

Appendix RF test data for WIFI2.4G

1. Duty Cycle

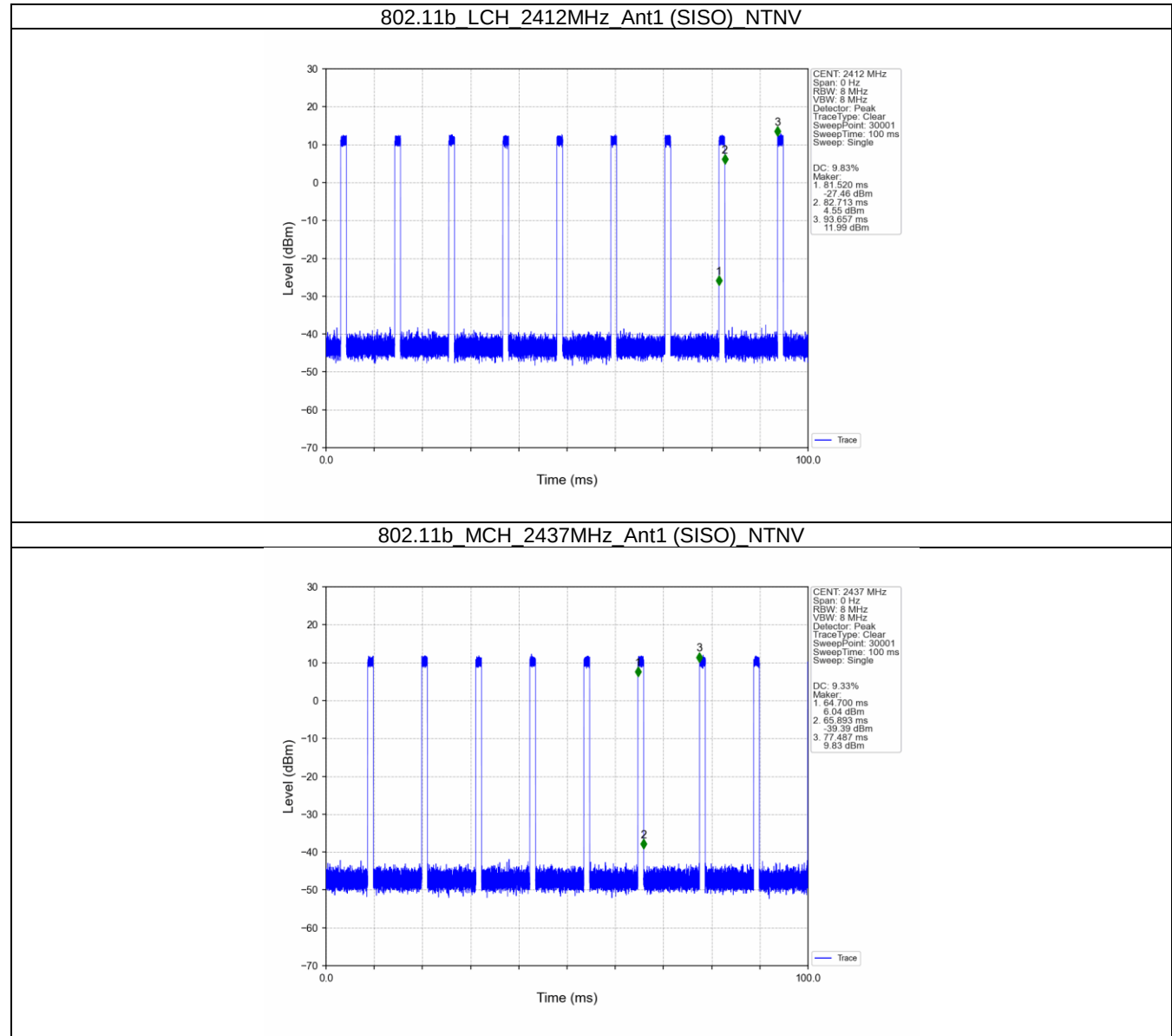
1.1 Test Result

1.1.1 Ant1

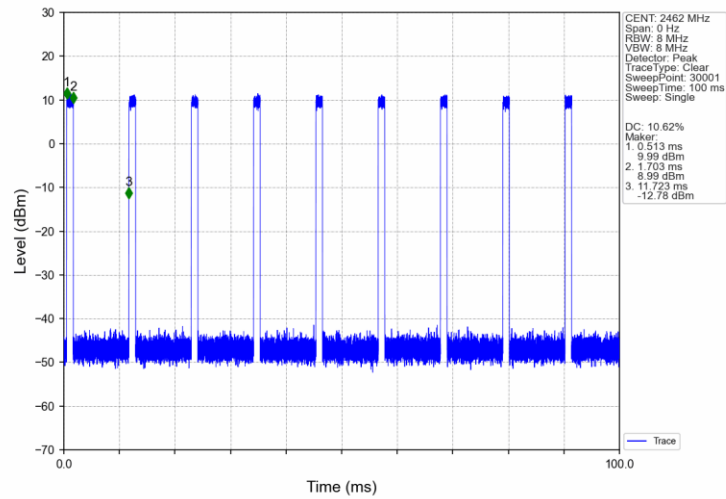
Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	/	/	1.193	12.137	9.83	10.07	0.81
		2437	/	/	1.193	12.787	9.33	10.30	1.31
		2462	/	/	1.190	11.210	10.62	9.74	0.03
802.11g	SISO	2412	/	/	0.247	10.277	2.40	16.19	0.00
		2437	/	/	0.244	10.270	2.38	16.24	0.03
		2462	/	/	0.247	12.137	2.04	16.91	0.37
802.11n (HT20)	SISO	2412	/	/	0.227	13.347	1.70	17.69	0.52
		2437	/	/	0.227	12.357	1.84	17.36	0.38
		2462	/	/	0.223	10.257	2.17	16.63	0.03
802.11n (HT40)	SISO	2422	/	/	0.934	10.964	8.52	10.70	0.00
		2437	/	/	0.933	10.963	8.51	10.70	0.03
		2452	/	/	0.934	10.967	8.52	10.70	0.04
802.11ax (HEW20)	SISO	2412	SU	/	1.460	11.490	12.71	8.96	0.03
		2437	SU	/	1.460	11.687	12.49	9.03	0.24
		2462	SU	/	1.460	11.497	12.70	8.96	0.03
802.11ax (HEW40)	SISO	2422	SU	/	0.760	10.793	7.04	11.52	0.03
		2437	SU	/	0.764	10.800	7.07	11.50	0.01
		2452	SU	/	0.763	10.900	7.00	11.55	0.07

1.2 Test Graph

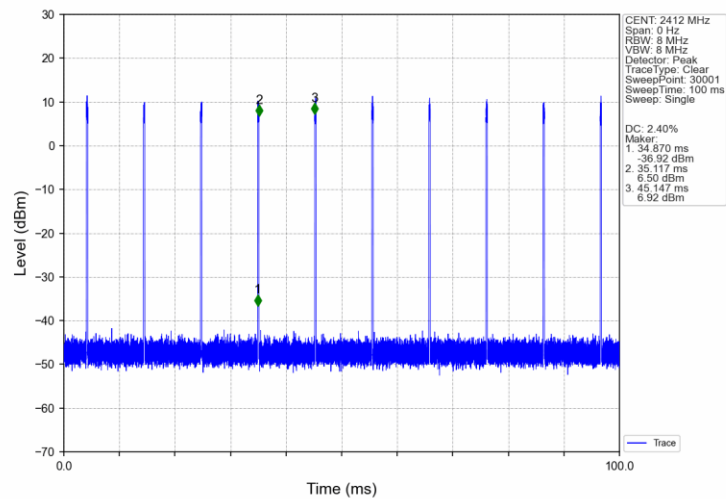
1.2.1 Ant1



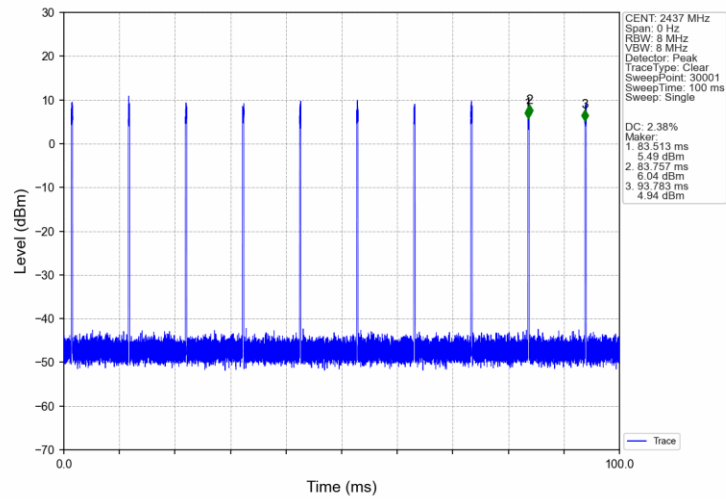
802.11b HCH 2462MHz_Ant1 (SISO) NTN



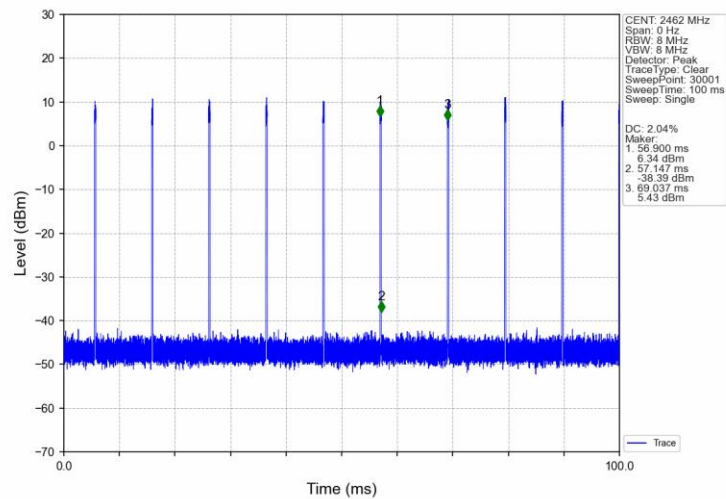
802.11g LCH 2412MHz_Ant1 (SISO) NTN



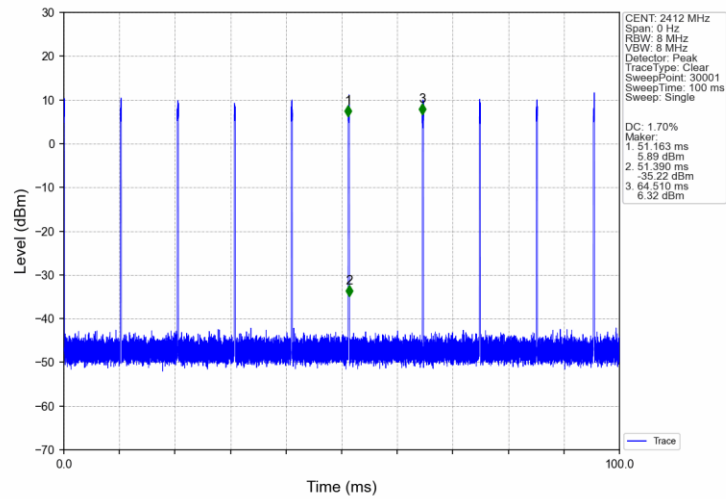
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



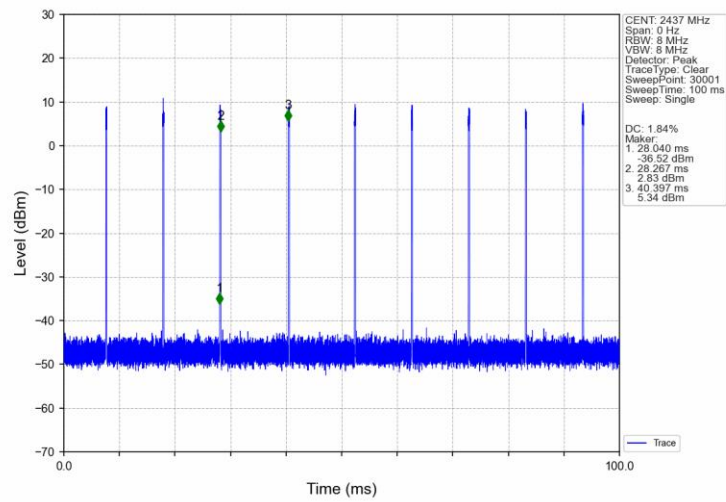
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



