

Appendix A for SHEM210800877501

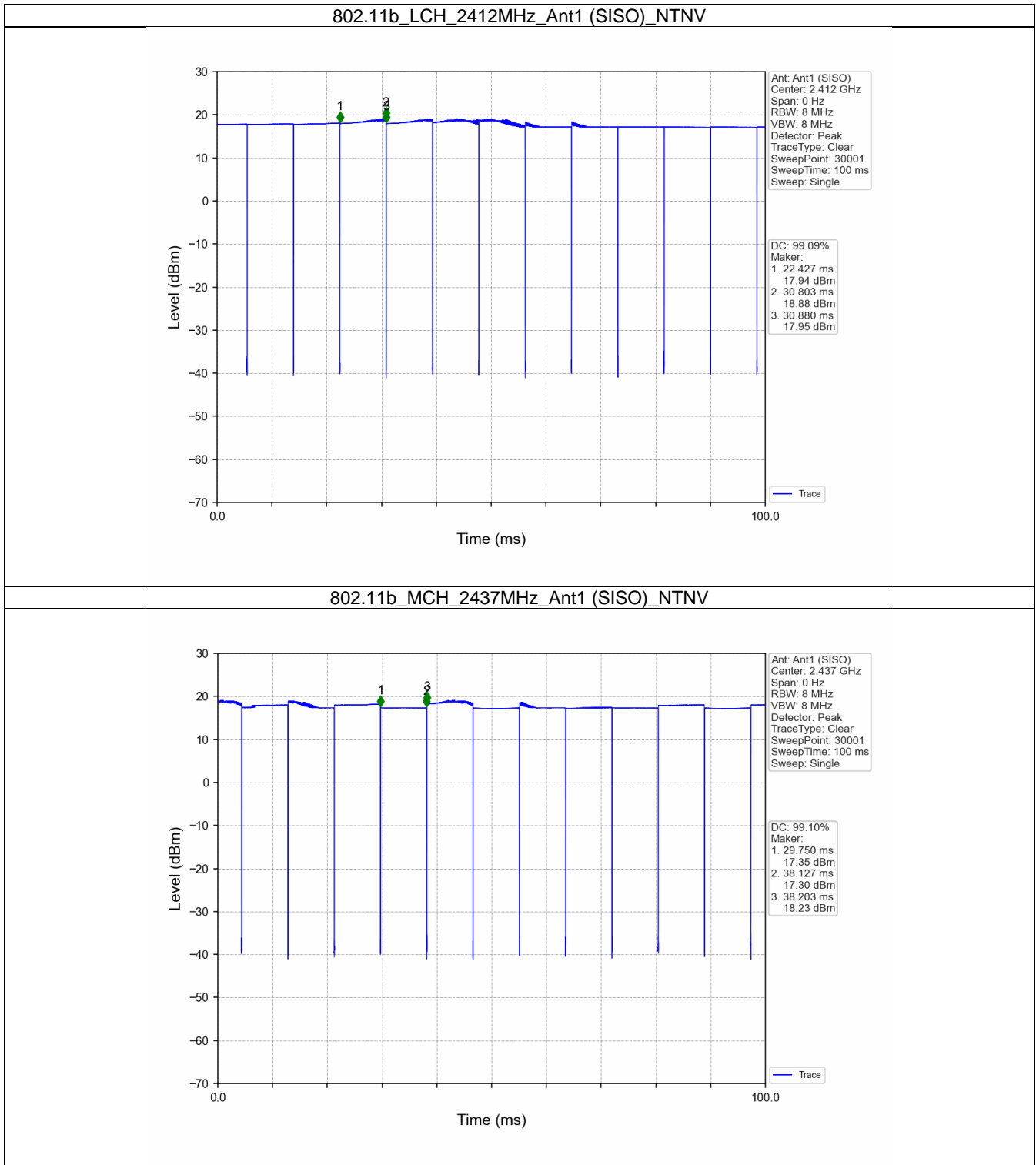
1. Duty Cycle

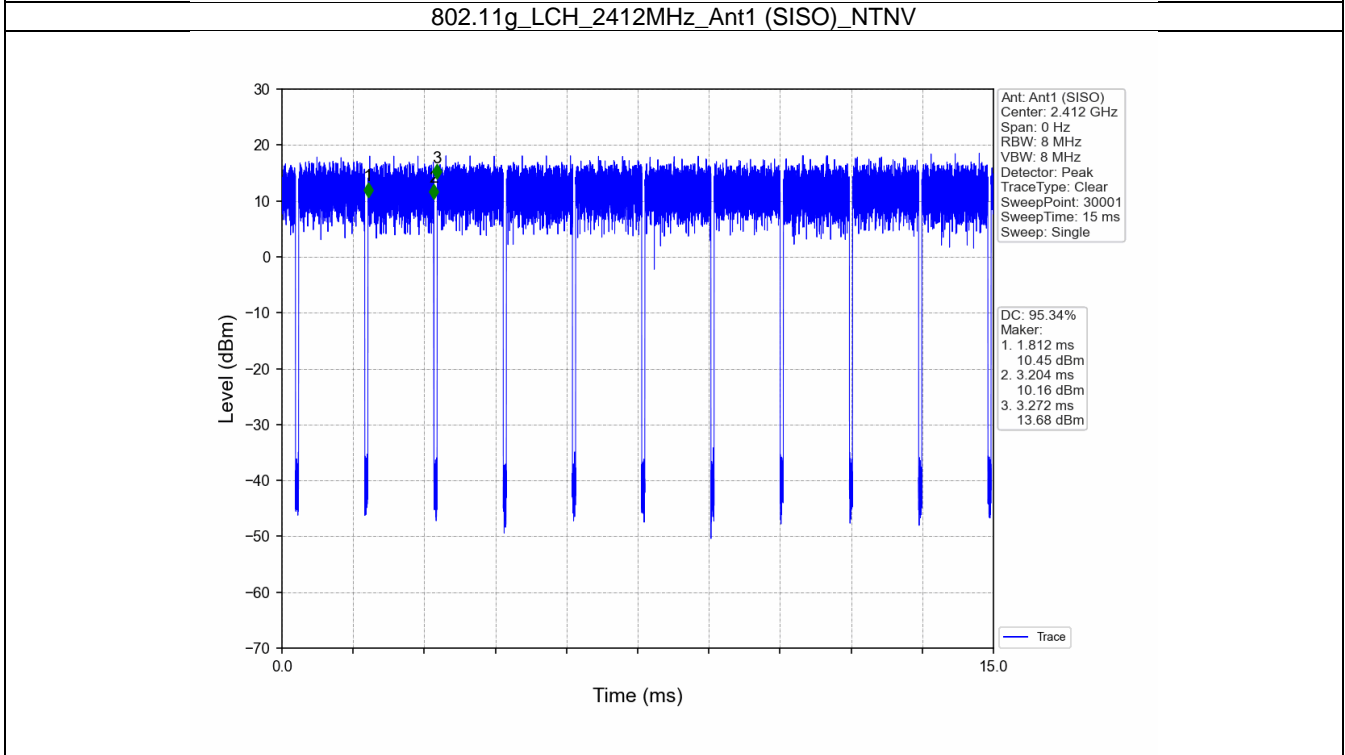
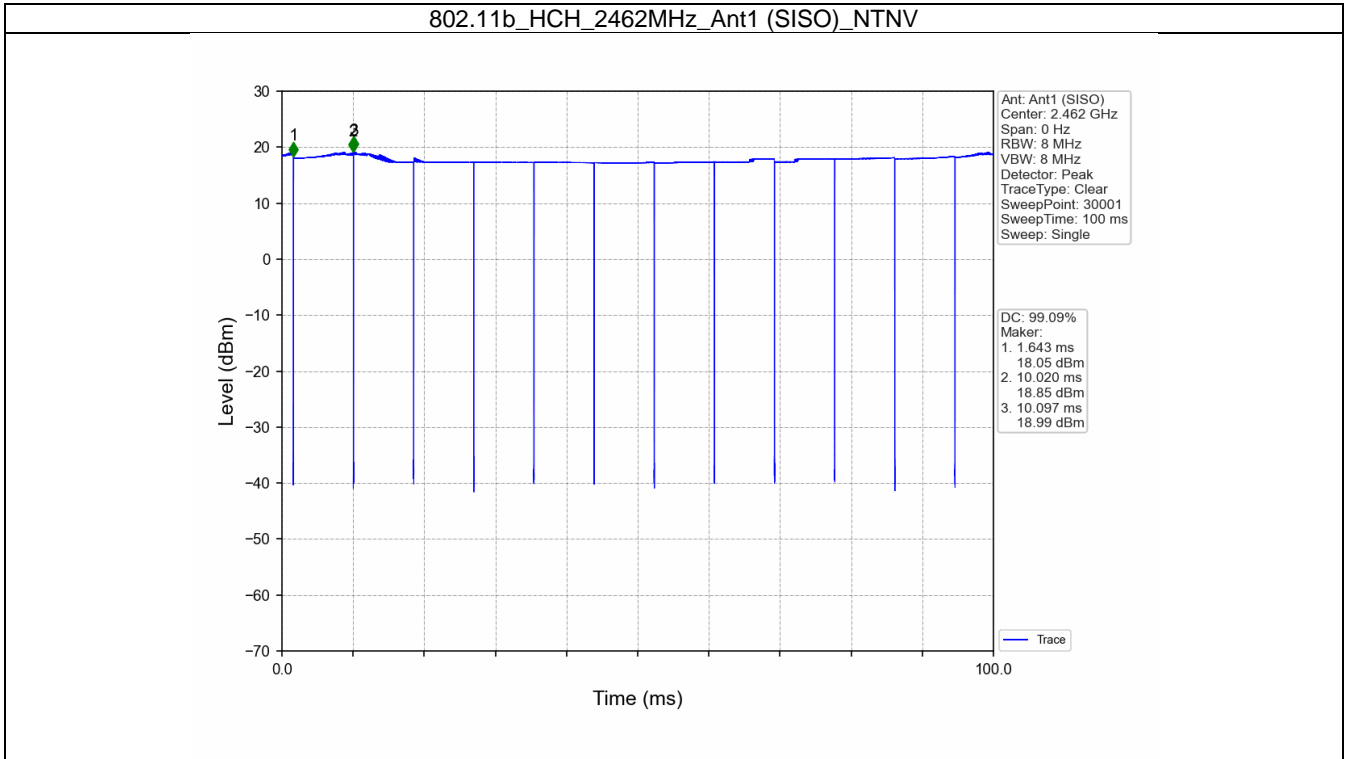
1.1 Ant1

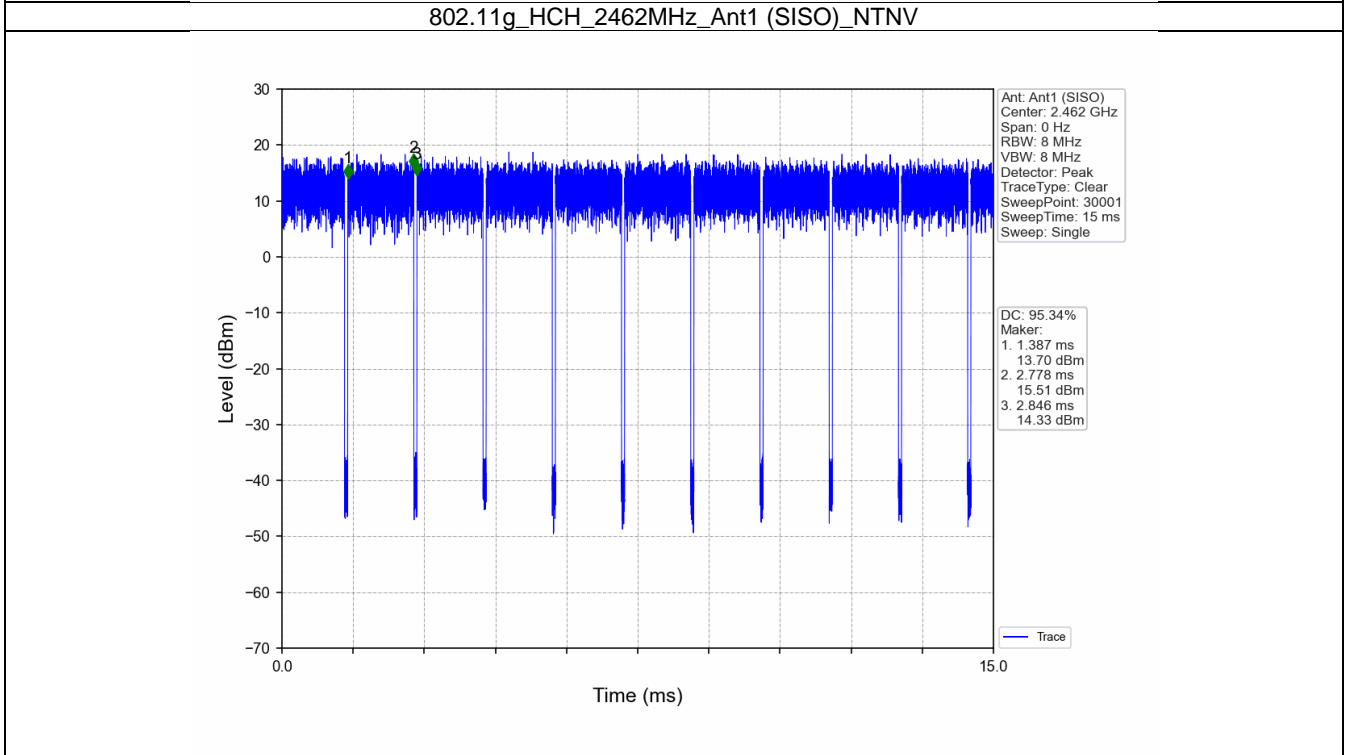
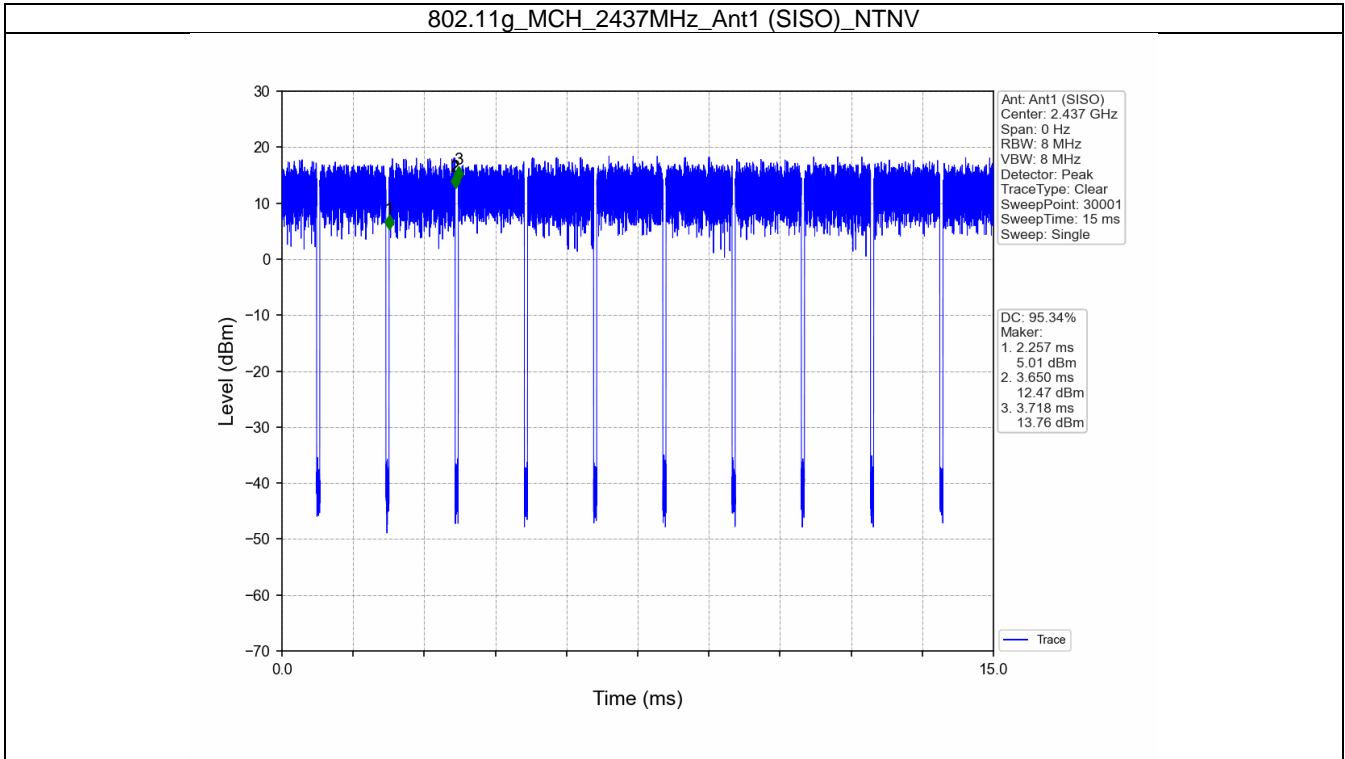
1.1.1 Test Result

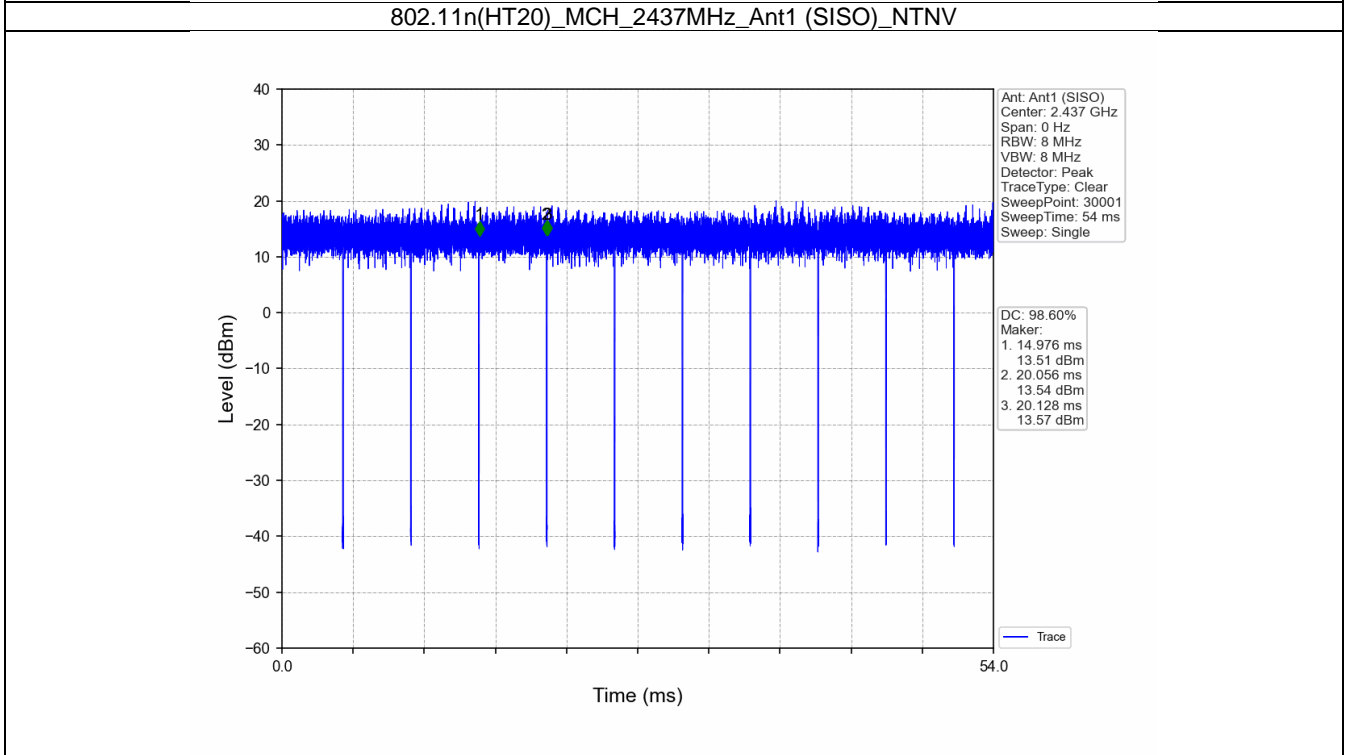
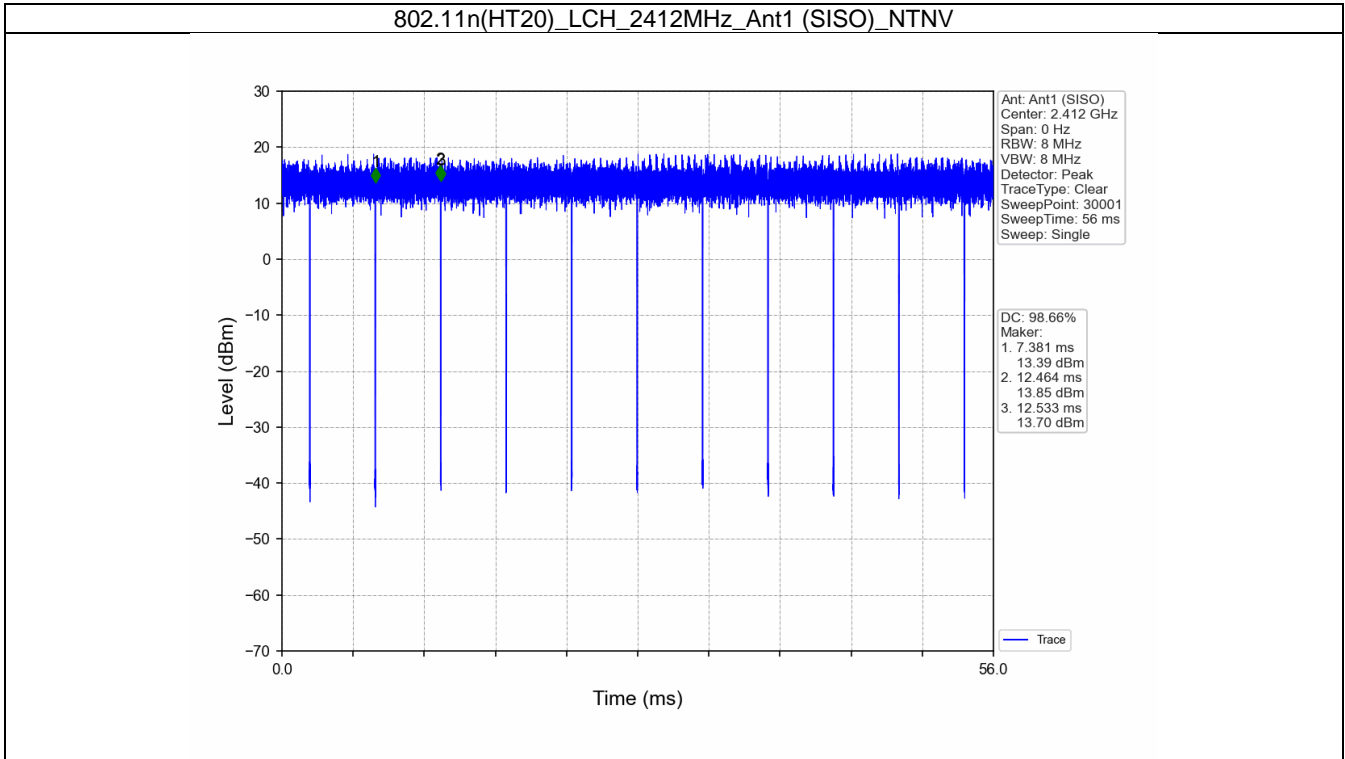
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	8.376	8.453	99.09	0.04	0.00
		2437	8.377	8.453	99.10	0.04	0.04
		2462	8.377	8.454	99.09	0.04	0.04
802.11g	SISO	2412	1.392	1.460	95.34	0.21	0.03
		2437	1.392	1.460	95.34	0.21	0.03
		2462	1.391	1.459	95.34	0.21	0.03
802.11n (HT20)	SISO	2412	5.083	5.152	98.66	0.06	0.04
		2437	5.080	5.152	98.60	0.06	0.00
		2462	5.083	5.152	98.66	0.06	0.04
802.11n (HT40)	SISO	2422	2.468	2.536	97.32	0.12	0.03
		2437	2.467	2.536	97.28	0.12	0.03
		2452	2.468	2.536	97.32	0.12	0.03

