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Annex for BT

Test Report No.: CTL2405117011-WF

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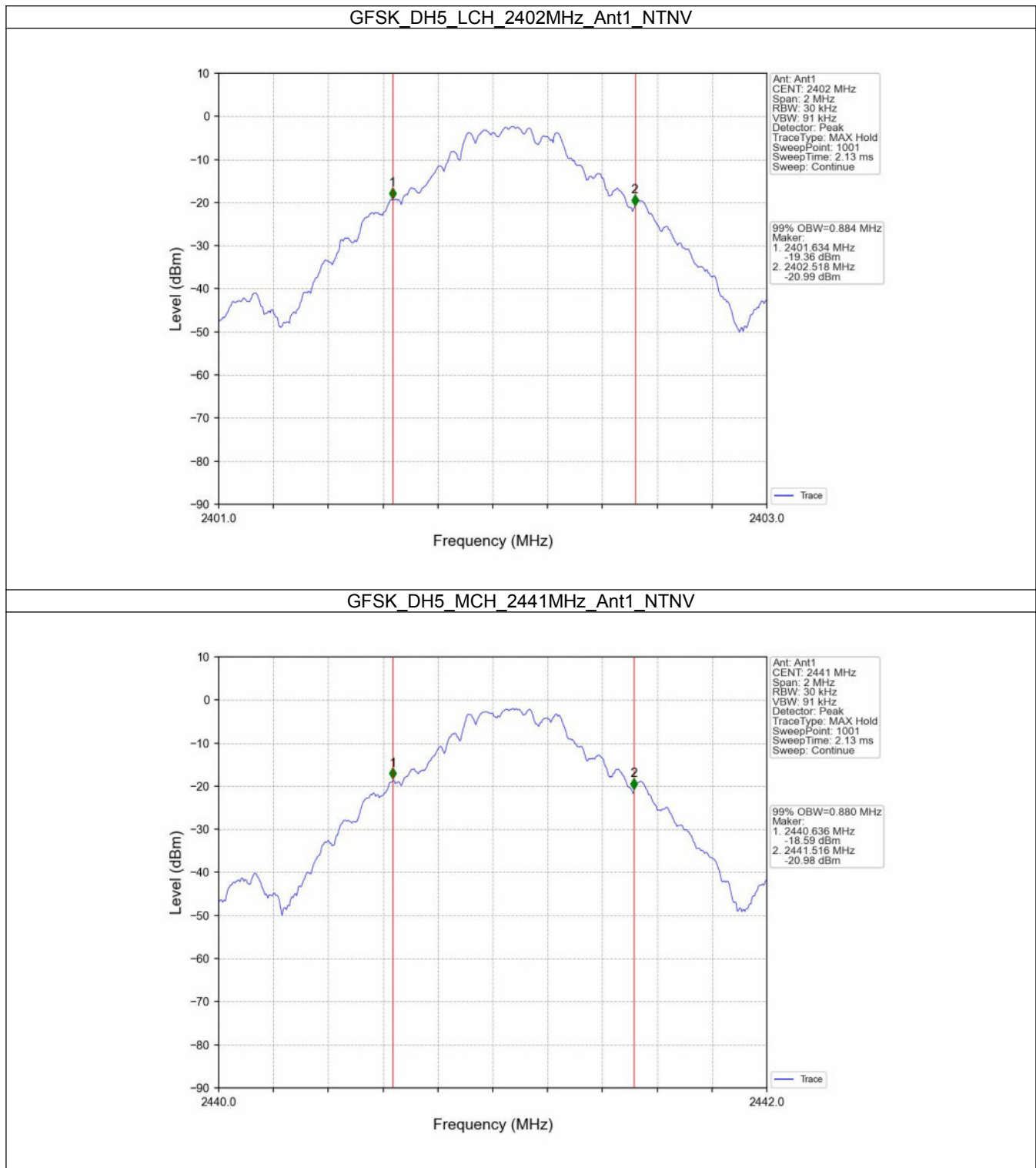
FCC ID: 2AC9N-1686122-03

1. Bandwidth**1.1 OBW****1.1.1 Test Result**

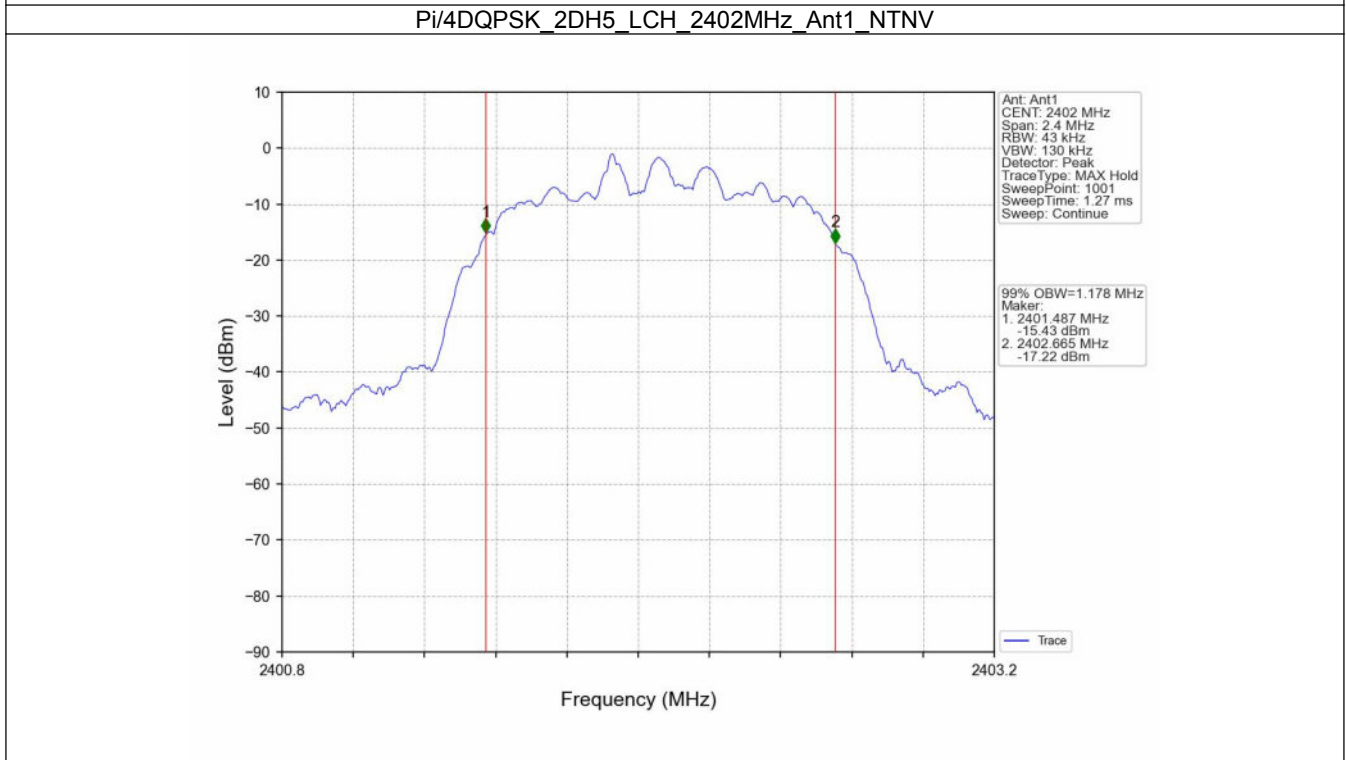
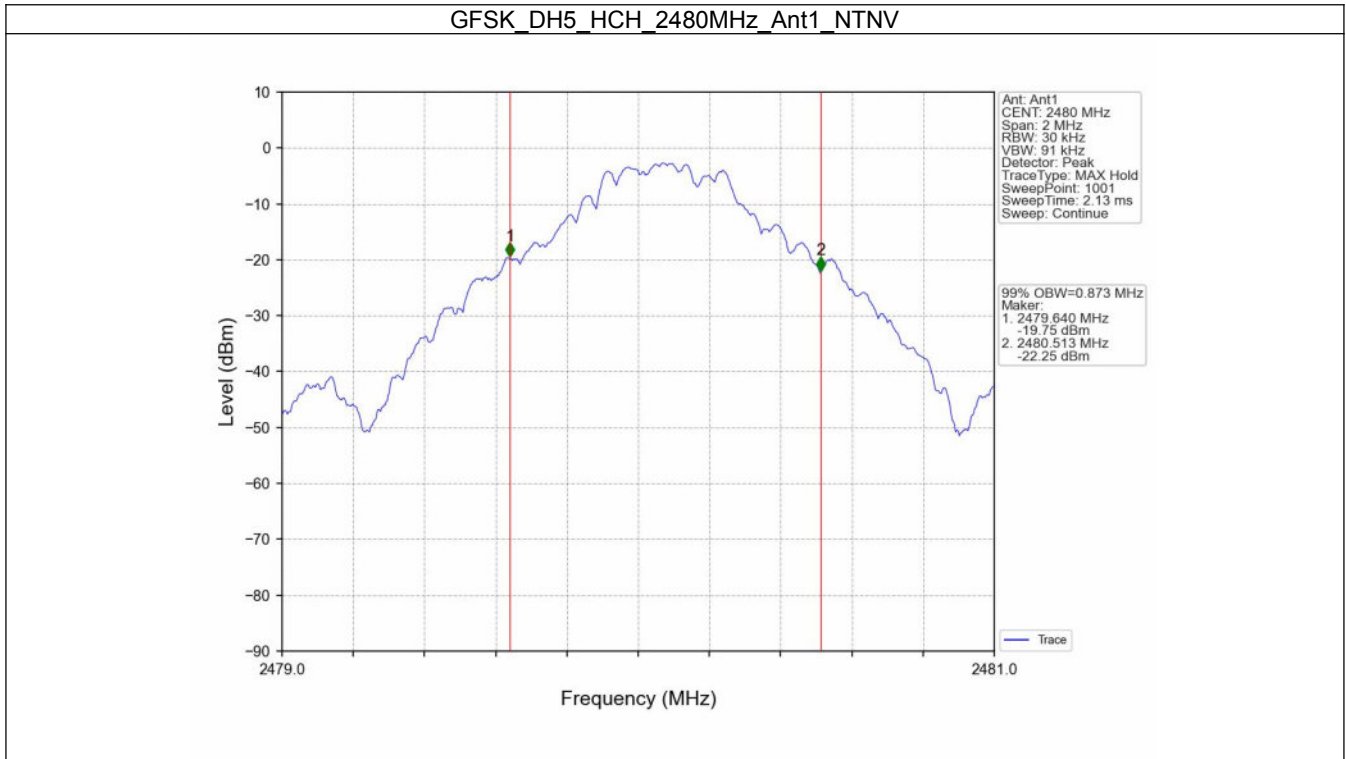
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.884	/	Pass
		2441	DH5	1	0.880	/	Pass
		2480	DH5	1	0.873	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.178	/	Pass
		2441	2DH5	1	1.176	/	Pass
		2480	2DH5	1	1.174	/	Pass
8DPSK	SISO	2402	3DH5	1	1.190	/	Pass
		2441	3DH5	1	1.183	/	Pass
		2480	3DH5	1	1.180	/	Pass

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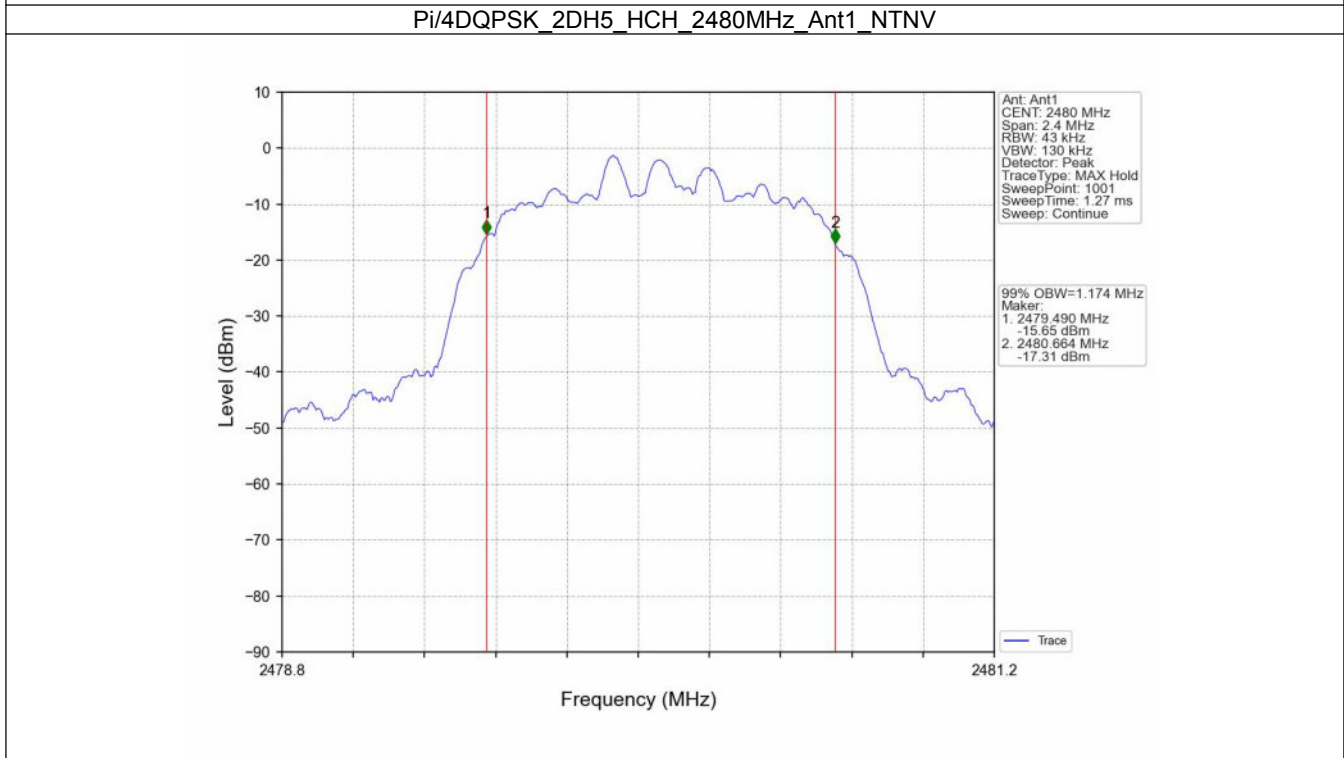
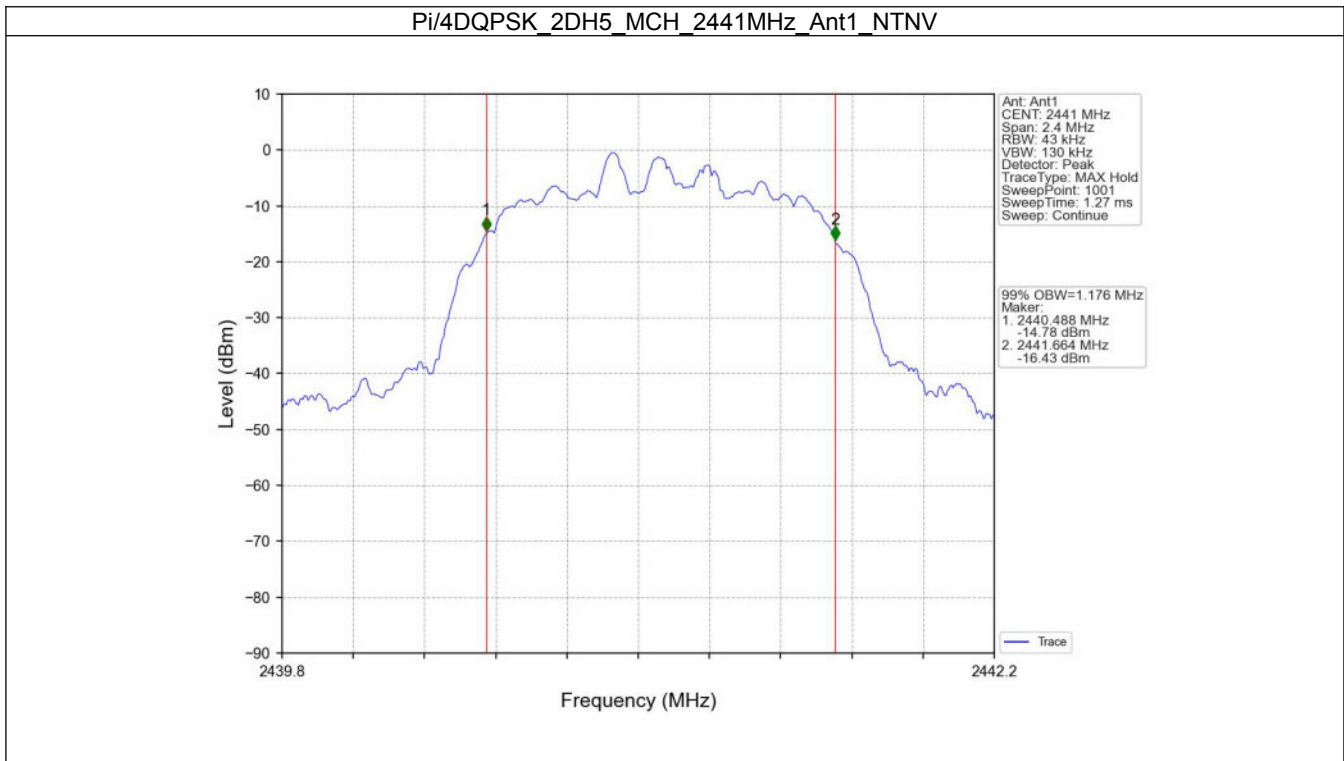
1.1.2 Test Graph



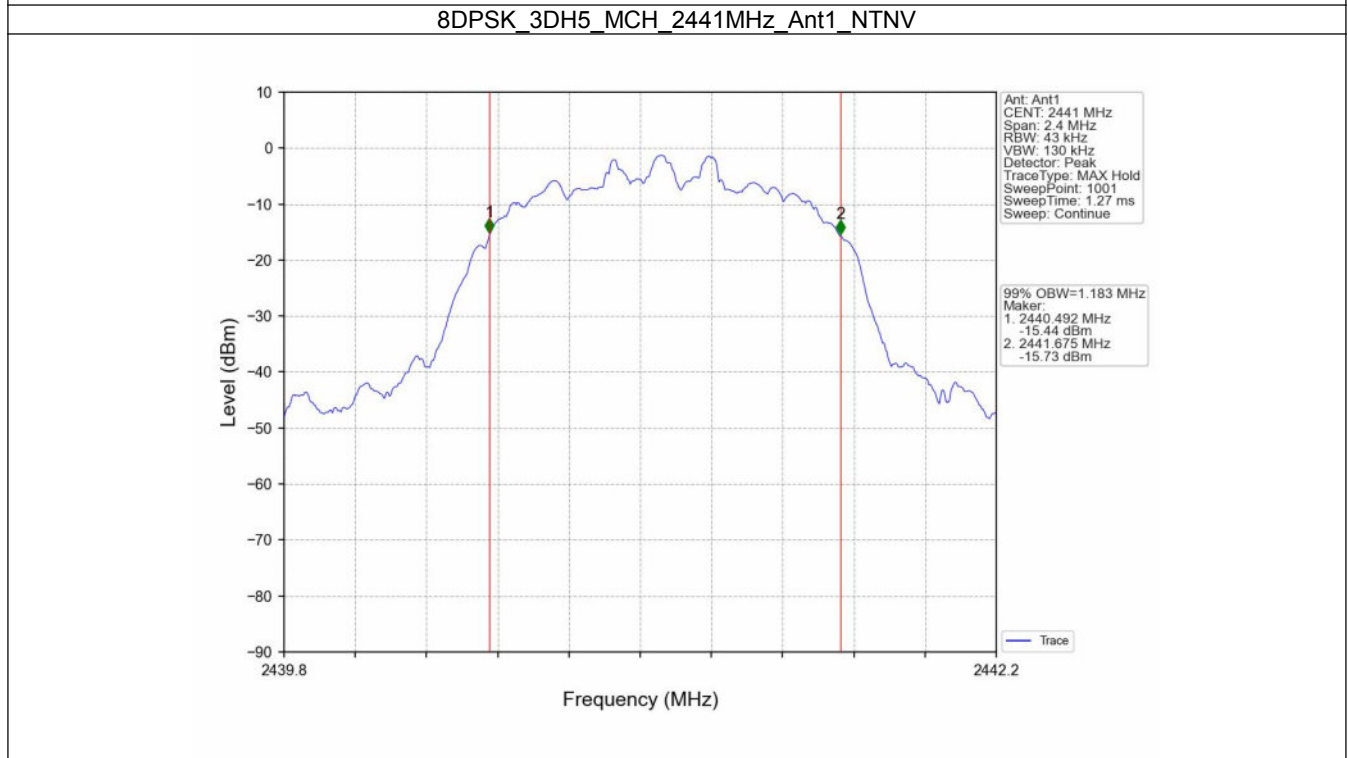
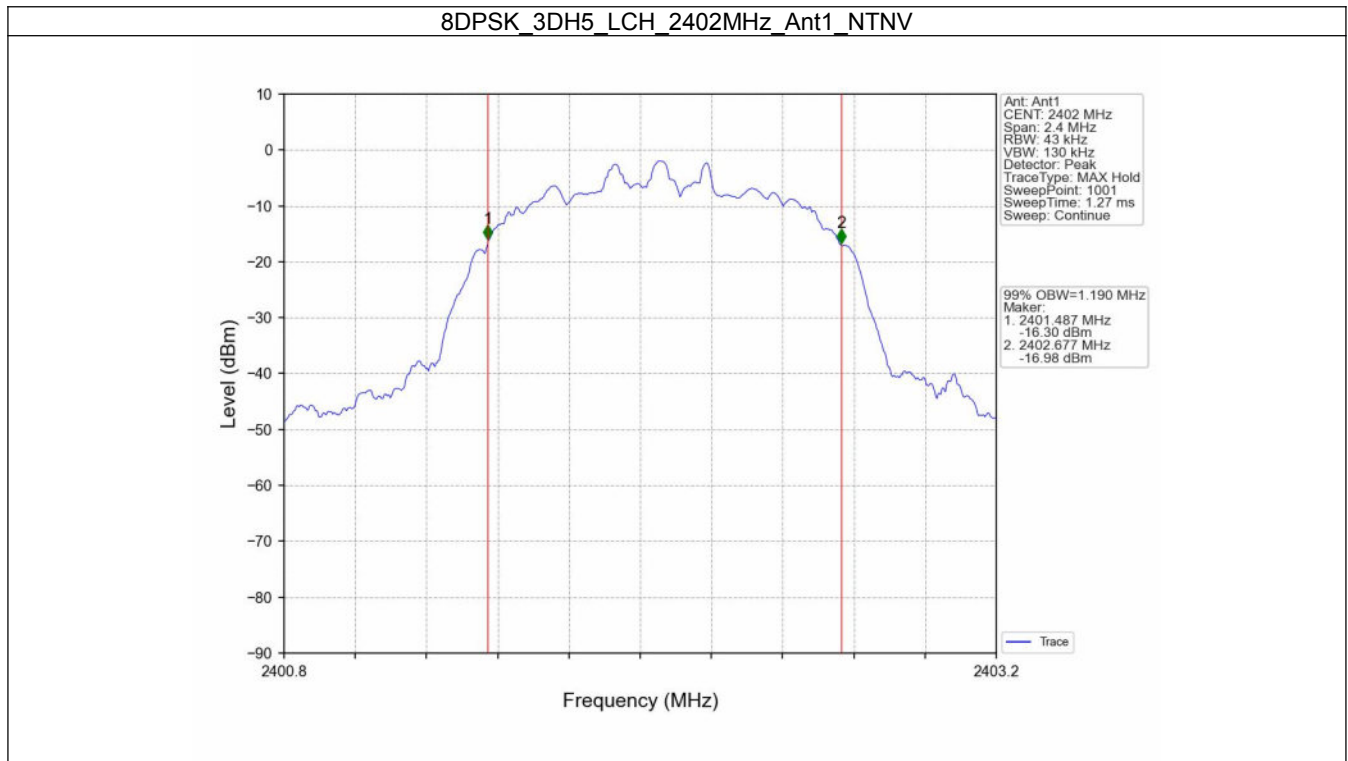
FCC ID: 2AC9N-1686122-03



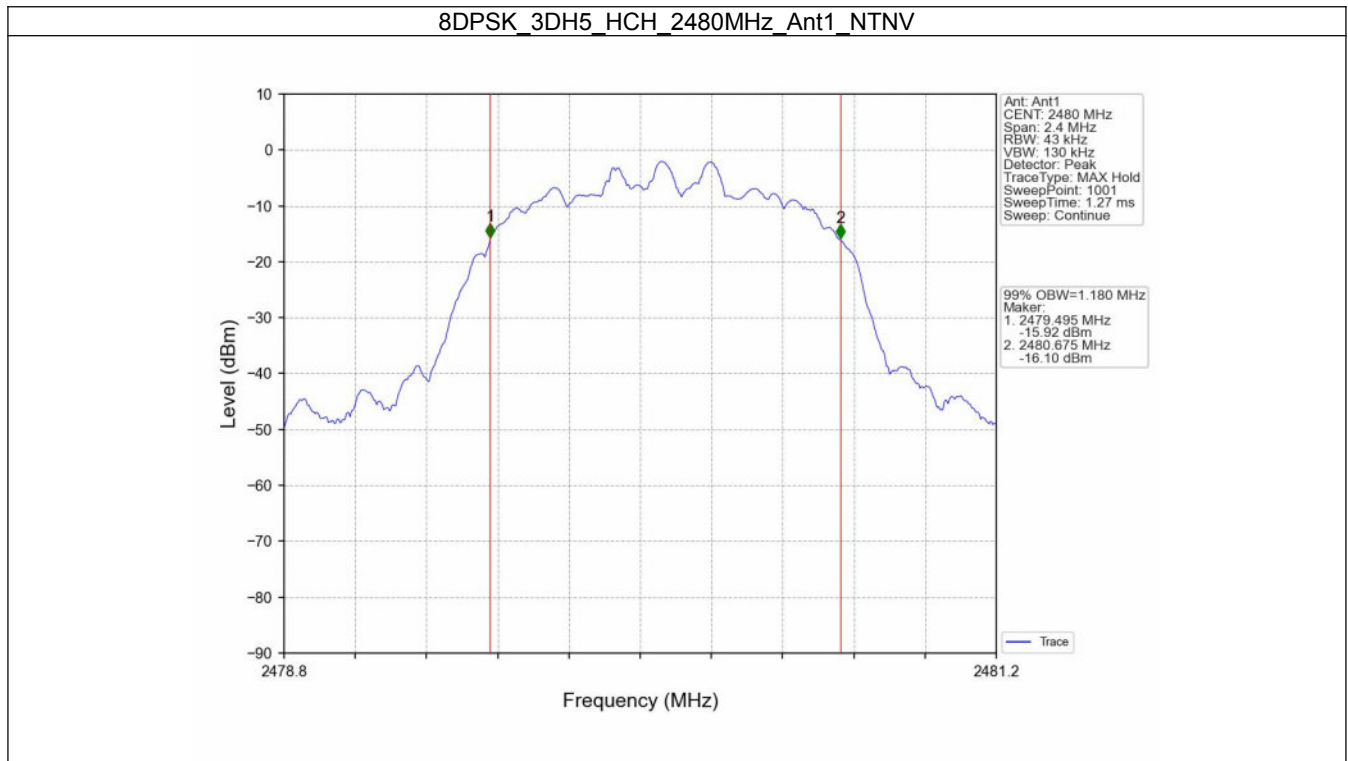
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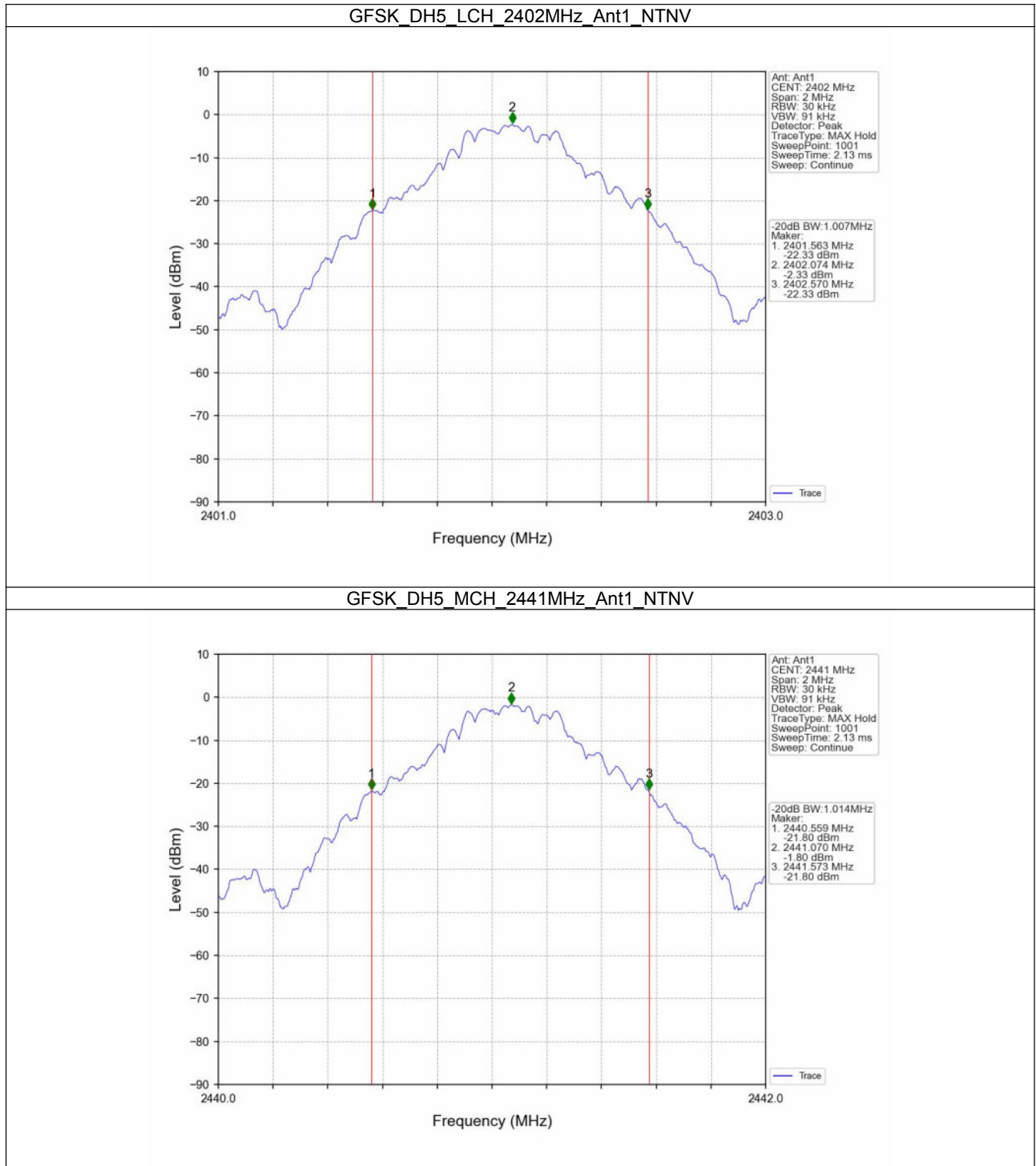
FCC ID: 2AC9N-1686122-03

