

Appendix RF test data for WIFI2.4G



1. Duty Cycle

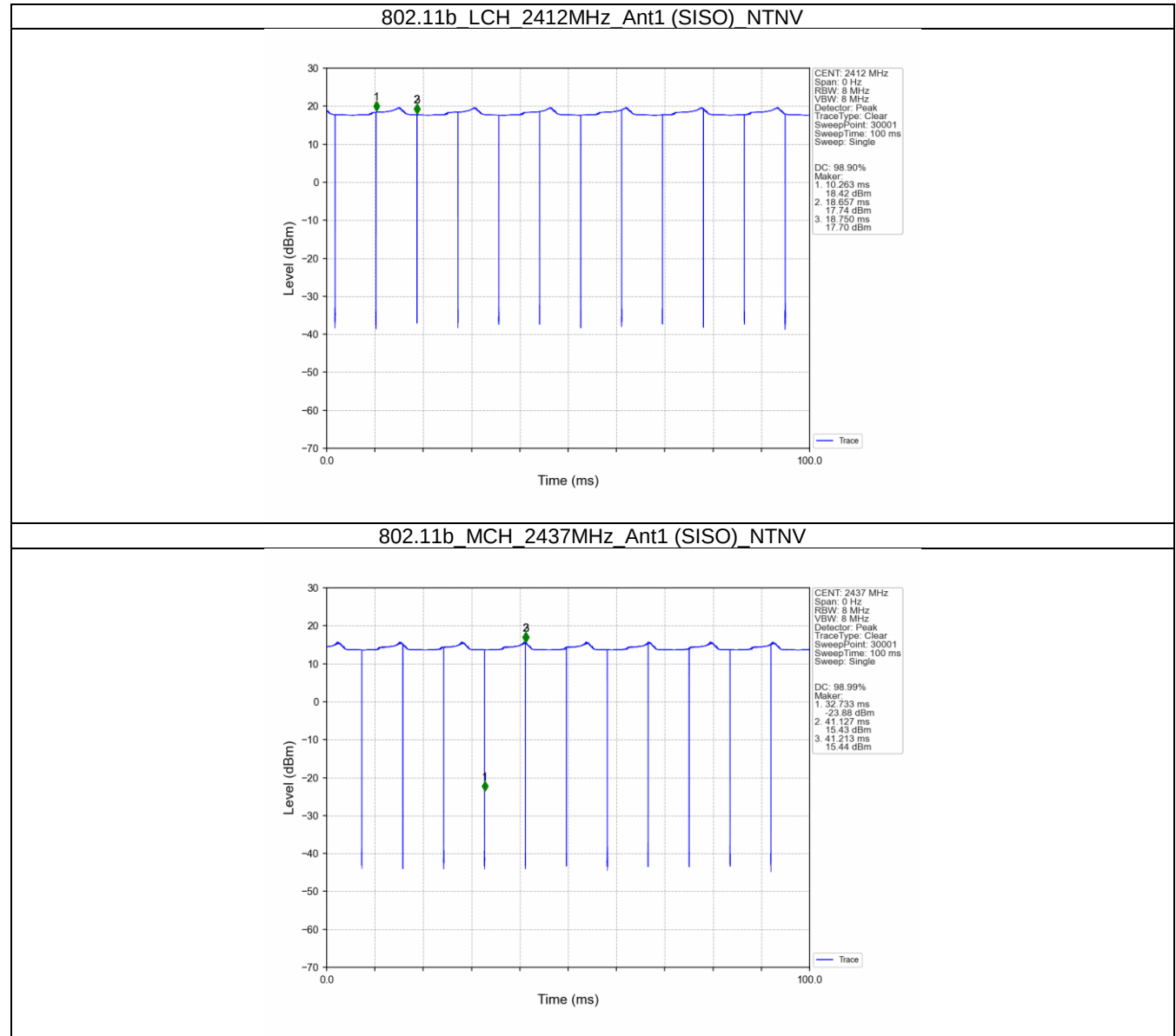
1.1 Test Result

1.1.1 Ant1

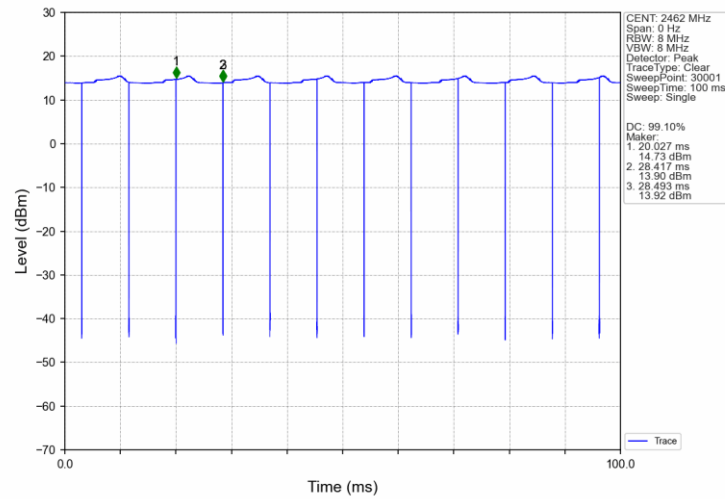
Ant1							
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	8.394	8.487	98.90	0.05	0.23
		2437	8.394	8.480	98.99	0.04	0.16
		2462	8.390	8.466	99.10	0.04	0.04
802.11g	SISO	2412	1.392	1.491	93.36	0.30	1.69
		2437	1.393	1.474	94.50	0.25	0.03
		2462	1.392	1.490	93.42	0.30	1.11
802.11n (HT20)	SISO	2412	1.178	1.258	93.64	0.29	0.04
		2437	1.178	1.259	93.57	0.29	0.03
		2462	1.178	1.276	92.32	0.35	1.34
802.11n (HT40)	SISO	2422	0.587	0.666	88.14	0.55	0.00
		2437	0.588	0.685	85.84	0.66	2.31
		2452	0.587	0.685	85.69	0.67	2.31

1.2 Test Graph

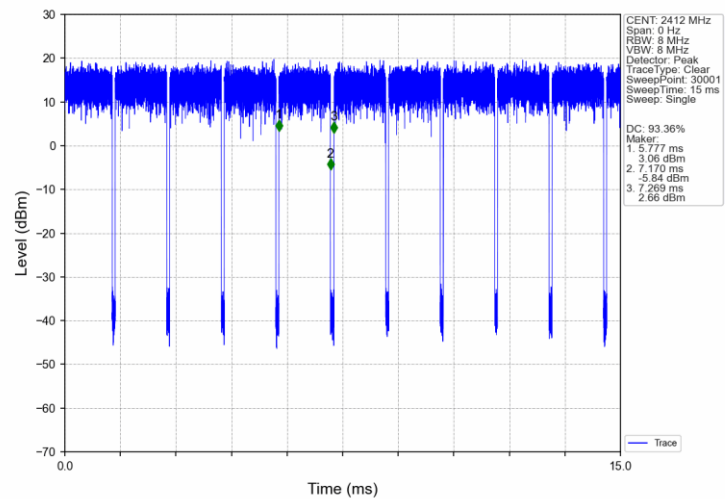
1.2.1 Ant1



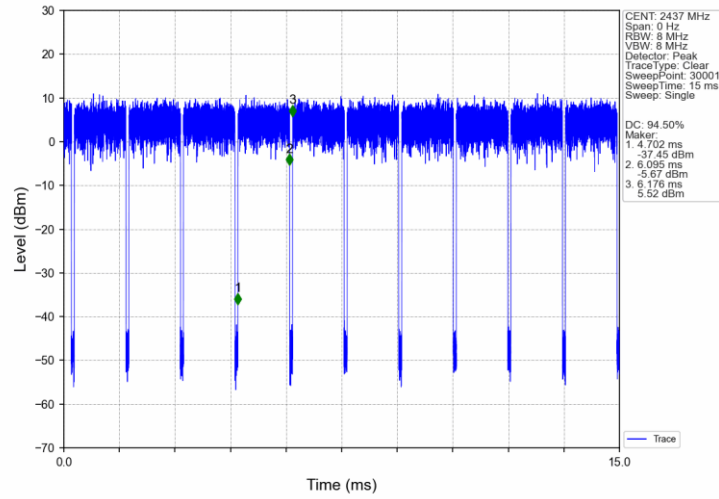
802.11b HCH 2462MHz Ant1 (SISO) NTNV



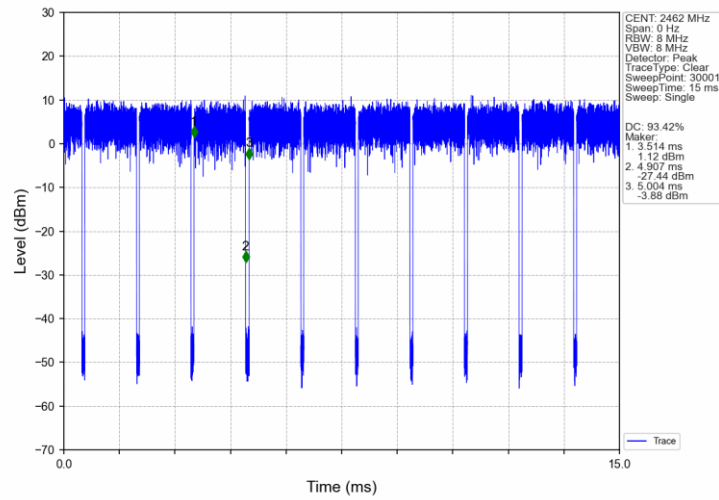
802.11g LCH 2412MHz Ant1 (SISO) NTNV



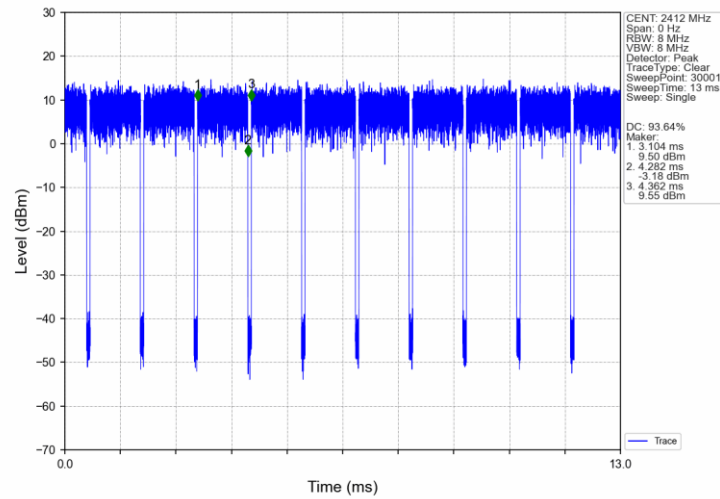
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



