

Appendix RF test data for WIFI2.4G

1. Duty Cycle

1.1 Test Result

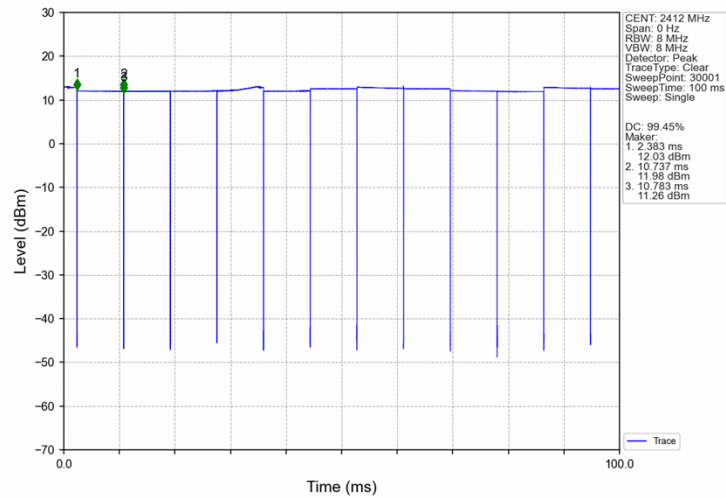
1.1.1 Ant1

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	/	/	8.354	8.400	99.45	0.02	0.04
		2437	/	/	8.353	8.403	99.40	0.03	0.08
		2462	/	/	8.353	8.403	99.40	0.03	0.04
802.11g	SISO	2412	/	/	2.089	2.136	97.80	0.10	0.07
		2437	/	/	2.088	2.137	97.71	0.10	0.14
		2462	/	/	2.089	2.137	97.75	0.10	0.14
802.11n (HT20)	SISO	2412	/	/	3.976	4.023	98.83	0.05	0.03
		2437	/	/	3.976	4.023	98.83	0.05	0.07
		2462	/	/	3.977	4.026	98.78	0.05	0.07
802.11n (HT40)	SISO	2422	/	/	3.972	4.021	98.78	0.05	0.07
		2437	/	/	3.973	4.022	98.78	0.05	0.07
		2452	/	/	3.971	4.020	98.78	0.05	0.07

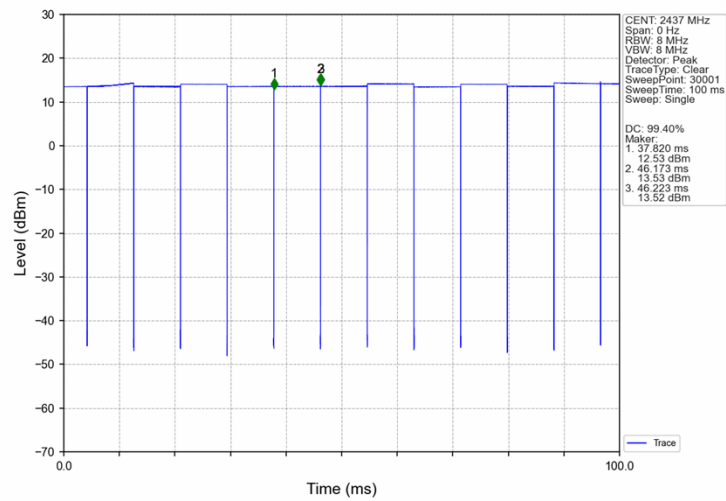
1.2 Test Graph

1.2.1 Ant1

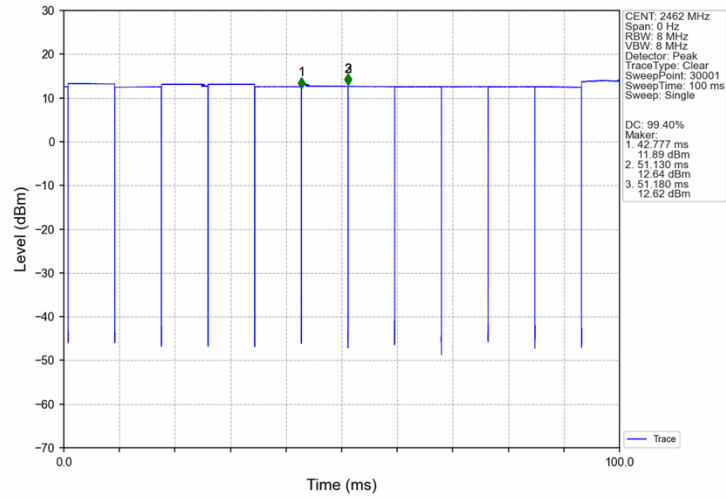
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



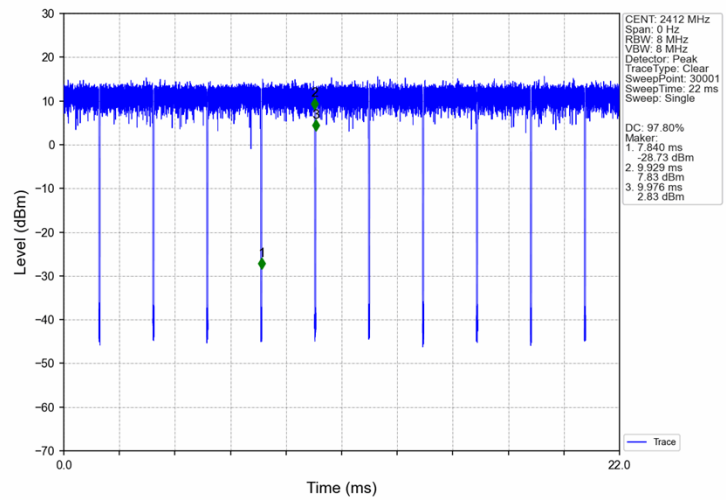
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



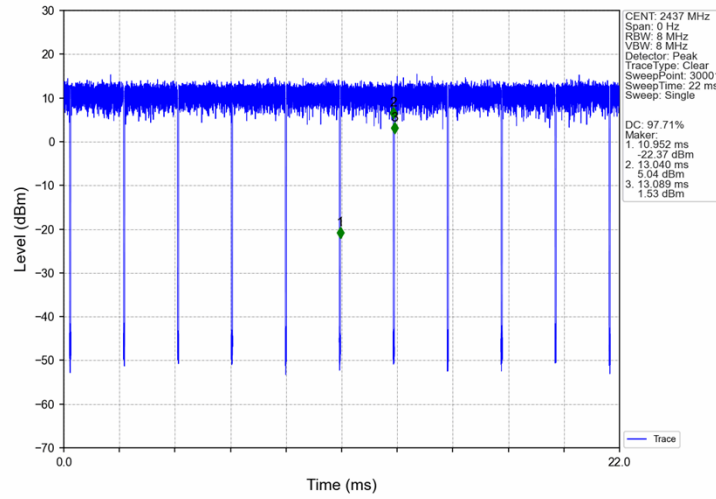
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



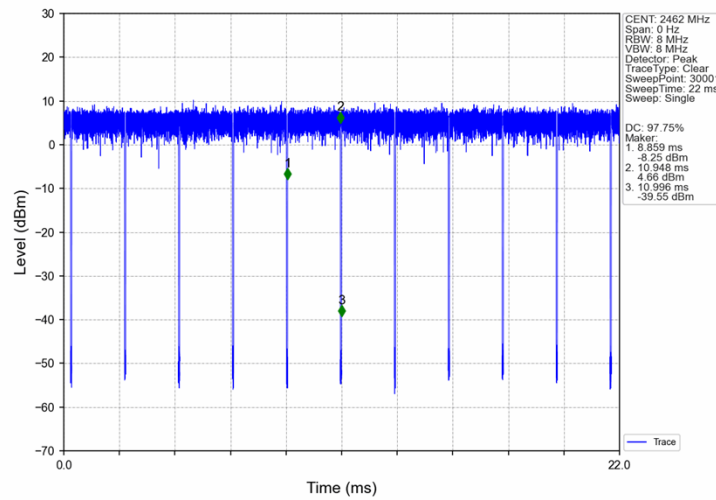
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



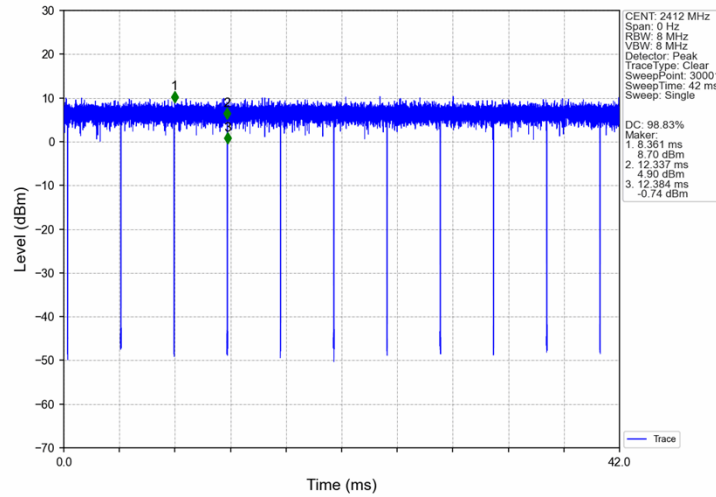
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



