

1. Duty Cycle

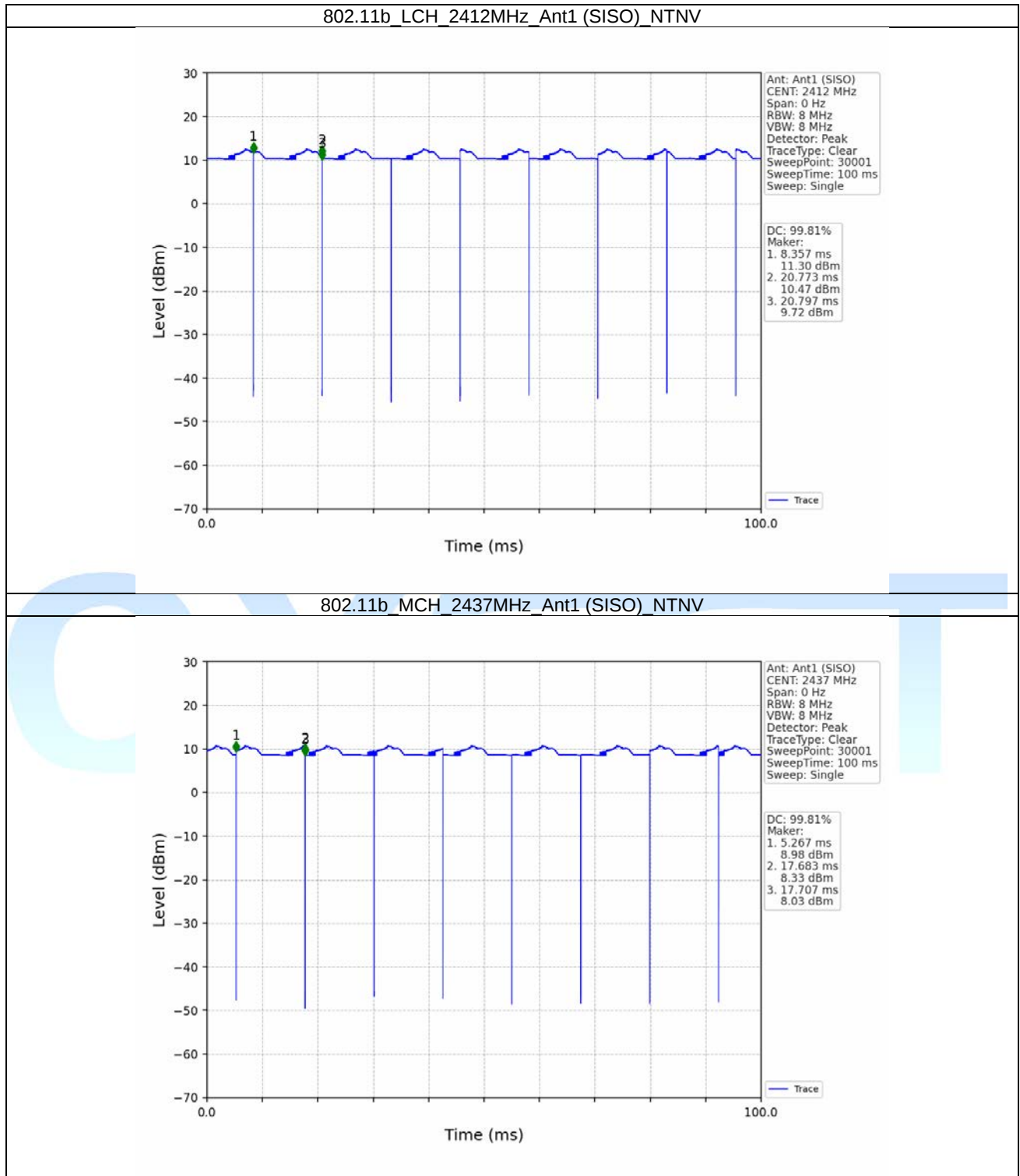
1.1 Ant1

1.1.1 Test Result

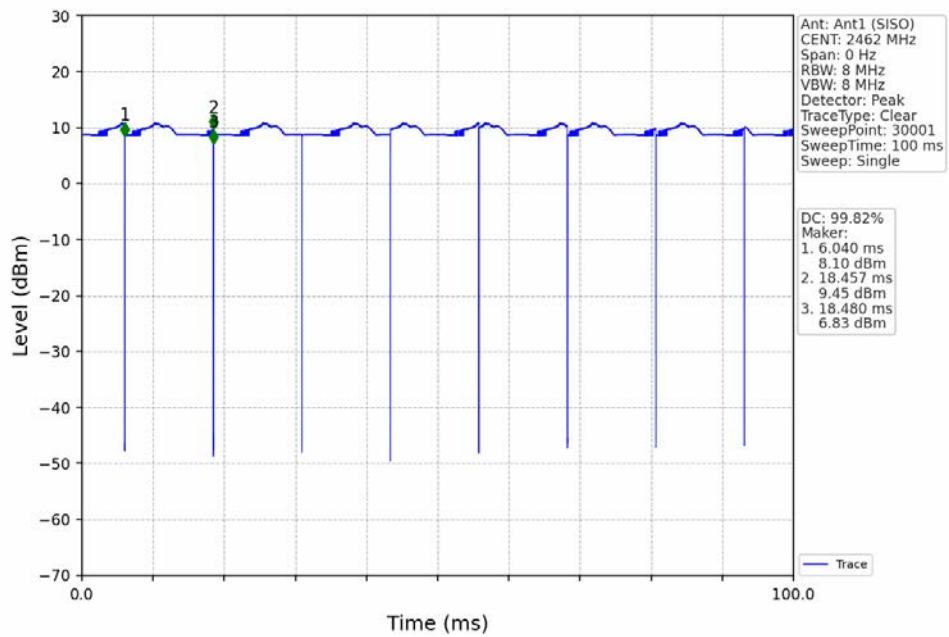
Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	/	/	12.416	12.440	99.81	0.01	0.00
		2437	/	/	12.416	12.440	99.81	0.01	0.00
		2462	/	/	12.417	12.440	99.82	0.01	0.00
802.11g	SISO	2412	/	/	2.066	2.084	99.14	0.04	0.04
		2437	/	/	2.065	2.084	99.09	0.04	0.04
		2462	/	/	2.065	2.083	99.14	0.04	0.04
802.11n (HT20)	MIMO	2412	/	/	1.920	1.939	99.02	0.04	0.03
		2437	/	/	1.921	1.939	99.07	0.04	0.03
		2462	/	/	1.921	1.939	99.07	0.04	0.03
802.11ax (HEW20)	MIMO	2412	RU242	Left	1.489	1.508	98.74	0.06	0.03
		2437	RU242	Left	1.489	1.508	98.74	0.06	0.07
		2462	RU242	Left	1.488	1.507	98.74	0.06	0.03

The duty cycle for two antennas were same, only ant 1 report

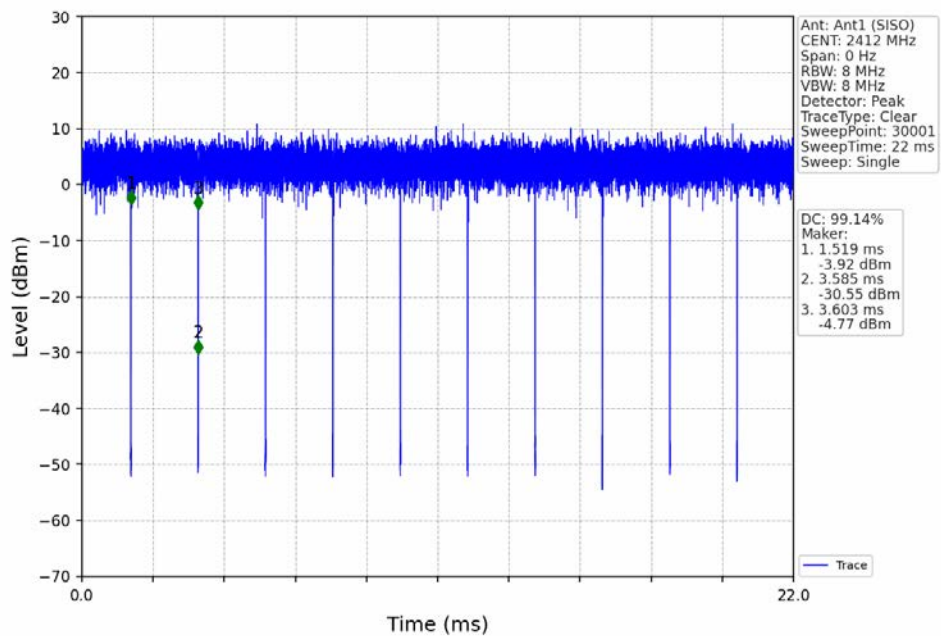
1.1.2 Test Graph



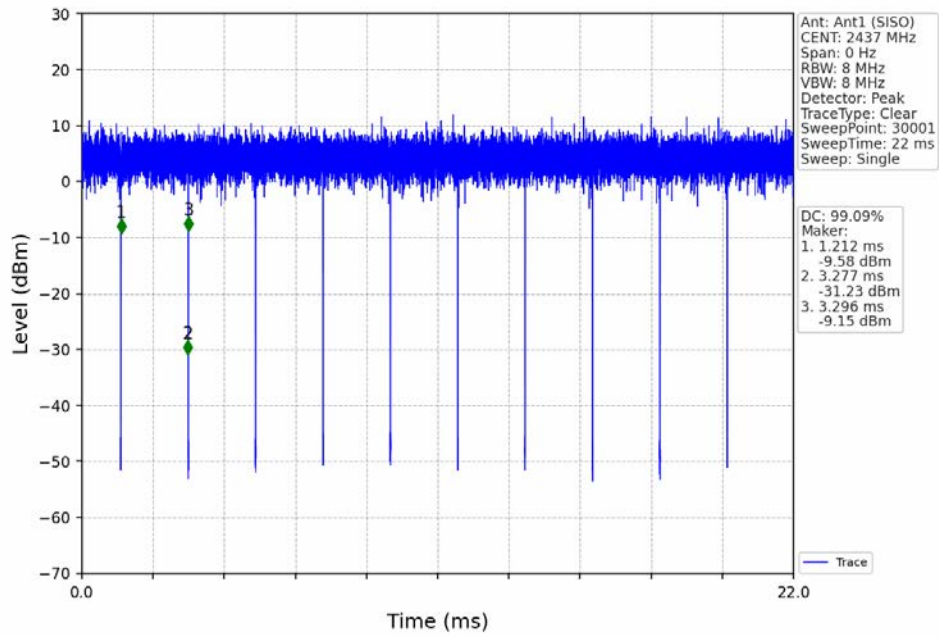
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



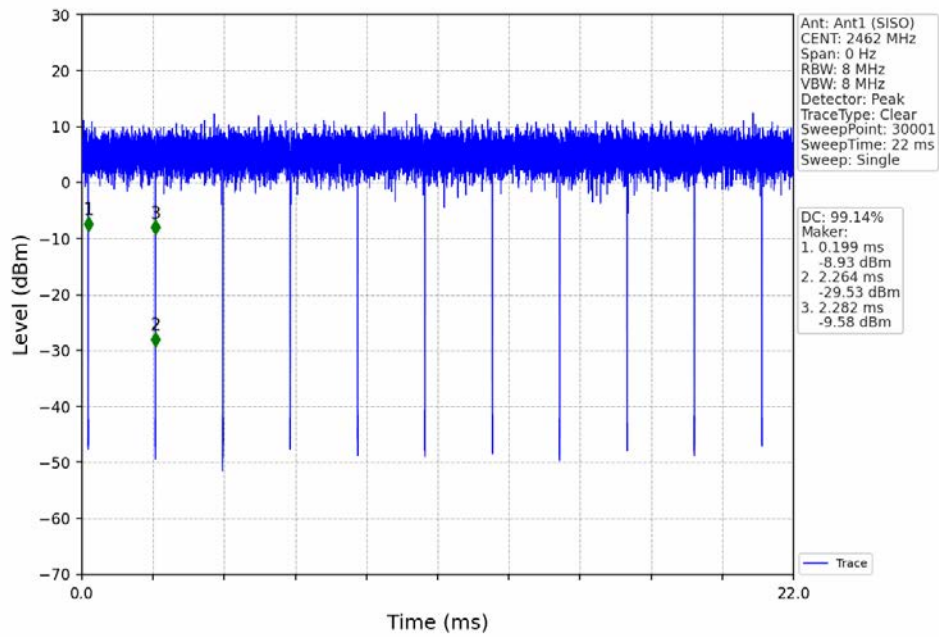
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



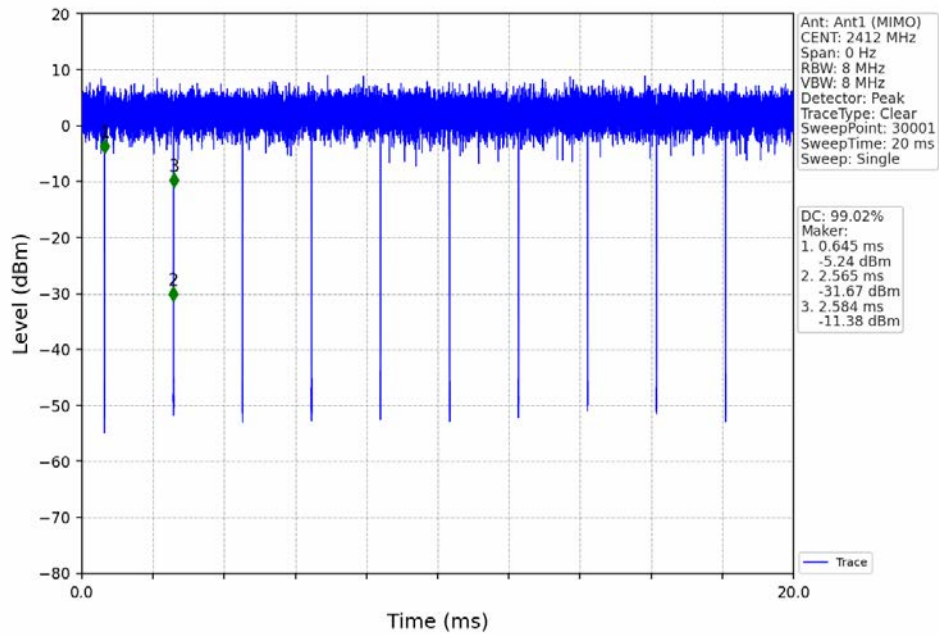
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



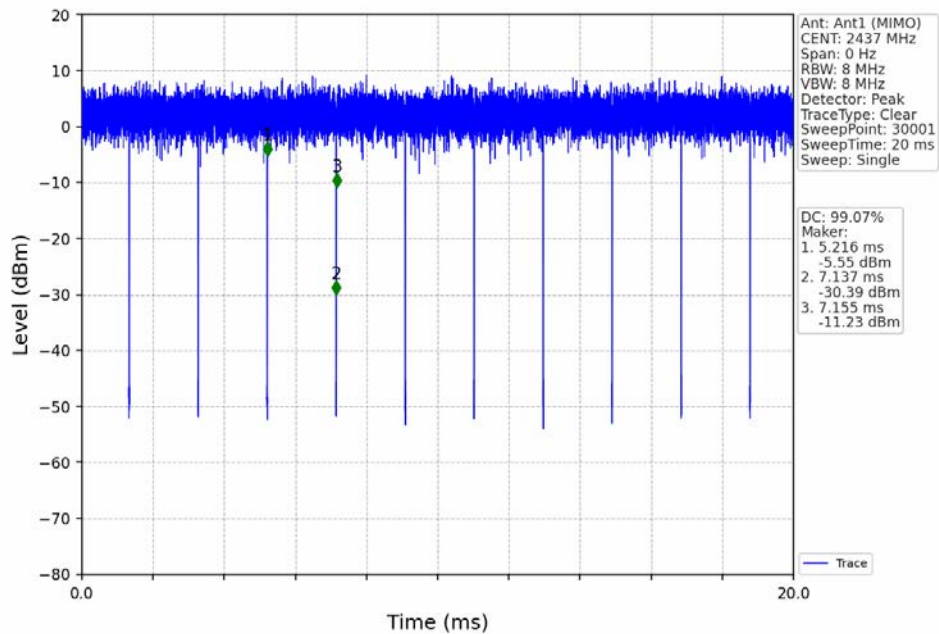
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



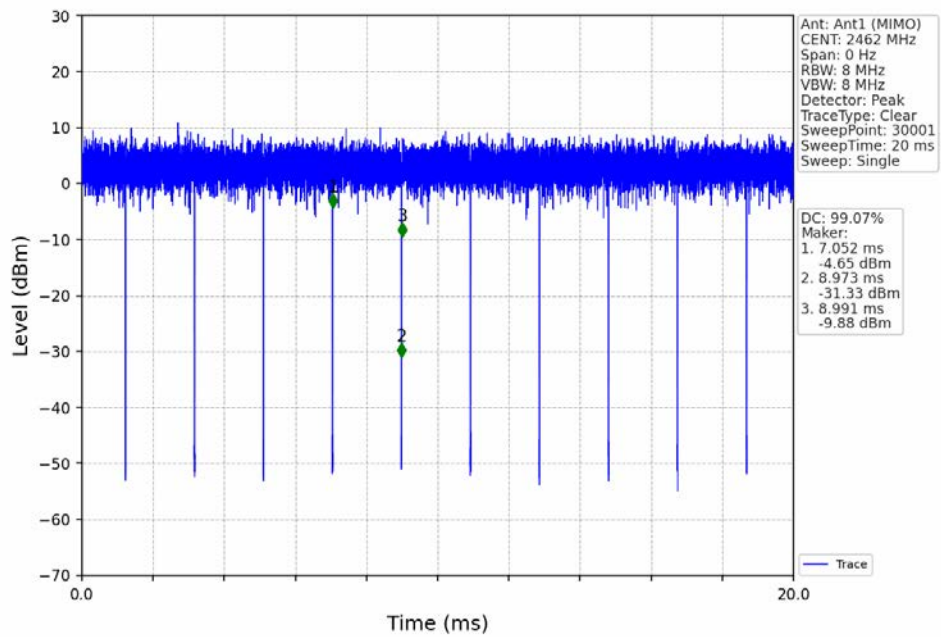
802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



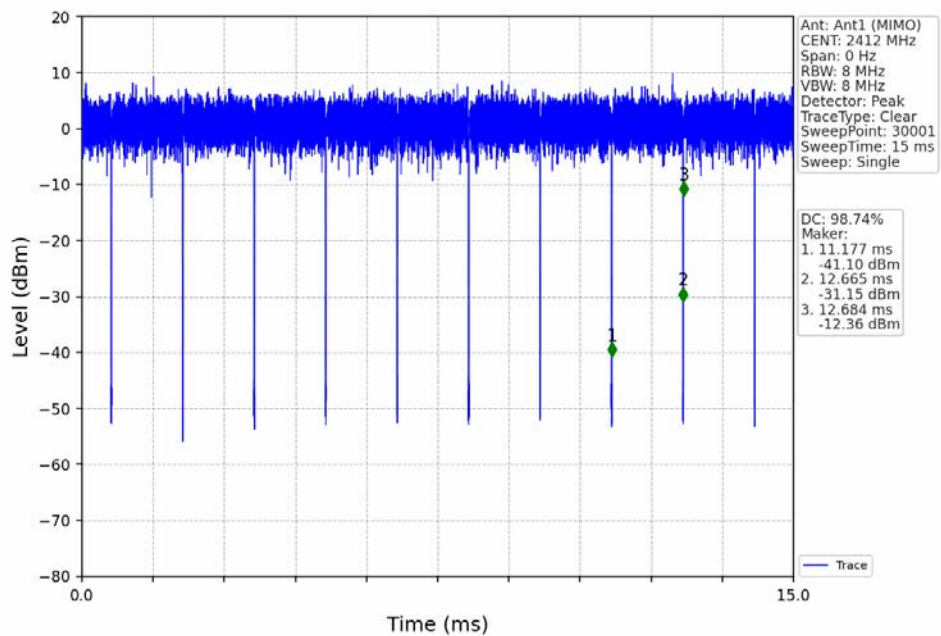
802.11n(HT20)_MCH_2437MHz_Ant1 (MIMO)_NTNV



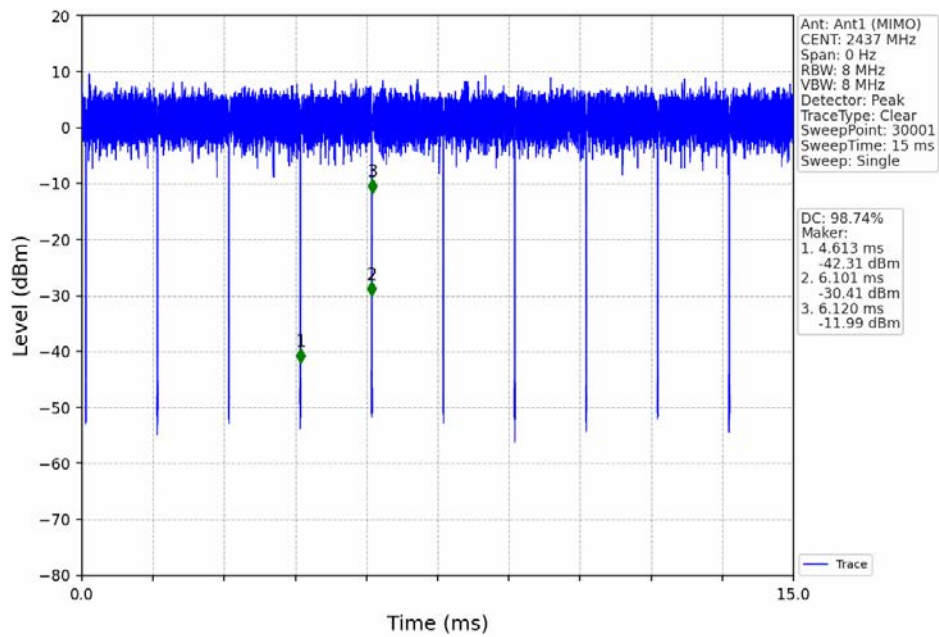
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



