

RF Test Data

For

Project No.:	RF251027002-03-001
Client:	Autel Robotics Co., Ltd.
Manufacturer:	Autel Robotics Co., Ltd.
Product Description:	Dragonfish Repeater
Model(s):	DFRP
Test Engineer:	Jason Huang
Test Date:	2025-11-11

Test Summary

Item	Result
Duty Cycle	Pass
Bandwidth	Pass
Maximum Conducted Output Power	Pass
Maximum Power Spectral Density	Pass
Unwanted Emissions In Non-restricted Frequency Bands	Pass
Frequency Error	Pass

1. Duty Cycle

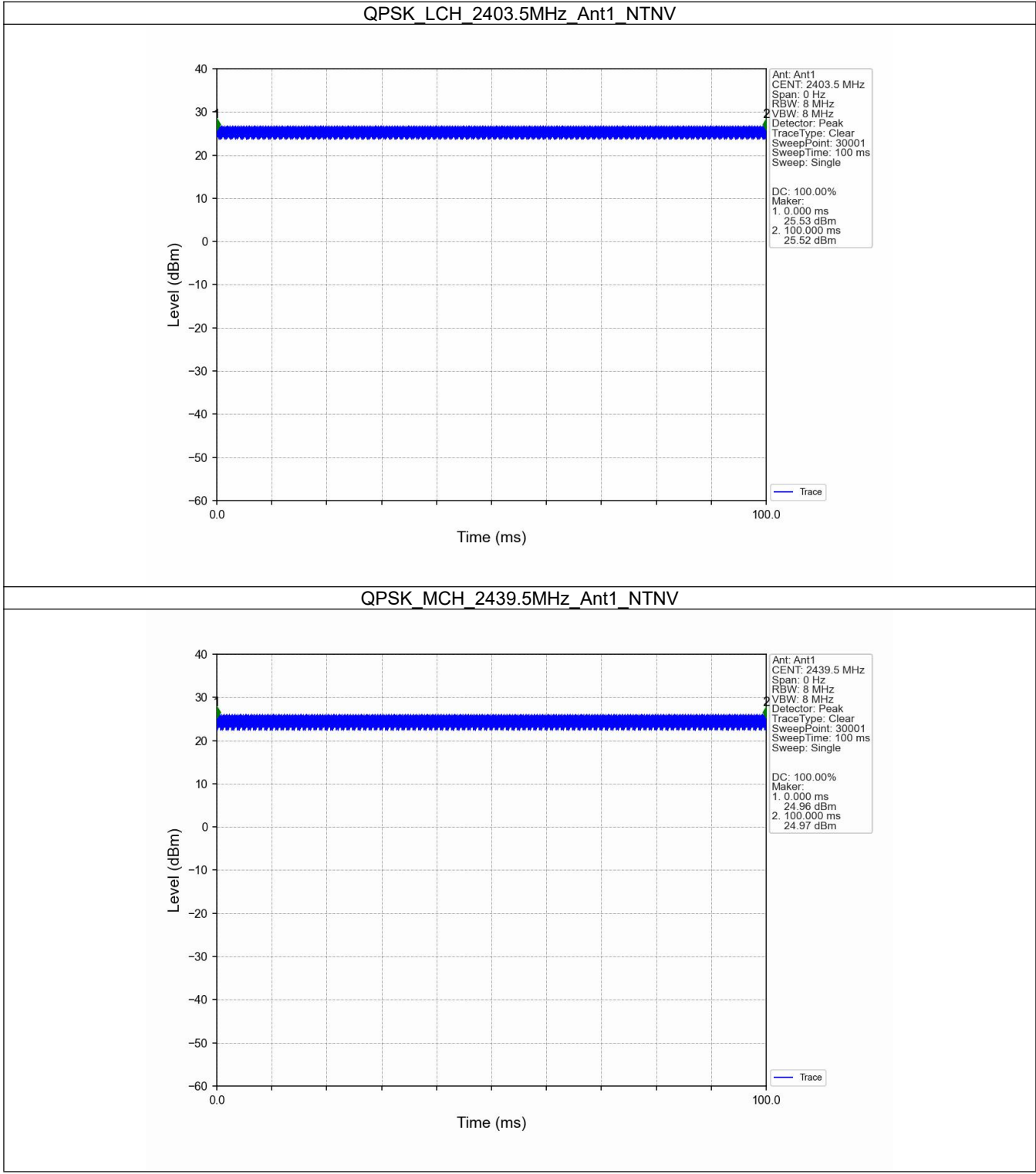
1.1 Test Result

1.1.1 Ant1

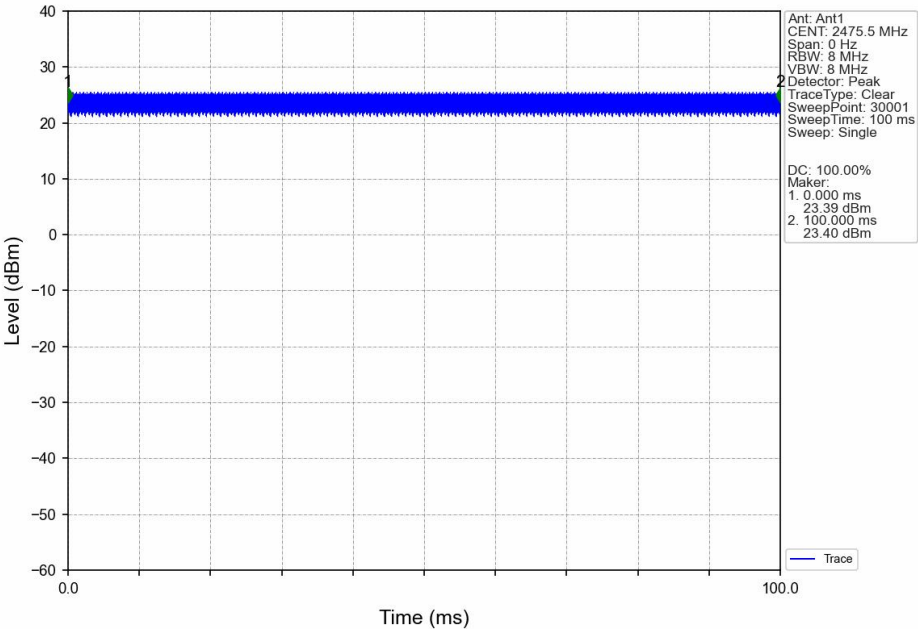
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
QPSK	MIMO	2403.5	100.000	100.000	100.00	0.00	0.00
		2439.5	100.000	100.000	100.00	0.00	0.00
		2475.5	100.000	100.000	100.00	0.00	0.00
16QAM	MIMO	2403.5	100.000	100.000	100.00	0.00	0.00
		2439.5	100.000	100.000	100.00	0.00	0.00
		2475.5	100.000	100.000	100.00	0.00	0.00