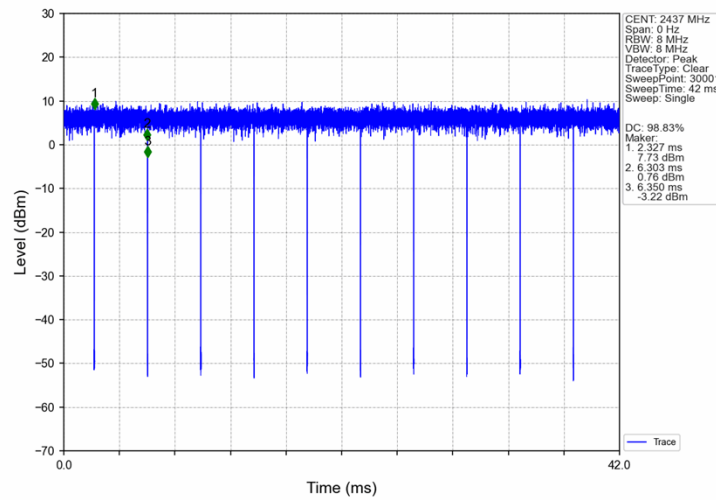
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



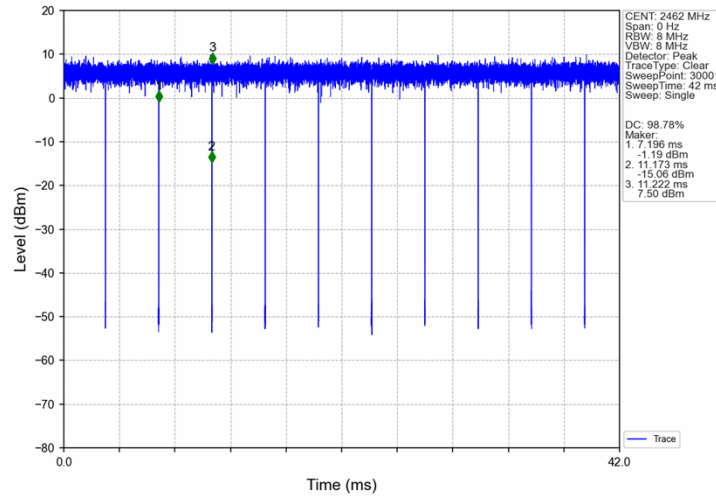
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



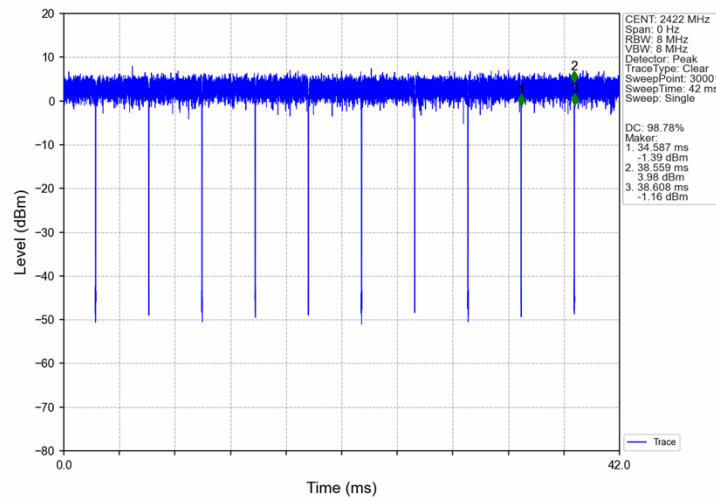
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



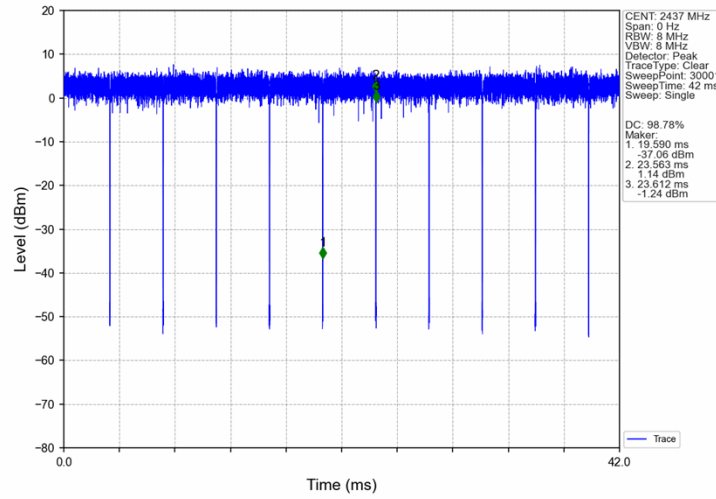
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



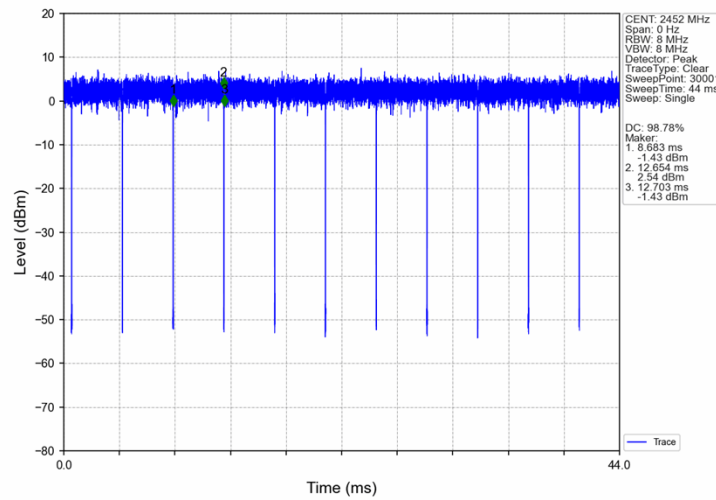
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



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)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	13.409	/	Pass
		2437	/	/	1	13.375	/	Pass
		2462	/	/	1	13.465	/	Pass
802.11g	SISO	2412	/	/	1	17.527	/	Pass
		2437	/	/	1	17.498	/	Pass
		2462	/	/	1	17.605	/	Pass
802.11n (HT20)	SISO	2412	/	/	1	18.432	/	Pass
		2437	/	/	1	18.462	/	Pass
		2462	/	/	1	18.521	/	Pass
802.11n (HT40)	SISO	2422	/	/	1	36.489	/	Pass
		2437	/	/	1	36.478	/	Pass
		2452	/	/	1	36.471	/	Pass

2.1.2 6dB BW

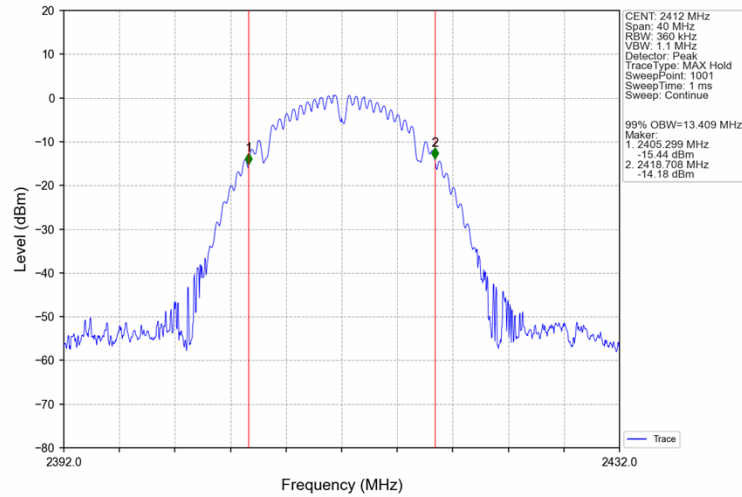
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	9.195	≥ 0.5	Pass
		2437	/	/	1	9.195	≥ 0.5	Pass
		2462	/	/	1	9.204	≥ 0.5	Pass
802.11g	SISO	2412	/	/	1	16.080	≥ 0.5	Pass

		2437	/	/	1	15.871	≥ 0.5	Pass
		2462	/	/	1	16.065	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.159	≥ 0.5	Pass
		2437	/	/	1	17.467	≥ 0.5	Pass
		2462	/	/	1	17.338	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	/	/	1	35.930	≥ 0.5	Pass
		2437	/	/	1	35.819	≥ 0.5	Pass
		2452	/	/	1	35.851	≥ 0.5	Pass

