

Product Name : Digital Photo Frame

Mode: BS-DGCL15

FCC ID : 2AL64-CF-1566P

1. Duty Cycle

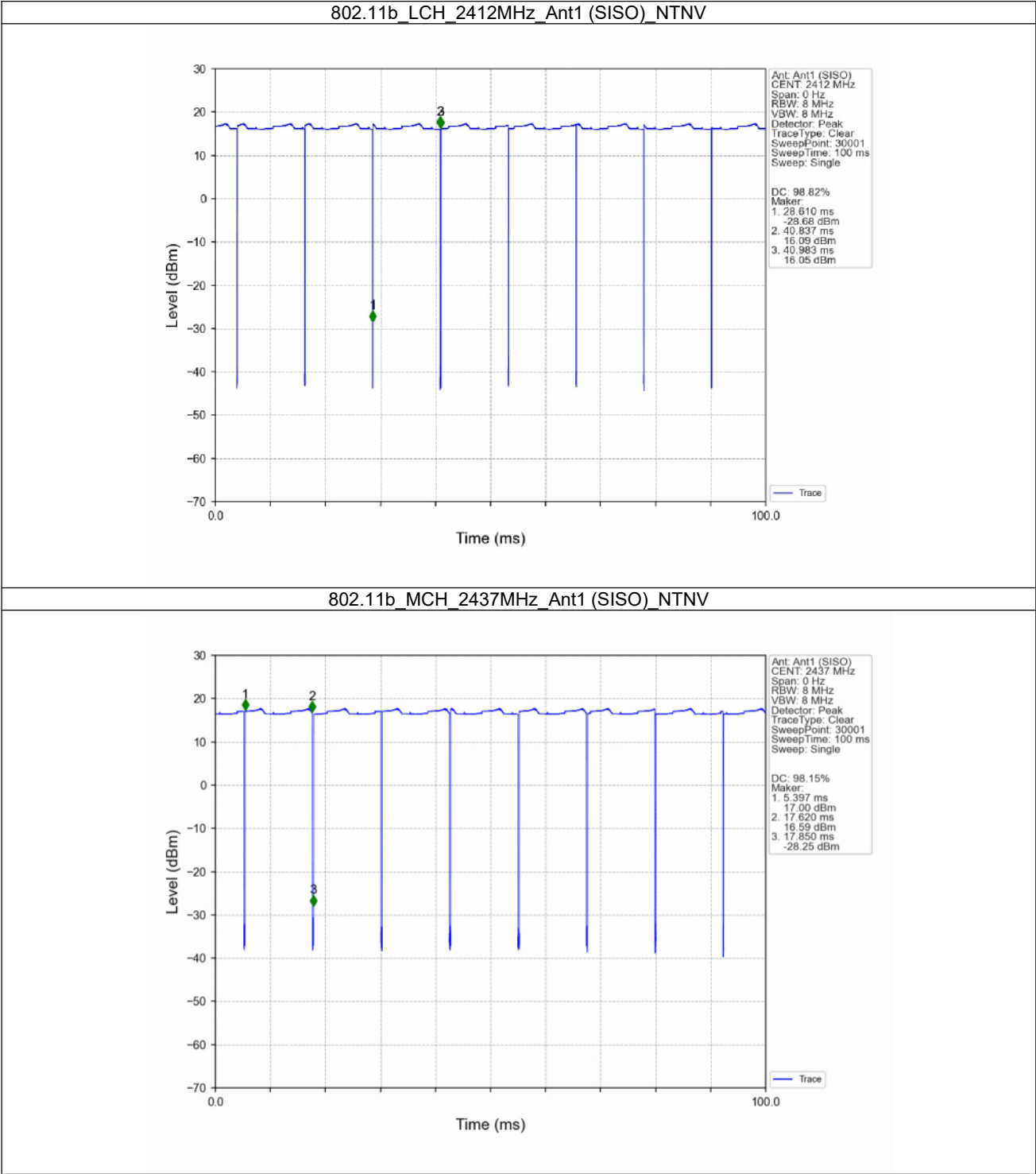
1.1 Test Result

1.1.1 Ant1

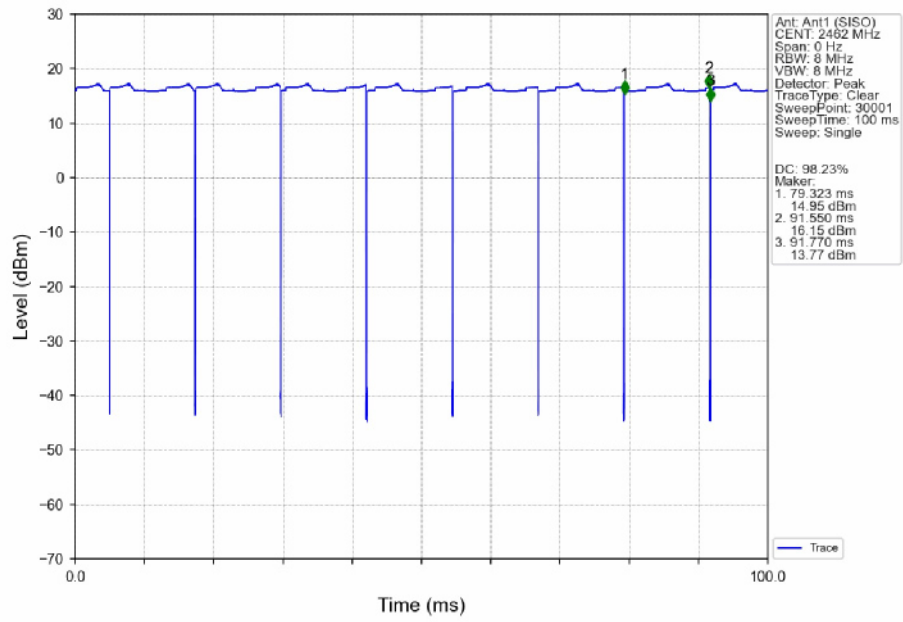
Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	/	/	12.227	12.373	98.82	0.05	0.83
		2437	/	/	12.223	12.453	98.15	0.08	1.01
		2462	/	/	12.227	12.447	98.23	0.08	0.80
802.11g	SISO	2412	/	/	2.034	2.210	92.04	0.36	5.57
		2437	/	/	2.035	2.269	89.69	0.47	5.29
		2462	/	/	2.034	2.223	91.50	0.39	3.45
802.11n (HT20)	SISO	2412	/	/	1.892	2.112	89.58	0.48	3.59
		2437	/	/	1.892	2.072	91.31	0.39	5.95
		2462	/	/	1.892	2.130	88.83	0.51	5.63
802.11n (HT40)	SISO	2422	/	/	0.933	1.094	85.28	0.69	9.37
		2437	/	/	0.934	1.169	79.90	0.97	8.15
		2452	/	/	0.933	1.084	86.07	0.65	8.65

1.2 Test Graph

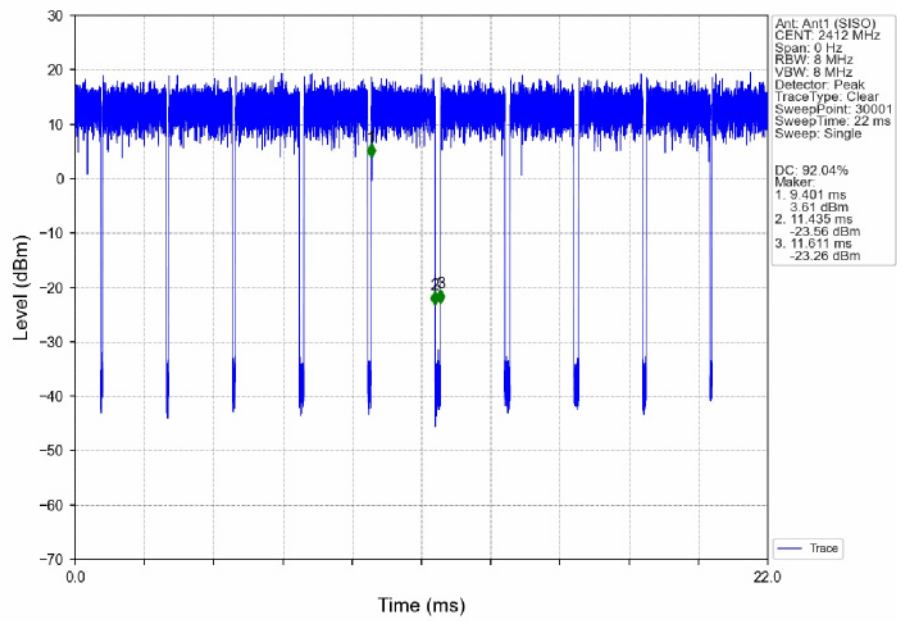
1.2.1 Ant1



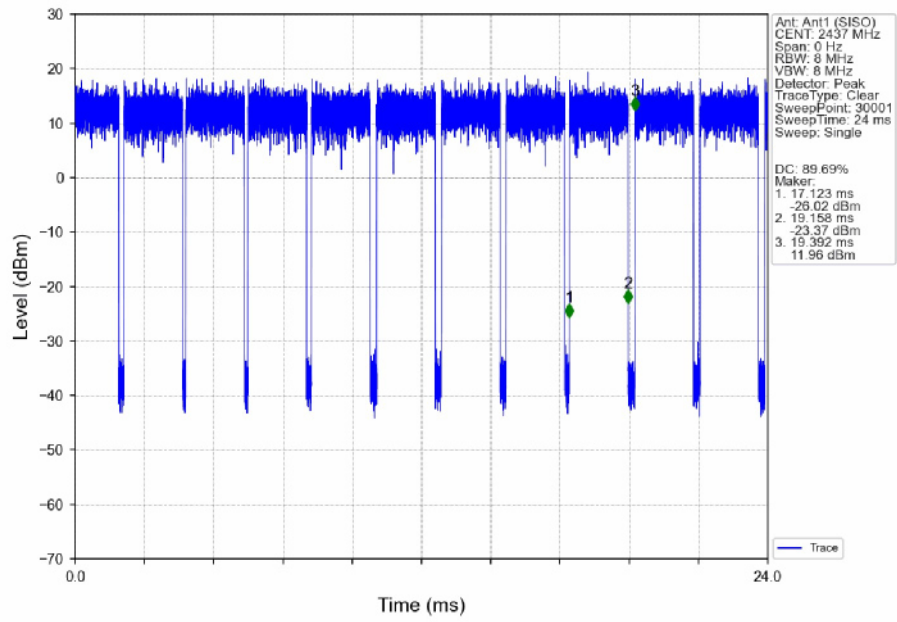
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



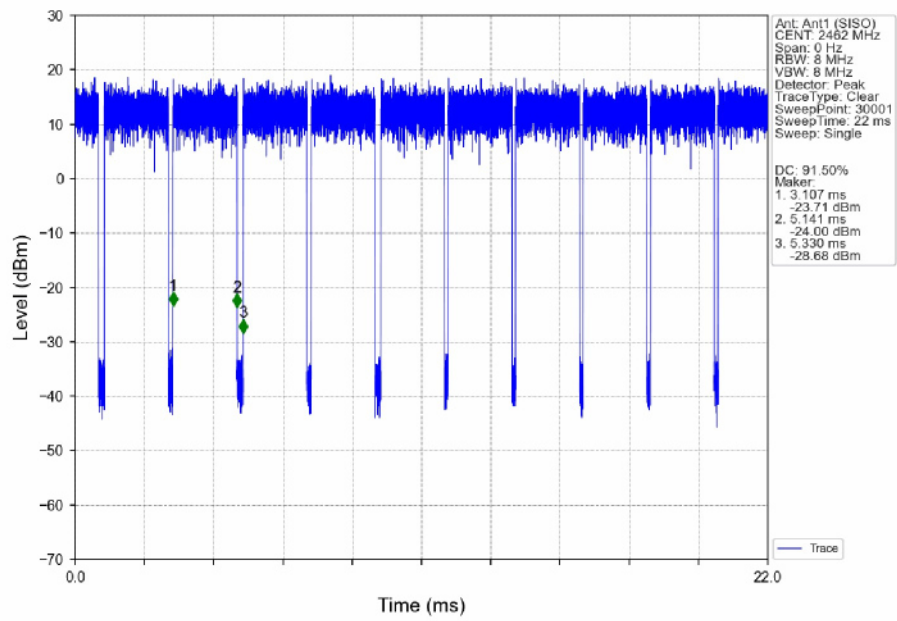
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



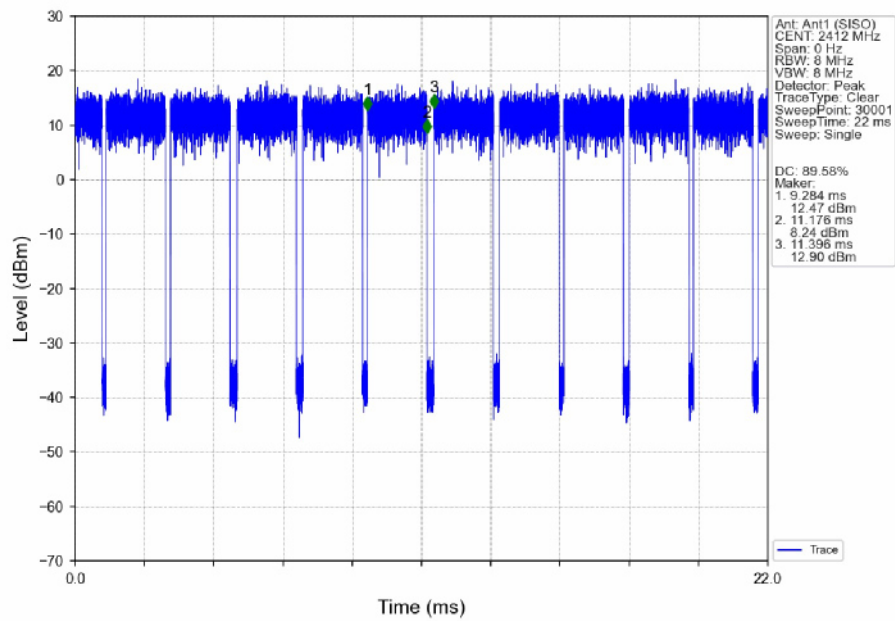
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



