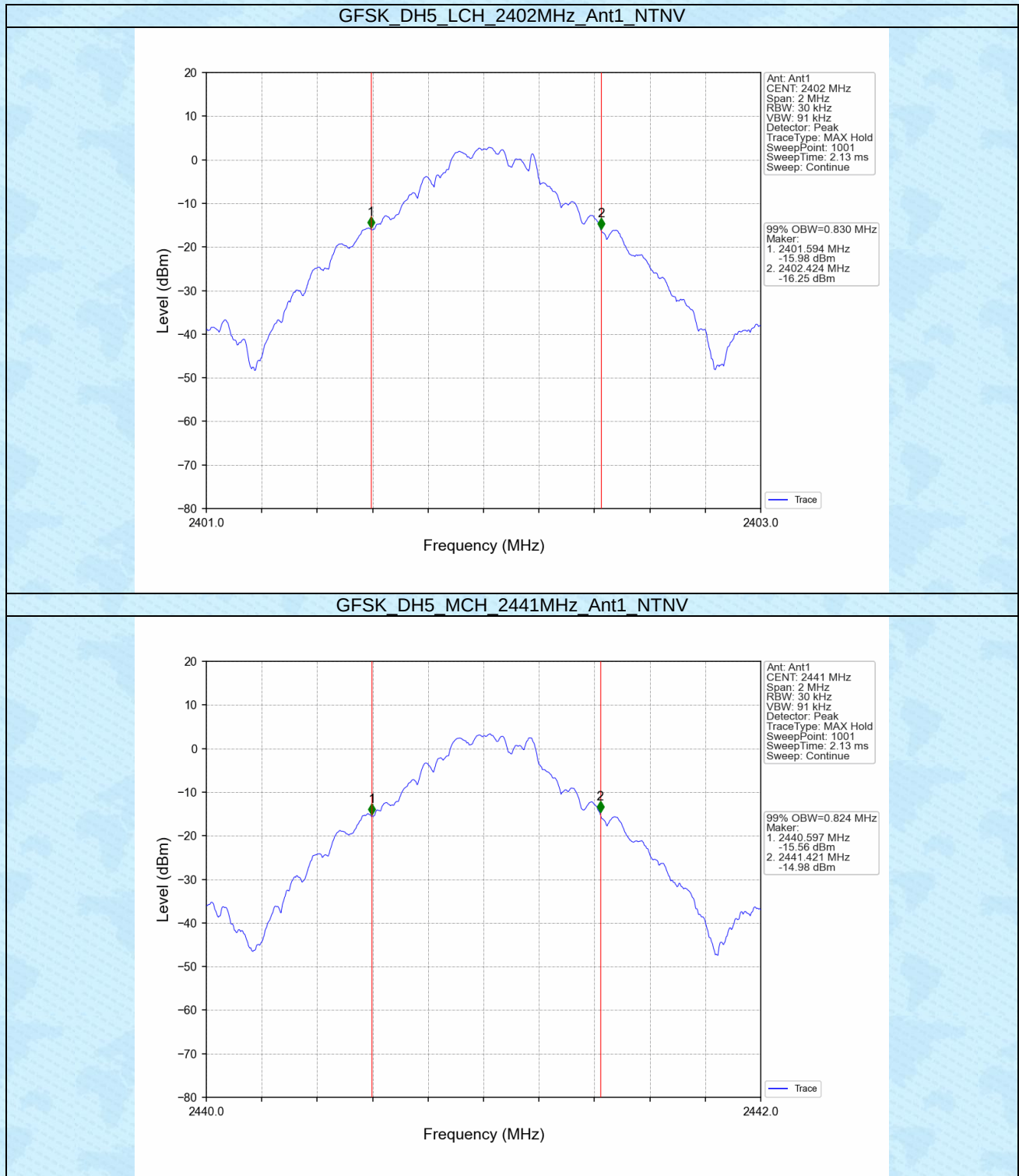


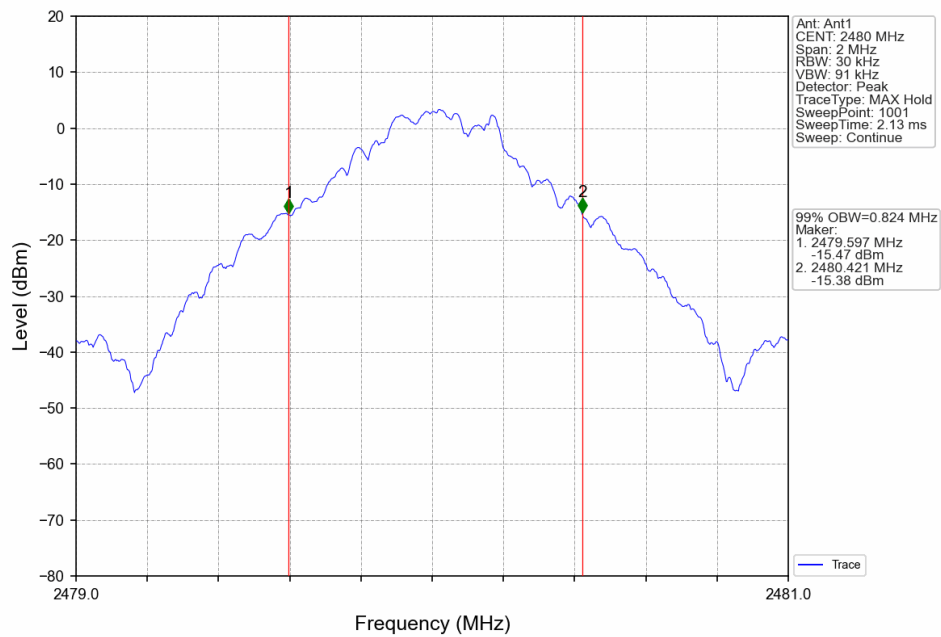
Appendix for 15.247**1. Bandwidth****1.1 OBW****1.1.1 Test Result**

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)	Verdict
					Result	
GFSK	SISO	2402	DH5	1	0.830	Pass
		2441	DH5	1	0.824	Pass
		2480	DH5	1	0.824	Pass
$\pi/4$ -DQPSK	SISO	2402	2DH5	1	1.174	Pass
		2441	2DH5	1	1.174	Pass
		2480	2DH5	1	1.176	Pass
8-DPSK	SISO	2402	3DH5	1	1.179	Pass
		2441	3DH5	1	1.180	Pass
		2480	3DH5	1	1.183	Pass

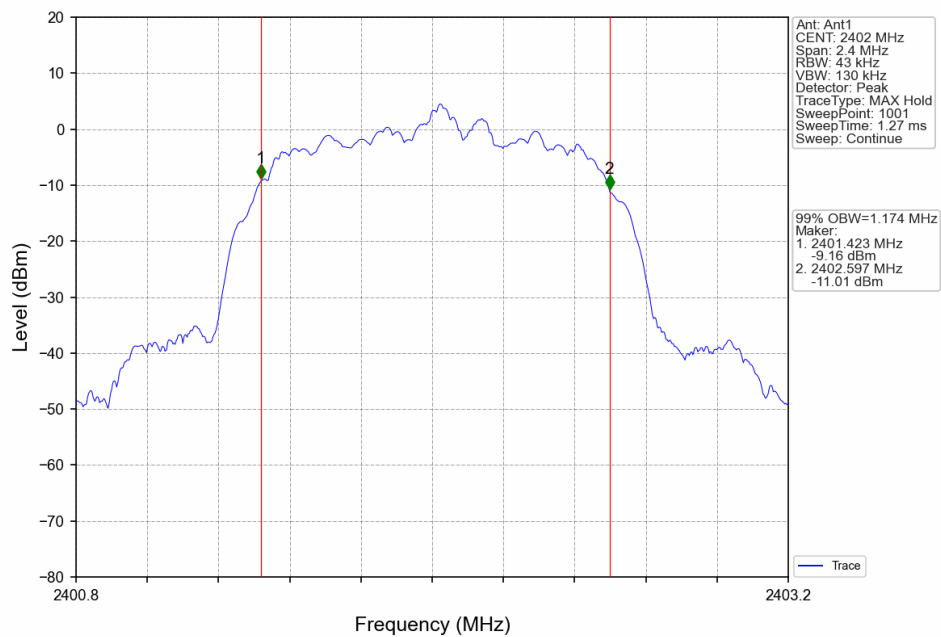
1.1.2 Test Graph



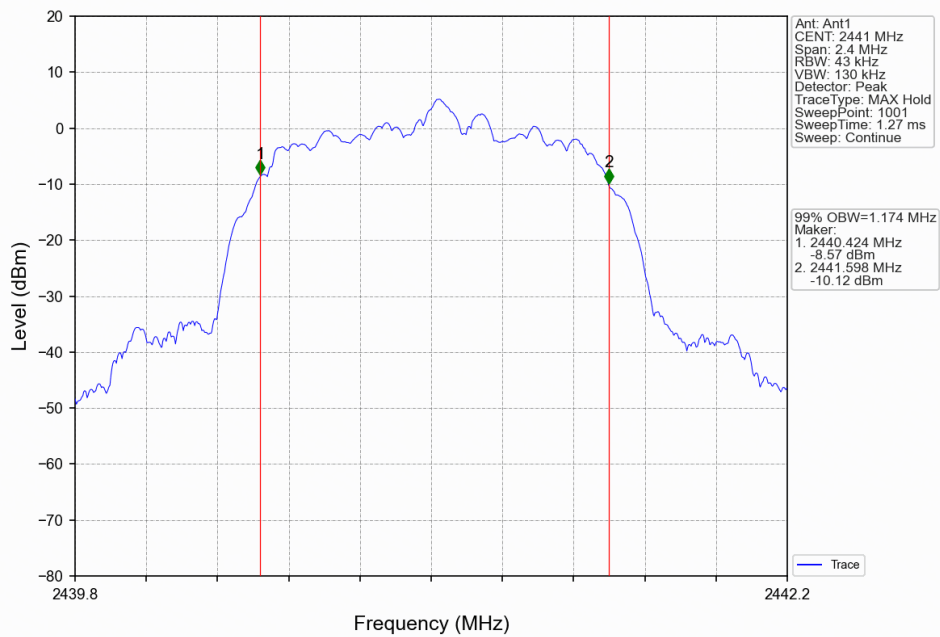
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



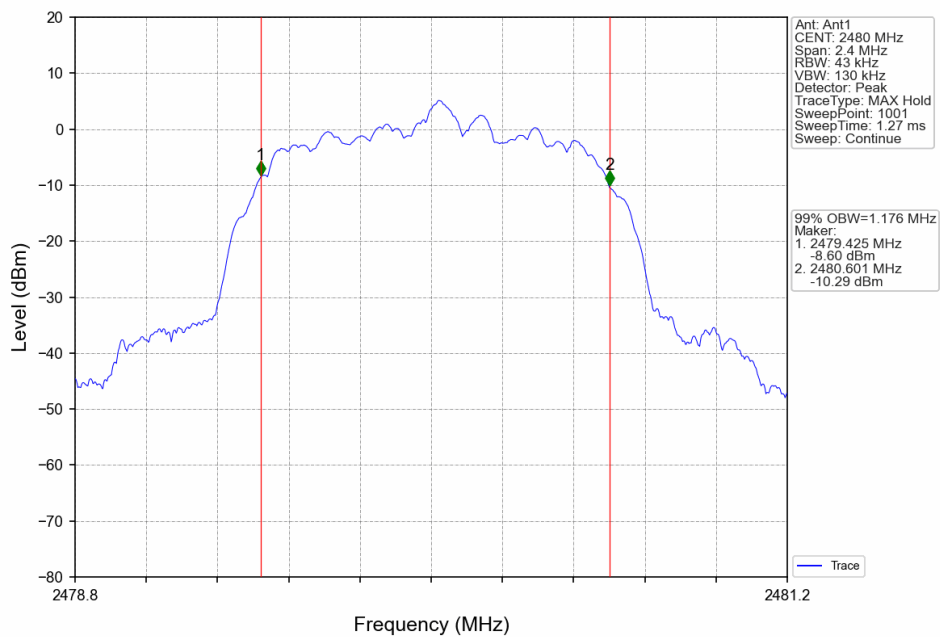
$\pi/4$ -DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



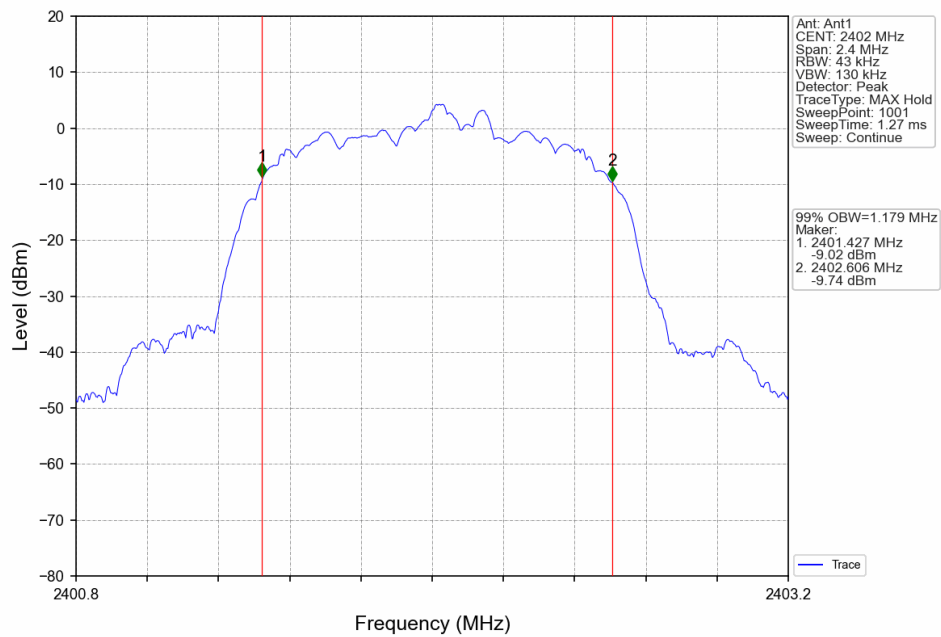
$\pi/4$ -DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



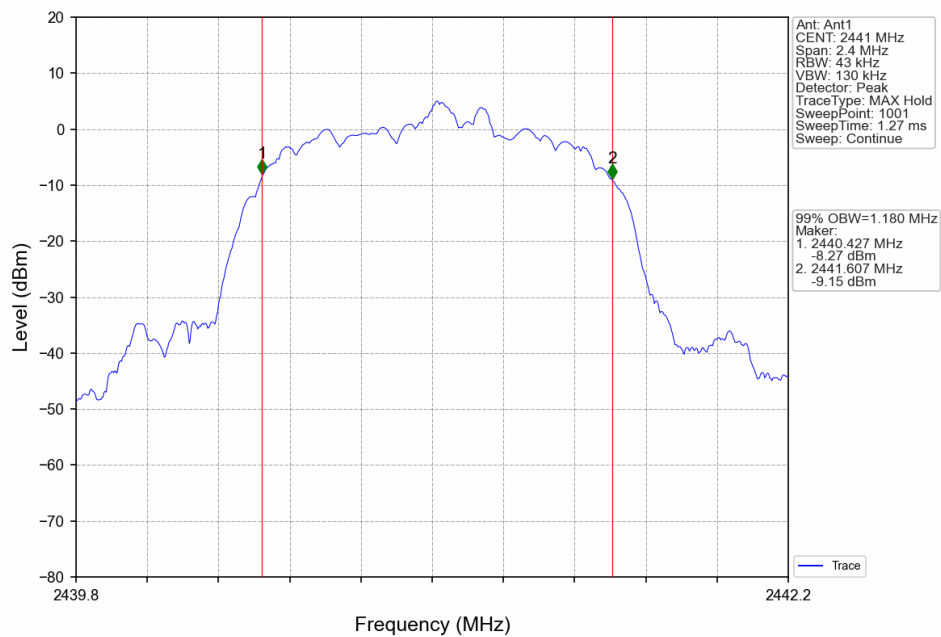
$\pi/4$ -DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

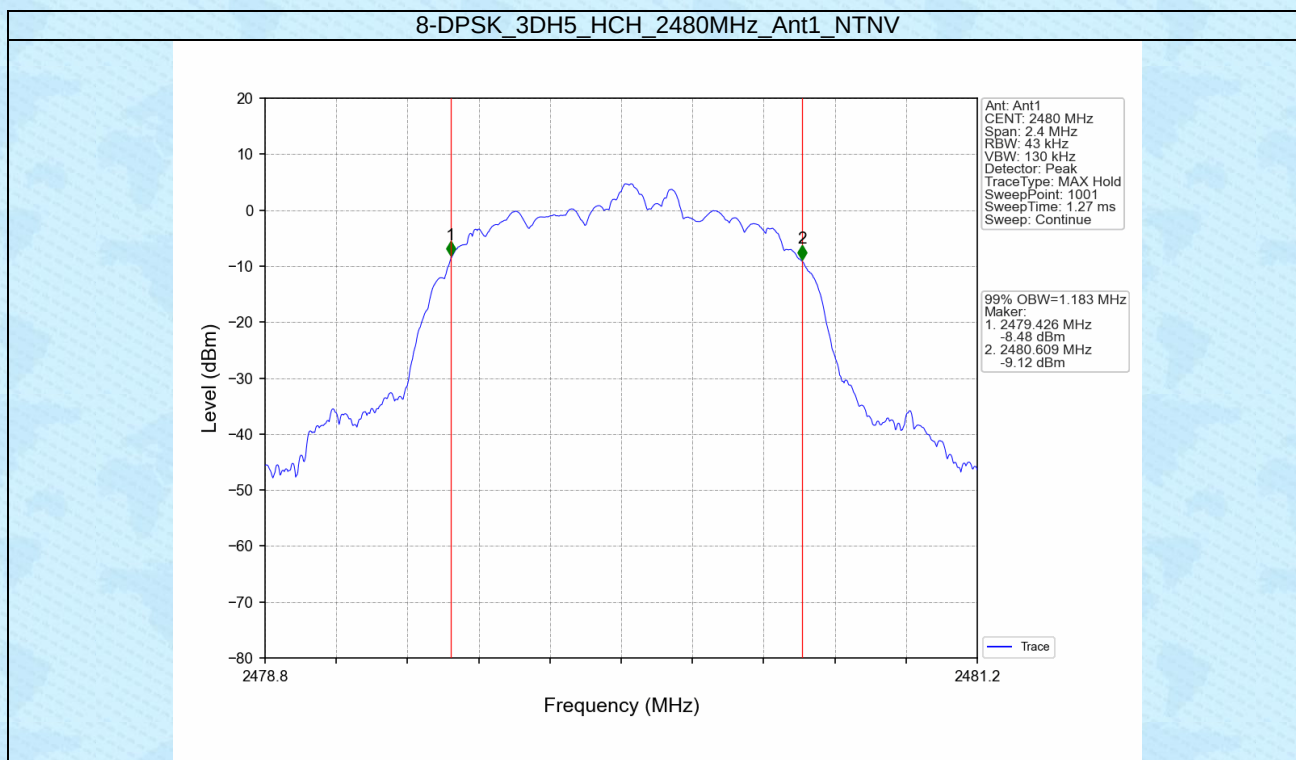


8-DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8-DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



