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## Annex for 5G Wi-Fi BAND 1

Test Report No.: CTL2404222135-WF04

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## 1. Bandwidth

### 1.1 Test Result

#### 1.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	19.058	/	Pass
		5200	1	19.319	/	Pass
		5240	1	19.246	/	Pass
802.11n (HT20)	SISO	5180	1	19.817	/	Pass
		5200	1	19.935	/	Pass
		5240	1	19.997	/	Pass
802.11n (HT40)	SISO	5190	1	38.269	/	Pass
		5230	1	38.449	/	Pass
802.11ac (VHT20)	SISO	5180	1	20.098	/	Pass
		5200	1	20.262	/	Pass
		5240	1	20.466	/	Pass
802.11ac (VHT40)	SISO	5190	1	38.007	/	Pass
		5230	1	38.138	/	Pass

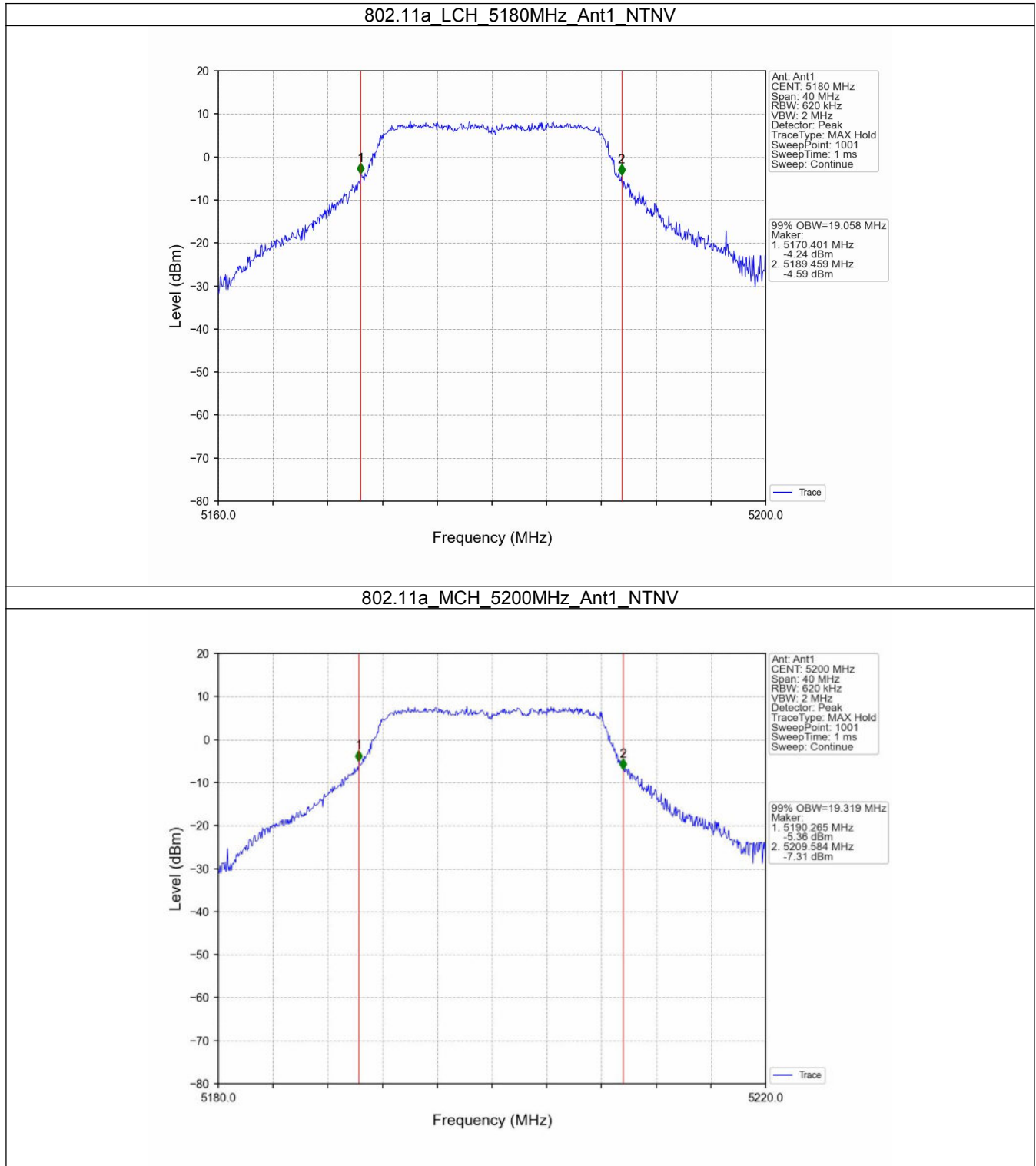
#### 1.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	24.362	/	Pass
		5200	1	25.044	/	Pass
		5240	1	24.653	/	Pass
802.11n (HT20)	SISO	5180	1	24.723	/	Pass
		5200	1	26.495	/	Pass
		5240	1	25.534	/	Pass
802.11n (HT40)	SISO	5190	1	47.476	/	Pass
		5230	1	48.328	/	Pass
802.11ac (VHT20)	SISO	5180	1	25.345	/	Pass
		5200	1	25.459	/	Pass
		5240	1	25.712	/	Pass
802.11ac (VHT40)	SISO	5190	1	46.674	/	Pass
		5230	1	46.615	/	Pass

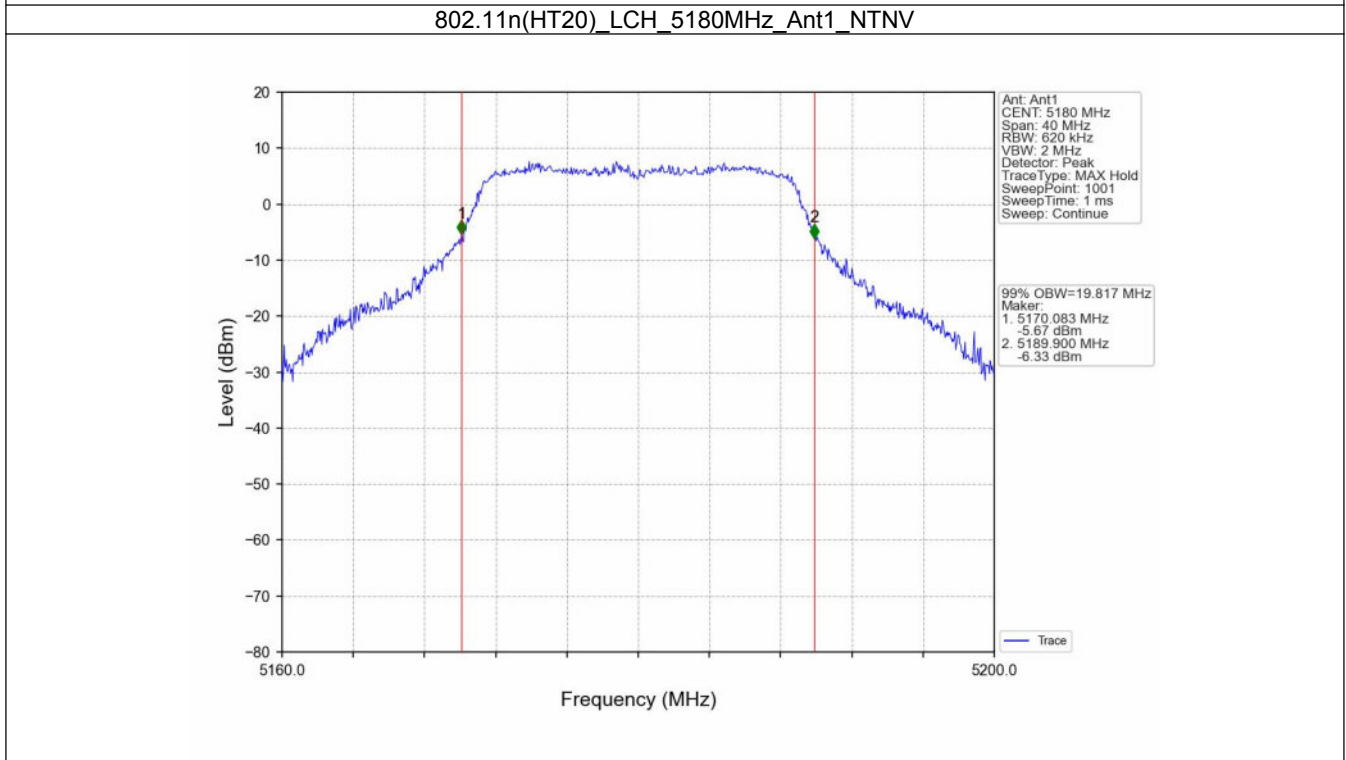
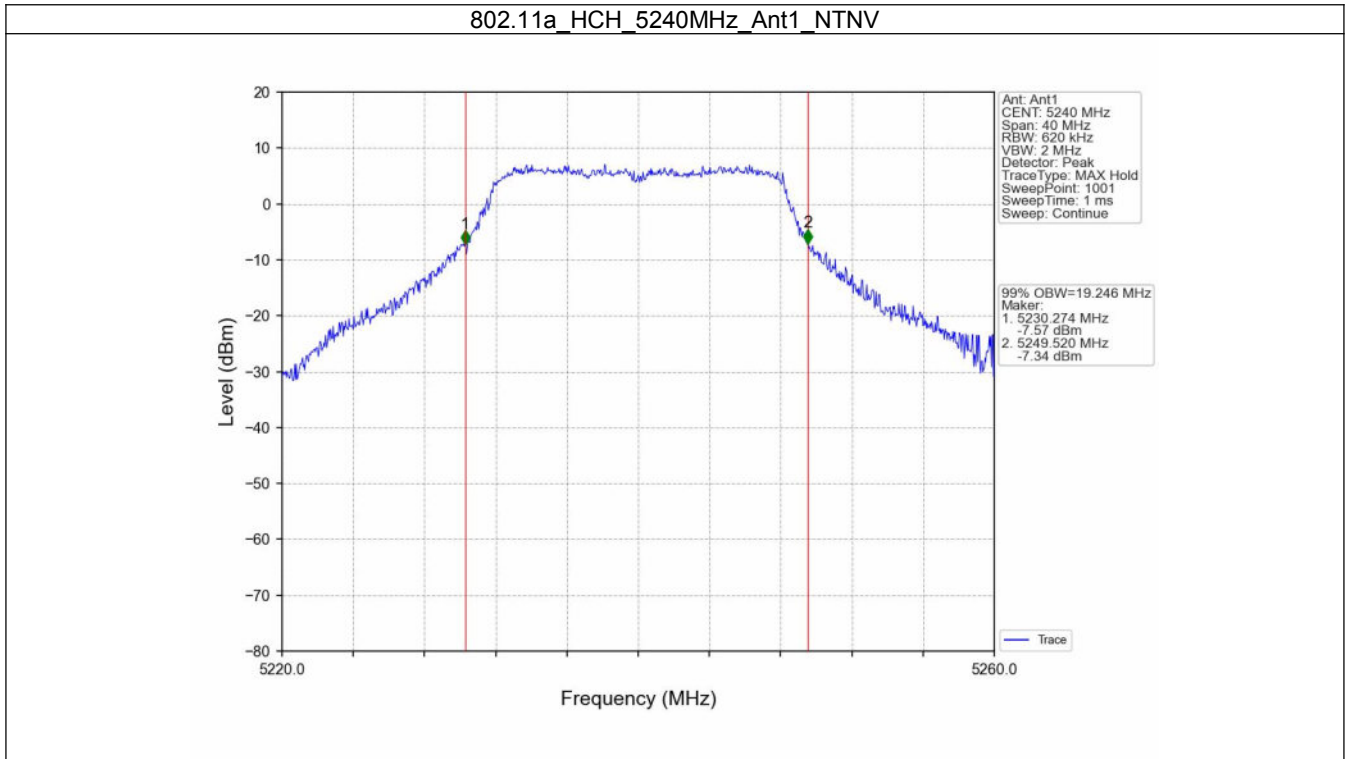
FCC ID: 2ASC7TAB702

### 1.2 Test Graph

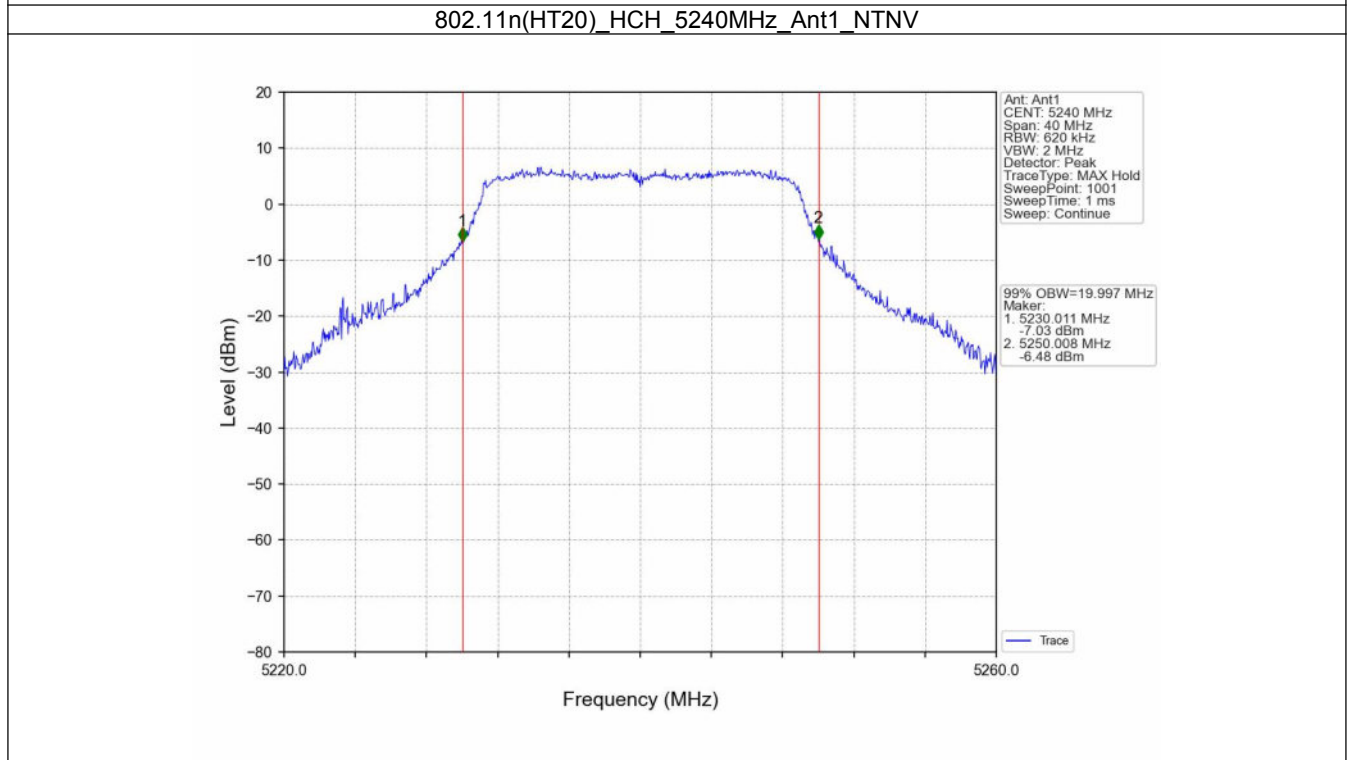
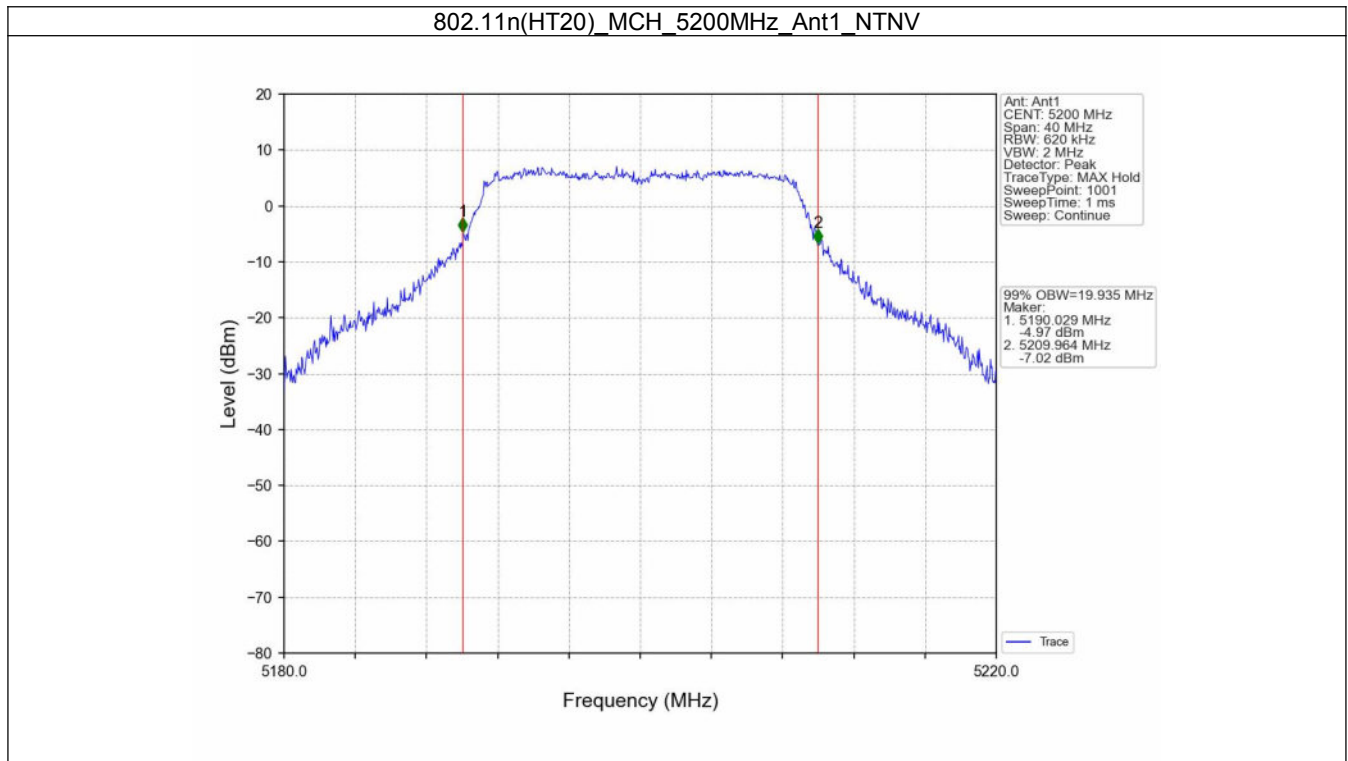
#### 1.2.1 OBW