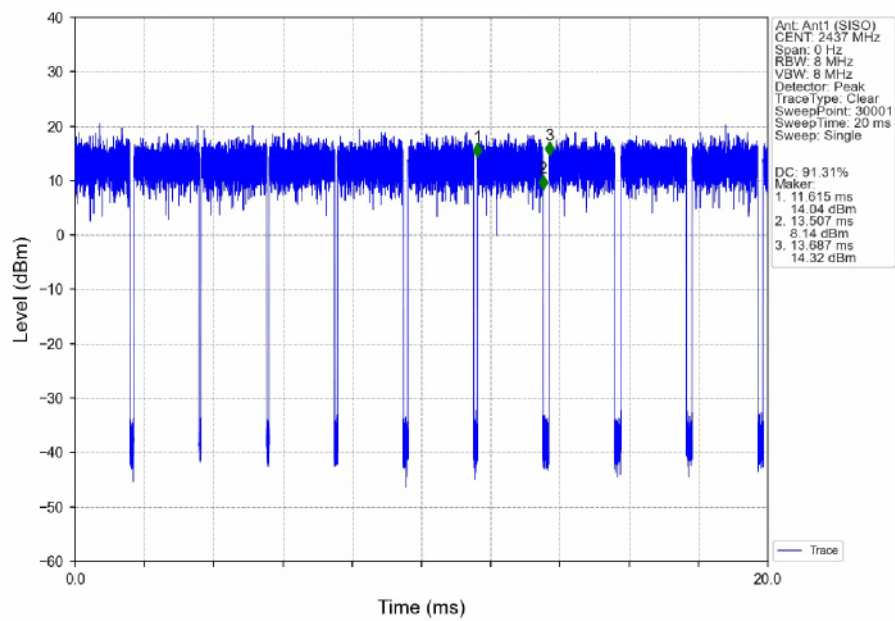
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



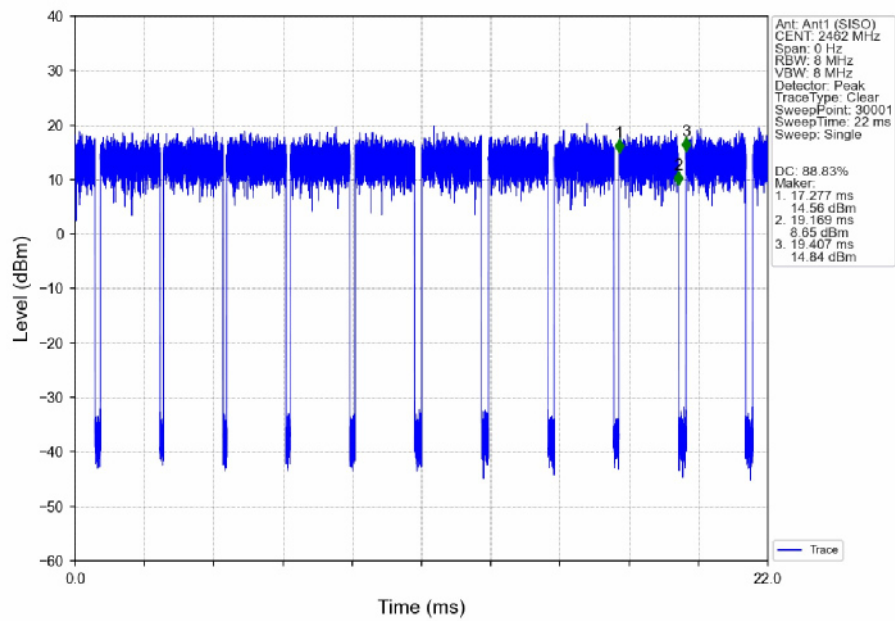
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



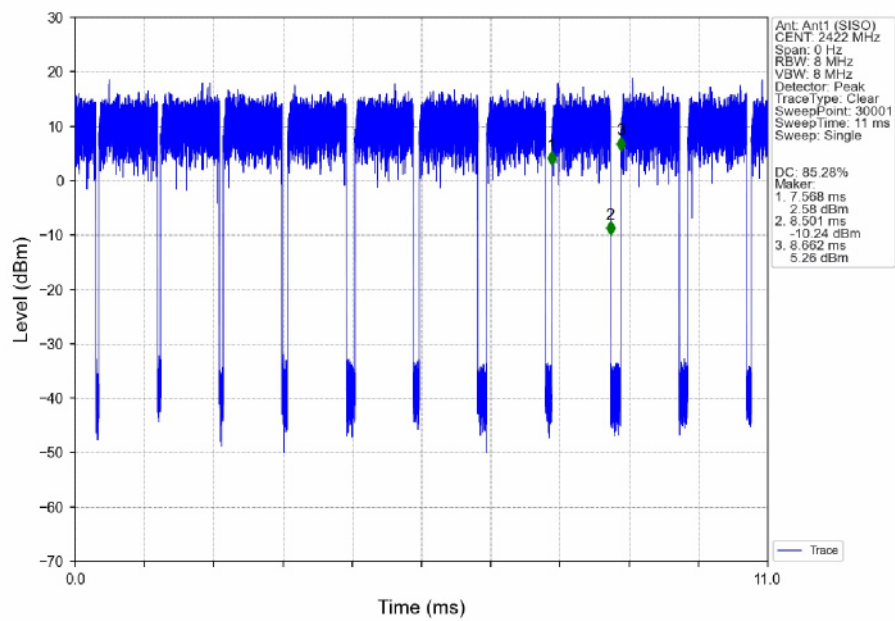
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



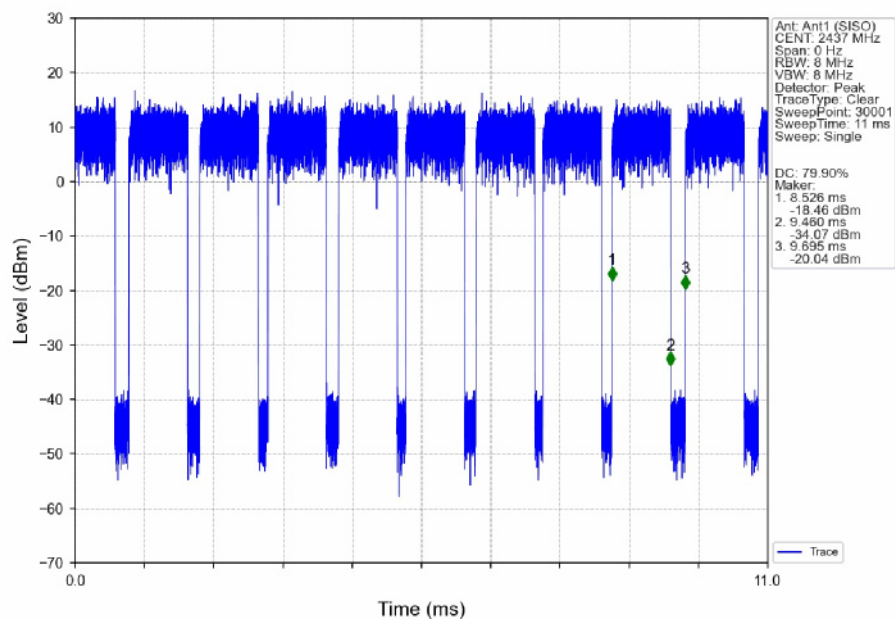
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



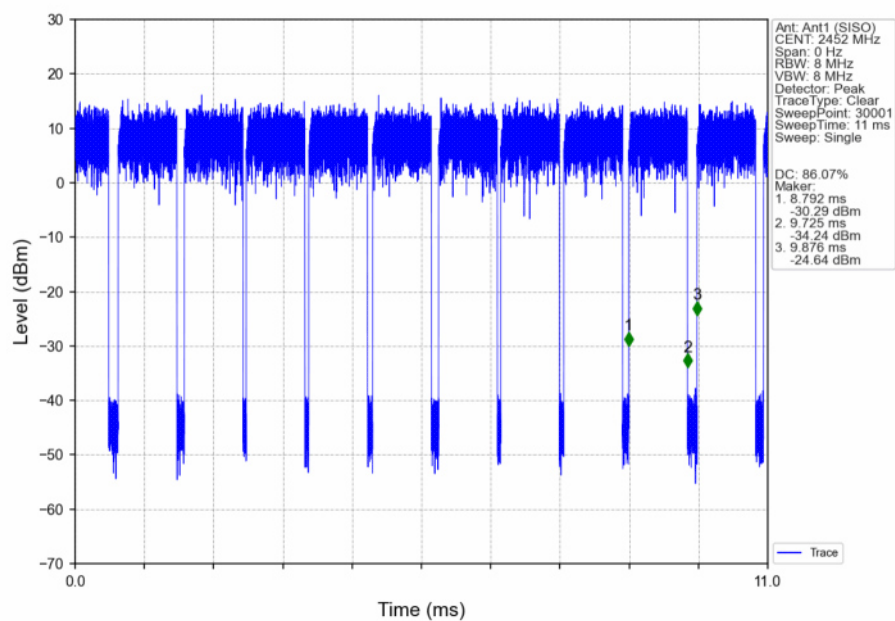
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



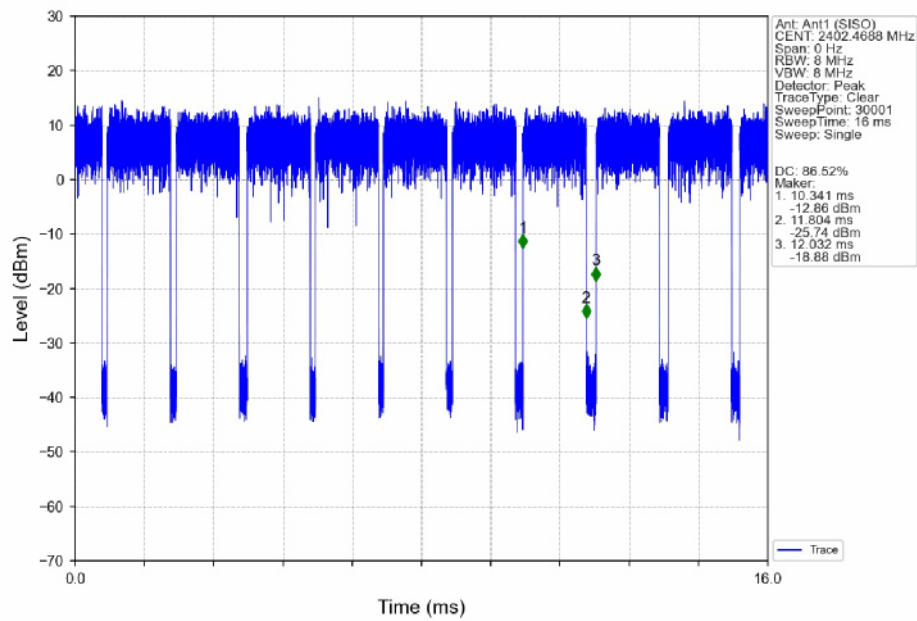
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



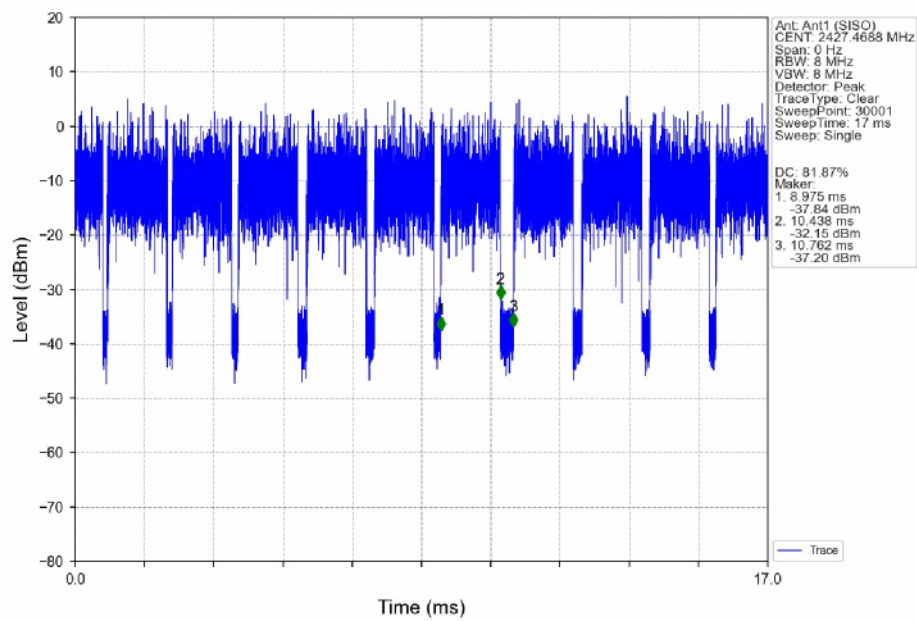
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



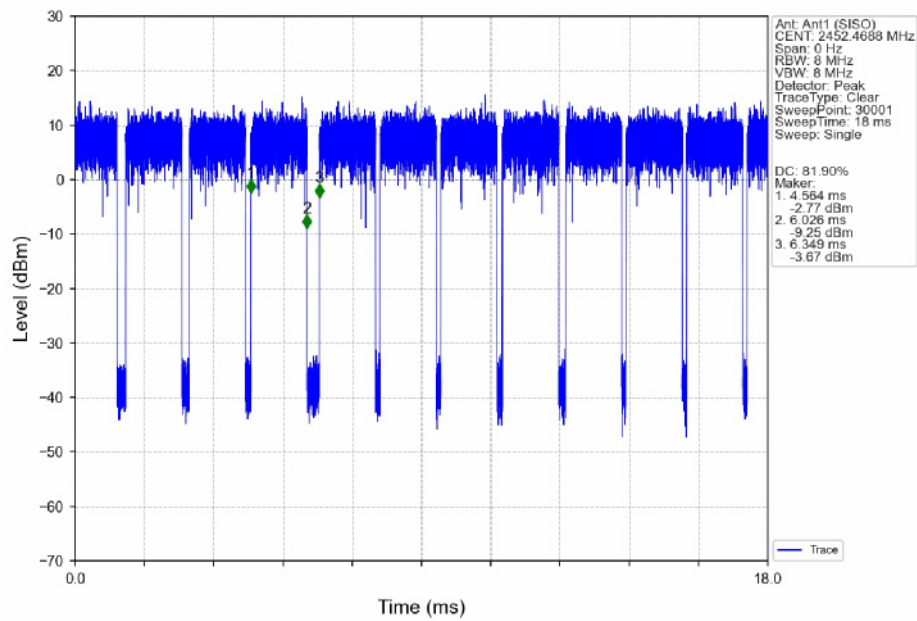
802.11ax(HEW20)_LCH_2412MHz_SU_/_Ant1 (SISO)_NTNV



