

Appendix RF Test Data for BT

Company: : Shenzhen Wanaka Technology Co., Ltd.
EUT : Audio Player
FCC ID : 2BRER-WTB-797
Model Number : WTB-797
Report No. : HTT2025061042F01
Reviewed By : Heber He

1. Duty Cycle

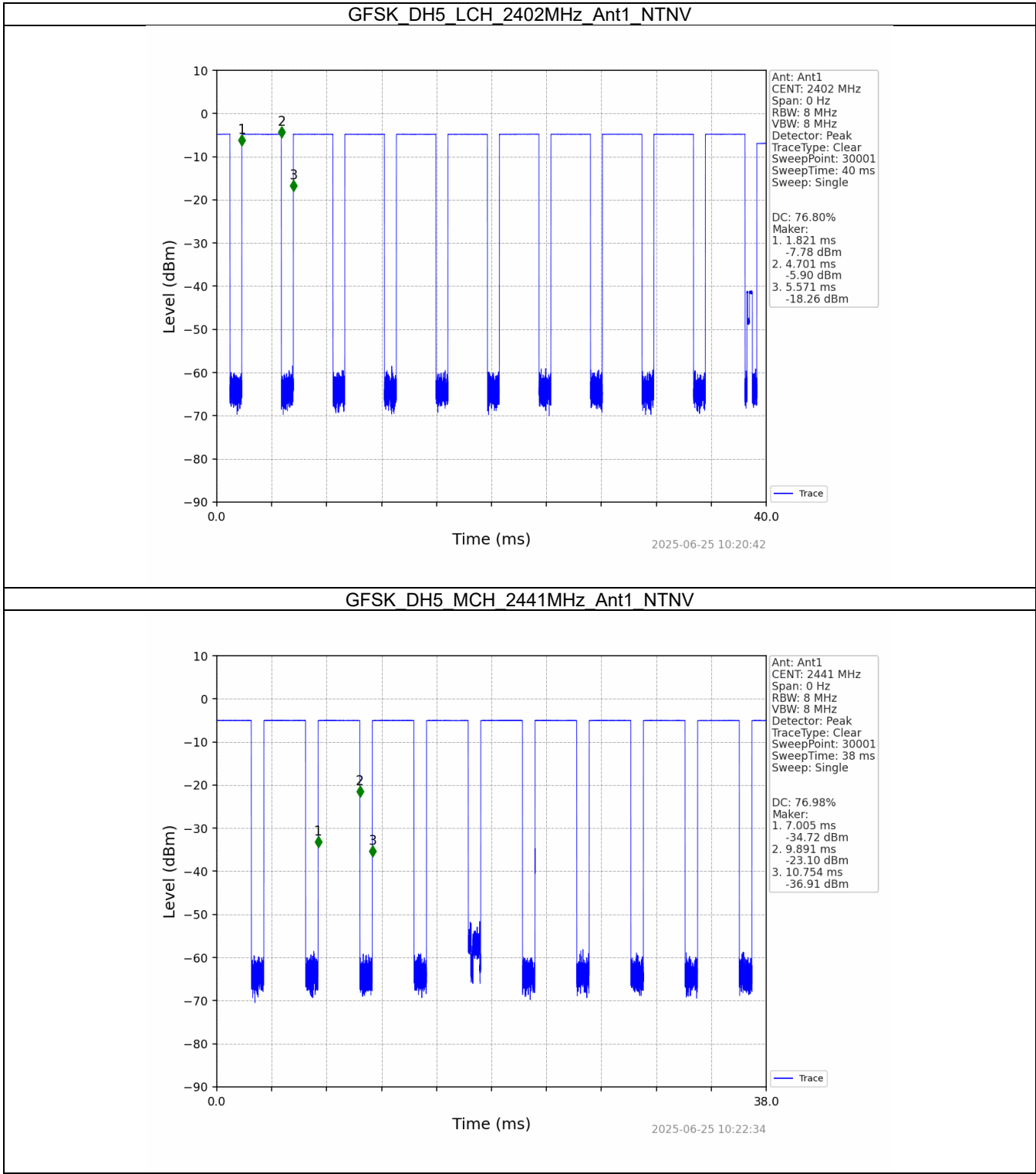
1.1 Test Result

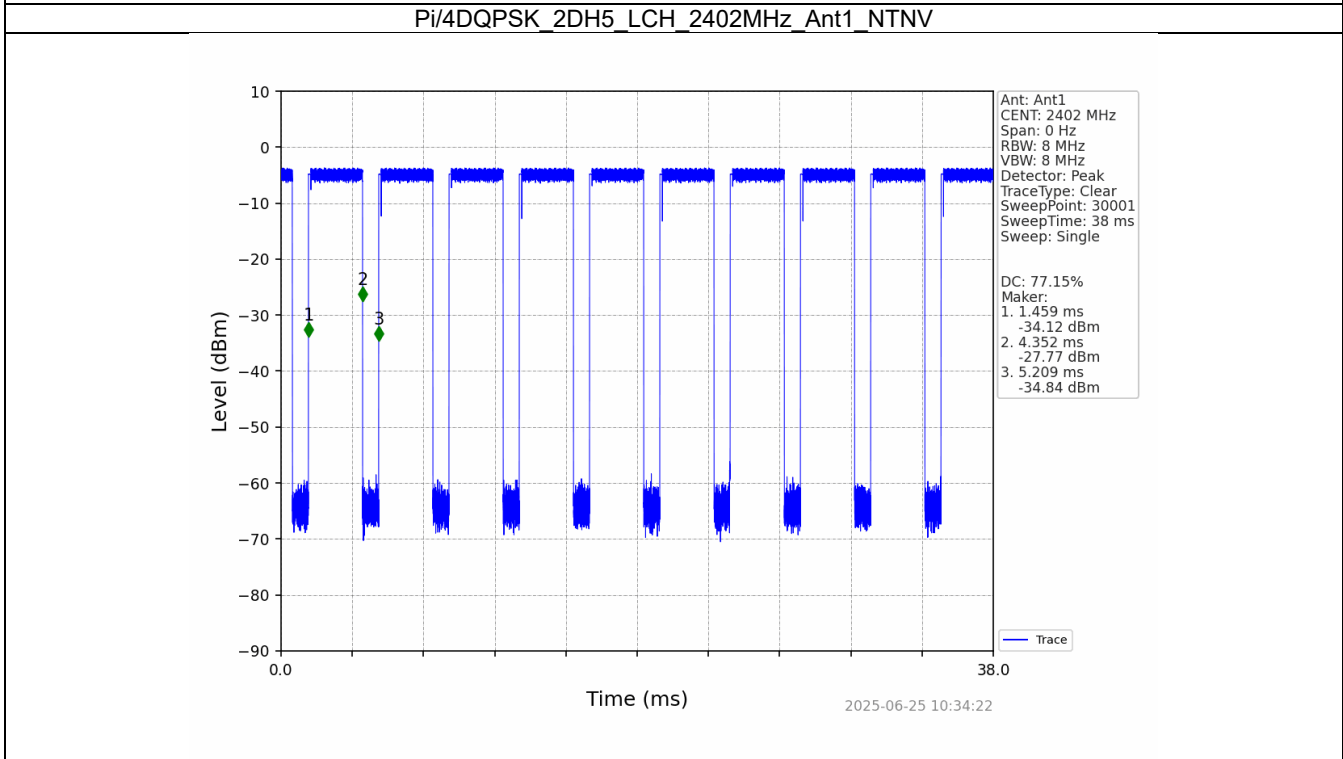
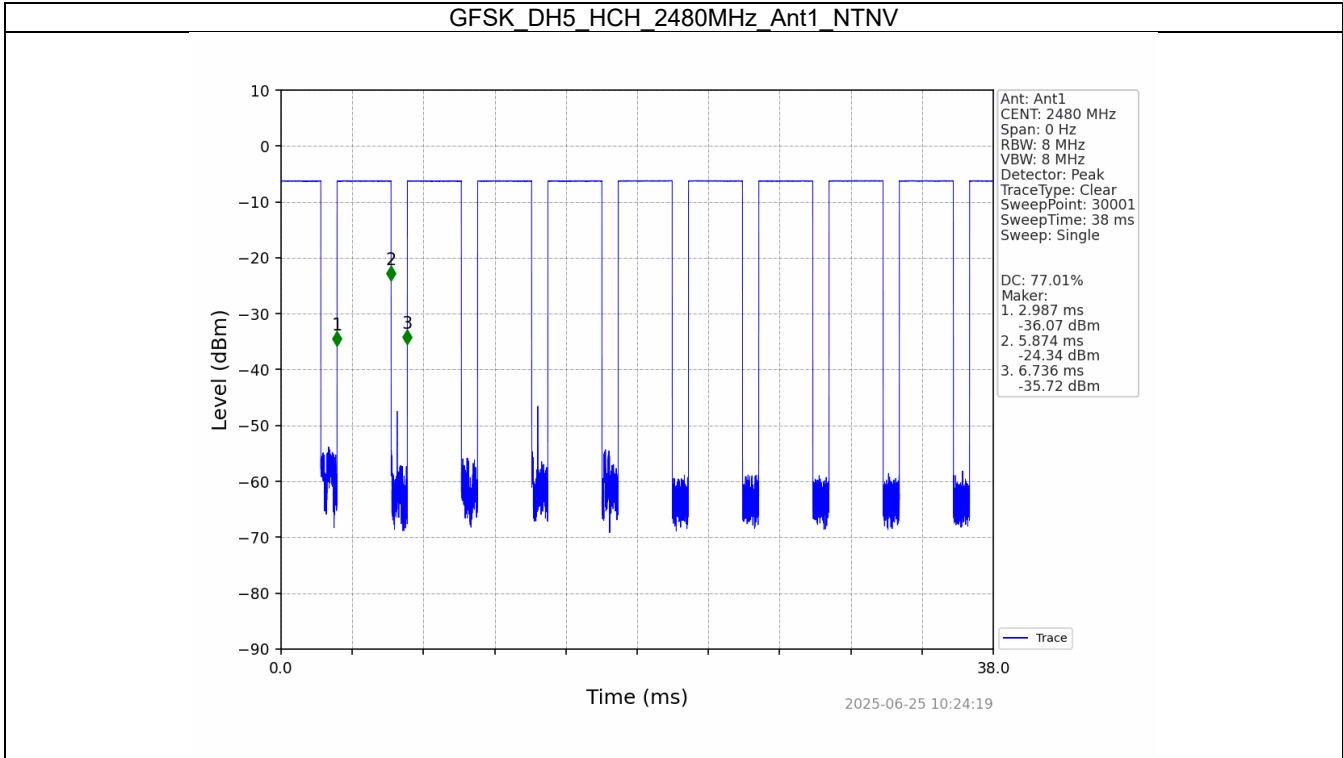
1.1.1 Ant1

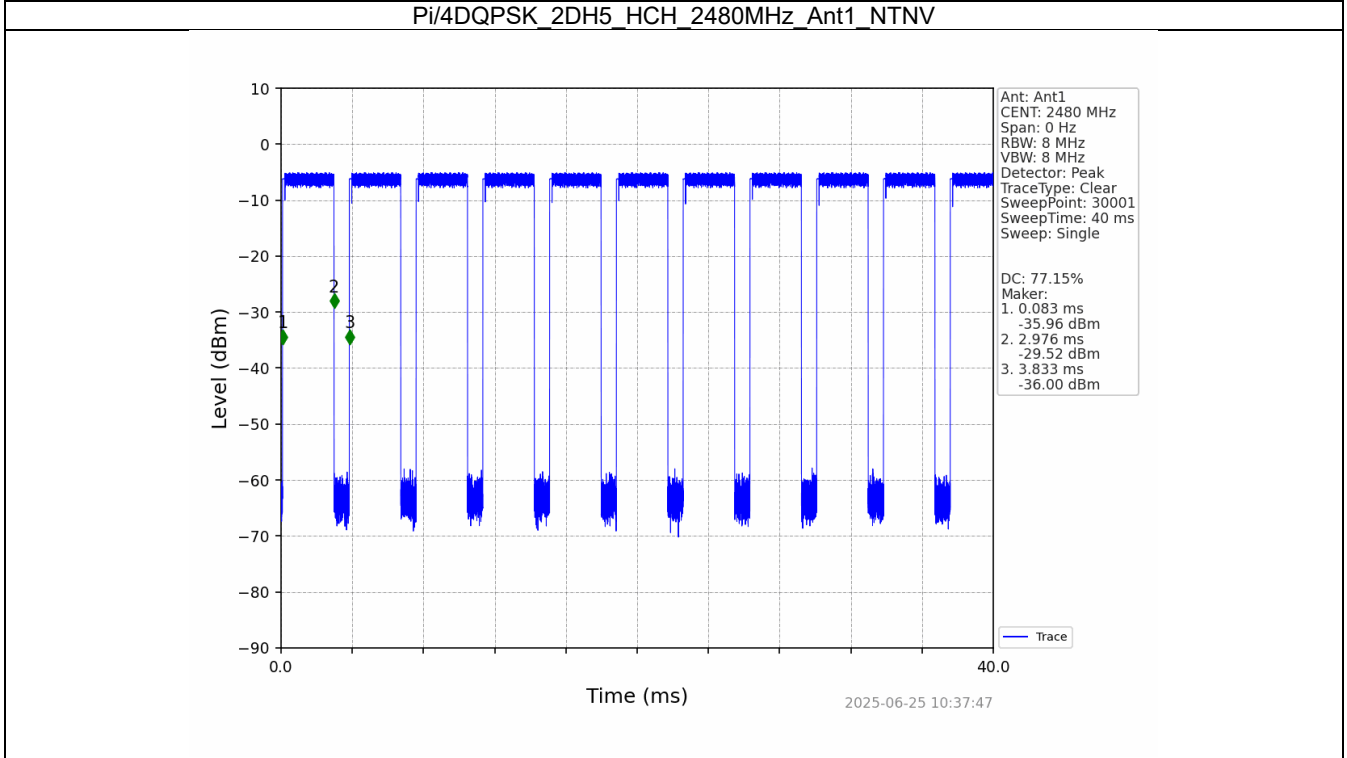
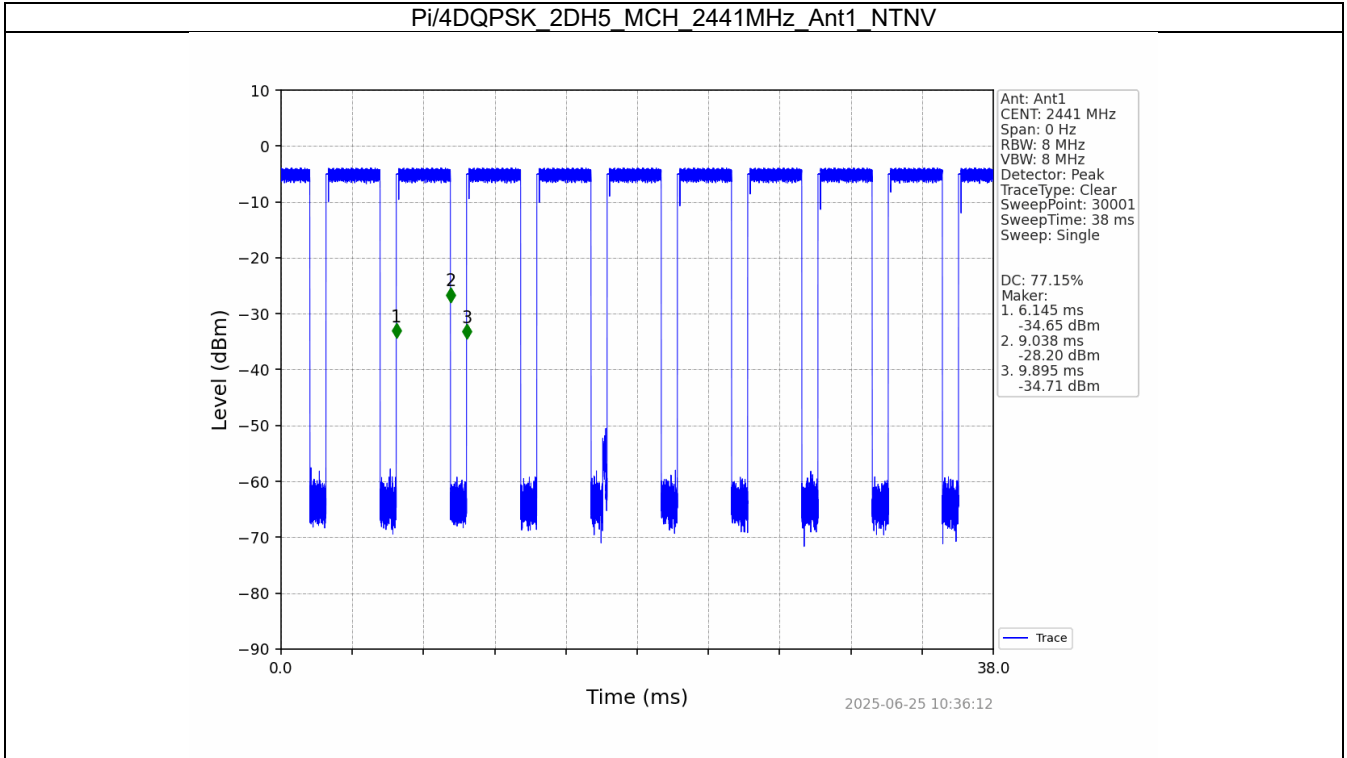
Ant1								
Mode	Tx Type	Frequency (MHz)	Packet Type	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
GFSK	SISO	2402	DH5	2.880	3.750	76.80	1.15	0.01
		2441	DH5	2.886	3.749	76.98	1.14	0.01
		2480	DH5	2.887	3.749	77.01	1.13	0.01
Pi/4DQPSK	SISO	2402	2DH5	2.893	3.750	77.15	1.13	0.01
		2441	2DH5	2.893	3.750	77.15	1.13	0.03
		2480	2DH5	2.893	3.750	77.15	1.13	0.04

1.2 Test Graph

1.2.1 Ant1







2. Bandwidth

2.1 Test Result

2.1.1 OBW

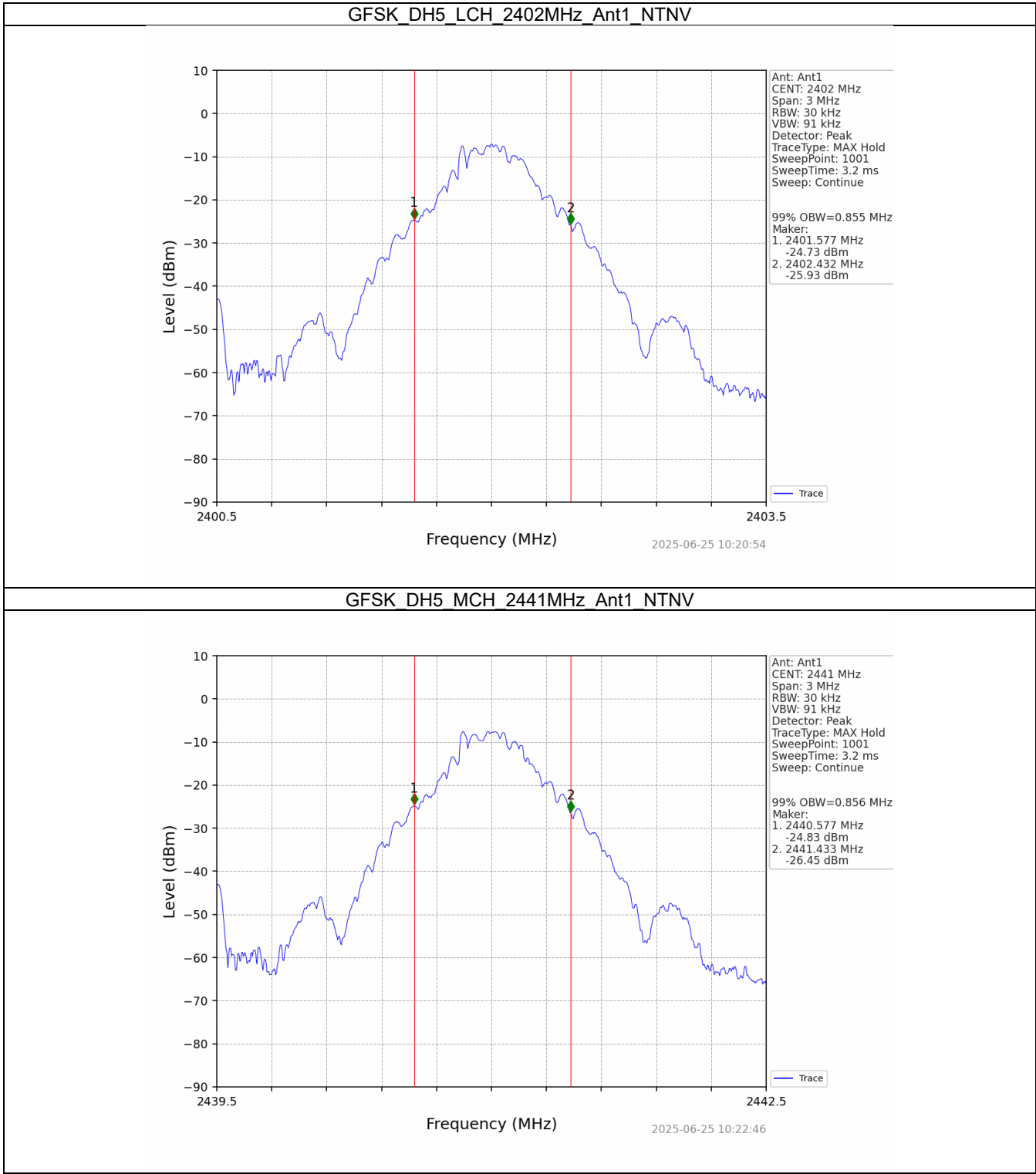
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.855	/	Pass
		2441	DH5	1	0.856	/	Pass
		2480	DH5	1	0.855	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.175	/	Pass
		2441	2DH5	1	3.570	/	Pass
		2480	2DH5	1	1.174	/	Pass

