

1.-6 dB Bandwidth and 99% Bandwidth Measurement

1.1 Test Result

1.1.1 OBW

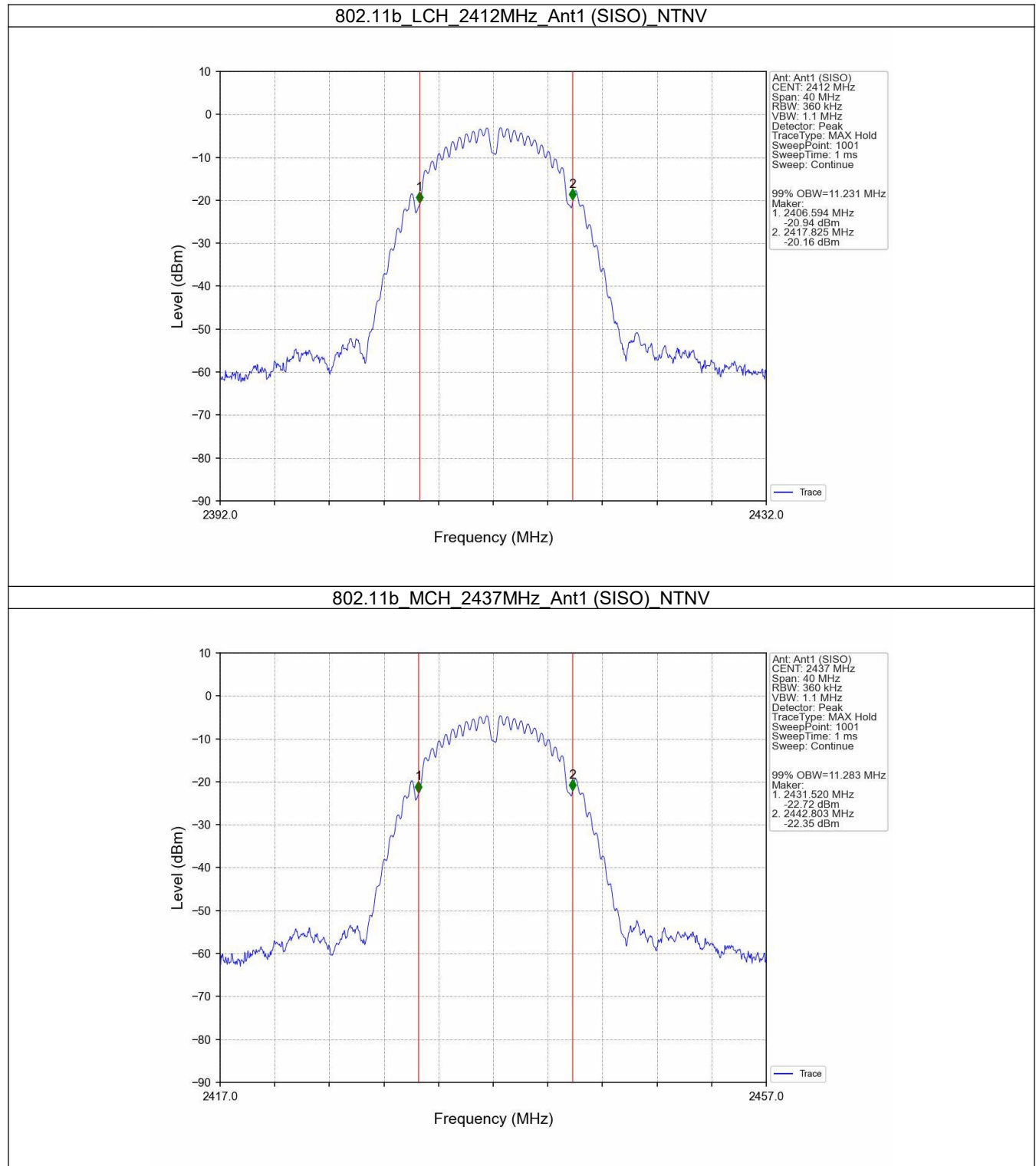
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	11.231	/	Pass
		2437	1	11.283	/	Pass
		2462	1	11.289	/	Pass
802.11g	SISO	2412	1	18.286	/	Pass
		2437	1	18.374	/	Pass
		2462	1	18.370	/	Pass
802.11n (HT20)	SISO	2412	1	19.233	/	Pass
		2437	1	19.250	/	Pass
		2462	1	19.279	/	Pass
802.11n (HT40)	SISO	2422	1	37.050	/	Pass
		2437	1	36.962	/	Pass
		2452	1	37.157	/	Pass

1.1.2 -6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	7.594	≥ 0.5	Pass
		2437	1	7.570	≥ 0.5	Pass
		2462	1	8.060	≥ 0.5	Pass
802.11g	SISO	2412	1	15.449	≥ 0.5	Pass
		2437	1	15.795	≥ 0.5	Pass
		2462	1	15.808	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	15.884	≥ 0.5	Pass
		2437	1	15.455	≥ 0.5	Pass
		2462	1	15.143	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	35.117	≥ 0.5	Pass
		2437	1	35.133	≥ 0.5	Pass
		2452	1	33.826	≥ 0.5	Pass

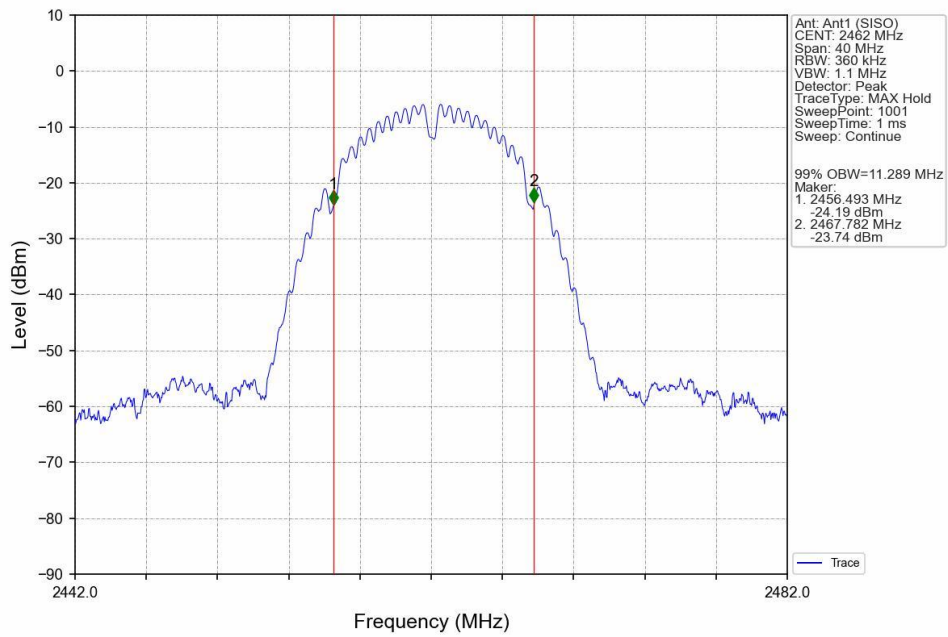
1.2 Test Graph

1.2.1 OBW

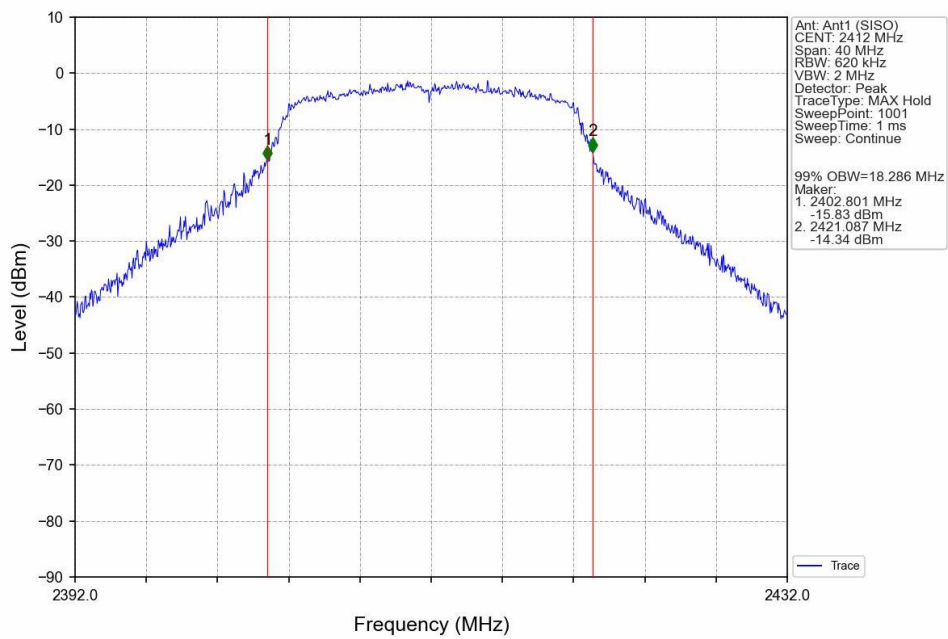


FCC ID:2ASAF-07C

802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

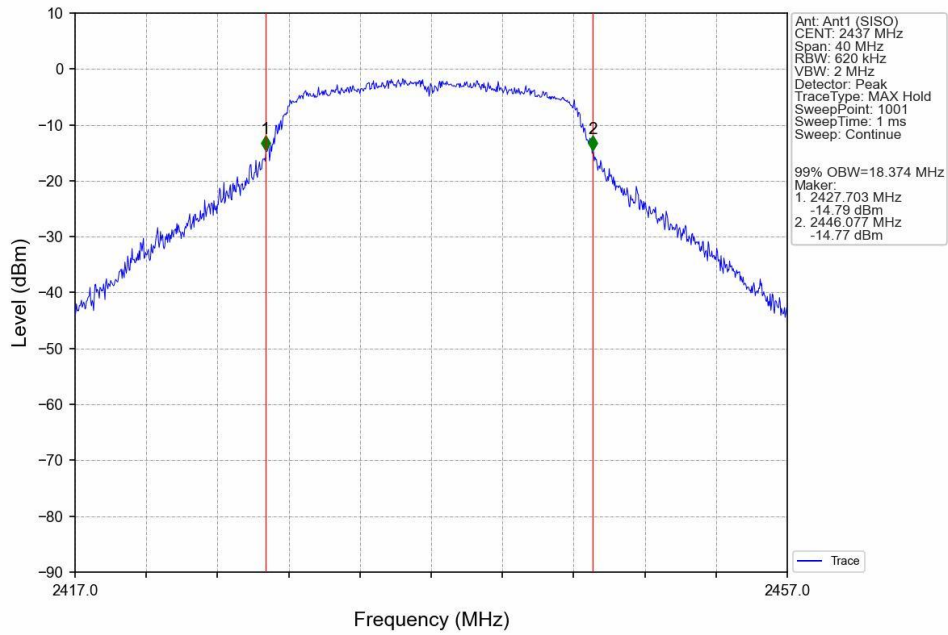


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

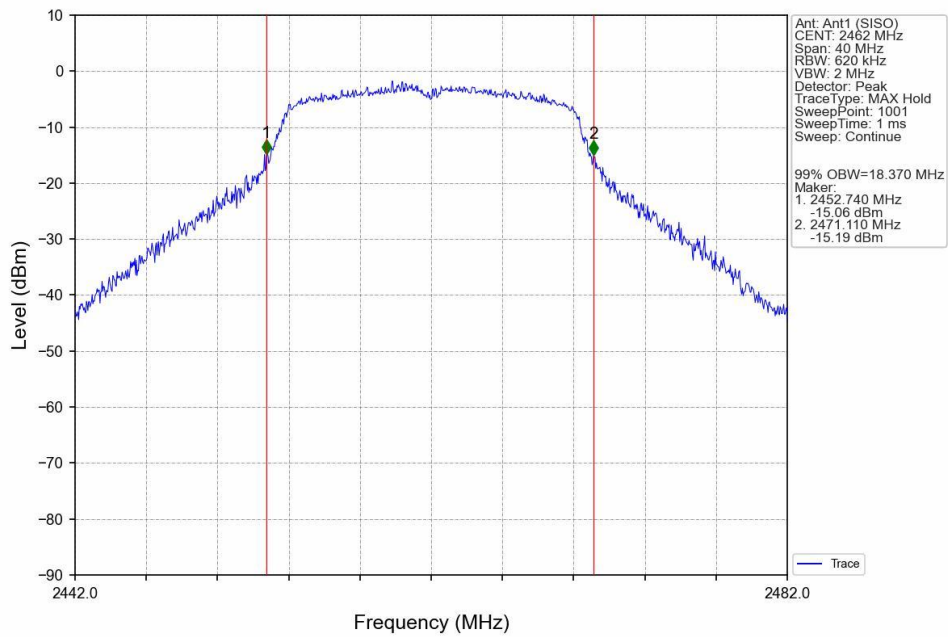


FCC ID:2ASAF-07C

802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

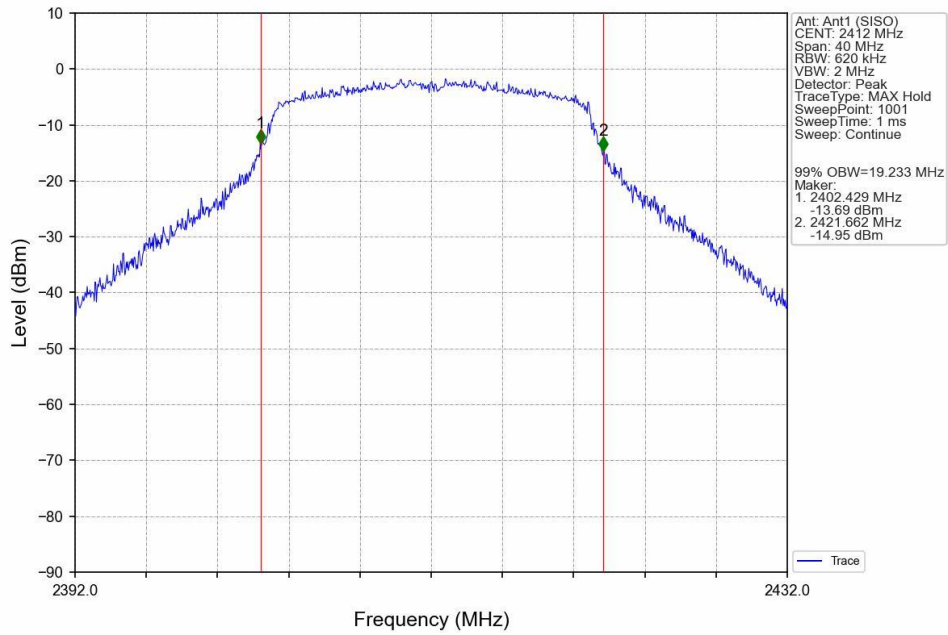


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

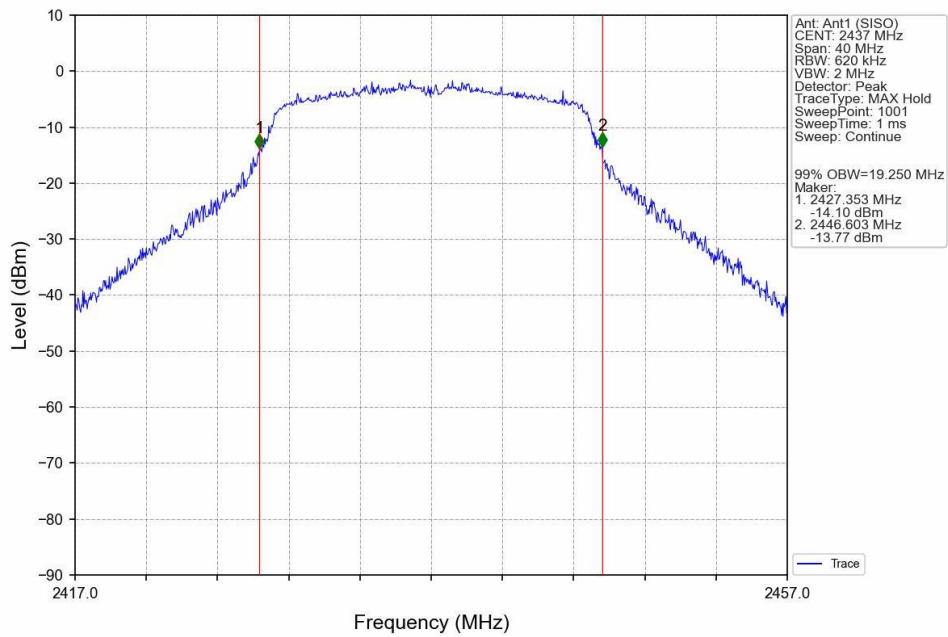


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802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

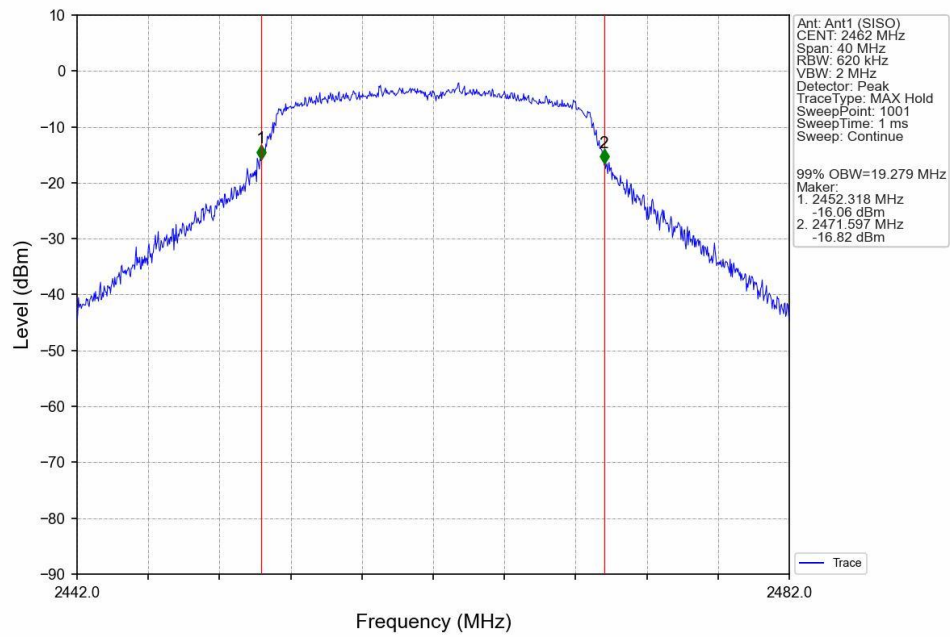


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

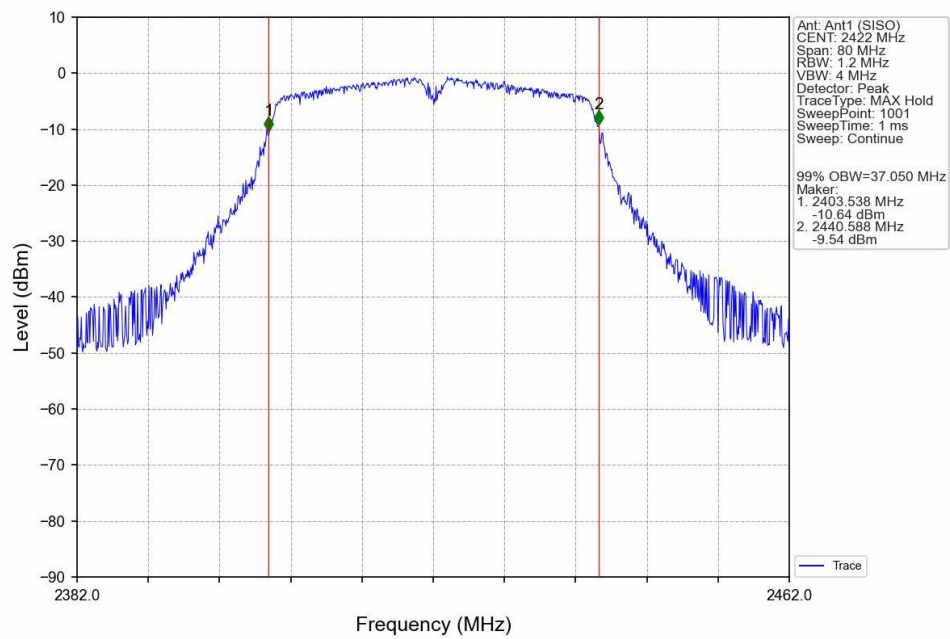


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802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