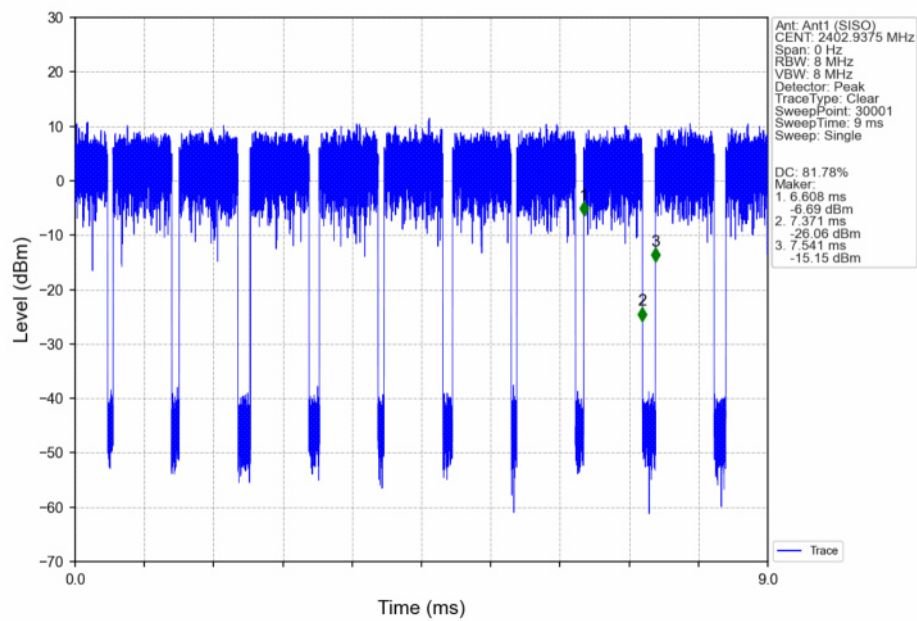
802.11ax(HEW20)_MCH_2437MHz_SU_/_Ant1 (SISO)_NTNV



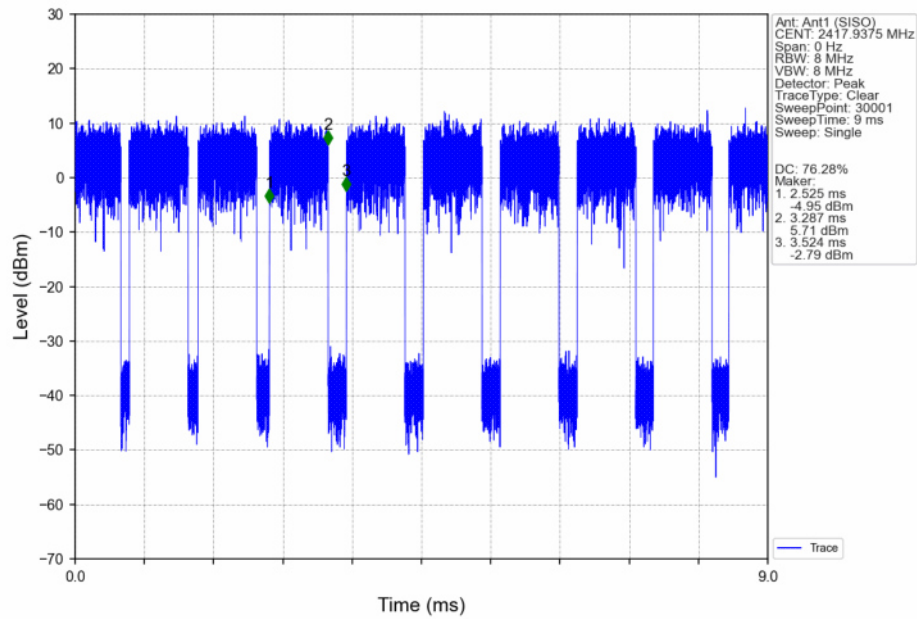
802.11ax(HEW20)_HCH_2462MHz_SU_/_Ant1 (SISO)_NTNV



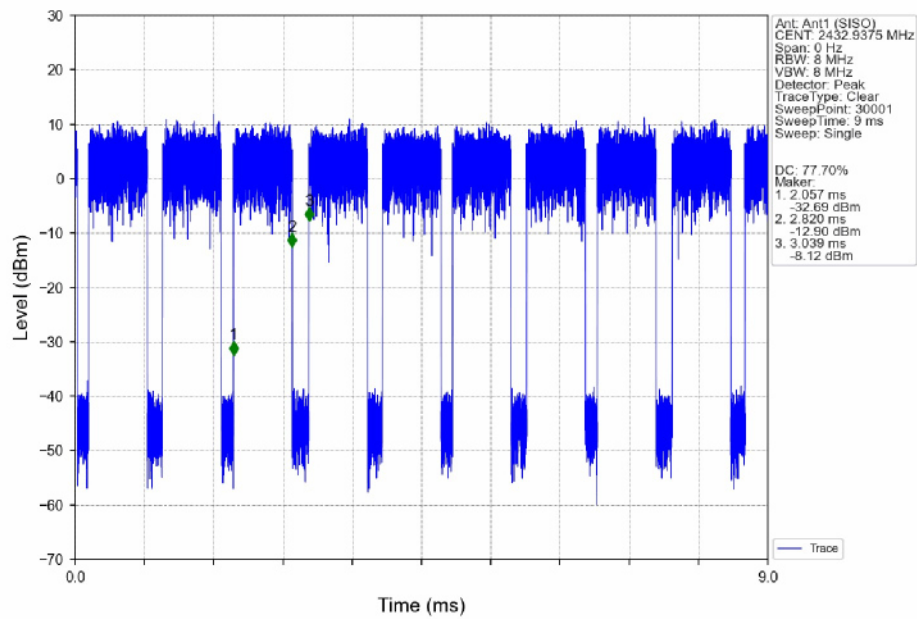
802.11ax(HEW40)_LCH_2422MHz_SU_/_Ant1 (SISO)_NTNV



802.11ax(HEW40)_MCH_2437MHz_SU_/_Ant1 (SISO)_NTNV



802.11ax(HEW40)_HCH_2452MHz_SU_/_Ant1 (SISO)_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

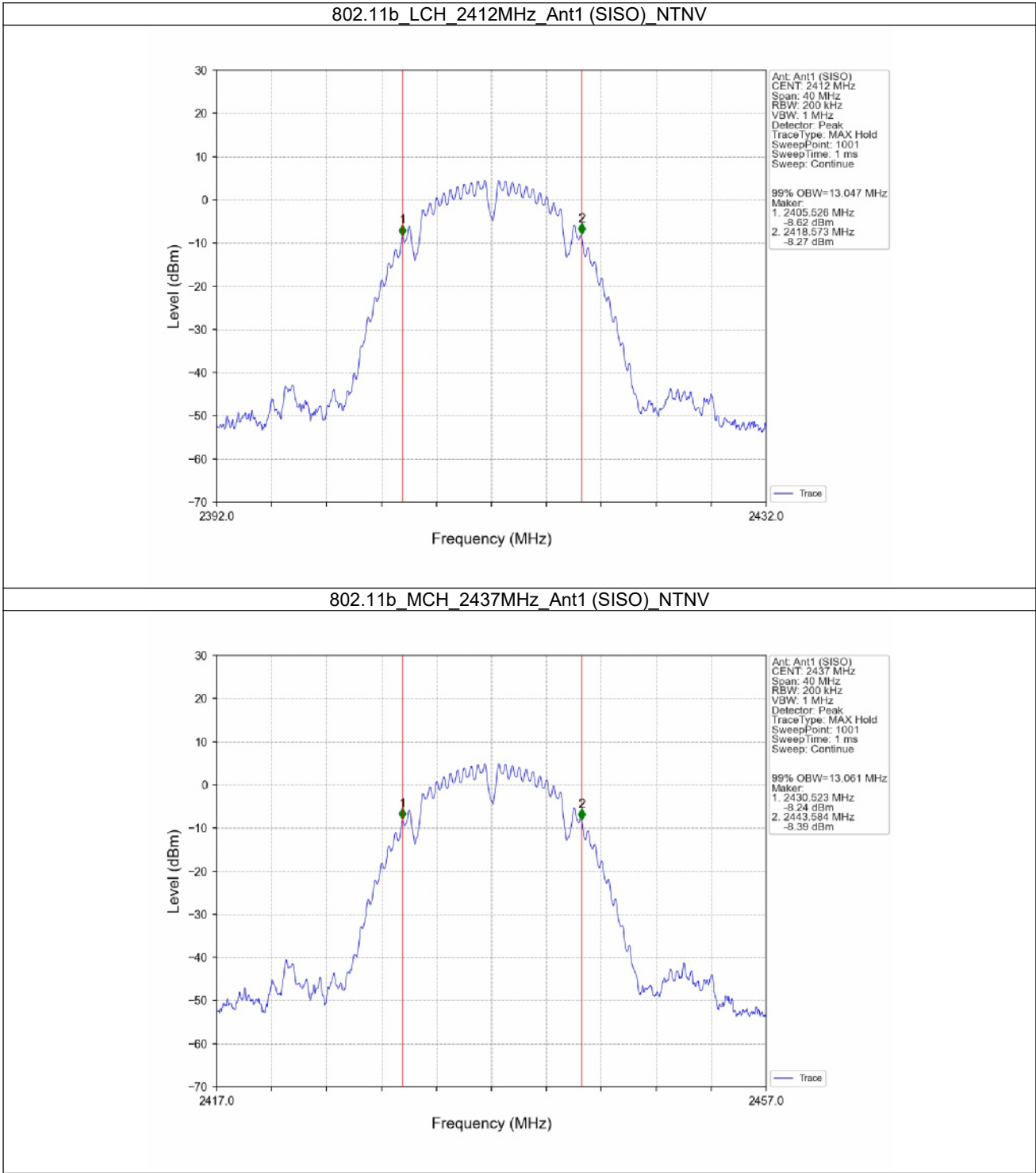
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	13.047	/	Pass
		2437	/	/	1	13.061	/	Pass
		2462	/	/	1	13.083	/	Pass
802.11g	SISO	2412	/	/	1	16.709	/	Pass
		2437	/	/	1	16.692	/	Pass
		2462	/	/	1	16.720	/	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.847	/	Pass
		2437	/	/	1	17.905	/	Pass
		2462	/	/	1	17.869	/	Pass
802.11n (HT40)	SISO	2422	/	/	1	37.399	/	Pass
		2437	/	/	1	37.318	/	Pass
		2452	/	/	1	37.279	/	Pass

2.1.2 6dB BW

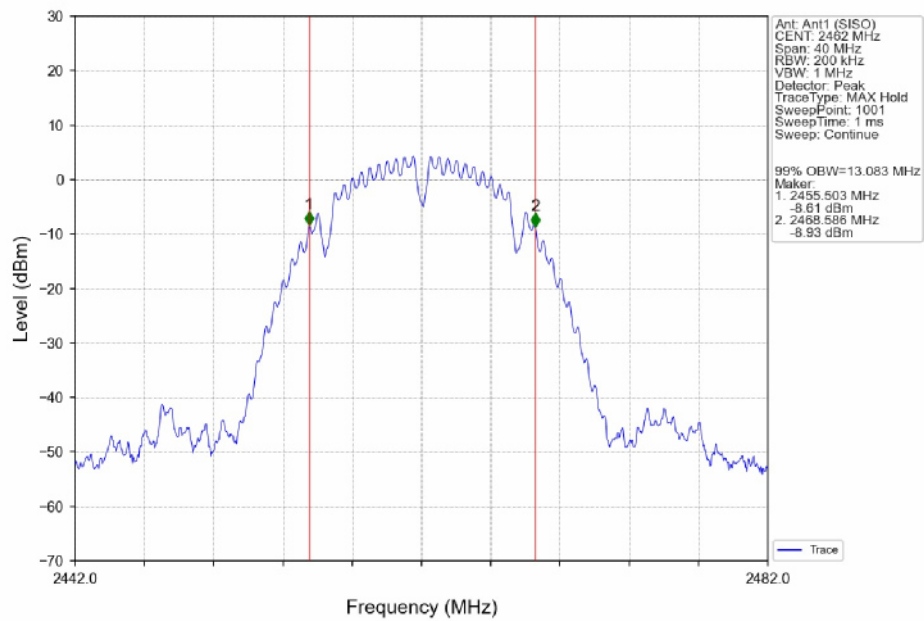
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	9.171	>=0.5	Pass
		2437	/	/	1	9.176	>=0.5	Pass
		2462	/	/	1	9.179	>=0.5	Pass
802.11g	SISO	2412	/	/	1	16.390	>=0.5	Pass
		2437	/	/	1	16.333	>=0.5	Pass
		2462	/	/	1	16.350	>=0.5	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.537	>=0.5	Pass
		2437	/	/	1	17.520	>=0.5	Pass
		2462	/	/	1	17.601	>=0.5	Pass
802.11n (HT40)	SISO	2422	/	/	1	36.650	>=0.5	Pass
		2437	/	/	1	35.863	>=0.5	Pass
		2452	/	/	1	36.514	>=0.5	Pass