1.1.2 Test Graph

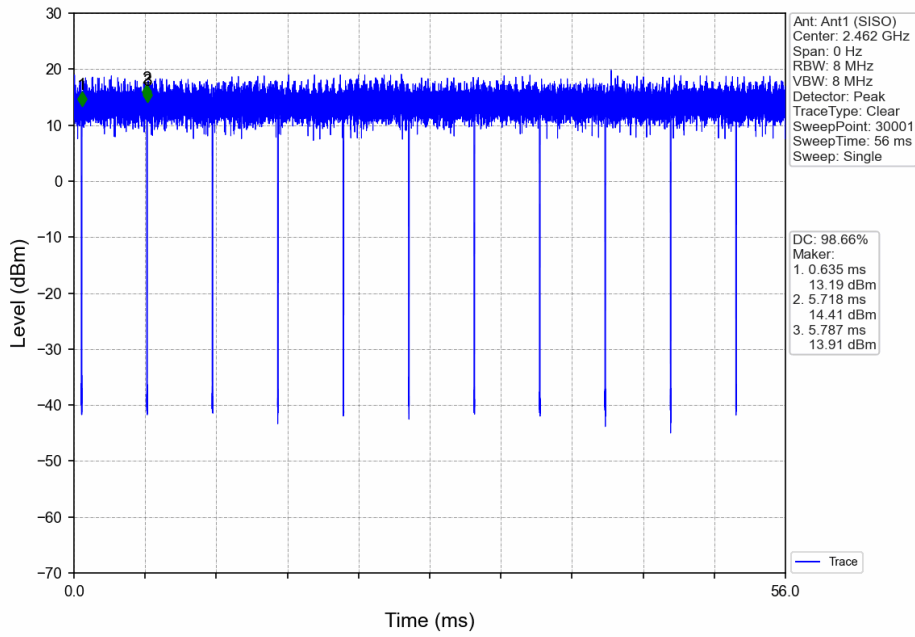




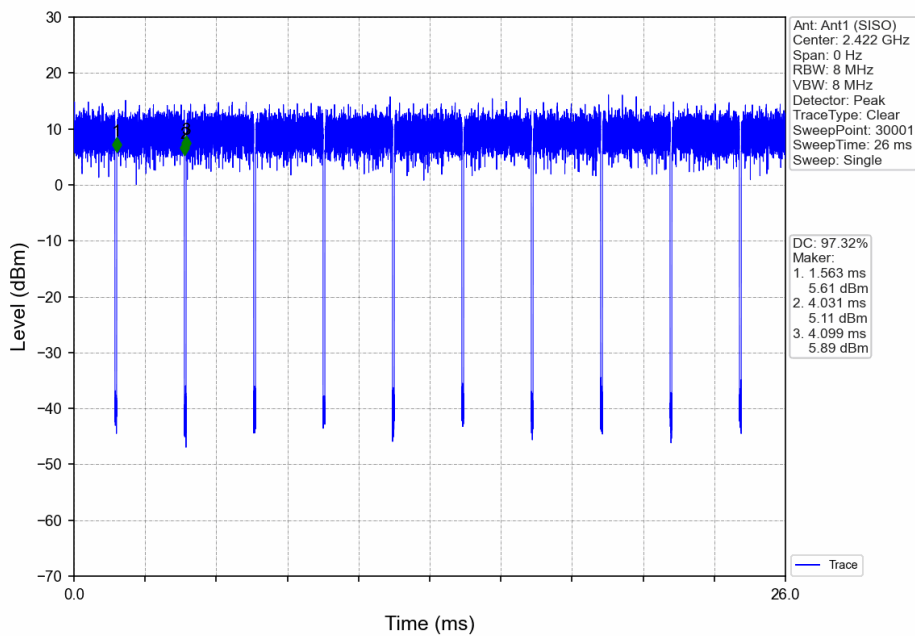


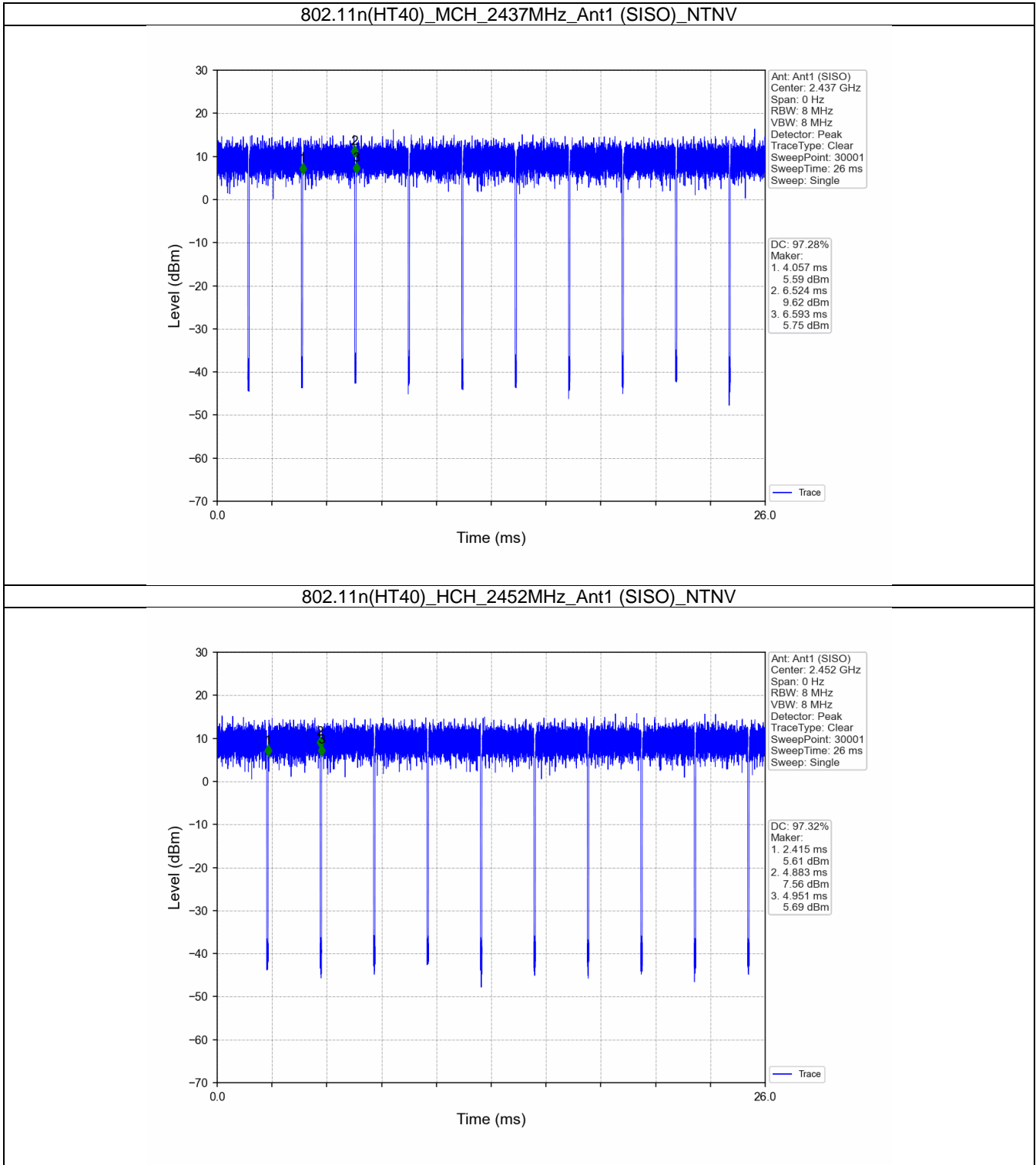


802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV





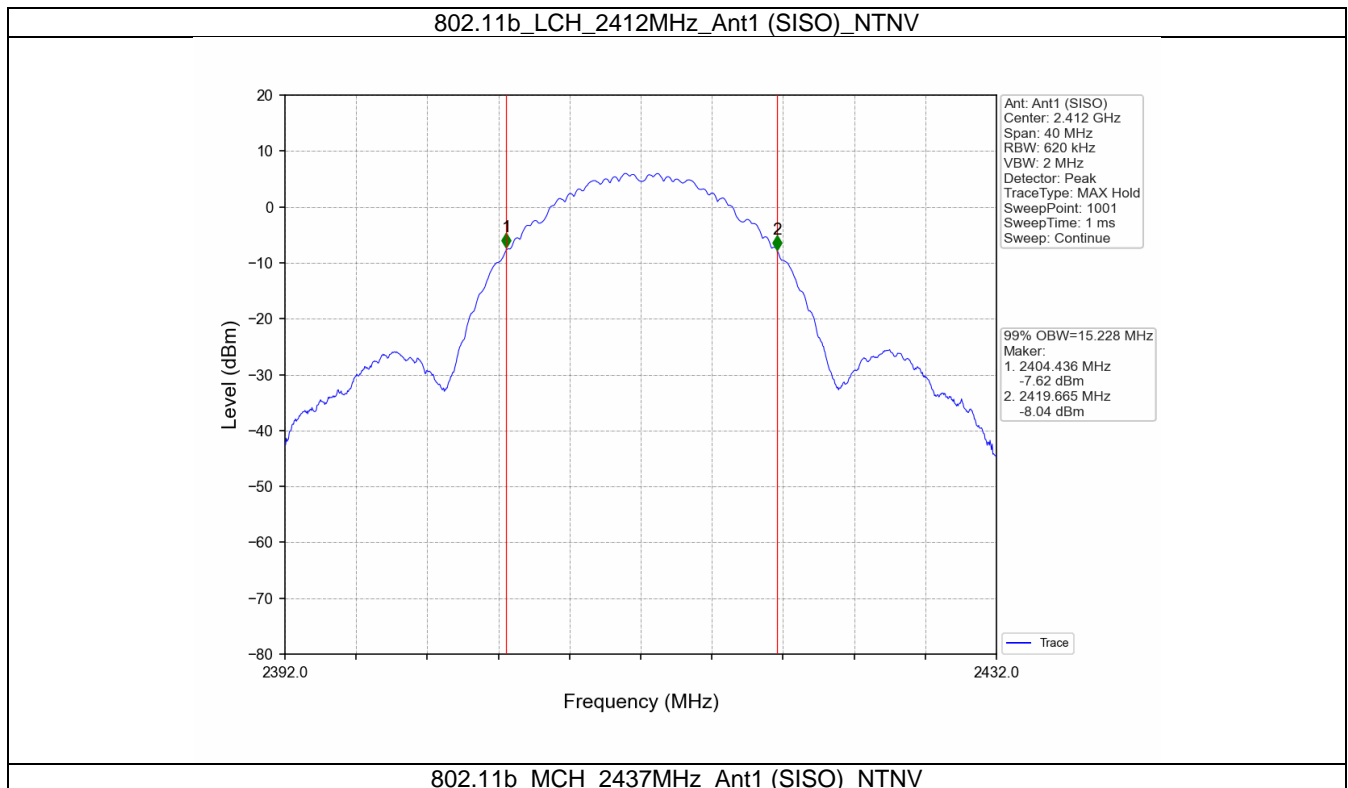
## 2. Bandwidth

### 2.1 OBW

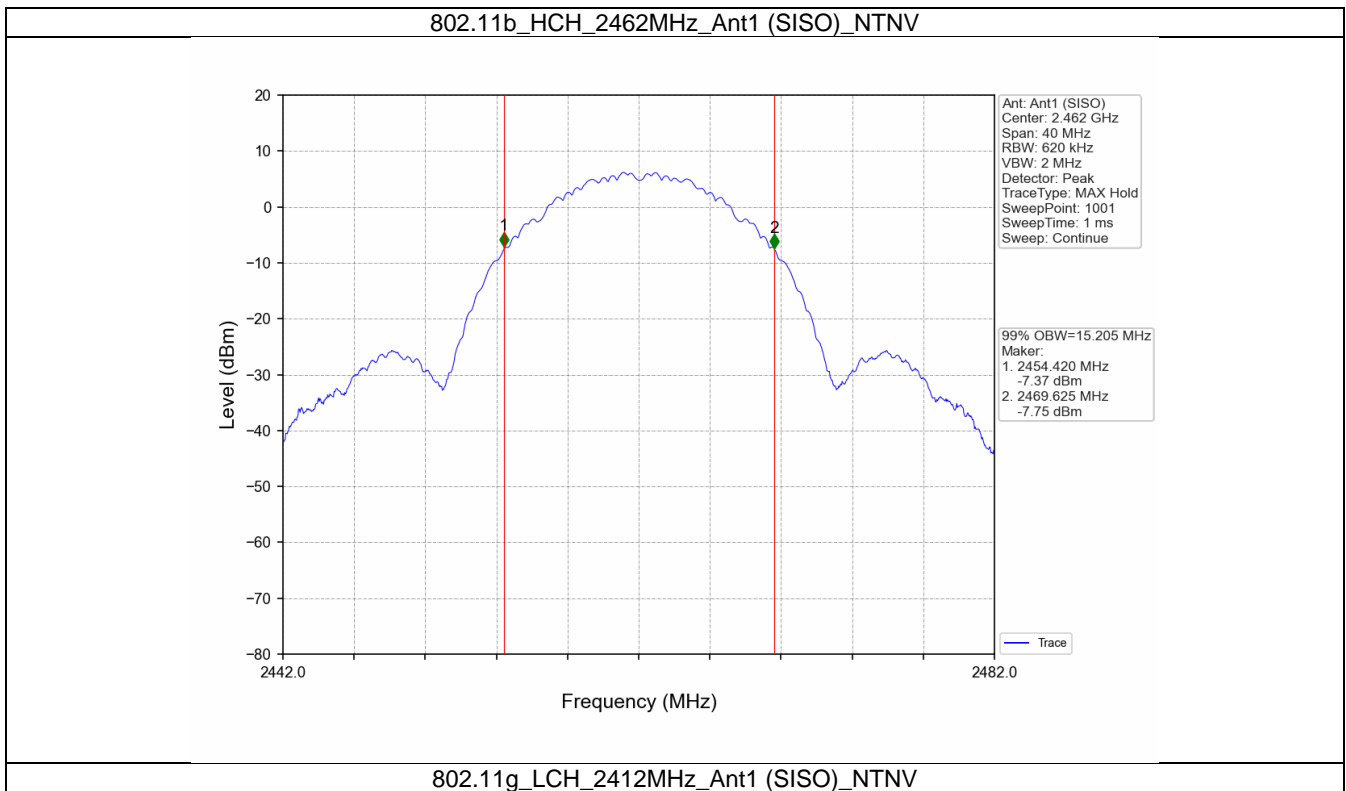
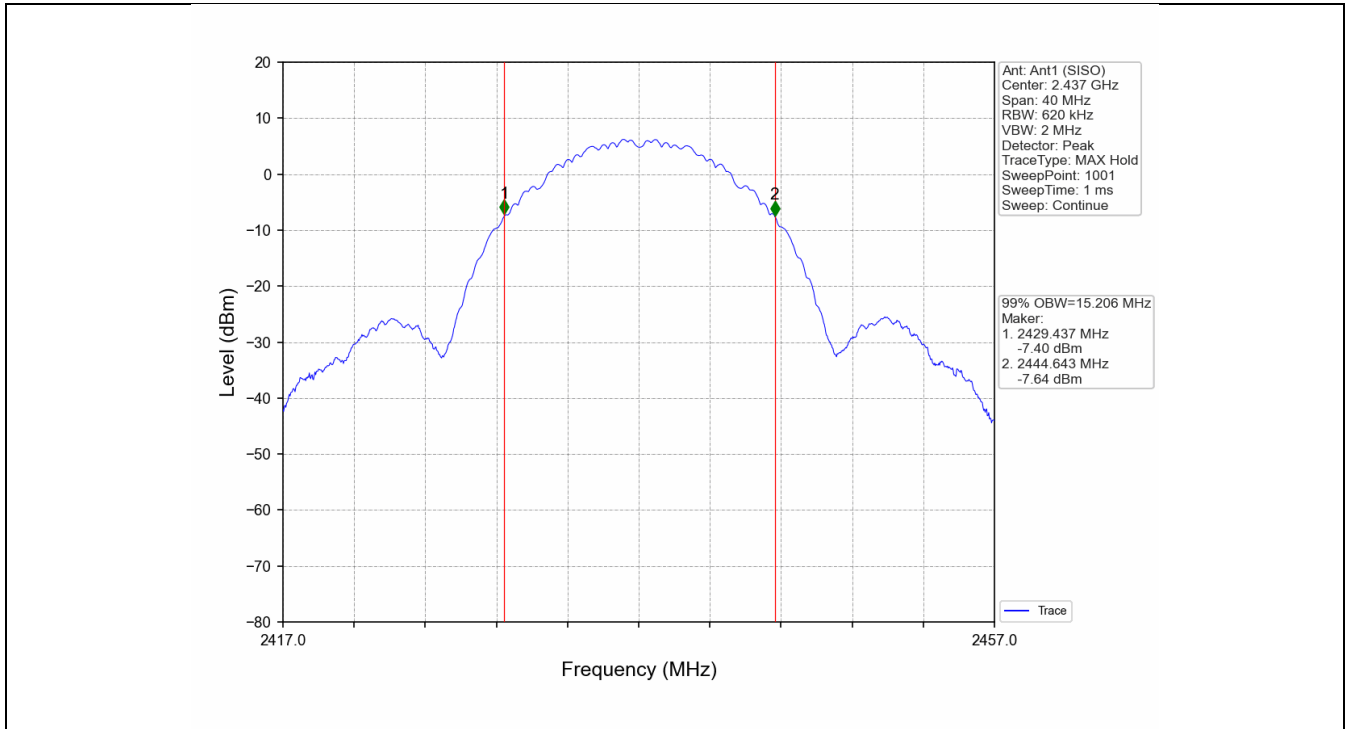
#### 2.1.1 Test Result

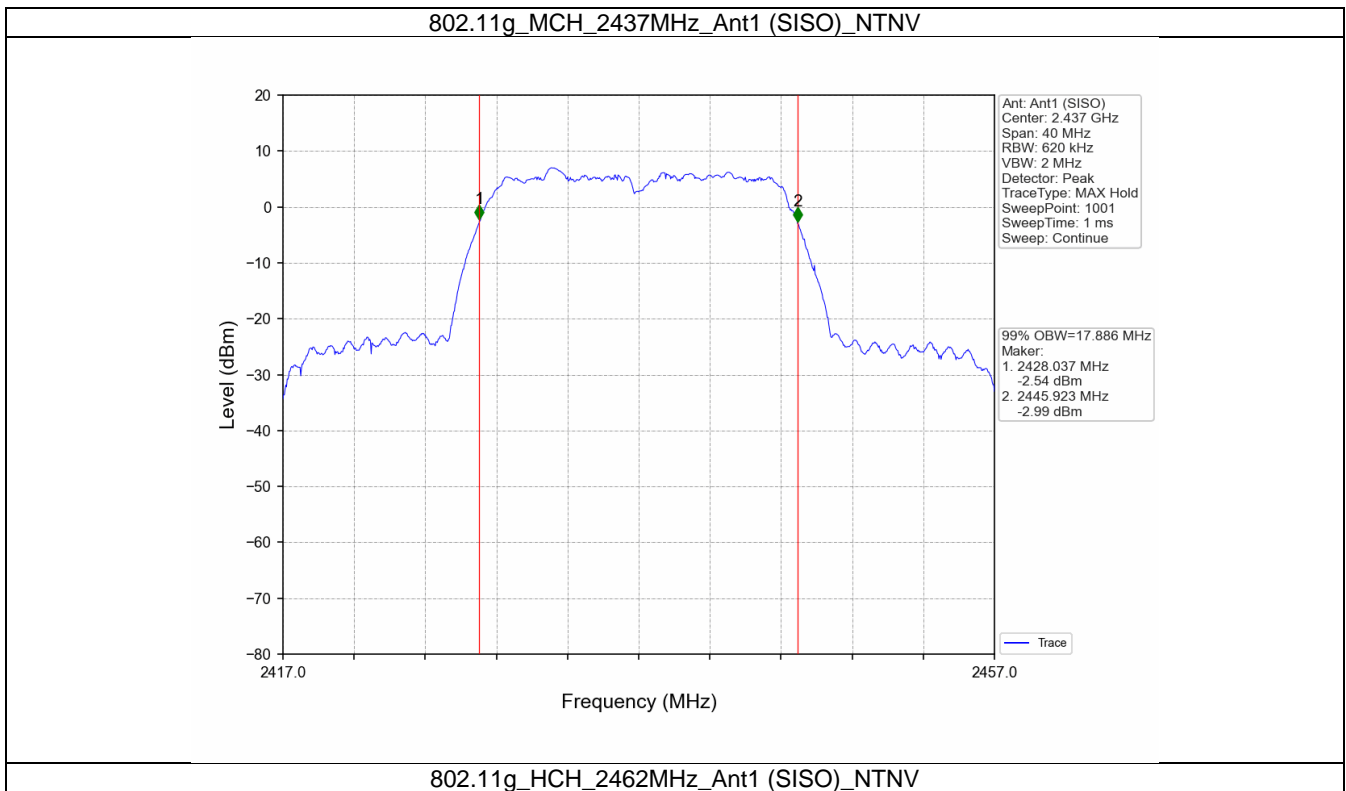
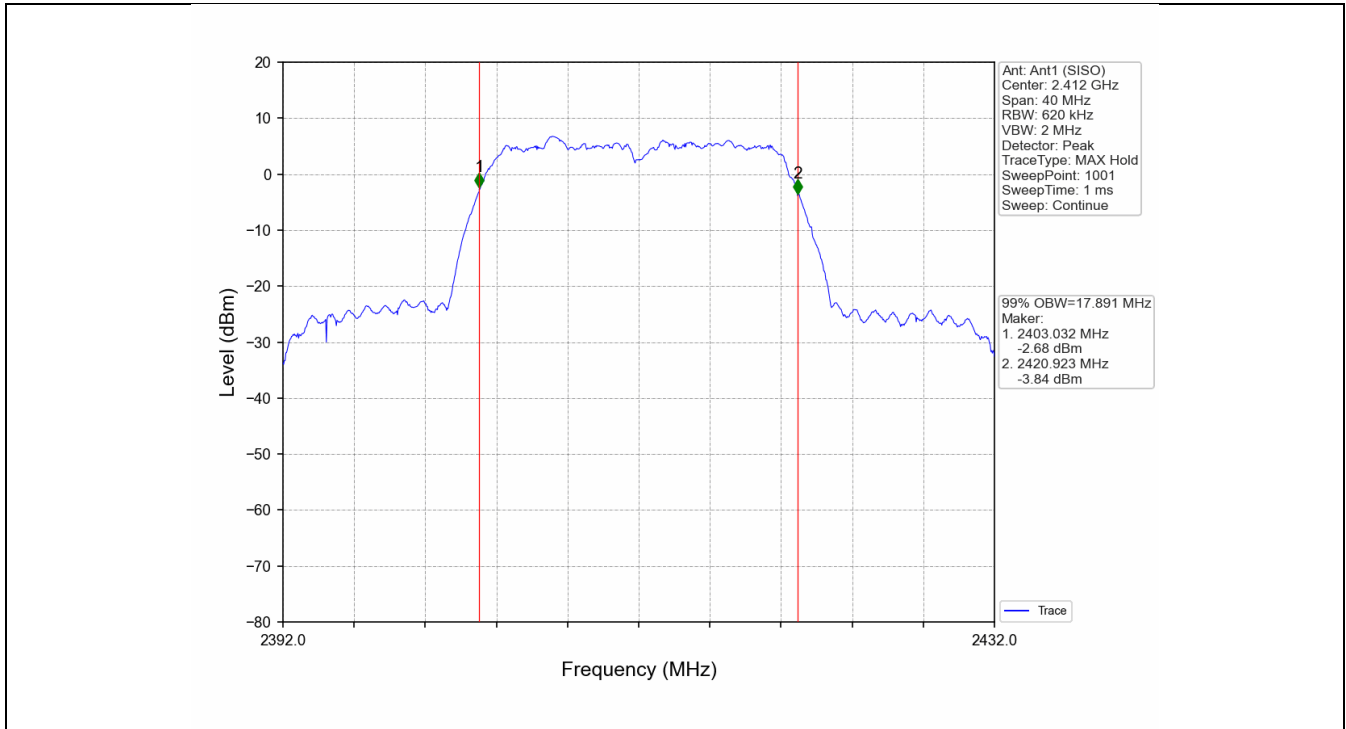
Mode	TX Type	Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11b	SISO	2412	1	15.228	Pass
		2437	1	15.206	Pass
		2462	1	15.205	Pass
802.11g	SISO	2412	1	17.891	Pass
		2437	1	17.886	Pass
		2462	1	17.876	Pass
802.11n (HT20)	SISO	2412	1	18.559	Pass
		2437	1	18.549	Pass
		2462	1	18.545	Pass
802.11n (HT40)	SISO	2422	1	37.087	Pass
		2437	1	37.085	Pass
		2452	1	37.094	Pass

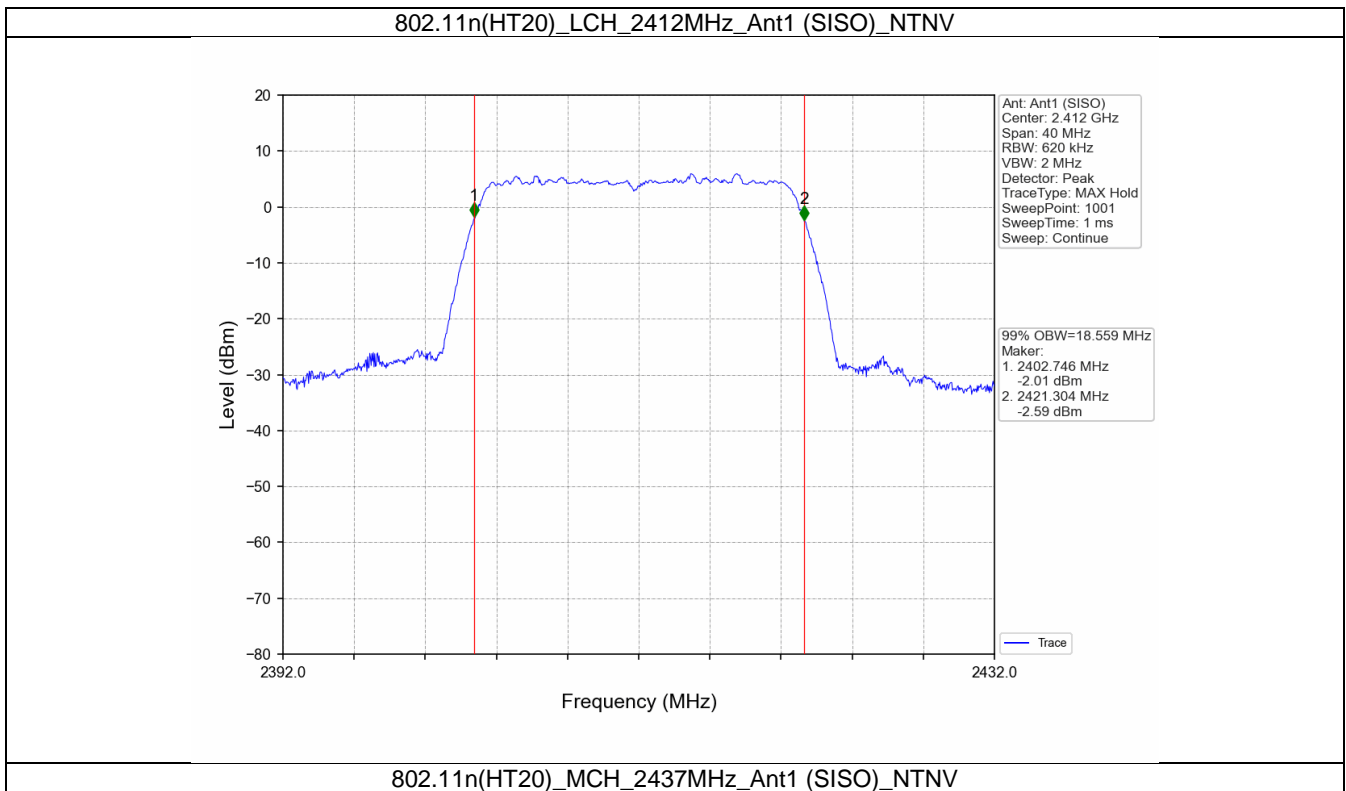
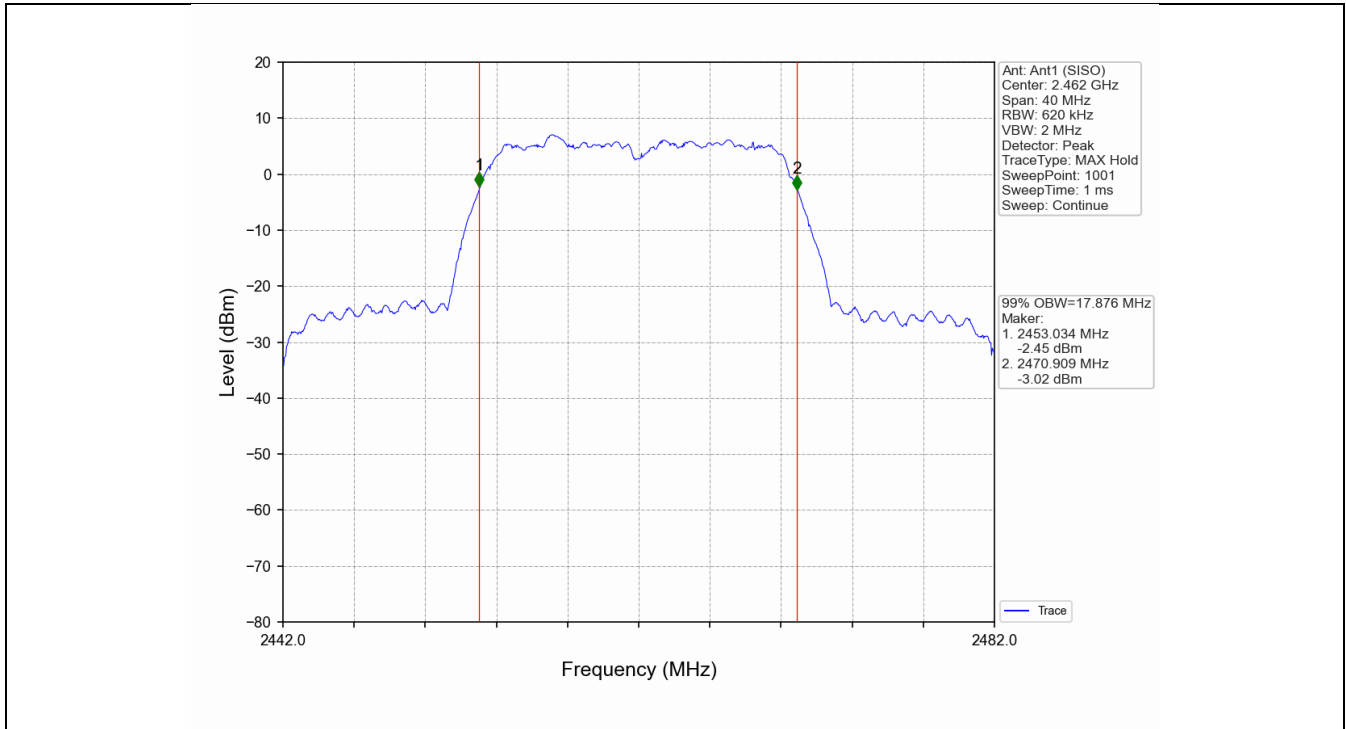
#### 2.1.2 Test Graph