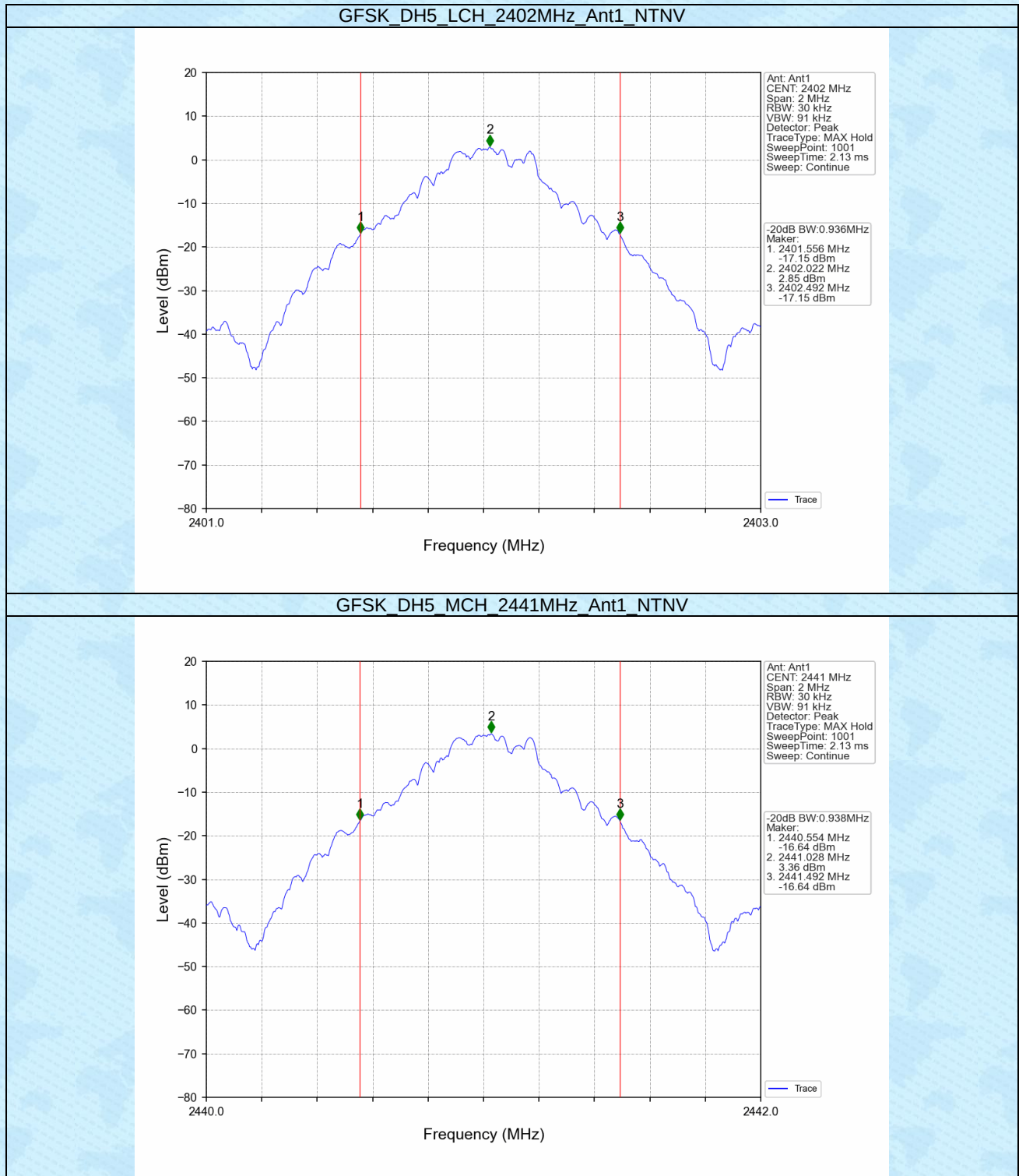


1.2 20dB BW

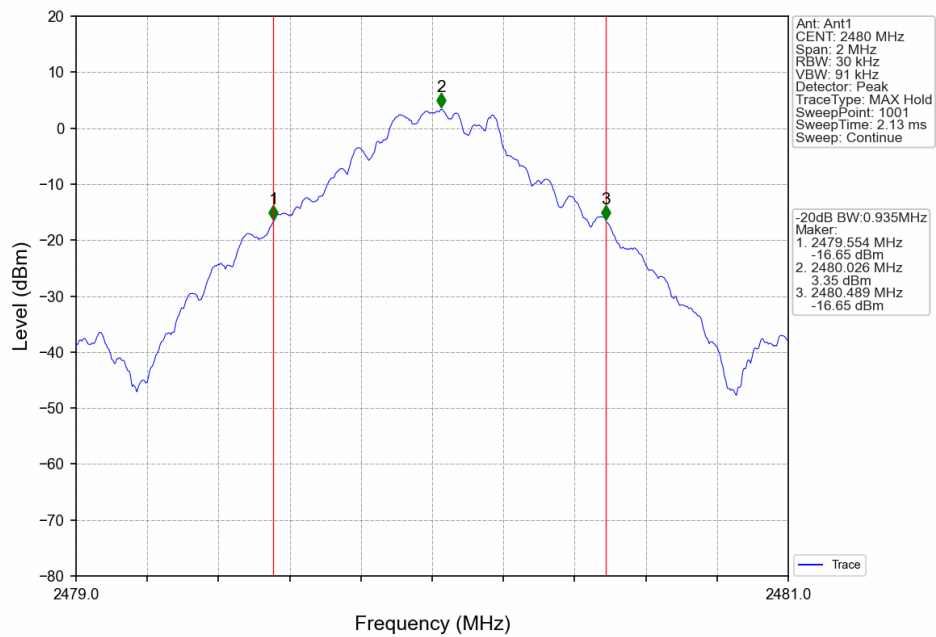
1.2.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)	Verdict
					Result	
GFSK	SISO	2402	DH5	1	0.936	Pass
		2441	DH5	1	0.938	Pass
		2480	DH5	1	0.935	Pass
$\pi/4$ -DQPSK	SISO	2402	2DH5	1	1.299	Pass
		2441	2DH5	1	1.295	Pass
		2480	2DH5	1	1.299	Pass
8-DPSK	SISO	2402	3DH5	1	1.311	Pass
		2441	3DH5	1	1.310	Pass
		2480	3DH5	1	1.310	Pass

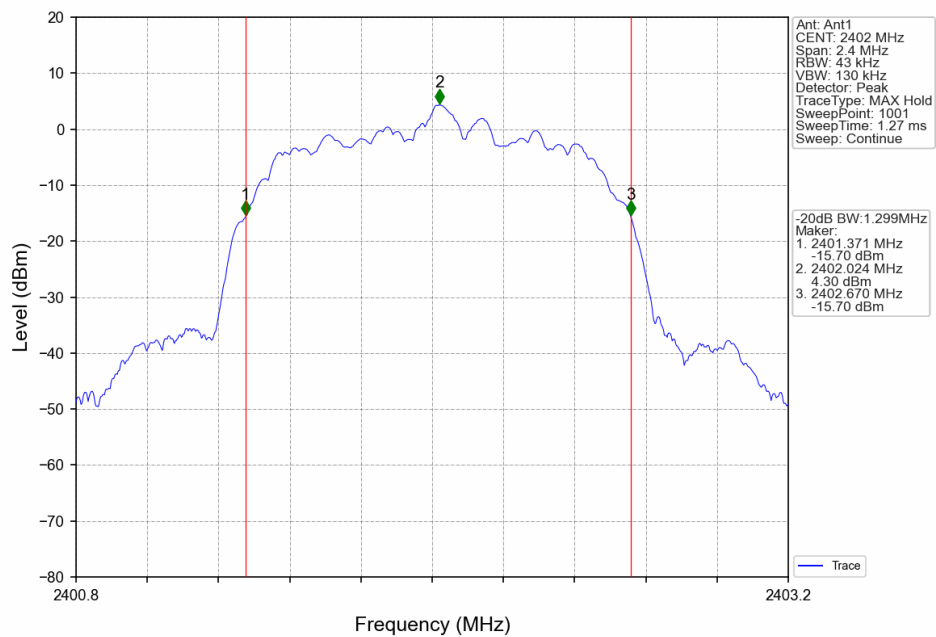
1.2.2 Test Graph



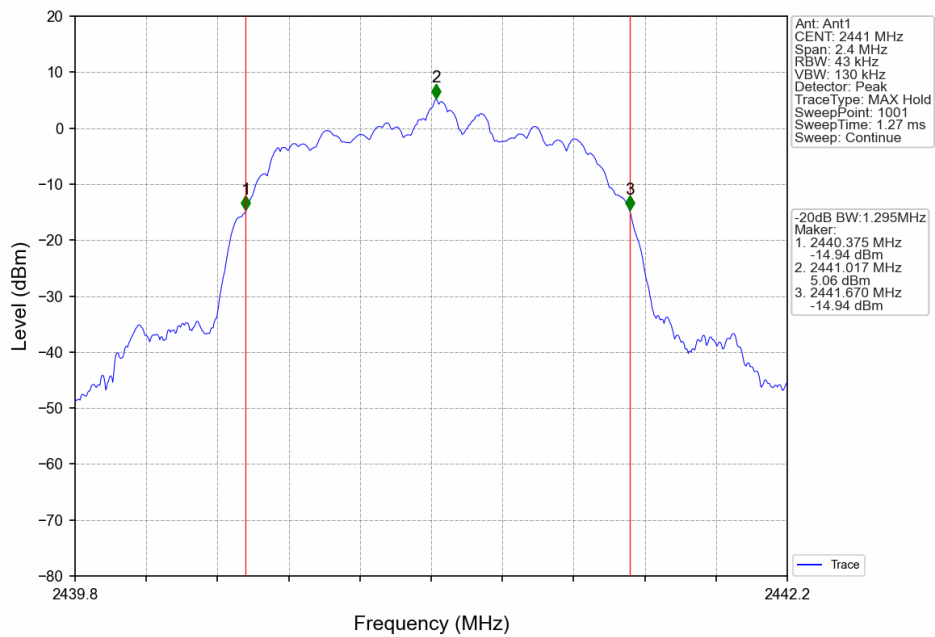
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



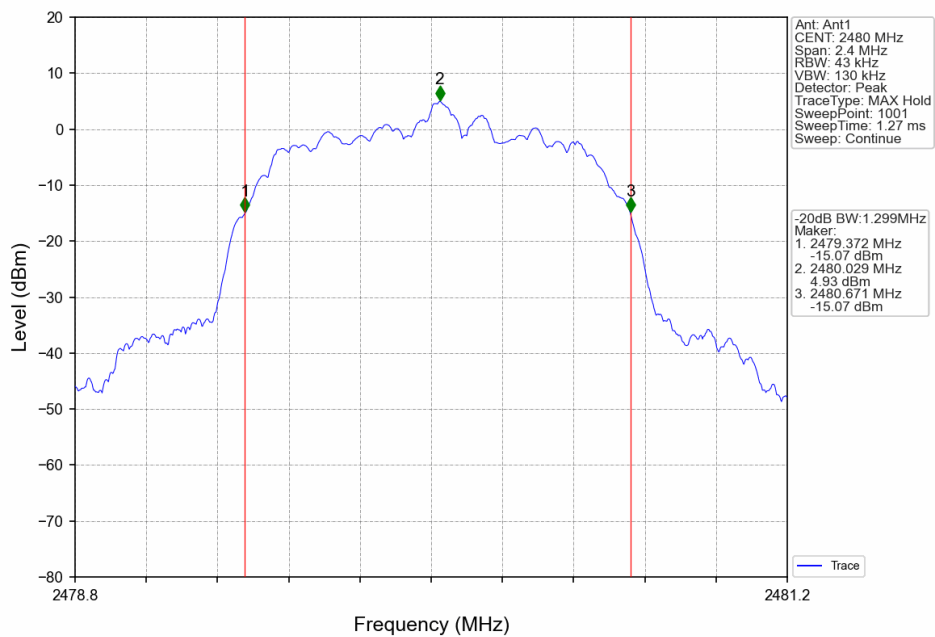
$\pi/4$ -DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



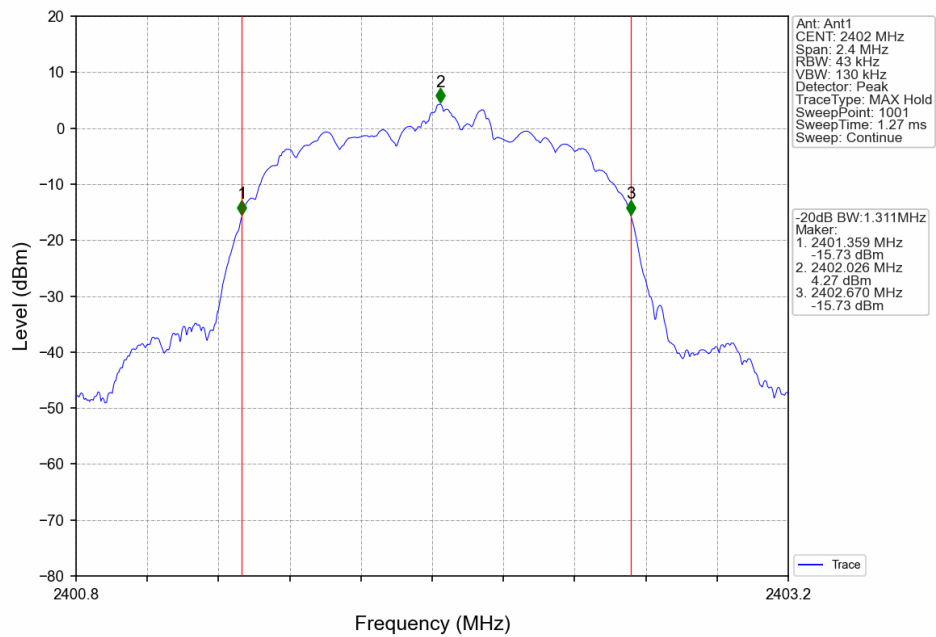
$\pi/4$ -DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



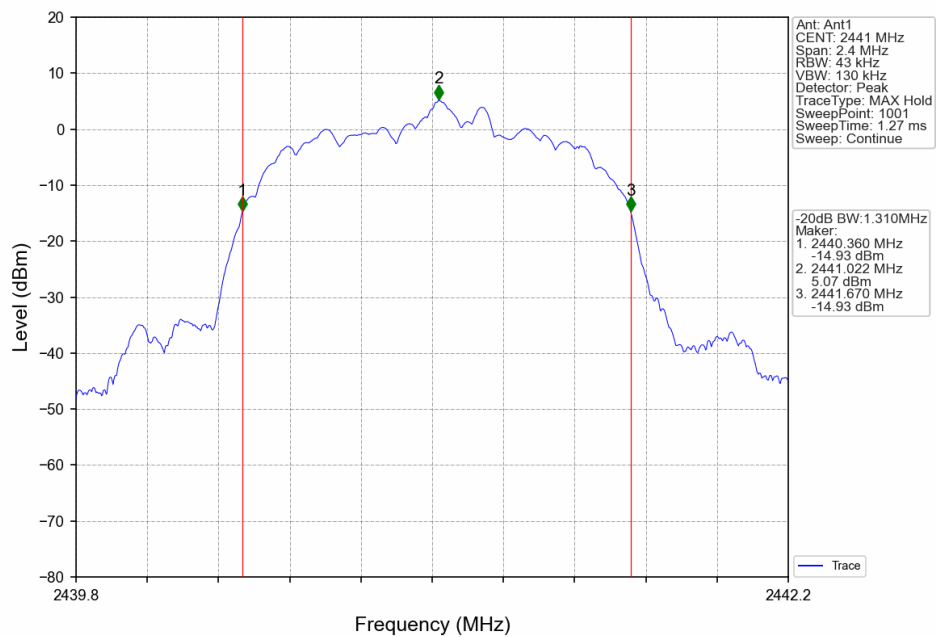
$\pi/4$ -DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



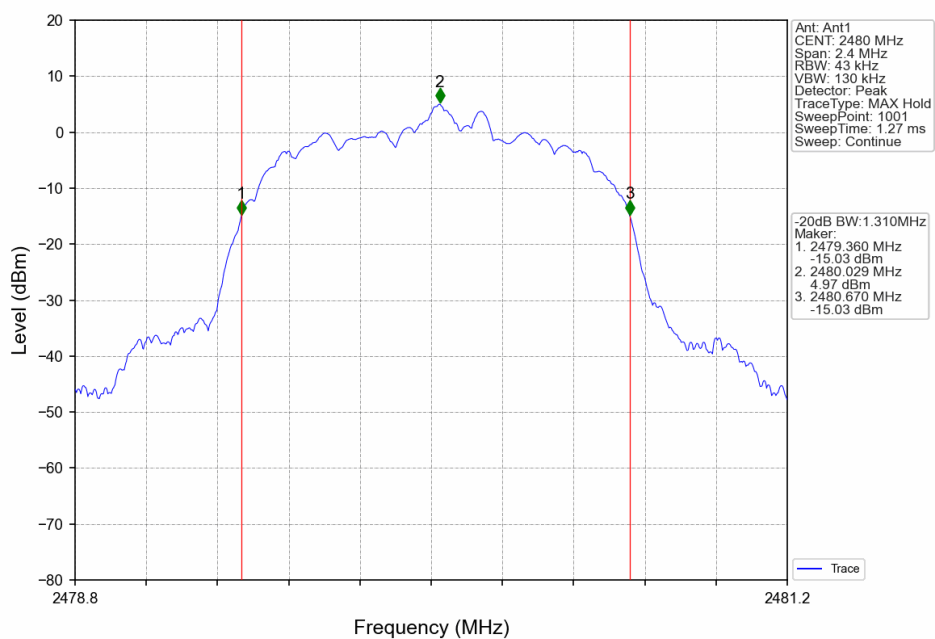
8-DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8-DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



8-DPSK_3DH5_HCH_2480MHz_Ant1_NTNV

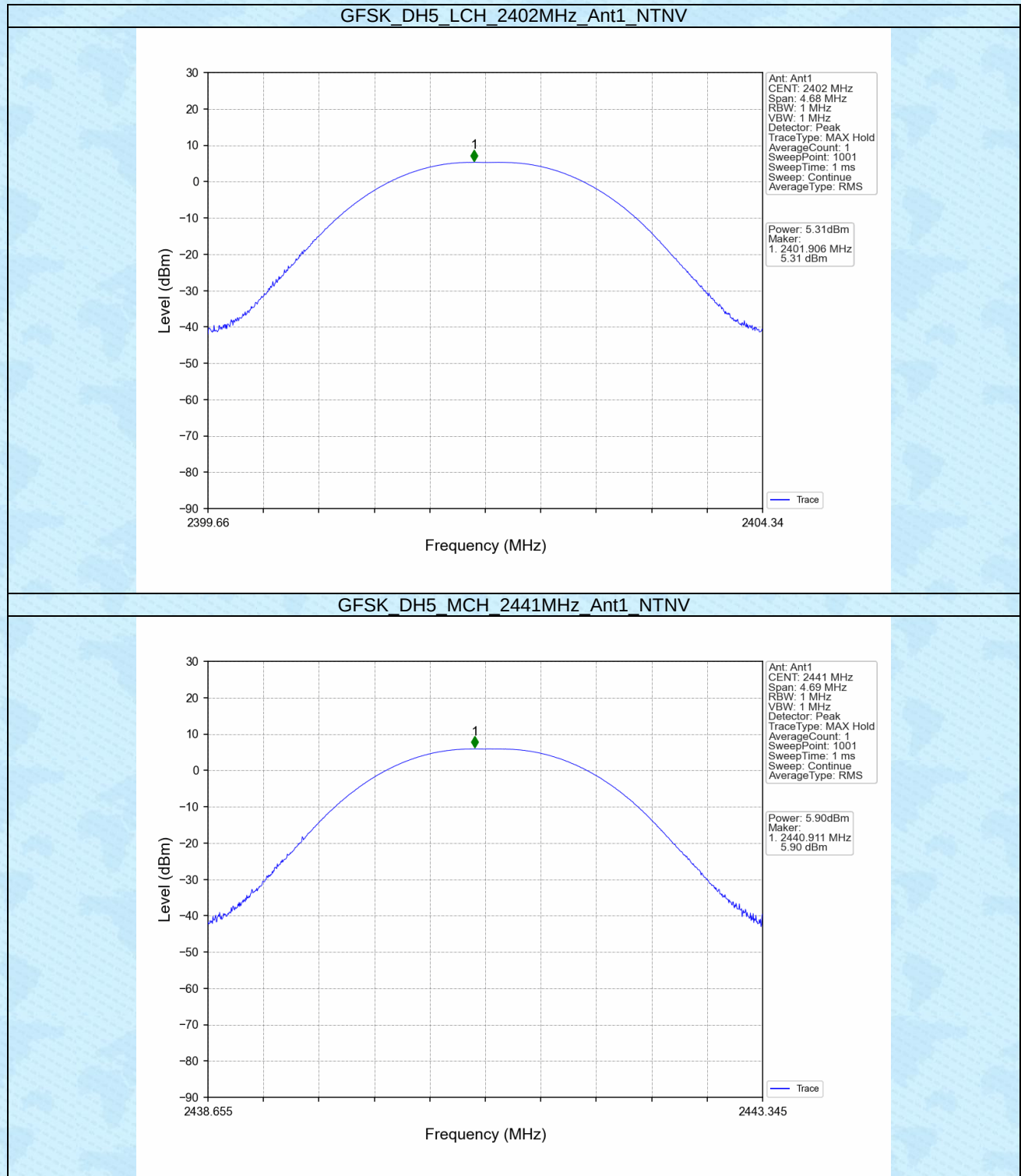


2. Maximum Conducted Output Power

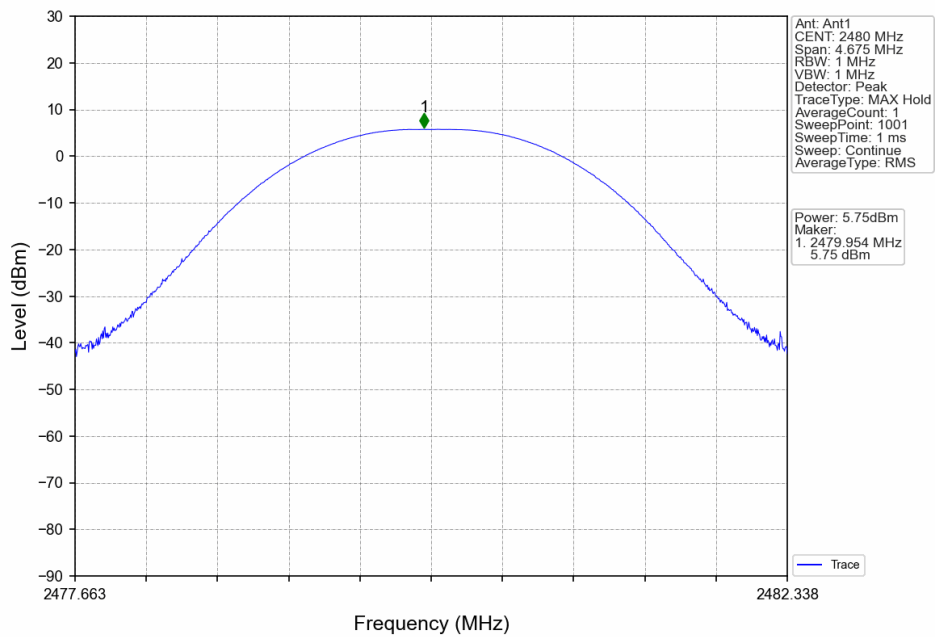
2.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	5.31	<=30	Pass
		2441	DH5	5.90	<=30	Pass
		2480	DH5	5.75	<=30	Pass
$\pi/4$ -DQPSK	SISO	2402	2DH5	7.62	<=20.97	Pass
		2441	2DH5	8.26	<=20.97	Pass
		2480	2DH5	8.15	<=20.97	Pass
8-DPSK	SISO	2402	3DH5	8.02	<=20.97	Pass
		2441	3DH5	8.63	<=20.97	Pass
		2480	3DH5	8.50	<=20.97	Pass