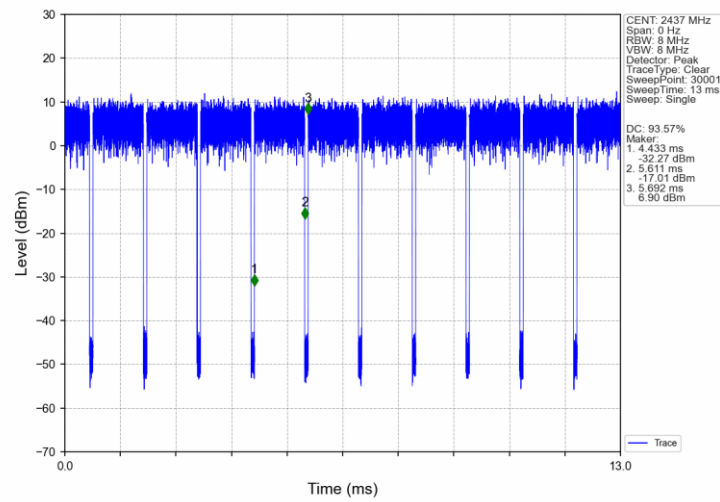
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



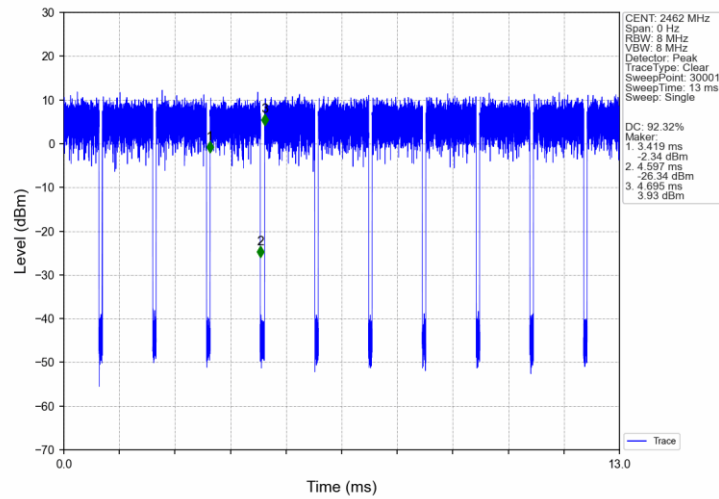
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



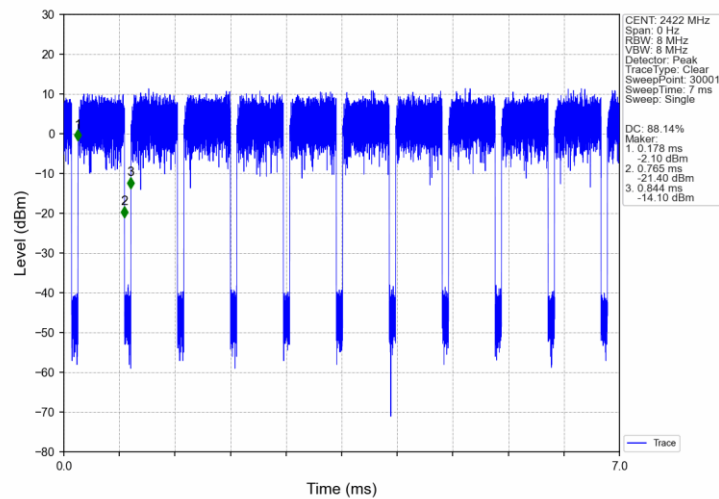
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



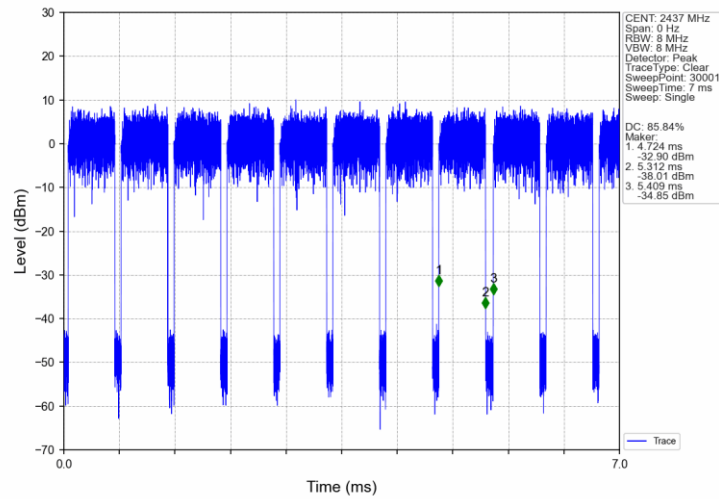
802.11n(HT20) HCH_2462MHz_Ant1 (SISO)_NTNV



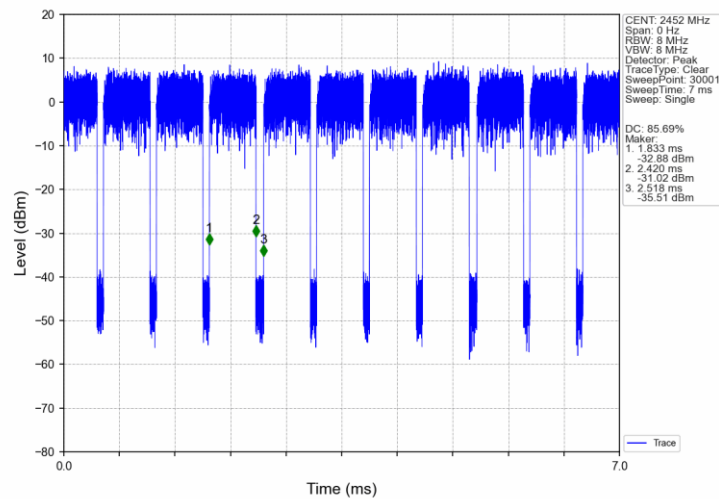
802.11n(HT40) LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNv



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTNv



2. Bandwidth

2.1 Test Result

2.1.1 OBW

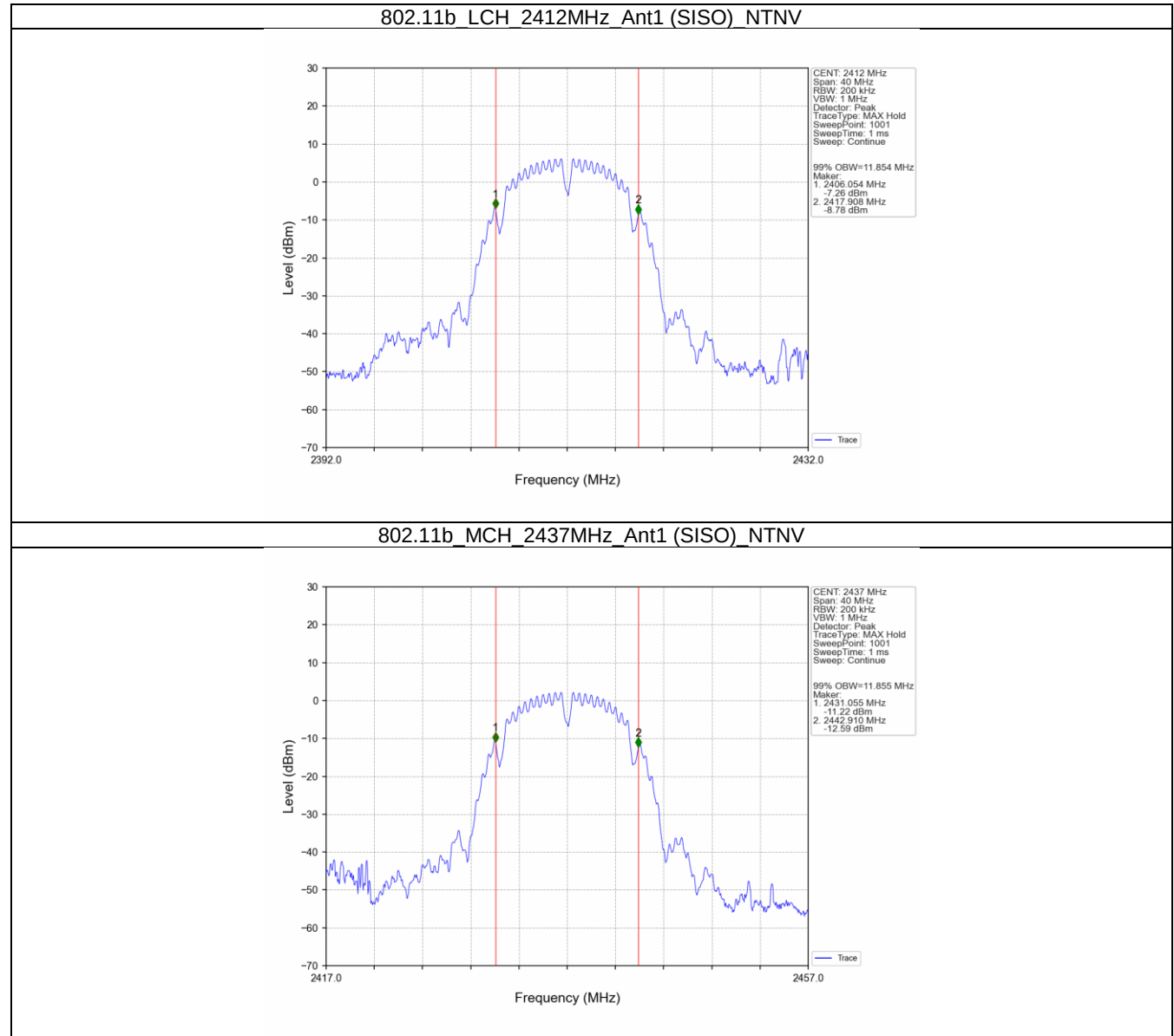
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	11.854	/	Pass
		2437	1	11.855	/	Pass
		2462	1	11.817	/	Pass
802.11g	SISO	2412	1	16.494	/	Pass
		2437	1	16.579	/	Pass
		2462	1	16.569	/	Pass
802.11n (HT20)	SISO	2412	1	17.621	/	Pass
		2437	1	17.613	/	Pass
		2462	1	17.623	/	Pass
802.11n (HT40)	SISO	2422	1	36.445	/	Pass
		2437	1	36.421	/	Pass
		2452	1	36.300	/	Pass