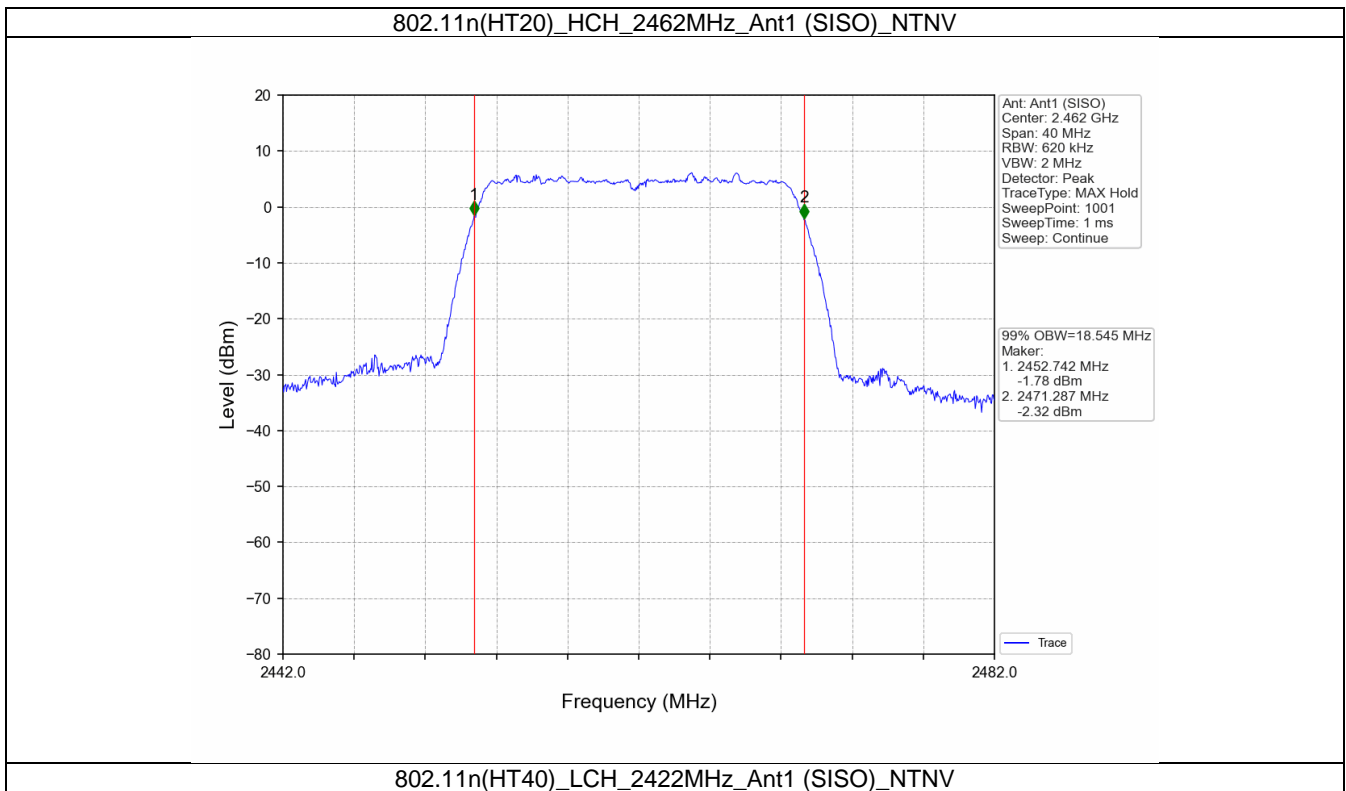
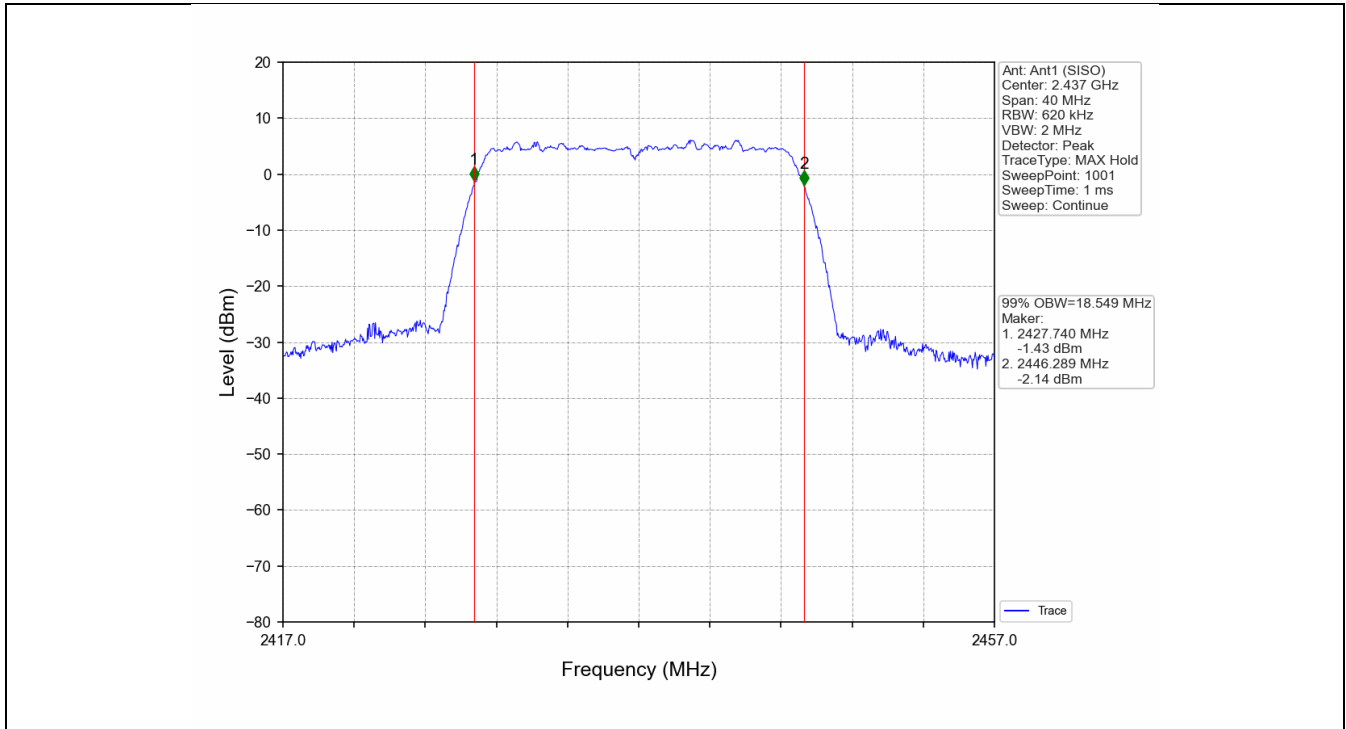


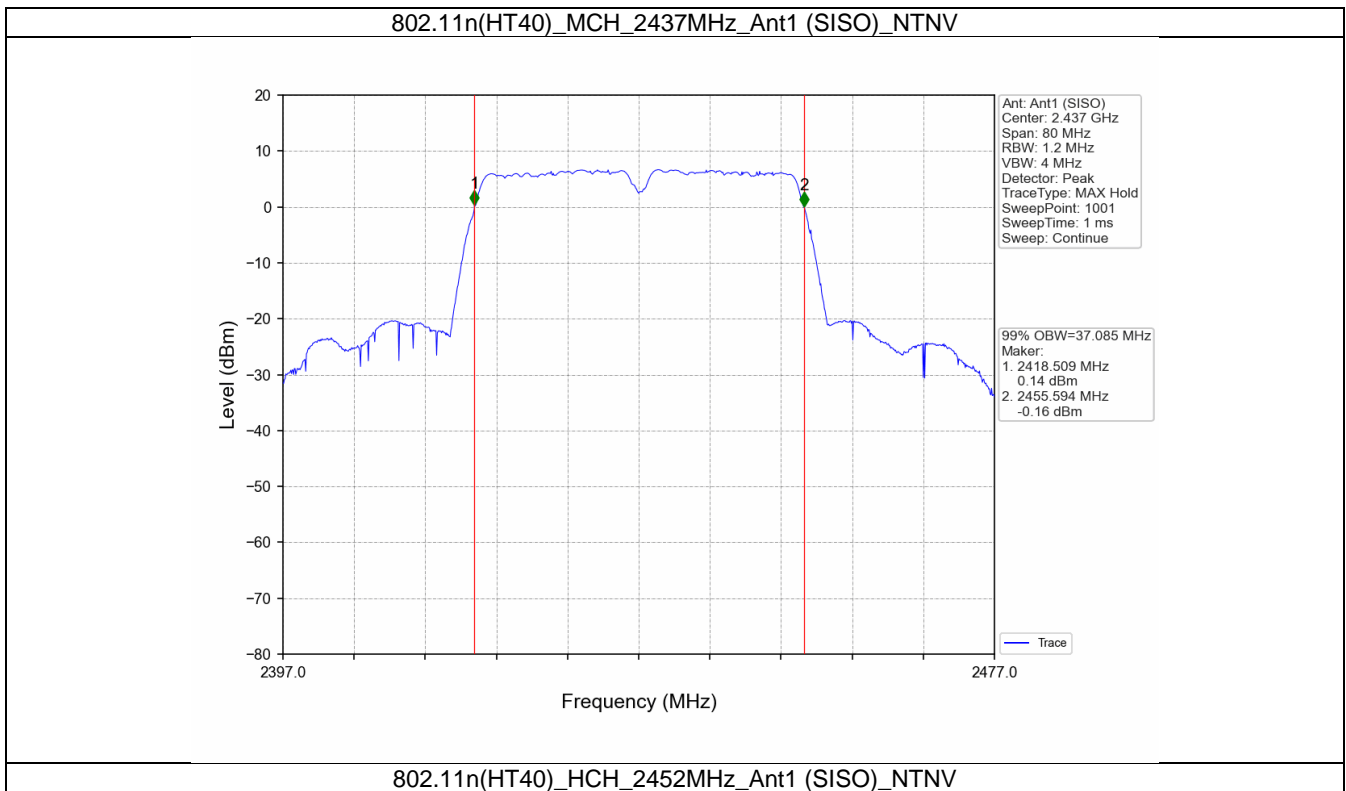
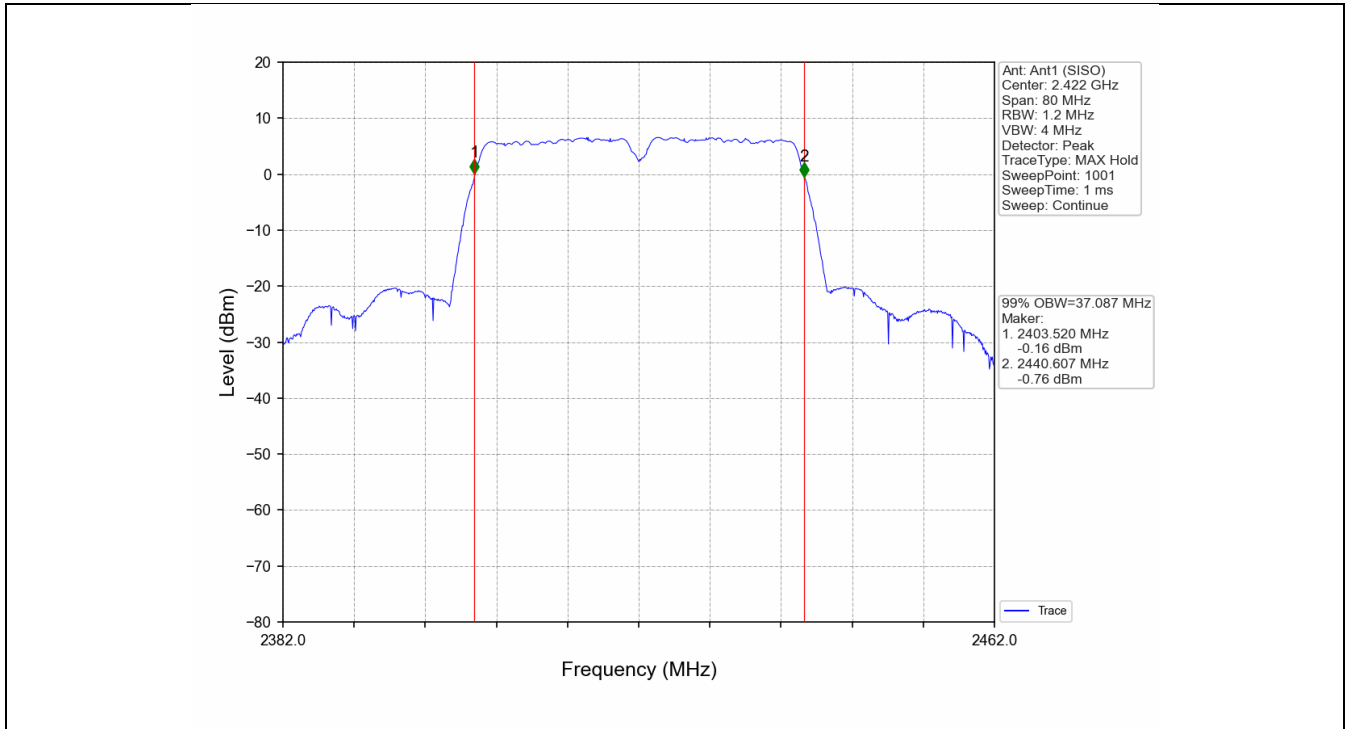


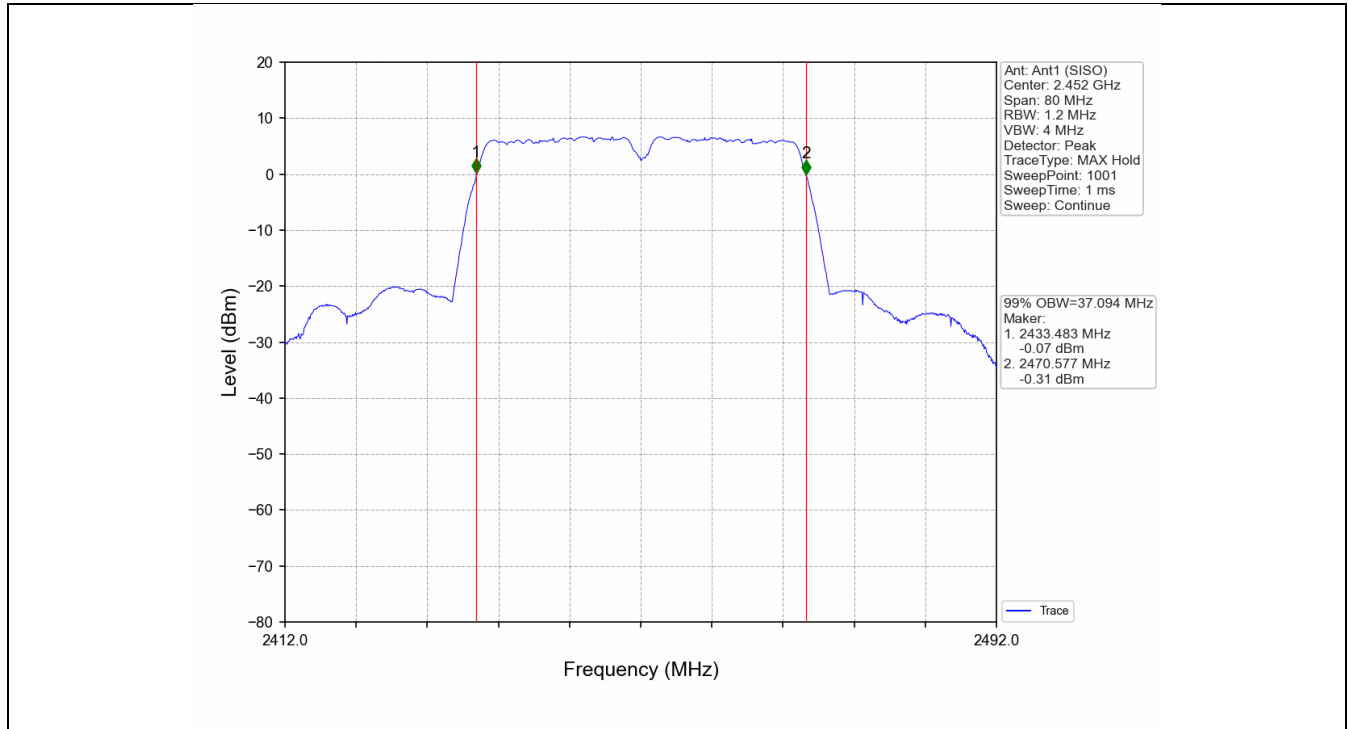










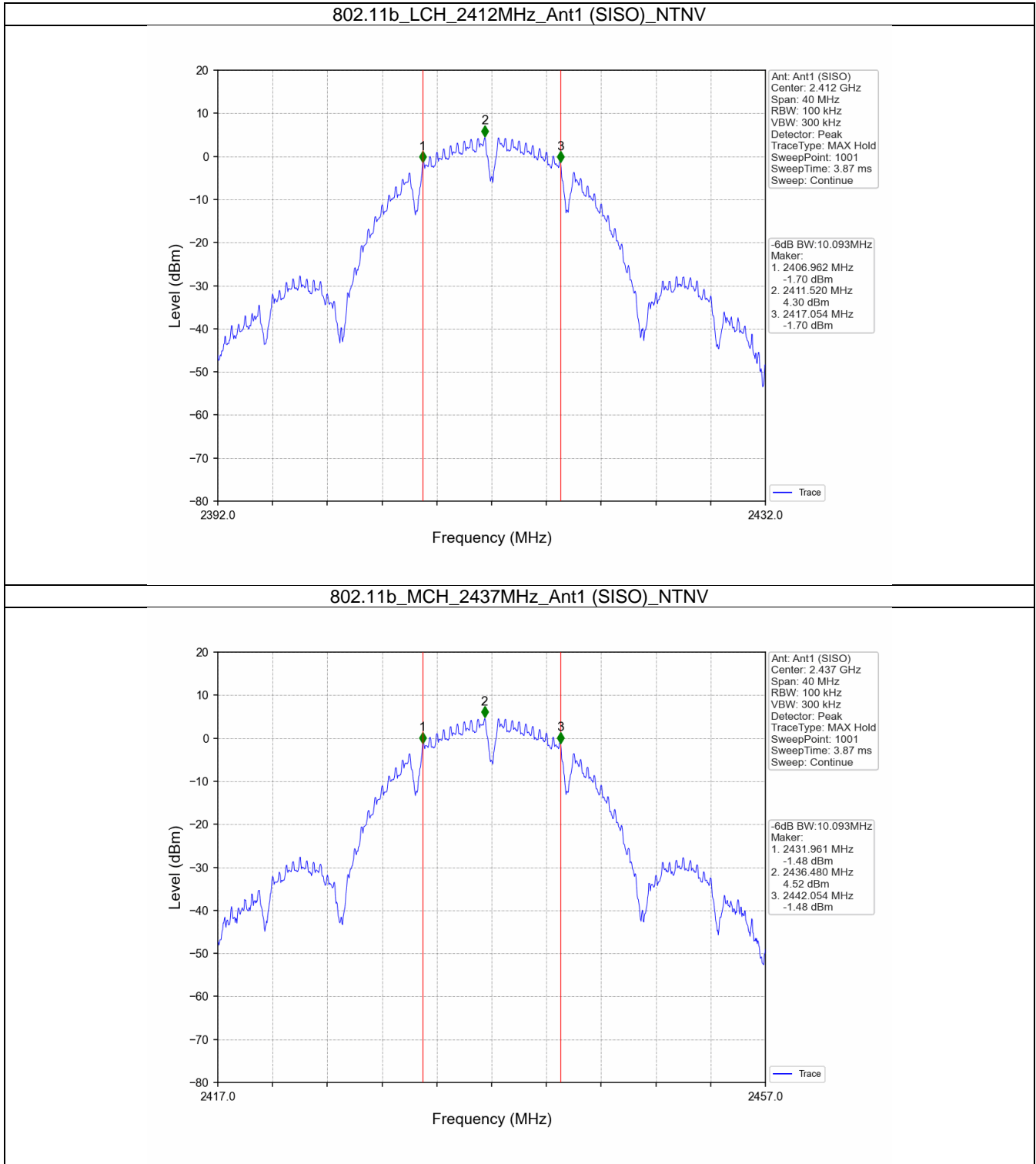


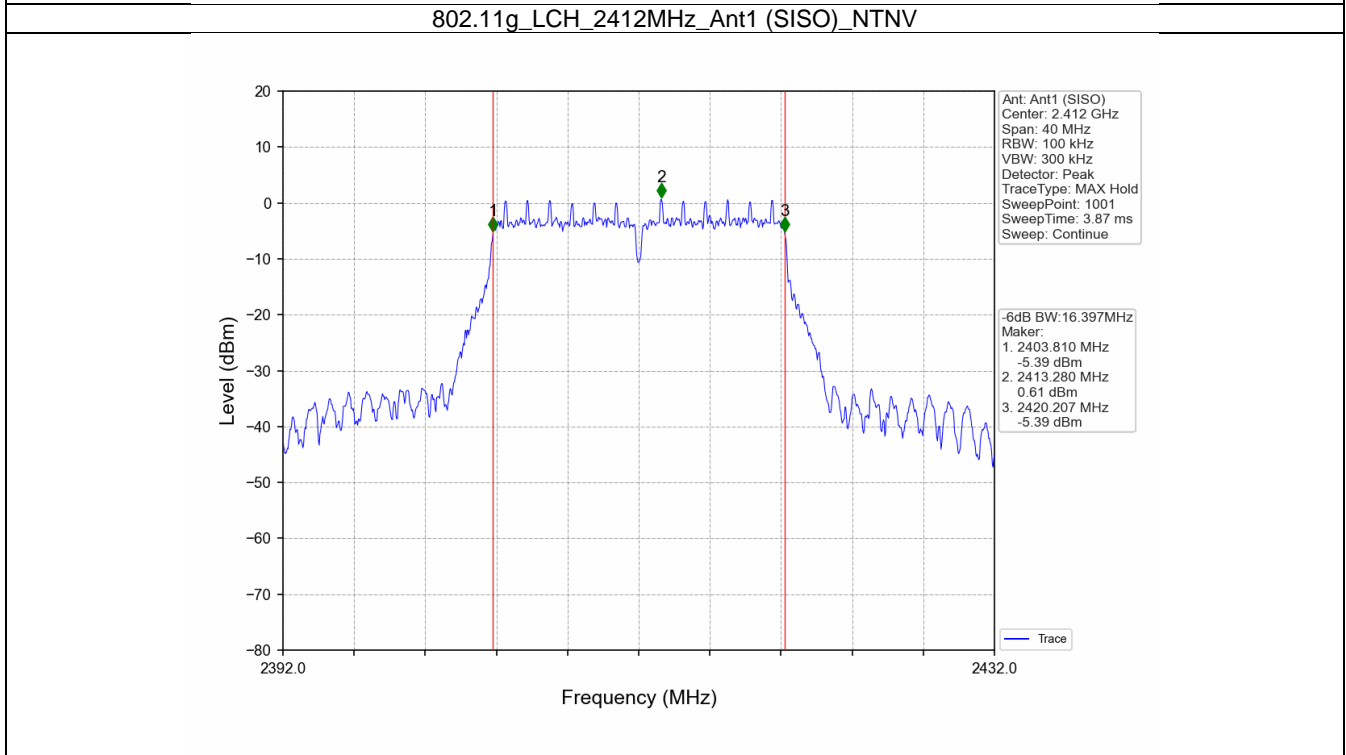
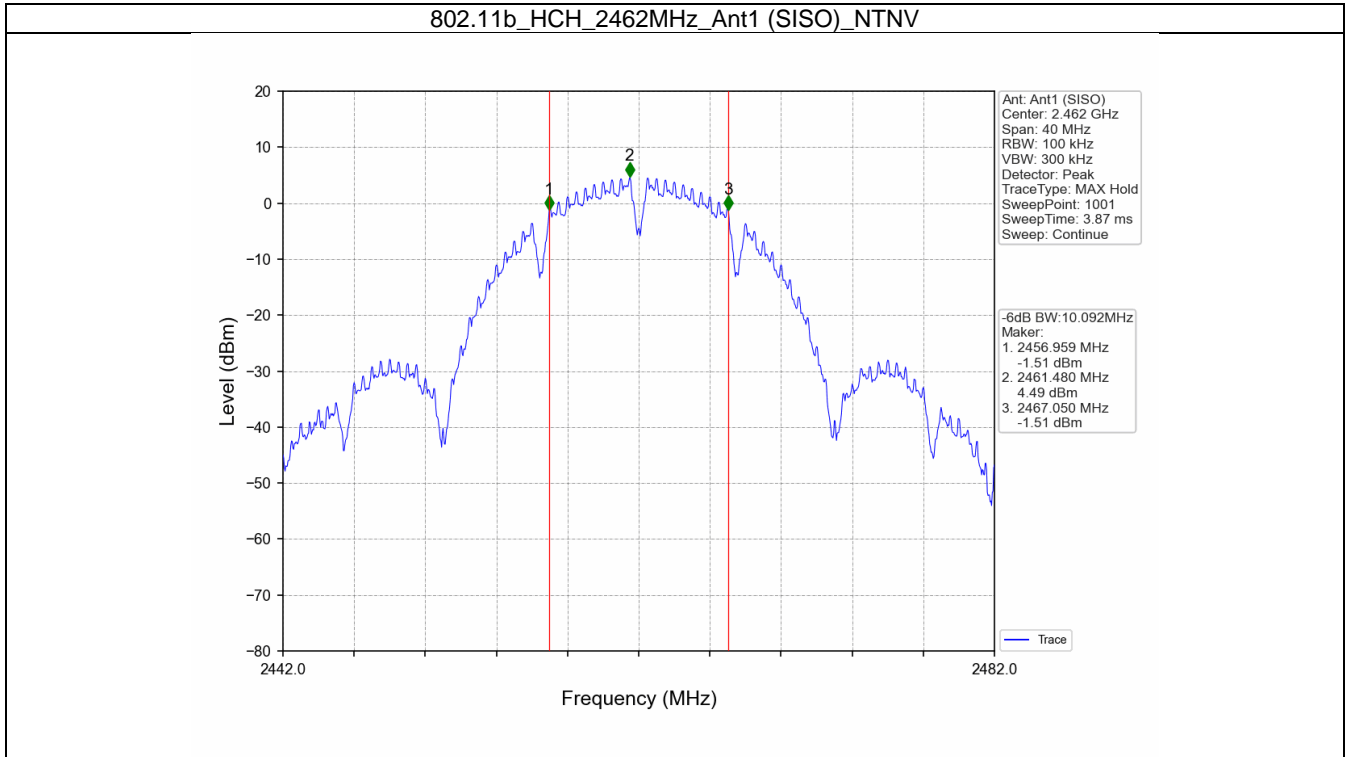
## 2.2 6dB BW

### 2.2.1 Test Result

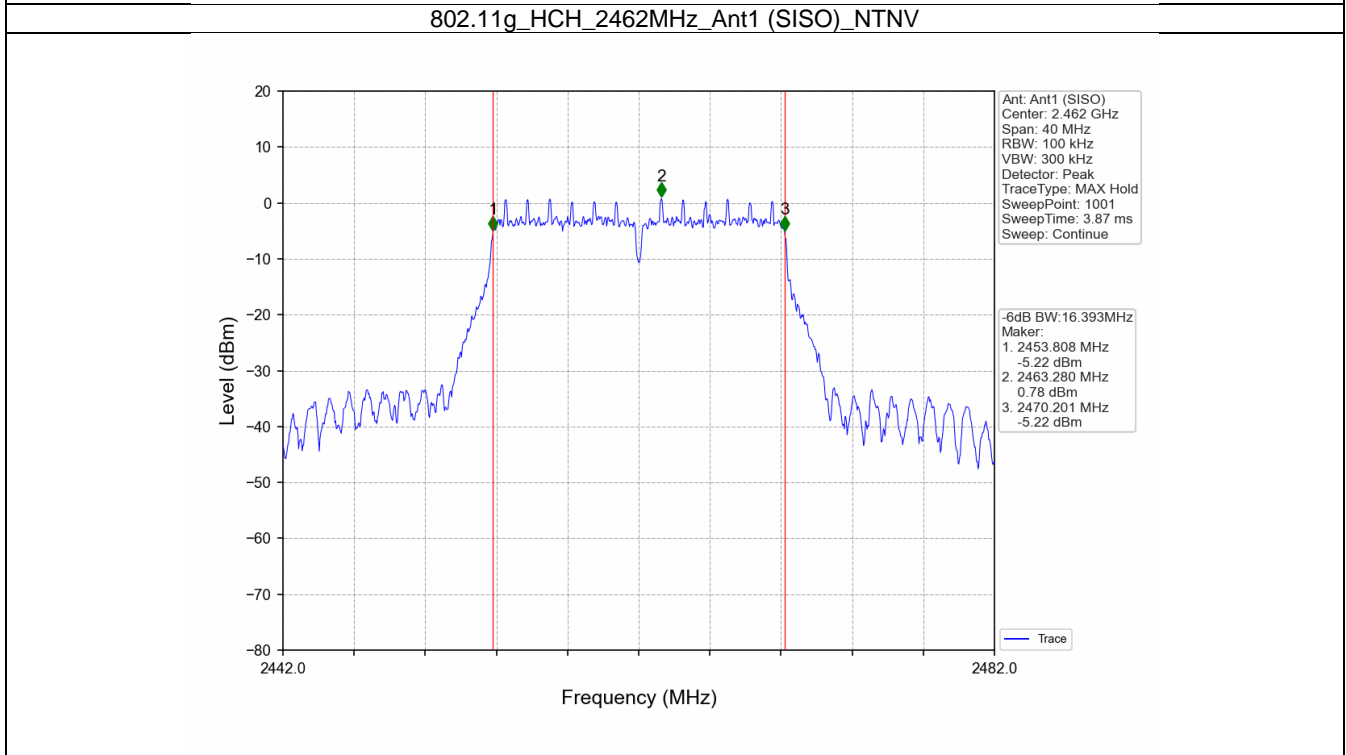
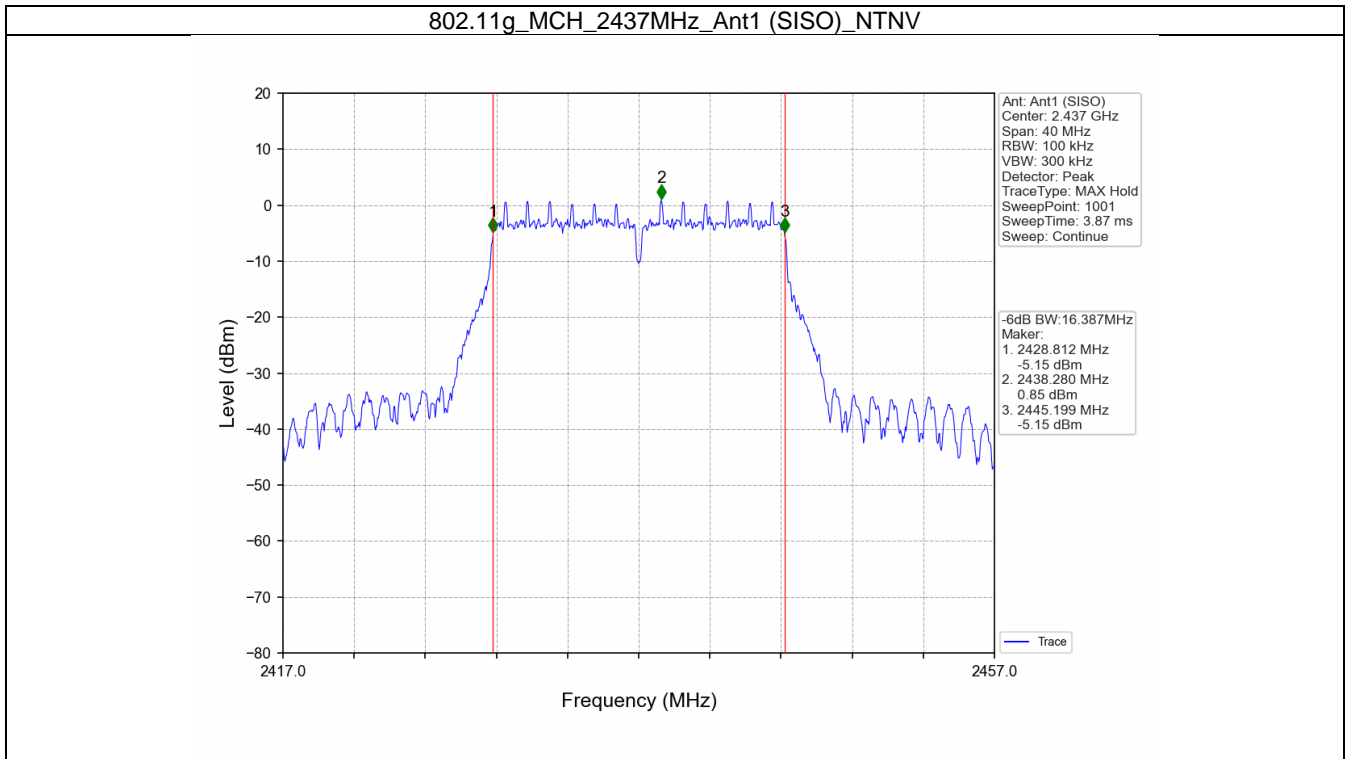
Mode	TX Type	Frequency (MHz)	Ant	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	10.093	>=0.5	Pass
		2437	1	10.093	>=0.5	Pass
		2462	1	10.092	>=0.5	Pass
802.11g	SISO	2412	1	16.397	>=0.5	Pass
		2437	1	16.387	>=0.5	Pass
		2462	1	16.393	>=0.5	Pass
802.11n (HT20)	SISO	2412	1	17.652	>=0.5	Pass
		2437	1	17.651	>=0.5	Pass
		2462	1	17.648	>=0.5	Pass
802.11n (HT40)	SISO	2422	1	36.342	>=0.5	Pass
		2437	1	36.342	>=0.5	Pass
		2452	1	36.343	>=0.5	Pass