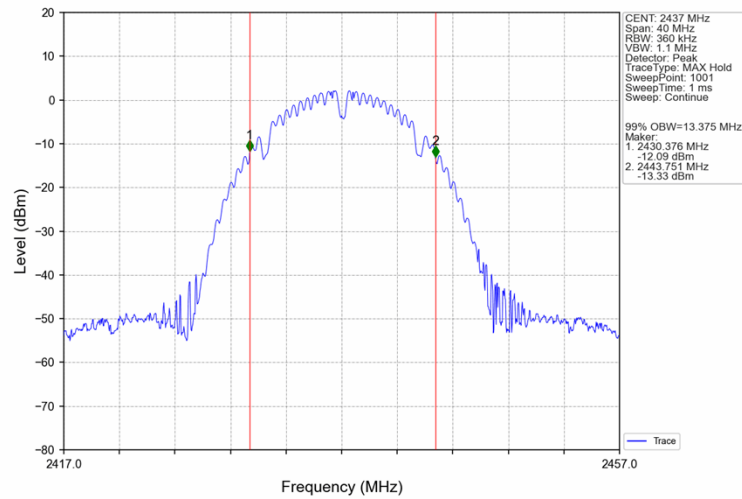
2.2 Test Graph

2.2.1 OBW

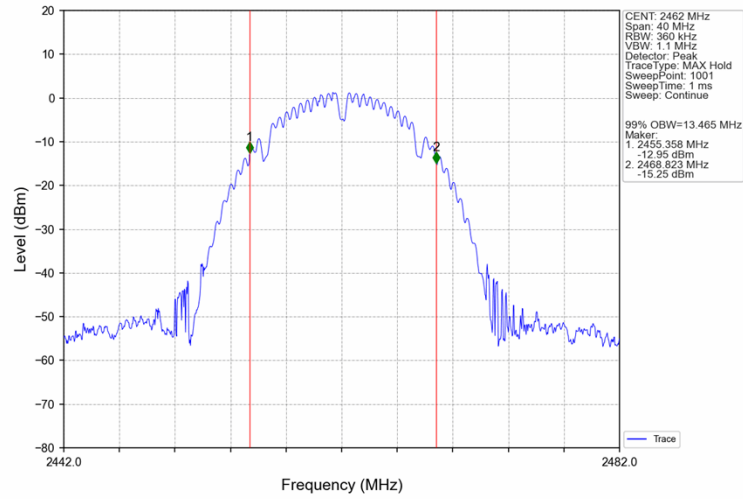
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



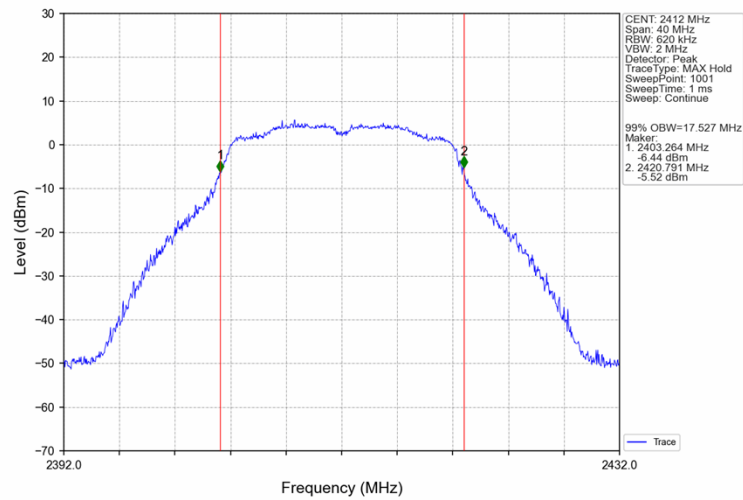
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



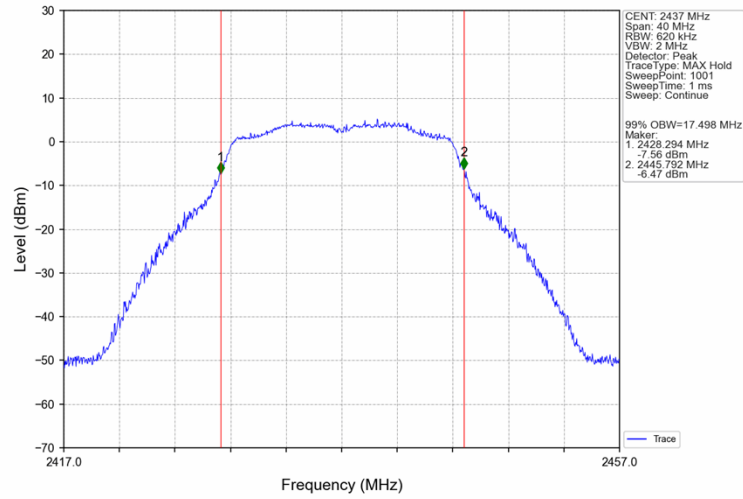
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



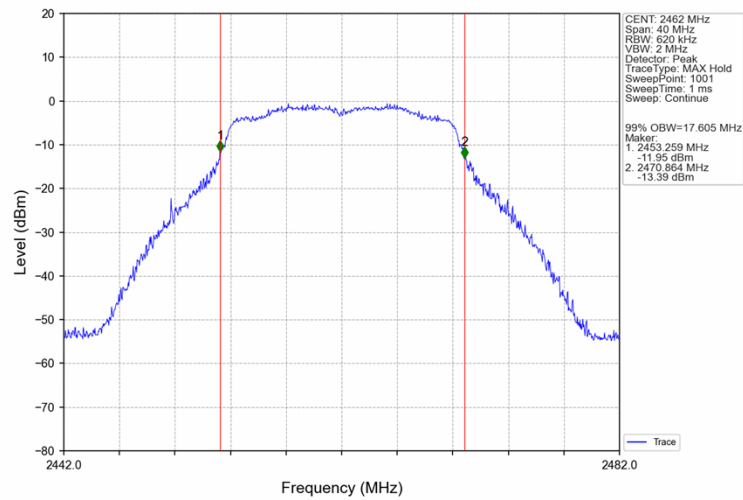
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



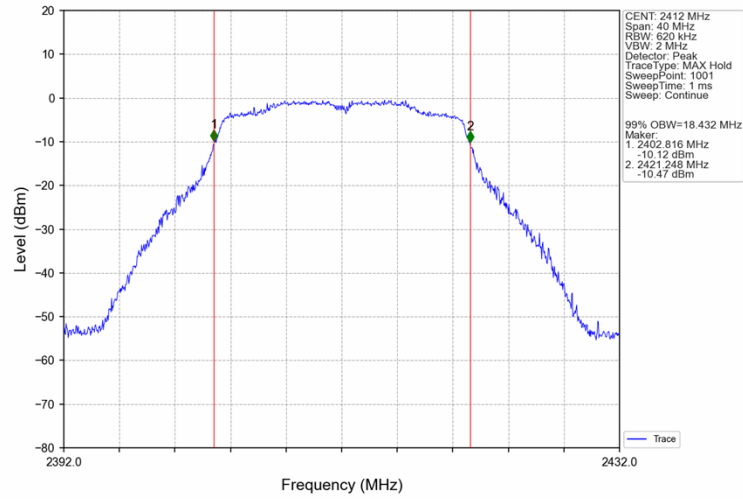
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



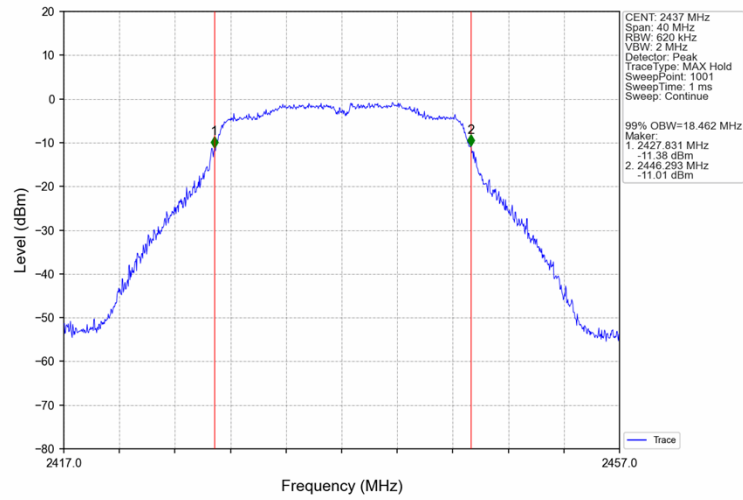
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



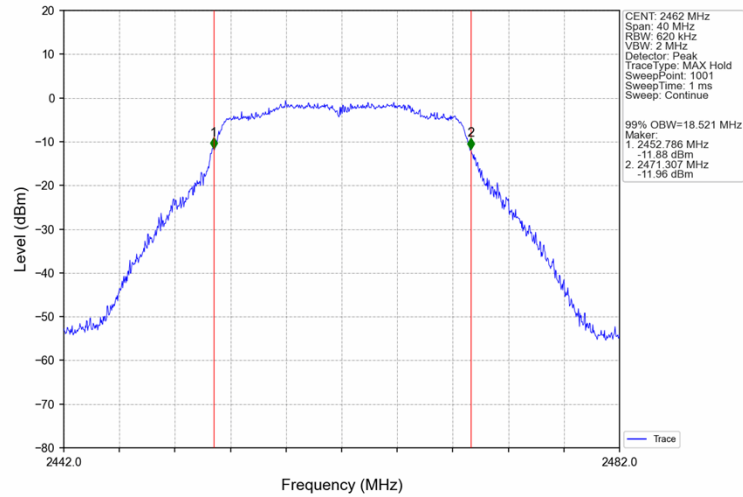
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



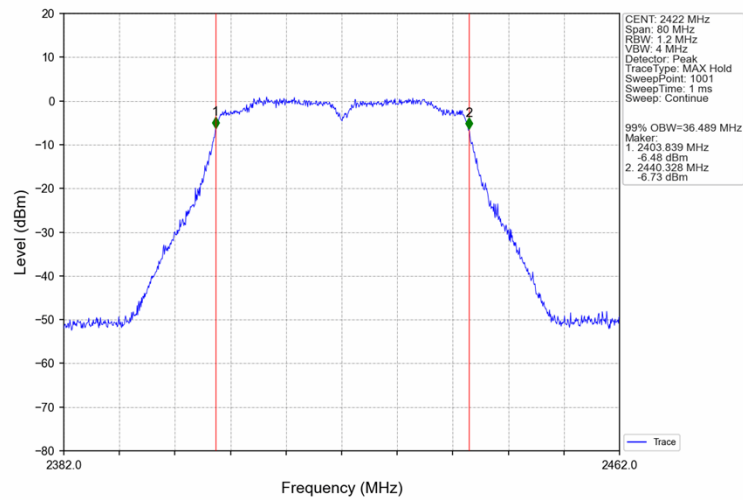
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