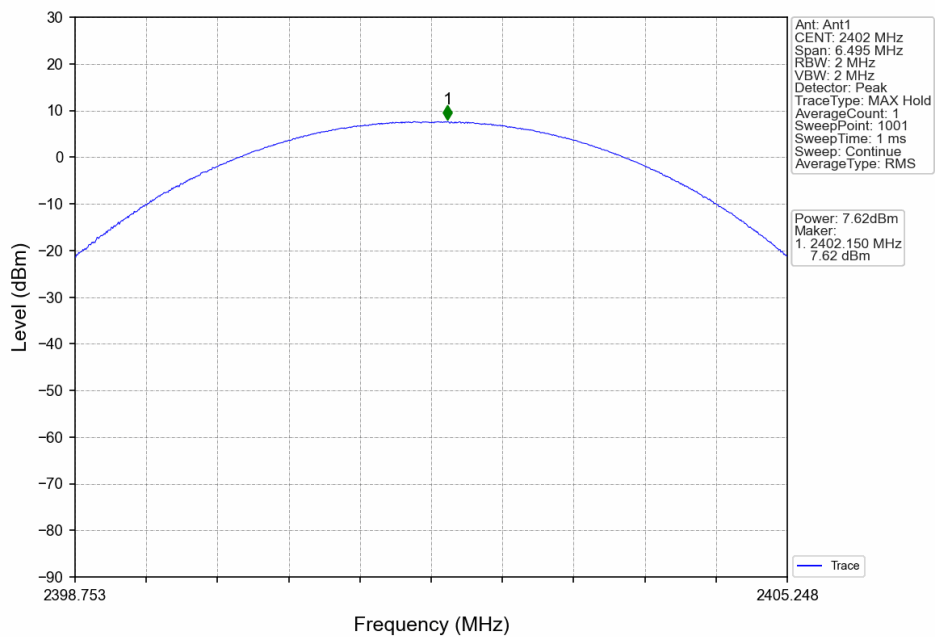
2.2 Test Graph



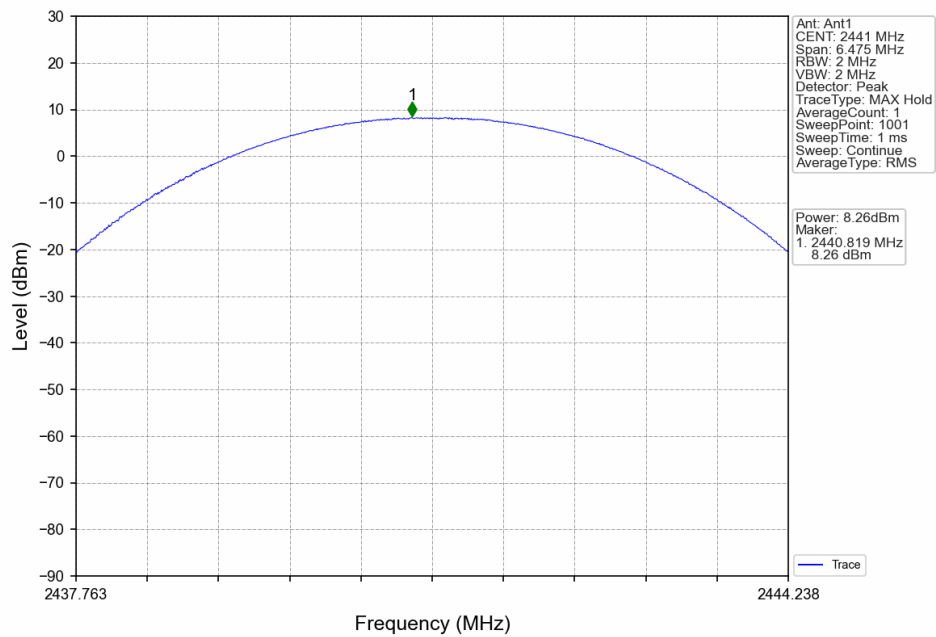
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



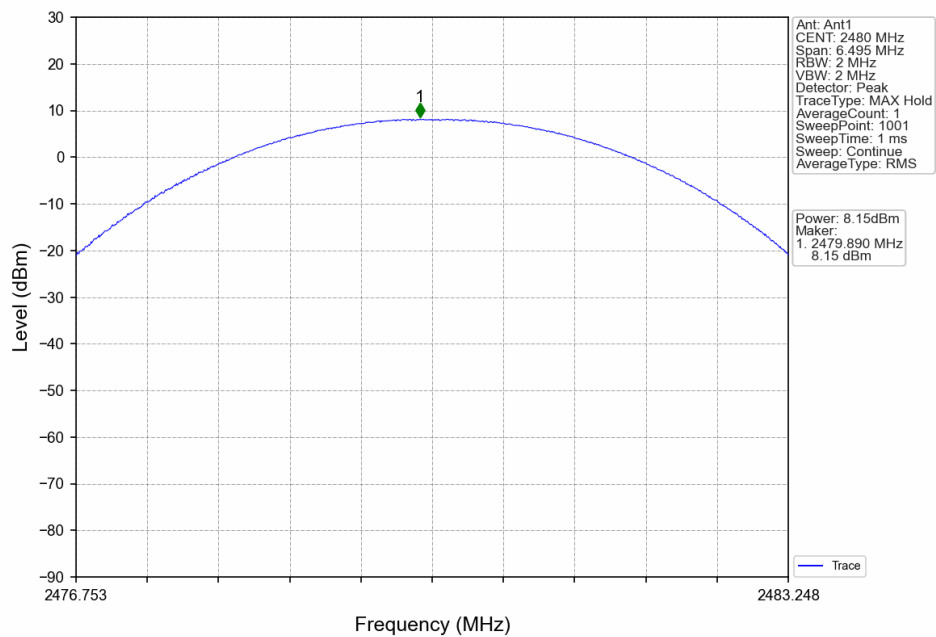
$\pi/4$ -DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



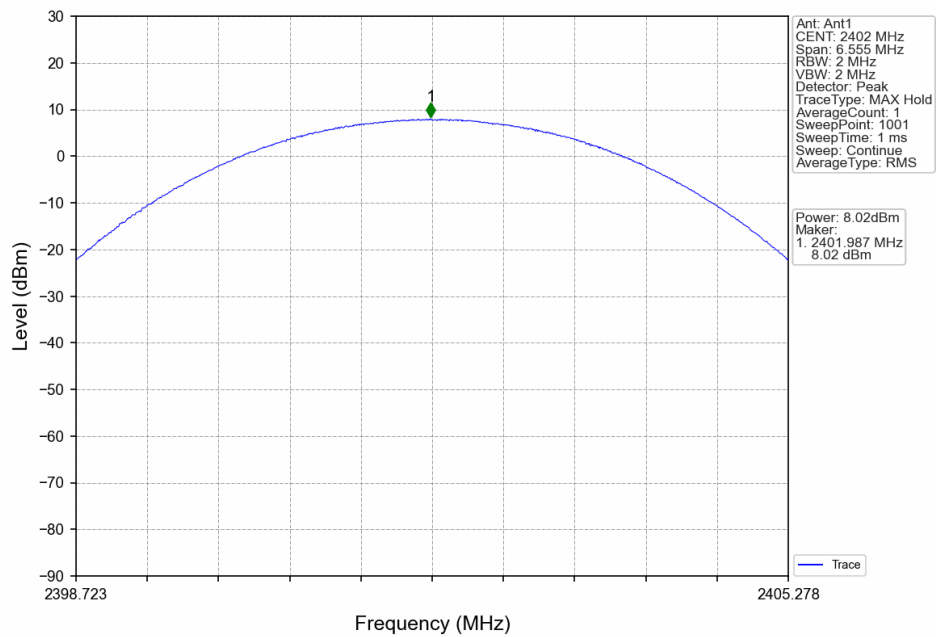
$\pi/4$ -DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



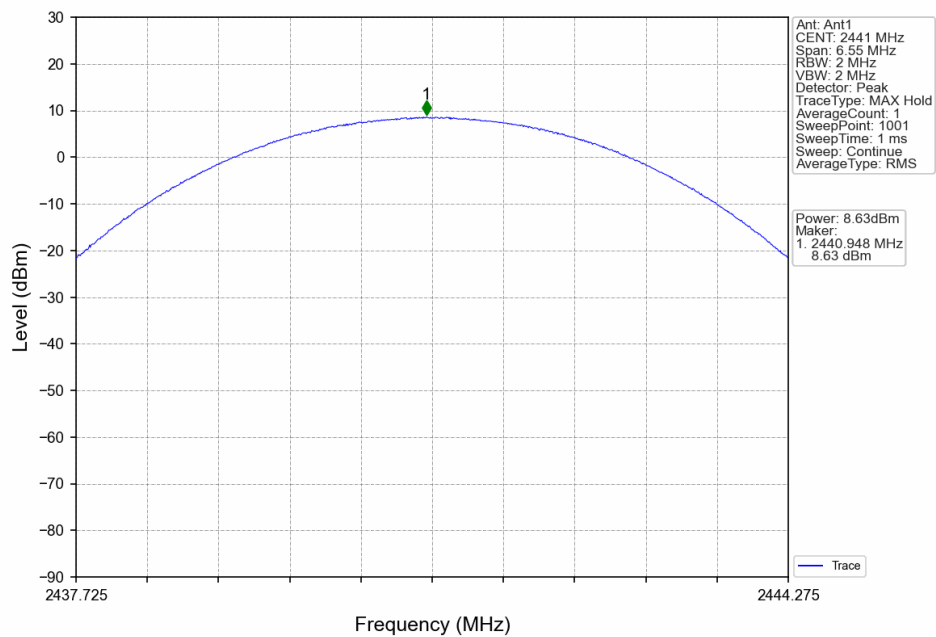
$\pi/4$ -DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



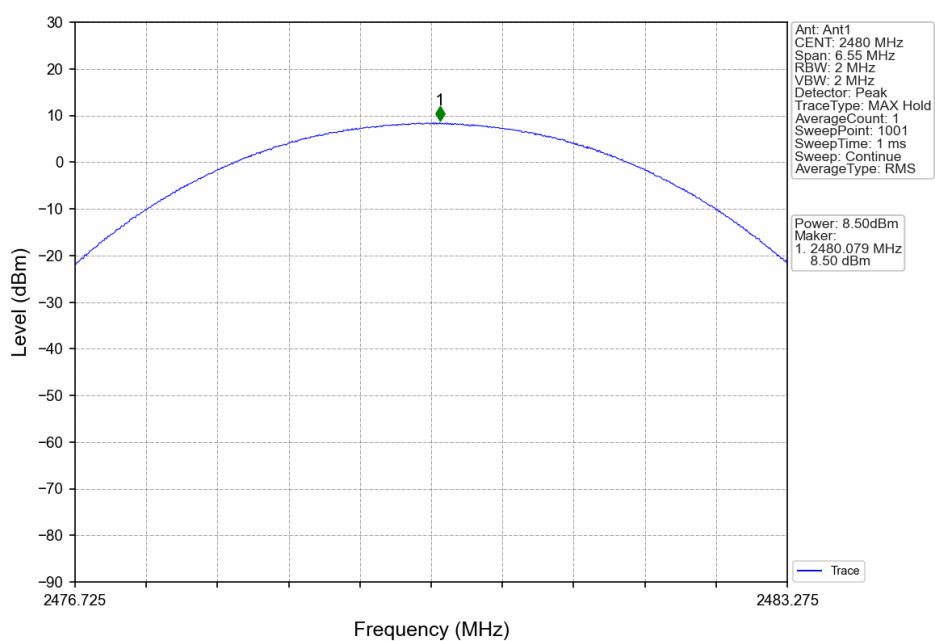
8-DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8-DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



8-DPSK_3DH5_HCH_2480MHz_Ant1_NTNV

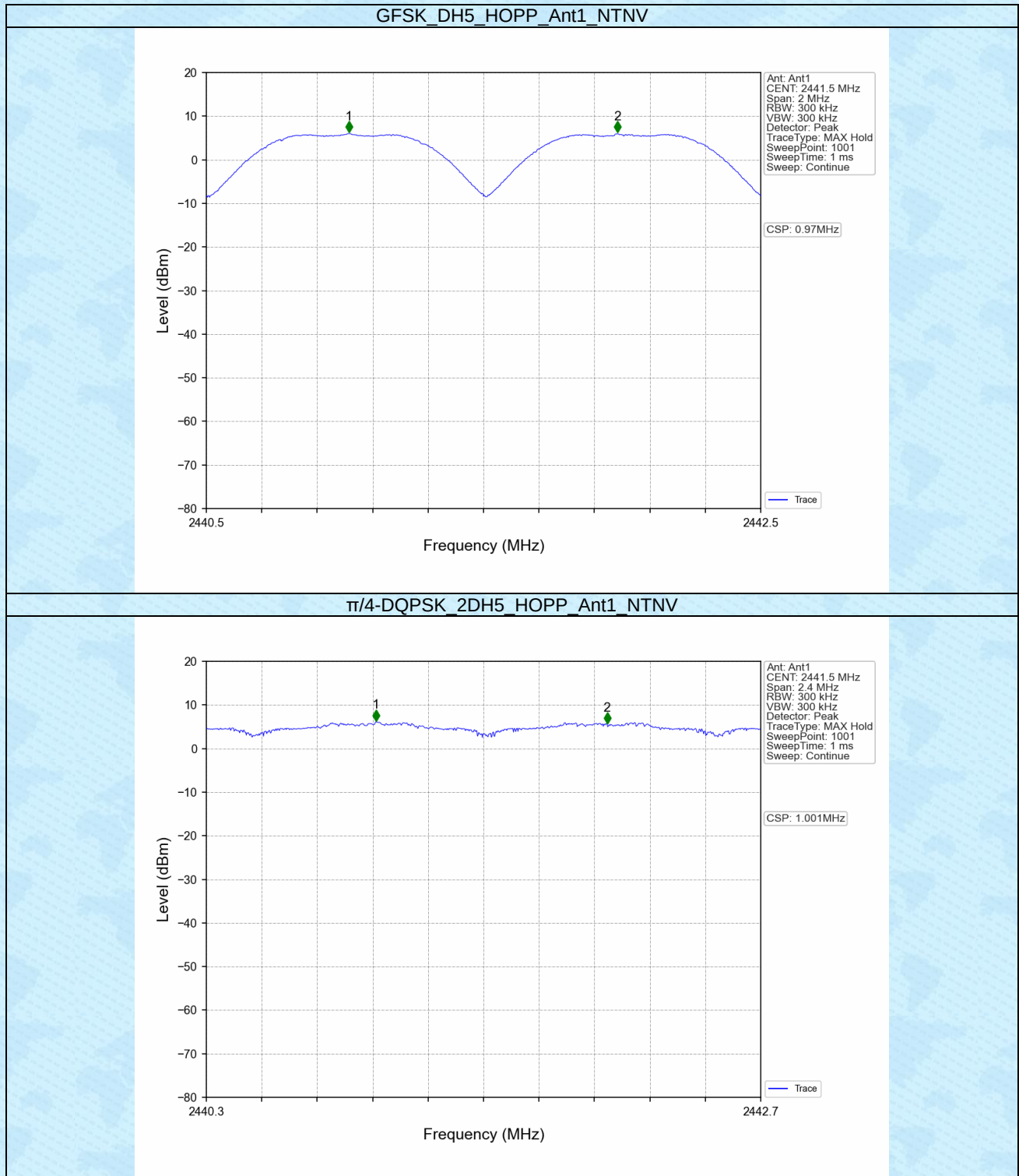


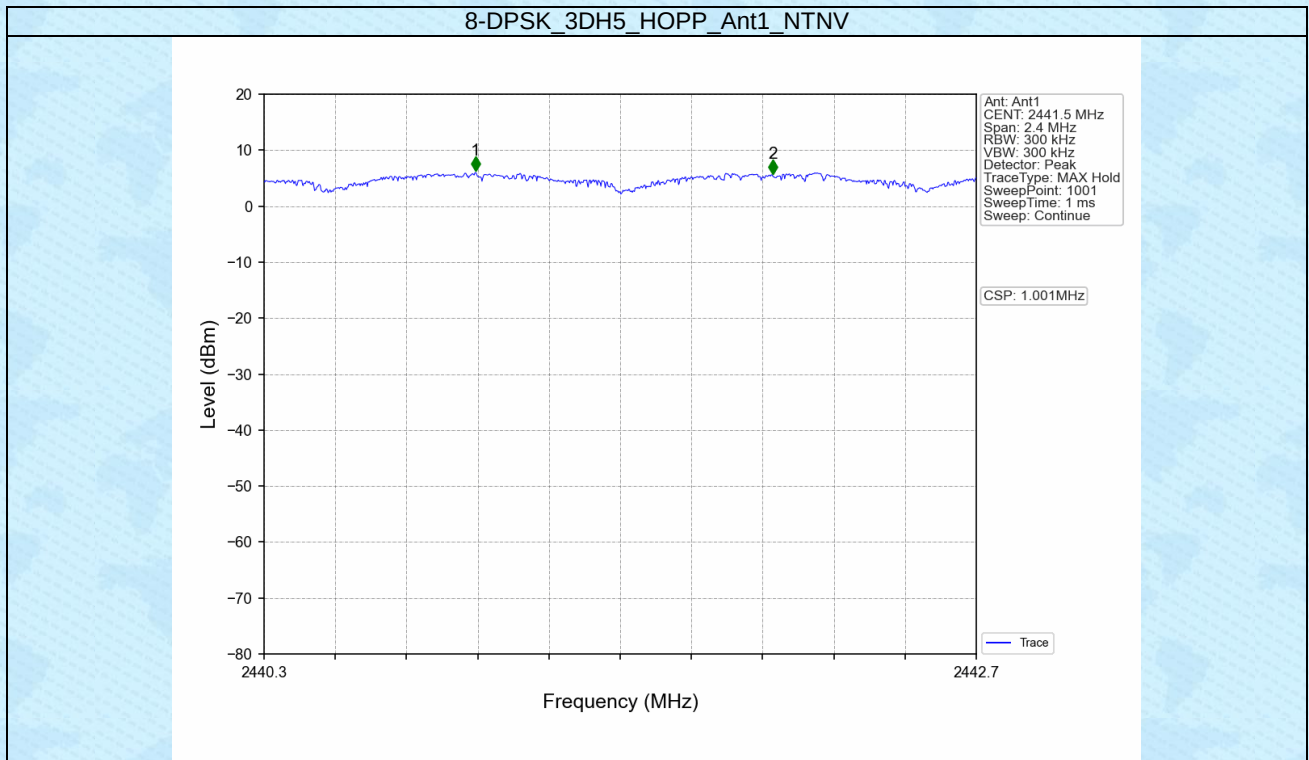
3. Carrier Frequency Separation

3.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	0.970	0.938	≥ 0.938	Pass
$\pi/4$ -DQPSK	SISO	HOPP	2DH5	1.001	1.299	≥ 0.866	Pass
8-DPSK	SISO	HOPP	3DH5	1.001	1.311	≥ 0.874	Pass

