

Appendix RF test data for WIFI2.4G

1. Duty Cycle

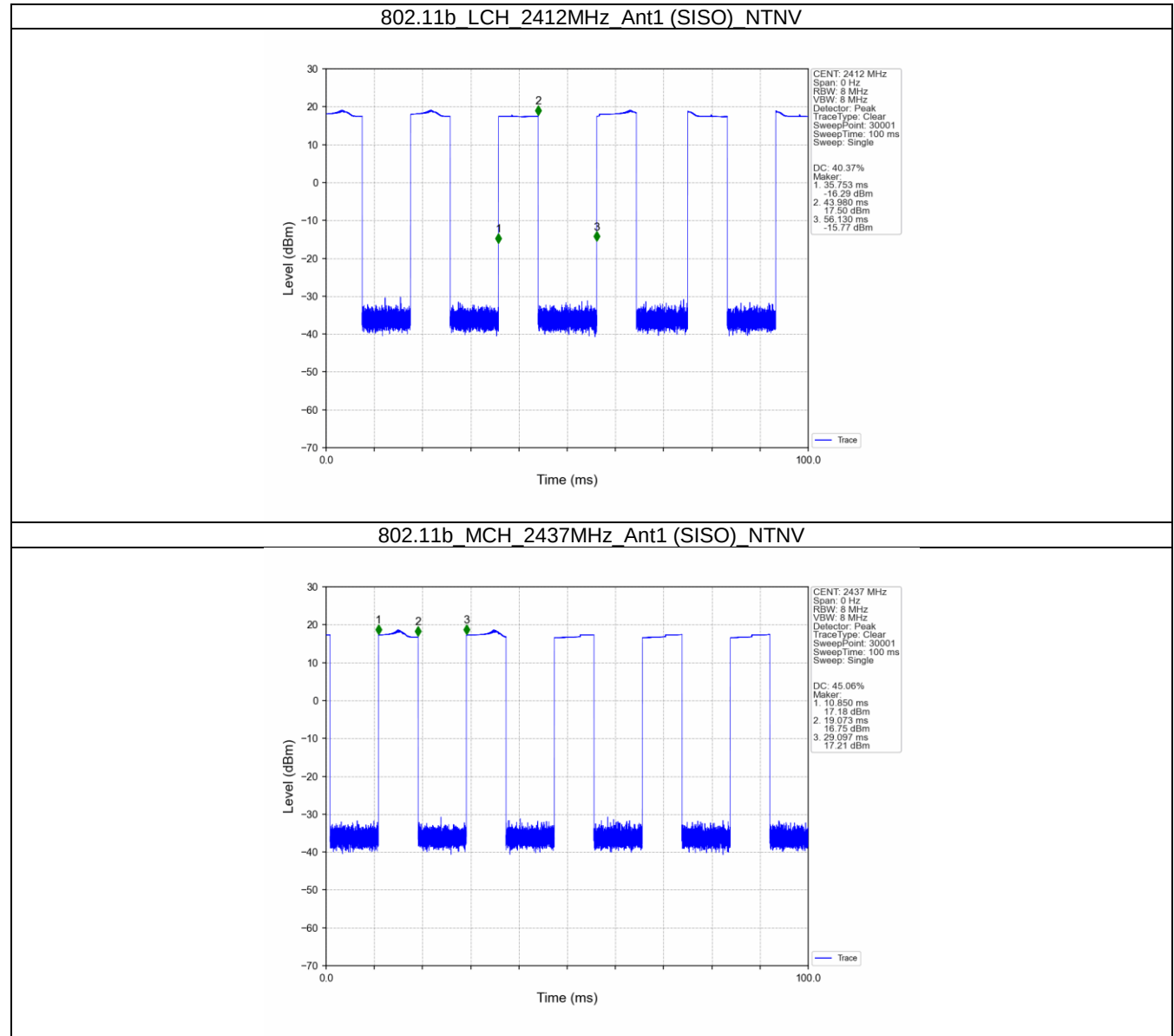
1.1 Test Result

1.1.1 Ant1

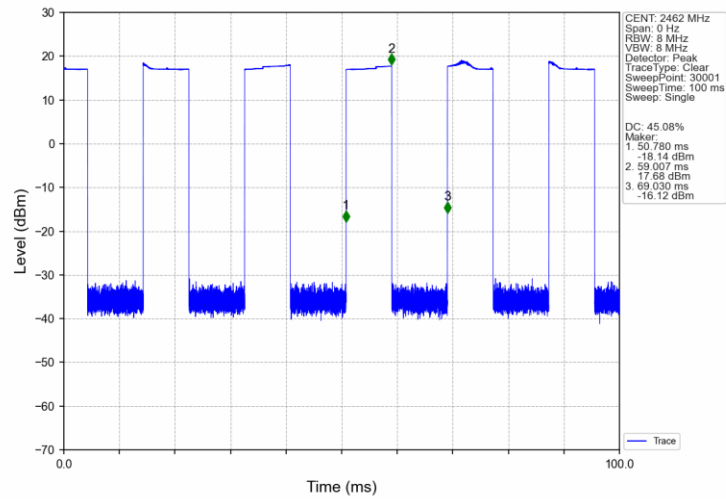
Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	/	/	8.227	20.377	40.37	3.94	4.71
		2437	/	/	8.223	18.247	45.06	3.46	0.03
		2462	/	/	8.227	18.250	45.08	3.46	0.01
802.11g	SISO	2412	/	/	1.367	13.087	10.45	9.81	1.56
		2437	/	/	1.364	11.394	11.97	9.22	0.03
		2462	/	/	1.364	14.227	9.59	10.18	2.43
802.11n (HT20)	SISO	2412	/	/	0.163	10.190	1.60	17.96	0.00
		2437	/	/	1.277	14.233	8.97	10.47	2.36
		2462	/	/	1.277	11.307	11.29	9.47	0.04
802.11n (HT40)	SISO	2422	/	/	0.637	10.667	5.97	12.24	0.03
		2437	/	/	0.637	10.667	5.97	12.24	0.03
		2452	/	/	0.637	10.667	5.97	12.24	0.01
802.11ax (HEW20)	SISO	2412	SU	/	1.003	12.673	7.91	11.02	1.19
		2437	SU	/	1.000	11.030	9.07	10.43	0.03
		2462	SU	/	1.003	12.923	7.76	11.10	1.34
802.11ax (HEW40)	SISO	2422	SU	/	0.530	10.673	4.97	13.04	0.09
		2437	SU	/	0.530	10.560	5.02	12.99	0.03
		2452	SU	/	0.533	15.850	3.36	14.73	1.70

1.2 Test Graph

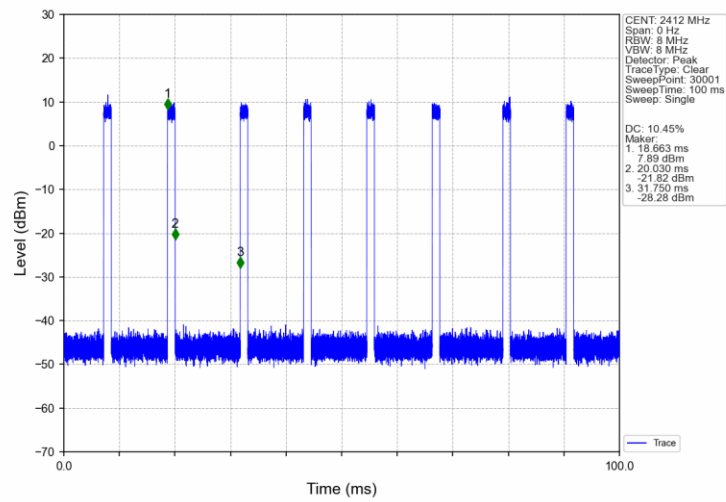
1.2.1 Ant1



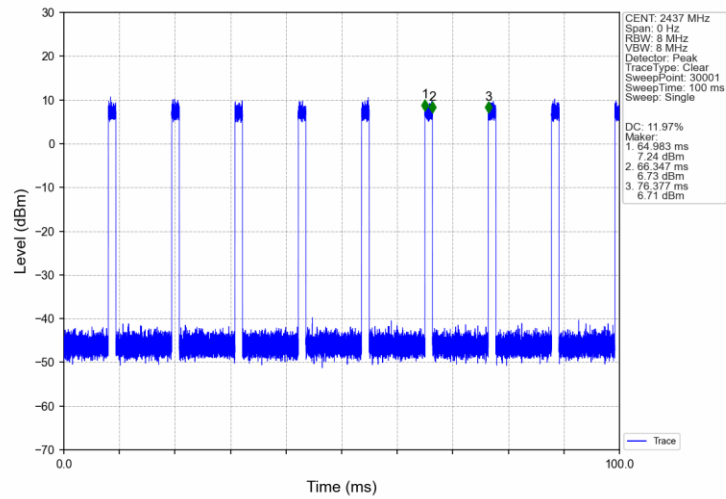
802.11b HCH 2462MHz_Ant1 (SISO)_NTNV



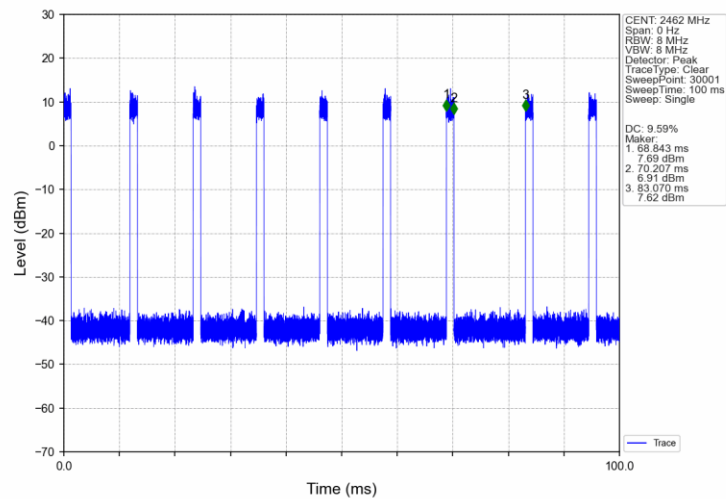
802.11g LCH 2412MHz_Ant1 (SISO)_NTNV



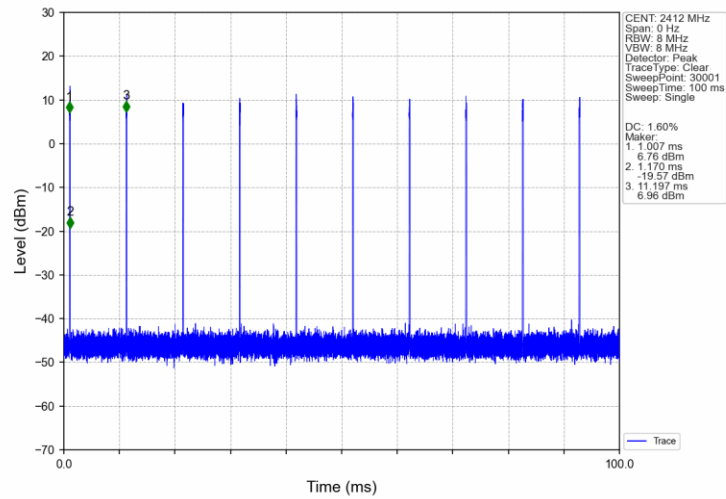
802.11g MCH 2437MHz_Ant1 (SISO) NTN



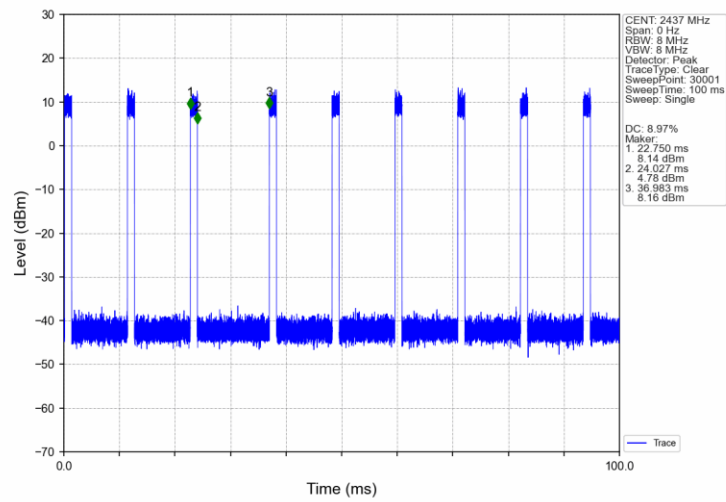
802.11g HCH 2462MHz_Ant1 (SISO) NTN



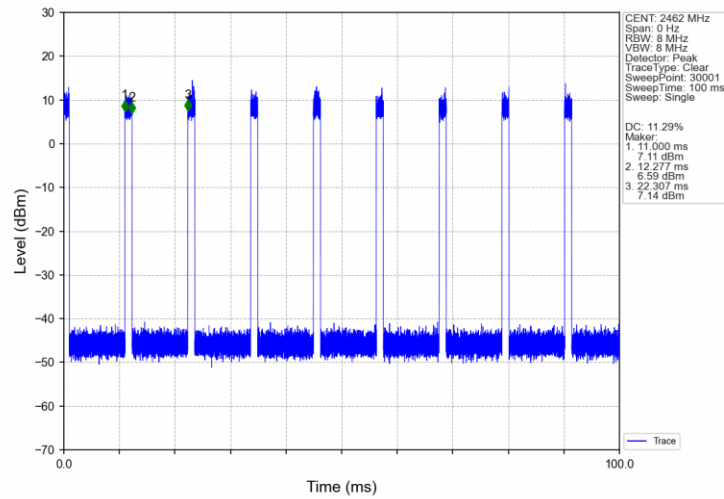
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