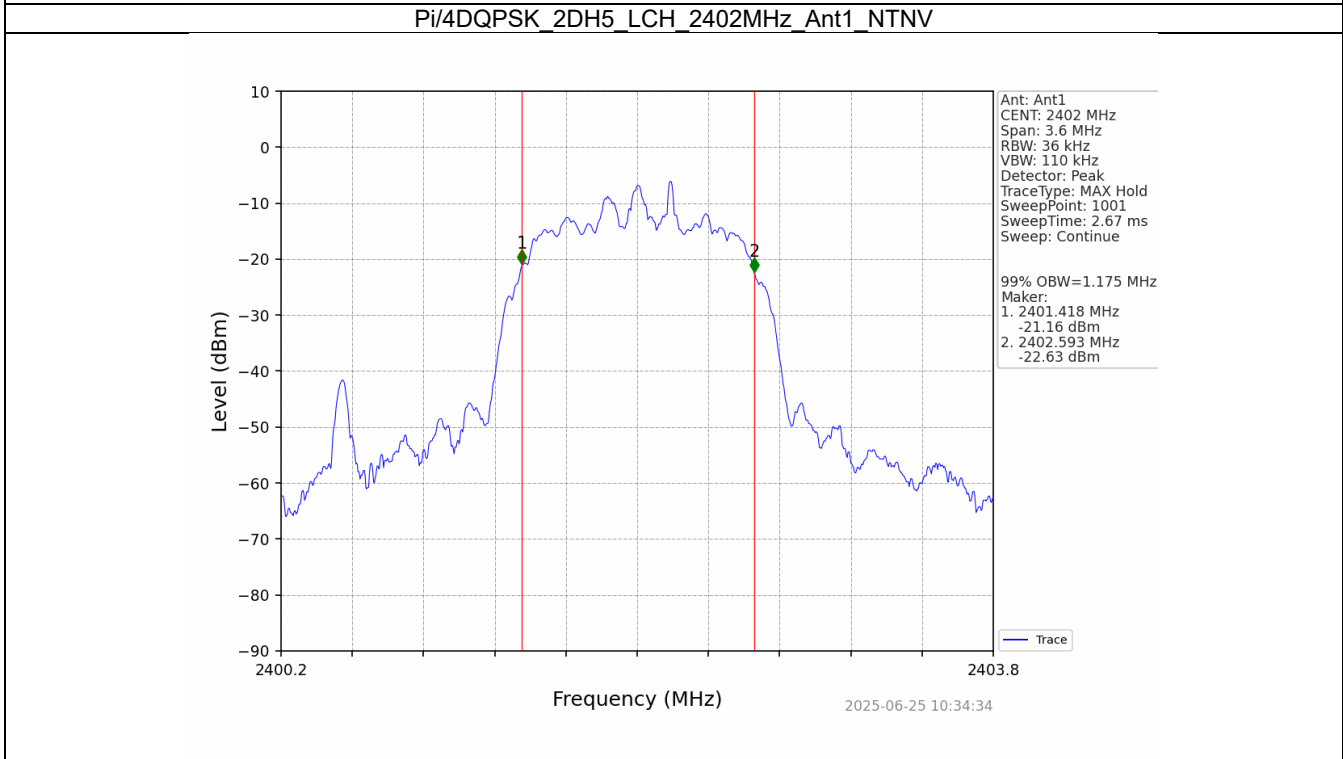
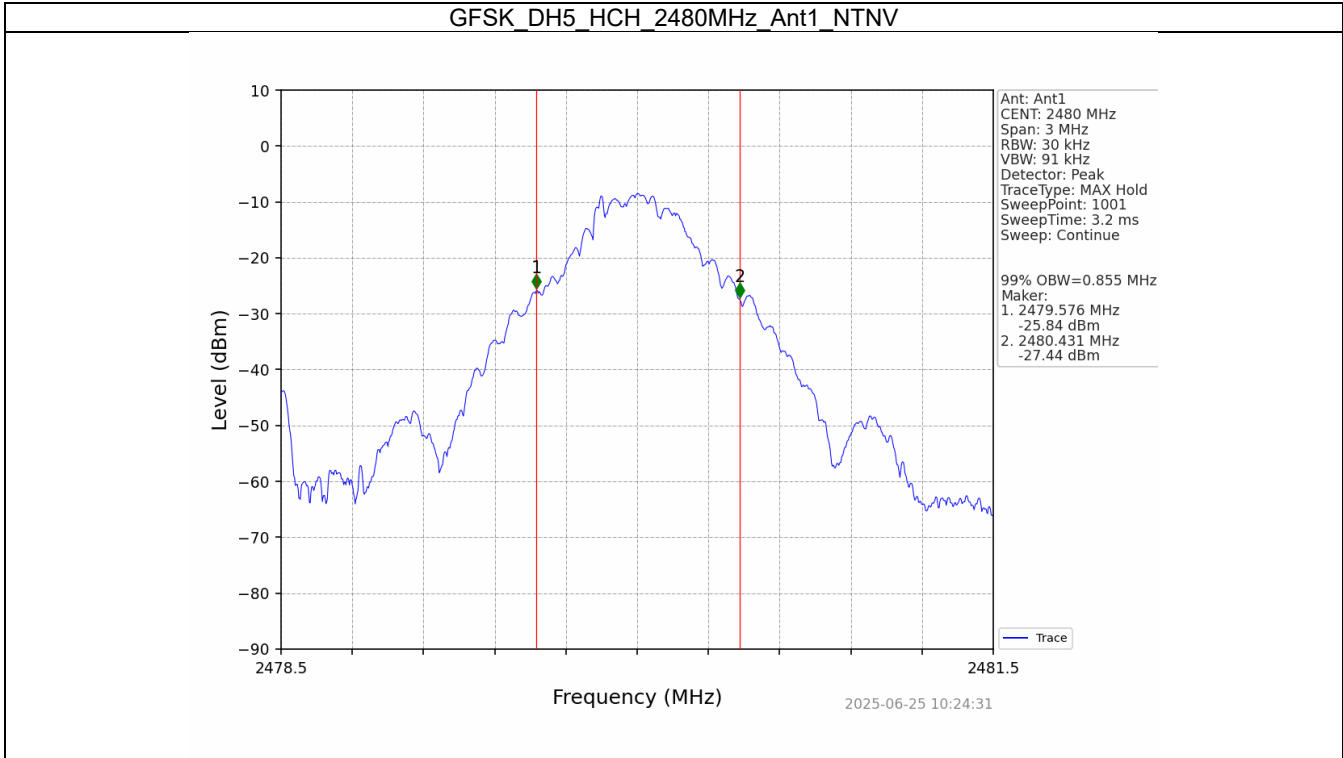
2.1.2 20dB BW

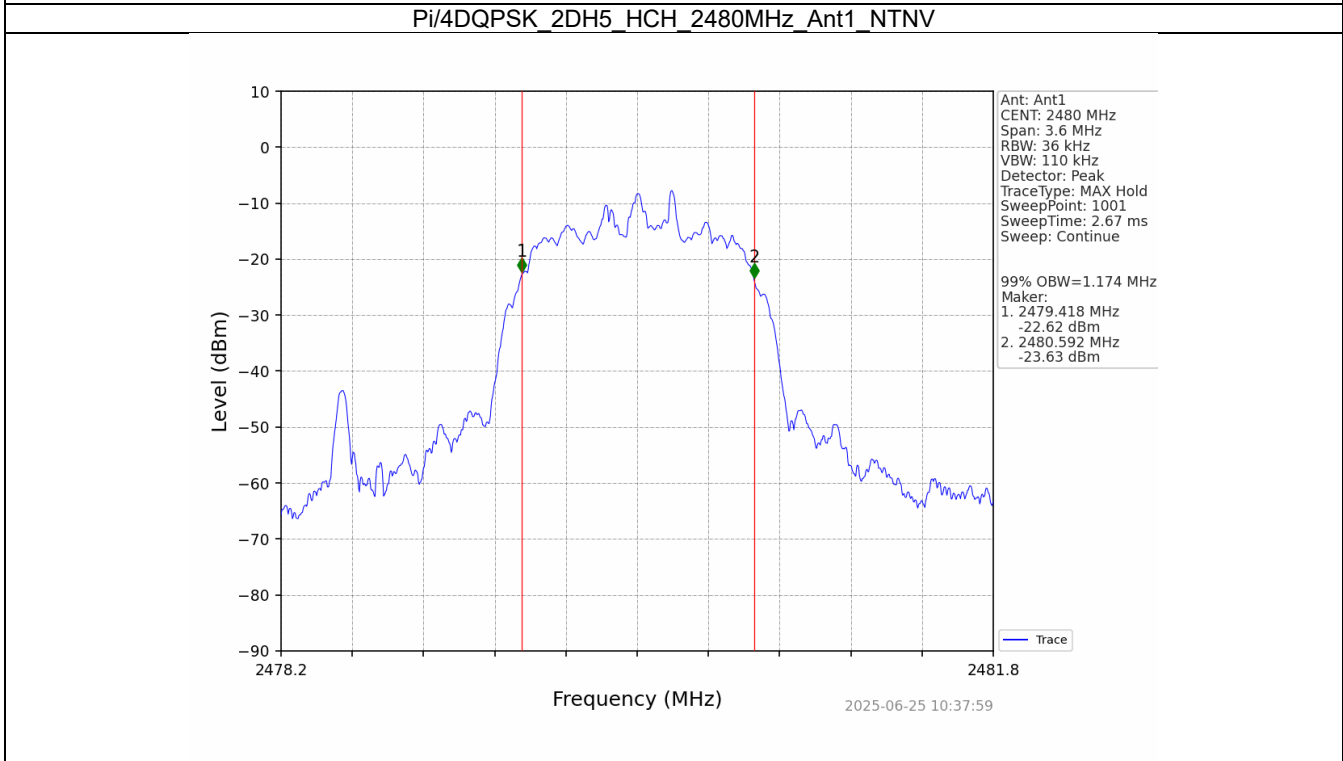
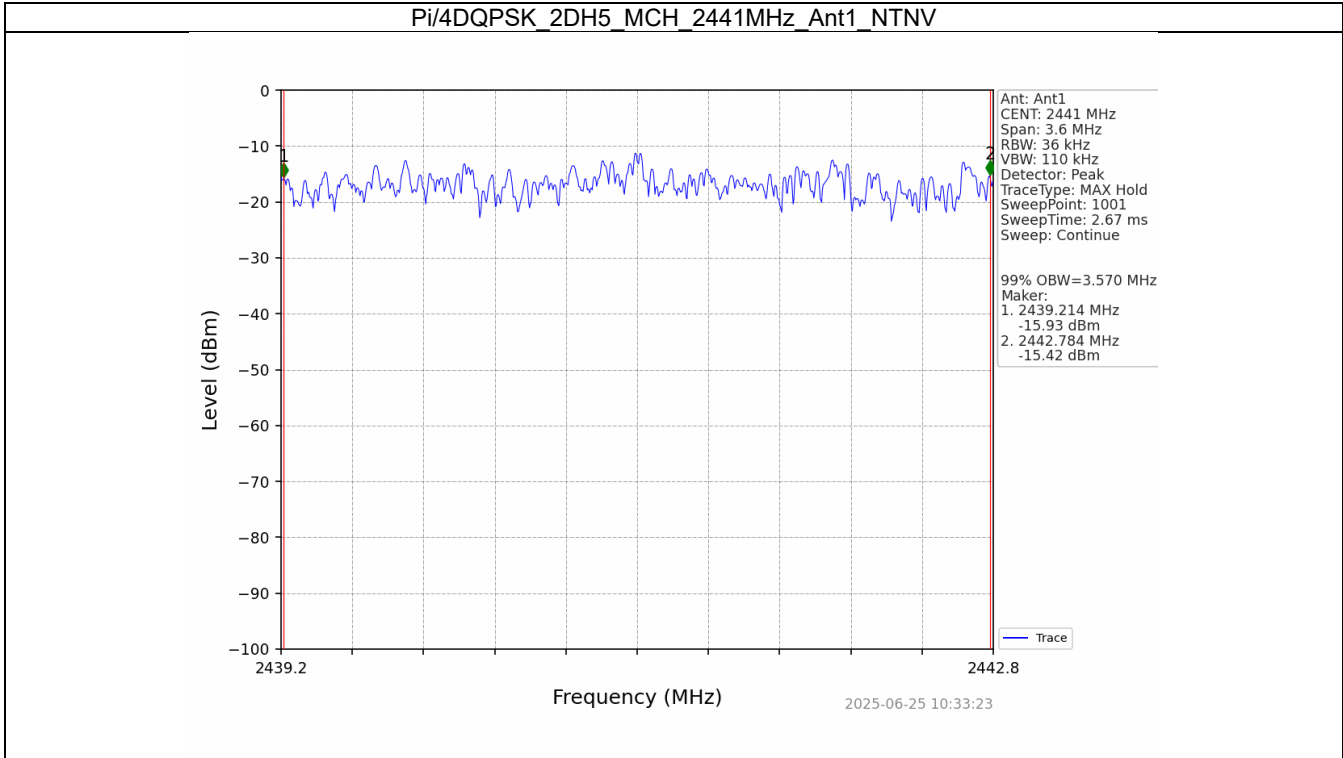
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.951	/	Pass
		2441	DH5	1	0.954	/	Pass
		2480	DH5	1	0.954	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.330	/	Pass
		2441	2DH5	1	1.288	/	Pass
		2480	2DH5	1	1.283	/	Pass

2.2 Test Graph

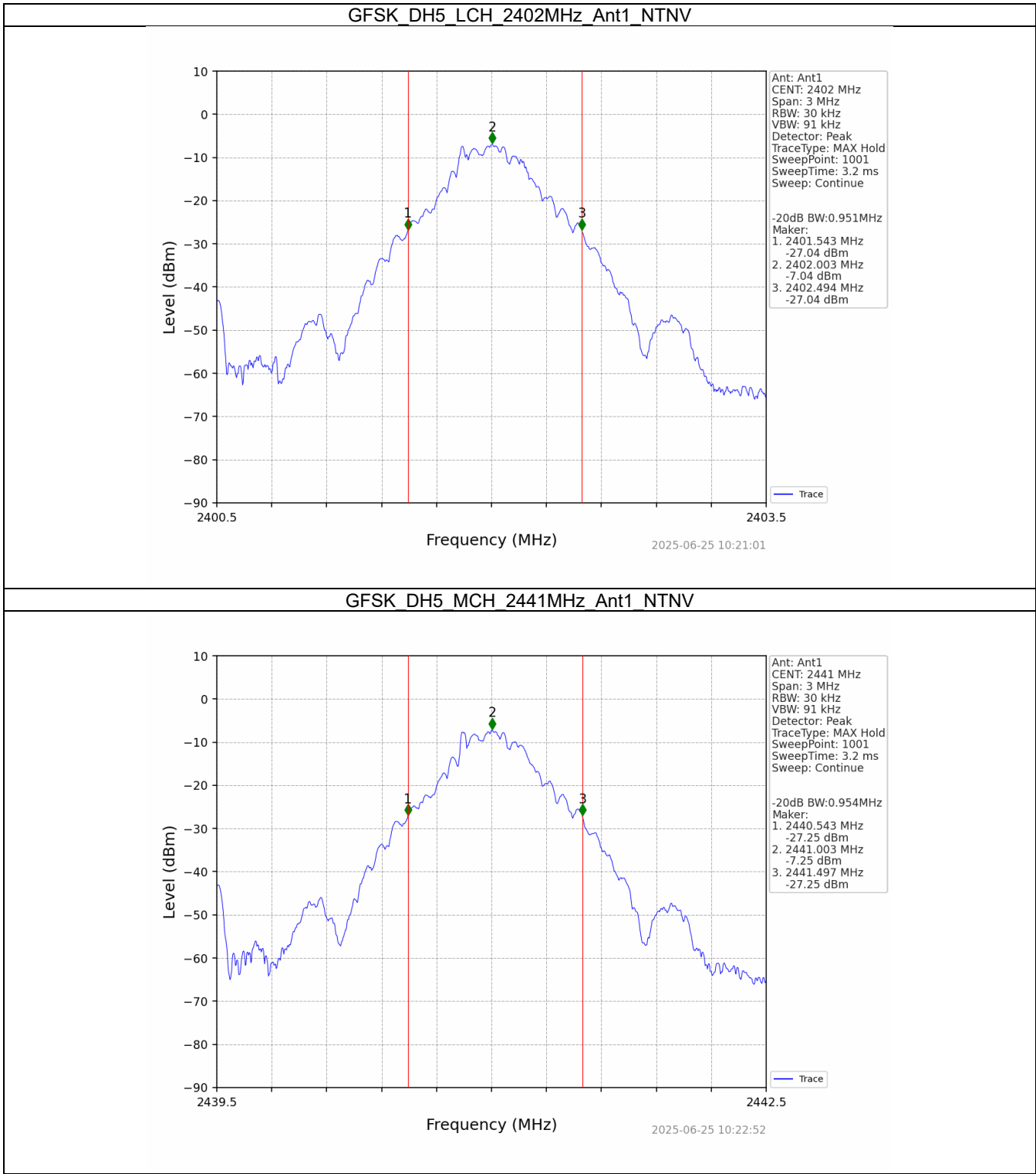
2.2.1 OBW

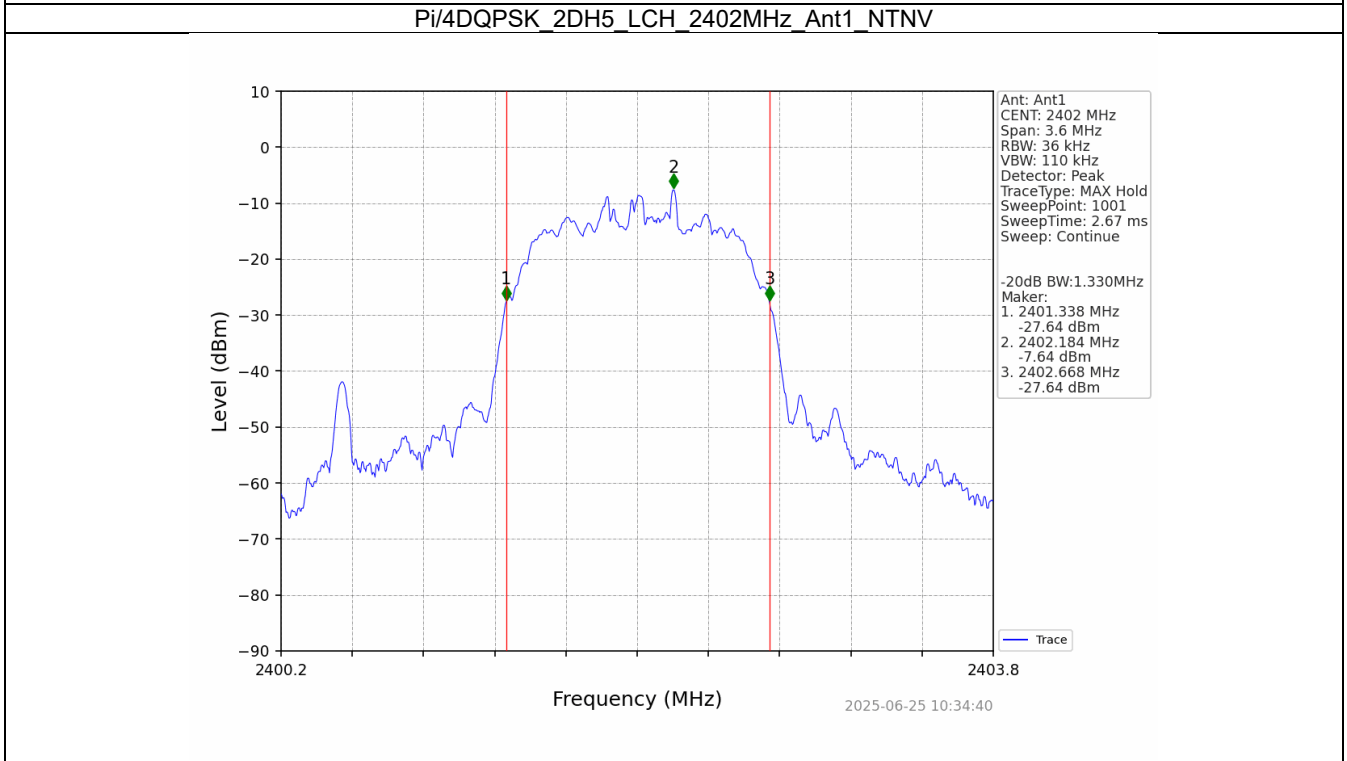
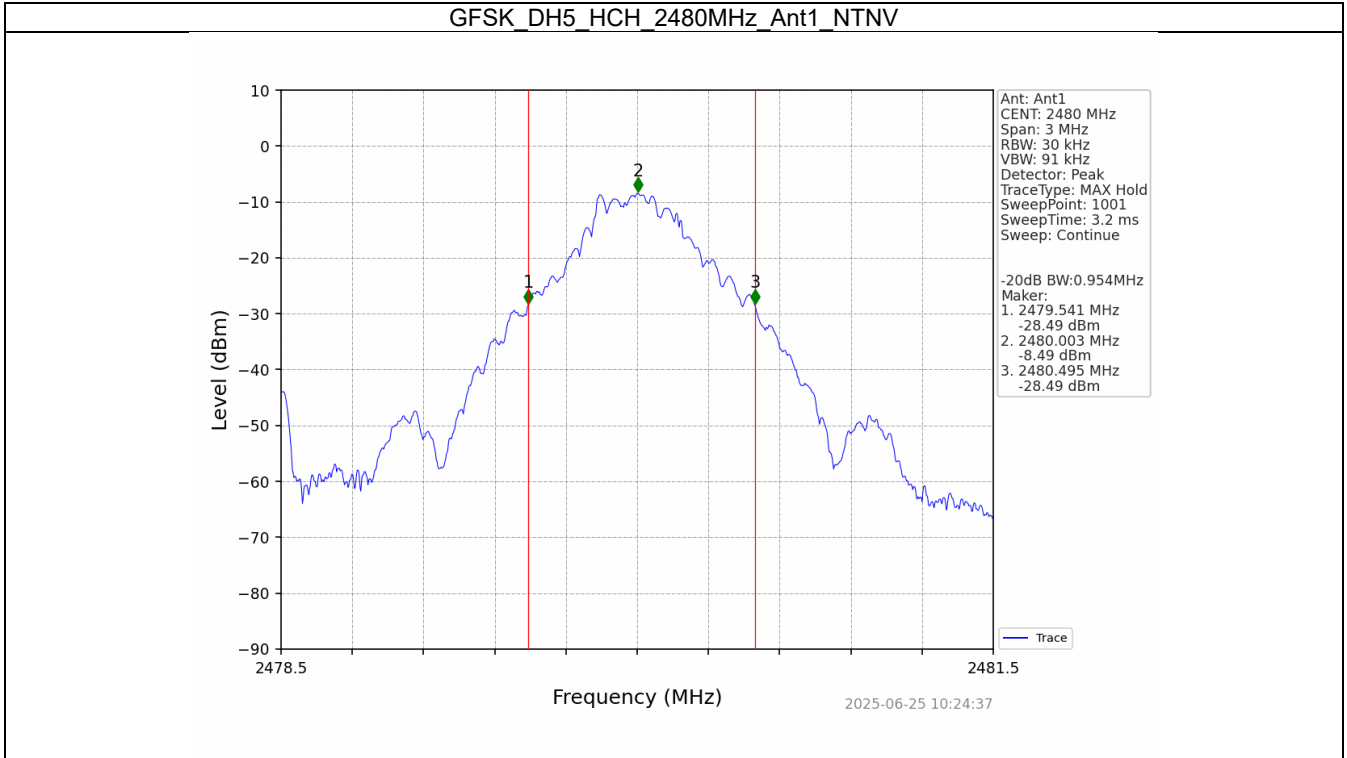


