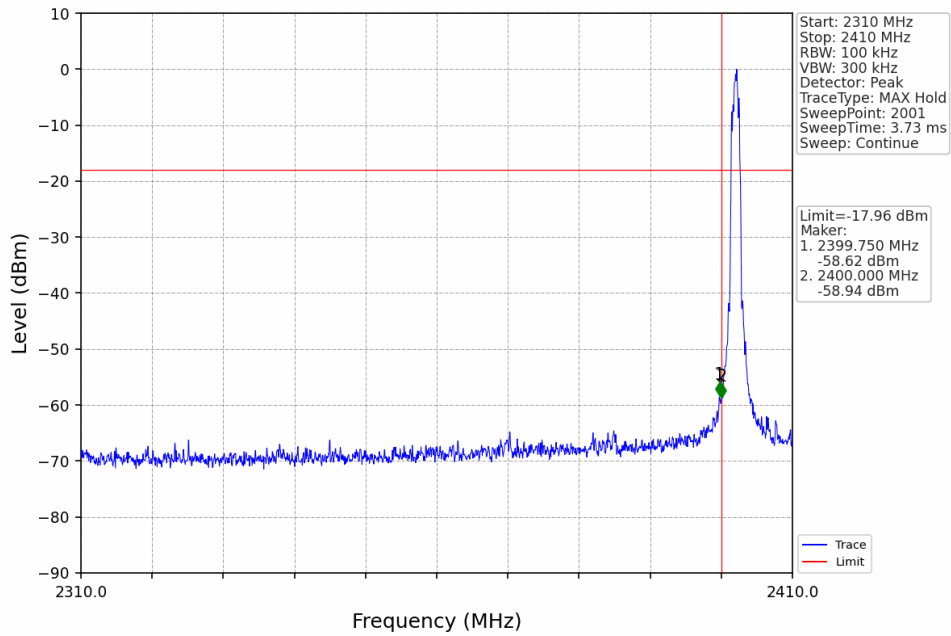
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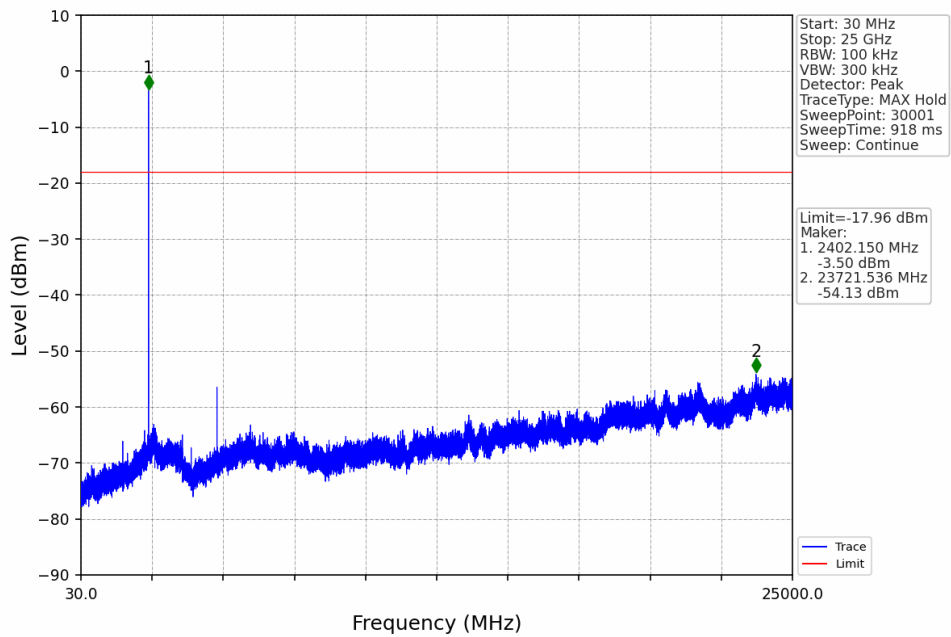
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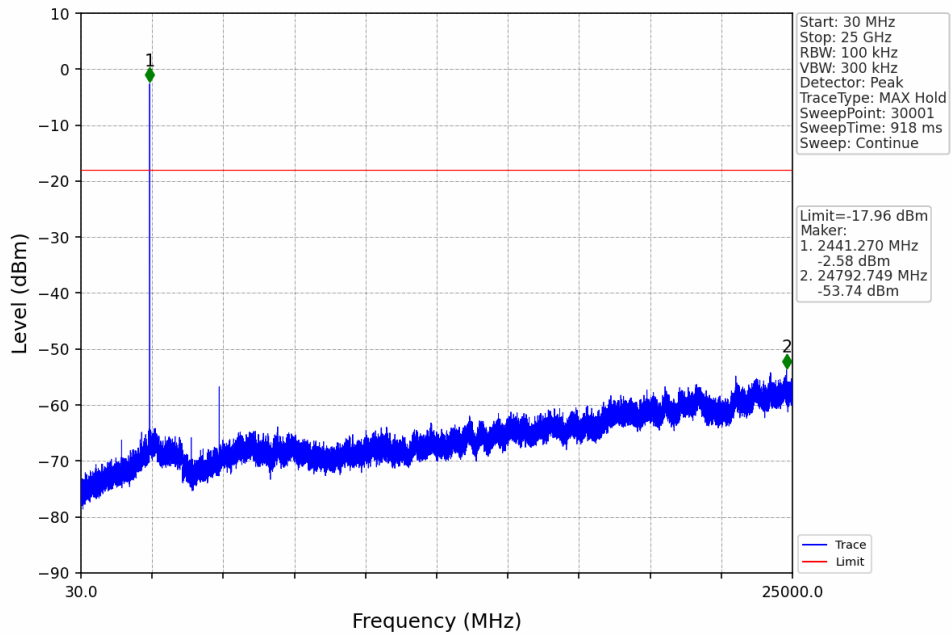
