

Appendix RF test data for WIFI2.4G

1. Duty Cycle

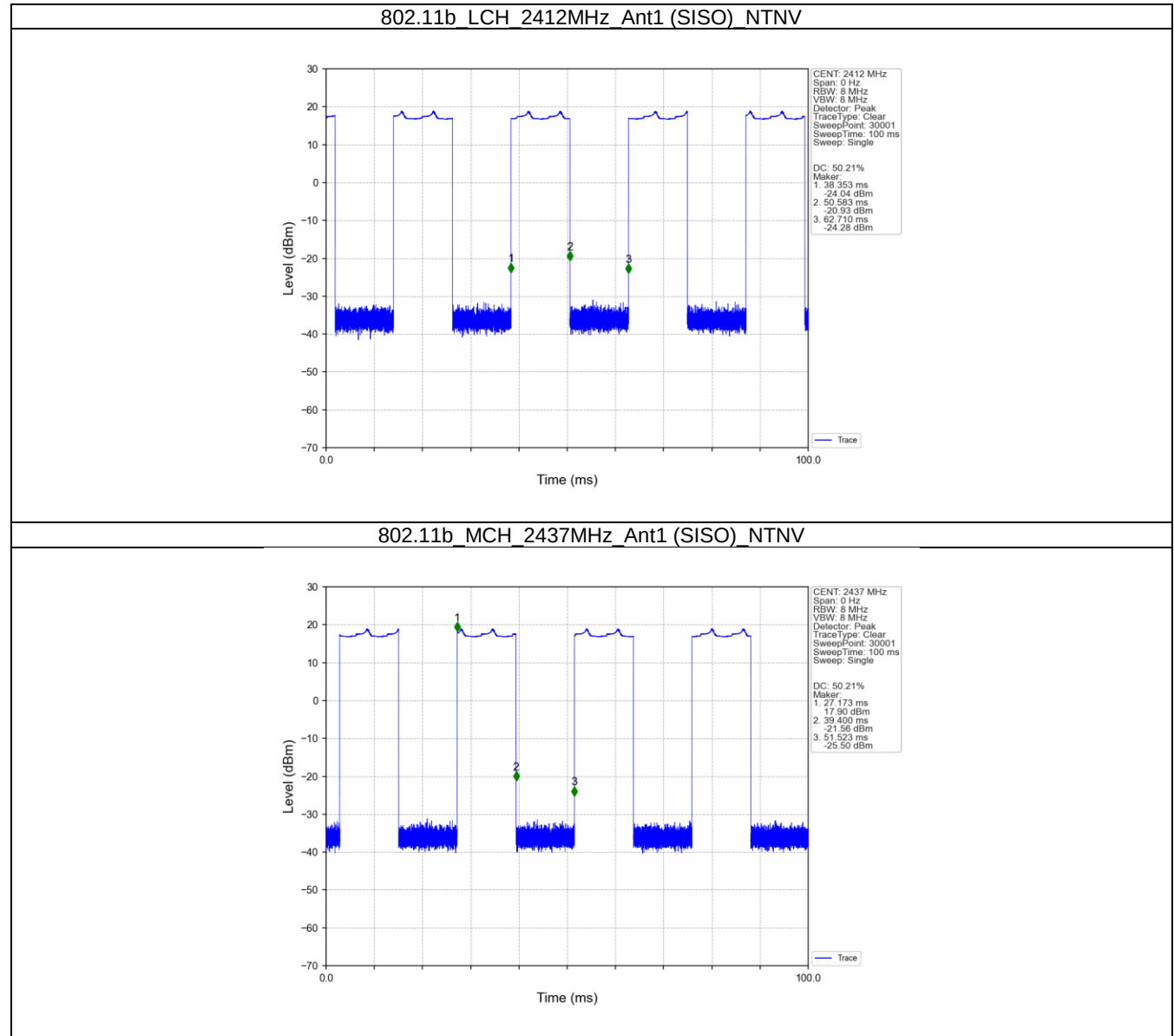
1.1 Test Result

1.1.1 Ant1

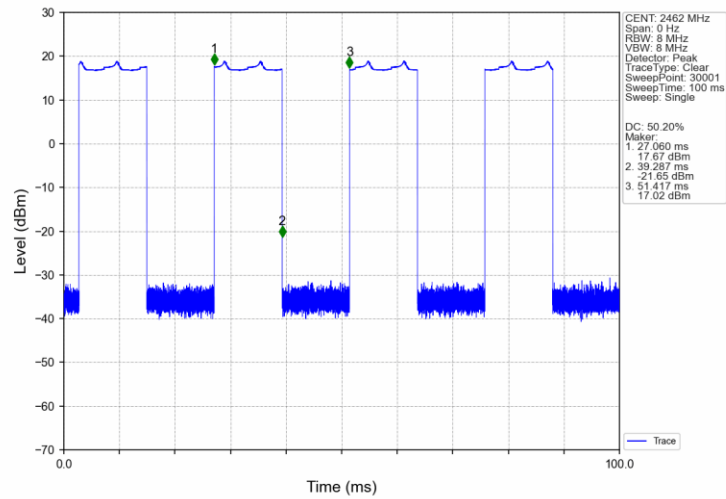
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	12.230	24.357	50.21	2.99	0.01
		2437	12.227	24.350	50.21	2.99	0.01
		2462	12.227	24.357	50.20	2.99	0.02
802.11g	SISO	2412	5.453	10.370	52.58	2.79	0.25
		2437	5.453	10.347	52.70	2.78	0.07
		2462	5.454	10.347	52.71	2.78	0.07
802.11n (HT20)	SISO	2412	5.343	10.430	51.23	2.90	0.43
		2437	5.344	10.354	51.61	2.87	0.05
		2462	5.340	10.350	51.59	2.87	0.07
802.11n (HT40)	SISO	2422	3.005	6.351	47.32	3.25	0.09
		2437	3.006	6.353	47.32	3.25	0.08
		2452	3.005	6.351	47.32	3.25	0.09

1.2 Test Graph

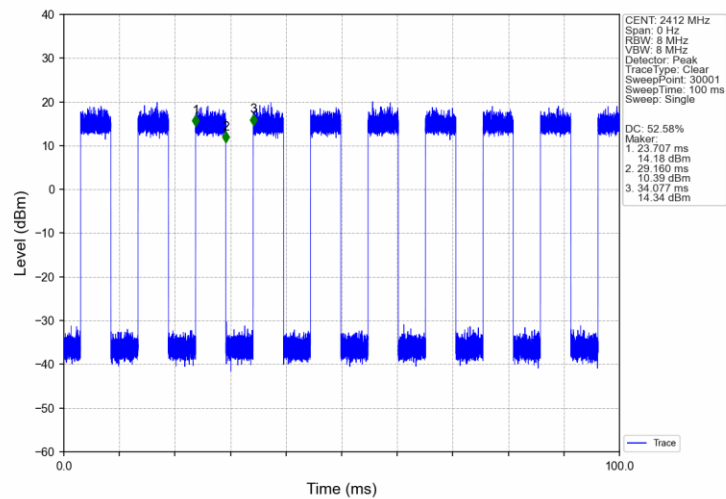
1.2.1 Ant1



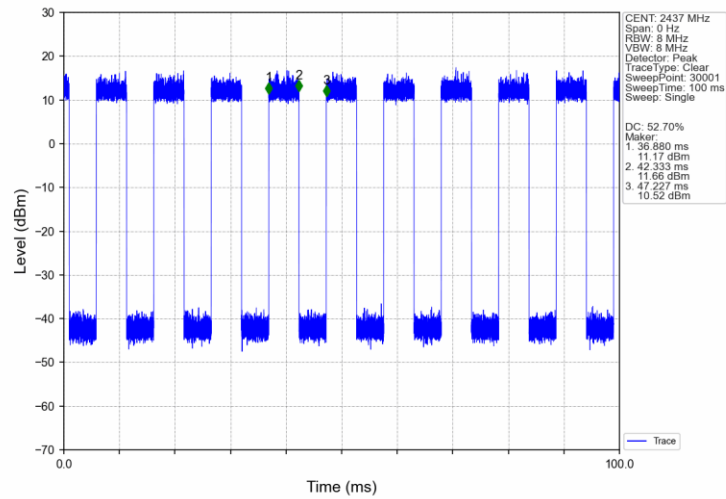
802.11b HCH 2462MHz_Ant1 (SISO) NTN



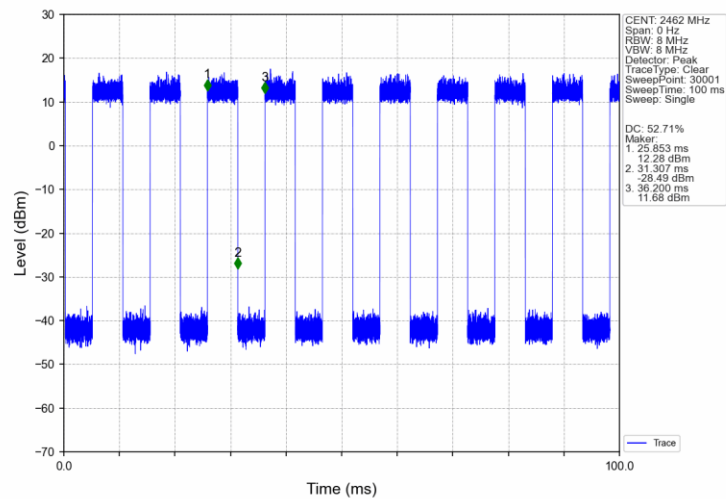
802.11g LCH 2412MHz_Ant1 (SISO) NTN



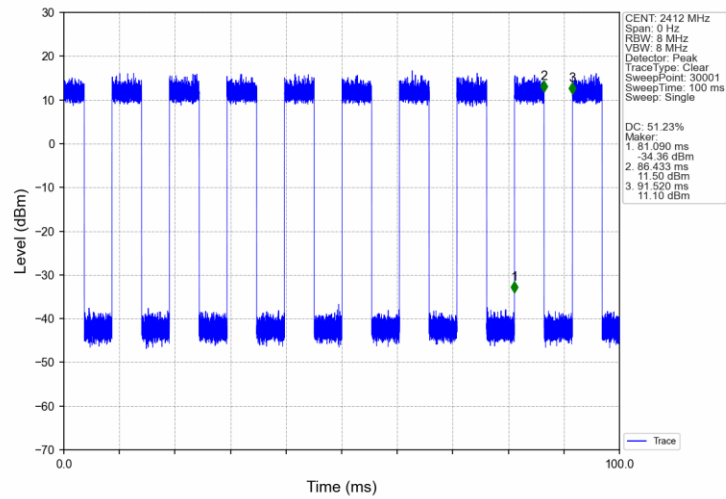
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



