

Product Name : Smart Plug-In Aroma Diffuser

Mode: WD200

FCC ID : 2BSFY- WD200

1. Duty Cycle

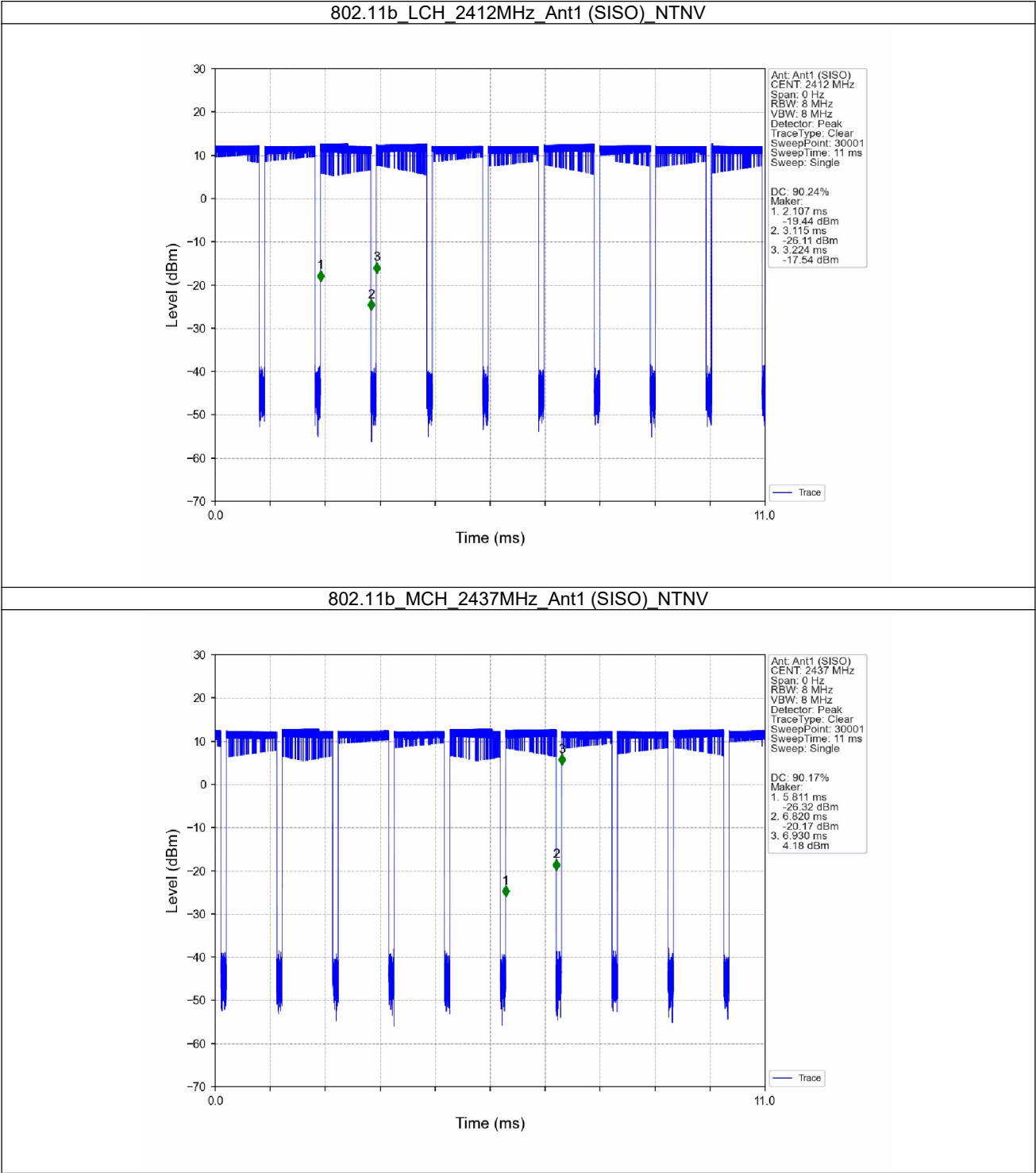
1.1 Test Result

1.1.1 Ant1

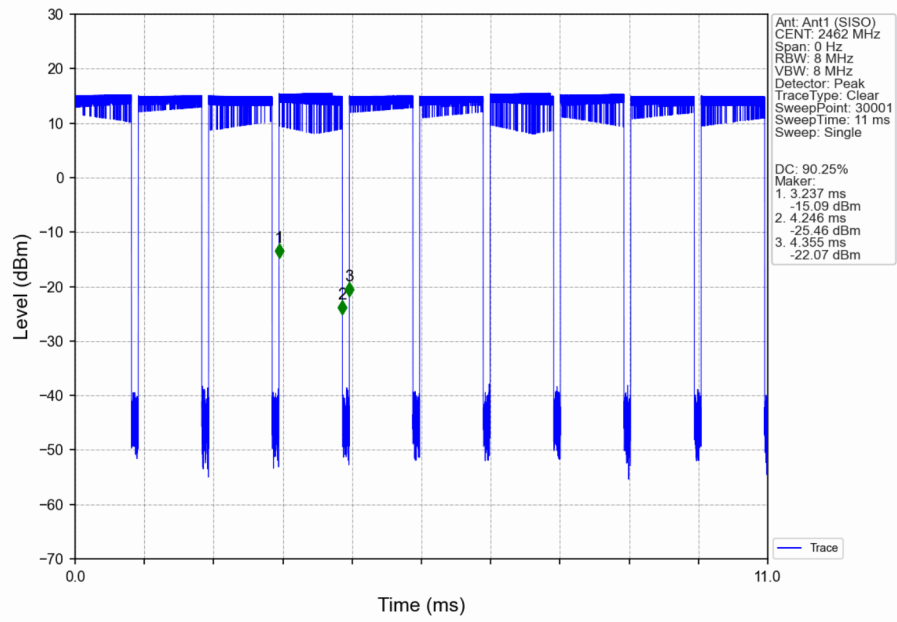
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	1.008	1.117	90.24	0.45	0.09
		2437	1.009	1.119	90.17	0.45	0.12
		2462	1.009	1.118	90.25	0.45	0.12
802.11g	SISO	2412	0.617	0.682	90.47	0.43	0.16
		2437	0.618	0.682	90.62	0.43	0.16
		2462	0.618	0.682	90.62	0.43	0.16
802.11n (HT20)	SISO	2412	0.614	0.679	90.43	0.44	0.16
		2437	0.613	0.679	90.28	0.44	0.16
		2462	0.614	0.679	90.43	0.44	0.16