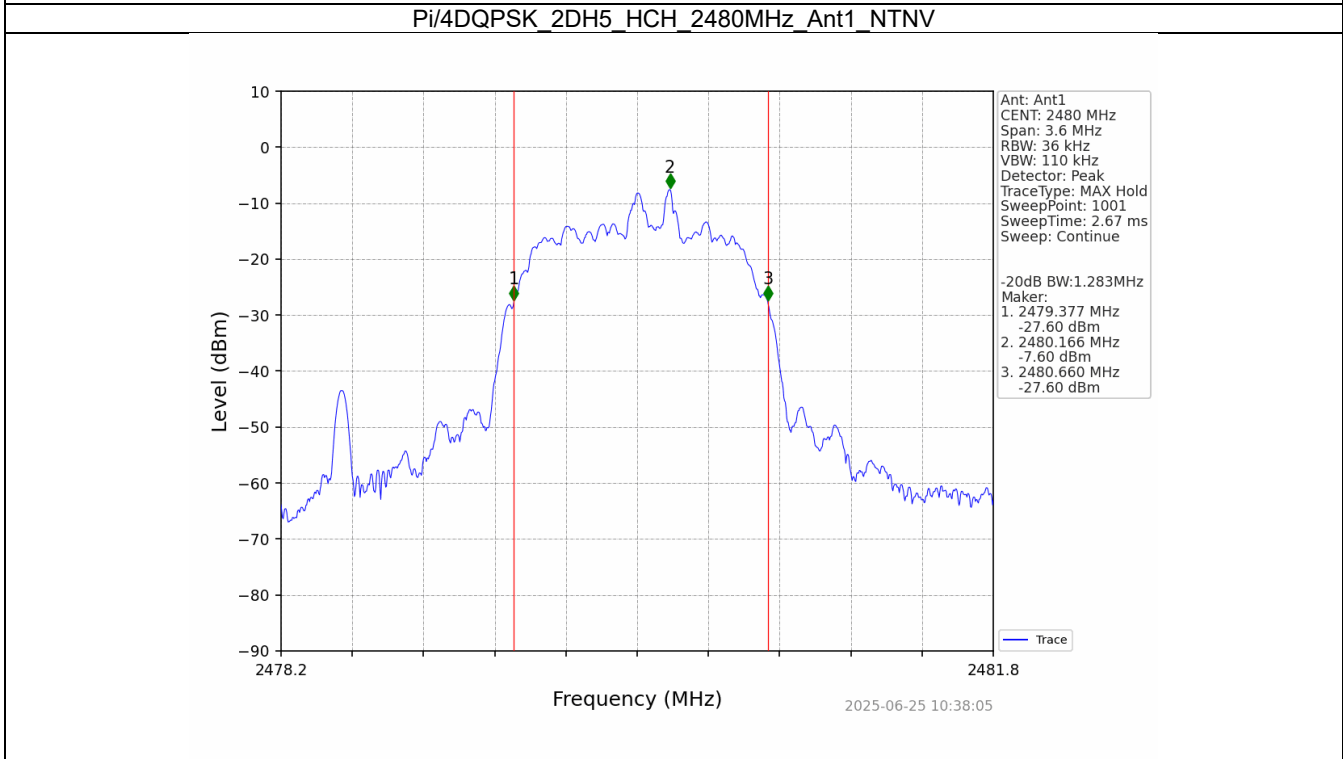
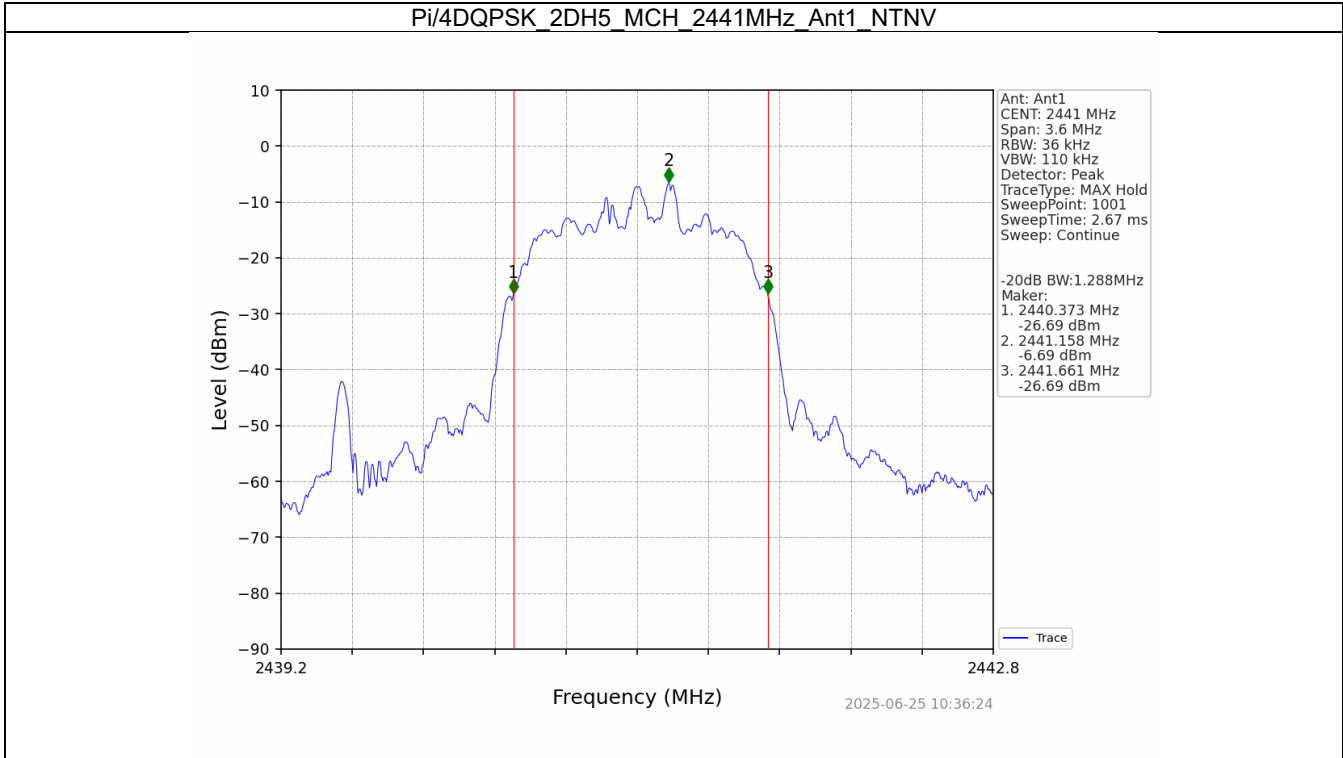




2.2.2 20dB BW







3. Maximum Conducted Output Power

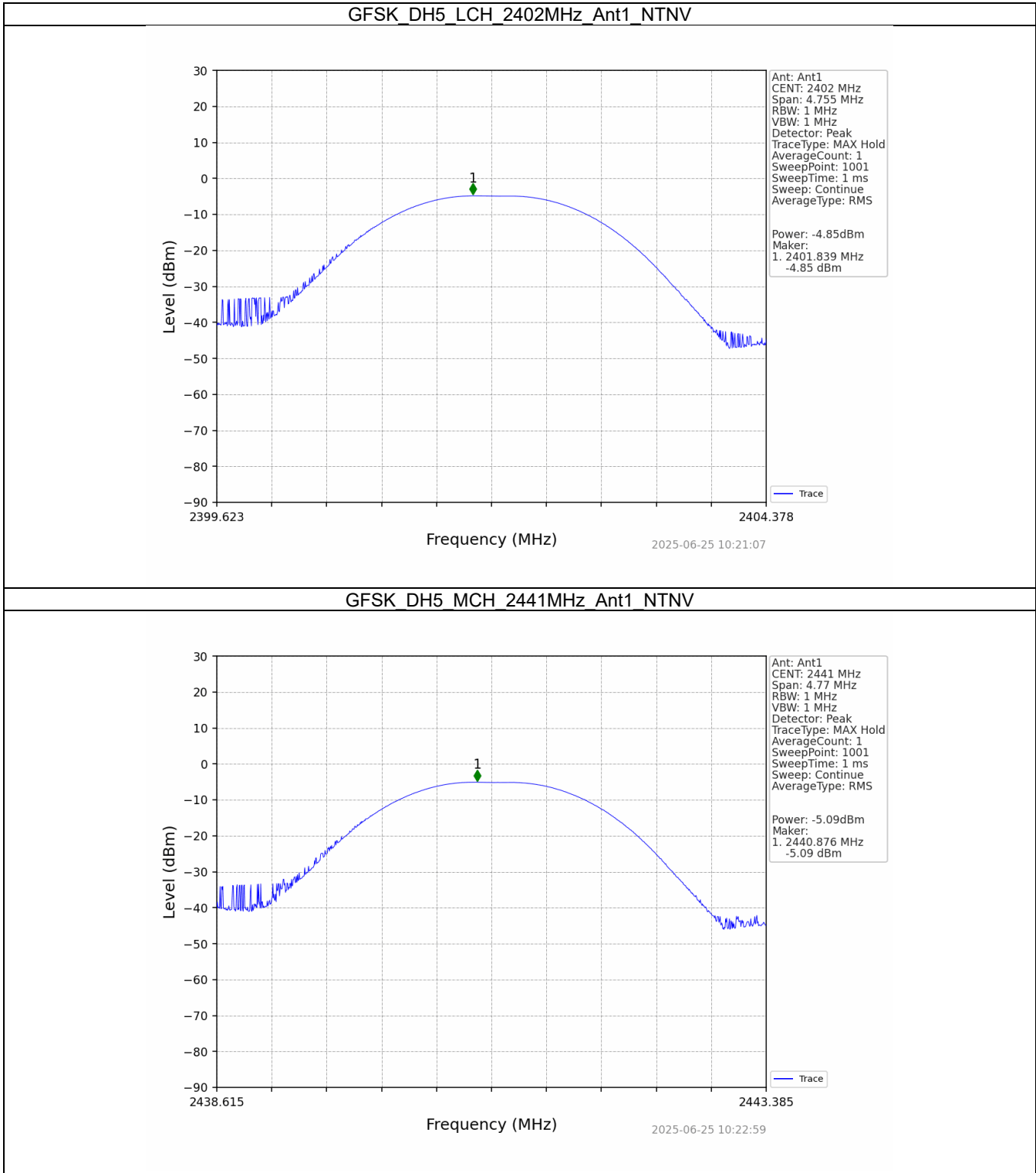
3.1 Test Result

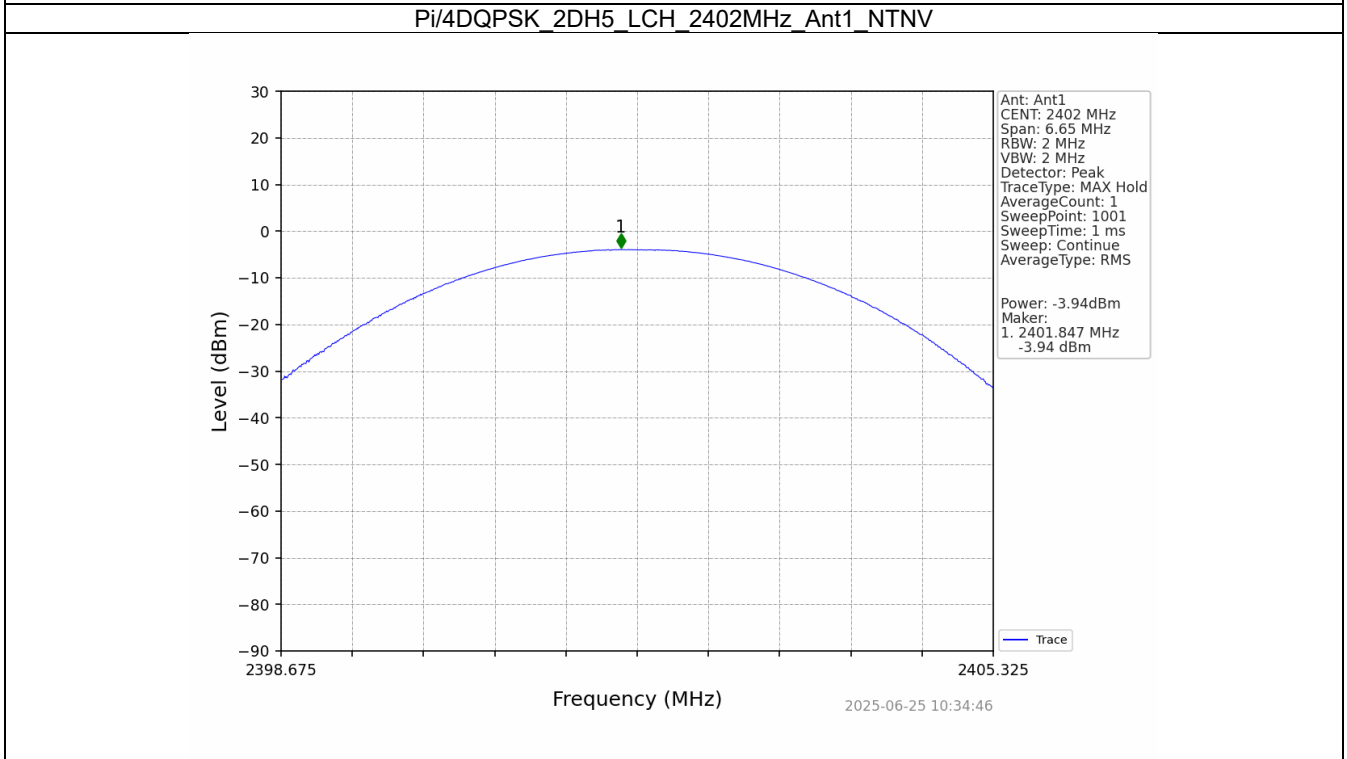
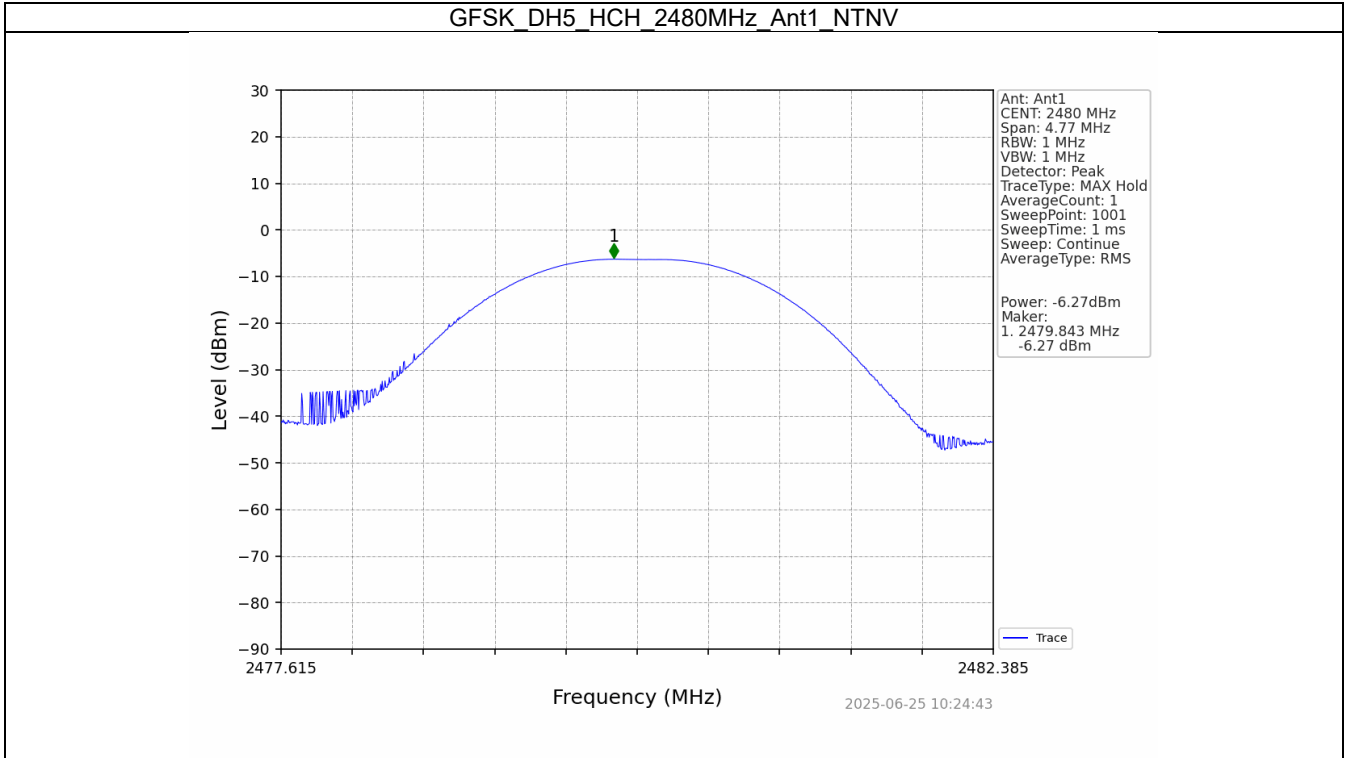
3.1.1 Power

