

Appendix RF test data for WIFI2.4G

1. Duty Cycle

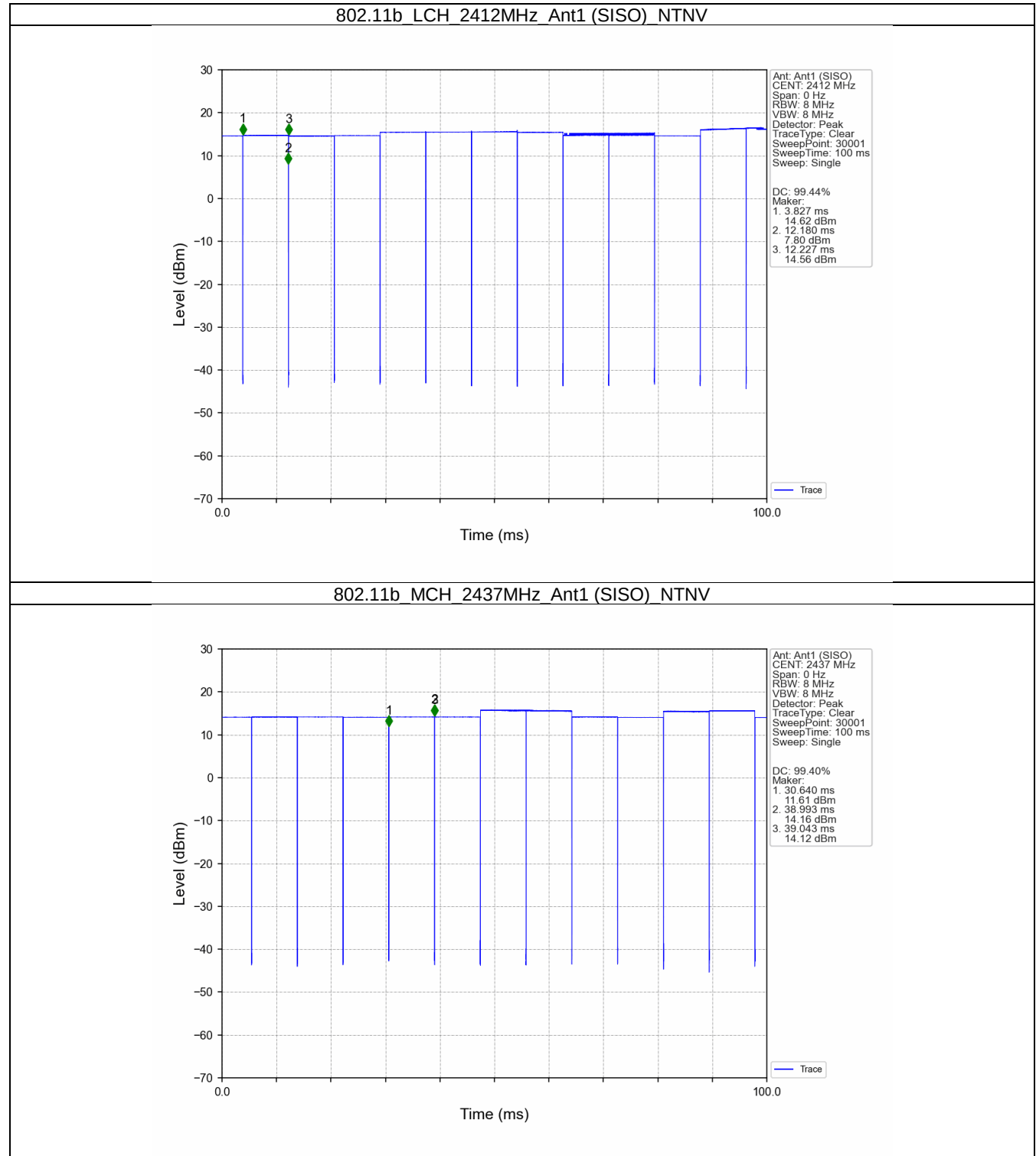
1.1 Test Result

1.1.1 Ant1

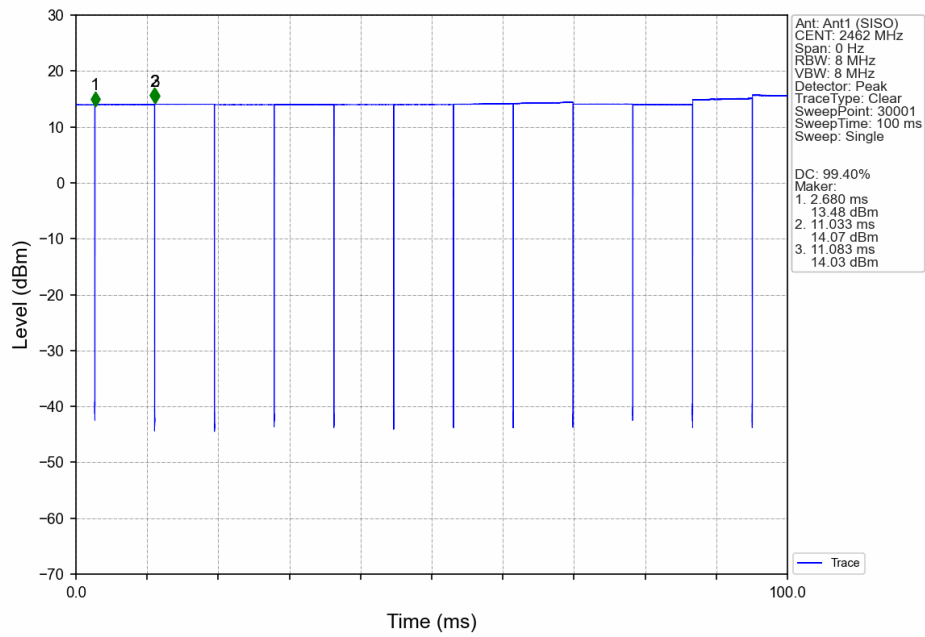
Ant1							
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	8.353	8.400	99.44	0.02	0.00
		2437	8.353	8.403	99.40	0.03	0.04
		2462	8.353	8.403	99.40	0.03	0.08
802.11g	SISO	2412	2.088	2.136	97.75	0.10	0.10
		2437	2.088	2.136	97.75	0.10	0.07
		2462	2.089	2.137	97.75	0.10	0.10
802.11n (HT20)	SISO	2412	3.976	4.024	98.81	0.05	0.03
		2437	3.977	4.026	98.78	0.05	0.07
		2462	3.976	4.025	98.78	0.05	0.10
802.11n (HT40)	SISO	2422	3.972	4.021	98.78	0.05	0.07
		2437	3.972	4.021	98.78	0.05	0.07
		2452	3.972	4.021	98.78	0.05	0.07

1.2 Test Graph

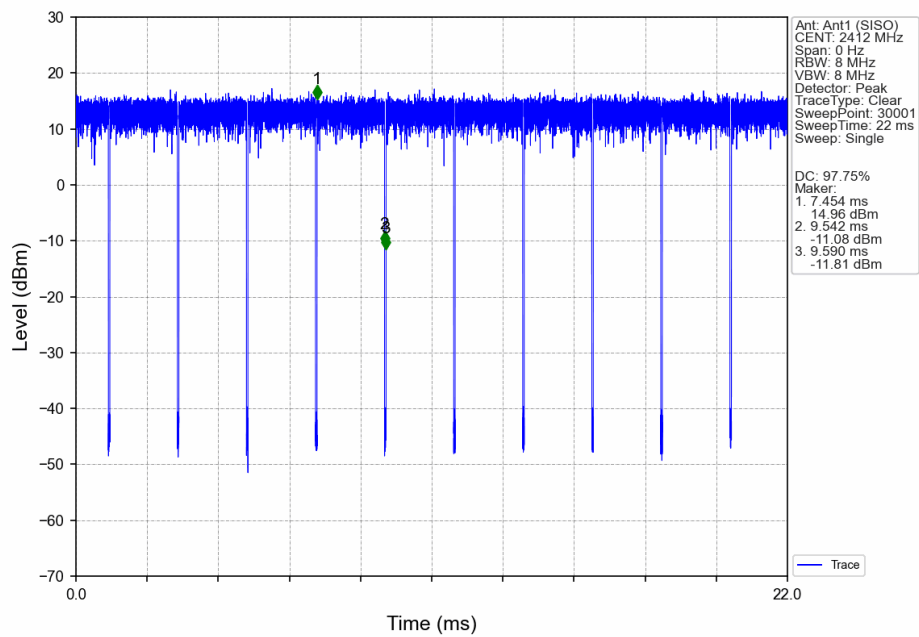
1.2.1 Ant1



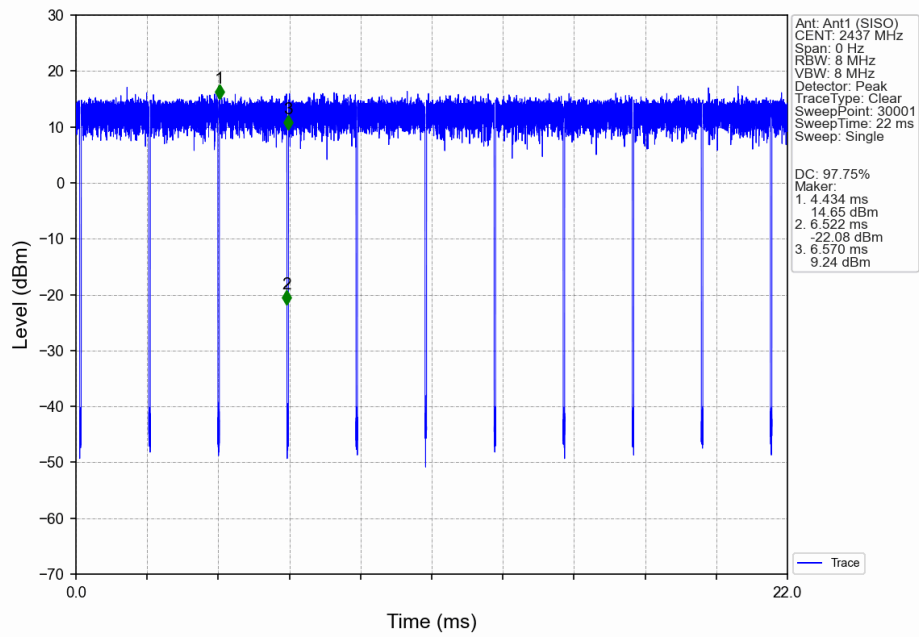
802.11b HCH 2462MHz Ant1 (SISO) NTN



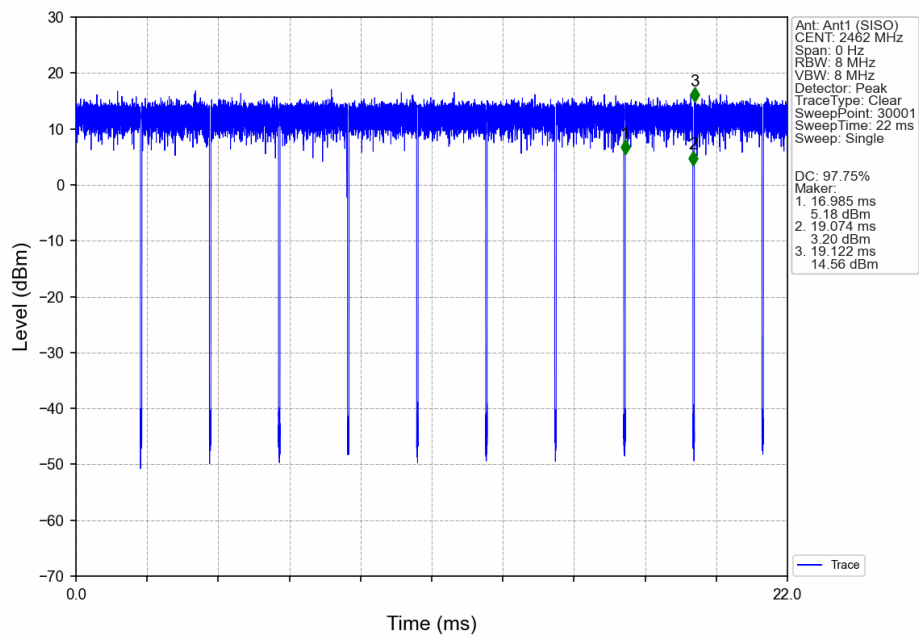
802.11g LCH 2412MHz Ant1 (SISO) NTN



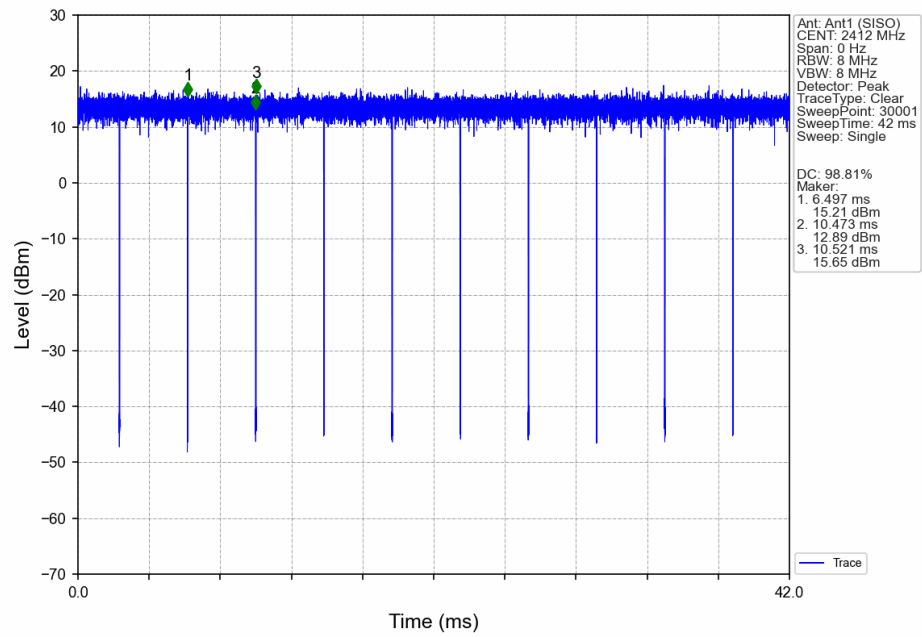
802.11g MCH 2437MHz Ant1 (SISO) NTNV



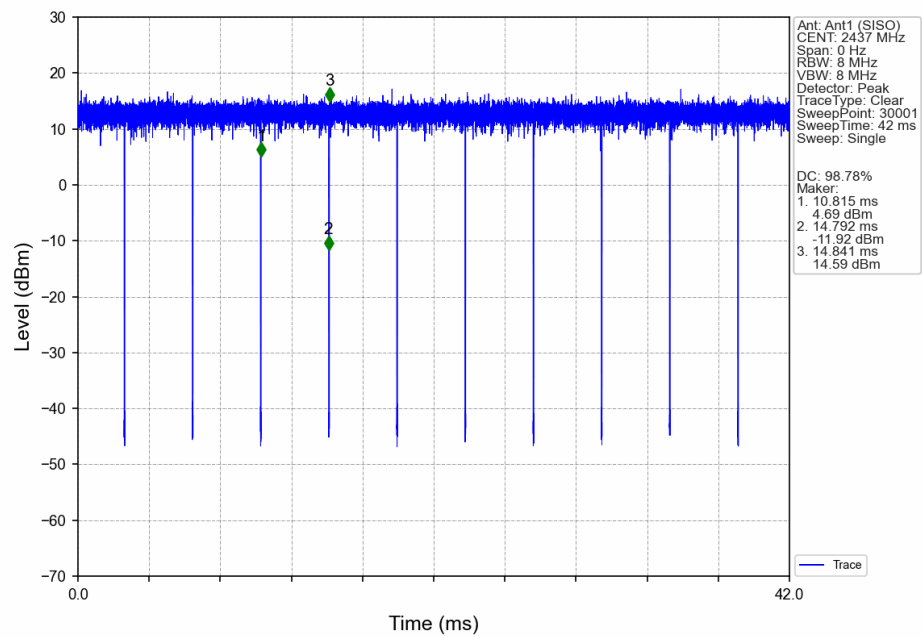
802.11g HCH 2462MHz Ant1 (SISO) NTNV



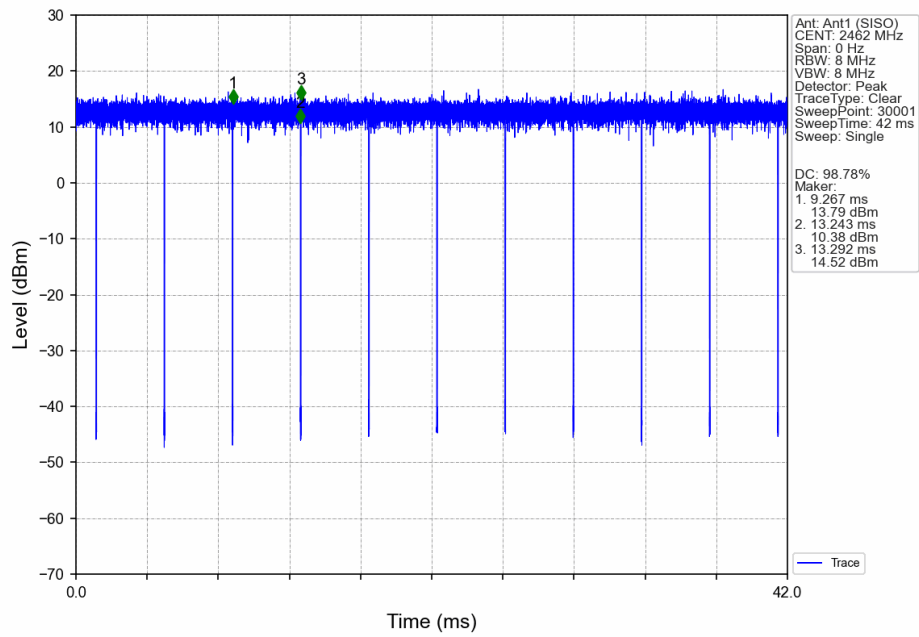
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



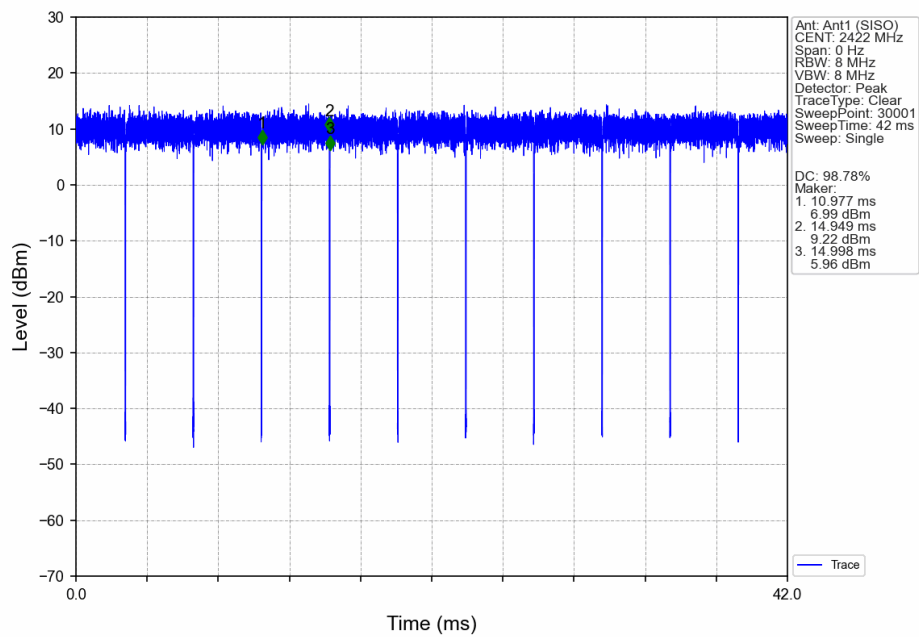
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