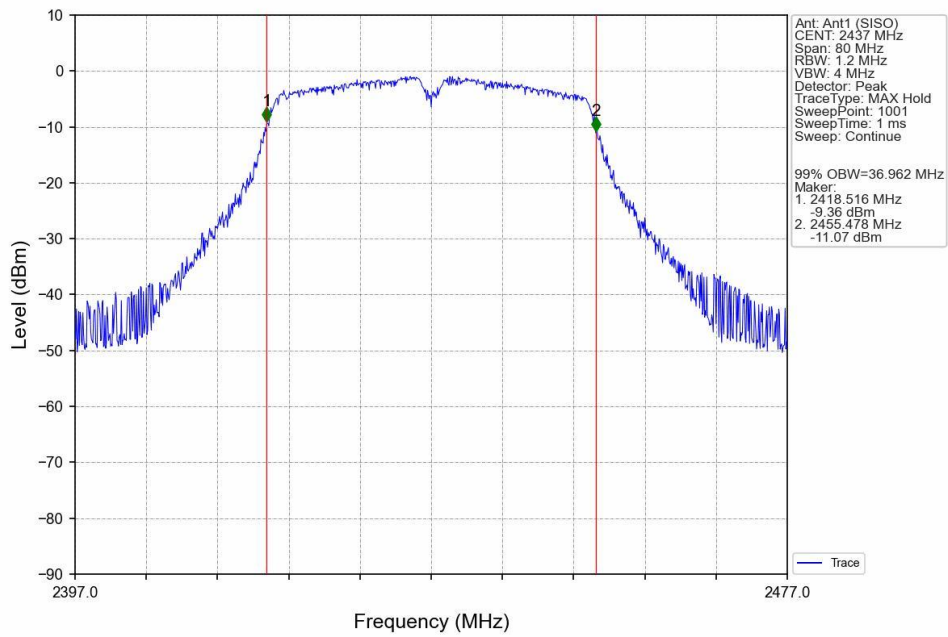


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

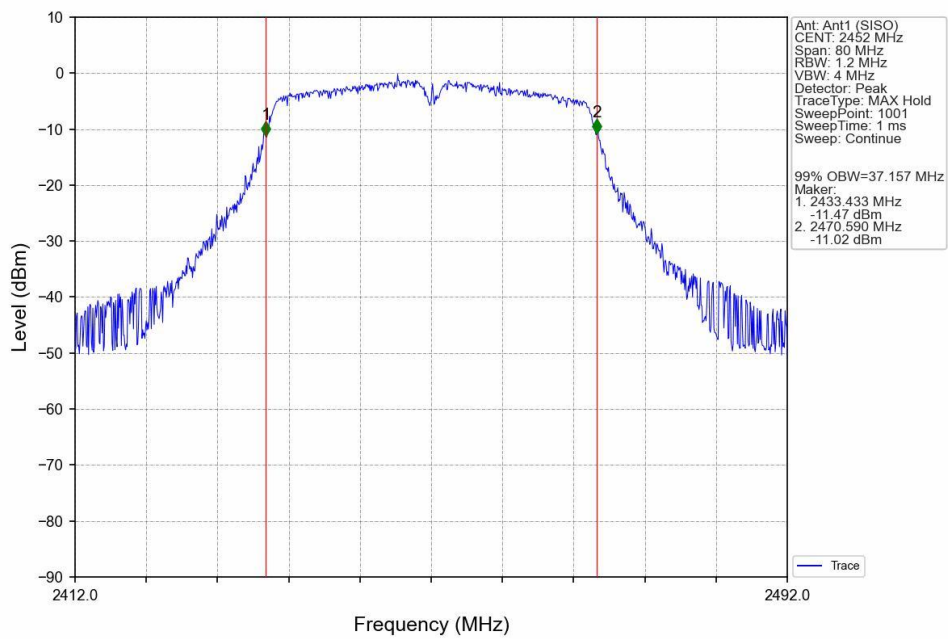


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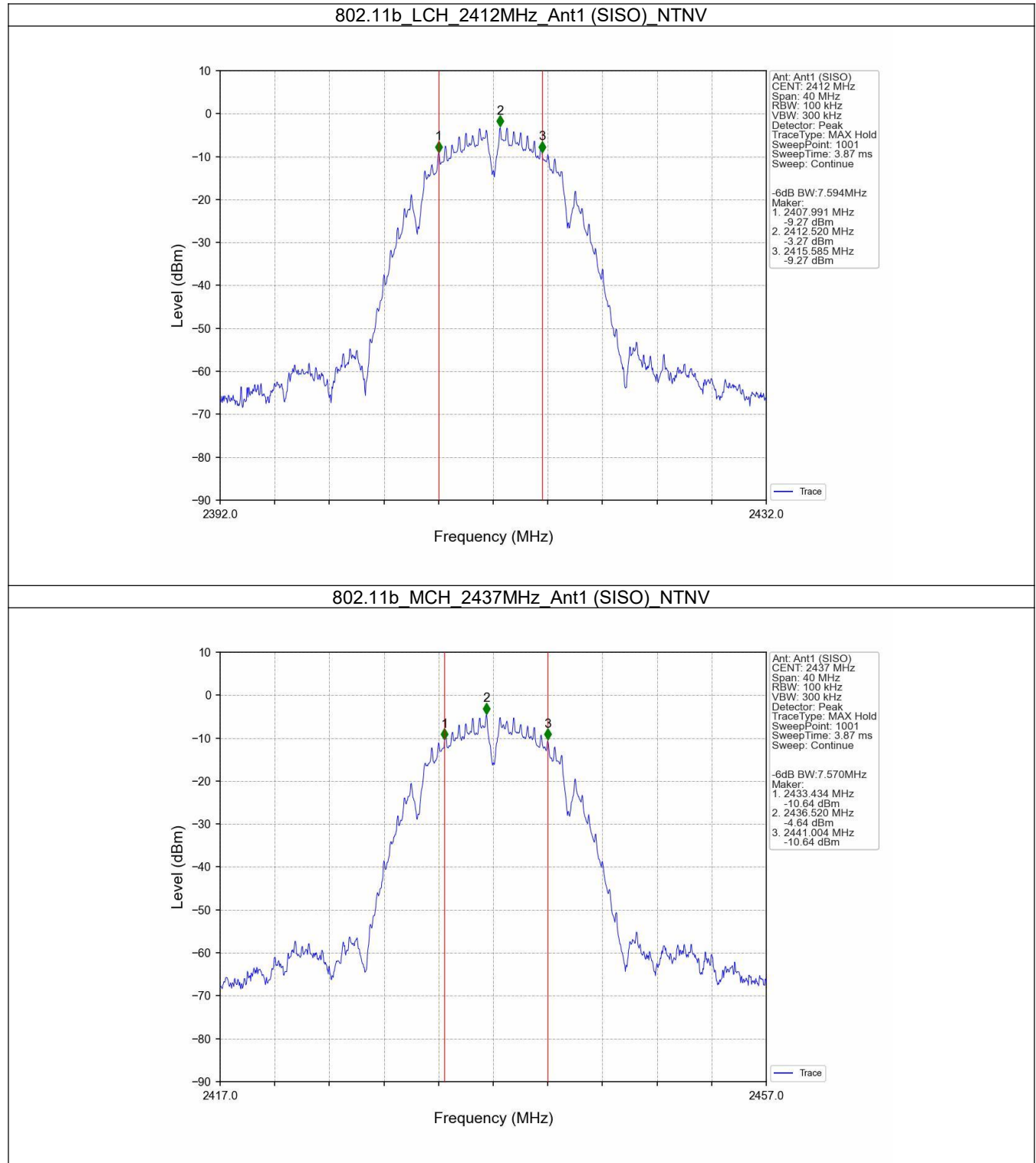
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

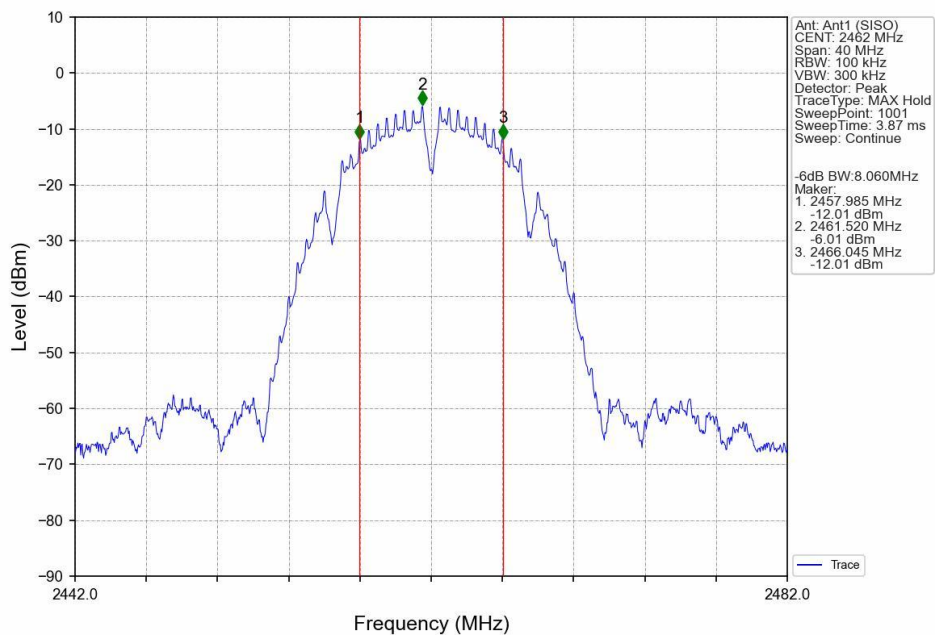


1.2.2 -6dB BW

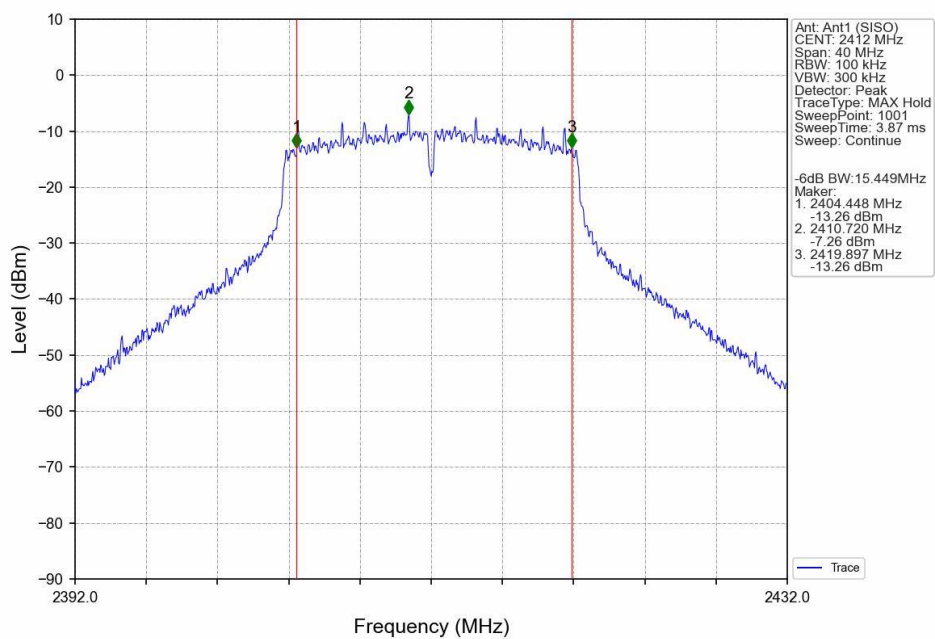


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802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

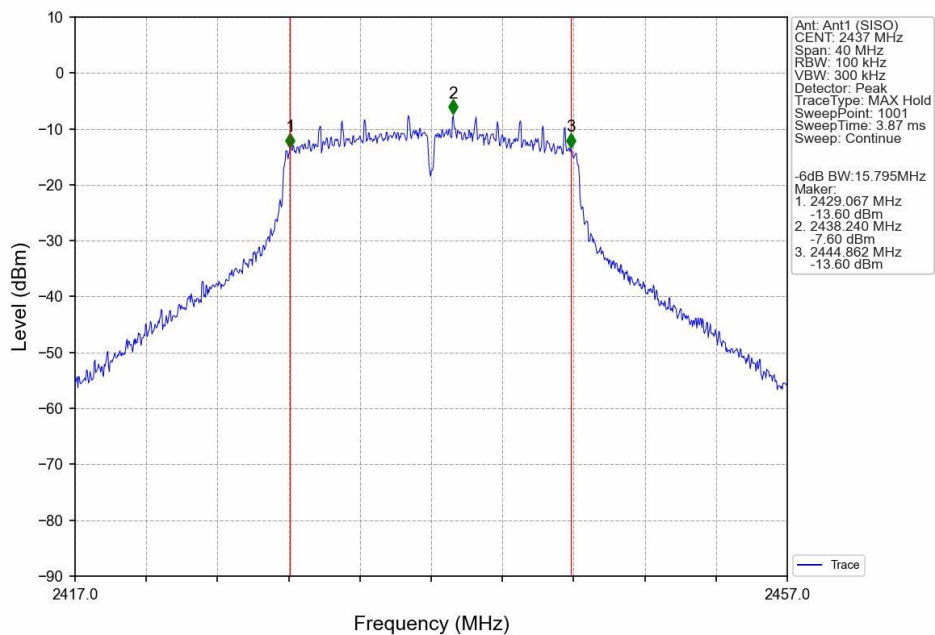


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

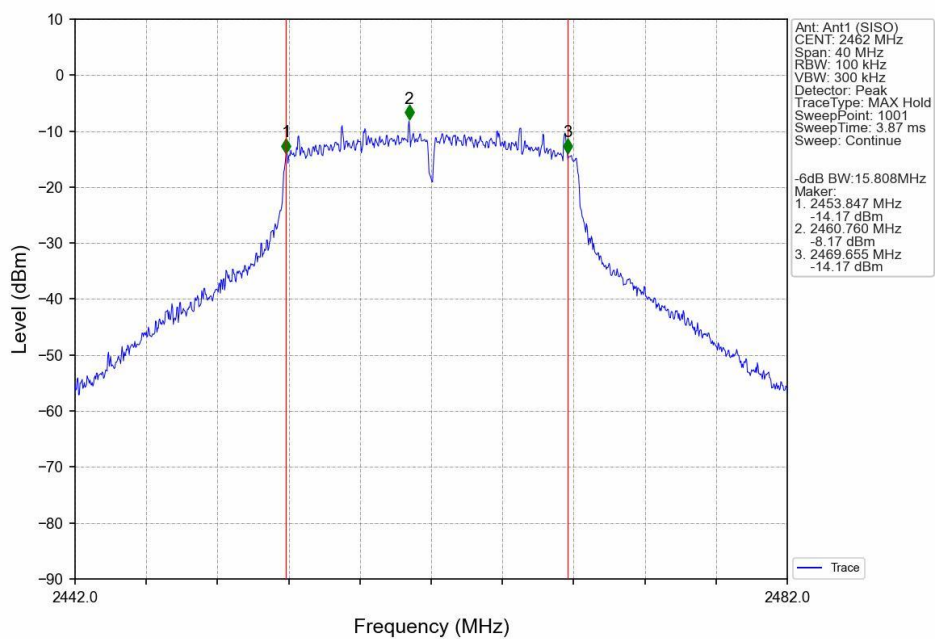


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802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

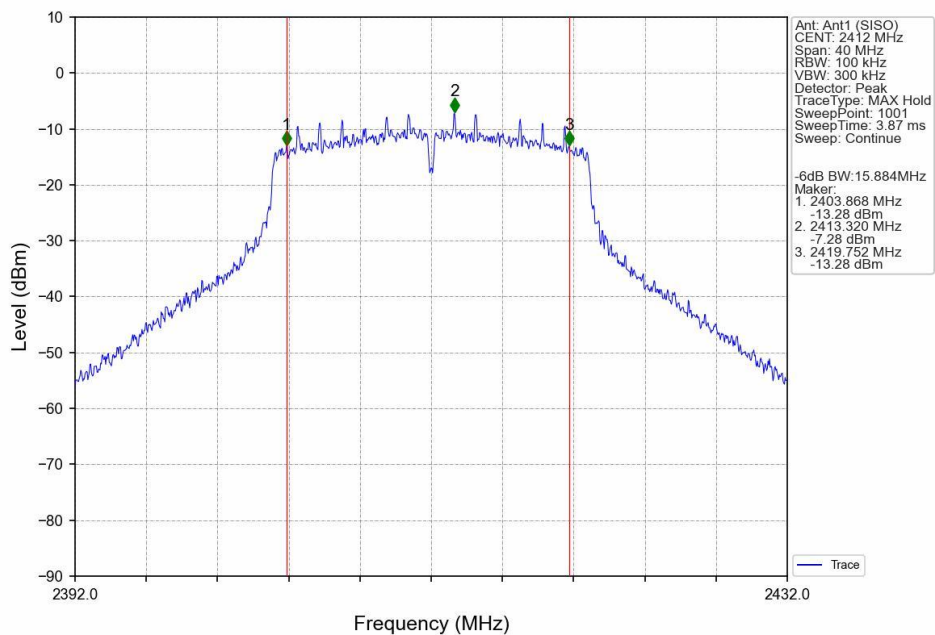


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

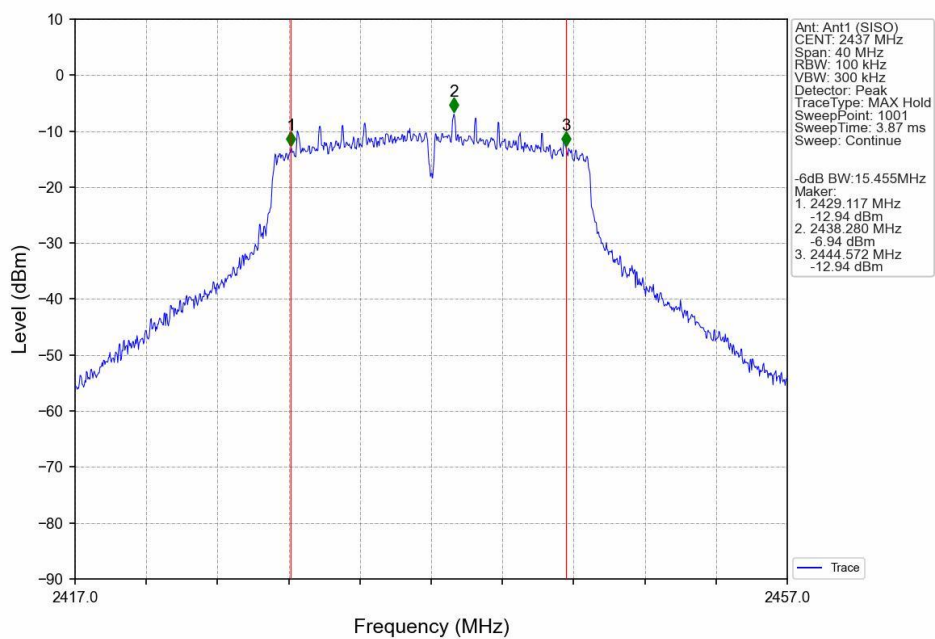


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802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

