

Appendix RF test data for WIFI2.4G

1. Duty Cycle

1.1 Test Result

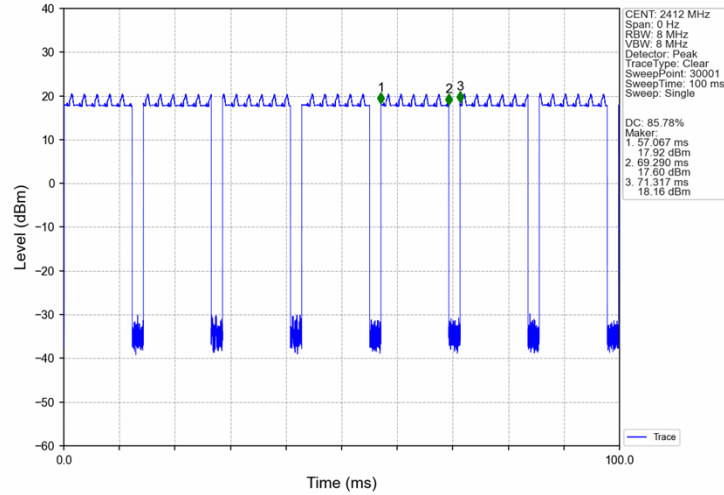
1.1.1 Ant1

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	12.223	14.250	85.78	0.67	0.02
		2437	12.223	14.250	85.78	0.67	0.02
		2462	12.223	14.250	85.78	0.67	0.02
802.11g	SISO	2412	2.031	4.056	50.07	3.00	0.02
		2437	2.032	4.058	50.07	3.00	0.03
		2462	2.033	4.059	50.09	3.00	0.02
802.11n (HT20)	SISO	2412	1.706	3.733	45.70	3.40	0.03
		2437	1.706	3.732	45.71	3.40	0.03
		2462	1.707	3.733	45.73	3.40	0.03

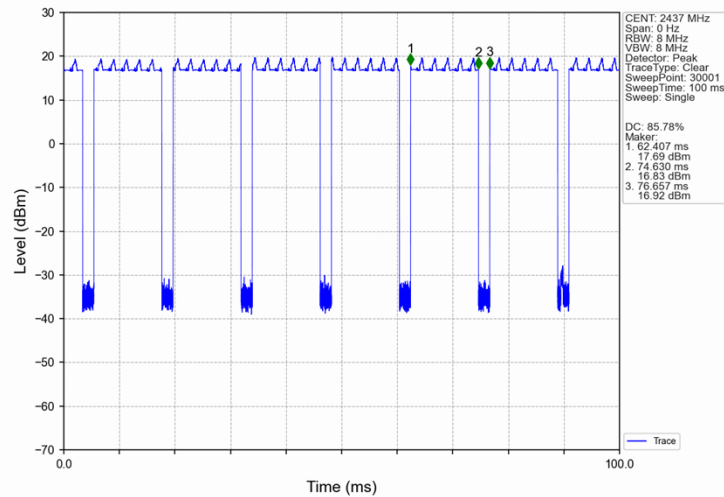
1.2 Test Graph

1.2.1 Ant1

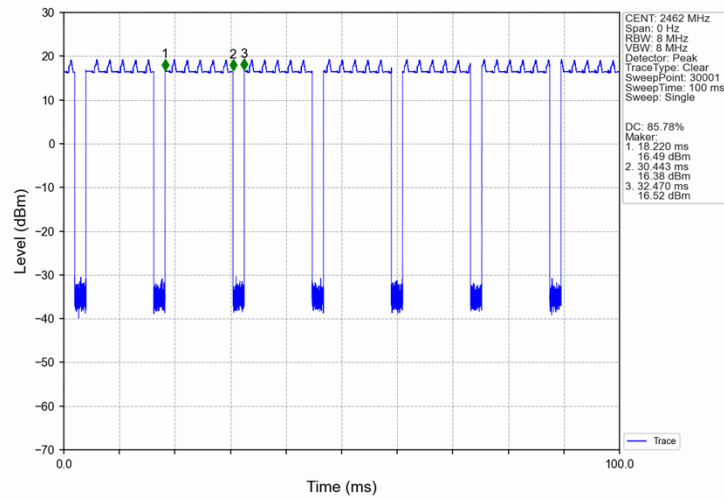
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



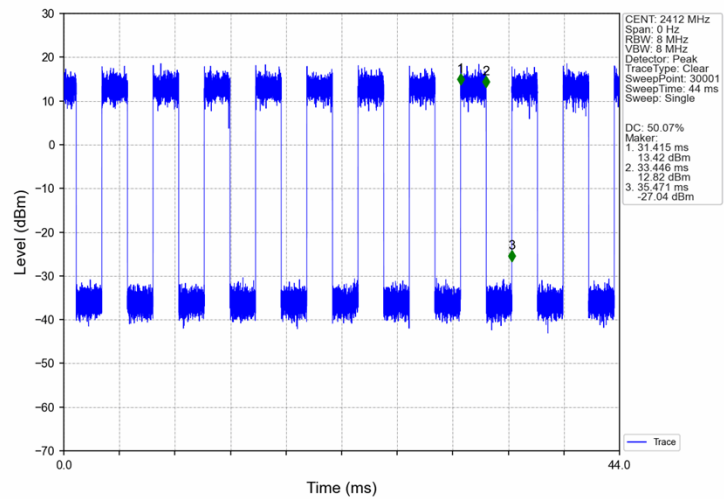
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



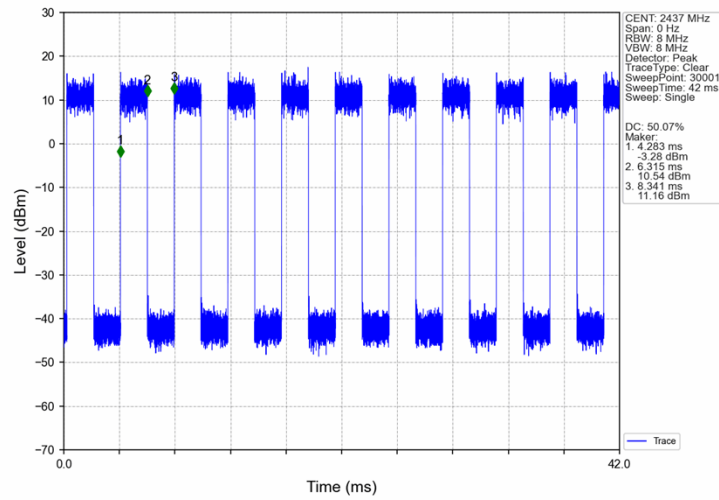
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