2.2 Test Graph

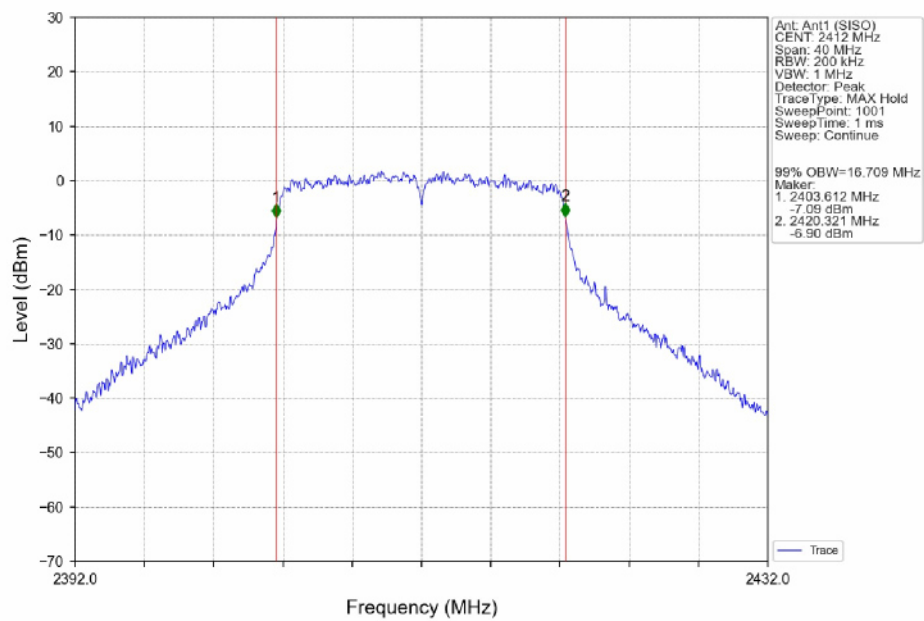
2.2.1 OBW



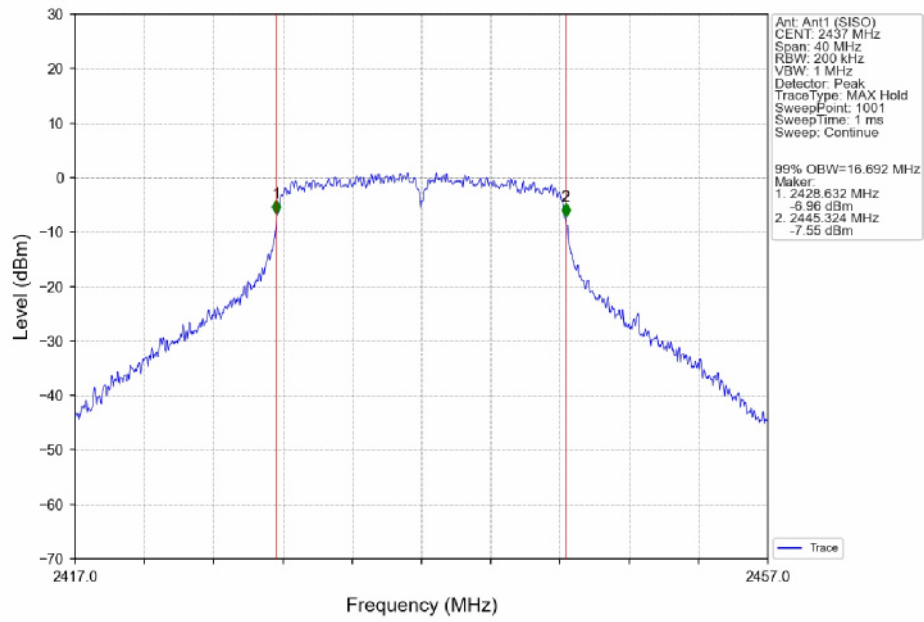
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



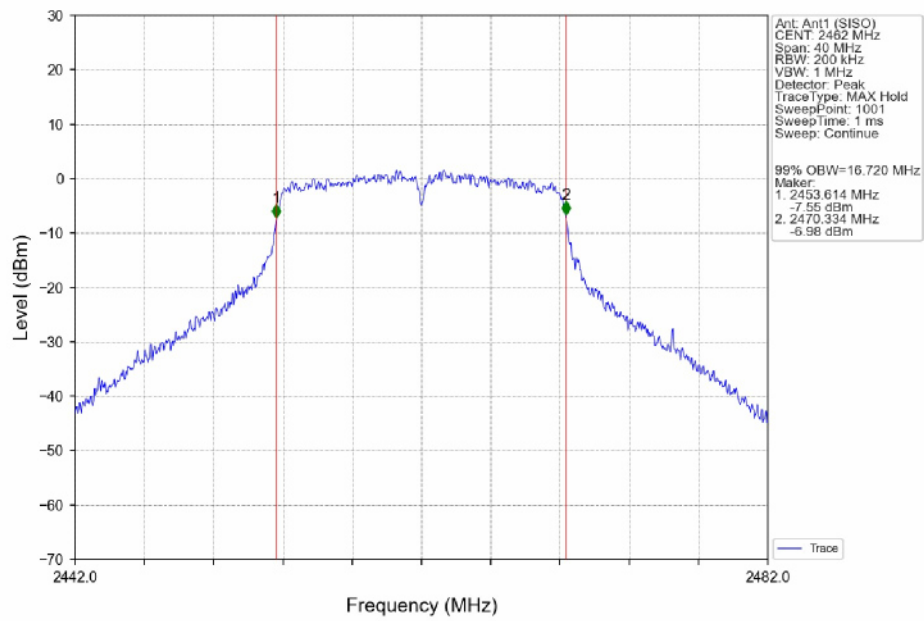
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



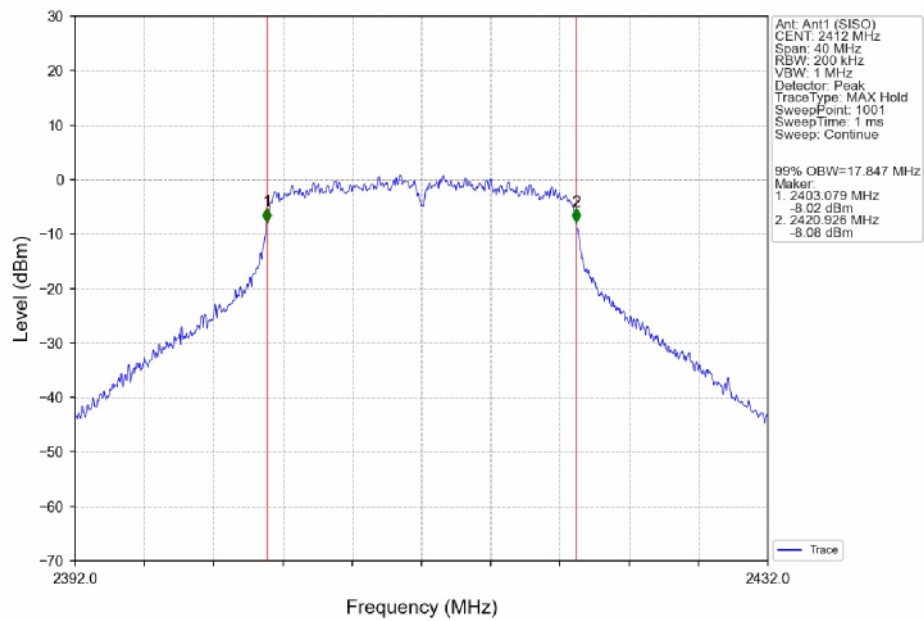
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



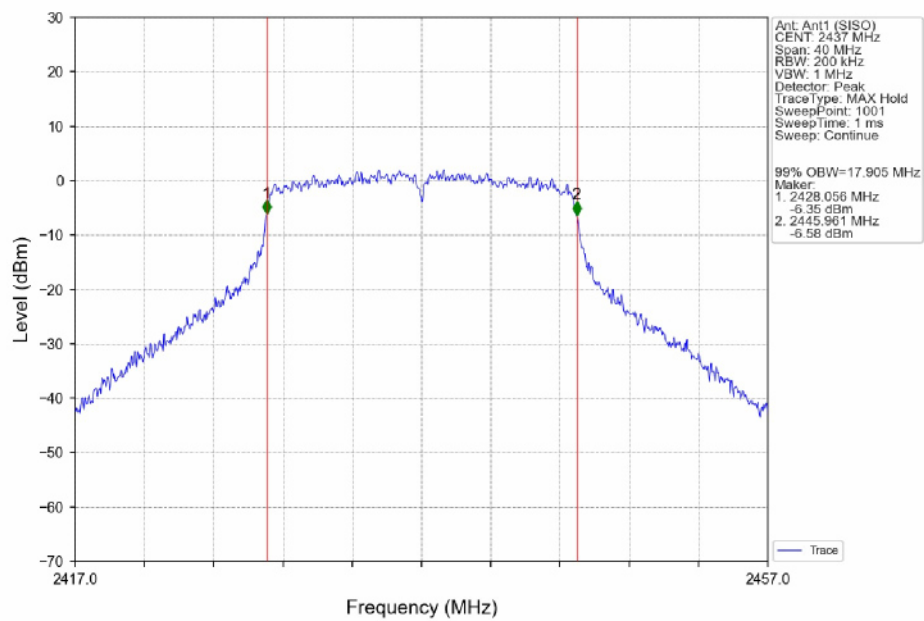
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



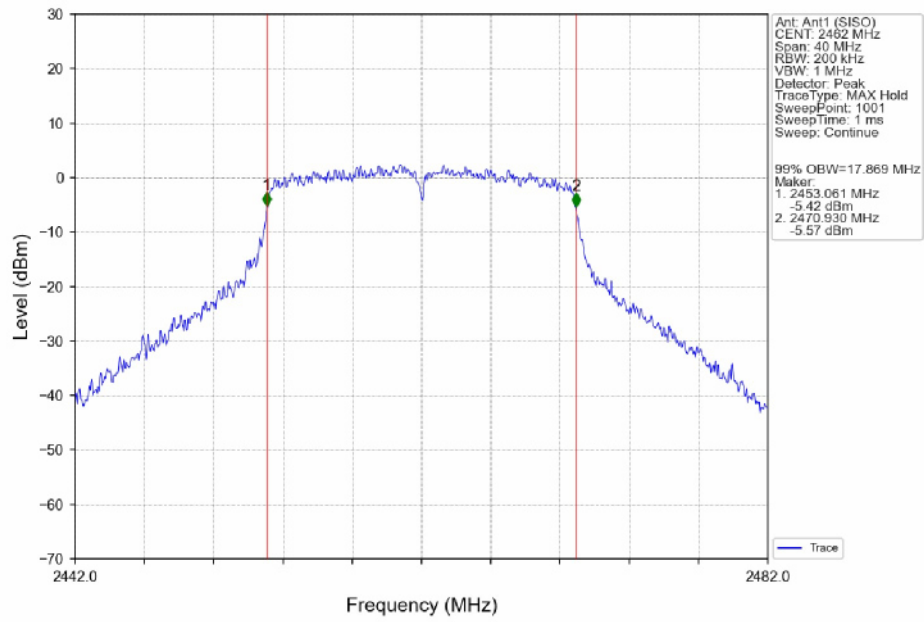
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



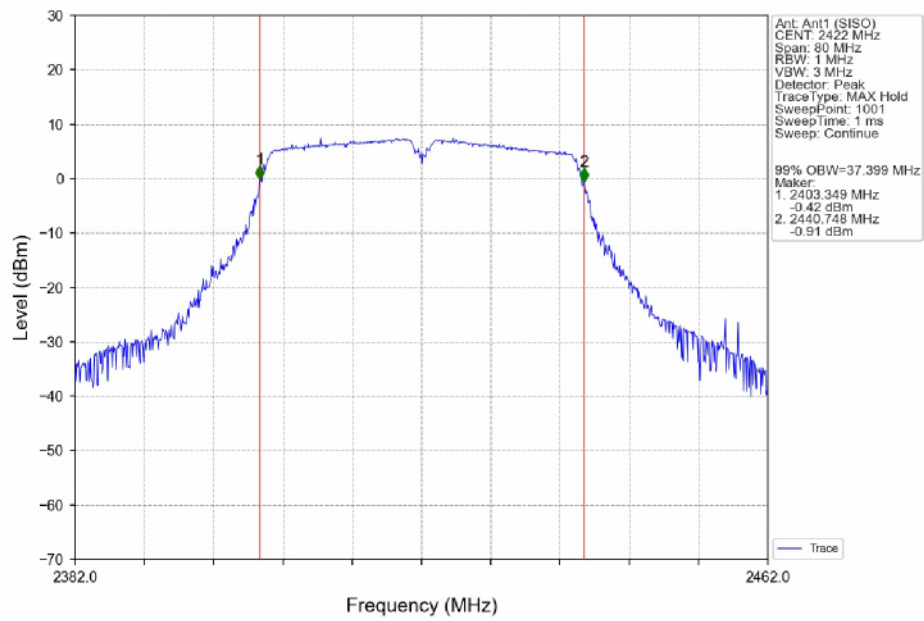
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



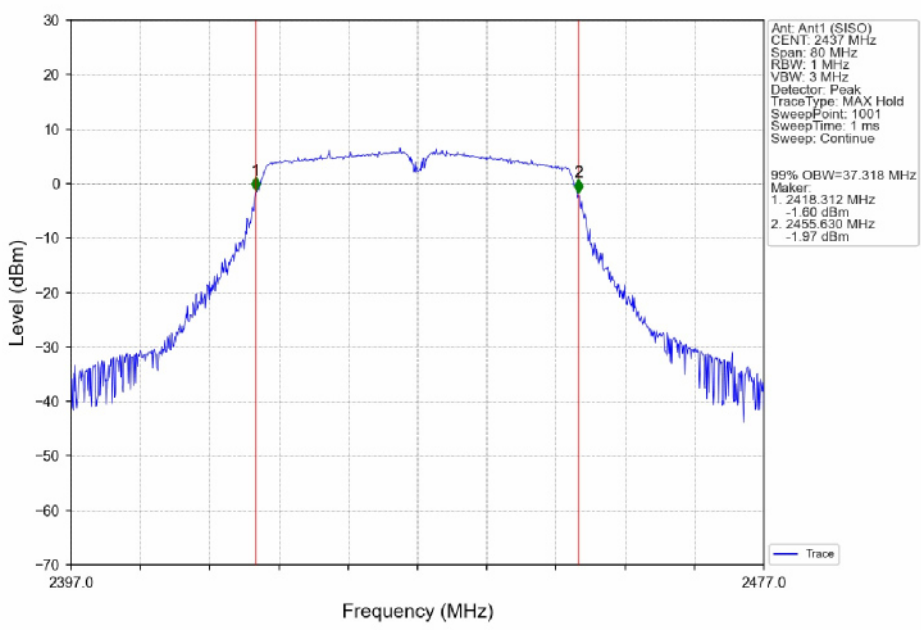
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