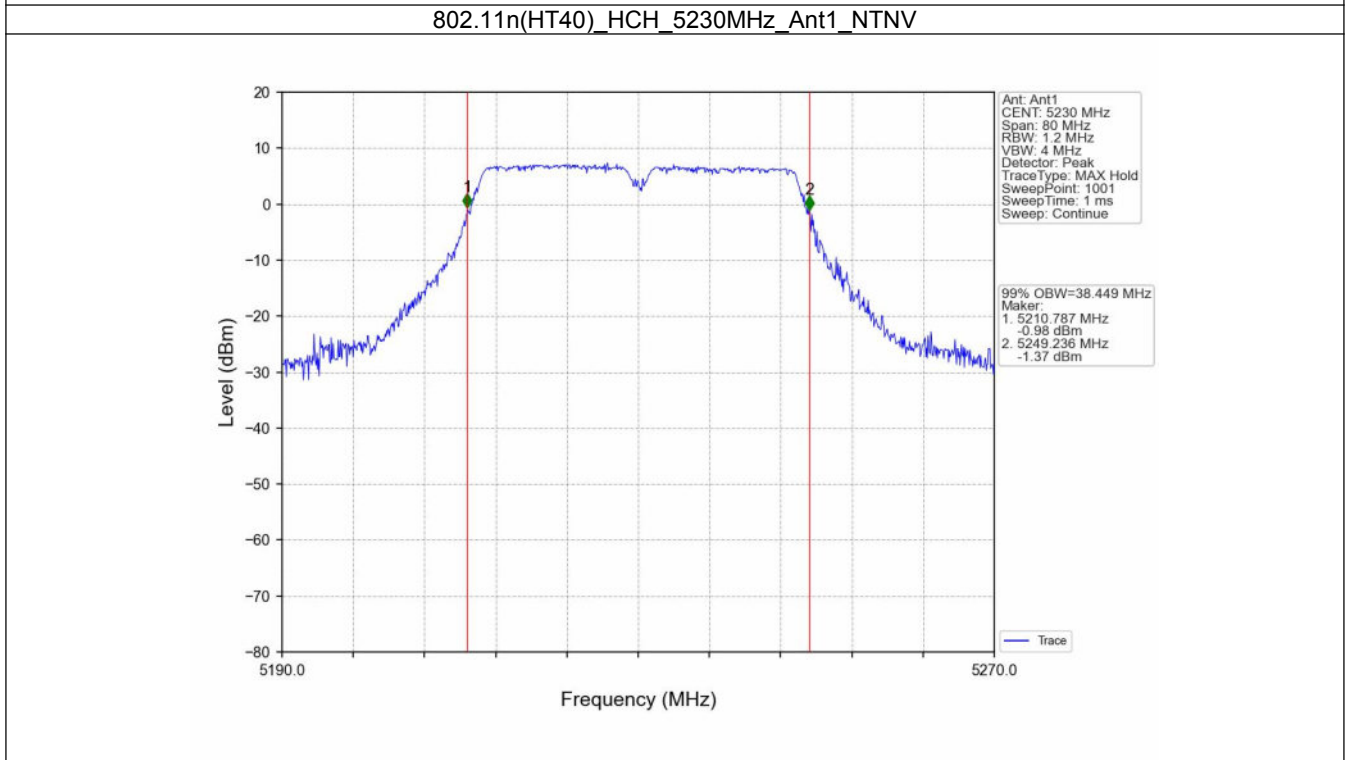
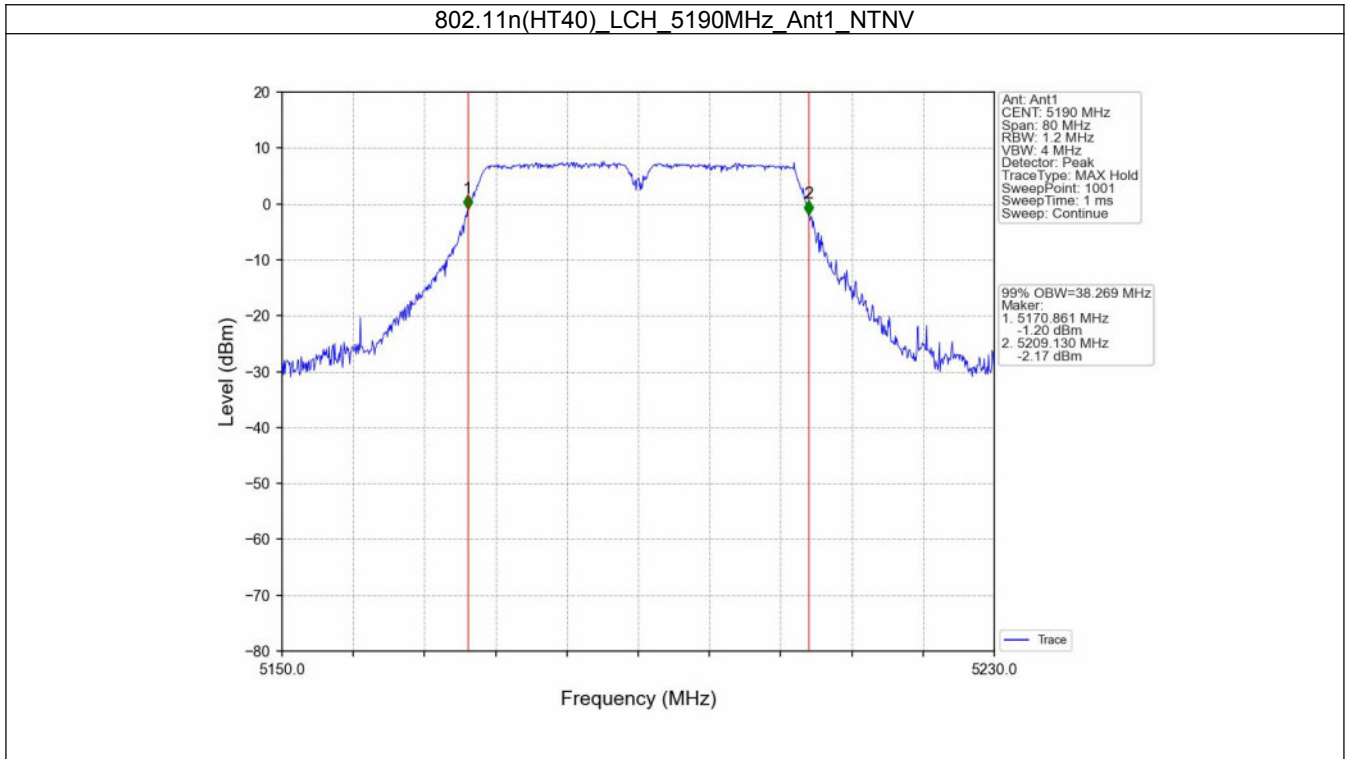
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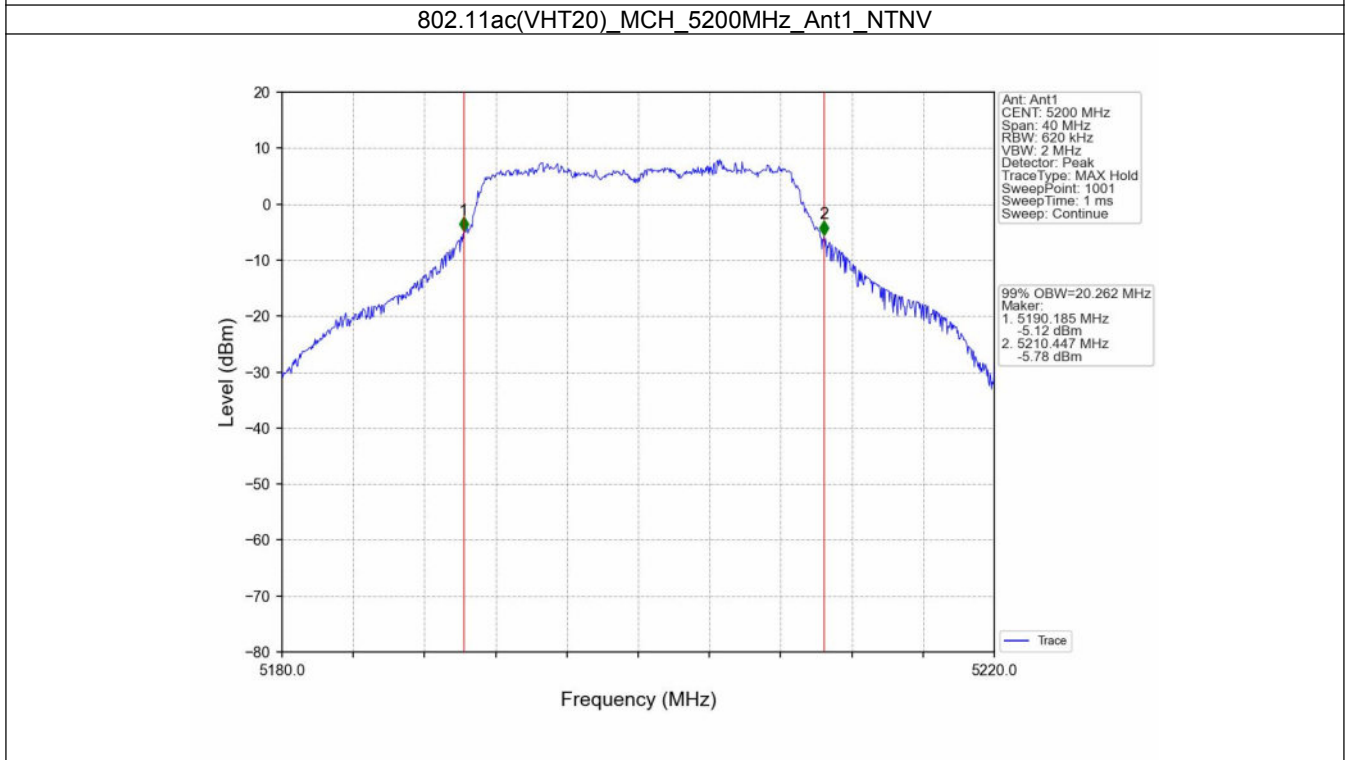
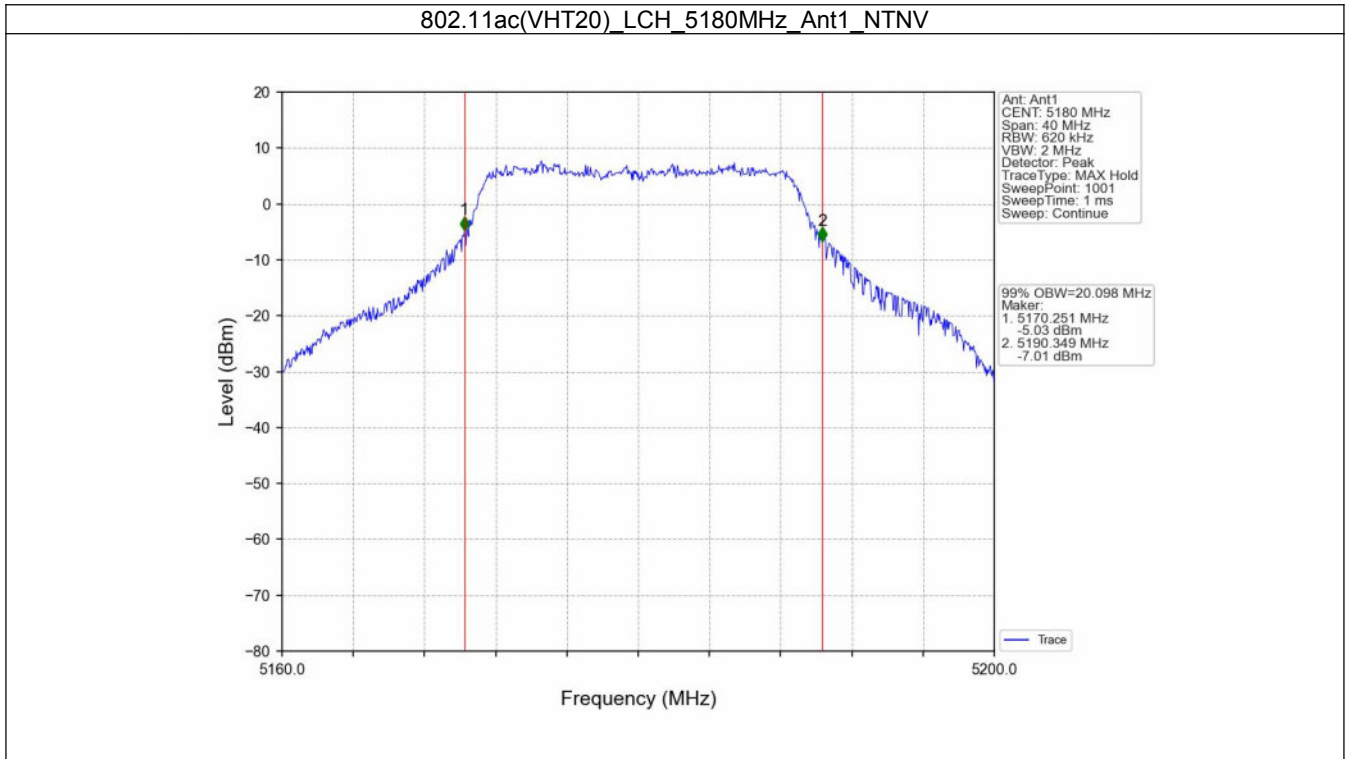
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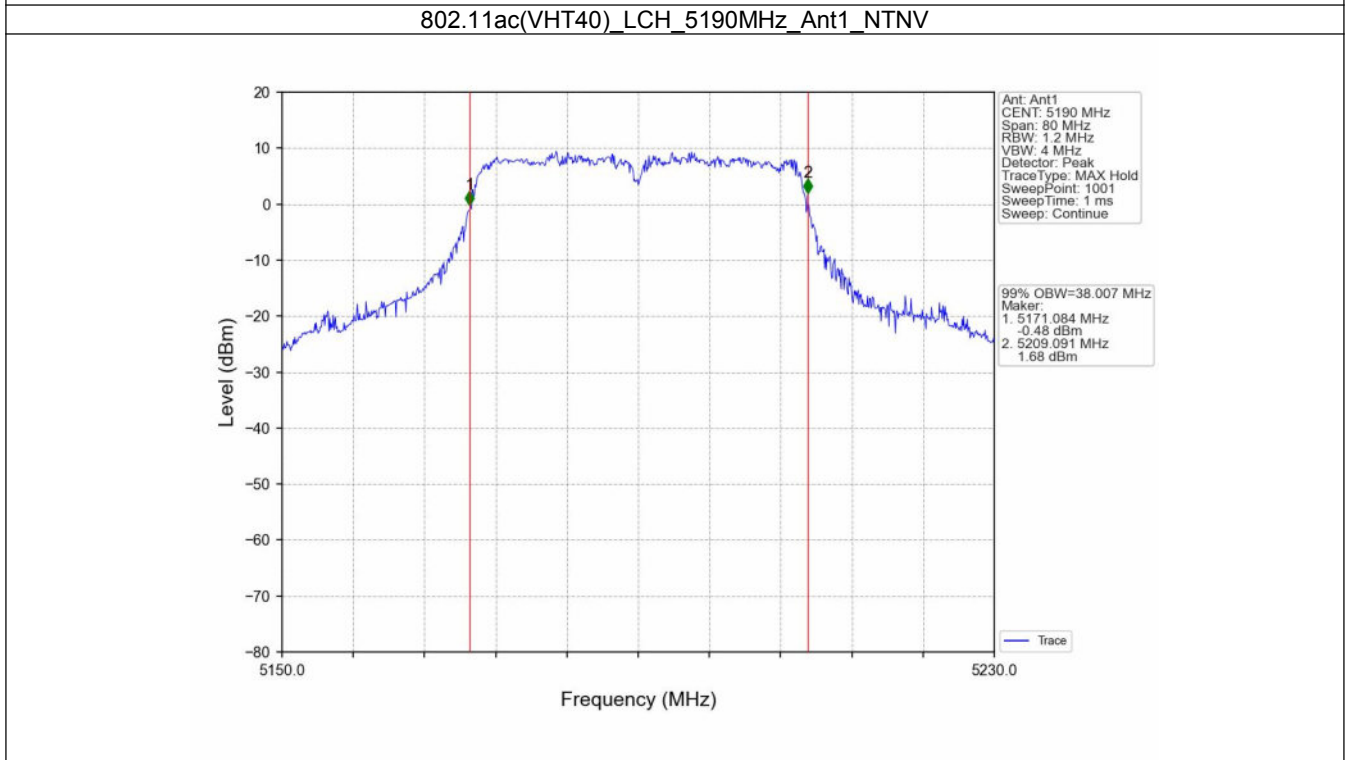
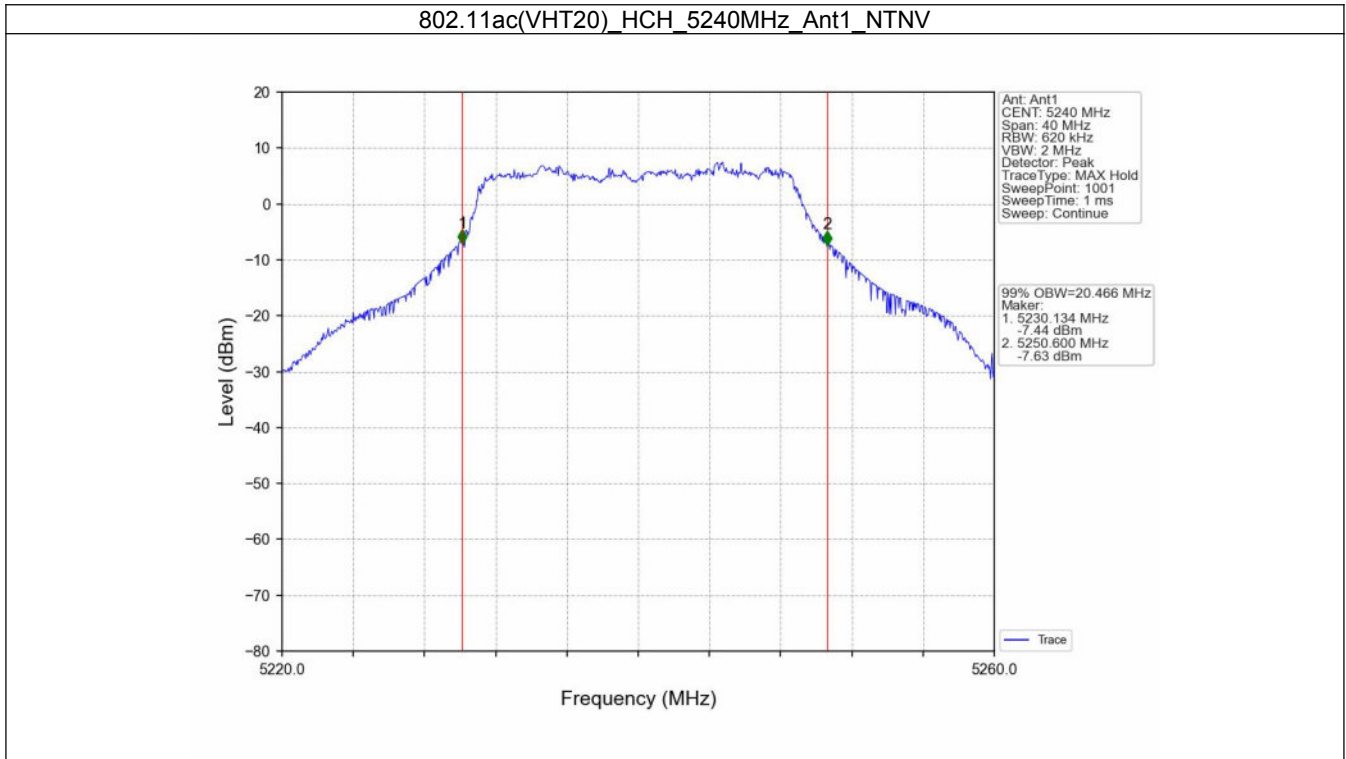
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FCC ID: 2ASC7TAB702