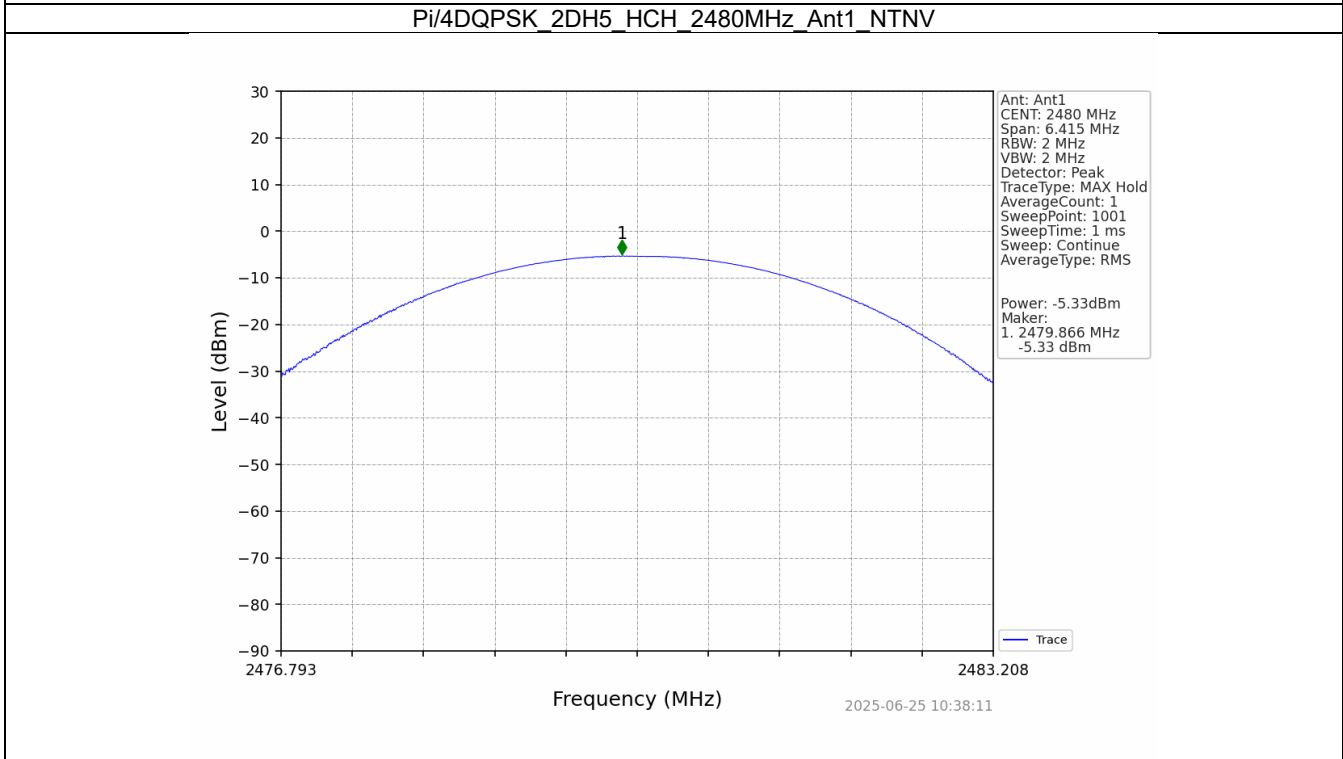
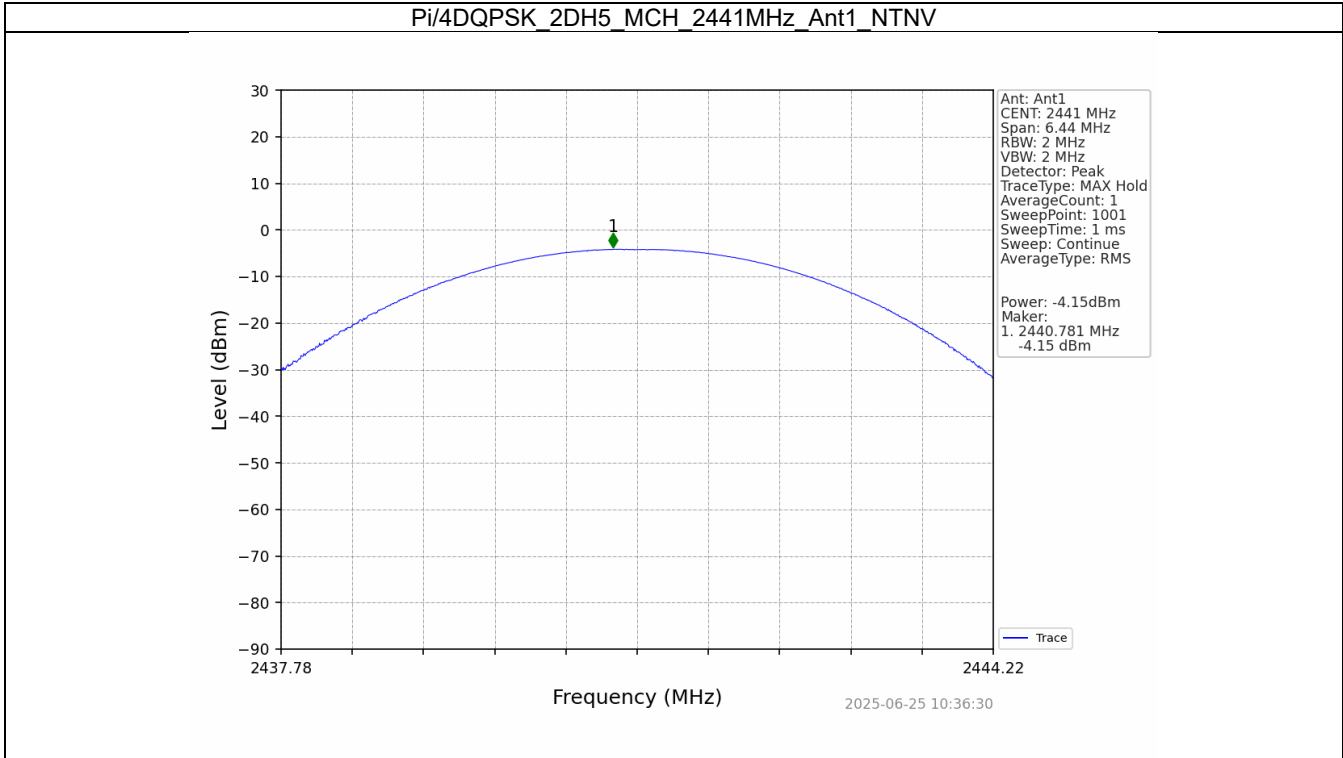
Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	-4.85	<=30	Pass
		2441	DH5	-5.09	<=30	Pass
		2480	DH5	-6.27	<=30	Pass
Pi/4DQPSK	SISO	2402	2DH5	-3.94	<=20.97	Pass
		2441	2DH5	-4.15	<=20.97	Pass
		2480	2DH5	-5.33	<=20.97	Pass

3.2 Test Graph

3.2.1 Power







4. Carrier Frequency Separation

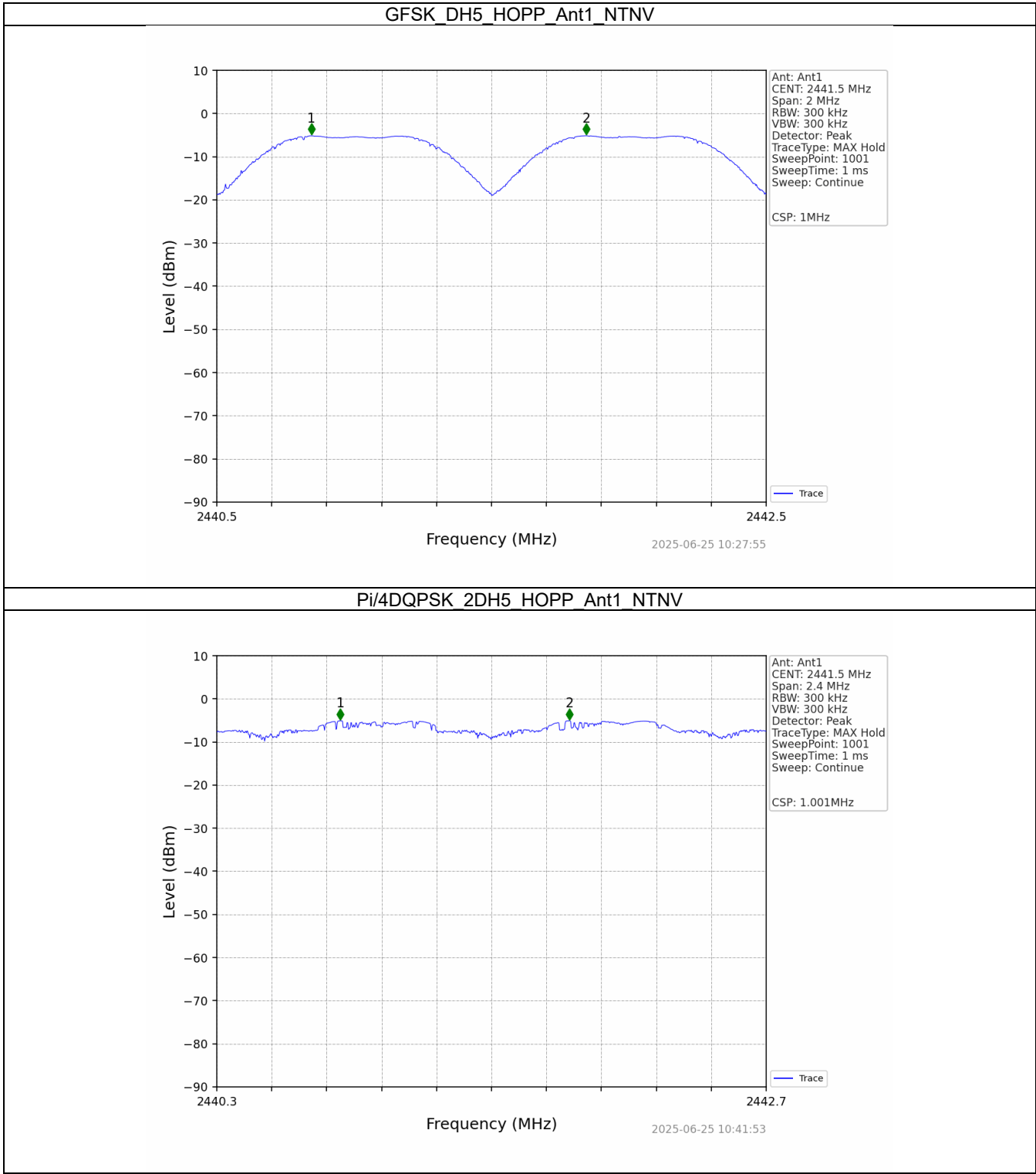
4.1 Test Result

4.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.000	0.954	≥ 0.954	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.001	1.330	≥ 0.887	Pass

4.2 Test Graph

4.2.1 Ant1



5. Number of Hopping Frequencies

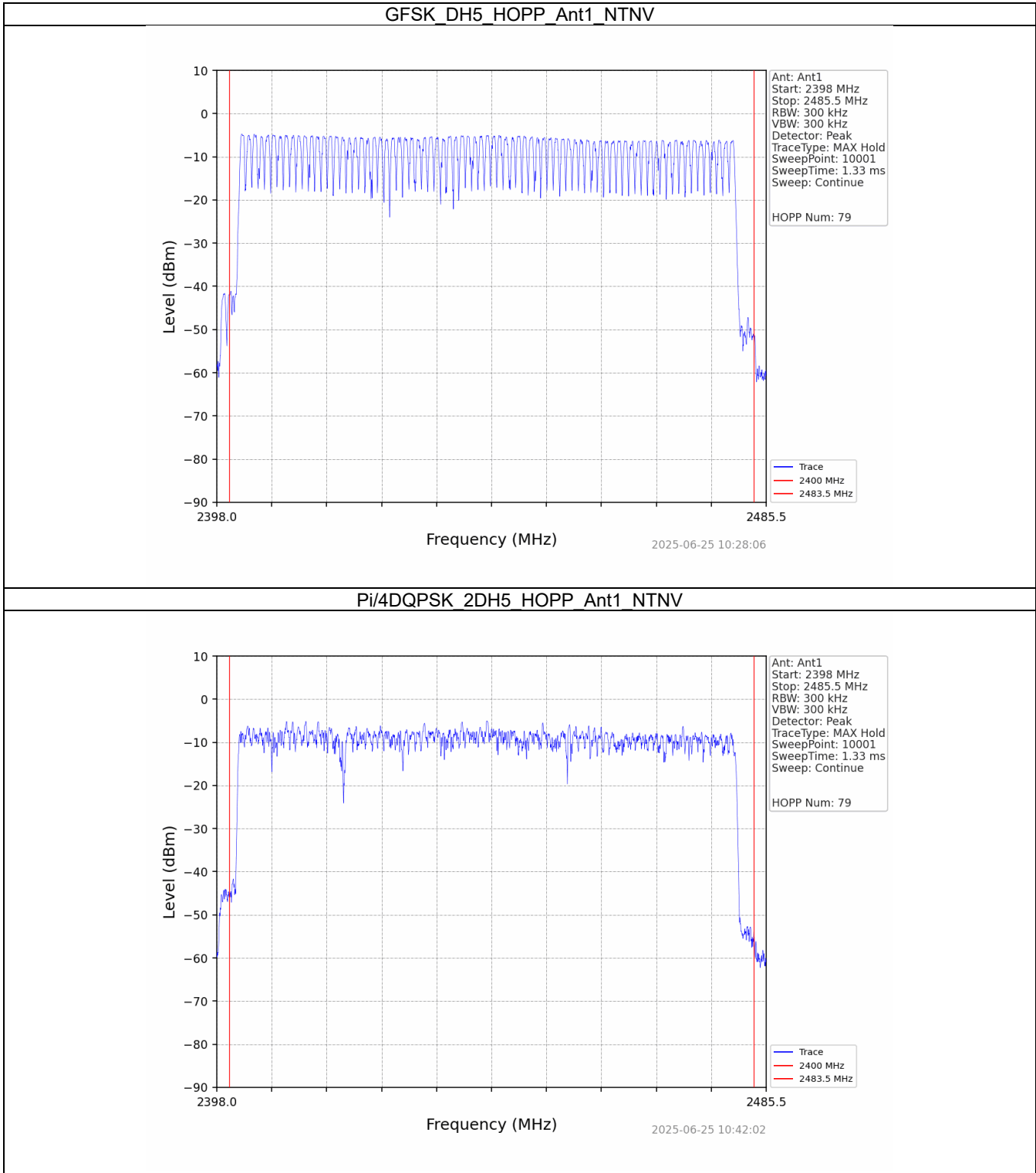
5.1 Test Result

5.1.1 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

5.2 Test Graph

5.2.1 HoppNum



6. Time of Occupancy (Dwell Time)

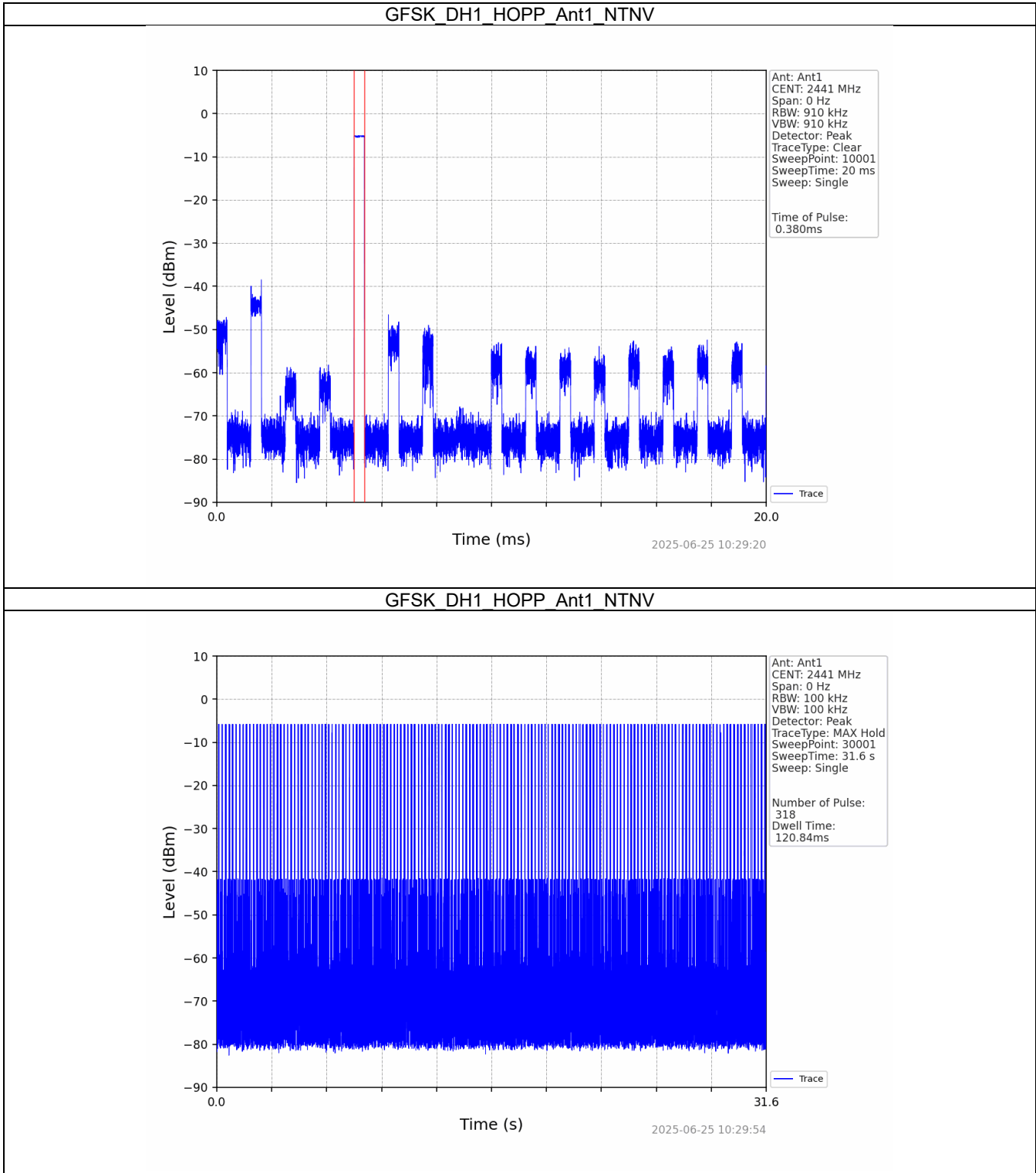
6.1 Test Result

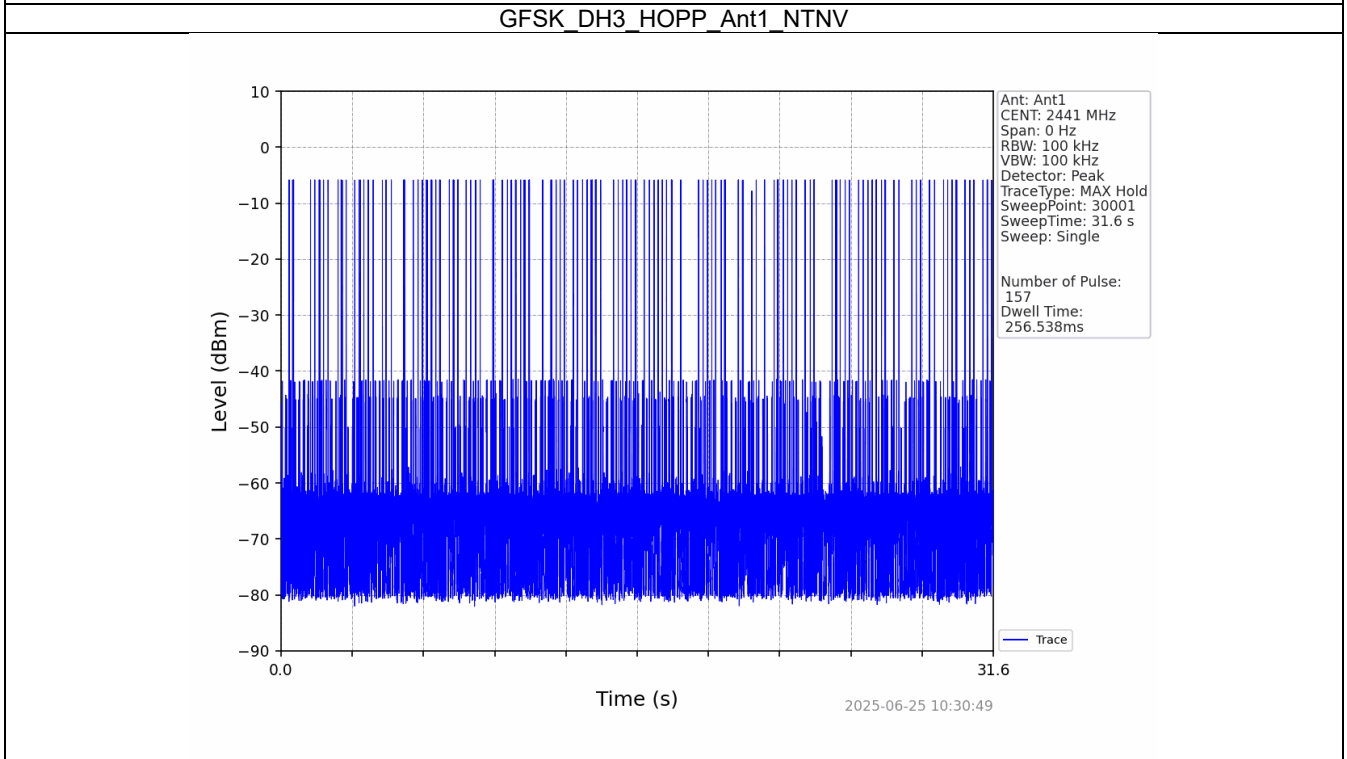
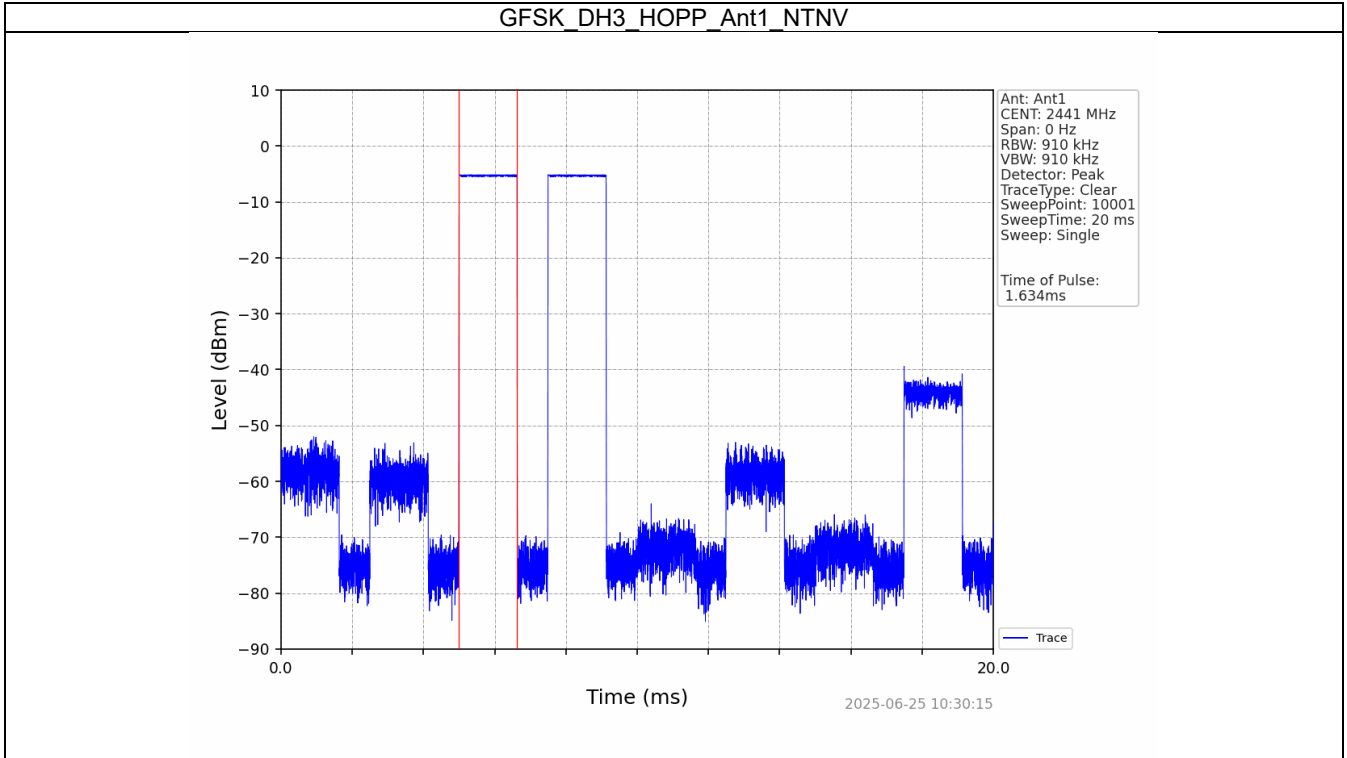
6.1.1 Ant1