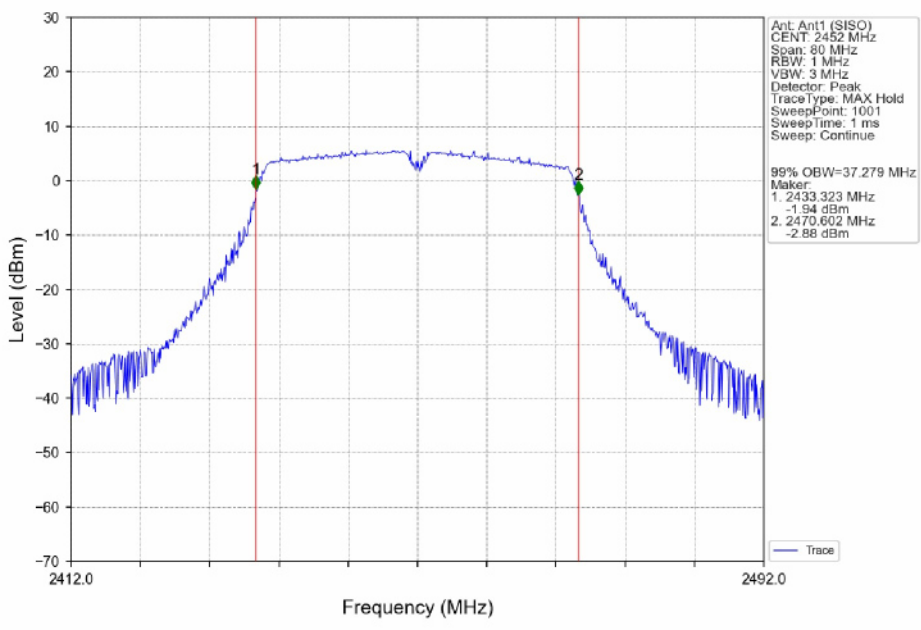
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



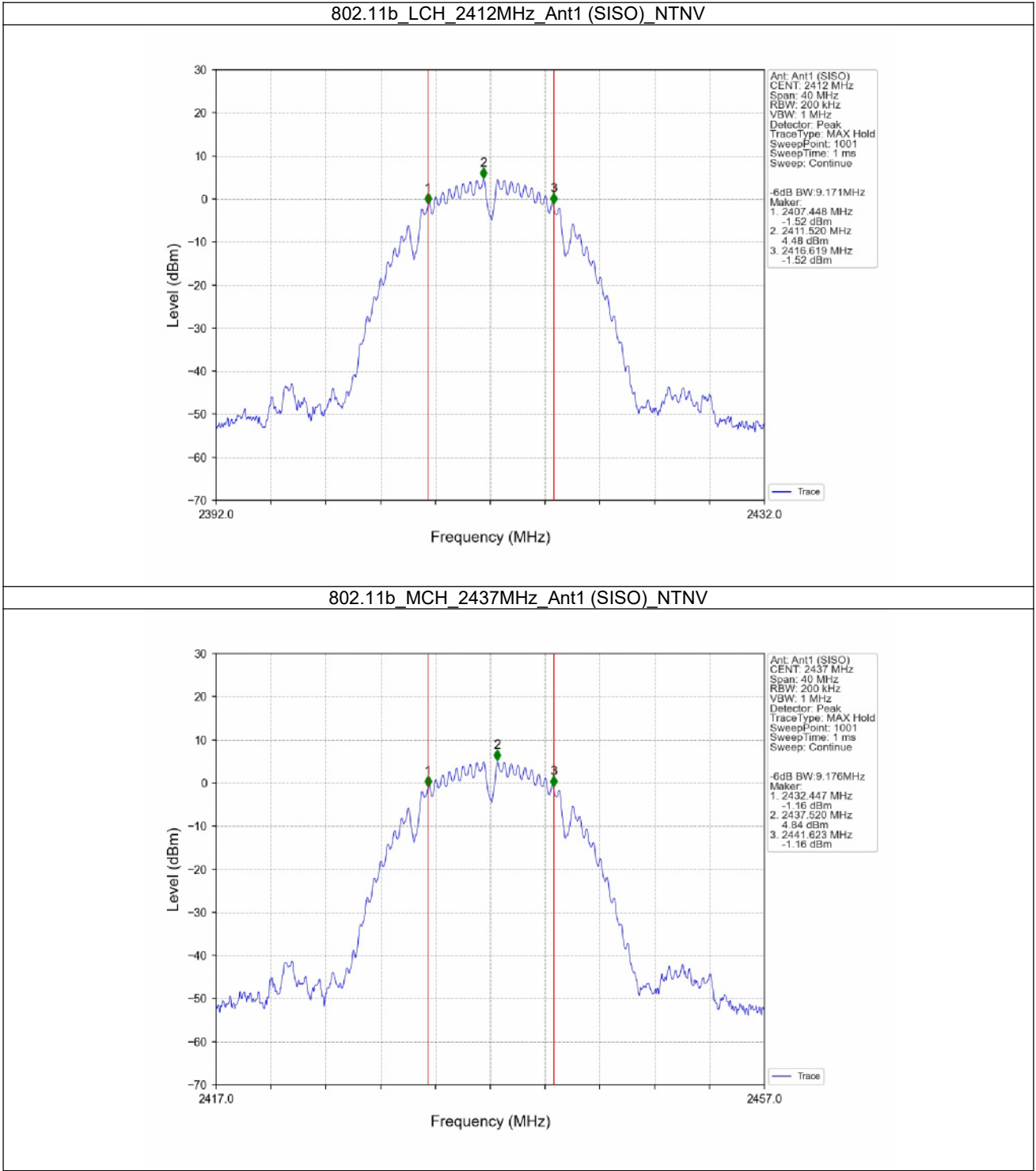
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



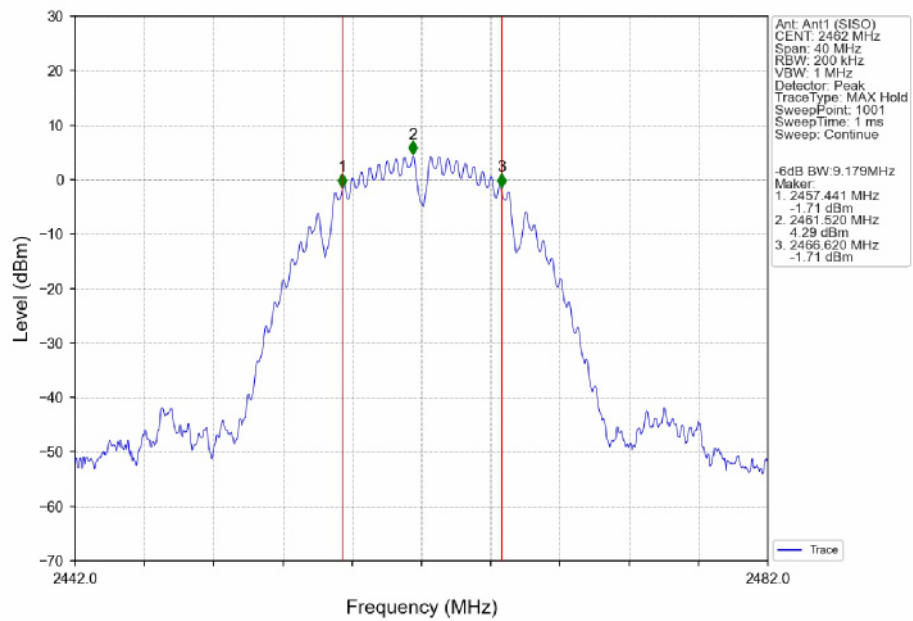
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



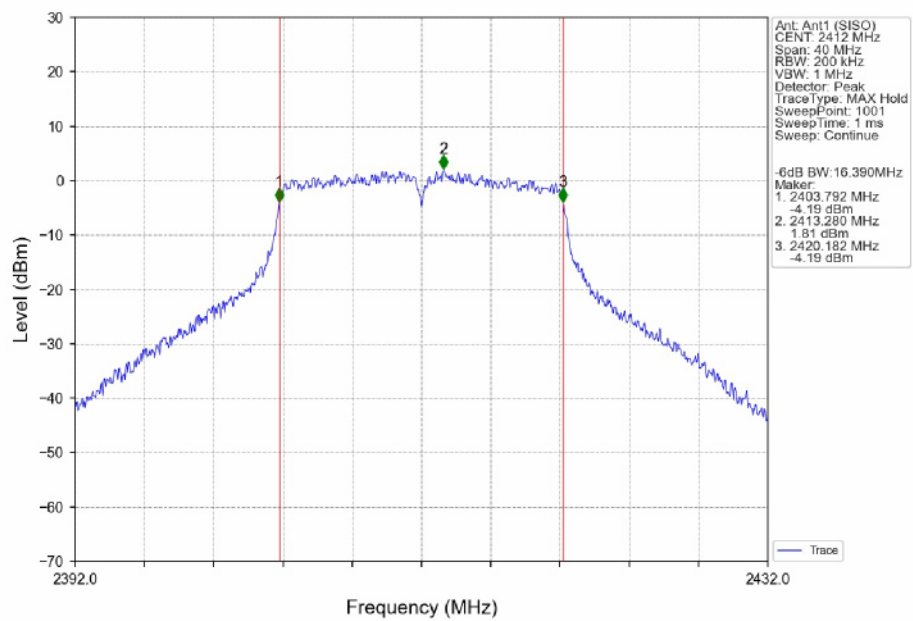
2.2.2 6dB BW



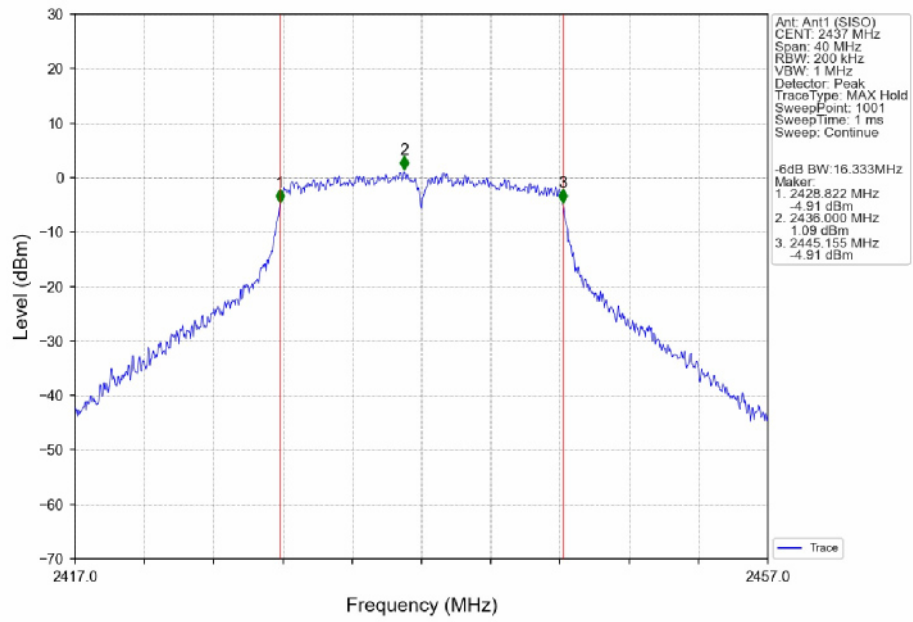
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



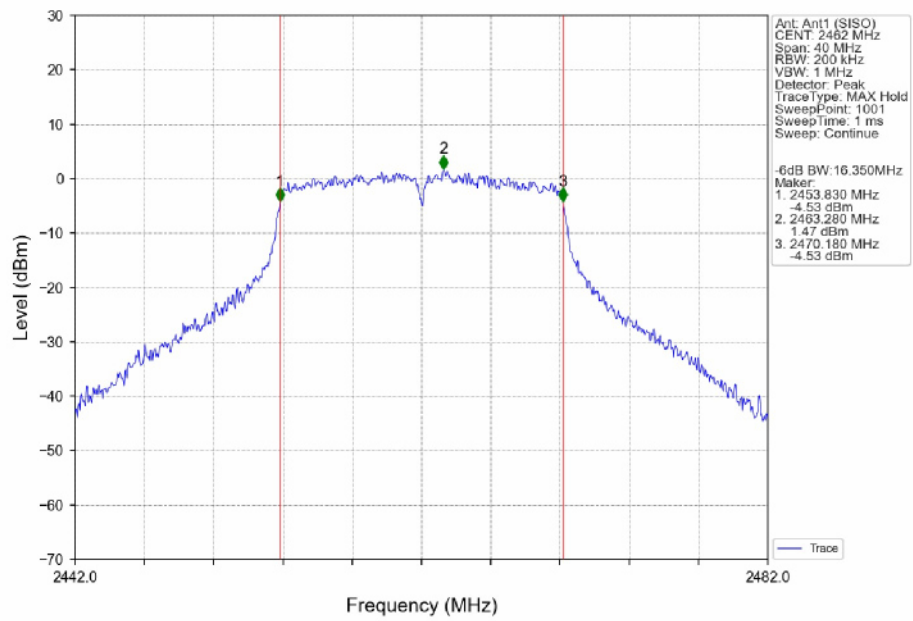
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