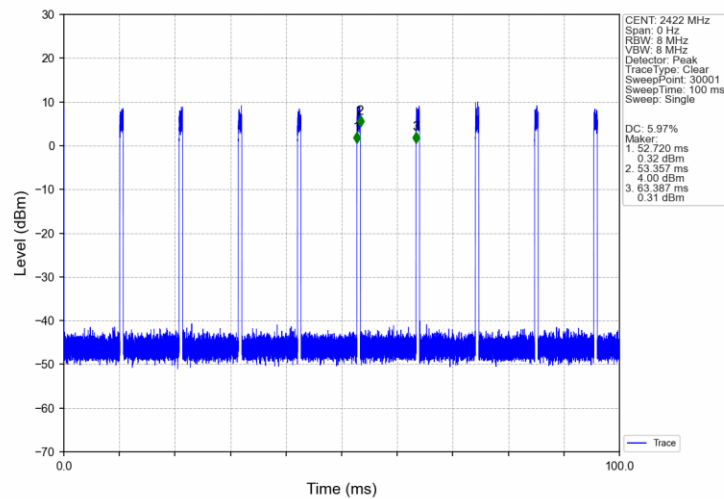
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



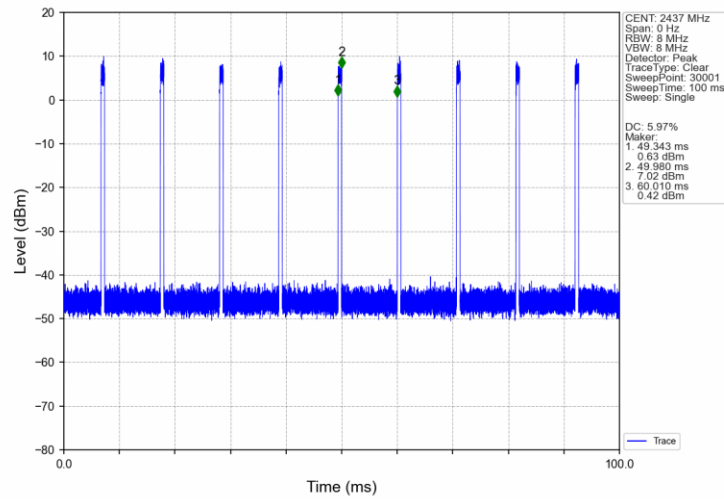
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



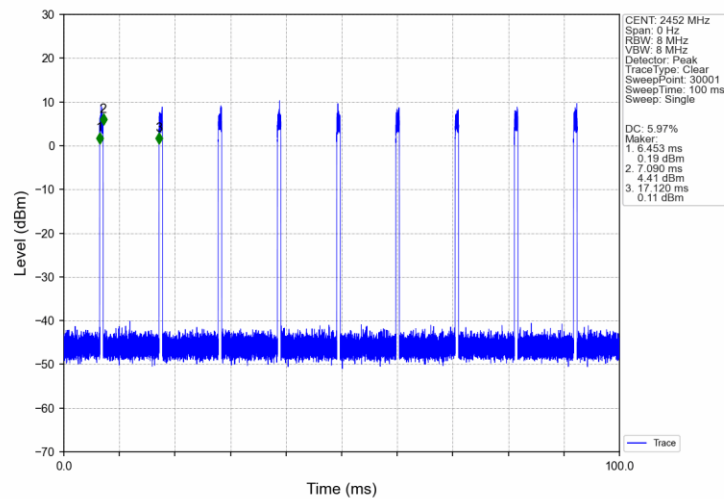
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



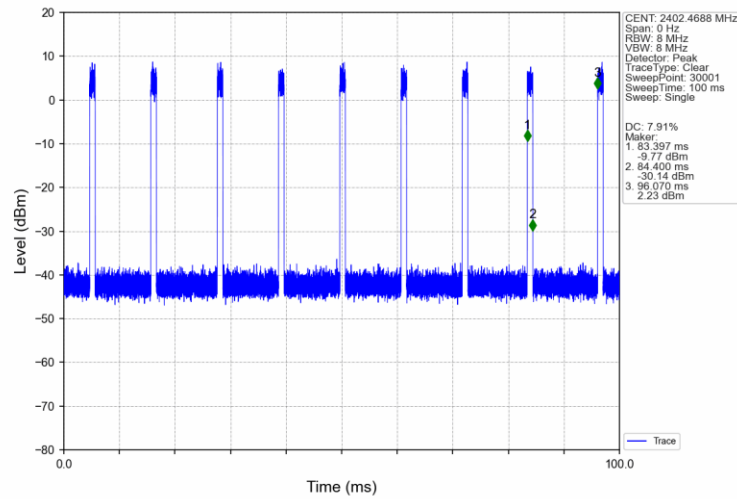
802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



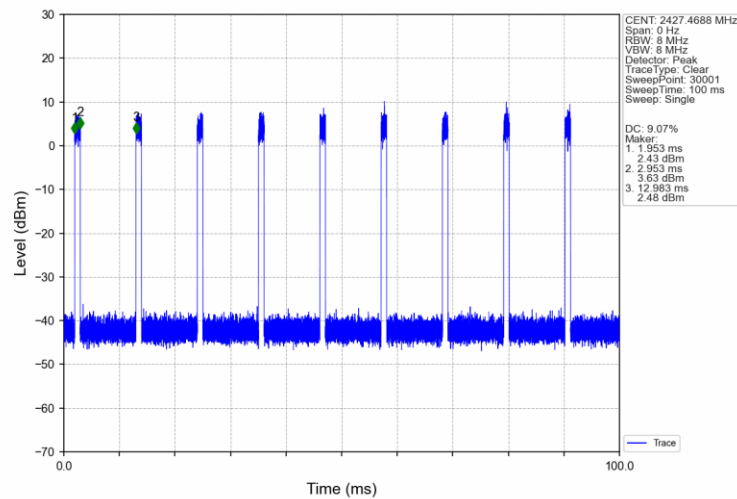
802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



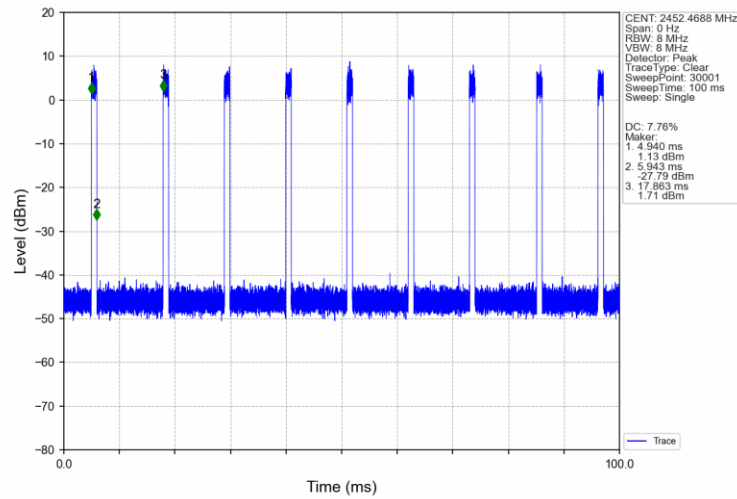
802.11ax(HEW20) LCH 2412MHz_SU / Ant1 (SISO) NTNv



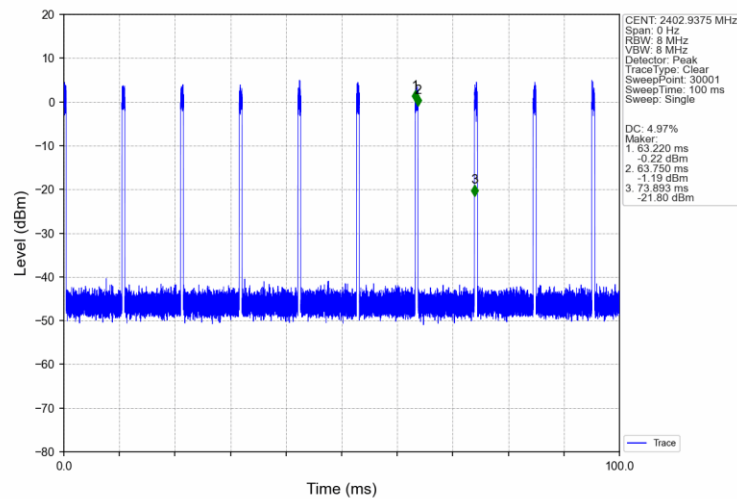
802.11ax(HEW20) MCH 2437MHz_SU / Ant1 (SISO) NTNv



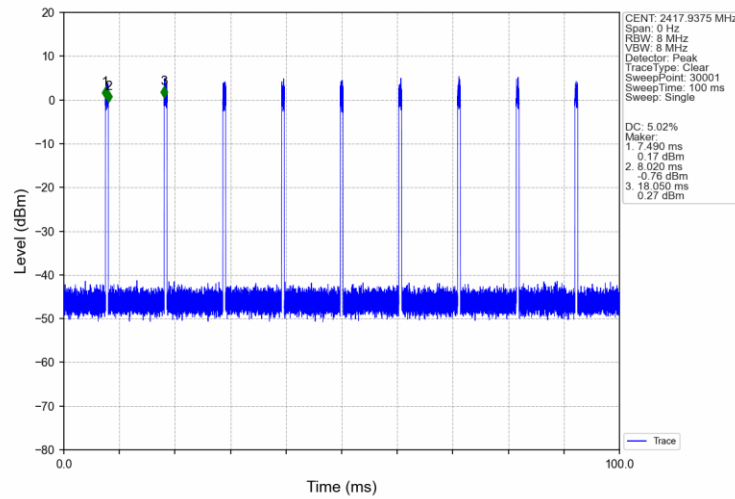
802.11ax(HEW20) HCH 2462MHz SU / Ant1 (SISO) NTNv



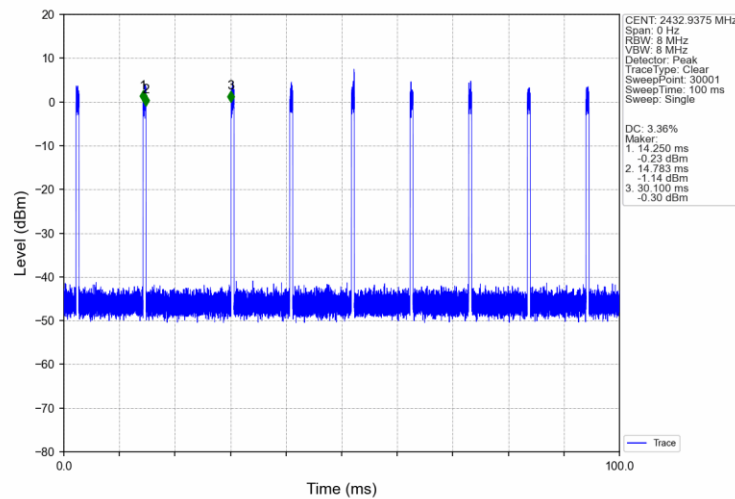
802.11ax(HEW40) LCH 2422MHz SU / Ant1 (SISO) NTNv



