

## 10 Appendix

### 1. Duty Cycle

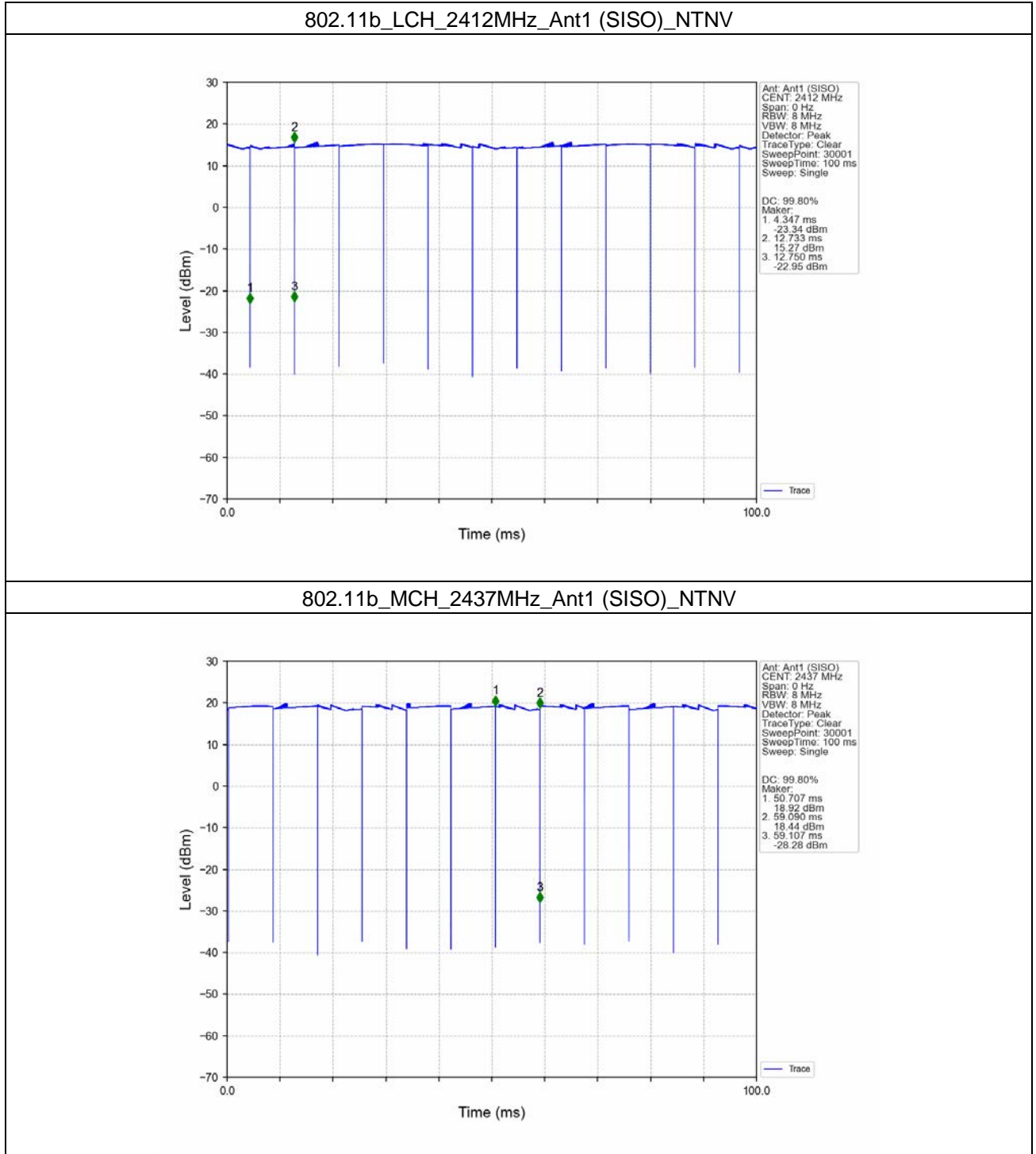
#### 1.1 Test Result

##### 1.1.1 Ant1

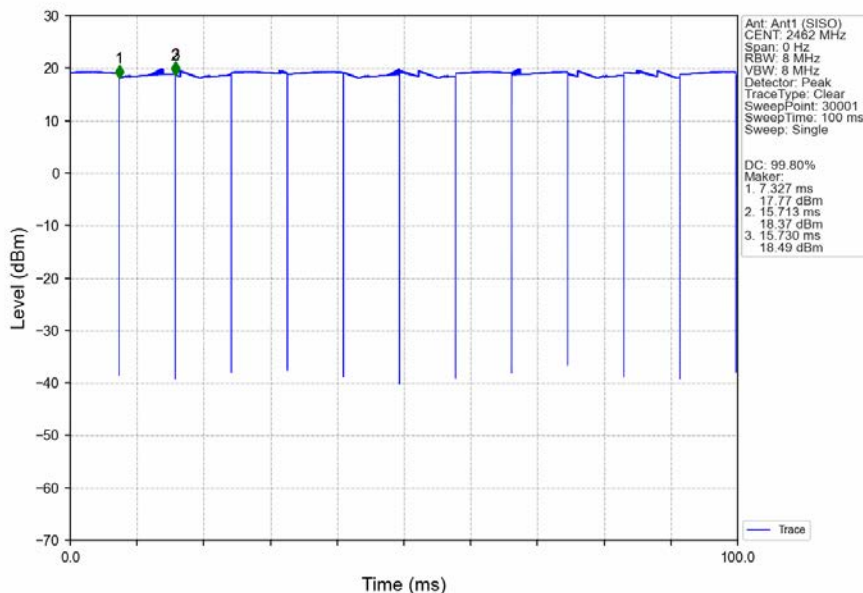
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	8.386	8.403	99.80	0.01	0.00
		2437	8.383	8.400	99.80	0.01	0.00
		2462	8.386	8.403	99.80	0.01	0.04
802.11g	SISO	2412	1.393	1.410	98.79	0.05	0.07
		2437	1.393	1.409	98.86	0.05	0.03
		2462	1.392	1.409	98.79	0.05	0.03
802.11n (HT20)	SISO	2412	5.085	5.103	99.65	0.02	0.04
		2437	5.085	5.102	99.67	0.01	0.00
		2462	5.083	5.101	99.65	0.02	0.04
802.11n (HT40)	SISO	2422	0.645	0.793	81.34	0.90	2.85
		2437	0.645	0.821	78.56	1.05	5.58
		2452	0.645	0.803	80.32	0.95	3.81

### 1.2 Test Graph

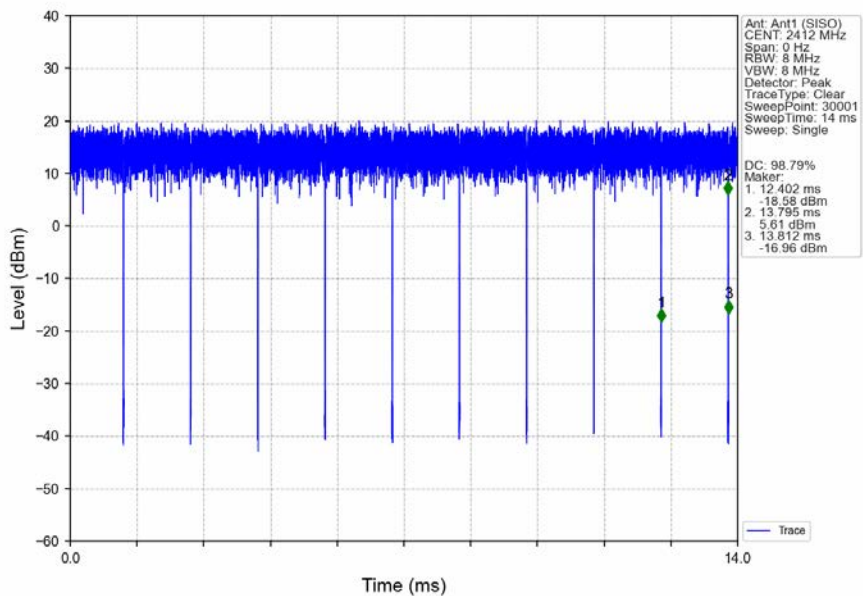
#### 1.2.1 Ant1



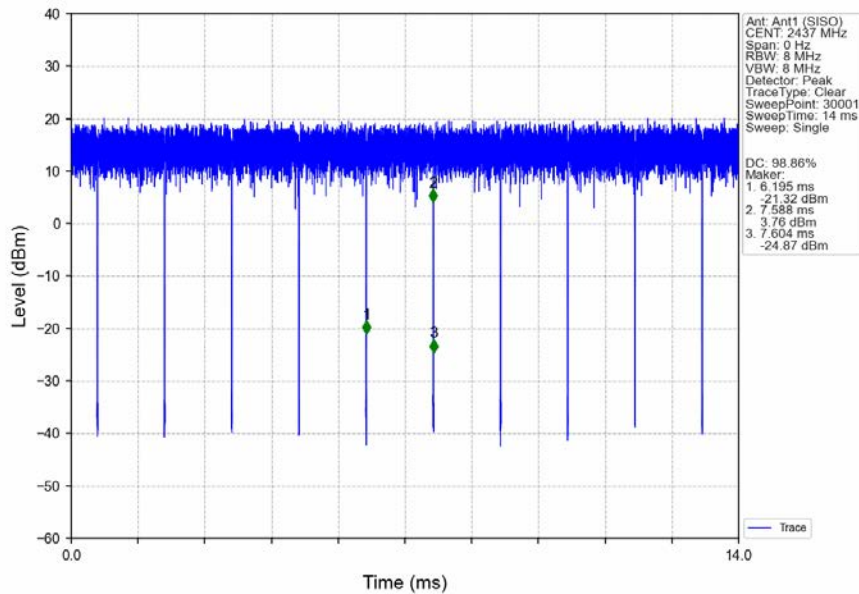
### 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



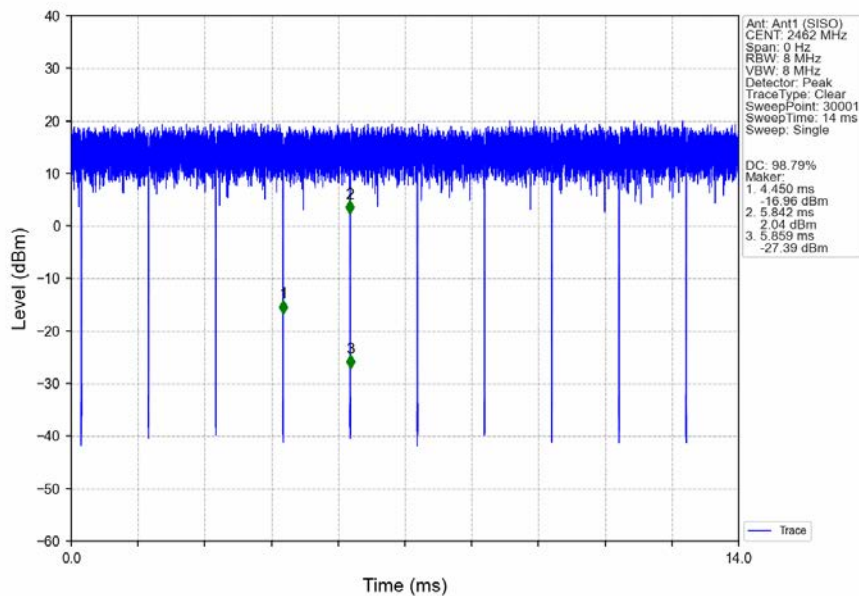
### 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV

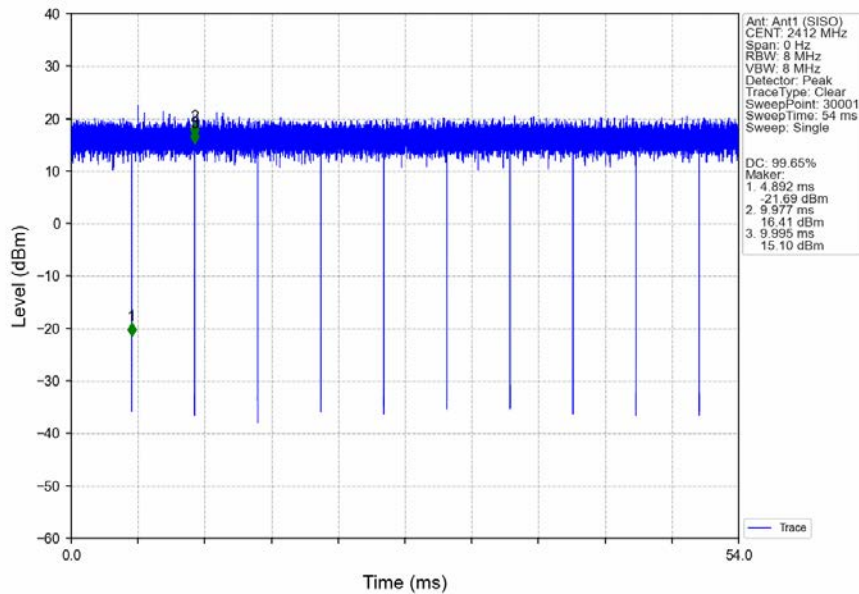


### 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

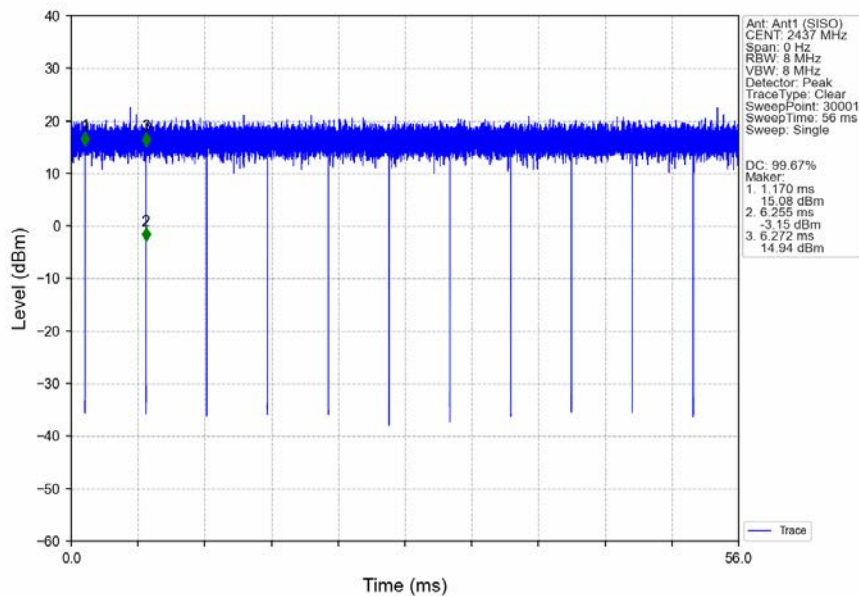




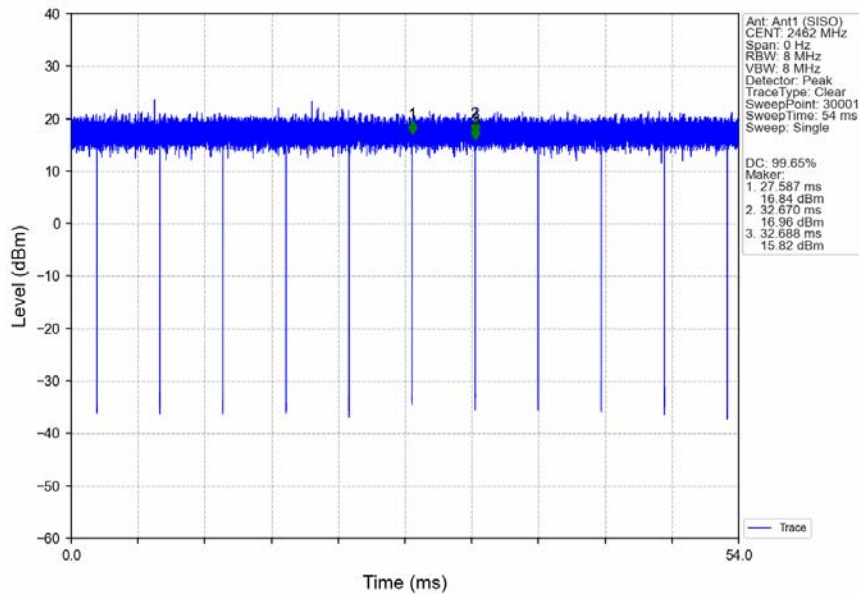
### 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