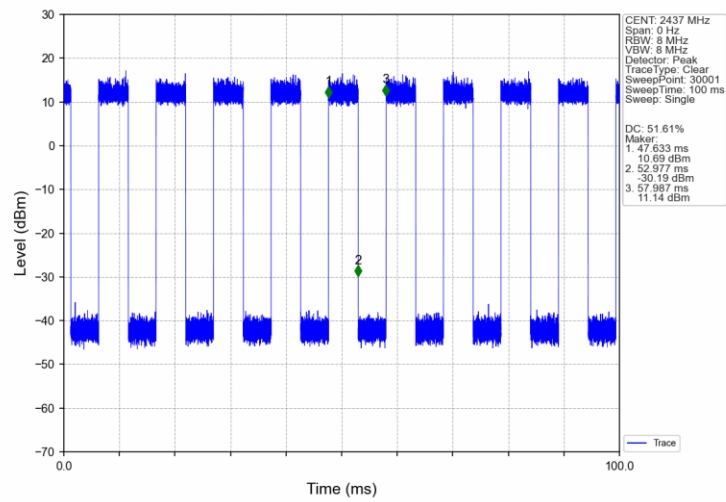
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



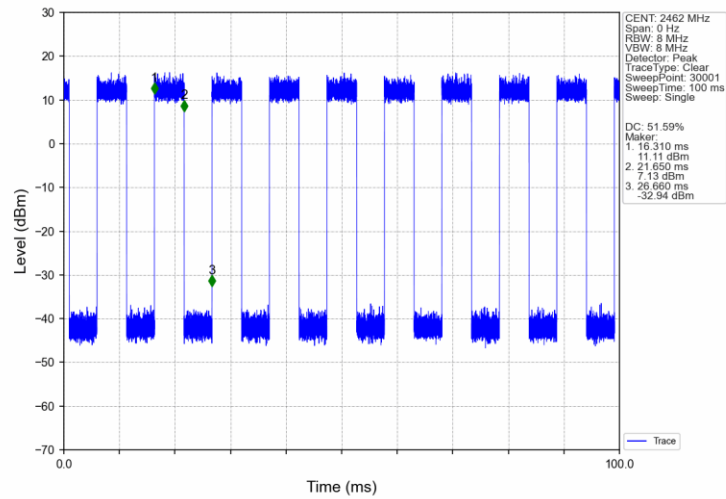
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



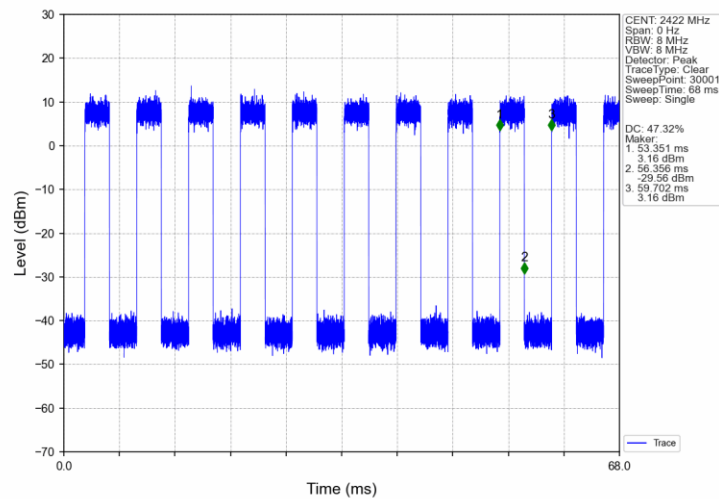
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



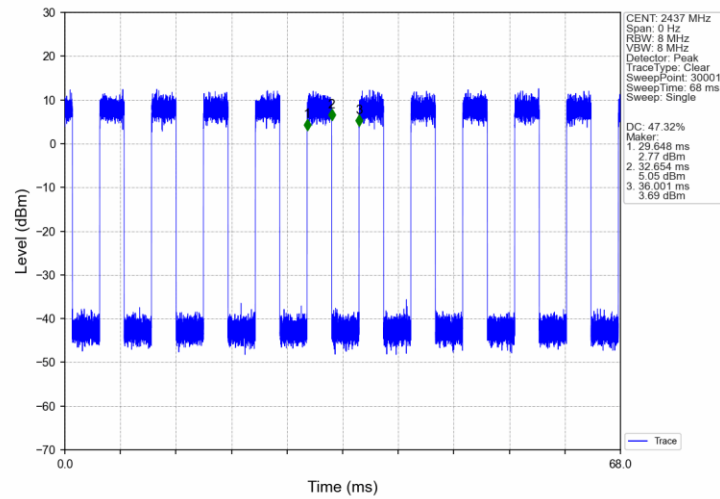
802.11n(HT20) HCH_2462MHz_Ant1 (SISO) NTNV



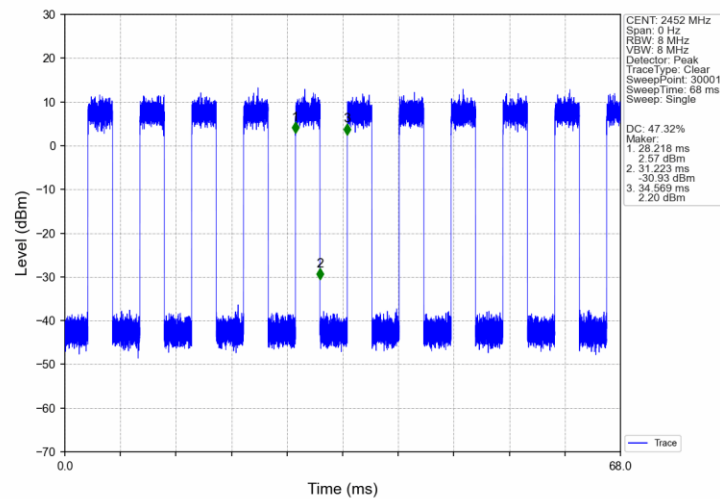
802.11n(HT40) LCH_2422MHz_Ant1 (SISO) NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNV



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

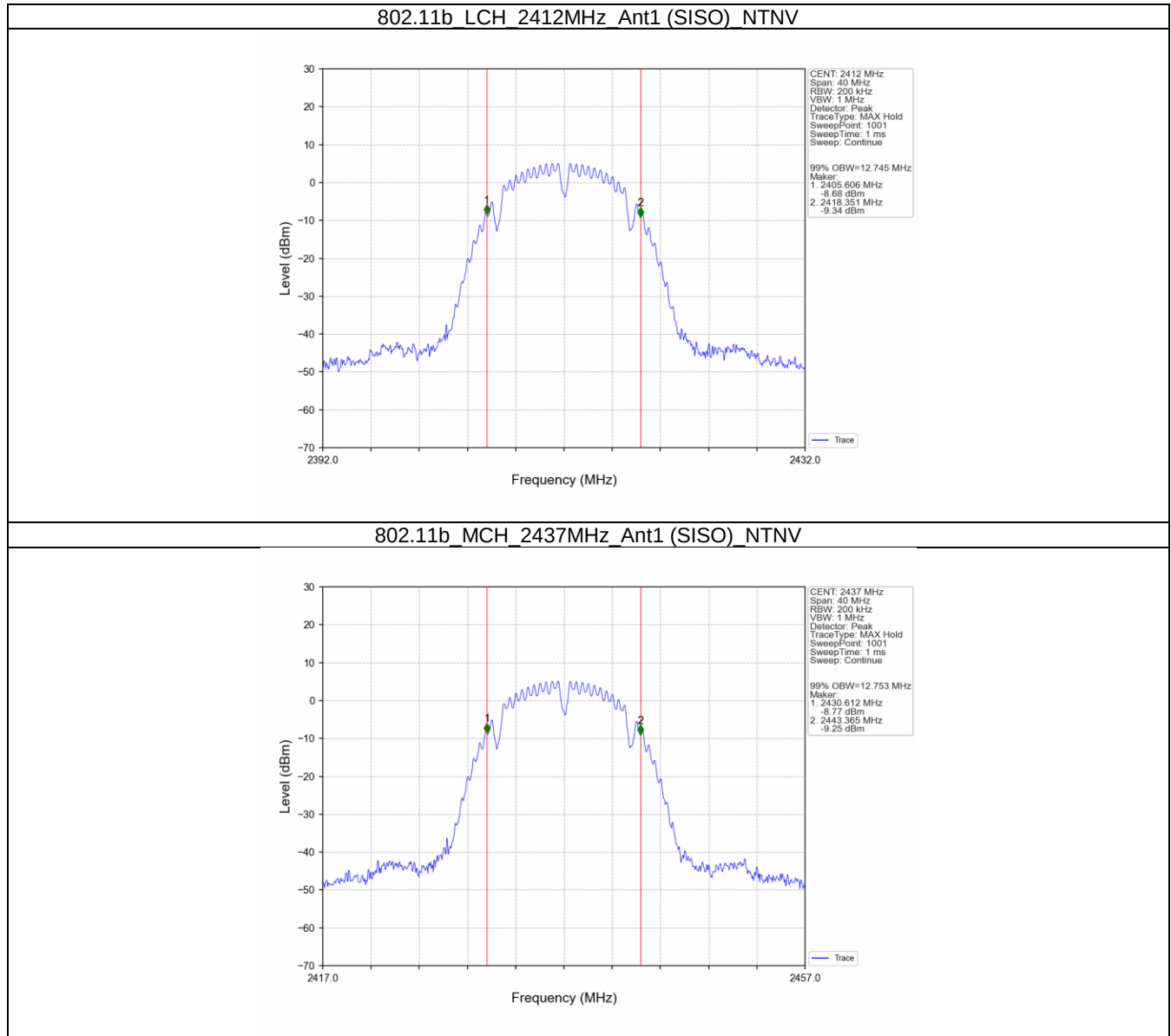
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	12.745	/	Pass
		2437	1	12.753	/	Pass
		2462	1	12.781	/	Pass
802.11g	SISO	2412	1	16.935	/	Pass
		2437	1	16.973	/	Pass
		2462	1	16.943	/	Pass
802.11n (HT20)	SISO	2412	1	18.033	/	Pass
		2437	1	17.965	/	Pass
		2462	1	17.981	/	Pass
802.11n (HT40)	SISO	2422	1	37.003	/	Pass
		2437	1	37.058	/	Pass
		2452	1	37.001	/	Pass