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



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



2. Bandwidth

2.1 Test Result

2.1.1 OBW

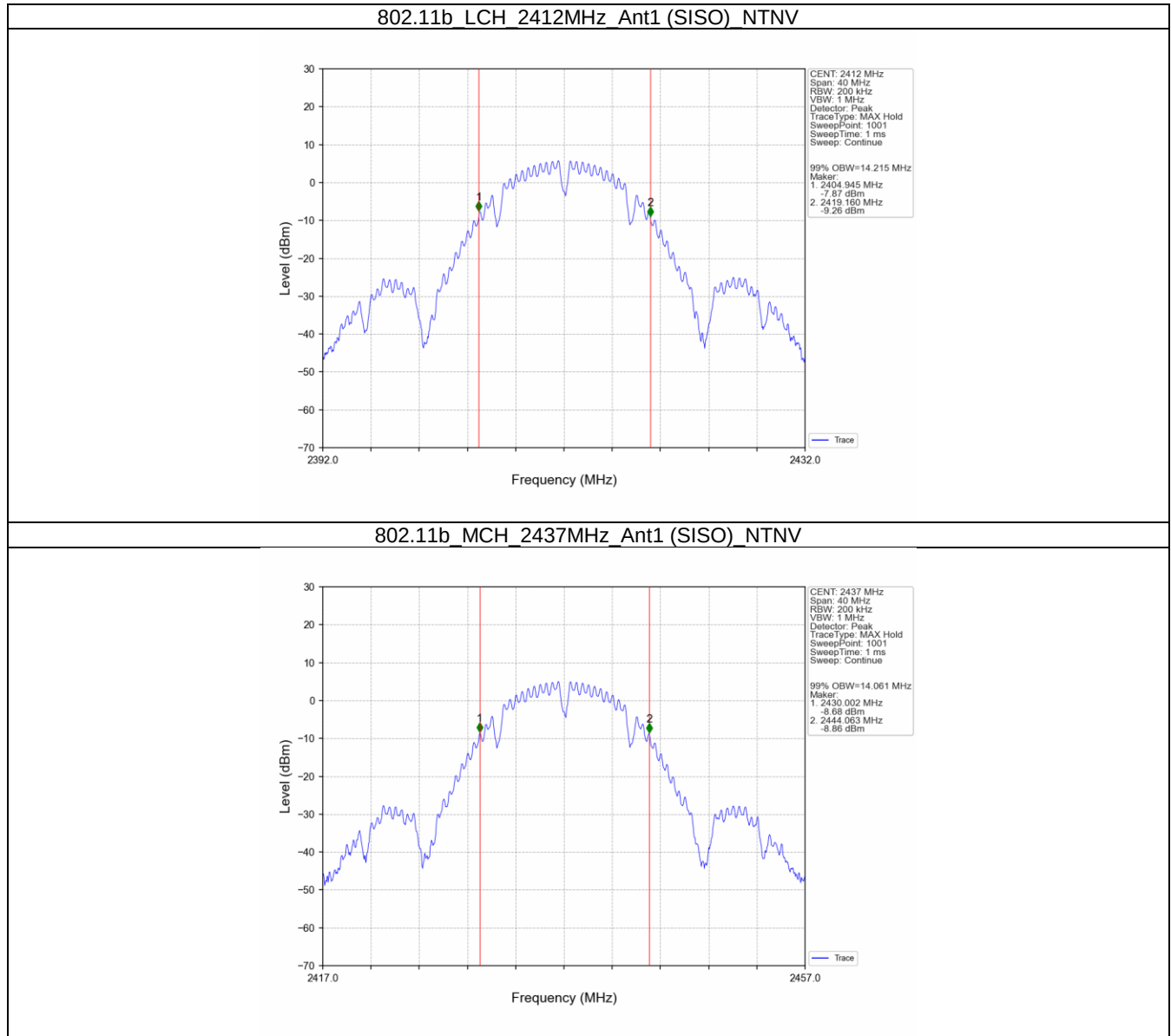
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	14.215	/	Pass
		2437	/	/	1	14.061	/	Pass
		2462	/	/	1	14.078	/	Pass
802.11g	SISO	2412	/	/	1	16.632	/	Pass
		2437	/	/	1	16.634	/	Pass
		2462	/	/	1	16.624	/	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.681	/	Pass
		2437	/	/	1	17.793	/	Pass
		2462	/	/	1	17.816	/	Pass
802.11n (HT40)	SISO	2422	/	/	1	36.625	/	Pass
		2437	/	/	1	36.611	/	Pass
		2452	/	/	1	36.753	/	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.998	/	Pass
		2437	SU	/	1	18.971	/	Pass
		2462	SU	/	1	18.947	/	Pass
802.11ax (HEW40)	SISO	2422	SU	/	1	38.084	/	Pass
		2437	SU	/	1	38.082	/	Pass
		2452	SU	/	1	37.982	/	Pass

2.1.2 6dB BW

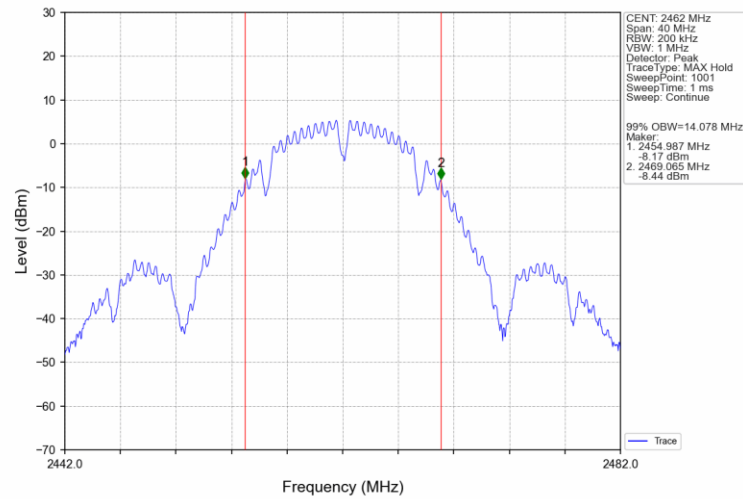
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	10.021	>=0.5	Pass
		2437	/	/	1	9.610	>=0.5	Pass
		2462	/	/	1	9.609	>=0.5	Pass
802.11g	SISO	2412	/	/	1	16.363	>=0.5	Pass
		2437	/	/	1	16.363	>=0.5	Pass
		2462	/	/	1	16.300	>=0.5	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.654	>=0.5	Pass
		2437	/	/	1	17.541	>=0.5	Pass
		2462	/	/	1	17.433	>=0.5	Pass
802.11n (HT40)	SISO	2422	/	/	1	36.050	>=0.5	Pass
		2437	/	/	1	36.099	>=0.5	Pass
		2452	/	/	1	35.931	>=0.5	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.932	>=0.5	Pass
		2437	SU	/	1	18.866	>=0.5	Pass
		2462	SU	/	1	18.535	>=0.5	Pass
802.11ax (HEW40)	SISO	2422	SU	/	1	37.269	>=0.5	Pass
		2437	SU	/	1	33.719	>=0.5	Pass
		2452	SU	/	1	35.874	>=0.5	Pass

2.2 Test Graph

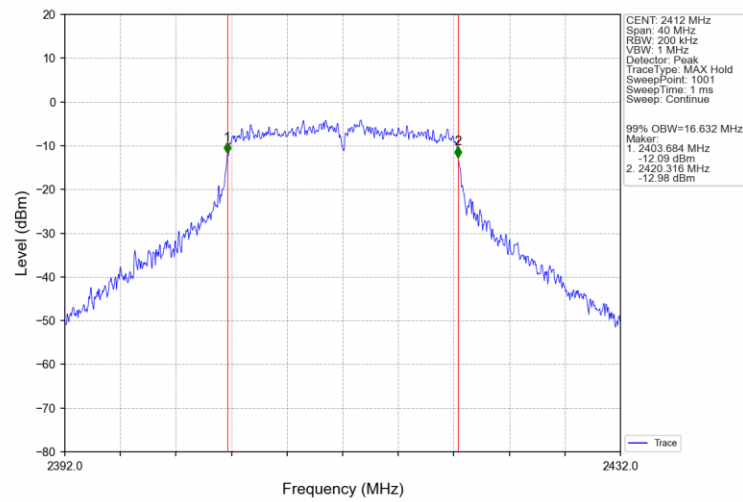
2.2.1 OBW



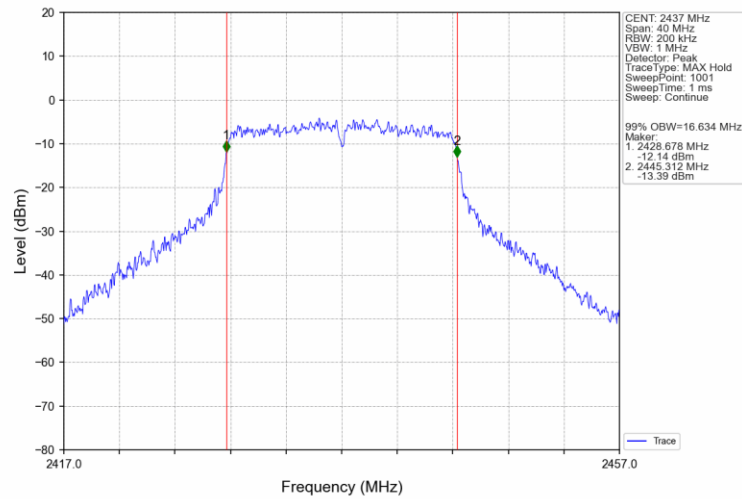
802.11b HCH 2462MHz_Ant1 (SISO)_NTNV



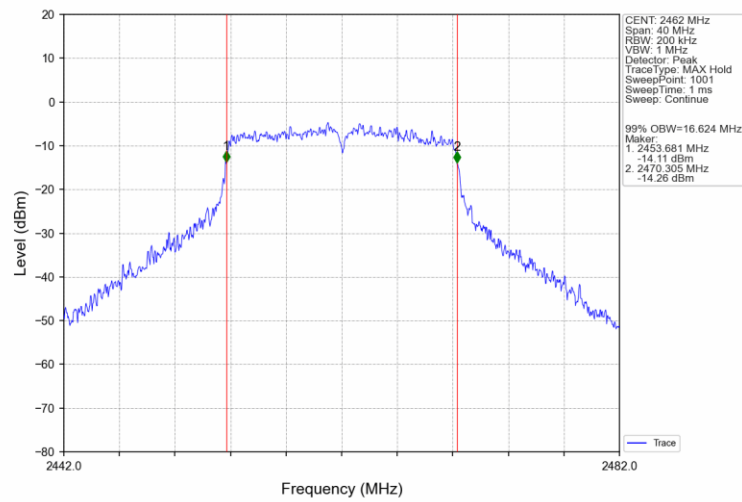
802.11g LCH 2412MHz_Ant1 (SISO)_NTNV



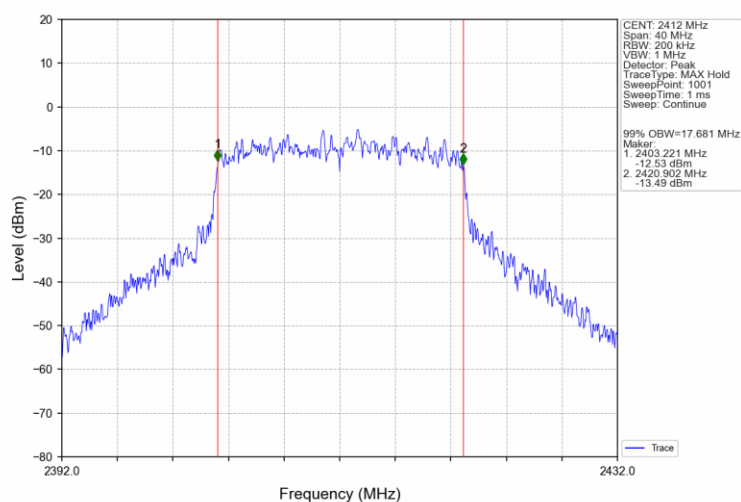
802.11g MCH 2437MHz_Ant1 (SISO) NTNv



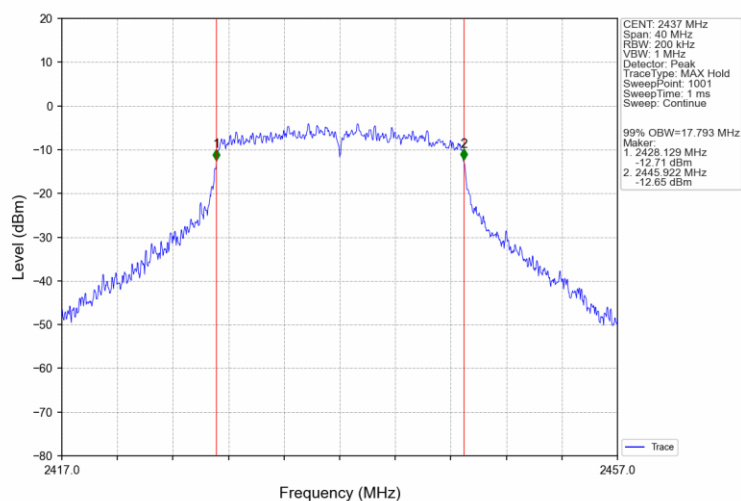
802.11g HCH 2462MHz_Ant1 (SISO) NTNv



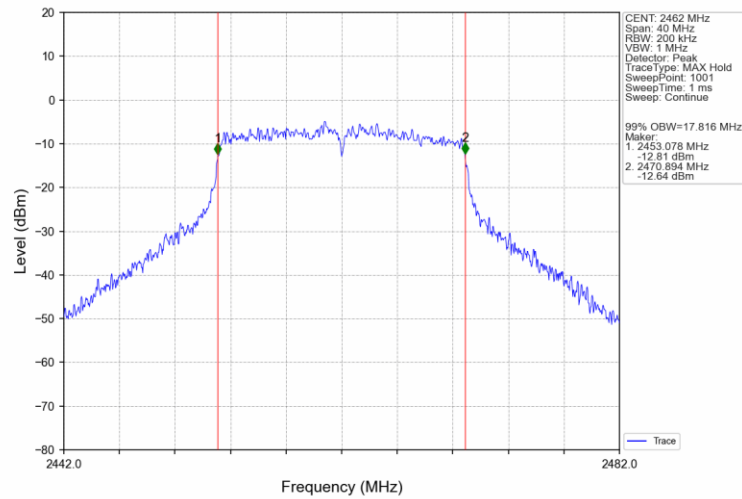
802.11n(HT20) LCH_2412MHz_Ant1 (SISO) NTN



