

Appendix A for SHEM210600603201

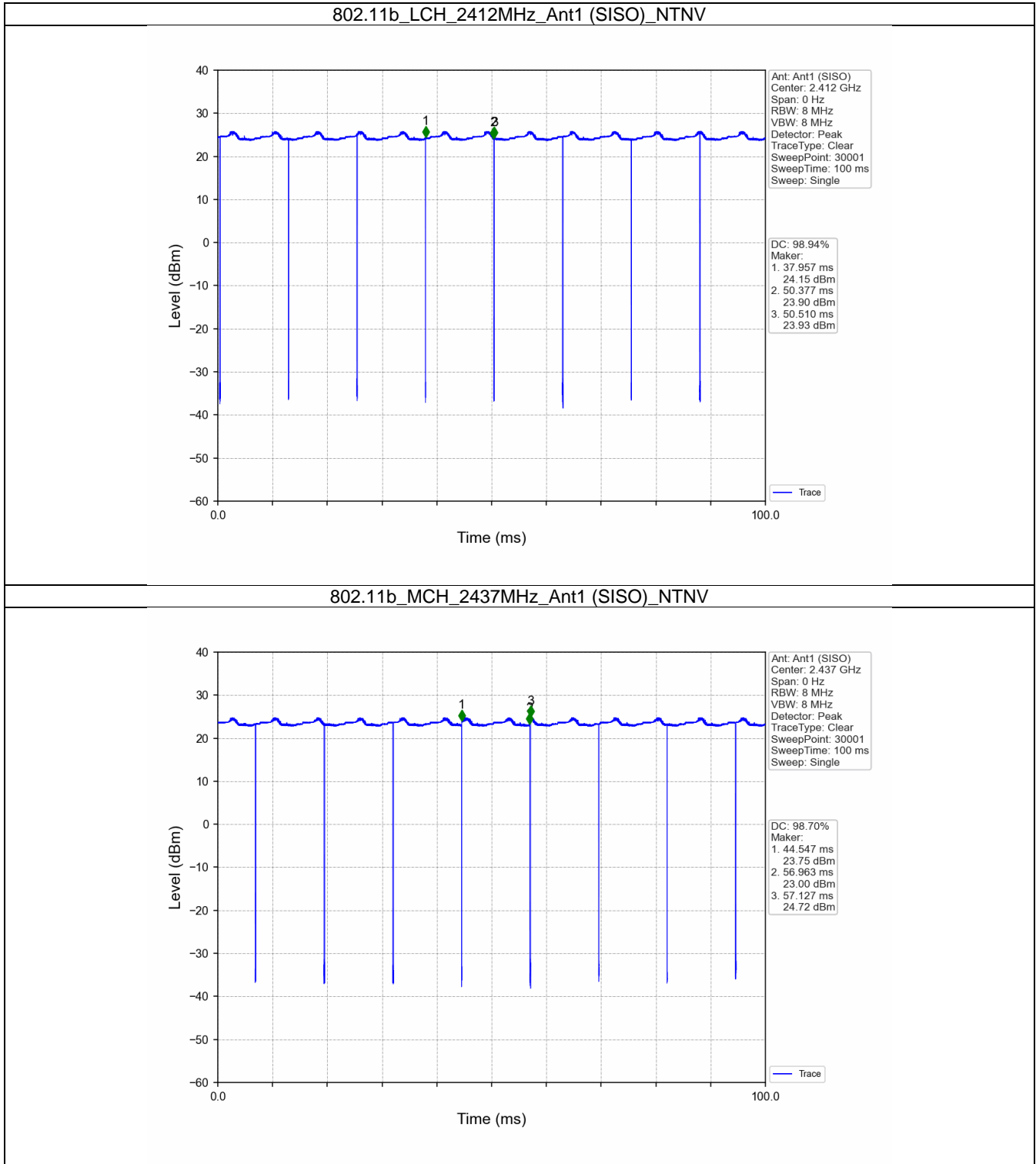
1. Duty Cycle

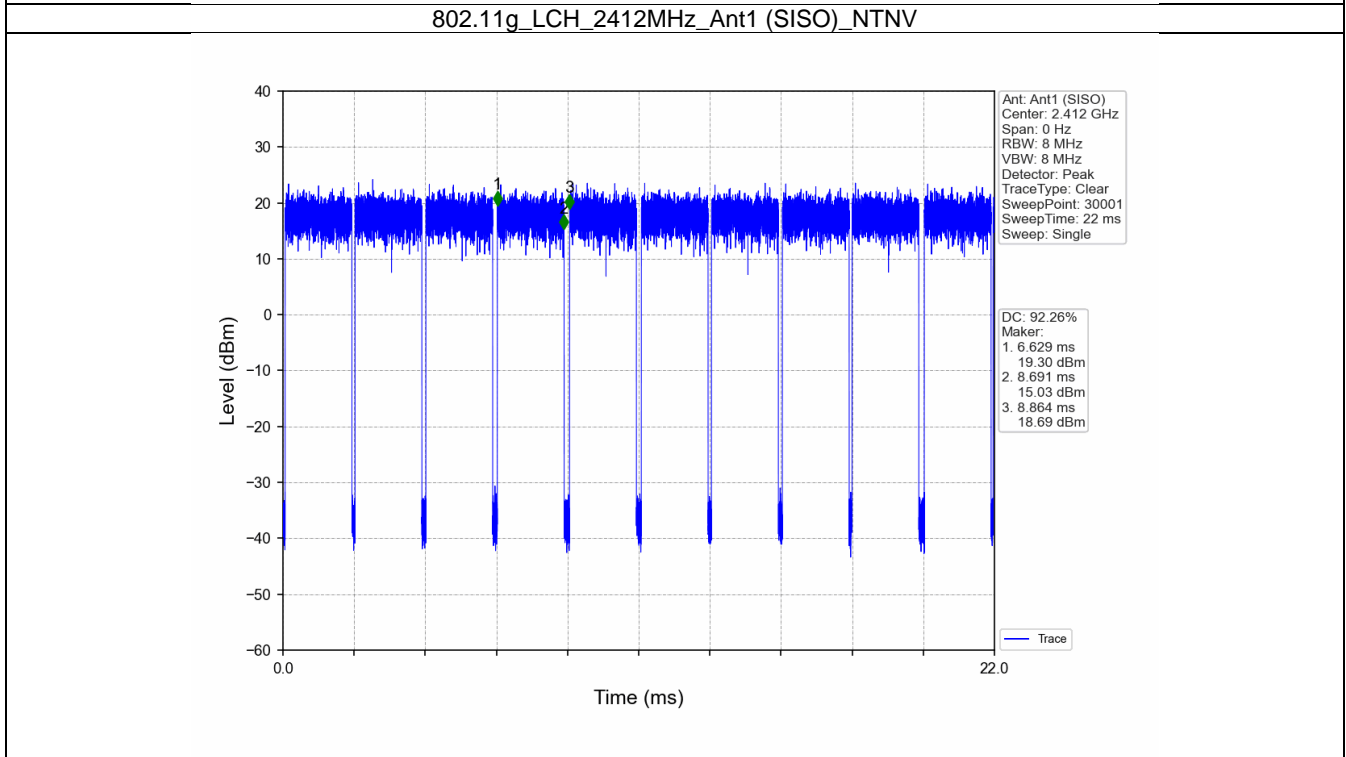
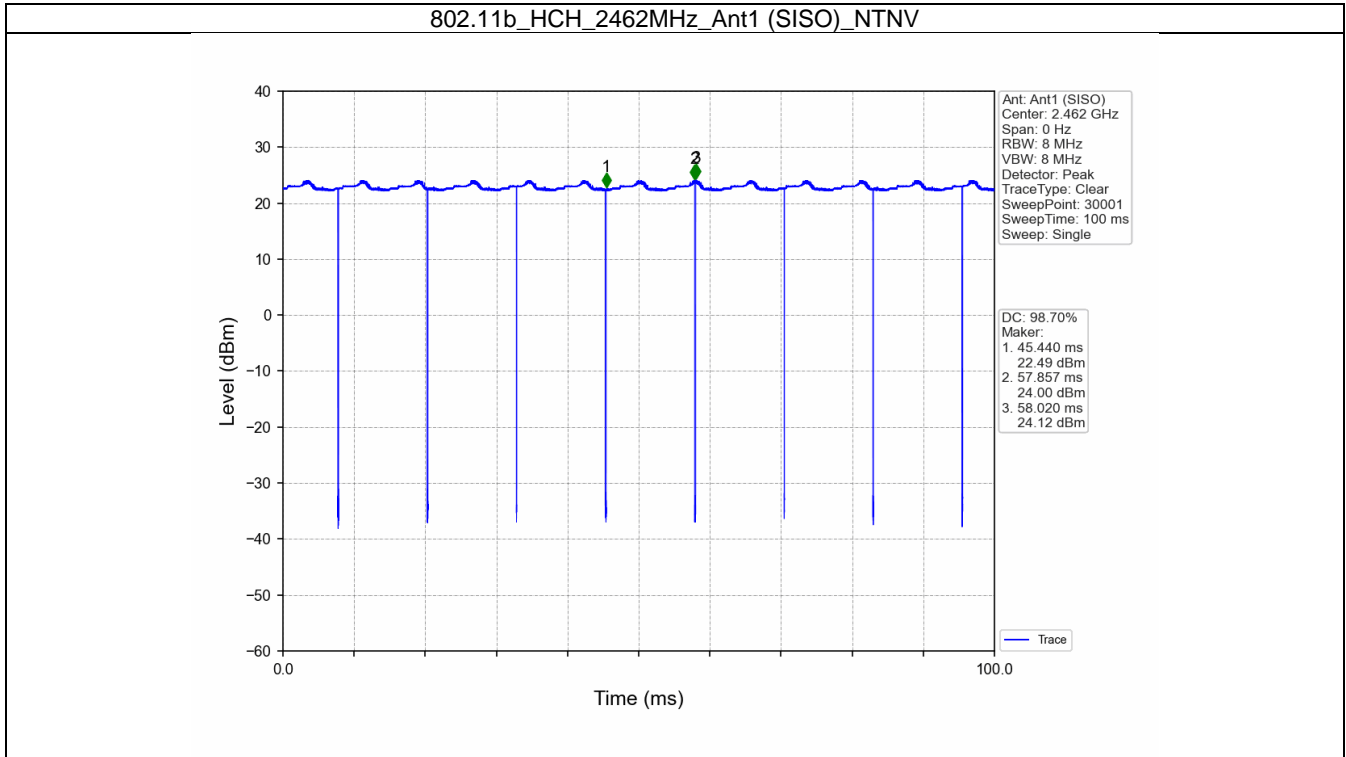
1.1 Ant1

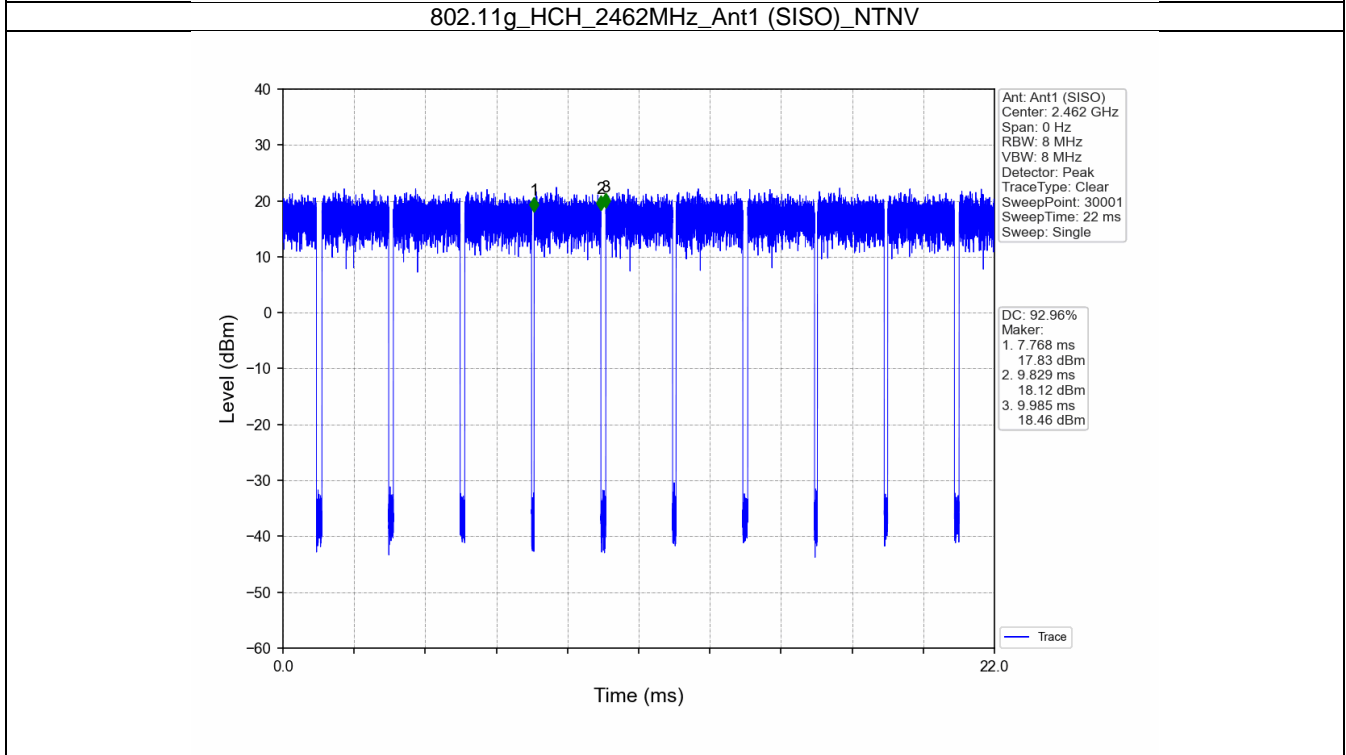
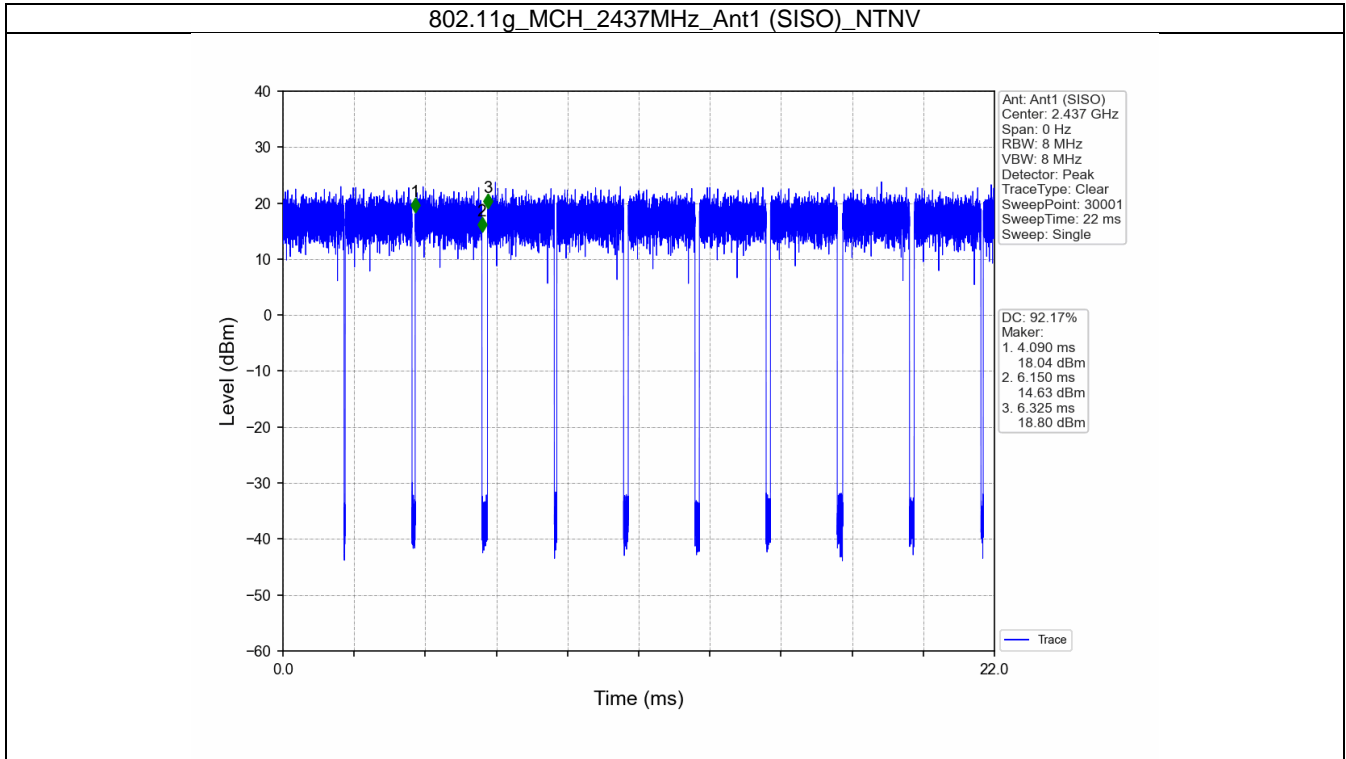
1.1.1 Test Result

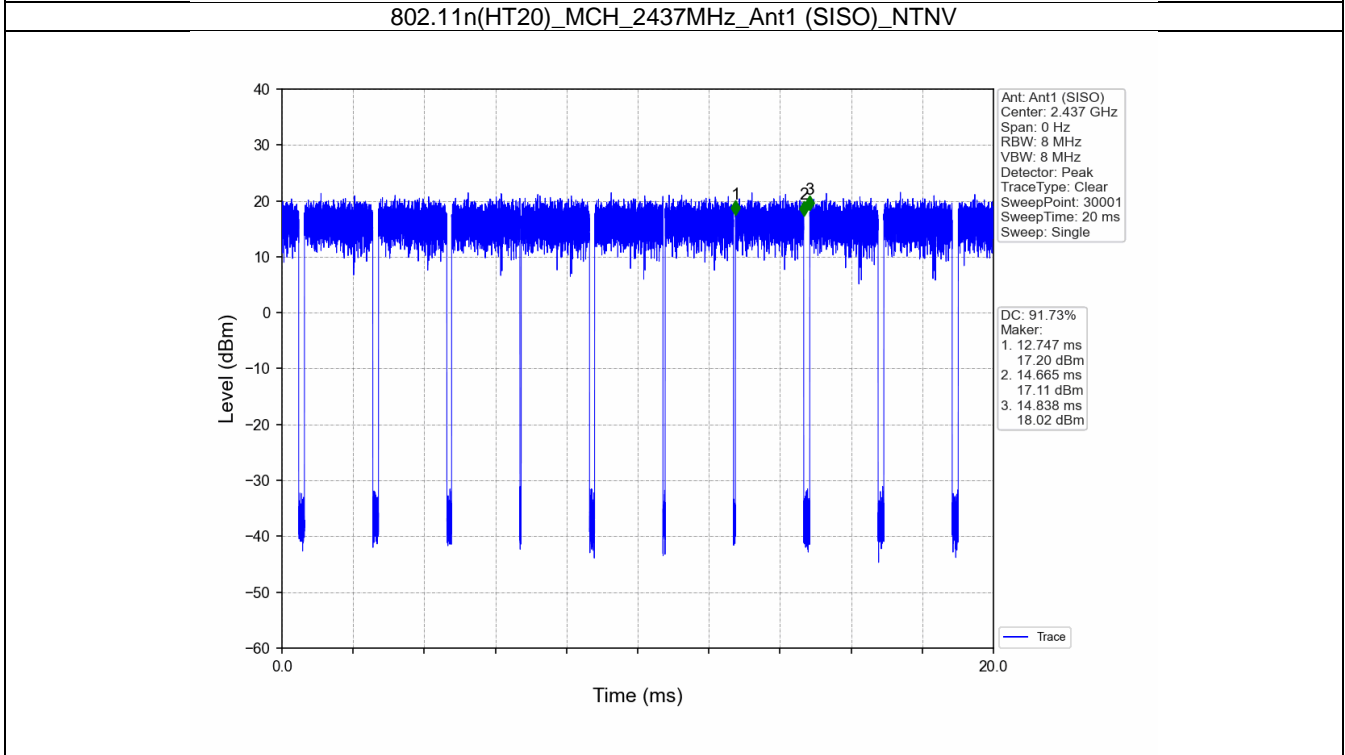
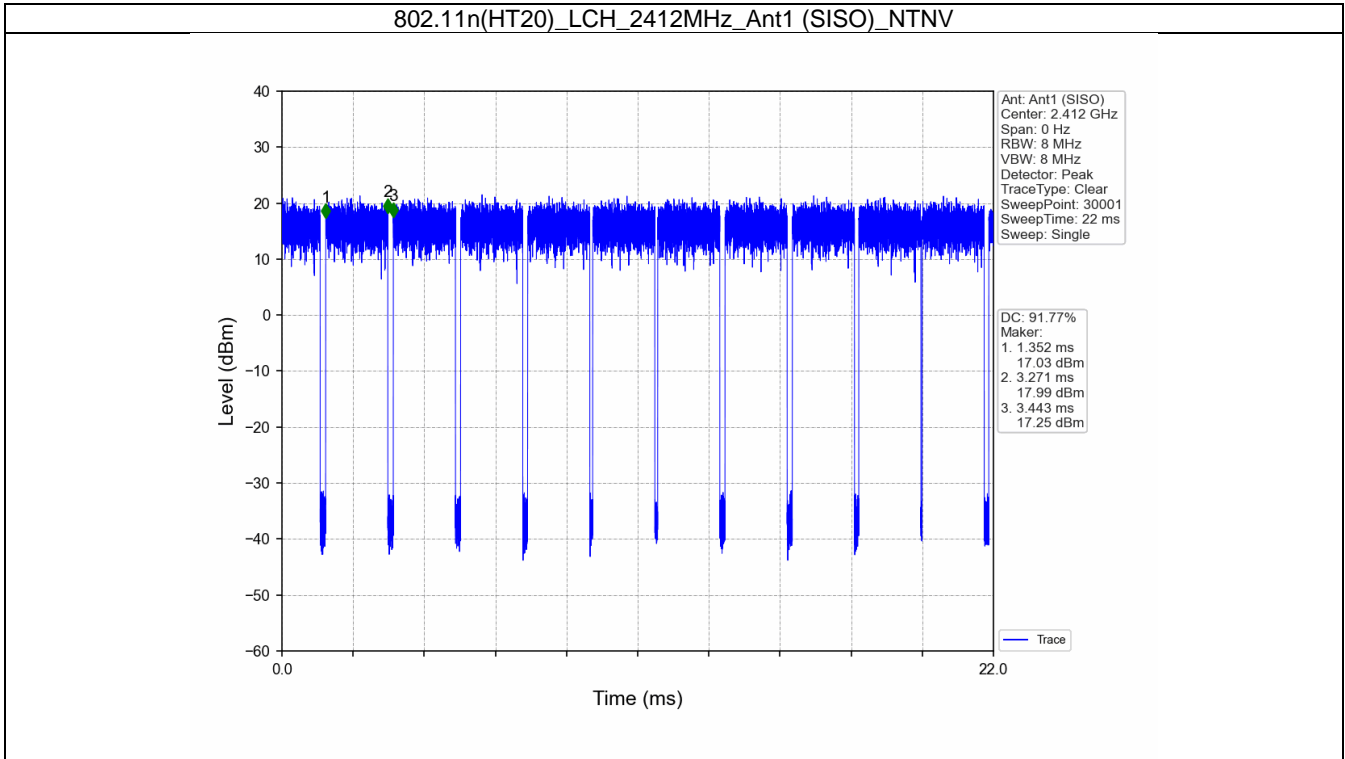
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	12.420	12.553	98.94	0.05	0.63
		2437	12.416	12.580	98.70	0.06	1.00
		2462	12.417	12.580	98.70	0.06	0.87
802.11g	SISO	2412	2.062	2.235	92.26	0.35	4.68
		2437	2.060	2.235	92.17	0.35	4.31
		2462	2.061	2.217	92.96	0.32	3.12
802.11n (HT20)	SISO	2412	1.919	2.091	91.77	0.37	6.30
		2437	1.918	2.091	91.73	0.38	6.35
		2462	1.916	2.090	91.67	0.38	3.68
802.11n (HT40)	SISO	2422	0.942	1.106	85.17	0.70	10.07
		2437	0.942	1.115	84.48	0.73	11.60
		2452	0.943	1.079	87.40	0.59	8.83