1.2 Test Graph

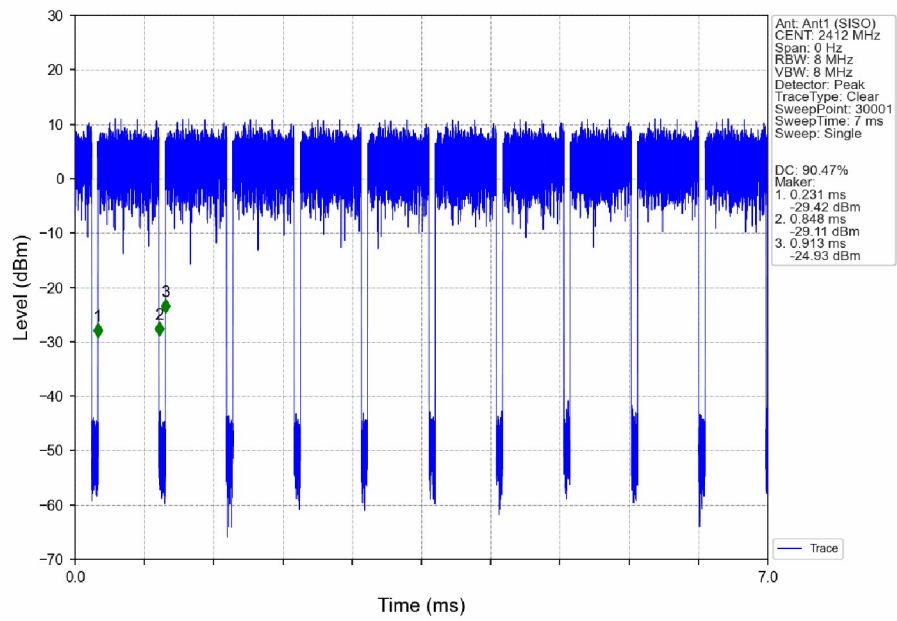
1.2.1 Ant1



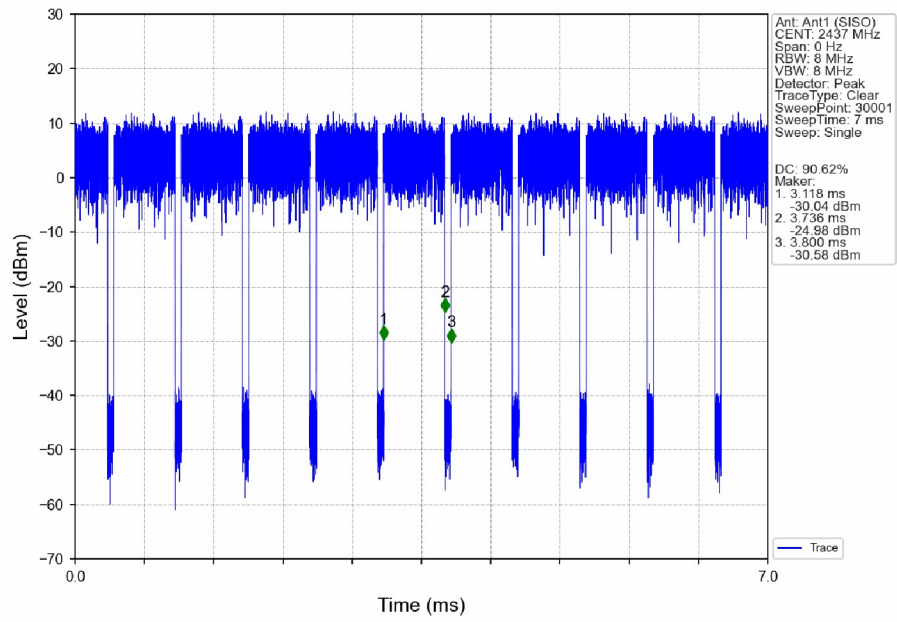
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



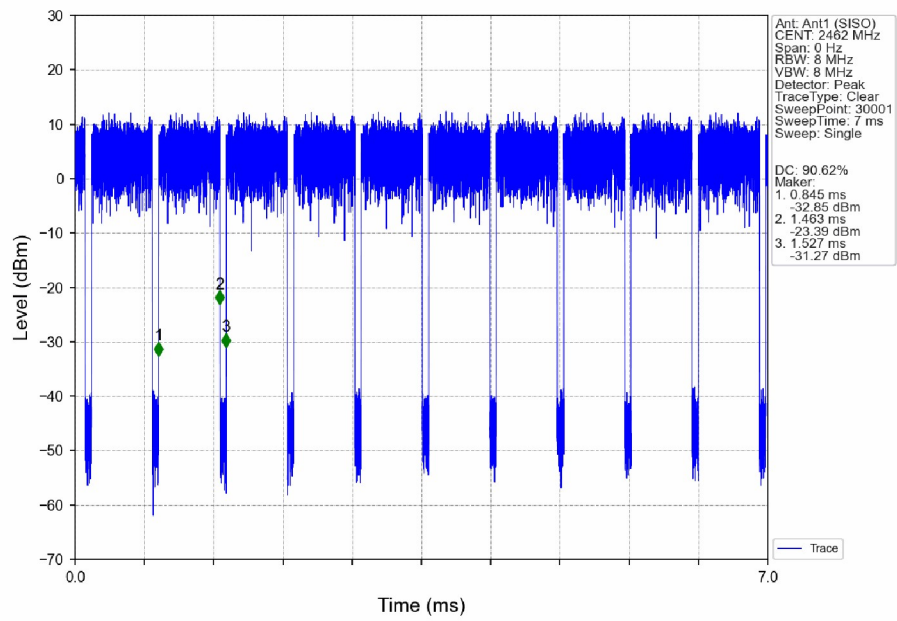
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



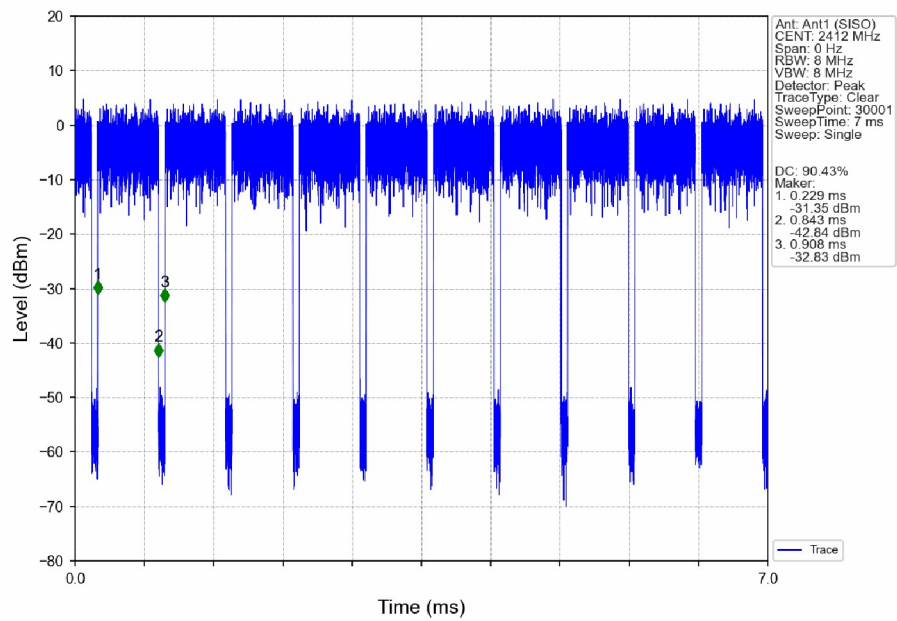
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