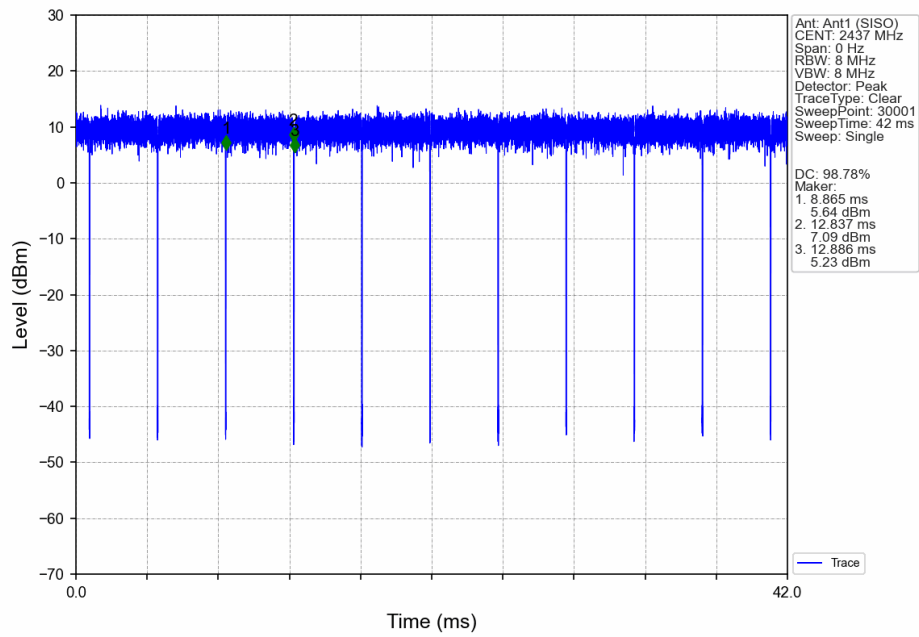
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



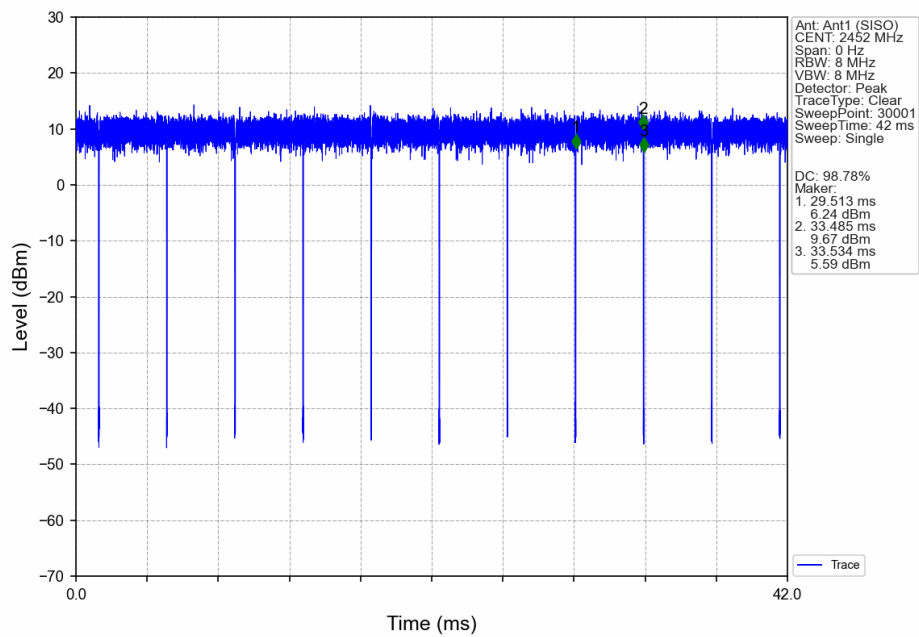
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



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



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



2. Bandwidth

2.1 Test Result

2.1.1 OBW

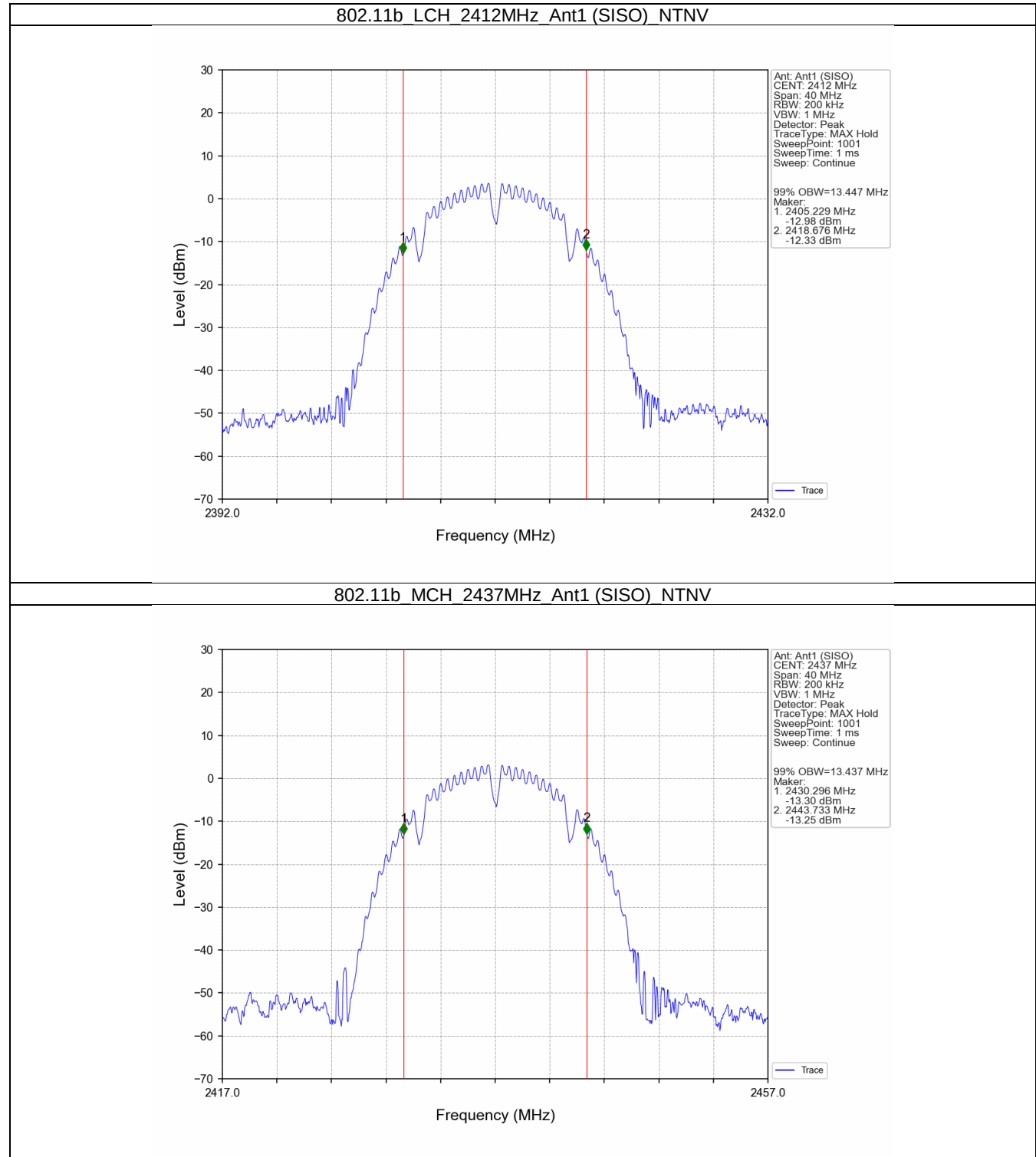
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	13.447	/	Pass
		2437	1	13.437	/	Pass
		2462	1	13.482	/	Pass
802.11g	SISO	2412	1	16.729	/	Pass
		2437	1	16.766	/	Pass
		2462	1	16.800	/	Pass
802.11n (HT20)	SISO	2412	1	17.795	/	Pass
		2437	1	17.825	/	Pass
		2462	1	17.855	/	Pass
802.11n (HT40)	SISO	2422	1	36.368	/	Pass
		2437	1	36.483	/	Pass
		2452	1	36.440	/	Pass

2.1.2 6dB BW

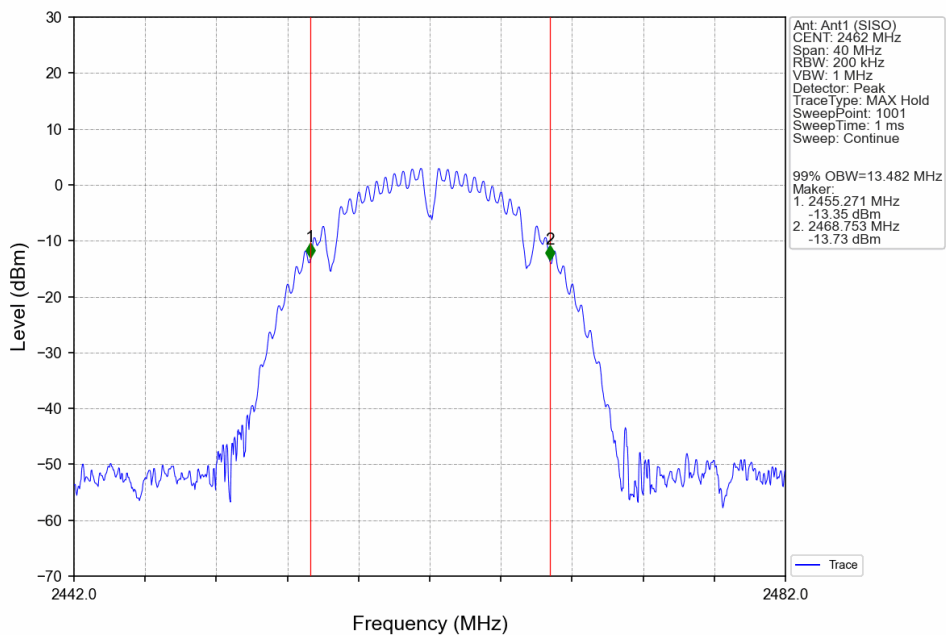
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.130	≥ 0.5	Pass
		2437	1	9.138	≥ 0.5	Pass
		2462	1	9.137	≥ 0.5	Pass
802.11g	SISO	2412	1	16.176	≥ 0.5	Pass
		2437	1	16.215	≥ 0.5	Pass
		2462	1	16.242	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.194	≥ 0.5	Pass
		2437	1	17.291	≥ 0.5	Pass
		2462	1	17.337	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	35.886	≥ 0.5	Pass
		2437	1	35.947	≥ 0.5	Pass
		2452	1	35.757	≥ 0.5	Pass

2.2 Test Graph

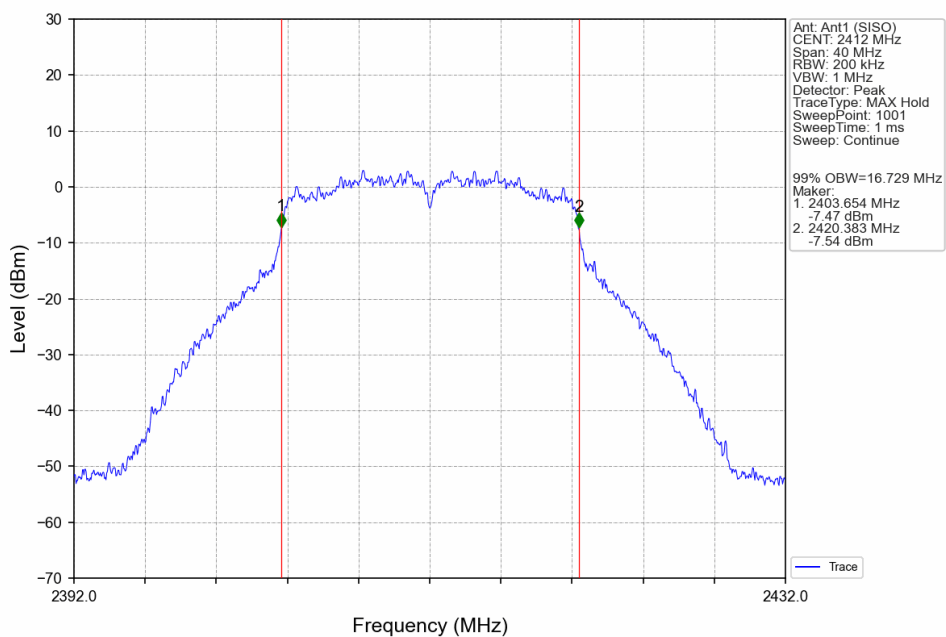
2.2.1 OBW



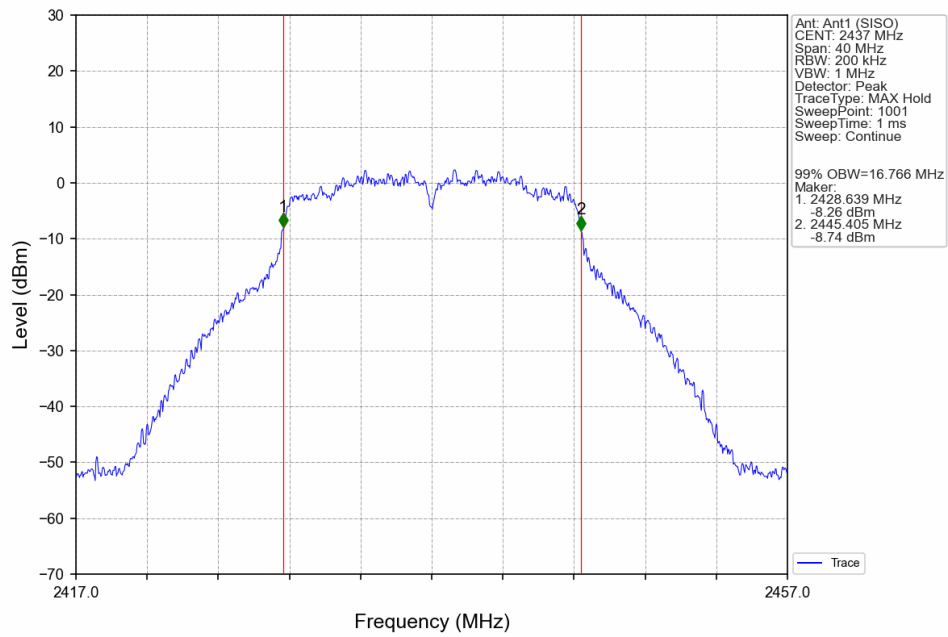
802.11b HCH 2462MHz Ant1 (SISO) NTNV



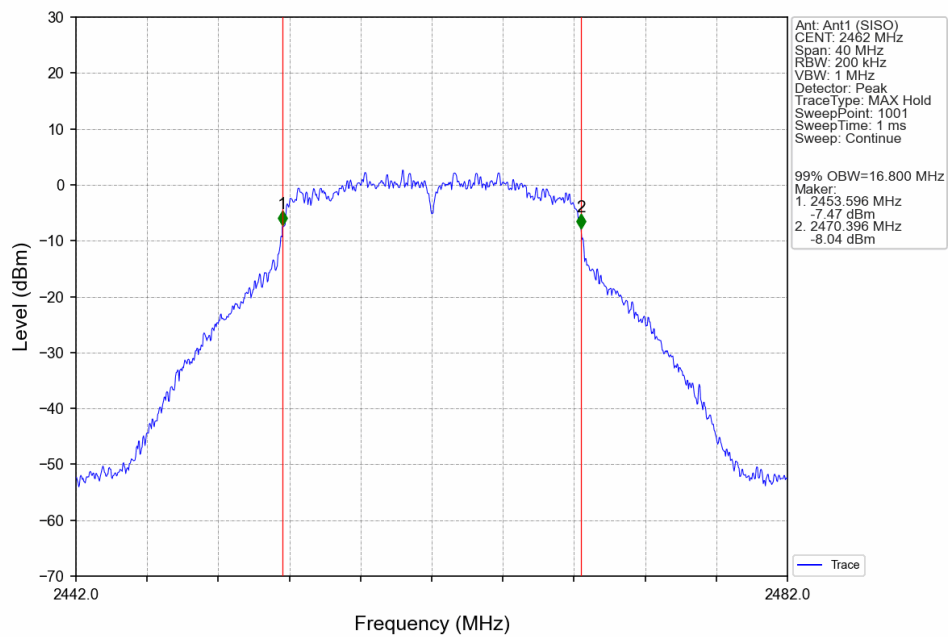
802.11g LCH 2412MHz Ant1 (SISO) NTNV



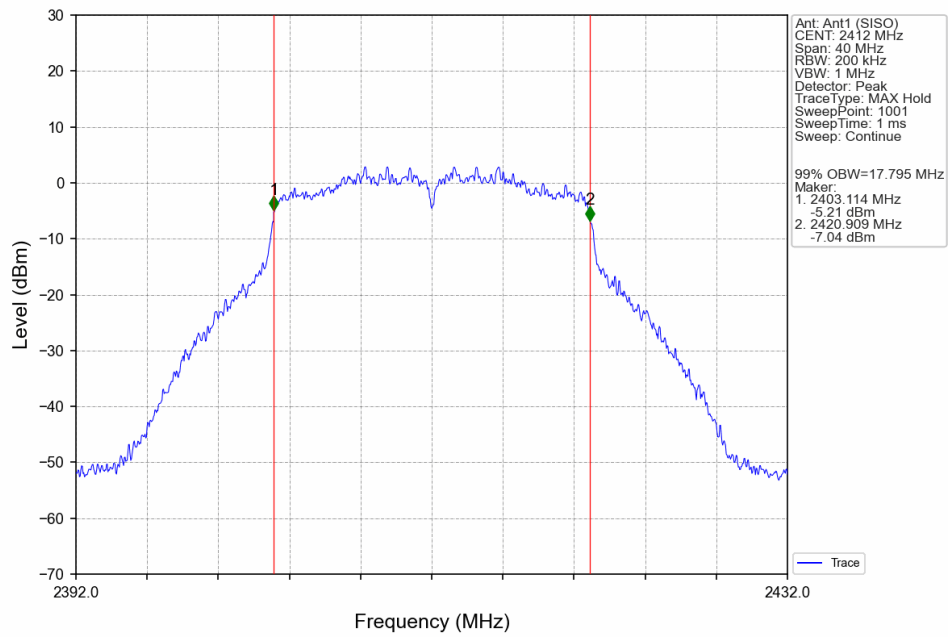
802.11g MCH 2437MHz Ant1 (SISO) NTNv



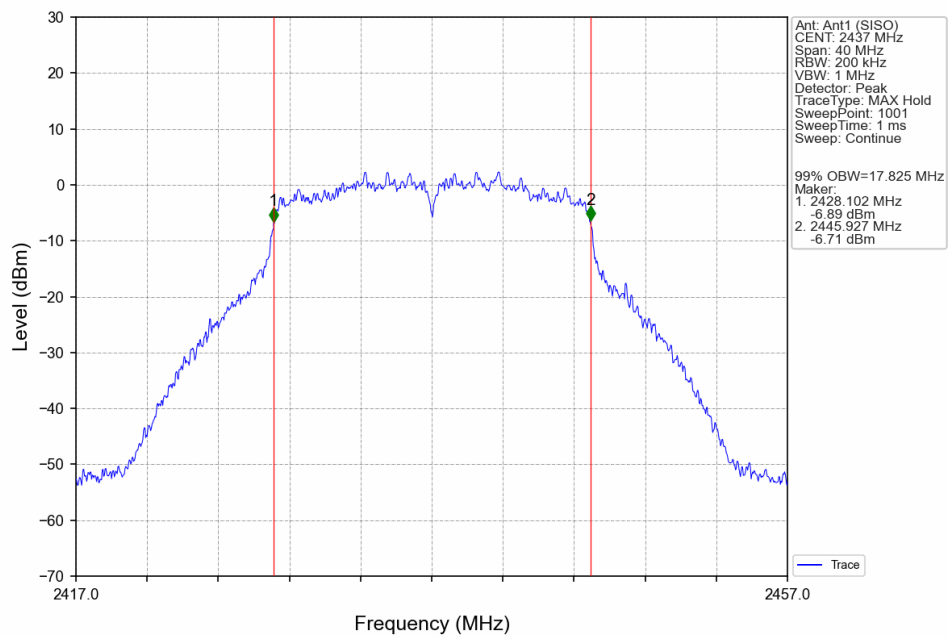
802.11g HCH 2462MHz Ant1 (SISO) NTNv



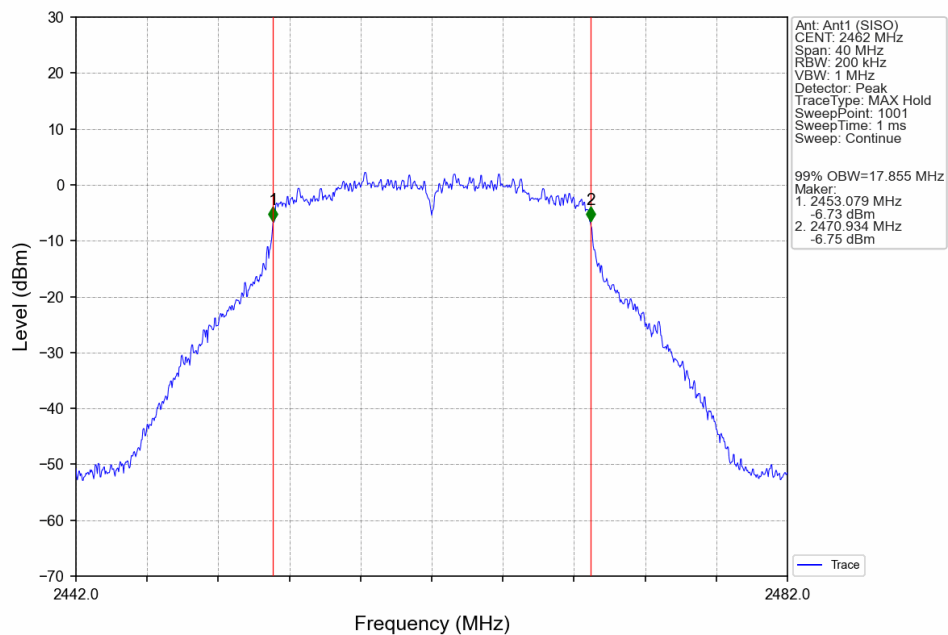
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