3.1.2 Test Graph



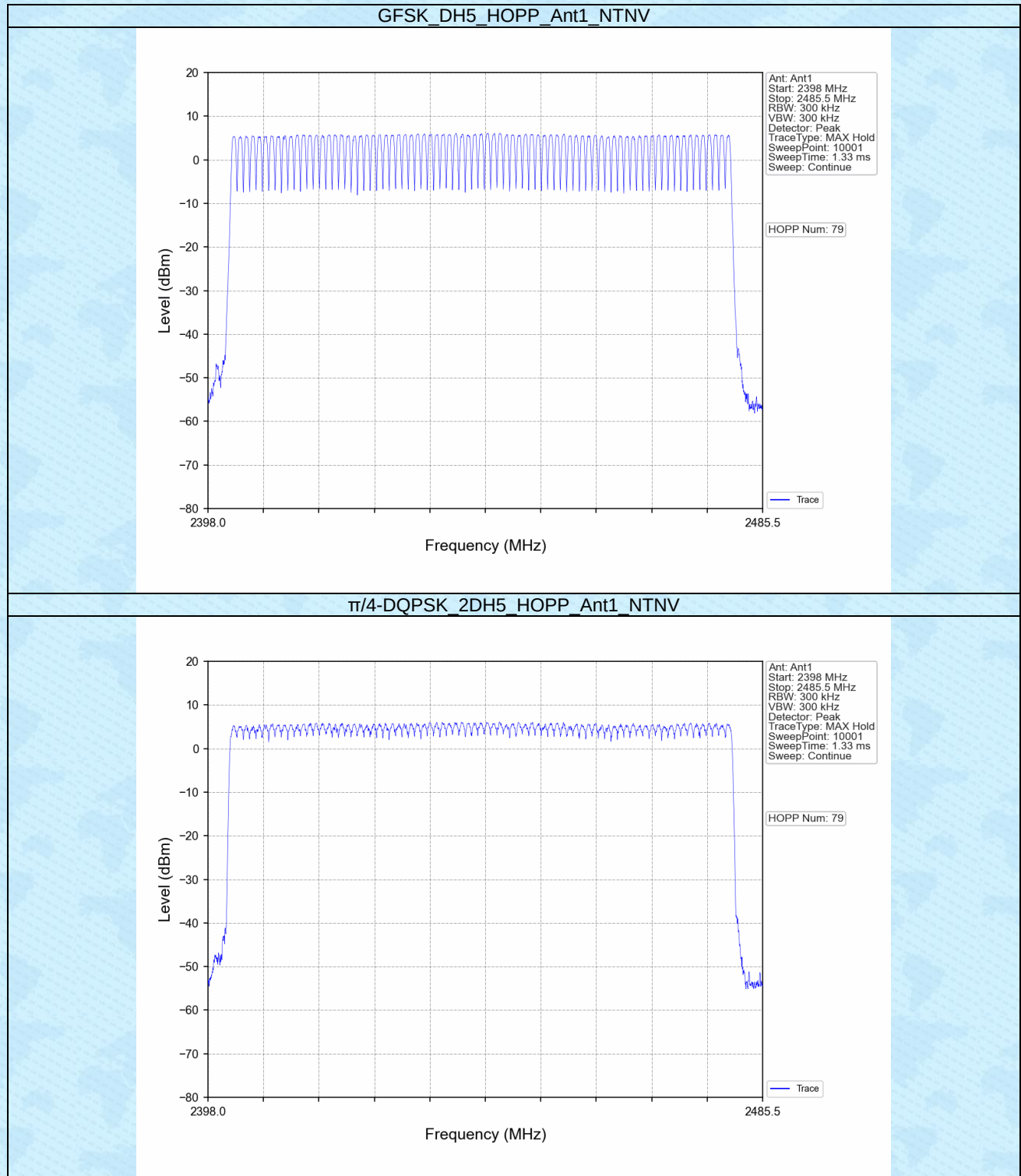


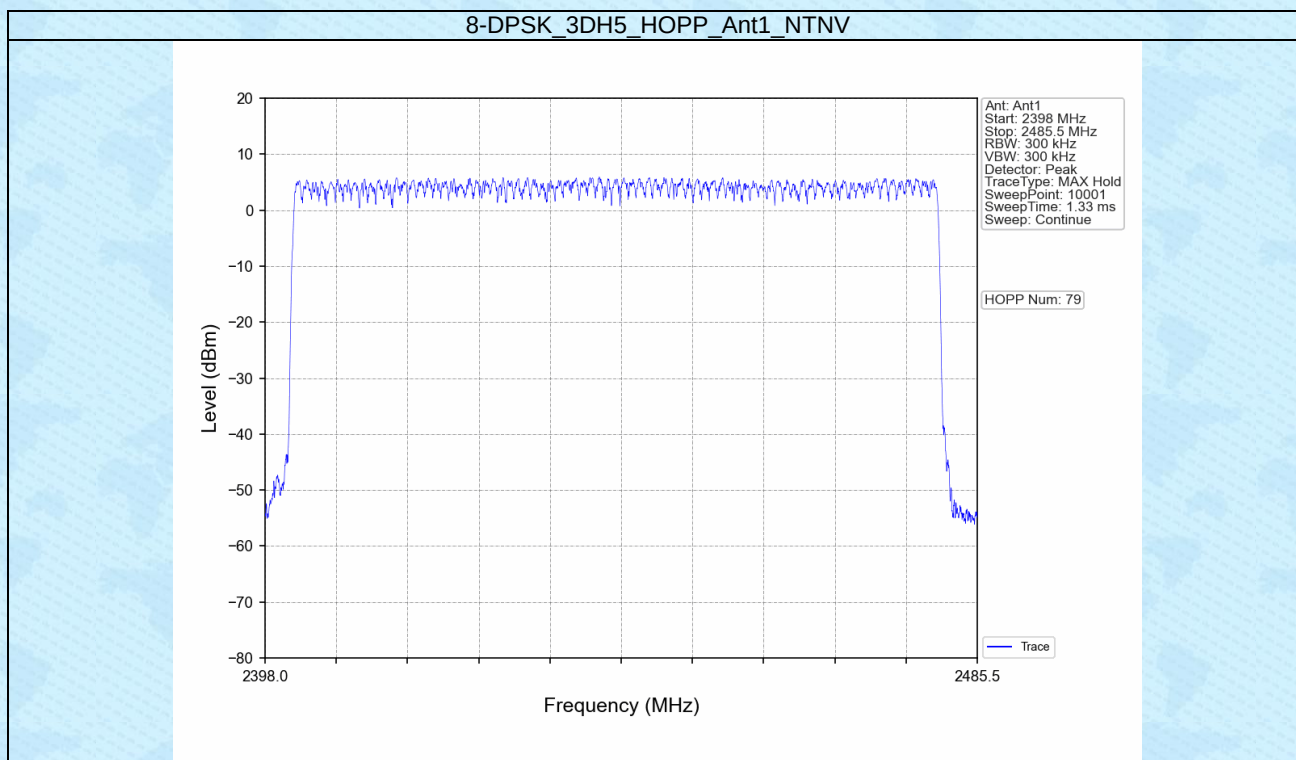
4. Number of Hopping Frequencies

4.1 Test Result

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

4.2 Test Graph



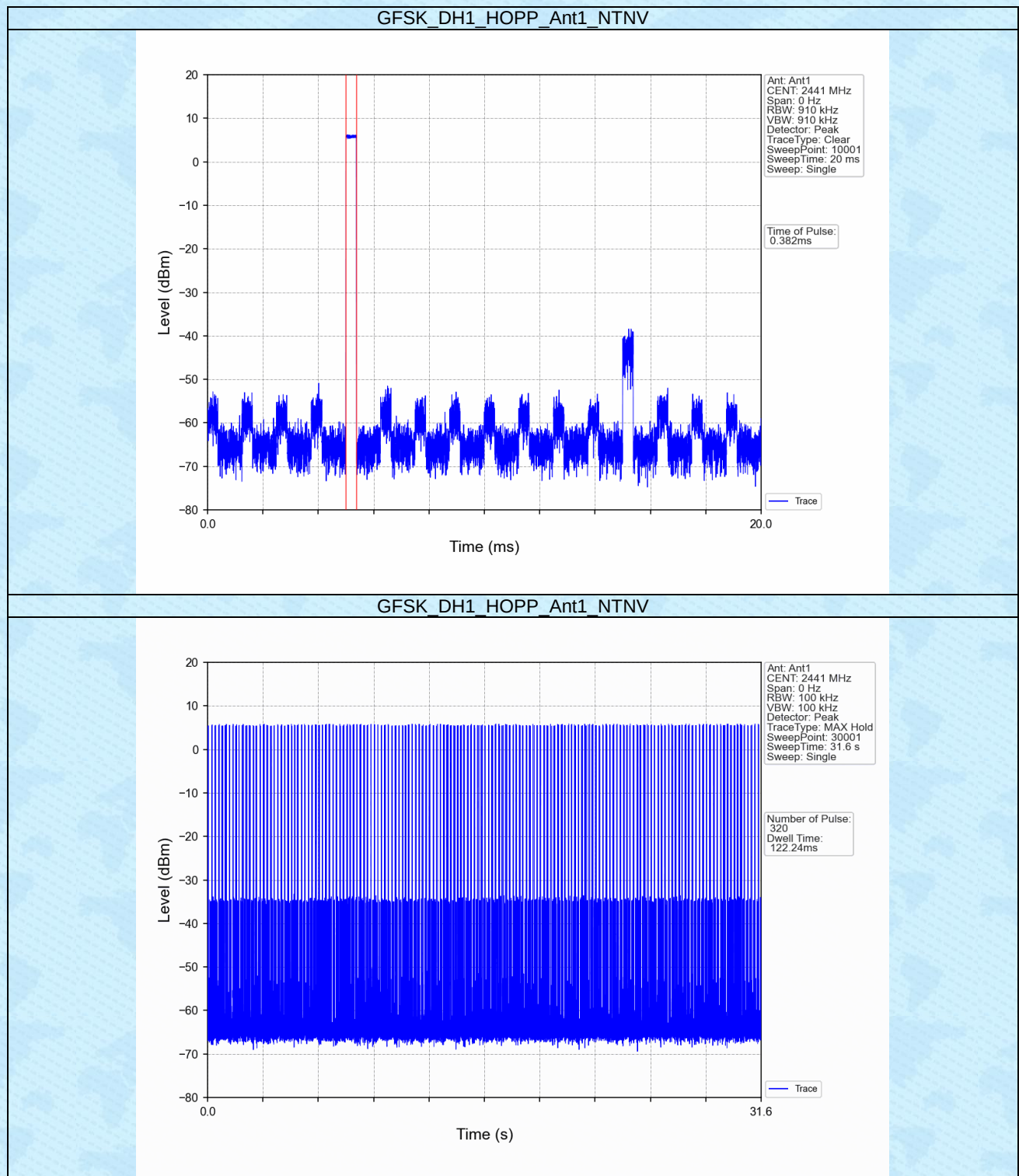


5. Time of Occupancy (Dwell Time)

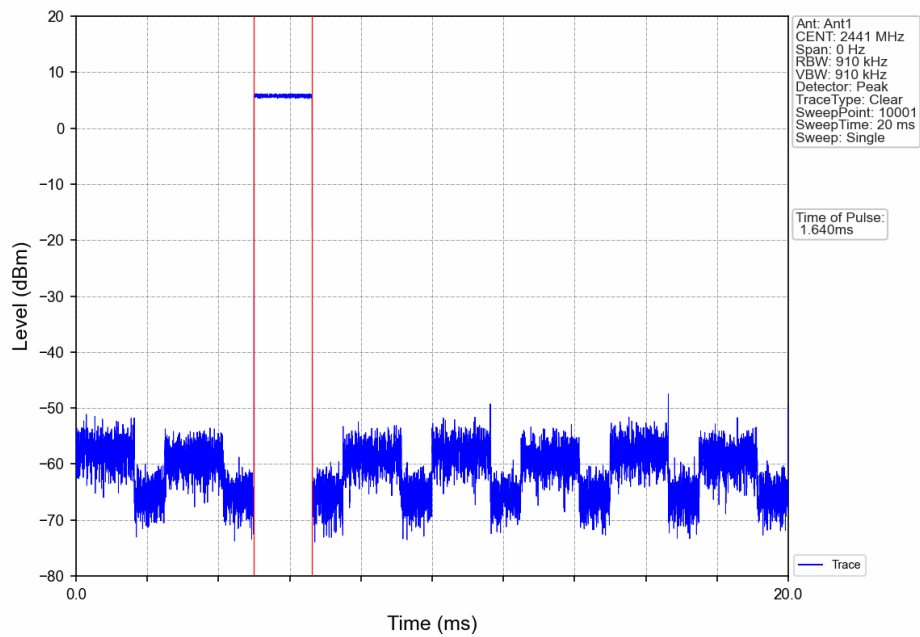
5.1 Test Result

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	0.382	31.600	320	122.240	<=400	Pass
			DH3	1.640	31.600	166	272.240	<=400	Pass
			DH5	2.888	31.600	110	317.680	<=400	Pass
$\pi/4$ -DQPSK	SISO	HOPP	2DH1	0.396	31.600	319	126.324	<=400	Pass
			2DH3	1.648	31.600	170	280.160	<=400	Pass
			2DH5	2.898	31.600	99	286.902	<=400	Pass
8-DPSK	SISO	HOPP	3DH1	0.396	31.600	317	125.532	<=400	Pass
			3DH3	1.648	31.600	169	278.512	<=400	Pass
			3DH5	2.898	31.600	101	292.698	<=400	Pass

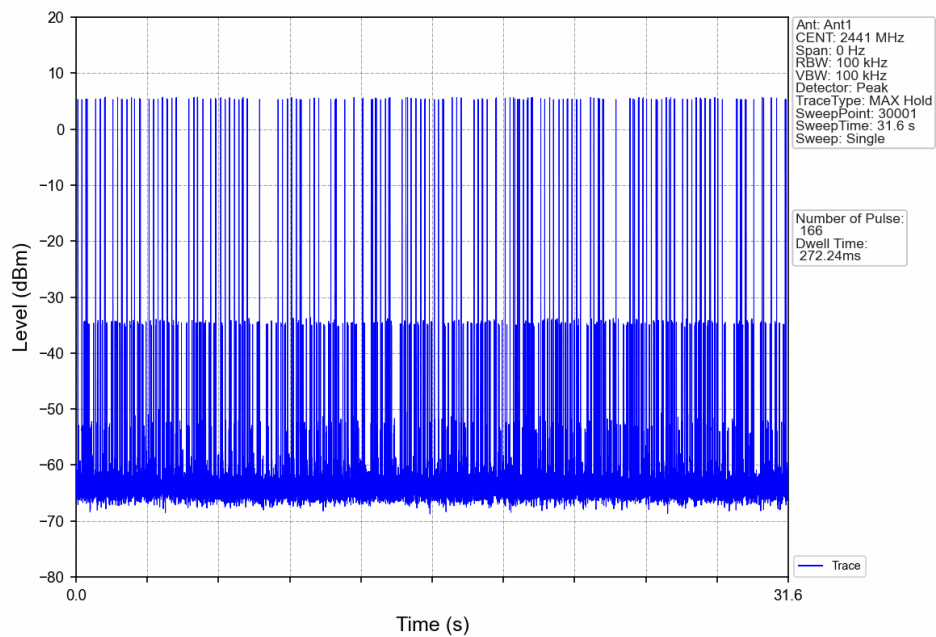
5.2 Test Graph



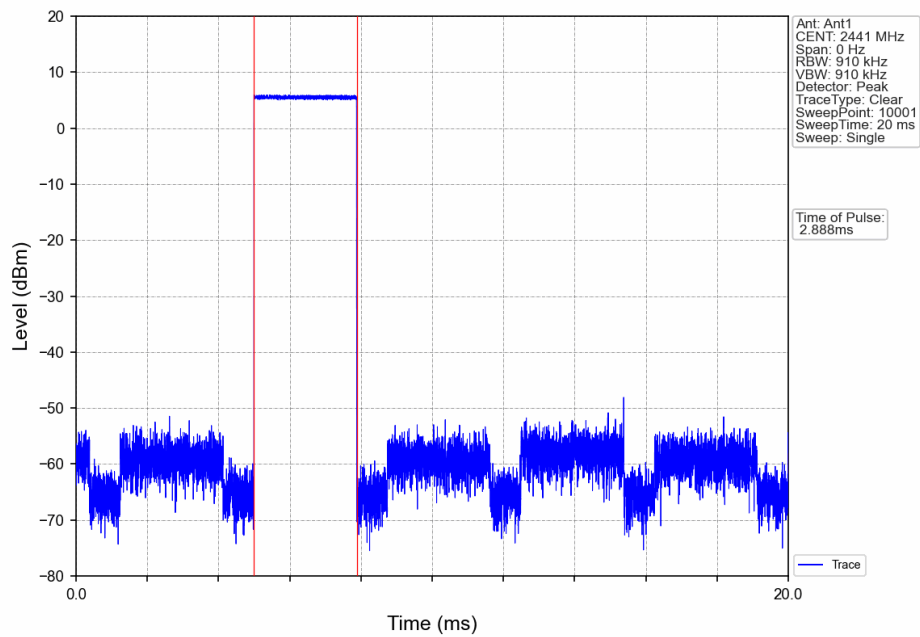
GFSK_DH3_HOPP_Ant1_NTNV



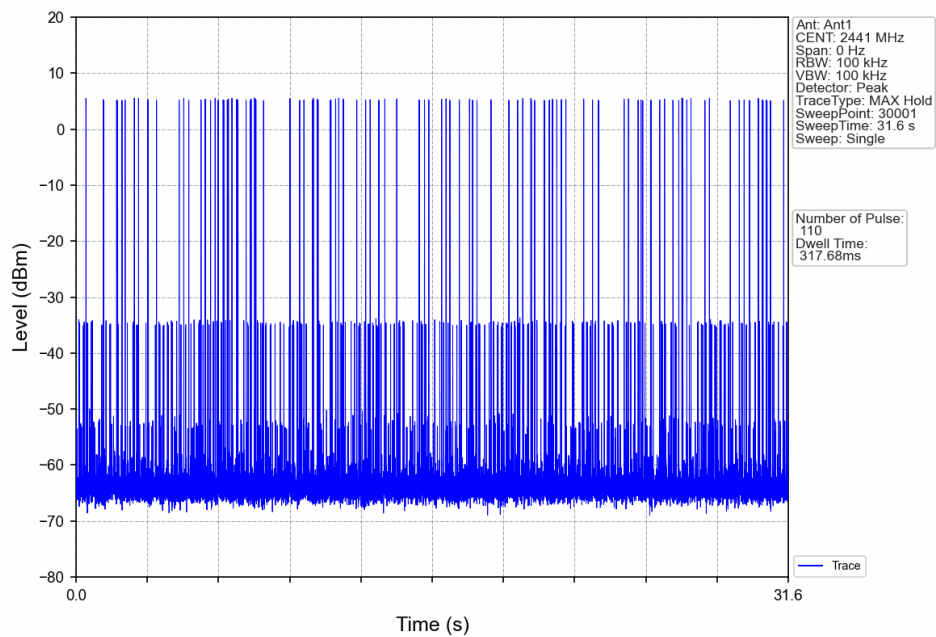
GFSK_DH3_HOPP_Ant1_NTNV

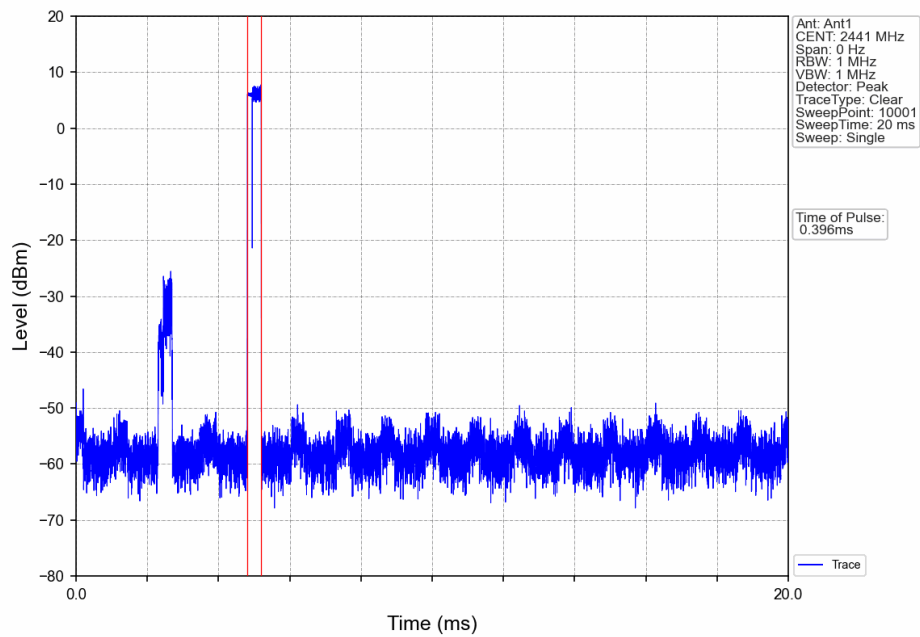
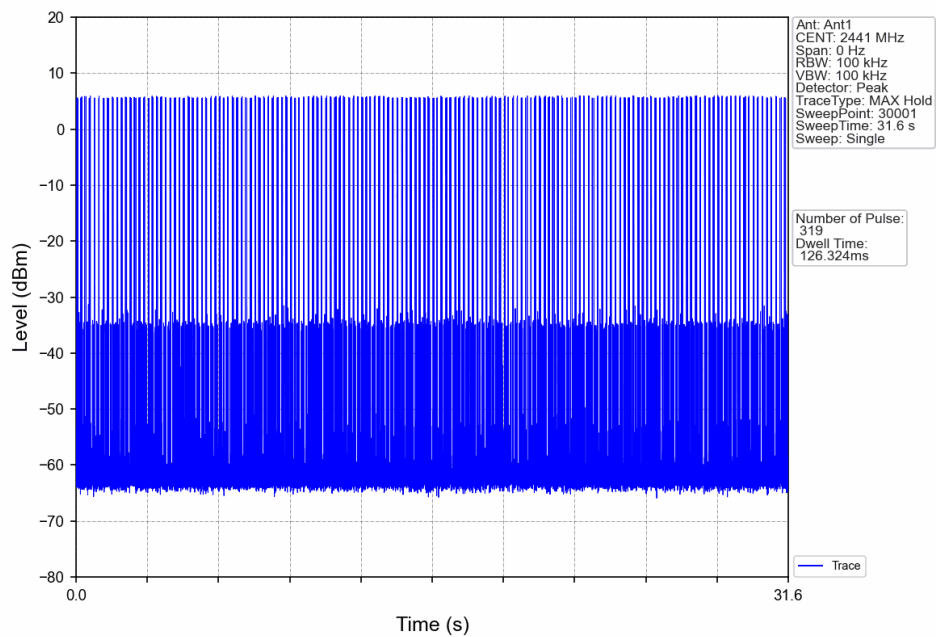


