

FCC ID: 2BYDN-TXQ20RW27

Applicant: Zhangzhou Tongxin Electronic Technology Co., Ltd.

Address: No. 288, Donghuan Road, Shancheng Town, Nanjing County, Zhangzhou City,
Fujian Province, China

Manufacturer: Zhangzhou Tongxin Electronic Technology Co., Ltd.

Address: No. 288, Donghuan Road, Shancheng Town, Nanjing County, Zhangzhou City,
Fujian Province, China

Product Name: Dual-lens WIFI Outdoor PTZ Speed Dome Wireless IP Camera

Trade Mark: N/A

Model Number: TX-Q20-RW27, TX-Q20-A27, TX-Q20-Q27, TX-Q20-J27, TX-Q20-W27

Date of Receipt: Jun. 25, 2026

Test Date: Jun. 25, 2026 - Jul. 15, 2026

Date of Report: Jul. 15, 2026

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1
Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen,
China

Applicable Standards: FCC PART 15 C 15.247
ANSI C63.10-2020 + Cor.1-2023+C63.10a-2024 + Errata to C63.10a-2024

Test Result: Pass

Report Number: DLE-260629032R

1. Duty Cycle

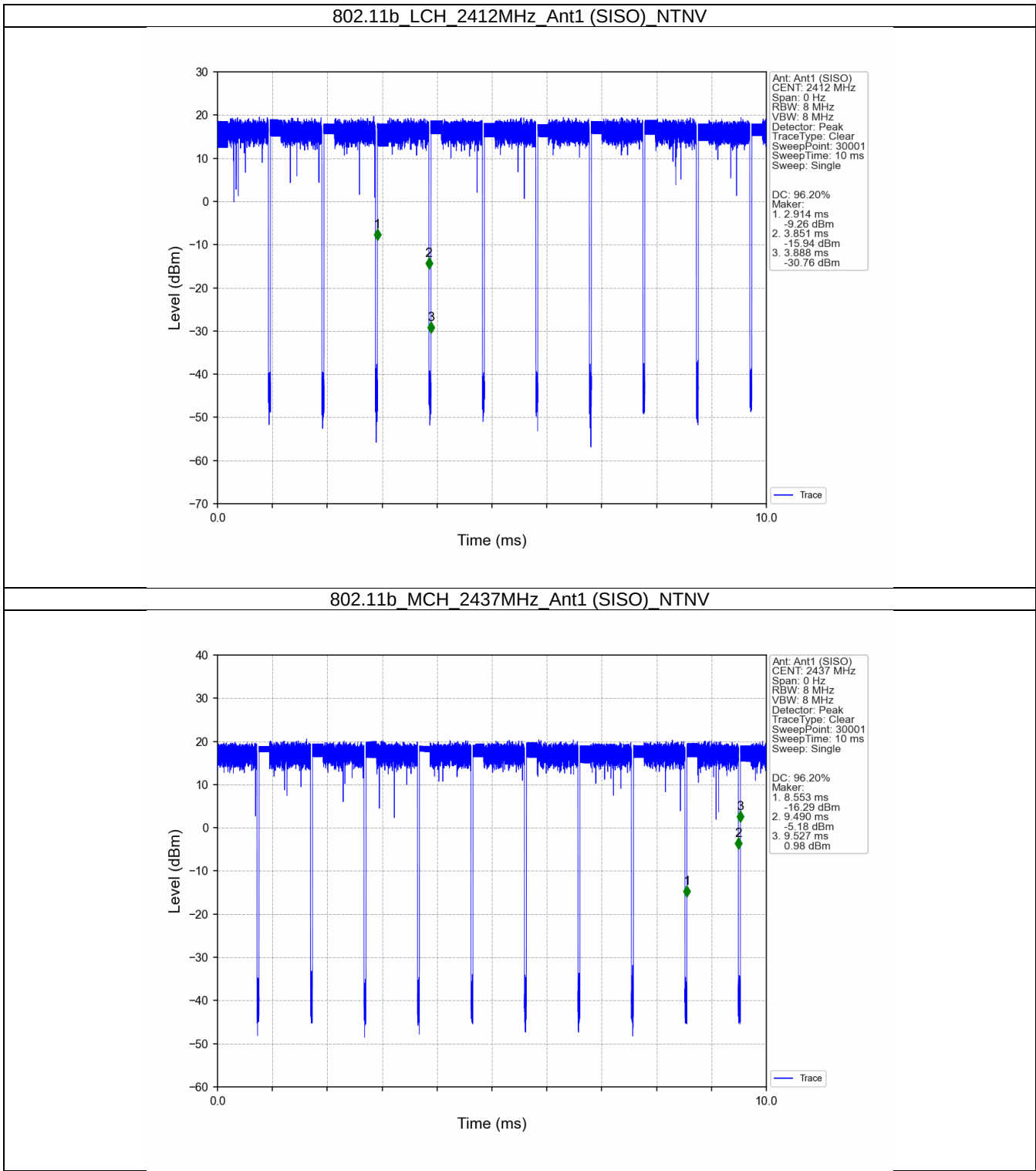
1.1 Test Result

1.1.1 Ant1

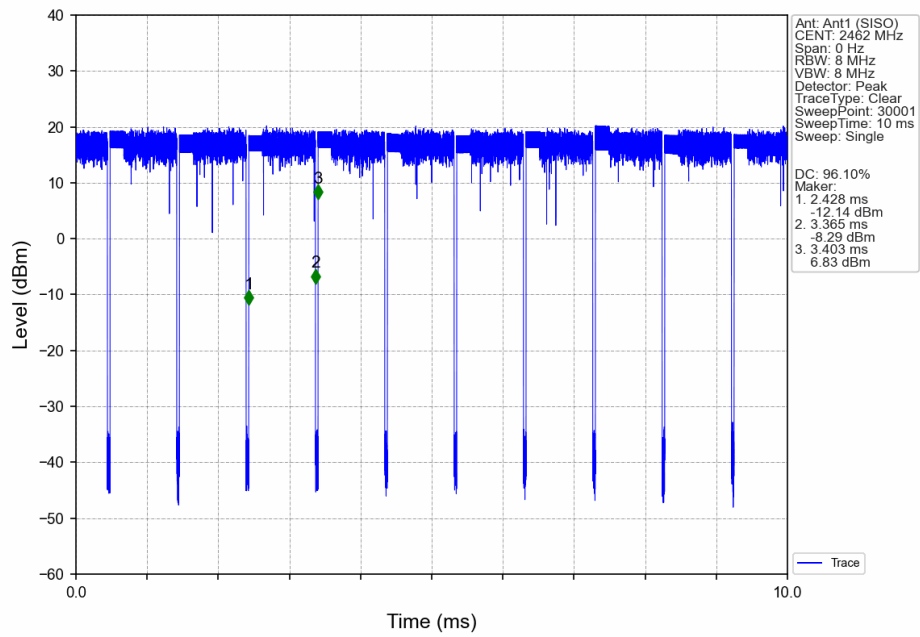
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	0.937	0.974	96.20	0.17	0.03
		2437	0.937	0.974	96.20	0.17	0.07
		2462	0.937	0.975	96.10	0.17	0.03
802.11g	SISO	2412	0.176	0.220	80.00	0.97	0.09
		2437	0.176	0.221	79.64	0.99	0.09
		2462	0.177	0.221	80.09	0.96	0.12
802.11n (HT20)	SISO	2412	0.165	0.209	78.95	1.03	0.13
		2437	0.167	0.209	79.90	0.97	0.11
		2462	0.164	0.209	78.47	1.05	0.10
802.11n (HT40)	SISO	2422	0.102	0.144	70.83	1.50	0.25
		2437	0.101	0.144	70.14	1.54	0.14
		2452	0.102	0.144	70.83	1.50	0.20

1.2 Test Graph

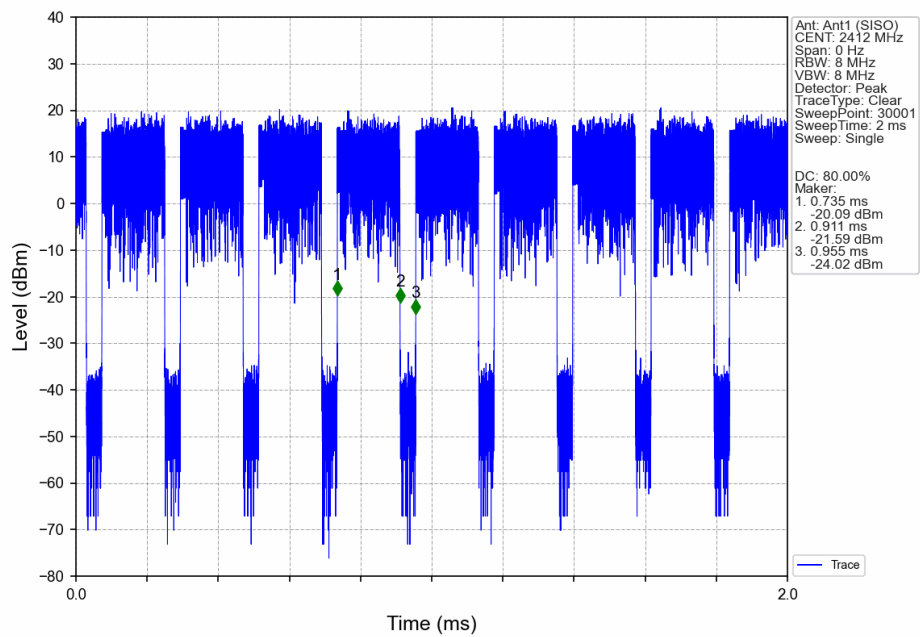
1.2.1 Ant1



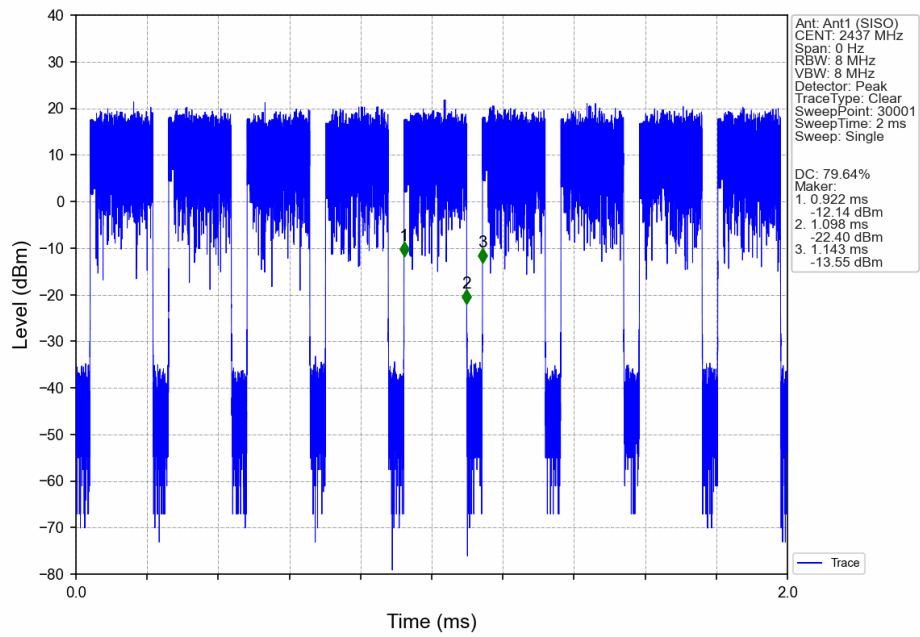
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



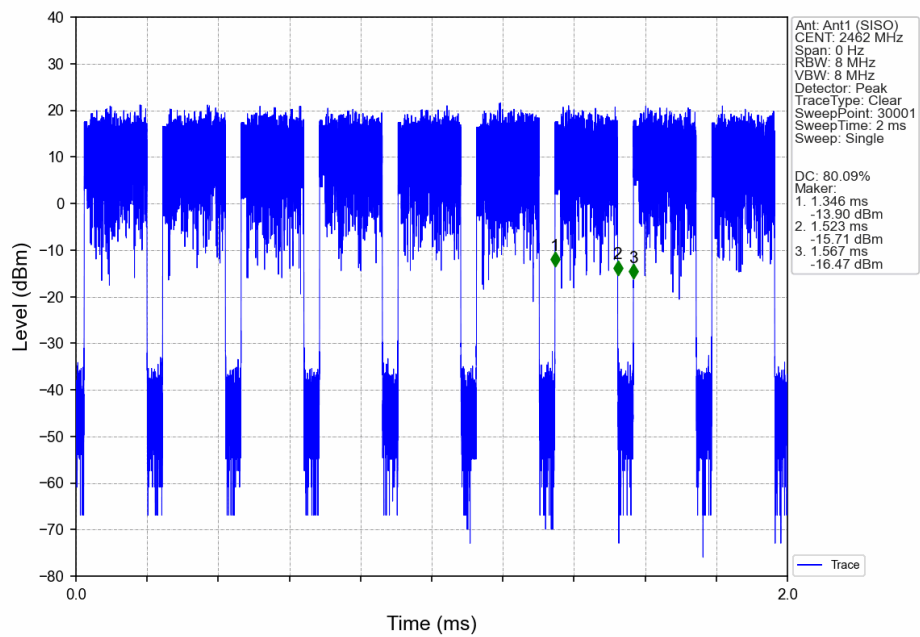
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



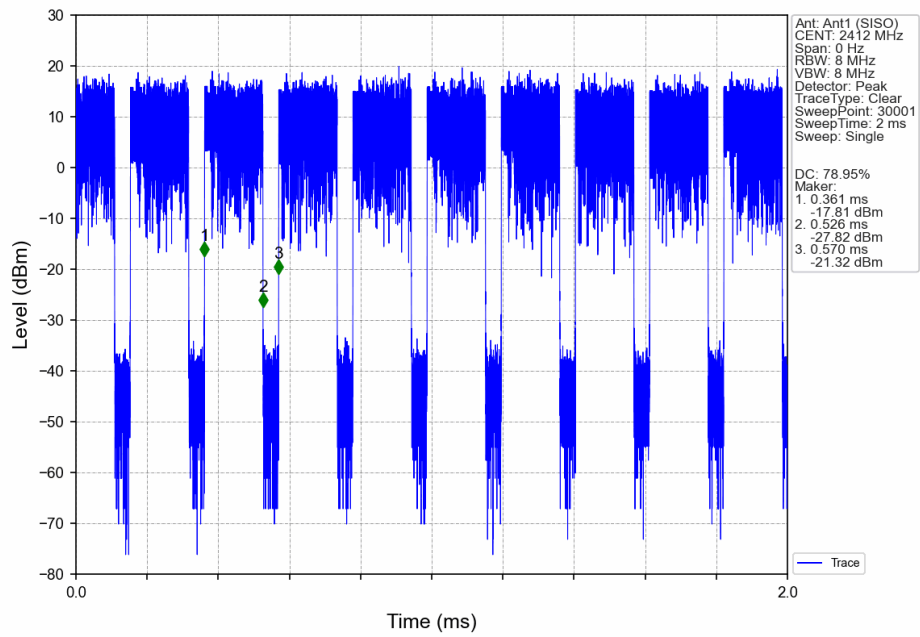
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



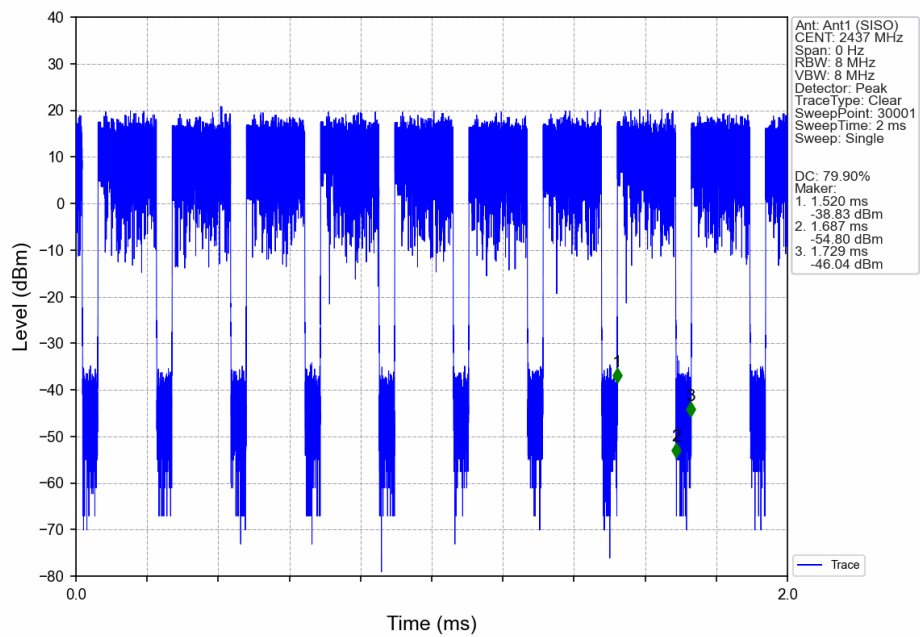
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



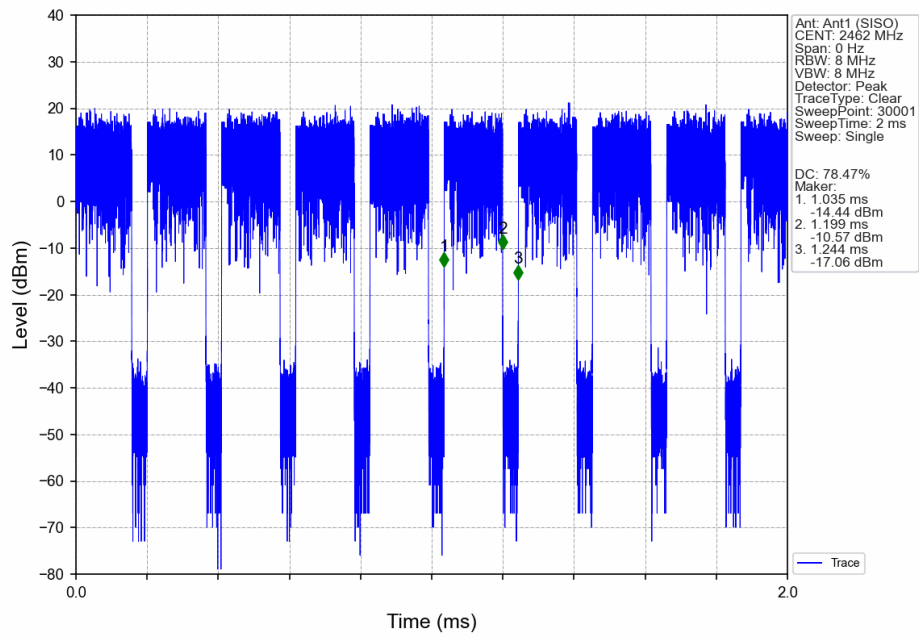
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



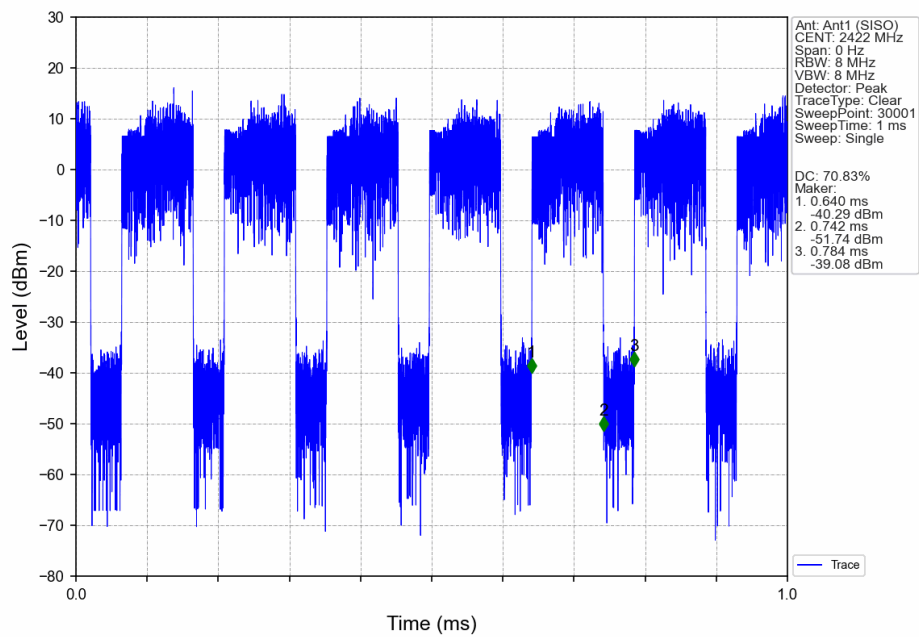
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



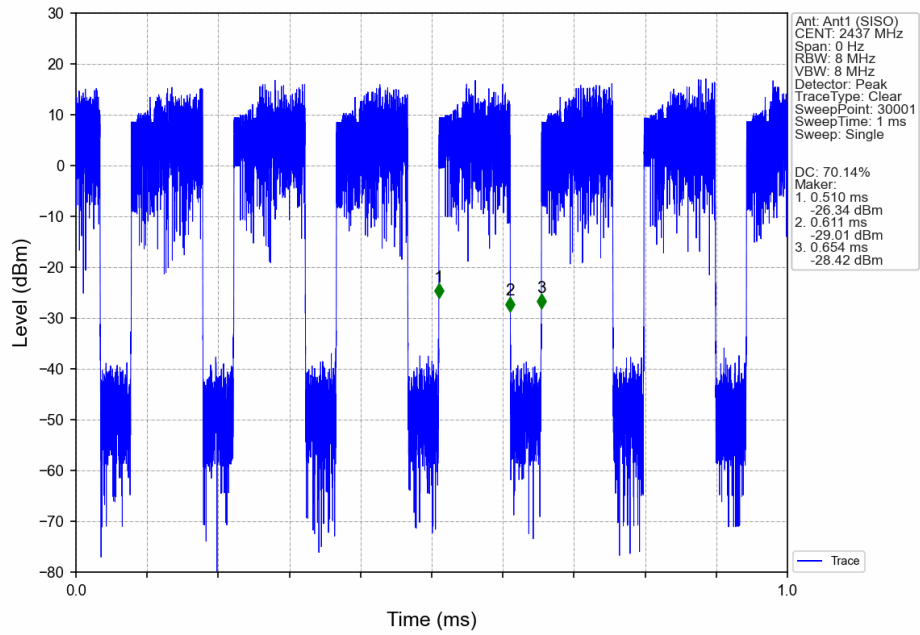
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