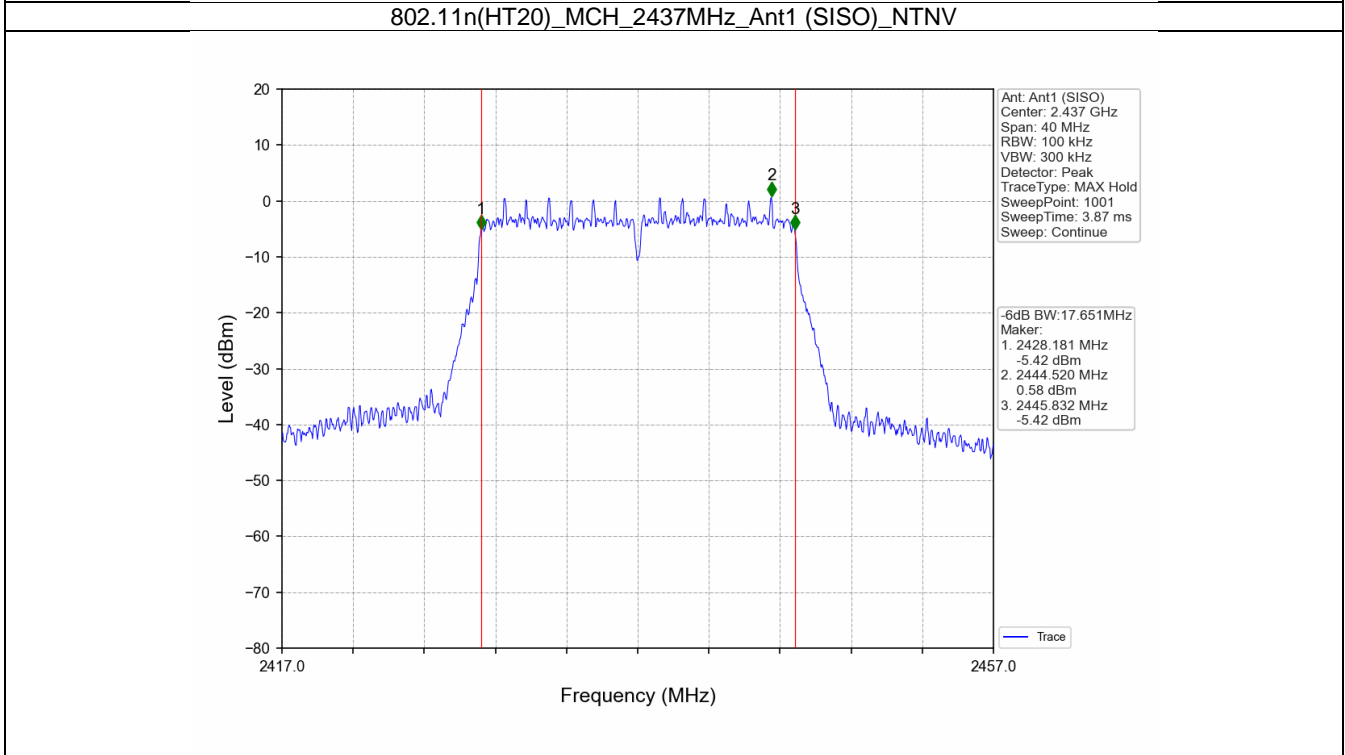
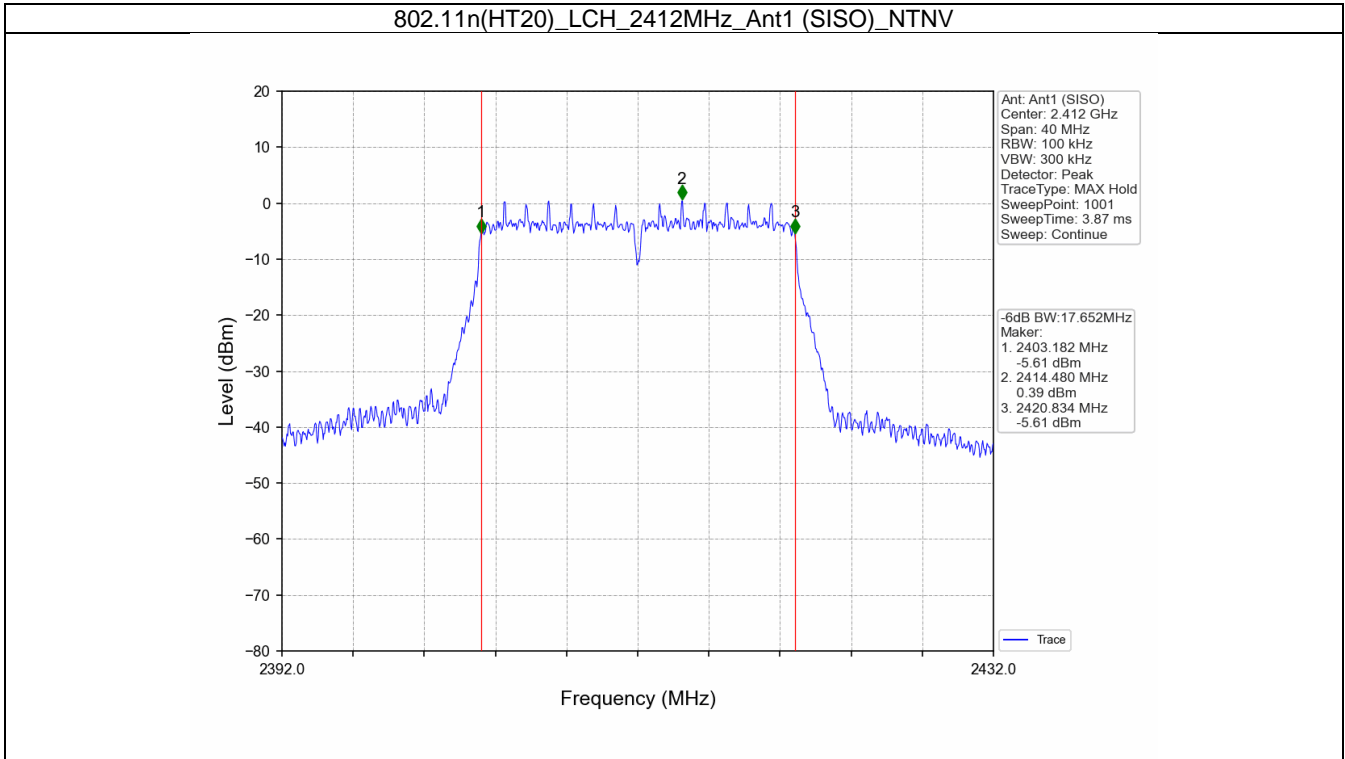
2.2.2 Test Graph



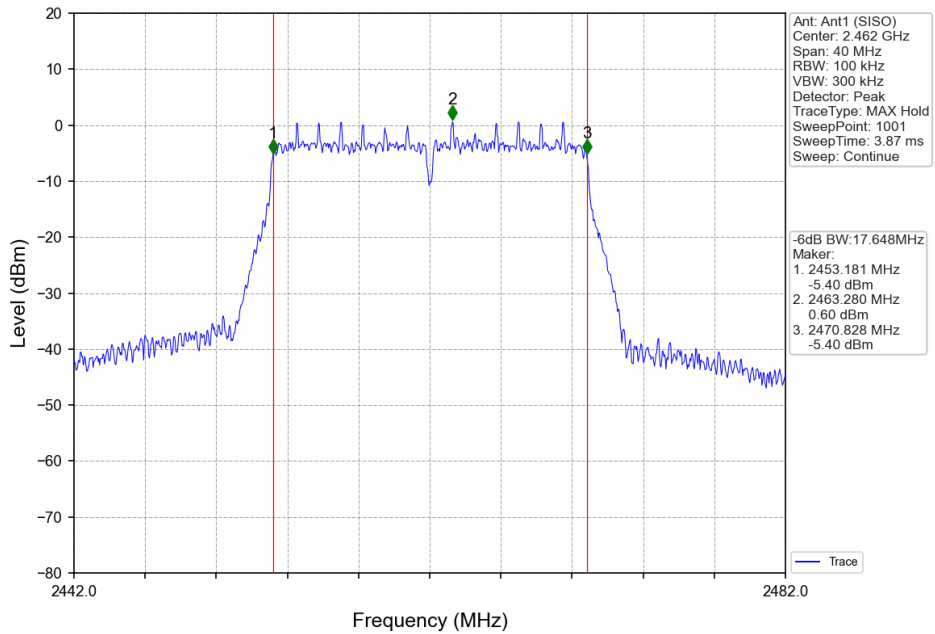




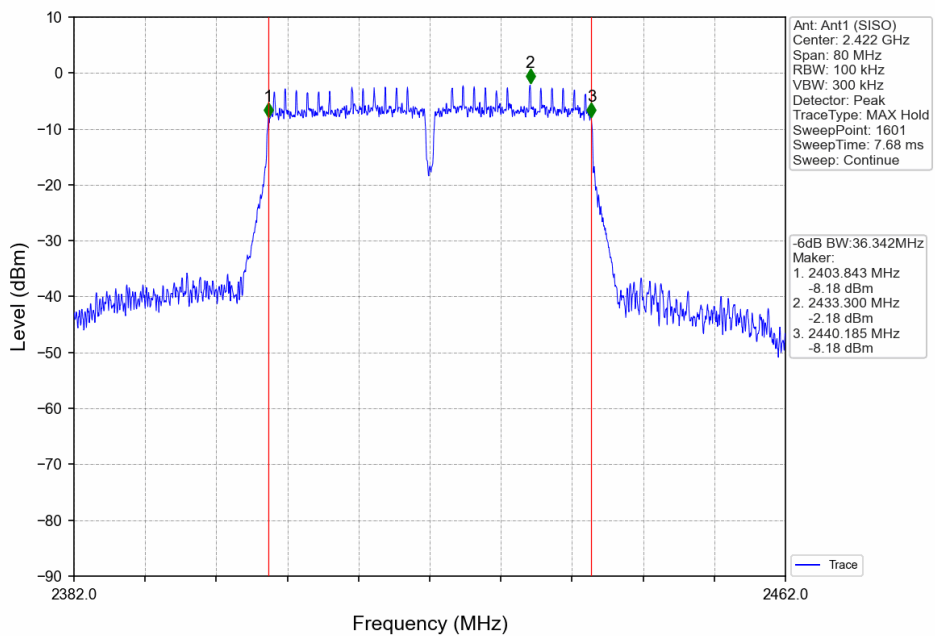


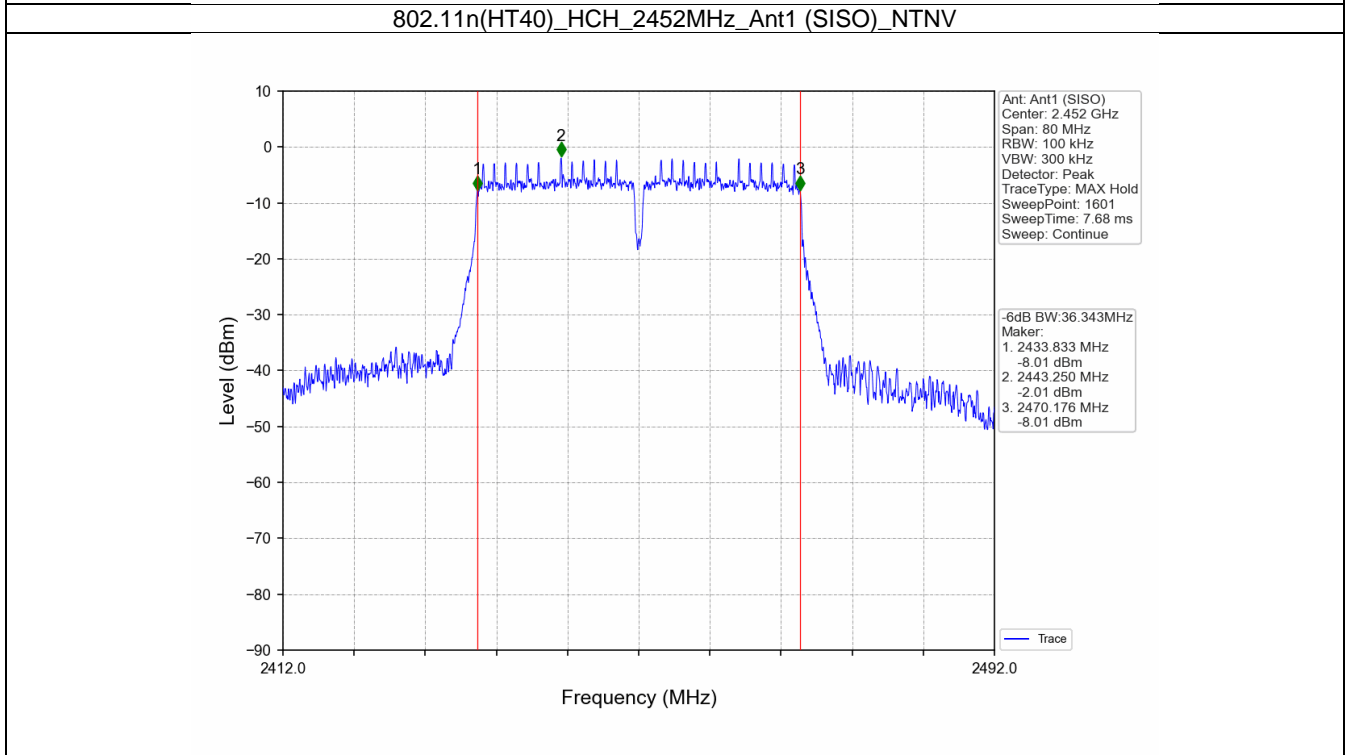
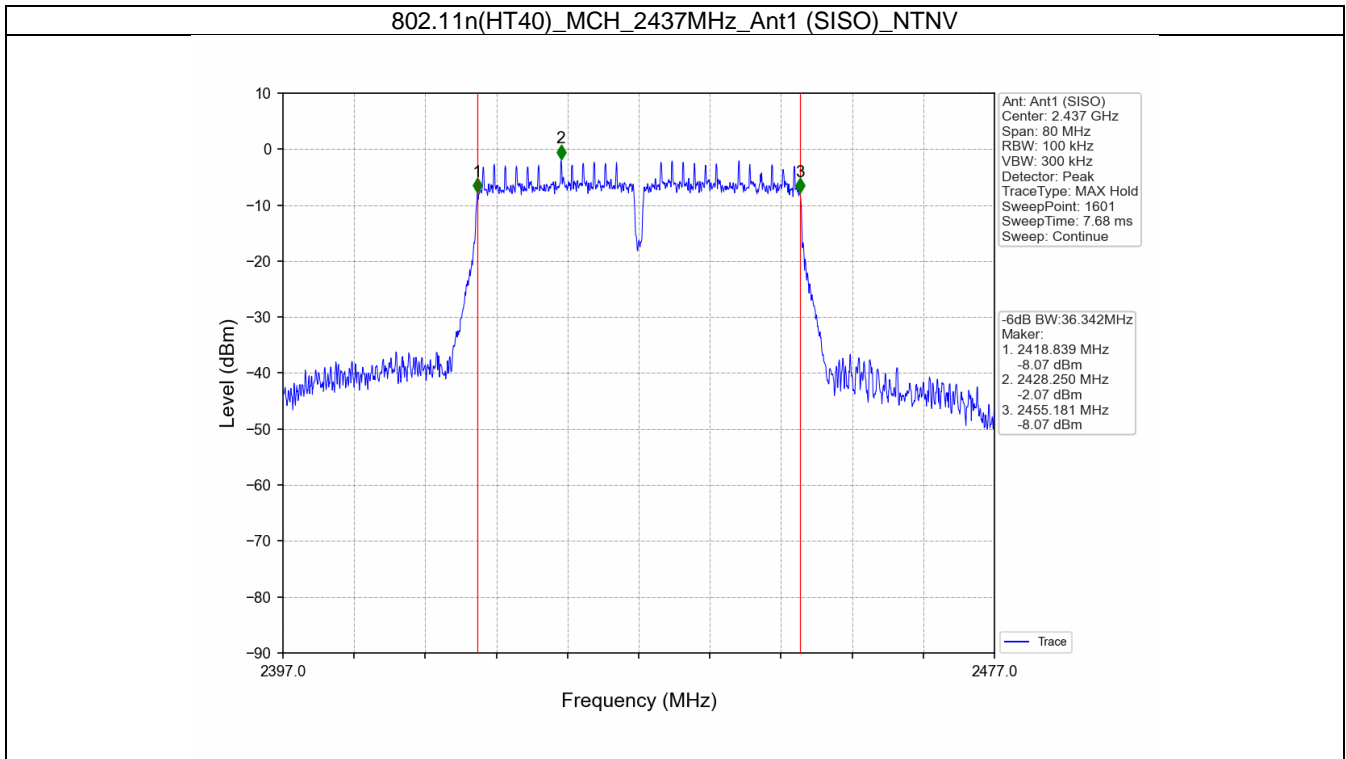


802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV





### 3. Maximum Conducted Output Power

#### 3.1 Power

##### 3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			Ant1	Limit	
802.11b	SISO	2412	16.62	<=30	Pass
		2437	16.84	<=30	Pass
		2462	16.80	<=30	Pass
802.11g	SISO	2412	19.71	<=30	Pass
		2437	19.94	<=30	Pass
		2462	19.91	<=30	Pass
802.11n (HT20)	SISO	2412	19.59	<=30	Pass
		2437	19.82	<=30	Pass
		2462	19.79	<=30	Pass
802.11n (HT40)	SISO	2422	19.79	<=30	Pass
		2437	19.88	<=30	Pass
		2452	19.90	<=30	Pass

Note1: Antenna Gain: Ant1: 1.43dBi;

### 4. Maximum Power Spectral Density

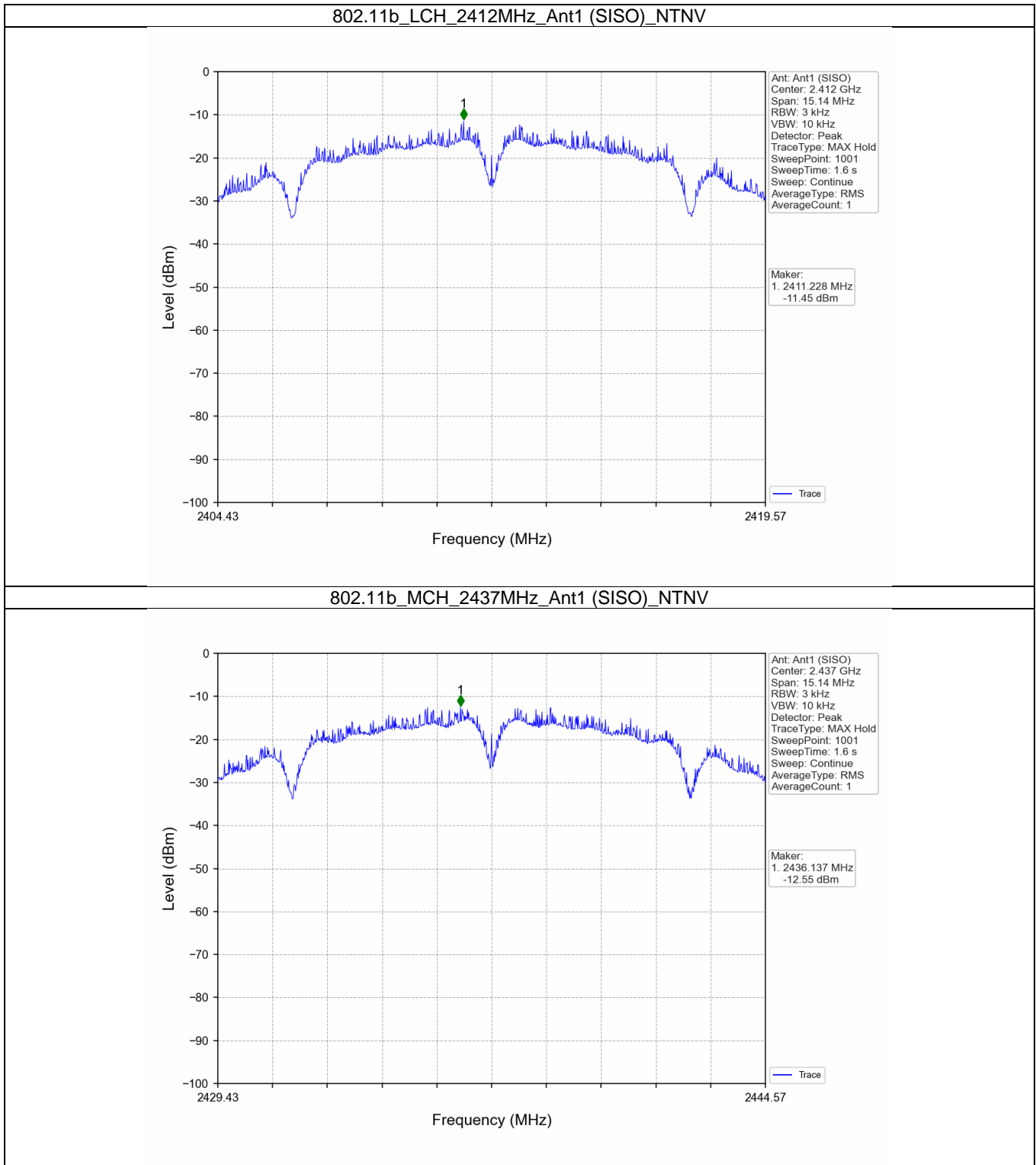
#### 4.1 PSD

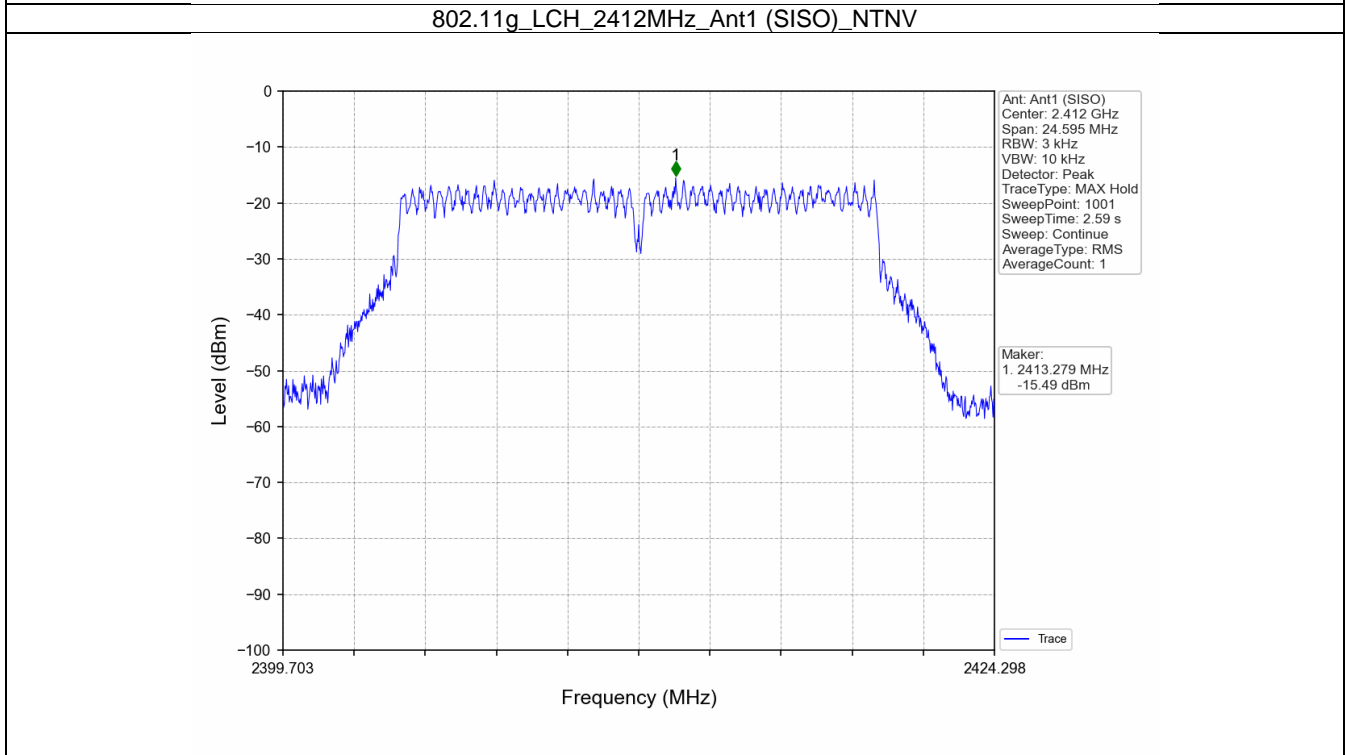
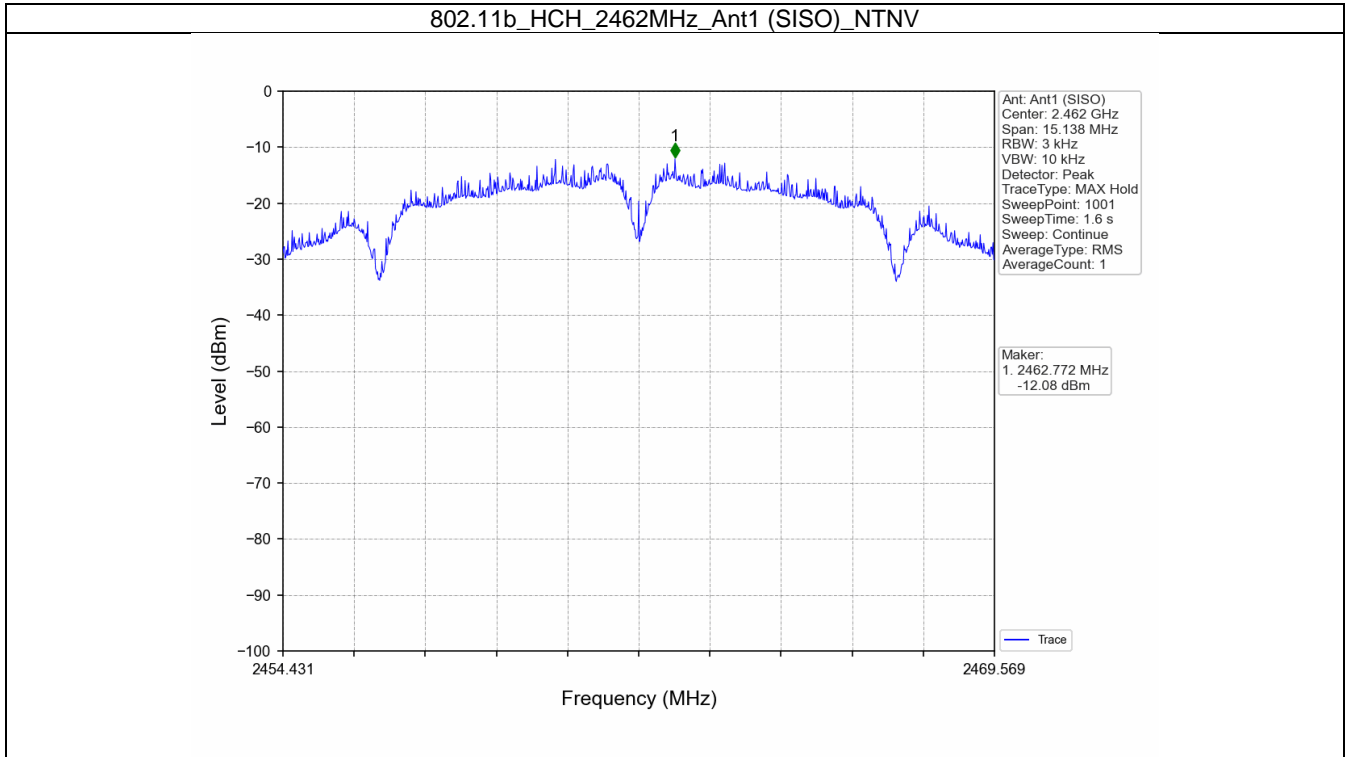
##### 4.1.1 Test Result