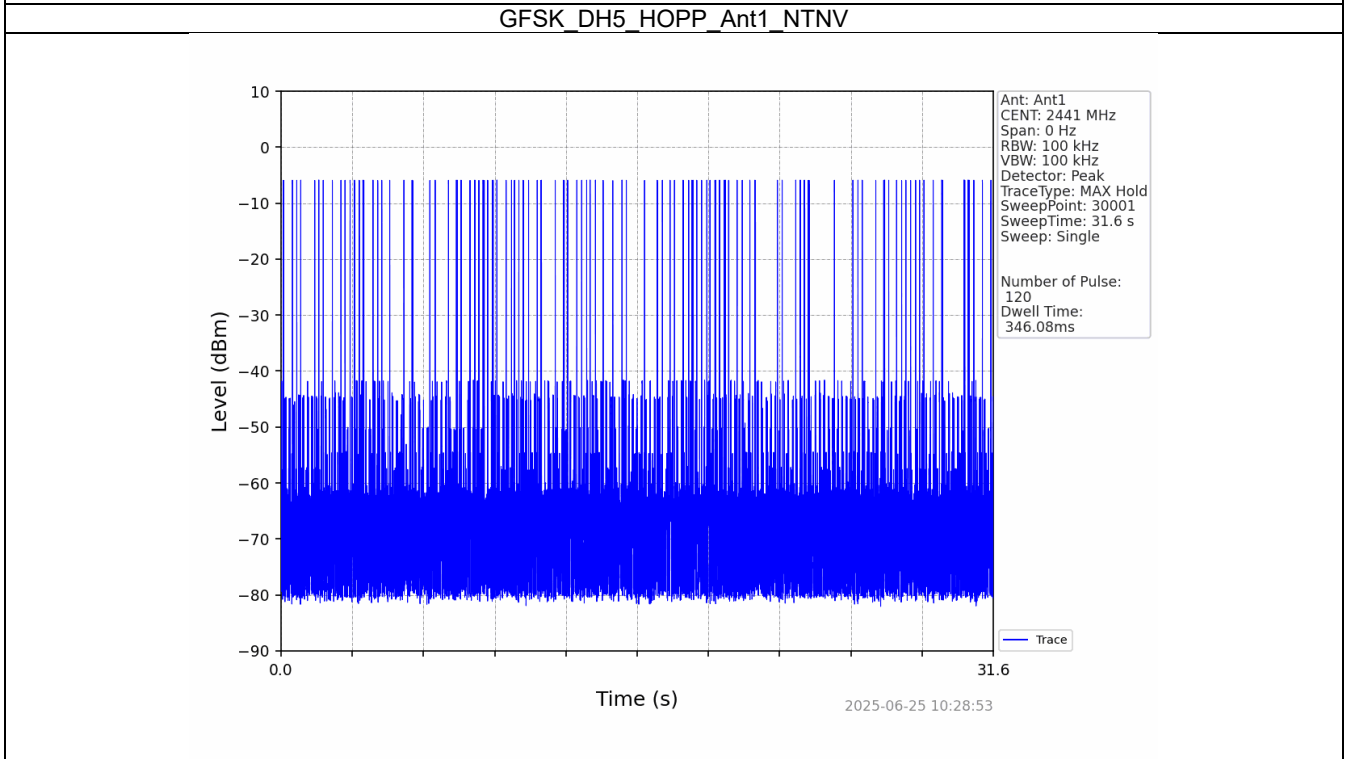
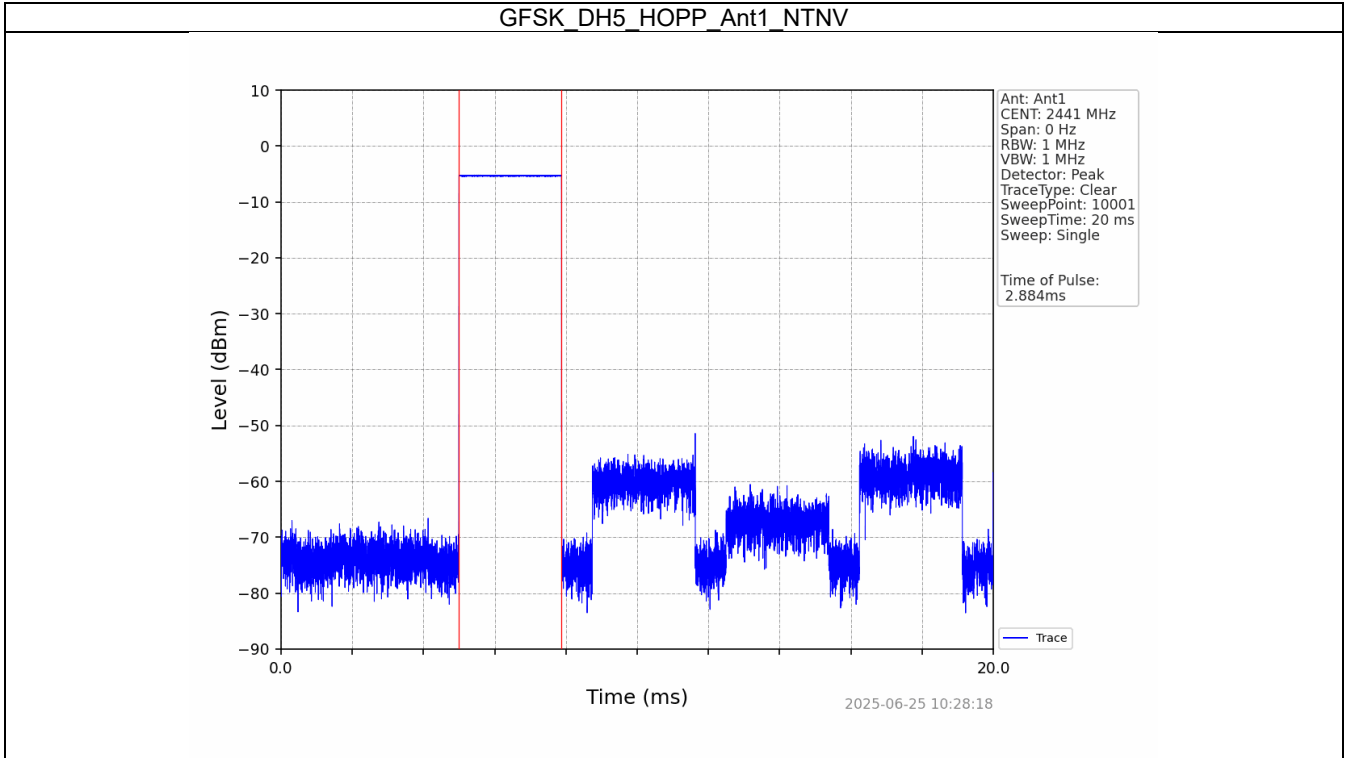
Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.380	31.600	318	120.840	<=400	Pass
			DH3	1.634	31.600	157	256.538	<=400	Pass
			DH5	2.884	31.600	120	346.080	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.390	31.600	316	123.240	<=400	Pass
			2DH3	1.642	31.600	150	246.300	<=400	Pass
			2DH5	2.890	31.600	99	286.110	<=400	Pass

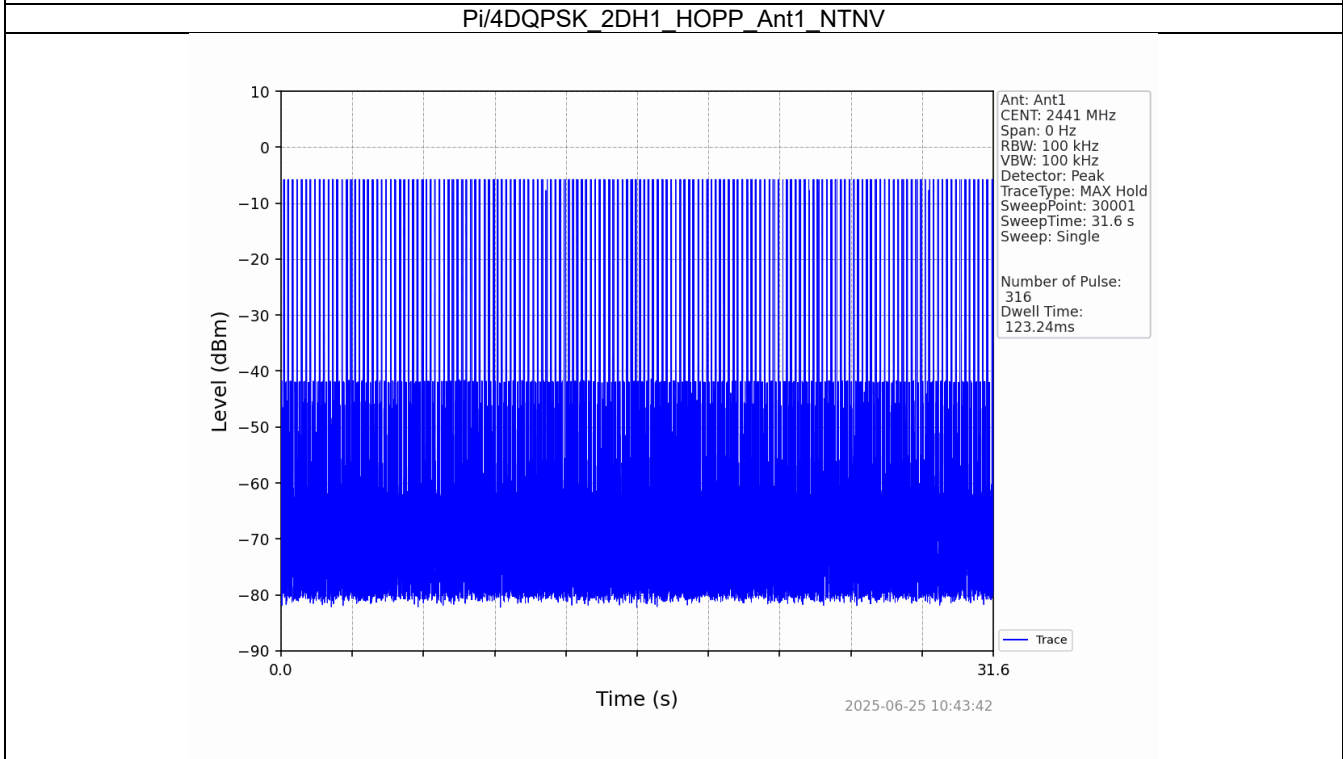
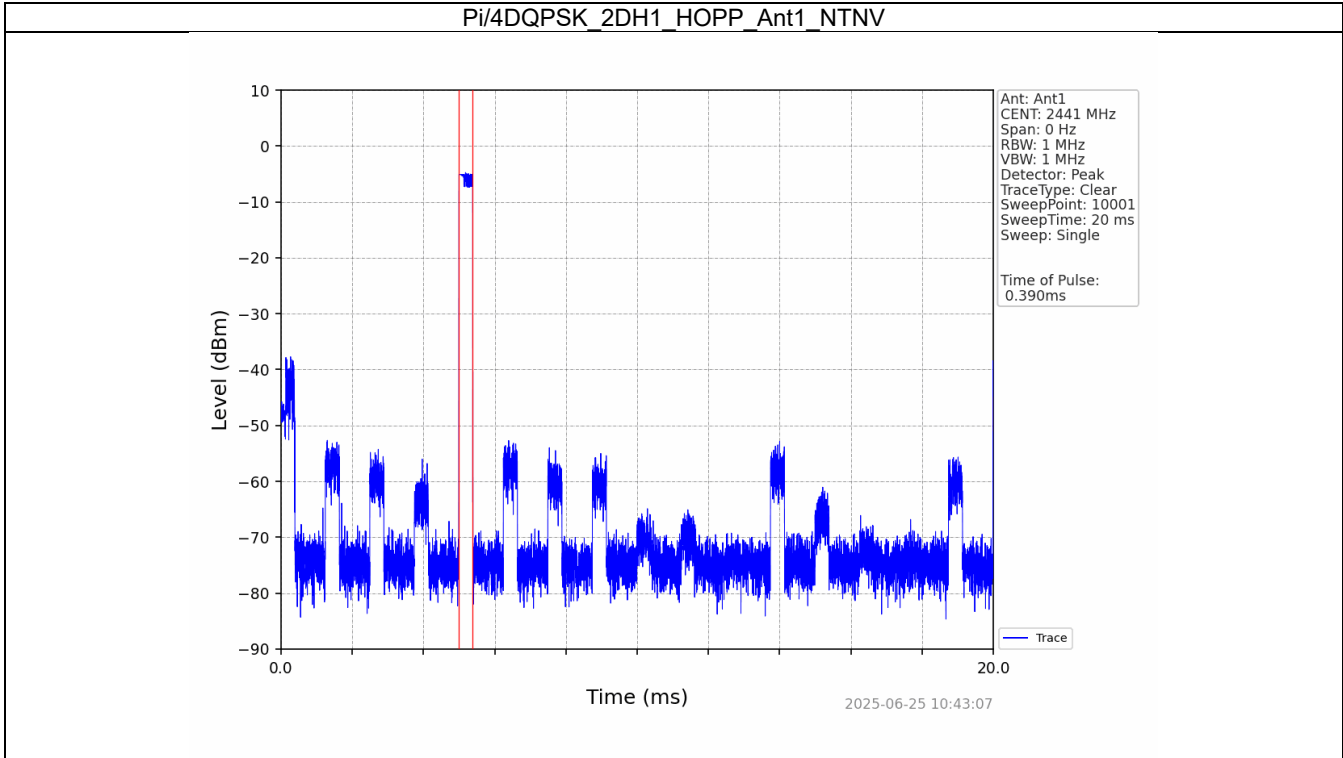
6.2 Test Graph

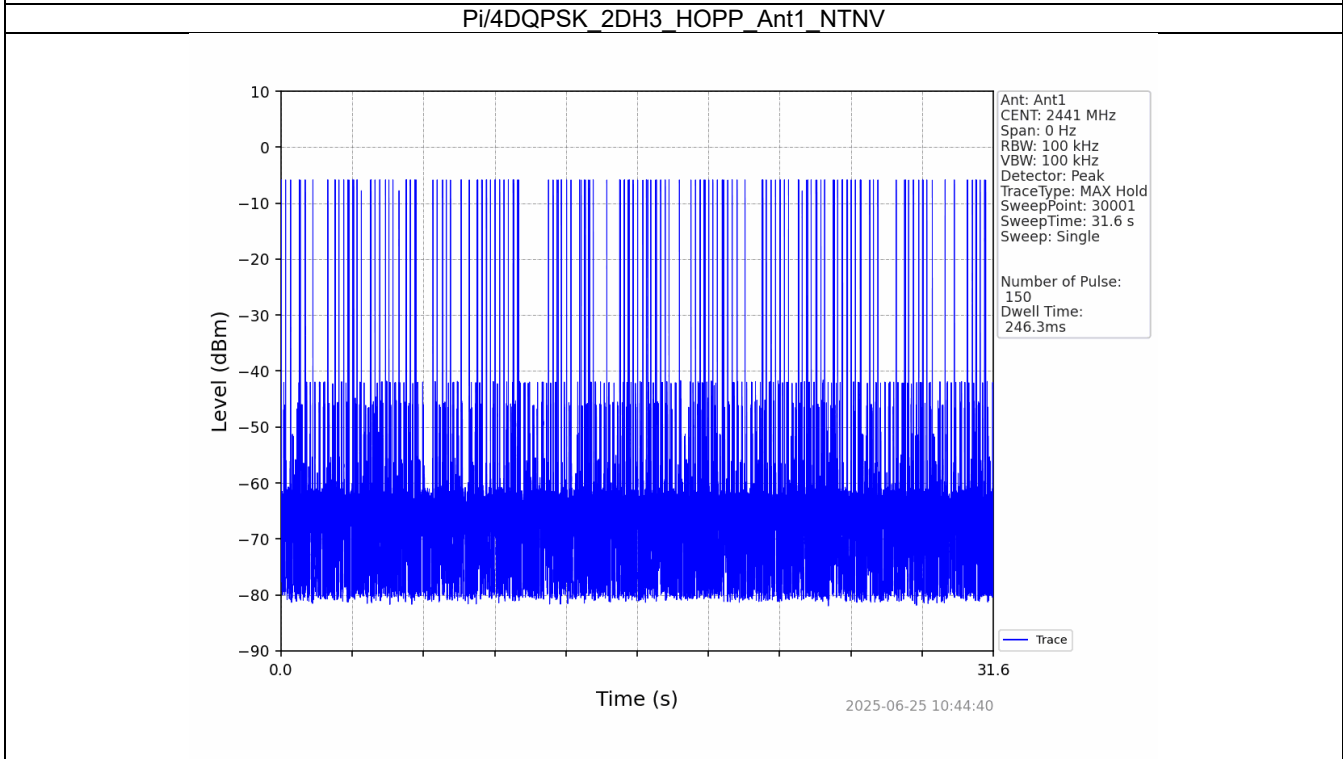
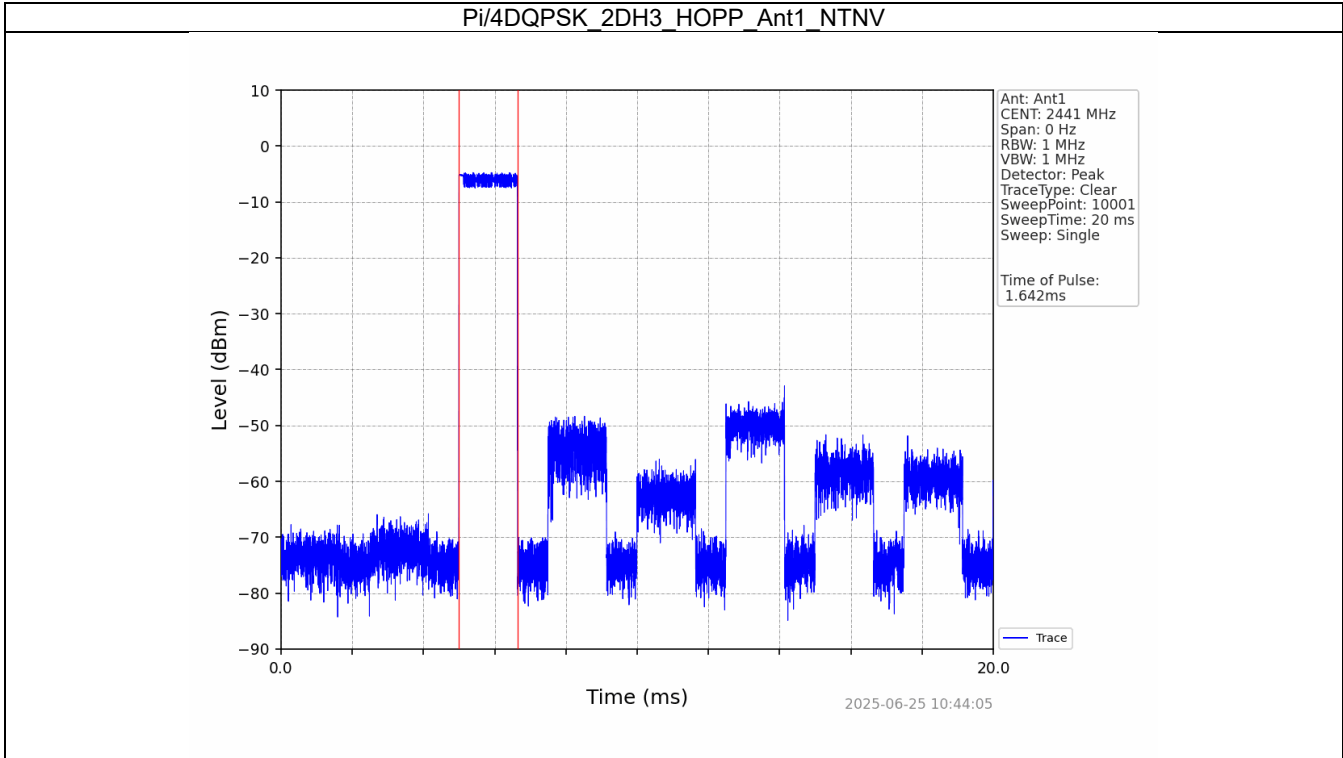
6.2.1 Ant1