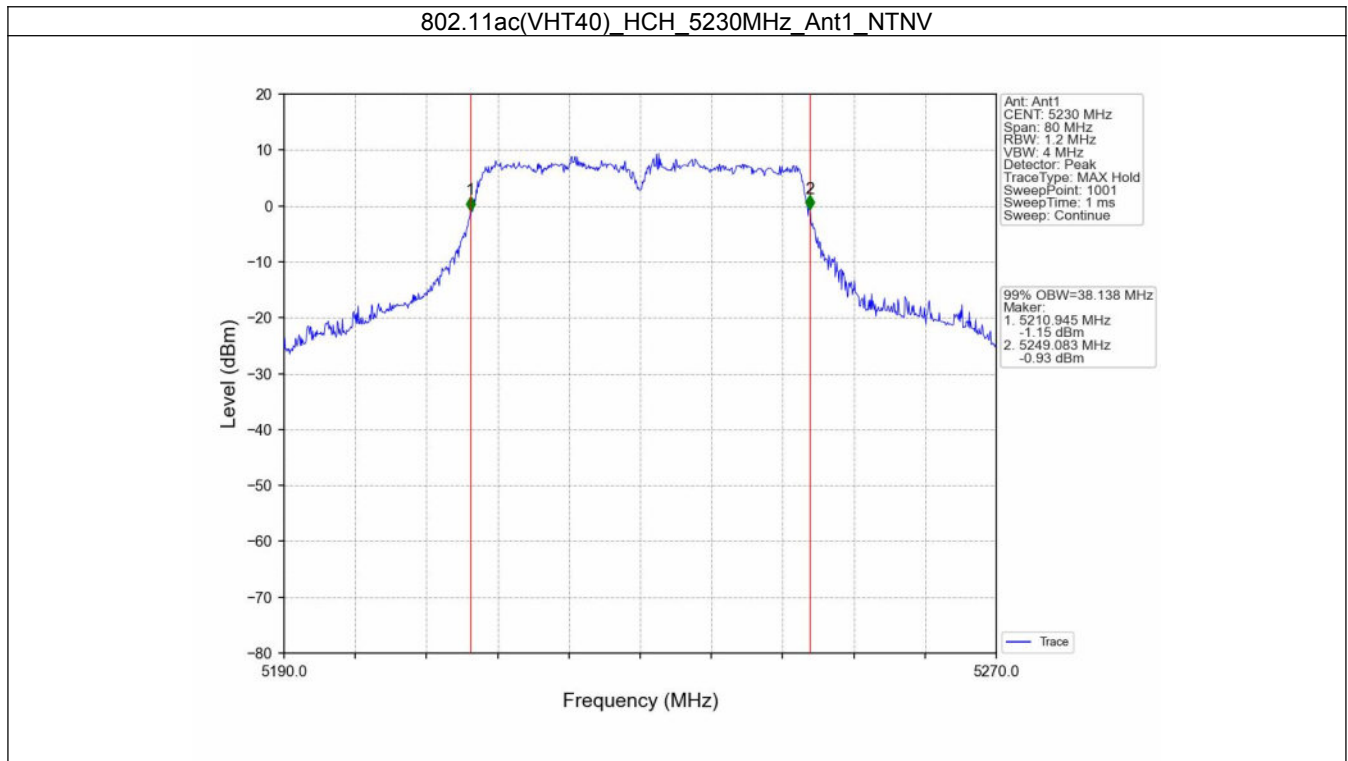


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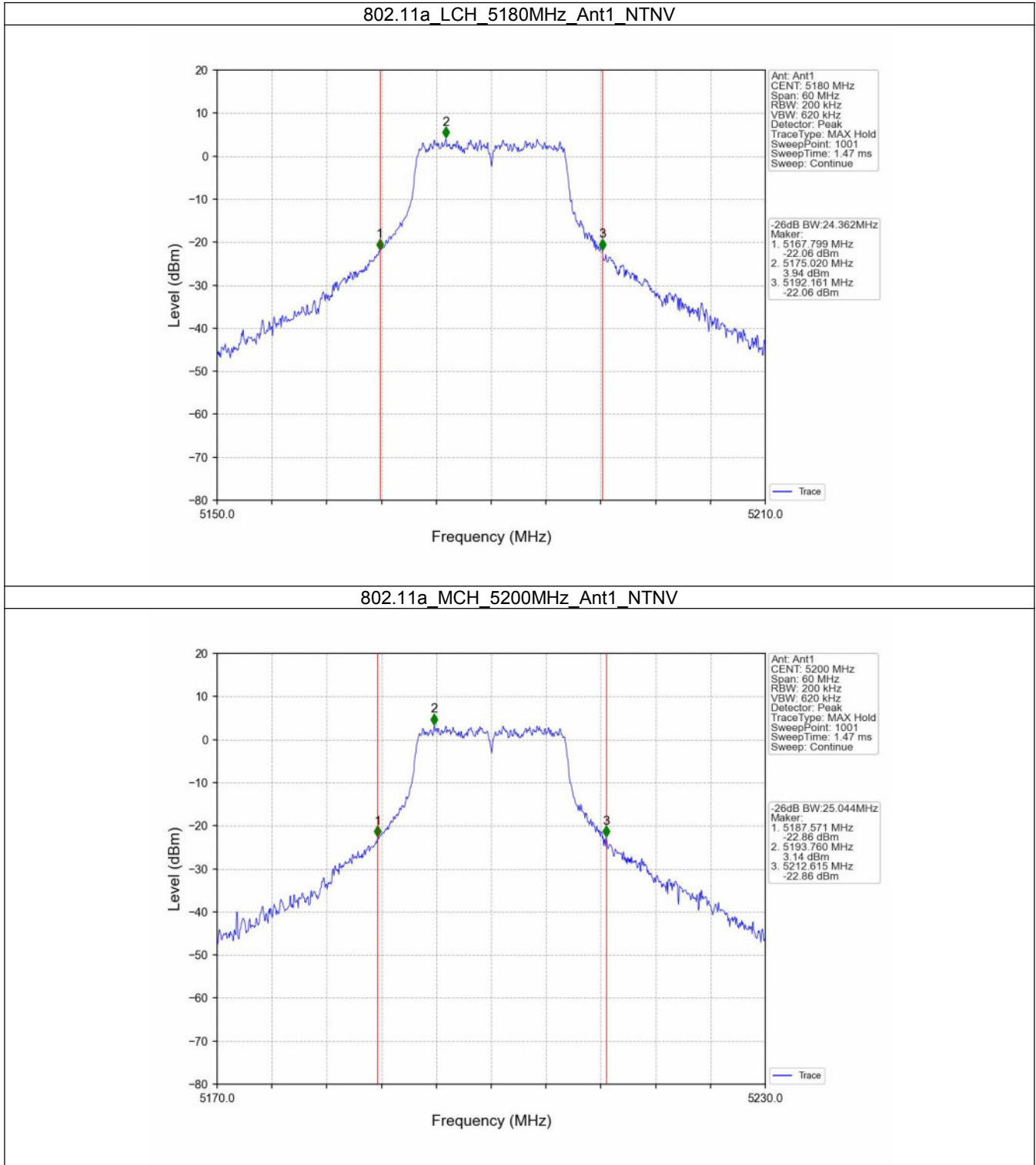


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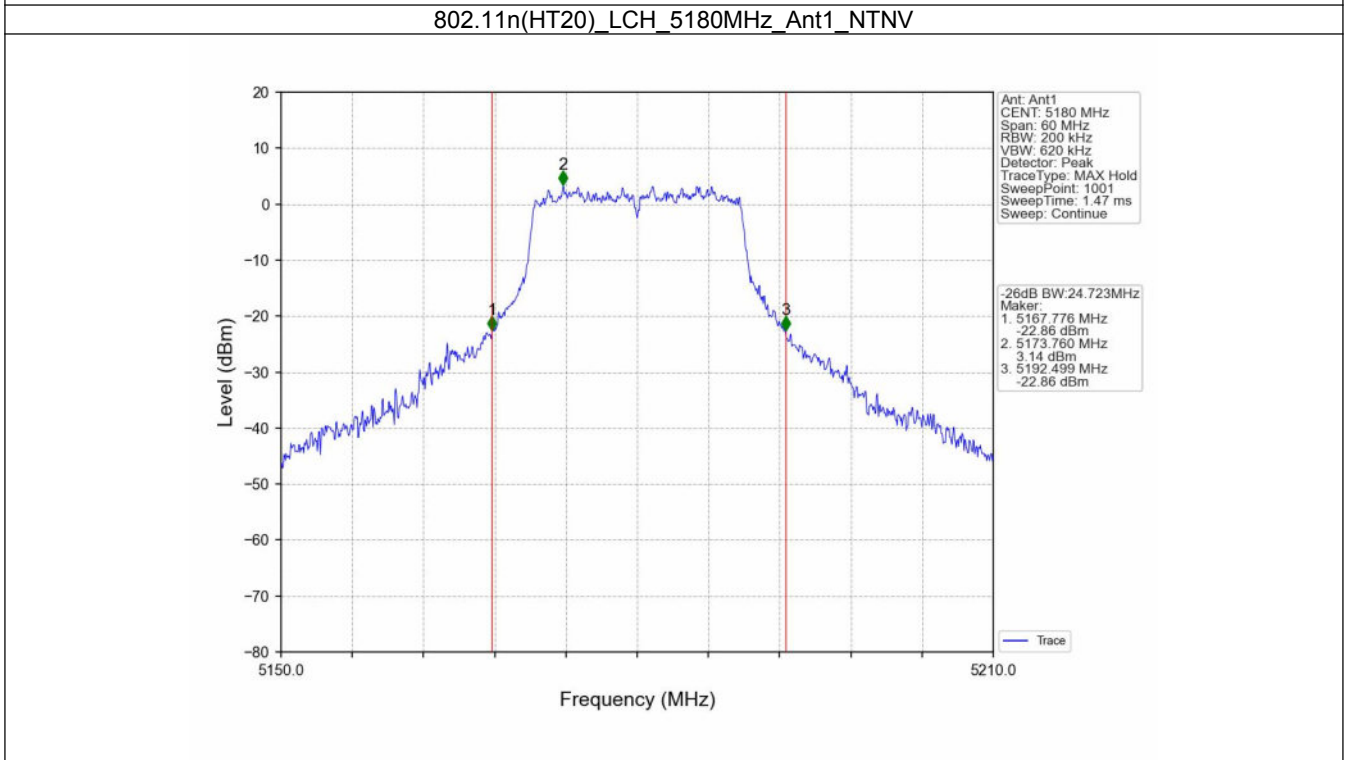
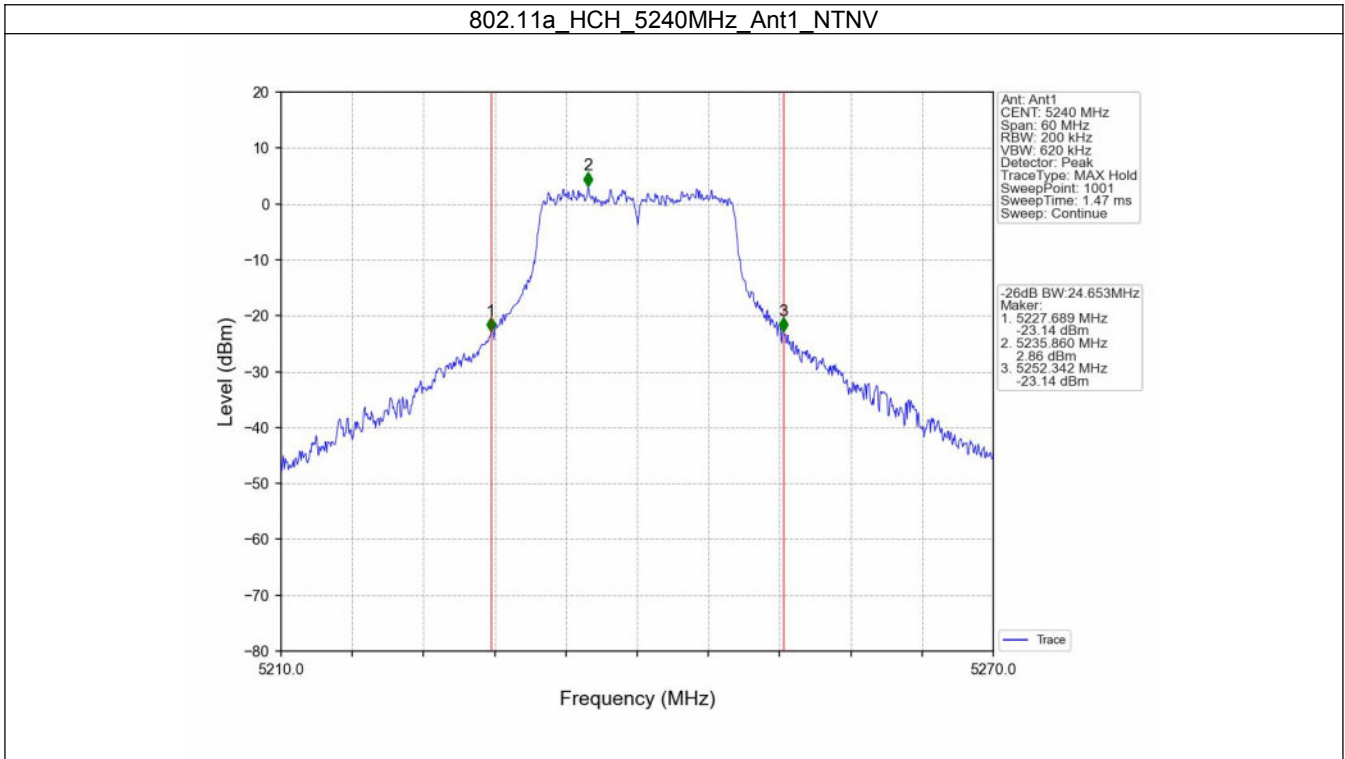


