



Annex for 2.4G WiFi

Test Report No.: CTL2403273071-WF01

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FCCID: 2AP6Y-SK4MINI

1. Bandwidth

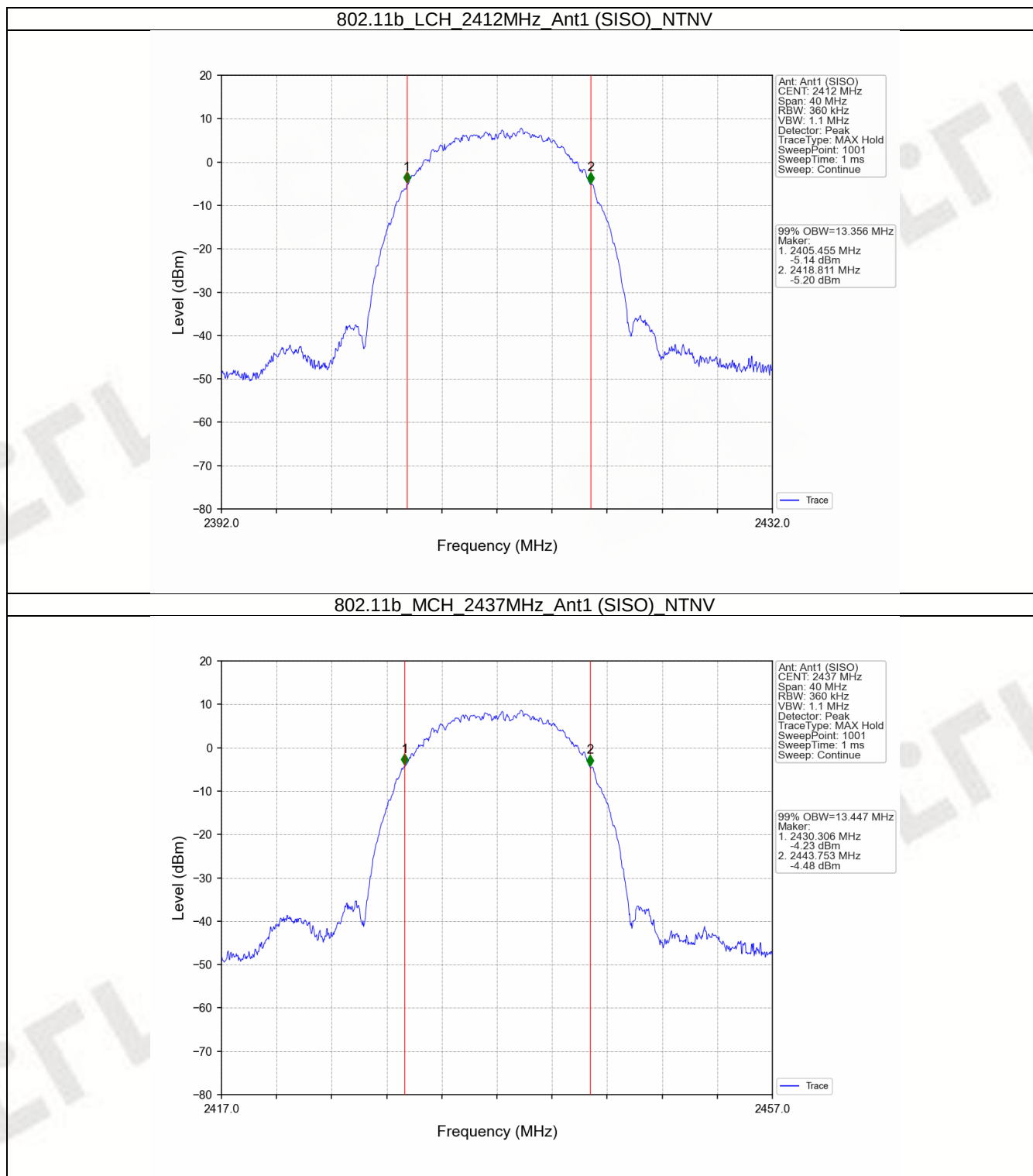
1.1 OBW

1.1.1 Test Result

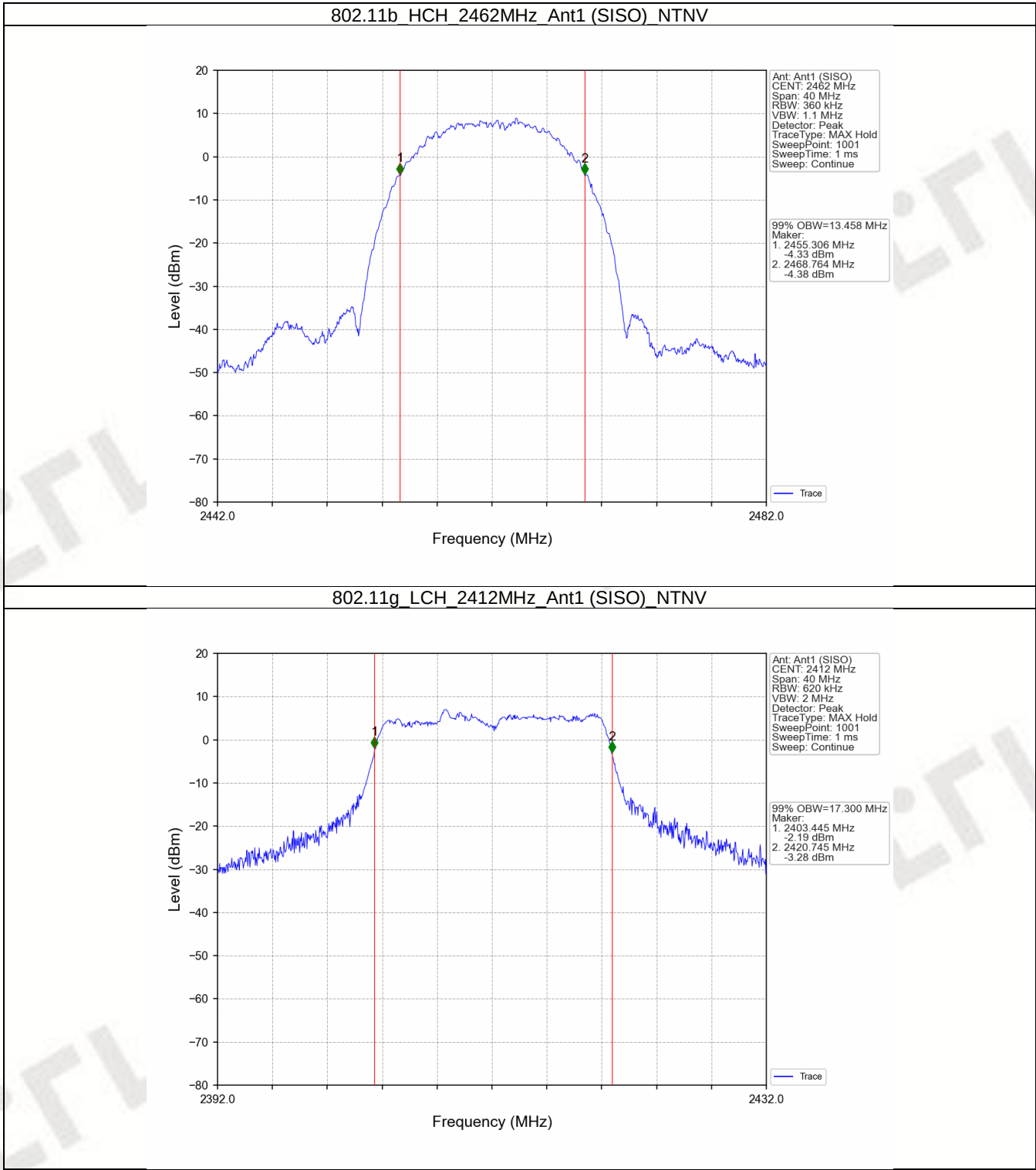
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	13.356	/	Pass
		2437	1	13.447	/	Pass
		2462	1	13.458	/	Pass
802.11g	SISO	2412	1	17.300	/	Pass
		2437	1	17.431	/	Pass
		2462	1	17.246	/	Pass
802.11n (HT20)	SISO	2412	1	18.200	/	Pass
		2437	1	18.258	/	Pass
		2462	1	18.141	/	Pass
802.11n (HT40)	SISO	2422	1	36.691	/	Pass
		2437	1	36.846	/	Pass
		2452	1	36.833	/	Pass

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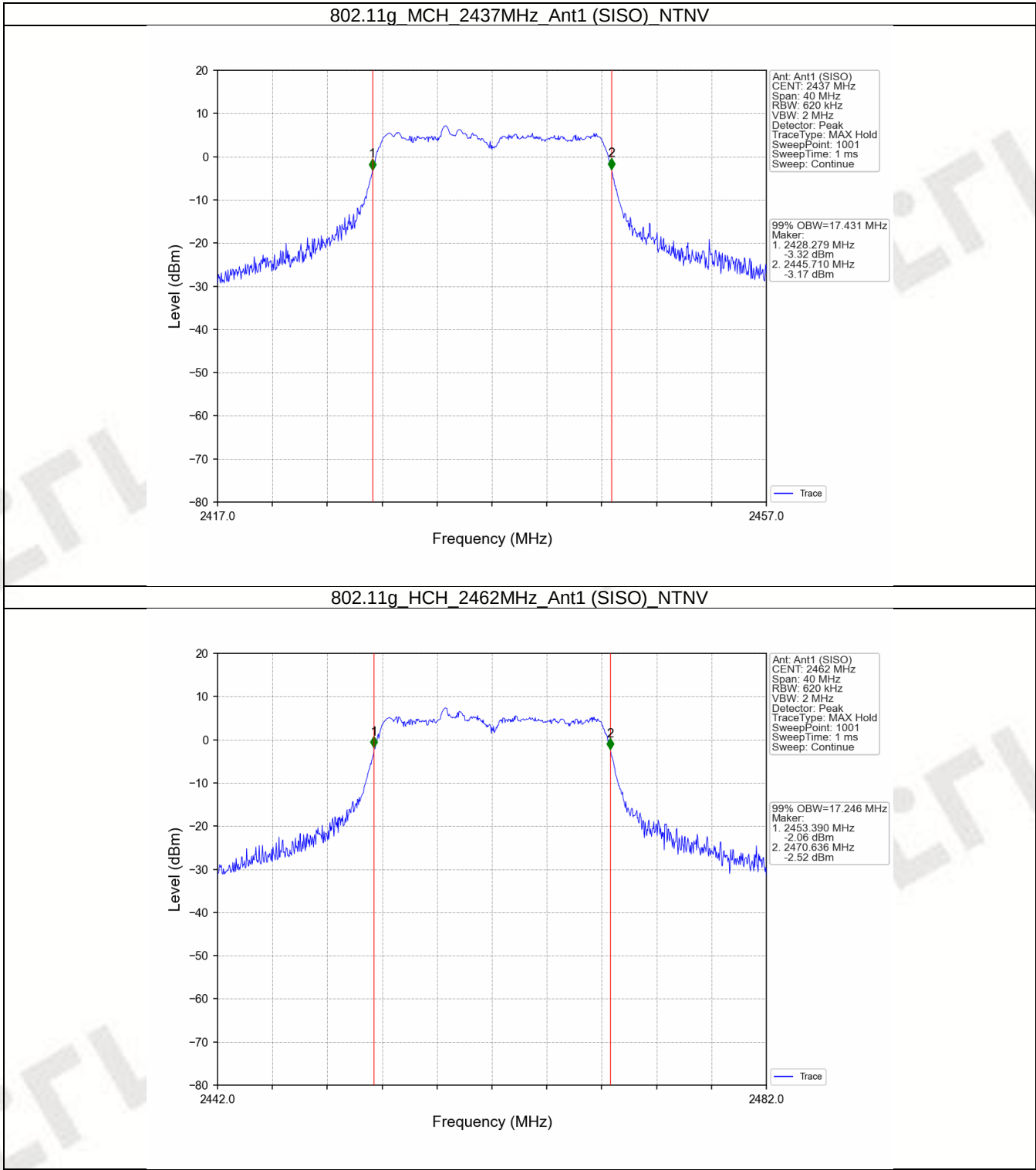
1.1.2 Test Graph



FCCID: 2AP6Y-SK4MINI

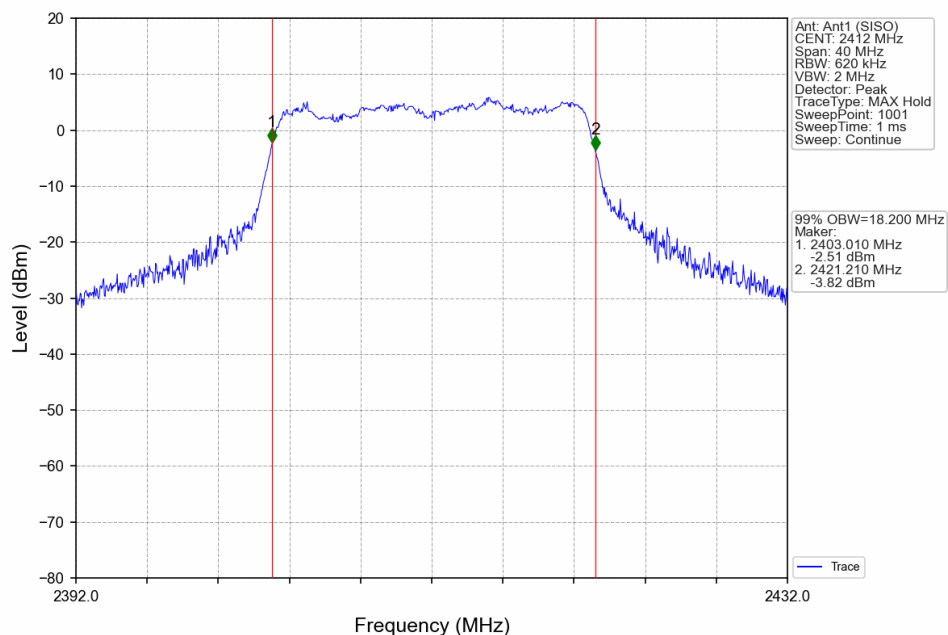


FCCID: 2AP6Y-SK4MINI

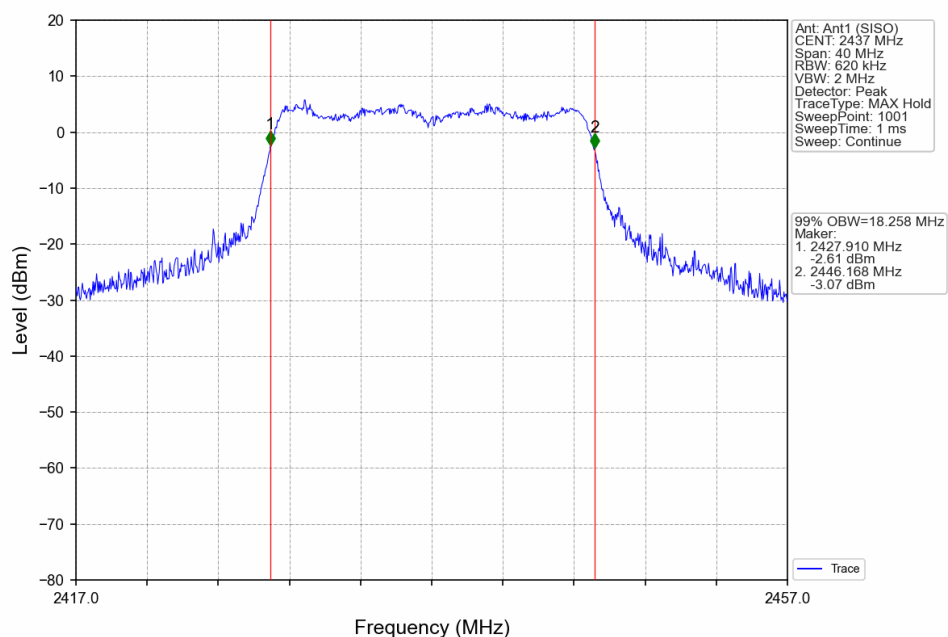


FCCID: 2AP6Y-SK4MINI

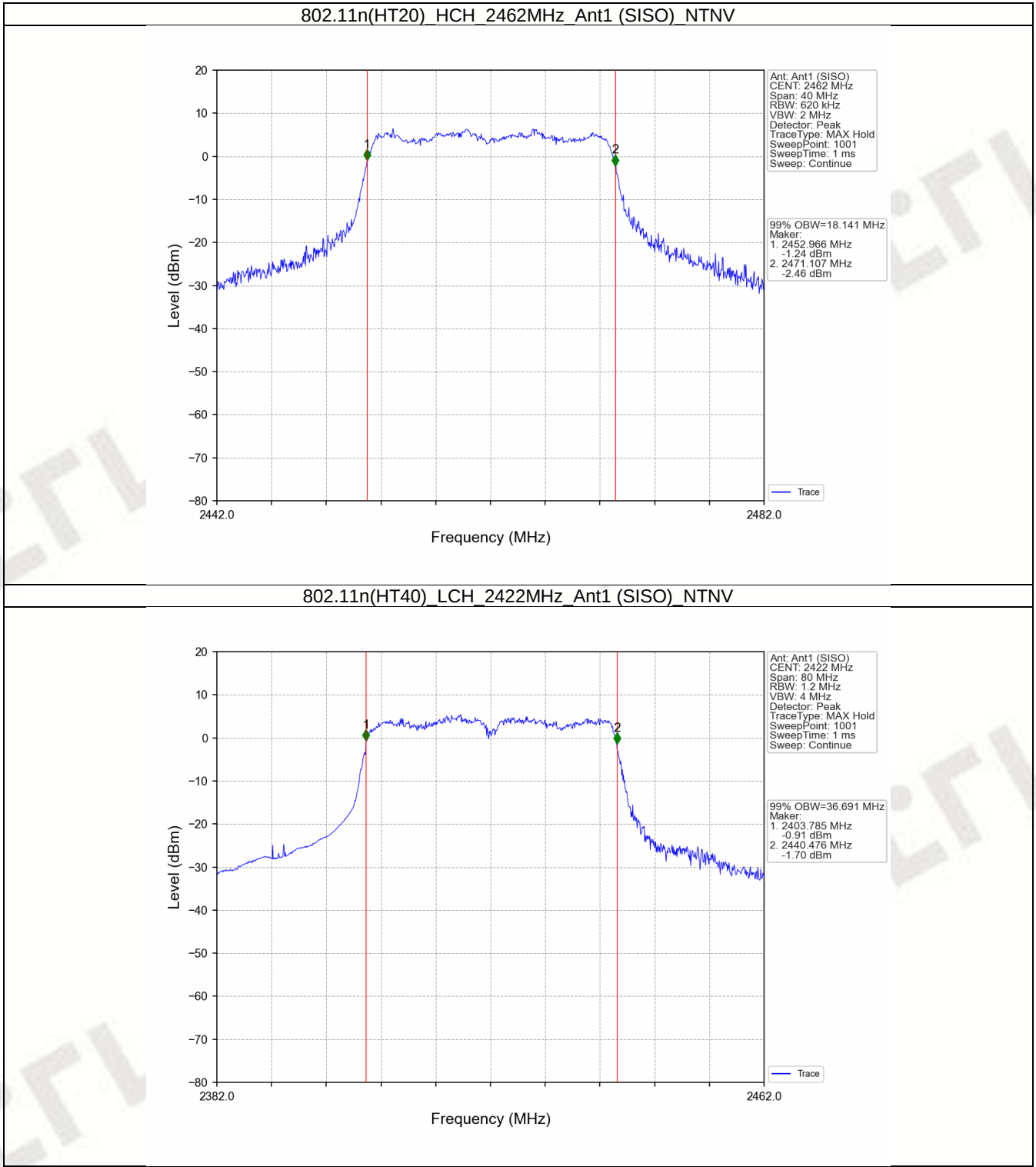
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