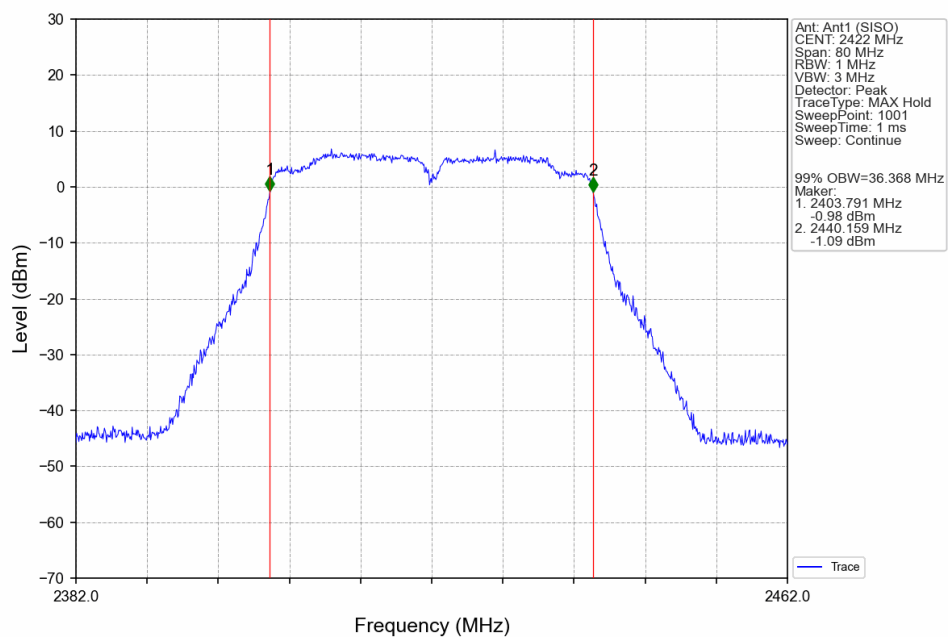
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



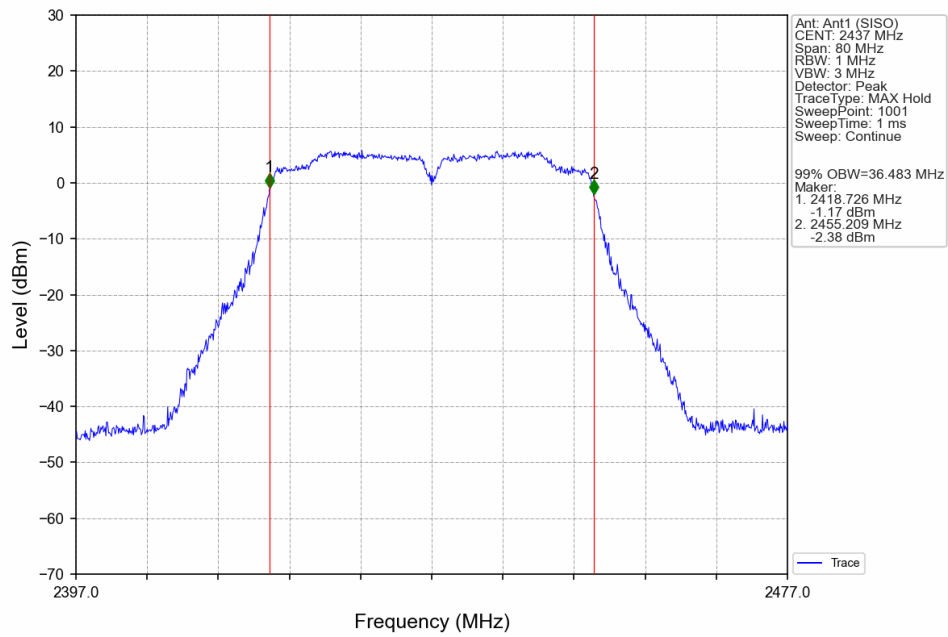
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTV



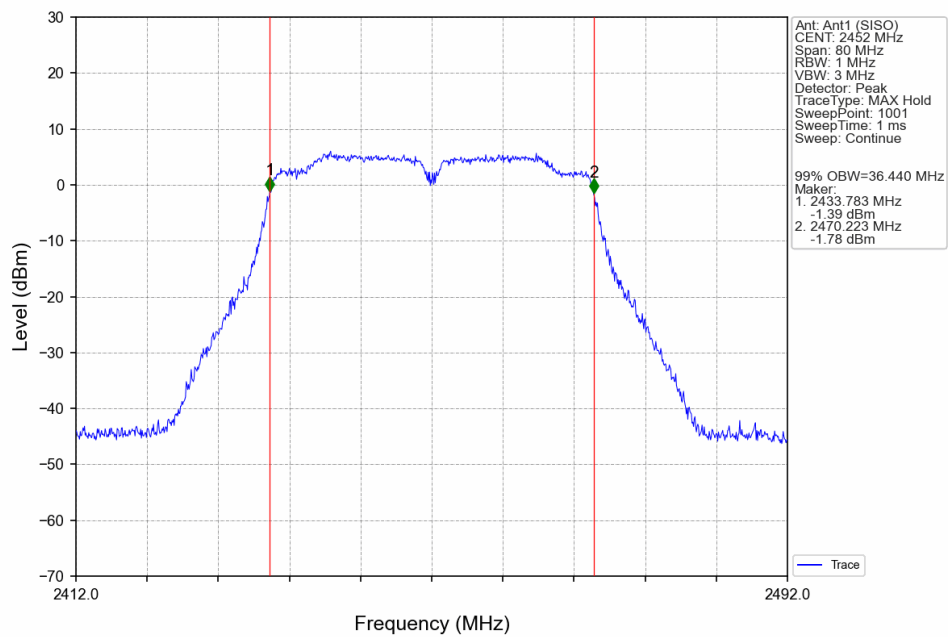
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV



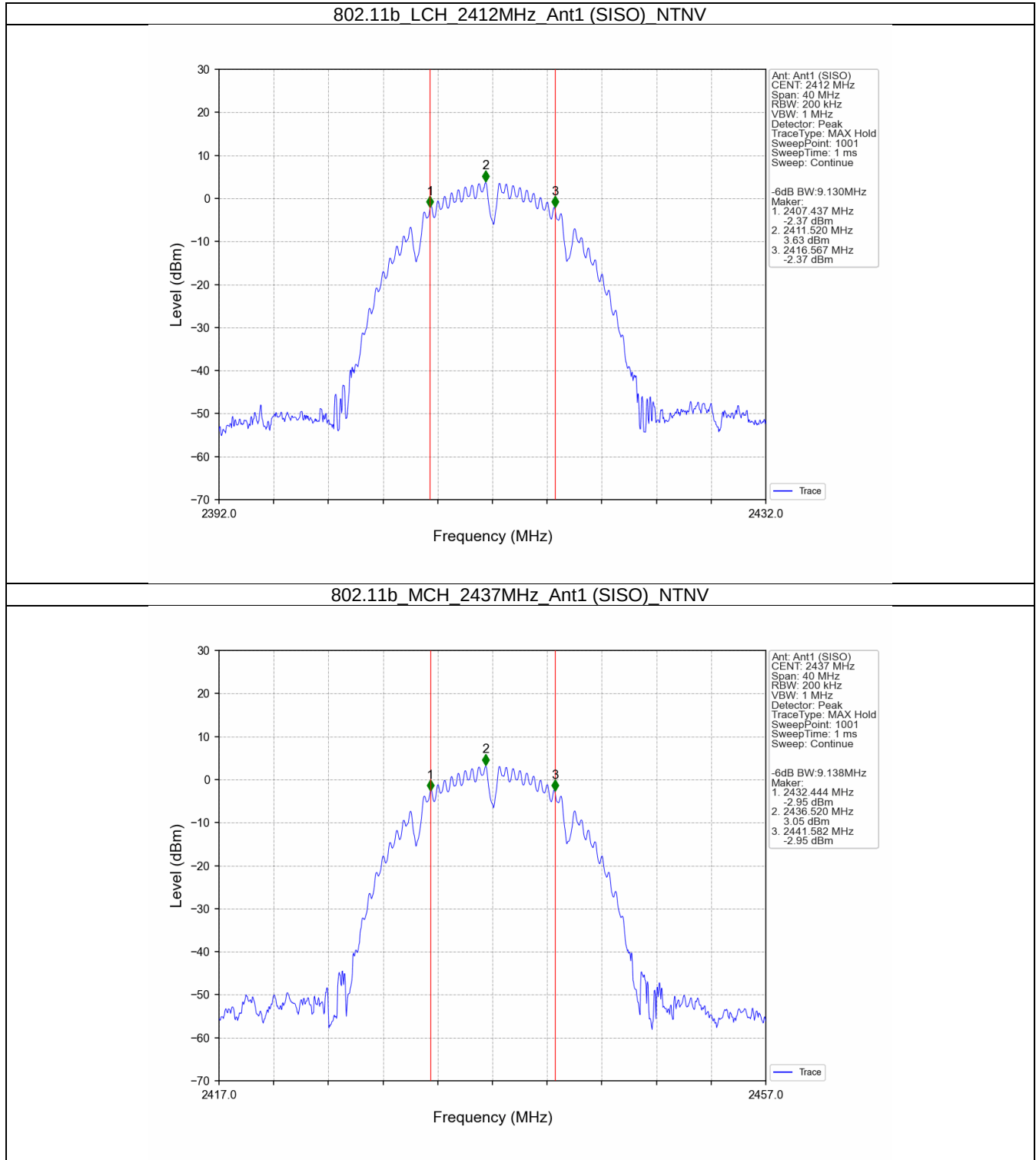
802.11n(HT40) MCH 2437MHz Ant1 (SISO) NTNV



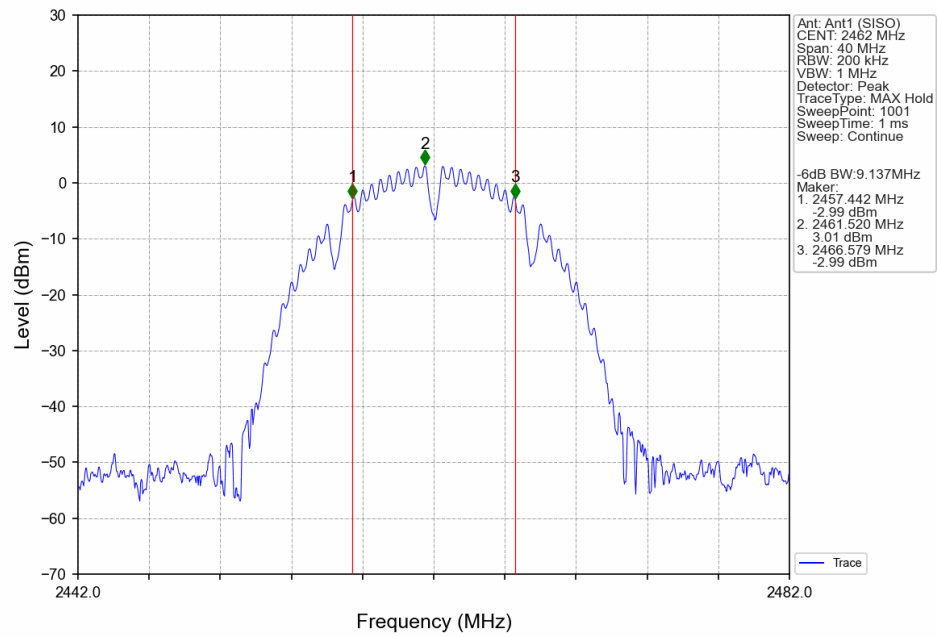
802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTNV



