

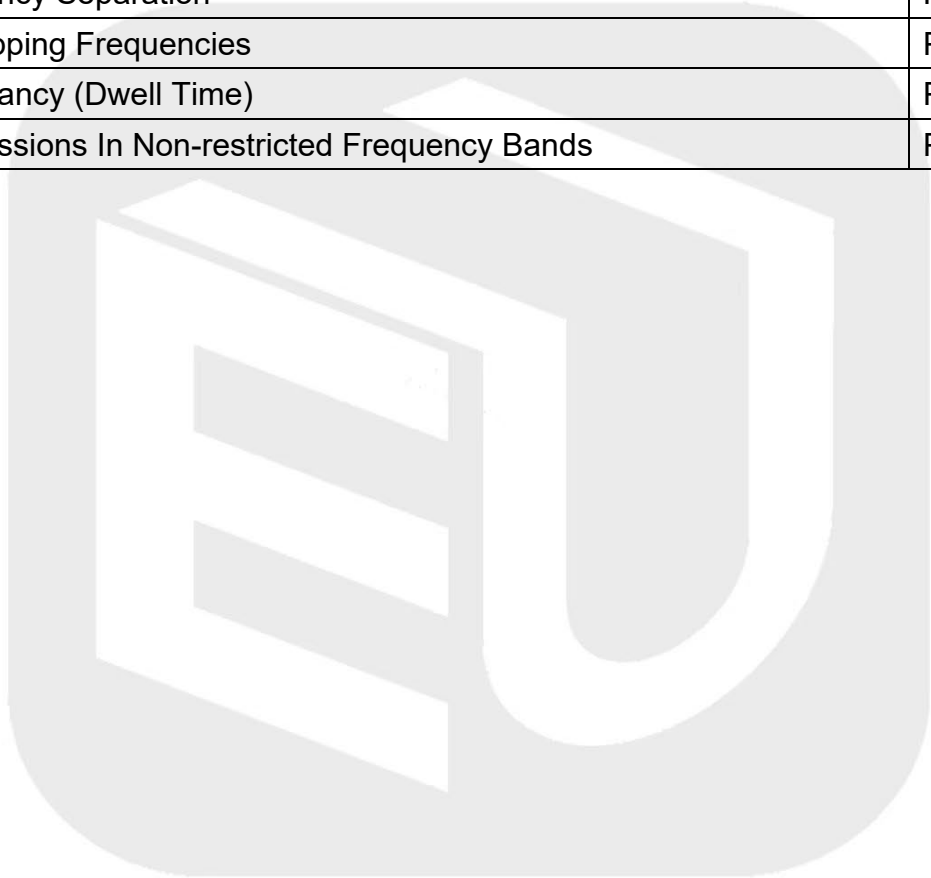
# ANNEX E TEST DATA

## For

Project No.:	8230EU011906W
Client:	Guangzhou MUNBYN Information Technology Co., Ltd.
Product Description:	Thermal Label Maker
Model No.:	FM226
FCC ID:	2BF4E-FM226
Technology:	Bluetooth BDR
Test Engineer:	<i>Mikoy zhu</i>
Test Date:	2024-07-19

## Test Summary

Item	Result
Bandwidth	Pass
Maximum Conducted Output Power	Pass
Carrier Frequency Separation	Pass
Number of Hopping Frequencies	Pass
Time of Occupancy (Dwell Time)	Pass
Unwanted Emissions In Non-restricted Frequency Bands	Pass



## 1. Bandwidth

### 1.1 Test Result

#### 1.1.1 OBW

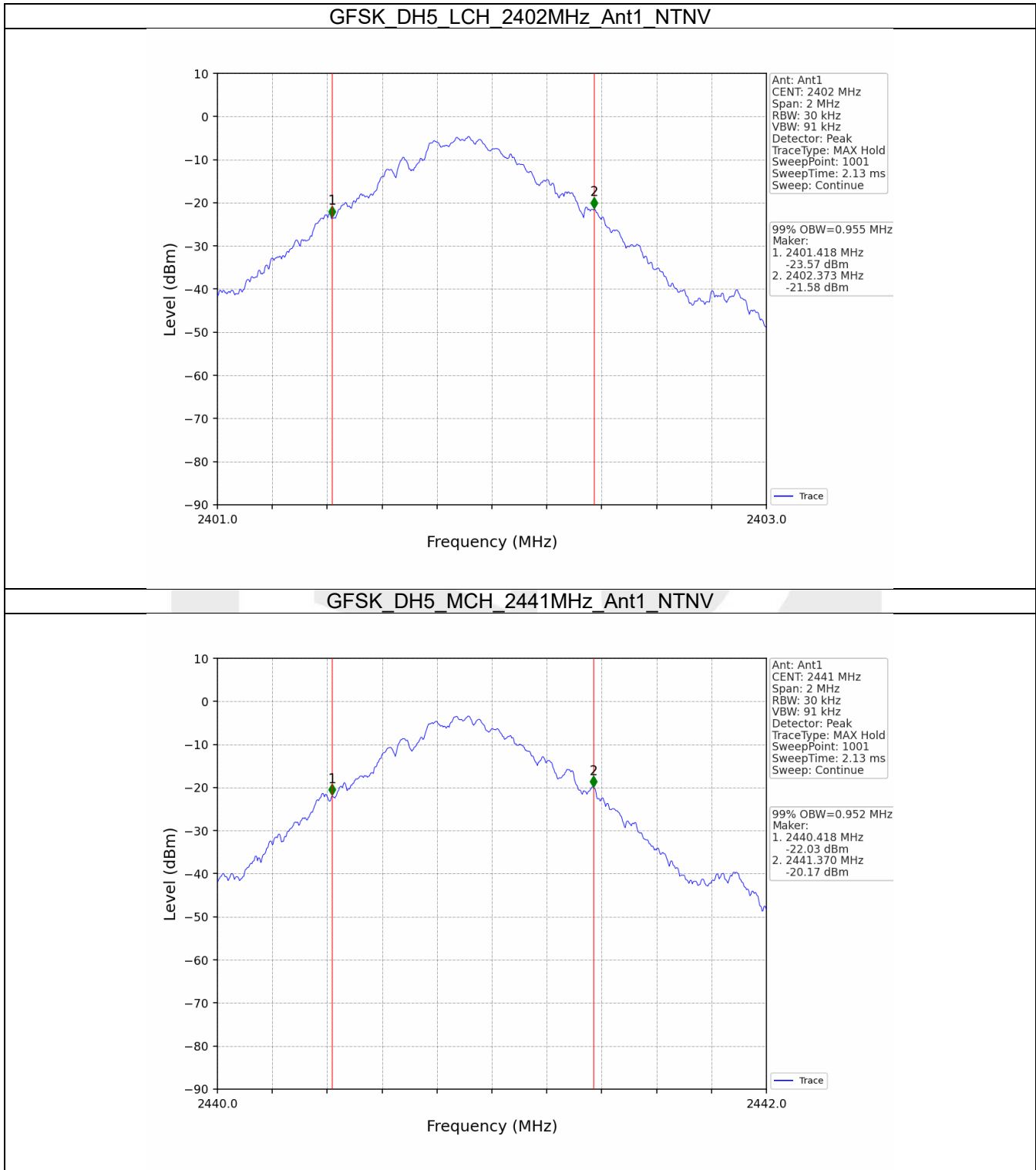
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.955	/	Pass
		2441	DH5	1	0.952	/	Pass
		2480	DH5	1	0.956	/	Pass

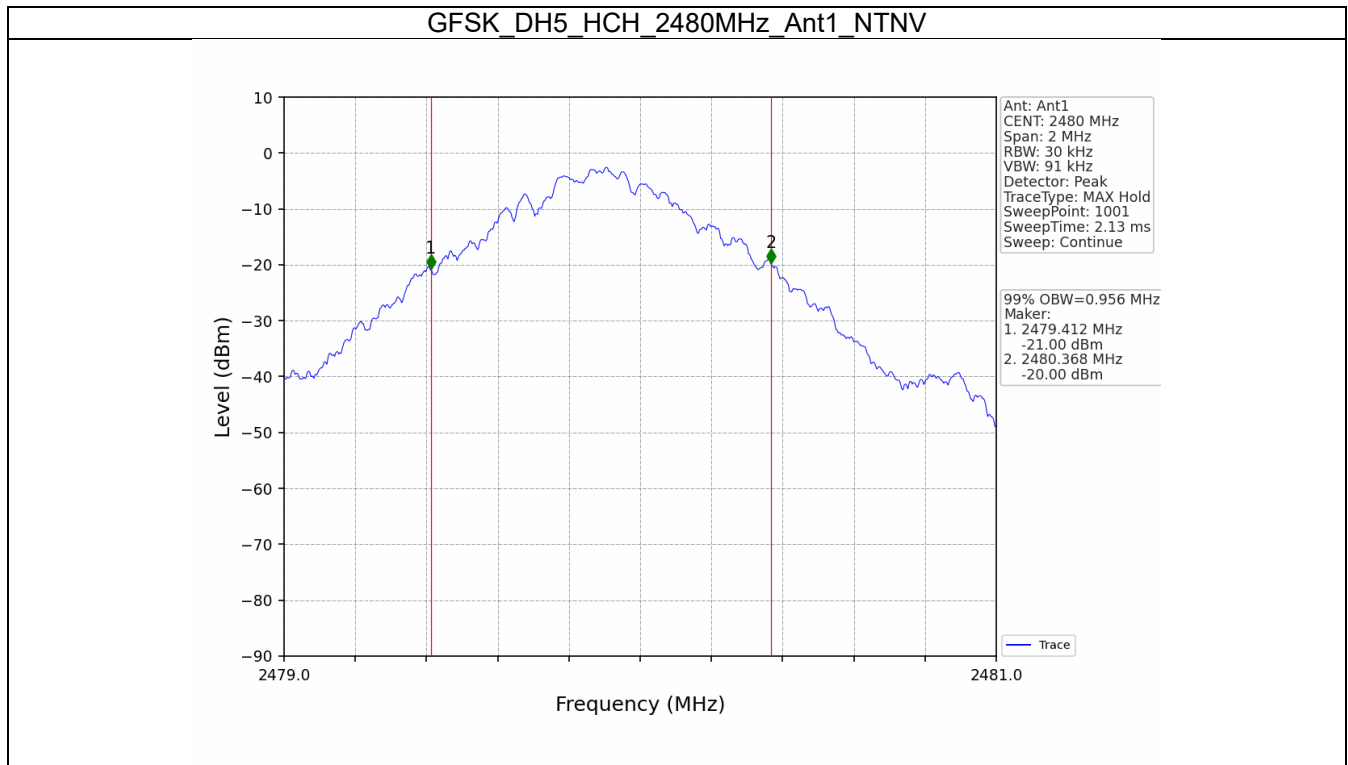
#### 1.1.2 20dB BW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	1.047	/	Pass
		2441	DH5	1	1.054	/	Pass
		2480	DH5	1	1.050	/	Pass