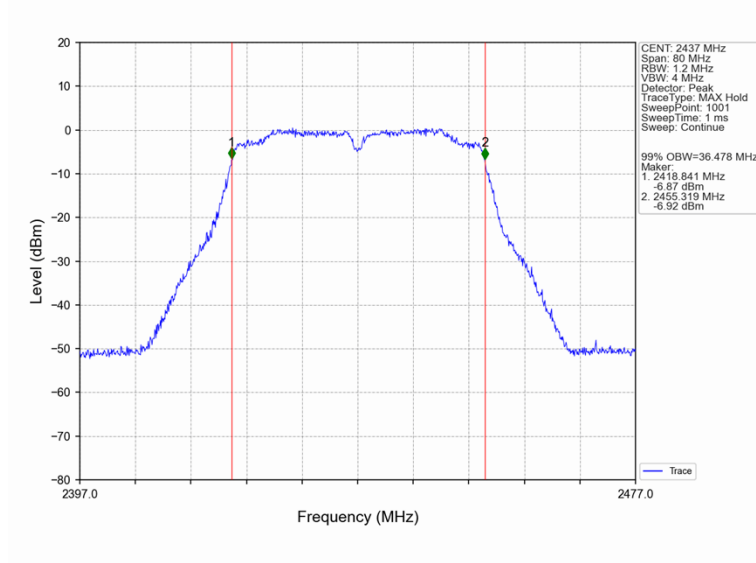
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



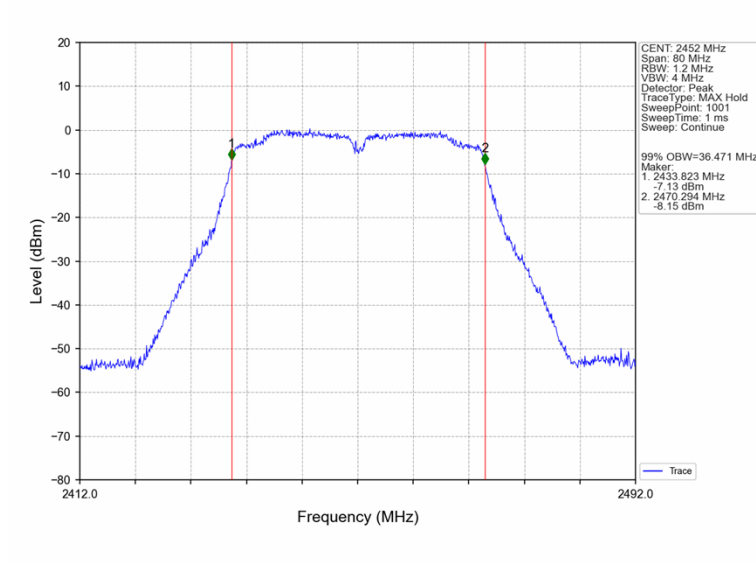
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV

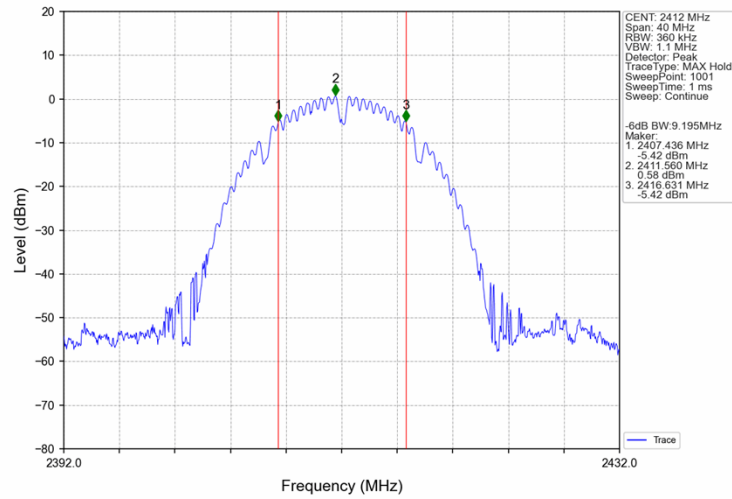


802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

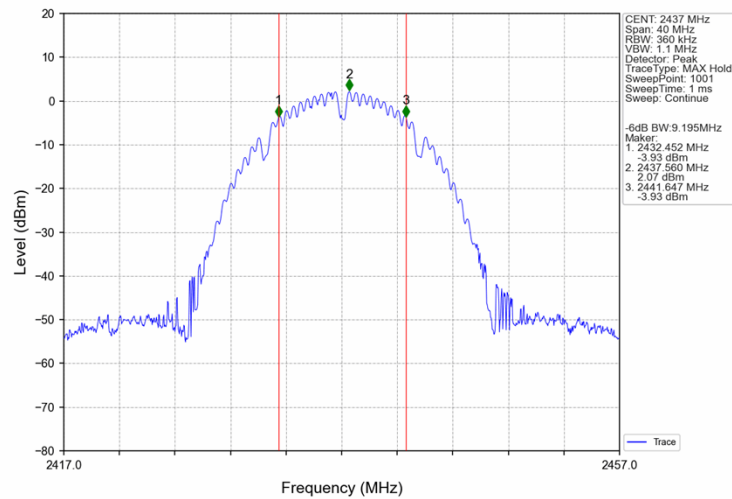


2.2.2 6dB BW

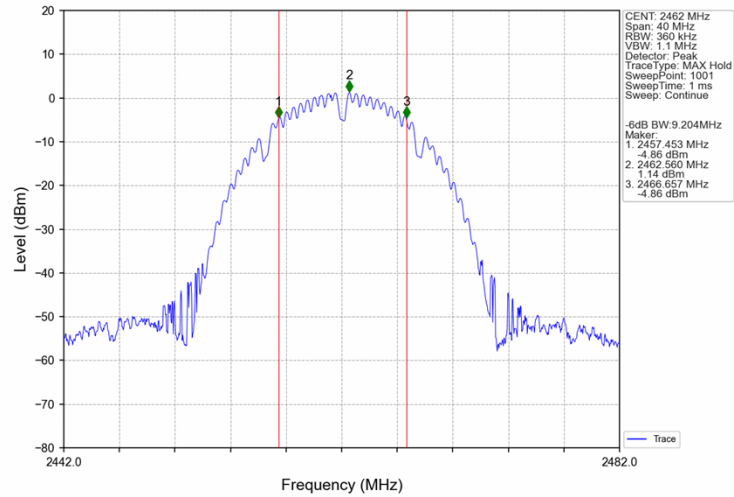
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



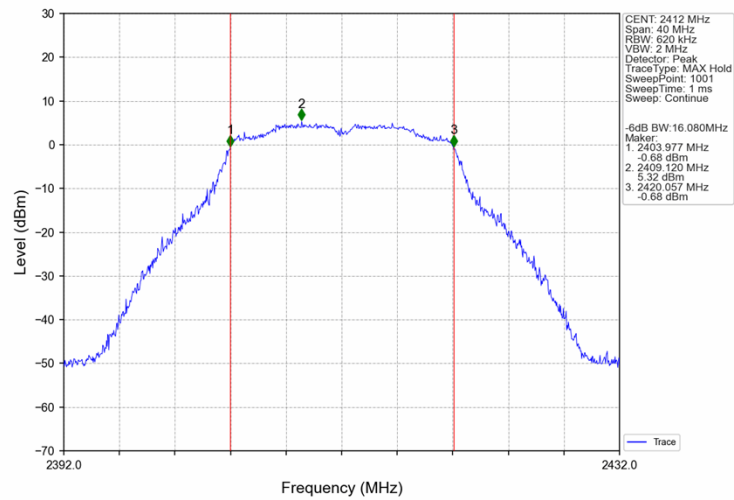
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



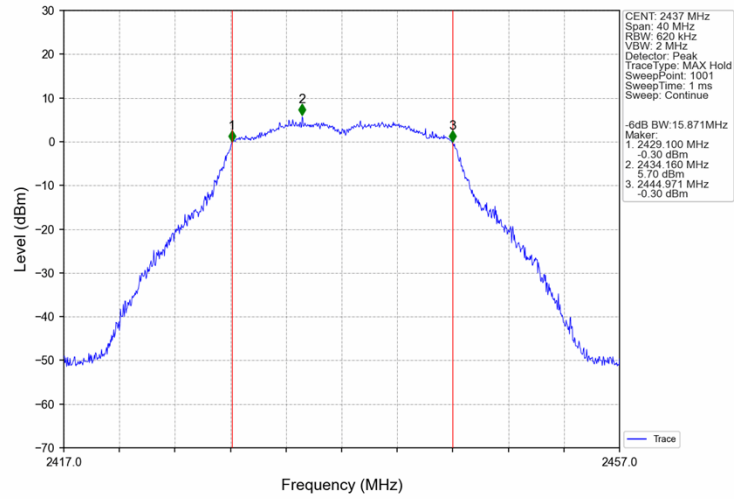
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



