

## Appendix A for SHEM210600643401

### 1. Duty Cycle

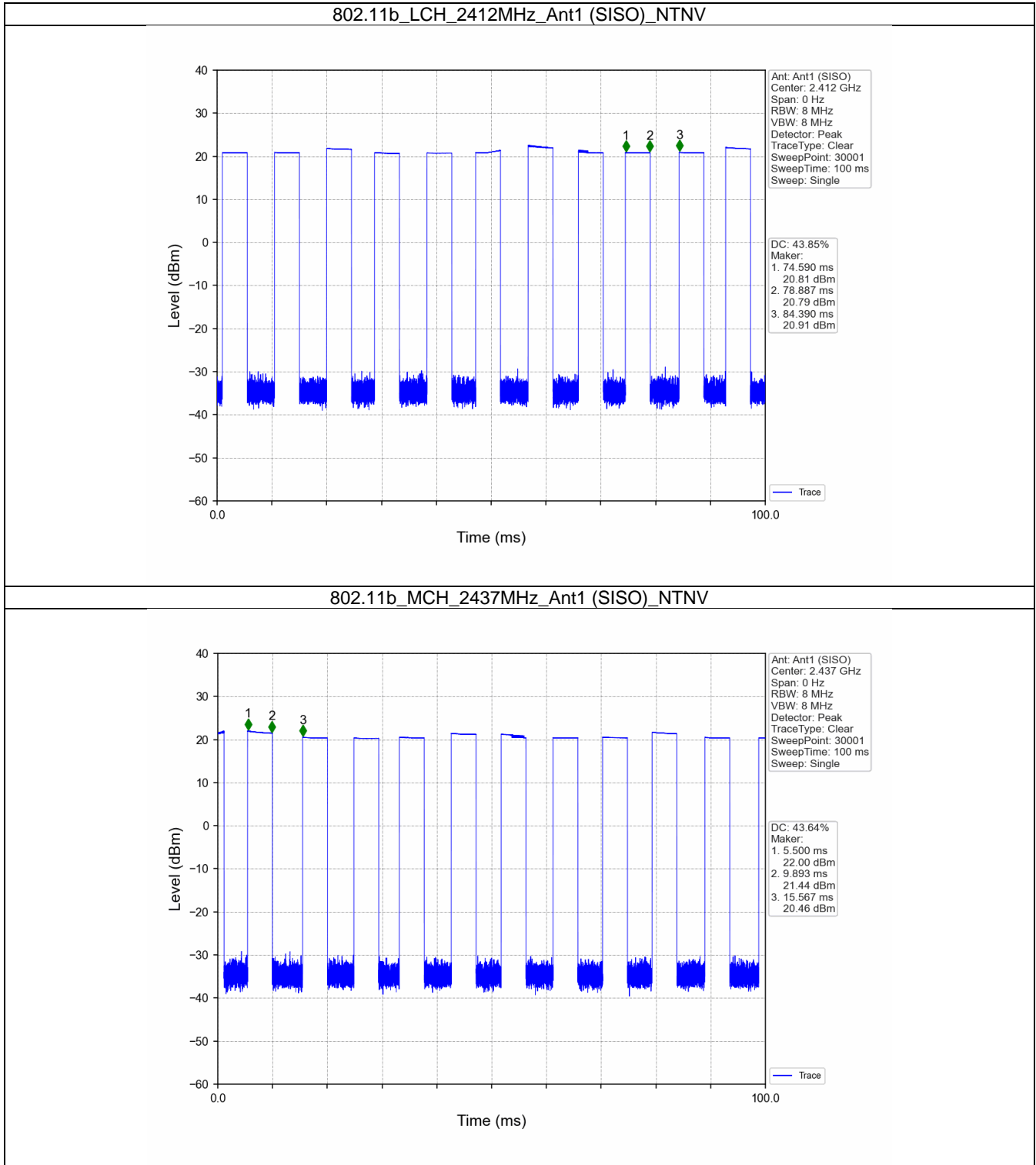
#### 1.1 Ant1

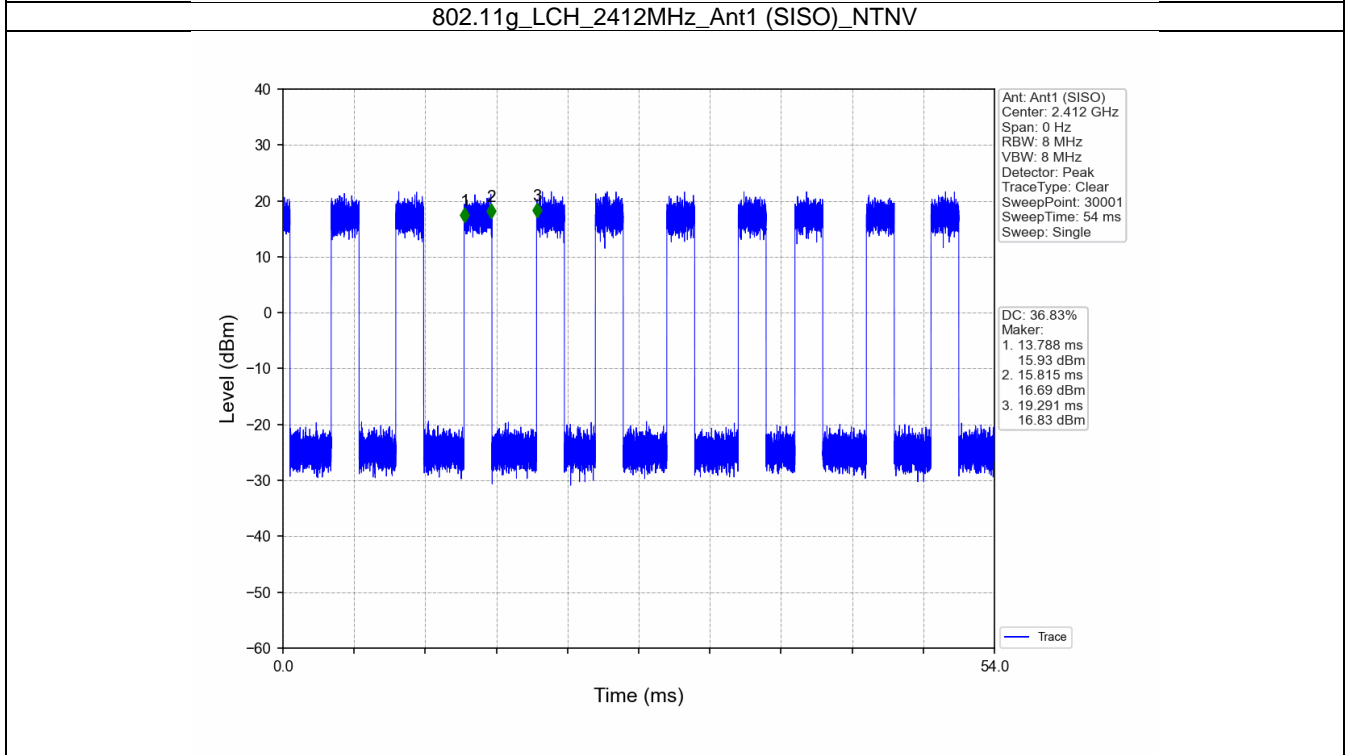
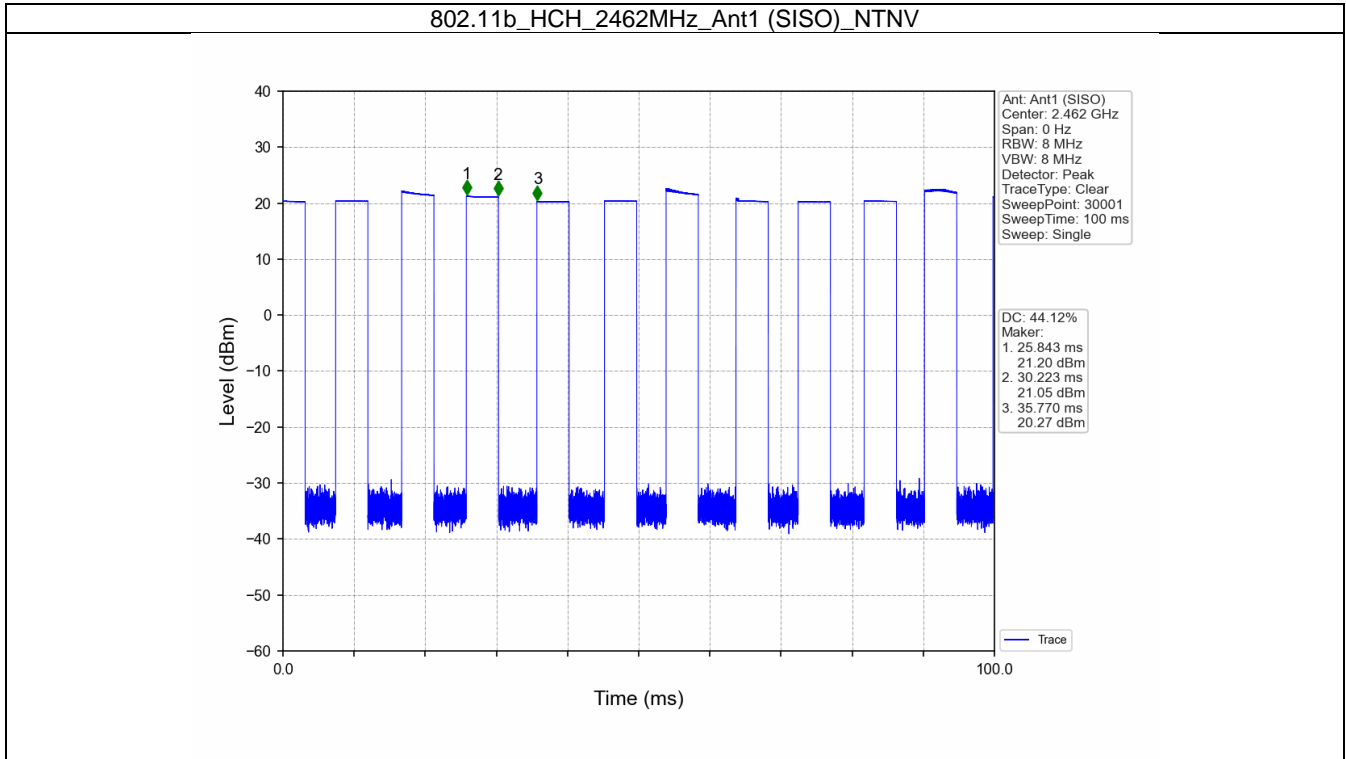
##### 1.1.1 Test Result

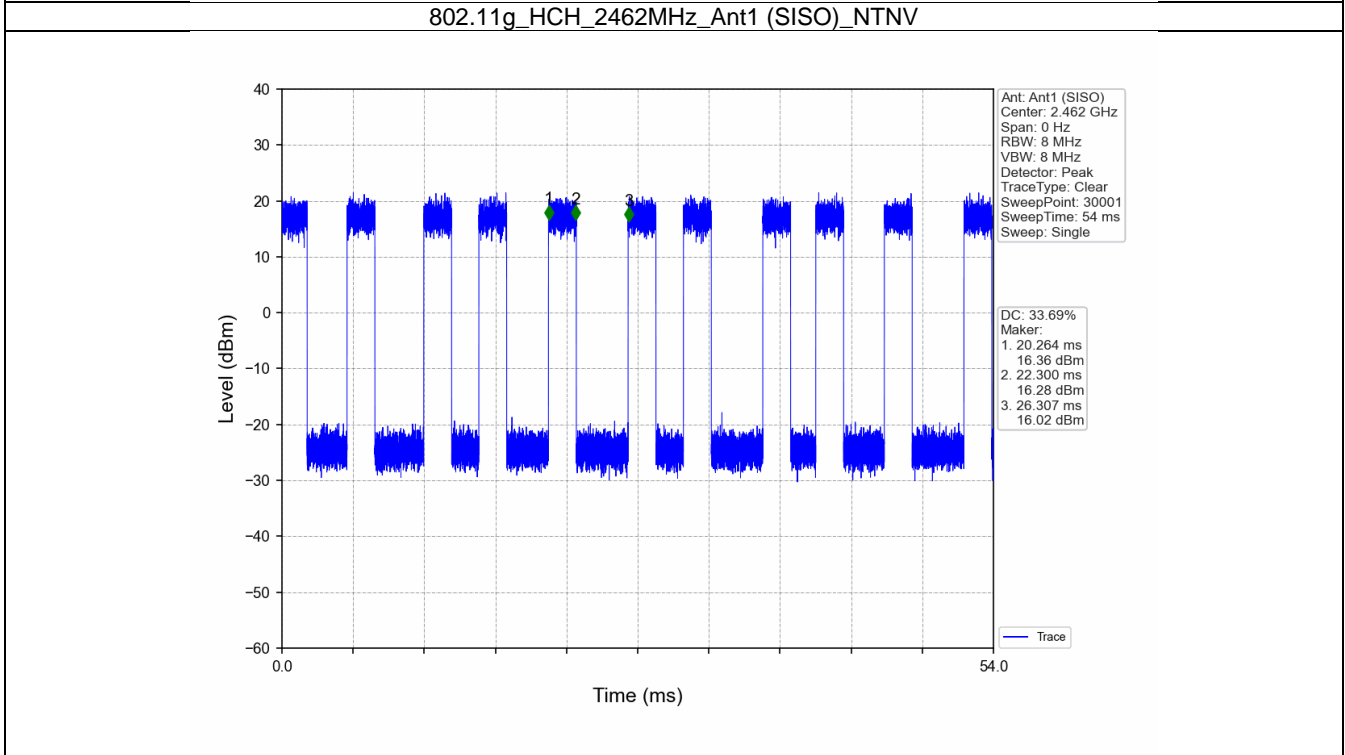
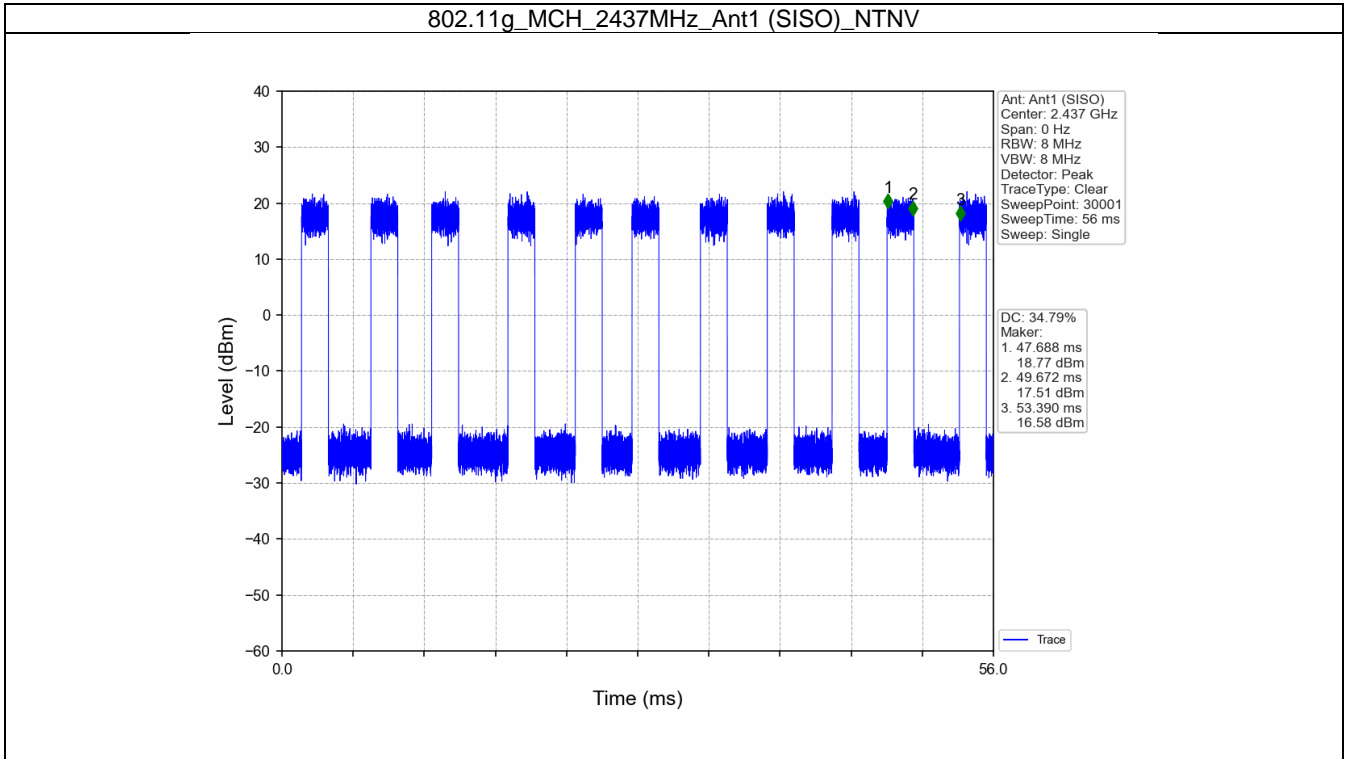
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	4.297	9.800	43.85	3.58	6.75
		2437	4.393	10.067	43.64	3.60	9.18
		2462	4.380	9.927	44.12	3.55	7.50
802.11g	SISO	2412	2.027	5.503	36.83	4.34	10.27
		2437	1.984	5.702	34.79	4.58	9.69
		2462	2.036	6.043	33.69	4.72	16.97
802.11n (HT20)	SISO	2412	1.842	5.159	35.70	4.47	8.58
		2437	1.878	5.818	32.28	4.91	11.02
		2462	1.827	5.999	30.46	5.16	10.94