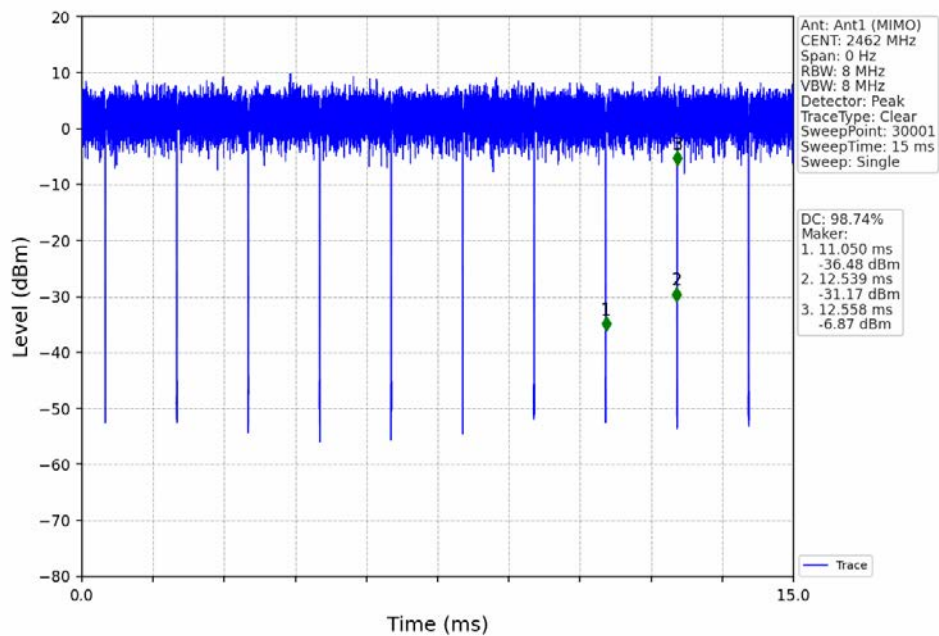
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW20)_MCH_2437MHz_RU242_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW20)_HCH_2462MHz_RU242_Left_Ant1 (MIMO)_NTNV



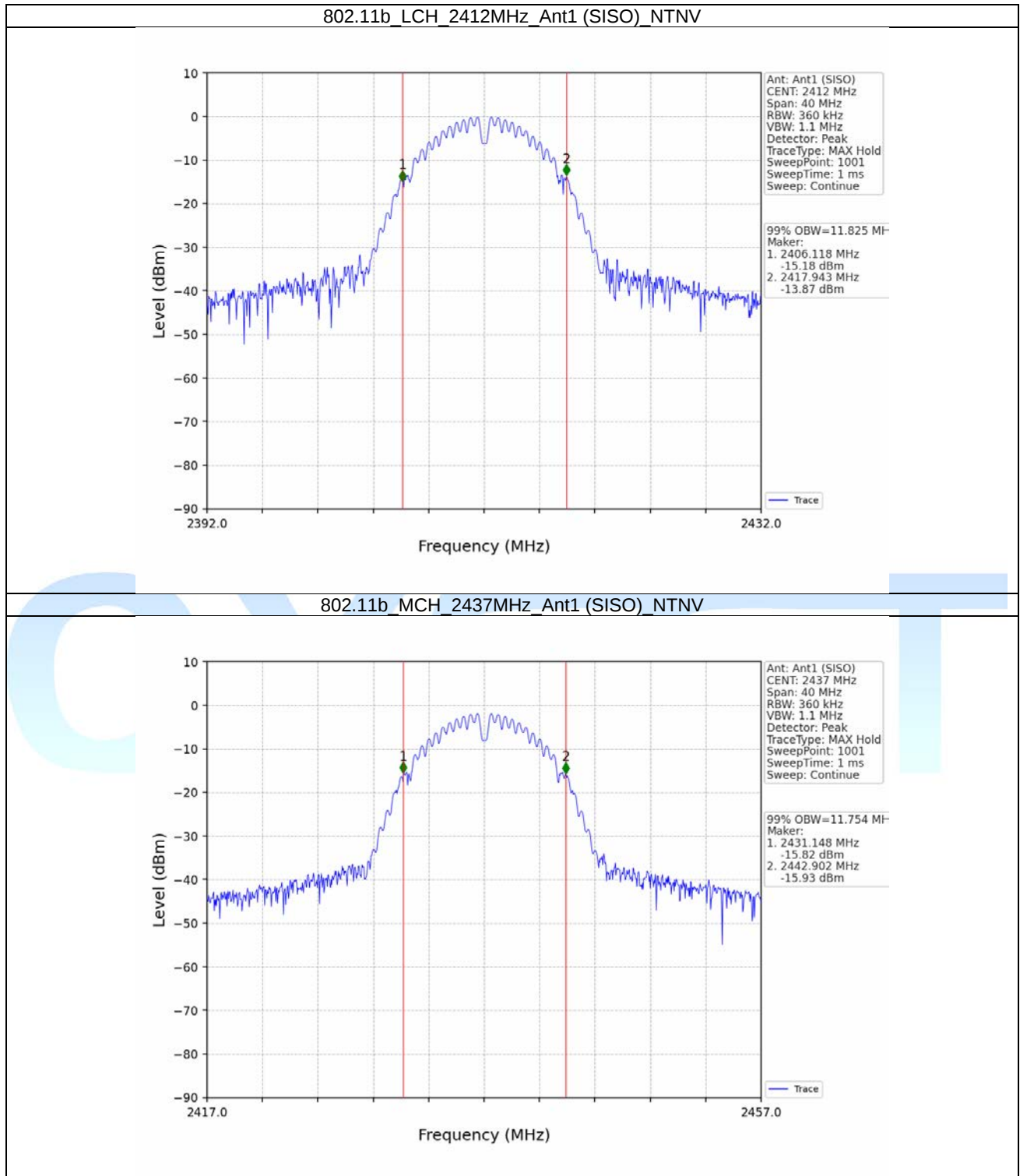
2. Bandwidth

2.1 OBW

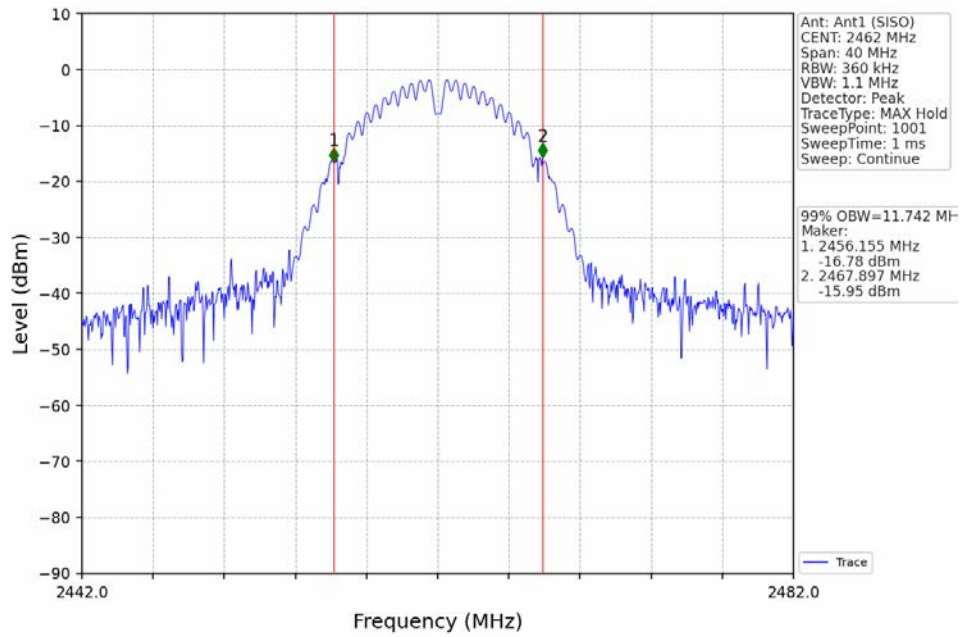
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	11.825	/	Pass
		2437	/	/	1	11.754	/	Pass
		2462	/	/	1	11.742	/	Pass
802.11g	SISO	2412	/	/	1	17.496	/	Pass
		2437	/	/	1	17.460	/	Pass
		2462	/	/	1	17.424	/	Pass
802.11n (HT20)	MIMO	2412	/	/	1	18.243	/	Pass
		2437	/	/	1	18.265	/	Pass
		2462	/	/	1	18.187	/	Pass
802.11ax (HEW20)	MIMO	2412	RU242	Left	1	19.124	/	Pass
		2437	RU242	Left	1	19.157	/	Pass
		2462	RU242	Left	1	19.113	/	Pass

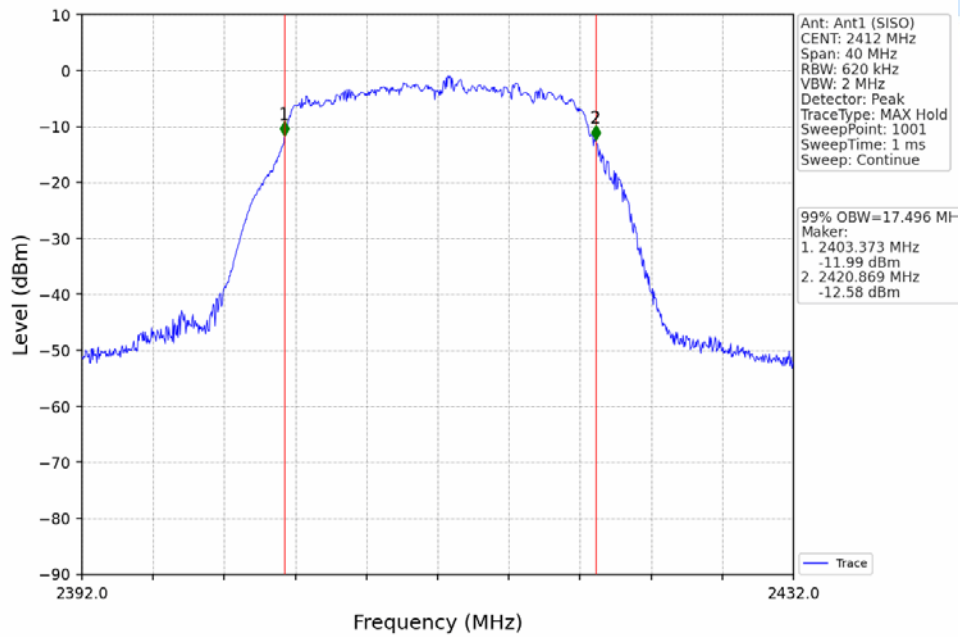
2.1.2 Test Graph



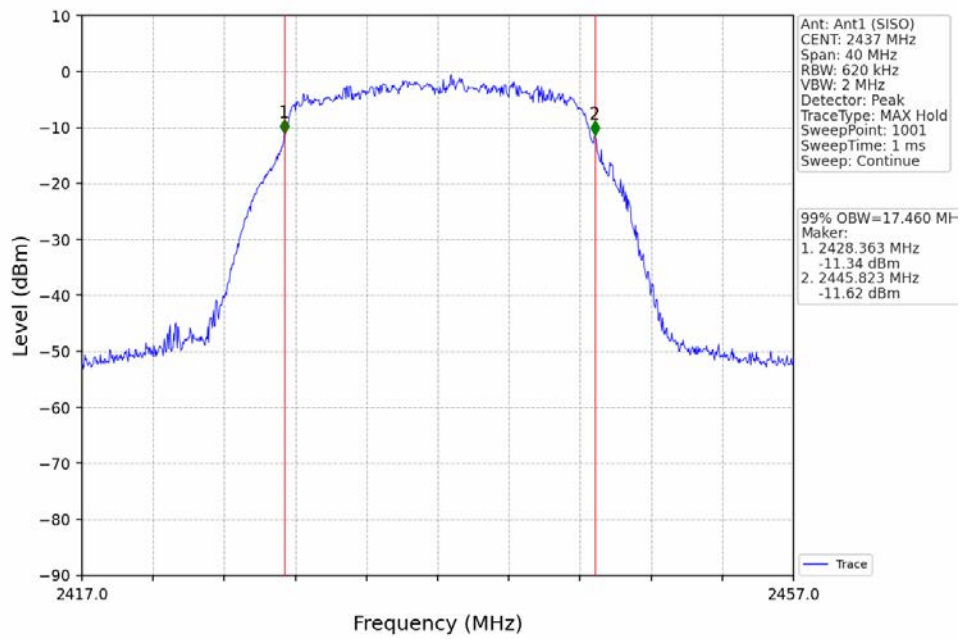
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



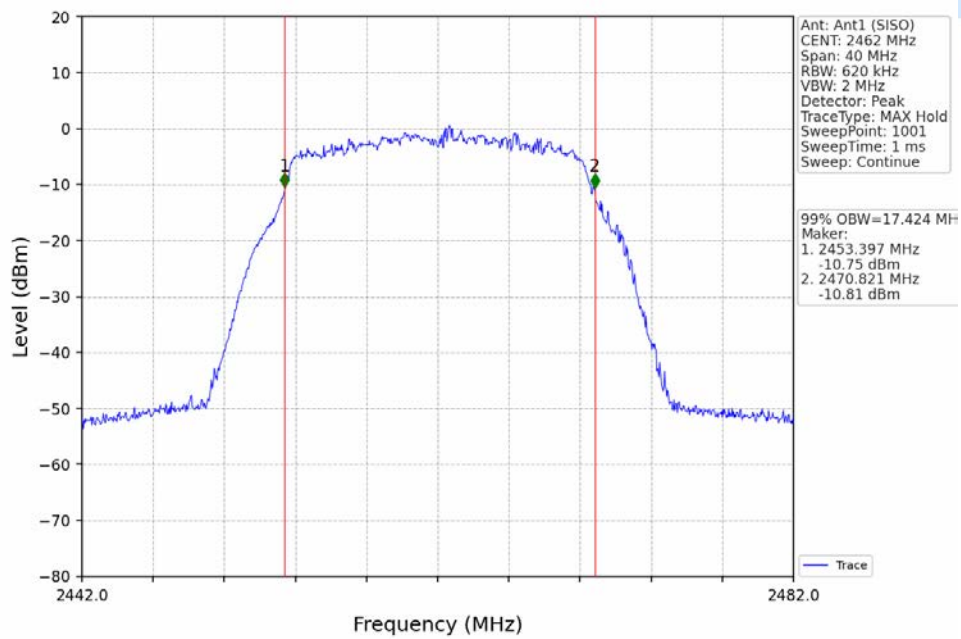
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



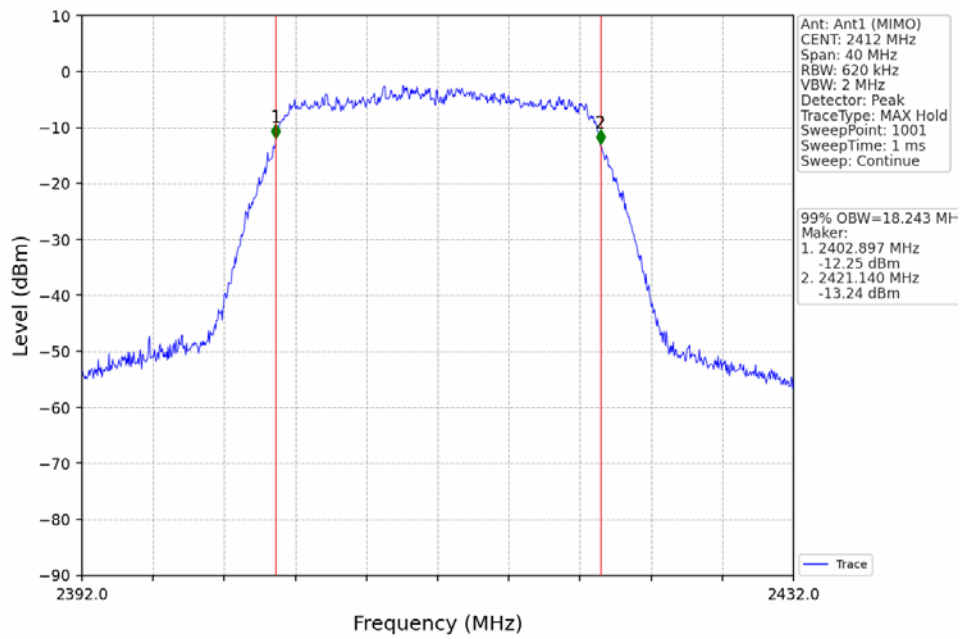
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



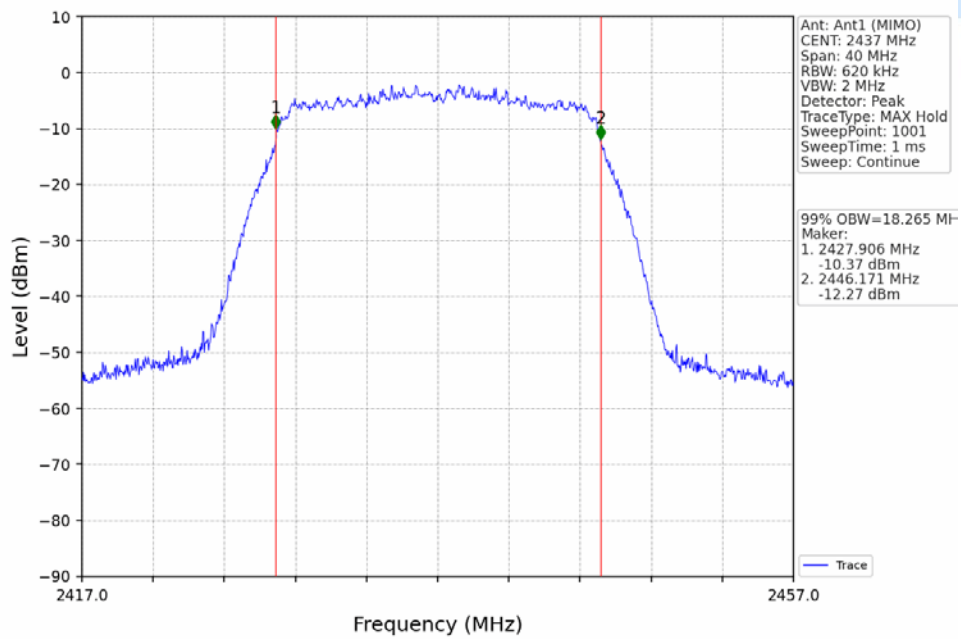
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



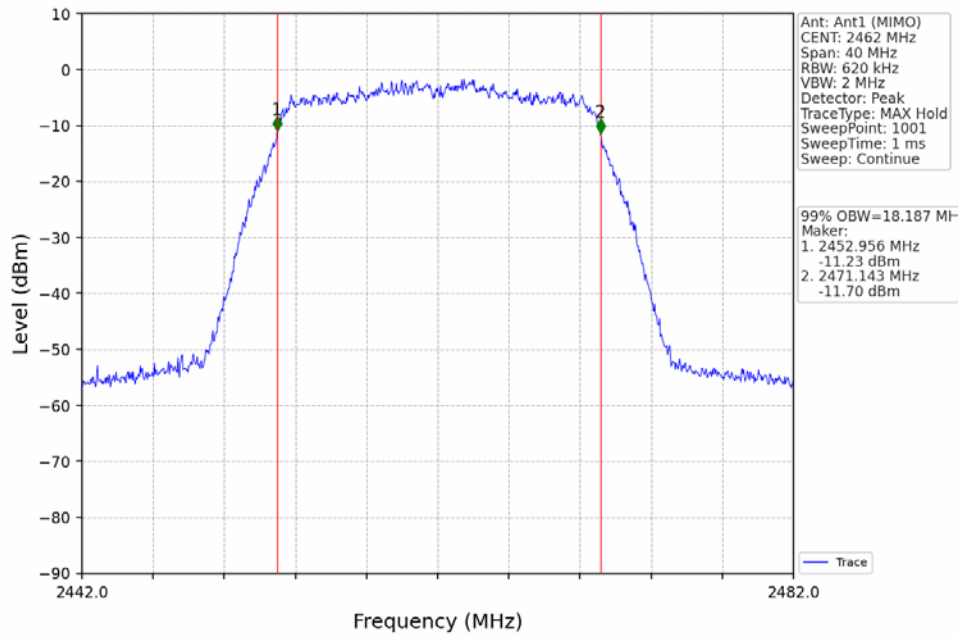
802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