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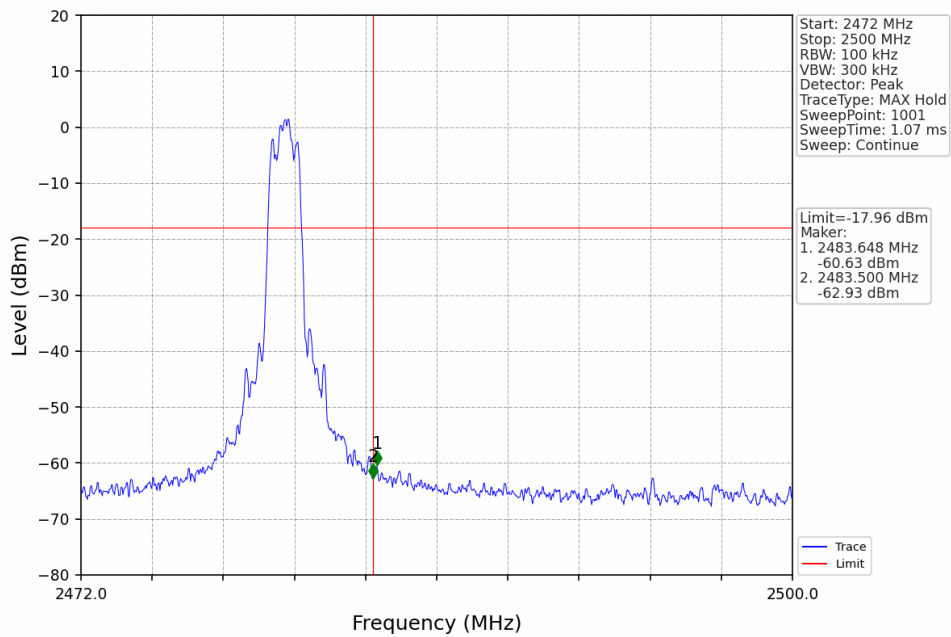
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8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV