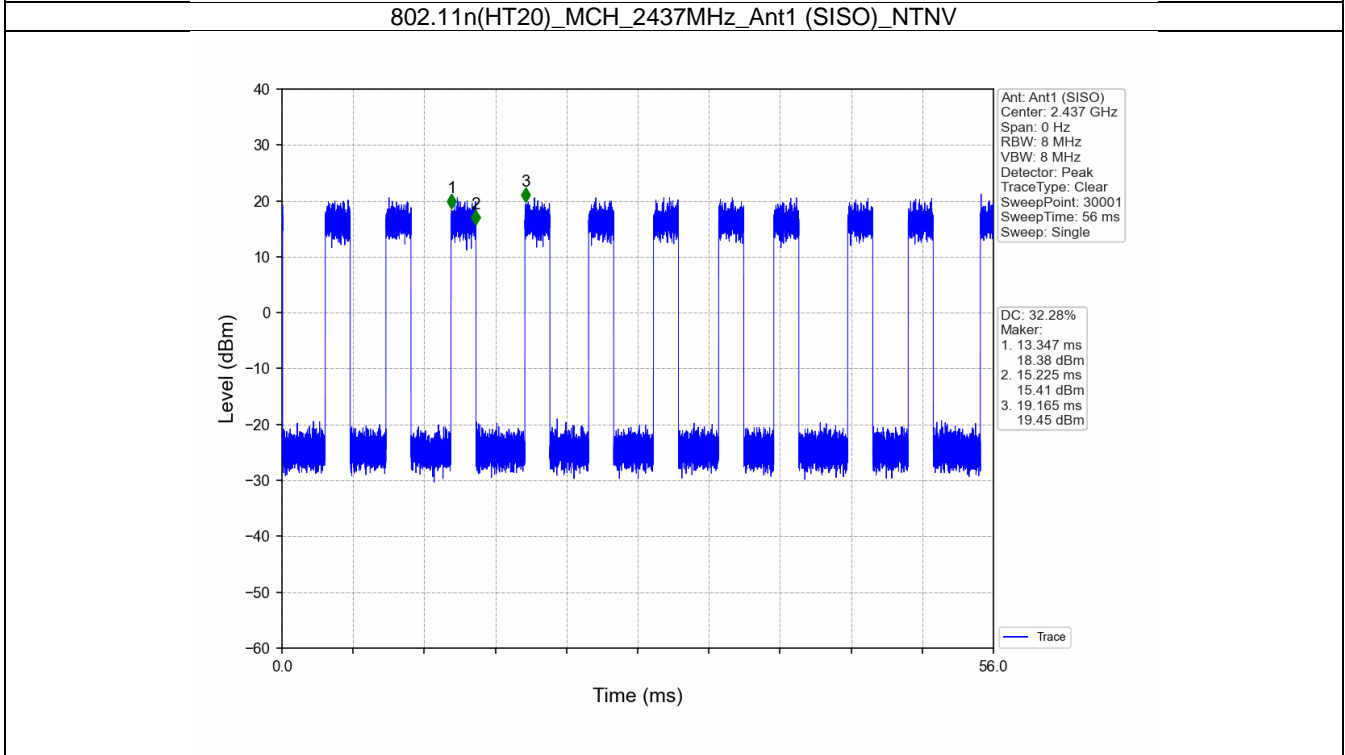
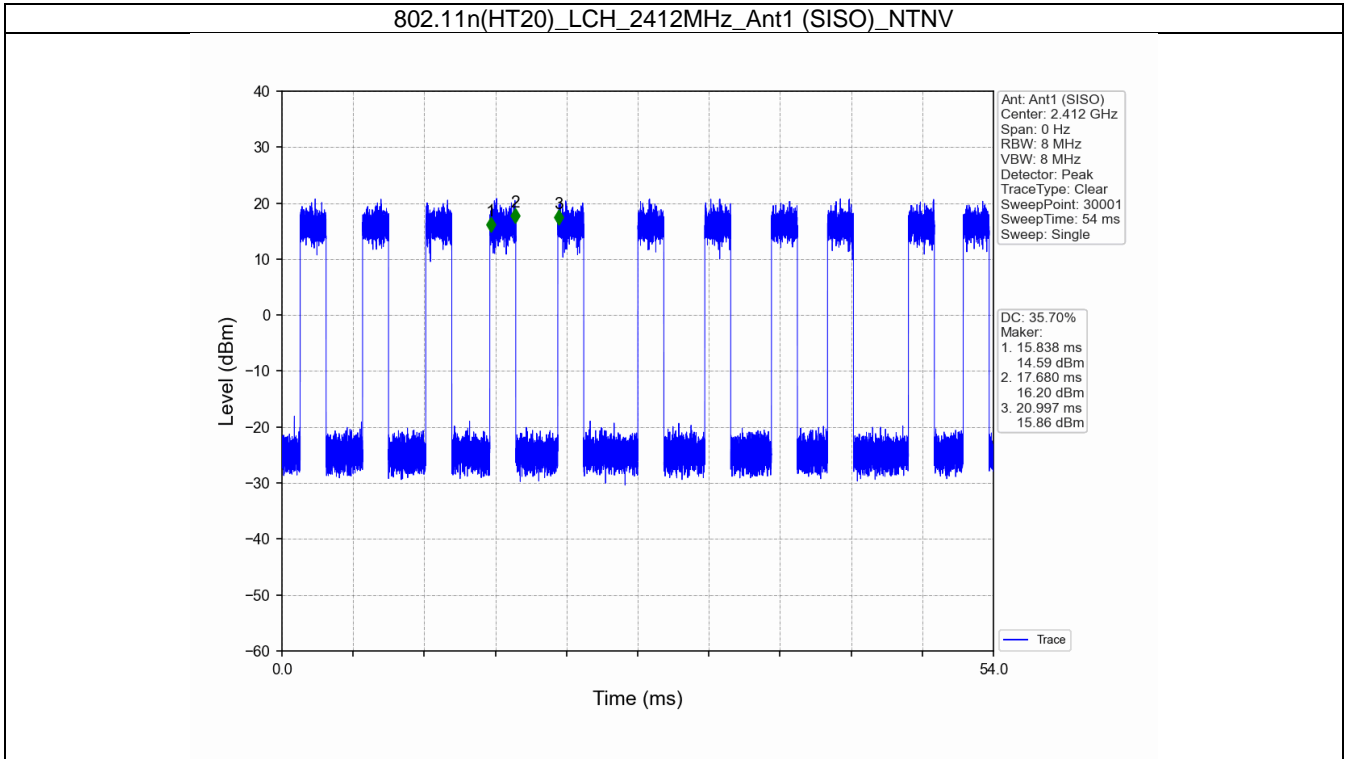
Remark: The manufacturer advertises that the duty cycle has reached the maximum value

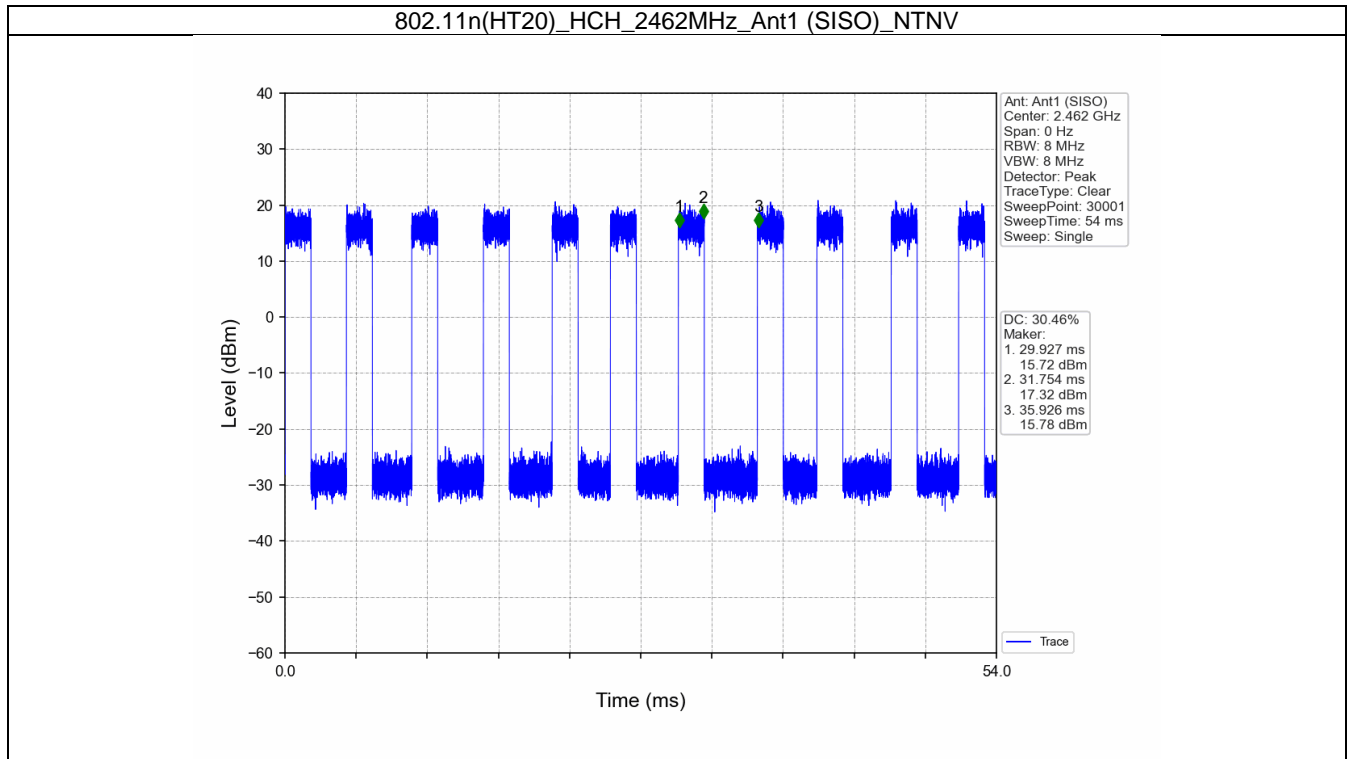
1.1.2 Test Graph











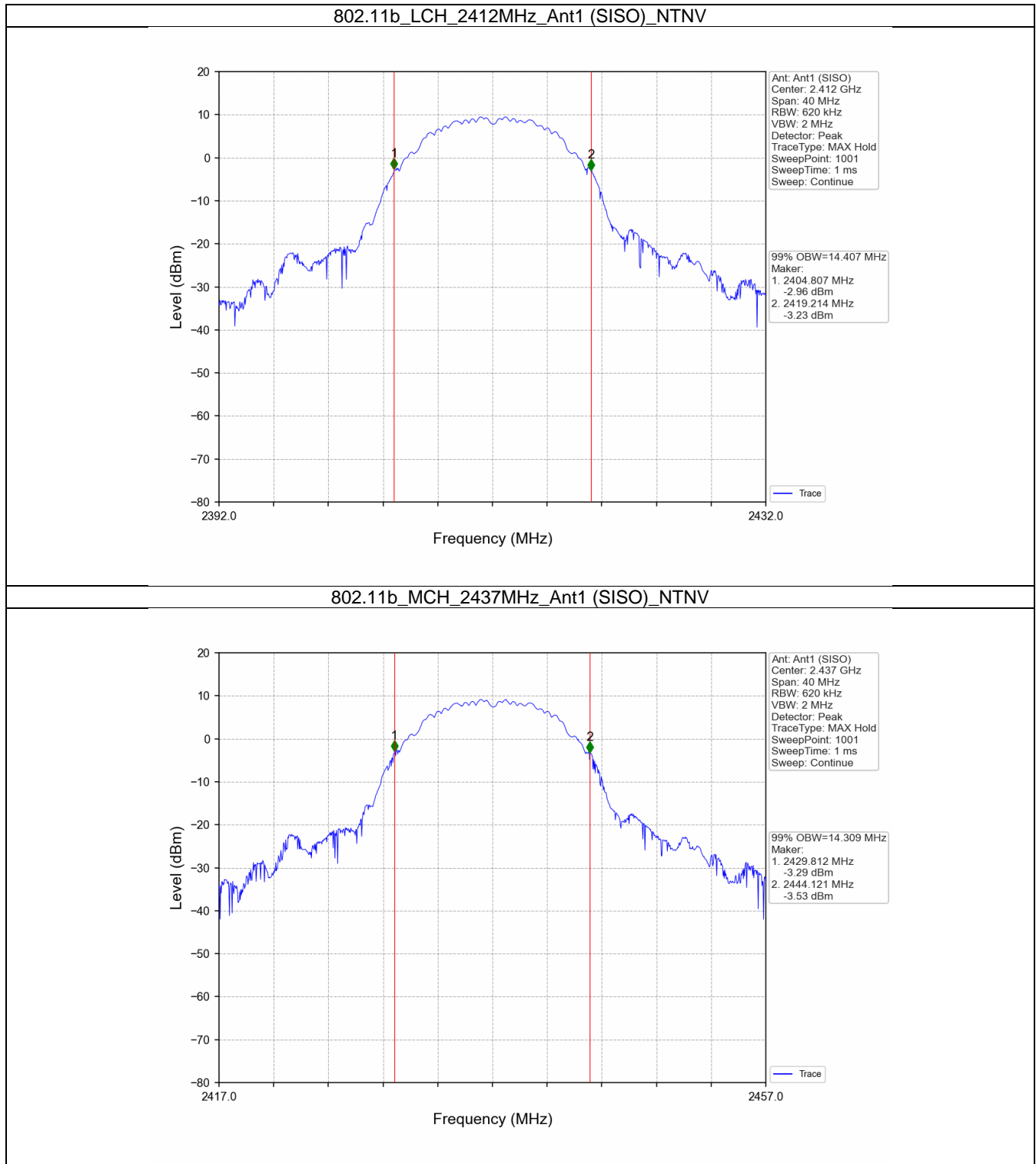
## 2. Bandwidth

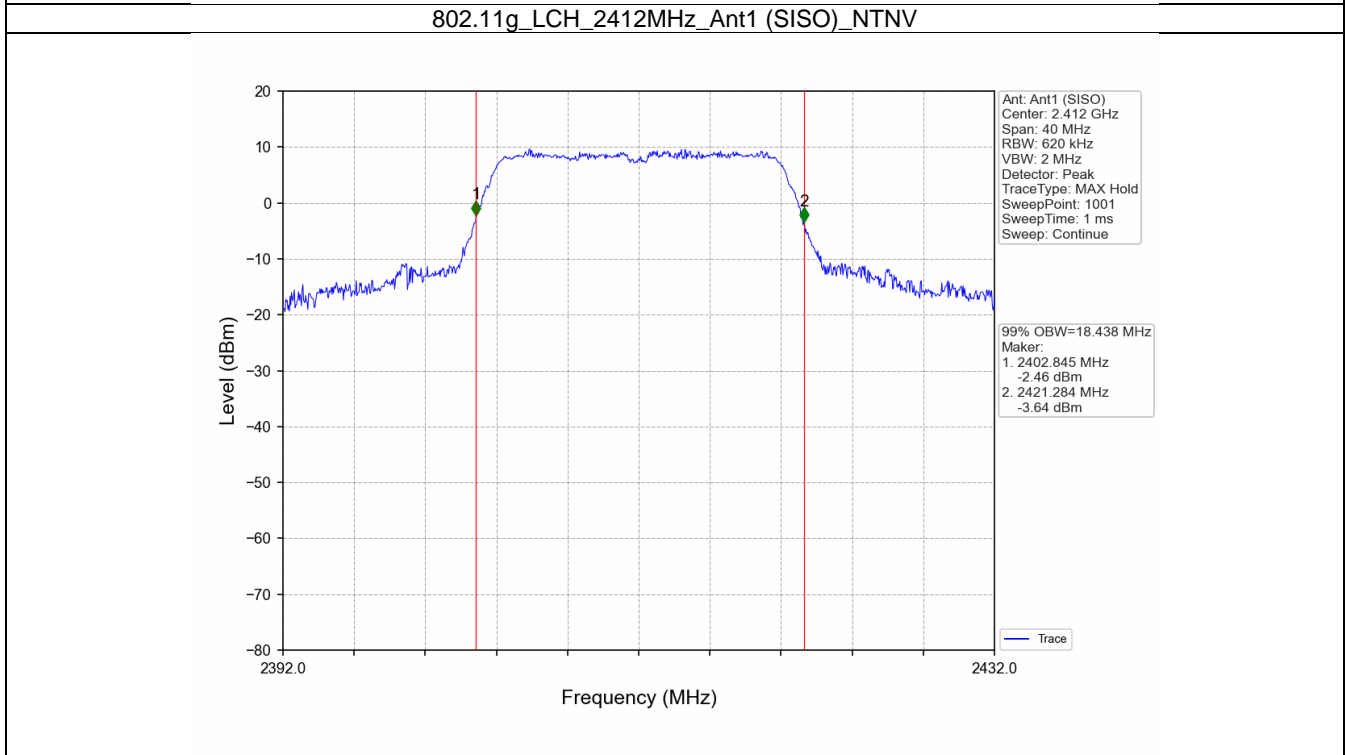
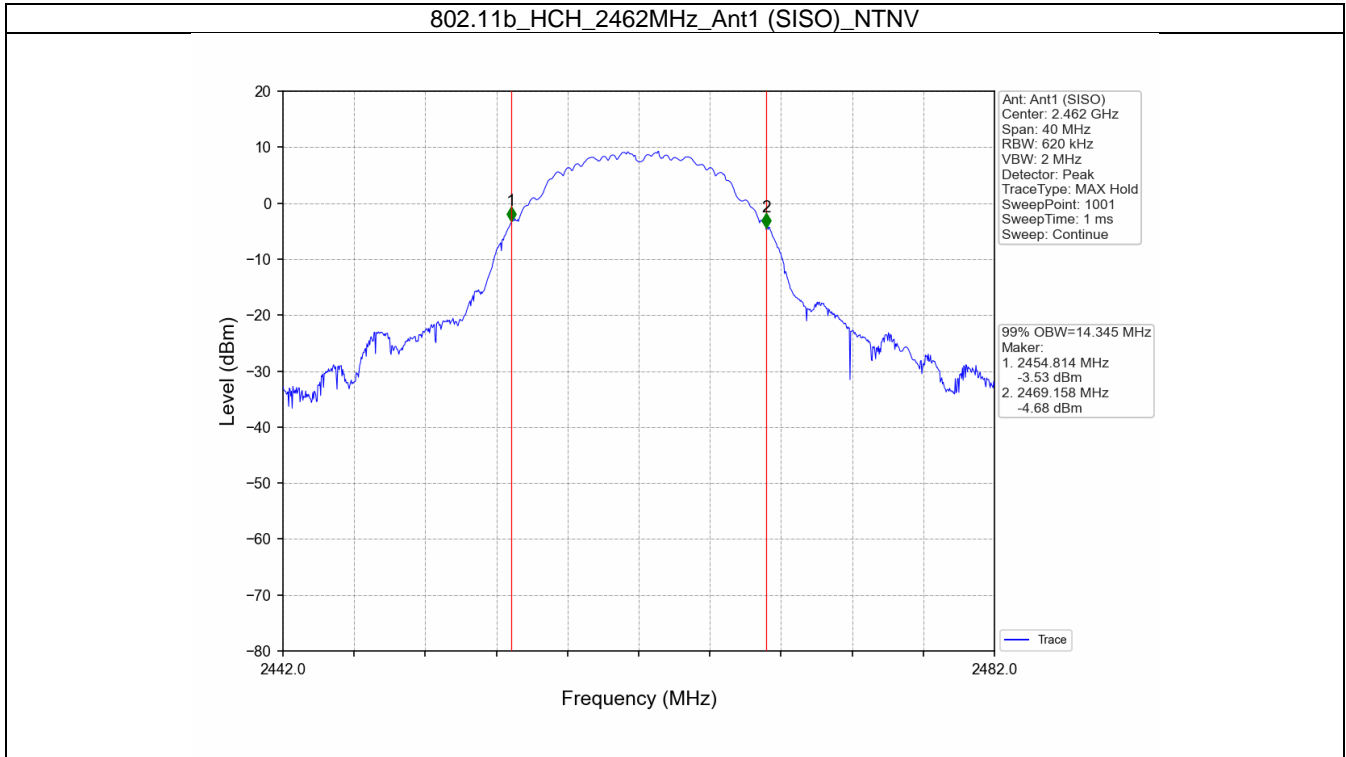
### 2.1 OBW