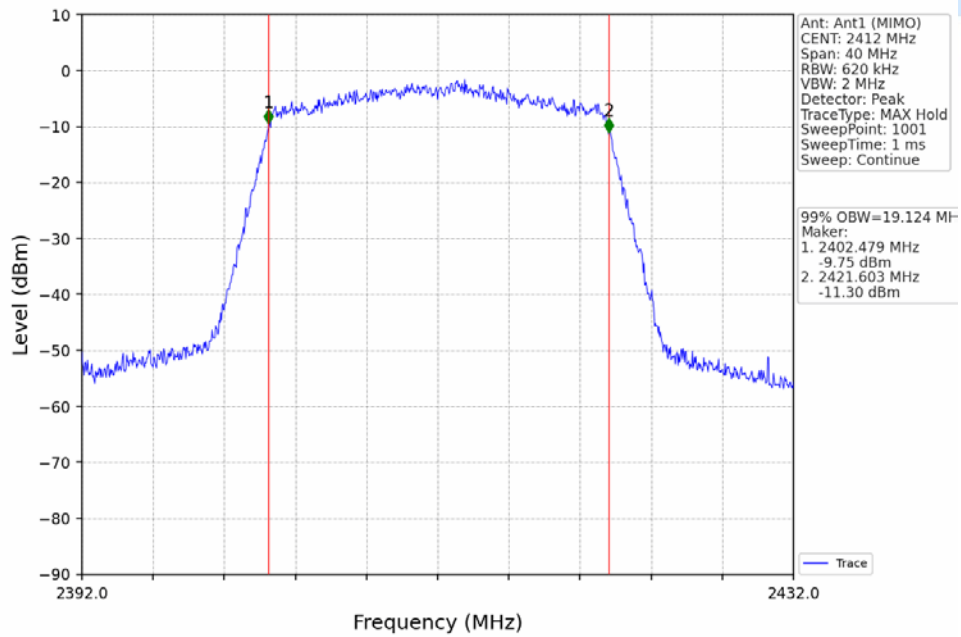
802.11n(HT20)_MCH_2437MHz_Ant1 (MIMO)_NTNV



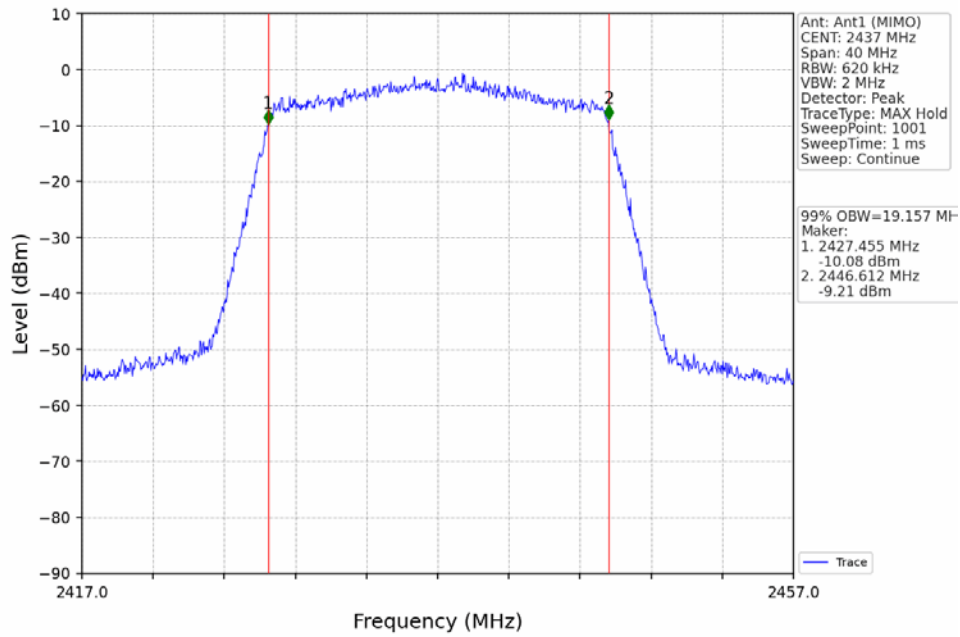
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



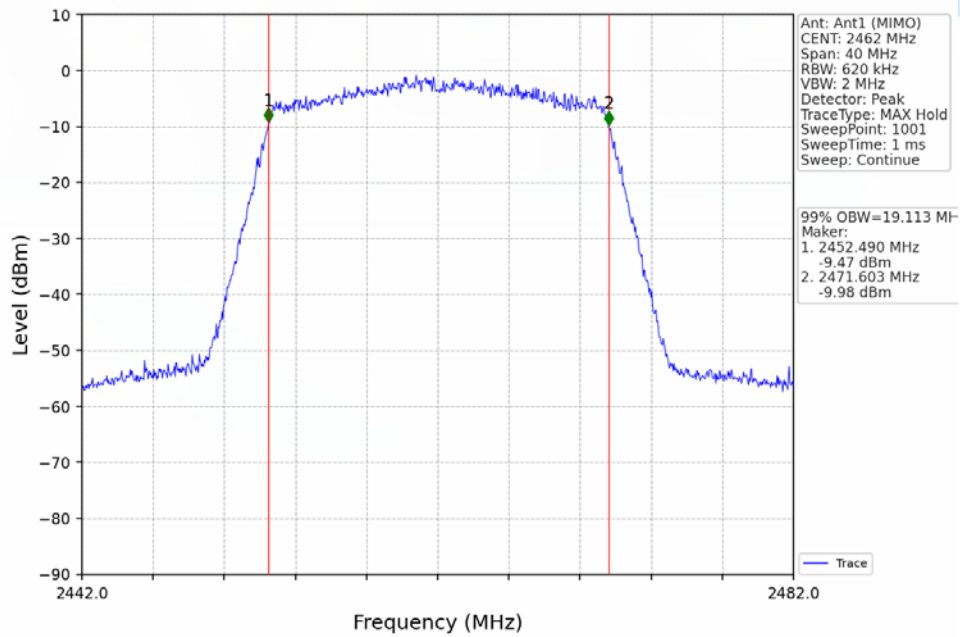
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW20)_MCH_2437MHz_RU242_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW20)_HCH_2462MHz_RU242_Left_Ant1 (MIMO)_NTNV

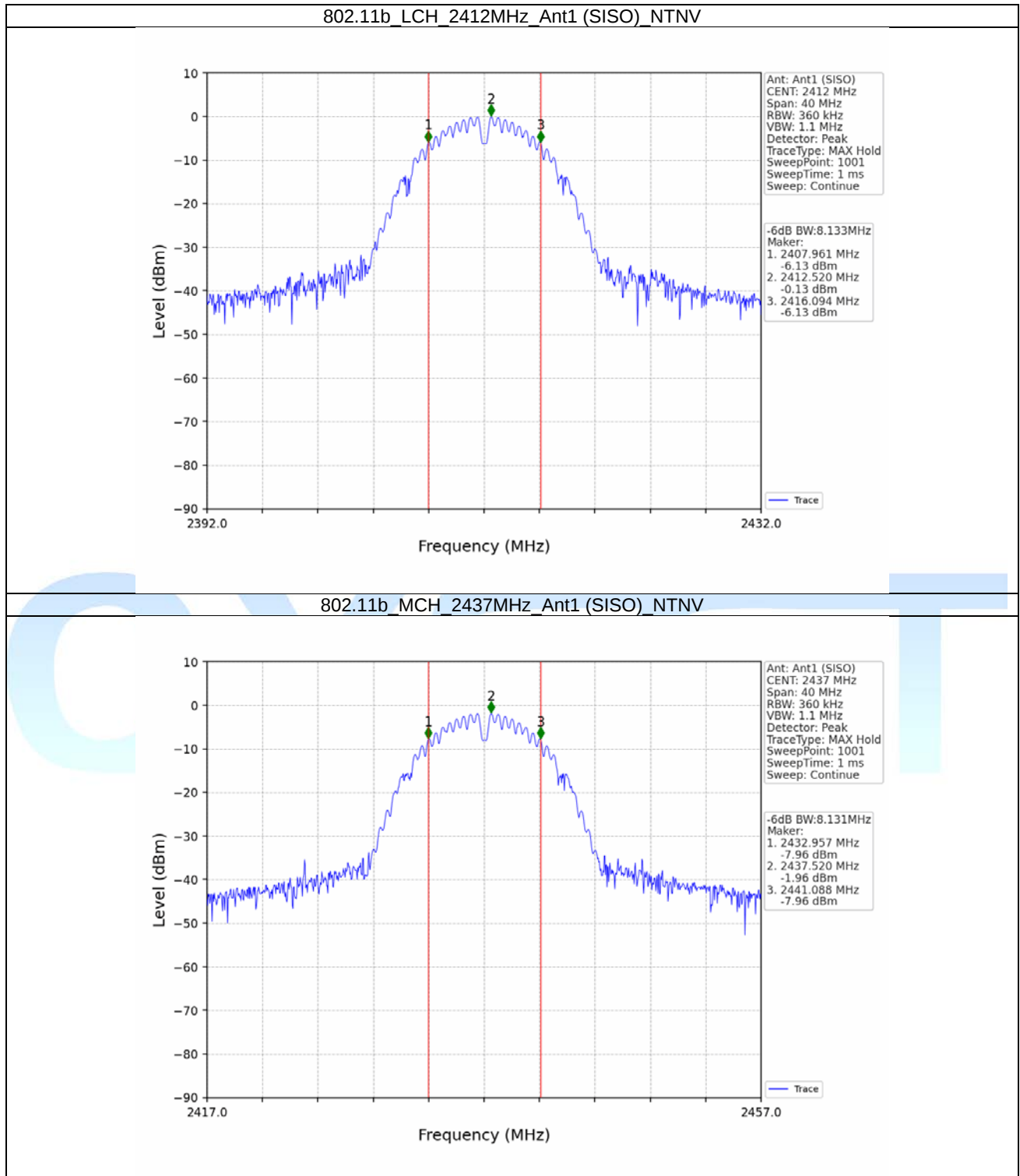


2.2 6dB BW

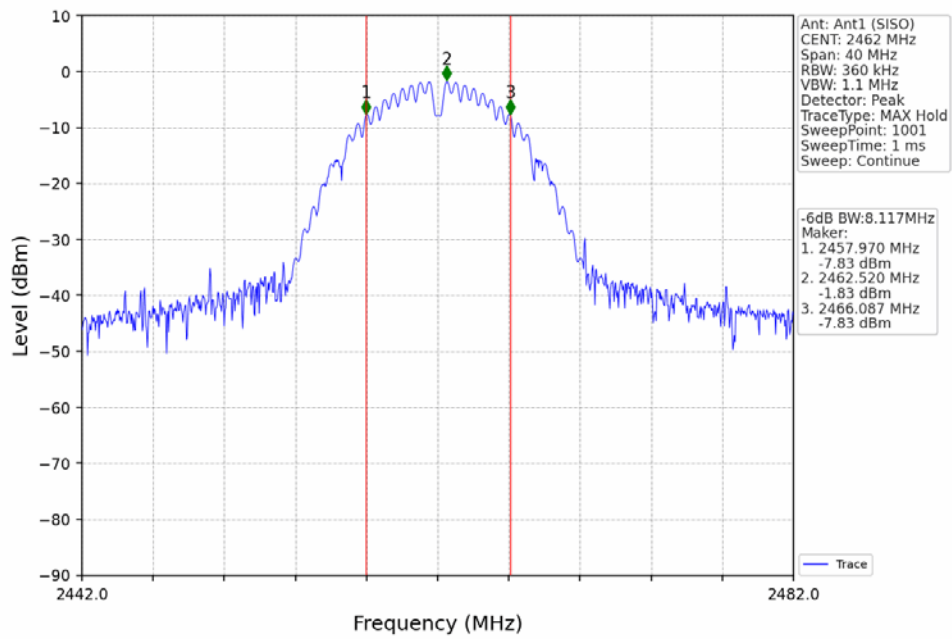
2.2.1 Test Result

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	8.133	≥ 0.5	Pass
		2437	/	/	1	8.131	≥ 0.5	Pass
		2462	/	/	1	8.117	≥ 0.5	Pass
802.11g	SISO	2412	/	/	1	16.016	≥ 0.5	Pass
		2437	/	/	1	16.219	≥ 0.5	Pass
		2462	/	/	1	16.009	≥ 0.5	Pass
802.11n (HT20)	MIMO	2412	/	/	1	17.593	≥ 0.5	Pass
		2437	/	/	1	17.511	≥ 0.5	Pass
		2462	/	/	1	17.562	≥ 0.5	Pass
802.11ax (HEW20)	MIMO	2412	RU242	Left	1	18.579	≥ 0.5	Pass
		2437	RU242	Left	1	18.422	≥ 0.5	Pass
		2462	RU242	Left	1	18.510	≥ 0.5	Pass

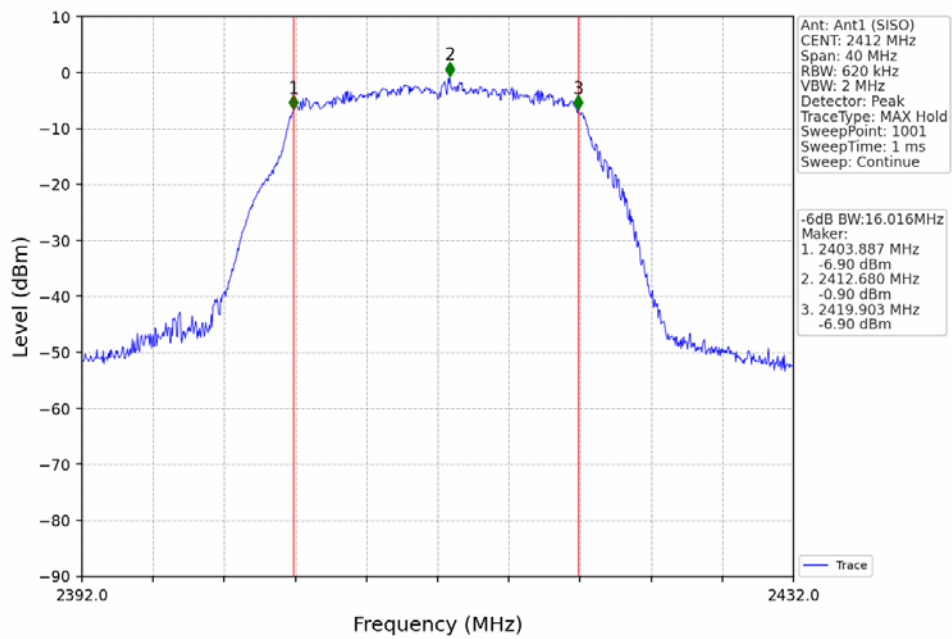
2.2.2 Test Graph



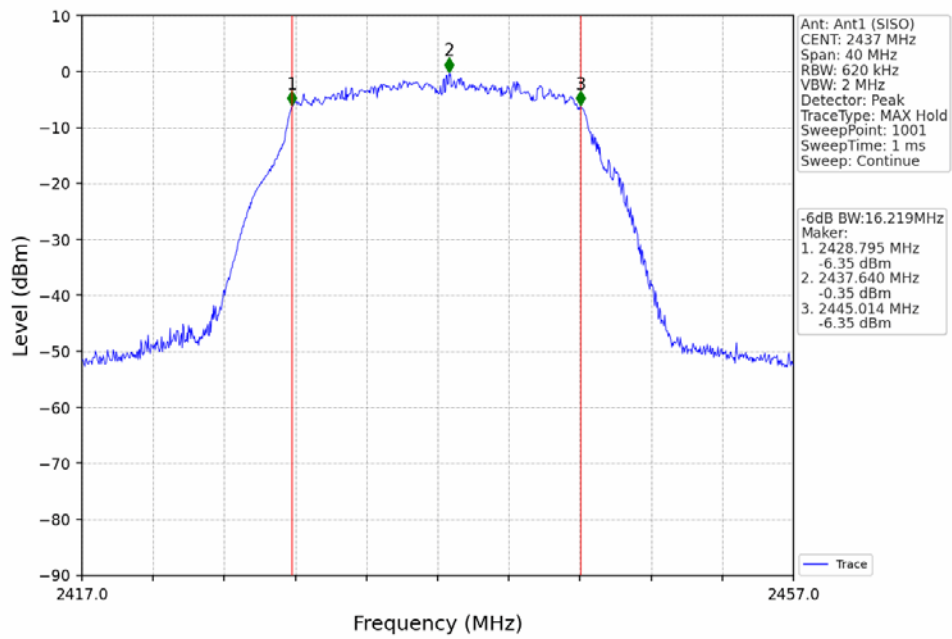
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



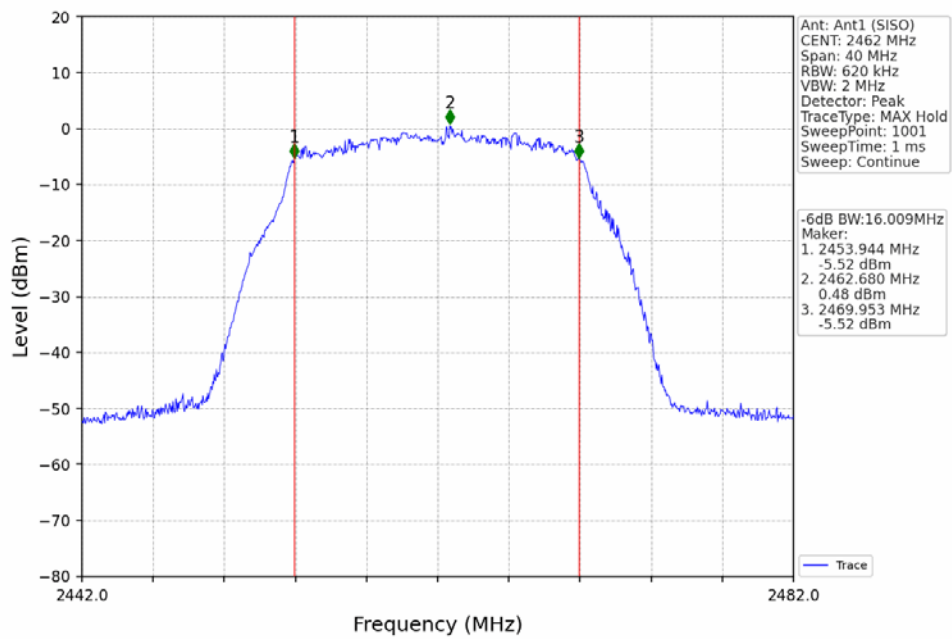
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



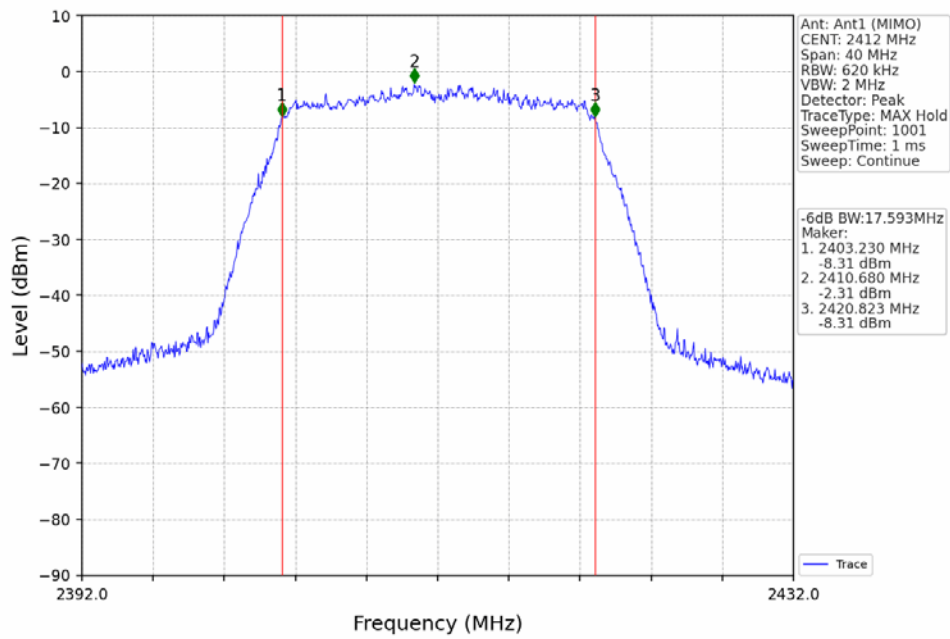
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



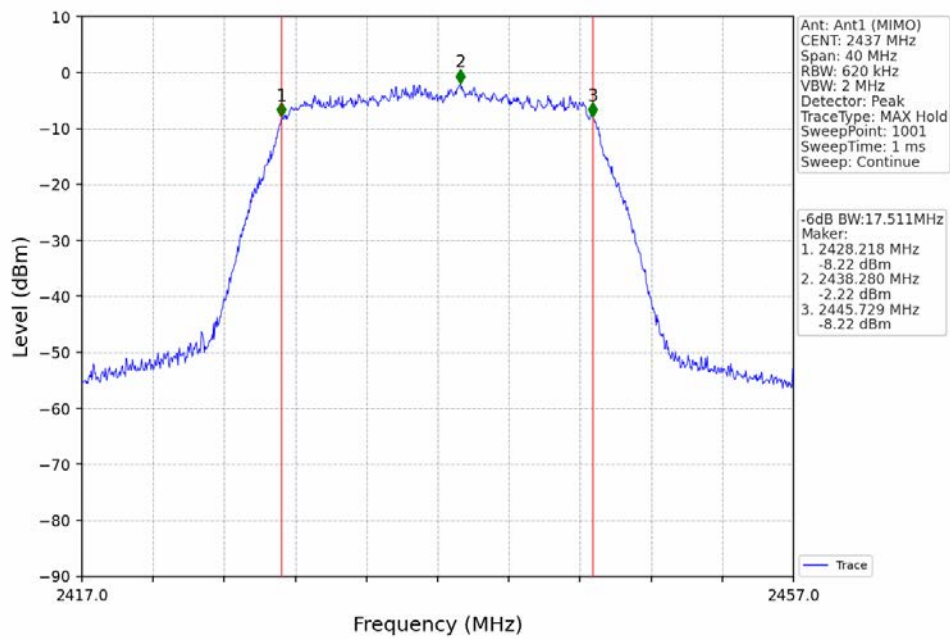
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



