

## 1. Bandwidth

### 1.1 Test Result

#### 1.1.1 OBW

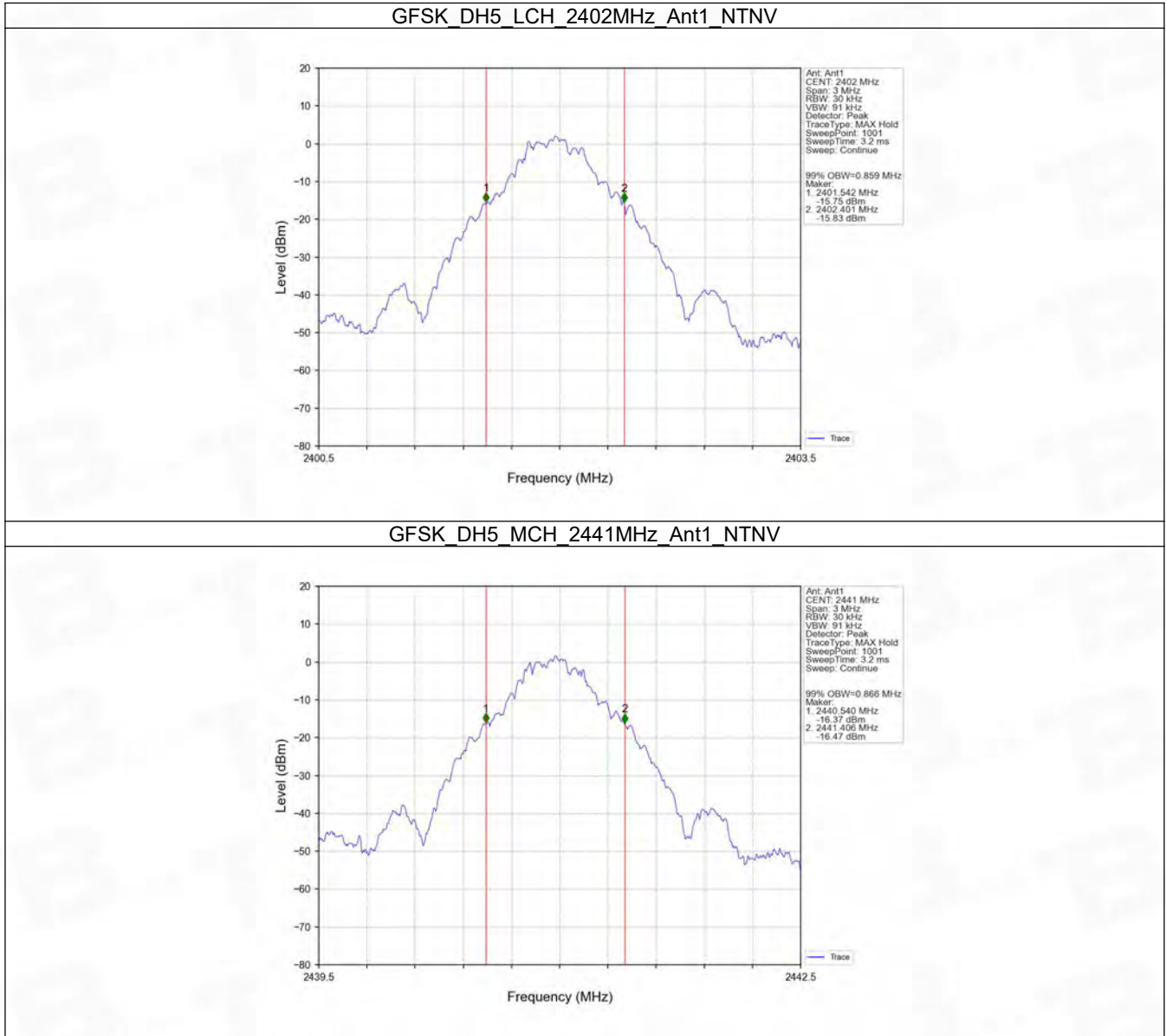
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.859	/	Pass
		2441	DH5	1	0.866	/	Pass
		2480	DH5	1	0.866	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.157	/	Pass
		2441	2DH5	1	1.158	/	Pass
		2480	2DH5	1	1.154	/	Pass
8DPSK	SISO	2402	3DH5	1	1.171	/	Pass
		2441	3DH5	1	1.165	/	Pass
		2480	3DH5	1	1.173	/	Pass

#### 1.1.2 20dB BW

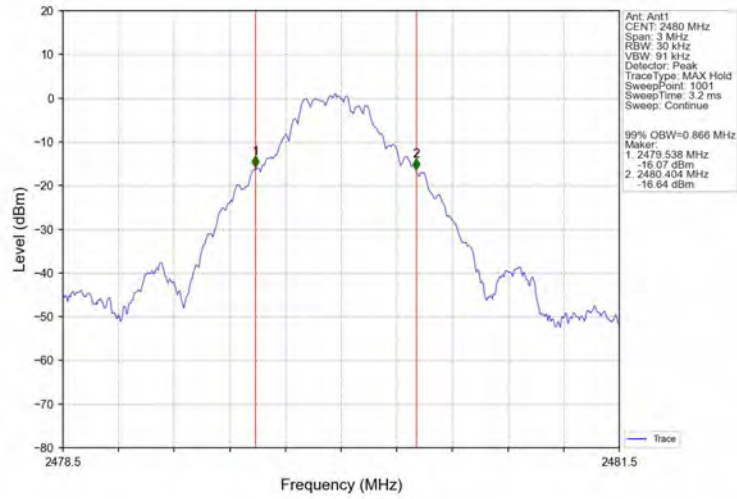
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.948	/	Pass
		2441	DH5	1	0.950	/	Pass
		2480	DH5	1	0.952	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.270	/	Pass
		2441	2DH5	1	1.269	/	Pass
		2480	2DH5	1	1.270	/	Pass
8DPSK	SISO	2402	3DH5	1	1.281	/	Pass
		2441	3DH5	1	1.284	/	Pass
		2480	3DH5	1	1.284	/	Pass

## 1.2 Test Graph

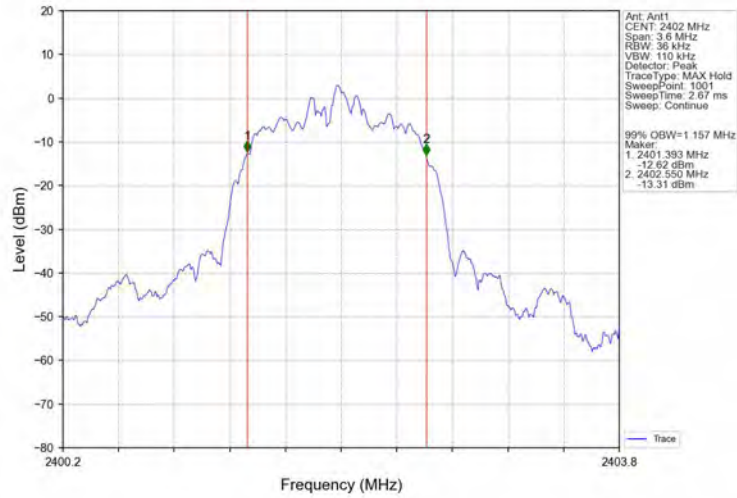
### 1.2.1 OBW



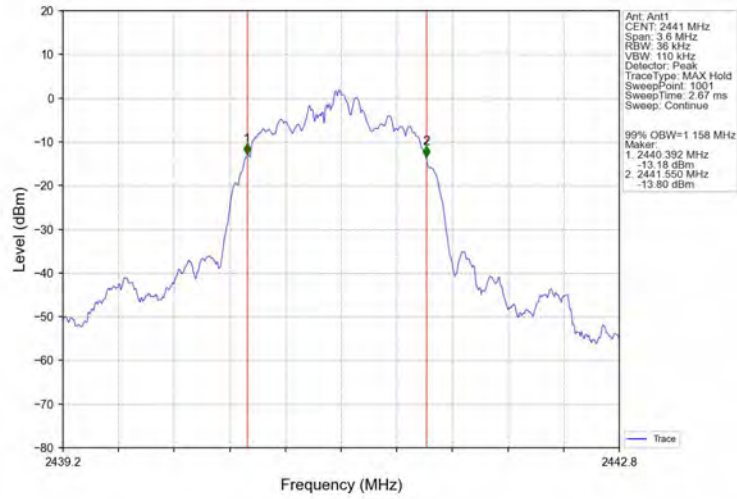
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



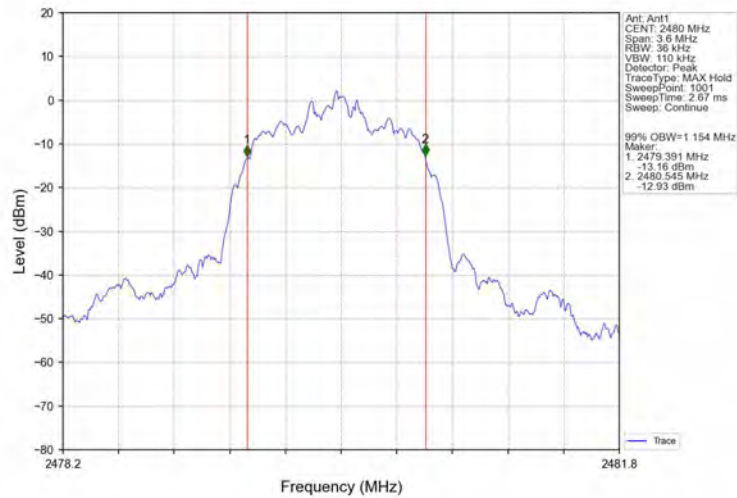
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



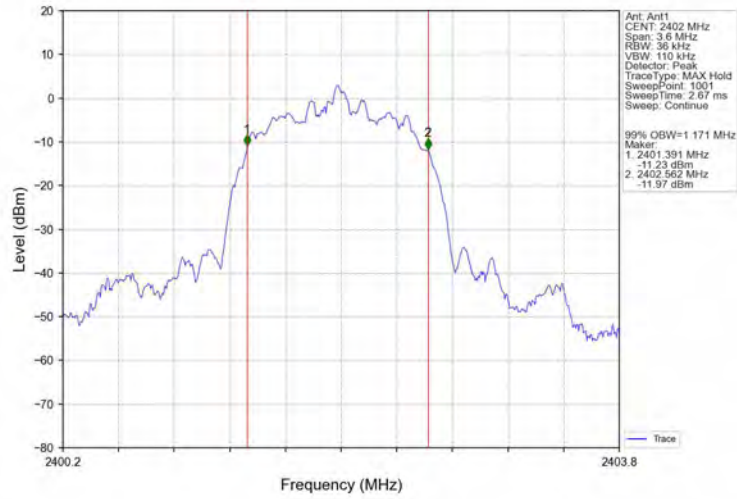
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



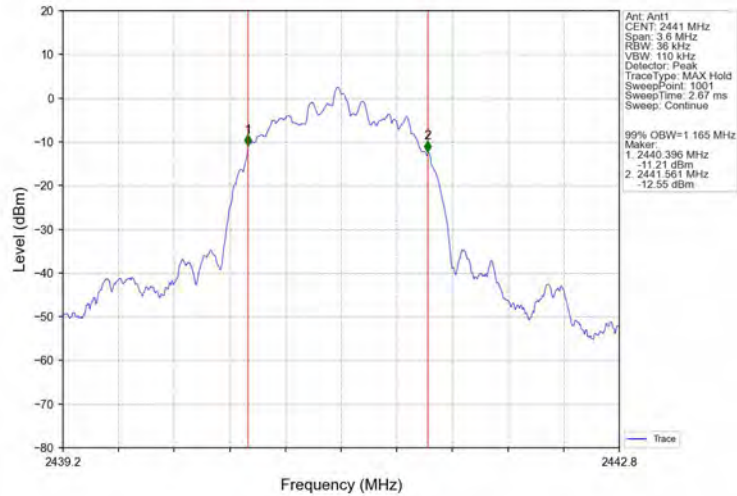
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