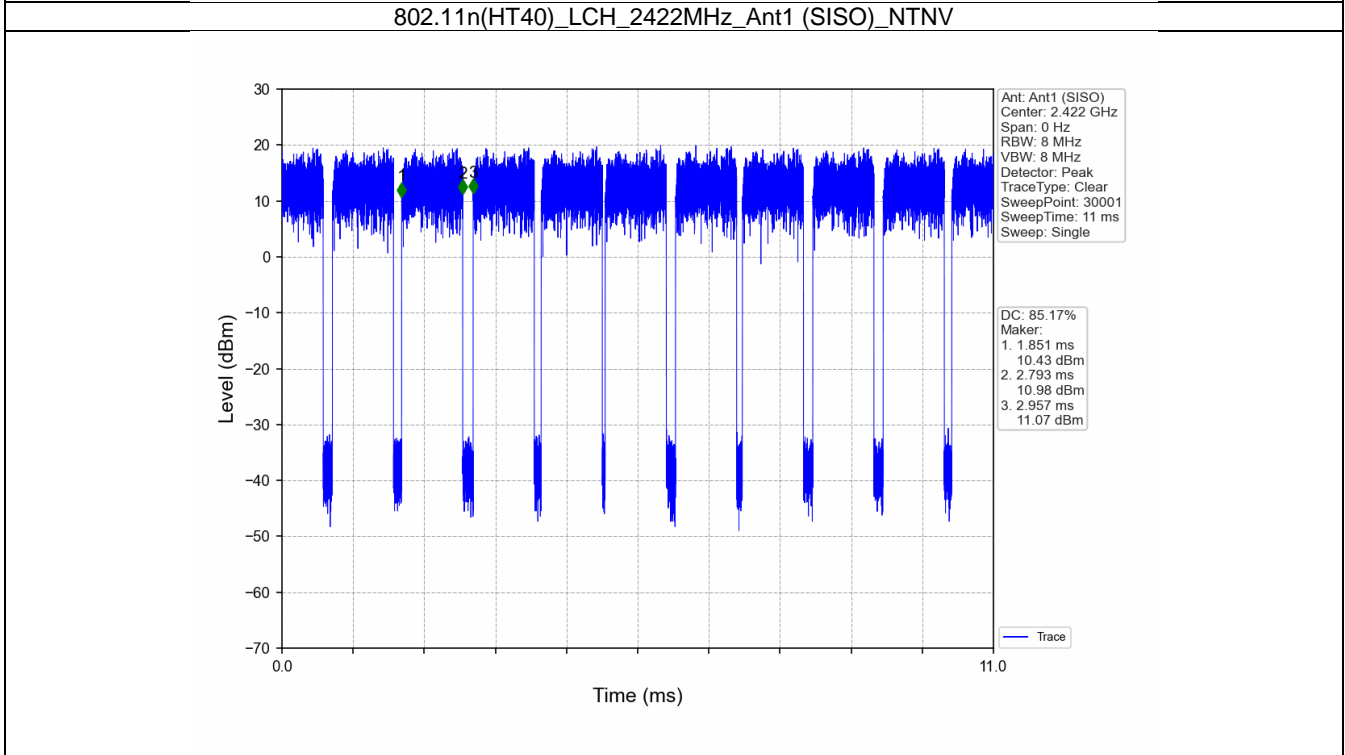
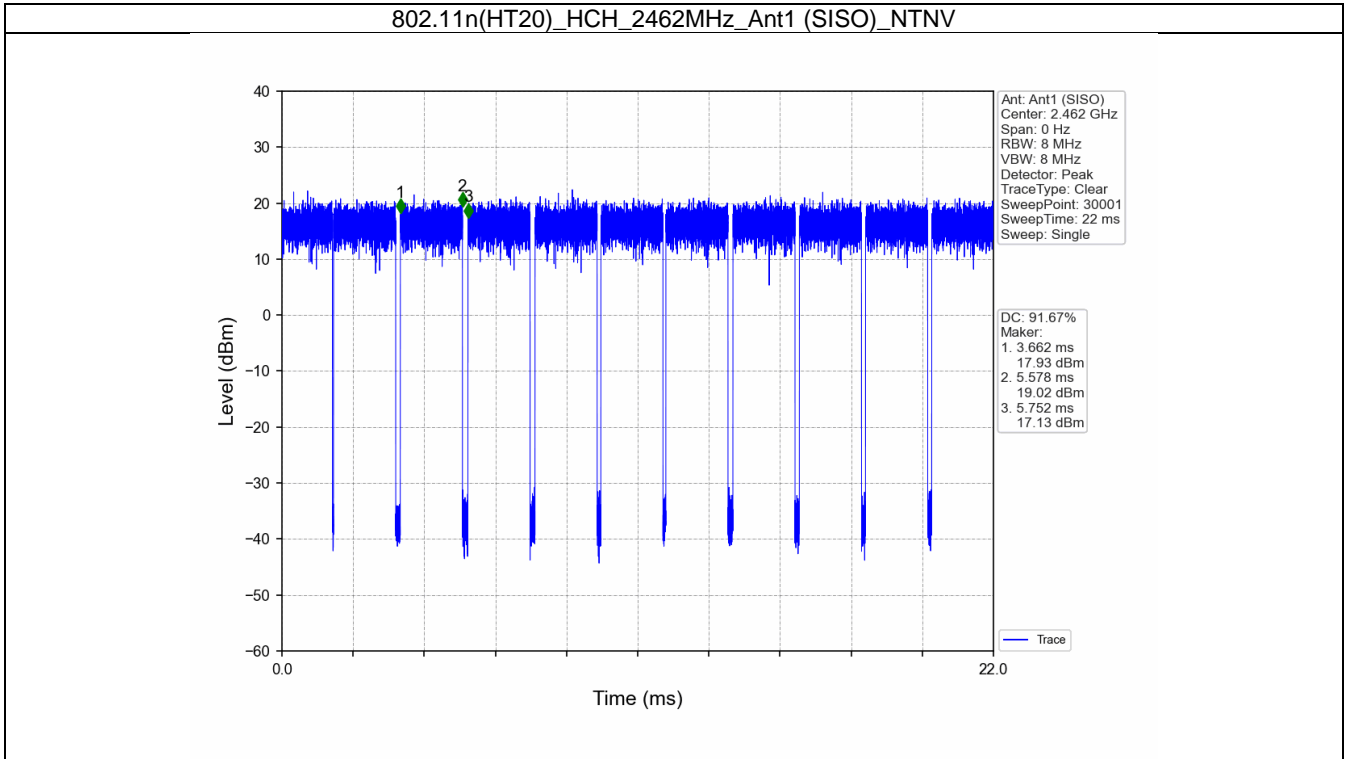
1.1.2 Test Graph

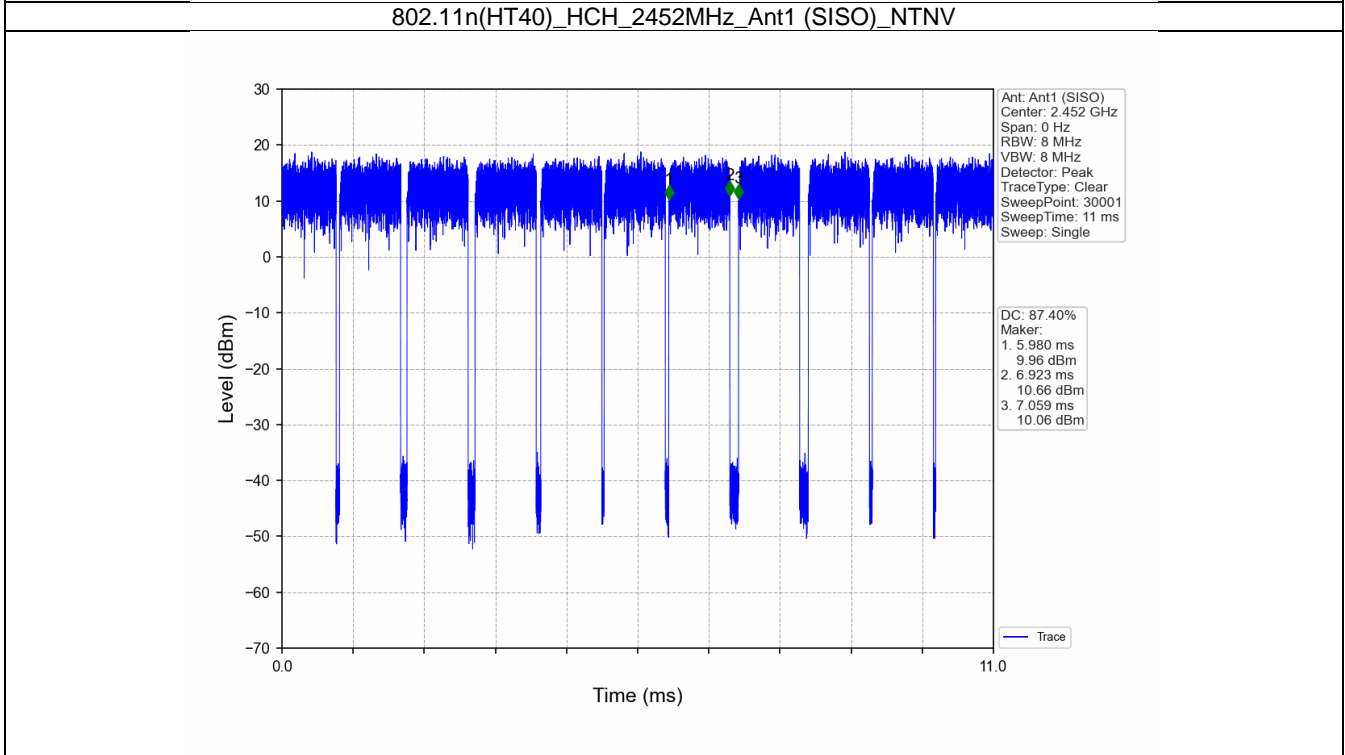
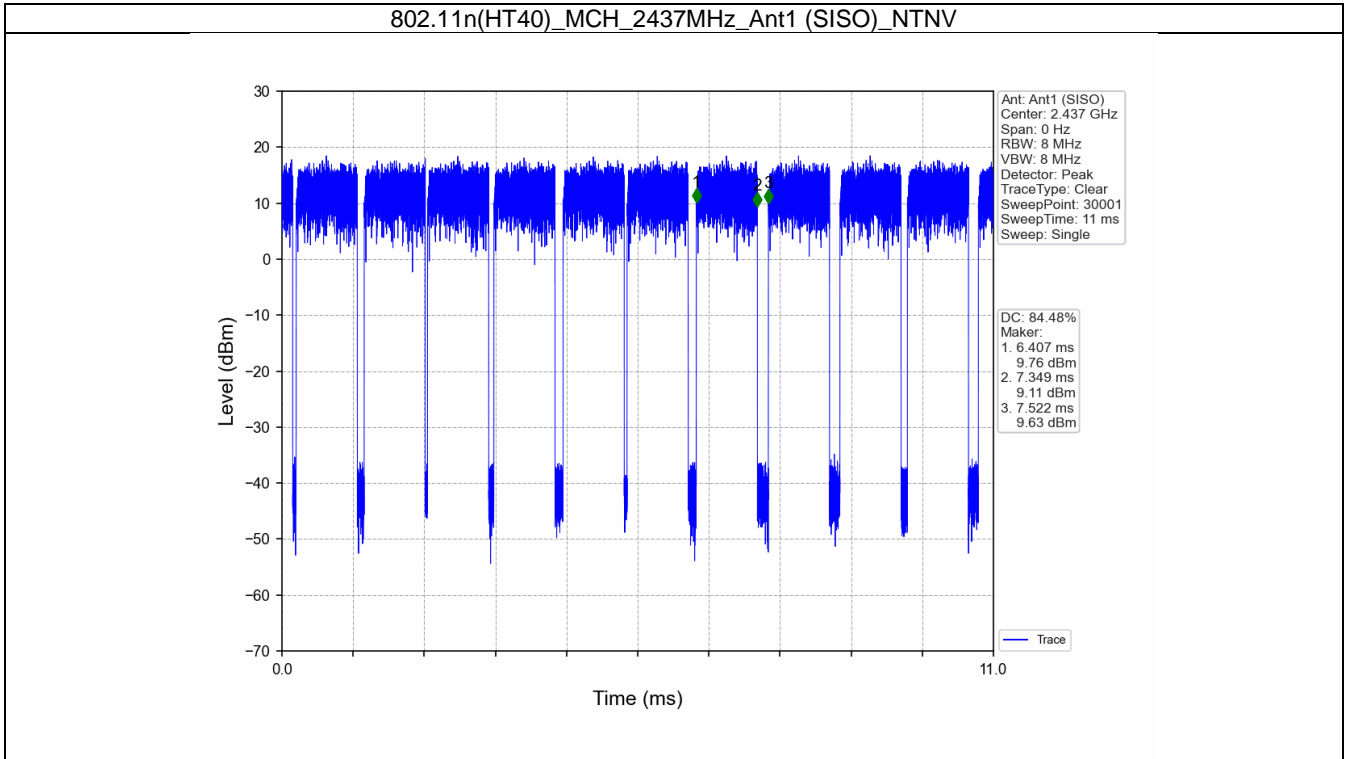












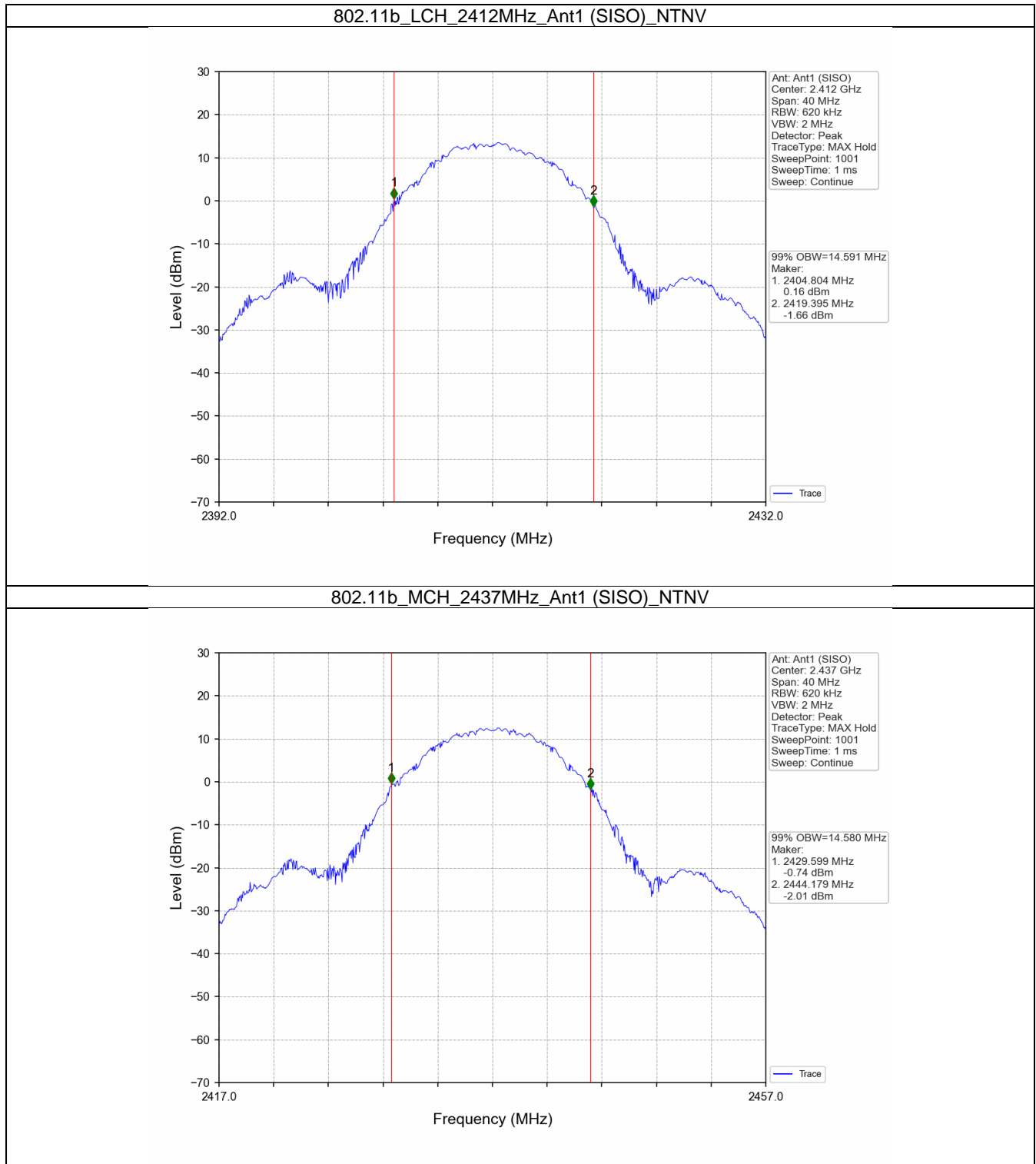
2. Bandwidth

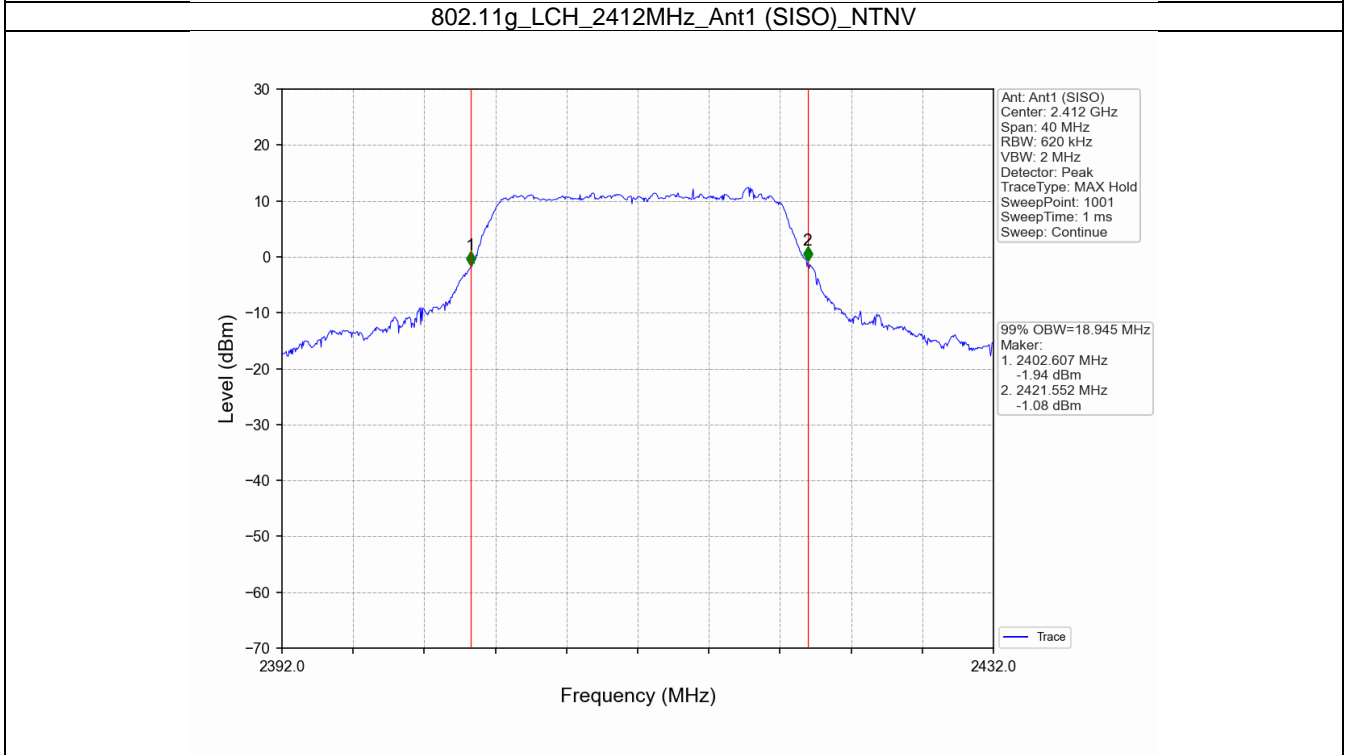
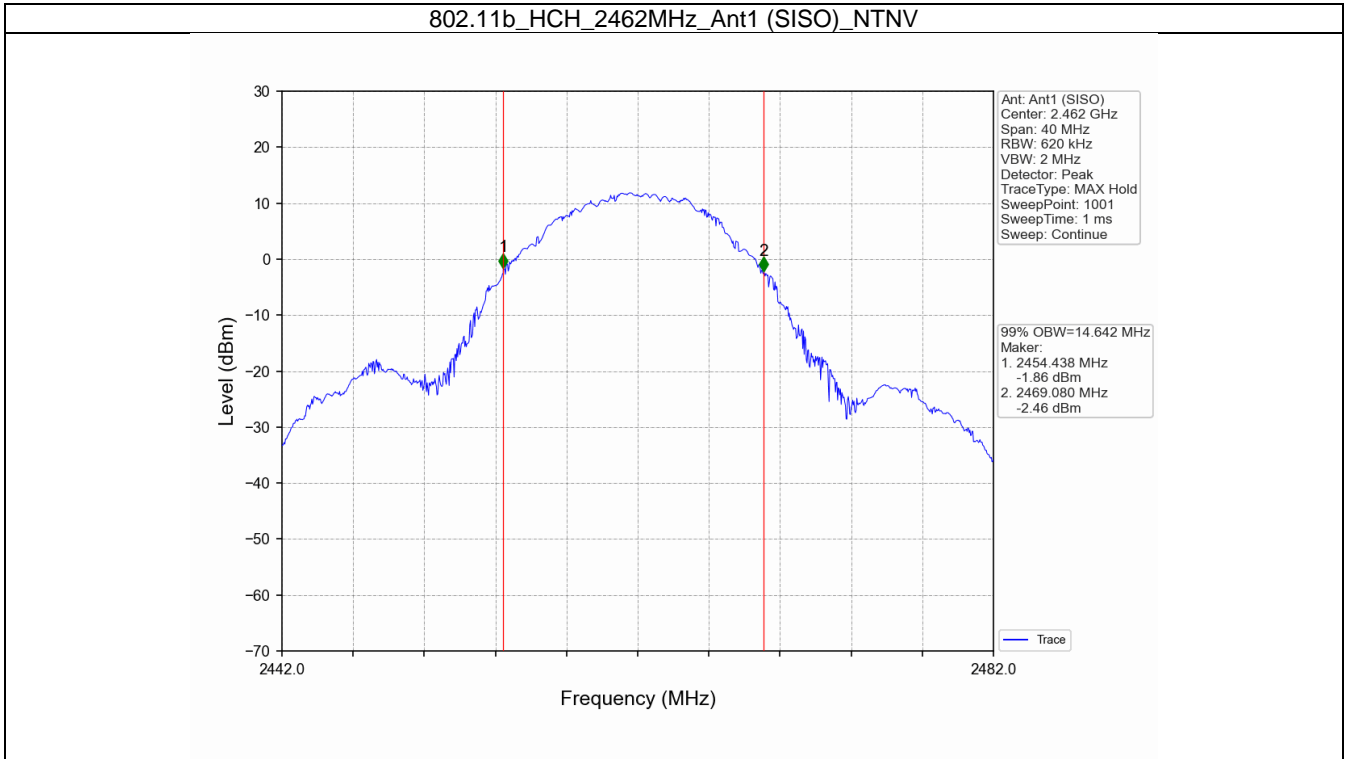
2.1 OBW

