



Annex for 2.4G Wi-Fi

Test Report No.: CTL2507222181-WF01

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FCCID: 2ASC7HD7000ELITE

1. Bandwidth

1.1 Test Result

1.1.1 OBW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	14.241	/	Pass
		2437	/	/	1	14.312	/	Pass
		2462	/	/	1	14.180	/	Pass
802.11g	SISO	2412	/	/	1	17.244	/	Pass
		2437	/	/	1	17.339	/	Pass
		2462	/	/	1	17.172	/	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.983	/	Pass
		2437	/	/	1	18.047	/	Pass
		2462	/	/	1	17.949	/	Pass
802.11n (HT40)	SISO	2422	/	/	1	35.706	/	Pass
		2437	/	/	1	36.063	/	Pass
		2452	/	/	1	35.909	/	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.908	/	Pass
		2437	SU	/	1	19.524	/	Pass
		2462	SU	/	1	19.387	/	Pass
802.11ax (HEW40)	SISO	2422	SU	/	1	37.850	/	Pass
		2437	SU	/	1	37.853	/	Pass
		2452	SU	/	1	37.835	/	Pass

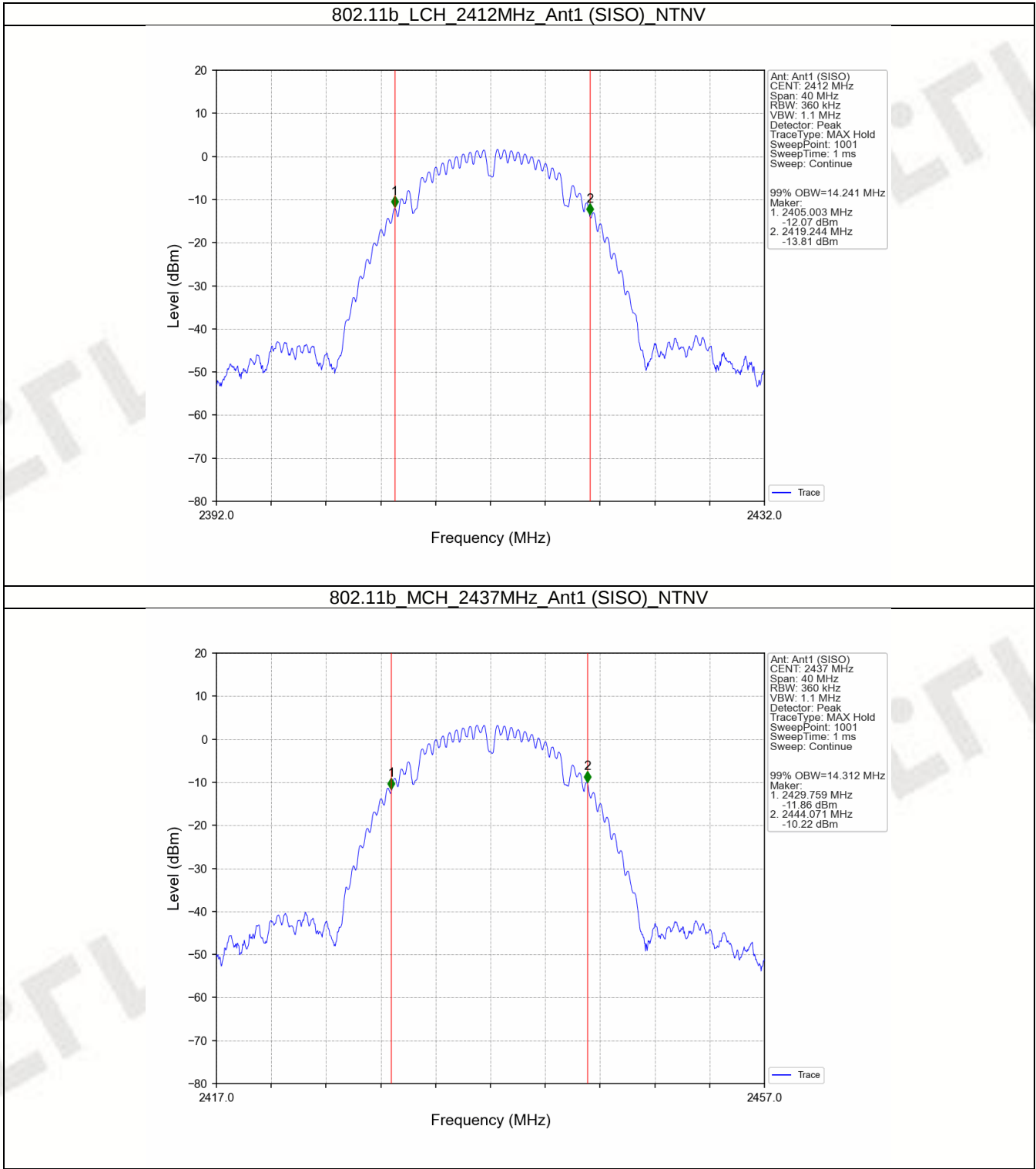
1.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	9.724	≥ 0.5	Pass
		2437	/	/	1	9.729	≥ 0.5	Pass
		2462	/	/	1	9.705	≥ 0.5	Pass
802.11g	SISO	2412	/	/	1	15.802	≥ 0.5	Pass
		2437	/	/	1	15.838	≥ 0.5	Pass
		2462	/	/	1	15.618	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.002	≥ 0.5	Pass
		2437	/	/	1	17.178	≥ 0.5	Pass
		2462	/	/	1	16.921	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	/	/	1	33.092	≥ 0.5	Pass
		2437	/	/	1	35.278	≥ 0.5	Pass
		2452	/	/	1	33.945	≥ 0.5	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.444	≥ 0.5	Pass
		2437	SU	/	1	18.623	≥ 0.5	Pass
		2462	SU	/	1	18.726	≥ 0.5	Pass
802.11ax (HEW40)	SISO	2422	SU	/	1	37.390	≥ 0.5	Pass
		2437	SU	/	1	37.338	≥ 0.5	Pass
		2452	SU	/	1	37.098	≥ 0.5	Pass

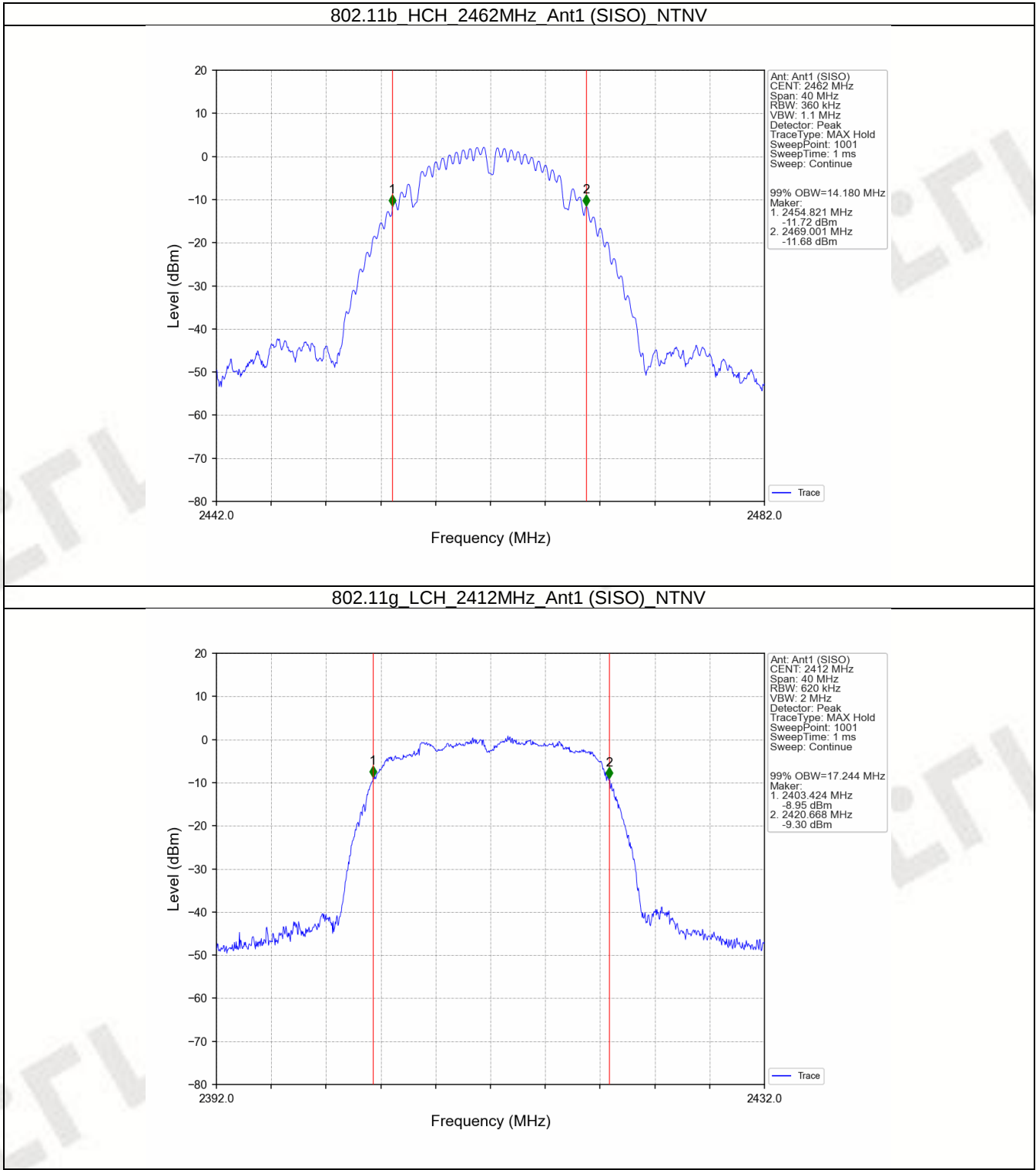
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1.2 Test Graph

1.2.1 OBW

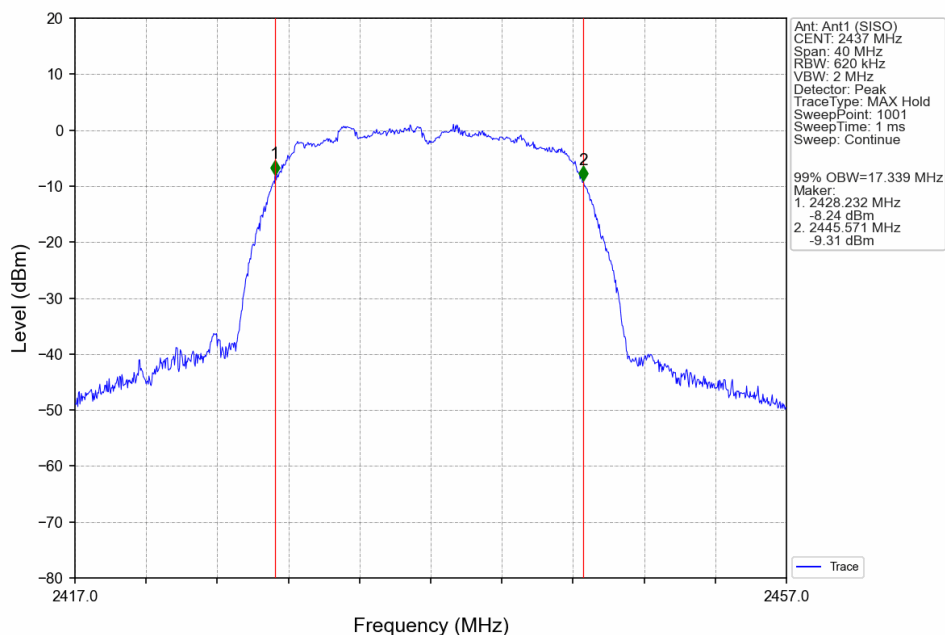


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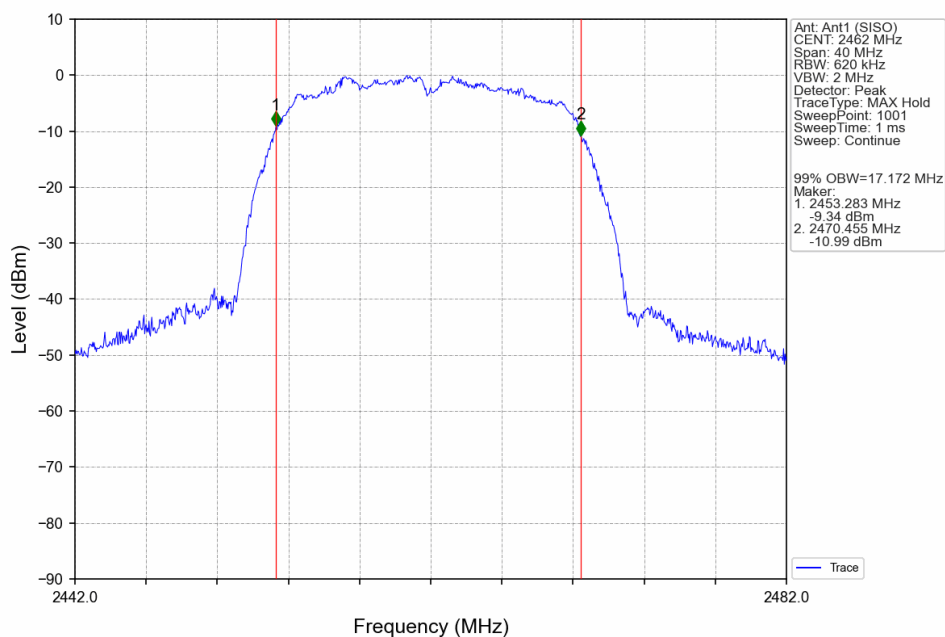


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802.11g MCH 2437MHz Ant1 (SISO) NTN

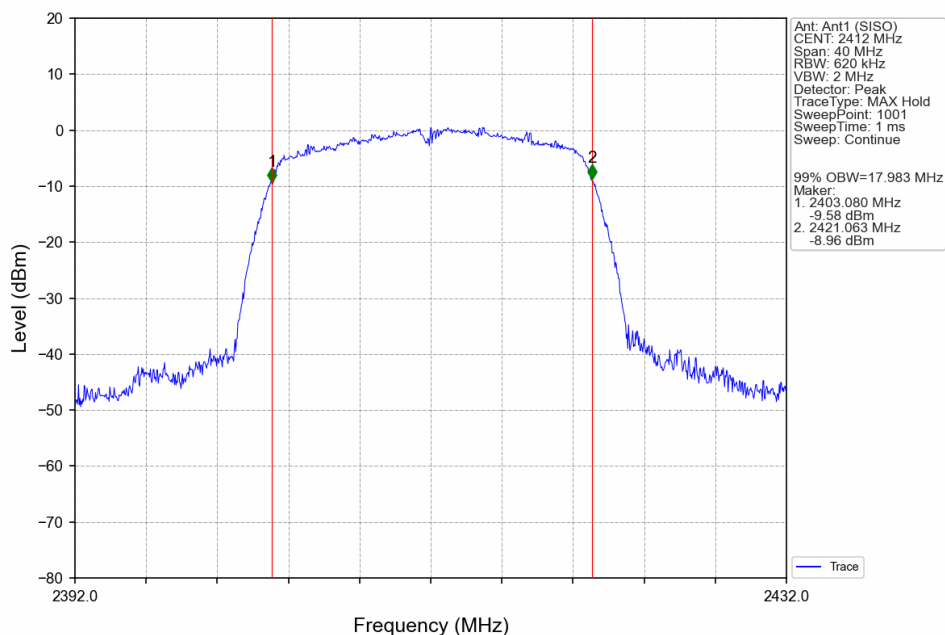


802.11g HCH 2462MHz Ant1 (SISO) NTN

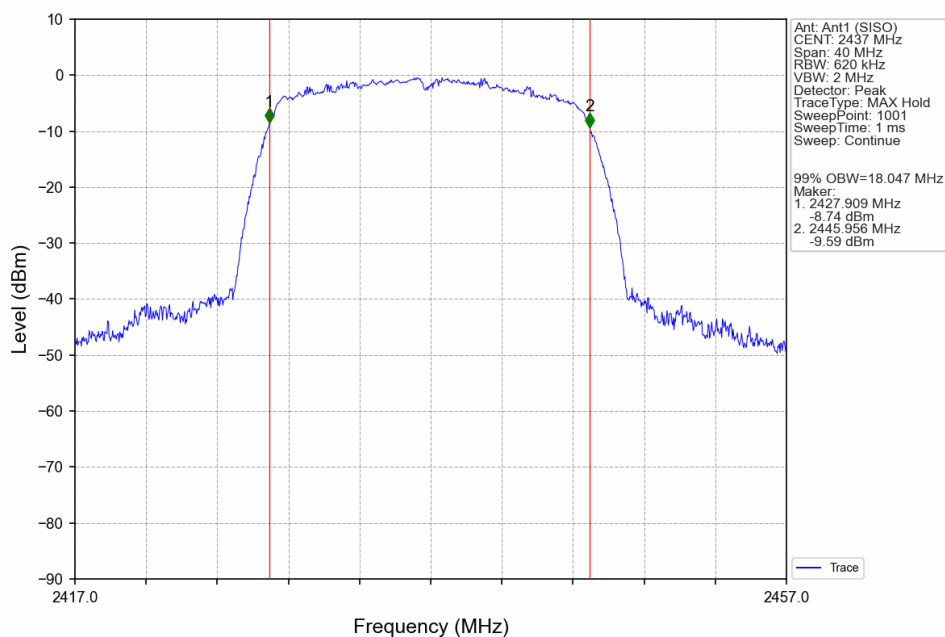


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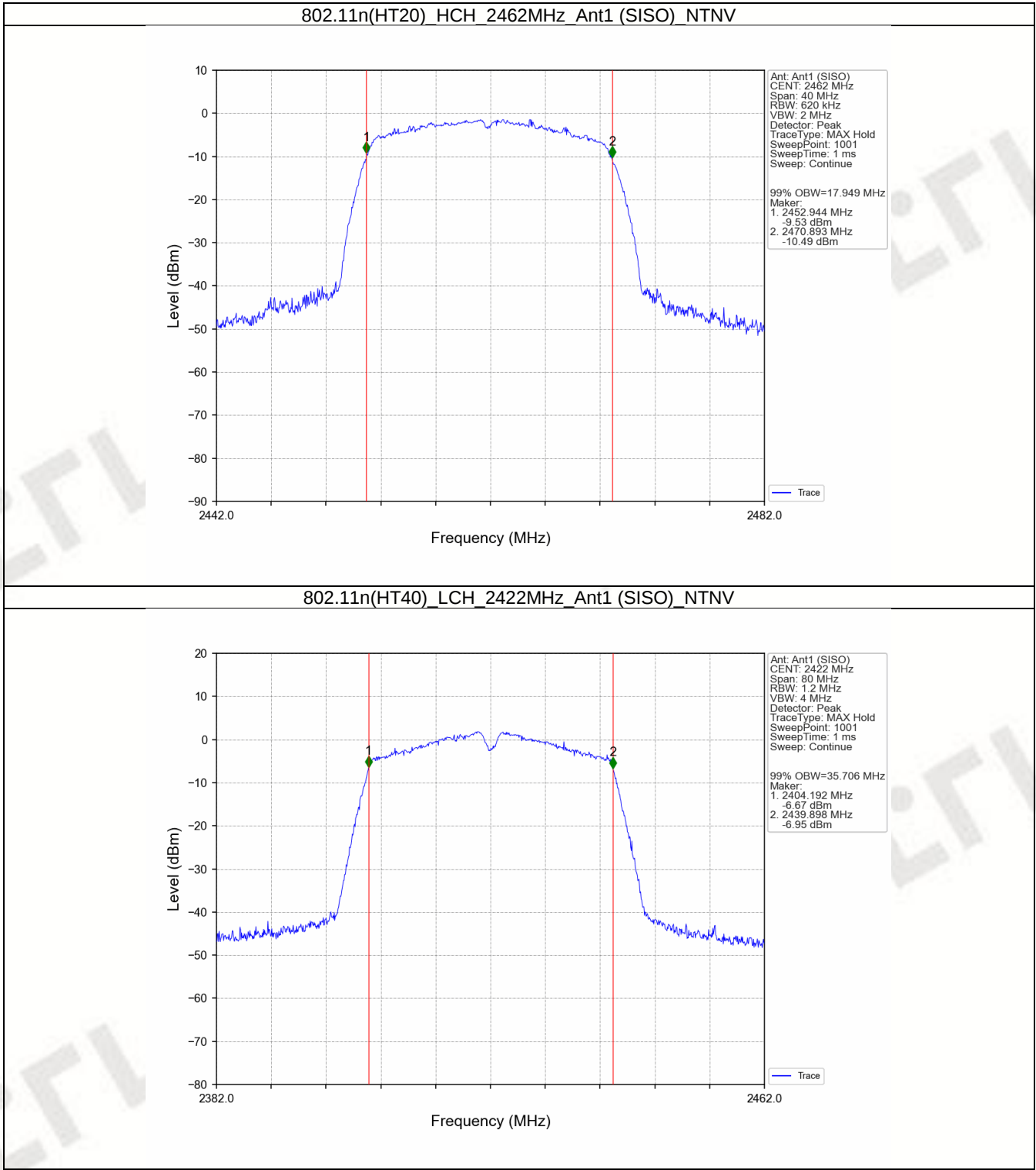
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTV



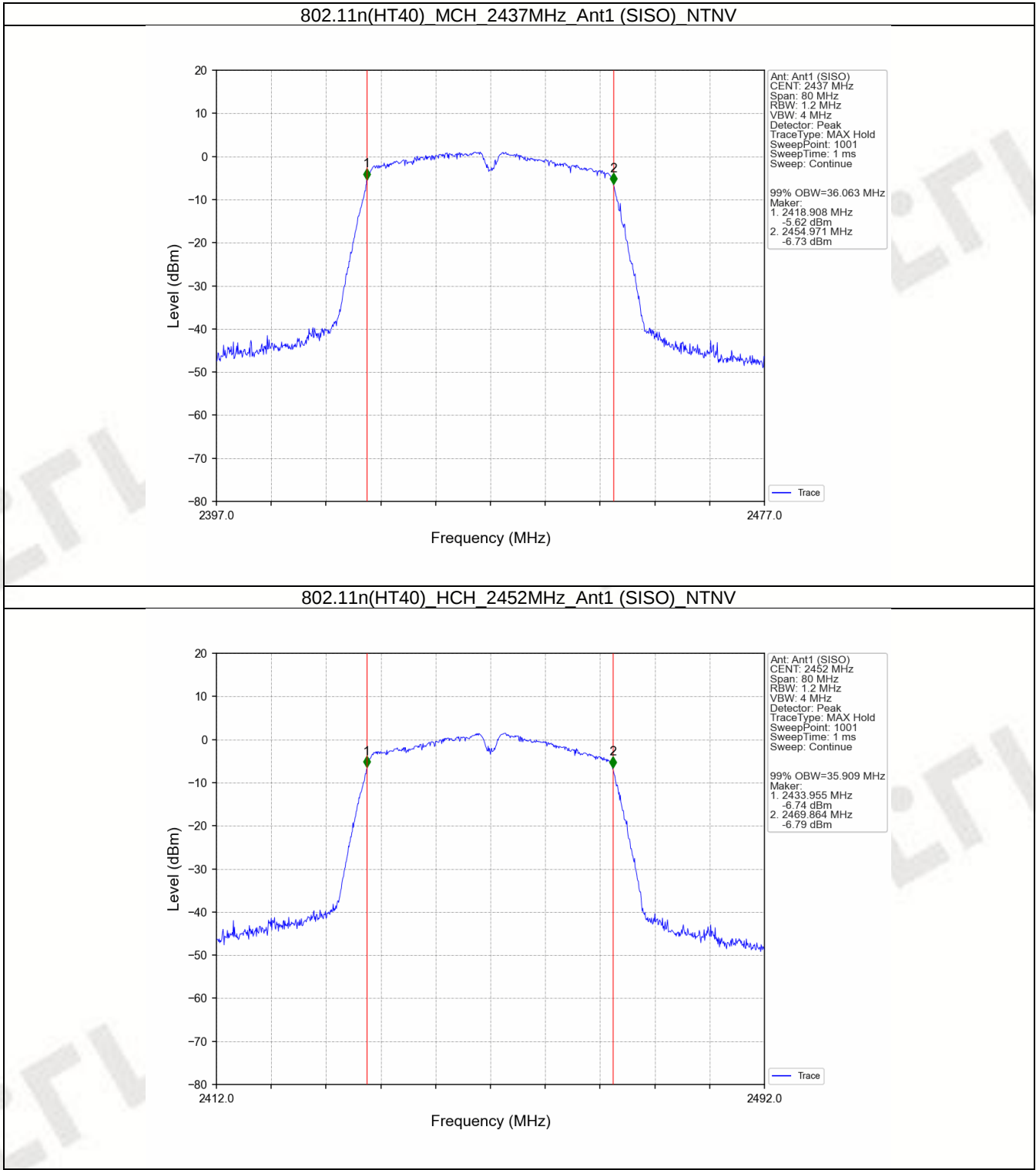
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTV