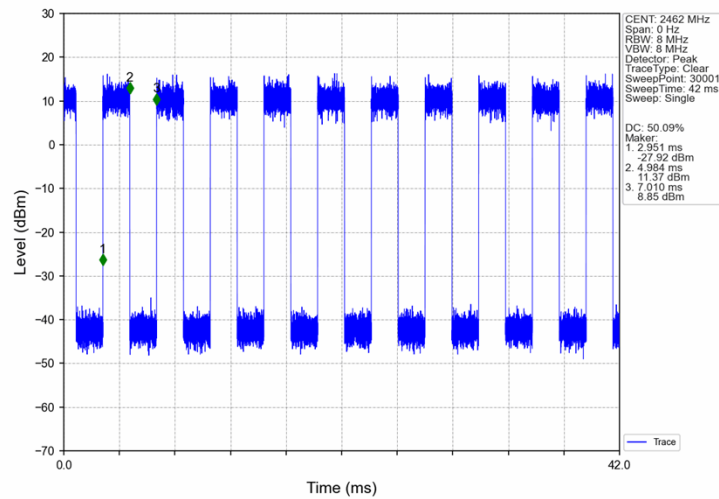
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



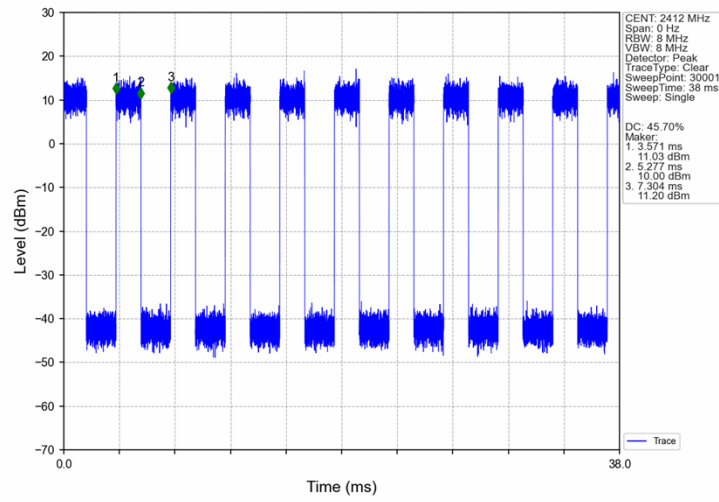
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



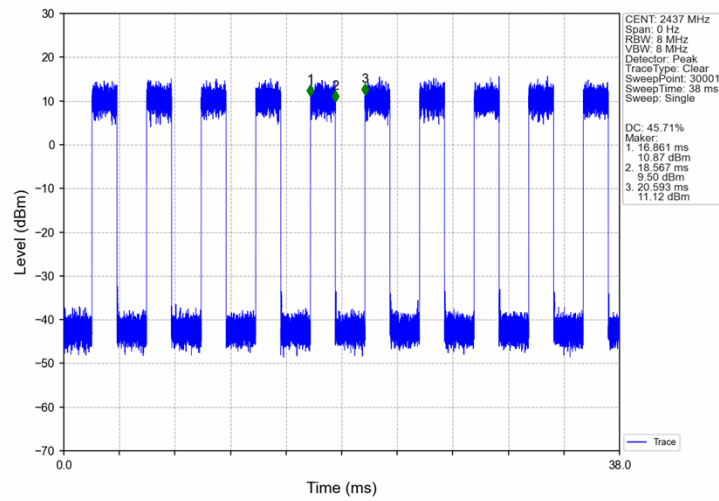
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



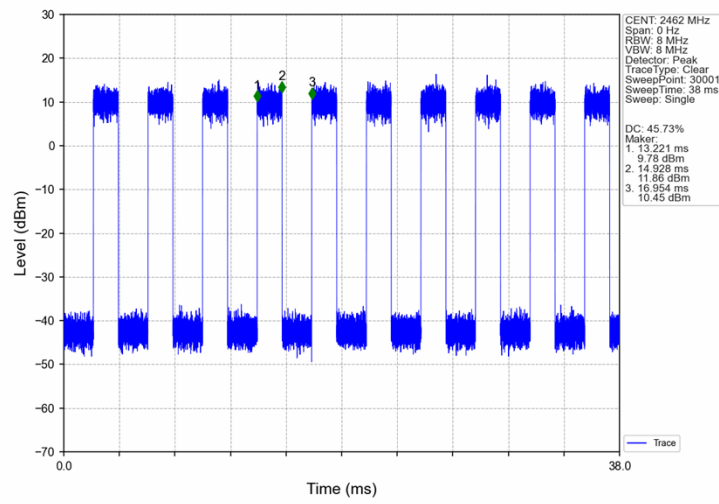
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



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	16.494	/	Pass
		2437	1	16.235	/	Pass
		2462	1	16.326	/	Pass
802.11g	SISO	2412	1	16.848	/	Pass
		2437	1	16.827	/	Pass
		2462	1	16.825	/	Pass
802.11n (HT20)	SISO	2412	1	17.848	/	Pass
		2437	1	17.835	/	Pass
		2462	1	17.873	/	Pass

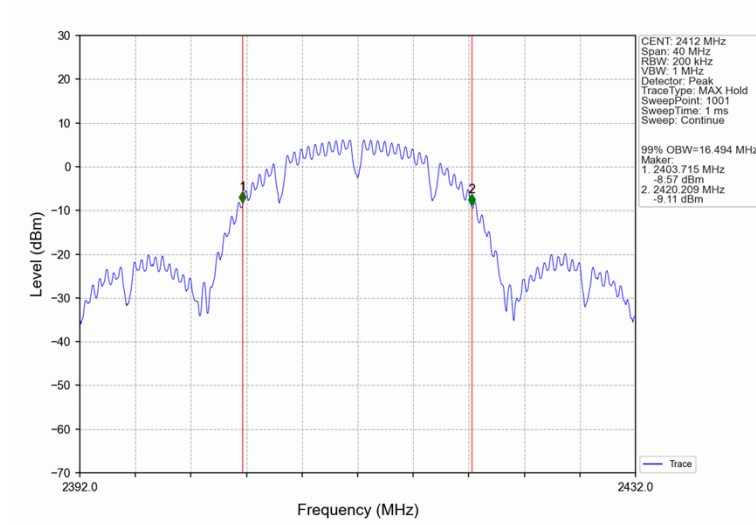
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	12.147	≥ 0.5	Pass
		2437	1	12.119	≥ 0.5	Pass
		2462	1	12.135	≥ 0.5	Pass
802.11g	SISO	2412	1	16.463	≥ 0.5	Pass
		2437	1	16.440	≥ 0.5	Pass
		2462	1	16.460	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.704	≥ 0.5	Pass
		2437	1	17.662	≥ 0.5	Pass
		2462	1	17.712	≥ 0.5	Pass