2.1.2 6dB BW

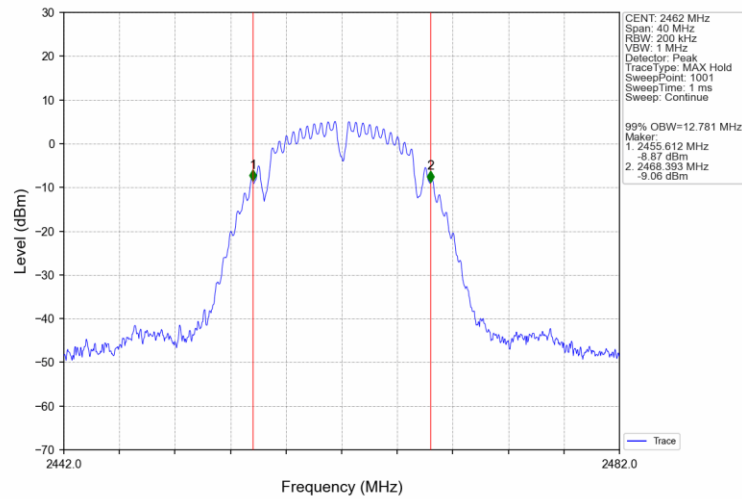
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.634	≥ 0.5	Pass
		2437	1	9.598	≥ 0.5	Pass
		2462	1	9.589	≥ 0.5	Pass
802.11g	SISO	2412	1	16.555	≥ 0.5	Pass
		2437	1	16.663	≥ 0.5	Pass
		2462	1	16.489	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.837	≥ 0.5	Pass
		2437	1	17.842	≥ 0.5	Pass
		2462	1	17.838	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	36.824	≥ 0.5	Pass
		2437	1	36.877	≥ 0.5	Pass
		2452	1	36.852	≥ 0.5	Pass

2.2 Test Graph

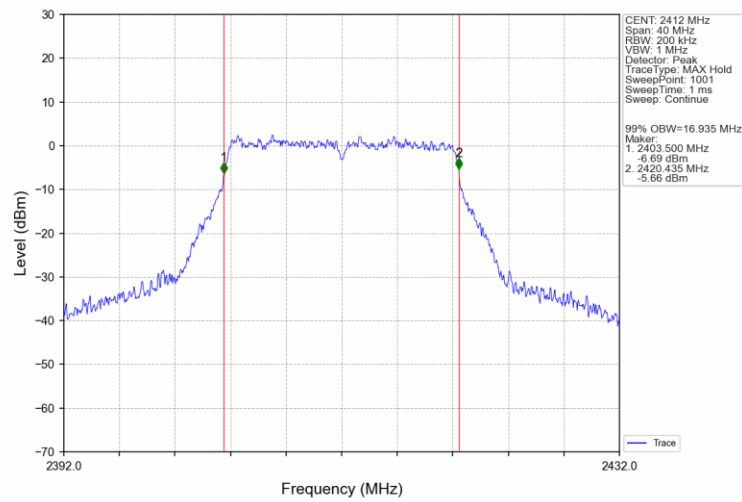
2.2.1 OBW



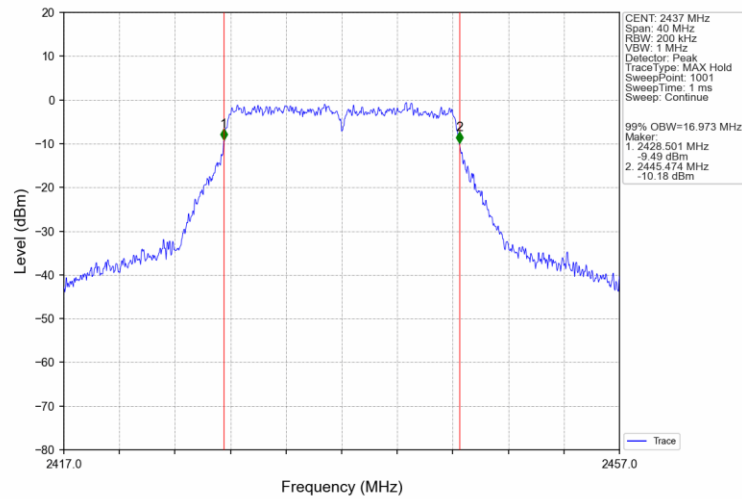
802.11b HCH 2462MHz_Ant1 (SISO)_NTNV



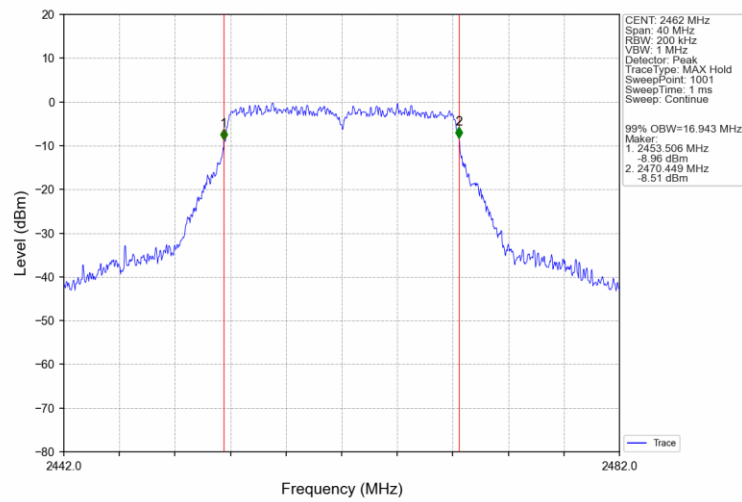
802.11g LCH 2412MHz_Ant1 (SISO)_NTNV



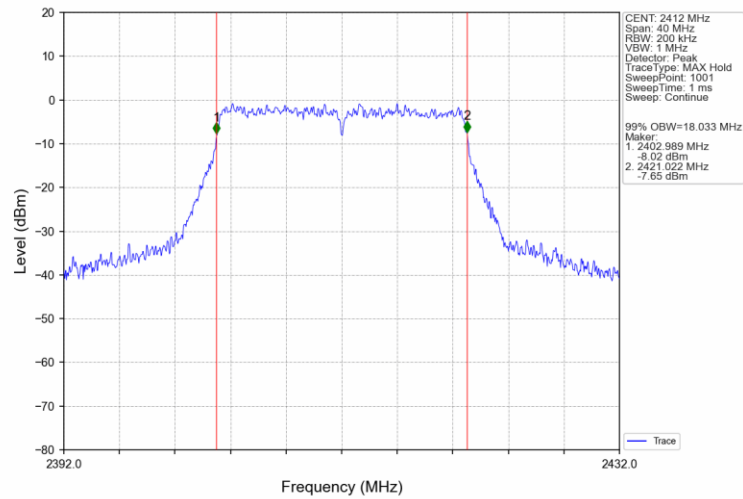
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



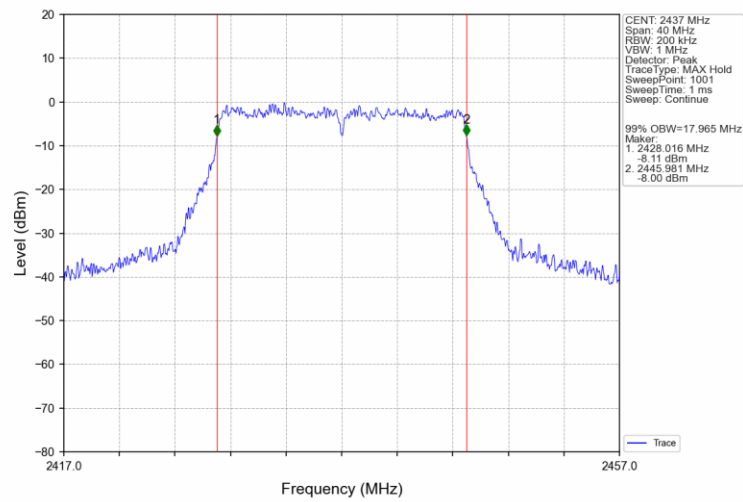
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



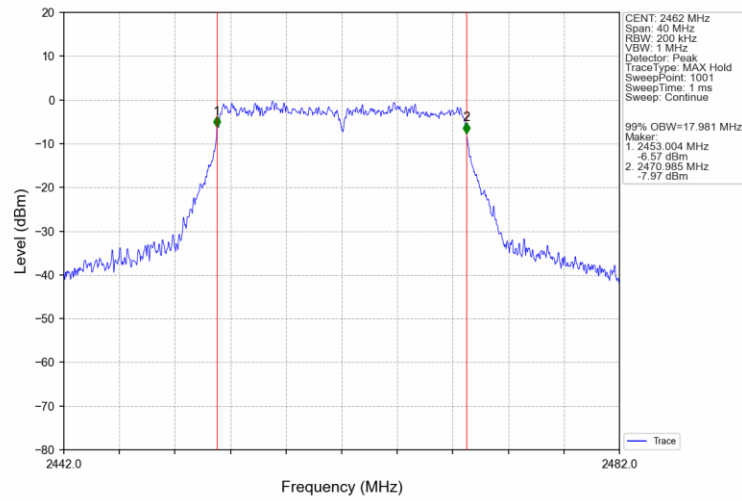
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



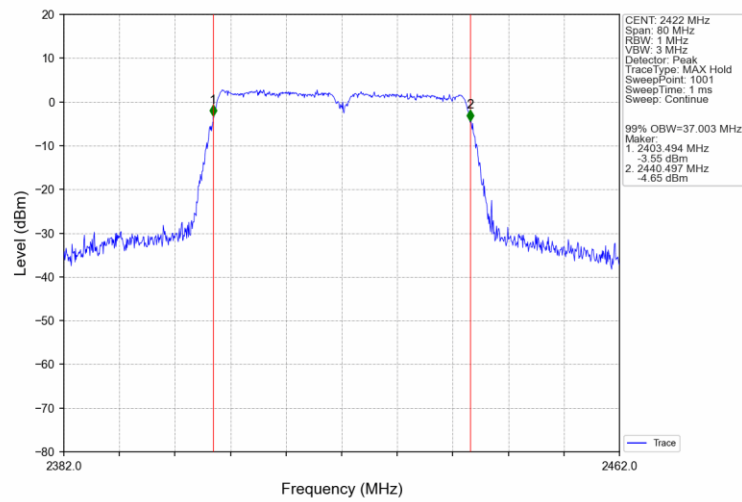
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



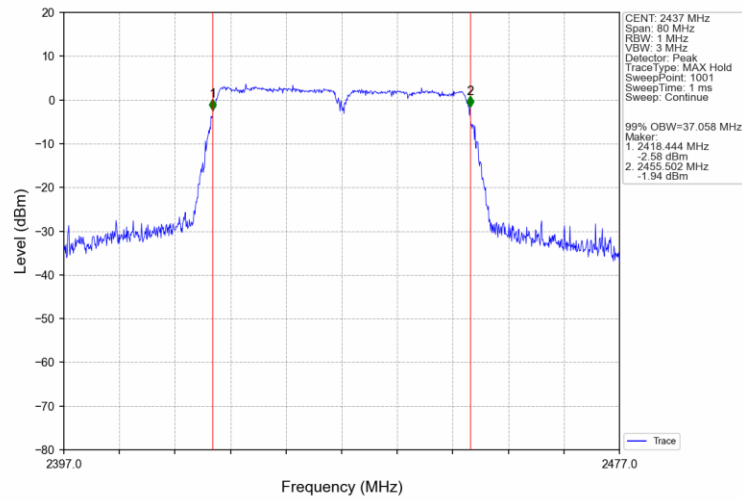
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



