

ANNEX D TEST DATA

For

Project No.:	8228EU012201W
Client:	QUEST USA CORP
Product Name:	IJOY GIANT EARBUD SPEAKER (GEN1& 2)
Model No.:	IJPDQ366-DG
FCC ID:	2AJQ7-GIANT
Technology:	Bluetooth BDR&EDR
Test Engineer:	<i>Mikoy zhu</i>
Test Date:	2024-04-24

Test Summary

Item	Result
Duty Cycle	Pass
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

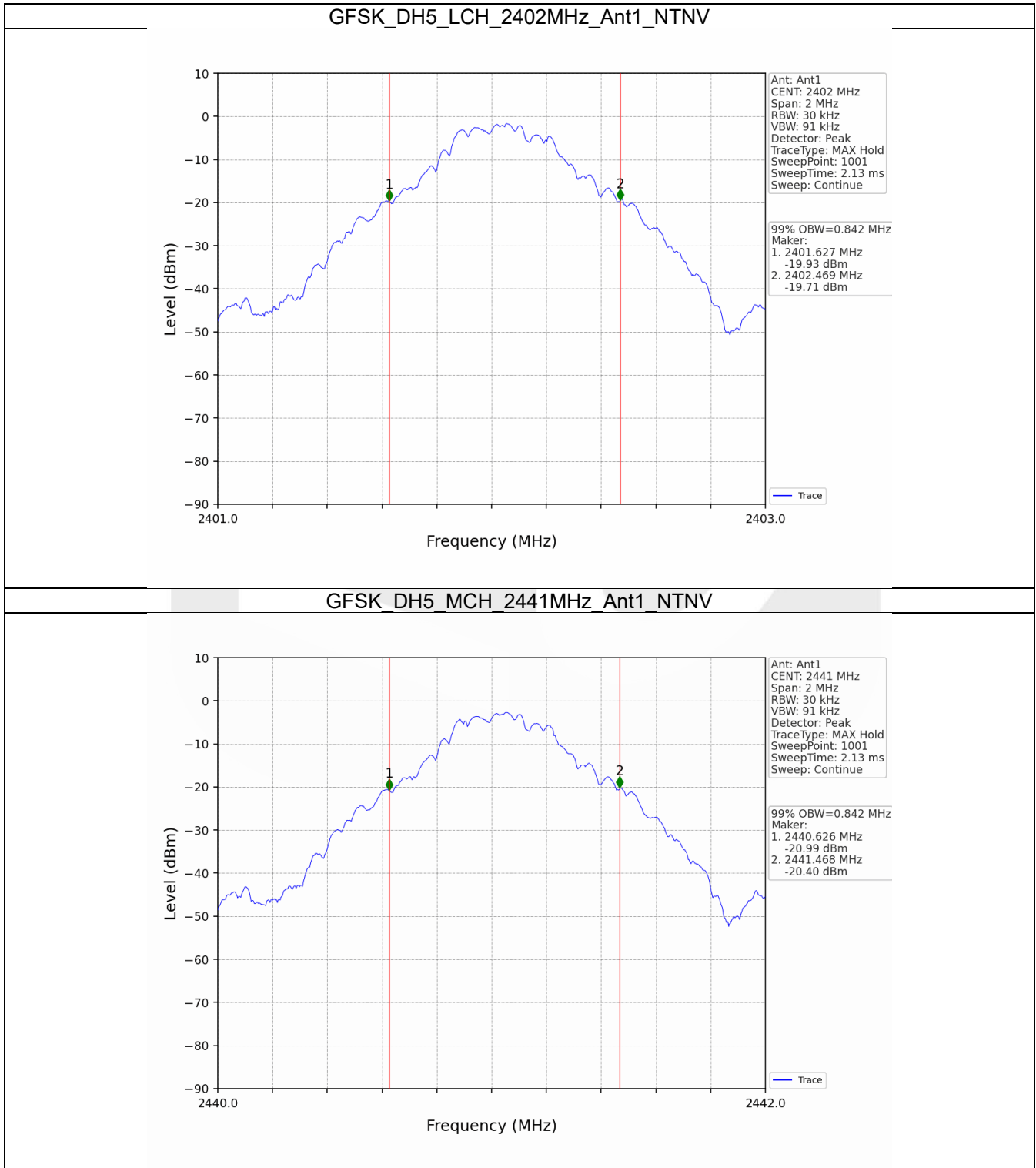
1. Bandwidth

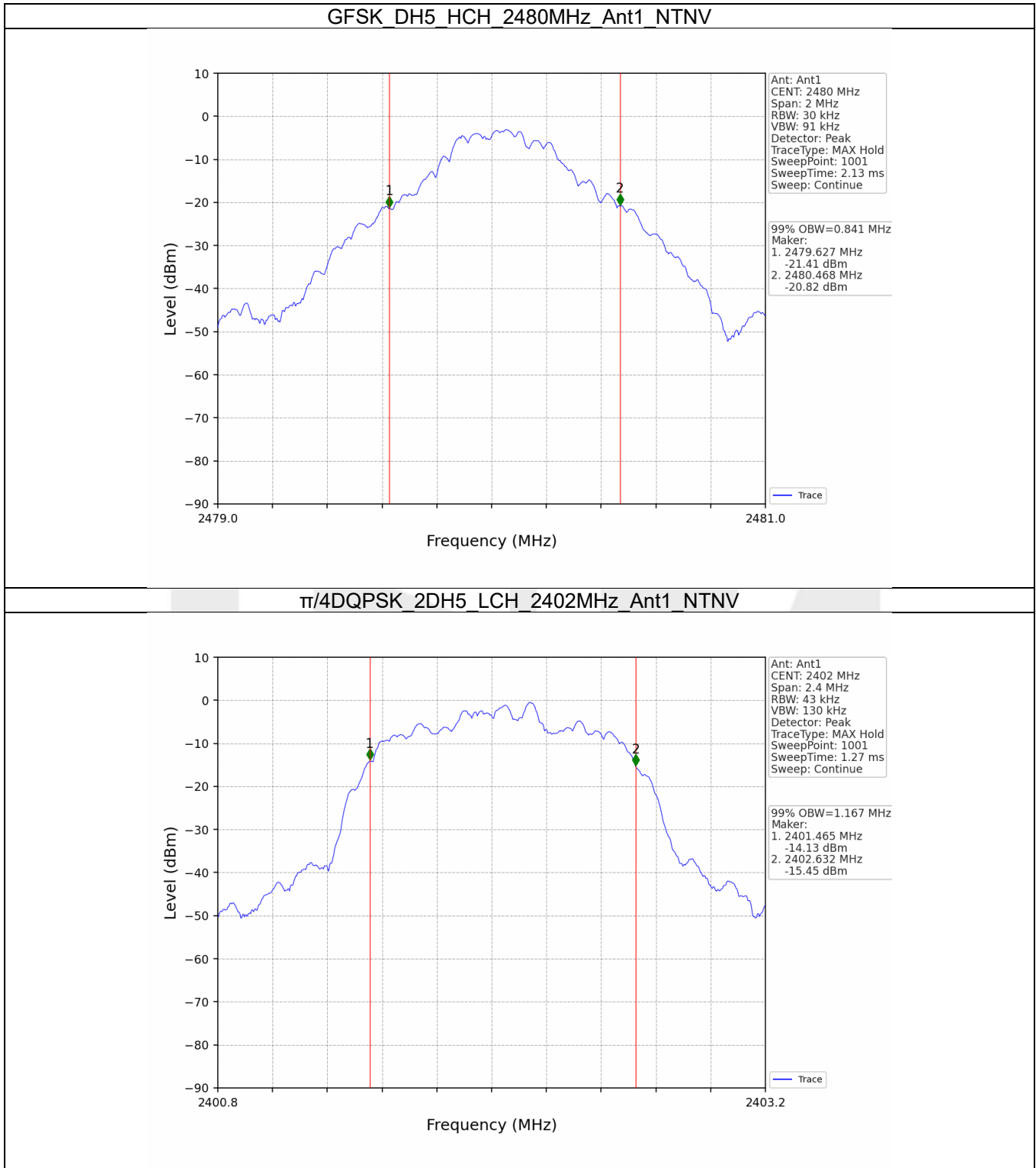
1.1 OBW

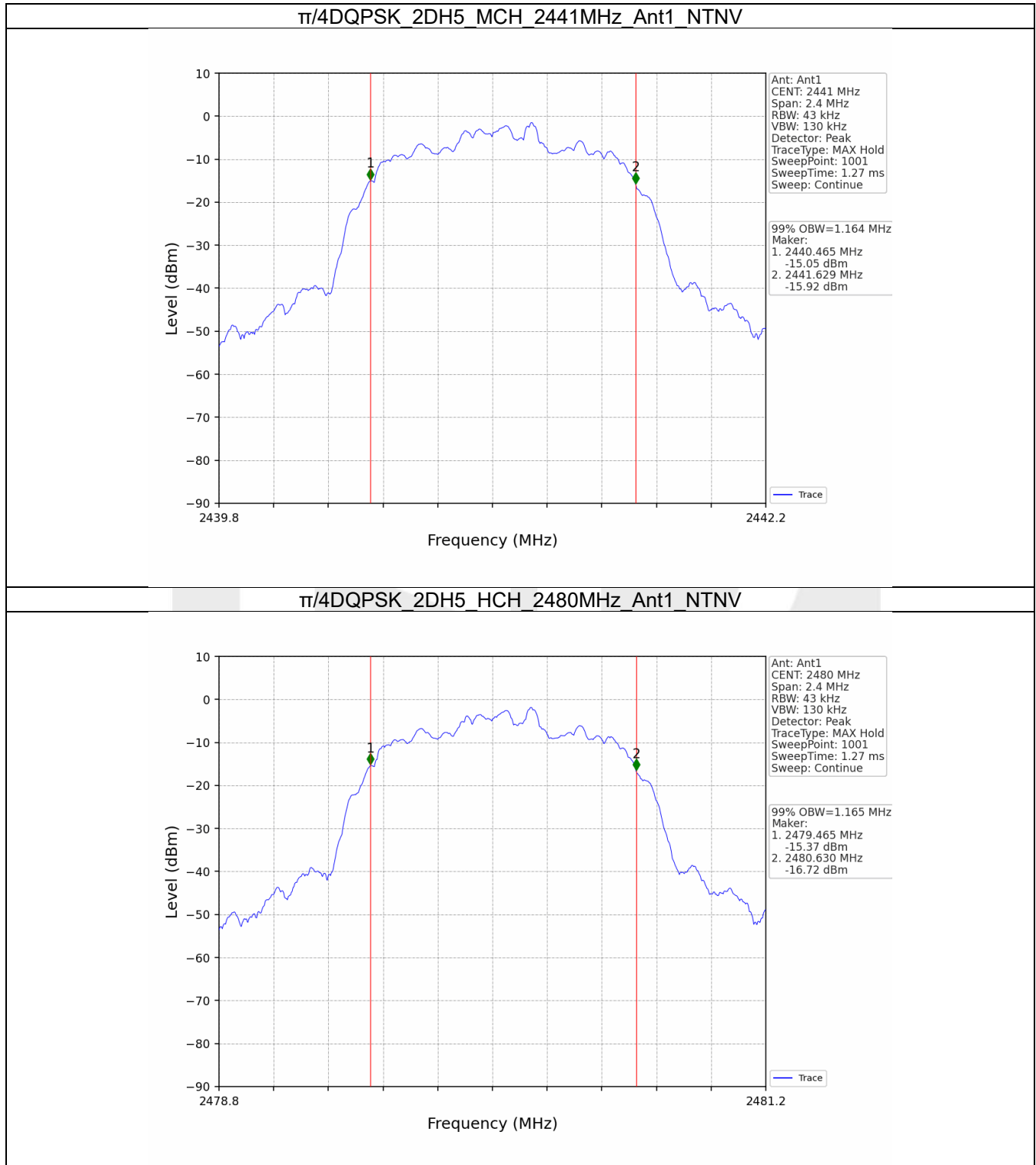
1.1.1 Test Result

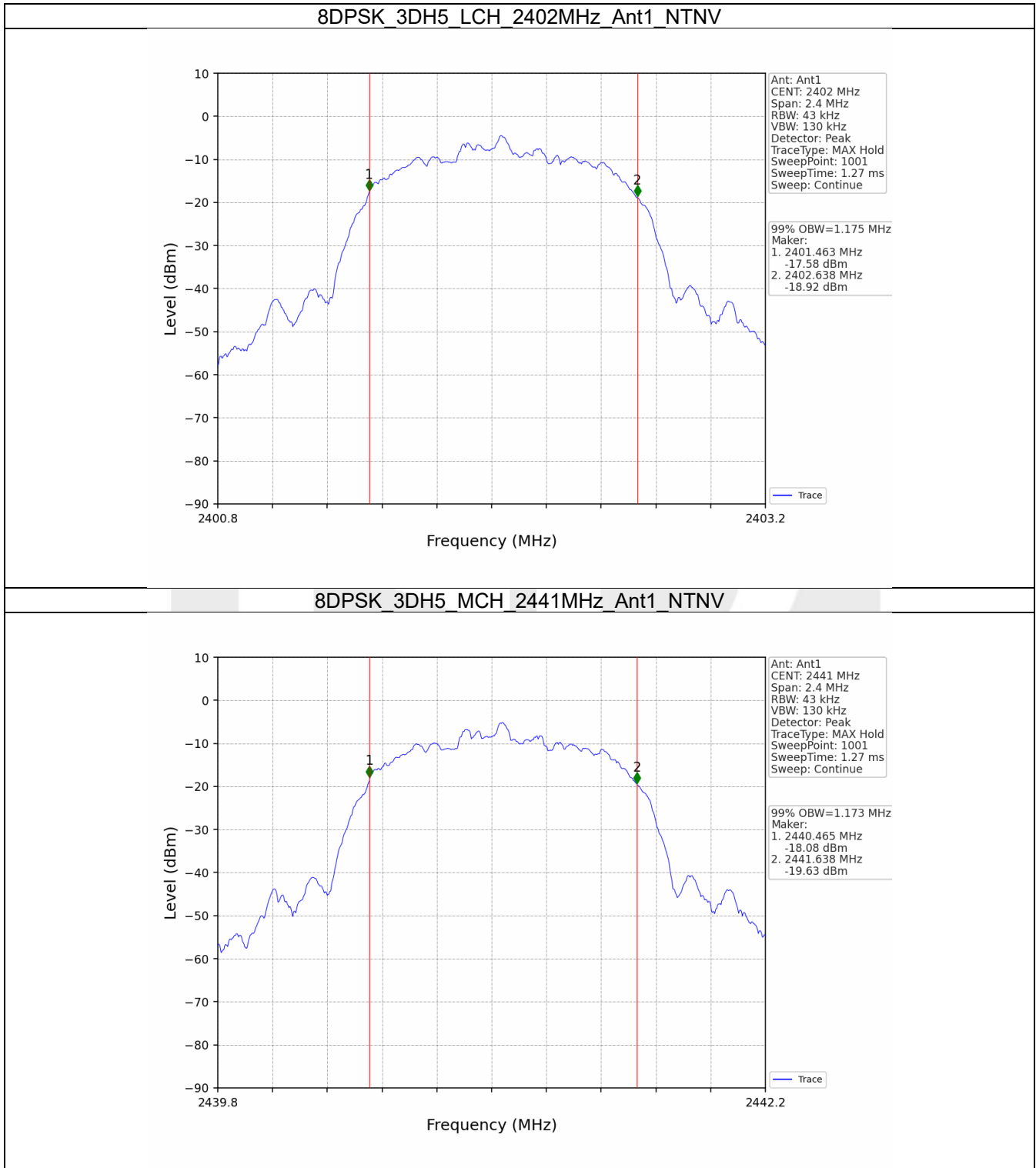
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.842	/	Pass
		2441	DH5	1	0.842	/	Pass
		2480	DH5	1	0.841	/	Pass
π /4DQPSK	SISO	2402	2DH5	1	1.167	/	Pass
		2441	2DH5	1	1.164	/	Pass
		2480	2DH5	1	1.165	/	Pass
8DPSK	SISO	2402	3DH5	1	1.175	/	Pass
		2441	3DH5	1	1.173	/	Pass
		2480	3DH5	1	1.175	/	Pass