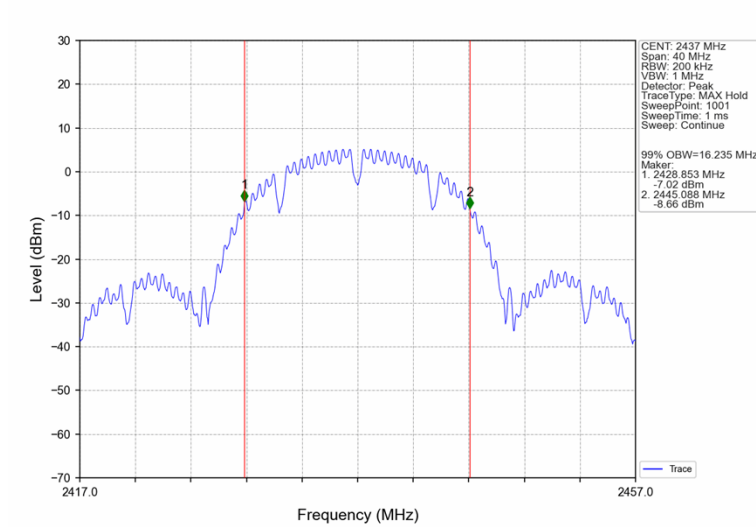
2.2 Test Graph

2.2.1 OBW

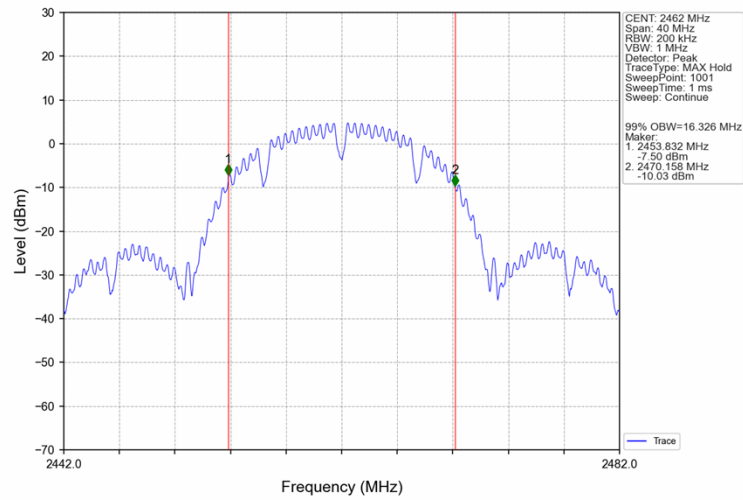
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



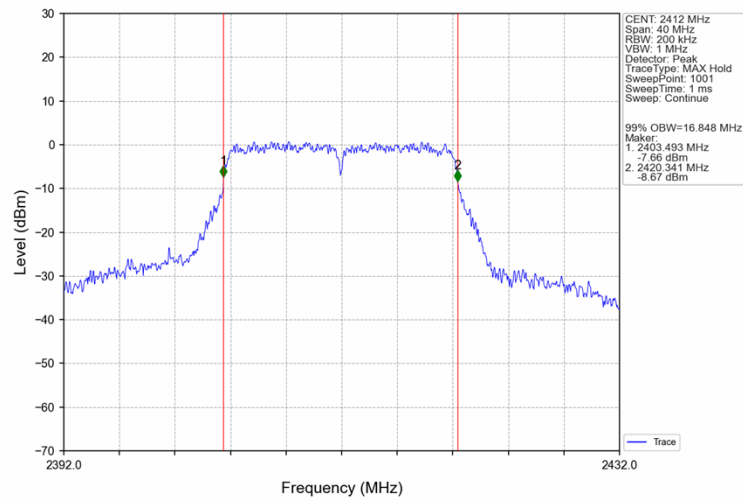
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



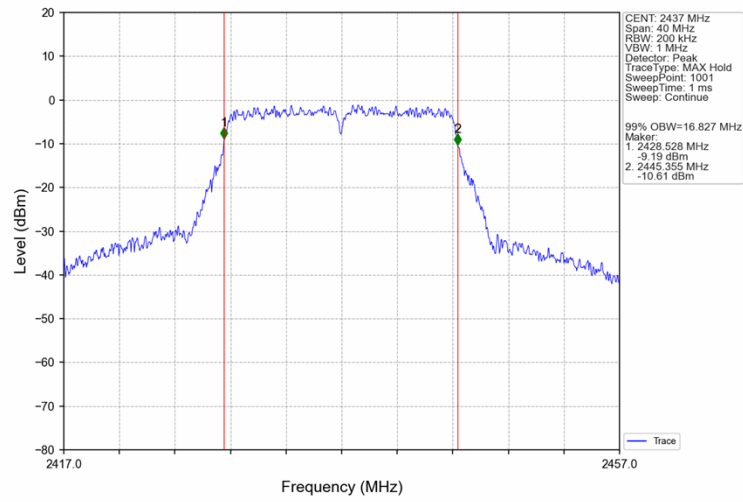
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



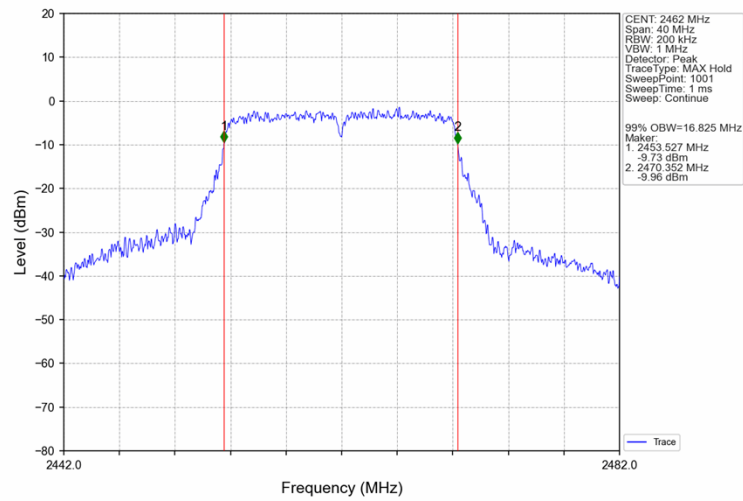
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



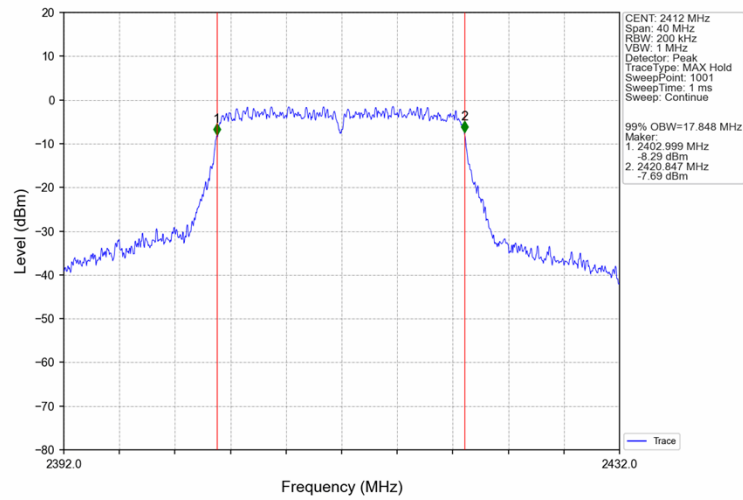
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