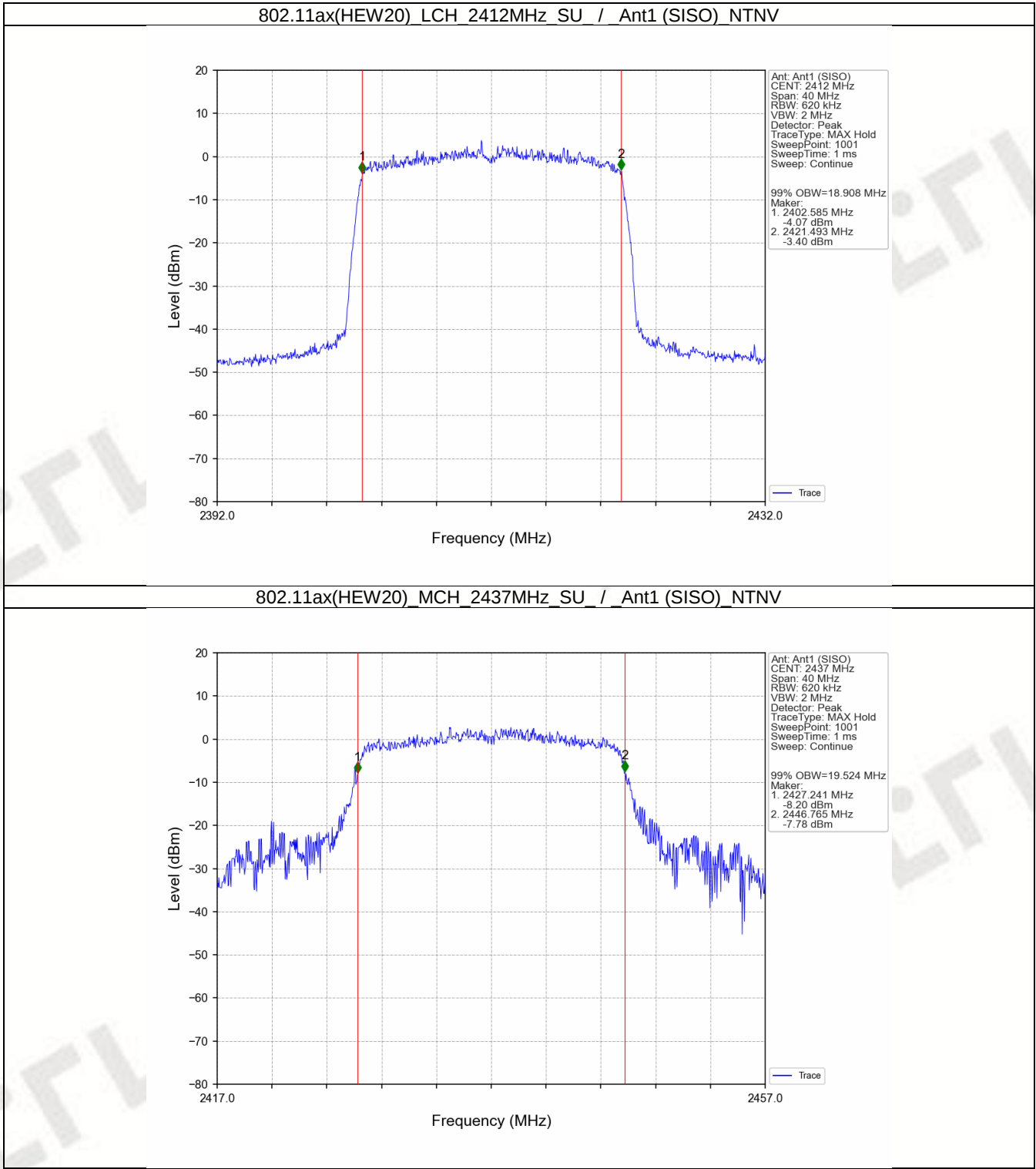
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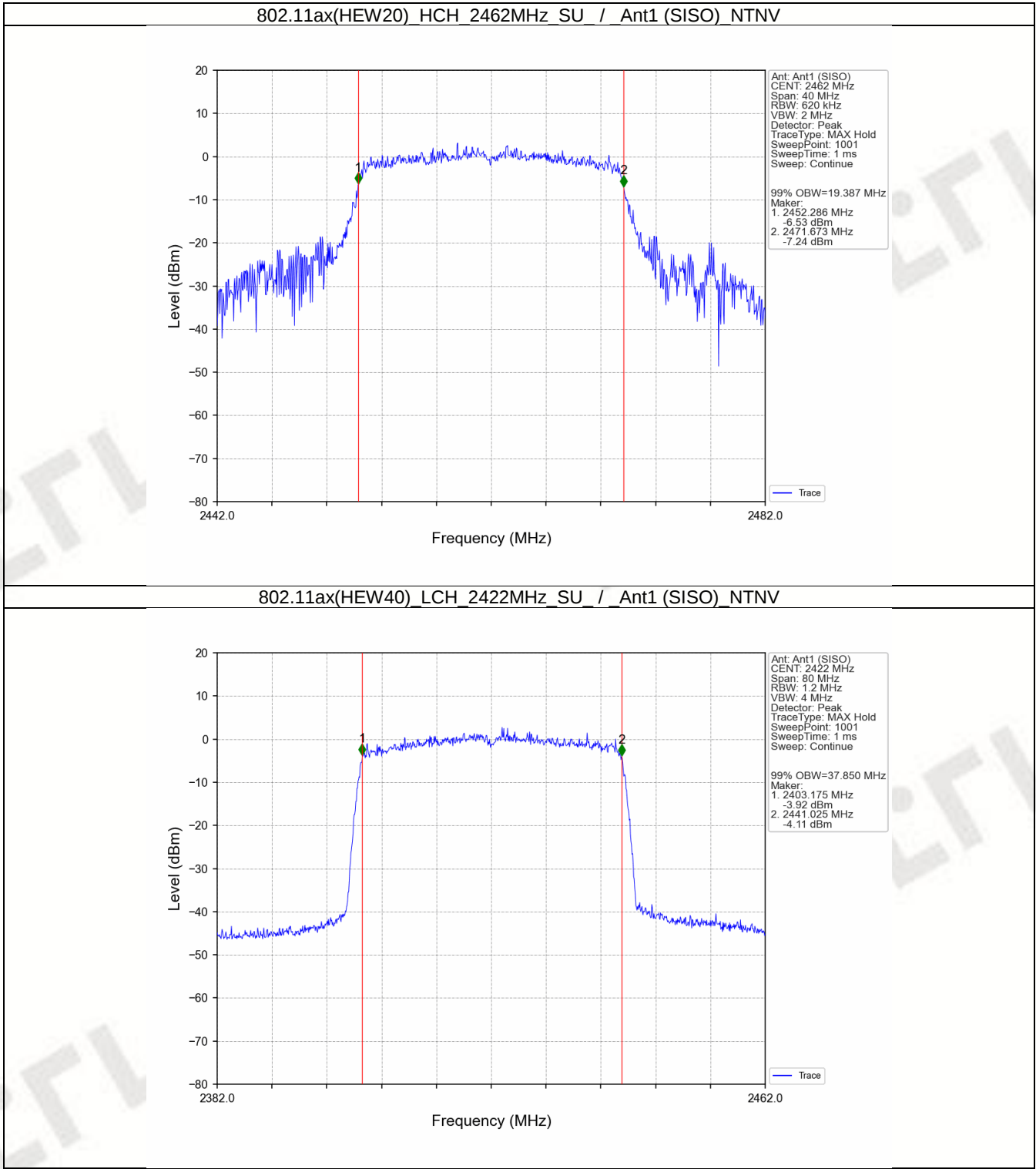
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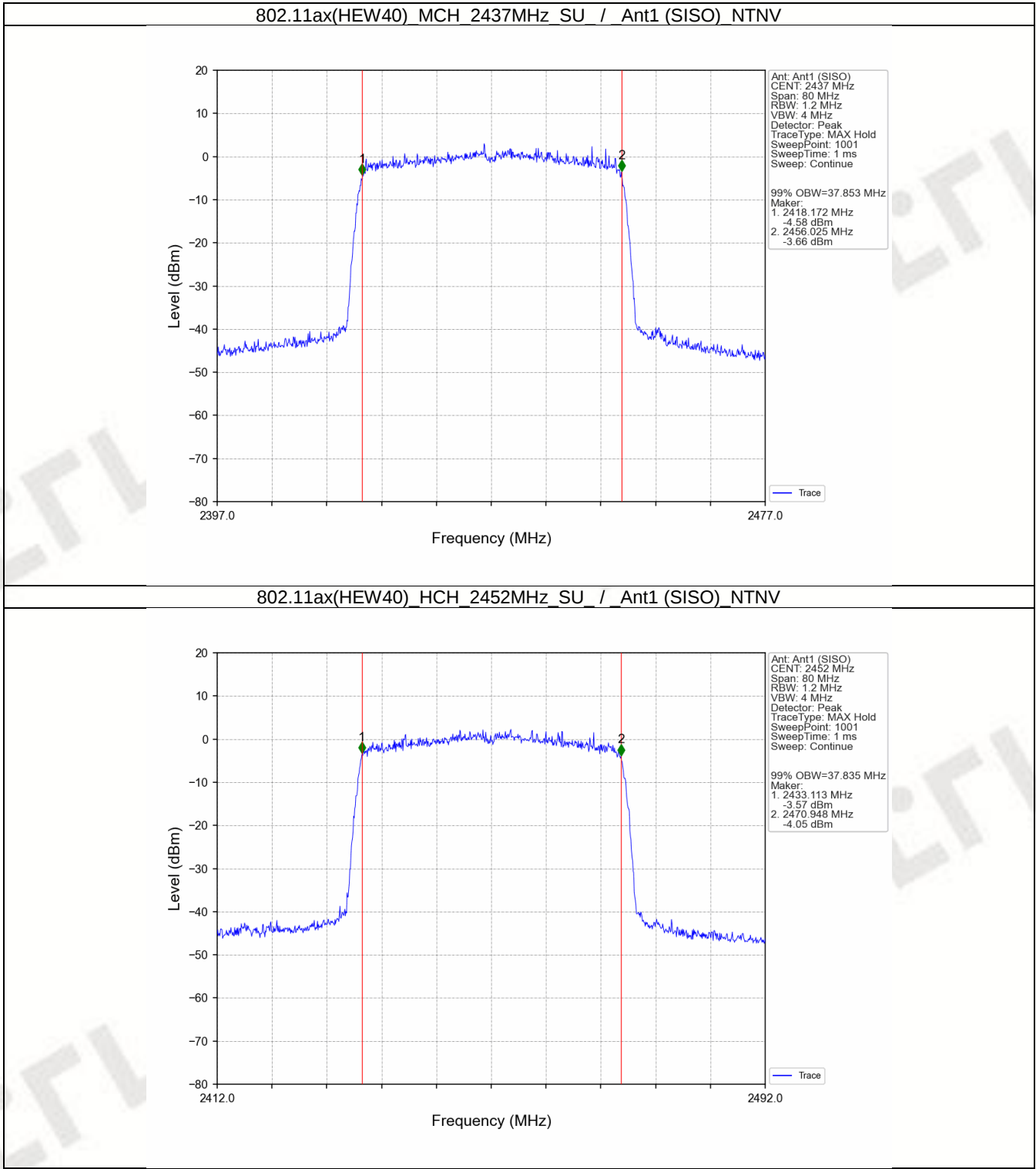
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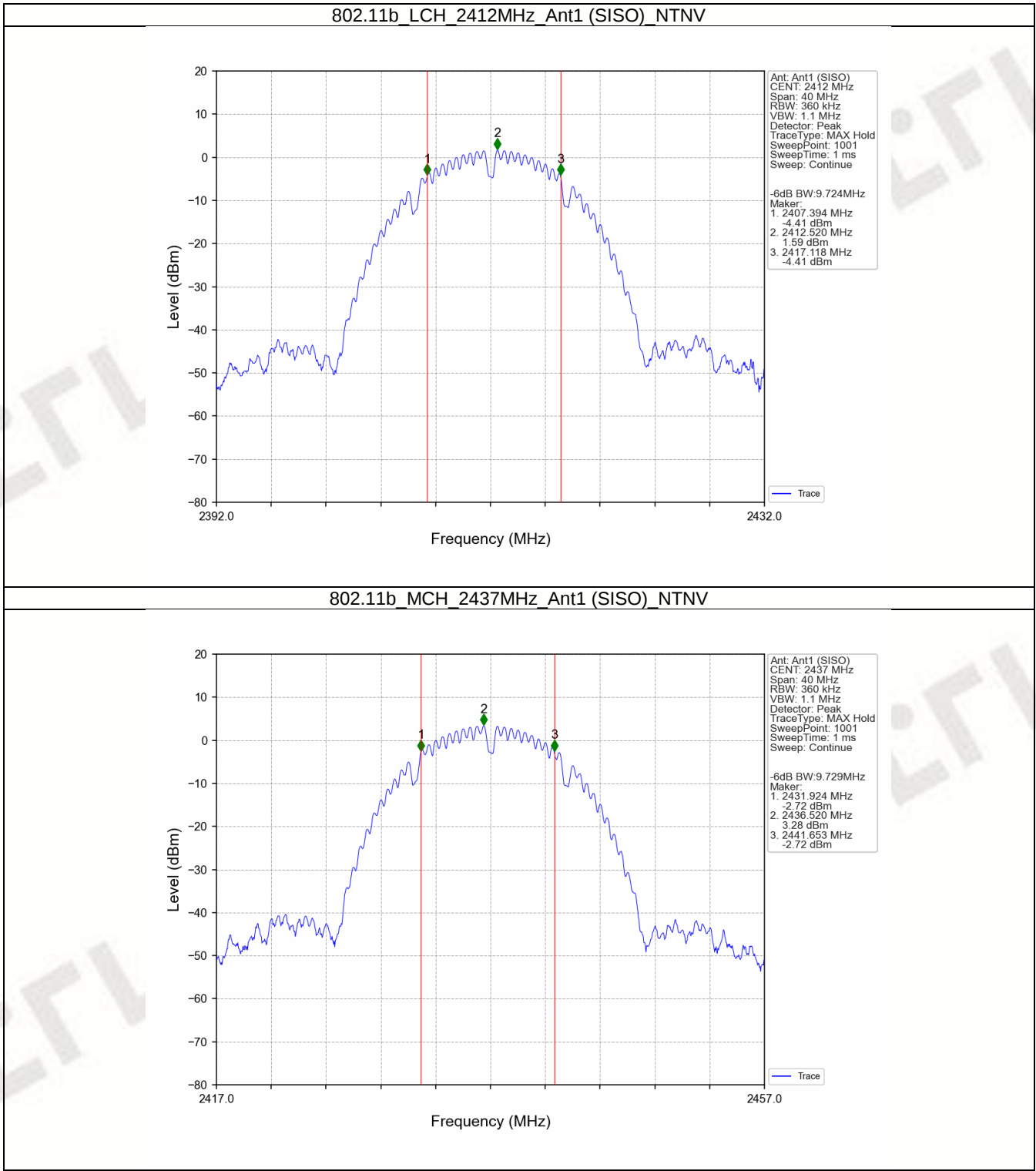


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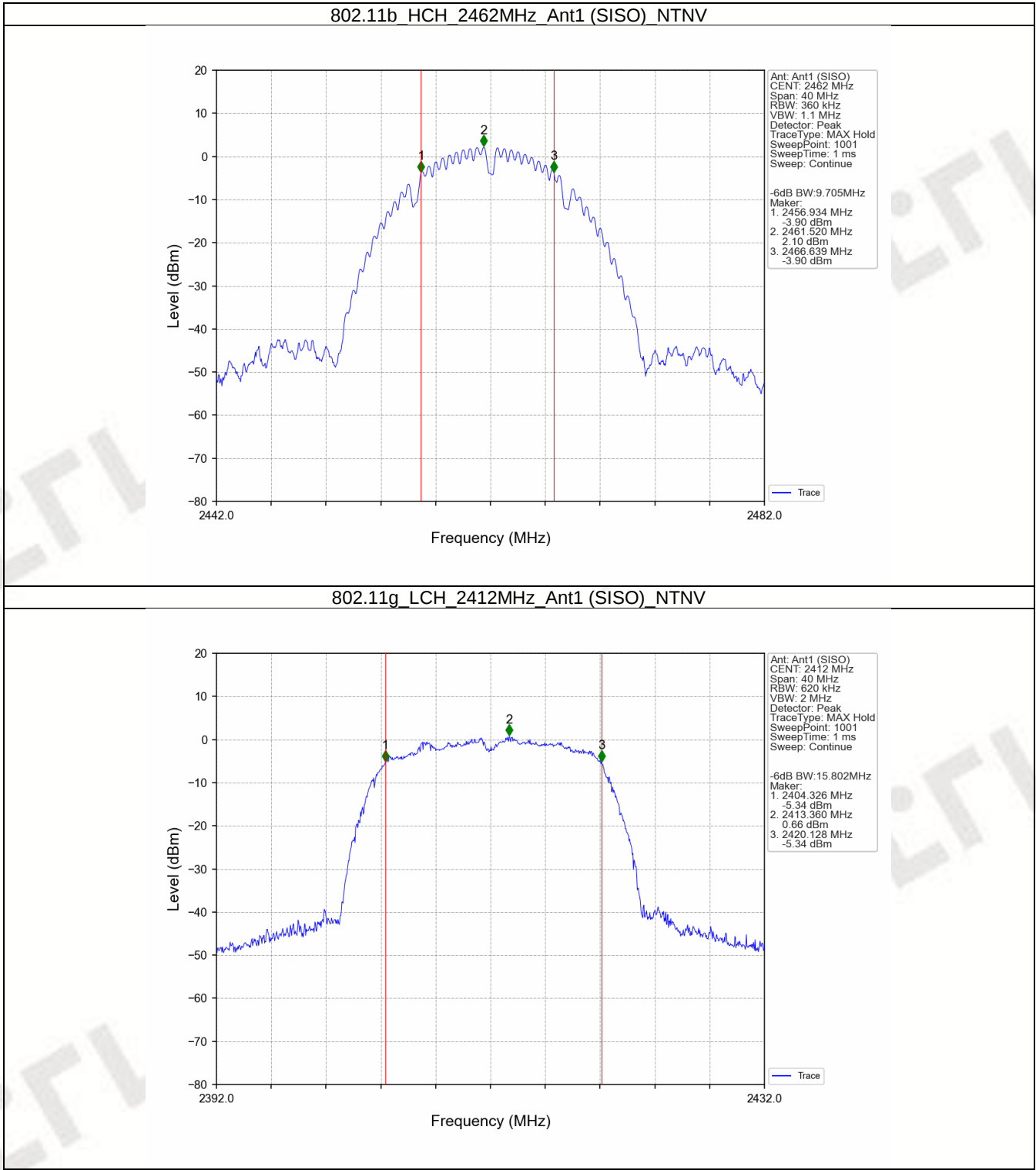


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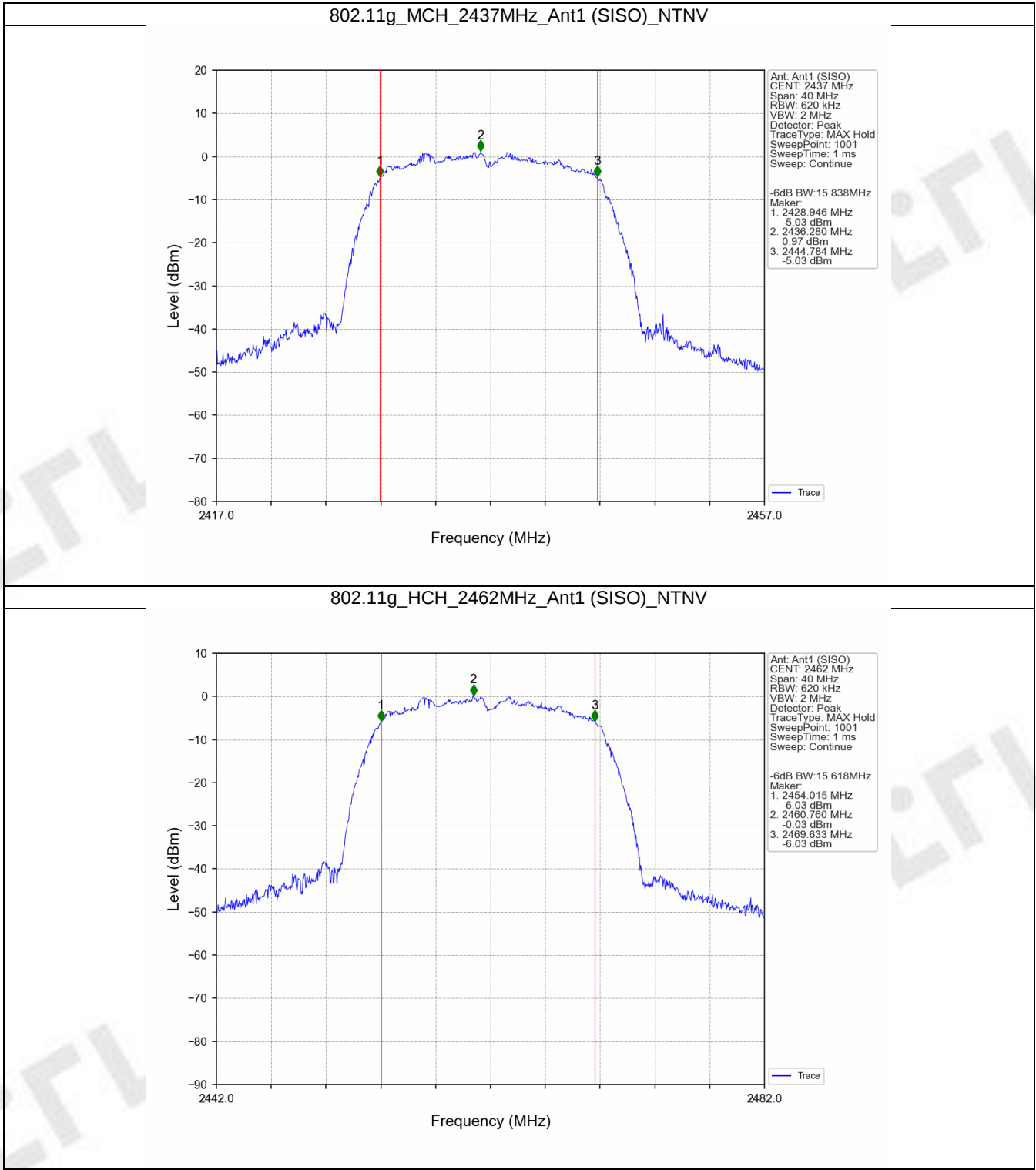
1.2.2 6dB BW