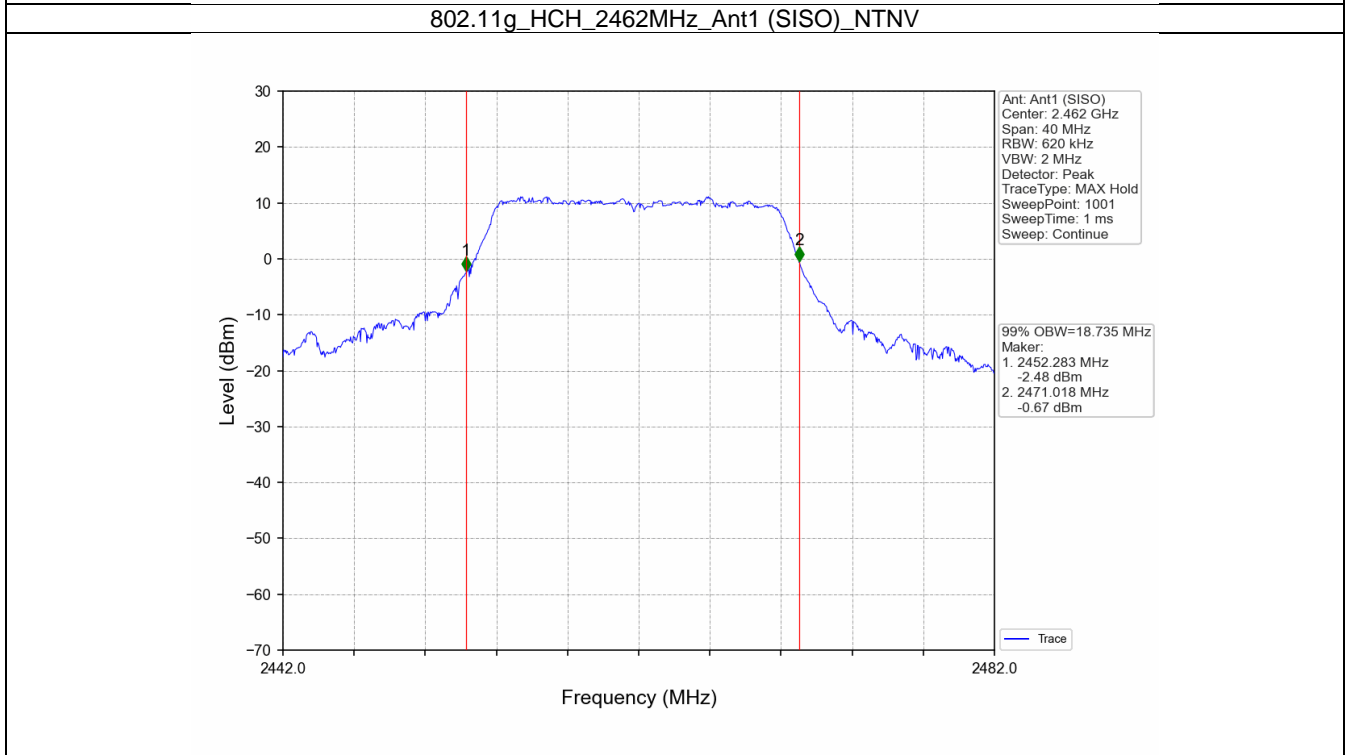
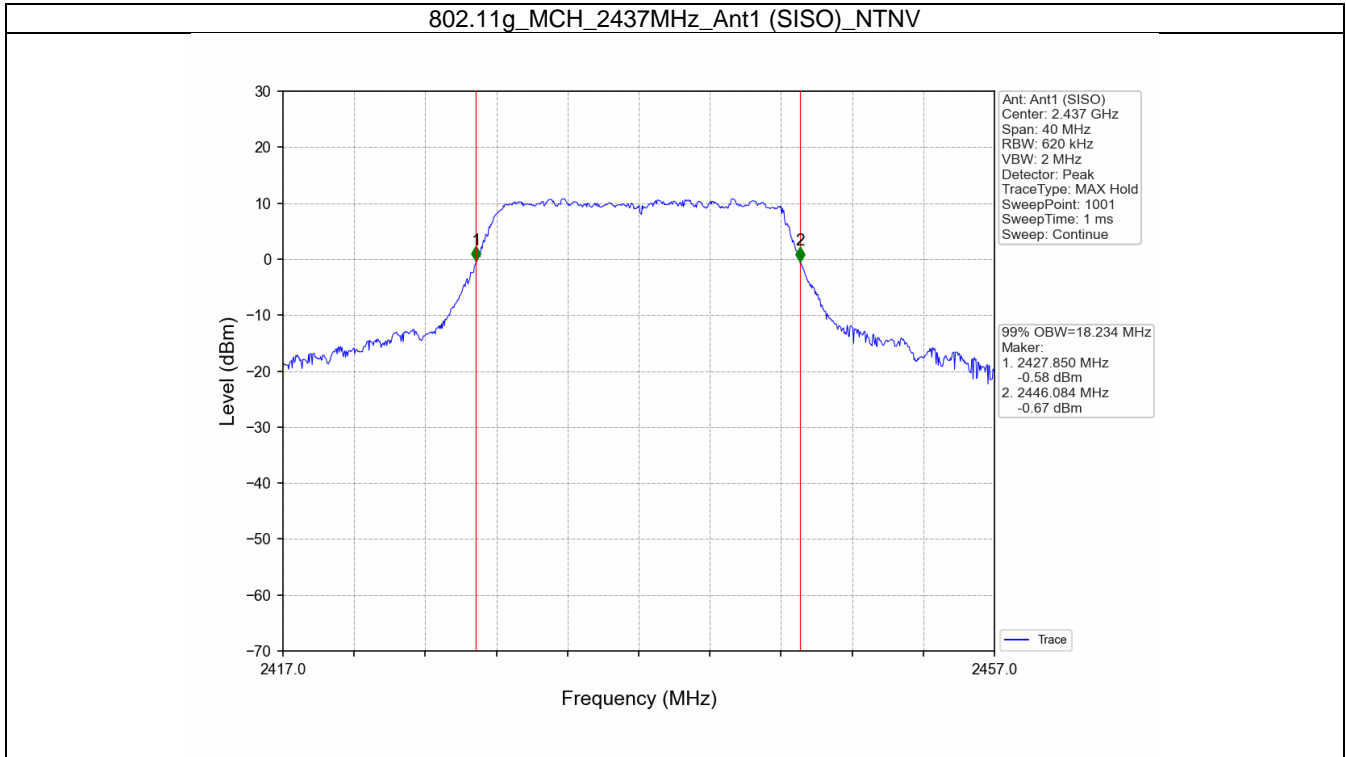
2.1.1 Test Result

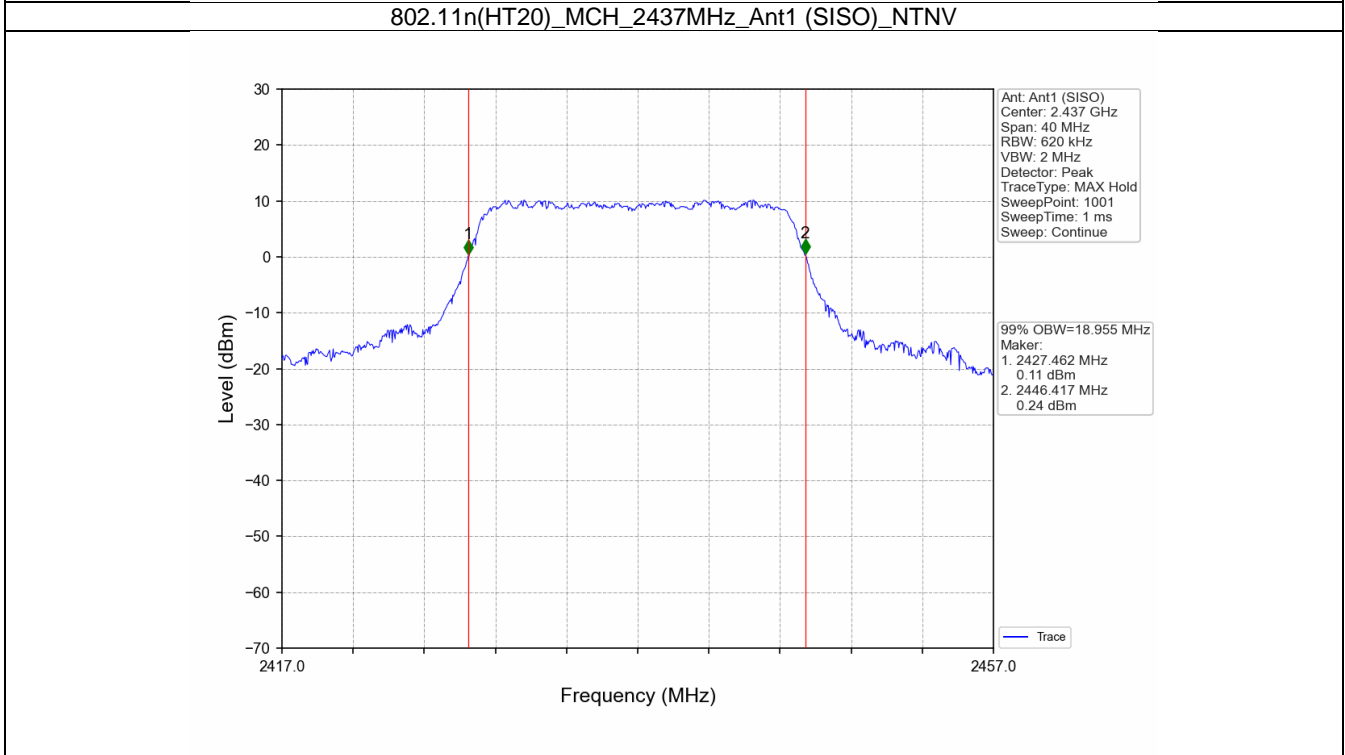
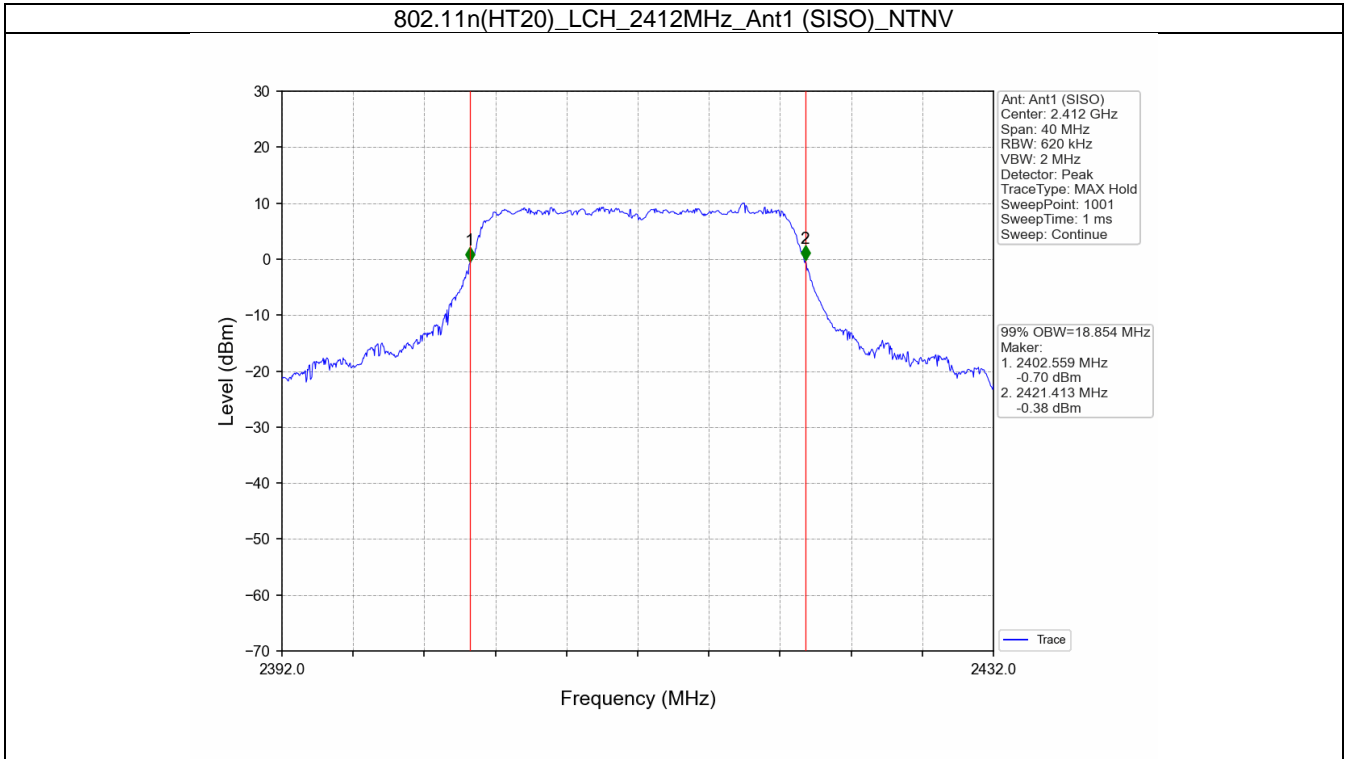
Mode	TX Type	Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Limit (MHz)	Verdict
802.11b	SISO	2412	1	14.591	/	Pass
		2437	1	14.580	/	Pass
		2462	1	14.642	/	Pass
802.11g	SISO	2412	1	18.945	/	Pass
		2437	1	18.234	/	Pass
		2462	1	18.735	/	Pass
802.11n (HT20)	SISO	2412	1	18.854	/	Pass
		2437	1	18.955	/	Pass
		2462	1	19.177	/	Pass
802.11n (HT40)	SISO	2422	1	37.079	/	Pass
		2437	1	37.232	/	Pass
		2452	1	37.258	/	Pass

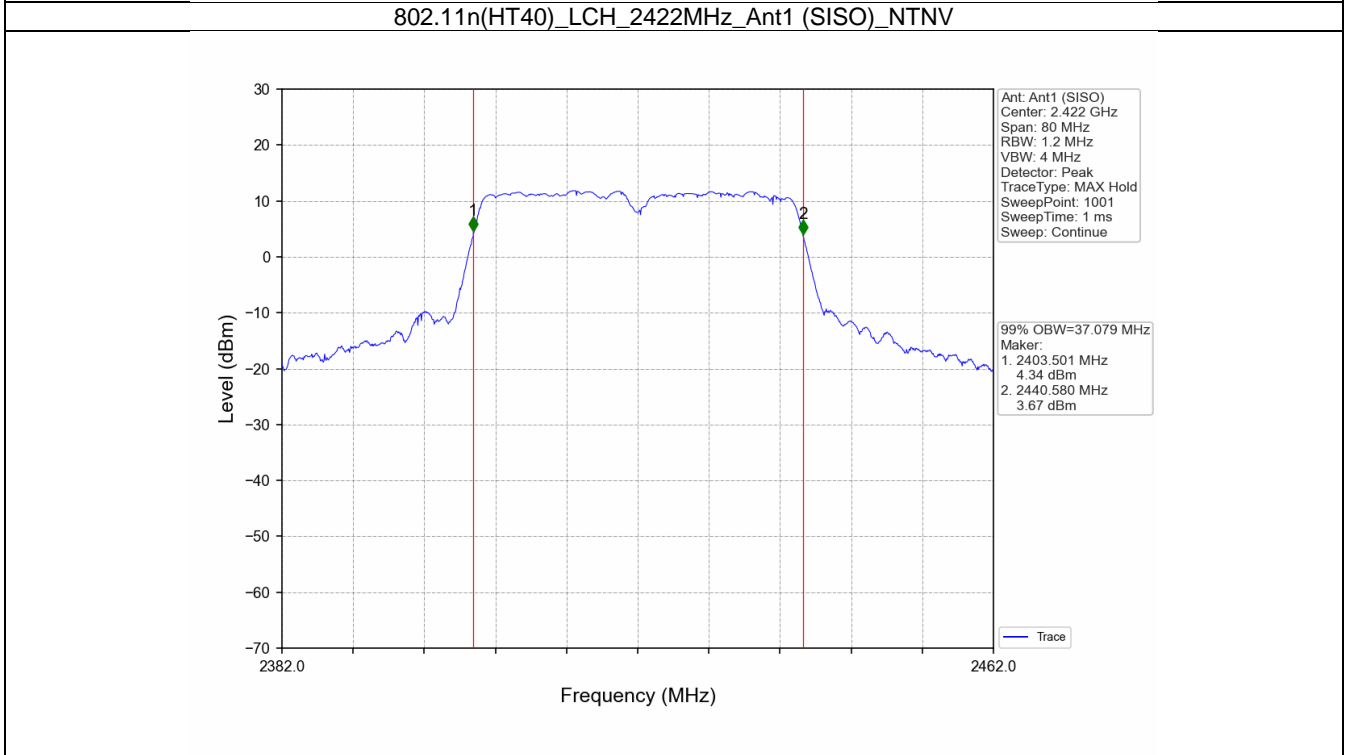
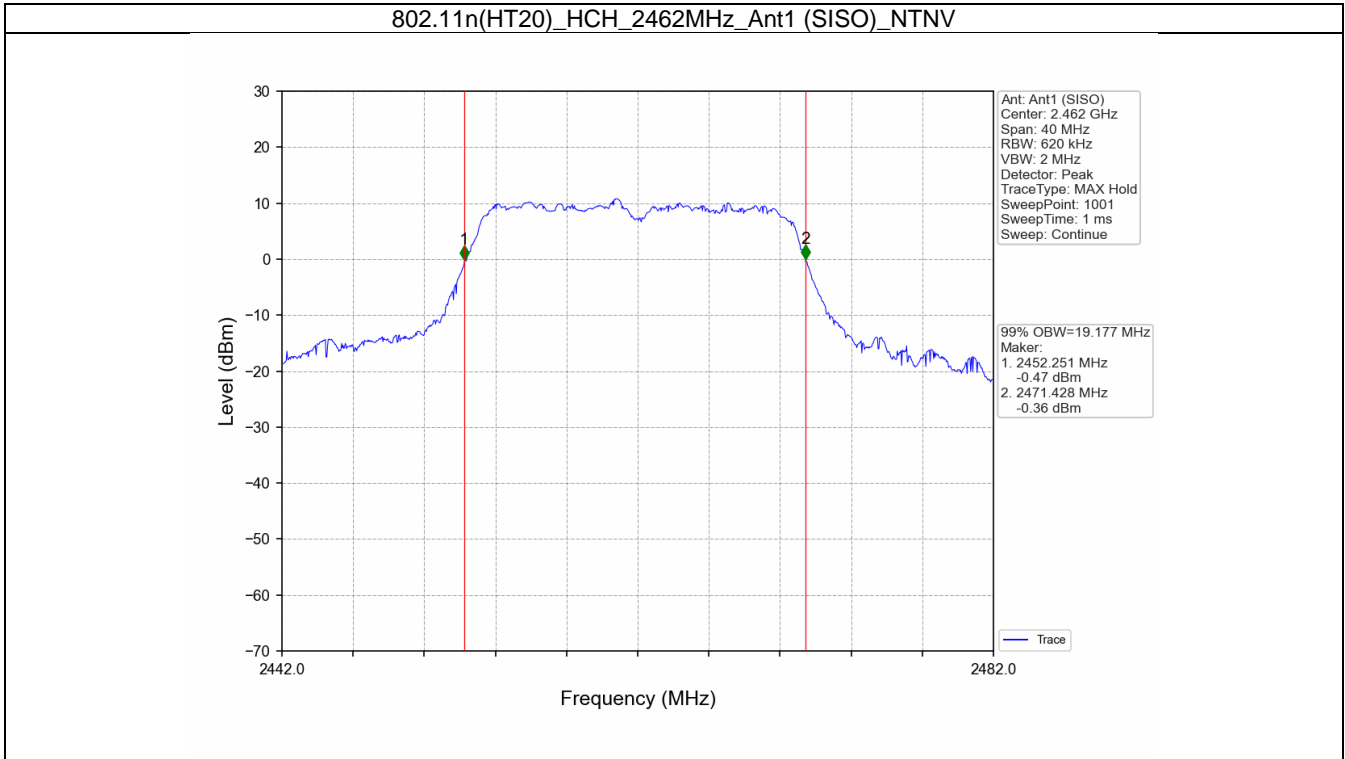
2.1.2 Test Graph