1.2 Test Graph

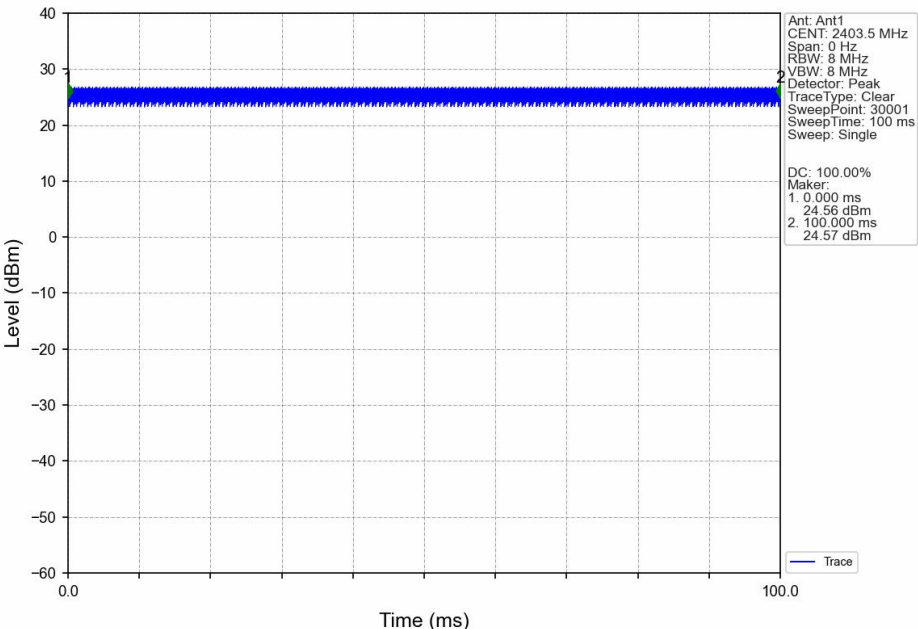
1.2.1 Ant1



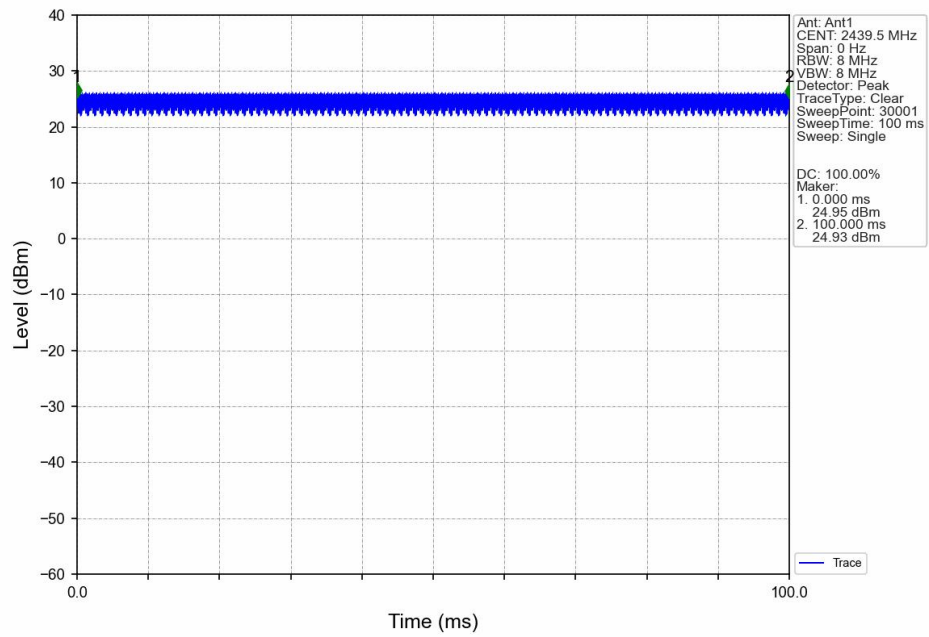
QPSK_HCH_2475.5MHz_Ant1_NTNV



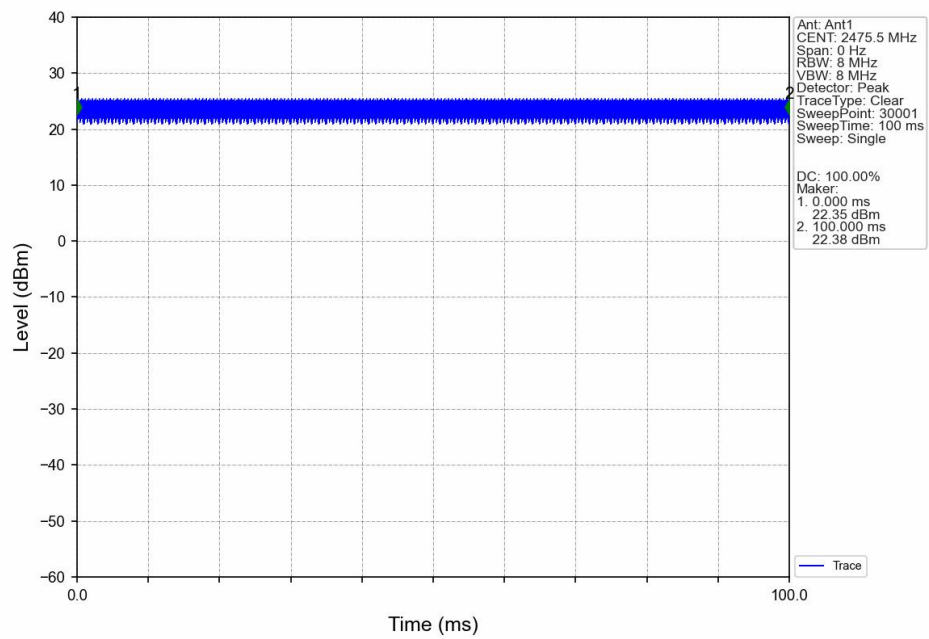
16QAM_LCH_2403.5MHz_Ant1_NTNV



16QAM_MCH_2439.5MHz_Ant1_NTNV



16QAM_HCH_2475.5MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

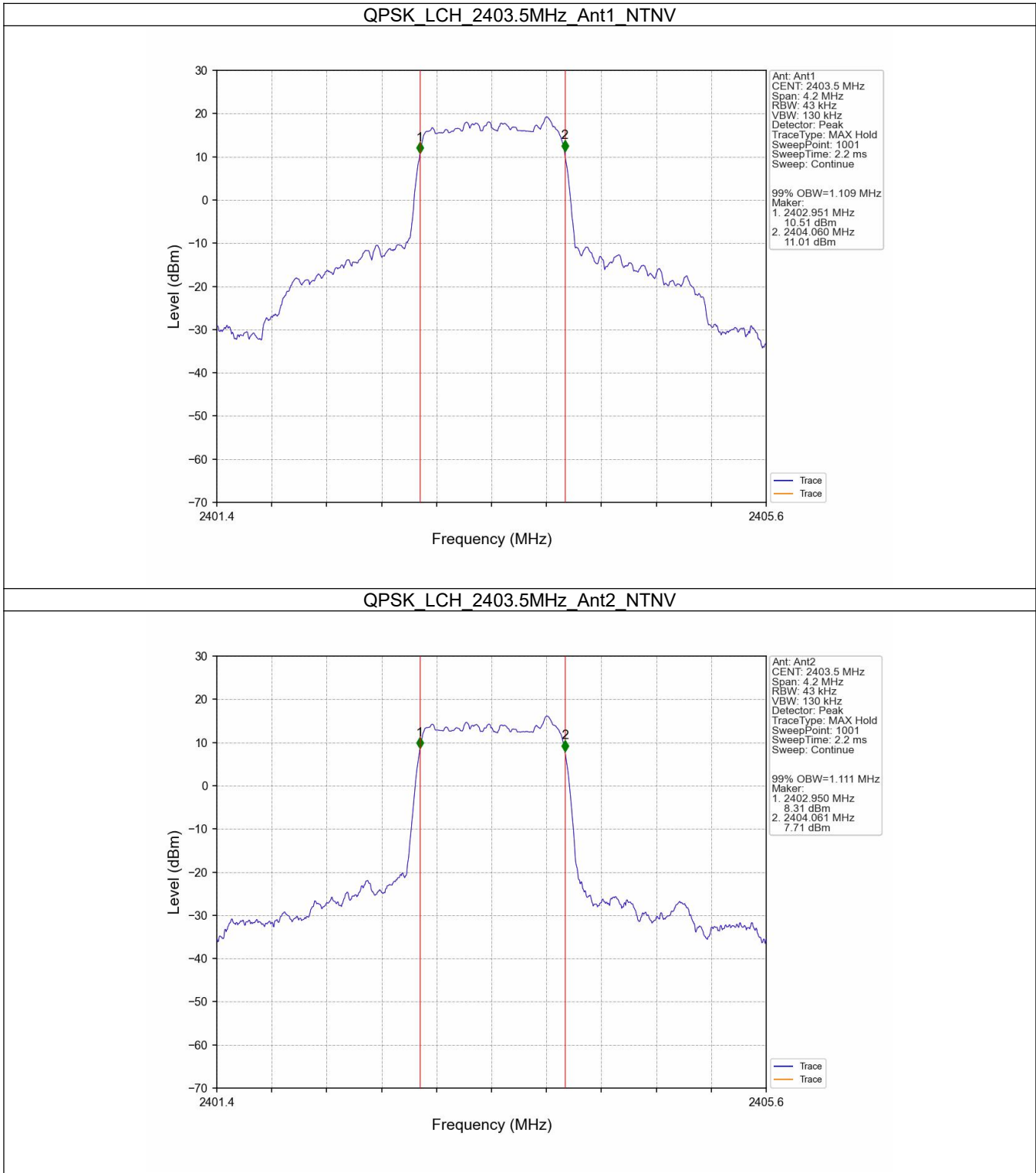
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
QPSK	MIMO	2403.5	1	1.109	/	Pass
			2	1.111	/	Pass
		2439.5	1	1.114	/	Pass
			2	1.102	/	Pass
		2475.5	1	1.114	/	Pass
			2	1.102	/	Pass