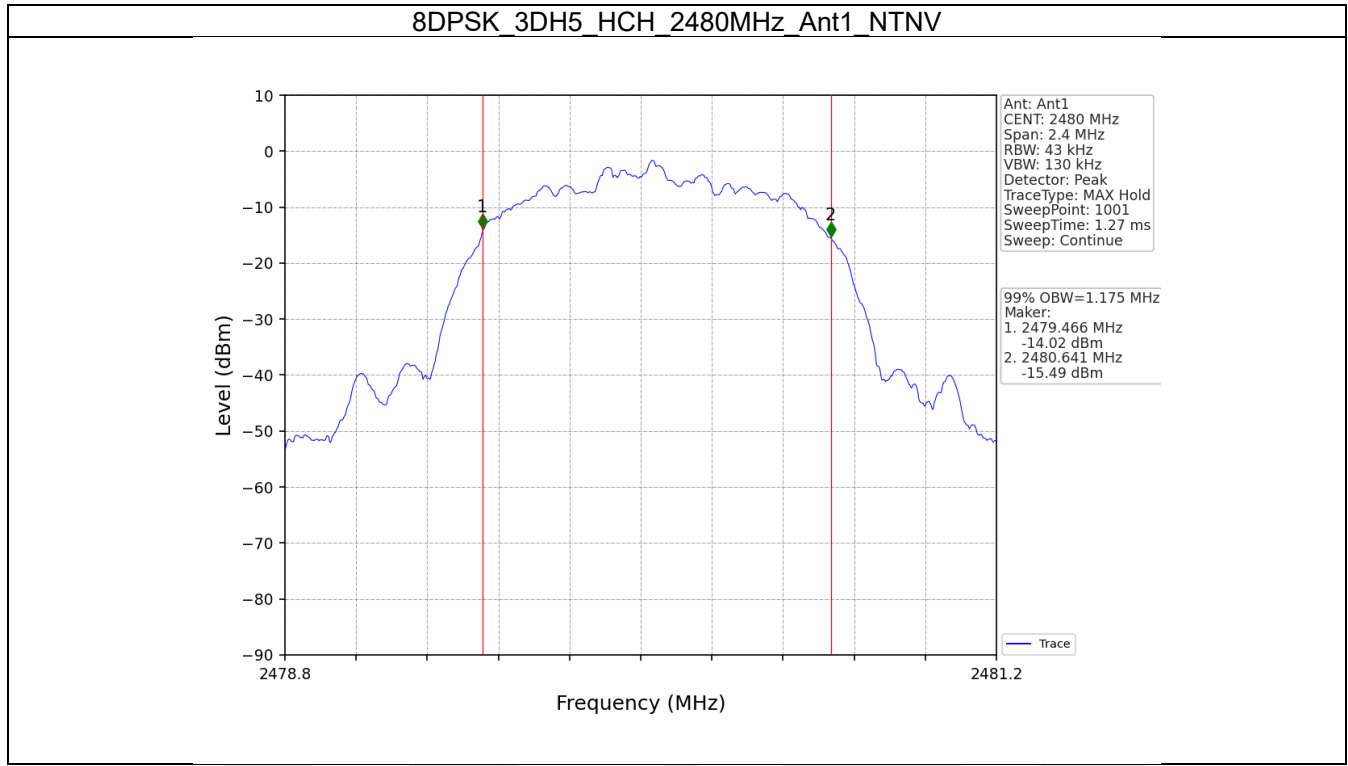
1.1.2 Test Graph









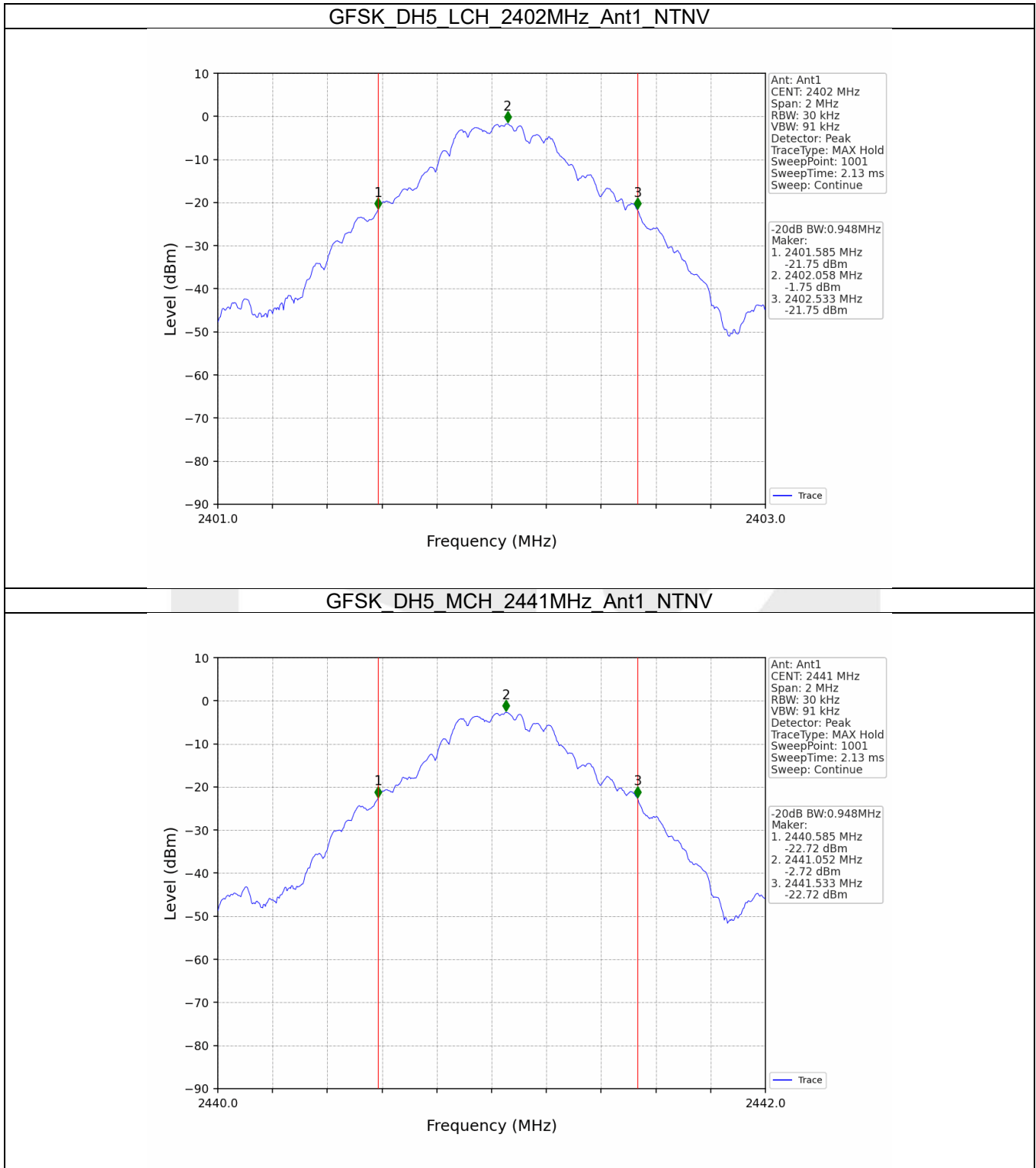


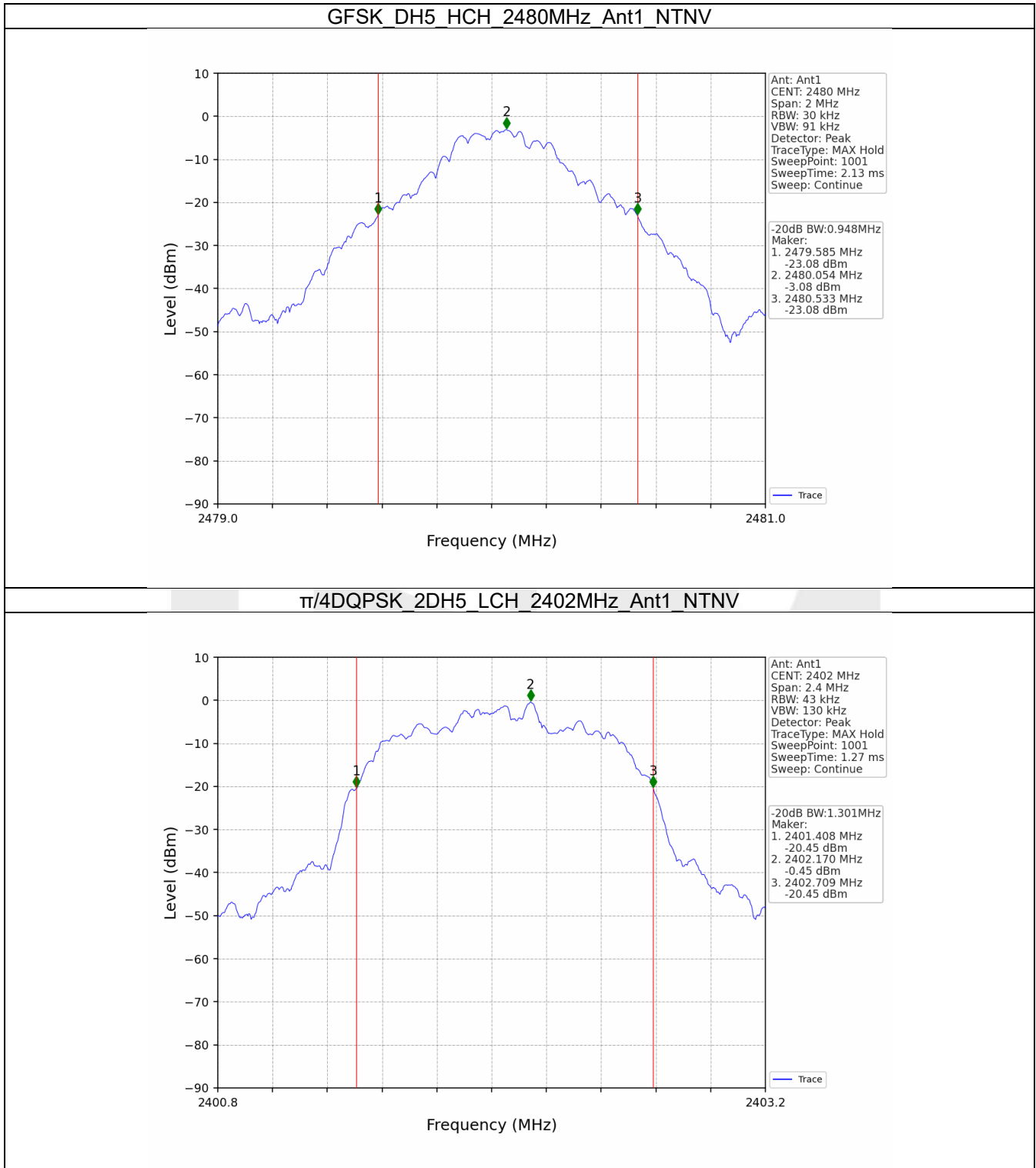
1.2 20dB BW

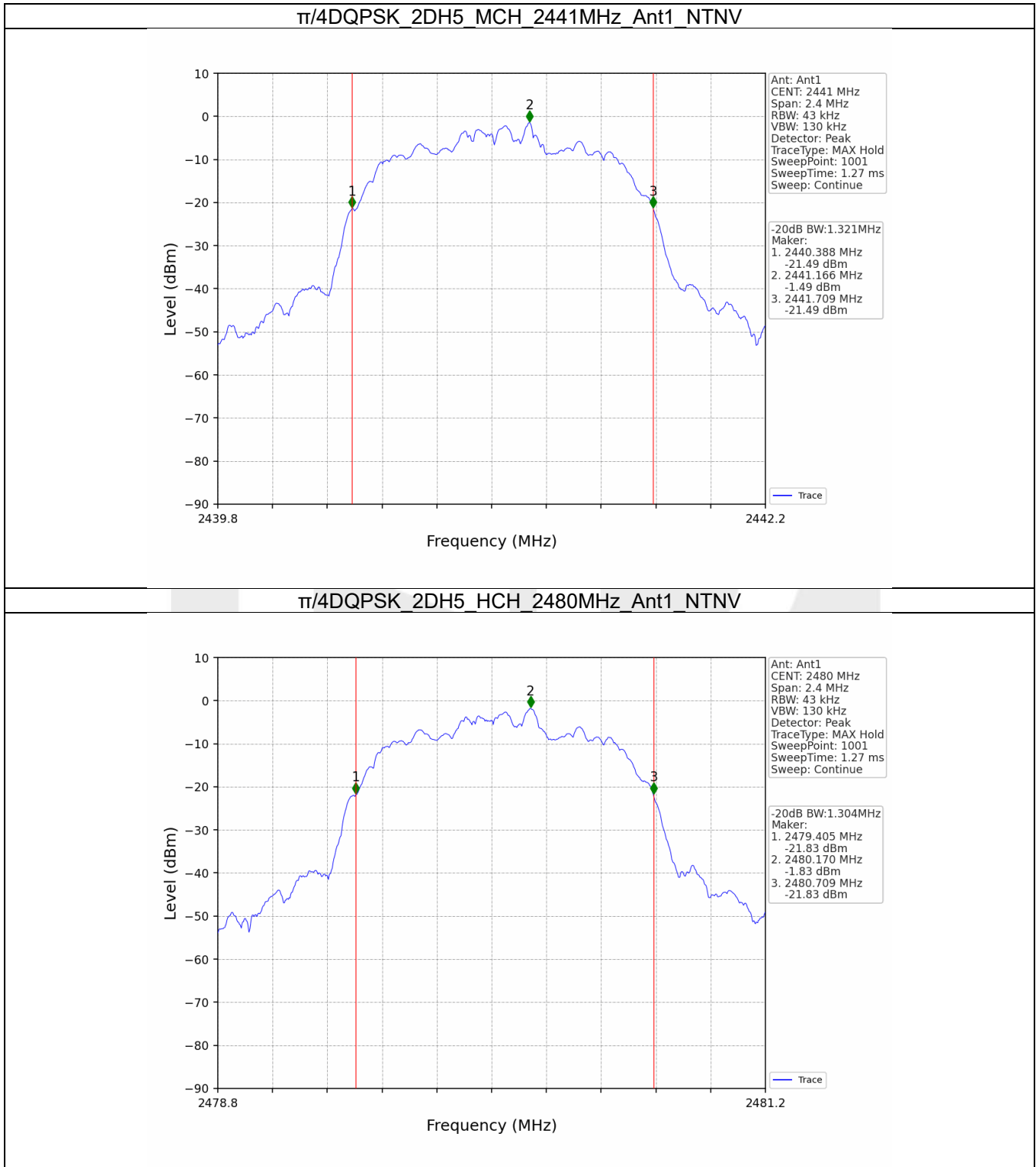
1.2.1 Test Result

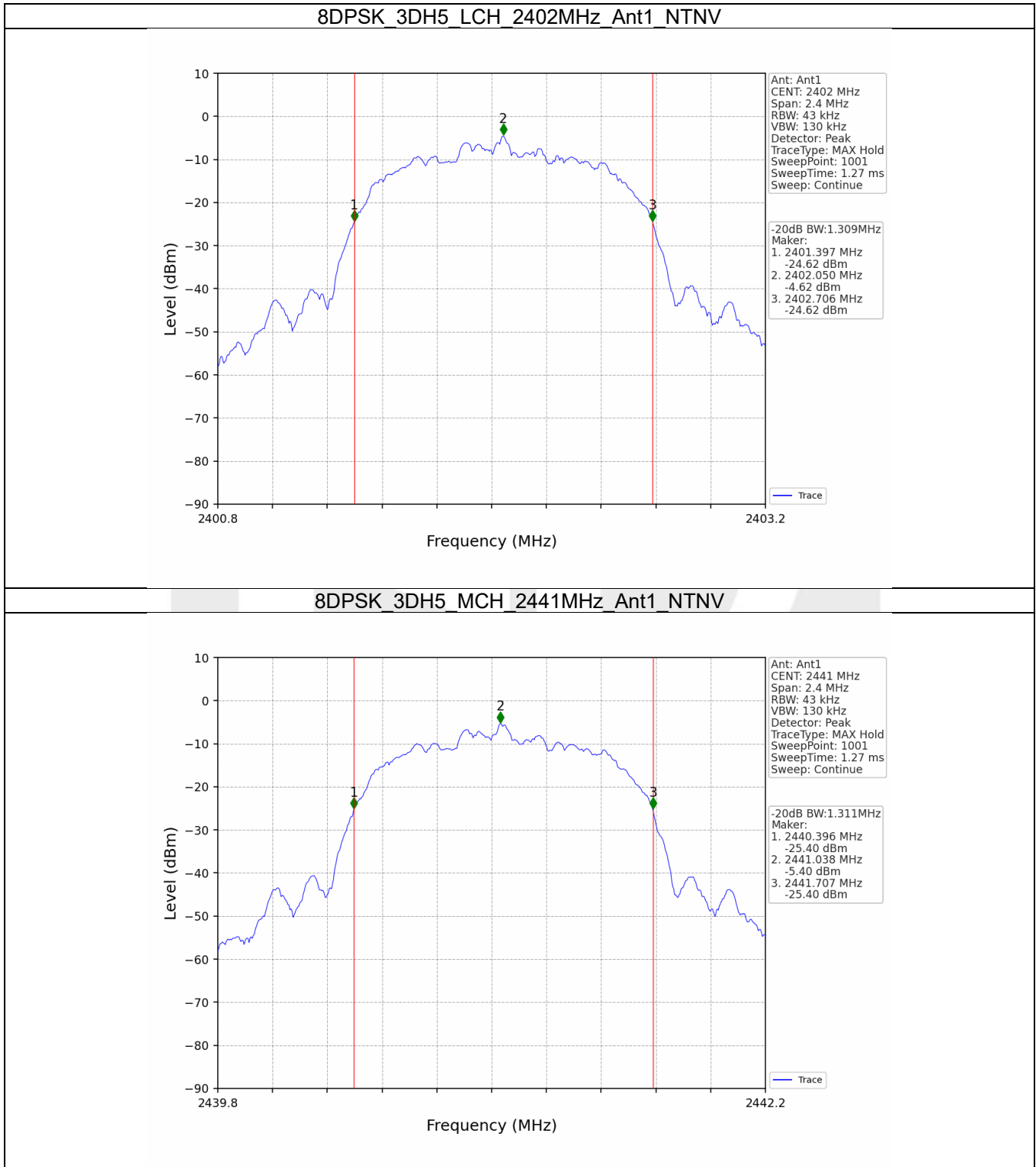
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.948	/	Pass
		2441	DH5	1	0.948	/	Pass
		2480	DH5	1	0.948	/	Pass
$\pi/4$ DQPSK	SISO	2402	2DH5	1	1.301	/	Pass
		2441	2DH5	1	1.321	/	Pass
		2480	2DH5	1	1.304	/	Pass
8DPSK	SISO	2402	3DH5	1	1.309	/	Pass
		2441	3DH5	1	1.311	/	Pass
		2480	3DH5	1	1.310	/	Pass