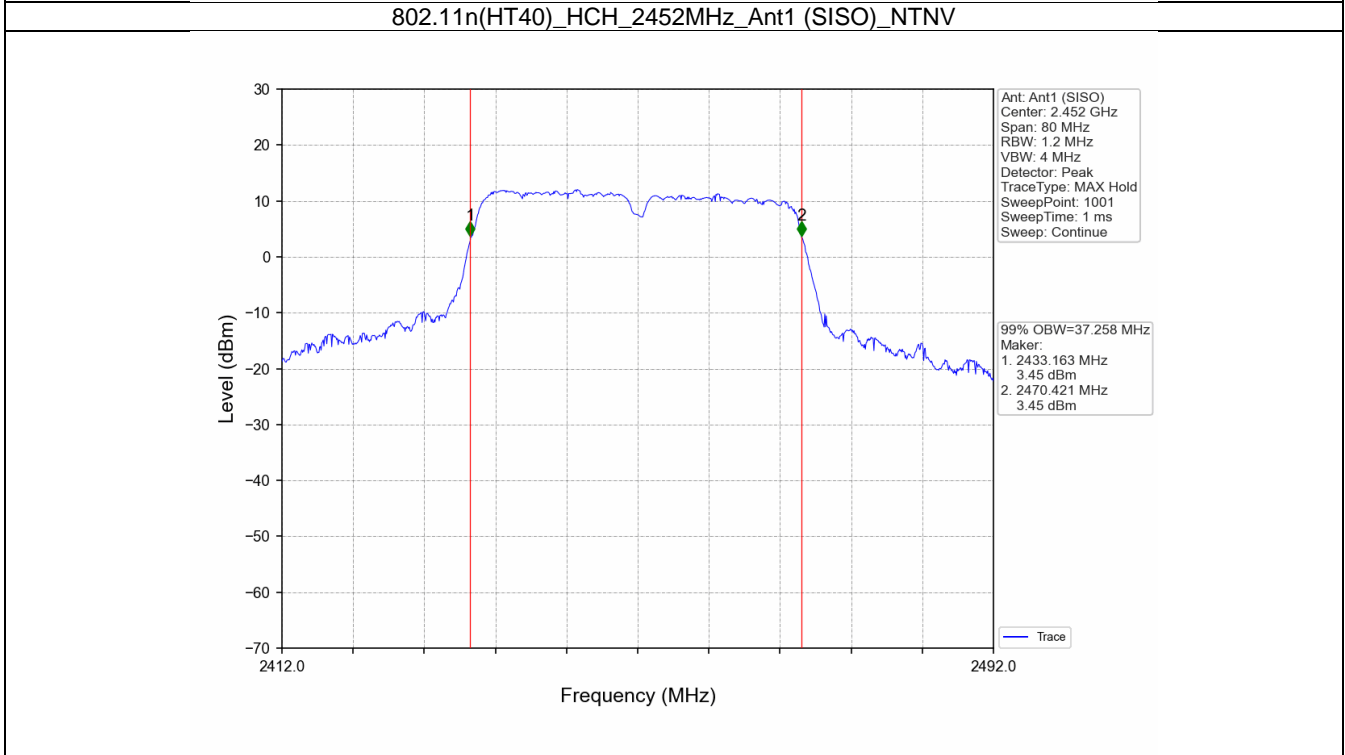
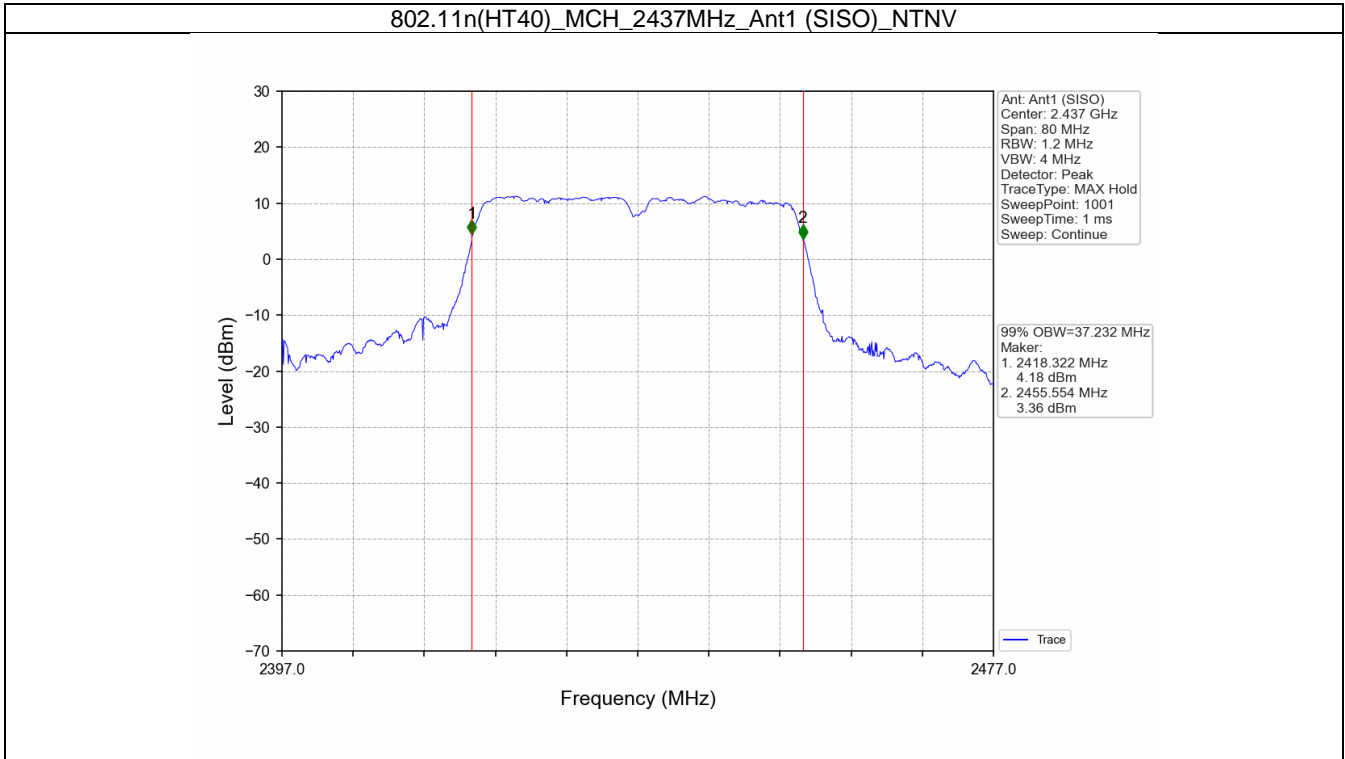












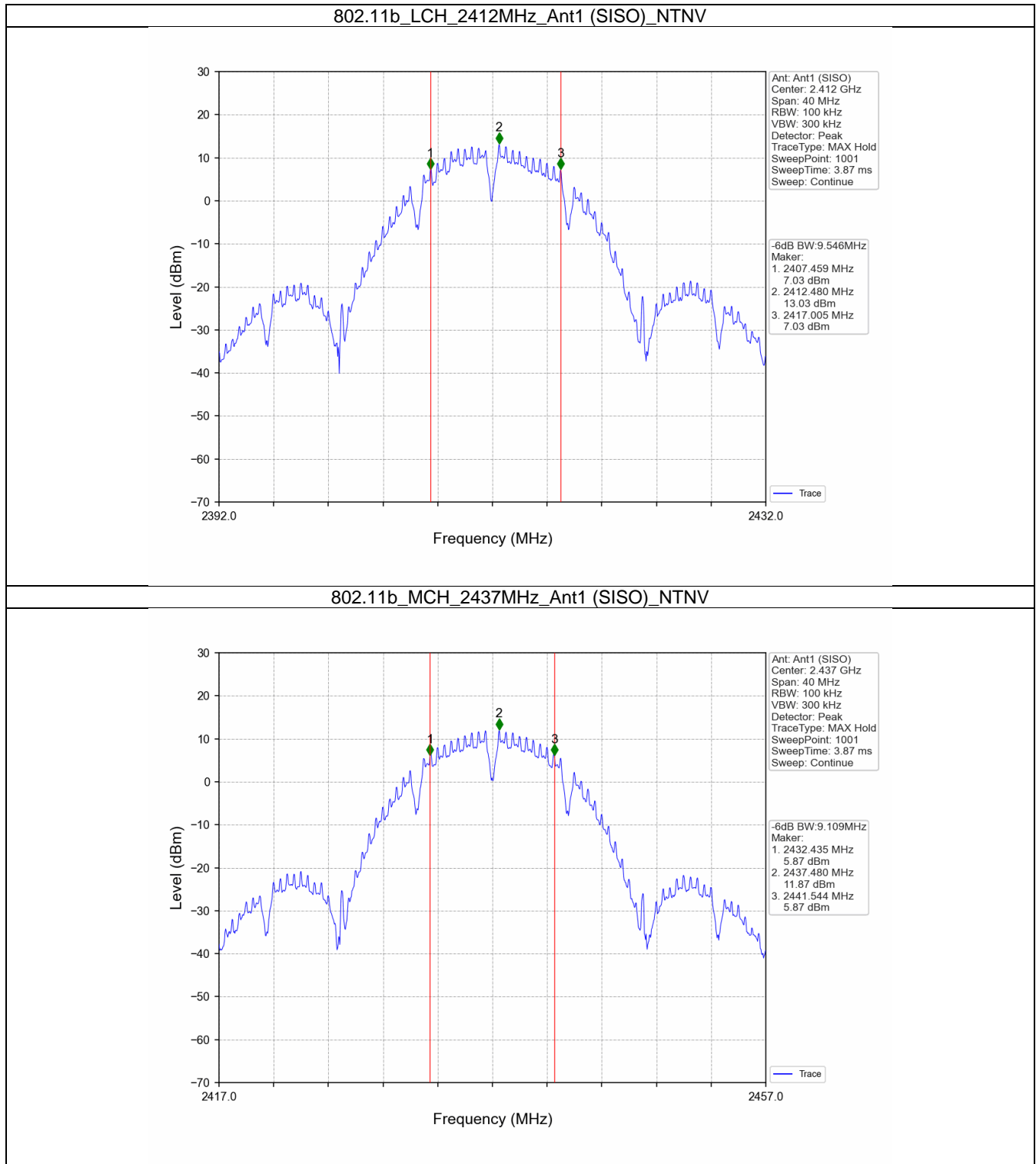


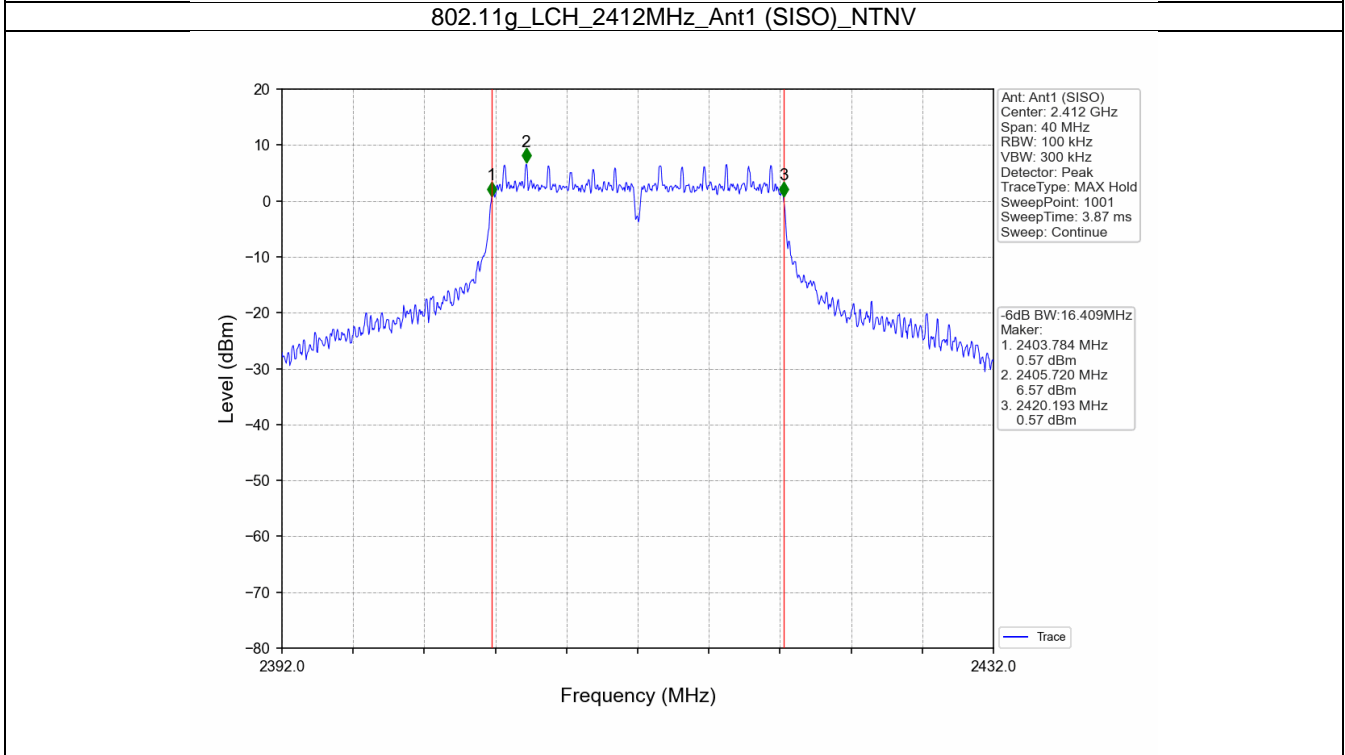
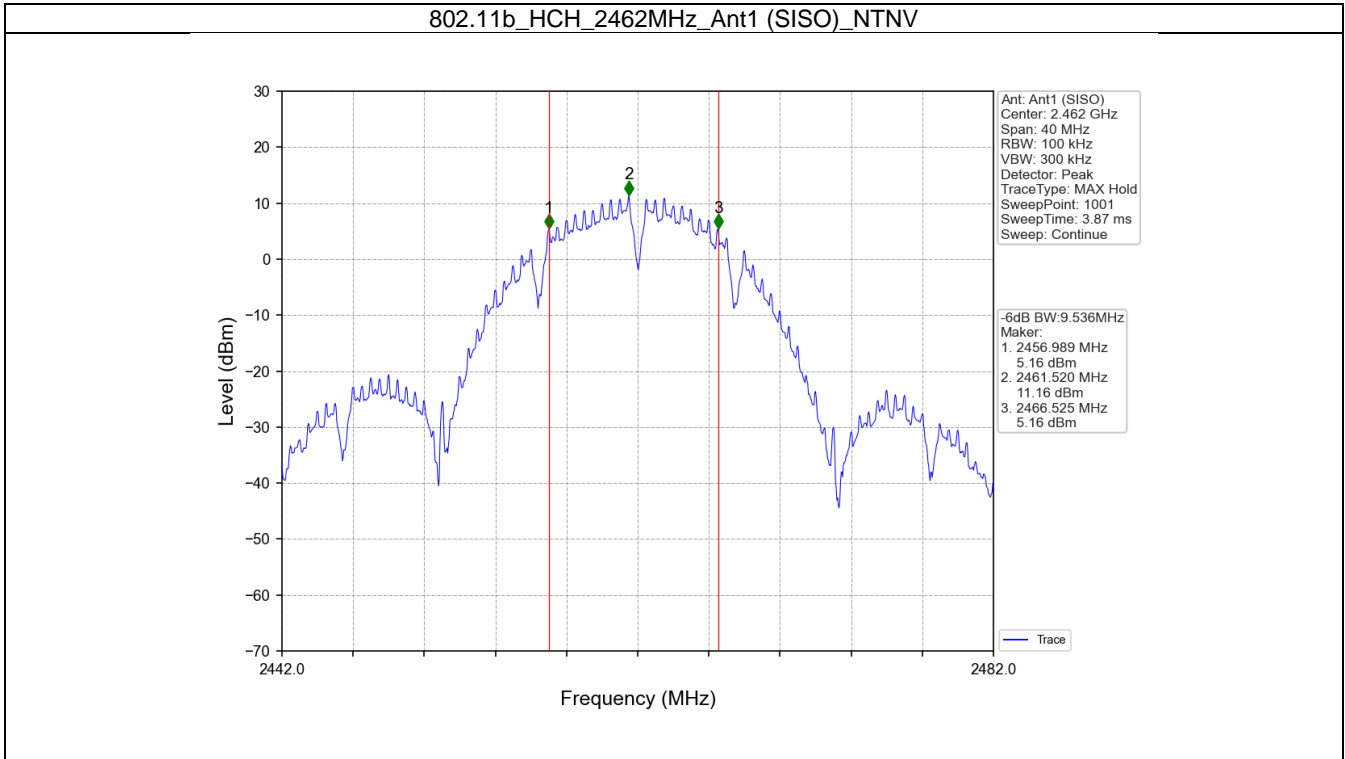
2.2 6dB BW

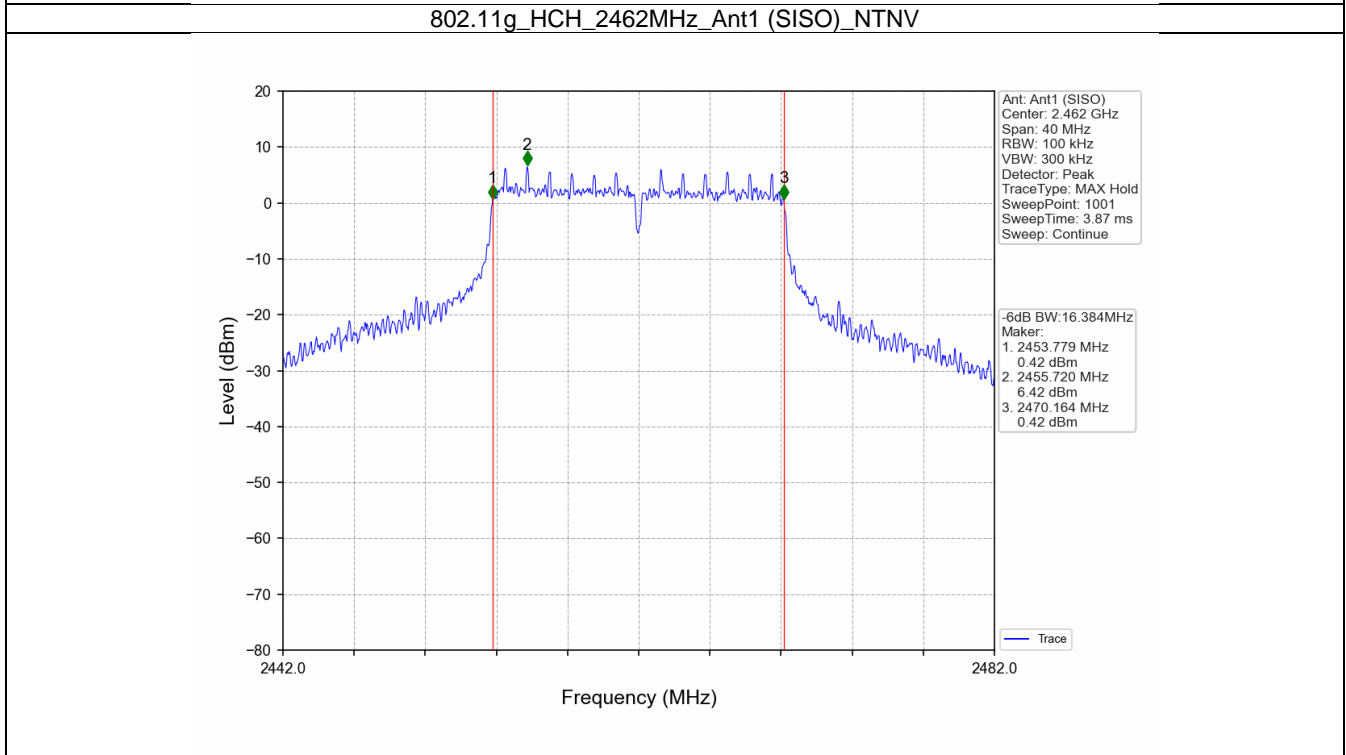
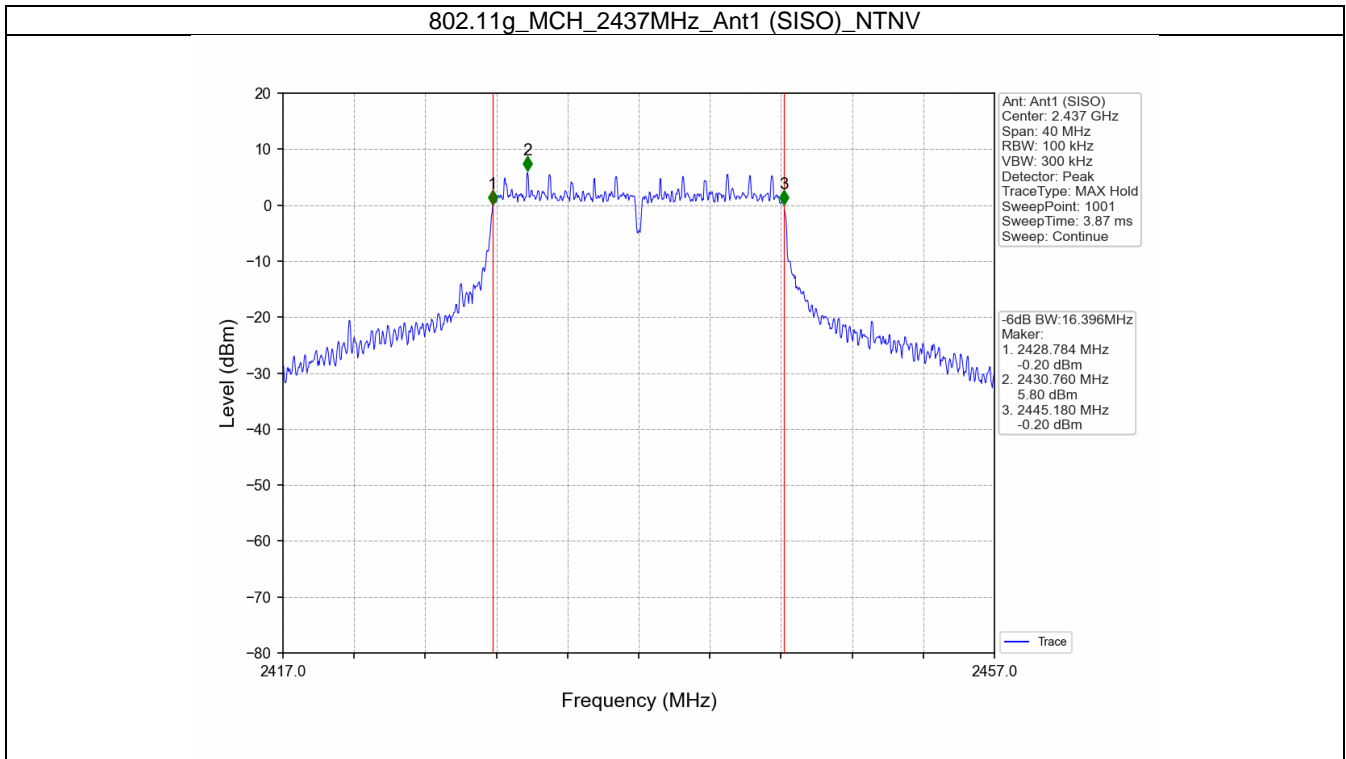
2.2.1 Test Result