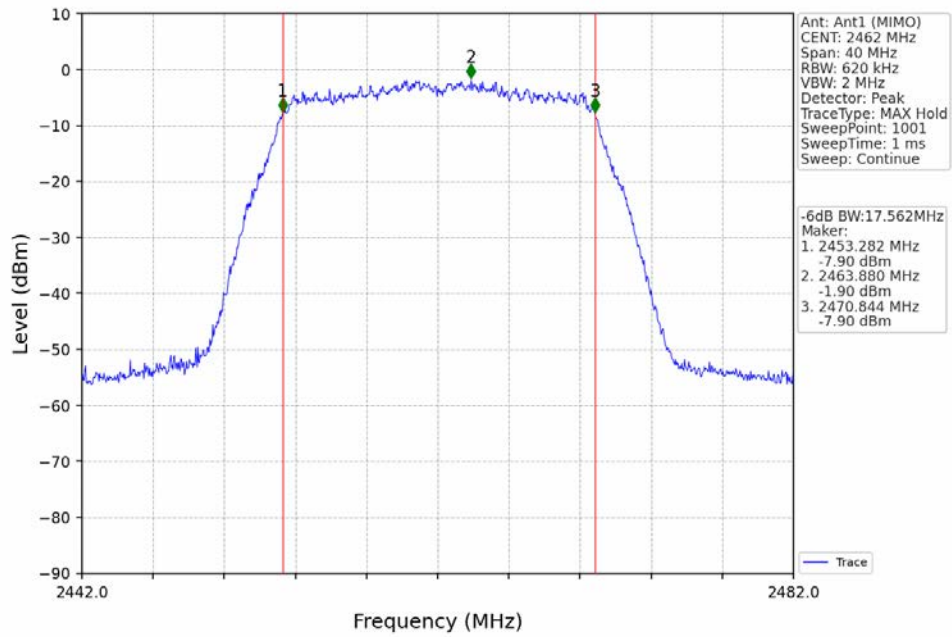
802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



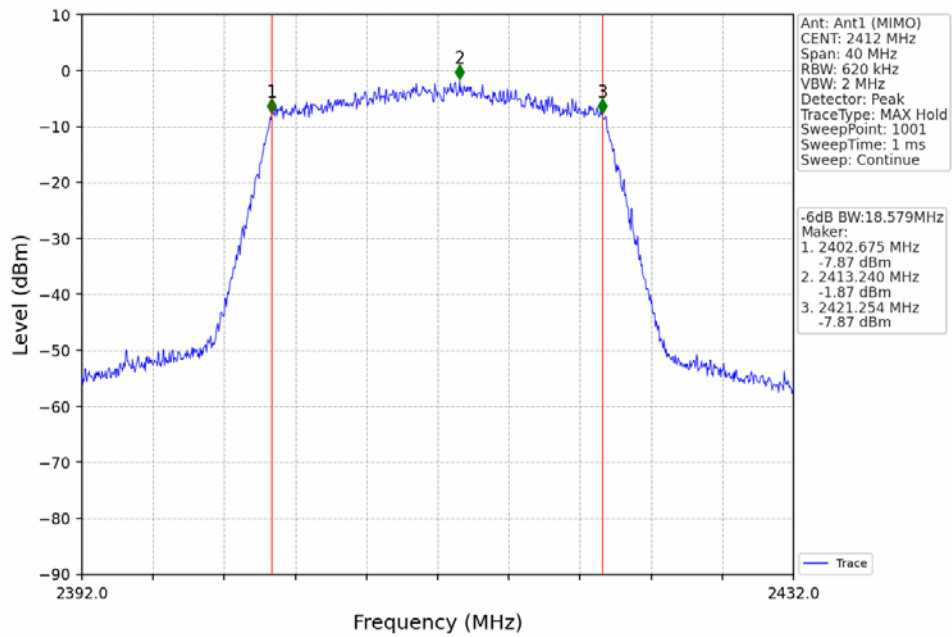
802.11n(HT20)_MCH_2437MHz_Ant1 (MIMO)_NTNV



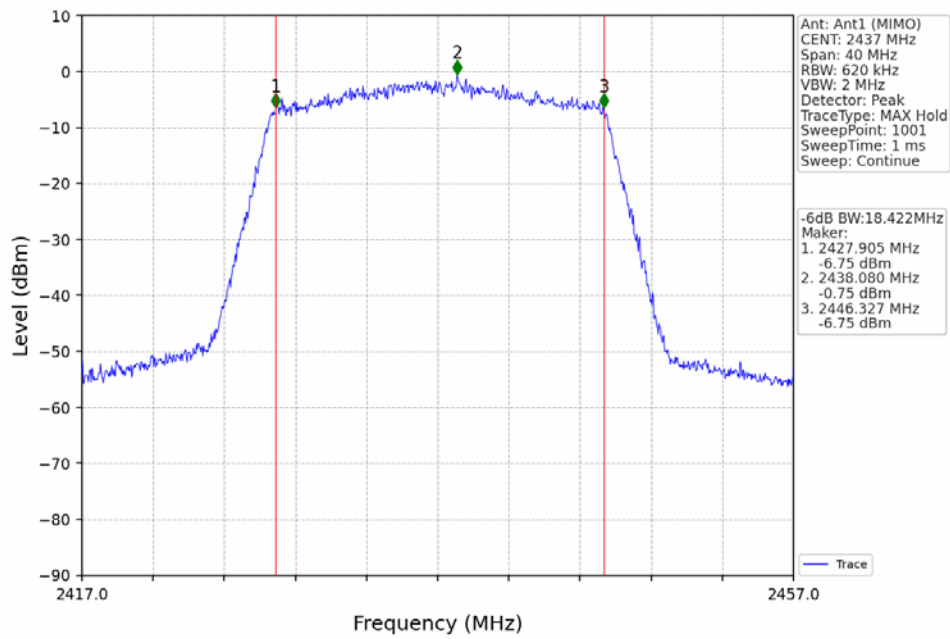
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



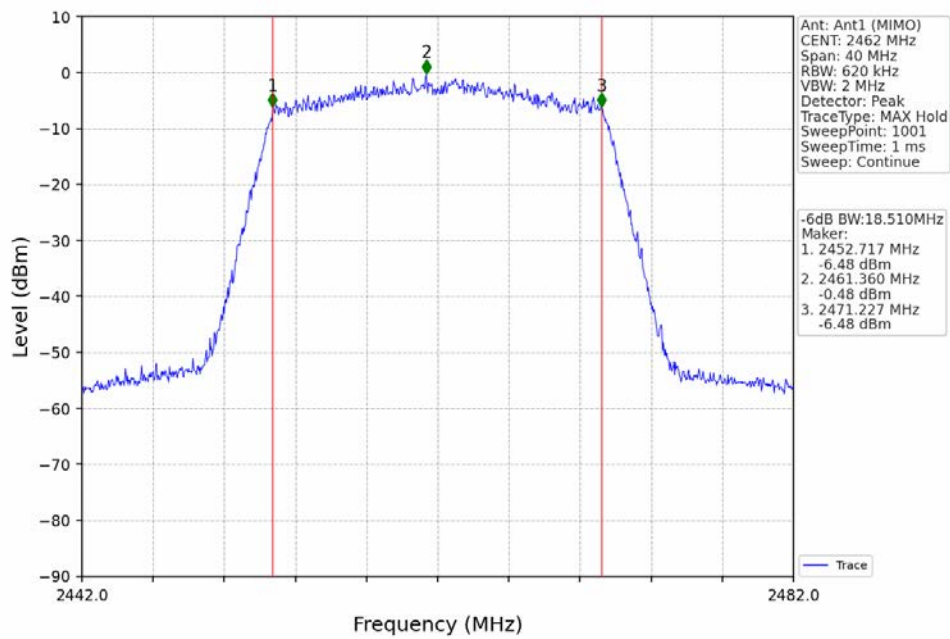
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW20)_MCH_2437MHz_RU242_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW20)_HCH_2462MHz_RU242_Left_Ant1 (MIMO)_NTNV



3. Maximum Conducted Output Power

3.1 Power

3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Peak Conducted Output Power (dBm)				Verdict
					ANT1	ANT2	MIMO	Limit	
802.11b	SISO	2412	/	/	9.83	10.24	/	<=30	Pass
		2437	/	/	8.01	9.53	/	<=30	Pass
		2462	/	/	8.11	9.32	/	<=30	Pass
802.11g	SISO	2412	/	/	9.99	12.21	/	<=30	Pass
		2437	/	/	10.53	12.06	/	<=30	Pass
		2462	/	/	11.42	12.18	/	<=30	Pass
802.11n (HT20)	MIMO	2412	/	/	8.91	11.18	13.20	<=30	Pass
		2437	/	/	9.15	10.80	13.06	<=30	Pass
		2462	/	/	9.77	10.96	13.42	<=30	Pass
802.11ax (HEW20)	MIMO	2412	RU242	Left	8.96	11.56	13.46	<=30	Pass
		2437	RU242	Left	9.59	11.77	13.83	<=30	Pass
		2462	RU242	Left	9.94	11.77	13.96	<=30	Pass

Note1: Antenna Gain: Ant1: 1.98dBi; Ant2: 1.83dBi;
Note2: Directional Gain: 4.92dBi

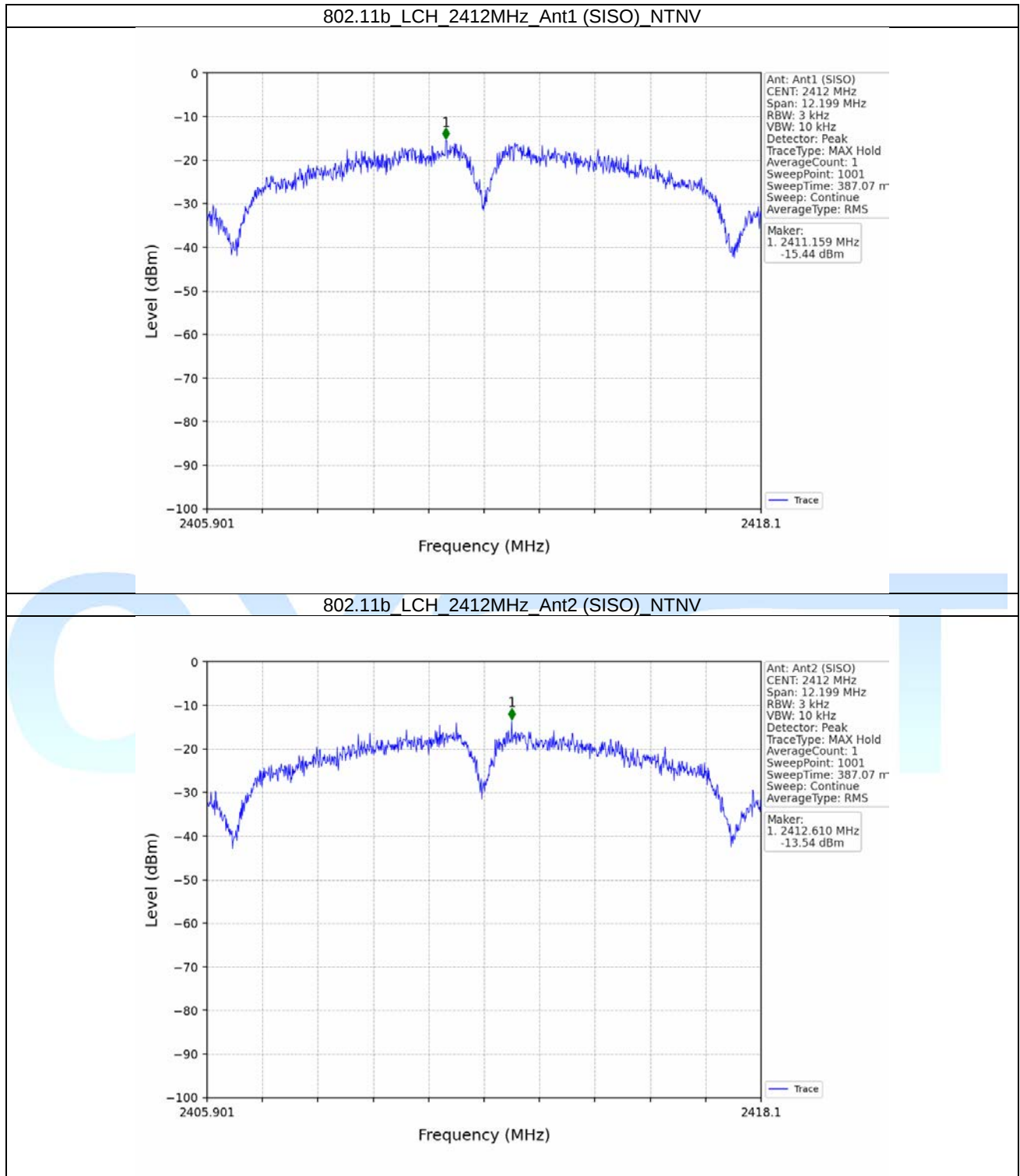
4. Maximum Power Spectral Density

4.1 PSD

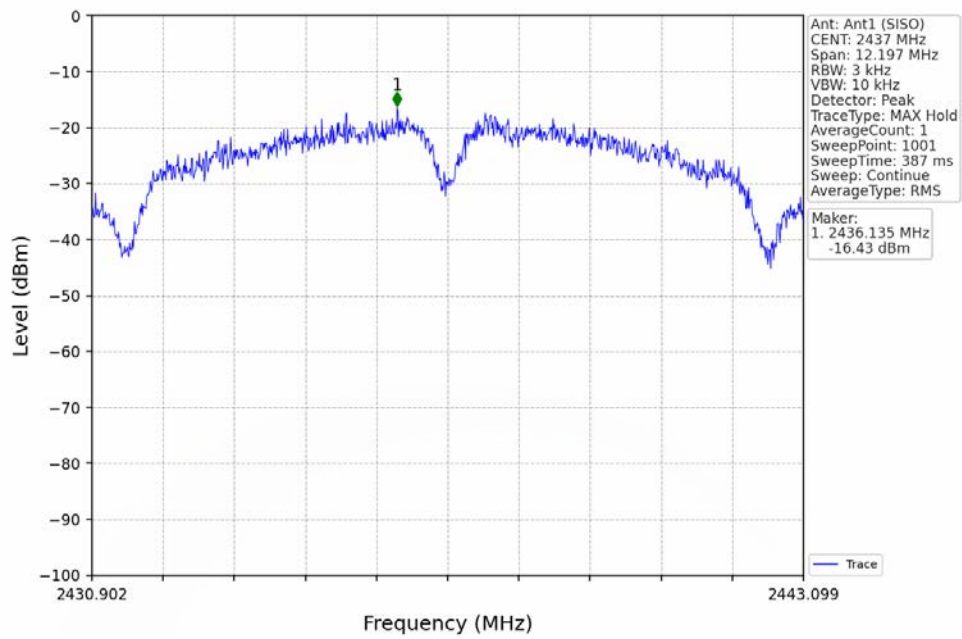
4.1.1 Test Result

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum PSD (dBm/3kHz)				Verdict
					ANT1	ANT2	MIMO	Limit	
802.11b	SISO	2412	/	/	-15.44	-13.54	/	<=8	Pass
		2437	/	/	-16.43	-14.49	/	<=8	Pass
		2462	/	/	-17.39	-15.57	/	<=8	Pass
802.11g	SISO	2412	/	/	-23.22	-20.16	/	<=8	Pass
		2437	/	/	-22.01	-20.64	/	<=8	Pass
		2462	/	/	-20.57	-19.63	/	<=8	Pass
802.11n (HT20)	MIMO	2412	/	/	-23.57	-21.64	-20.62	<=8	Pass
		2437	/	/	-24.29	-22.31	-21.03	<=8	Pass
		2462	/	/	-24.03	-20.37	-19.38	<=8	Pass
802.11ax (HEW20)	MIMO	2412	RU242	Left	-26.62	-24.02	-22.86	<=8	Pass
		2437	RU242	Left	-24.92	-23.54	-22.38	<=8	Pass
		2462	RU242	Left	-24.07	-22.51	-21.41	<=8	Pass
Note1: Antenna Gain: Ant1: 1.98dBi; Ant2: 1.83dBi; Note2: Directional Gain: 4.92dBi									

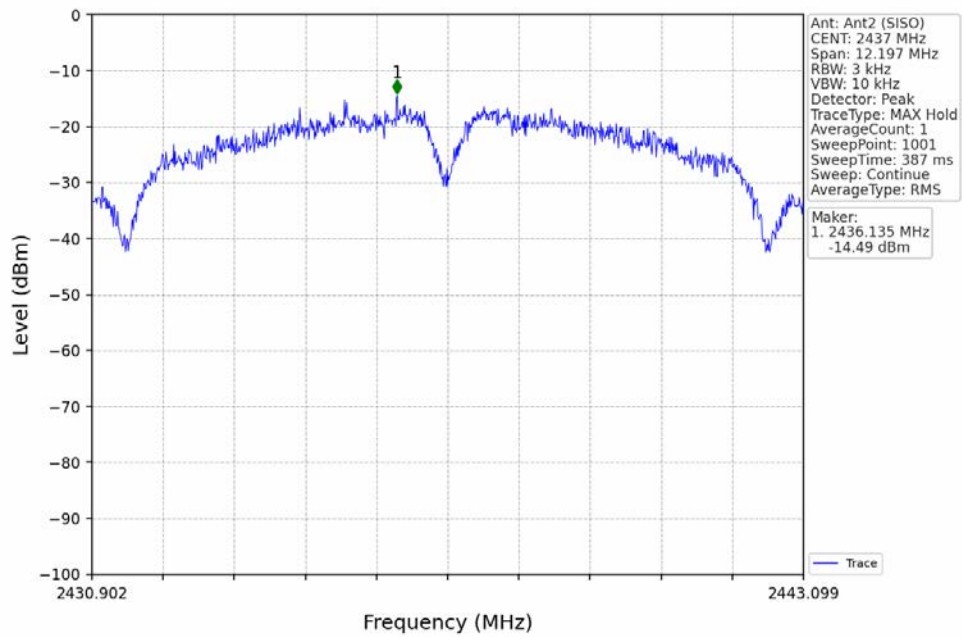
4.1.2 Test Graph



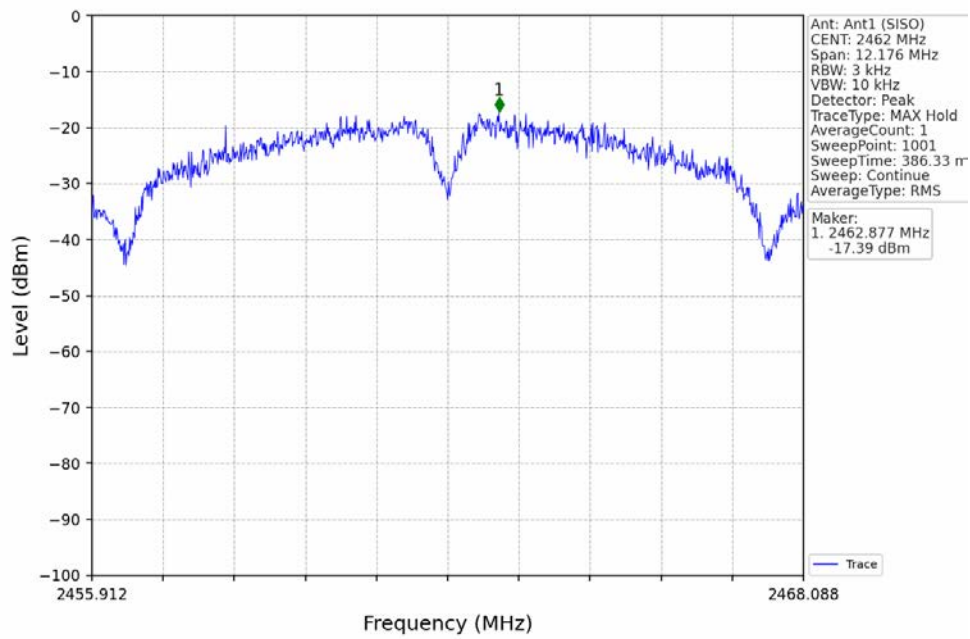
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



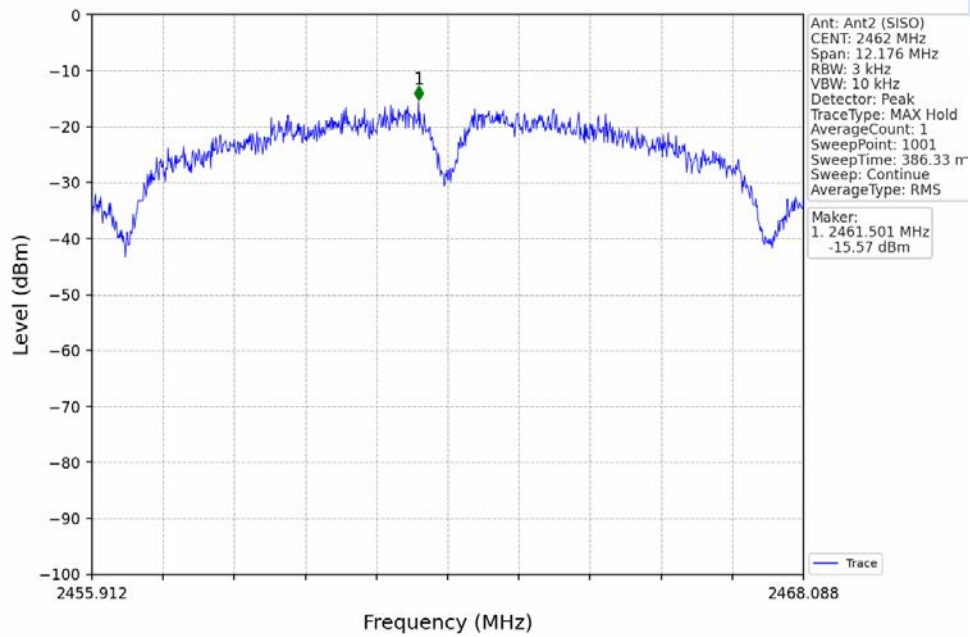
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