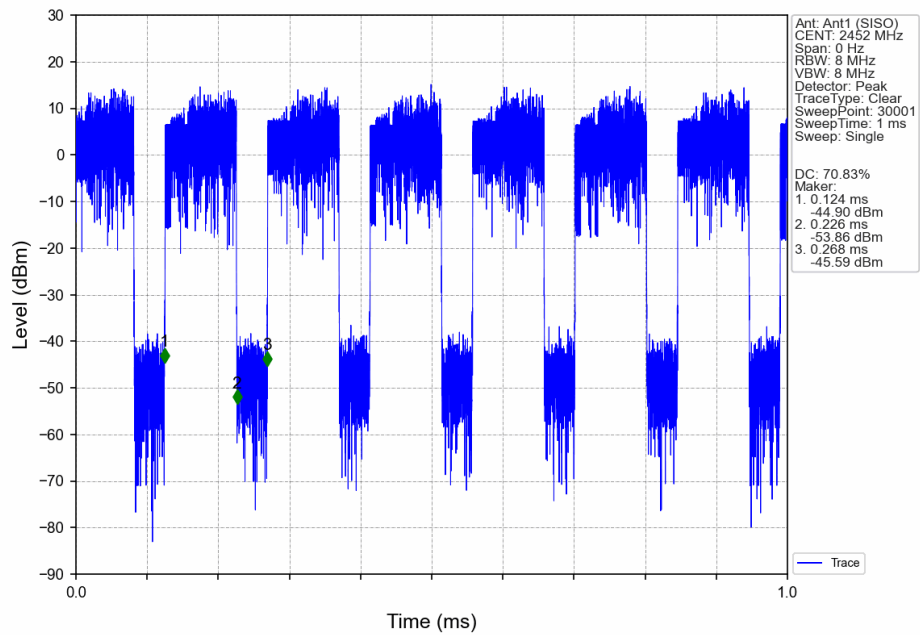
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



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

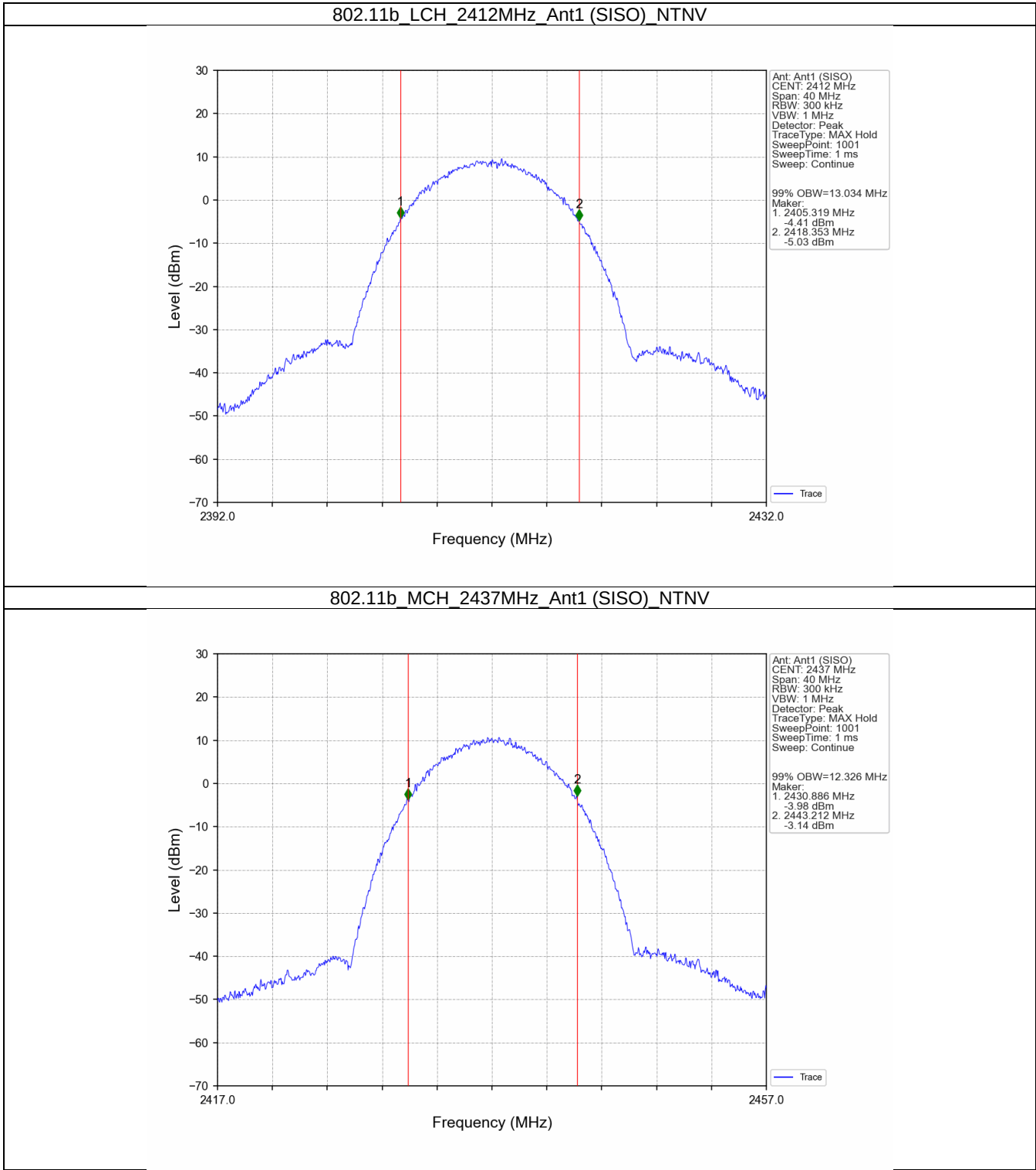
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	13.034	/	Pass
		2437	1	12.326	/	Pass
		2462	1	12.891	/	Pass
802.11g	SISO	2412	1	16.946	/	Pass
		2437	1	16.441	/	Pass
		2462	1	16.628	/	Pass
802.11n (HT20)	SISO	2412	1	17.893	/	Pass
		2437	1	17.551	/	Pass
		2462	1	17.782	/	Pass
802.11n (HT40)	SISO	2422	1	36.729	/	Pass
		2437	1	35.666	/	Pass
		2452	1	36.393	/	Pass

2.1.2 6dB BW

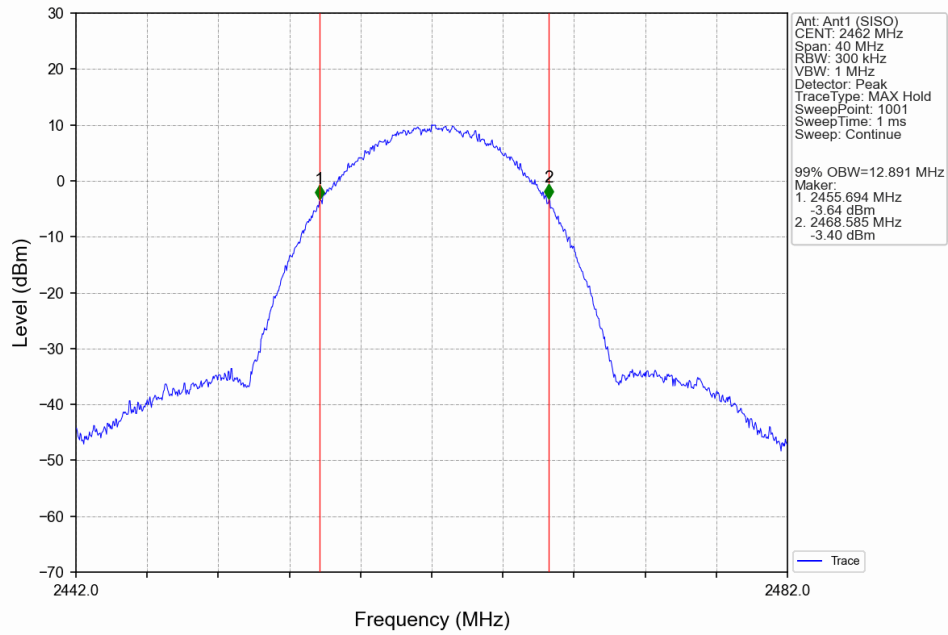
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	8.234	≥ 0.5	Pass
		2437	1	7.572	≥ 0.5	Pass
		2462	1	8.732	≥ 0.5	Pass
802.11g	SISO	2412	1	16.461	≥ 0.5	Pass
		2437	1	15.745	≥ 0.5	Pass
		2462	1	16.297	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.679	≥ 0.5	Pass
		2437	1	15.246	≥ 0.5	Pass
		2462	1	17.552	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	36.266	≥ 0.5	Pass
		2437	1	26.626	≥ 0.5	Pass
		2452	1	35.723	≥ 0.5	Pass

2.2 Test Graph

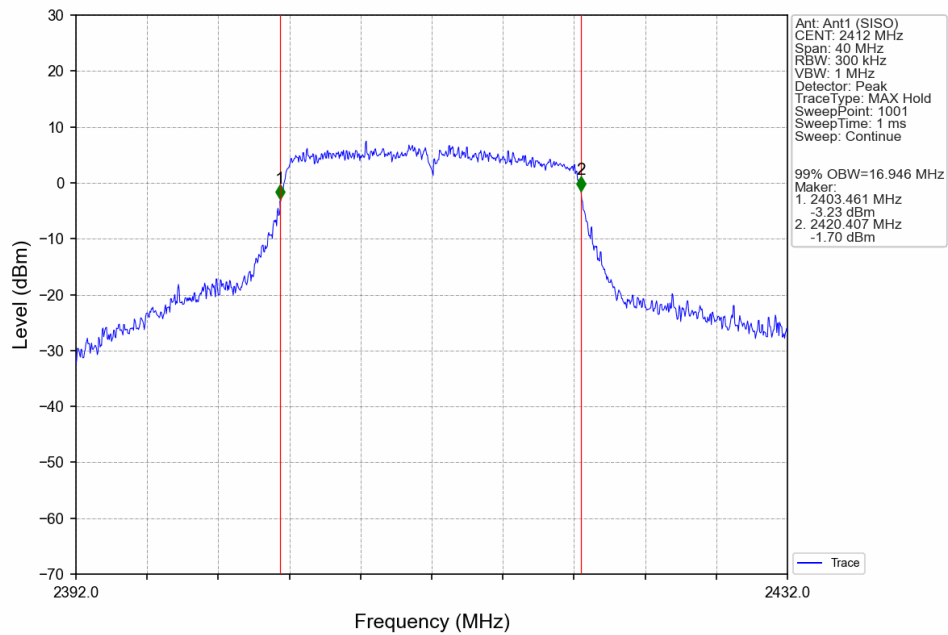
2.2.1 OBW



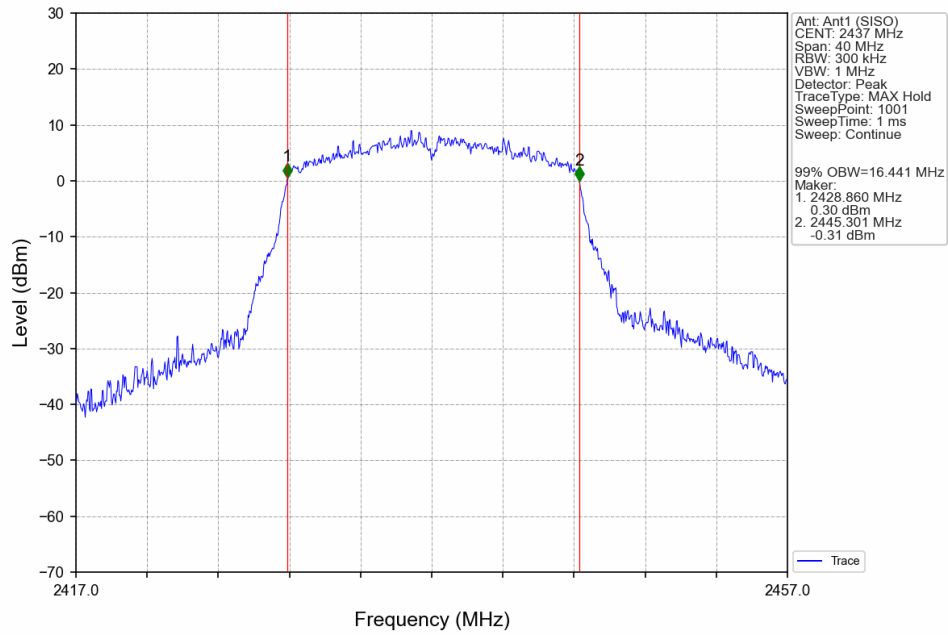
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



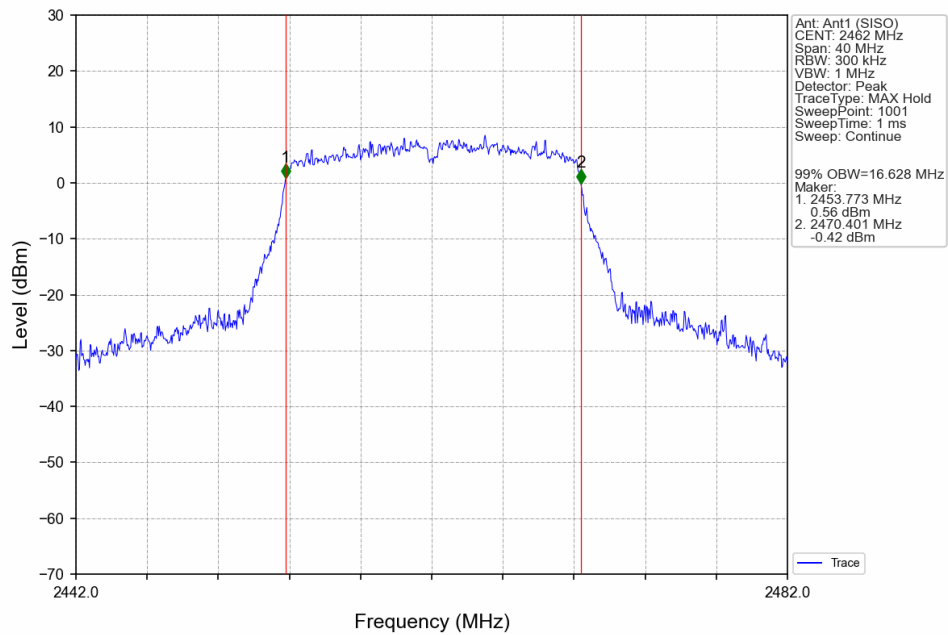
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



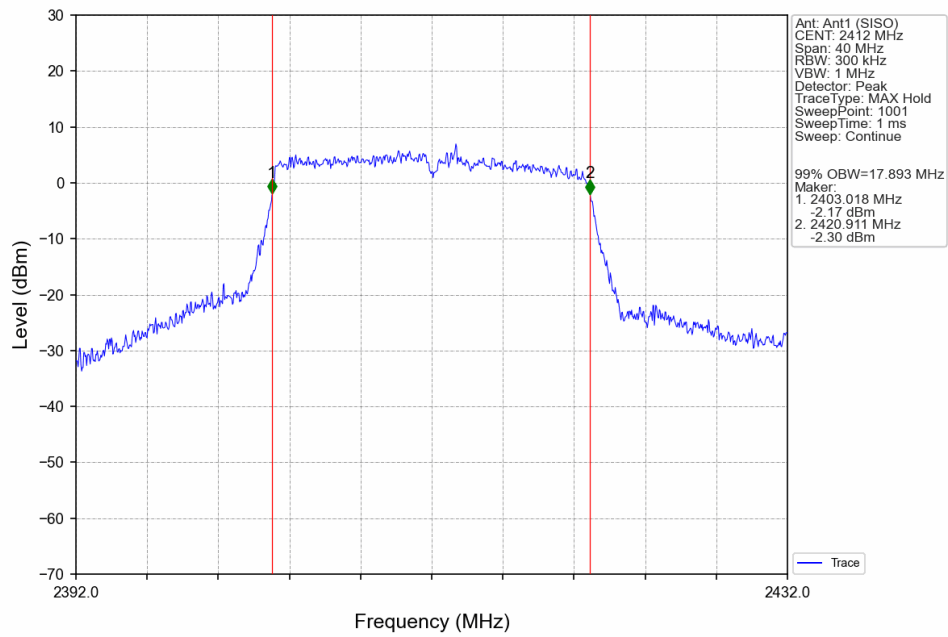
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



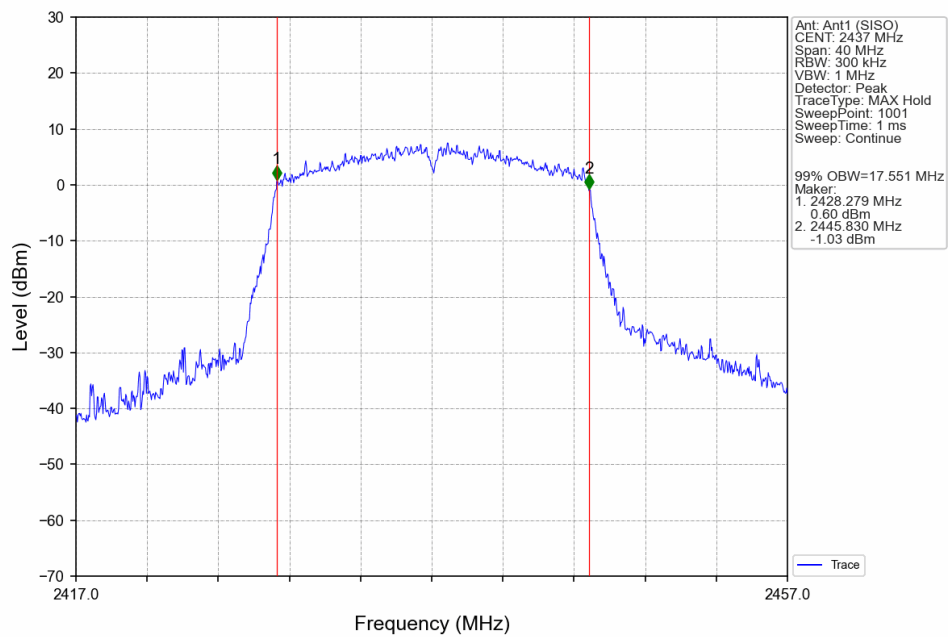
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



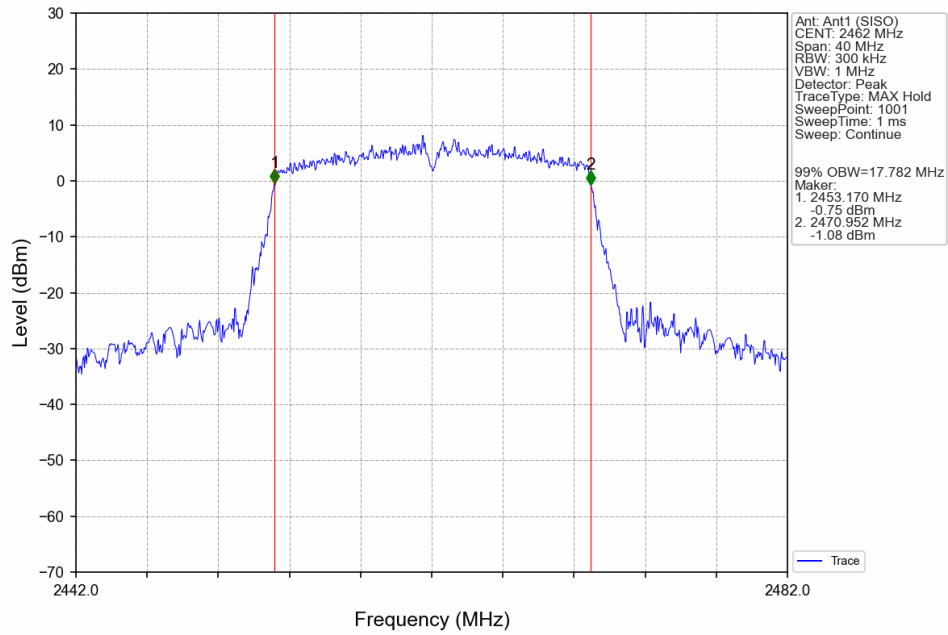
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



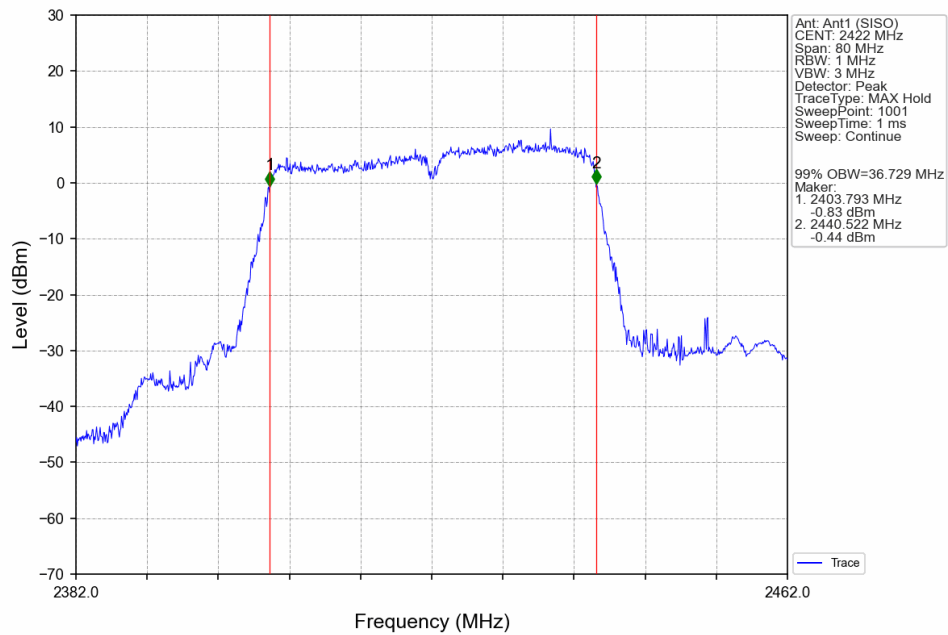
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