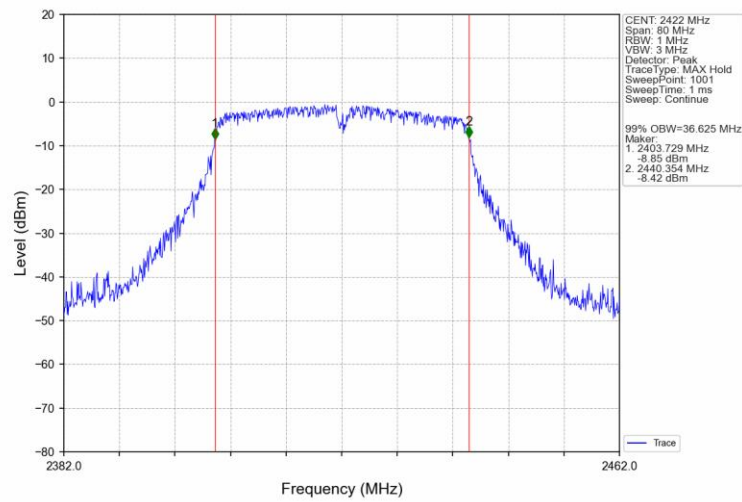
802.11n(HT20) MCH_2437MHz_Ant1 (SISO) NTN



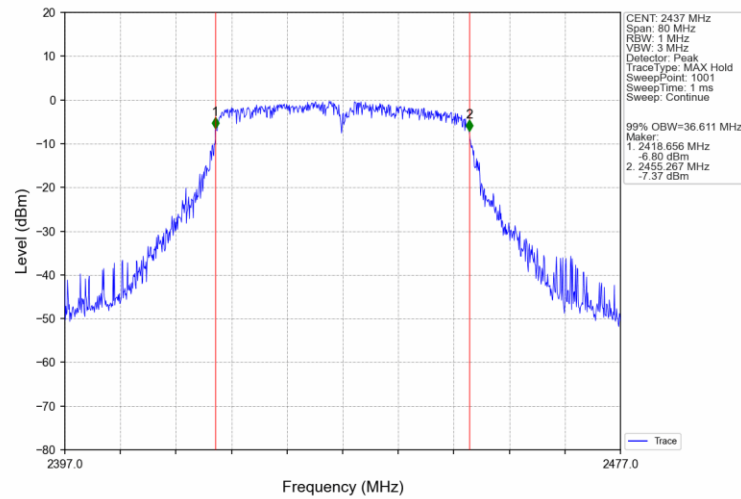
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



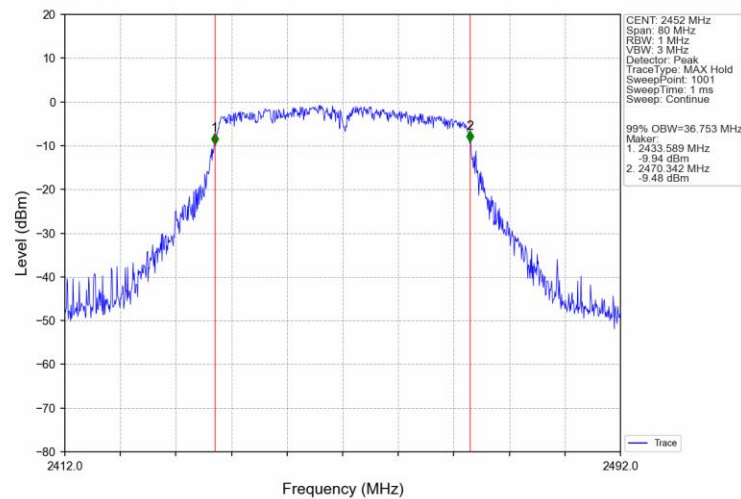
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



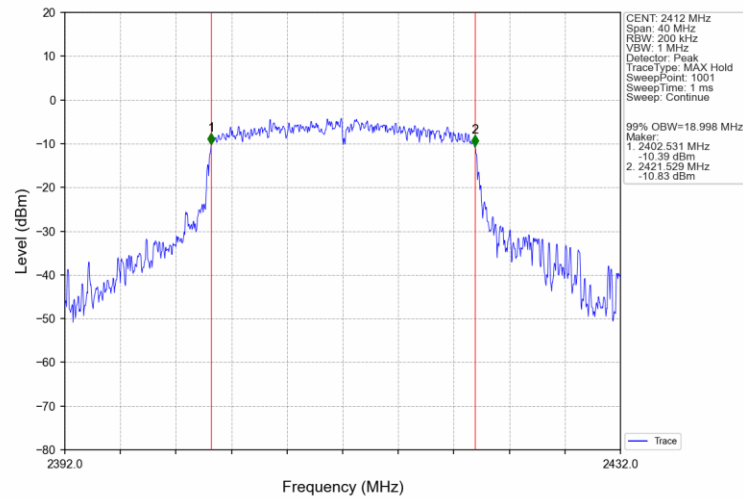
802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



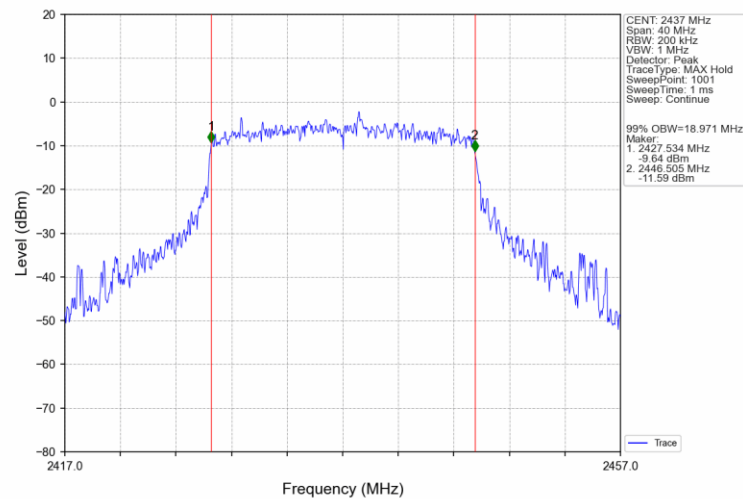
802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



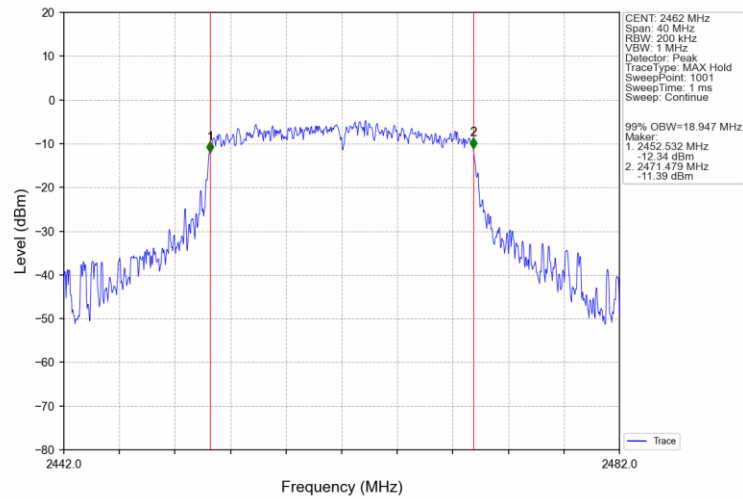
802.11ax(HEW20) LCH 2412MHz SU / Ant1 (SISO) NTNv



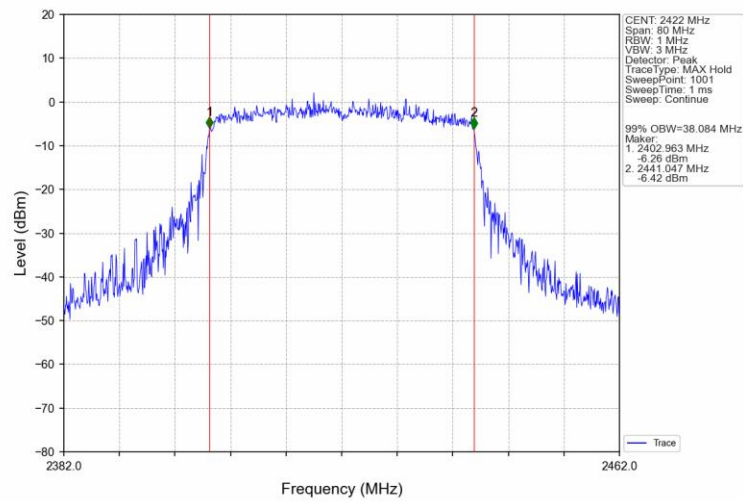
802.11ax(HEW20) MCH 2437MHz SU / Ant1 (SISO) NTNv



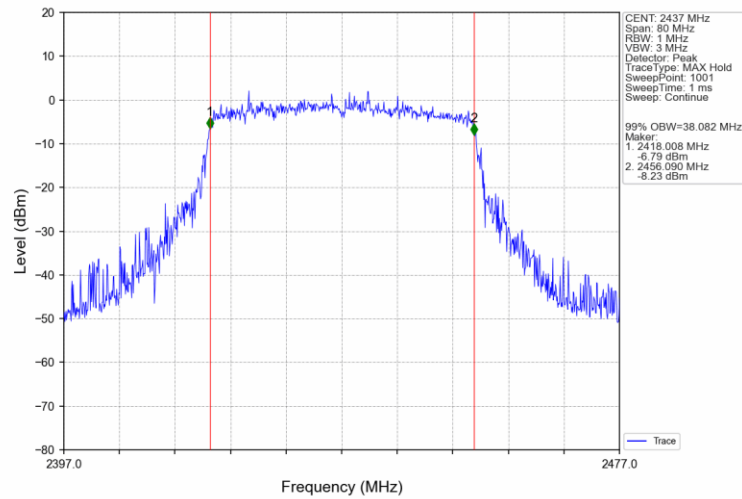
802.11ax(HEW20) HCH 2462MHz SU / Ant1 (SISO) NTN



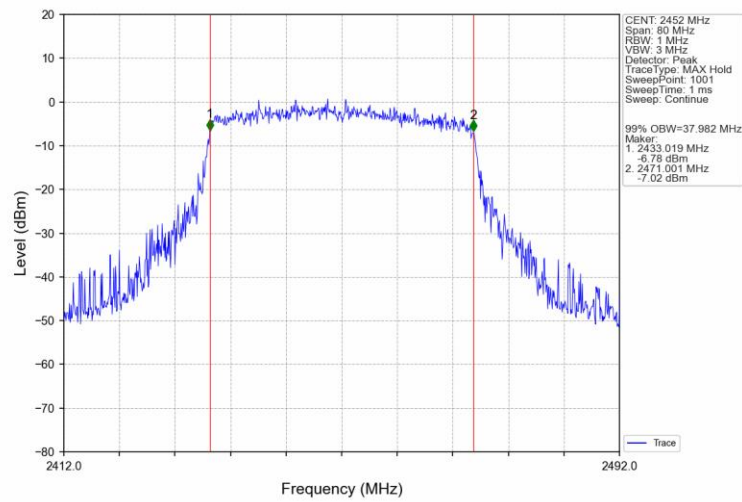
802.11ax(HEW40) LCH 2422MHz SU / Ant1 (SISO) NTN