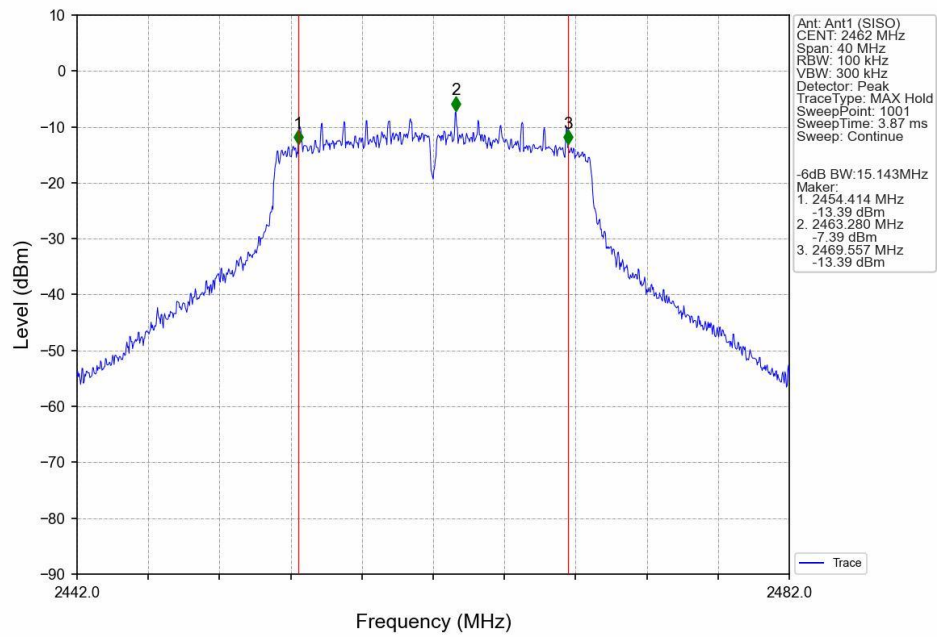


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

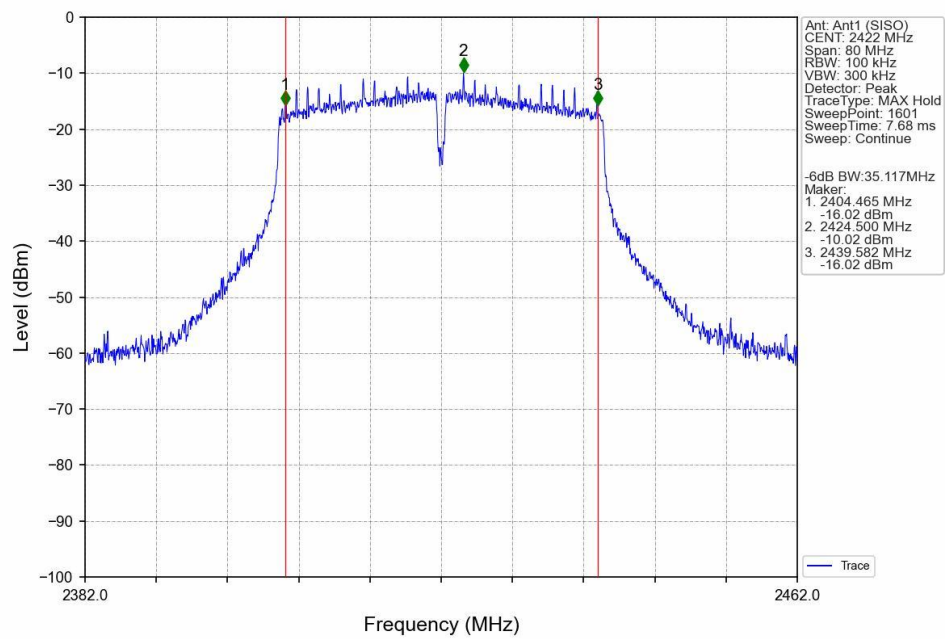


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802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

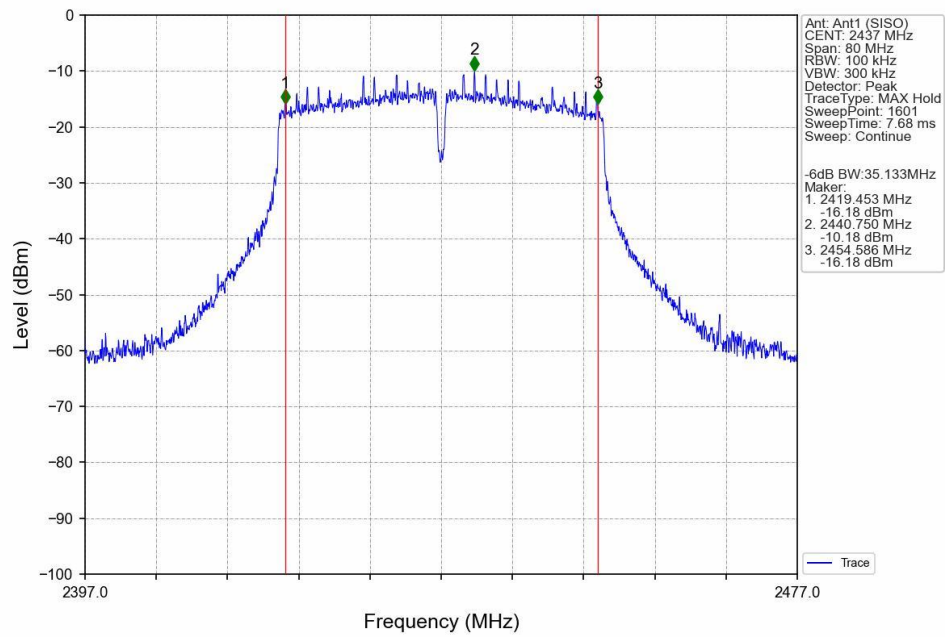


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

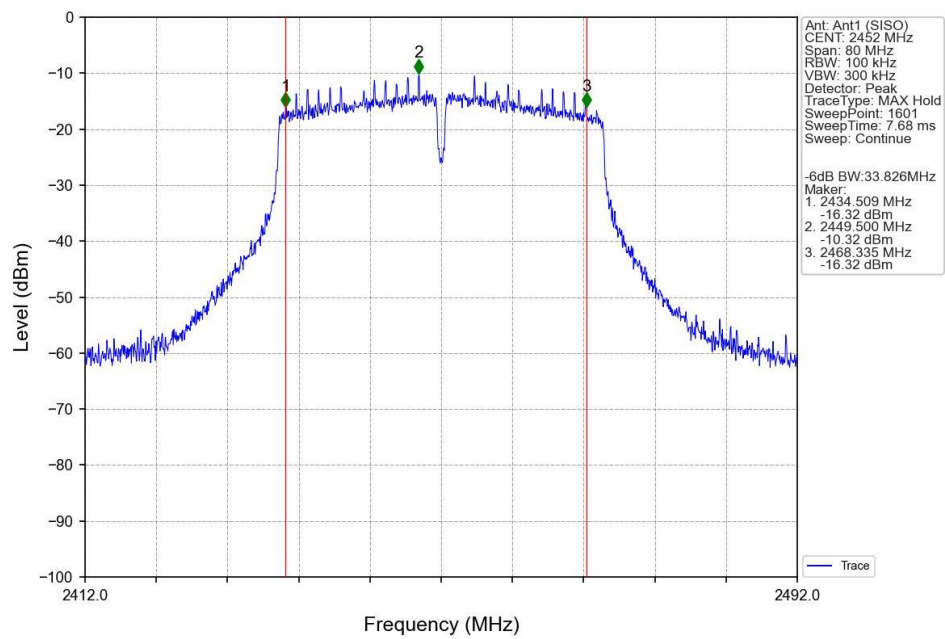


FCC ID:2ASAF-07C

802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



2. Maximum Output Power& E.I.R.P

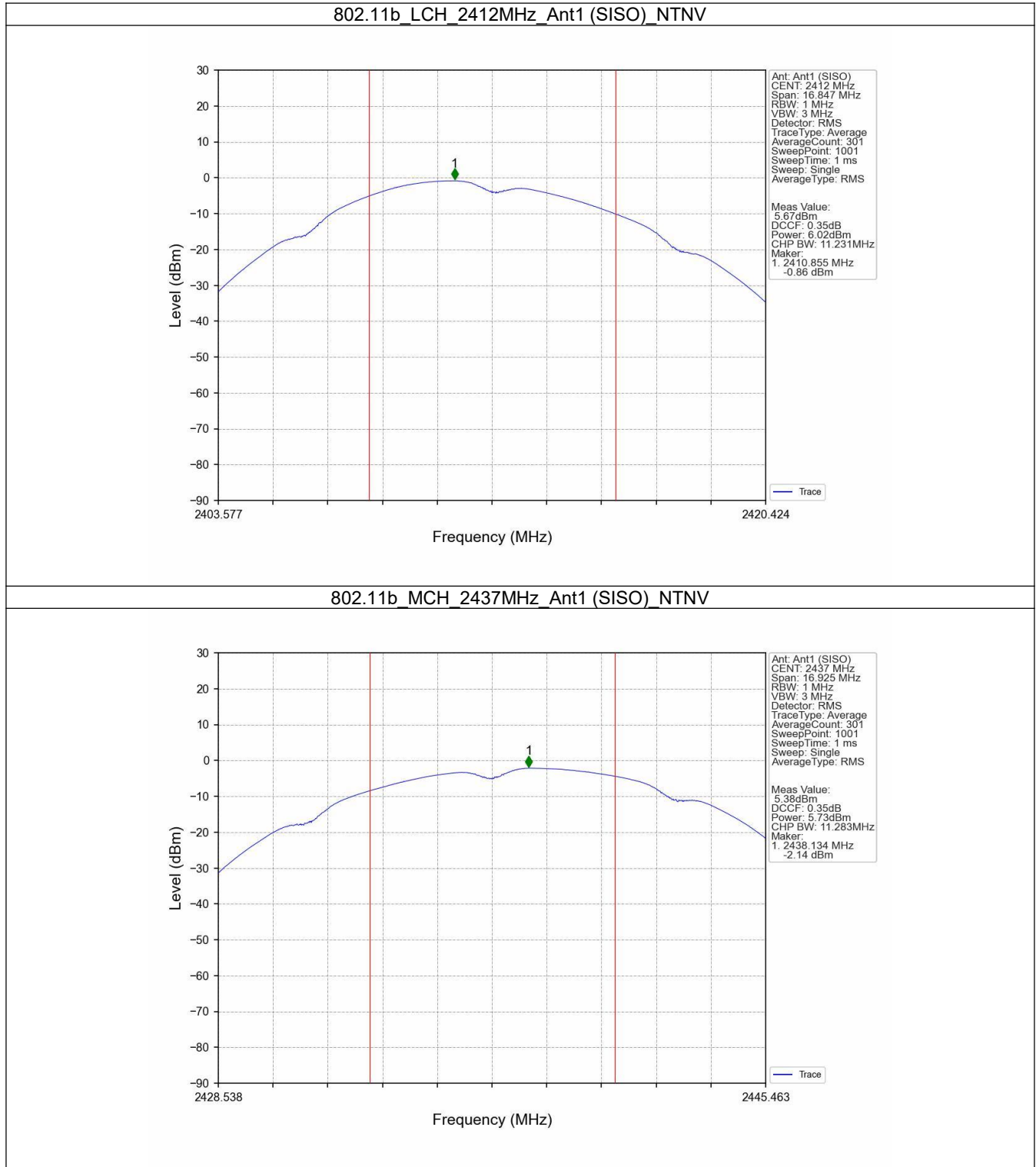
2.1 Test Result

2.1.1 Power

Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)	E.I.R.P value	Test Result
b	2412	6.02	0	6.02	30	8.38	PASS
b	2437	5.73	0	5.73	30	8.09	PASS
b	2462	6.22	0	6.22	30	8.58	PASS
g	2412	6.15	0	6.15	30	8.51	PASS
g	2437	6.31	0	6.31	30	8.67	PASS
g	2462	6.69	0	6.69	30	9.05	PASS
n20	2412	5.44	0	5.44	30	7.8	PASS
n20	2437	5.46	0	5.46	30	7.82	PASS
n20	2462	5.74	0	5.74	30	8.1	PASS
n40	2422	6.71	0	6.71	30	9.07	PASS
n40	2437	6.89	0	6.89	30	9.25	PASS
n40	2452	7.41	0	7.41	30	9.77	PASS

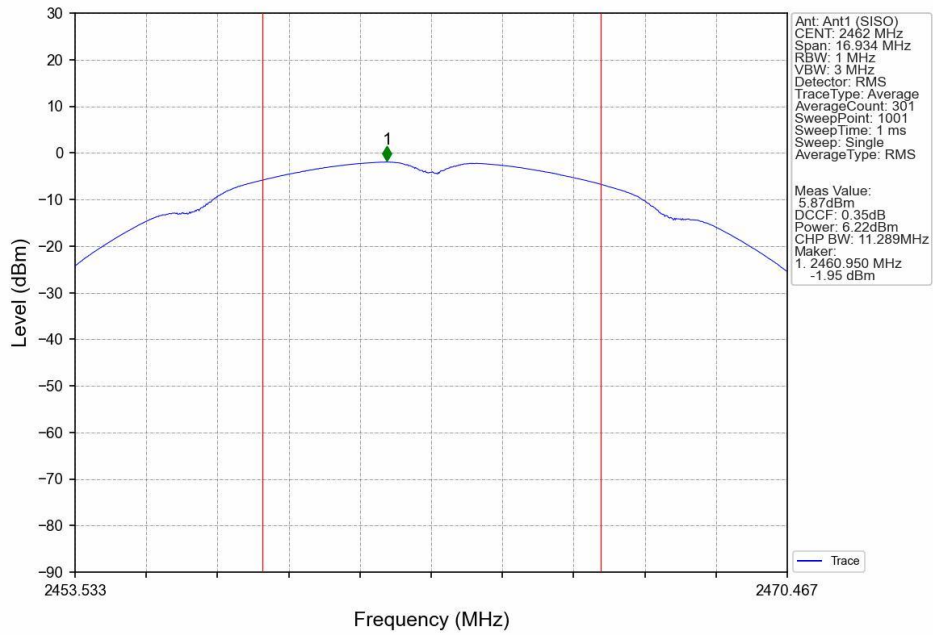
2.2 Test Graph

2.2.1 Power

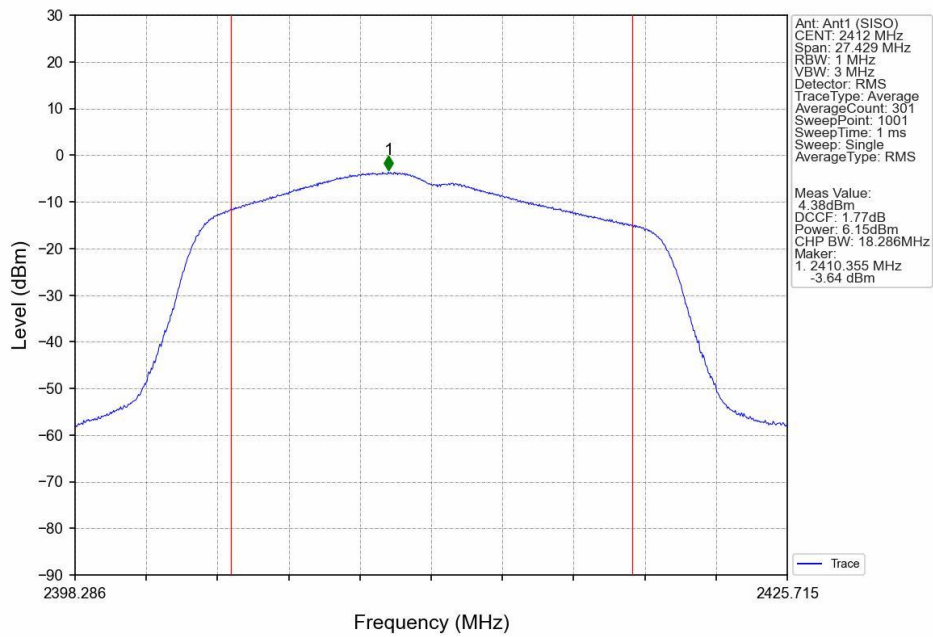


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802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

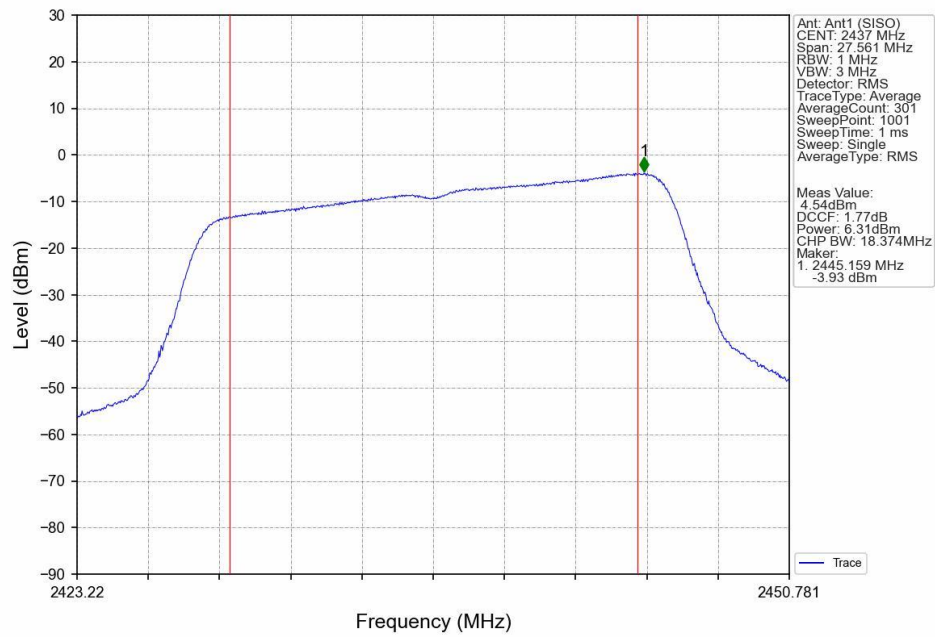


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

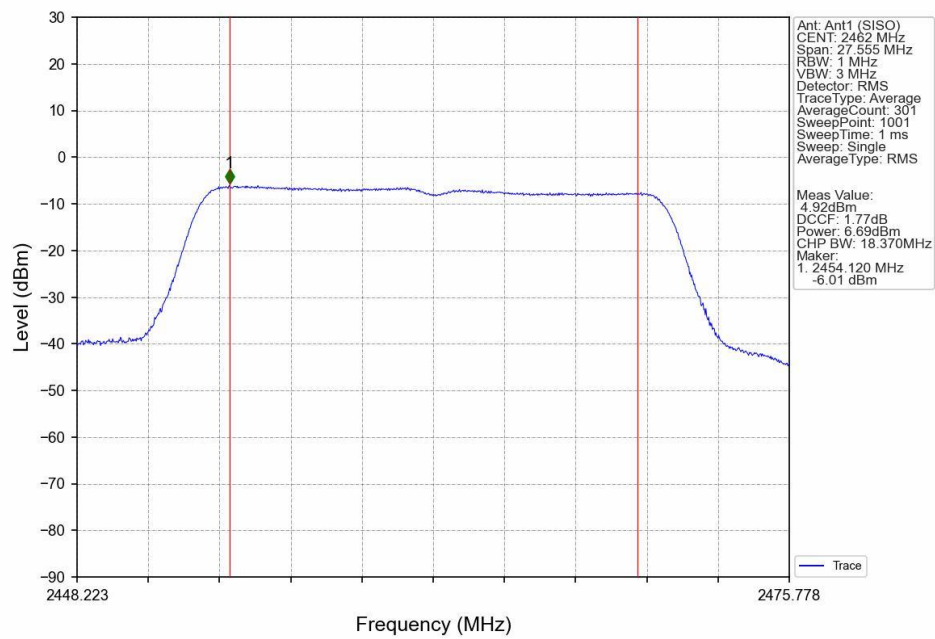


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802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