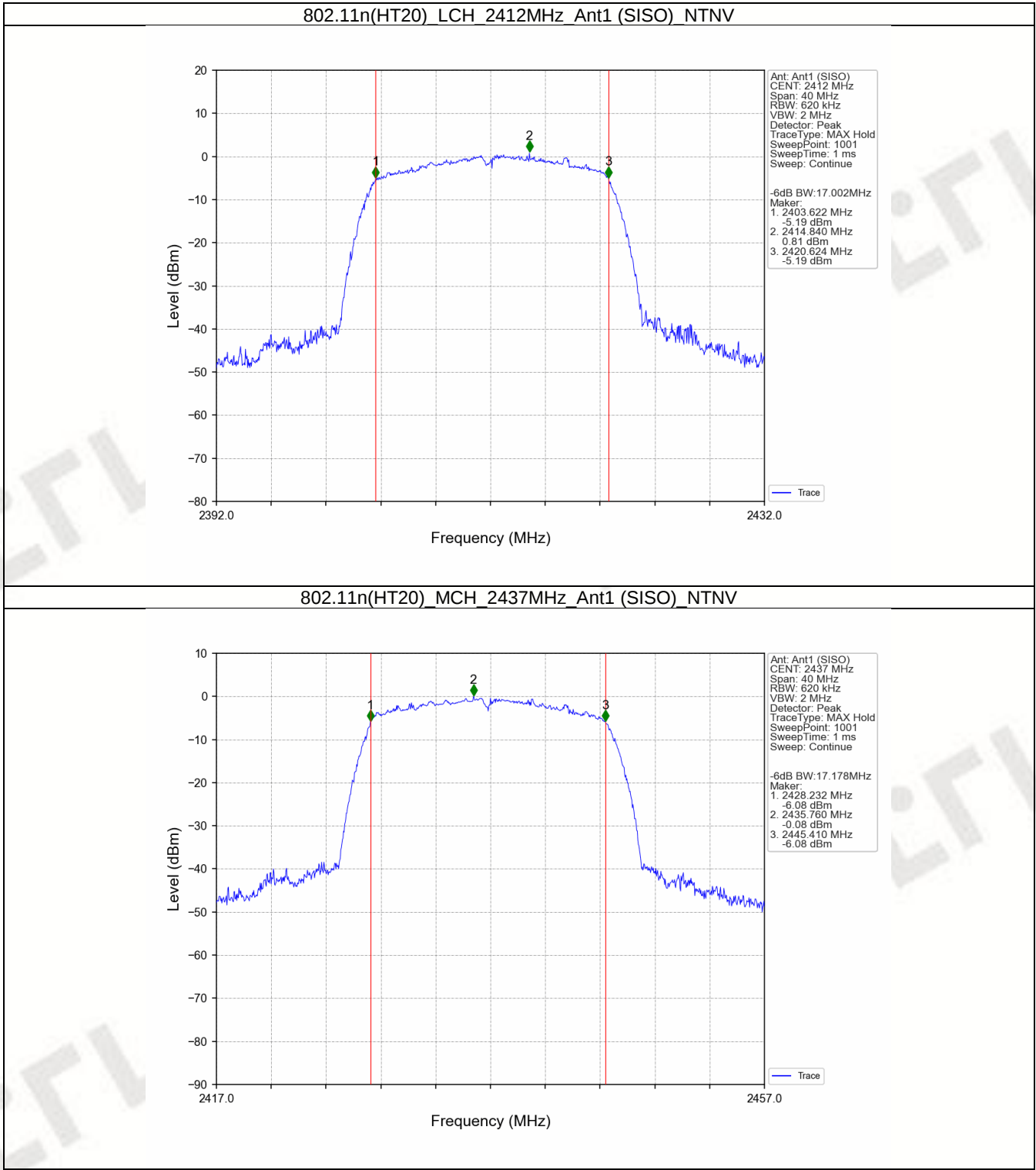
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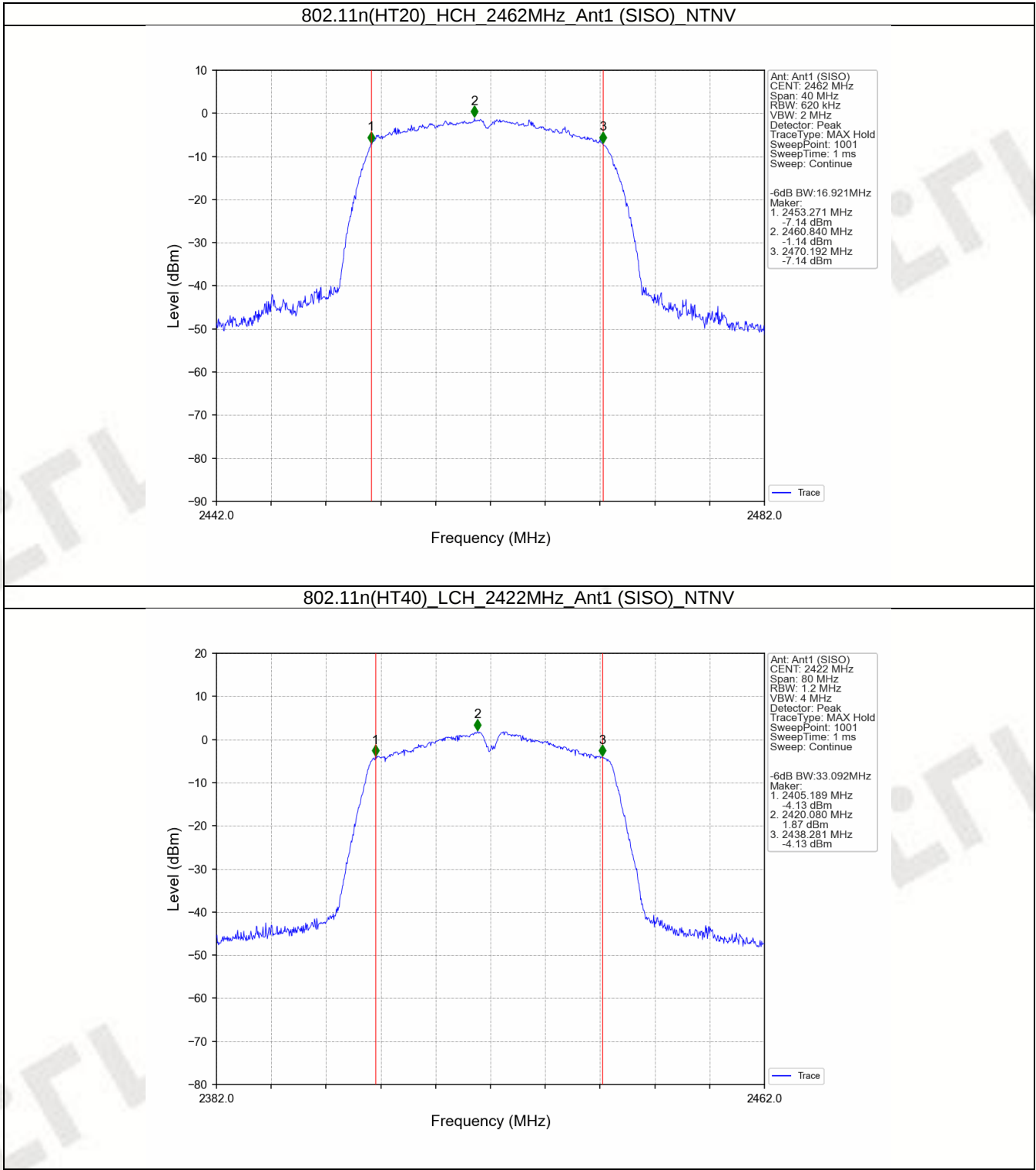
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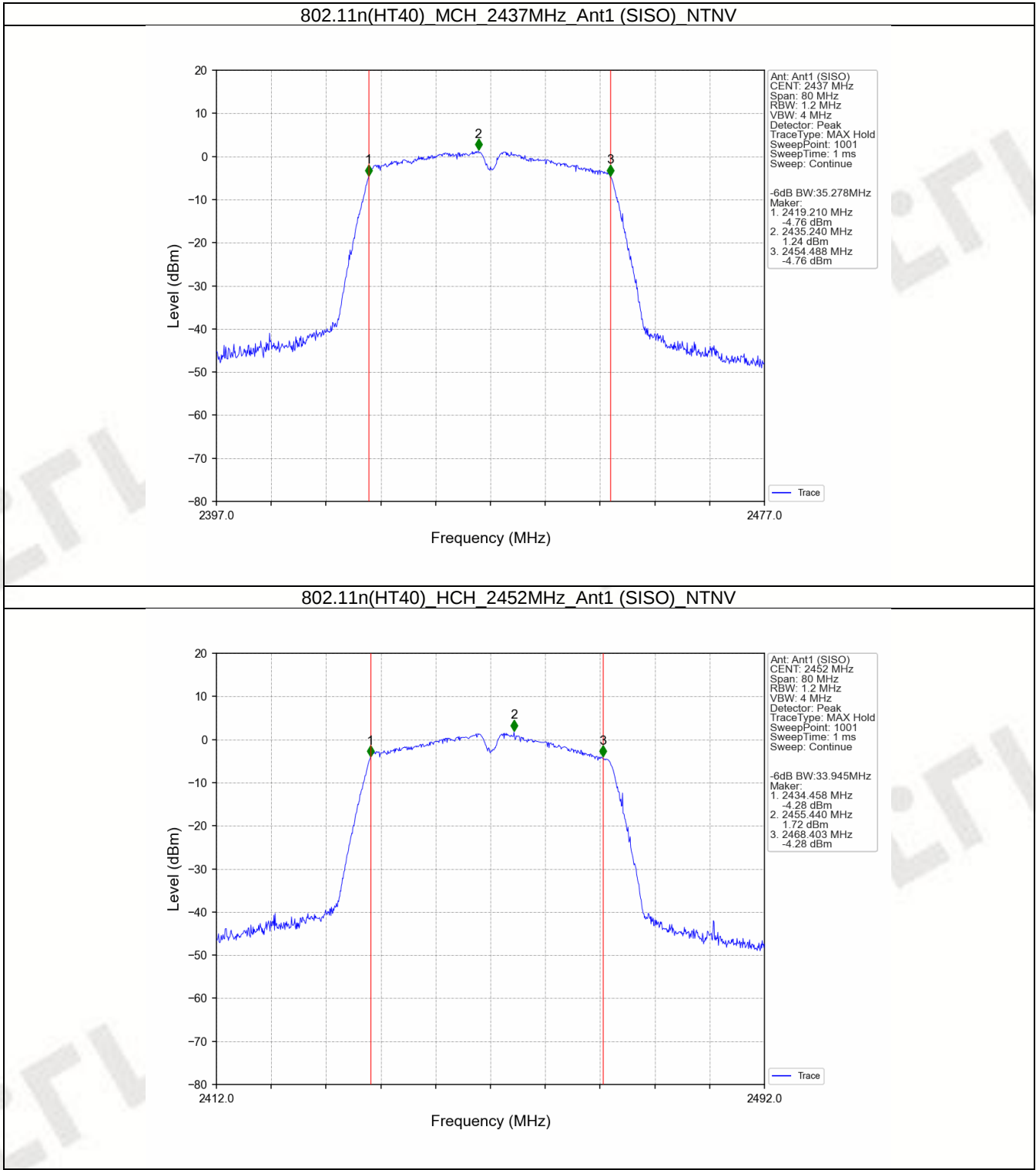
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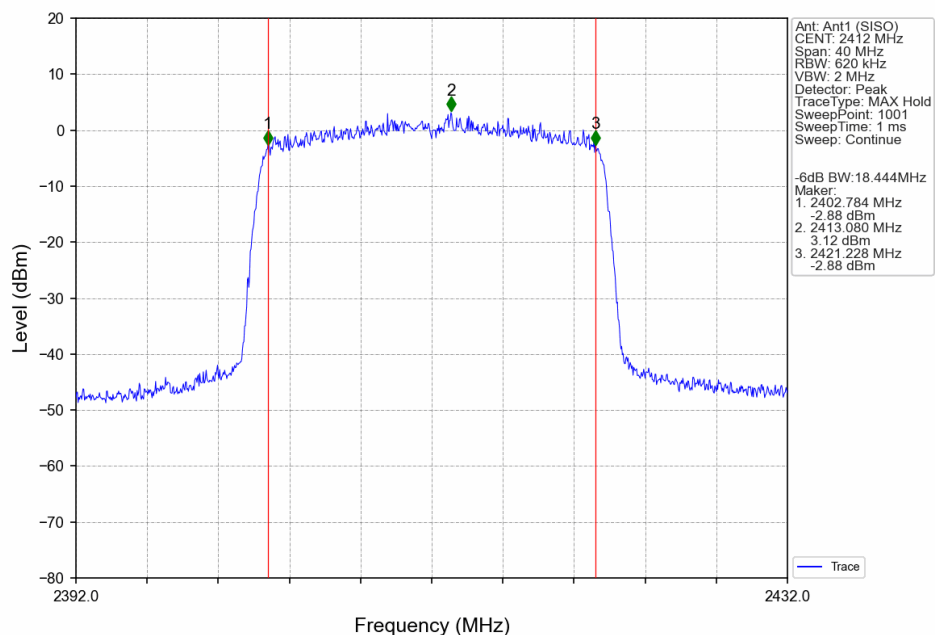


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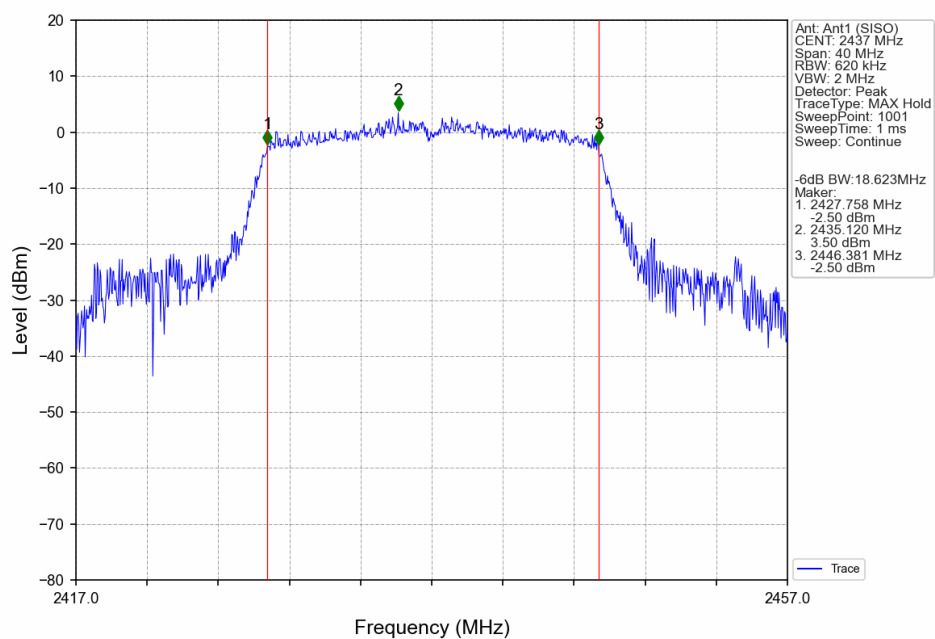


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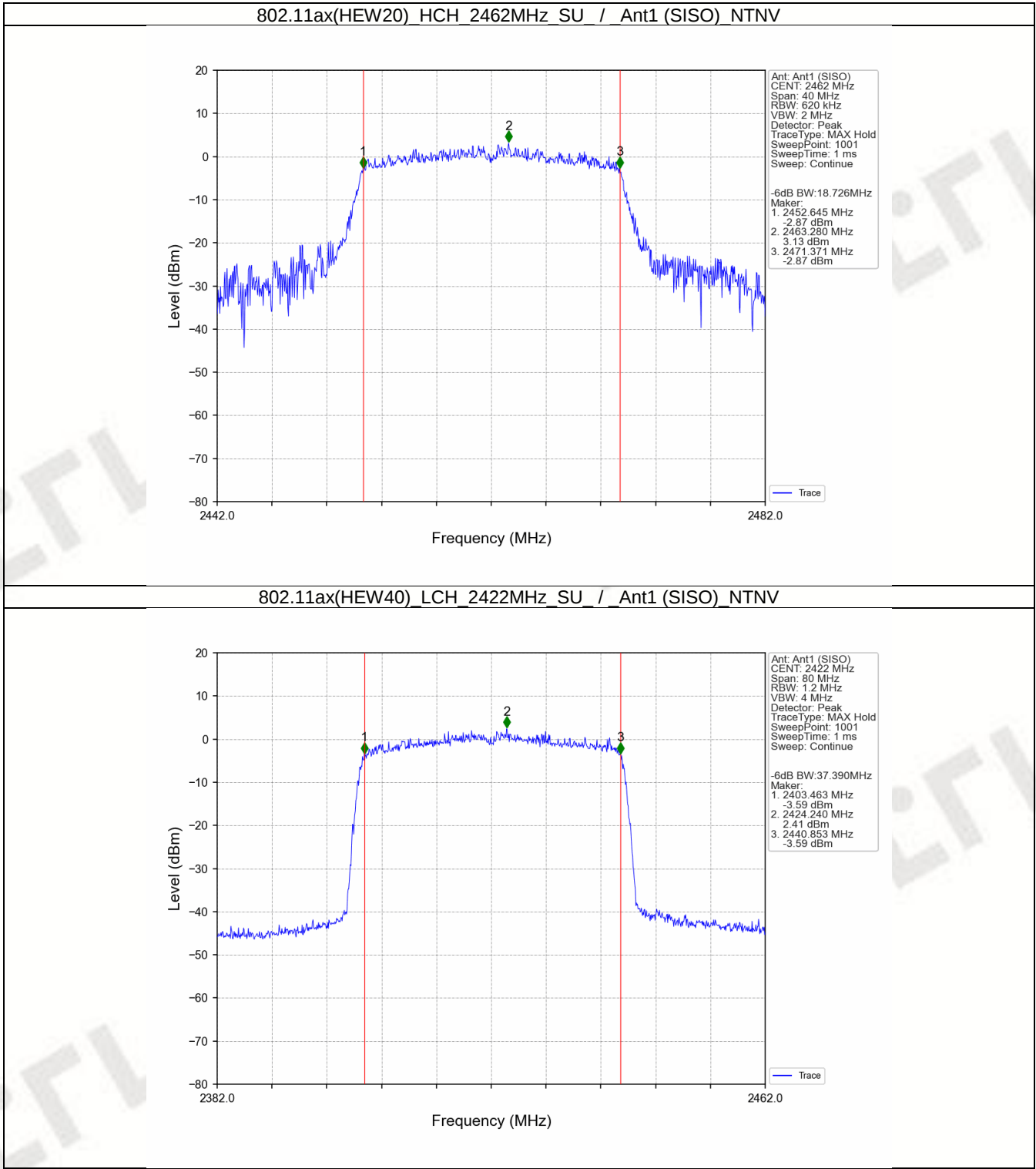
802.11ax(HEW20) LCH 2412MHz SU / Ant1 (SISO) NTN



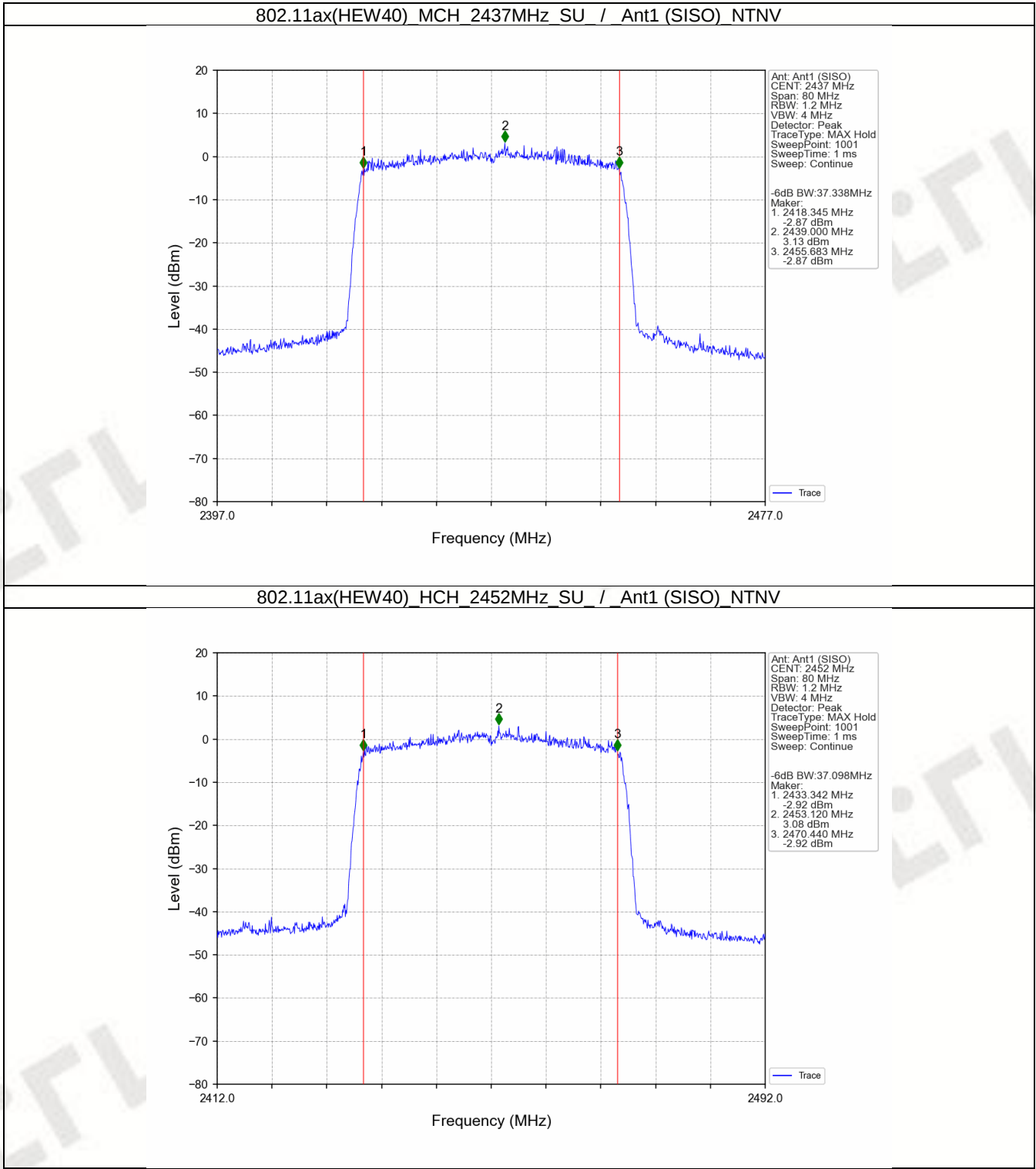
802.11ax(HEW20) MCH 2437MHz SU / Ant1 (SISO) NTN



FCCID: 2ASC7HD7000ELITE



FCCID: 2ASC7HD7000ELITE



FCCID: 2ASC7HD7000ELITE

2. Maximum Conducted Output Power

2.1 Test Result

2.1.1 Power

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Peak Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	-2.94	<=30	Pass
		2437	/	/	-2.83	<=30	Pass
		2462	/	/	-3.10	<=30	Pass
802.11g	SISO	2412	/	/	-2.47	<=30	Pass
		2437	/	/	-2.26	<=30	Pass
		2462	/	/	-2.45	<=30	Pass
802.11n (HT20)	SISO	2412	/	/	-2.72	<=30	Pass
		2437	/	/	-2.50	<=30	Pass
		2462	/	/	-2.70	<=30	Pass
802.11n (HT40)	SISO	2422	/	/	-2.50	<=30	Pass
		2437	/	/	-2.44	<=30	Pass
		2452	/	/	-2.55	<=30	Pass
802.11ax (HEW20)	SISO	2412	SU	/	-2.71	<=30	Pass
		2437	SU	/	-2.48	<=30	Pass
		2462	SU	/	-2.72	<=30	Pass
802.11ax (HEW40)	SISO	2422	SU	/	-2.50	<=30	Pass
		2437	SU	/	-2.45	<=30	Pass
		2452	SU	/	-2.54	<=30	Pass
Note1: Antenna Gain: Ant1: 2.12dBi;							

FCCID: 2ASC7HD7000ELITE

3. Maximum Power Spectral Density**3.1 Test Result****3.1.1 PSD**

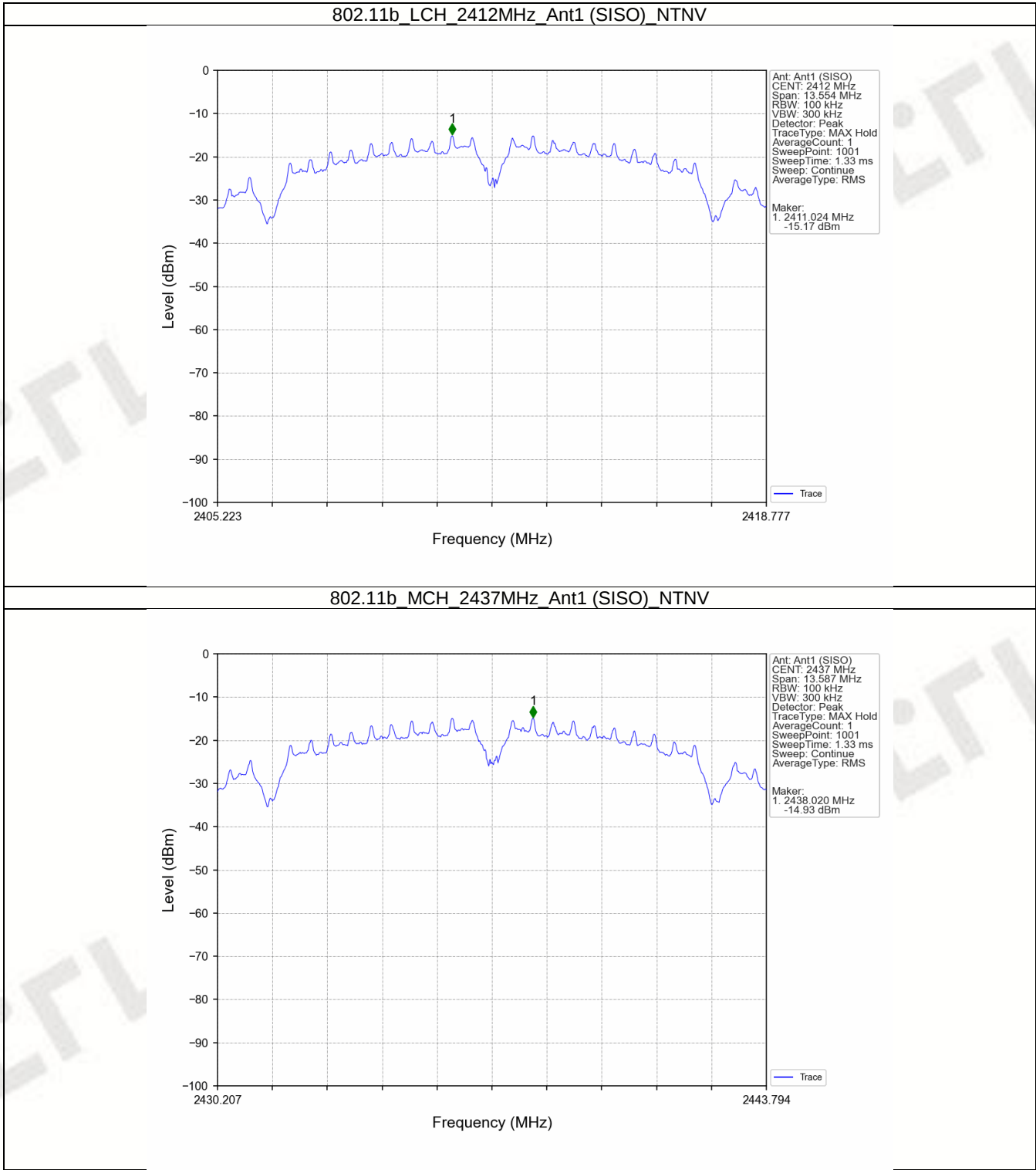
Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum PSD		Verdict
					ANT1 (dBm/100kHz)	Limit (dBm/3kHz)	
802.11b	SISO	2412	/	/	-15.17	<=8	Pass
		2437	/	/	-14.93	<=8	Pass
		2462	/	/	-15.14	<=8	Pass
802.11g	SISO	2412	/	/	-20.33	<=8	Pass
		2437	/	/	-20.20	<=8	Pass
		2462	/	/	-20.36	<=8	Pass
802.11n (HT20)	SISO	2412	/	/	-20.28	<=8	Pass
		2437	/	/	-20.07	<=8	Pass
		2462	/	/	-20.29	<=8	Pass
802.11n (HT40)	SISO	2422	/	/	-20.08	<=8	Pass
		2437	/	/	-20.02	<=8	Pass
		2452	/	/	-20.14	<=8	Pass
802.11ax (HEW20)	SISO	2412	SU	/	-20.24	<=8	Pass
		2437	SU	/	-20.09	<=8	Pass
		2462	SU	/	-20.27	<=8	Pass
802.11ax (HEW40)	SISO	2422	SU	/	-20.04	<=8	Pass
		2437	SU	/	-20.01	<=8	Pass
		2452	SU	/	-20.10	<=8	Pass