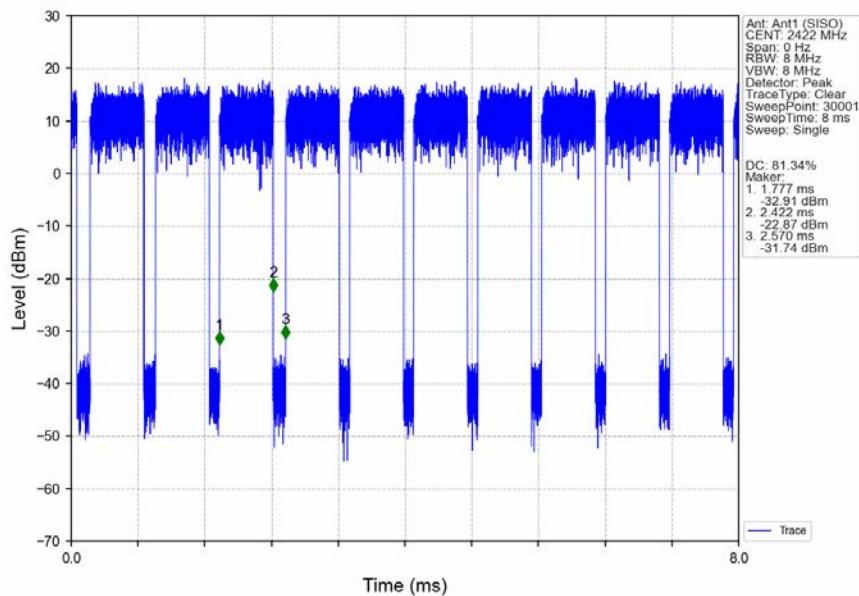
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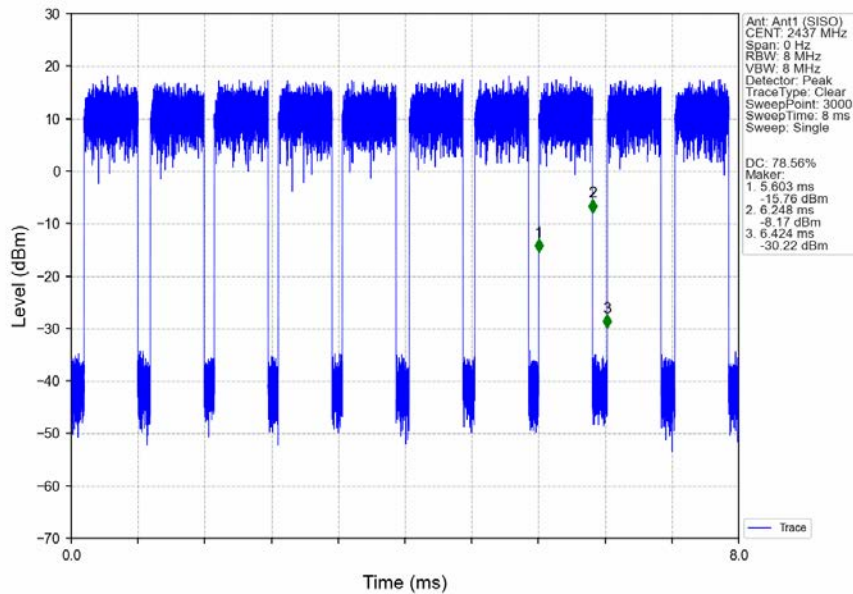
802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



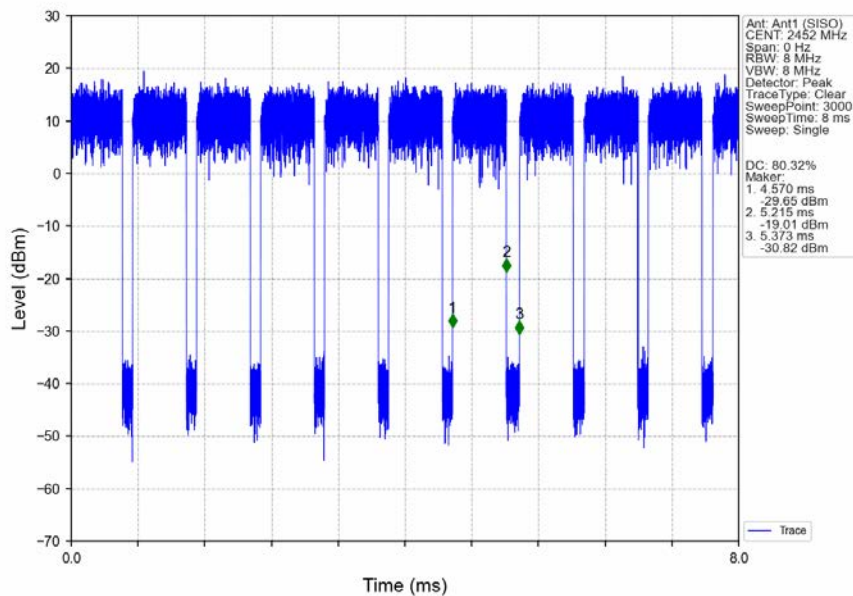
802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



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



### 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV





## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW(report only)

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	13.119	/	Pass
		2437	1	13.168	/	Pass
		2462	1	13.147	/	Pass
802.11g	SISO	2412	1	17.545	/	Pass
		2437	1	17.610	/	Pass
		2462	1	17.556	/	Pass
802.11n (HT20)	SISO	2412	1	18.208	/	Pass
		2437	1	18.175	/	Pass
		2462	1	18.374	/	Pass
802.11n (HT40)	SISO	2422	1	36.771	/	Pass
		2437	1	36.881	/	Pass
		2452	1	37.018	/	Pass

#### 2.1.2 6dB BW

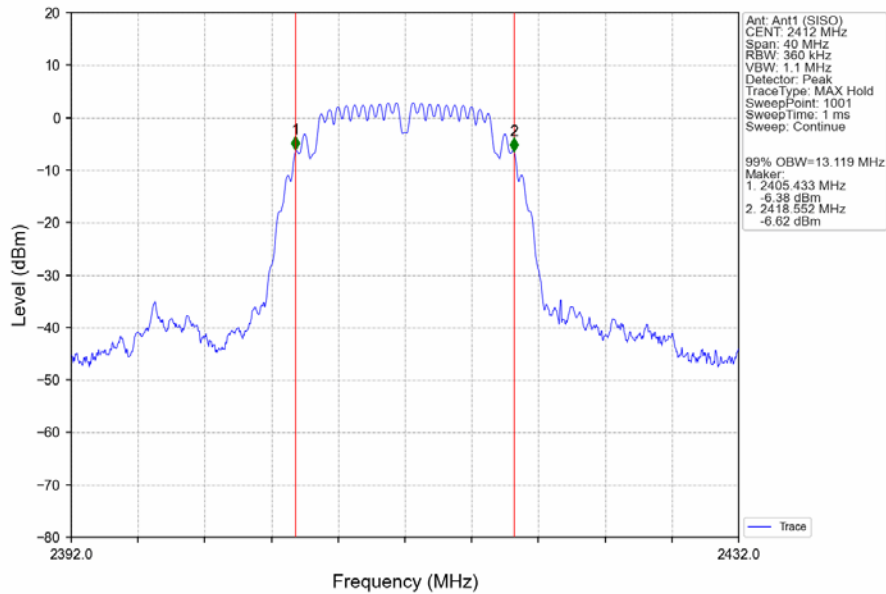
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	11.133	$\geq 0.5$	Pass
		2437	1	12.027	$\geq 0.5$	Pass
		2462	1	12.011	$\geq 0.5$	Pass
802.11g	SISO	2412	1	15.214	$\geq 0.5$	Pass
		2437	1	15.198	$\geq 0.5$	Pass
		2462	1	15.206	$\geq 0.5$	Pass
802.11n (HT20)	SISO	2412	1	15.214	$\geq 0.5$	Pass
		2437	1	15.098	$\geq 0.5$	Pass
		2462	1	15.201	$\geq 0.5$	Pass
802.11n (HT40)	SISO	2422	1	35.070	$\geq 0.5$	Pass
		2437	1	35.121	$\geq 0.5$	Pass
		2452	1	35.116	$\geq 0.5$	Pass



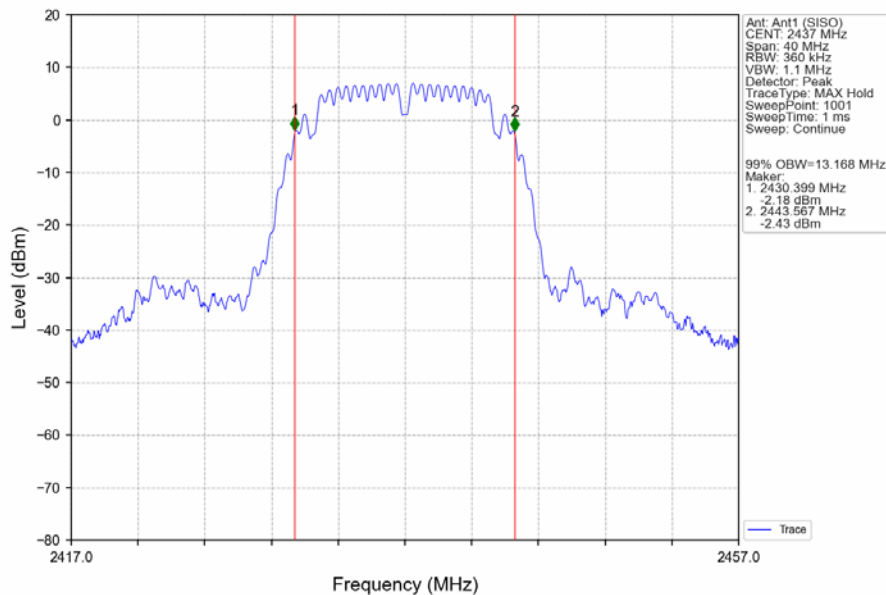
### 2.2 Test Graph

#### 2.2.1 OBW

802.11b\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



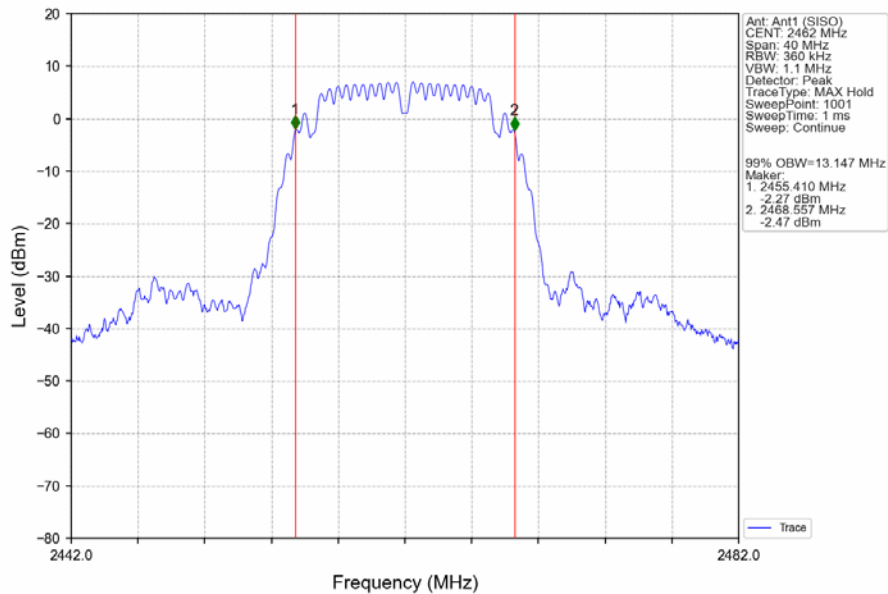
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



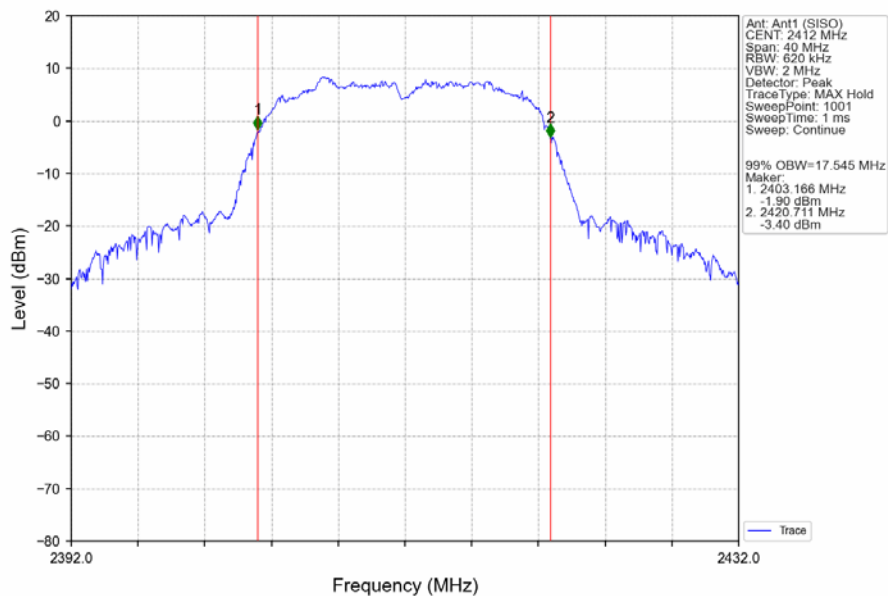
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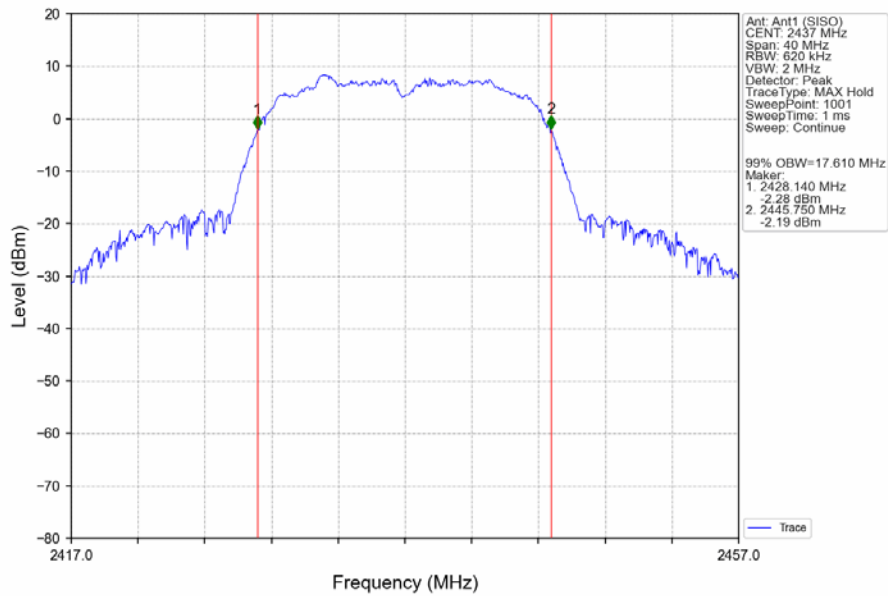
### 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



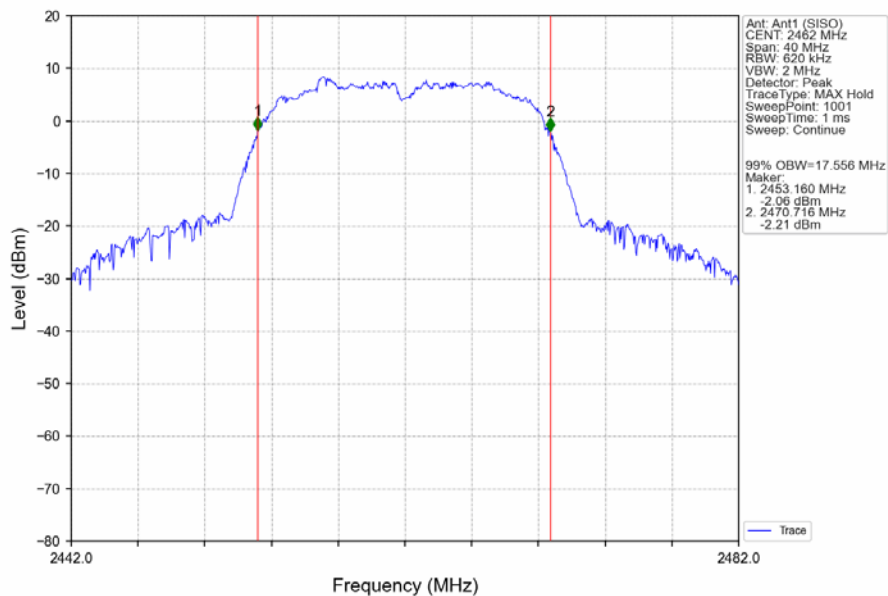
### 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV