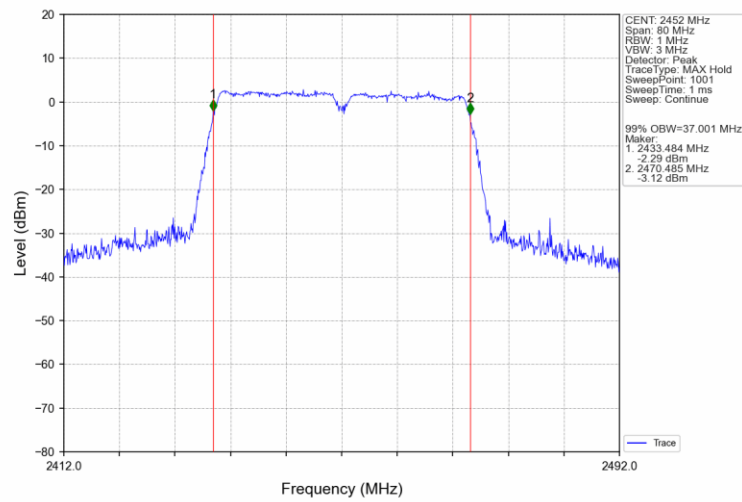
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNV

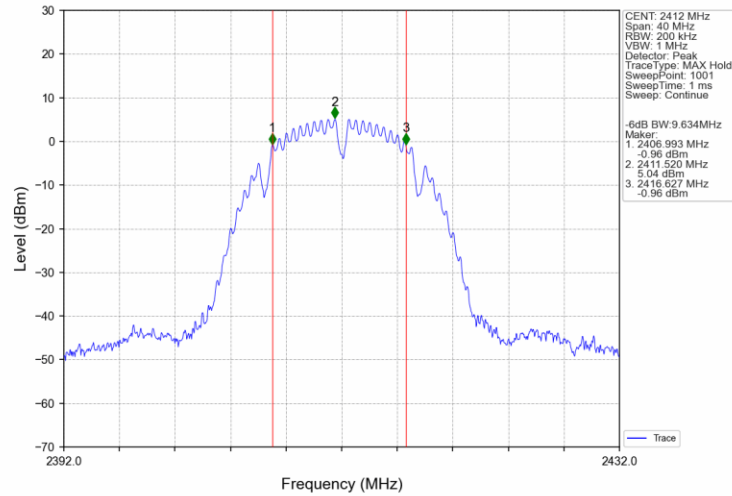


802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTNV

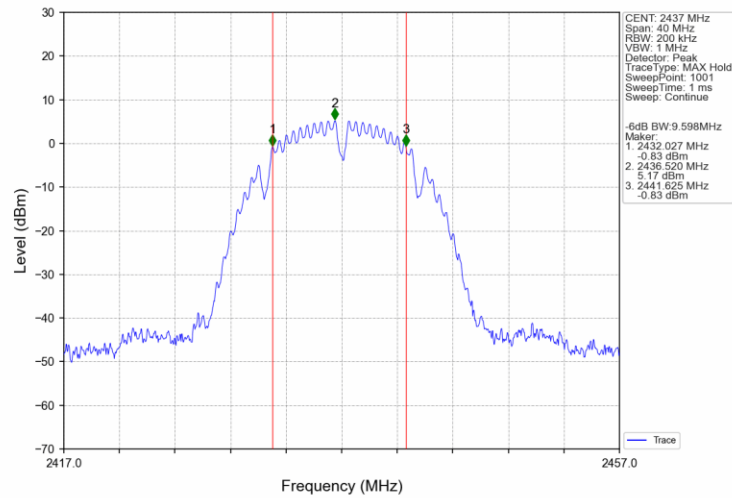


2.2.2 6dB BW

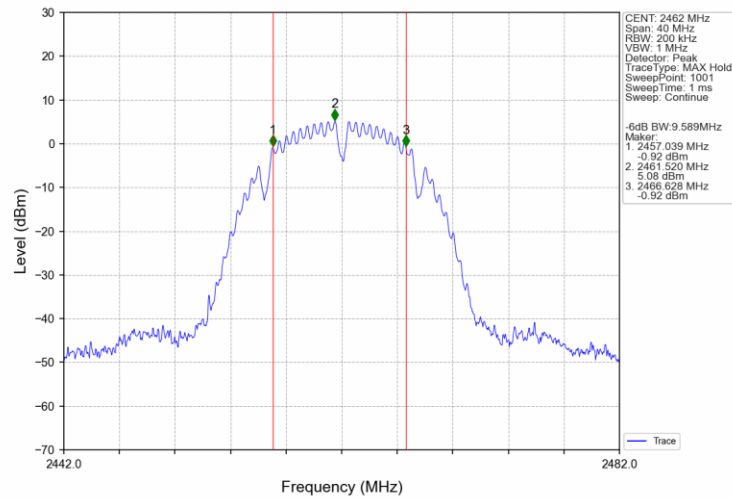
802.11b LCH 2412MHz_Ant1 (SISO)_NTNV



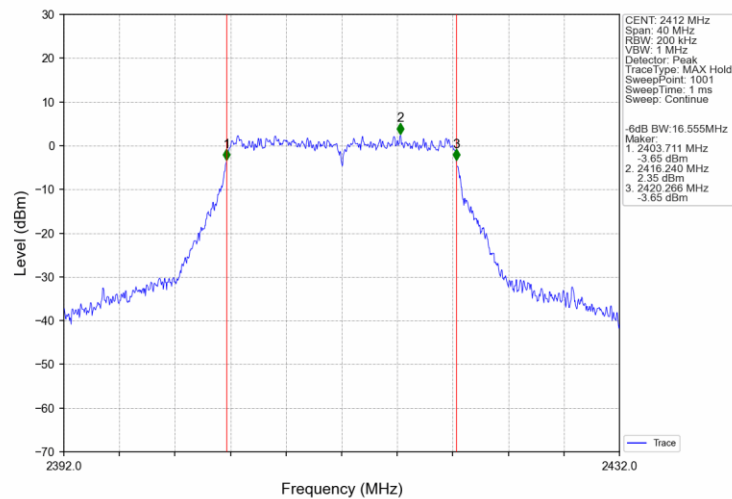
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



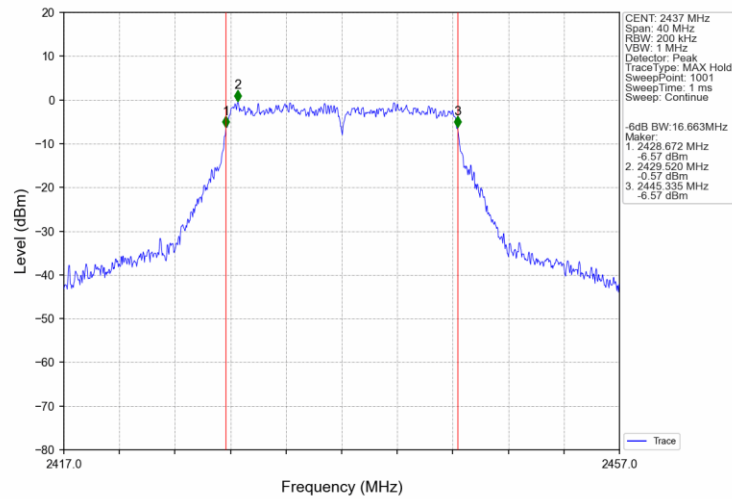
802.11b HCH 2462MHz_Ant1 (SISO) NTN



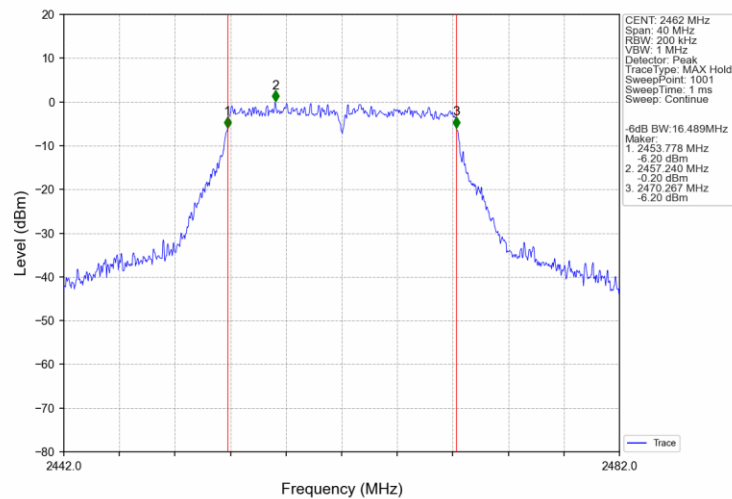
802.11g LCH 2412MHz_Ant1 (SISO) NTN



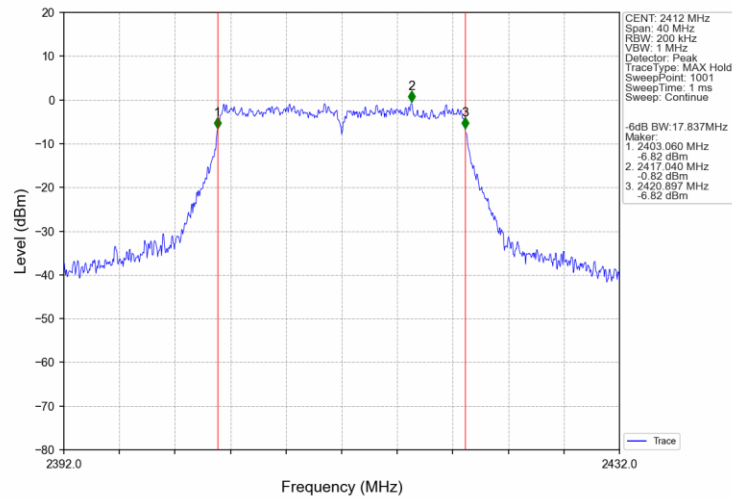
802.11g MCH 2437MHz Ant1 (SISO) NTNv



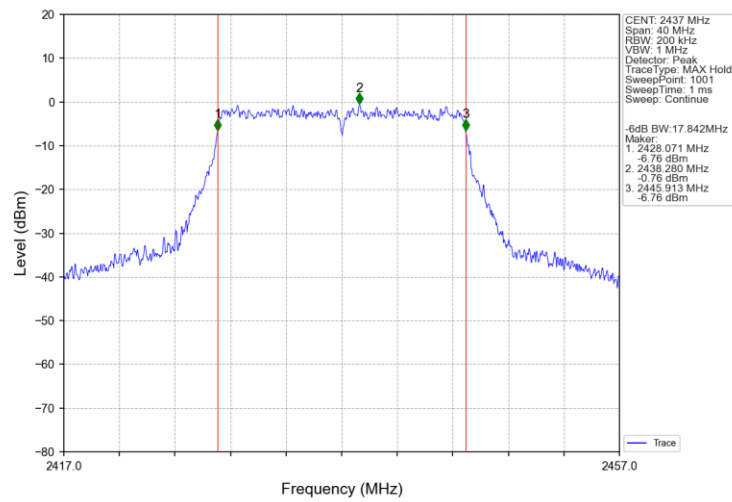
802.11g HCH 2462MHz Ant1 (SISO) NTNv



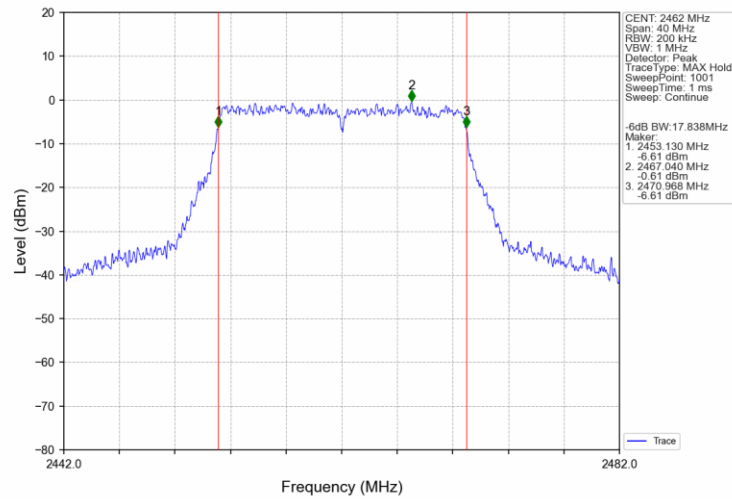
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTV