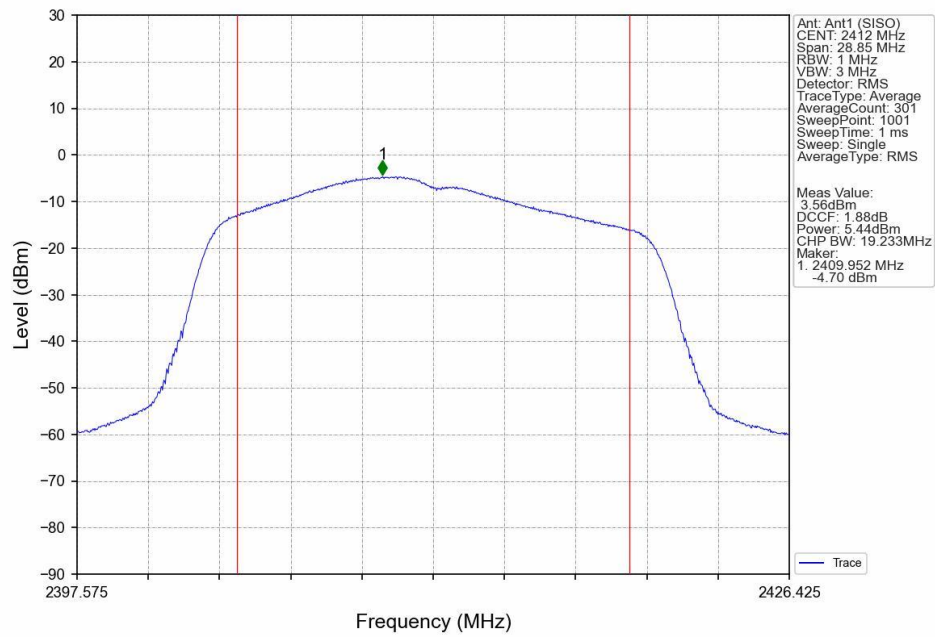


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

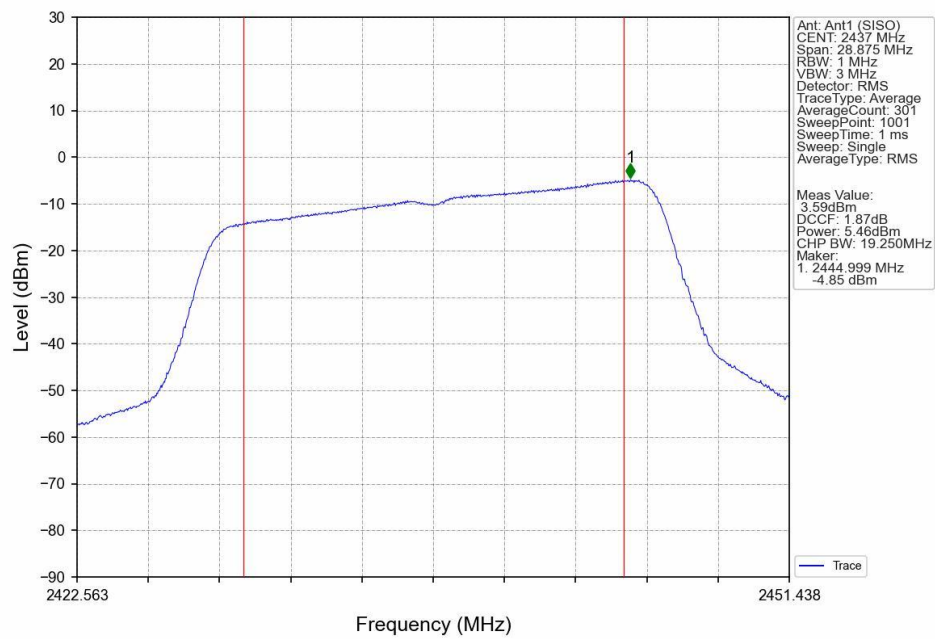


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802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

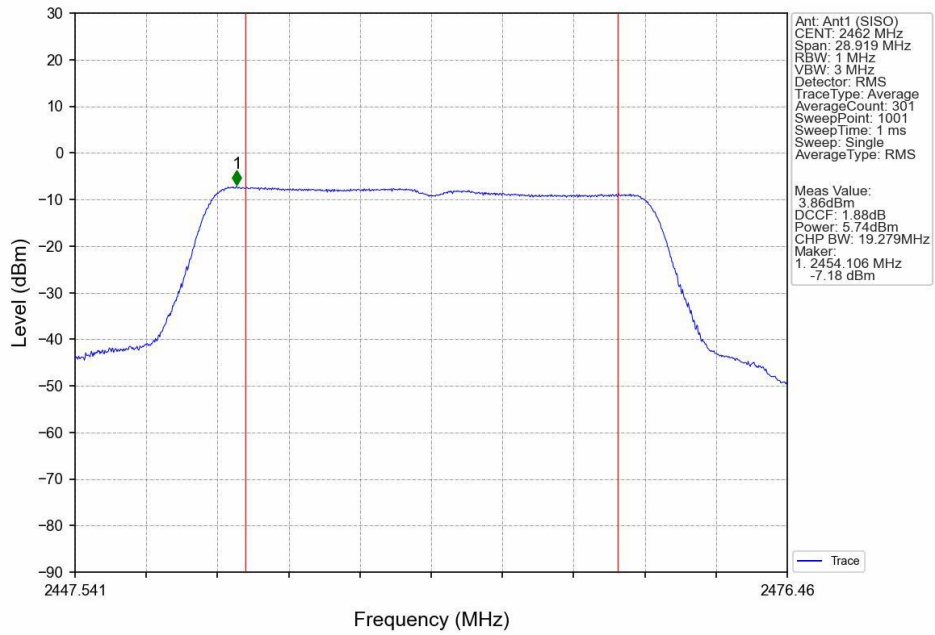


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

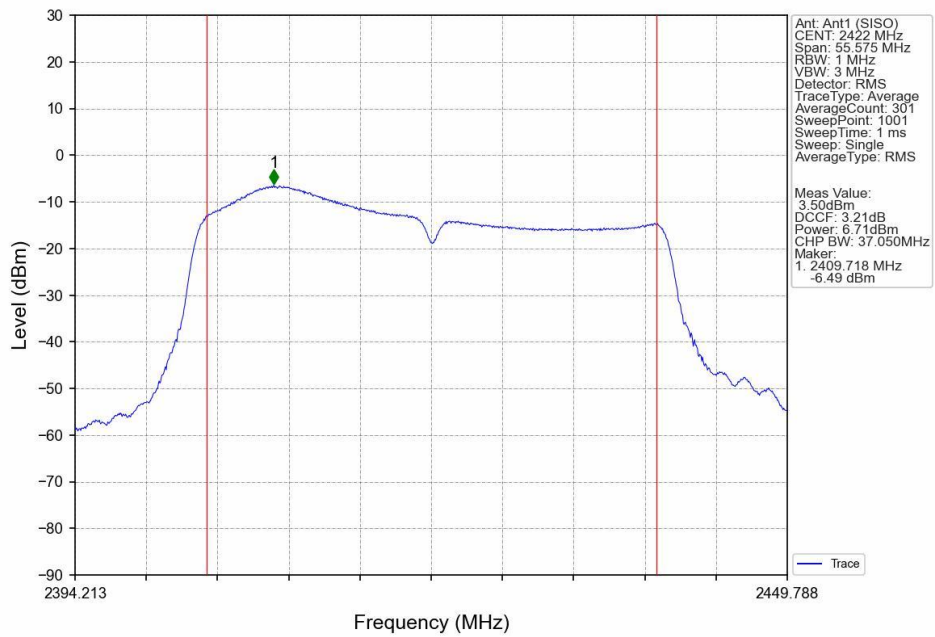


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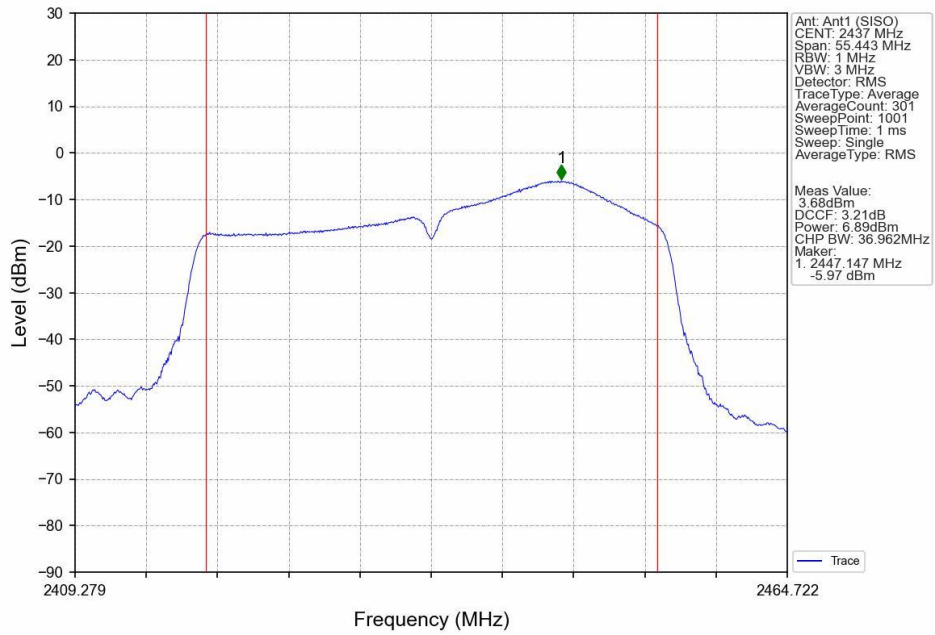
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



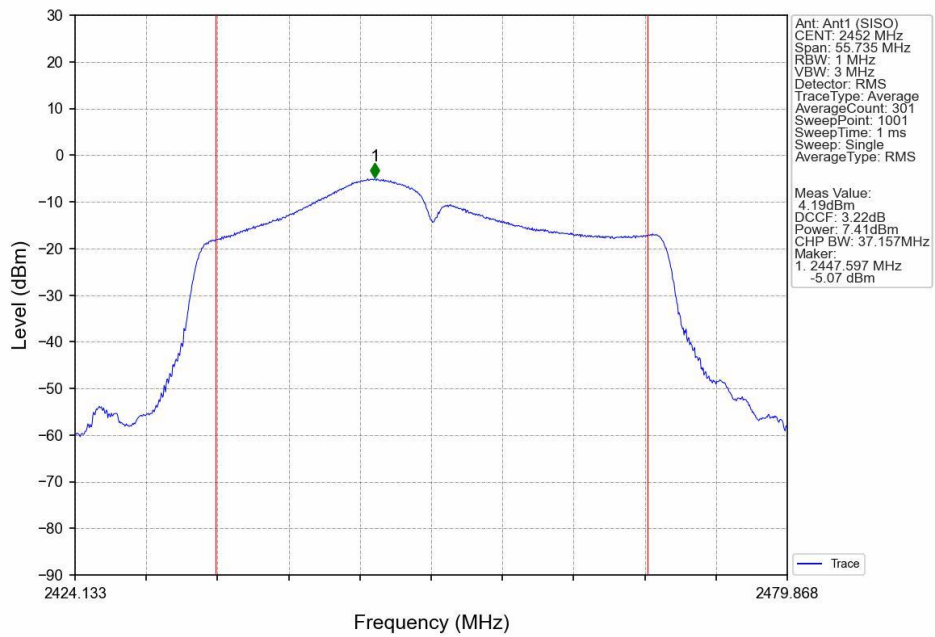
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



3. Power Spectral density

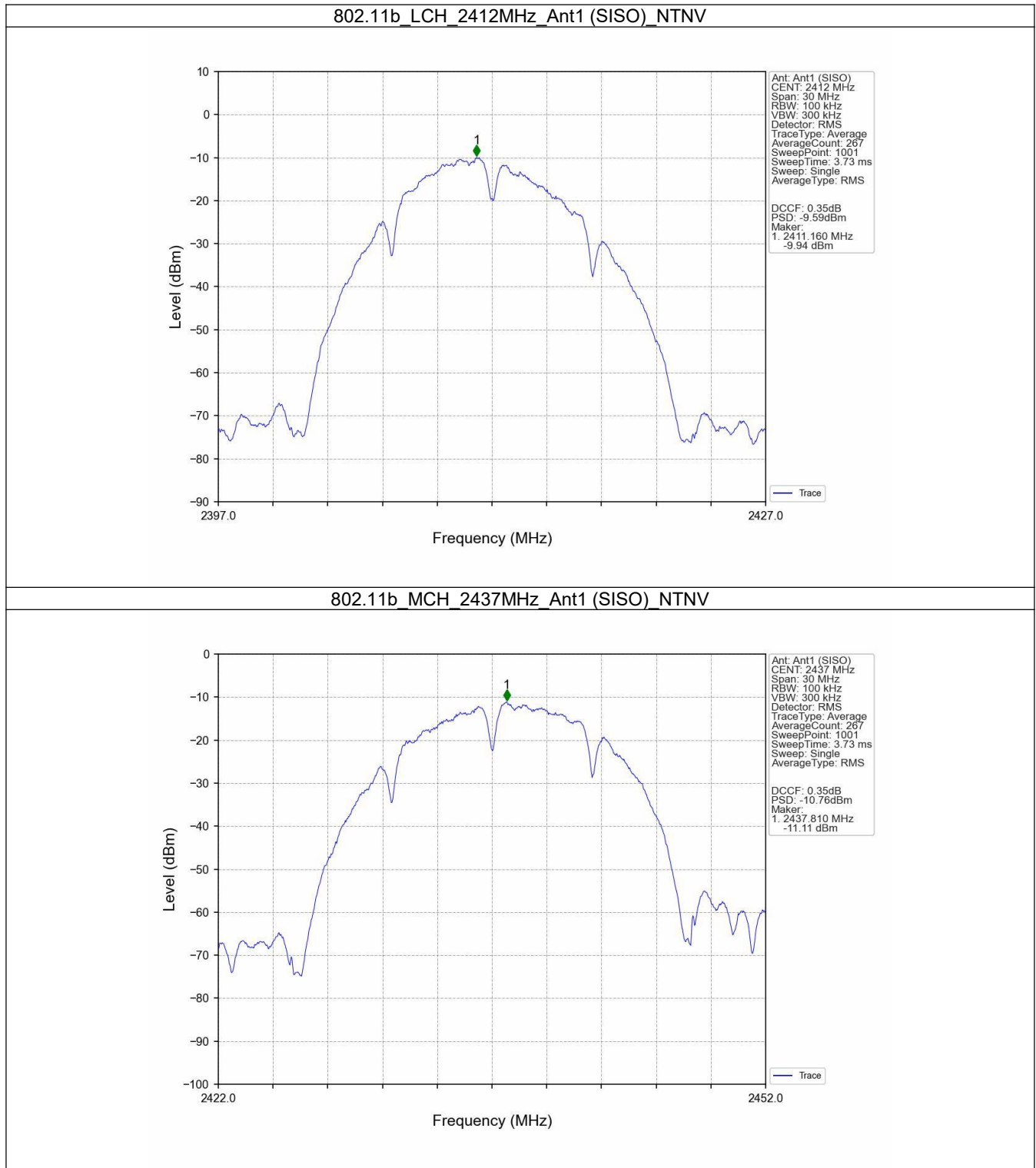
3.1 Test Result

3.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	-9.59	<=8	Pass
		2437	-10.76	<=8	Pass
		2462	-10.50	<=8	Pass
802.11g	SISO	2412	-10.82	<=8	Pass
		2437	-10.72	<=8	Pass
		2462	-13.09	<=8	Pass
802.11n (HT20)	SISO	2412	-11.99	<=8	Pass
		2437	-11.82	<=8	Pass
		2462	-14.38	<=8	Pass
802.11n (HT40)	SISO	2422	-11.87	<=8	Pass
		2437	-11.65	<=8	Pass
		2452	-10.67	<=8	Pass
Note1: Antenna Gain: Ant1: 2.36dBi;					