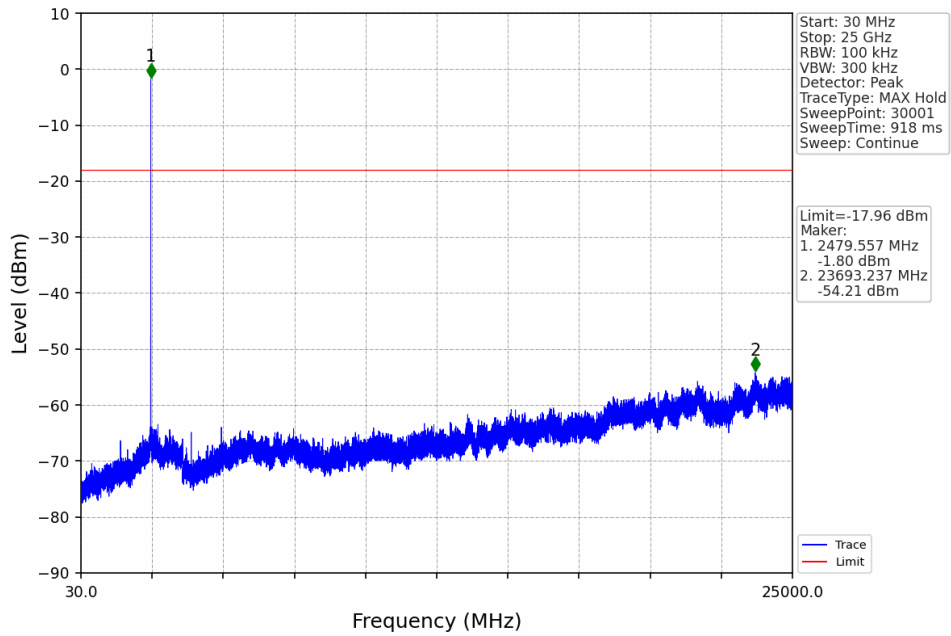


8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV

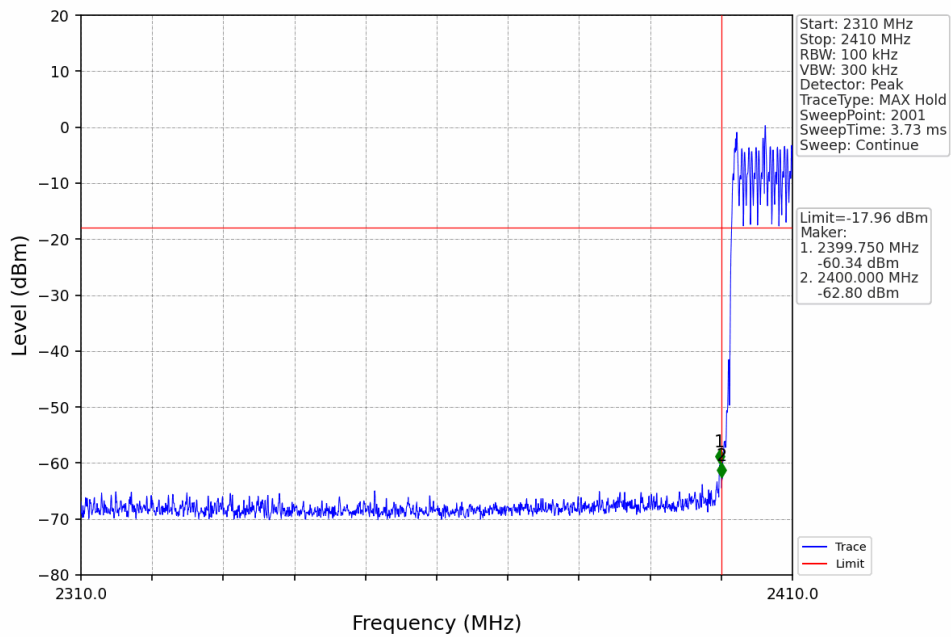


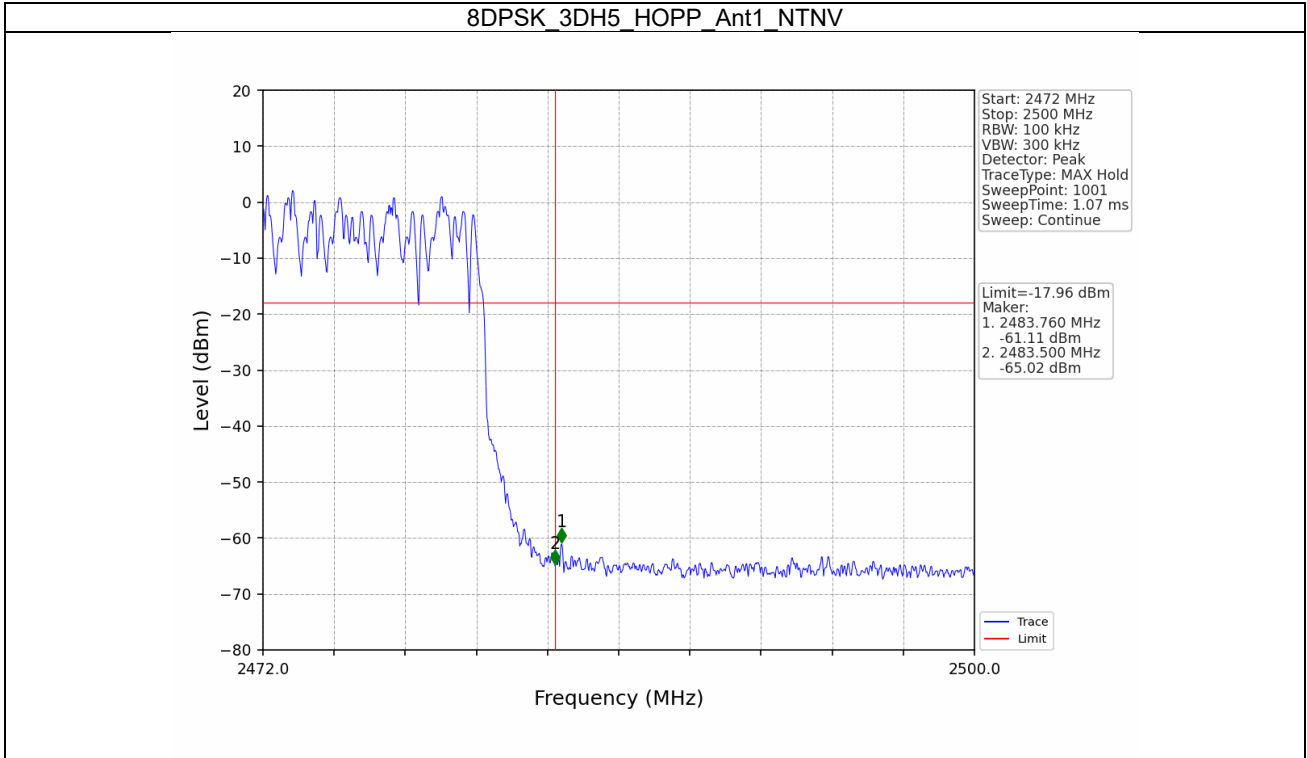


8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV





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