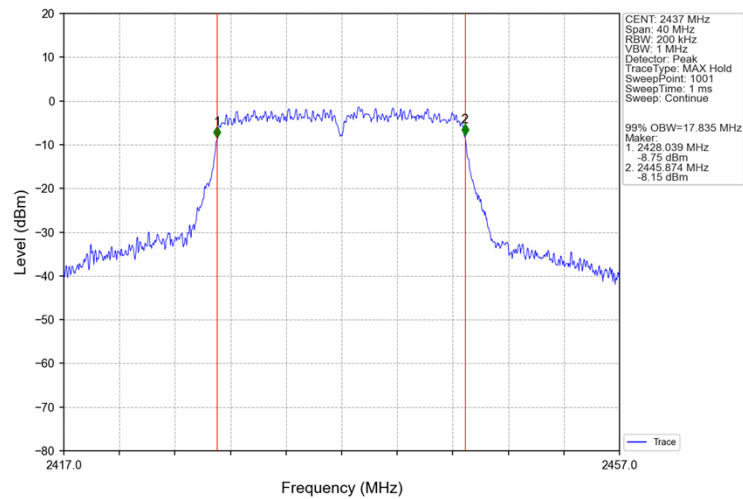
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



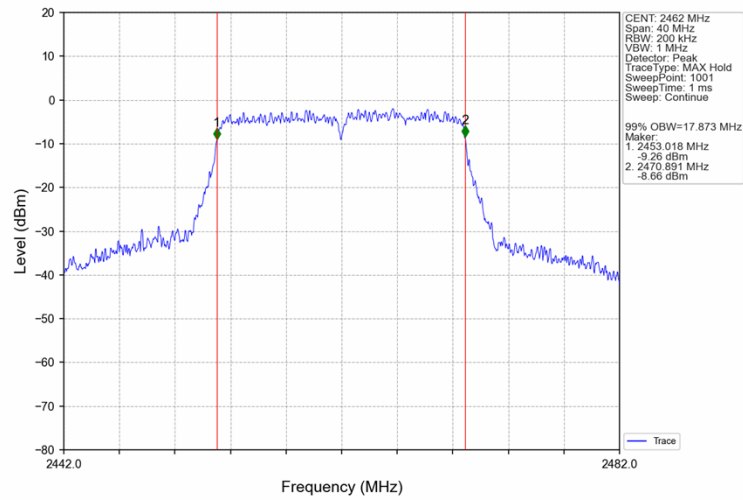
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

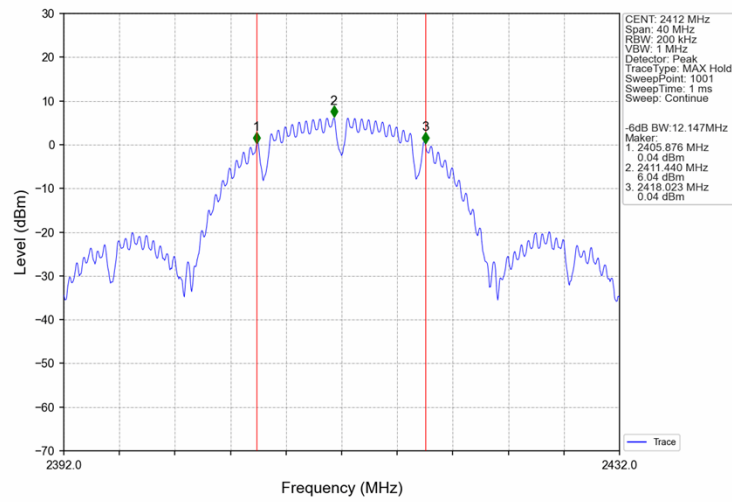


802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

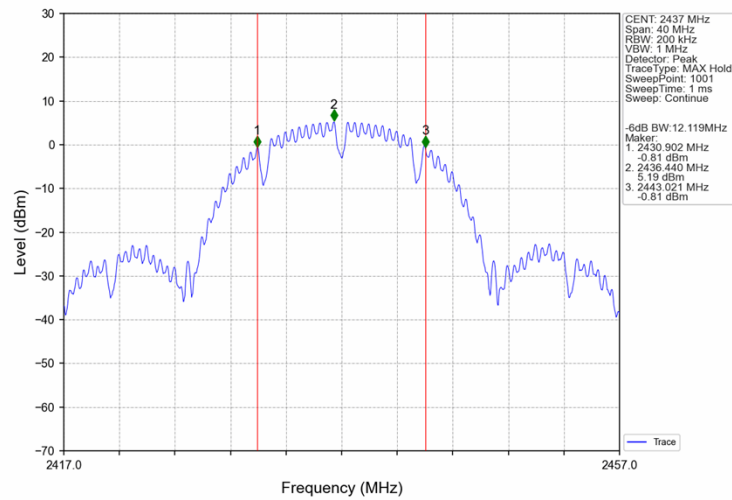


2.2.2 6dB BW

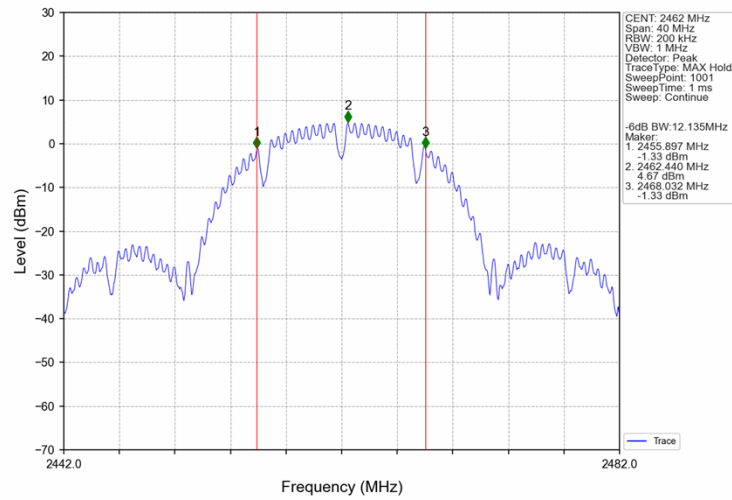
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



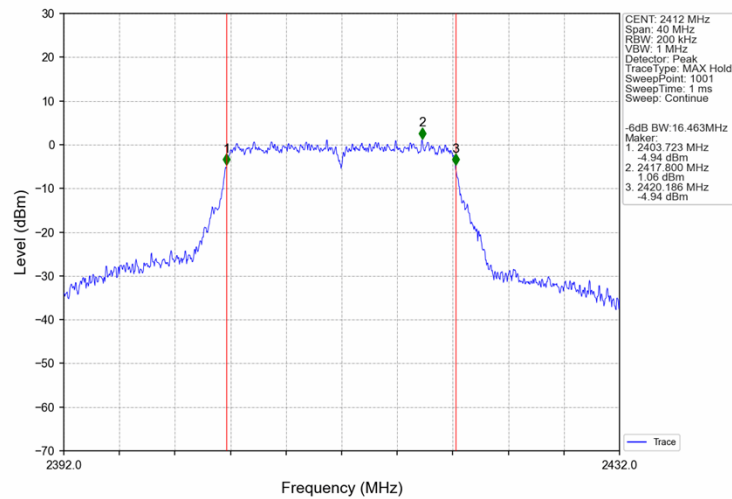
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