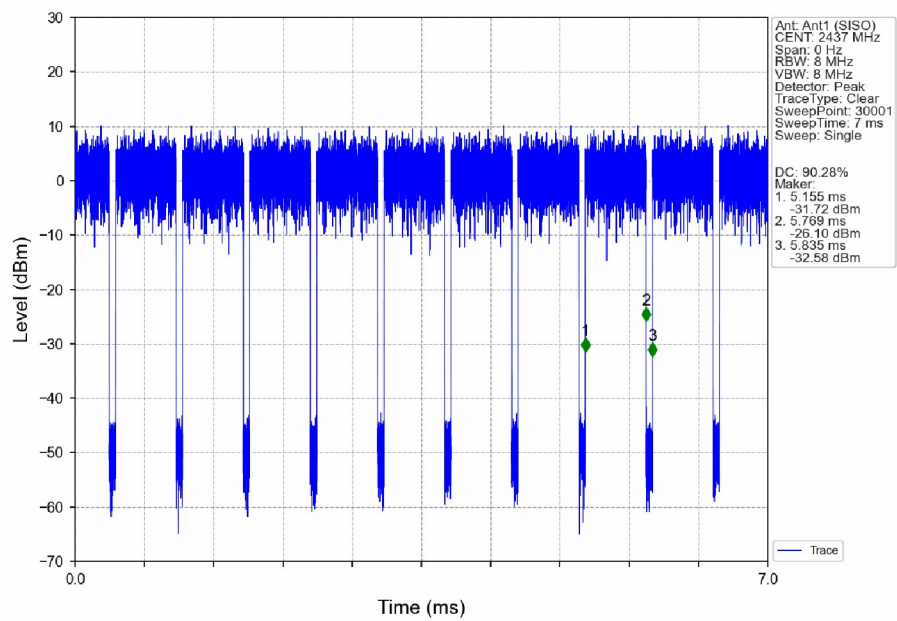
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



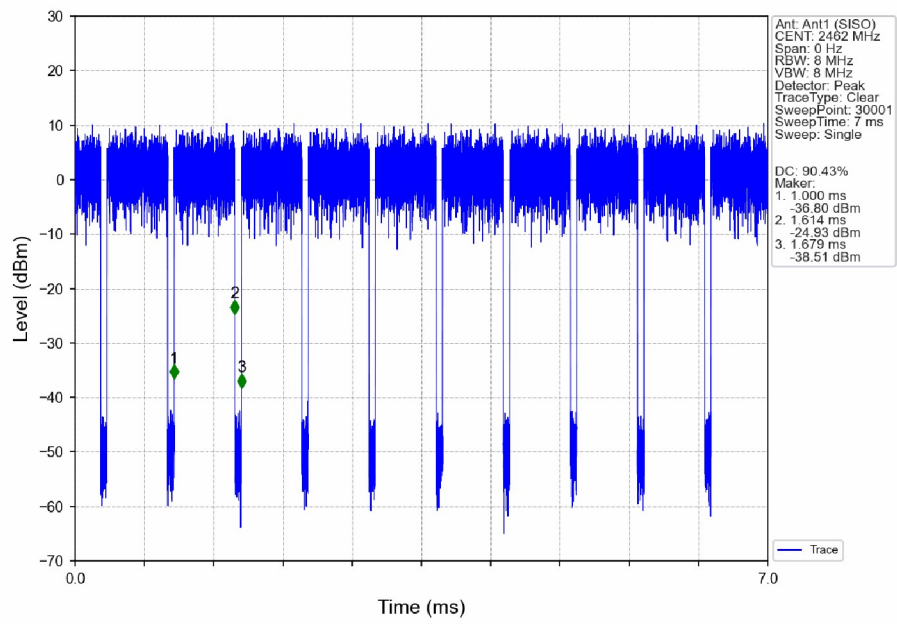
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

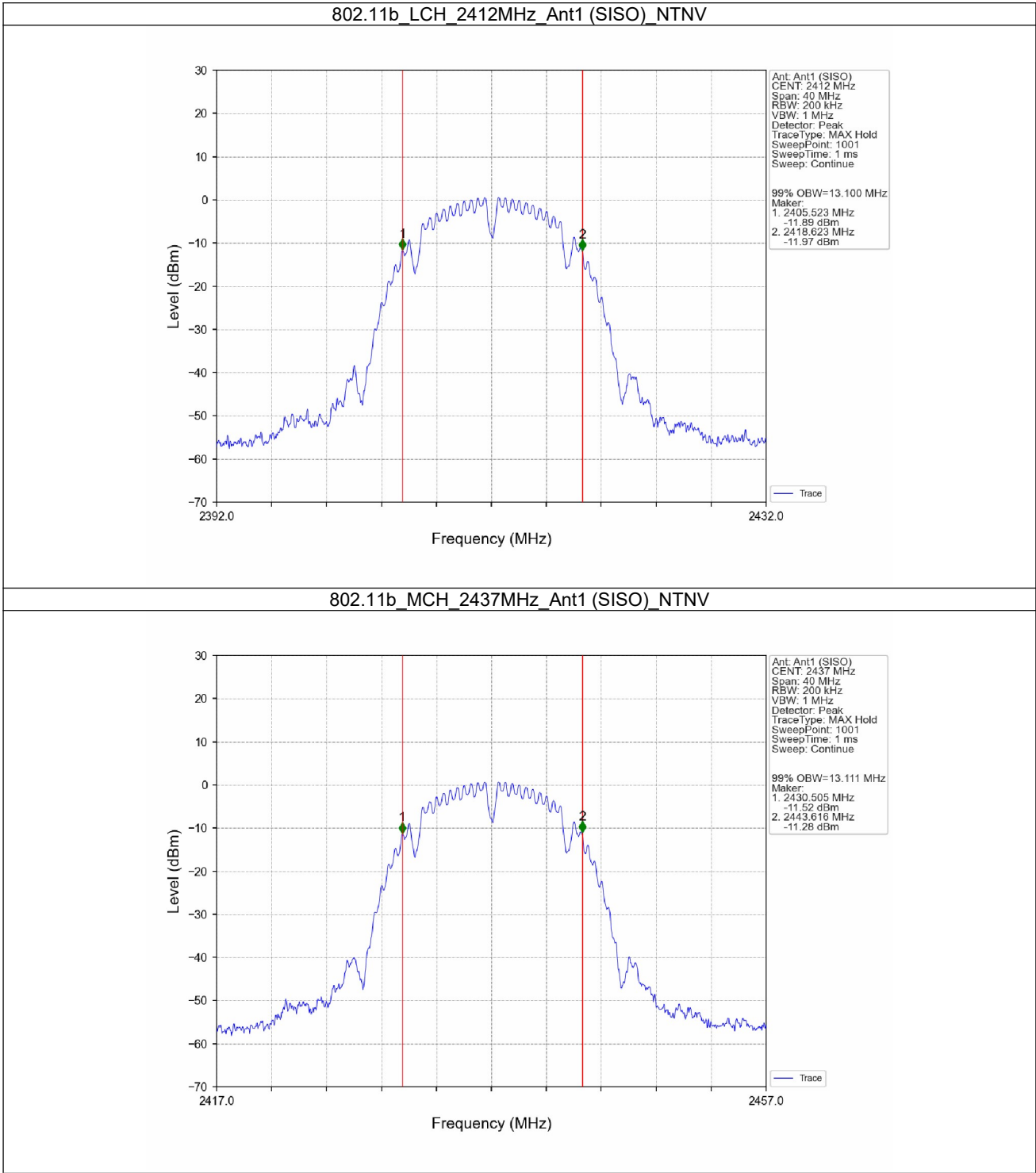
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	13.100	/	Pass
		2437	1	13.111	/	Pass
		2462	1	13.116	/	Pass
802.11g	SISO	2412	1	16.942	/	Pass
		2437	1	16.955	/	Pass
		2462	1	16.924	/	Pass
802.11n (HT20)	SISO	2412	1	17.982	/	Pass
		2437	1	17.989	/	Pass
		2462	1	17.977	/	Pass