#### 2.1.1 Test Result

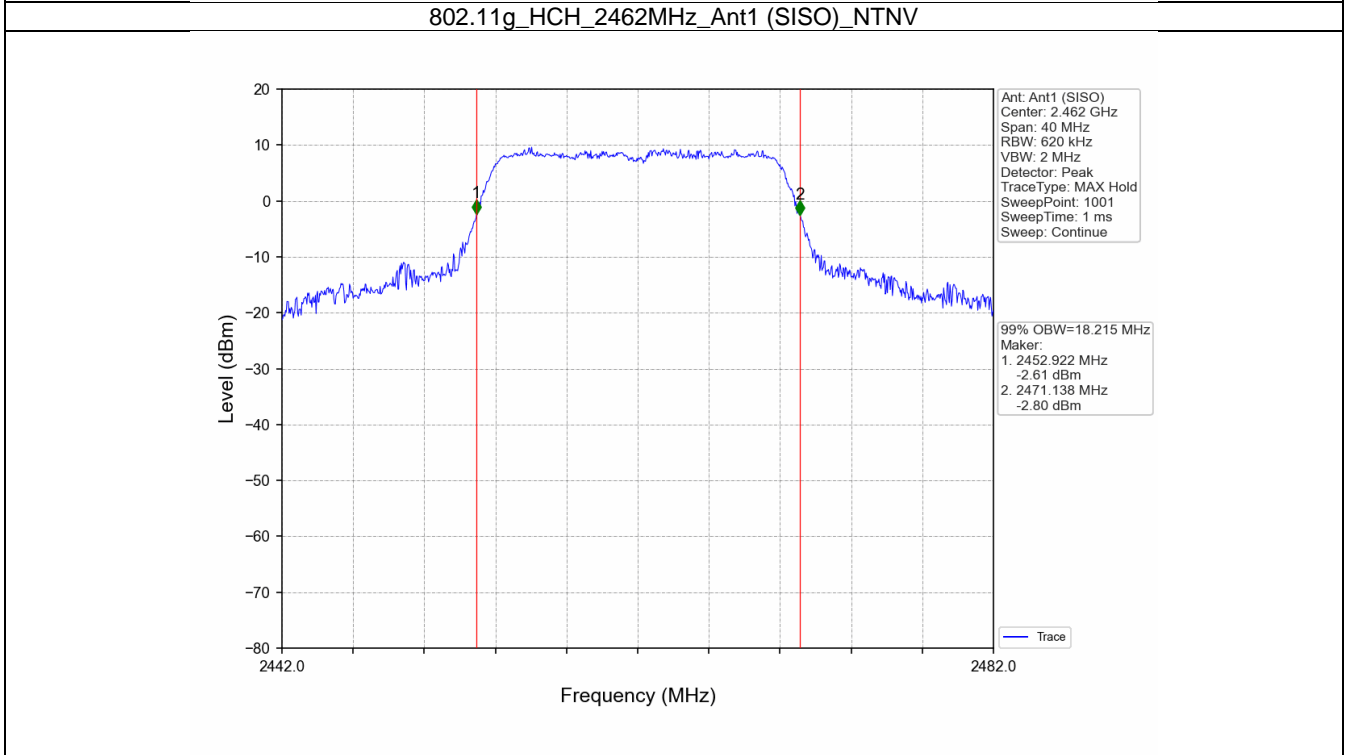
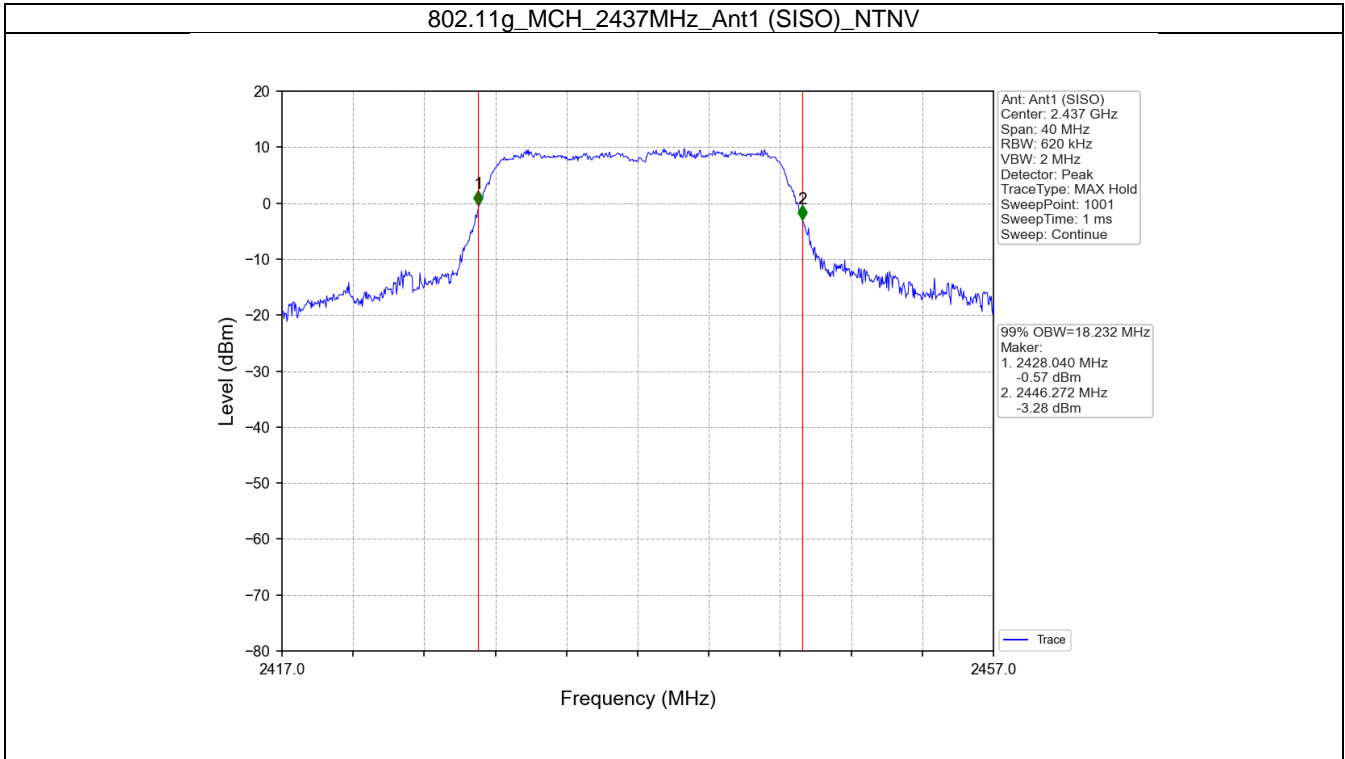
Mode	TX Type	Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Limit (MHz)	Verdict
802.11b	SISO	2412	1	14.407	/	Pass
		2437	1	14.309	/	Pass
		2462	1	14.345	/	Pass
802.11g	SISO	2412	1	18.438	/	Pass
		2437	1	18.232	/	Pass
		2462	1	18.215	/	Pass
802.11n (HT20)	SISO	2412	1	19.069	/	Pass
		2437	1	18.962	/	Pass
		2462	1	19.039	/	Pass

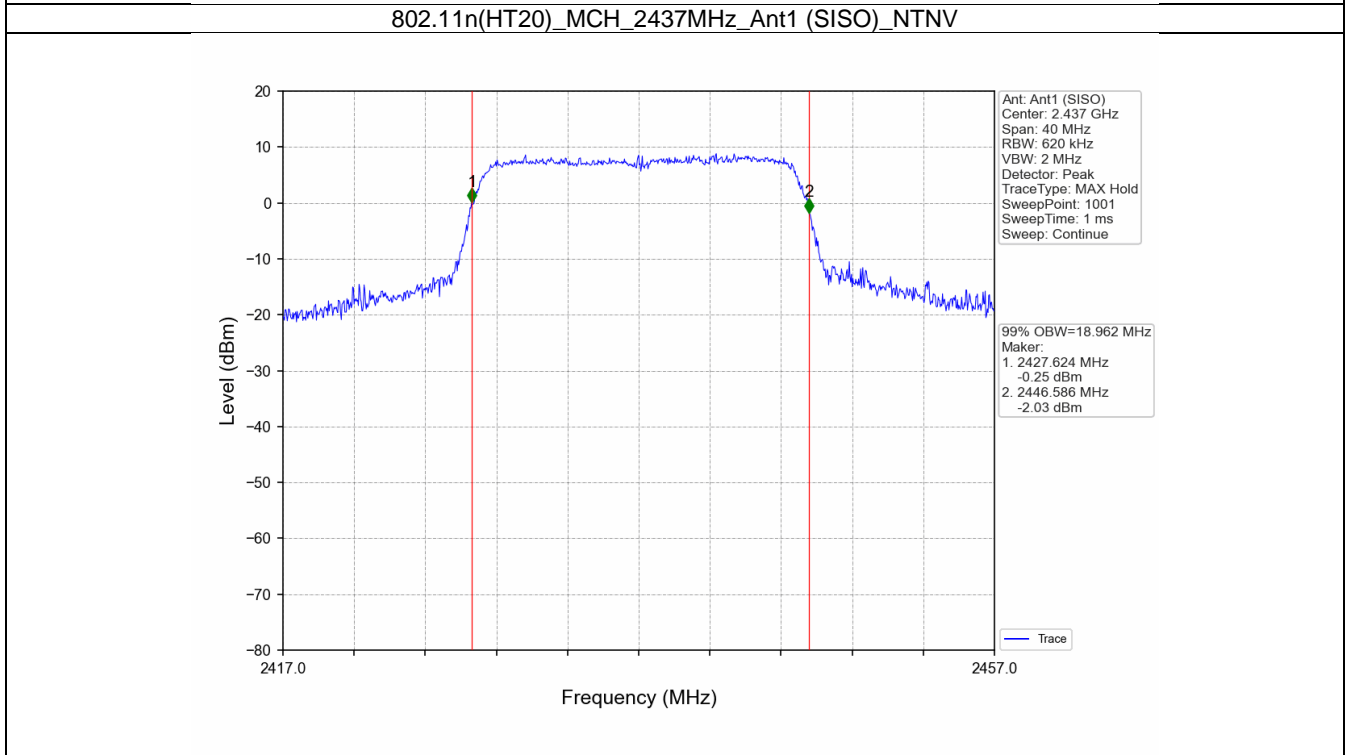
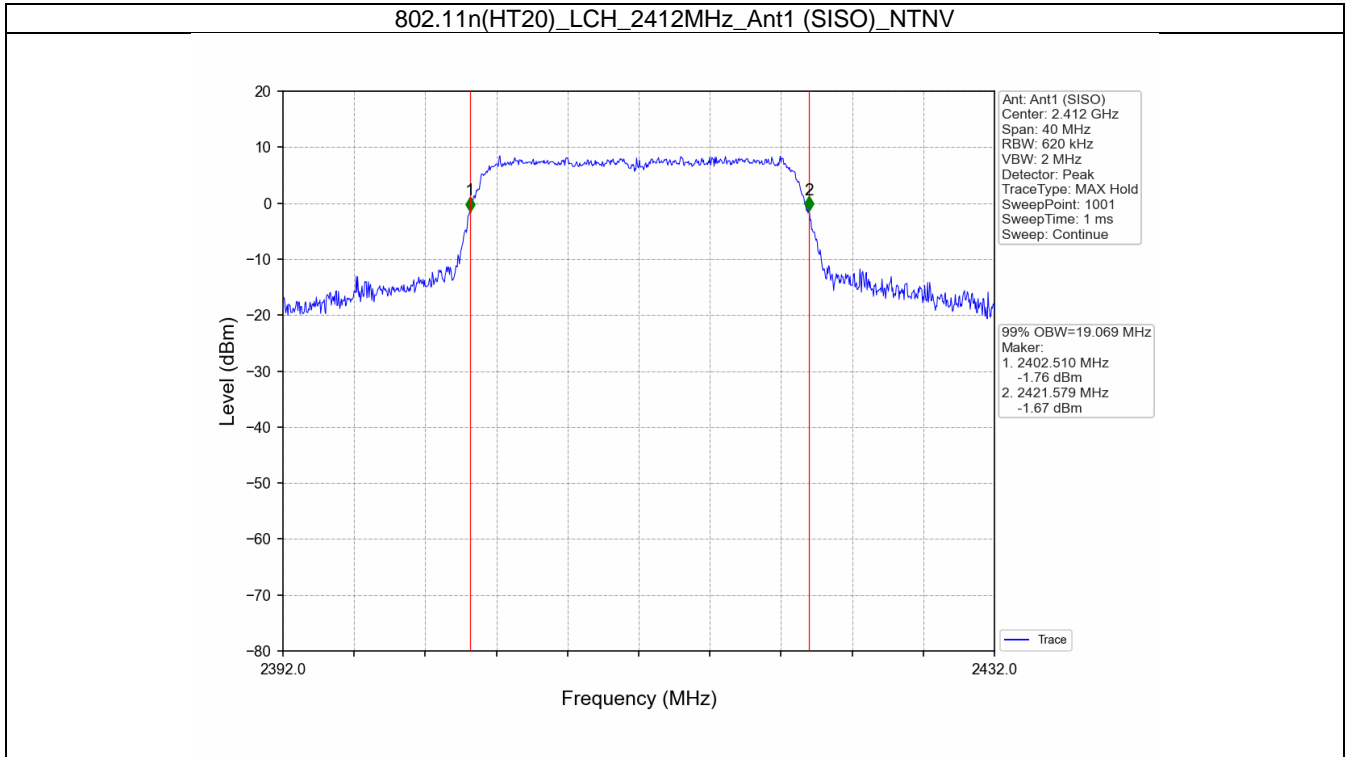
2.1.2 Test Graph