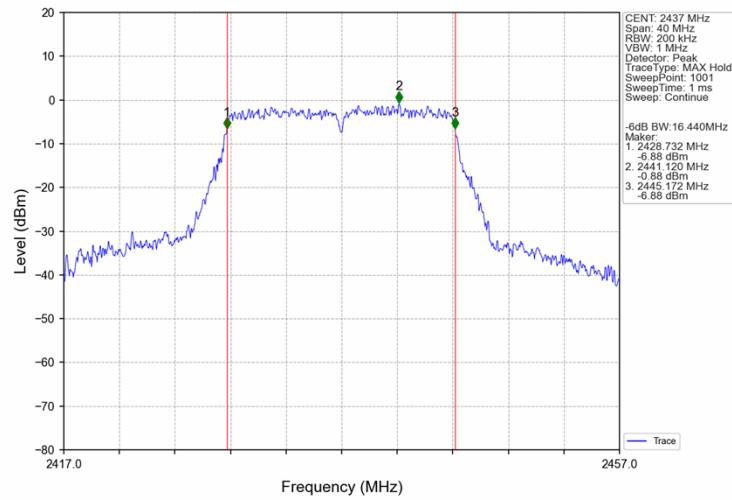
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



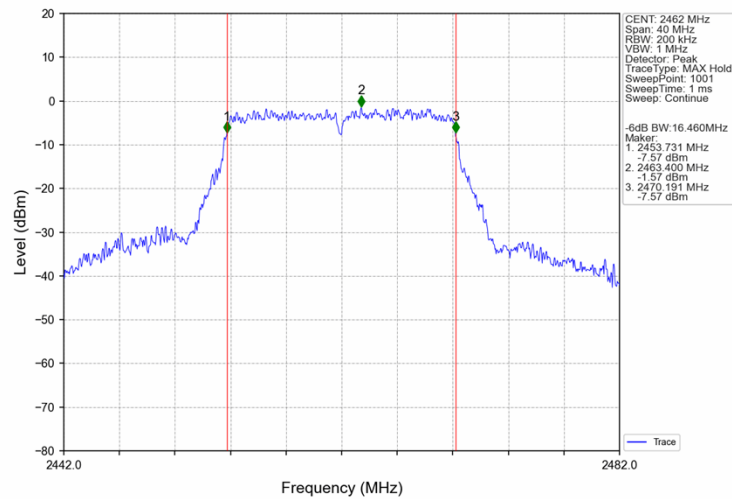
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



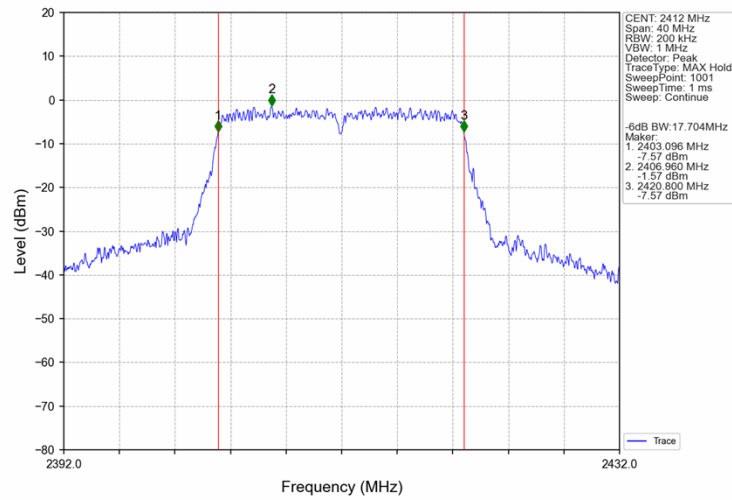
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



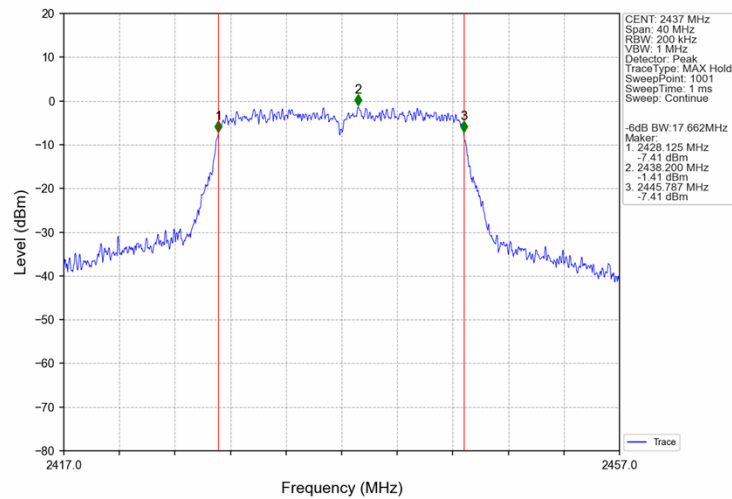
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



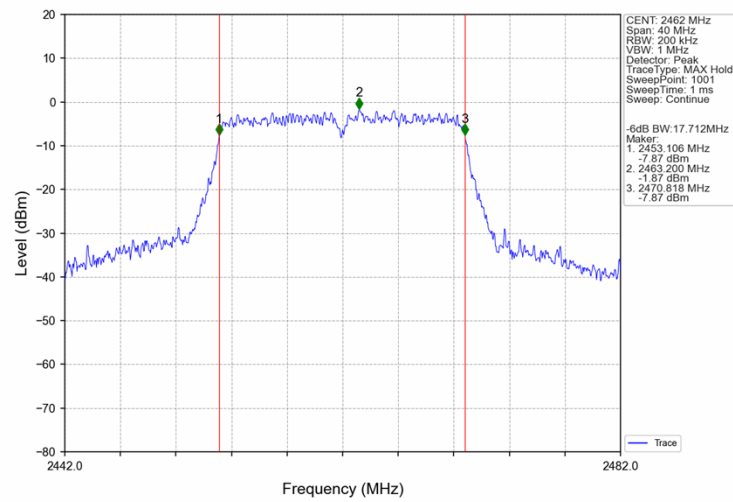
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



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	17.32	<=30	Pass
		2437	17.10	<=30	Pass
		2462	16.65	<=30	Pass
802.11g	SISO	2412	18.62	<=30	Pass
		2437	16.69	<=30	Pass
		2462	16.19	<=30	Pass
802.11n (HT20)	SISO	2412	16.91	<=30	Pass
		2437	16.75	<=30	Pass
		2462	16.19	<=30	Pass
Note1: Antenna Gain: Ant1: 3.00dBi;					