GFSK_DH5_HOPP_Ant1_NTNV

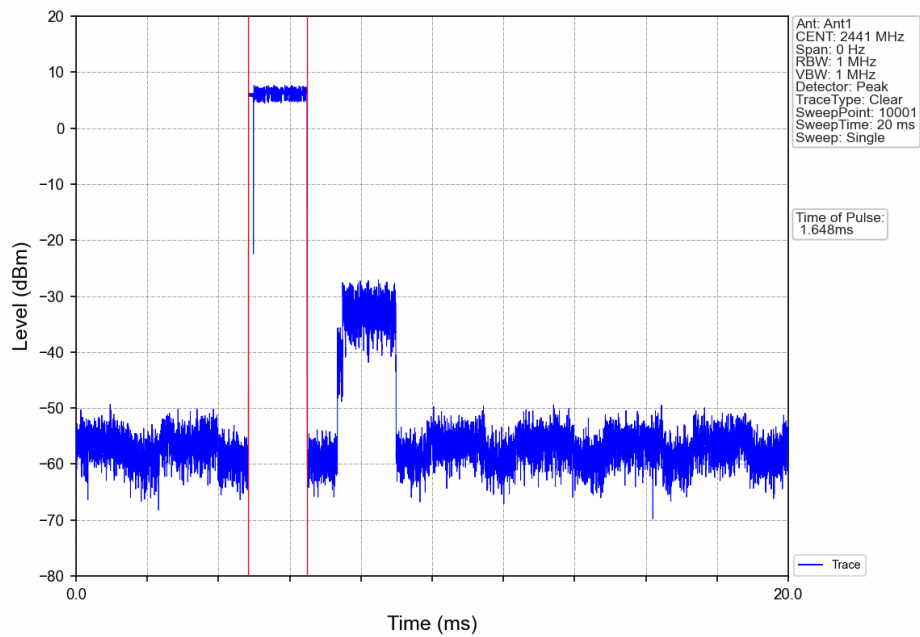


GFSK_DH5_HOPP_Ant1_NTNV

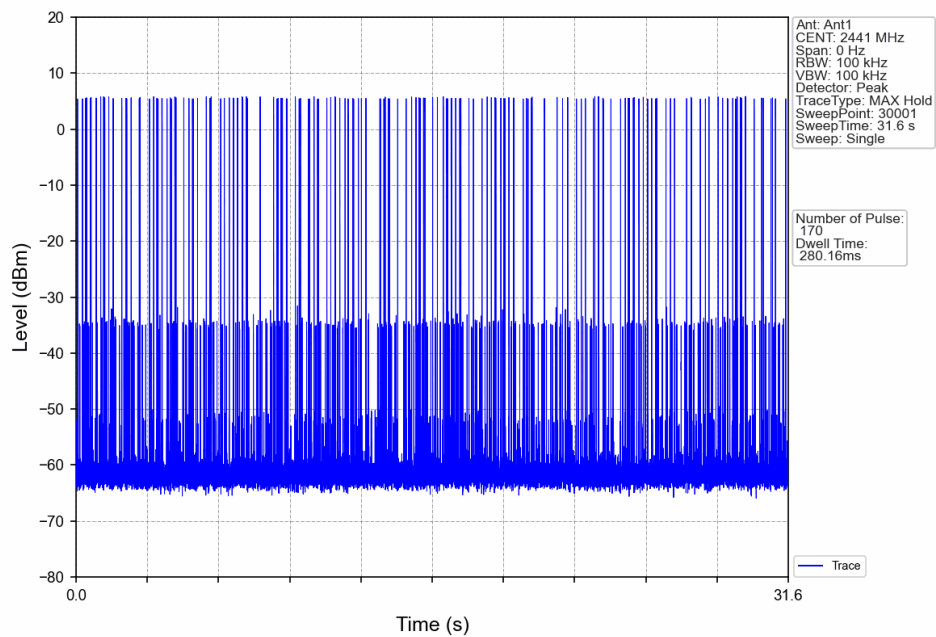


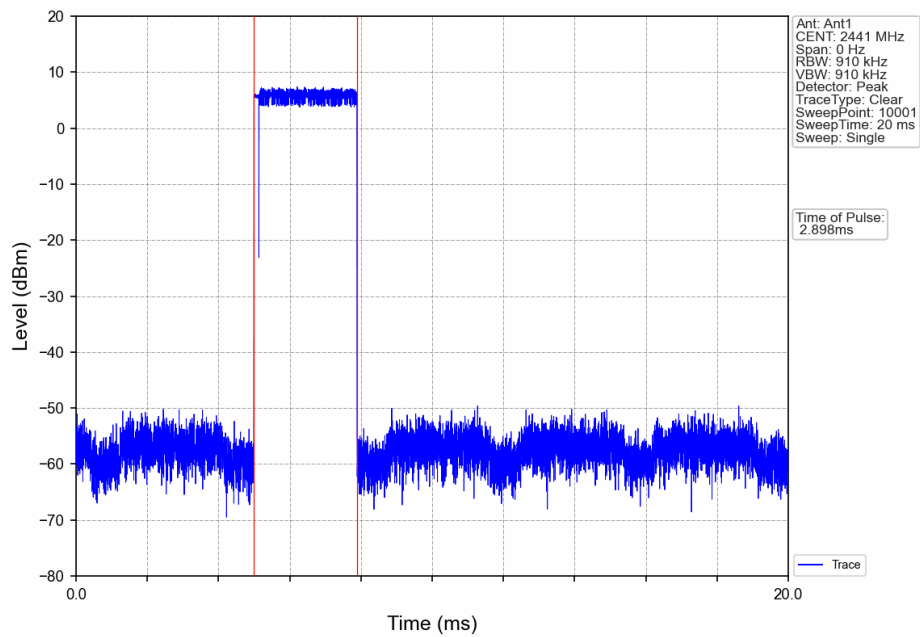
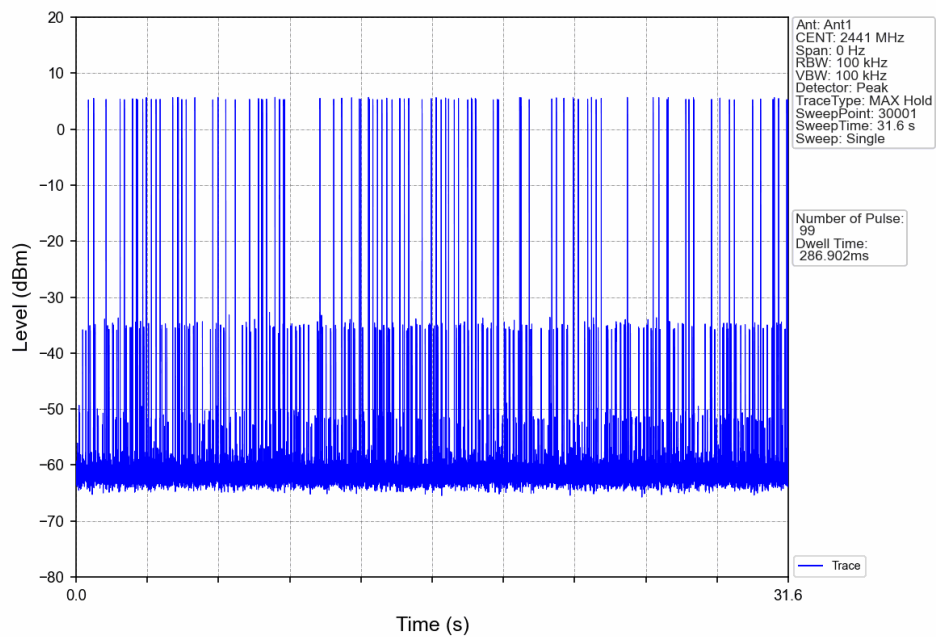
$\pi/4$ -DQPSK_2DH1_HOPP_Ant1_NTNV $\pi/4$ -DQPSK_2DH1_HOPP_Ant1_NTNV