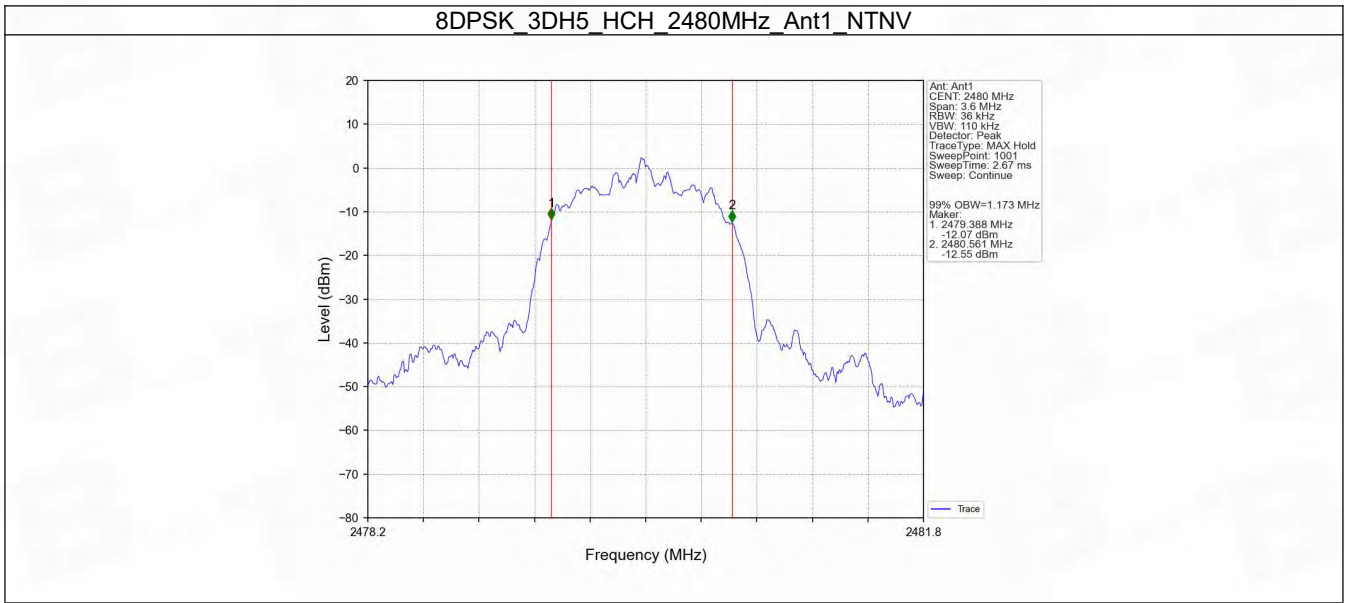


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV

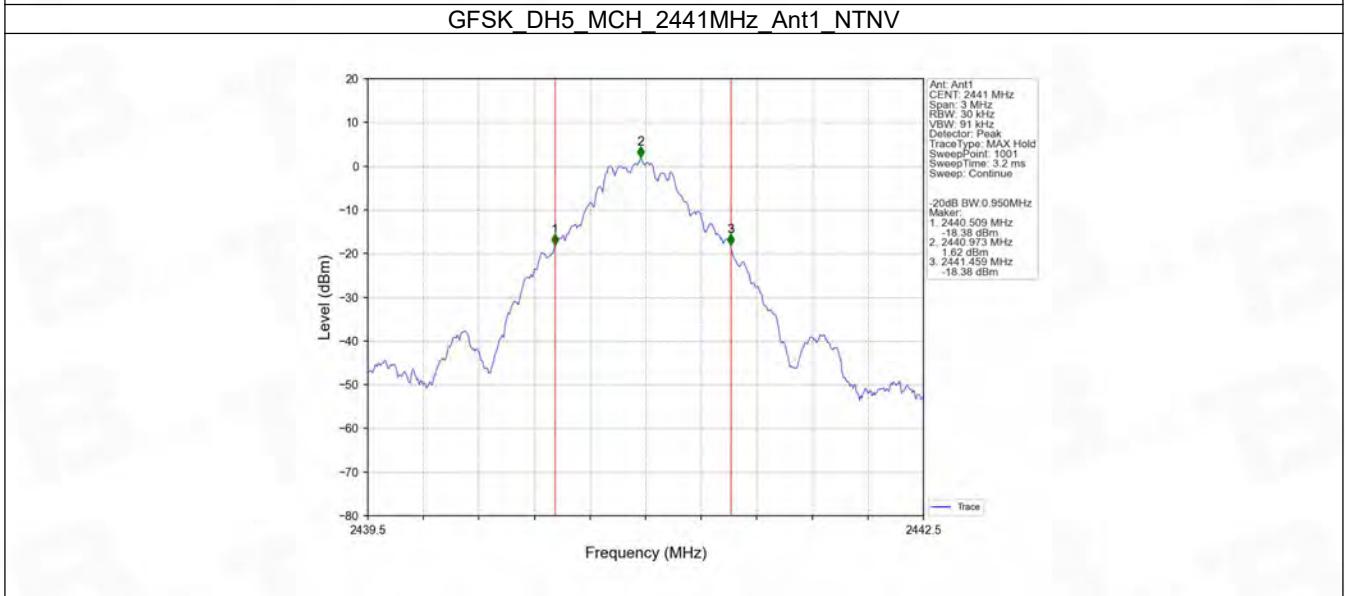
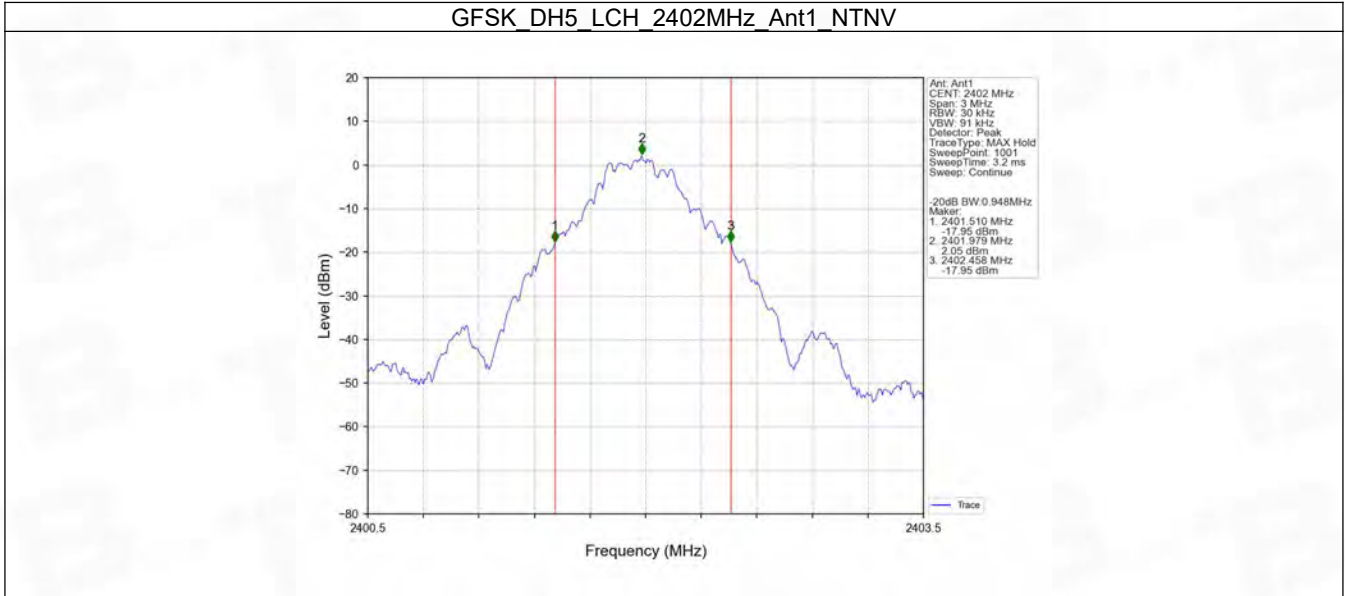


8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV

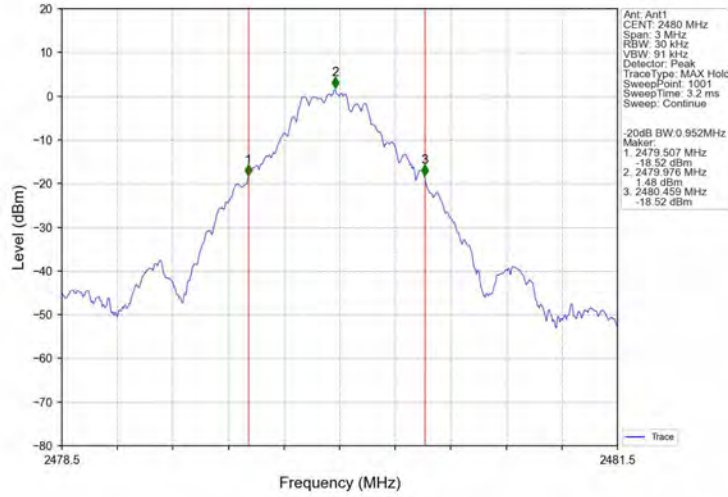




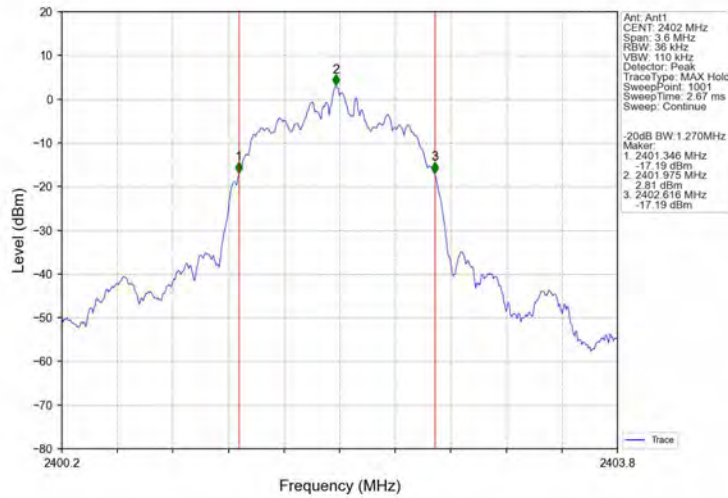
1.2.2 20dB BW



GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV

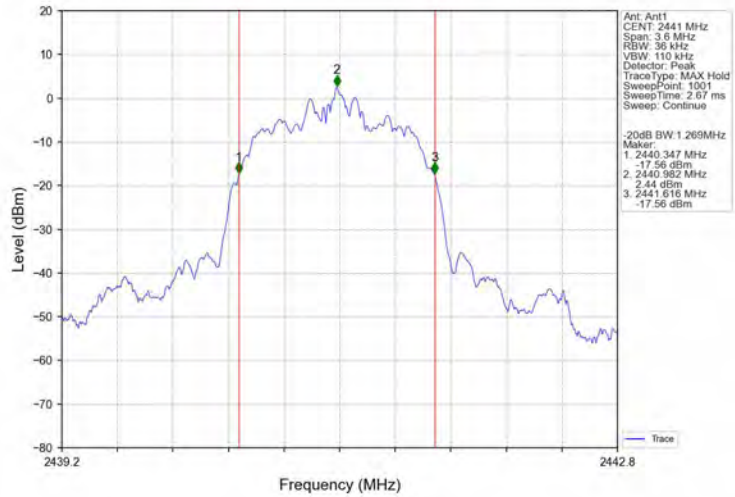


Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV

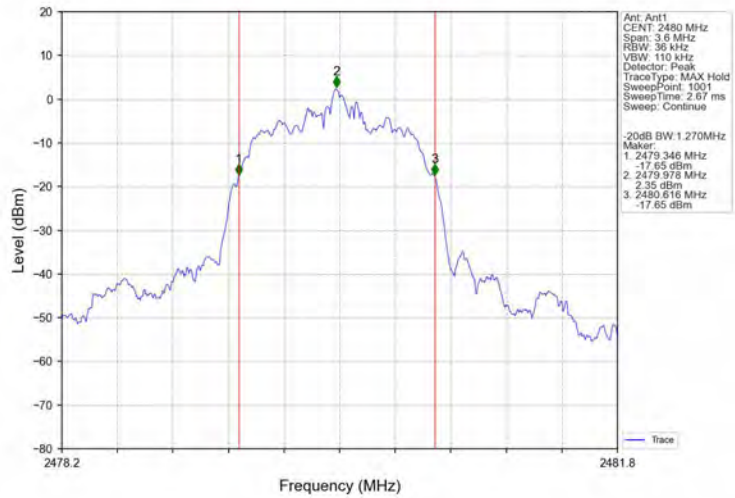




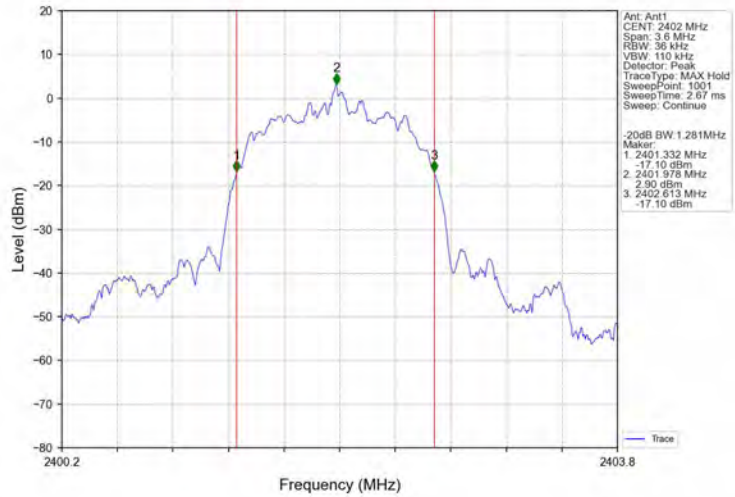
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



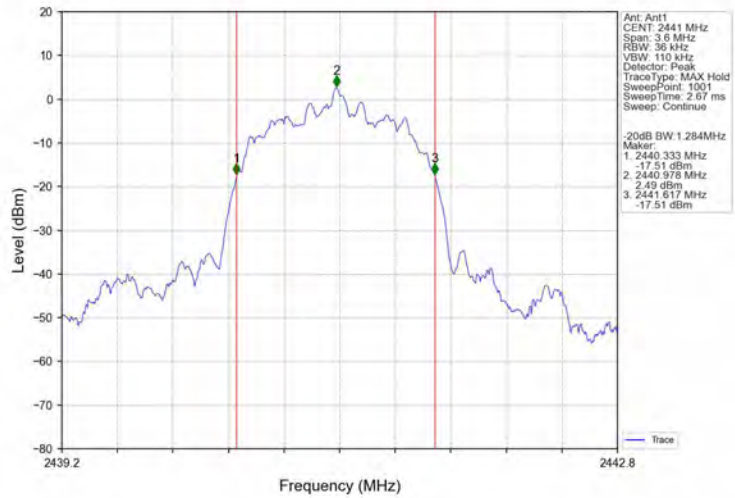
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

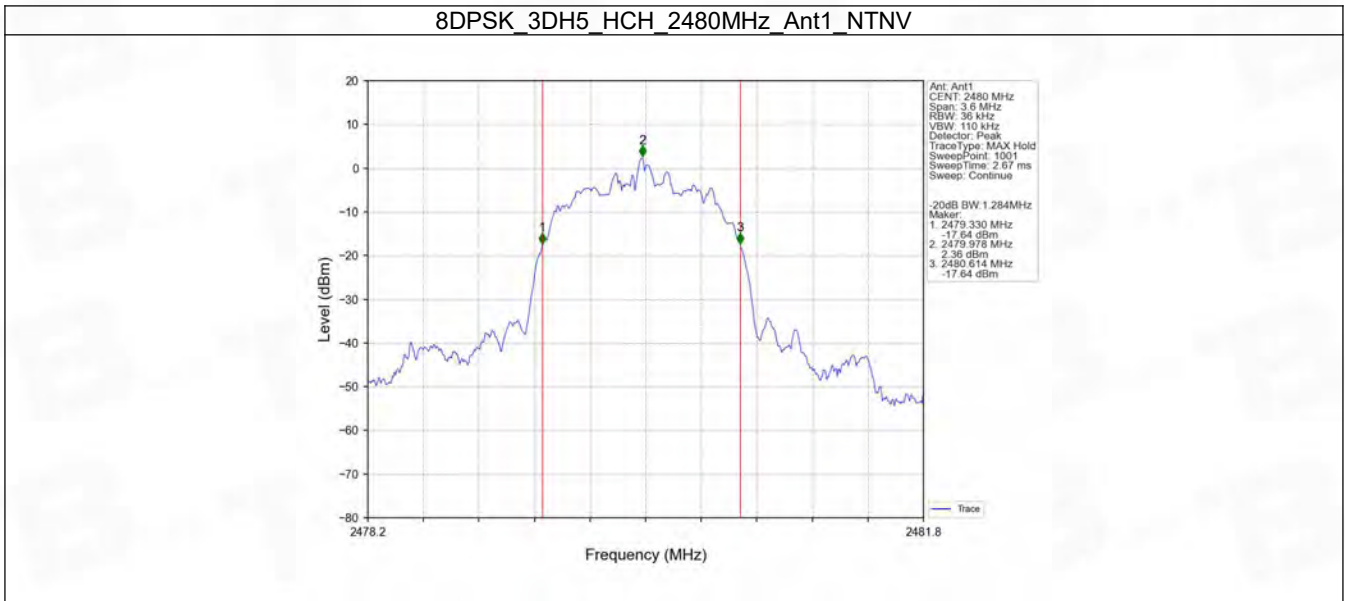


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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