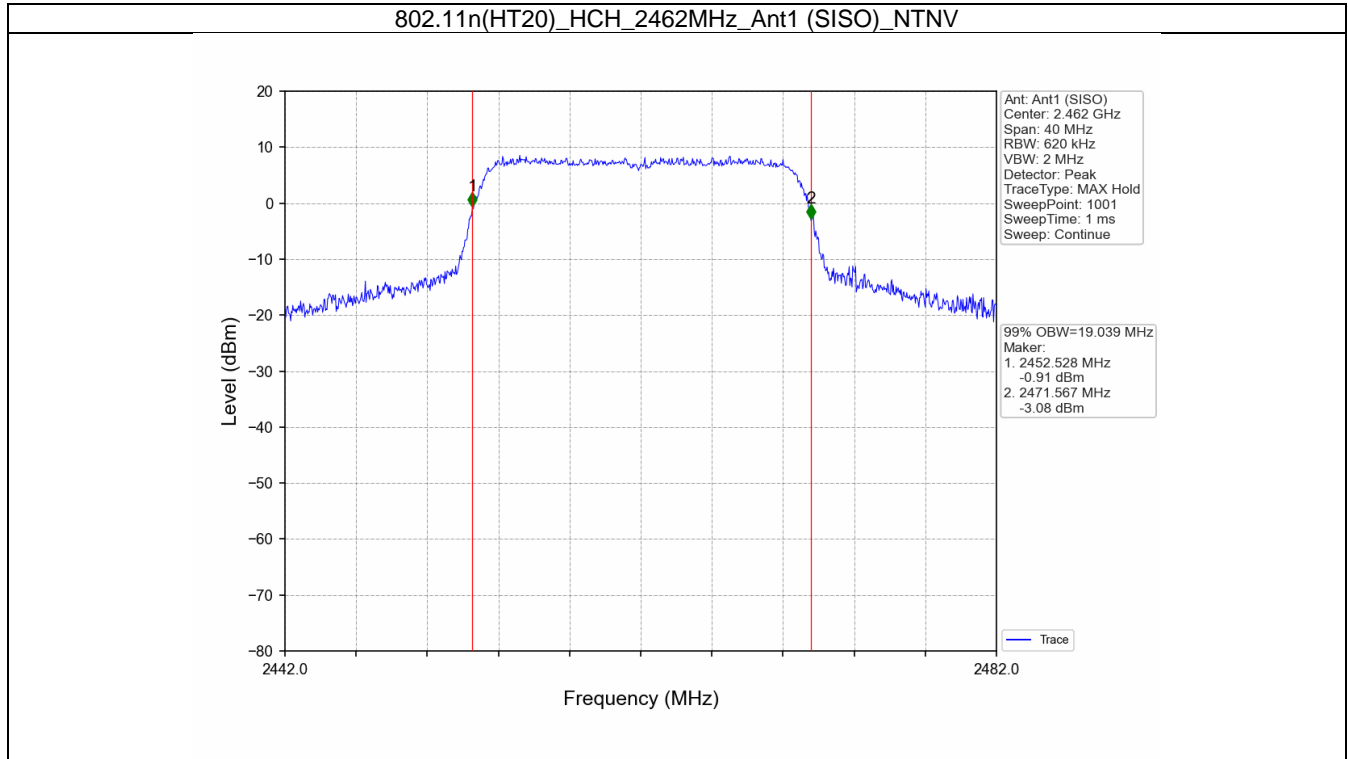










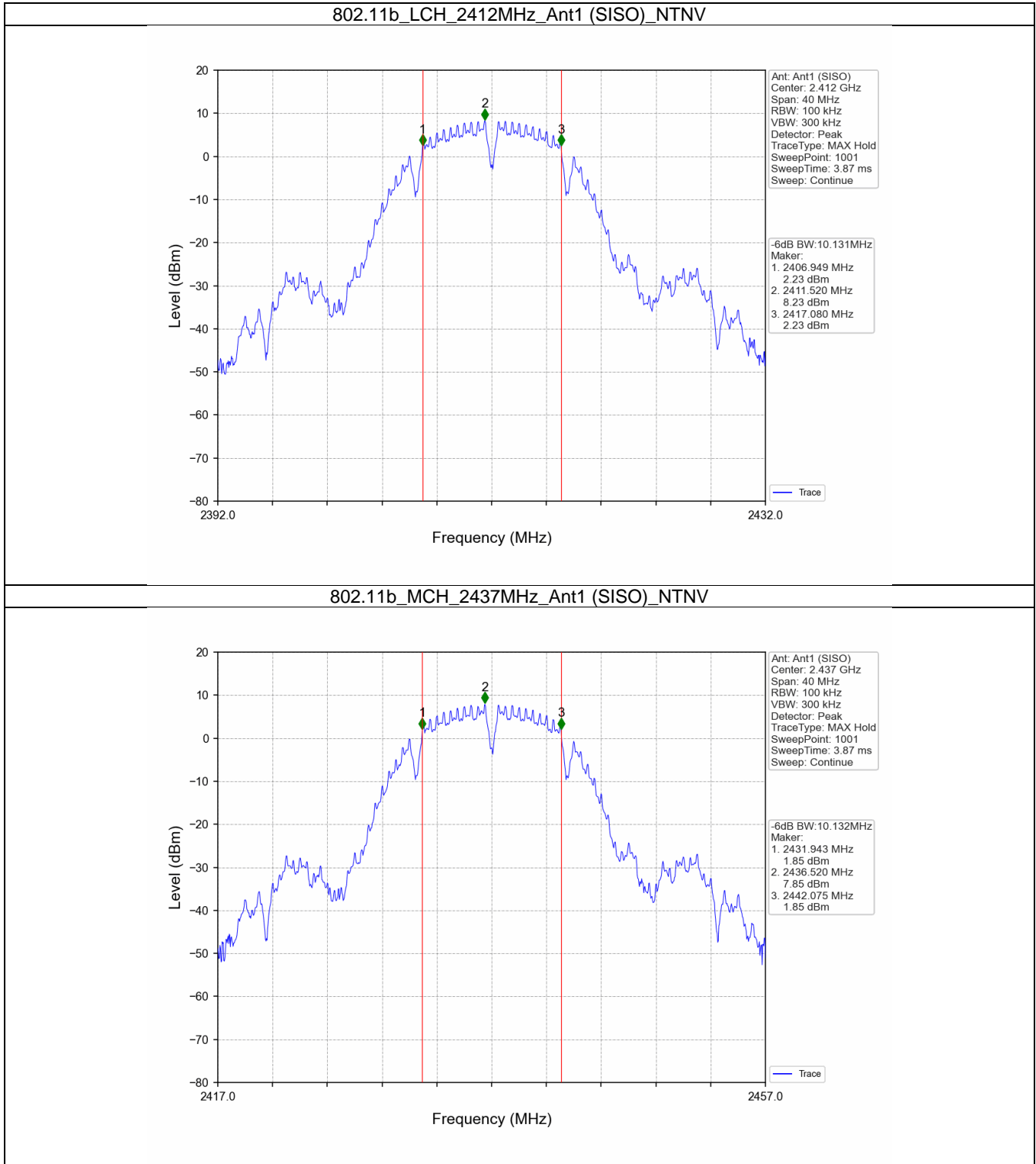


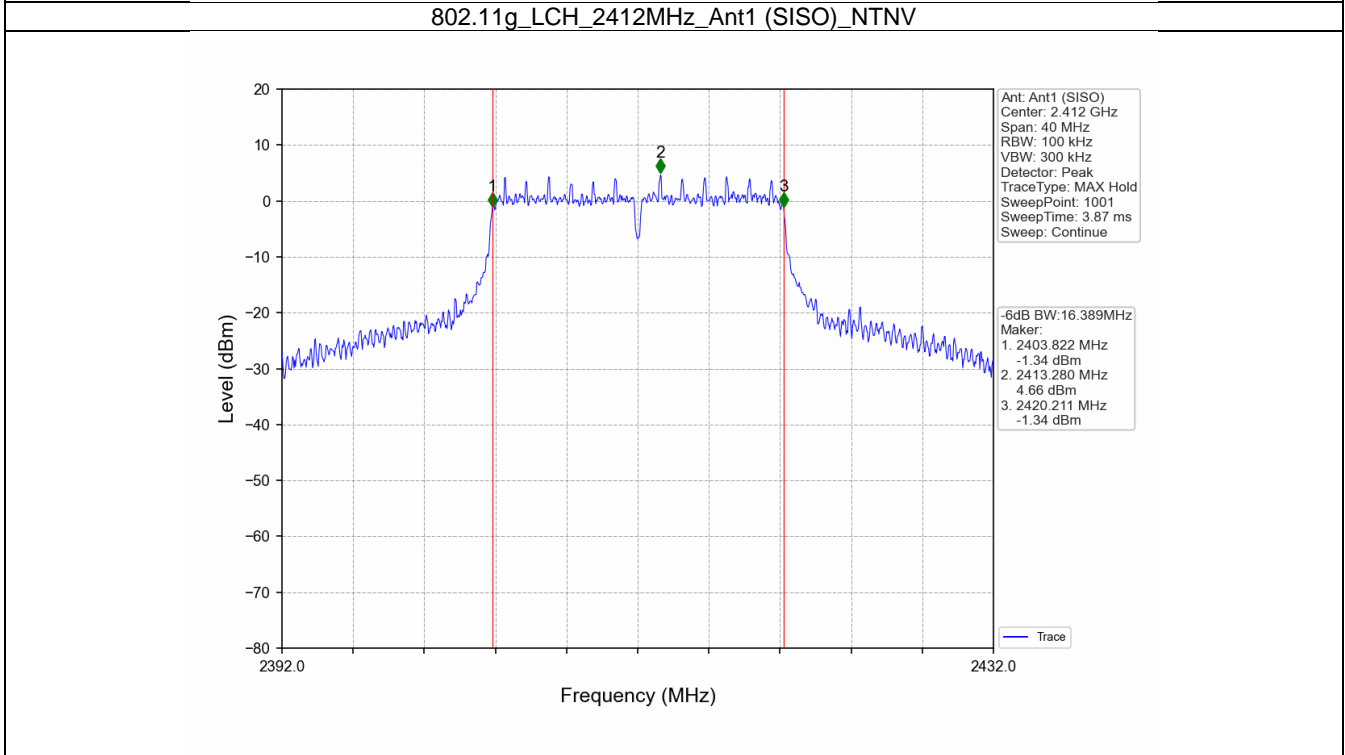
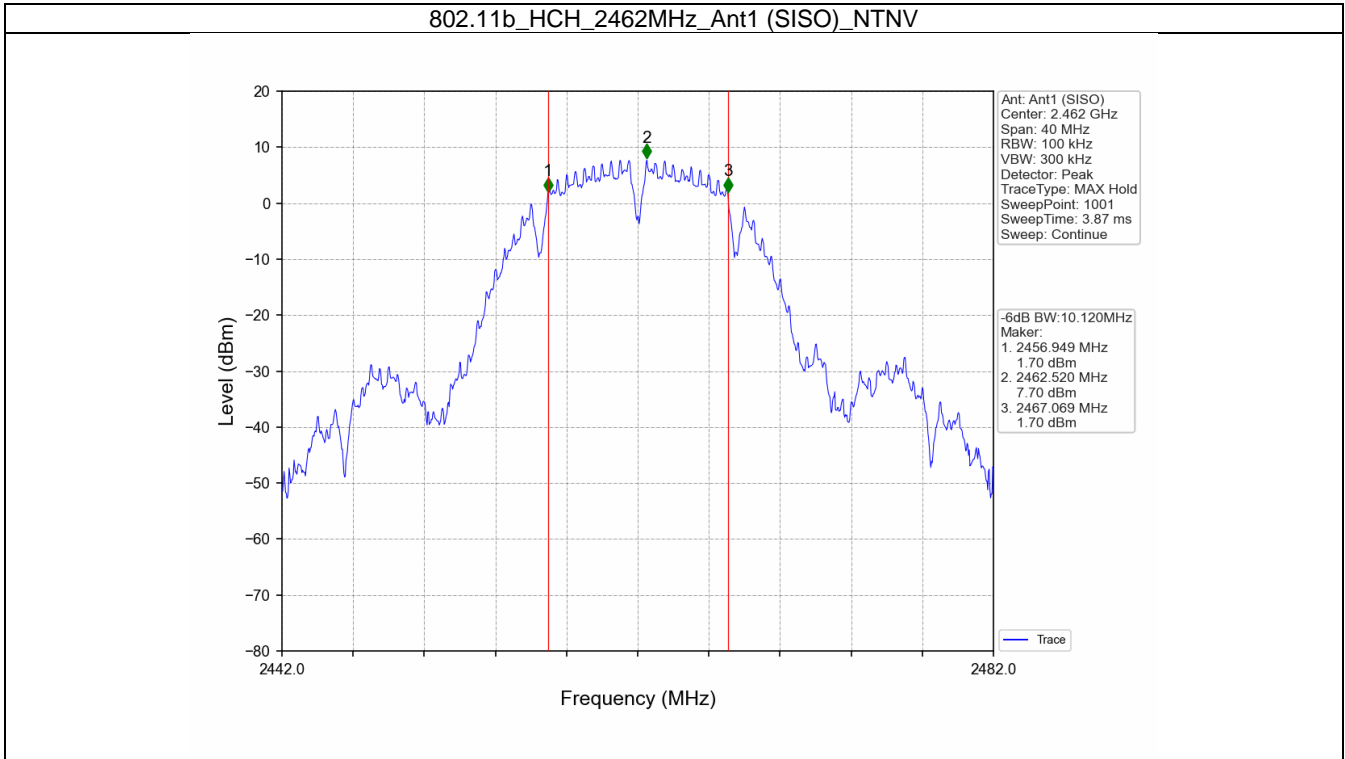
## 2.2 6dB BW

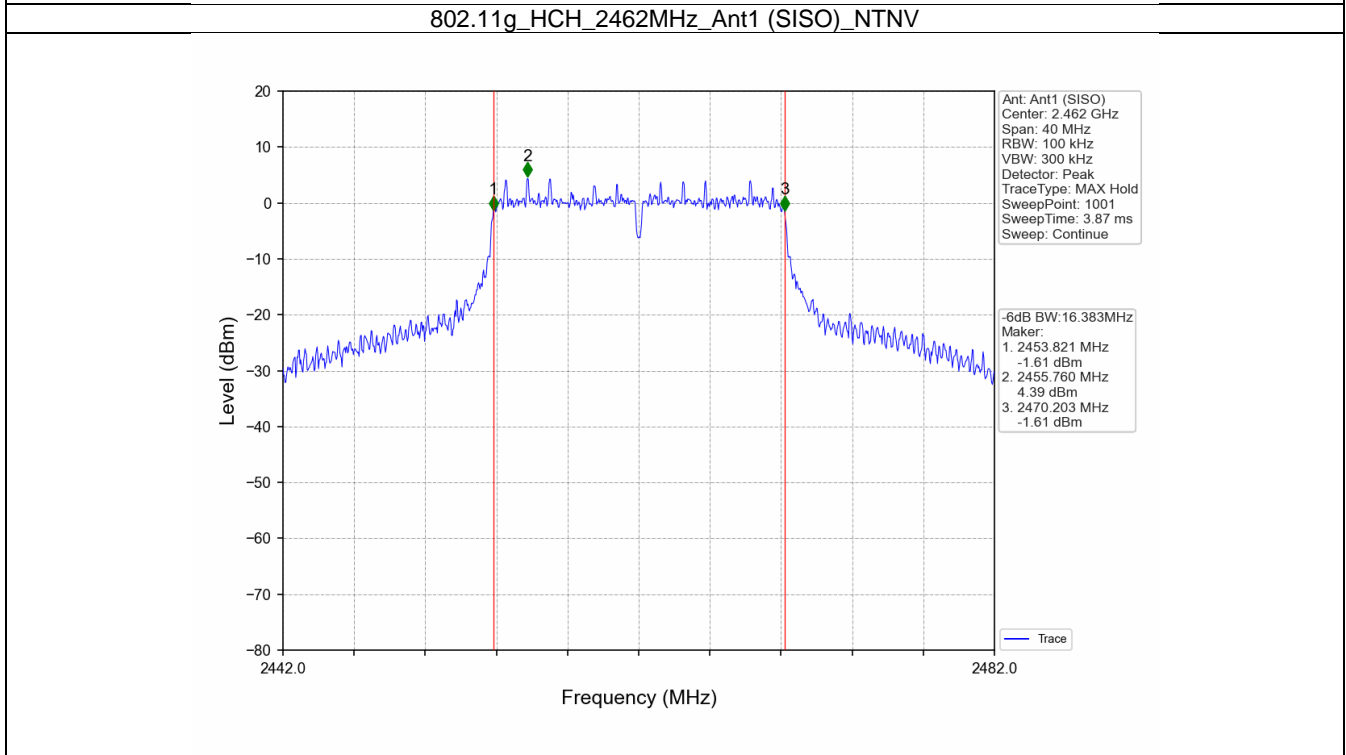
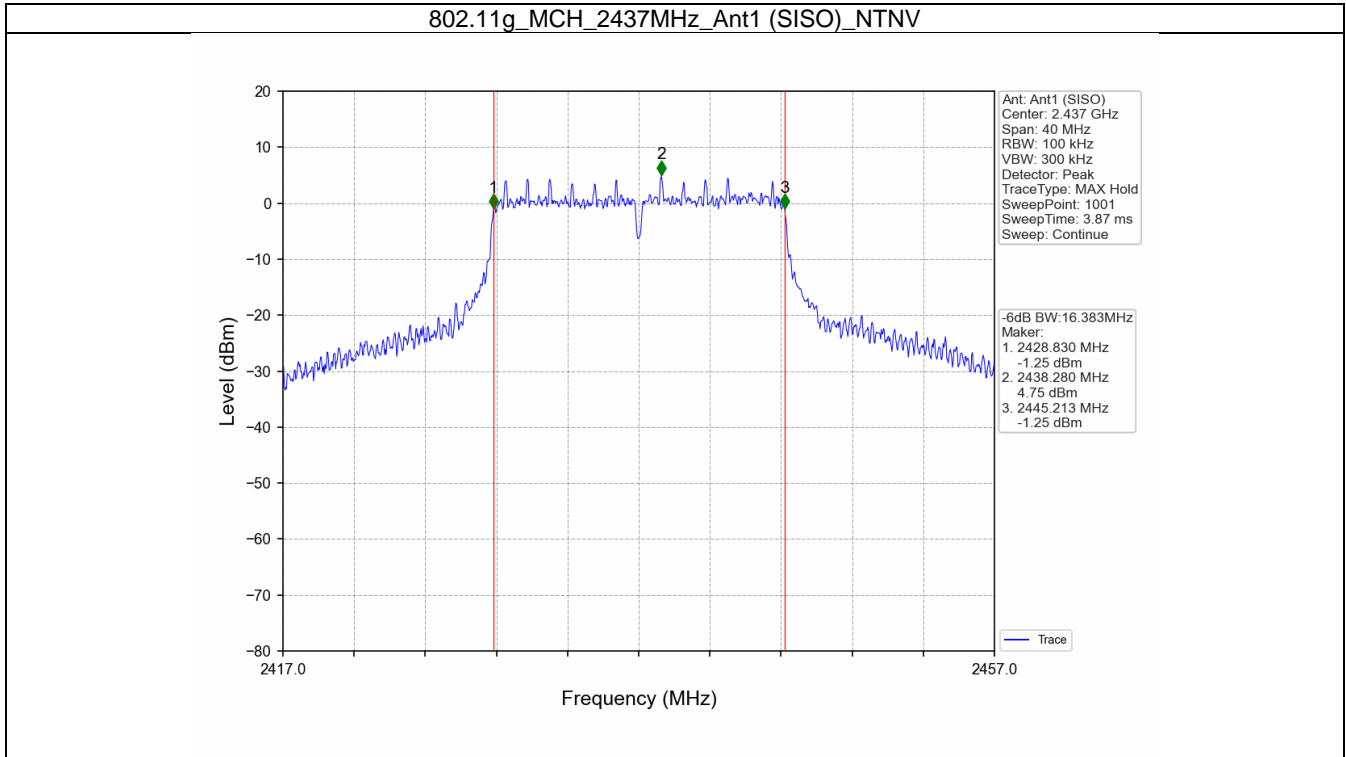
### 2.2.1 Test Result