802.11ax(HEW40) MCH 2437MHz SU / Ant1 (SISO) NTN

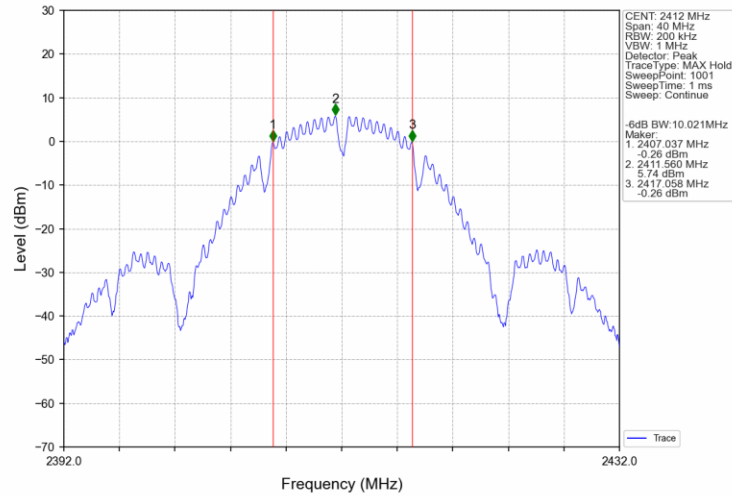


802.11ax(HEW40) HCH 2452MHz SU / Ant1 (SISO) NTN

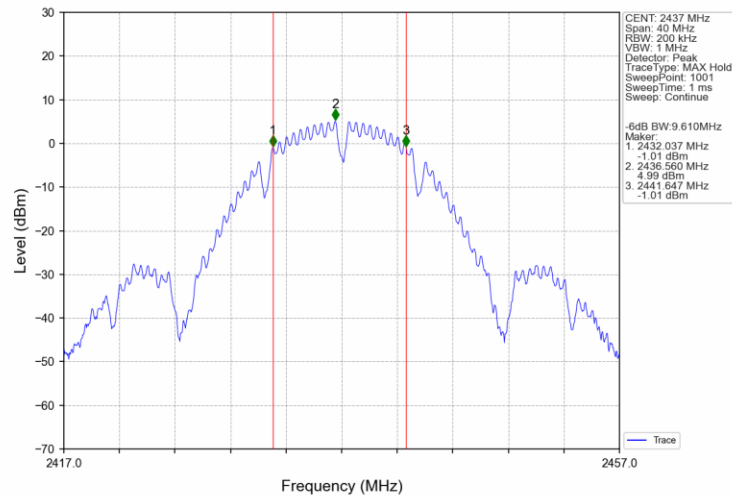


2.2.2 6dB BW

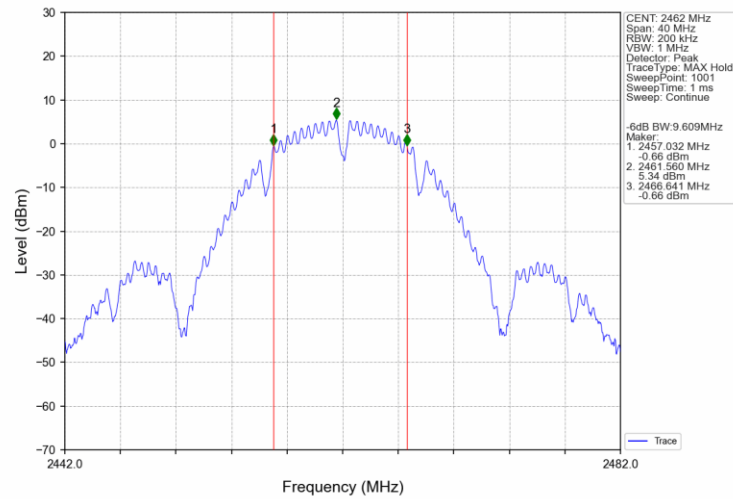
802.11b LCH 2412MHz Ant1 (SISO) NTN



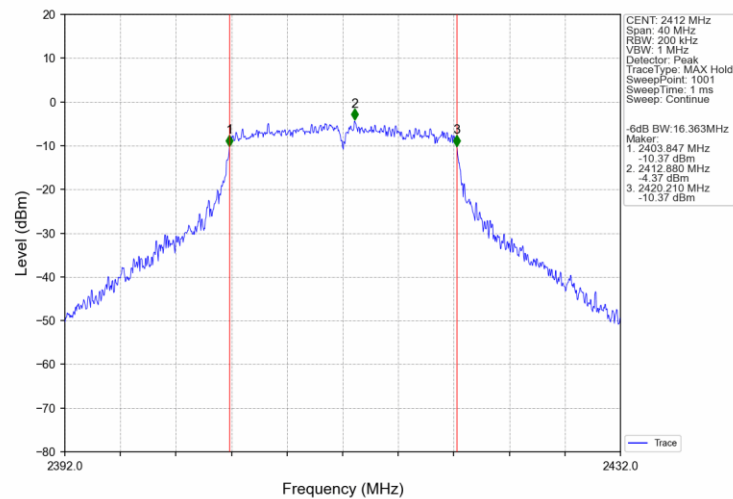
802.11b MCH 2437MHz Ant1 (SISO) NTN



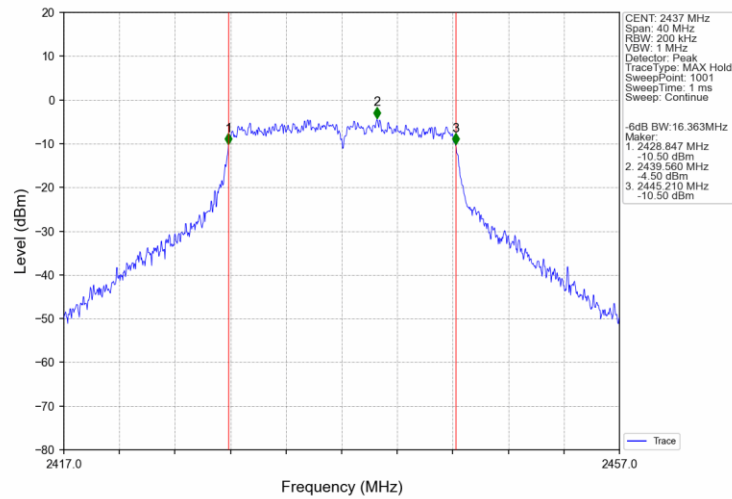
802.11b HCH 2462MHz Ant1 (SISO) NTN



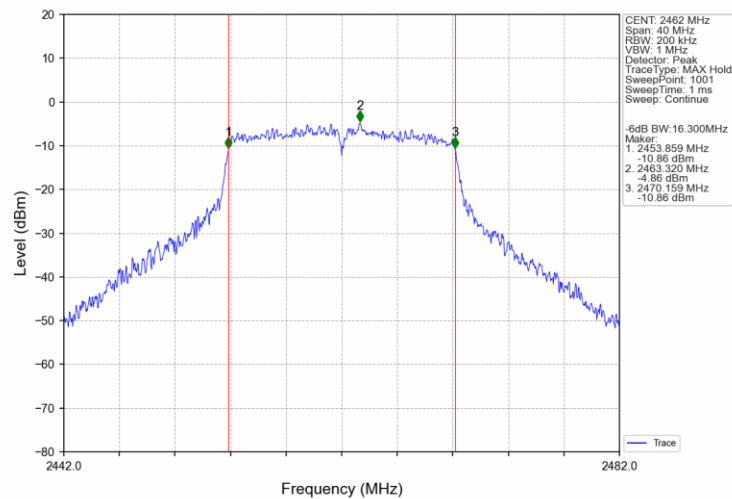
802.11g LCH 2412MHz Ant1 (SISO) NTN



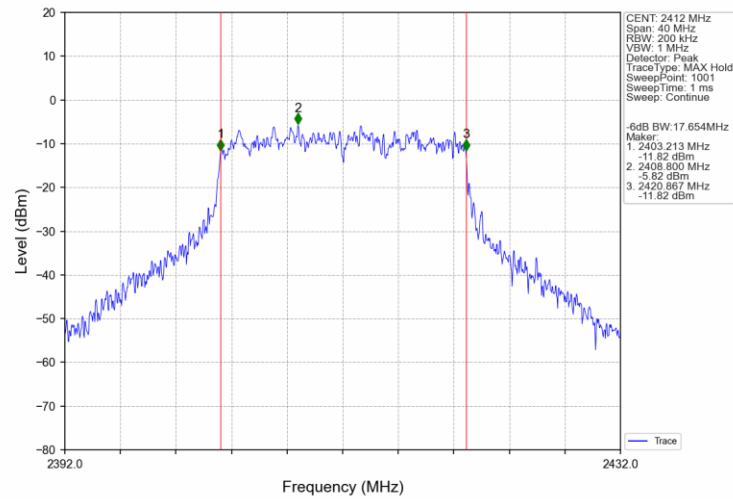
802.11g MCH 2437MHz_Ant1 (SISO) NTNv



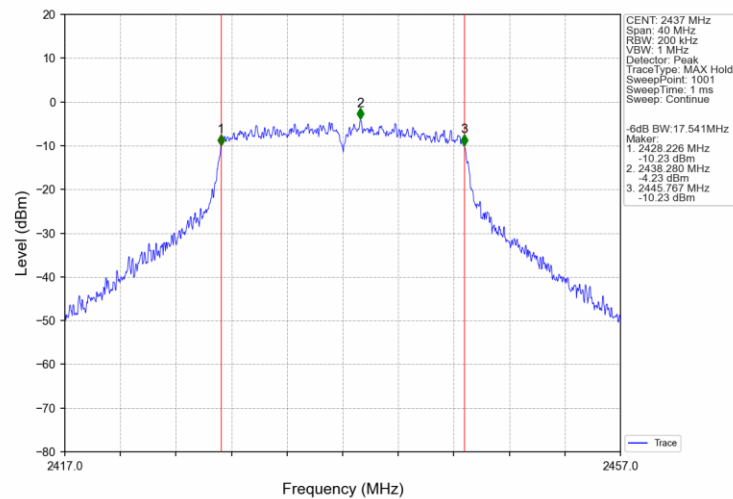
802.11g HCH 2462MHz_Ant1 (SISO) NTNv



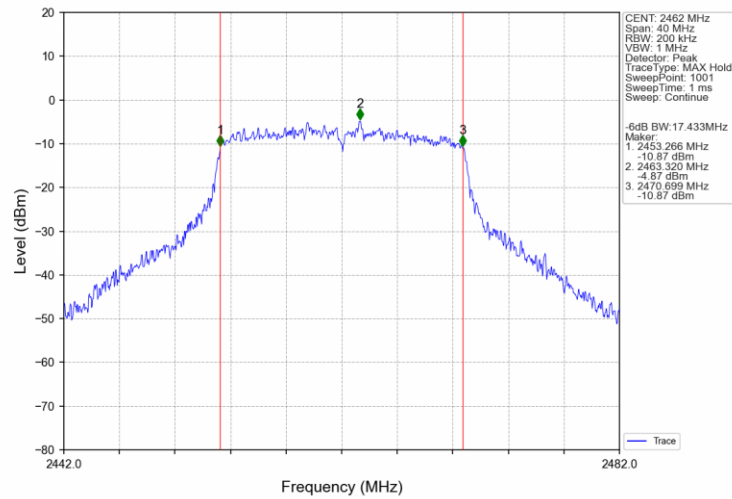
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



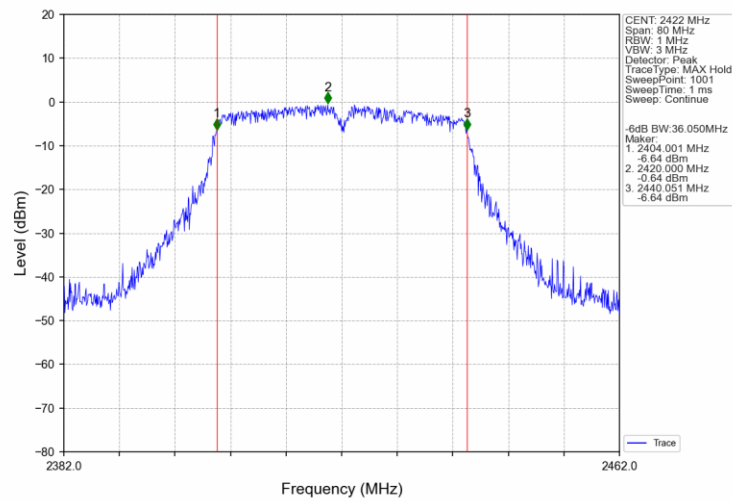
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