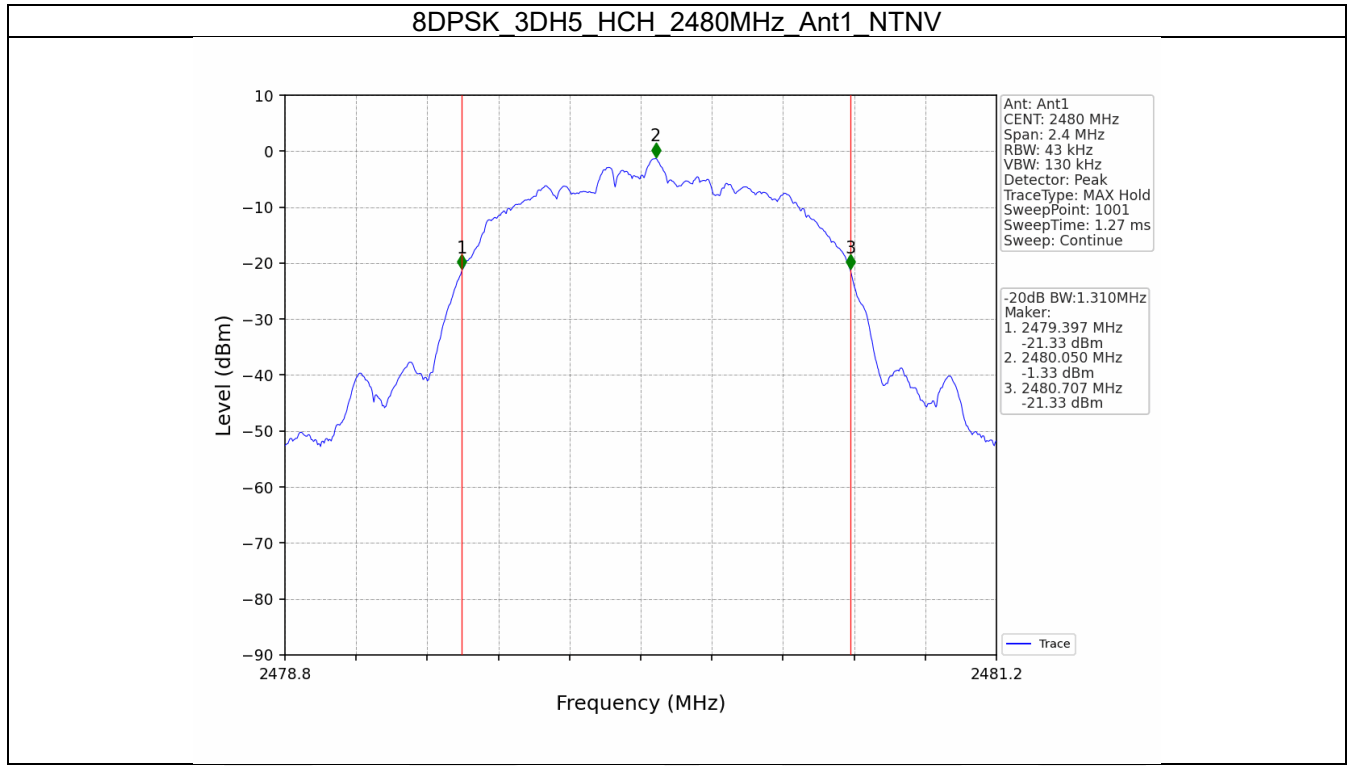
1.2.2 Test Graph











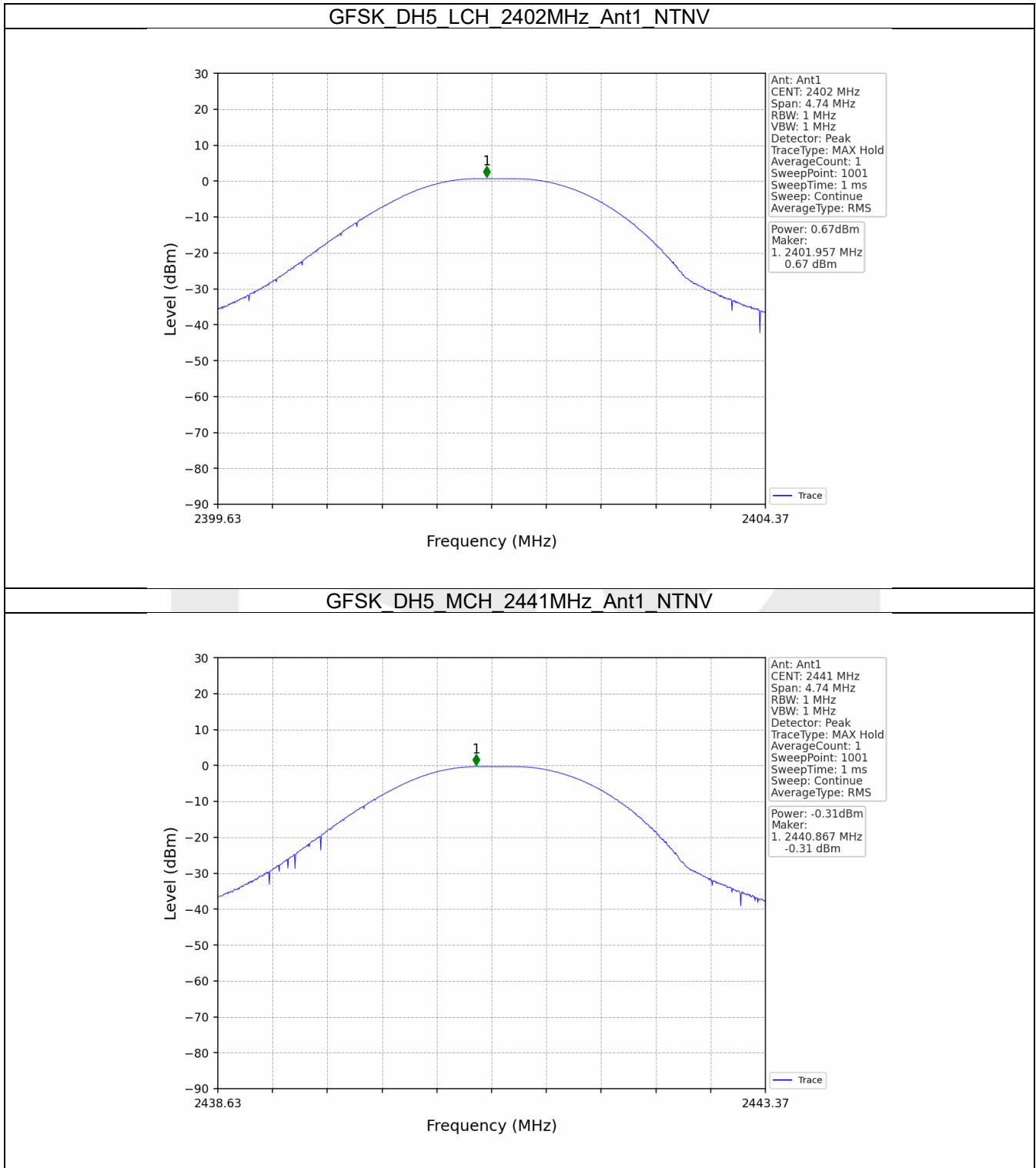
2. Maximum Conducted Output Power

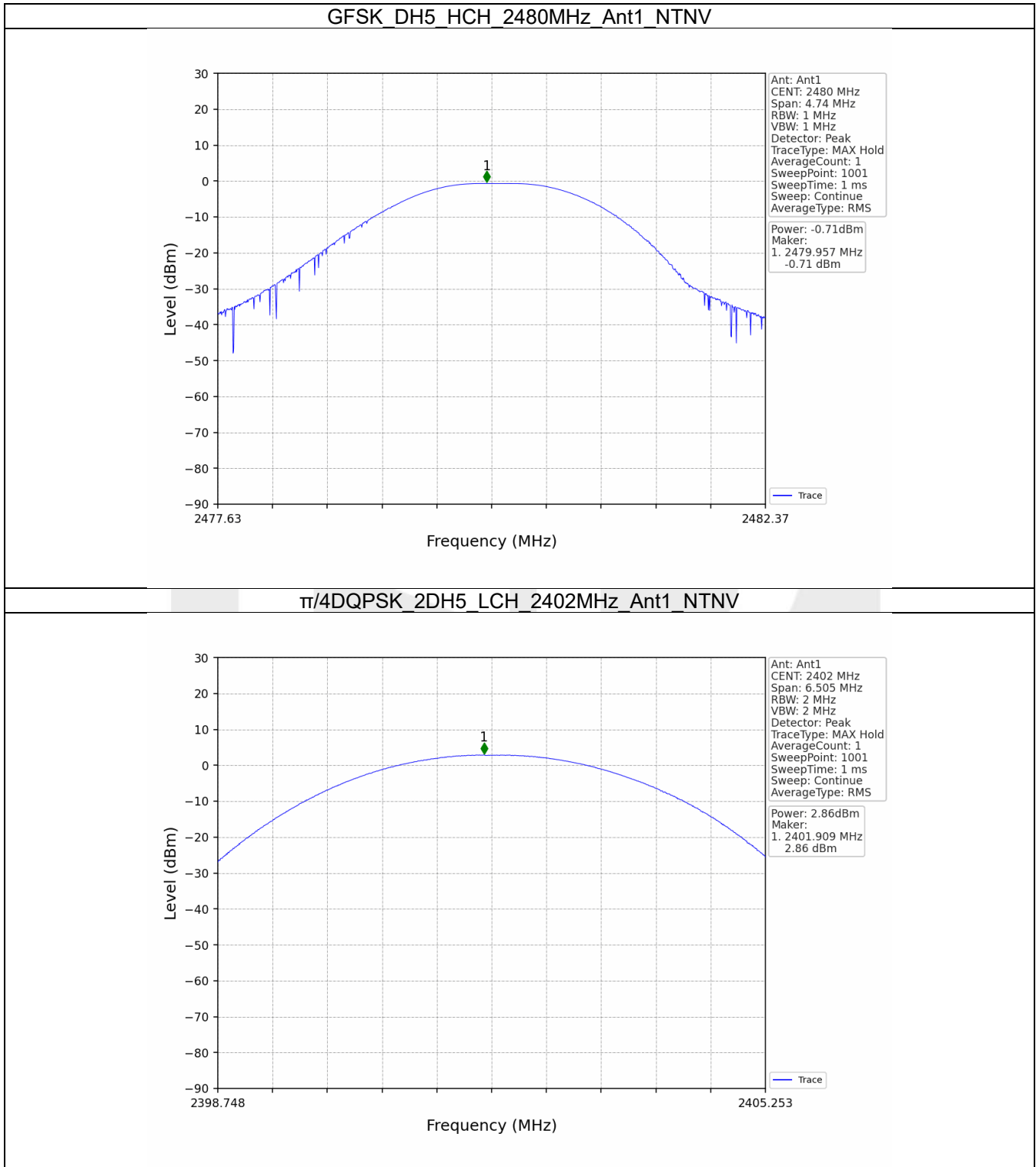
2.1 Power

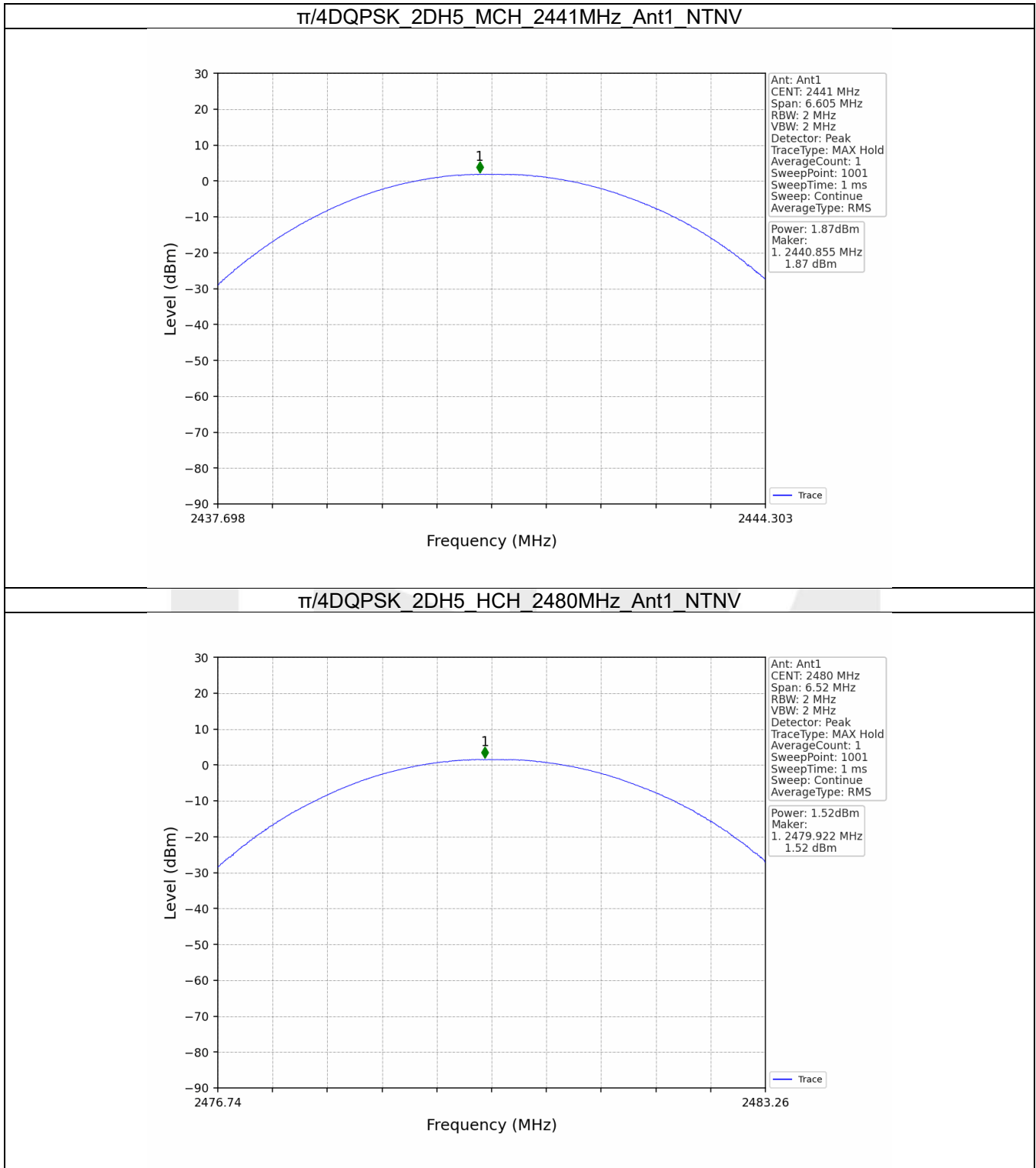
2.1.1 Test Result

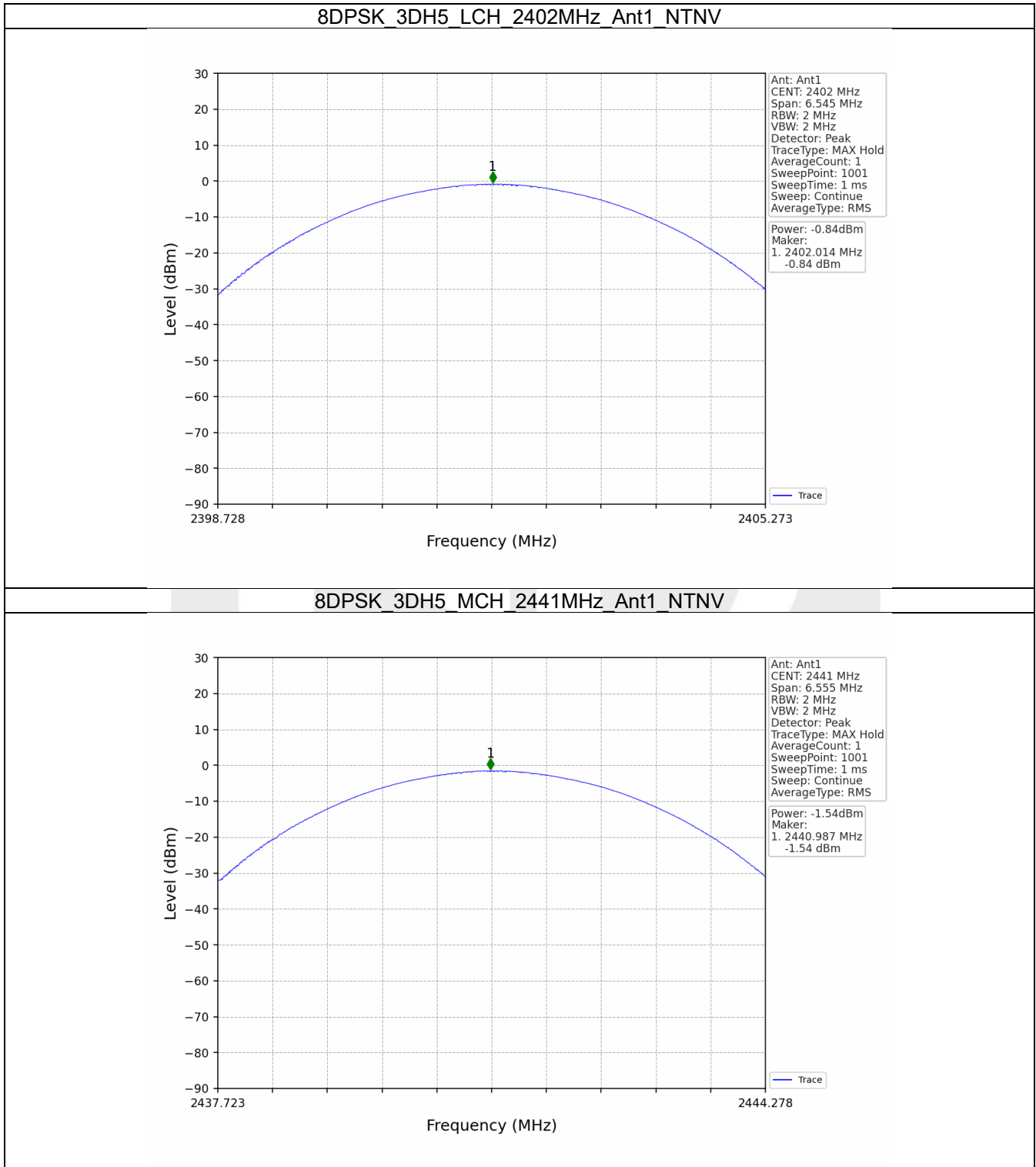
Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	0.67	<=30	Pass
		2441	DH5	-0.31	<=30	Pass
		2480	DH5	-0.71	<=30	Pass
$\pi/4$ DQPSK	SISO	2402	2DH5	2.86	<=20.97	Pass
		2441	2DH5	1.87	<=20.97	Pass
		2480	2DH5	1.52	<=20.97	Pass
8DPSK	SISO	2402	3DH5	-0.84	<=20.97	Pass
		2441	3DH5	-1.54	<=20.97	Pass
		2480	3DH5	2.12	<=20.97	Pass

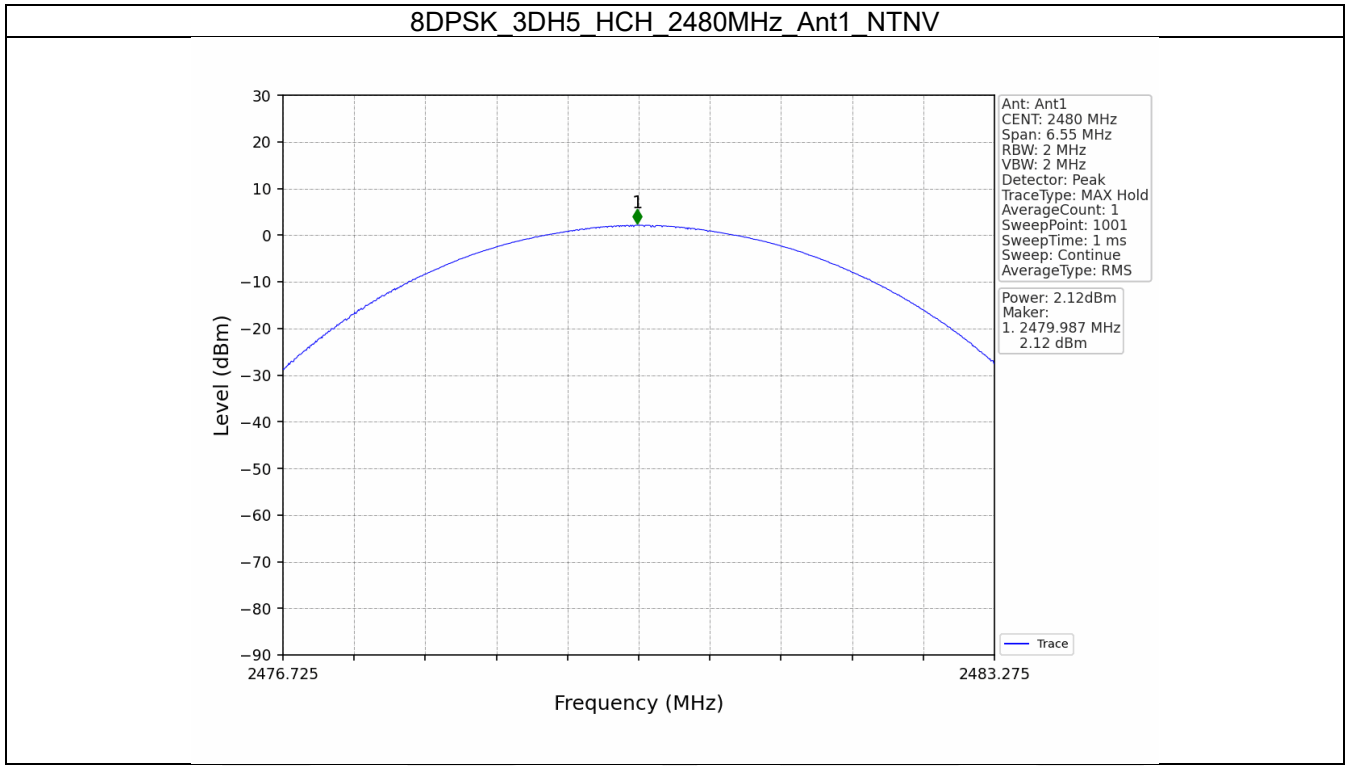
2.1.2 Test Graph











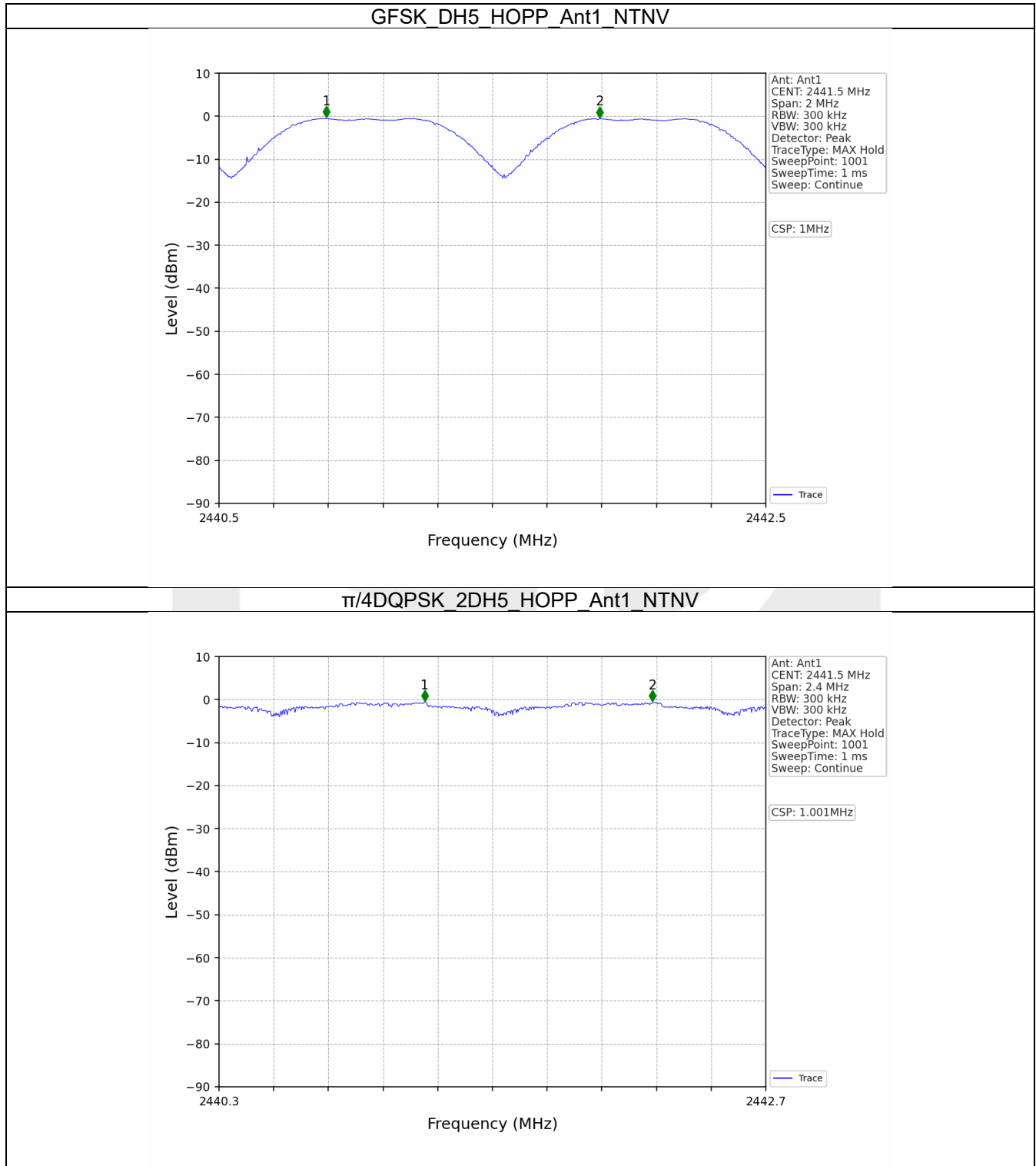
3. Carrier Frequency Separation

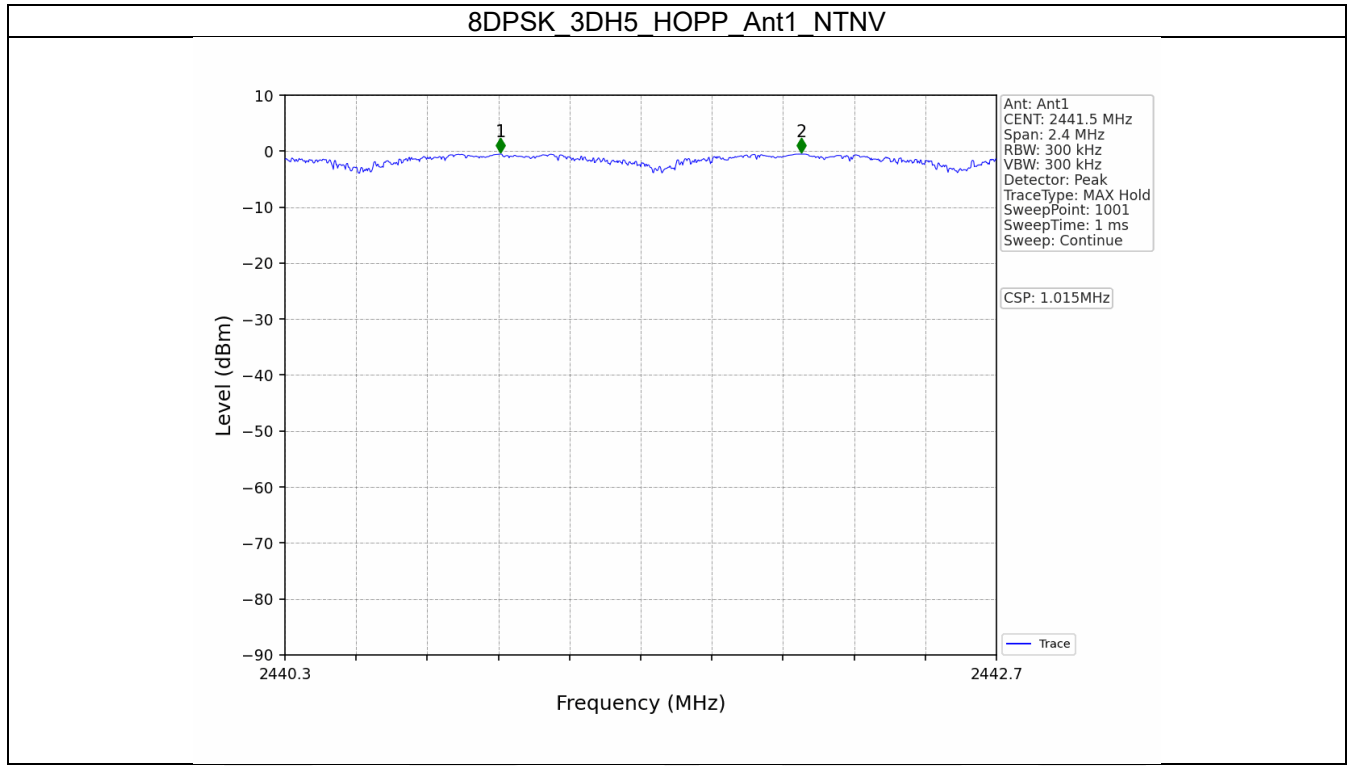
3.1 Ant1

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	1.000	0.948	≥ 0.948	Pass
$\pi/4$ DQPSK	SISO	HOPP	2DH5	1.001	1.321	≥ 0.881	Pass
8DPSK	SISO	HOPP	3DH5	1.015	1.311	≥ 0.874	Pass