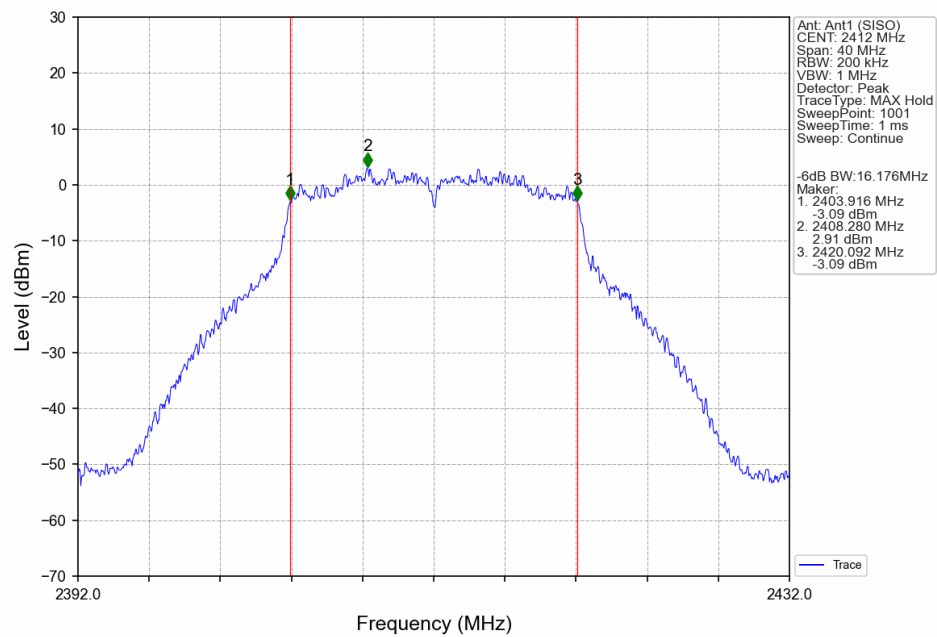
2.2.2 6dB BW



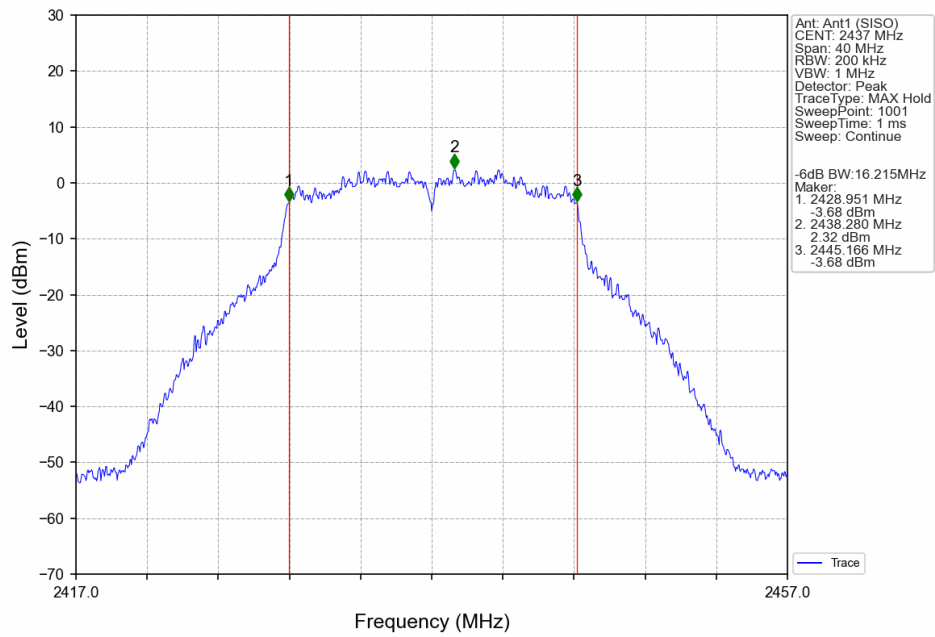
802.11b HCH 2462MHz Ant1 (SISO) NTNV



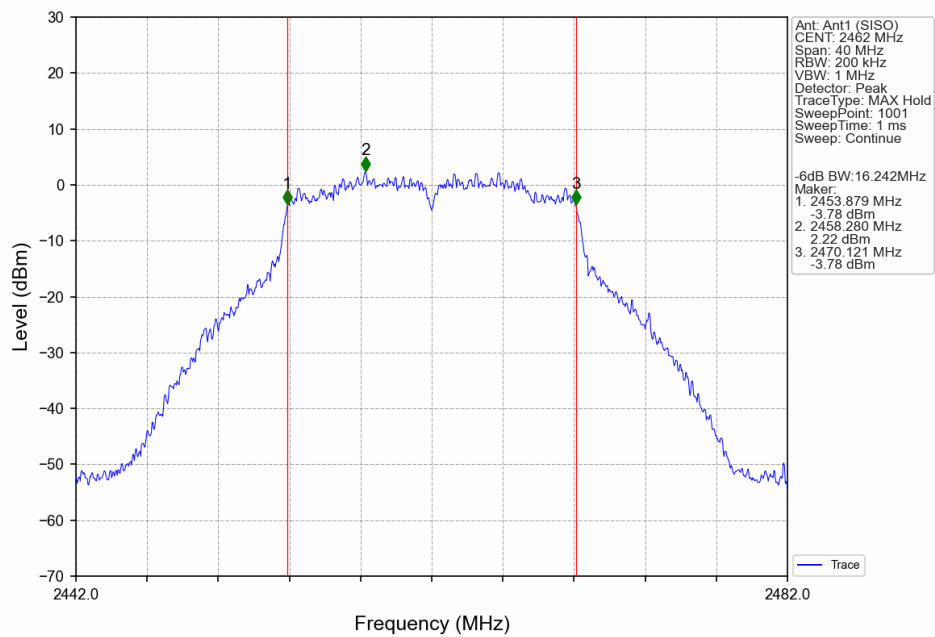
802.11g LCH 2412MHz Ant1 (SISO) NTNV



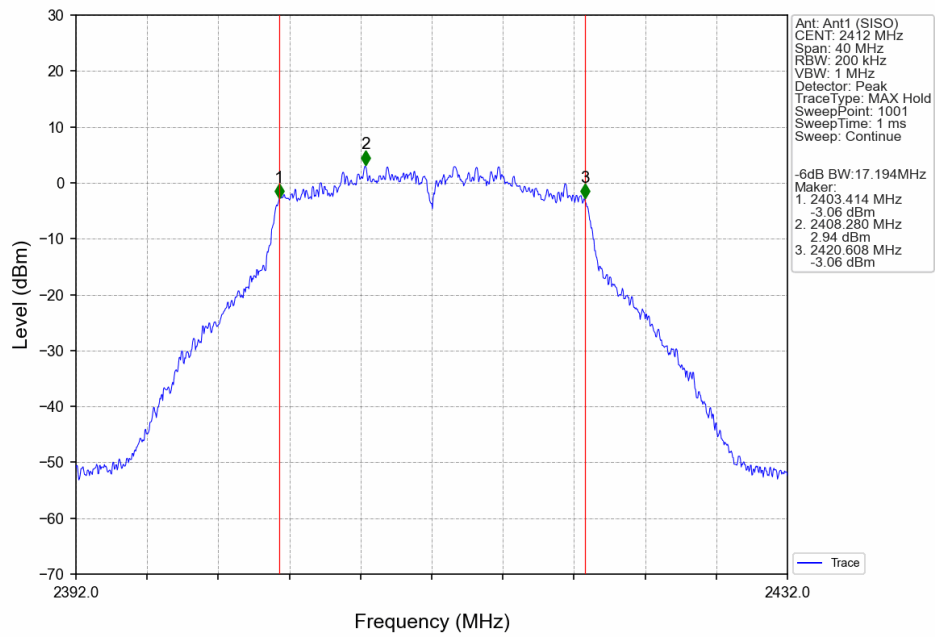
802.11g MCH 2437MHz Ant1 (SISO) NTNV



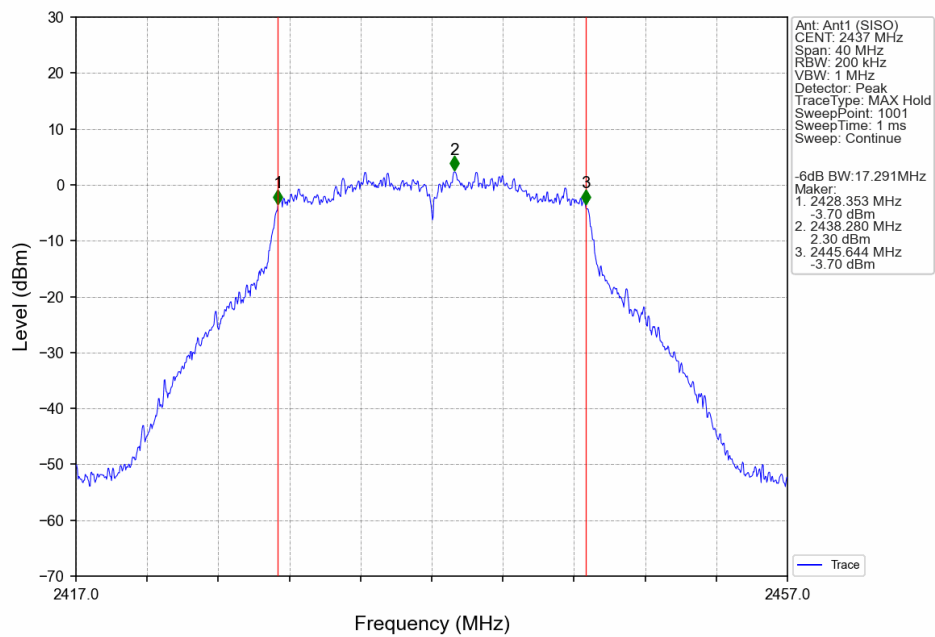
802.11g HCH 2462MHz Ant1 (SISO) NTNV



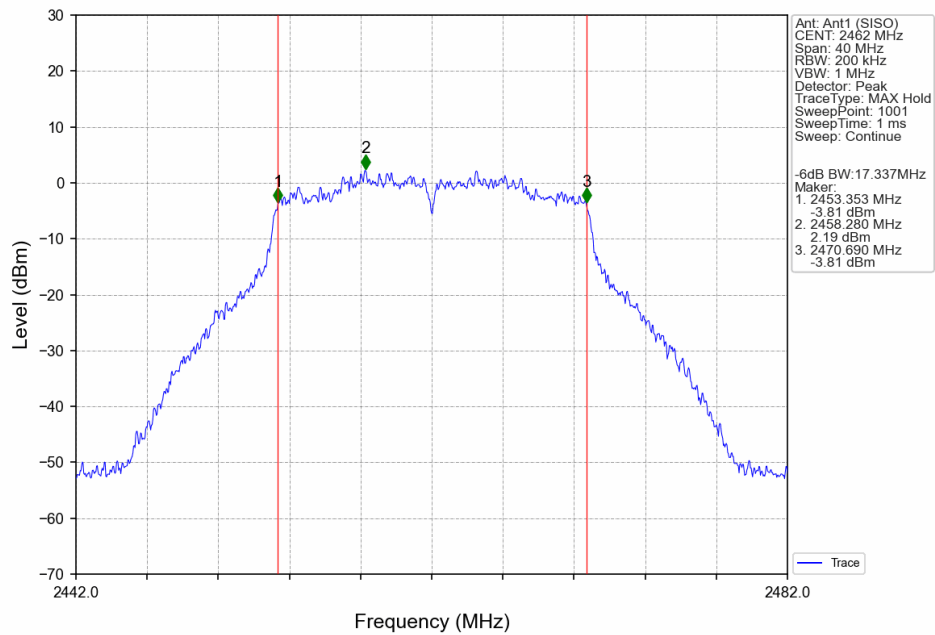
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



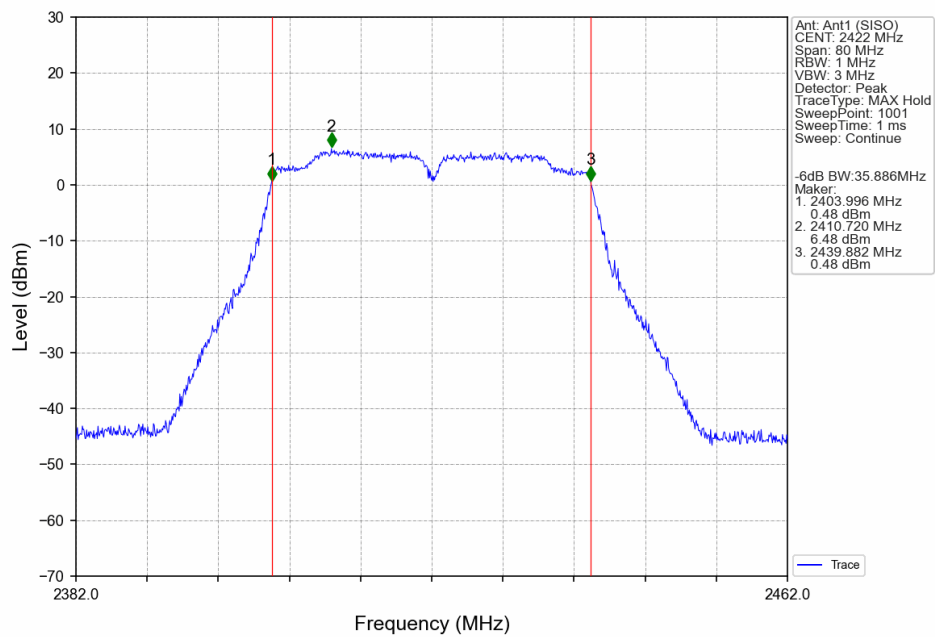
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



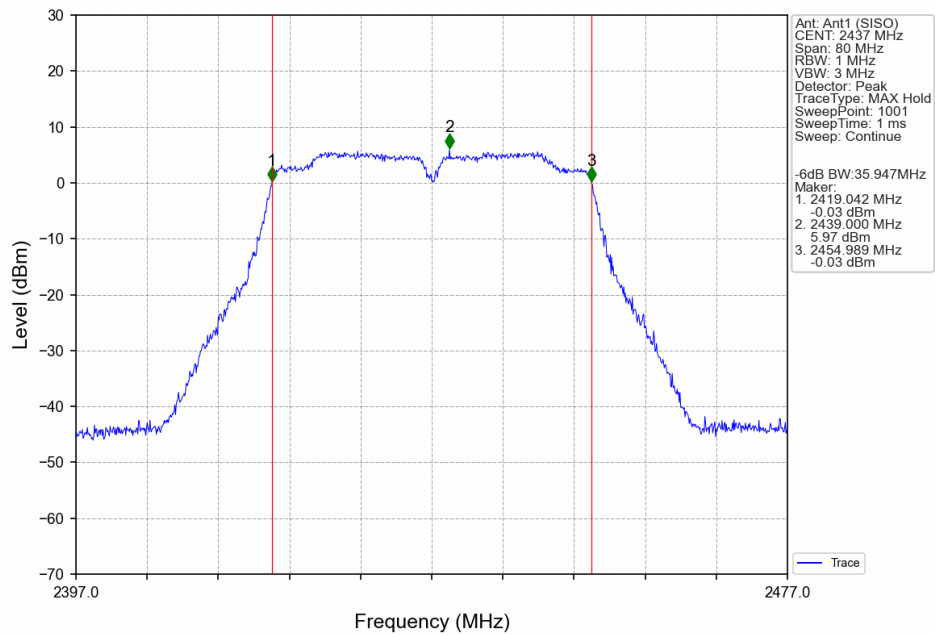
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTV



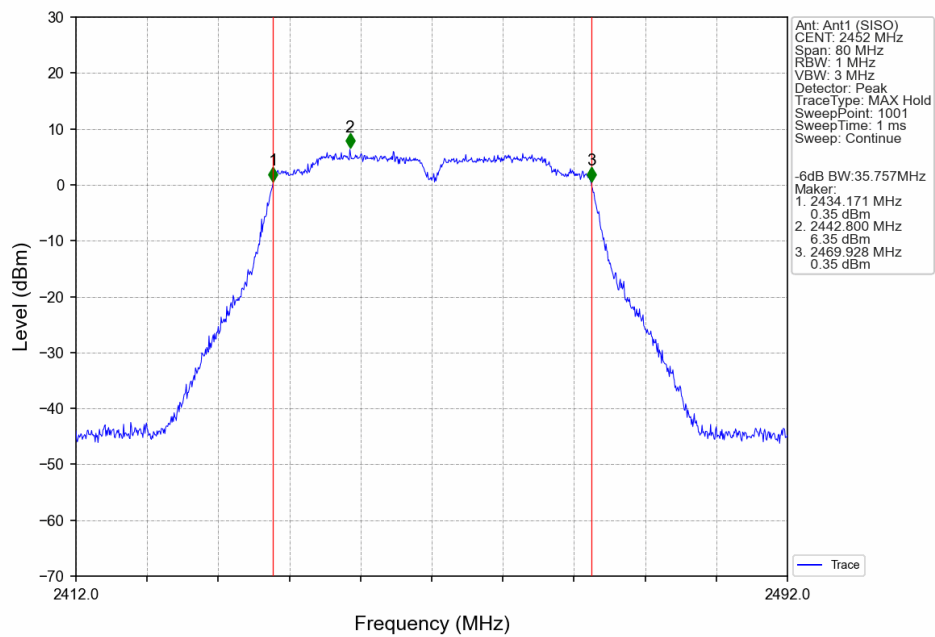
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV



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



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



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
			ANT1	Limit	
802.11b	SISO	2412	14.17	<=30	Pass
		2437	13.61	<=30	Pass
		2462	13.52	<=30	Pass
802.11g	SISO	2412	15.19	<=30	Pass
		2437	14.58	<=30	Pass
		2462	14.49	<=30	Pass
802.11n (HT20)	SISO	2412	15.76	<=30	Pass
		2437	14.60	<=30	Pass
		2462	14.43	<=30	Pass
802.11n (HT40)	SISO	2422	15.32	<=30	Pass
		2437	14.89	<=30	Pass
		2452	14.84	<=30	Pass

4. Maximum Power Spectral Density

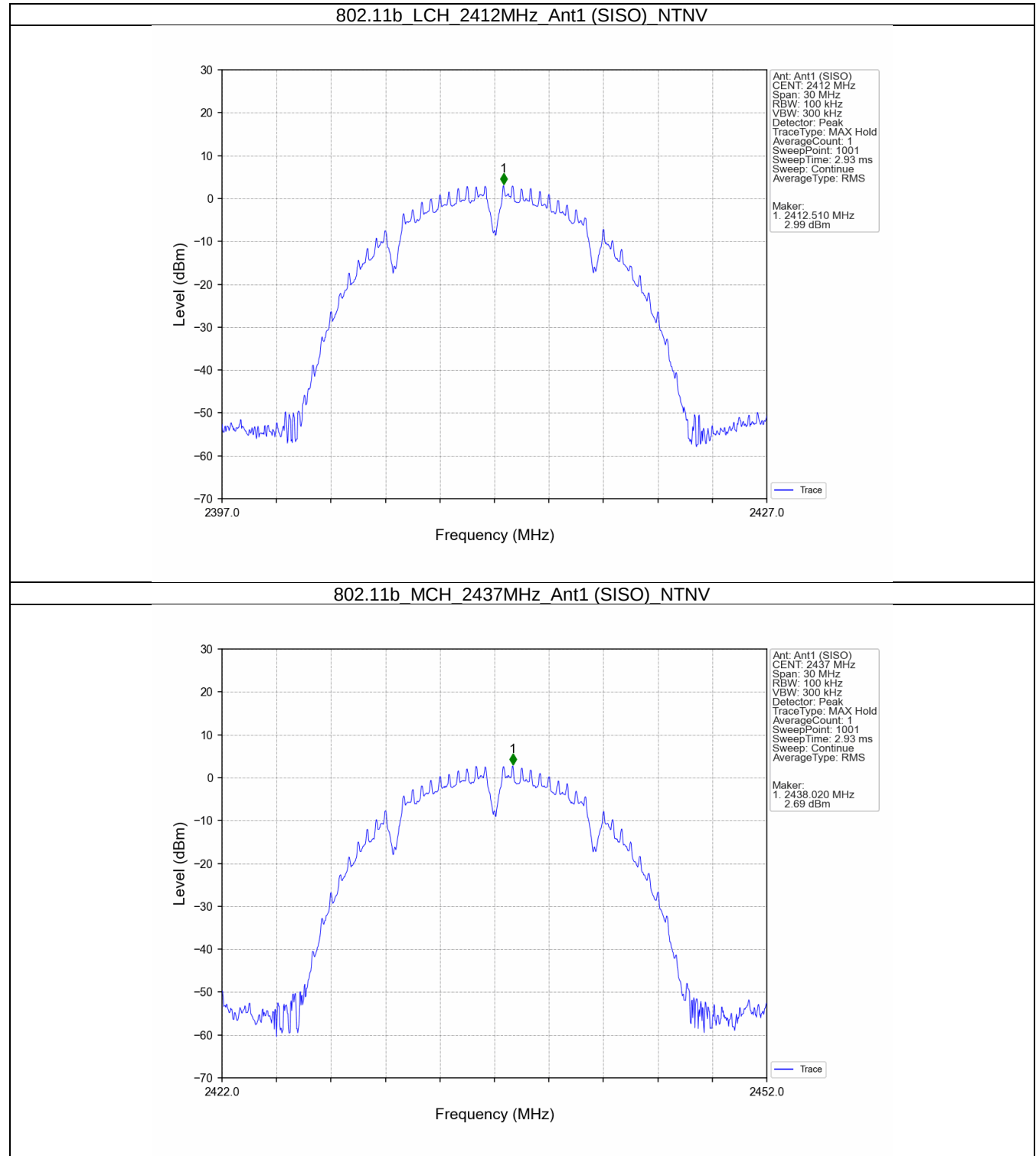
4.1 Test Result

4.1.1 PSD

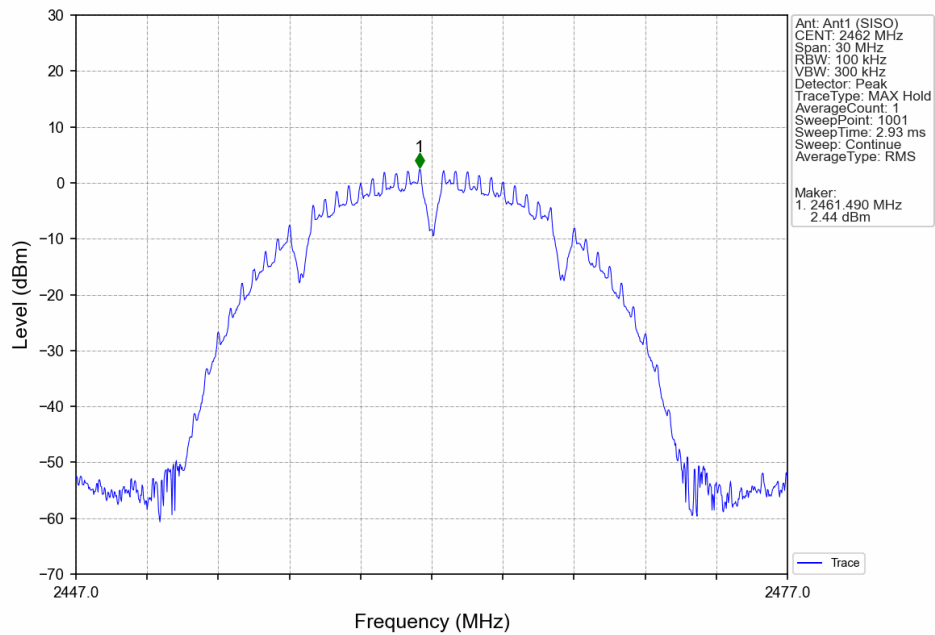
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit(dBm/3kHz)	
802.11b	SISO	2412	2.99dBm/100kHz	<=8	Pass
		2437	2.69dBm/100kHz	<=8	Pass
		2462	2.44dBm/100kHz	<=8	Pass
802.11g	SISO	2412	2.04dBm/100kHz	<=8	Pass
		2437	1.48dBm/100kHz	<=8	Pass
		2462	1.11dBm/100kHz	<=8	Pass
802.11n (HT20)	SISO	2412	1.61dBm/100kHz	<=8	Pass
		2437	0.71dBm/100kHz	<=8	Pass
		2462	1.33dBm/100kHz	<=8	Pass
802.11n (HT40)	SISO	2422	-1.98dBm/100kHz	<=8	Pass
		2437	-2.20dBm/100kHz	<=8	Pass
		2452	-2.63dBm/100kHz	<=8	Pass