2.1.2 6dB BW

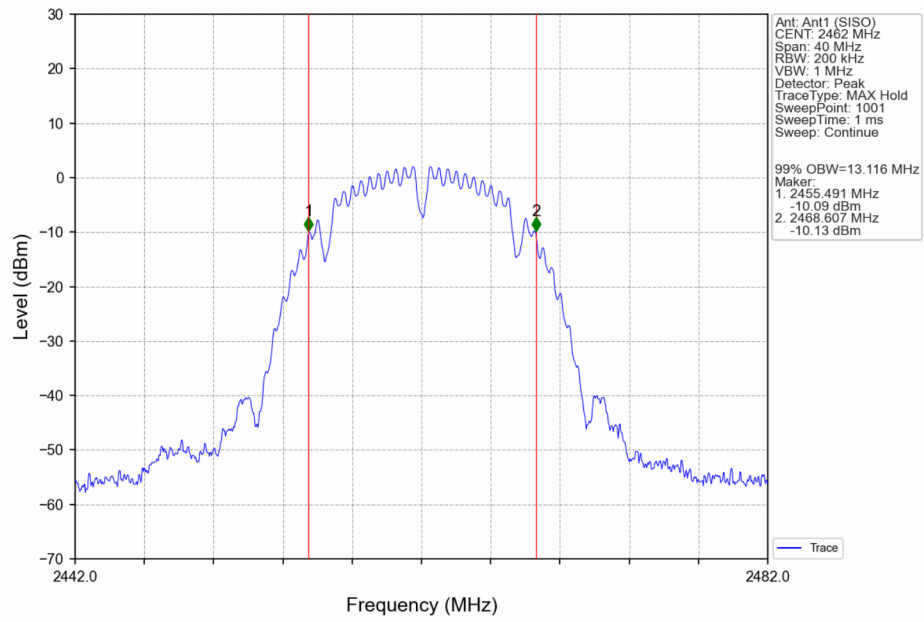
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.671	≥ 0.5	Pass
		2437	1	10.081	≥ 0.5	Pass
		2462	1	10.071	≥ 0.5	Pass
802.11g	SISO	2412	1	16.544	≥ 0.5	Pass
		2437	1	16.563	≥ 0.5	Pass
		2462	1	16.562	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.678	≥ 0.5	Pass
		2437	1	17.711	≥ 0.5	Pass
		2462	1	17.705	≥ 0.5	Pass