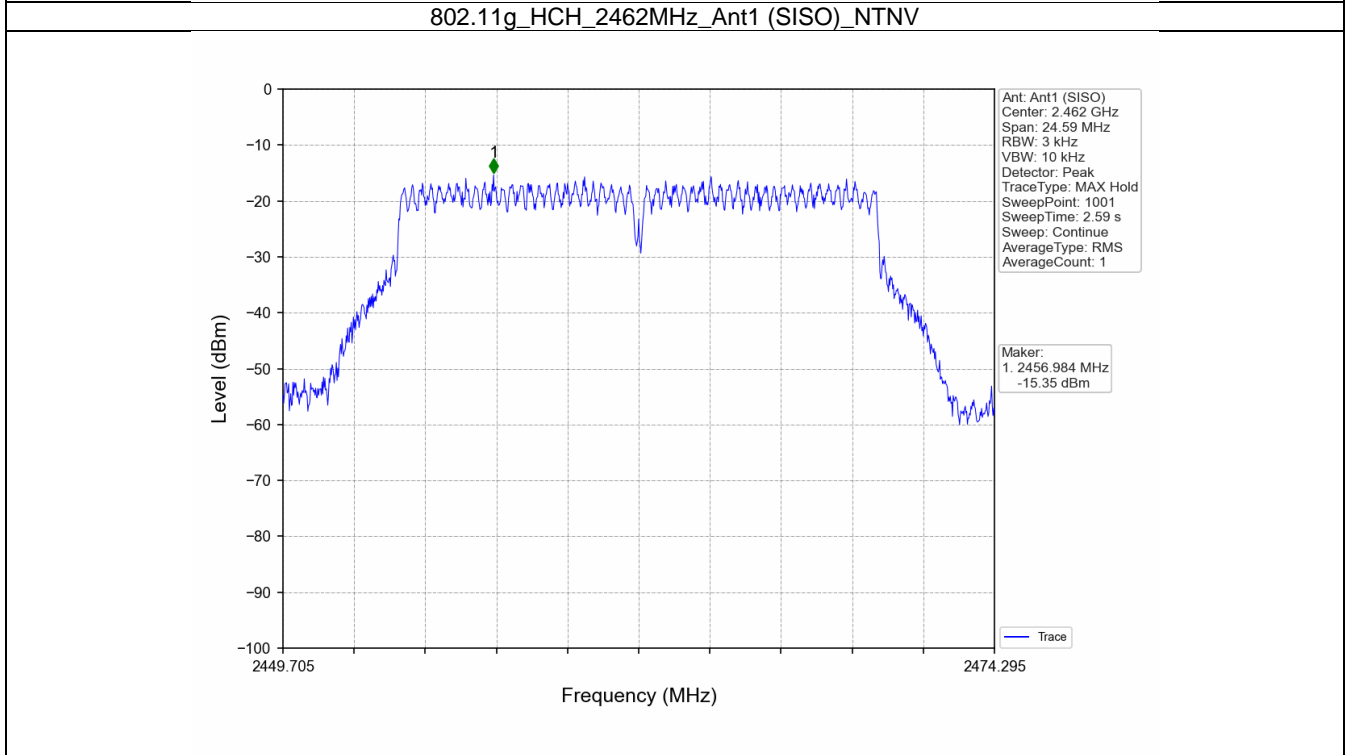
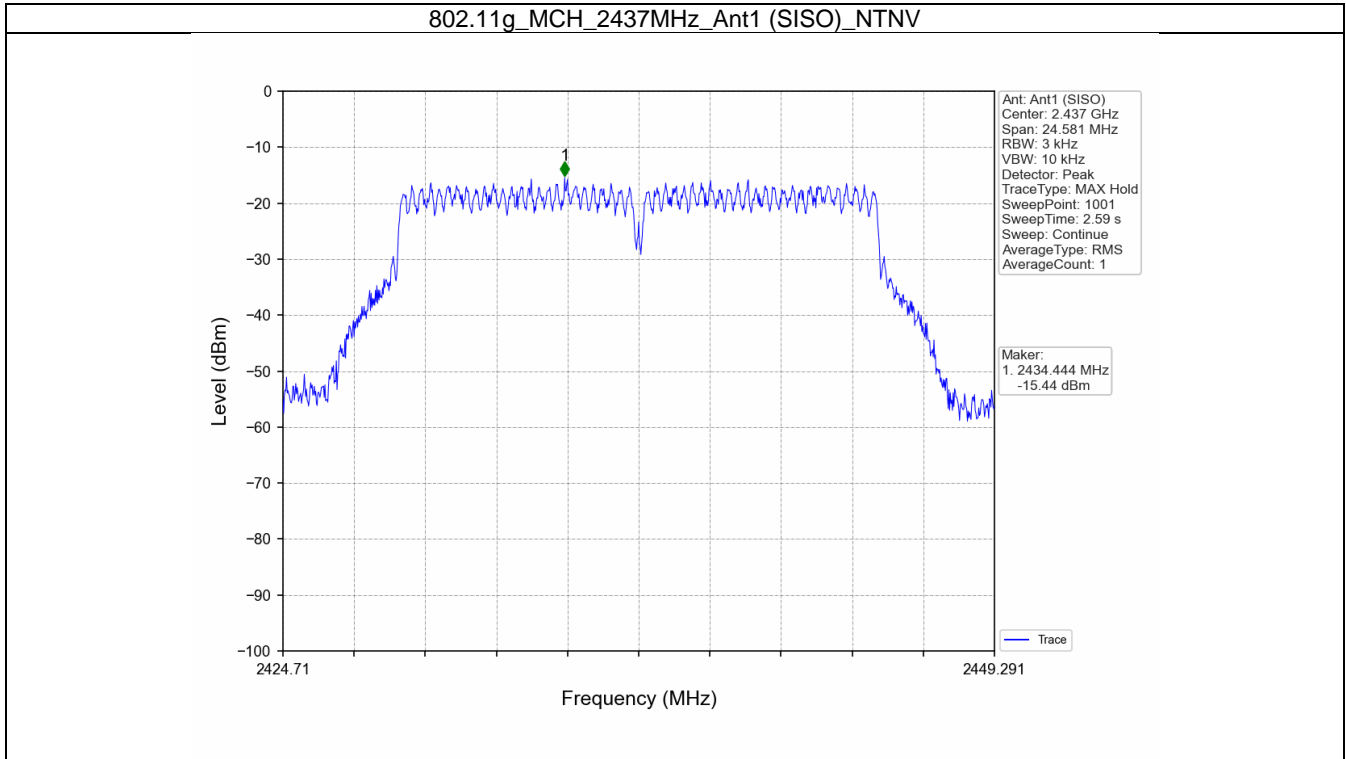
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			Ant1	Limit	
802.11b	SISO	2412	-11.45	<=8	Pass
		2437	-12.55	<=8	Pass
		2462	-12.08	<=8	Pass
802.11g	SISO	2412	-15.49	<=8	Pass
		2437	-15.44	<=8	Pass
		2462	-15.35	<=8	Pass
802.11n (HT20)	SISO	2412	-15.69	<=8	Pass
		2437	-15.87	<=8	Pass
		2462	-15.41	<=8	Pass
802.11n (HT40)	SISO	2422	-17.59	<=8	Pass
		2437	-18.00	<=8	Pass
		2452	-17.79	<=8	Pass

Note1: Antenna Gain: Ant1: 1.43dBi;

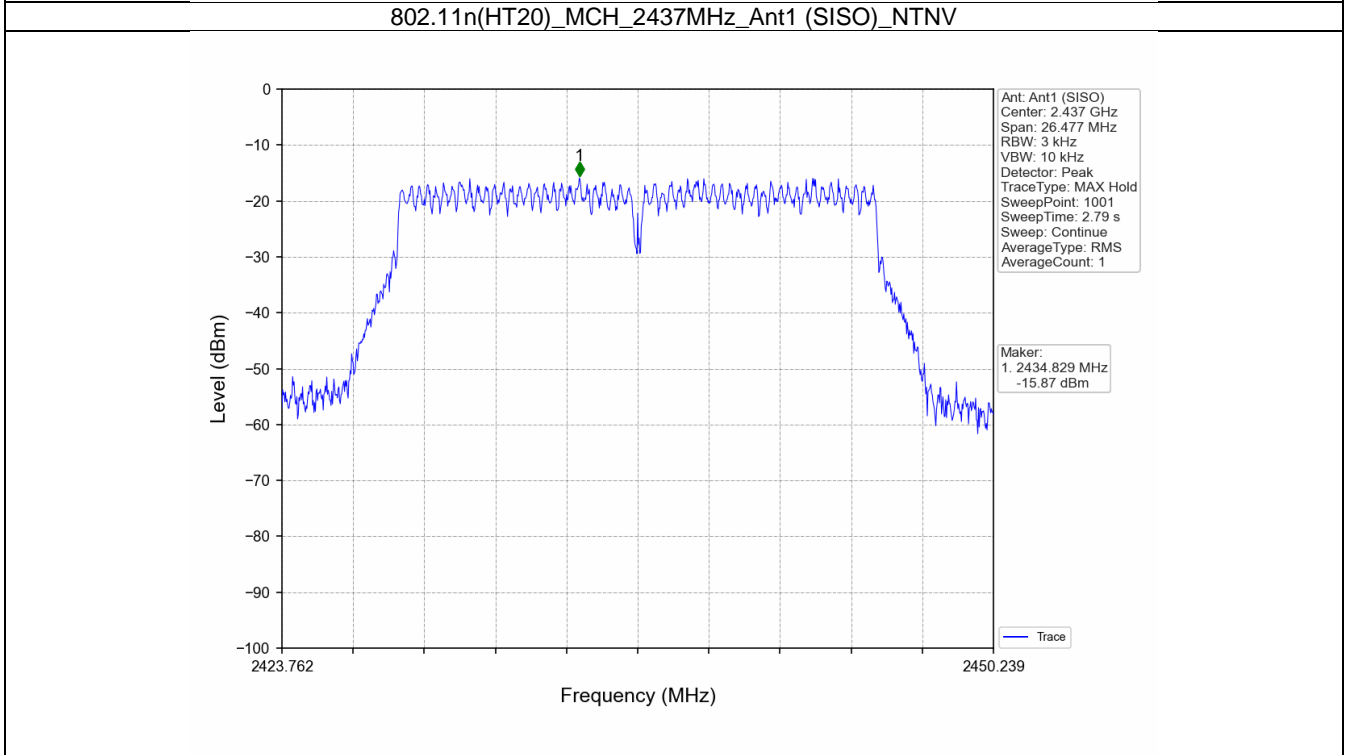
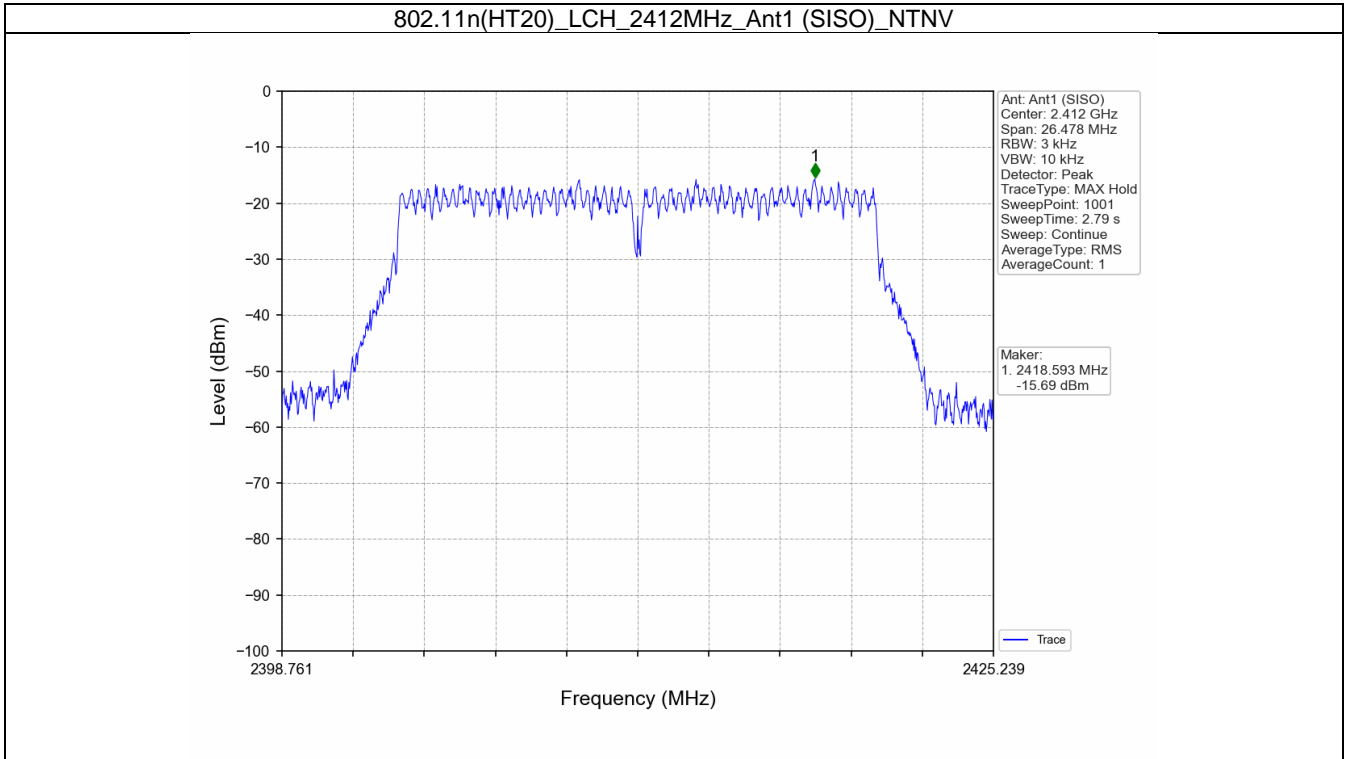
4.1.2 Test Graph

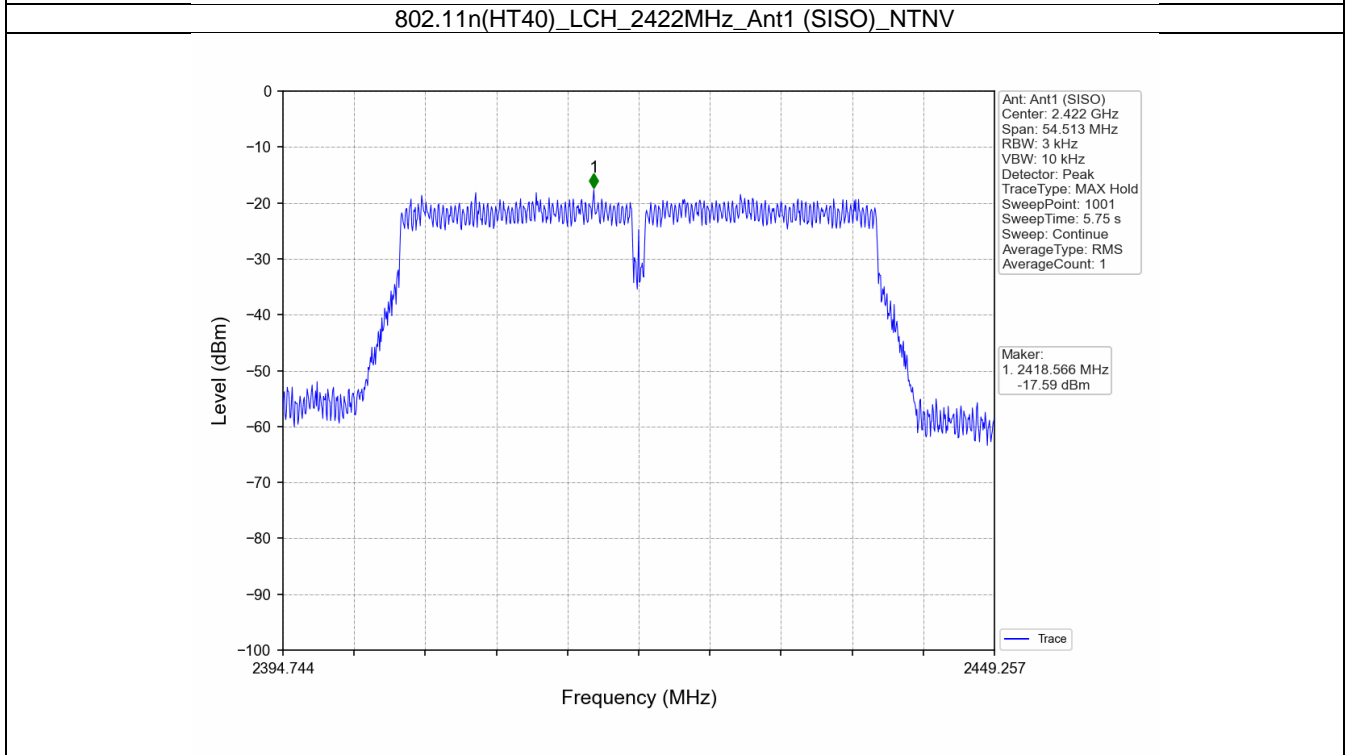


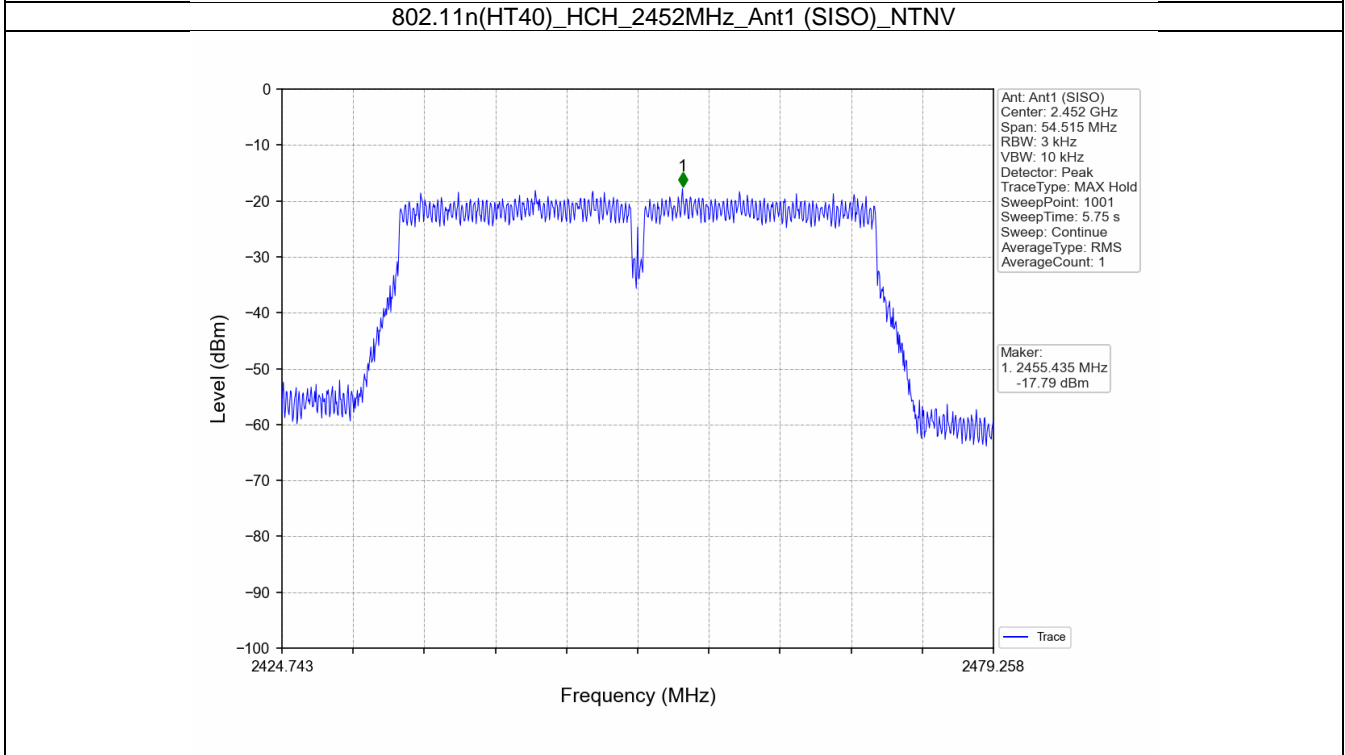
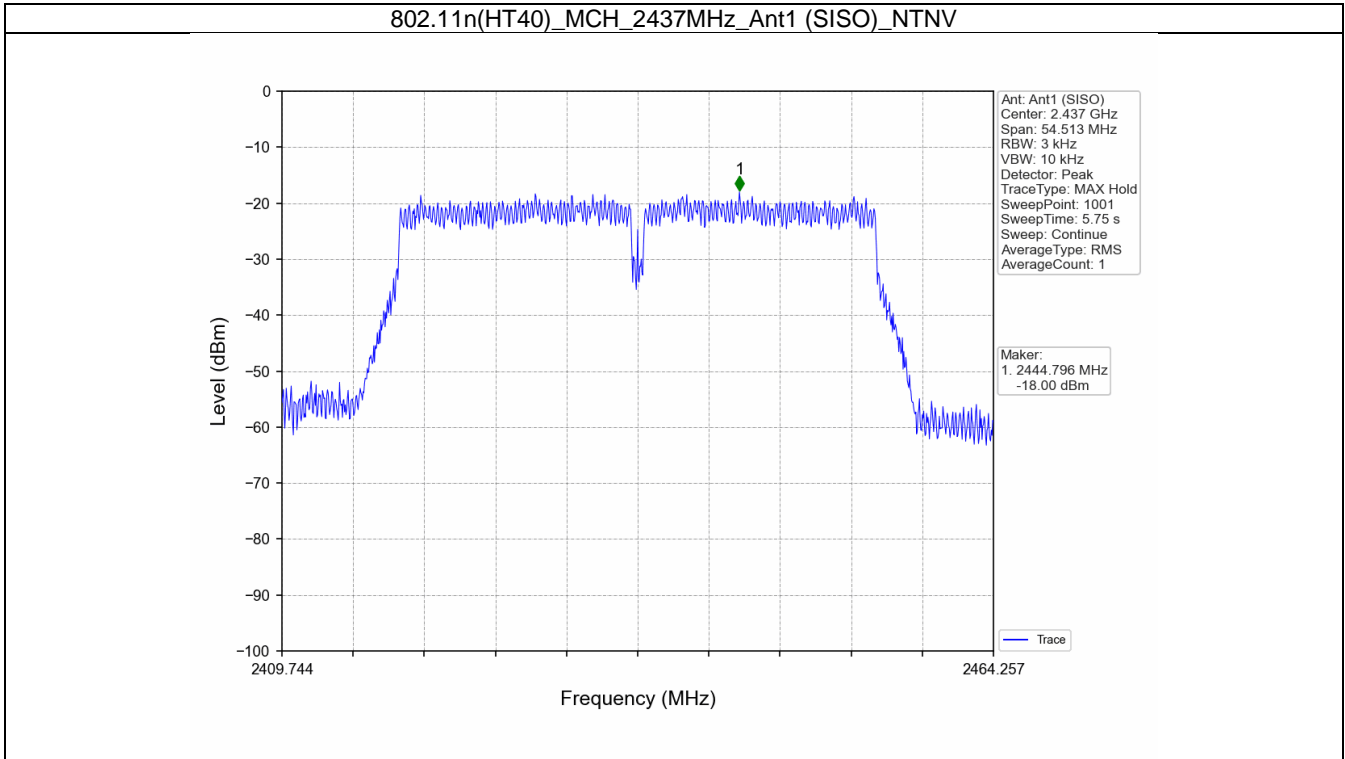