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

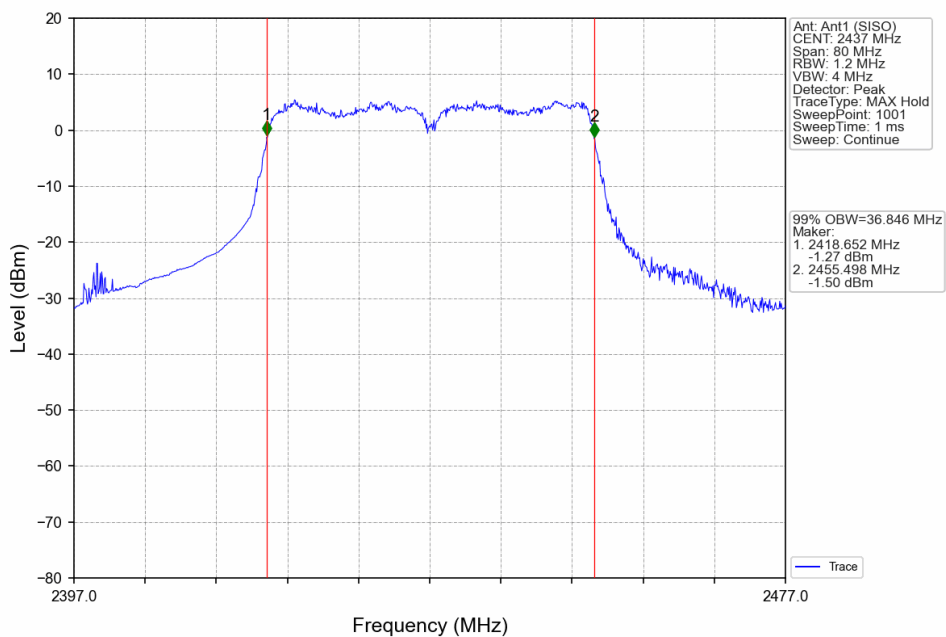


FCCID: 2AP6Y-SK4MINI

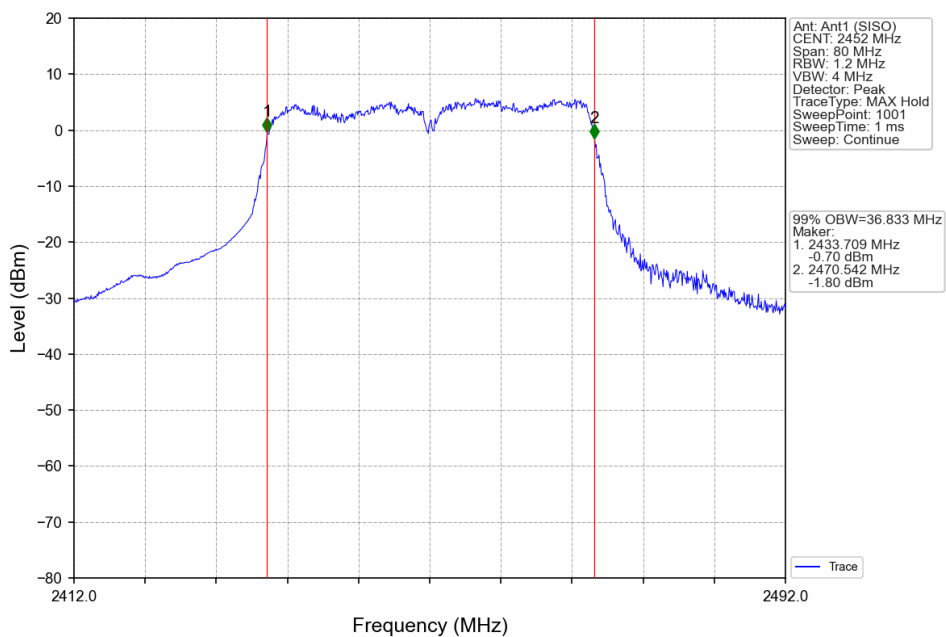


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802.11n(HT40) MCH 2437MHz Ant1 (SISO) NTNV



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



FCCID: 2AP6Y-SK4MINI

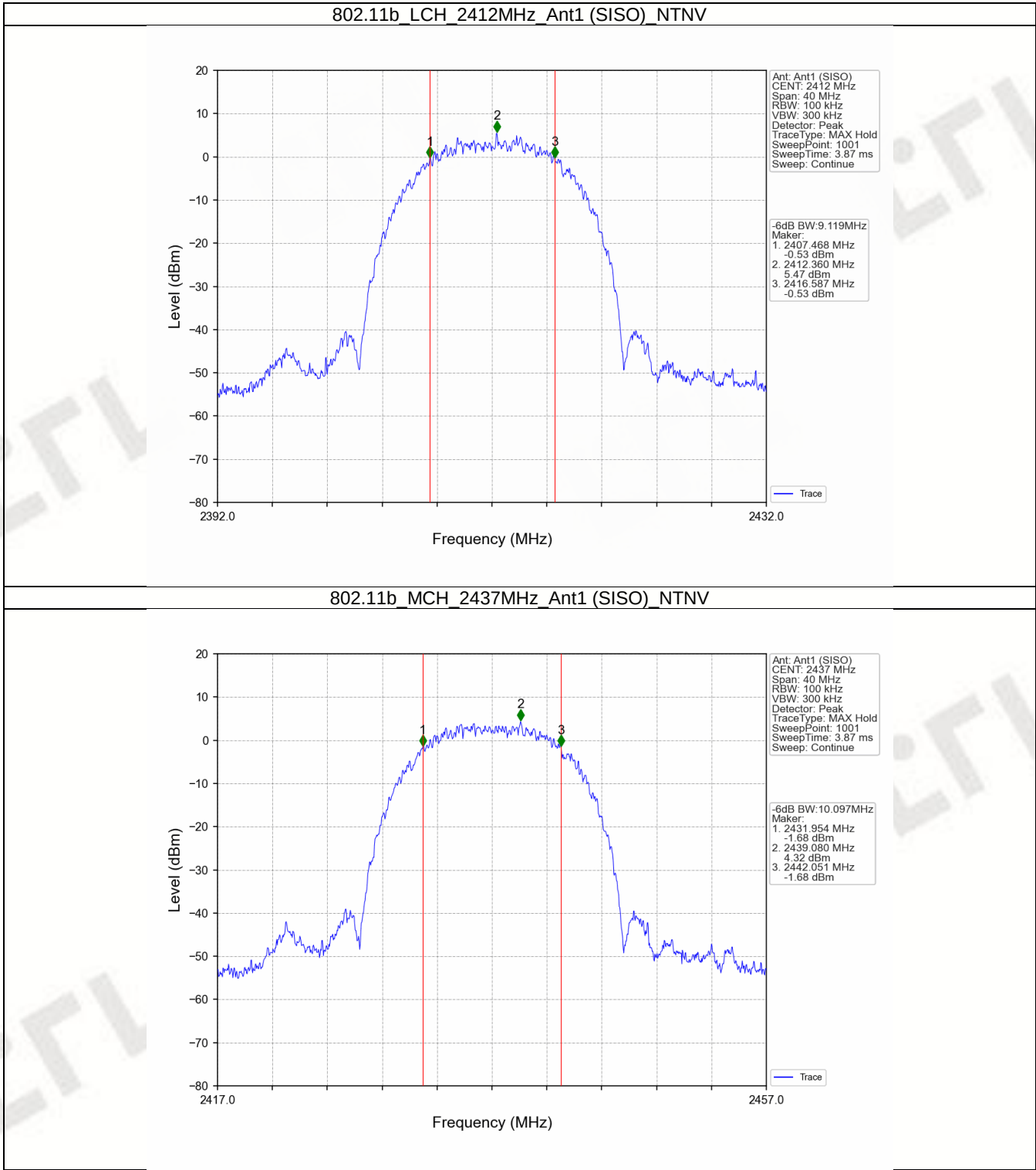
1.2 6dB BW

1.2.1 Test Result

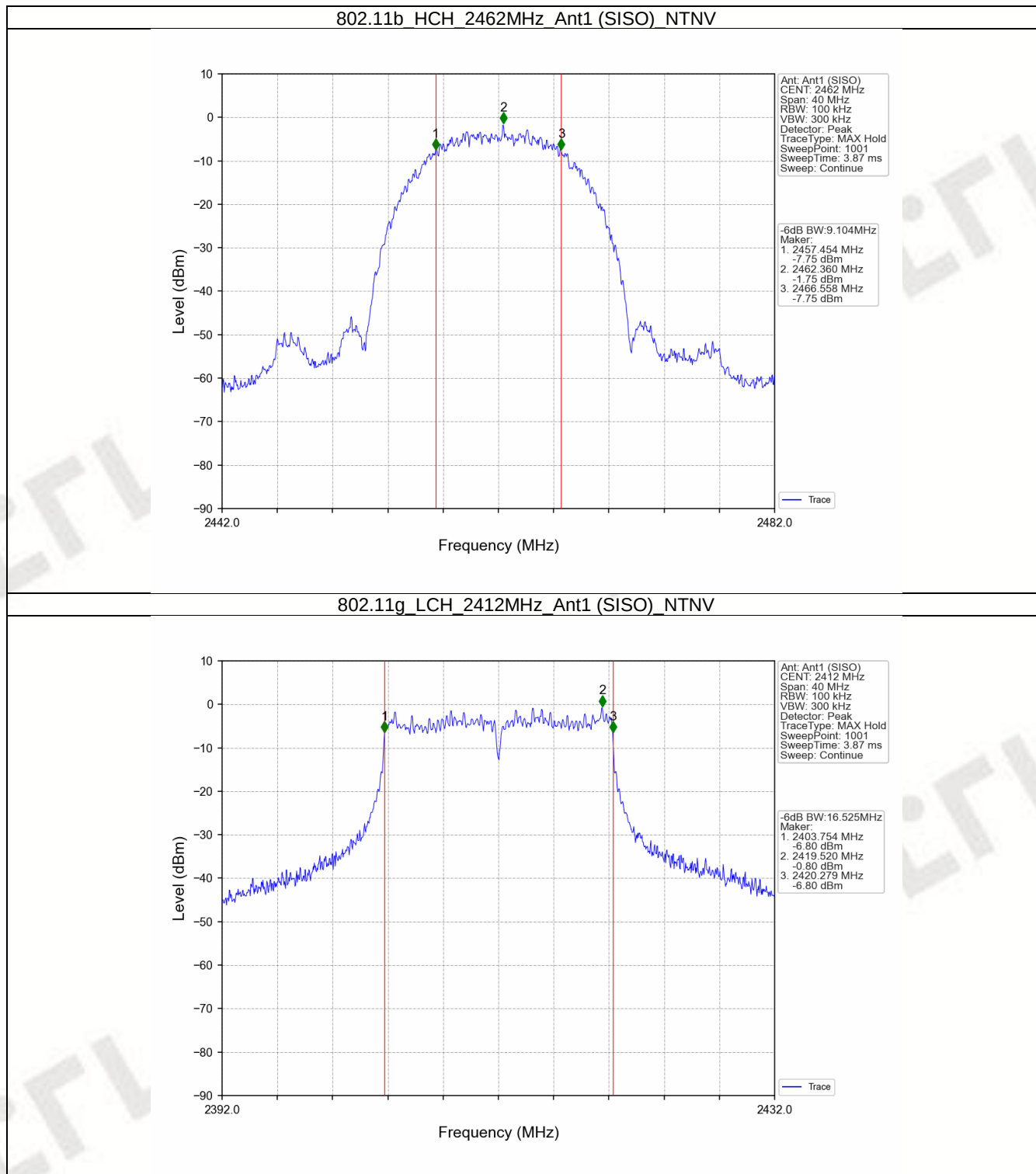
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.119	≥ 0.5	Pass
		2437	1	10.097	≥ 0.5	Pass
		2462	1	9.104	≥ 0.5	Pass
802.11g	SISO	2412	1	16.525	≥ 0.5	Pass
		2437	1	16.543	≥ 0.5	Pass
		2462	1	16.529	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.729	≥ 0.5	Pass
		2437	1	17.764	≥ 0.5	Pass
		2462	1	17.742	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	36.355	≥ 0.5	Pass
		2437	1	36.347	≥ 0.5	Pass
		2452	1	36.095	≥ 0.5	Pass