2.2 Test Graph

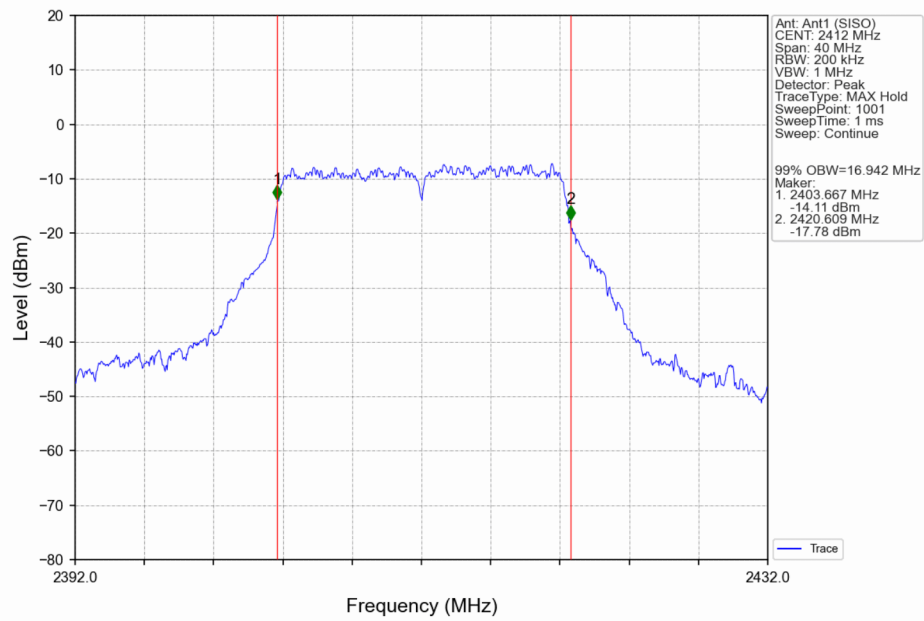
2.2.1 OBW



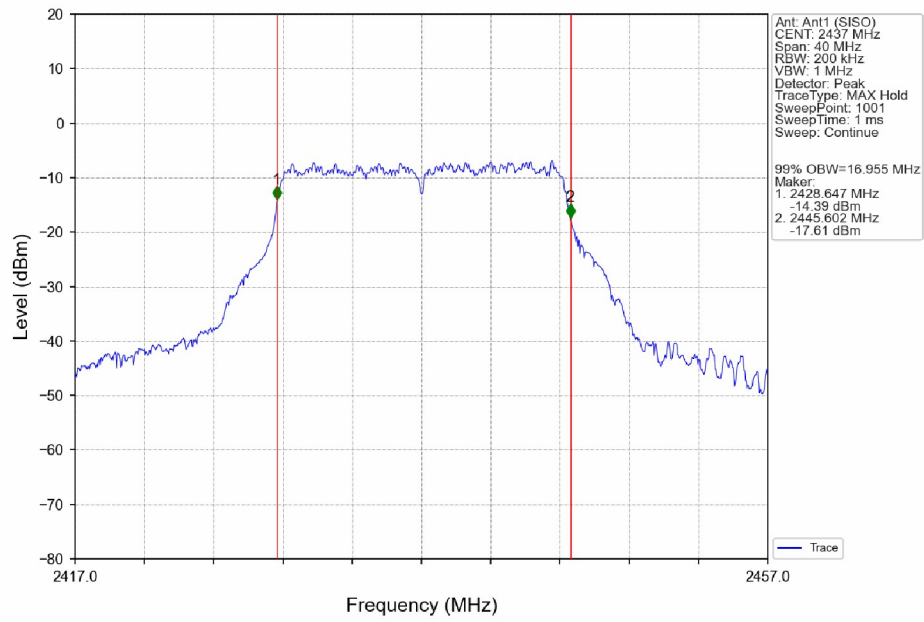
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



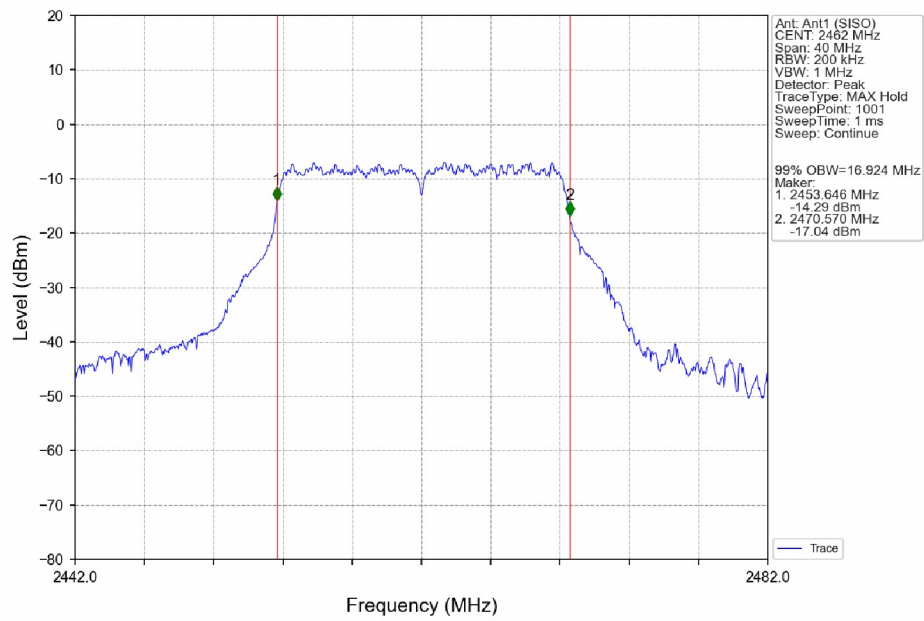
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



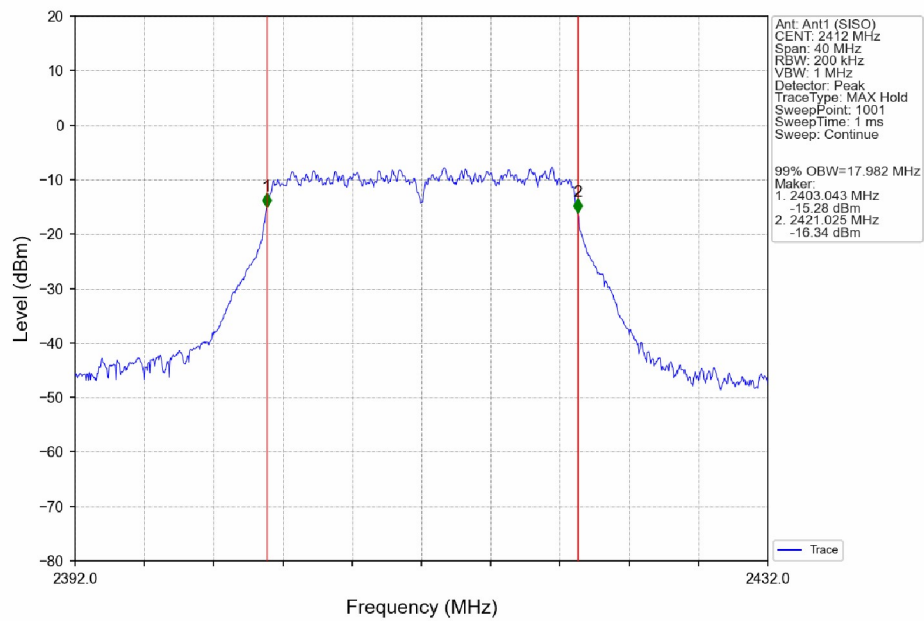
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



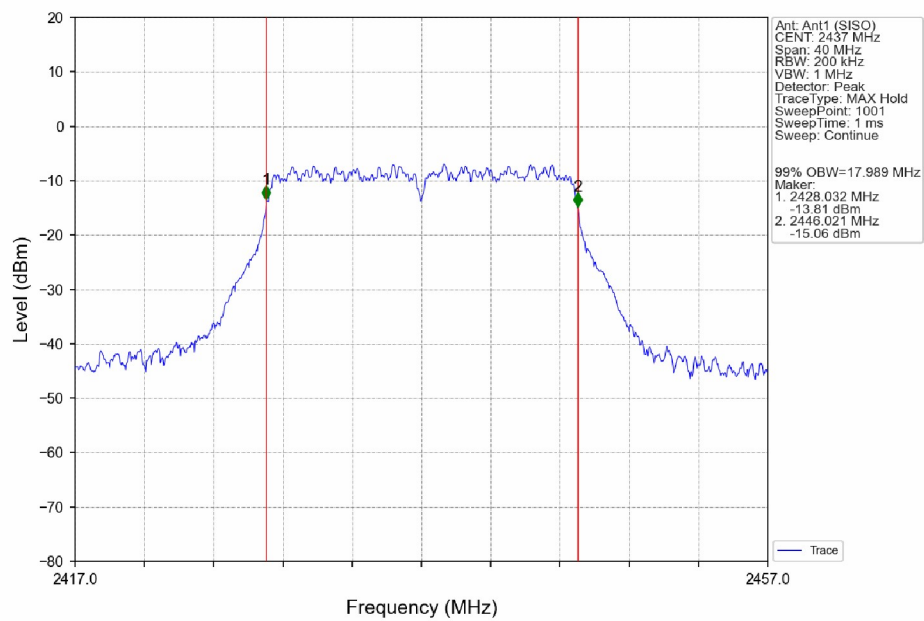
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