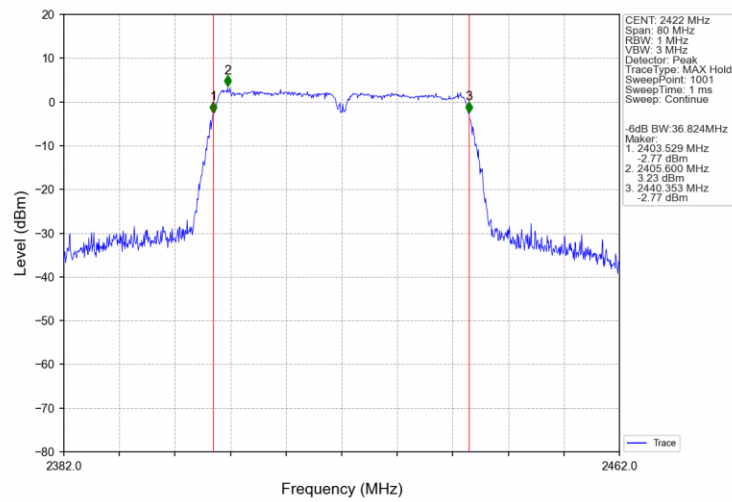
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTV



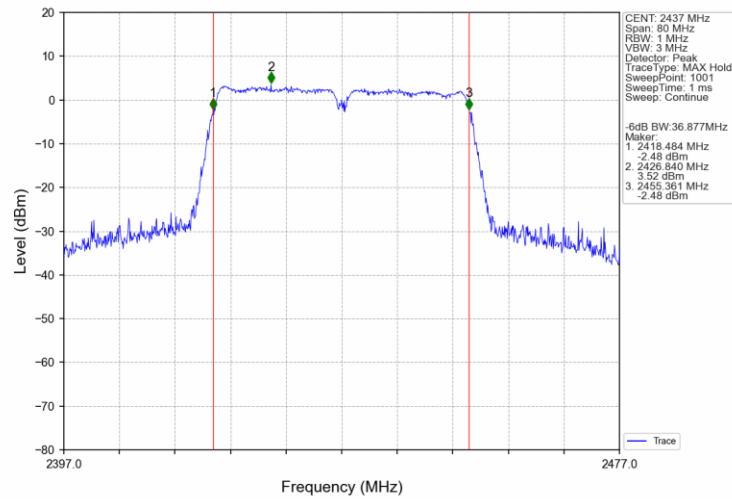
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTV



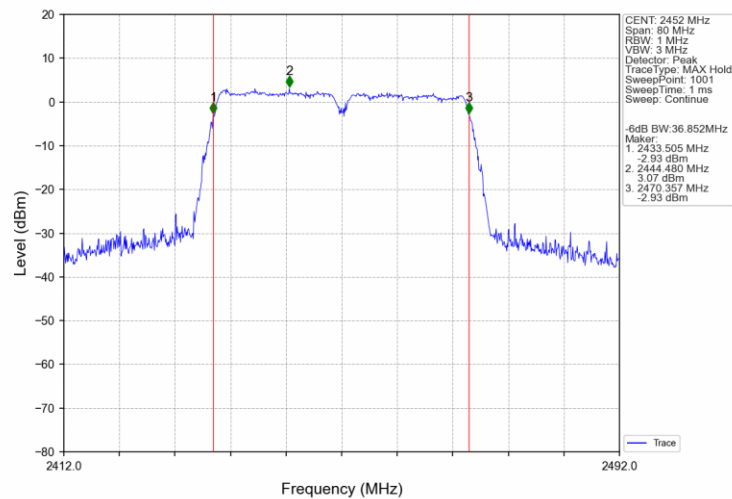
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNV



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTNV



3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	16.16	<=30	Pass
		2437	16.21	<=30	Pass
		2462	16.12	<=30	Pass
802.11g	SISO	2412	17.07	<=30	Pass
		2437	17.21	<=30	Pass
		2462	17.37	<=30	Pass
802.11n (HT20)	SISO	2412	17.26	<=30	Pass
		2437	17.35	<=30	Pass
		2462	17.49	<=30	Pass
802.11n (HT40)	SISO	2422	16.80	<=30	Pass
		2437	17.23	<=30	Pass
		2452	16.72	<=30	Pass
Note1: Antenna Gain: Ant1: -1.01dBi;					

4. Maximum Power Spectral Density

4.1 Test Result

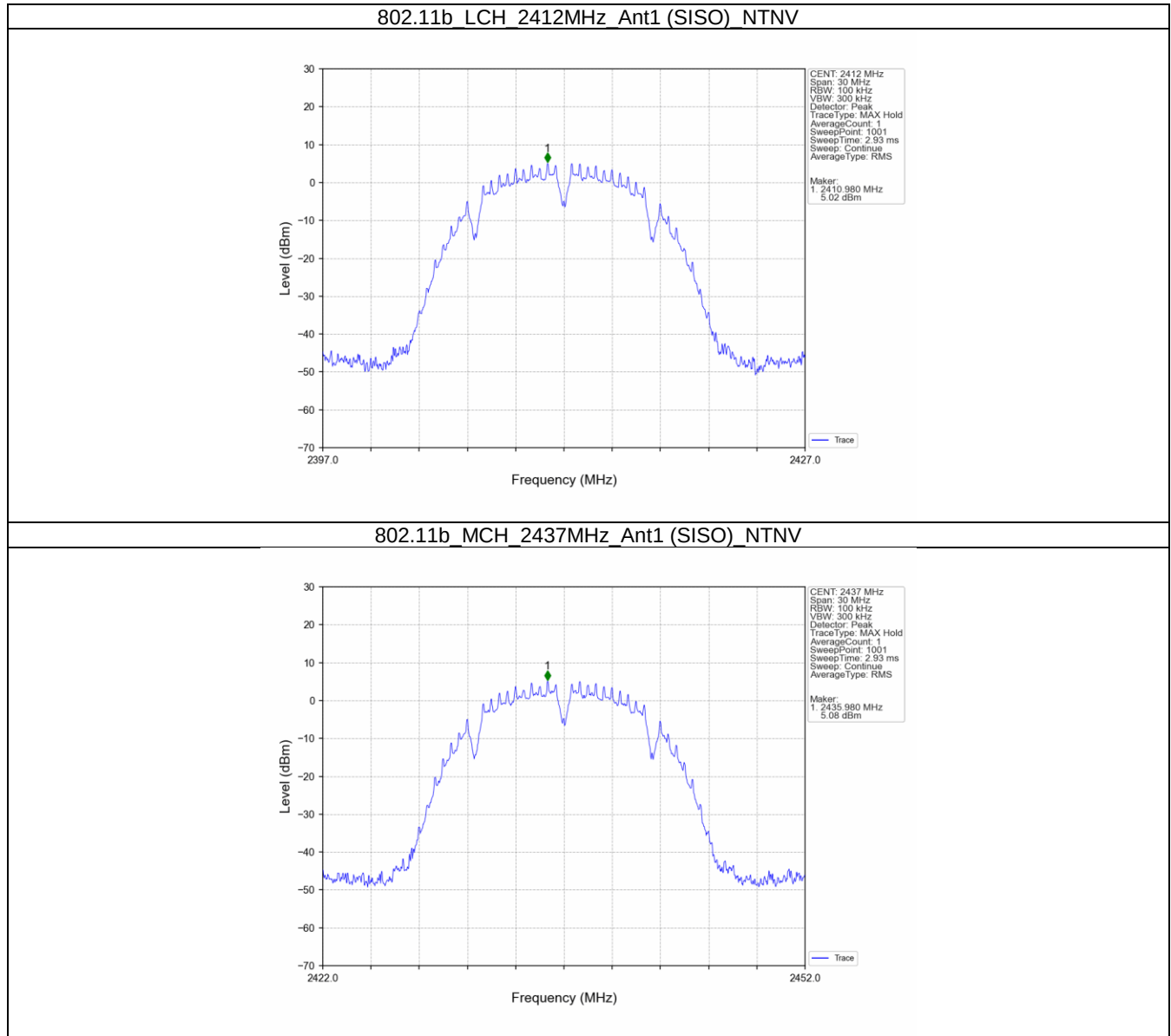
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	5.02	<=8	Pass
		2437	5.08	<=8	Pass
		2462	4.60	<=8	Pass
802.11g	SISO	2412	0.61	<=8	Pass
		2437	-1.79	<=8	Pass
		2462	-1.25	<=8	Pass
802.11n (HT20)	SISO	2412	-1.83	<=8	Pass
		2437	-2.48	<=8	Pass
		2462	-1.16	<=8	Pass
802.11n (HT40)	SISO	2422	-4.84	<=8	Pass
		2437	-3.92	<=8	Pass
		2452	-5.26	<=8	Pass

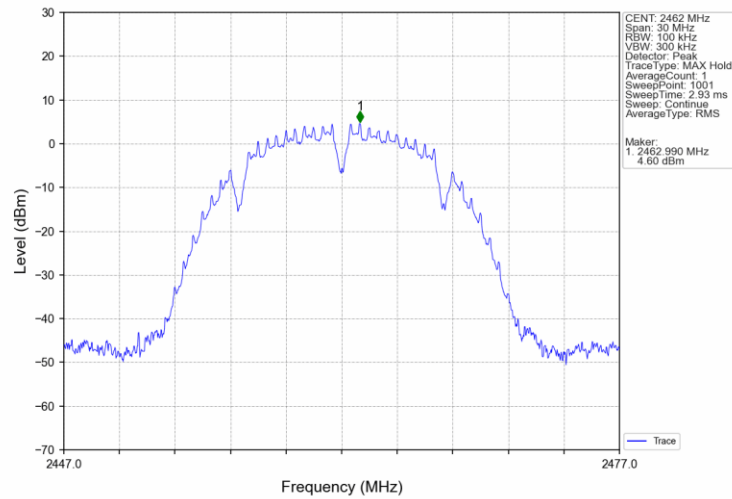
Note1: Antenna Gain: Ant1: -1.01dBi;