3.1.2 Test Graph





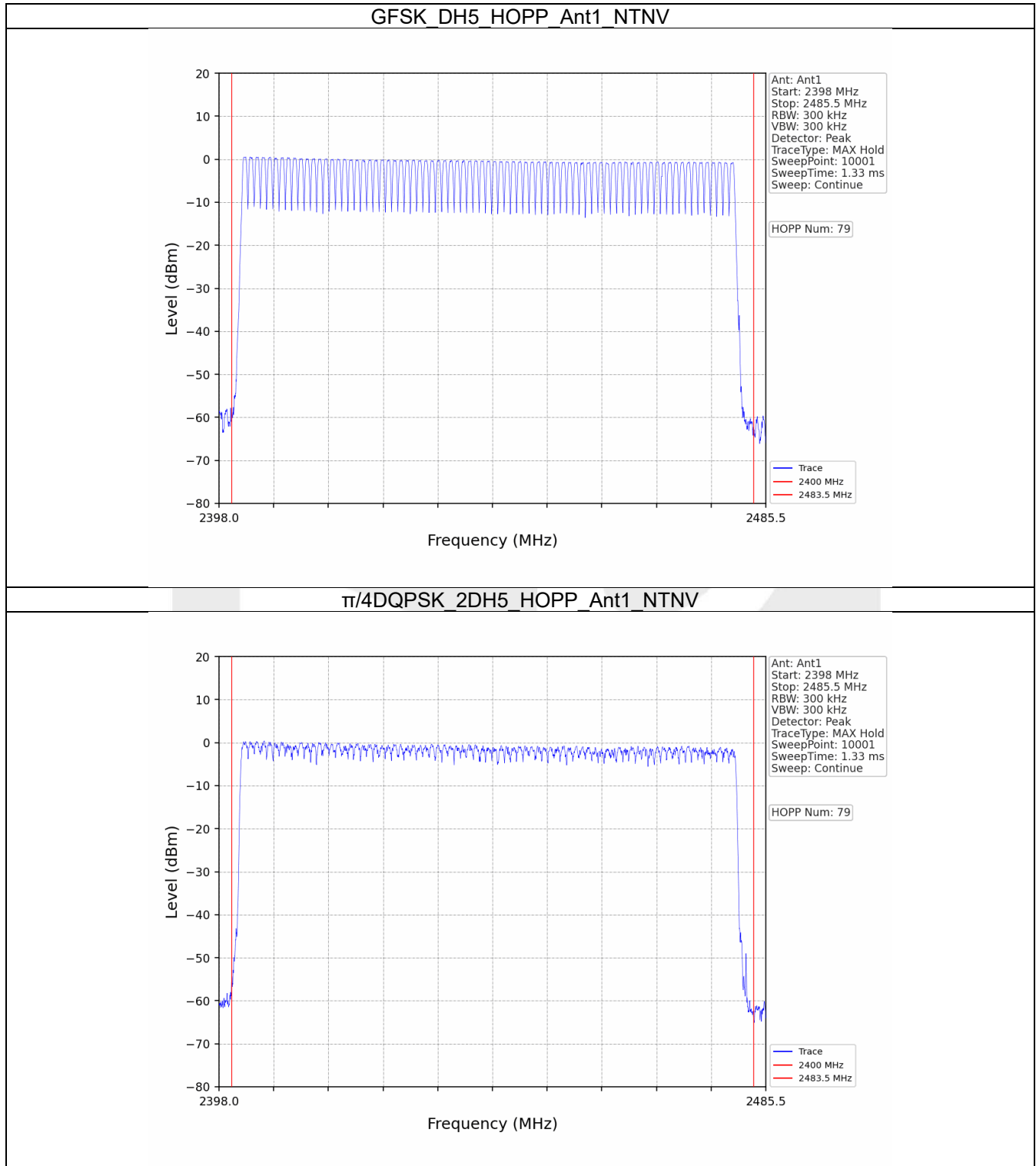
4. Number of Hopping Frequencies

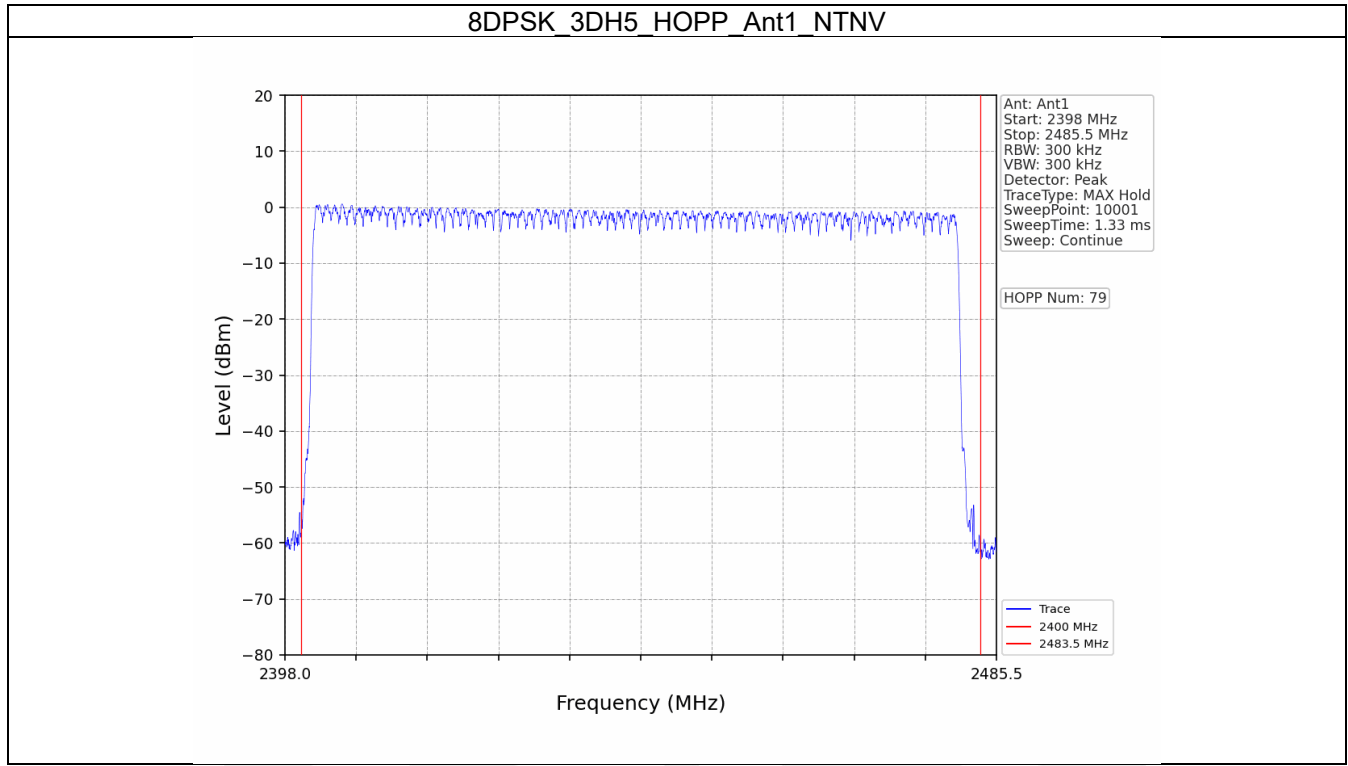
4.1 HoppNum

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
$\pi/4$ DQPSK	SISO	HOPP	2DH5	79	>=15	Pass
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass

4.1.2 Test Graph





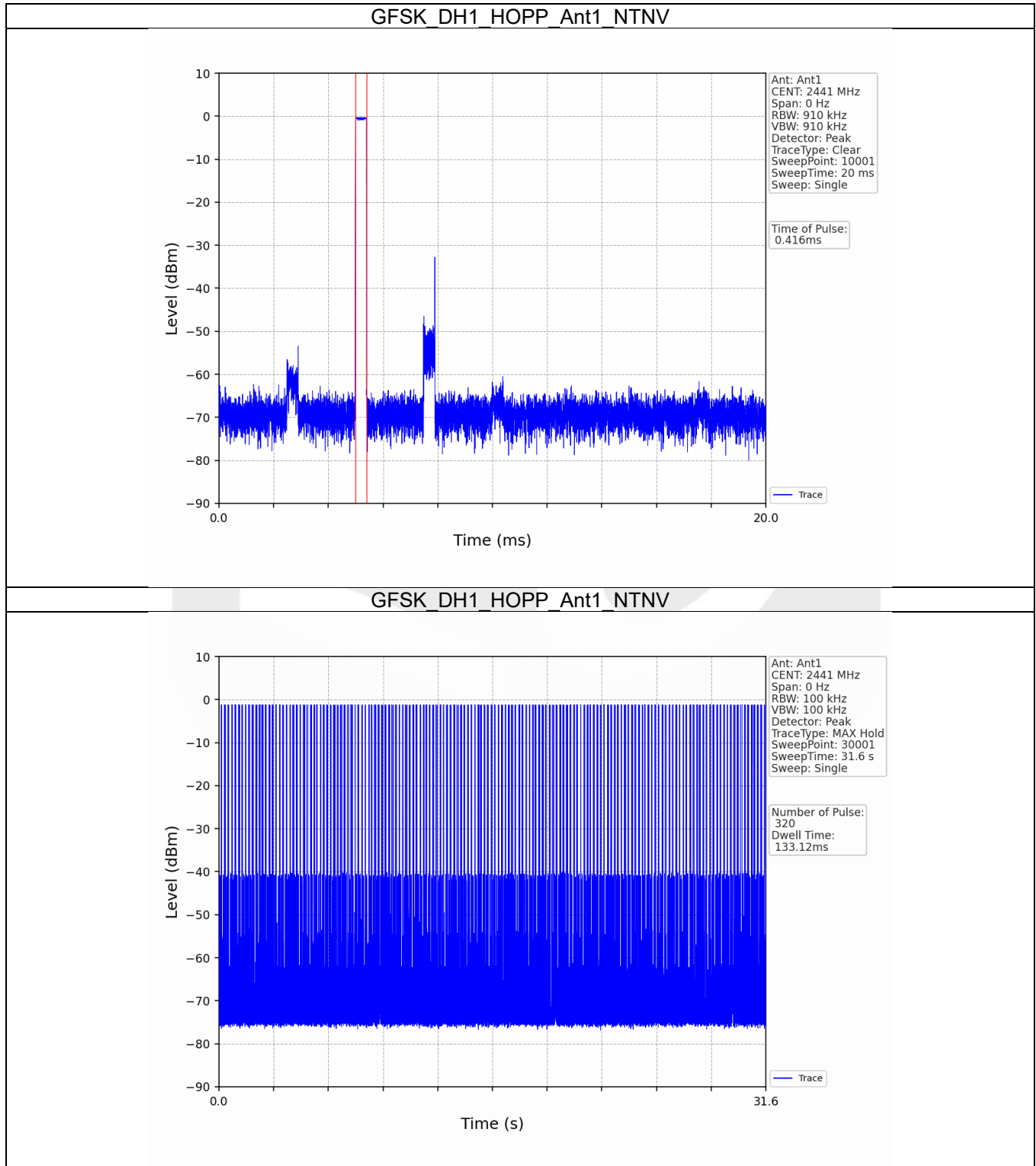
5. Time of Occupancy (Dwell Time)

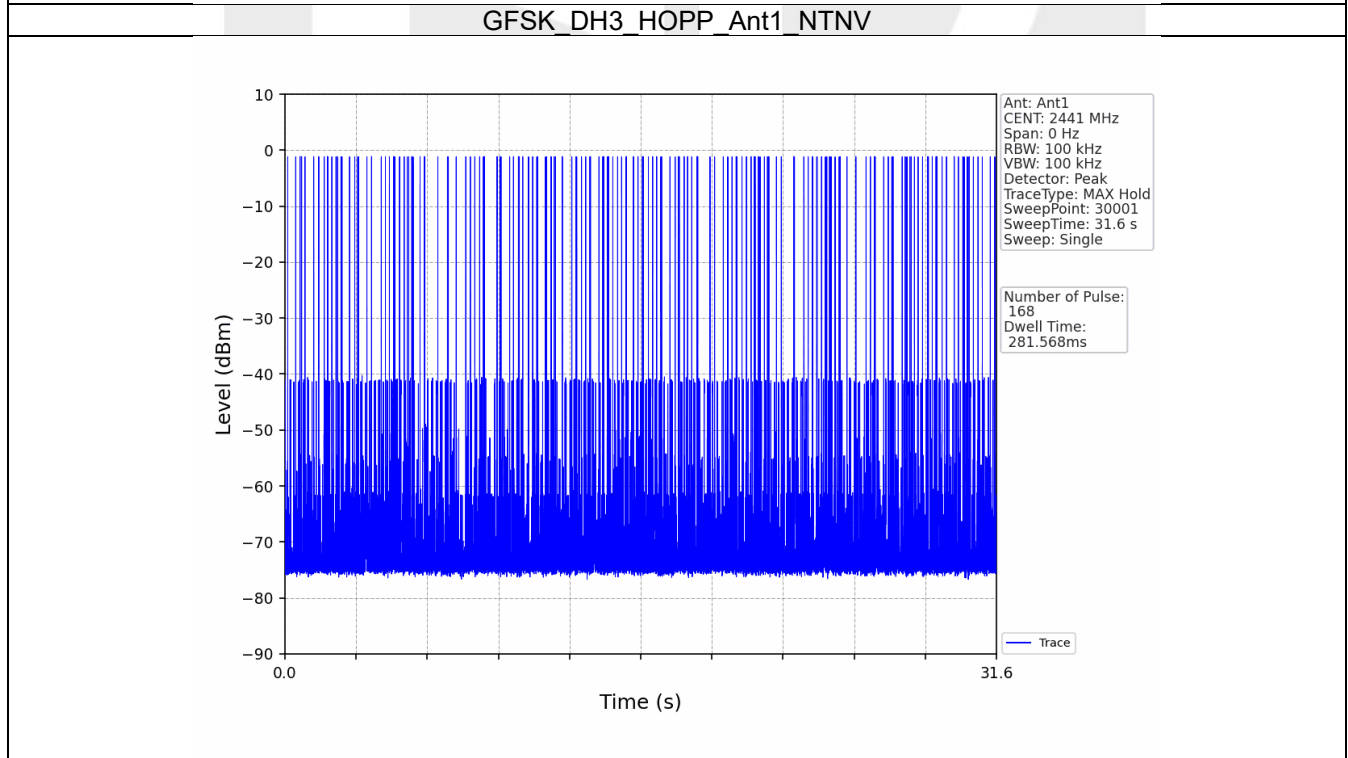
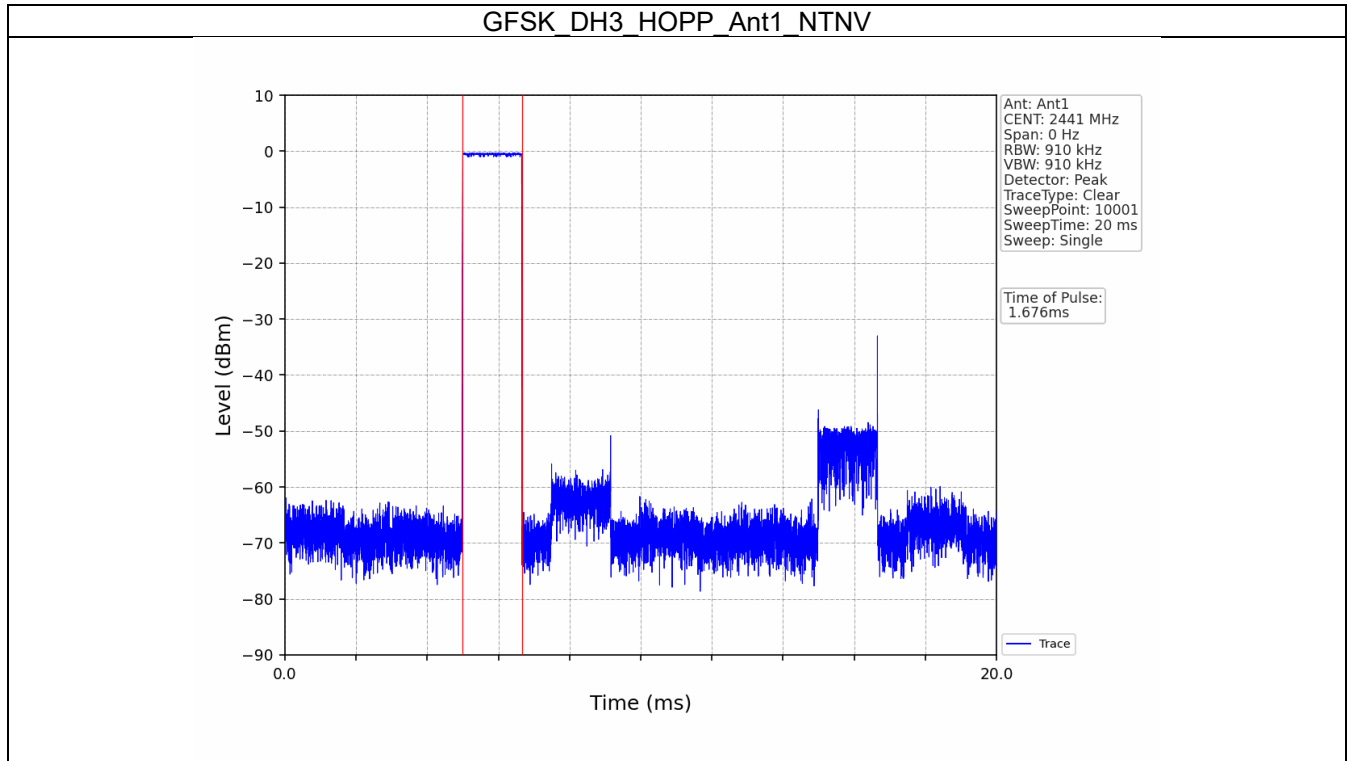
5.1 Ant1

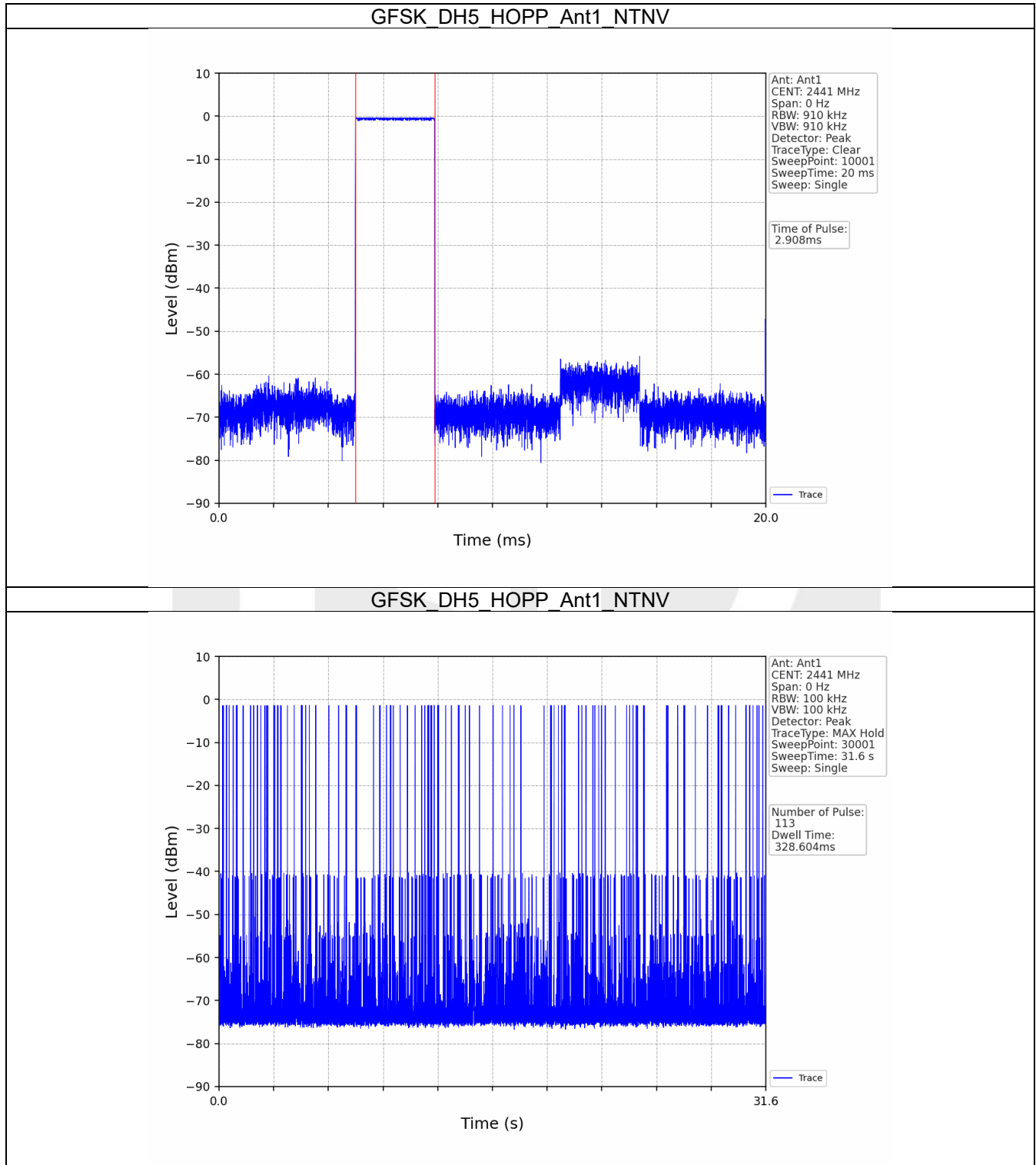
5.1.1 Test Result

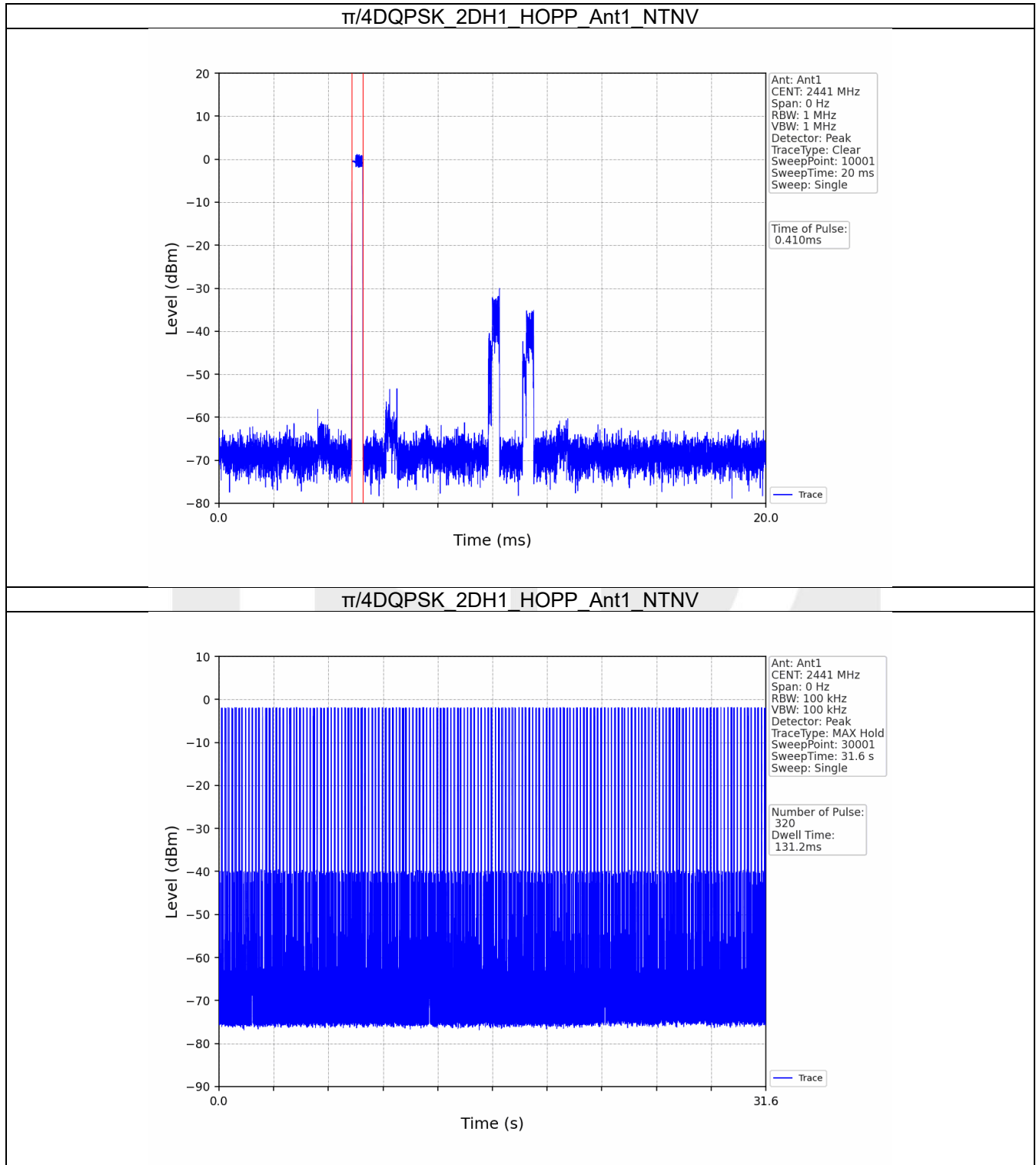
Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.416	31.600	320	133.120	<=400	Pass
			DH3	1.676	31.600	168	281.568	<=400	Pass
			DH5	2.908	31.600	113	328.604	<=400	Pass
π/4DQPSK	SISO	HOPP	2DH1	0.410	31.600	320	131.200	<=400	Pass
			2DH3	1.666	31.600	153	254.898	<=400	Pass
			2DH5	2.914	31.600	113	329.282	<=400	Pass
8DPSK	SISO	HOPP	3DH1	2.918	31.600	106	309.308	<=400	Pass
			3DH3	2.918	31.600	109	318.062	<=400	Pass
			3DH5	2.914	31.600	103	300.142	<=400	Pass