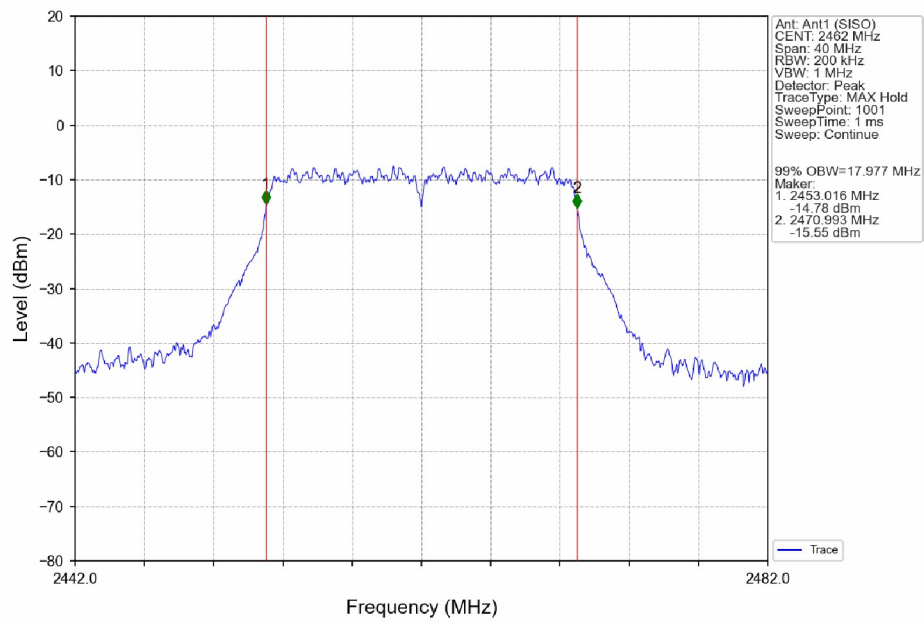
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



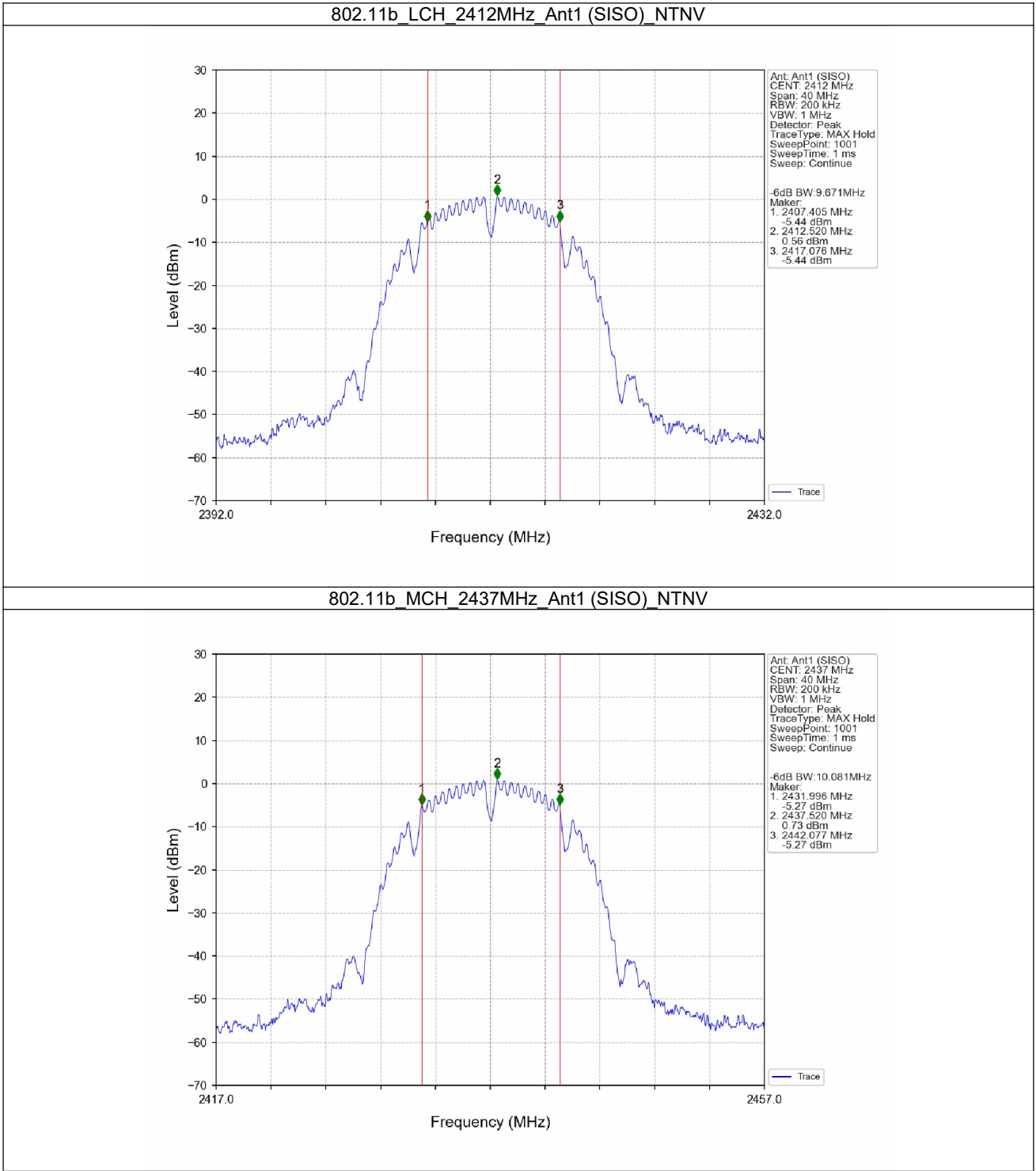
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