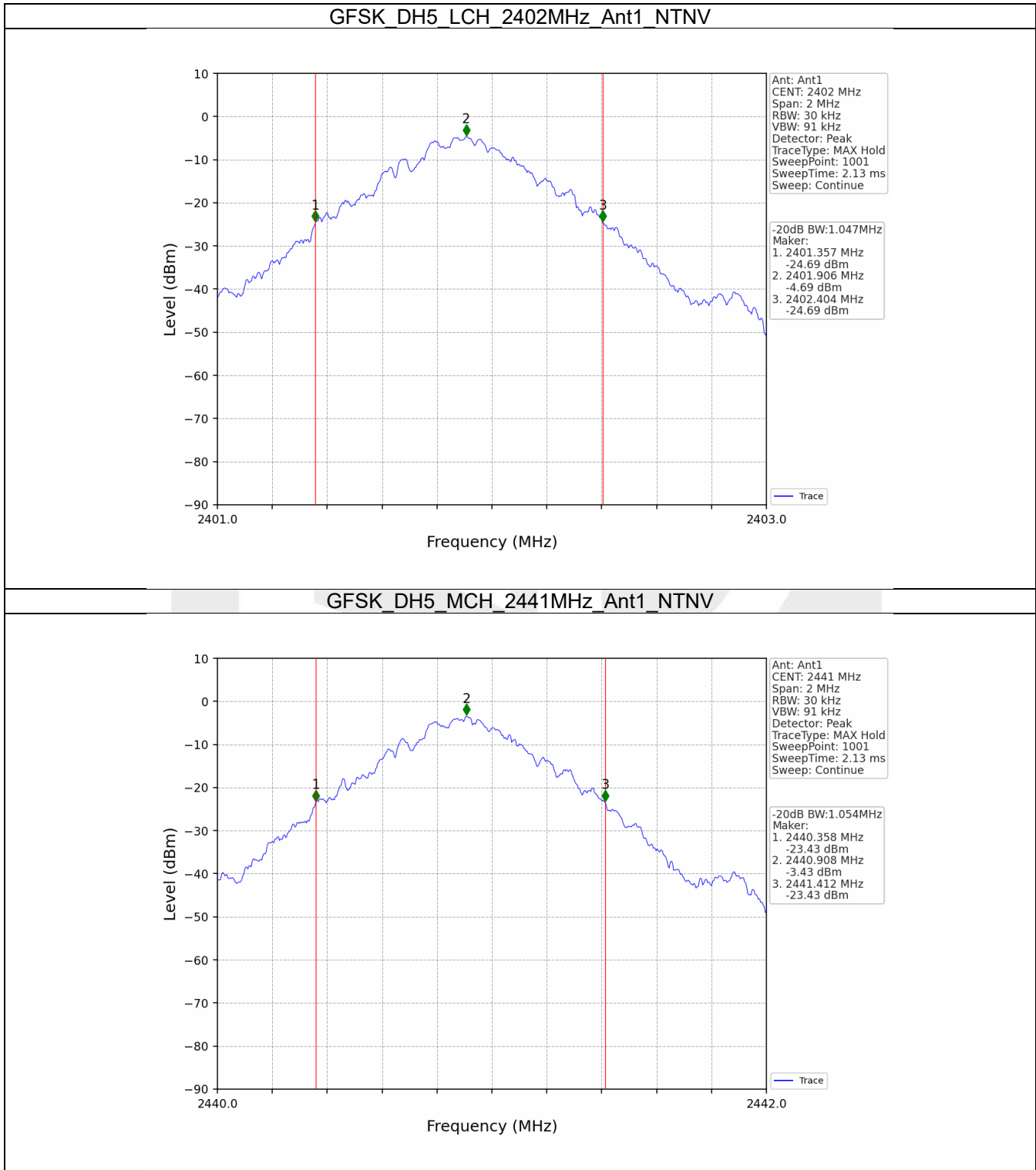
## 1.2 Test Graph

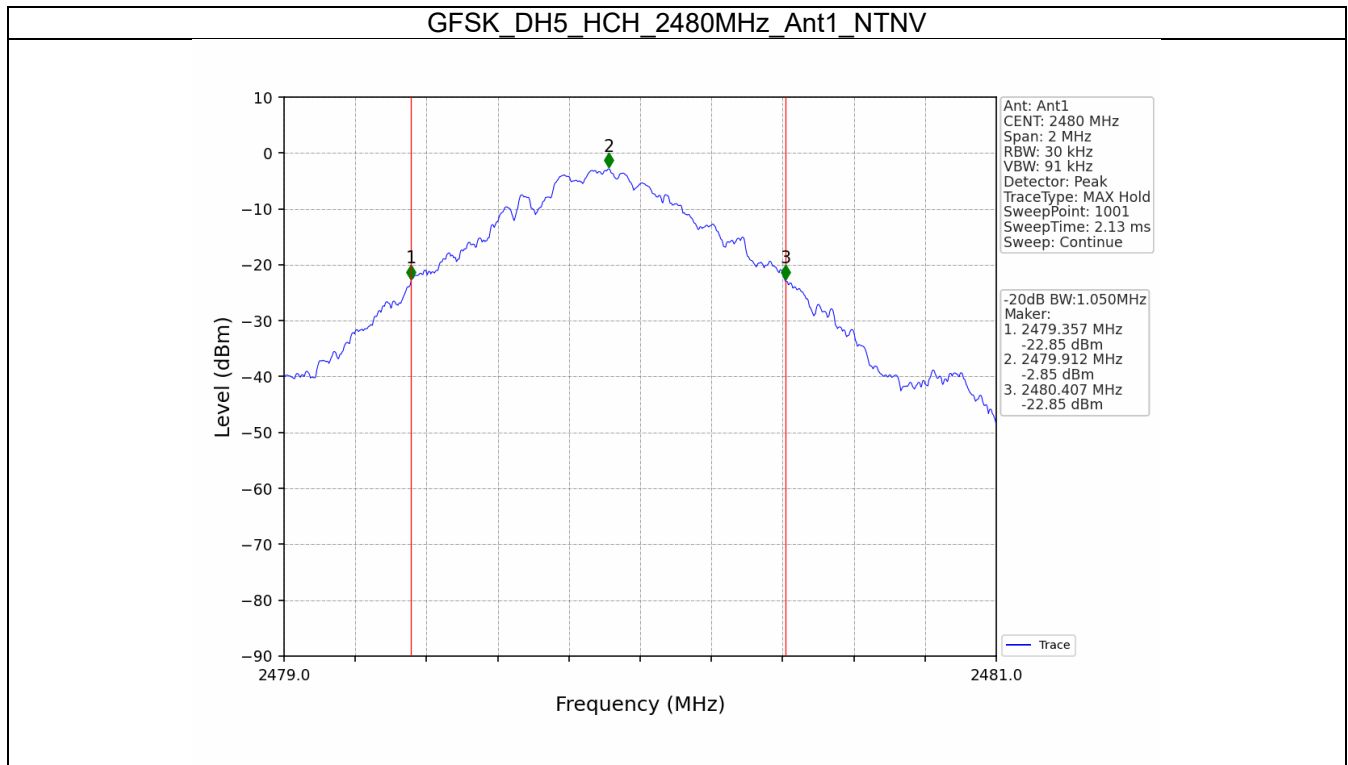
### 1.2.1 OBW





1.2.2 20dB BW





## 2. Maximum Conducted Output Power

### 2.1 Test Result

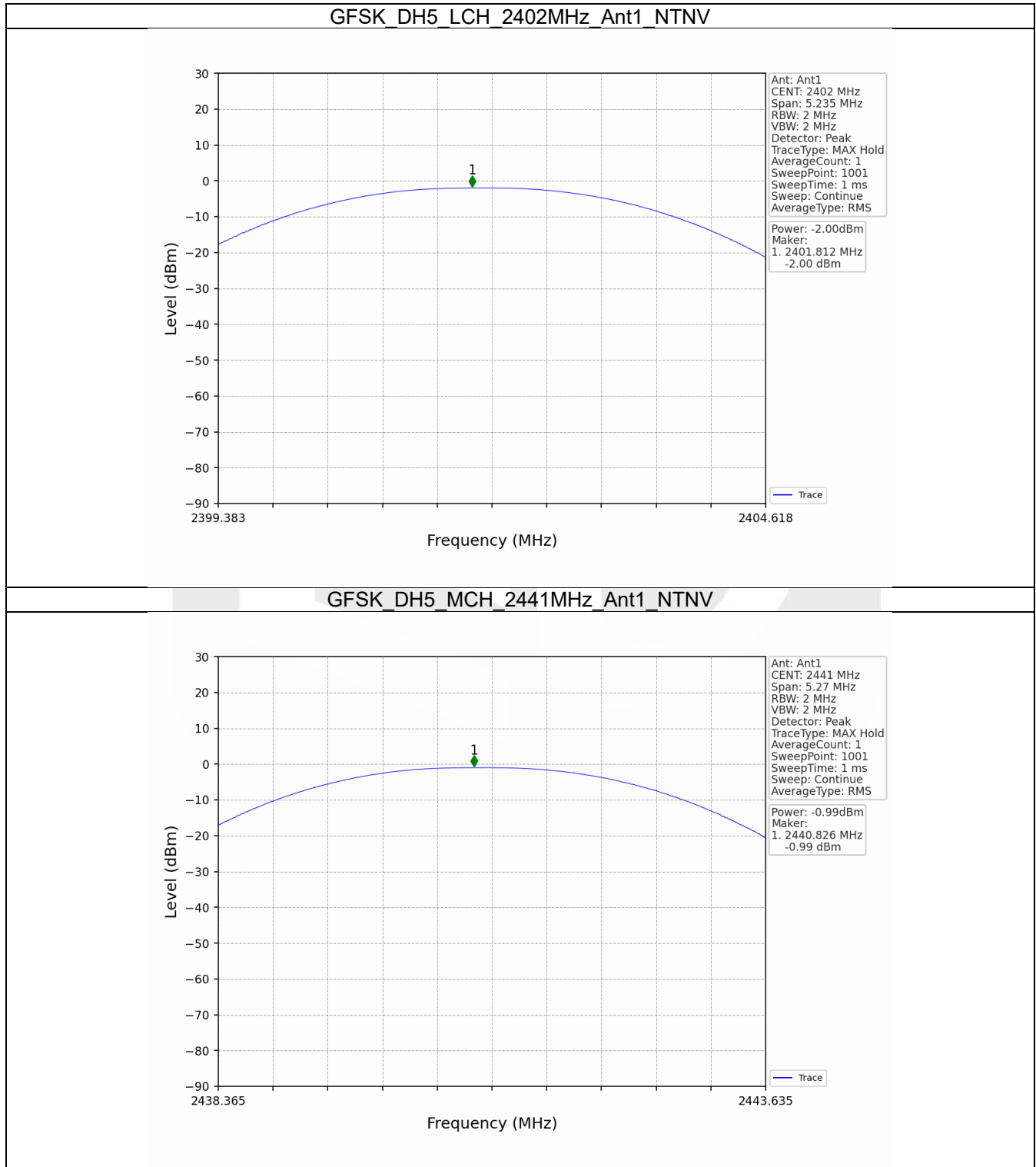
#### 2.1.1 Power

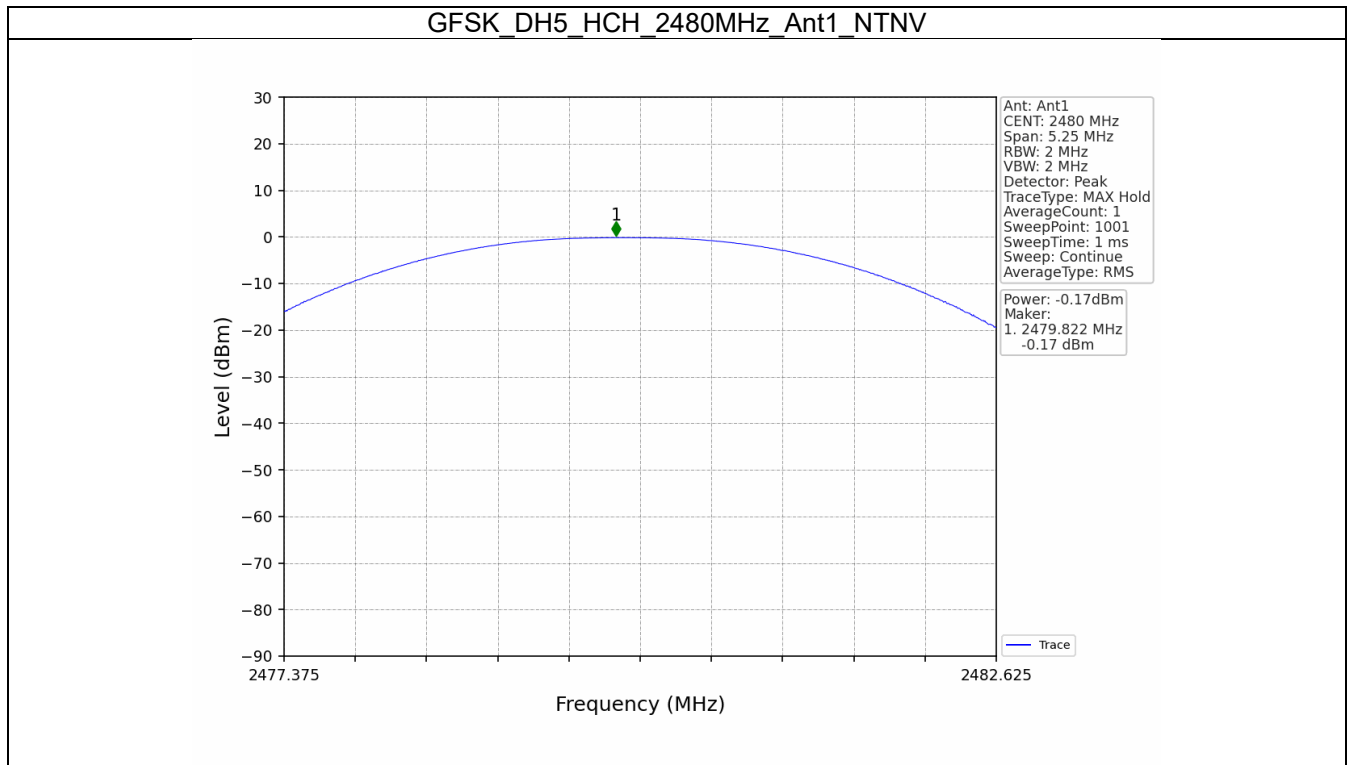
Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	-2.00	<=20.97	Pass