4. Maximum Power Spectral Density

4.1 Test Result

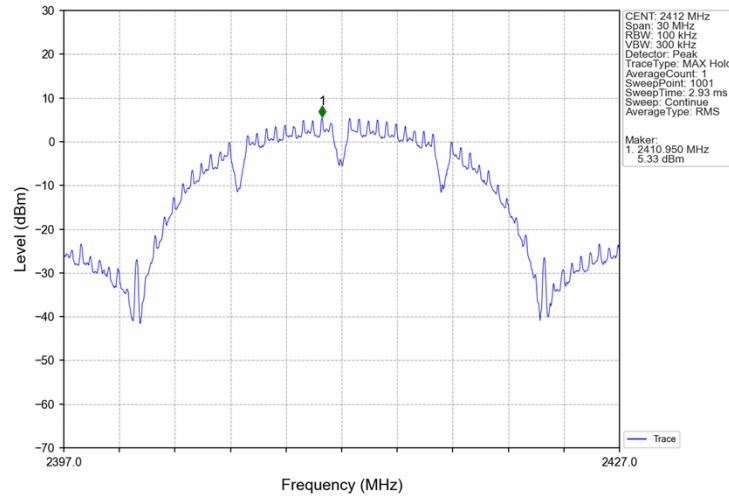
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit(dBm/3kHz)	
802.11b	SISO	2412	5.33dBm/100kHz	<=8	Pass
		2437	4.76dBm/100kHz	<=8	Pass
		2462	4.61dBm/100kHz	<=8	Pass
802.11g	SISO	2412	0.29dBm/100kHz	<=8	Pass
		2437	-2.24dBm/100kHz	<=8	Pass
		2462	-2.76dBm/100kHz	<=8	Pass
802.11n (HT20)	SISO	2412	-2.45dBm/100kHz	<=8	Pass
		2437	-2.34dBm/100kHz	<=8	Pass
		2462	-2.62dBm/100kHz	<=8	Pass
Note1: Antenna Gain: Ant1: 3.00dBi;					

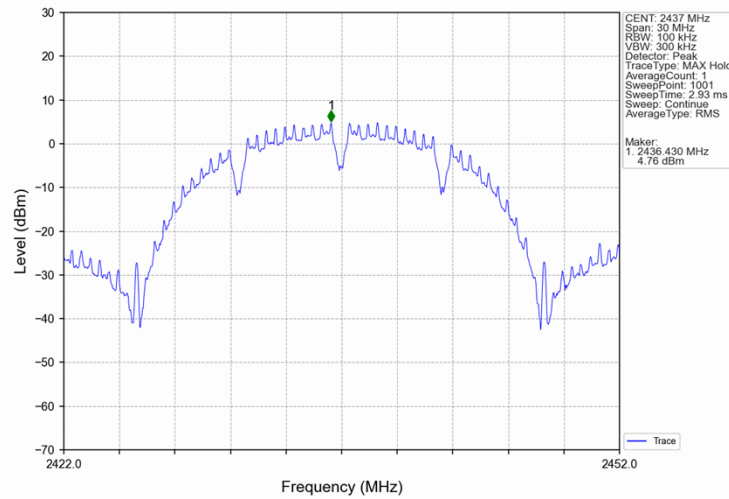
4.2 Test Graph

4.2.1 PSD

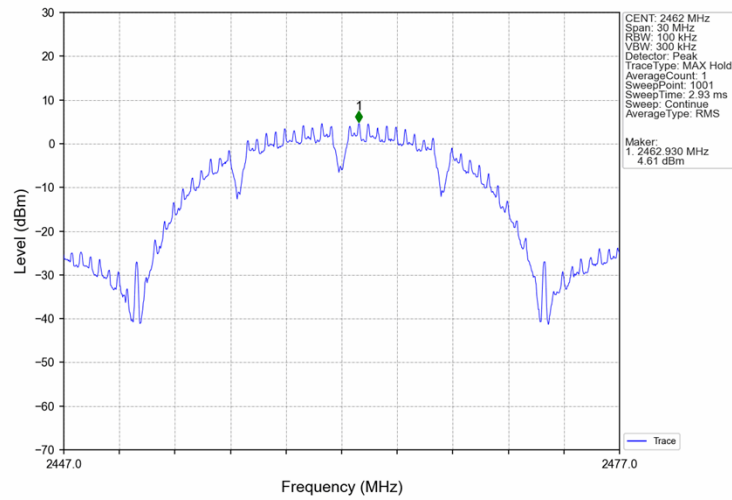
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



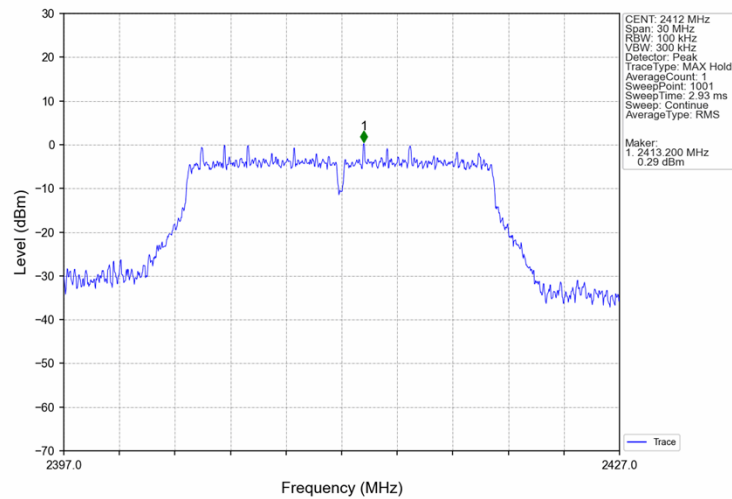
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



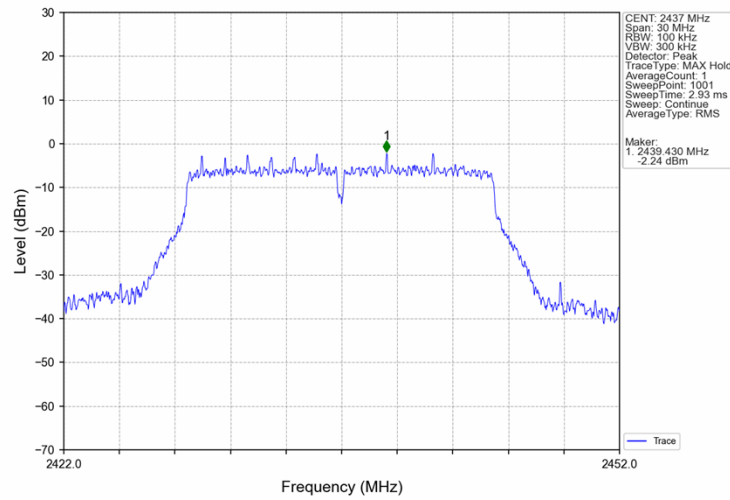
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



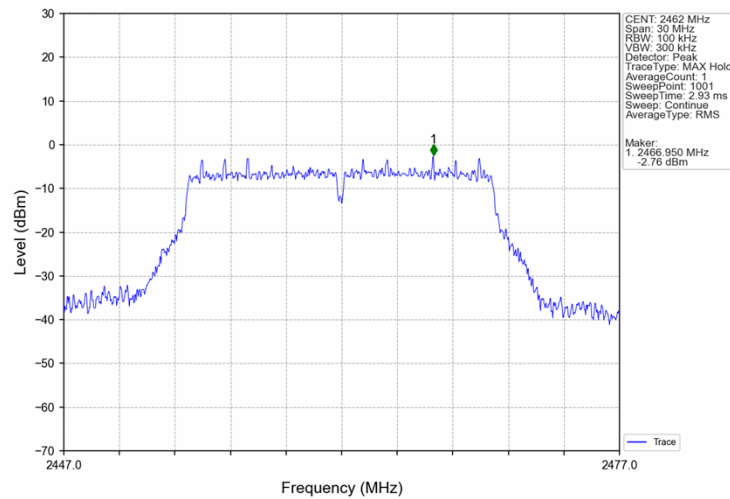
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