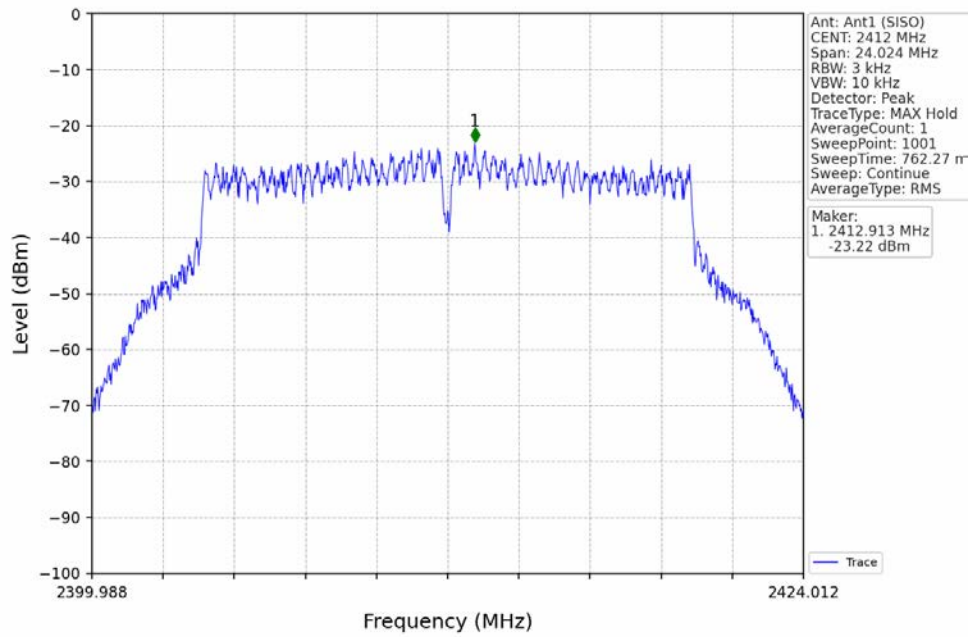
802.11b HCH 2462MHz_Ant1 (SISO)_NTNV



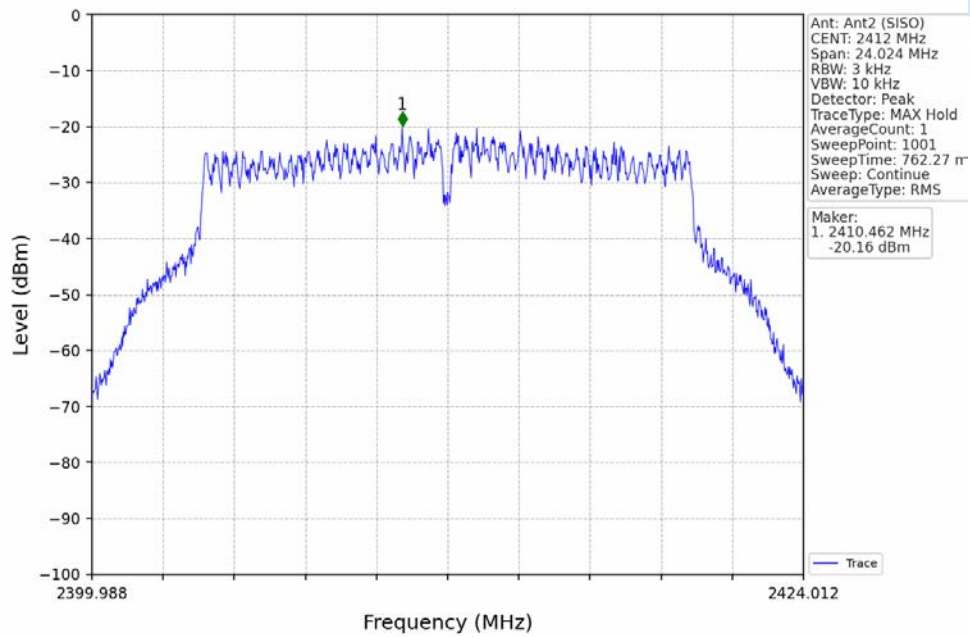
802.11b HCH 2462MHz_Ant2 (SISO)_NTNV



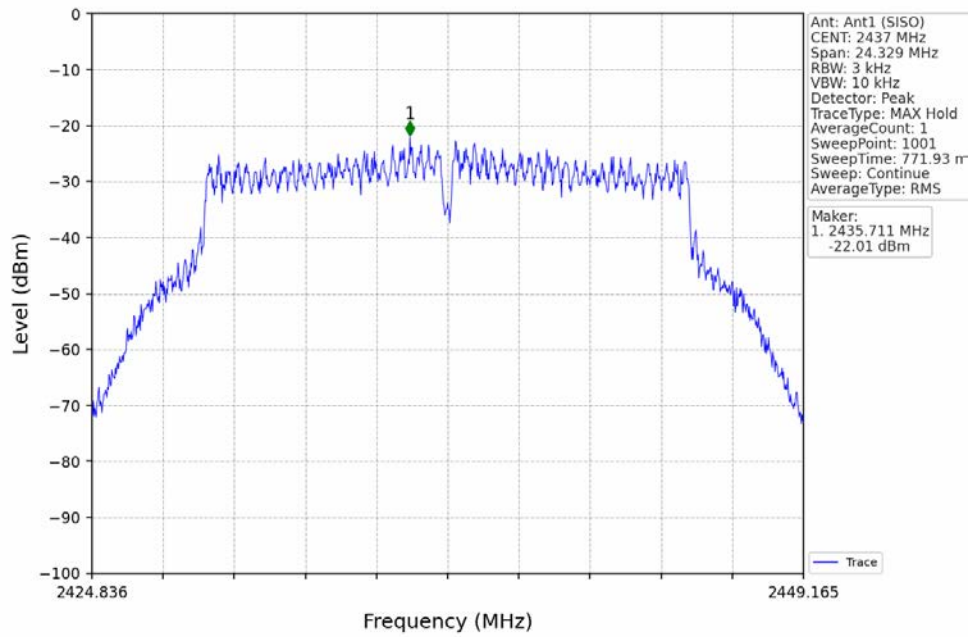
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



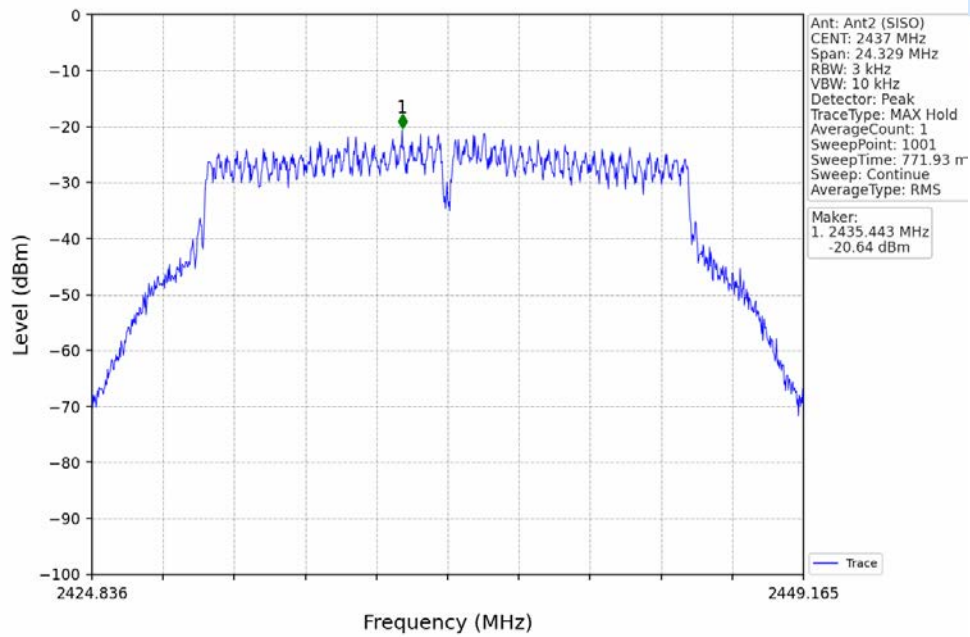
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



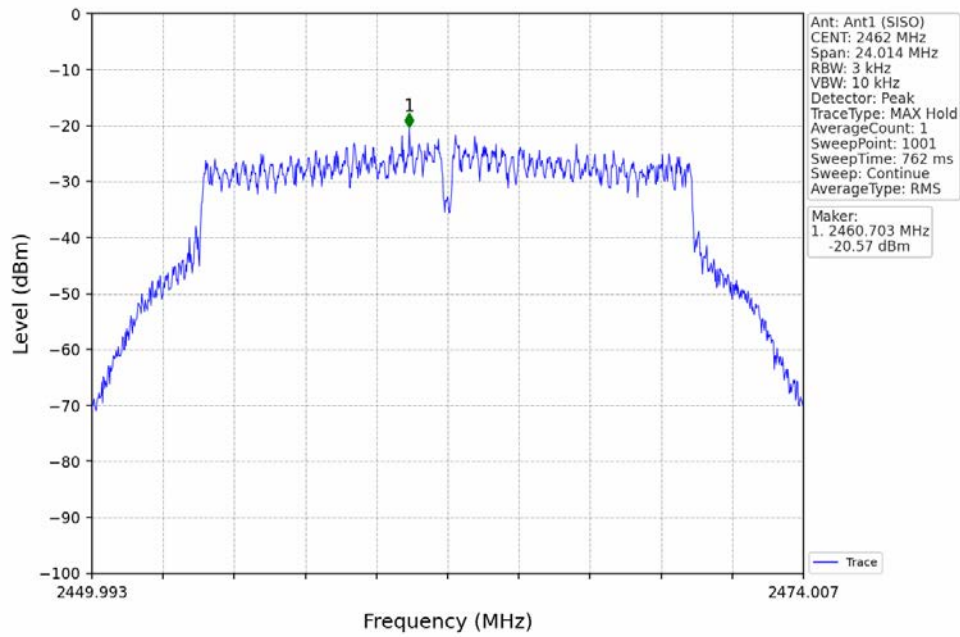
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



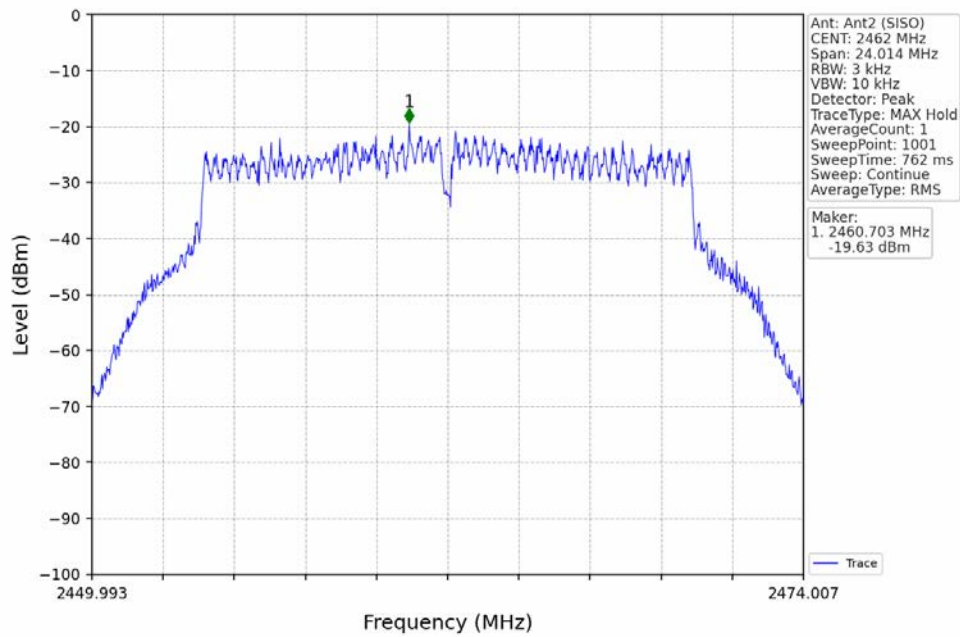
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



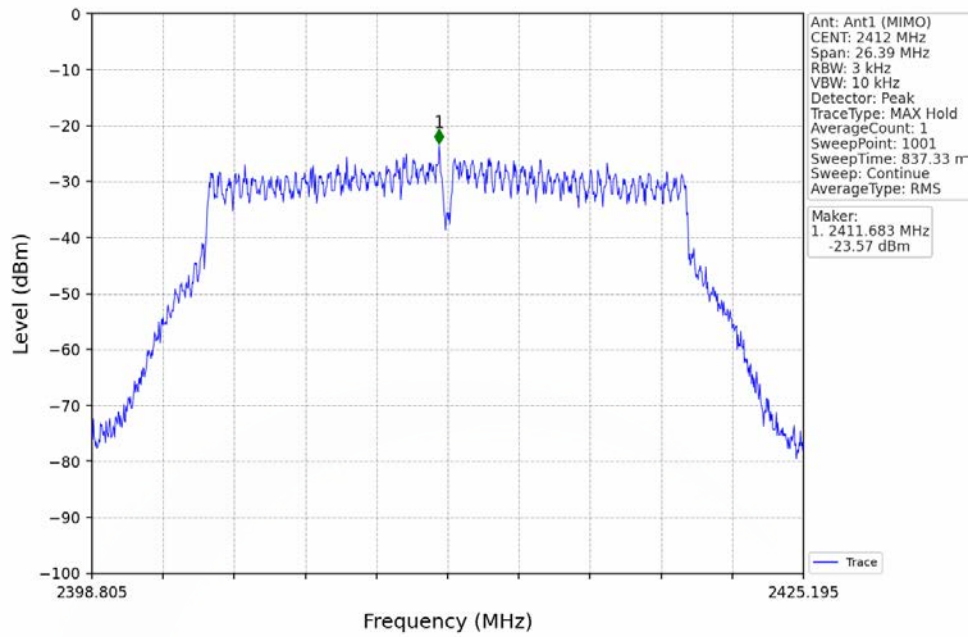
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



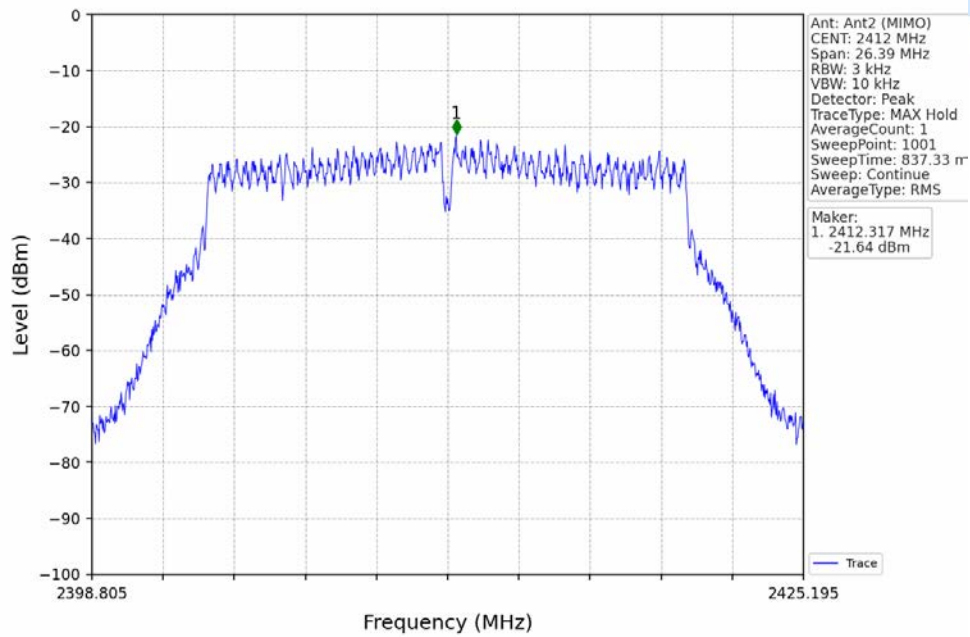
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



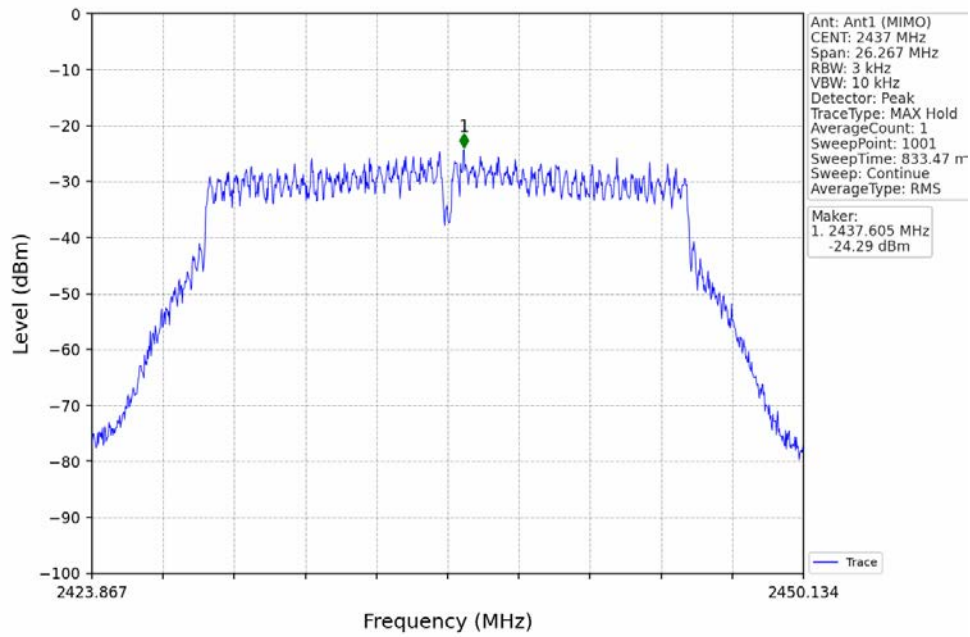
802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



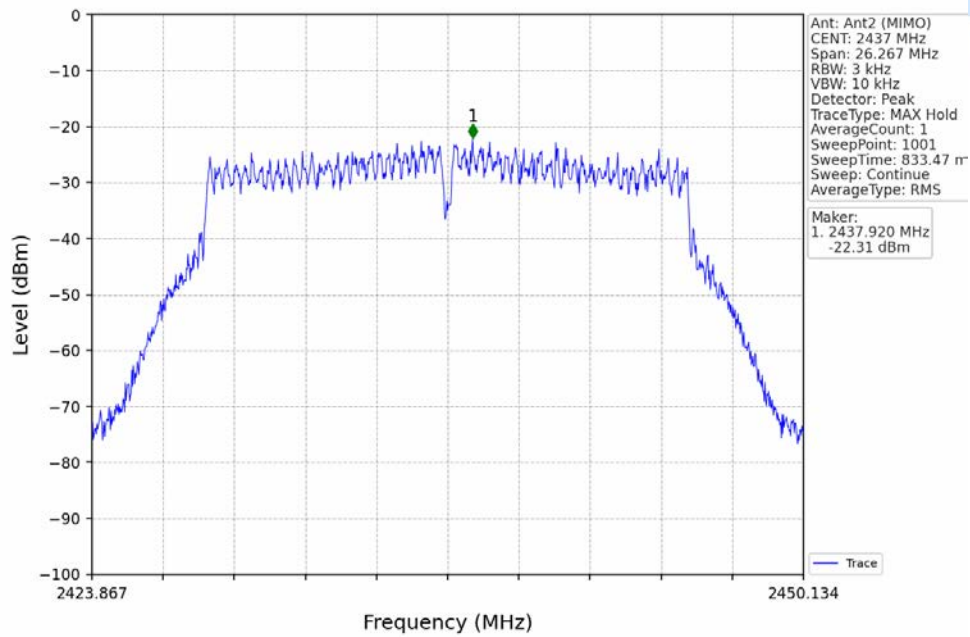
802.11n(HT20)_LCH_2412MHz_Ant2 (MIMO)_NTNV



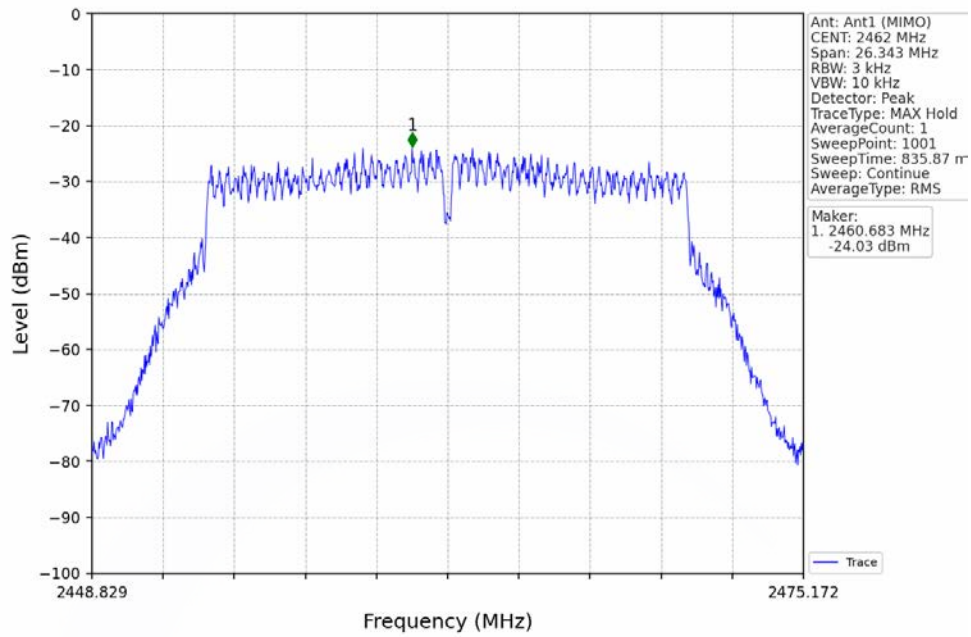
802.11n(HT20)_MCH_2437MHz_Ant1 (MIMO)_NTNV