## 2. Maximum Conducted Output Power

### 2.1 Test Result

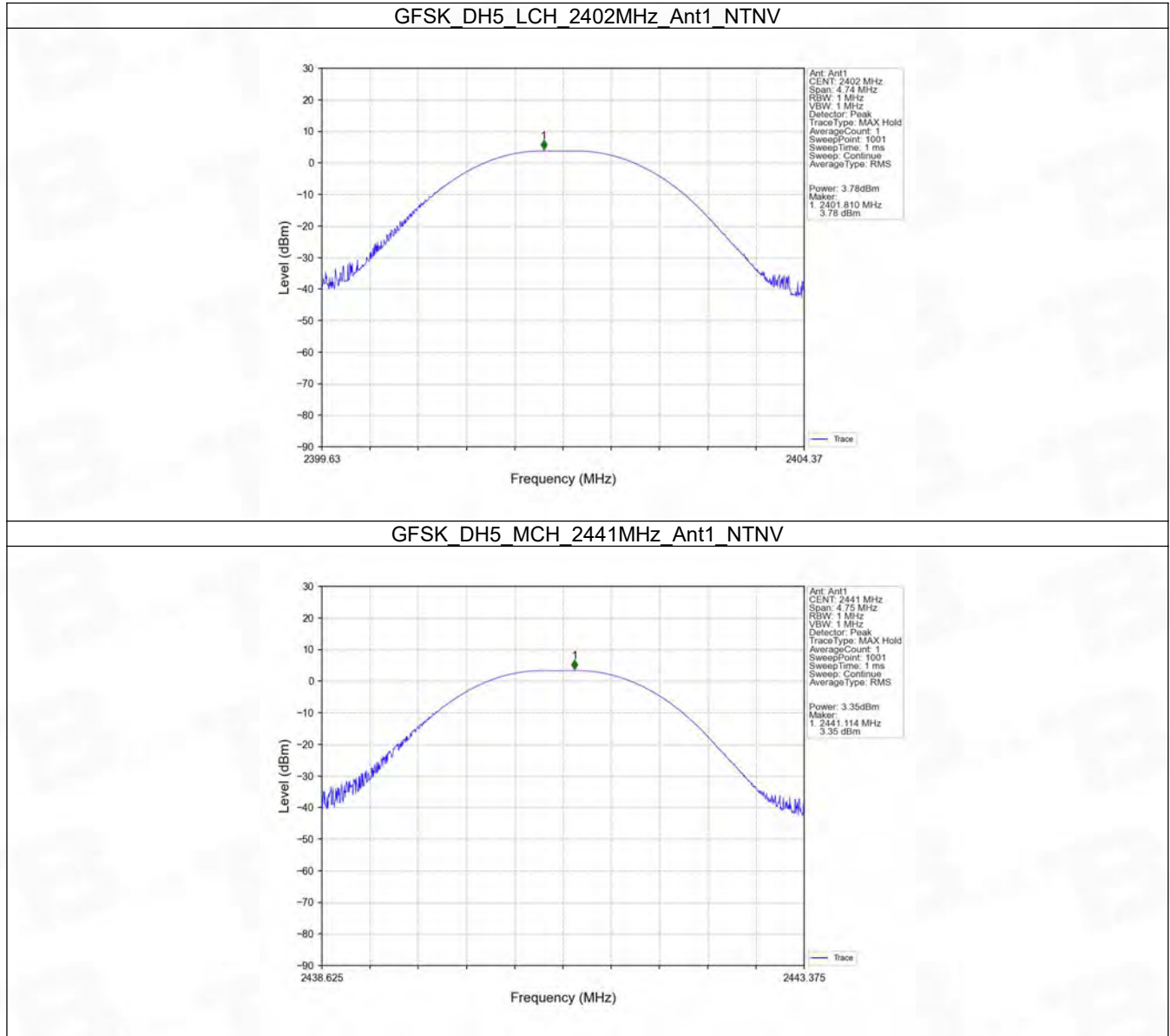
#### 2.1.1 Power

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	3.78	<=30	Pass
		2441	DH5	3.35	<=30	Pass
		2480	DH5	3.20	<=30	Pass
Pi/4DQPSK	SISO	2402	2DH5	4.65	<=20.97	Pass
		2441	2DH5	4.21	<=20.97	Pass
		2480	2DH5	4.06	<=20.97	Pass
8DPSK	SISO	2402	3DH5	5.22	<=20.97	Pass
		2441	3DH5	4.79	<=20.97	Pass
		2480	3DH5	4.63	<=20.97	Pass

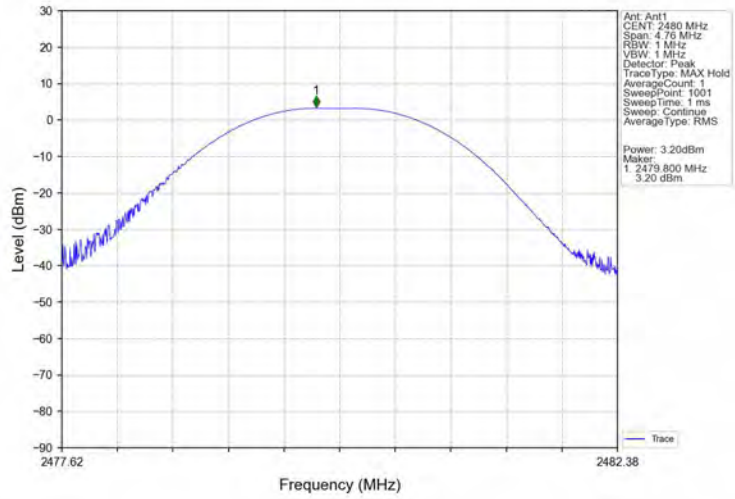
Note1: Antenna Gain: Ant1: -3.00dBi;

## 2.2 Test Graph

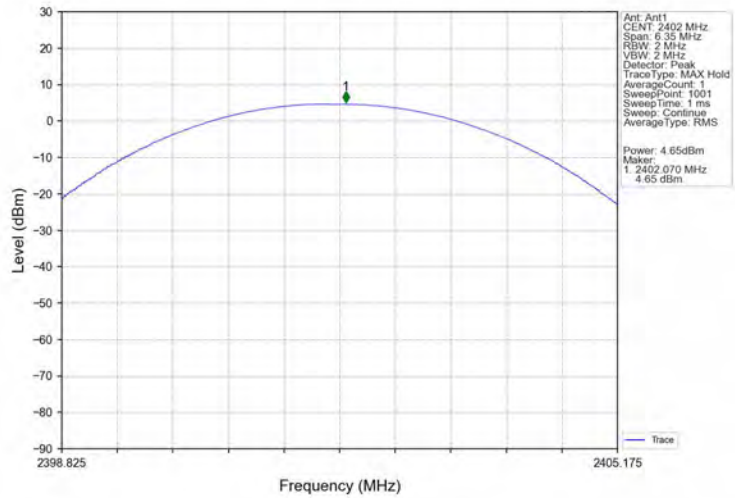
### 2.2.1 Power



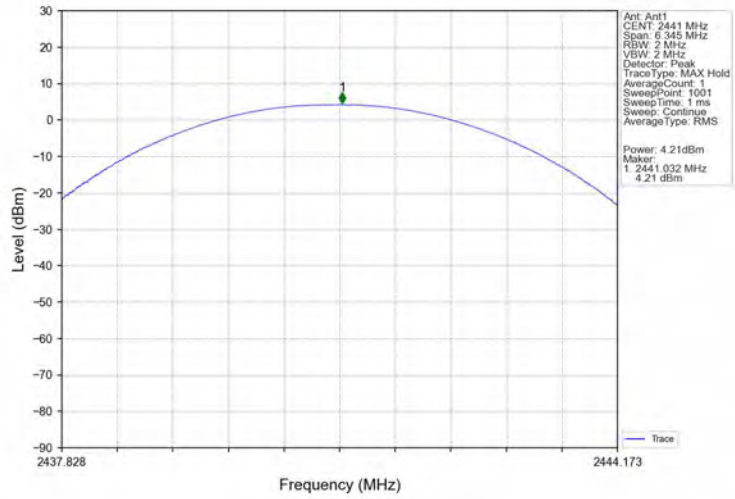
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



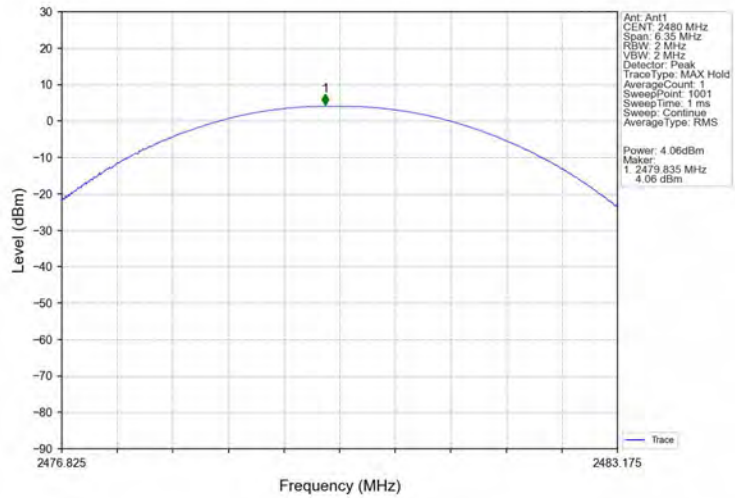
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



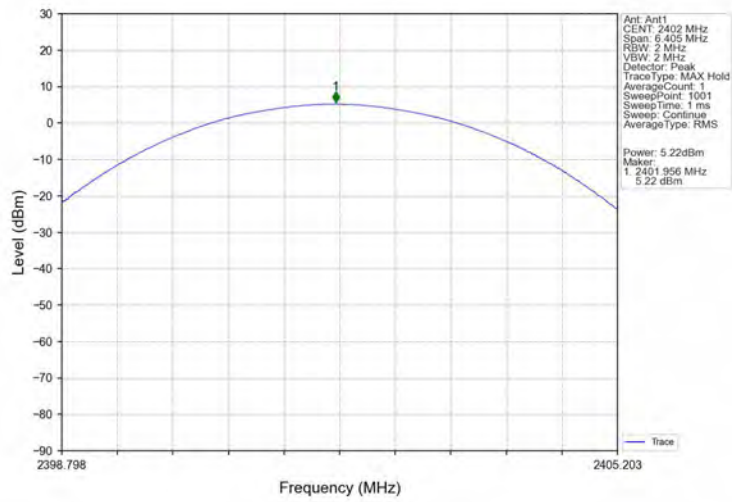
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



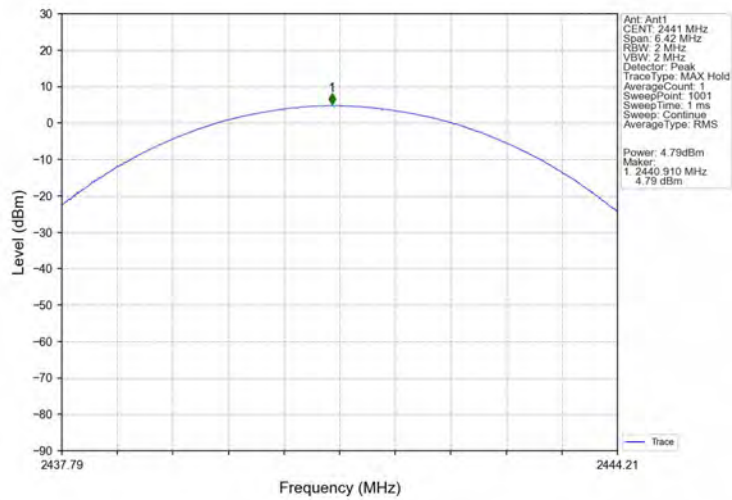
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



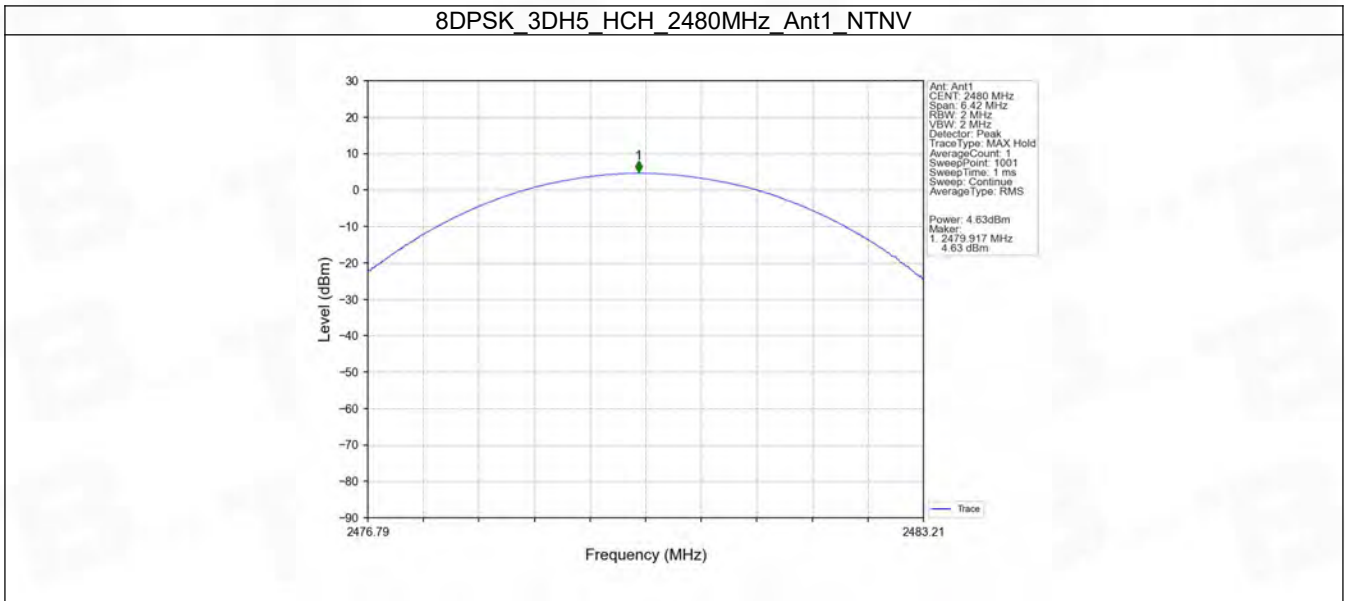
8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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