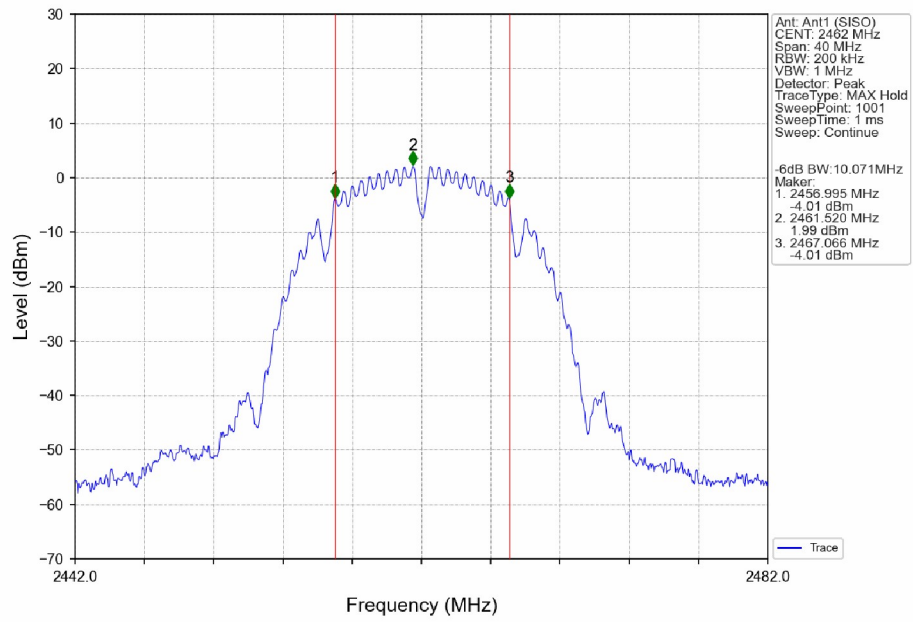
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



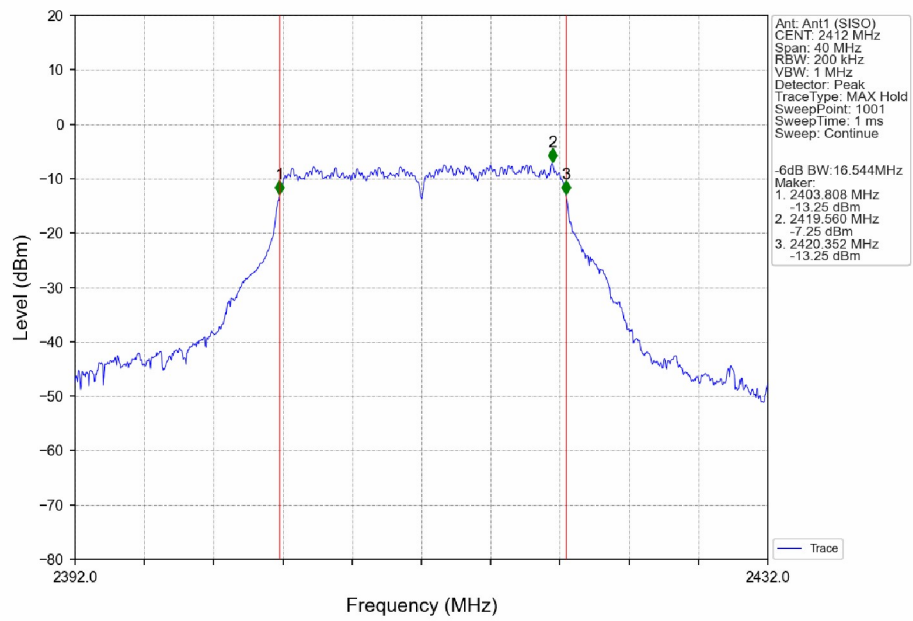
2.2.2 6dB BW



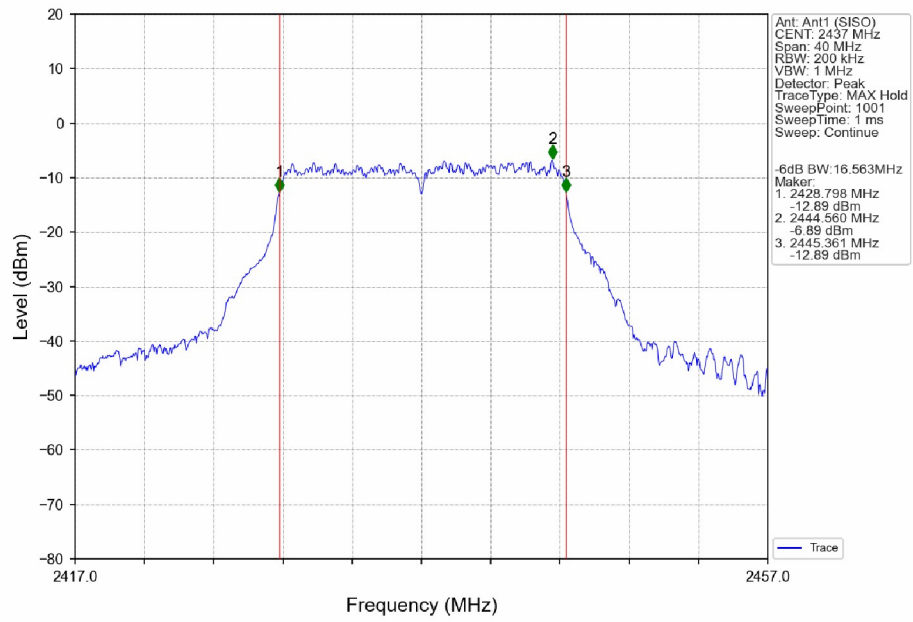
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



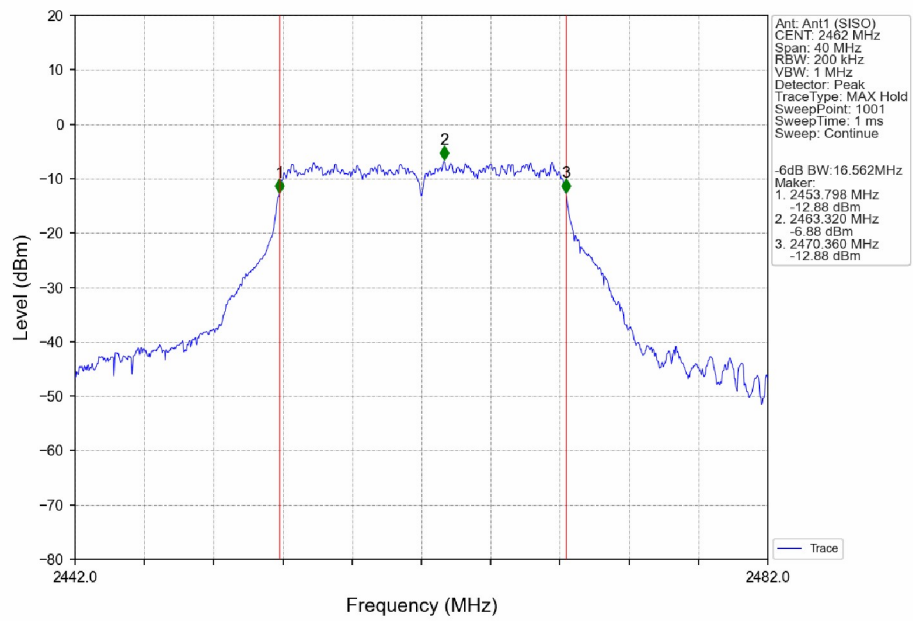
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