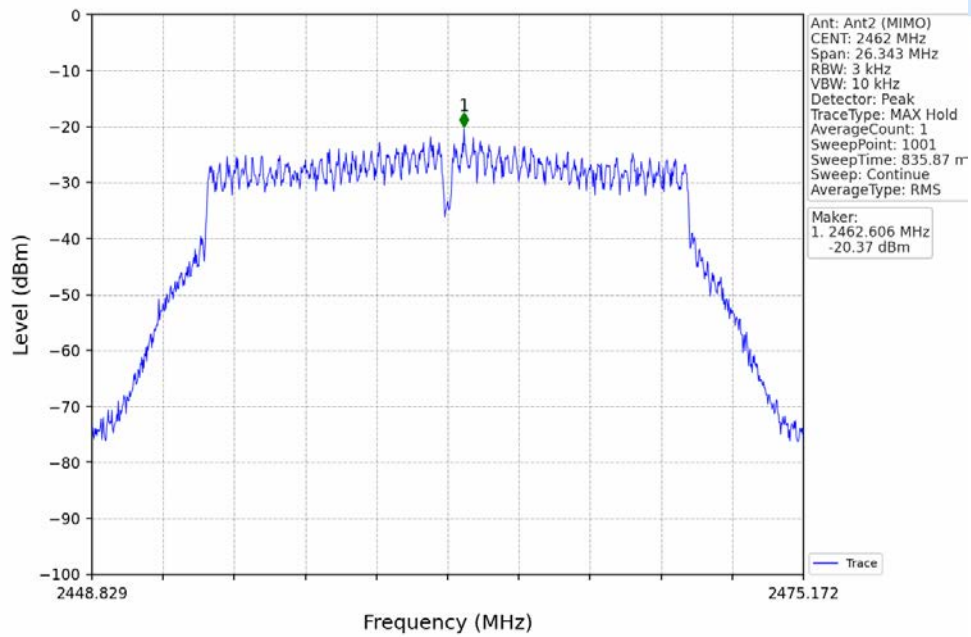
802.11n(HT20)_MCH_2437MHz_Ant2 (MIMO)_NTNV



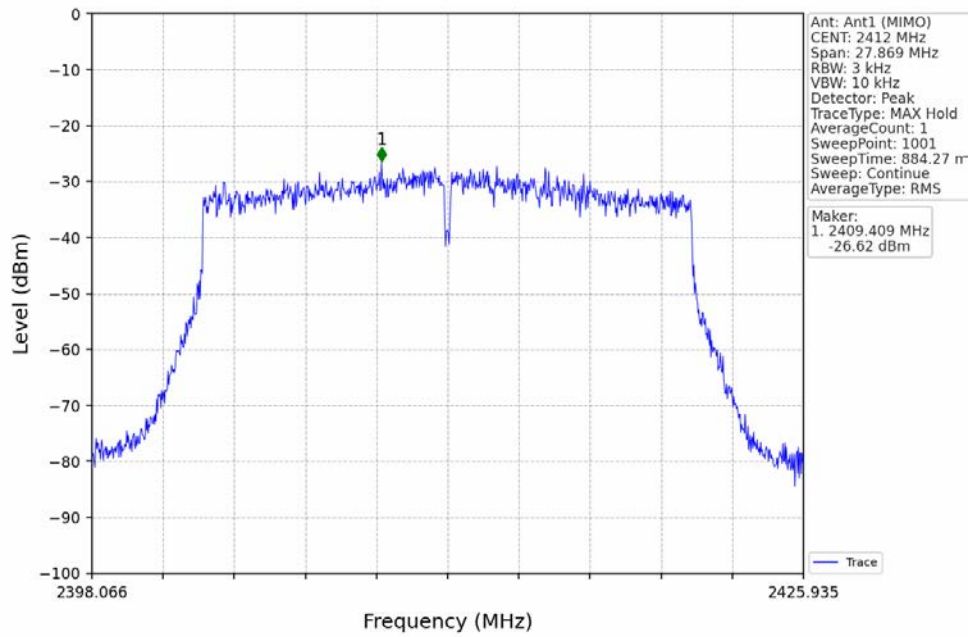
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



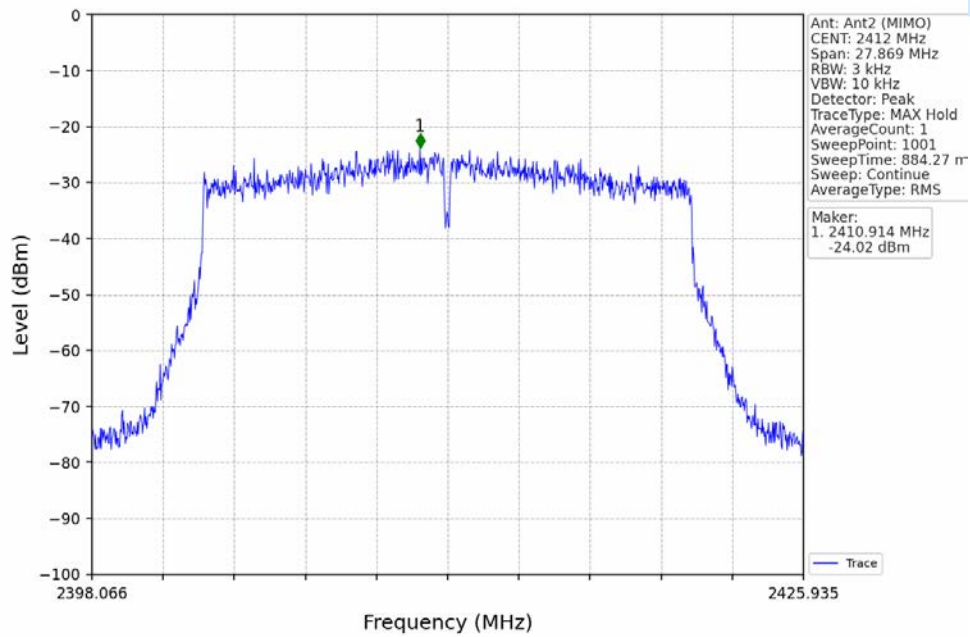
802.11n(HT20)_HCH_2462MHz_Ant2 (MIMO)_NTNV



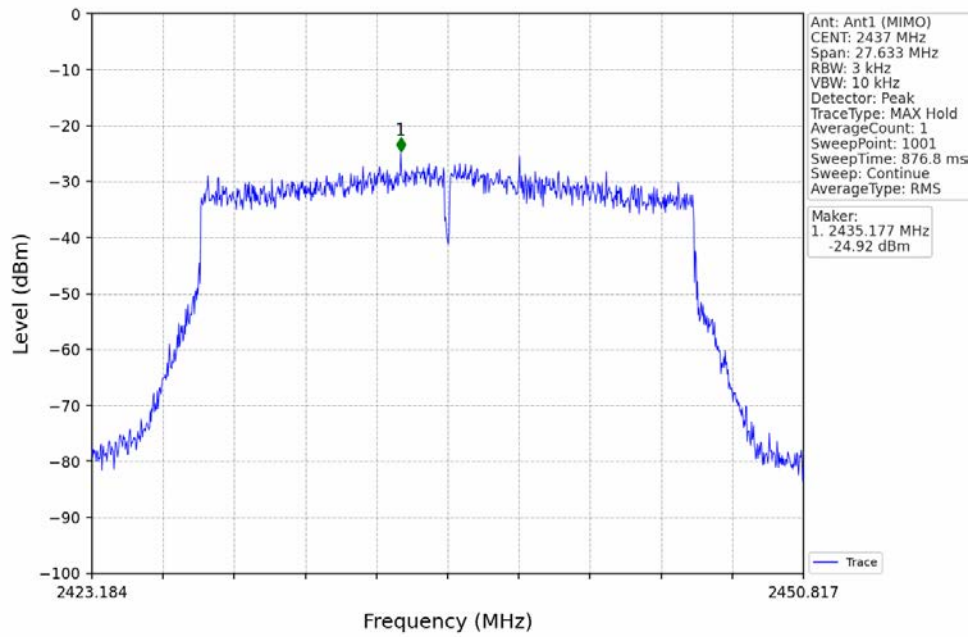
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant1 (MIMO)_NTNV



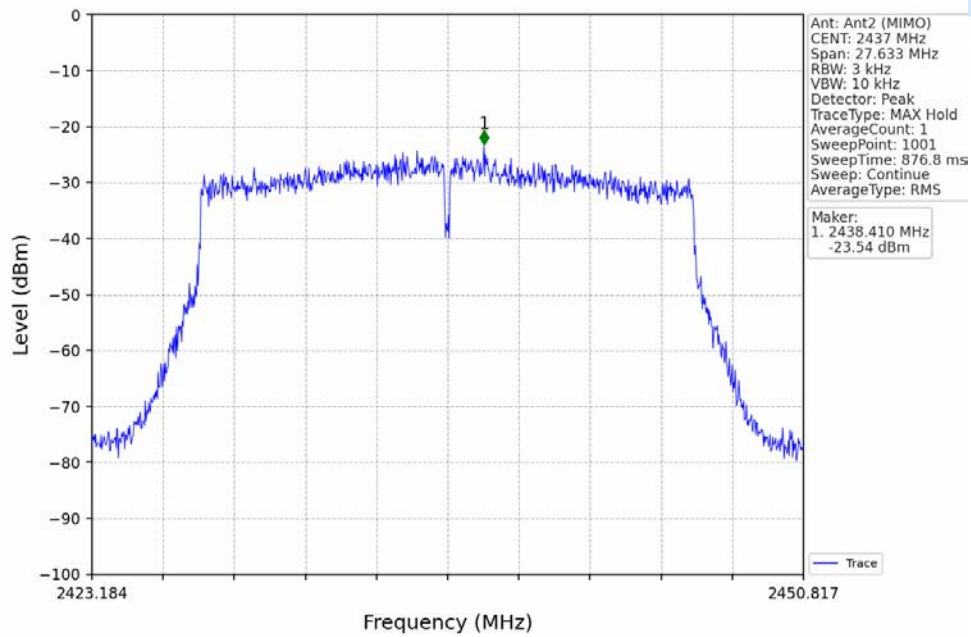
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant2 (MIMO)_NTNV



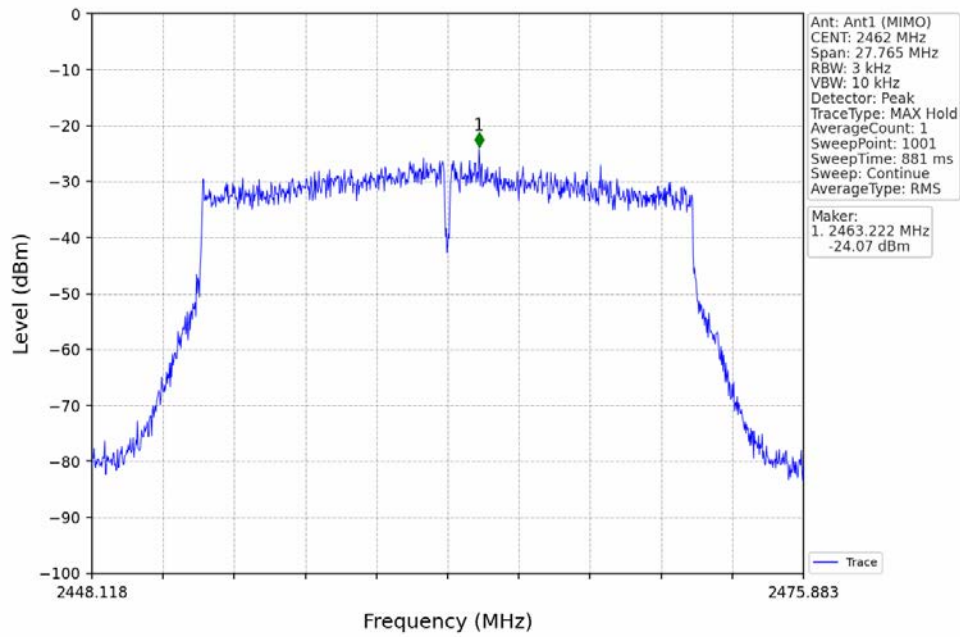
802.11ax(HEW20)_MCH_2437MHz_RU242_Left_Ant1 (MIMO)_NTNV



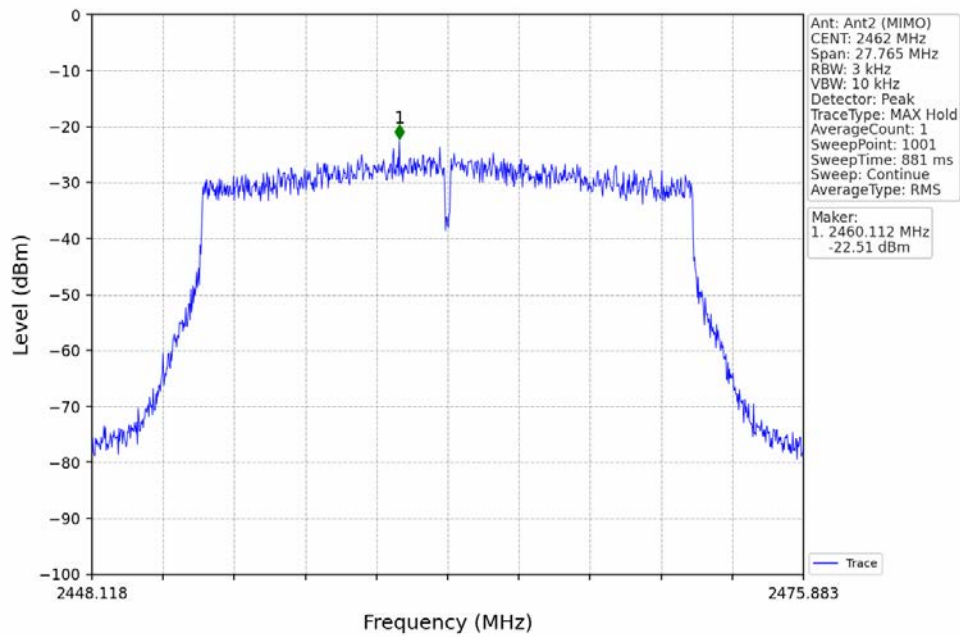
802.11ax(HEW20)_MCH_2437MHz_RU242_Left_Ant2 (MIMO)_NTNV



802.11ax(HEW20)_HCH_2462MHz_RU242_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW20)_HCH_2462MHz_RU242_Left_Ant2 (MIMO)_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

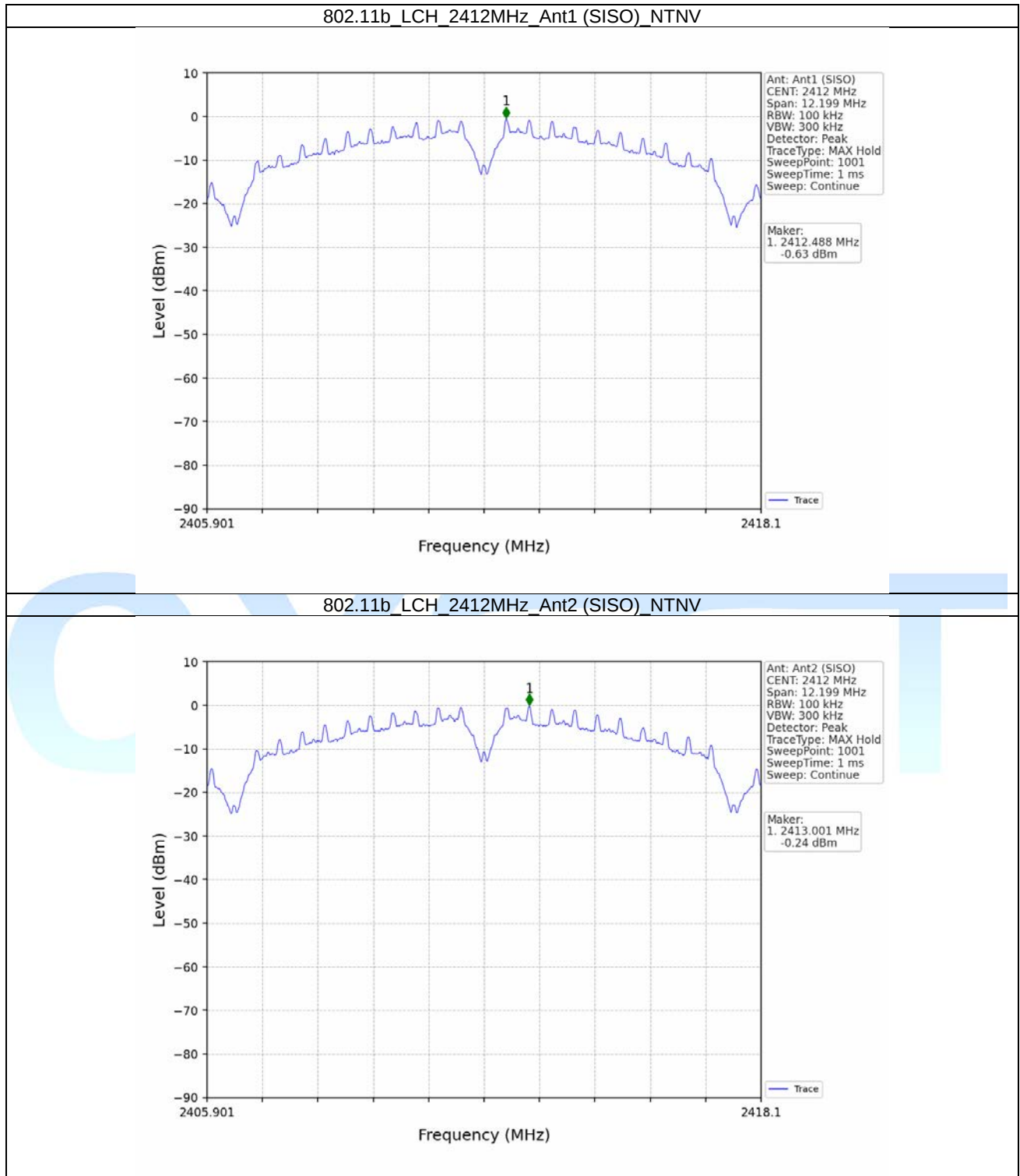
5.1 Ref

5.1.1 Test Result

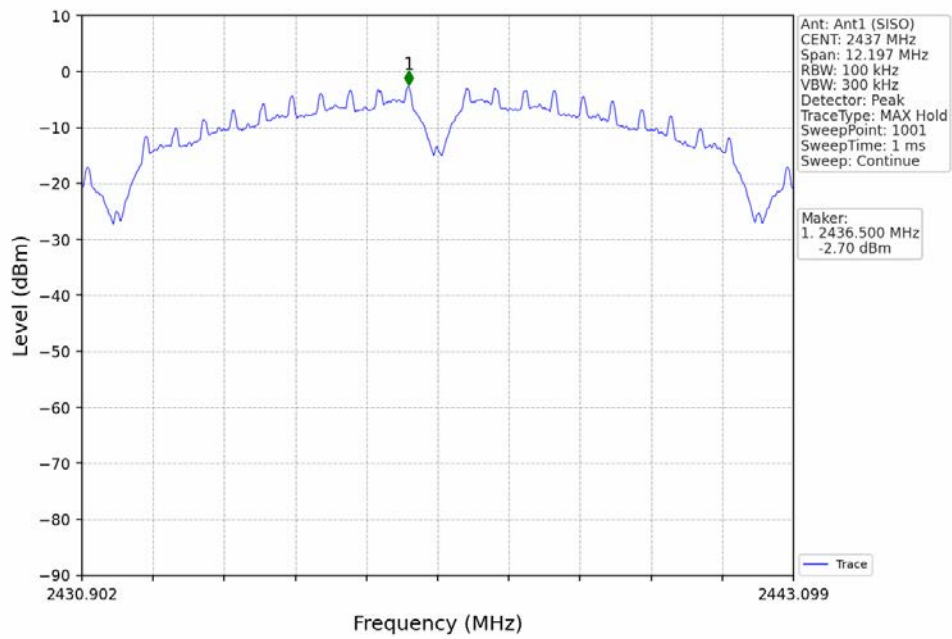
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)
802.11b	SISO	2412	/	/	1	-0.63
					2	-0.24
		2437	/	/	1	-2.70
					2	-0.94
		2462	/	/	1	-2.20
					2	-1.16
802.11g	SISO	2412	/	/	1	-10.32
					2	-7.66
		2437	/	/	1	-9.65
					2	-7.82
		2462	/	/	1	-8.63
					2	-7.51
802.11n (HT20)	MIMO	2412	/	/	1	-10.92
					2	-8.72
		2437	/	/	1	-11.10
					2	-9.01
		2462	/	/	1	-10.17
					2	-8.66
802.11ax (HEW20)	MIMO	2412	RU242	Left	1	-12.35
					2	-9.73
		2437	RU242	Left	1	-11.68
					2	-9.50
		2462	RU242	Left	1	-11.30
					2	-9.78

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.