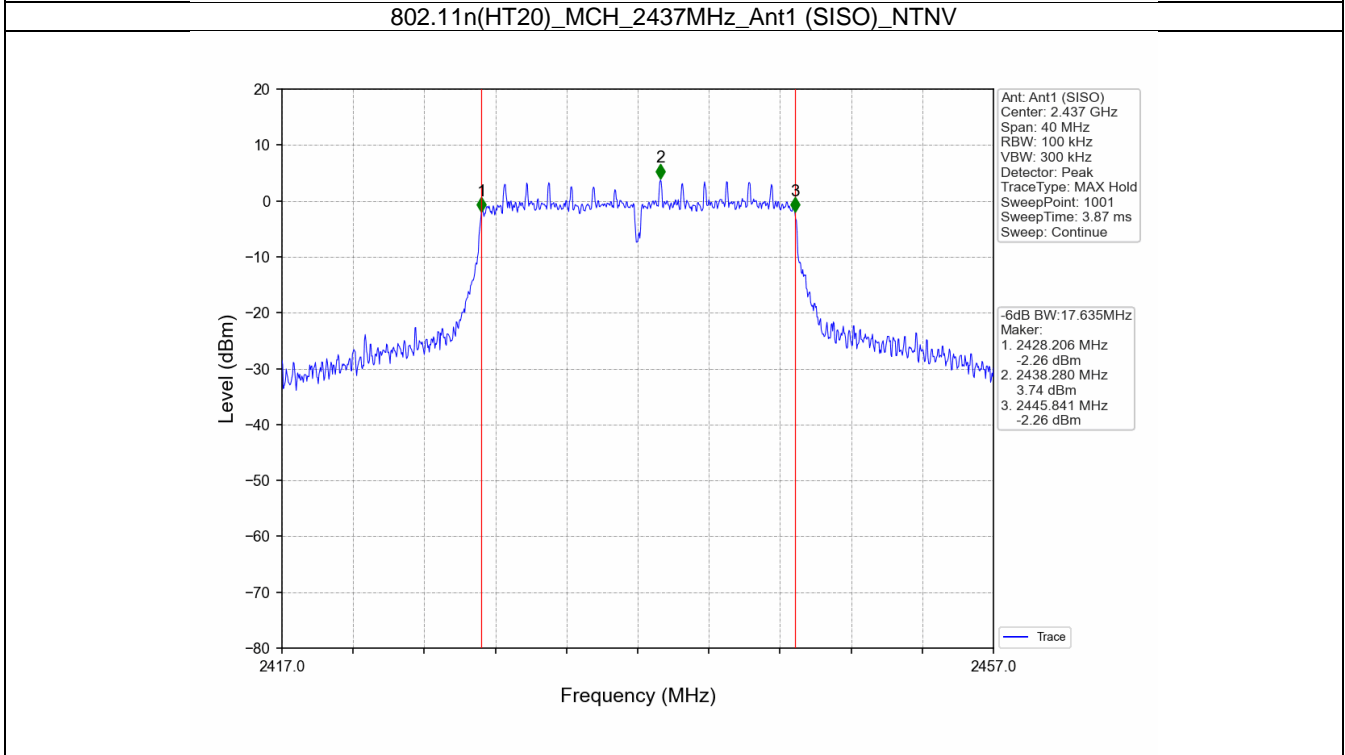
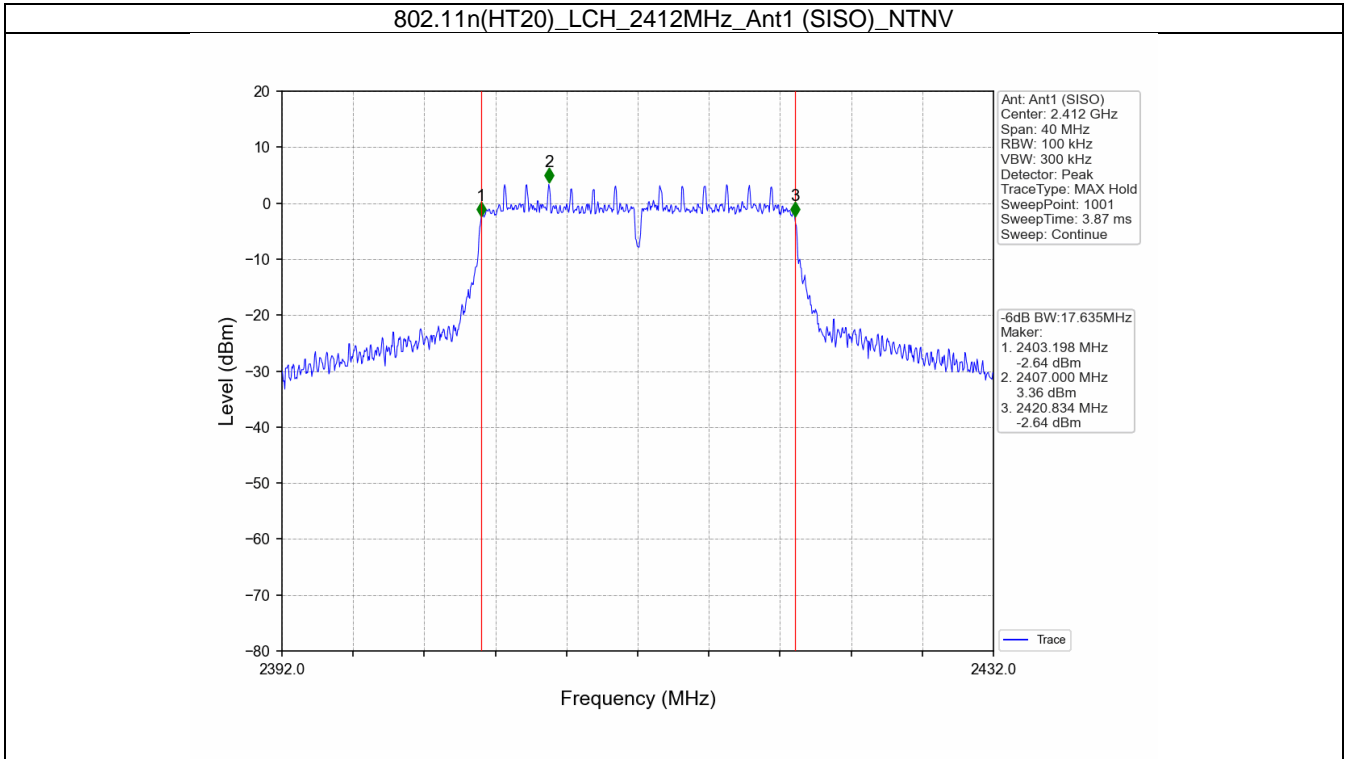
Mode	TX Type	Frequency (MHz)	Ant	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
802.11b	SISO	2412	1	10.131	>=0.5	Pass
		2437	1	10.132	>=0.5	Pass
		2462	1	10.120	>=0.5	Pass
802.11g	SISO	2412	1	16.389	>=0.5	Pass
		2437	1	16.383	>=0.5	Pass
		2462	1	16.383	>=0.5	Pass
802.11n (HT20)	SISO	2412	1	17.635	>=0.5	Pass
		2437	1	17.635	>=0.5	Pass
		2462	1	17.616	>=0.5	Pass

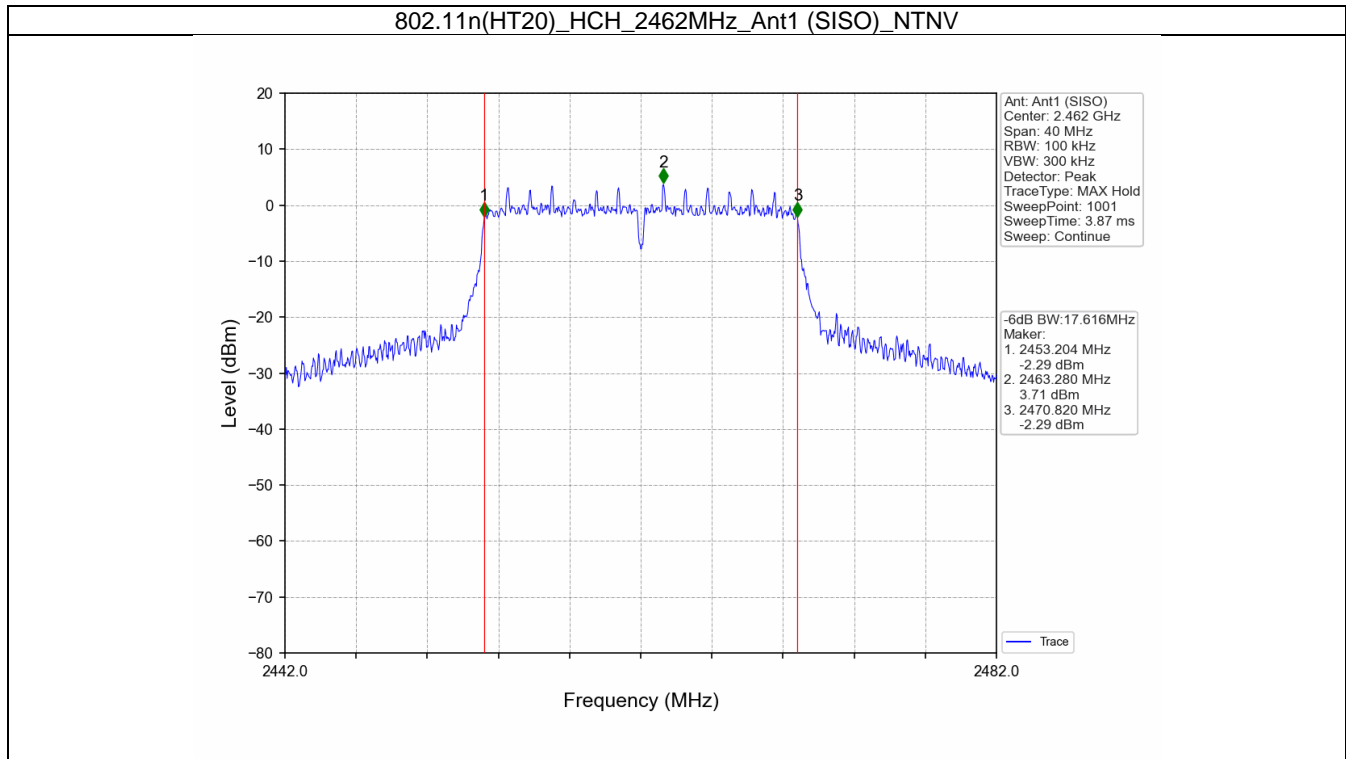
2.2.2 Test Graph











### 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	20.39	<=30	Pass
		2437	20.02	<=30	Pass
		2462	19.94	<=30	Pass
802.11g	SISO	2412	23.05	<=30	Pass
		2437	23.11	<=30	Pass
		2462	22.87	<=30	Pass
802.11n (HT20)	SISO	2412	22.31	<=30	Pass
		2437	22.43	<=30	Pass
		2462	22.22	<=30	Pass

Note1: Antenna Gain: Ant1: 3.56dBi;

### 4. Maximum Power Spectral Density

#### 4.1 PSD

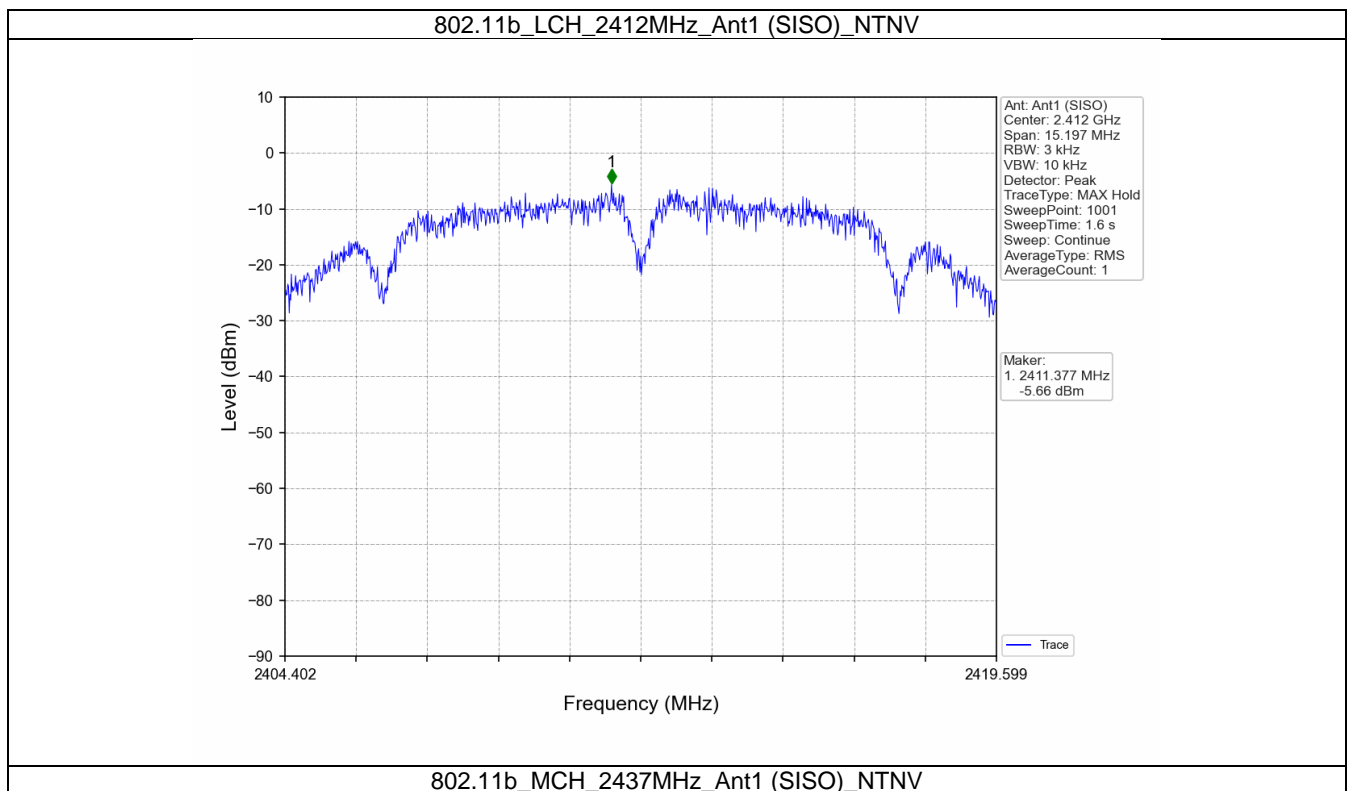
##### 4.1.1 Test Result

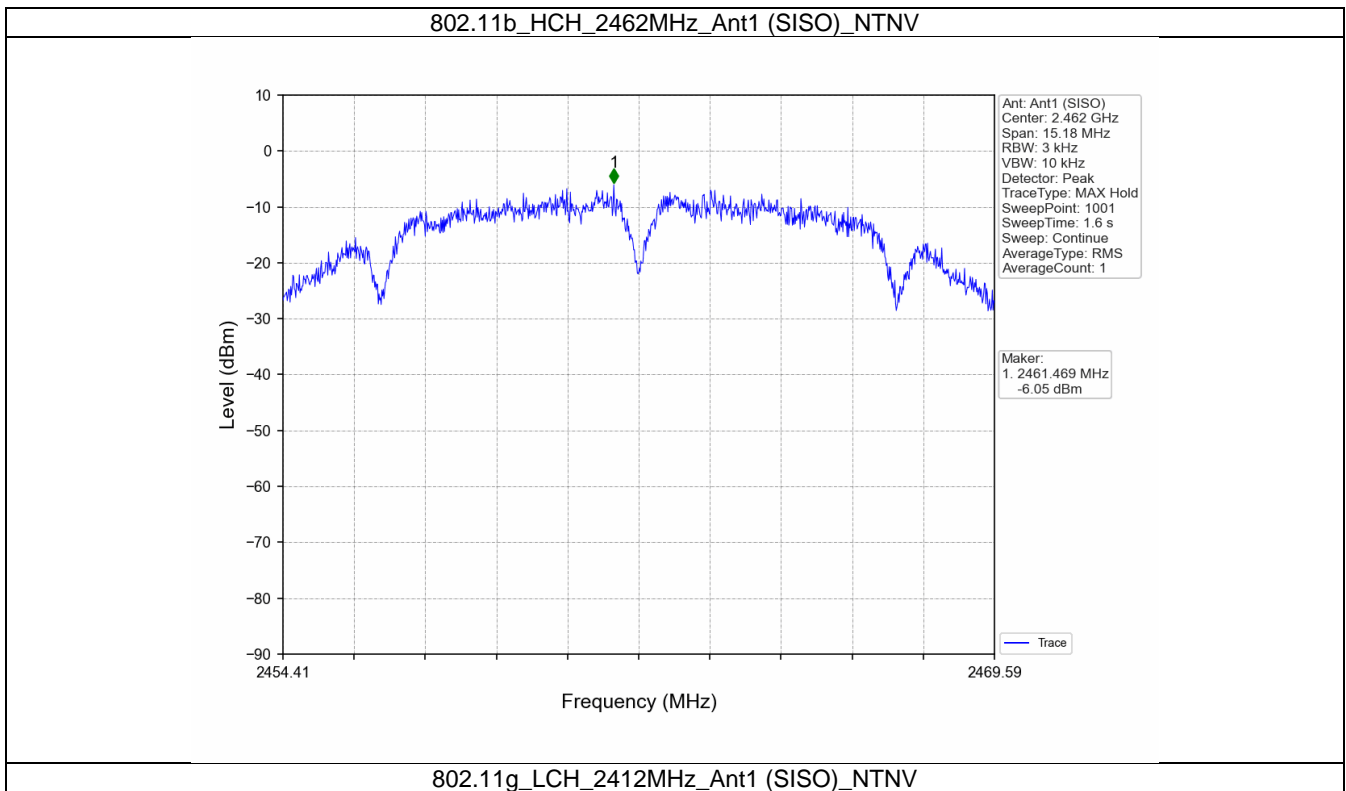
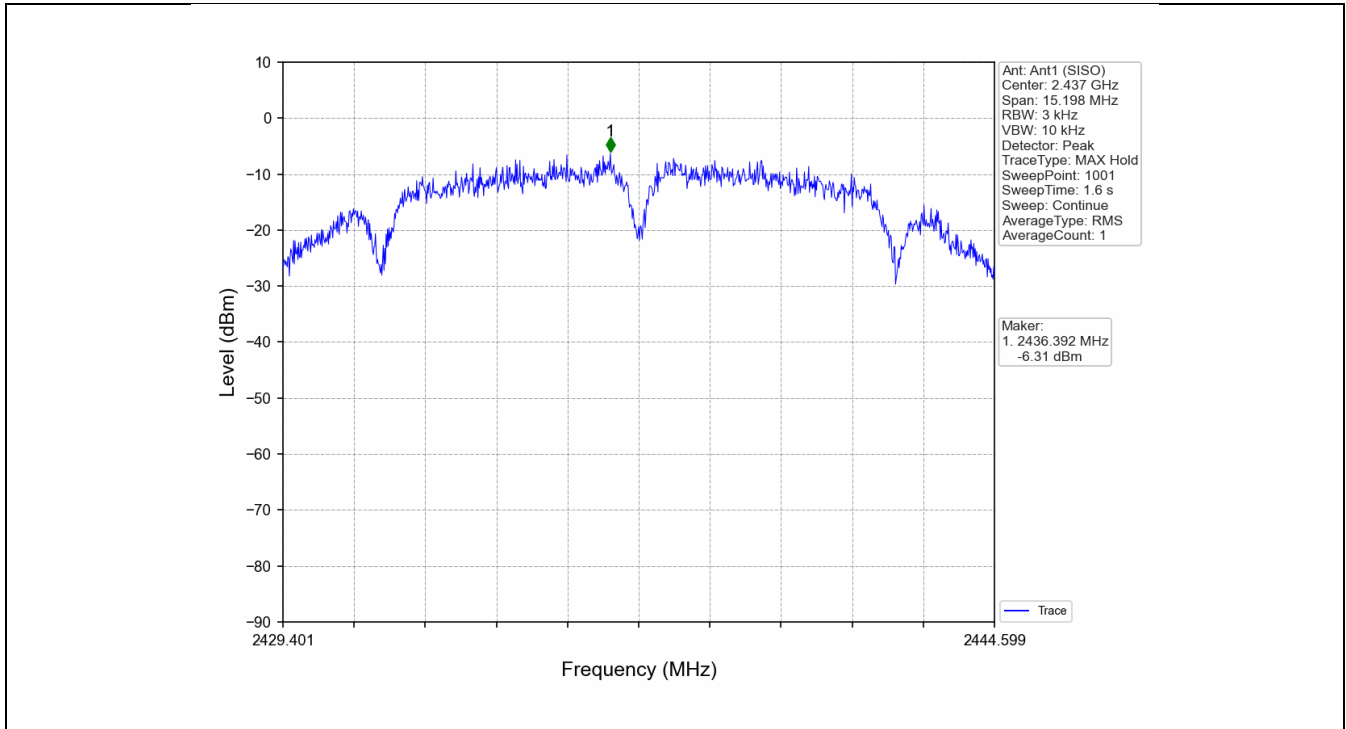