2.1.2 6dB BW

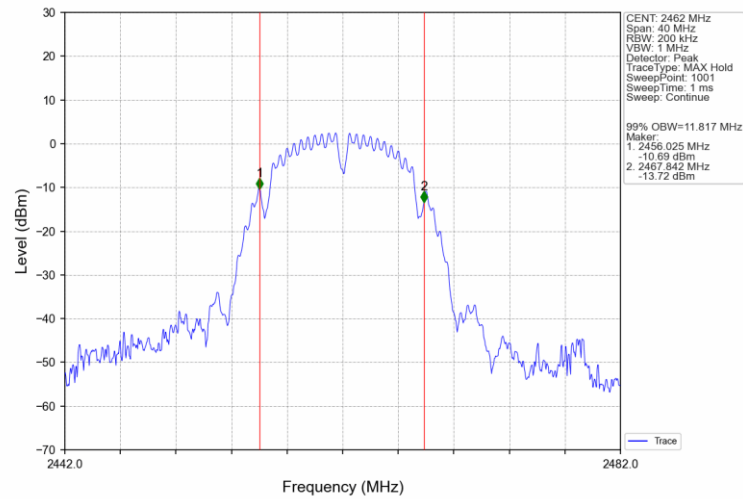
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.151	≥ 0.5	Pass
		2437	1	9.161	≥ 0.5	Pass
		2462	1	9.151	≥ 0.5	Pass
802.11g	SISO	2412	1	16.396	≥ 0.5	Pass
		2437	1	16.433	≥ 0.5	Pass
		2462	1	16.438	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.552	≥ 0.5	Pass
		2437	1	17.476	≥ 0.5	Pass
		2462	1	17.554	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	36.050	≥ 0.5	Pass
		2437	1	36.081	≥ 0.5	Pass
		2452	1	36.013	≥ 0.5	Pass

2.2 Test Graph

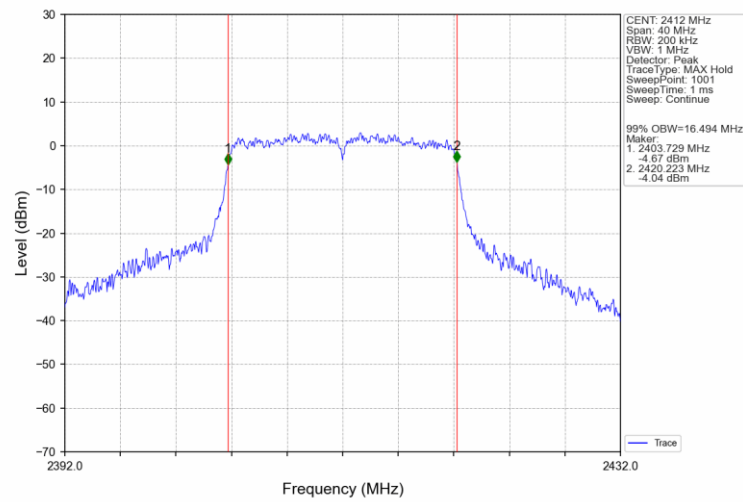
2.2.1 OBW



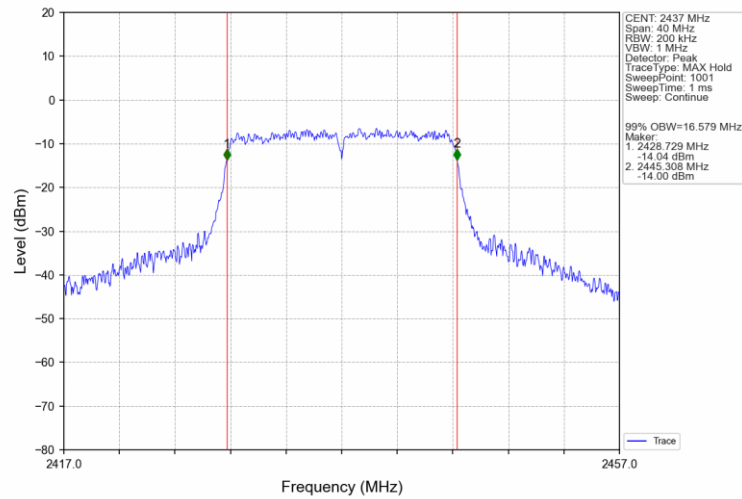
802.11b HCH 2462MHz_Ant1 (SISO) NTN



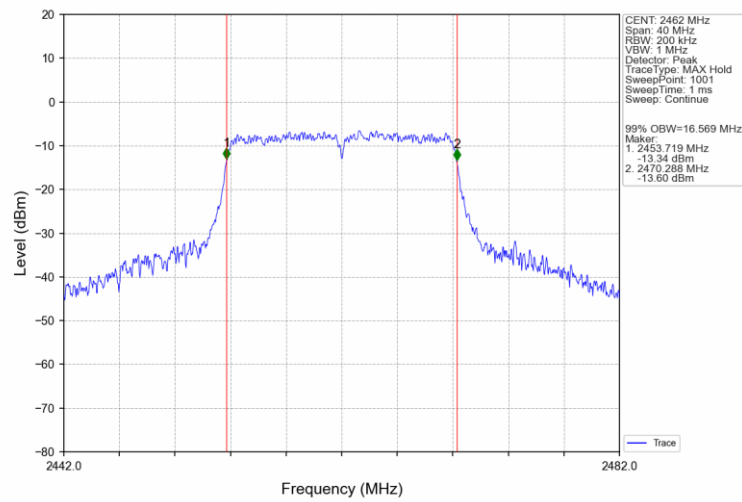
802.11g LCH 2412MHz_Ant1 (SISO) NTN



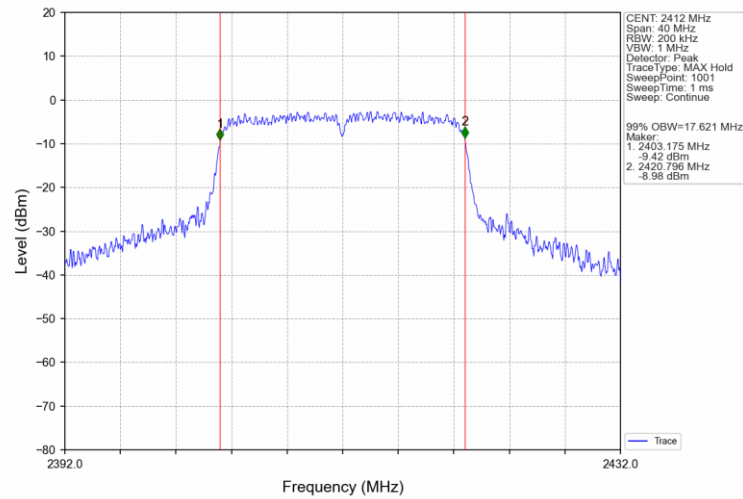
802.11g MCH 2437MHz_Ant1 (SISO) NTNv



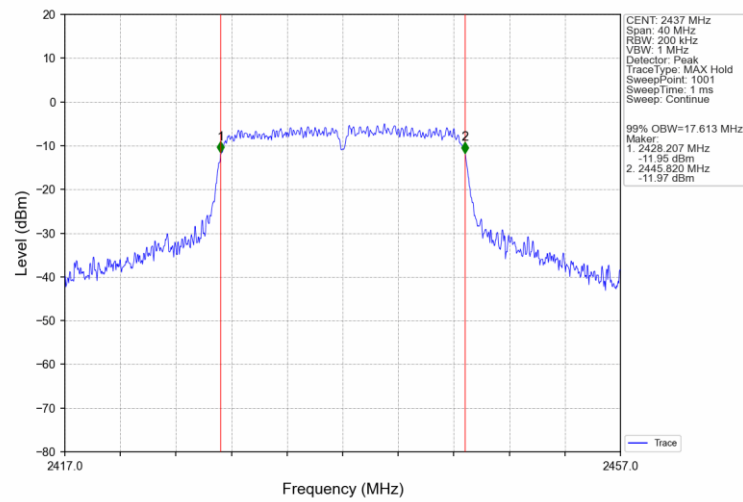
802.11g HCH 2462MHz_Ant1 (SISO) NTNv



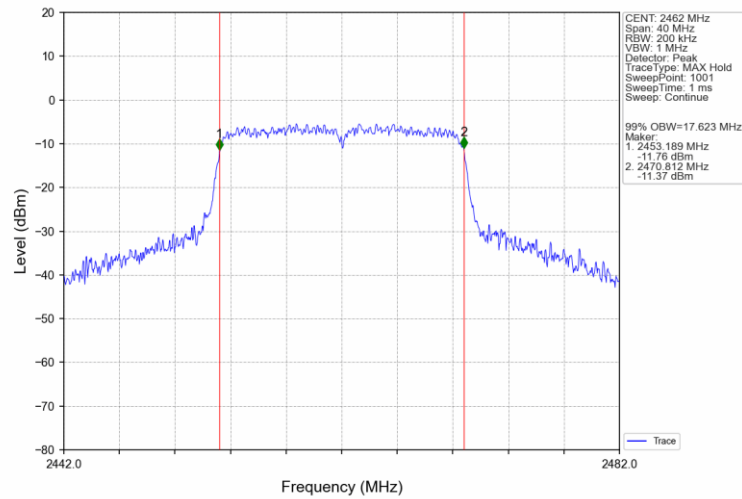
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



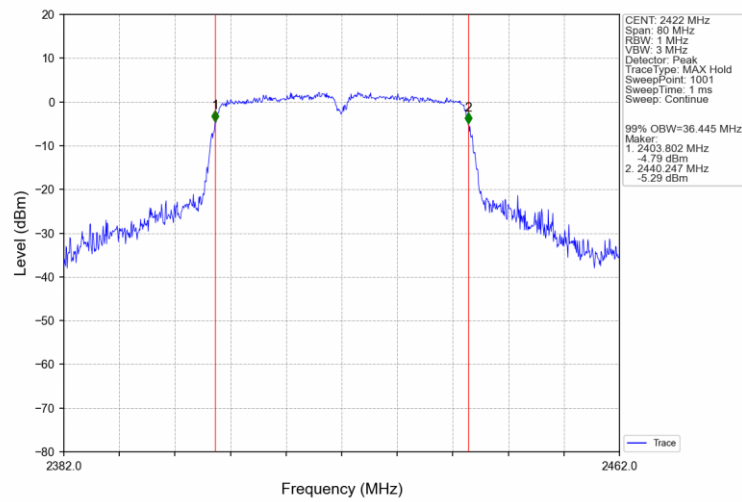
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