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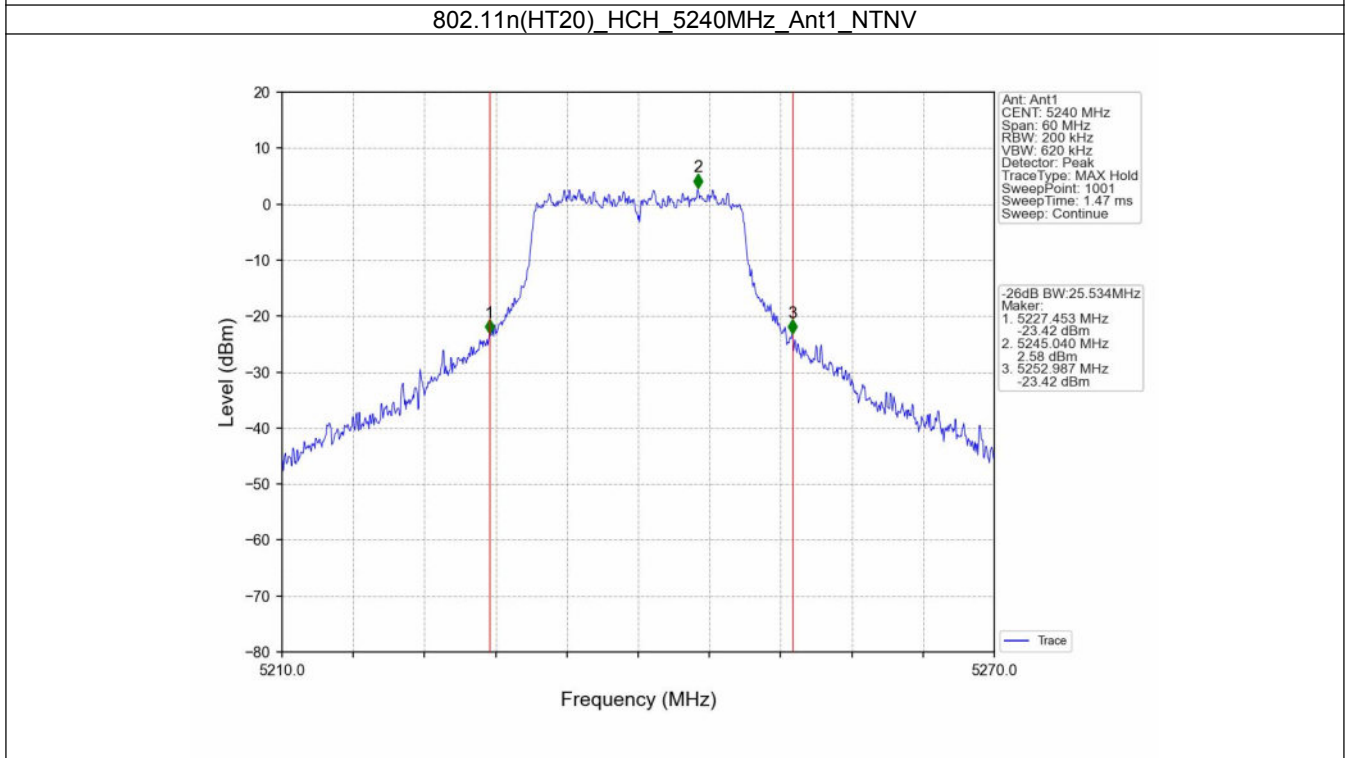
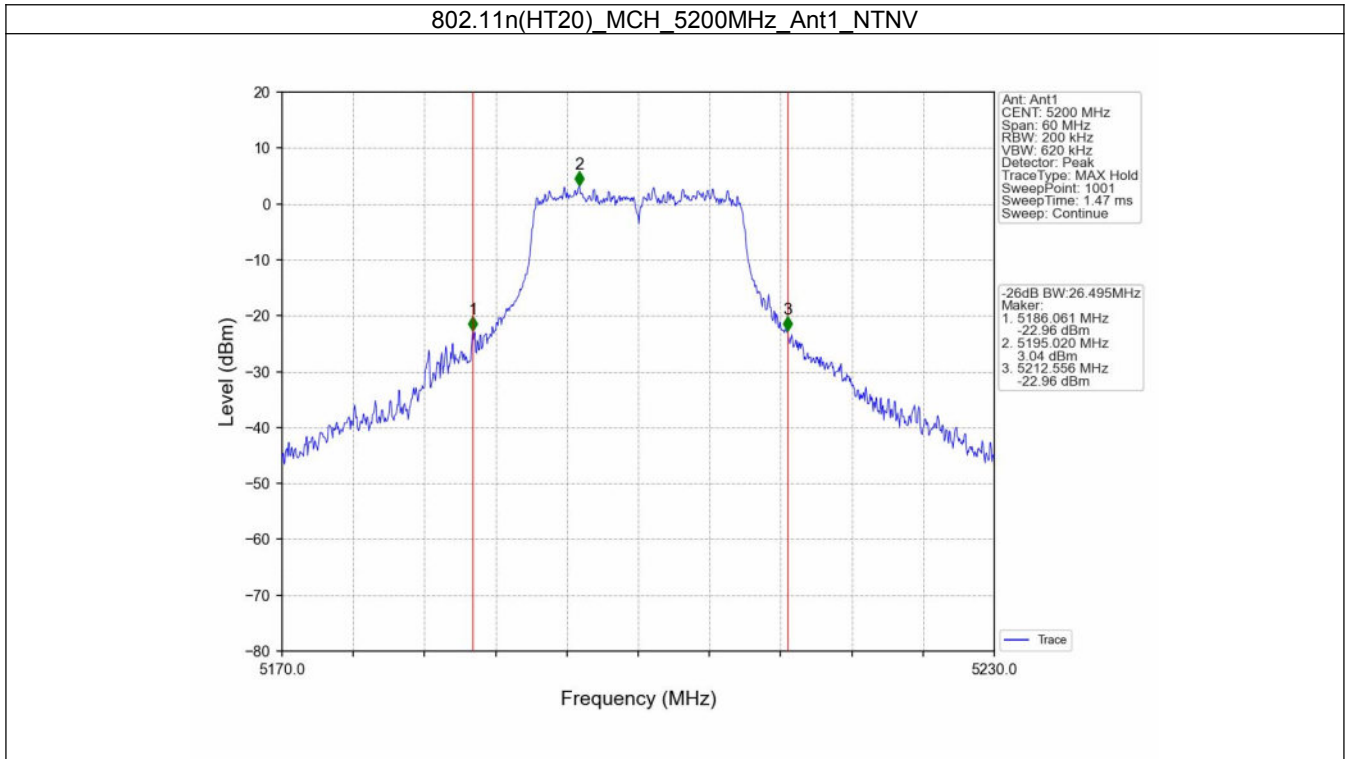
### 1.2.2 26dB BW



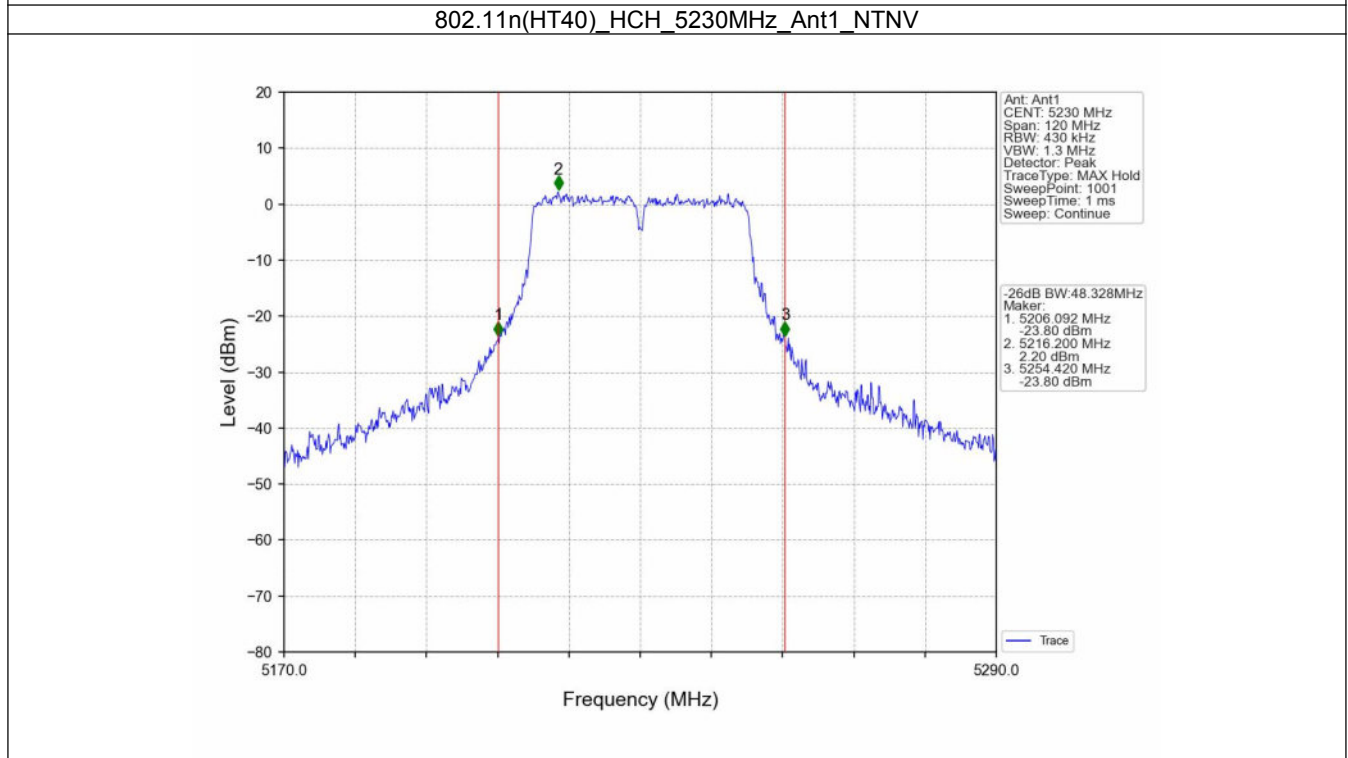
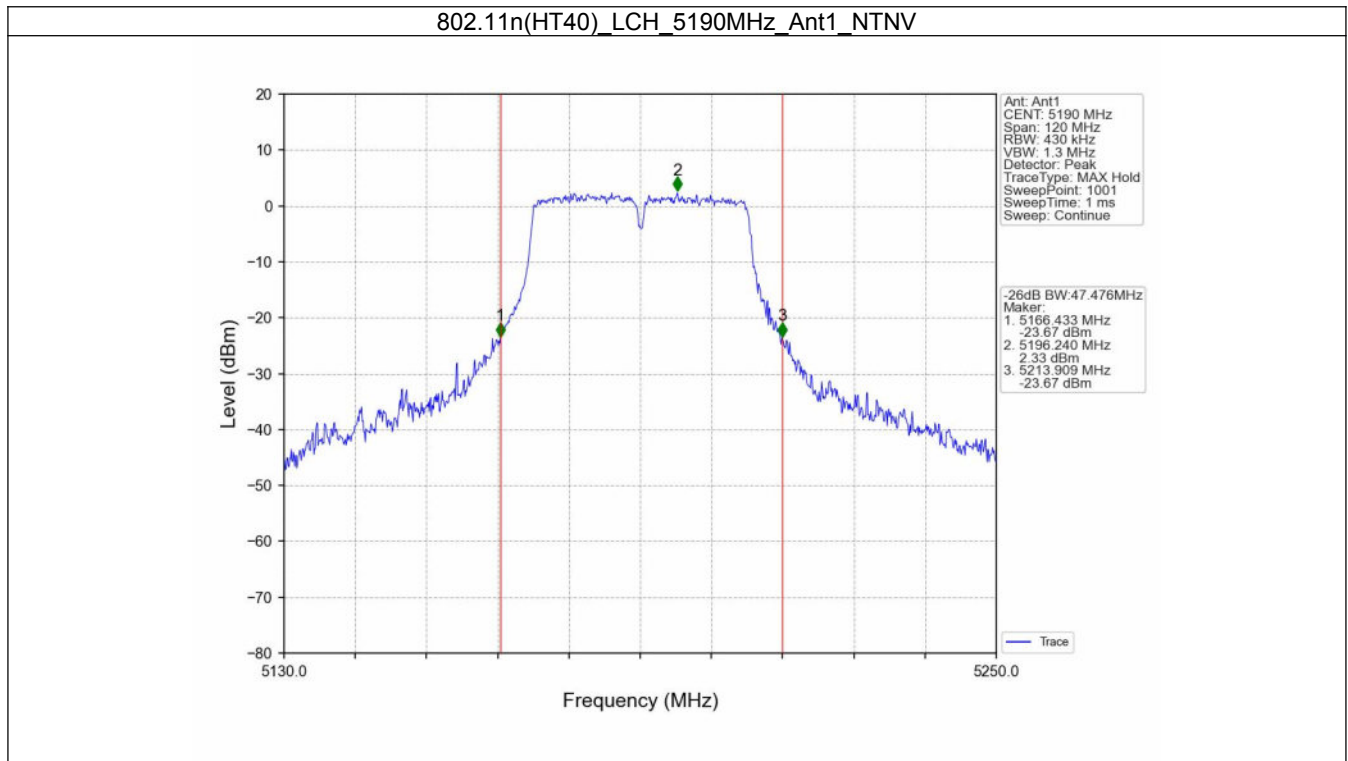
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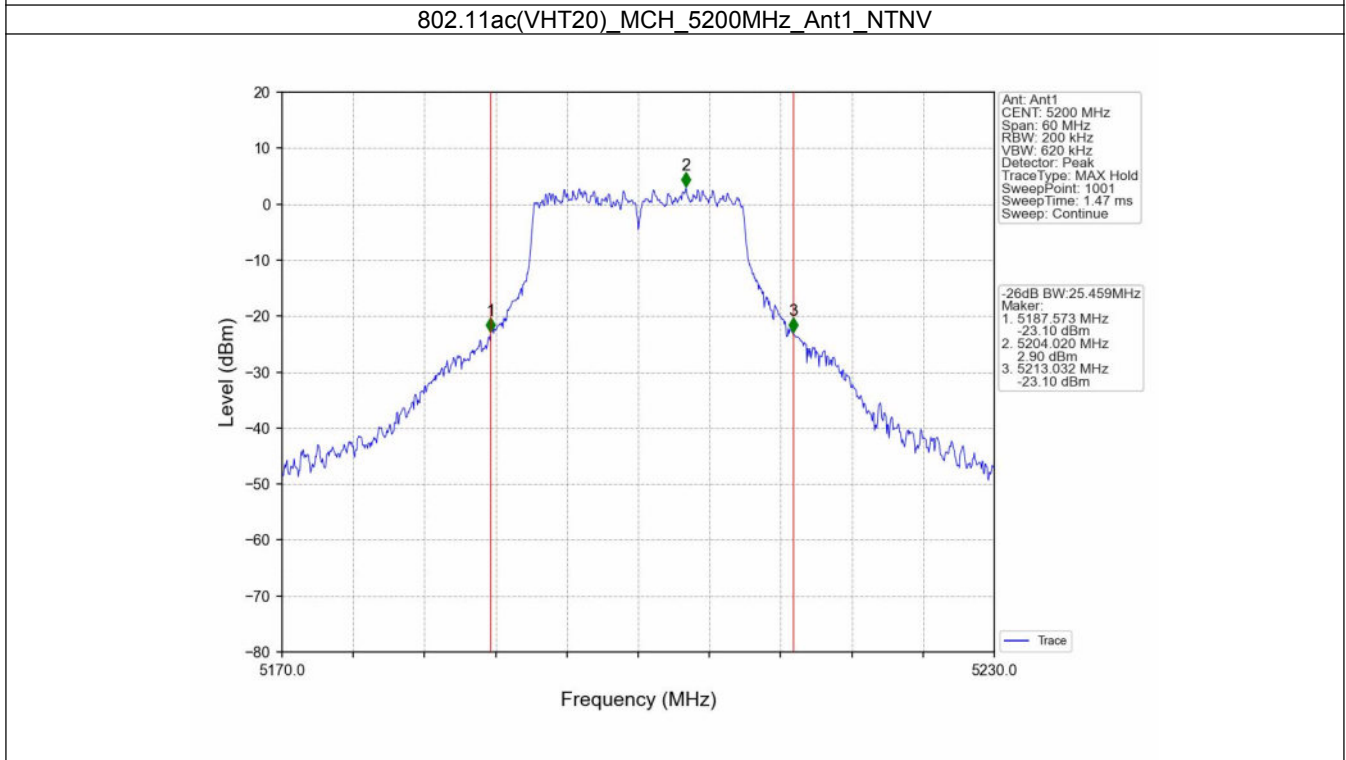
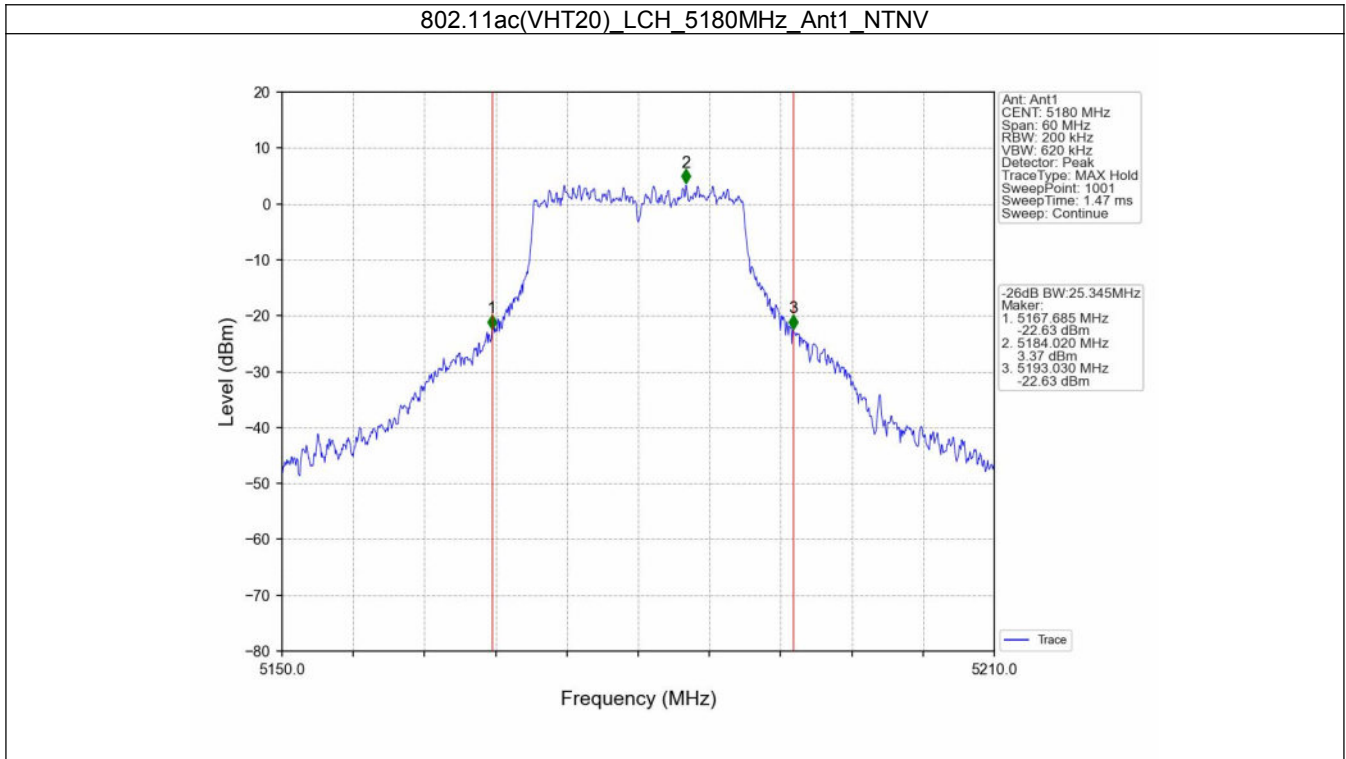
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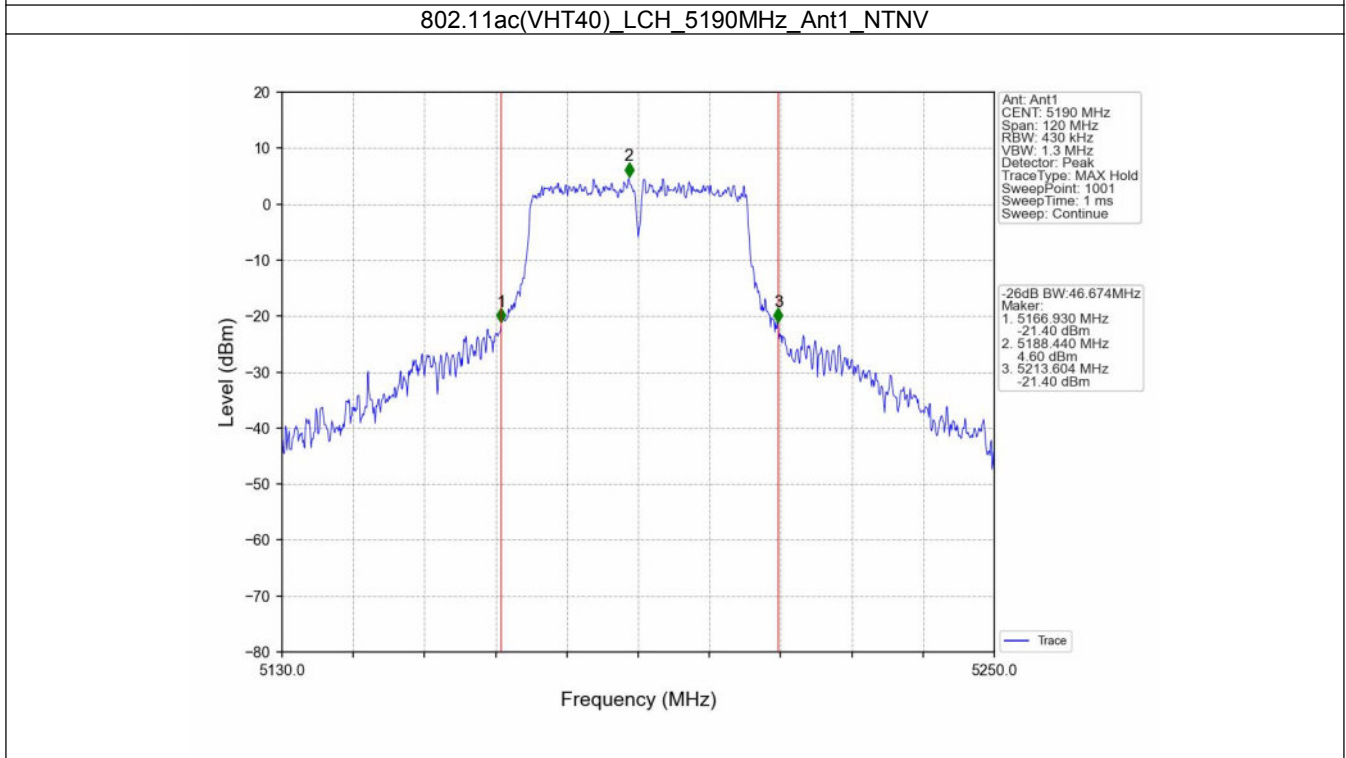
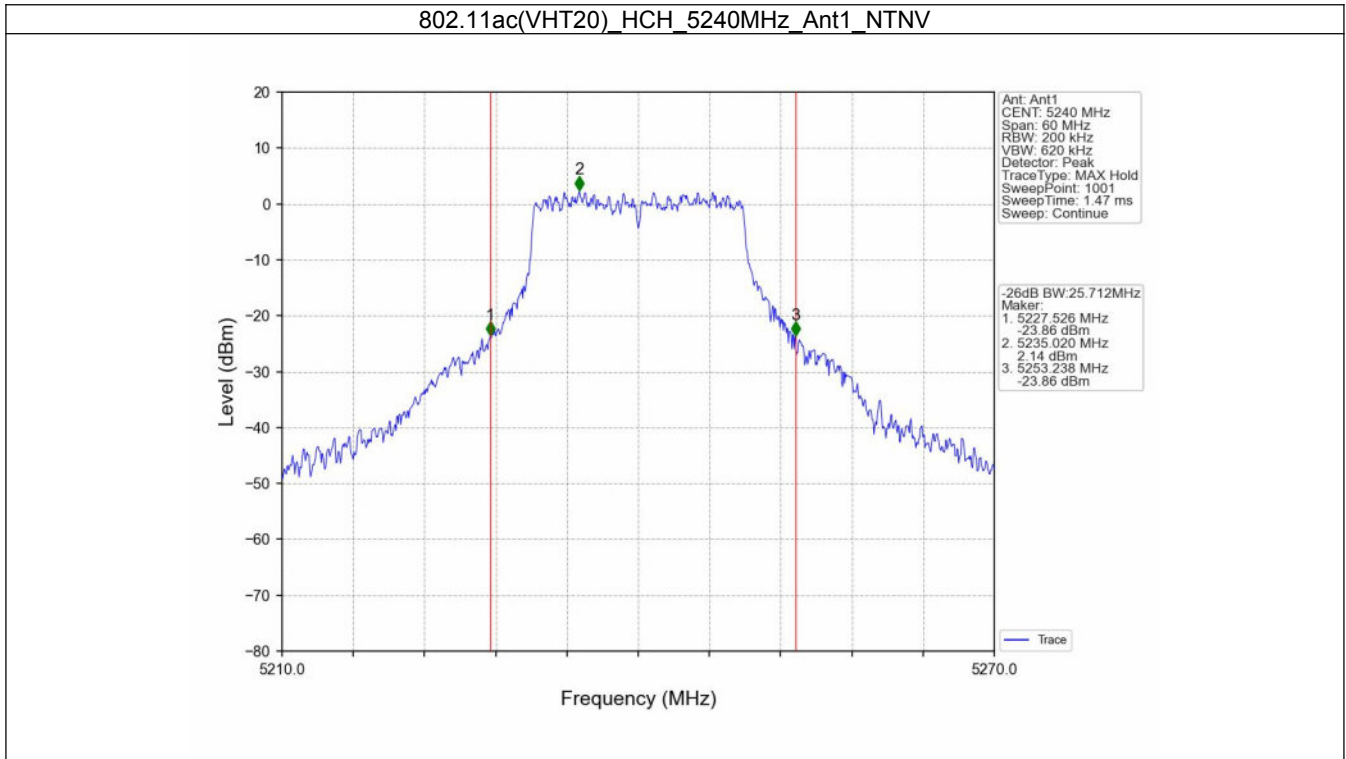
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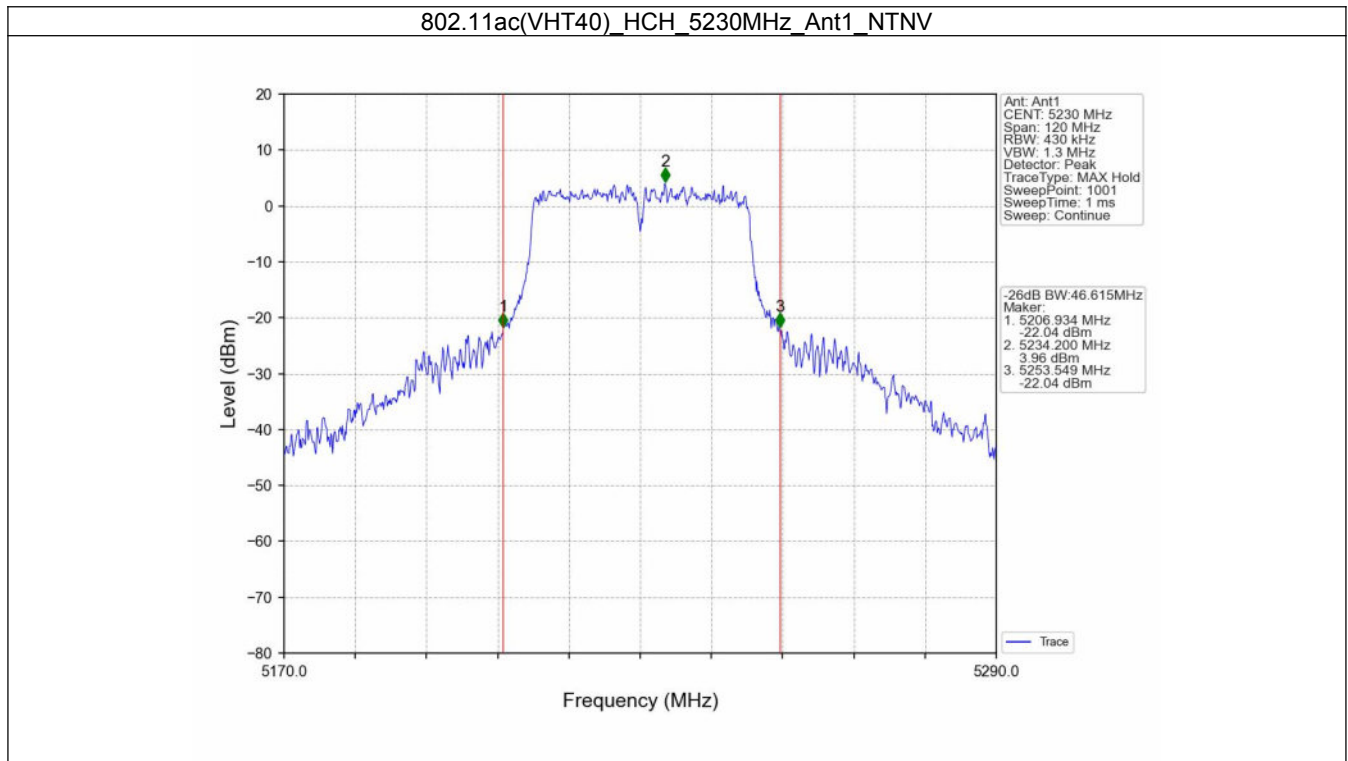
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## 2. Maximum Conducted Output Power