1.2 20dB BW**1.2.1 Test Result**

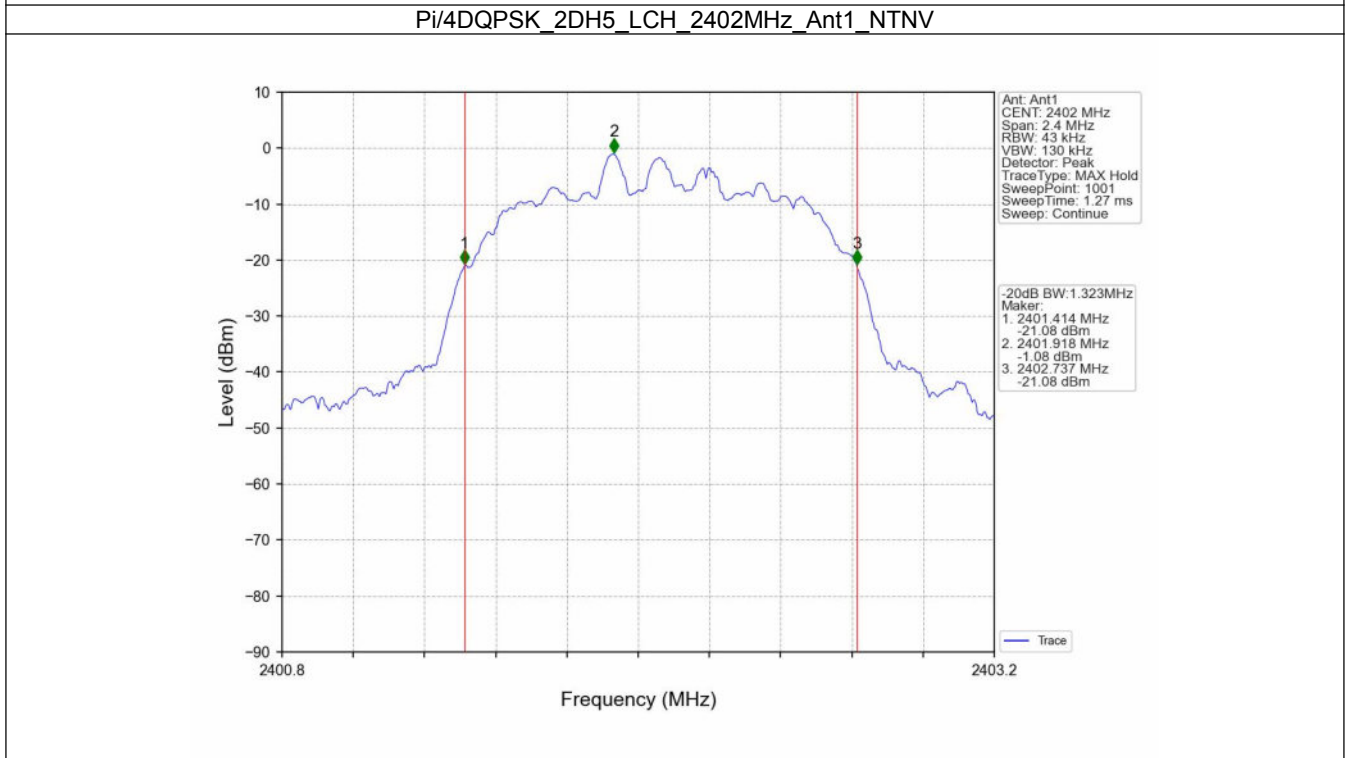
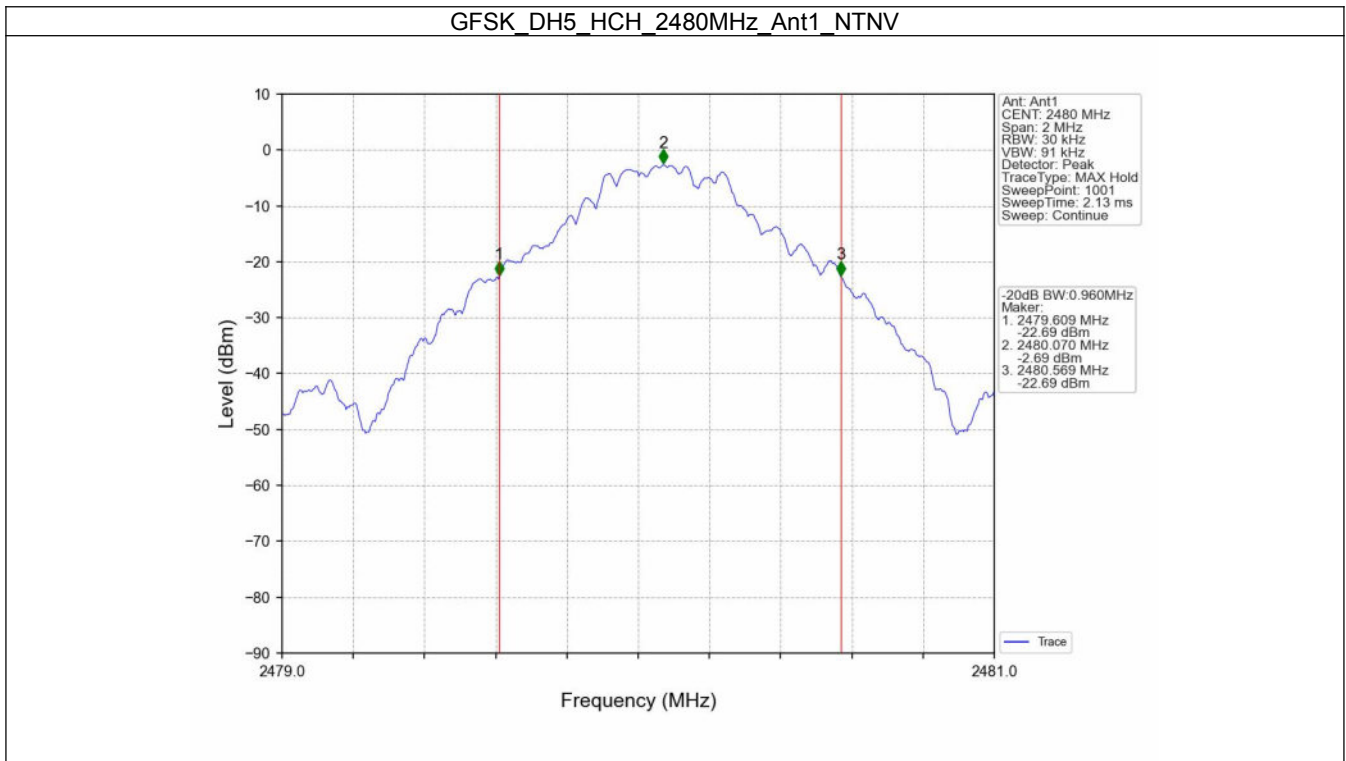
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	1.007	/	Pass
		2441	DH5	1	1.014	/	Pass
		2480	DH5	1	0.960	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.323	/	Pass
		2441	2DH5	1	1.322	/	Pass
		2480	2DH5	1	1.299	/	Pass
8DPSK	SISO	2402	3DH5	1	1.318	/	Pass
		2441	3DH5	1	1.320	/	Pass
		2480	3DH5	1	1.317	/	Pass

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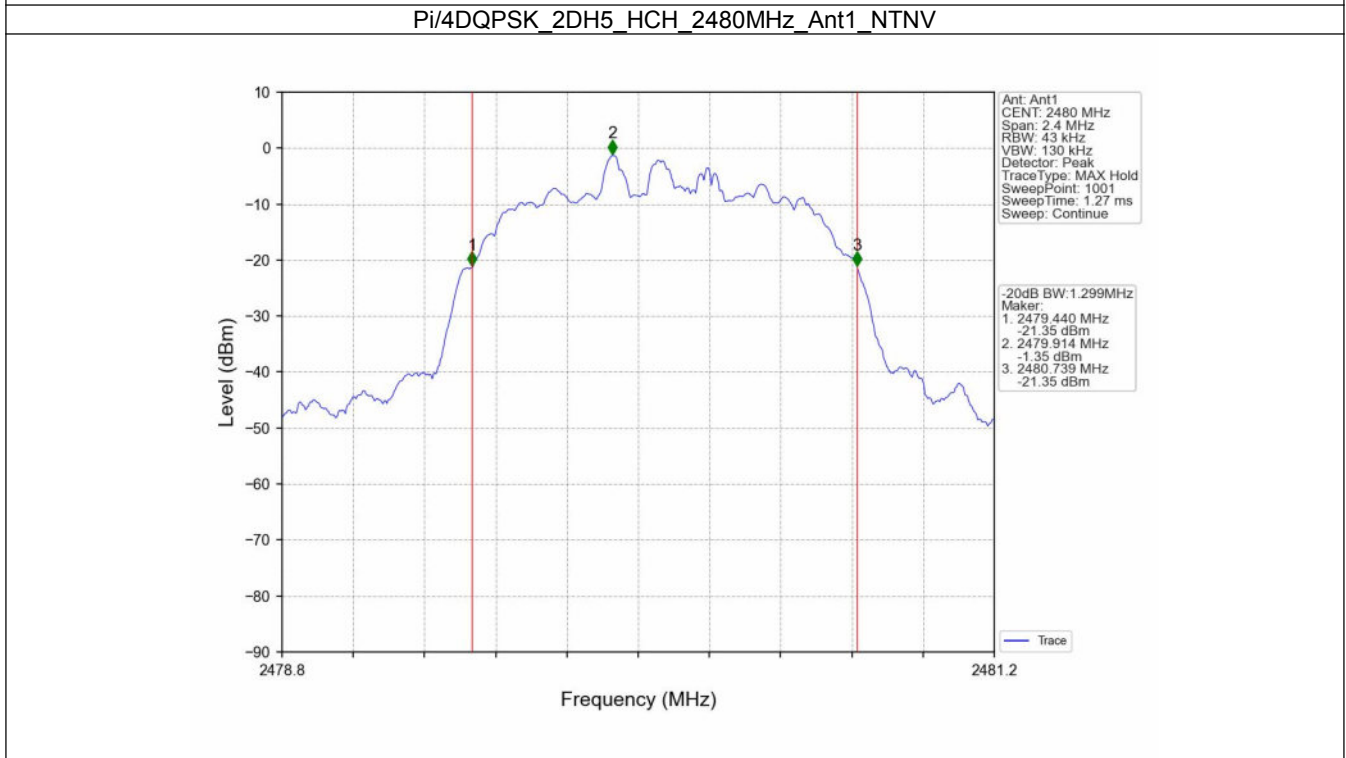
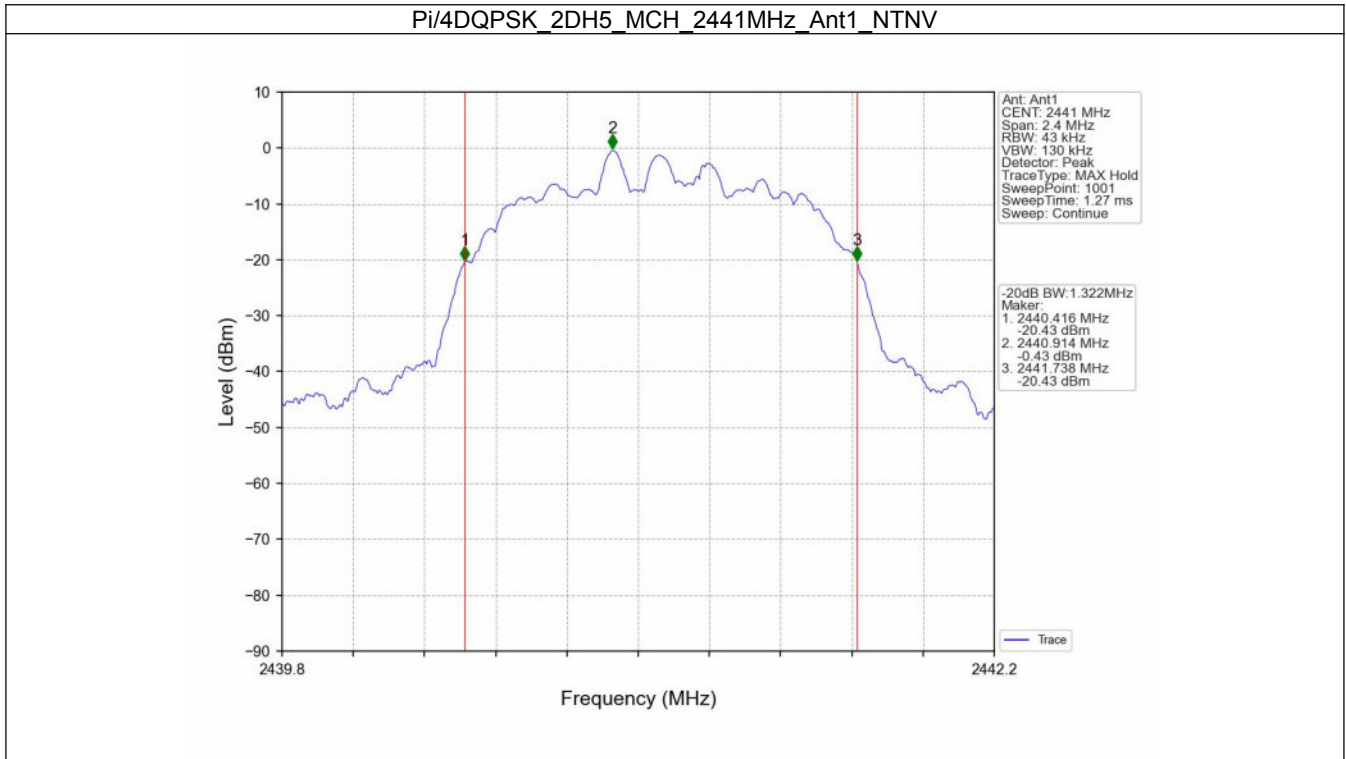
1.2.2 Test Graph



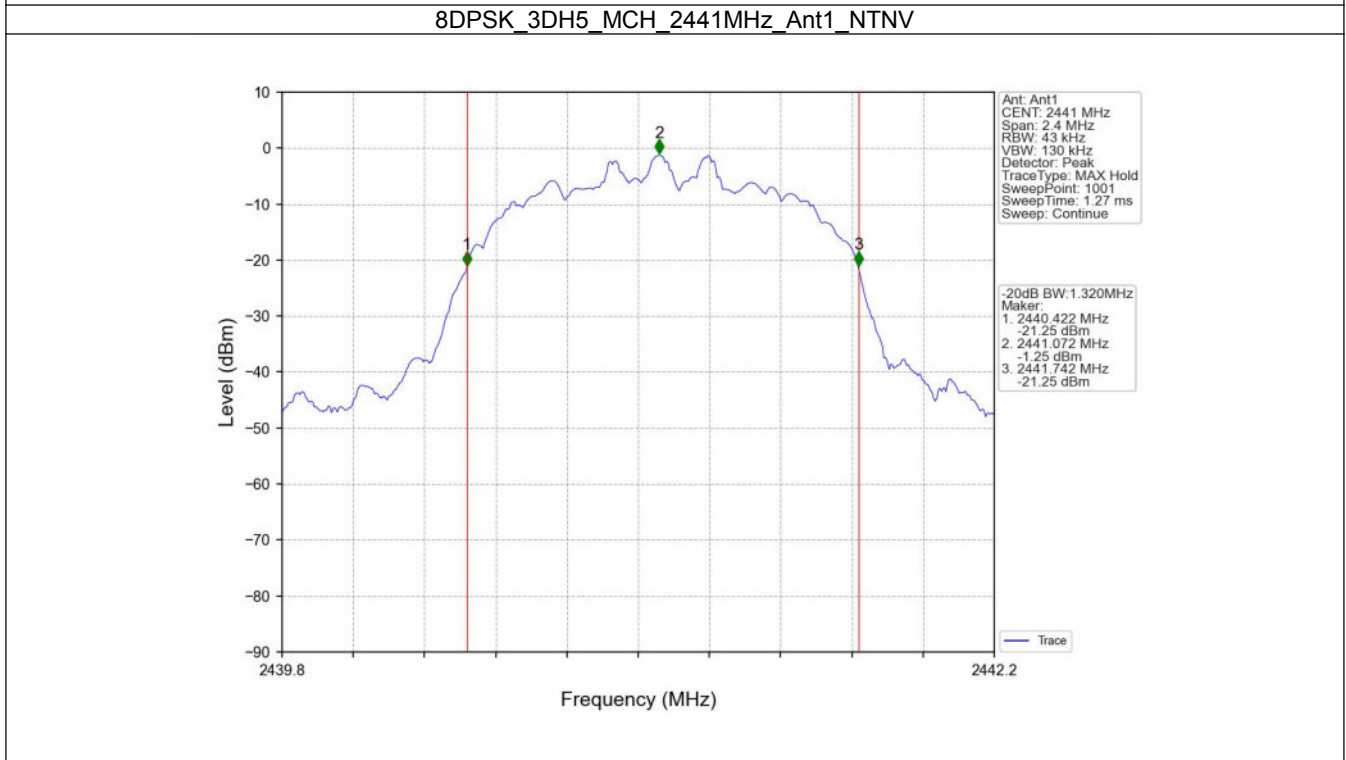
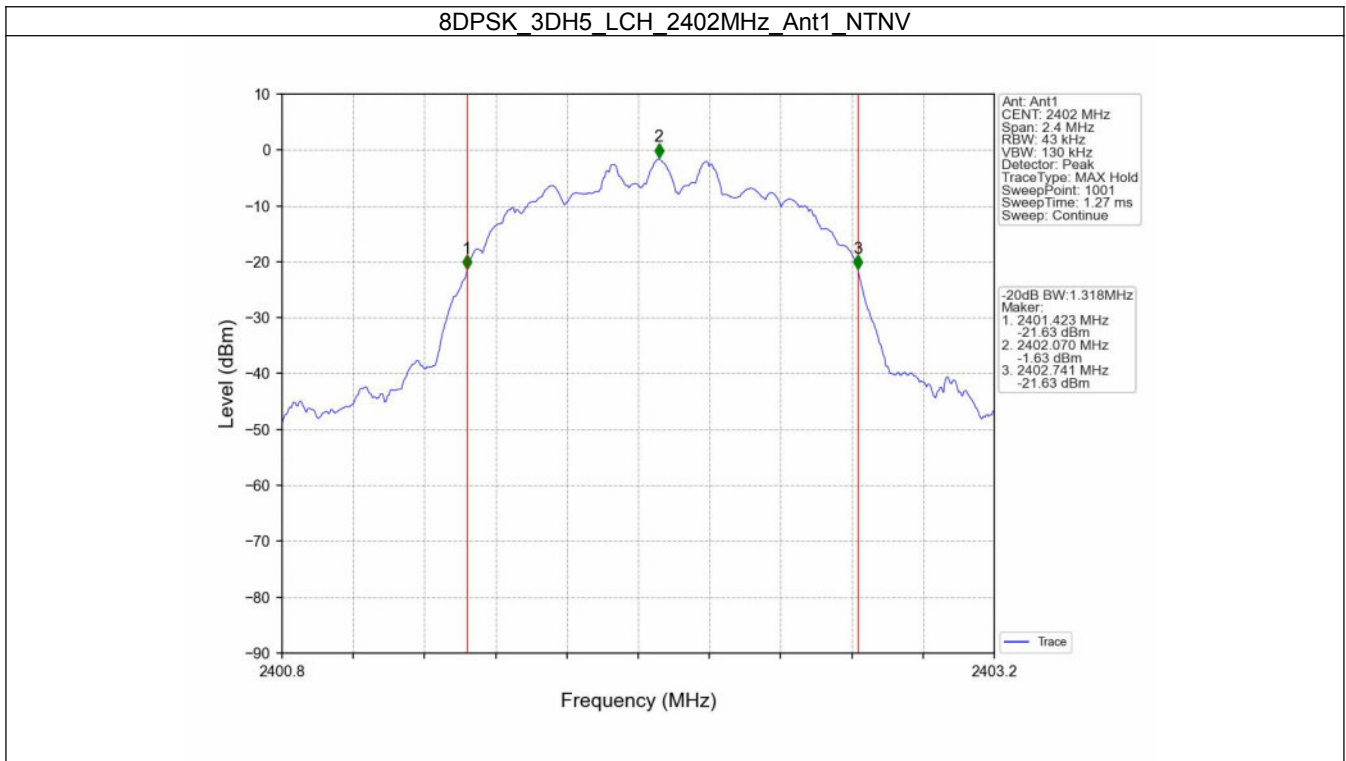
FCC ID: 2AC9N-1686122-03



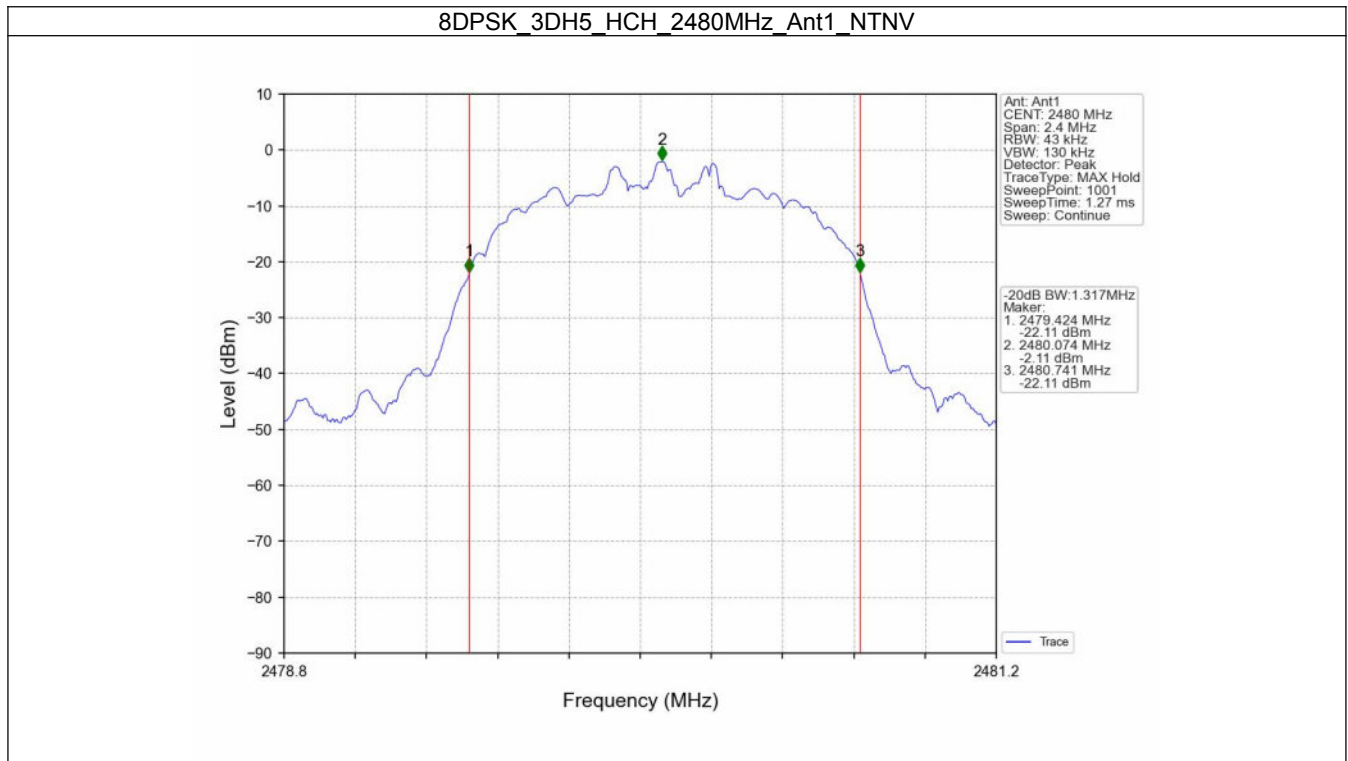
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2. Maximum Conducted Output Power

2.1 Power

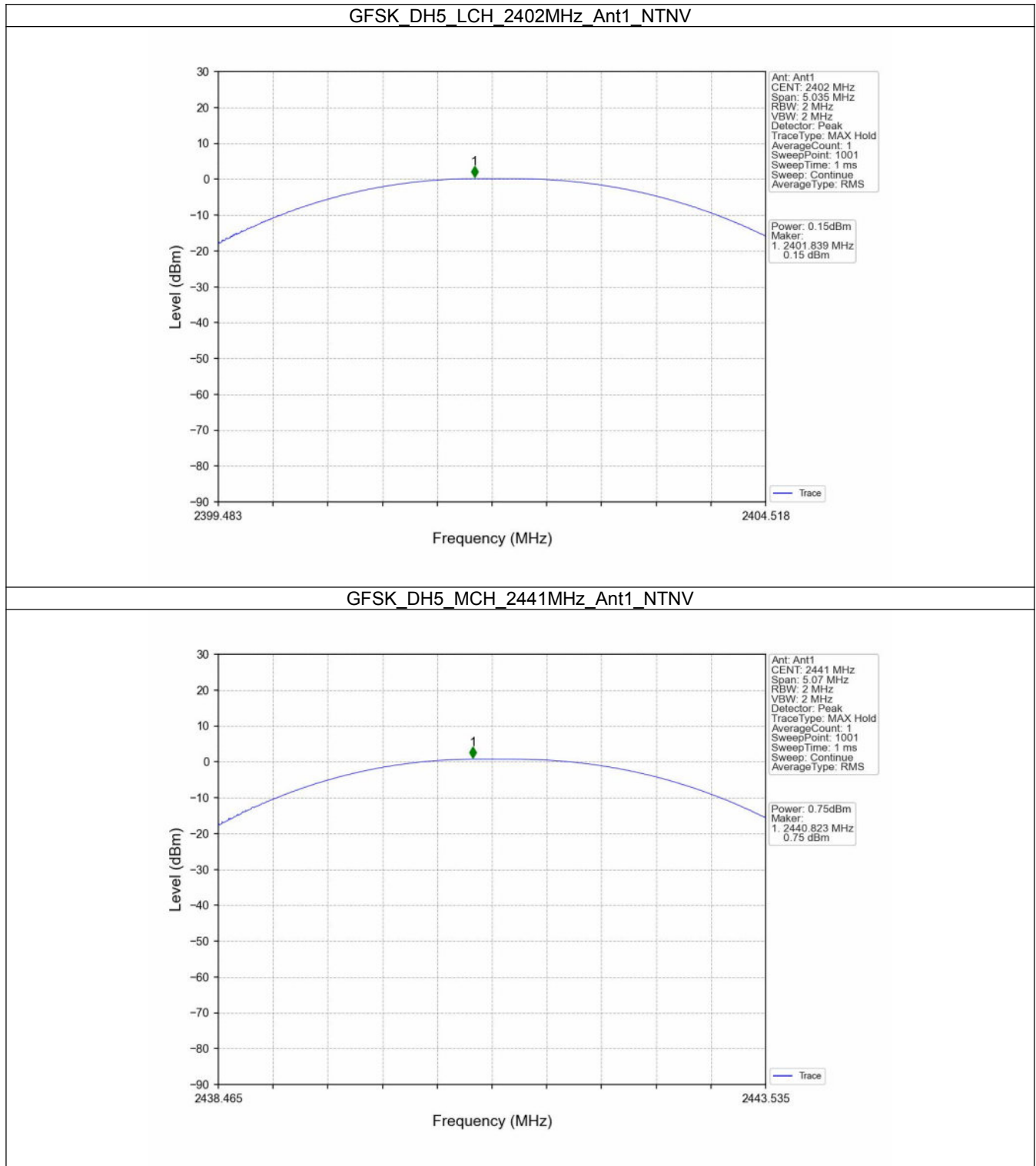
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	0.15	<=20.97	Pass
		2441	DH5	0.75	<=20.97	Pass
		2480	DH5	-0.12	<=20.97	Pass
Pi/4DQPSK	SISO	2402	2DH5	1.06	<=20.97	Pass
		2441	2DH5	1.66	<=20.97	Pass
		2480	2DH5	0.81	<=20.97	Pass
8DPSK	SISO	2402	3DH5	1.49	<=20.97	Pass
		2441	3DH5	2.07	<=20.97	Pass
		2480	3DH5	1.22	<=20.97	Pass

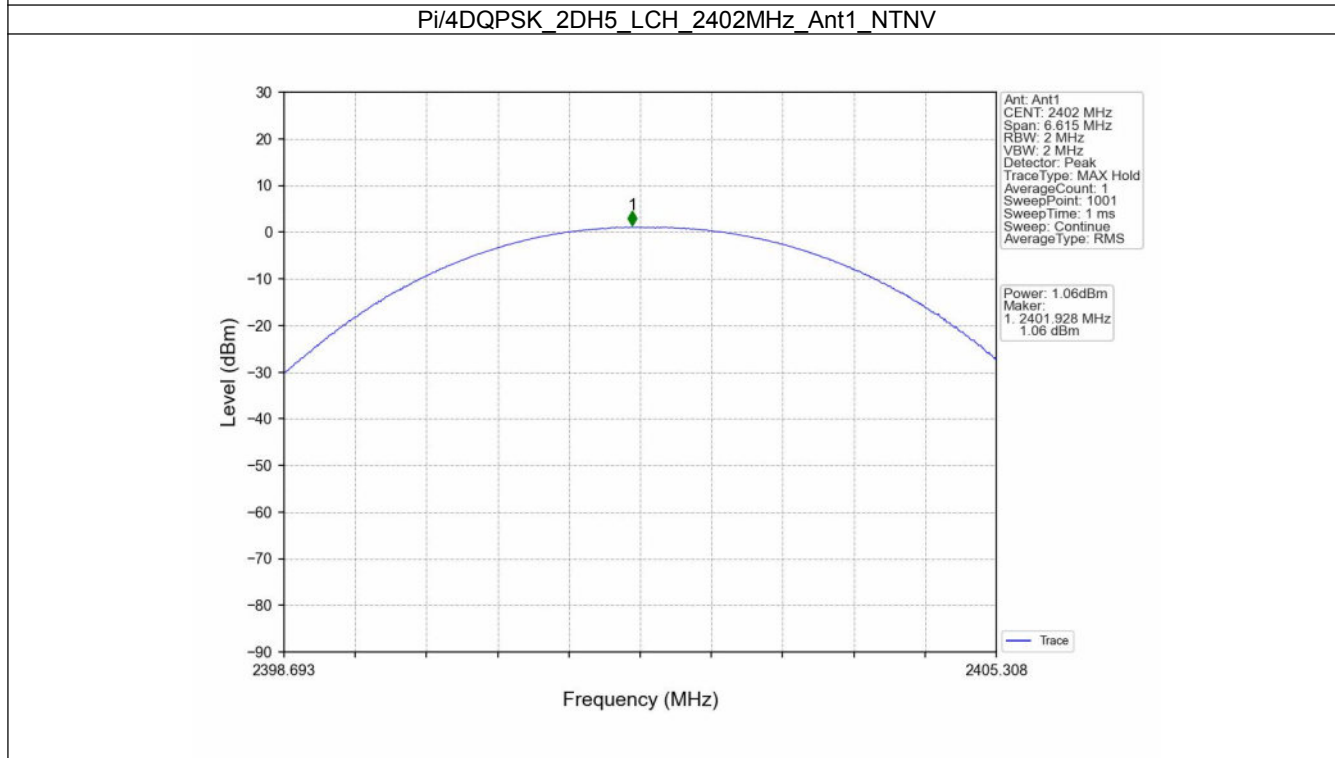
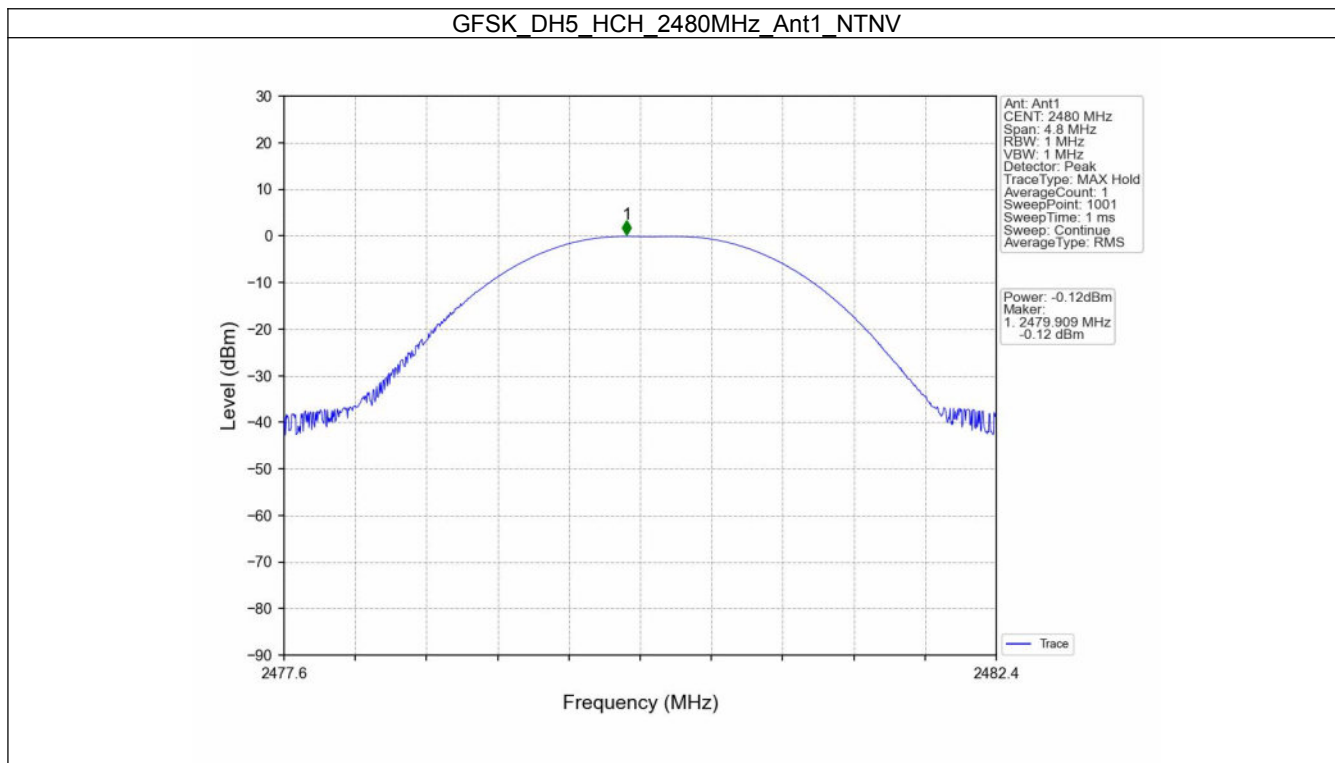
Note1: Antenna Gain: Ant1: -0.68dBi;