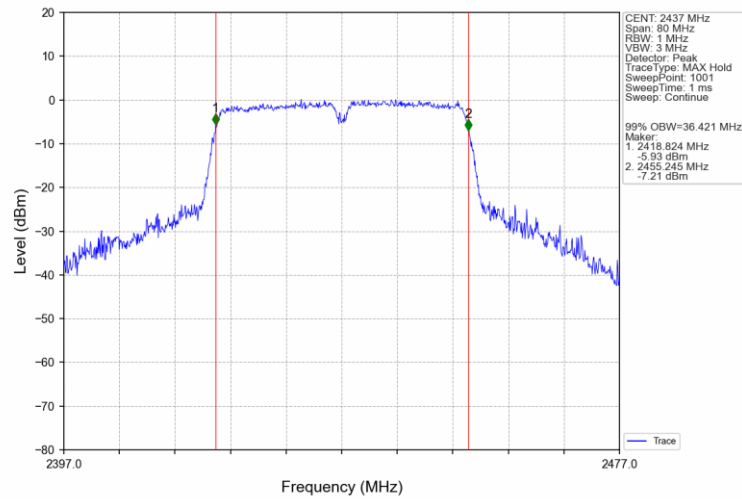
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



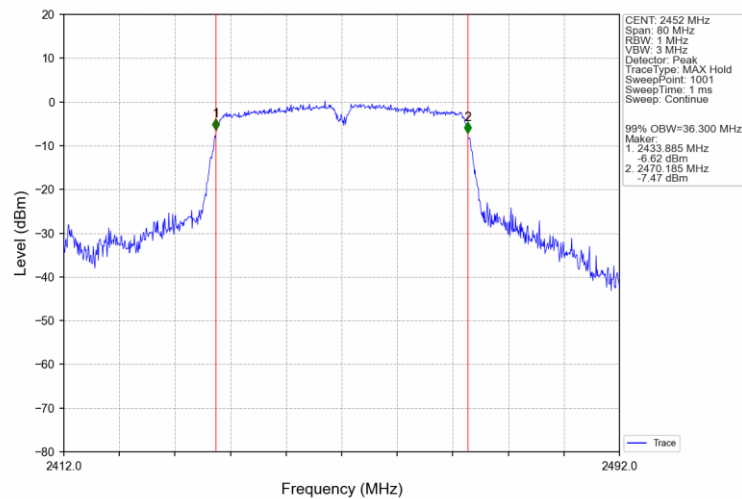
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNv