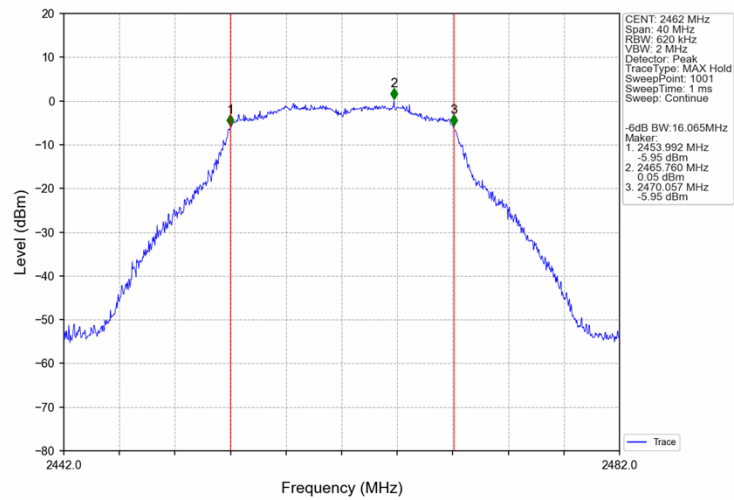
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



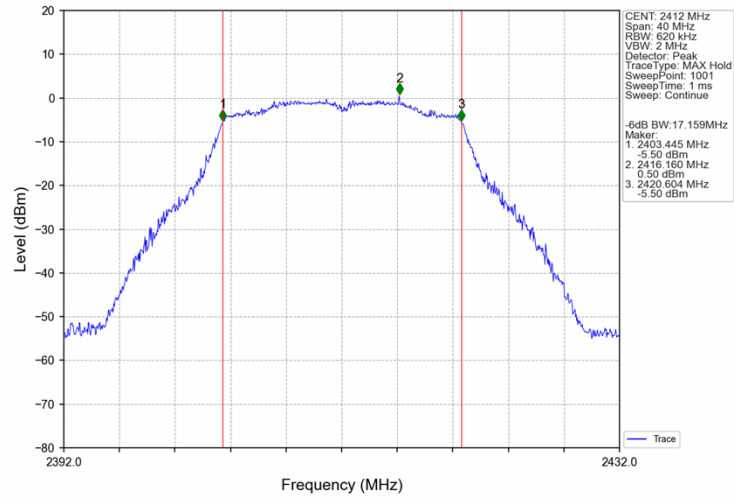
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



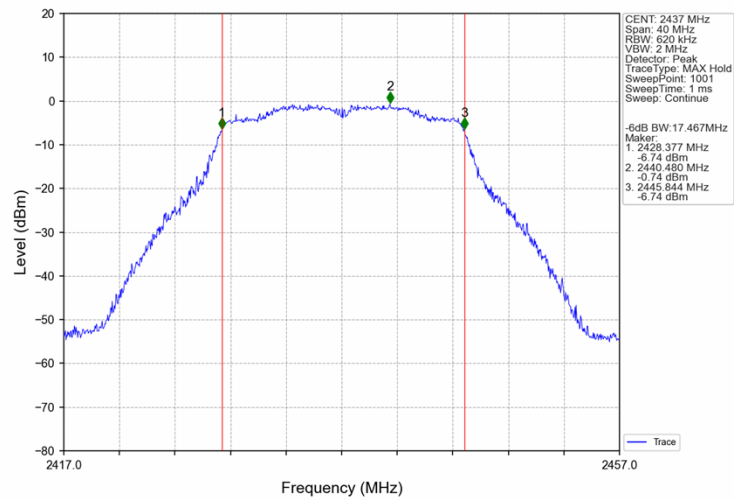
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



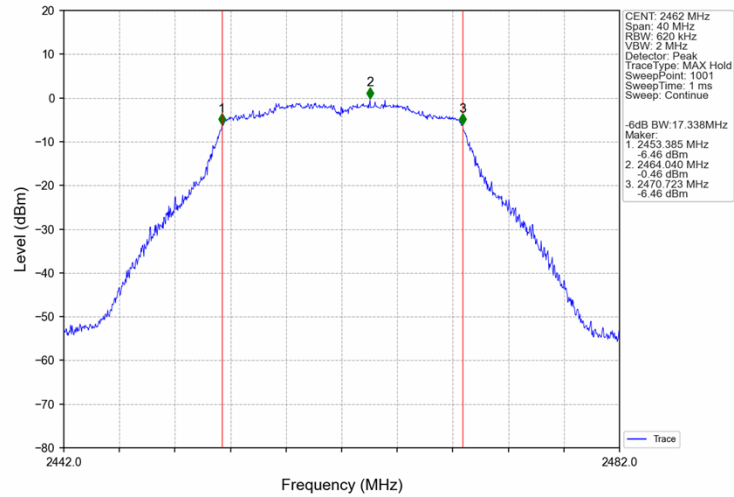
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



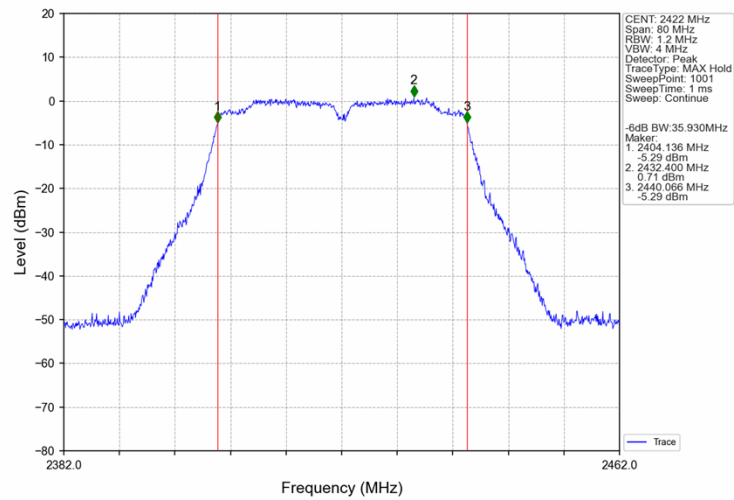
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



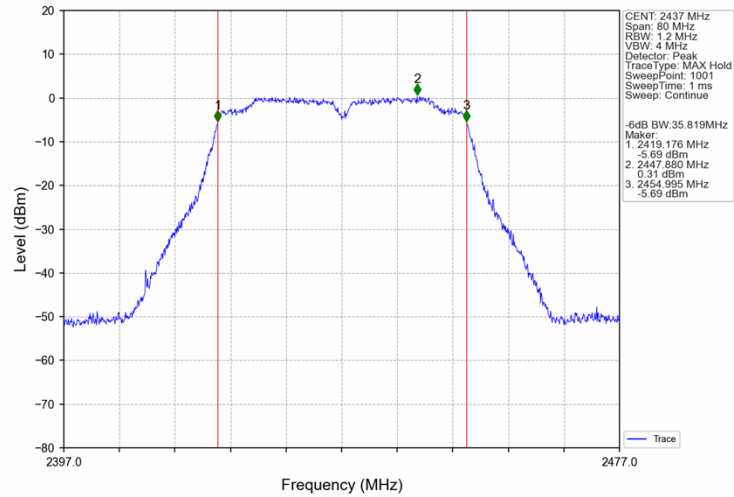
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



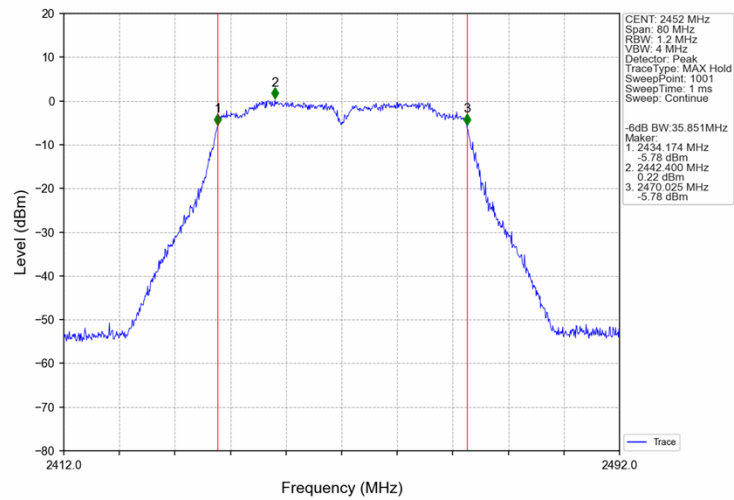
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Peak Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	13.63	<=30	Pass
		2437	/	/	12.78	<=30	Pass
		2462	/	/	11.79	<=30	Pass
802.11g	SISO	2412	/	/	12.83	<=30	Pass
		2437	/	/	12.40	<=30	Pass
		2462	/	/	12.20	<=30	Pass
802.11n (HT20)	SISO	2412	/	/	12.82	<=30	Pass
		2437	/	/	12.43	<=30	Pass
		2462	/	/	12.15	<=30	Pass
802.11n (HT40)	SISO	2422	/	/	13.01	<=30	Pass
		2437	/	/	12.71	<=30	Pass
		2452	/	/	12.27	<=30	Pass

Note1: Antenna Gain: Ant1: 0.00dBi;