## 5. Unwanted Emissions In Non-restricted Frequency Bands

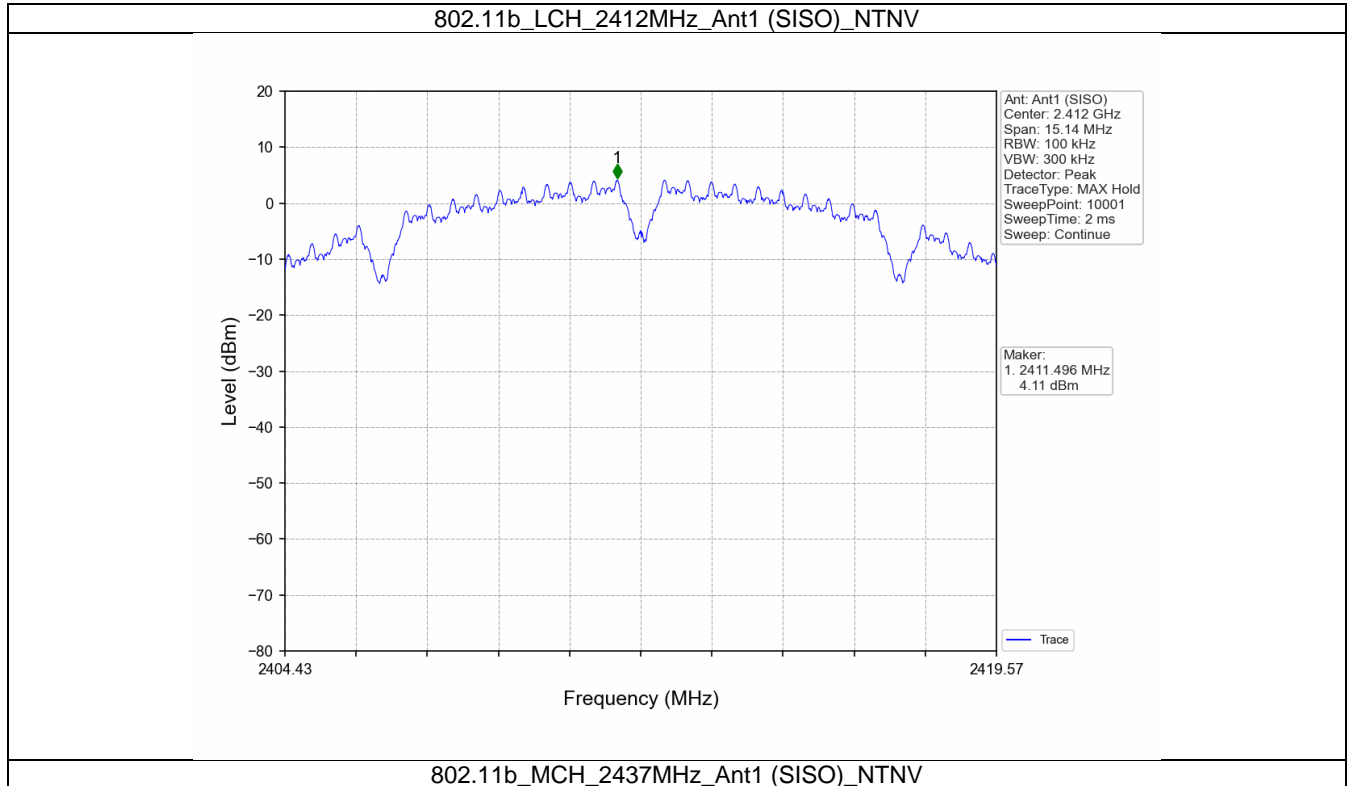
### 5.1 Ref

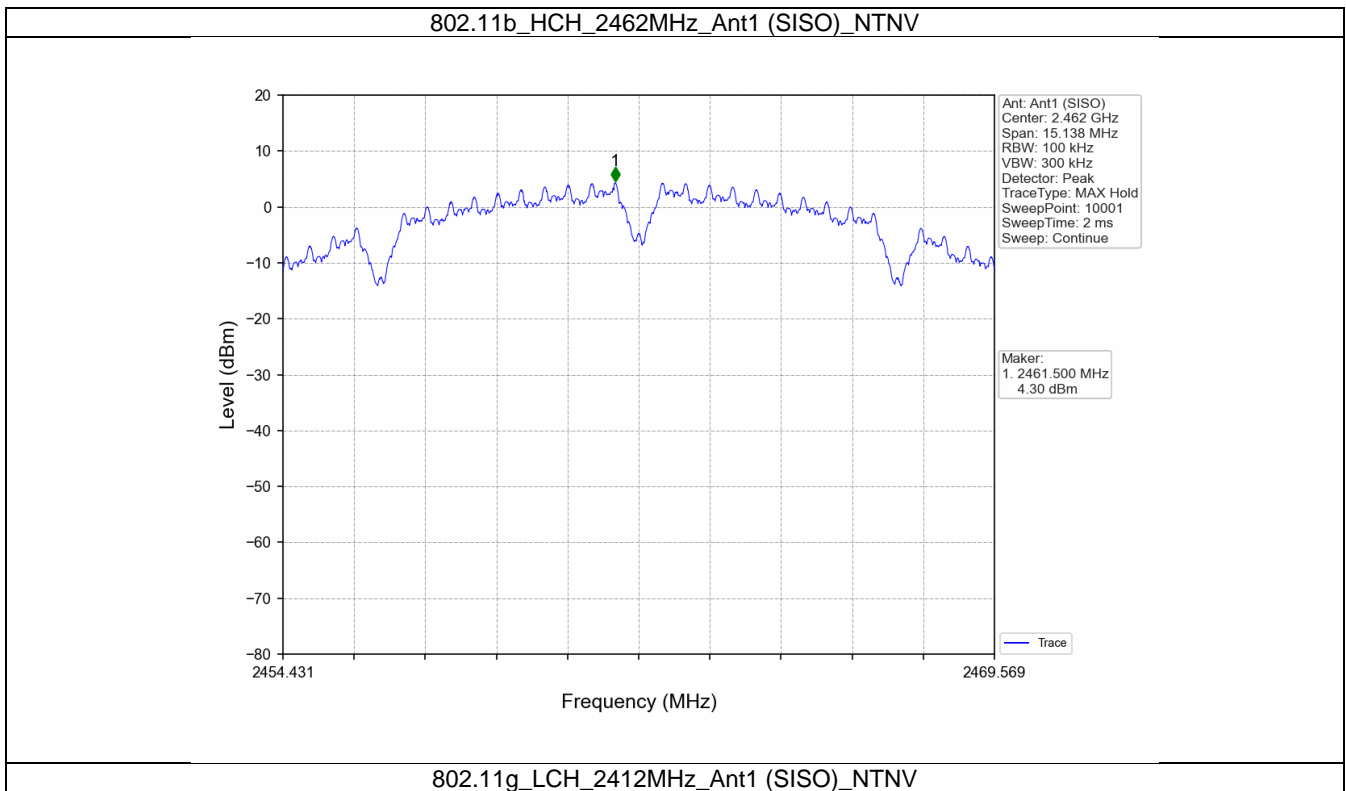
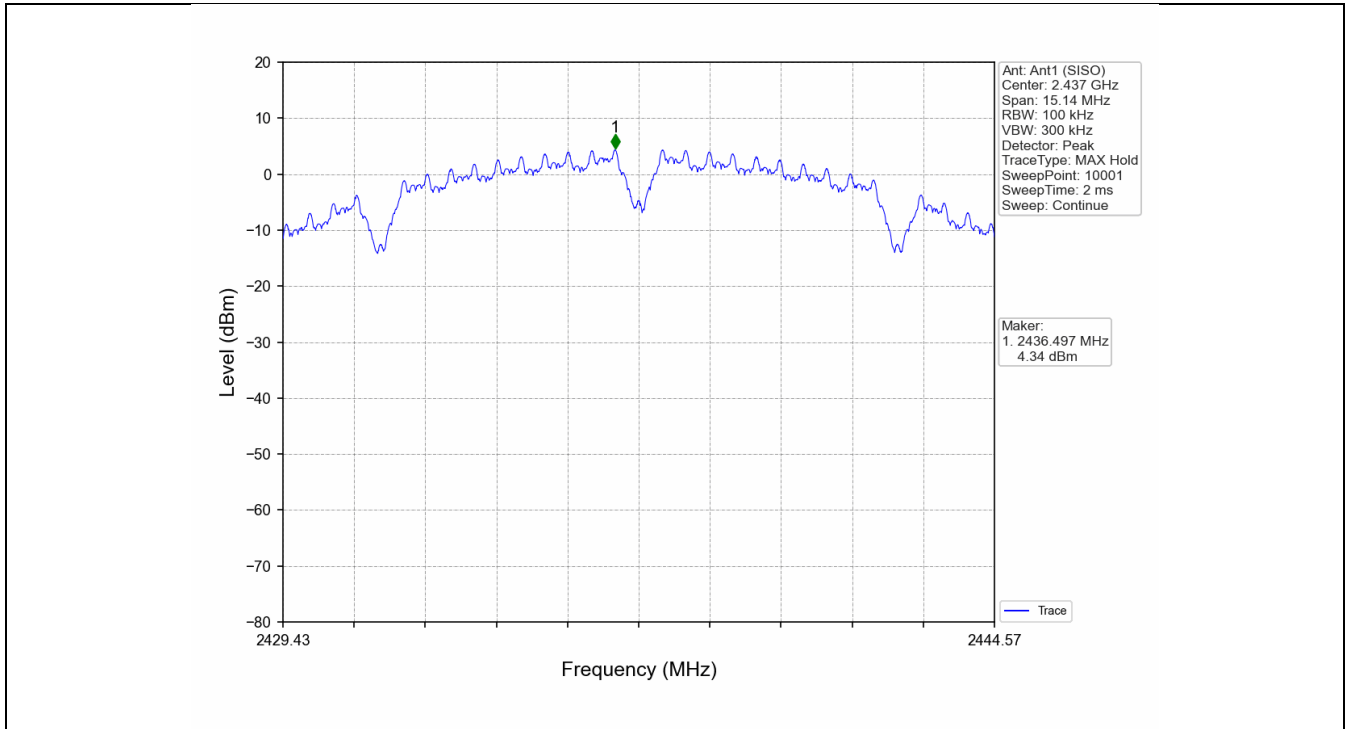
#### 5.1.1 Test Result

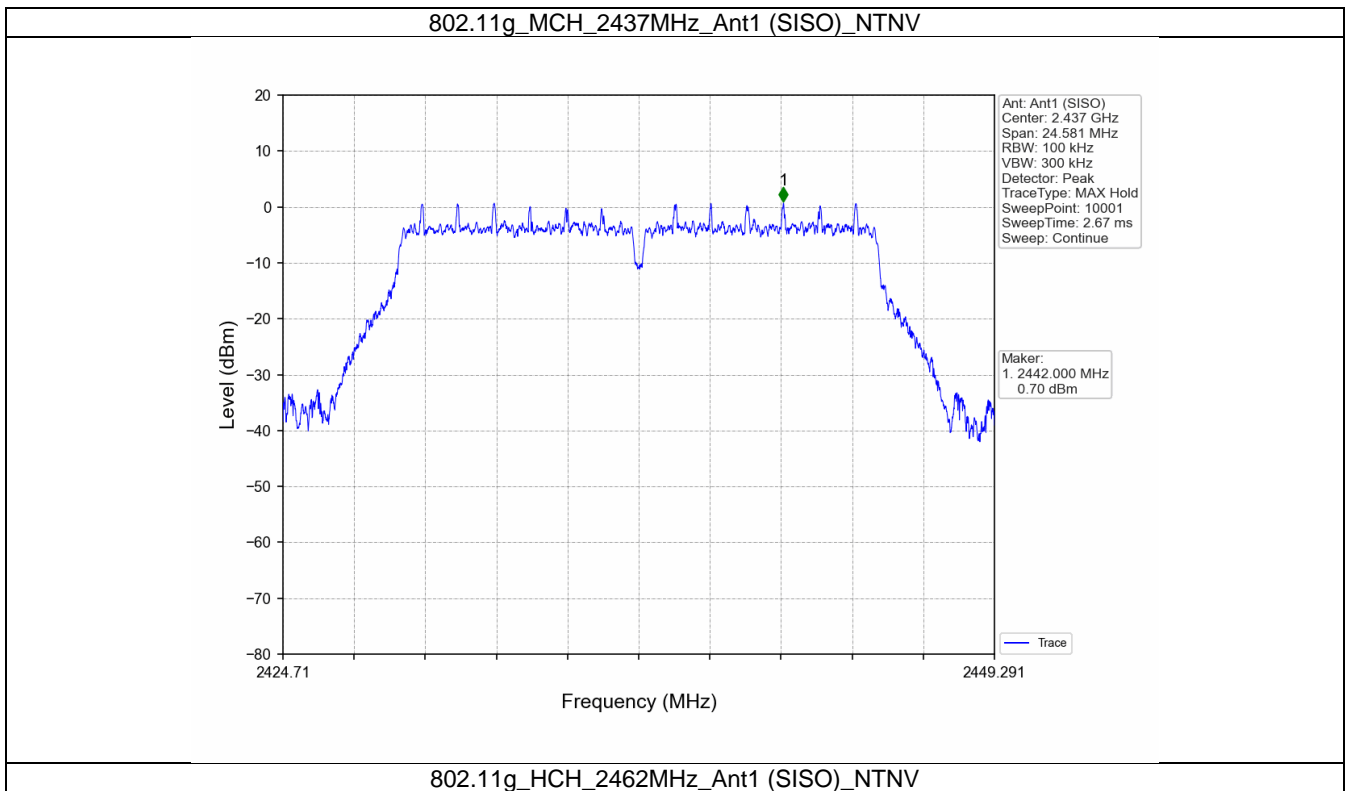
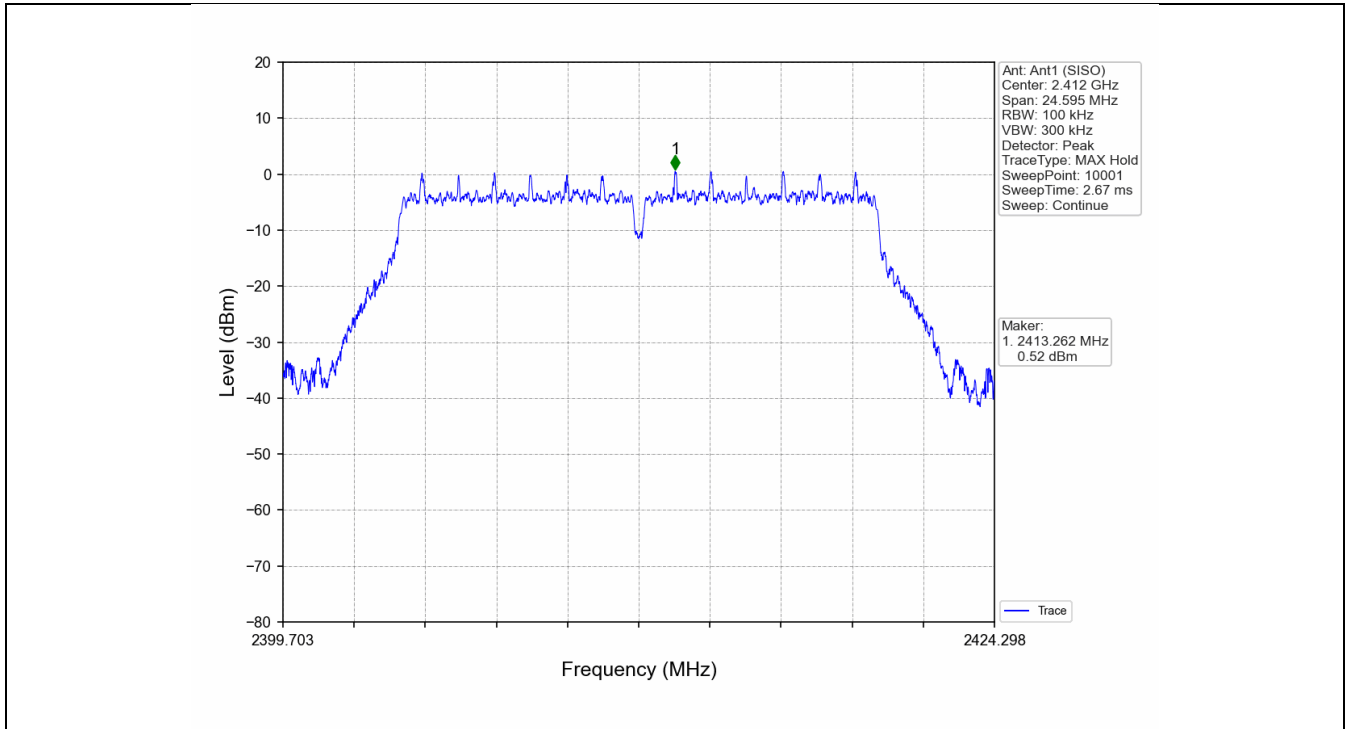
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)
802.11b	SISO	2412	1	4.11
		2437	1	4.34
		2462	1	4.30
802.11g	SISO	2412	1	0.52
		2437	1	0.70
		2462	1	0.71
802.11n (HT20)	SISO	2412	1	0.57
		2437	1	0.70
		2462	1	0.70
802.11n (HT40)	SISO	2422	1	-2.48
		2437	1	-2.13
		2452	1	-2.02

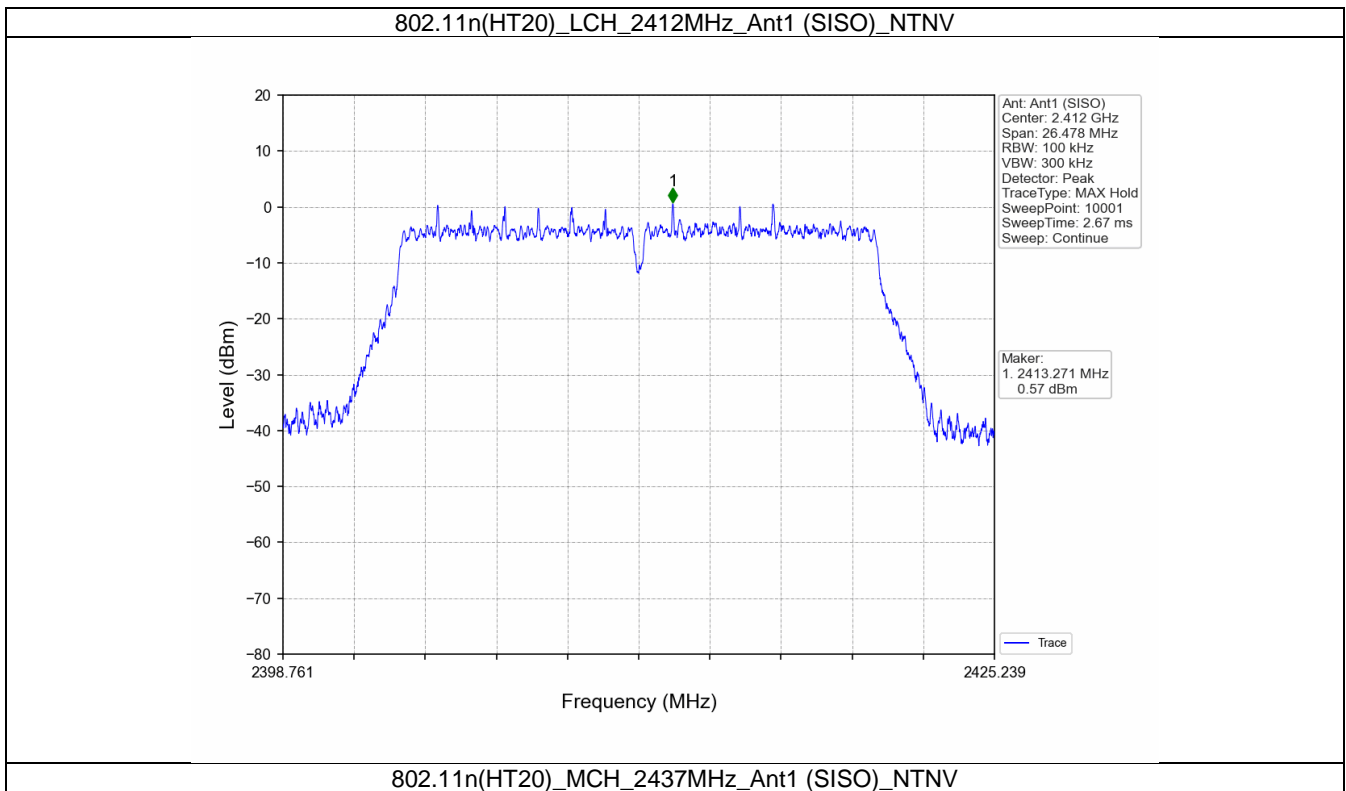
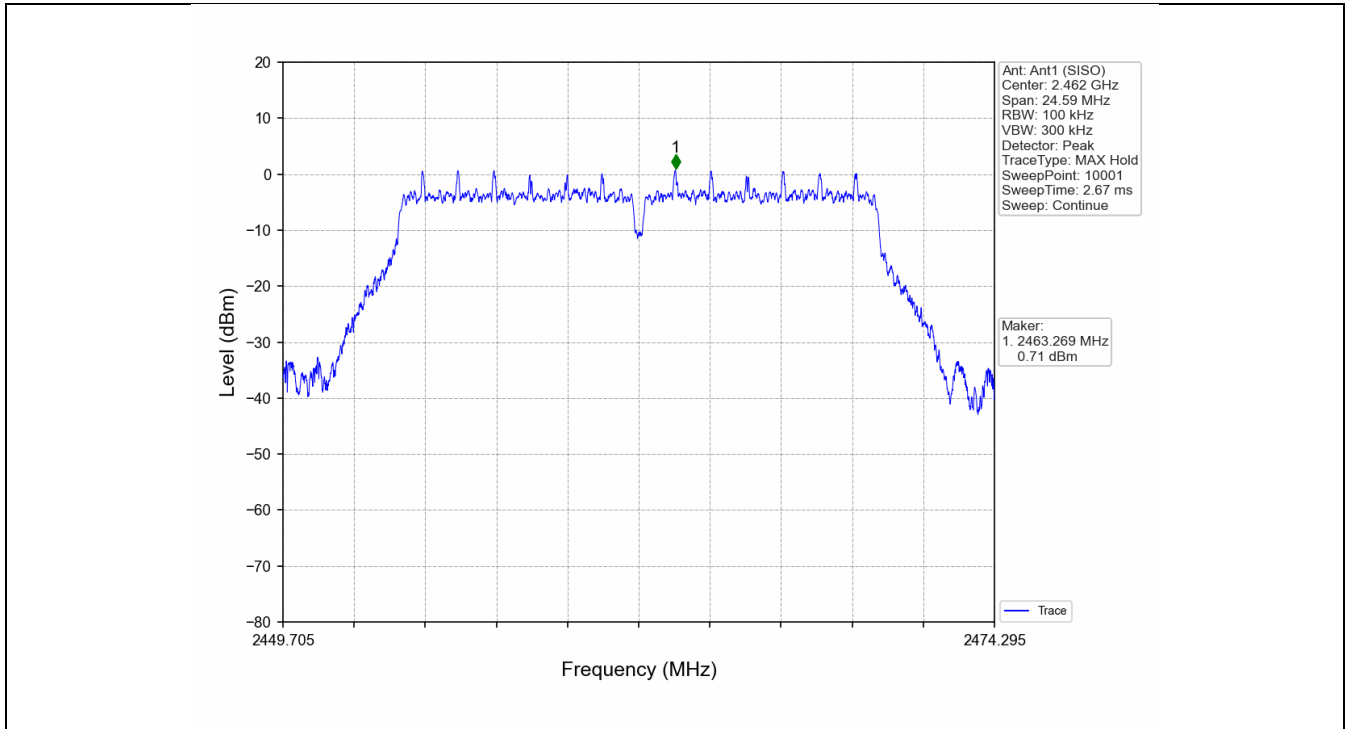
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

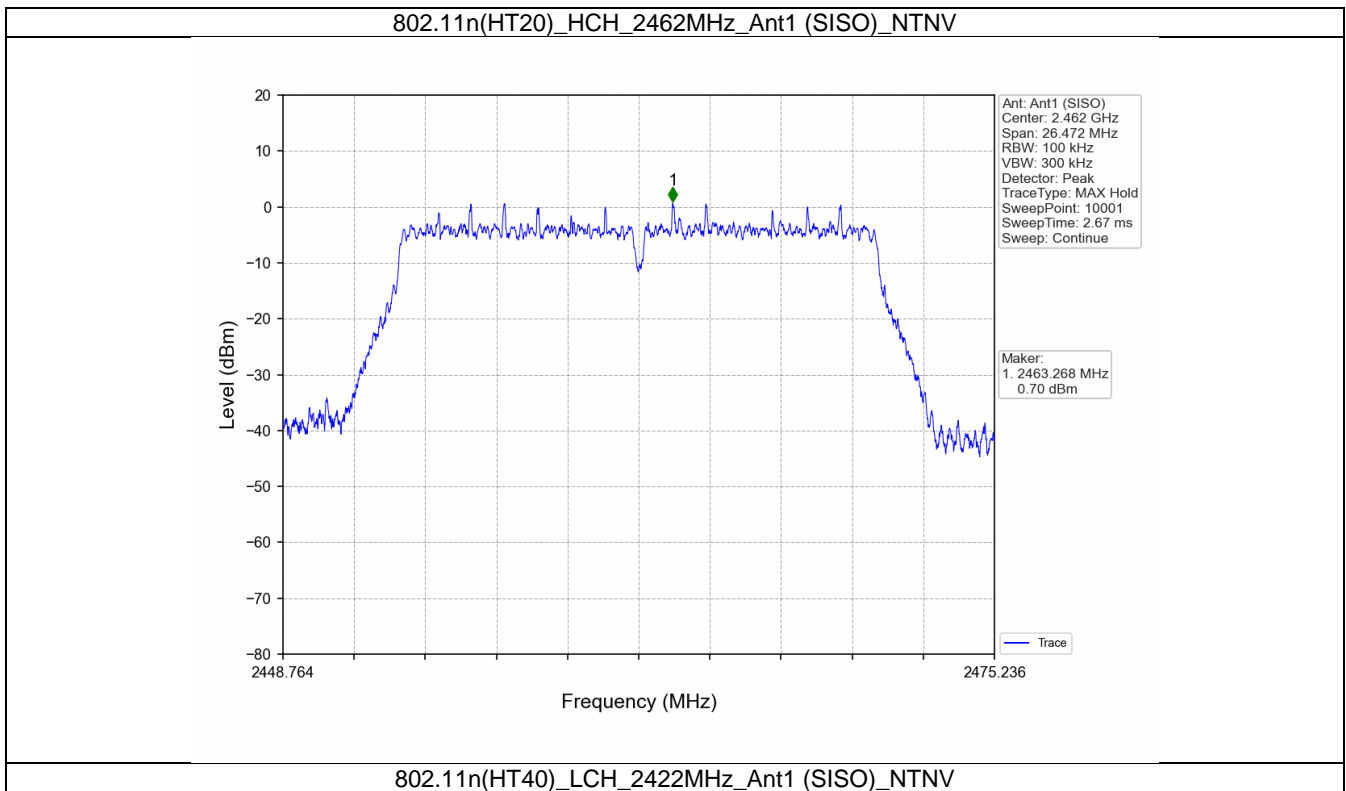
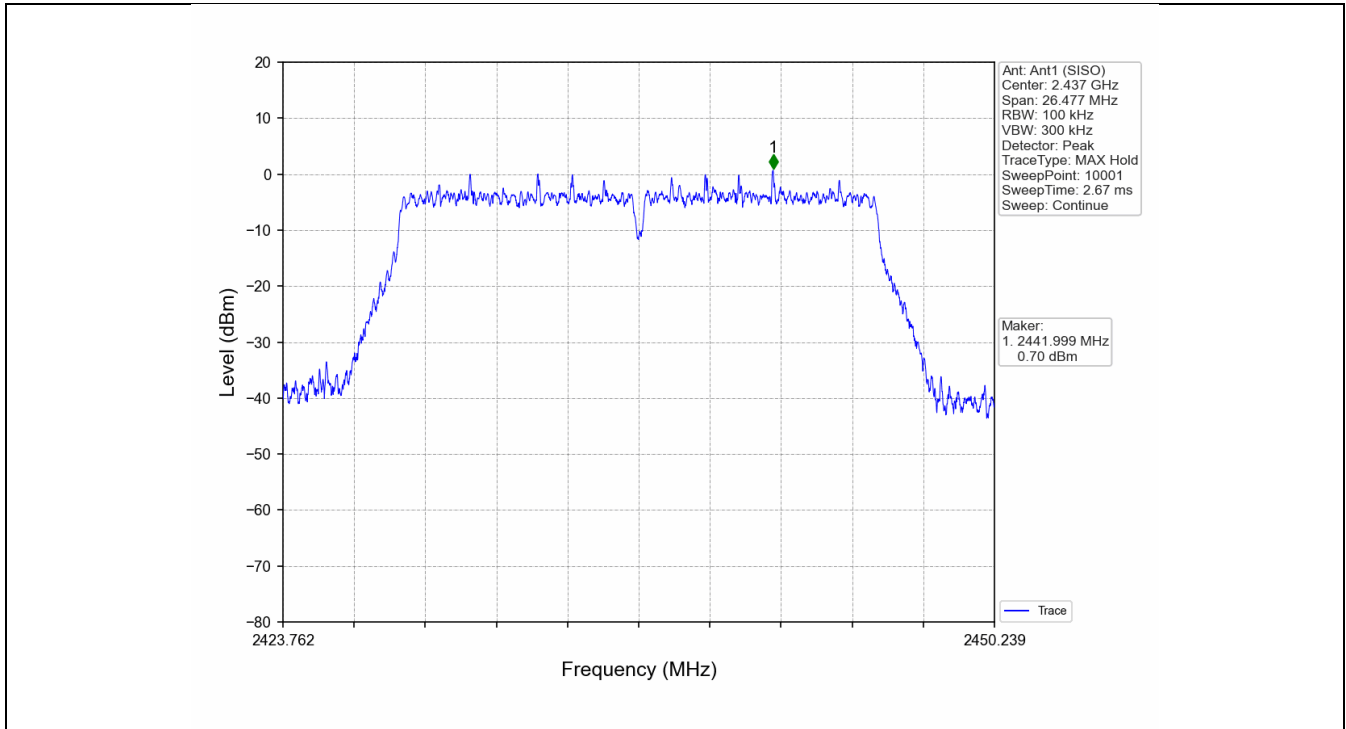
#### 5.1.2 Test Graph



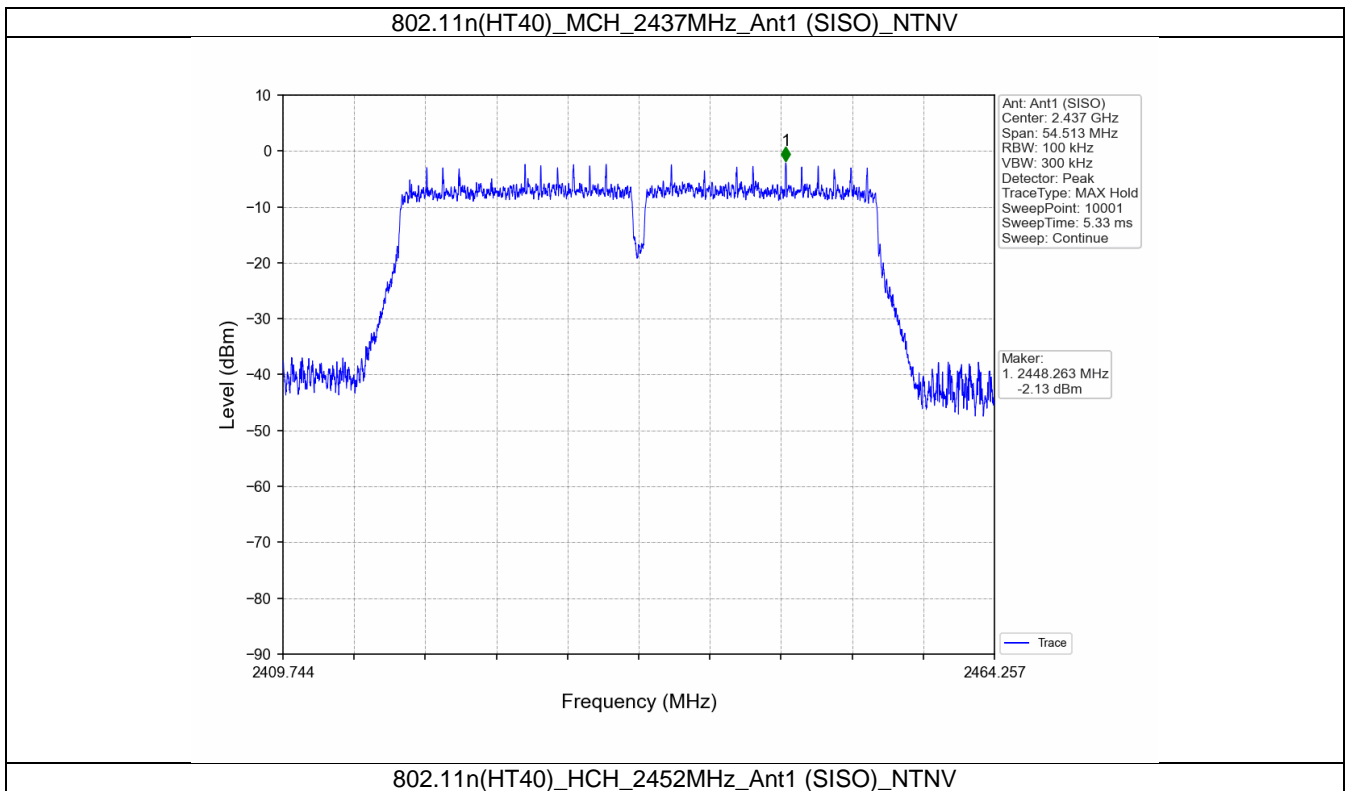
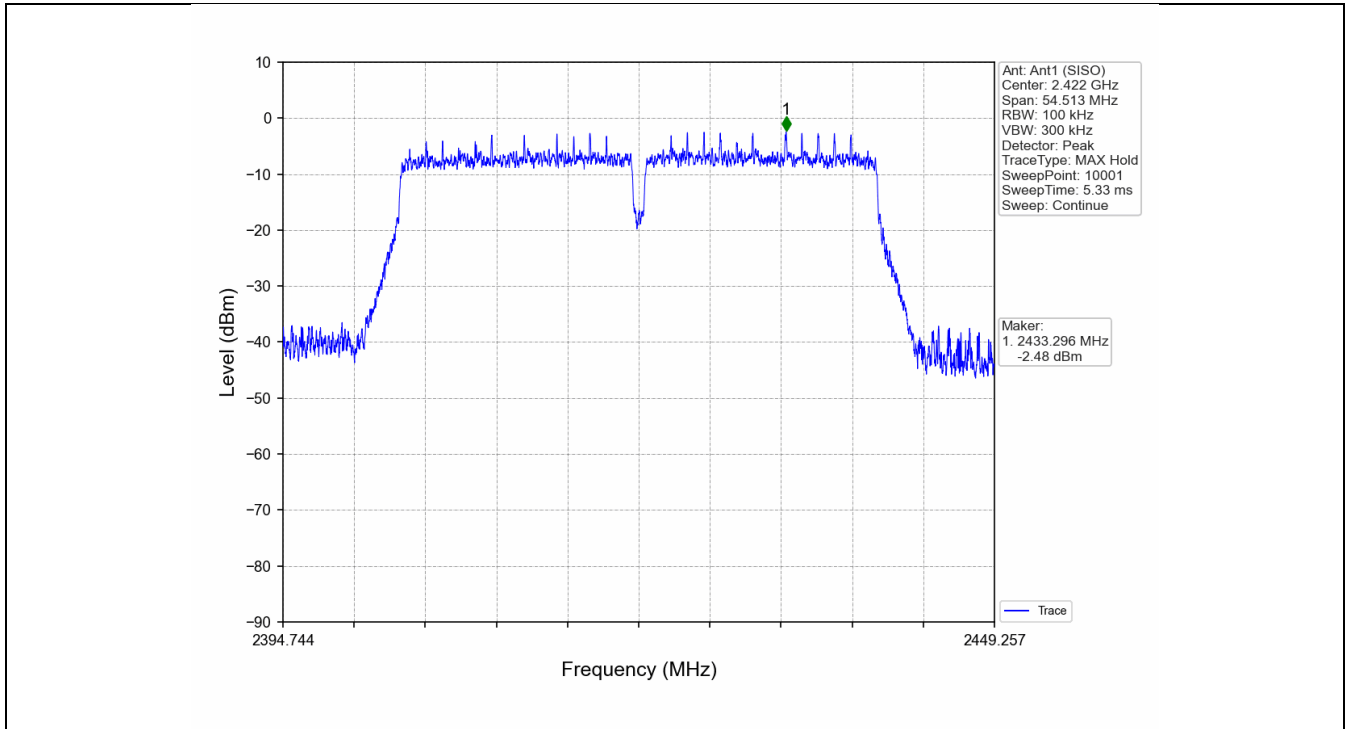