4.2 Test Graph

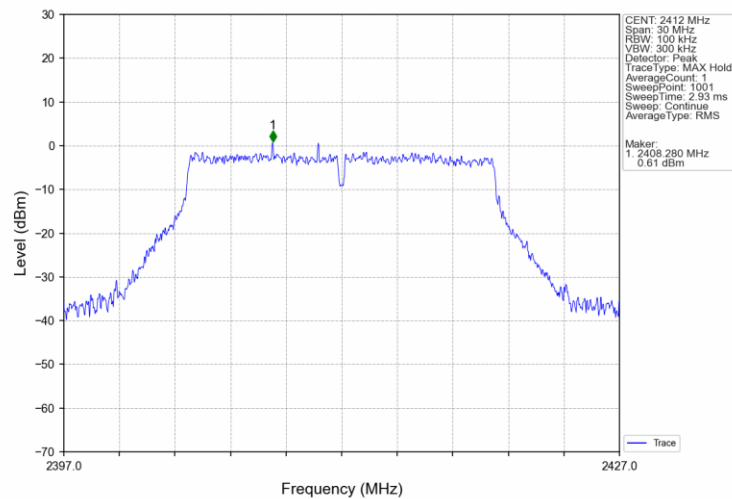
4.2.1 PSD



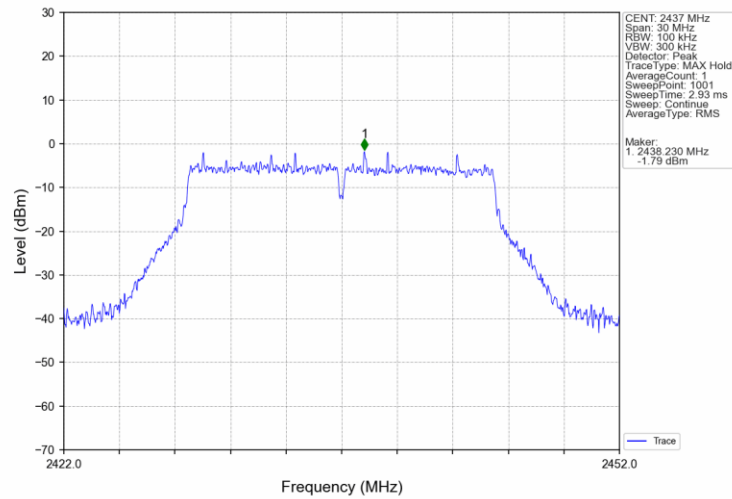
802.11b HCH 2462MHz_Ant1 (SISO)_NTNV



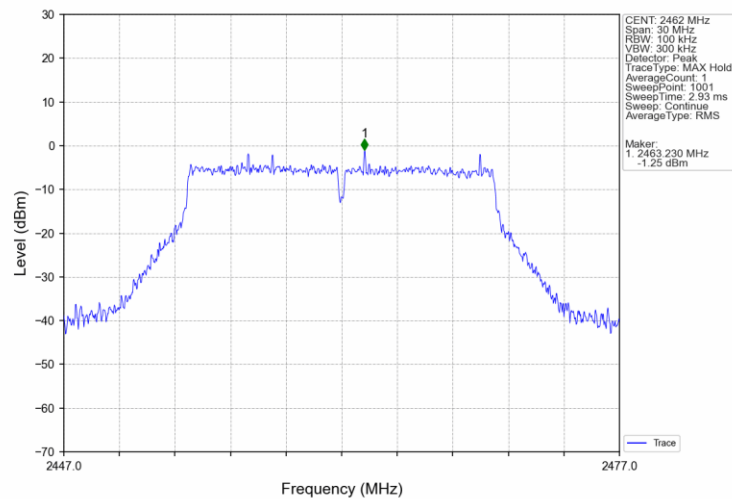
802.11g LCH 2412MHz_Ant1 (SISO)_NTNV



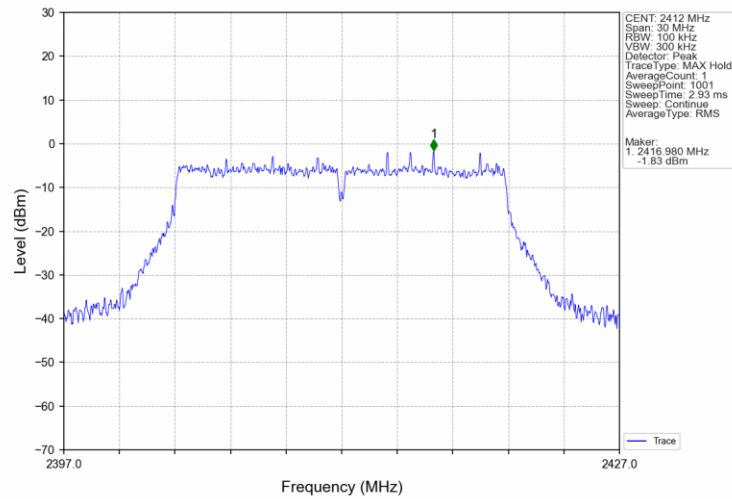
802.11g_MCH_2437MHz_Ant1 (SISO) NTN



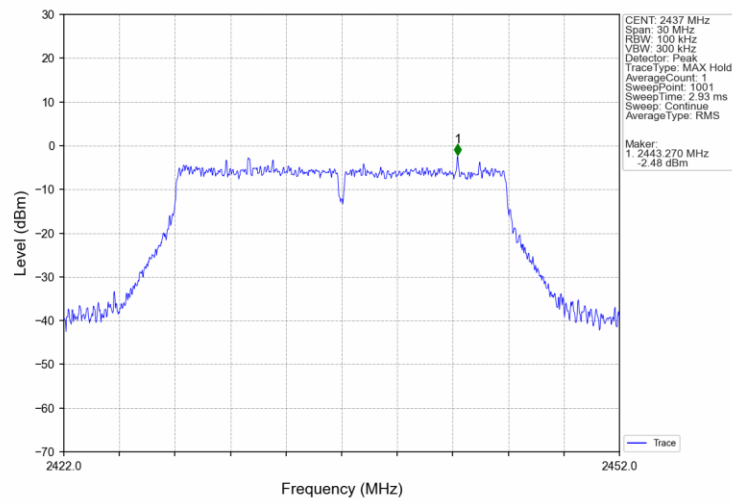
802.11g_HCH_2462MHz_Ant1 (SISO) NTN



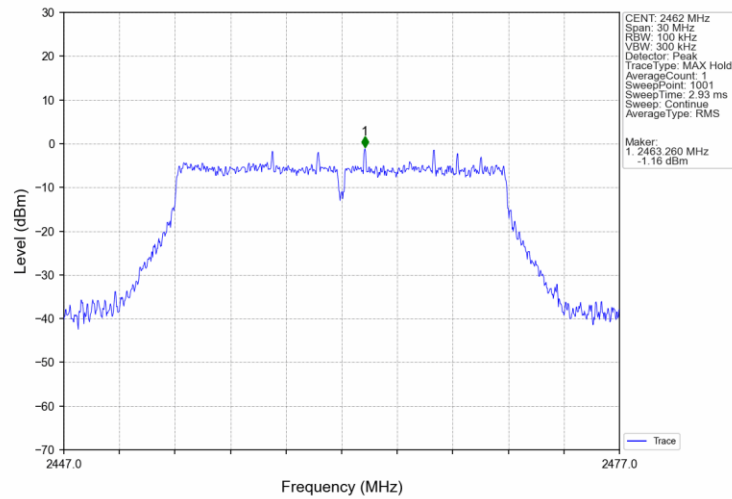
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



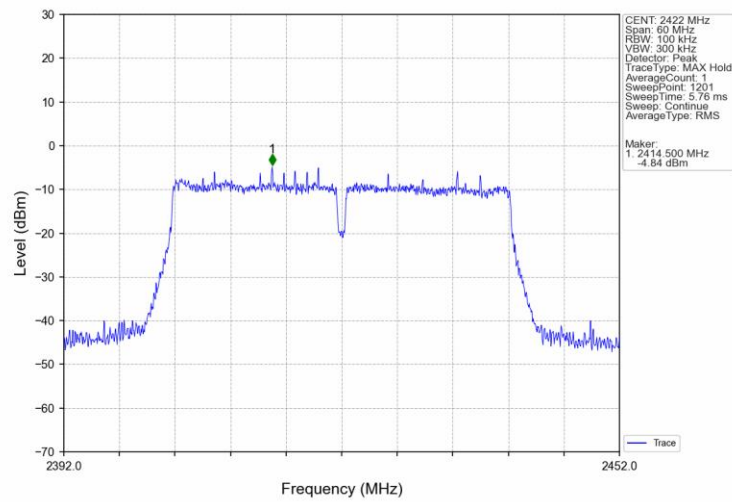
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



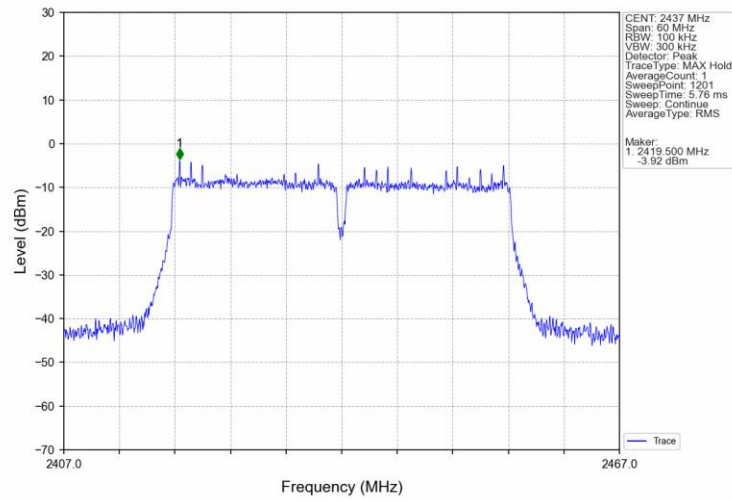
802.11n(HT20) HCH_2462MHz_Ant1 (SISO)_NTNV