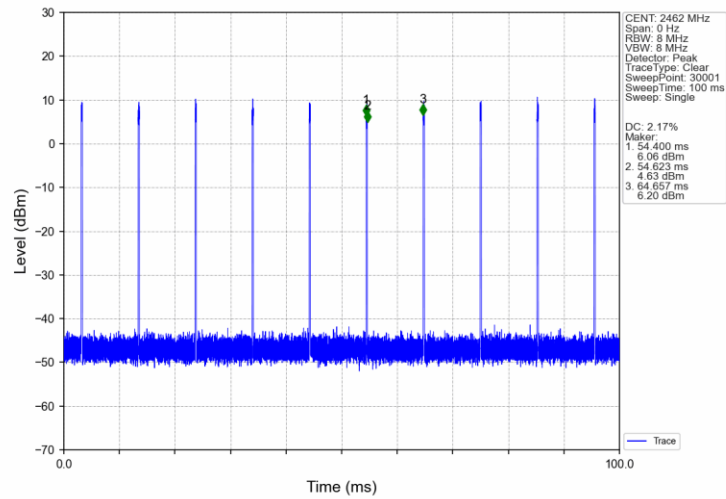
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



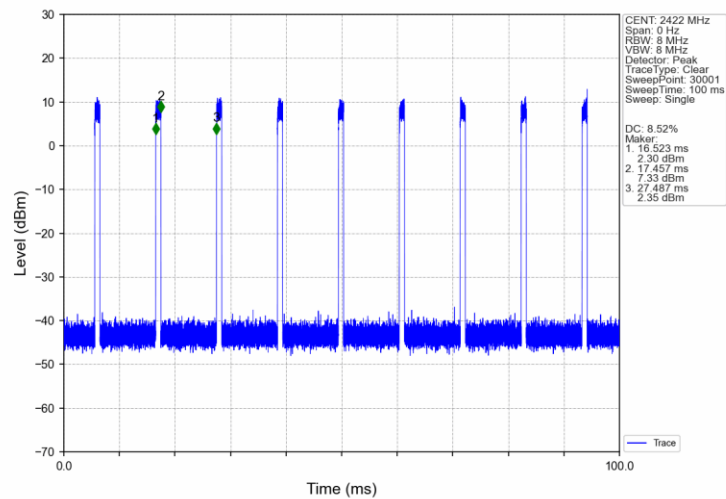
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



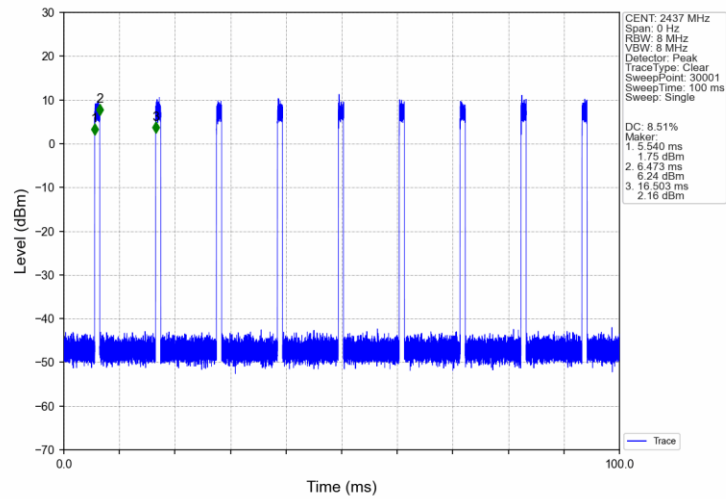
802.11n(HT20) HCH_2462MHz_Ant1 (SISO)_NTNV



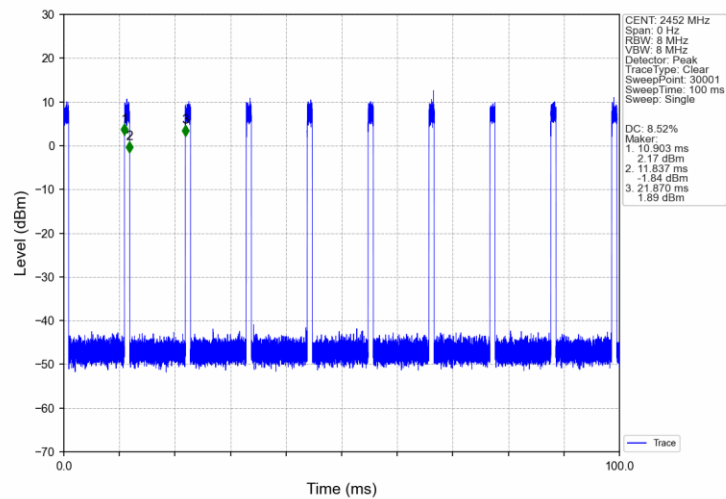
802.11n(HT40) LCH_2422MHz_Ant1 (SISO)_NTNV



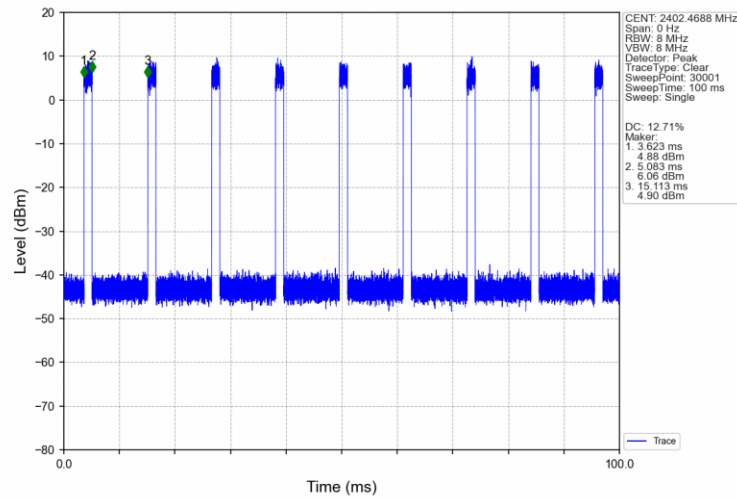
802.11n(HT40) MCH 2437MHz Ant1 (SISO) NTNV



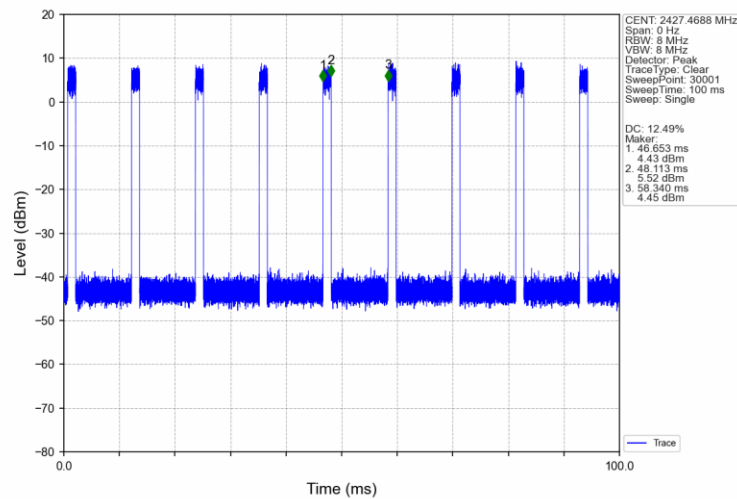
802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTNV



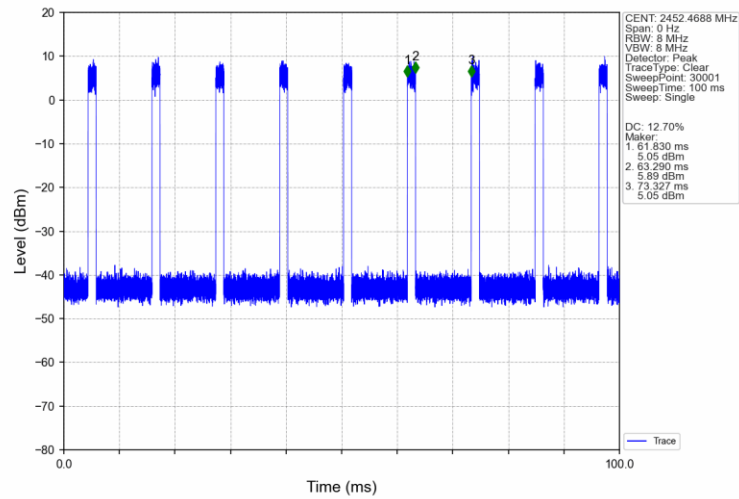
802.11ax(HEW20) LCH 2412MHz_SU / _Ant1 (SISO) NTN



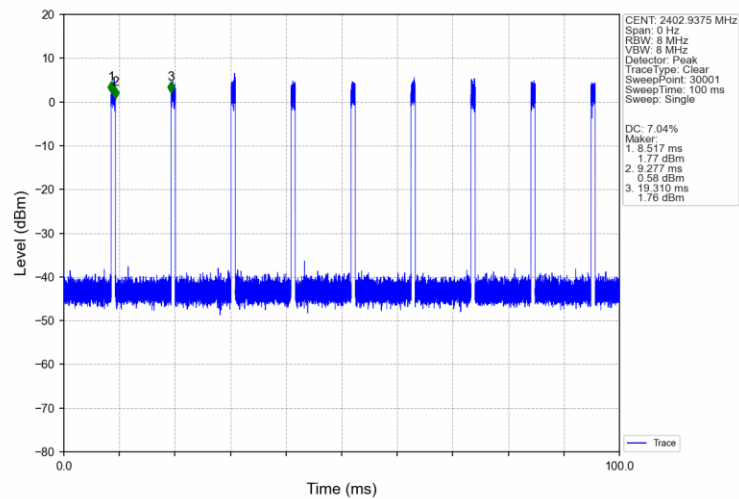
802.11ax(HEW20) MCH 2437MHz_SU / _Ant1 (SISO) NTN



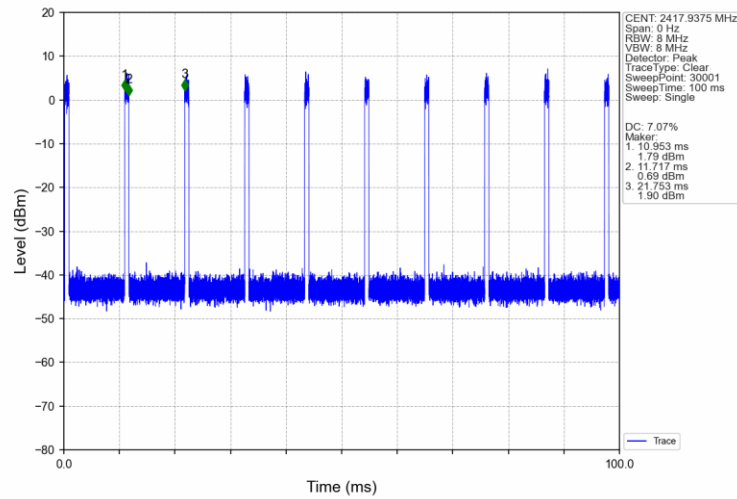
802.11ax(HEW20) HCH 2462MHz SU / Ant1 (SISO) NTNv