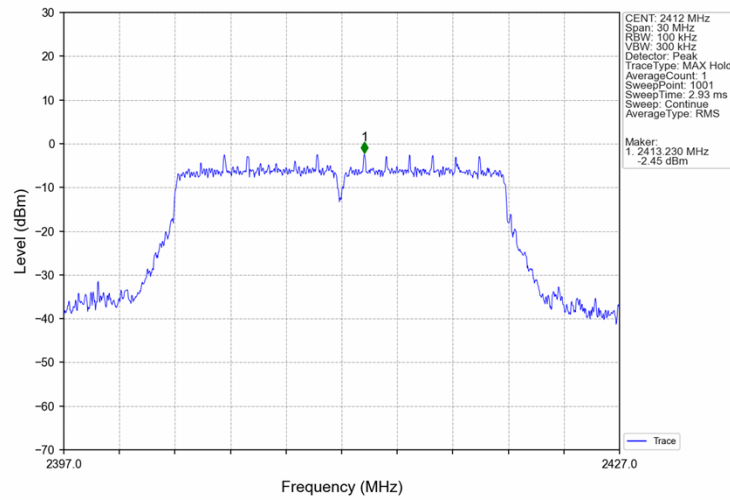
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



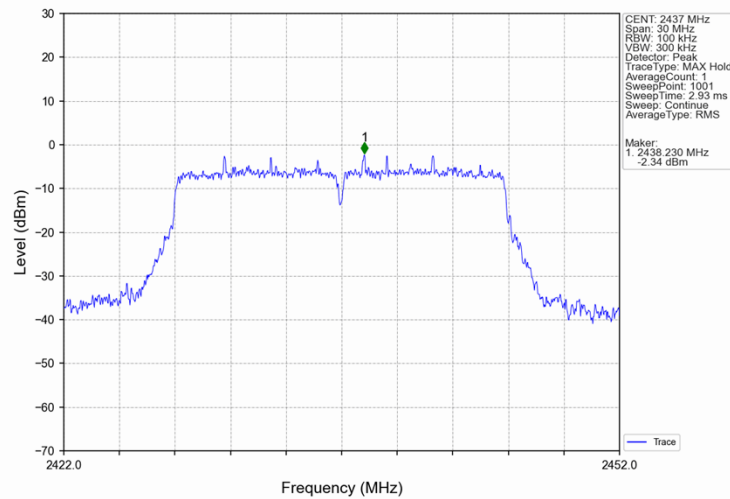
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



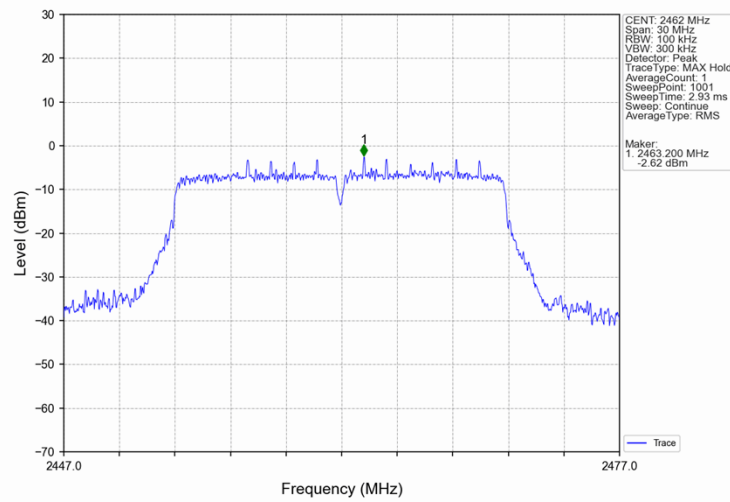
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



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	6.57
		2437	1	5.07
		2462	1	4.37
802.11g	SISO	2412	1	-0.14
		2437	1	-1.91
		2462	1	-2.11
802.11n (HT20)	SISO	2412	1	-2.13
		2437	1	-2.16
		2462	1	-2.92

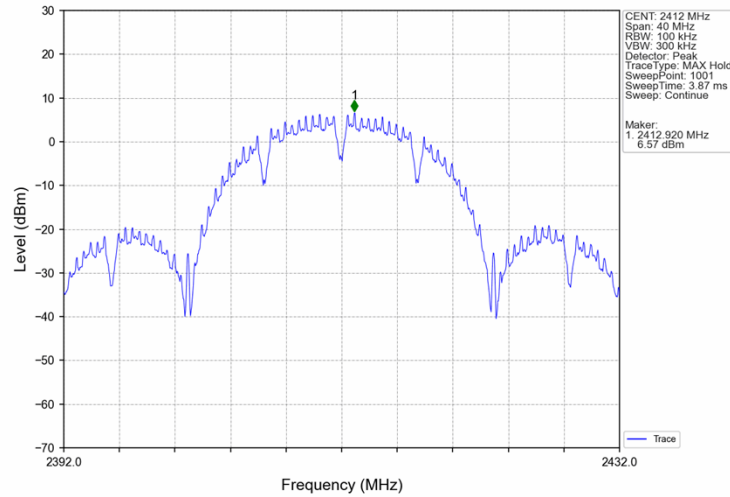
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	6.57	-13.43	Pass
		2437	1	5.07	-14.93	Pass
		2462	1	4.37	-15.63	Pass
802.11g	SISO	2412	1	-0.14	-20.14	Pass
		2437	1	-1.91	-21.91	Pass
		2462	1	-2.11	-22.11	Pass
802.11n (HT20)	SISO	2412	1	-2.13	-22.13	Pass
		2437	1	-2.16	-22.16	Pass
		2462	1	-2.92	-22.92	Pass

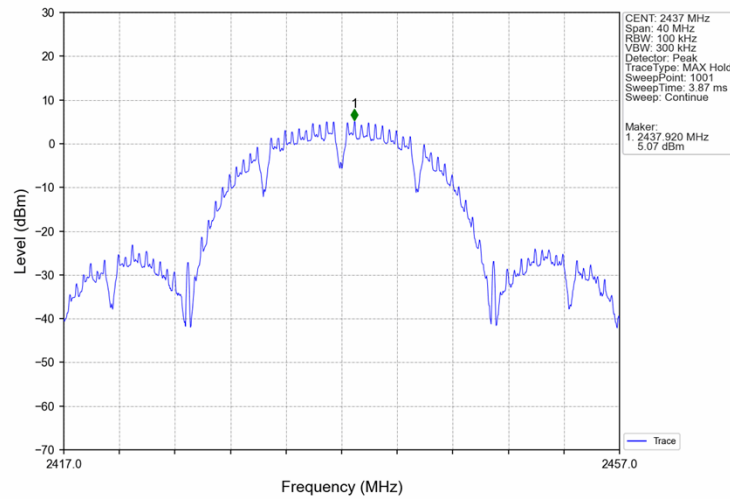
5.2 Test Graph

5.2.1 Ref

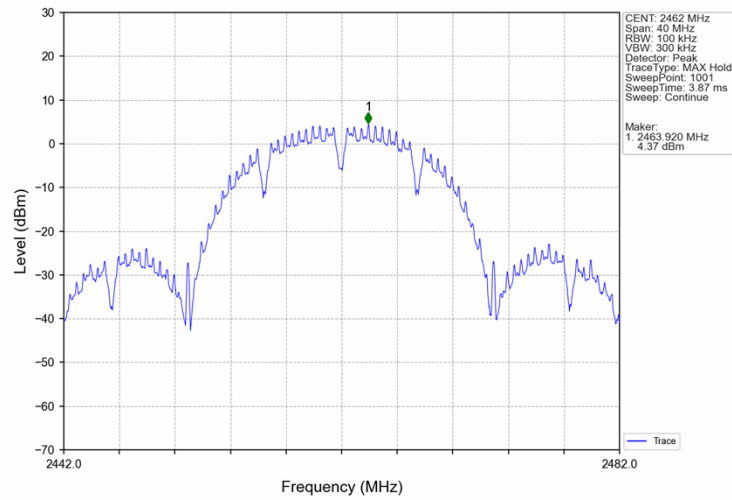
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