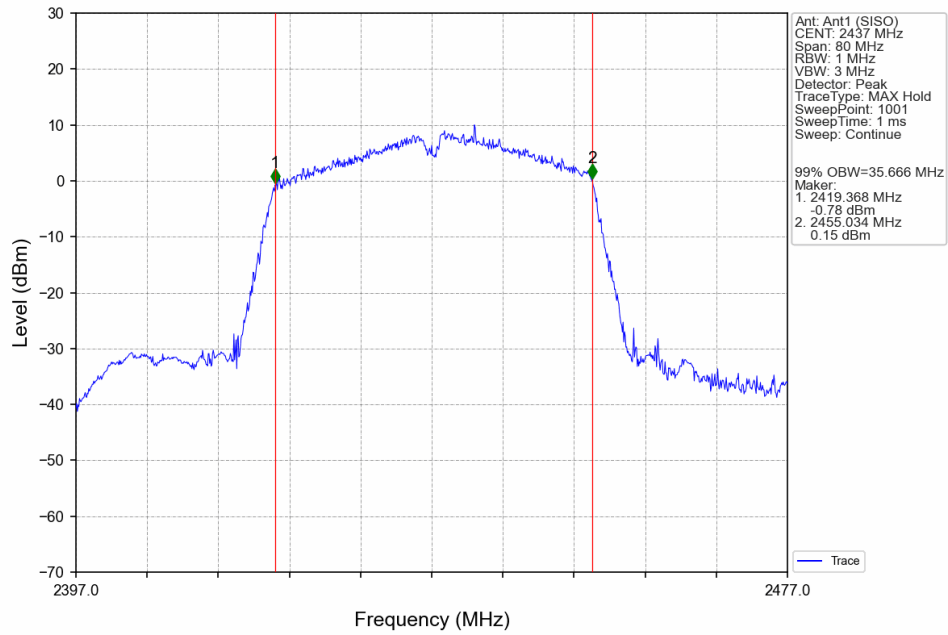
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



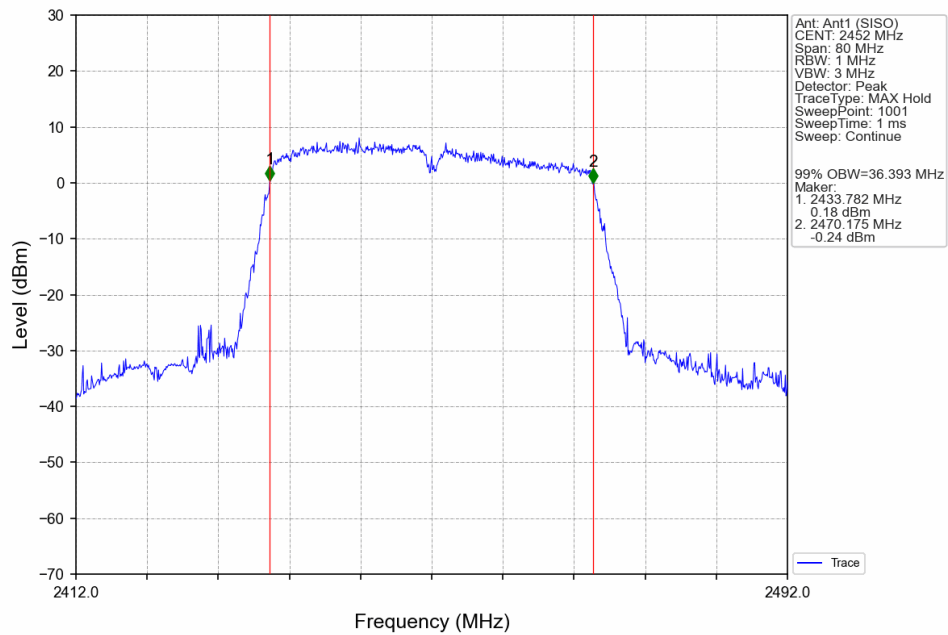
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



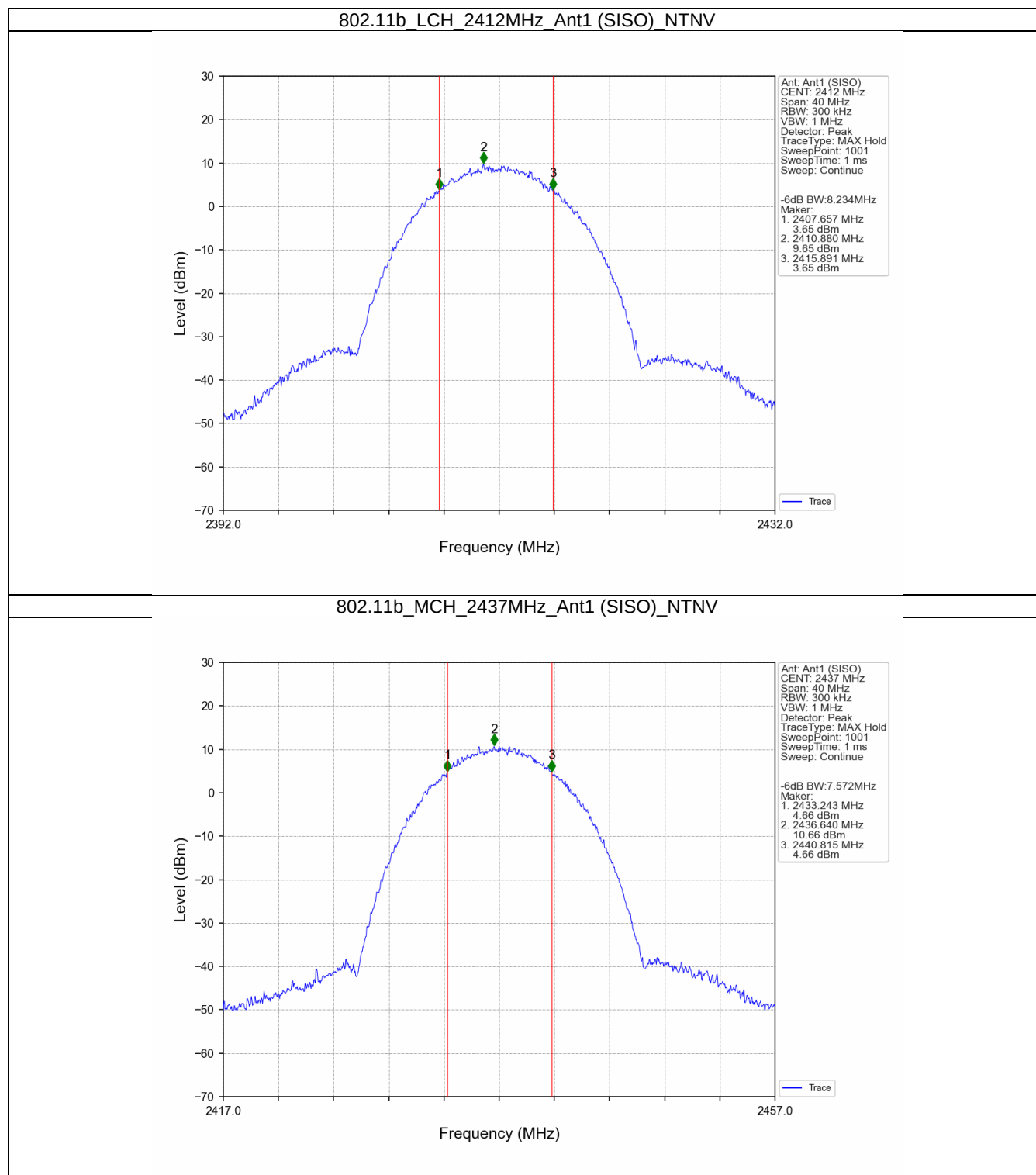
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



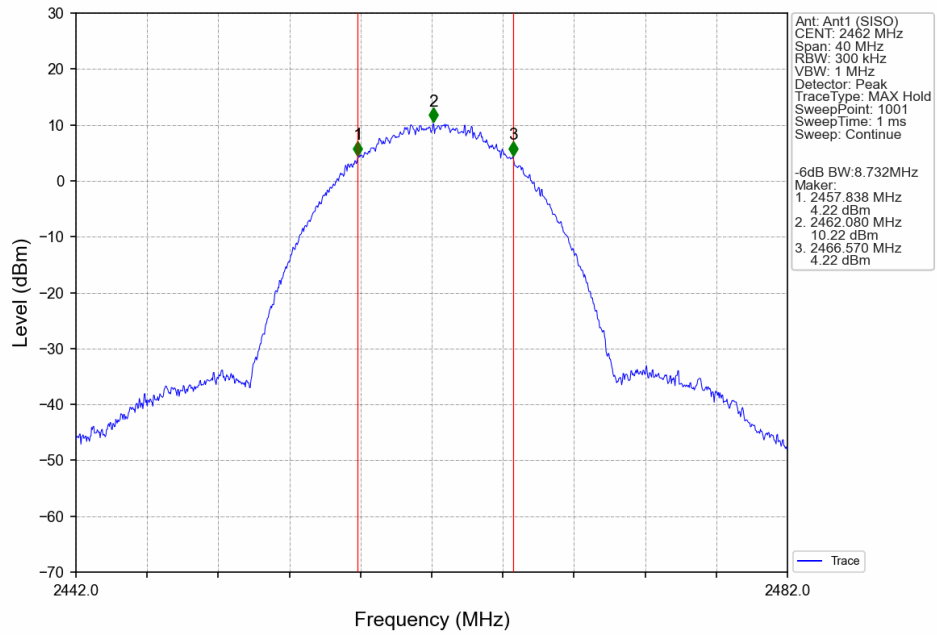
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



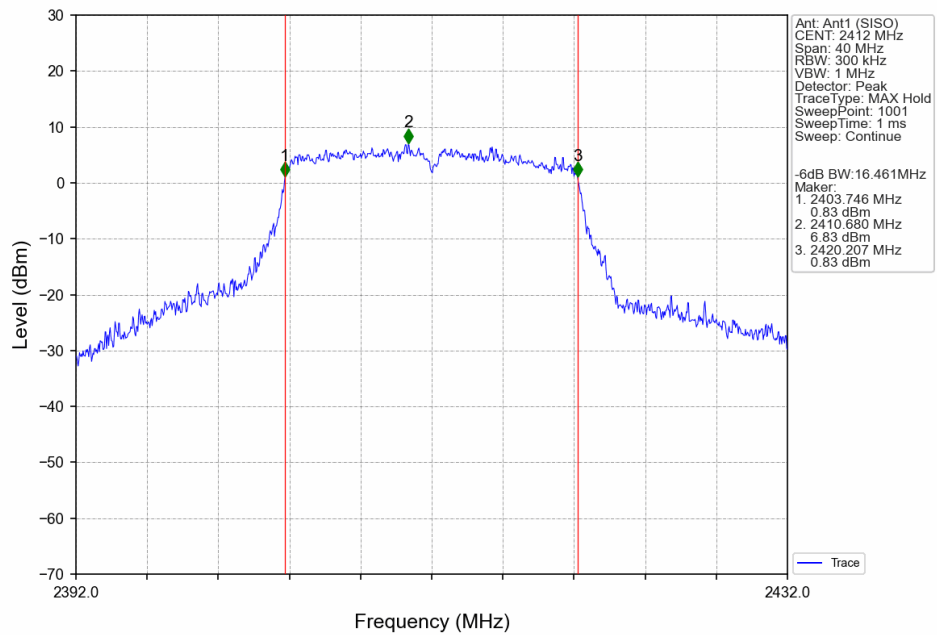
2.2.2 6dB BW



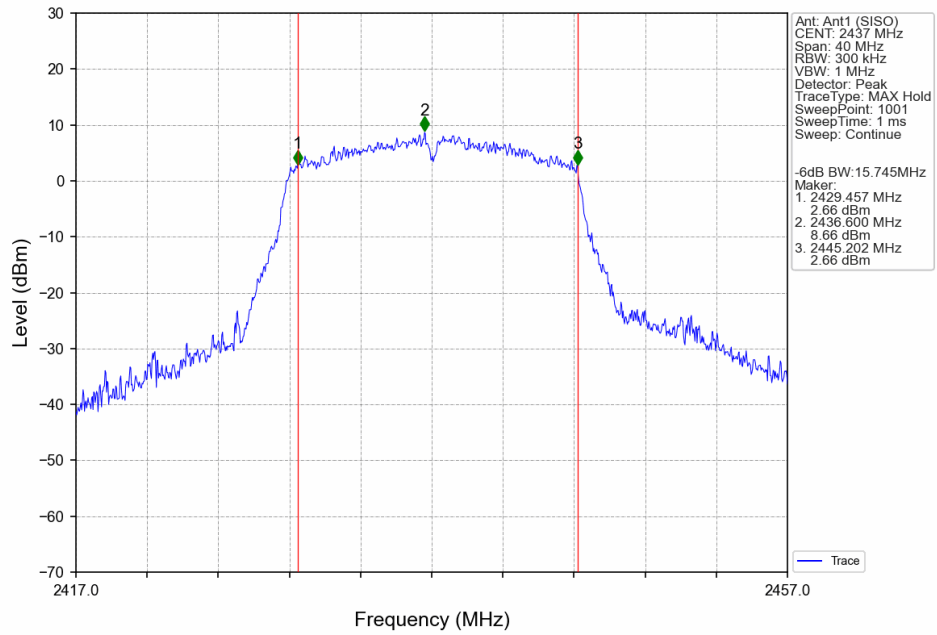
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



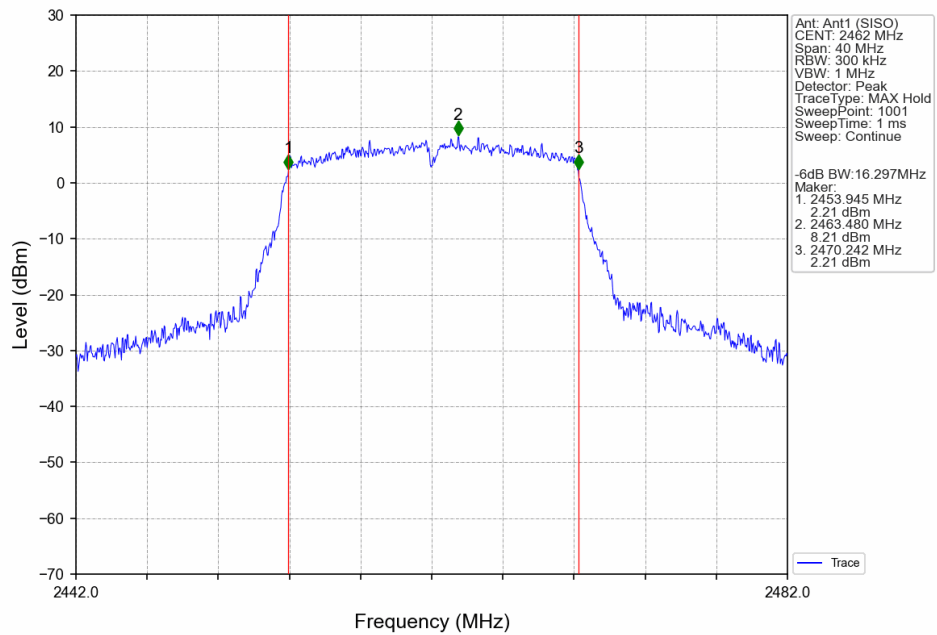
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



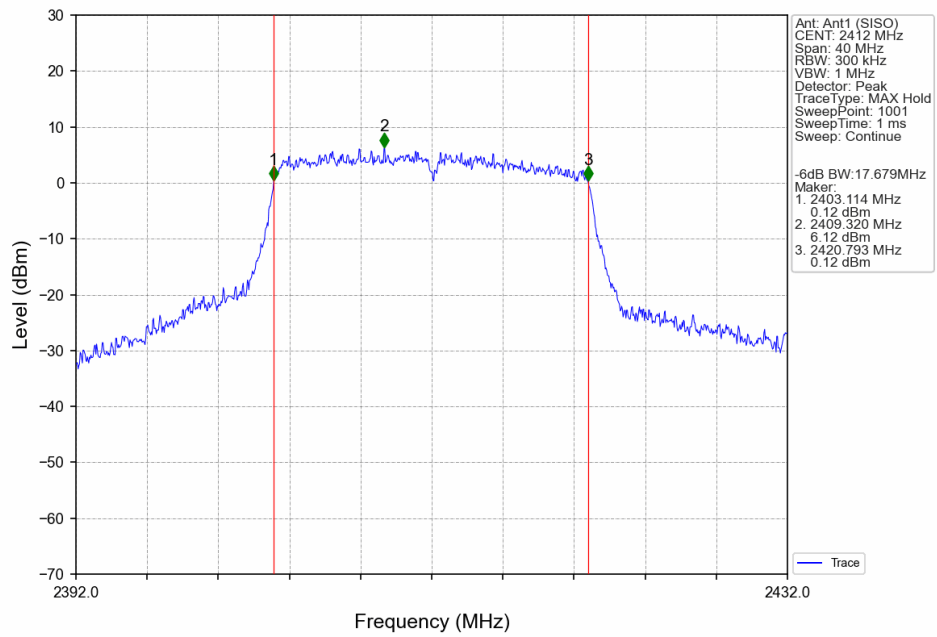
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



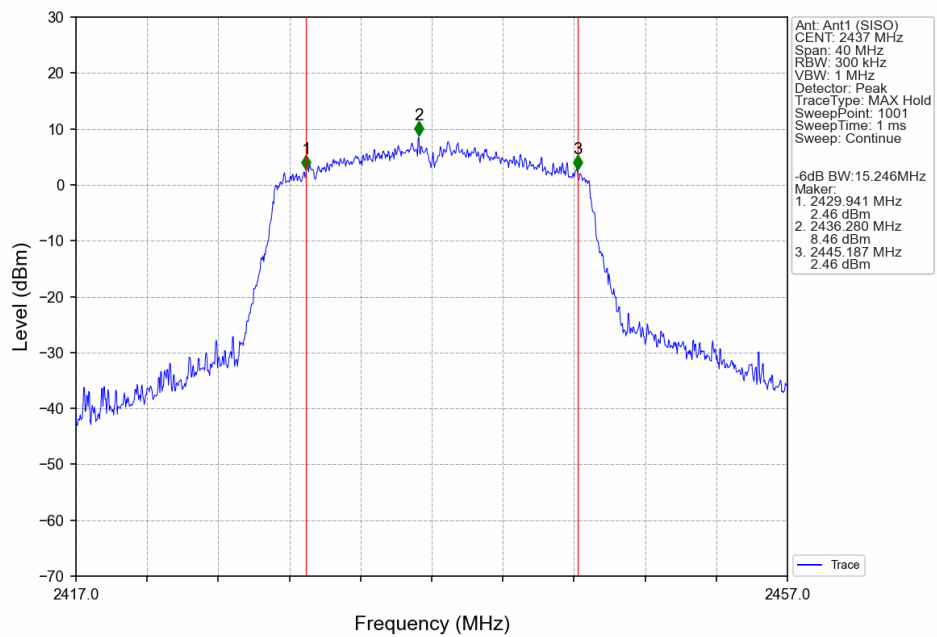
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



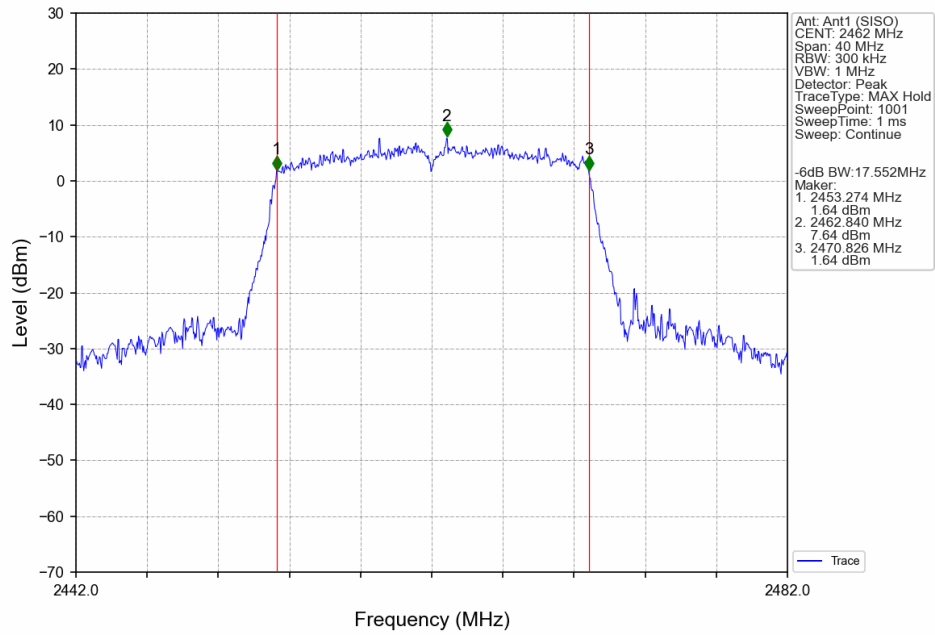
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



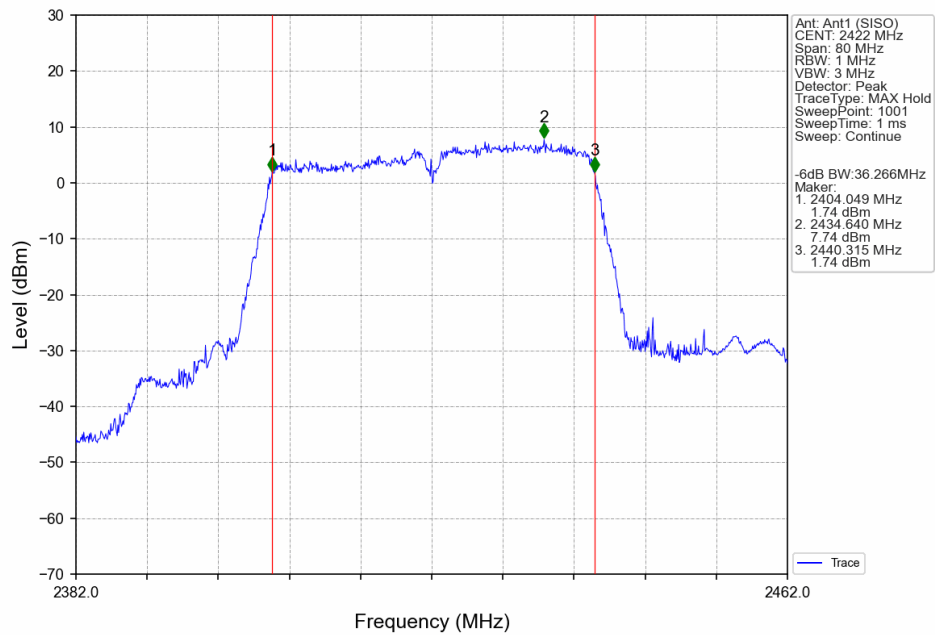
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