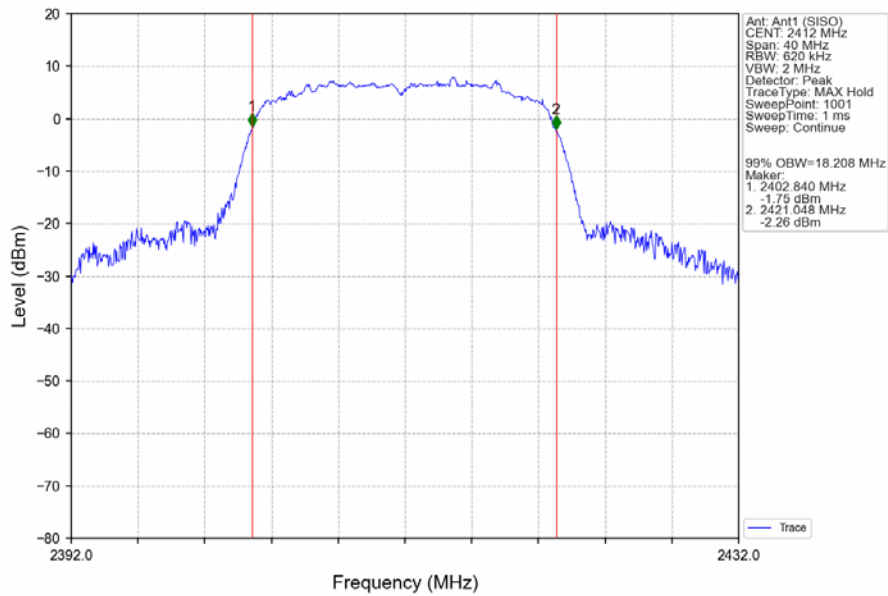


### 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

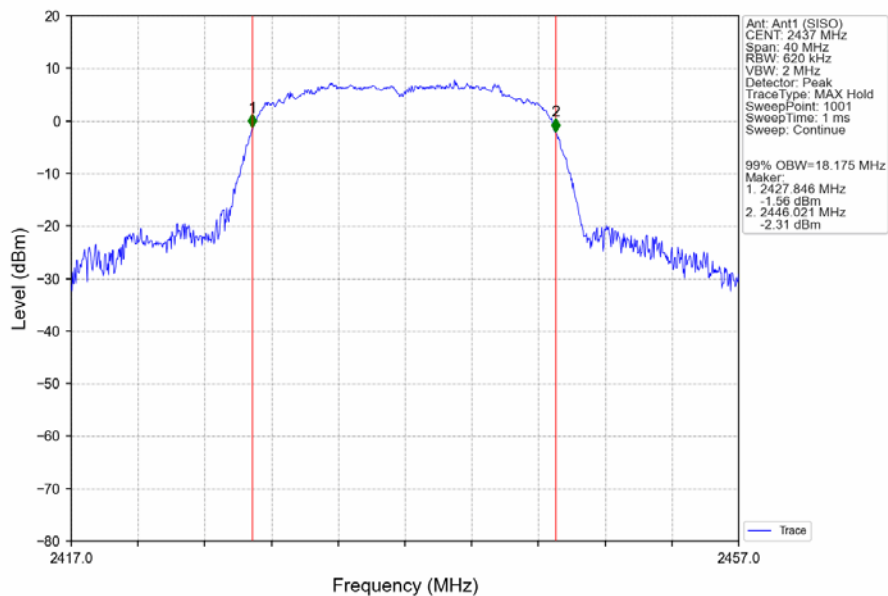




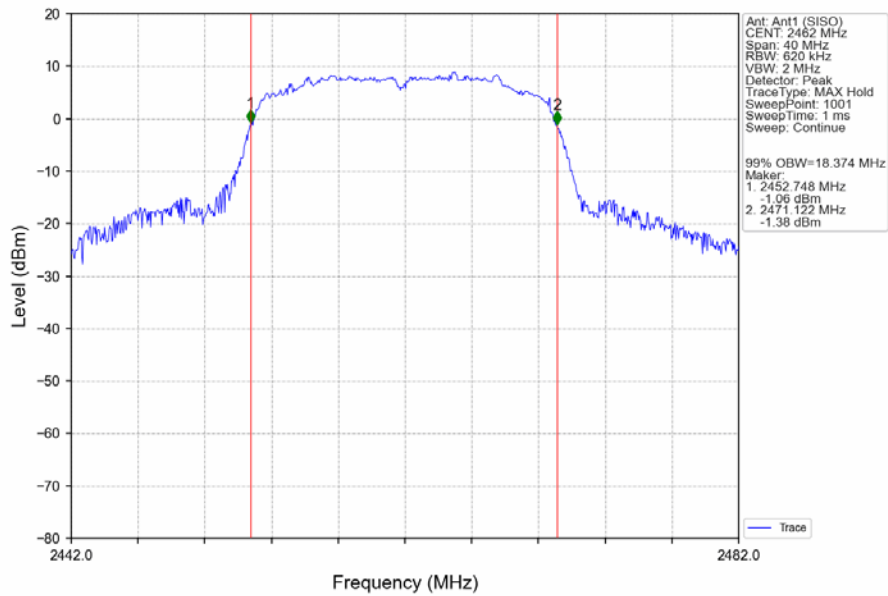
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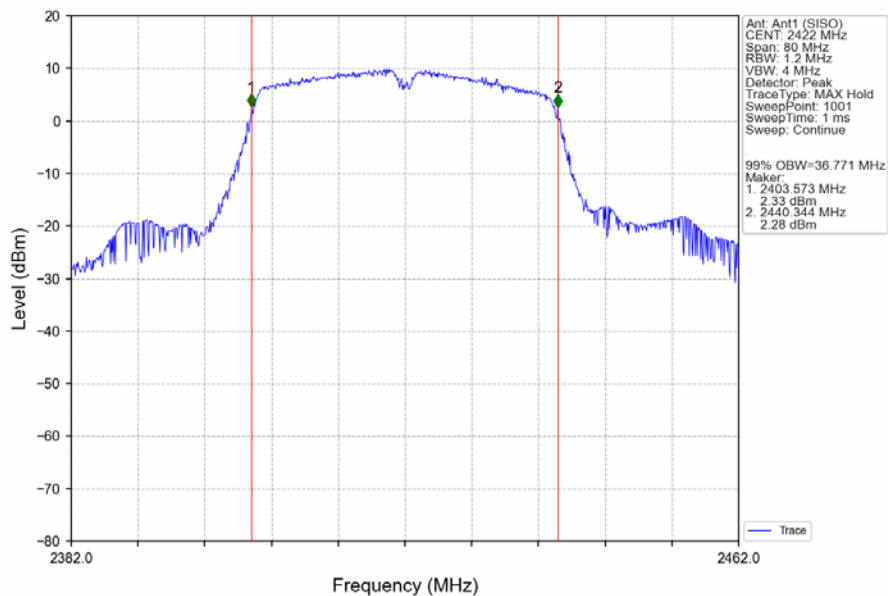
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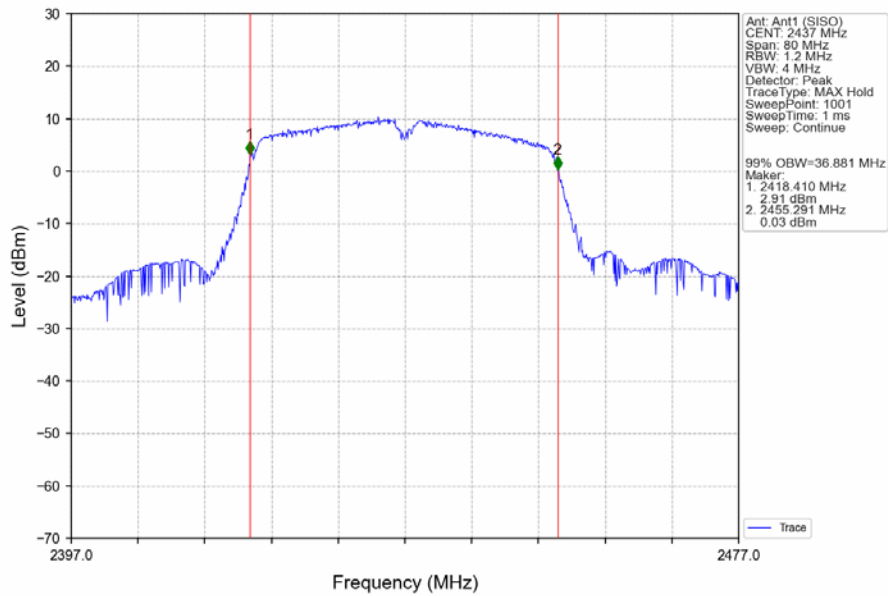
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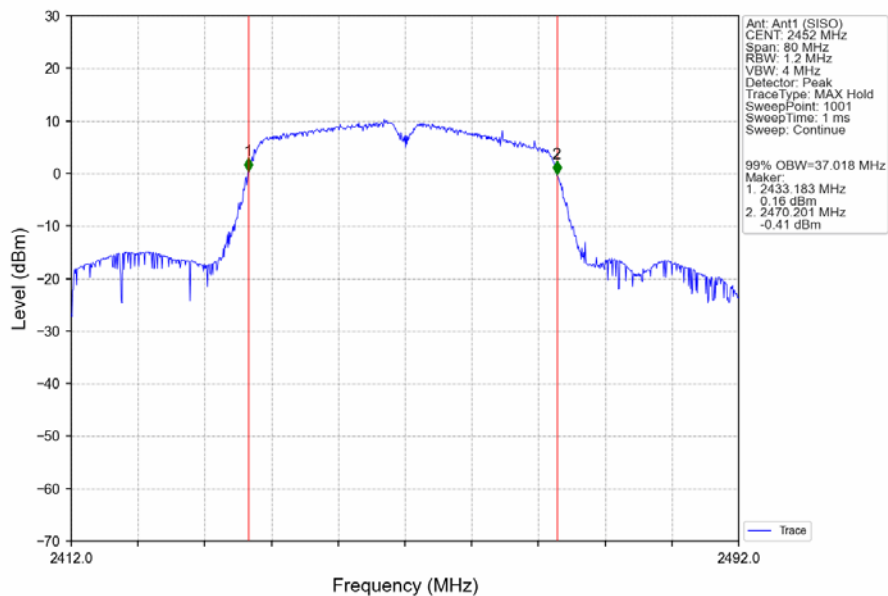
802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



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



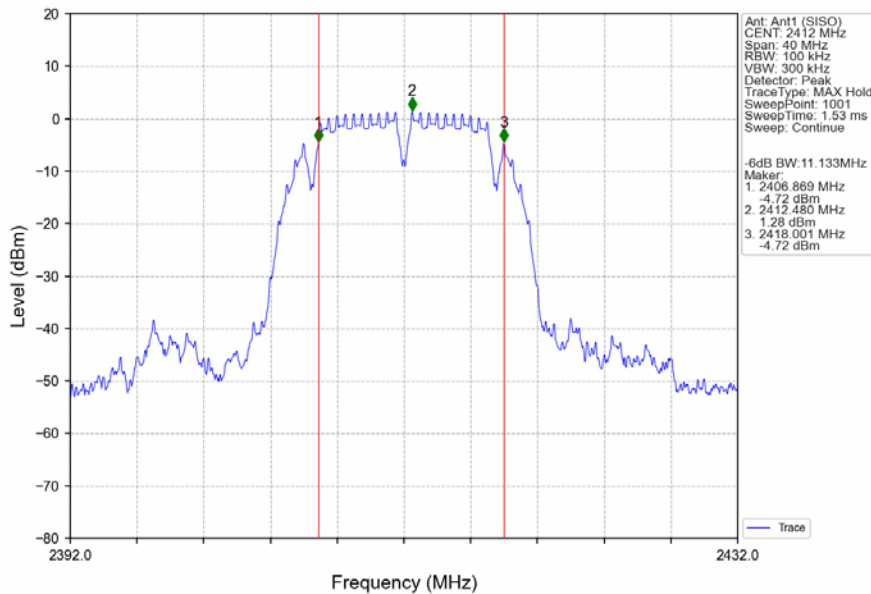
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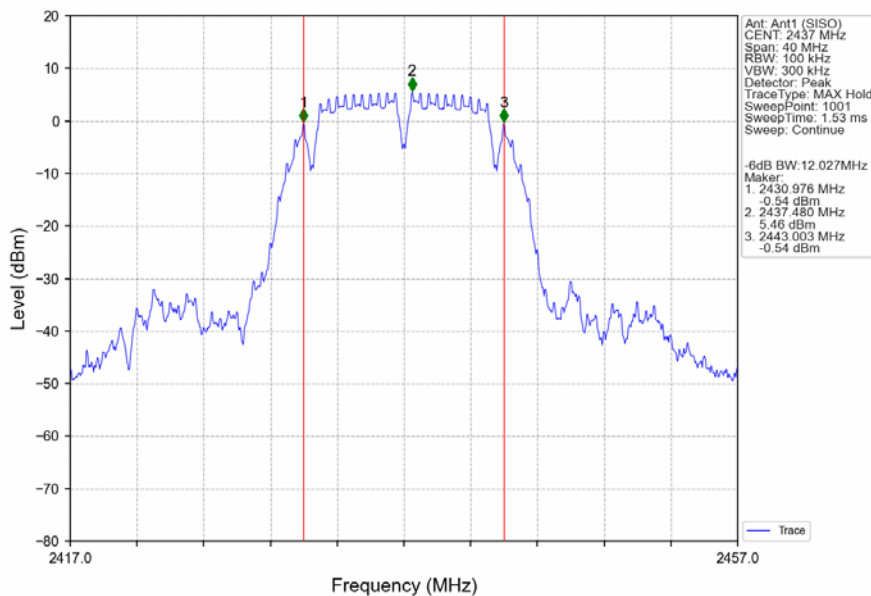


### 2.2.2 6dB BW

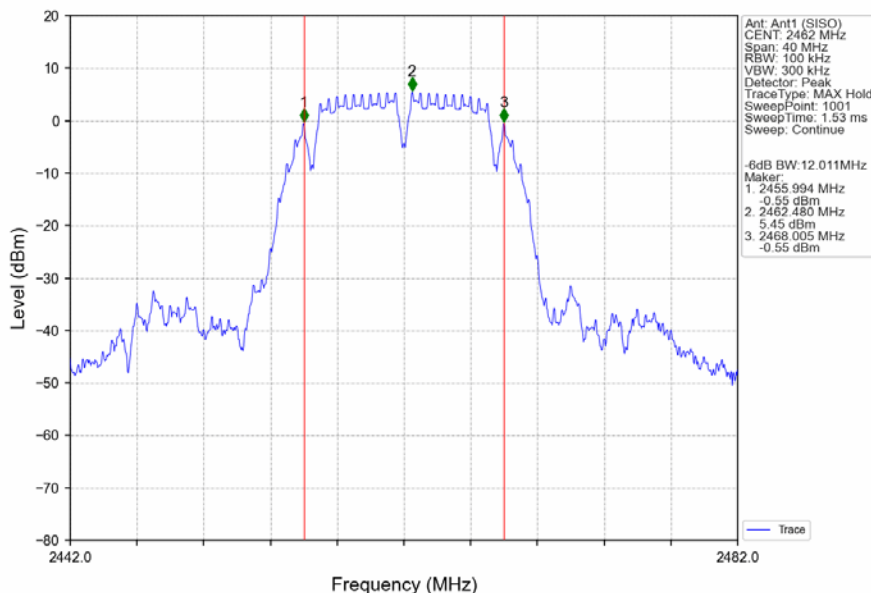
802.11b\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



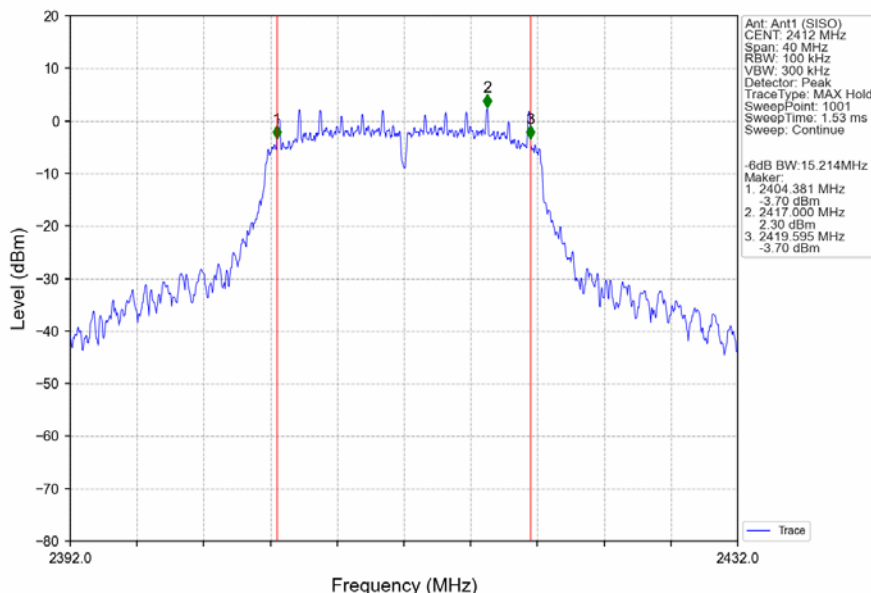
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



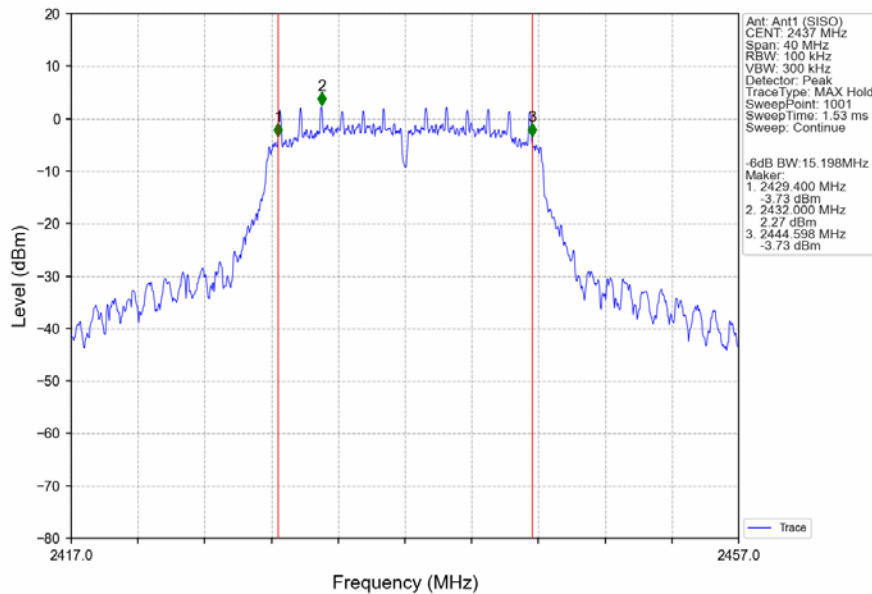
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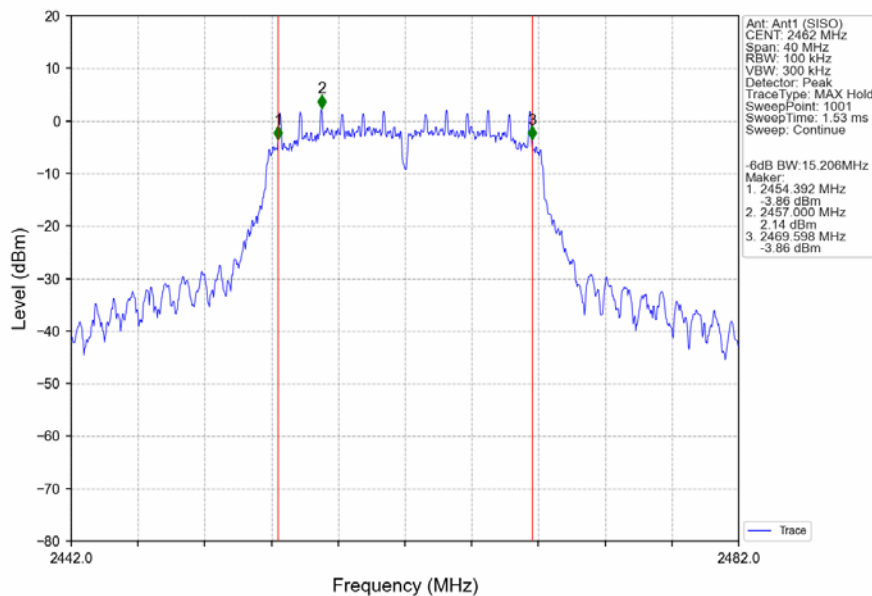
### 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV