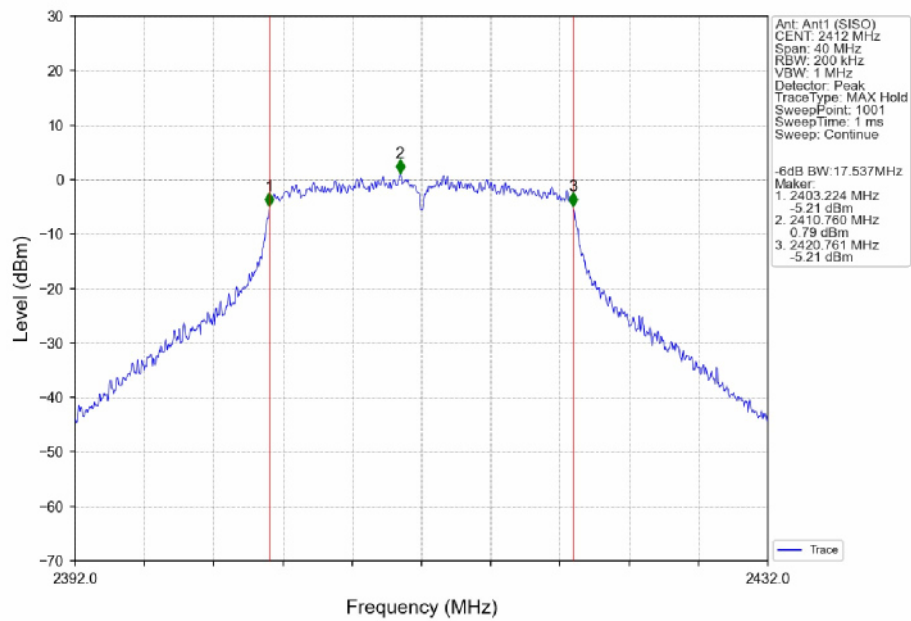
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



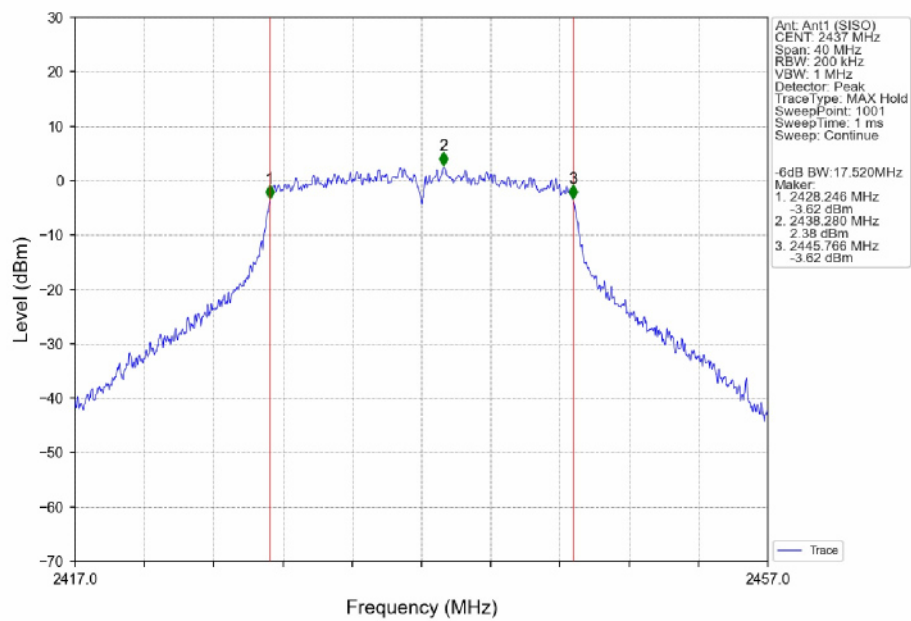
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



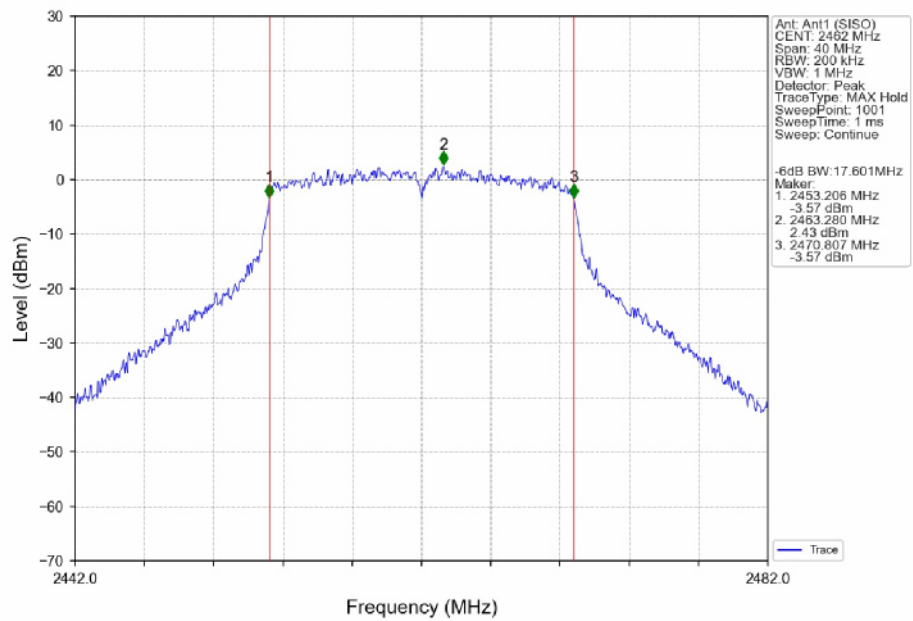
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



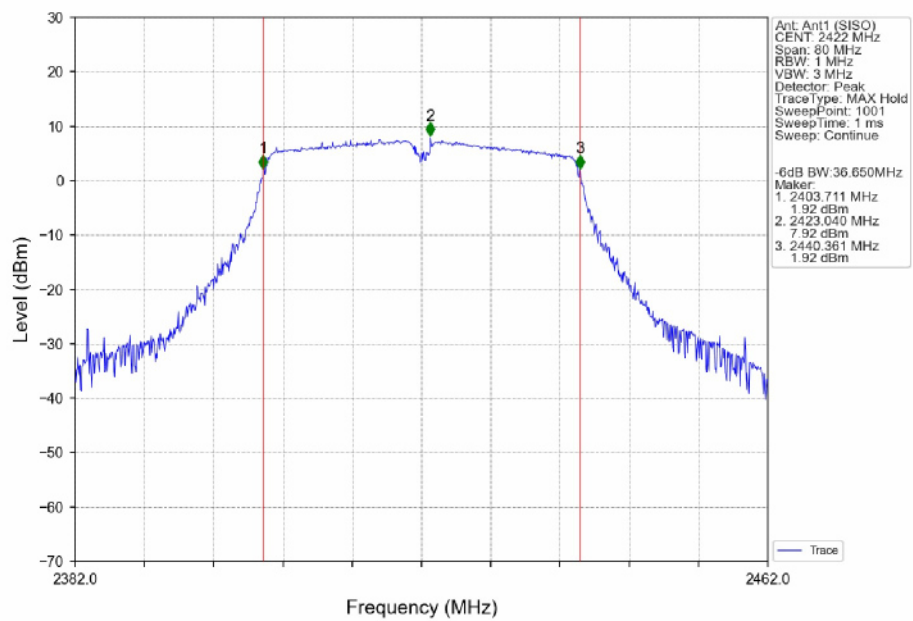
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



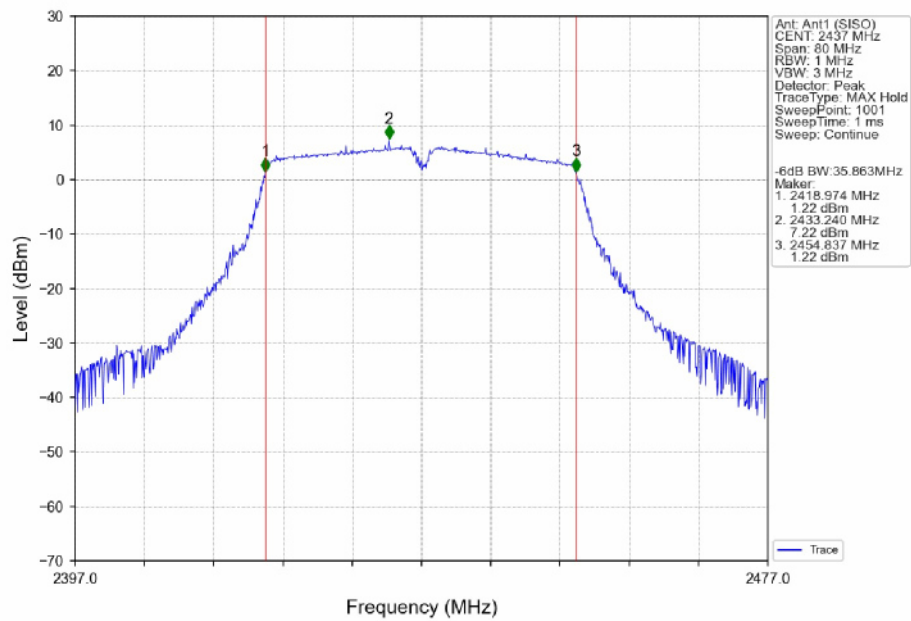
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



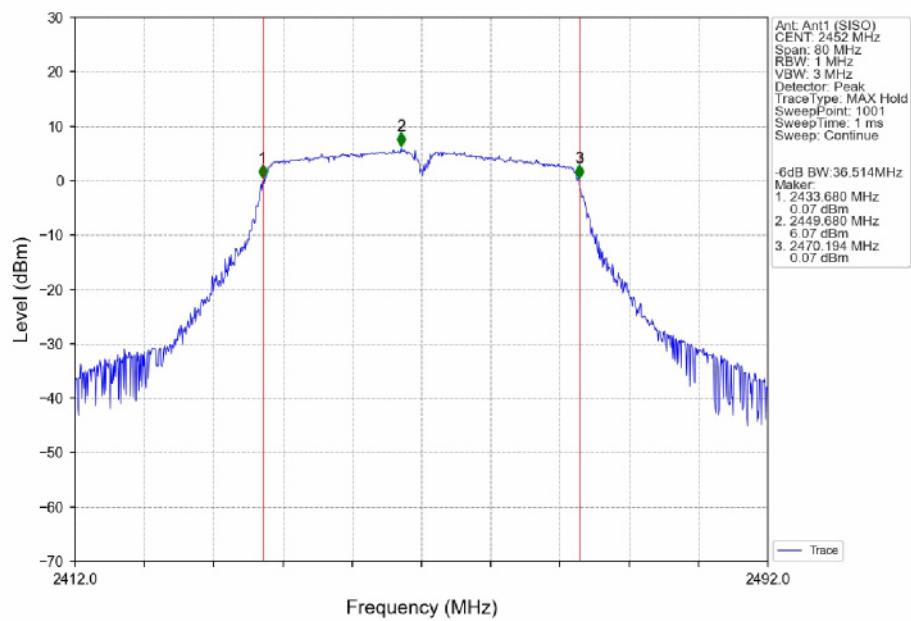
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)					Verdict
			Conducted Power	Duty Cycle Factor (dB)	Total Conducted Power	Limit	E.I.R.P value	
802.11b	SISO	2412	12.54	0.05	12.59	<=30	14.72	Pass
		2437	12.9	0.08	12.98	<=30	15.11	Pass
		2462	12.33	0.08	12.41	<=30	14.54	Pass
802.11g	SISO	2412	11.61	0.06	11.67	<=30	13.8	Pass
		2437	10.79	0.08	11.87	<=30	14	Pass
		2462	11.22	0.07	11.29	<=30	13.42	Pass
802.11n (HT20)	SISO	2412	11.05	0.48	11.53	<=30	13.66	Pass
		2437	11.71	0.39	12.10	<=30	14.23	Pass
		2462	11.8	0.51	12.31	<=30	14.44	Pass
802.11n (HT40)	SISO	2422	10.76	0.69	11.45	<=30	13.58	Pass
		2437	11	0.97	11.97	<=30	14.1	Pass
		2452	10.93	0.65	11.58	<=30	13.71	Pass
Note1: Antenna Gain: Ant1: 2.13dBi;								