16QAM	MIMO	2403.5	1	1.109	/	Pass
			2	1.110	/	Pass
		2439.5	1	1.114	/	Pass
			2	1.102	/	Pass
		2475.5	1	1.113	/	Pass
			2	1.102	/	Pass

2.1.2 6dB BW

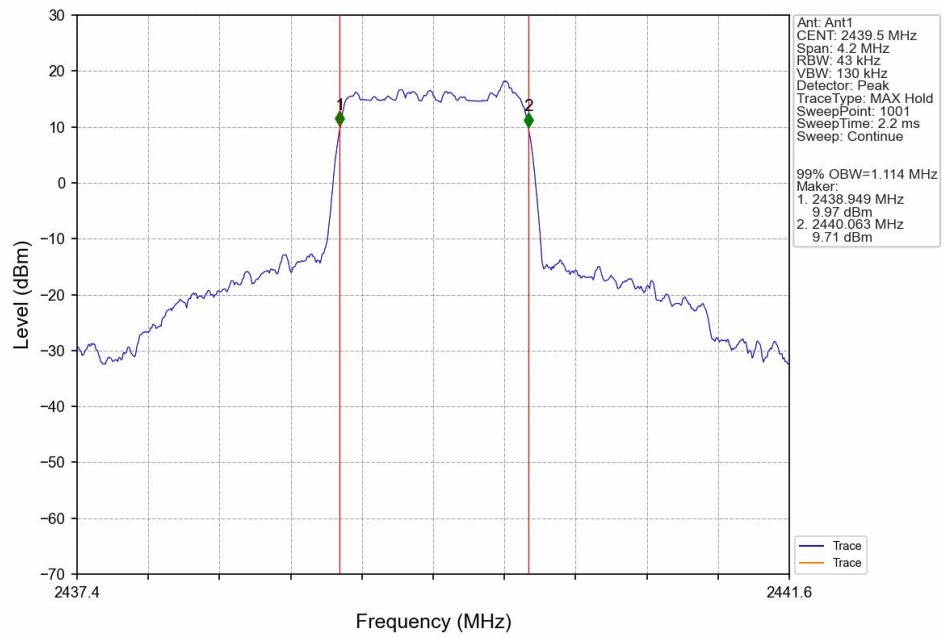
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
QPSK	MIMO	2403.5	1	1.127	≥ 0.5	Pass
			2	1.134	≥ 0.5	Pass
		2439.5	1	1.130	≥ 0.5	Pass
			2	1.122	≥ 0.5	Pass
		2475.5	1	1.132	≥ 0.5	Pass
			2	1.123	≥ 0.5	Pass
16QAM	MIMO	2403.5	1	1.126	≥ 0.5	Pass
			2	1.133	≥ 0.5	Pass
		2439.5	1	1.132	≥ 0.5	Pass
			2	1.122	≥ 0.5	Pass
		2475.5	1	1.131	≥ 0.5	Pass
			2	1.123	≥ 0.5	Pass