FCCID: 2AP6Y-SK4MINI

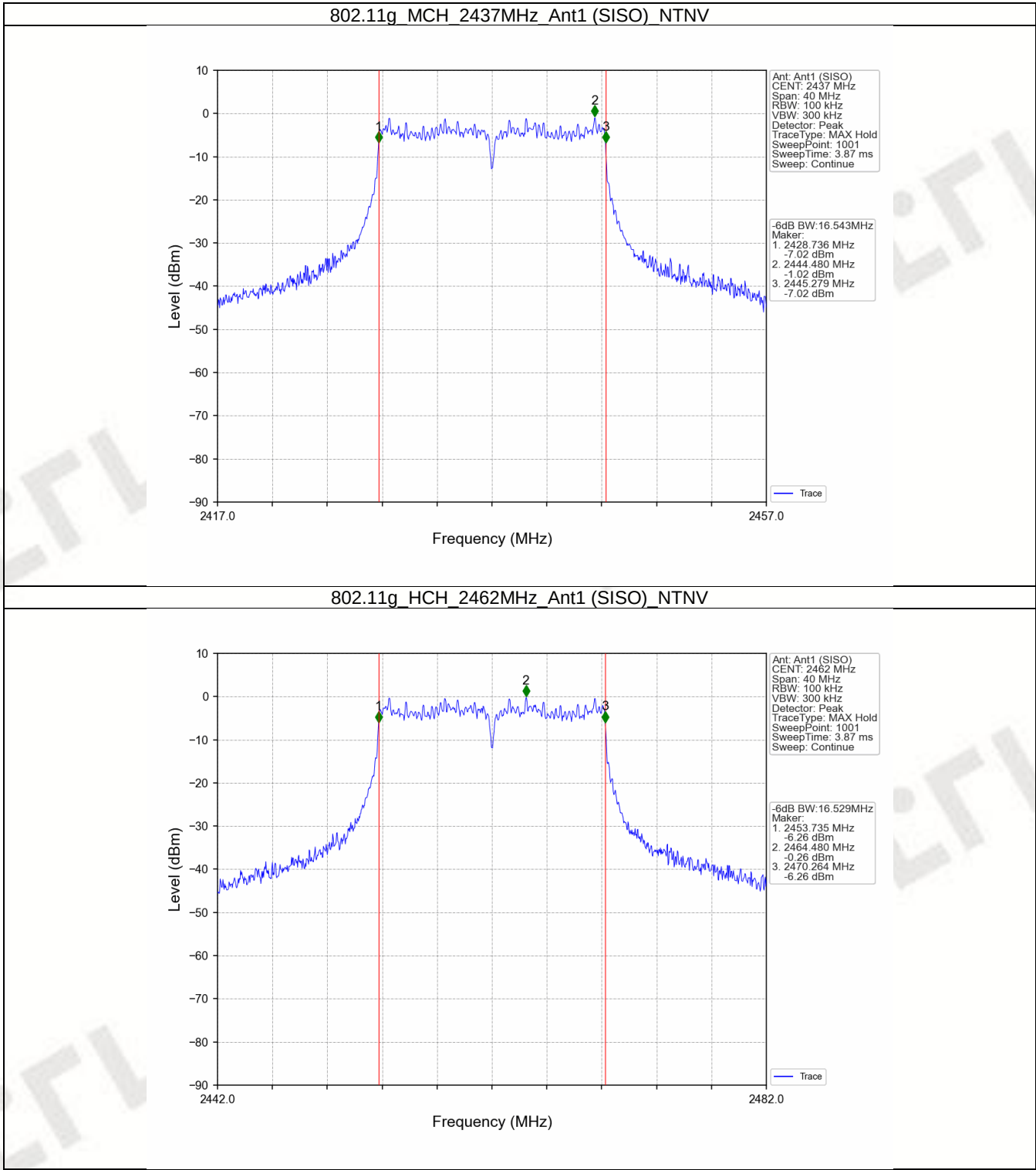
1.2.2 Test Graph



FCCID: 2AP6Y-SK4MINI

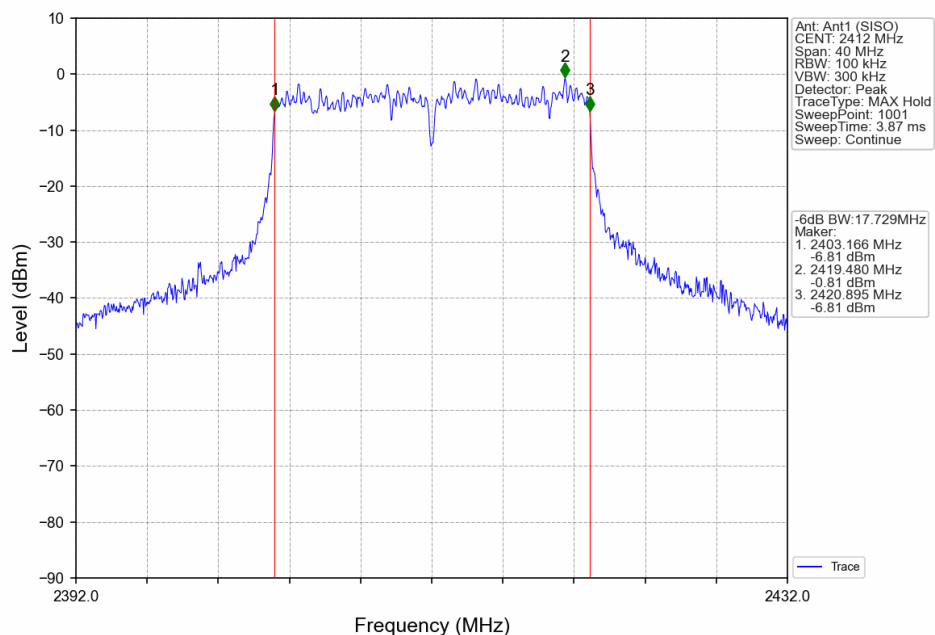


FCCID: 2AP6Y-SK4MINI

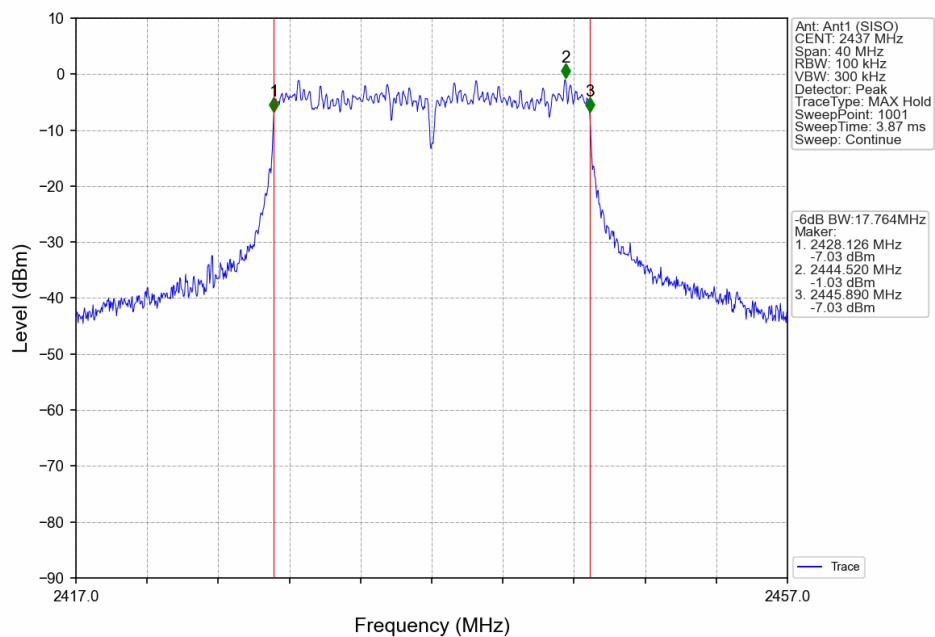


FCCID: 2AP6Y-SK4MINI

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

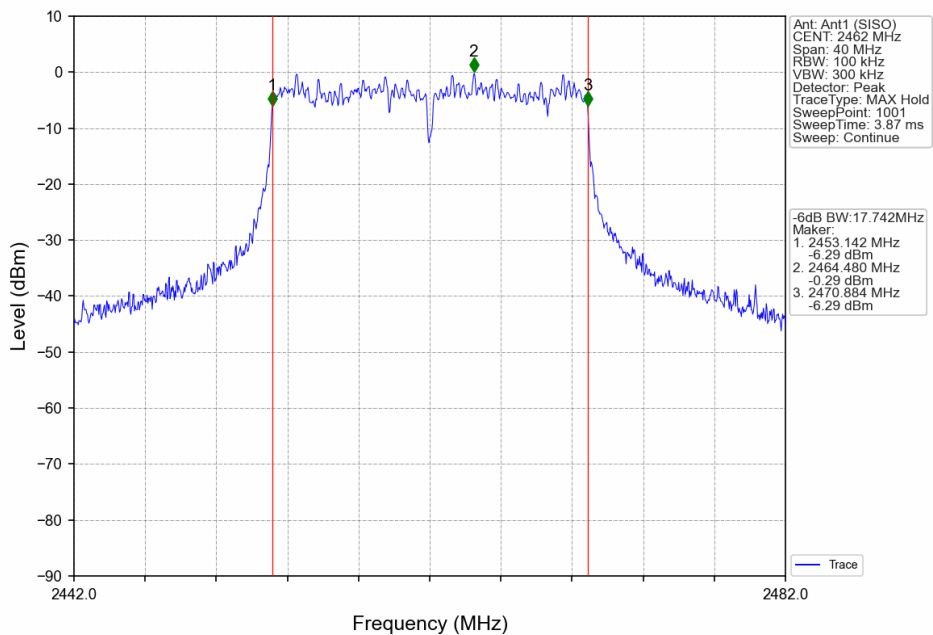


802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTVN

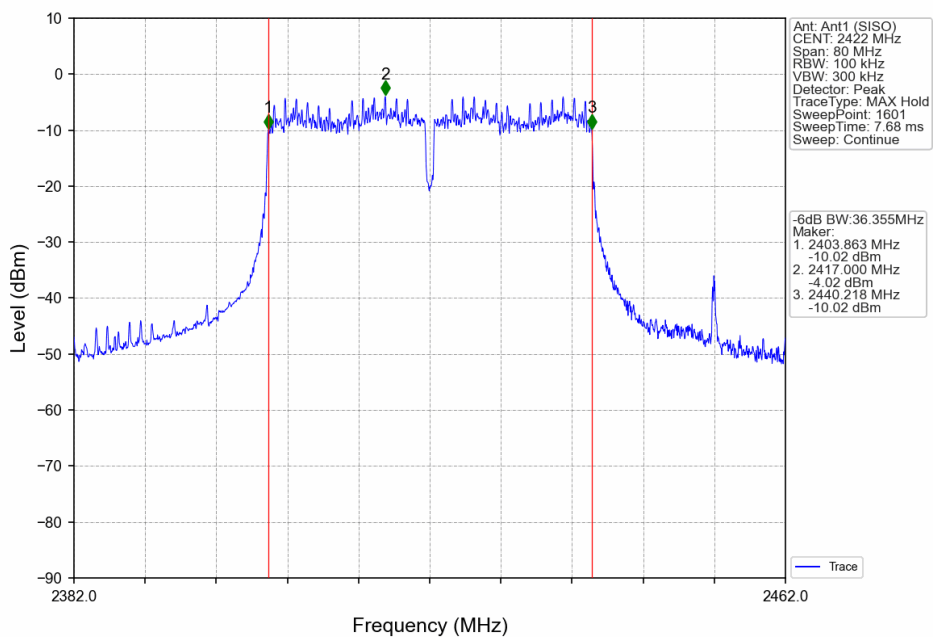


FCCID: 2AP6Y-SK4MINI

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

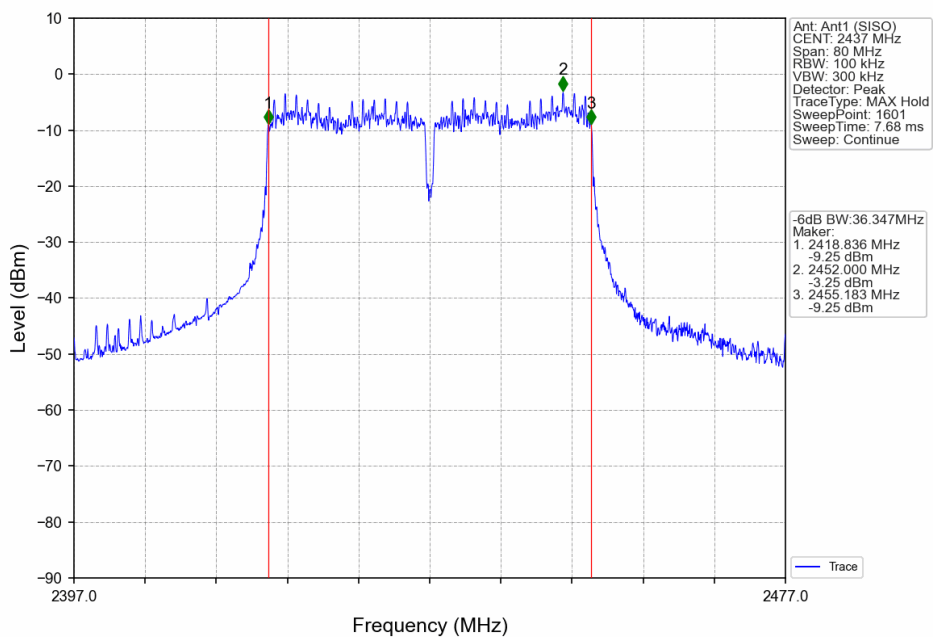


802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV

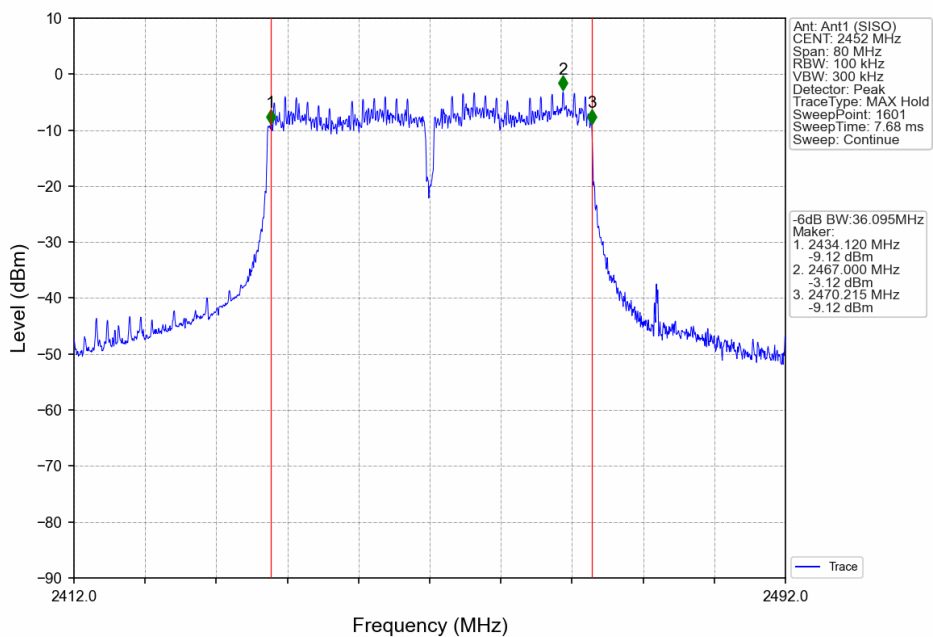


FCCID: 2AP6Y-SK4MINI

802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



FCCID: 2AP6Y-SK4MINI

2. Maximum Conducted Output Power

2.1 Power

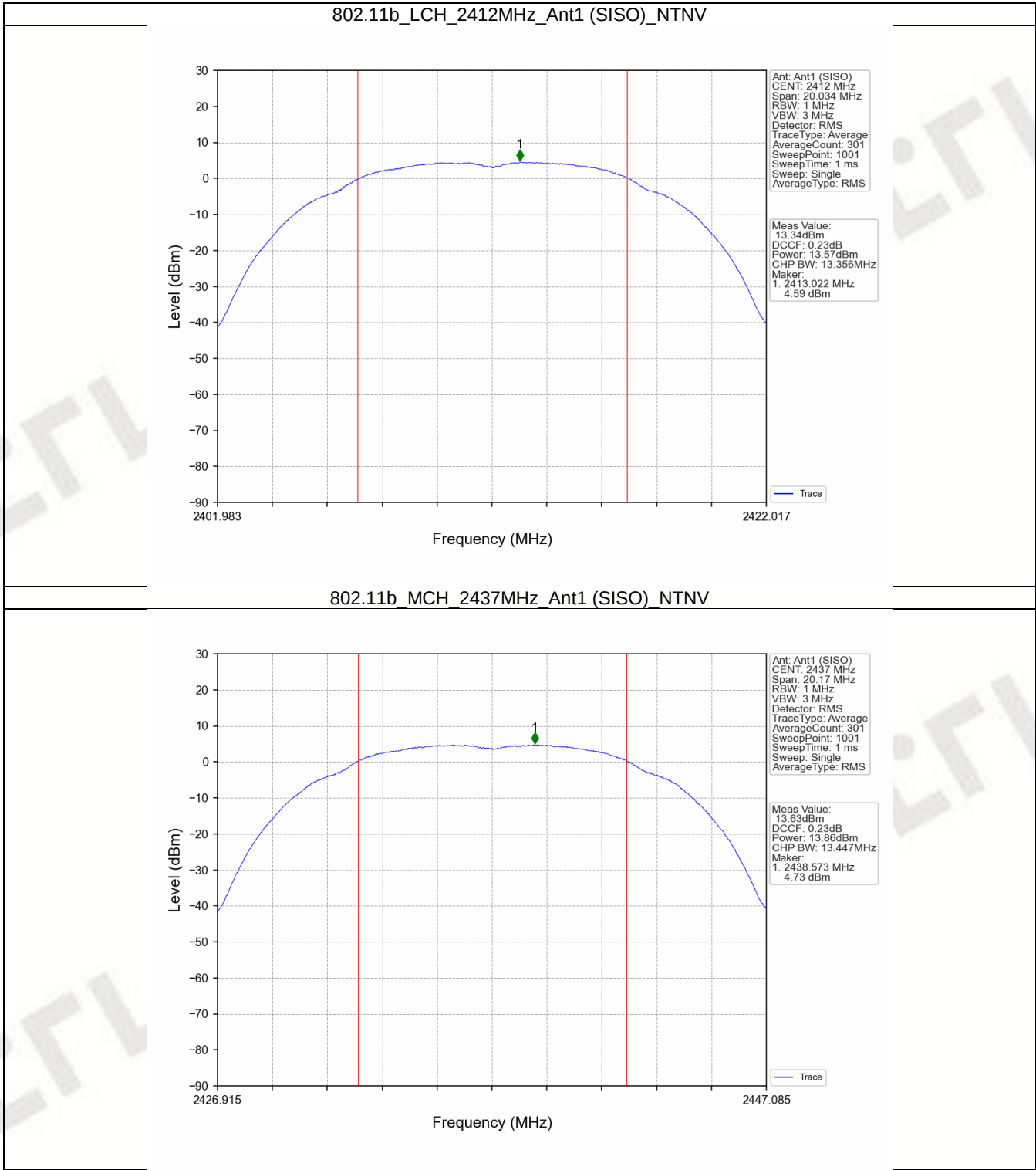
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	13.57	<=30	Pass
		2437	13.86	<=30	Pass
		2462	14.09	<=30	Pass
802.11g	SISO	2412	9.31	<=30	Pass
		2437	9.56	<=30	Pass
		2462	9.84	<=30	Pass
802.11n (HT20)	SISO	2412	9.50	<=30	Pass
		2437	9.75	<=30	Pass
		2462	9.95	<=30	Pass
802.11n (HT40)	SISO	2422	9.50	<=30	Pass
		2437	9.71	<=30	Pass
		2452	9.96	<=30	Pass

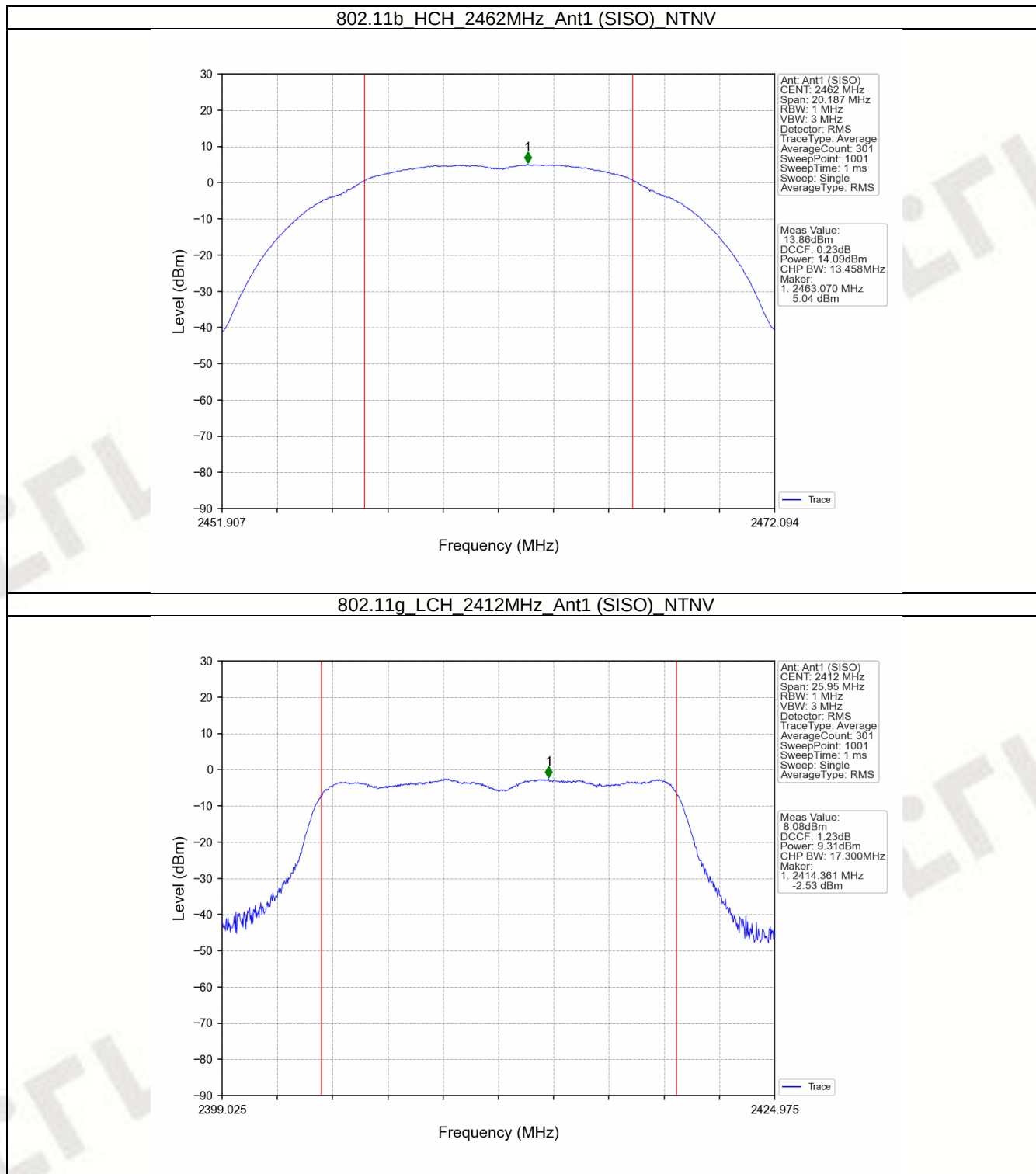
Note1: Antenna Gain: Ant1: 3.20dBi;