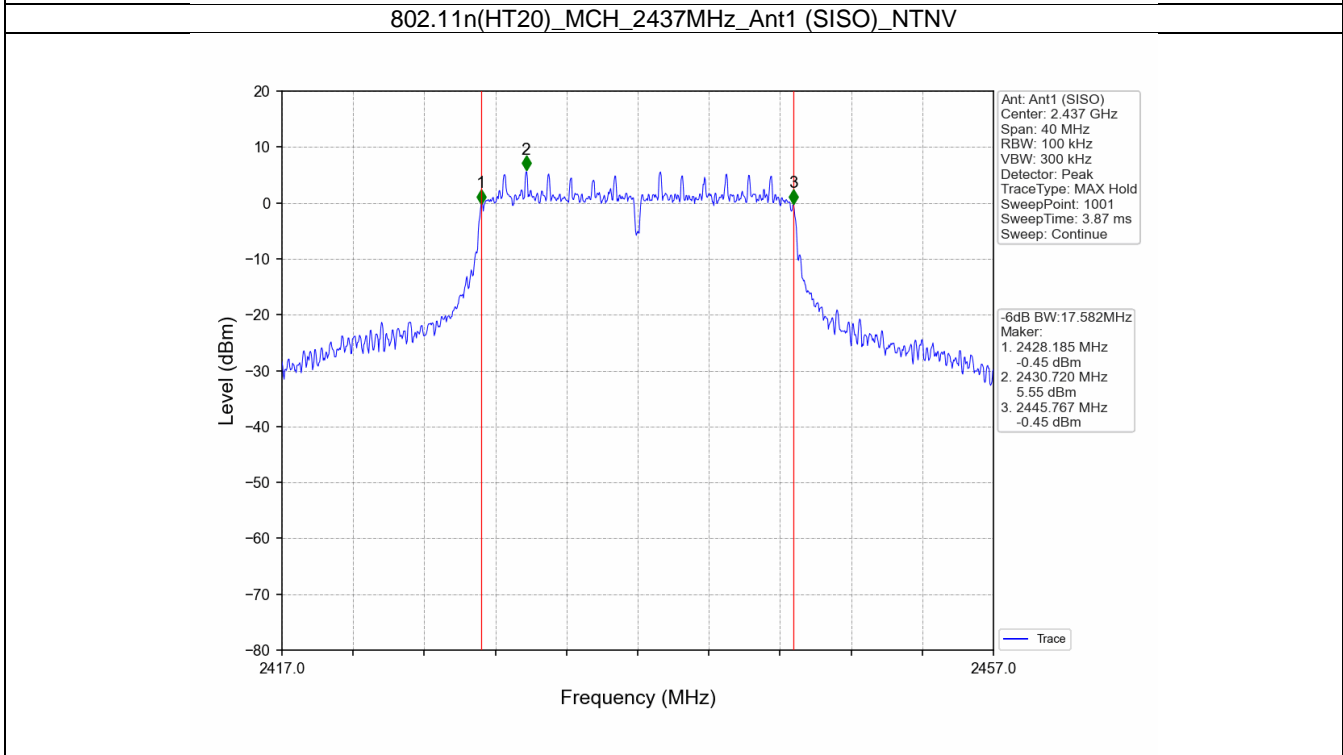
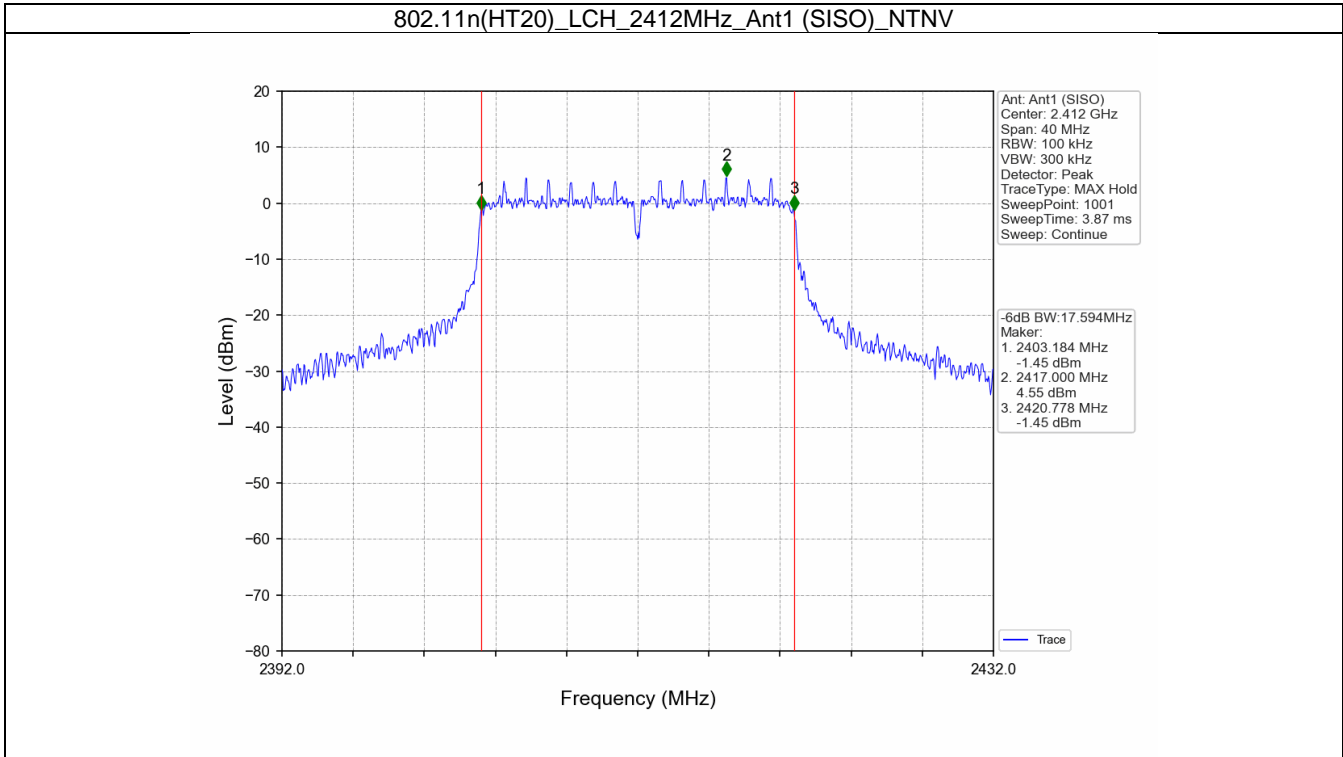
Mode	TX Type	Frequency (MHz)	Ant	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
802.11b	SISO	2412	1	9.546	≥ 0.5	Pass
		2437	1	9.109	≥ 0.5	Pass
		2462	1	9.536	≥ 0.5	Pass
802.11g	SISO	2412	1	16.409	≥ 0.5	Pass
		2437	1	16.396	≥ 0.5	Pass
		2462	1	16.384	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.594	≥ 0.5	Pass
		2437	1	17.582	≥ 0.5	Pass
		2462	1	17.332	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	35.821	≥ 0.5	Pass
		2437	1	35.764	≥ 0.5	Pass
		2452	1	35.558	≥ 0.5	Pass

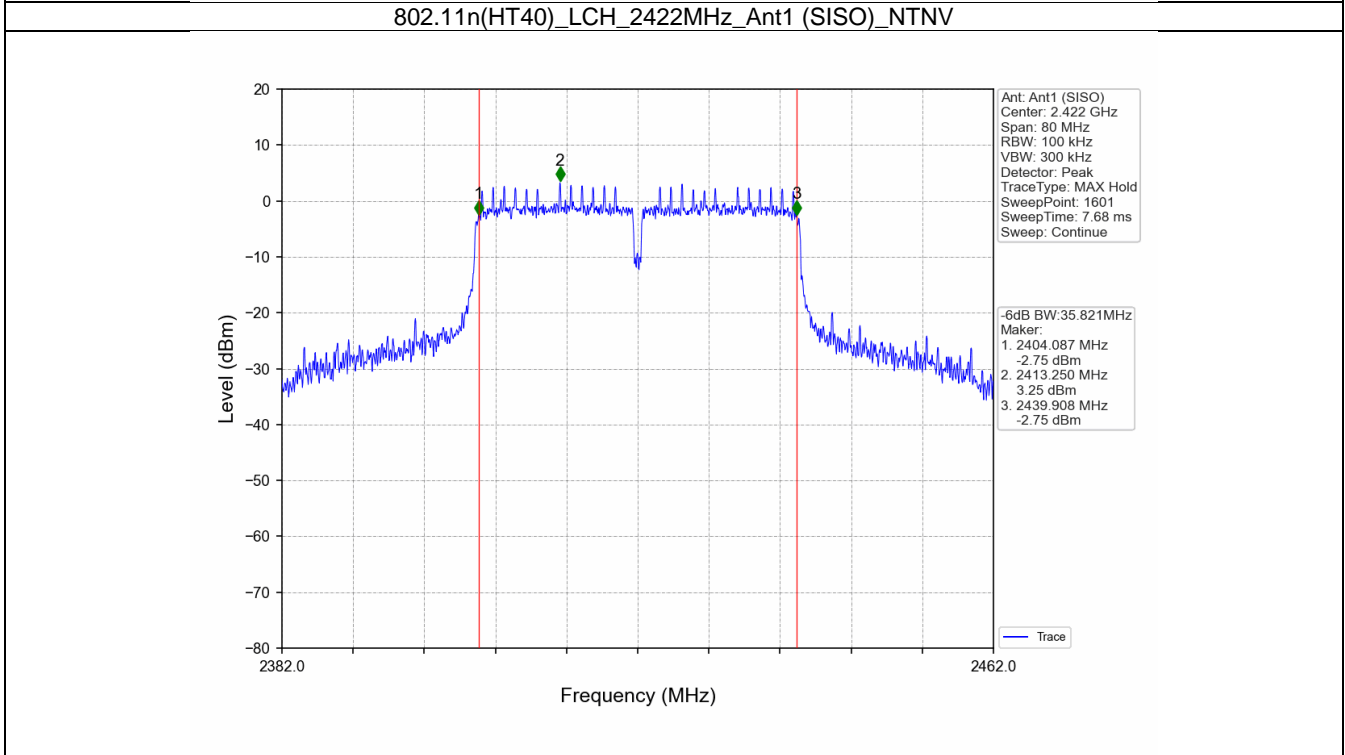
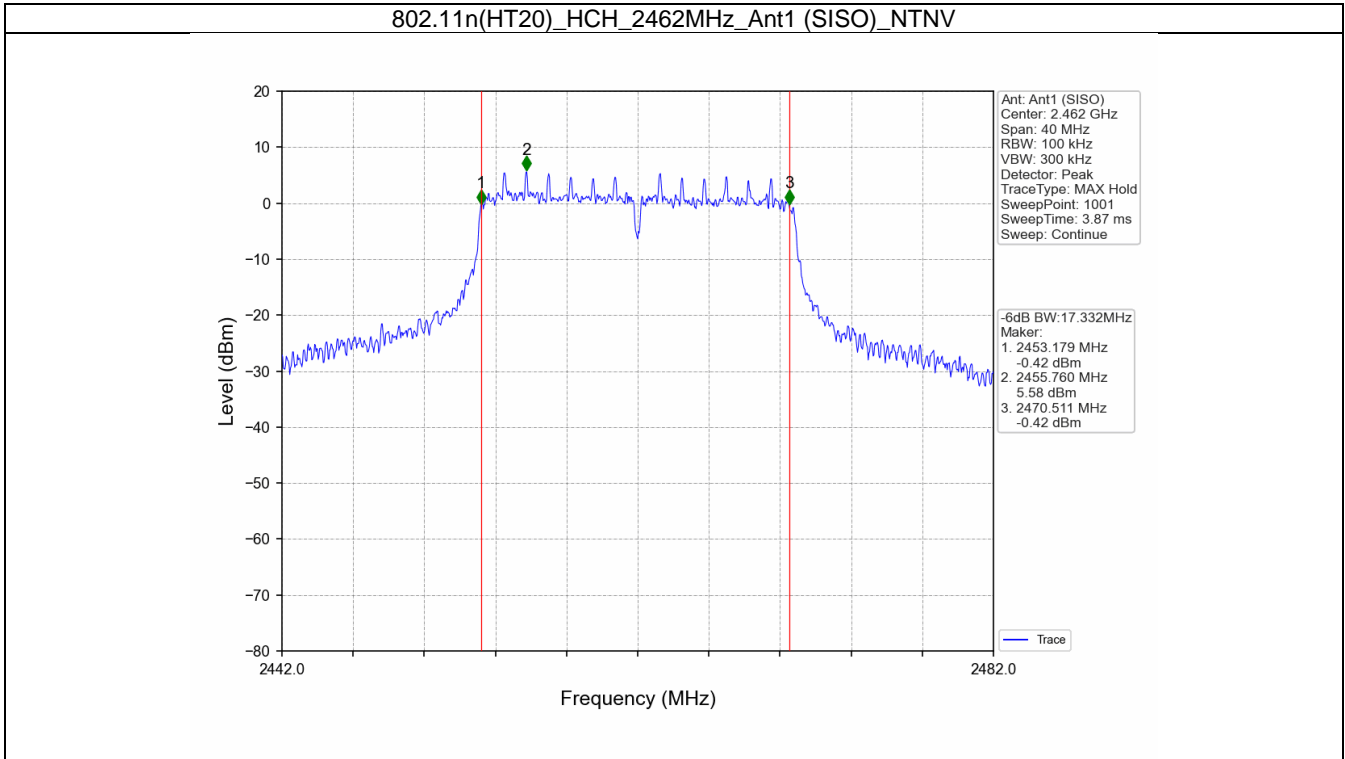
2.2.2 Test Graph

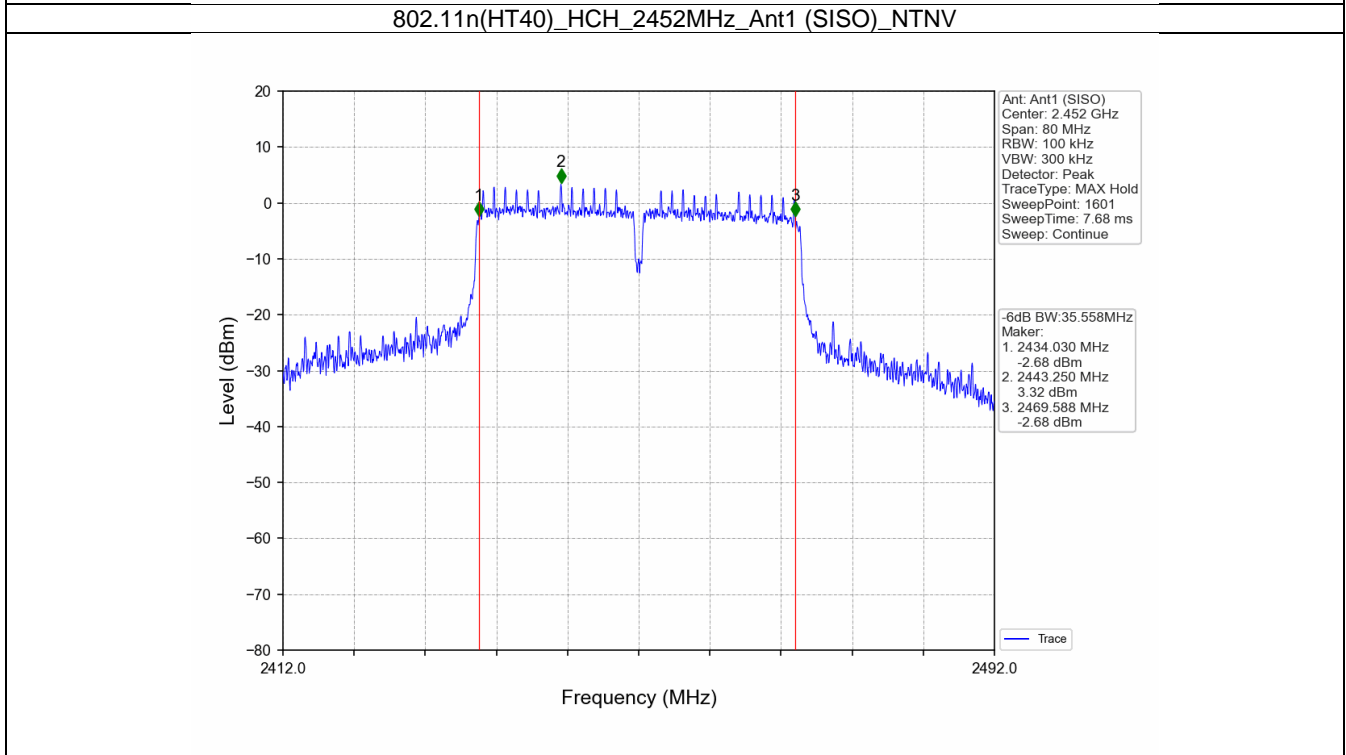
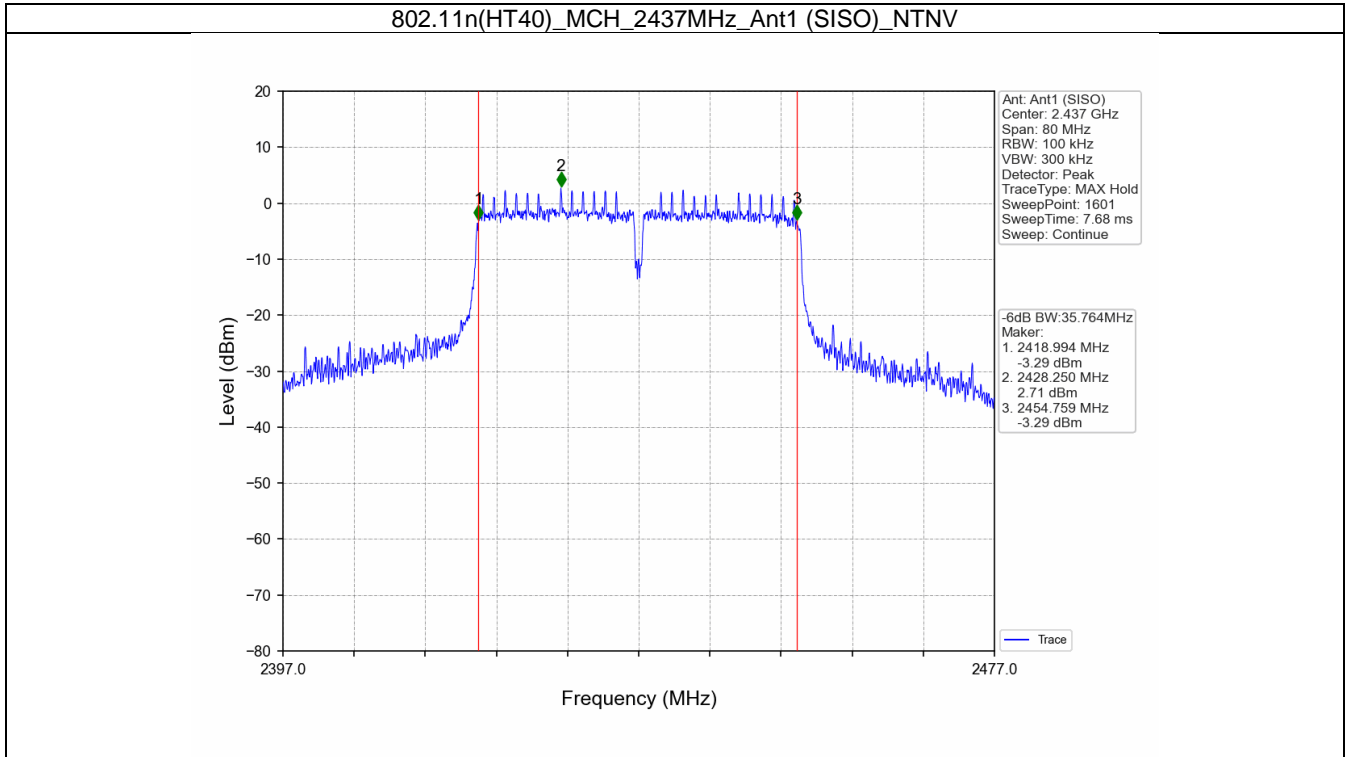












3. Maximum Conducted Output Power

3.1 Power

3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Measured Peak Output Power (dBm)		Verdict
			Ant1	Limit	
802.11b	SISO	2412	23.78	<=30	Pass
		2437	22.78	<=30	Pass
		2462	22.20	<=30	Pass
802.11g	SISO	2412	25.28	<=30	Pass
		2437	24.36	<=30	Pass
		2462	24.55	<=30	Pass
802.11n (HT20)	SISO	2412	23.37	<=30	Pass
		2437	24.10	<=30	Pass
		2462	23.72	<=30	Pass
802.11n (HT40)	SISO	2422	24.81	<=30	Pass
		2437	24.24	<=30	Pass
		2452	24.49	<=30	Pass

Note1: Antenna Gain: Ant1: 3.77dBi;