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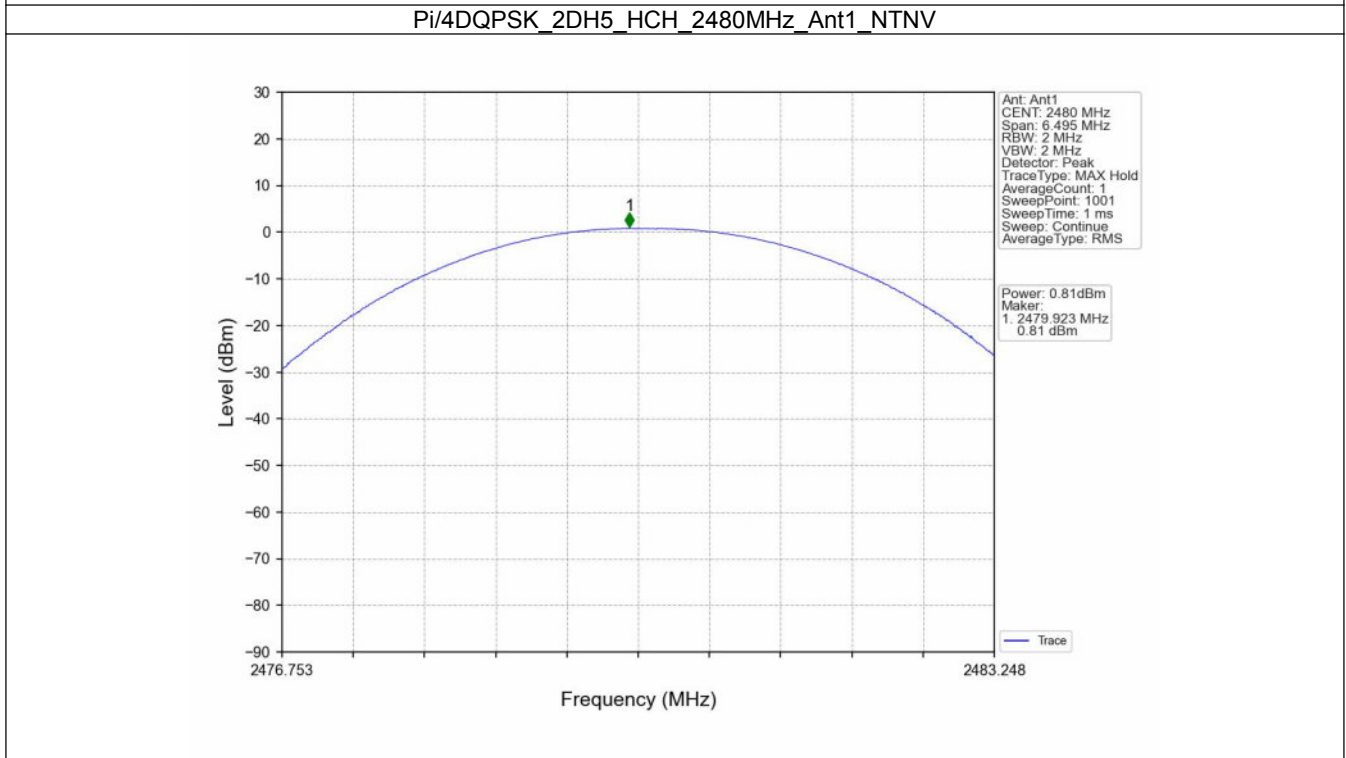
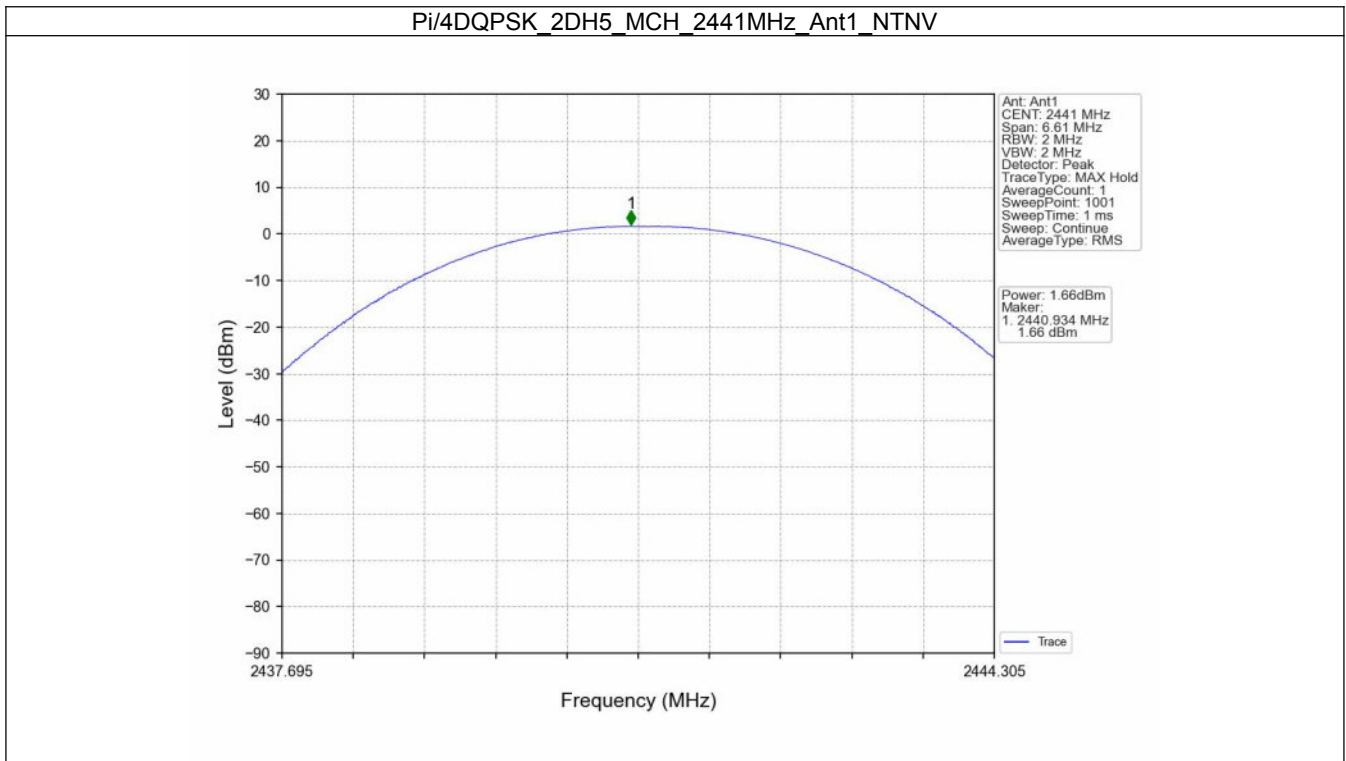
2.1.2 Test Graph



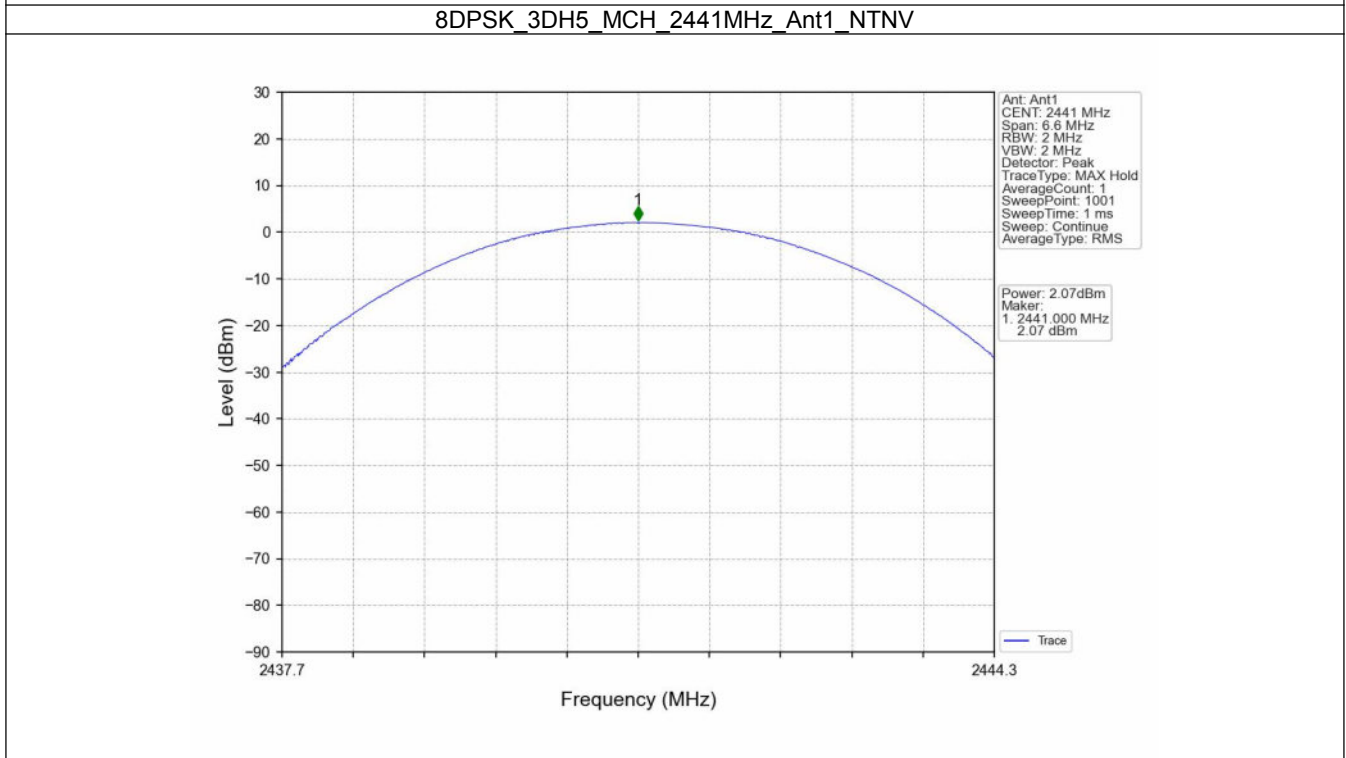
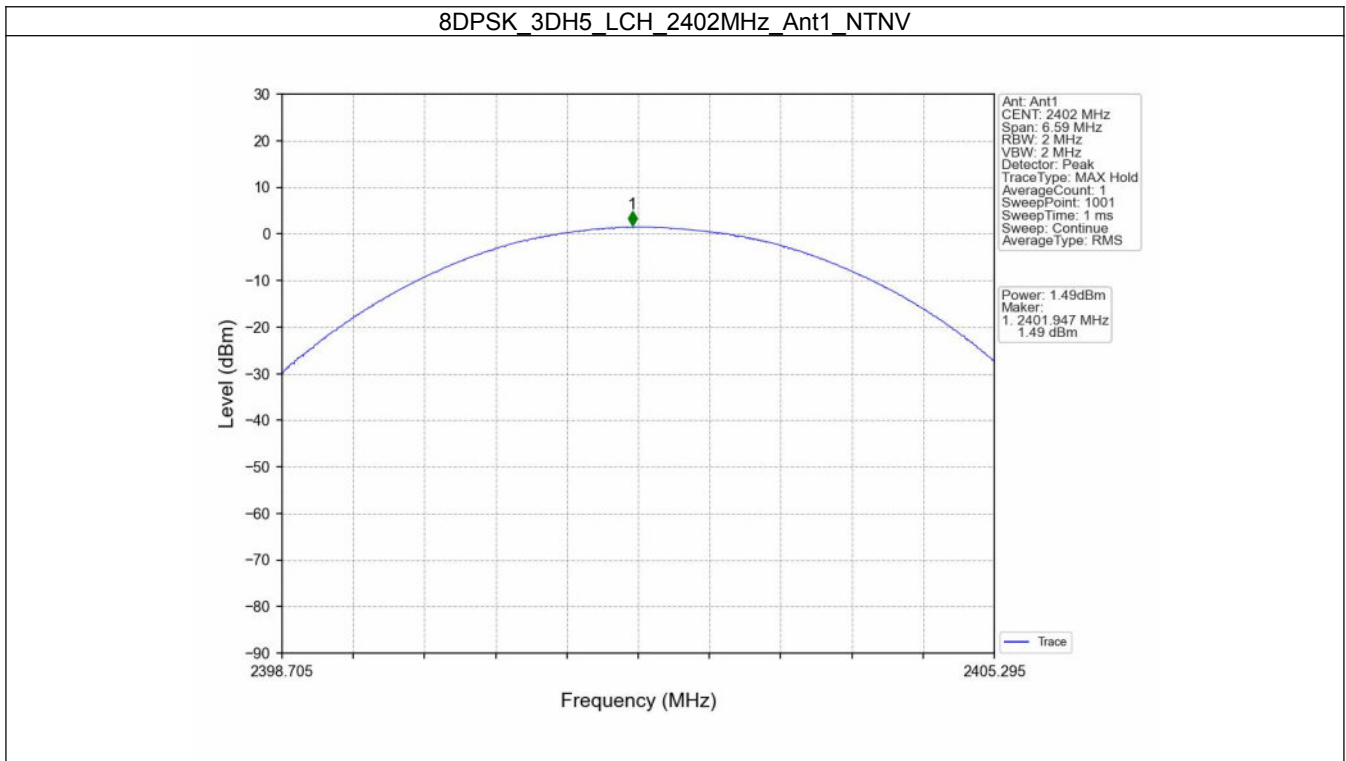
FCC ID: 2AC9N-1686122-03



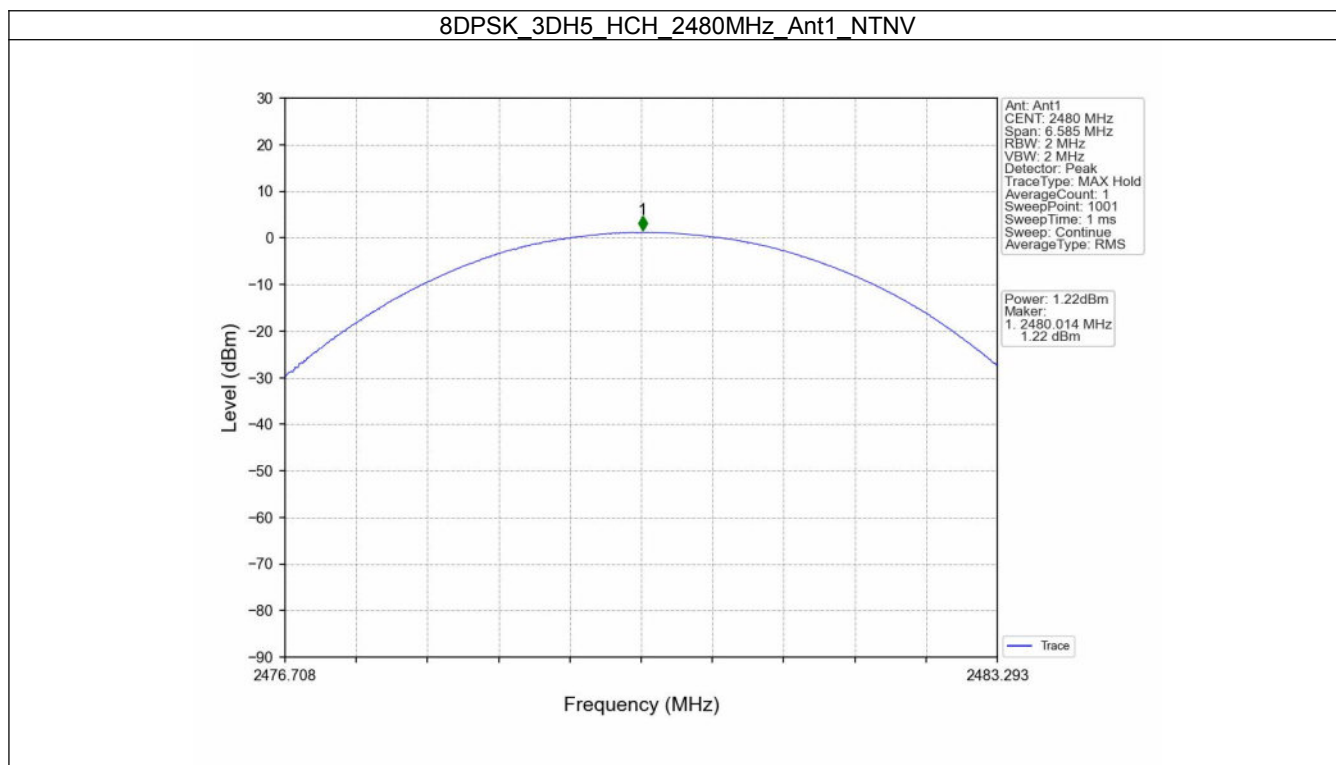
FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03

3. Carrier Frequency Separation

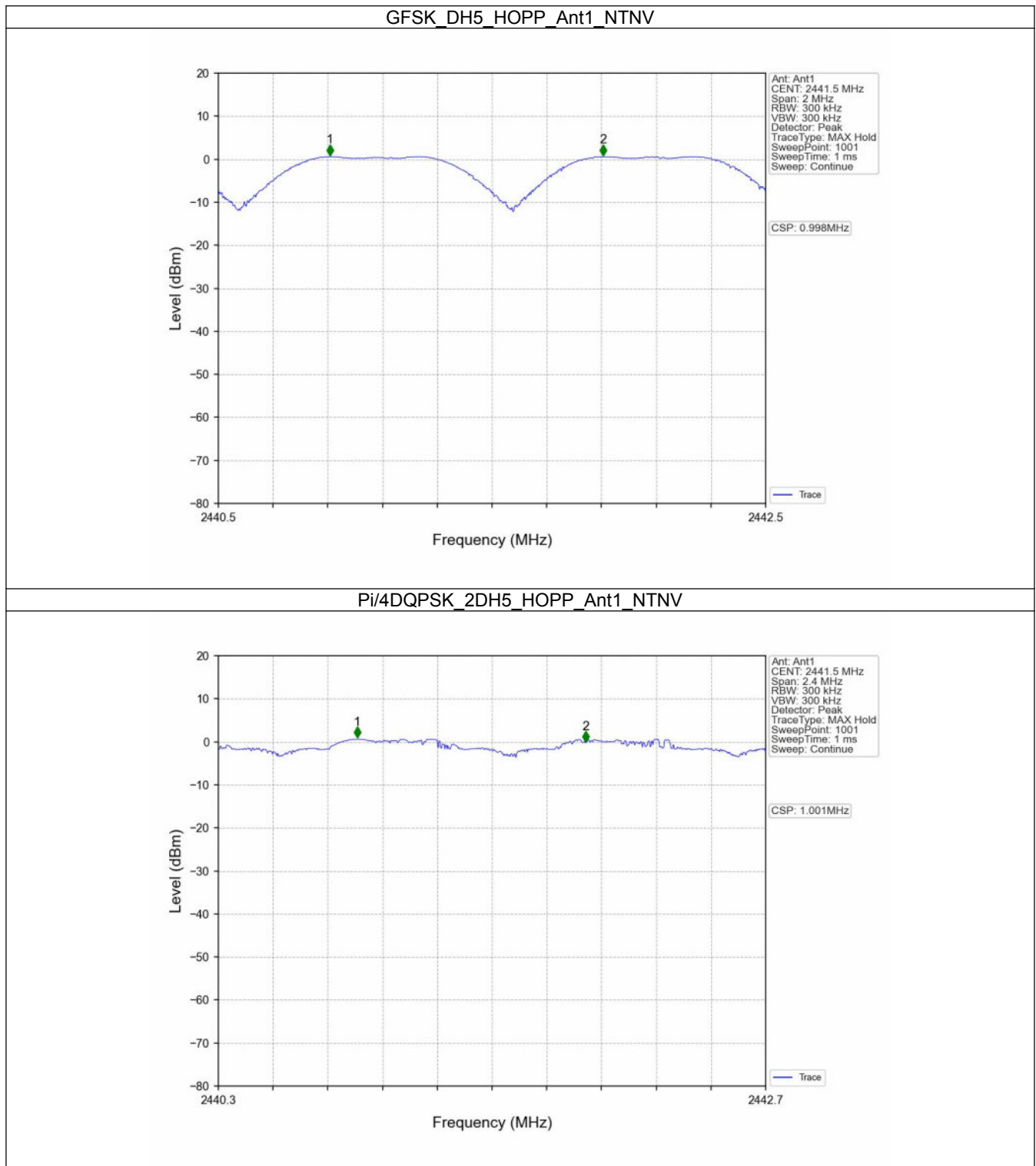
3.1 Ant1

3.1.1 Test Result

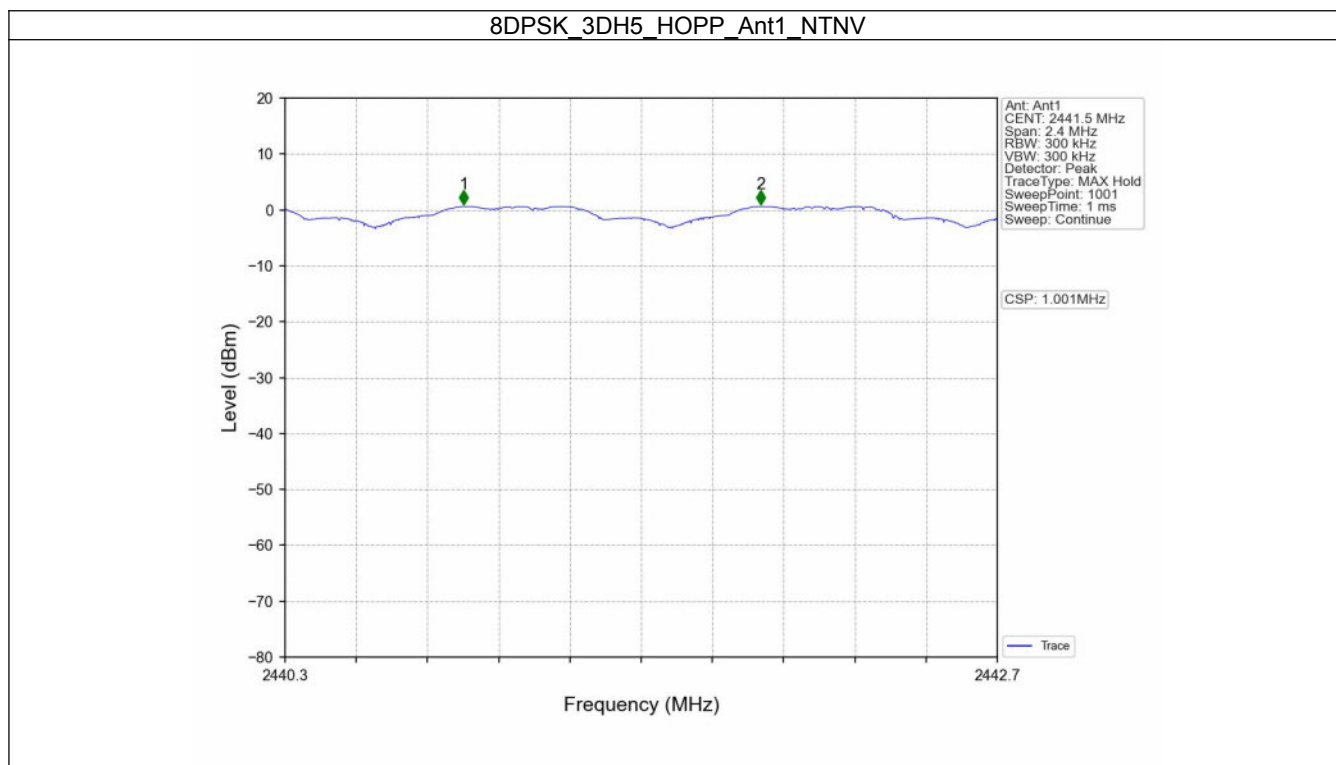
Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	0.998	1.014	≥ 0.676	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.001	1.323	≥ 0.882	Pass
8DPSK	SISO	HOPP	3DH5	1.001	1.320	≥ 0.88	Pass

FCC ID: 2AC9N-1686122-03

3.1.2 Test Graph



FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03

4. Number of Hopping Frequencies

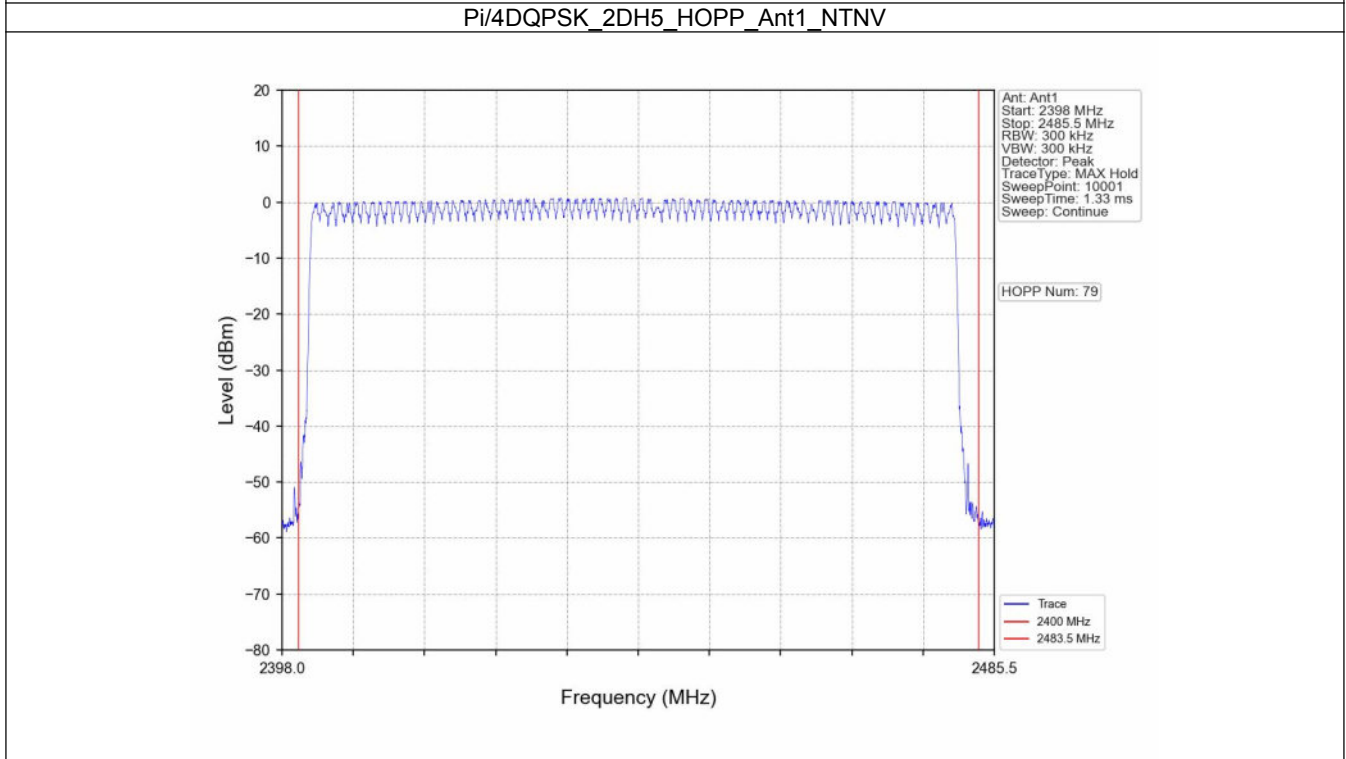
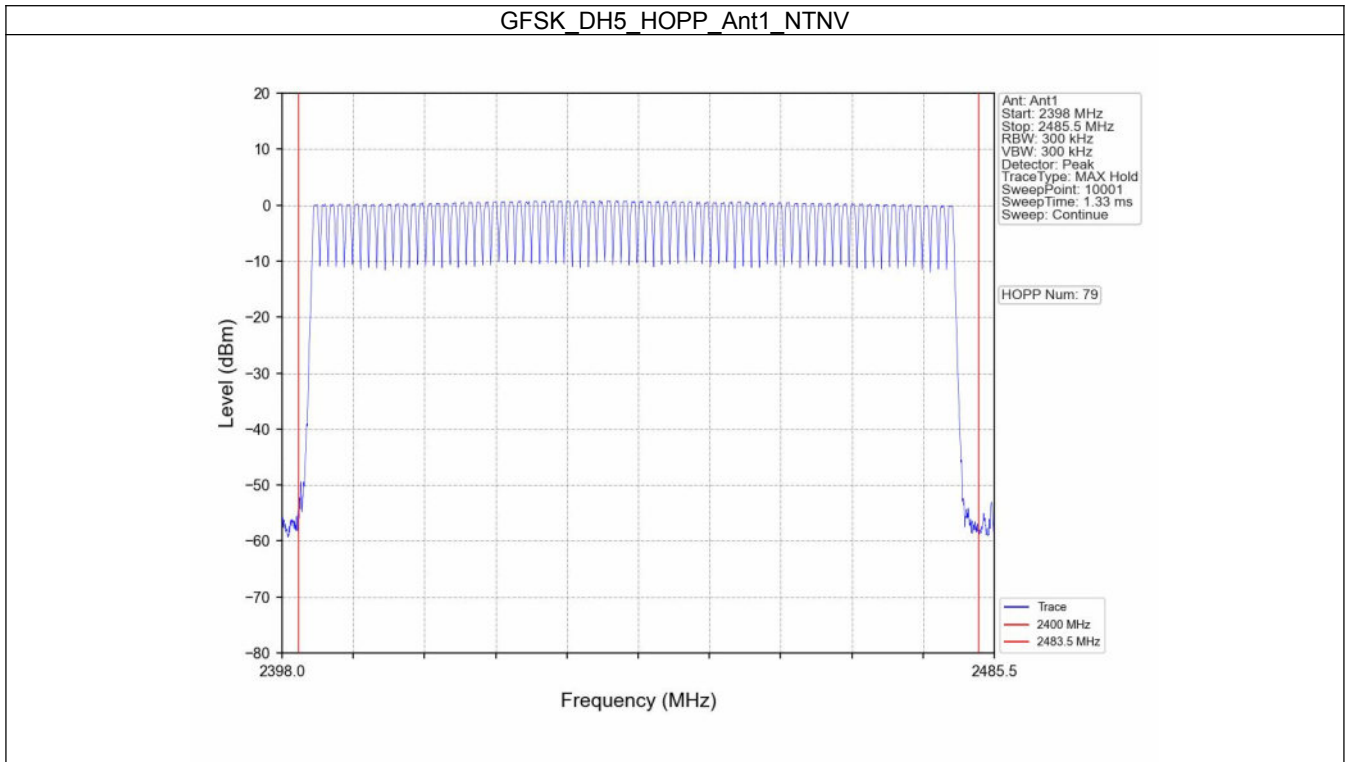
4.1 HoppNum