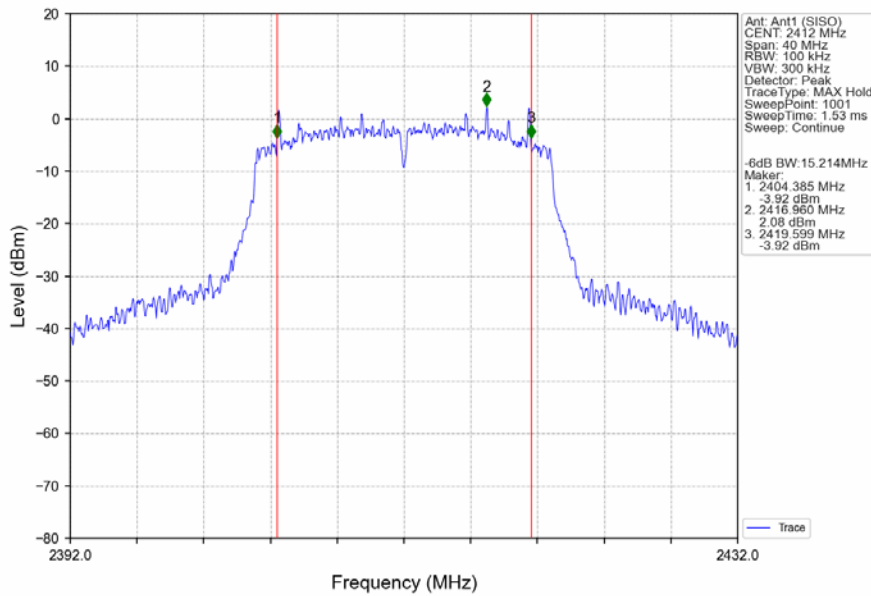


### 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

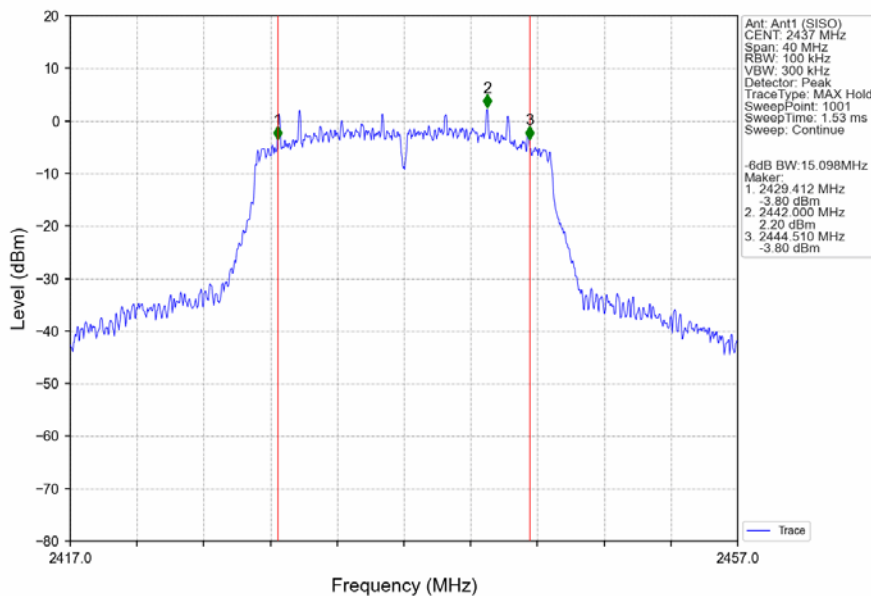




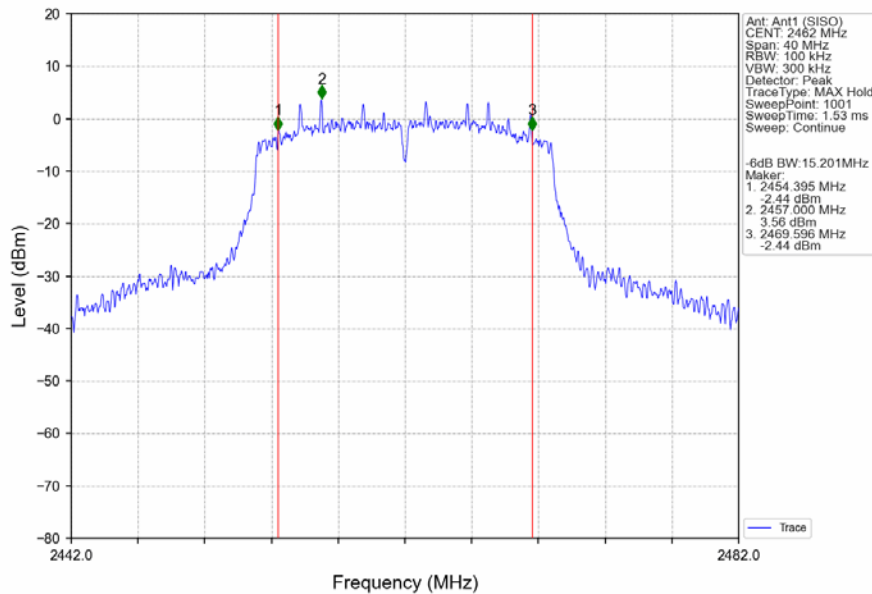
### 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



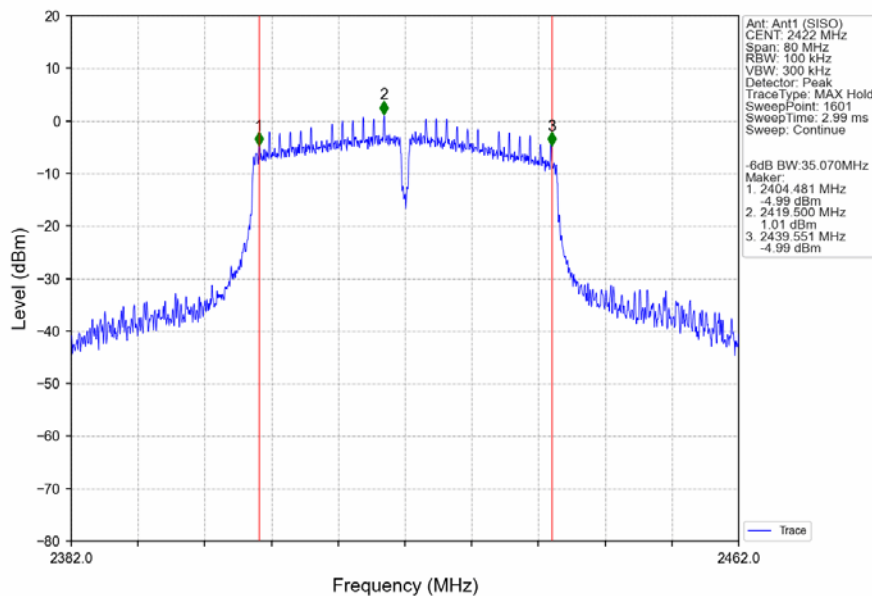
### 802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



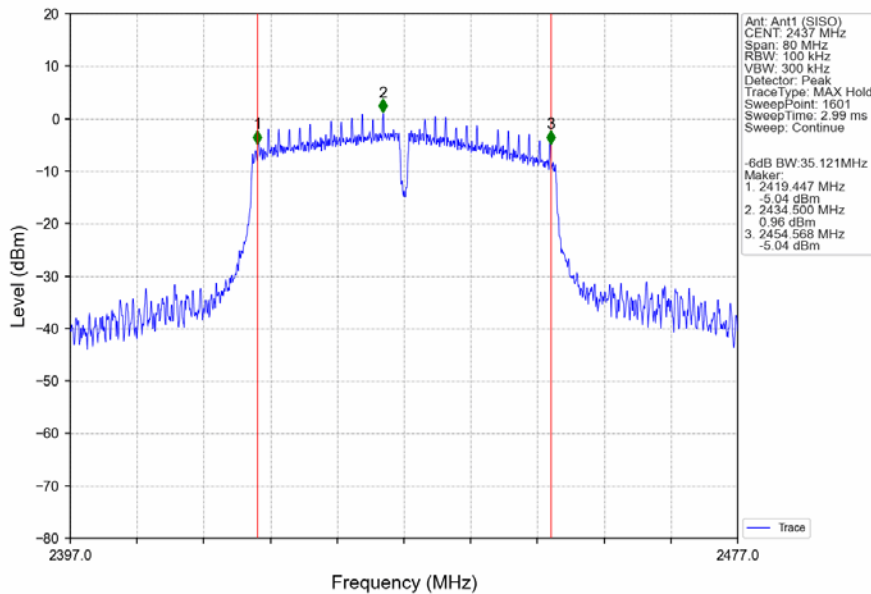
802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



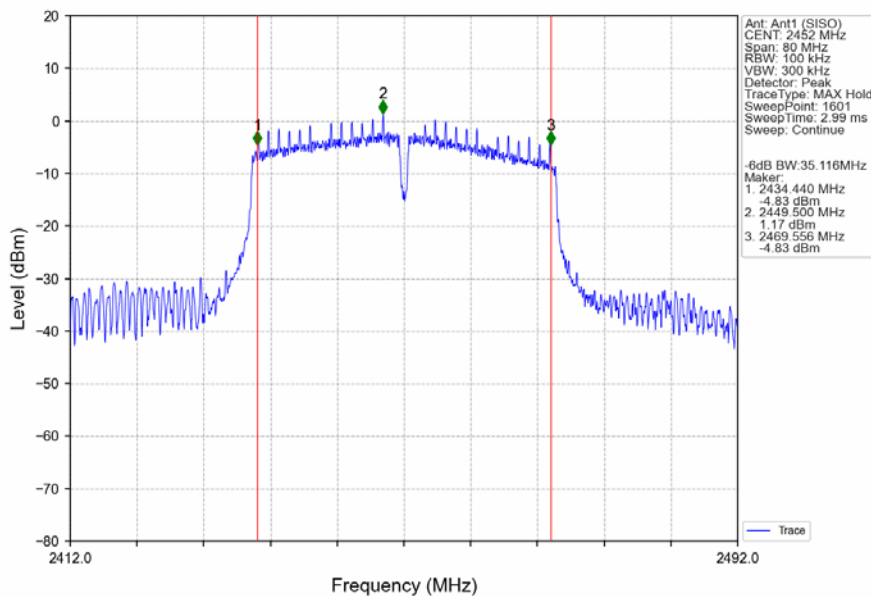
802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



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



### 802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV





## 3. Maximum Conducted Output Power

### 3.1 Test Result

#### 3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	16.46	<=30	Pass
		2437	16.55	<=30	Pass
		2462	16.52	<=30	Pass
802.11g	SISO	2412	13.39	<=30	Pass
		2437	13.11	<=30	Pass
		2462	13.30	<=30	Pass
802.11n (HT20)	SISO	2412	13.02	<=30	Pass
		2437	13.00	<=30	Pass
		2462	12.90	<=30	Pass
802.11n (HT40)	SISO	2422	14.26	<=30	Pass
		2437	13.82	<=30	Pass
		2452	13.77	<=30	Pass

## 4. Maximum Power Spectral Density

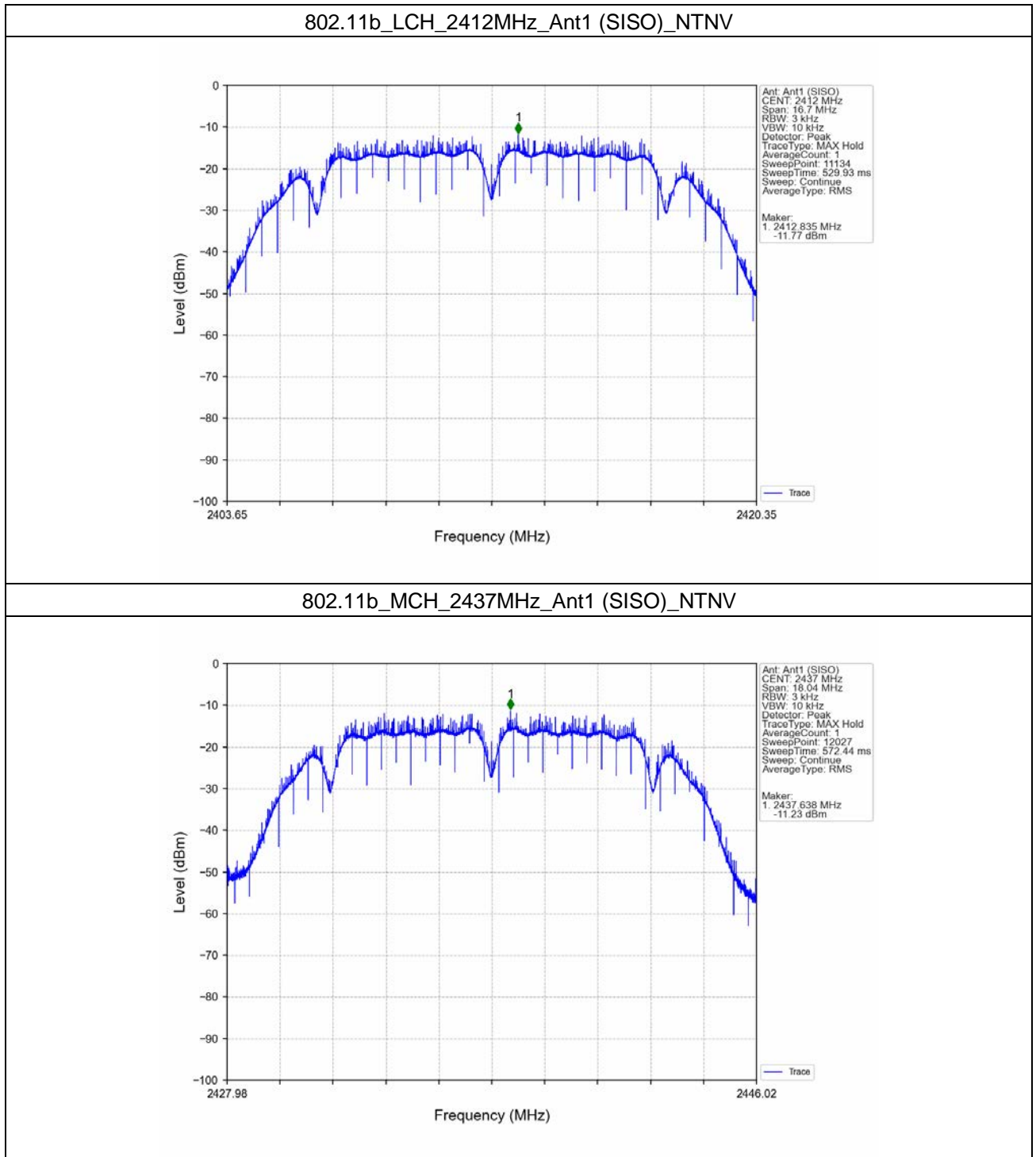
### 4.1 Test Result

#### 4.1.1 PSD

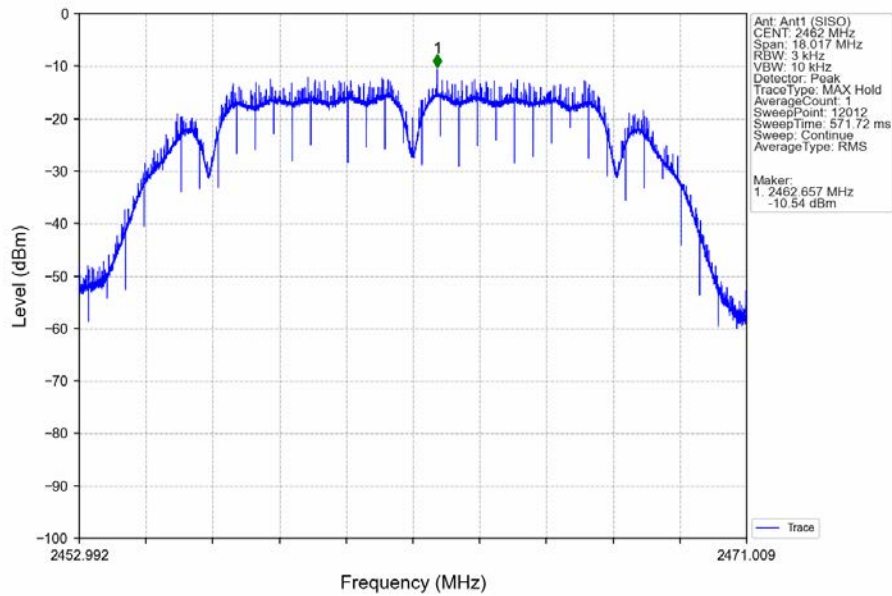
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	-11.77	<=8	Pass
		2437	-11.23	<=8	Pass
		2462	-10.54	<=8	Pass
802.11g	SISO	2412	-12.24	<=8	Pass
		2437	-14.37	<=8	Pass
		2462	-14.03	<=8	Pass
802.11n (HT20)	SISO	2412	-14.03	<=8	Pass
		2437	-14.45	<=8	Pass
		2462	-14.99	<=8	Pass
802.11n (HT40)	SISO	2422	-13.82	<=8	Pass
		2437	-14.48	<=8	Pass
		2452	-14.75	<=8	Pass