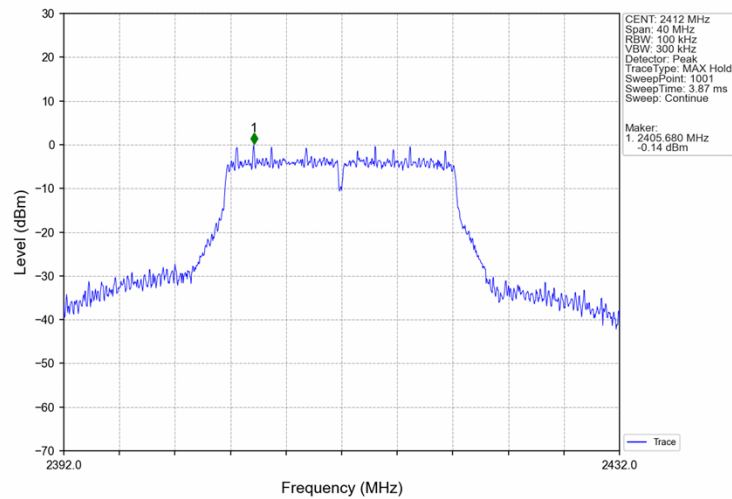
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



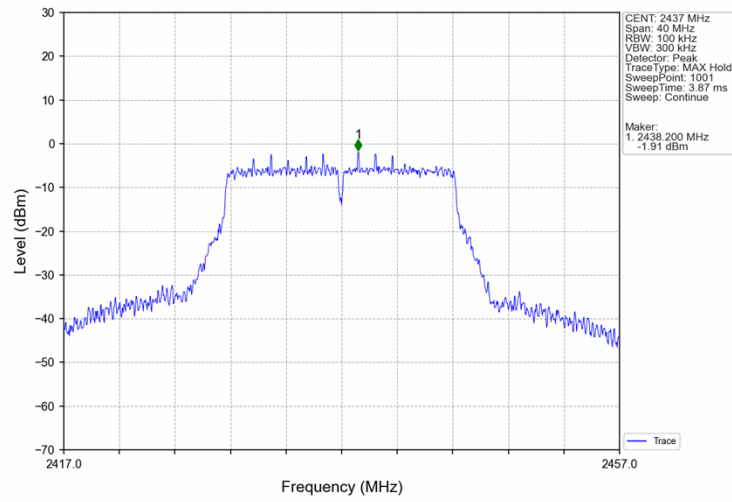
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



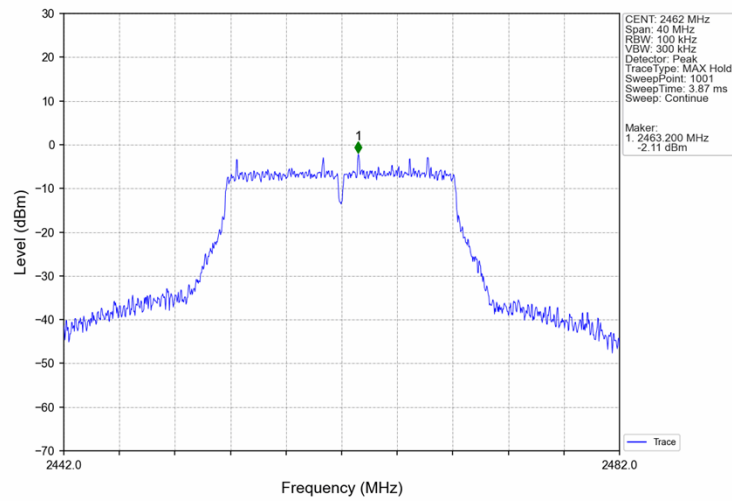
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



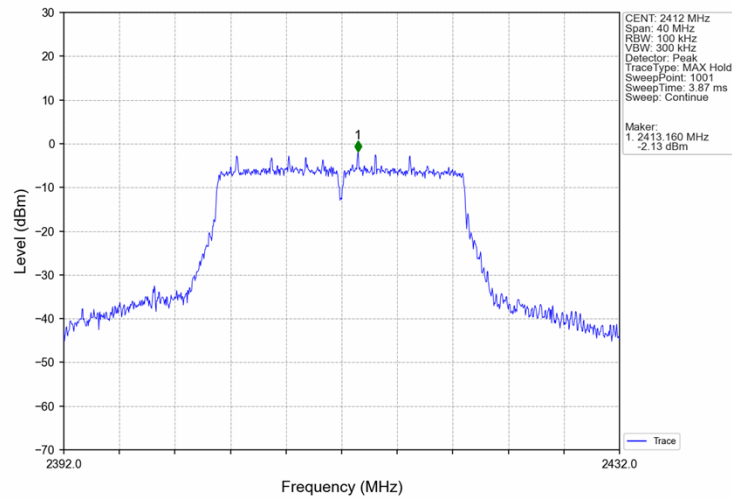
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



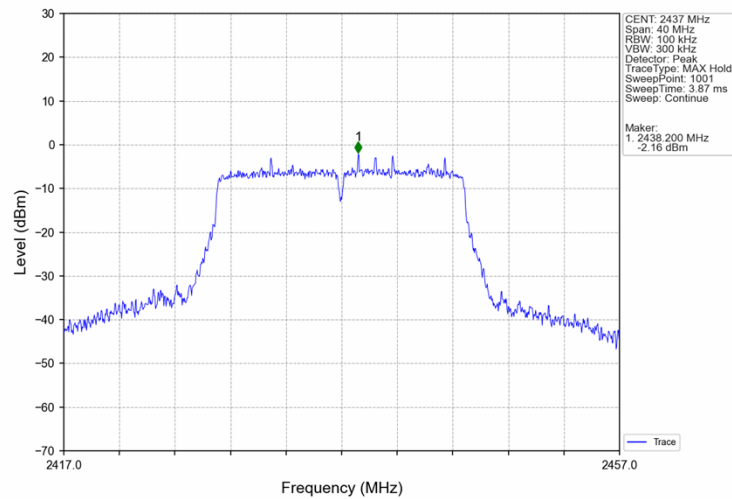
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