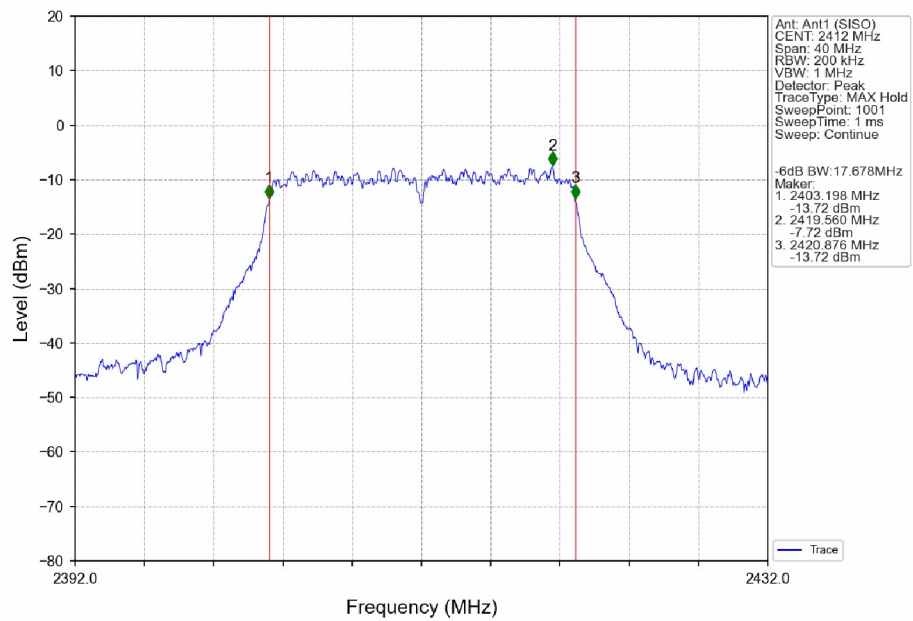
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



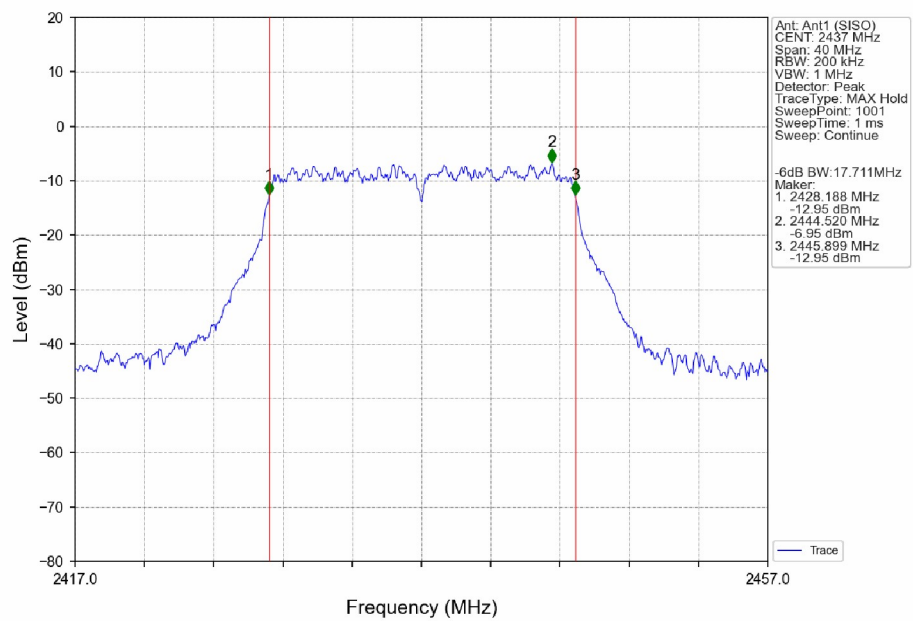
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



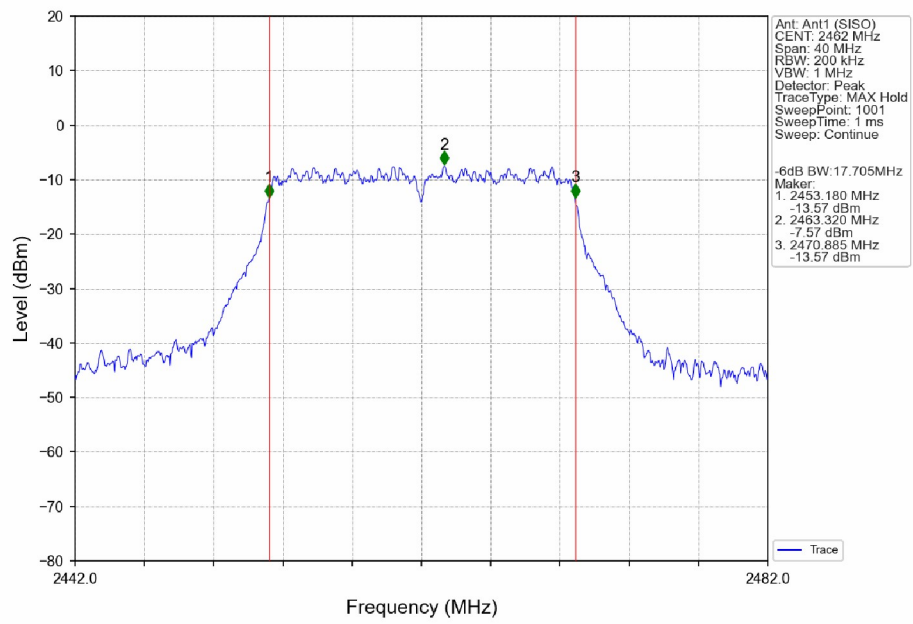
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



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
			Conducted Power	Limit	
802.11b	SISO	2412	10.98	<=30	Pass
		2437	10.95	<=30	Pass
		2462	10.91	<=30	Pass
802.11g	SISO	2412	10.33	<=30	Pass
		2437	10.74	<=30	Pass
		2462	10.8	<=30	Pass
802.11n (HT20)	SISO	2412	9.87	<=30	Pass
		2437	10.75	<=30	Pass
		2462	10.14	<=30	Pass
Note1: Antenna Gain: Ant1: 2.45dBi;					

4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1dBm/100Khz)	Limit (dBm/3Khz)	
802.11b	SISO	2412	-0.39	<=8	Pass
		2437	-0.36	<=8	Pass
		2462	2.24	<=8	Pass
802.11g	SISO	2412	-6.64	<=8	Pass
		2437	-5.31	<=8	Pass
		2462	-5.24	<=8	Pass
802.11n (HT20)	SISO	2412	-13.17	<=8	Pass
		2437	-7.73	<=8	Pass
		2462	-7.62	<=8	Pass
Note1: Antenna Gain: Ant1: 2.45dBi;					

4.2 Test Graph

4.2.1 PSD