4.1.1 Test Result

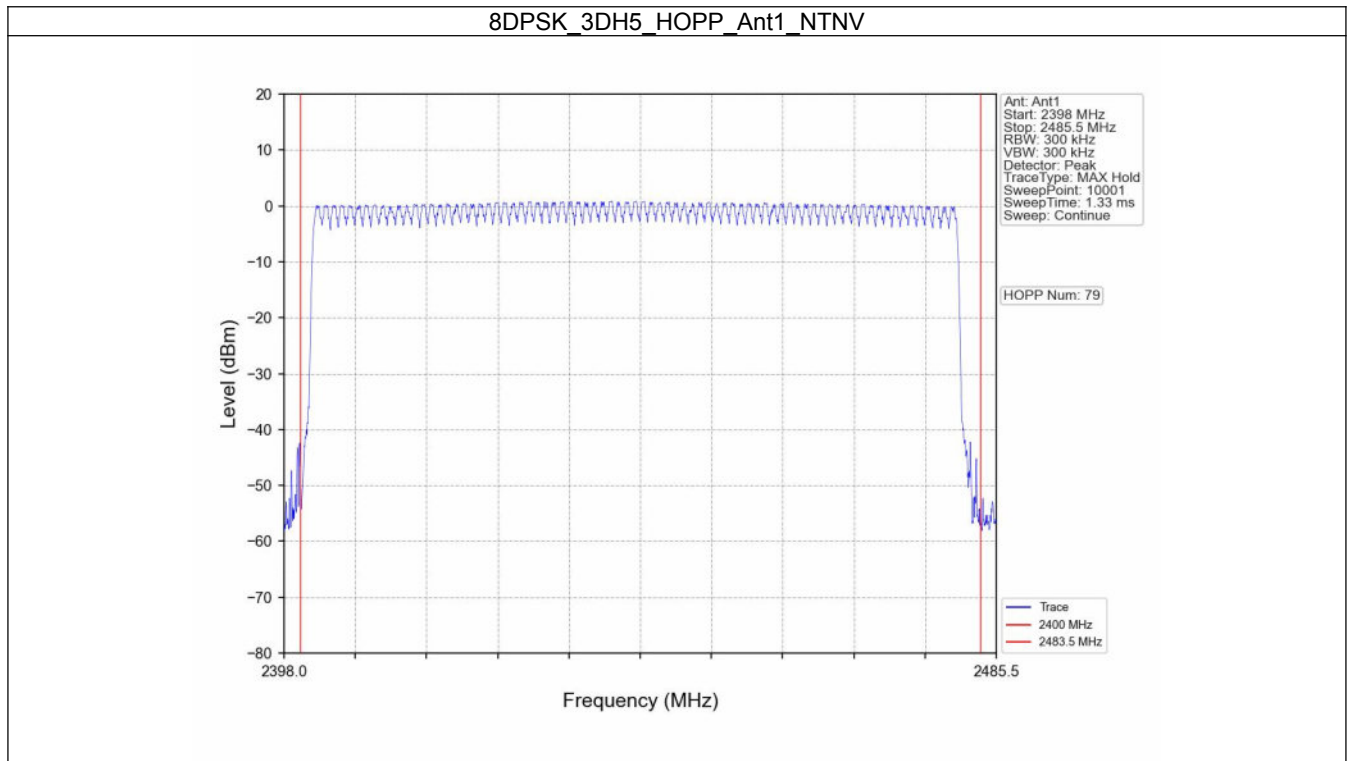
Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	>=15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	>=15	Pass
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass

FCC ID: 2AC9N-1686122-03

4.1.2 Test Graph



FCC ID: 2AC9N-1686122-03



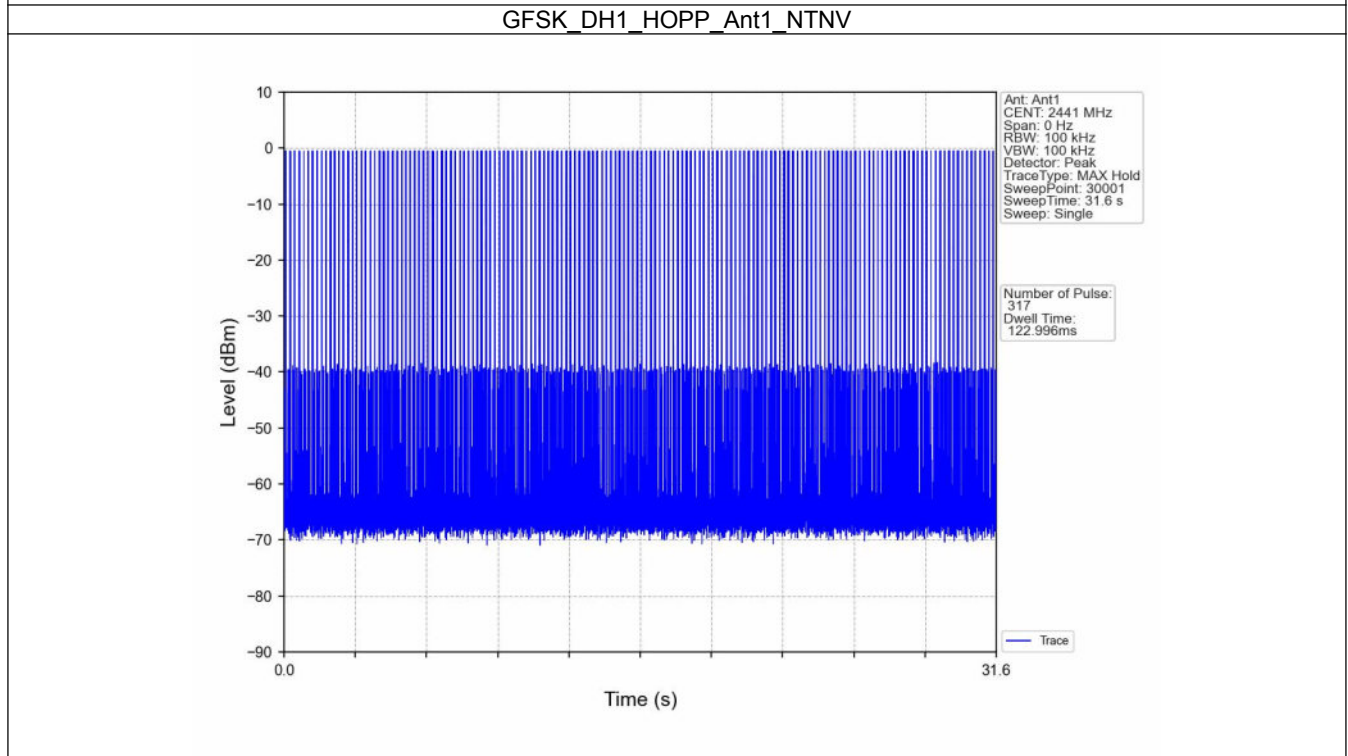
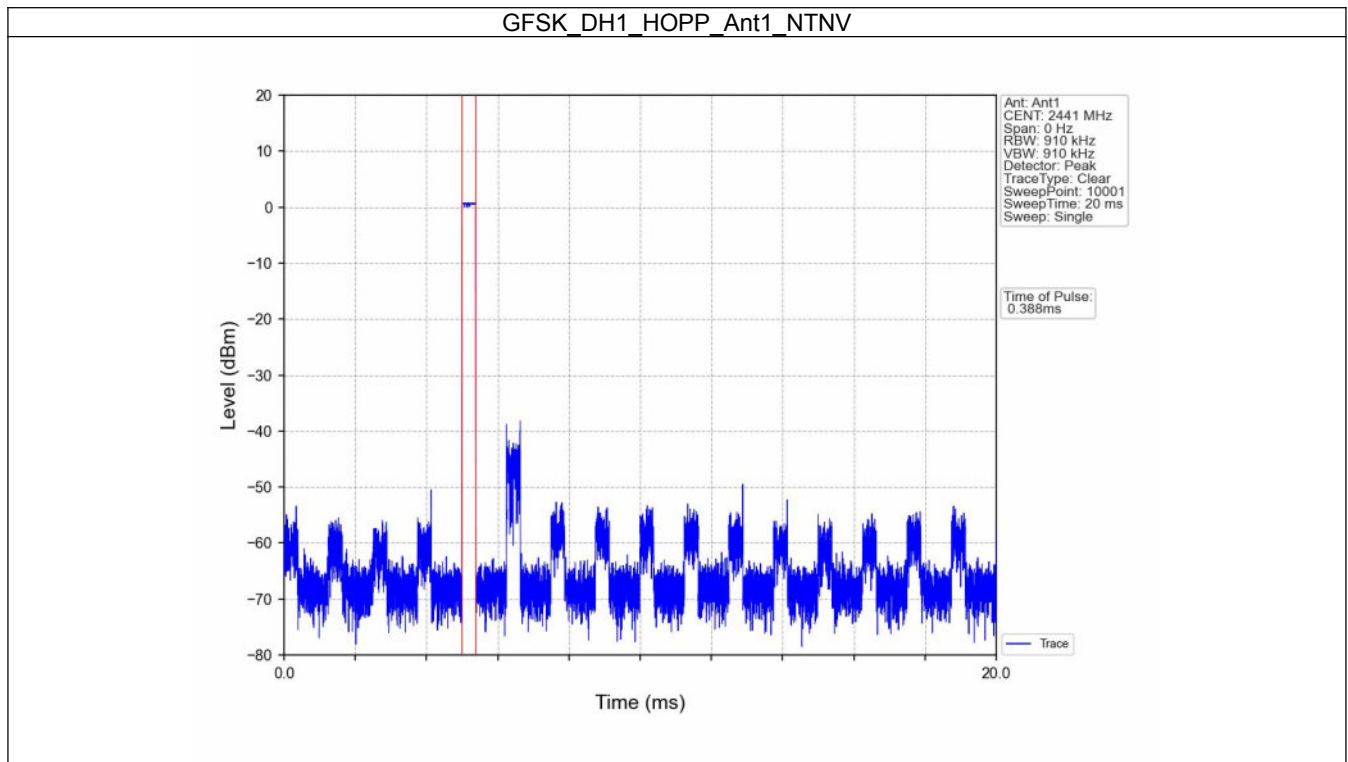
FCC ID: 2AC9N-1686122-03

5. Time of Occupancy (Dwell Time)**5.1 Ant1****5.1.1 Test Result**

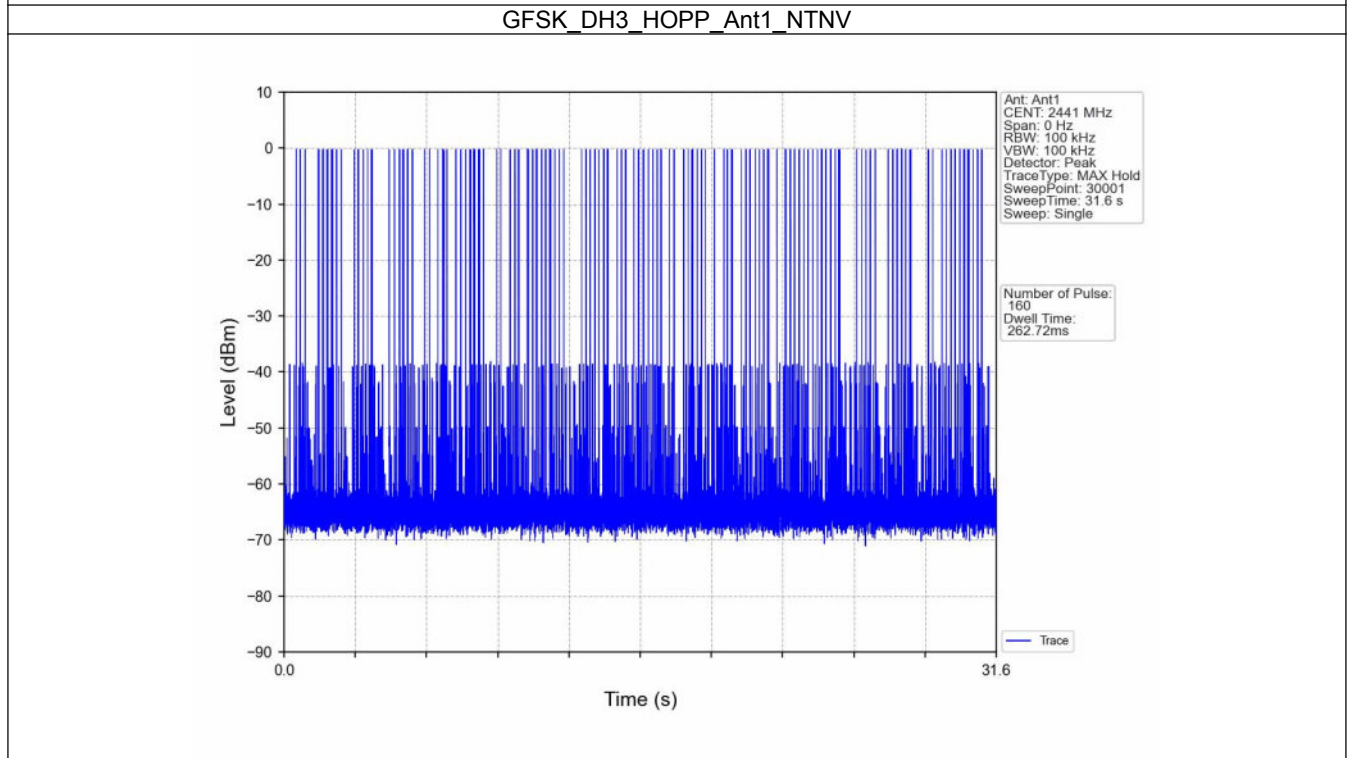
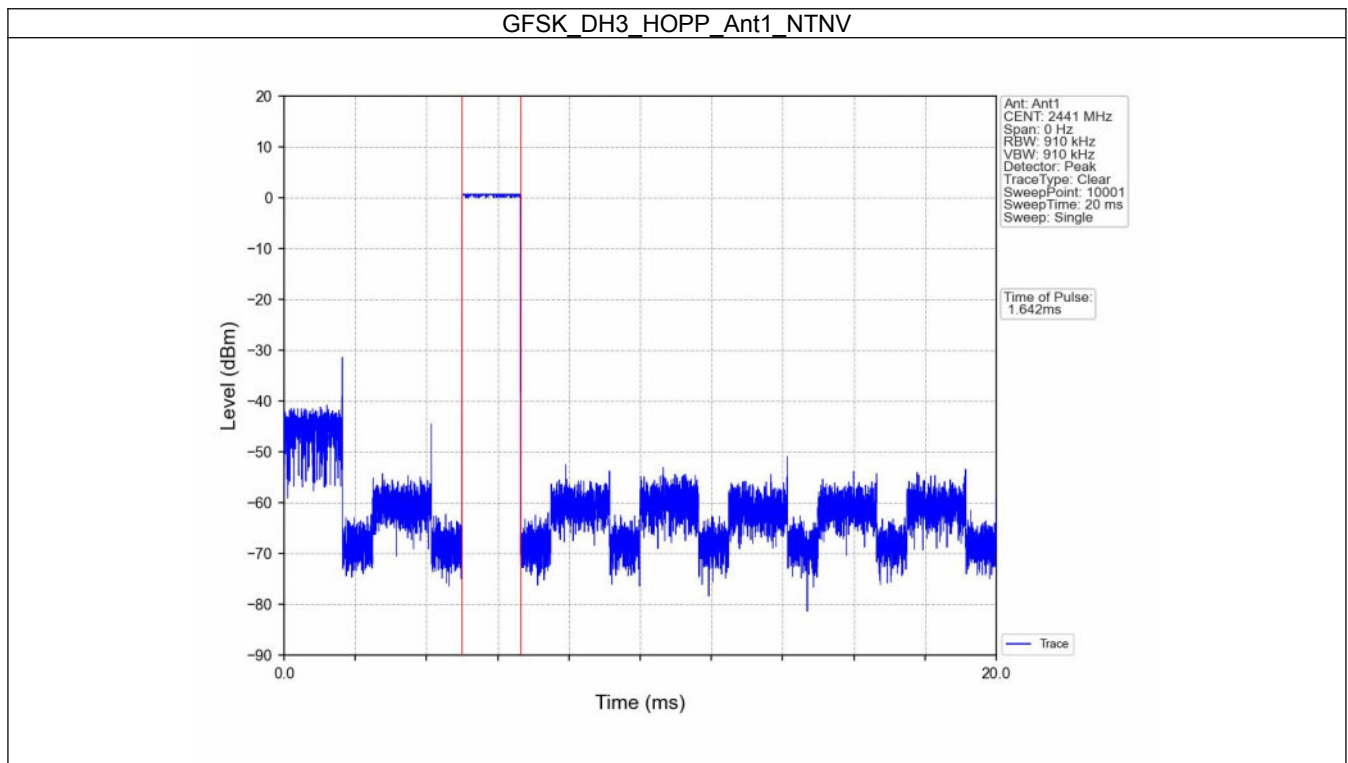
Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.388	31.600	317	122.996	<=400	Pass
			DH3	1.642	31.600	160	262.720	<=400	Pass
			DH5	2.896	31.600	87	251.952	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.396	31.600	318	125.928	<=400	Pass
			2DH3	1.646	31.600	163	268.298	<=400	Pass
			2DH5	2.902	31.600	91	264.082	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.396	31.600	320	126.720	<=400	Pass
			3DH3	1.652	31.600	153	252.756	<=400	Pass
			3DH5	2.902	31.600	109	316.318	<=400	Pass

FCC ID: 2AC9N-1686122-03

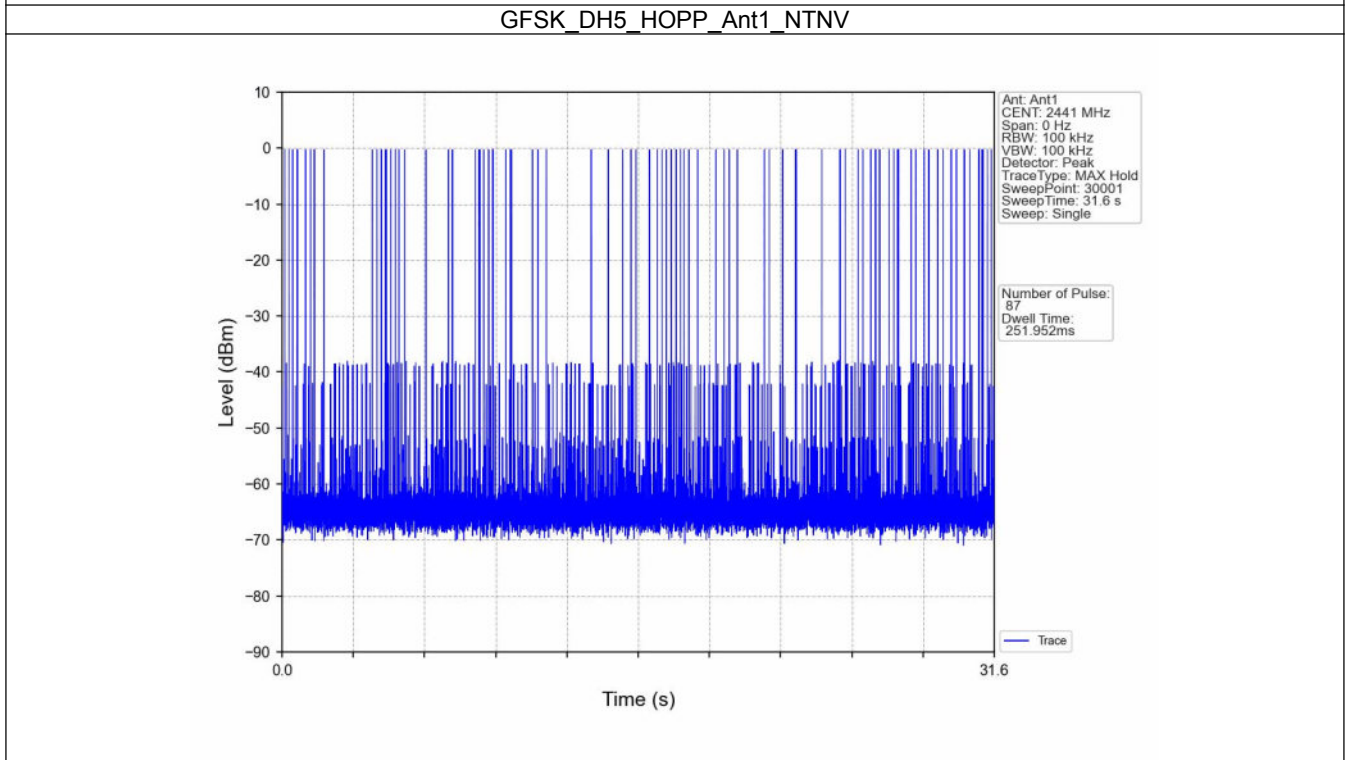
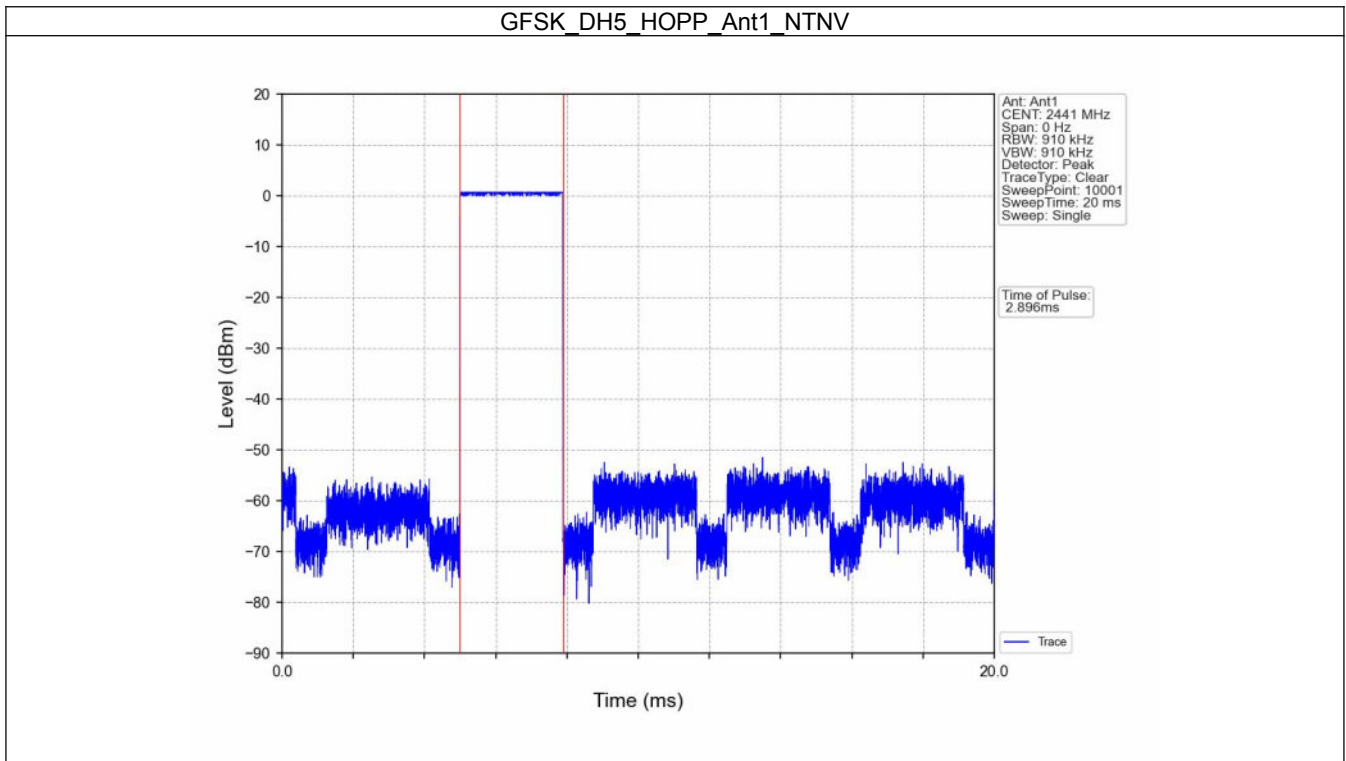
5.1.2 Test Graph