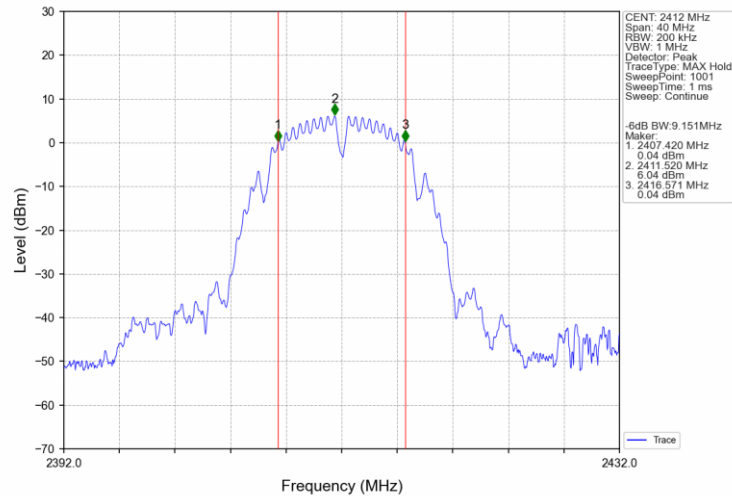


802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTNv

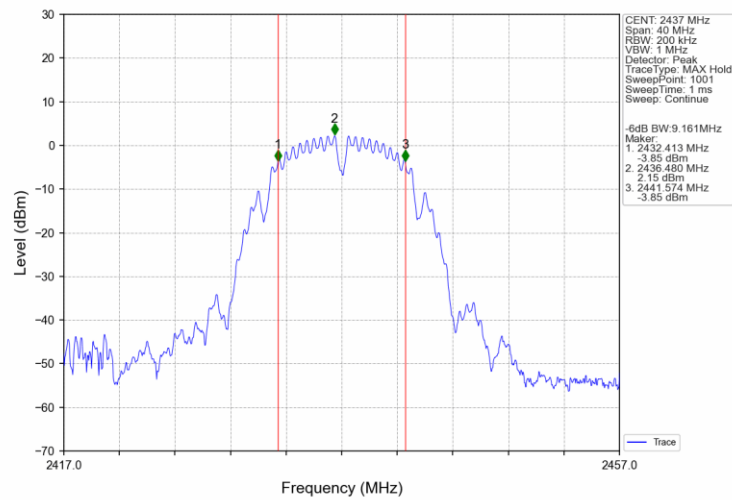


2.2.2 6dB BW

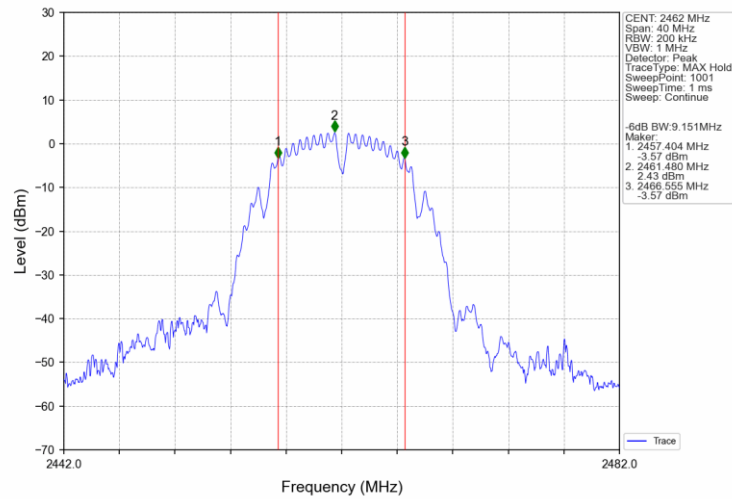
802.11b LCH 2412MHz Ant1 (SISO) NTN



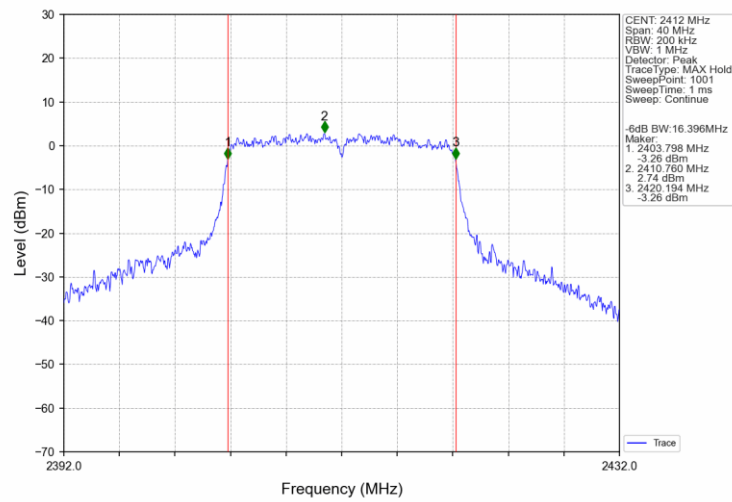
802.11b MCH 2437MHz Ant1 (SISO) NTN



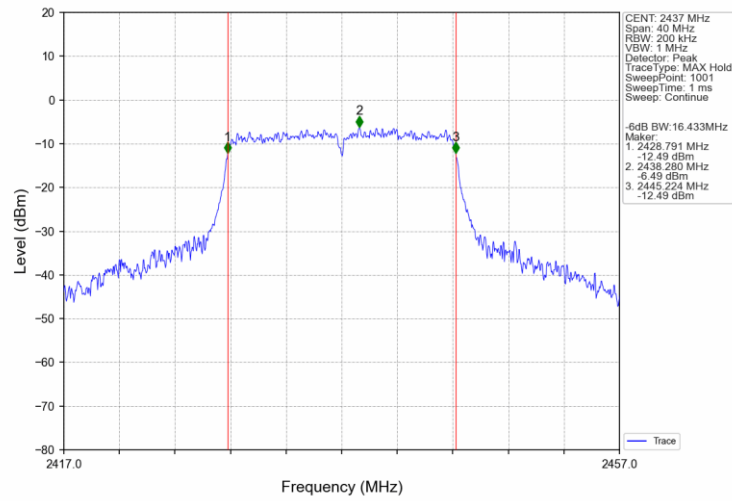
802.11b HCH 2462MHz_Ant1 (SISO) NTNv



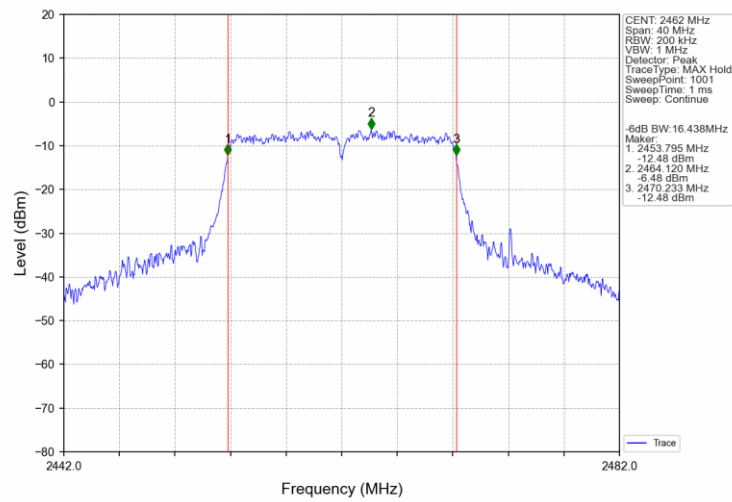
802.11g LCH 2412MHz_Ant1 (SISO) NTNv



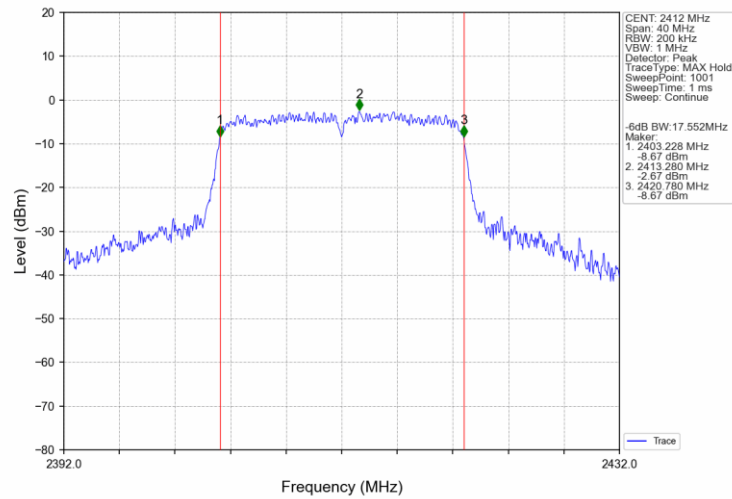
802.11g MCH 2437MHz_Ant1 (SISO) NTNv



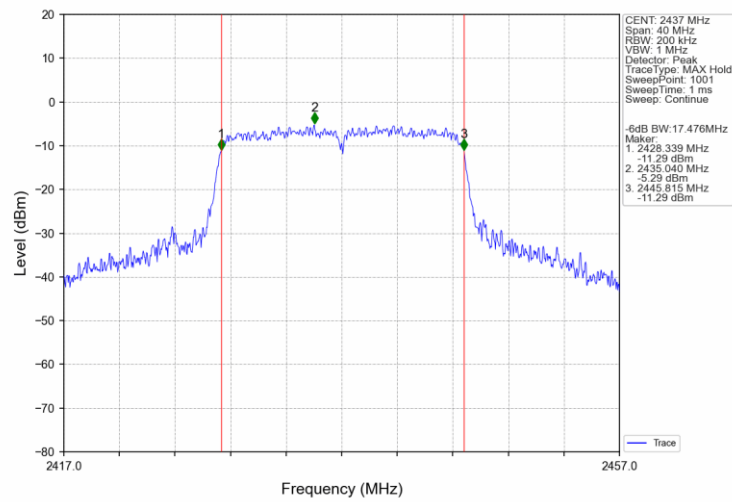
802.11g HCH 2462MHz_Ant1 (SISO) NTNv



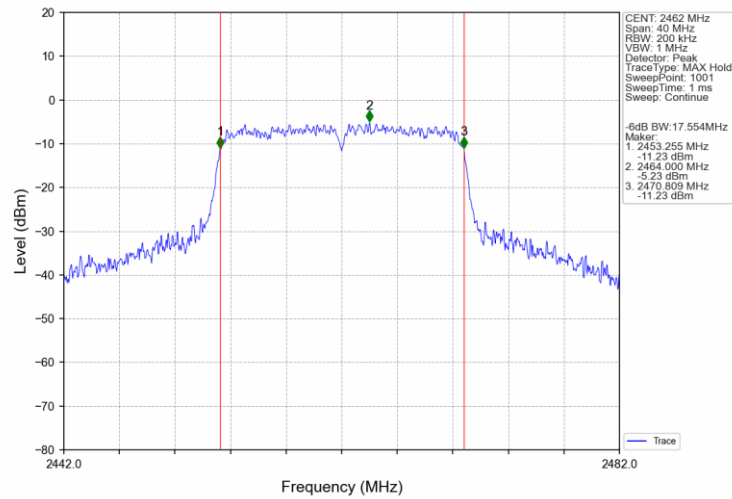
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTN



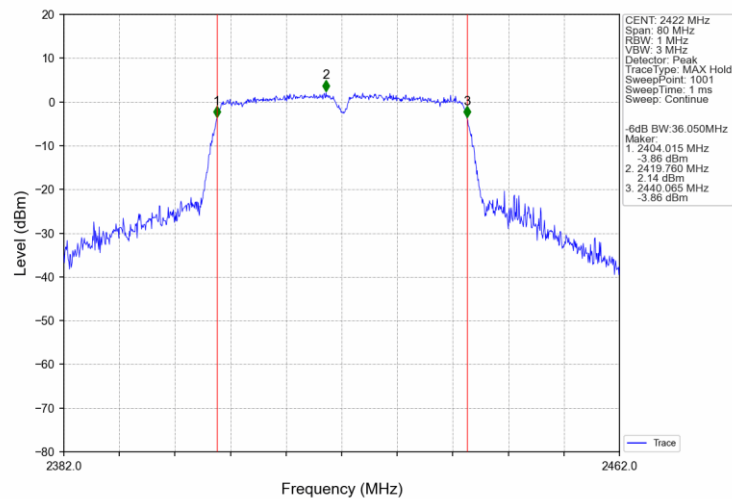
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTN



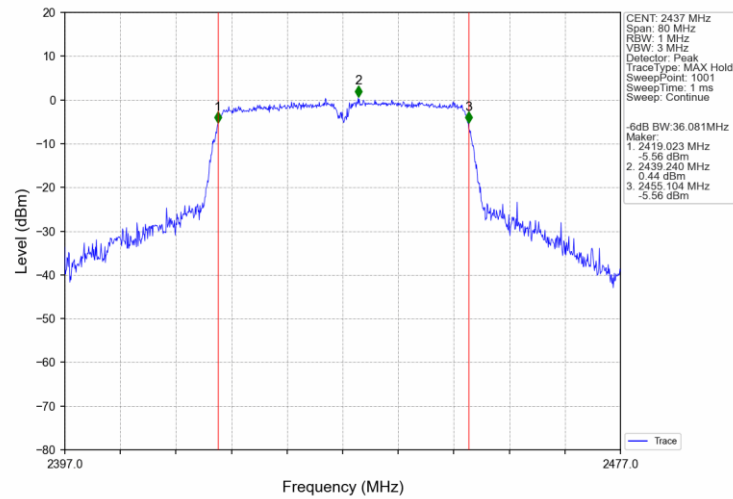
802.11n(HT20) HCH_2462MHz_Ant1 (SISO) NTN



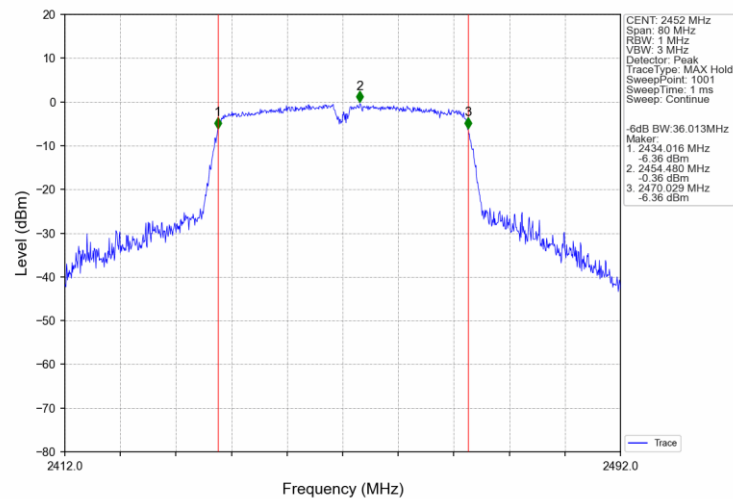
802.11n(HT40) LCH_2422MHz_Ant1 (SISO) NTN



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



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	16.83	<=30	Pass
		2437	12.98	<=30	Pass
		2462	13.22	<=30	Pass
802.11g	SISO	2412	14.03	<=30	Pass
		2437	11.40	<=30	Pass
		2462	11.37	<=30	Pass
802.11n (HT20)	SISO	2412	15.93	<=30	Pass
		2437	13.10	<=30	Pass
		2462	12.98	<=30	Pass
802.11n (HT40)	SISO	2422	15.74	<=30	Pass
		2437	13.69	<=30	Pass
		2452	13.22	<=30	Pass