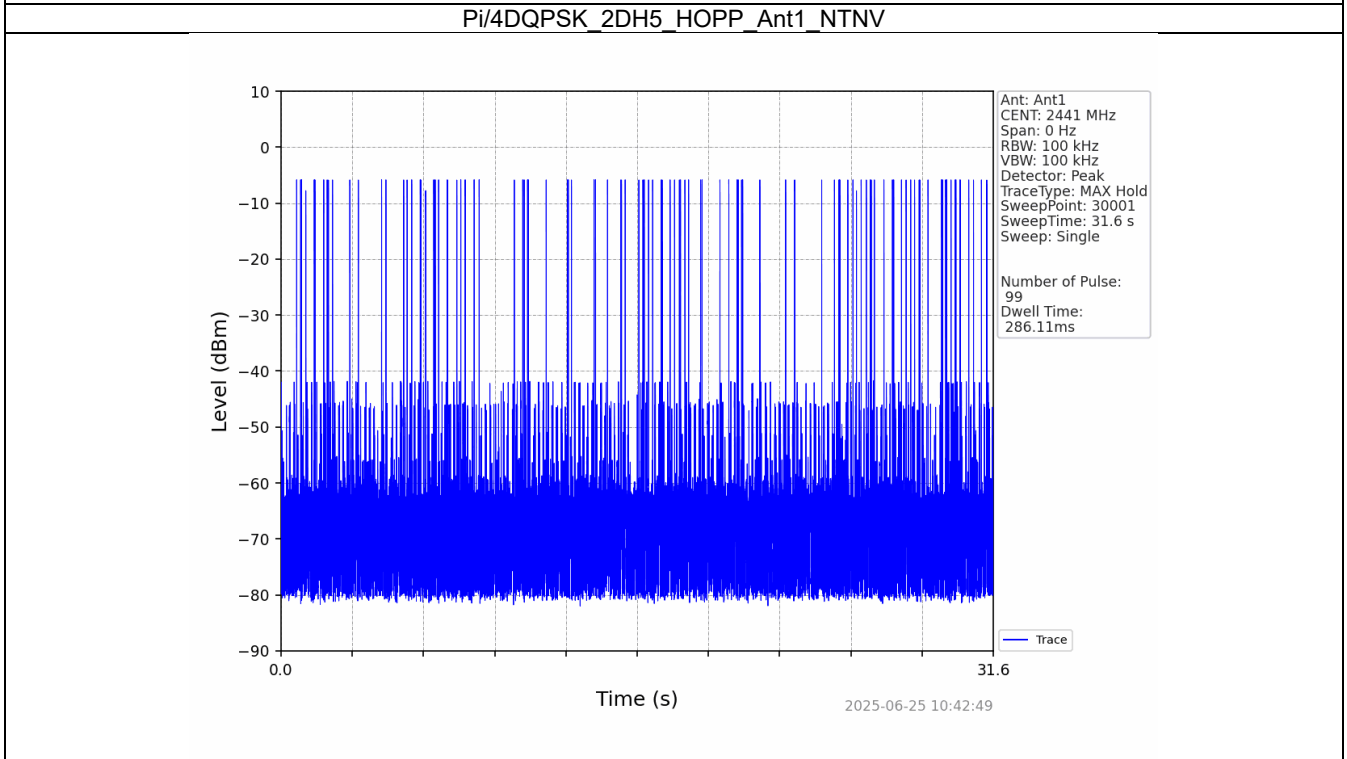
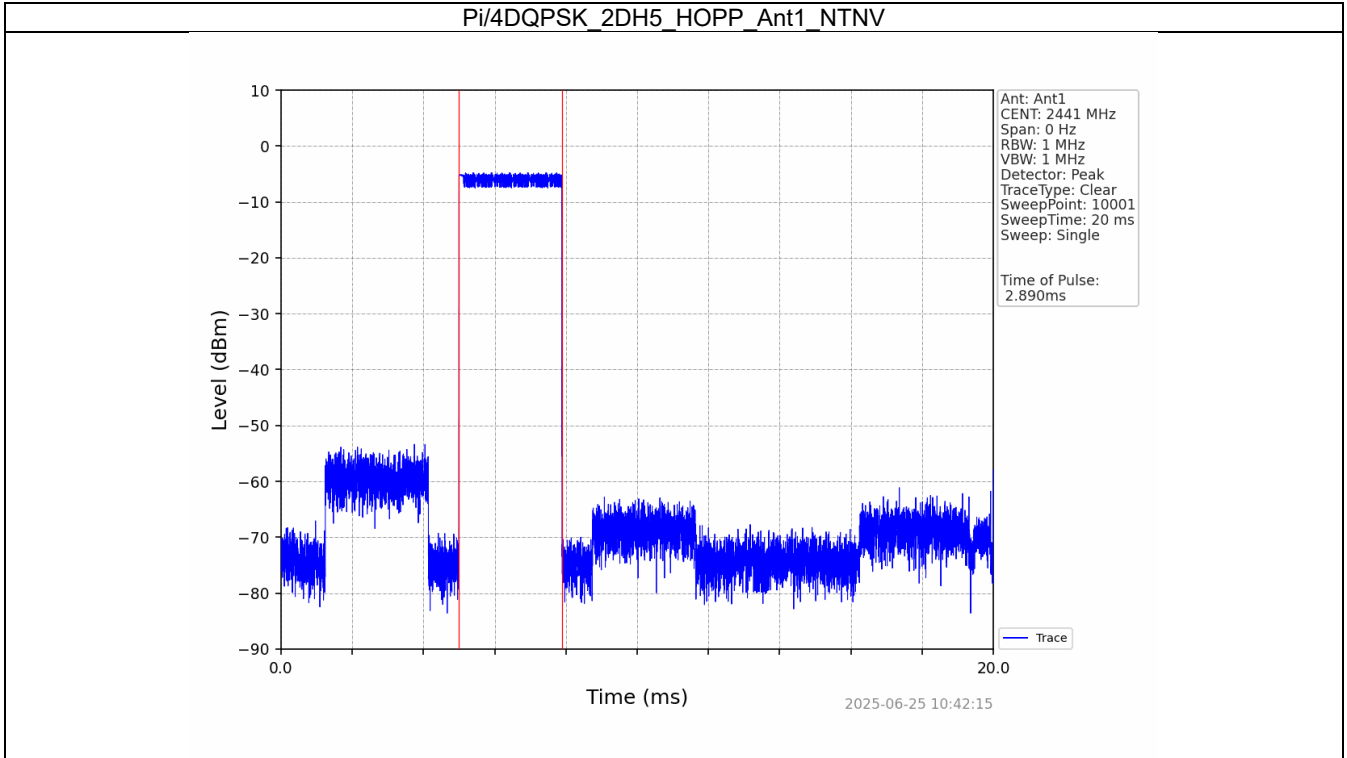












7. Unwanted Emissions In Non-restricted Frequency Bands

7.1 Test Result

7.1.1 Ref

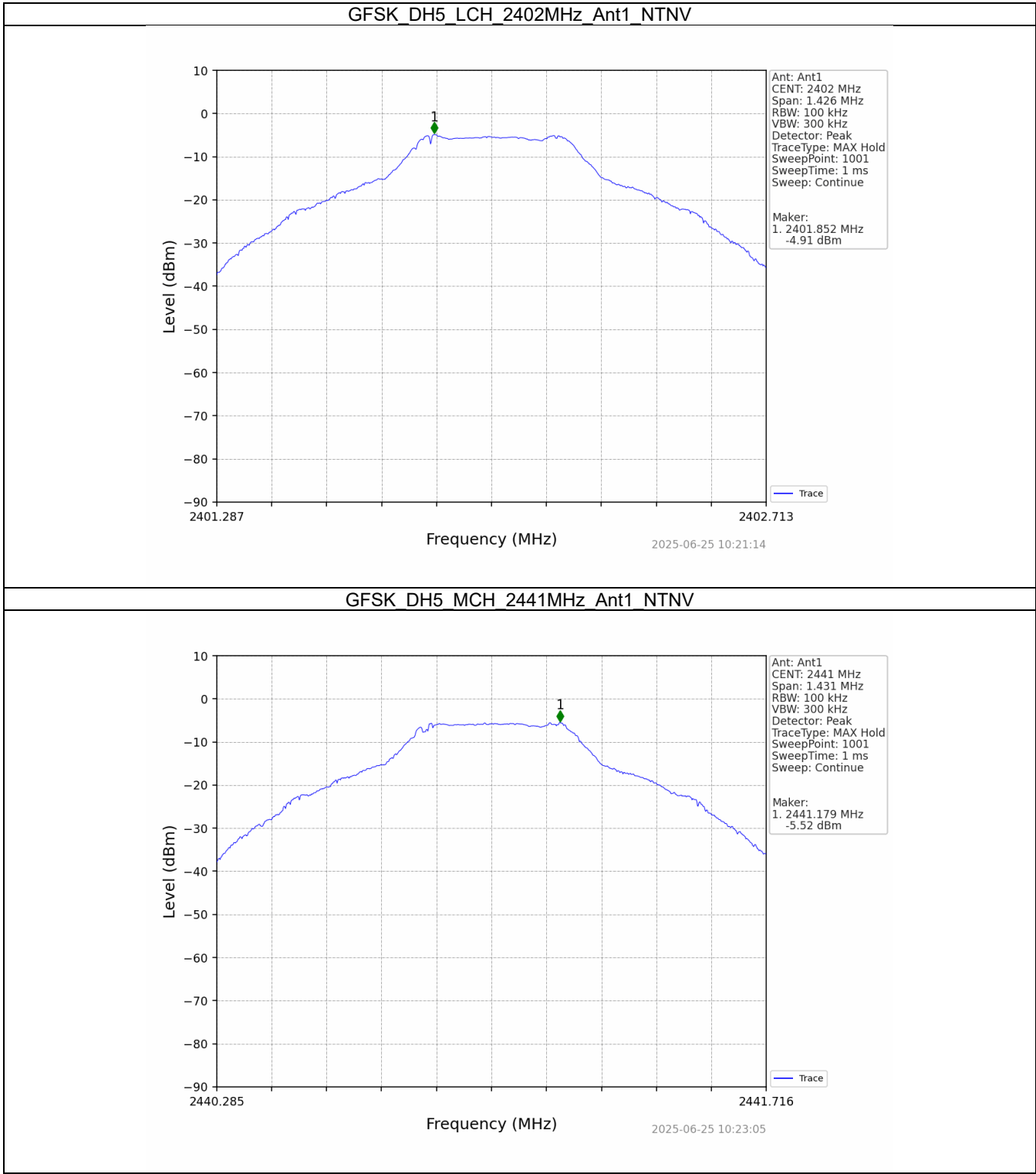
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	-4.91
		2441	DH5	1	-5.52
		2480	DH5	1	-6.33
Pi/4DQPSK	SISO	2402	2DH5	1	-4.92
		2441	2DH5	1	-5.15
		2480	2DH5	1	-6.40
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.					

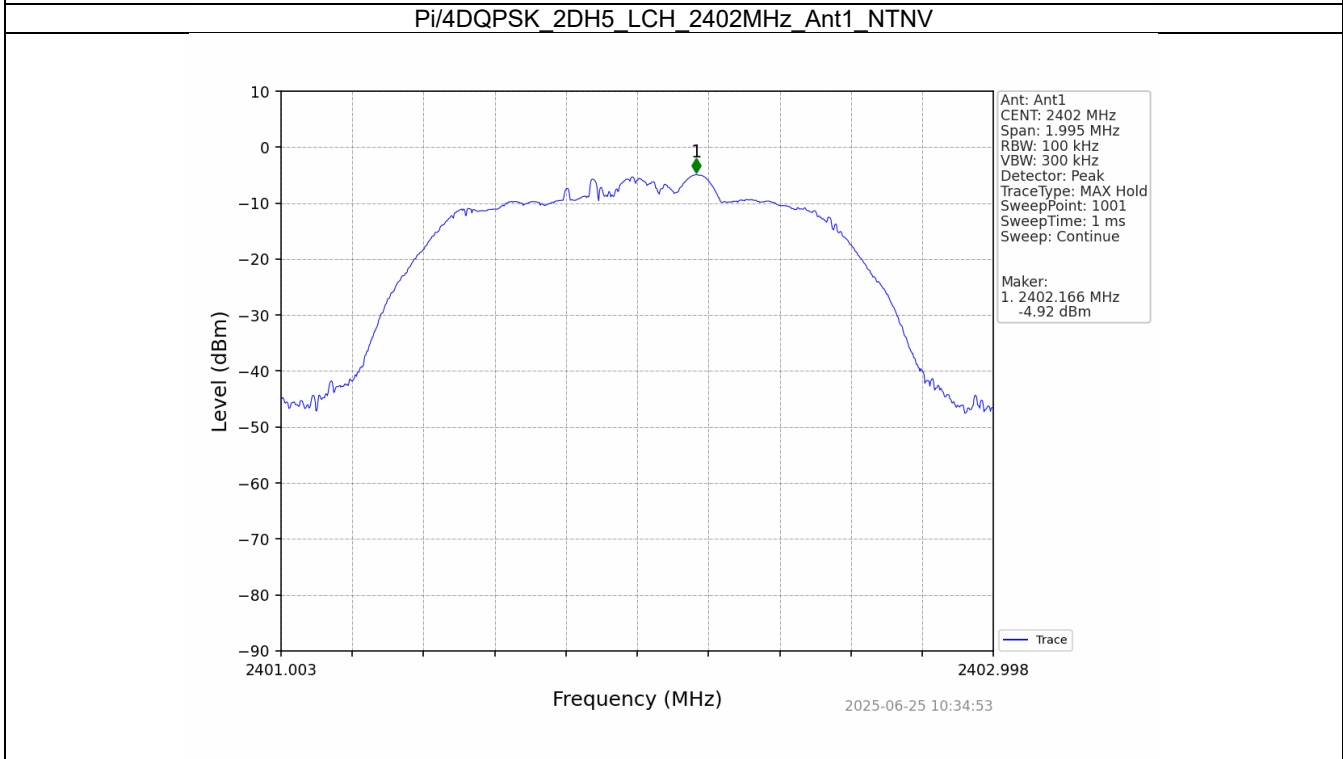
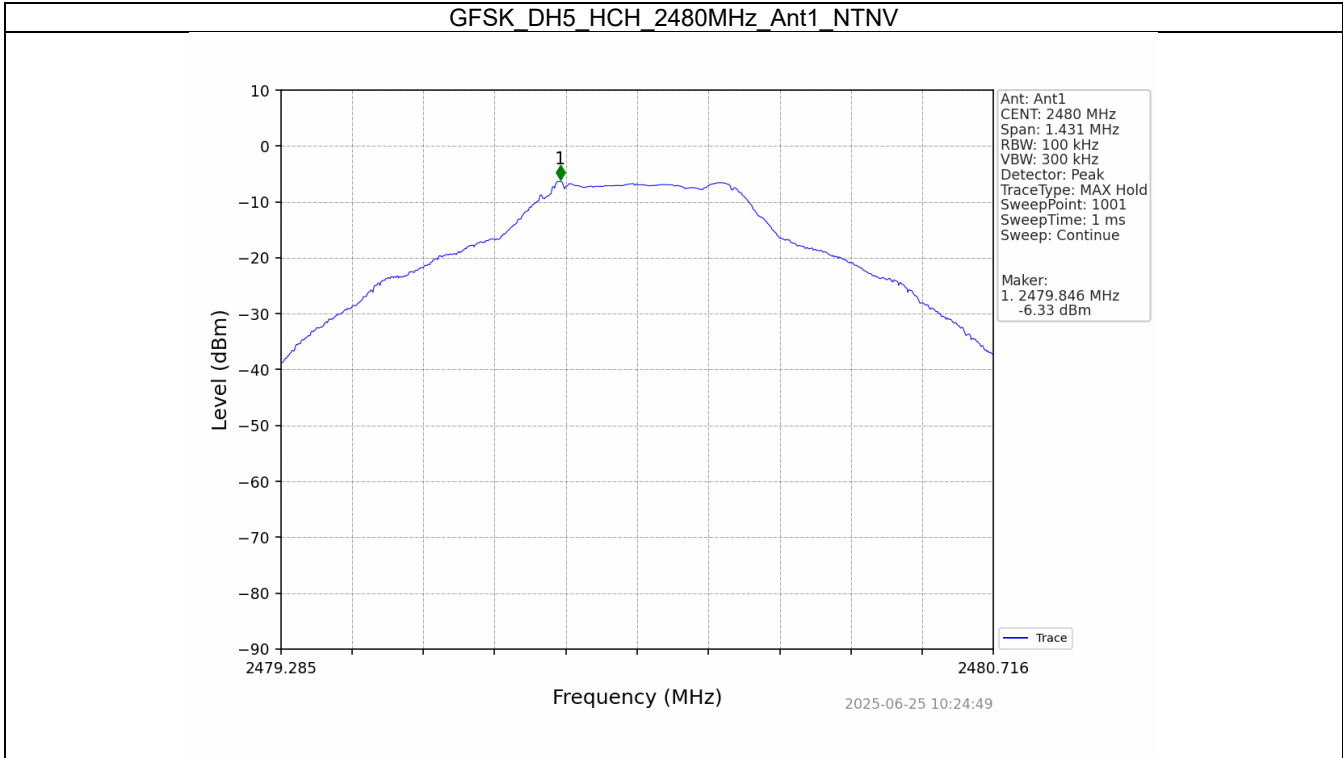
7.1.2 CSE

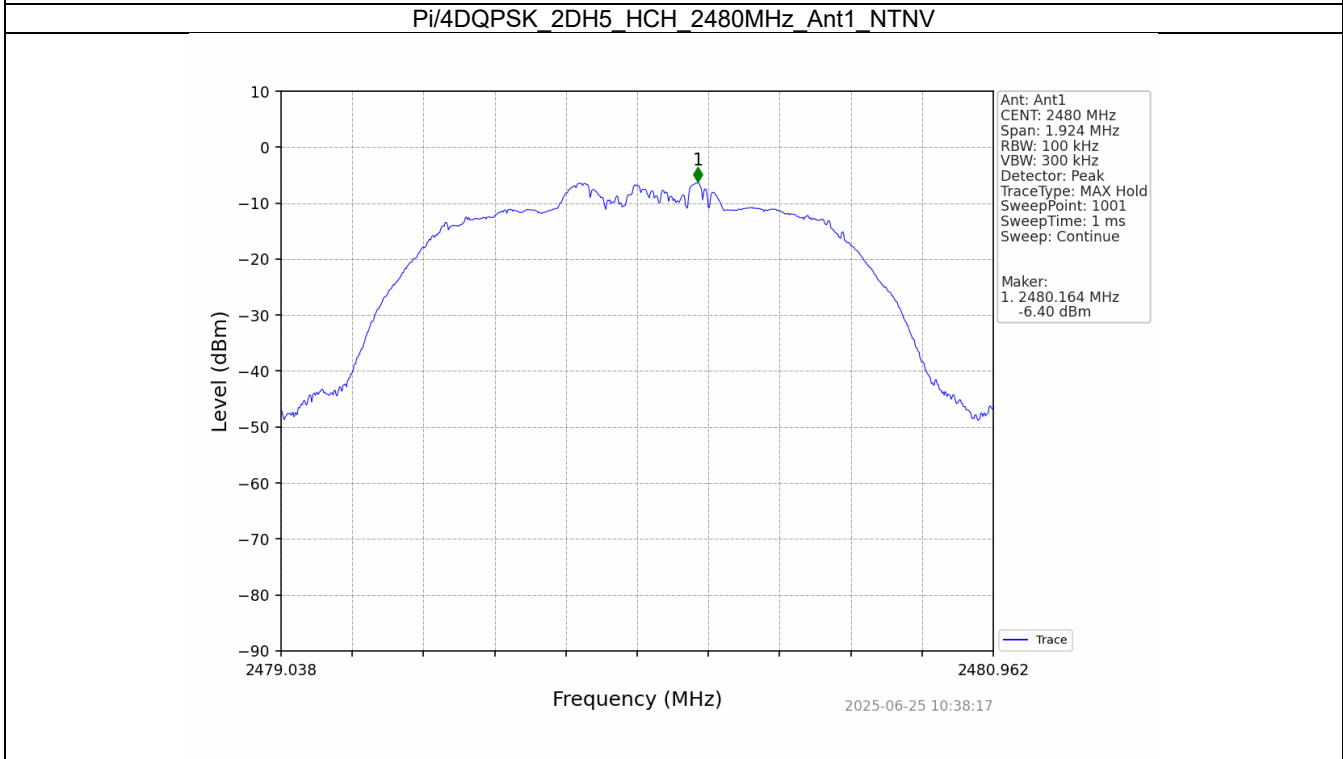
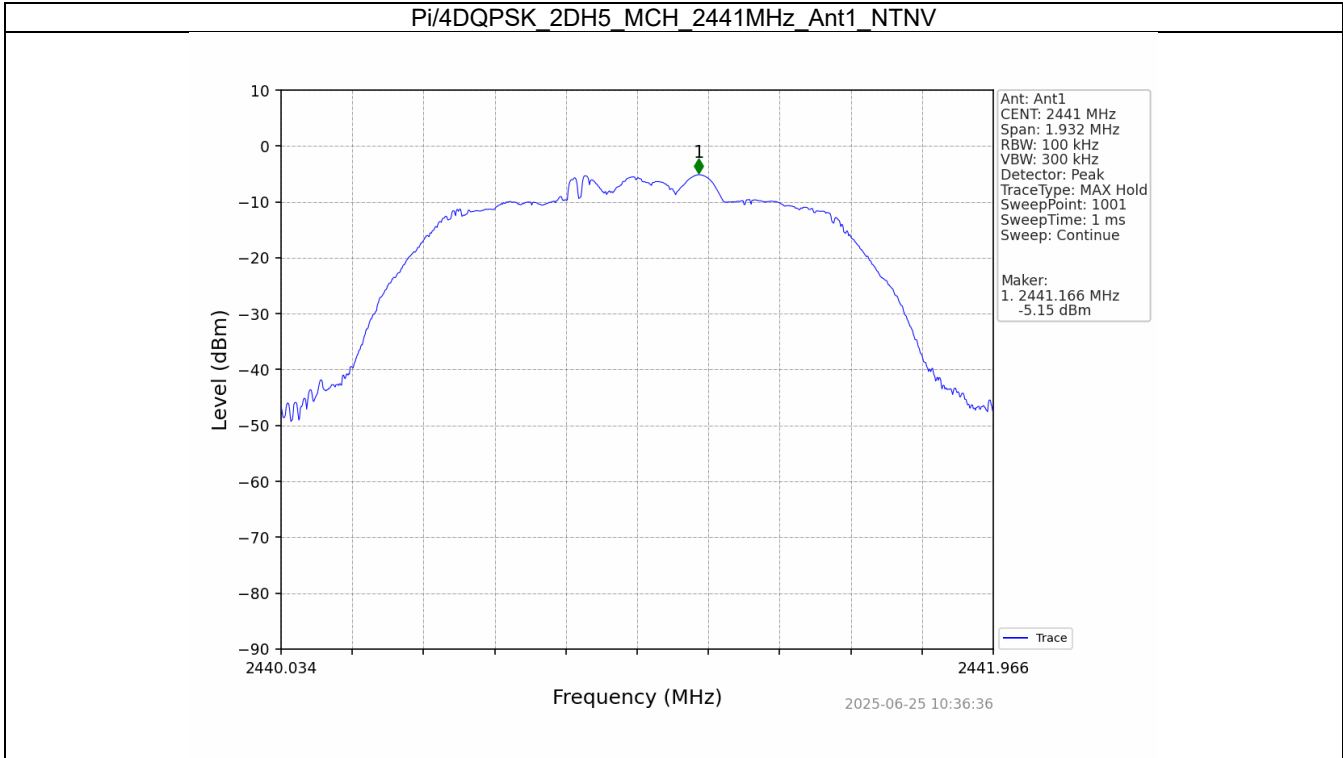
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	-4.91	-24.91	Pass
		2441	DH5	1	-4.91	-24.91	Pass
		2480	DH5	1	-4.91	-24.91	Pass
		HOPP	DH5	1	-4.91	-24.91	Pass
					-4.91	-24.91	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	-4.92	-24.92	Pass
		2441	2DH5	1	-4.92	-24.92	Pass
		2480	2DH5	1	-4.92	-24.92	Pass
		HOPP	2DH5	1	-4.92	-24.92	Pass
					-4.92	-24.92	Pass
					-4.92	-24.92	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.							