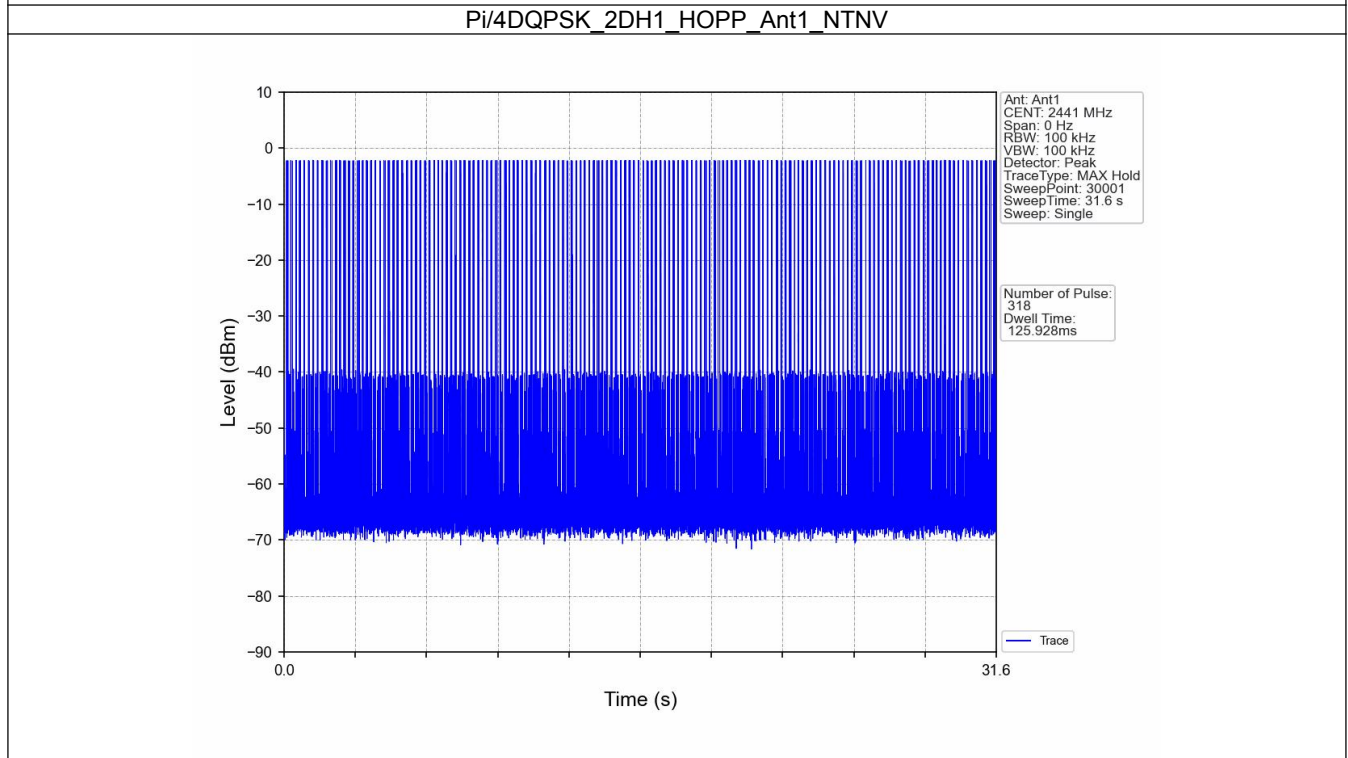
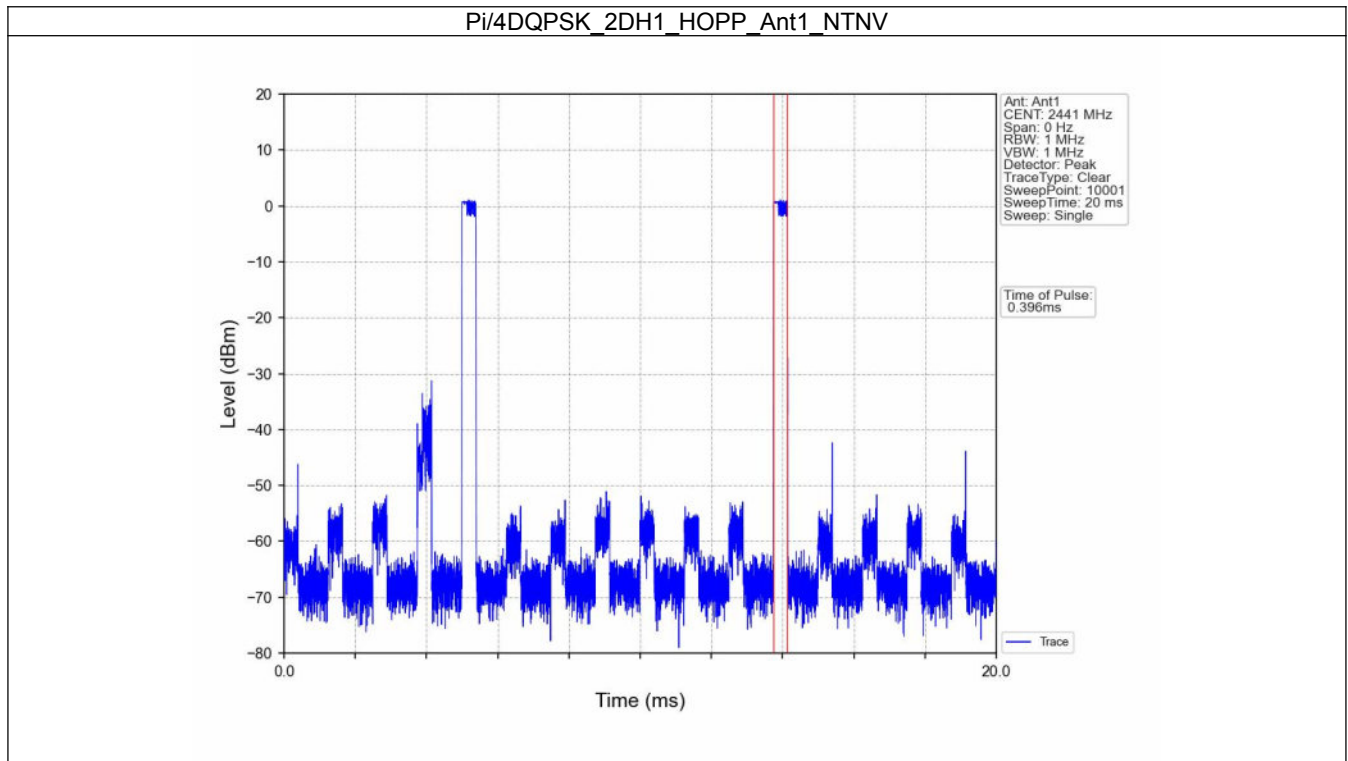
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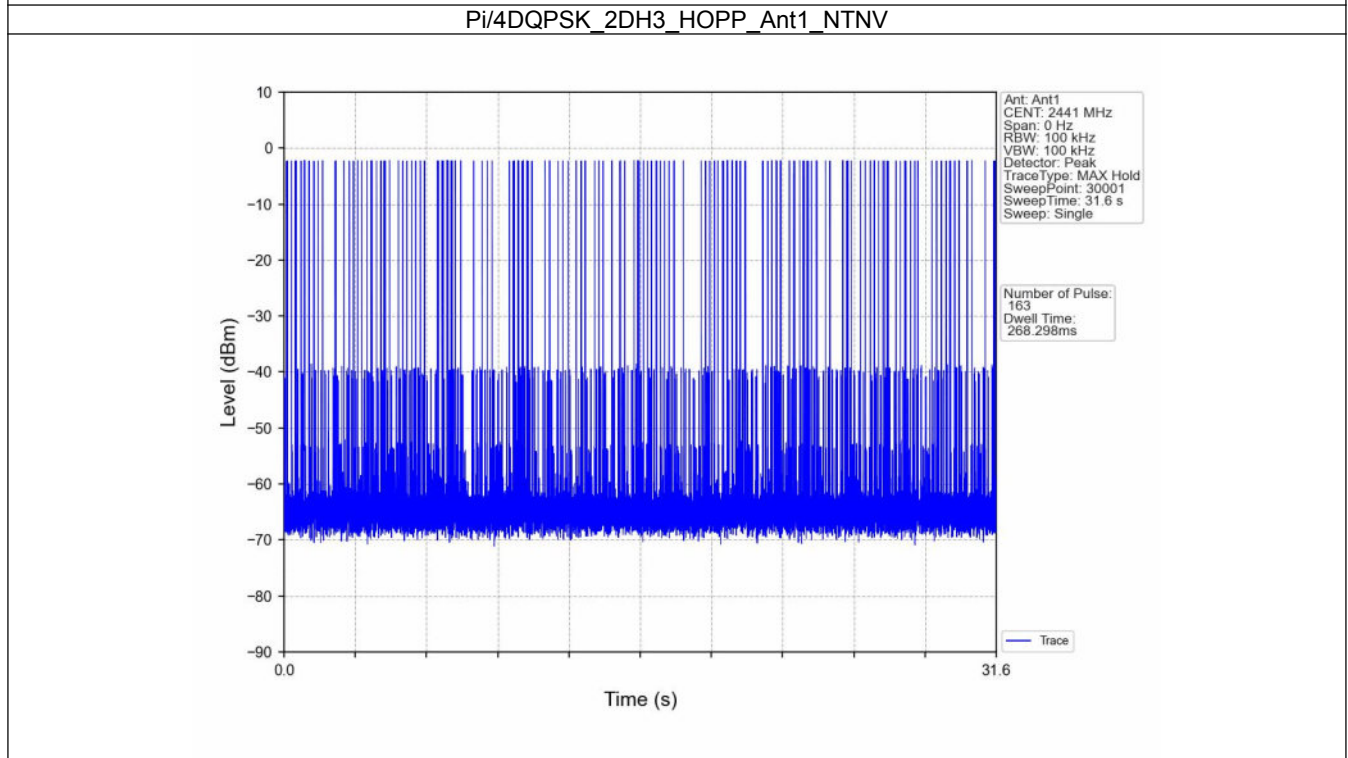
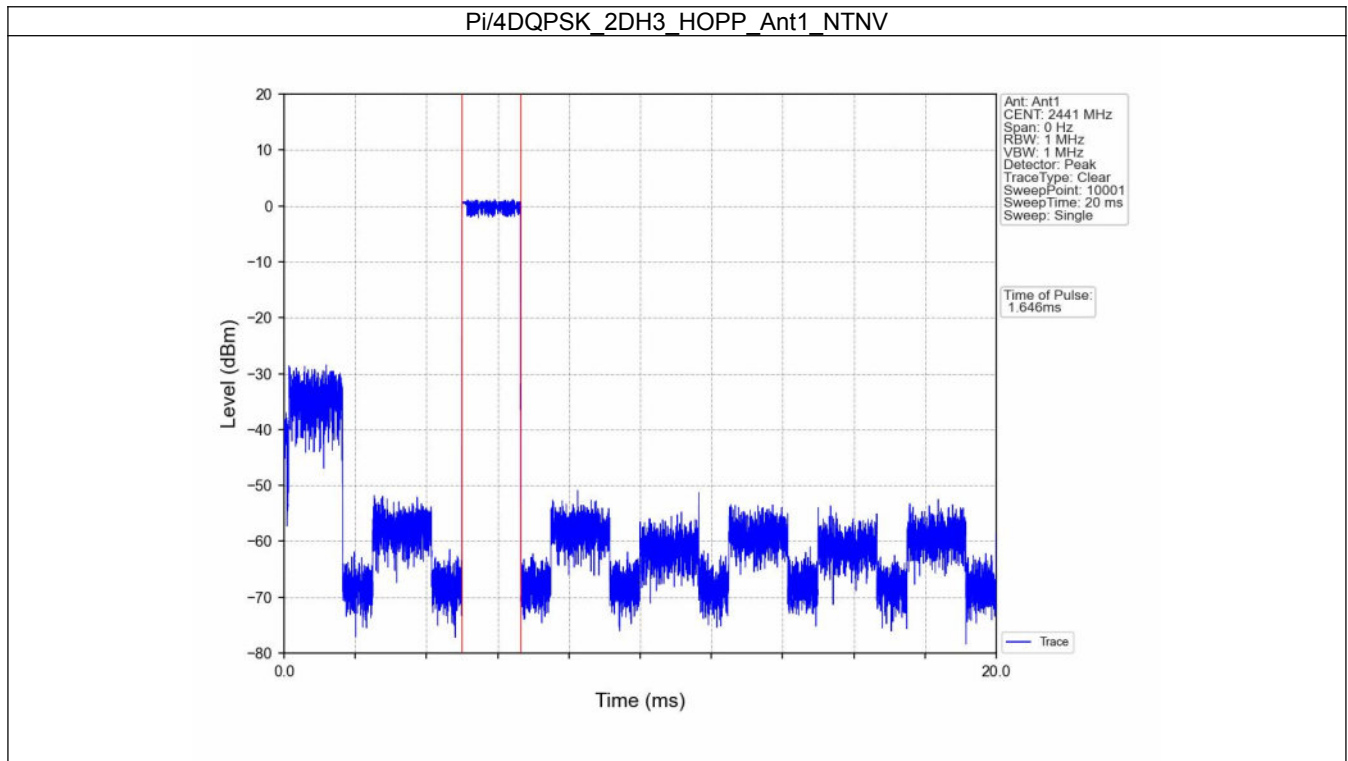
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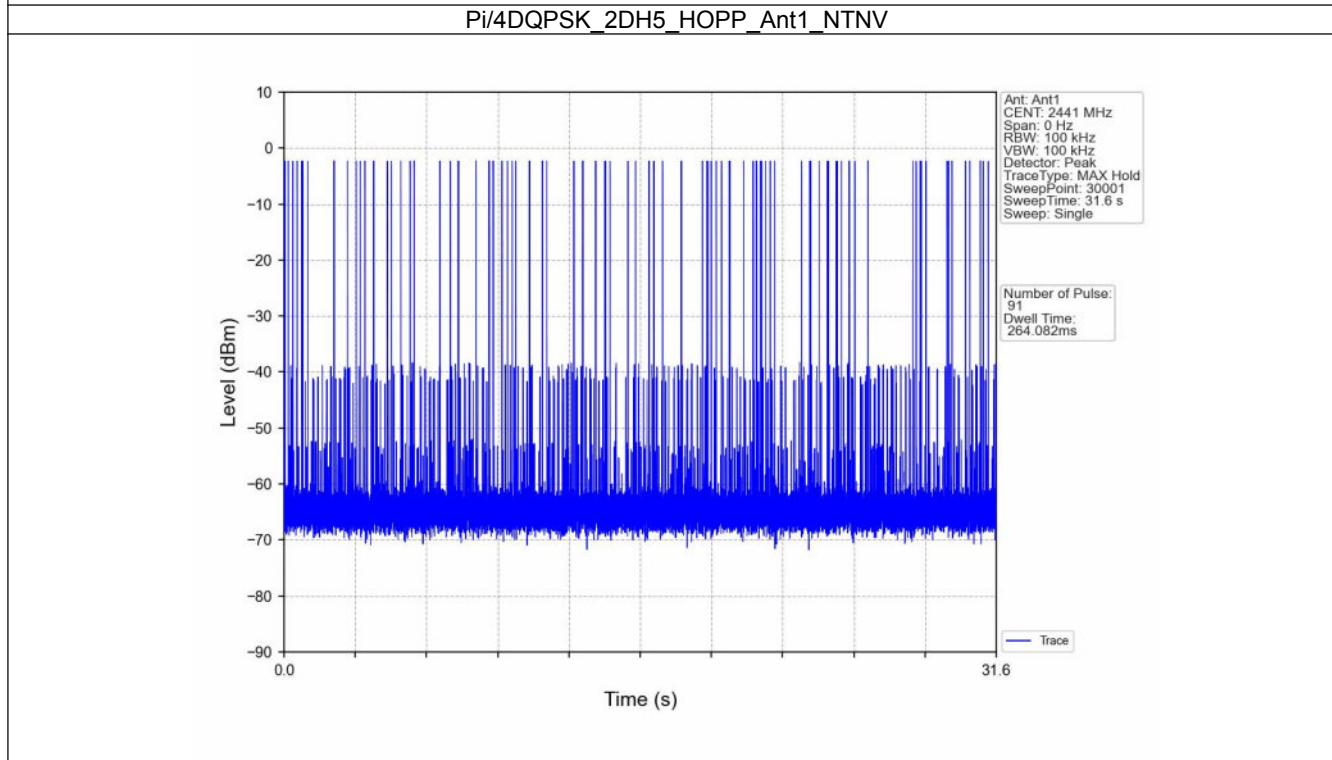
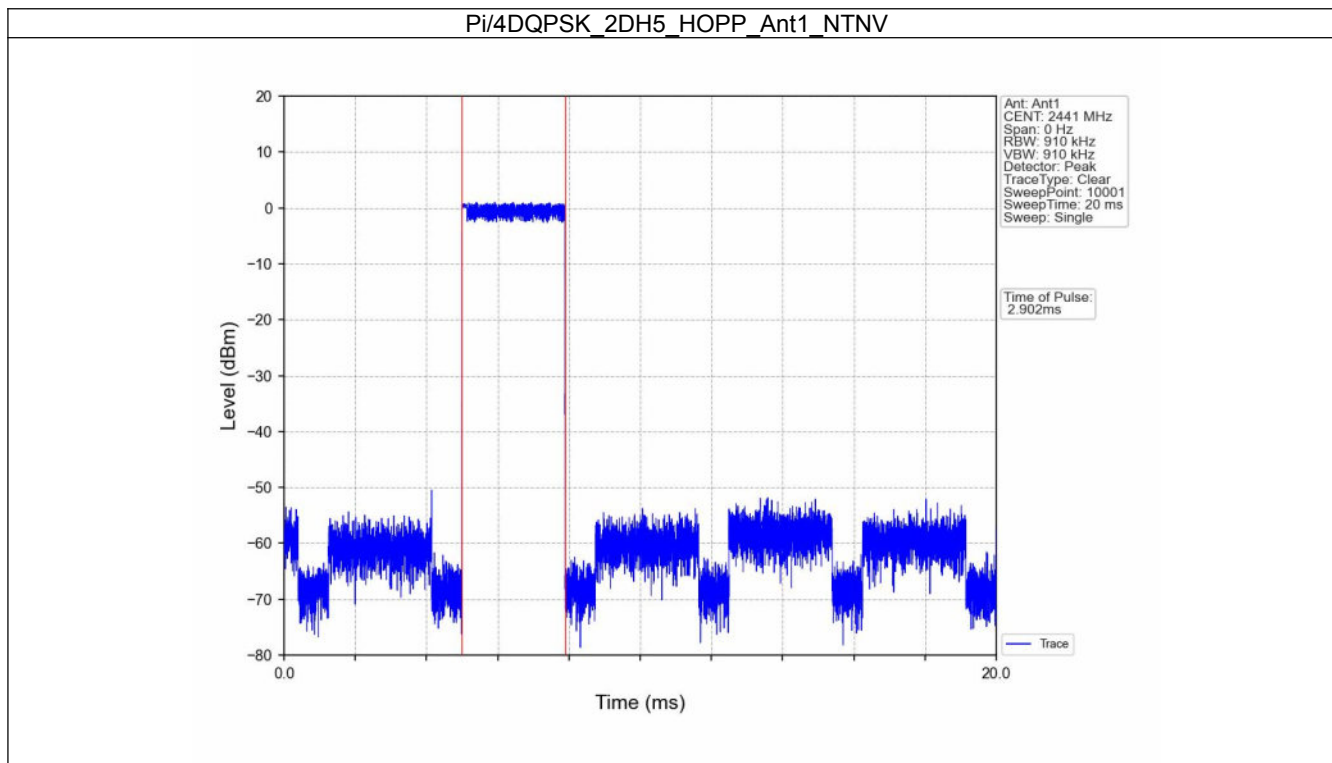
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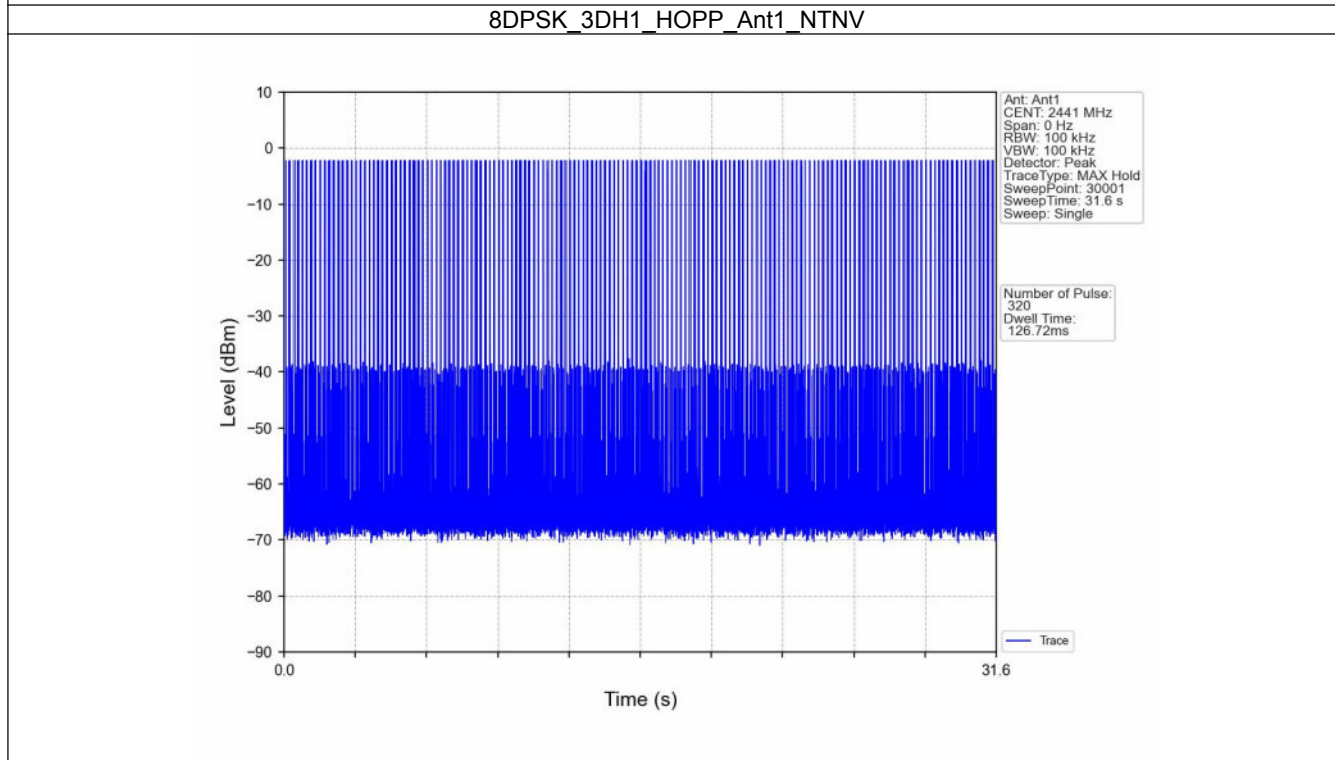
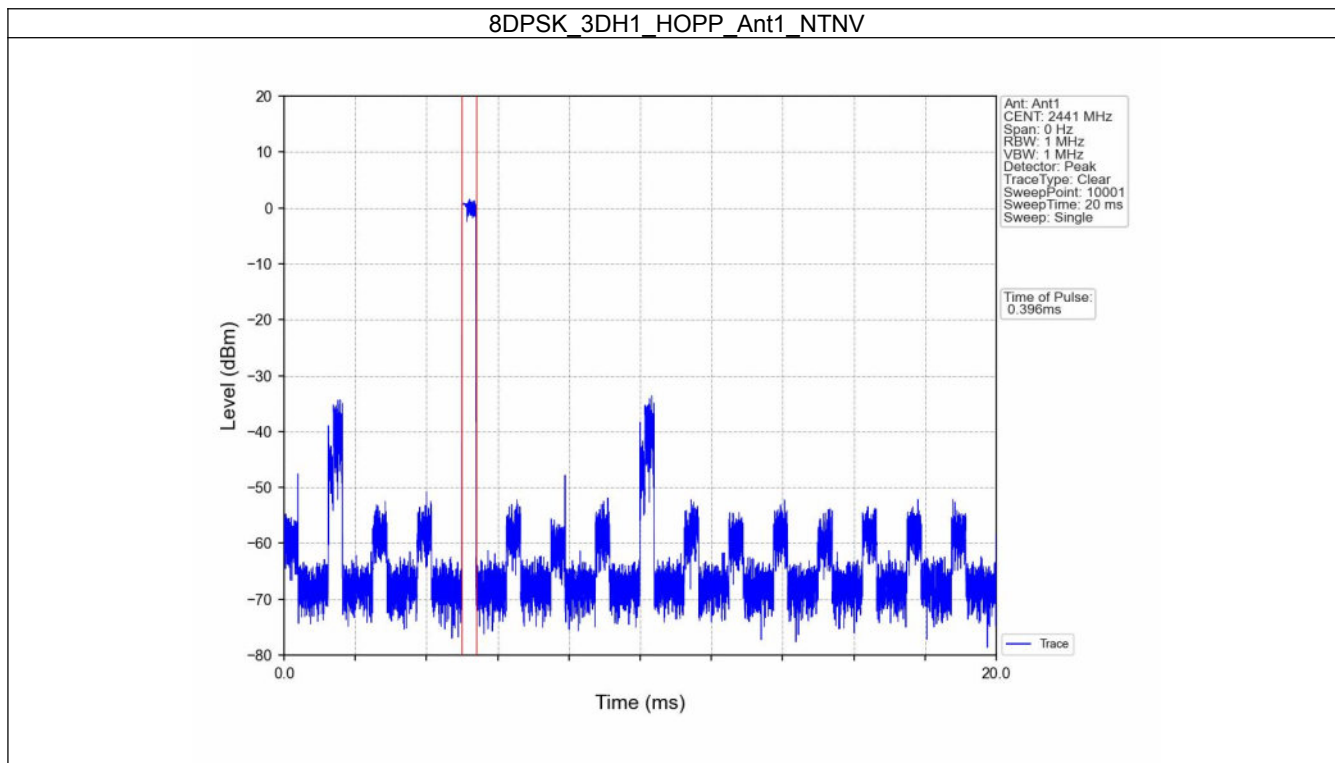
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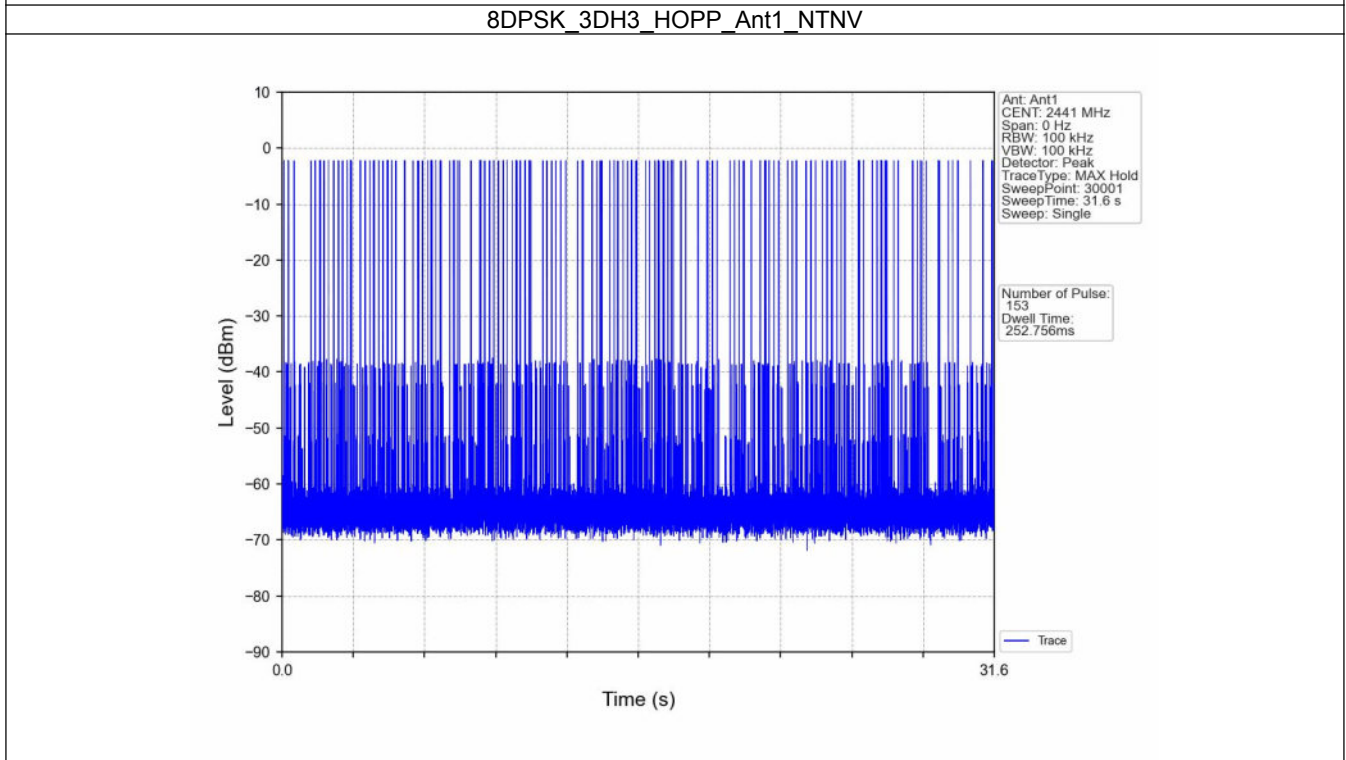
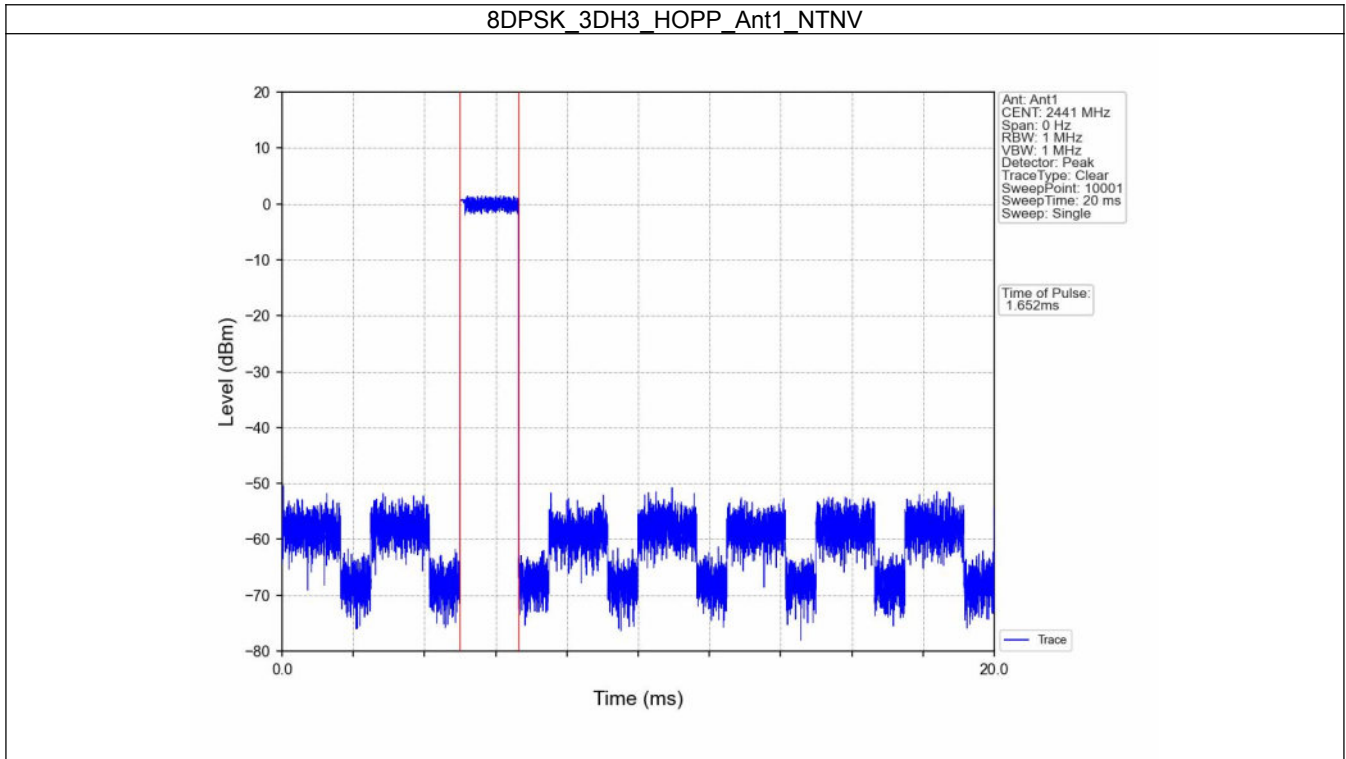
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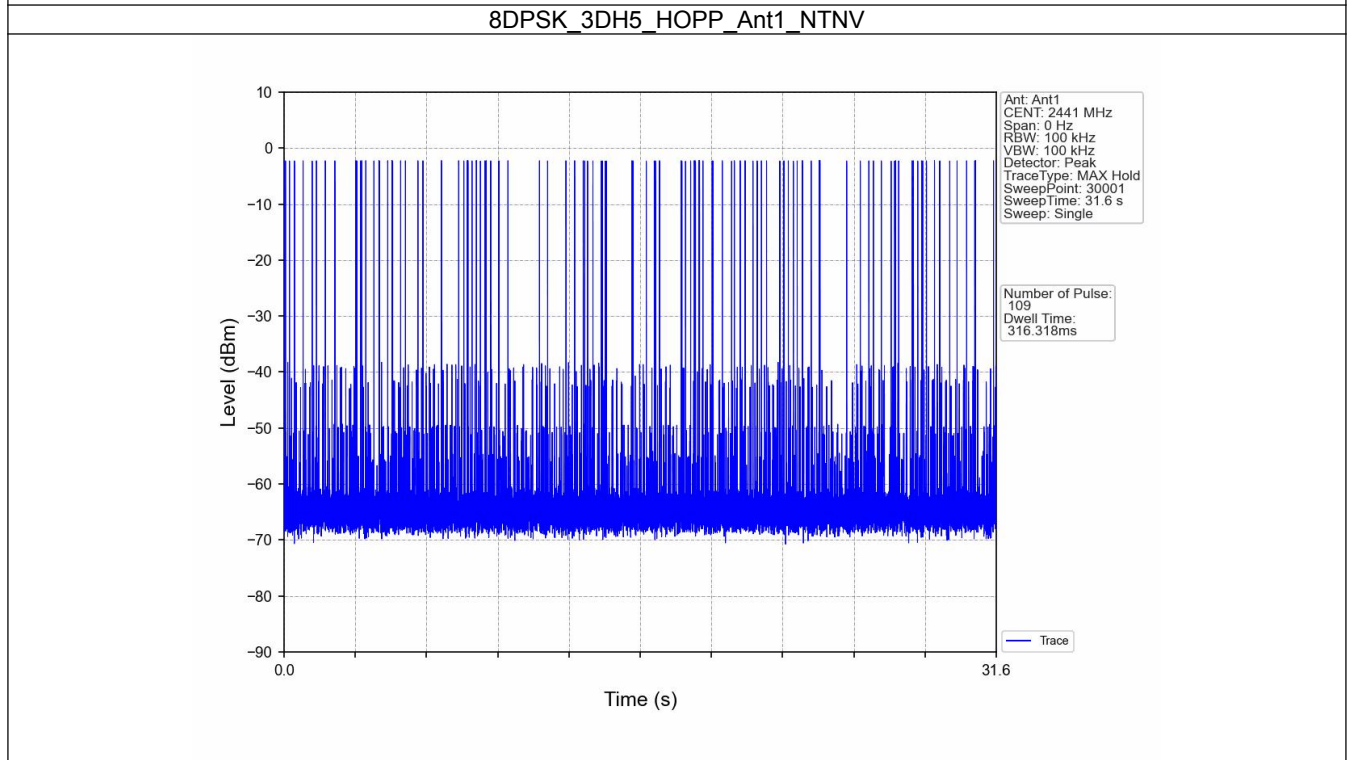
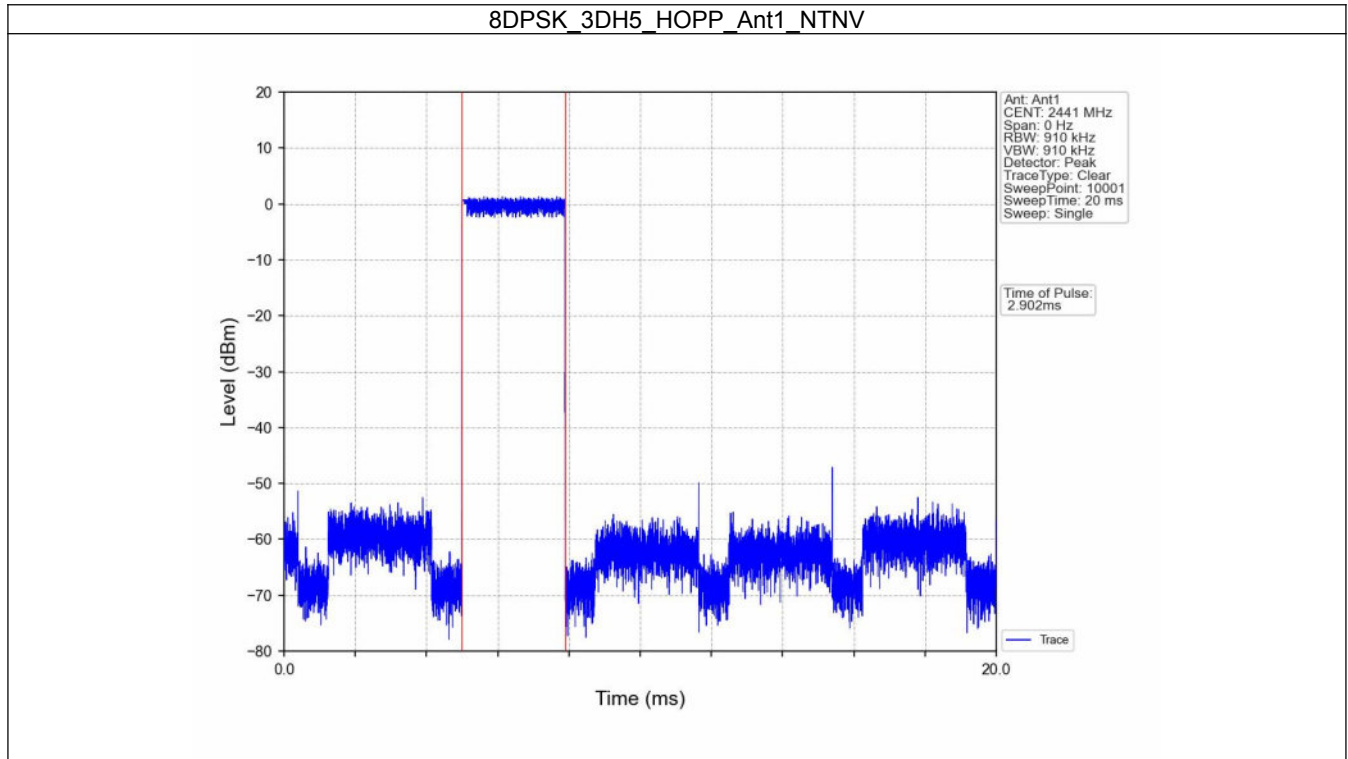
FCC ID: 2AC9N-1686122-03