### 3. Carrier Frequency Separation

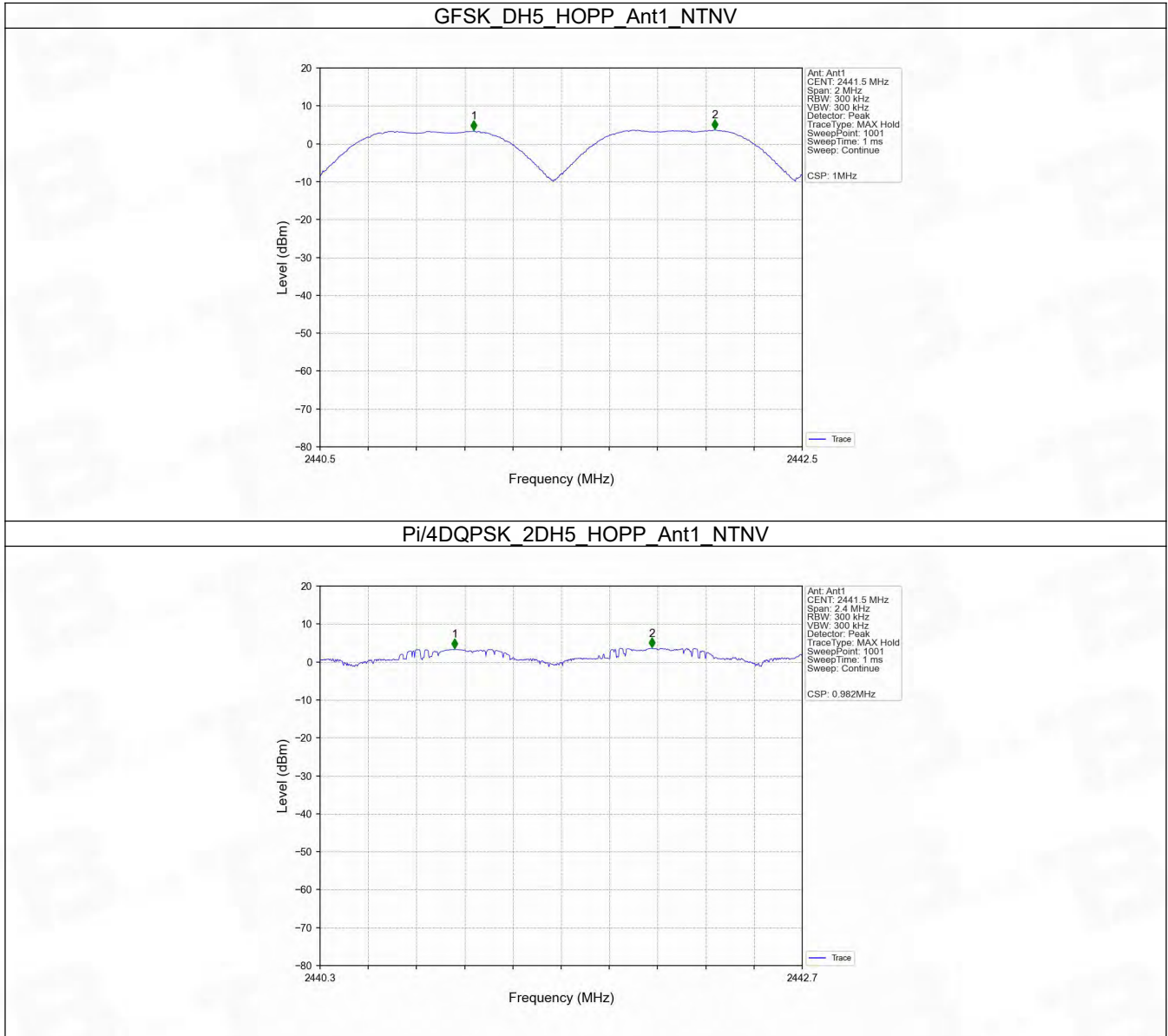
#### 3.1 Test Result

##### 3.1.1 Ant1

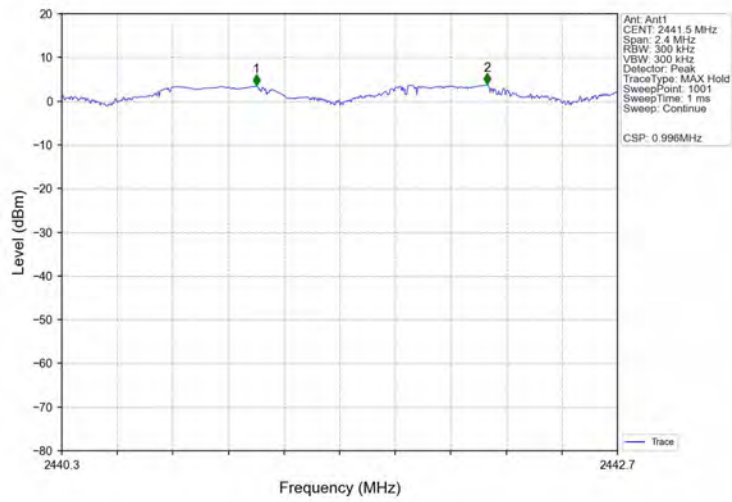
Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.000	0.952	$\geq 0.952$	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	0.982	1.270	$\geq 0.847$	Pass
8DPSK	SISO	HOPP	3DH5	0.996	1.284	$\geq 0.856$	Pass

### 3.2 Test Graph

#### 3.2.1 Ant1



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



## 4. Number of Hopping Frequencies

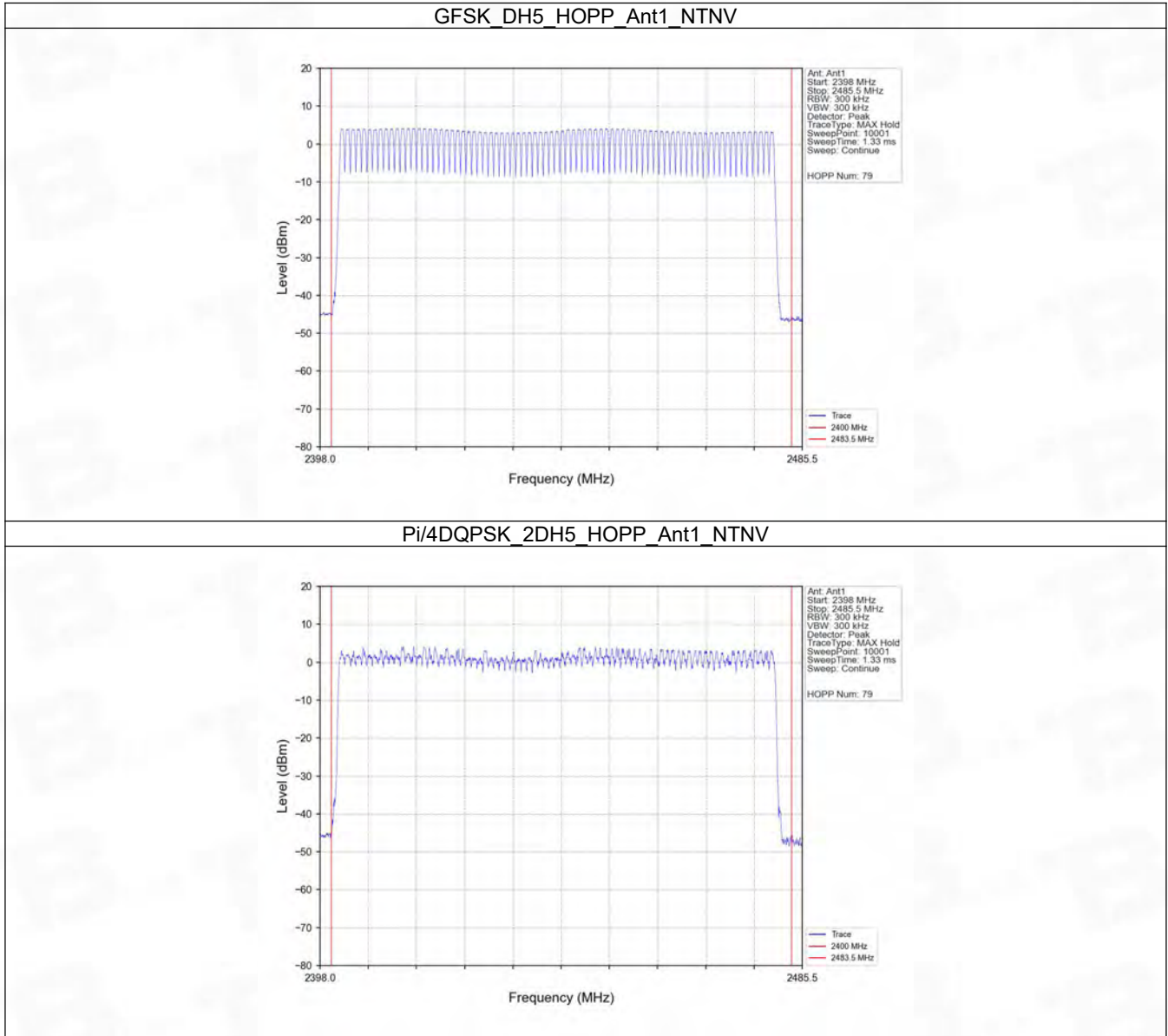
### 4.1 Test Result

#### 4.1.1 HoppNum

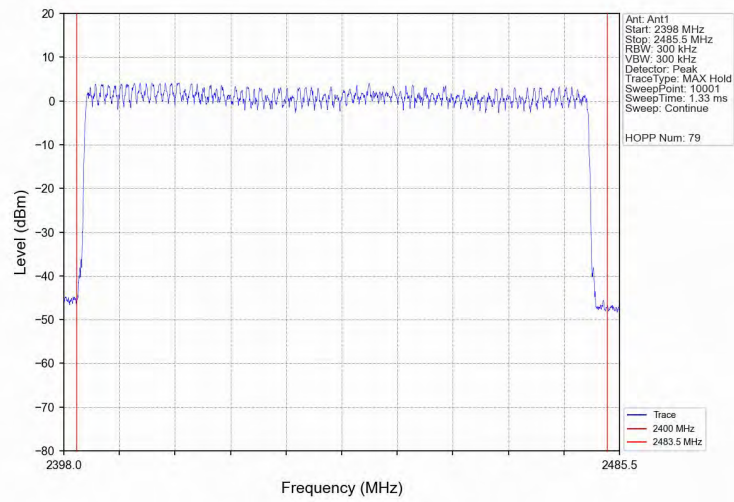
Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	>=15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	>=15	Pass
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass

## 4.2 Test Graph

### 4.2.1 HoppNum



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



## 5. Time of Occupancy (Dwell Time)

### 5.1 Test Result

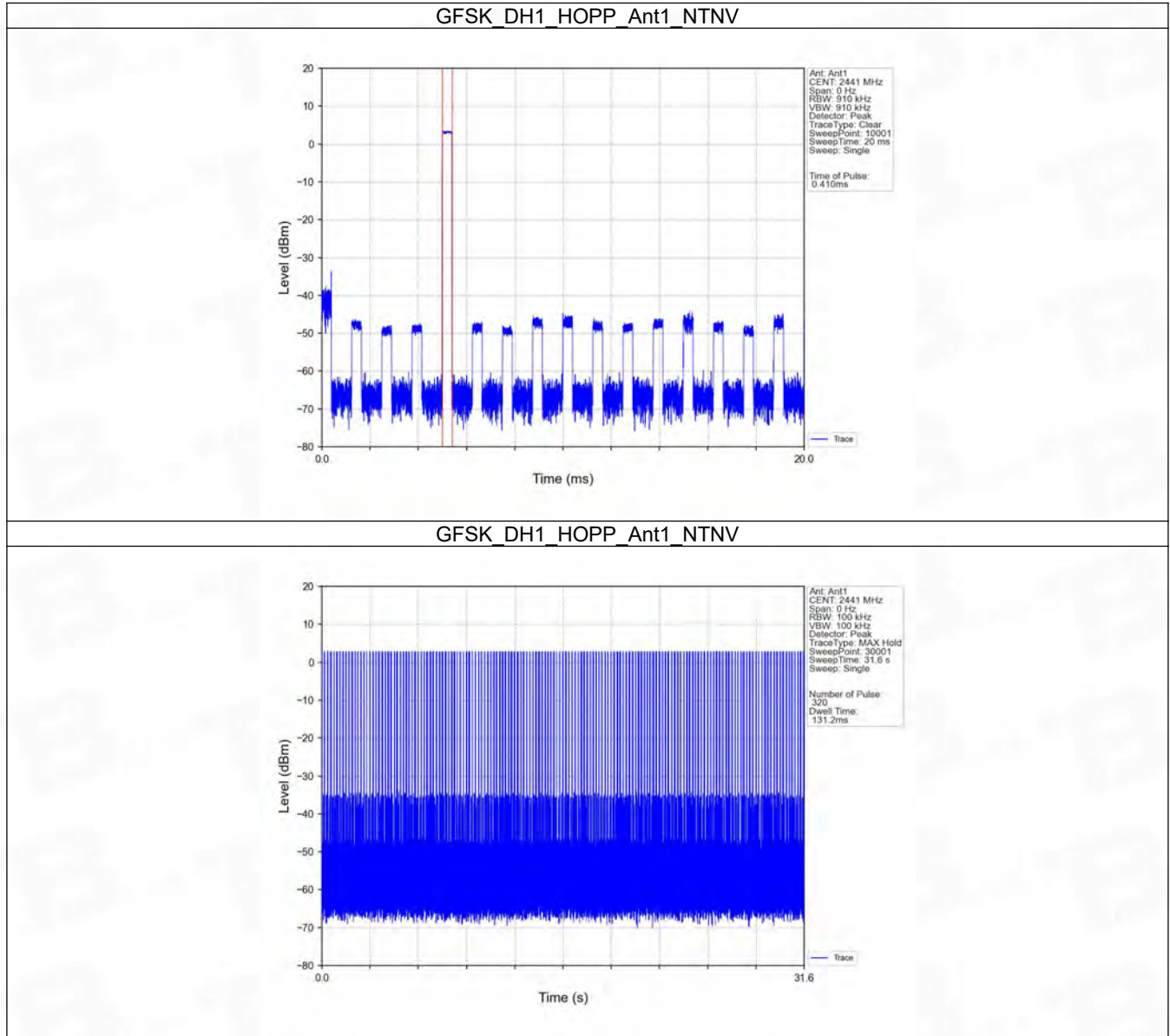
#### 5.1.1 Ant1

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	0.410	31.600	320	131.200	<=400	Pass
			DH3	1.668	31.600	162	270.216	<=400	Pass
			DH5	2.918	31.600	117	341.406	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.422	31.600	319	134.618	<=400	Pass
			2DH3	1.672	31.600	151	252.472	<=400	Pass
			2DH5	2.922	31.600	101	295.122	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.420	31.600	320	134.400	<=400	Pass
			3DH3	1.672	31.600	159	265.848	<=400	Pass
			3DH5	2.922	31.600	106	309.732	<=400	Pass