		2441	DH5	-0.99	<=20.97	Pass
		2480	DH5	-0.17	<=20.97	Pass



## 2.2 Test Graph

### 2.2.1 Power



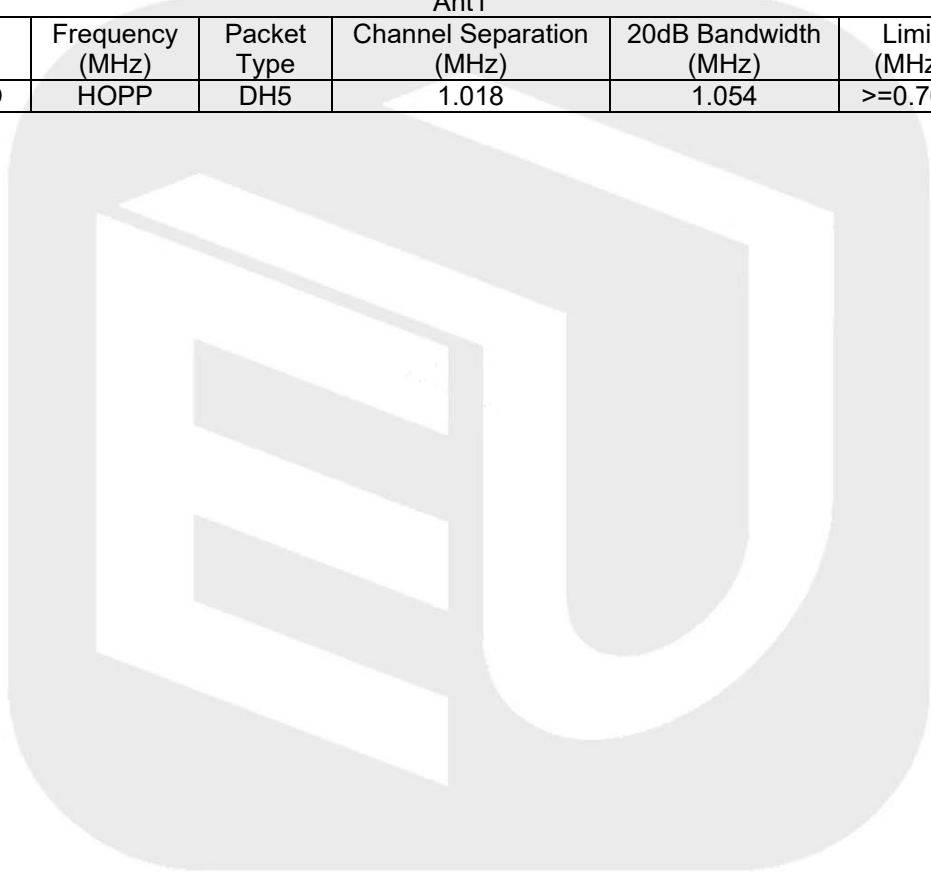


### 3. Carrier Frequency Separation

#### 3.1 Test Result

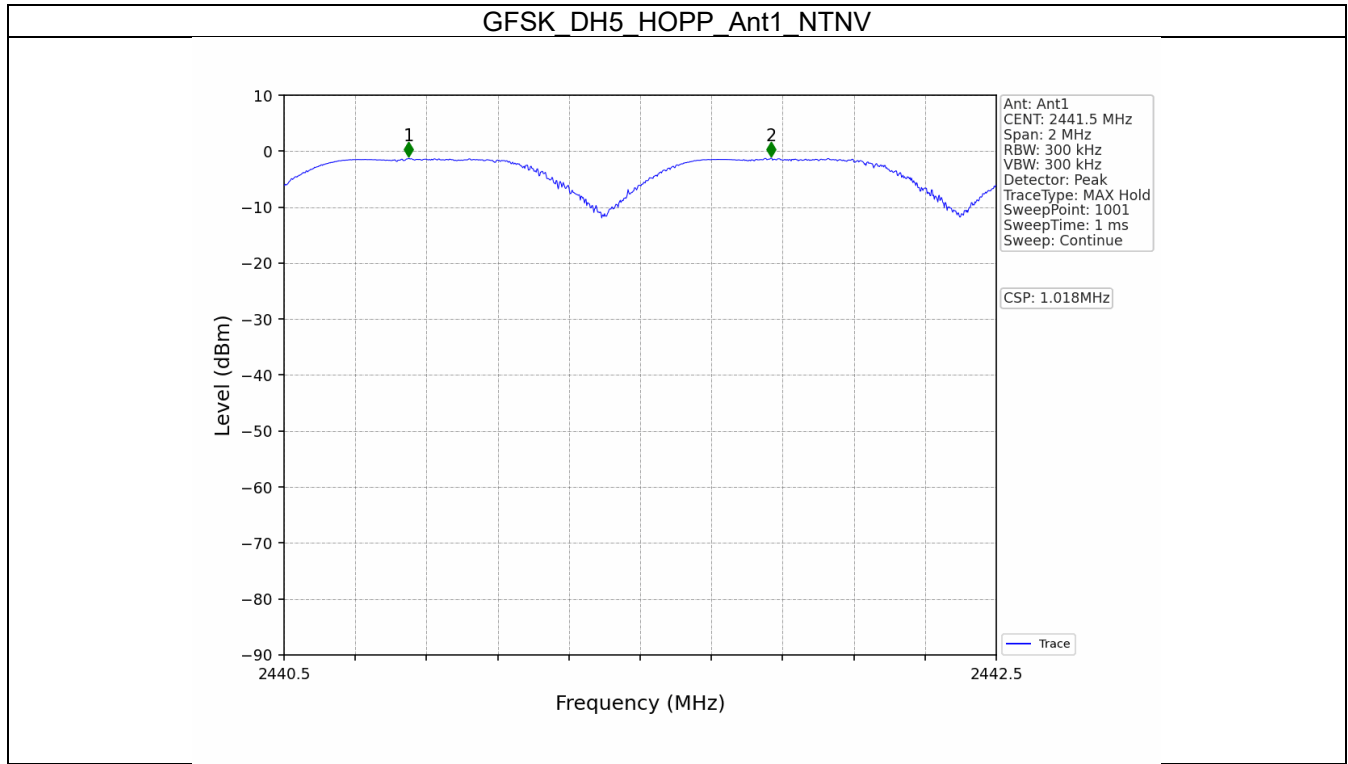
##### 3.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.018	1.054	$\geq 0.703$	Pass