4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

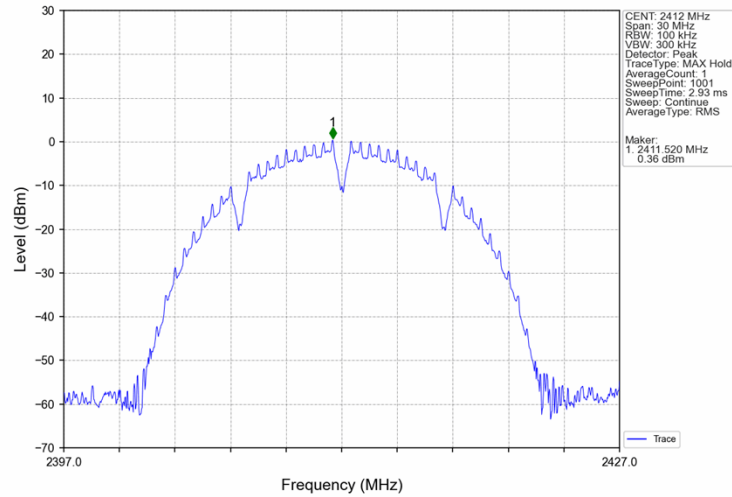
Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum PSD (dBm)		Verdict
					ANT1	Limit(dBm/3kHz)	
802.11b	SISO	2412	/	/	0.36dBm/100kHz	<=8	Pass
		2437	/	/	1.54dBm/100kHz	<=8	Pass
		2462	/	/	0.85dBm/100kHz	<=8	Pass
802.11g	SISO	2412	/	/	0.12dBm/100kHz	<=8	Pass
		2437	/	/	-0.21dBm/100kHz	<=8	Pass
		2462	/	/	-5.68dBm/100kHz	<=8	Pass
802.11n (HT20)	SISO	2412	/	/	-4.73dBm/100kHz	<=8	Pass
		2437	/	/	-5.26dBm/100kHz	<=8	Pass
		2462	/	/	-5.96dBm/100kHz	<=8	Pass
802.11n (HT40)	SISO	2422	/	/	-8.61dBm/100kHz	<=8	Pass
		2437	/	/	-9.16dBm/100kHz	<=8	Pass
		2452	/	/	-9.39dBm/100kHz	<=8	Pass

Note1: Antenna Gain: Ant1: 0.00dBi;

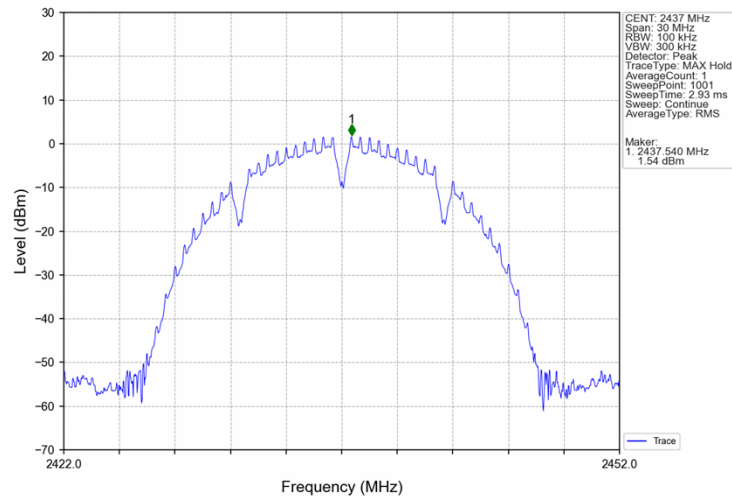
4.2 Test Graph

4.2.1 PSD

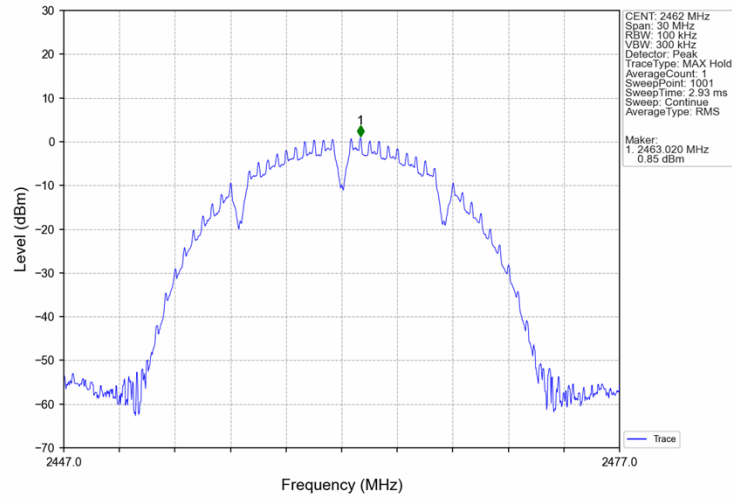
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



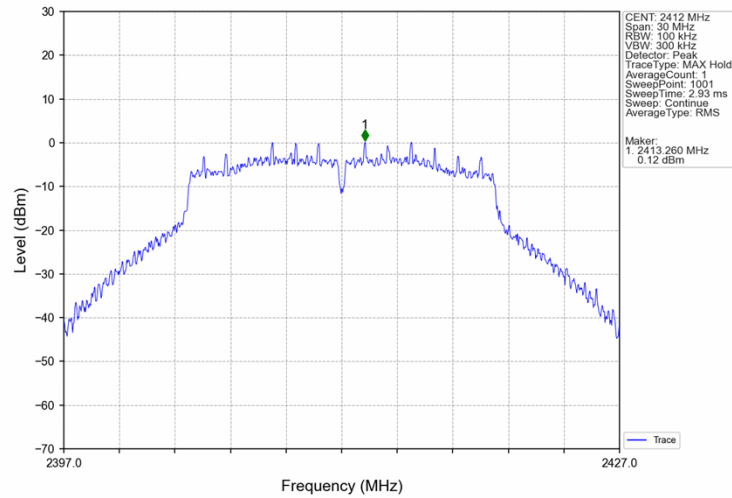
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



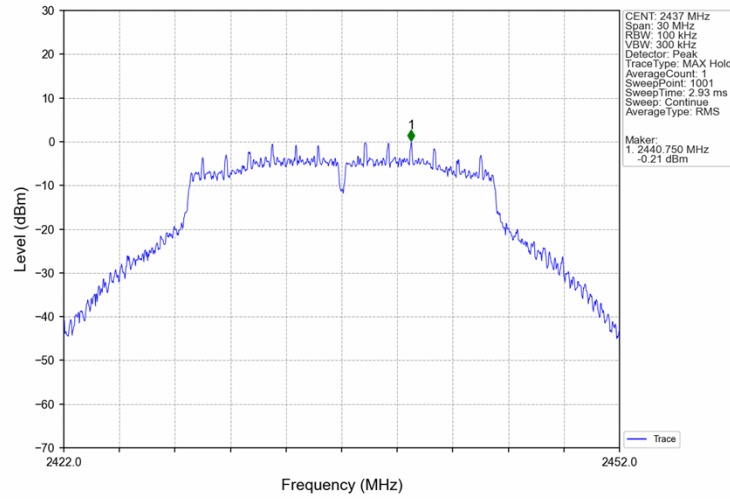
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



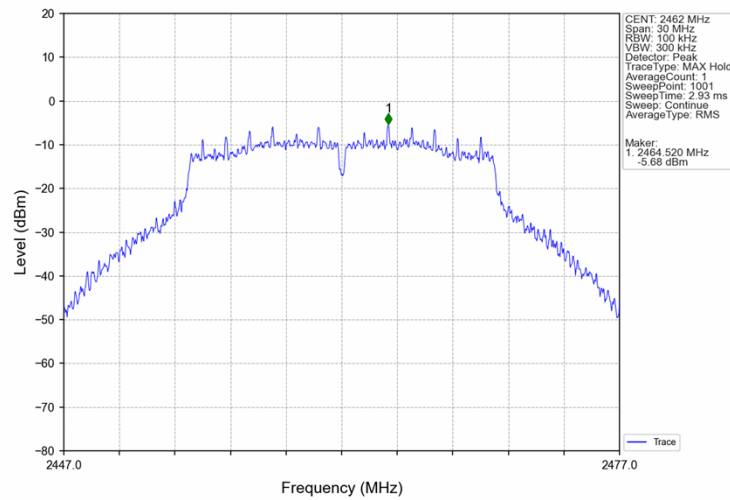
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



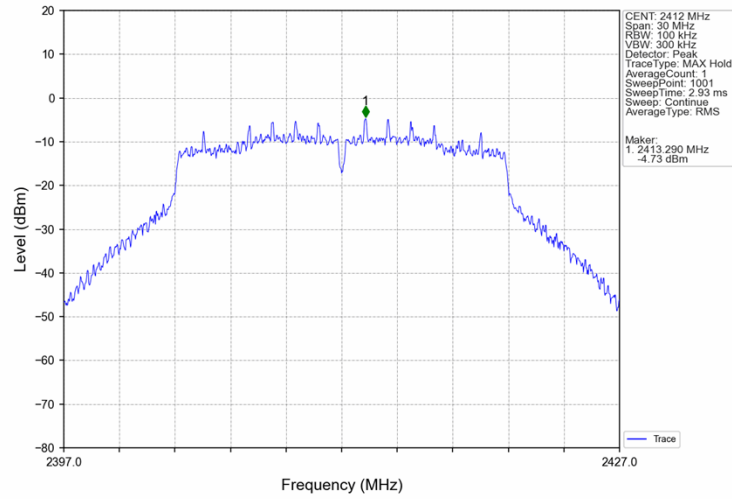
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