### 2.1 Test Result

#### 2.1.1 Power

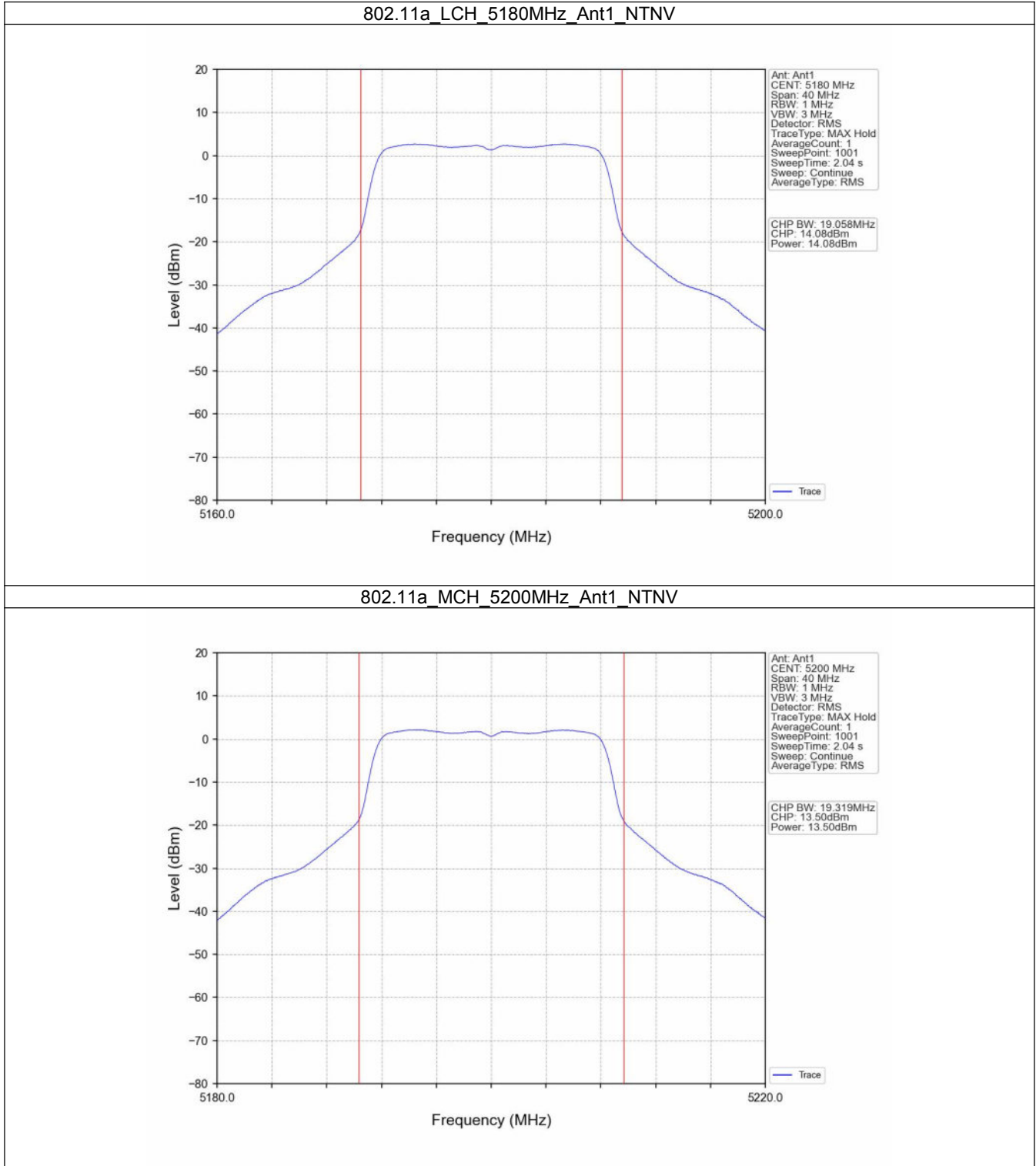
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	14.08	<=23.98	Pass
		5200	13.50	<=23.98	Pass
		5240	12.98	<=23.98	Pass
802.11n (HT20)	SISO	5180	13.59	<=23.98	Pass
		5200	13.31	<=23.98	Pass
		5240	12.83	<=23.98	Pass
802.11n (HT40)	SISO	5190	12.80	<=23.98	Pass
		5230	12.39	<=23.98	Pass
802.11ac (VHT20)	SISO	5180	13.62	<=23.98	Pass
		5200	13.13	<=23.98	Pass
		5240	12.52	<=23.98	Pass
802.11ac (VHT40)	SISO	5190	14.47	<=23.98	Pass
		5230	13.72	<=23.98	Pass

Note1: Antenna Gain: Ant1: 1.25dBi;