2.2 Test Graph

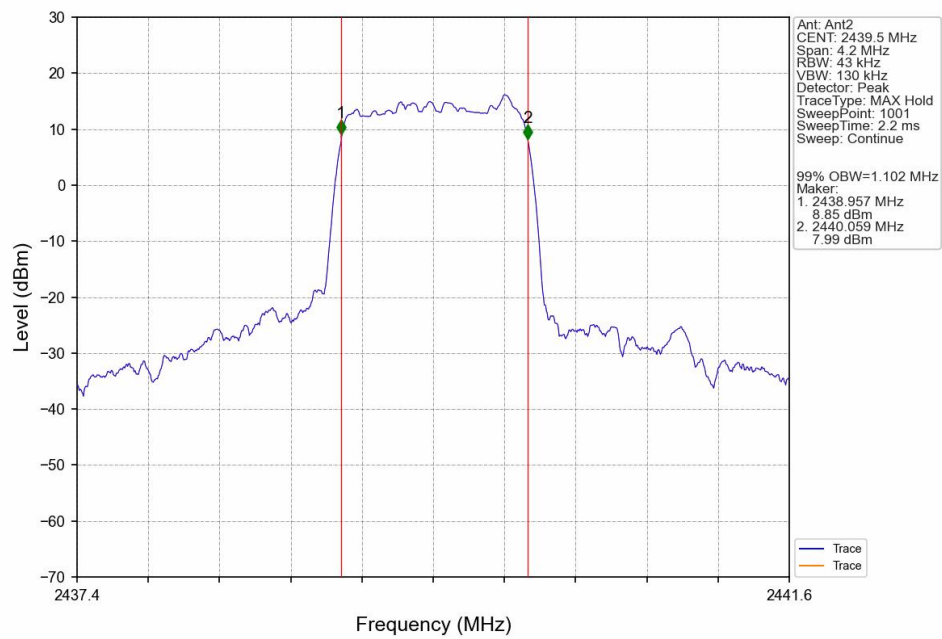
2.2.1 OBW



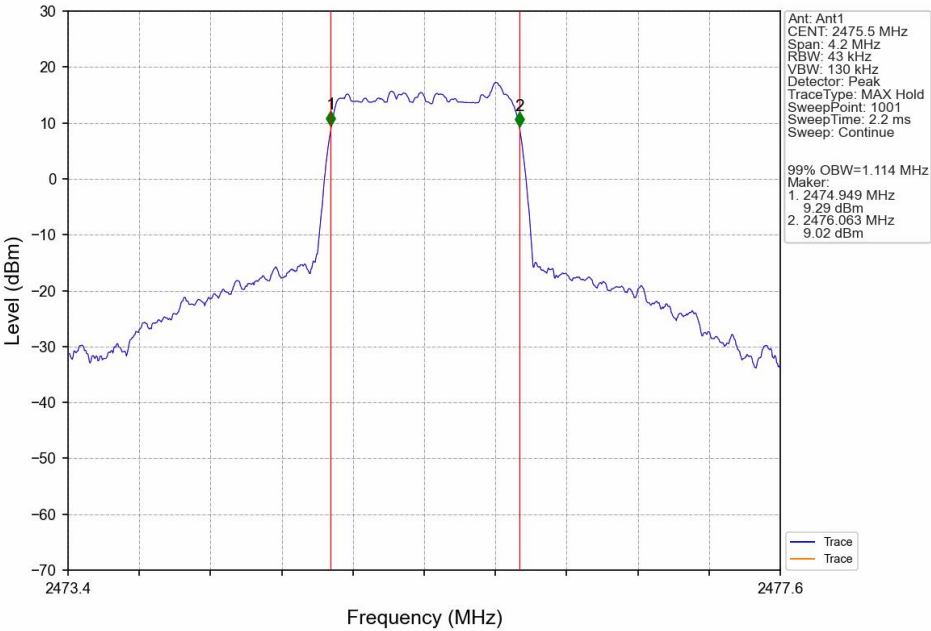
QPSK_MCH_2439.5MHz_Ant1_NTNV



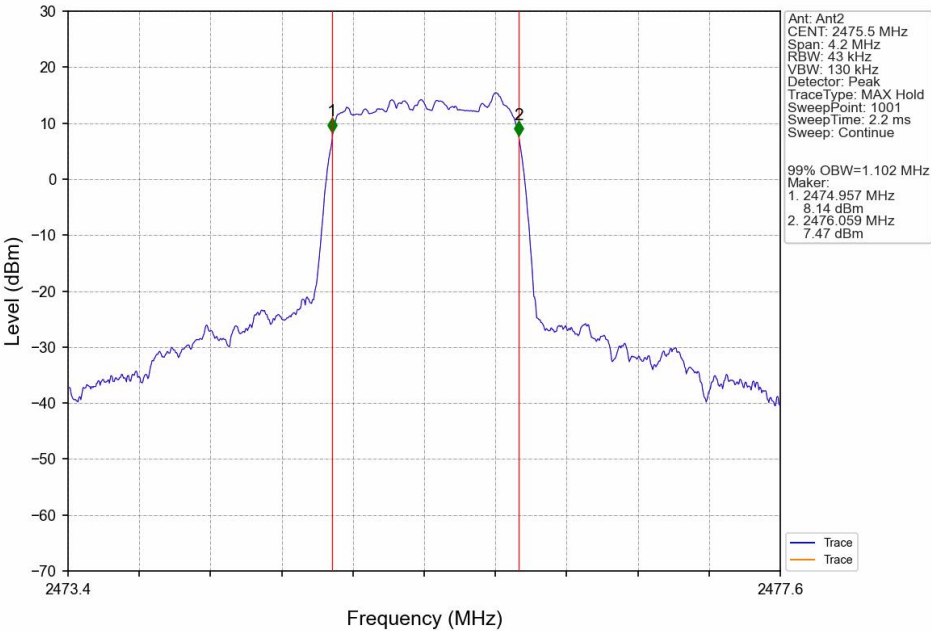
QPSK_MCH_2439.5MHz_Ant2_NTNV



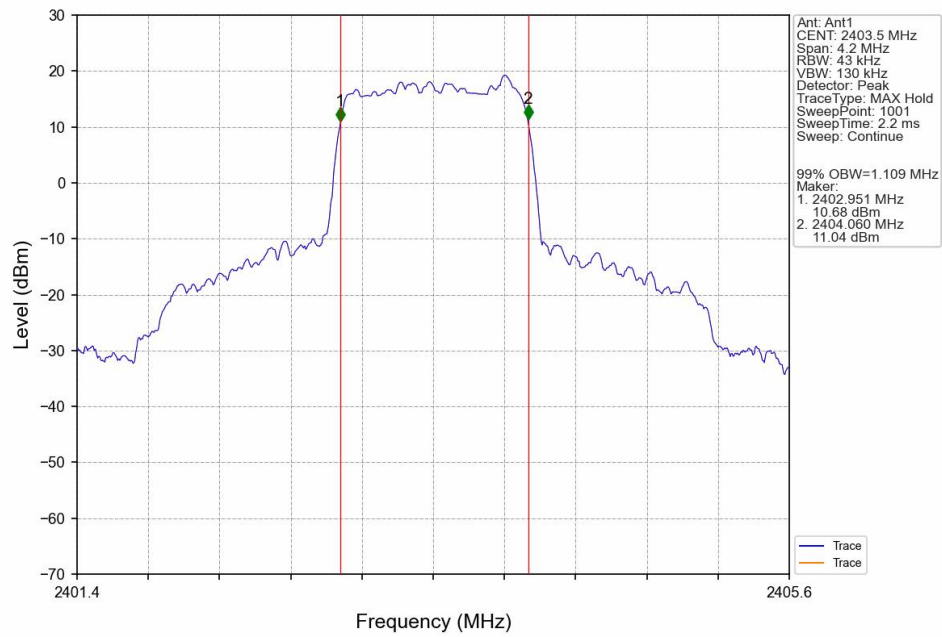
QPSK_HCH_2475.5MHz_Ant1_NTNV