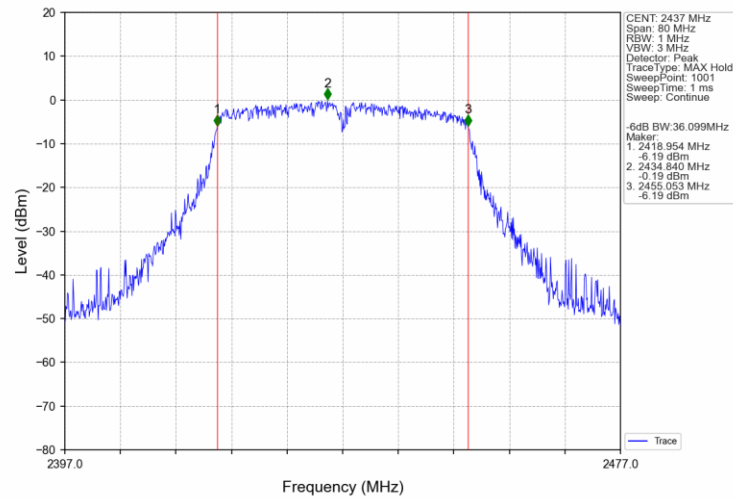
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



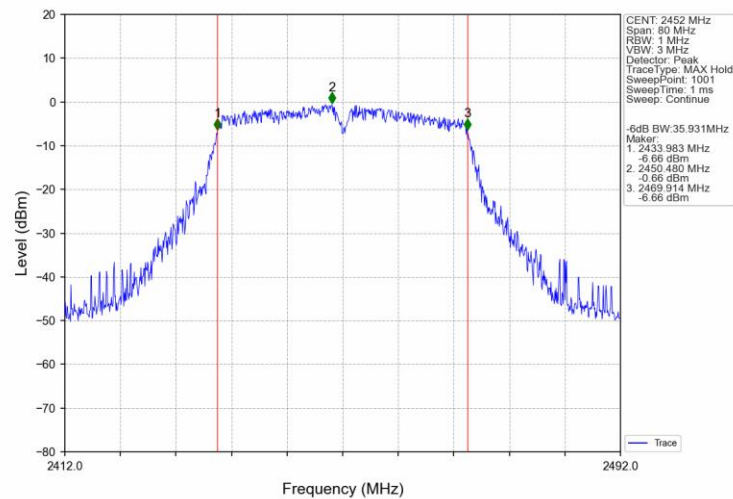
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



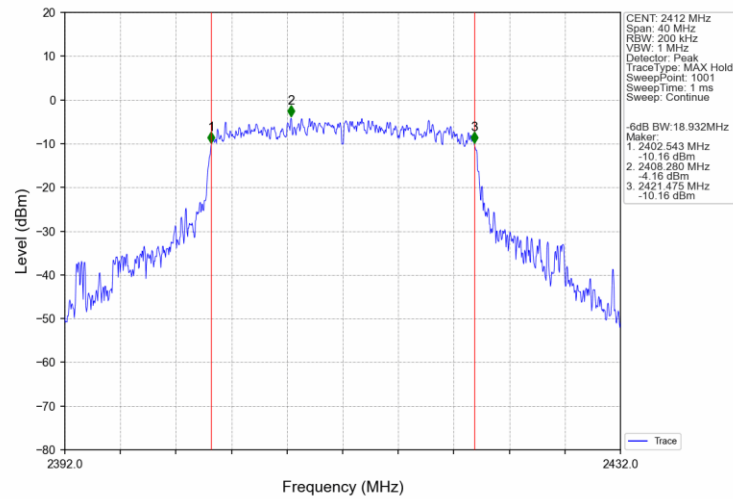
802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTNV



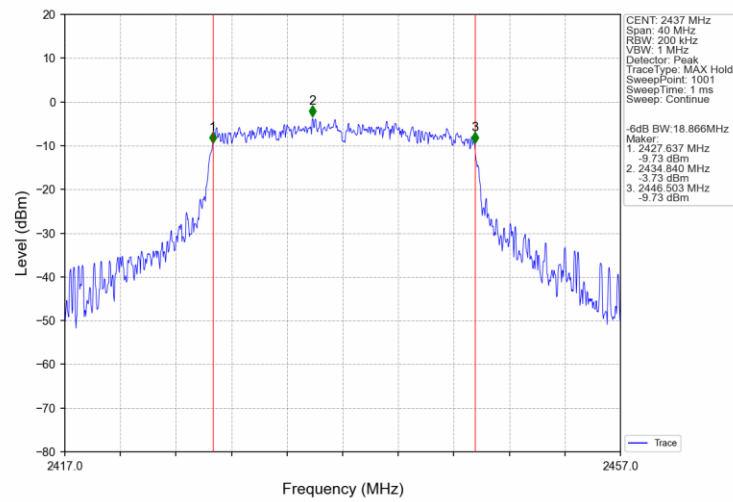
802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTNV



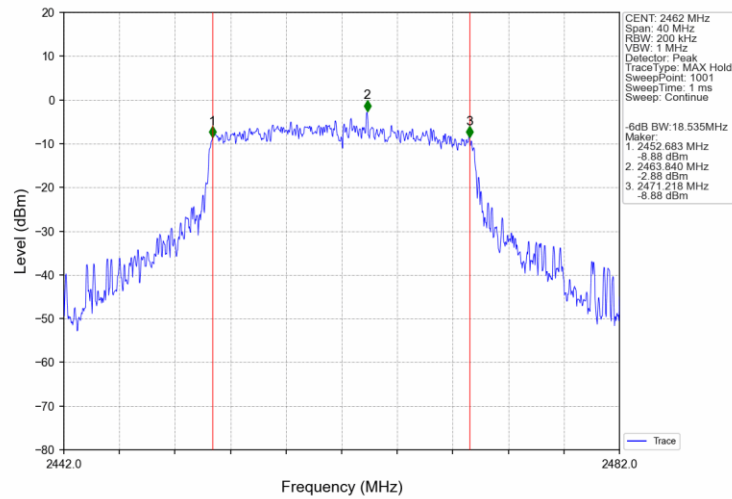
802.11ax(HEW20) LCH 2412MHz SU / Ant1 (SISO) NTNv



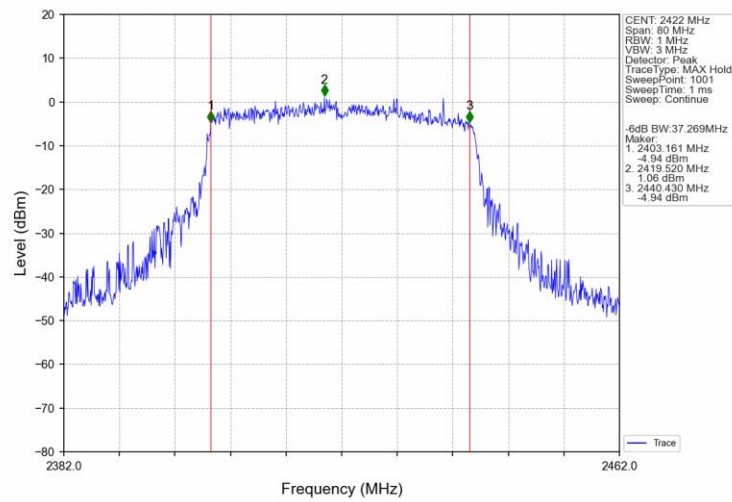
802.11ax(HEW20) MCH 2437MHz SU / Ant1 (SISO) NTNv



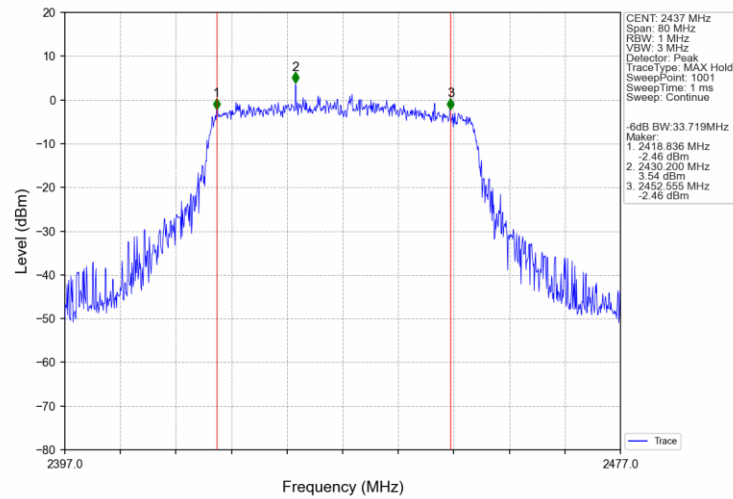
802.11ax(HEW20) HCH 2462MHz SU / Ant1 (SISO) NTNv



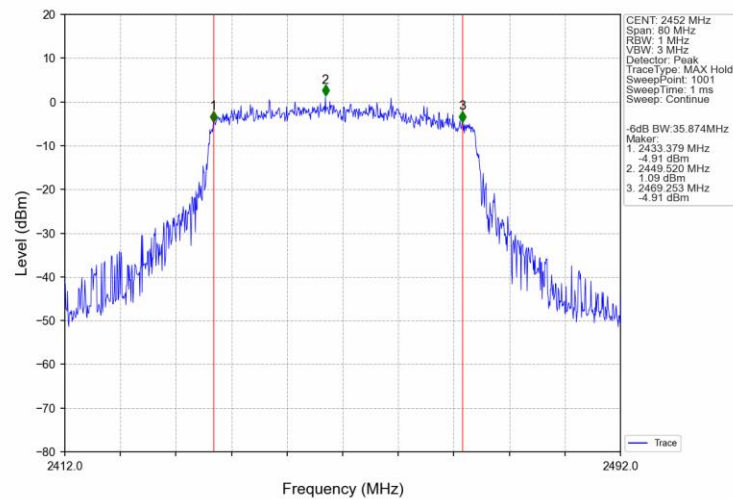
802.11ax(HEW40) LCH 2422MHz SU / Ant1 (SISO) NTNv



802.11ax(HEW40) MCH 2437MHz SU / Ant1 (SISO) NTN



802.11ax(HEW40) HCH 2452MHz SU / Ant1 (SISO) NTN



3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Peak Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	16.82	<=30	Pass
		2437	/	/	15.98	<=30	Pass
		2462	/	/	16.33	<=30	Pass
802.11g	SISO	2412	/	/	13.19	<=30	Pass
		2437	/	/	13.26	<=30	Pass
		2462	/	/	12.41	<=30	Pass
802.11n (HT20)	SISO	2412	/	/	13.08	<=30	Pass
		2437	/	/	13.03	<=30	Pass
		2462	/	/	12.23	<=30	Pass
802.11n (HT40)	SISO	2422	/	/	12.31	<=30	Pass
		2437	/	/	12.68	<=30	Pass
		2452	/	/	12.18	<=30	Pass
802.11ax (HEW20)	SISO	2412	SU	/	13.51	<=30	Pass
		2437	SU	/	13.73	<=30	Pass
		2462	SU	/	12.69	<=30	Pass
802.11ax (HEW40)	SISO	2422	SU	/	12.72	<=30	Pass
		2437	SU	/	12.72	<=30	Pass
		2452	SU	/	12.37	<=30	Pass