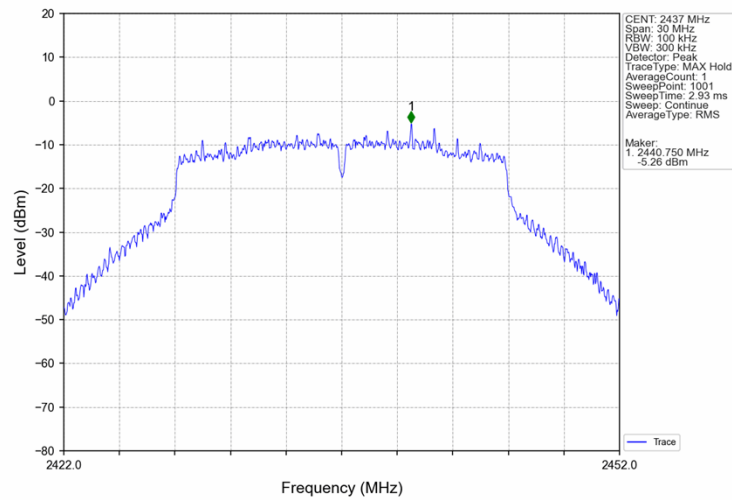
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



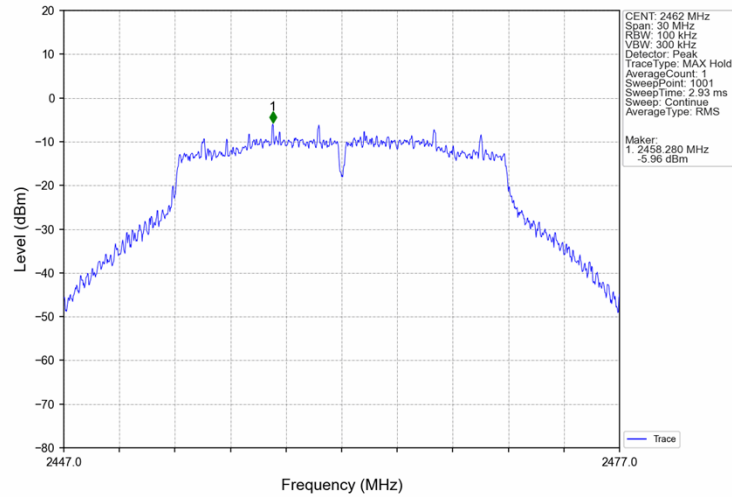
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



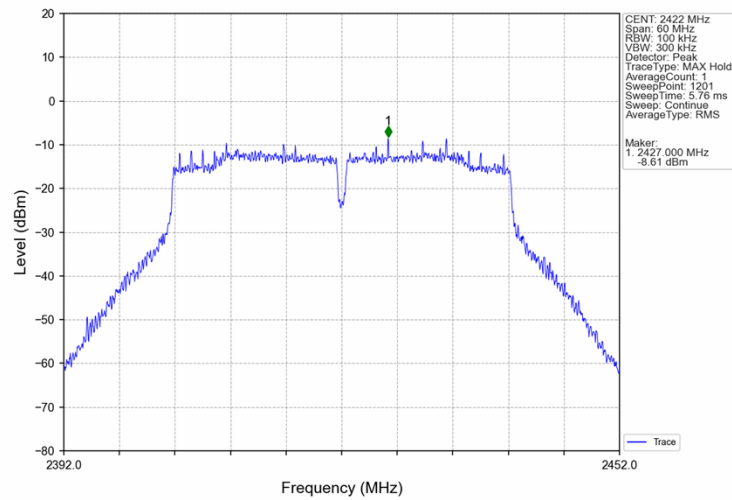
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



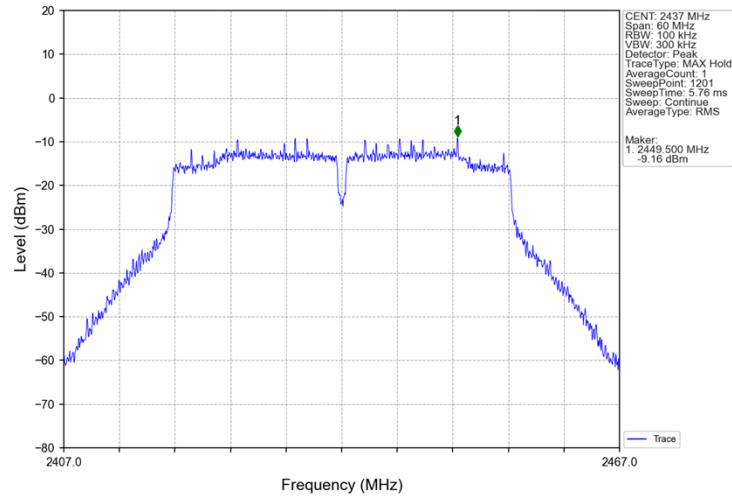
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



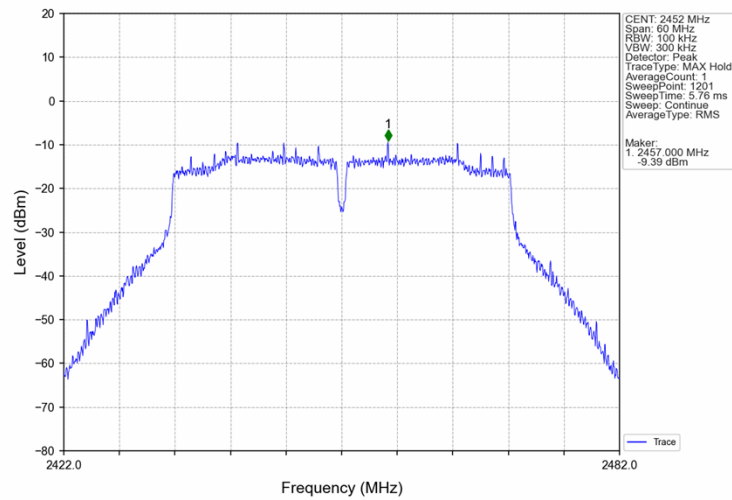
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



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)	RU	RU Pos	ANT	Level of Reference (dBm)
802.11b	SISO	2412	/	/	1	0.16
		2437	/	/	1	1.85
		2462	/	/	1	0.92
802.11g	SISO	2412	/	/	1	0.24
		2437	/	/	1	-0.17
		2462	/	/	1	-5.41
802.11n (HT20)	SISO	2412	/	/	1	-4.97
		2437	/	/	1	-5.01
		2462	/	/	1	-5.55
802.11n (HT40)	SISO	2422	/	/	1	-8.50
		2437	/	/	1	-8.94
		2452	/	/	1	-8.95

5.1.2 CSE

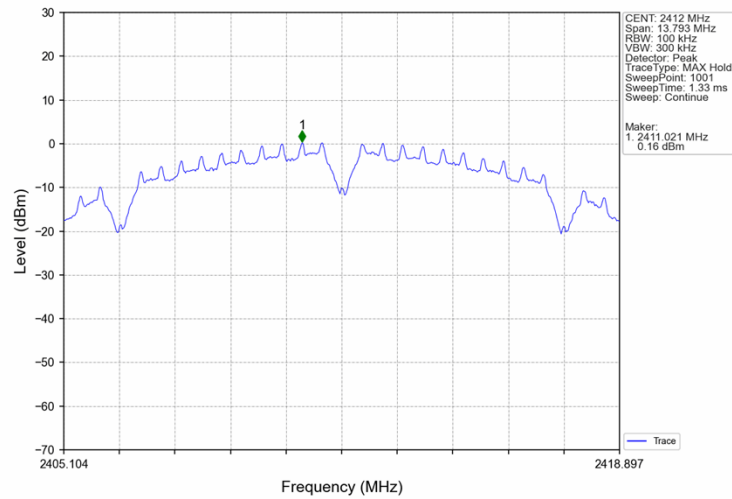
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	/	/	1	0.16	-19.84	Pass
		2437	/	/	1	1.85	-18.15	Pass
		2462	/	/	1	0.92	-19.08	Pass
802.11g	SISO	2412	/	/	1	0.24	-19.76	Pass
		2437	/	/	1	-0.17	-20.17	Pass
		2462	/	/	1	-5.41	-25.41	Pass

802.11n (HT20)	SISO	2412	/	/	1	-4.97	-24.97	Pass
		2437	/	/	1	-5.01	-25.01	Pass
		2462	/	/	1	-5.55	-25.55	Pass
802.11n (HT40)	SISO	2422	/	/	1	-8.50	-28.50	Pass
		2437	/	/	1	-8.94	-28.94	Pass
		2452	/	/	1	-8.95	-28.95	Pass