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FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03

6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Ref

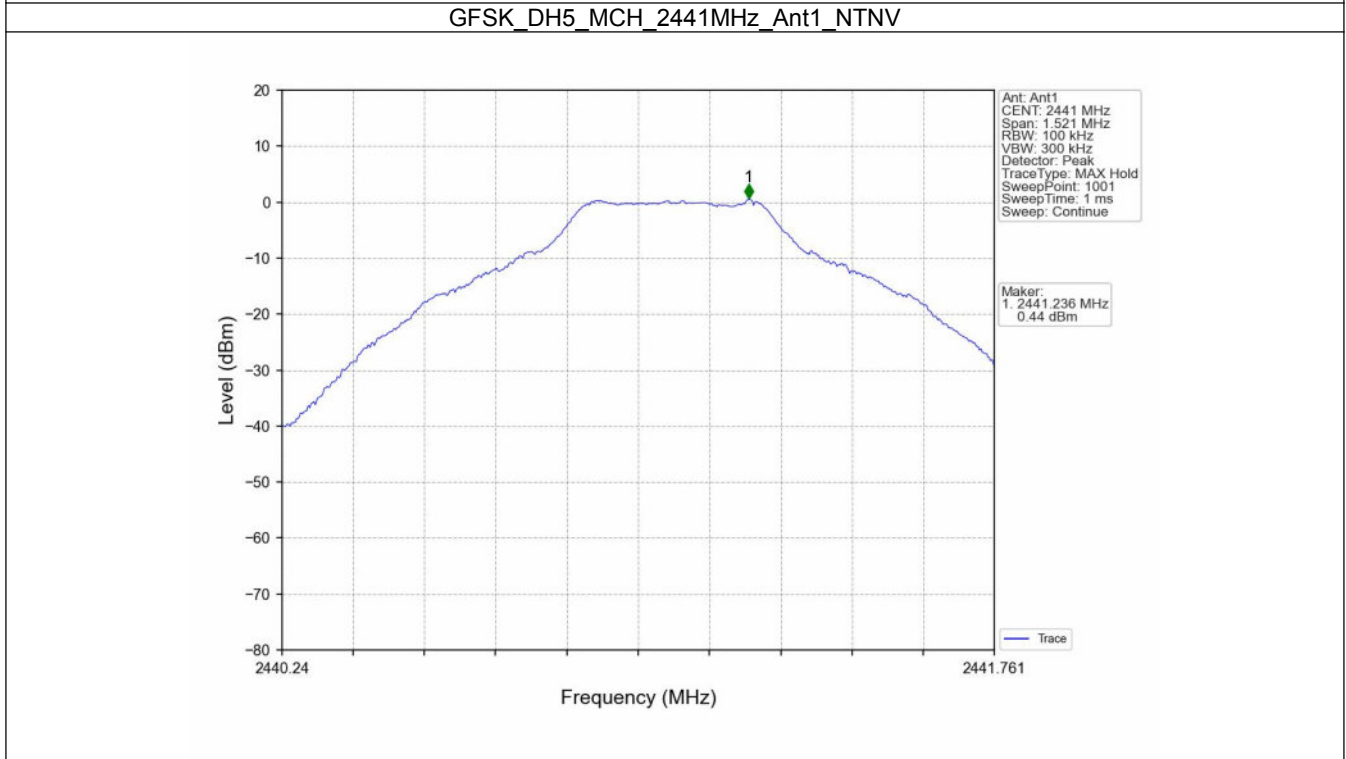
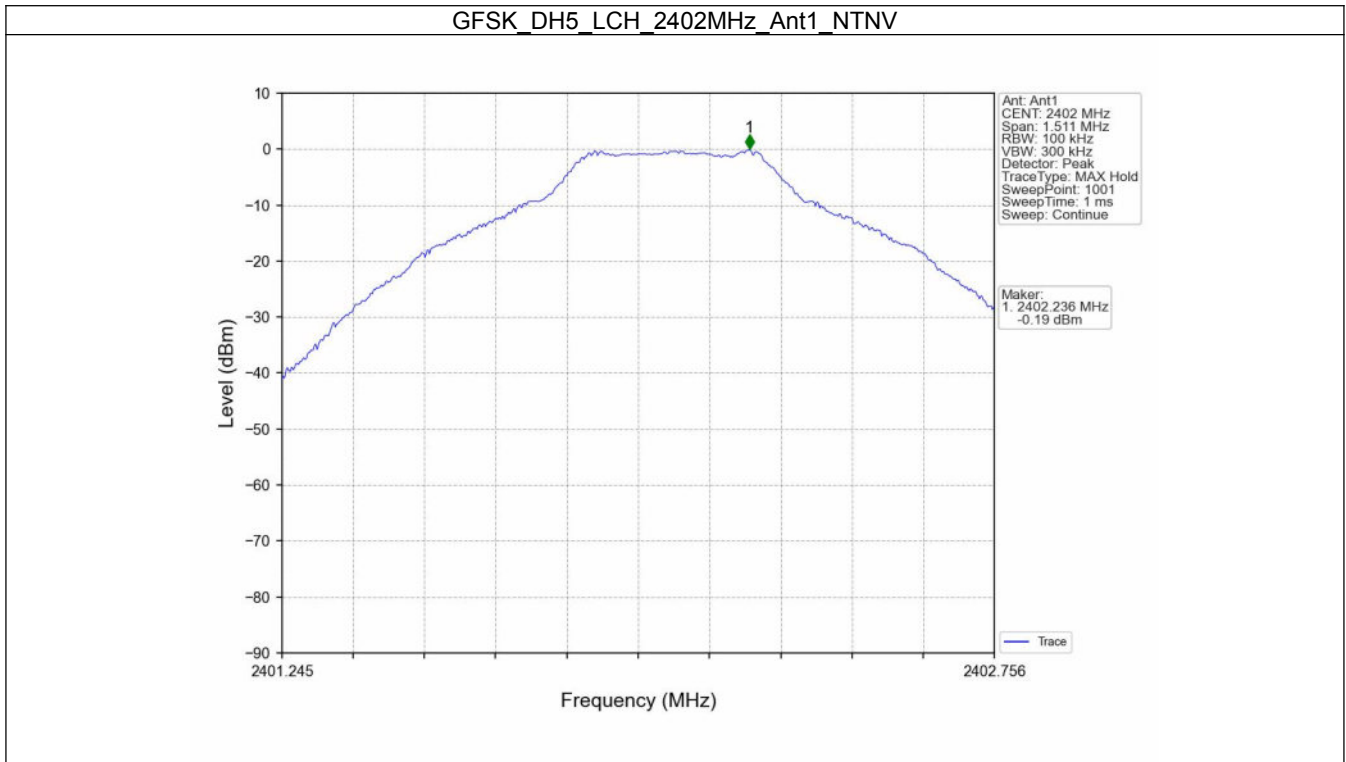
6.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	-0.19
		2441	DH5	1	0.44
		2480	DH5	1	-0.39
Pi/4DQPSK	SISO	2402	2DH5	1	-0.13
		2441	2DH5	1	0.49
		2480	2DH5	1	-0.31
8DPSK	SISO	2402	3DH5	1	-0.15
		2441	3DH5	1	0.34
		2480	3DH5	1	-0.31

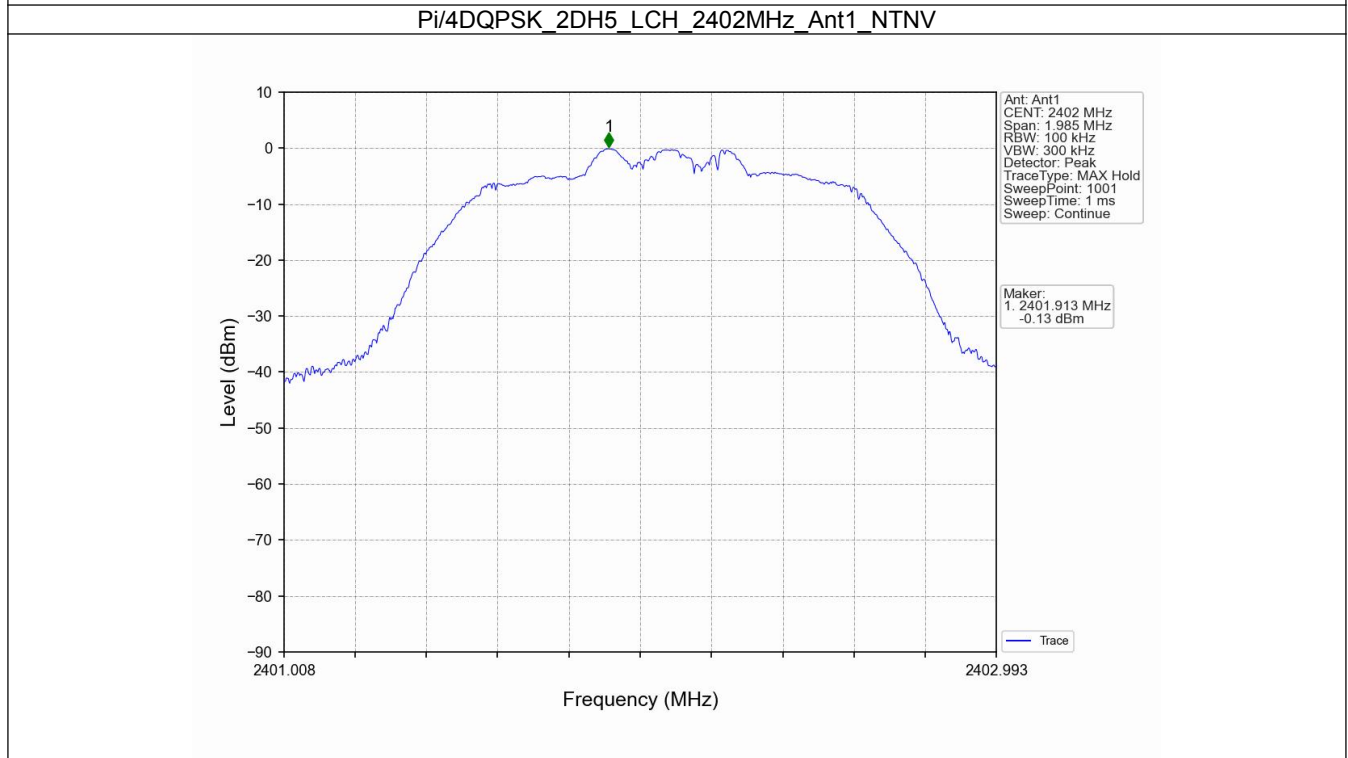
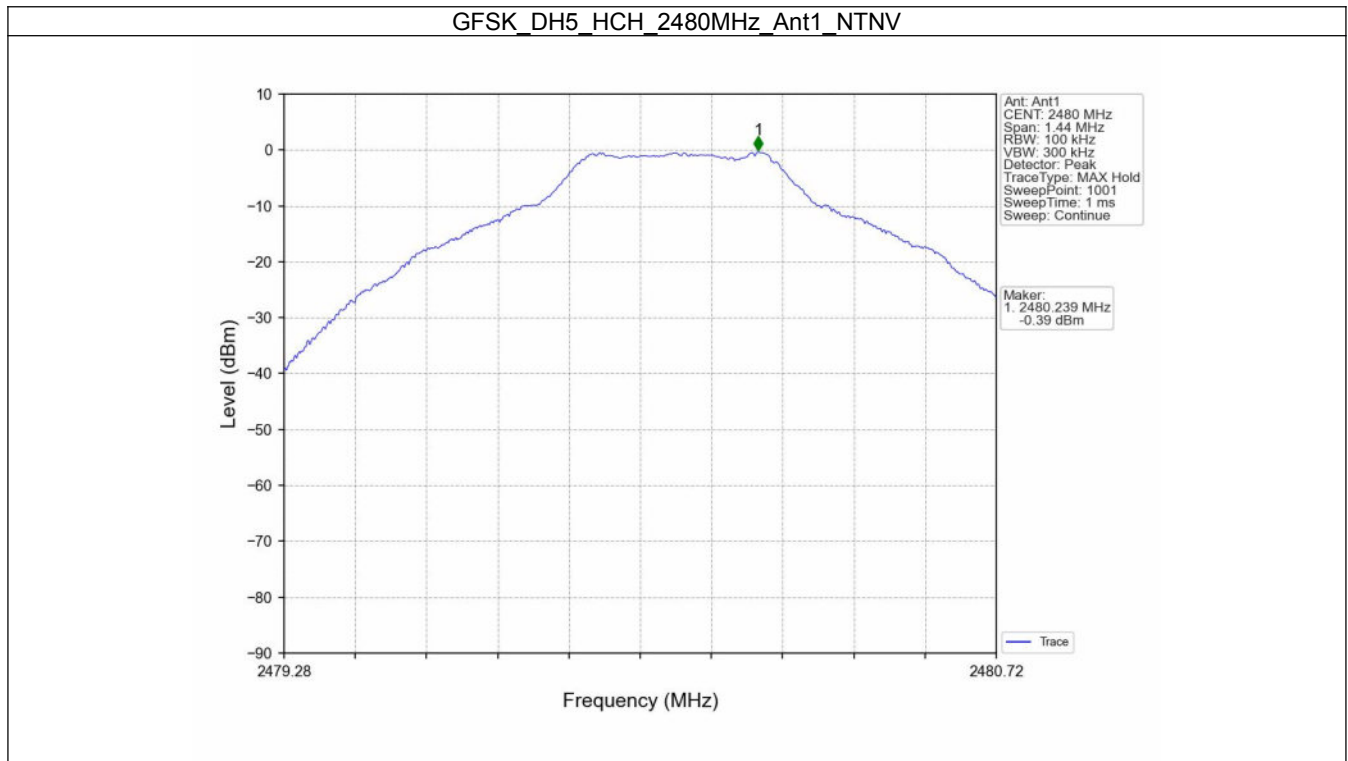
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

FCC ID: 2AC9N-1686122-03

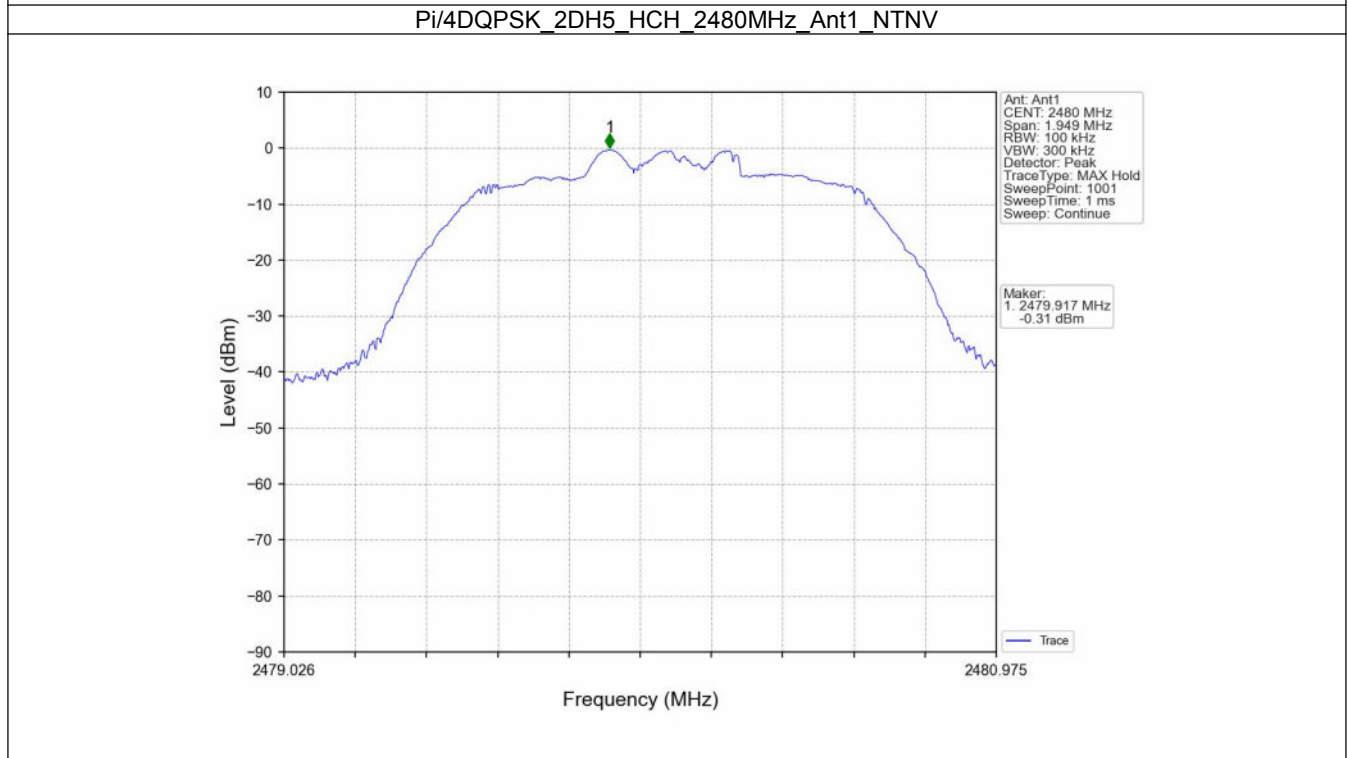
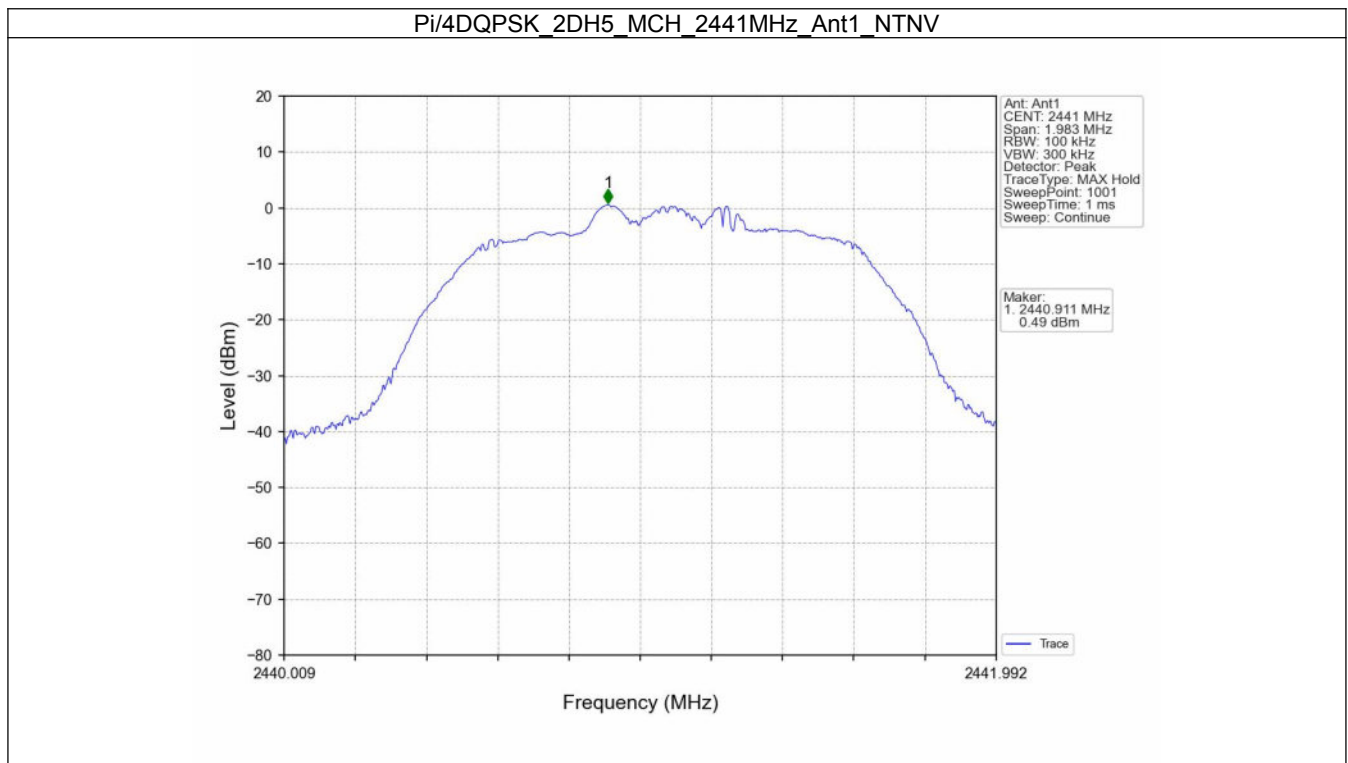
6.1.2 Test Graph



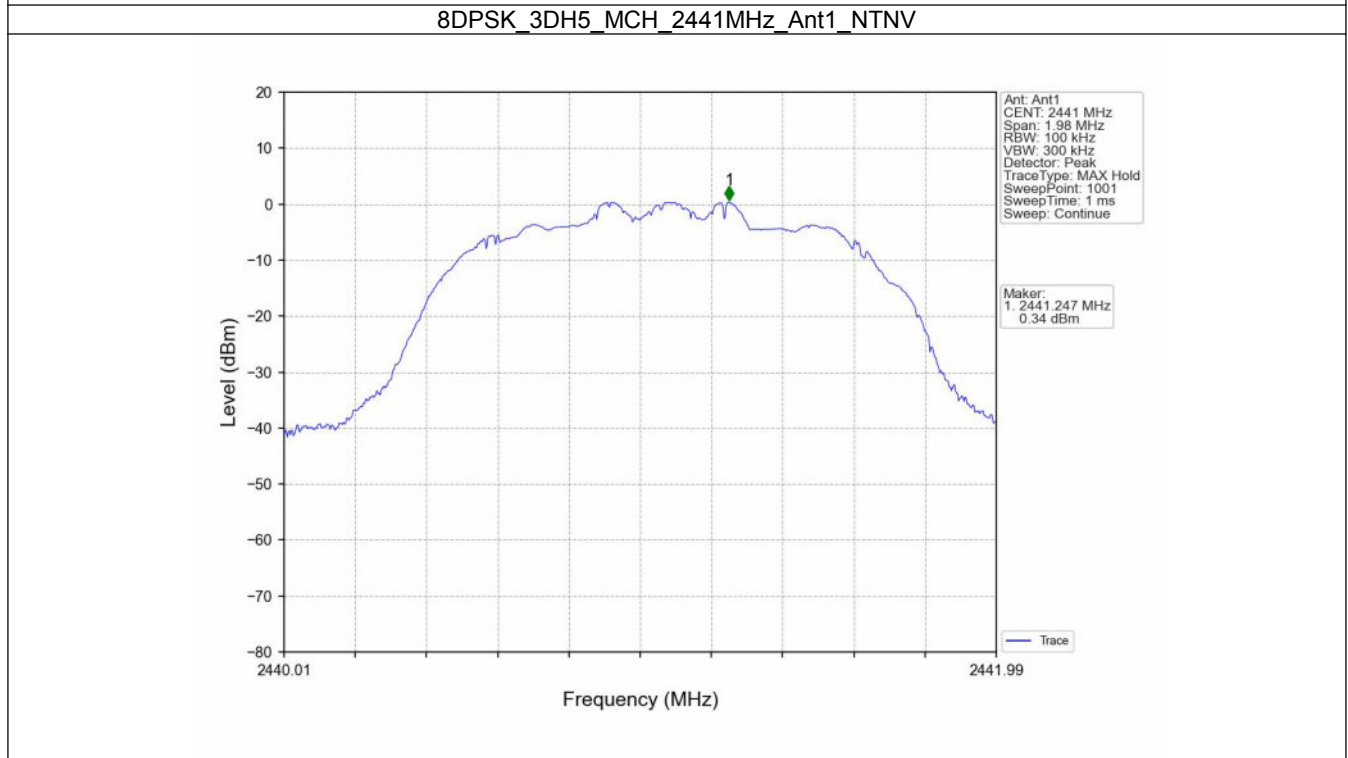
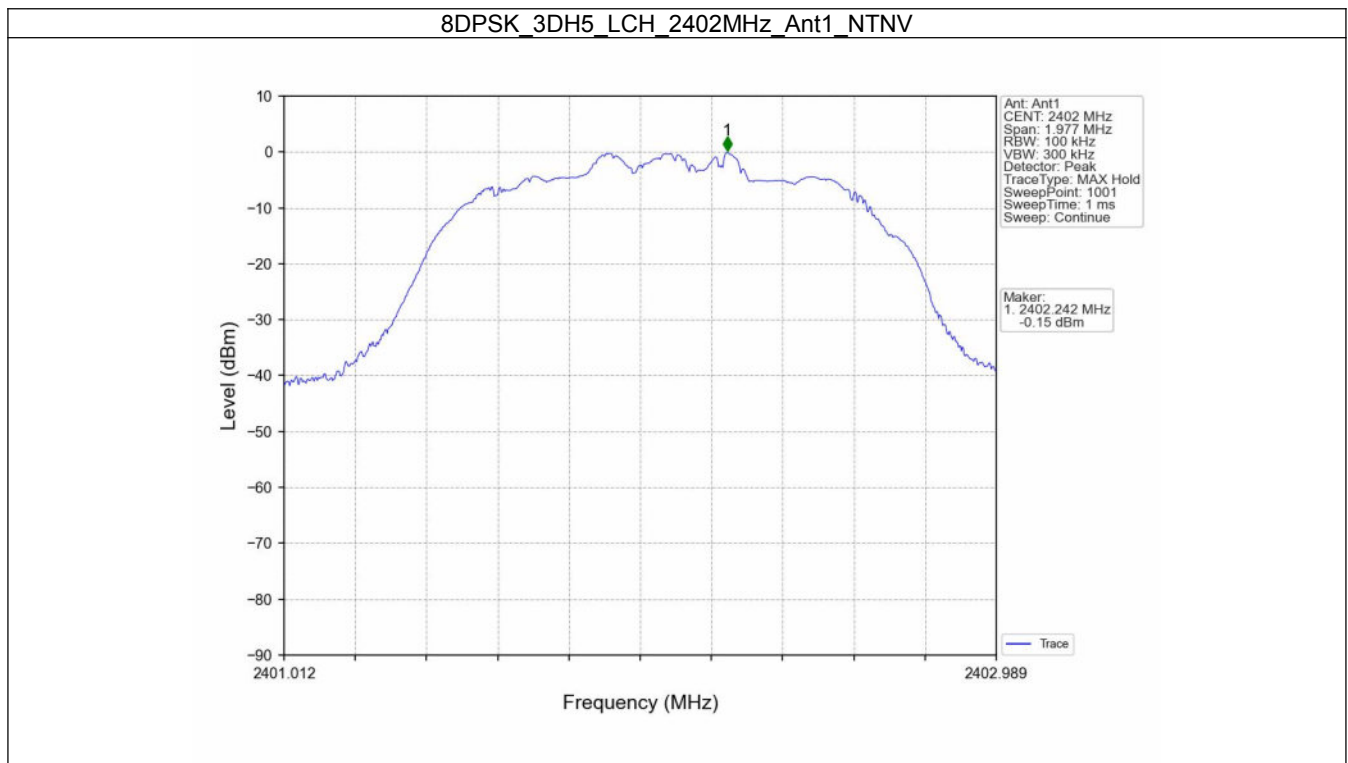
FCC ID: 2AC9N-1686122-03



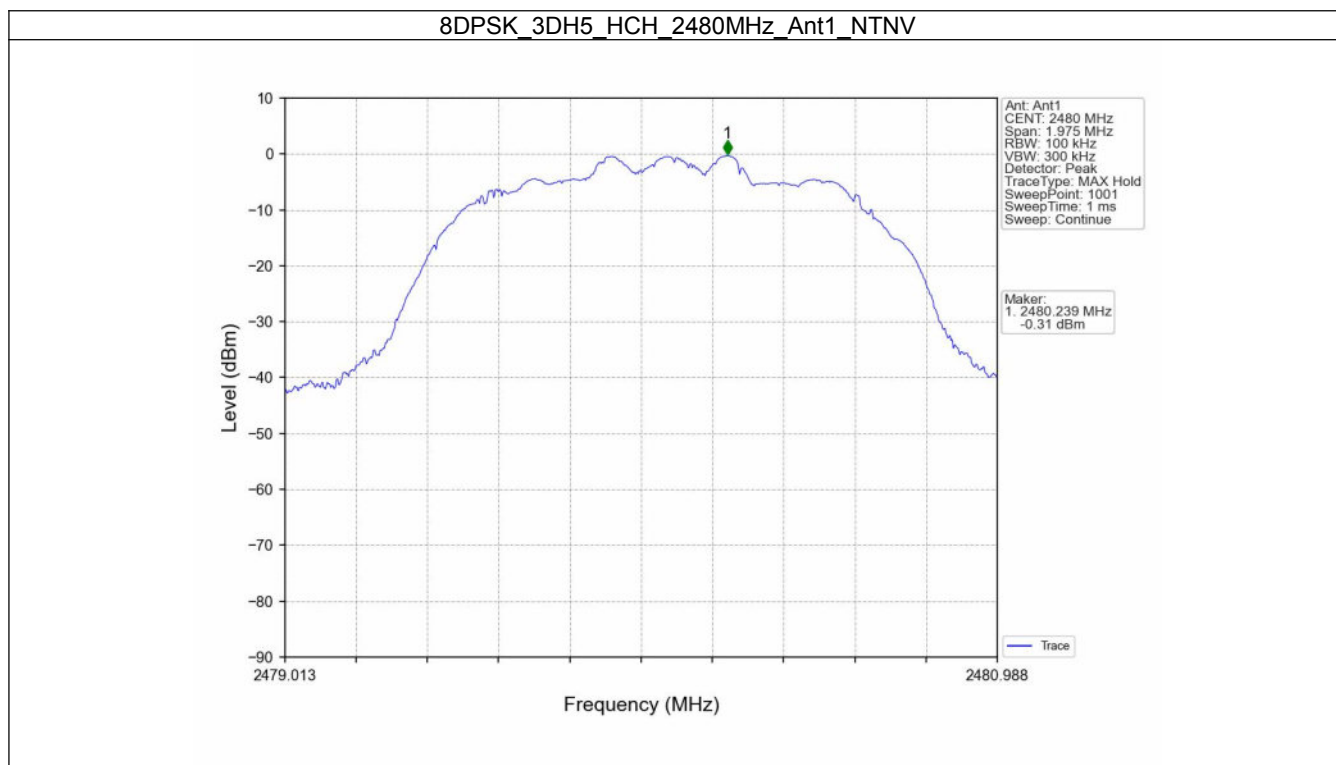
FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03