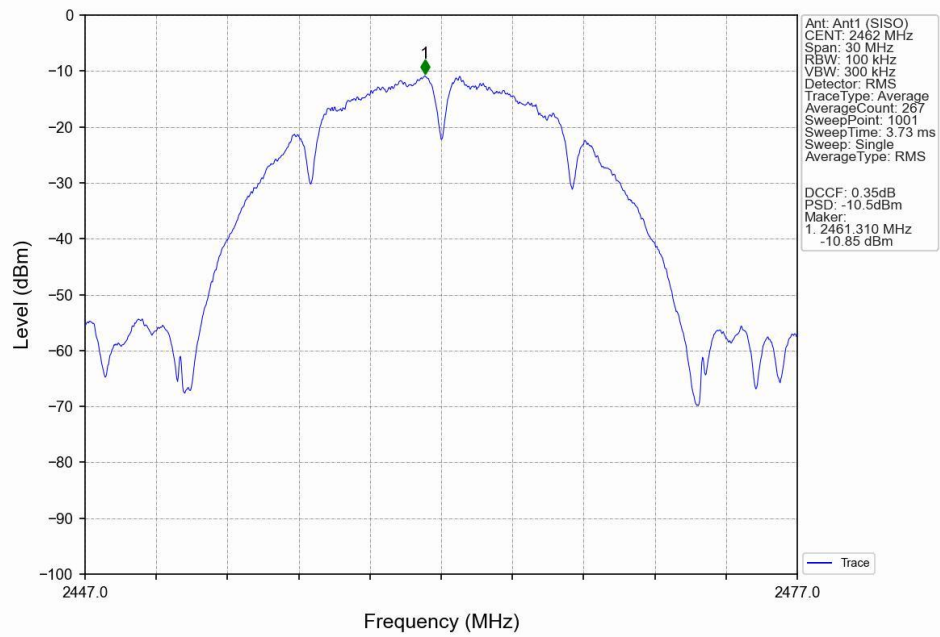
3.2 Test Graph

3.2.1 PSD

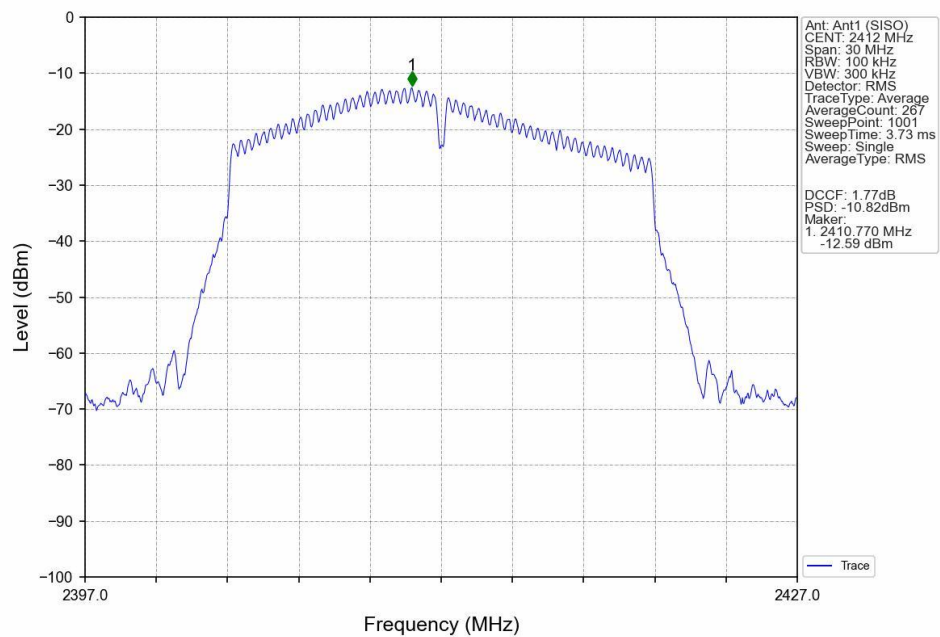


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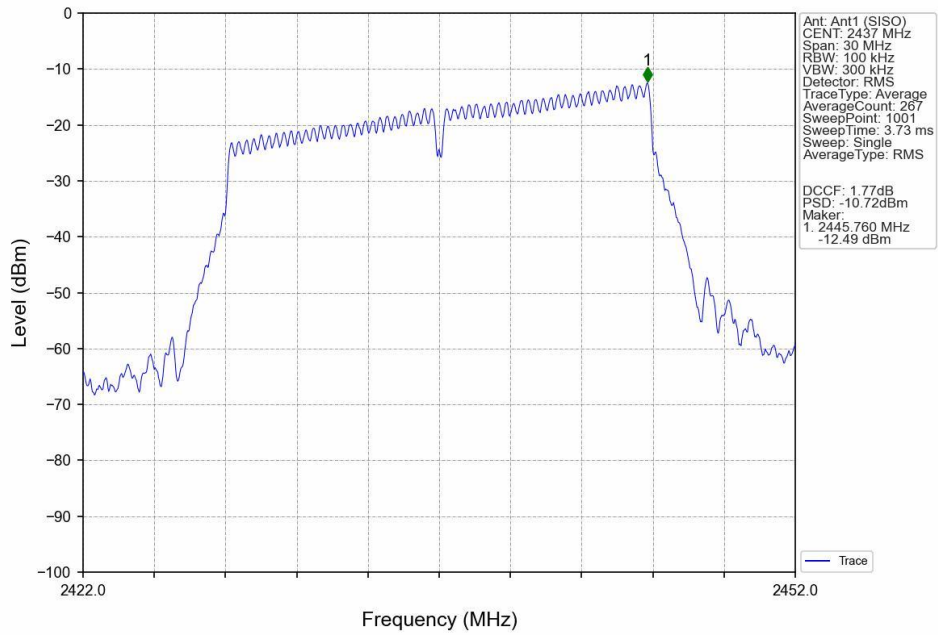
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



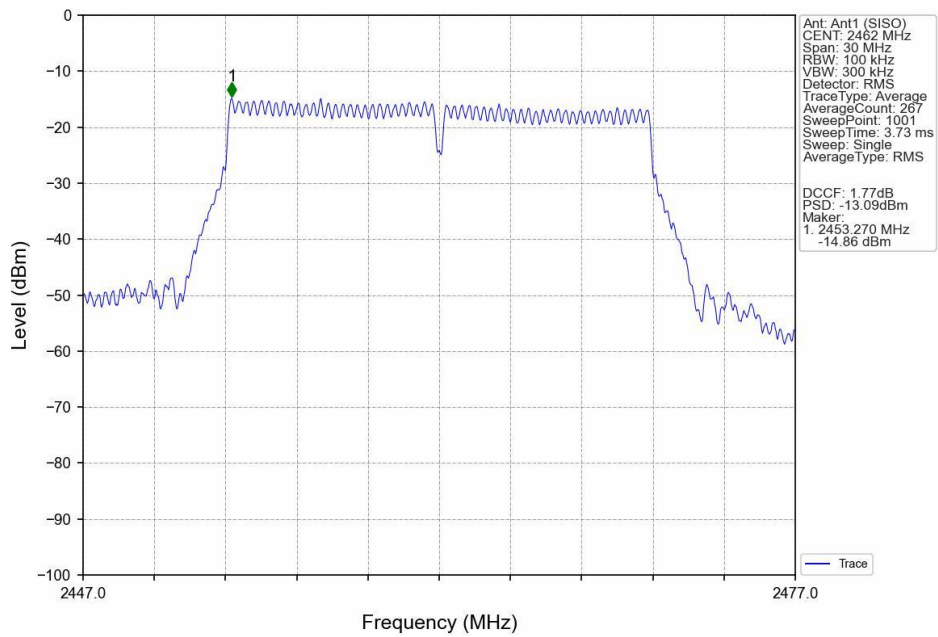
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



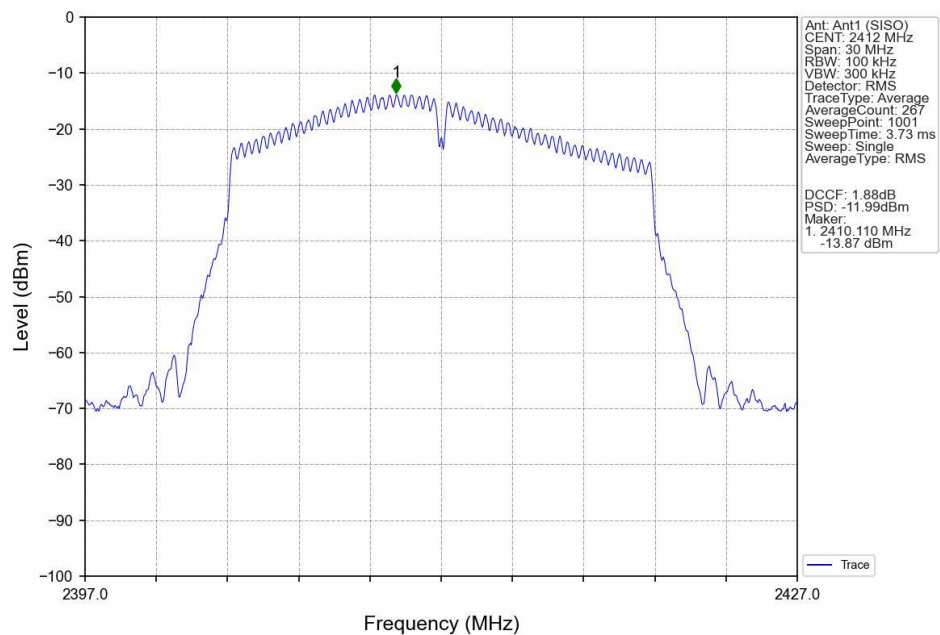
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



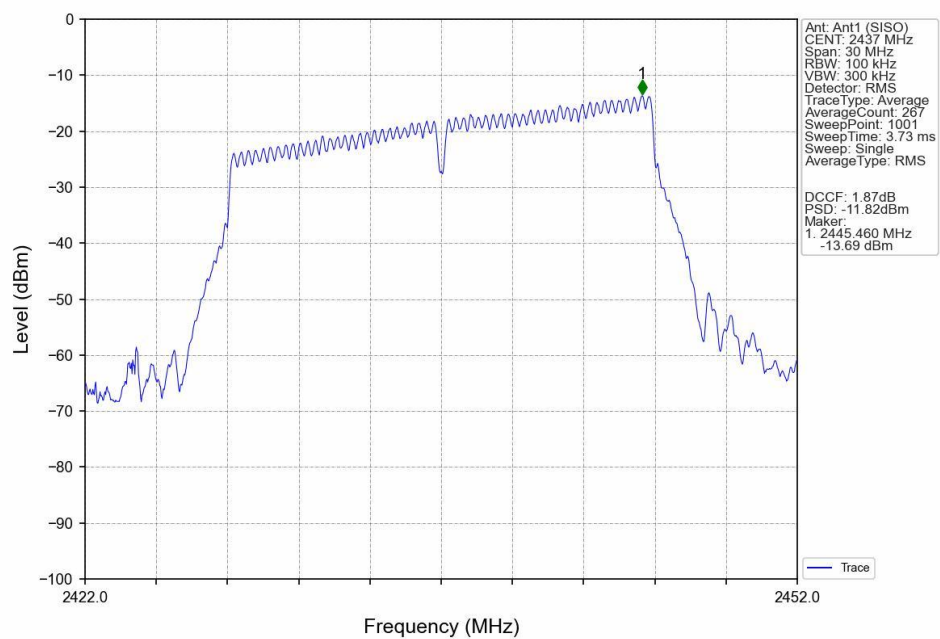
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

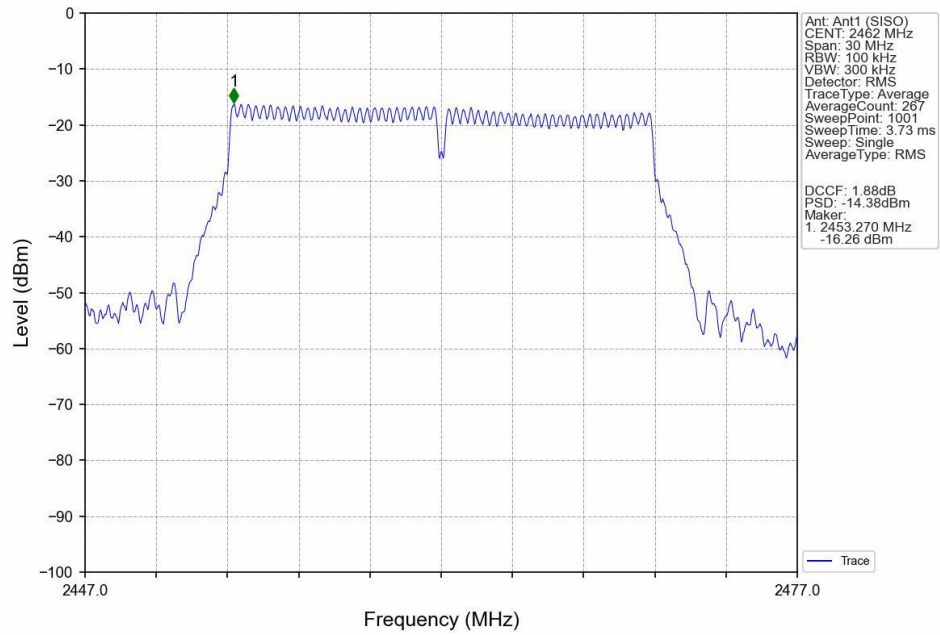


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

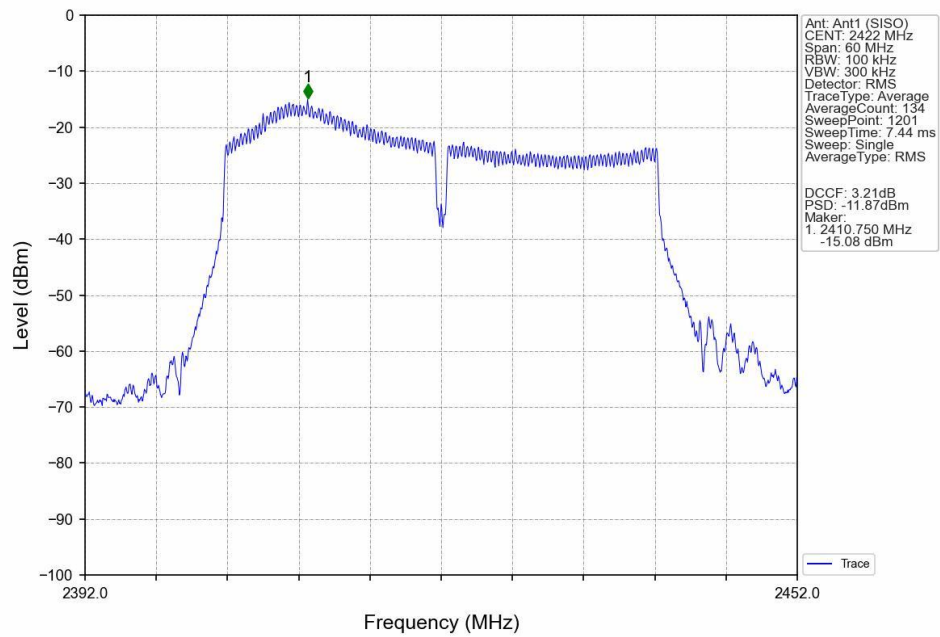


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802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

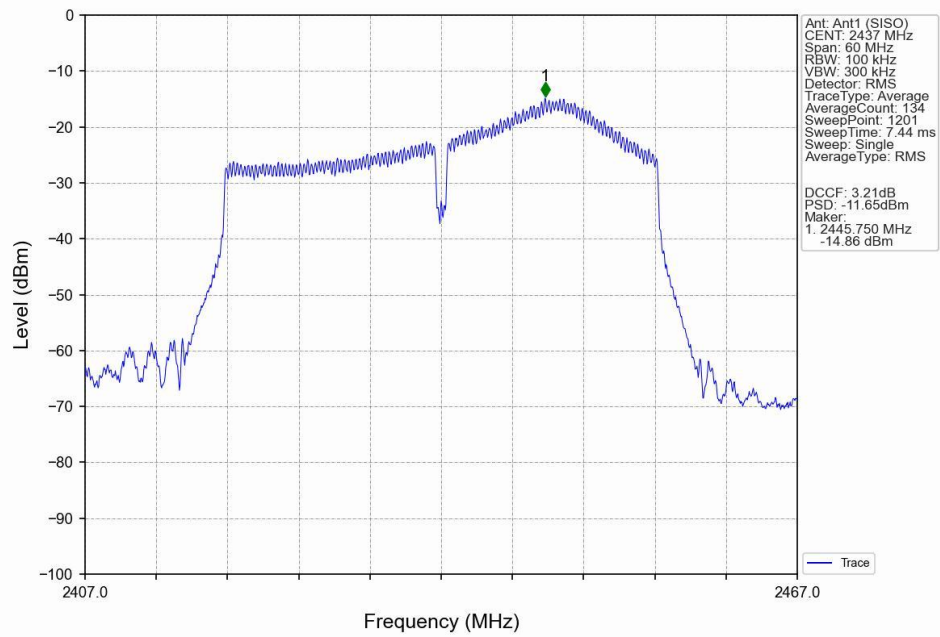


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

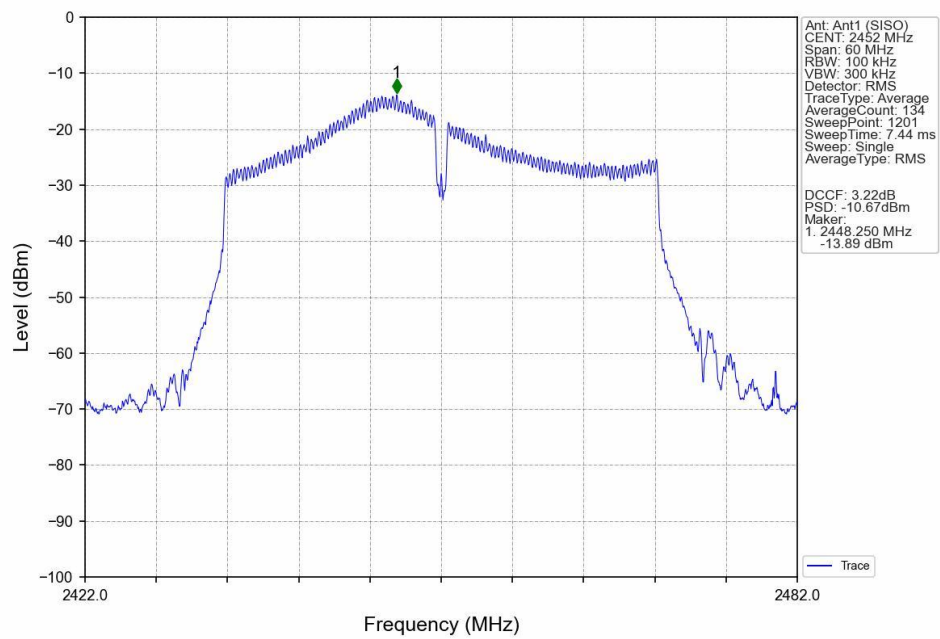


FCC ID:2ASAF-07C

802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



4. Unwanted Emissions In Non-restricted Frequency Bands

4.1 Test Result

4.1.1 Ref

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	-5.68
		2437	1	-4.66
		2462	1	-5.97
802.11g	SISO	2412	1	-7.03
		2437	1	-8.22
		2462	1	-7.79
802.11n (HT20)	SISO	2412	1	-7.24
		2437	1	-7.29
		2462	1	-8.05
802.11n (HT40)	SISO	2422	1	-10.06
		2437	1	-10.03
		2452	1	-10.45

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

4.1.2 Conducted Spurious Emissions

Mode	TX Type	Frequency (MHz)	ANT	Max Value (dBm)	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	-53.44	-5.68	-35.68	Pass
		2437	1	-52.81	-4.66	-34.66	Pass
		2462	1	-52.66	-5.97	-35.97	Pass
802.11g	SISO	2412	1	-46.17	-7.03	-37.03	Pass
		2437	1	-47.68	-8.22	-38.22	Pass
		2462	1	-47.54	-7.79	-37.79	Pass
802.11n (HT20)	SISO	2412	1	-46.71	-7.24	-37.24	Pass
		2437	1	-47.20	-7.29	-37.29	Pass
		2462	1	-47.45	-8.05	-38.05	Pass
802.11n (HT40)	SISO	2422	1	-47.68	-10.06	-40.06	Pass
		2437	1	-47.39	-10.03	-40.03	Pass
		2452	1	-47.76	-10.45	-40.45	Pass