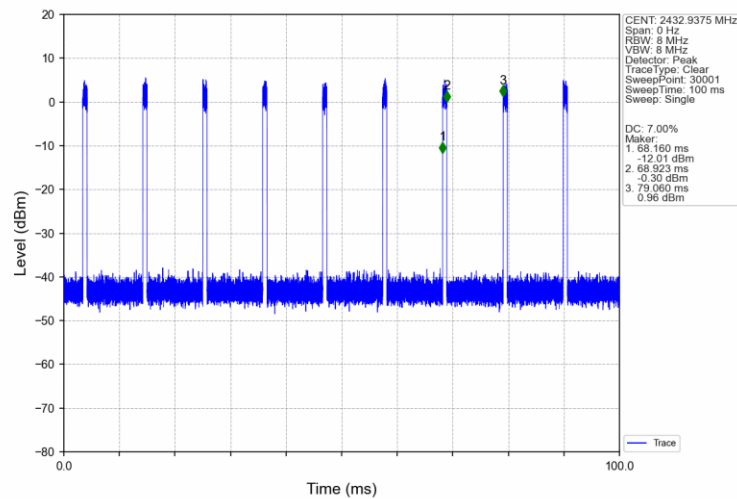
802.11ax(HEW40) LCH 2422MHz SU / Ant1 (SISO) NTNv



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	12.890	/	Pass
		2437	/	/	1	13.045	/	Pass
		2462	/	/	1	13.033	/	Pass
802.11g	SISO	2412	/	/	1	16.516	/	Pass
		2437	/	/	1	16.476	/	Pass
		2462	/	/	1	16.493	/	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.713	/	Pass
		2437	/	/	1	17.758	/	Pass
		2462	/	/	1	17.680	/	Pass
802.11n (HT40)	SISO	2422	/	/	1	36.948	/	Pass
		2437	/	/	1	37.103	/	Pass
		2452	/	/	1	36.773	/	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.957	/	Pass
		2437	SU	/	1	18.987	/	Pass
		2462	SU	/	1	19.007	/	Pass
802.11ax (HEW40)	SISO	2422	SU	/	1	38.143	/	Pass
		2437	SU	/	1	38.224	/	Pass
		2452	SU	/	1	38.096	/	Pass

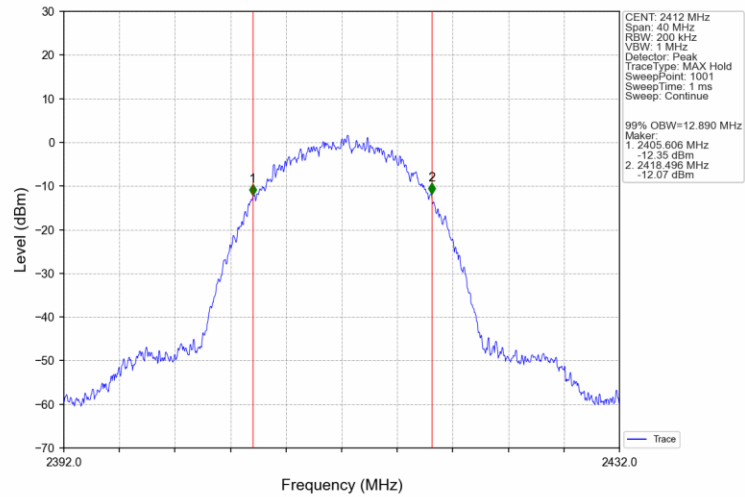
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	8.719	>=0.5	Pass
		2437	/	/	1	9.540	>=0.5	Pass
		2462	/	/	1	8.178	>=0.5	Pass
802.11g	SISO	2412	/	/	1	16.454	>=0.5	Pass
		2437	/	/	1	16.368	>=0.5	Pass
		2462	/	/	1	16.264	>=0.5	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.282	>=0.5	Pass
		2437	/	/	1	17.403	>=0.5	Pass
		2462	/	/	1	17.332	>=0.5	Pass
802.11n (HT40)	SISO	2422	/	/	1	35.726	>=0.5	Pass
		2437	/	/	1	36.184	>=0.5	Pass
		2452	/	/	1	35.726	>=0.5	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.055	>=0.5	Pass
		2437	SU	/	1	18.024	>=0.5	Pass
		2462	SU	/	1	18.728	>=0.5	Pass
802.11ax (HEW40)	SISO	2422	SU	/	1	36.681	>=0.5	Pass
		2437	SU	/	1	36.927	>=0.5	Pass
		2452	SU	/	1	37.174	>=0.5	Pass

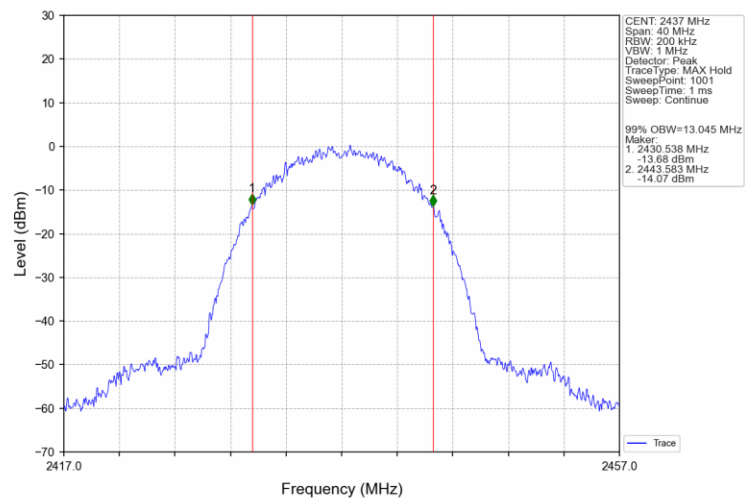
2.2 Test Graph

2.2.1 OBW

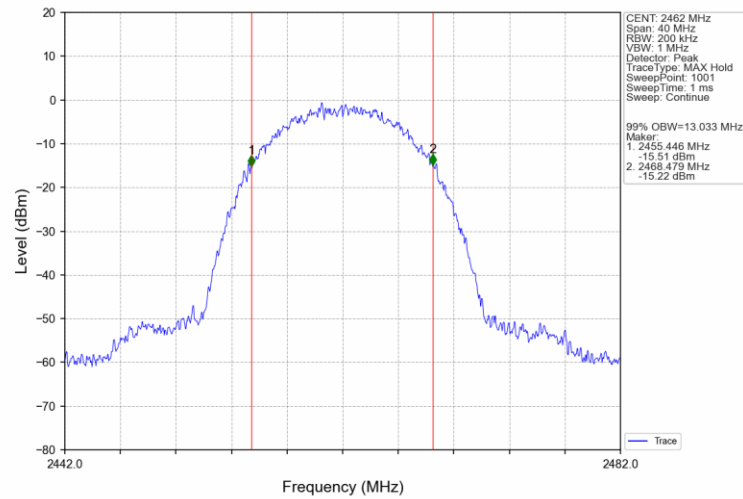
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



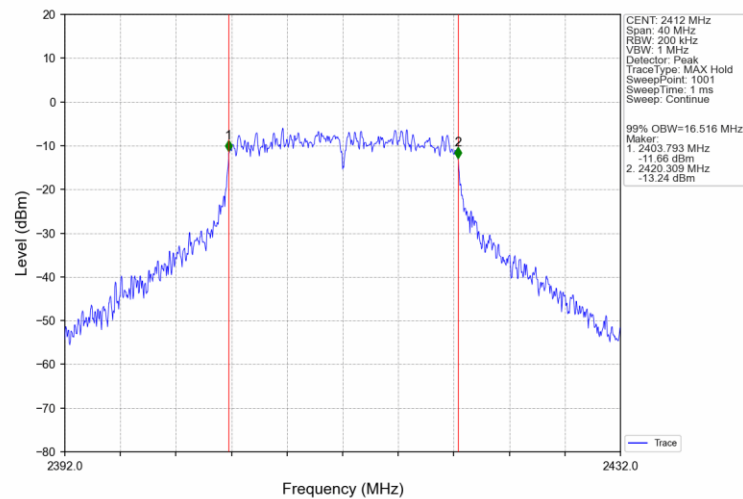
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