### 3.2 Test Graph

#### 3.2.1 Ant1



#### 4. Number of Hopping Frequencies

##### 4.1 Test Result

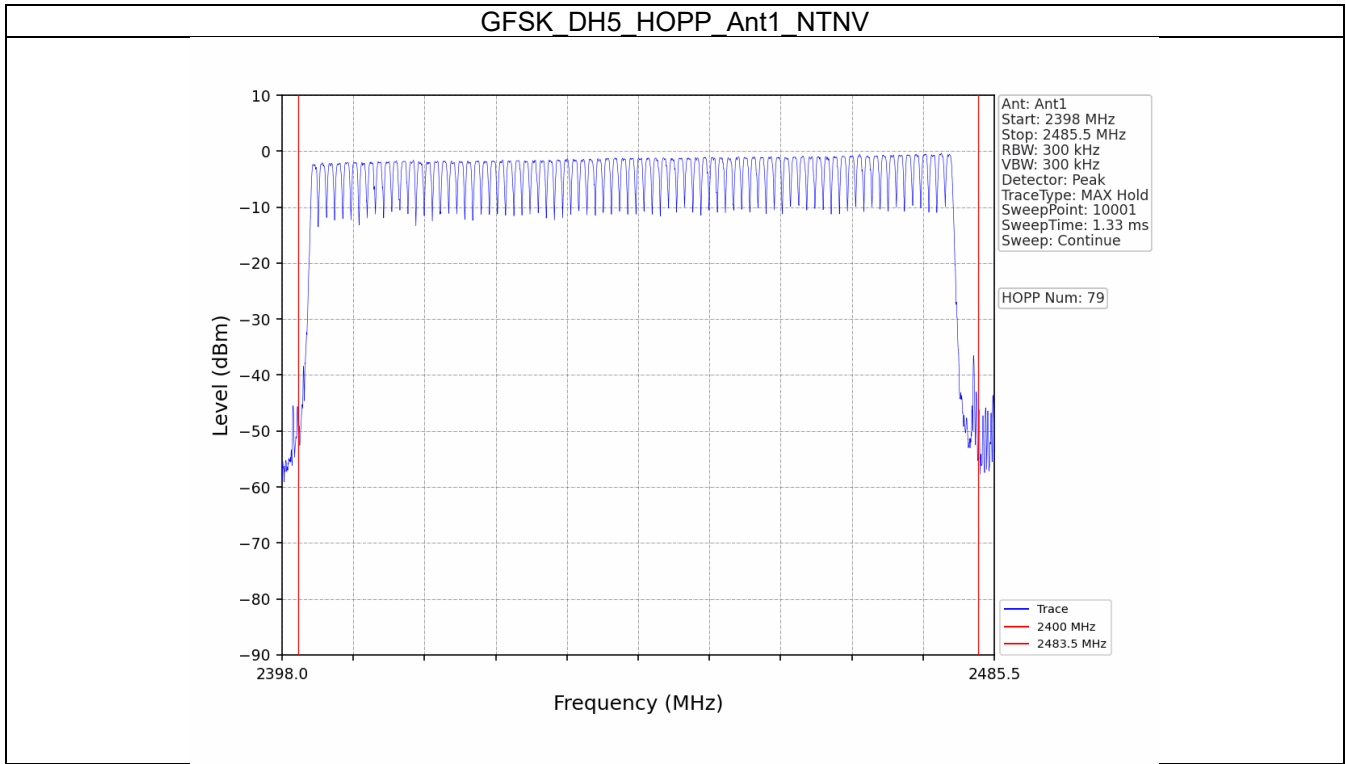
##### 4.1.1 HoppNum

Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	>=15	Pass



### 4.2 Test Graph

#### 4.2.1 HoppNum



## 5. Time of Occupancy (Dwell Time)

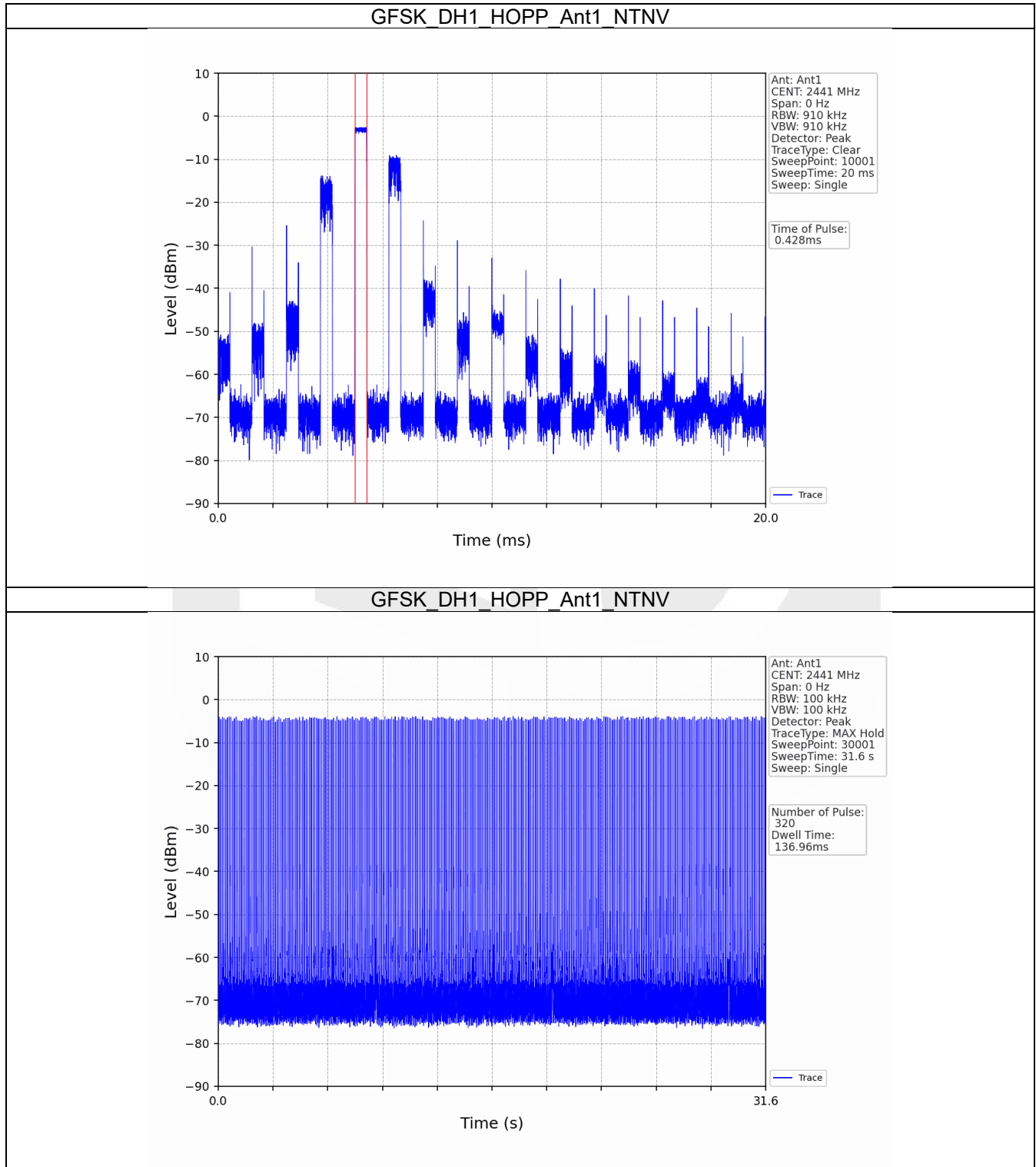
### 5.1 Test Result

#### 5.1.1 Ant1

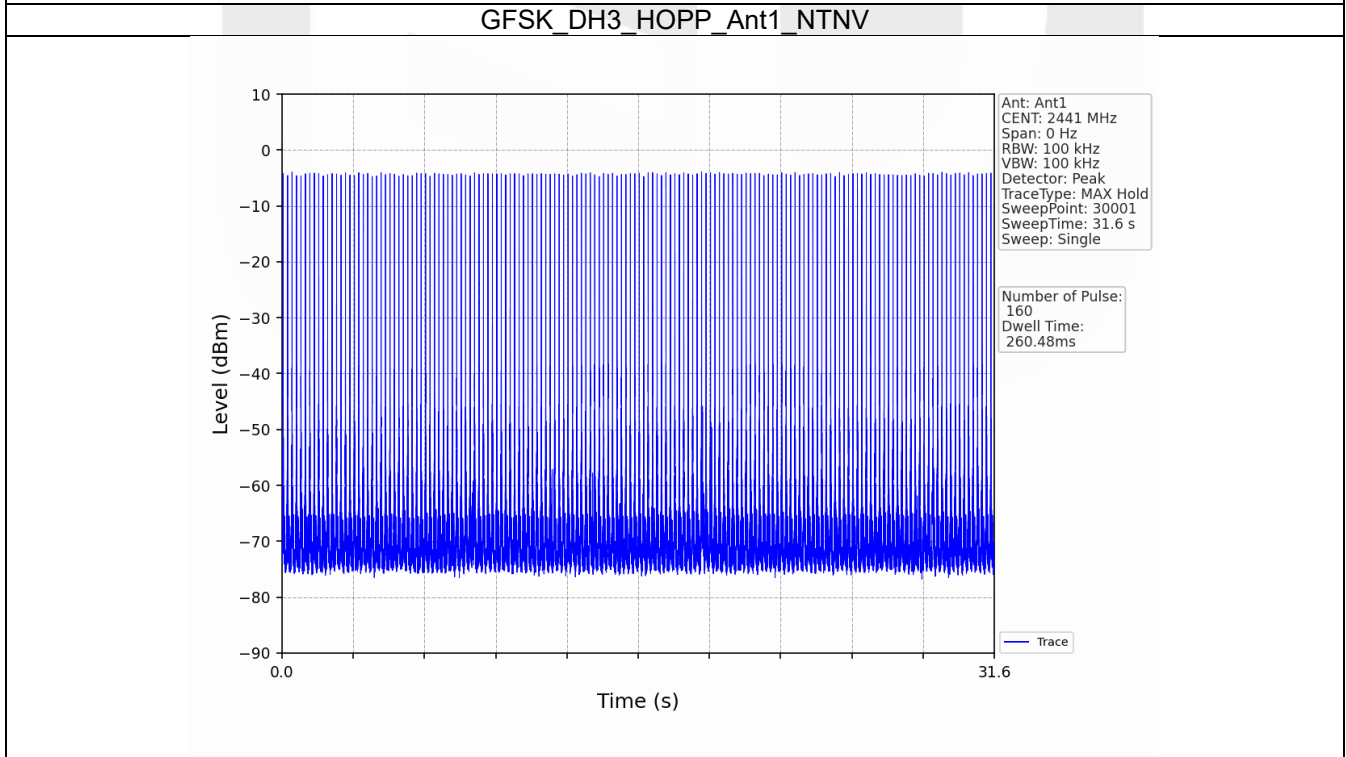
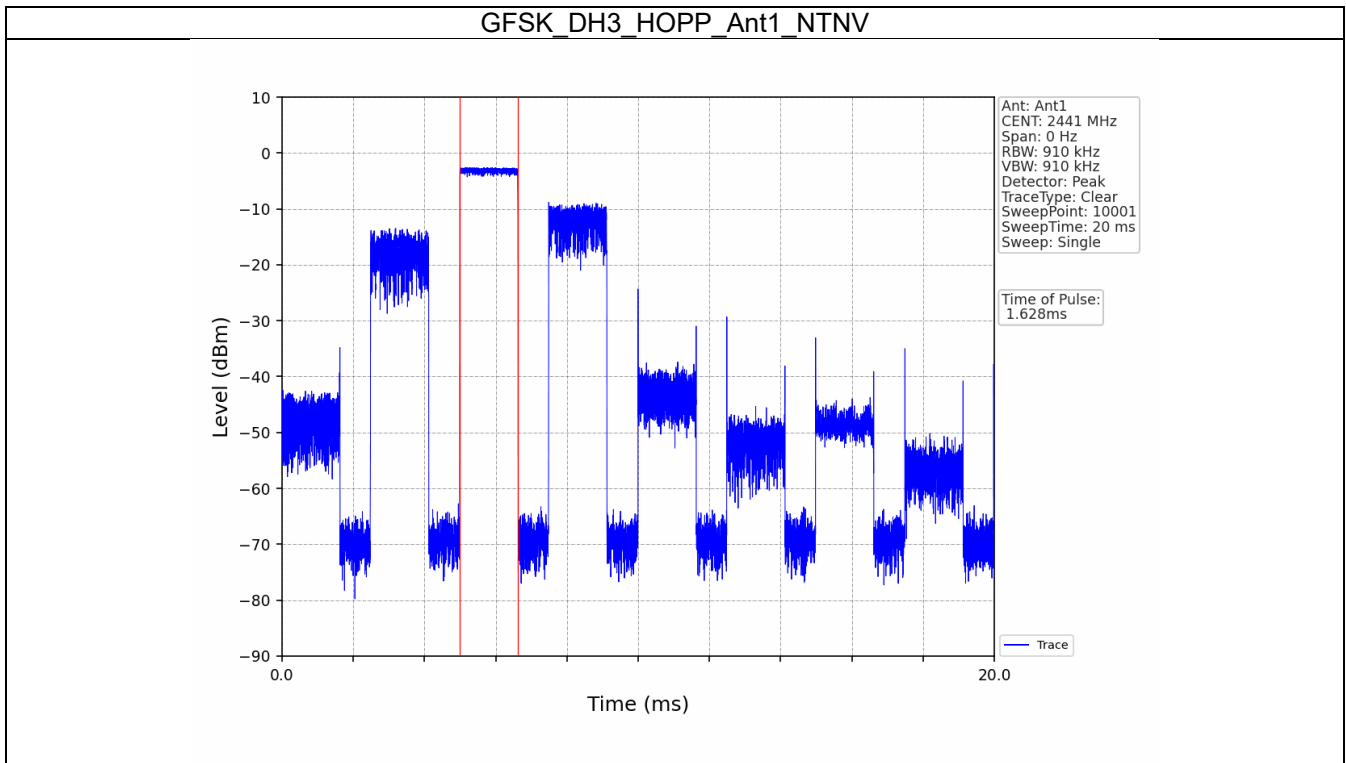
Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.428	31.600	320	136.960	<=400	Pass
			DH3	1.628	31.600	160	260.480	<=400	Pass
			DH5	2.826	31.600	80	226.080	<=400	Pass