4. Maximum Power Spectral Density

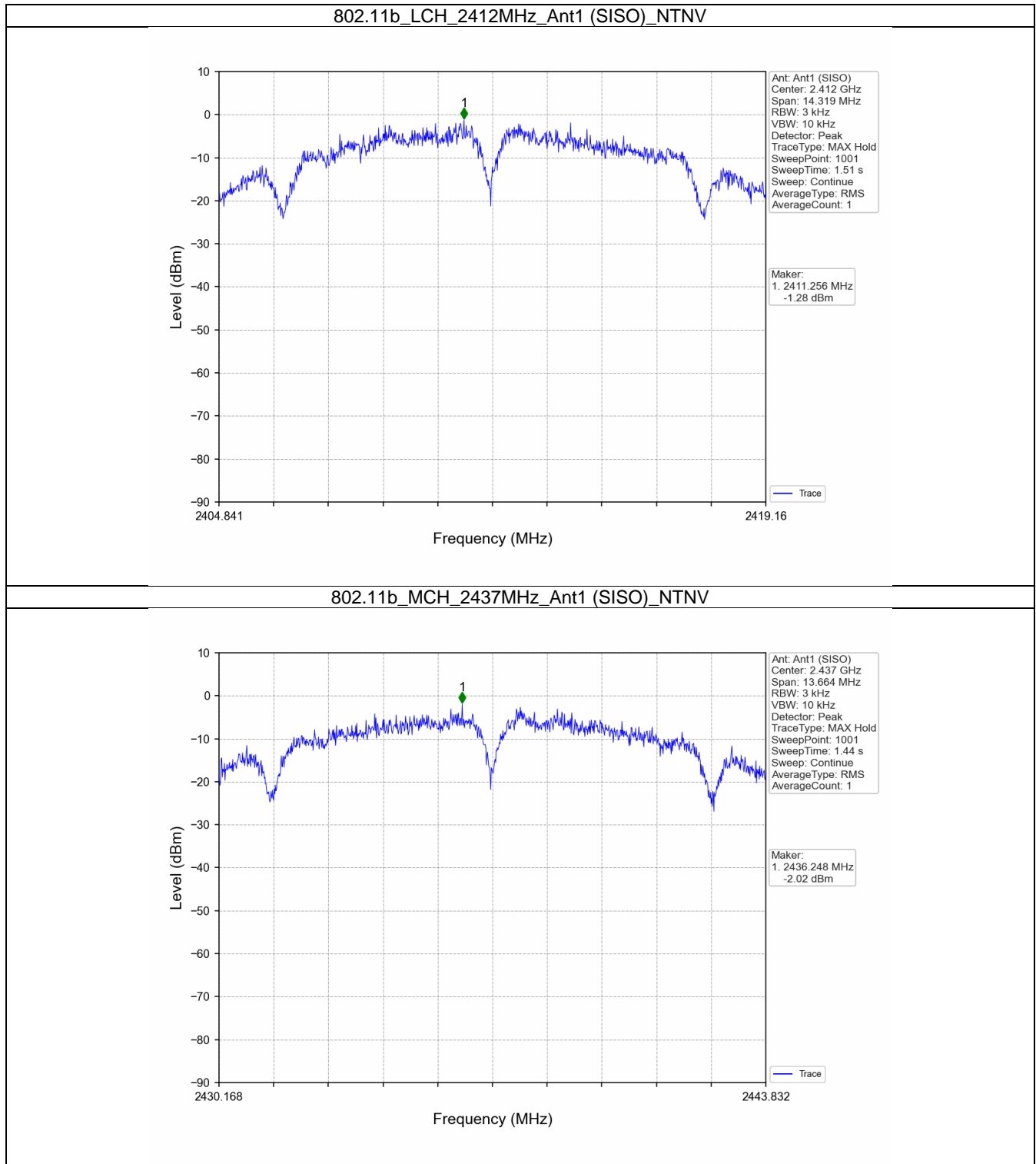
4.1 PSD

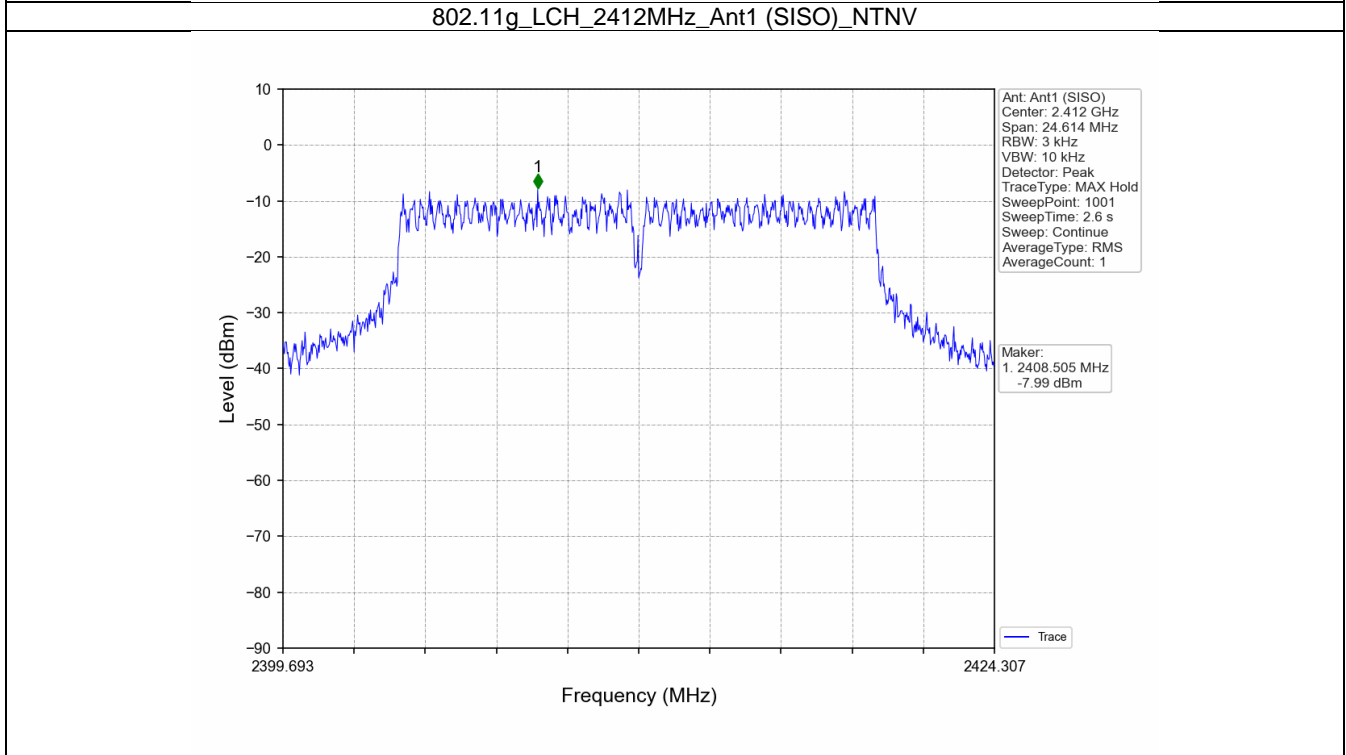
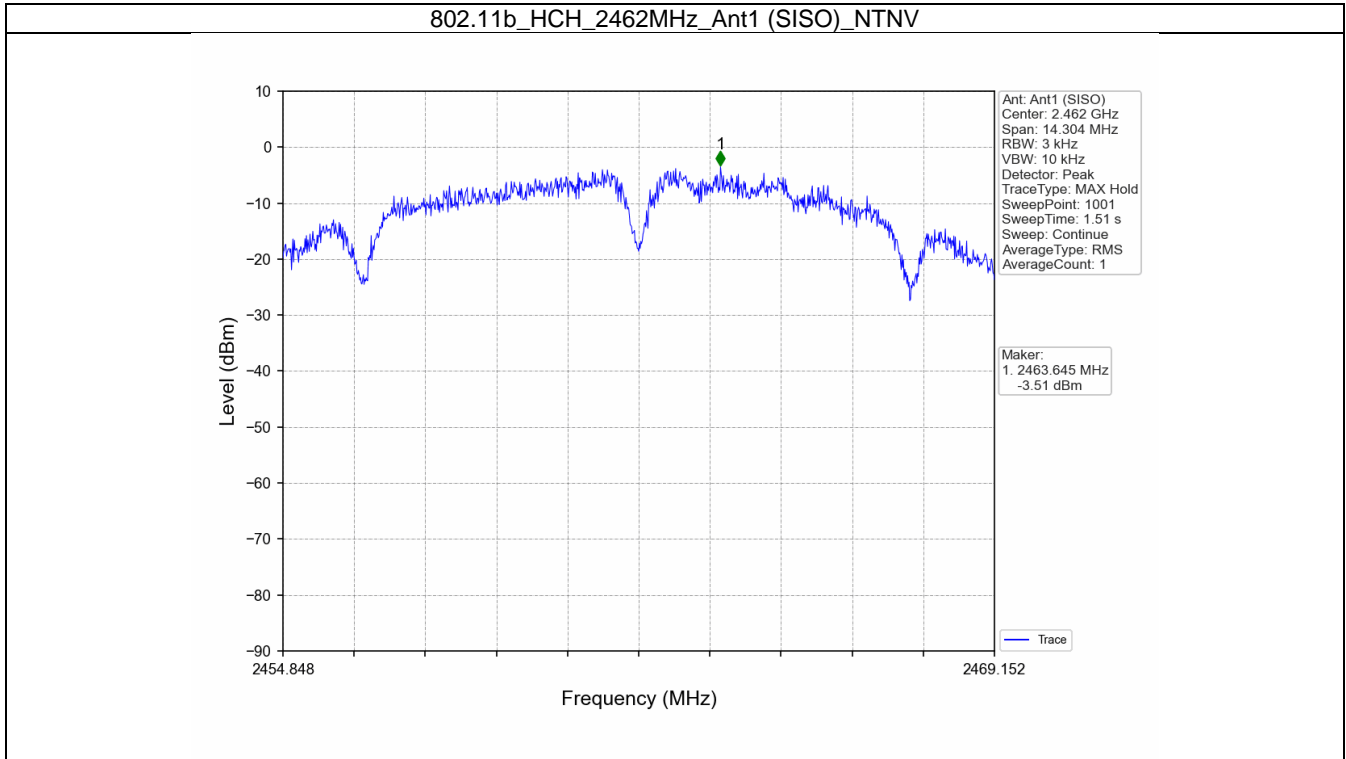
4.1.1 Test Result

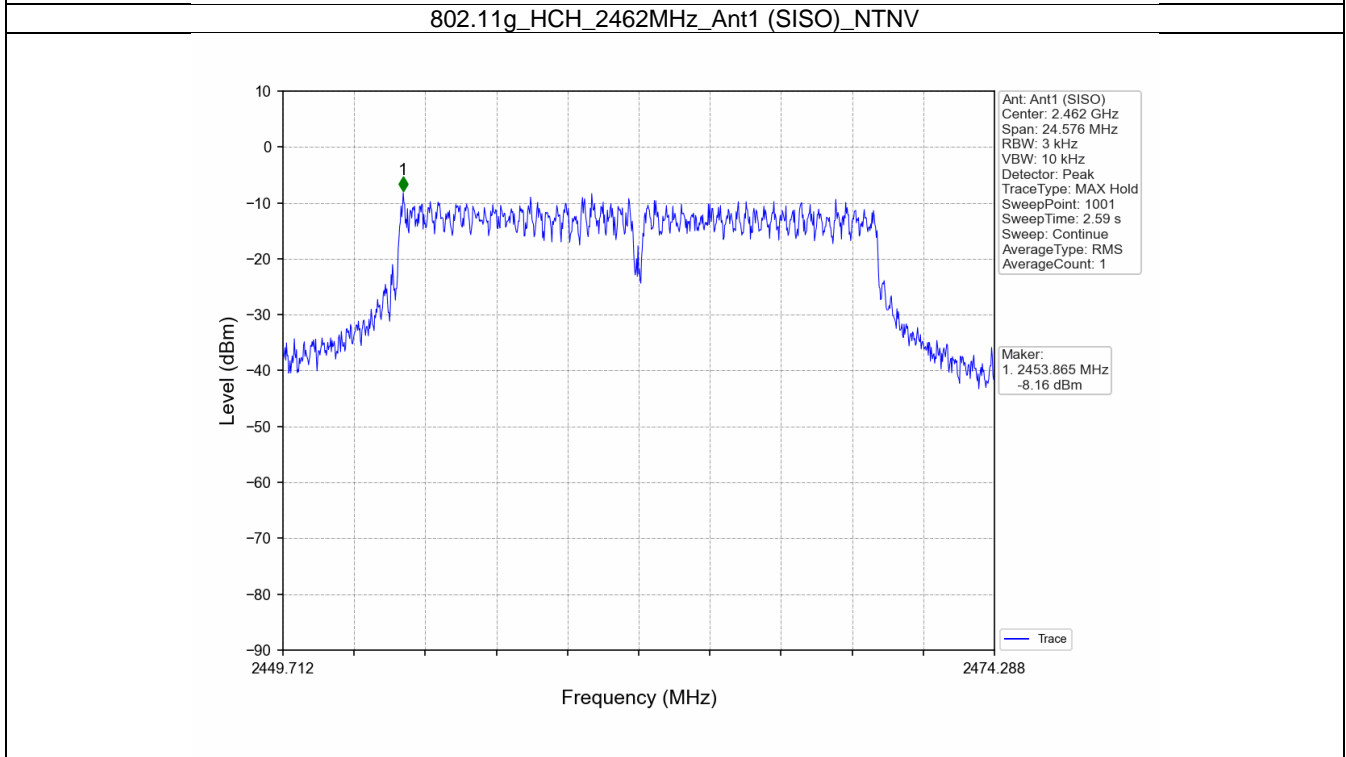
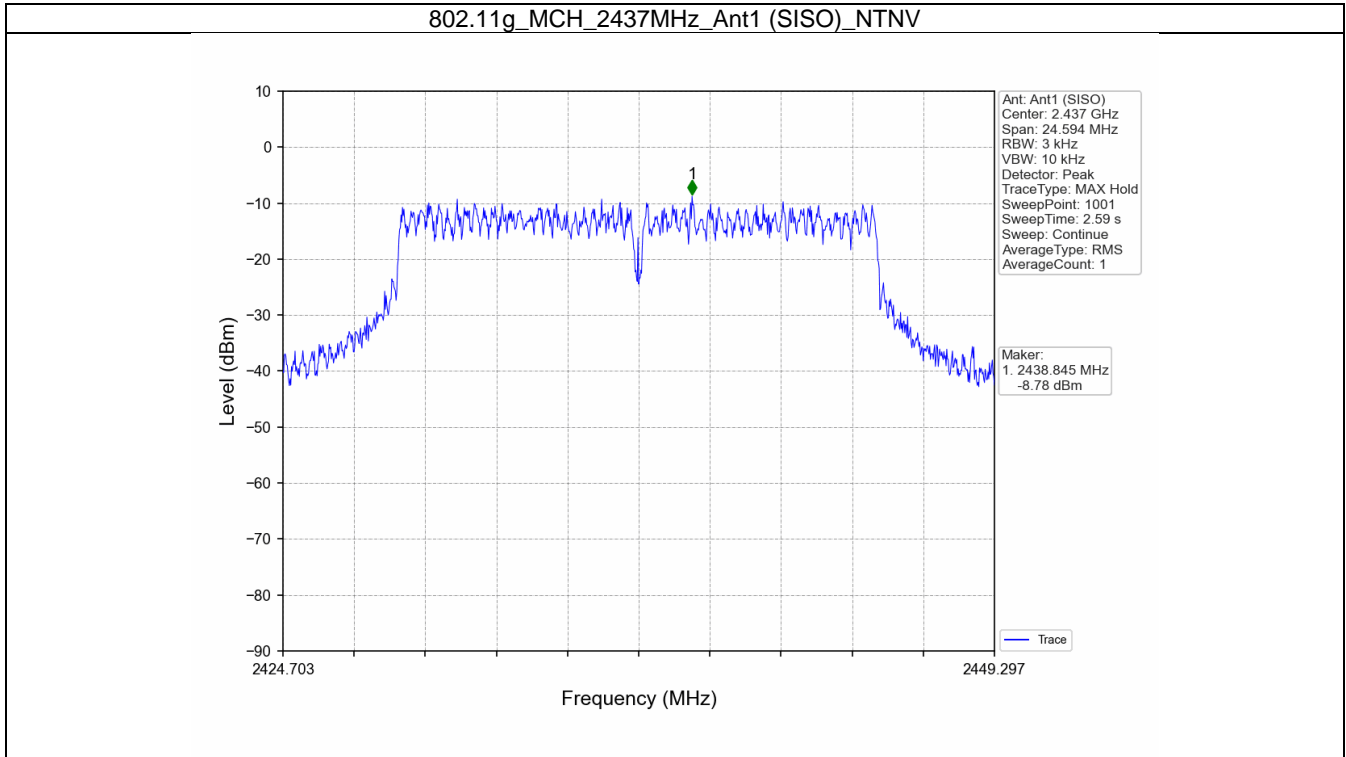
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			Ant1	Limit	
802.11b	SISO	2412	-1.28	<=8	Pass
		2437	-2.02	<=8	Pass
		2462	-3.51	<=8	Pass
802.11g	SISO	2412	-7.99	<=8	Pass
		2437	-8.78	<=8	Pass
		2462	-8.16	<=8	Pass
802.11n (HT20)	SISO	2412	-9.74	<=8	Pass
		2437	-9.39	<=8	Pass
		2462	-8.49	<=8	Pass
802.11n (HT40)	SISO	2422	-10.99	<=8	Pass
		2437	-11.41	<=8	Pass
		2452	-10.88	<=8	Pass

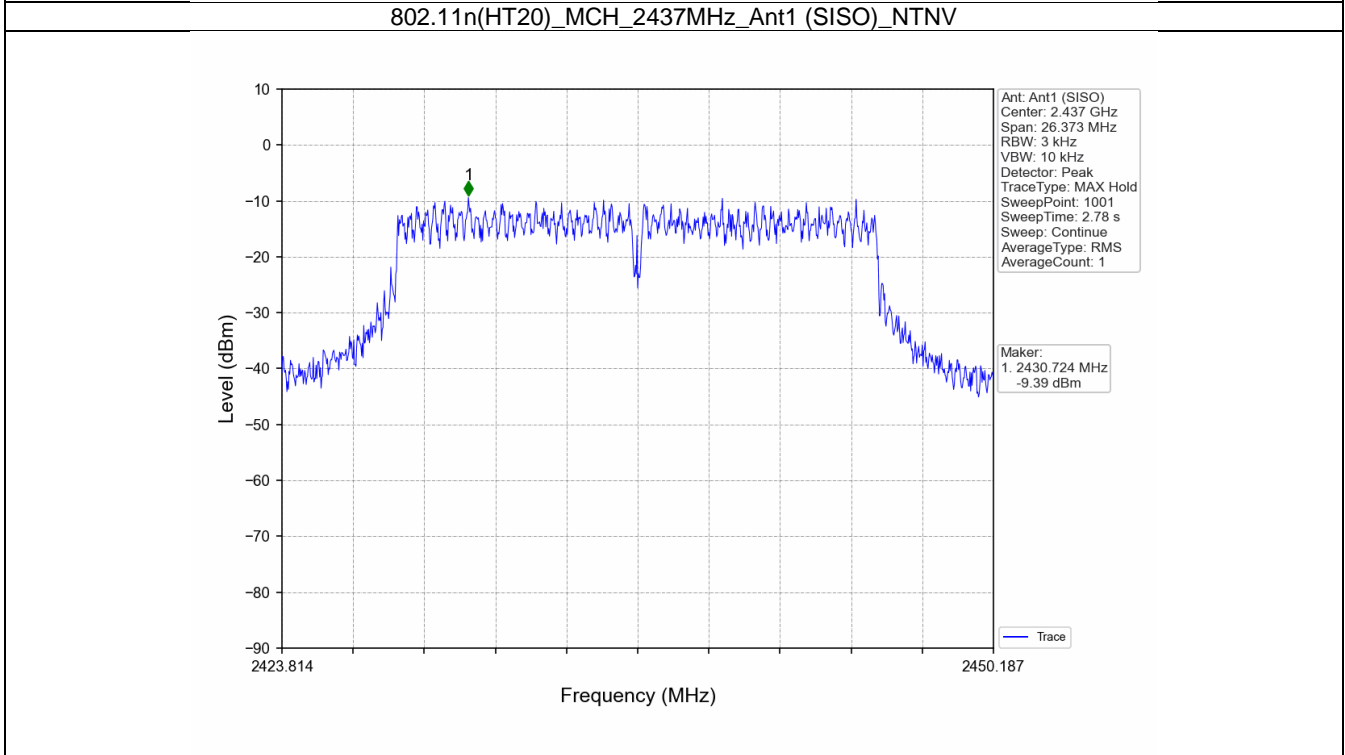
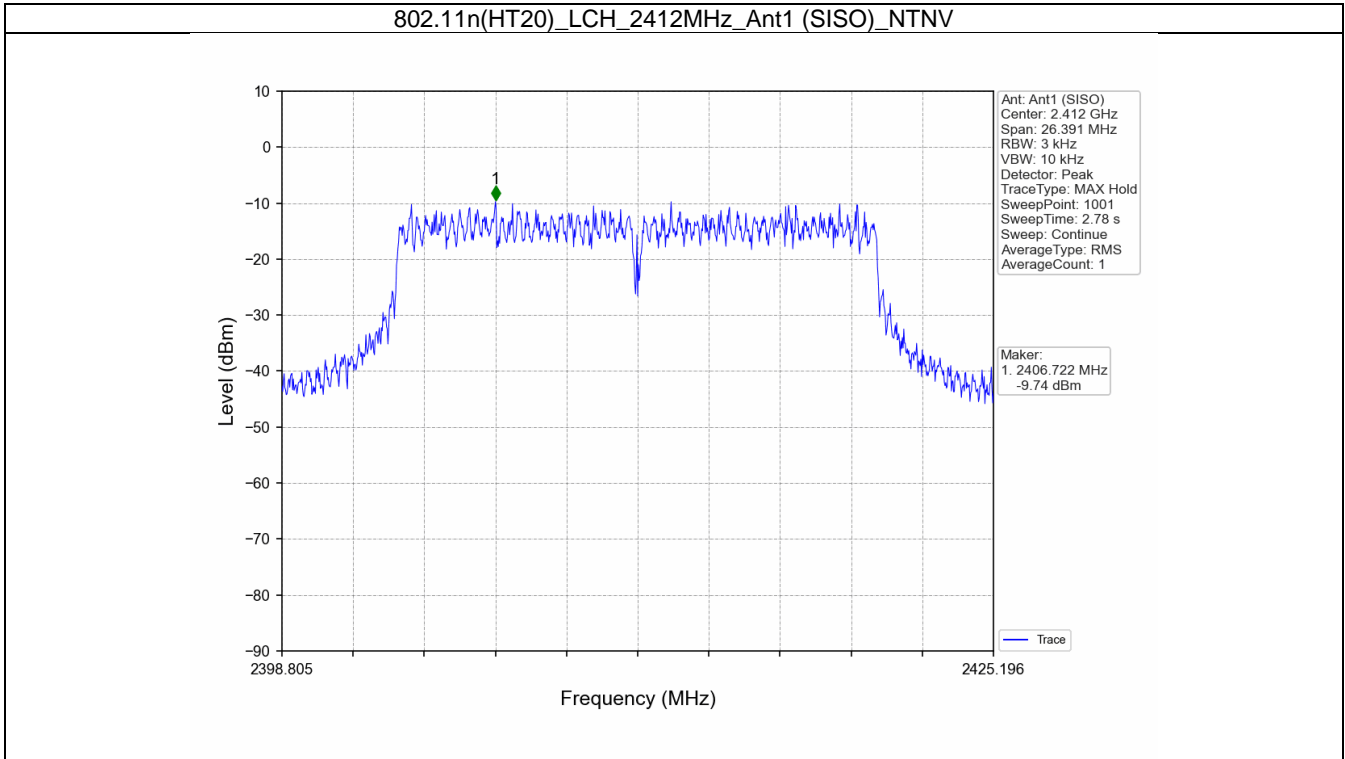
Note1: Antenna Gain: Ant1: 3.77dBi;