### 4.2 Test Graph

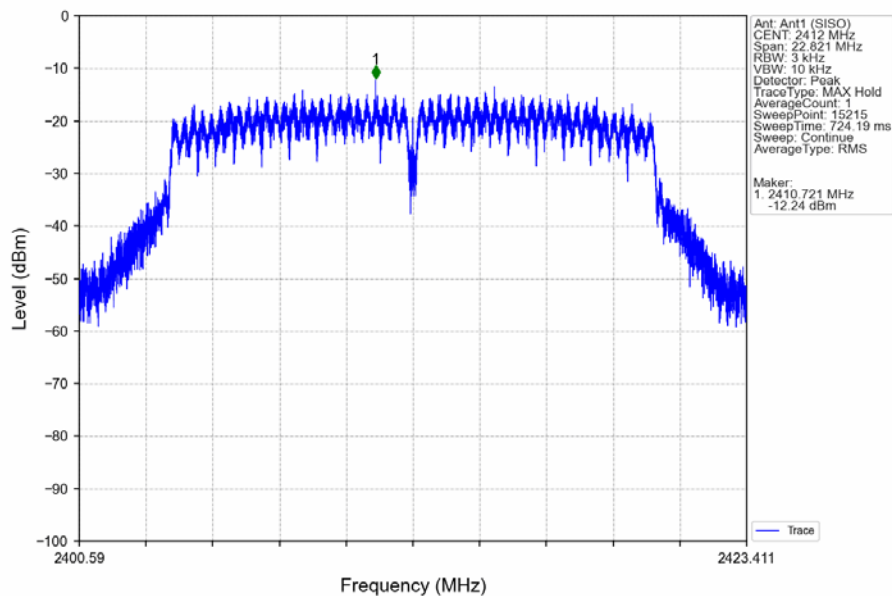
#### 4.2.1 PSD



802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

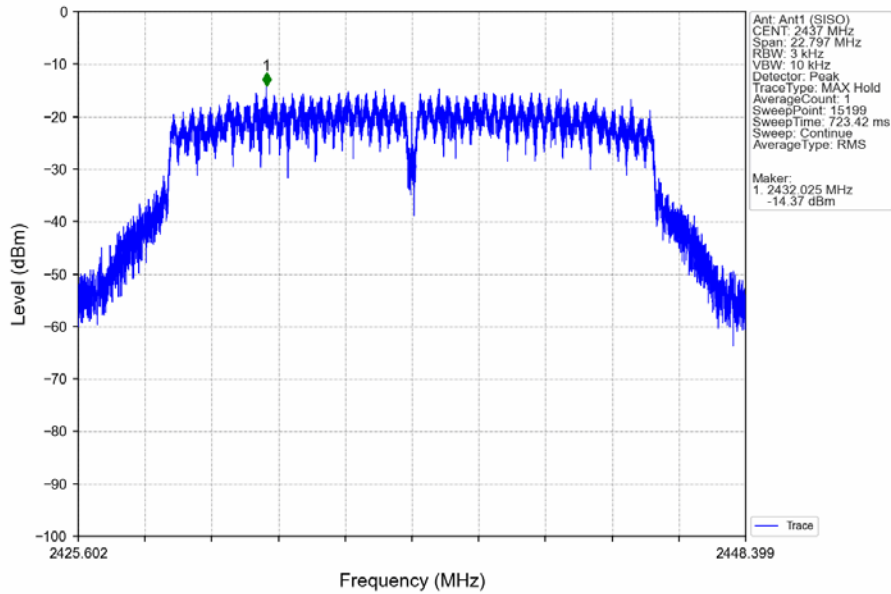


802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV

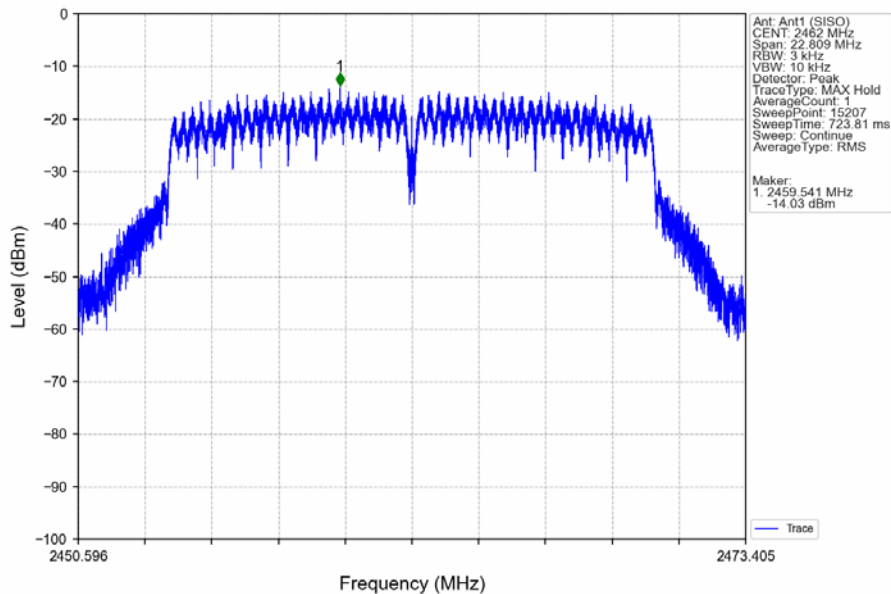




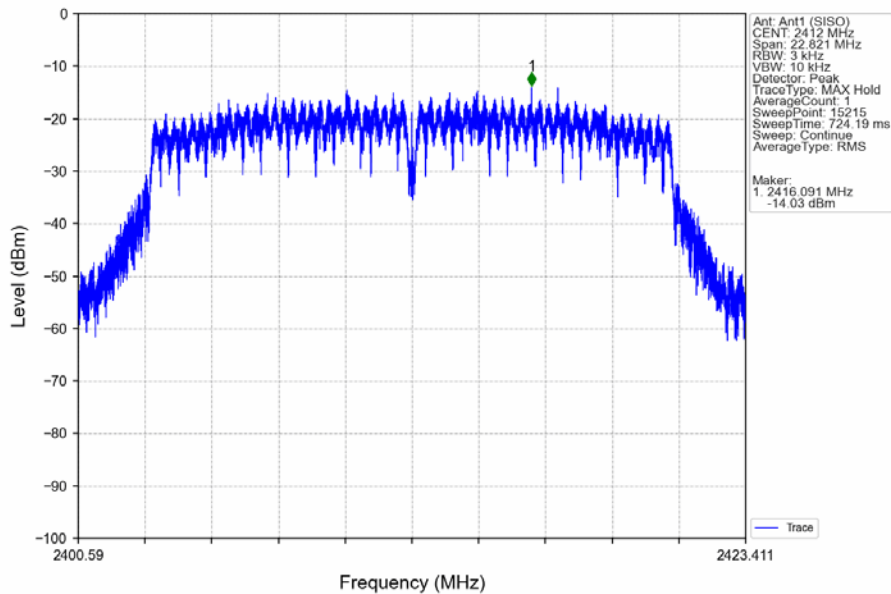
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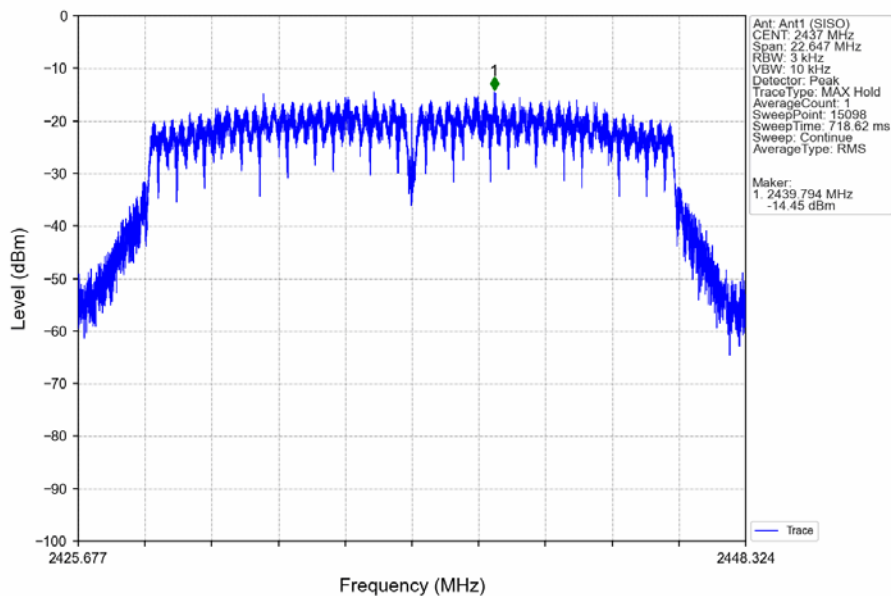
### 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



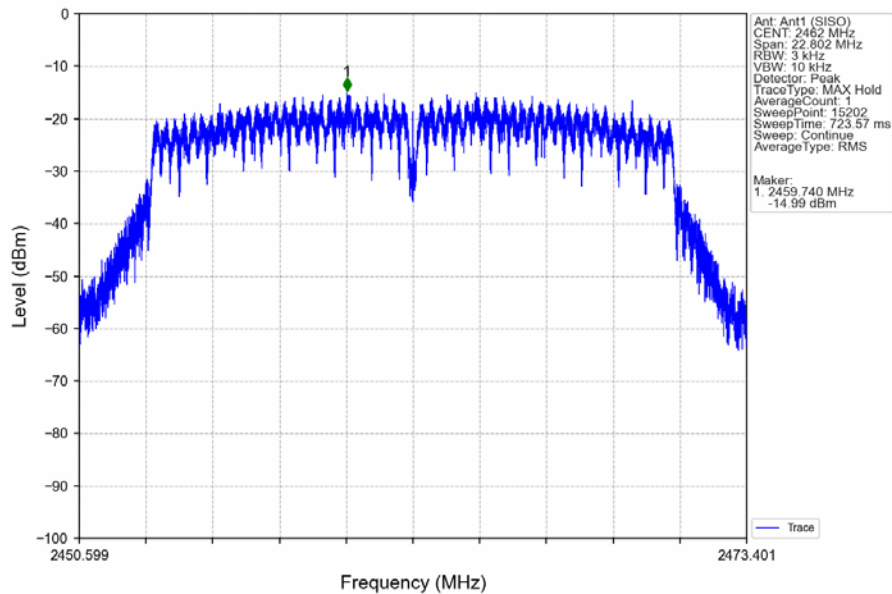
802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



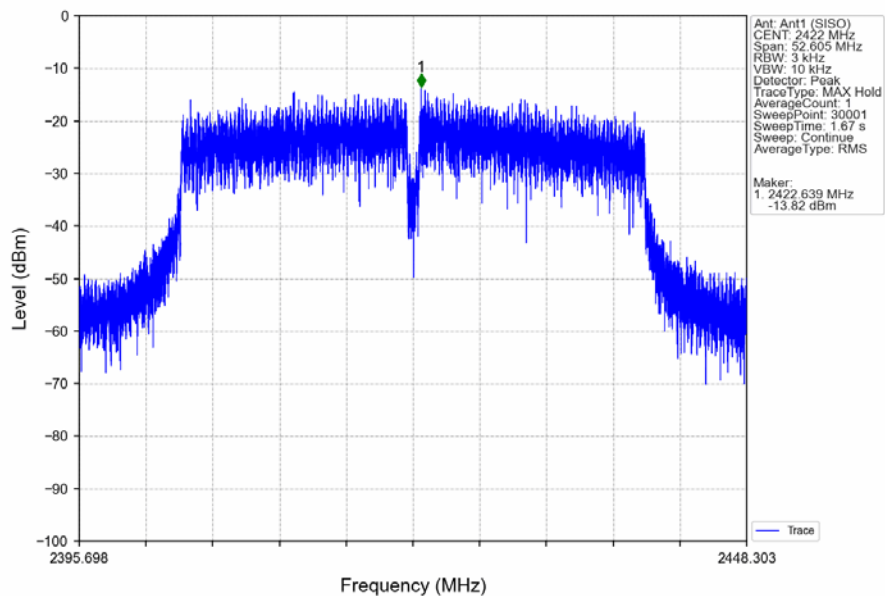
802.11n(HT20)\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



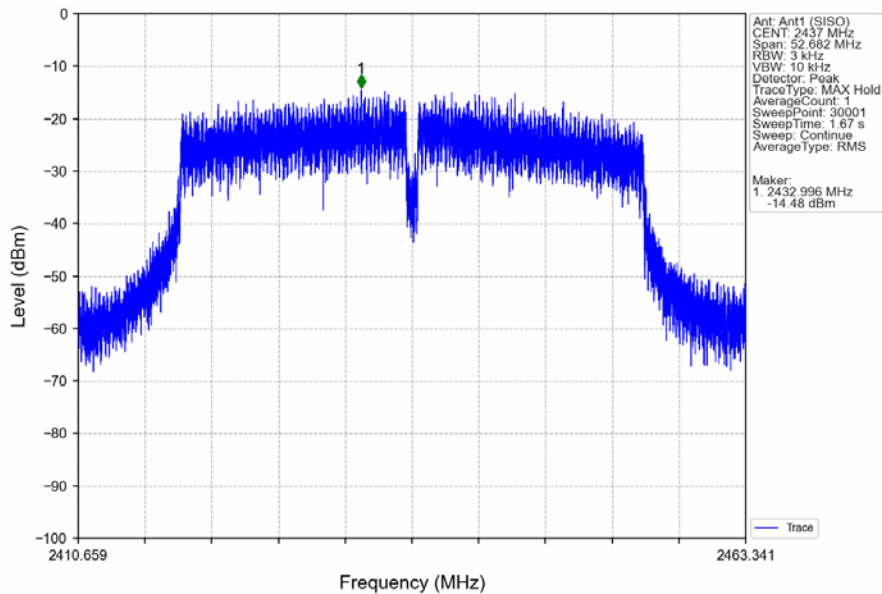
802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



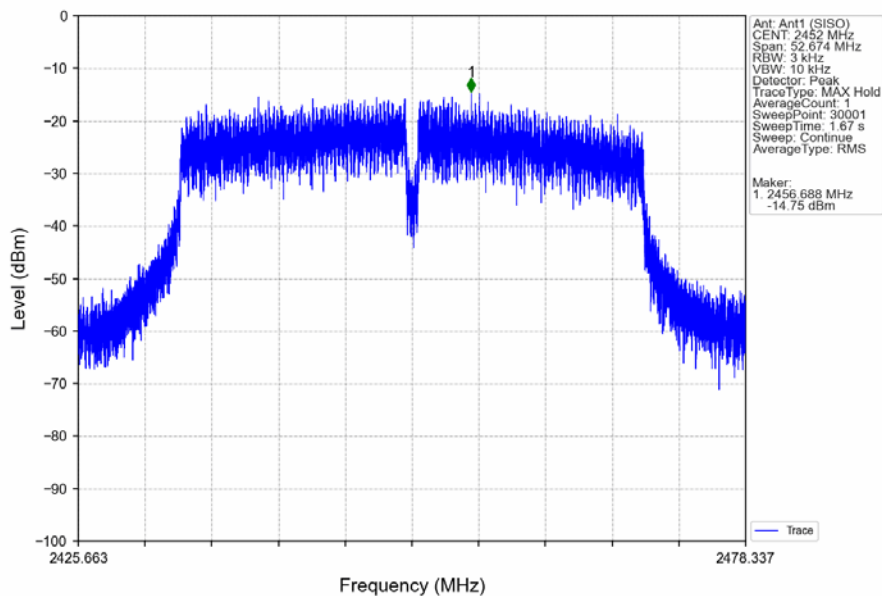
802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



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



802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV





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

### 5.1 Test Result

#### 5.1.1 Ref

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	5.25
		2437	1	5.42
		2462	1	5.40
802.11g	SISO	2412	1	2.53
		2437	1	2.21
		2462	1	2.41
802.11n (HT20)	SISO	2412	1	2.11
		2437	1	2.21
		2462	1	1.84
802.11n (HT40)	SISO	2422	1	1.67
		2437	1	1.14
		2452	1	0.92

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

#### 5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	5.42	-24.58	Pass
		2437	1	5.42	-24.58	Pass
		2462	1	5.42	-24.58	Pass
802.11g	SISO	2412	1	2.53	-27.47	Pass
		2437	1	2.53	-27.47	Pass
		2462	1	2.53	-27.47	Pass
802.11n (HT20)	SISO	2412	1	2.21	-27.79	Pass
		2437	1	2.21	-27.79	Pass
		2462	1	2.21	-27.79	Pass
802.11n (HT40)	SISO	2422	1	1.67	-28.33	Pass
		2437	1	1.67	-28.33	Pass
		2452	1	1.67	-28.33	Pass

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.