FCCID: 2AP6Y-SK4MINI

2.1.2 Test Graph

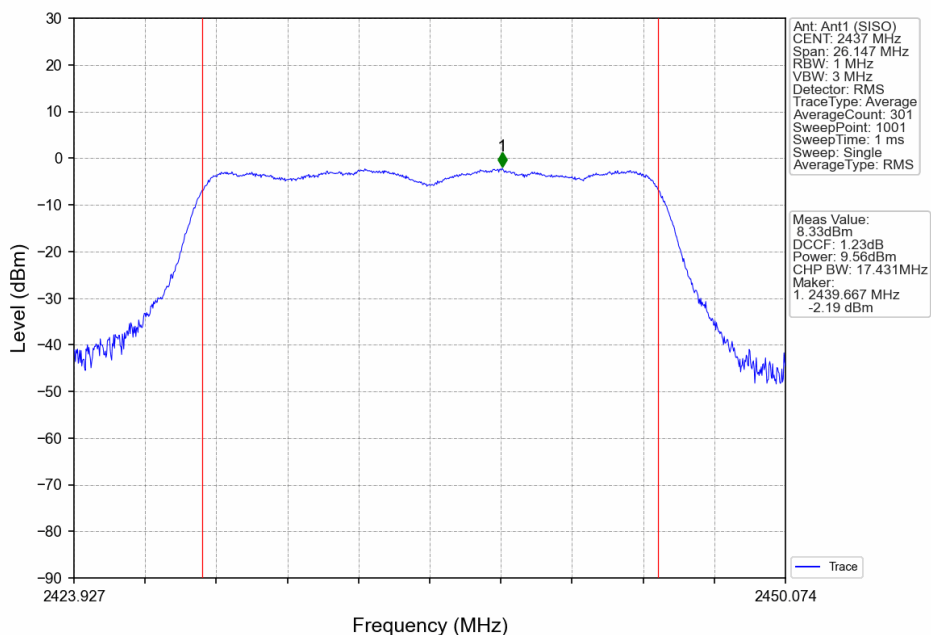


FCCID: 2AP6Y-SK4MINI

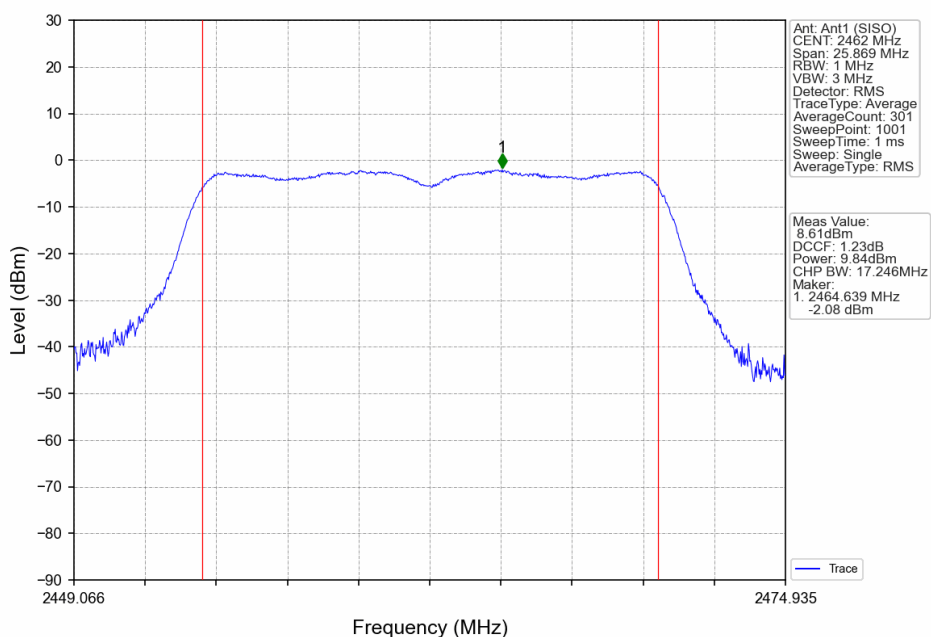


FCCID: 2AP6Y-SK4MINI

802.11g MCH 2437MHz Ant1 (SISO) NTN

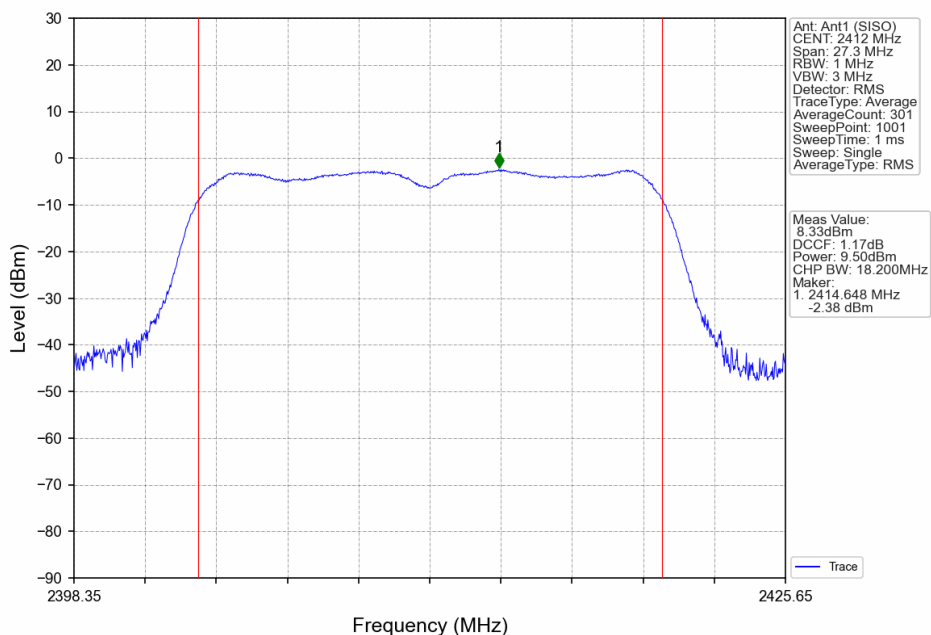


802.11g HCH 2462MHz Ant1 (SISO) NTN

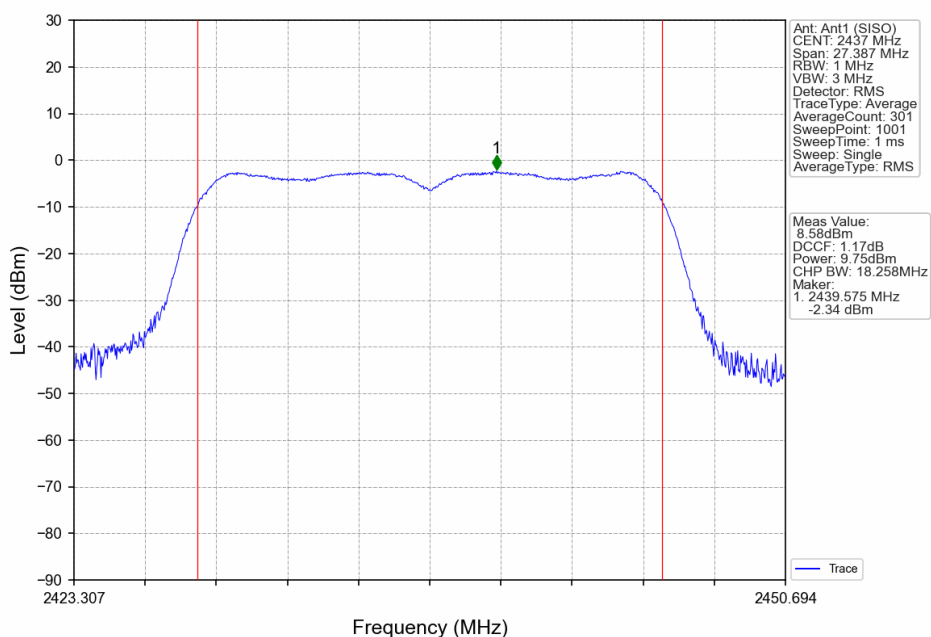


FCCID: 2AP6Y-SK4MINI

802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

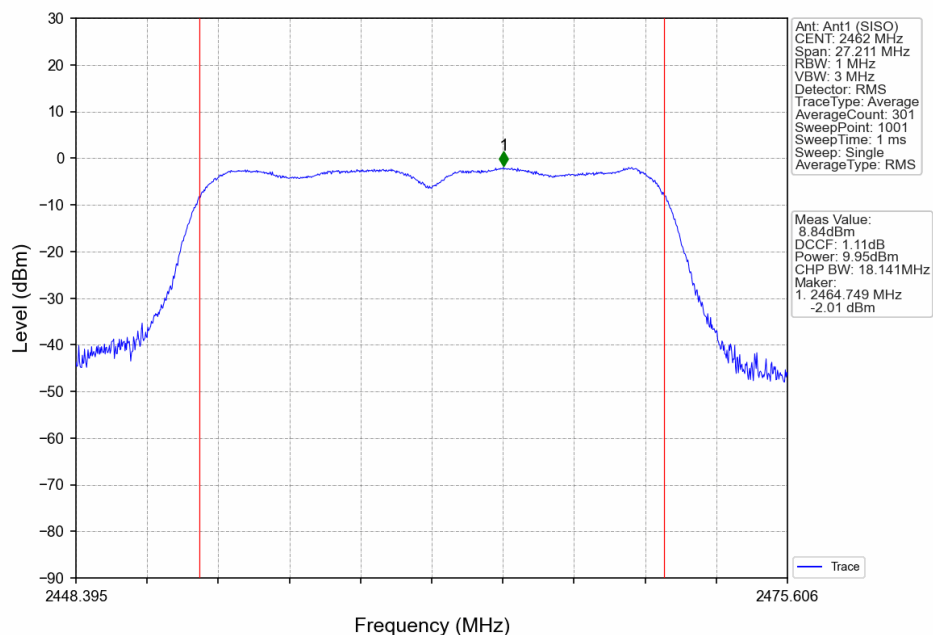


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

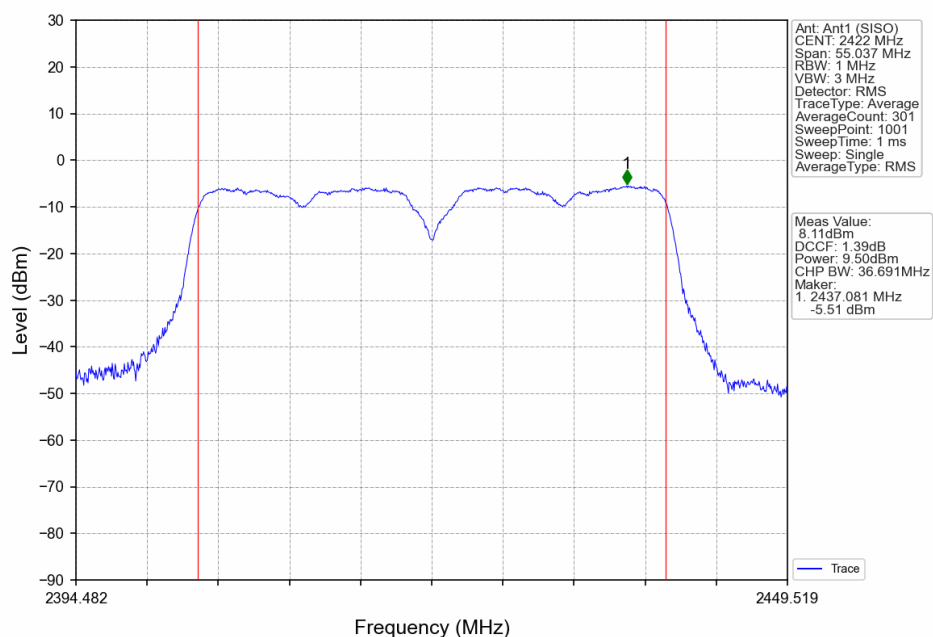


FCCID: 2AP6Y-SK4MINI

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

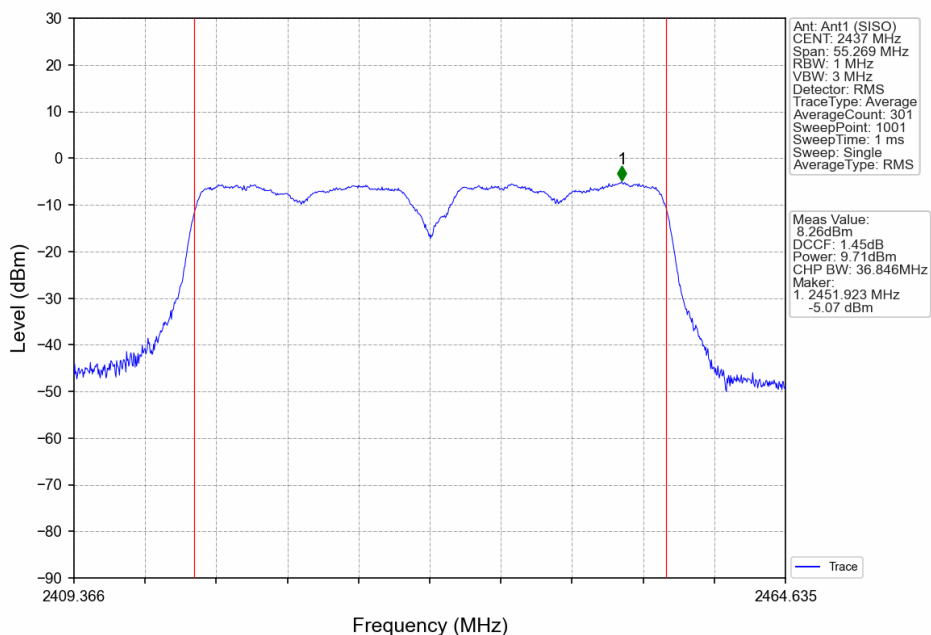


802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV

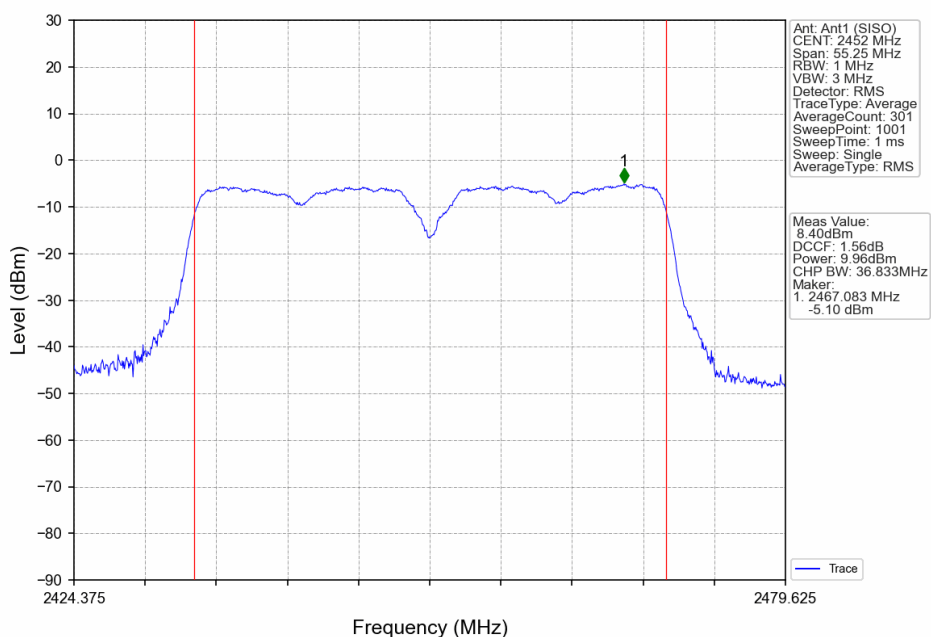


FCCID: 2AP6Y-SK4MINI

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



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



FCCID: 2AP6Y-SK4MINI

3. Maximum Power Spectral Density

3.1 PSD

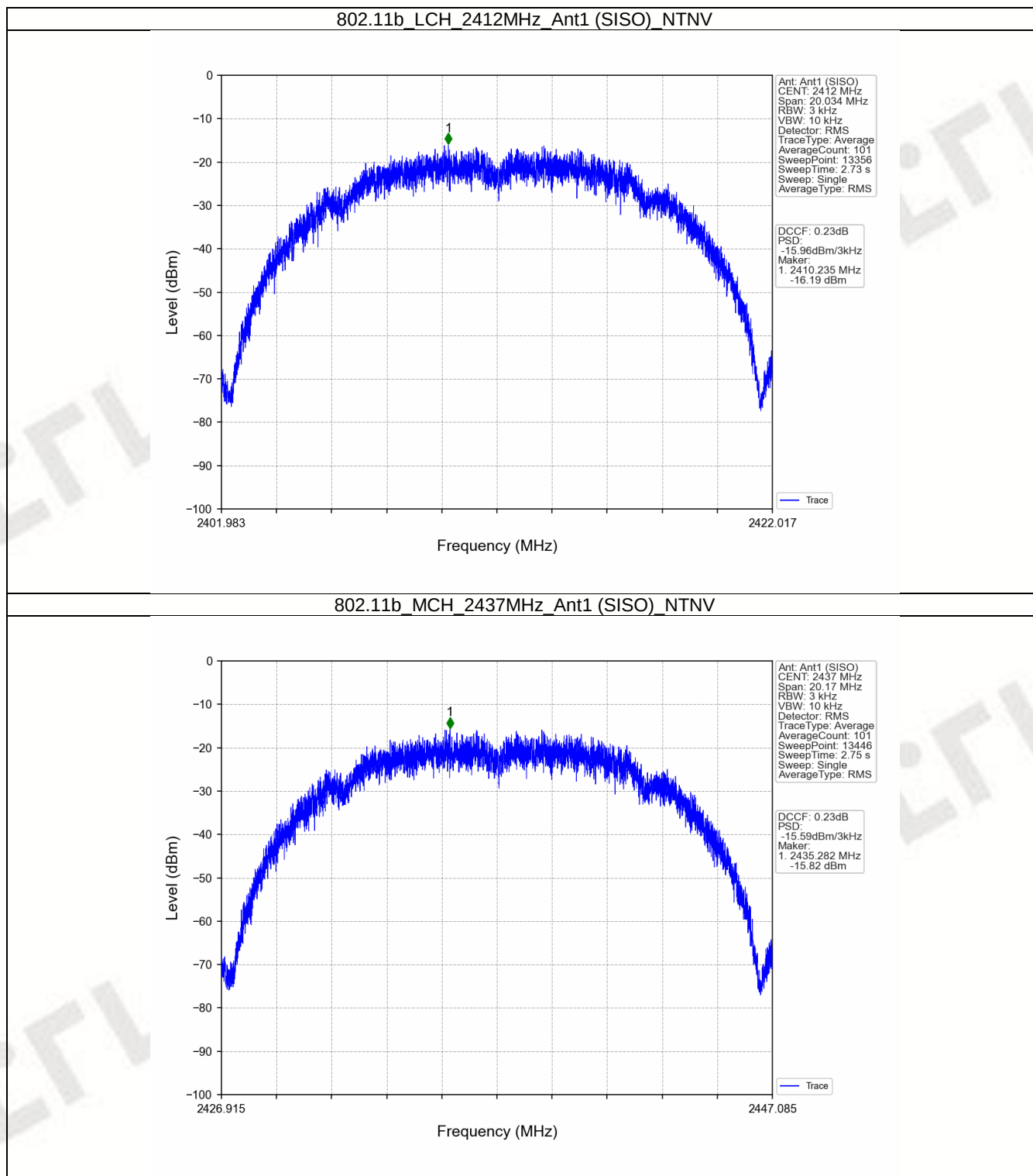
3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	-15.96	<=8	Pass
		2437	-15.59	<=8	Pass
		2462	-14.95	<=8	Pass
802.11g	SISO	2412	-18.14	<=8	Pass
		2437	-18.30	<=8	Pass
		2462	-18.16	<=8	Pass
802.11n (HT20)	SISO	2412	-16.90	<=8	Pass
		2437	-16.99	<=8	Pass
		2462	-17.05	<=8	Pass
802.11n (HT40)	SISO	2422	-19.27	<=8	Pass
		2437	-20.13	<=8	Pass
		2452	-18.70	<=8	Pass