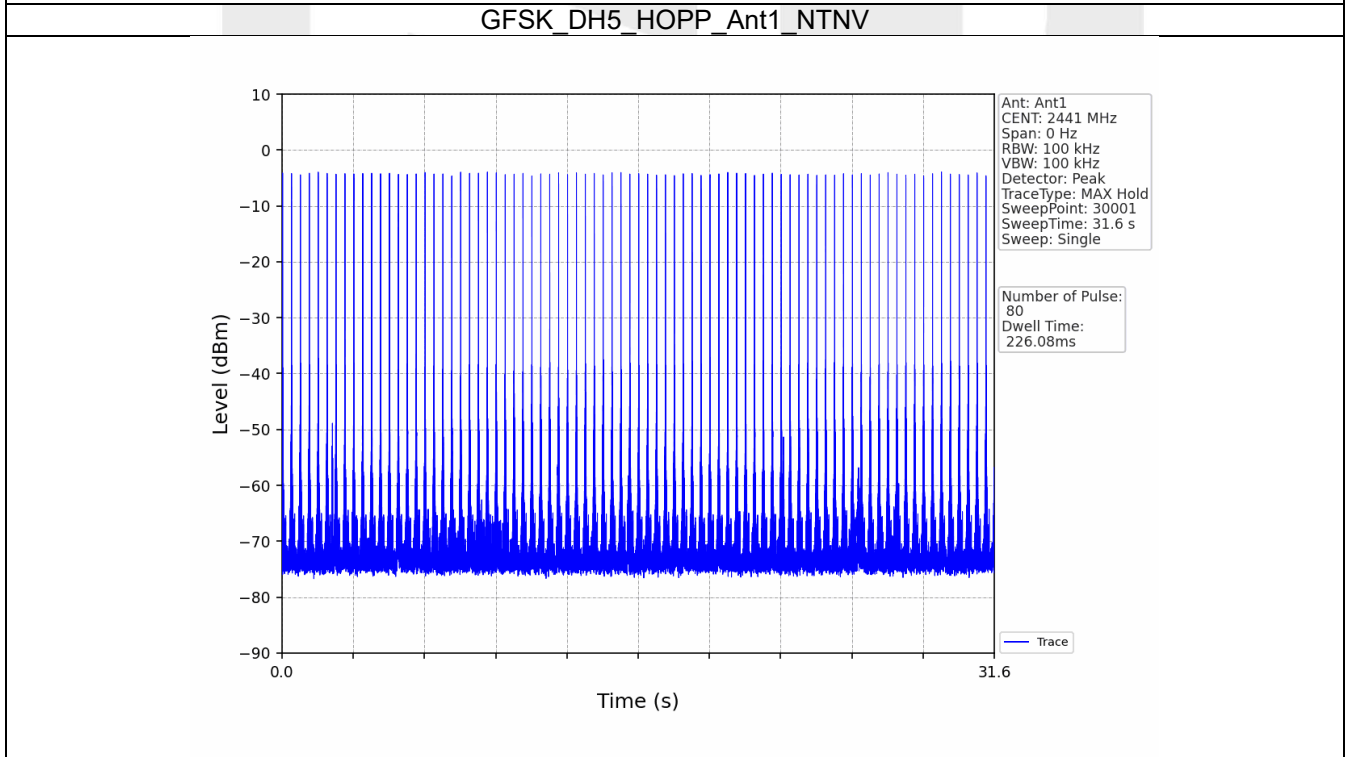
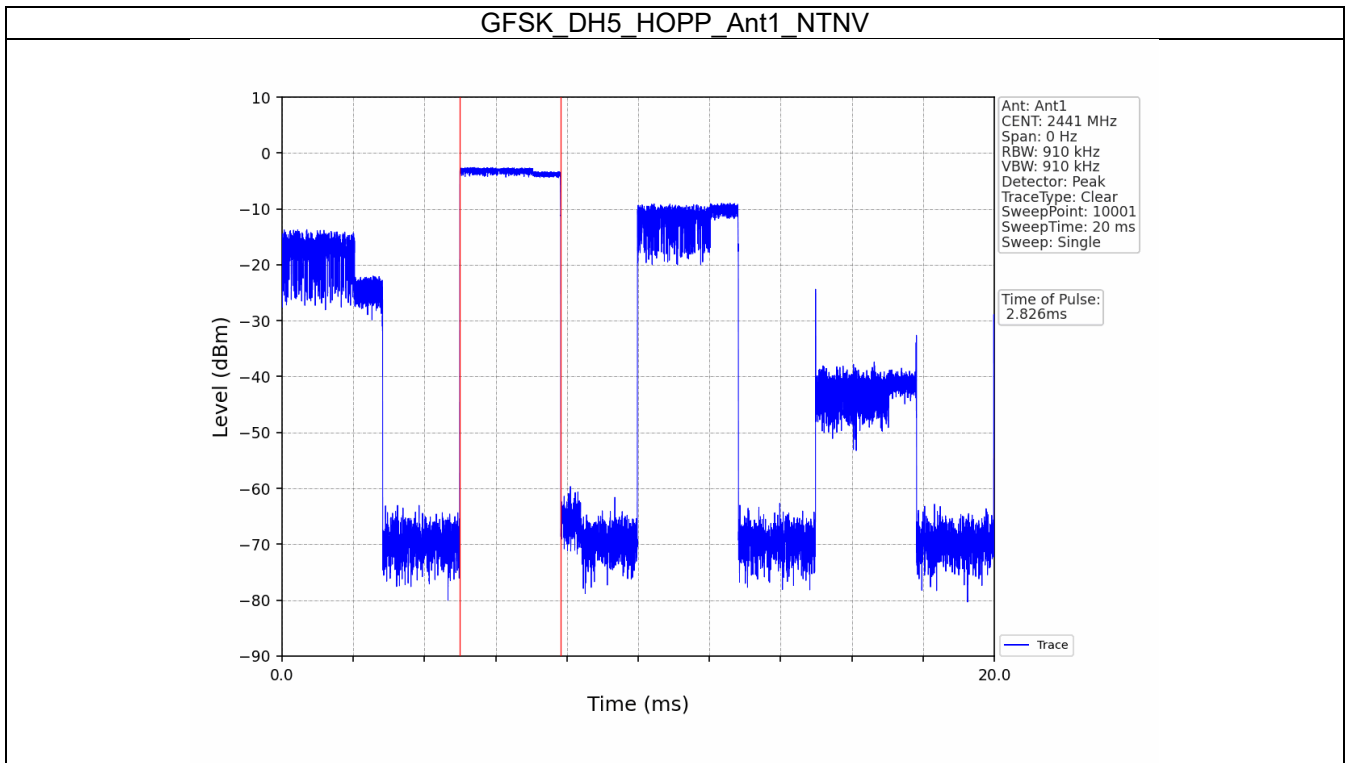
## 5.2 Test Graph

### 5.2.1 Ant1









## 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	-1.52
		2441	DH5	1	-1.46
		2480	DH5	1	-2.04
		HOPP	DH5	1	-1.10
					-1.10

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.