Note1: Antenna Gain: Ant1: 2.12dBi;

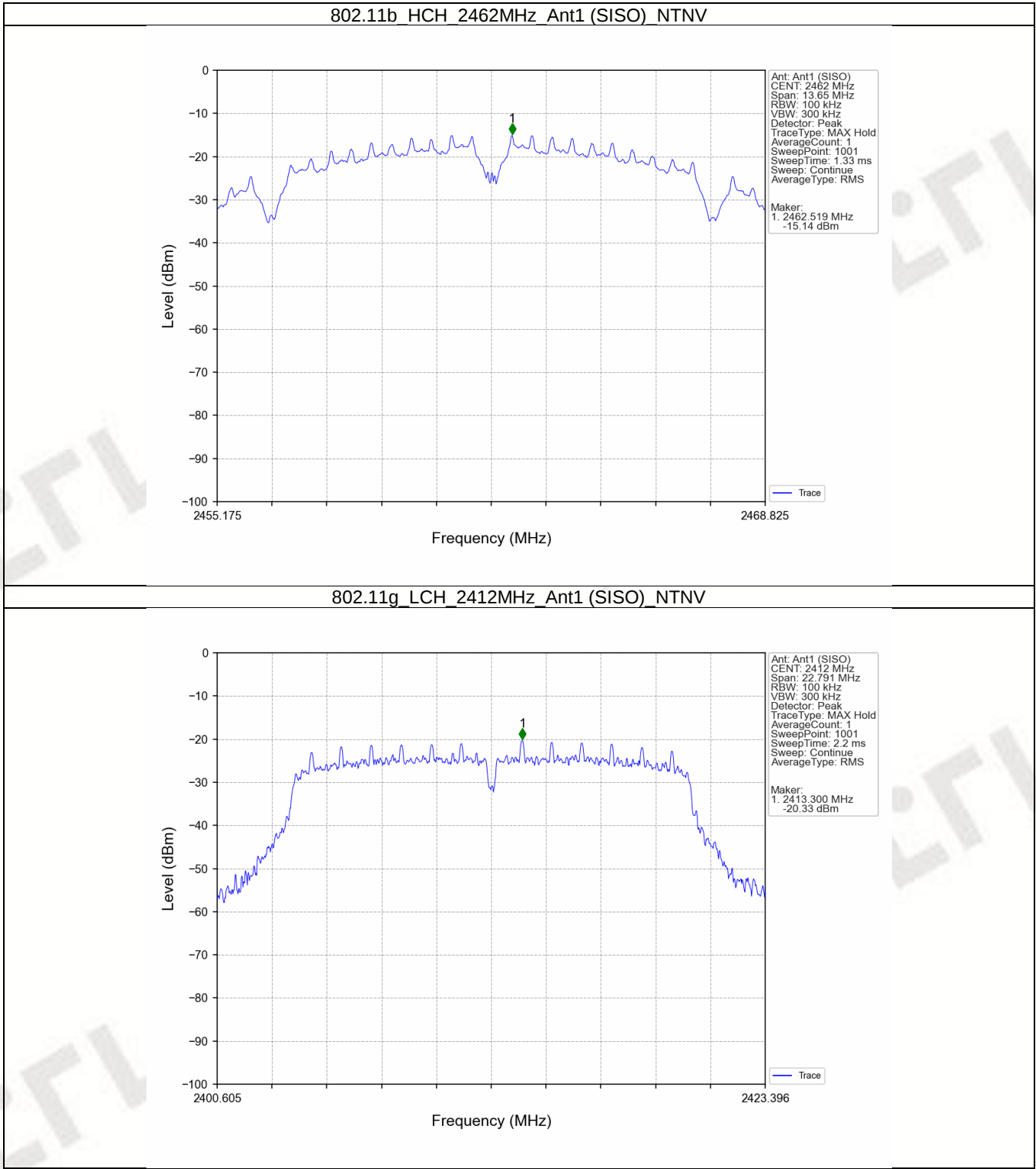
FCCID: 2ASC7HD7000ELITE

3.2 Test Graph

3.2.1 PSD

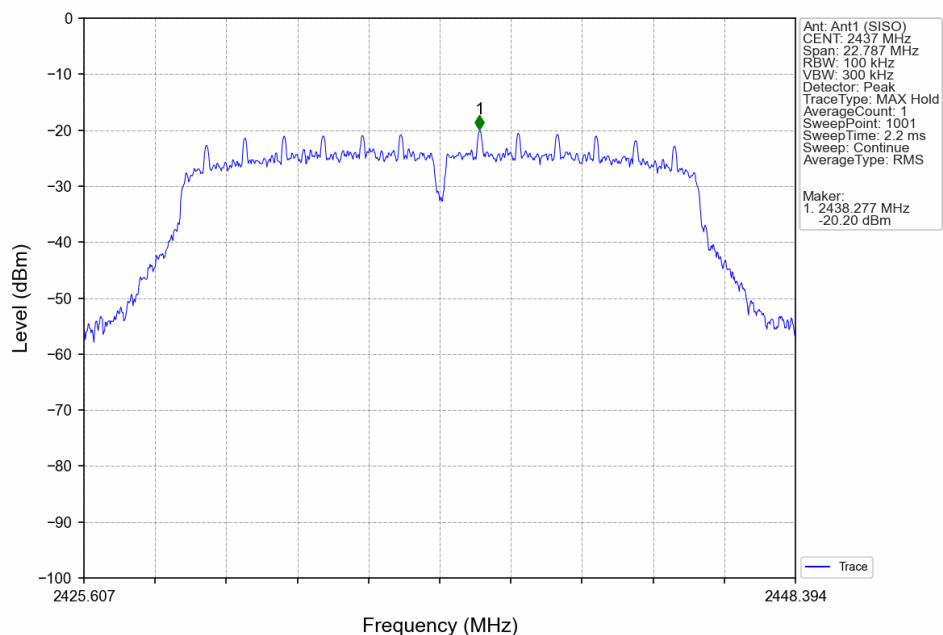


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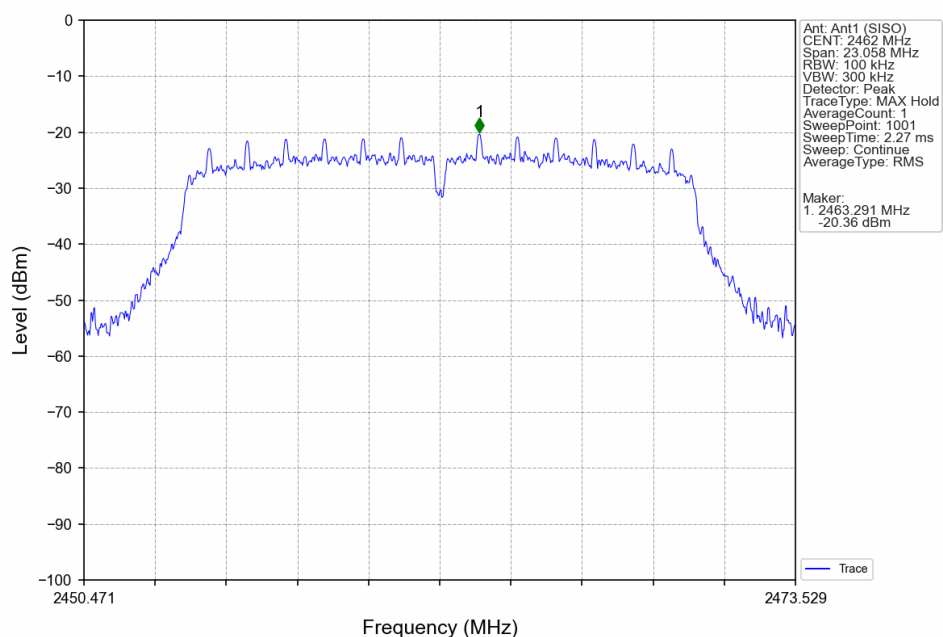


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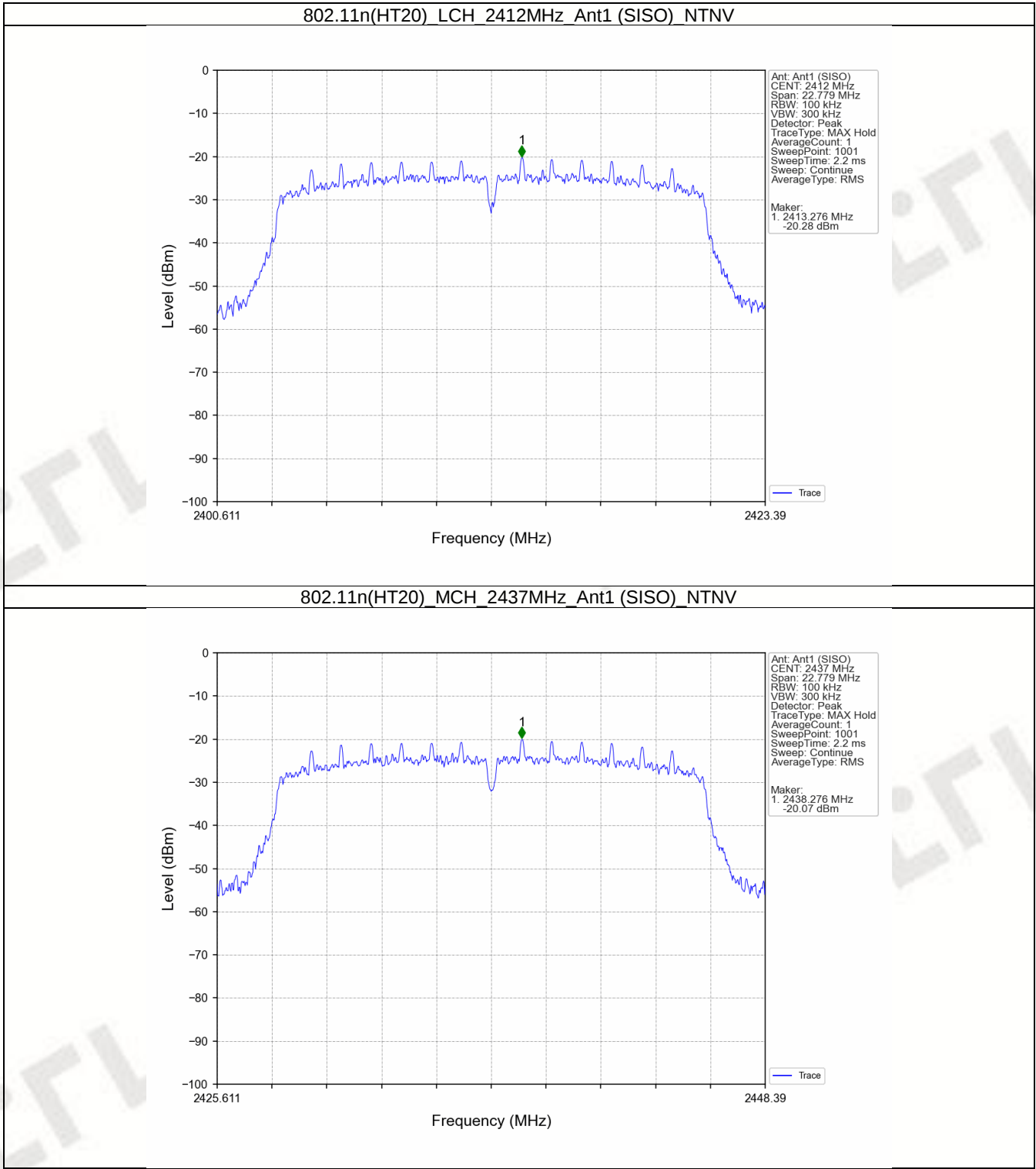
802.11g MCH 2437MHz Ant1 (SISO) NTN



802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

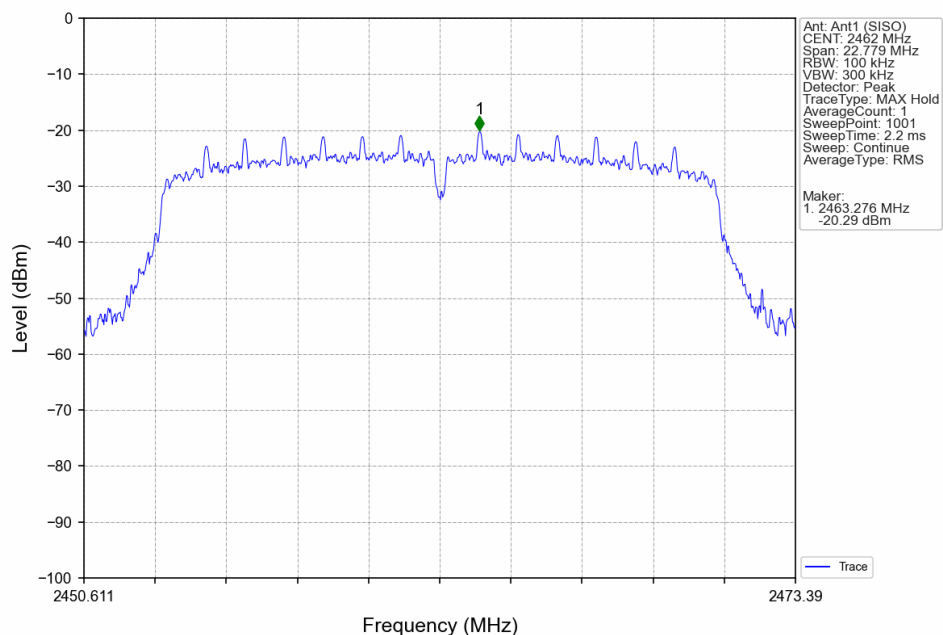


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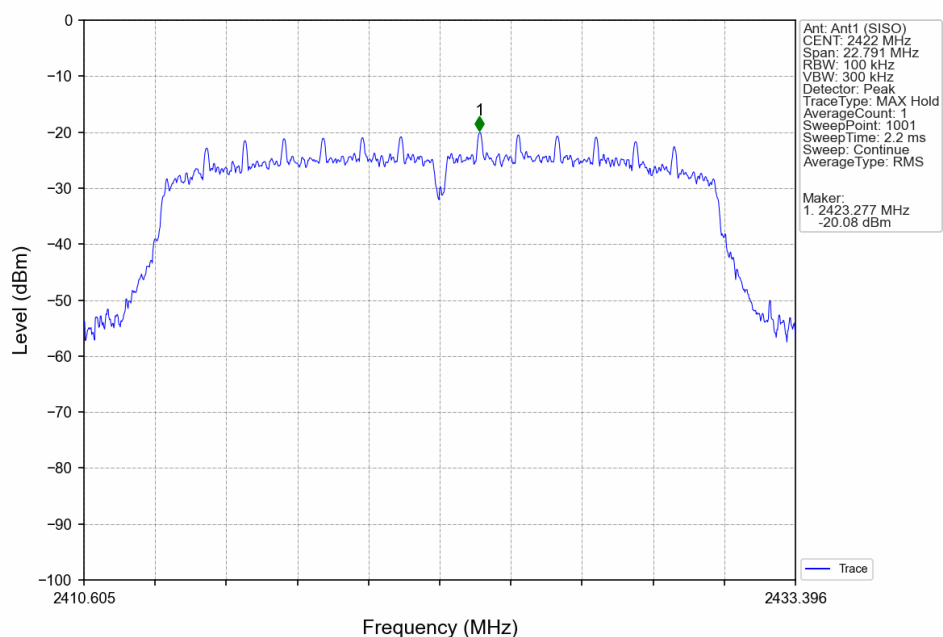


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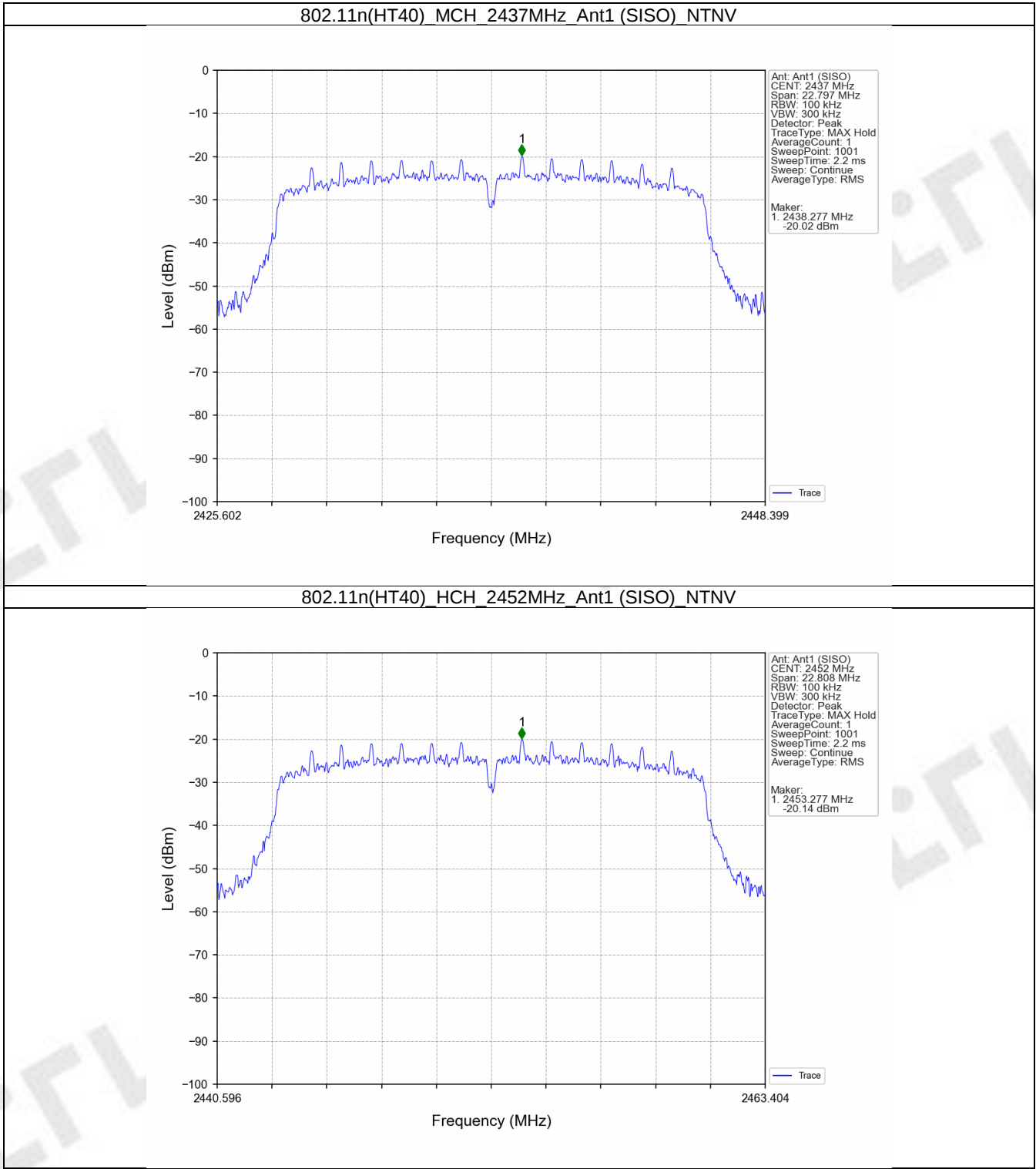
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTV



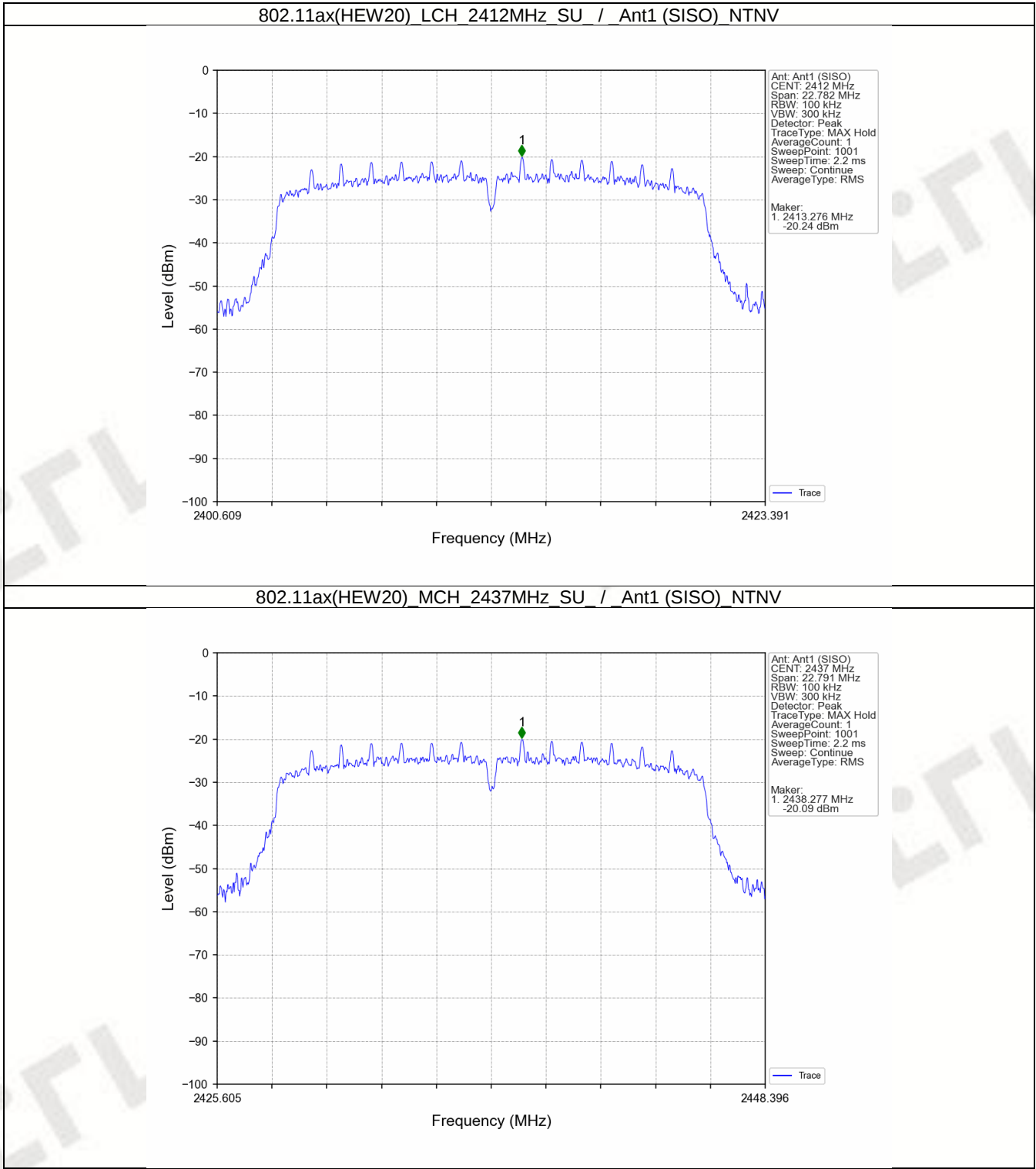
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV



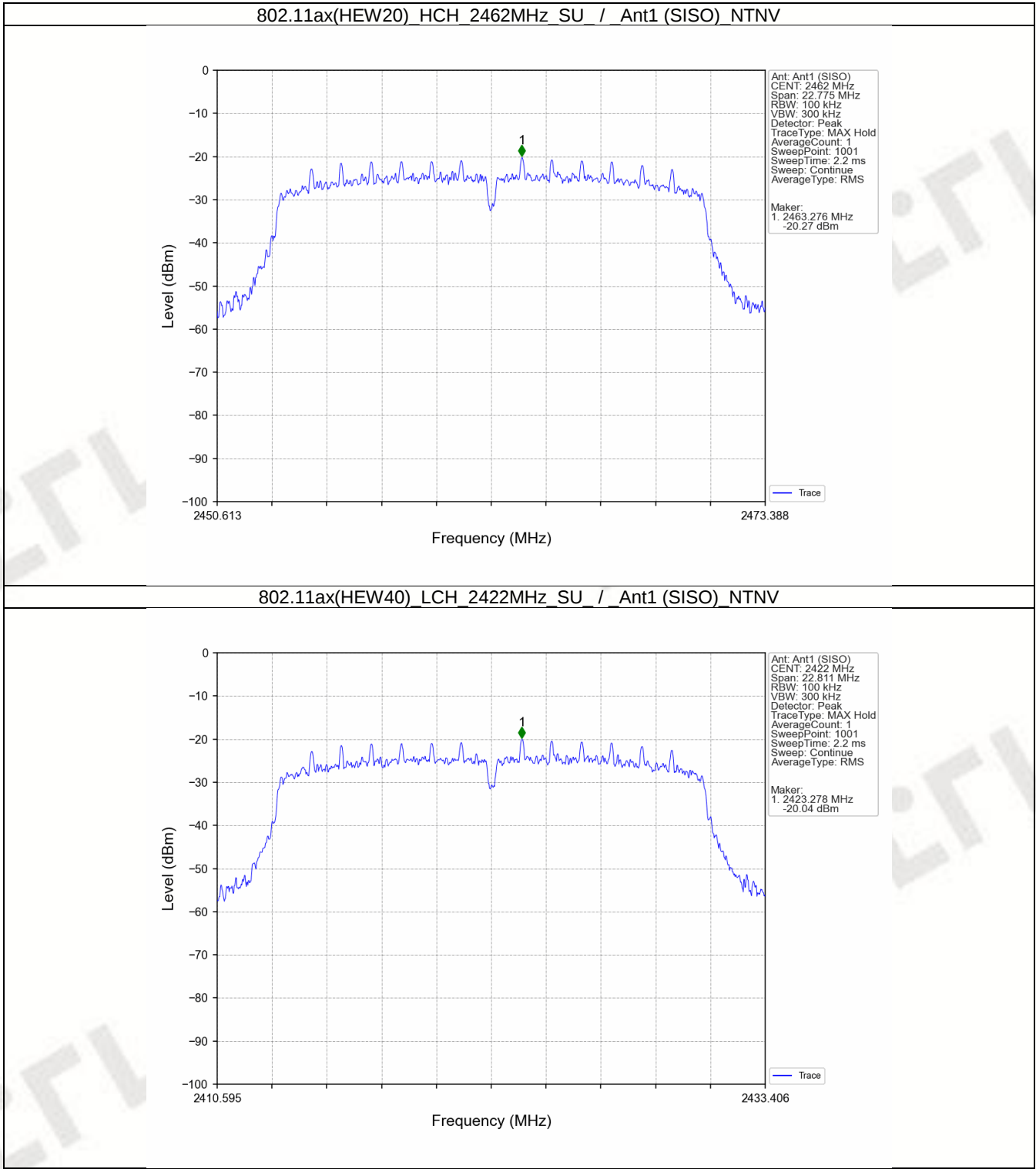
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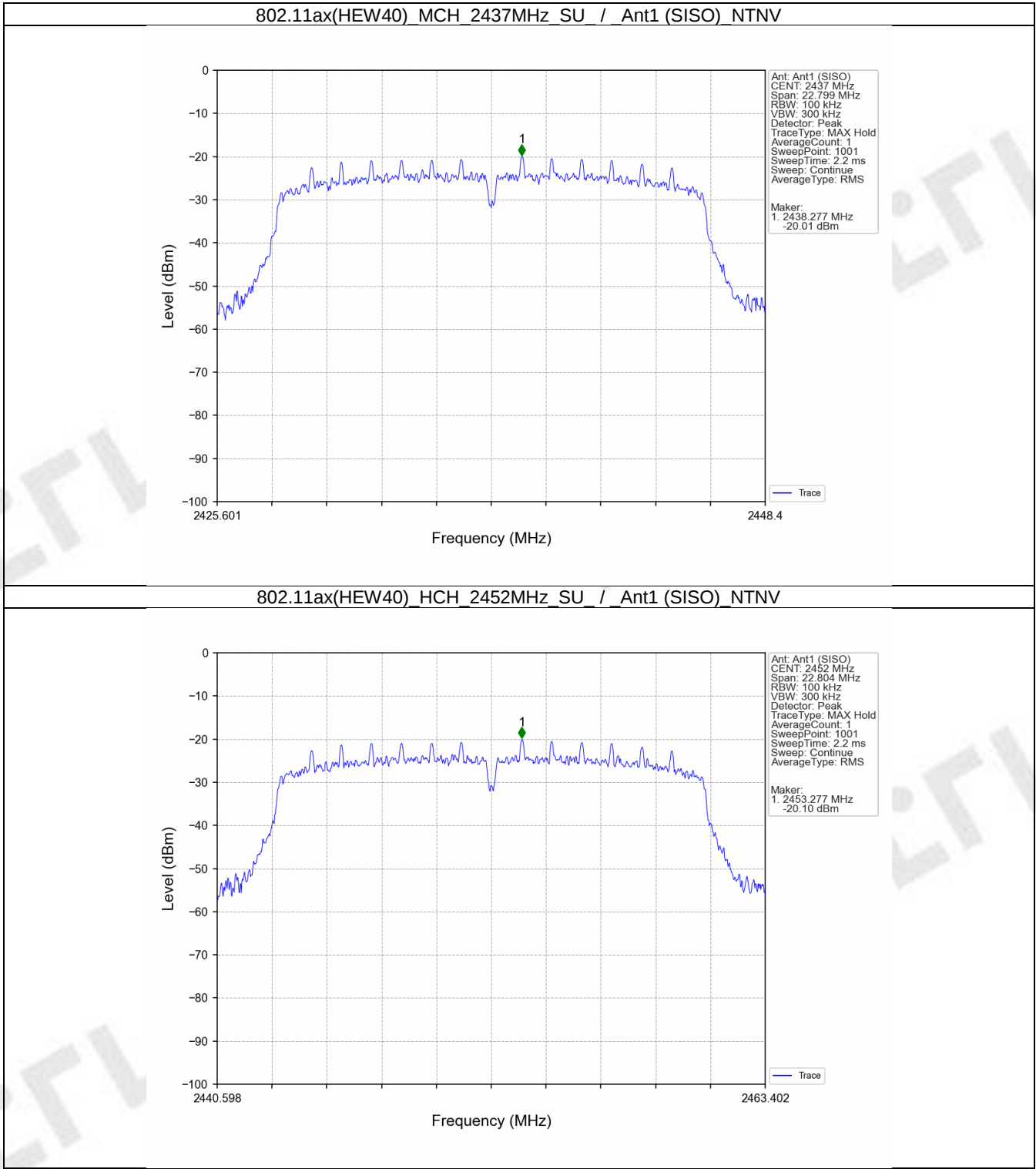
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FCCID: 2ASC7HD7000ELITE

4. Unwanted Emissions In Non-restricted Frequency Bands

4.1 Test Result

4.1.1 Ref

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)
802.11b	SISO	2412	/	/	1	-17.57
		2437	/	/	1	-17.29
		2462	/	/	1	-17.52
802.11g	SISO	2412	/	/	1	-20.31
		2437	/	/	1	-20.12
		2462	/	/	1	-20.36
802.11n (HT20)	SISO	2412	/	/	1	-20.30
		2437	/	/	1	-20.07
		2462	/	/	1	-20.27
802.11n (HT40)	SISO	2422	/	/	1	-20.04
		2437	/	/	1	-20.01
		2452	/	/	1	-20.25
802.11ax (HEW20)	SISO	2412	SU	/	1	-20.26
		2437	SU	/	1	-20.04
		2462	SU	/	1	-20.28
802.11ax (HEW40)	SISO	2422	SU	/	1	-20.05
		2437	SU	/	1	-20.01
		2452	SU	/	1	-20.08

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

4.1.2 CSE

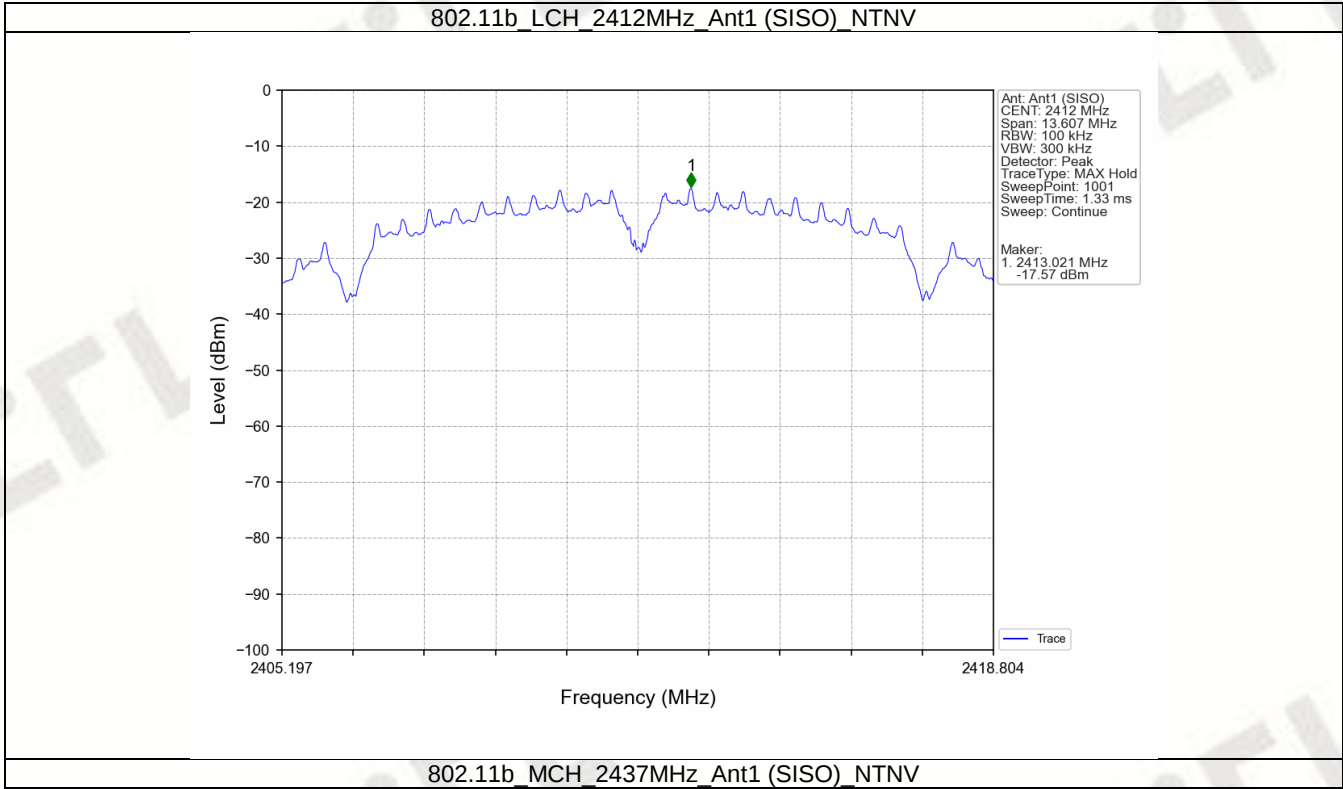
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	/	/	1	-17.29	-37.29	Pass
		2437	/	/	1	-17.29	-37.29	Pass
		2462	/	/	1	-17.29	-37.29	Pass
802.11g	SISO	2412	/	/	1	-20.12	-40.12	Pass
		2437	/	/	1	-20.12	-40.12	Pass
		2462	/	/	1	-20.12	-40.12	Pass
802.11n (HT20)	SISO	2412	/	/	1	-20.07	-40.07	Pass
		2437	/	/	1	-20.07	-40.07	Pass
		2462	/	/	1	-20.07	-40.07	Pass
802.11n (HT40)	SISO	2422	/	/	1	-20.01	-40.01	Pass
		2437	/	/	1	-20.01	-40.01	Pass
		2452	/	/	1	-20.01	-40.01	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	-20.04	-40.04	Pass
		2437	SU	/	1	-20.04	-40.04	Pass
		2462	SU	/	1	-20.04	-40.04	Pass
802.11ax (HEW40)	SISO	2422	SU	/	1	-20.01	-40.01	Pass
		2437	SU	/	1	-20.01	-40.01	Pass
		2452	SU	/	1	-20.01	-40.01	Pass

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

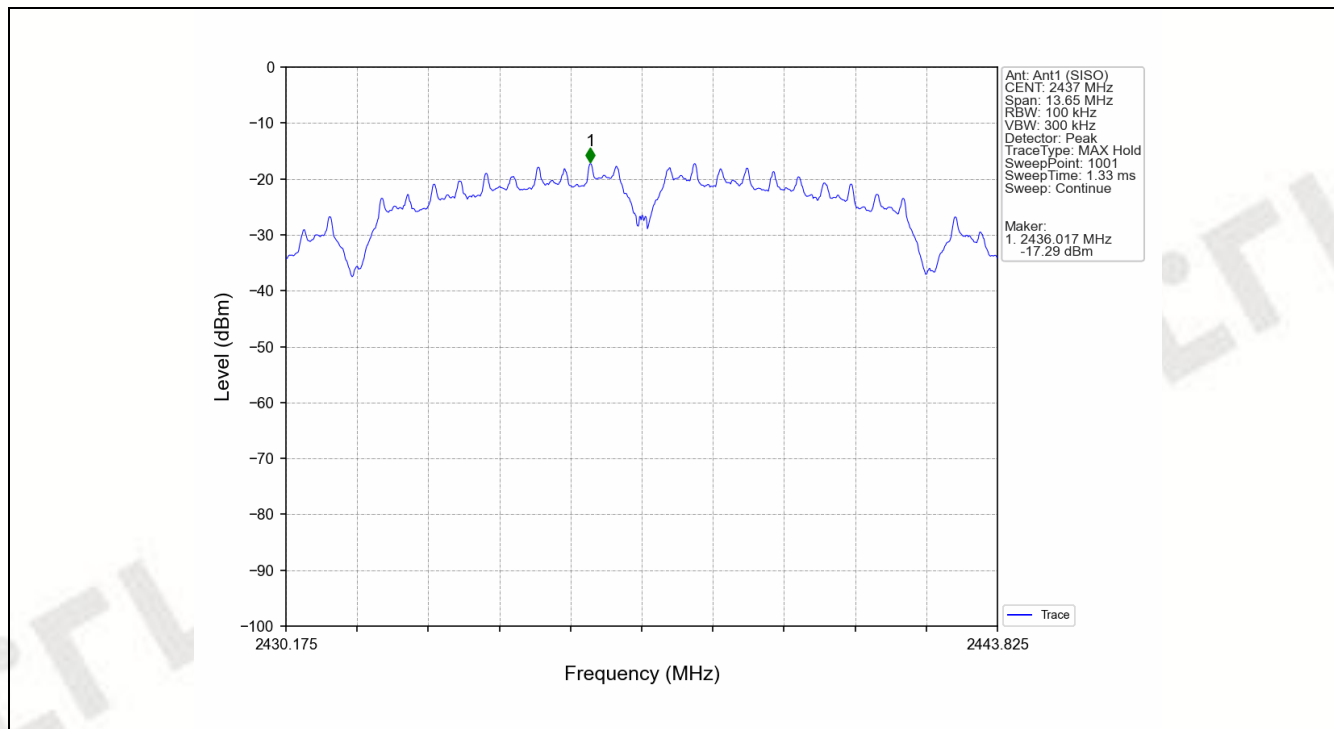
FCCID: 2ASC7HD7000ELITE

4.2 Test Graph

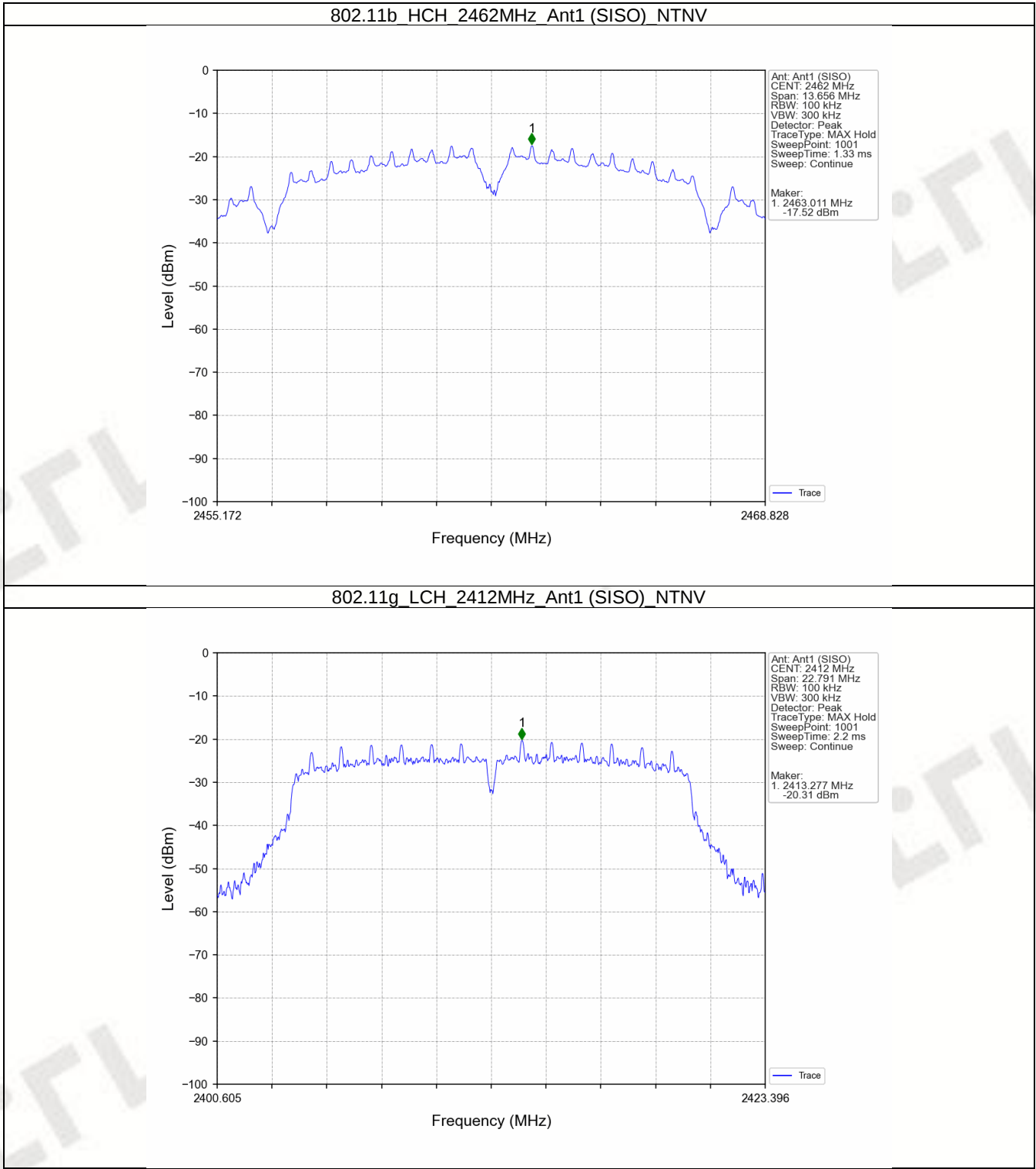
4.2.1 Ref



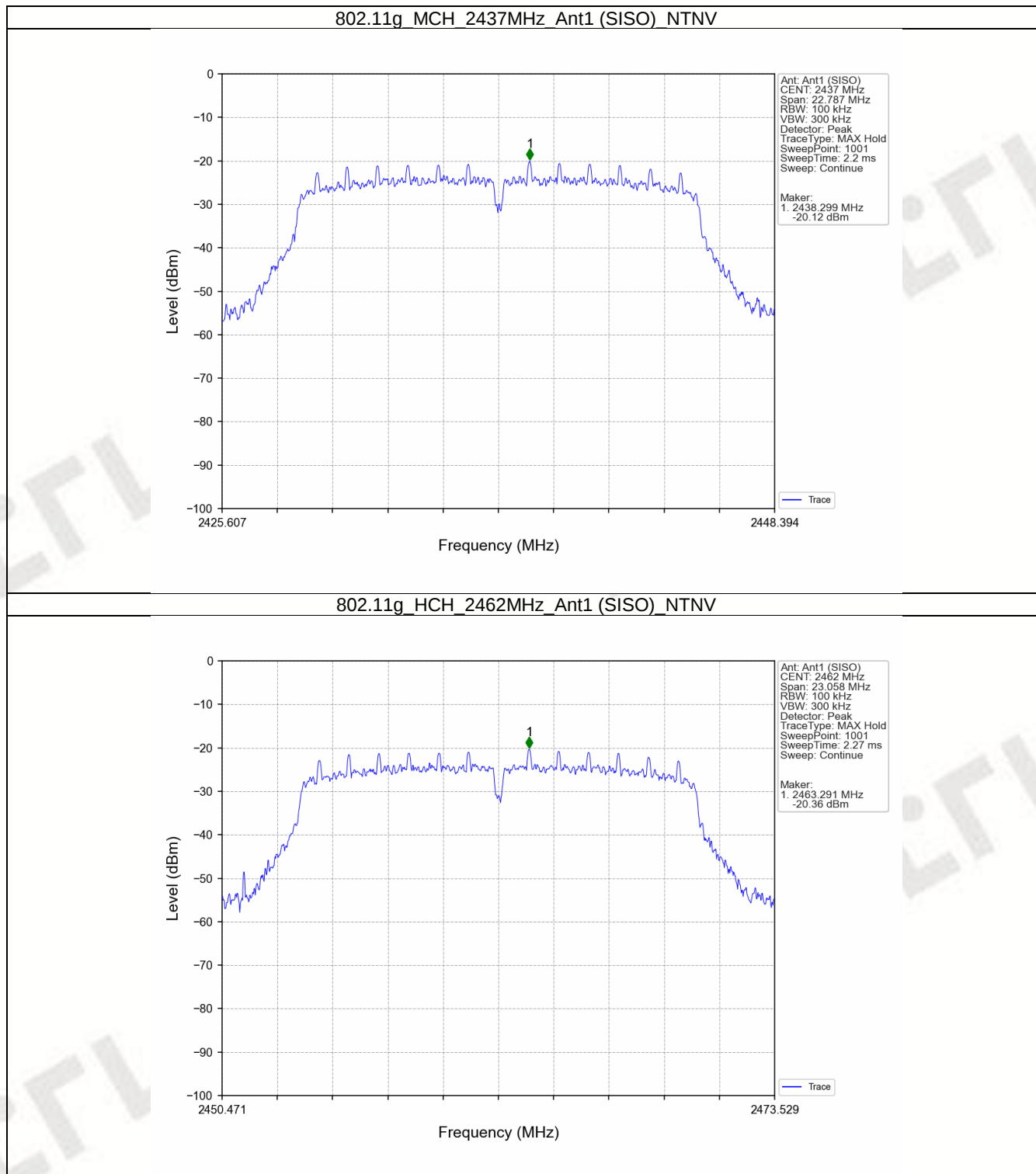
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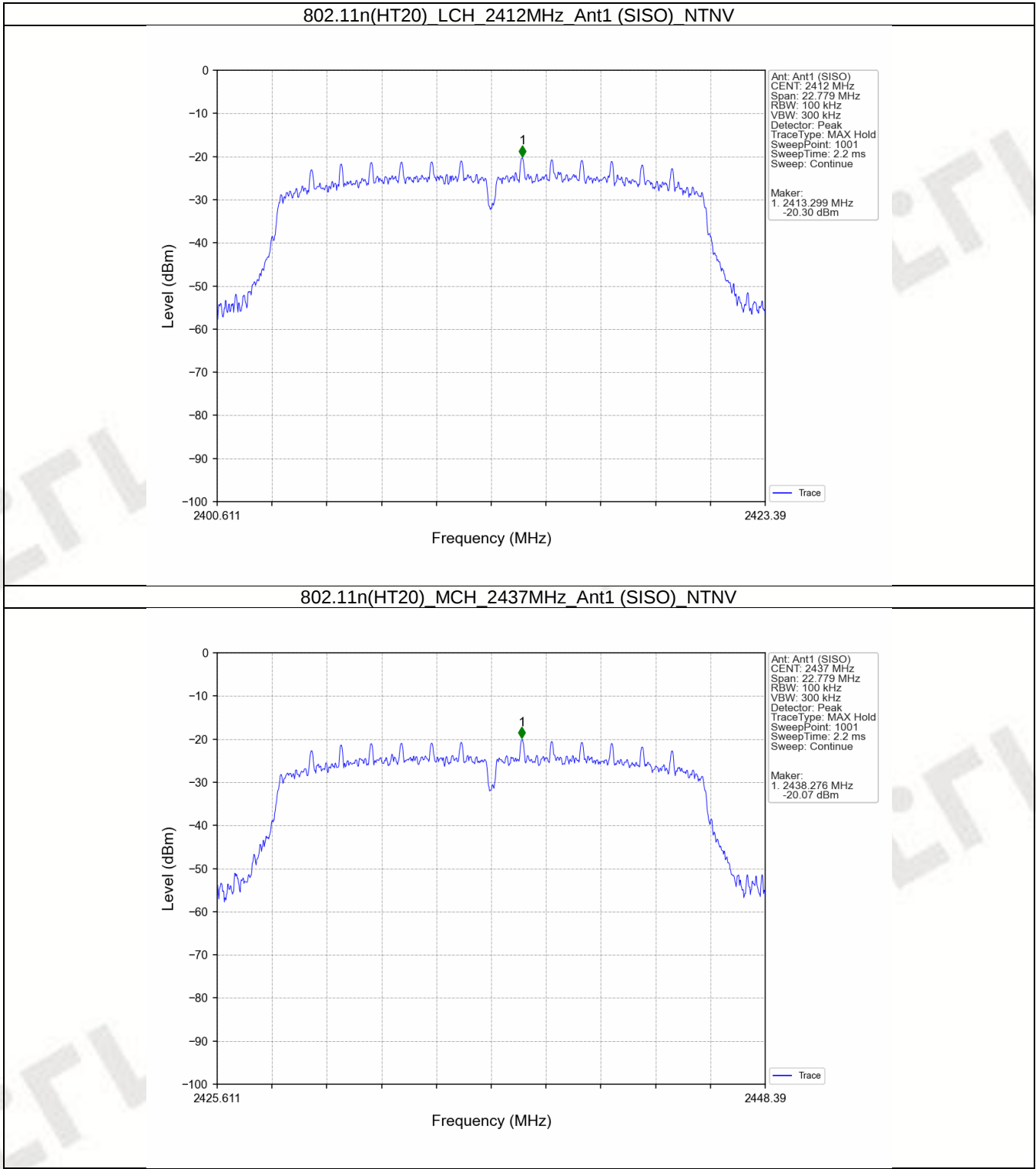
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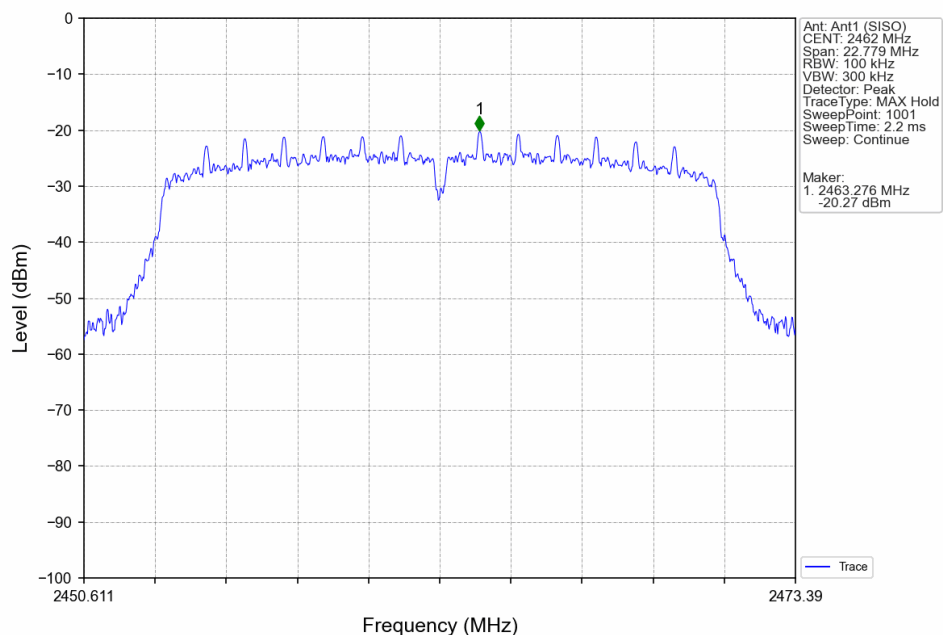