$\pi/4$ -DQPSK_2DH3_HOPP_Ant1_NTNV

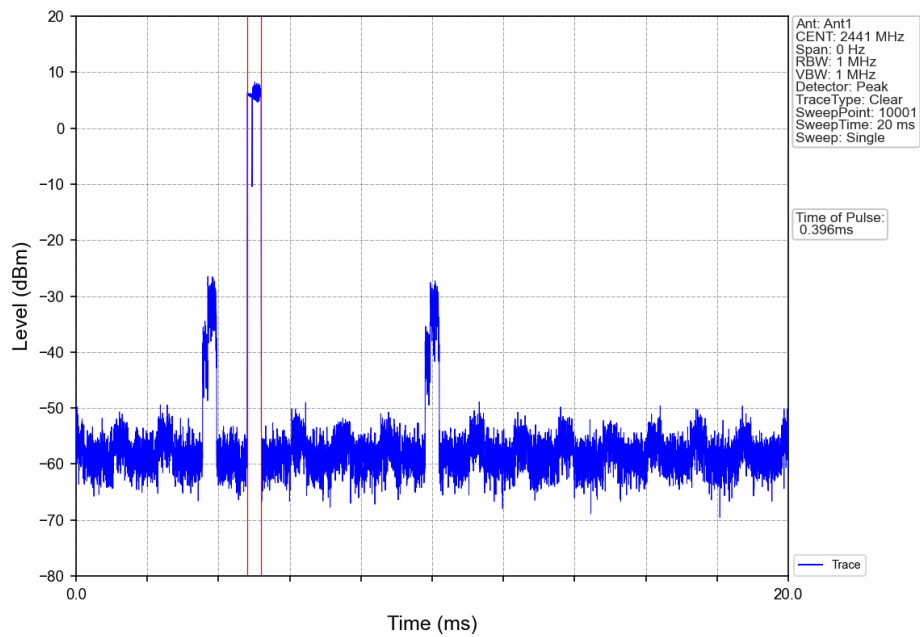


$\pi/4$ -DQPSK_2DH3_HOPP_Ant1_NTNV

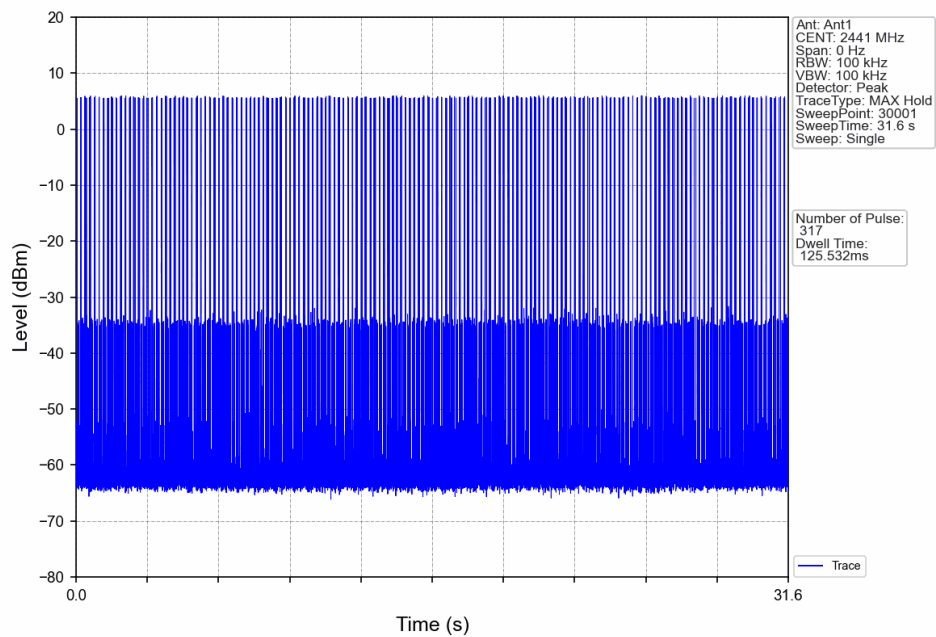


$\pi/4$ -DQPSK_2DH5_HOPP_Ant1_NTNV $\pi/4$ -DQPSK_2DH5_HOPP_Ant1_NTNV

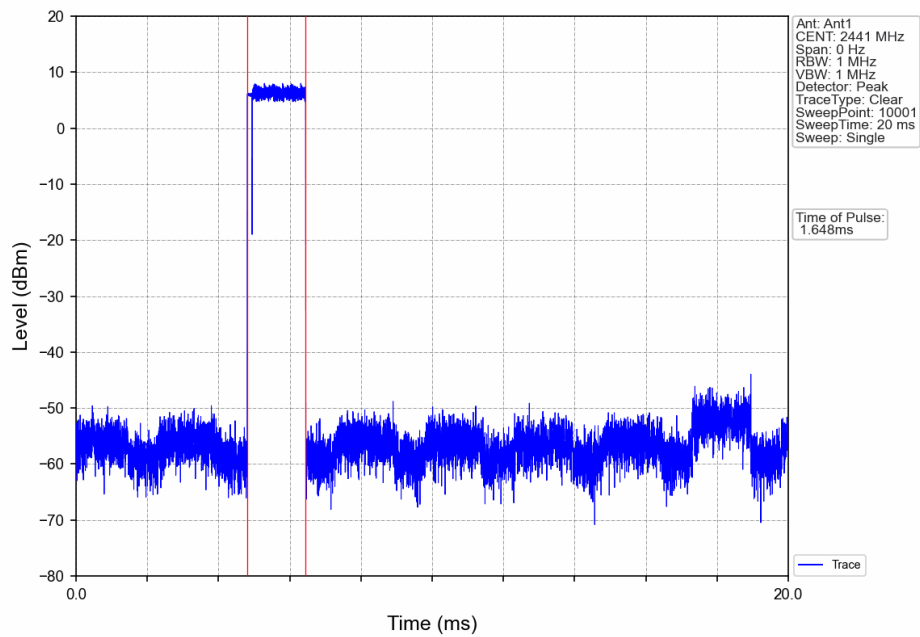
8-DPSK_3DH1_HOPP_Ant1_NTNV



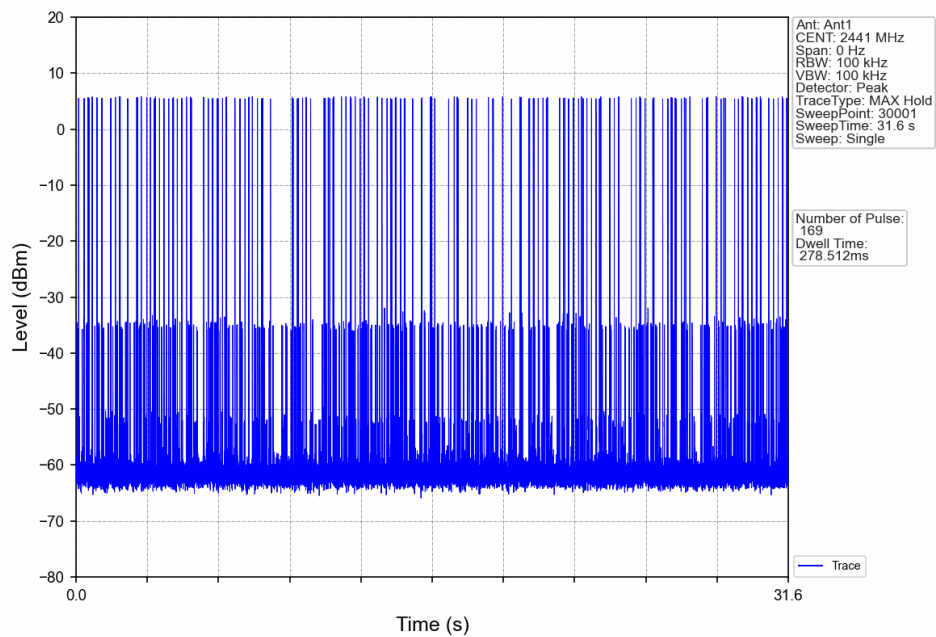
8-DPSK_3DH1_HOPP_Ant1_NTNV



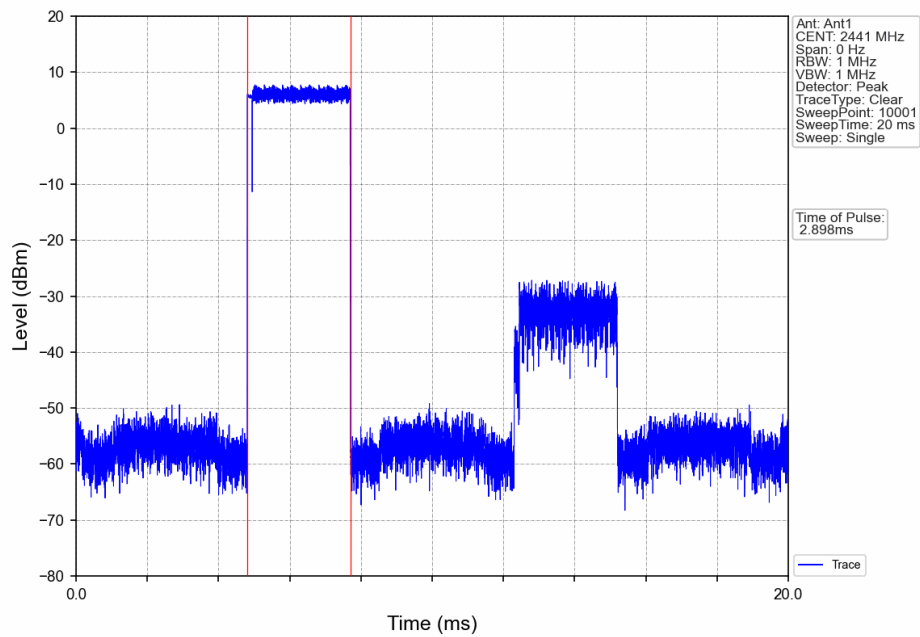
8-DPSK_3DH3_HOPP_Ant1_NTNV



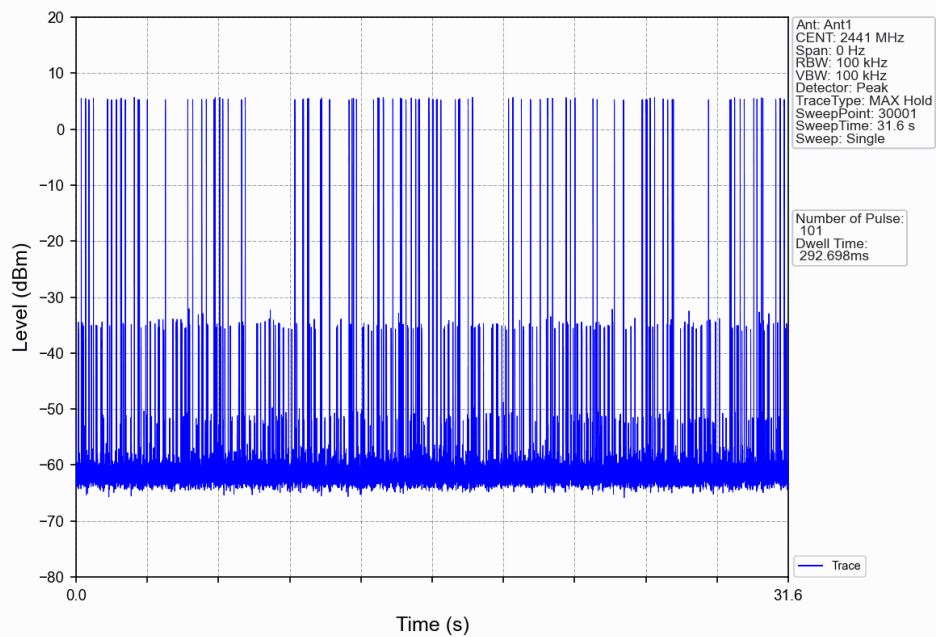
8-DPSK_3DH3_HOPP_Ant1_NTNV



8-DPSK_3DH5_HOPP_Ant1_NTNV



8-DPSK_3DH5_HOPP_Ant1_NTNV



6. Unwanted Emissions In Non-restricted Frequency Bands

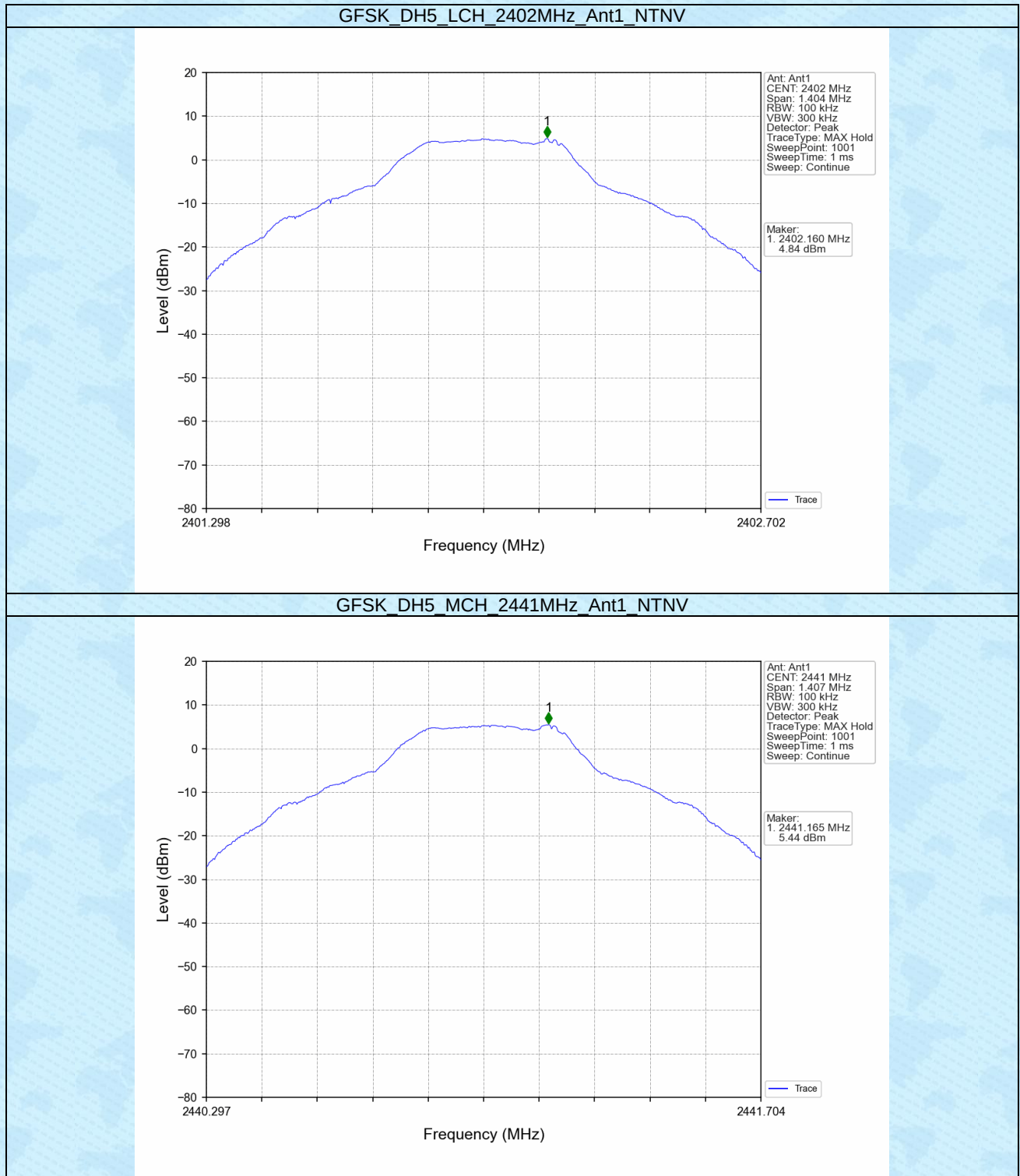
6.1 Ref

6.1.1 Test Result

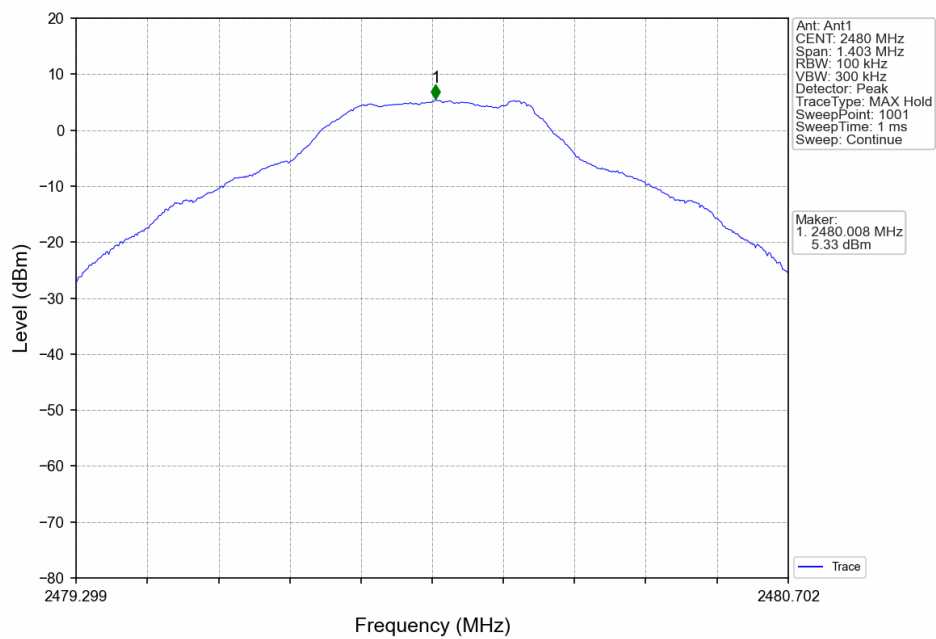
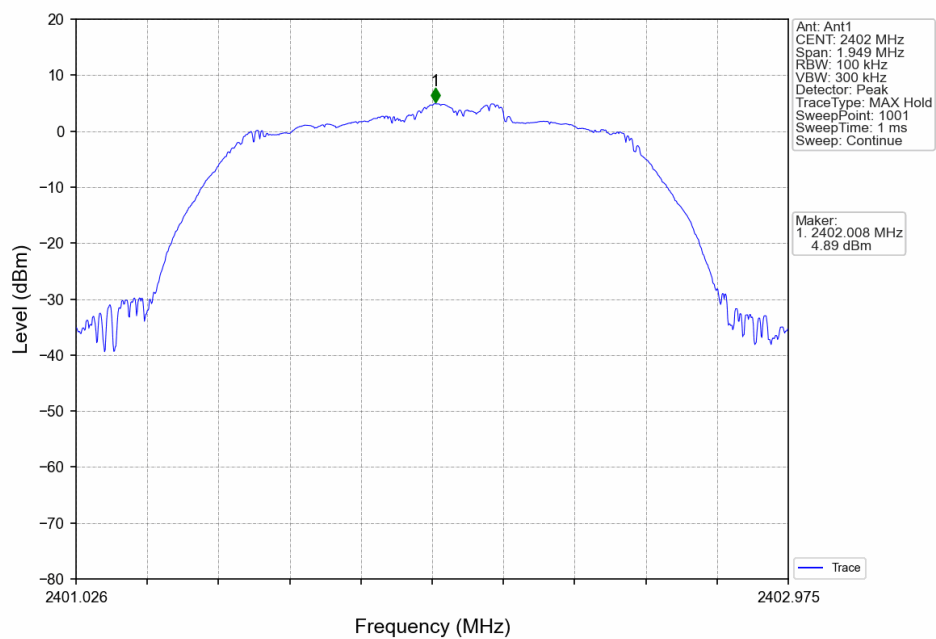
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	4.84
		2441	DH5	1	5.44
		2480	DH5	1	5.33
$\pi/4$ -DQPSK	SISO	2402	2DH5	1	4.89
		2441	2DH5	1	5.68
		2480	2DH5	1	5.62
8-DPSK	SISO	2402	3DH5	1	5.04
		2441	3DH5	1	5.71
		2480	3DH5	1	5.74

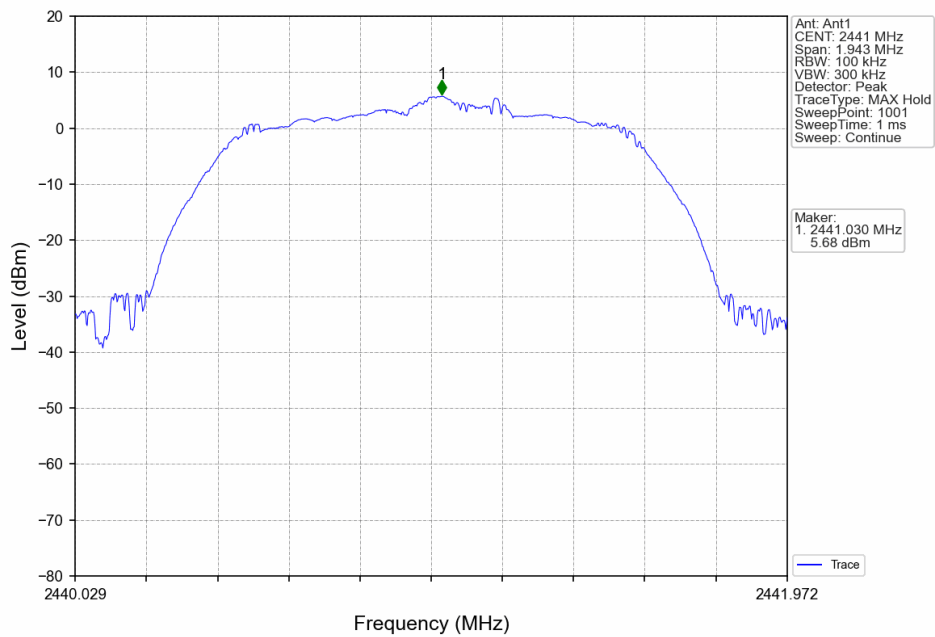
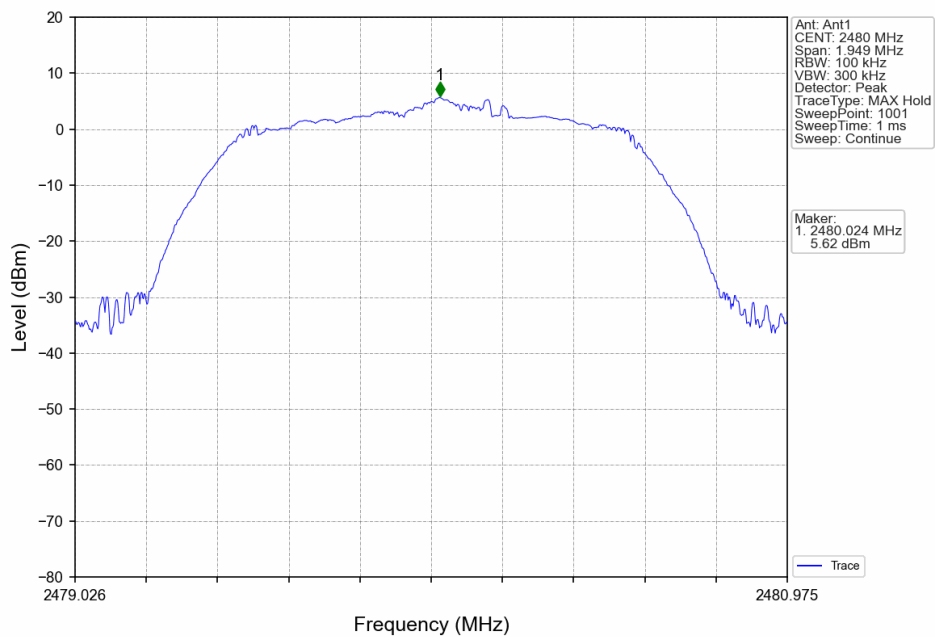
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

6.1.2 Test Graph

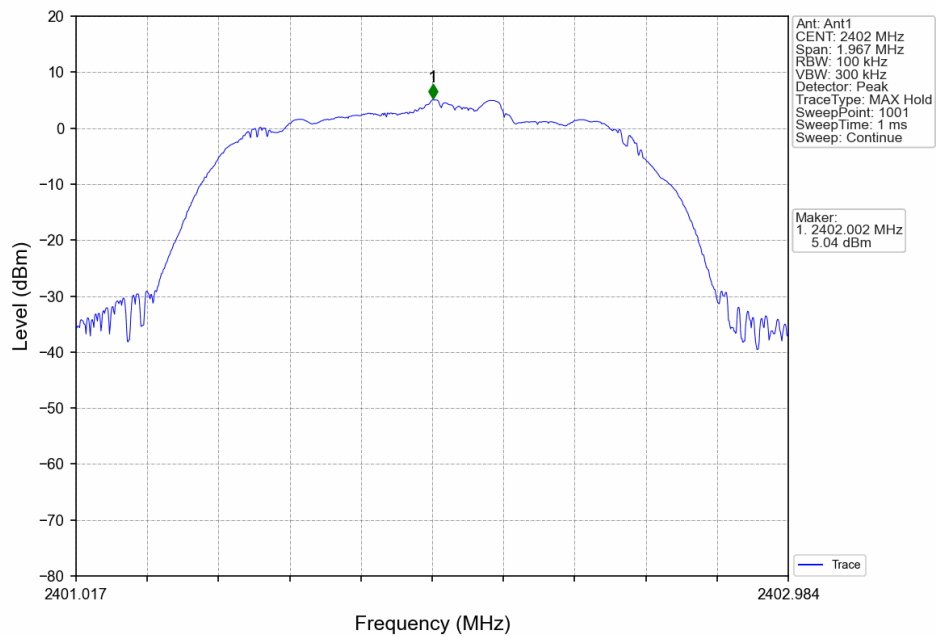


GFSK_DH5_HCH_2480MHz_Ant1_NTNV

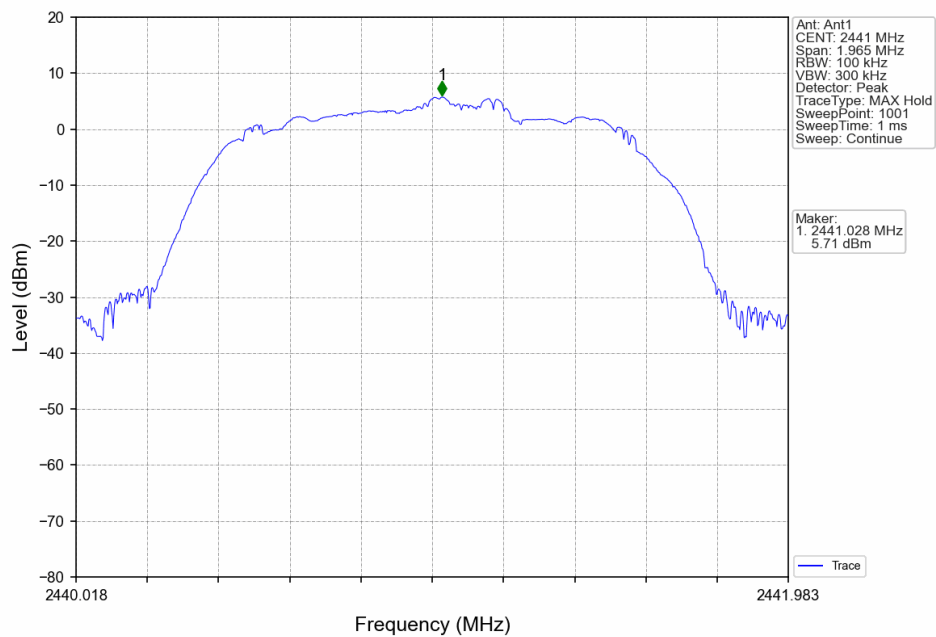
 $\pi/4$ -DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV

$\pi/4$ -DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV $\pi/4$ -DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

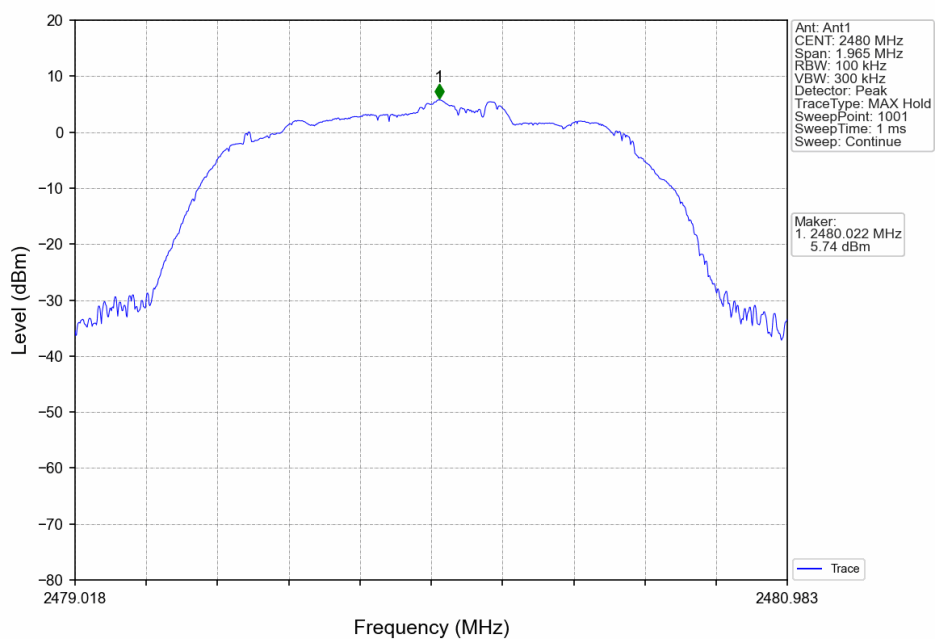
8-DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8-DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