4. Maximum Power Spectral Density

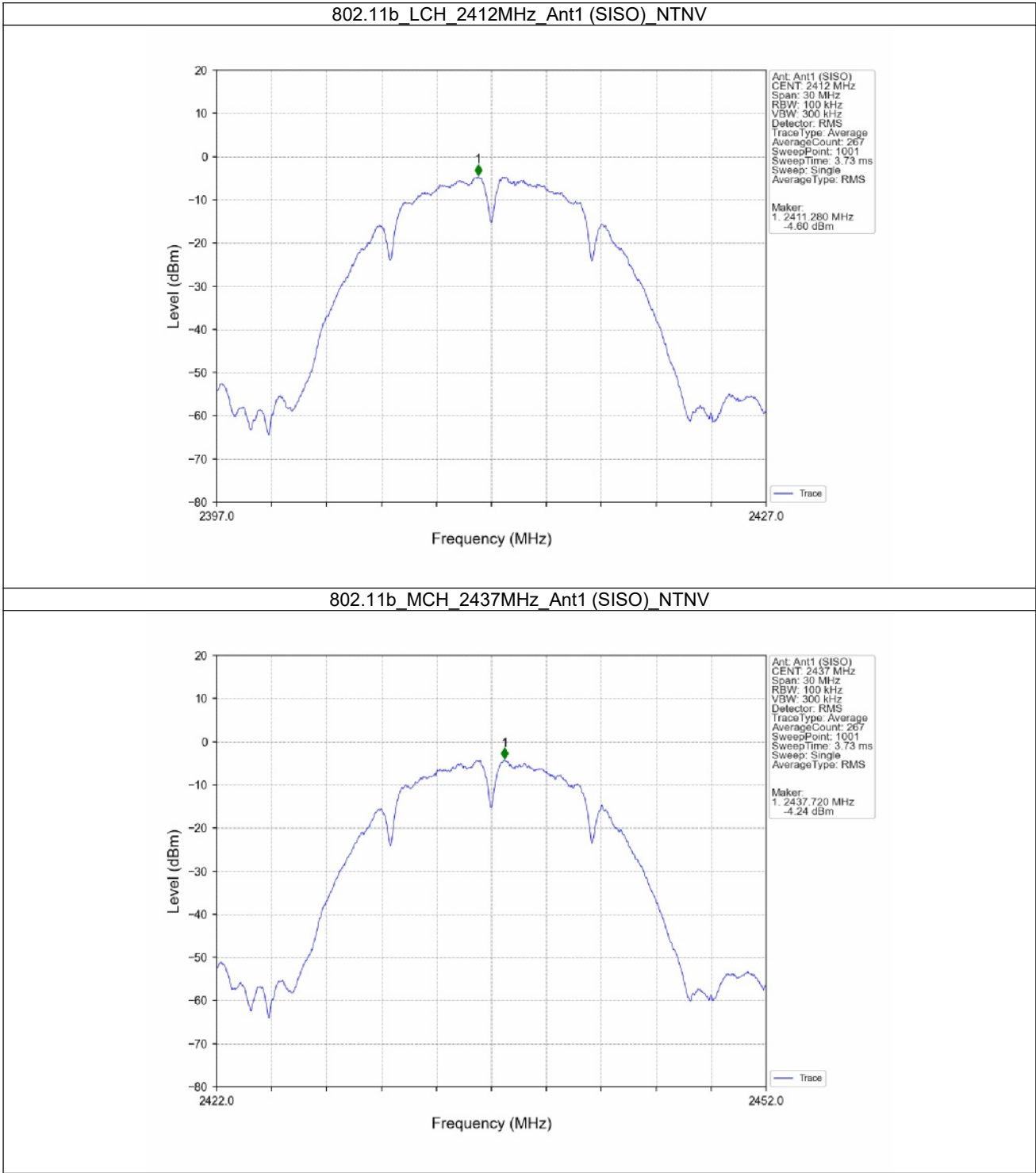
4.1 Test Result

4.1.1 PSD

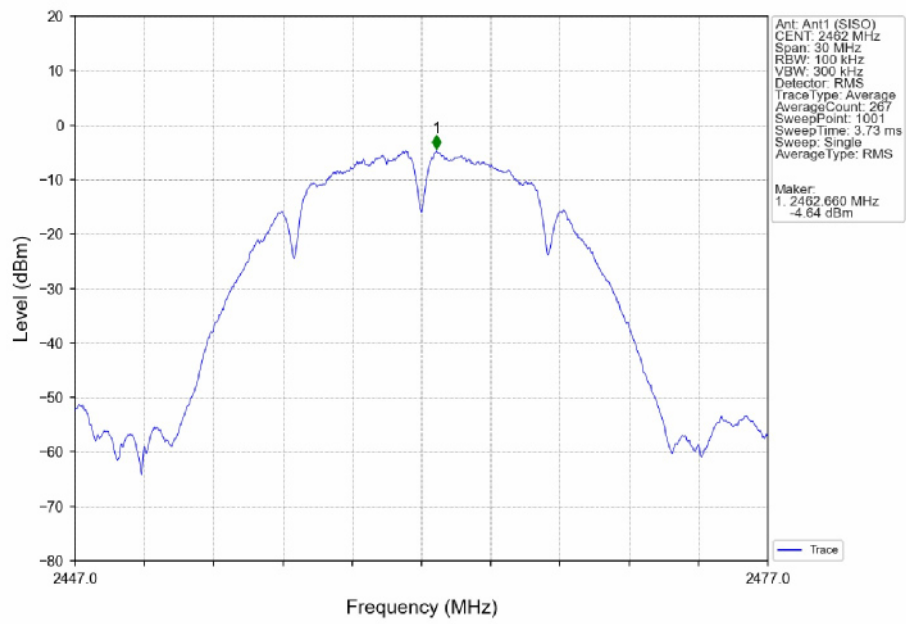
Mode	TX Type	Frequency (MHz)	Maximum PSD		Verdict
			ANT1 (dBm/100KHz)	Limit (dBm/3KHz)	
802.11b	SISO	2412	-4.60	<=8	Pass
		2437	-4.24	<=8	Pass
		2462	-4.64	<=8	Pass
802.11g	SISO	2412	-9.23	<=8	Pass
		2437	-8.39	<=8	Pass
		2462	-8.13	<=8	Pass
802.11n (HT20)	SISO	2412	-7.75	<=8	Pass
		2437	-7.54	<=8	Pass
		2462	-7.19	<=8	Pass
802.11n (HT40)	SISO	2422	-11.18	<=8	Pass
		2437	-10.78	<=8	Pass
		2452	-11.12	<=8	Pass
Note1: Antenna Gain: Ant1: 2.13dBi; Note2: The Duty Cycle Factor has been compensated in the test graph.					

4.2 Test Graph

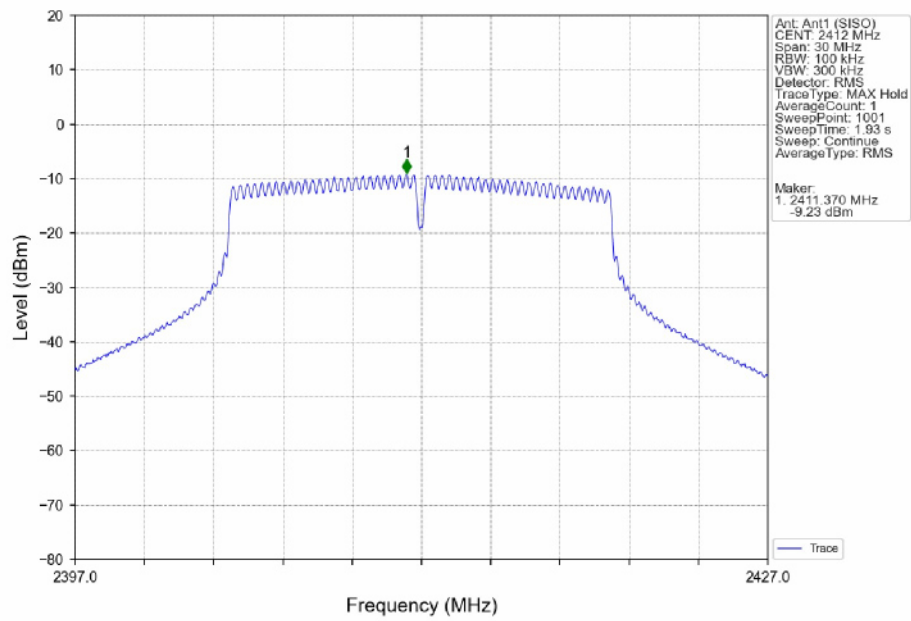
4.2.1 PSD



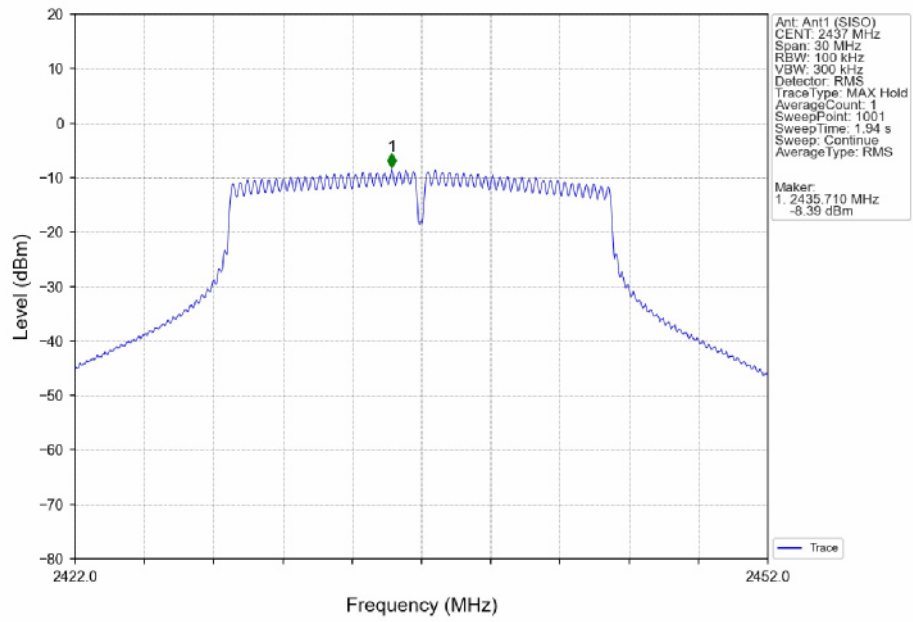
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



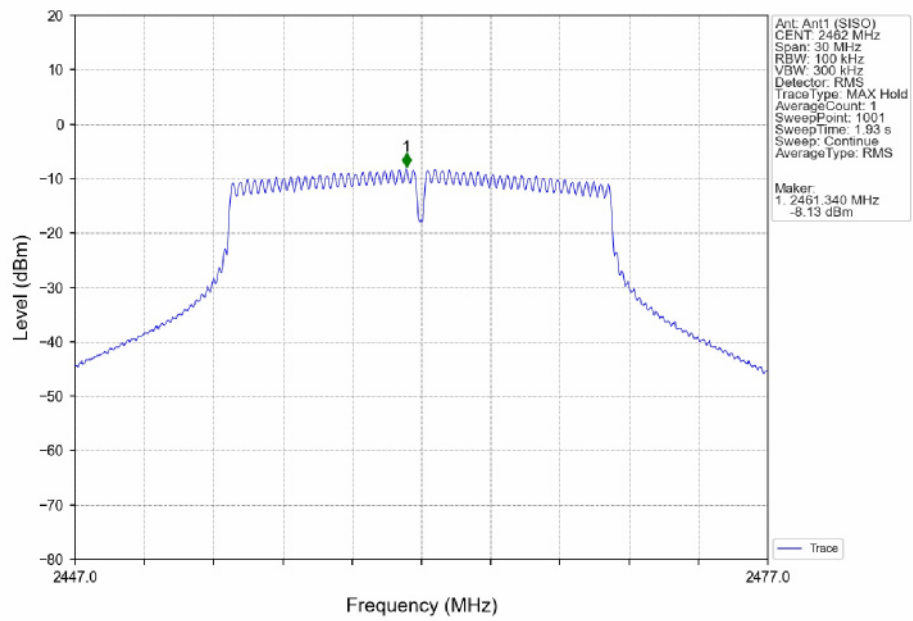
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



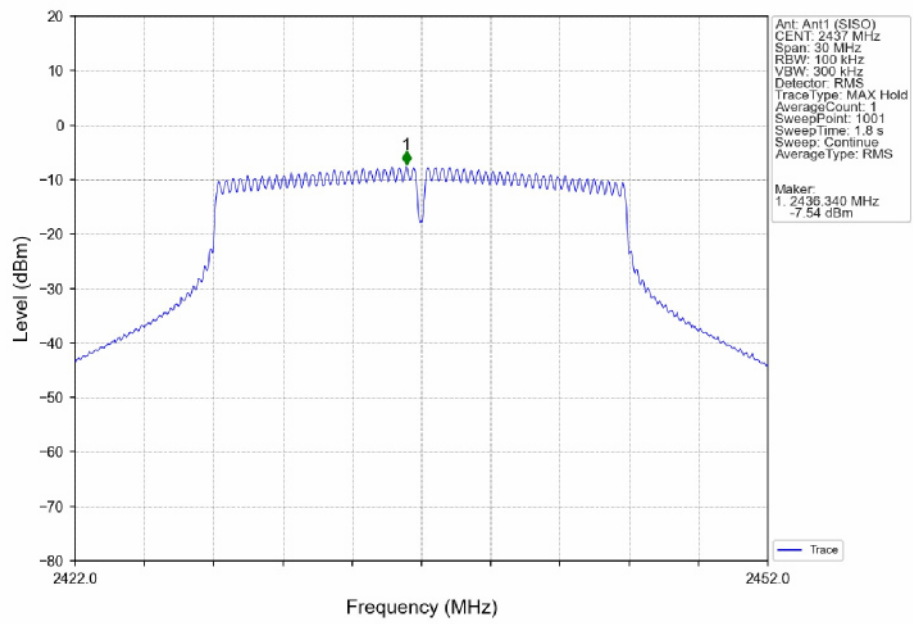
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



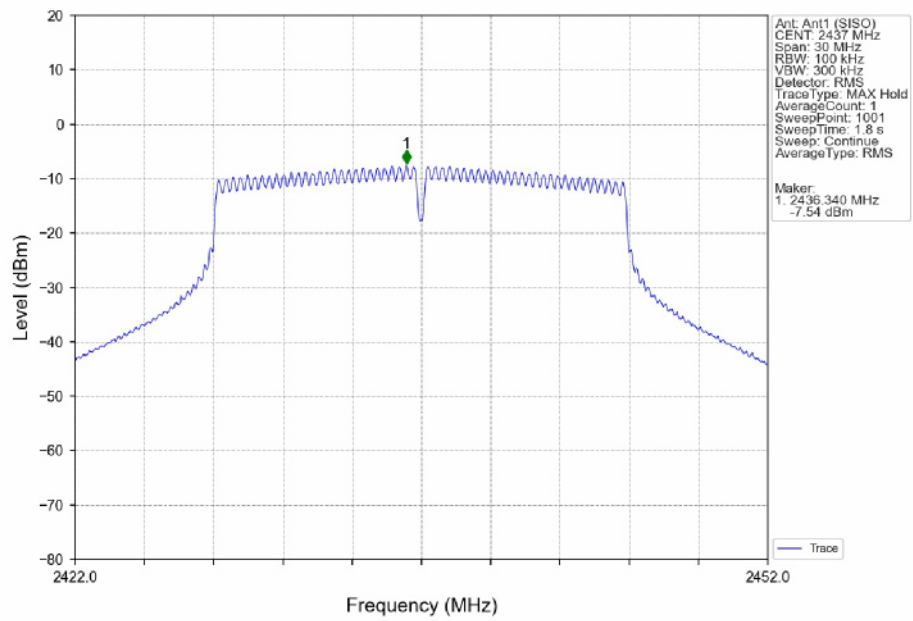
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



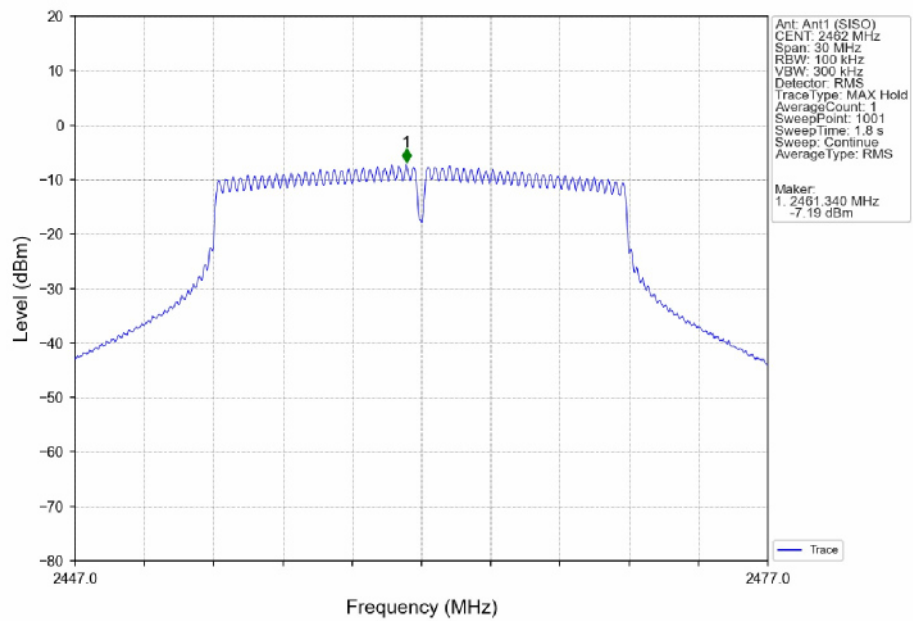
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