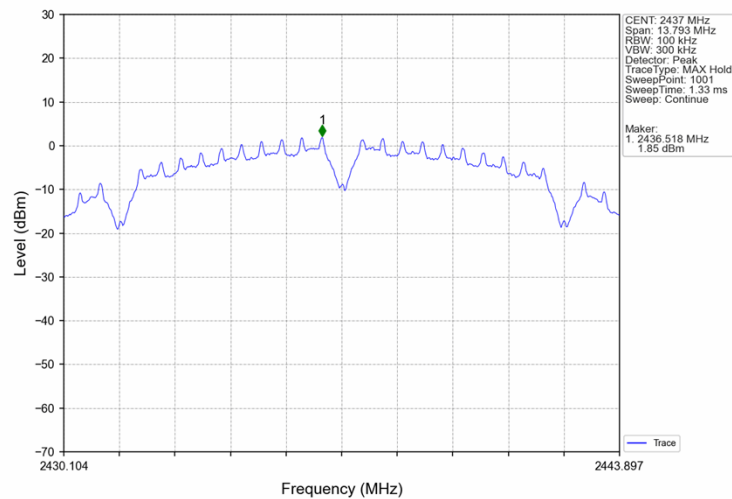
5.2 Test Graph

5.2.1 Ref

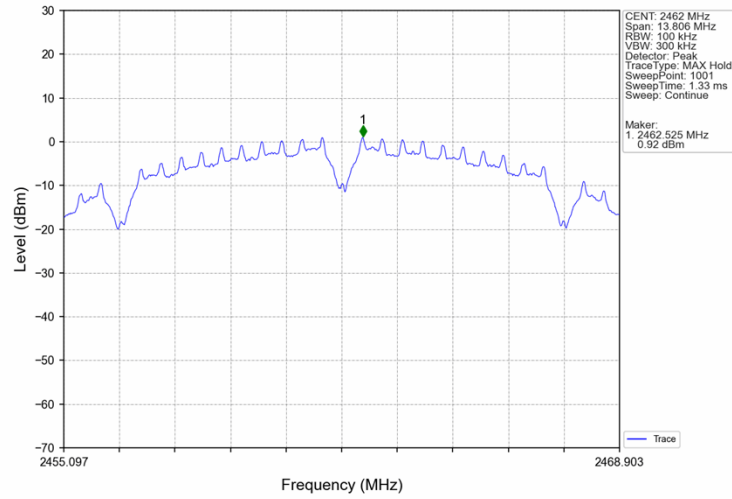
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



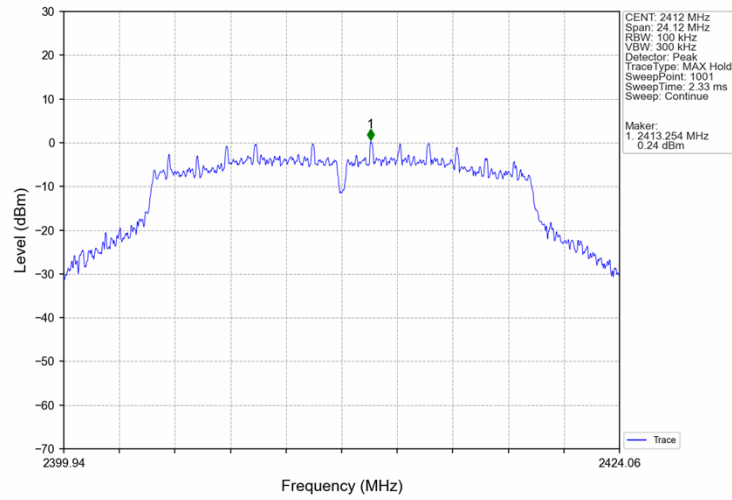
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



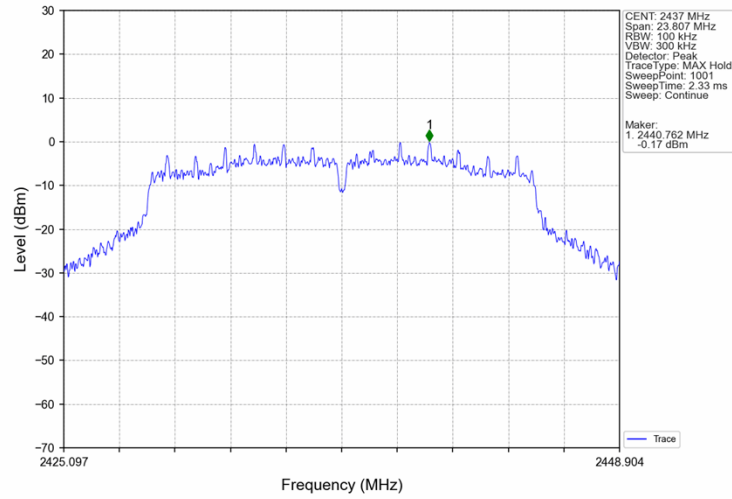
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



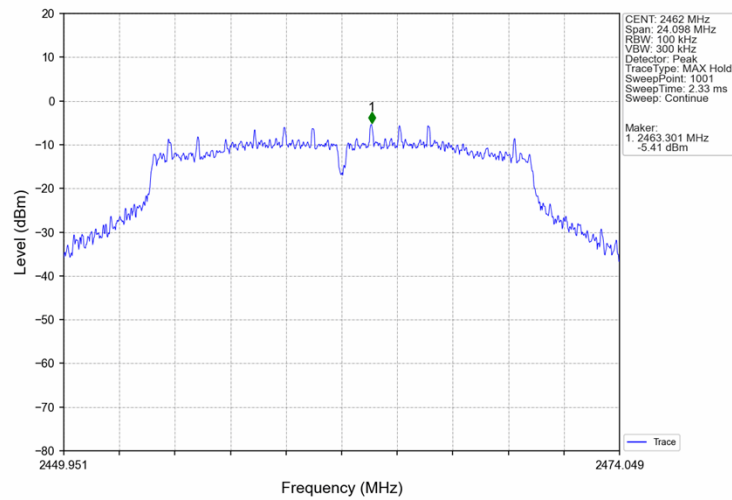
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



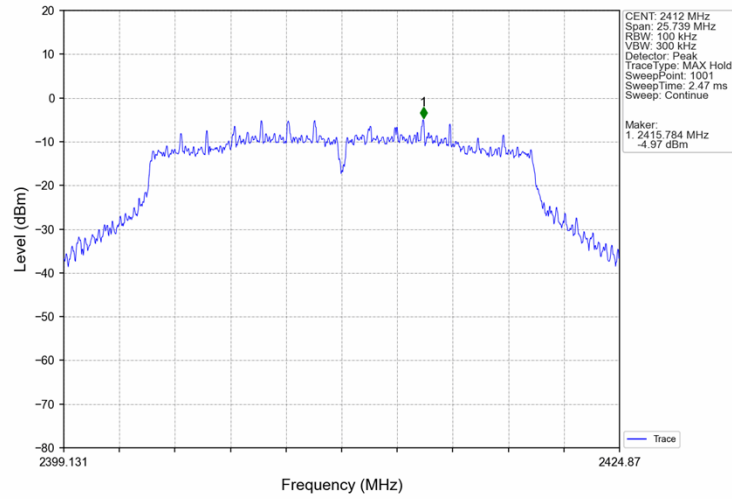
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



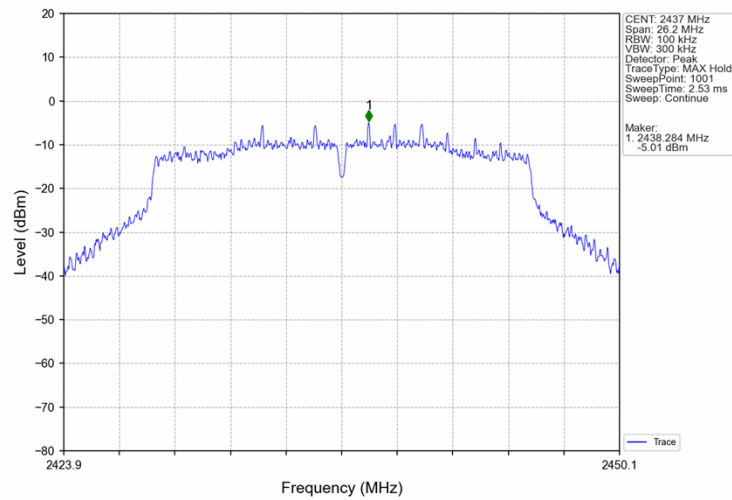
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



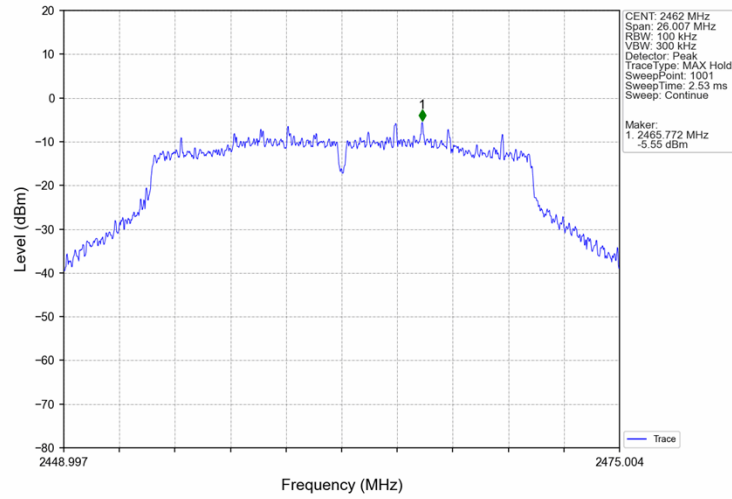
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