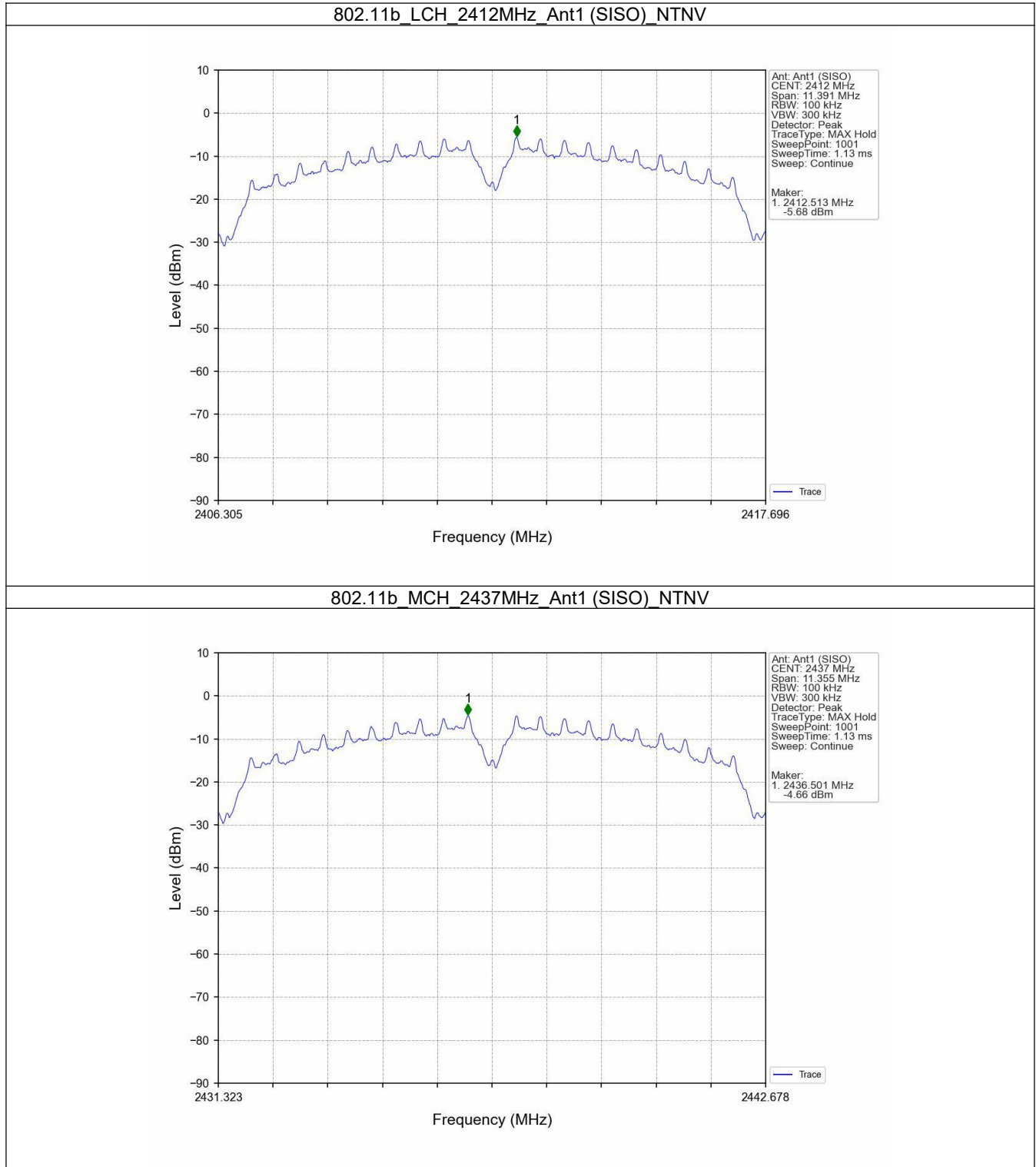
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

4.1.3. Band Edge Measurement

Mode	Frequency (MHz)	Max Value (dBm)	Limit (dBm)	Verdict
802.11b	2412	-59.69	-35.68	Pass
	2462	-64.61	-35.97	Pass
802.11g	2412	-36.13	-37.03	Pass
	2462	-56.66	-37.79	Pass
802.11n (HT20)	2412	-37.23	-37.24	Pass
	2462	-57.73	-38.05	Pass
802.11n (HT40)	2422	-42.93	-40.06	Pass
	2452	-55.03	-40.45	Pass

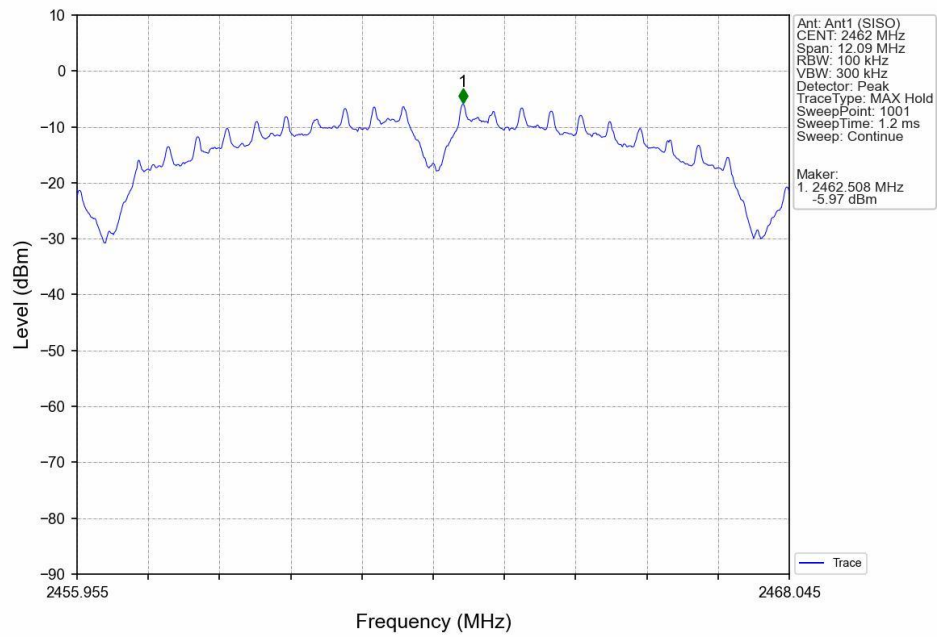
4.2 Test Graph

4.2.1 Ref

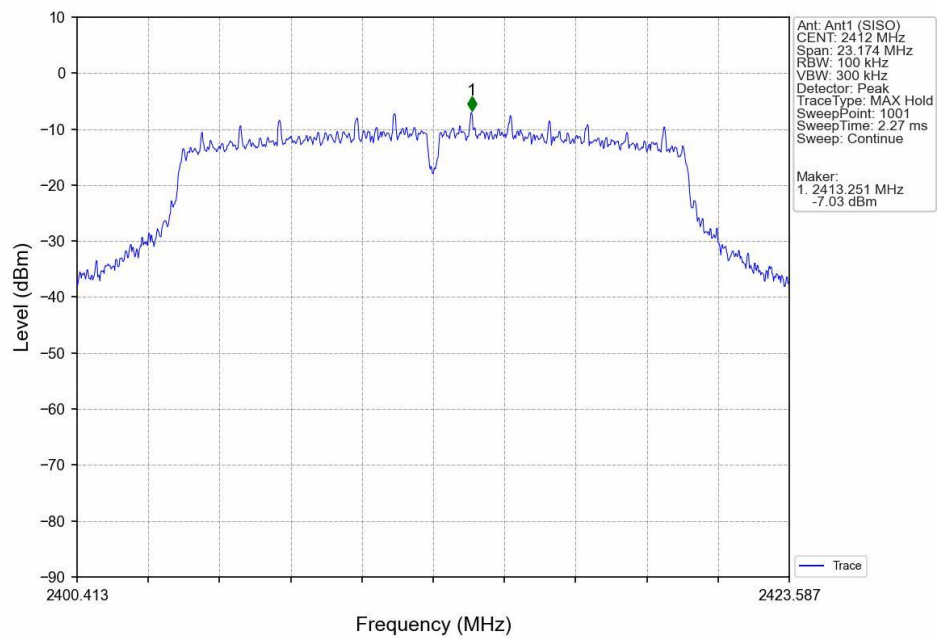


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802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

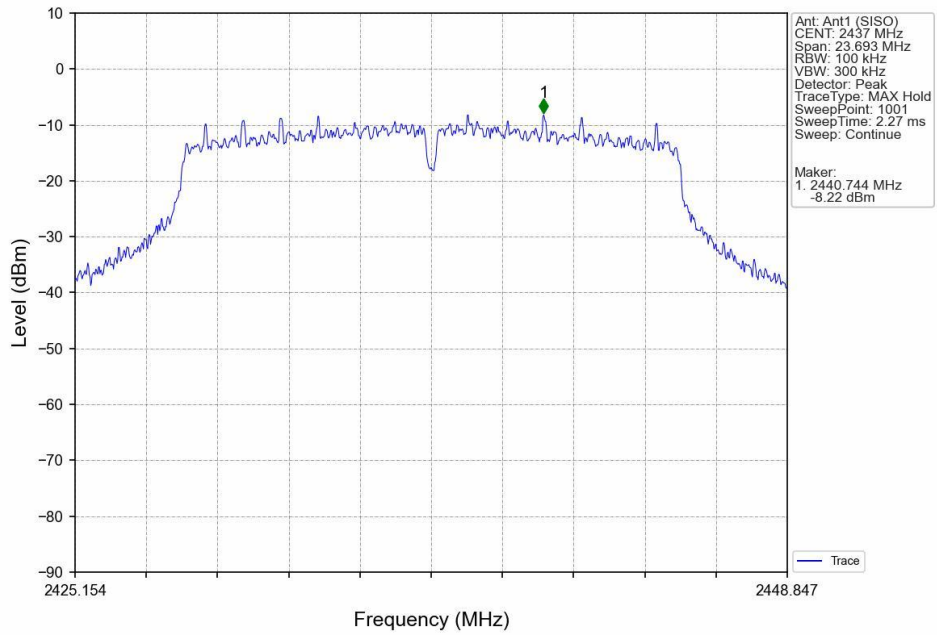


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

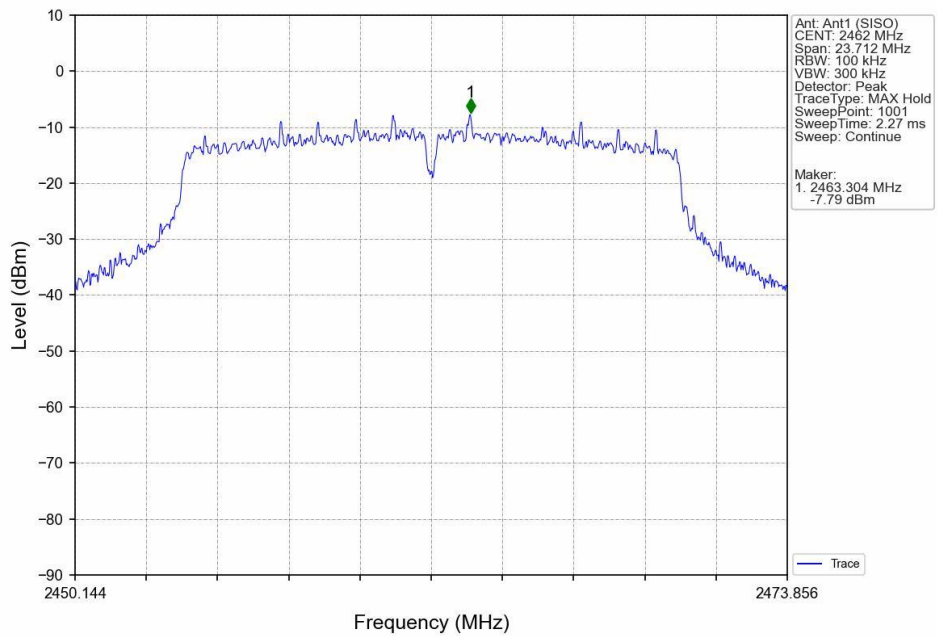


FCC ID:2ASAF-07C

802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

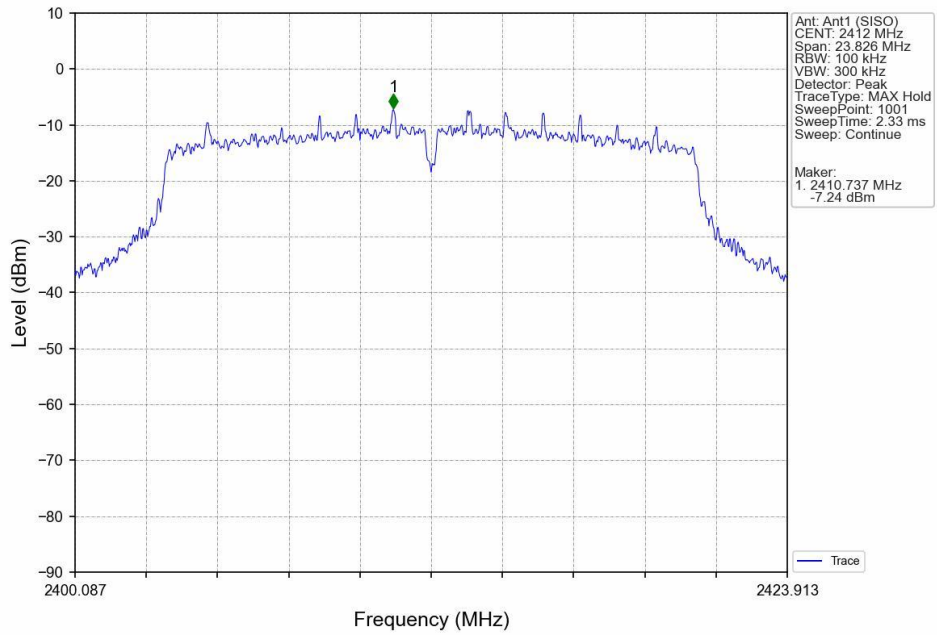


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

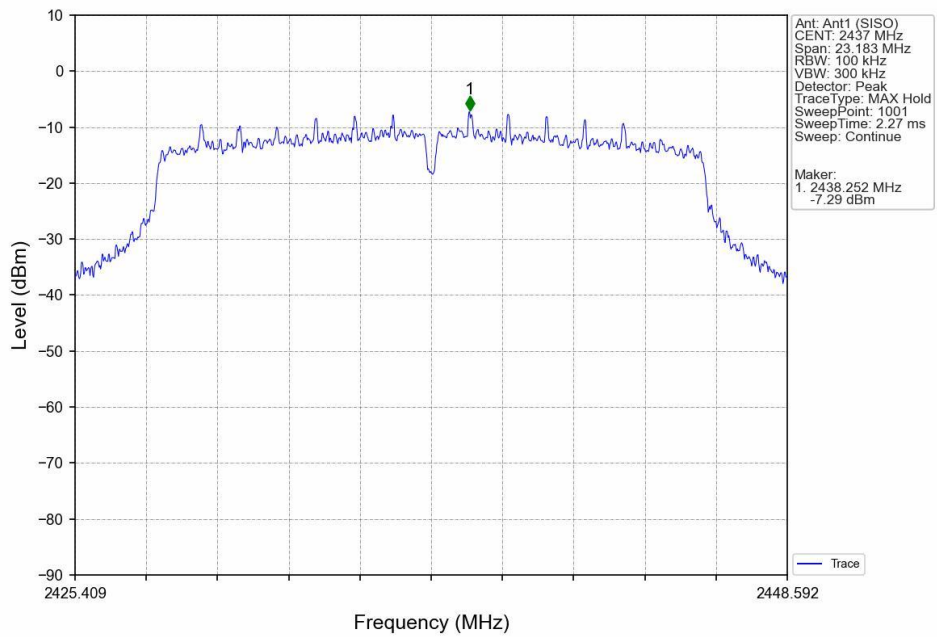


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802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

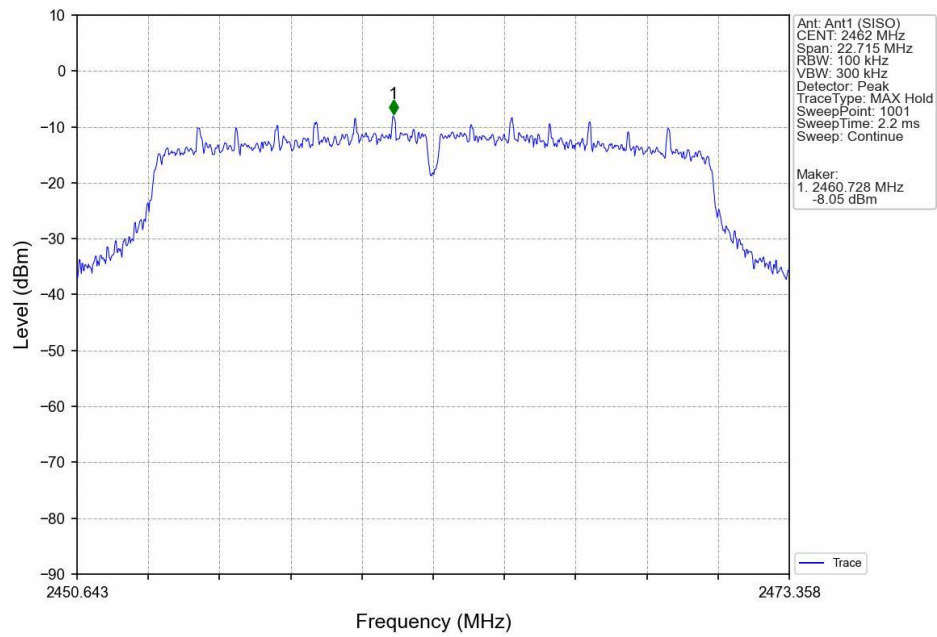


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

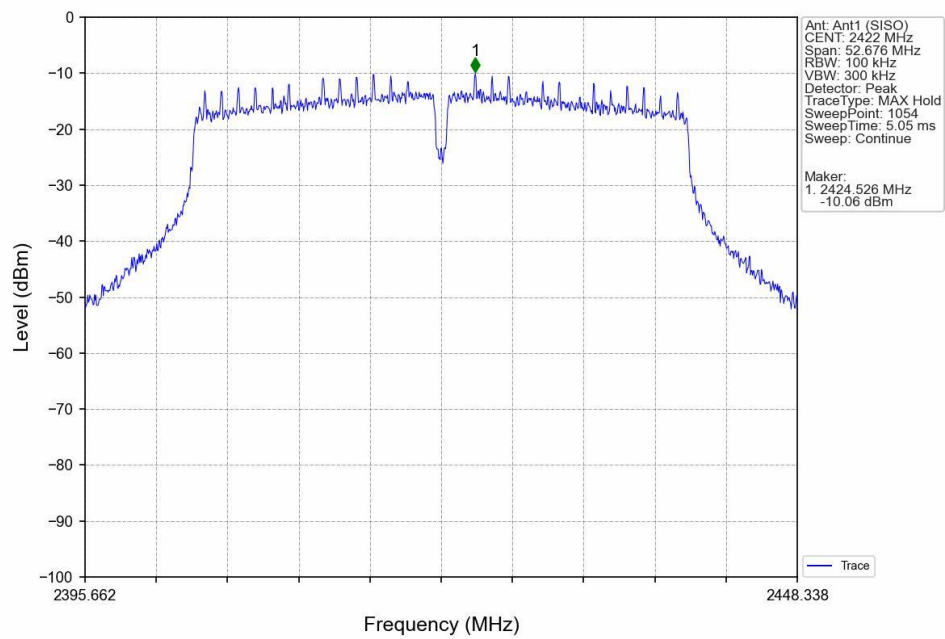


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802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