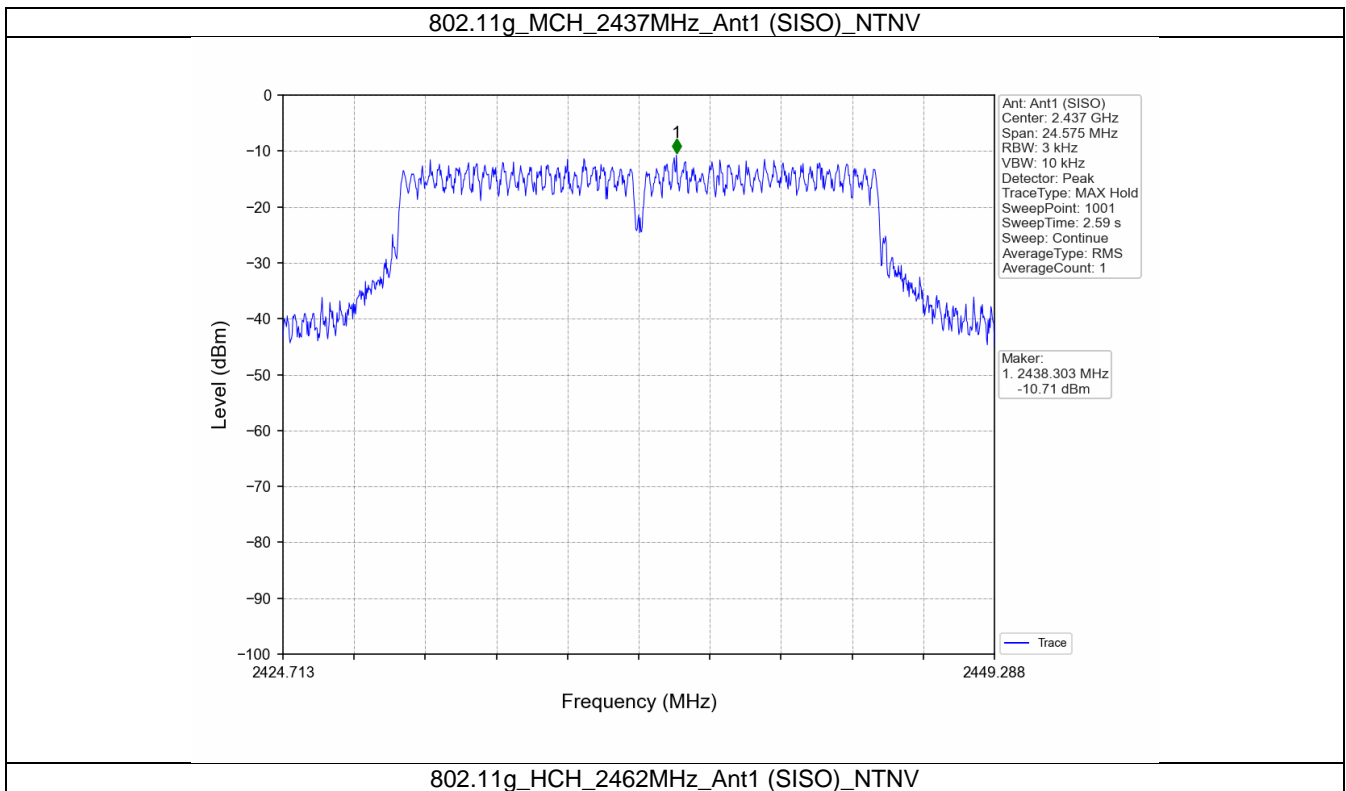
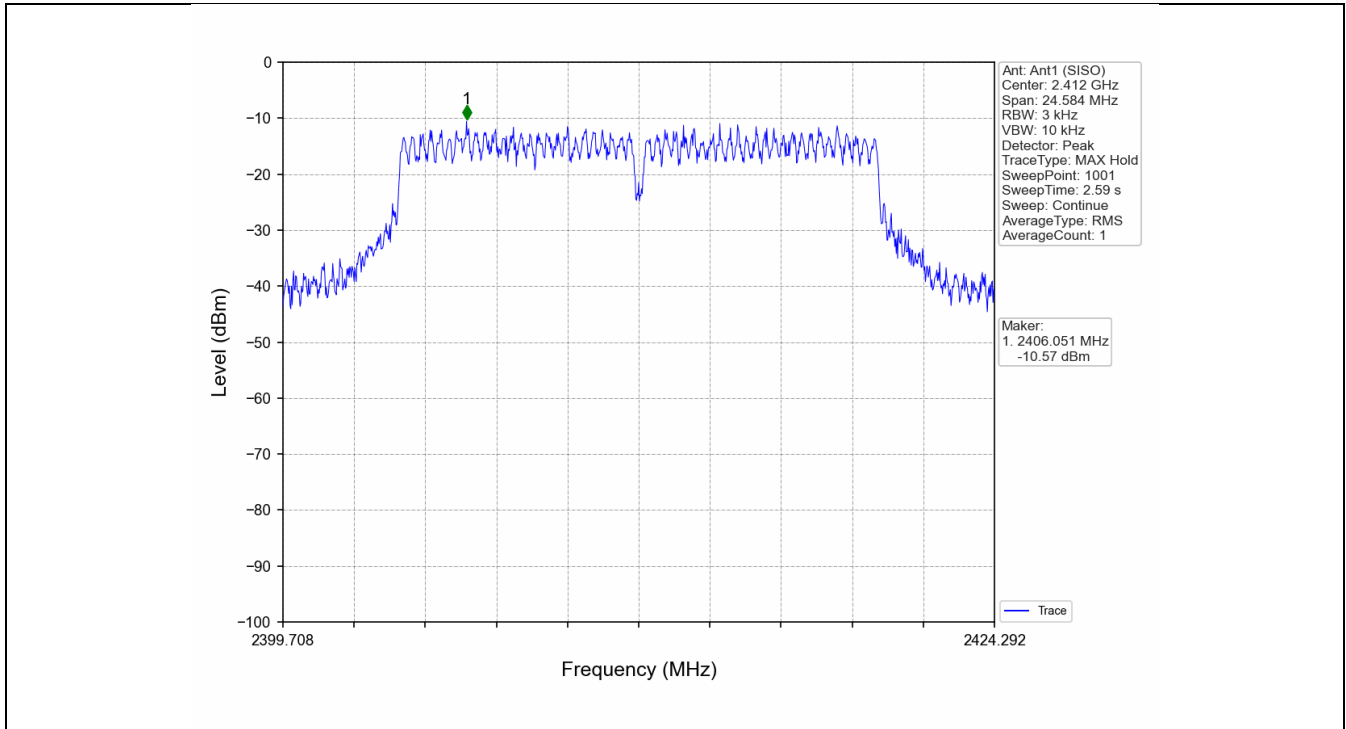
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			Ant1	Limit	
802.11b	SISO	2412	-5.66	<=8	Pass
		2437	-6.31	<=8	Pass
		2462	-6.05	<=8	Pass
802.11g	SISO	2412	-10.57	<=8	Pass
		2437	-10.71	<=8	Pass
		2462	-11.29	<=8	Pass
802.11n (HT20)	SISO	2412	-11.59	<=8	Pass
		2437	-11.64	<=8	Pass
		2462	-11.93	<=8	Pass

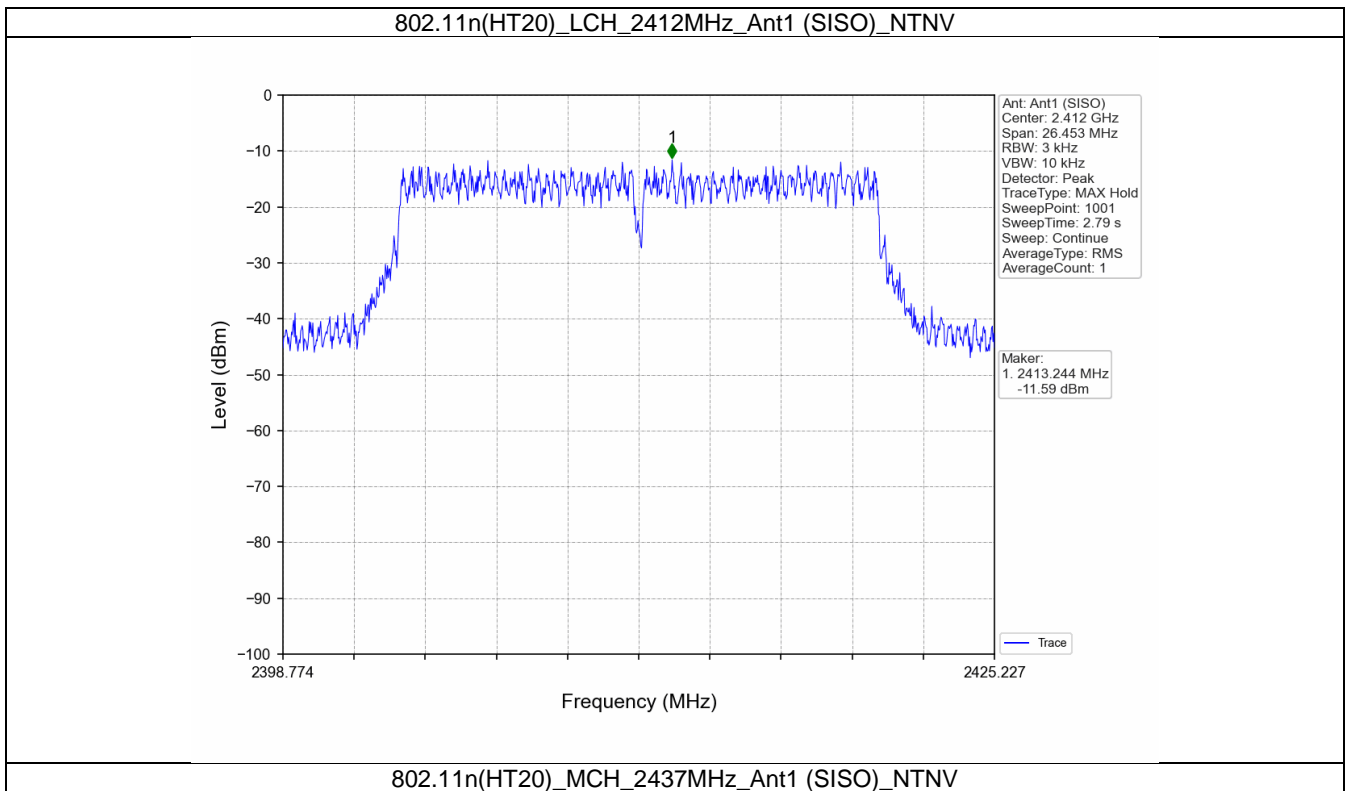
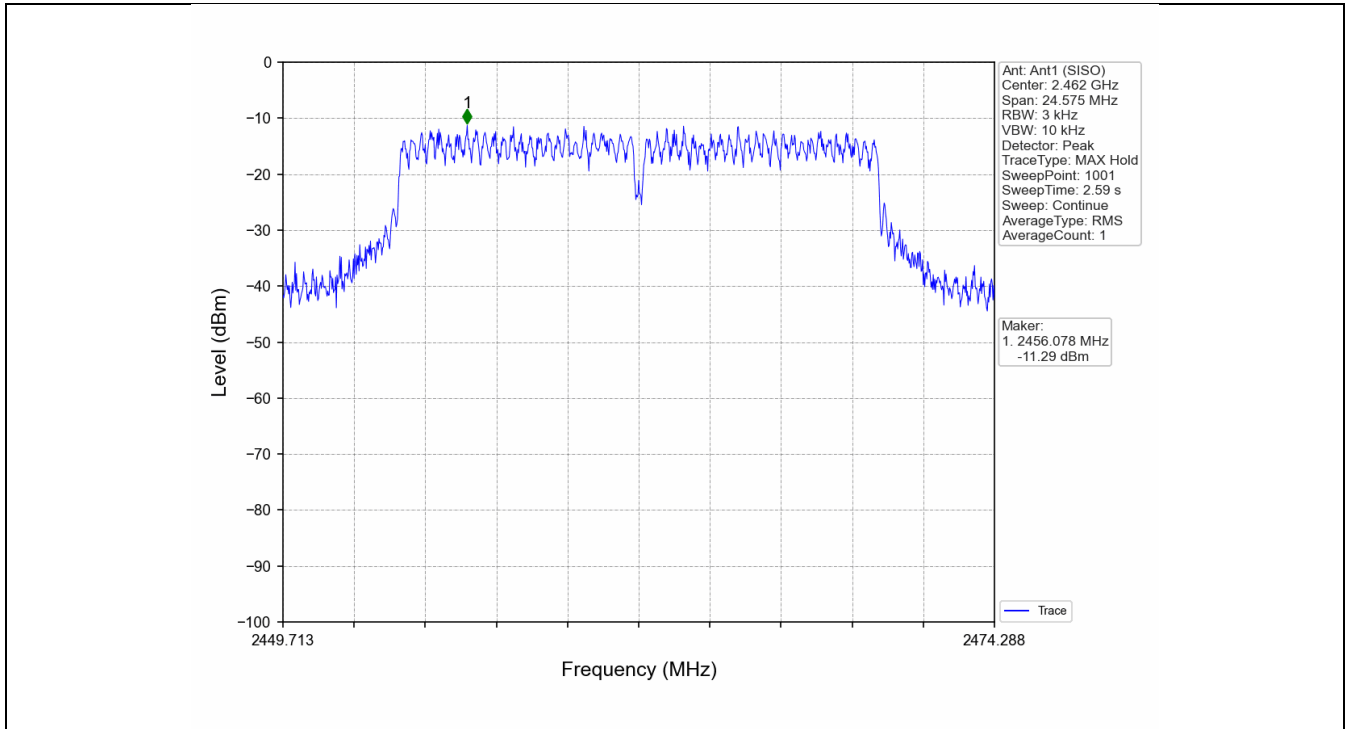
Note1: Antenna Gain: Ant1: 3.56dBi;