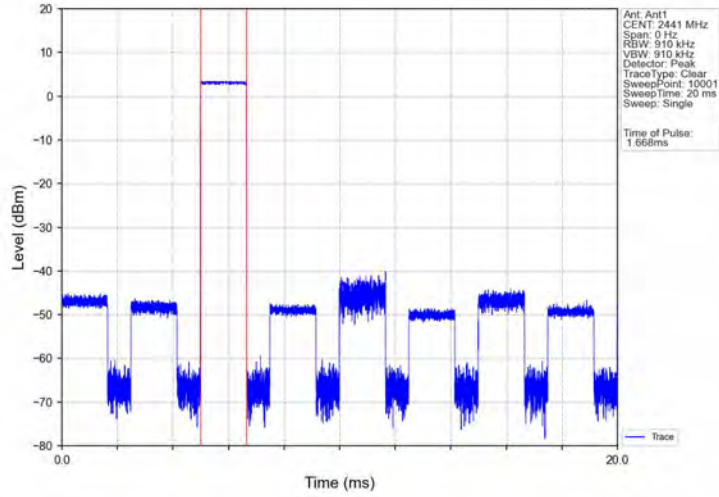


## 5.2 Test Graph

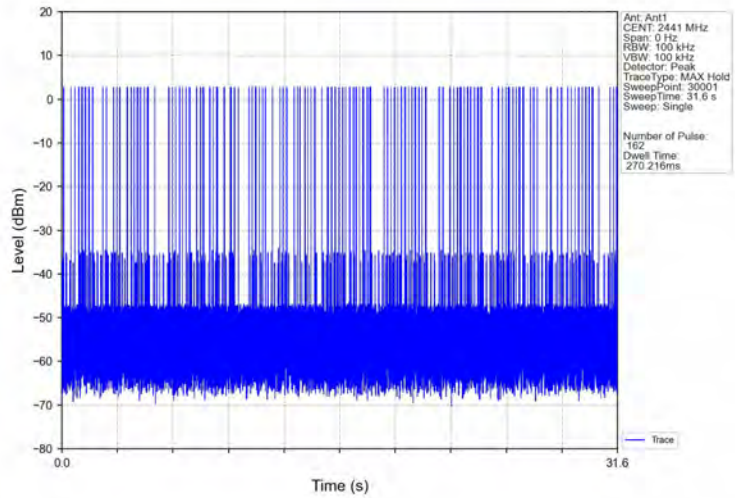
### 5.2.1 Ant1



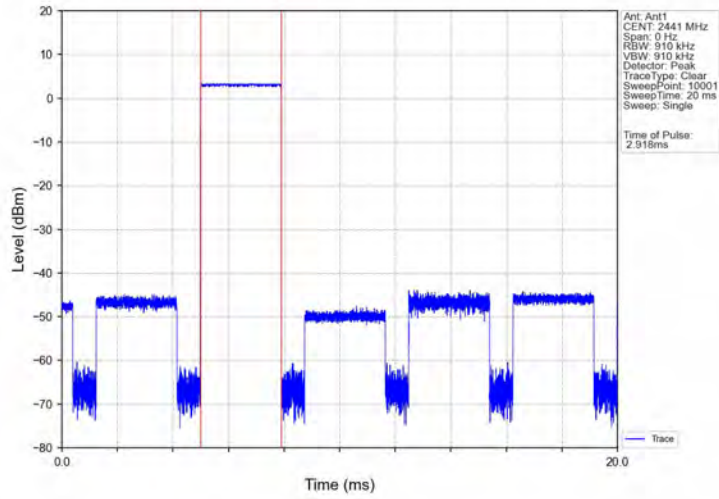
GFSK\_DH3\_HOPP\_Ant1\_NTNV



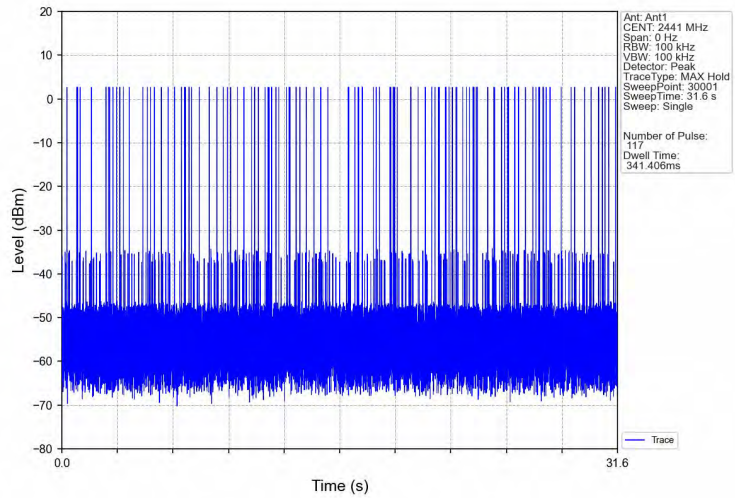
GFSK\_DH3\_HOPP\_Ant1\_NTNV



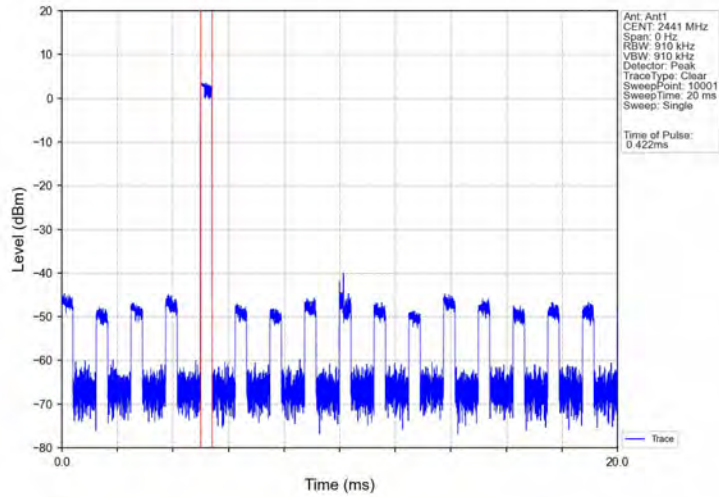
GFSK\_DH5\_HOPP\_Ant1\_NTNV



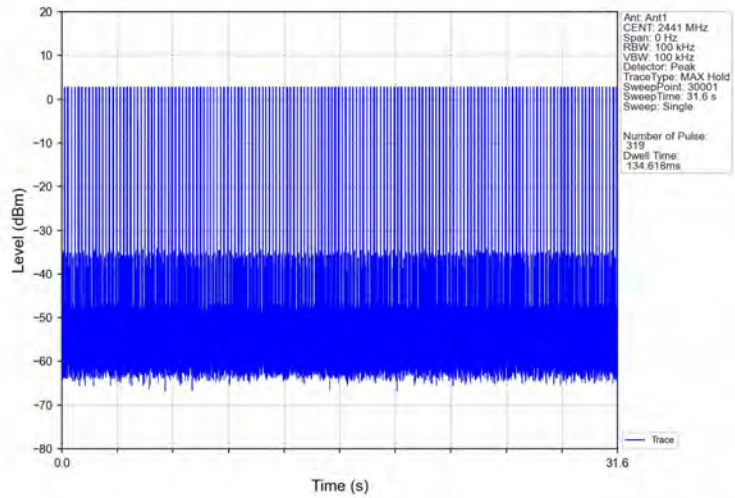
GFSK\_DH5\_HOPP\_Ant1\_NTNV



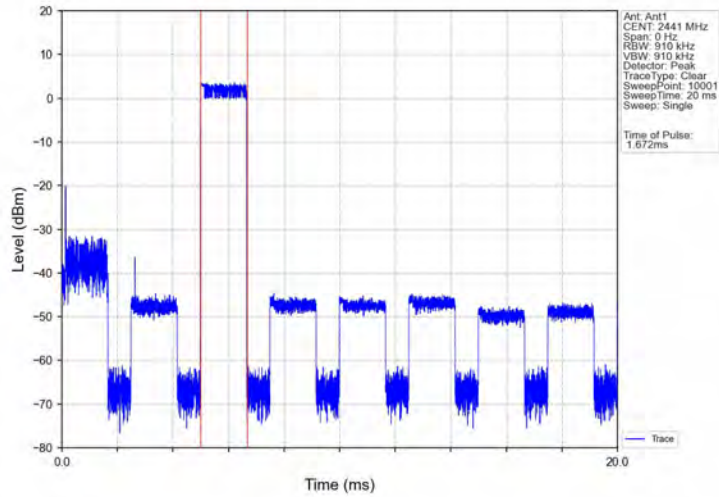
Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



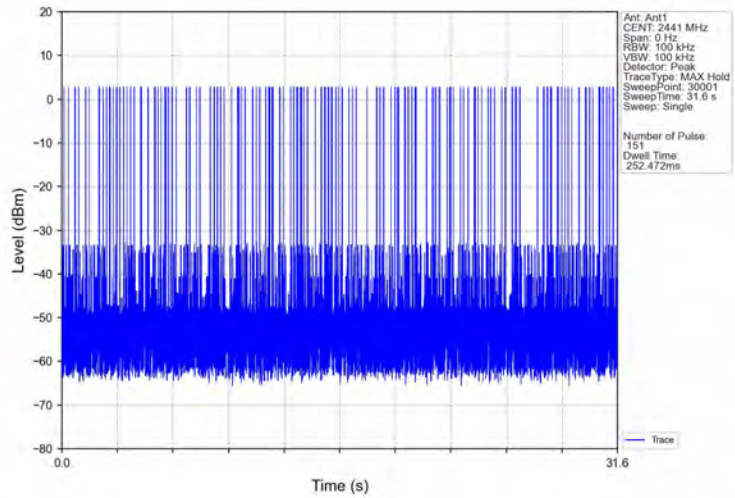
Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



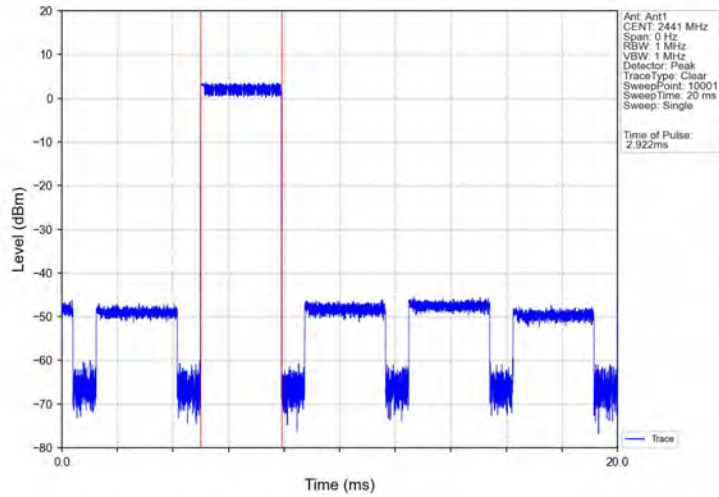
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



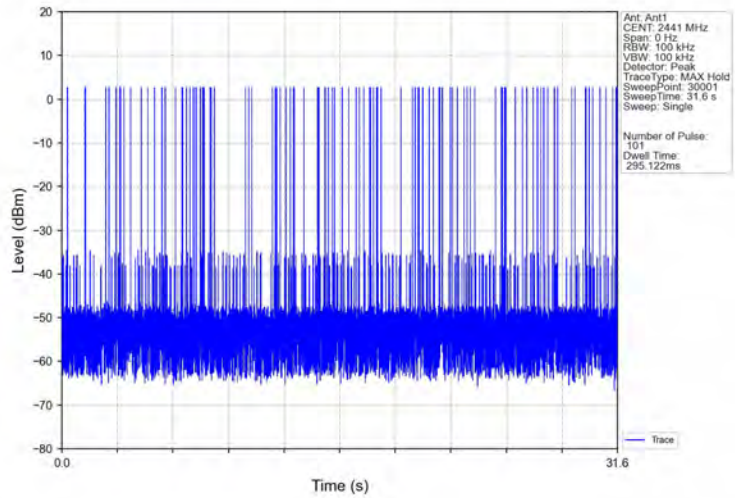
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



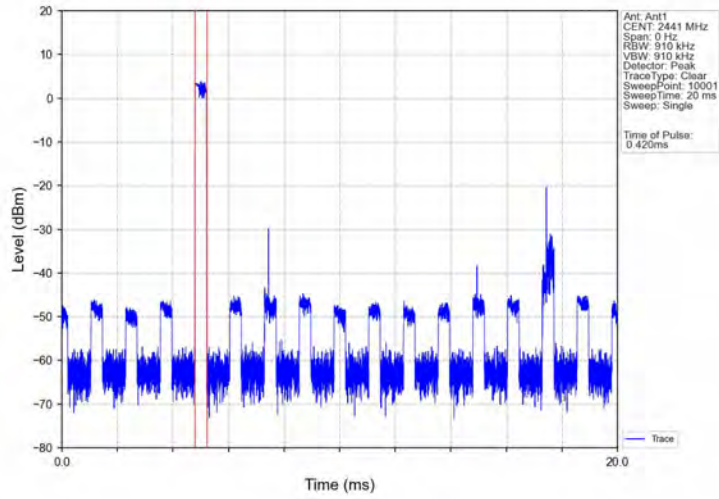
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



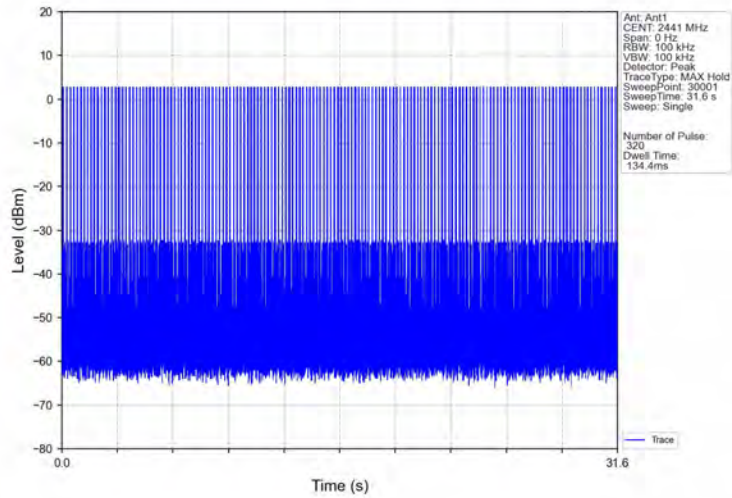
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



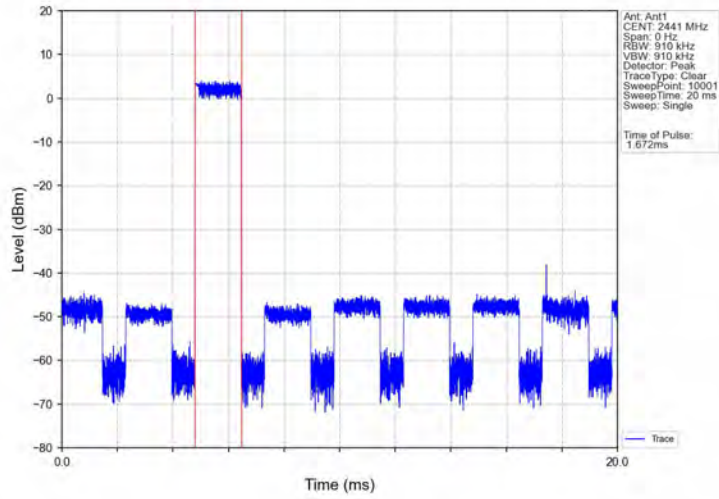
8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



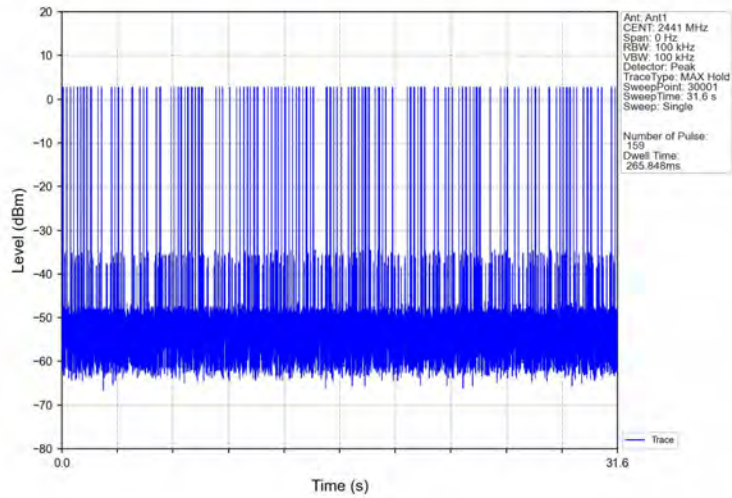
8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