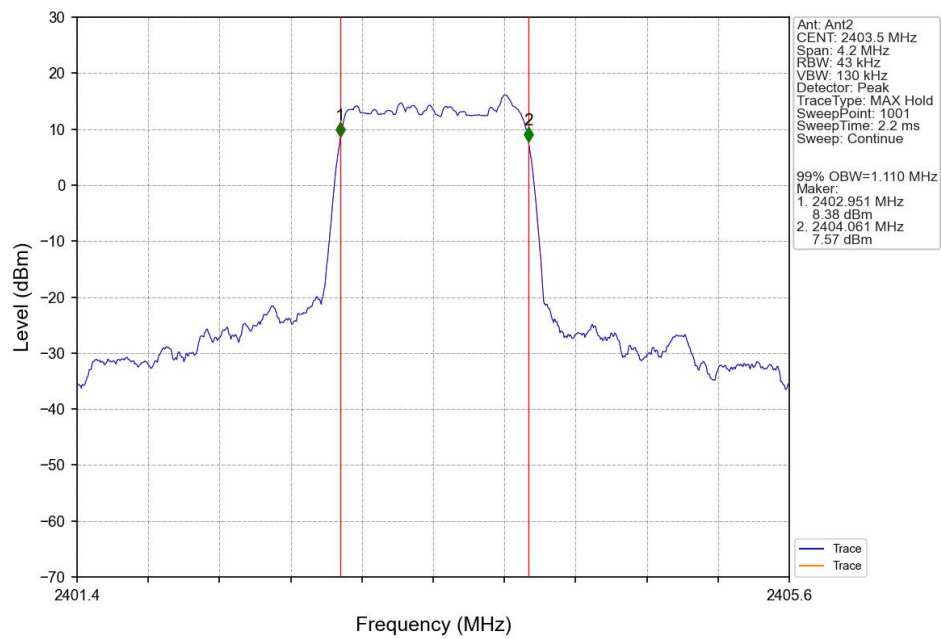
QPSK_HCH_2475.5MHz_Ant2_NTNV



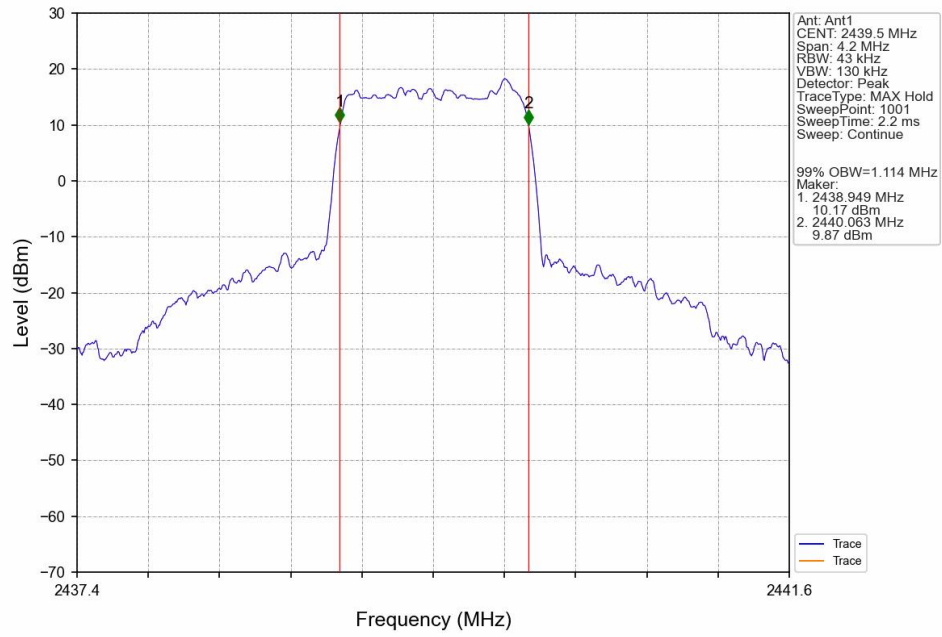
16QAM_LCH_2403.5MHz_Ant1_NTNV



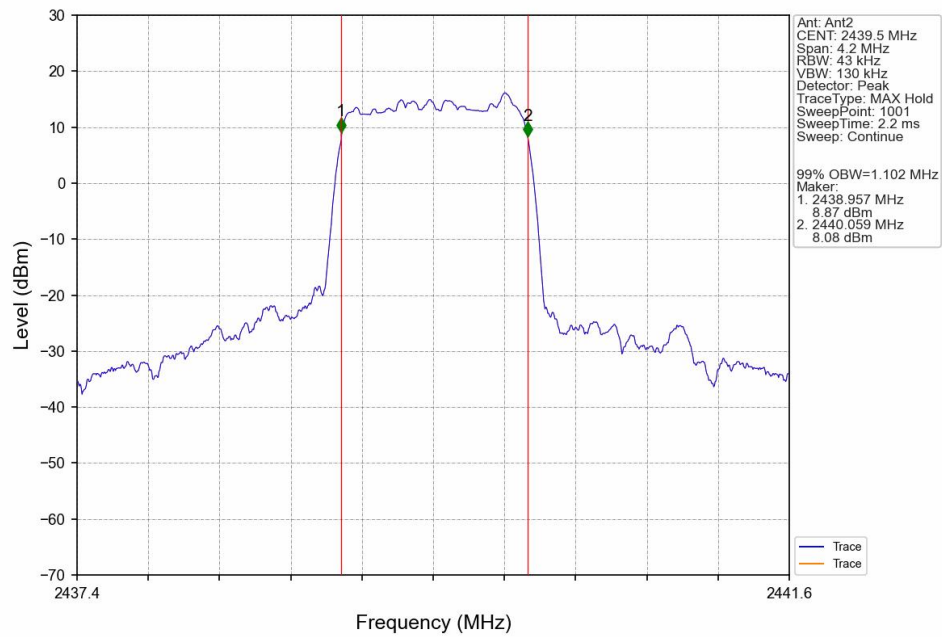
16QAM_LCH_2403.5MHz_Ant2_NTNV



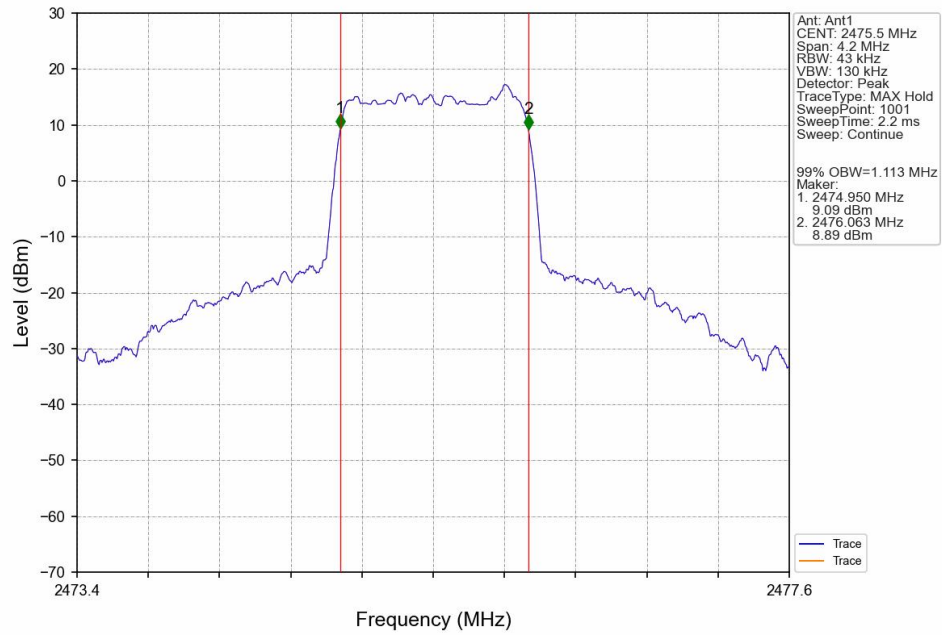
16QAM_MCH_2439.5MHz_Ant1_NTNV