4.2 Test Graph

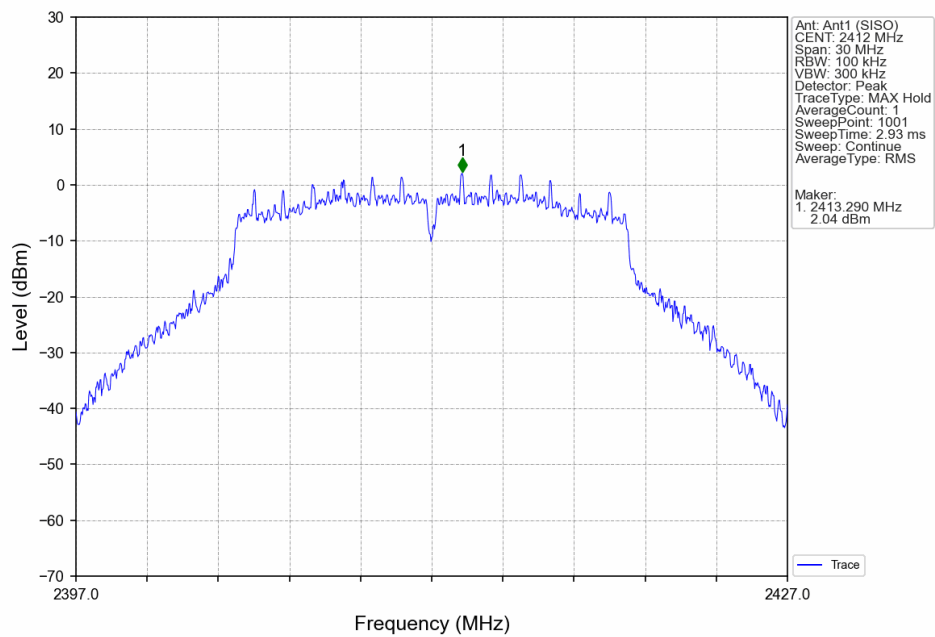
4.2.1 PSD



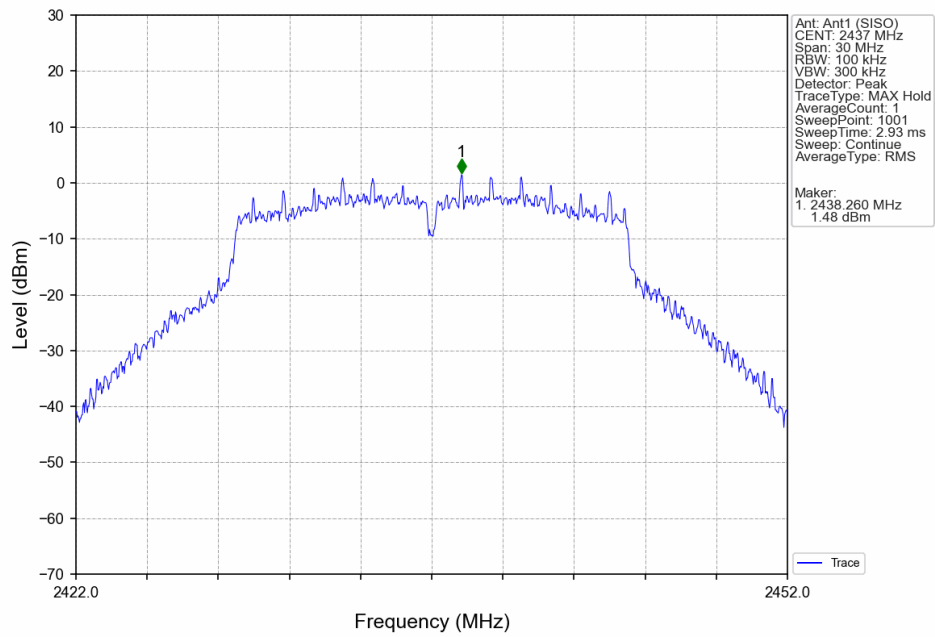
802.11b HCH 2462MHz Ant1 (SISO) NTN



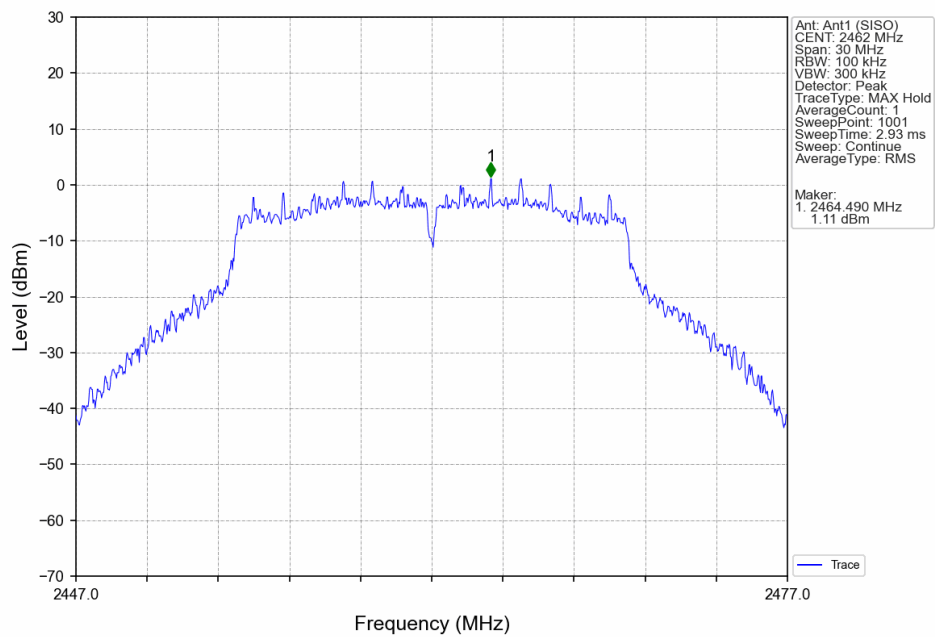
802.11g LCH 2412MHz Ant1 (SISO) NTN



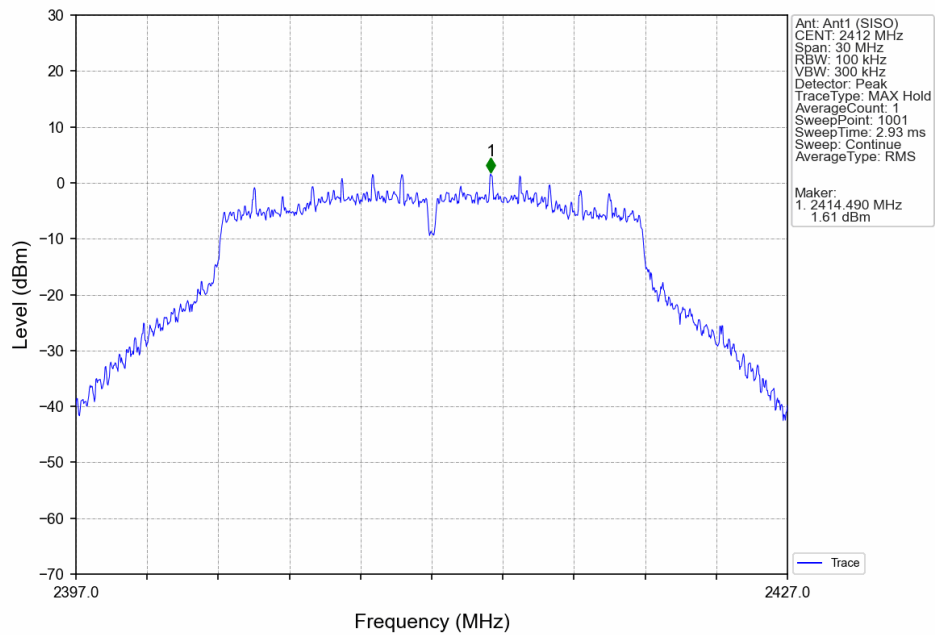
802.11g MCH 2437MHz Ant1 (SISO) NTN



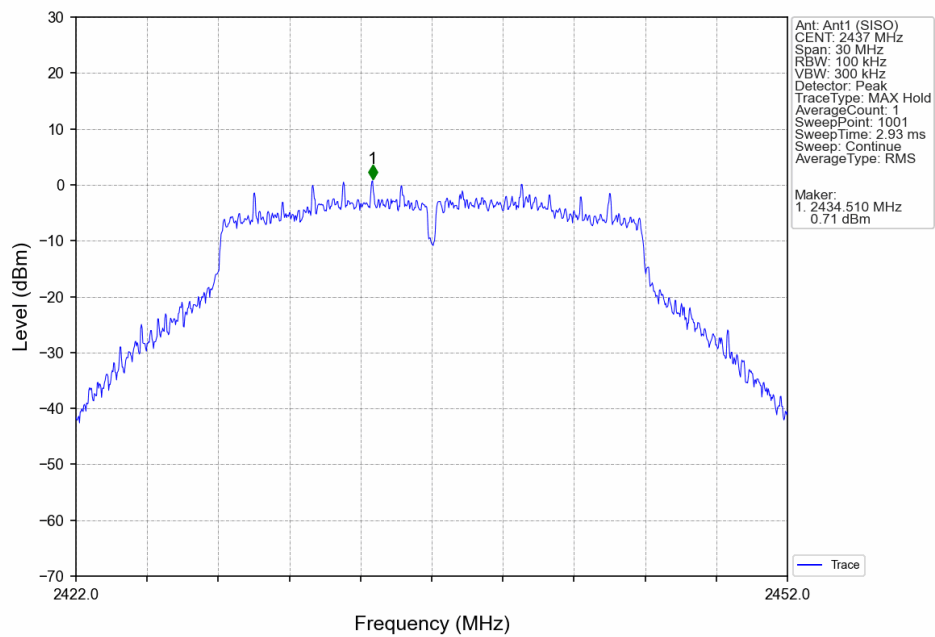
802.11g HCH 2462MHz Ant1 (SISO) NTN



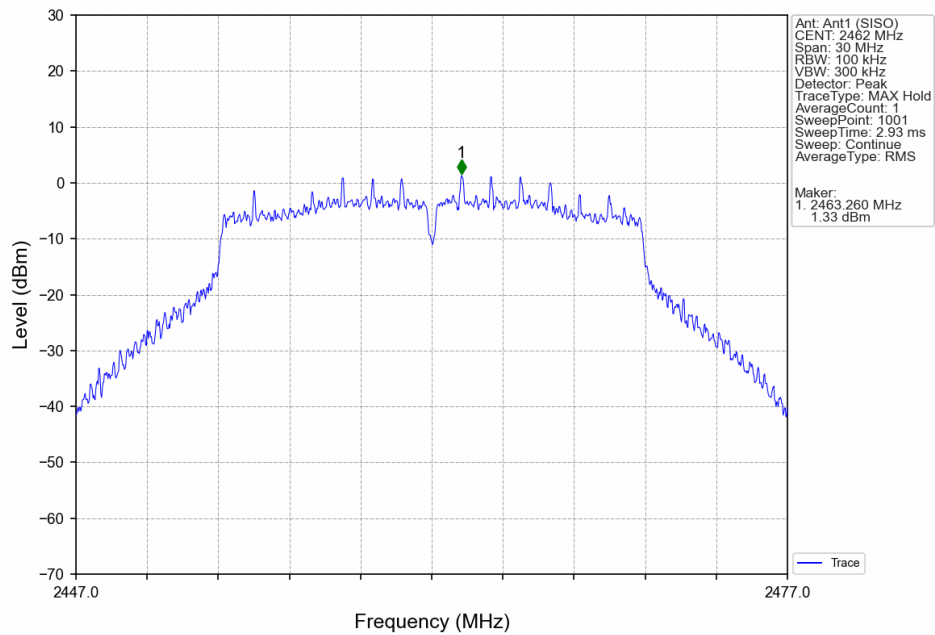
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



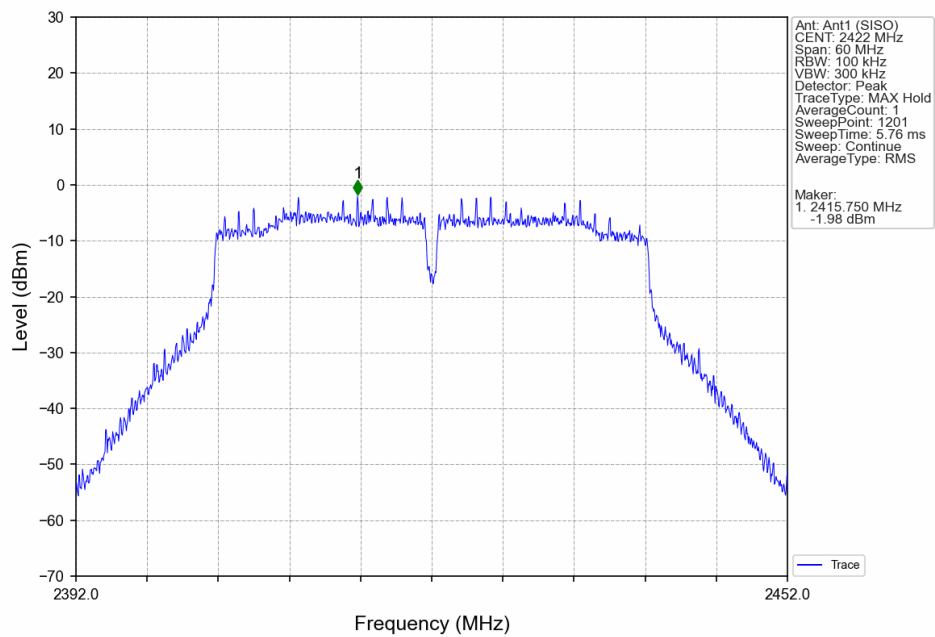
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



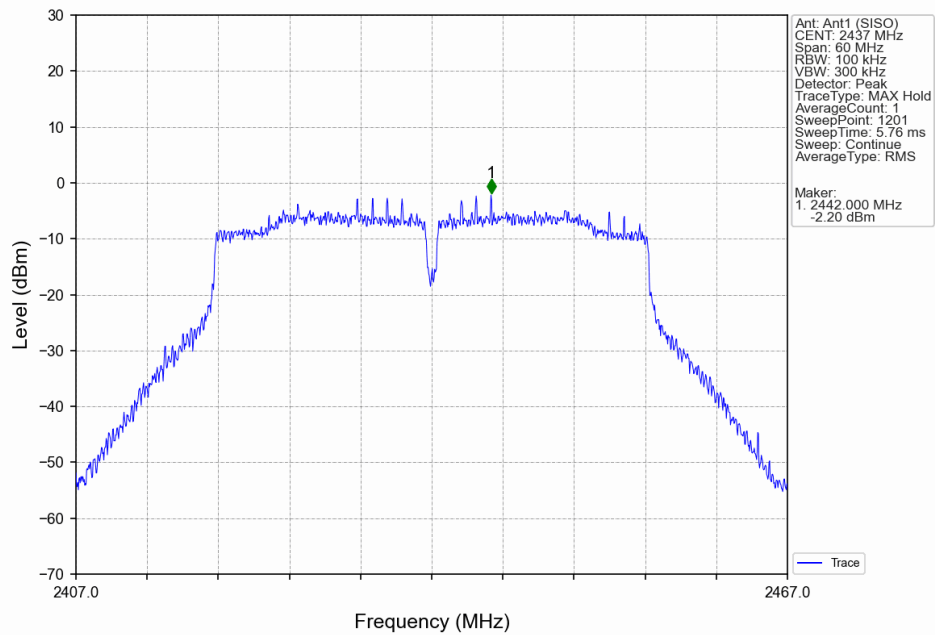
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



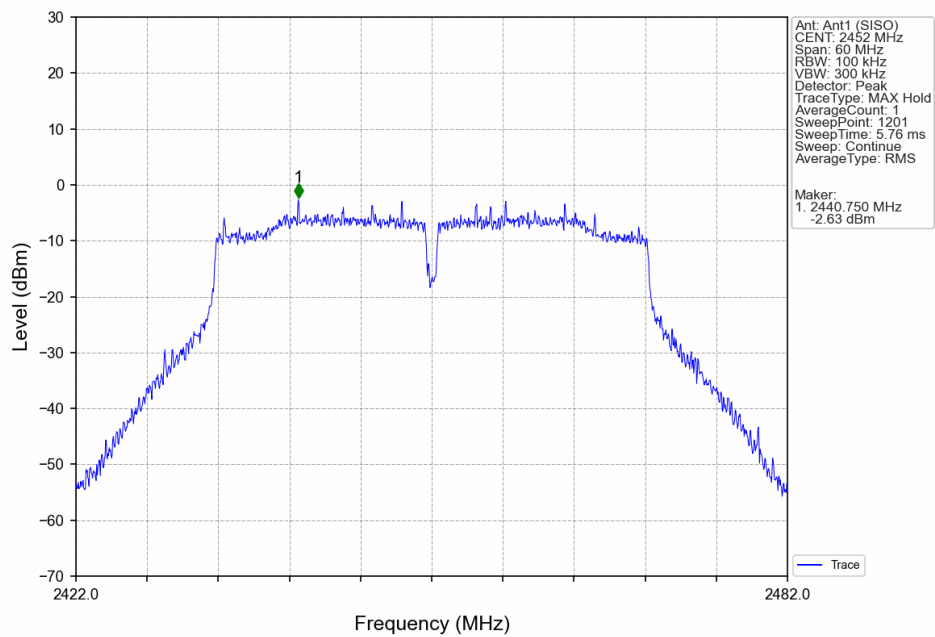
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



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



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



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

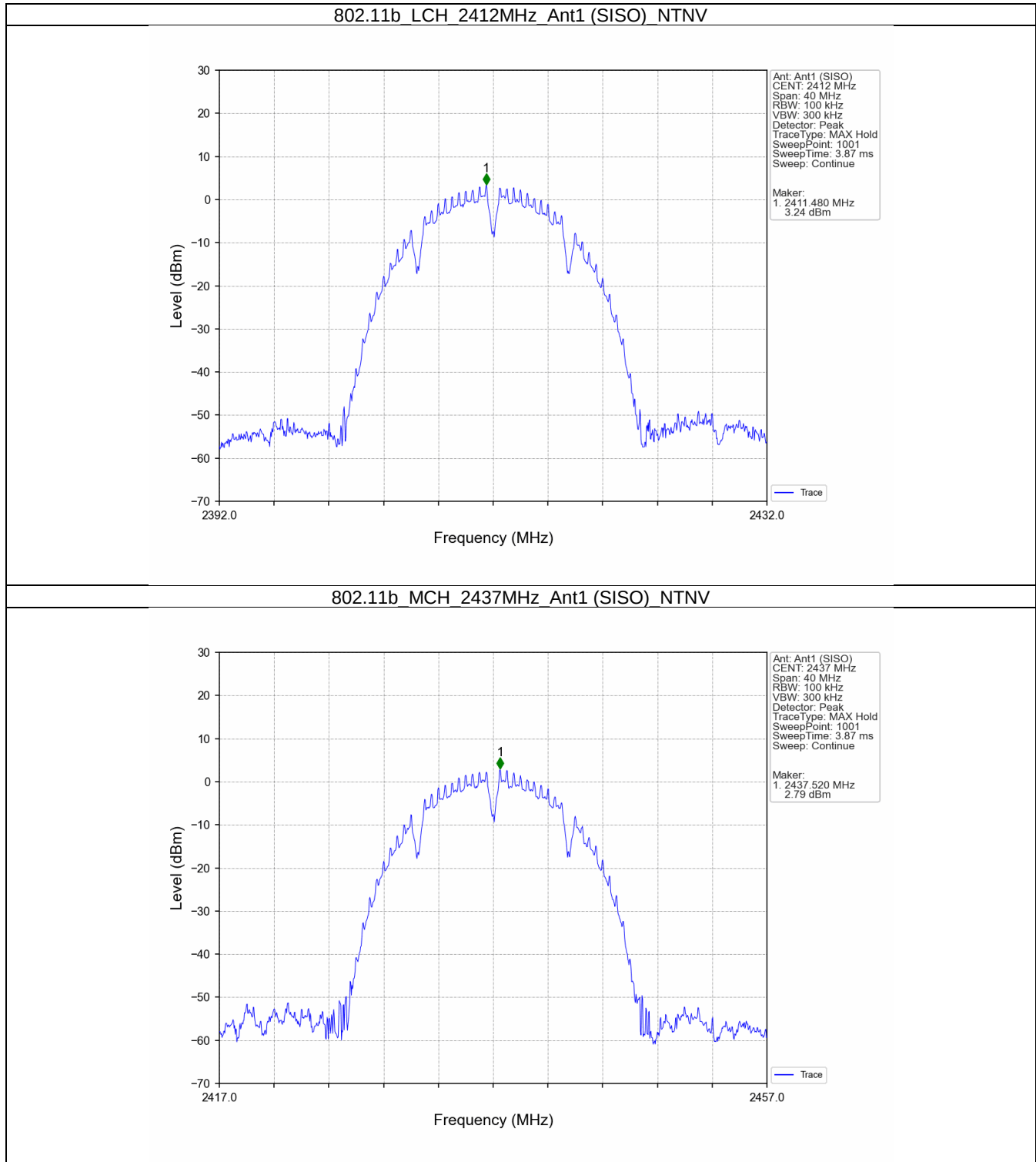
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	3.24
		2437	1	2.79
		2462	1	2.59
802.11g	SISO	2412	1	1.92
		2437	1	1.50
		2462	1	1.30
802.11n (HT20)	SISO	2412	1	1.88
		2437	1	1.05
		2462	1	1.23
802.11n (HT40)	SISO	2422	1	-1.52
		2437	1	-2.09
		2452	1	-2.38