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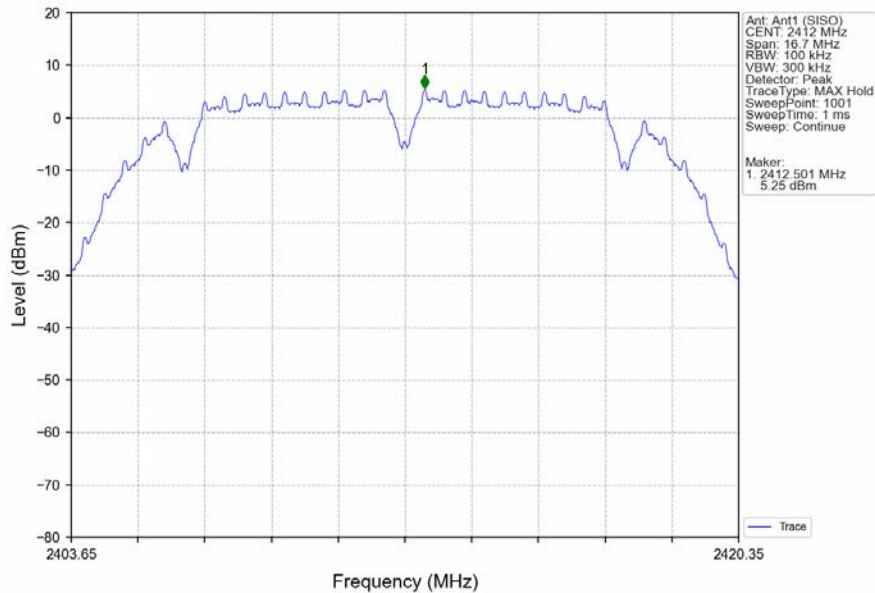
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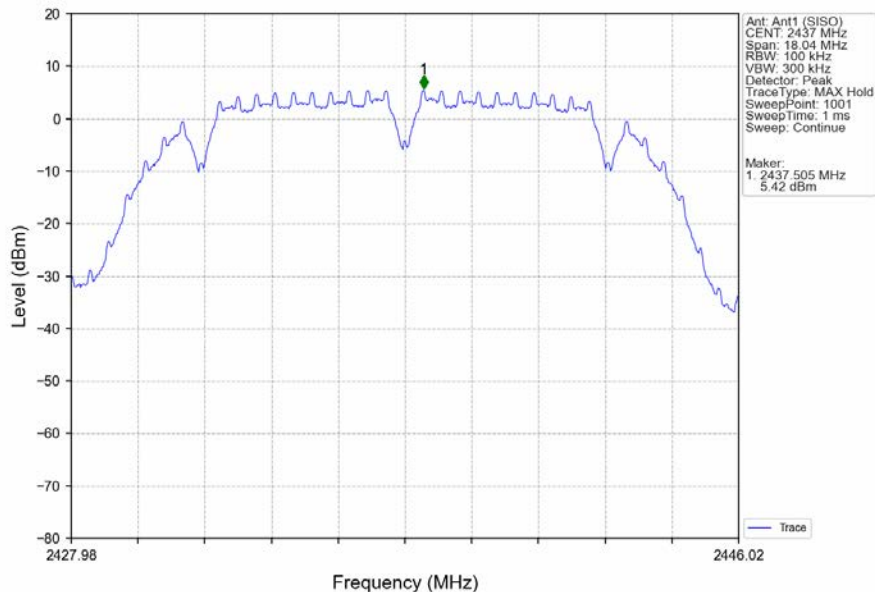
### 5.2 Test Graph

#### 5.2.1 Ref

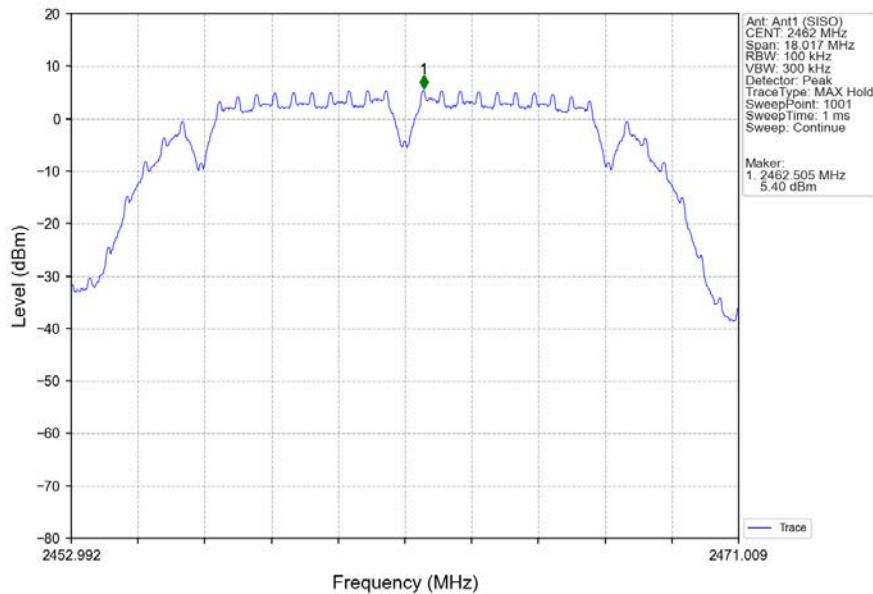
802.11b\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



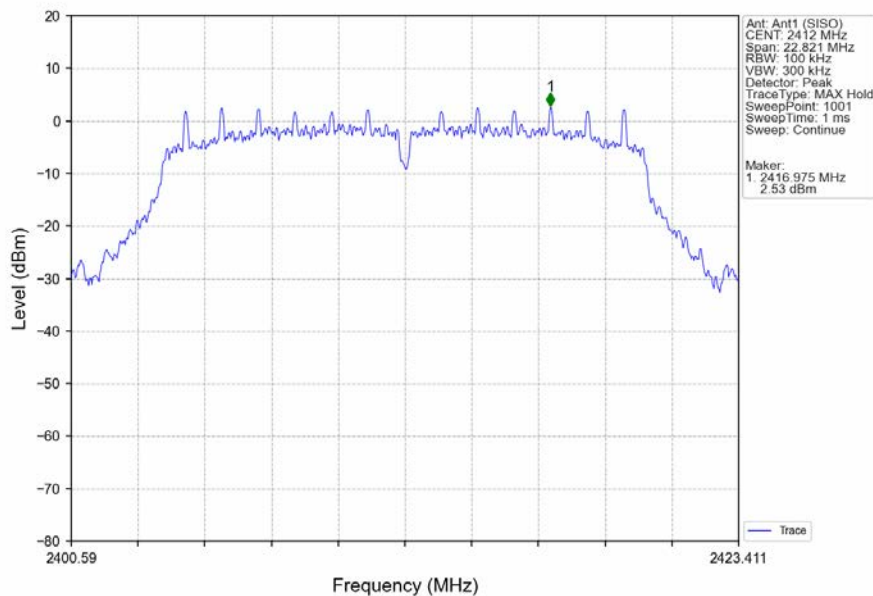
802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



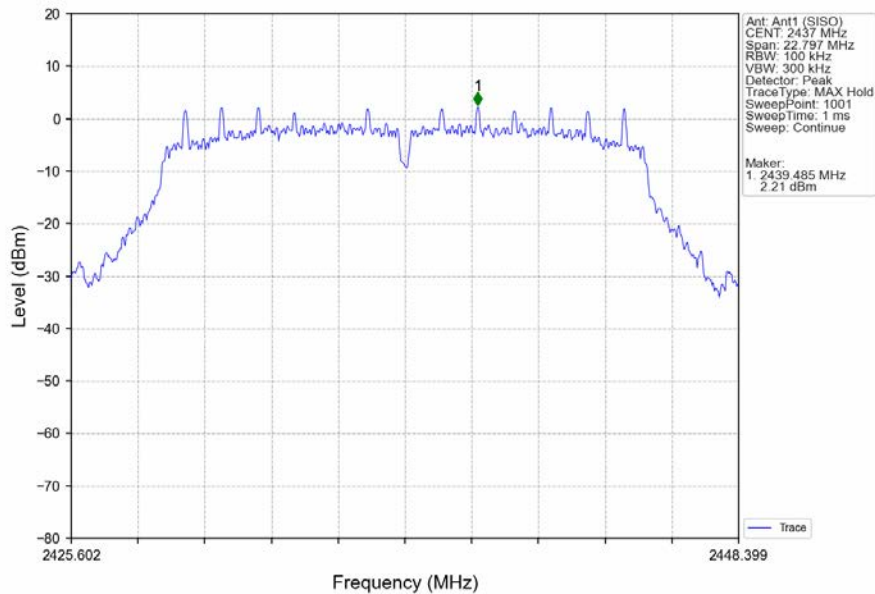
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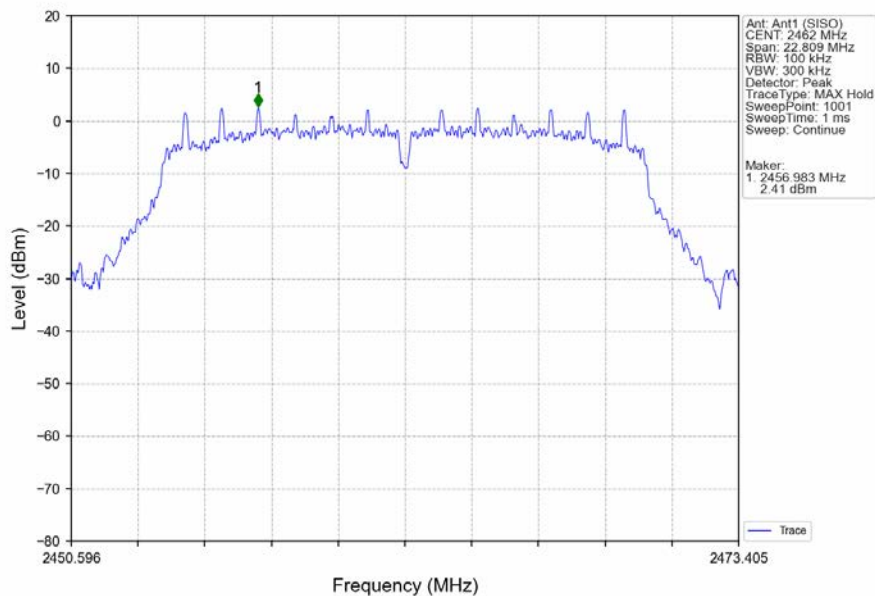
### 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV

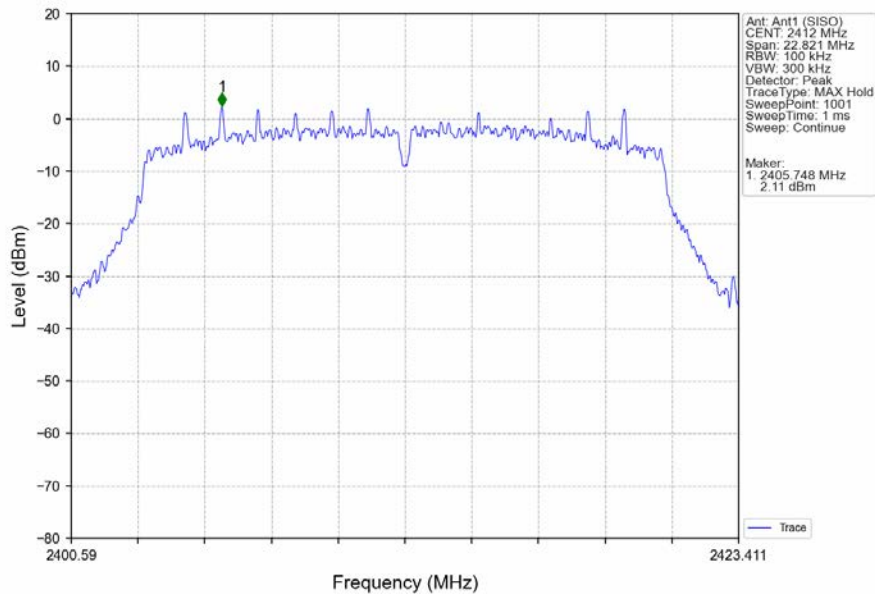


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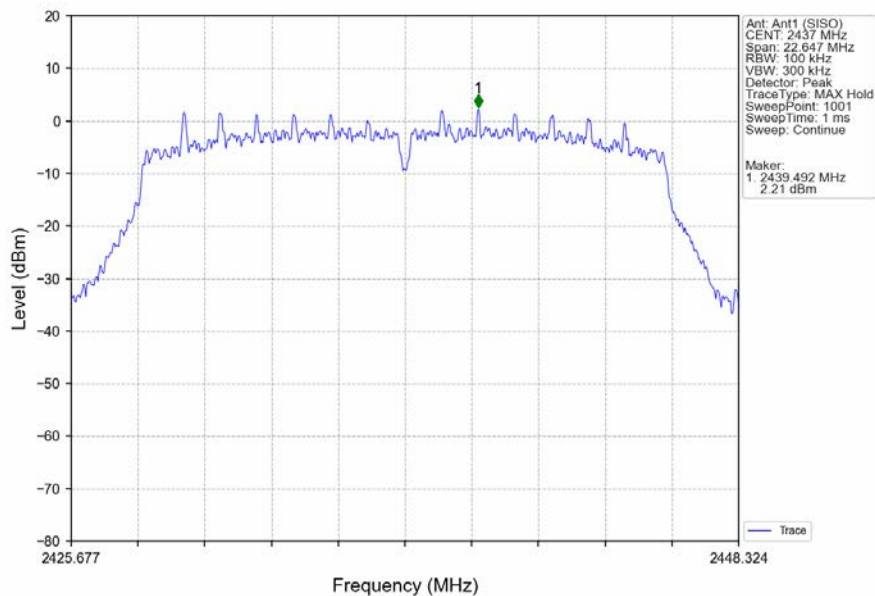




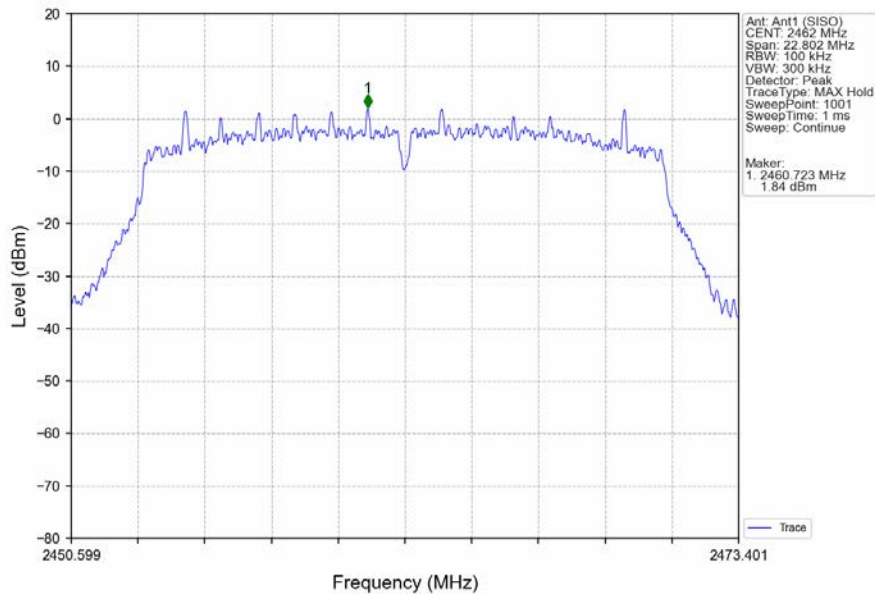
### 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



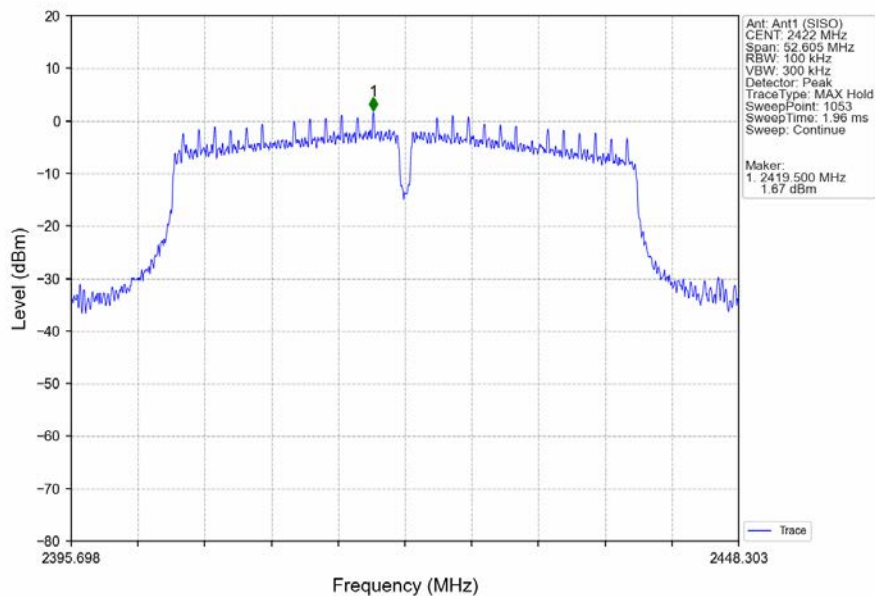
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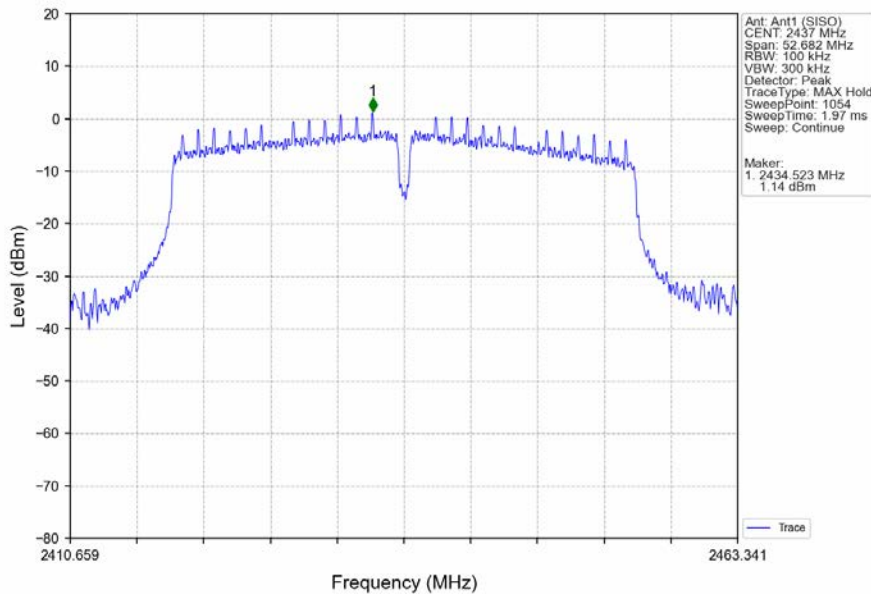
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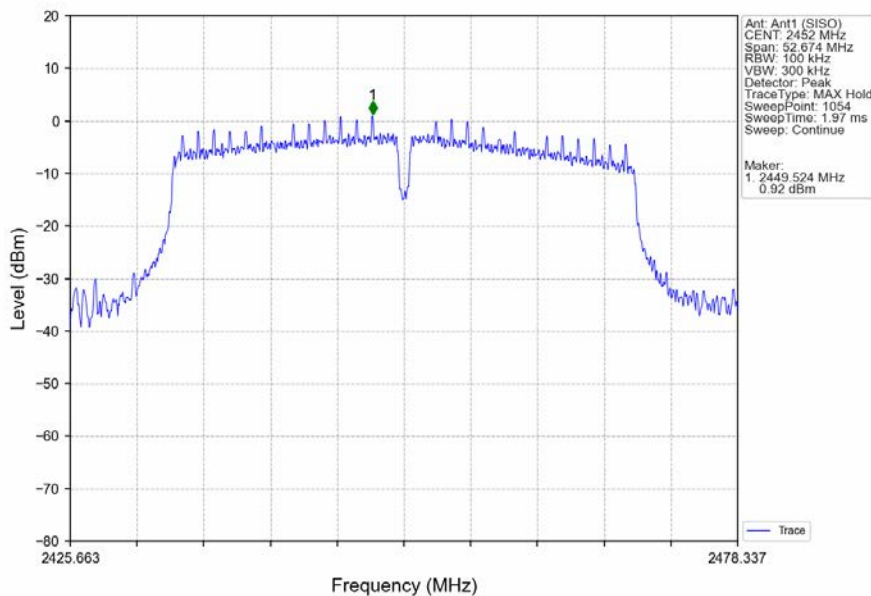
802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