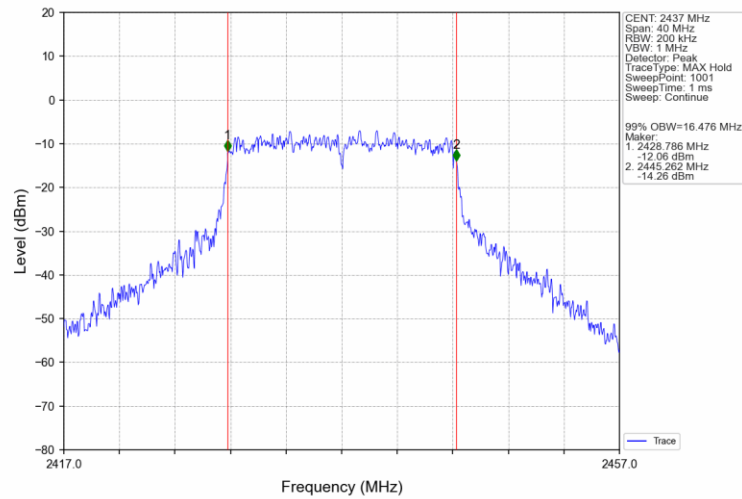
802.11b HCH 2462MHz_Ant1 (SISO) NTN



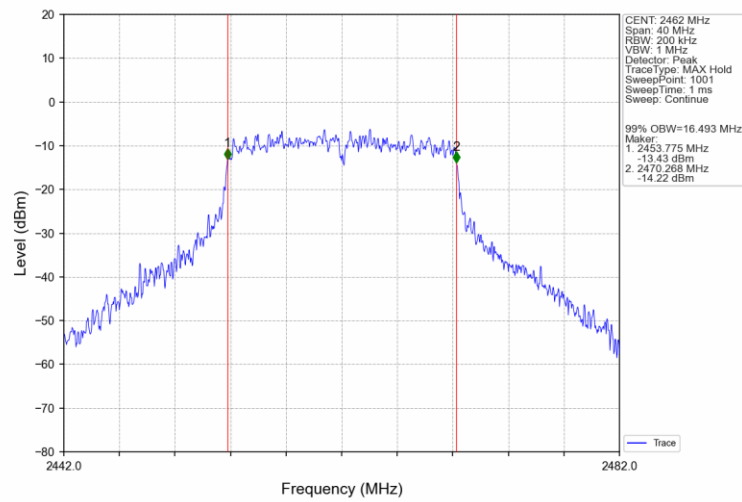
802.11g LCH 2412MHz_Ant1 (SISO) NTN



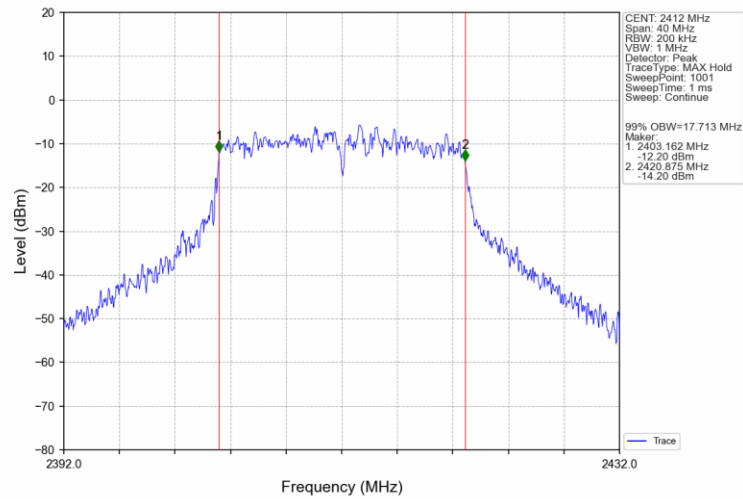
802.11g MCH 2437MHz_Ant1 (SISO) NTNv



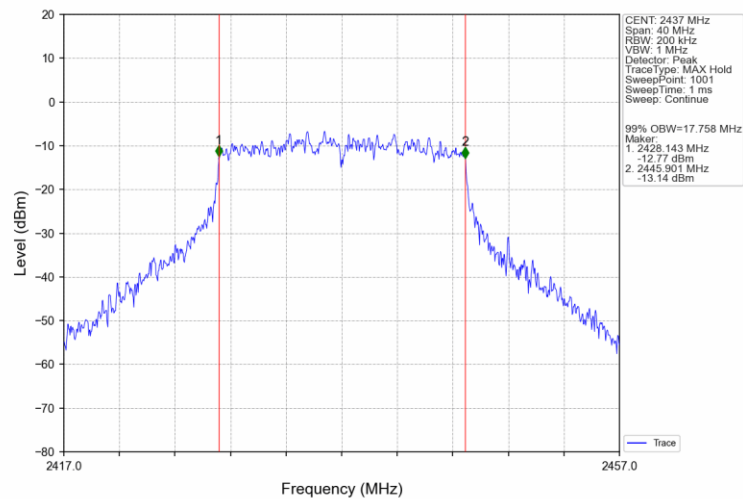
802.11g HCH 2462MHz_Ant1 (SISO) NTNv



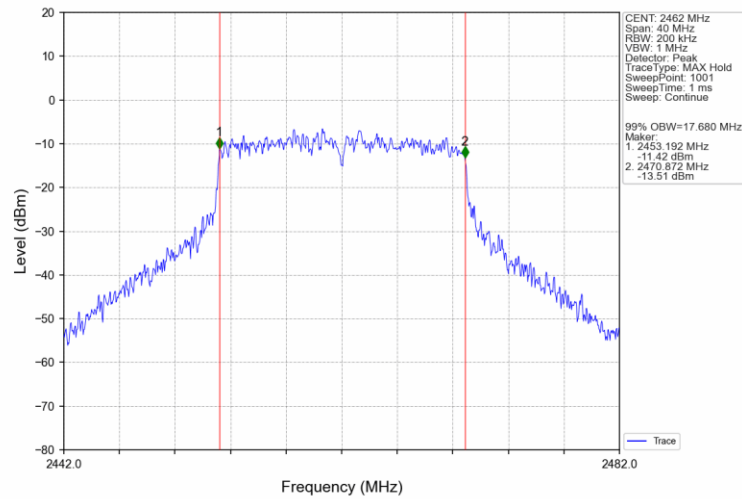
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



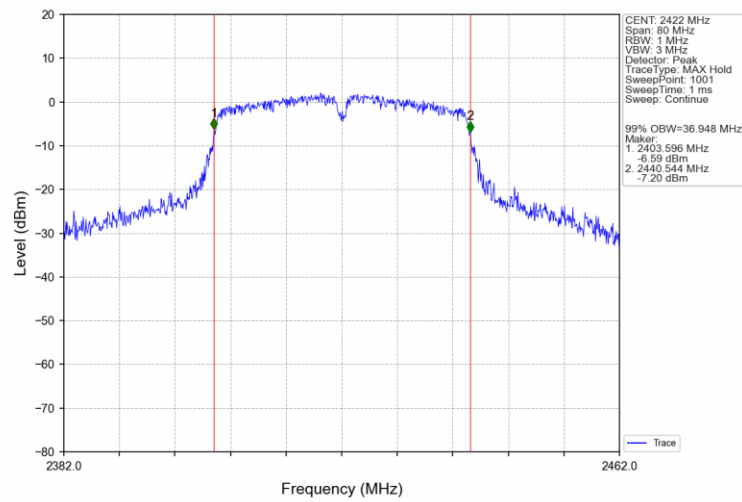
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



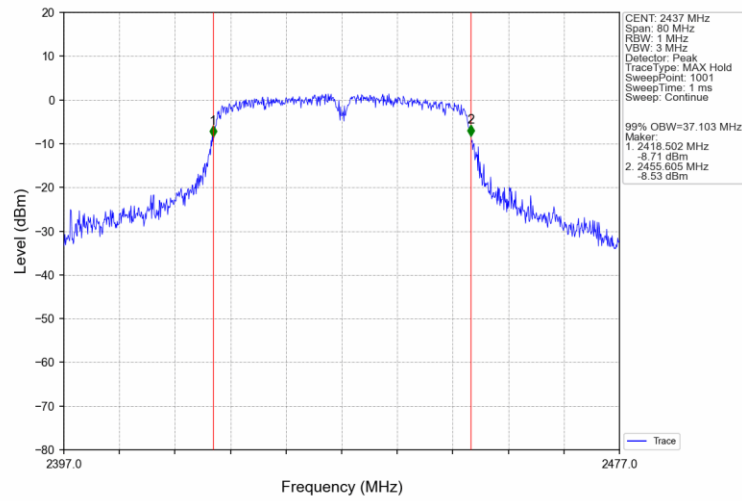
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



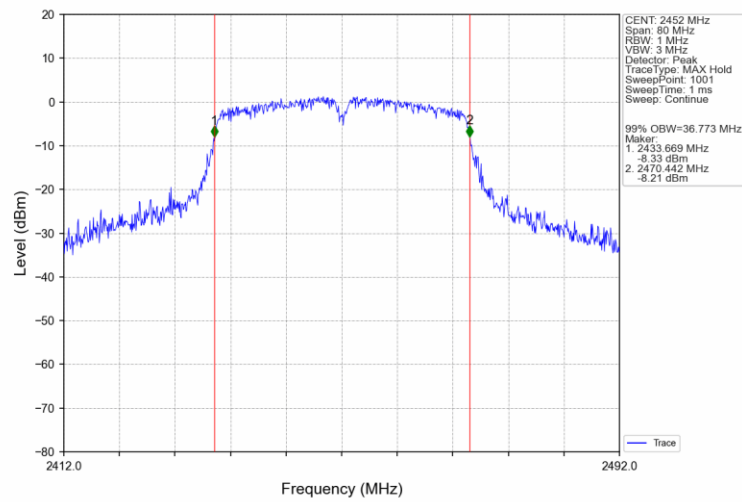
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



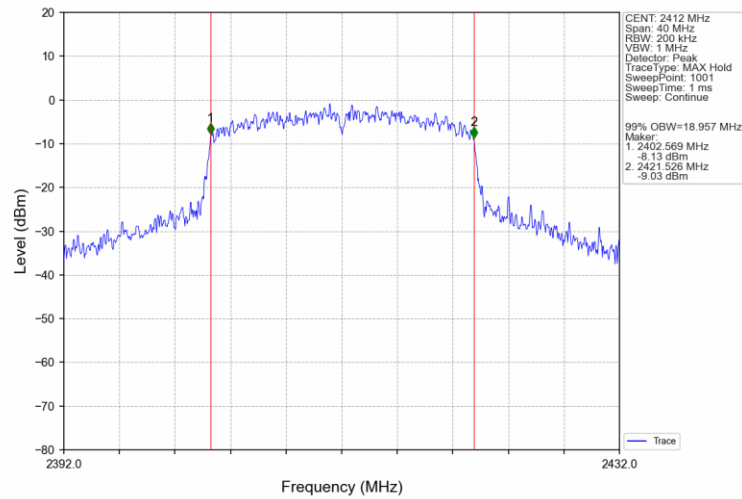
802.11n(HT40) MCH 2437MHz Ant1 (SISO) NTNV



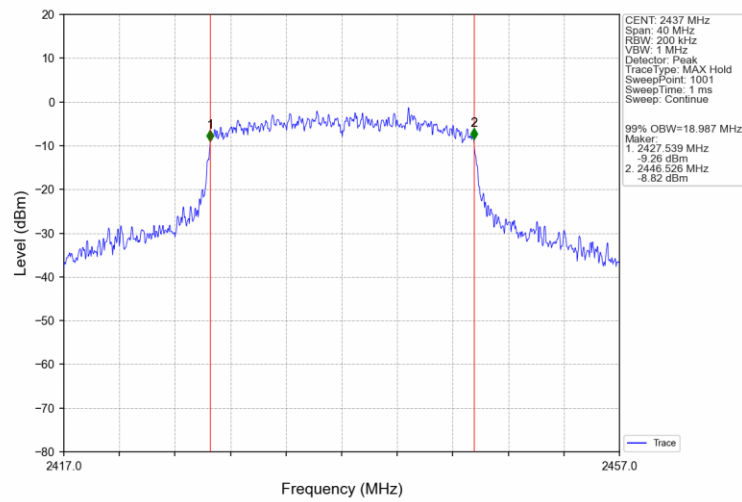
802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTNV



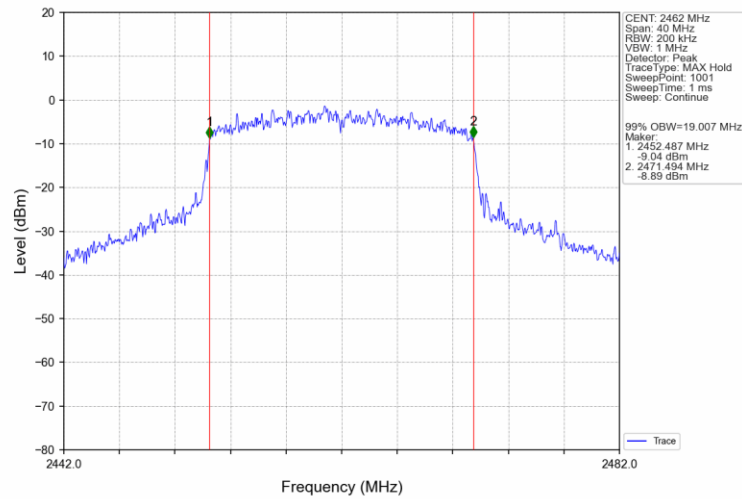
802.11ax(HEW20) LCH 2412MHz SU / Ant1 (SISO) NTN



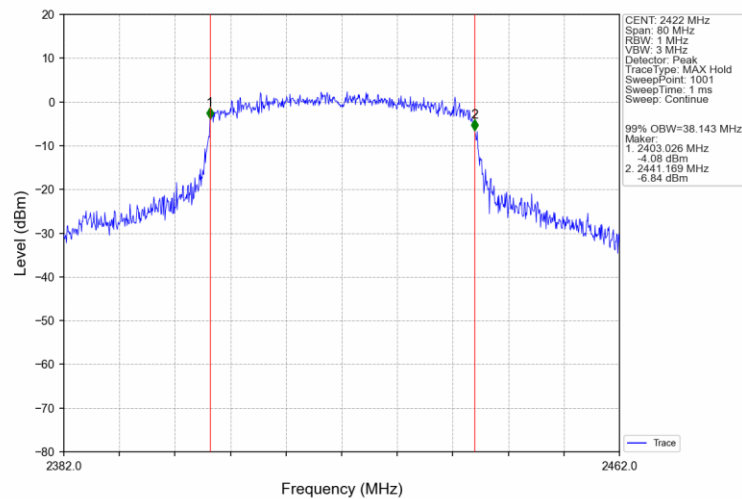
802.11ax(HEW20) MCH 2437MHz SU / Ant1 (SISO) NTN



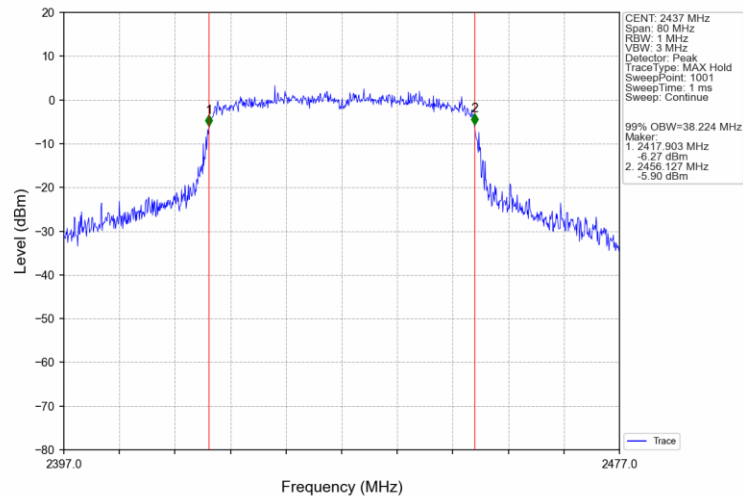
802.11ax(HEW20) HCH 2462MHz SU / Ant1 (SISO) NTNv