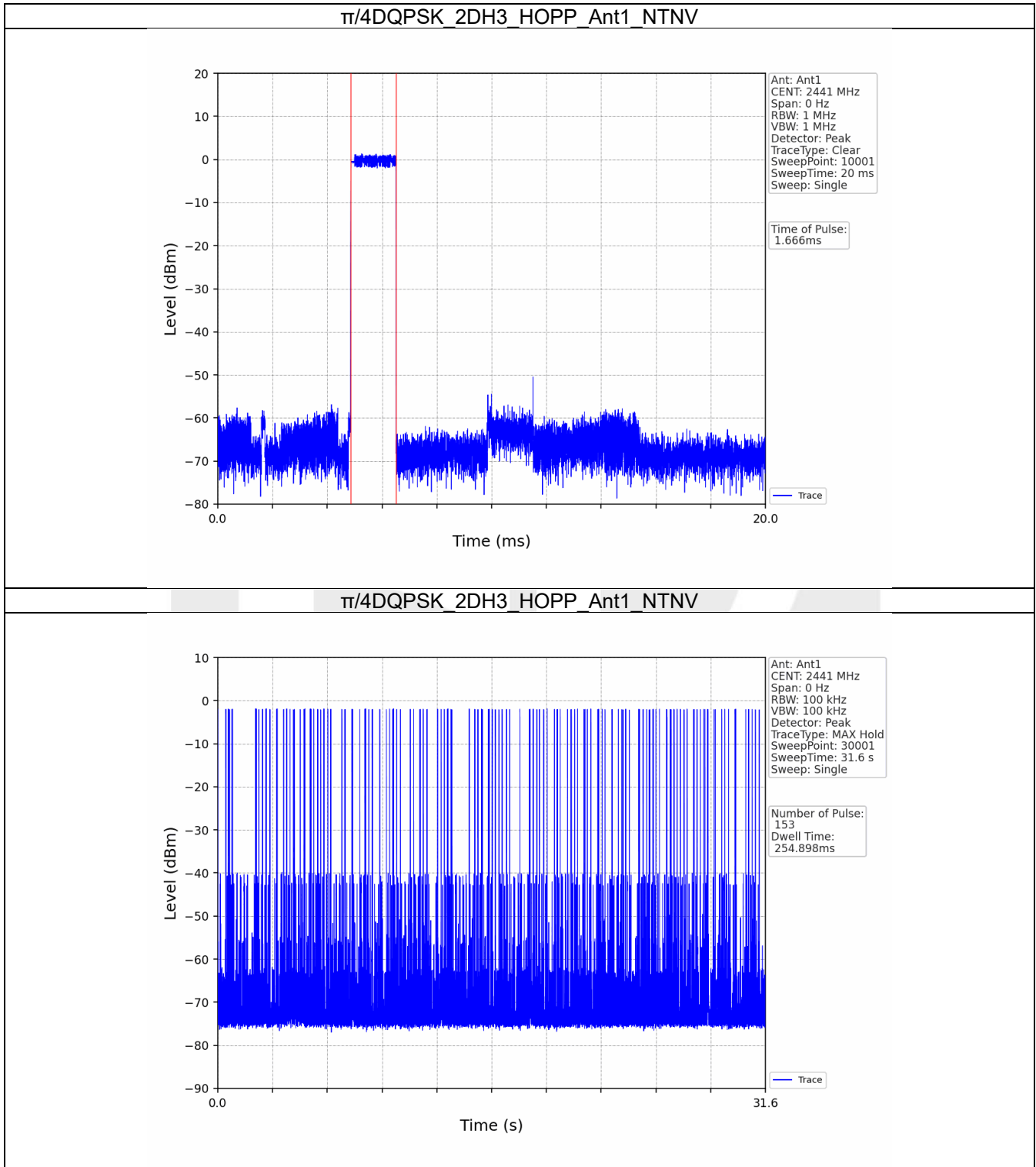
5.1.2 Test Graph

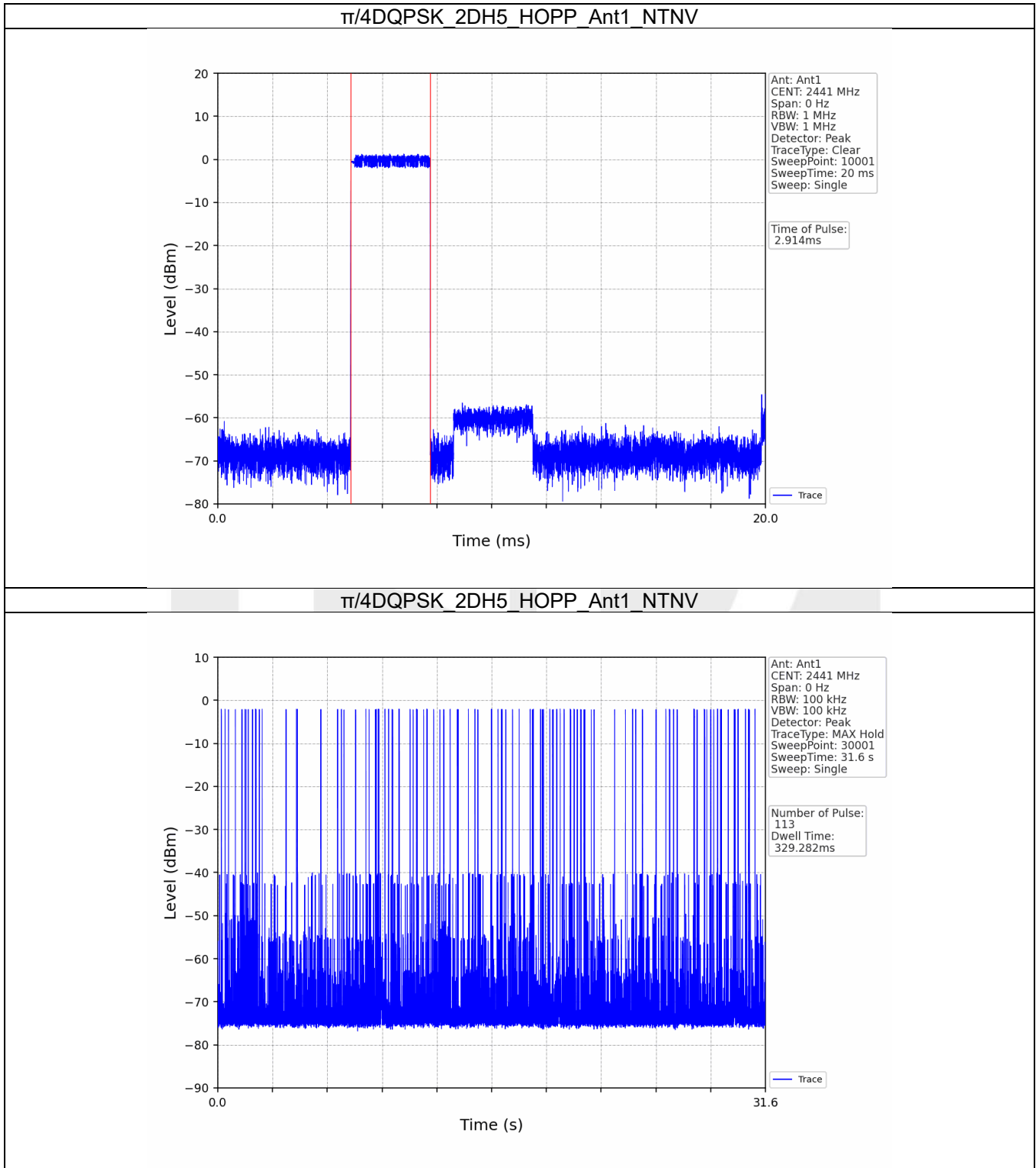


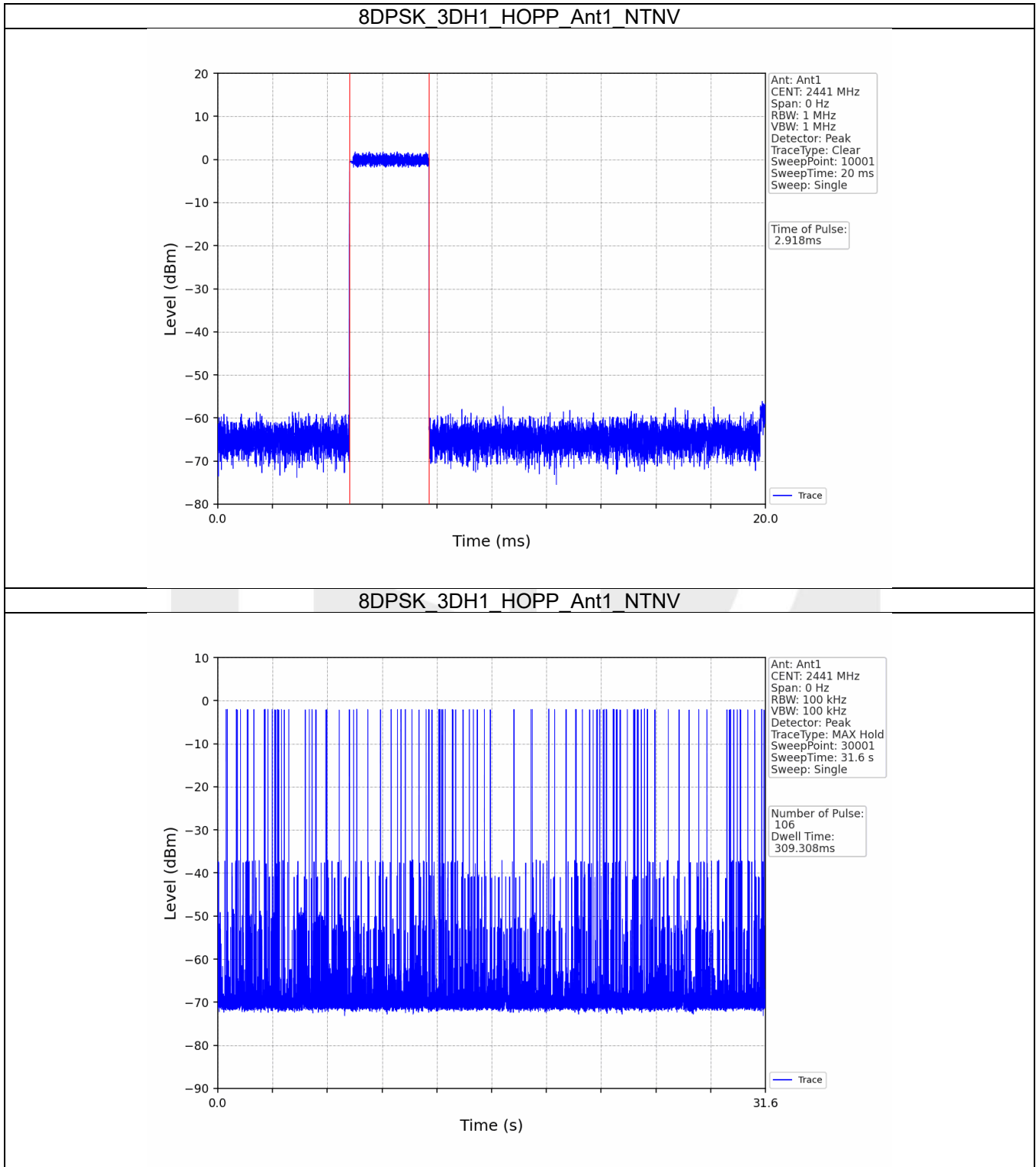


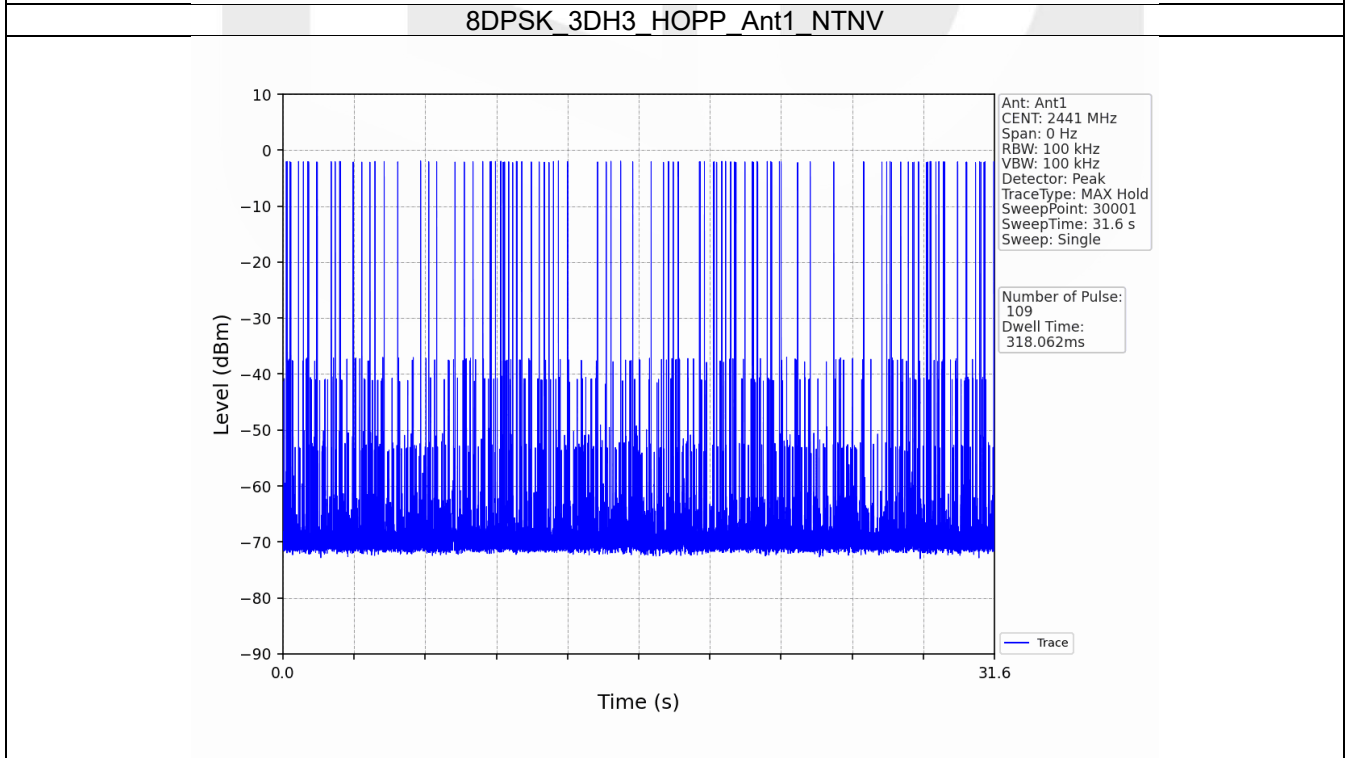
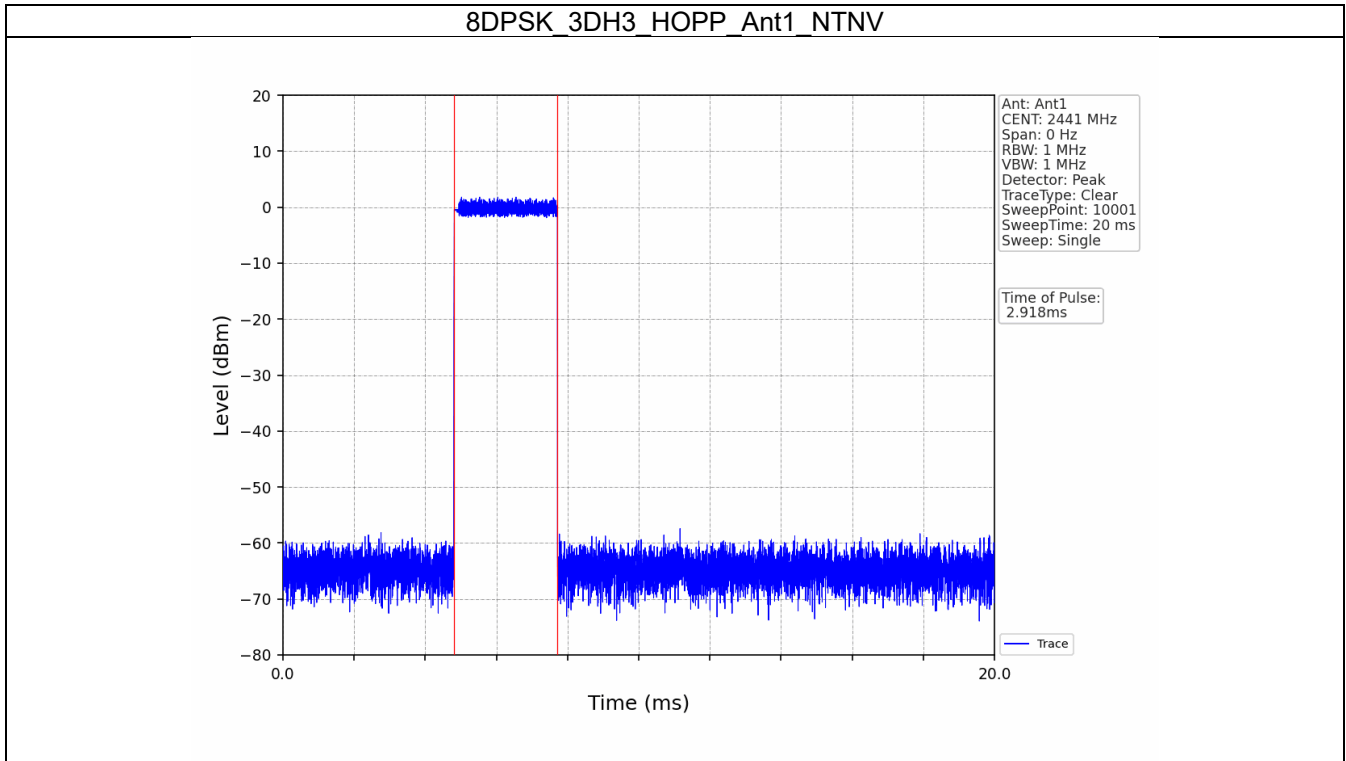