4. Maximum Power Spectral Density

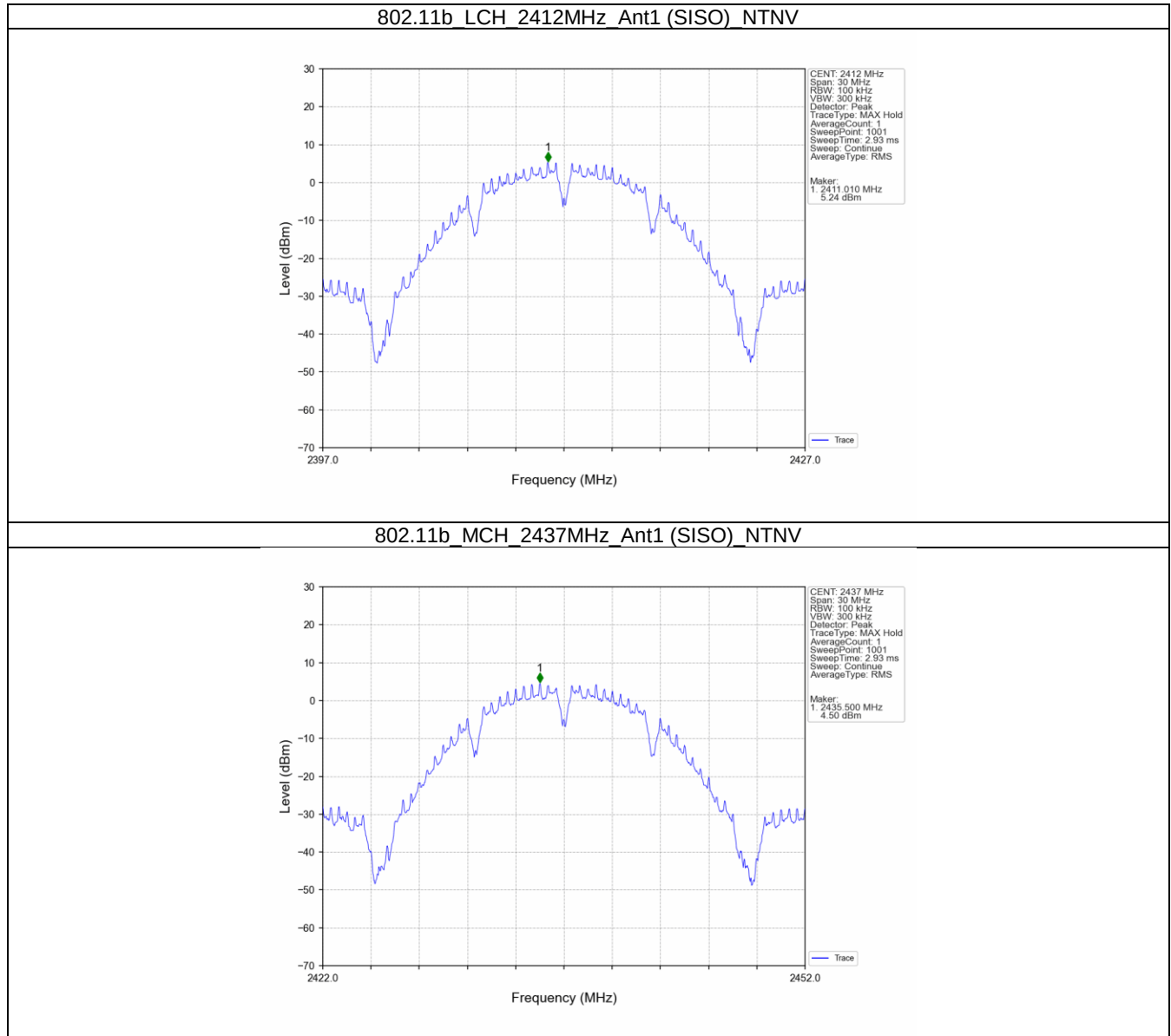
4.1 Test Result

4.1.1 PSD

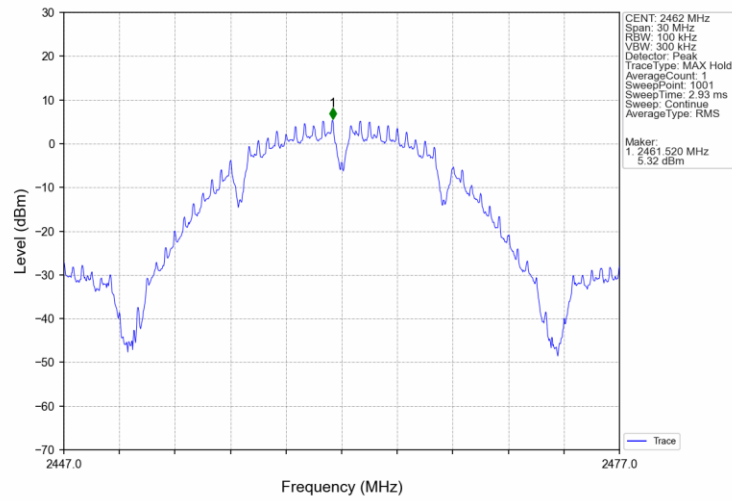
Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum PSD (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	5.24	<=8	Pass
		2437	/	/	4.50	<=8	Pass
		2462	/	/	5.32	<=8	Pass
802.11g	SISO	2412	/	/	-5.48	<=8	Pass
		2437	/	/	-5.63	<=8	Pass
		2462	/	/	-6.37	<=8	Pass
802.11n (HT20)	SISO	2412	/	/	-5.76	<=8	Pass
		2437	/	/	-5.22	<=8	Pass
		2462	/	/	-6.68	<=8	Pass
802.11n (HT40)	SISO	2422	/	/	-8.64	<=8	Pass
		2437	/	/	-8.71	<=8	Pass
		2452	/	/	-8.67	<=8	Pass
802.11ax (HEW20)	SISO	2412	SU	/	-5.13	<=8	Pass
		2437	SU	/	-5.34	<=8	Pass
		2462	SU	/	-7.22	<=8	Pass
802.11ax (HEW40)	SISO	2422	SU	/	-8.23	<=8	Pass
		2437	SU	/	-8.92	<=8	Pass
		2452	SU	/	-8.89	<=8	Pass

4.2 Test Graph

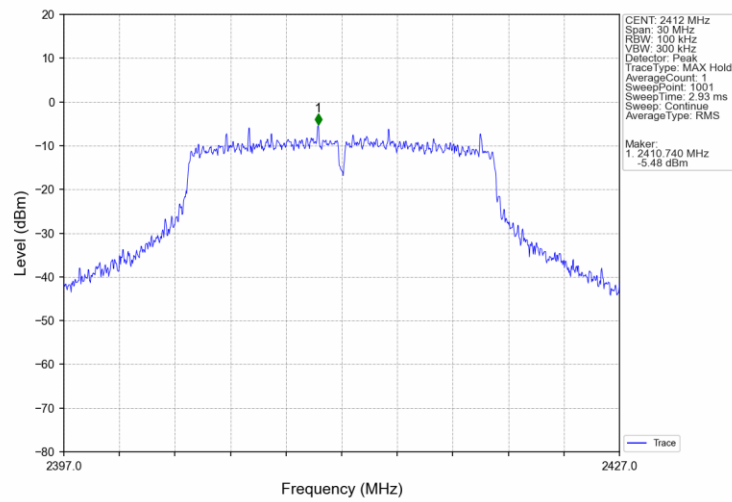
4.2.1 PSD



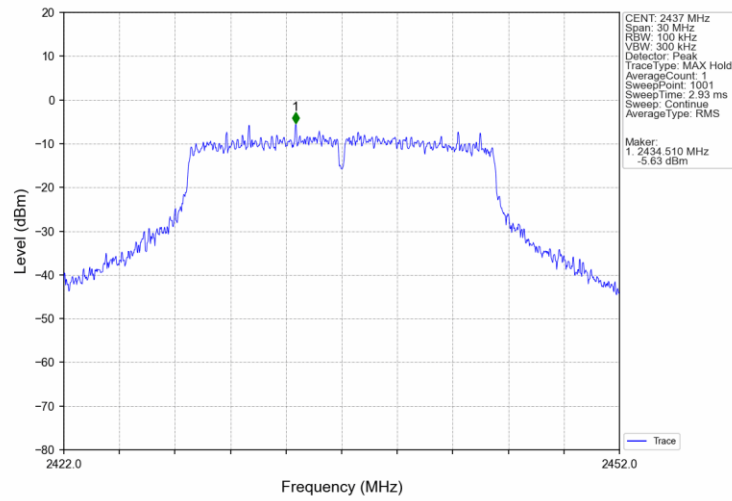
802.11b HCH 2462MHz_Ant1 (SISO) NTN



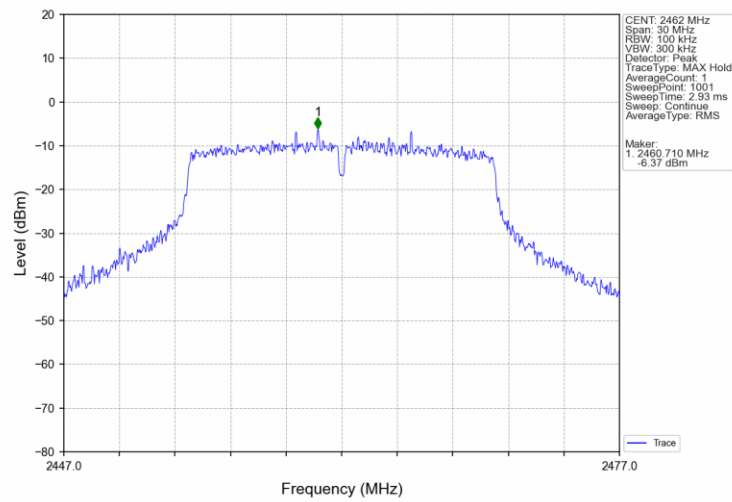
802.11g LCH 2412MHz_Ant1 (SISO) NTN



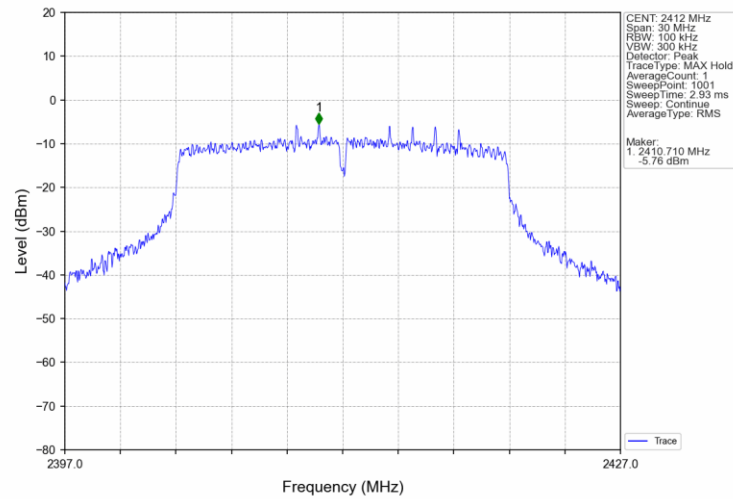
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



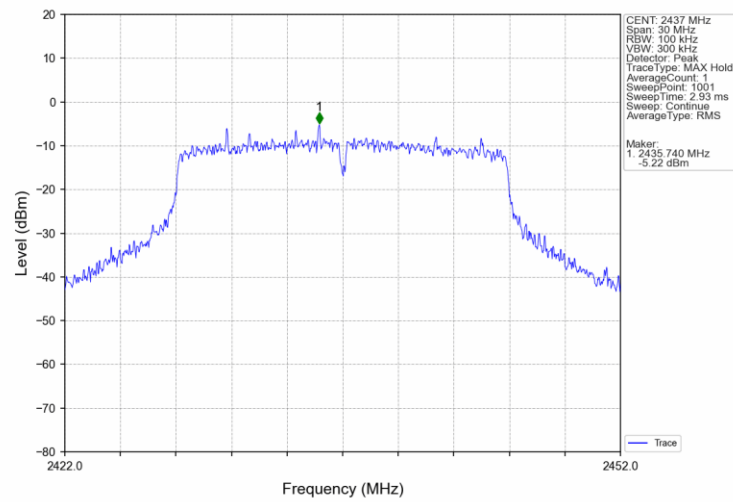
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



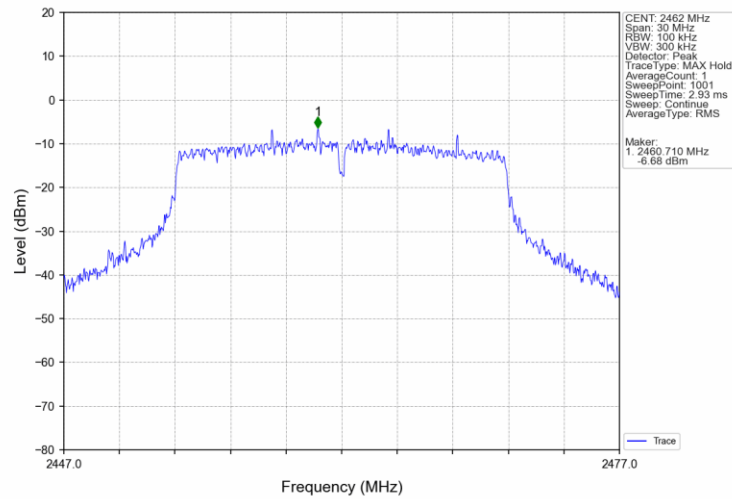
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



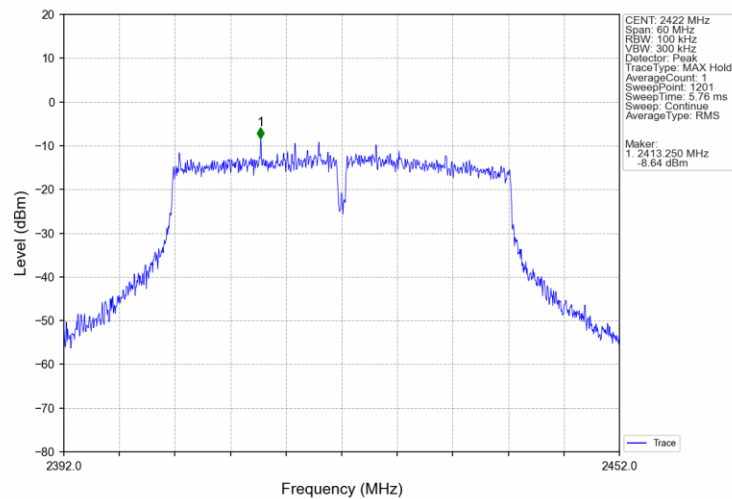
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