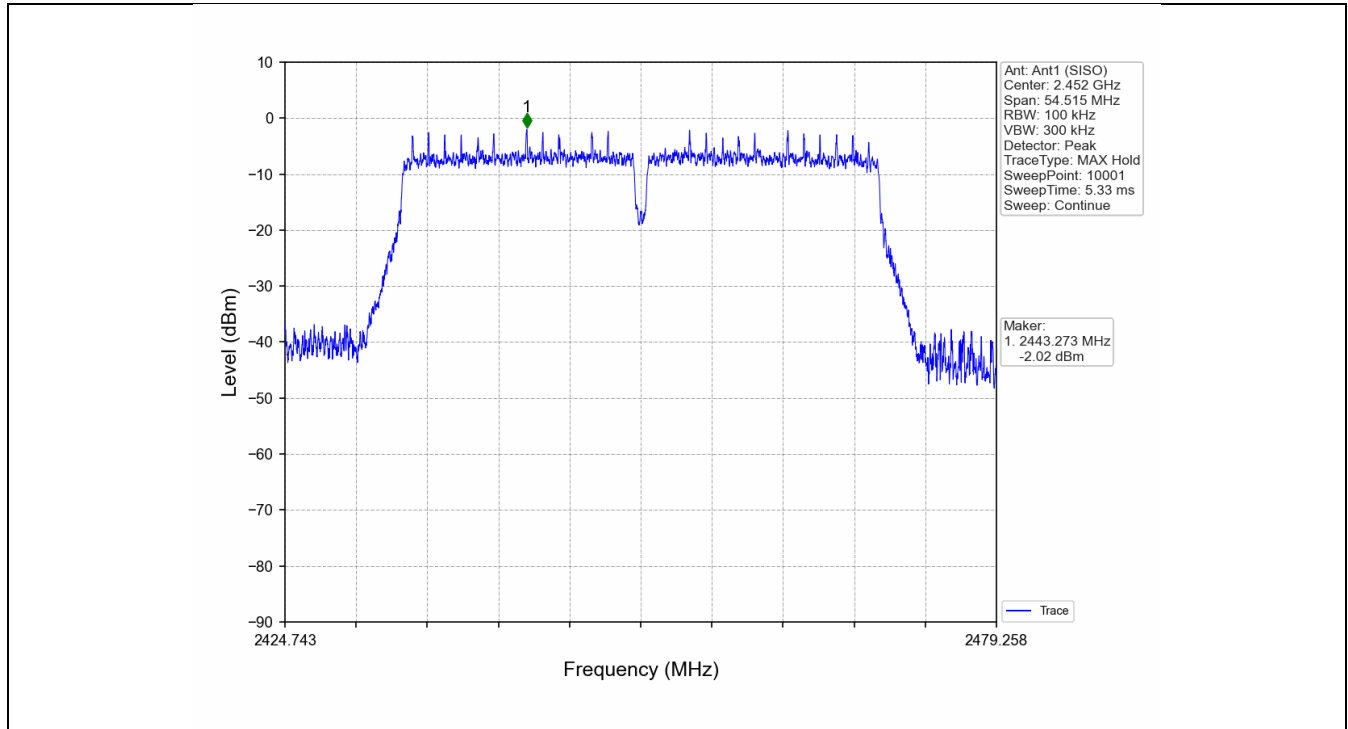












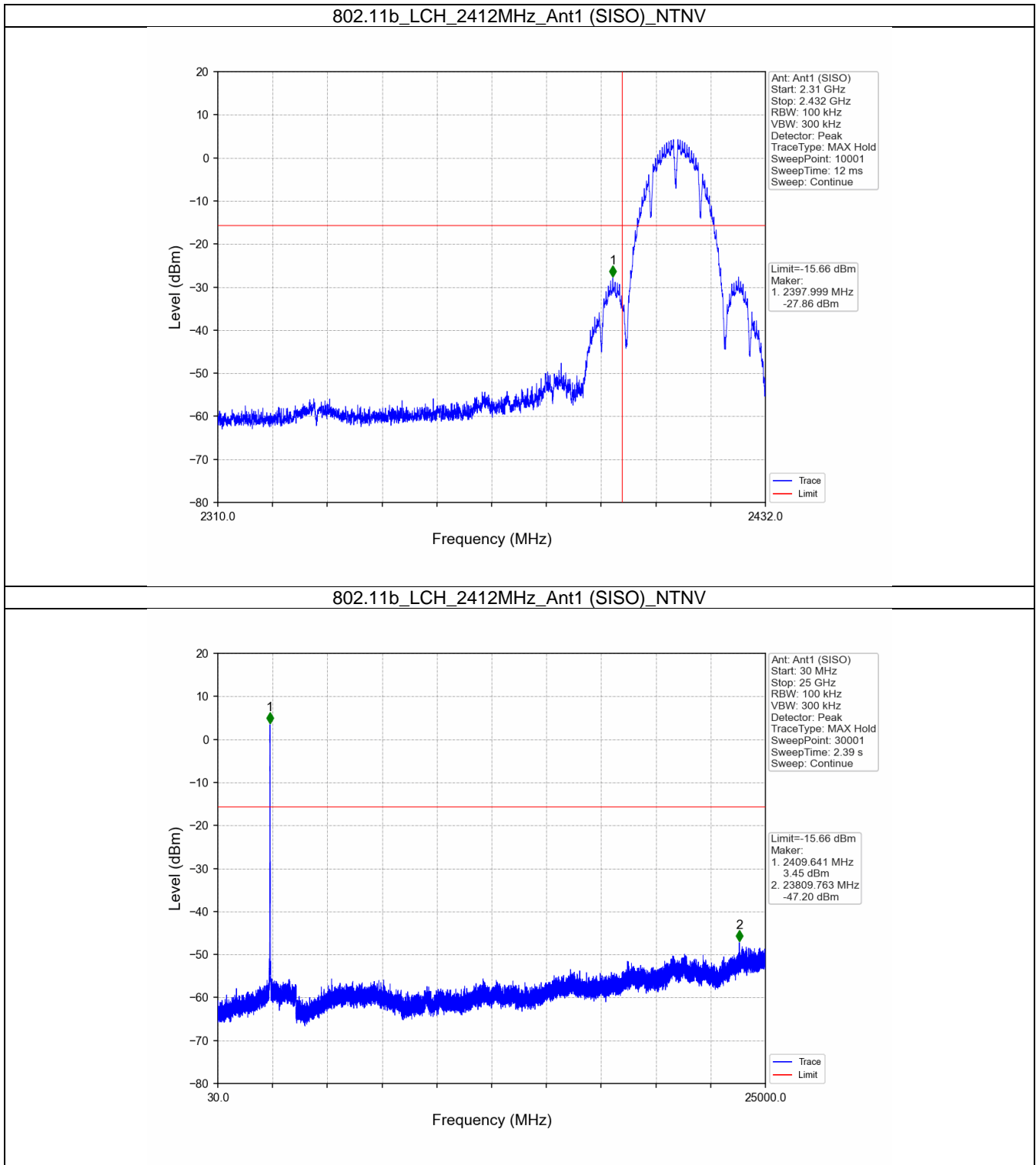
## 5.2 CSE

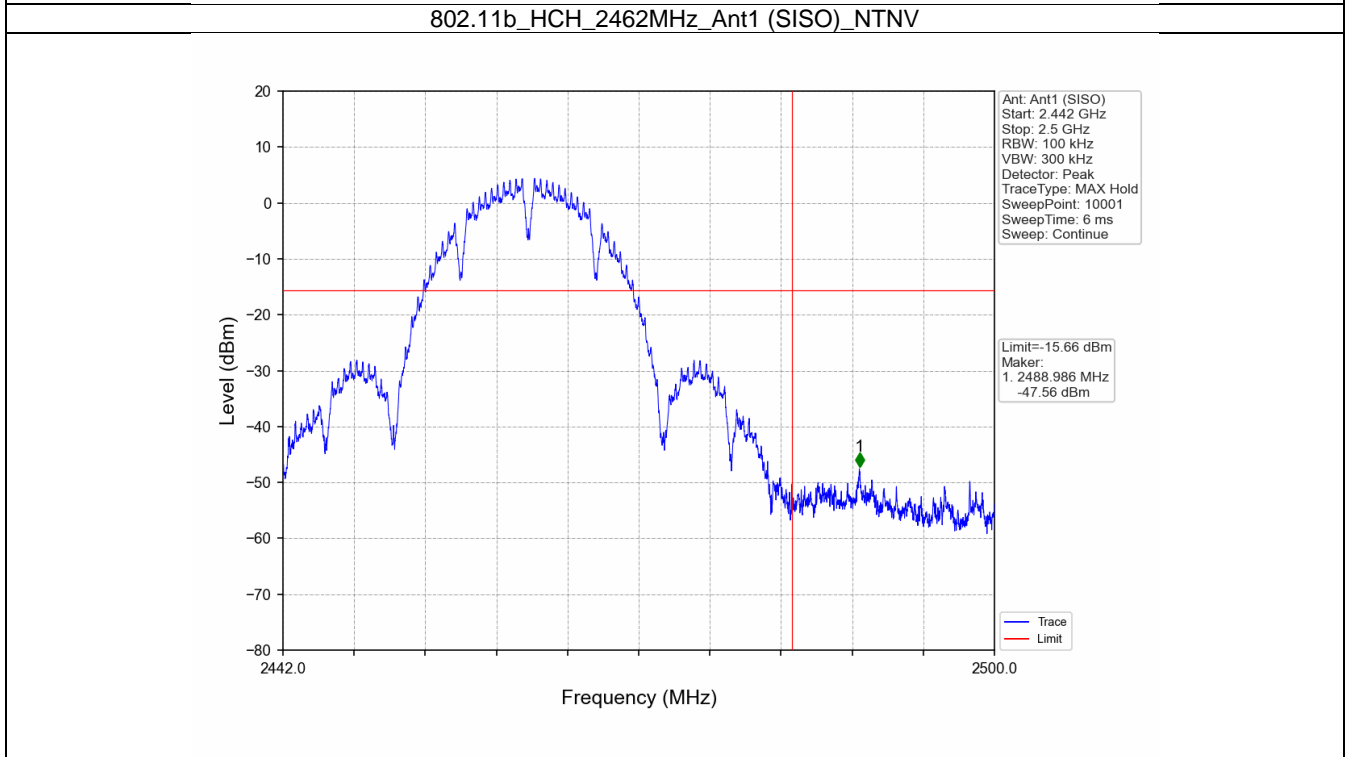
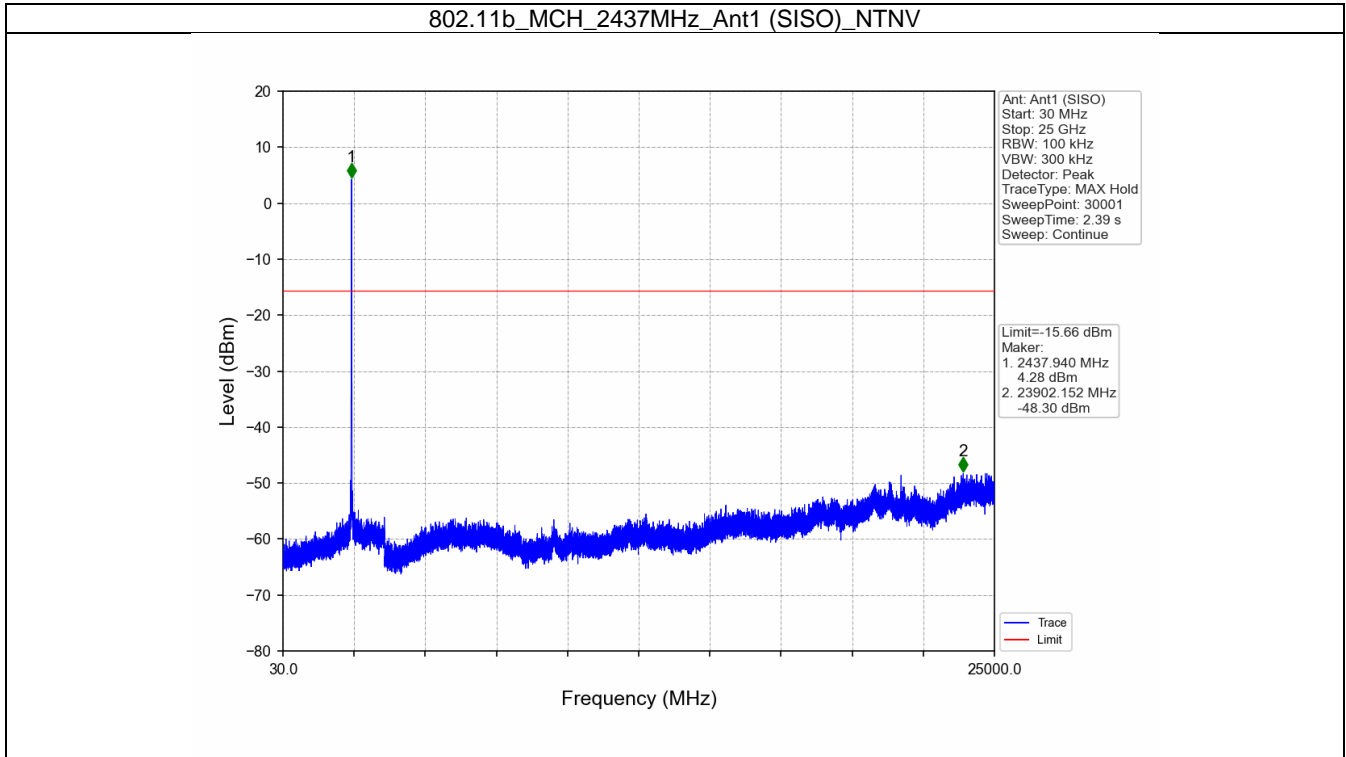
### 5.2.1 Test Result

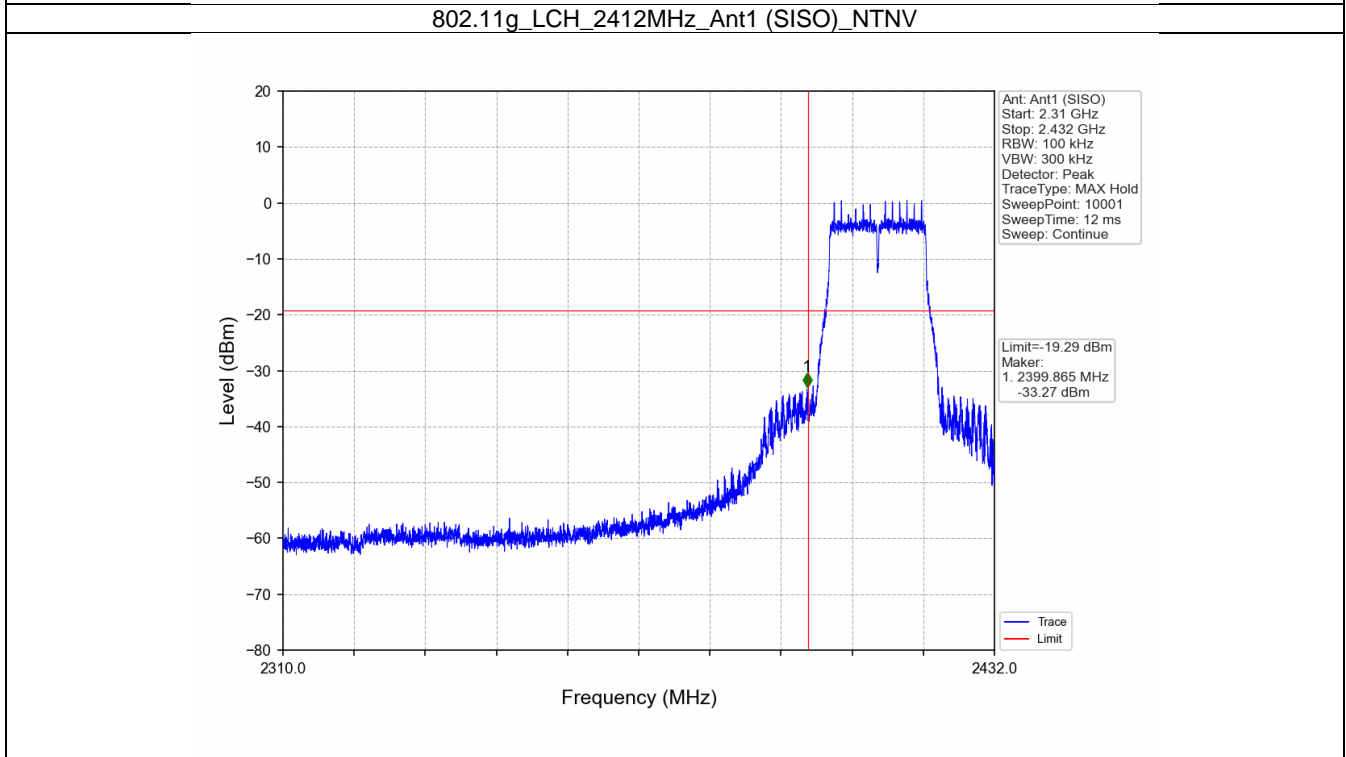
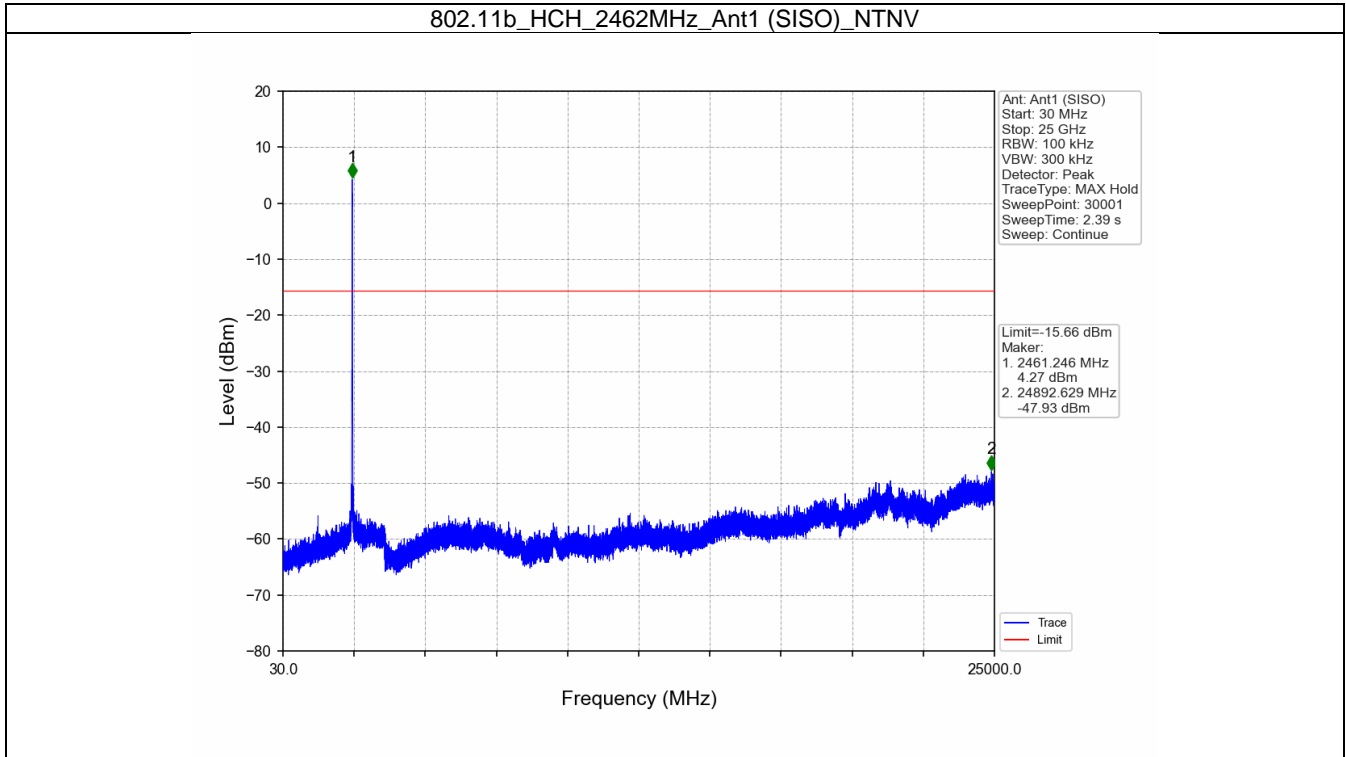
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	4.34	-15.66	Pass
		2437	1	4.34	-15.66	Pass
		2462	1	4.34	-15.66	Pass
802.11g	SISO	2412	1	0.71	-19.29	Pass
		2437	1	0.71	-19.29	Pass
		2462	1	0.71	-19.29	Pass
802.11n (HT20)	SISO	2412	1	0.70	-19.30	Pass
		2437	1	0.70	-19.30	Pass
		2462	1	0.70	-19.30	Pass
802.11n (HT40)	SISO	2422	1	-2.02	-22.02	Pass
		2437	1	-2.02	-22.02	Pass
		2452	1	-2.02	-22.02	Pass

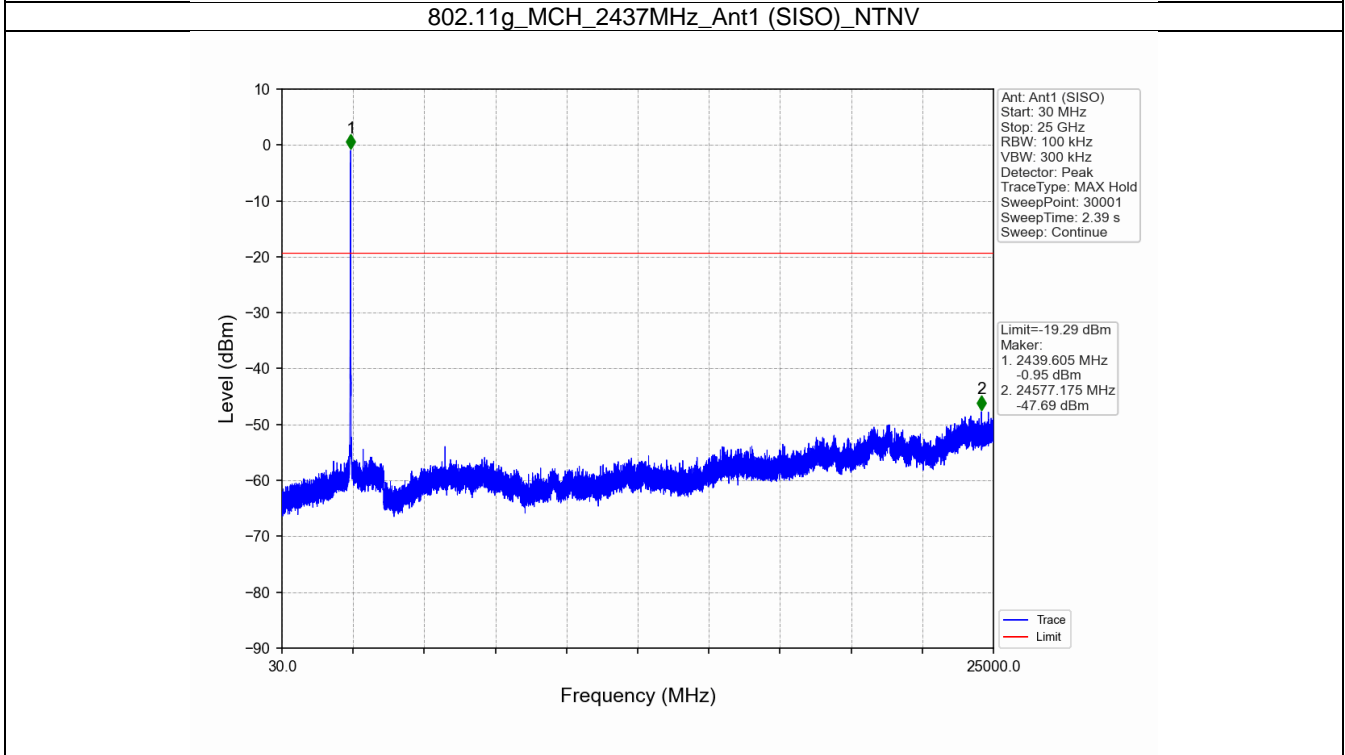
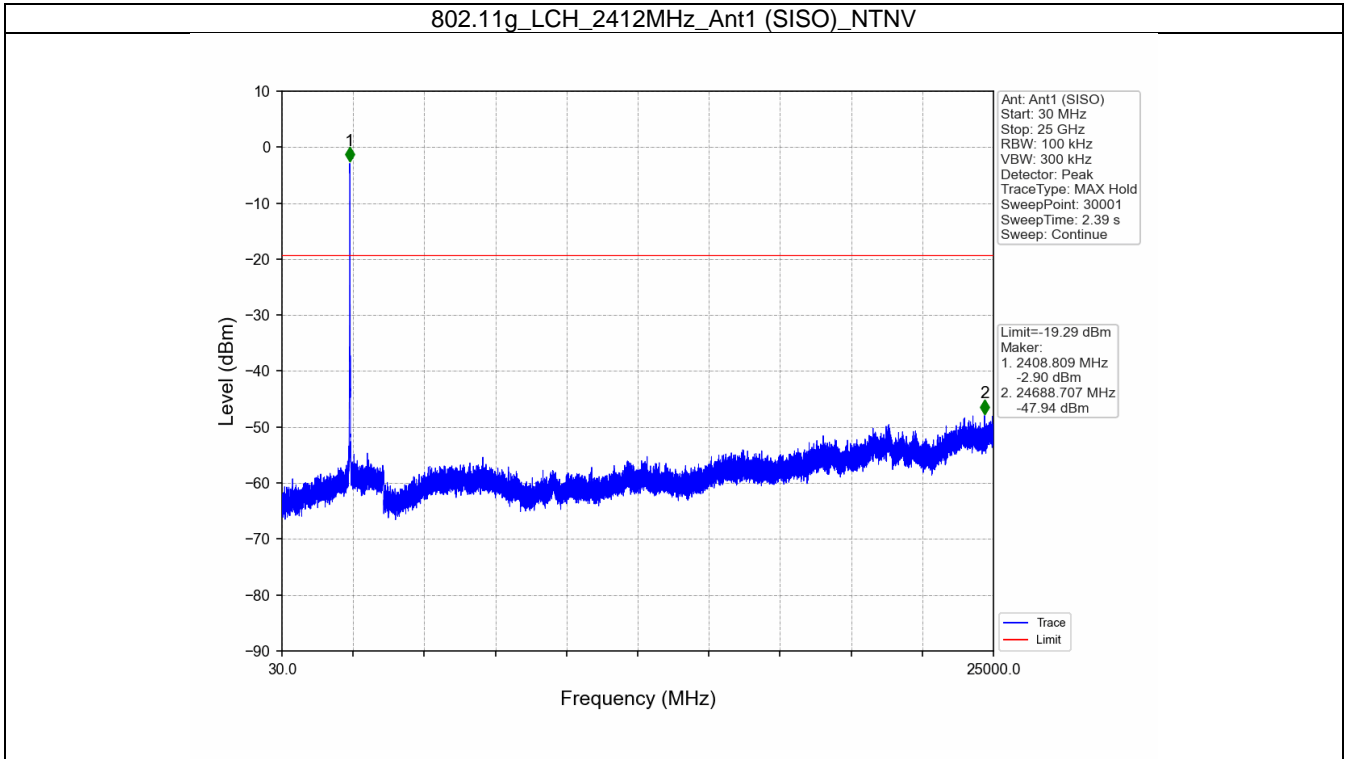
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