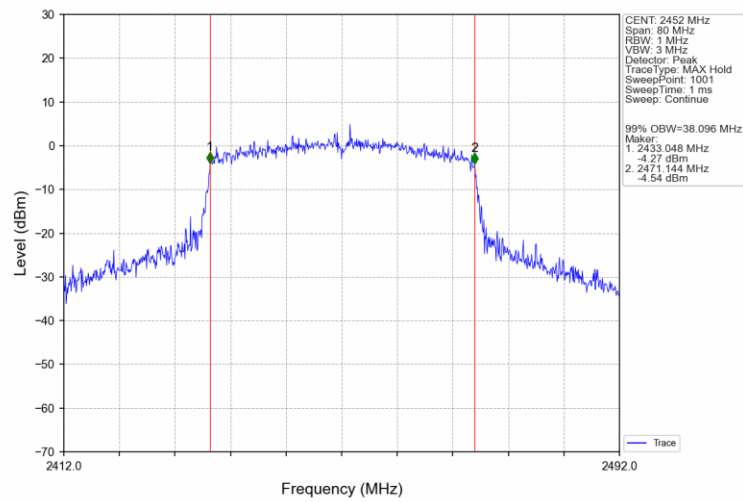
802.11ax(HEW40) LCH 2422MHz SU / Ant1 (SISO) NTNv



802.11ax(HEW40) MCH 2437MHz_SU / Ant1 (SISO) NTN

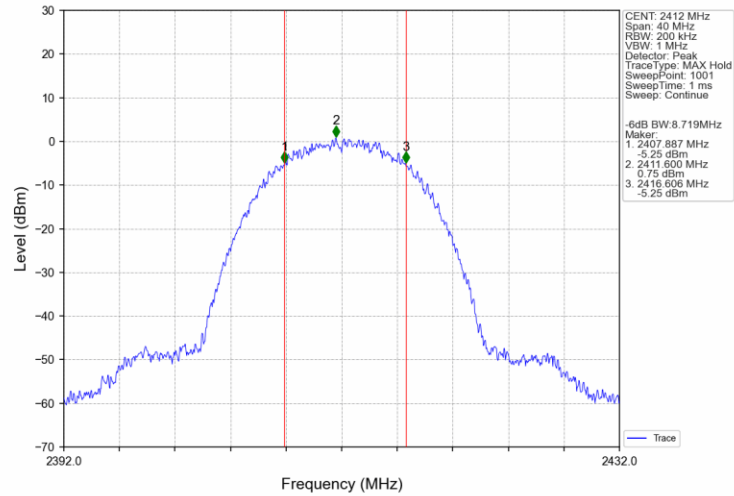


802.11ax(HEW40) HCH 2452MHz_SU / Ant1 (SISO) NTN

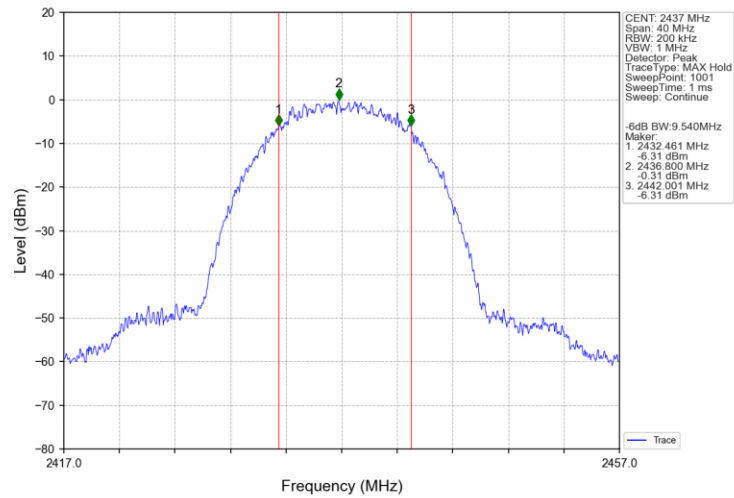


2.2.2 6dB BW

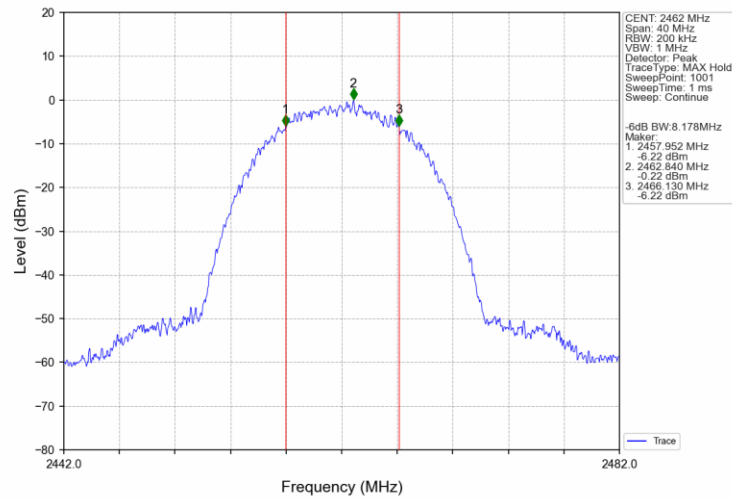
802.11b LCH 2412MHz_Ant1 (SISO)_NTNV



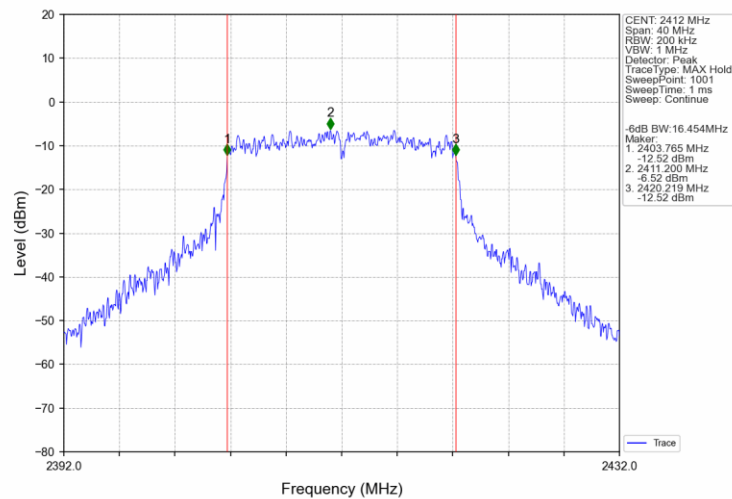
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



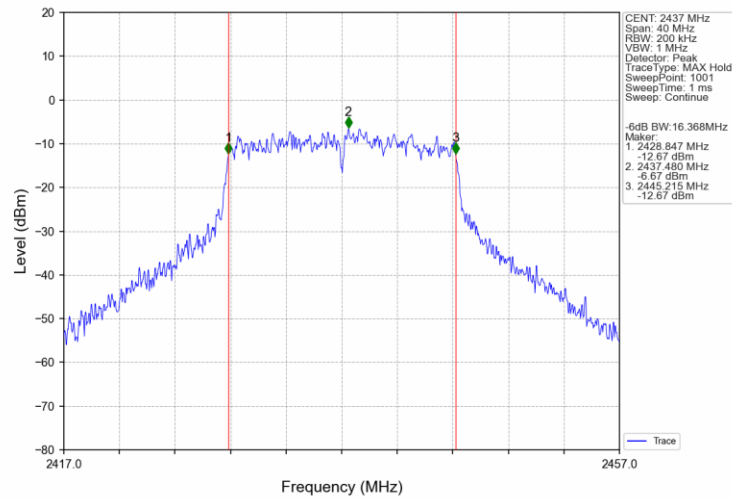
802.11b HCH 2462MHz_Ant1 (SISO) NTN



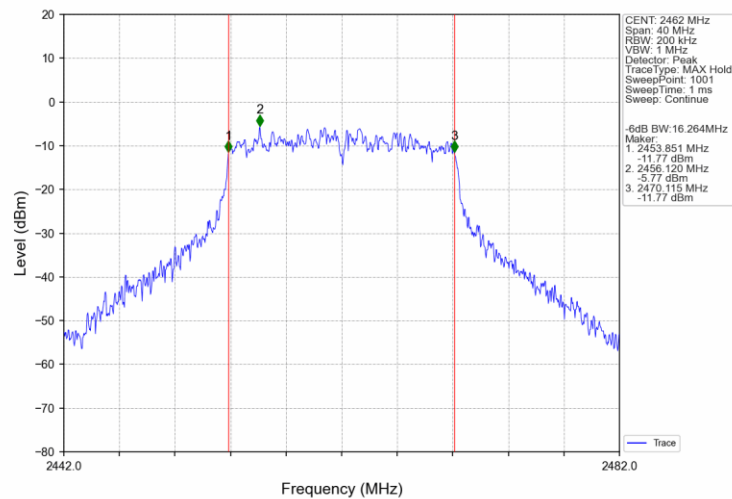
802.11g LCH 2412MHz_Ant1 (SISO) NTN



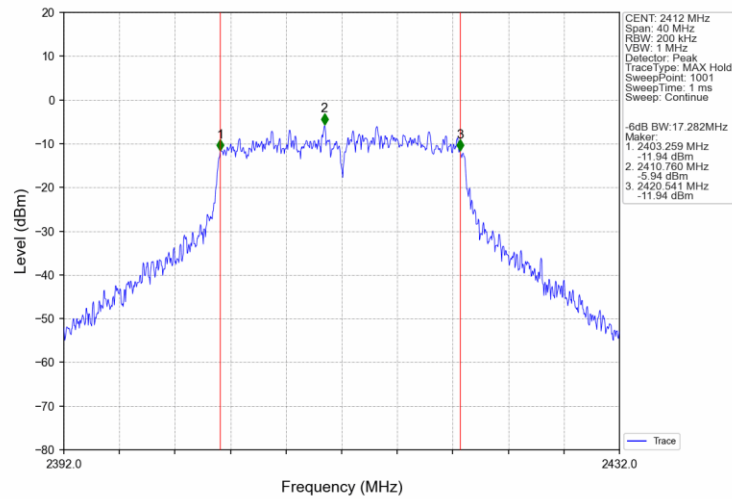
802.11g MCH 2437MHz_Ant1 (SISO) NTNv



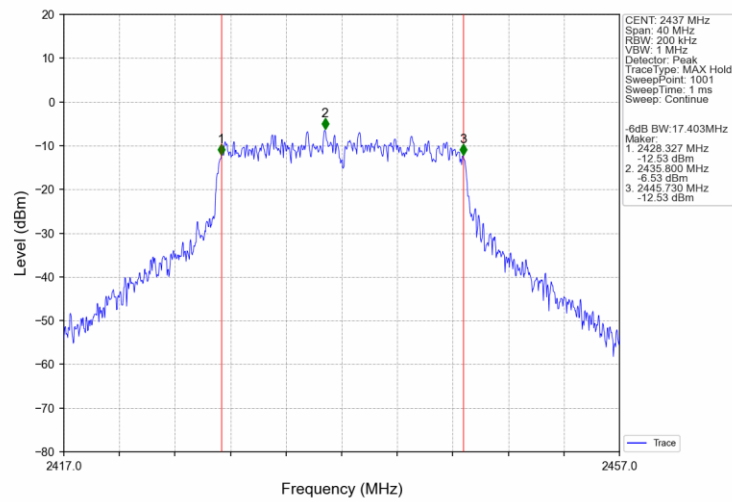
802.11g HCH 2462MHz_Ant1 (SISO) NTNv



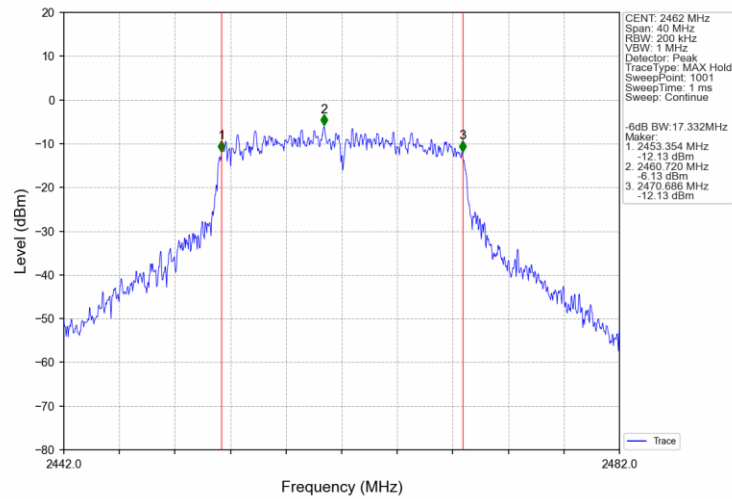
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTN