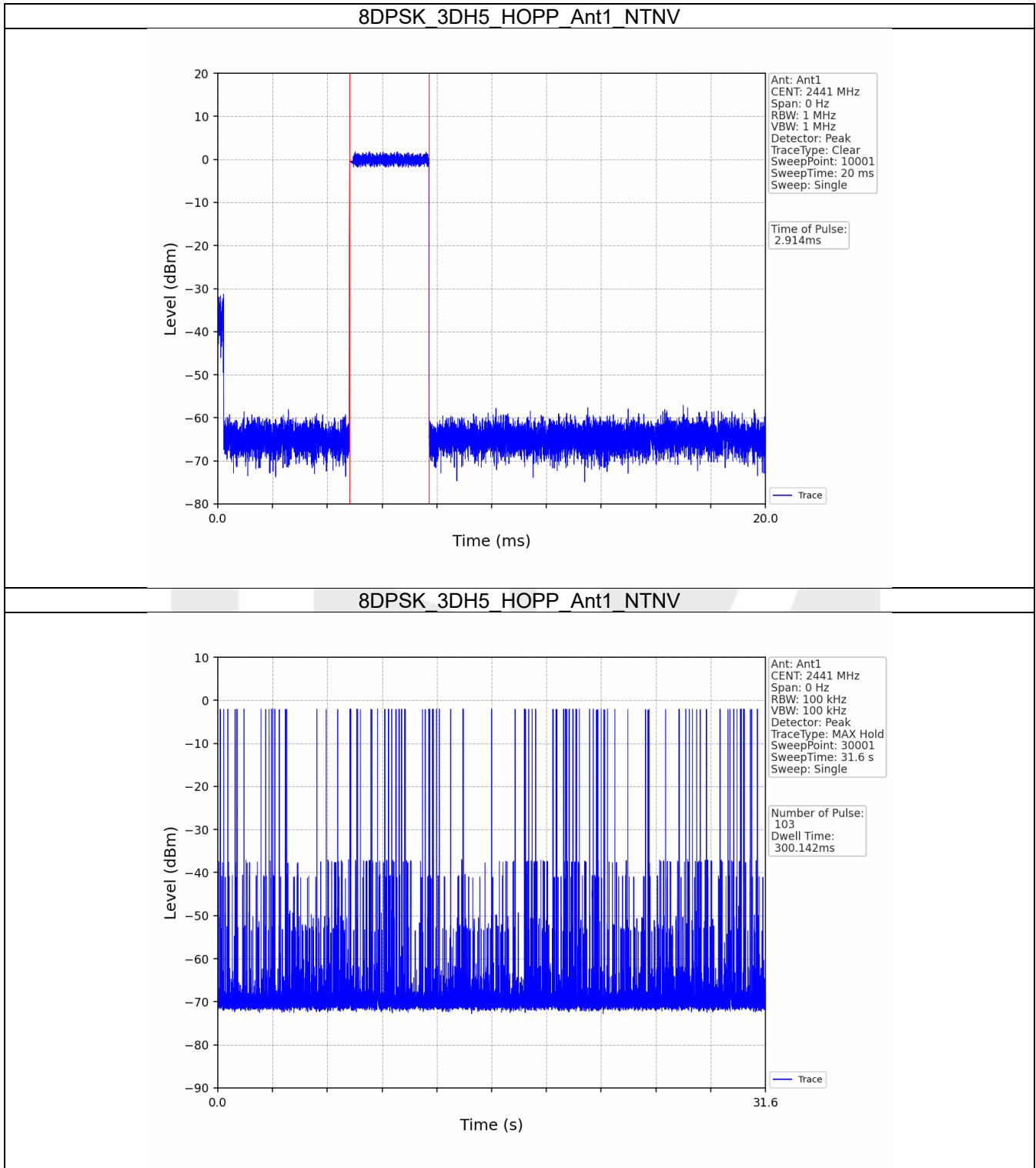












6. Unwanted Emissions In Non-restricted Frequency Bands

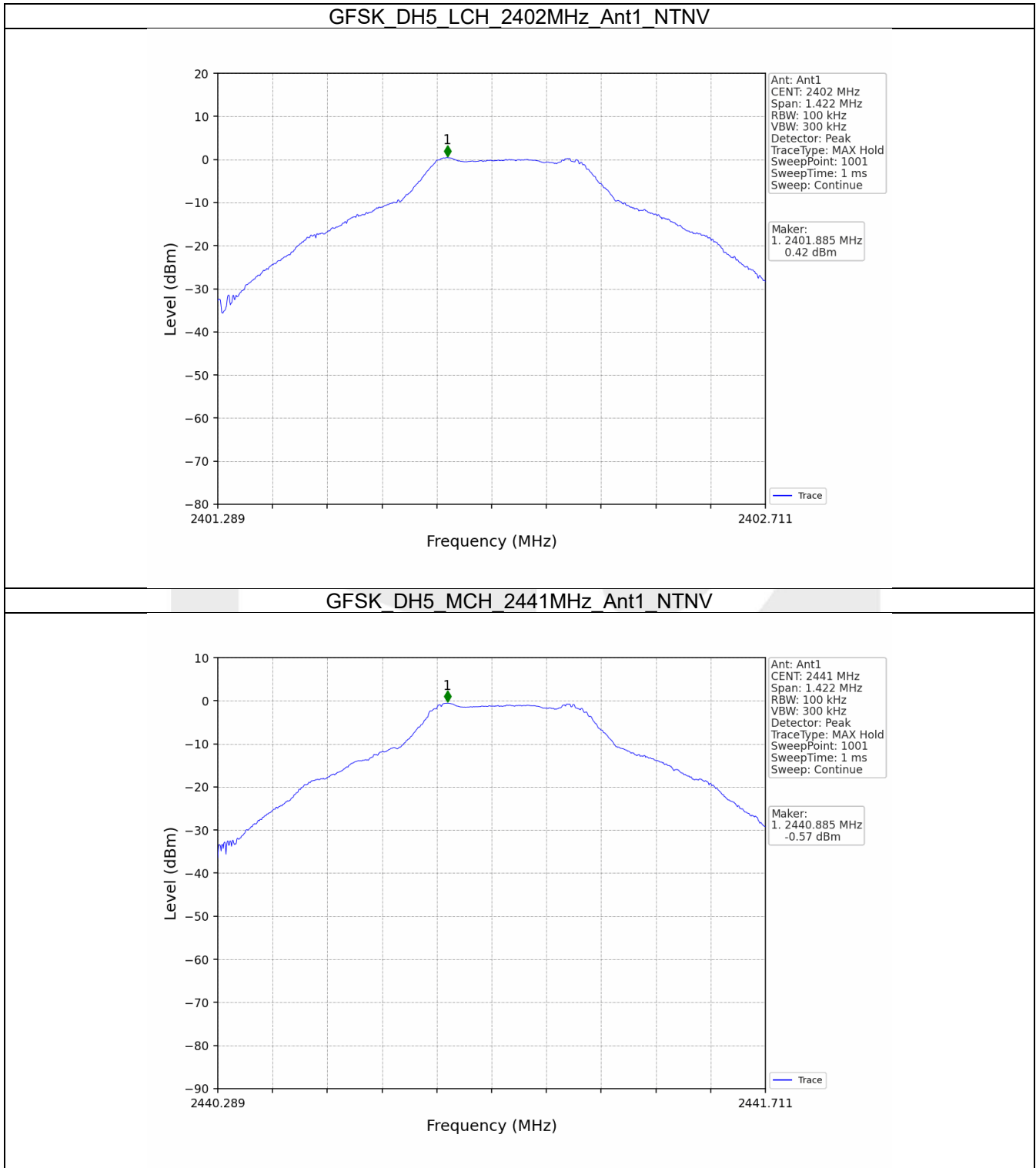
6.1 Ref

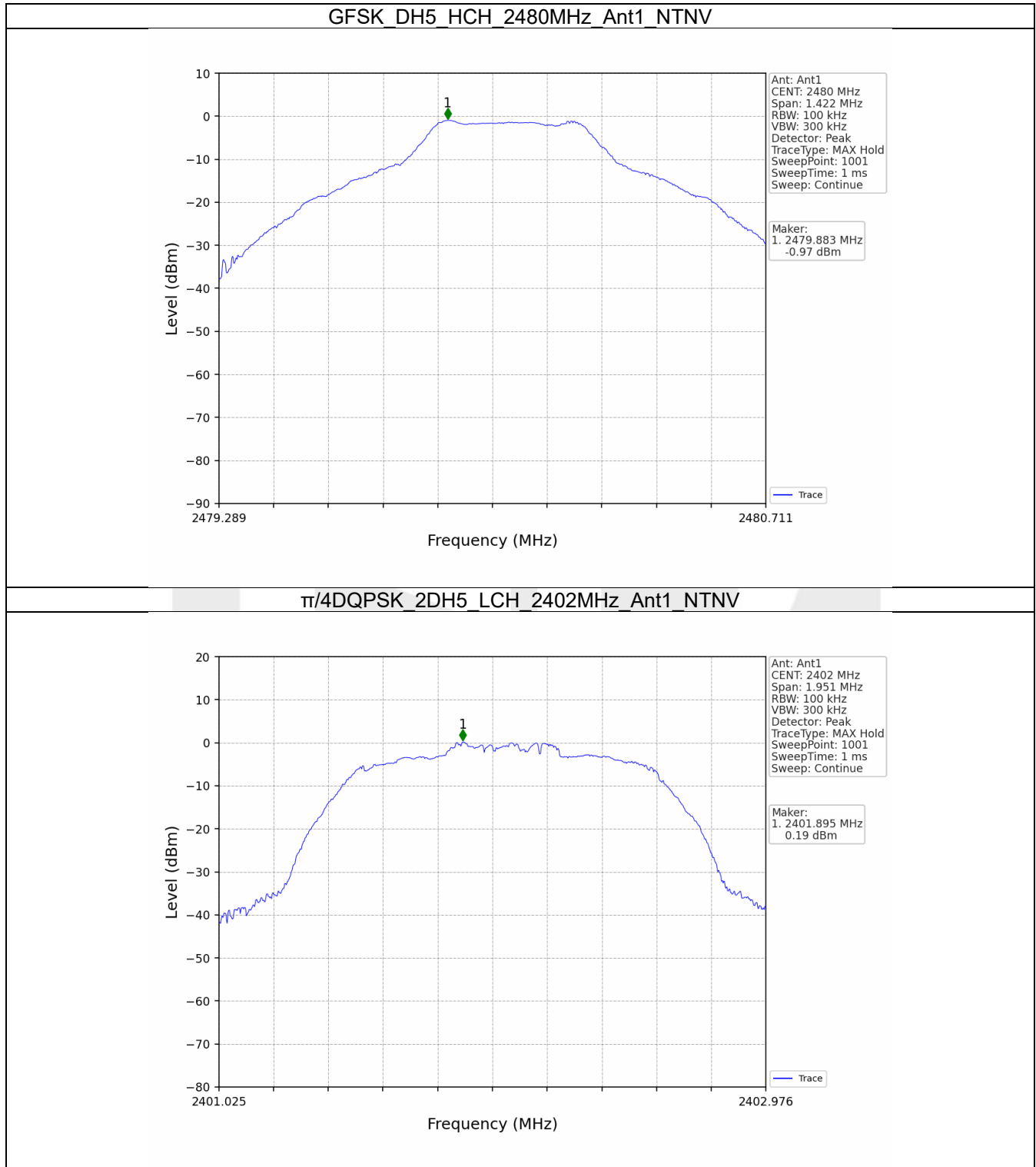
6.1.1 Test Result

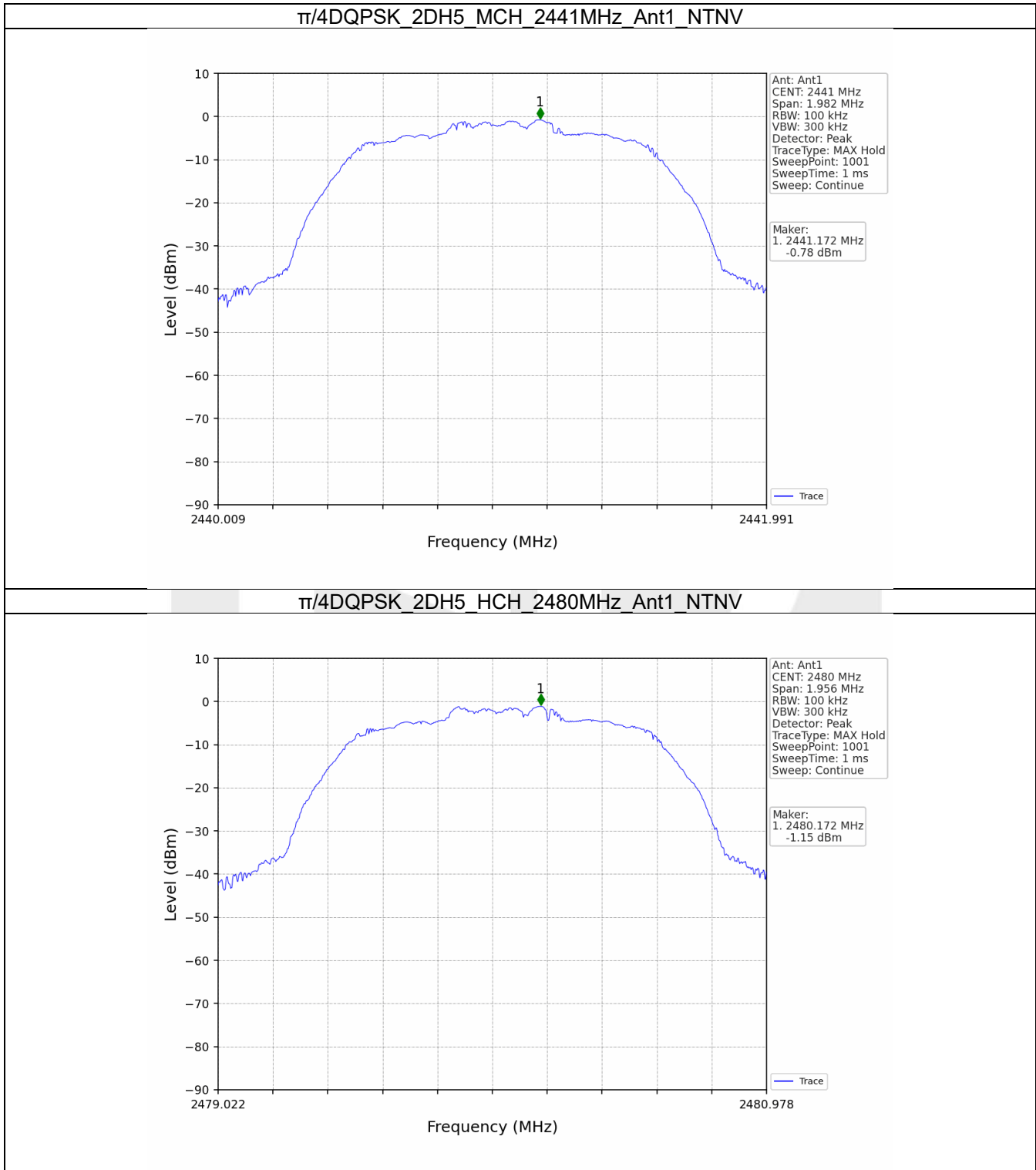
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	0.42
		2441	DH5	1	-0.57
		2480	DH5	1	-0.97
$\pi/4$ DQPSK	SISO	2402	2DH5	1	0.19
		2441	2DH5	1	-0.78
		2480	2DH5	1	-1.15
8DPSK	SISO	2402	3DH5	1	0.42
		2441	3DH5	1	-4.72
		2480	3DH5	1	-0.87

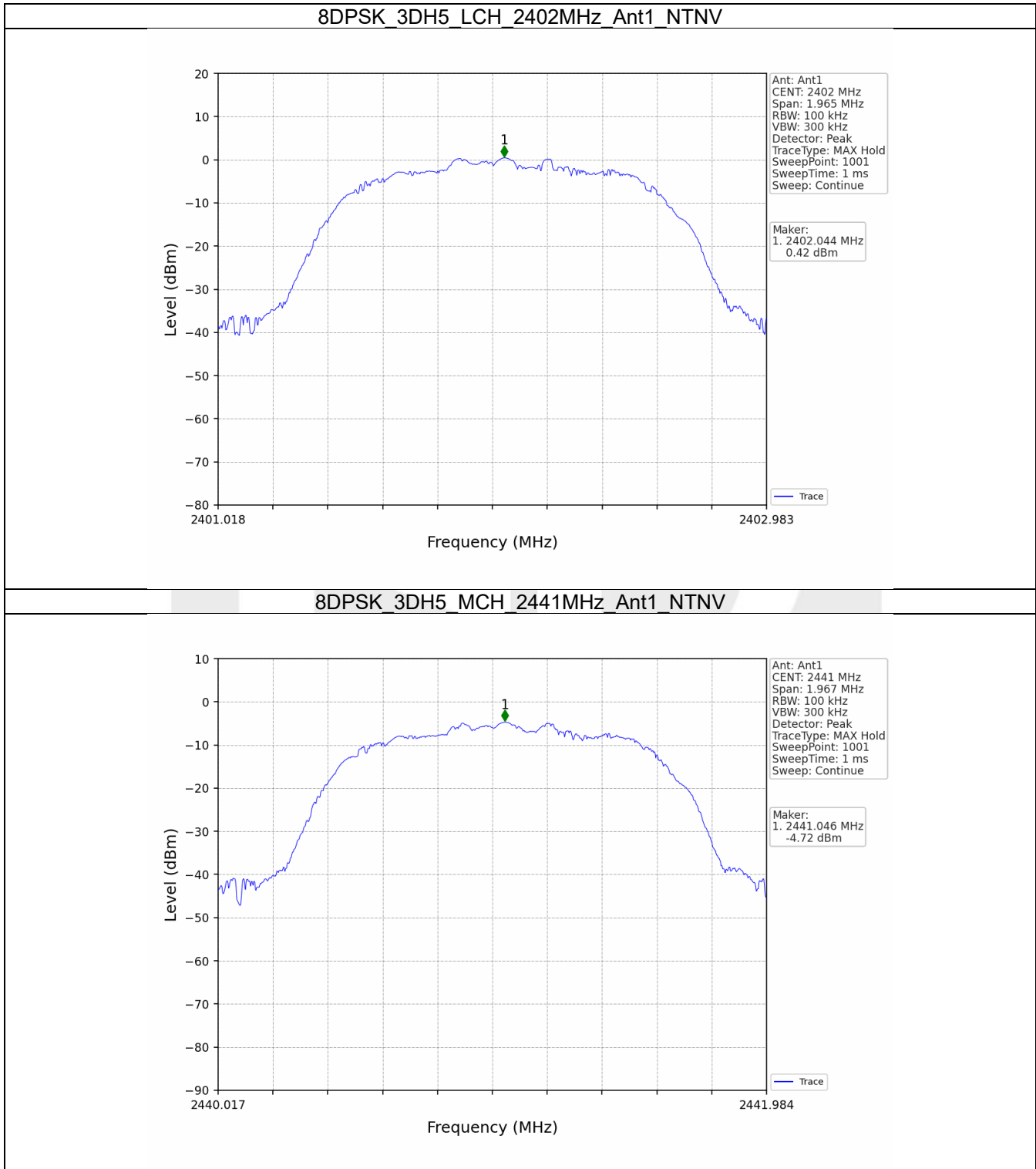
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