8DPSK\_3DH3\_HOPP\_Ant1\_NTNV

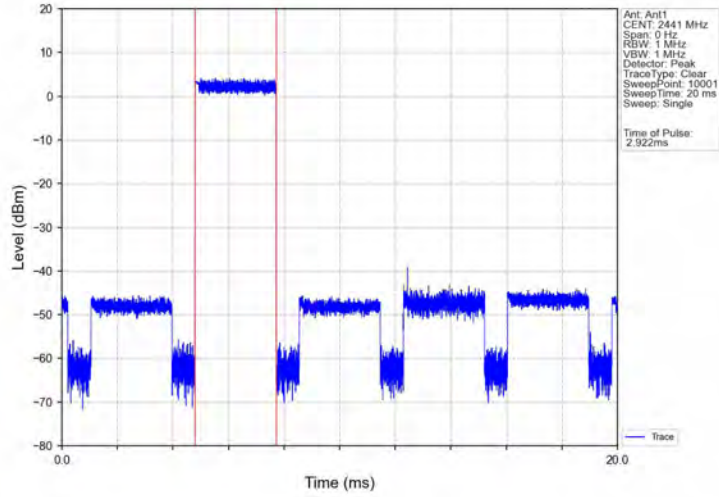


8DPSK\_3DH3\_HOPP\_Ant1\_NTNV

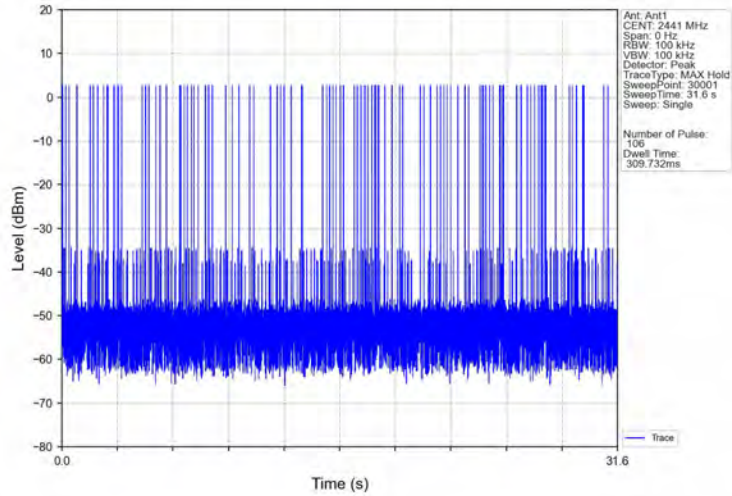




8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



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	3.66
		2441	DH5	1	3.19
		2480	DH5	1	3.10
Pi/4DQPSK	SISO	2402	2DH5	1	3.61
		2441	2DH5	1	3.28
		2480	2DH5	1	2.99
8DPSK	SISO	2402	3DH5	1	3.73
		2441	3DH5	1	3.27
		2480	3DH5	1	3.13

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

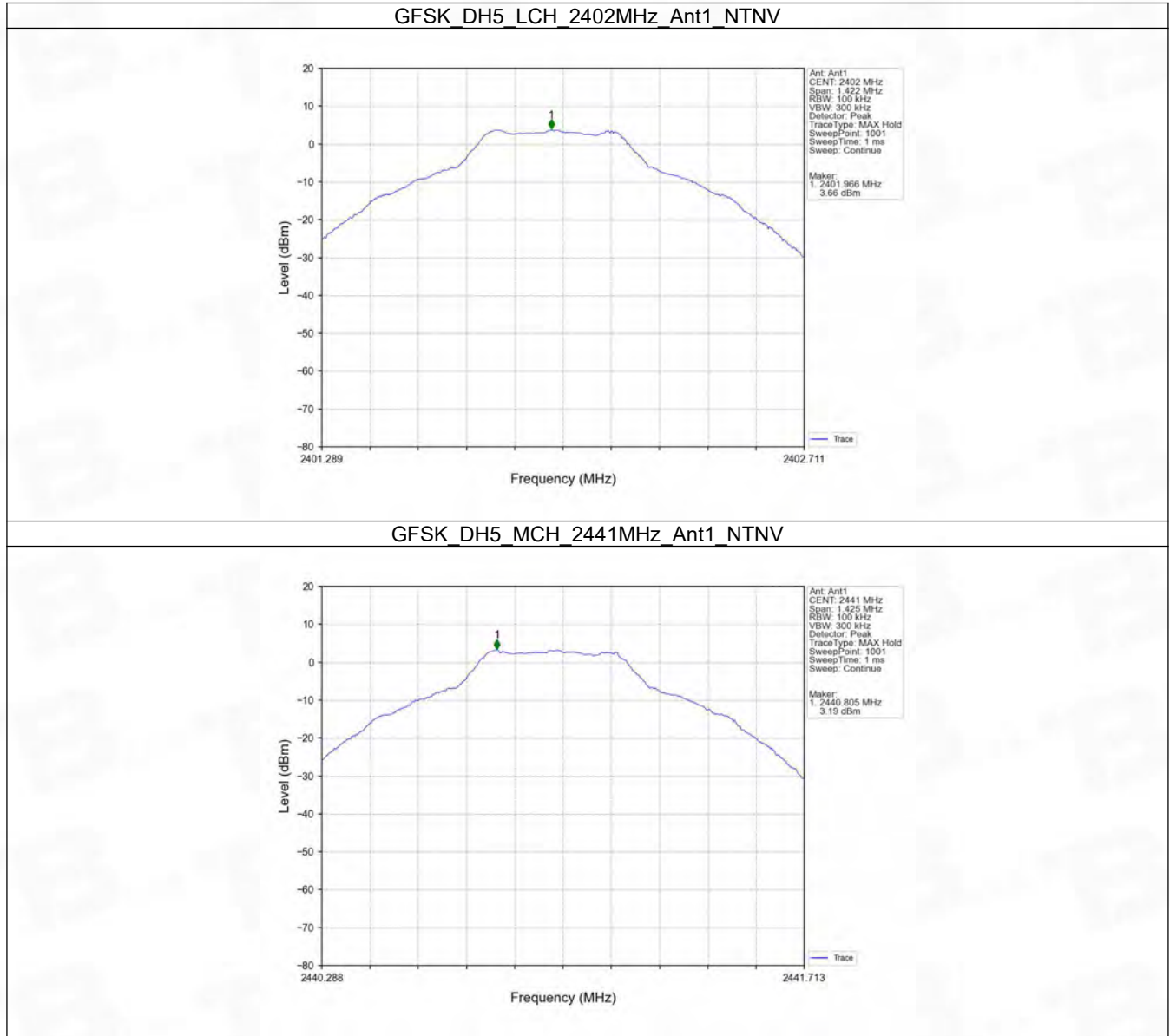
#### 6.1.2 CSE

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	3.66	-16.34	Pass
		2441	DH5	1	3.66	-16.34	Pass
		2480	DH5	1	3.66	-16.34	Pass
		HOPP	DH5	1	3.66	-16.34	Pass
					3.66	-16.34	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	3.61	-16.39	Pass
		2441	2DH5	1	3.61	-16.39	Pass
		2480	2DH5	1	3.61	-16.39	Pass
		HOPP	2DH5	1	3.61	-16.39	Pass
					3.61	-16.39	Pass
8DPSK	SISO	2402	3DH5	1	3.73	-16.27	Pass
		2441	3DH5	1	3.73	-16.27	Pass
		2480	3DH5	1	3.73	-16.27	Pass
		HOPP	3DH5	1	3.73	-16.27	Pass
					3.73	-16.27	Pass

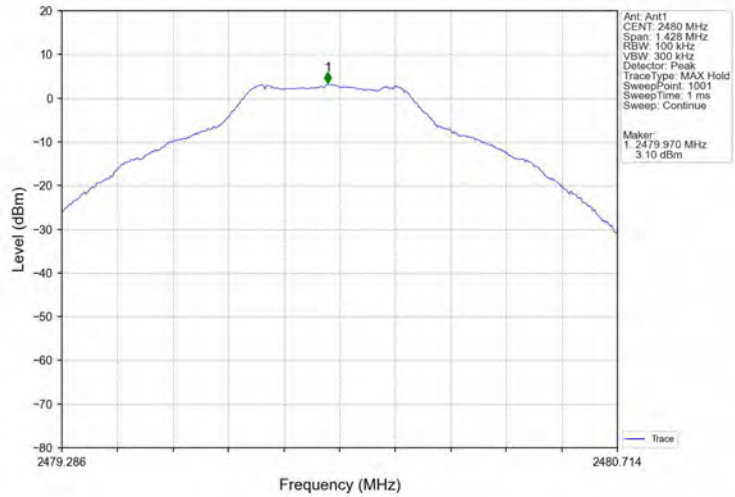
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

## 6.2 Test Graph

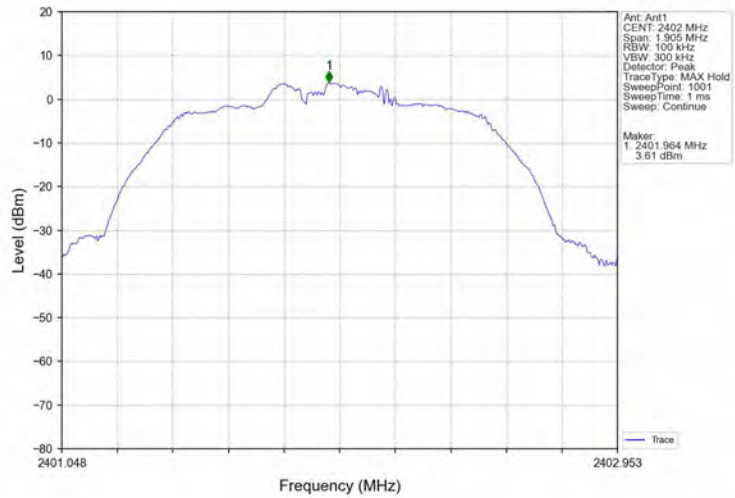
### 6.2.1 Ref



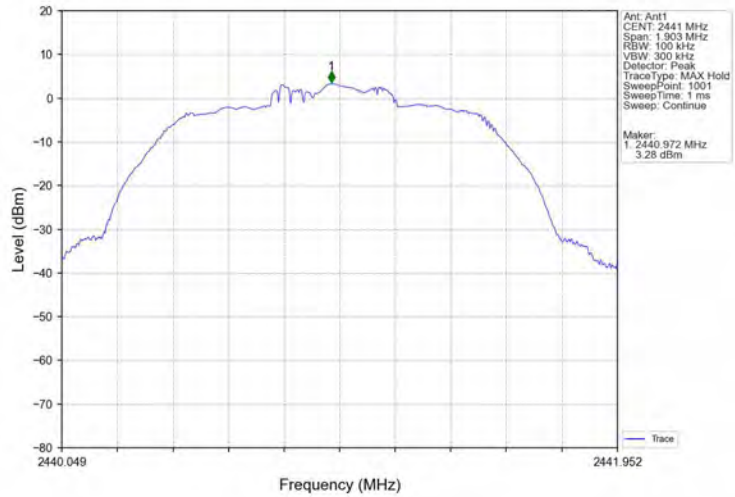
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



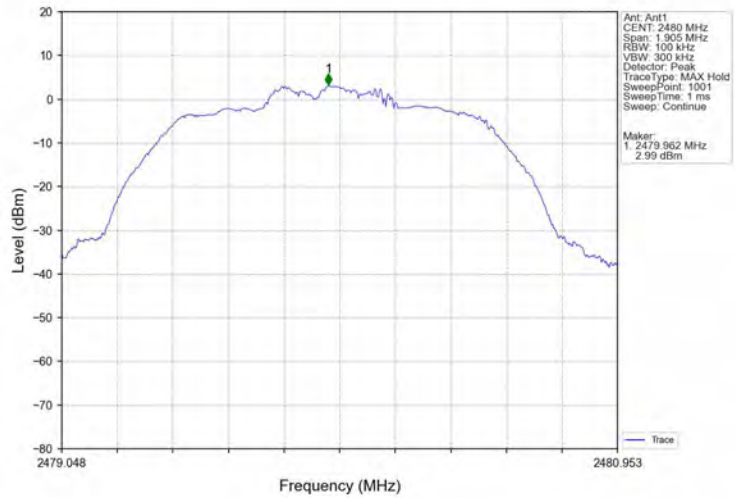
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



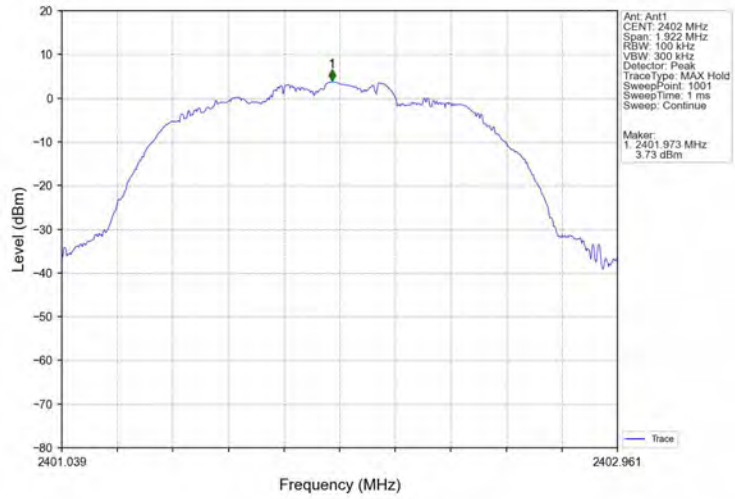
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



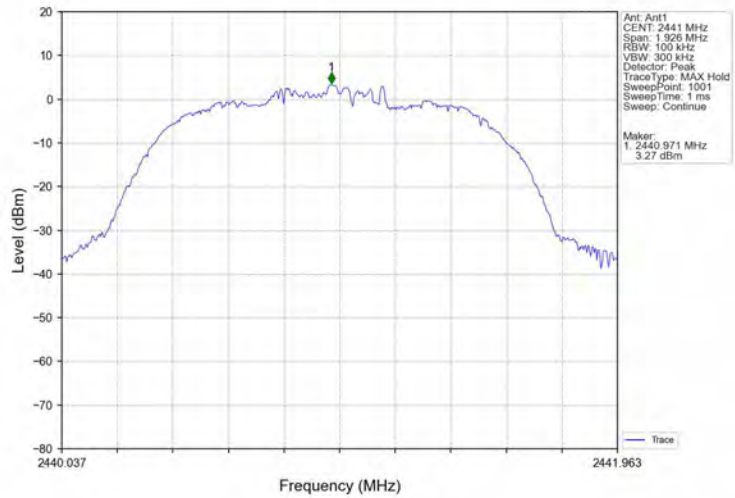
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