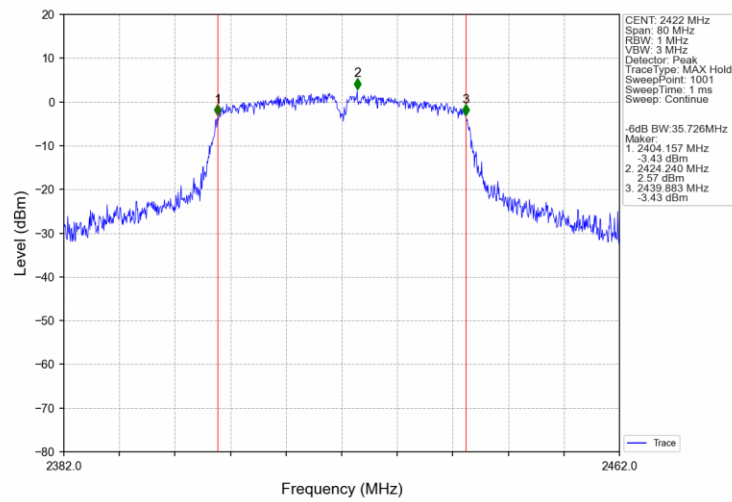
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTN



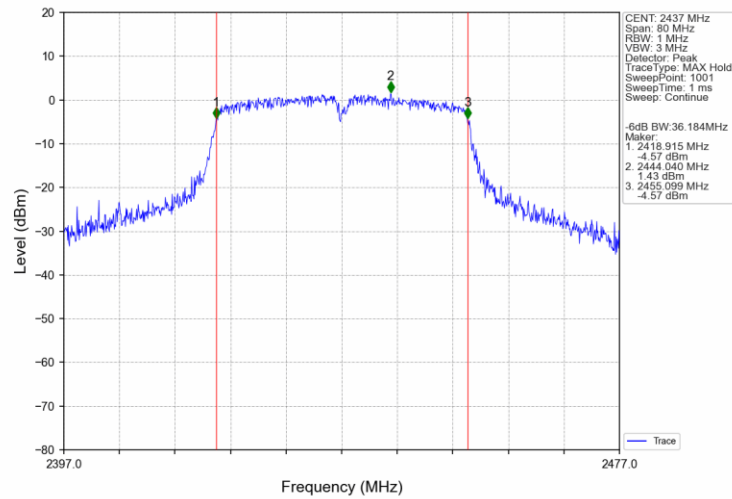
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



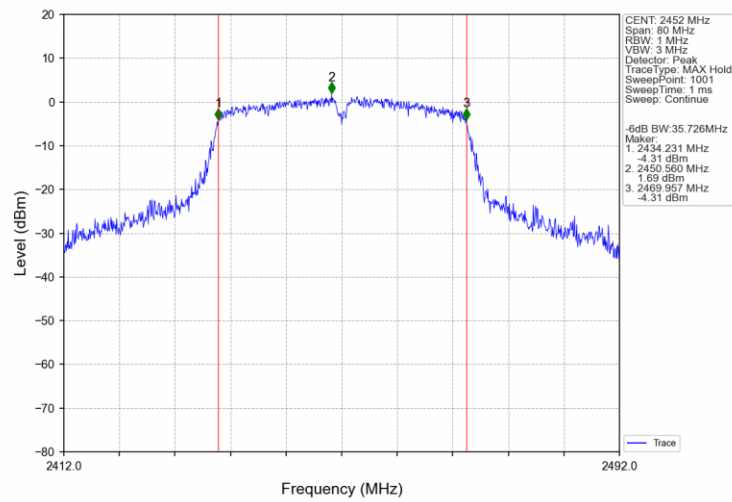
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



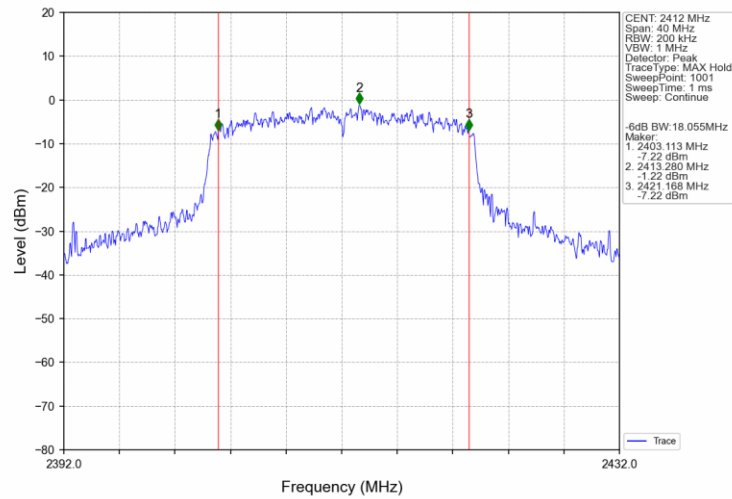
802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNV



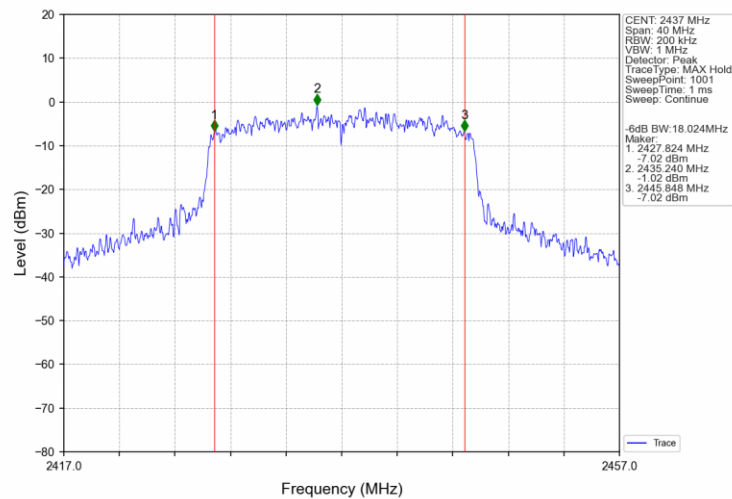
802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTNV



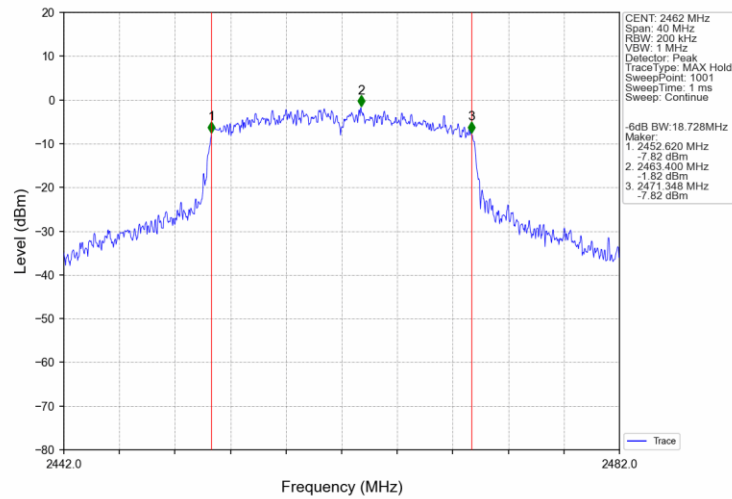
802.11ax(HEW20) LCH 2412MHz SU / Ant1 (SISO) NTN



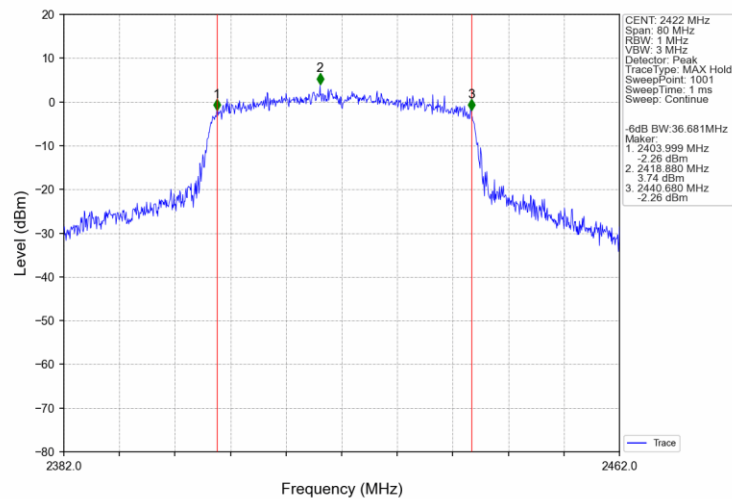
802.11ax(HEW20) MCH 2437MHz SU / Ant1 (SISO) NTN



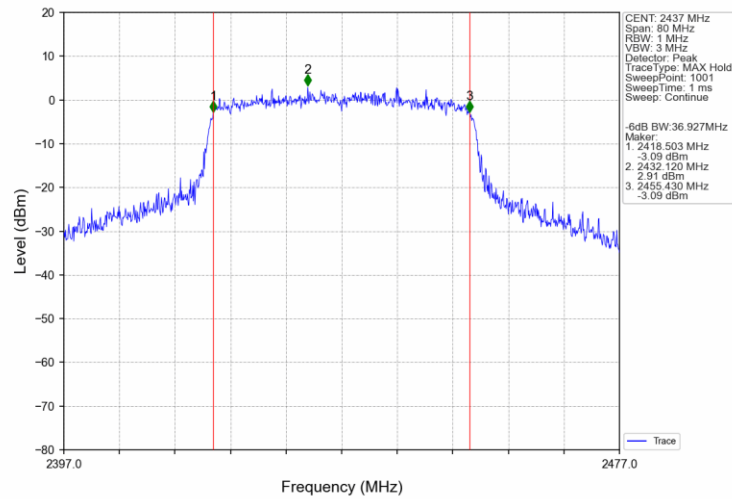
802.11ax(HEW20) HCH 2462MHz SU / Ant1 (SISO) NTNv



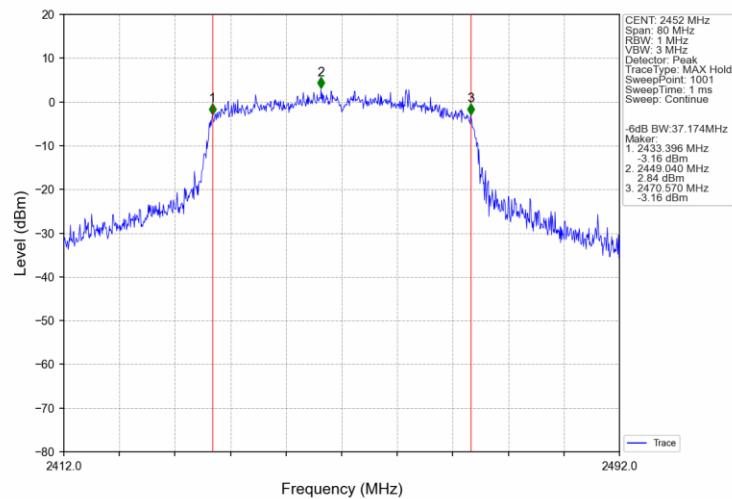
802.11ax(HEW40) LCH 2422MHz SU / Ant1 (SISO) NTNv