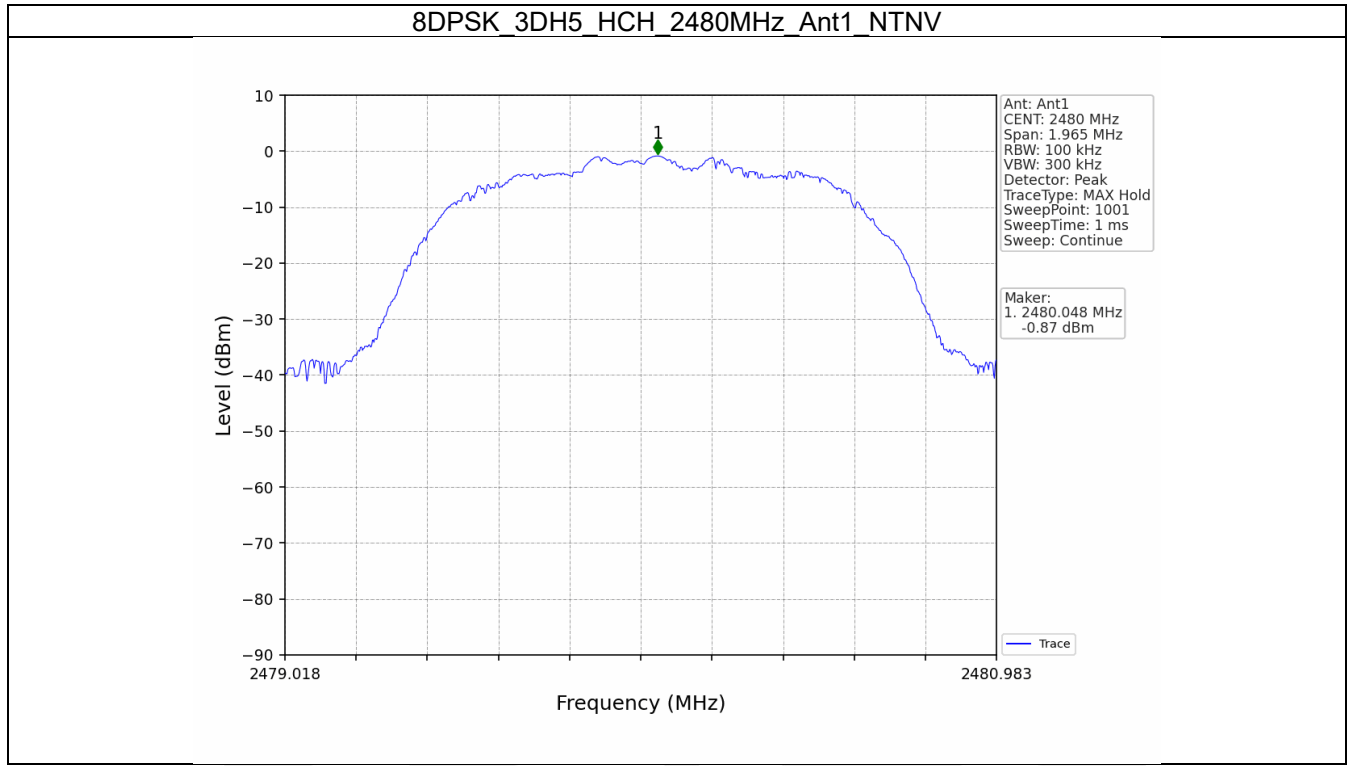
6.1.2 Test Graph











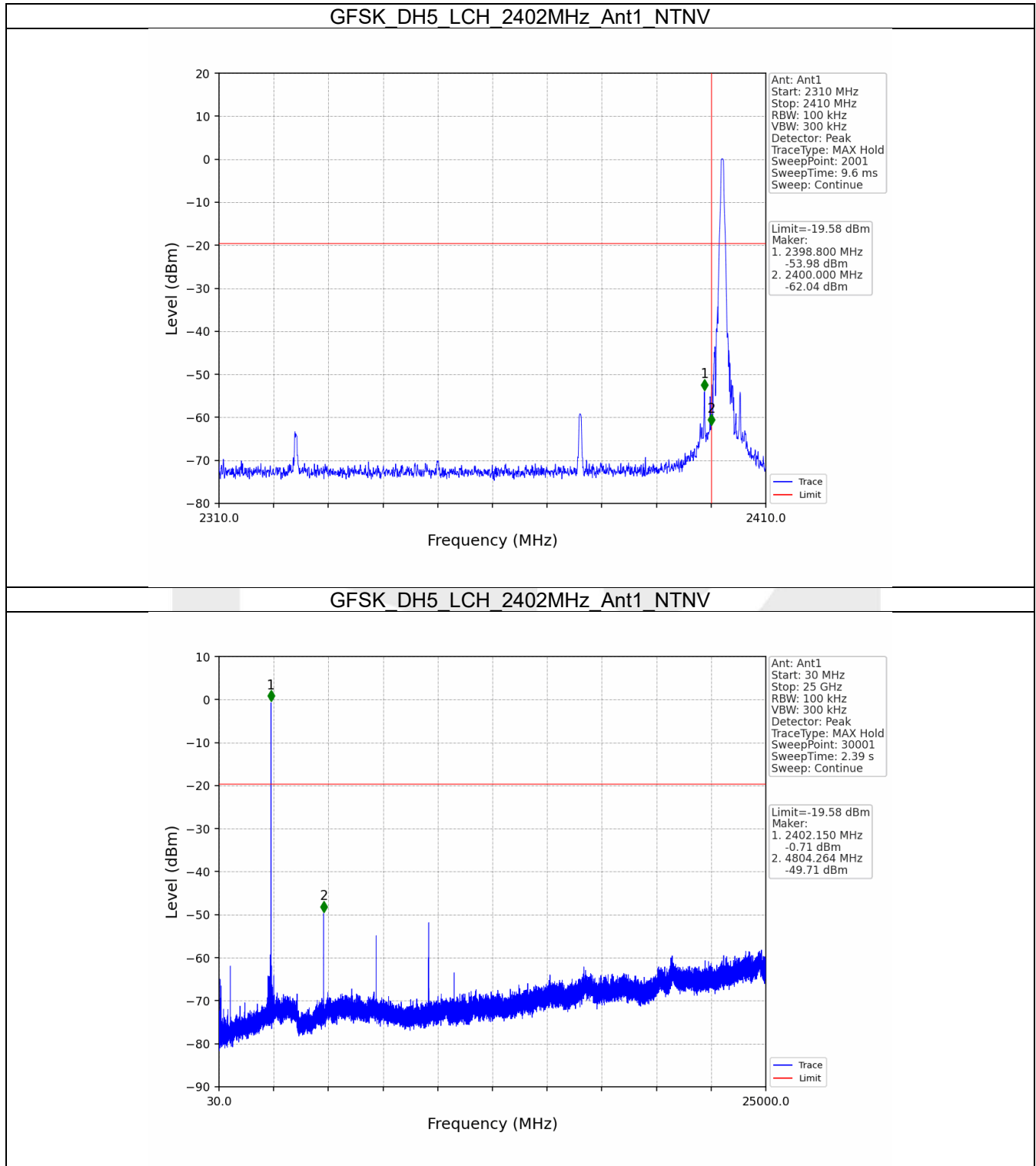
6.2 CSE

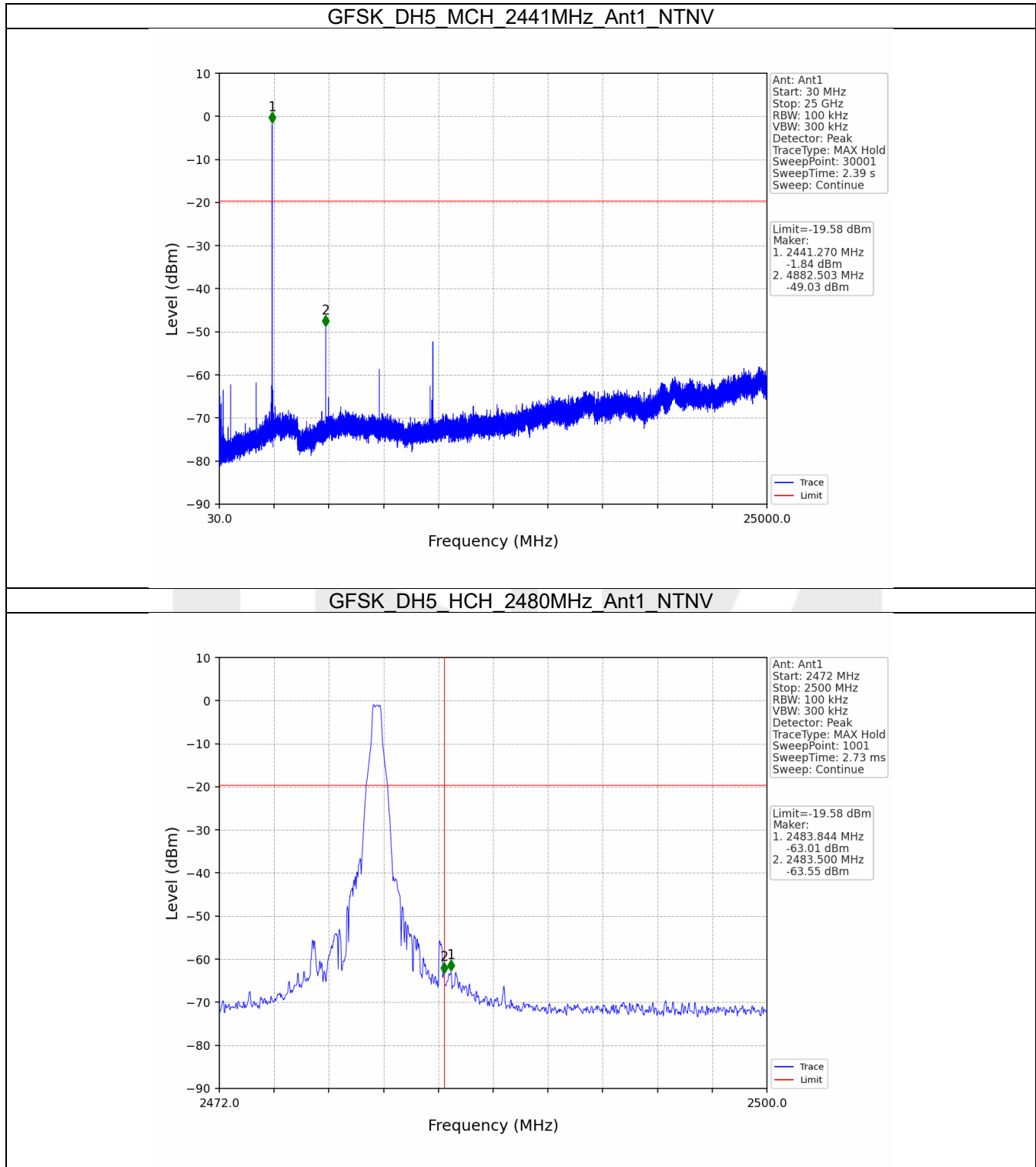
6.2.1 Test Result

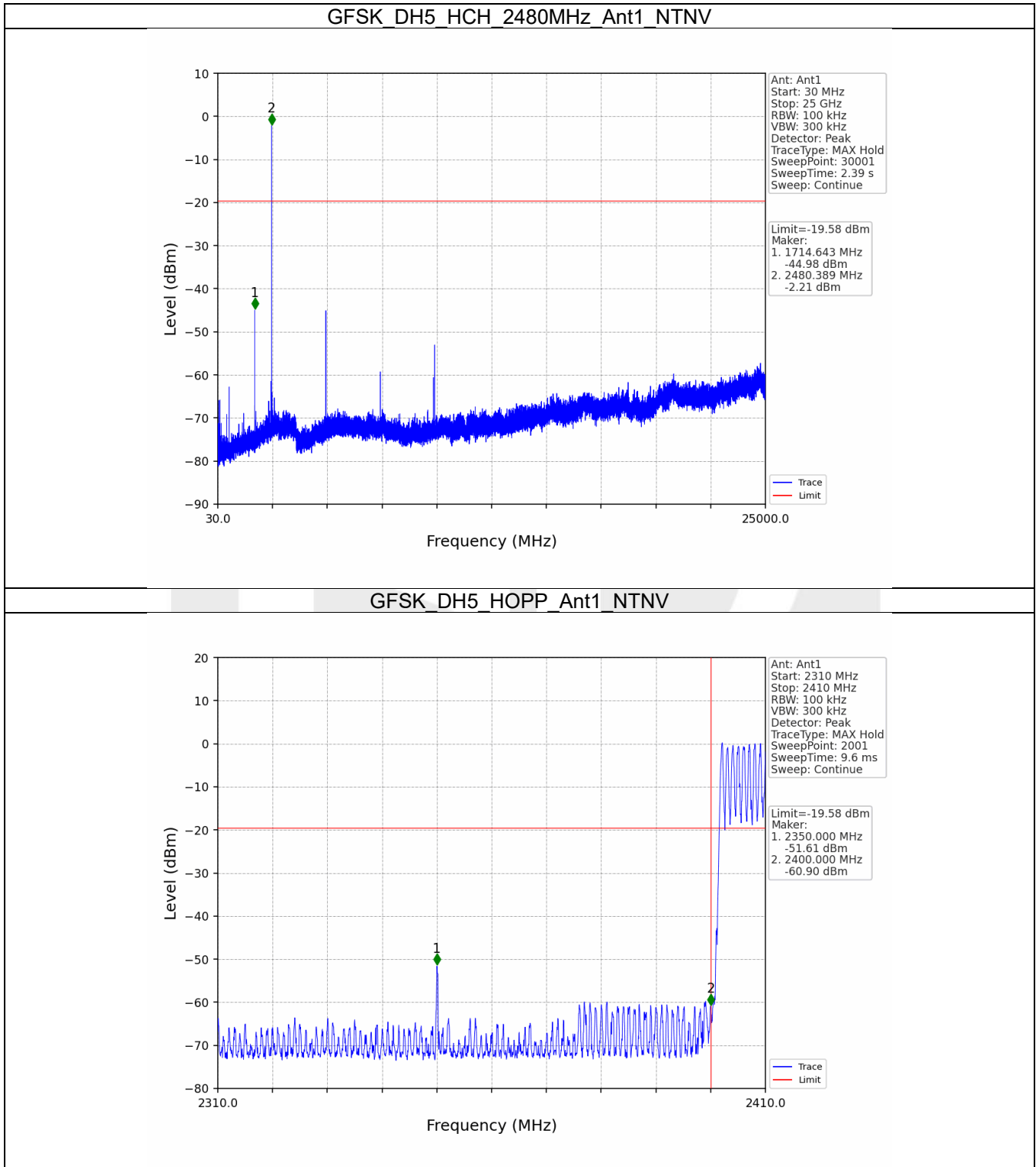
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	0.42	-19.58	Pass
		2441	DH5	1	0.42	-19.58	Pass
		2480	DH5	1	0.42	-19.58	Pass
		HOPP	DH5	1	0.42	-19.58	Pass
					0.42	-19.58	Pass
$\pi/4$ DQPSK	SISO	2402	2DH5	1	0.19	-19.81	Pass
		2441	2DH5	1	0.19	-19.81	Pass
		2480	2DH5	1	0.19	-19.81	Pass
		HOPP	2DH5	1	0.19	-19.81	Pass
					0.19	-19.81	Pass
8DPSK	SISO	2402	3DH5	1	0.42	-19.58	Pass
		2441	3DH5	1	0.42	-19.58	Pass
		2480	3DH5	1	0.42	-19.58	Pass
		HOPP	3DH5	1	0.42	-19.58	Pass
					0.42	-19.58	Pass

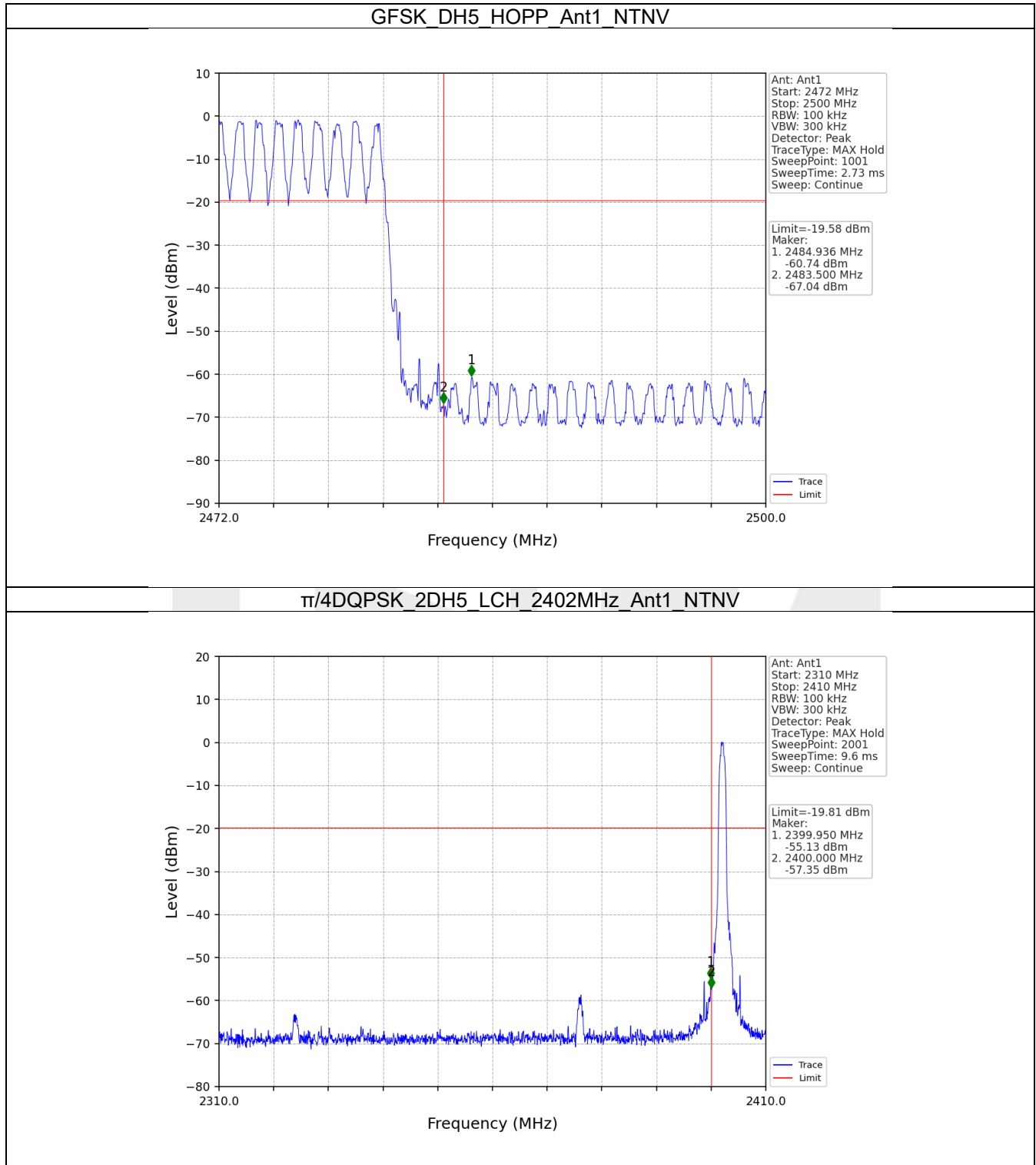
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