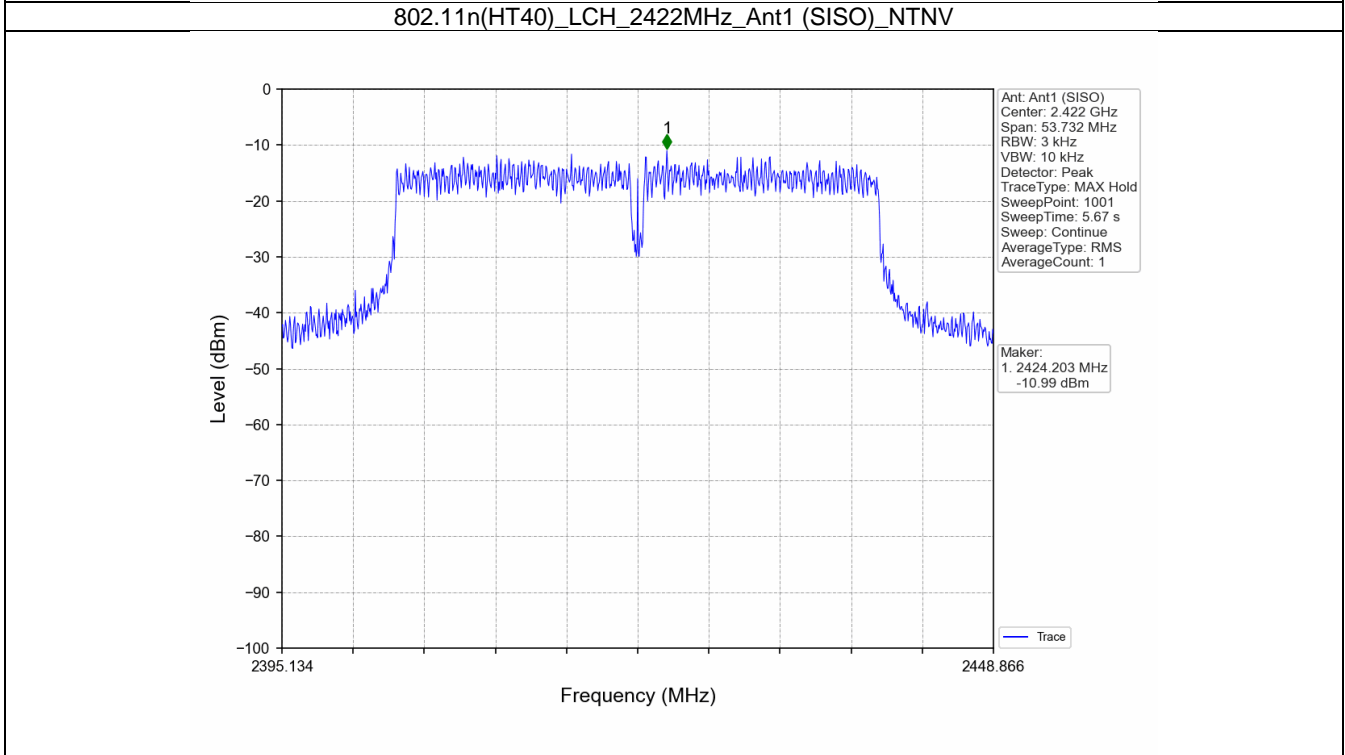
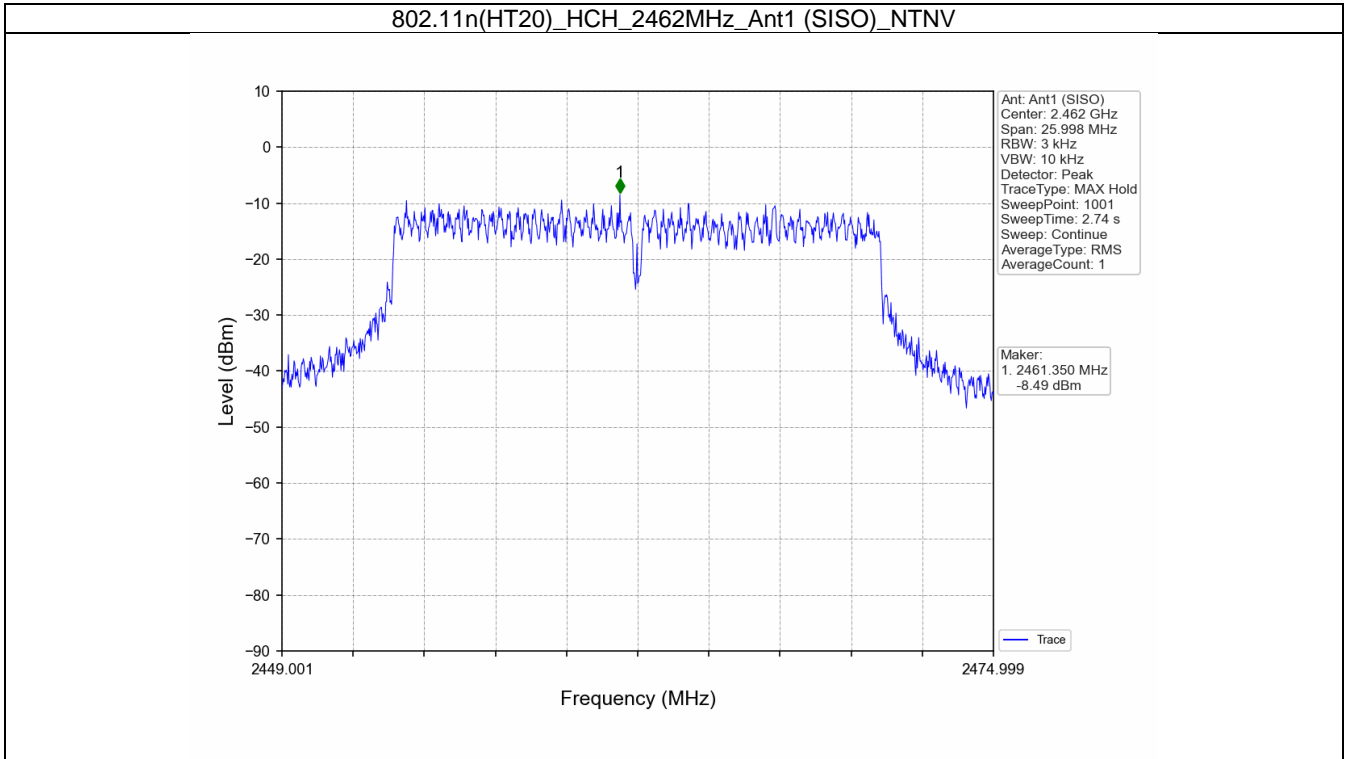
4.1.2 Test Graph

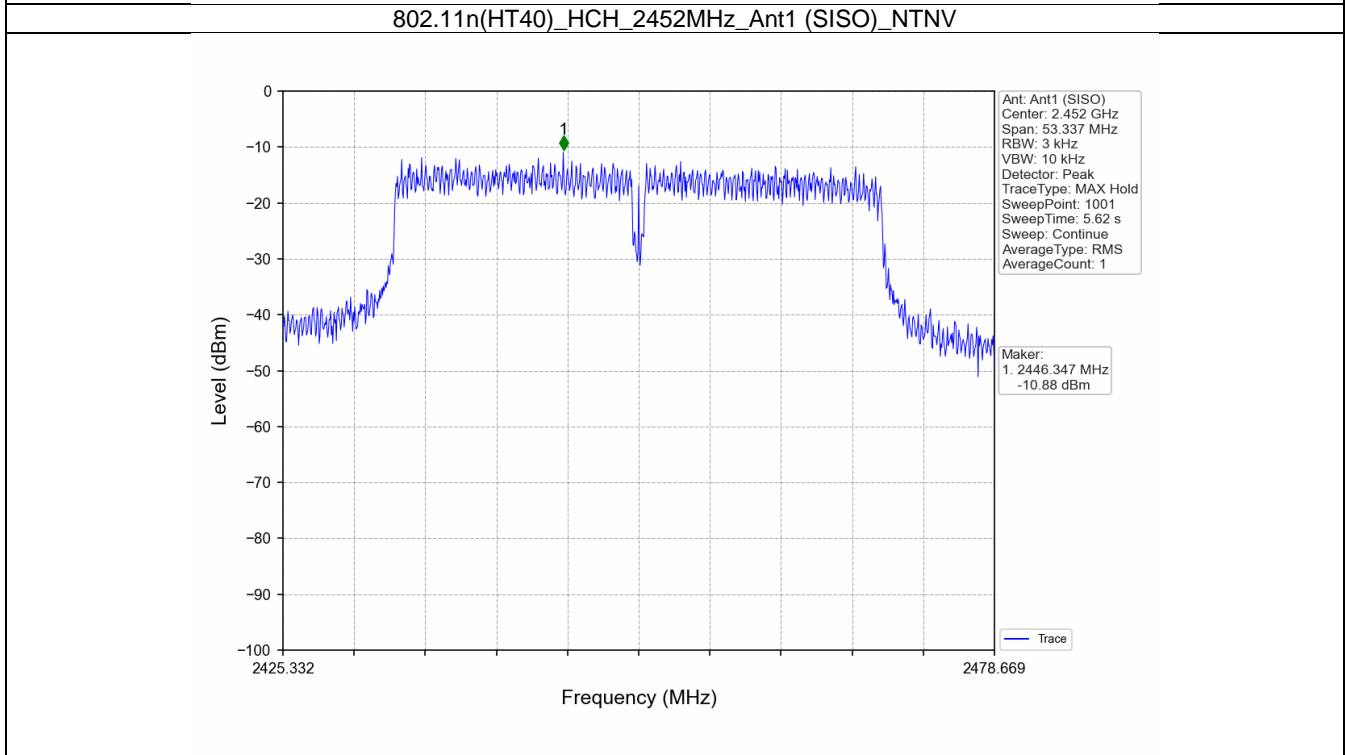












5. Unwanted Emissions In Non-restricted Frequency Bands

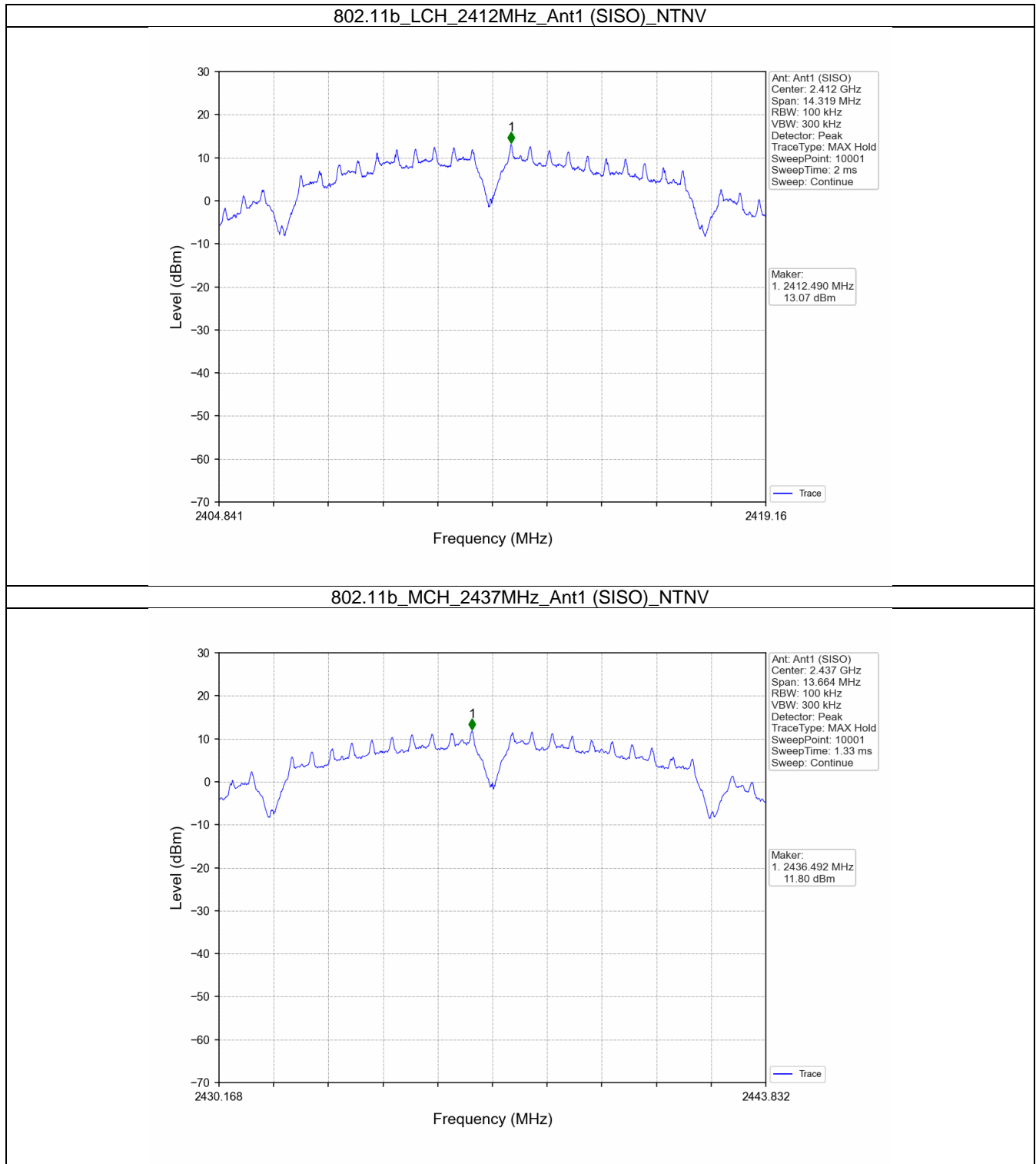
5.1 Ref

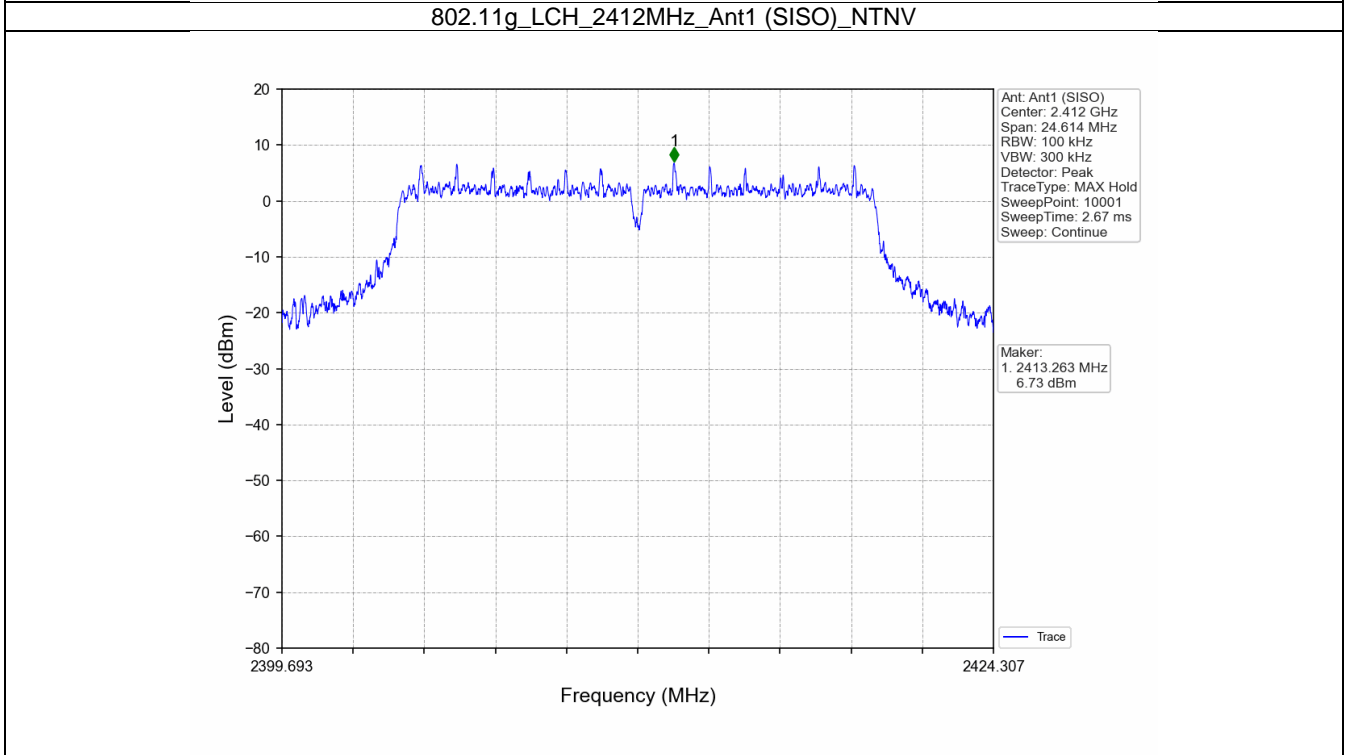
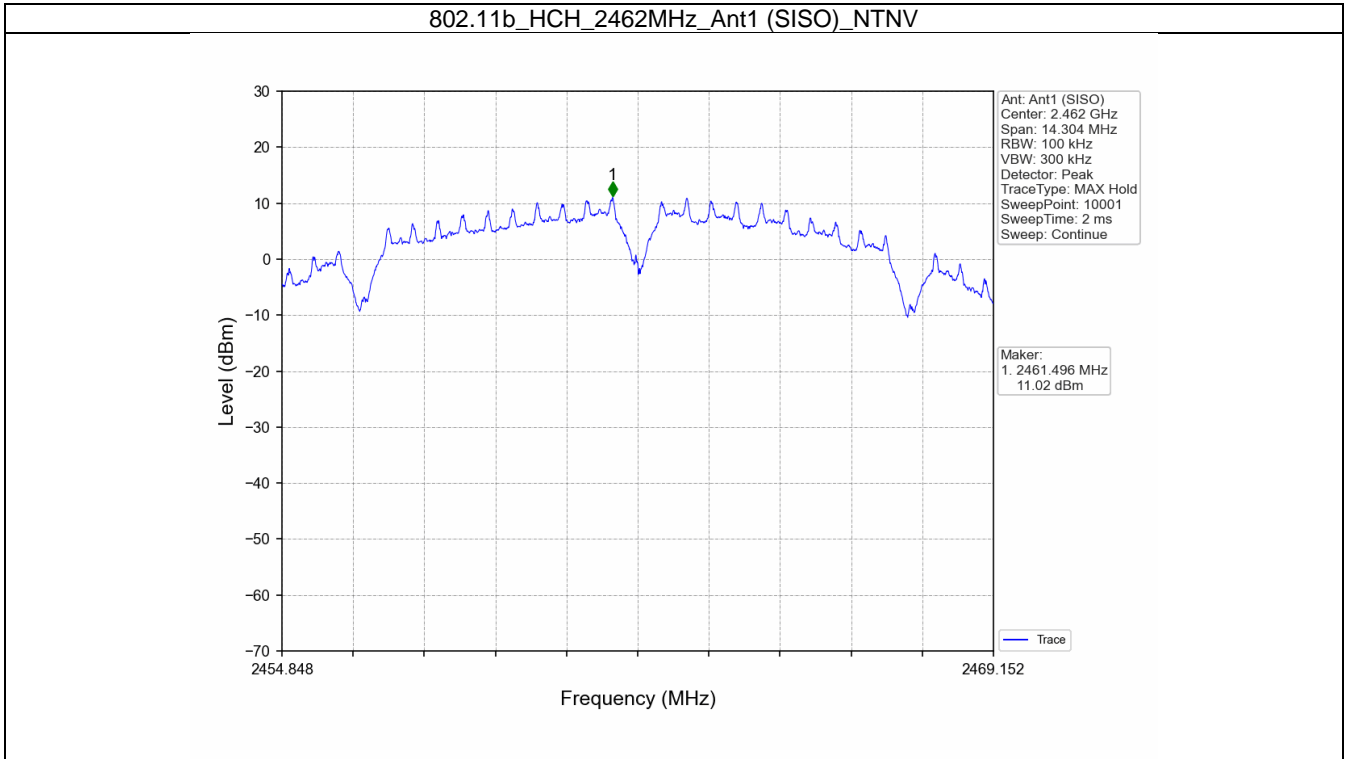
5.1.1 Test Result

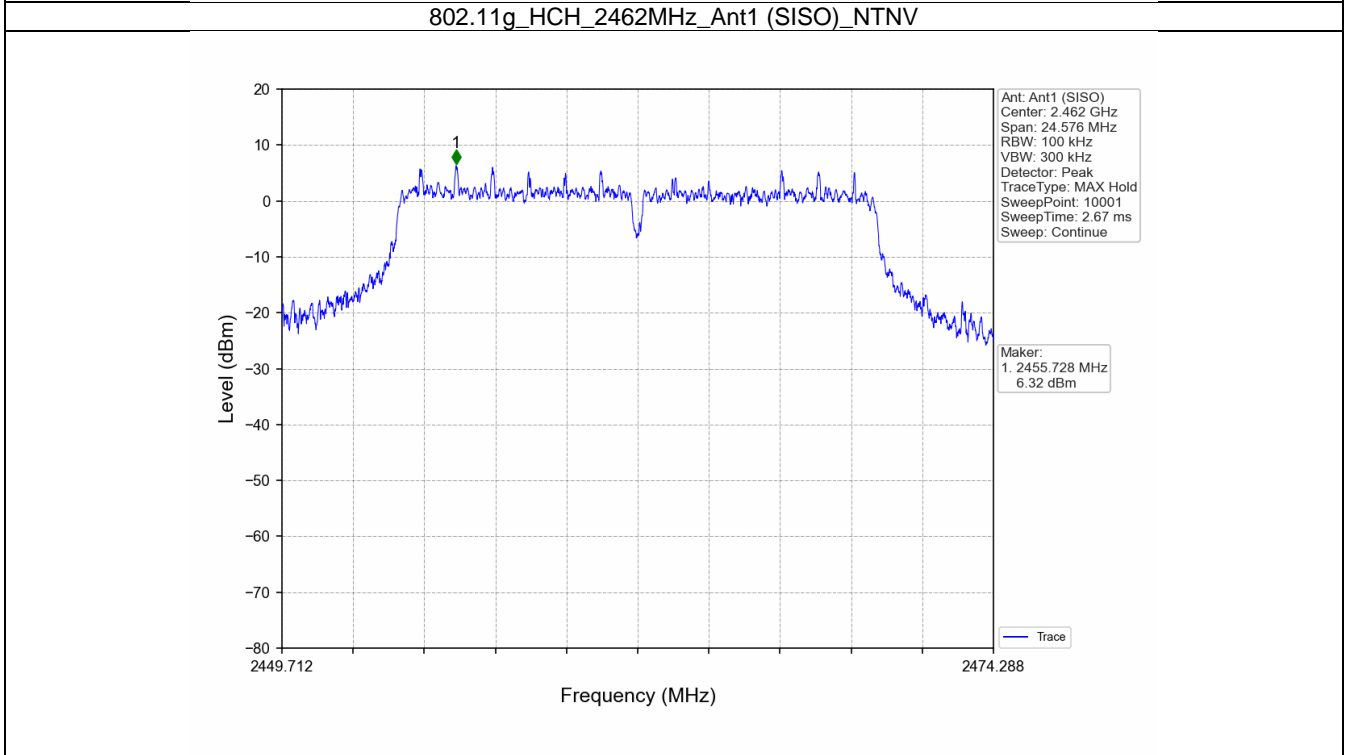
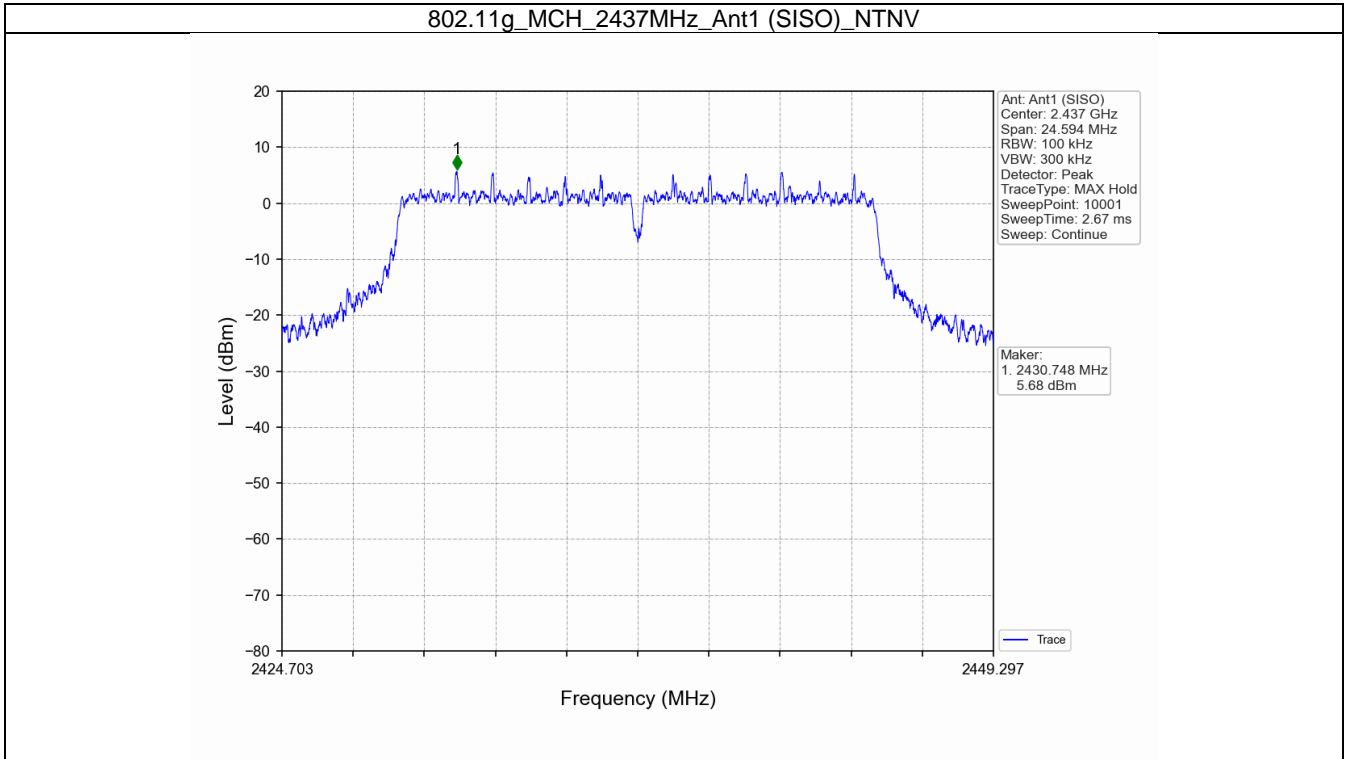
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)
802.11b	SISO	2412	1	13.07
		2437	1	11.80
		2462	1	11.02
802.11g	SISO	2412	1	6.73
		2437	1	5.68
		2462	1	6.32
802.11n (HT20)	SISO	2412	1	4.53
		2437	1	5.28
		2462	1	5.26
802.11n (HT40)	SISO	2422	1	2.88
		2437	1	2.62
		2452	1	3.26