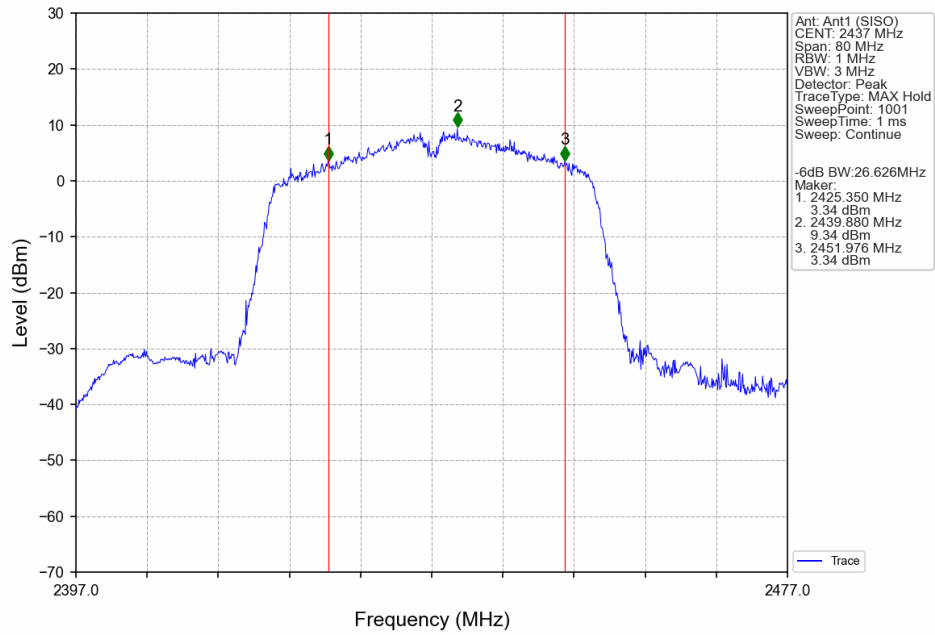
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



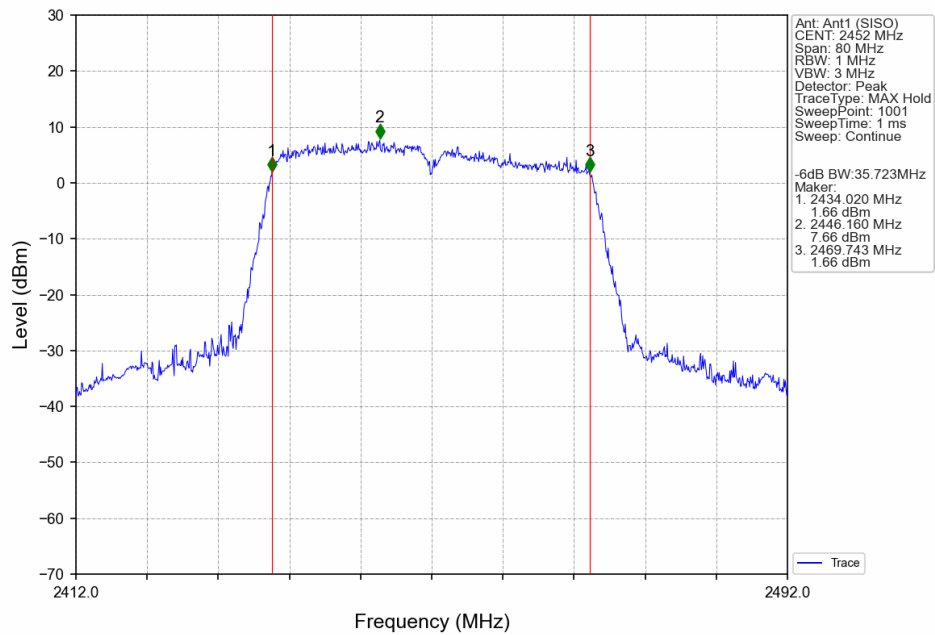
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



3. Maximum Conducted Output Power

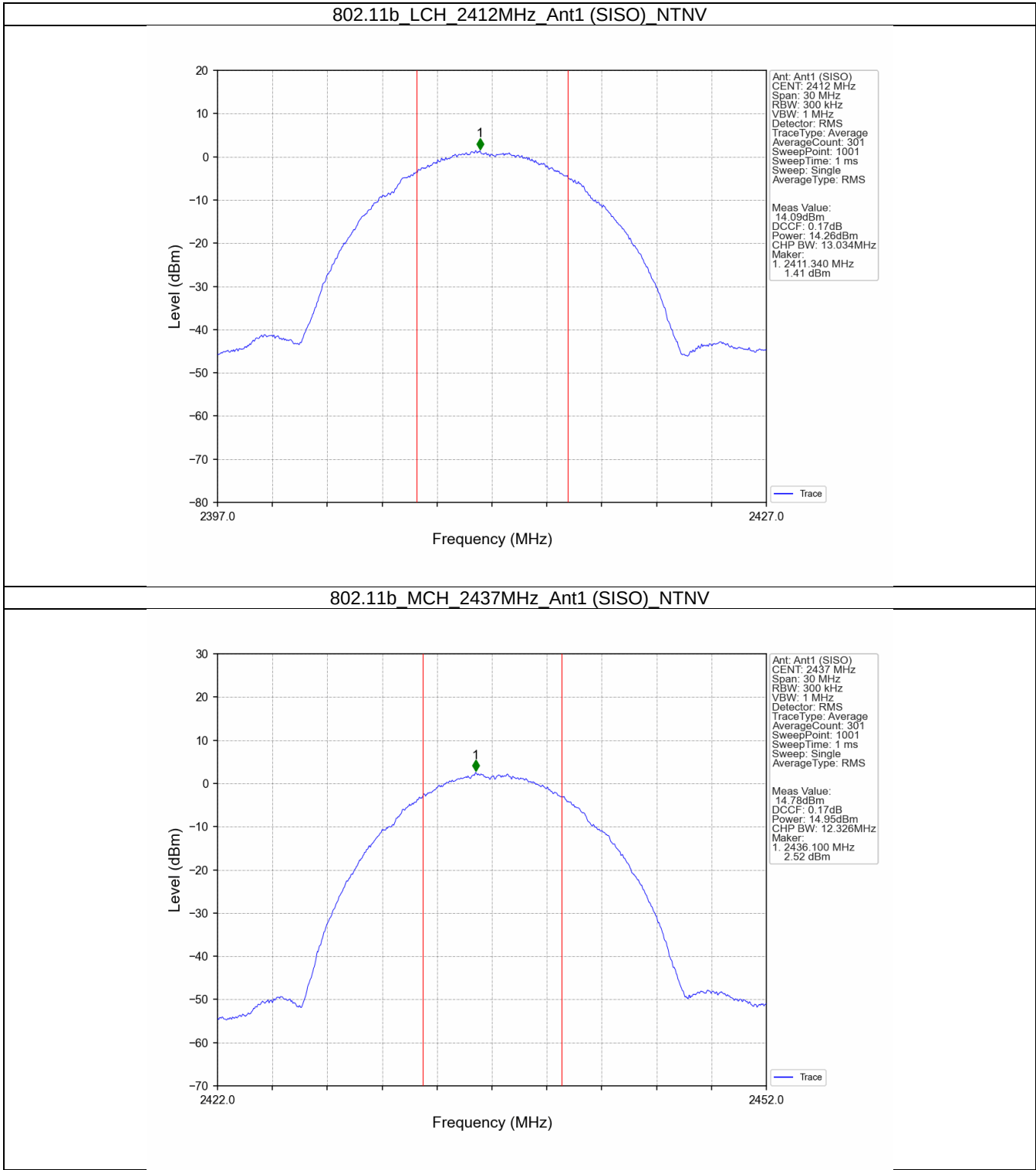
3.1 Test Result

3.1.1 Power

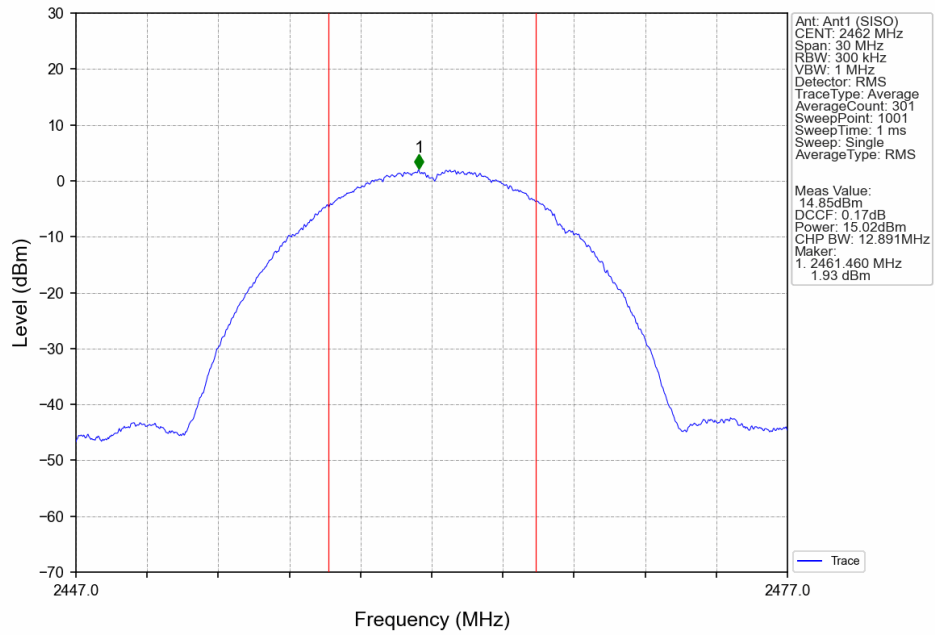
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	14.26	<=30	Pass
		2437	14.95	<=30	Pass
		2462	15.02	<=30	Pass
802.11g	SISO	2412	14.06	<=30	Pass
		2437	14.87	<=30	Pass
		2462	15.08	<=30	Pass
802.11n (HT20)	SISO	2412	13.46	<=30	Pass
		2437	22.09	<=30	Pass
		2462	14.37	<=30	Pass
802.11n (HT40)	SISO	2422	11.59	<=30	Pass
		2437	11.80	<=30	Pass
		2452	11.71	<=30	Pass

3.2 Test Graph

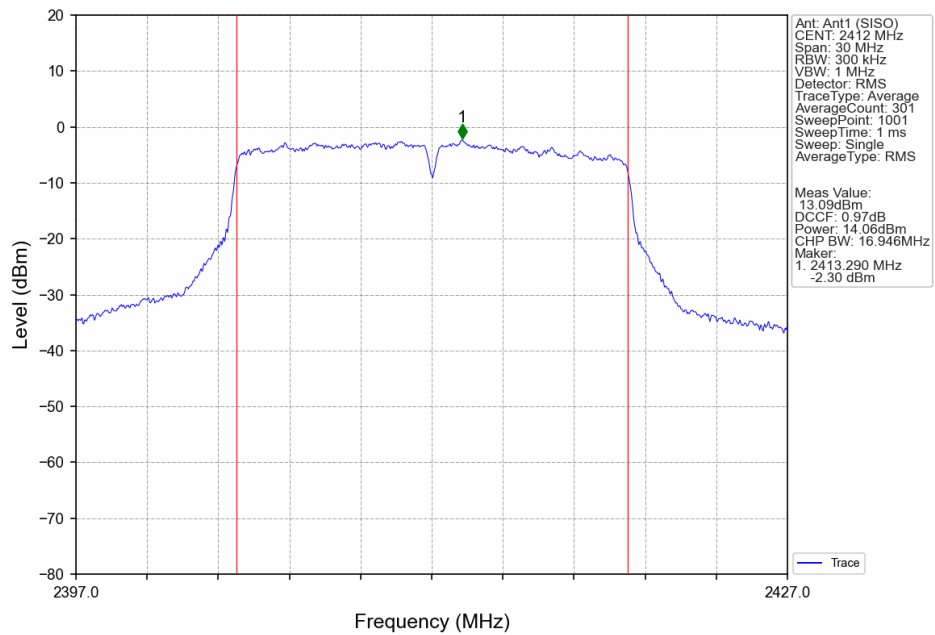
3.2.1 Power



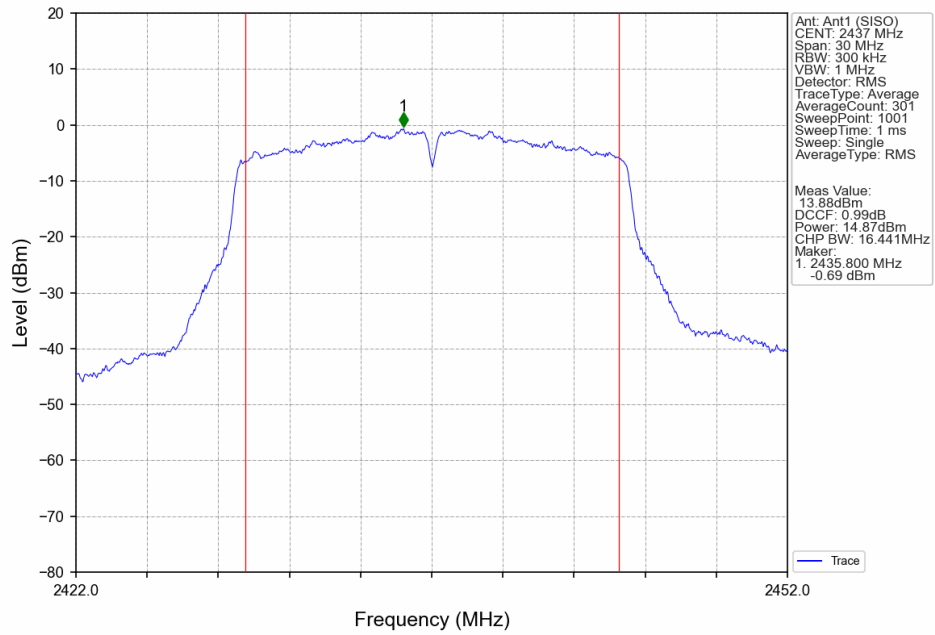
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



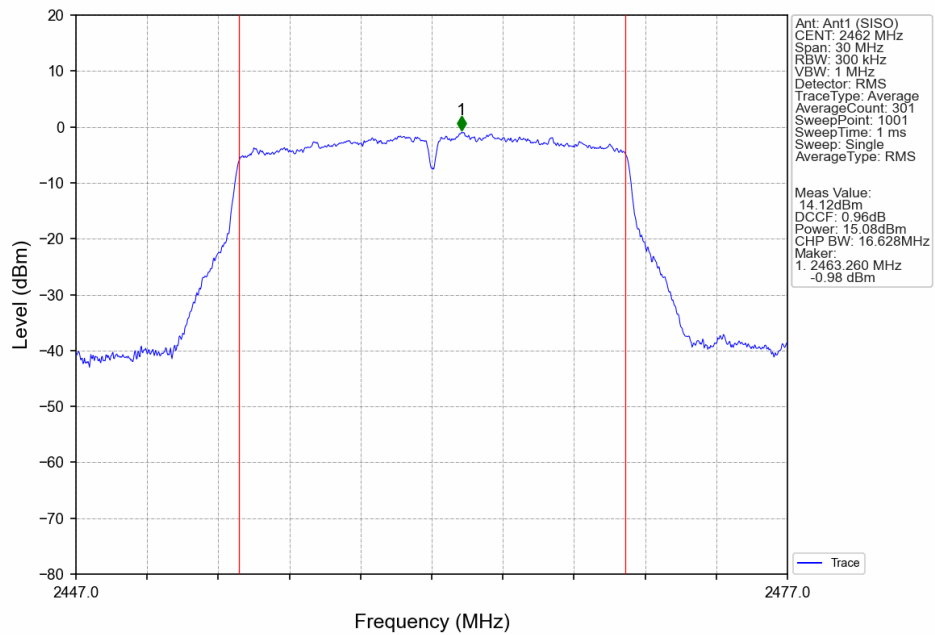
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



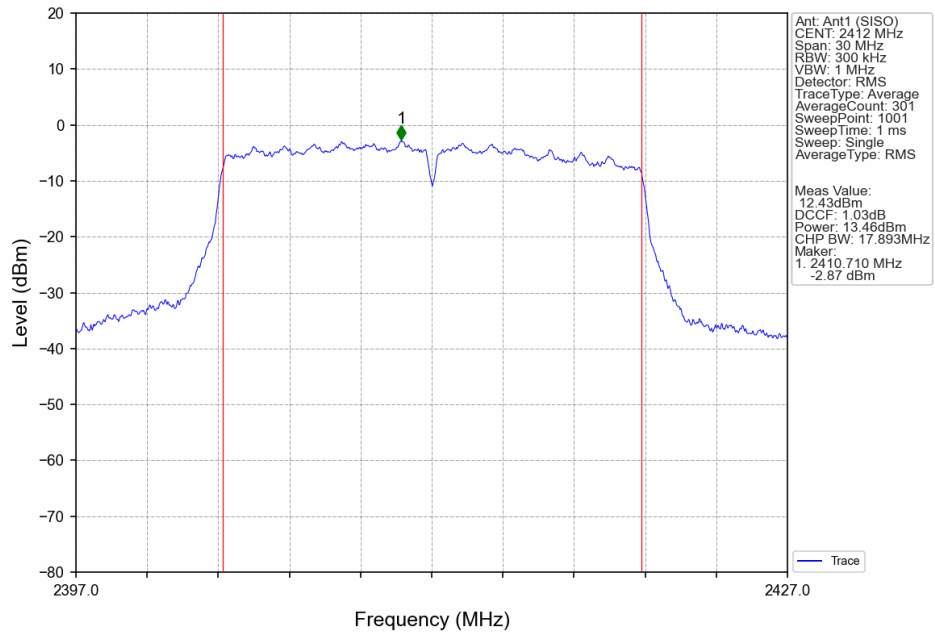
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



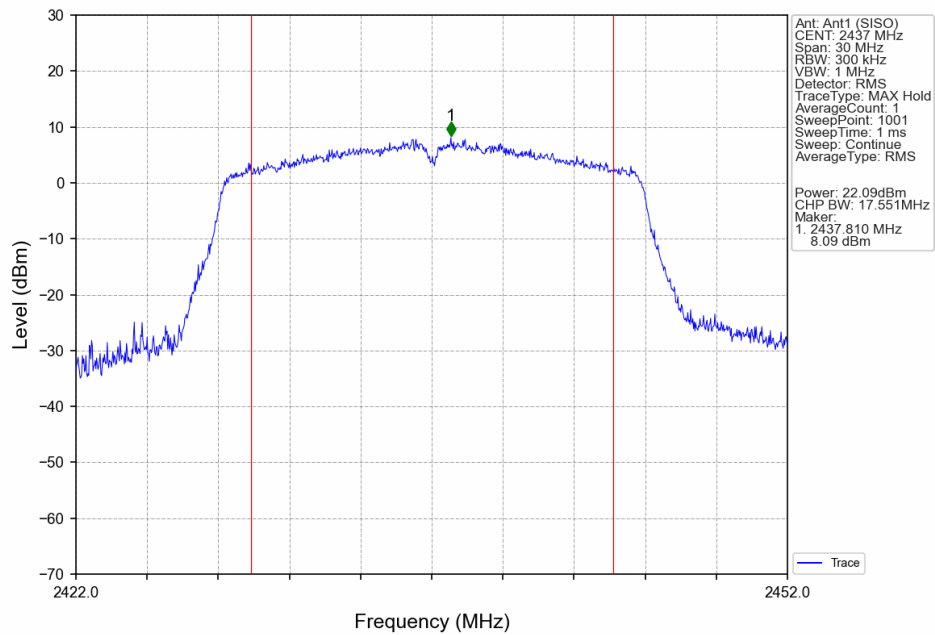
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



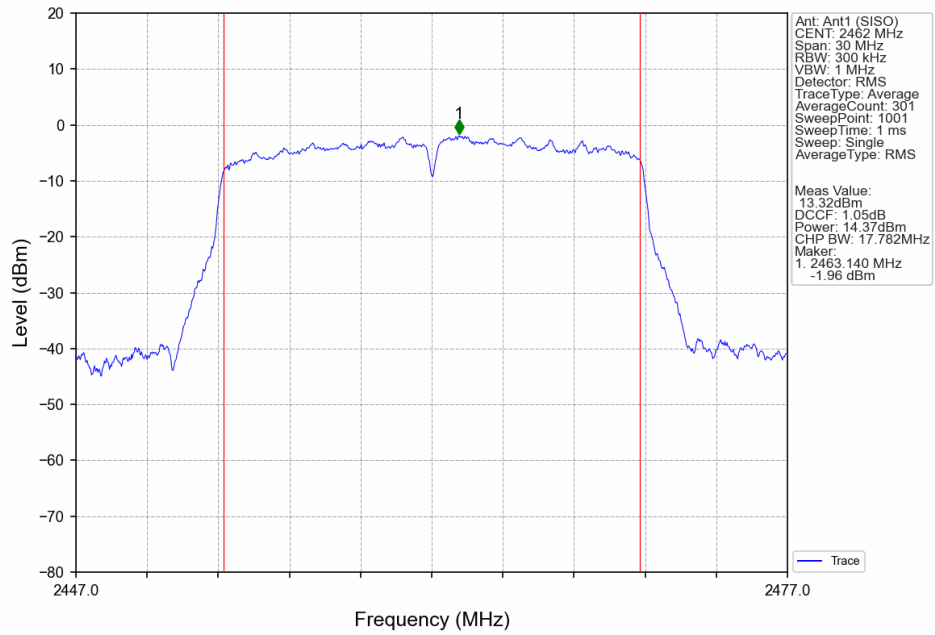
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