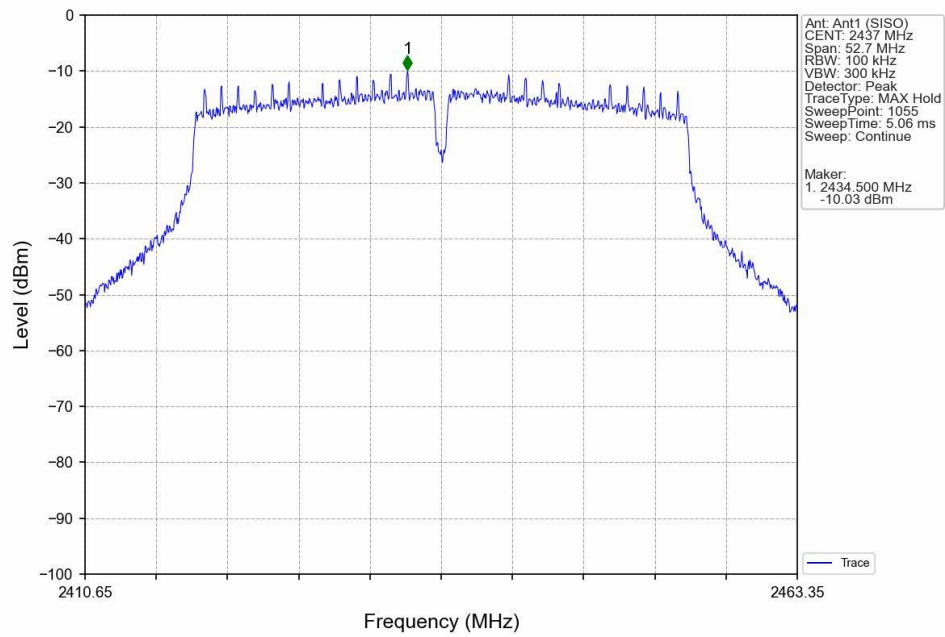


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

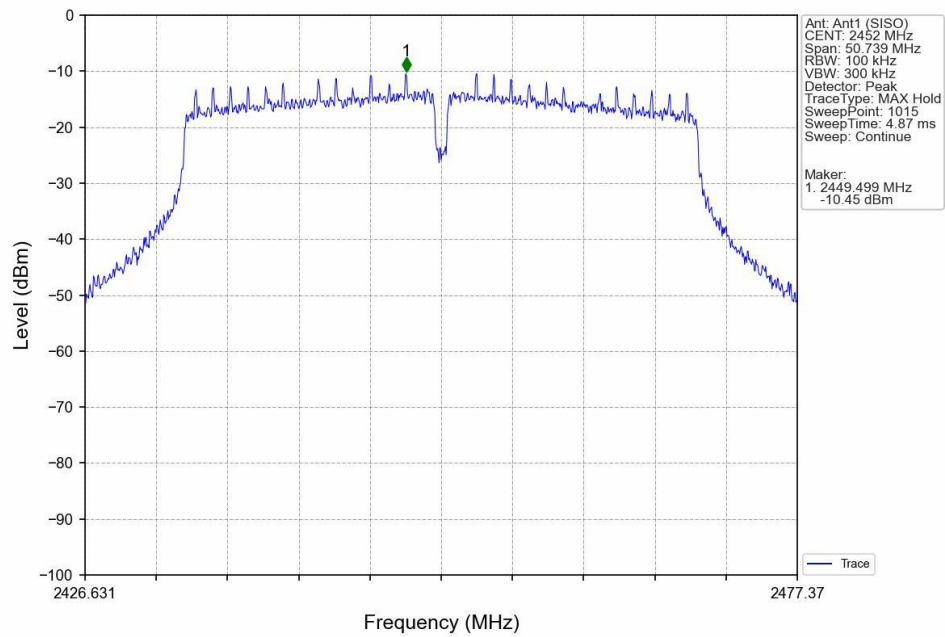


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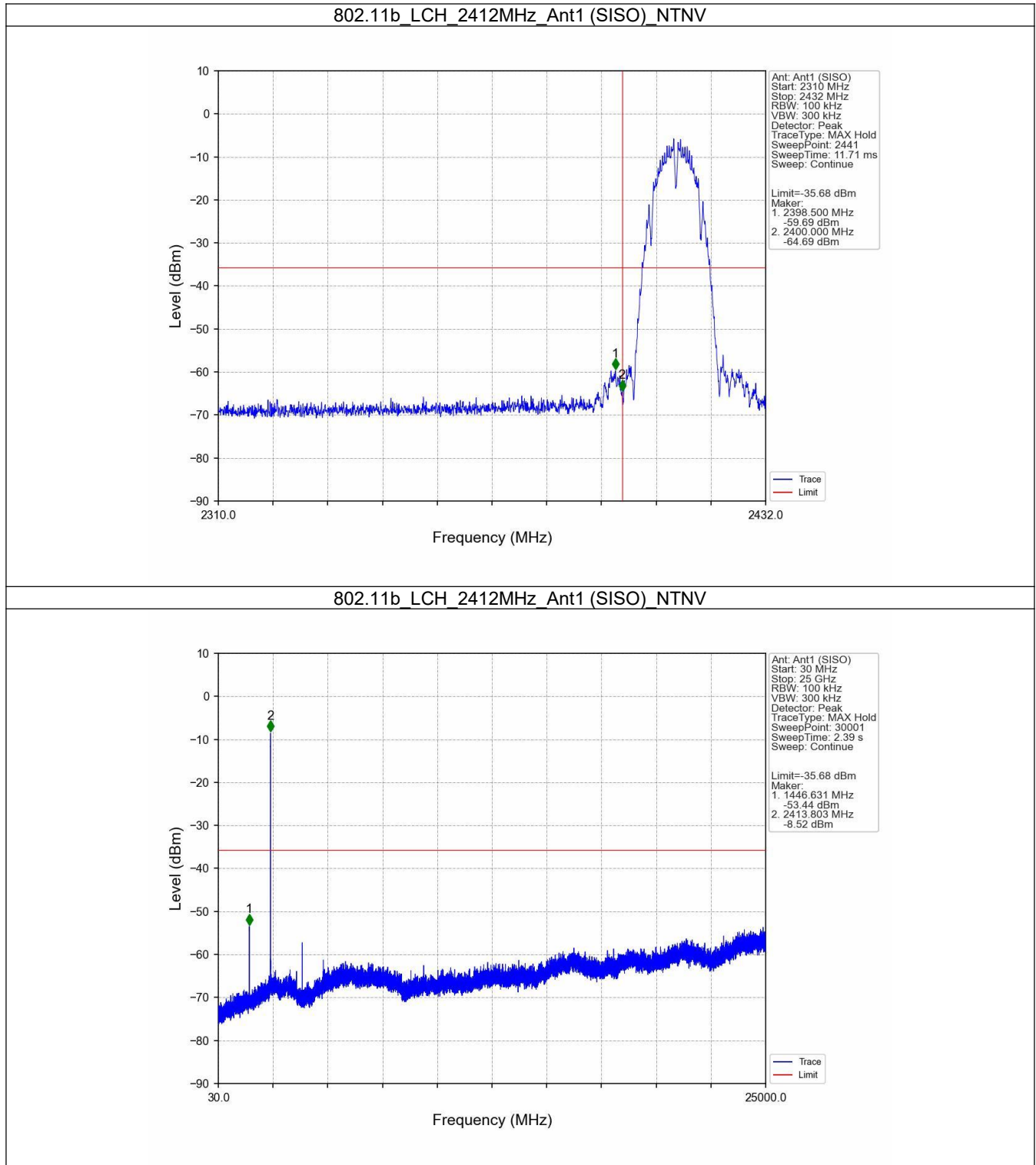
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

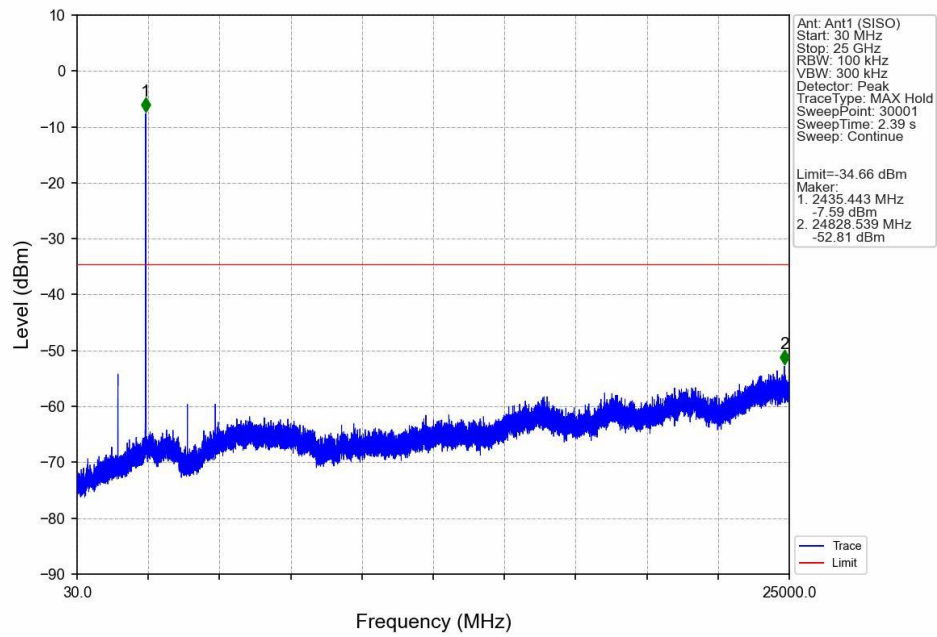


4.2.2 CSE

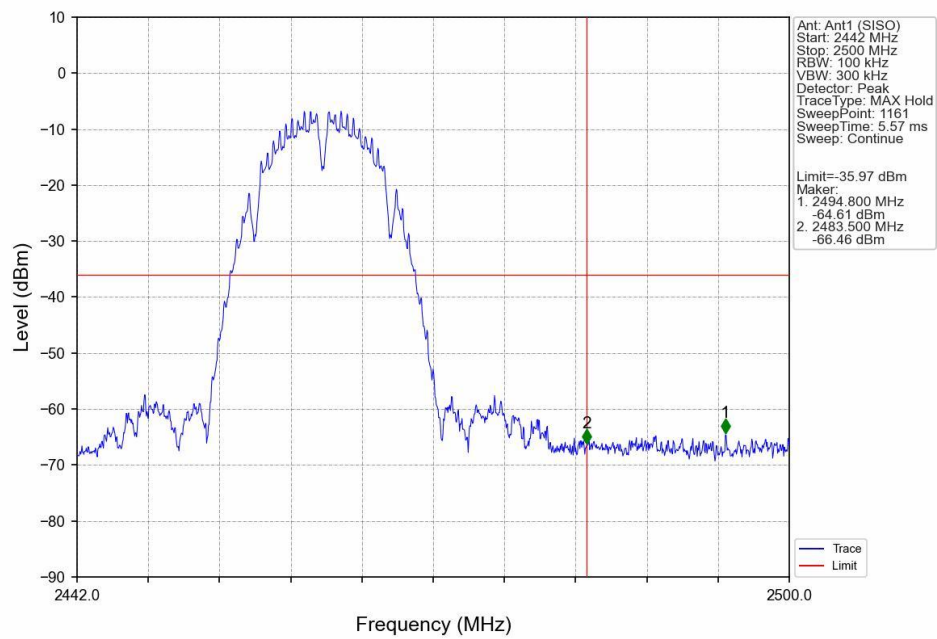


FCC ID:2ASAF-07C

802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV

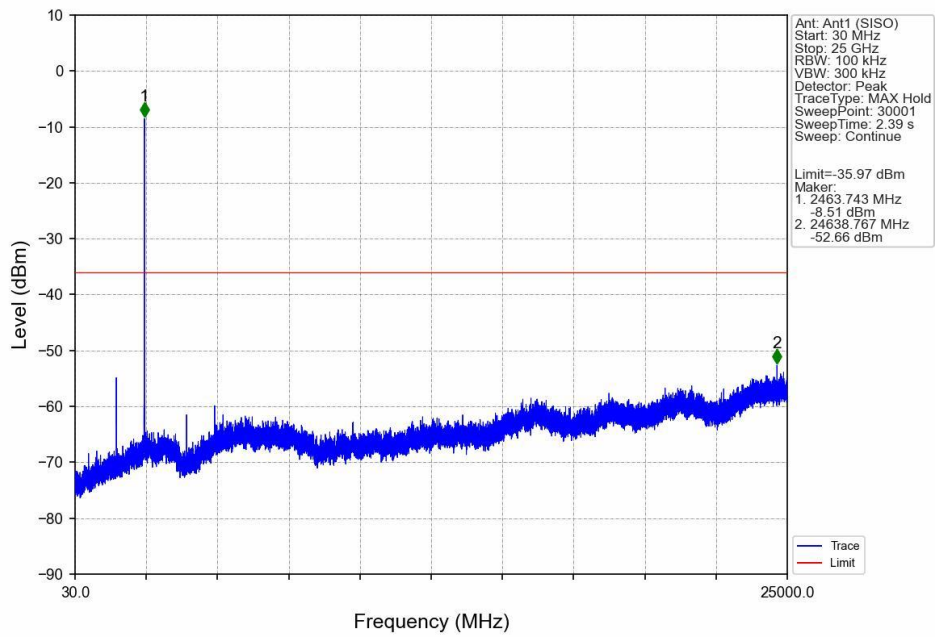


802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

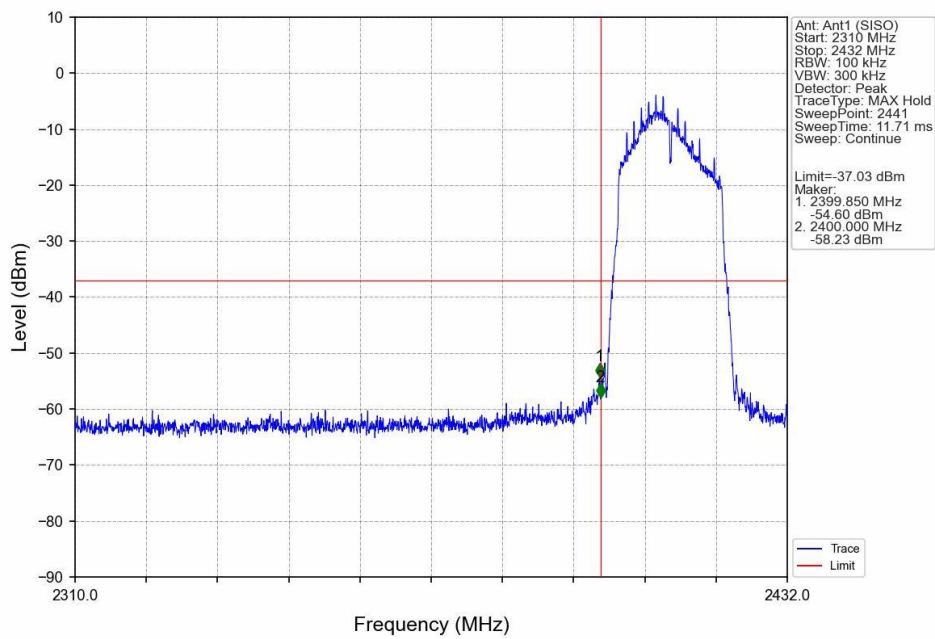


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802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

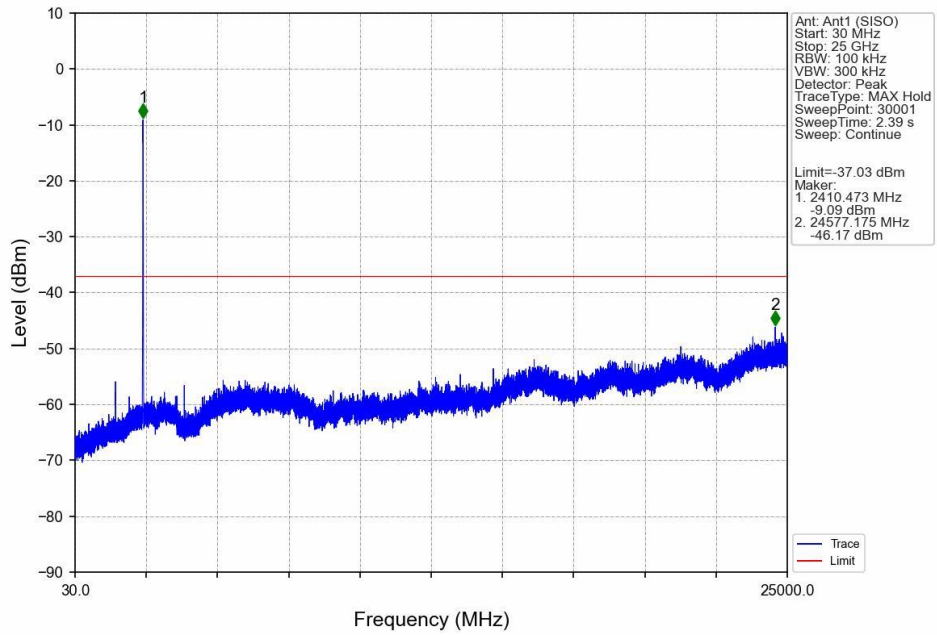


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

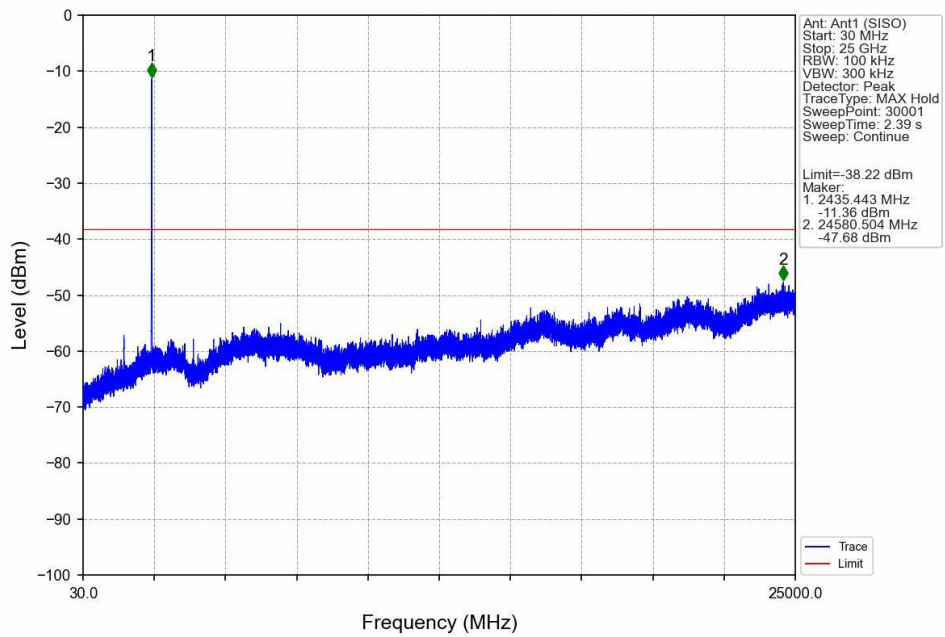


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802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