8-DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



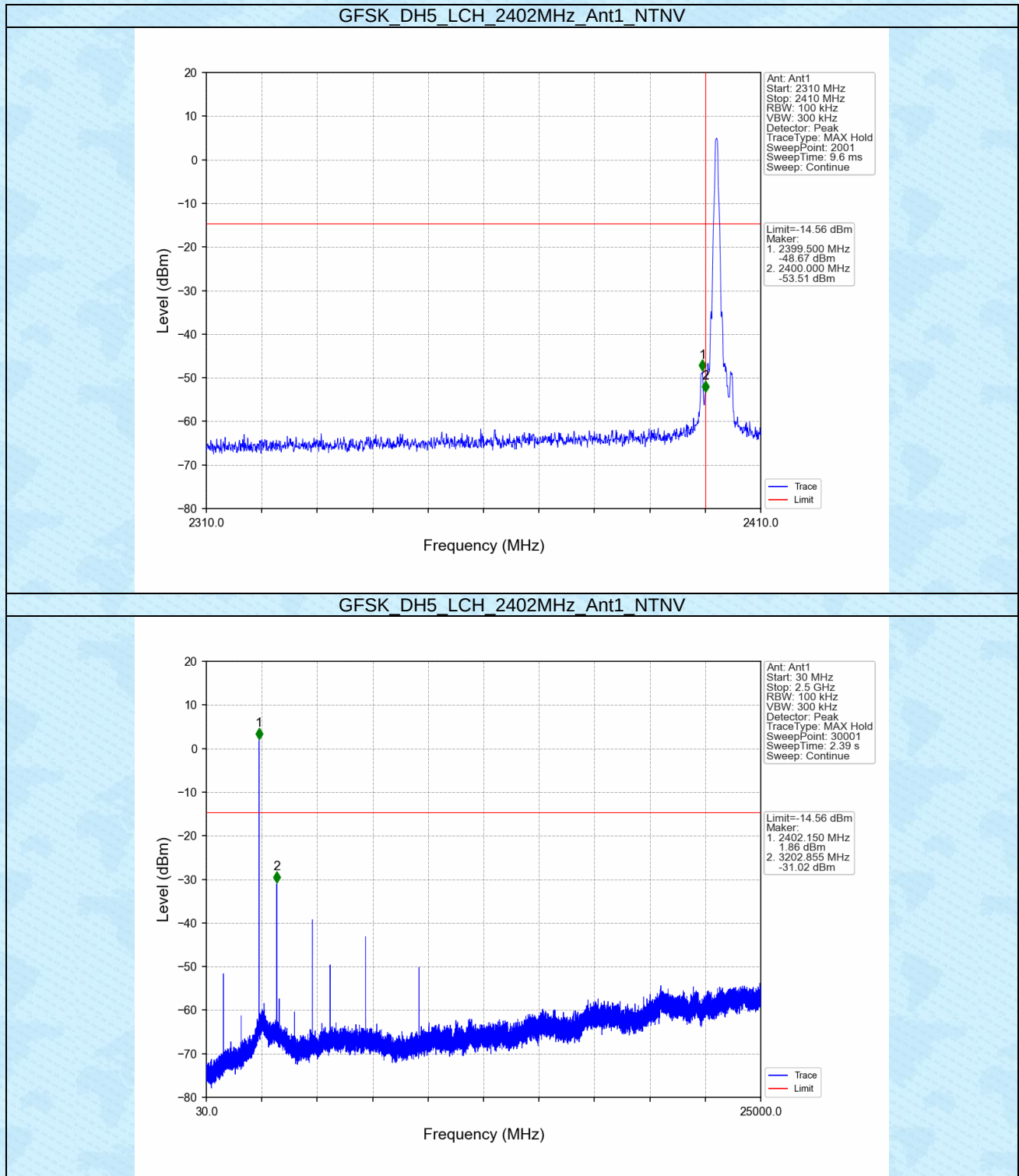
6.2 CSE

6.2.1 Test Result

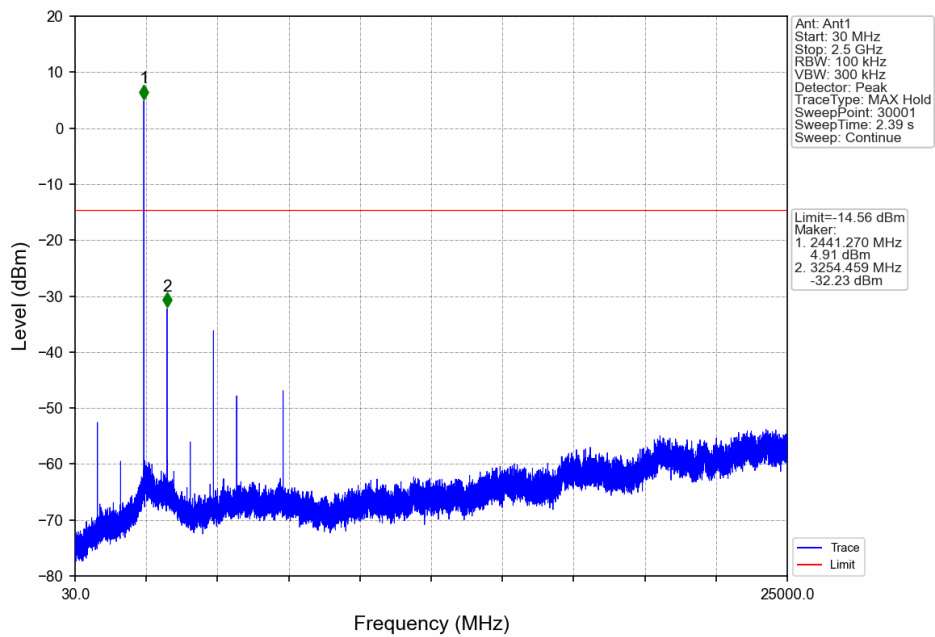
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	5.44	-14.56	Pass
		2441	DH5	1	5.44	-14.56	Pass
		2480	DH5	1	5.44	-14.56	Pass
		HOPP	DH5	1	5.44	-14.56	Pass
$\pi/4$ -DQPSK	SISO	2402	2DH5	1	5.68	-14.32	Pass
		2441	2DH5	1	5.68	-14.32	Pass
		2480	2DH5	1	5.68	-14.32	Pass
		HOPP	2DH5	1	5.68	-14.32	Pass
8-DPSK	SISO	2402	3DH5	1	5.74	-14.26	Pass
		2441	3DH5	1	5.74	-14.26	Pass
		2480	3DH5	1	5.74	-14.26	Pass
		HOPP	3DH5	1	5.74	-14.26	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.

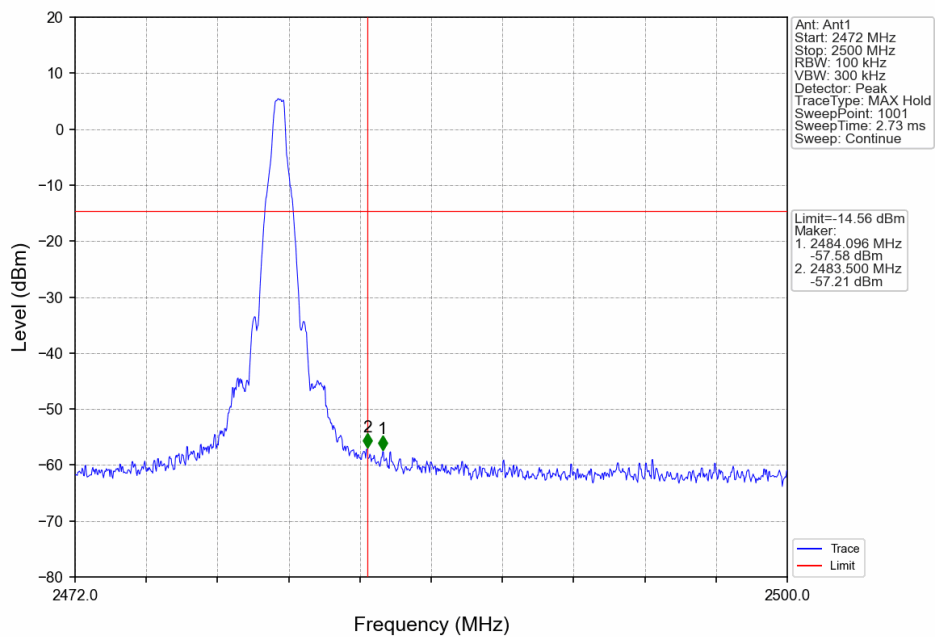
6.2.2 Test Graph



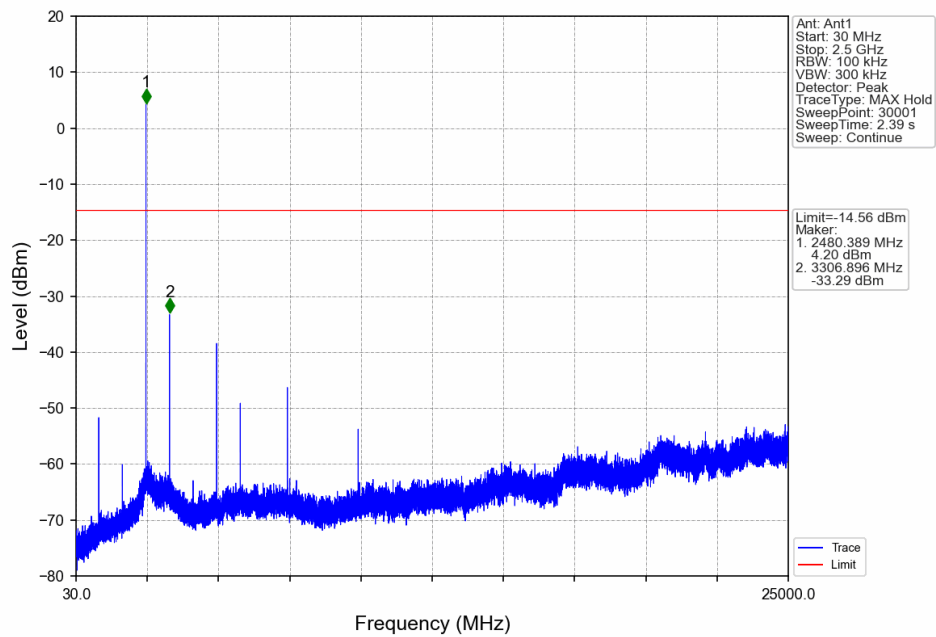
GFSK_DH5_MCH_2441MHz_Ant1_NTNV



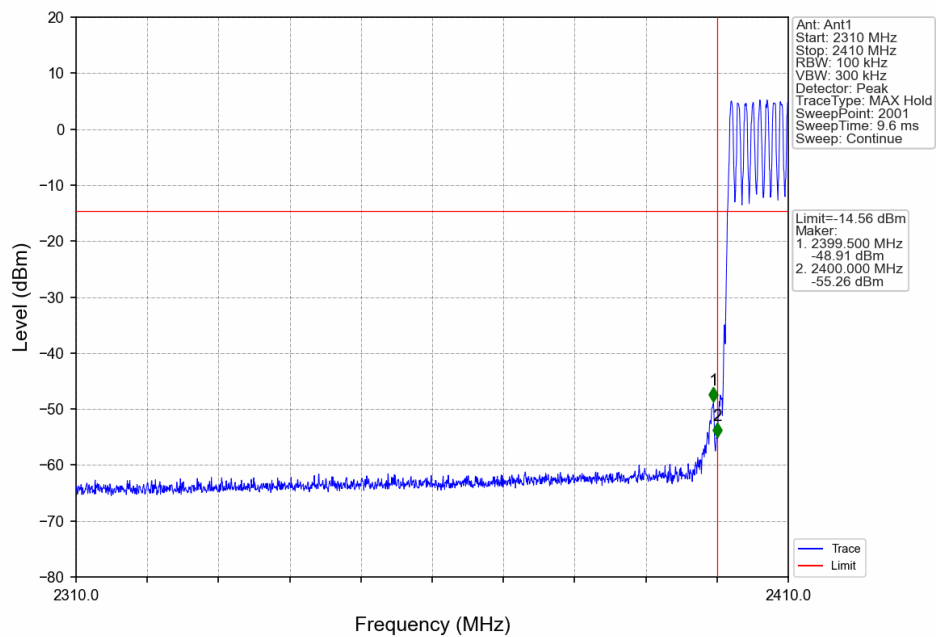
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



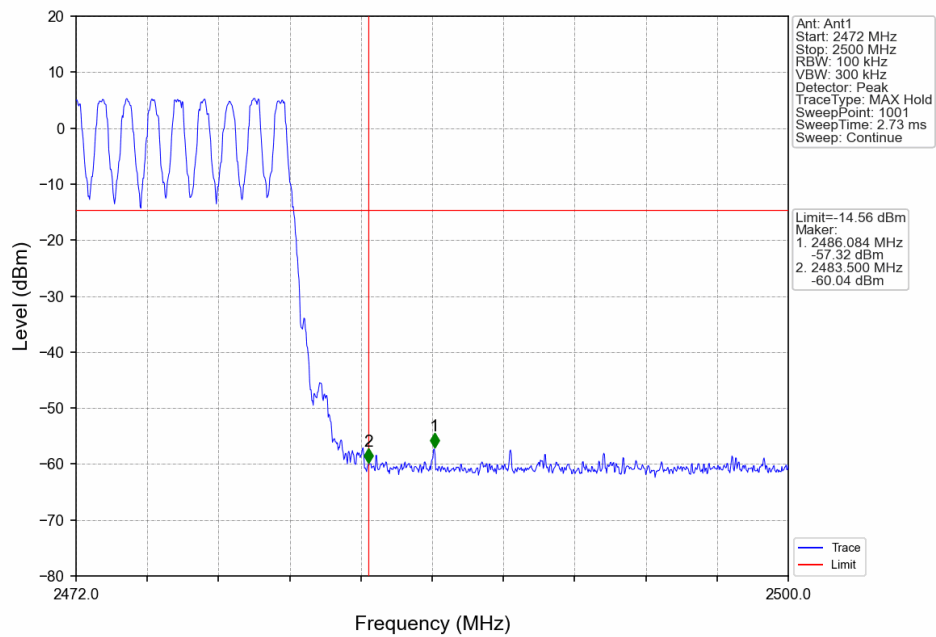
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



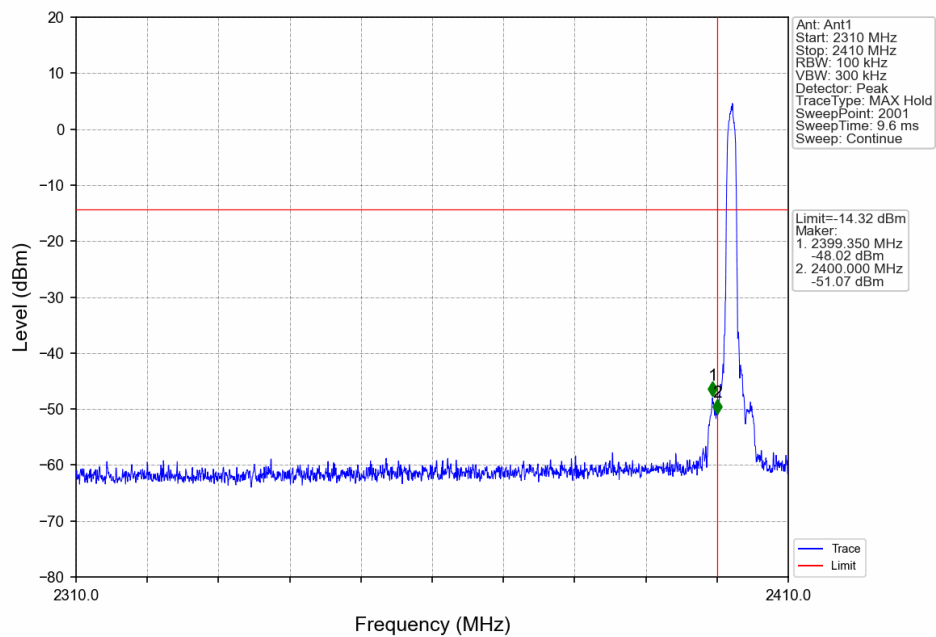
GFSK_DH5_HOPP_Ant1_NTNV

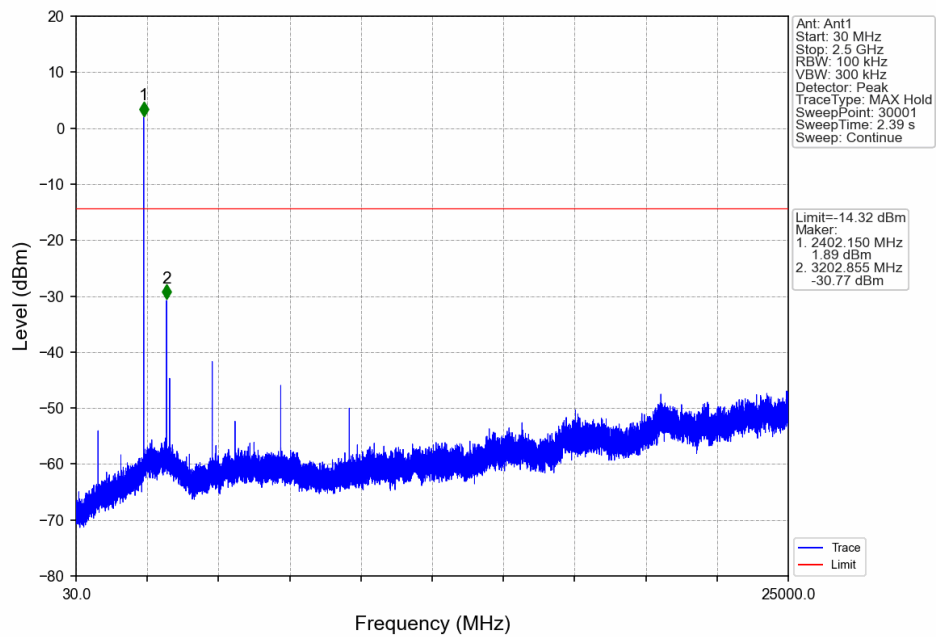
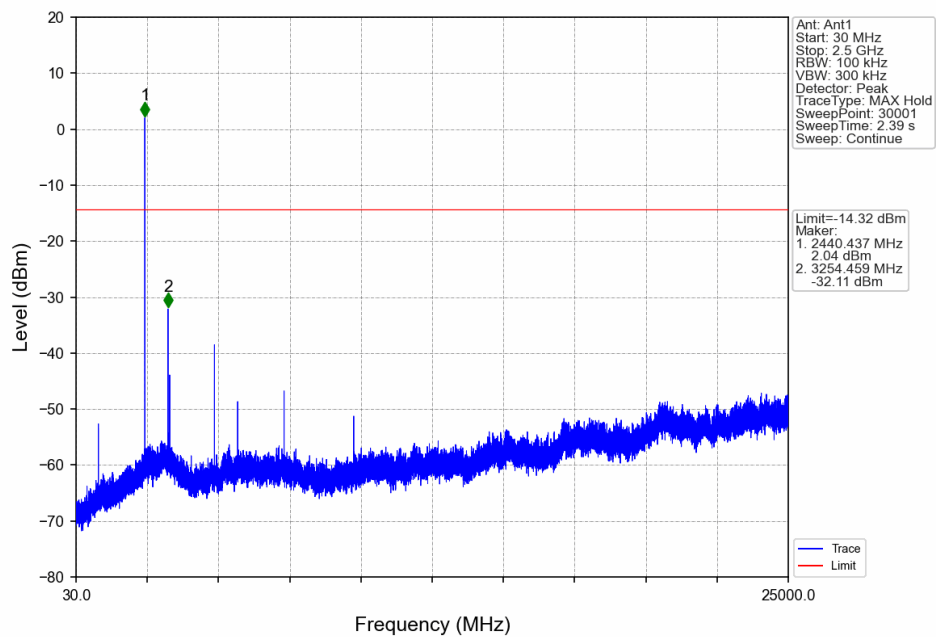