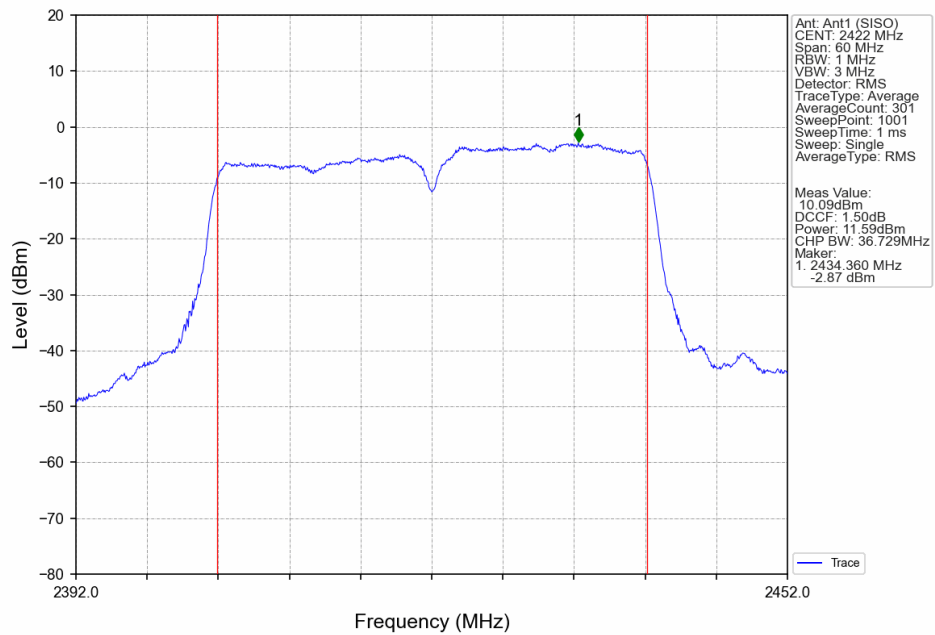
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



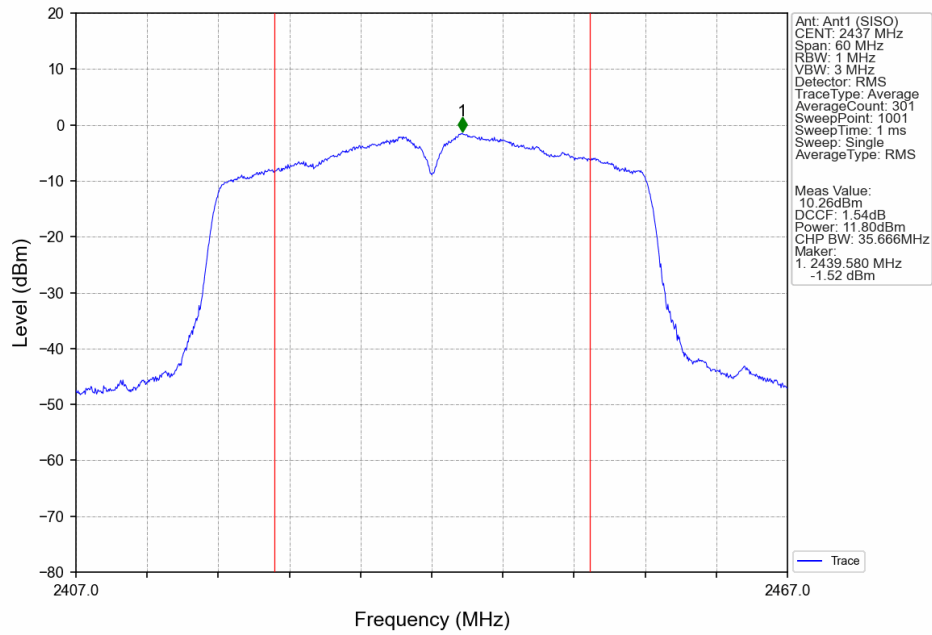
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



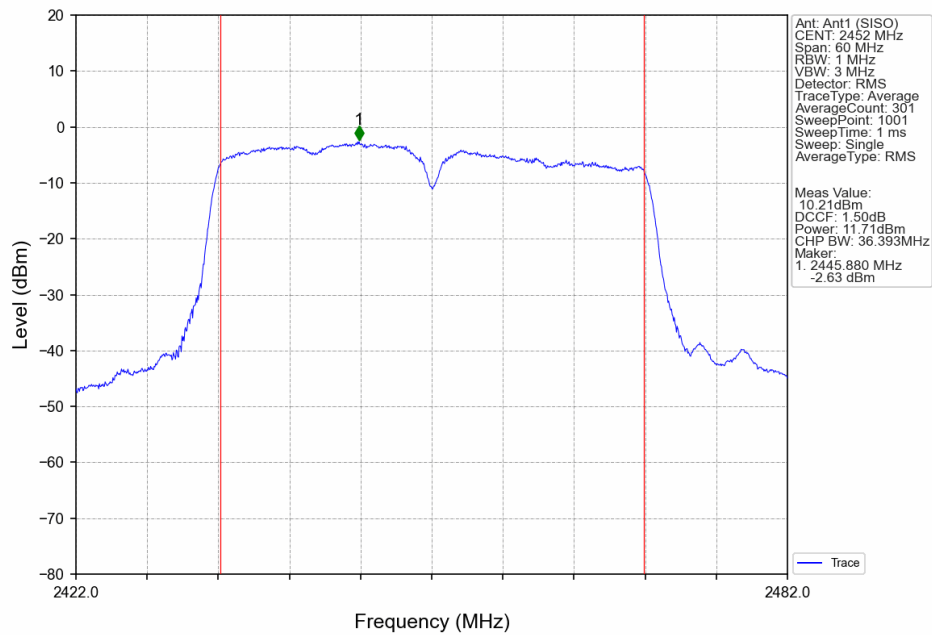
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



4. Maximum Power Spectral Density

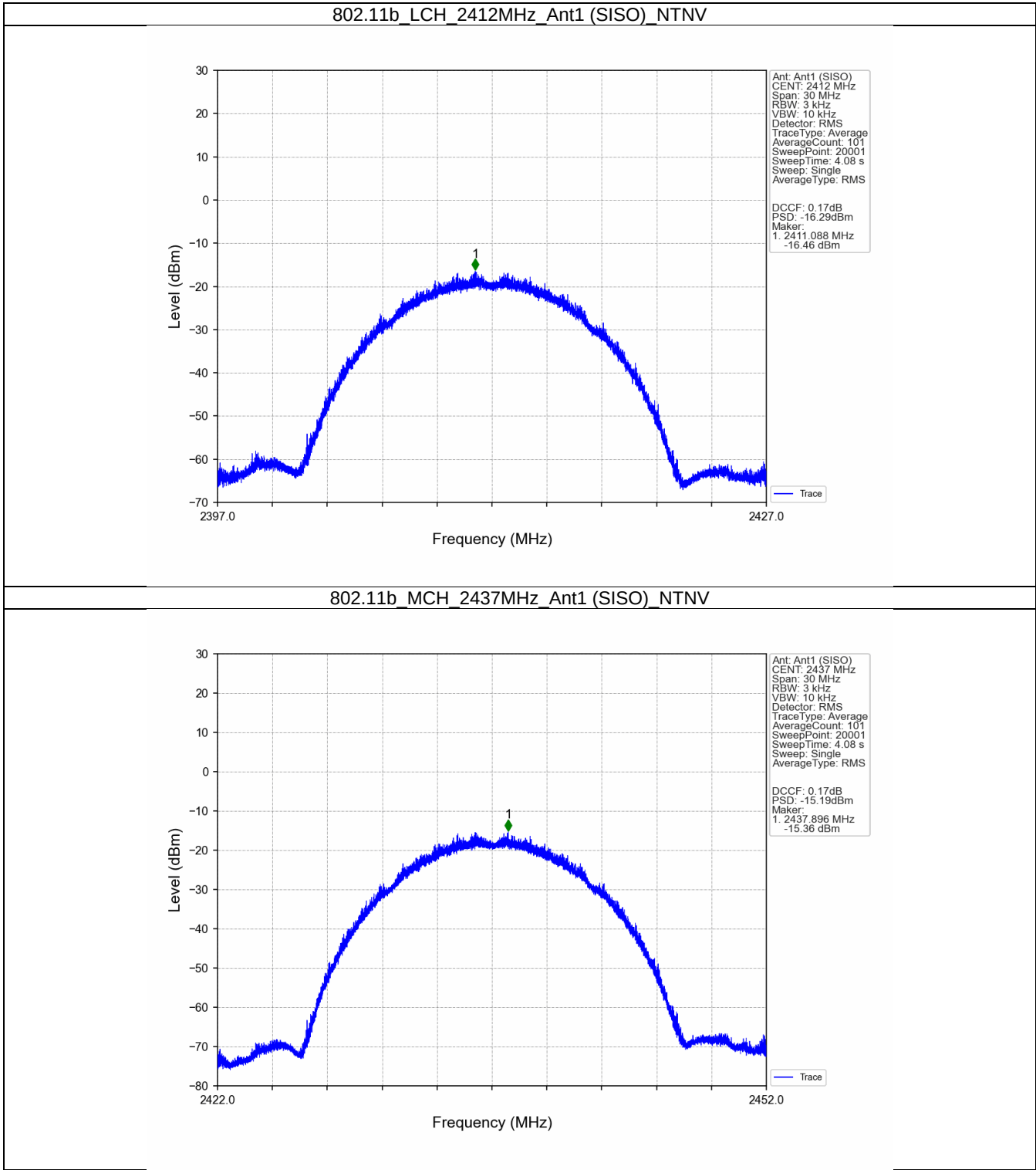
4.1 Test Result

4.1.1 PSD

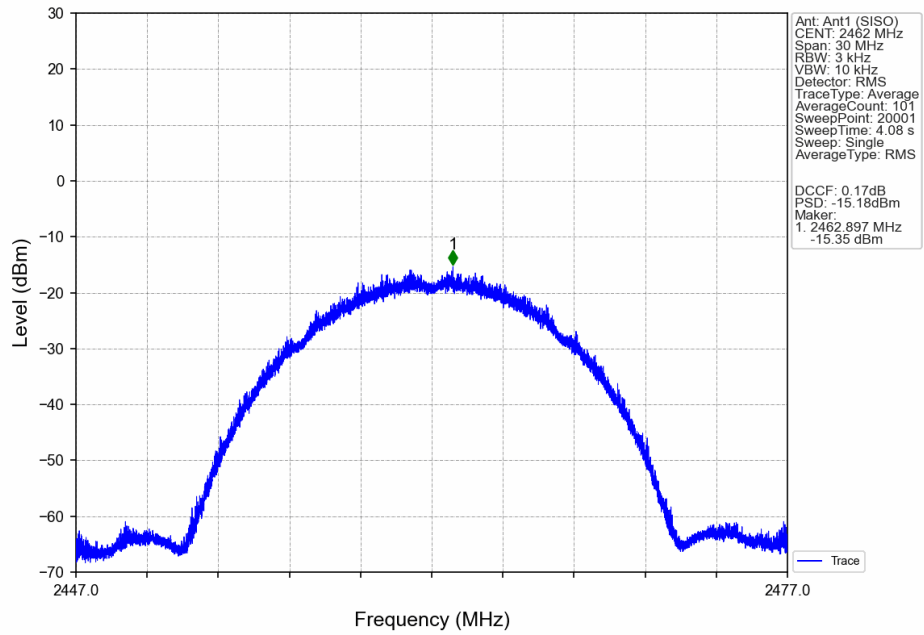
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit(dBm/3kHz)	
802.11b	SISO	2412	-16.29dBm/3kHz	<=8	Pass
		2437	-15.19dBm/3kHz	<=8	Pass
		2462	-15.18dBm/3kHz	<=8	Pass
802.11g	SISO	2412	-16.07dBm/3kHz	<=8	Pass
		2437	-14.54dBm/3kHz	<=8	Pass
		2462	-14.71dBm/3kHz	<=8	Pass
802.11n (HT20)	SISO	2412	-15.32dBm/3kHz	<=8	Pass
		2437	-11.31dBm/3kHz	<=8	Pass
		2462	-14.25dBm/3kHz	<=8	Pass
802.11n (HT40)	SISO	2422	-17.68dBm/3kHz	<=8	Pass
		2437	-17.40dBm/3kHz	<=8	Pass
		2452	-16.84dBm/3kHz	<=8	Pass

4.2 Test Graph

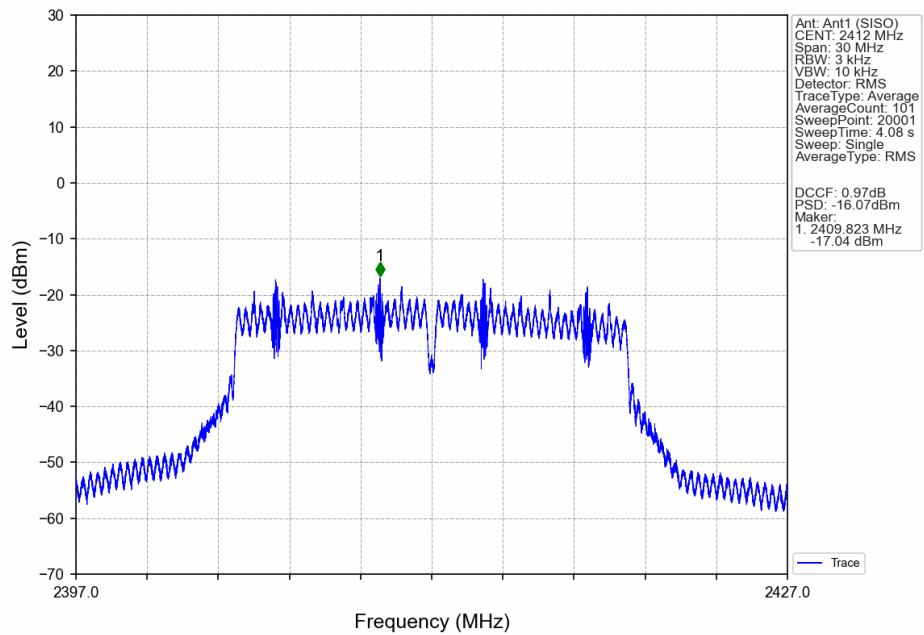
4.2.1 PSD



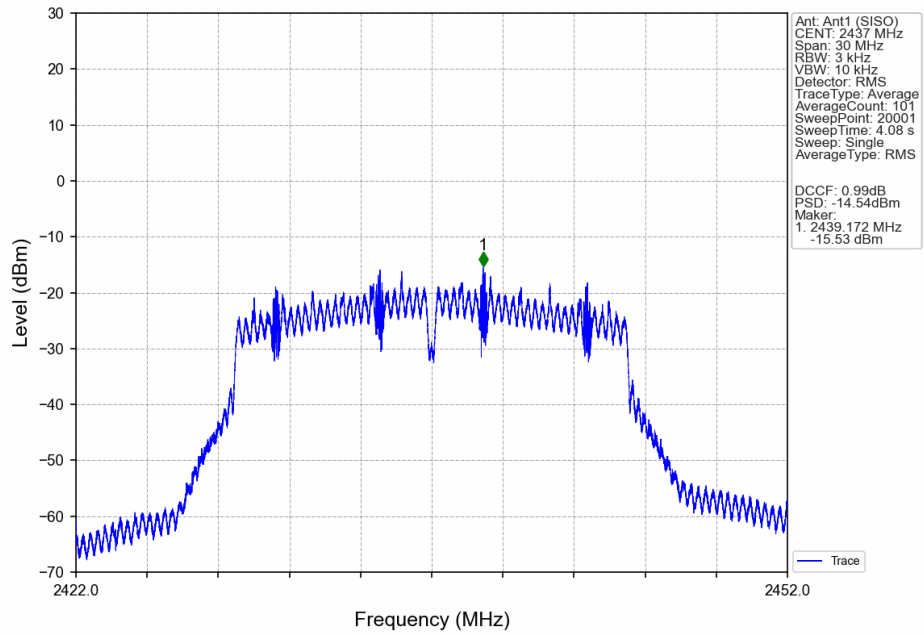
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



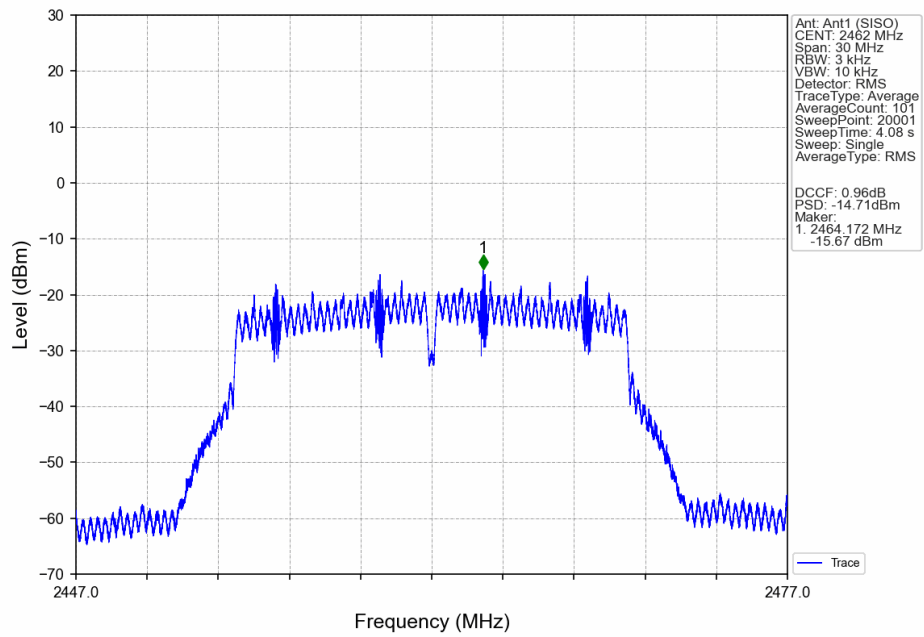
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



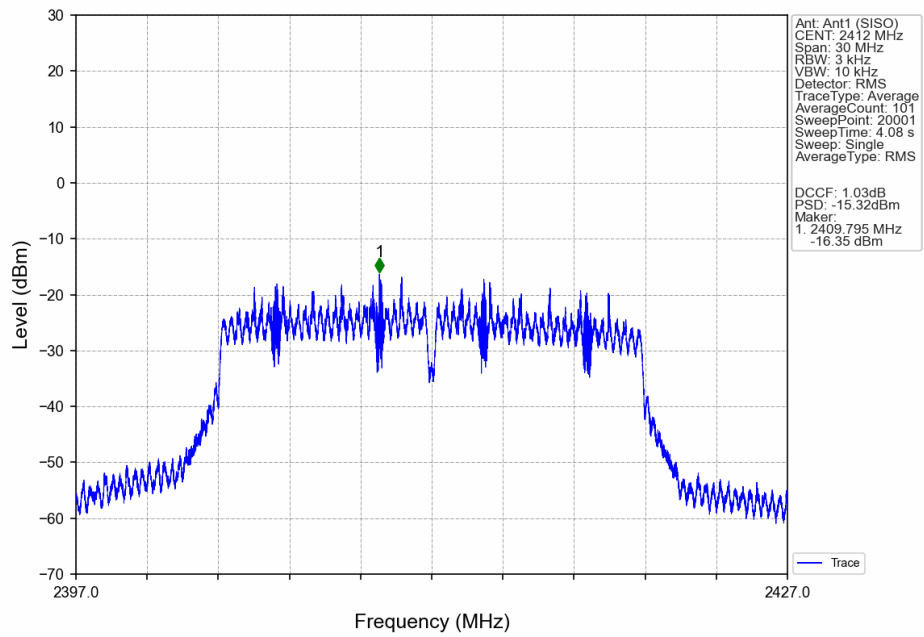
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



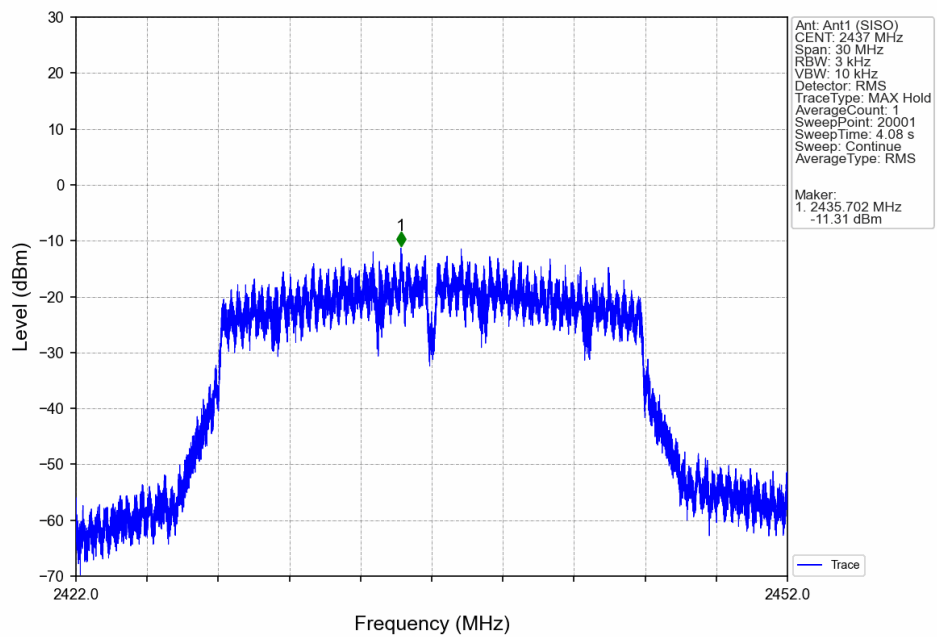
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