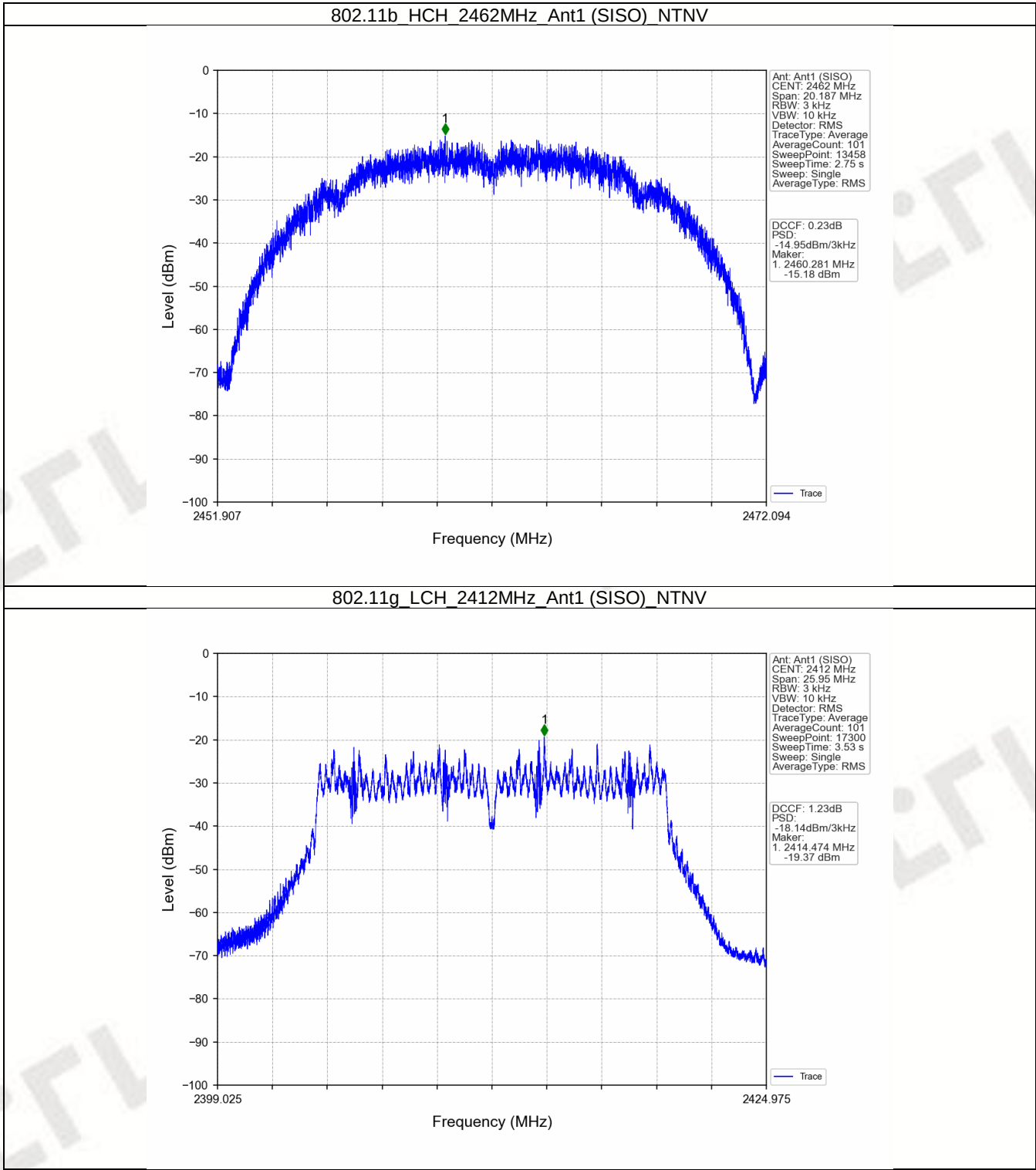
Note1: Antenna Gain: Ant1: 3.20dBi;

FCCID: 2AP6Y-SK4MINI

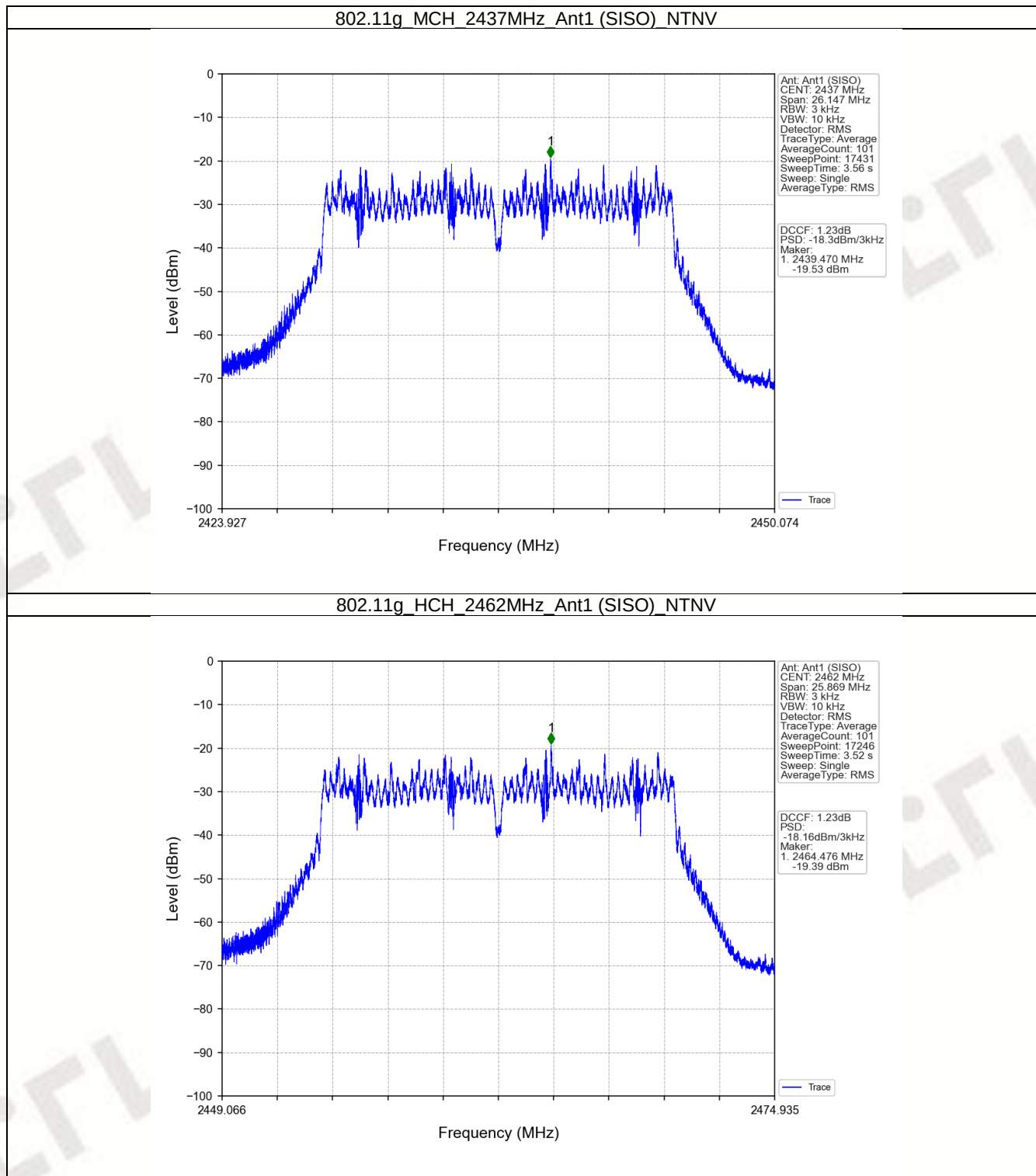
3.1.2 Test Graph



FCCID: 2AP6Y-SK4MINI

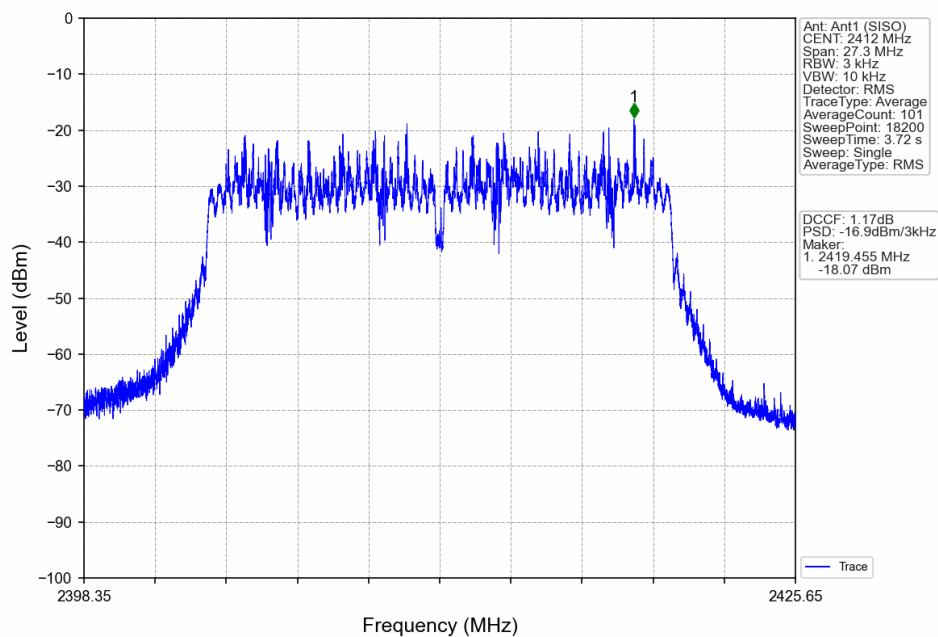


FCCID: 2AP6Y-SK4MINI

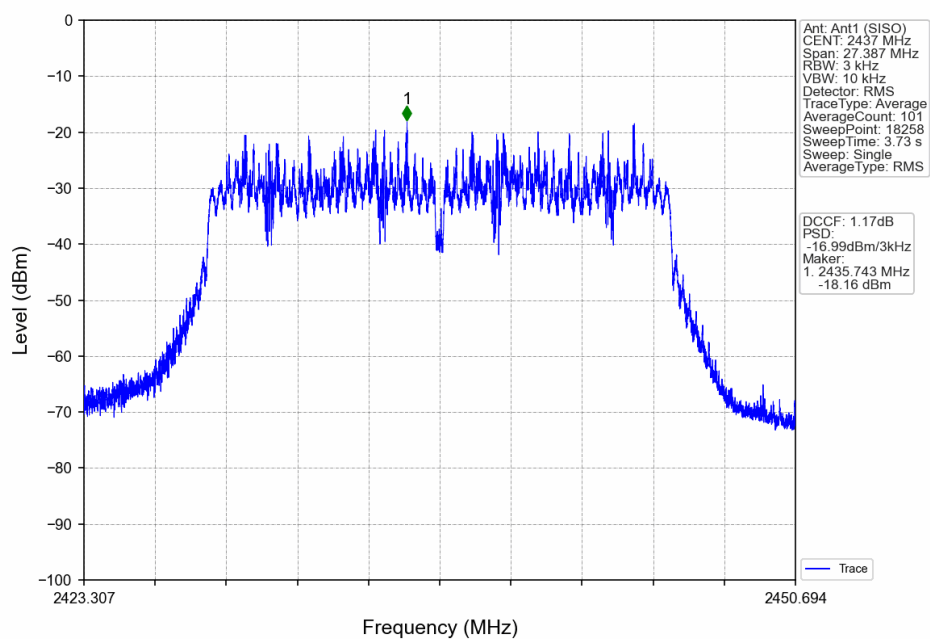


FCCID: 2AP6Y-SK4MINI

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

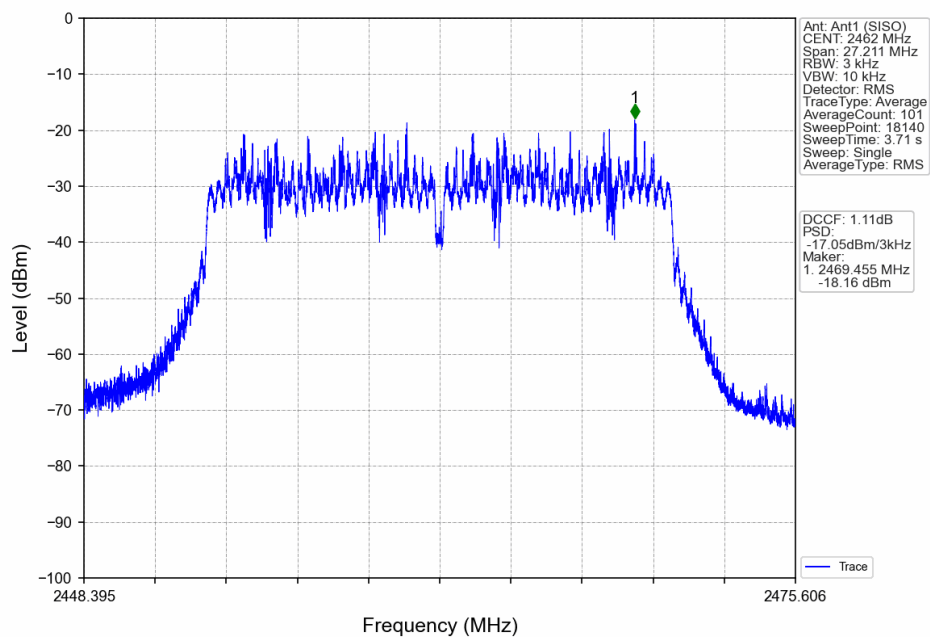


802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV

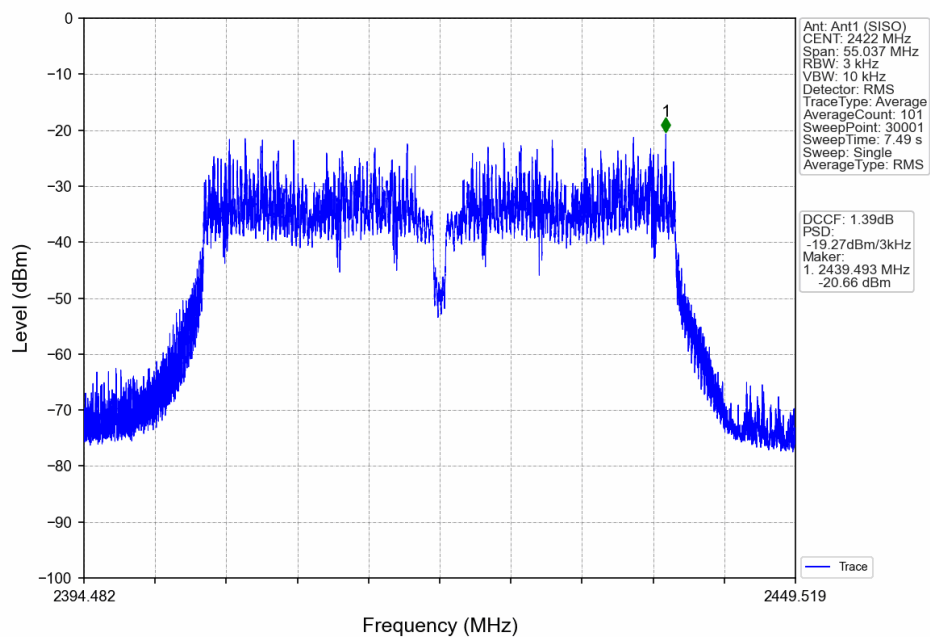


FCCID: 2AP6Y-SK4MINI

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

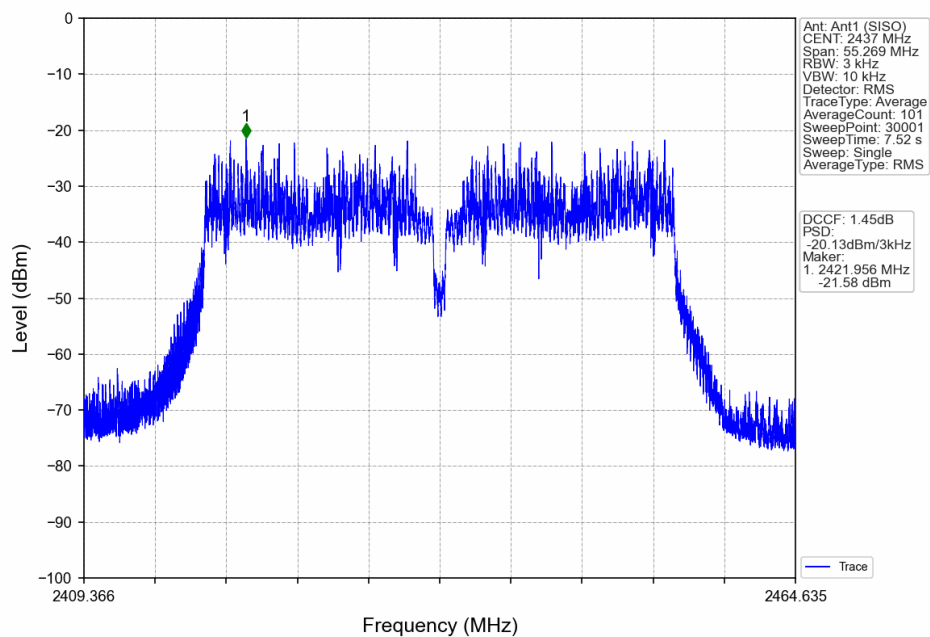


802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV

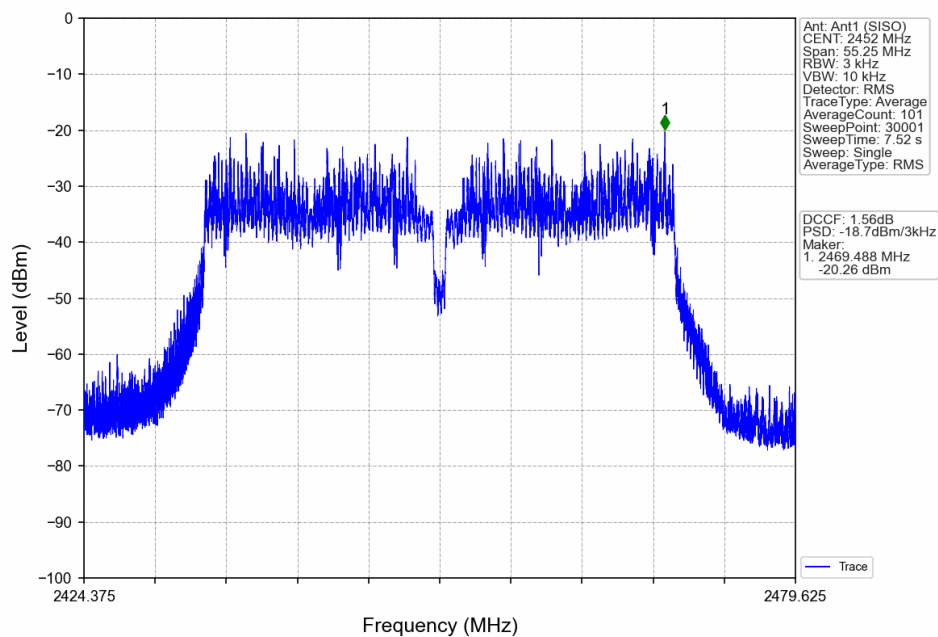


FCCID: 2AP6Y-SK4MINI

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 Ref

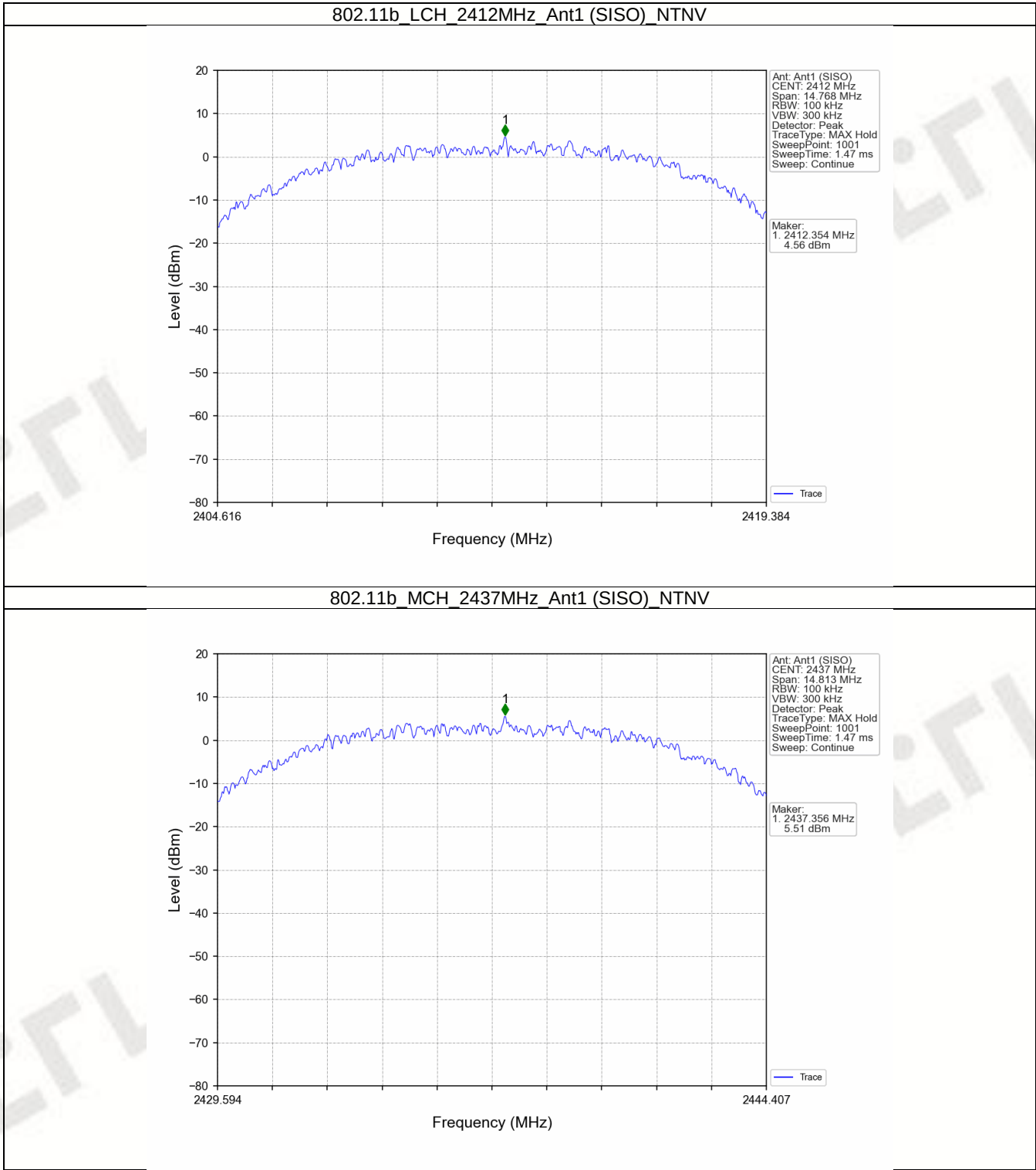
4.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	4.56
		2437	1	5.51
		2462	1	4.93
802.11g	SISO	2412	1	0.07
		2437	1	-0.48
		2462	1	-0.55
802.11n (HT20)	SISO	2412	1	-0.96
		2437	1	-1.47
		2462	1	-0.58
802.11n (HT40)	SISO	2422	1	-4.21
		2437	1	-3.68
		2452	1	-3.43

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.