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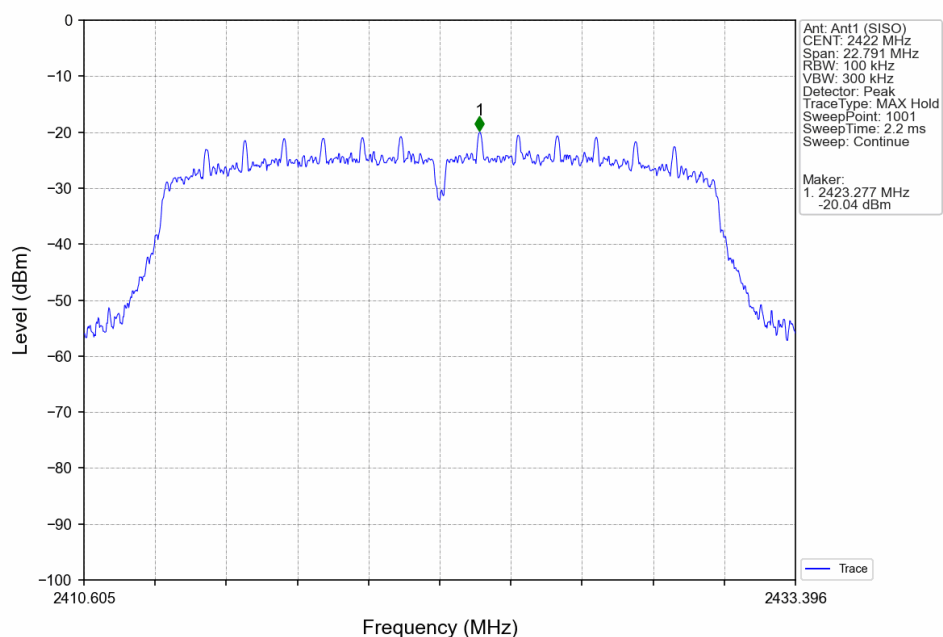


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802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTV

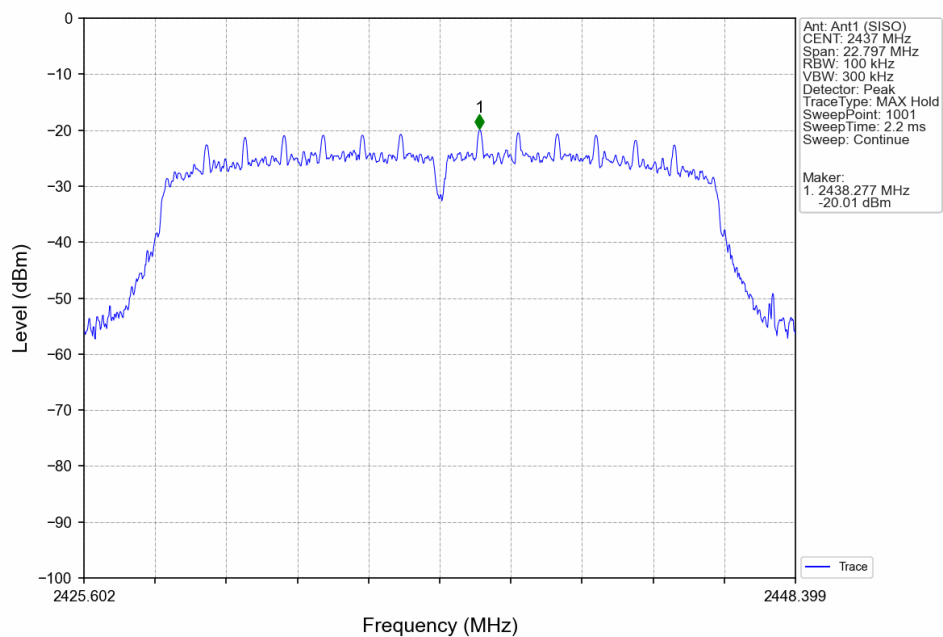


802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV

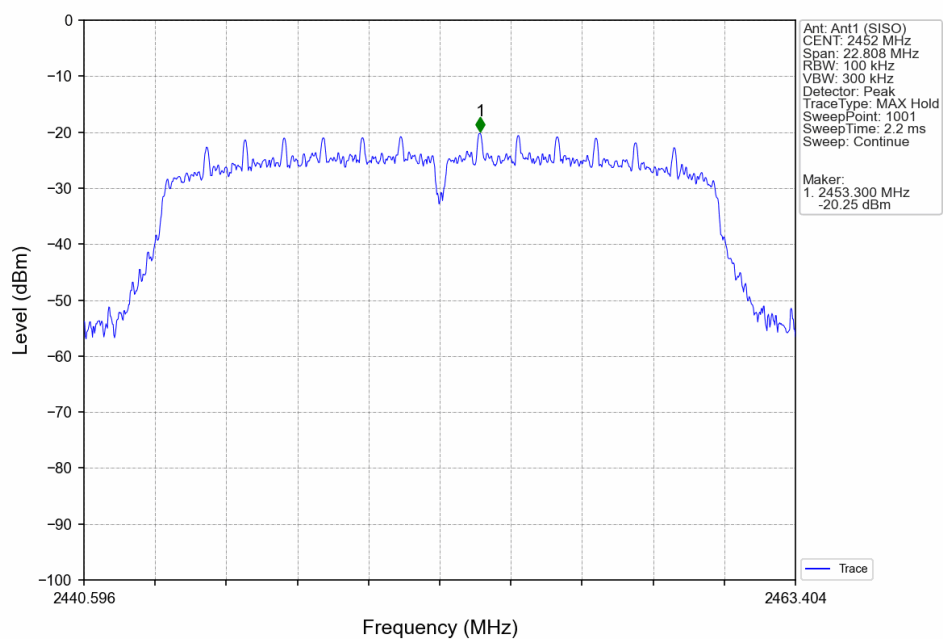


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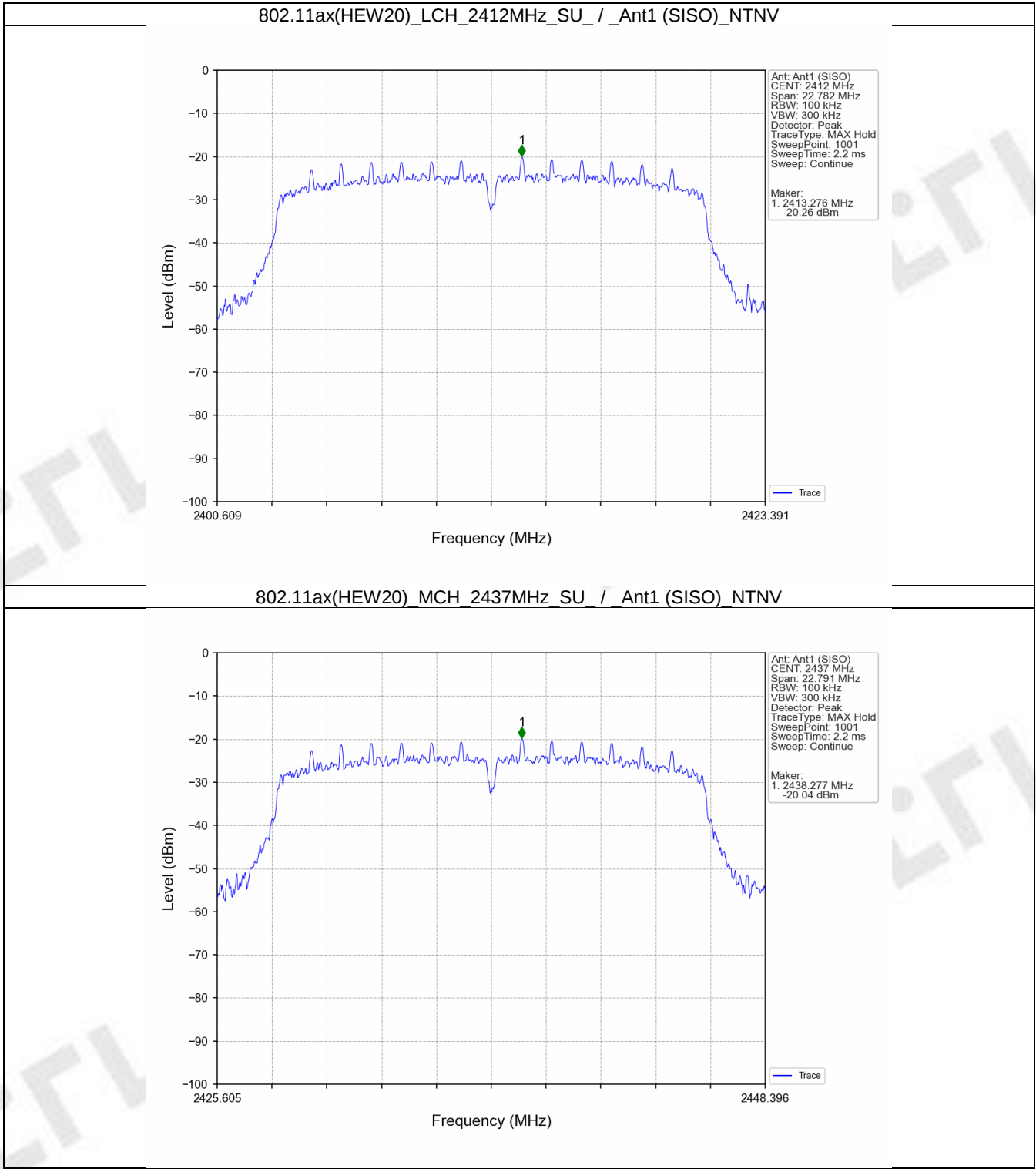
802.11n(HT40) MCH 2437MHz Ant1 (SISO) NTV



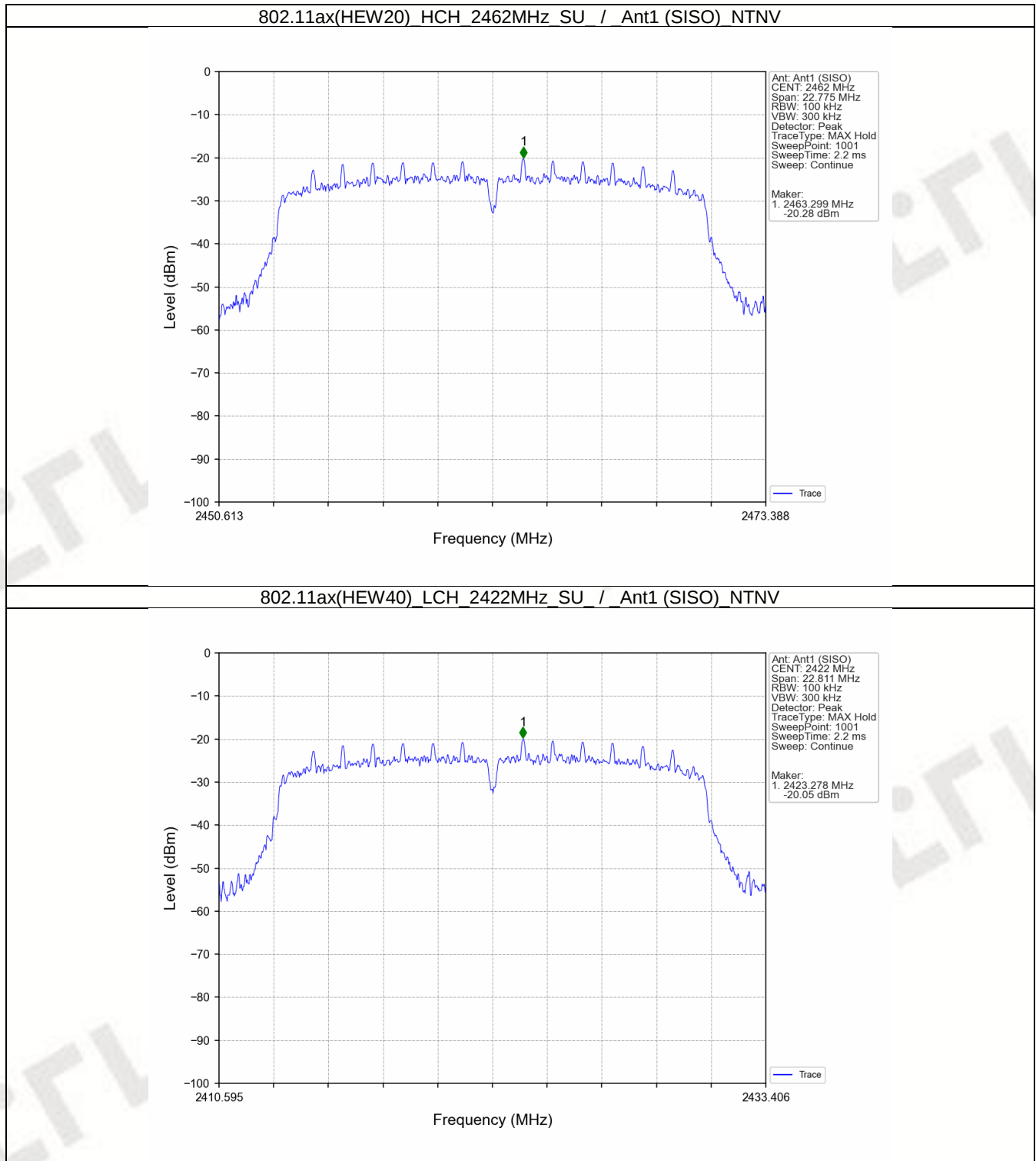
802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTV



FCCID: 2ASC7HD7000ELITE

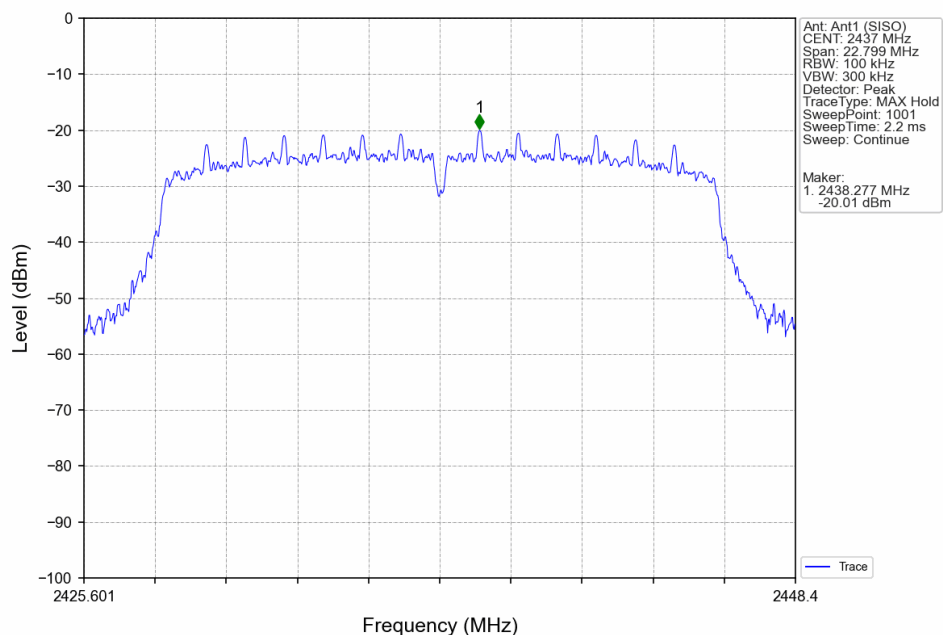


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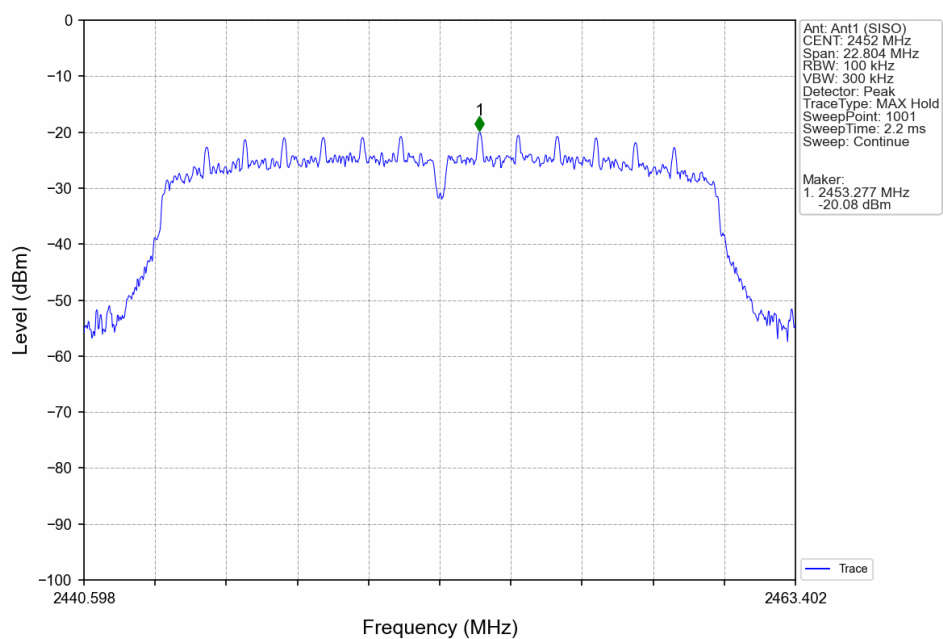


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802.11ax(HEW40) MCH 2437MHz SU / Ant1 (SISO) NTN