6.2 CSE

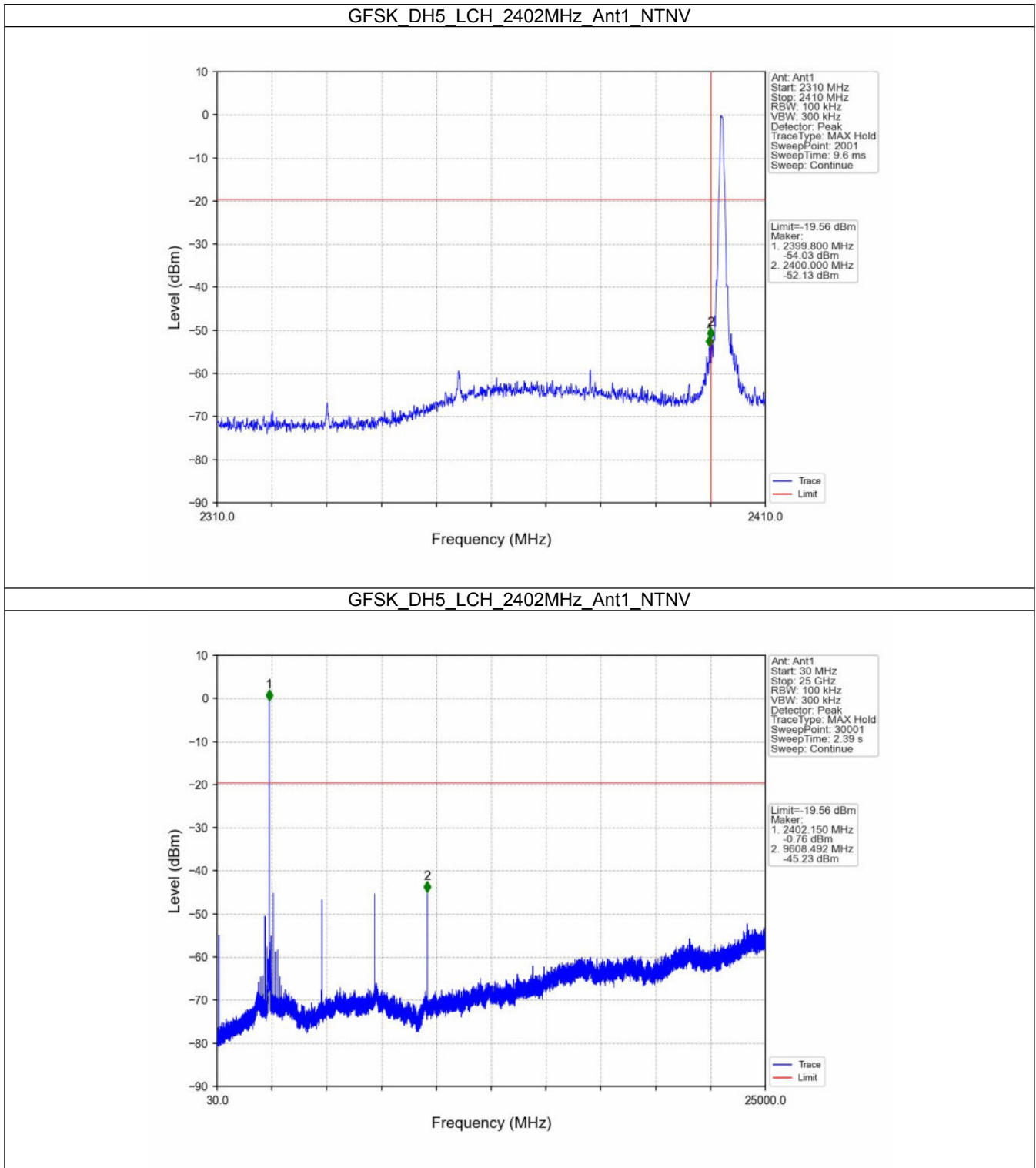
6.2.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	0.44	-19.56	Pass
		2441	DH5	1	0.44	-19.56	Pass
		2480	DH5	1	0.44	-19.56	Pass
		HOPP	DH5	1	0.44	-19.56	Pass
					0.44	-19.56	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	0.49	-19.51	Pass
		2441	2DH5	1	0.49	-19.51	Pass
		2480	2DH5	1	0.49	-19.51	Pass
		HOPP	2DH5	1	0.49	-19.51	Pass
					0.49	-19.51	Pass
8DPSK	SISO	2402	3DH5	1	0.34	-19.66	Pass
		2441	3DH5	1	0.34	-19.66	Pass
		2480	3DH5	1	0.34	-19.66	Pass
		HOPP	3DH5	1	0.34	-19.66	Pass
					0.34	-19.66	Pass

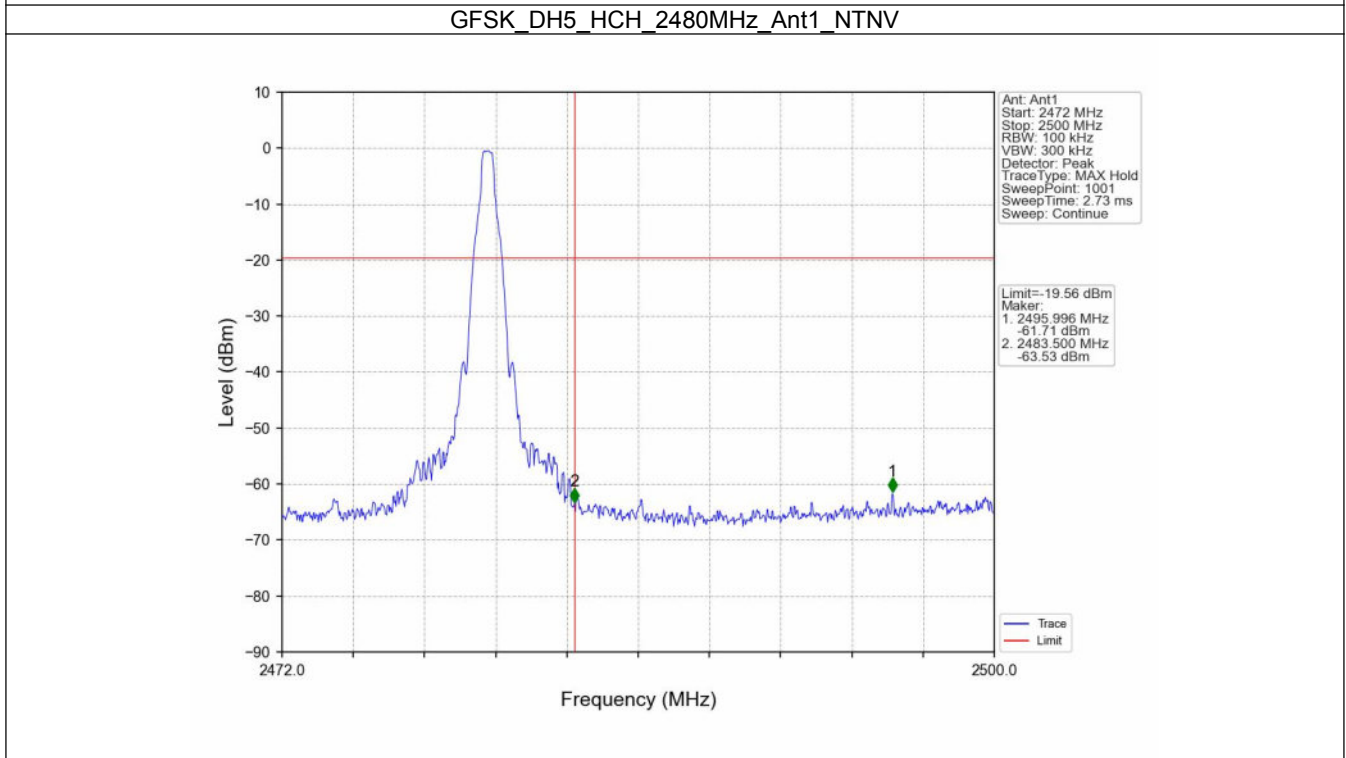
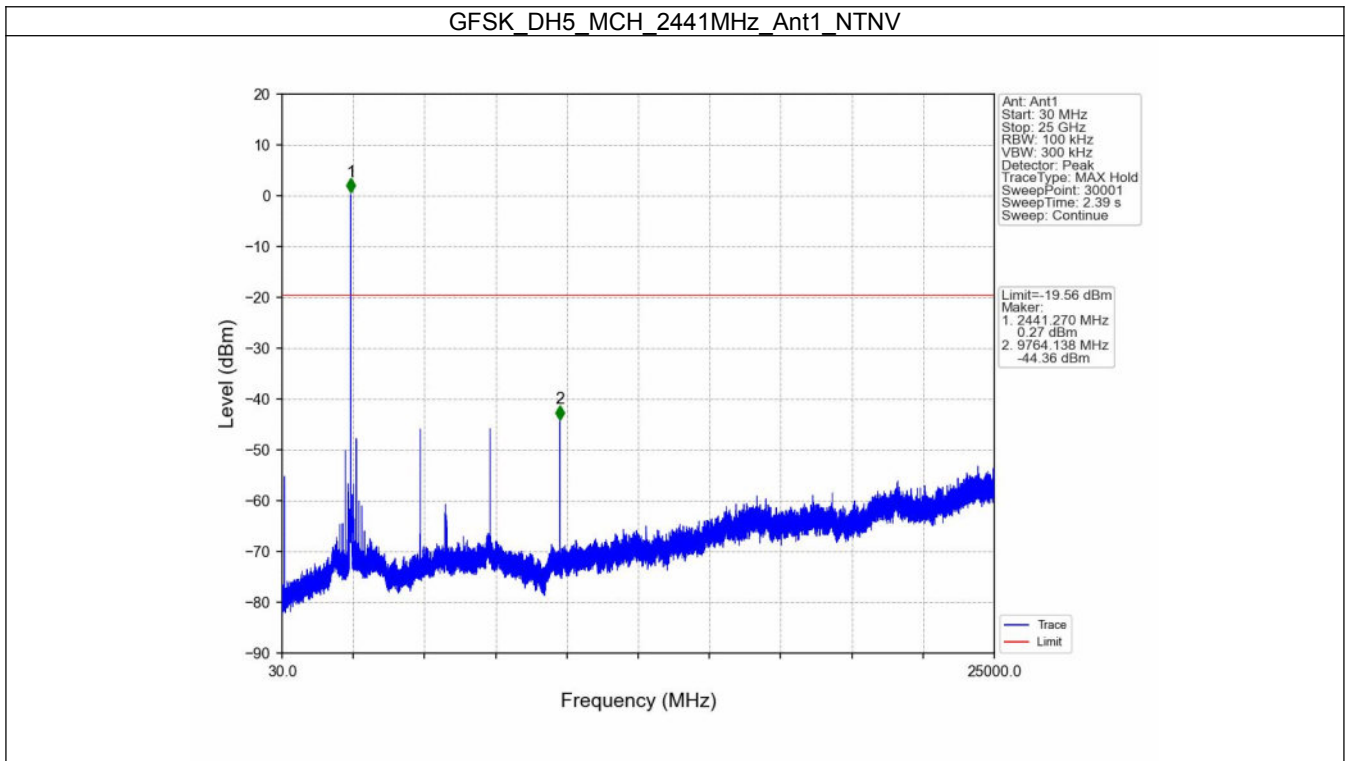
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

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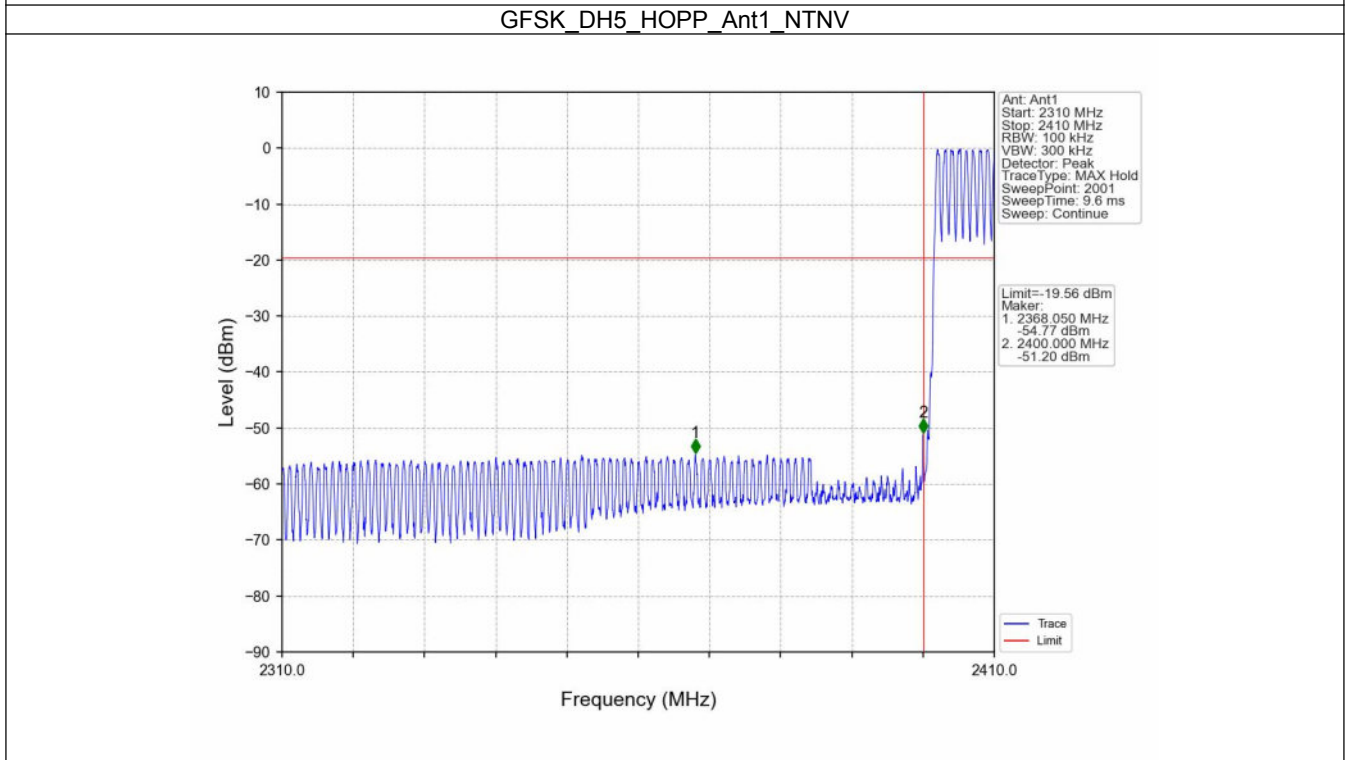
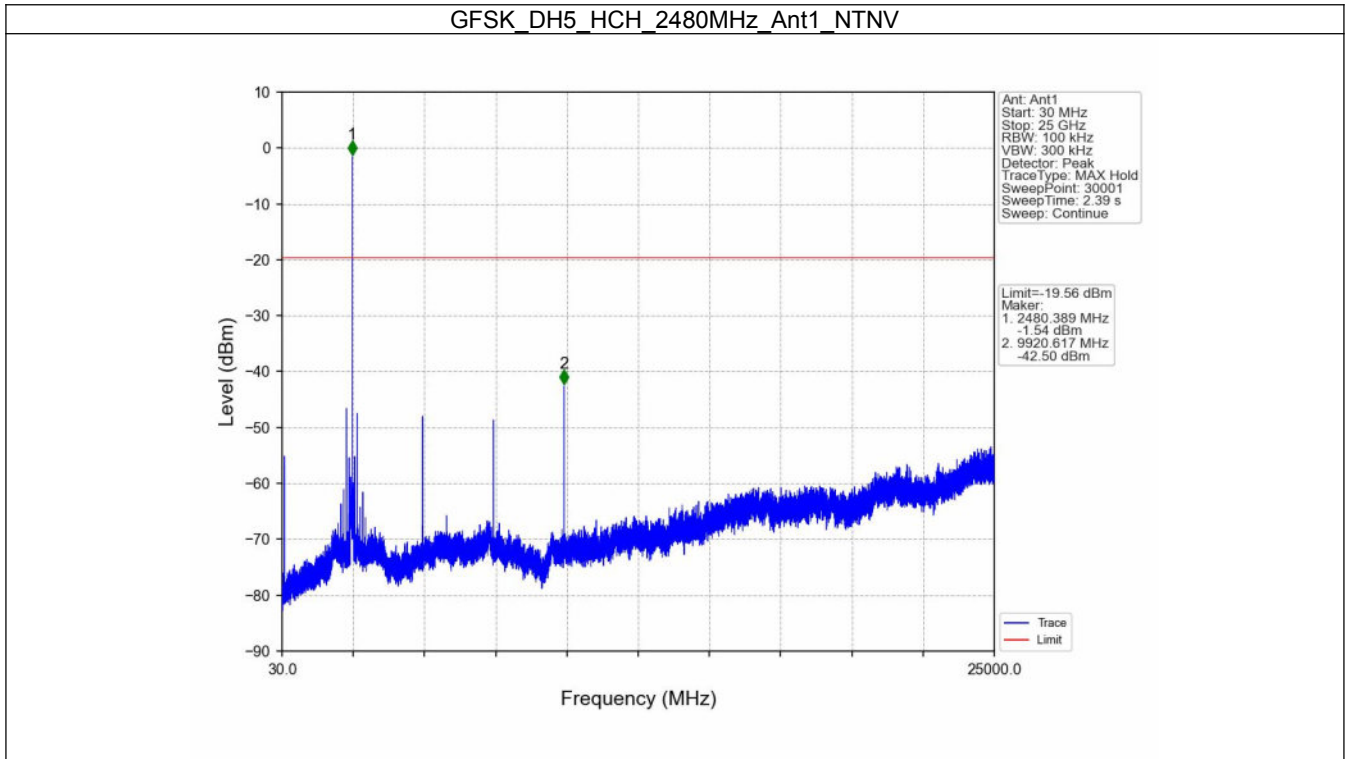
6.2.2 Test Graph



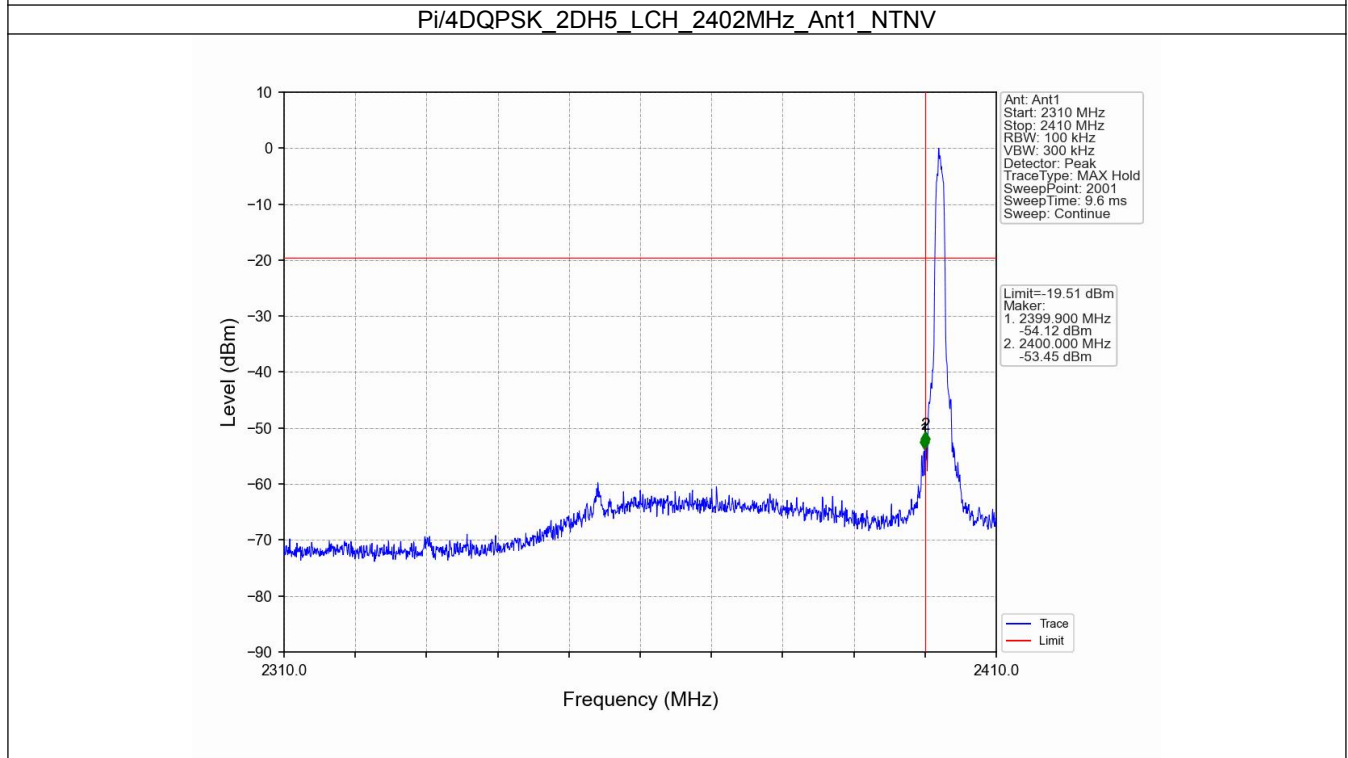
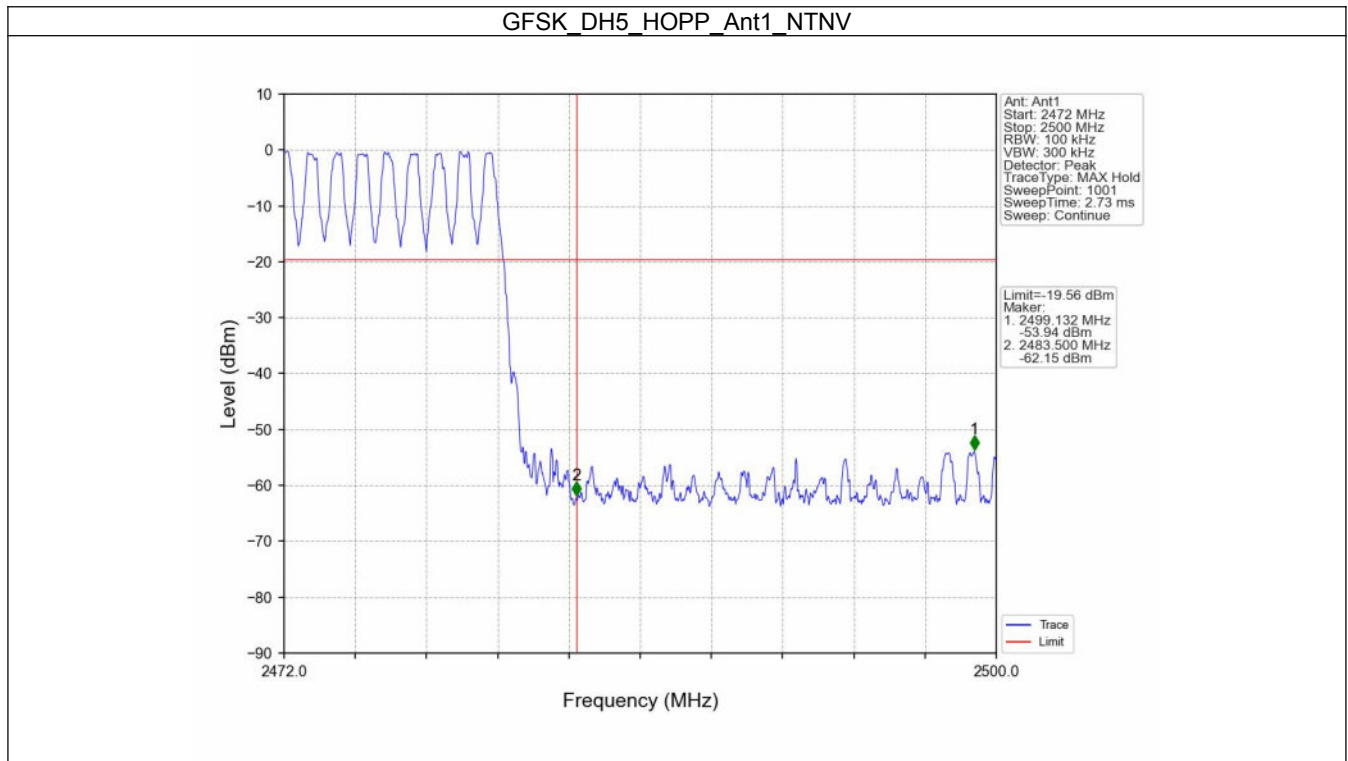
FCC ID: 2AC9N-1686122-03