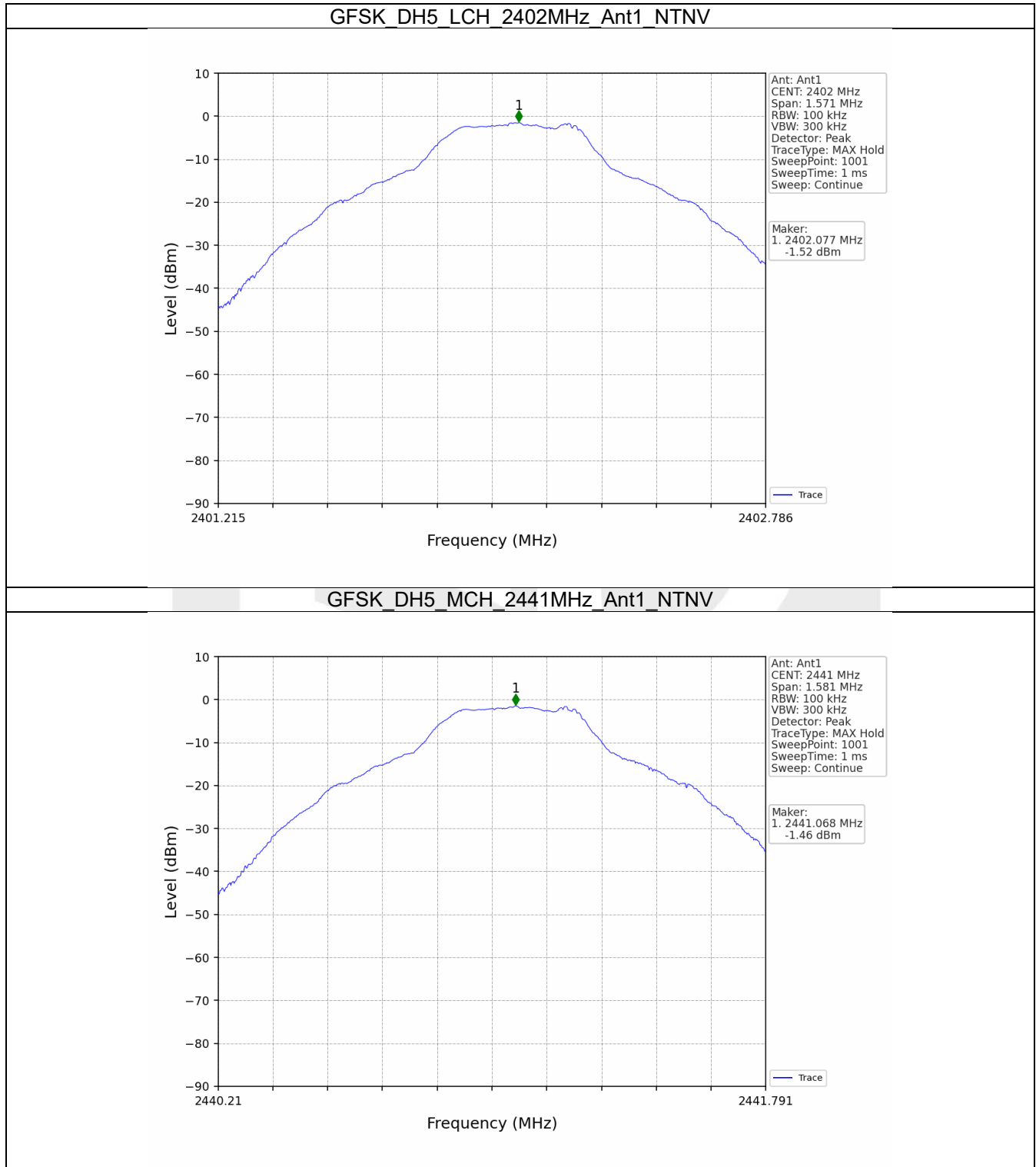
#### 6.1.2 CSE

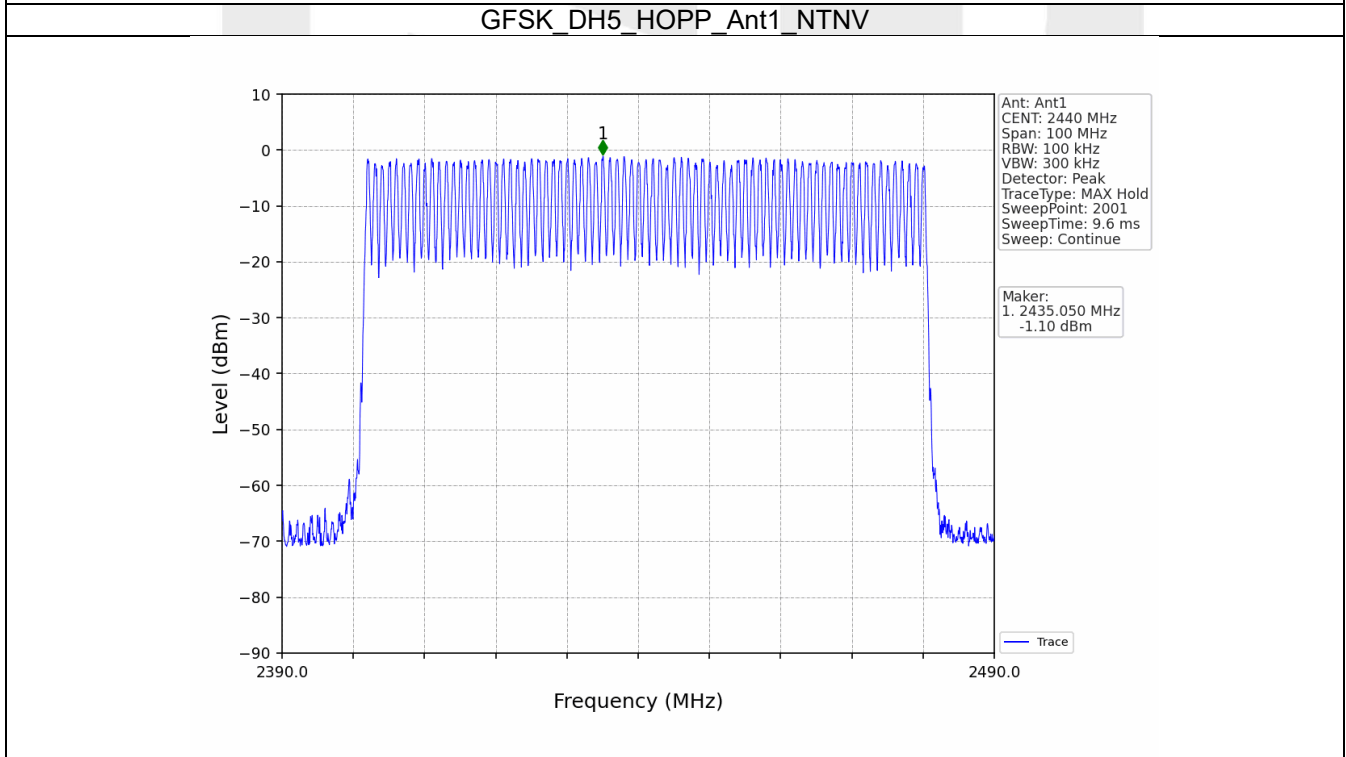
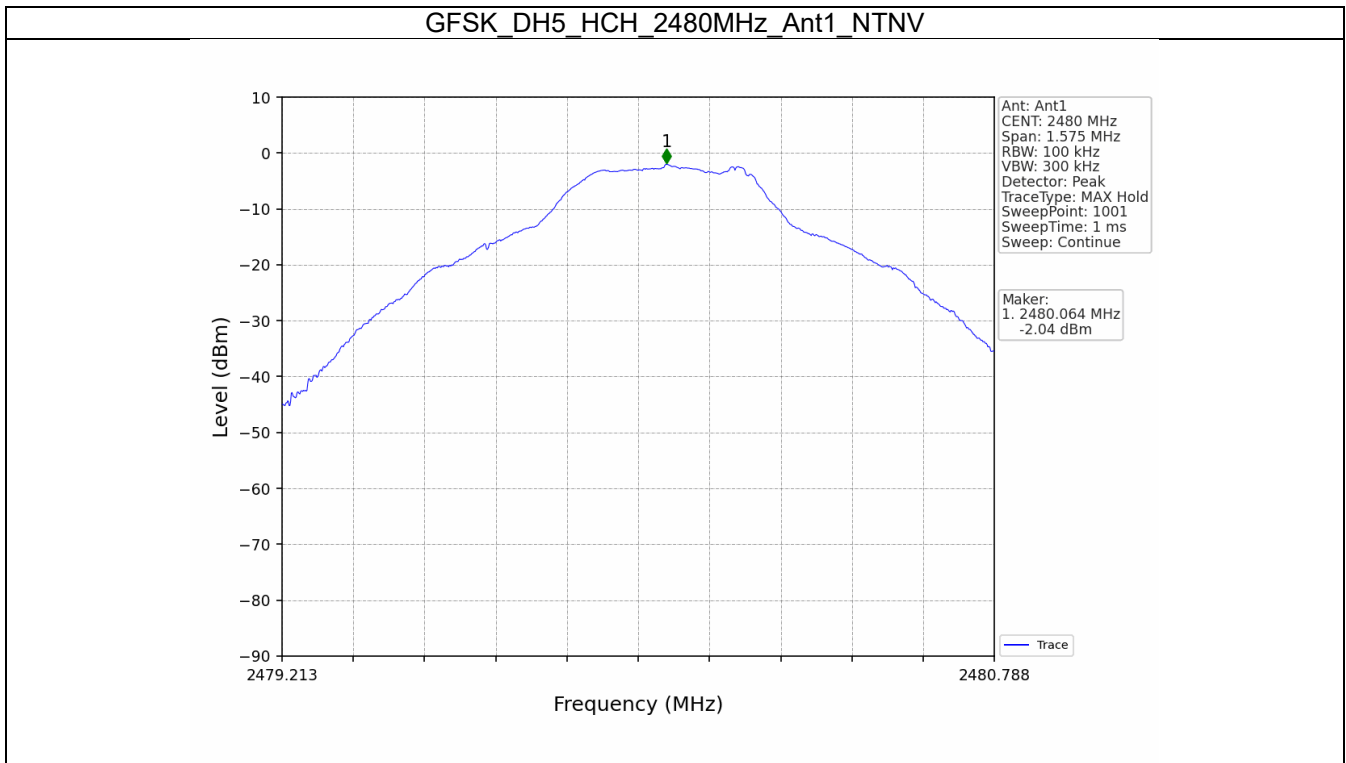
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	-1.52	-21.52	Pass
		2441	DH5	1	-1.46	-21.46	Pass
		2480	DH5	1	-2.04	-22.04	Pass
		HOPP	DH5	1	-1.10	-21.10	Pass
-1.10	-21.10				Pass		

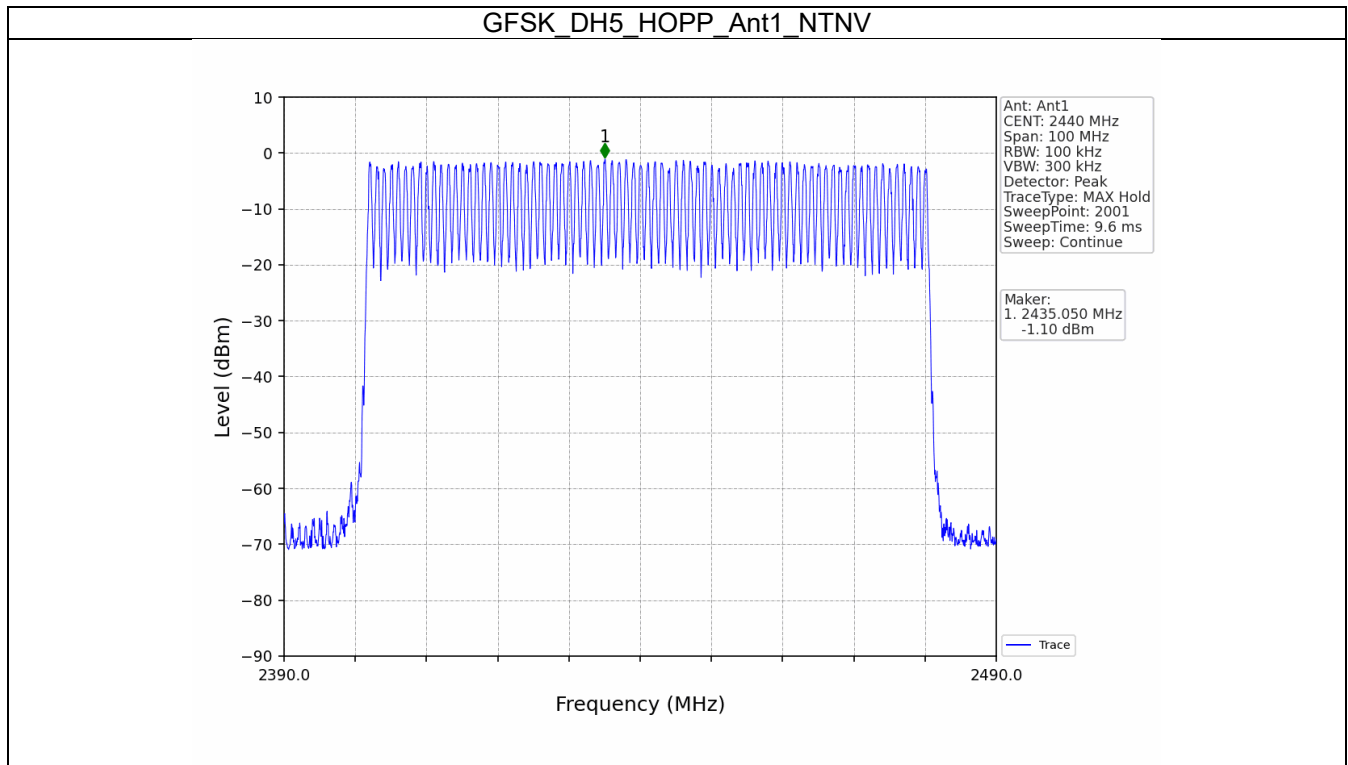
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