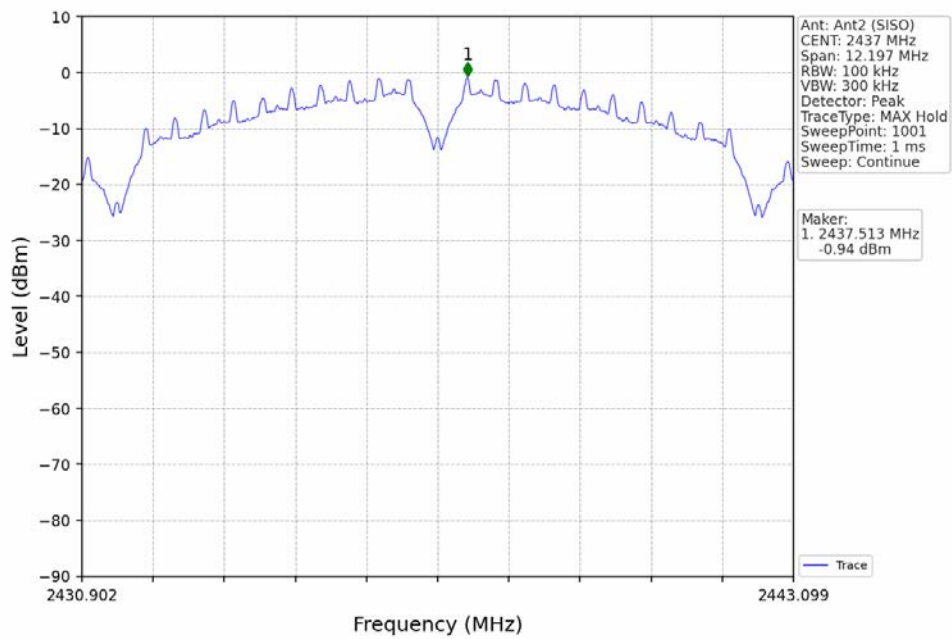
5.1.2 Test Graph



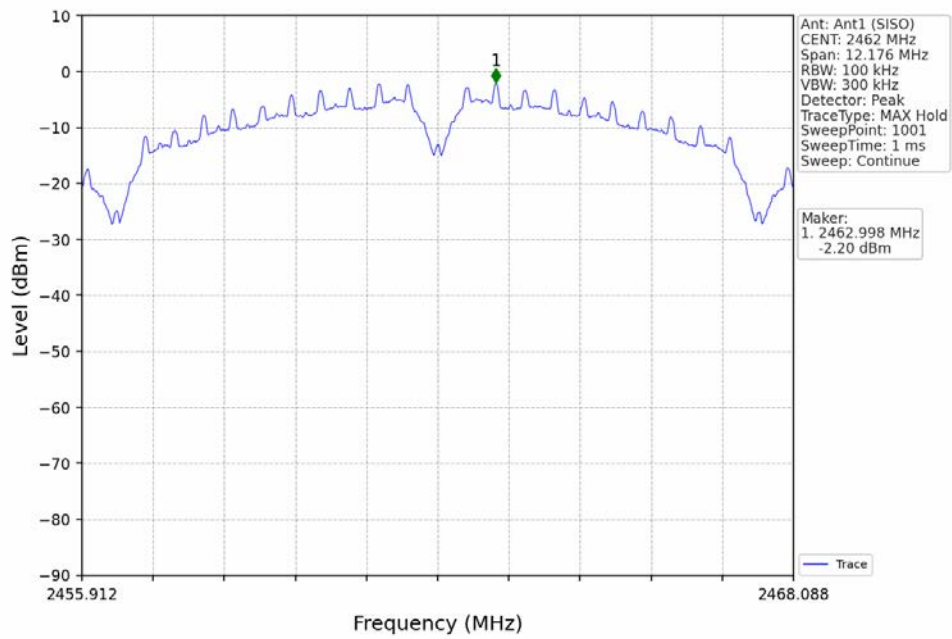
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



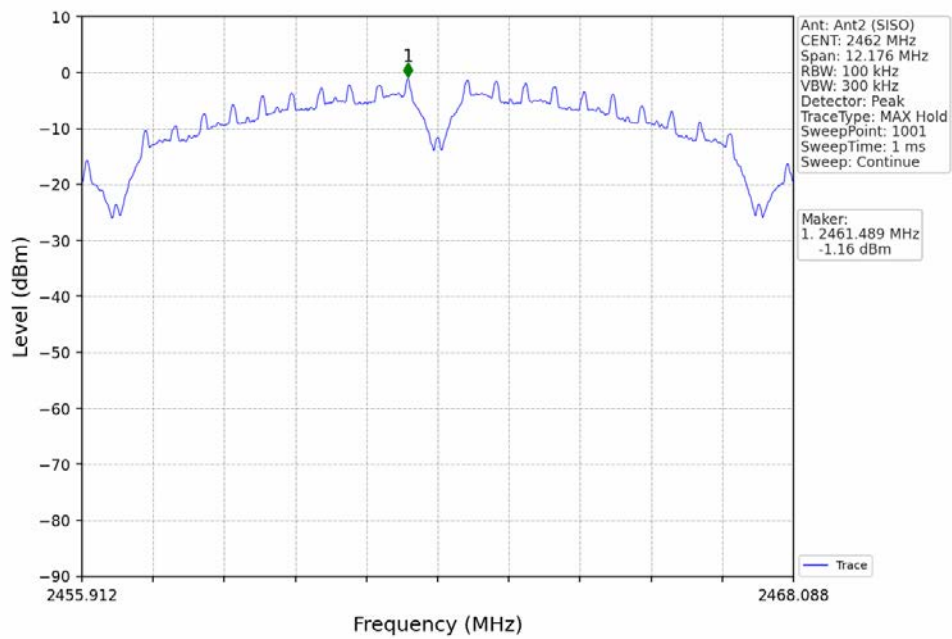
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



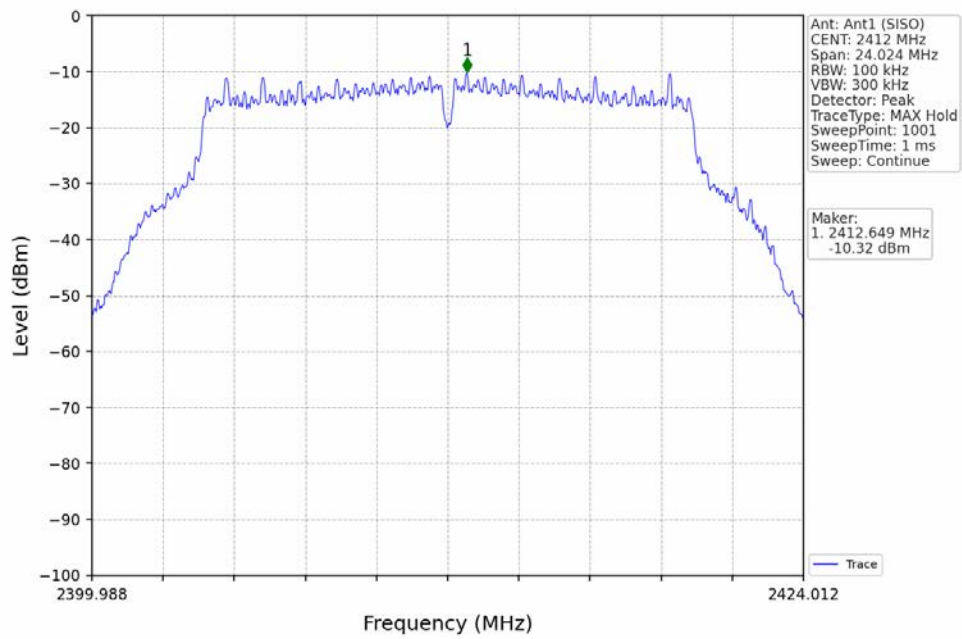
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



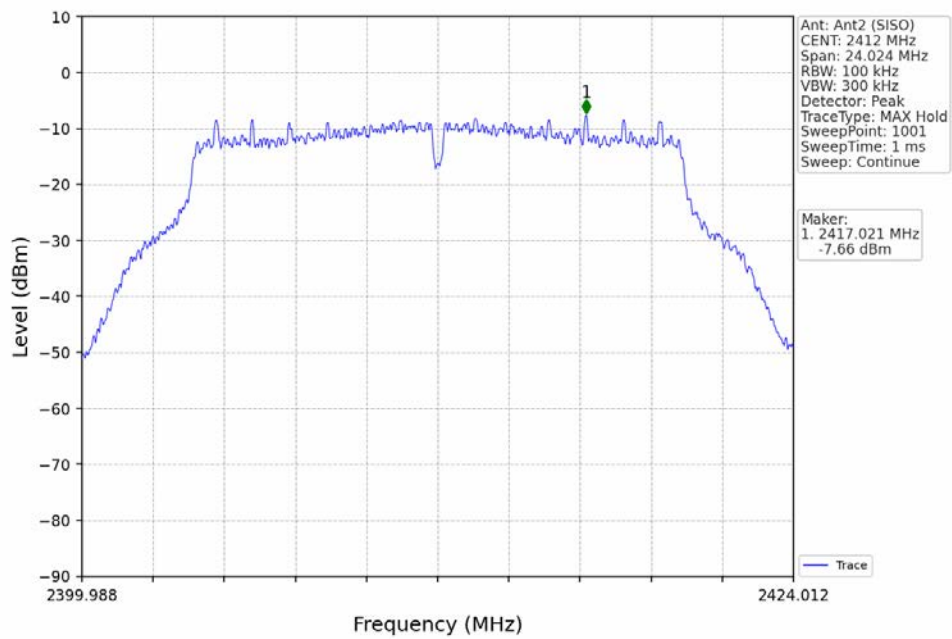
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



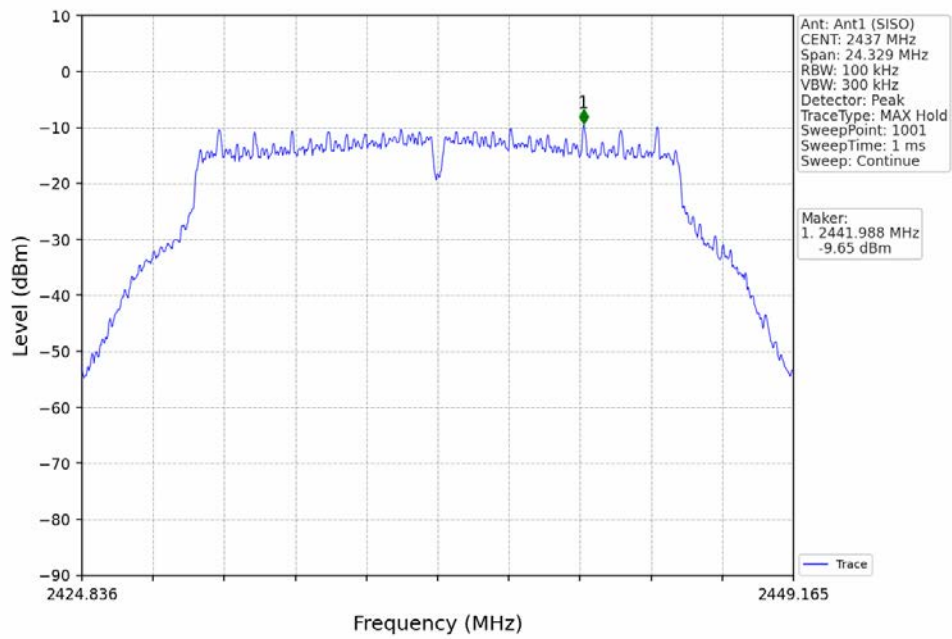
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



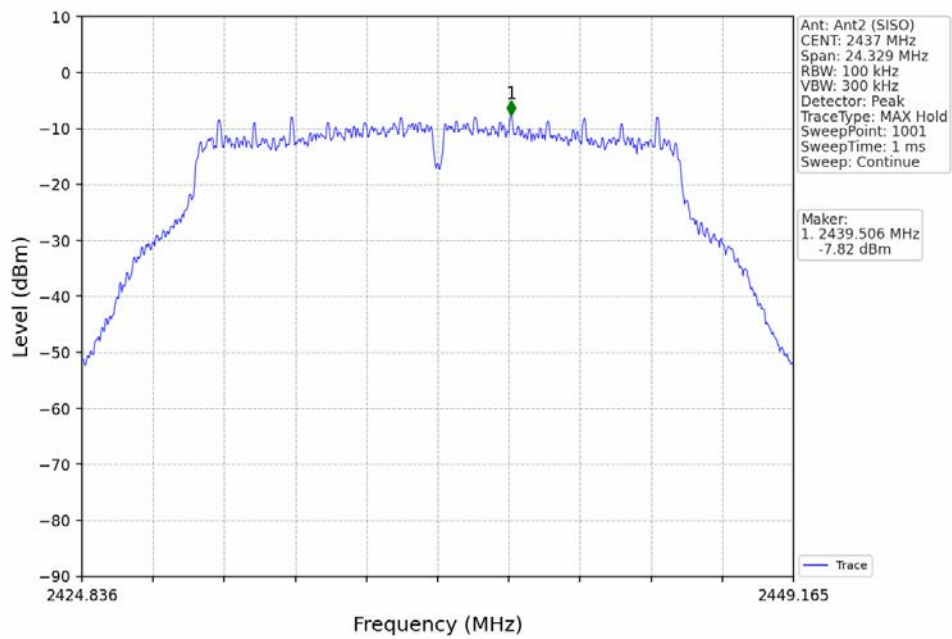
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



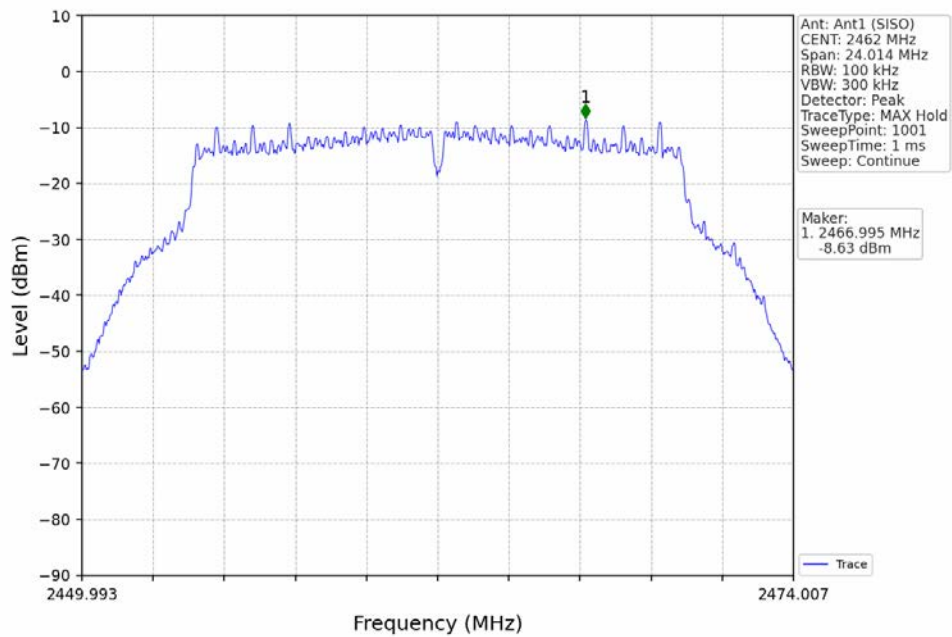
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



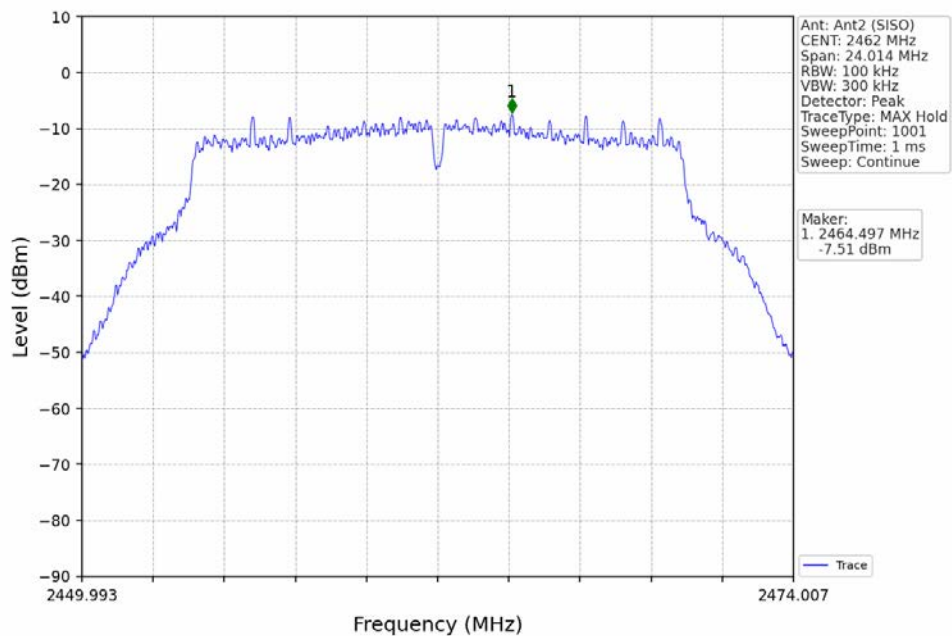
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



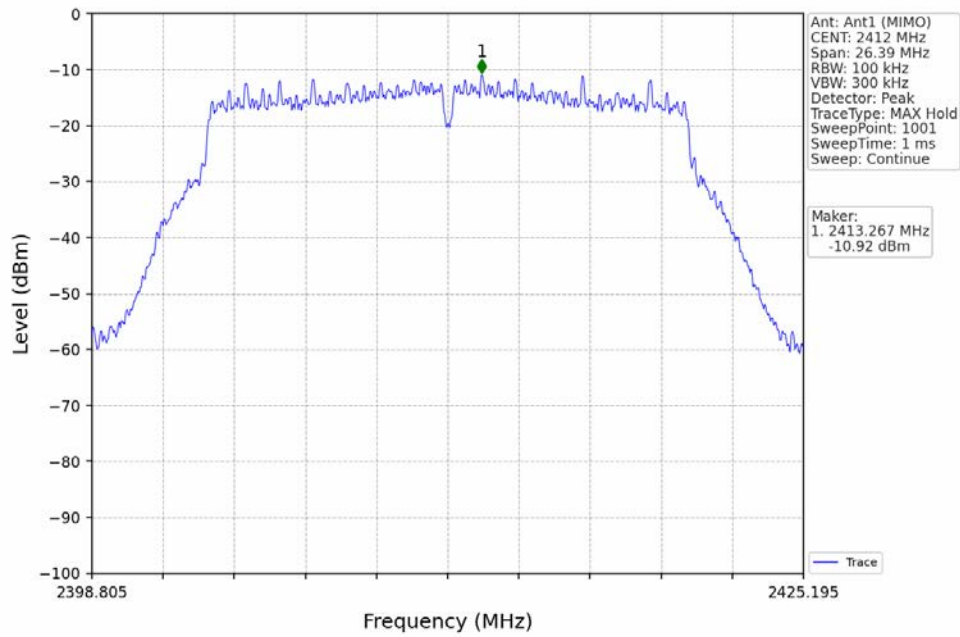
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



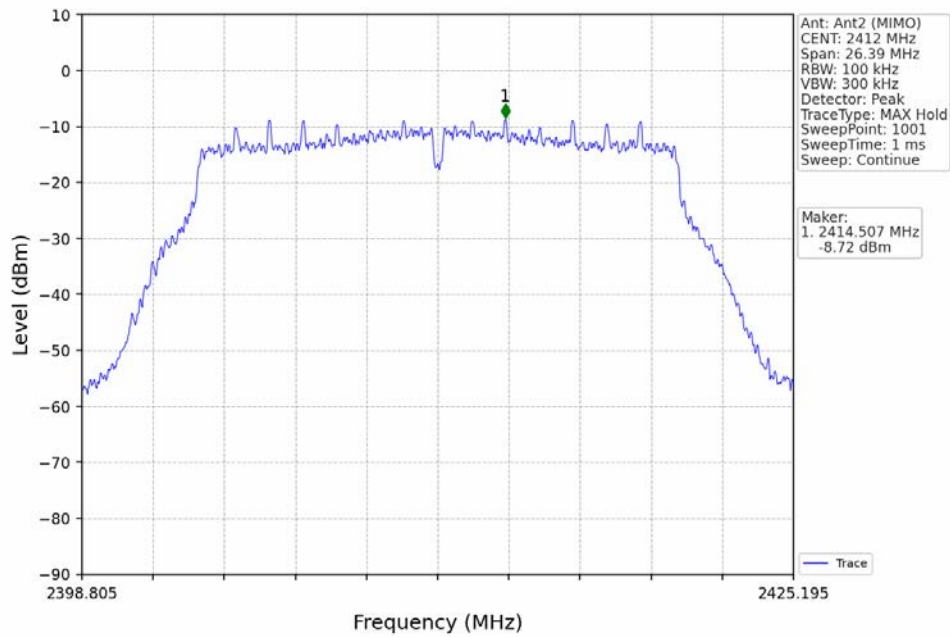
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