4. Maximum Power Spectral Density

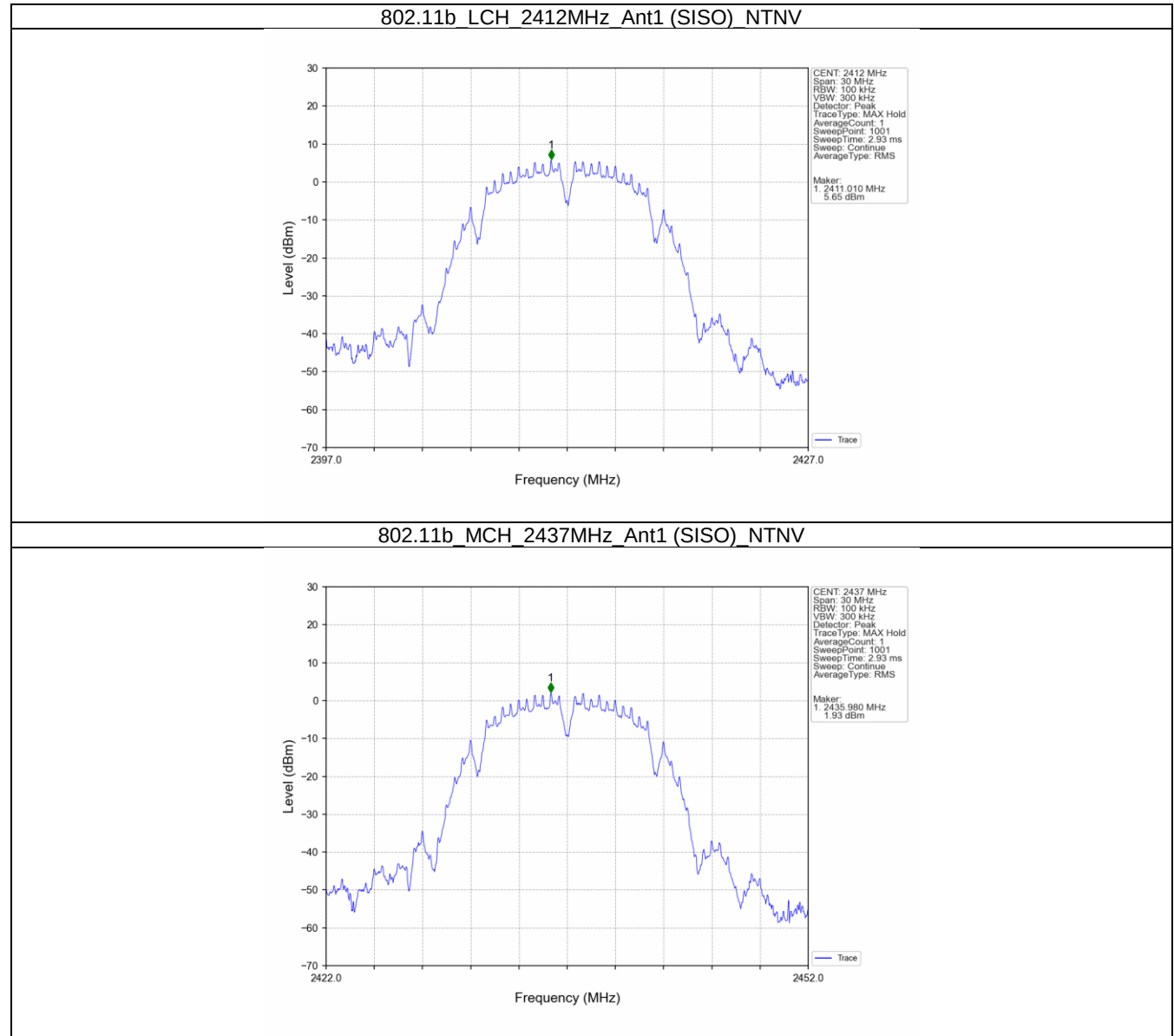
4.1 Test Result

4.1.1 PSD

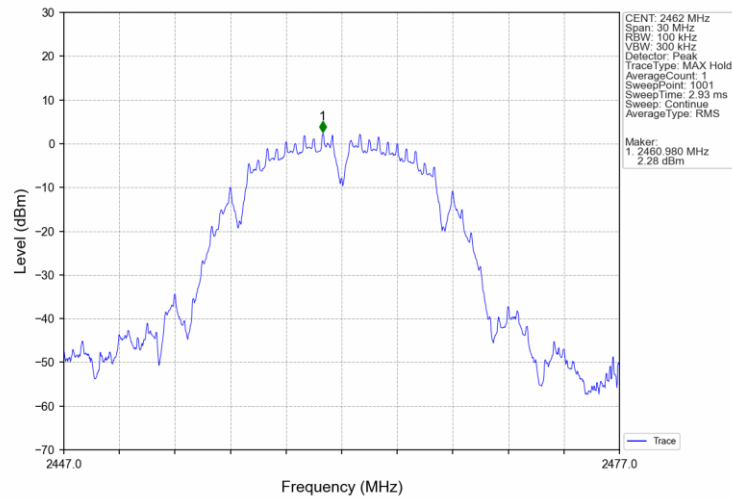
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit(dBm/3kHz)	
802.11b	SISO	2412	5.65dBm/100kHz	<=8	Pass
		2437	1.93dBm/100kHz	<=8	Pass
		2462	2.28dBm/100kHz	<=8	Pass
802.11g	SISO	2412	-4.63dBm/100kHz	<=8	Pass
		2437	-7.81dBm/100kHz	<=8	Pass
		2462	-7.38dBm/100kHz	<=8	Pass
802.11n (HT20)	SISO	2412	-3.66dBm/100kHz	<=8	Pass
		2437	-6.55dBm/100kHz	<=8	Pass
		2462	-6.26dBm/100kHz	<=8	Pass
802.11n (HT40)	SISO	2422	-6.66dBm/100kHz	<=8	Pass
		2437	-8.74dBm/100kHz	<=8	Pass
		2452	-9.01dBm/100kHz	<=8	Pass

4.2 Test Graph

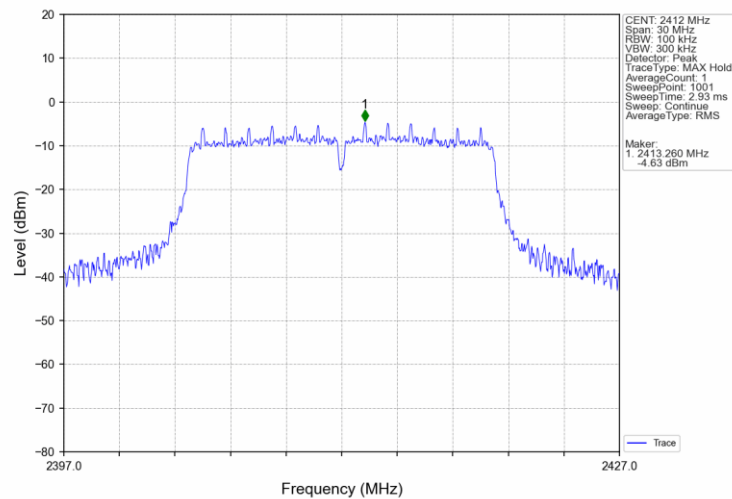
4.2.1 PSD



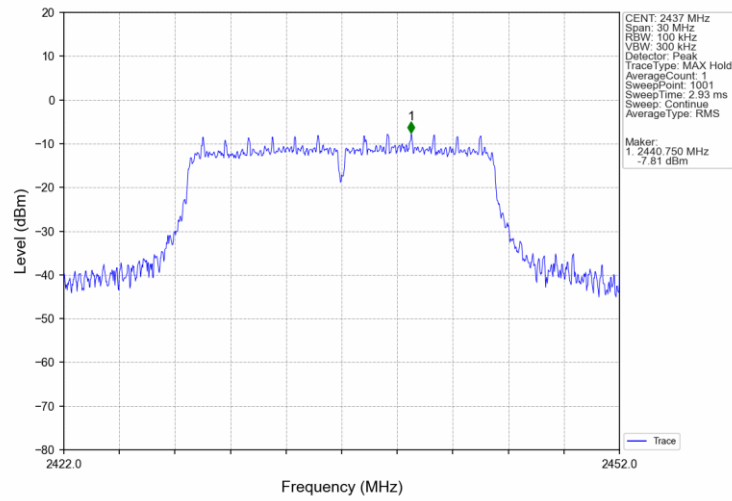
802.11b HCH 2462MHz_Ant1 (SISO) NTN



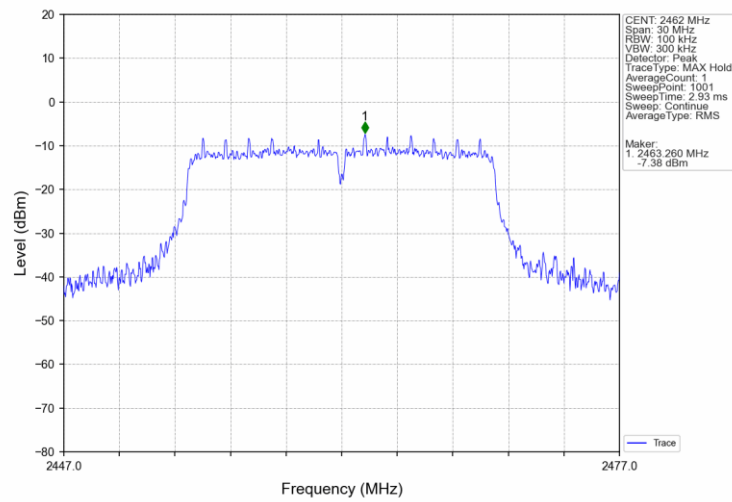
802.11g LCH 2412MHz_Ant1 (SISO) NTN



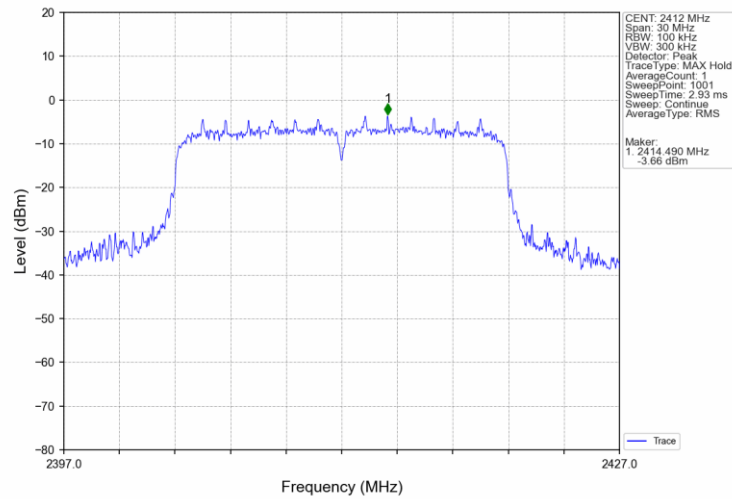
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



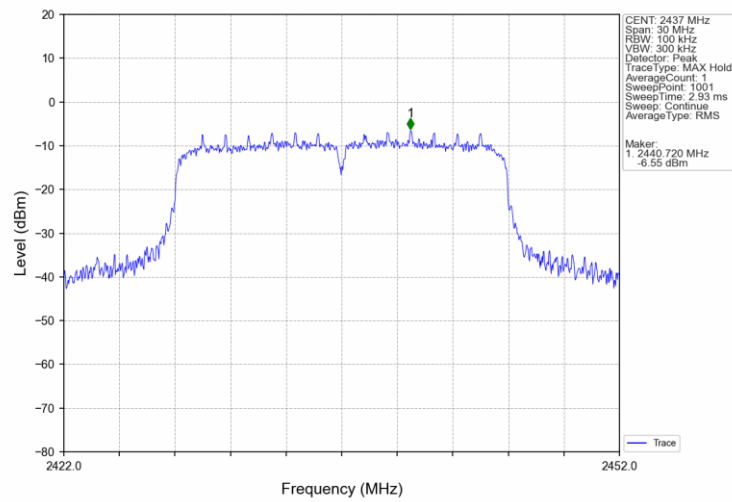
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



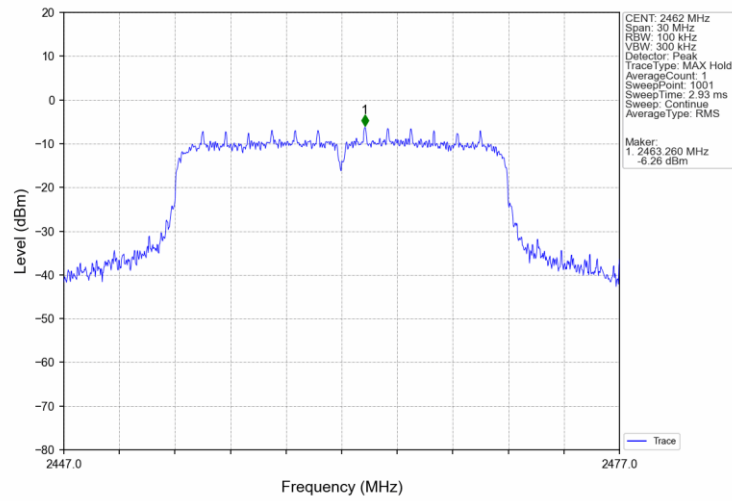
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



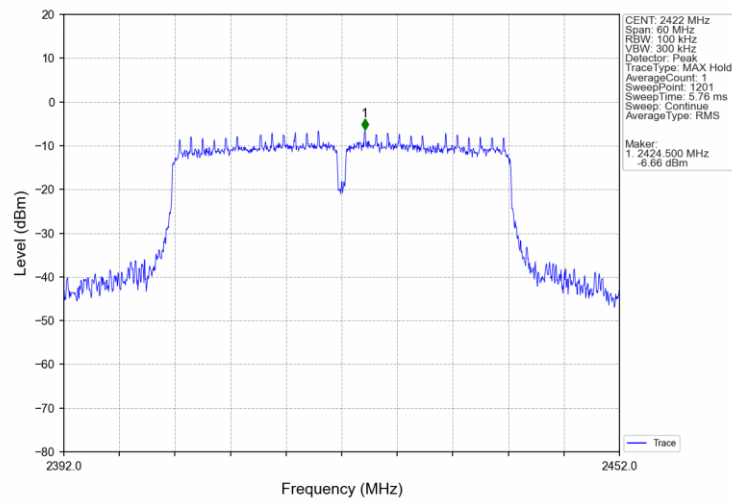
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