5.1.2 CSE

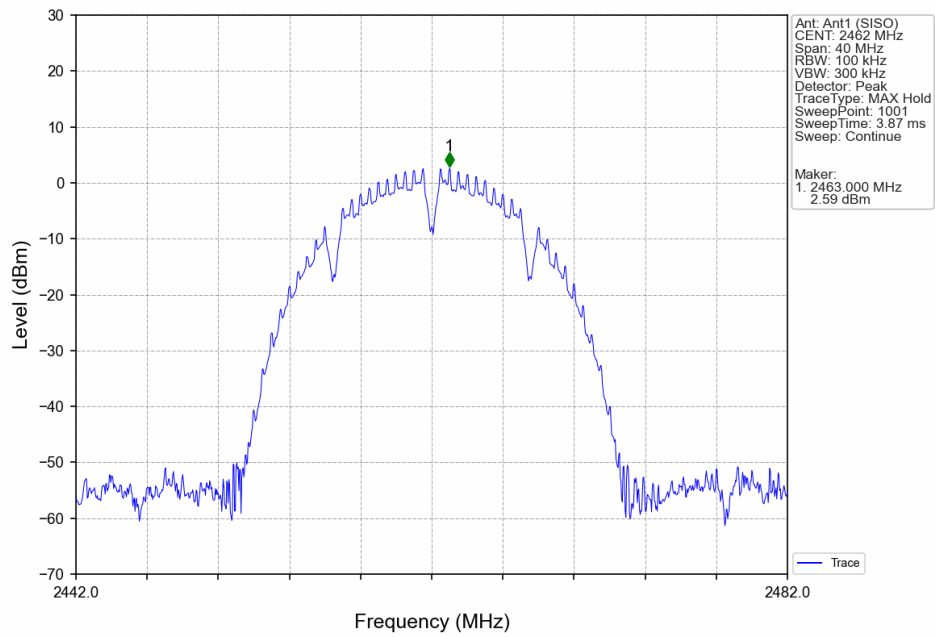
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	3.24	-16.76	Pass
		2437	1	2.79	-17.21	Pass
		2462	1	2.59	-17.41	Pass
802.11g	SISO	2412	1	1.92	-18.08	Pass
		2437	1	1.50	-18.50	Pass
		2462	1	1.30	-18.70	Pass
802.11n (HT20)	SISO	2412	1	1.88	-18.12	Pass
		2437	1	1.05	-18.95	Pass
		2462	1	1.23	-18.77	Pass
802.11n (HT40)	SISO	2422	1	-1.52	-21.52	Pass
		2437	1	-2.09	-22.09	Pass
		2452	1	-2.38	-22.38	Pass

5.2 Test Graph

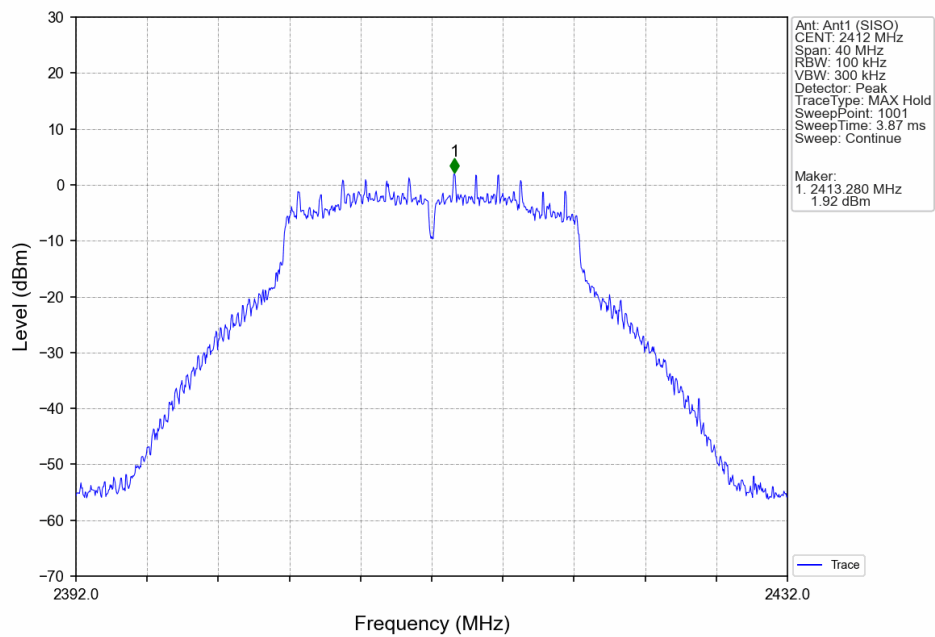
5.2.1 Ref



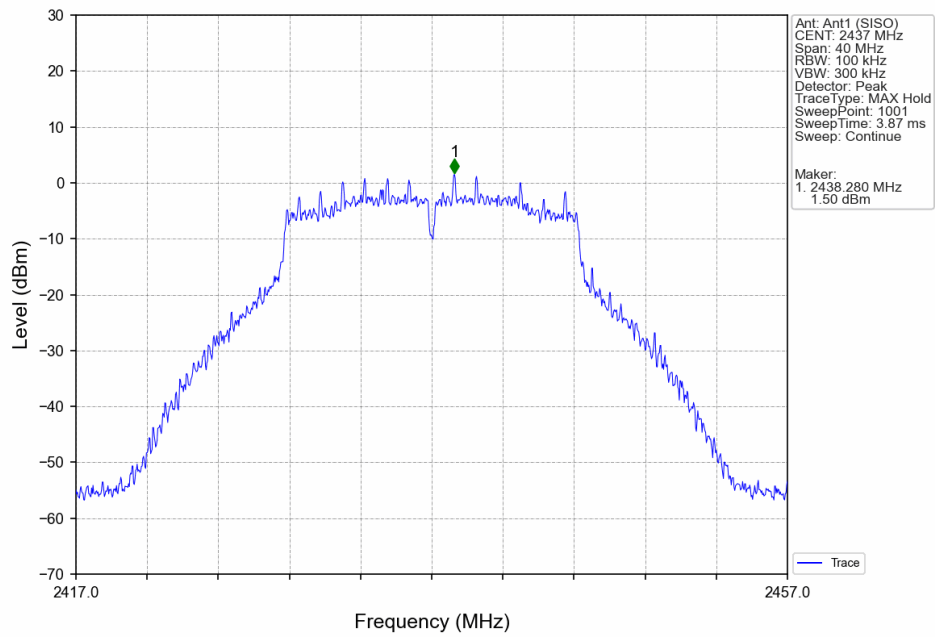
802.11b HCH 2462MHz Ant1 (SISO) NTNV



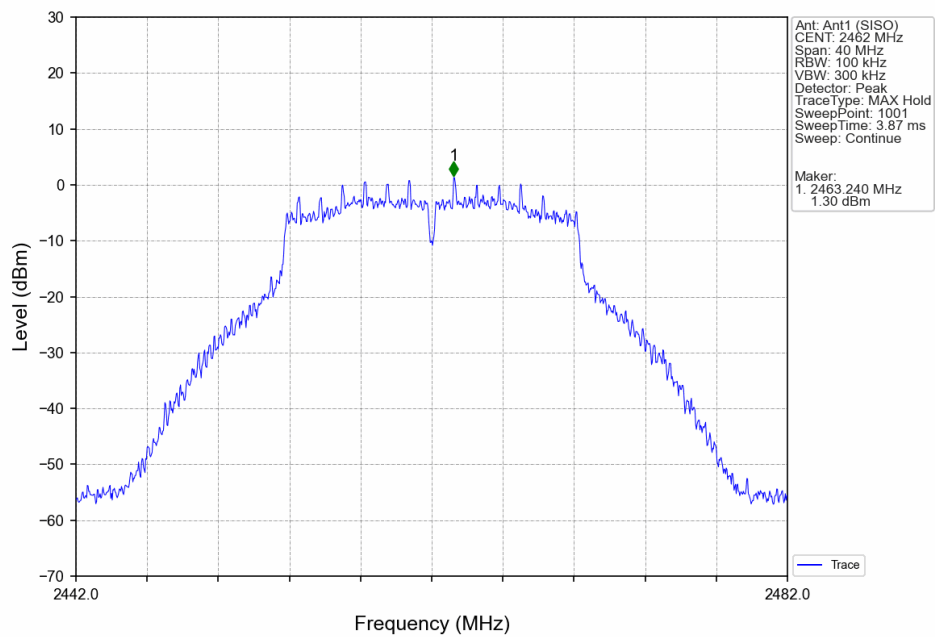
802.11g LCH 2412MHz Ant1 (SISO) NTNV



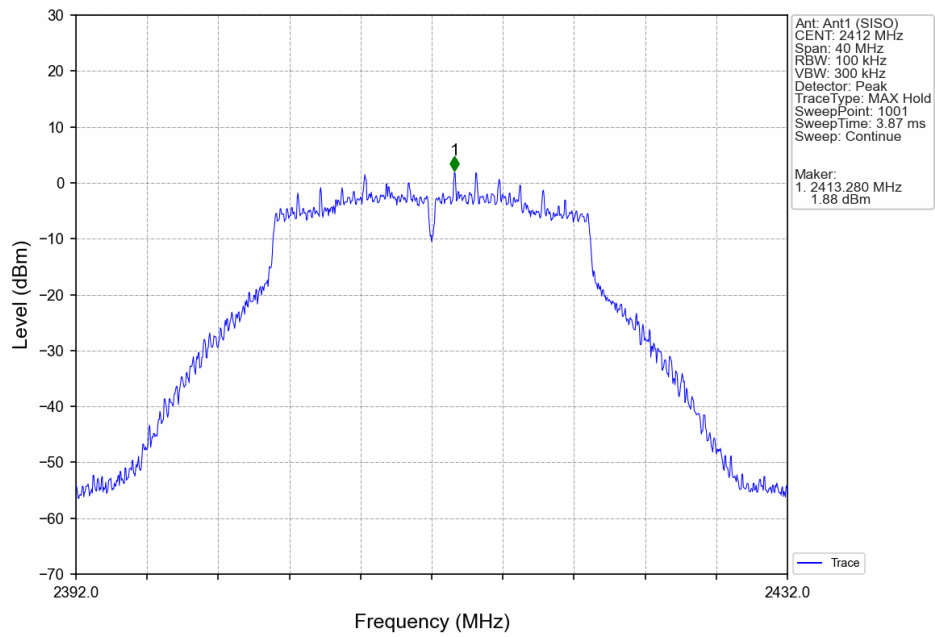
802.11g MCH 2437MHz Ant1 (SISO) NTN



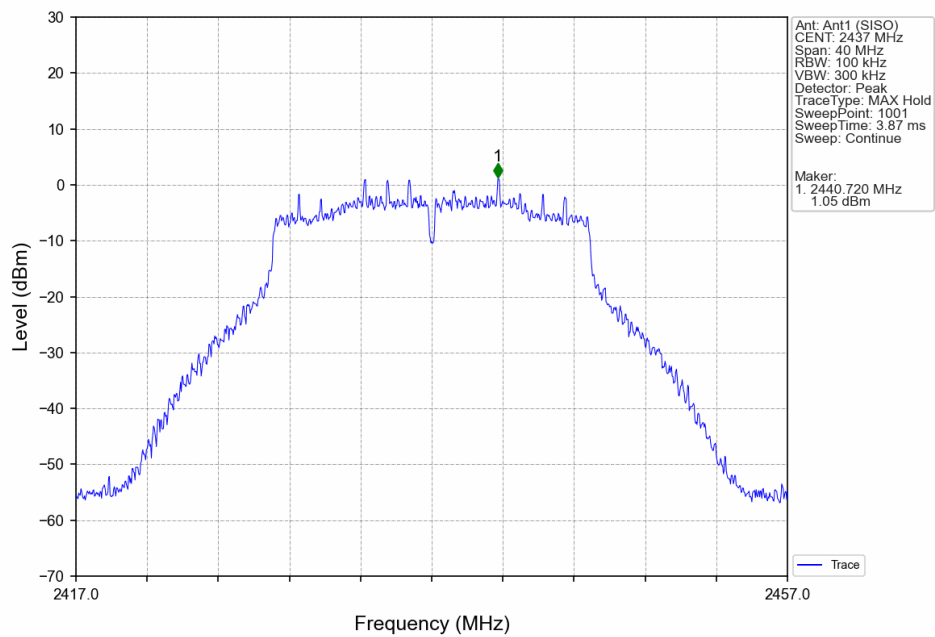
802.11g HCH 2462MHz Ant1 (SISO) NTN



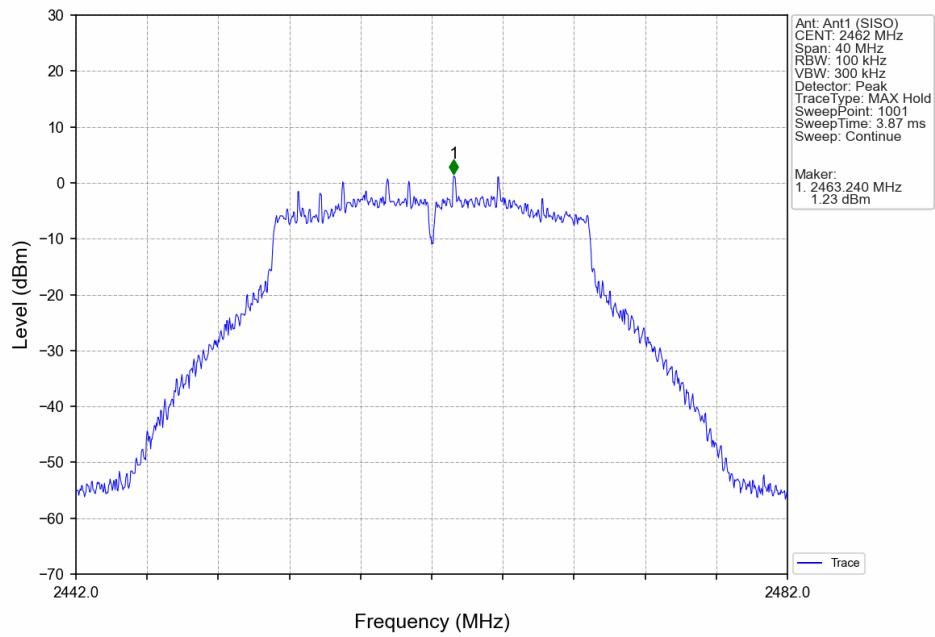
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



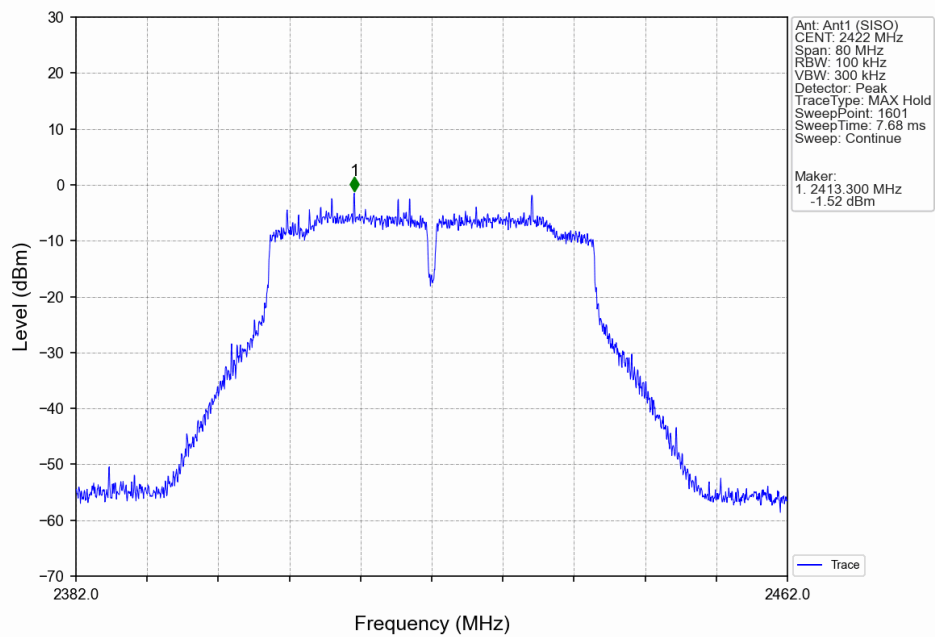
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



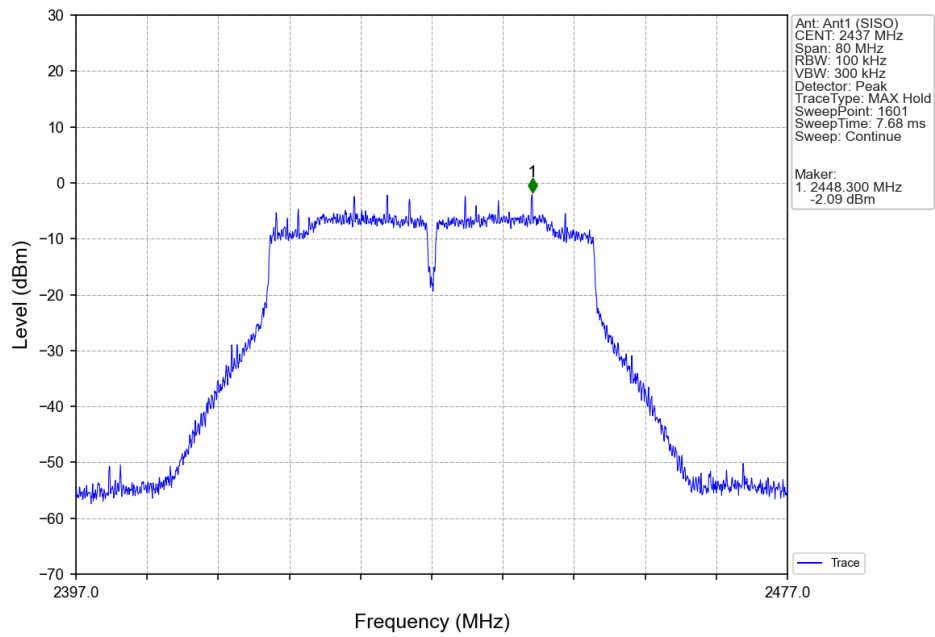
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