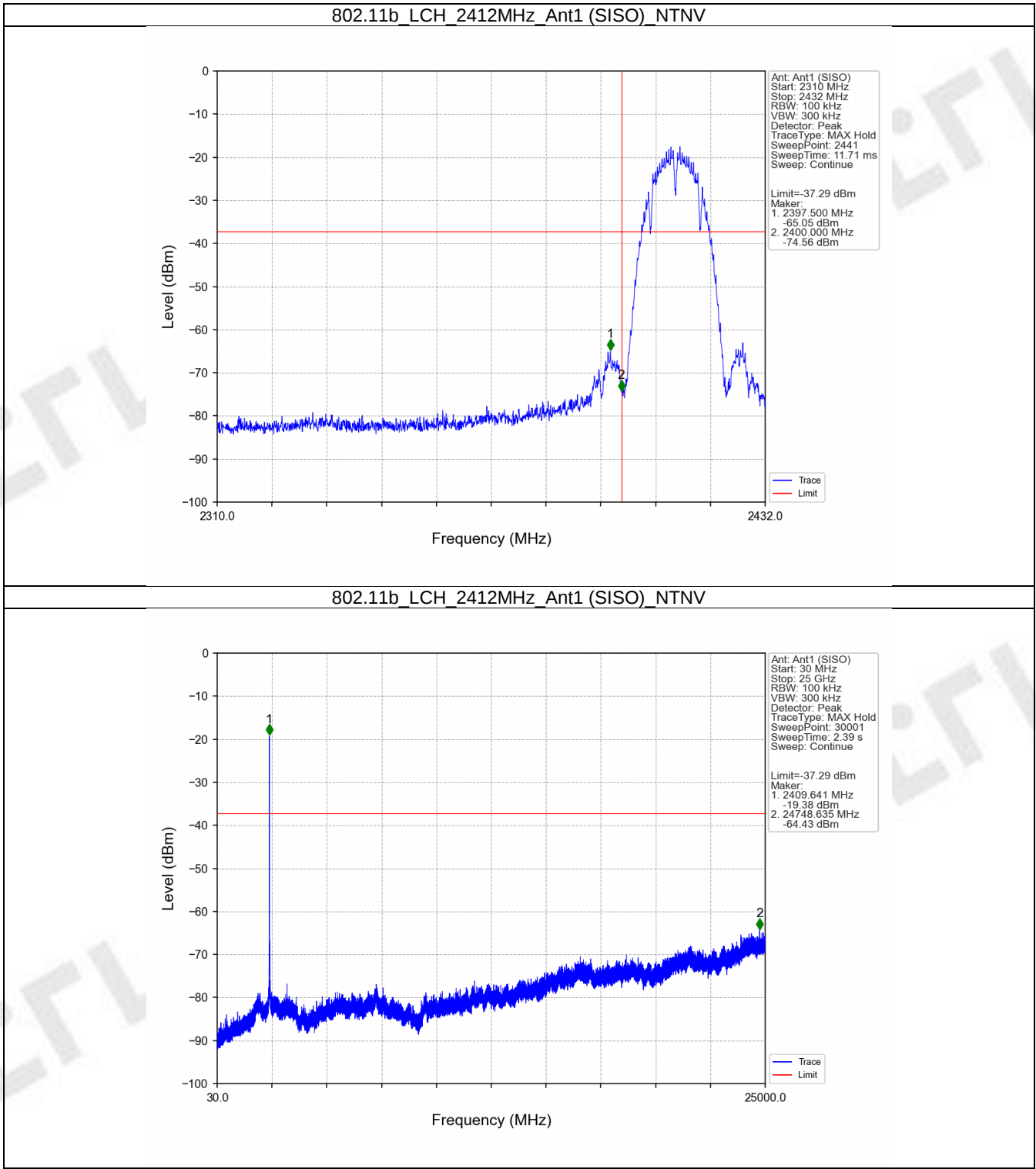


802.11ax(HEW40) HCH 2452MHz SU / Ant1 (SISO) NTN

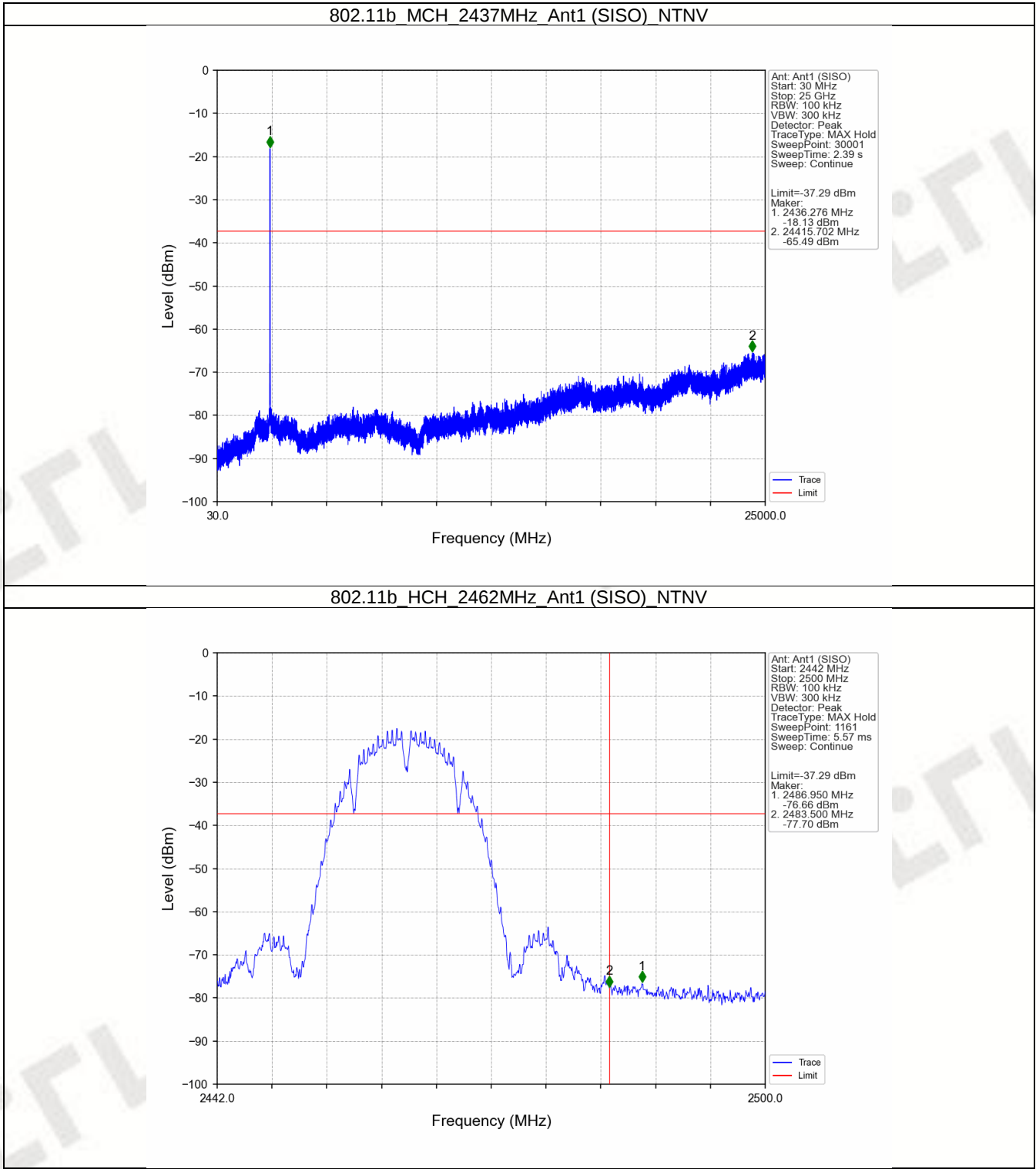


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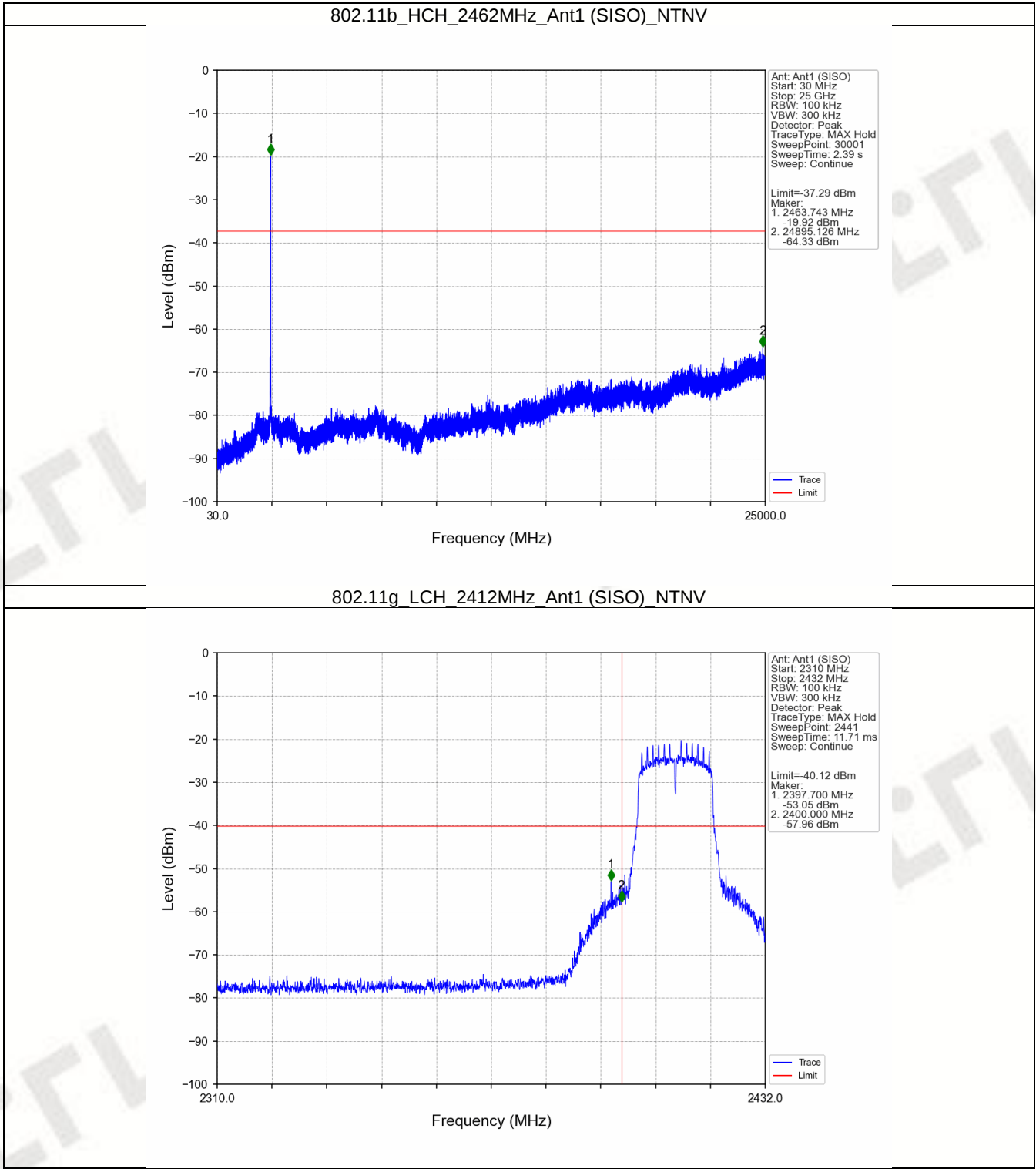
4.2.2 CSE



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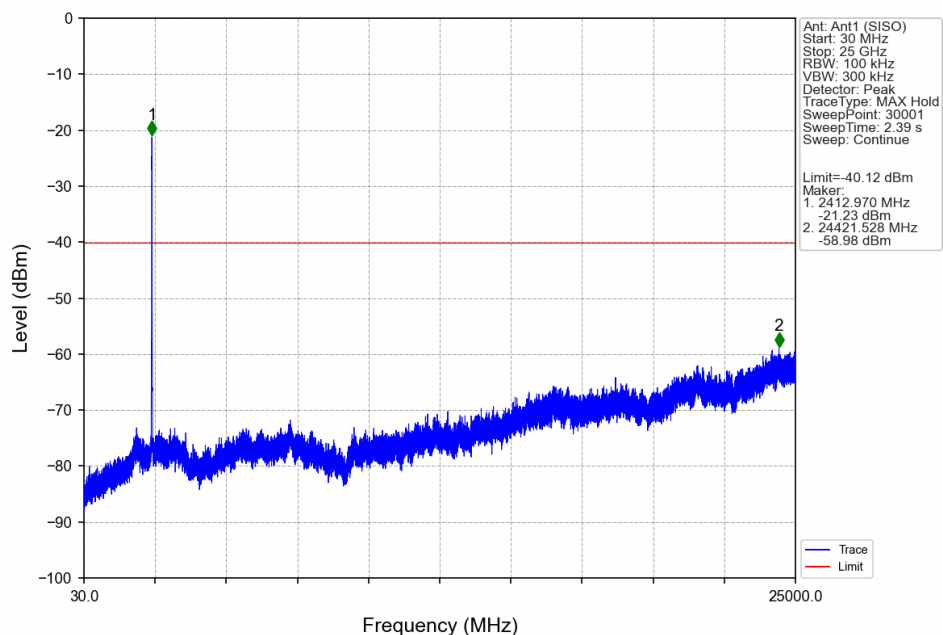


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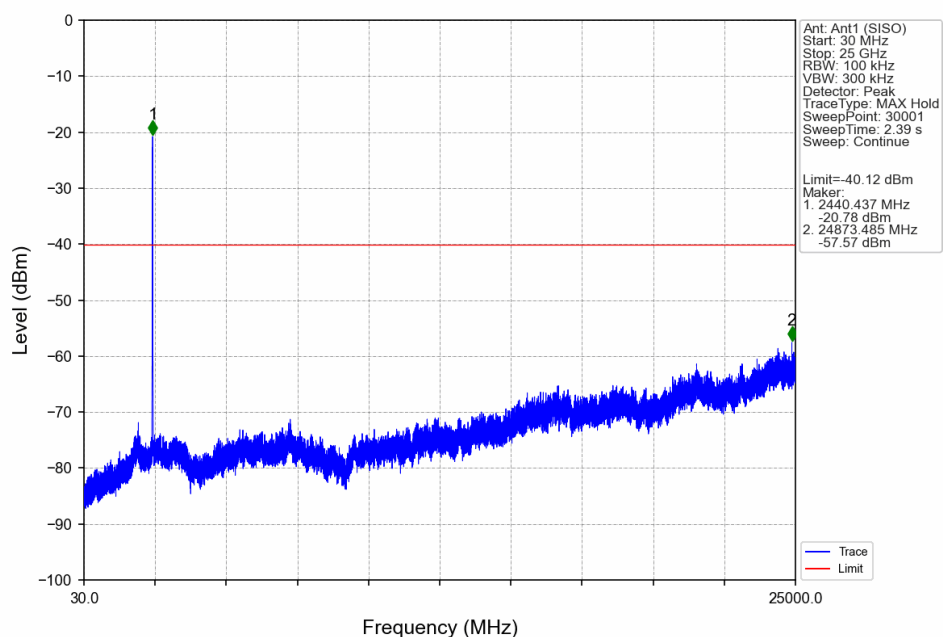


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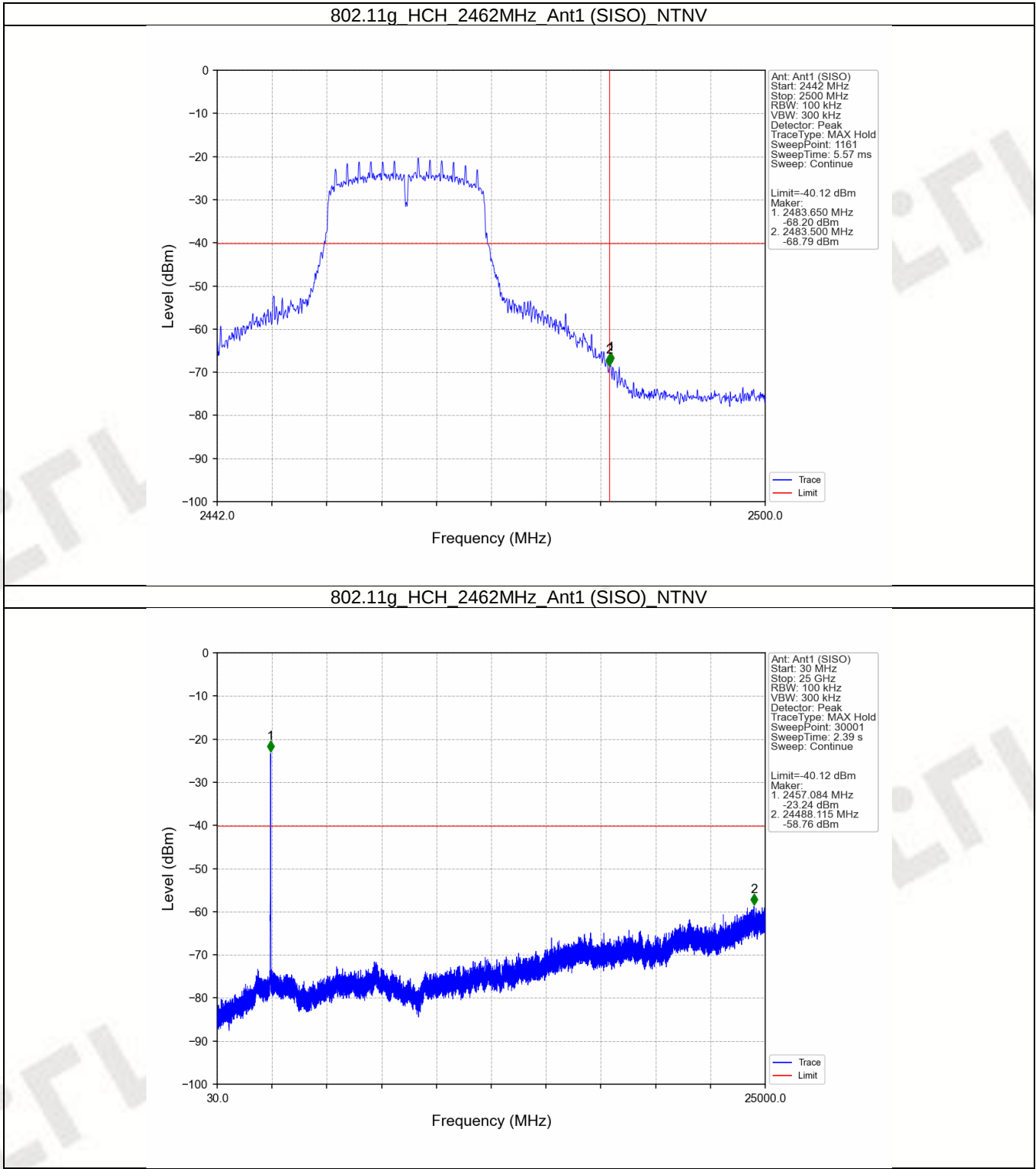
802.11g LCH 2412MHz Ant1 (SISO) NTN



802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

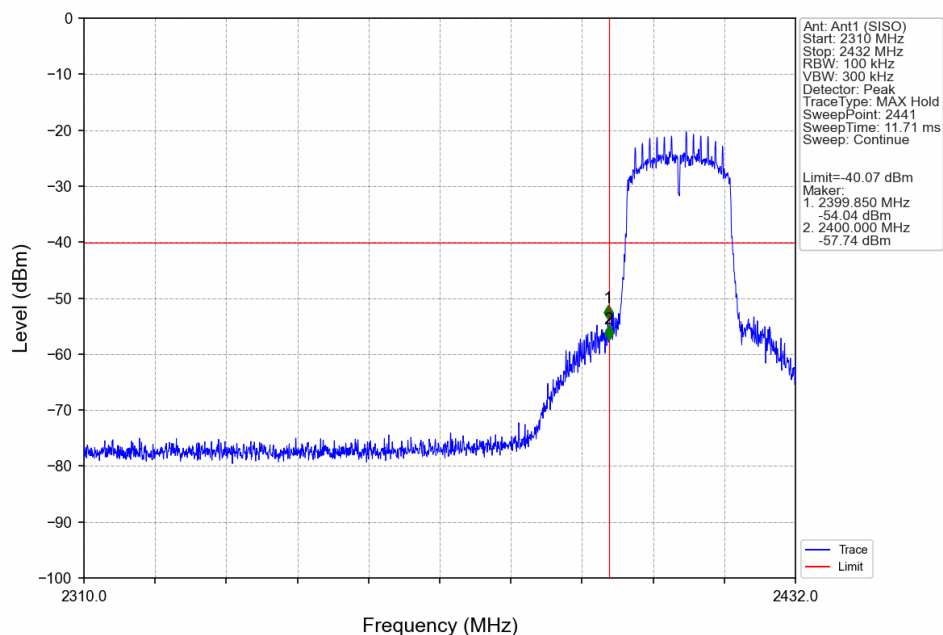


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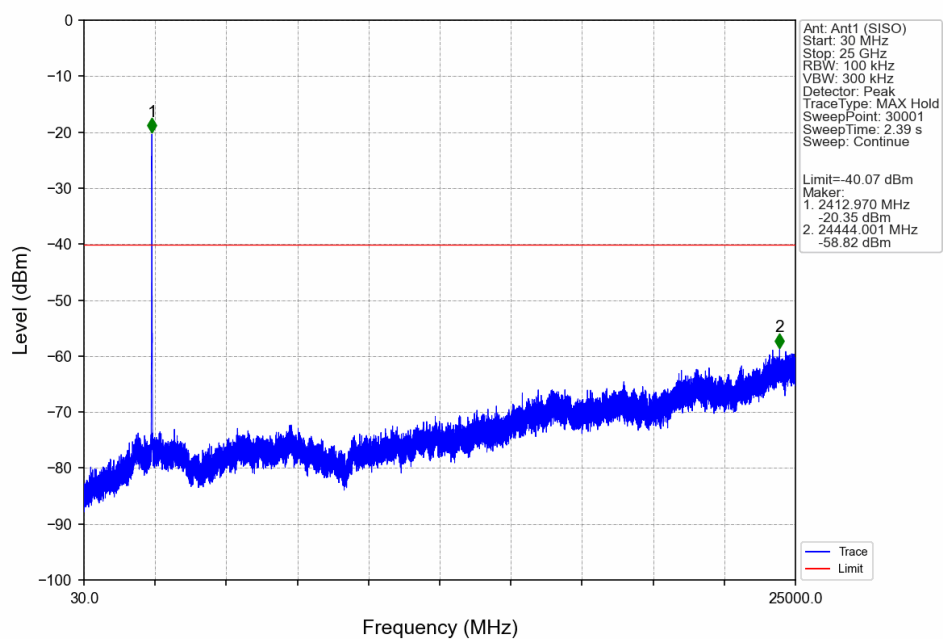


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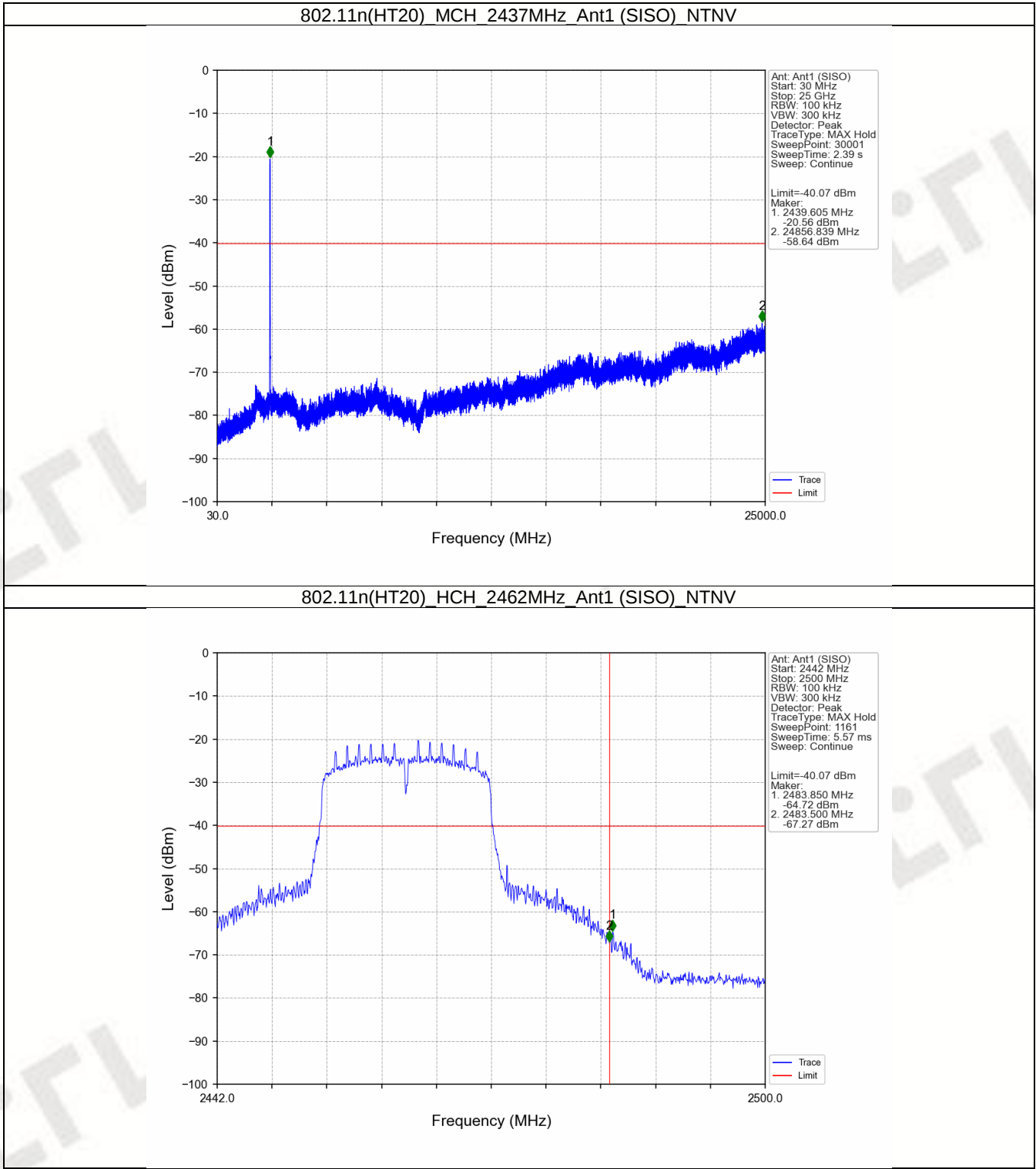
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