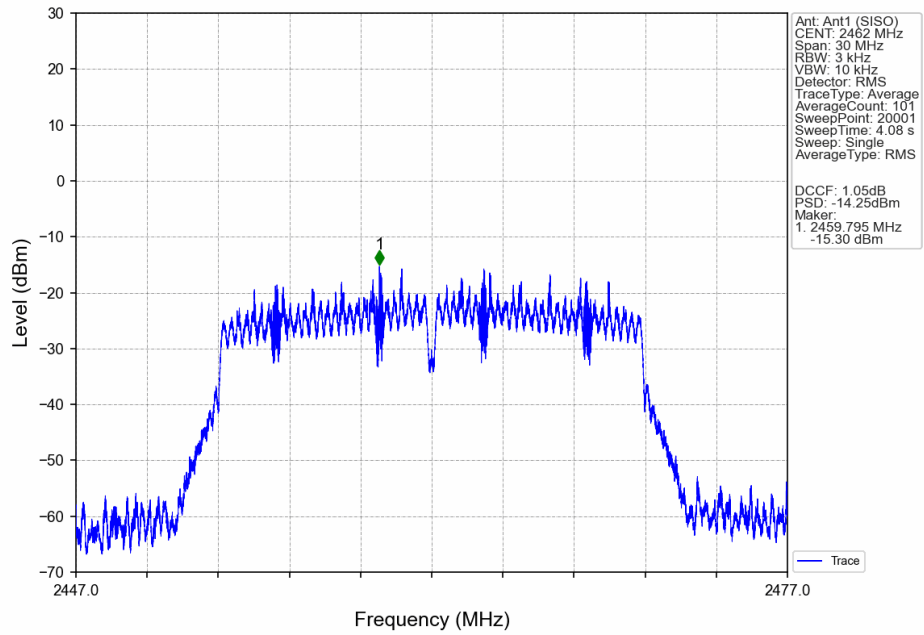
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



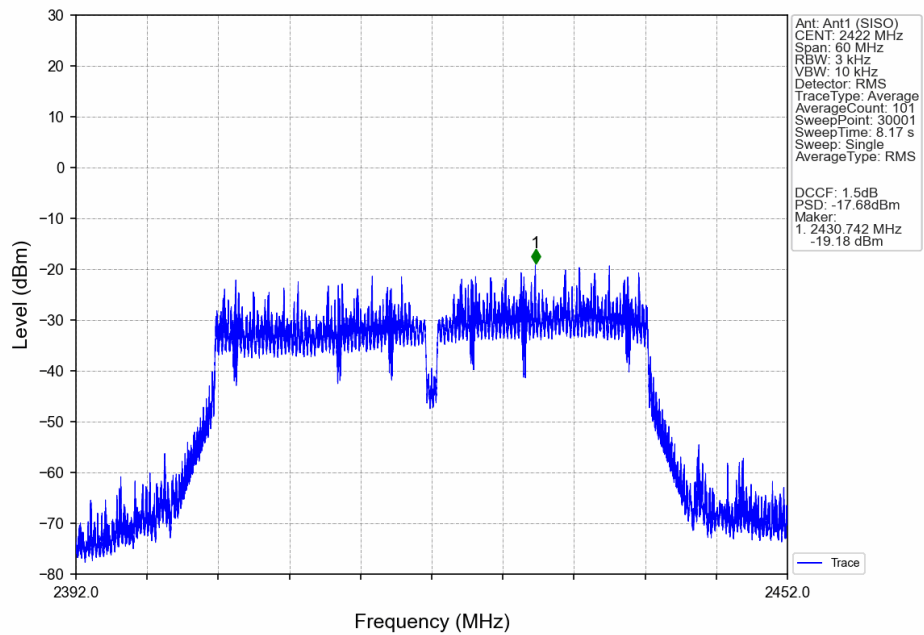
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



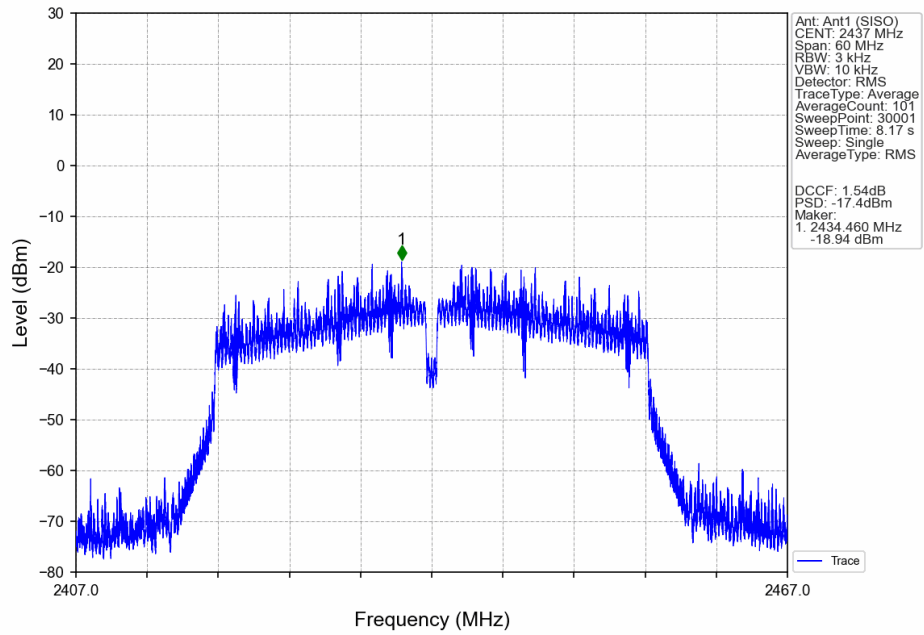
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



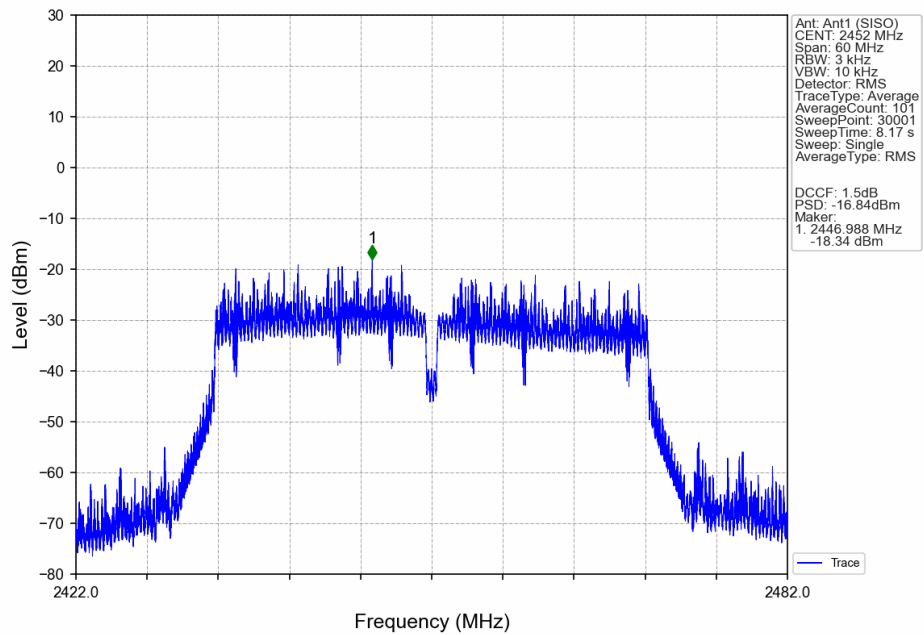
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



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

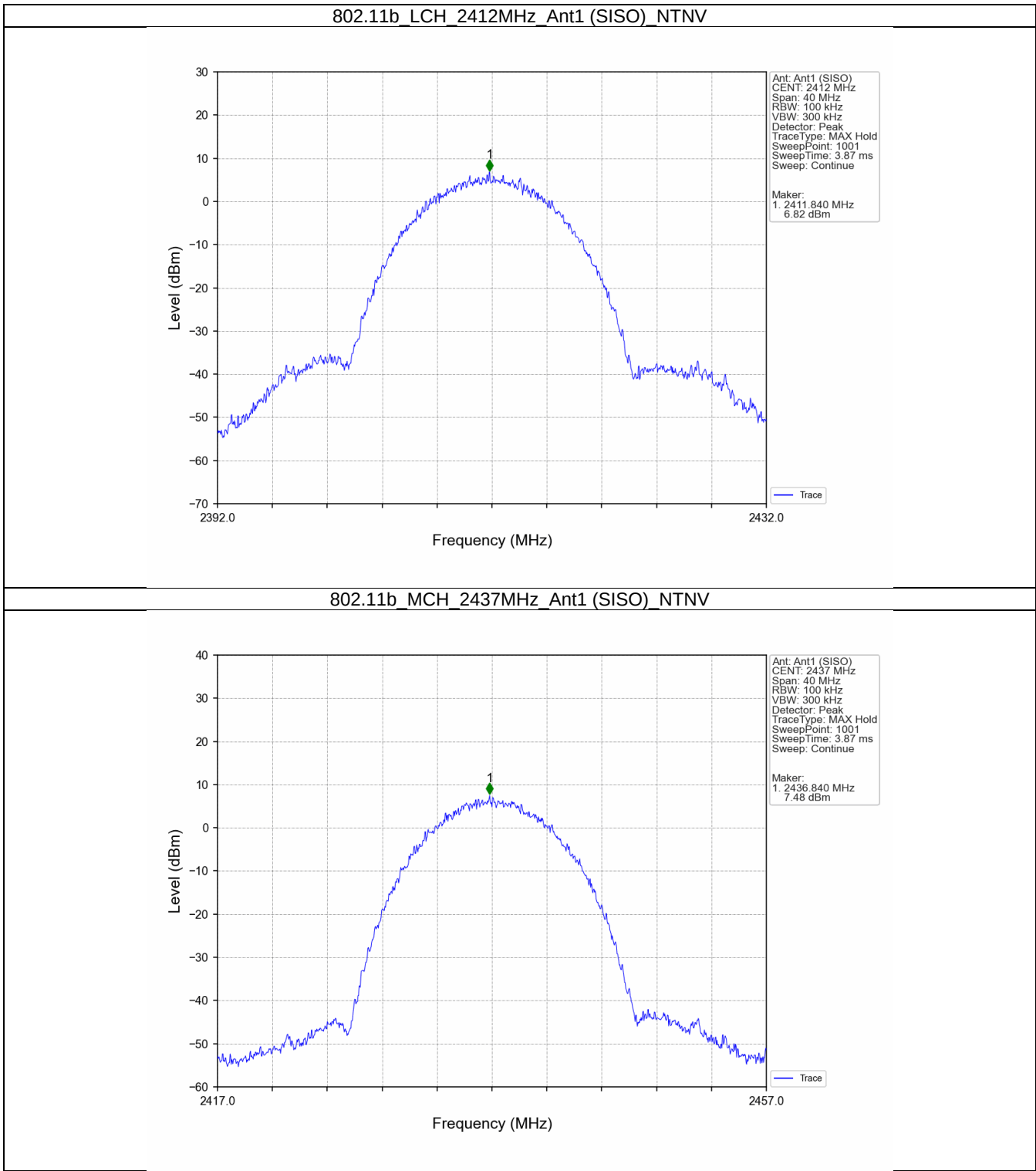
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	6.82
		2437	1	7.48
		2462	1	7.20
802.11g	SISO	2412	1	1.68
		2437	1	5.40
		2462	1	4.87
802.11n (HT20)	SISO	2412	1	1.49
		2437	1	4.89
		2462	1	4.42
802.11n (HT40)	SISO	2422	1	-1.13
		2437	1	0.65
		2452	1	-0.70

5.1.2 CSE

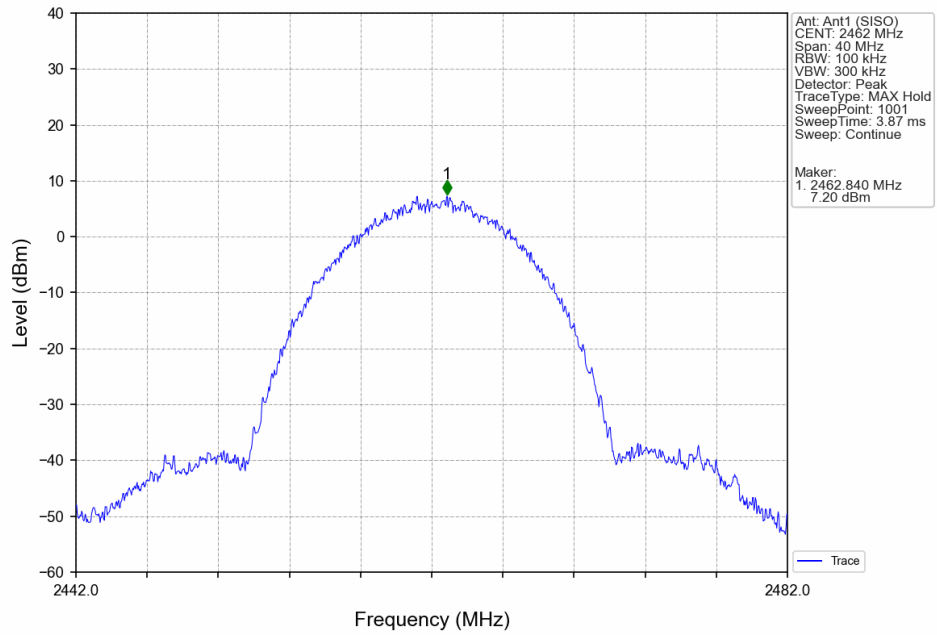
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	6.82	-23.18	Pass
		2437	1	7.48	-22.52	Pass
		2462	1	7.20	-22.80	Pass
802.11g	SISO	2412	1	1.68	-28.32	Pass
		2437	1	5.40	-24.60	Pass
		2462	1	4.87	-25.13	Pass
802.11n (HT20)	SISO	2412	1	1.49	-28.51	Pass
		2437	1	4.89	-25.11	Pass
		2462	1	4.42	-25.58	Pass
802.11n (HT40)	SISO	2422	1	-1.13	-31.13	Pass
		2437	1	0.65	-29.35	Pass
		2452	1	-0.70	-30.70	Pass

5.2 Test Graph

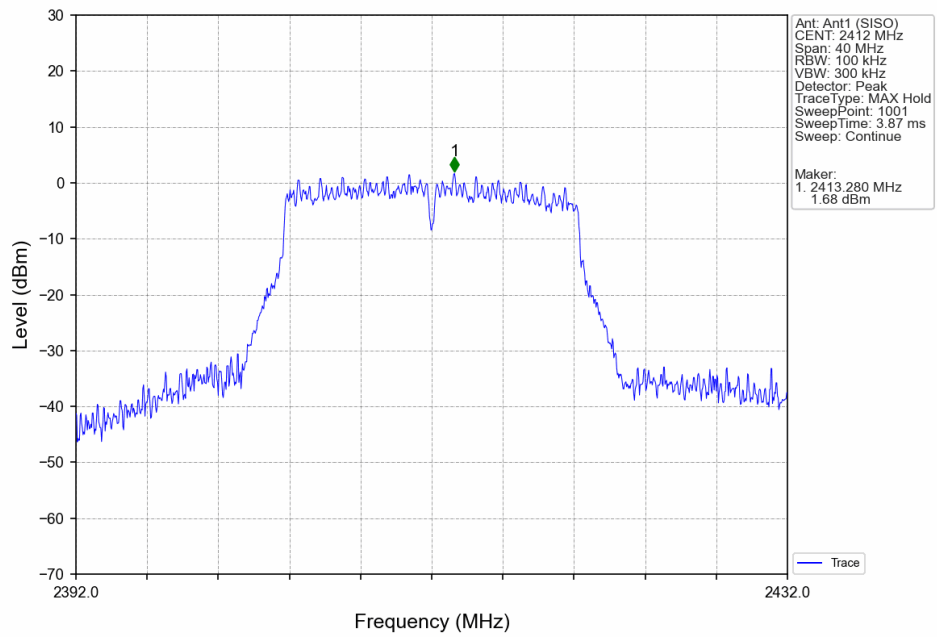
5.2.1 Ref



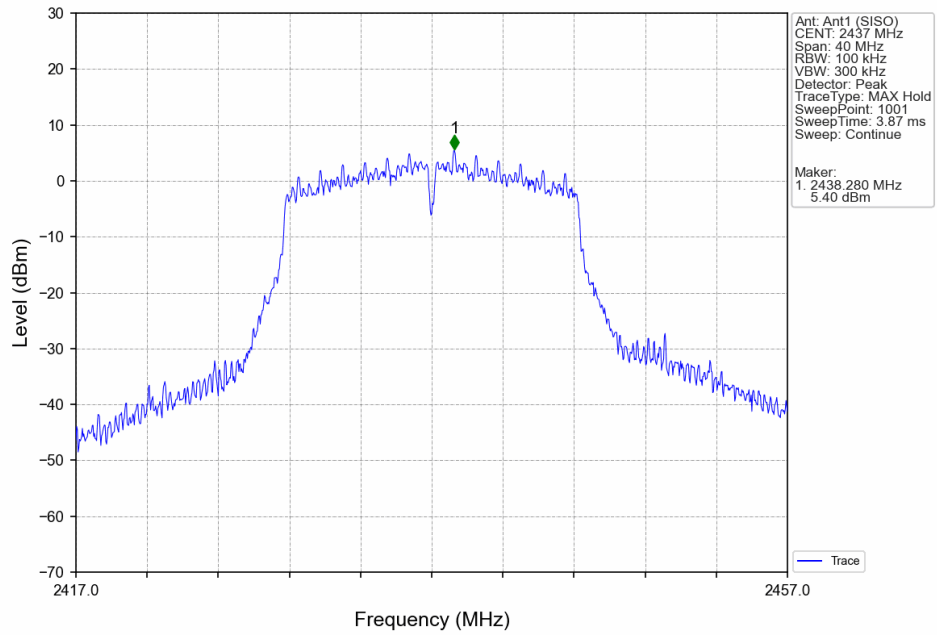
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



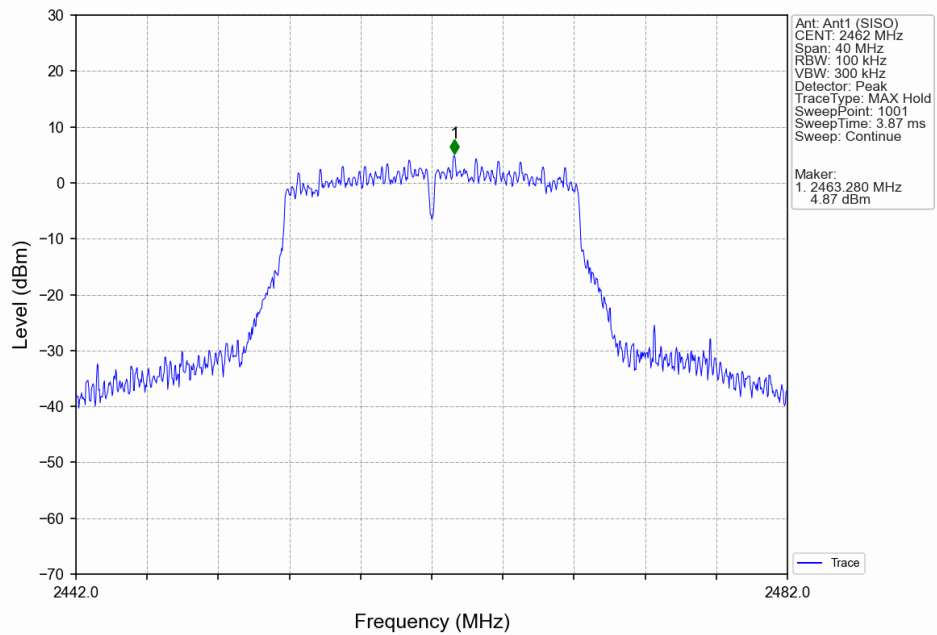
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



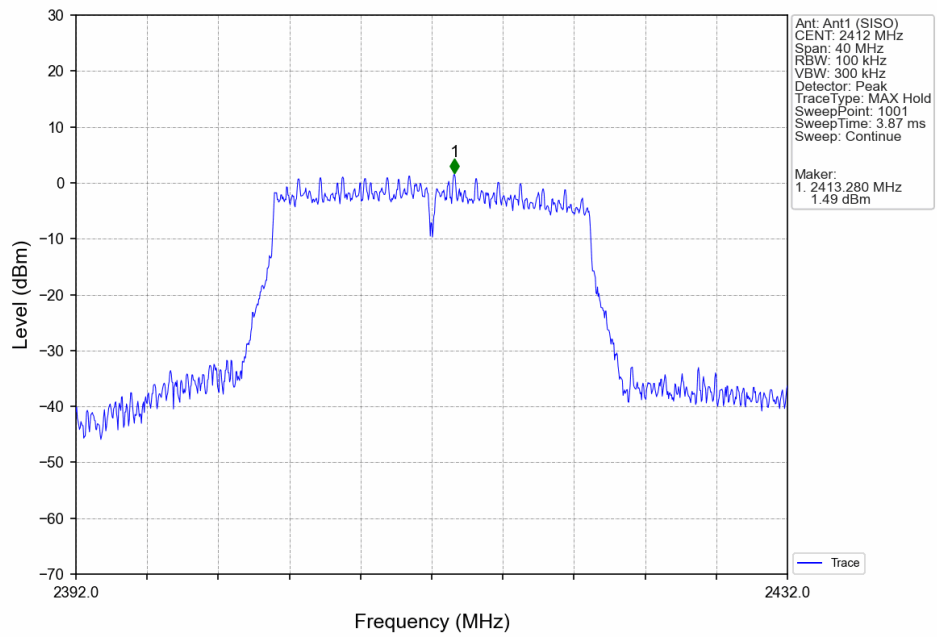
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



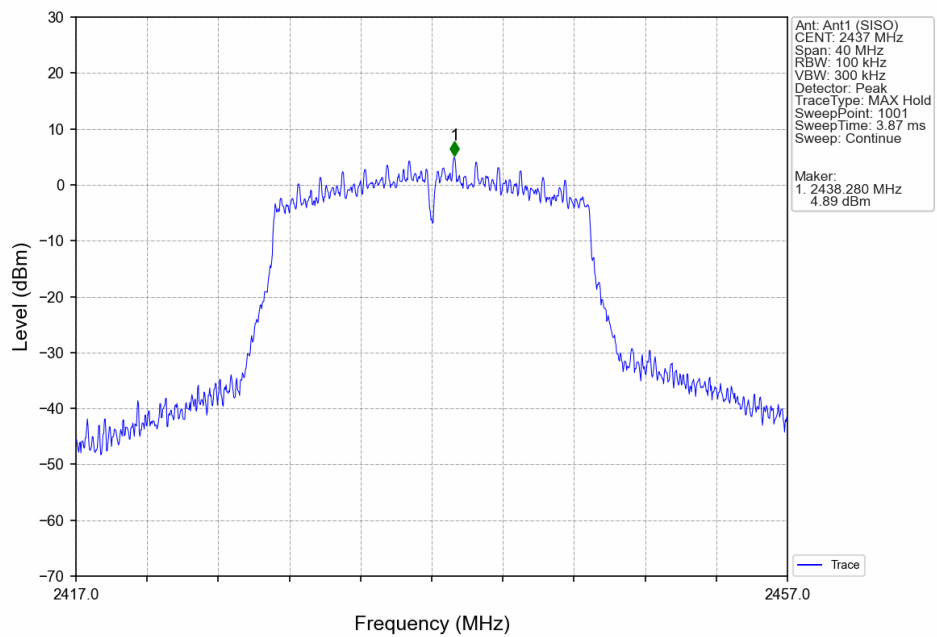
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