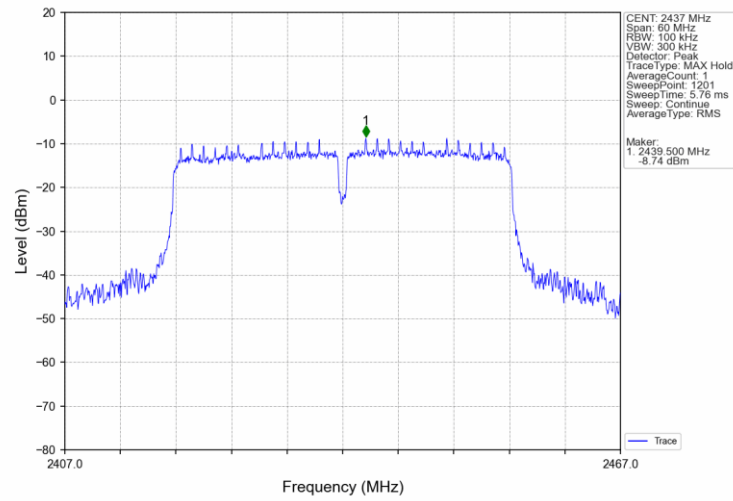
802.11n(HT20) HCH_2462MHz_Ant1 (SISO)_NTNV



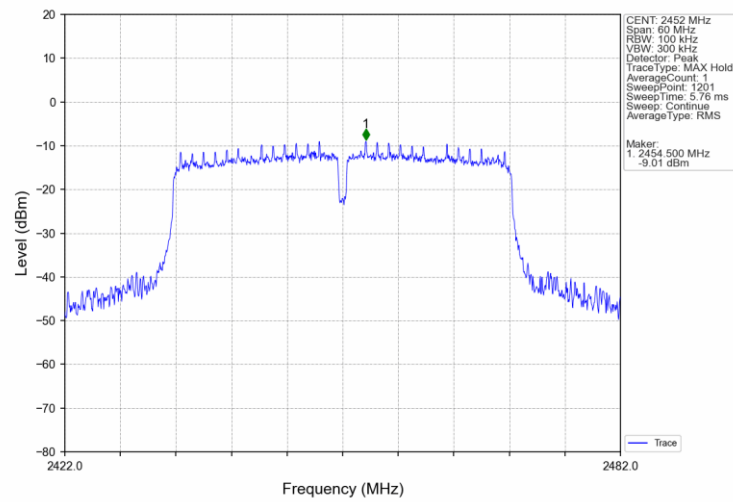
802.11n(HT40) LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

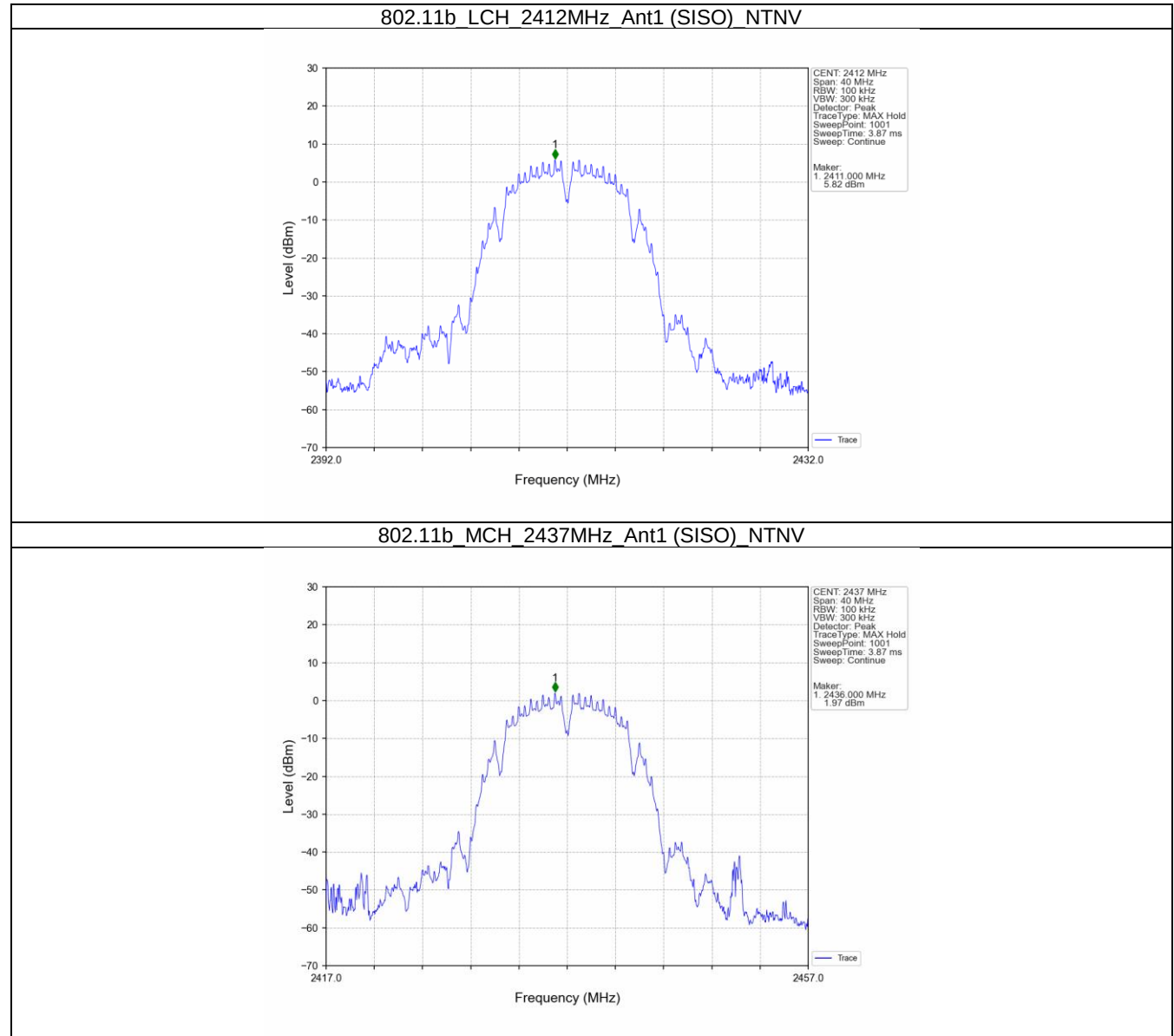
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	5.82
		2437	1	1.97
		2462	1	2.29
802.11g	SISO	2412	1	1.68
		2437	1	-7.52
		2462	1	-7.36
802.11n (HT20)	SISO	2412	1	-3.57
		2437	1	-6.39
		2462	1	-6.27
802.11n (HT40)	SISO	2422	1	-6.65
		2437	1	-8.85
		2452	1	-9.05

5.1.2 CSE

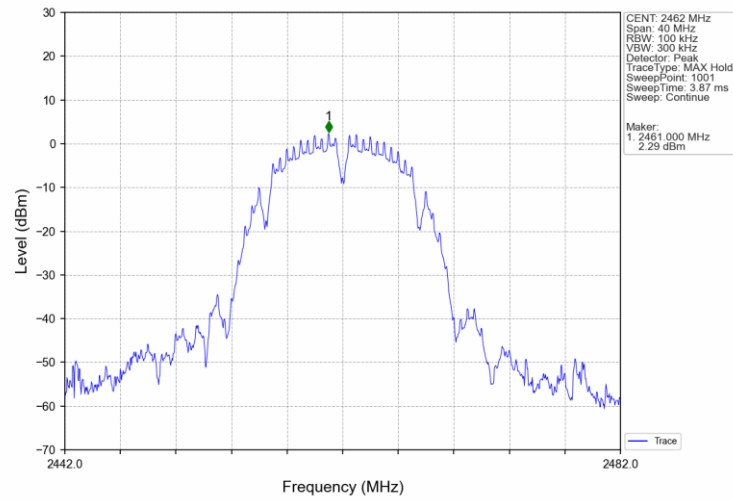
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	5.82	-14.18	Pass
		2437	1	1.97	-18.03	Pass
		2462	1	2.29	-17.71	Pass
802.11g	SISO	2412	1	1.68	-18.32	Pass
		2437	1	-7.52	-27.52	Pass
		2462	1	-7.36	-27.36	Pass
802.11n (HT20)	SISO	2412	1	-3.57	-23.57	Pass
		2437	1	-6.39	-26.39	Pass
		2462	1	-6.27	-26.27	Pass
802.11n (HT40)	SISO	2422	1	-6.65	-26.65	Pass
		2437	1	-8.85	-28.85	Pass
		2452	1	-9.05	-29.05	Pass