802.11ax(HEW40) MCH 2437MHz_SU / Ant1 (SISO) NTNv



802.11ax(HEW40) HCH 2452MHz_SU / Ant1 (SISO) NTNv



Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Peak Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	13.01	<=30	Pass
		2437	/	/	12.33	<=30	Pass
		2462	/	/	11.48	<=30	Pass
802.11g	SISO	2412	/	/	10.44	<=30	Pass
		2437	/	/	9.75	<=30	Pass
		2462	/	/	10.50	<=30	Pass
802.11n (HT20)	SISO	2412	/	/	10.38	<=30	Pass
		2437	/	/	9.73	<=30	Pass
		2462	/	/	10.13	<=30	Pass
802.11n (HT40)	SISO	2422	/	/	14.92	<=30	Pass
		2437	/	/	14.57	<=30	Pass
		2452	/	/	14.30	<=30	Pass
802.11ax (HEW20)	SISO	2412	SU	/	15.60	<=30	Pass
		2437	SU	/	14.97	<=30	Pass
		2462	SU	/	15.36	<=30	Pass
802.11ax (HEW40)	SISO	2422	SU	/	15.28	<=30	Pass
		2437	SU	/	14.89	<=30	Pass
		2452	SU	/	14.40	<=30	Pass

Note1: Antenna Gain: Ant1: 1.44dBi;

4. Maximum Power Spectral Density

4.1 Test Result

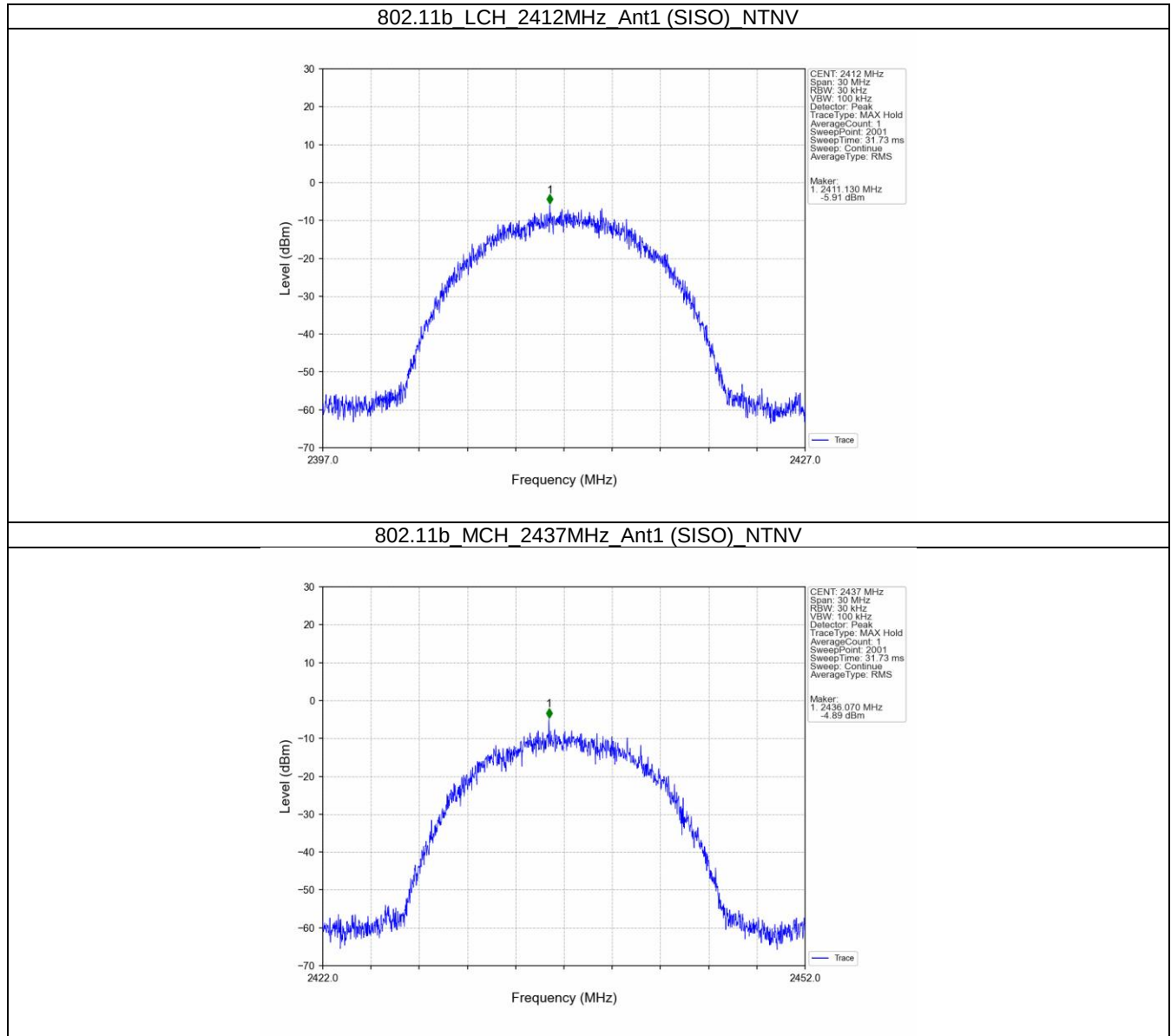
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum PSD (dBm)		Verdict
					ANT1	Limit(dBm/3kHz)	
802.11b	SISO	2412	/	/	-5.91dBm/30kHz	<=8	Pass
		2437	/	/	-4.89dBm/30kHz	<=8	Pass
		2462	/	/	-8.26dBm/30kHz	<=8	Pass
802.11g	SISO	2412	/	/	-6.78dBm/100kHz	<=8	Pass
		2437	/	/	-8.15dBm/100kHz	<=8	Pass
		2462	/	/	-6.65dBm/100kHz	<=8	Pass
802.11n (HT20)	SISO	2412	/	/	-7.09dBm/100kHz	<=8	Pass
		2437	/	/	-7.22dBm/100kHz	<=8	Pass
		2462	/	/	-6.96dBm/100kHz	<=8	Pass
802.11n (HT40)	SISO	2422	/	/	-5.29dBm/100kHz	<=8	Pass
		2437	/	/	-6.32dBm/100kHz	<=8	Pass
		2452	/	/	-6.41dBm/100kHz	<=8	Pass
802.11ax (HEW20)	SISO	2412	SU	/	-7.41dBm/30kHz	<=8	Pass
		2437	SU	/	-8.60dBm/30kHz	<=8	Pass
		2462	SU	/	-3.39dBm/100kHz	<=8	Pass
802.11ax (HEW40)	SISO	2422	SU	/	-5.62dBm/100kHz	<=8	Pass
		2437	SU	/	-7.21dBm/100kHz	<=8	Pass
		2452	SU	/	-6.35dBm/100kHz	<=8	Pass

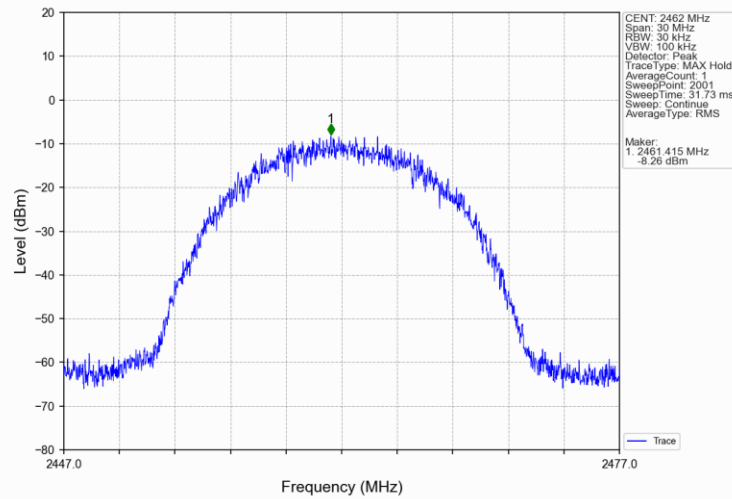
Note1: Antenna Gain: Ant1: 1.44dBi;