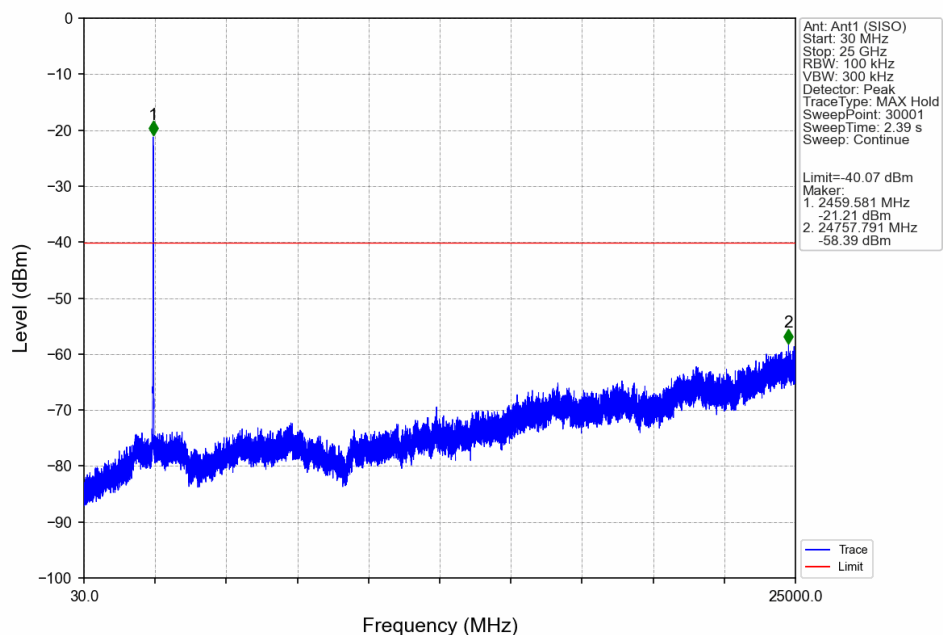


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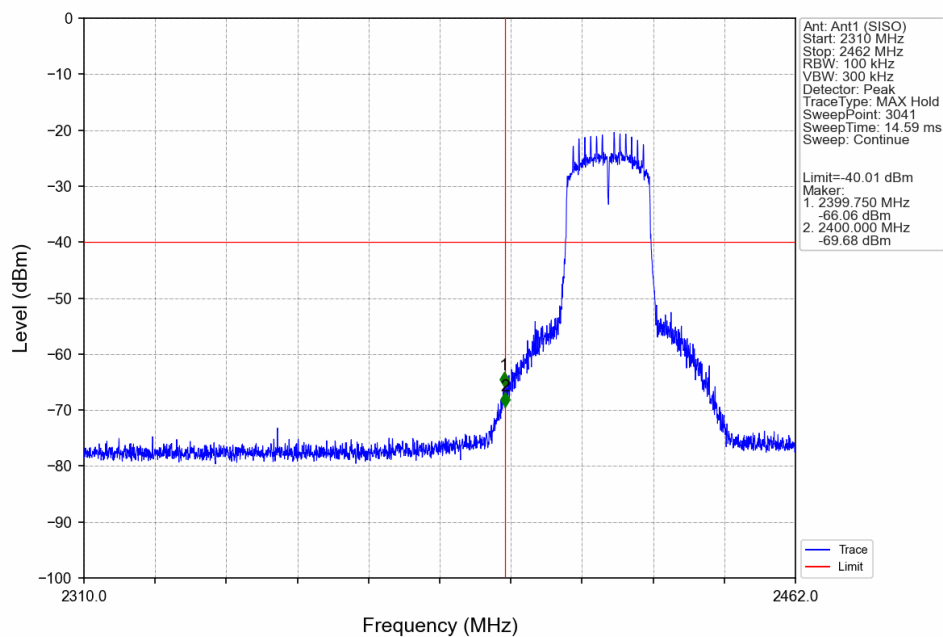


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802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTV

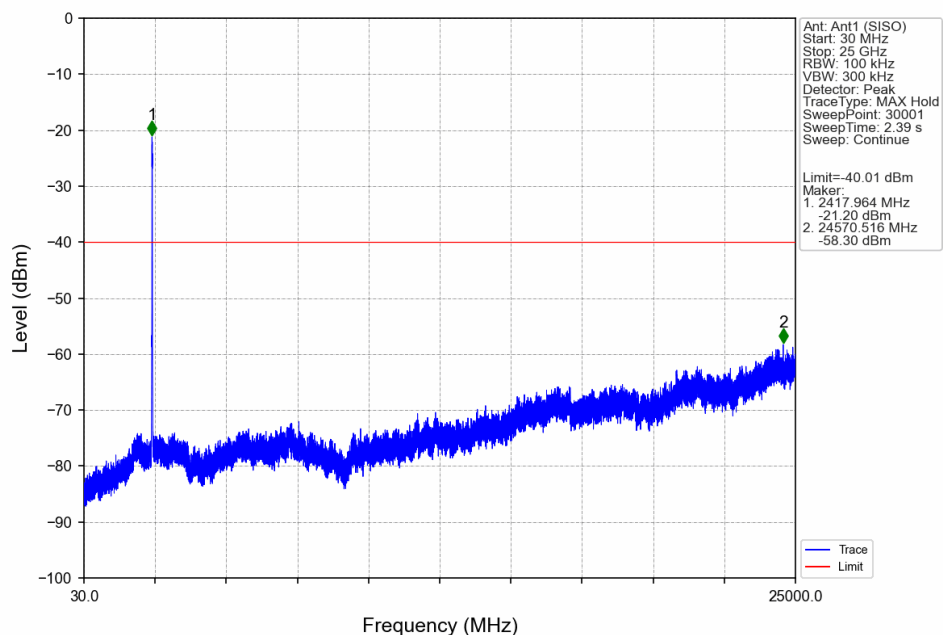


802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV

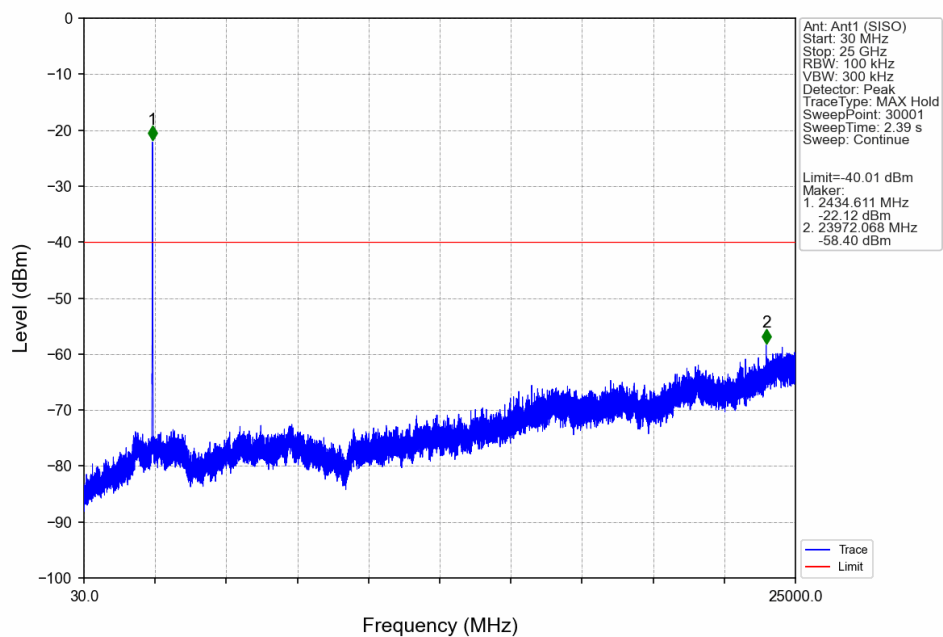


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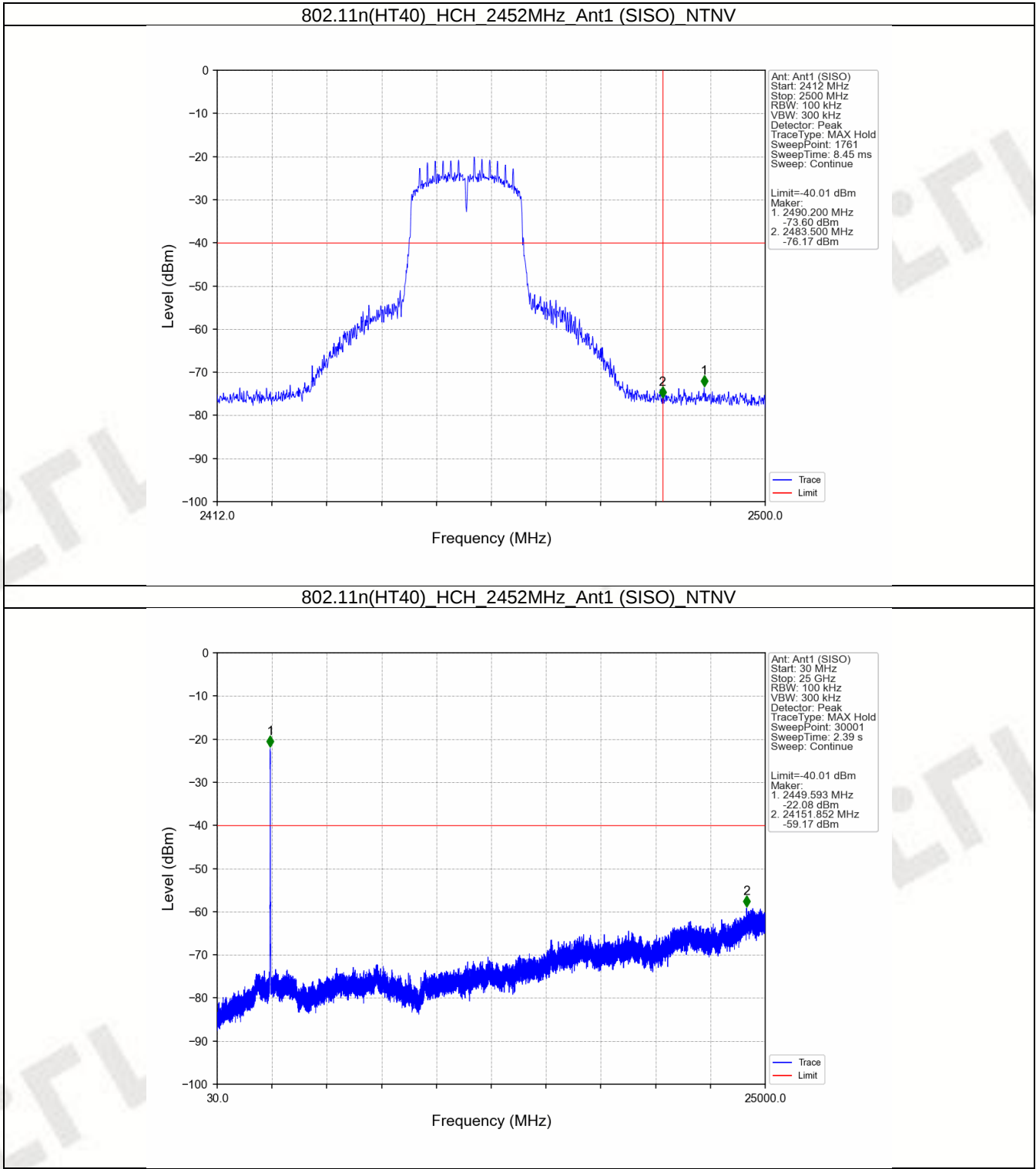
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



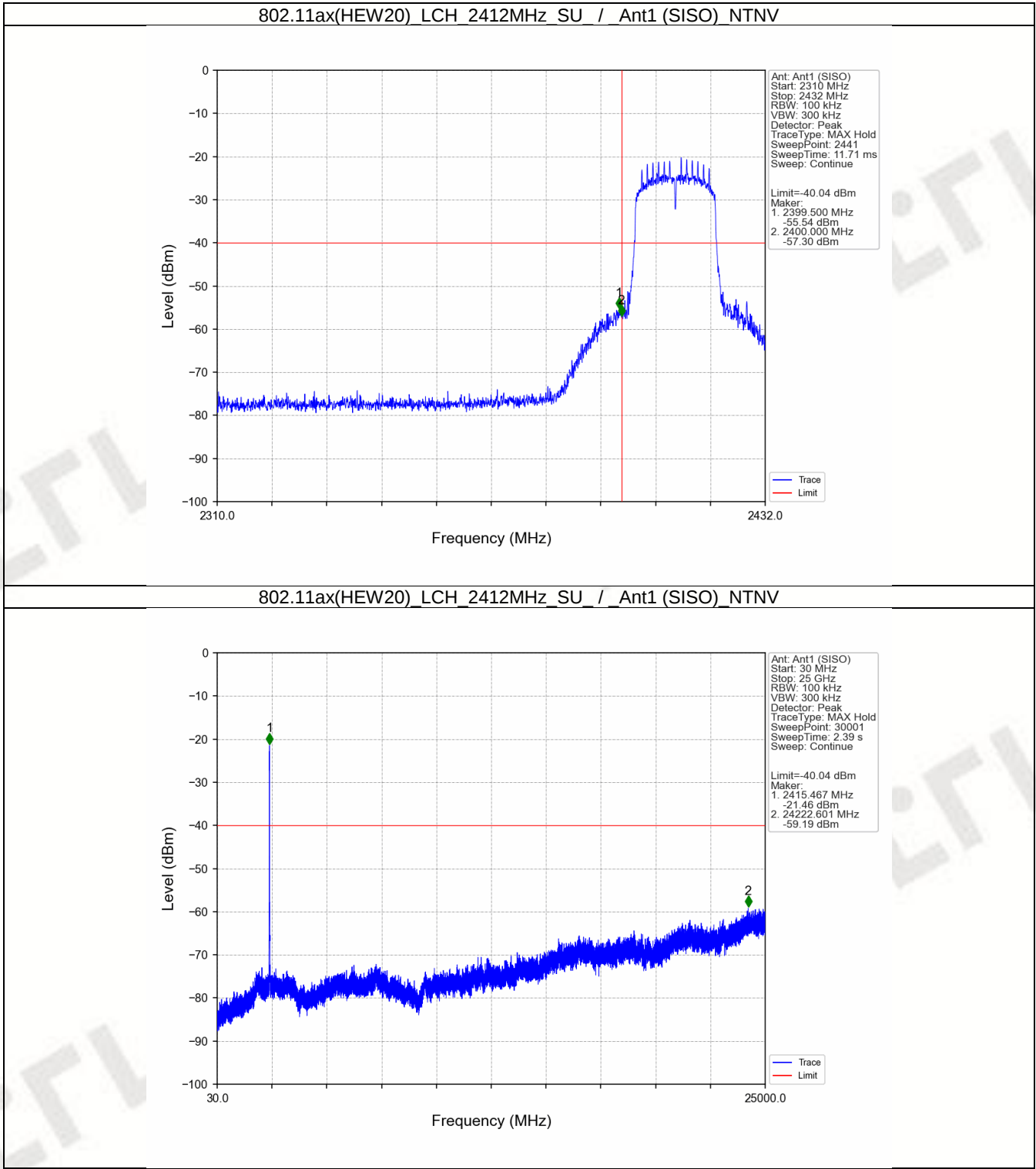
802.11n(HT40) MCH 2437MHz Ant1 (SISO) NTNV



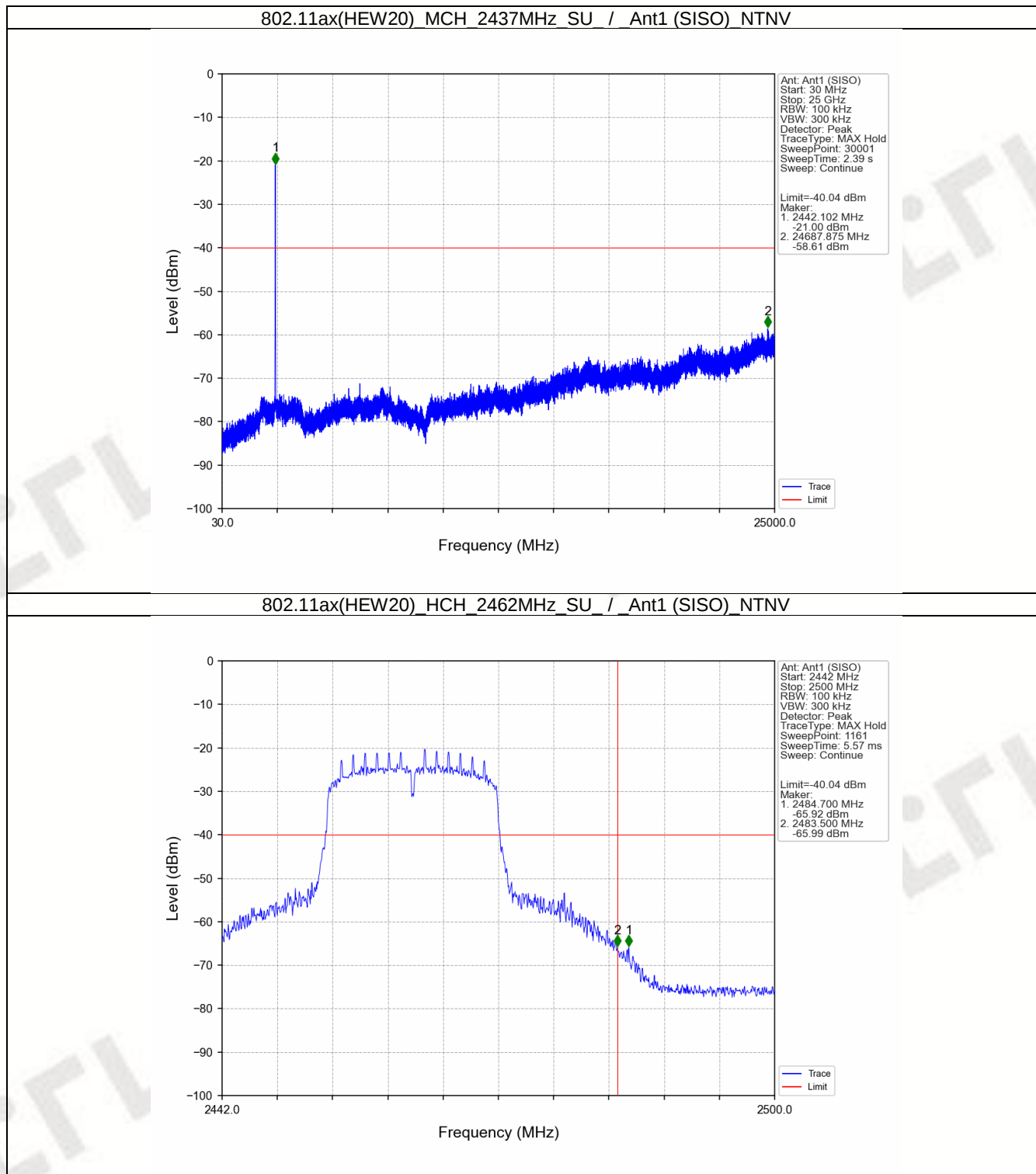
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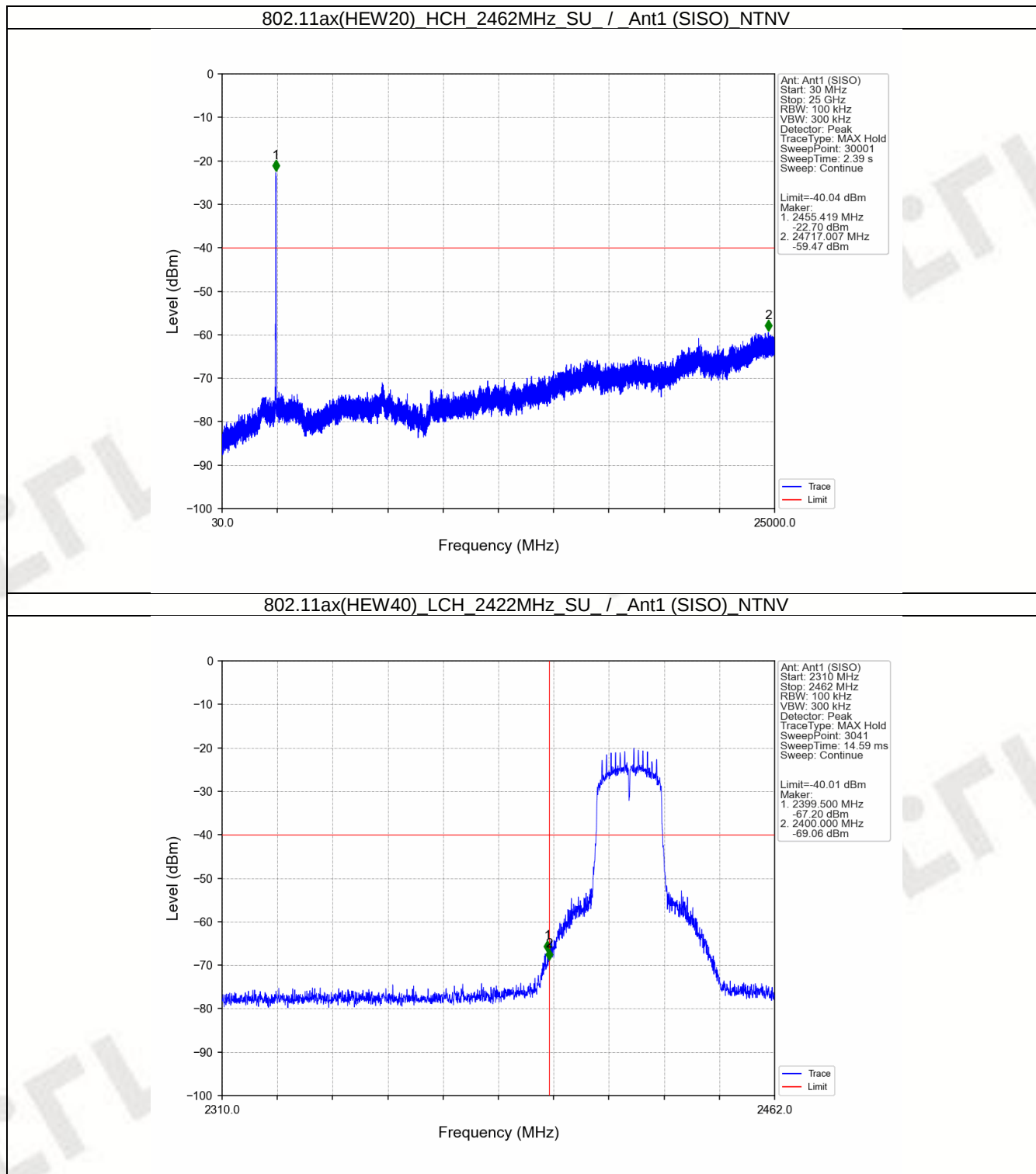
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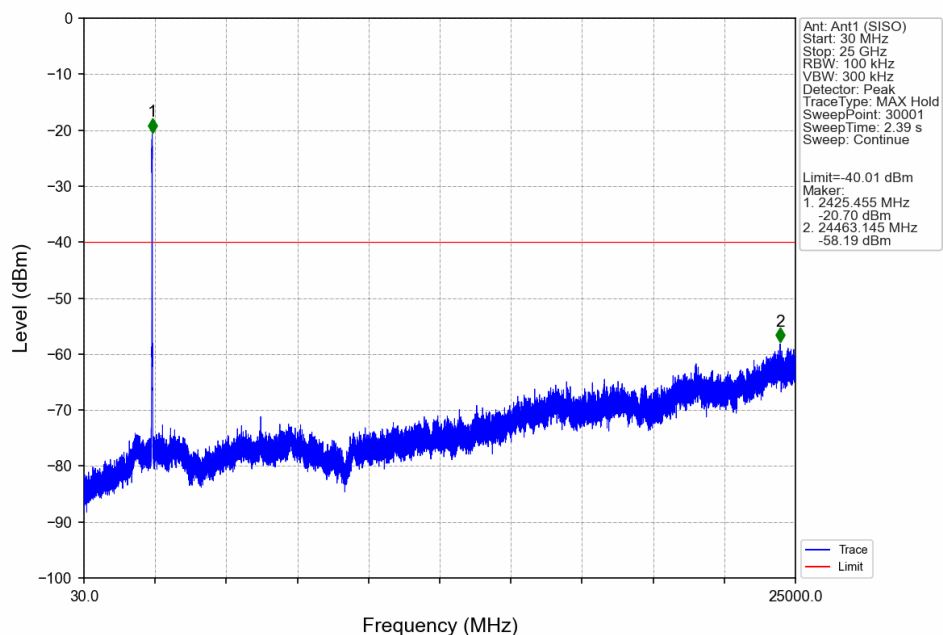


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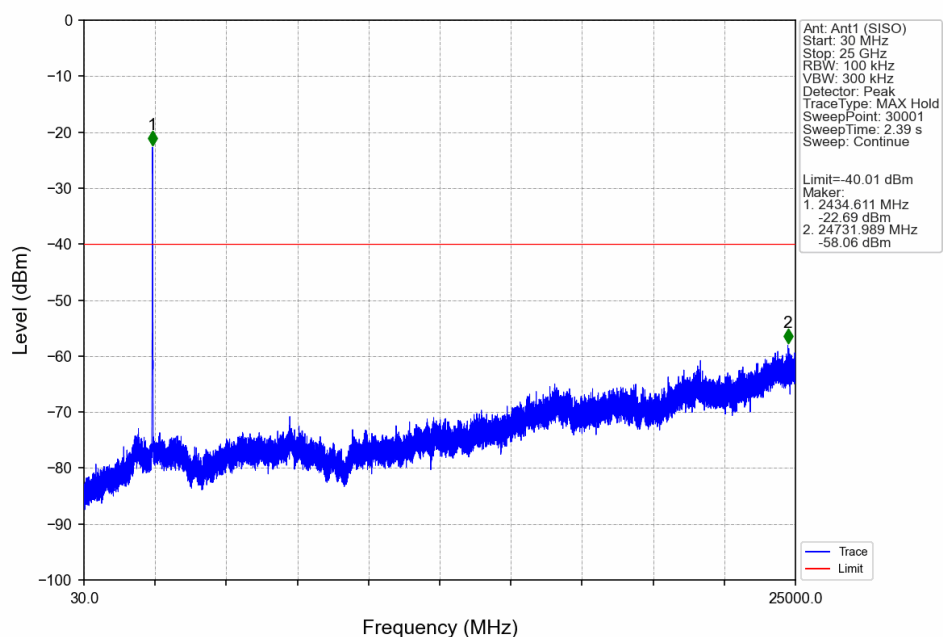


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802.11ax(HEW40) LCH 2422MHz SU / Ant1 (SISO) NTNv



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



FCCID: 2ASC7HD7000ELITE