7.2 Test Graph

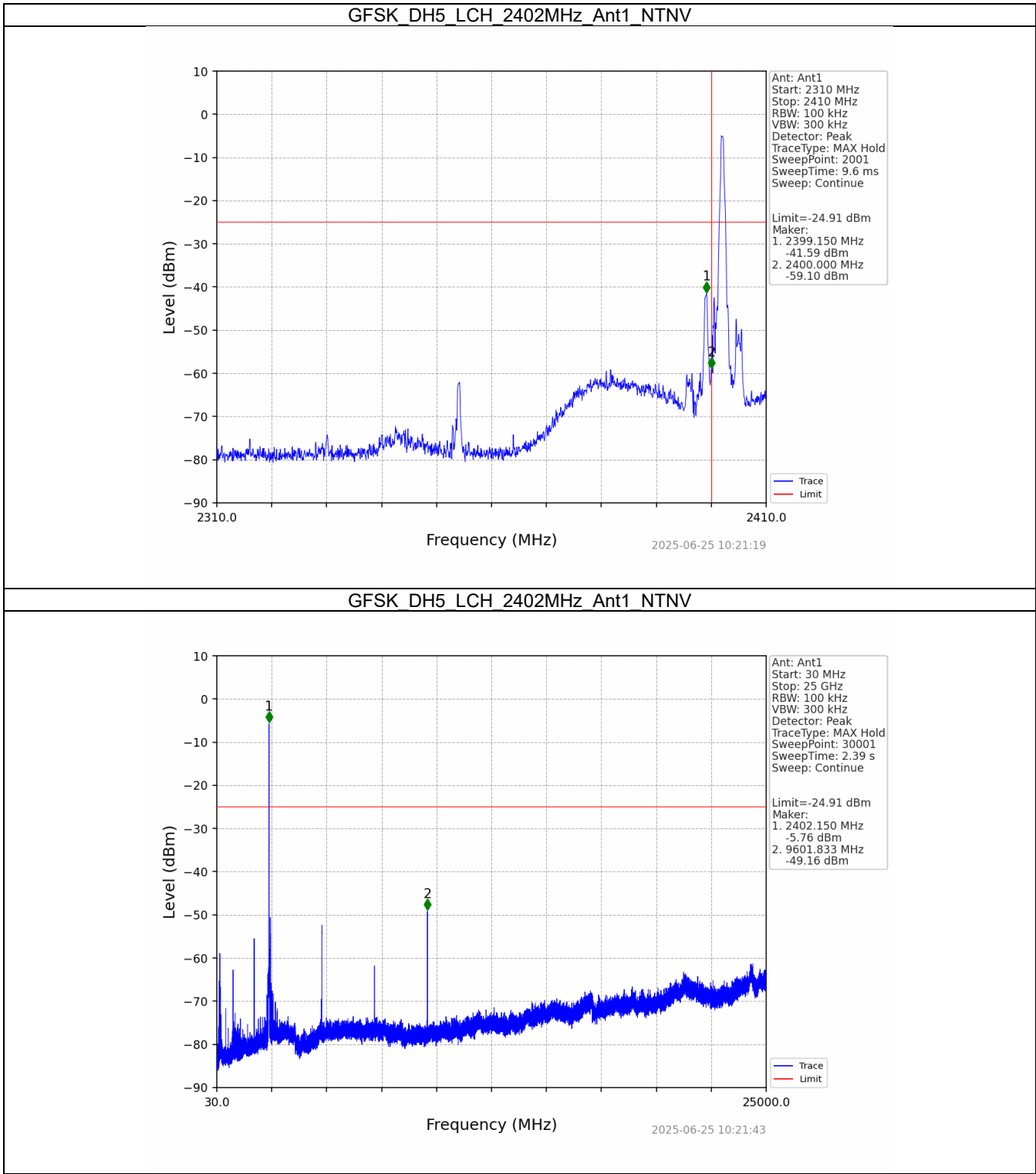
7.2.1 Ref

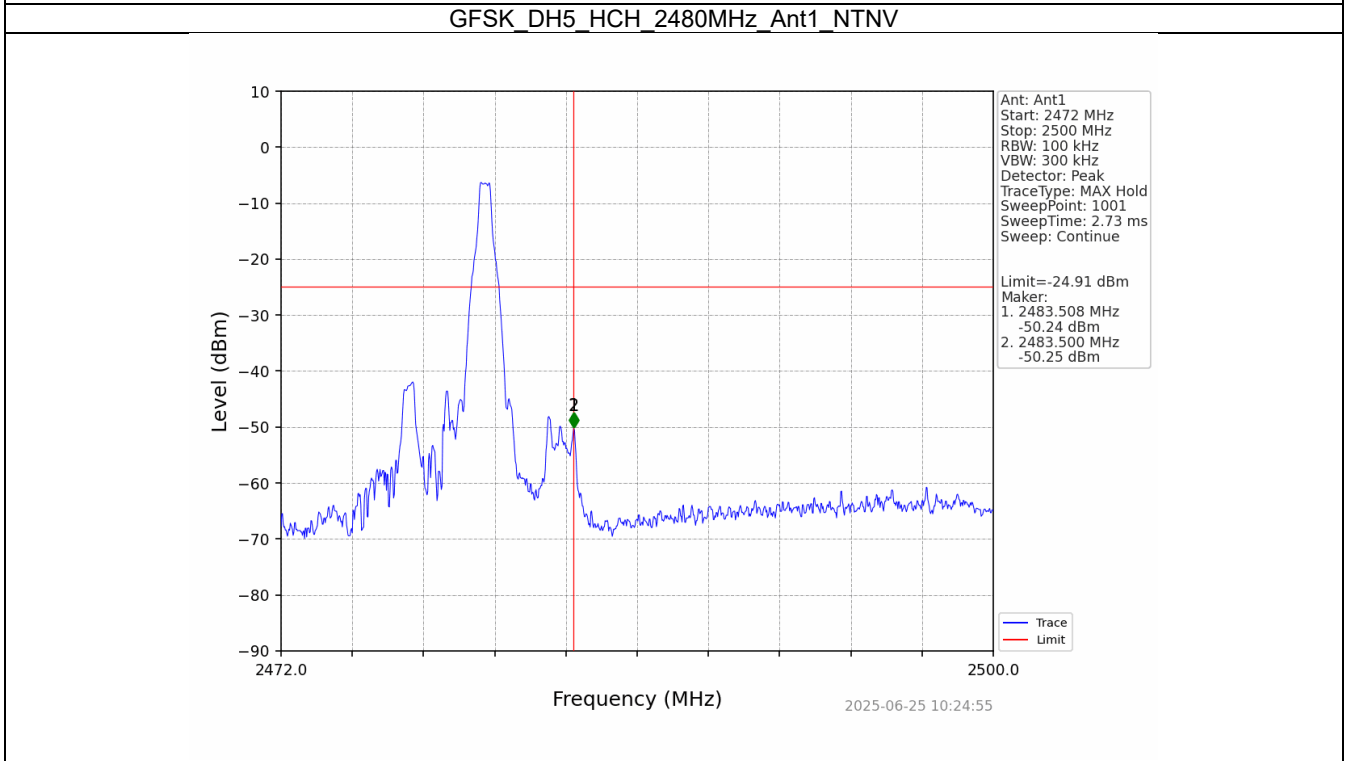
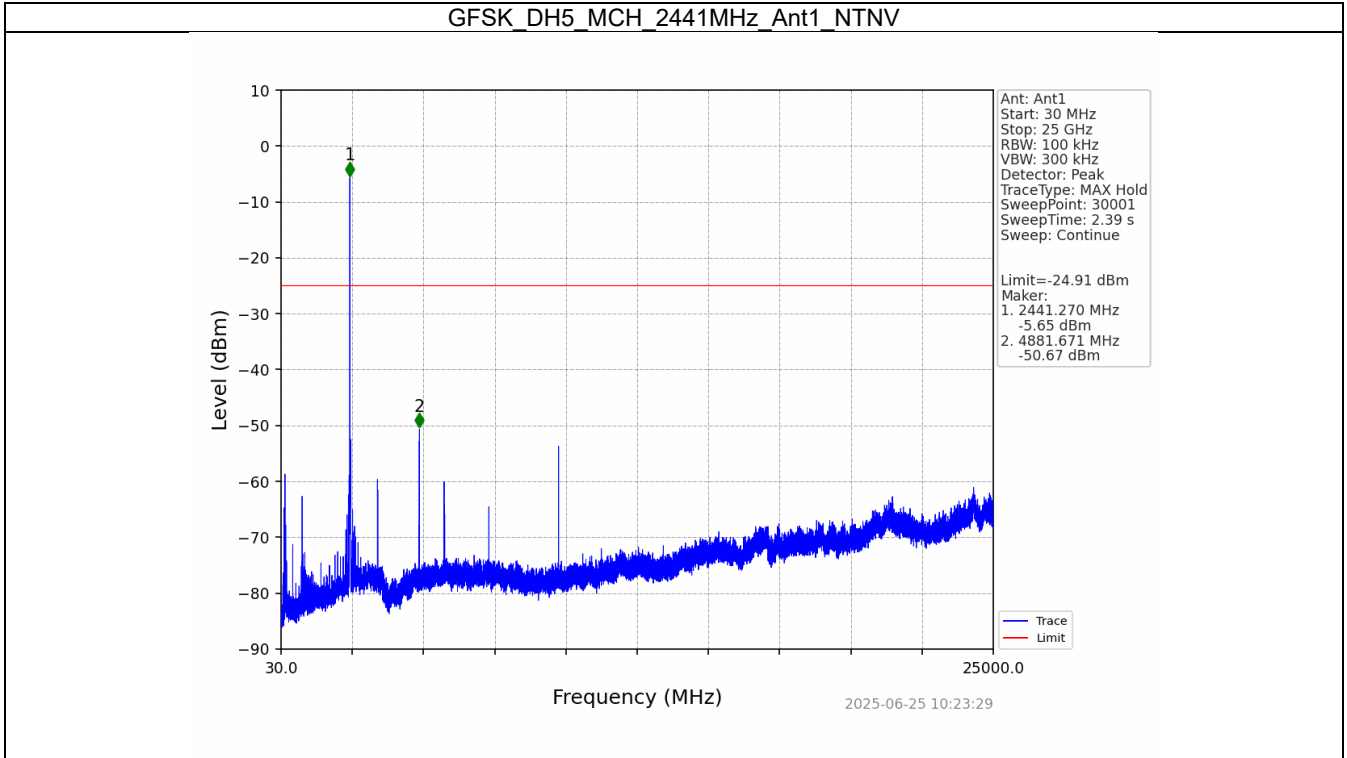


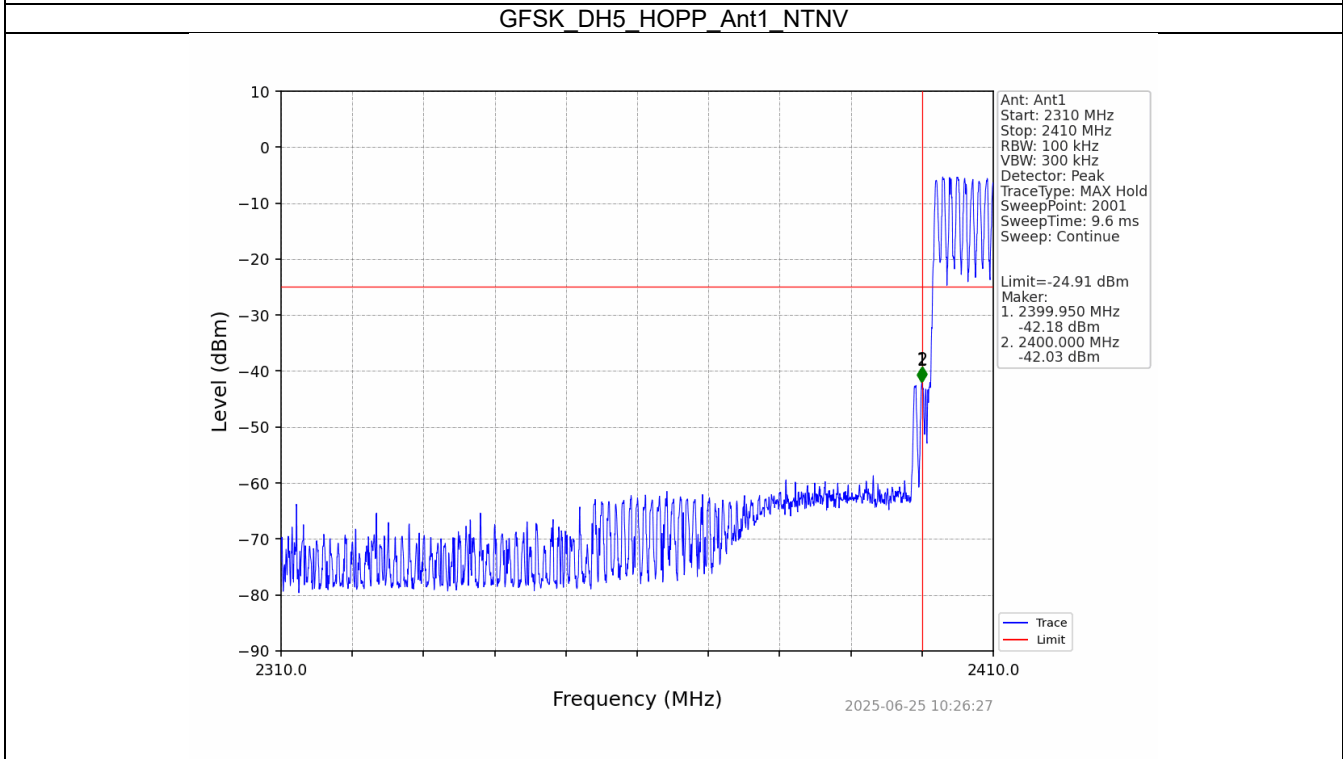
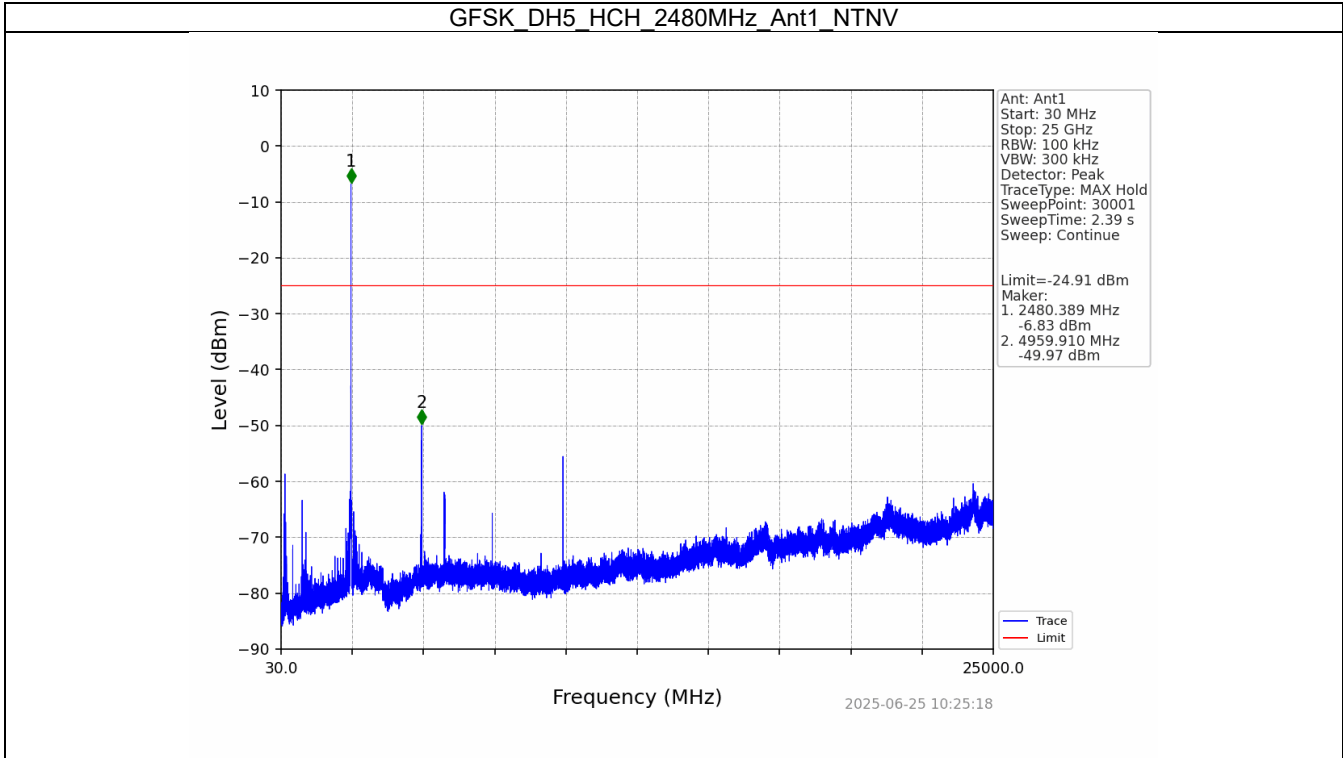


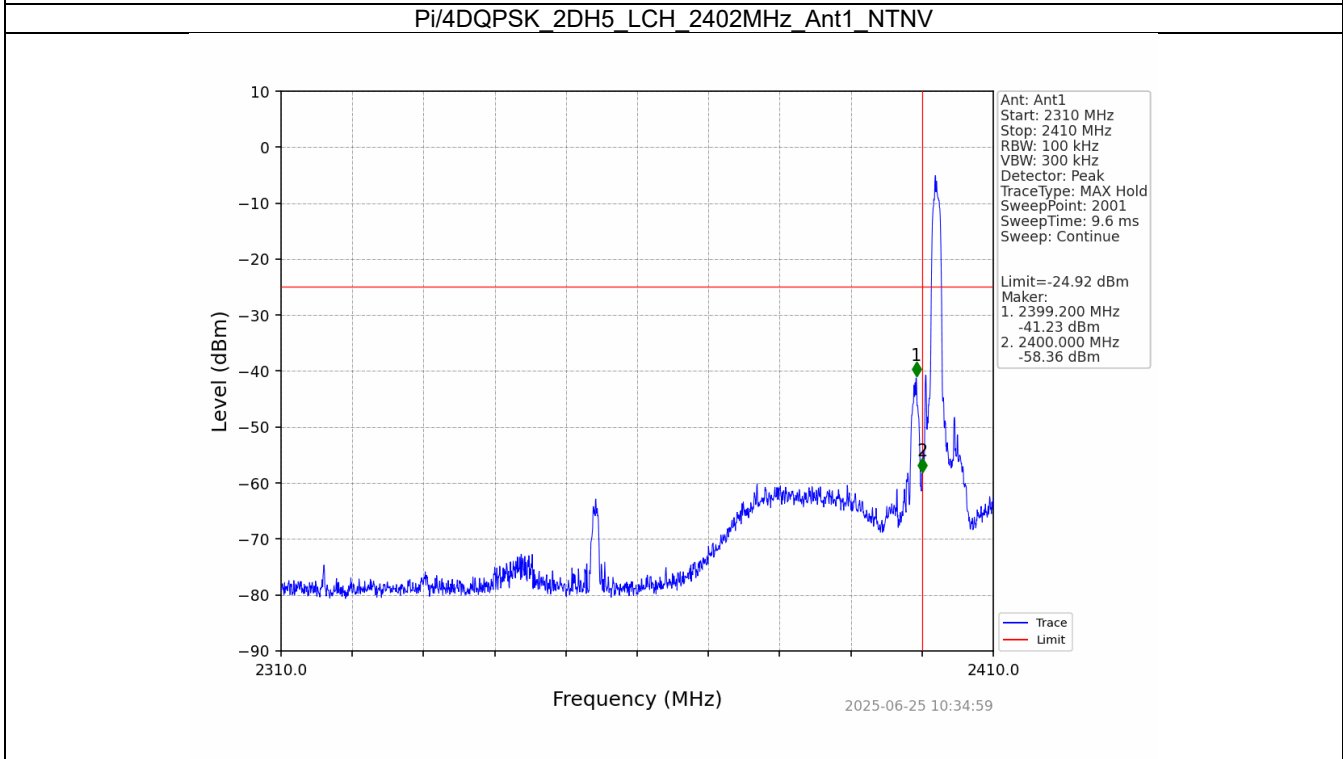
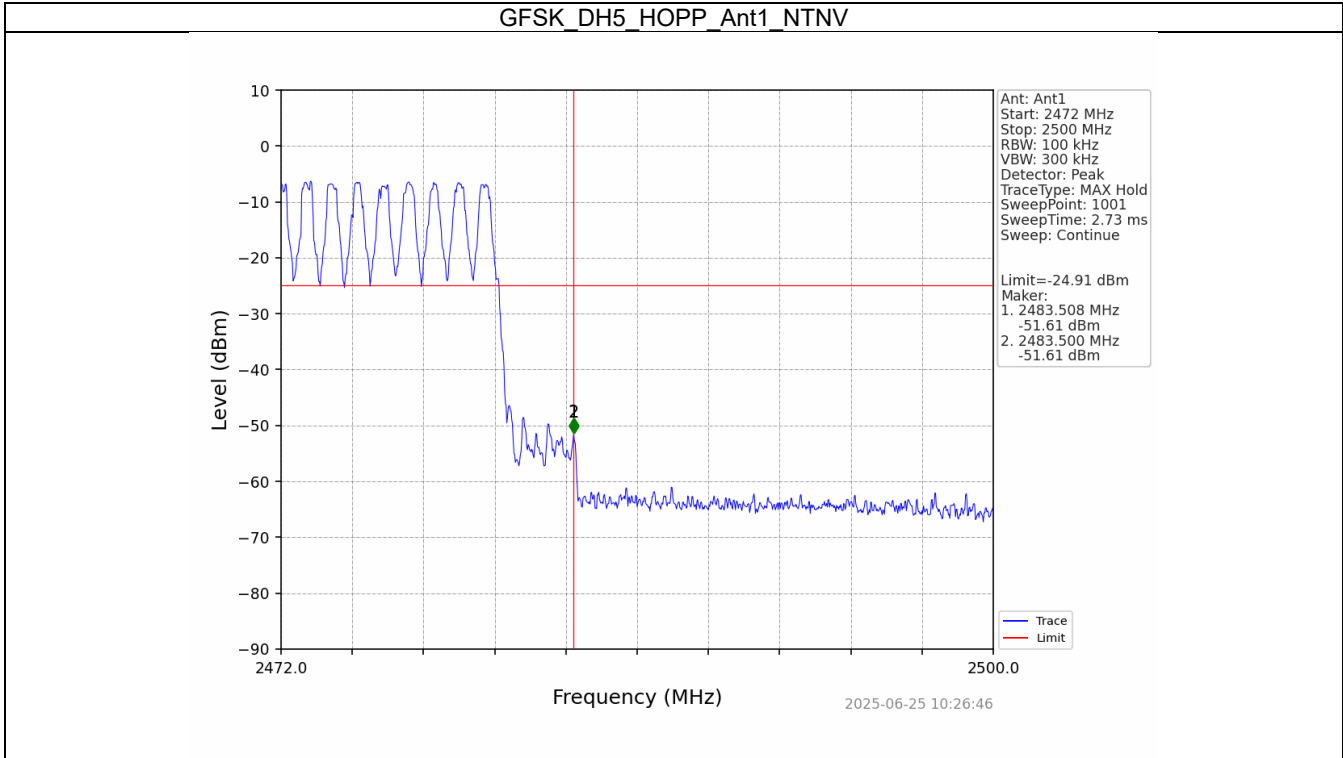