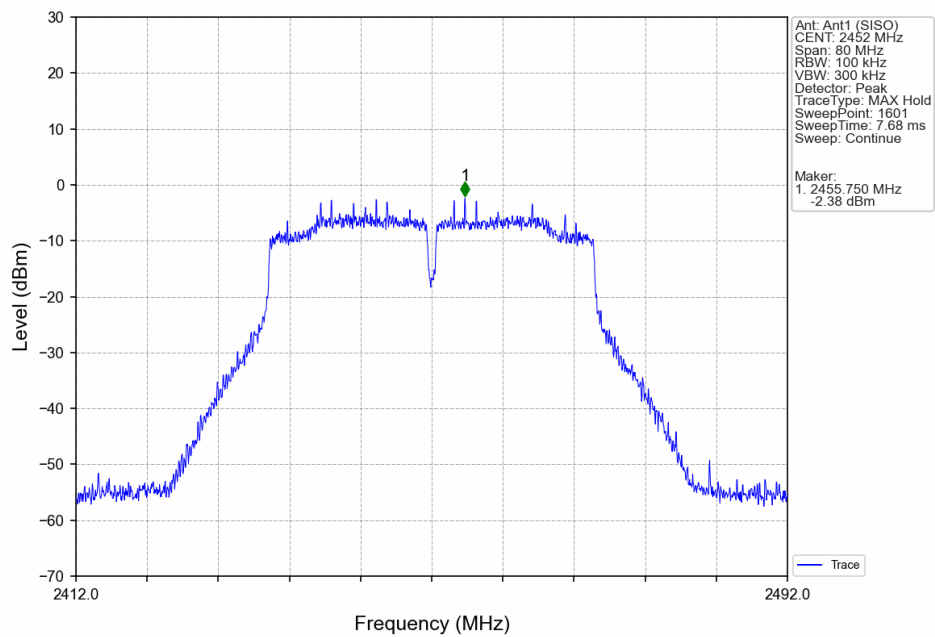
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