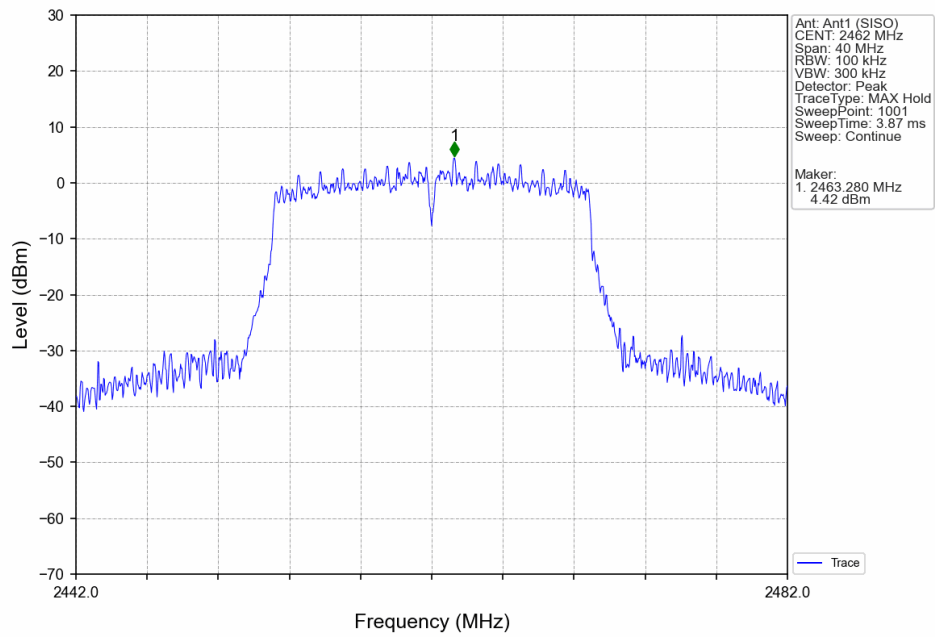
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



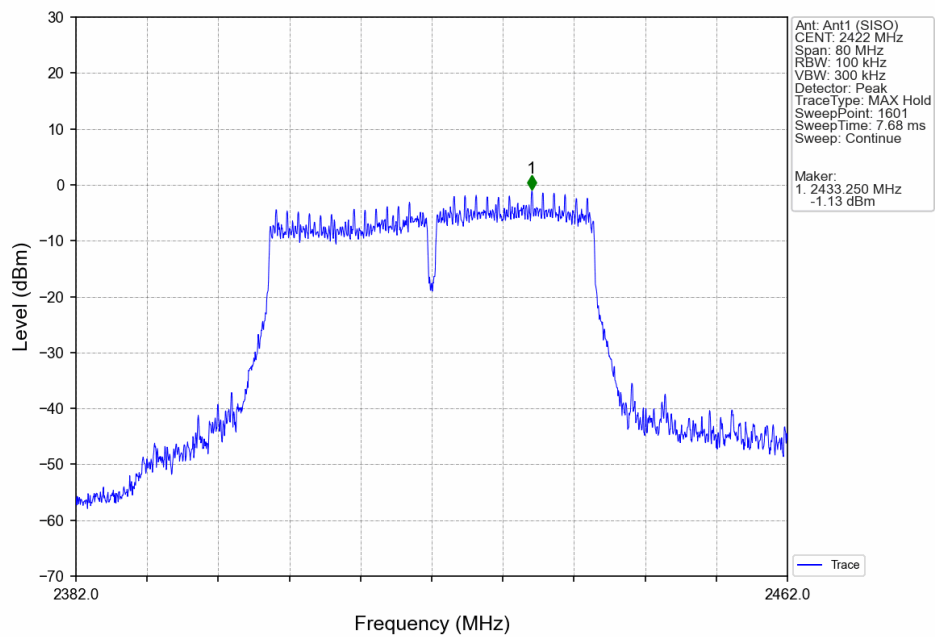
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



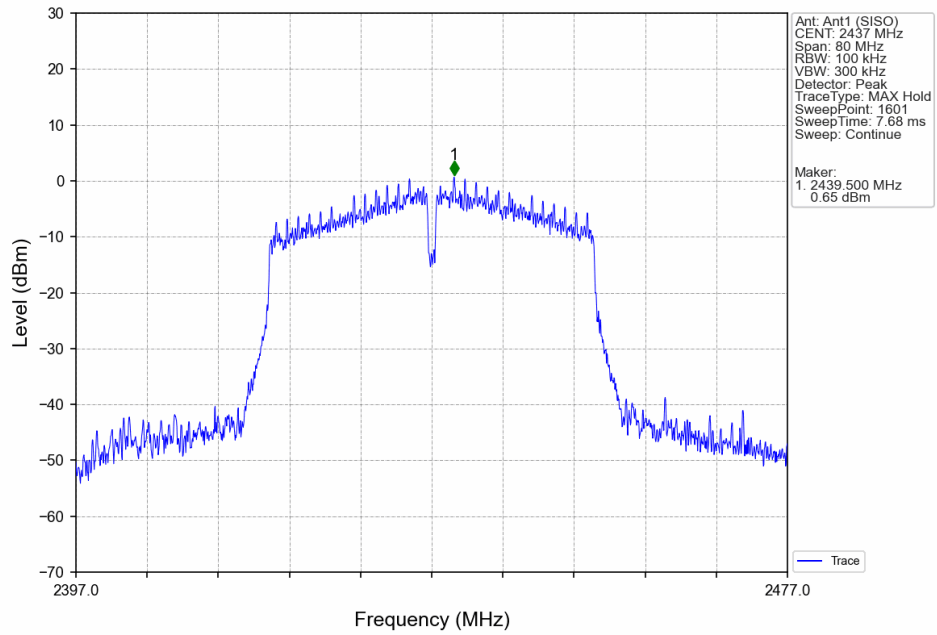
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



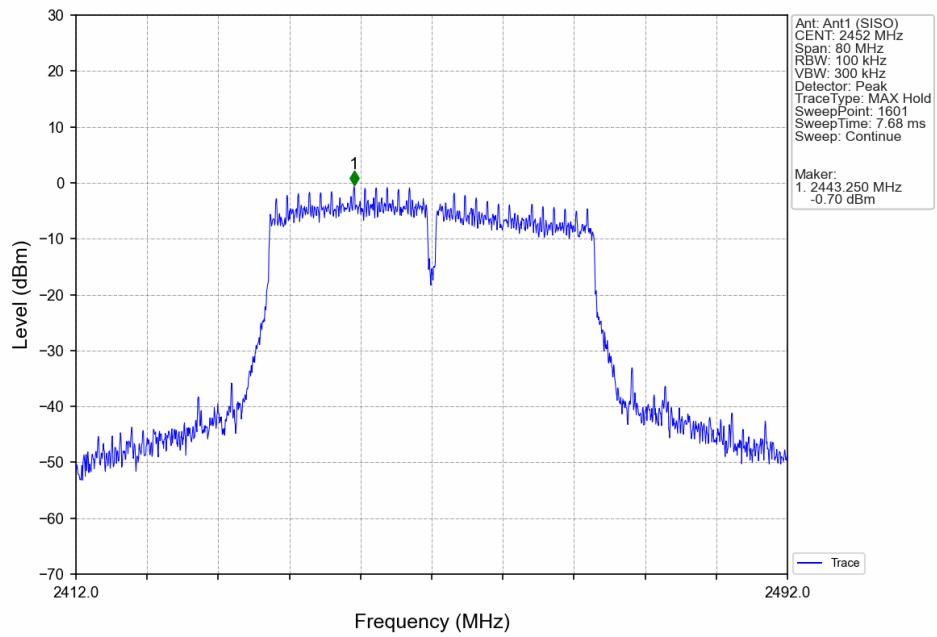
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



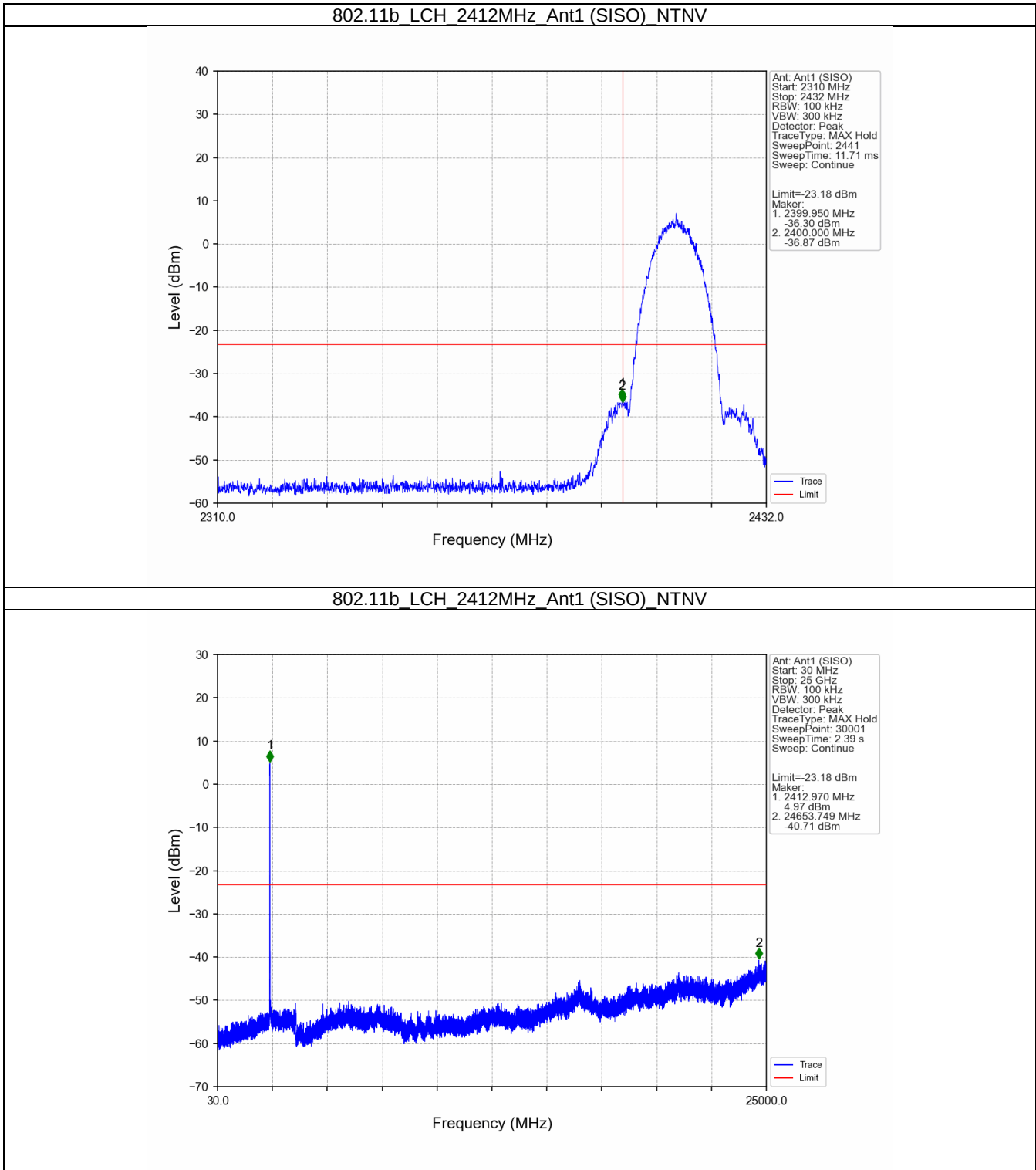
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



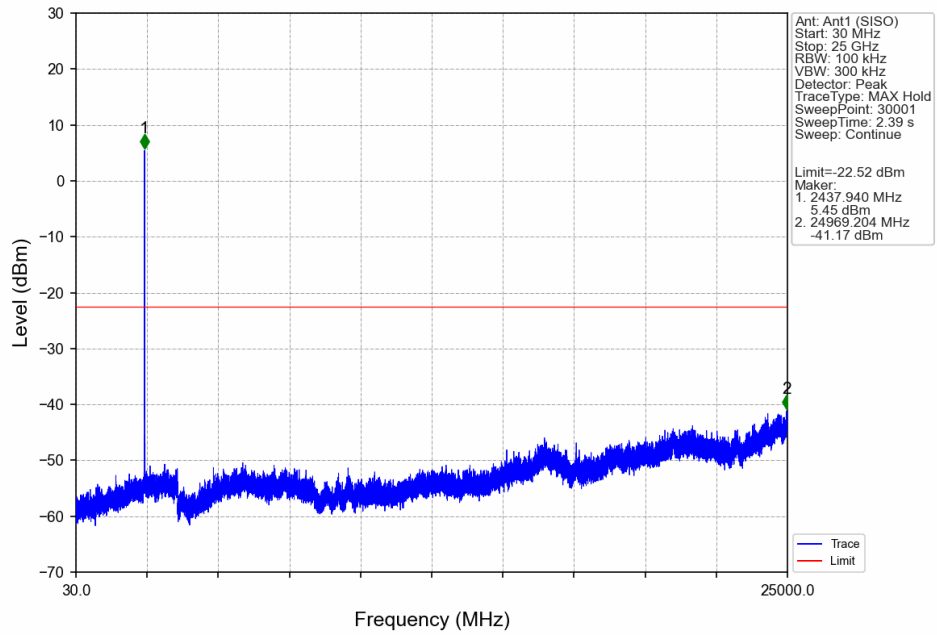
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



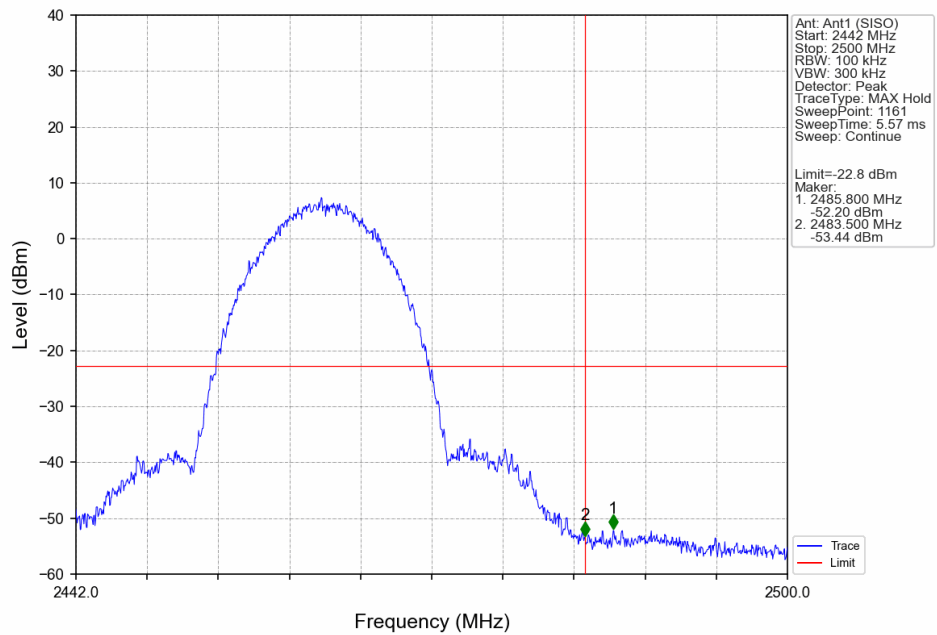
5.2.2 CSE



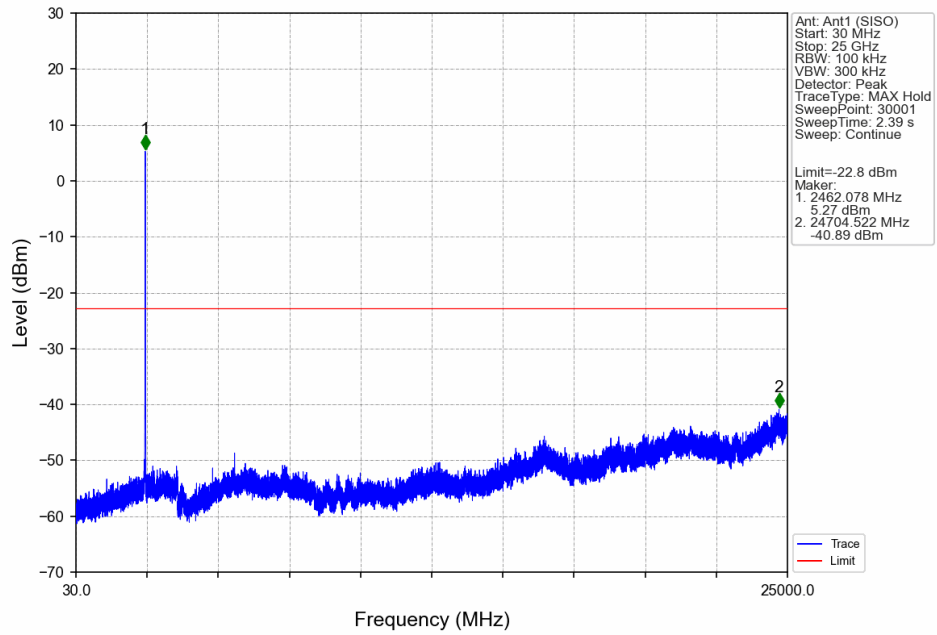
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



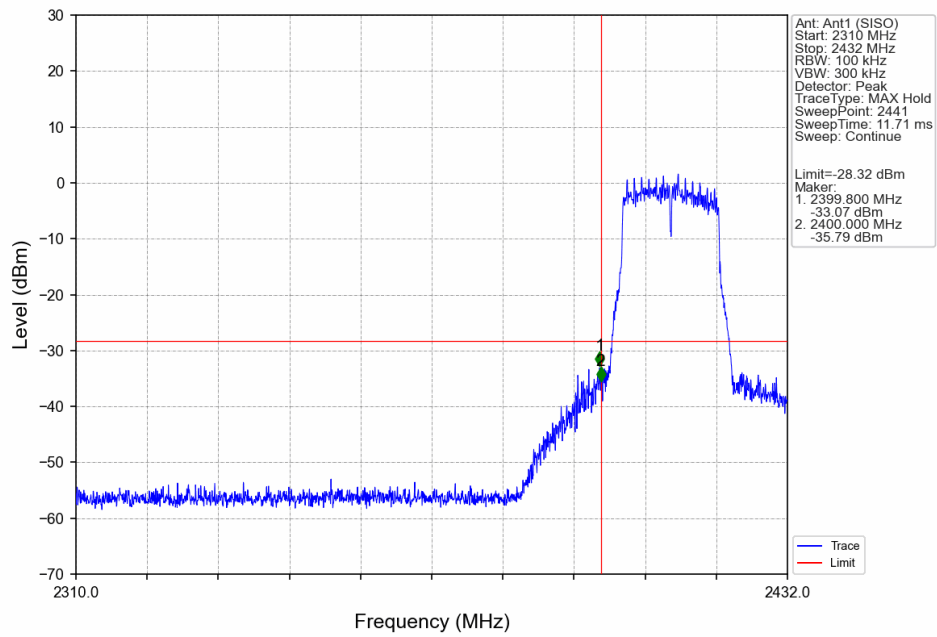
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



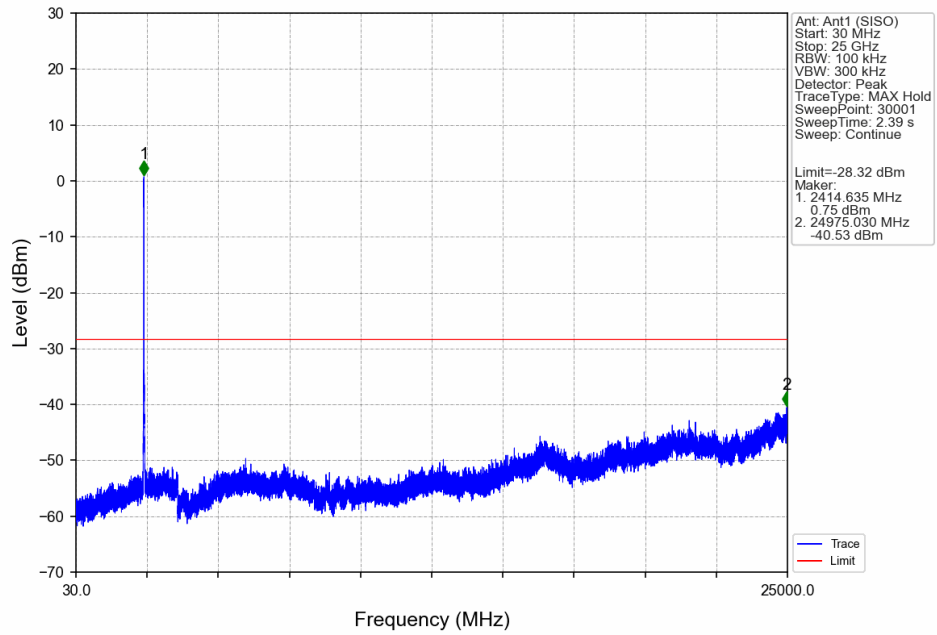
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