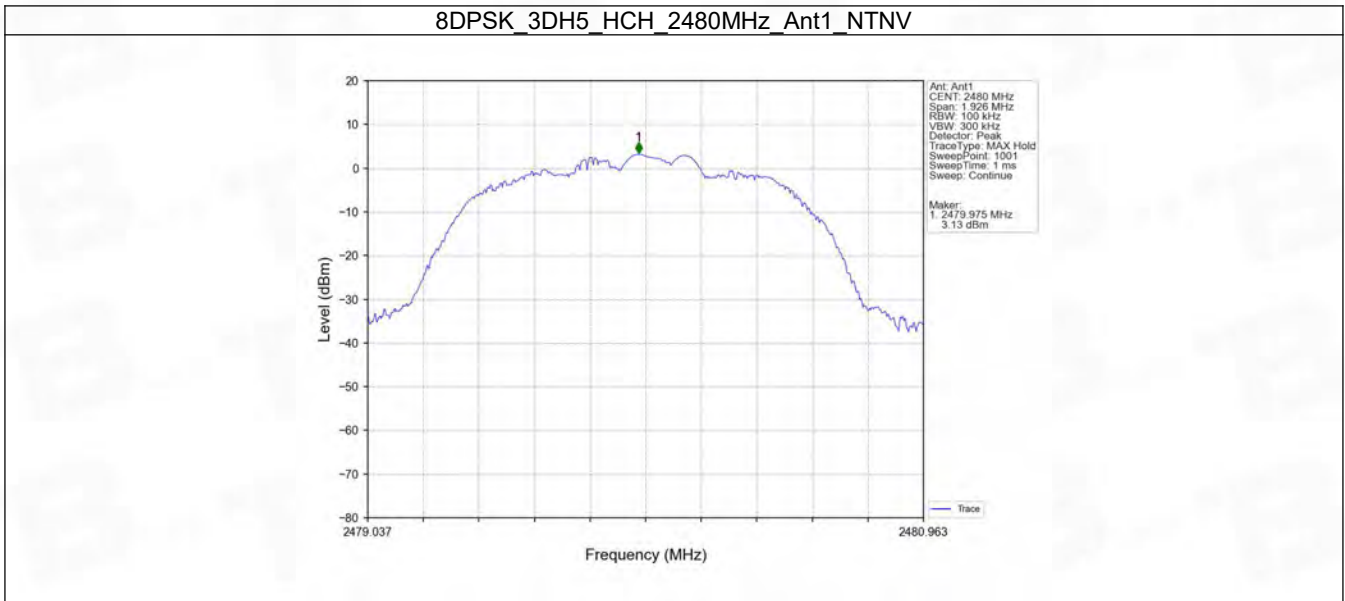


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV

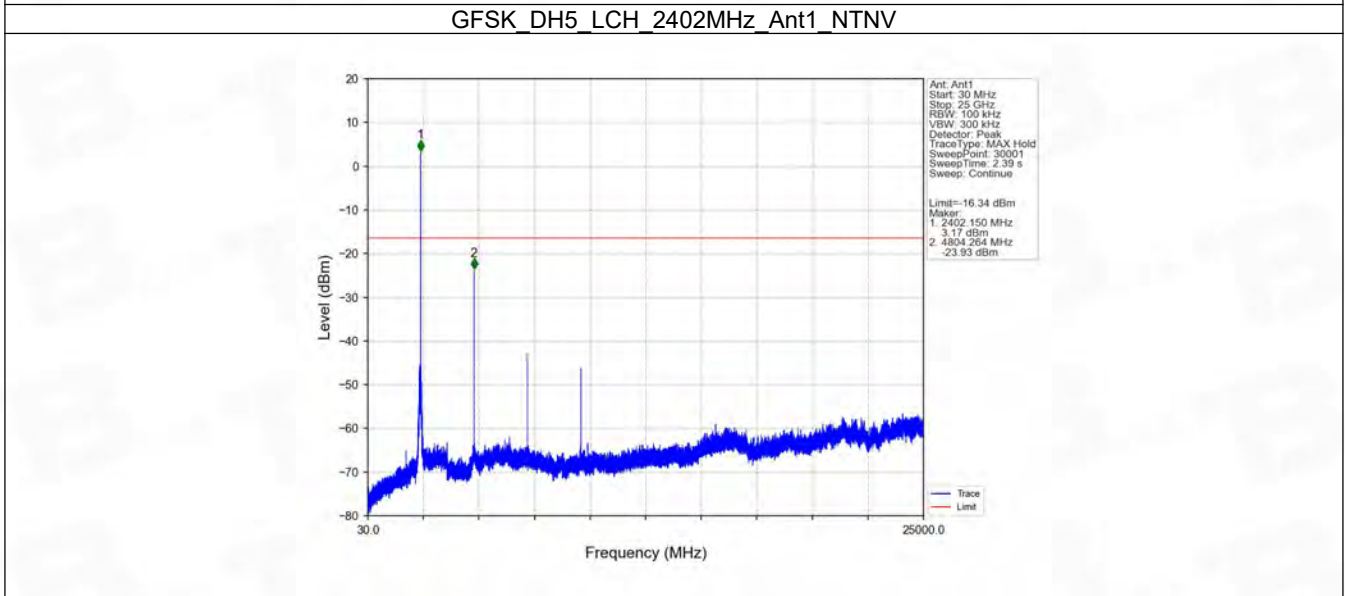
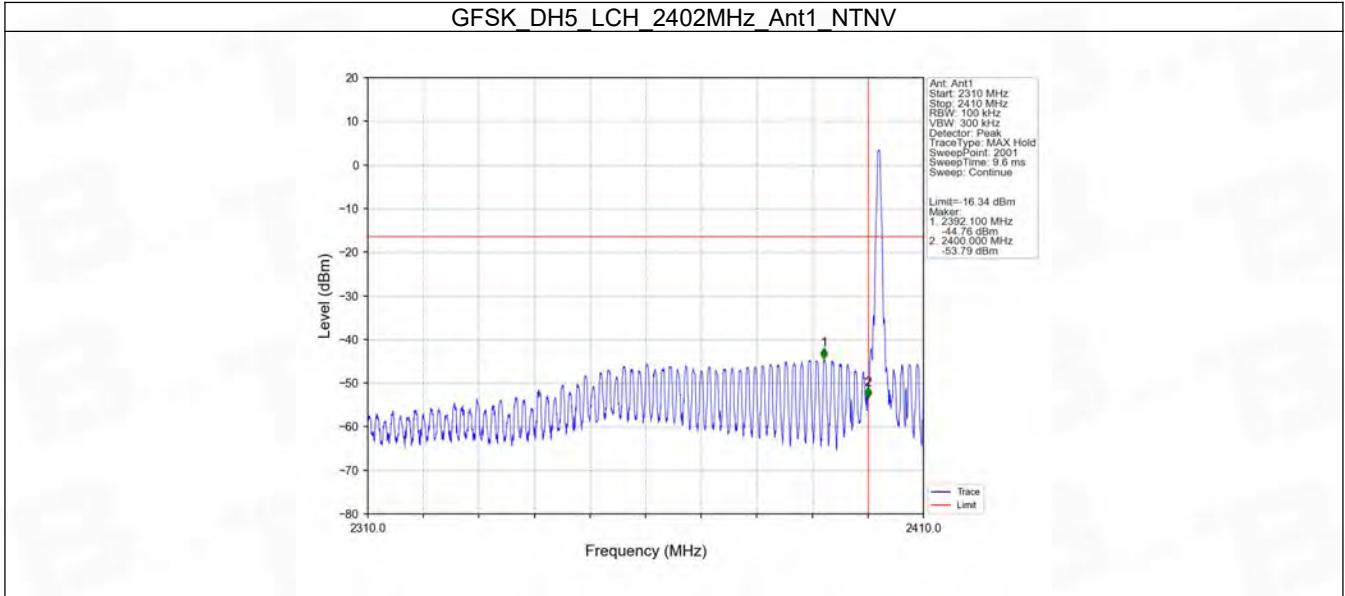


8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



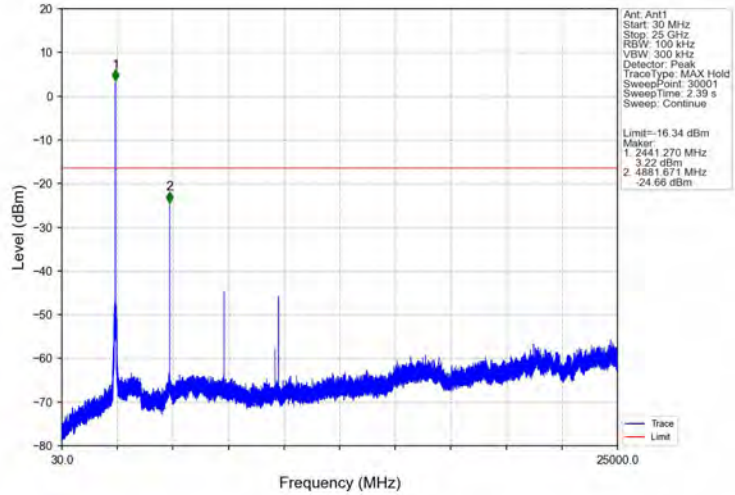


6.2.2 CSE

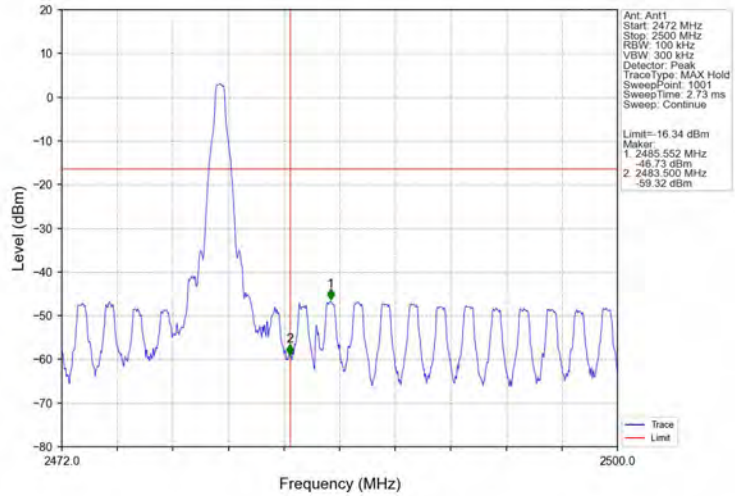




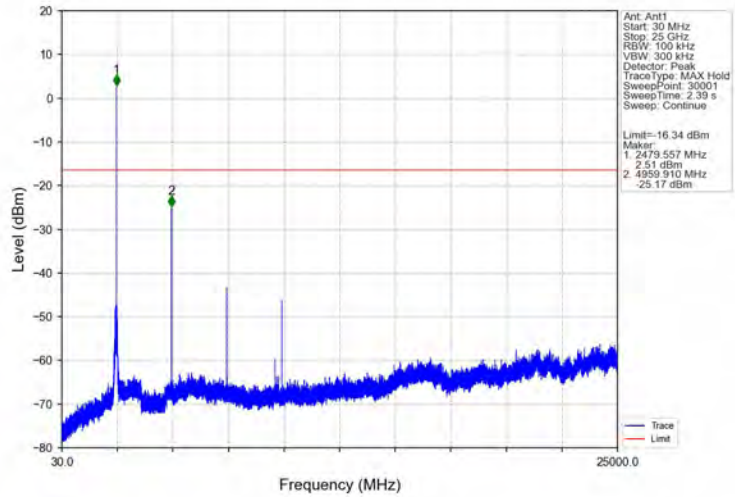
GFSK\_DH5\_MCH\_2441MHz\_Ant1\_NTNV



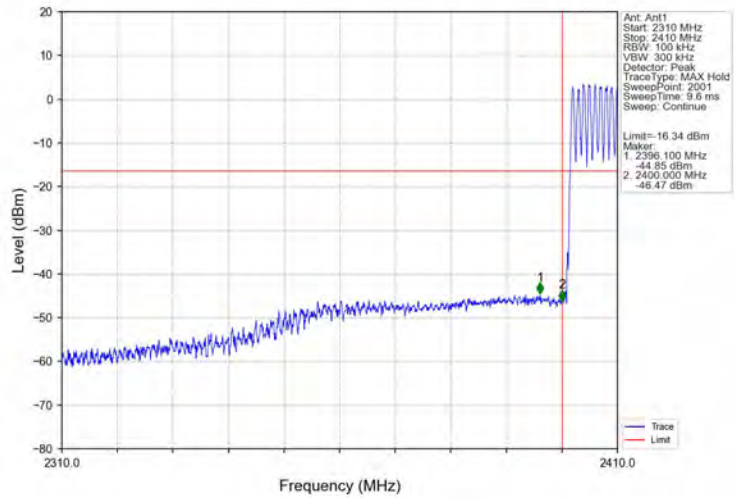
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



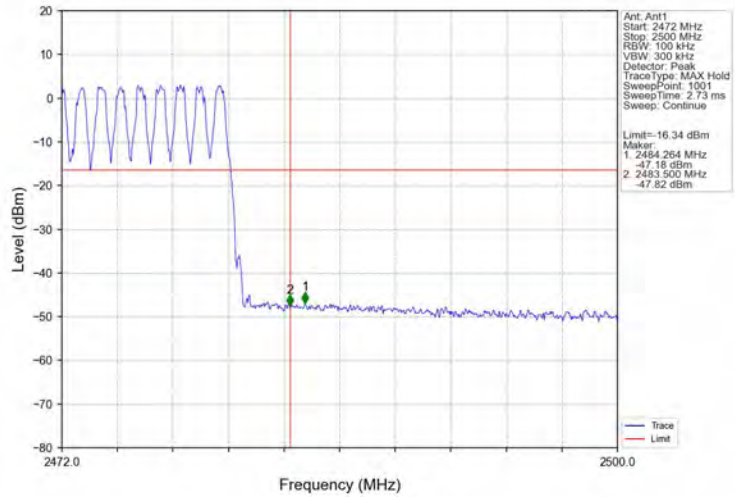
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



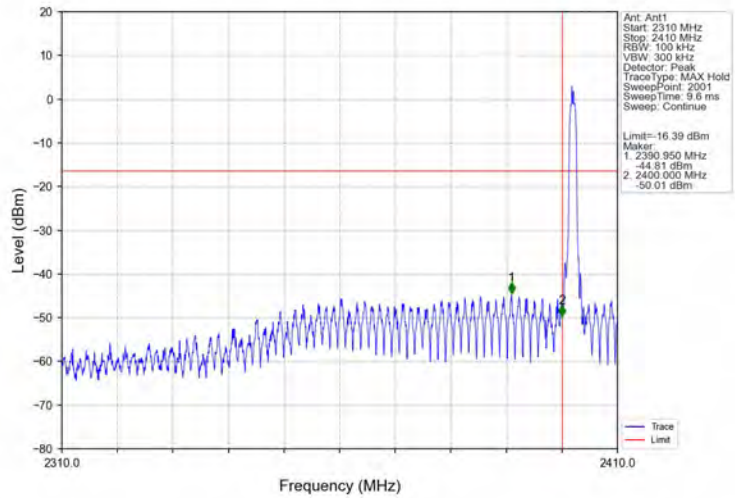
GFSK\_DH5\_HOPP\_2410MHz\_Ant1\_NTNV



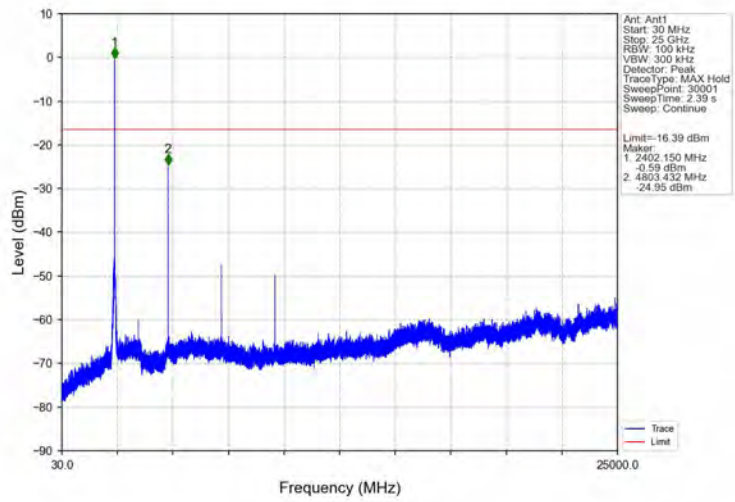
GFSK\_DH5\_HOPP\_Ant1\_NTNV



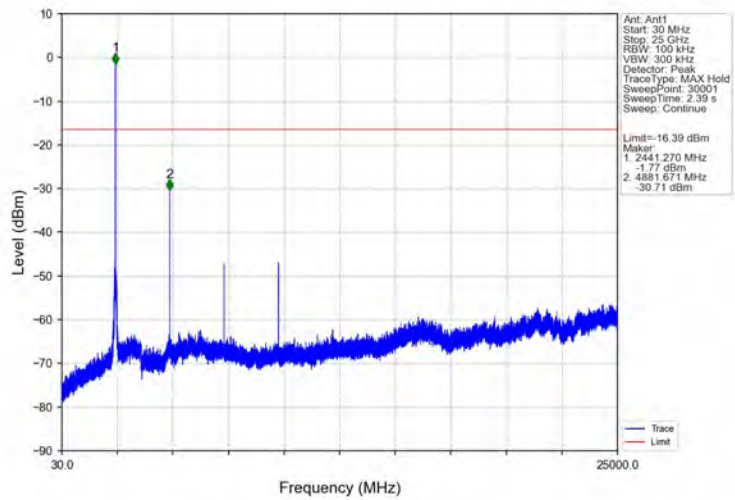
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