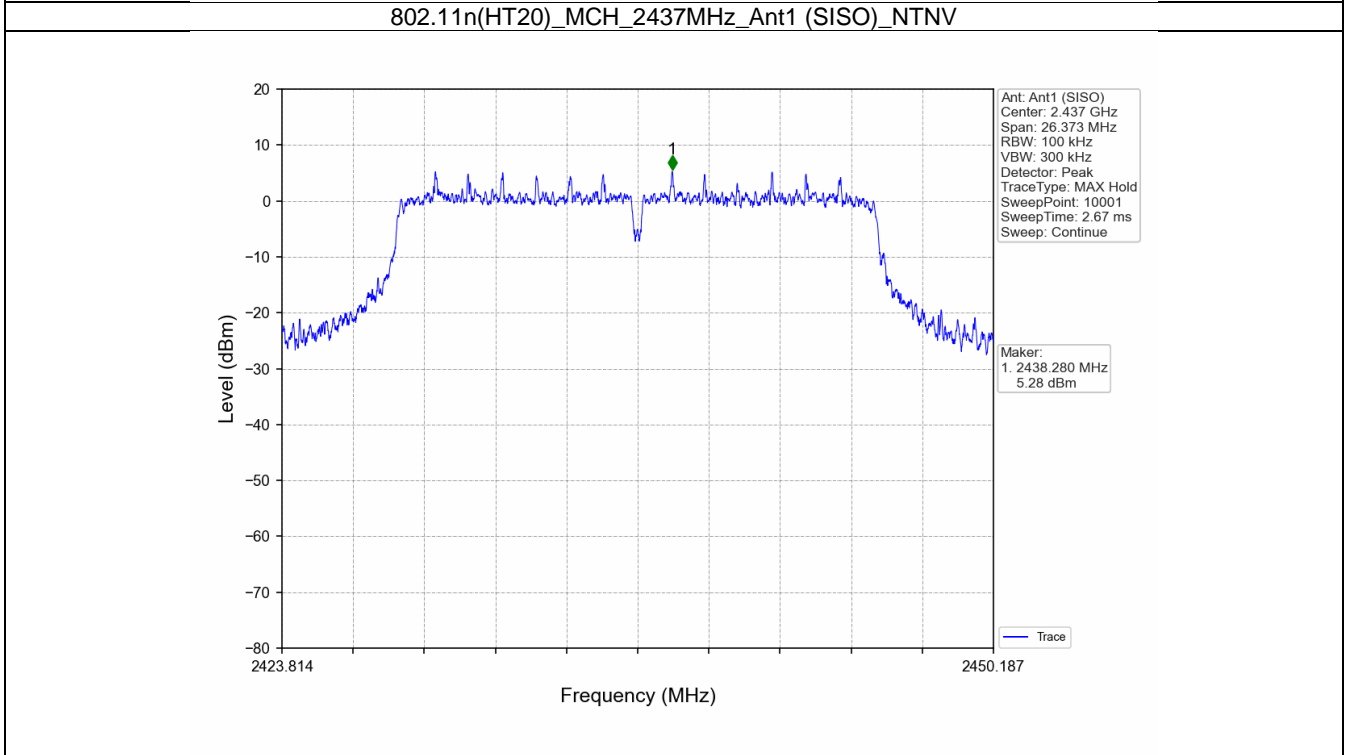
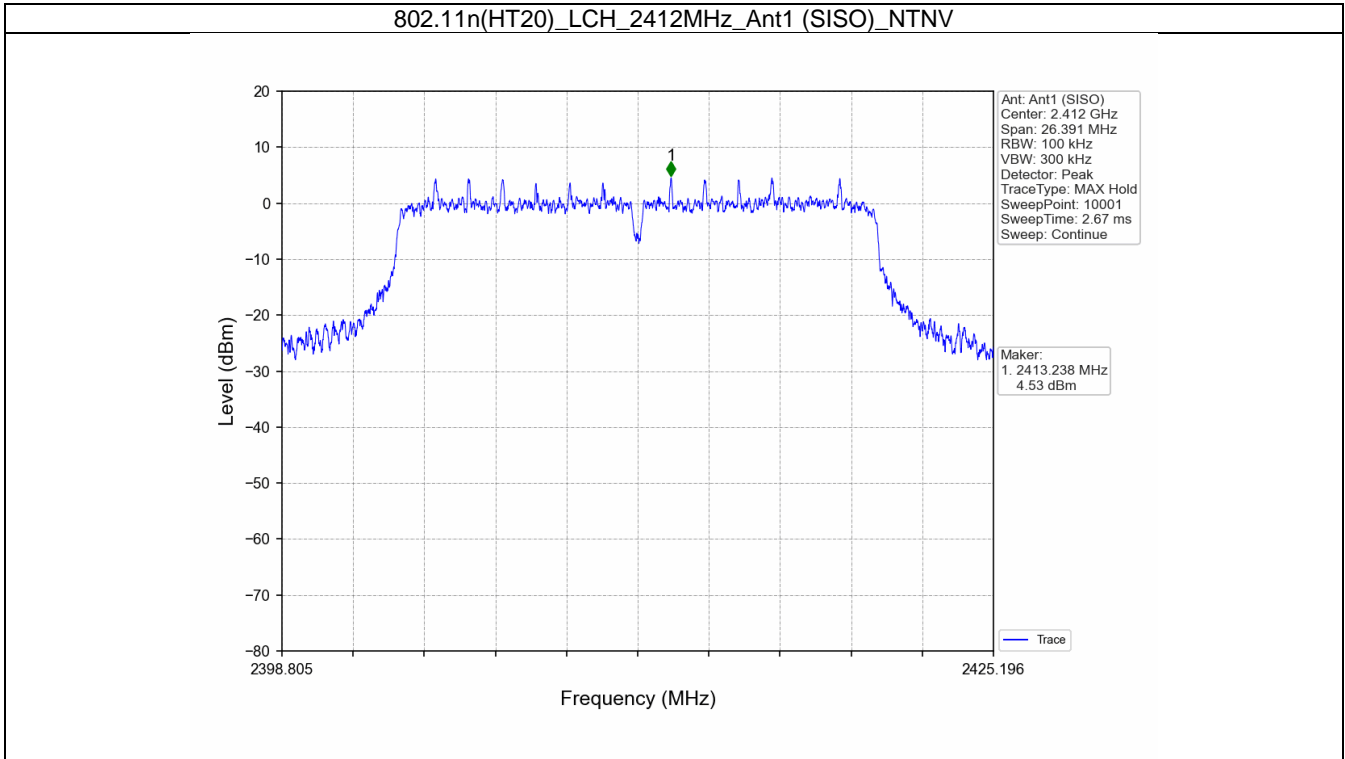
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

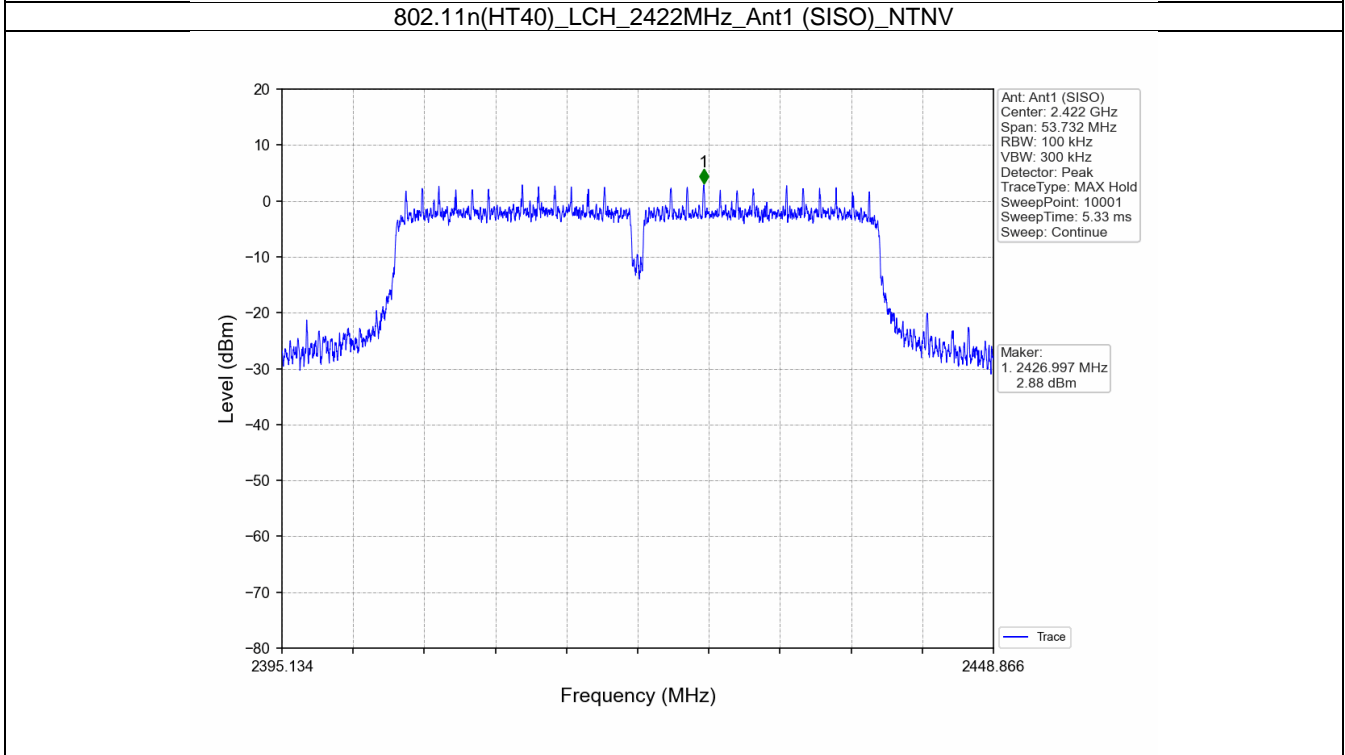
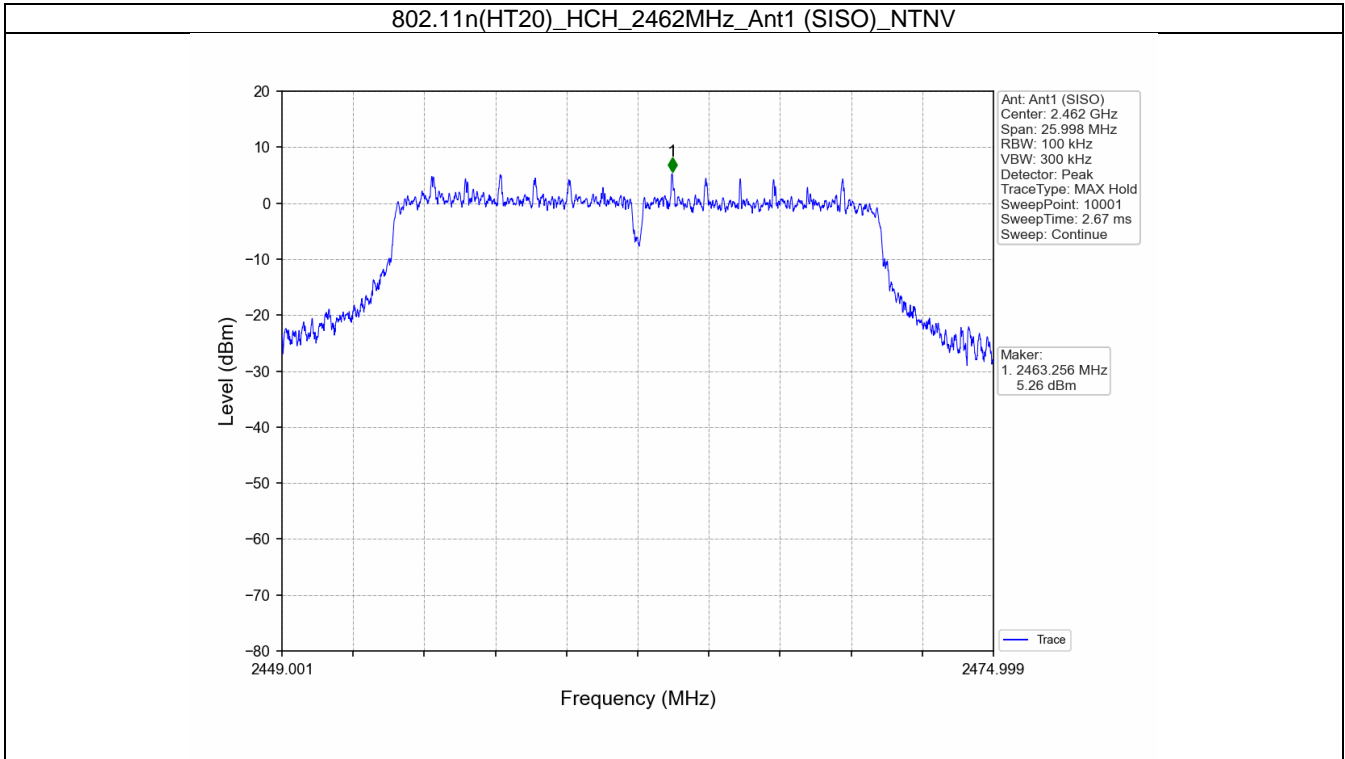
5.1.2 Test Graph

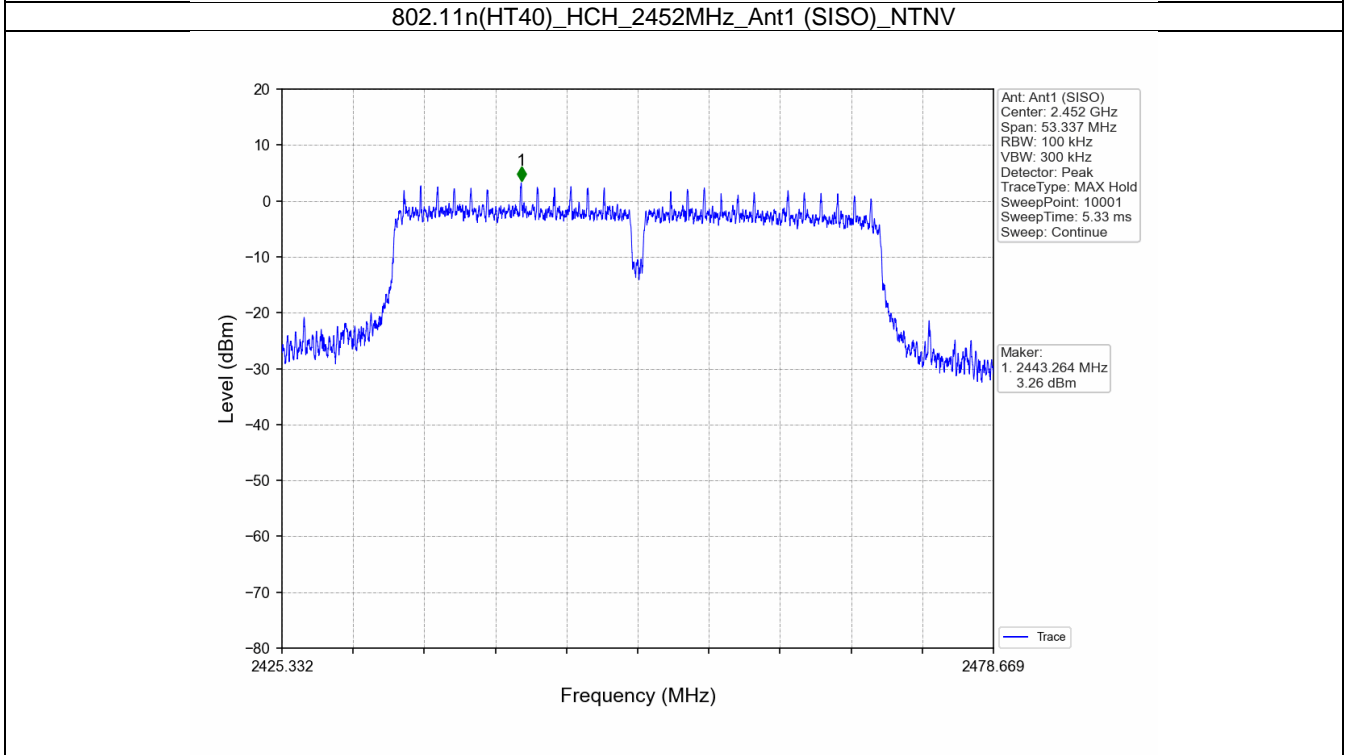
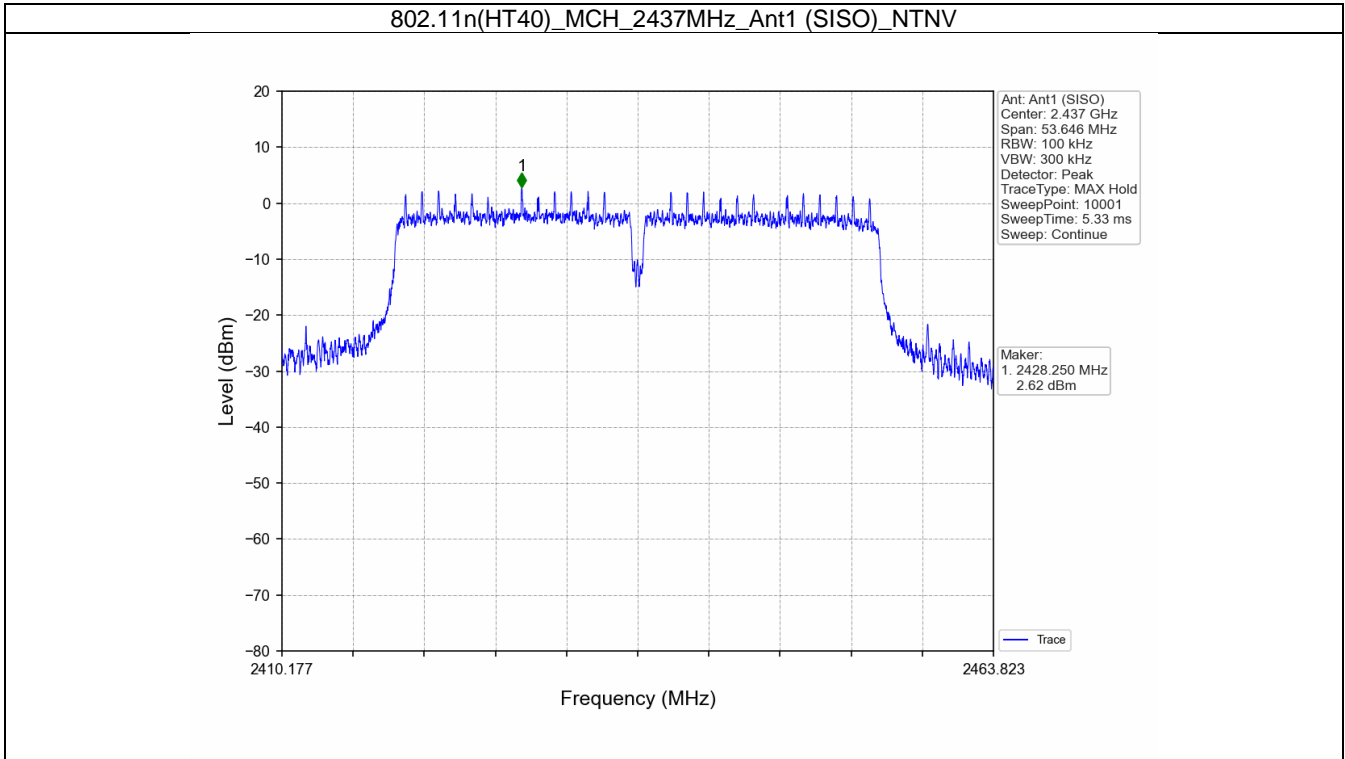














5.2 CSE

5.2.1 Test Result

Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	13.07	-6.93	Pass
		2437	1	13.07	-6.93	Pass
		2462	1	13.07	-6.93	Pass
802.11g	SISO	2412	1	6.73	-13.27	Pass
		2437	1	6.73	-13.27	Pass
		2462	1	6.73	-13.27	Pass
802.11n (HT20)	SISO	2412	1	5.28	-14.72	Pass
		2437	1	5.28	-14.72	Pass
		2462	1	5.28	-14.72	Pass
802.11n (HT40)	SISO	2422	1	3.26	-16.74	Pass
		2437	1	3.26	-16.74	Pass
		2452	1	3.26	-16.74	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.

5.2.2 Test Graph