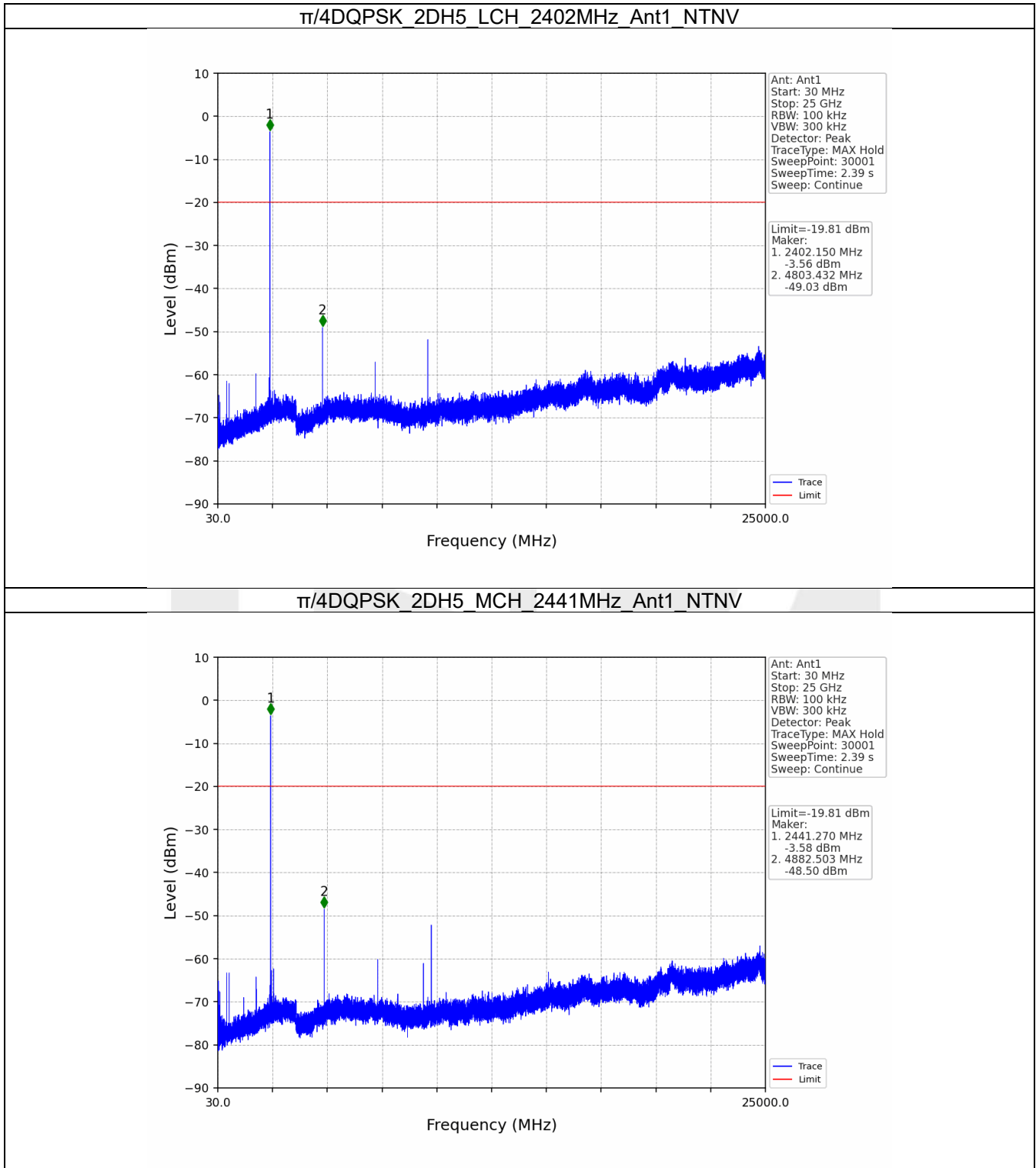
6.2.2 Test Graph

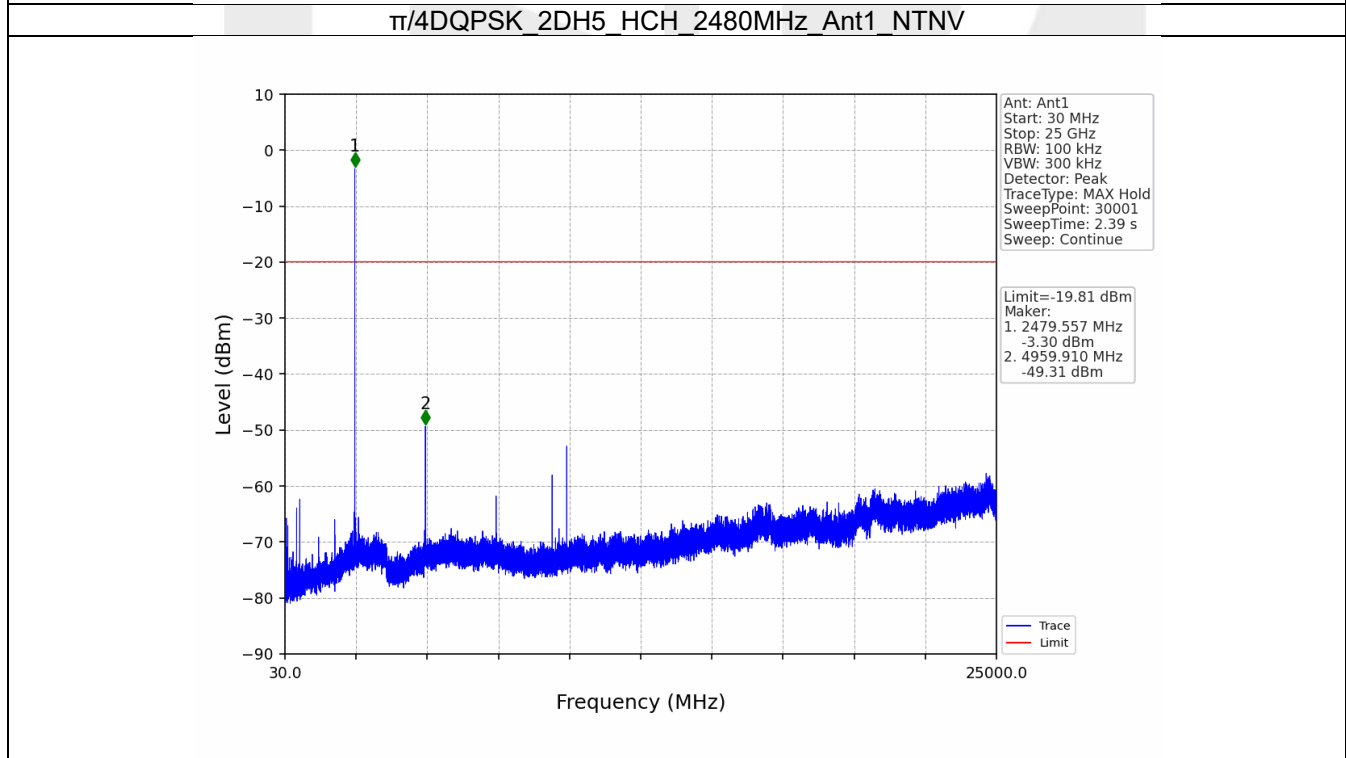
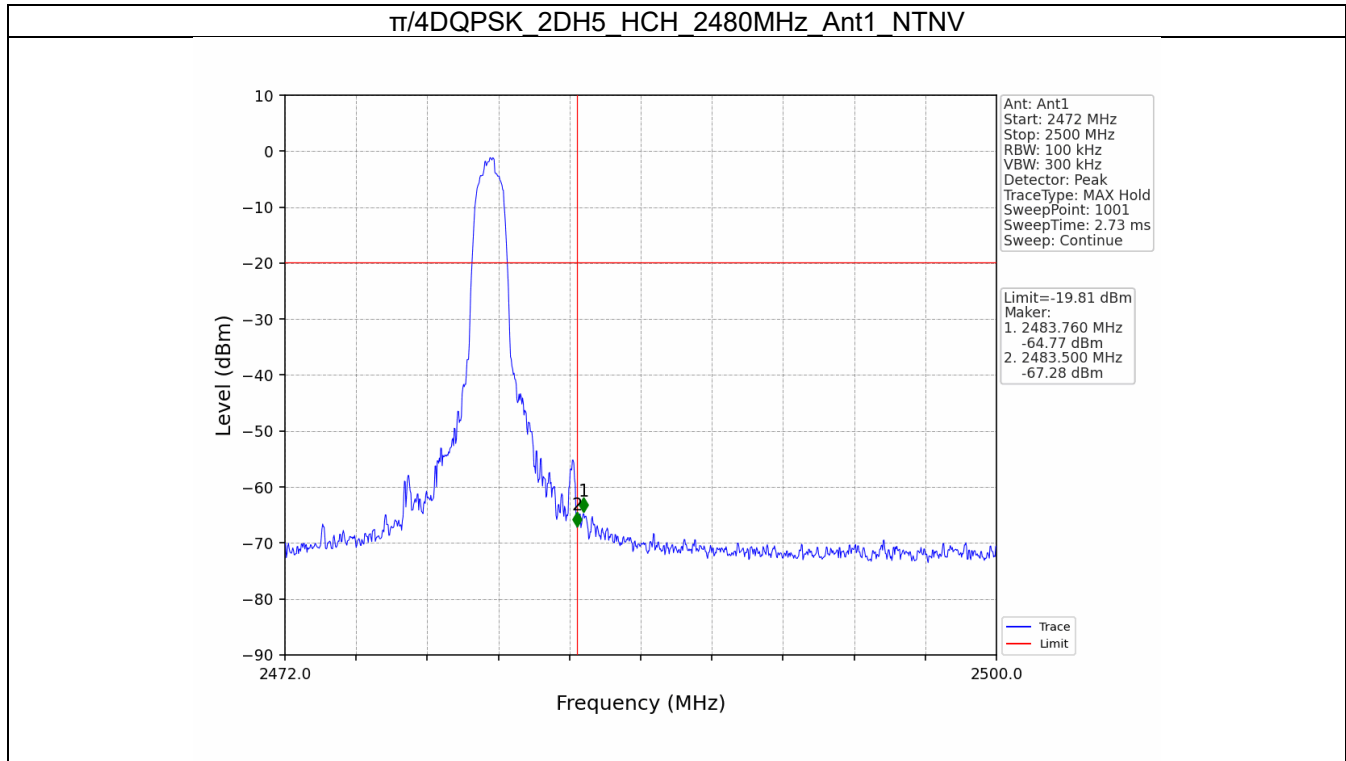


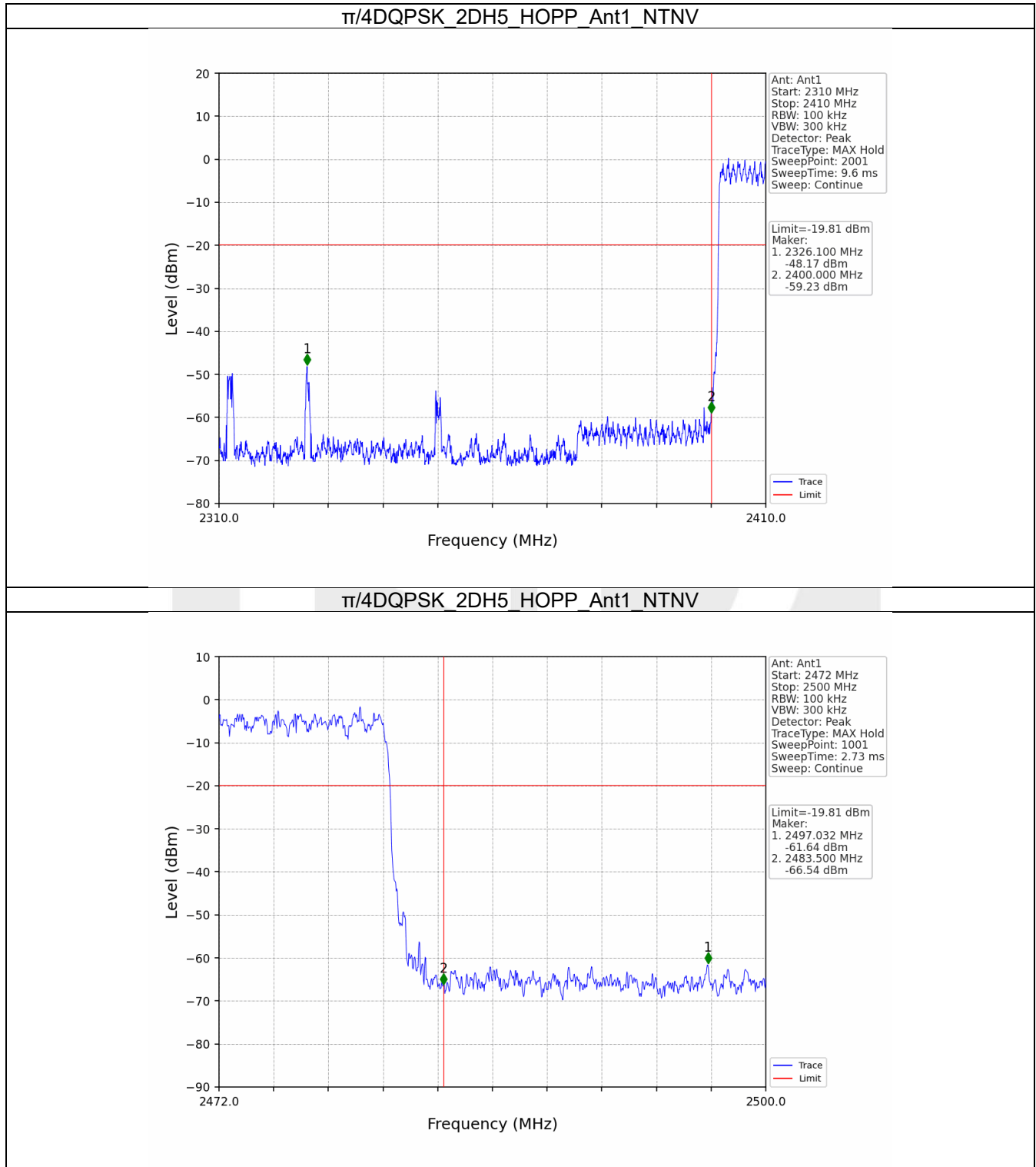


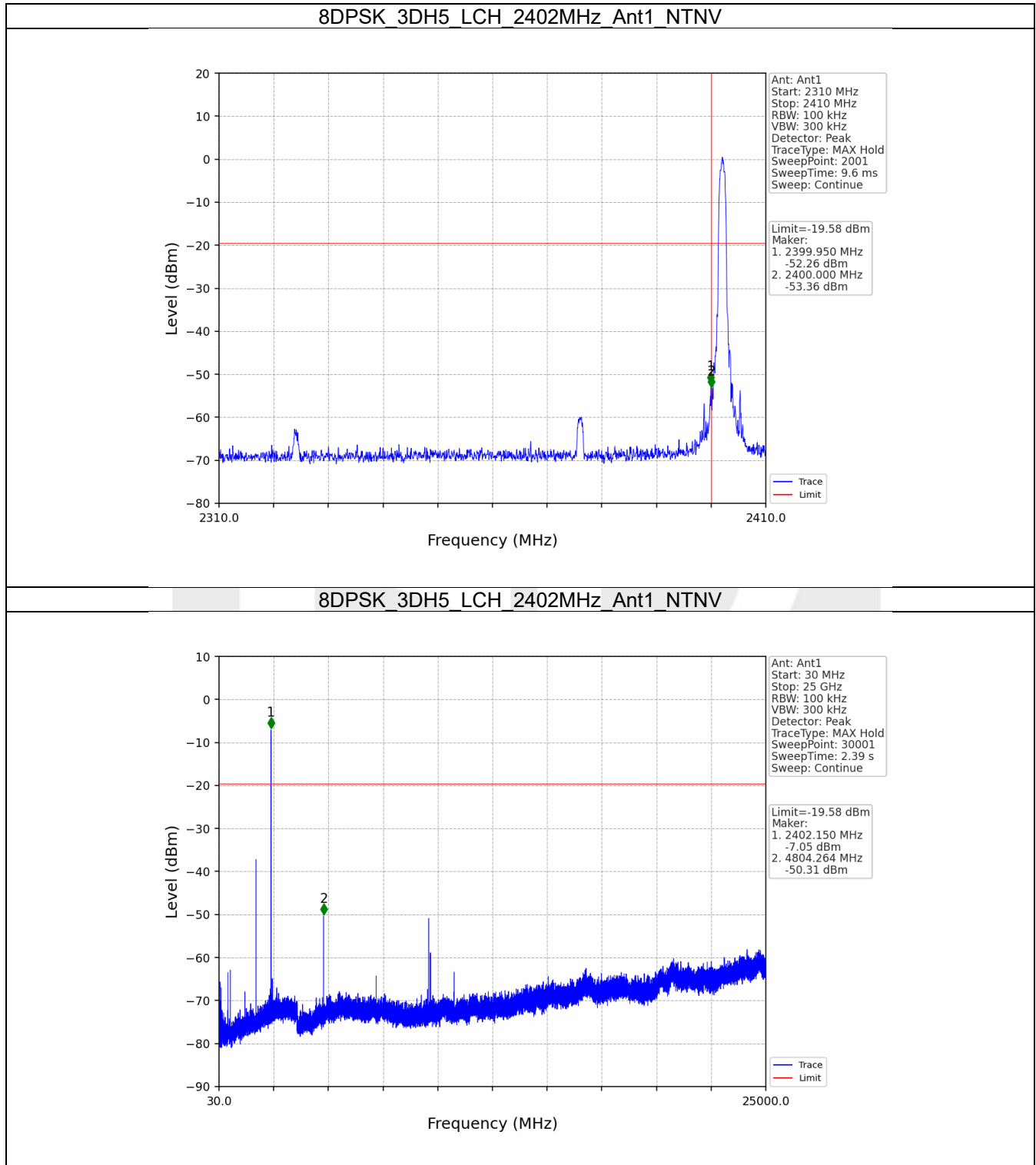


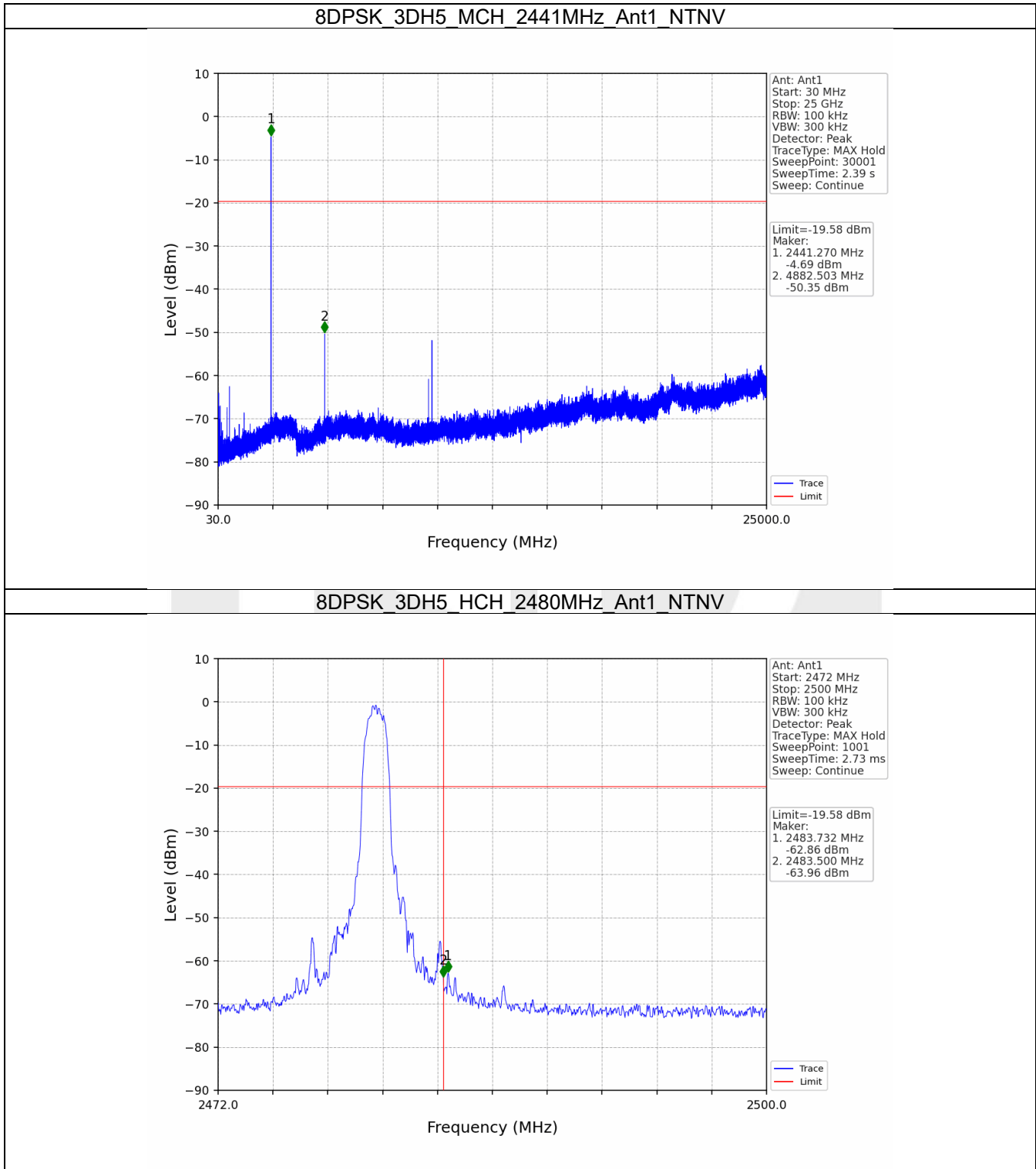


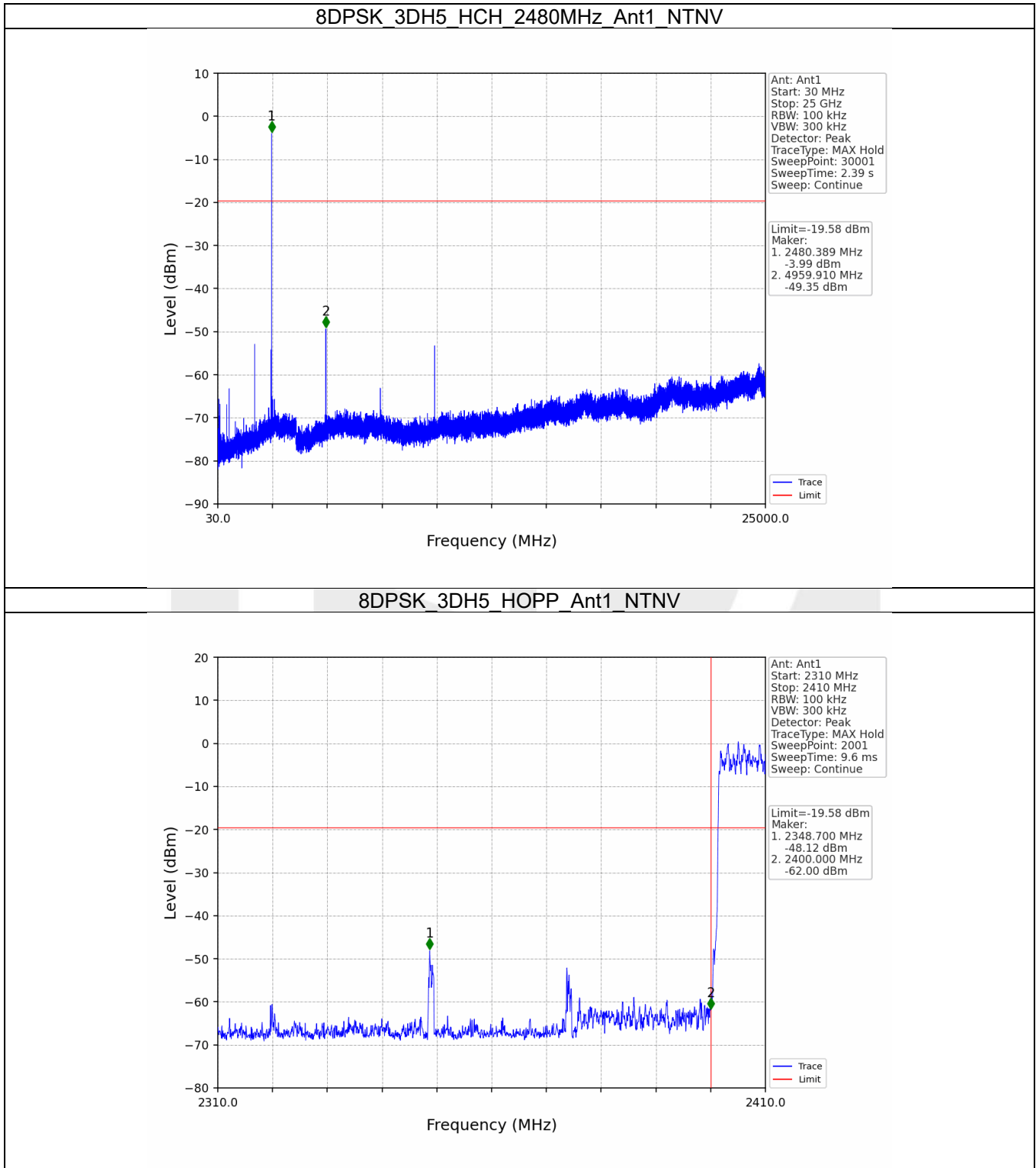


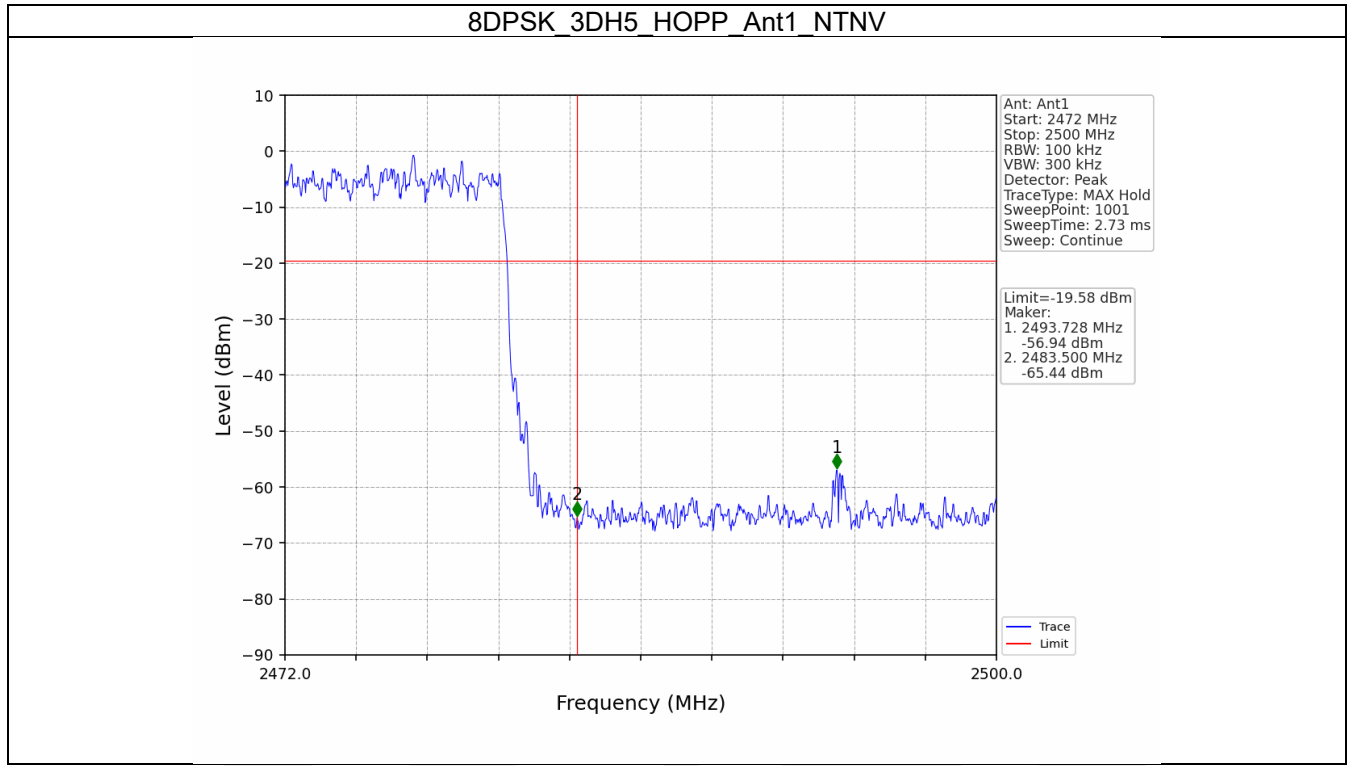












----- End of Report -----