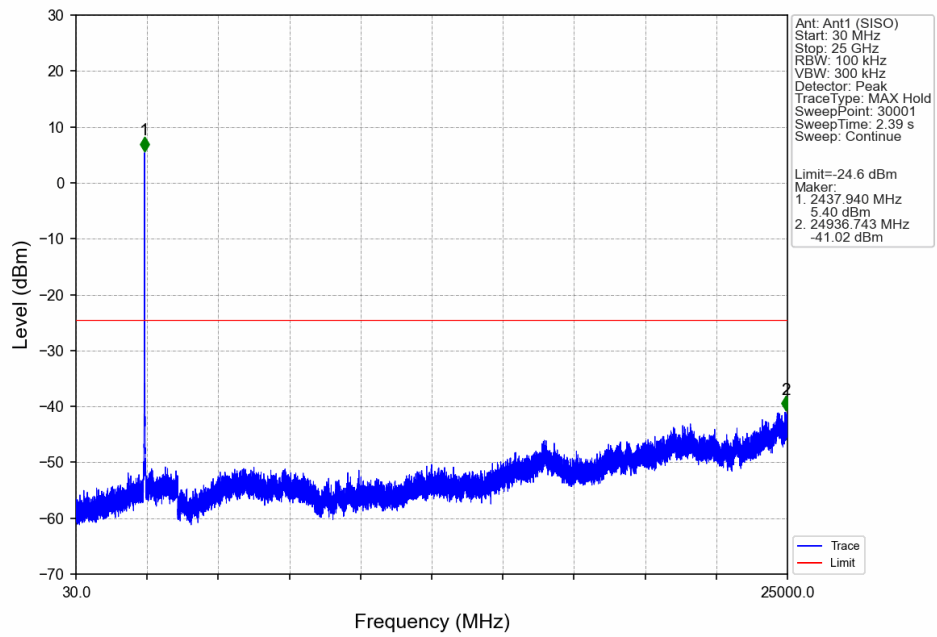
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



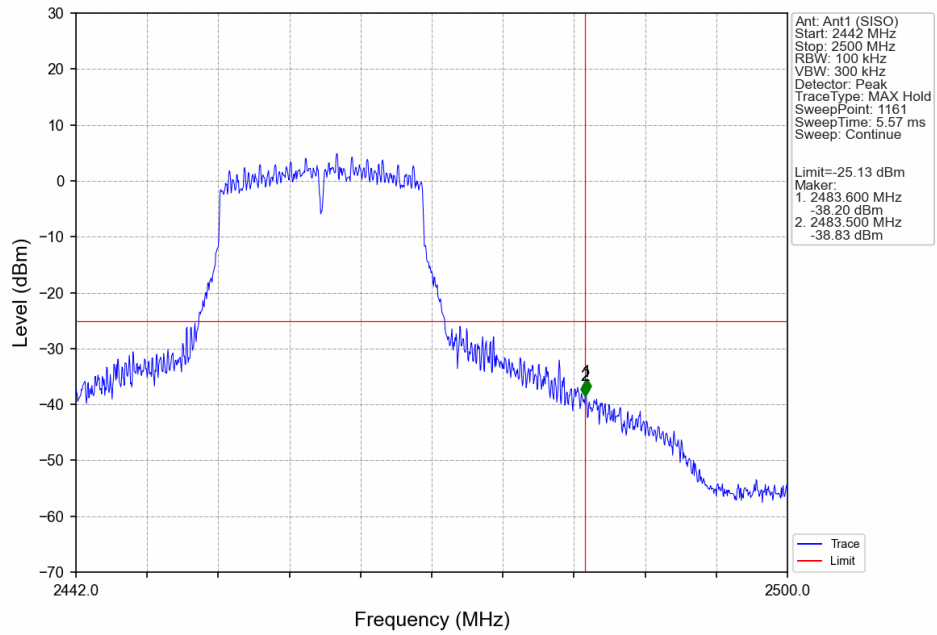
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



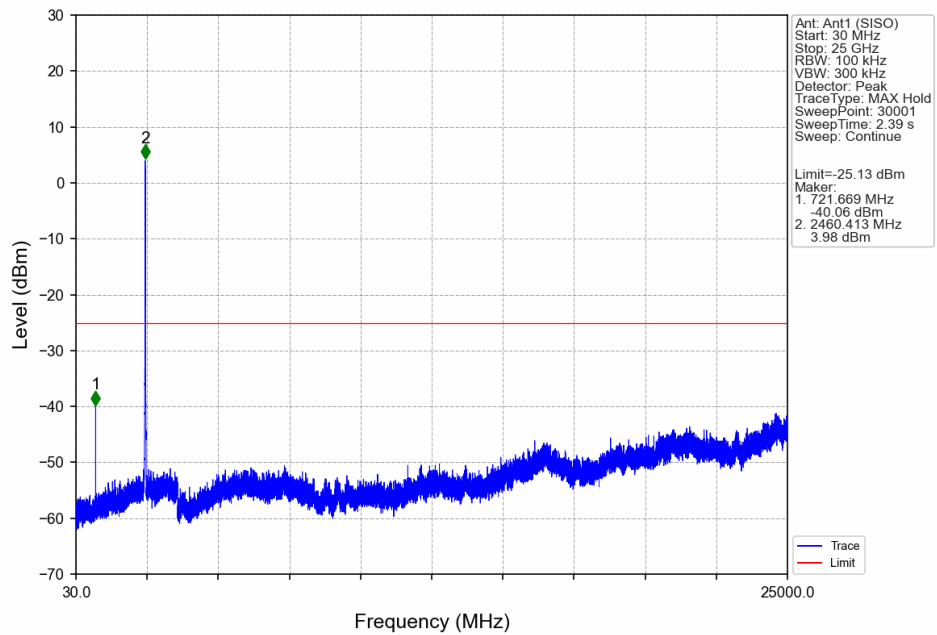
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



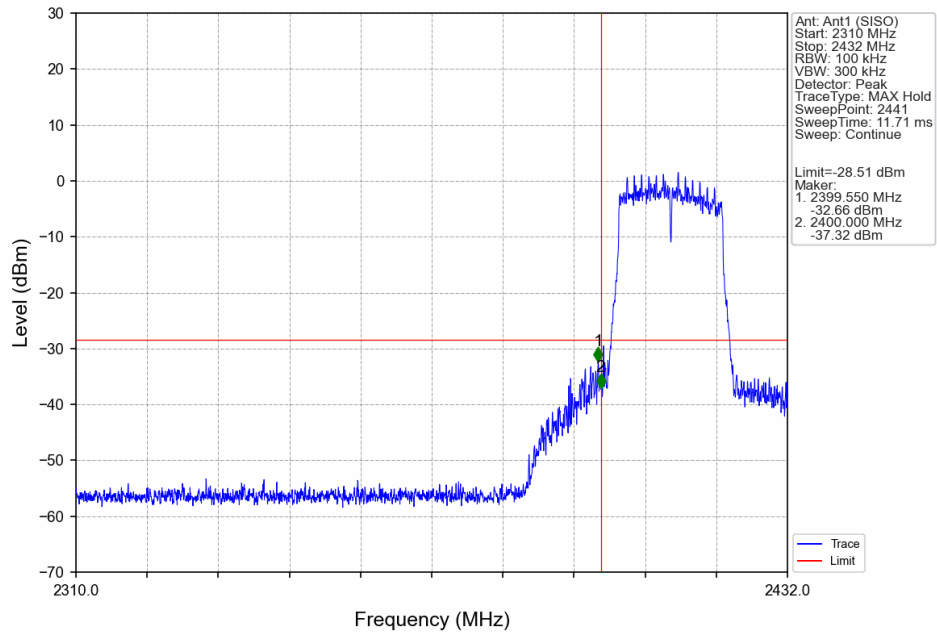
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



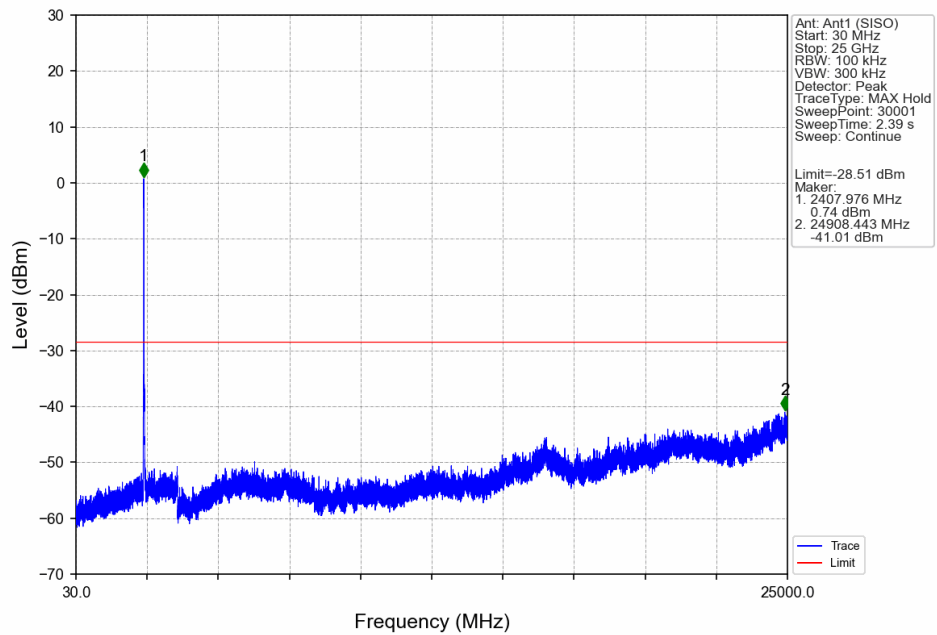
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



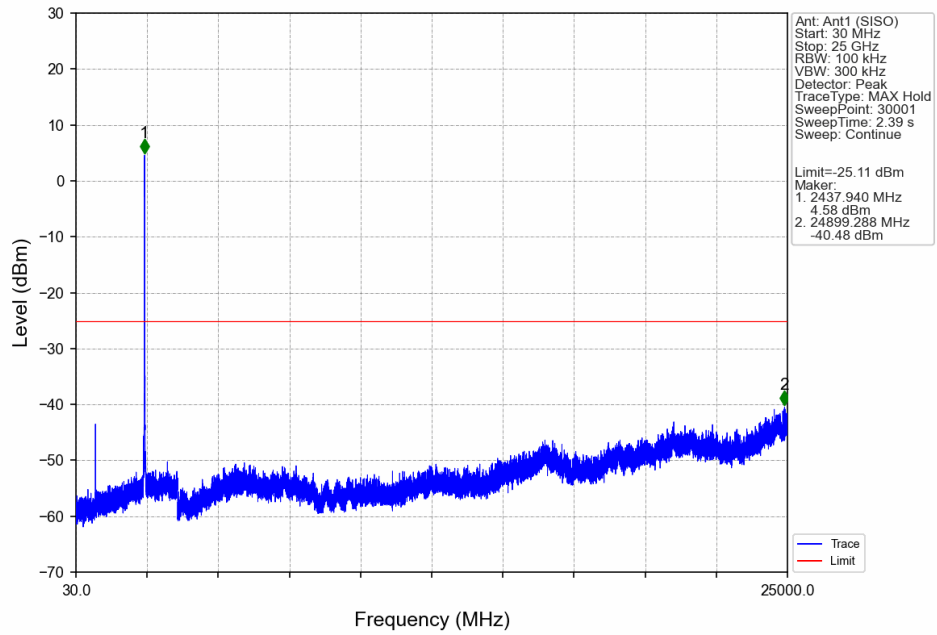
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



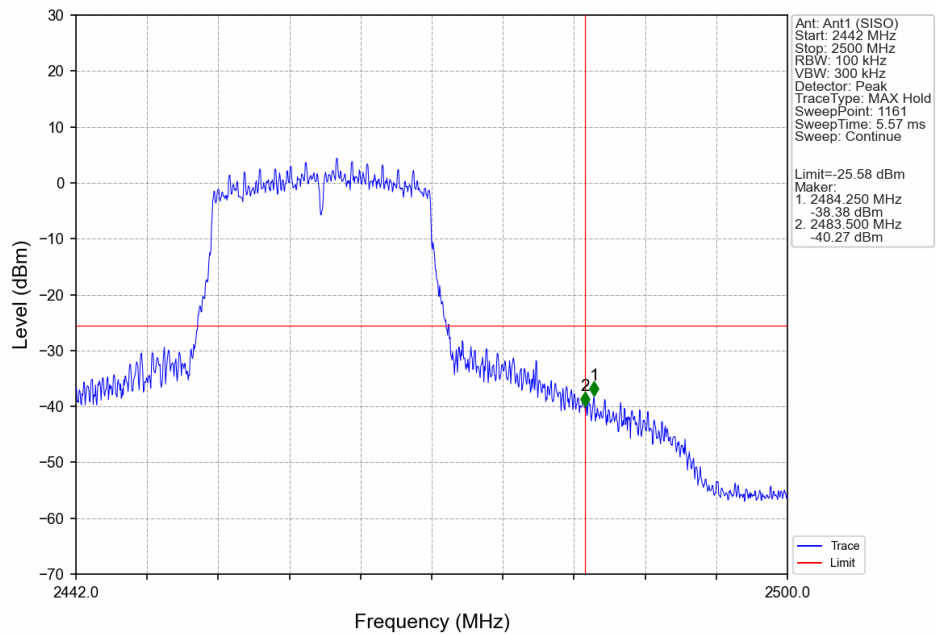
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



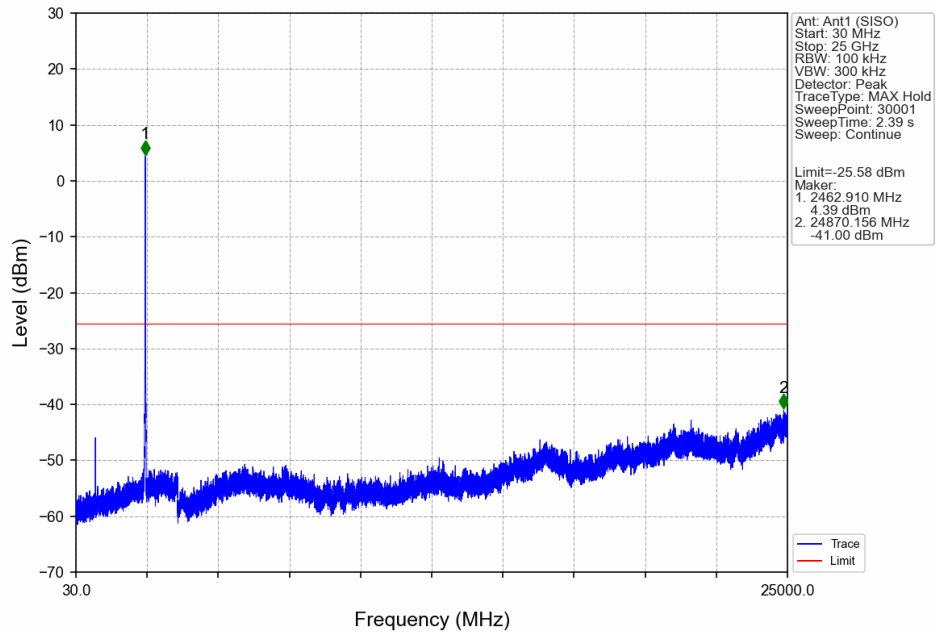
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



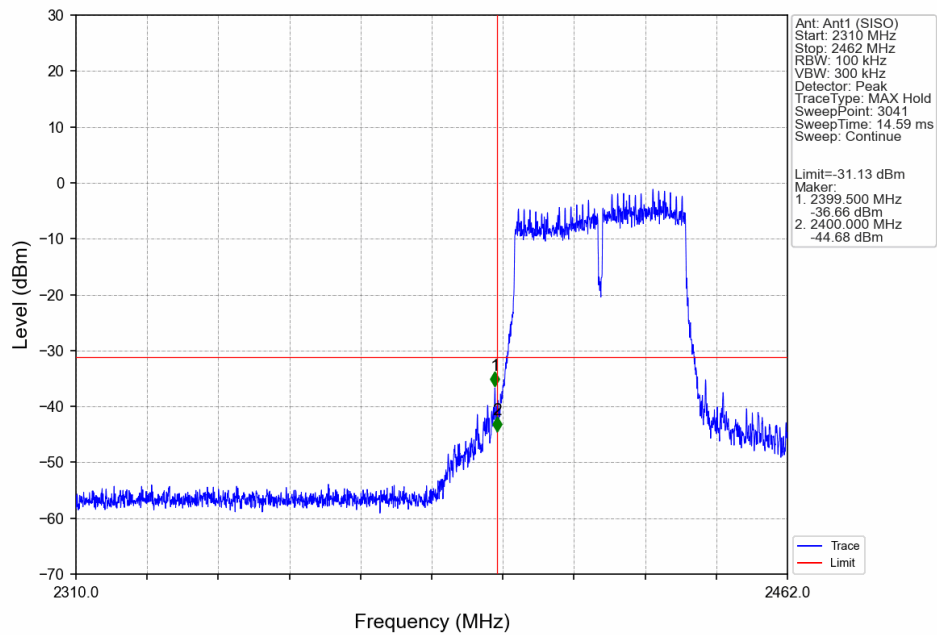
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



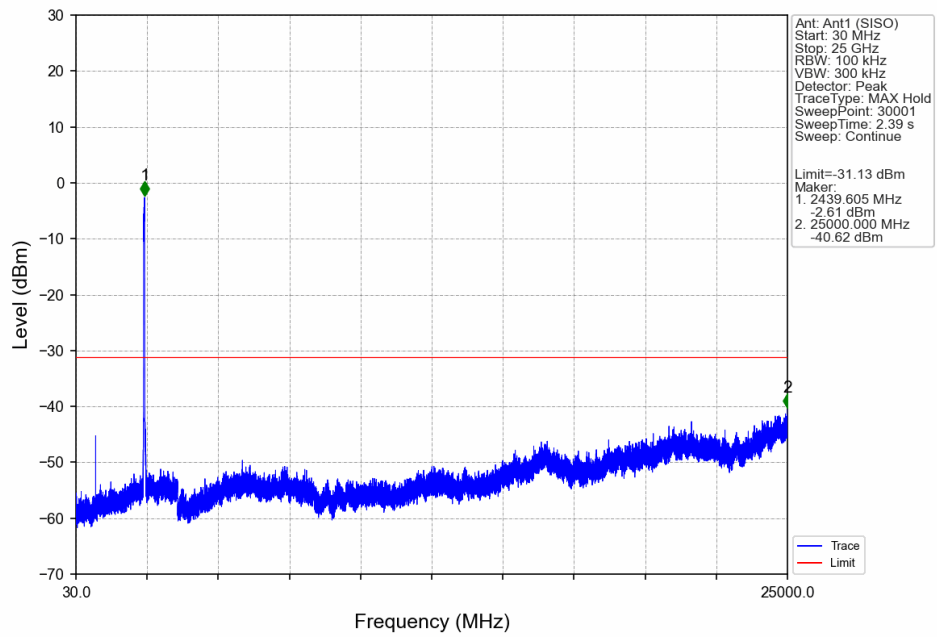
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



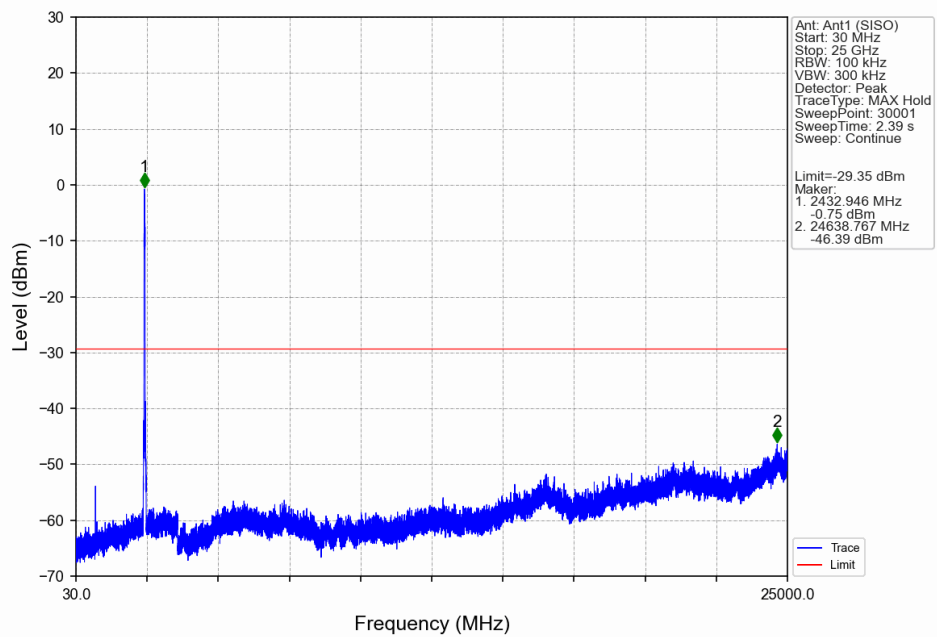
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



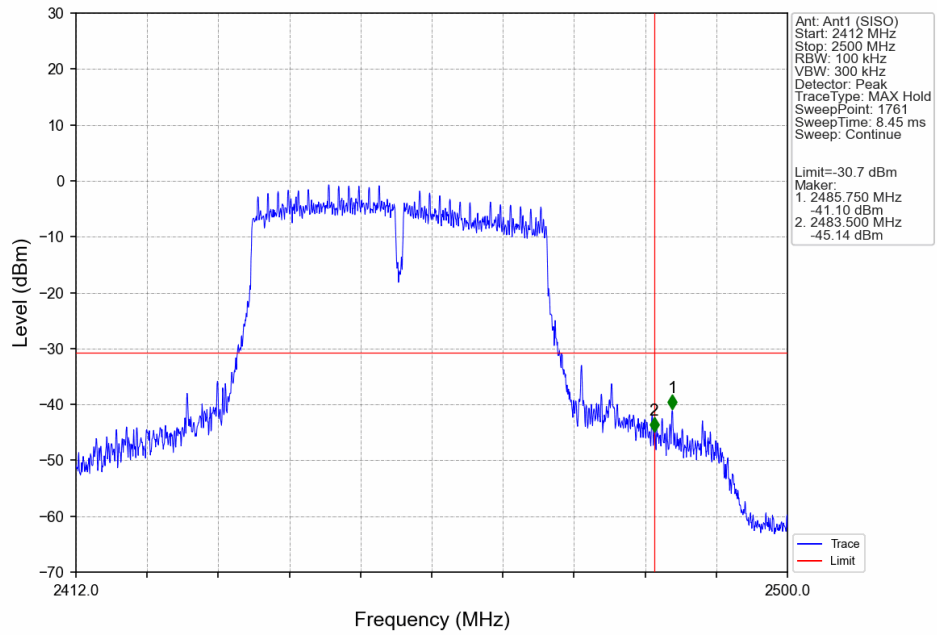
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