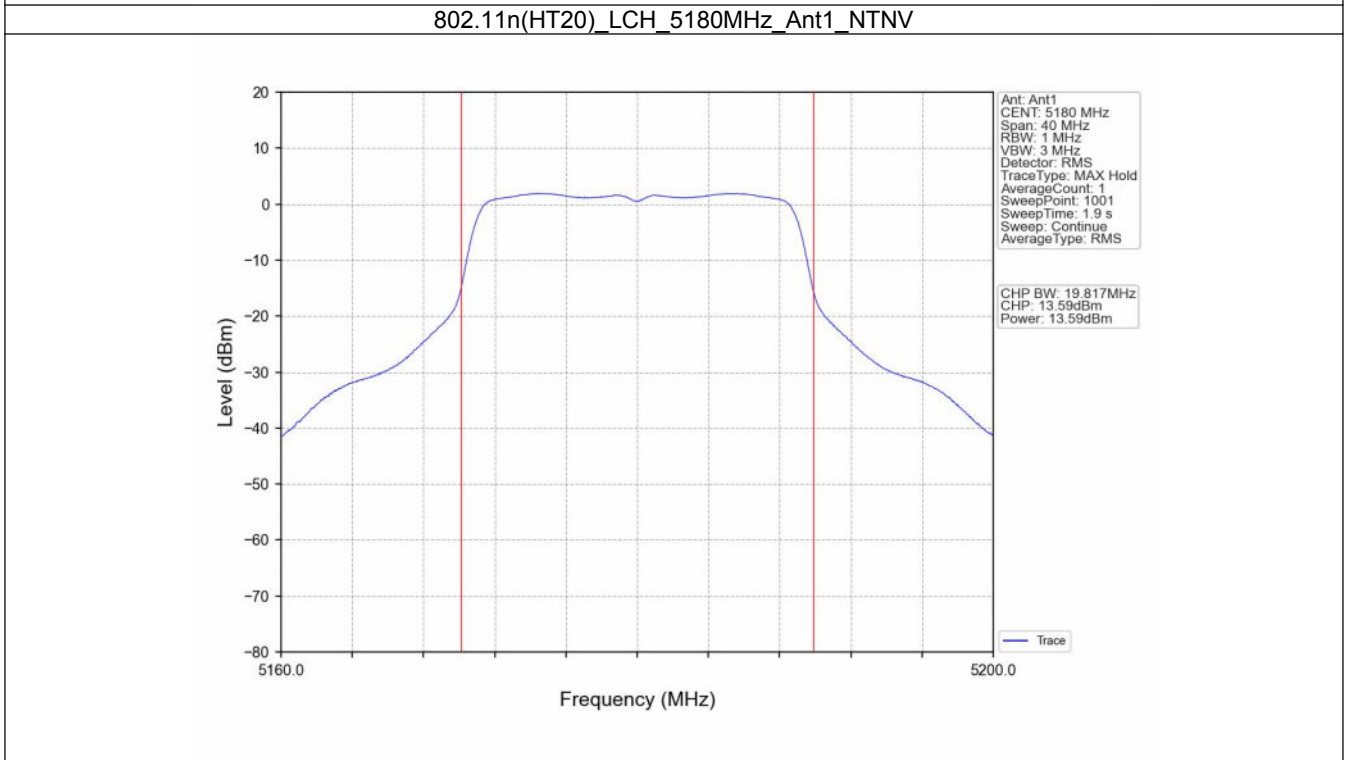
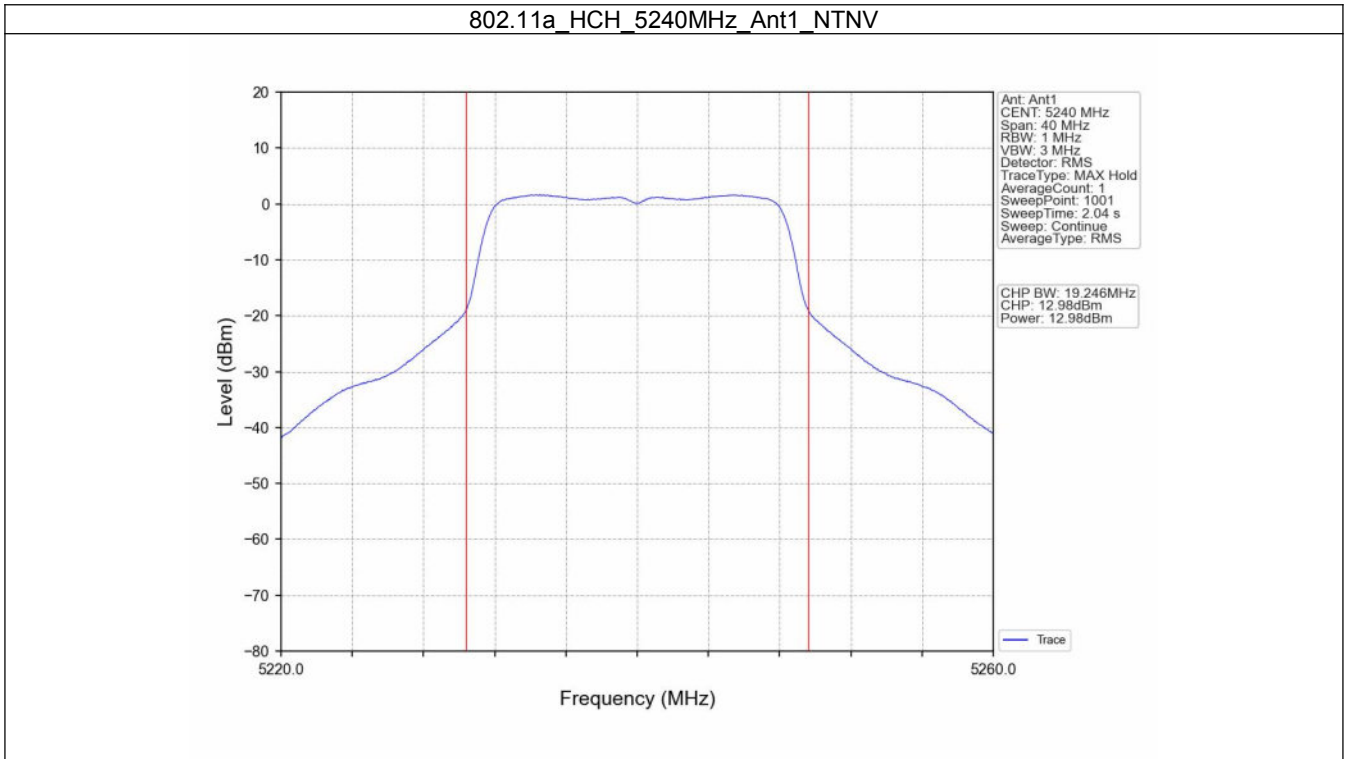
FCC ID: 2ASC7TAB702

## 2.2 Test Graph

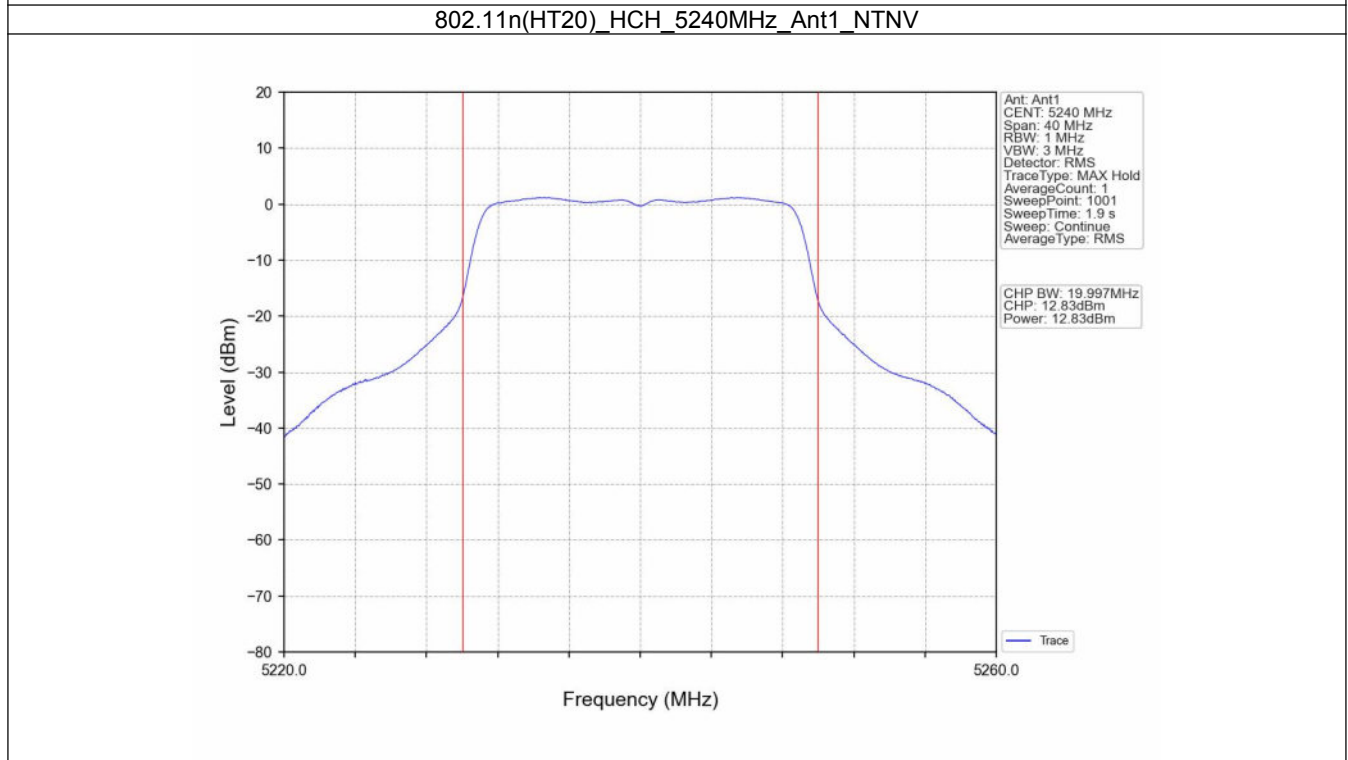
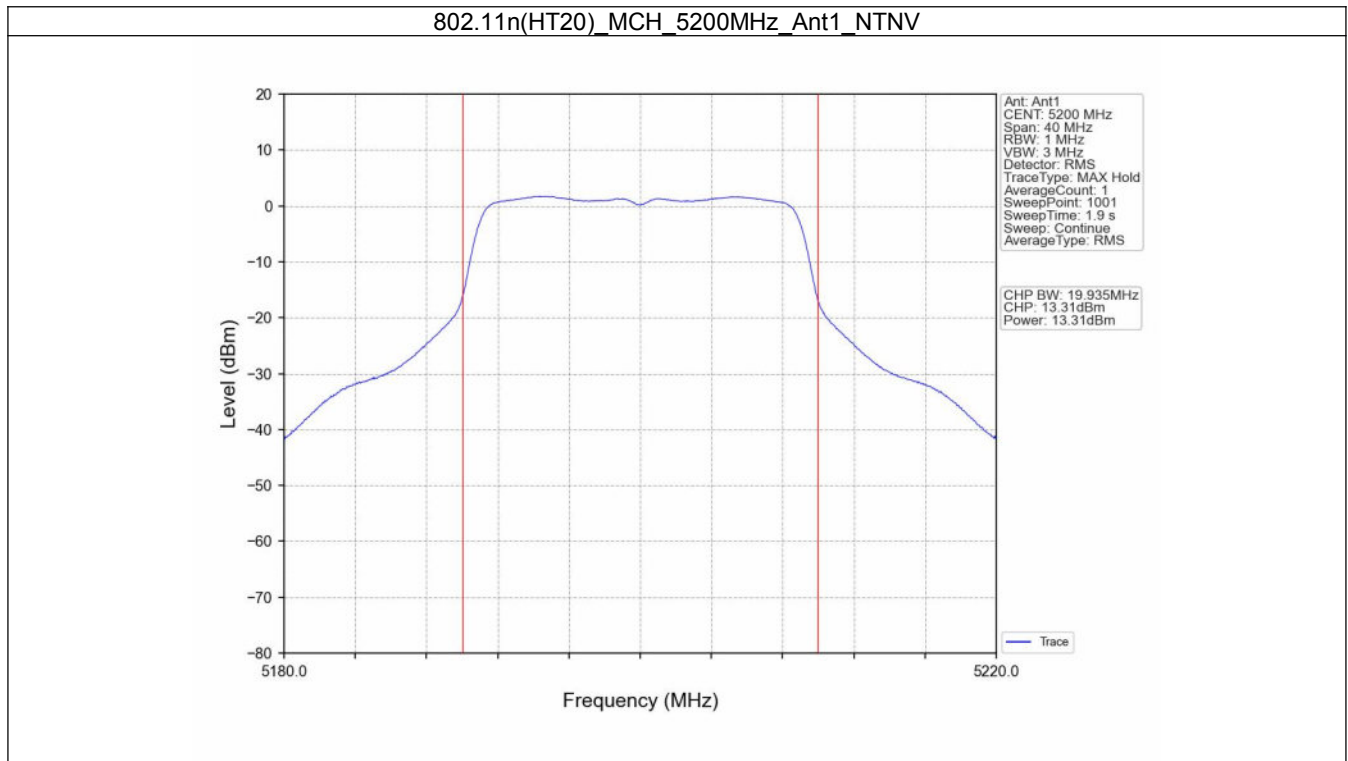
### 2.2.1 Power