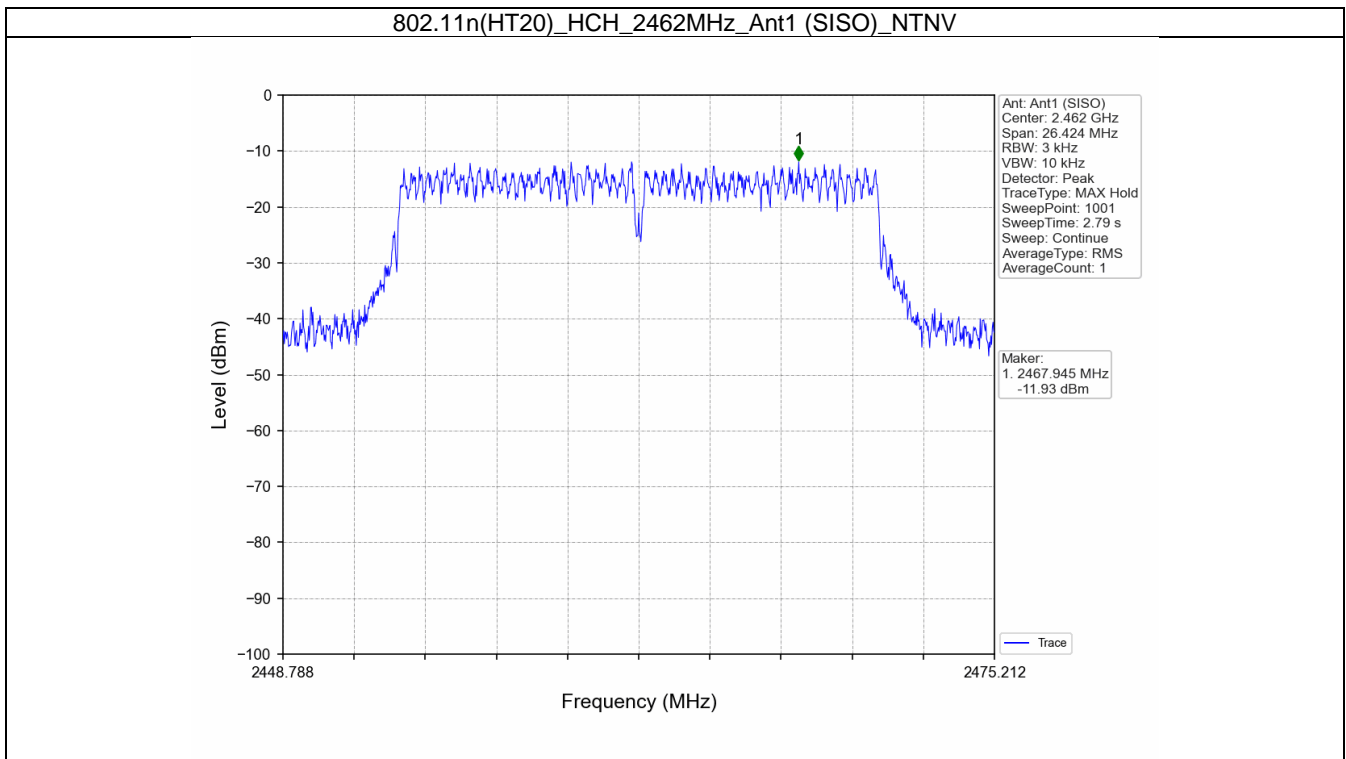
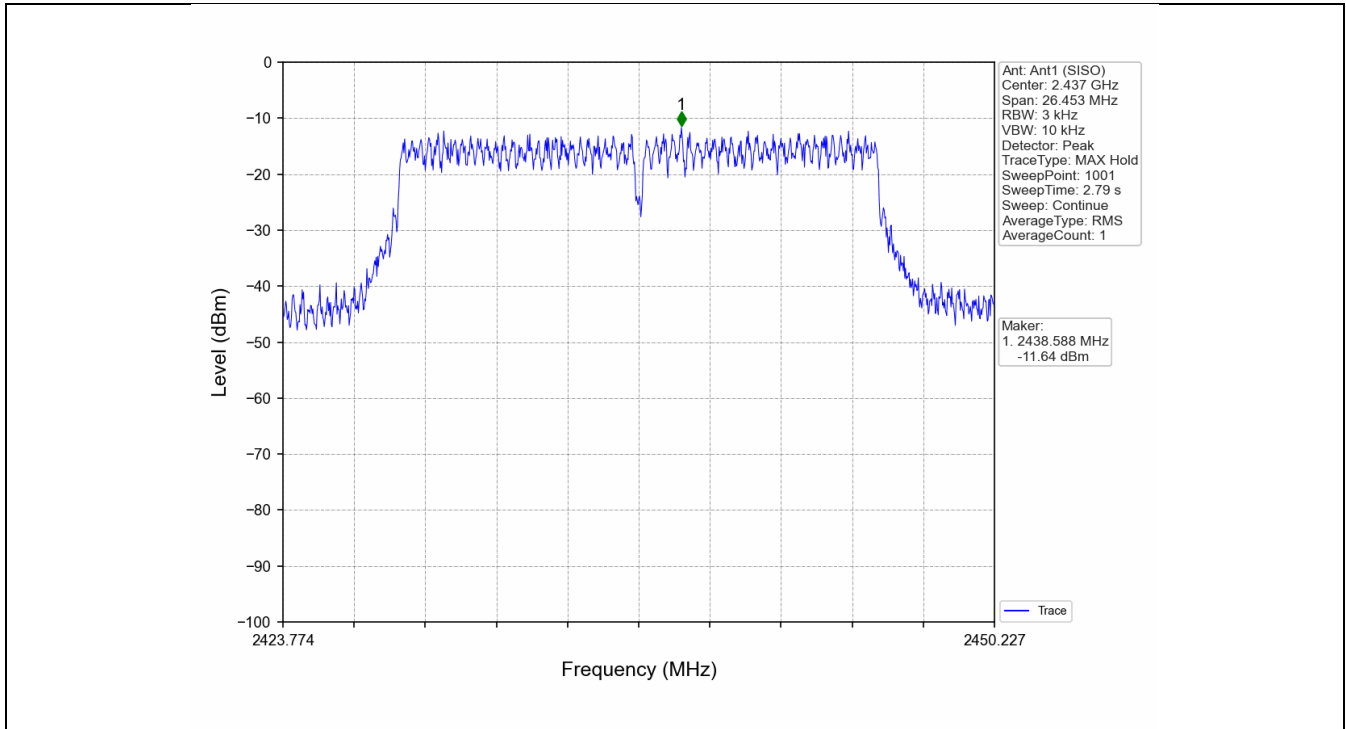
### 4.1.2 Test Graph











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

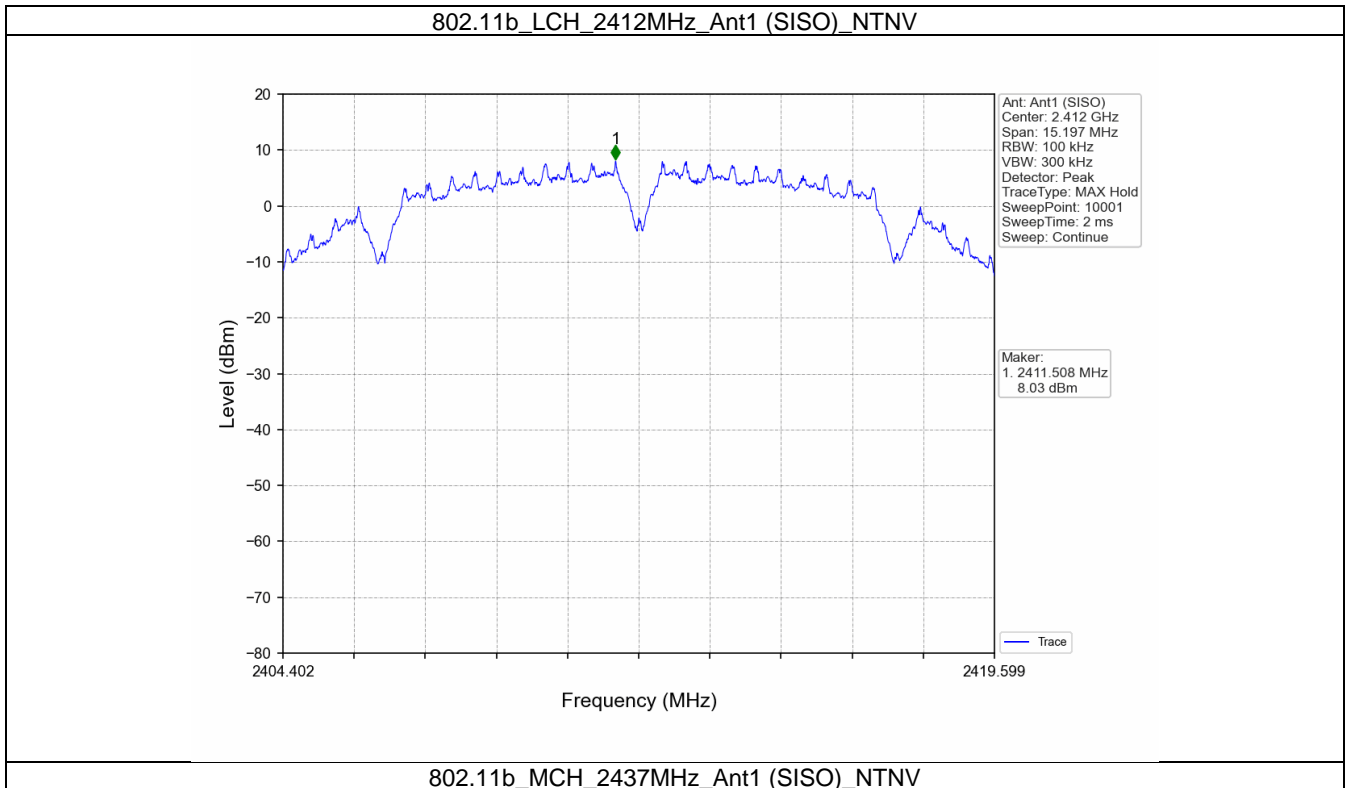
### 5.1 Ref

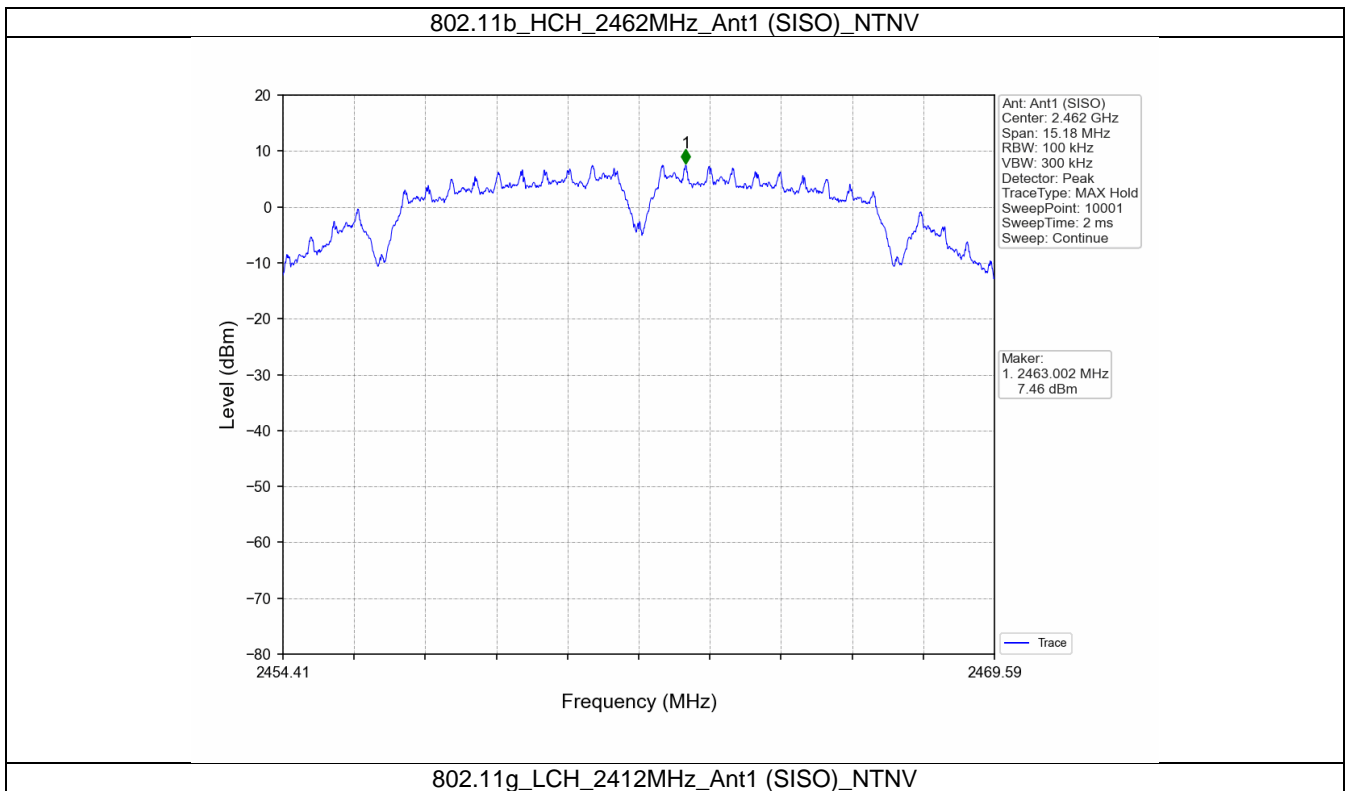
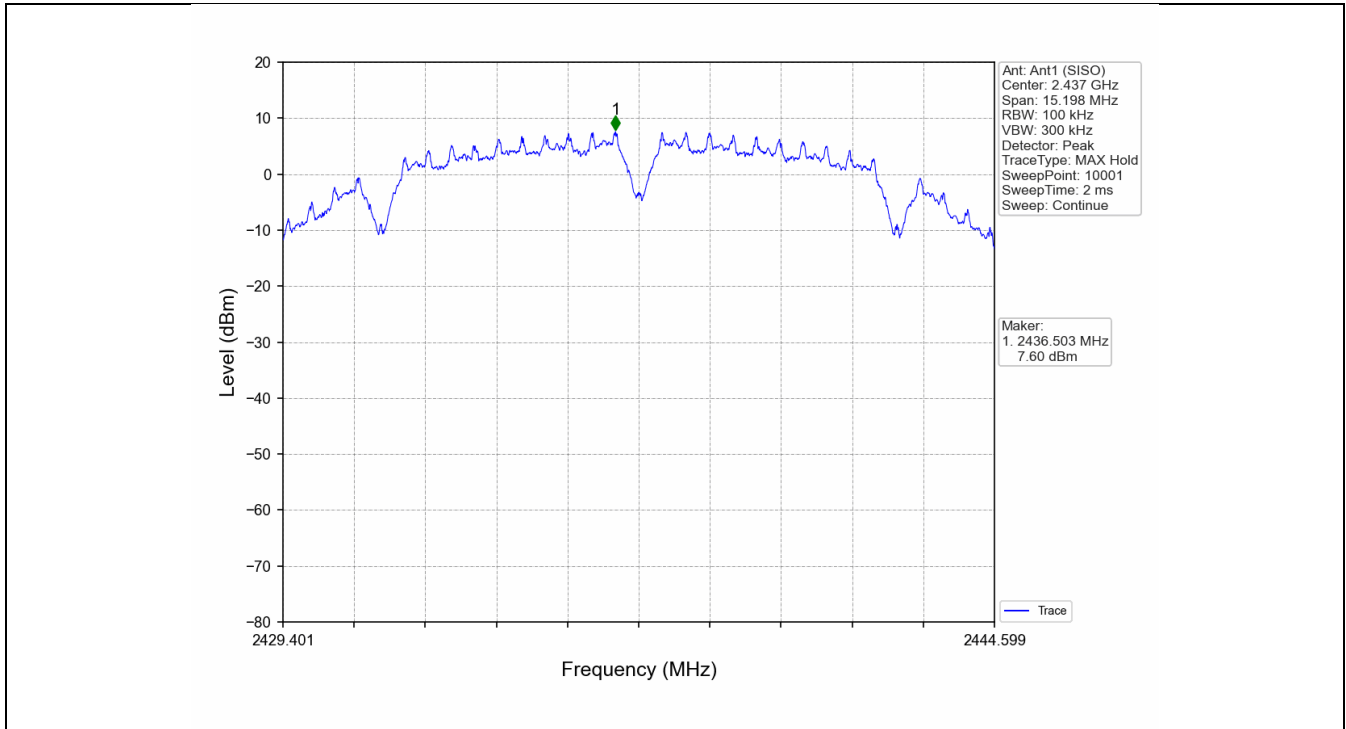
#### 5.1.1 Test Result