## 6.2 Test Graph

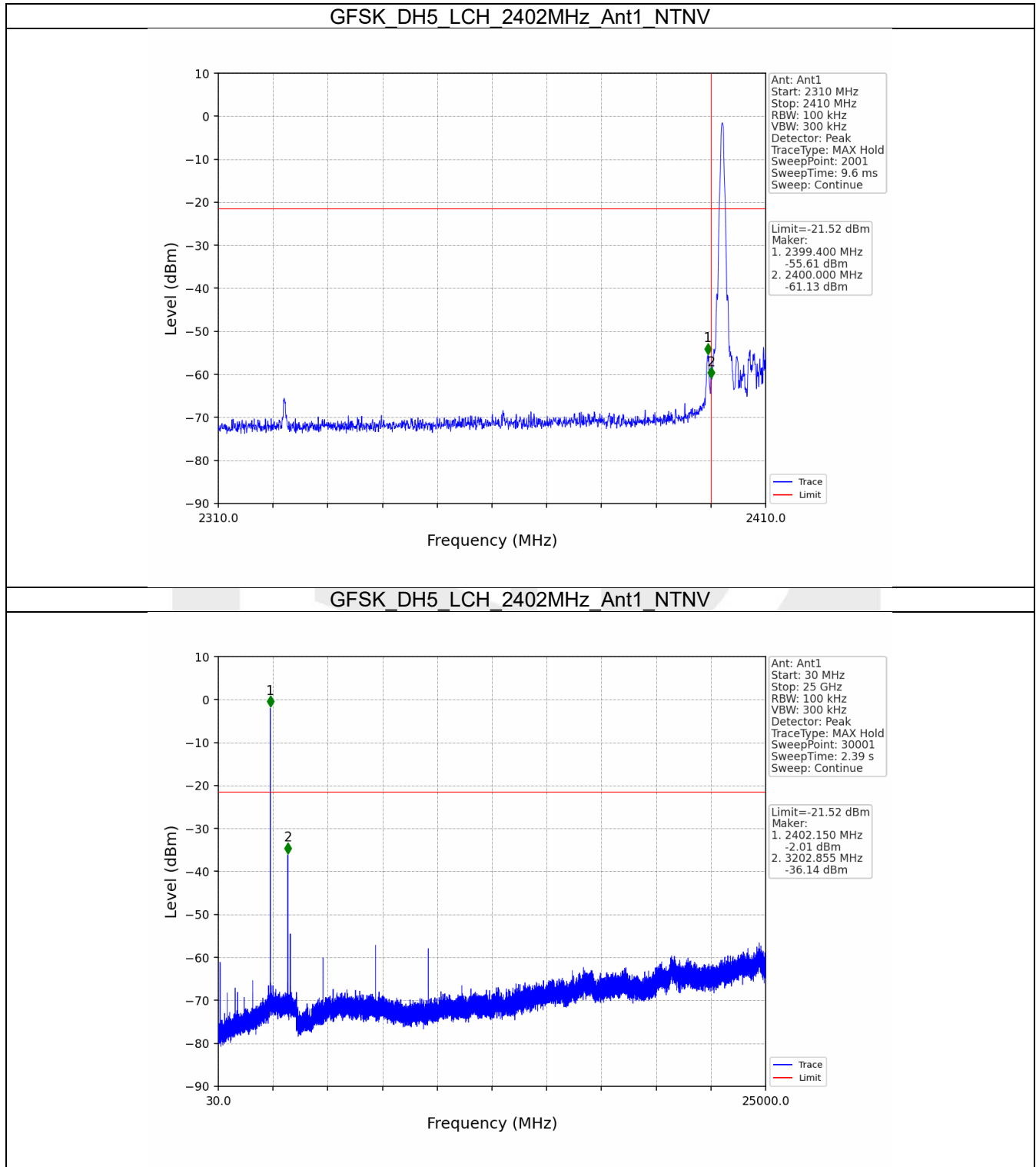
### 6.2.1 Ref

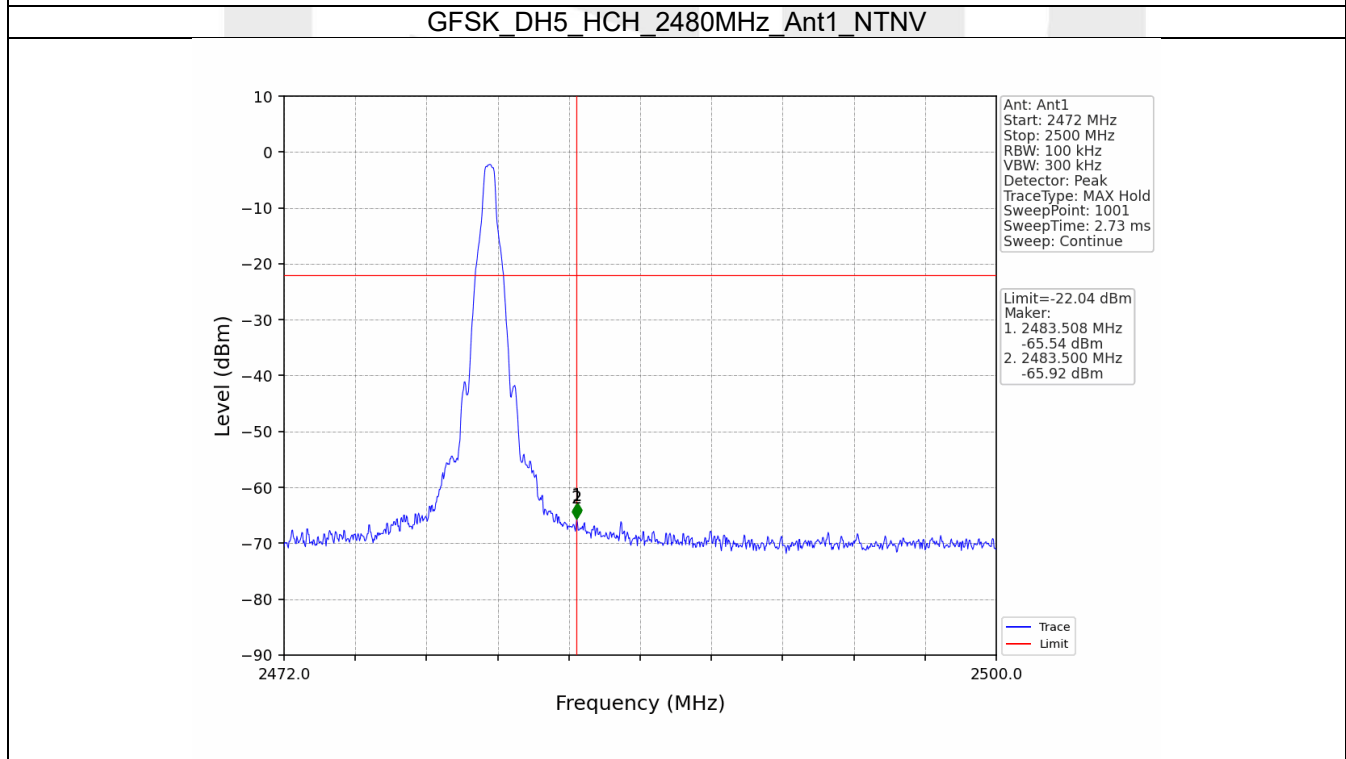
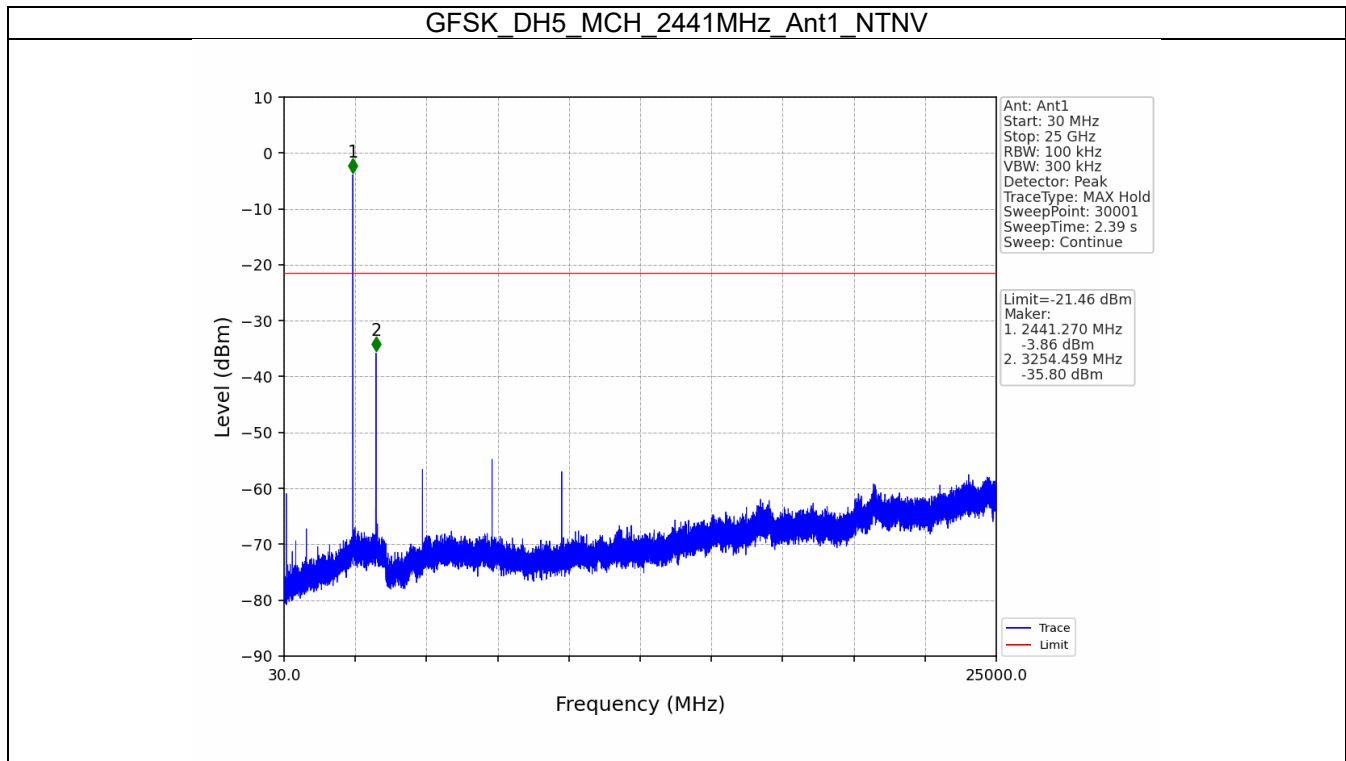