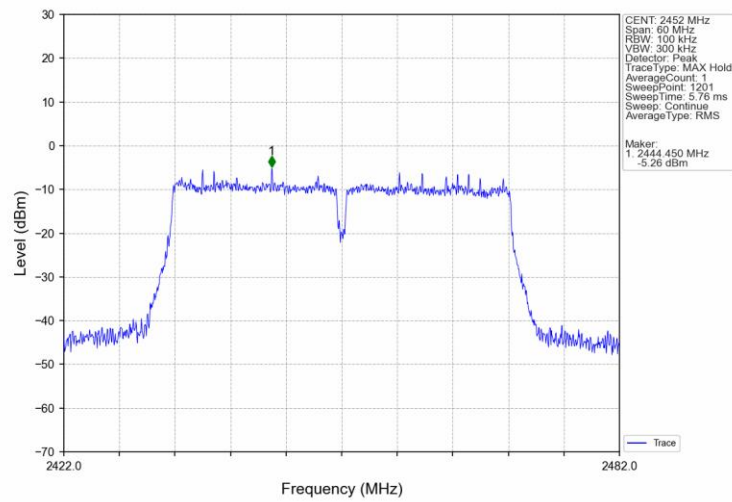
802.11n(HT40) LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNV



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

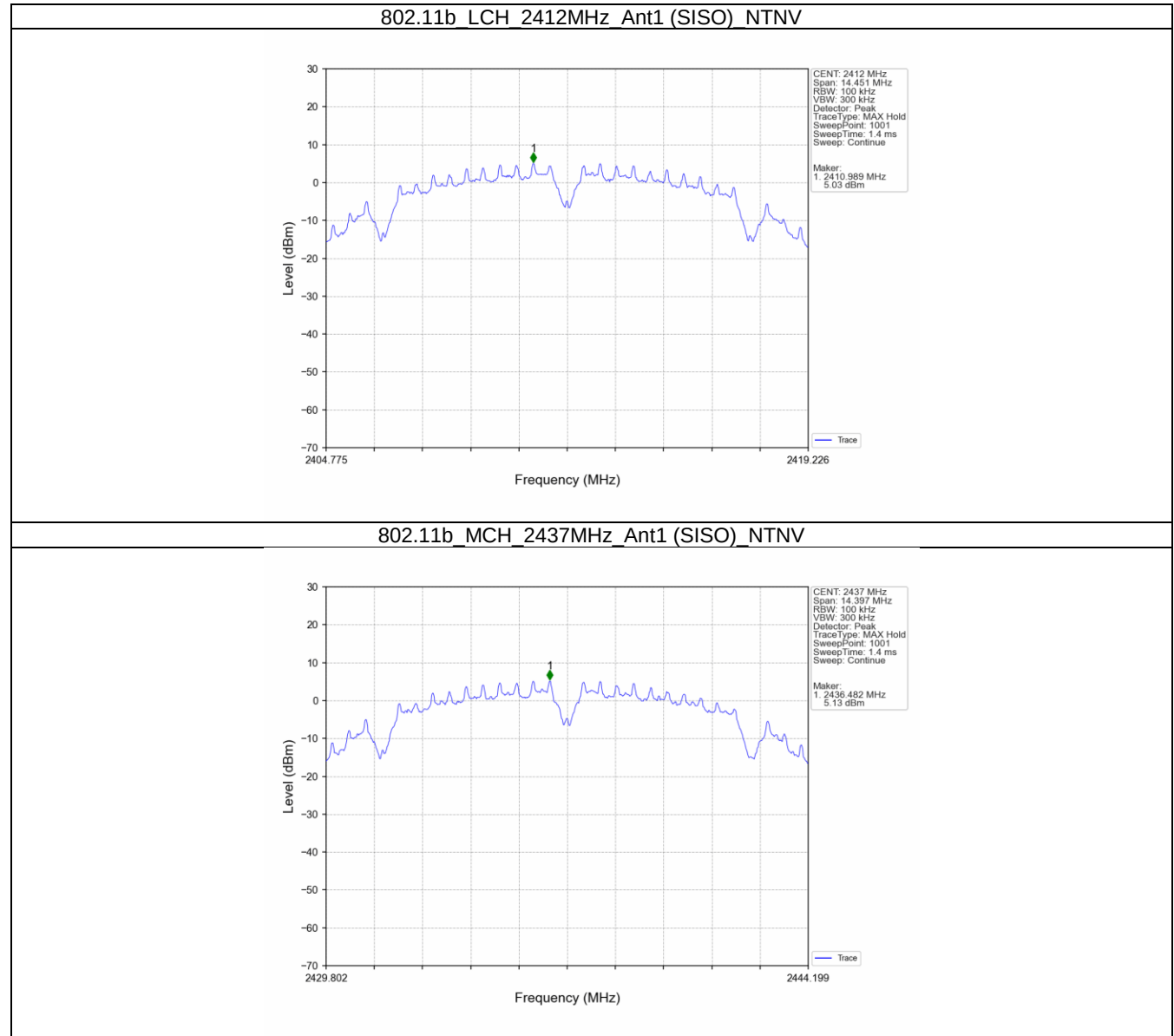
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	5.03
		2437	1	5.13
		2462	1	5.02
802.11g	SISO	2412	1	1.37
		2437	1	-1.41
		2462	1	-1.16
802.11n (HT20)	SISO	2412	1	-1.73
		2437	1	-2.58
		2462	1	-1.78
802.11n (HT40)	SISO	2422	1	-5.07
		2437	1	-4.79
		2452	1	-4.52

5.1.2 CSE

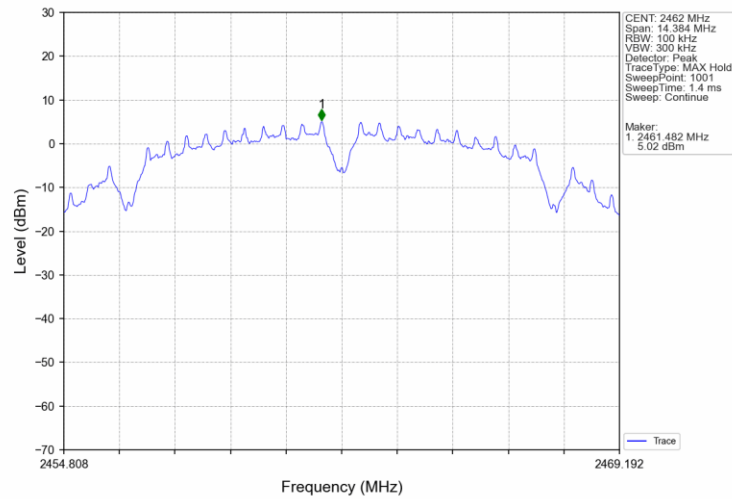
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	5.03	-14.97	Pass
		2437	1	5.13	-14.87	Pass
		2462	1	5.02	-14.98	Pass
802.11g	SISO	2412	1	1.37	-18.63	Pass
		2437	1	-1.41	-21.41	Pass
		2462	1	-1.16	-21.16	Pass
802.11n (HT20)	SISO	2412	1	-1.73	-21.73	Pass
		2437	1	-2.58	-22.58	Pass
		2462	1	-1.78	-21.78	Pass
802.11n (HT40)	SISO	2422	1	-5.07	-25.07	Pass
		2437	1	-4.79	-24.79	Pass
		2452	1	-4.52	-24.52	Pass