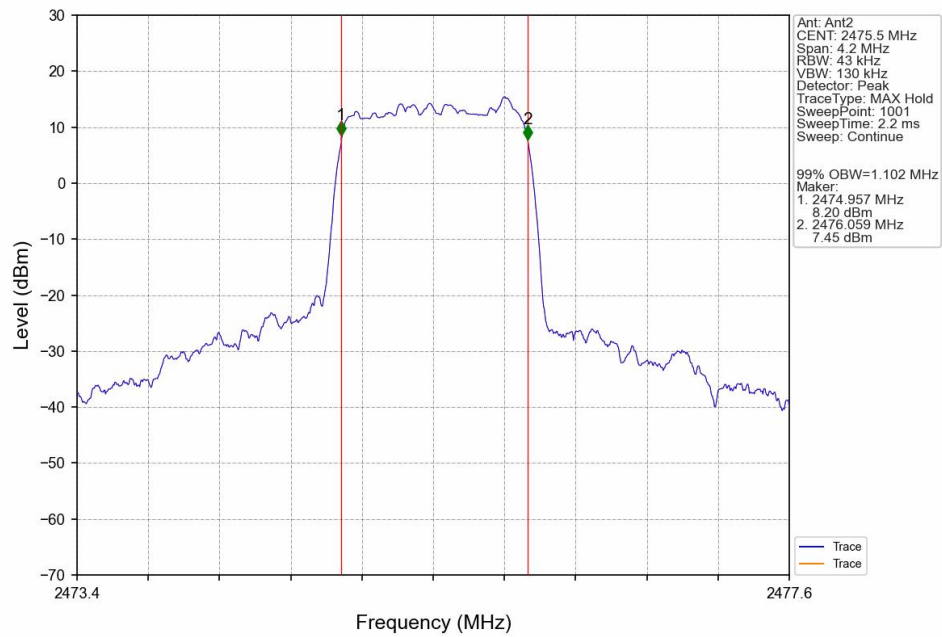
16QAM_MCH_2439.5MHz_Ant2_NTNV



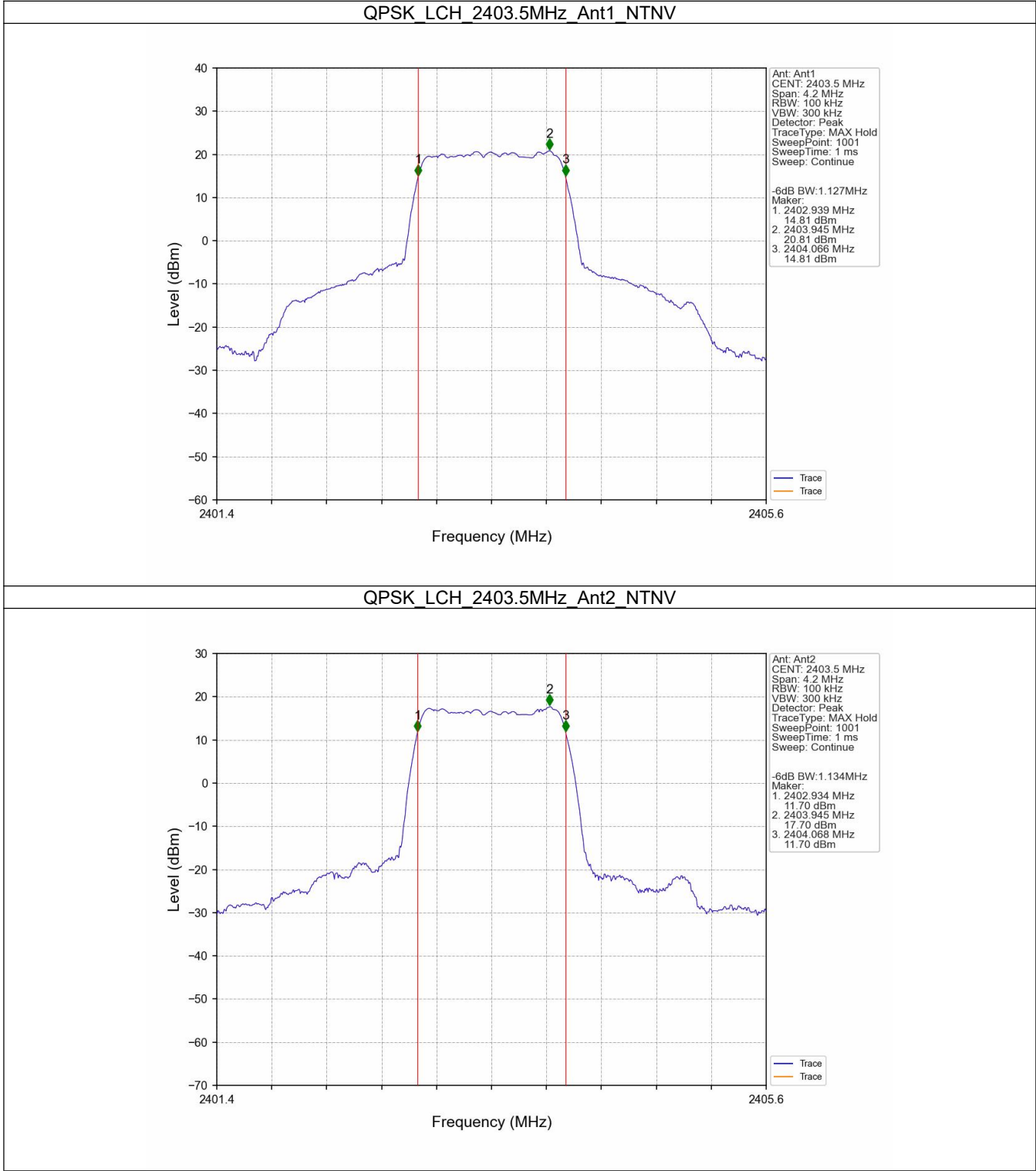
16QAM_HCH_2475.5MHz_Ant1_NTNV



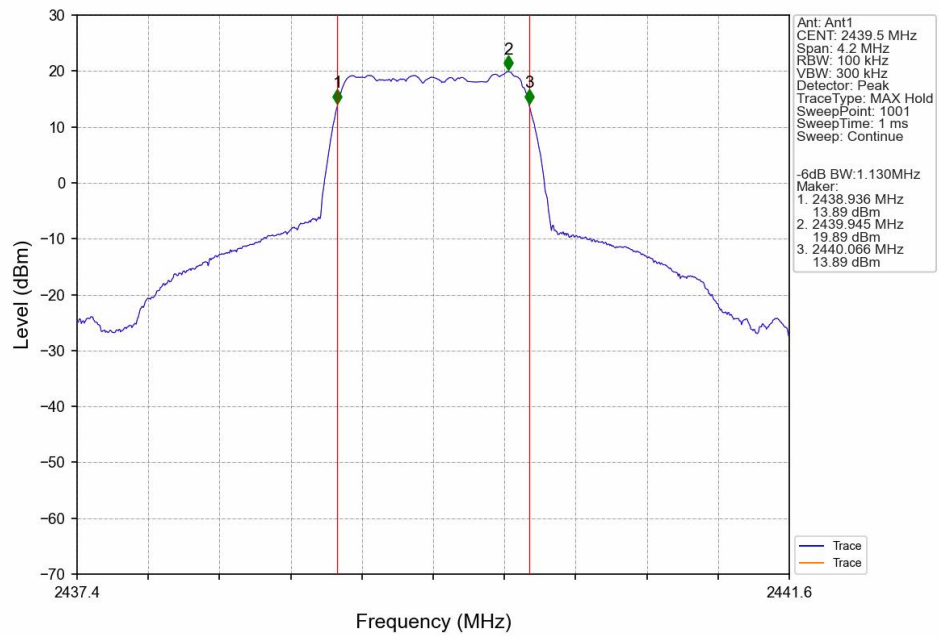
16QAM_HCH_2475.5MHz_Ant2_NTNV



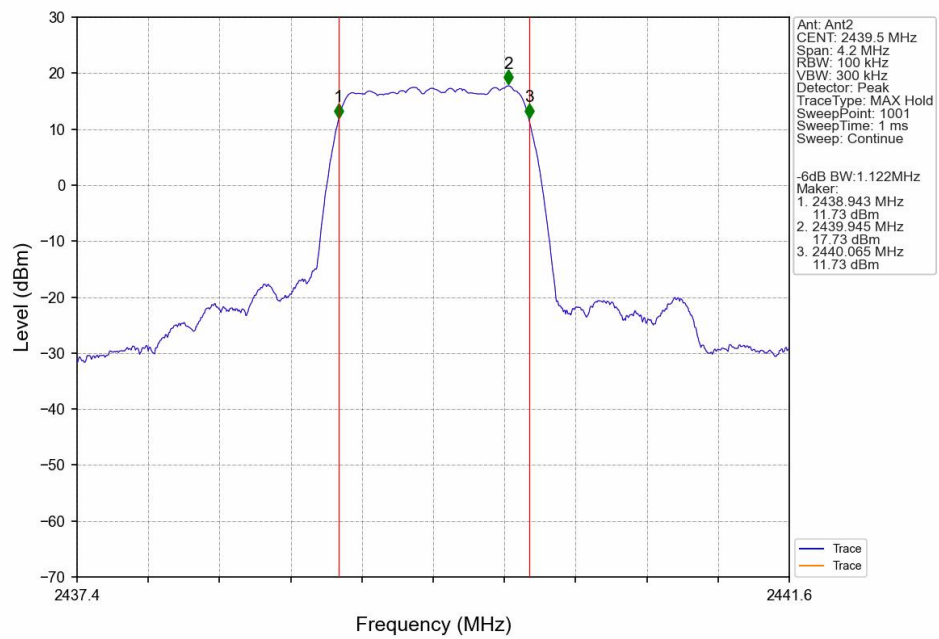
2.2.2 6dB BW



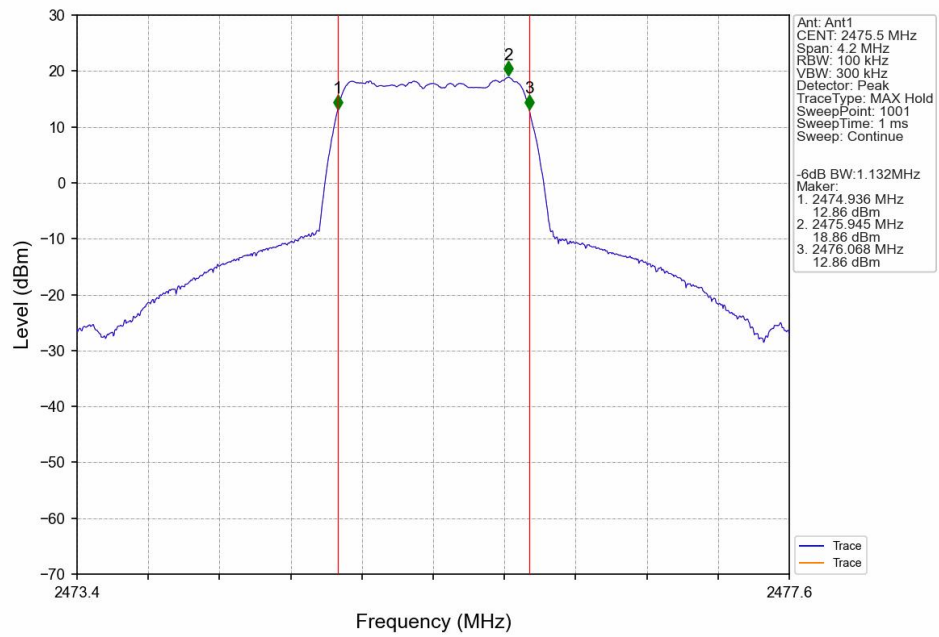