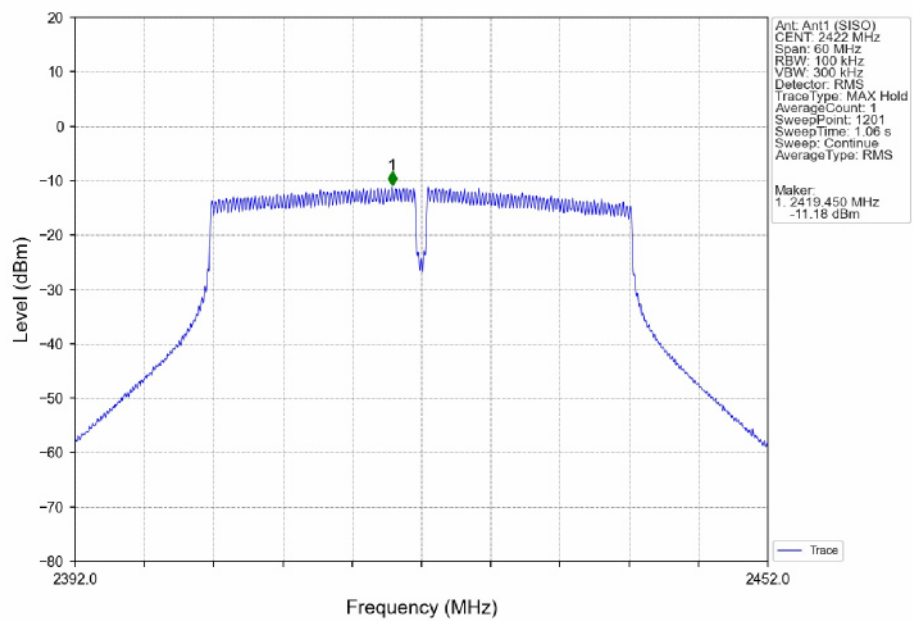
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



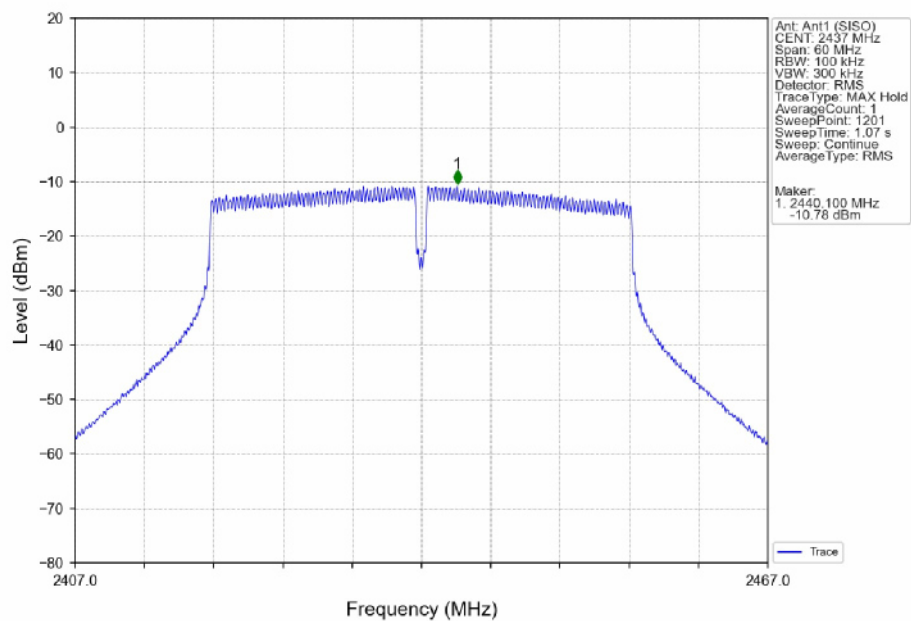
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



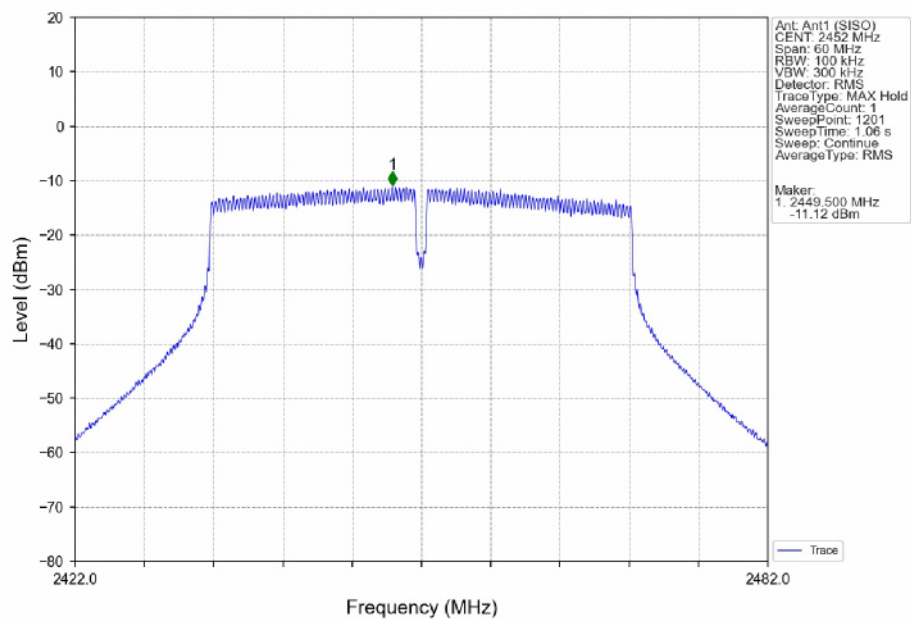
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



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

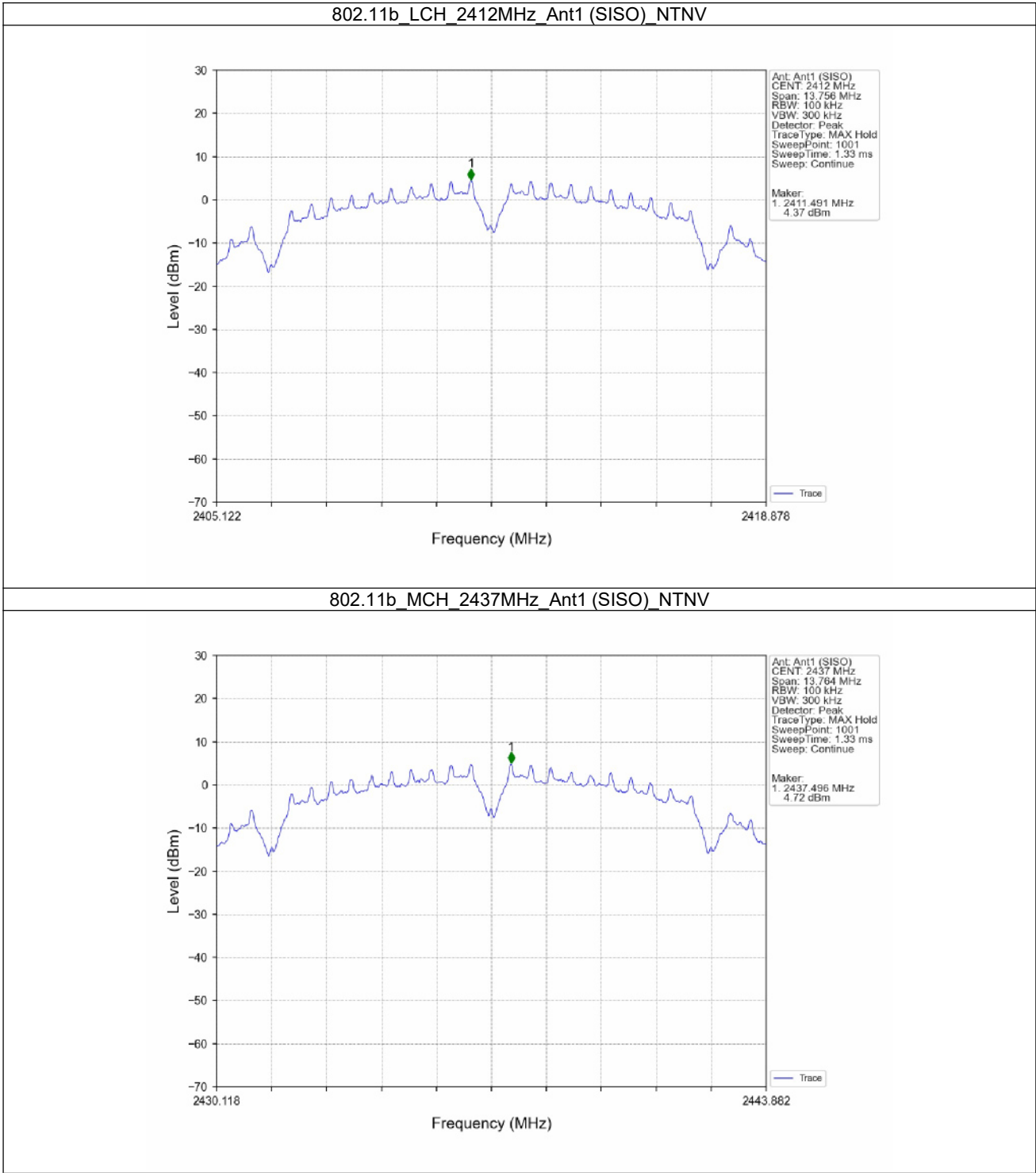
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)
802.11b	SISO	2412	/	/	1	4.37
		2437	/	/	1	4.72
		2462	/	/	1	4.21
802.11g	SISO	2412	/	/	1	-0.41
		2437	/	/	1	0.06
		2462	/	/	1	0.67
802.11n (HT20)	SISO	2412	/	/	1	-23.30
		2437	/	/	1	1.32
		2462	/	/	1	1.59
802.11n (HT40)	SISO	2422	/	/	1	-2.36
		2437	/	/	1	-1.91
		2452	/	/	1	-2.09
802.11ax (HEW20)	SISO	2412	SU	/	1	0.78
		2437	SU	/	1	0.91
		2462	SU	/	1	0.69
802.11ax (HEW40)	SISO	2422	SU	/	1	-2.39
		2437	SU	/	1	-1.69
		2452	SU	/	1	-2.32

5.1.2 CSE

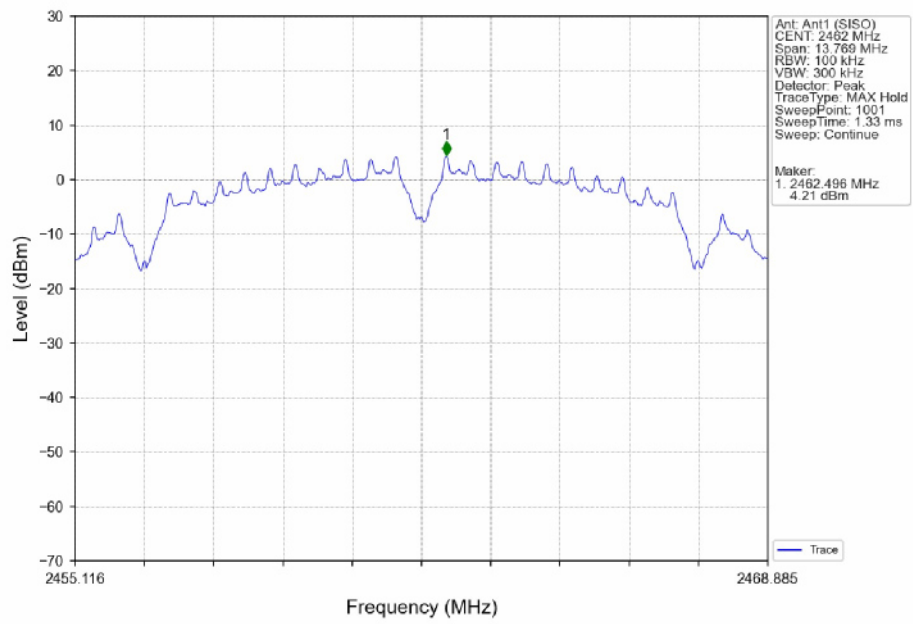
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	/	/	1	4.37	-25.63	Pass
		2437	/	/	1	4.72	-25.28	Pass
		2462	/	/	1	4.21	-25.79	Pass
802.11g	SISO	2412	/	/	1	-0.41	-30.41	Pass
		2437	/	/	1	0.06	-29.94	Pass
		2462	/	/	1	0.67	-29.33	Pass
802.11n (HT20)	SISO	2412	/	/	1	-23.30	-53.30	Pass
		2437	/	/	1	1.32	-28.68	Pass
		2462	/	/	1	1.59	-28.41	Pass
802.11n (HT40)	SISO	2422	/	/	1	-2.36	-32.36	Pass
		2437	/	/	1	-1.91	-31.91	Pass
		2452	/	/	1	-2.09	-32.09	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	0.78	-29.22	Pass
		2437	SU	/	1	0.91	-29.09	Pass
		2462	SU	/	1	0.69	-29.31	Pass
802.11ax (HEW40)	SISO	2422	SU	/	1	-2.39	-32.39	Pass
		2437	SU	/	1	-1.69	-31.69	Pass
		2452	SU	/	1	-2.32	-32.32	Pass

5.2 Test Graph

5.2.1 Ref



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