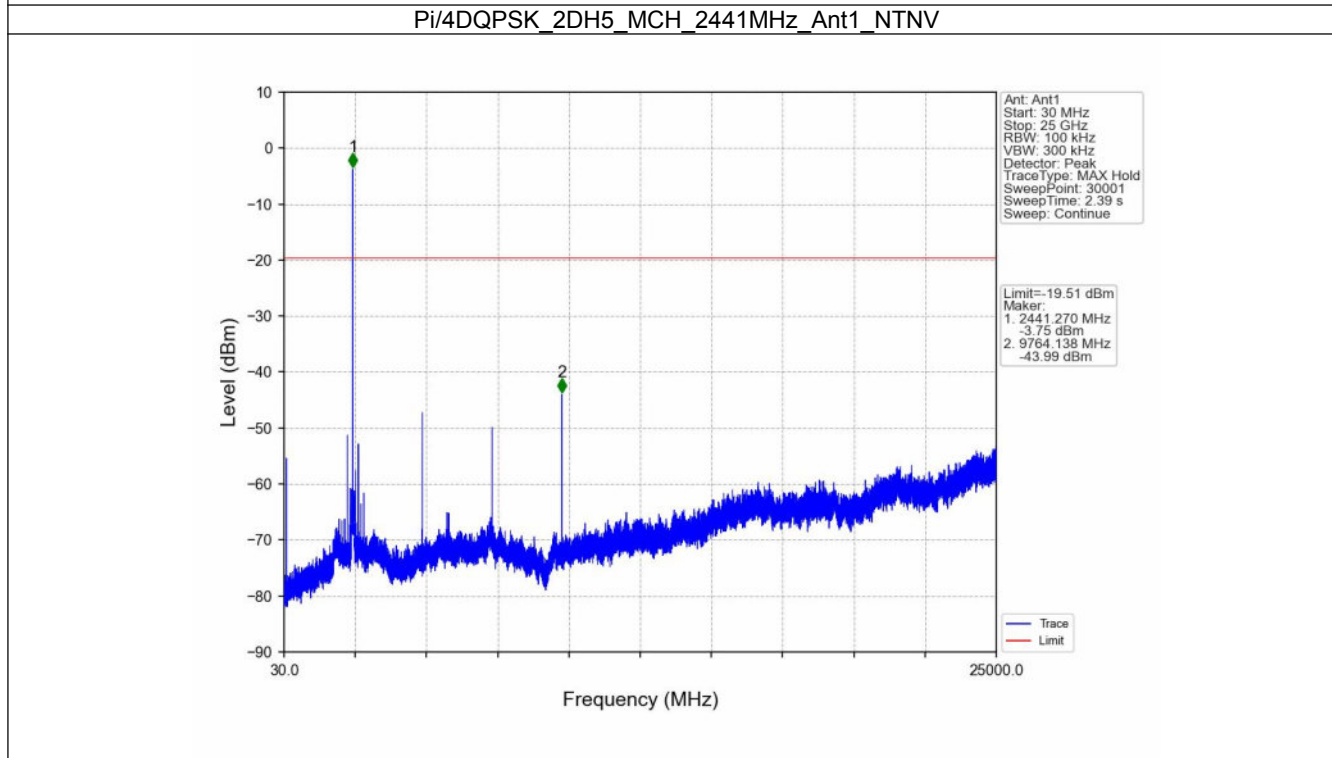
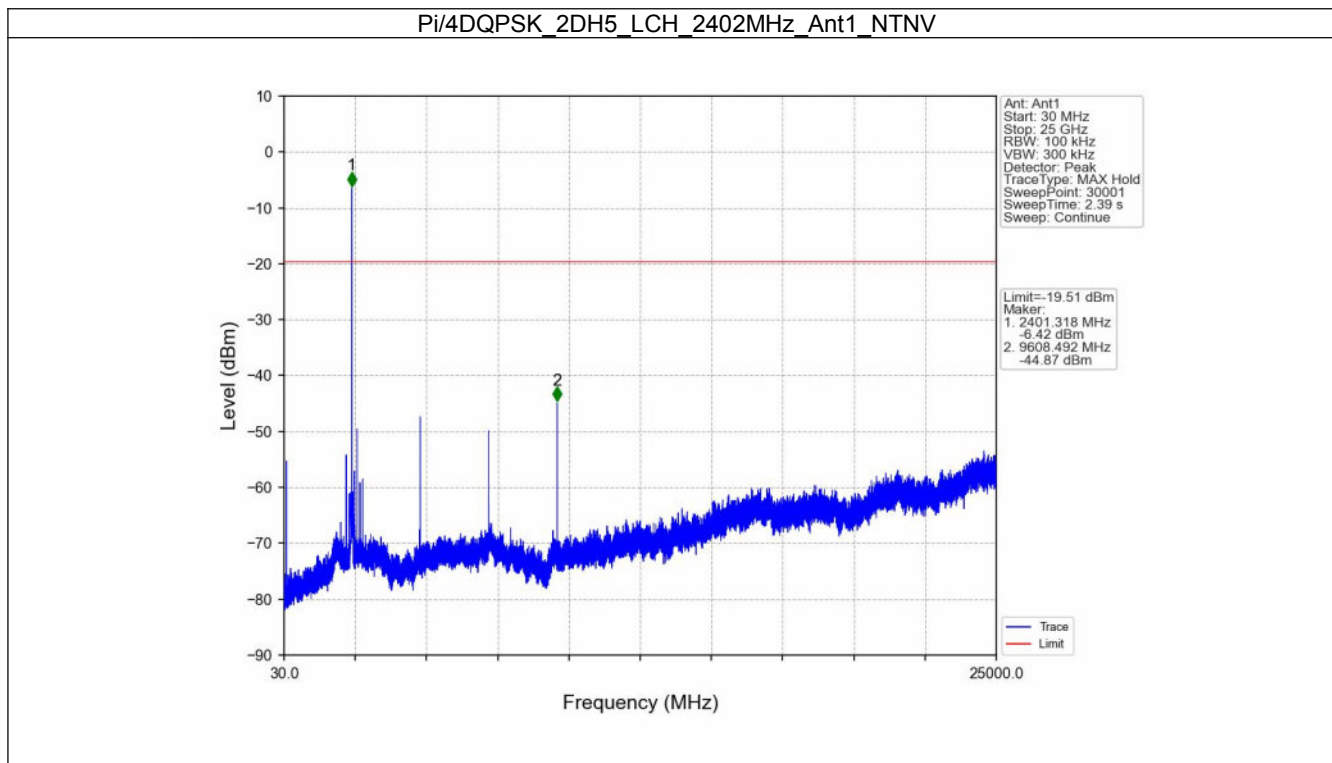
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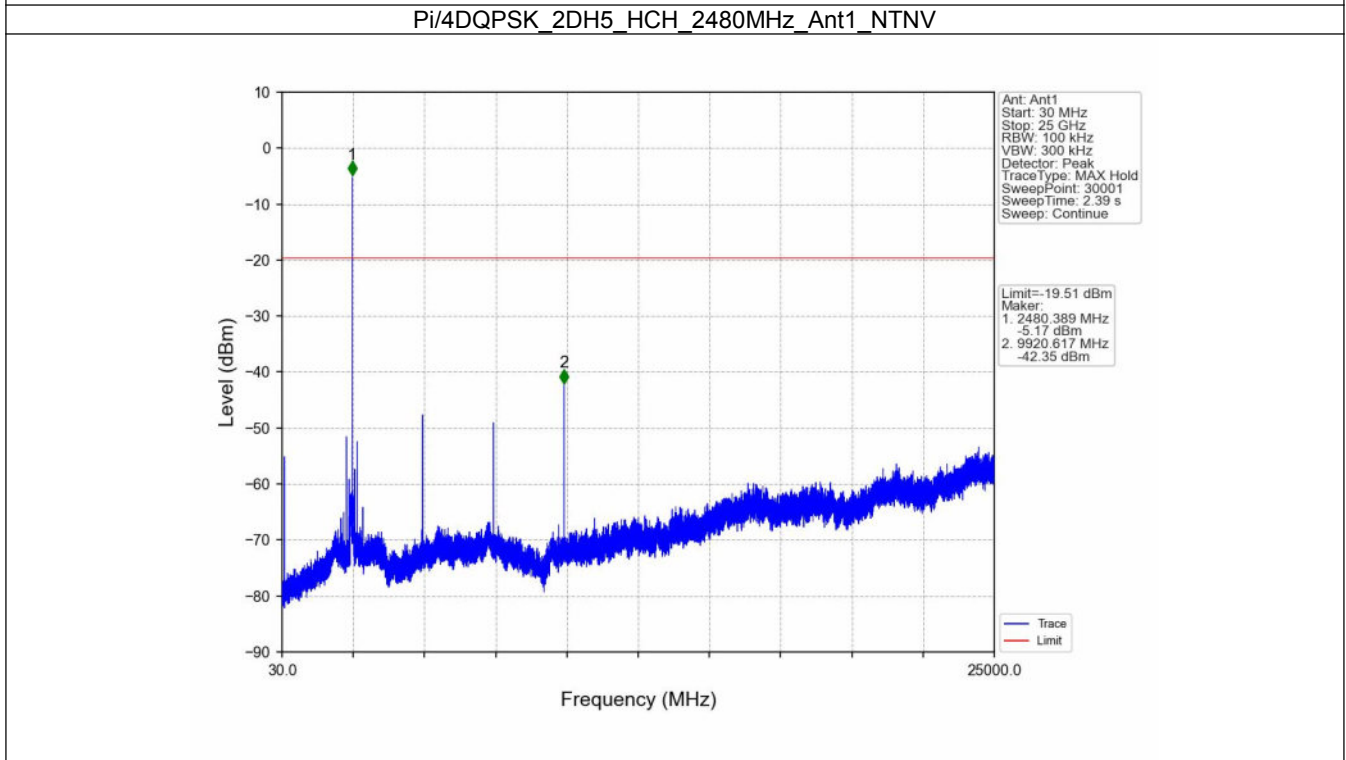
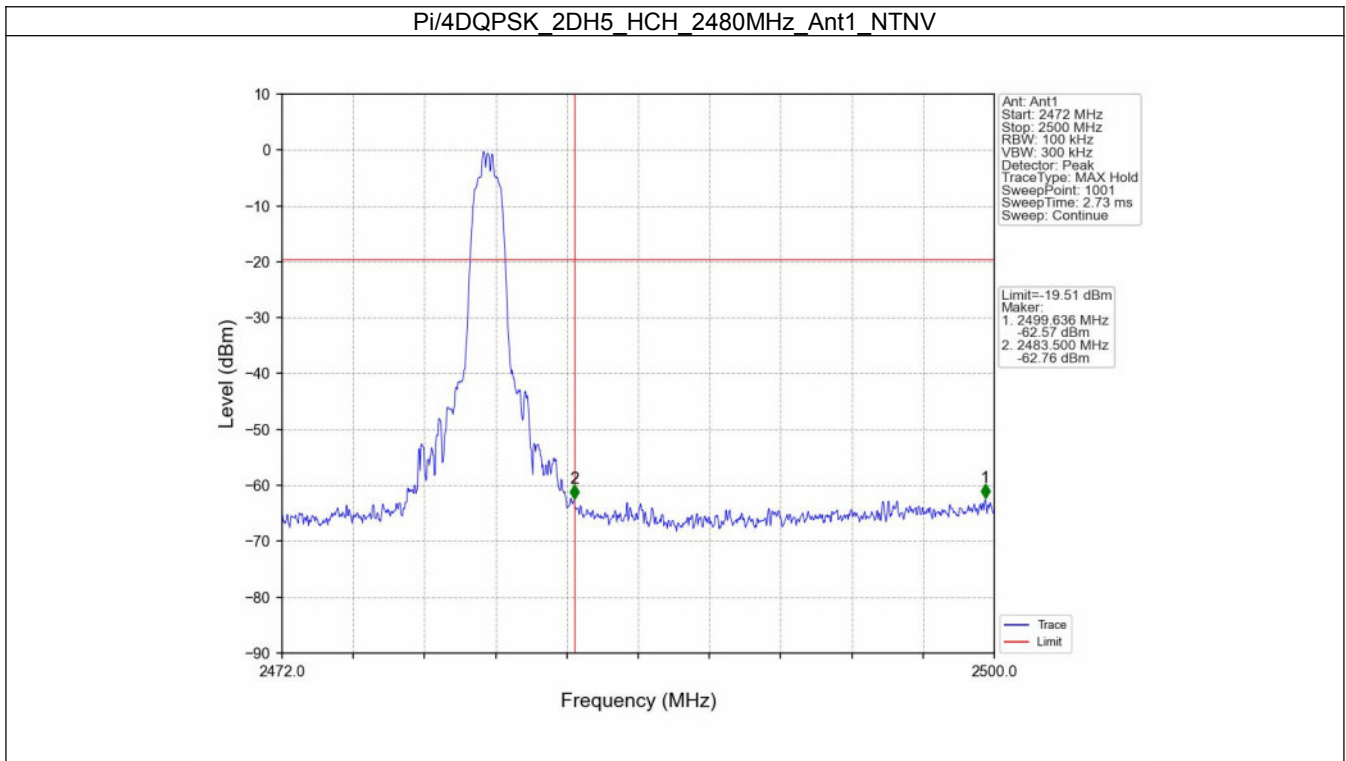
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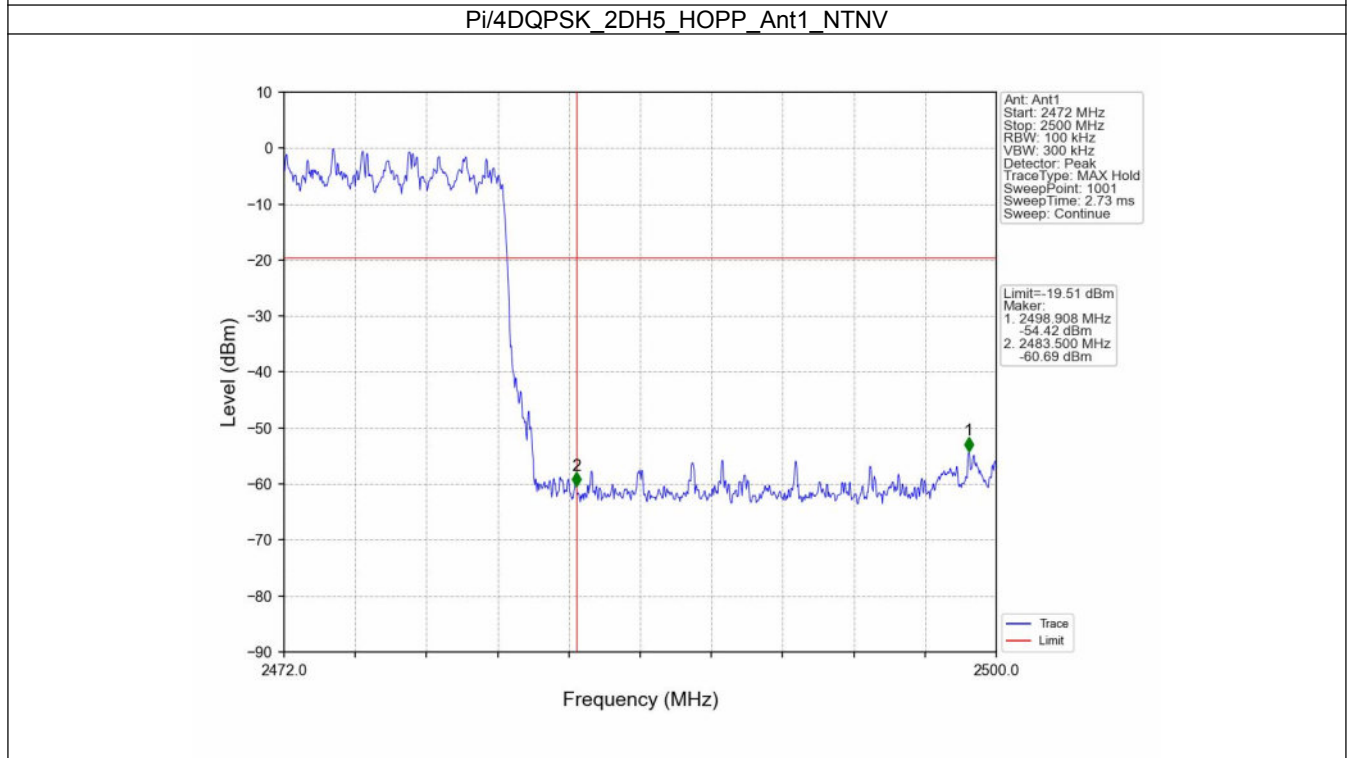
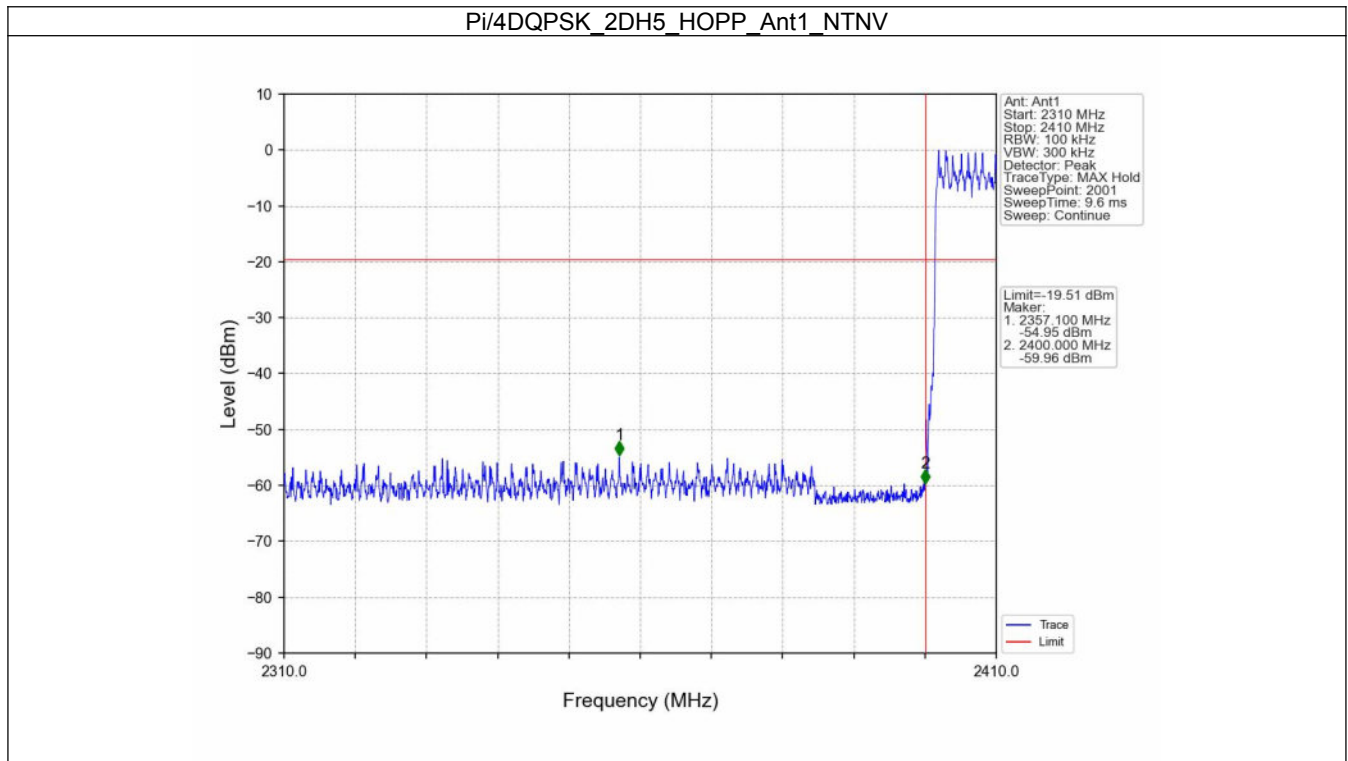
FCC ID: 2AC9N-1686122-03



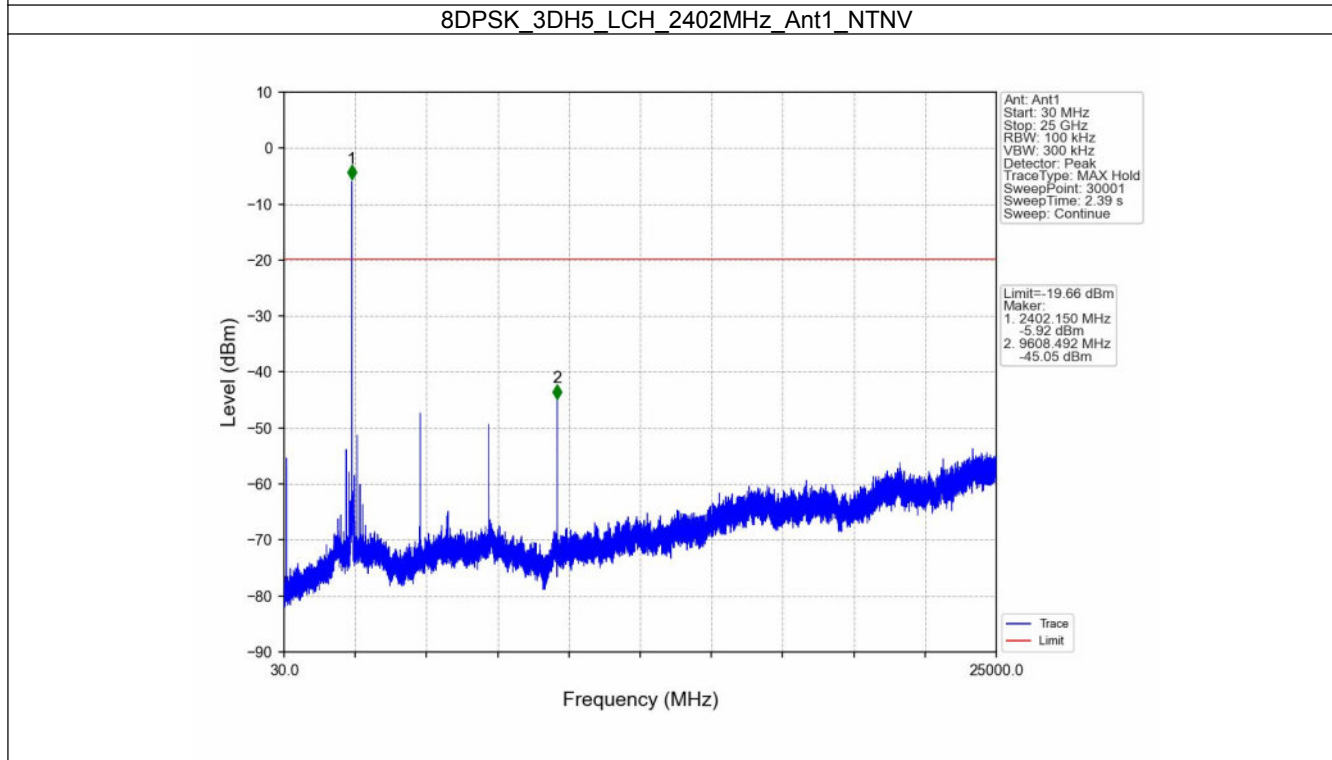
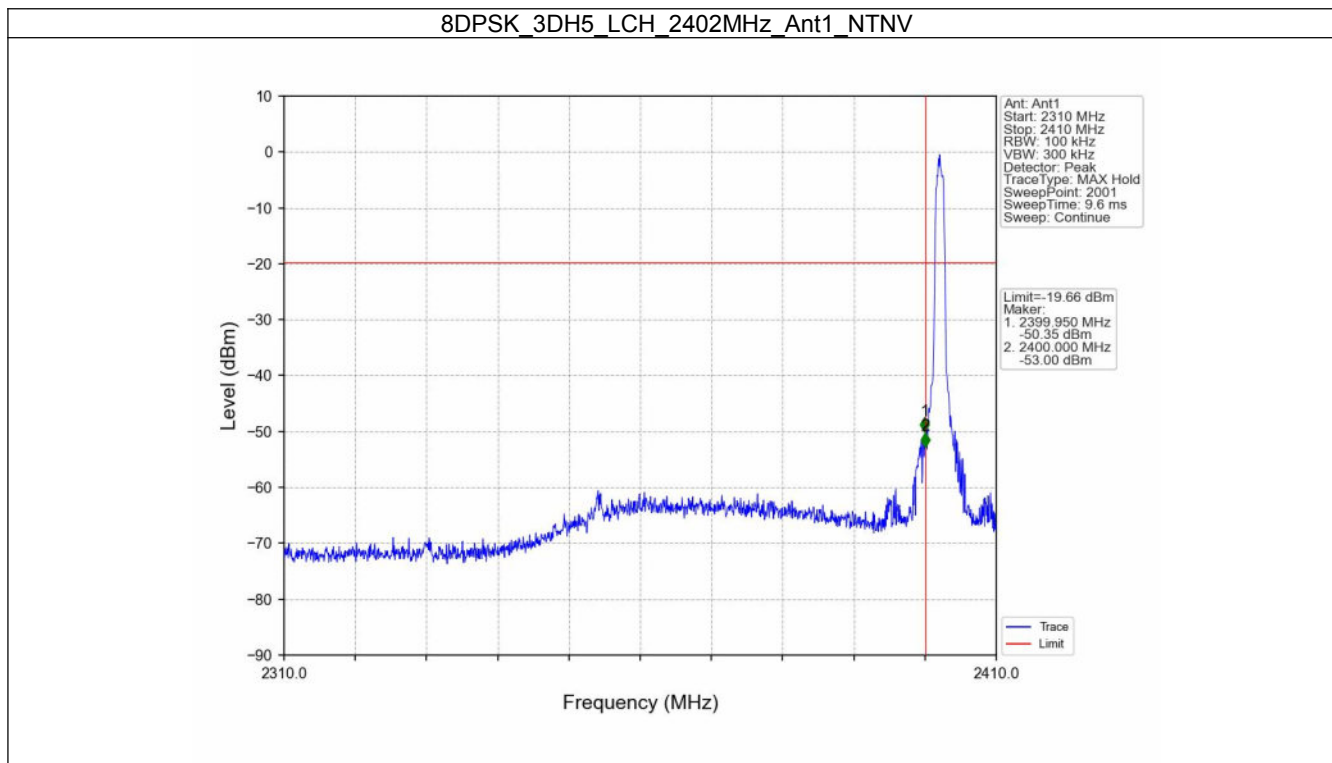
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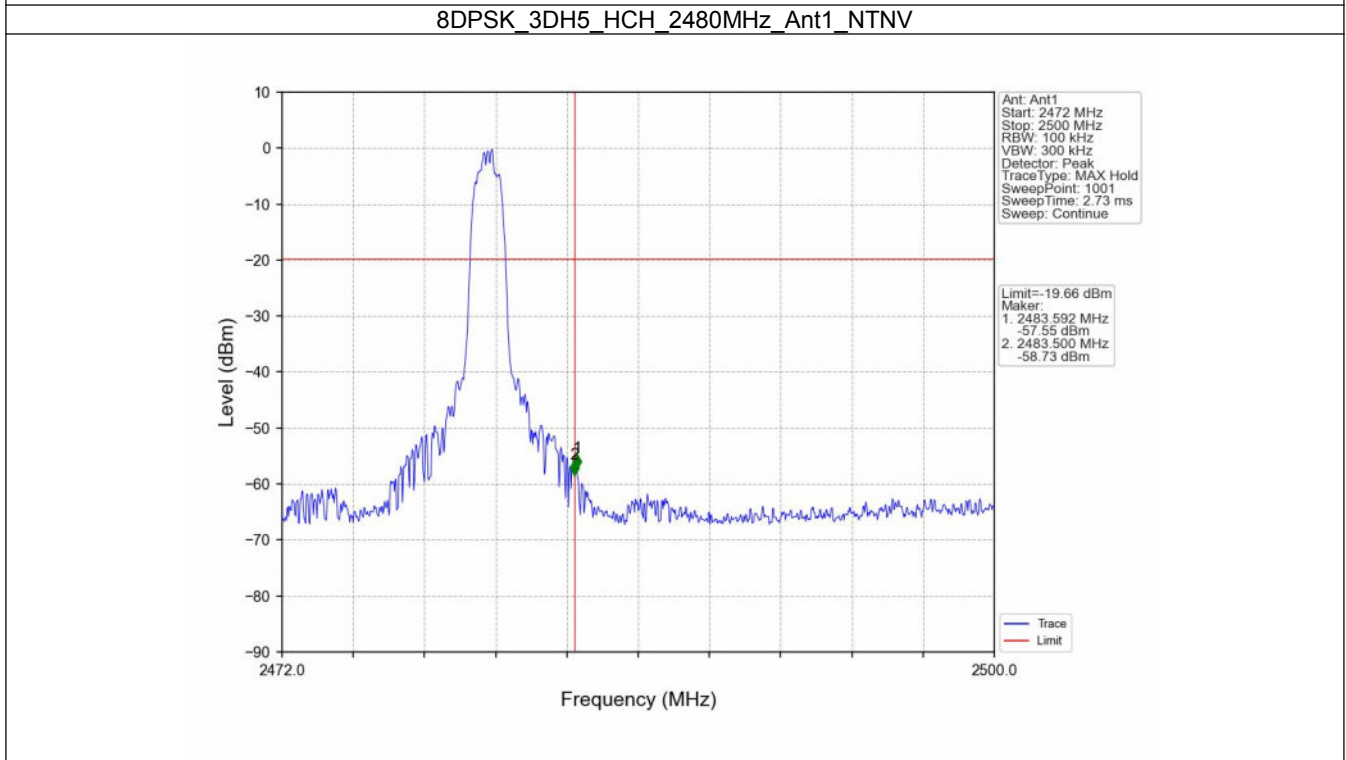
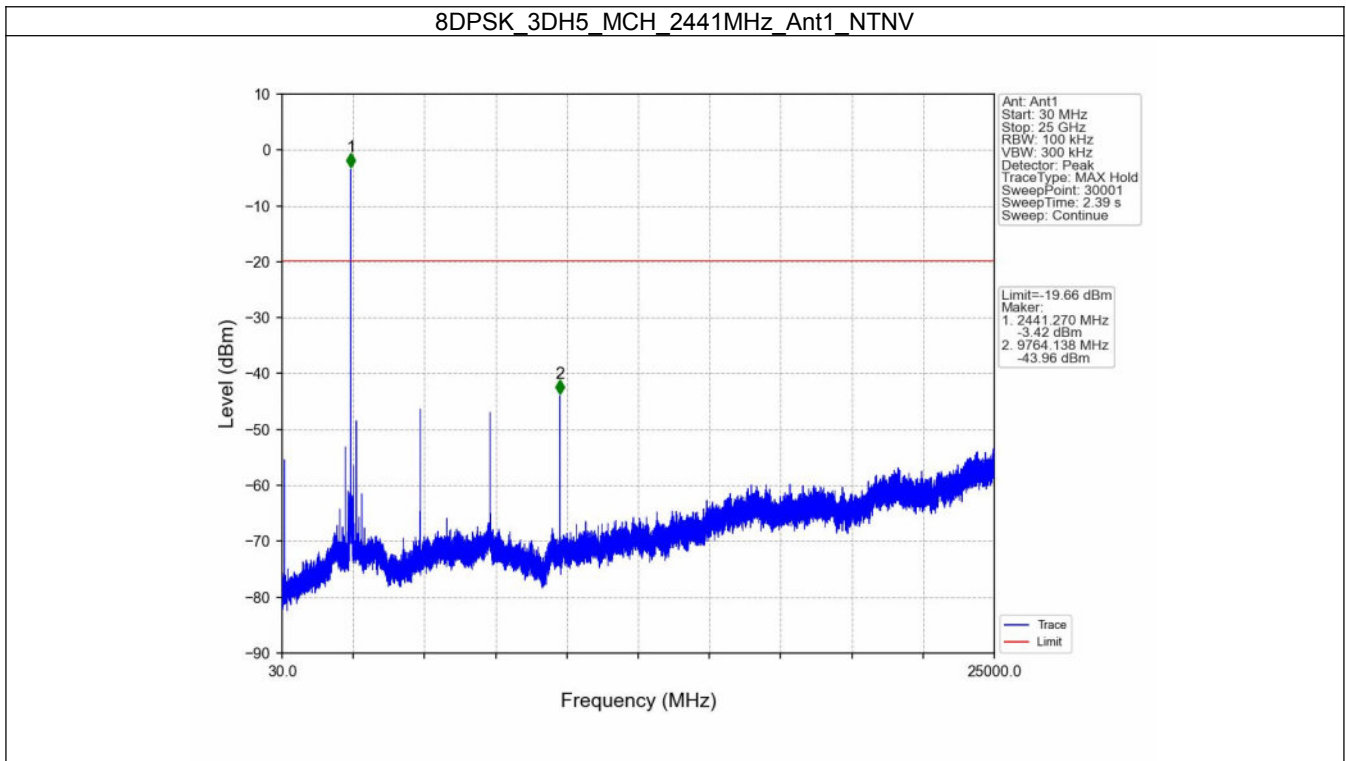
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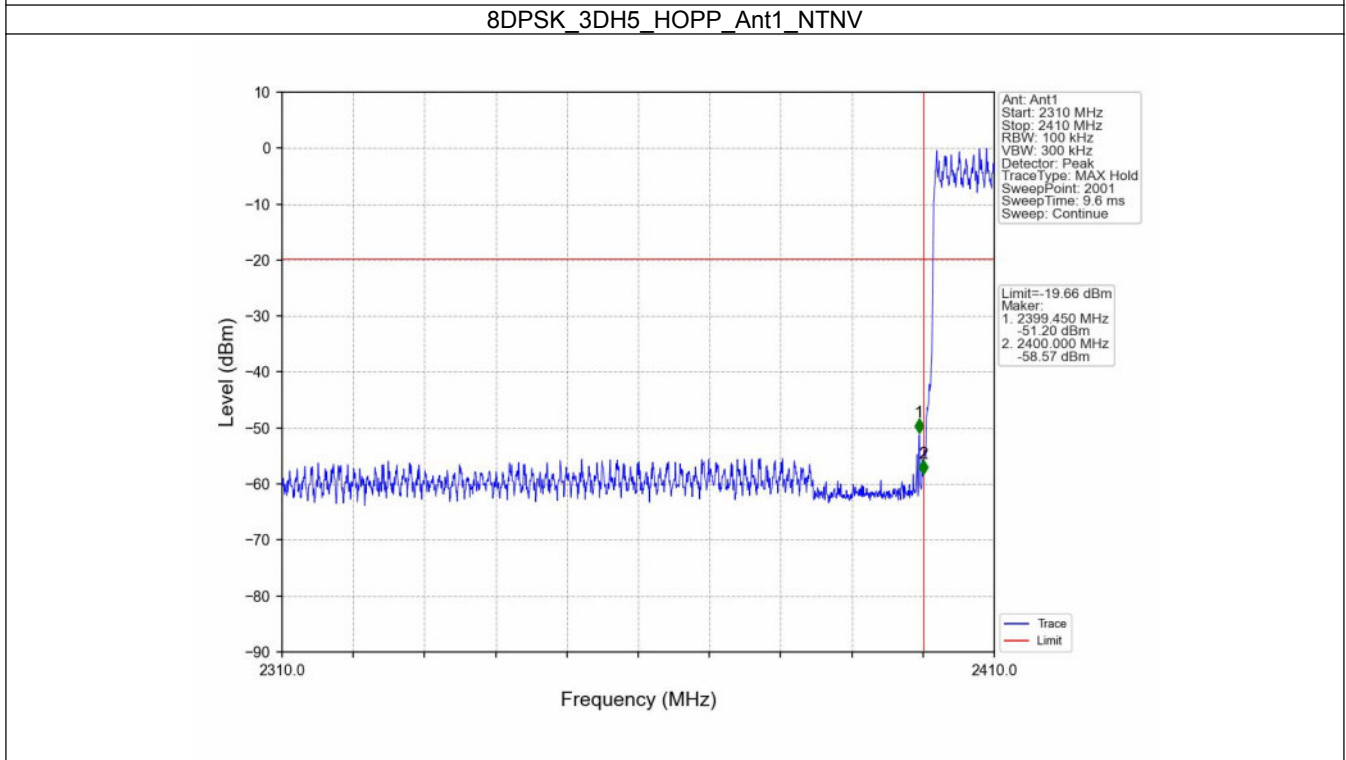
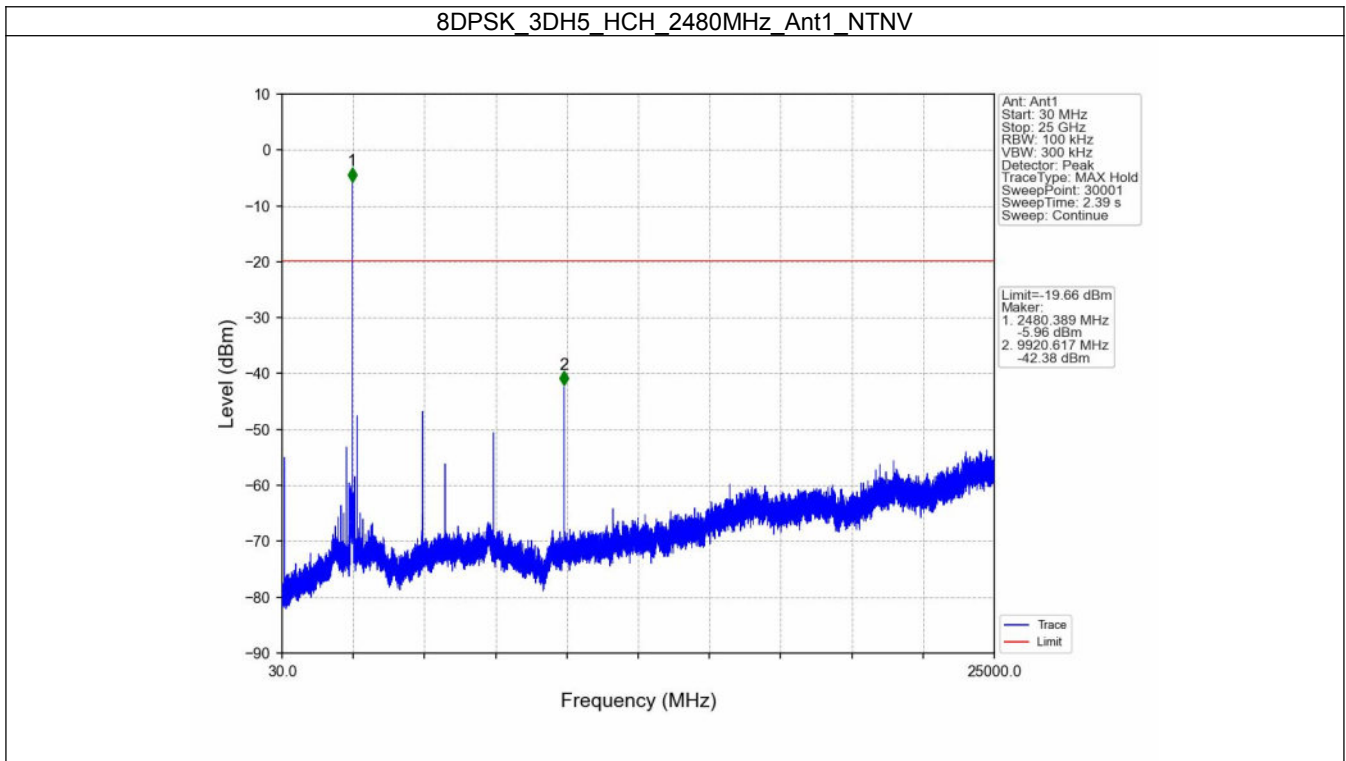
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FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03



FCC ID: 2AC9N-1686122-03