5.2 Test Graph

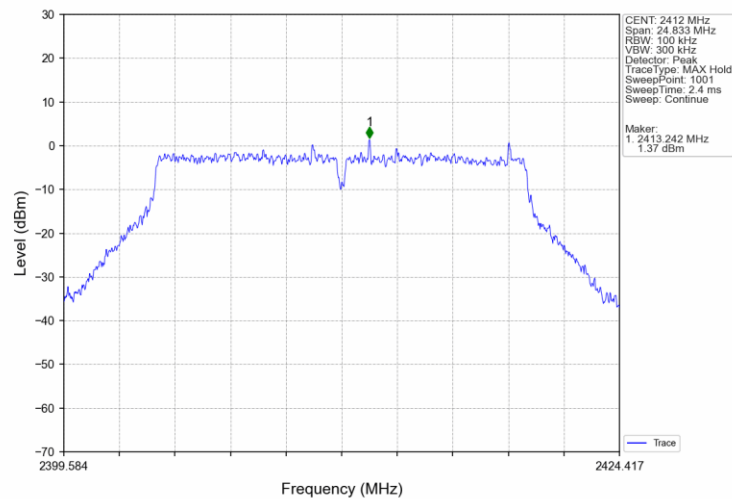
5.2.1 Ref



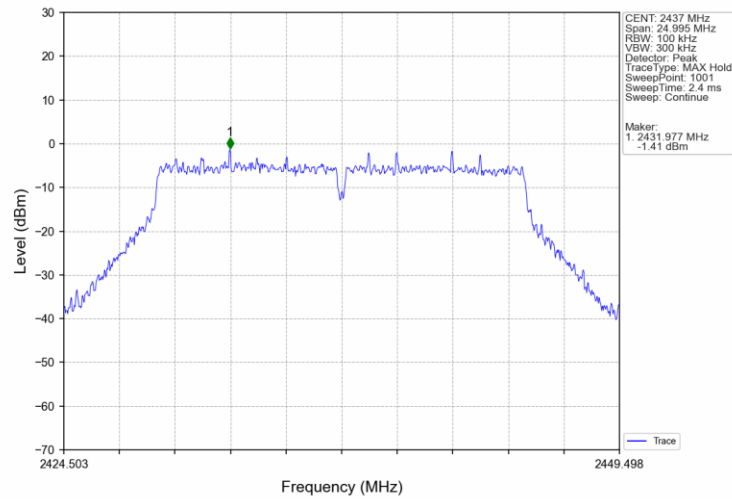
802.11b HCH 2462MHz_Ant1 (SISO) NTN



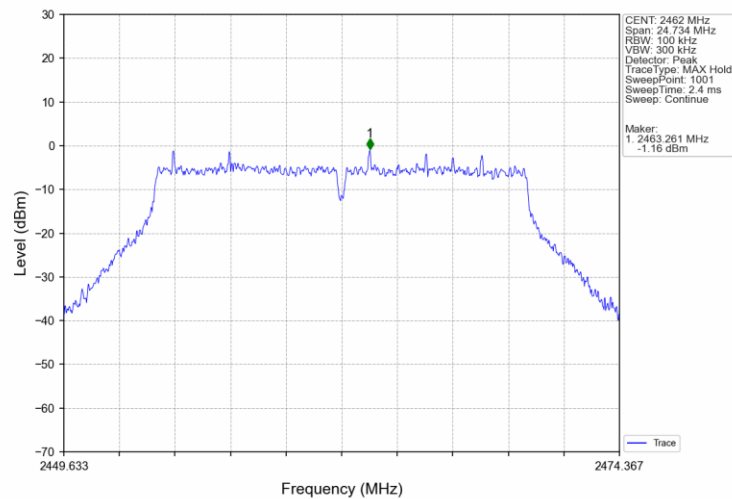
802.11g LCH 2412MHz_Ant1 (SISO) NTN



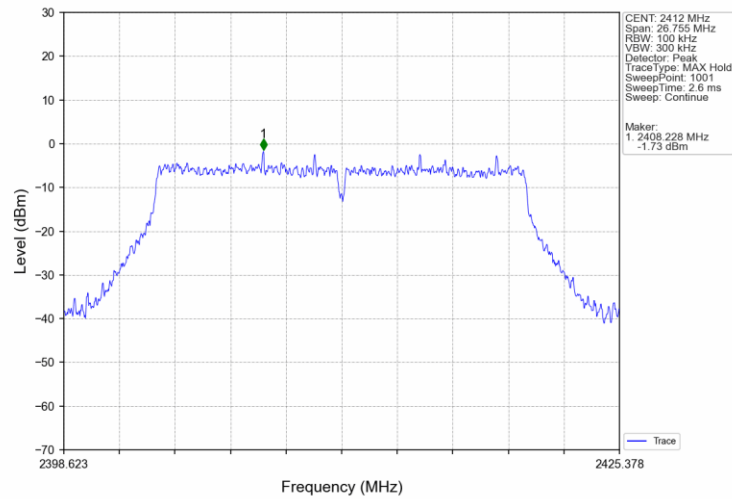
802.11g MCH 2437MHz_Ant1 (SISO) NTNv



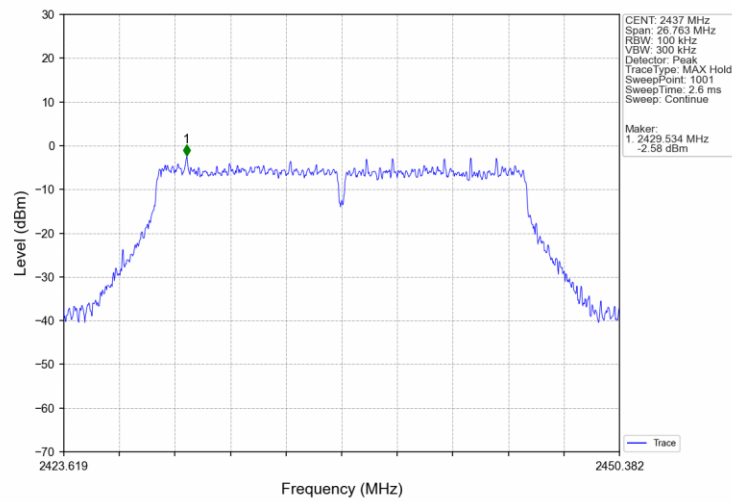
802.11g HCH 2462MHz_Ant1 (SISO) NTNv



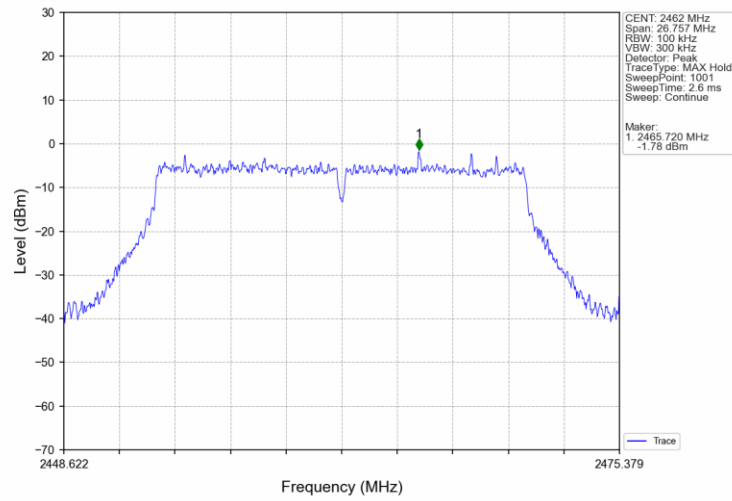
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



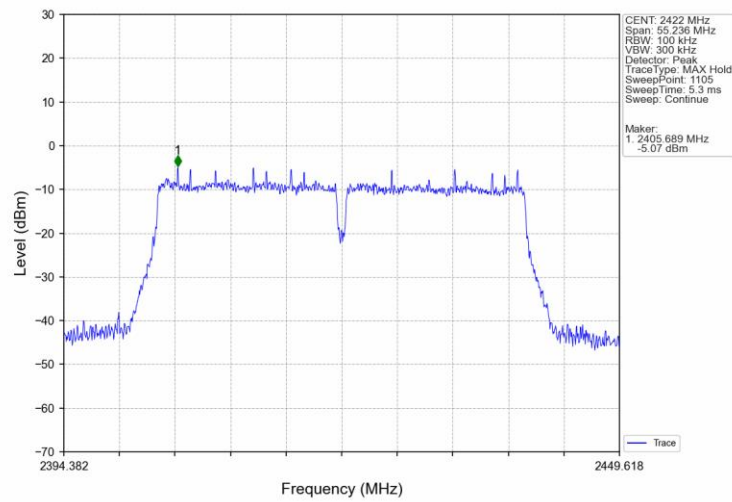
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



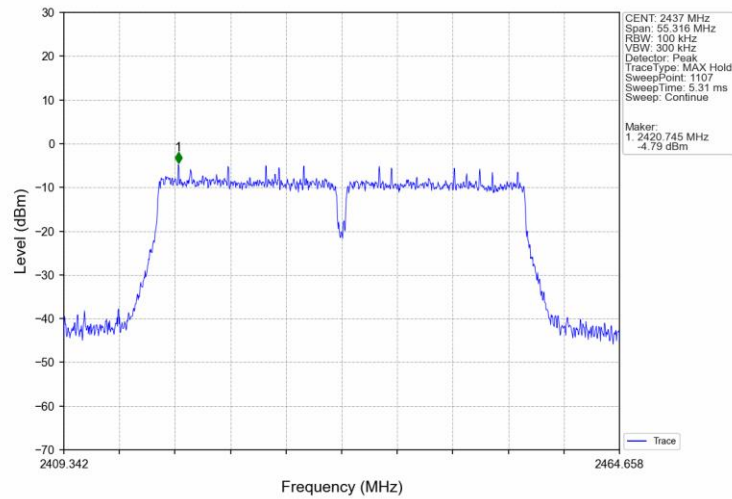
802.11n(HT20) HCH_2462MHz_Ant1 (SISO) NTNV



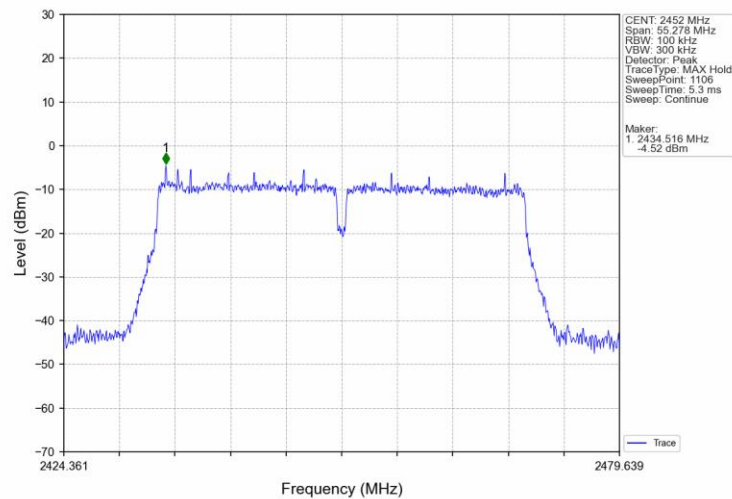
802.11n(HT40) LCH_2422MHz_Ant1 (SISO) NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNV

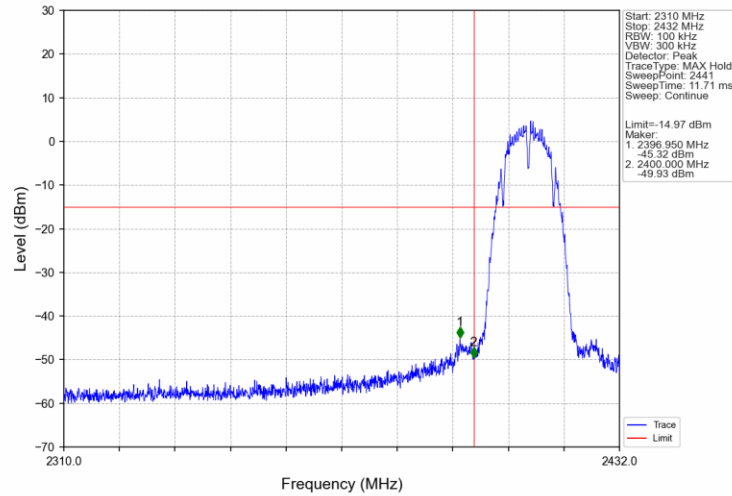


802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTNV

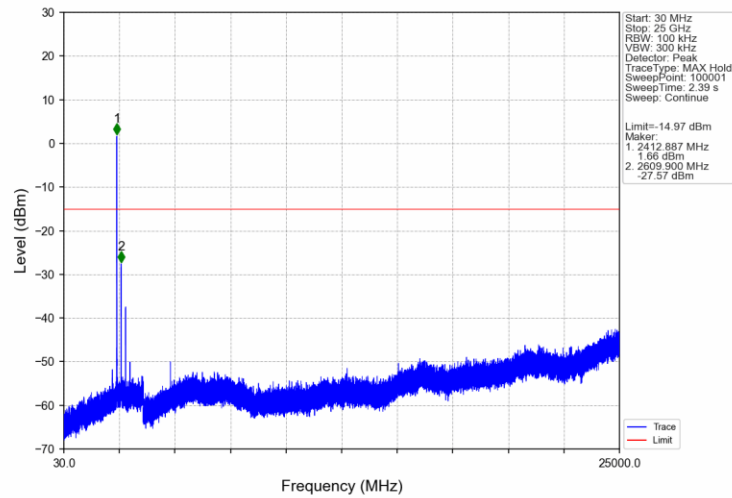


5.2.2 CSE

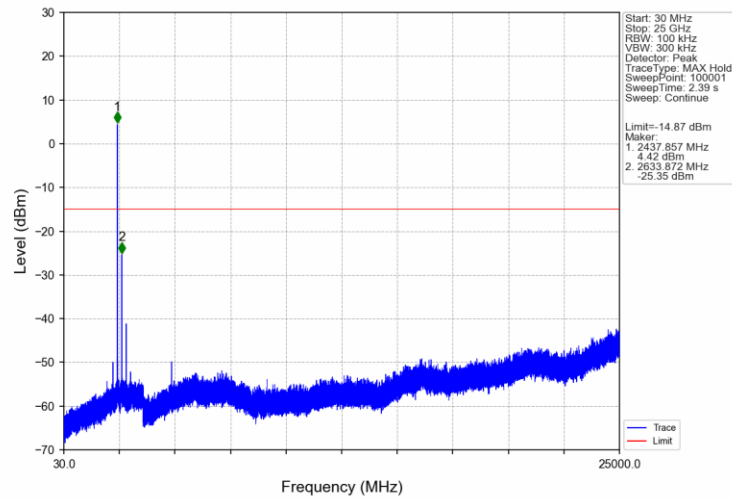
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11b MCH 2437MHz_Ant1 (SISO) NTN



802.11b_HCH_2462MHz_Ant1 (SISO) NTN