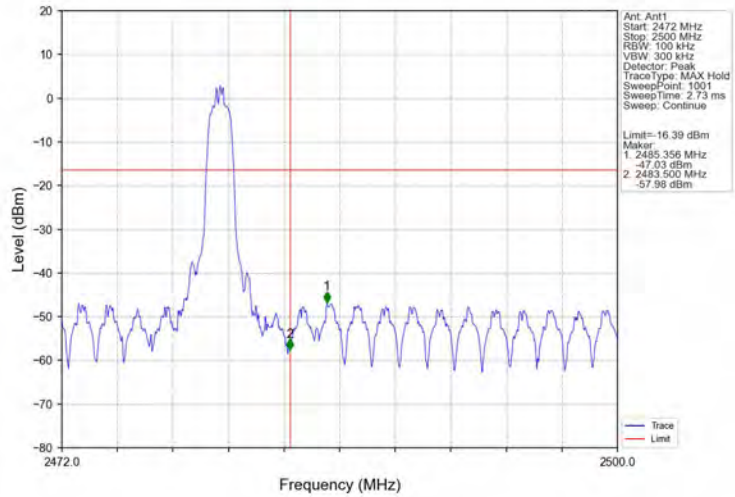
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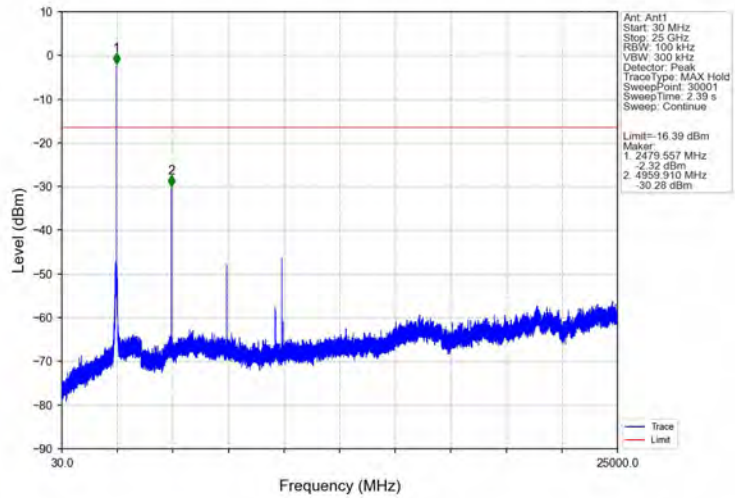
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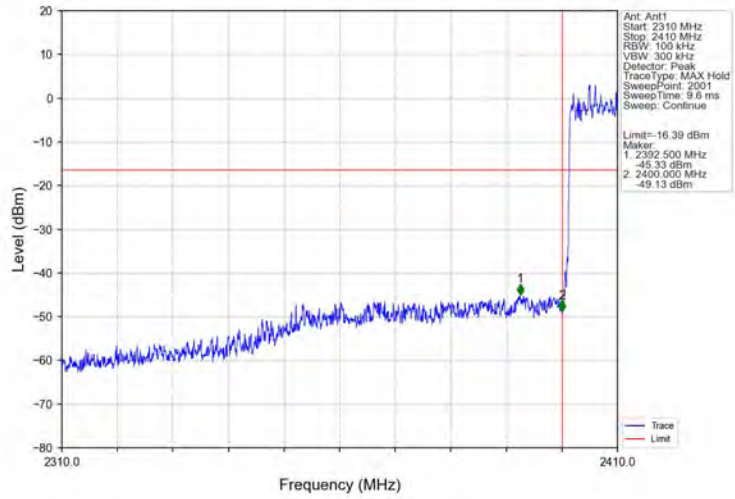
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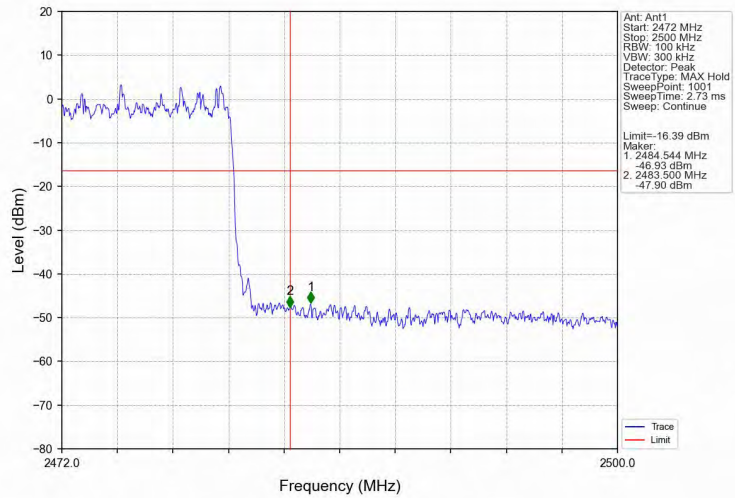
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



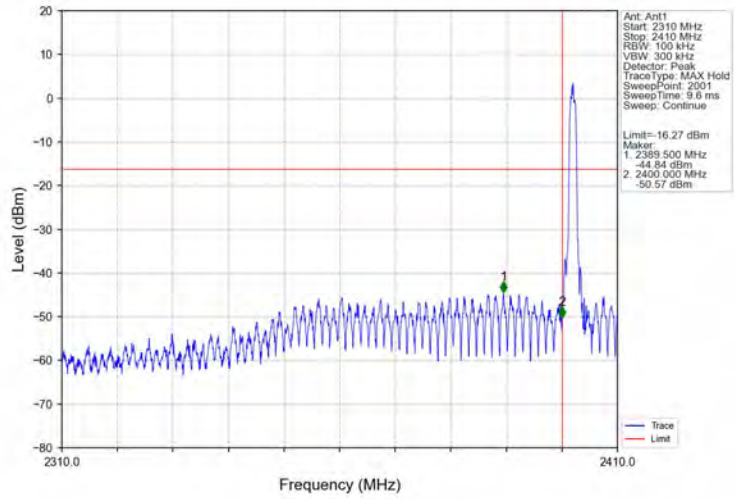
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



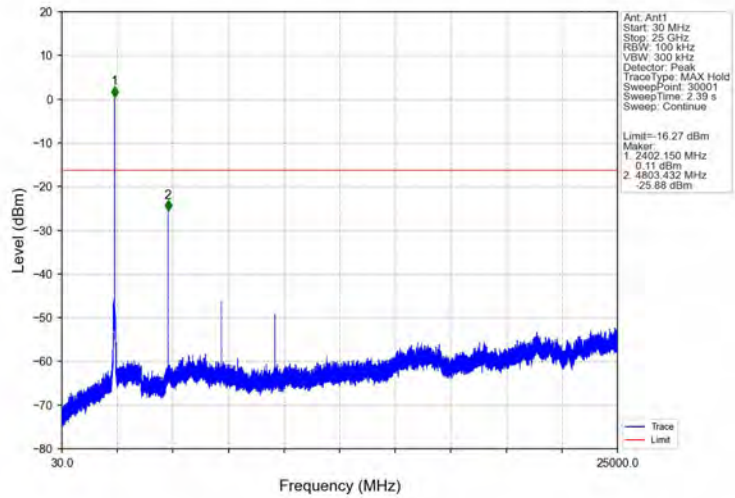
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



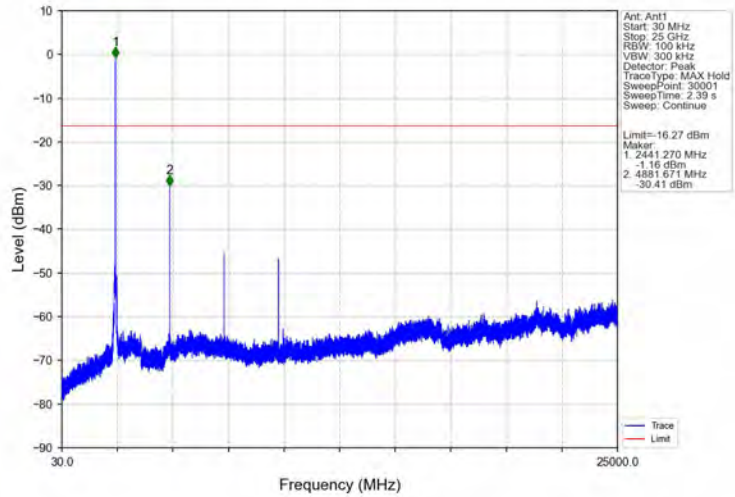
8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



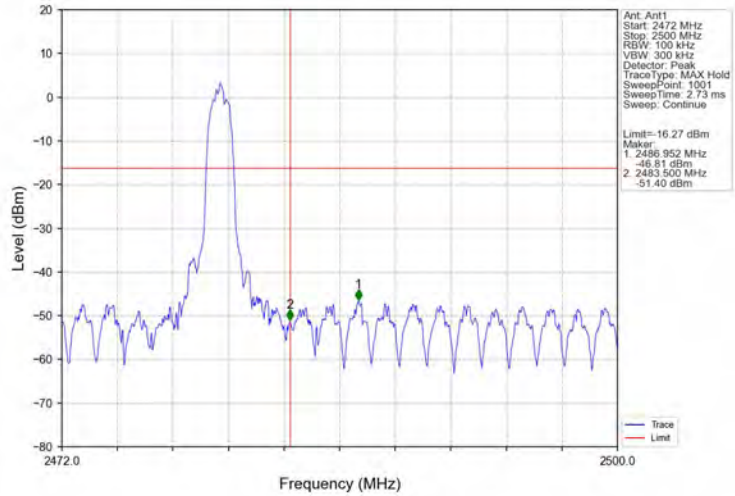
8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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

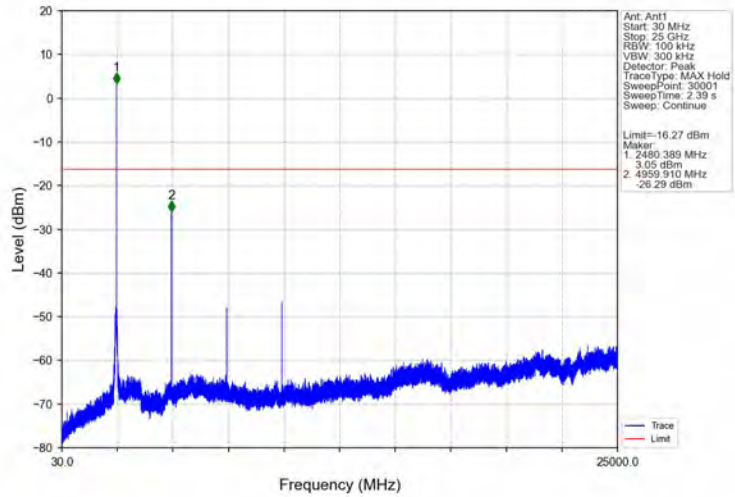


8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV

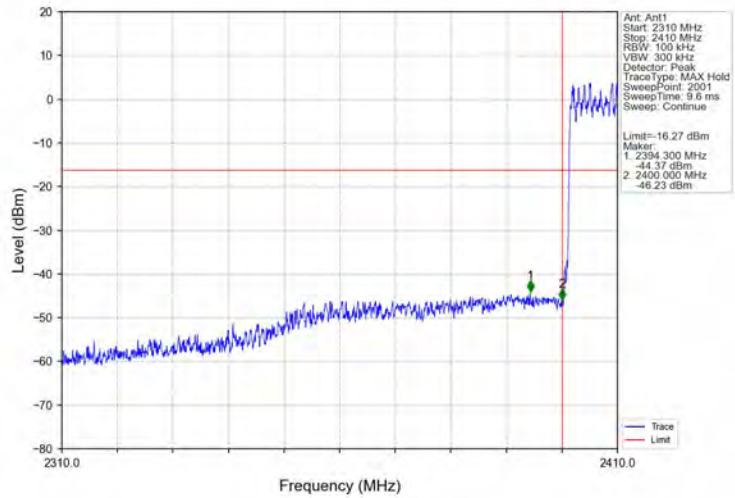


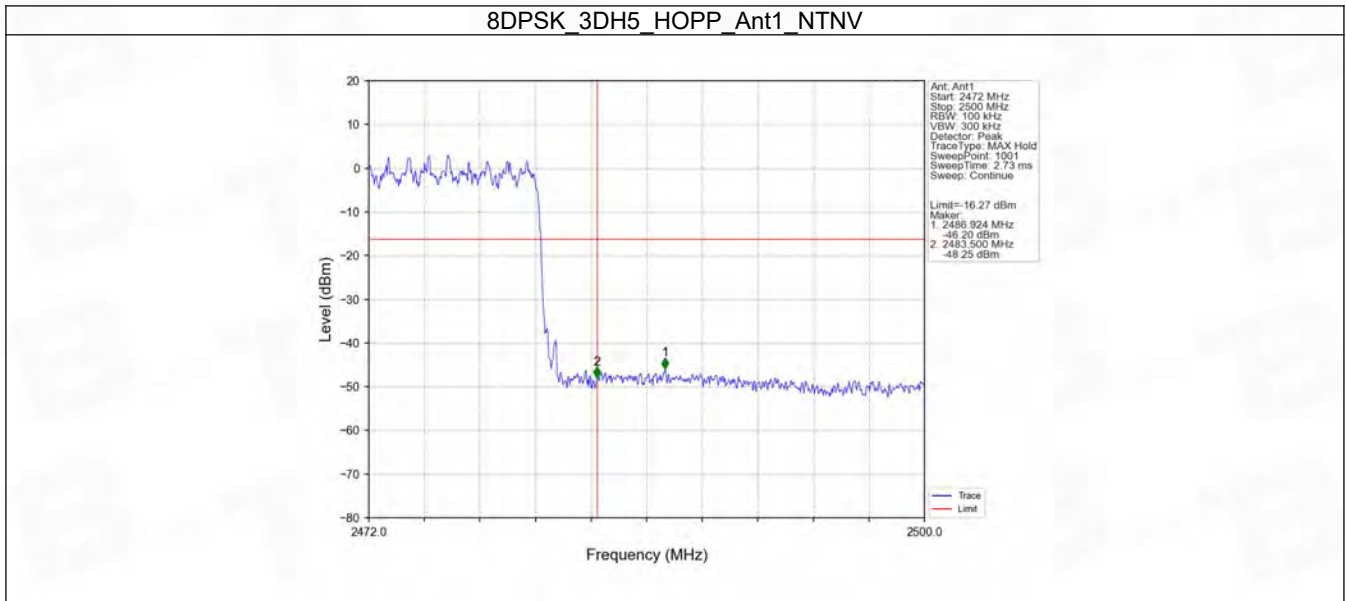


8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV





## 7. Form731

### 7.1 Test Result

#### 7.1.1 Form731

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
2402	2480	0.0033	5.22