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

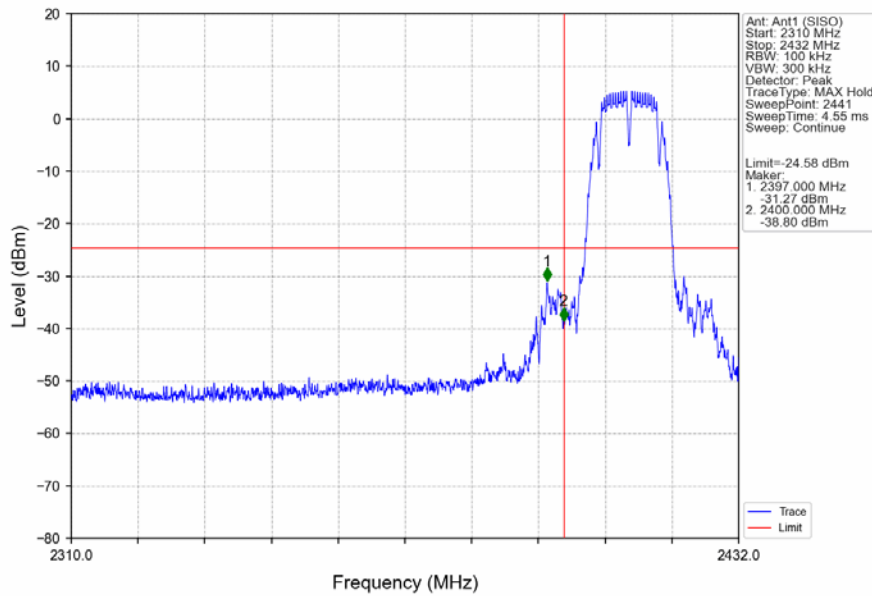


802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV

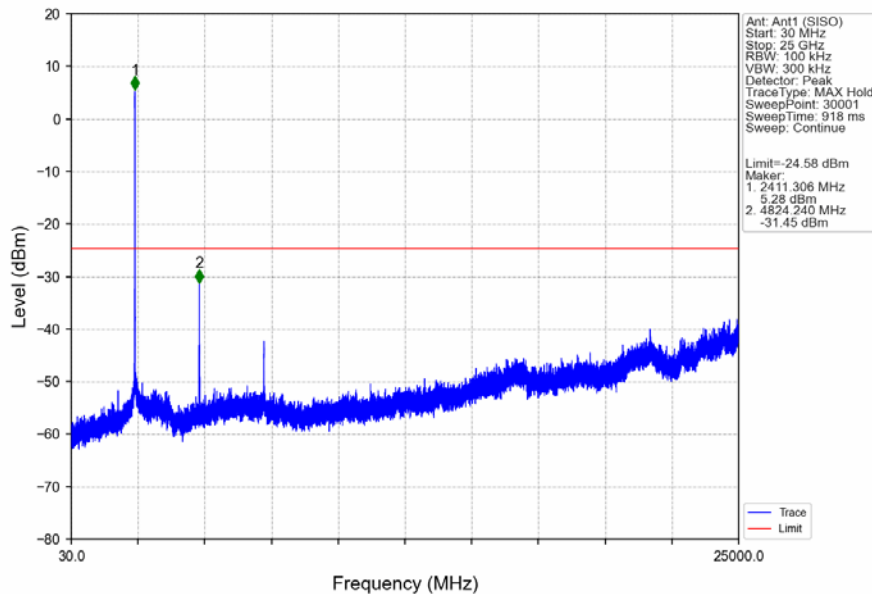


### 5.2.2 CSE

802.11b\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV

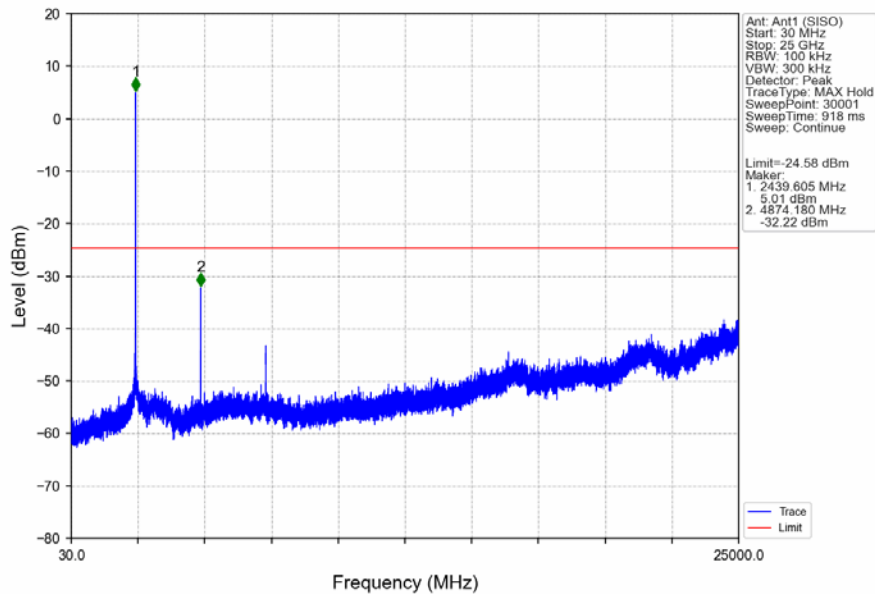


802.11b\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV

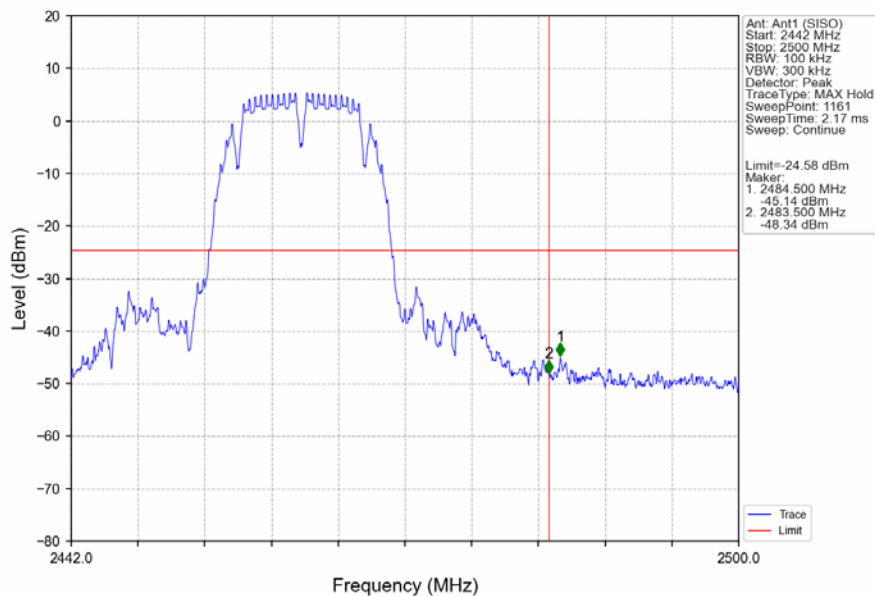




### 802.11b\_MCH\_2437MHz\_Ant1 (SISO)\_NTNV



### 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



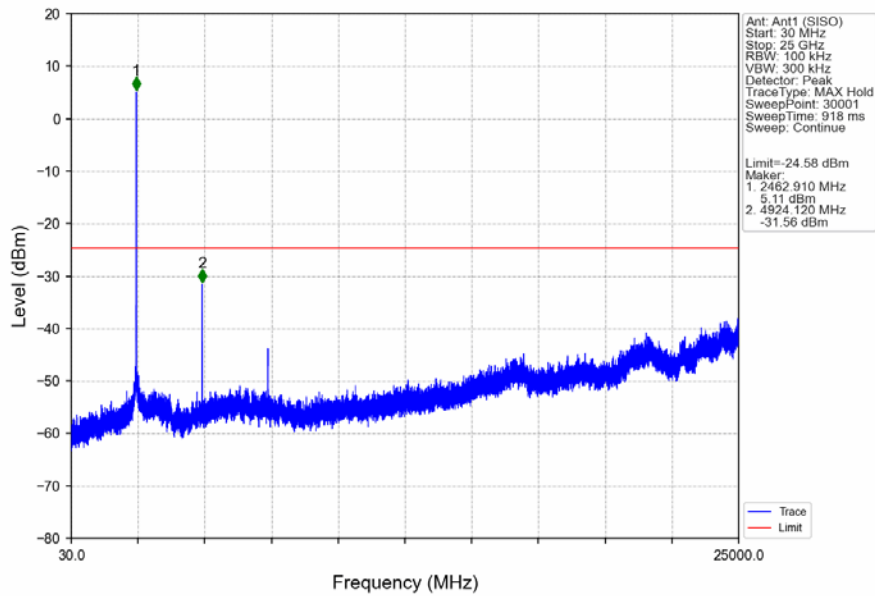
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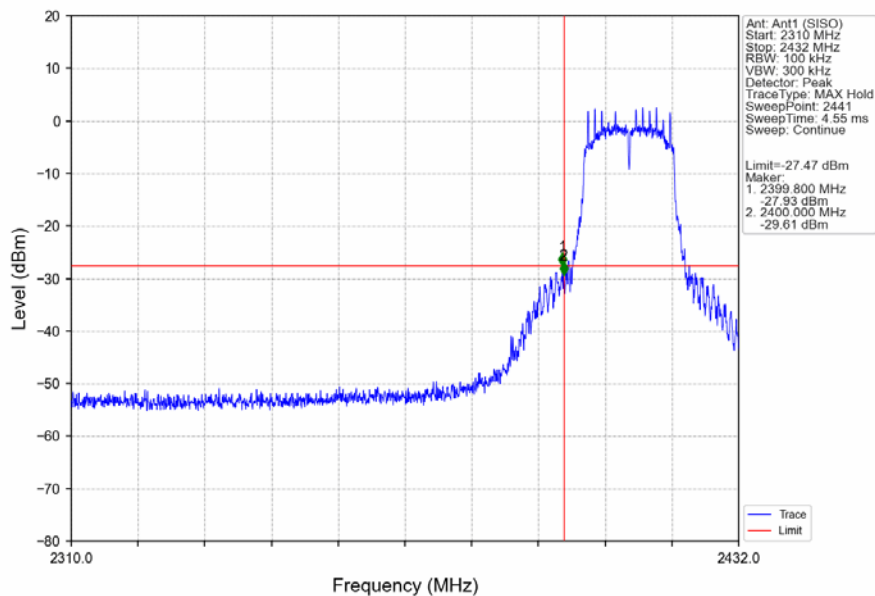
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### 802.11b\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



### 802.11g\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



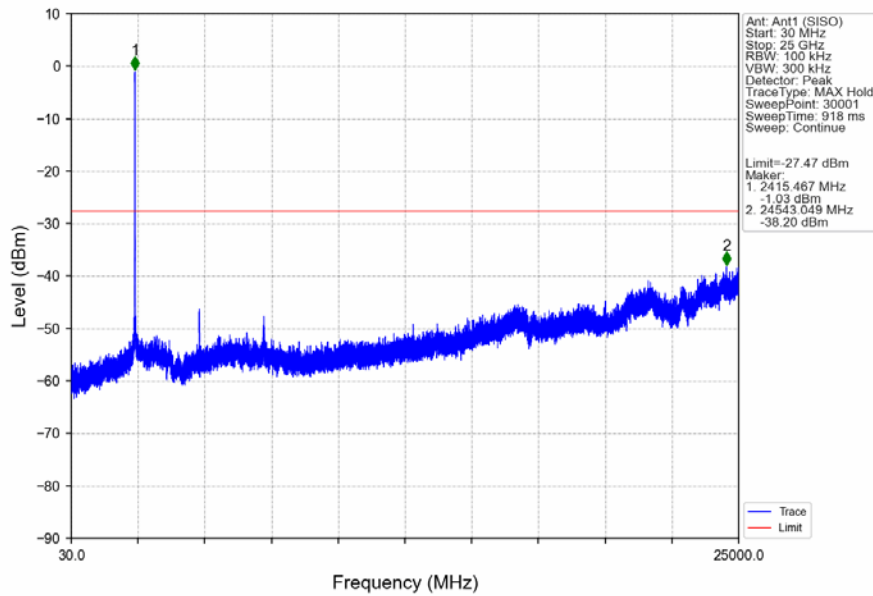
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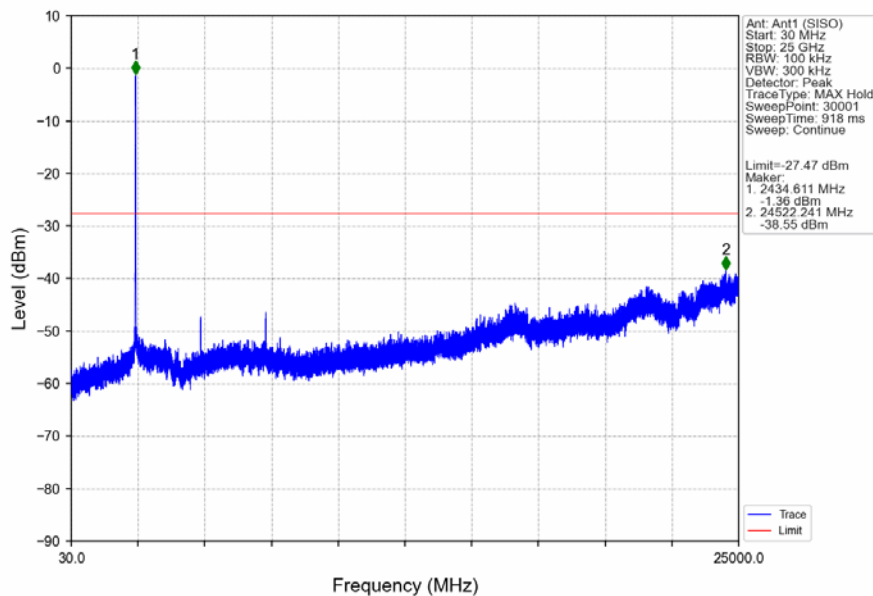
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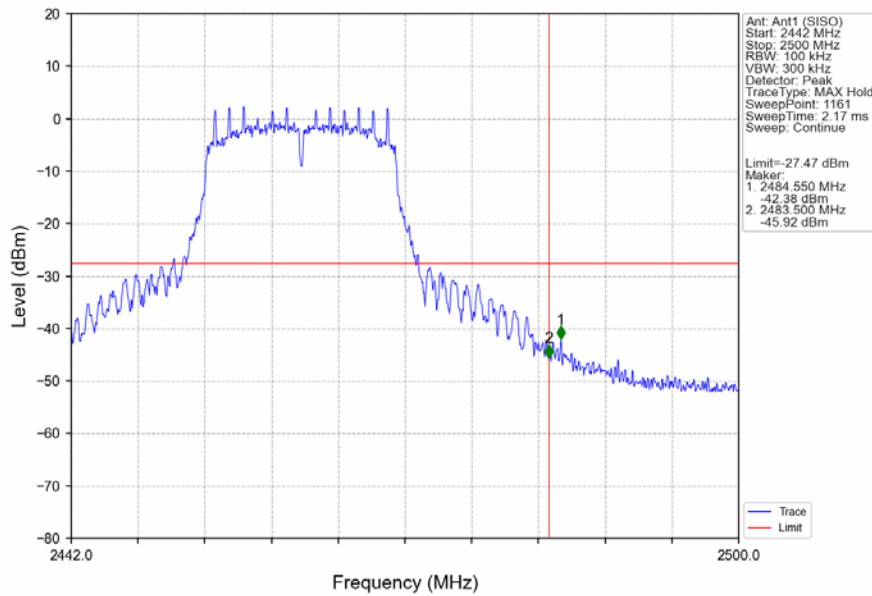
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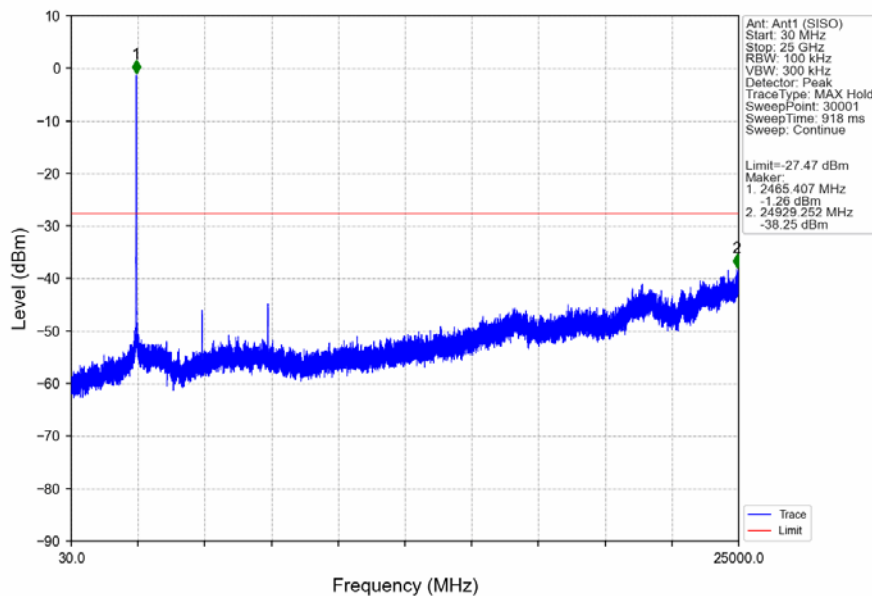
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### 802.11g\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV

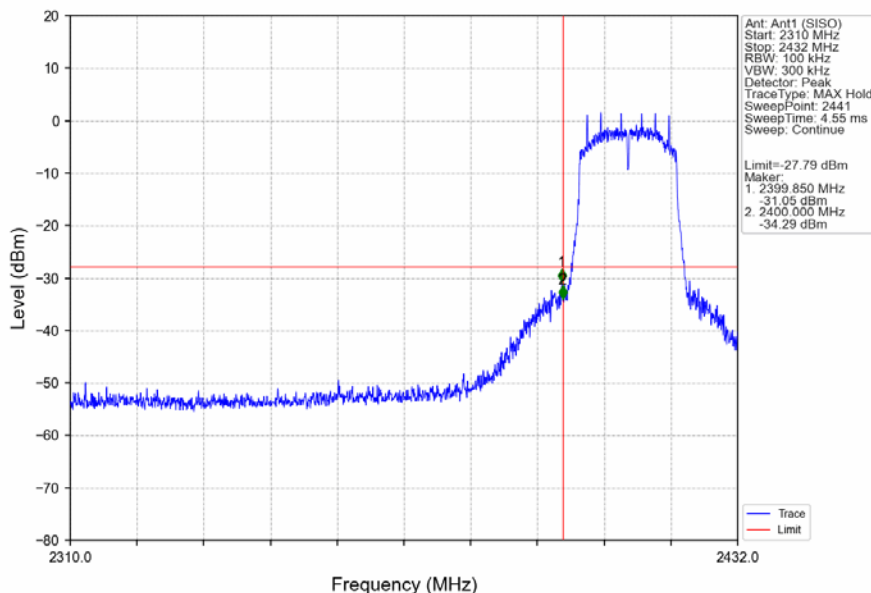


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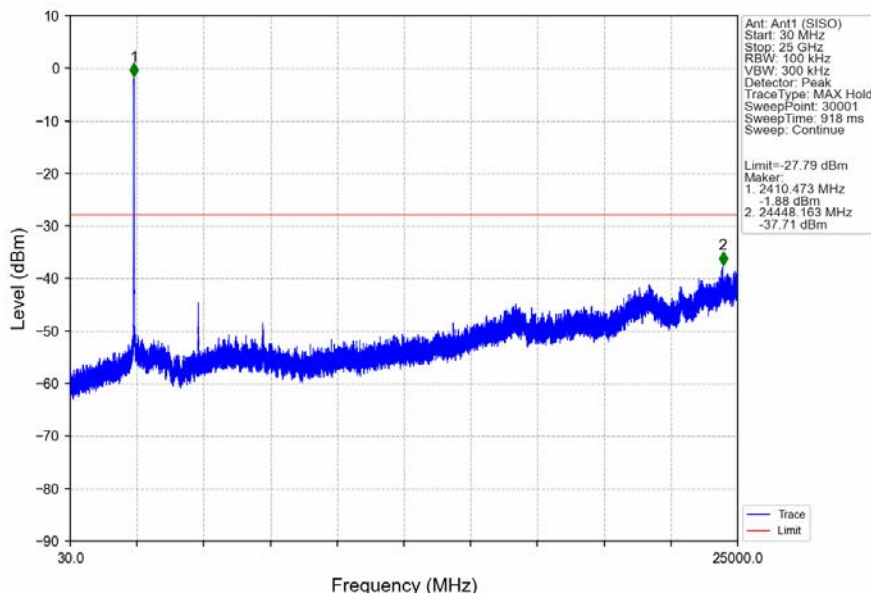




### 802.11n(HT20)\_LCH\_2412MHz\_Ant1 (SISO)\_NTNV



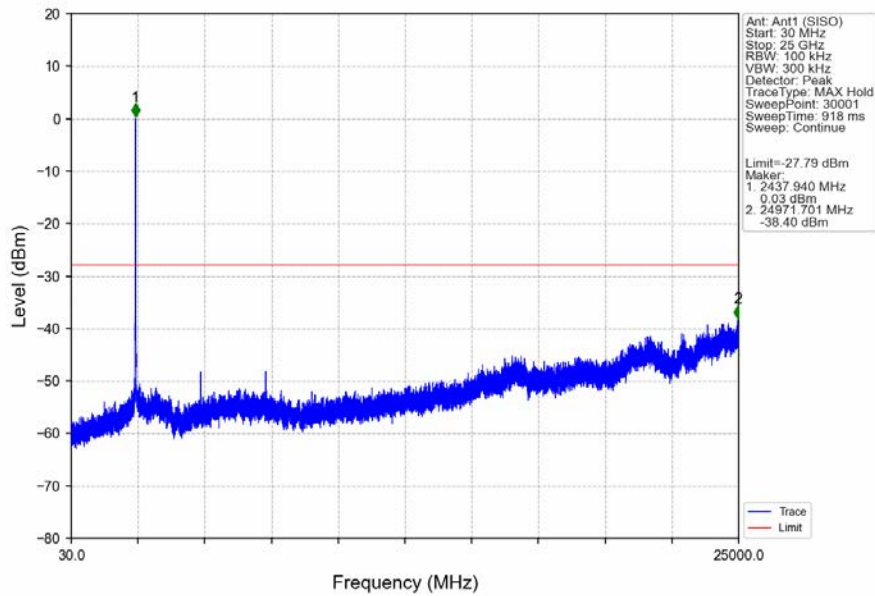
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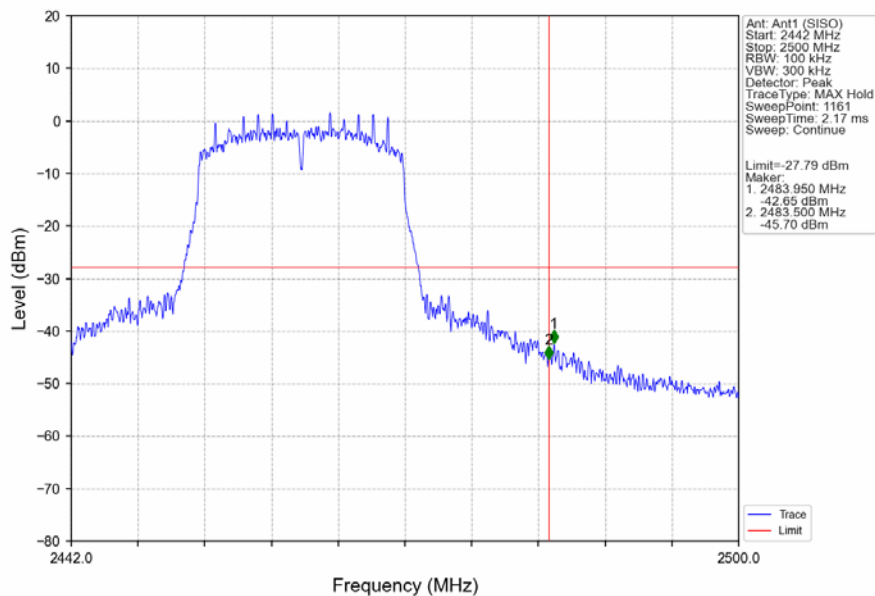
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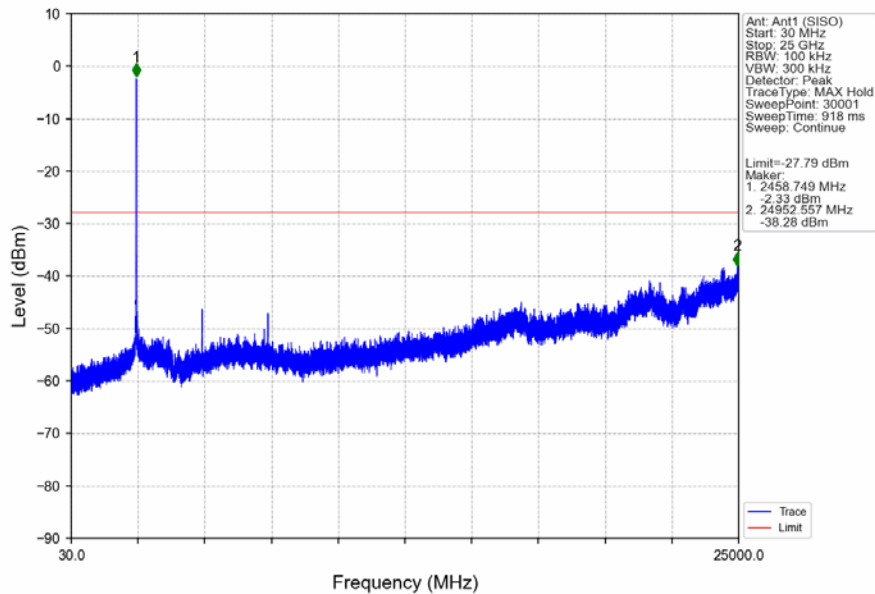
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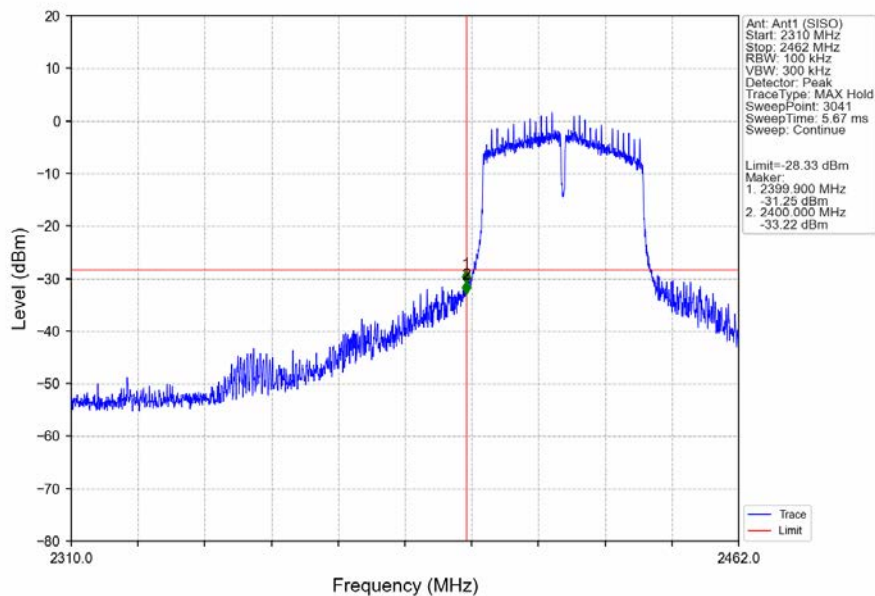
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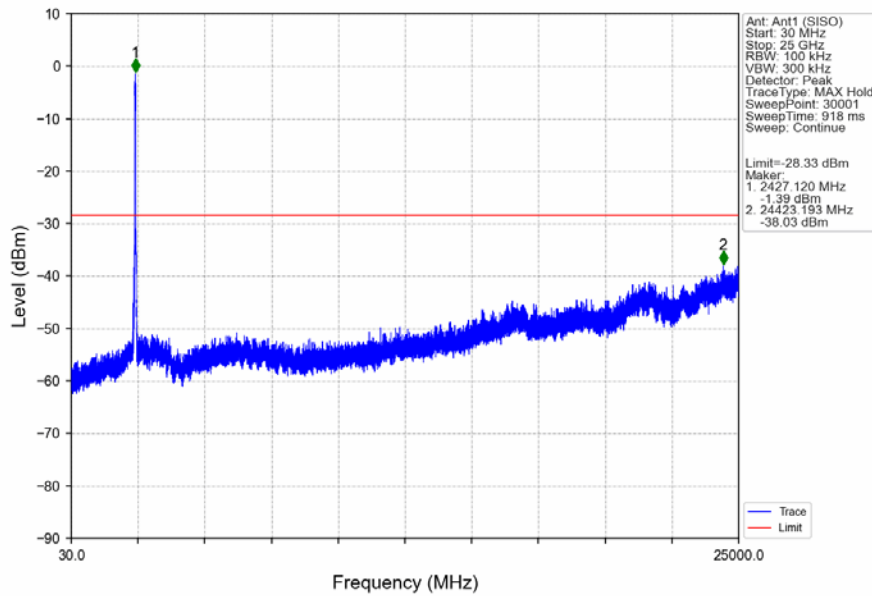
802.11n(HT20)\_HCH\_2462MHz\_Ant1 (SISO)\_NTNV



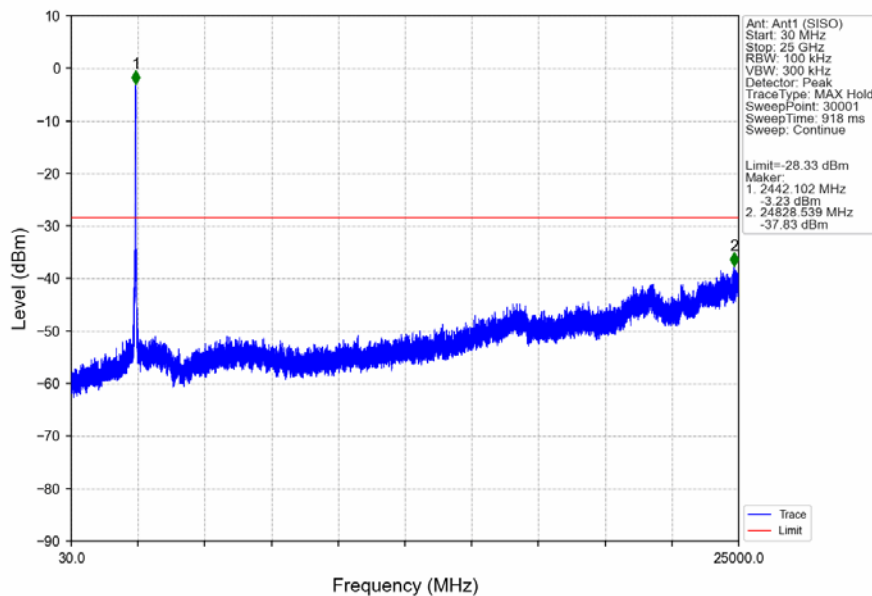
802.11n(HT40)\_LCH\_2422MHz\_Ant1 (SISO)\_NTNV



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

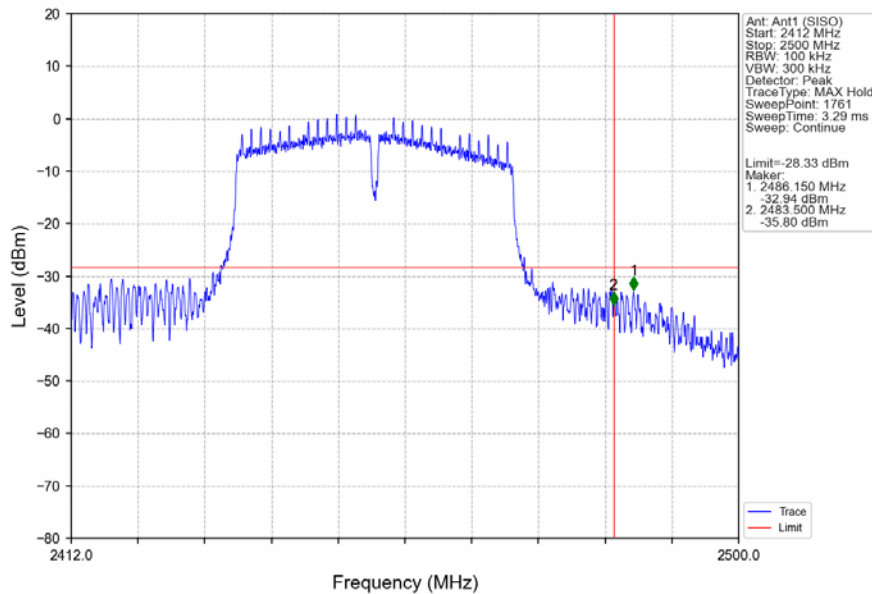


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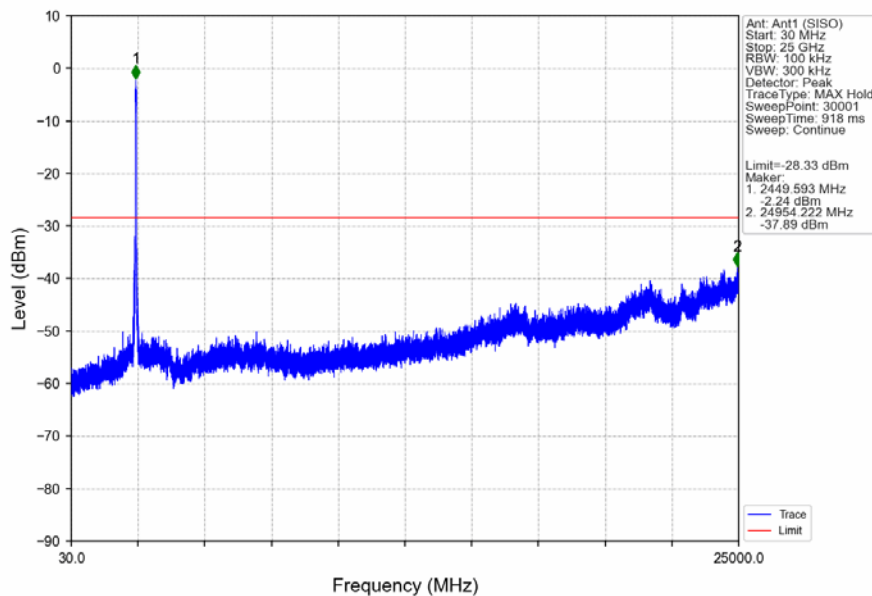




802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



802.11n(HT40)\_HCH\_2452MHz\_Ant1 (SISO)\_NTNV



- End of the Report -