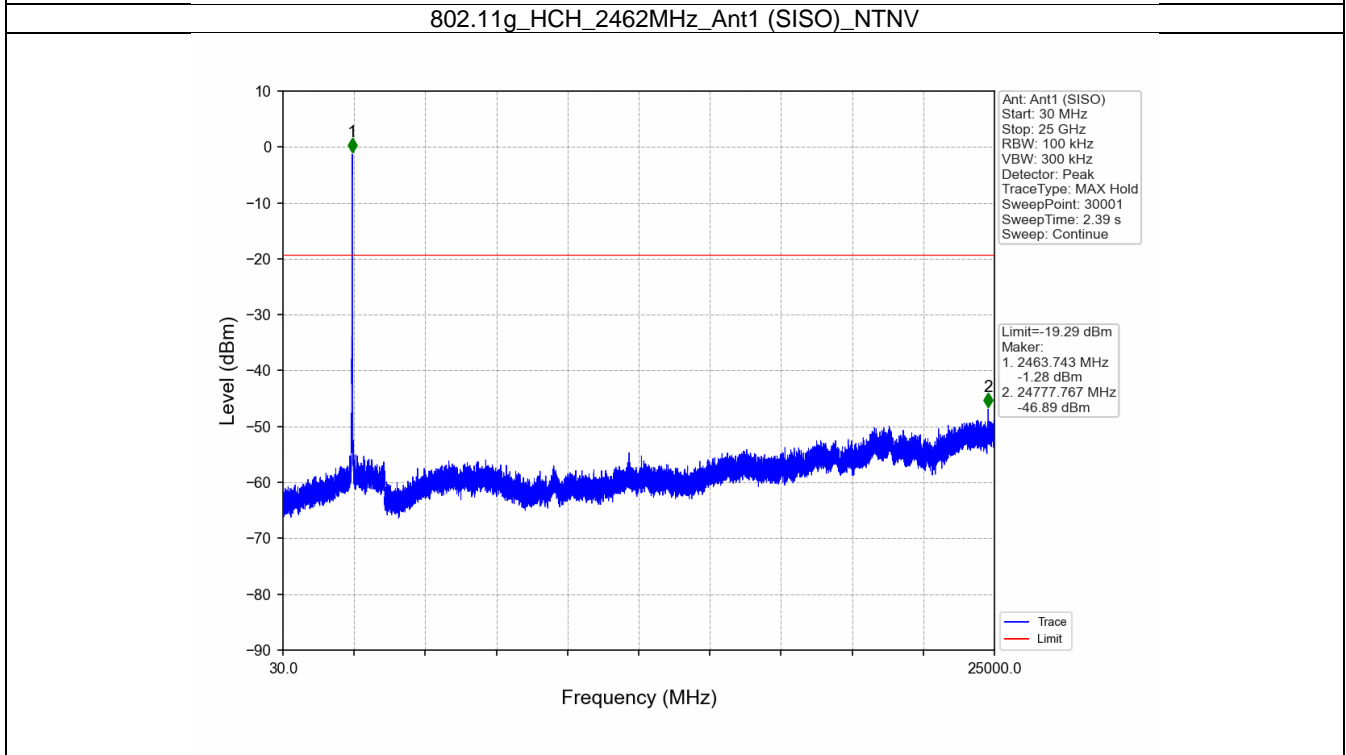
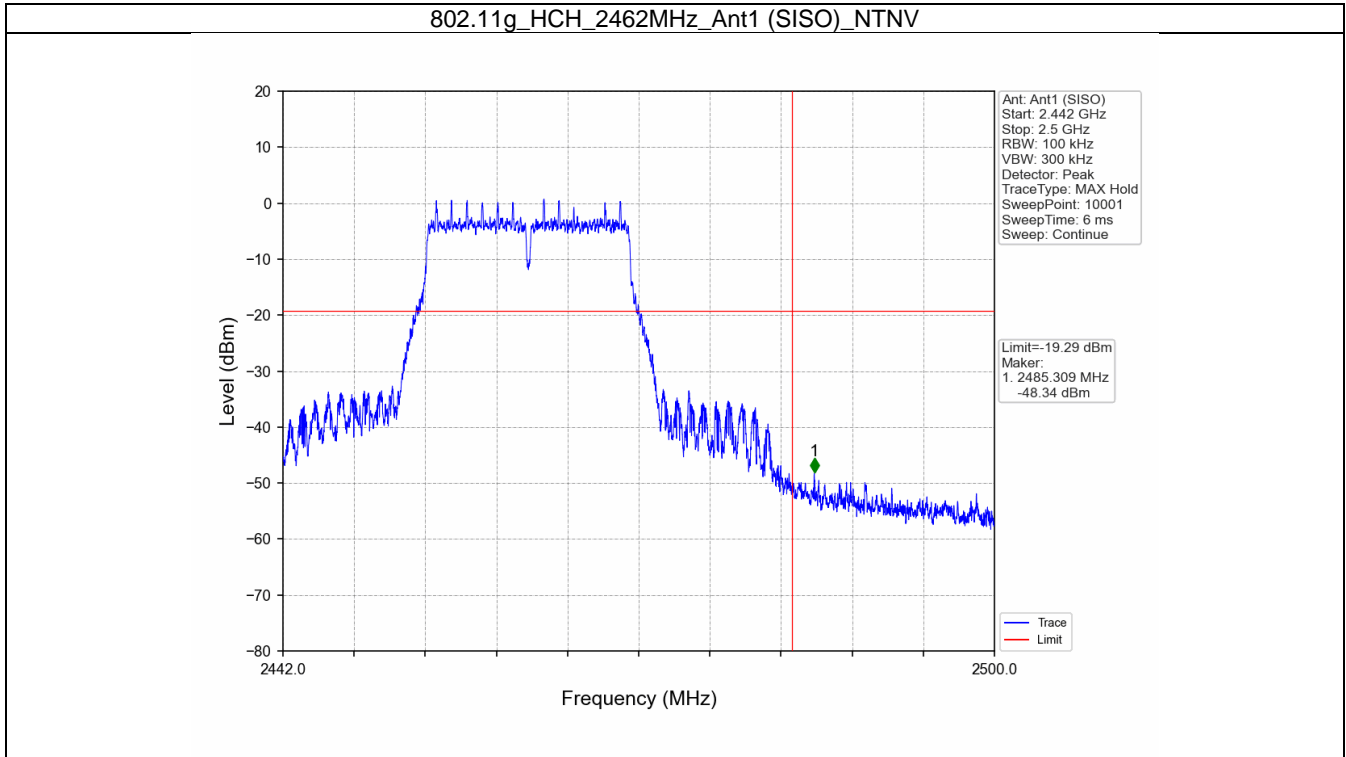
5.2.2 Test Graph

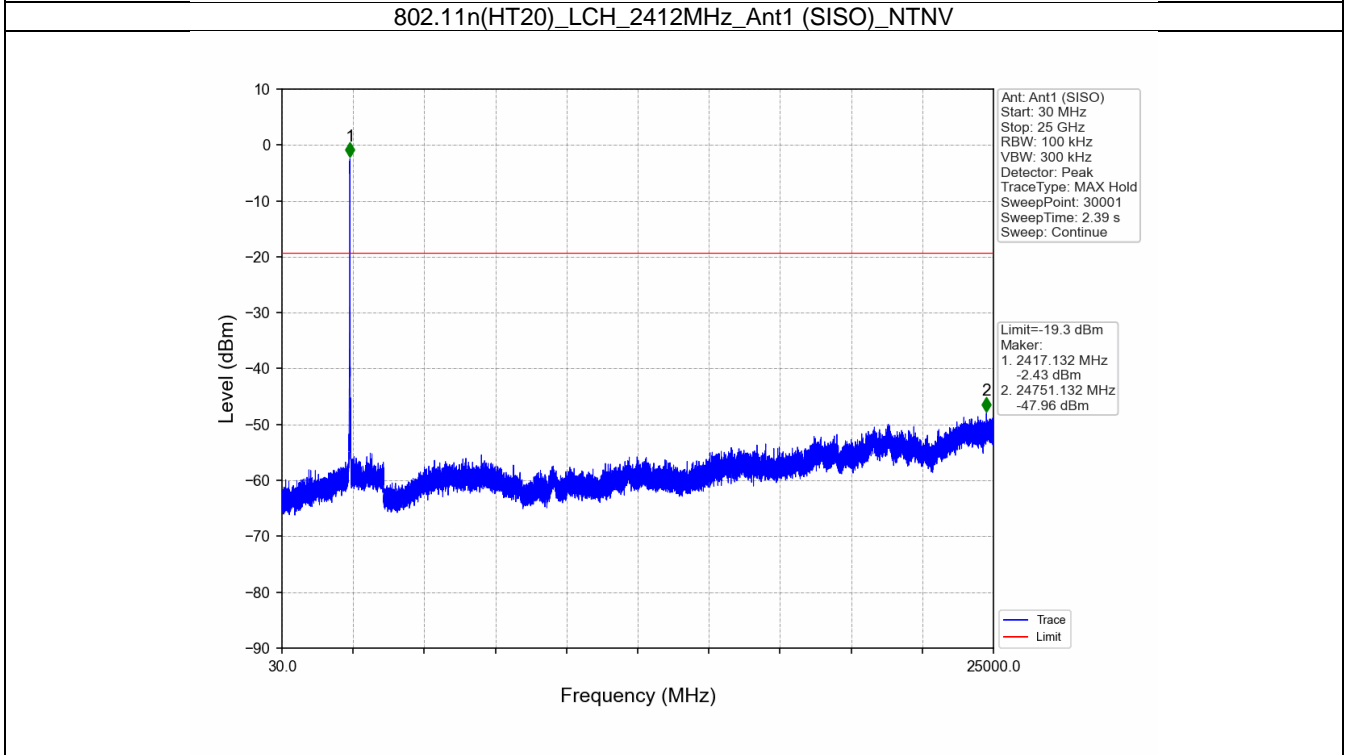
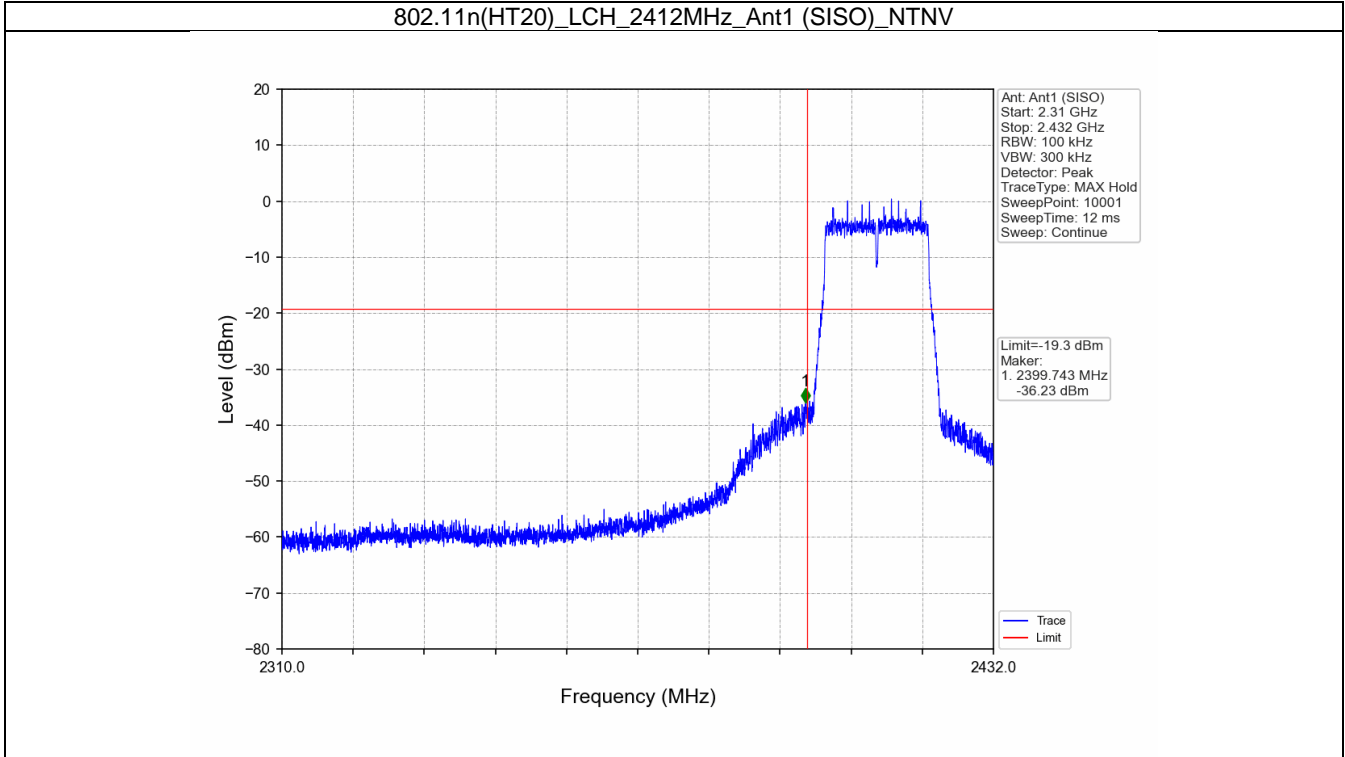




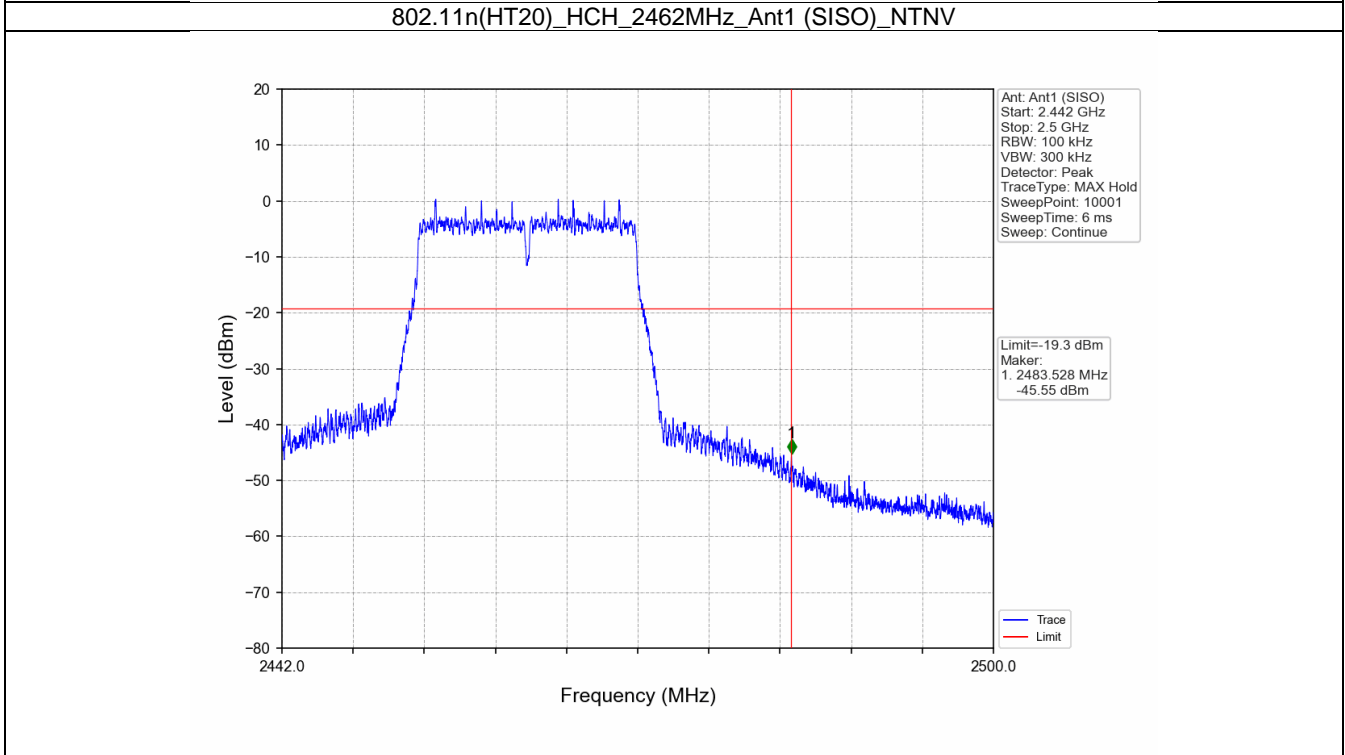
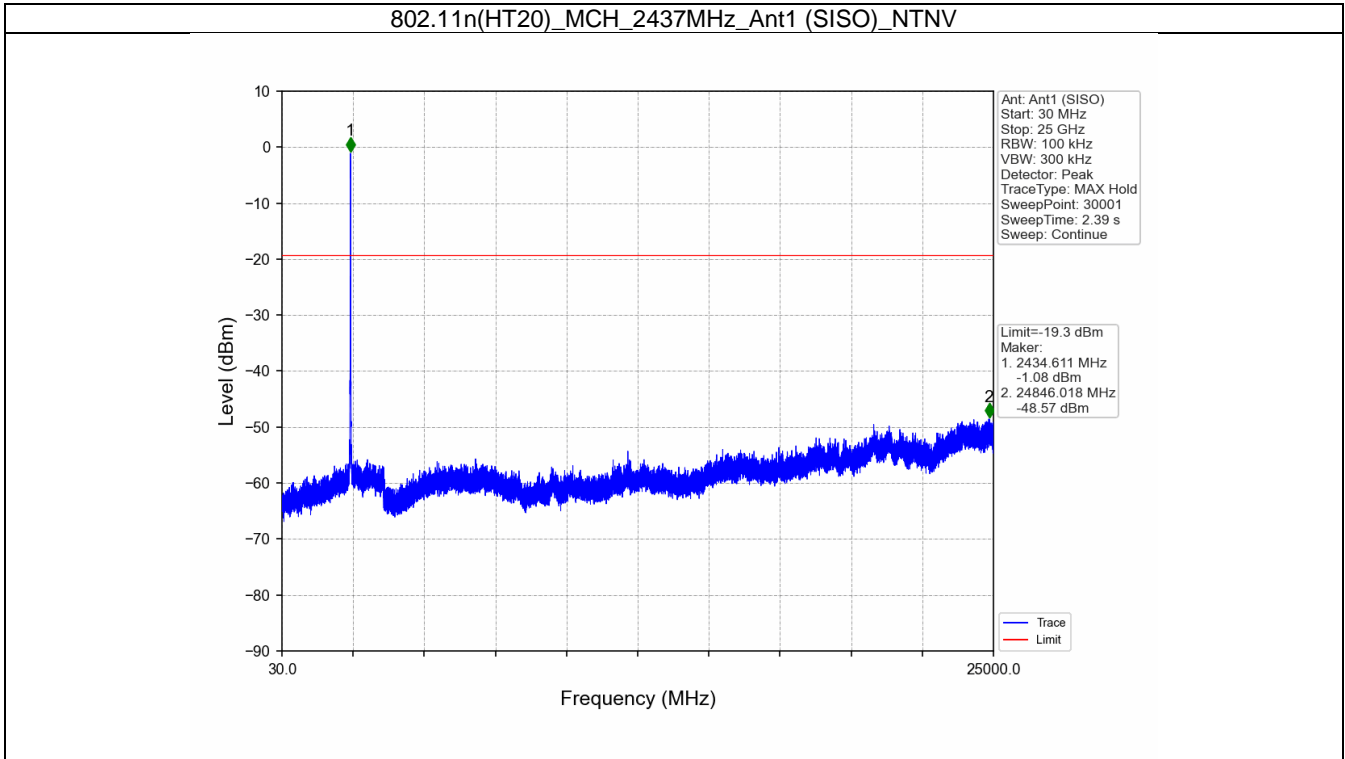


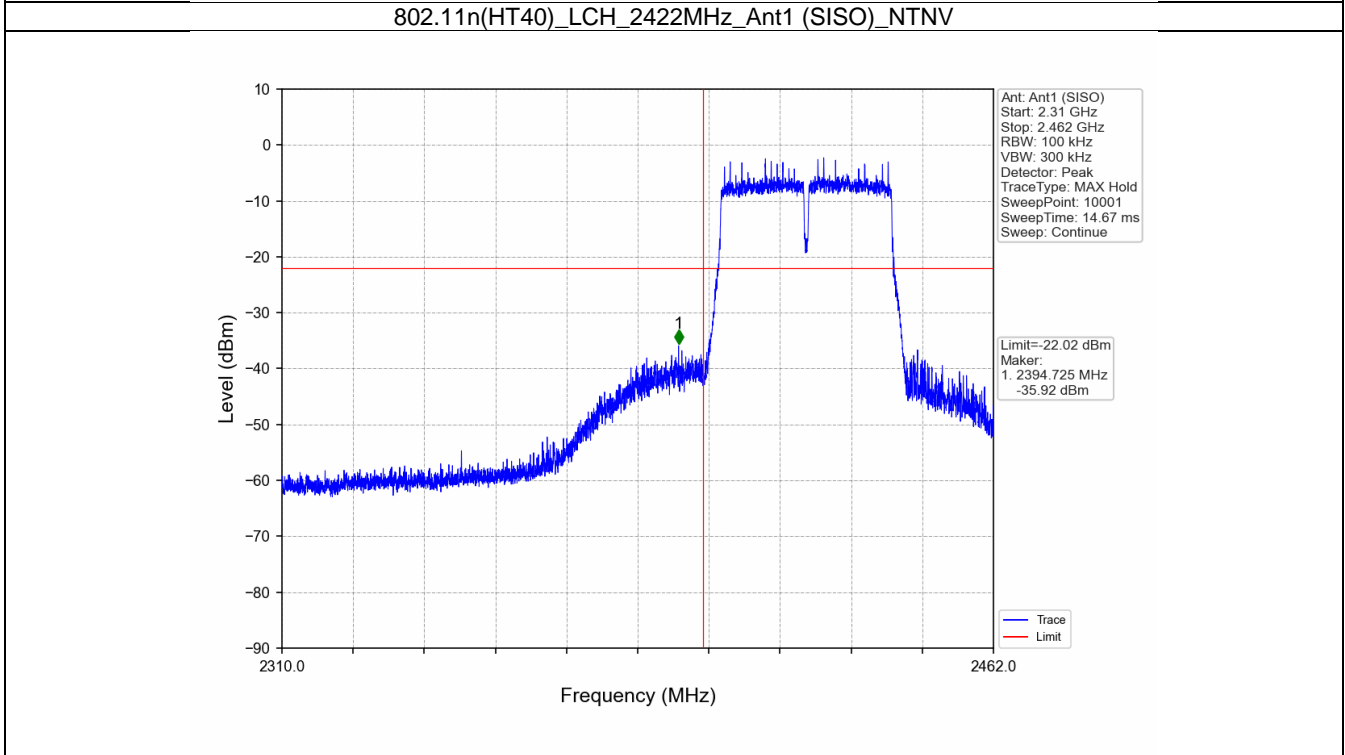
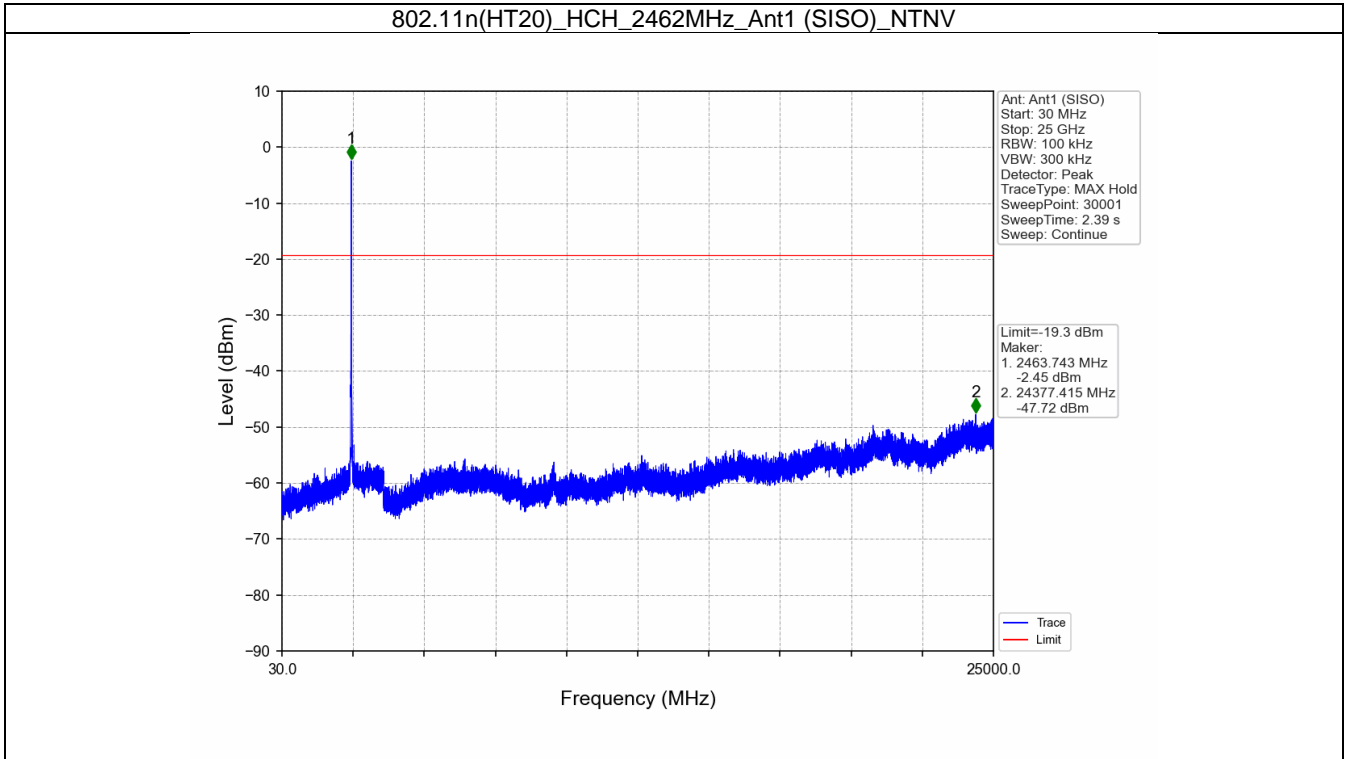




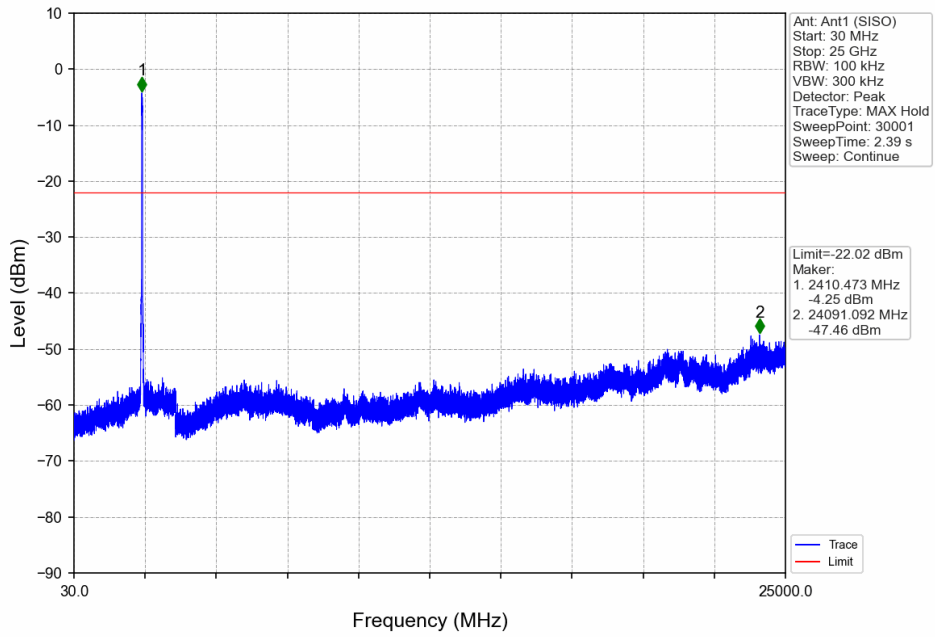








802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



802.11n(HT40)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV