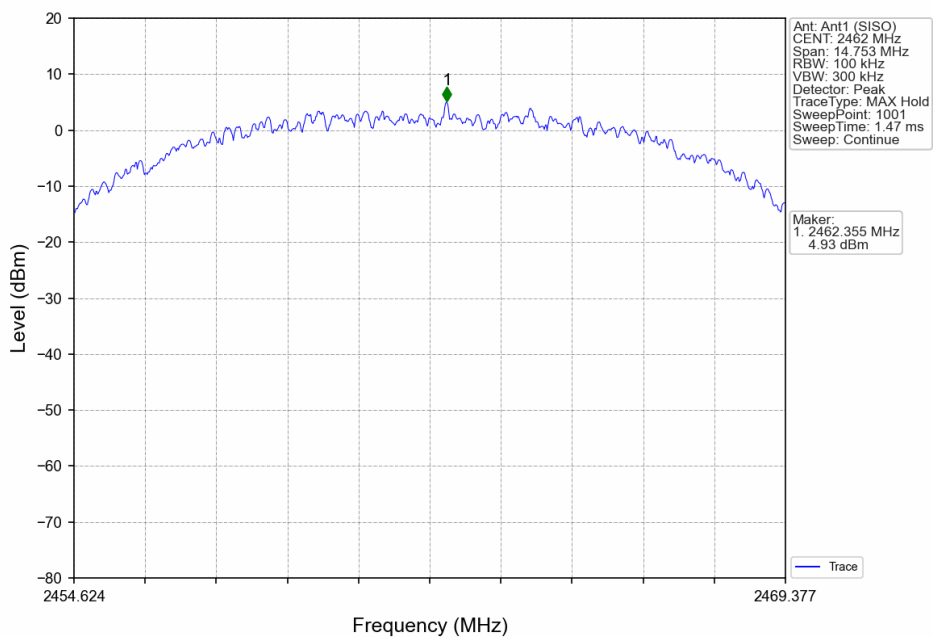
FCCID: 2AP6Y-SK4MINI

4.1.2 Test Graph

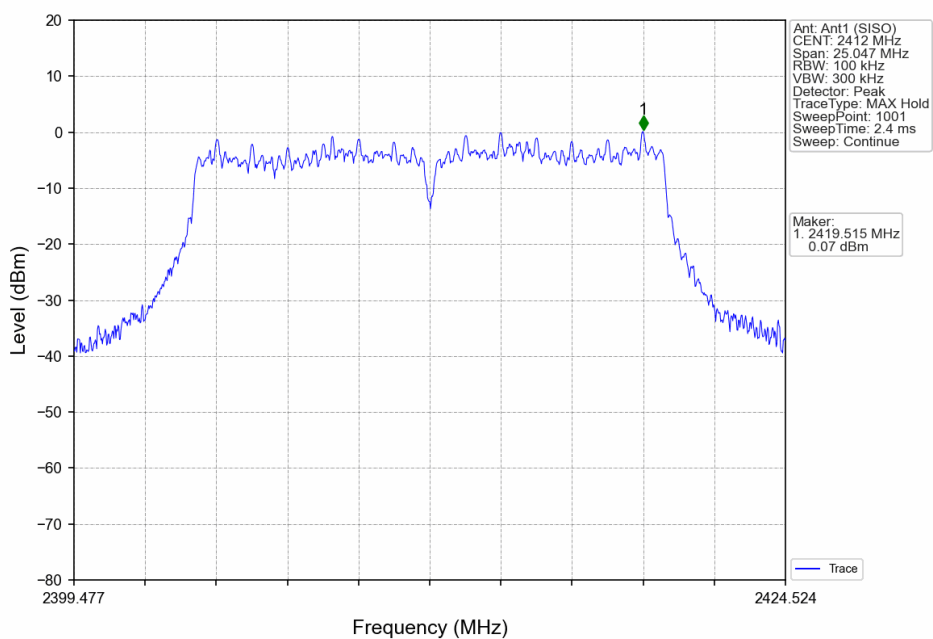


FCCID: 2AP6Y-SK4MINI

802.11b HCH 2462MHz Ant1 (SISO) NTN

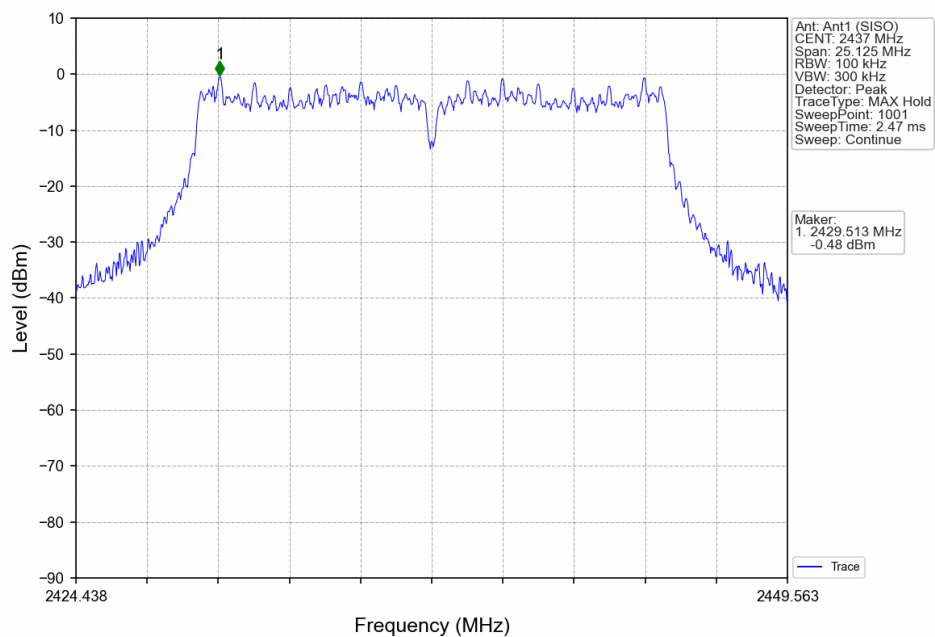


802.11g LCH 2412MHz Ant1 (SISO) NTN

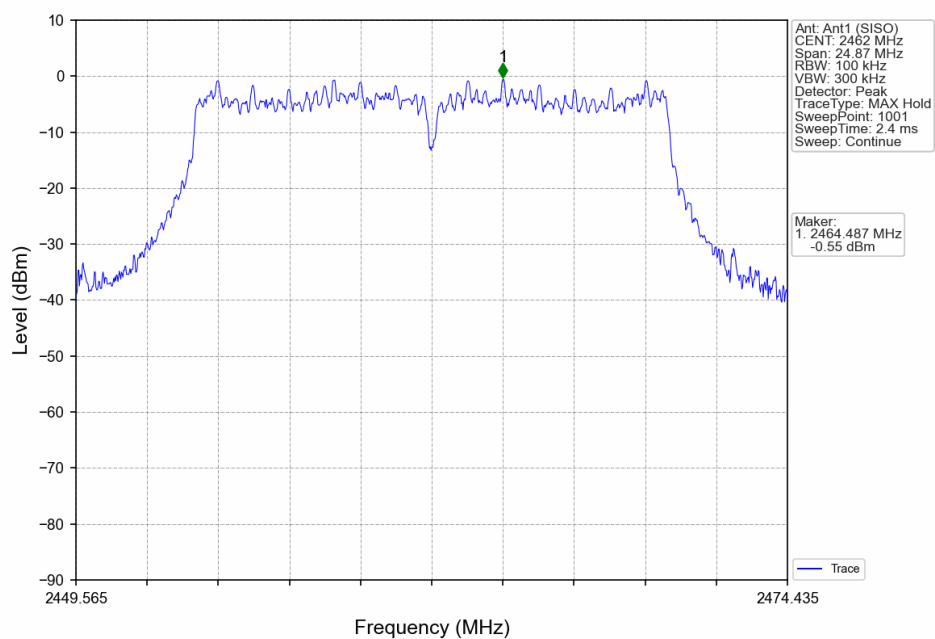


FCCID: 2AP6Y-SK4MINI

802.11g MCH 2437MHz Ant1 (SISO) NTN

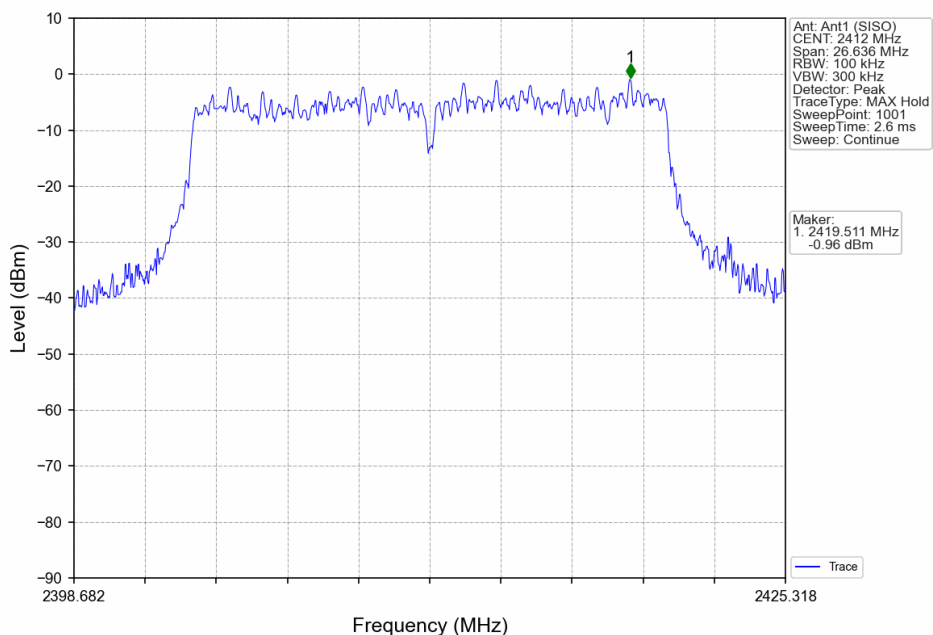


802.11g_HCH_2462MHz_Ant1 (SISO) NTN

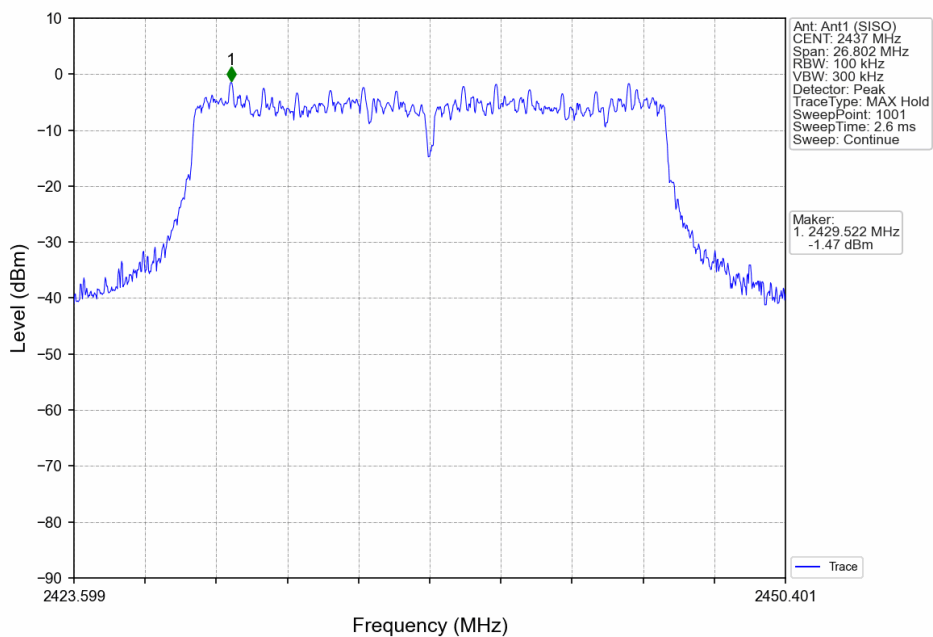


FCCID: 2AP6Y-SK4MINI

802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

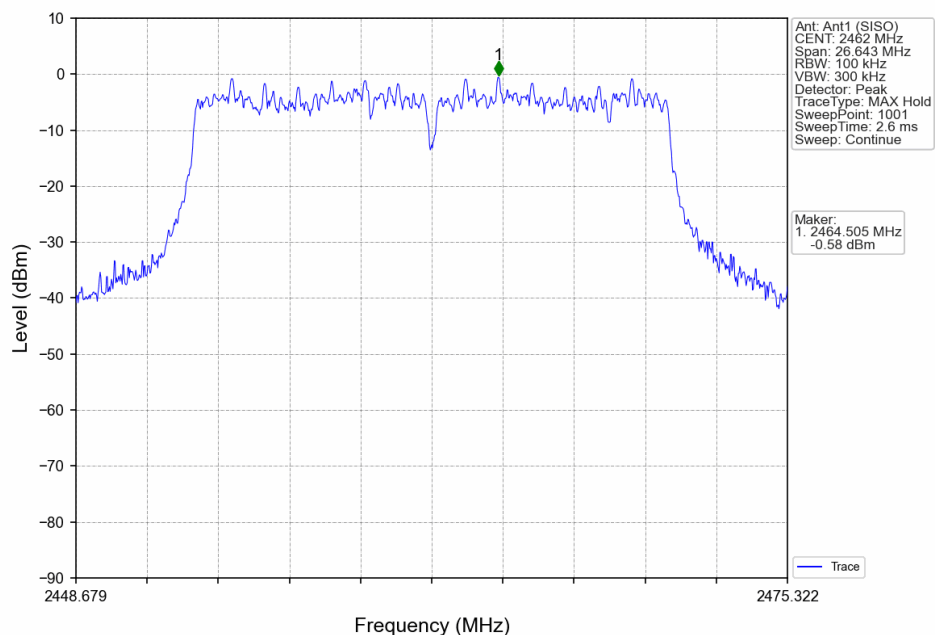


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

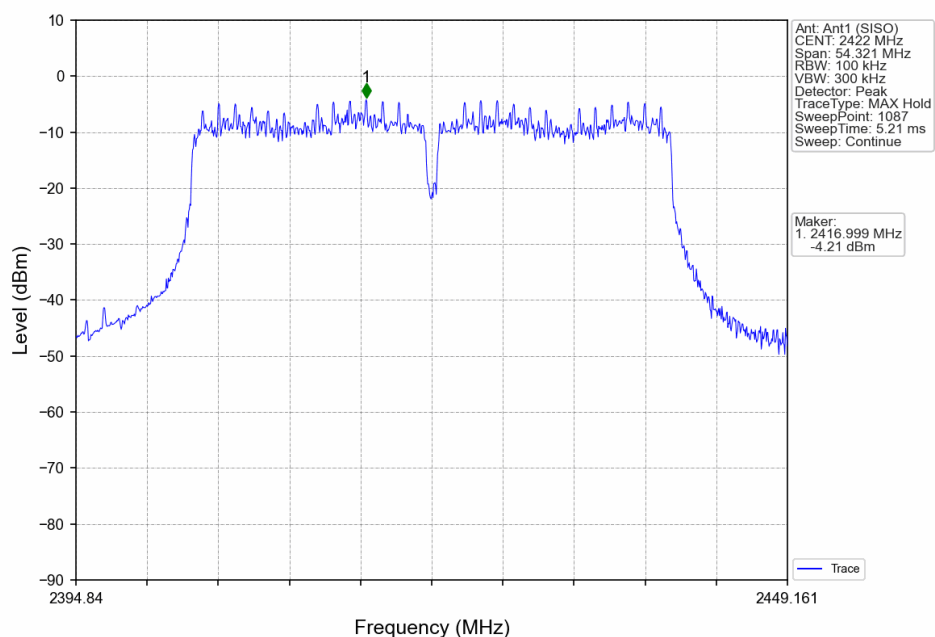


FCCID: 2AP6Y-SK4MINI

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

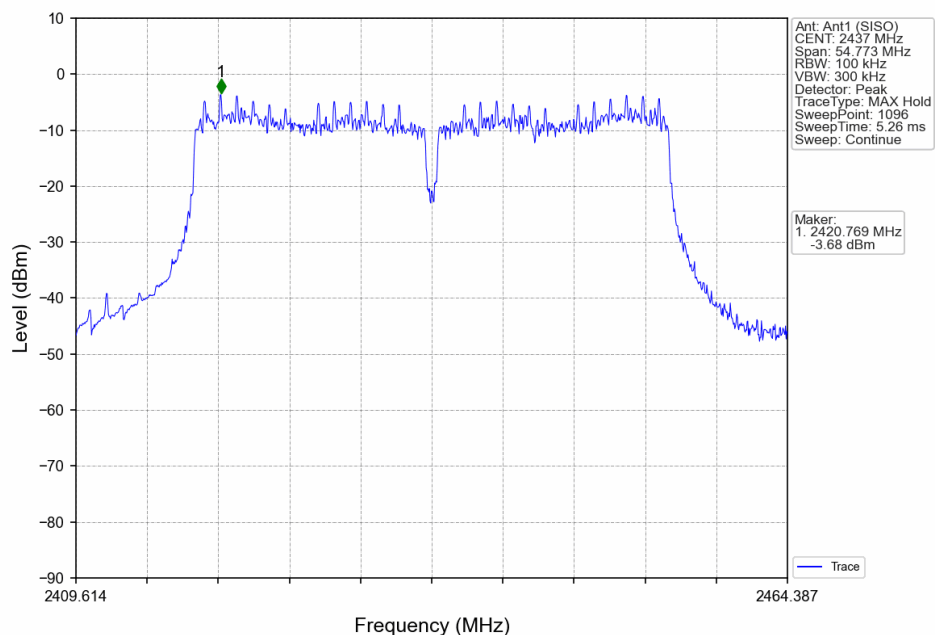


802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV

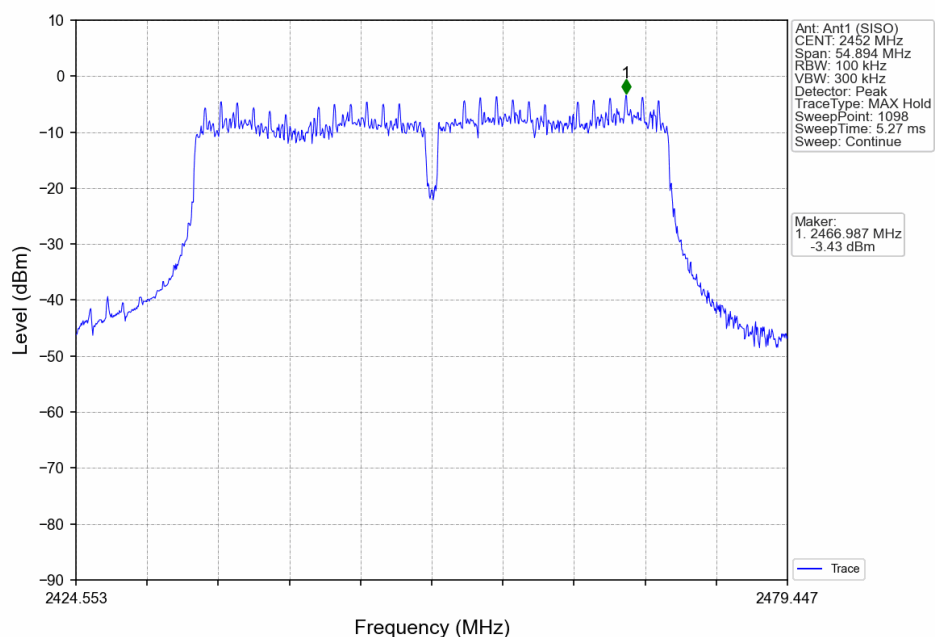


FCCID: 2AP6Y-SK4MINI

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



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



FCCID: 2AP6Y-SK4MINI

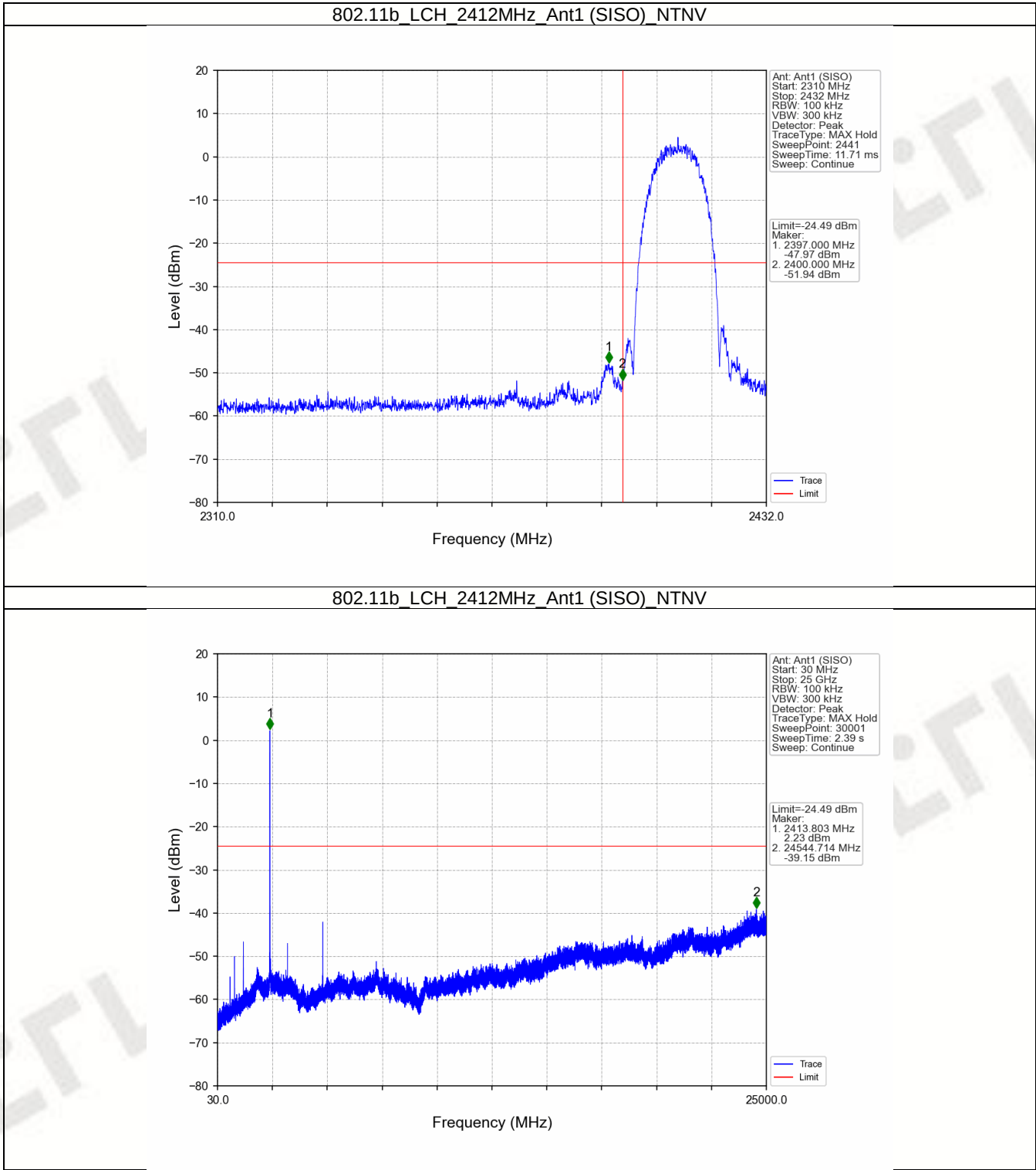
4.2 CSE

4.2.1 Test Result

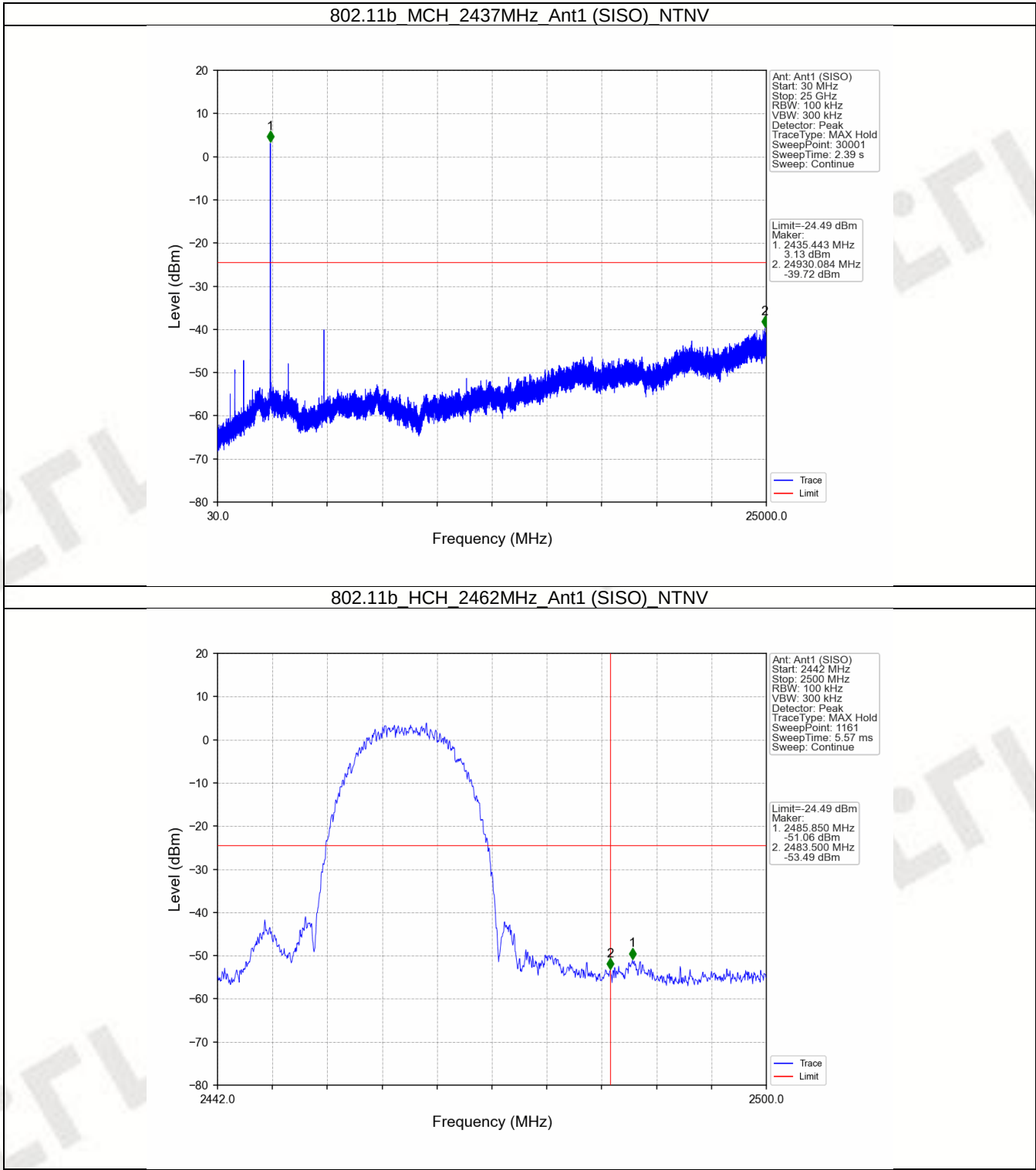
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	5.51	-24.49	Pass
		2437	1	5.51	-24.49	Pass
		2462	1	5.51	-24.49	Pass
802.11g	SISO	2412	1	0.07	-29.93	Pass
		2437	1	0.07	-29.93	Pass
		2462	1	0.07	-29.93	Pass
802.11n (HT20)	SISO	2412	1	-0.58	-30.58	Pass
		2437	1	-0.58	-30.58	Pass
		2462	1	-0.58	-30.58	Pass
802.11n (HT40)	SISO	2422	1	-3.43	-33.43	Pass
		2437	1	-3.43	-33.43	Pass
		2452	1	-3.43	-33.43	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.						