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

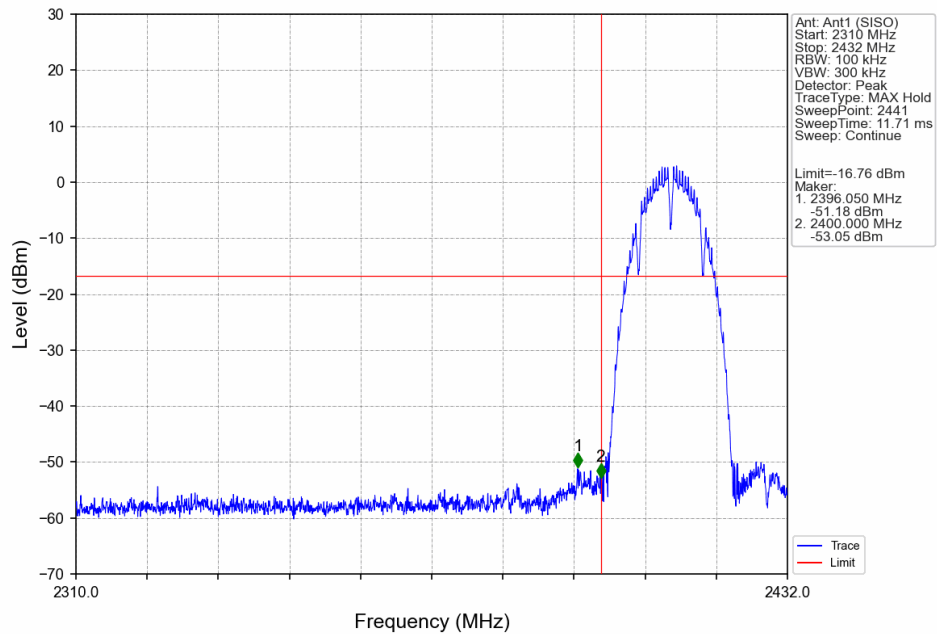


802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTNV

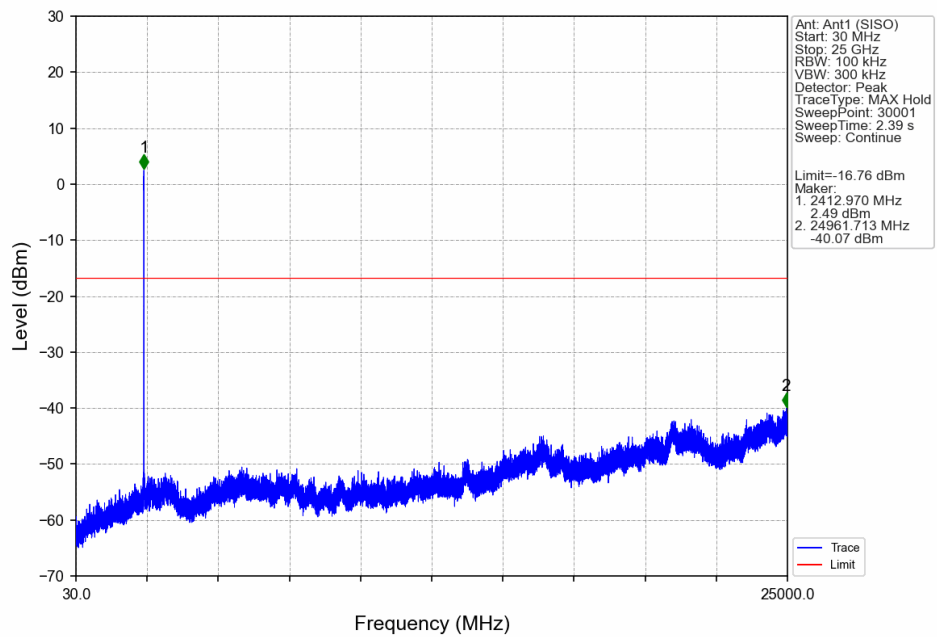


5.2.2 CSE

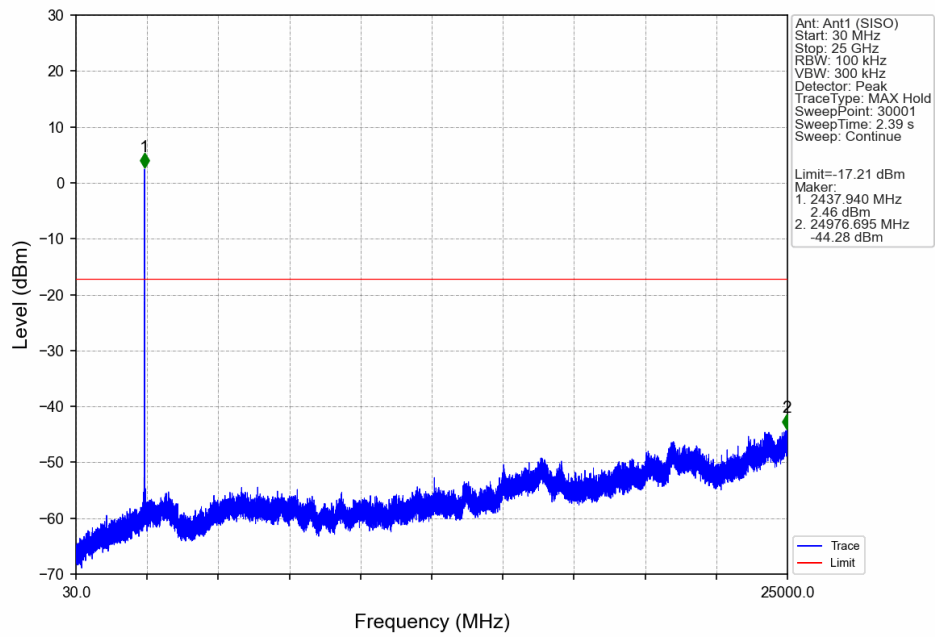
802.11b LCH 2412MHz Ant1 (SISO) NTN



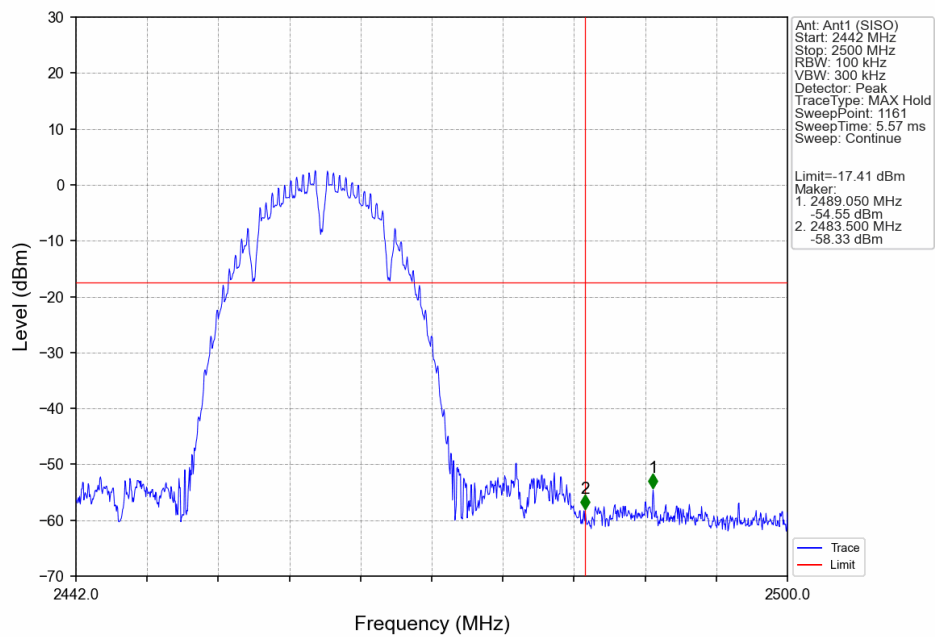
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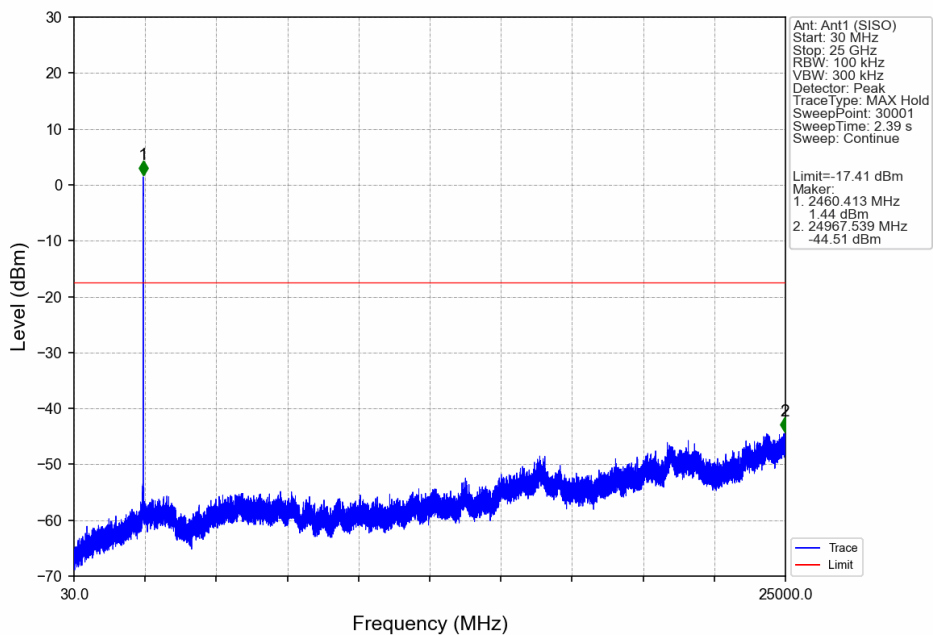
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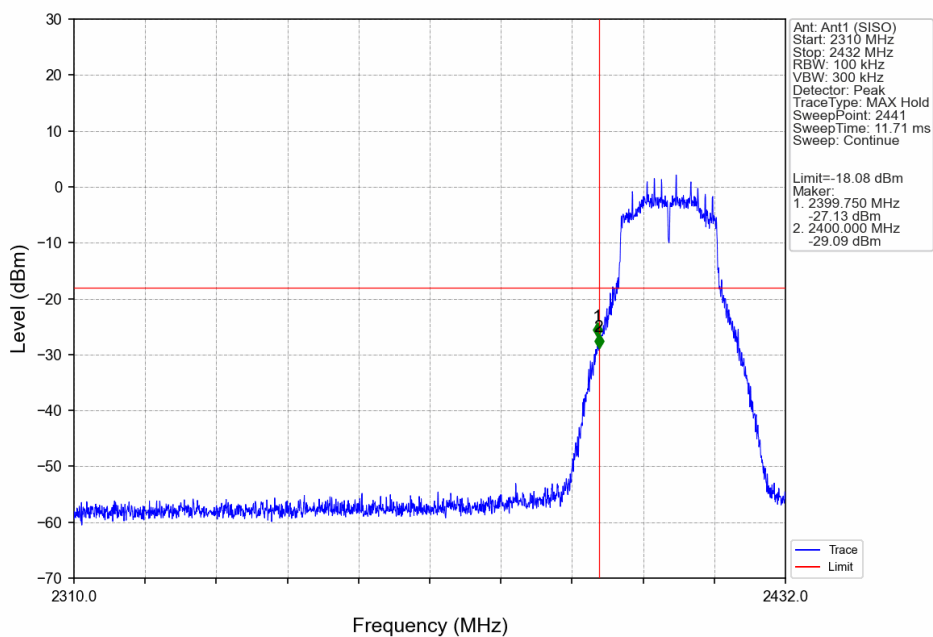
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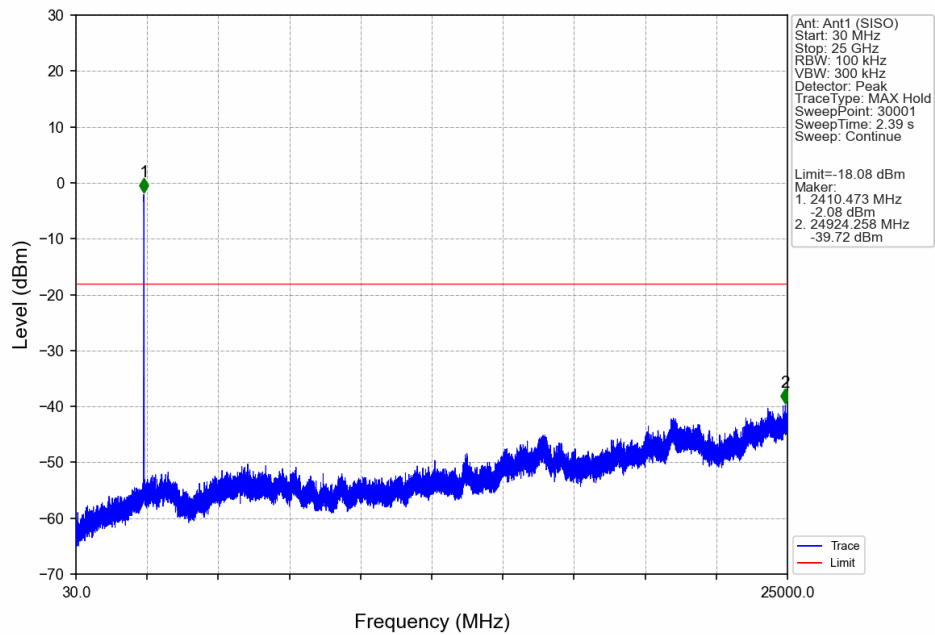
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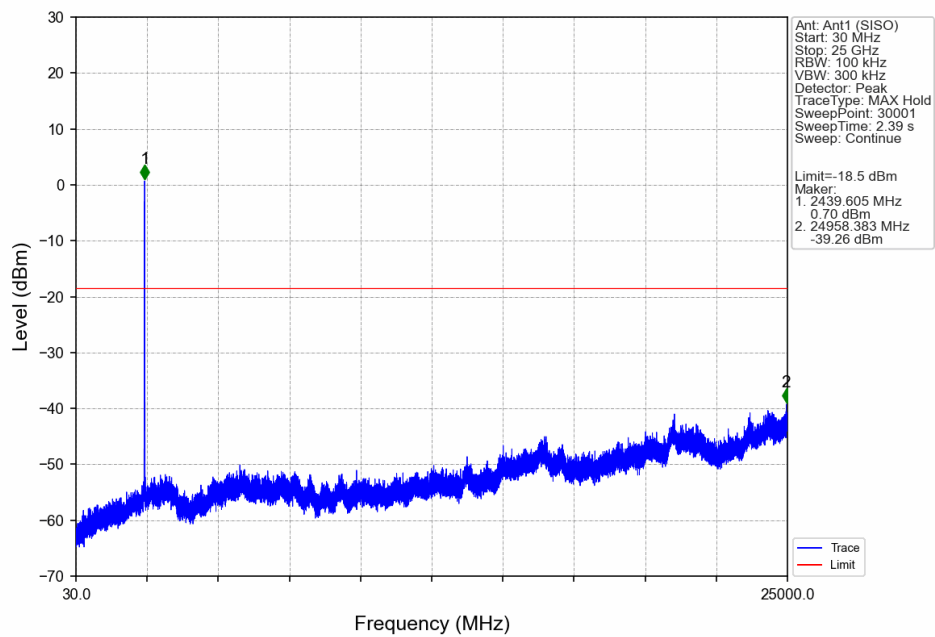
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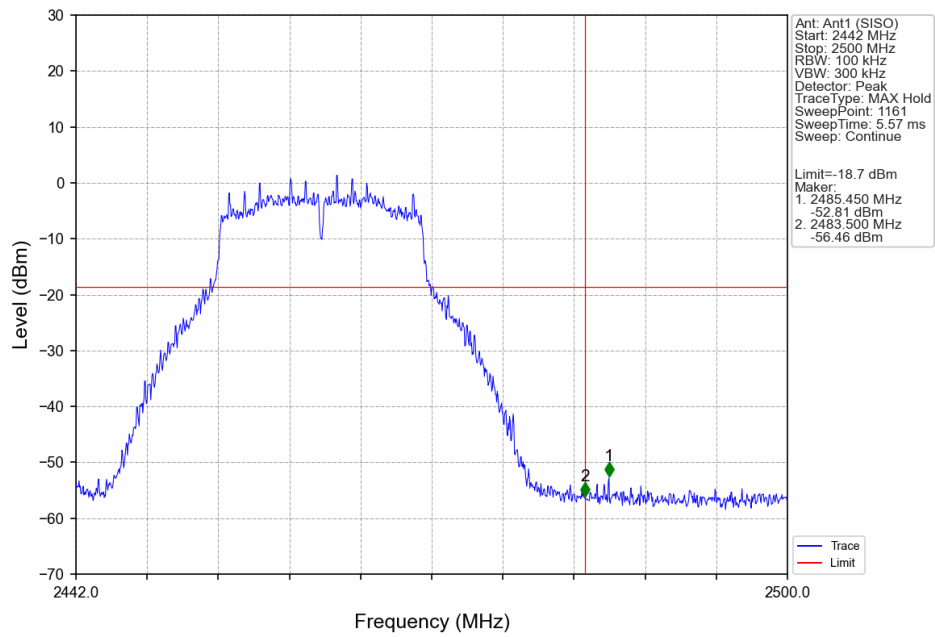
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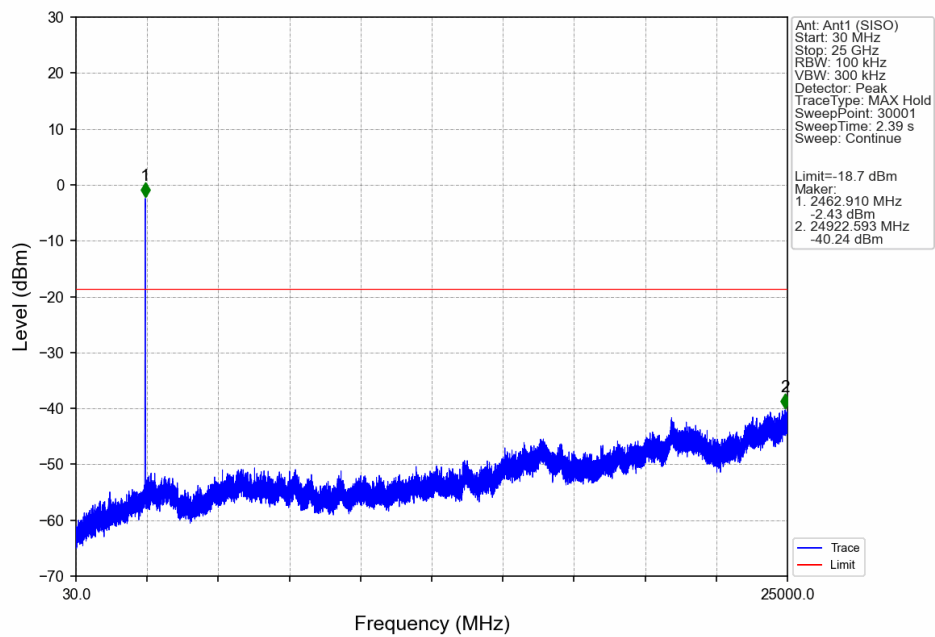
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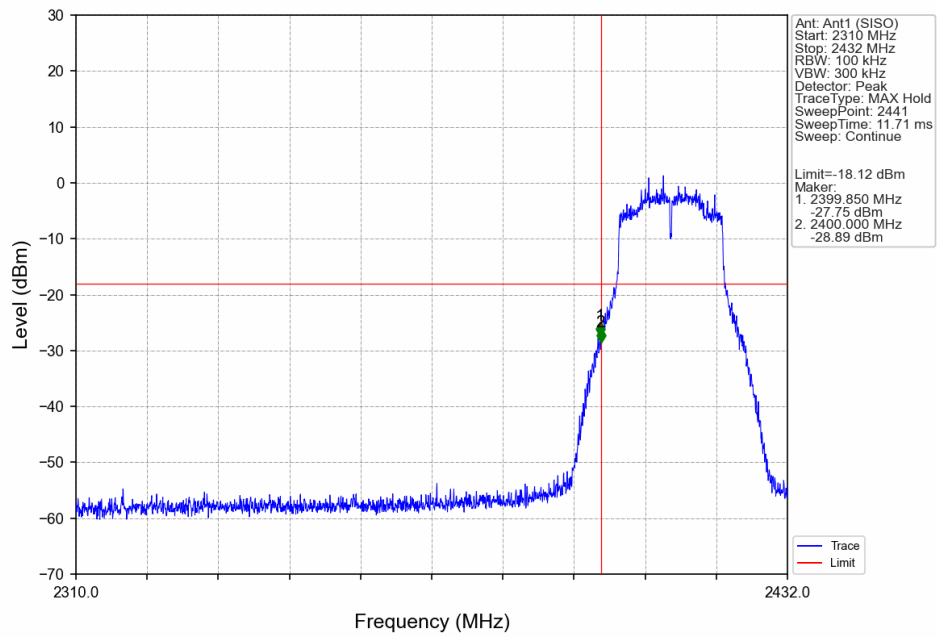
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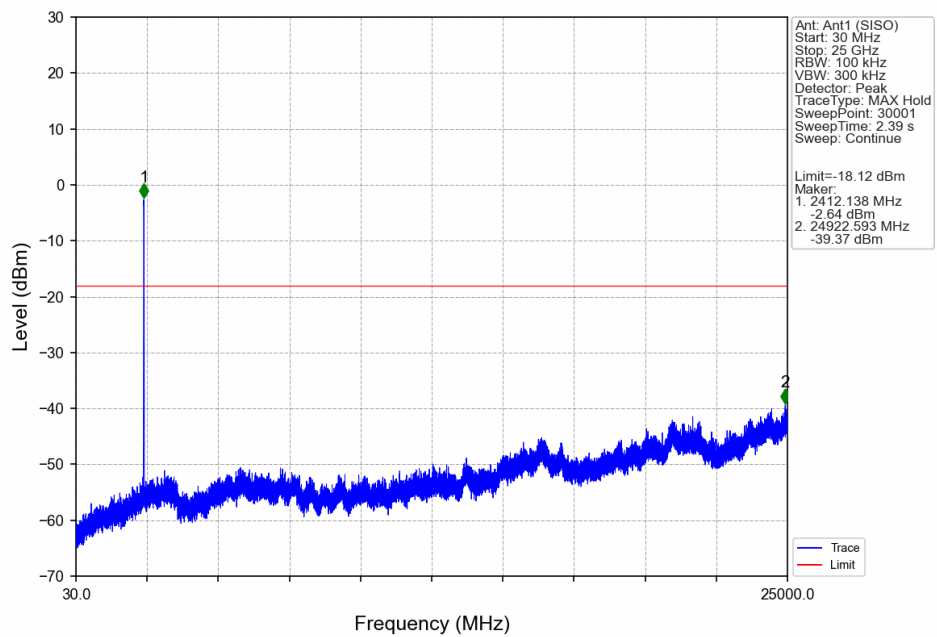
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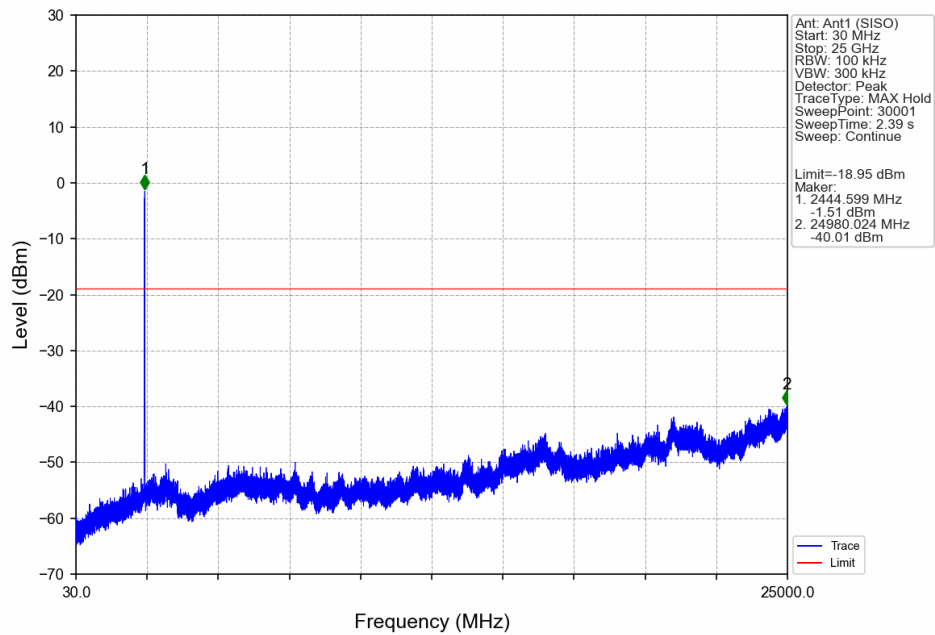
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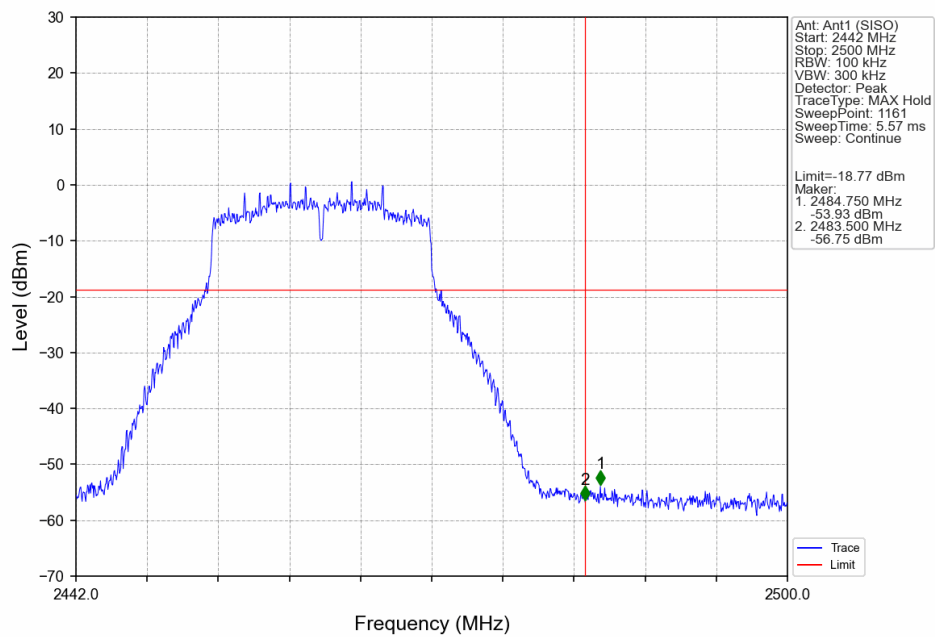
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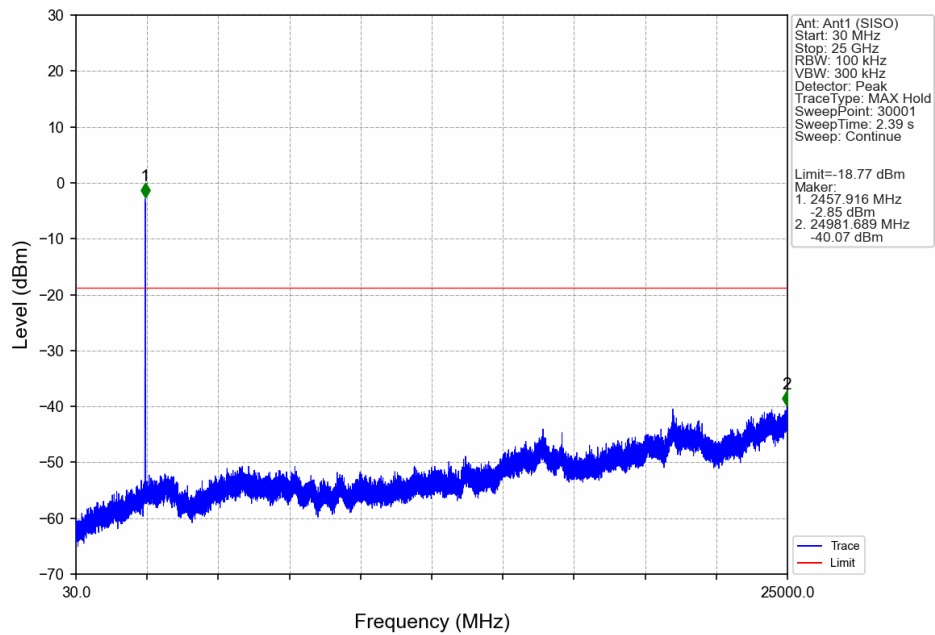
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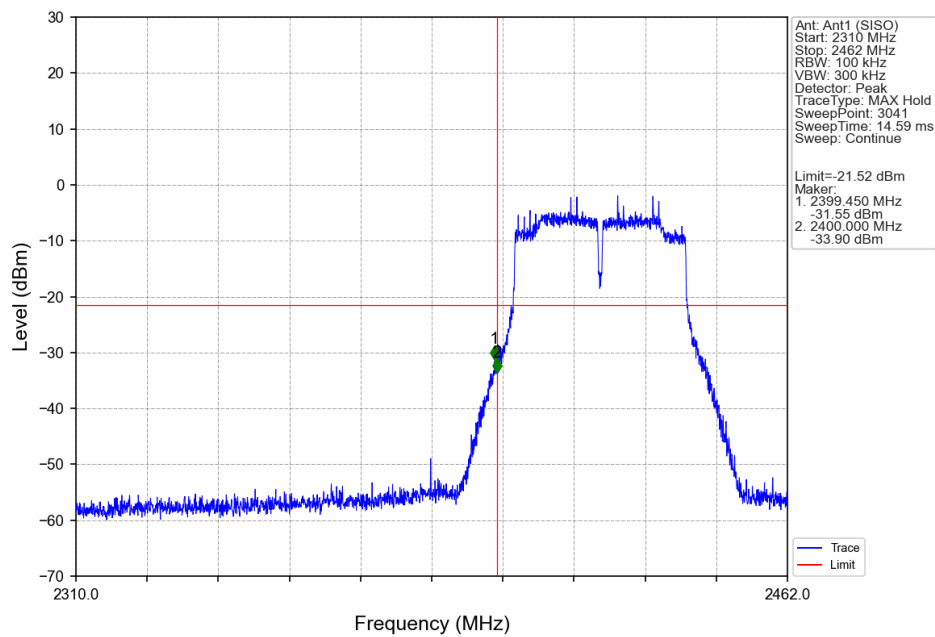
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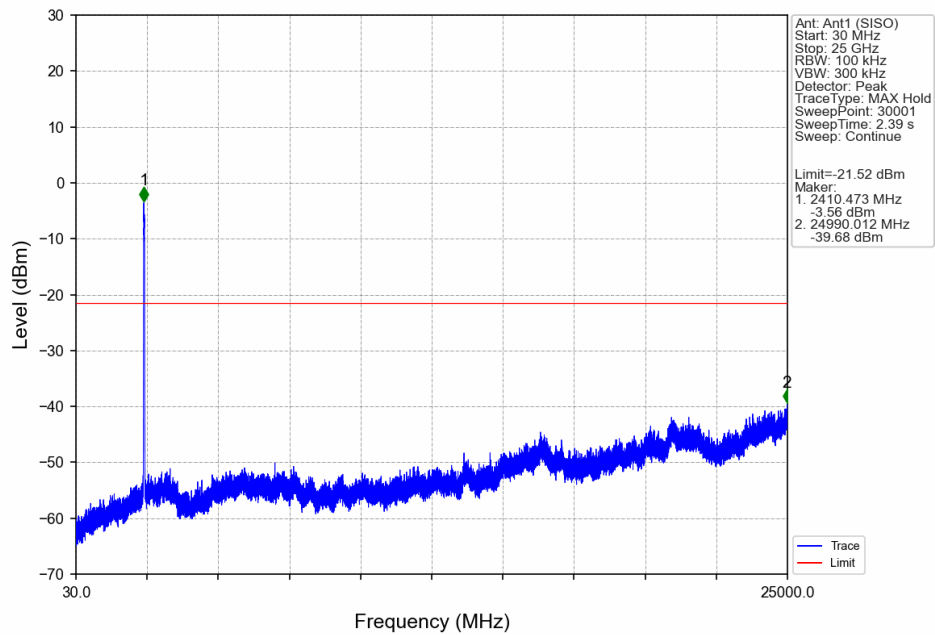
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTV



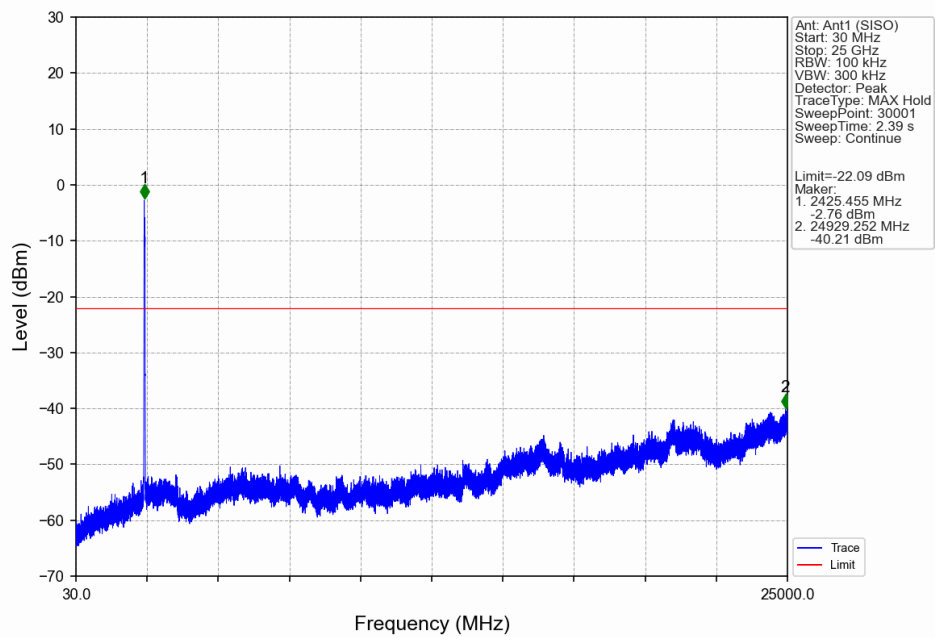
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV



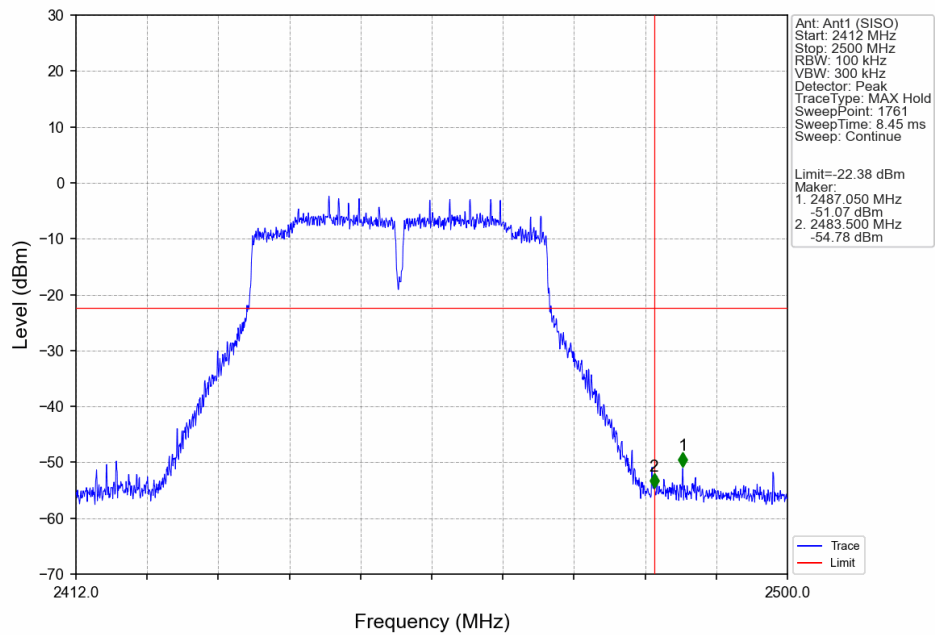
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTVN



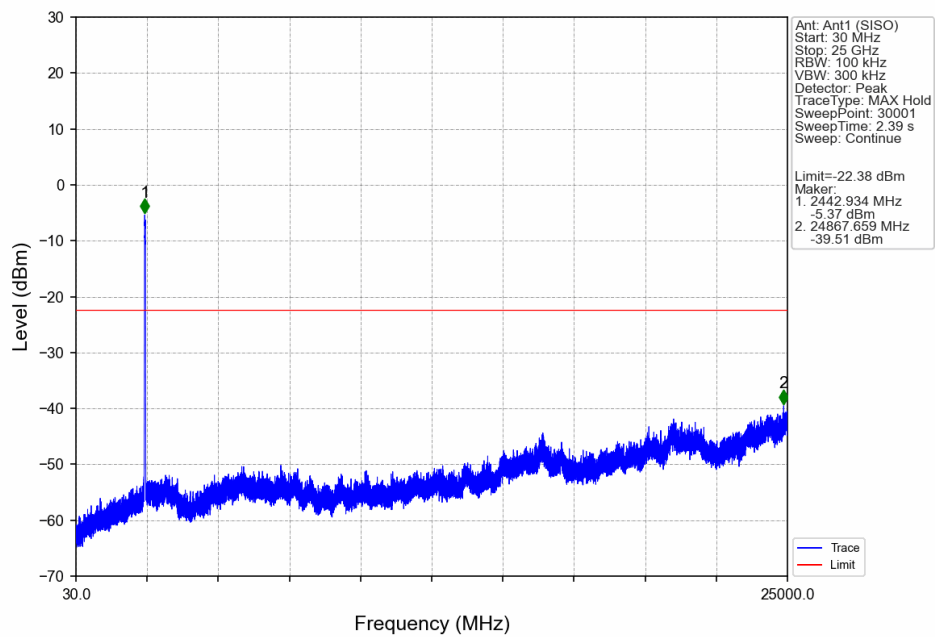
802.11n(HT40) MCH 2437MHz Ant1 (SISO) NTVN



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



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



***** End of Report *****