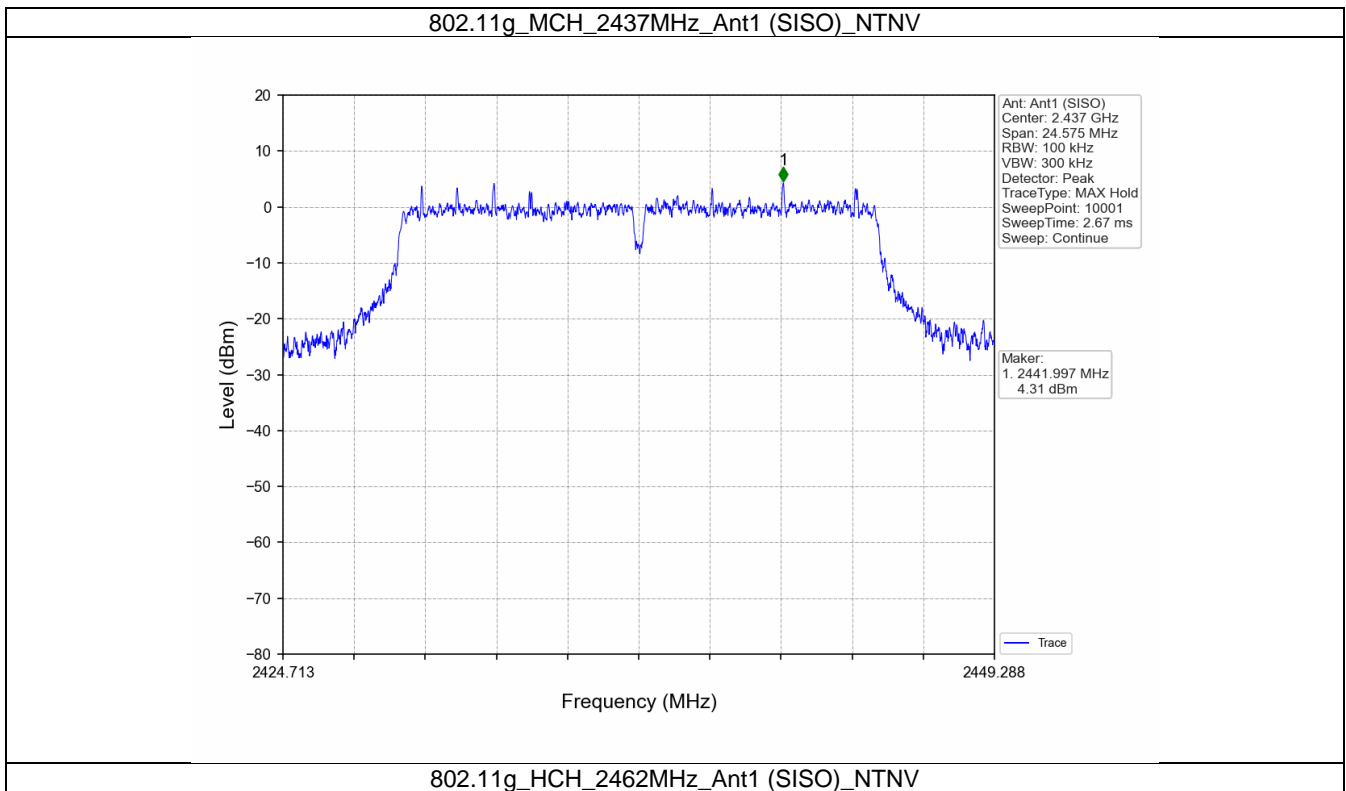
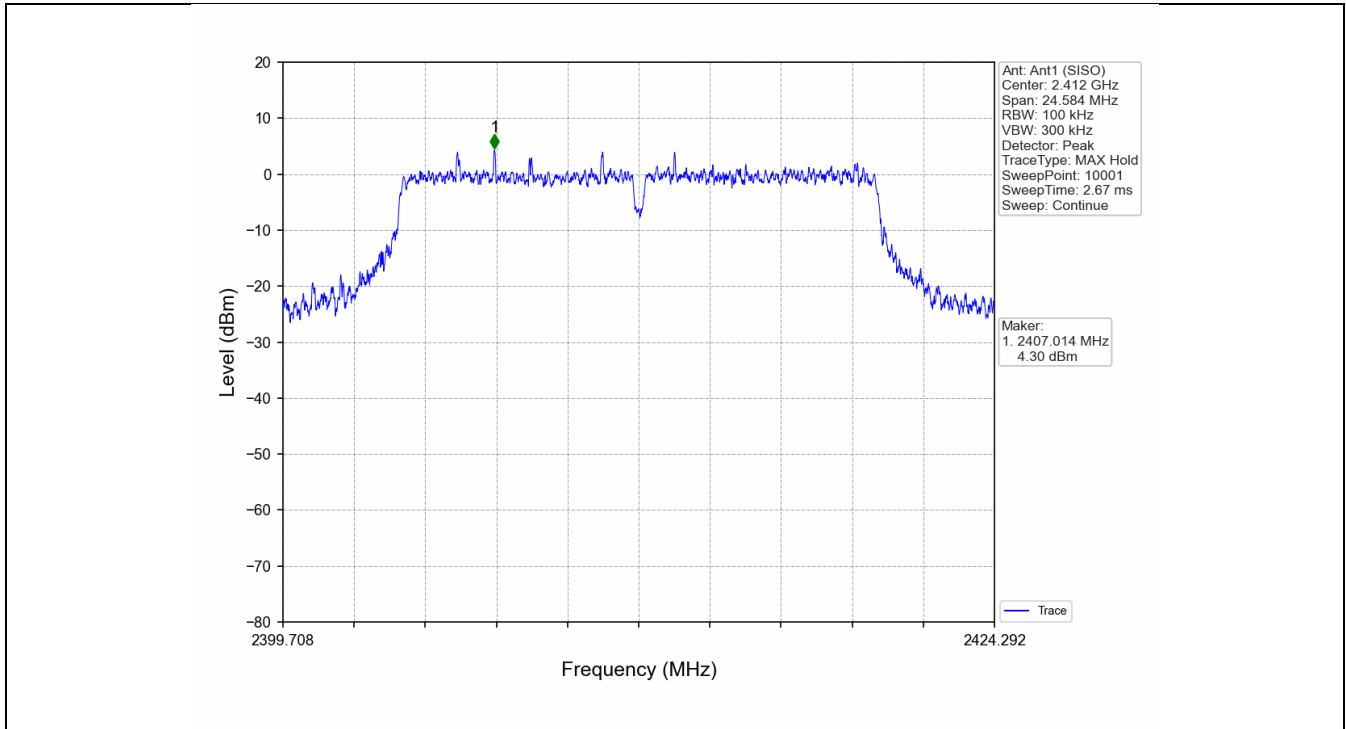
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)
802.11b	SISO	2412	1	8.03
		2437	1	7.60
		2462	1	7.46
802.11g	SISO	2412	1	4.30
		2437	1	4.31
		2462	1	4.04
802.11n (HT20)	SISO	2412	1	3.31
		2437	1	3.29
		2462	1	3.27

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.

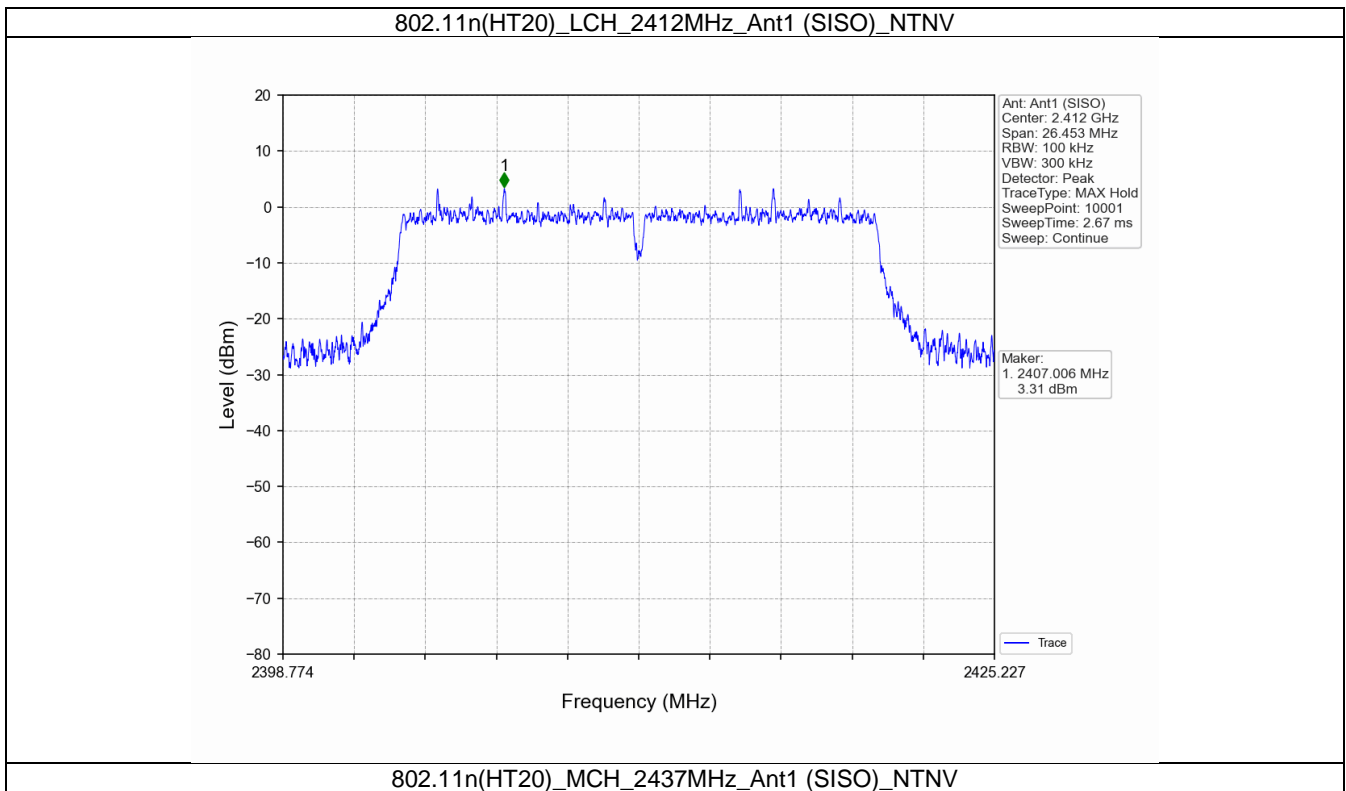
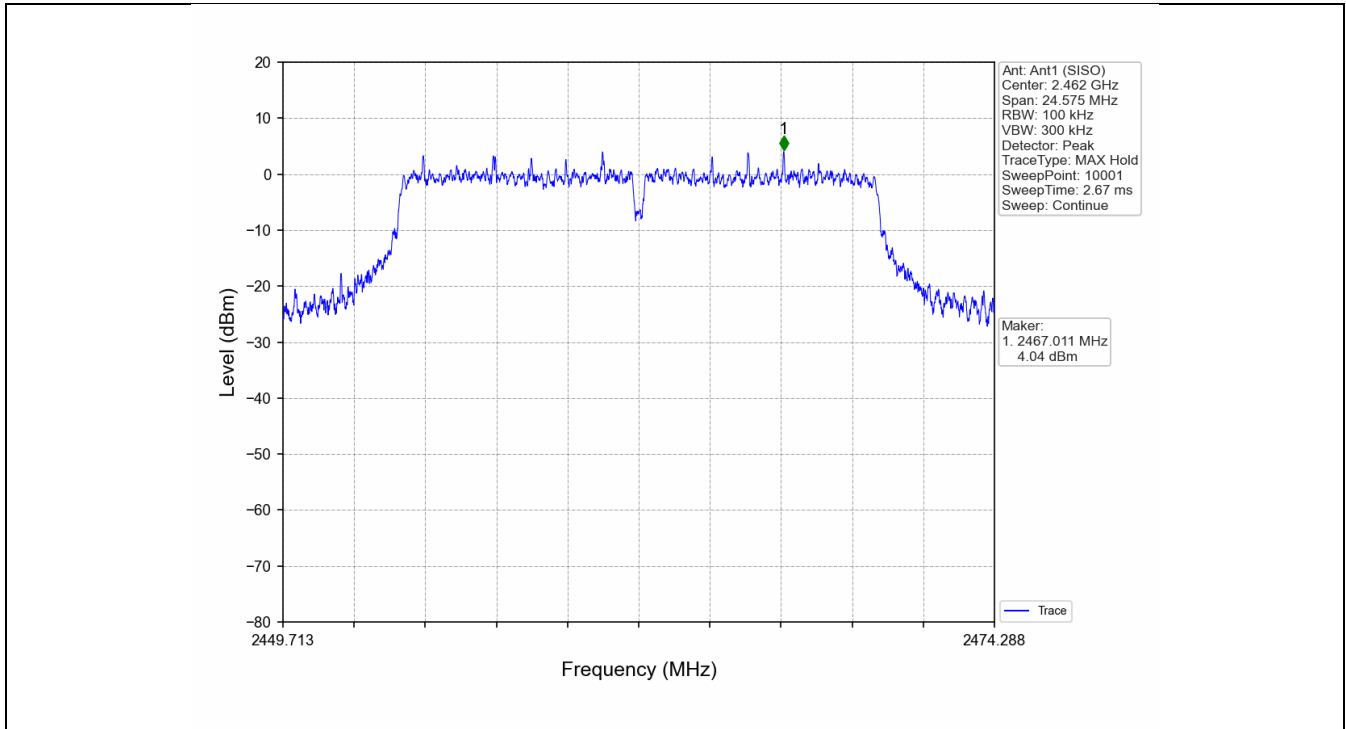
#### 5.1.2 Test Graph

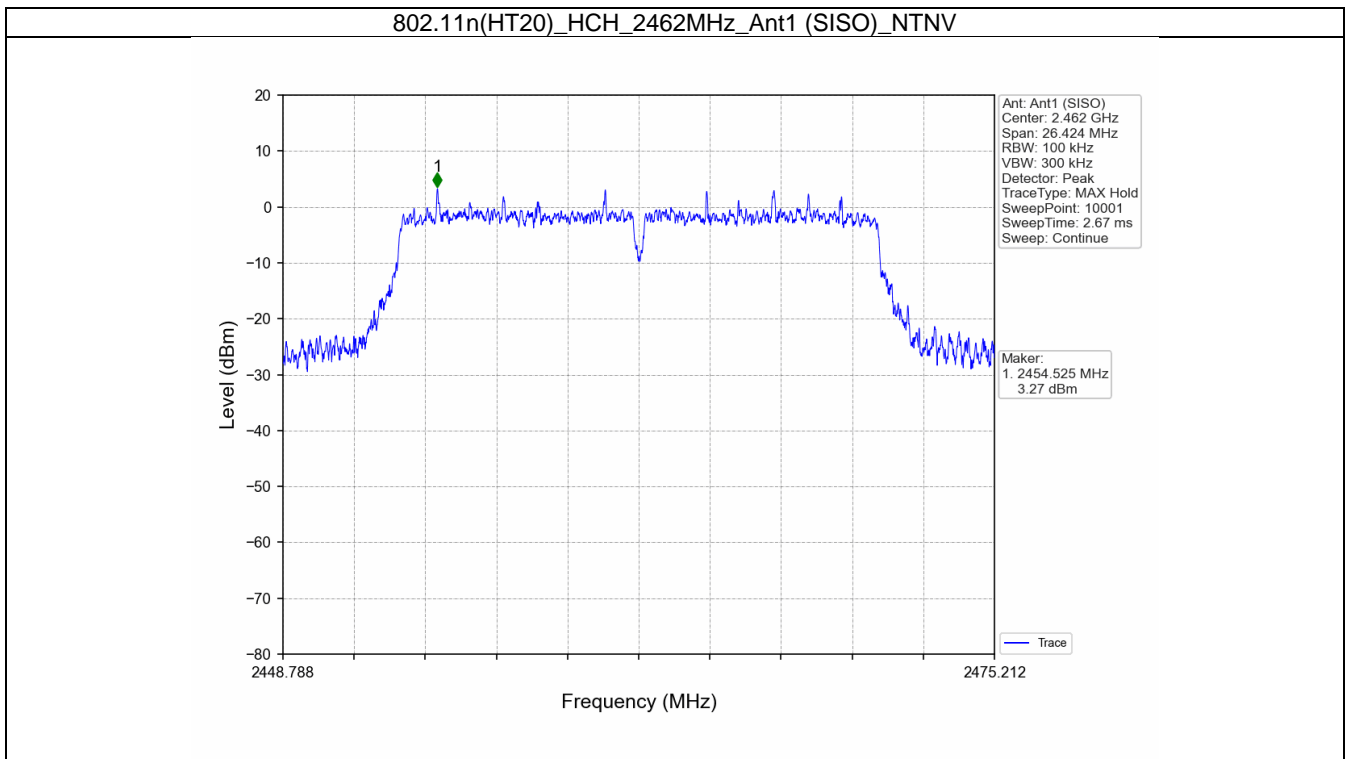
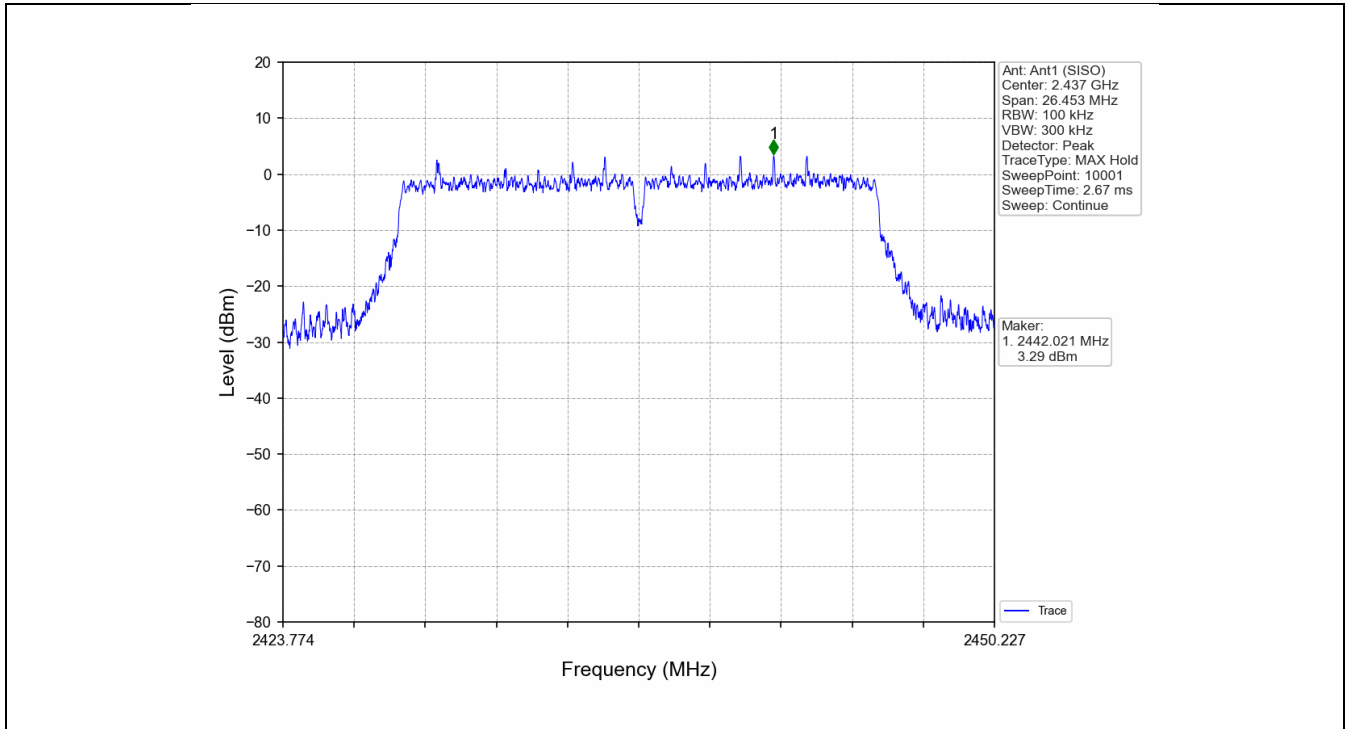












## 5.2 CSE

### 5.2.1 Test Result

Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	8.03	-11.97	Pass
		2437	1	8.03	-11.97	Pass
		2462	1	8.03	-11.97	Pass
802.11g	SISO	2412	1	4.31	-15.69	Pass
		2437	1	4.31	-15.69	Pass
		2462	1	4.31	-15.69	Pass
802.11n (HT20)	SISO	2412	1	3.31	-16.69	Pass
		2437	1	3.31	-16.69	Pass
		2462	1	3.31	-16.69	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