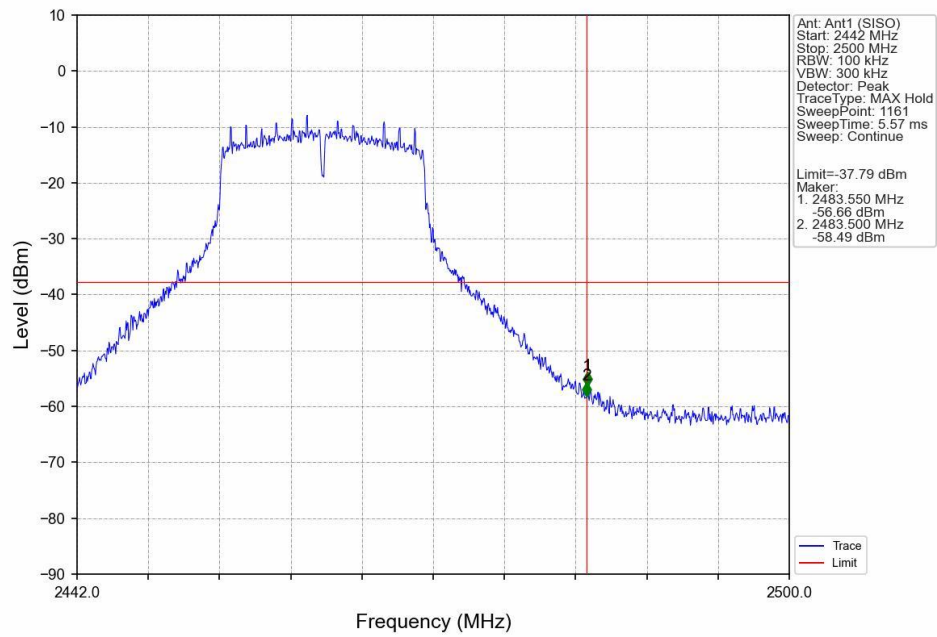


802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

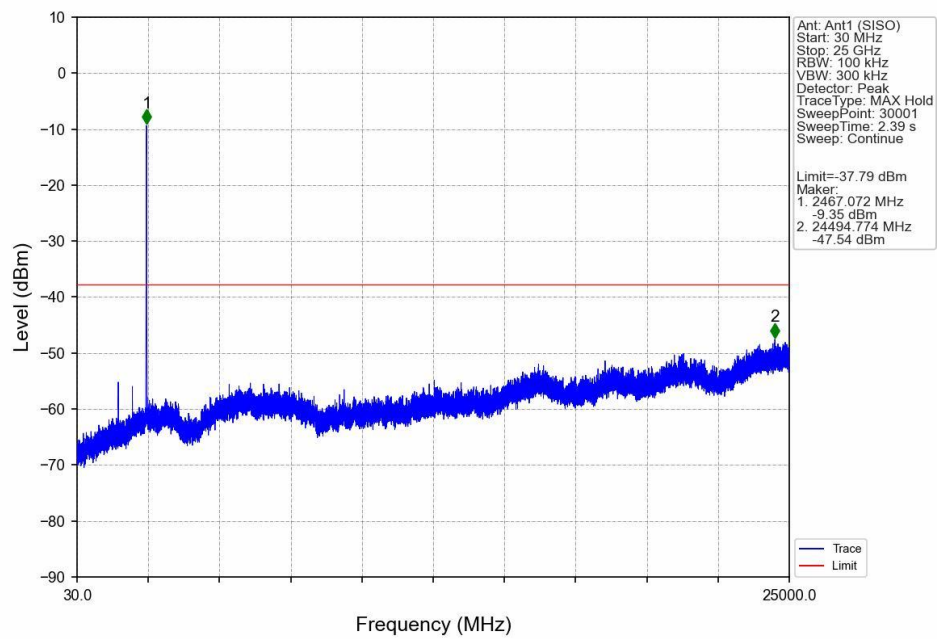


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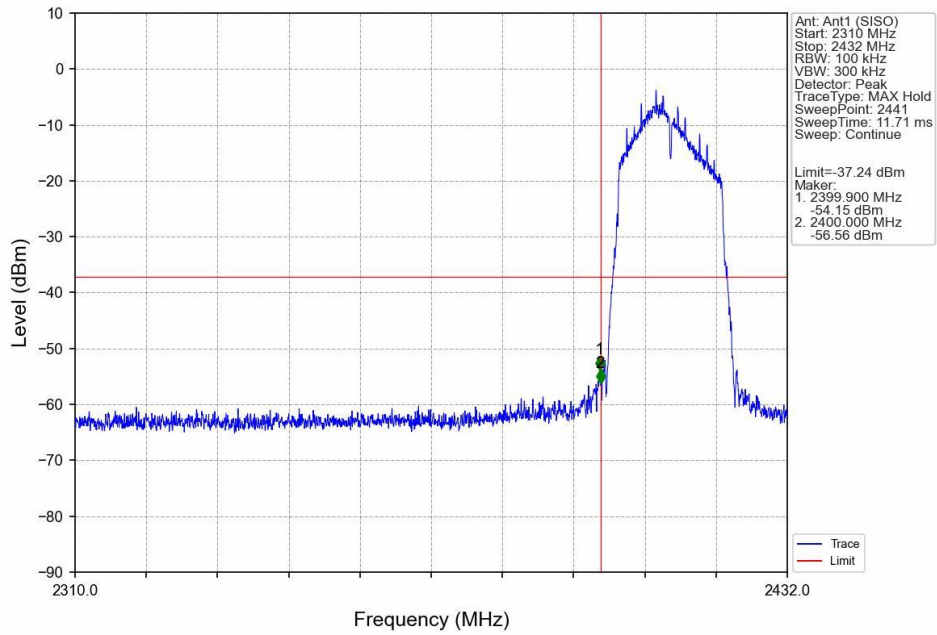
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



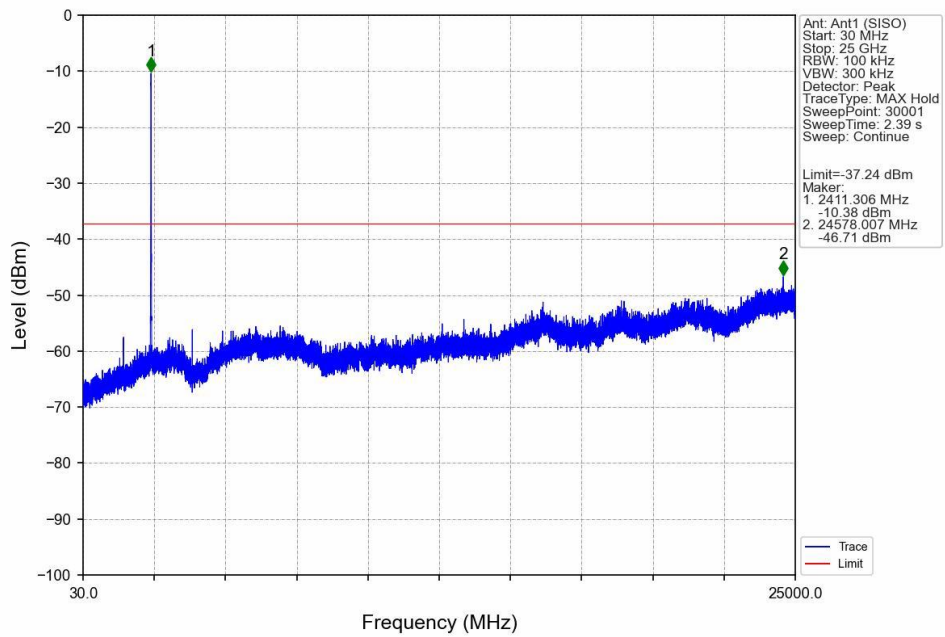
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



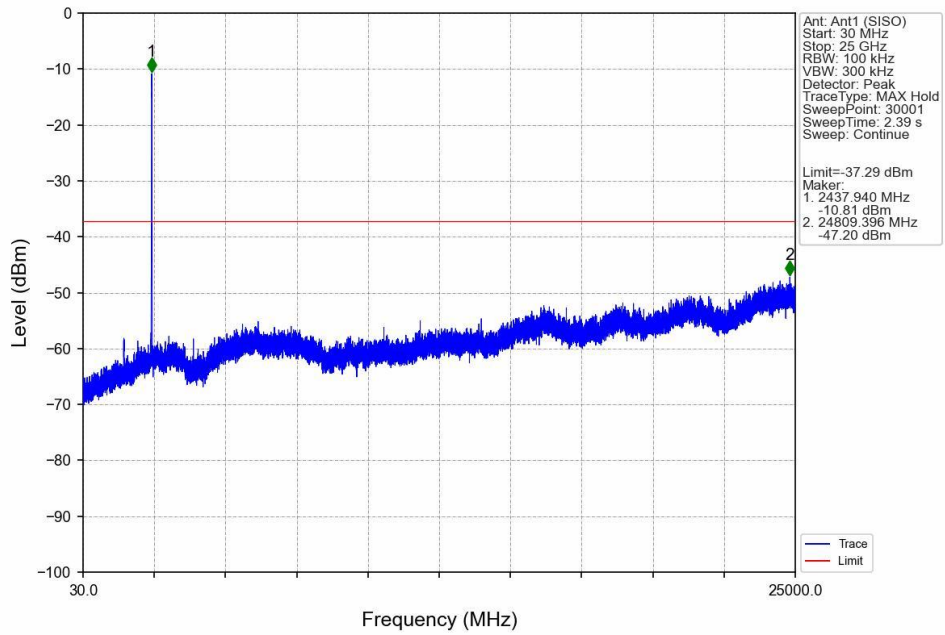
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



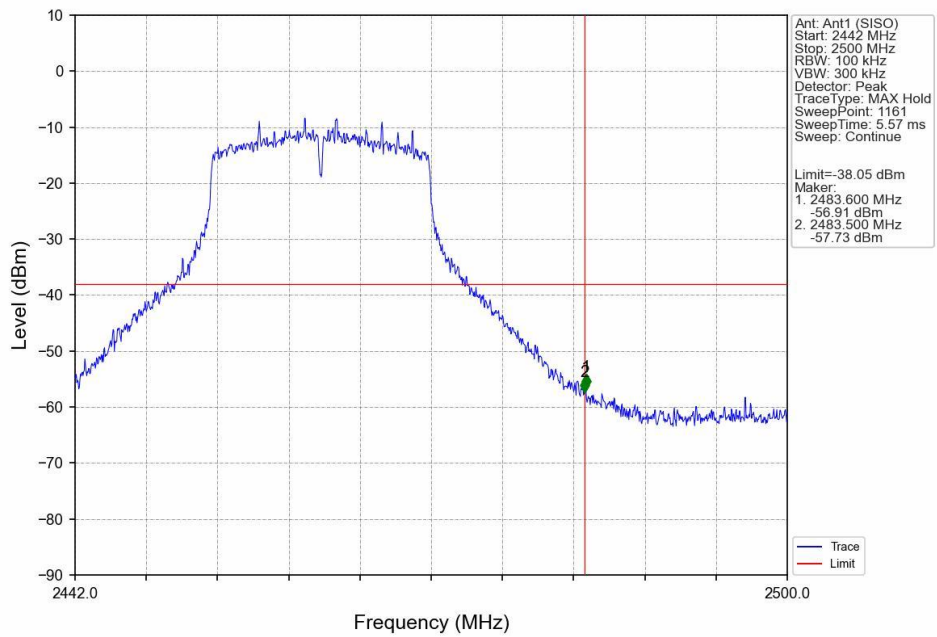
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

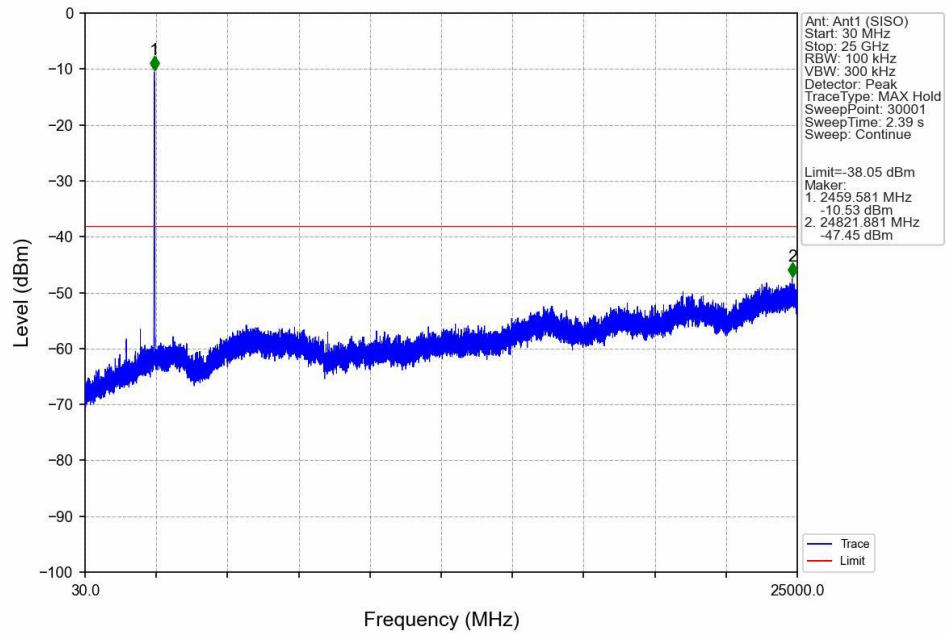


802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

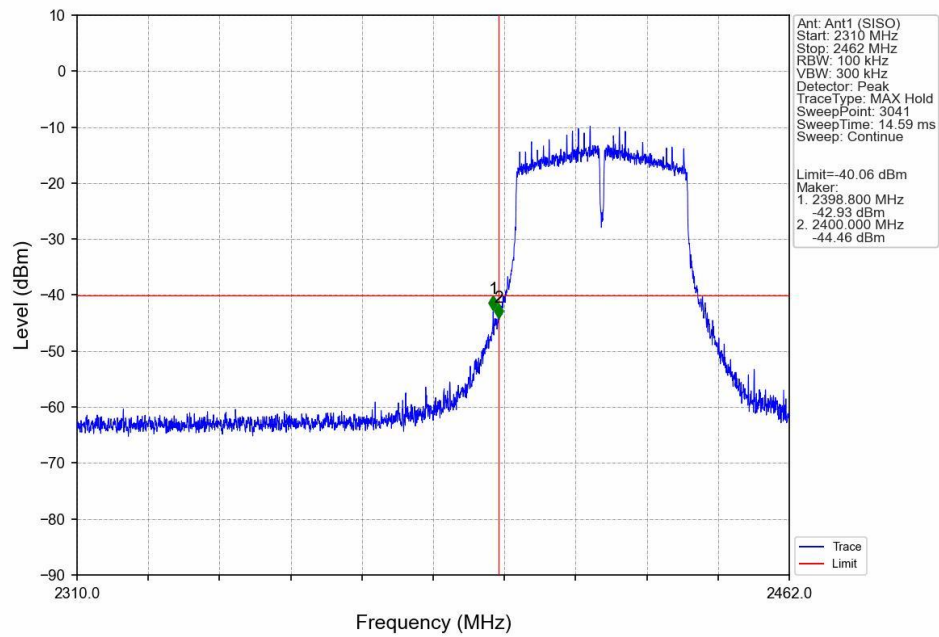


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802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

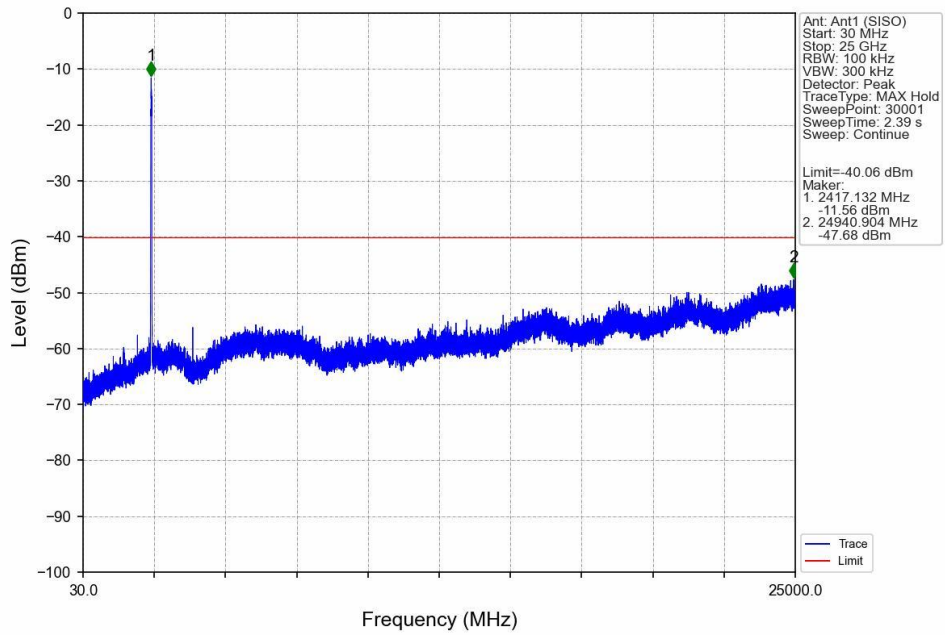


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

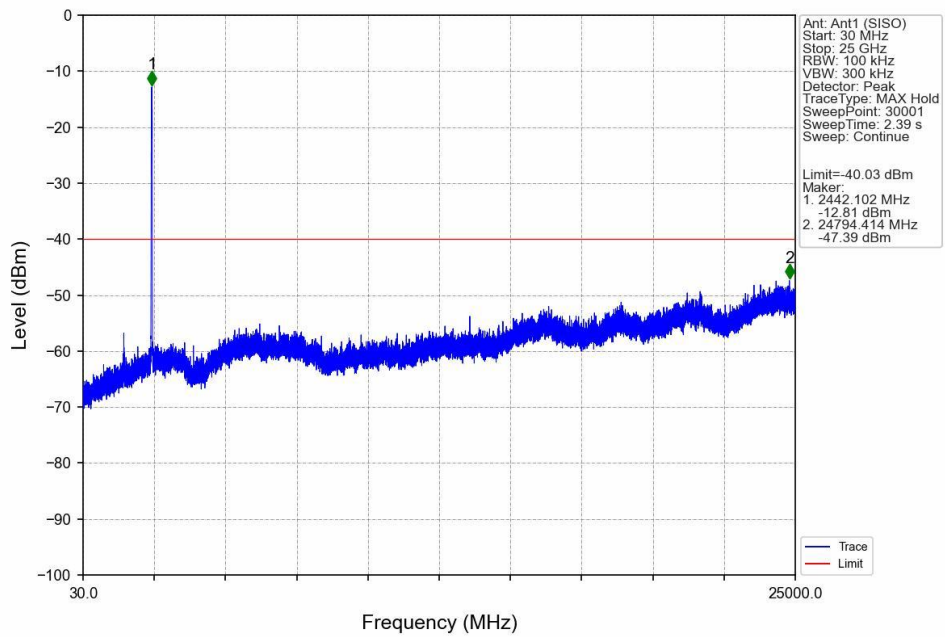


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802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

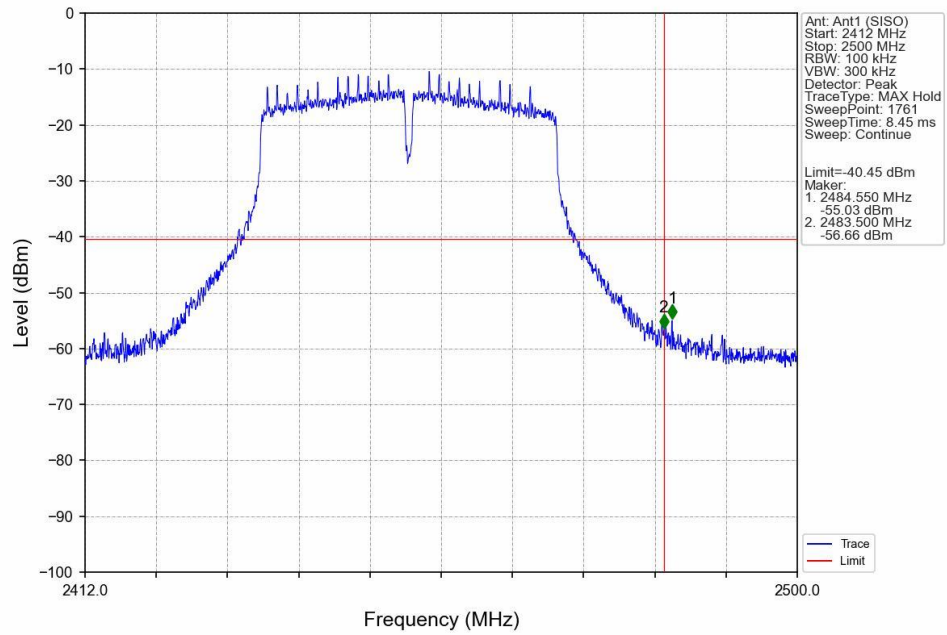


802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



FCC ID:2ASAF-07C

802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