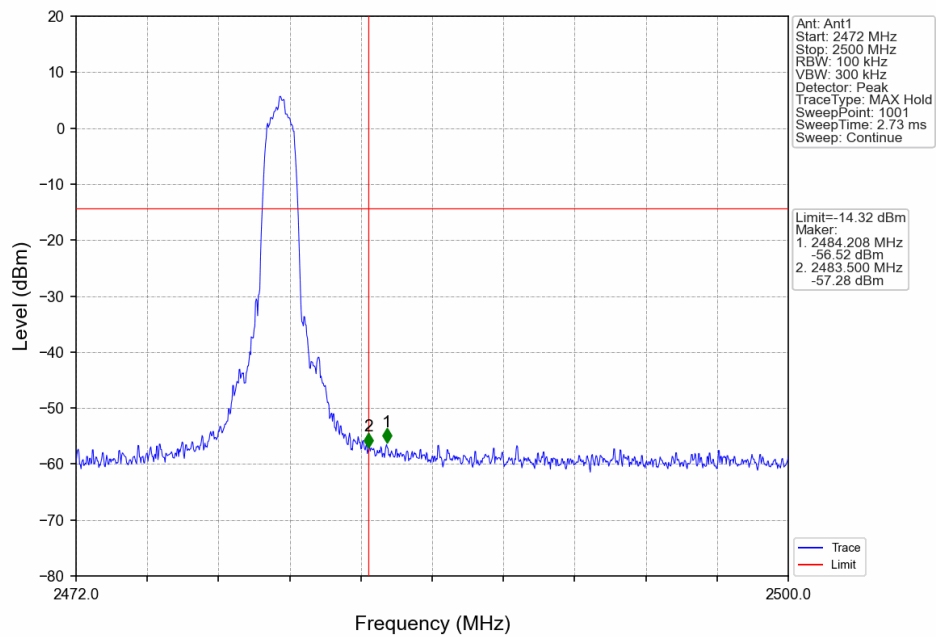
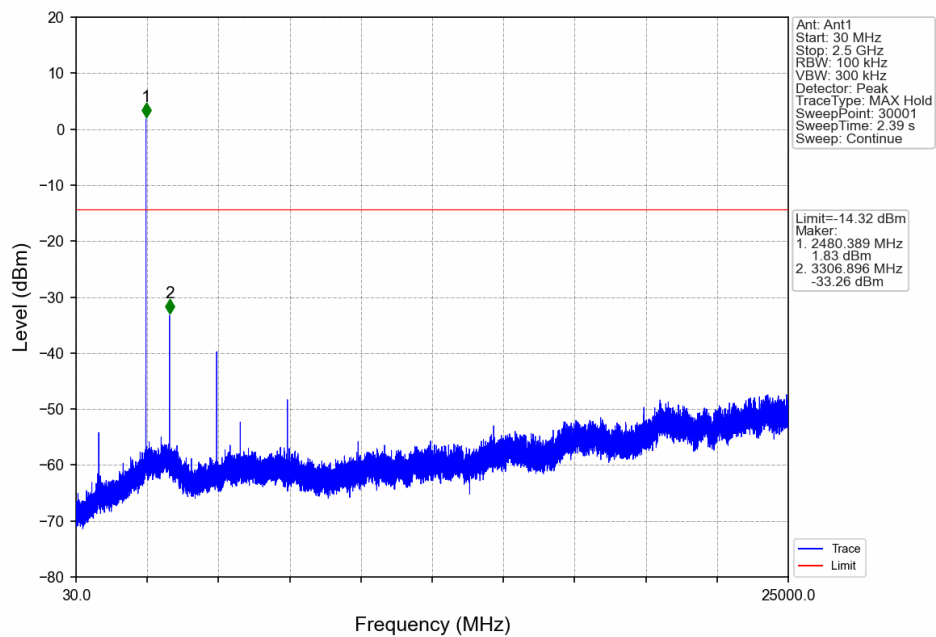
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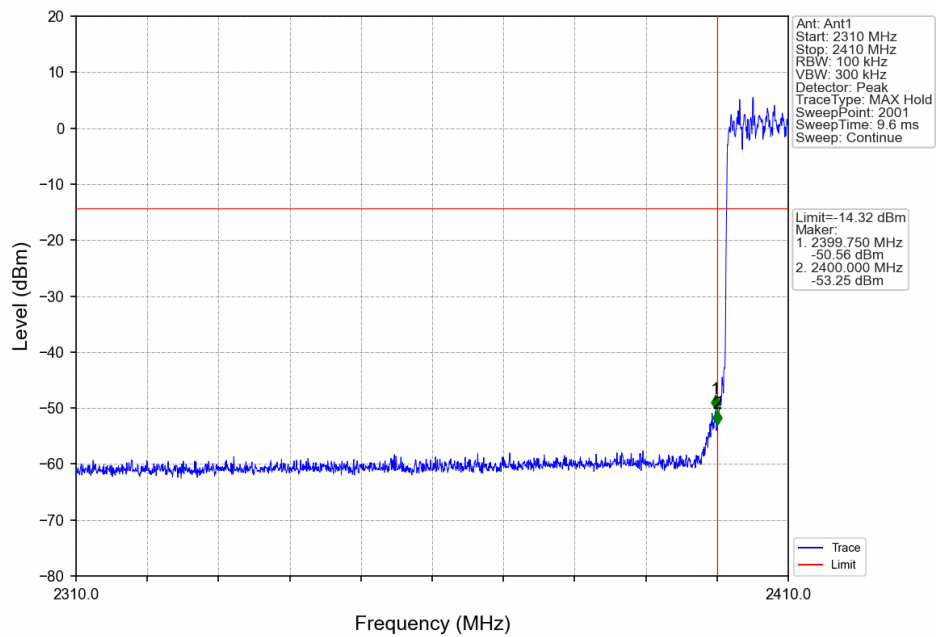
$\pi/4$ -DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



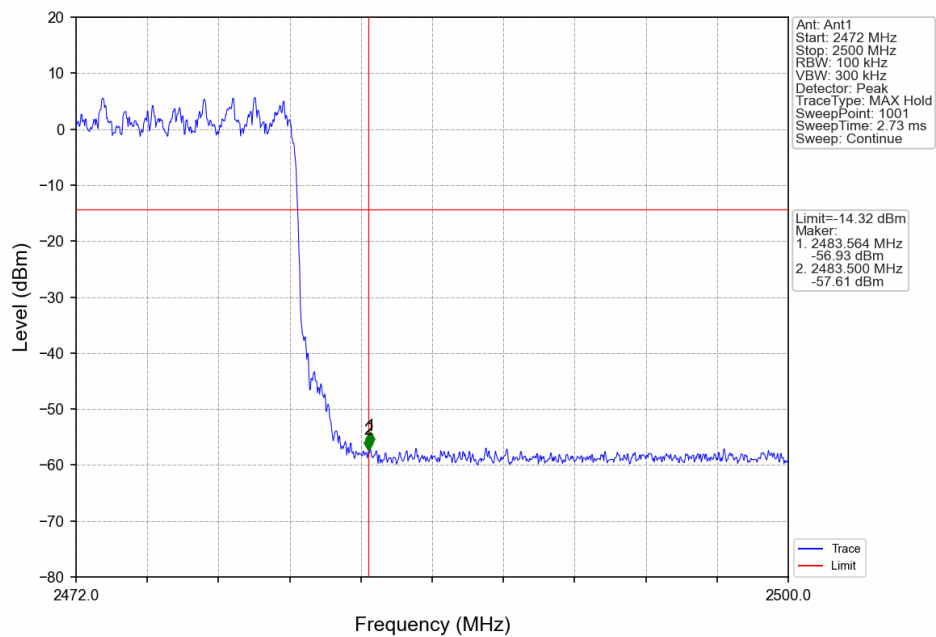
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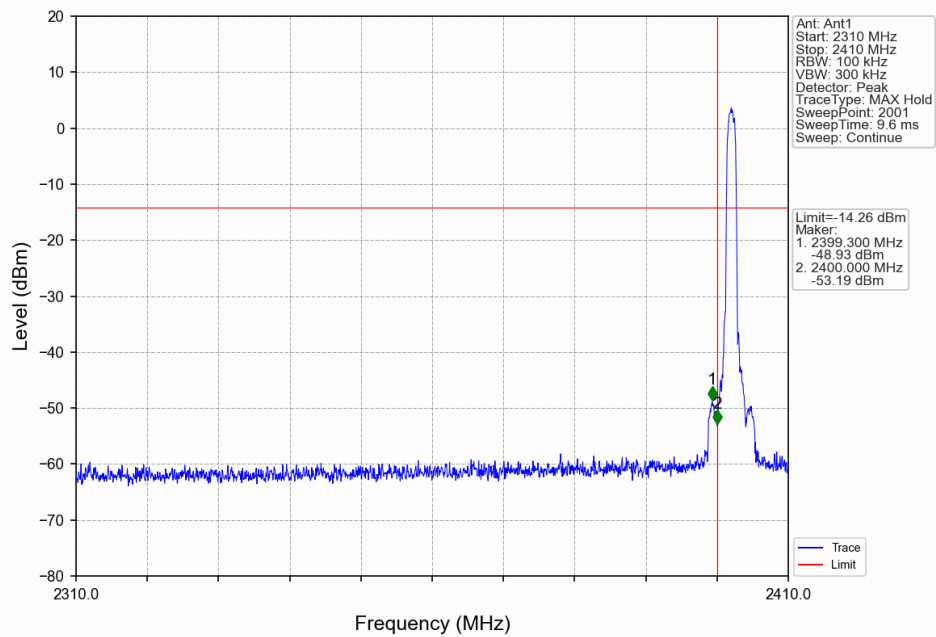
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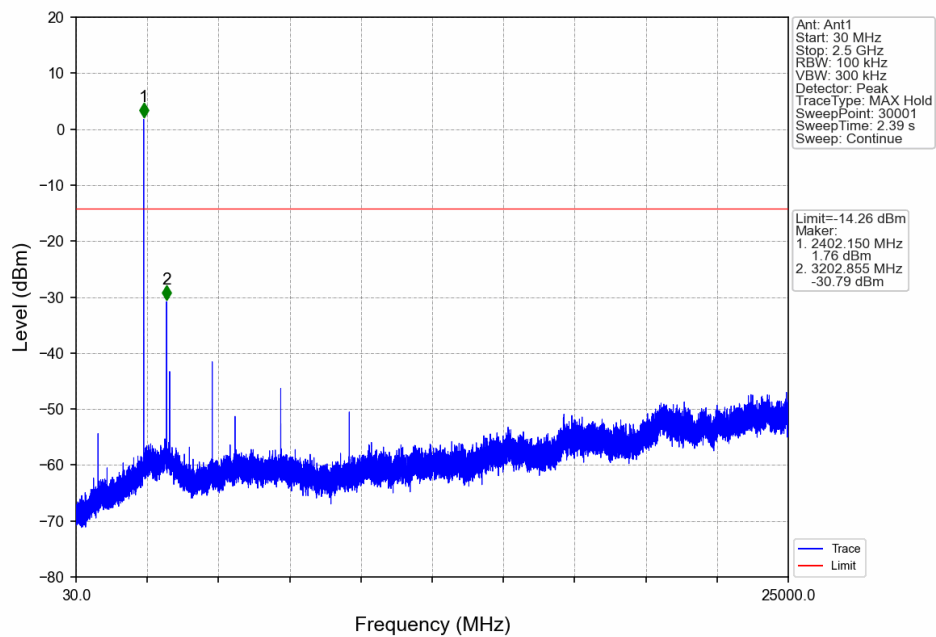
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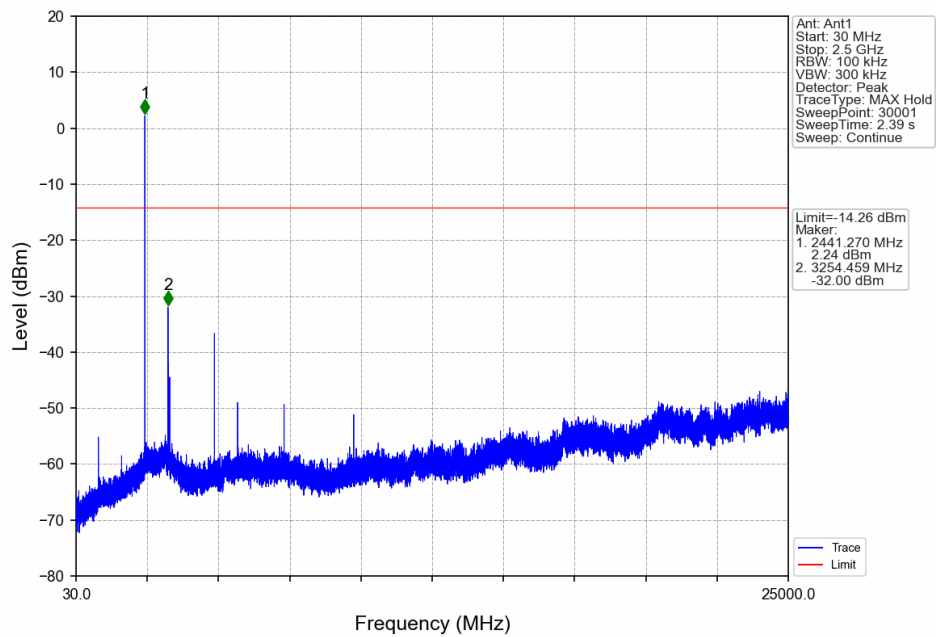
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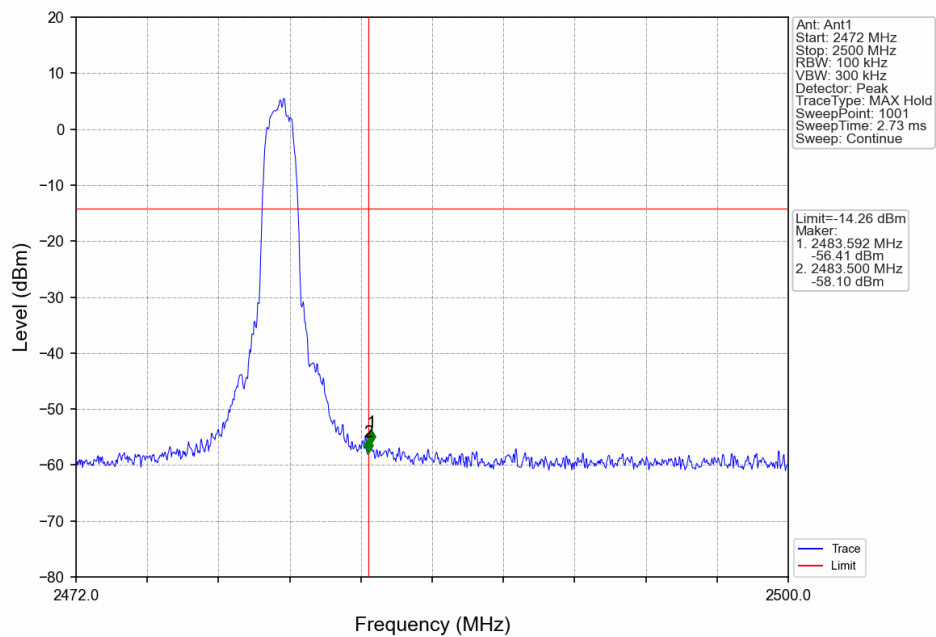
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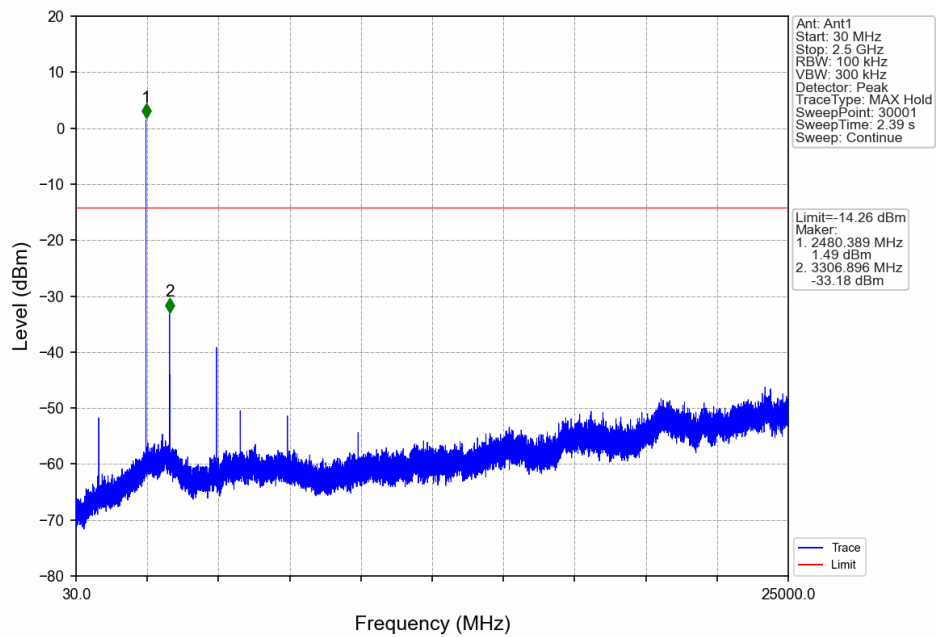
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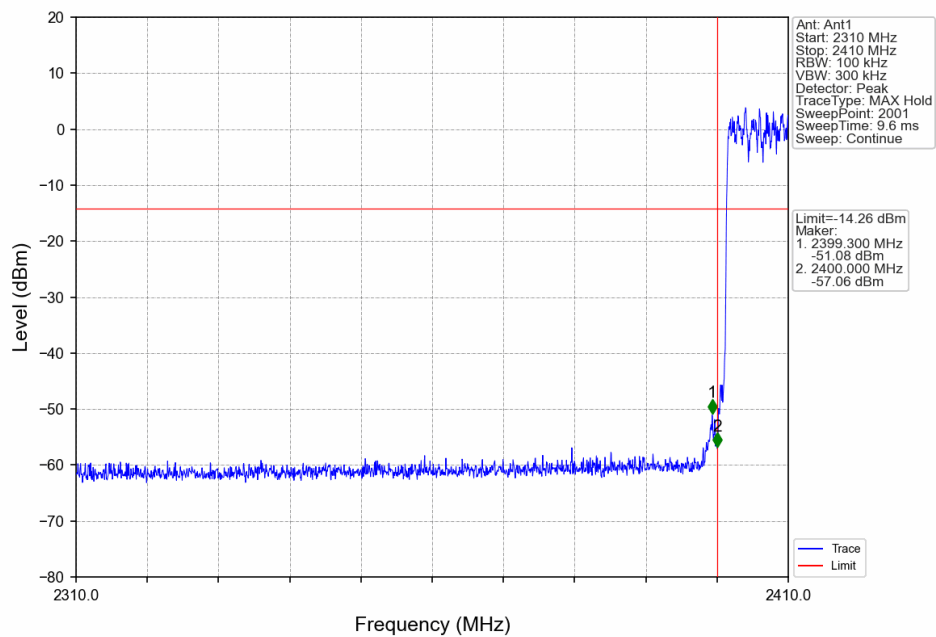
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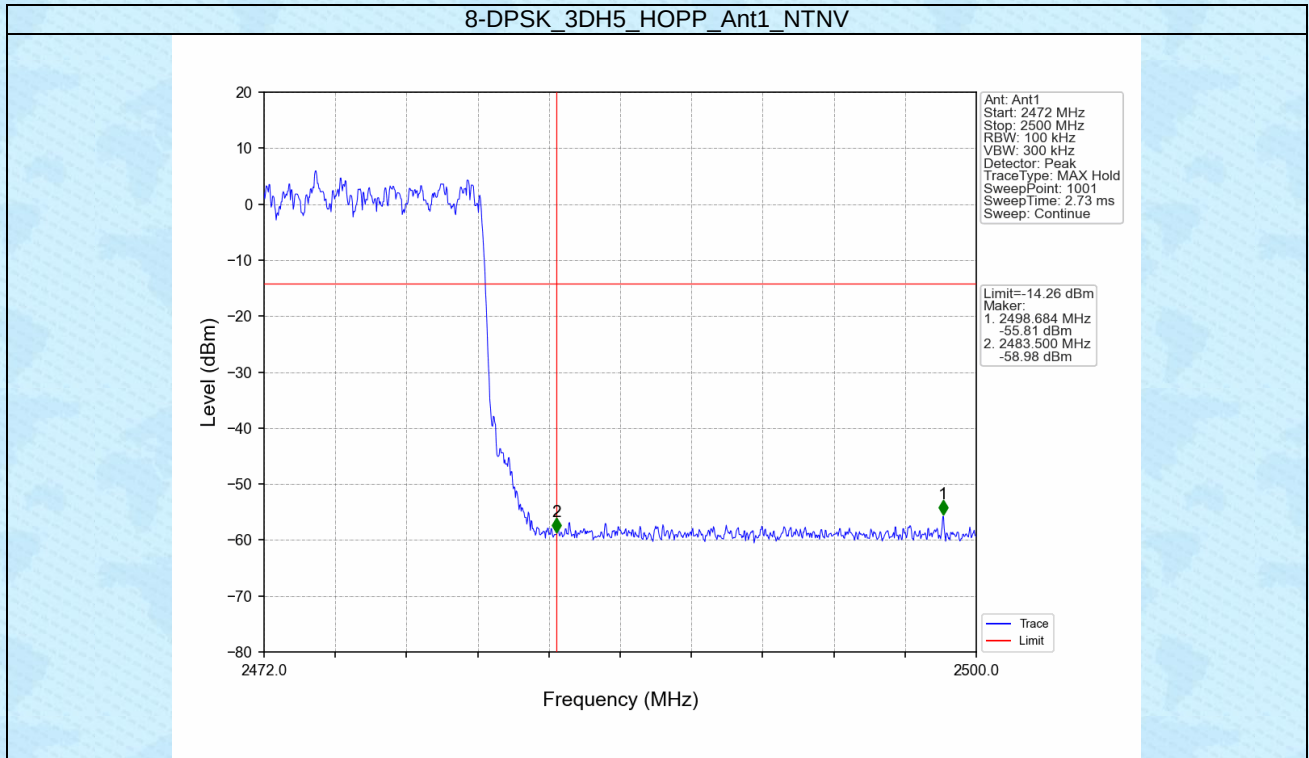


8-DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



8-DPSK_3DH5_HOPP_Ant1_NTNV





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