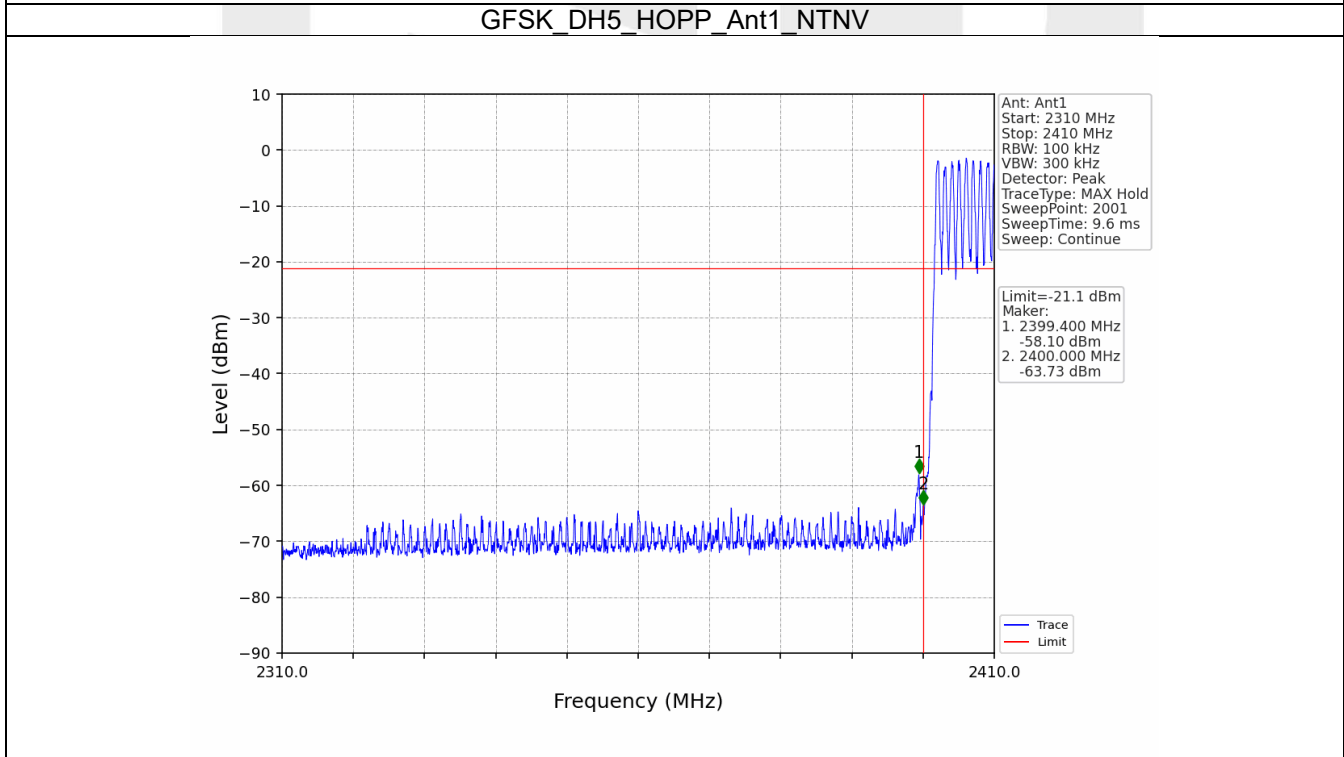
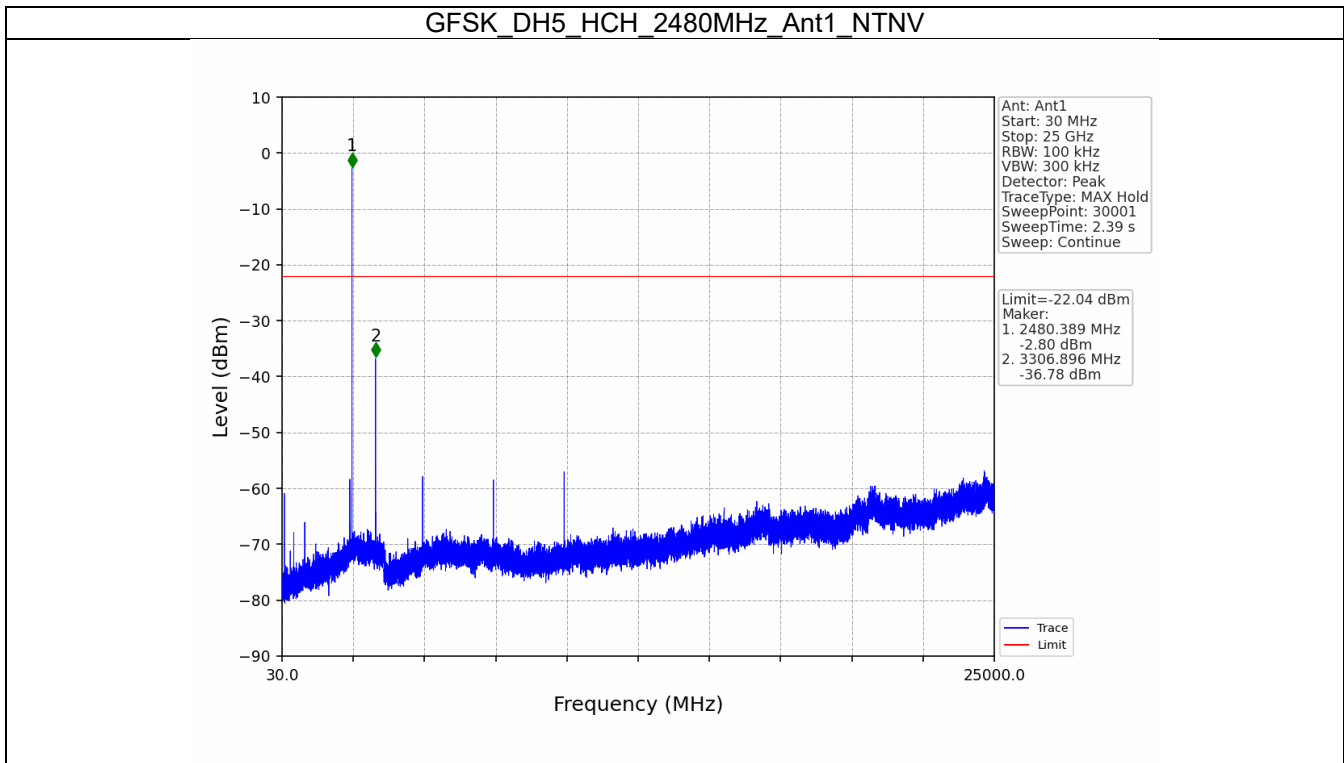


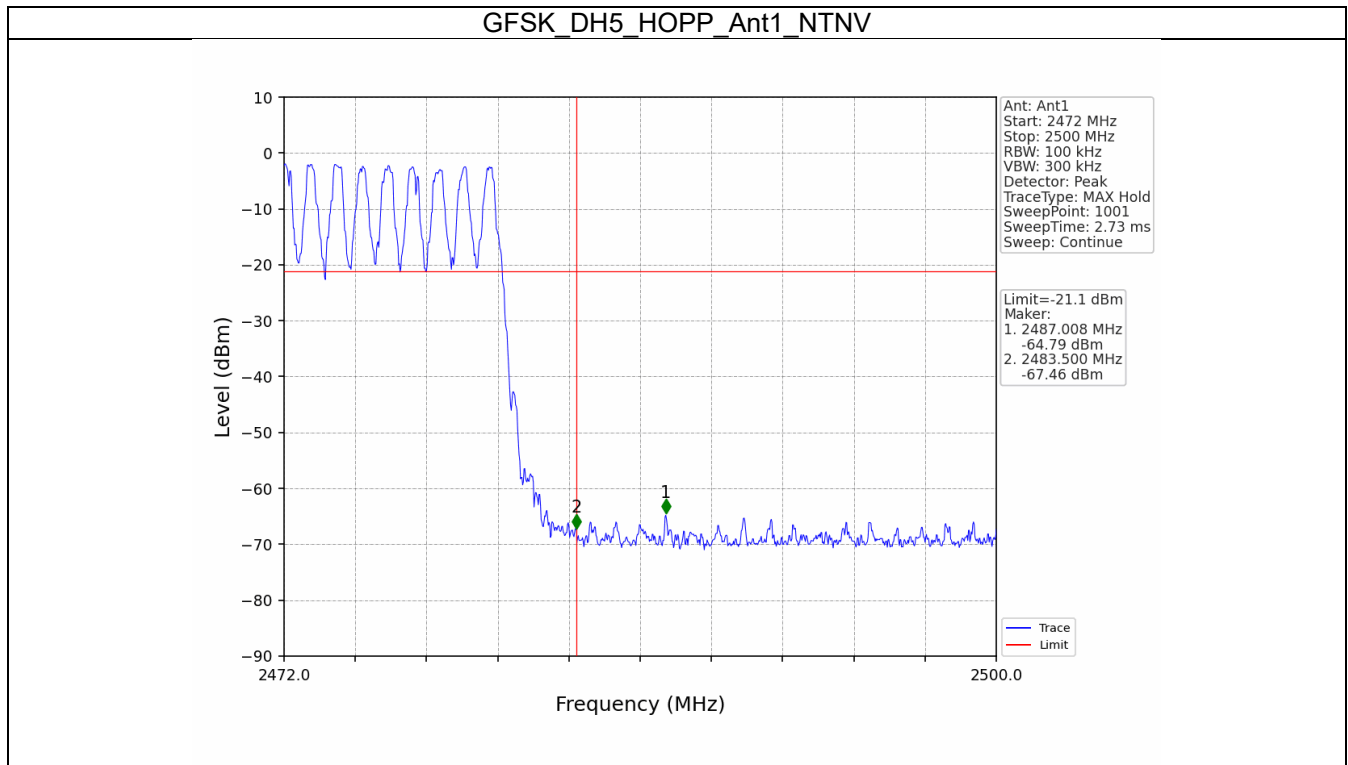
6.2.2 CSE











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