4.2 Test Graph

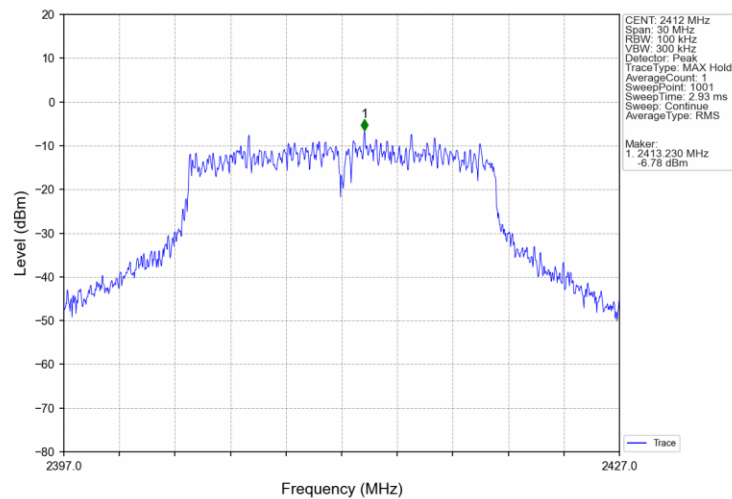
4.2.1 PSD



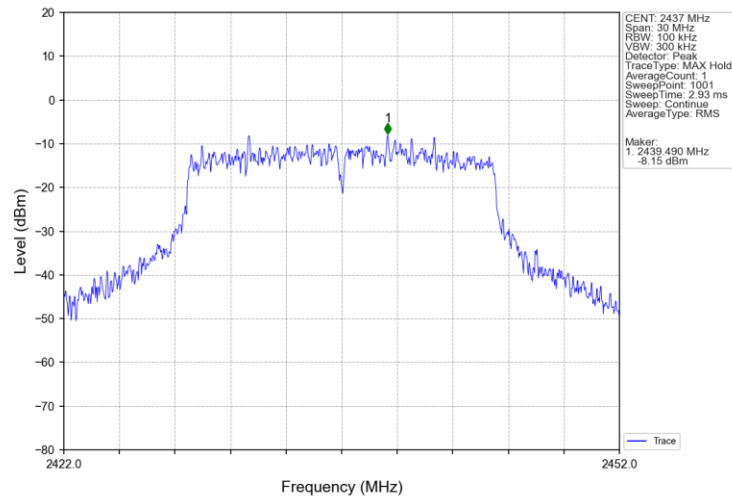
802.11b HCH 2462MHz_Ant1 (SISO) NTN



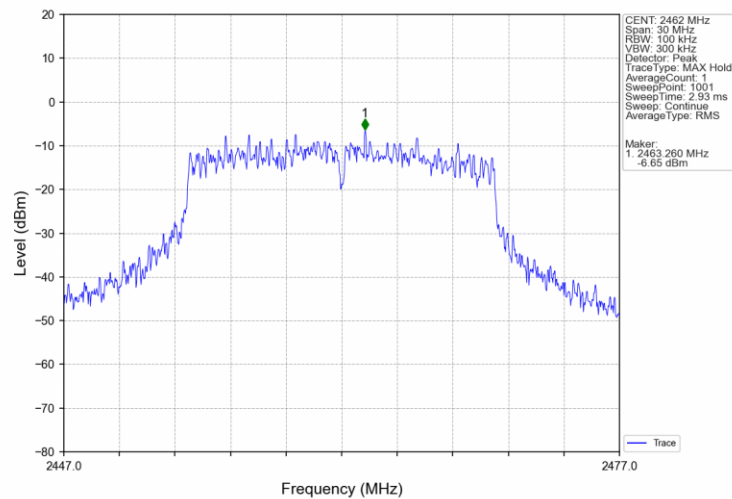
802.11g LCH 2412MHz_Ant1 (SISO) NTN



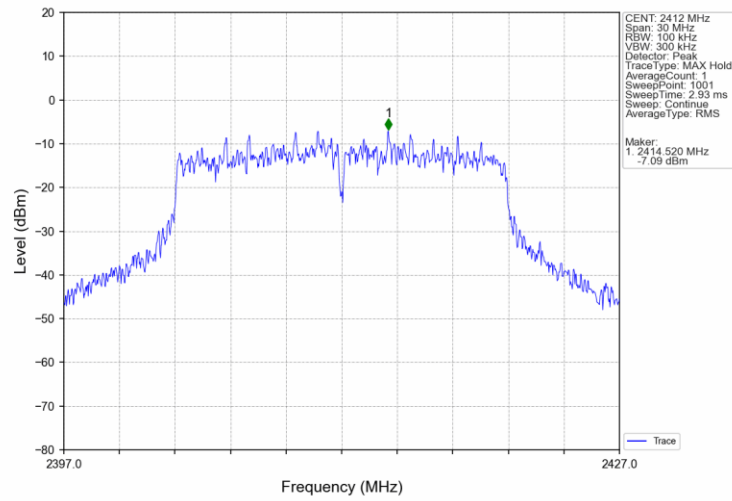
802.11g_MCH_2437MHz_Ant1 (SISO) NTN



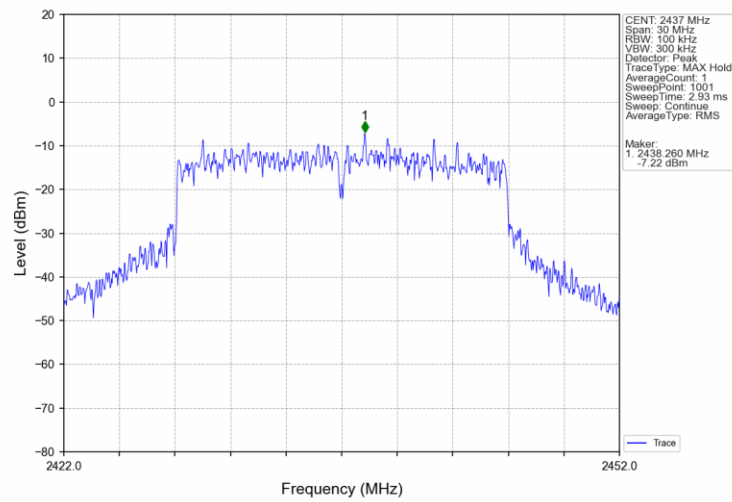
802.11g_HCH_2462MHz_Ant1 (SISO) NTN



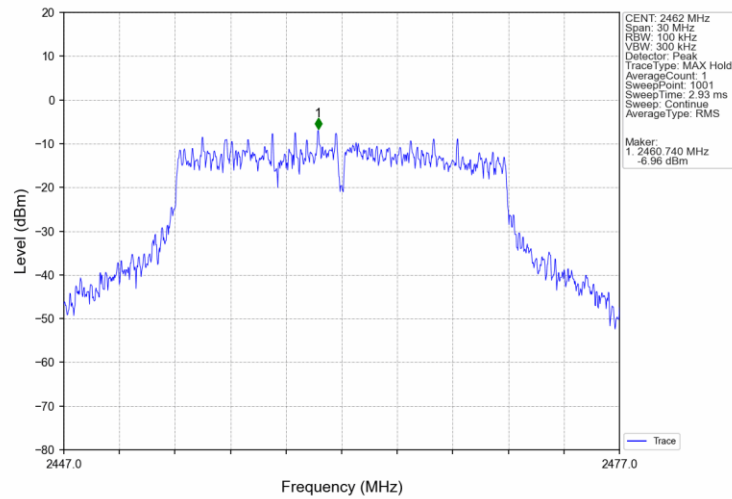
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



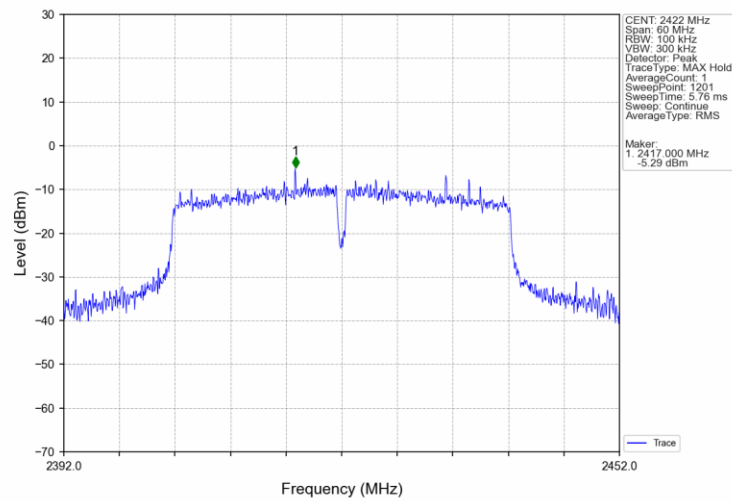
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



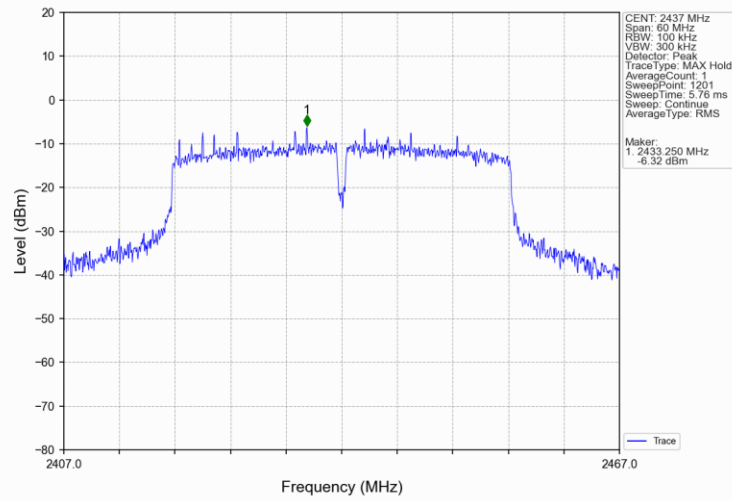
802.11n(HT20) HCH_2462MHz_Ant1 (SISO) NTNV



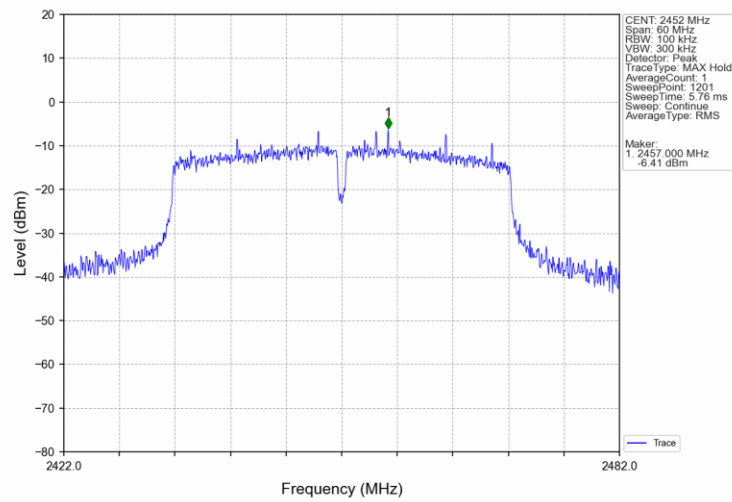
802.11n(HT40) LCH_2422MHz_Ant1 (SISO) NTNV



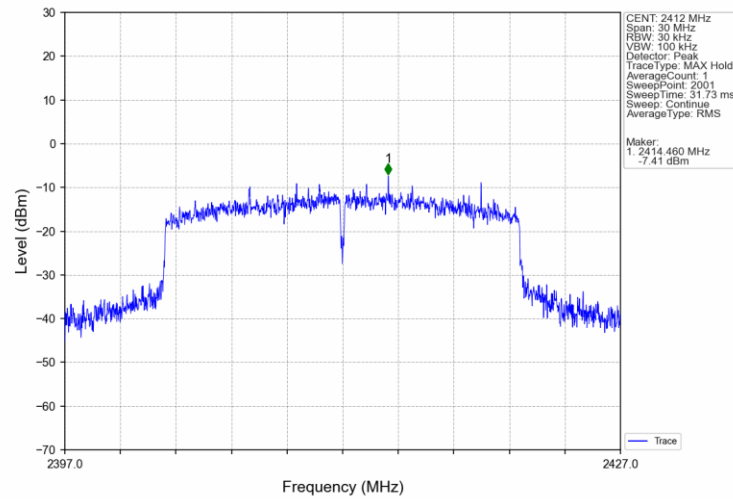
802.11n(HT40) MCH 2437MHz Ant1 (SISO) NTNV



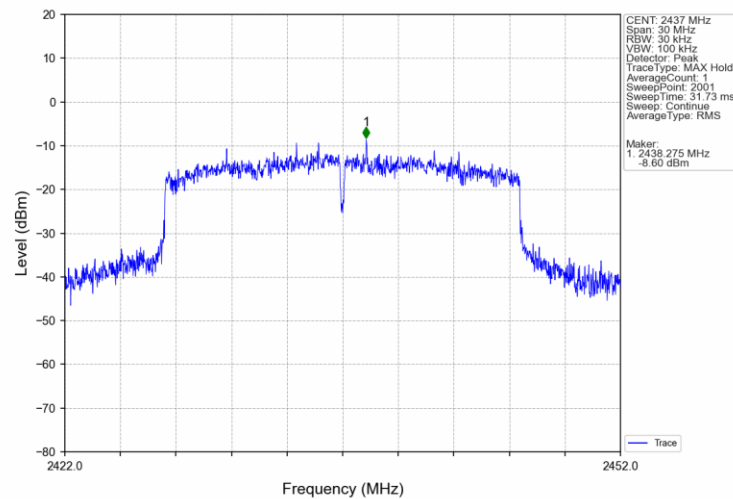
802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTNV



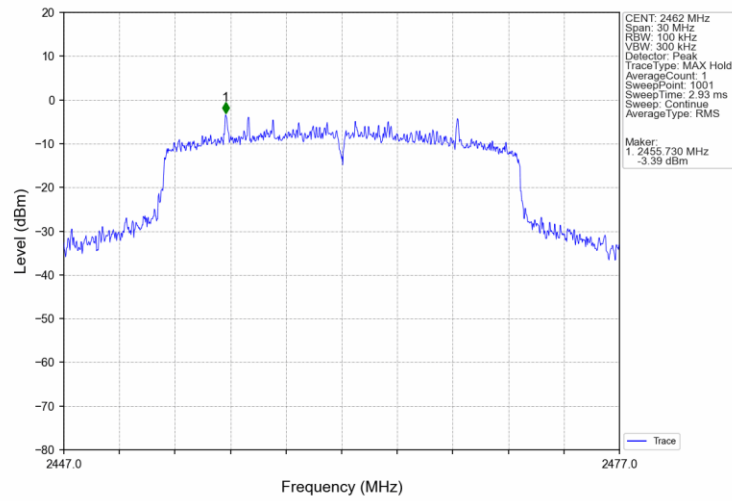
802.11ax(HEW20) LCH 2412MHz SU / Ant1 (SISO) NTN



802.11ax(HEW20) MCH 2437MHz SU / Ant1 (SISO) NTN



802.11ax(HEW20) HCH 2462MHz SU / Ant1 (SISO) NTNv



802.11ax(HEW40) LCH 2422MHz SU / Ant1 (SISO) NTNv