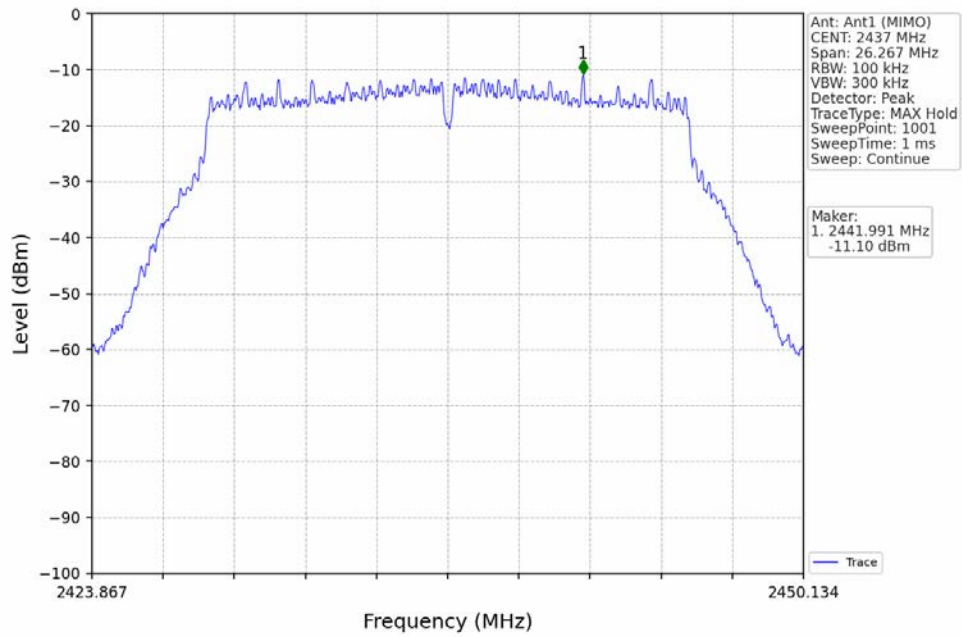
802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



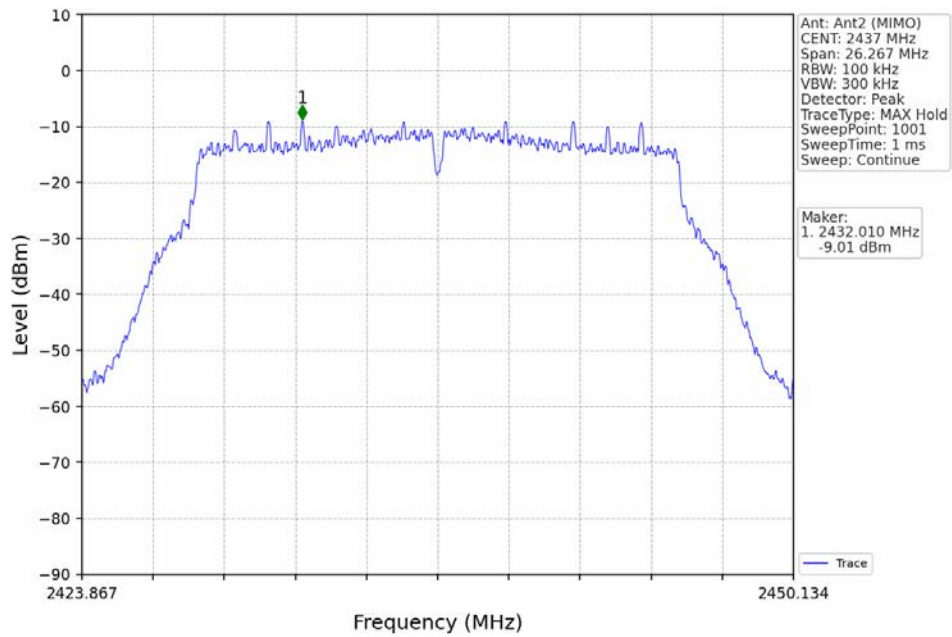
802.11n(HT20)_LCH_2412MHz_Ant2 (MIMO)_NTNV



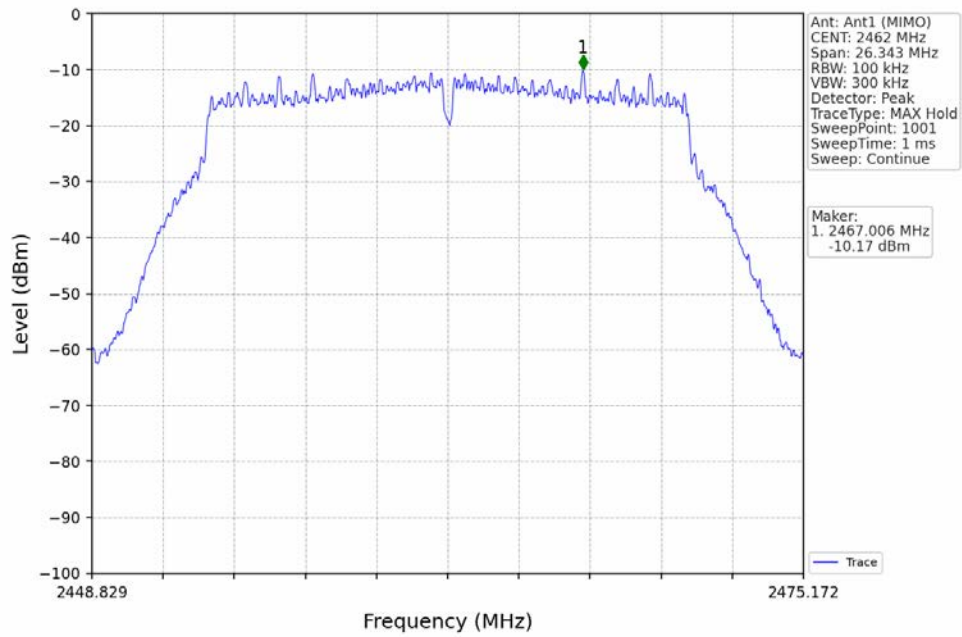
802.11n(HT20)_MCH_2437MHz_Ant1 (MIMO)_NTNV



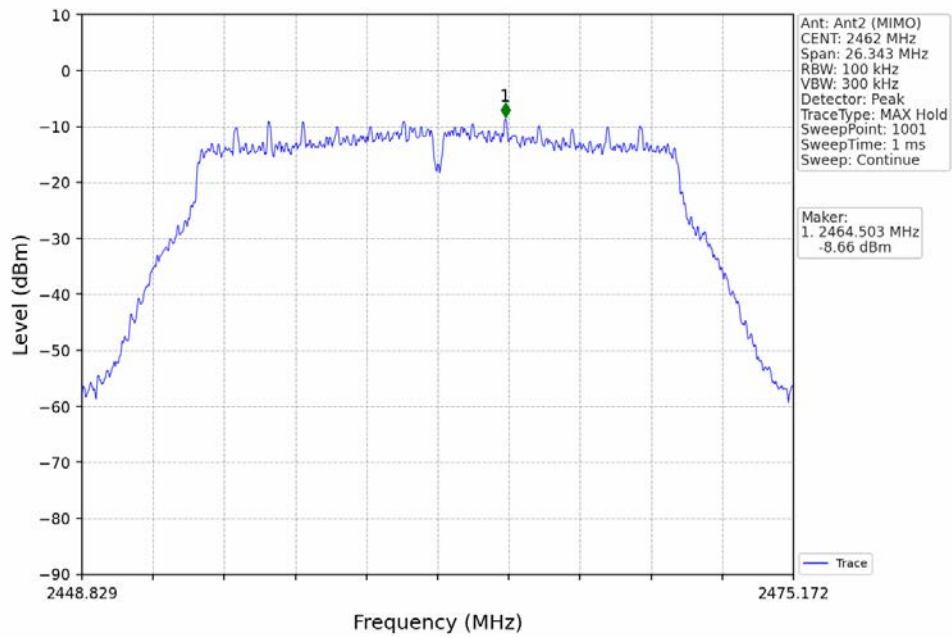
802.11n(HT20)_MCH_2437MHz_Ant2 (MIMO)_NTNV



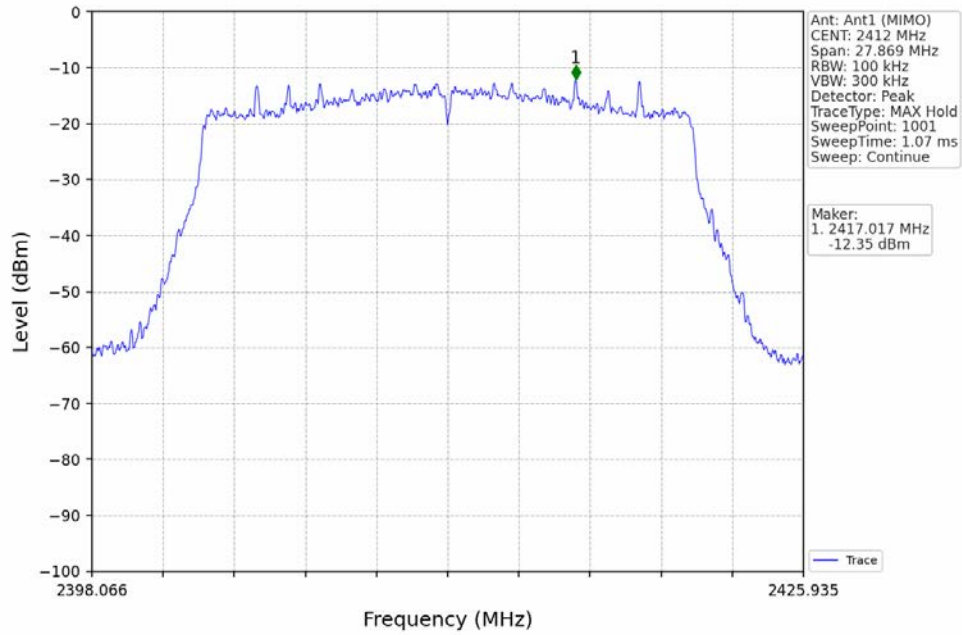
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



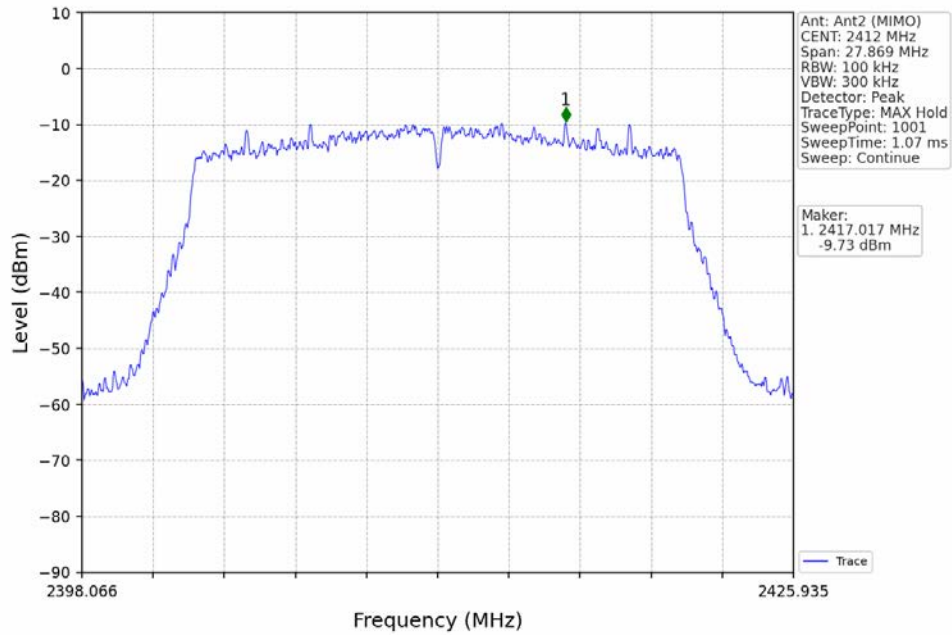
802.11n(HT20)_HCH_2462MHz_Ant2 (MIMO)_NTNV



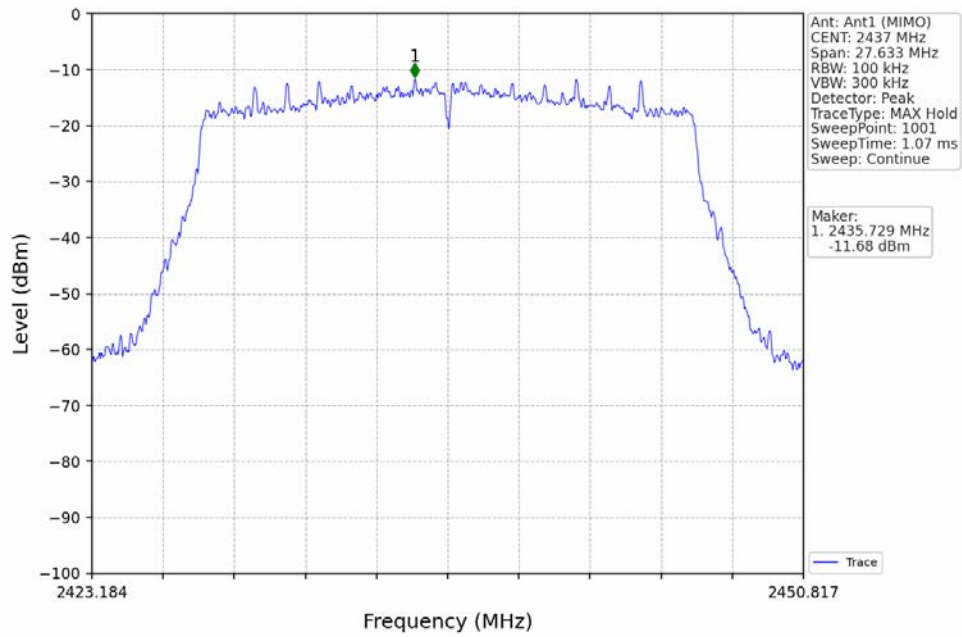
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant1 (MIMO)_NTNV



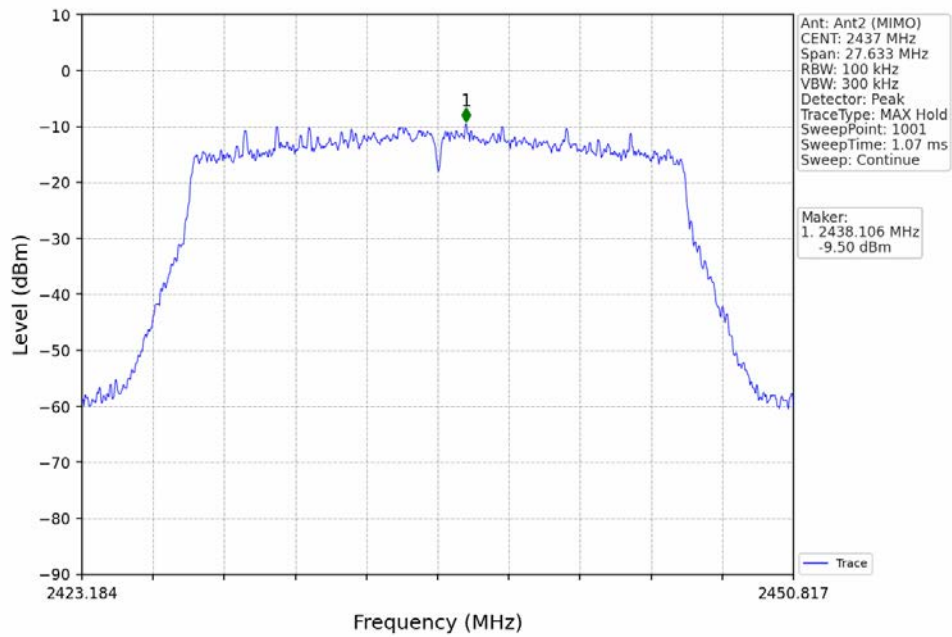
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant2 (MIMO)_NTNV



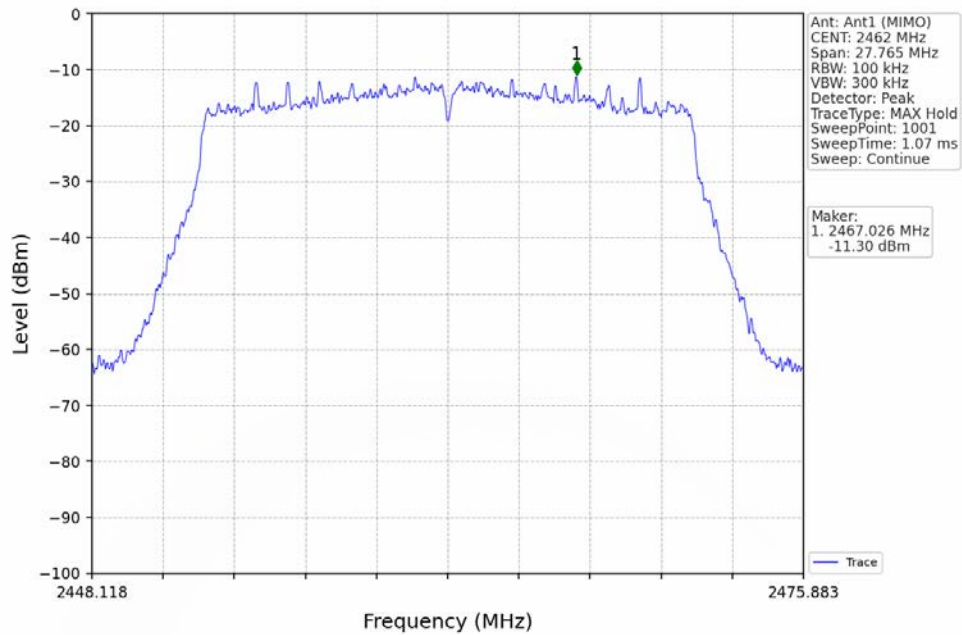
802.11ax(HEW20)_MCH_2437MHz_RU242_Left_Ant1 (MIMO)_NTNV



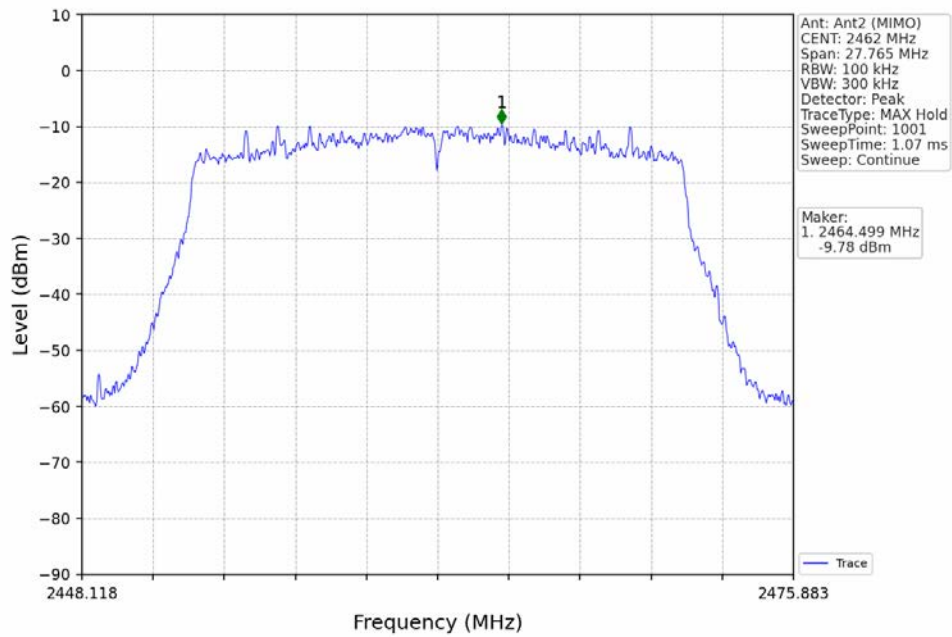
802.11ax(HEW20)_MCH_2437MHz_RU242_Left_Ant2 (MIMO)_NTNV



802.11ax(HEW20)_HCH_2462MHz_RU242_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW20)_HCH_2462MHz_RU242_Left_Ant2 (MIMO)_NTNV



5.2 CSE

5.2.1 Test Result

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	/	/	1	-0.63	-20.63	Pass
					2	-0.24	-20.24	Pass
		2437	/	/	1	-0.63	-20.63	Pass
					2	-0.24	-20.24	Pass
		2462	/	/	1	-0.63	-20.63	Pass
					2	-0.24	-20.24	Pass
802.11g	SISO	2412	/	/	1	-8.63	-28.63	Pass
					2	-7.51	-27.51	Pass
		2437	/	/	1	-8.63	-28.63	Pass
					2	-7.51	-27.51	Pass
		2462	/	/	1	-8.63	-28.63	Pass
					2	-7.51	-27.51	Pass
802.11n (HT20)	MIMO	2412	/	/	1	-10.17	-30.17	Pass
					2	-8.66	-28.66	Pass
		2437	/	/	1	-10.17	-30.17	Pass
					2	-8.66	-28.66	Pass
		2462	/	/	1	-10.17	-30.17	Pass
					2	-8.66	-28.66	Pass
802.11ax (HEW20)	MIMO	2412	RU242	Left	1	-11.30	-31.30	Pass
					2	-9.50	-29.50	Pass
		2437	RU242	Left	1	-11.30	-31.30	Pass
					2	-9.50	-29.50	Pass
		2462	RU242	Left	1	-11.30	-31.30	Pass
					2	-9.50	-29.50	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.

5.2.2 Test Graph