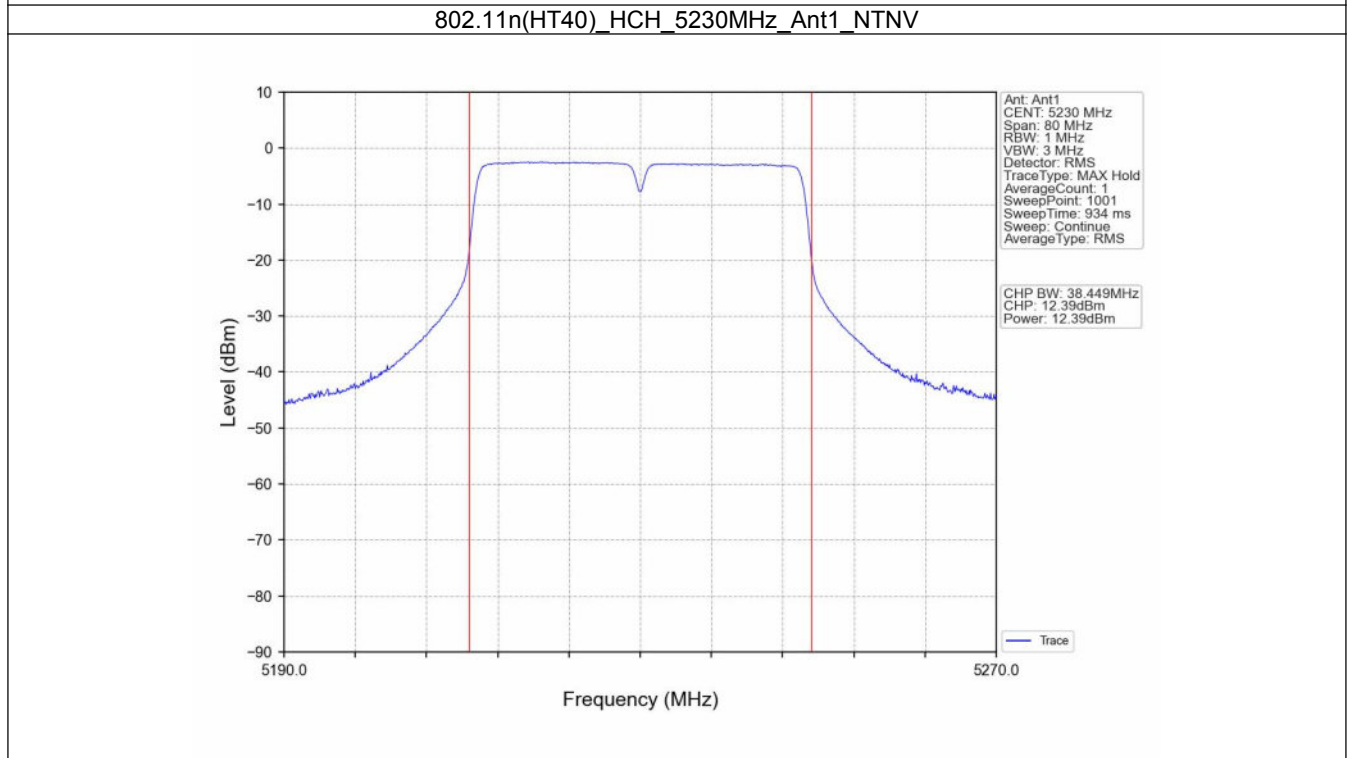
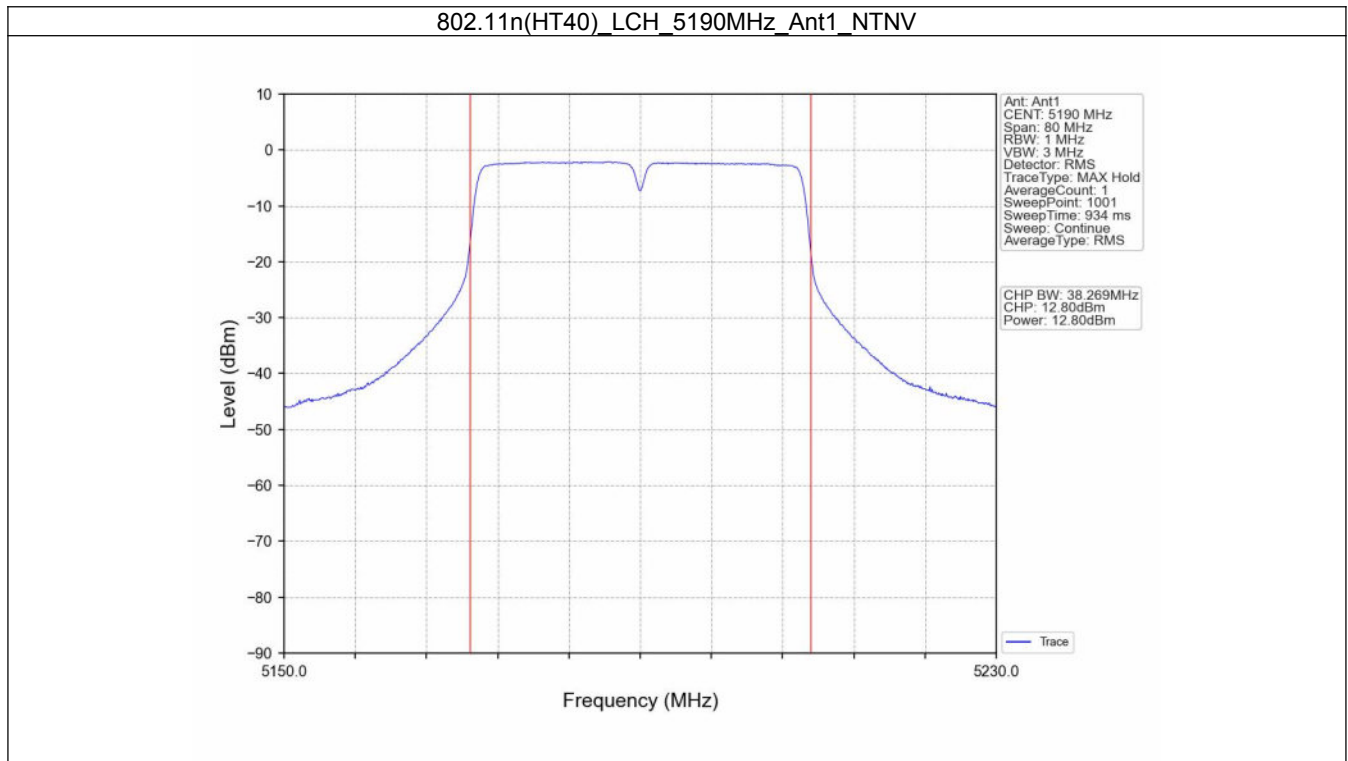
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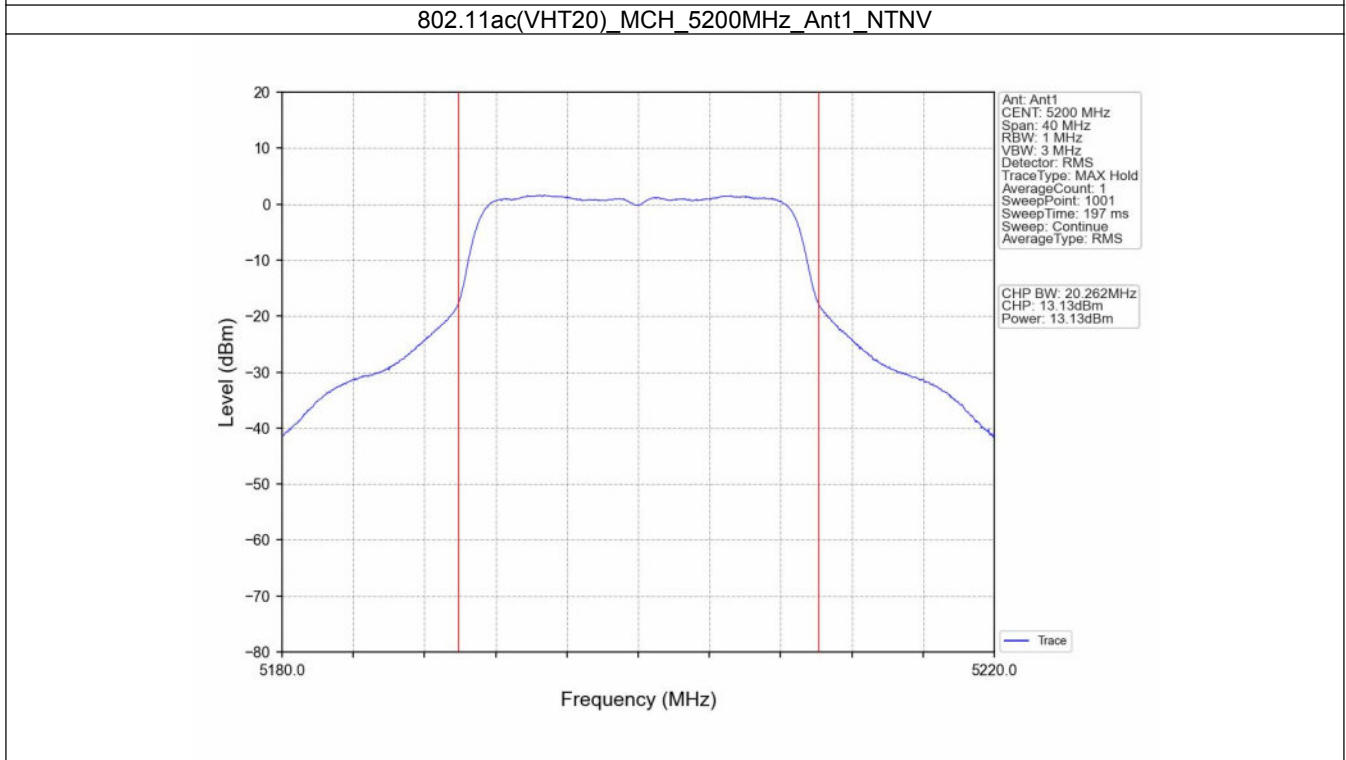
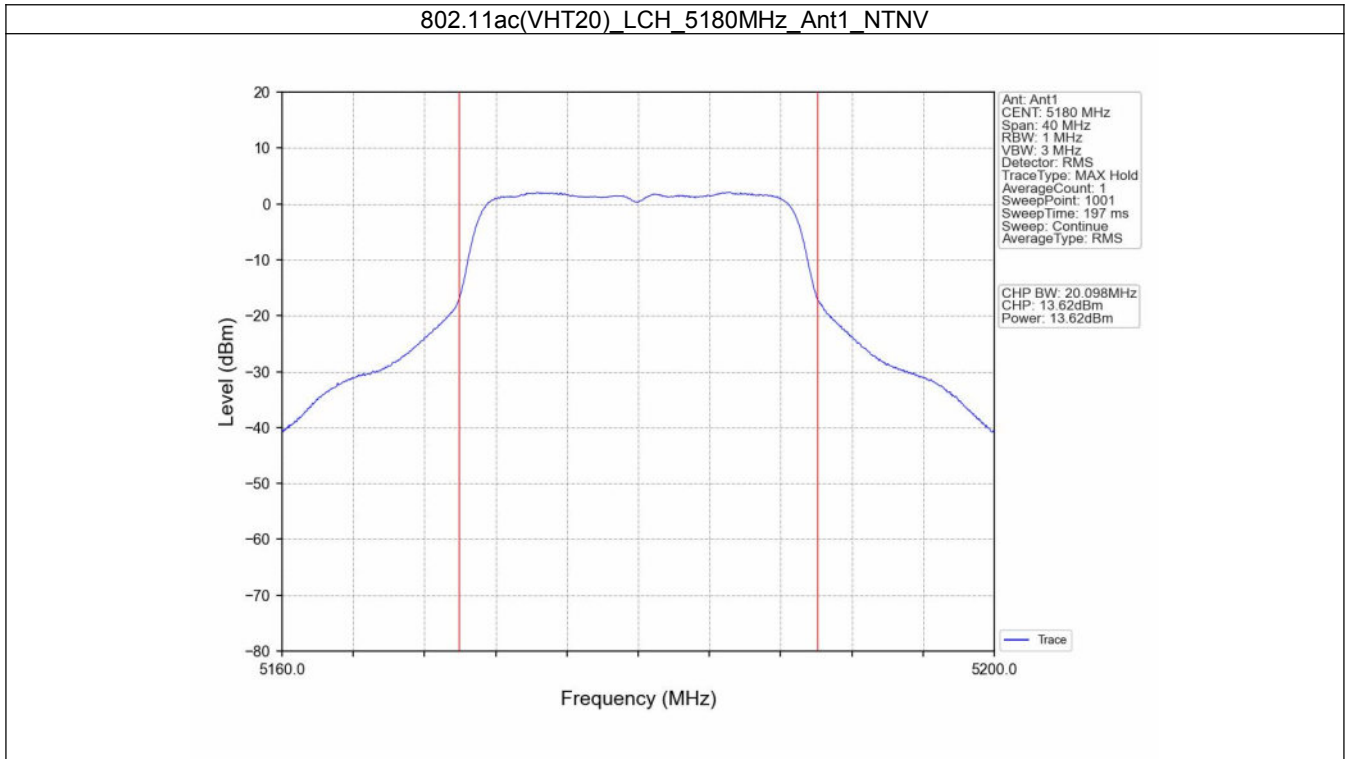
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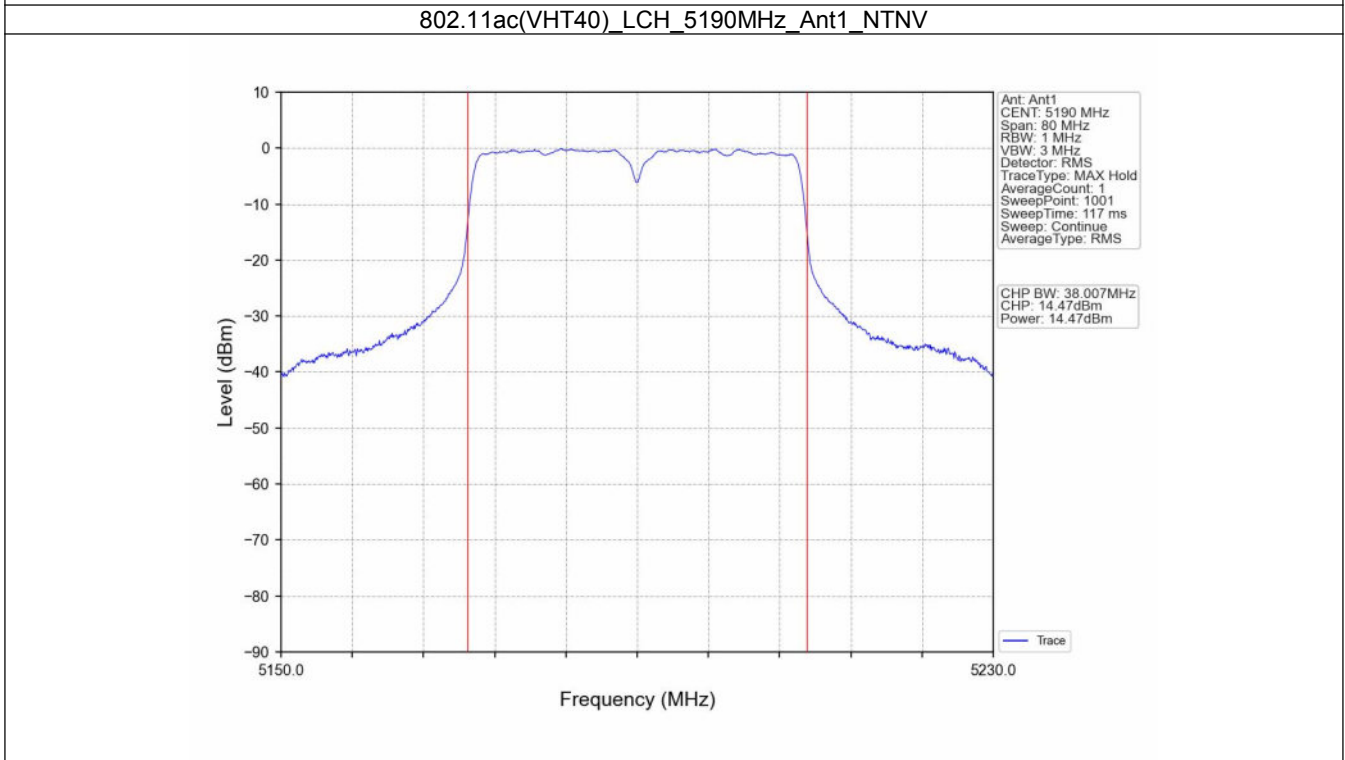
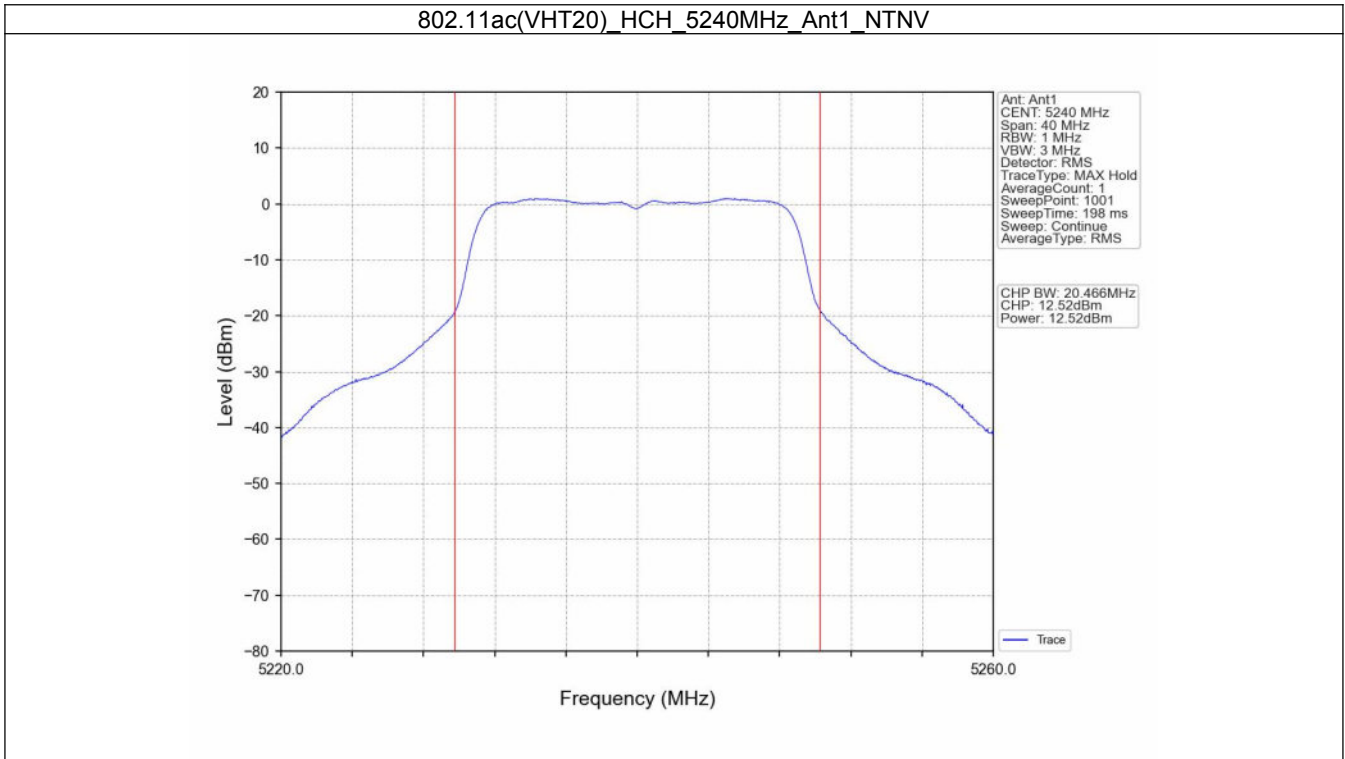
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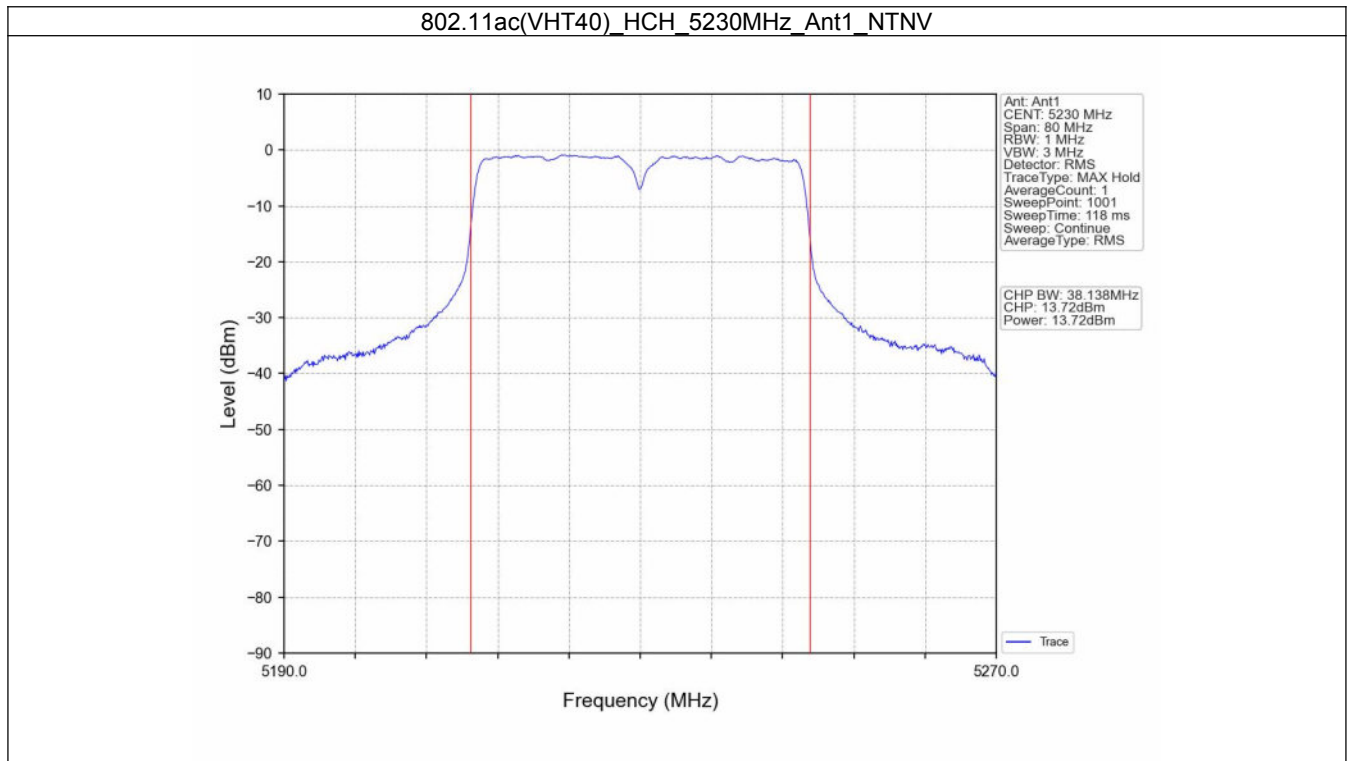
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FCC ID: 2ASC7TAB702