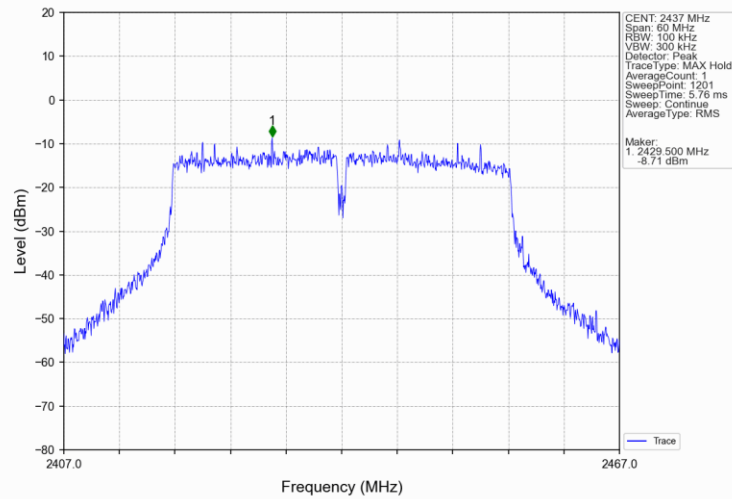
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



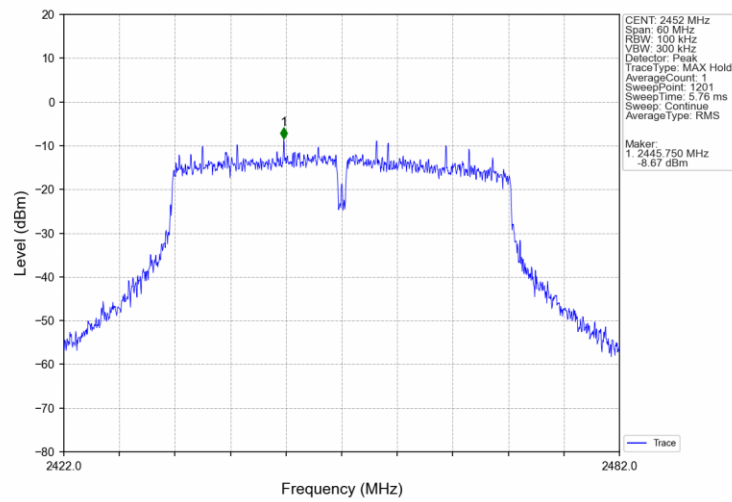
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



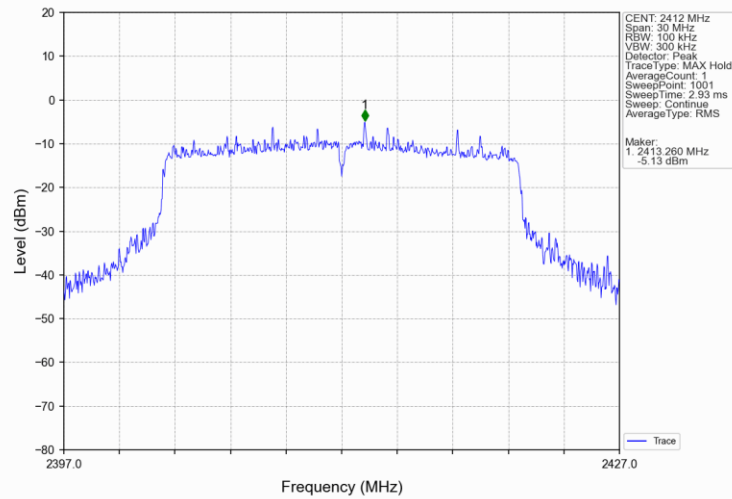
802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



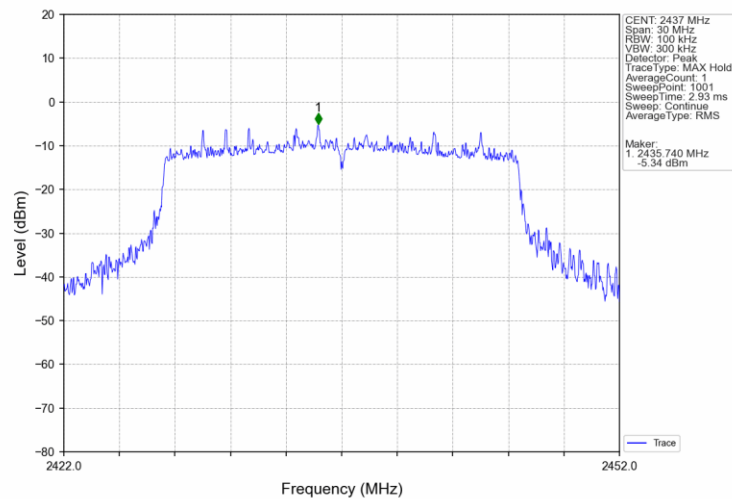
802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



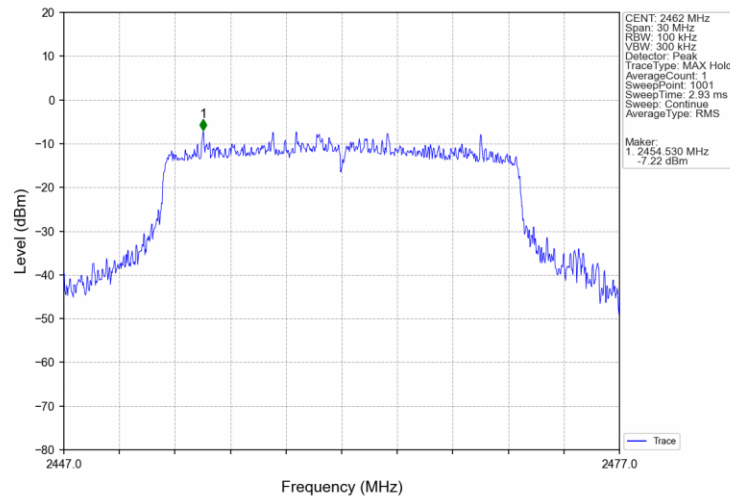
802.11ax(HEW20) LCH 2412MHz SU / Ant1 (SISO) NTN



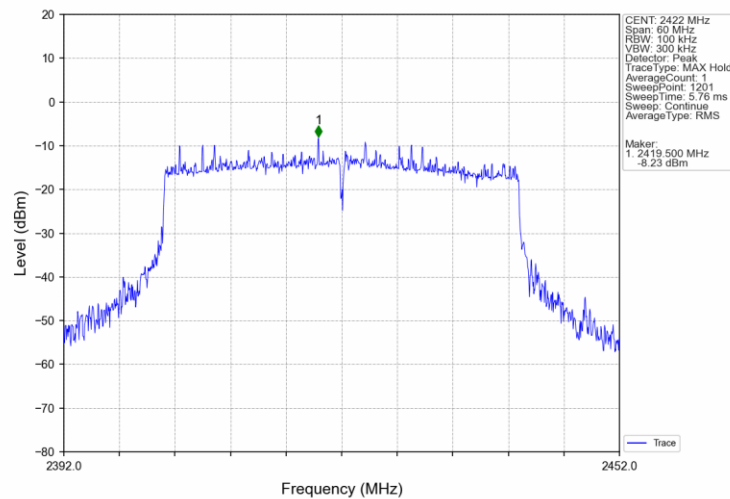
802.11ax(HEW20) MCH 2437MHz SU / Ant1 (SISO) NTN



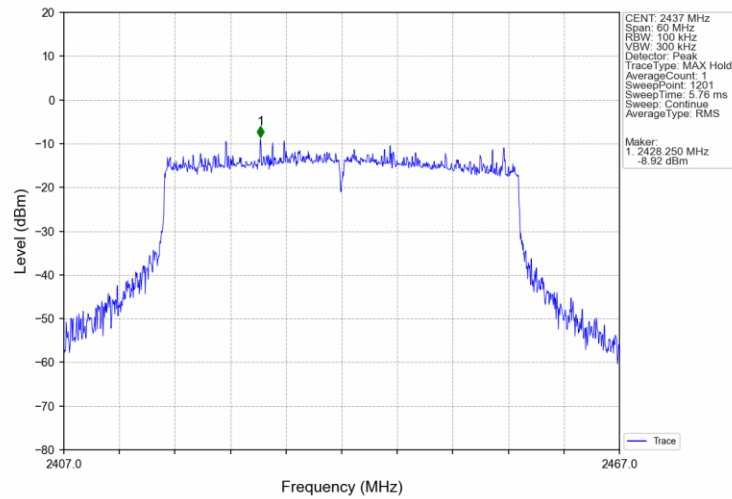
802.11ax(HEW20) HCH 2462MHz SU / Ant1 (SISO) NTNv



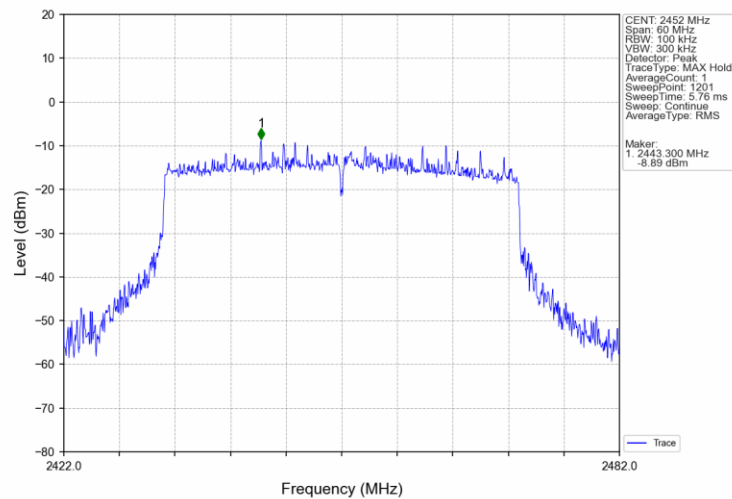
802.11ax(HEW40) LCH 2422MHz SU / Ant1 (SISO) NTNv



802.11ax(HEW40) MCH 2437MHz SU / Ant1 (SISO) NTNv



802.11ax(HEW40) HCH 2452MHz SU / Ant1 (SISO) NTNv



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	5.74
		2437	/	/	1	4.93
		2462	/	/	1	5.30
802.11g	SISO	2412	/	/	1	-5.56
		2437	/	/	1	-6.96
		2462	/	/	1	-6.04
802.11n (HT20)	SISO	2412	/	/	1	-6.74
		2437	/	/	1	-5.16
		2462	/	/	1	-6.29
802.11n (HT40)	SISO	2422	/	/	1	-8.33
		2437	/	/	1	-8.29
		2452	/	/	1	-8.53
802.11ax (HEW20)	SISO	2412	SU	/	1	-5.82
		2437	SU	/	1	-4.82
		2462	SU	/	1	-6.42
802.11ax (HEW40)	SISO	2422	SU	/	1	-8.80
		2437	SU	/	1	-8.50
		2452	SU	/	1	-8.29

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	5.74	-14.26	Pass
		2437	/	/	1	4.93	-15.07	Pass
		2462	/	/	1	5.30	-14.70	Pass
802.11g	SISO	2412	/	/	1	-5.56	-25.56	Pass
		2437	/	/	1	-6.96	-26.96	Pass
		2462	/	/	1	-6.04	-26.04	Pass
802.11n (HT20)	SISO	2412	/	/	1	-6.74	-26.74	Pass
		2437	/	/	1	-5.16	-25.16	Pass
		2462	/	/	1	-6.29	-26.29	Pass
802.11n (HT40)	SISO	2422	/	/	1	-8.33	-28.33	Pass
		2437	/	/	1	-8.29	-28.29	Pass
		2452	/	/	1	-8.53	-28.53	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	-5.82	-25.82	Pass
		2437	SU	/	1	-4.82	-24.82	Pass
		2462	SU	/	1	-6.42	-26.42	Pass
802.11ax (HEW40)	SISO	2422	SU	/	1	-8.80	-28.80	Pass
		2437	SU	/	1	-8.50	-28.50	Pass
		2452	SU	/	1	-8.29	-28.29	Pass

5.2 Test Graph

5.2.1 Ref