QPSK_MCH_2439.5MHz_Ant1_NTNV



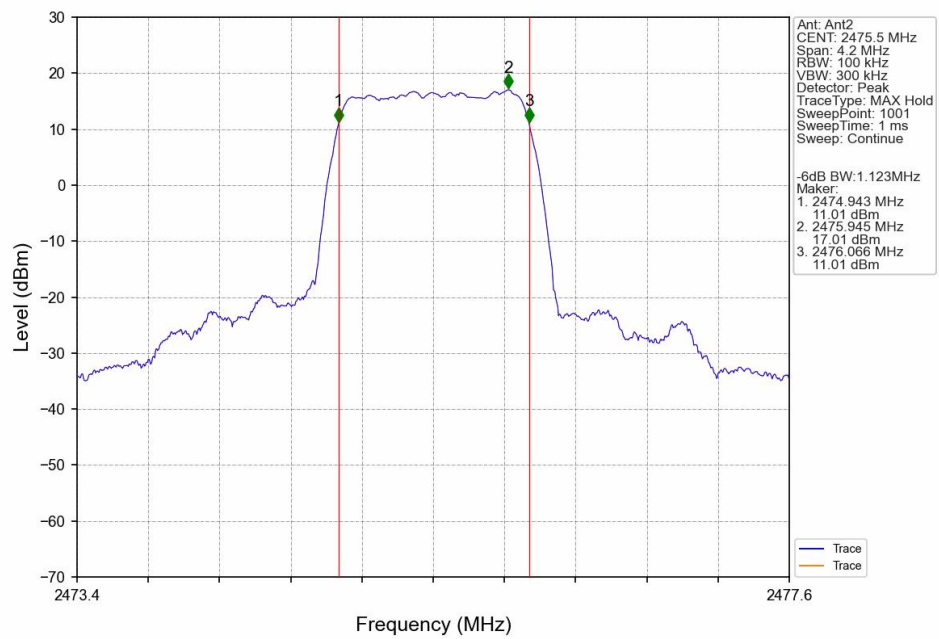
QPSK_MCH_2439.5MHz_Ant2_NTNV



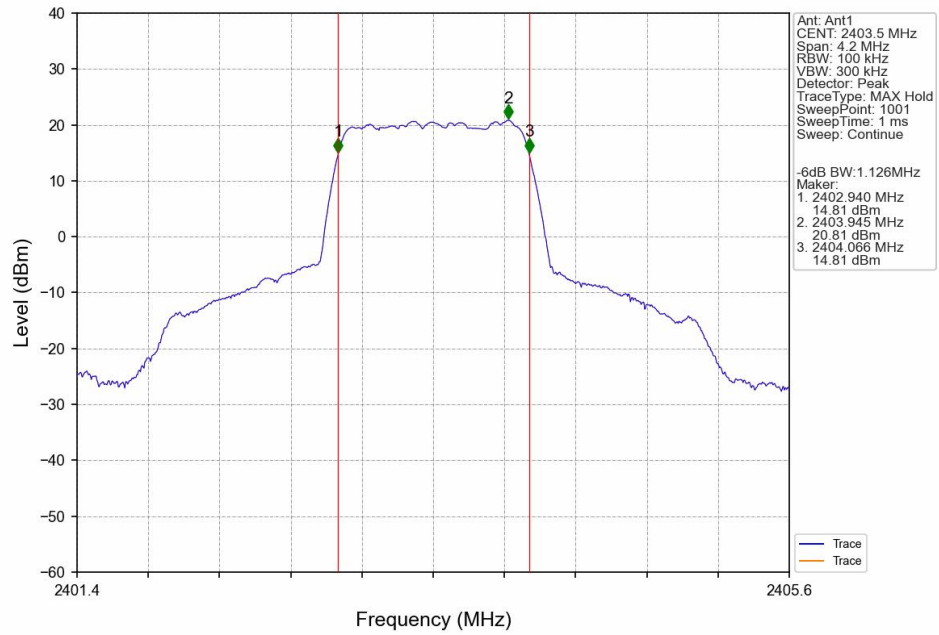
QPSK_HCH_2475.5MHz_Ant1_NTNV



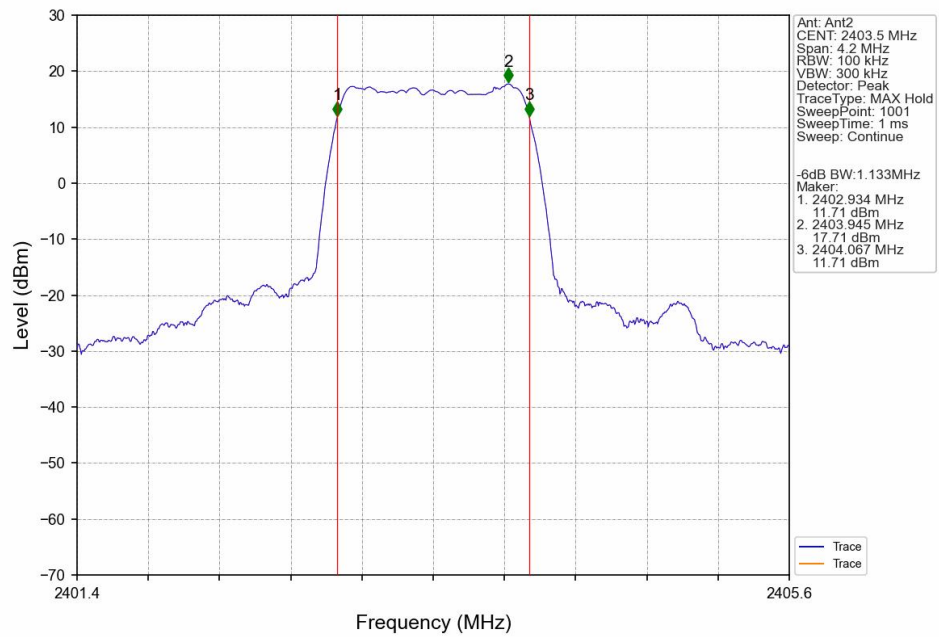
QPSK_HCH_2475.5MHz_Ant2_NTNV



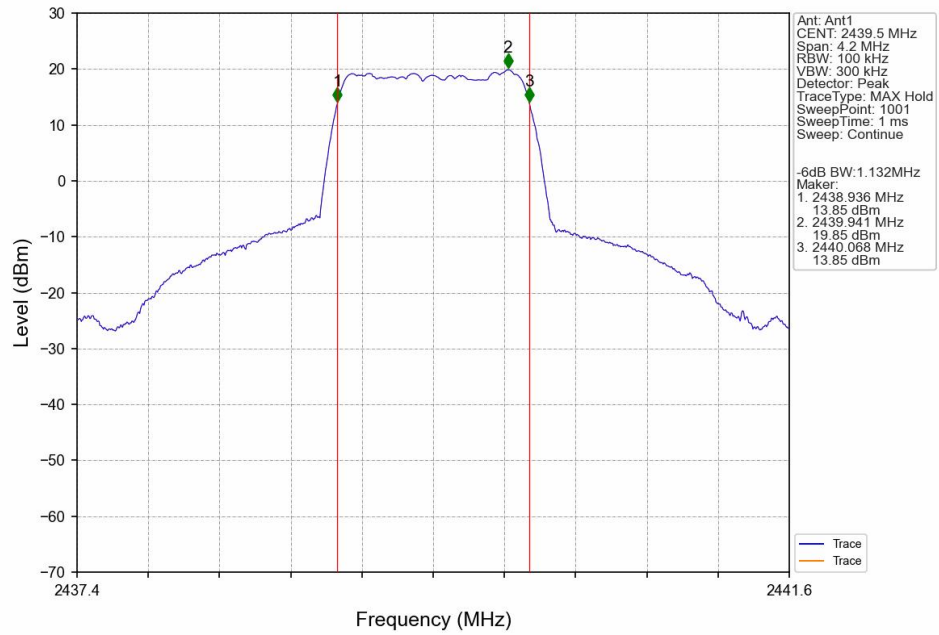