5.2 Test Graph

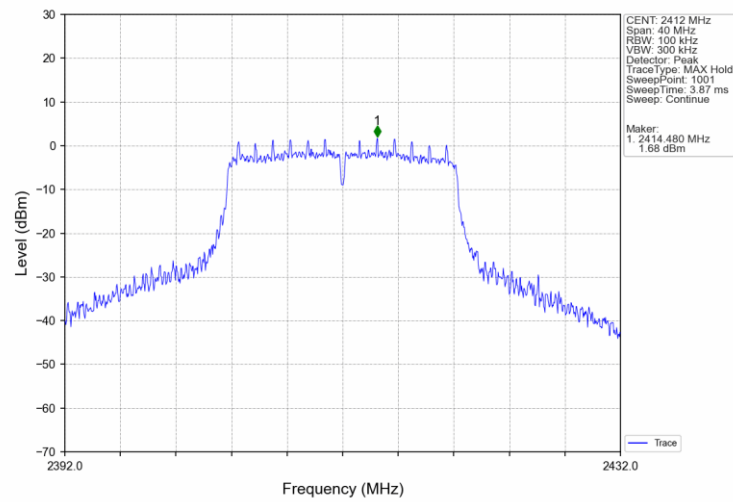
5.2.1 Ref



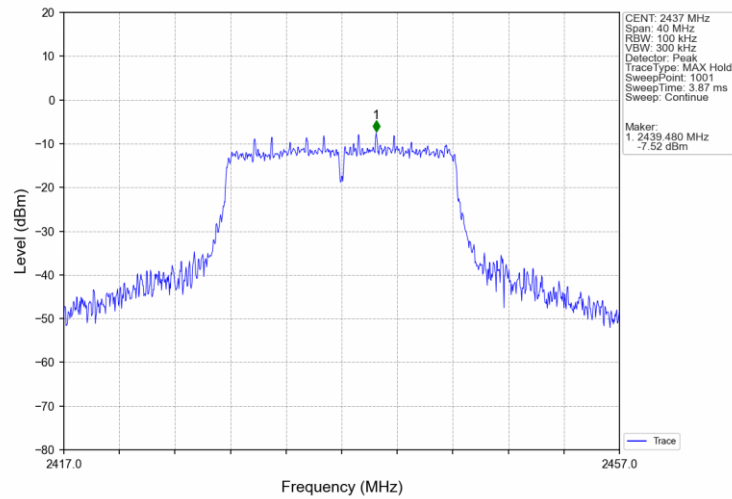
802.11b HCH 2462MHz_Ant1 (SISO)_NTNV



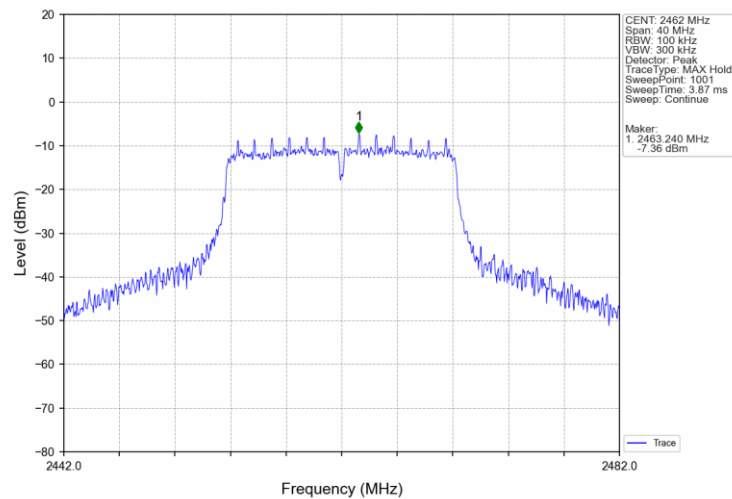
802.11g LCH 2412MHz_Ant1 (SISO)_NTNV



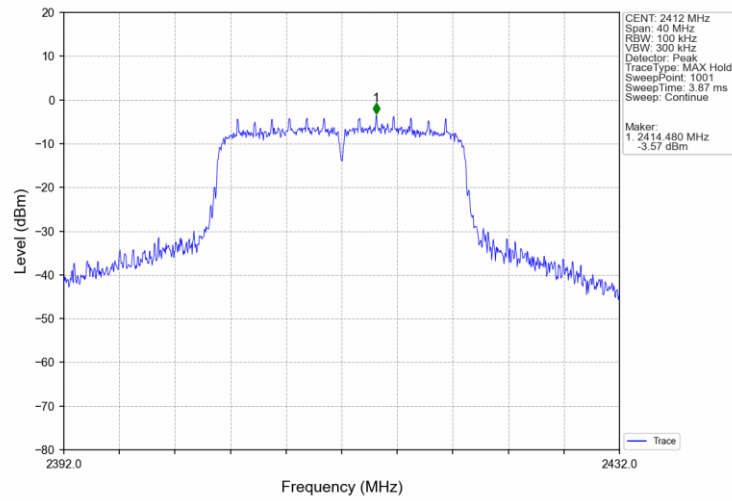
802.11g MCH 2437MHz_Ant1 (SISO) NTNv



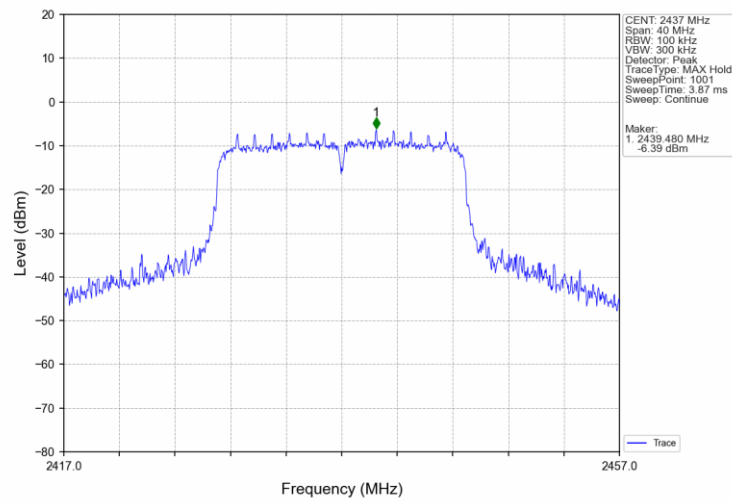
802.11g HCH 2462MHz_Ant1 (SISO) NTNv



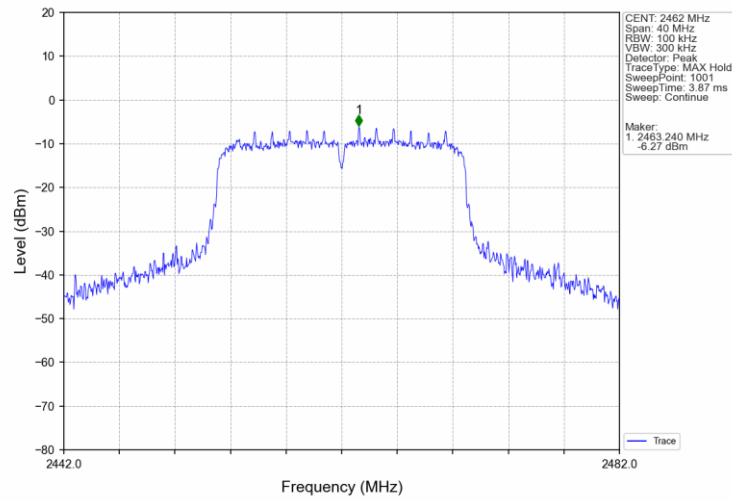
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



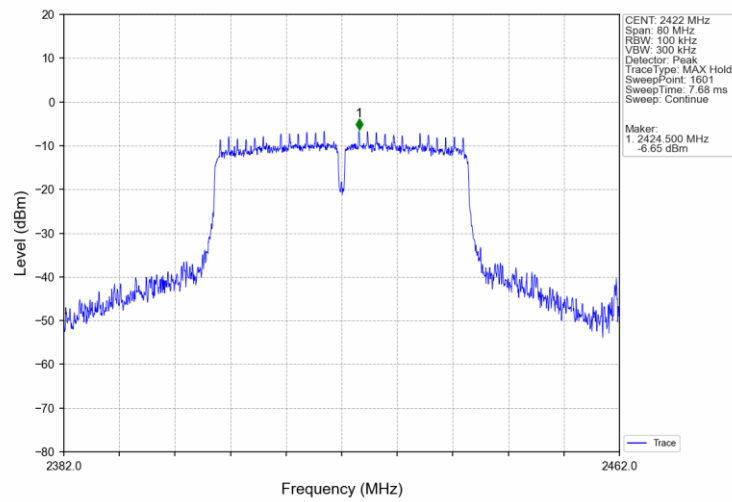
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



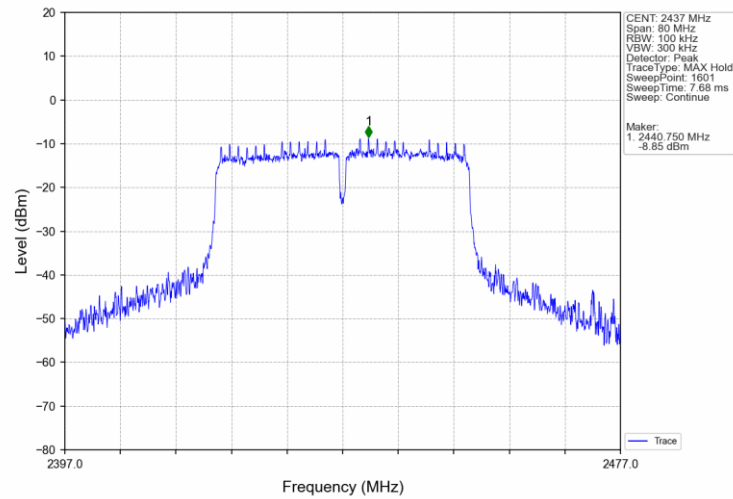
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



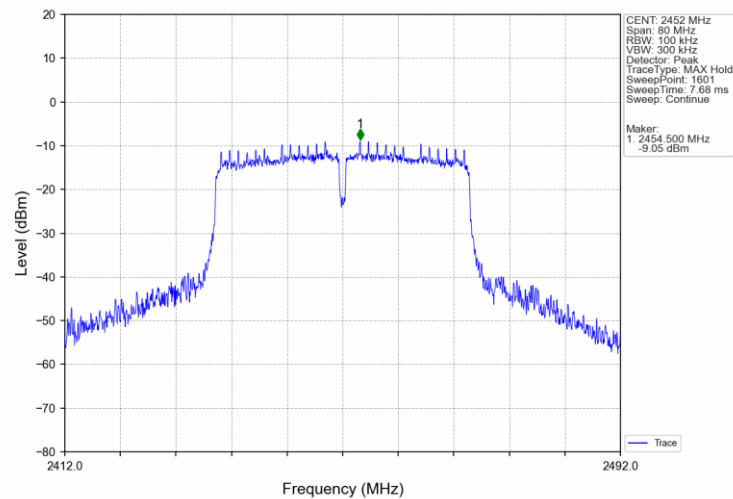
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN

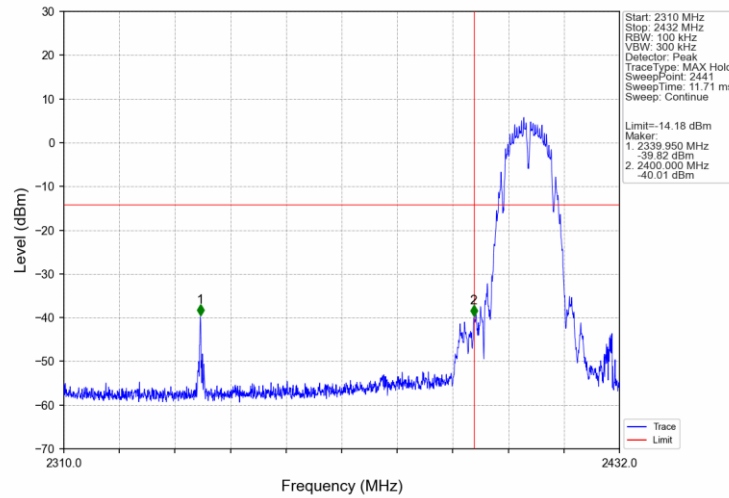


802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



5.2.2 CSE

802.11b LCH 2412MHz Ant1 (SISO) NTN



802.11b LCH 2412MHz Ant1 (SISO) NTN