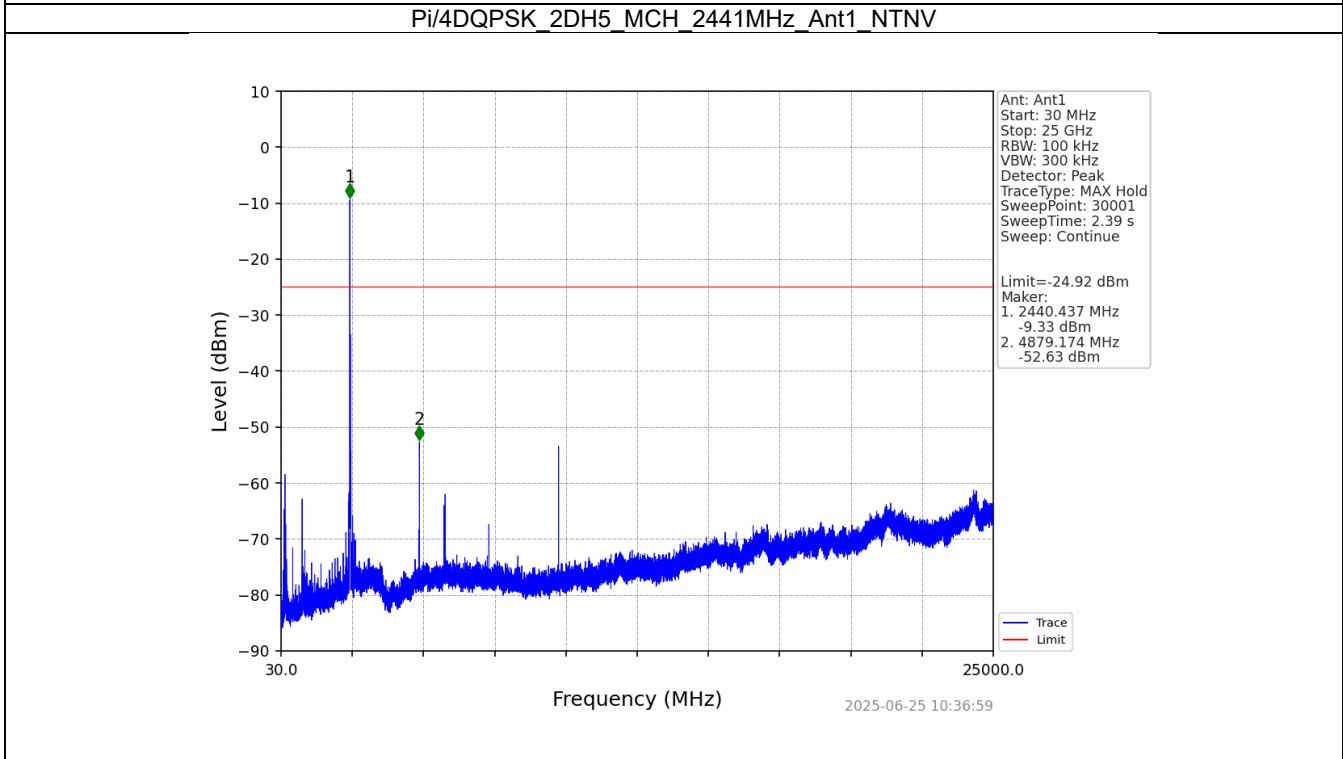
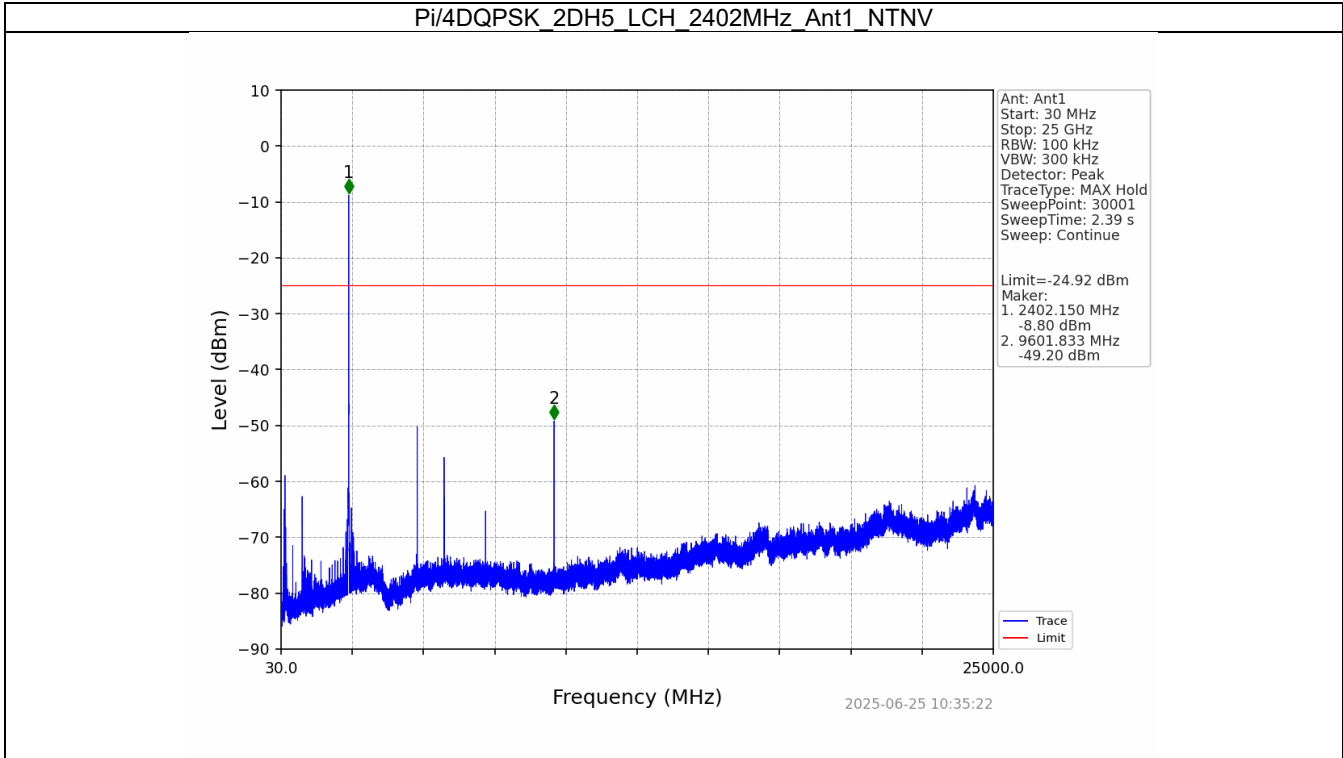
7.2.2 CSE

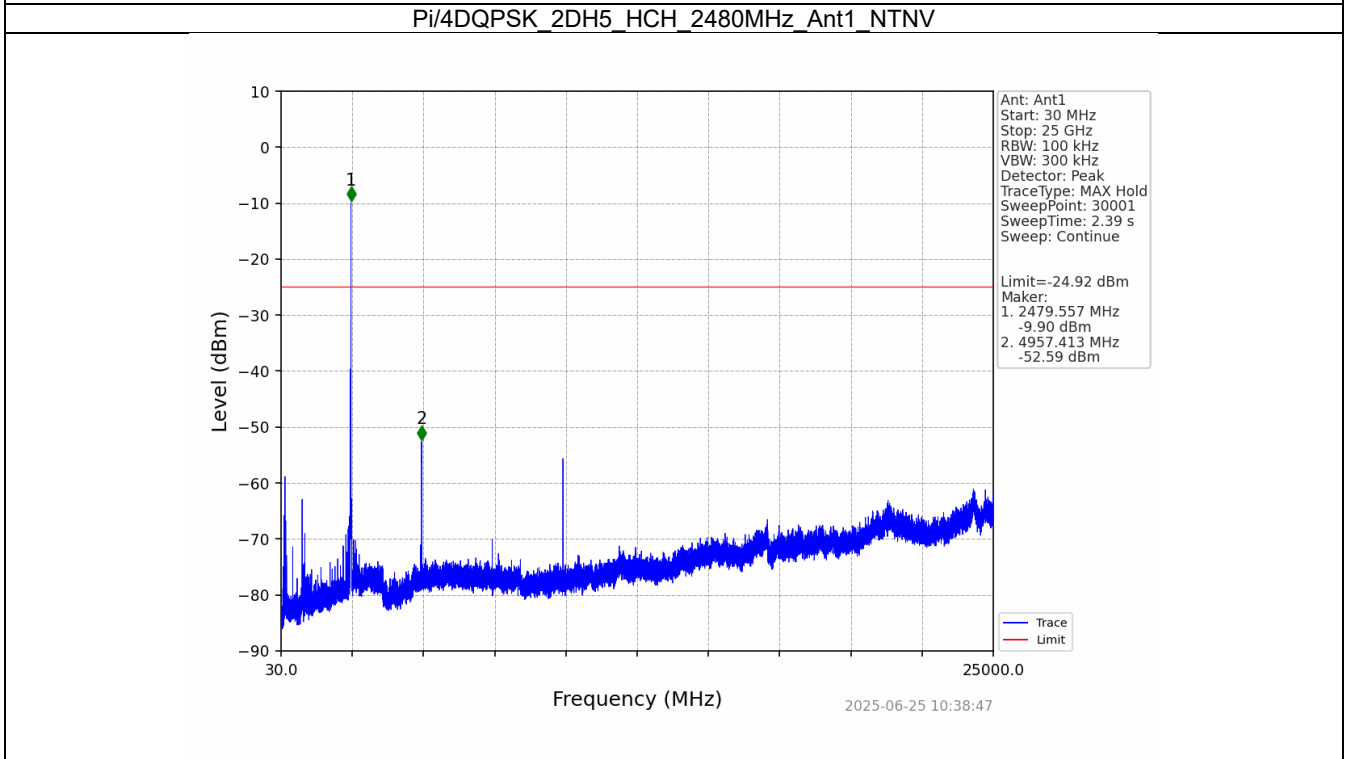
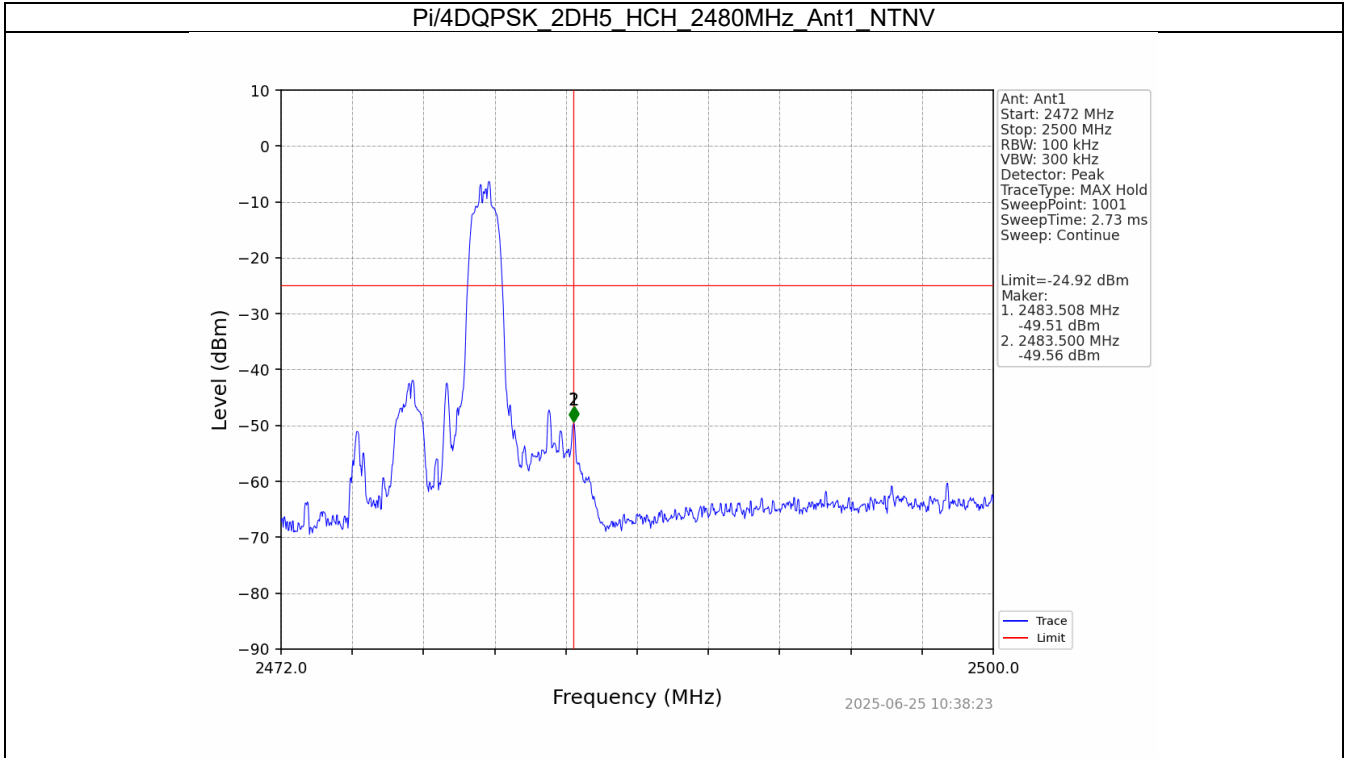


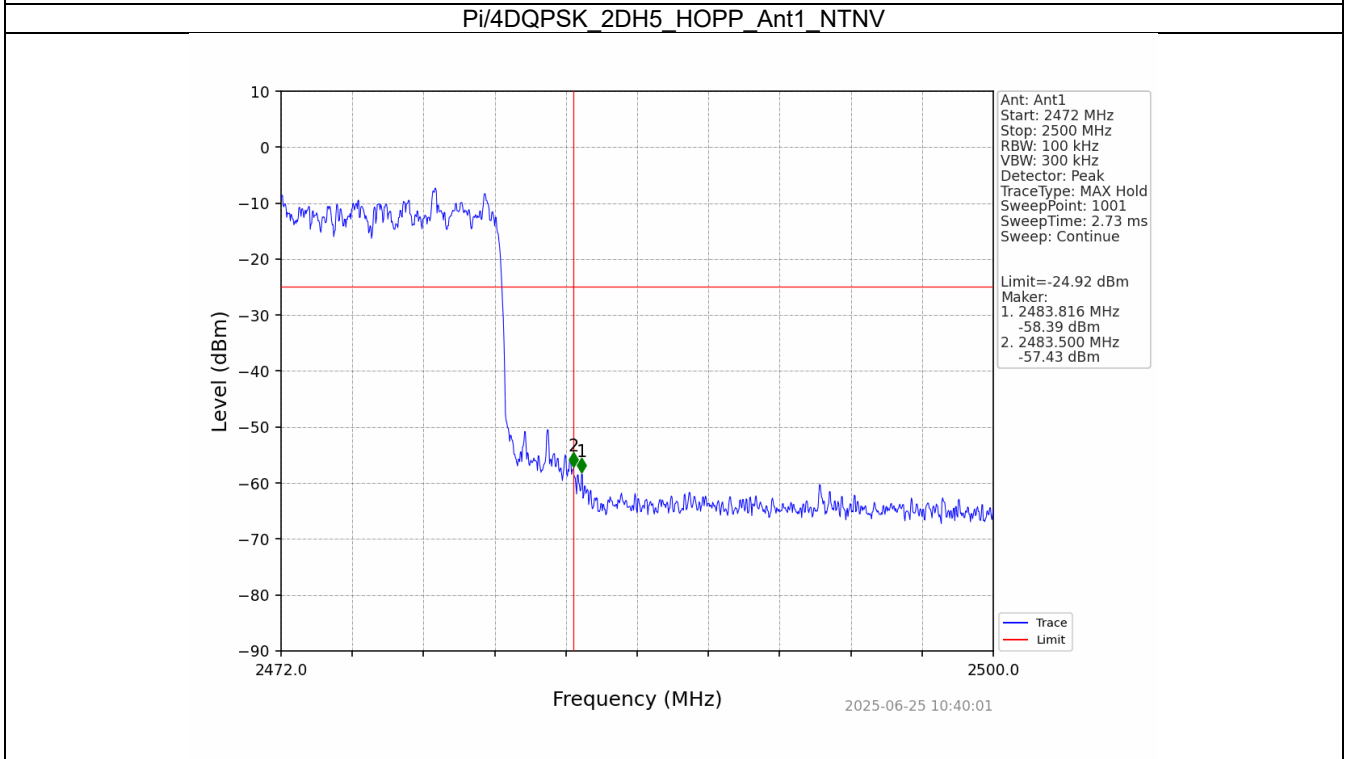
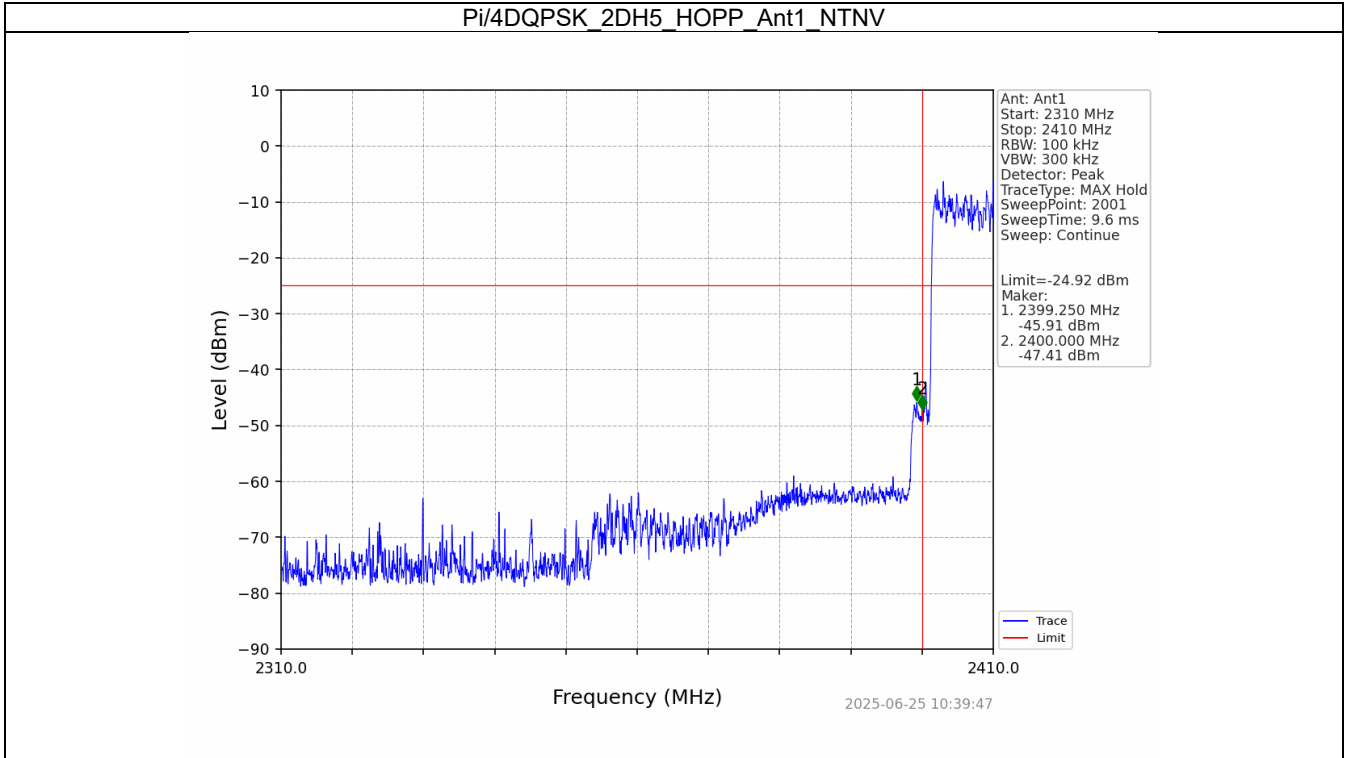












8. Form731

8.1 Test Result

8.1.1 Form731

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
2402	2480	0.0004	-3.94