FCCID: 2AP6Y-SK4MINI

4.2.2 Test Graph

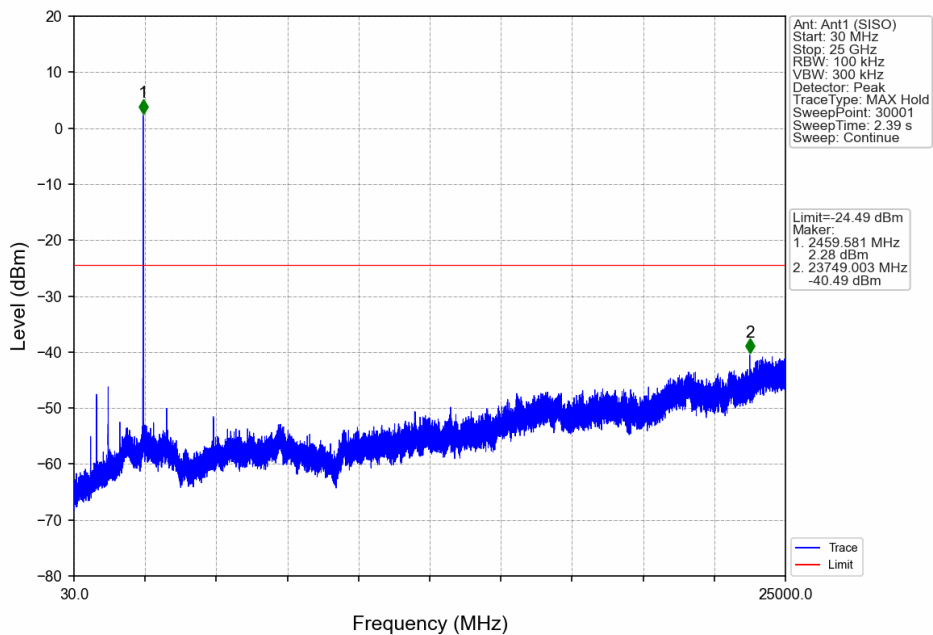


FCCID: 2AP6Y-SK4MINI

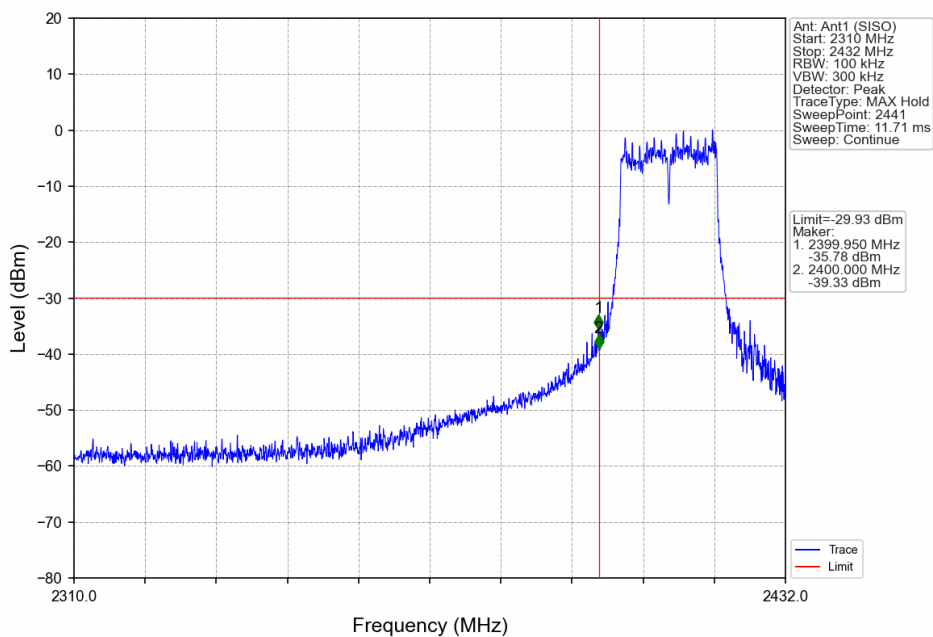


FCCID: 2AP6Y-SK4MINI

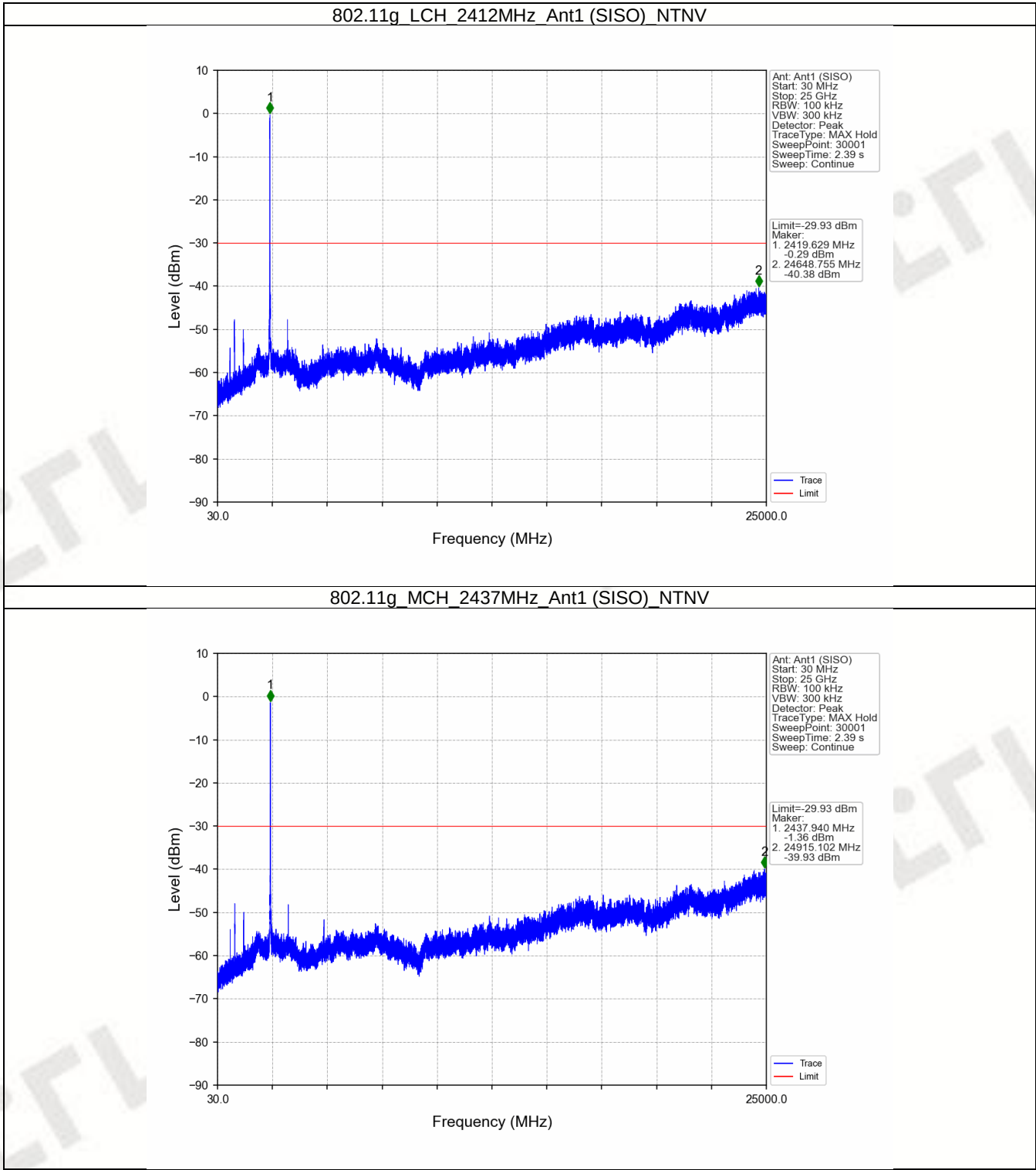
802.11b HCH 2462MHz Ant1 (SISO) NTNV



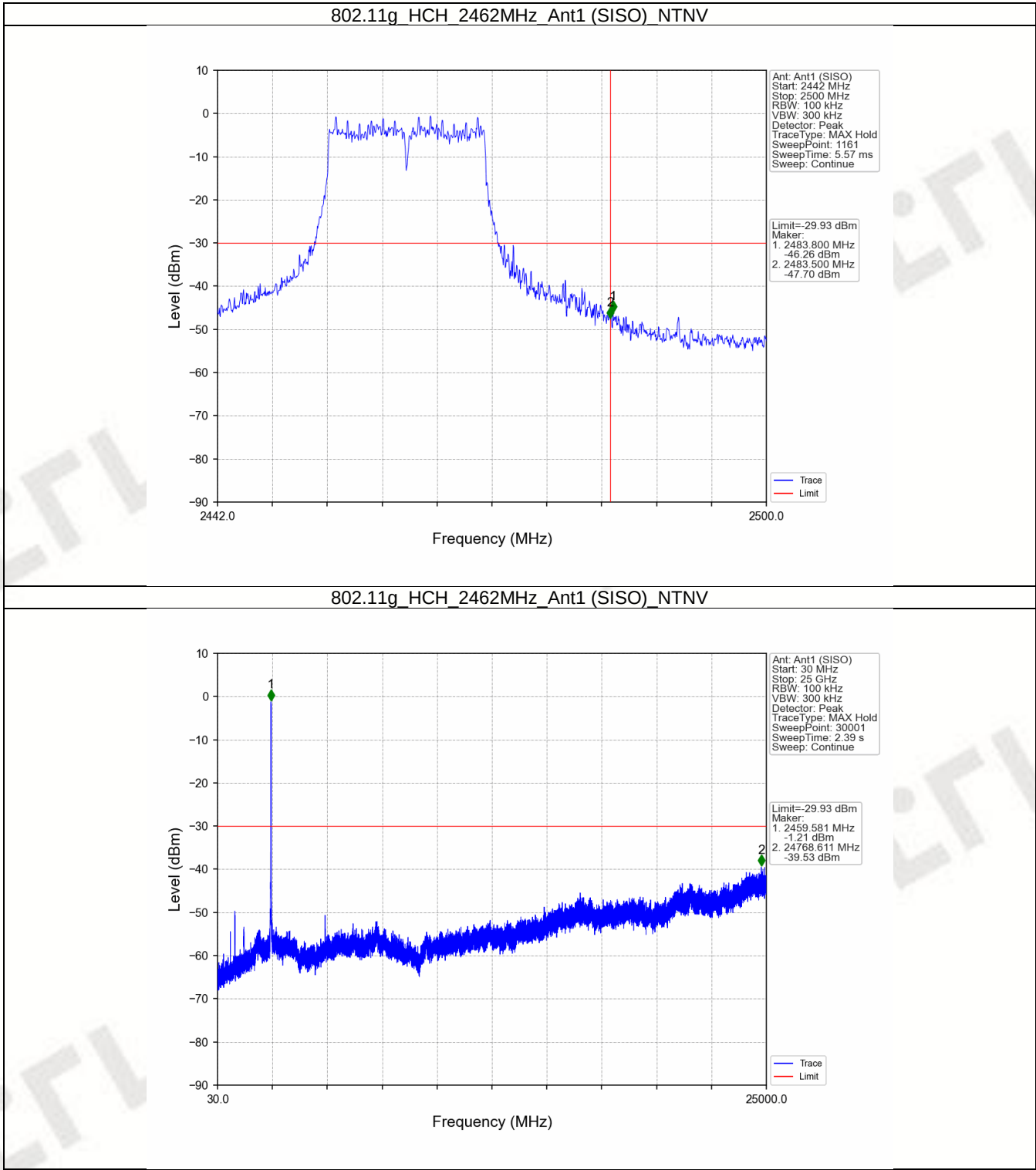
802.11g LCH 2412MHz Ant1 (SISO) NTNV



FCCID: 2AP6Y-SK4MINI

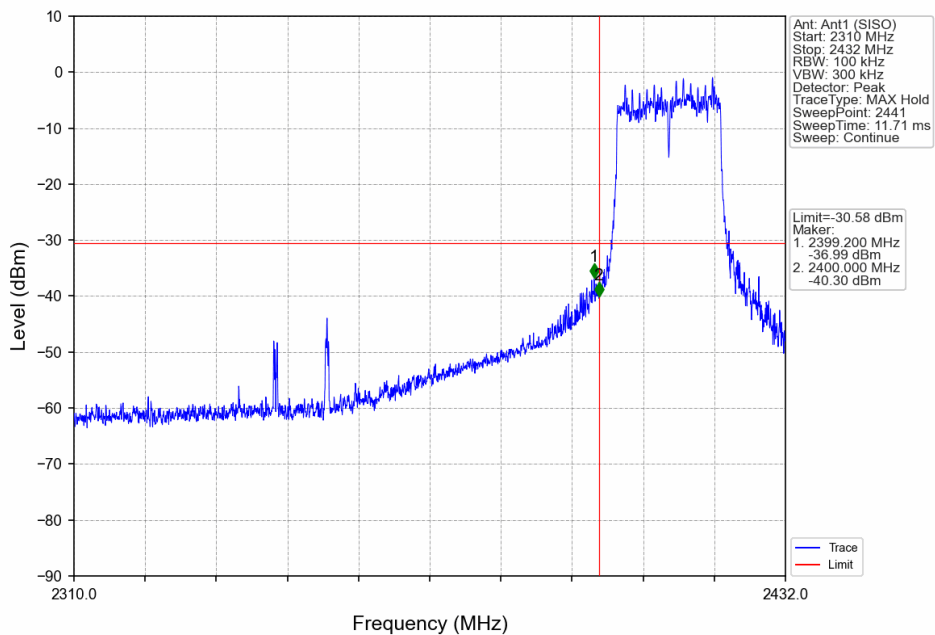


FCCID: 2AP6Y-SK4MINI

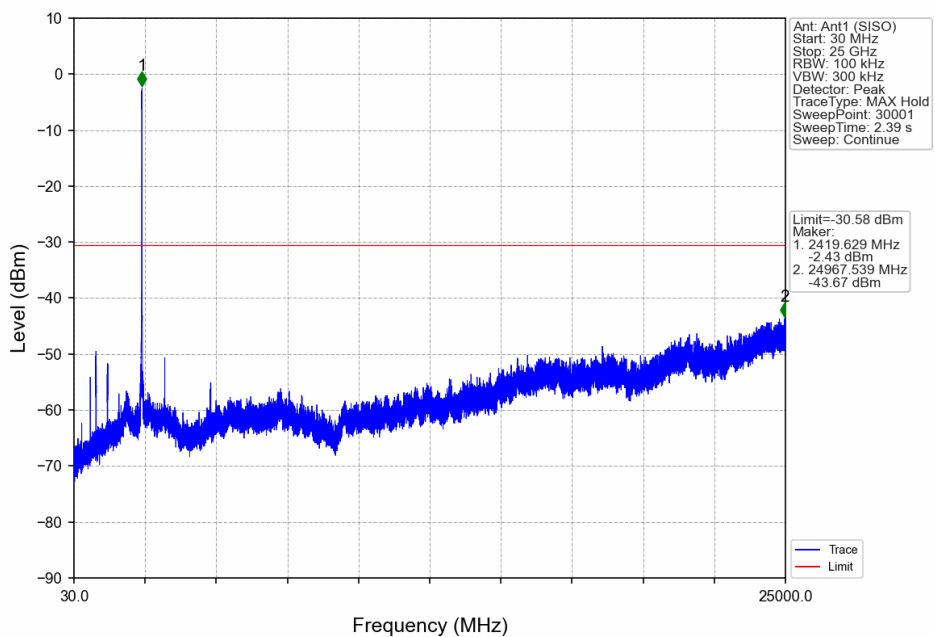


FCCID: 2AP6Y-SK4MINI

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

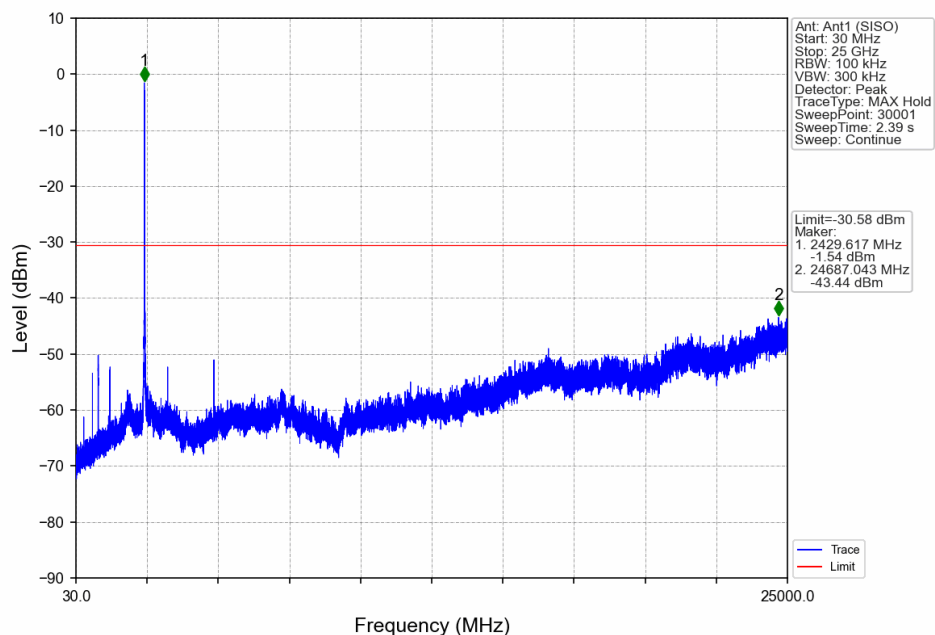


802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTV

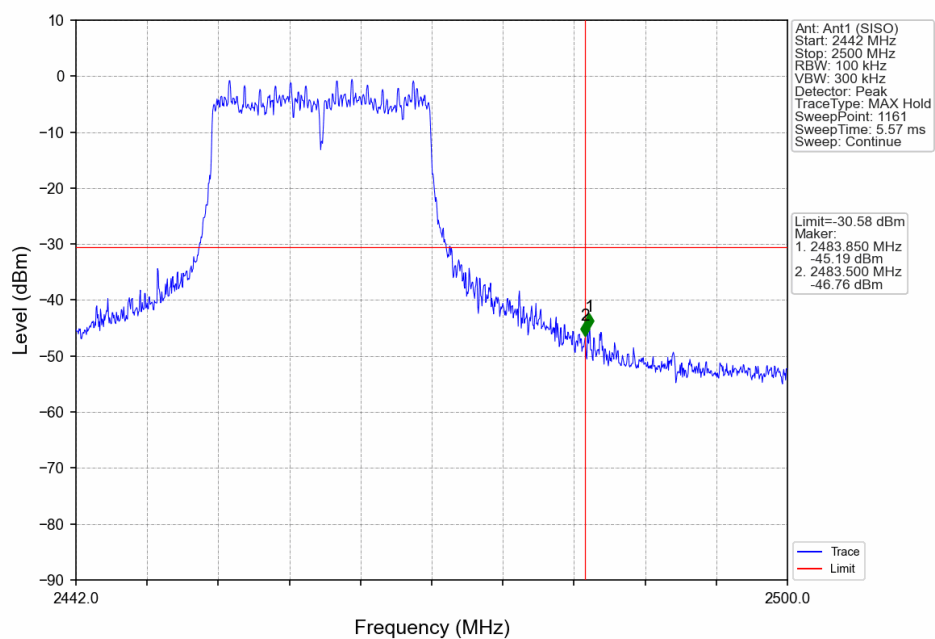


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802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

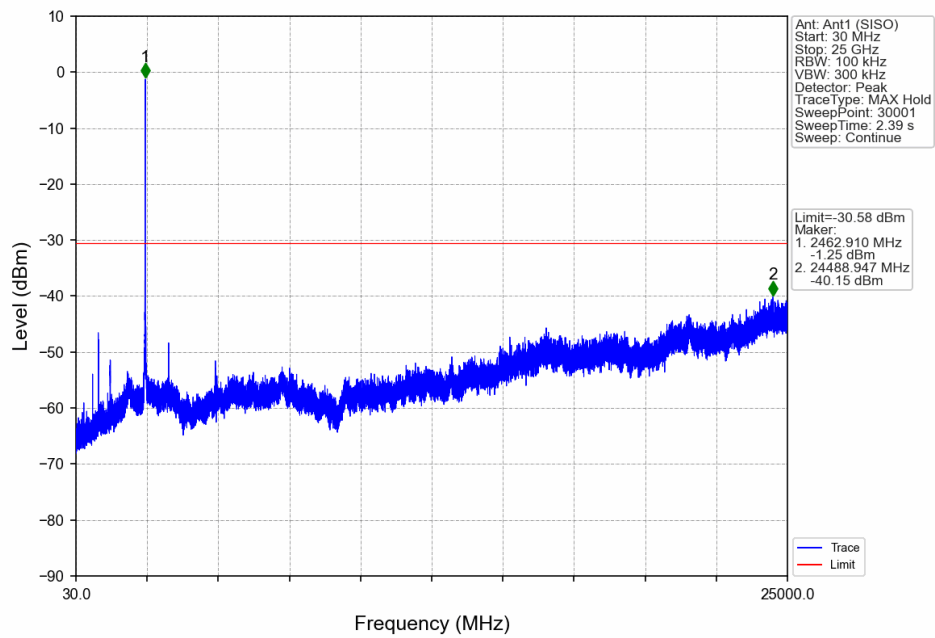


802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

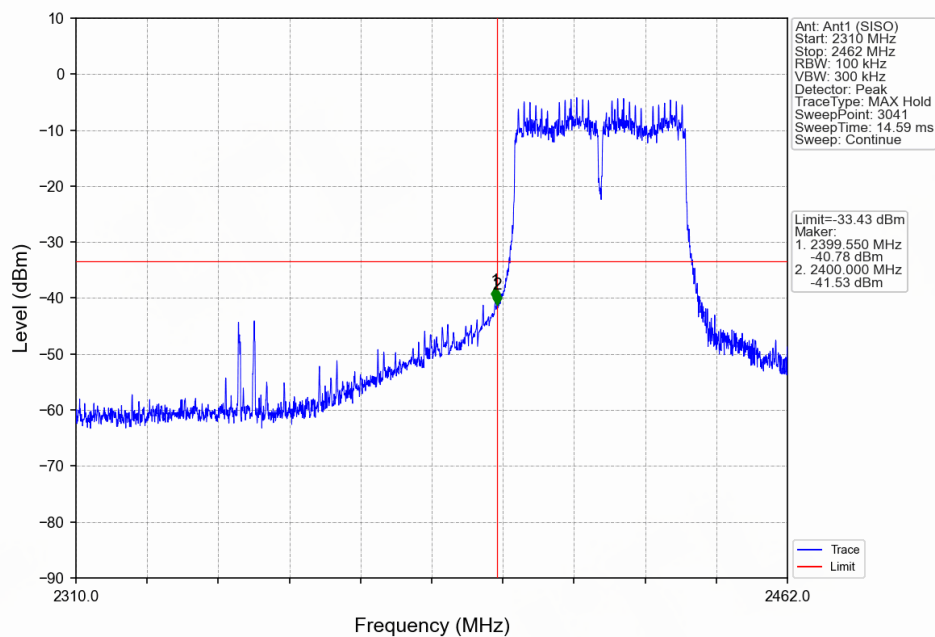


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802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTV

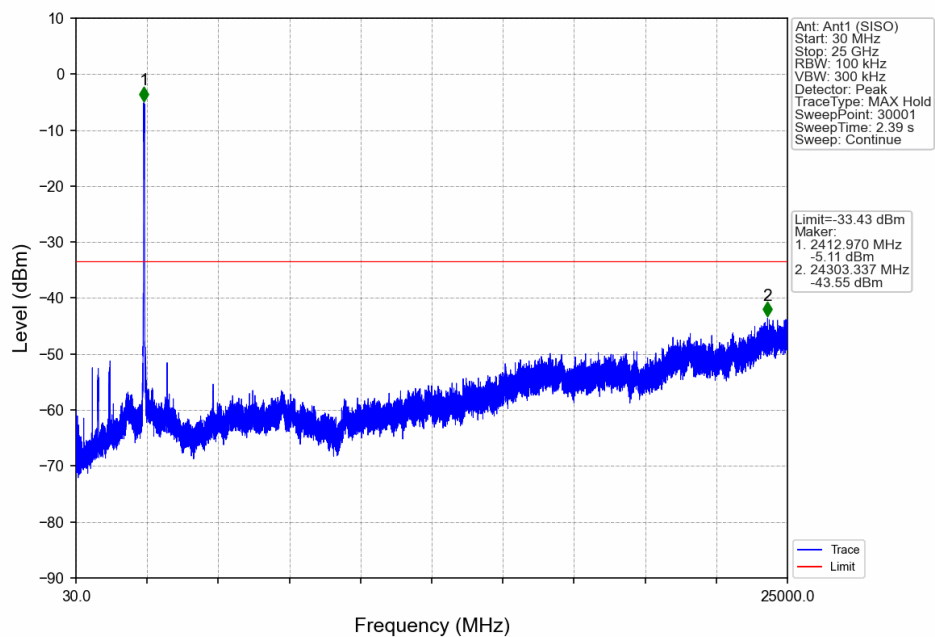


802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTV

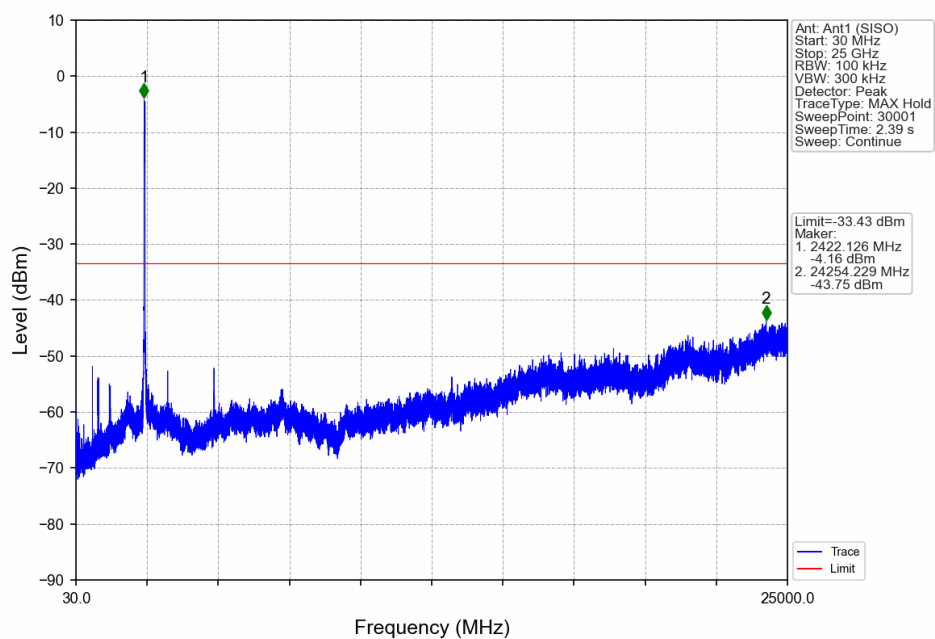


FCCID: 2AP6Y-SK4MINI

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



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



FCCID: 2AP6Y-SK4MINI