16QAM_LCH_2403.5MHz_Ant1_NTNV



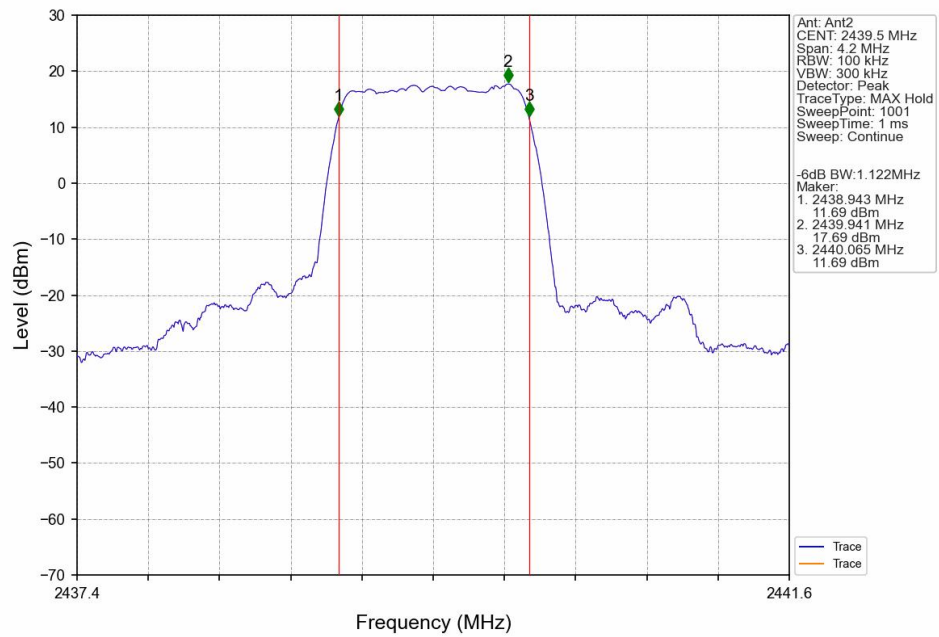
16QAM_LCH_2403.5MHz_Ant2_NTNV



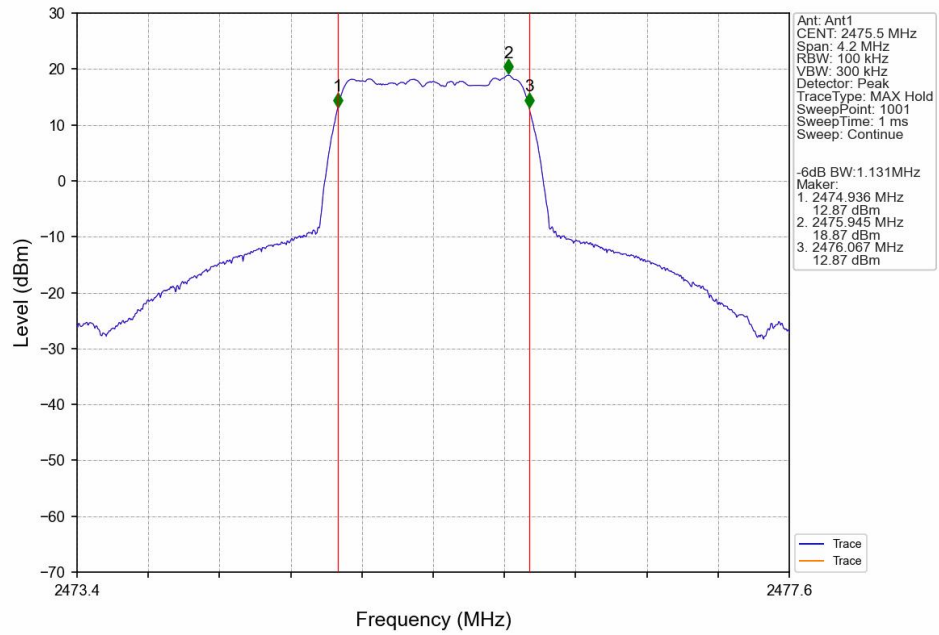
16QAM_MCH_2439.5MHz_Ant1_NTNV



16QAM_MCH_2439.5MHz_Ant2_NTNV



16QAM_HCH_2475.5MHz_Ant1_NTNV



16QAM_HCH_2475.5MHz_Ant2_NTNV