FCC ID: 2ASC7TAB702

### 3. Maximum Power Spectral Density

#### 3.1 Test Result

##### 3.1.1 PSD

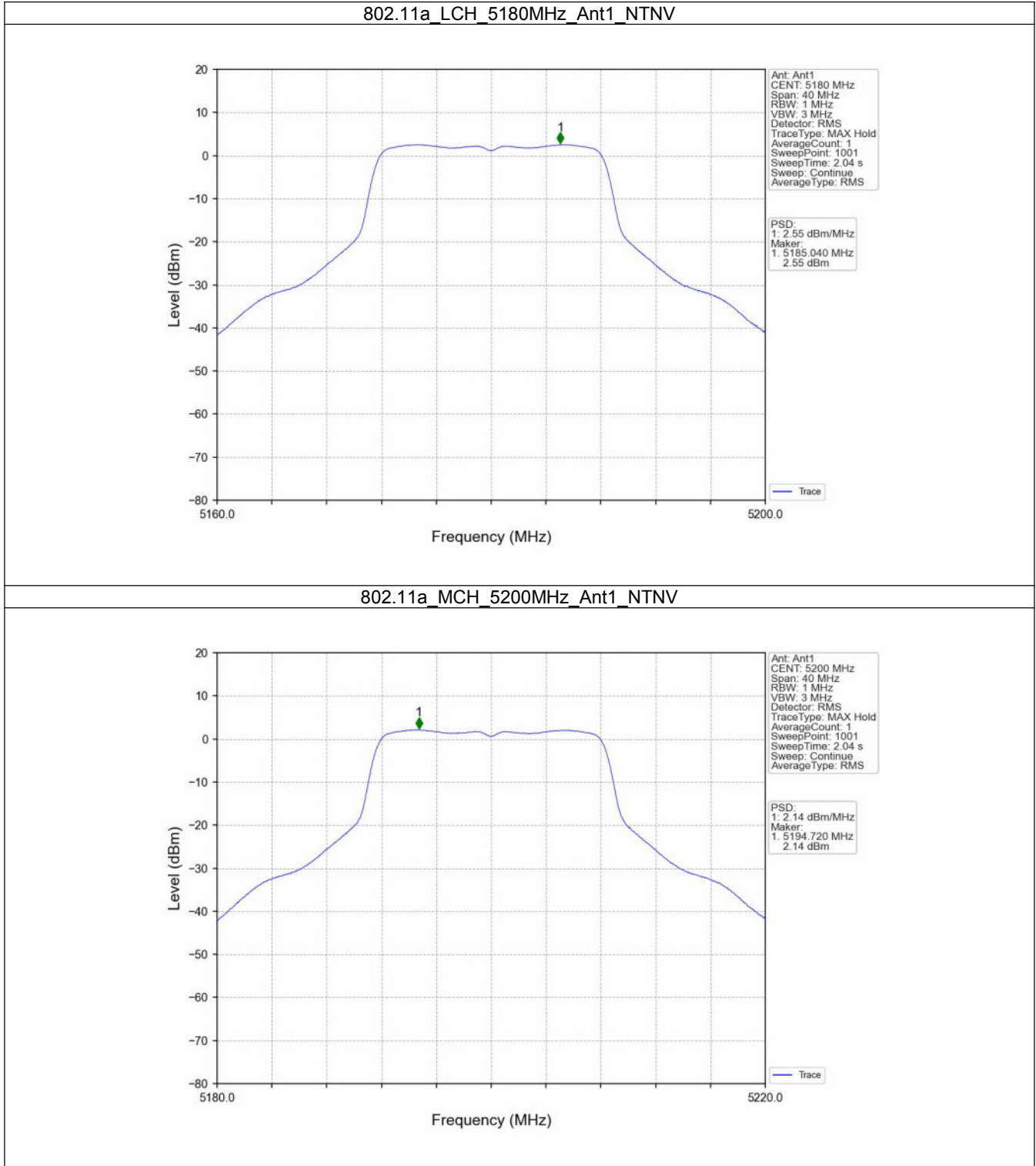
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	2.55	<=11	Pass
		5200	2.14	<=11	Pass
		5240	1.61	<=11	Pass
802.11n (HT20)	SISO	5180	1.91	<=11	Pass
		5200	1.68	<=11	Pass
		5240	1.18	<=11	Pass
802.11n (HT40)	SISO	5190	-2.16	<=11	Pass
		5230	-2.45	<=11	Pass
802.11ac (VHT20)	SISO	5180	1.98	<=11	Pass
		5200	1.56	<=11	Pass
		5240	1.03	<=11	Pass
802.11ac (VHT40)	SISO	5190	-0.10	<=11	Pass
		5230	-0.80	<=11	Pass

Note1: Antenna Gain: Ant1: 1.25dBi;

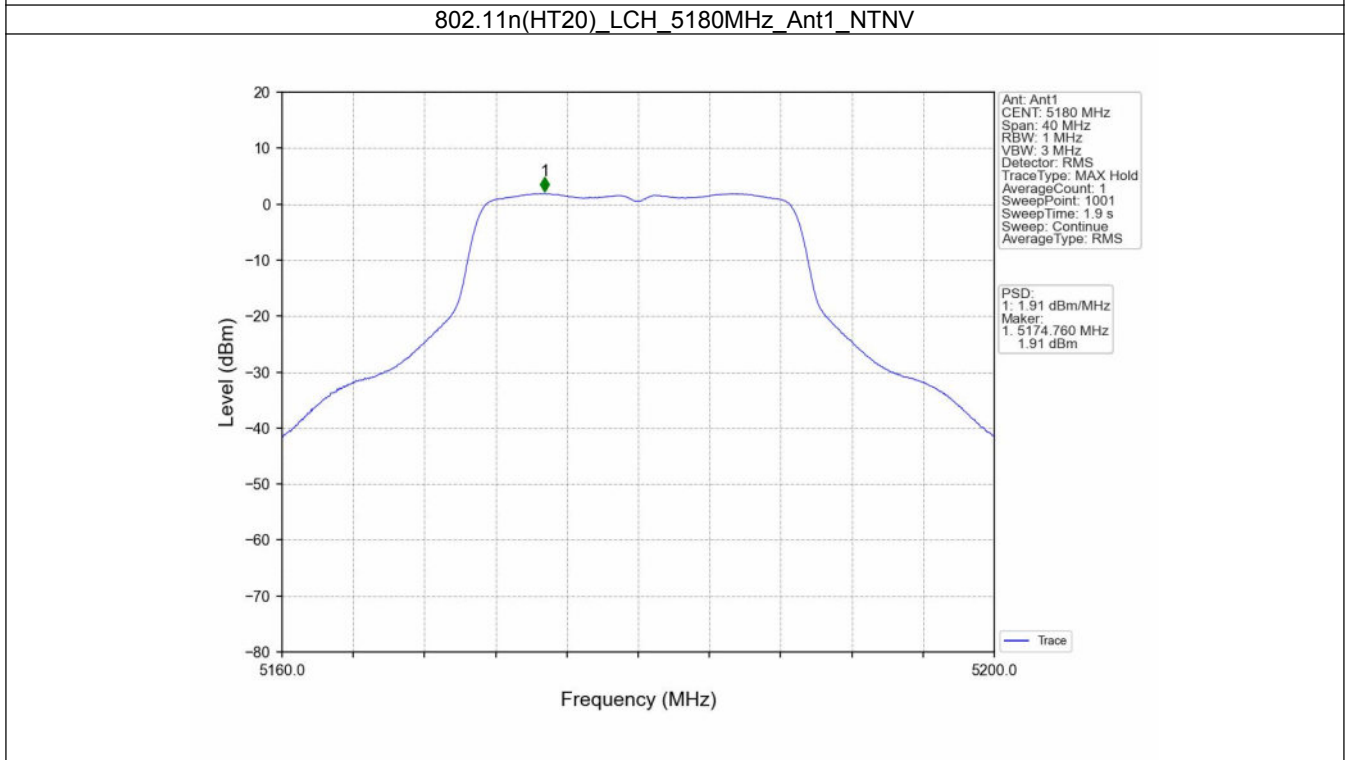
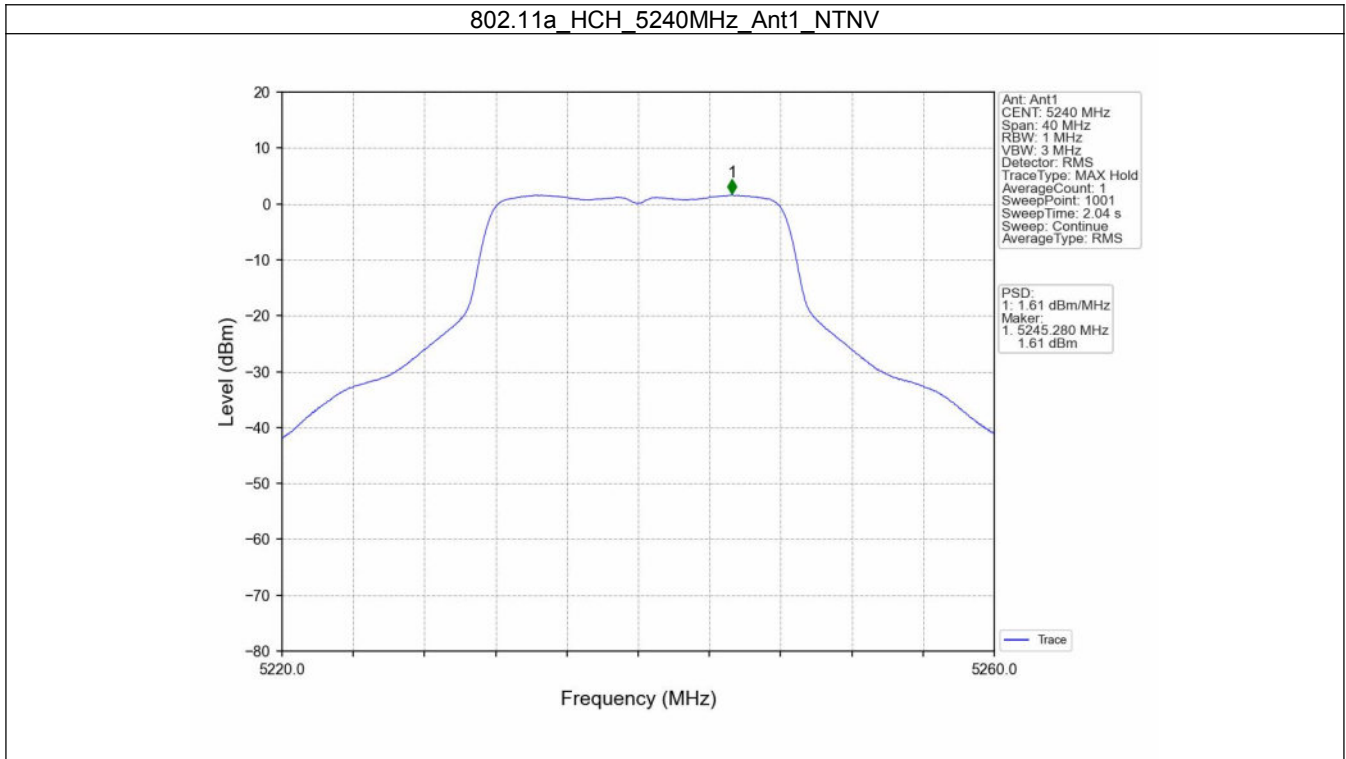
FCC ID: 2ASC7TAB702

### 3.2 Test Graph

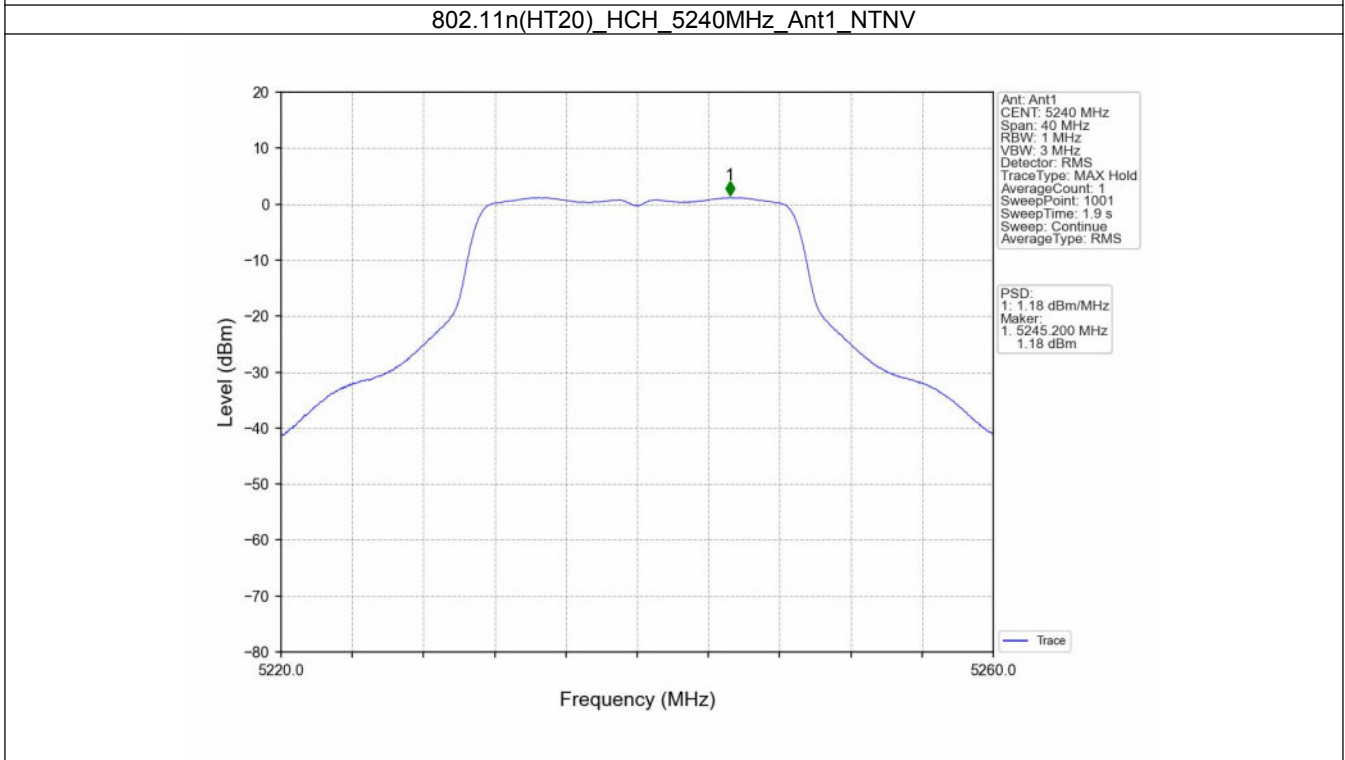
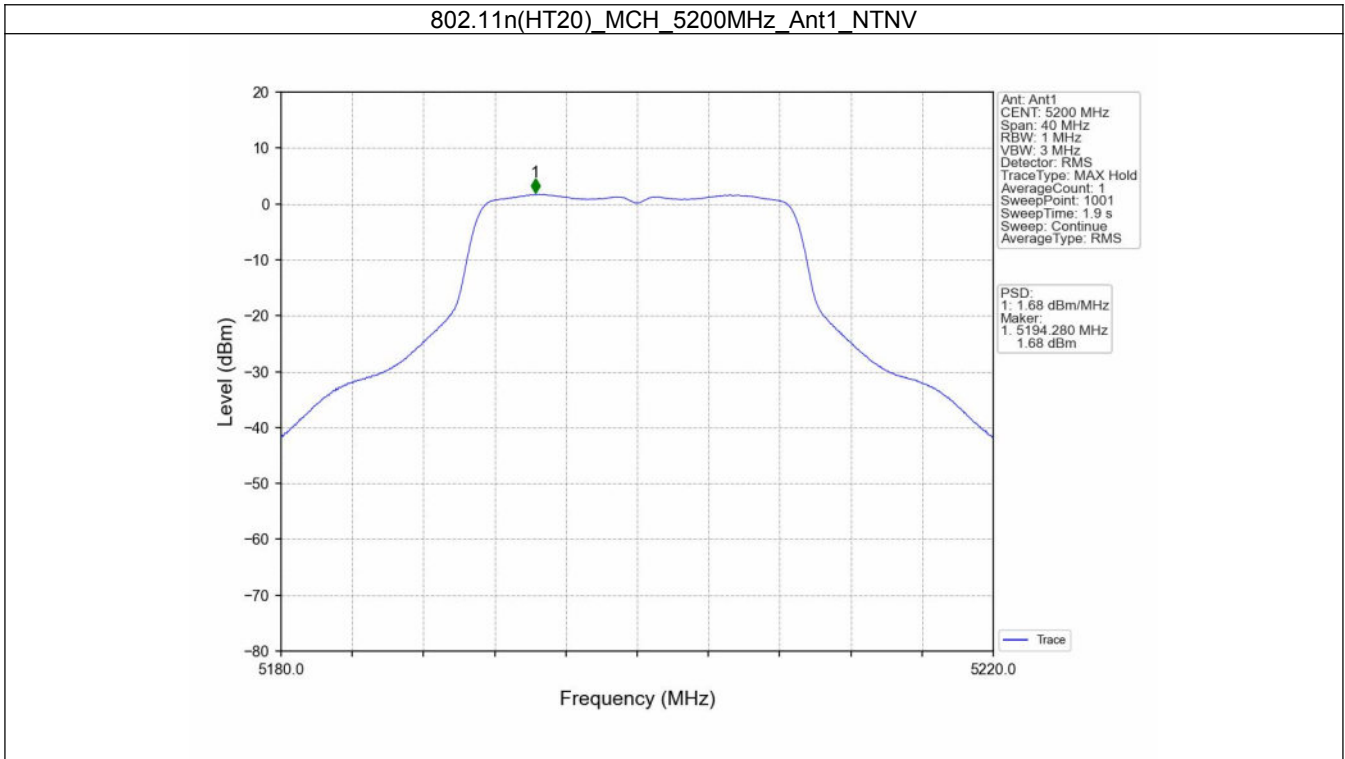
#### 3.2.1 PSD



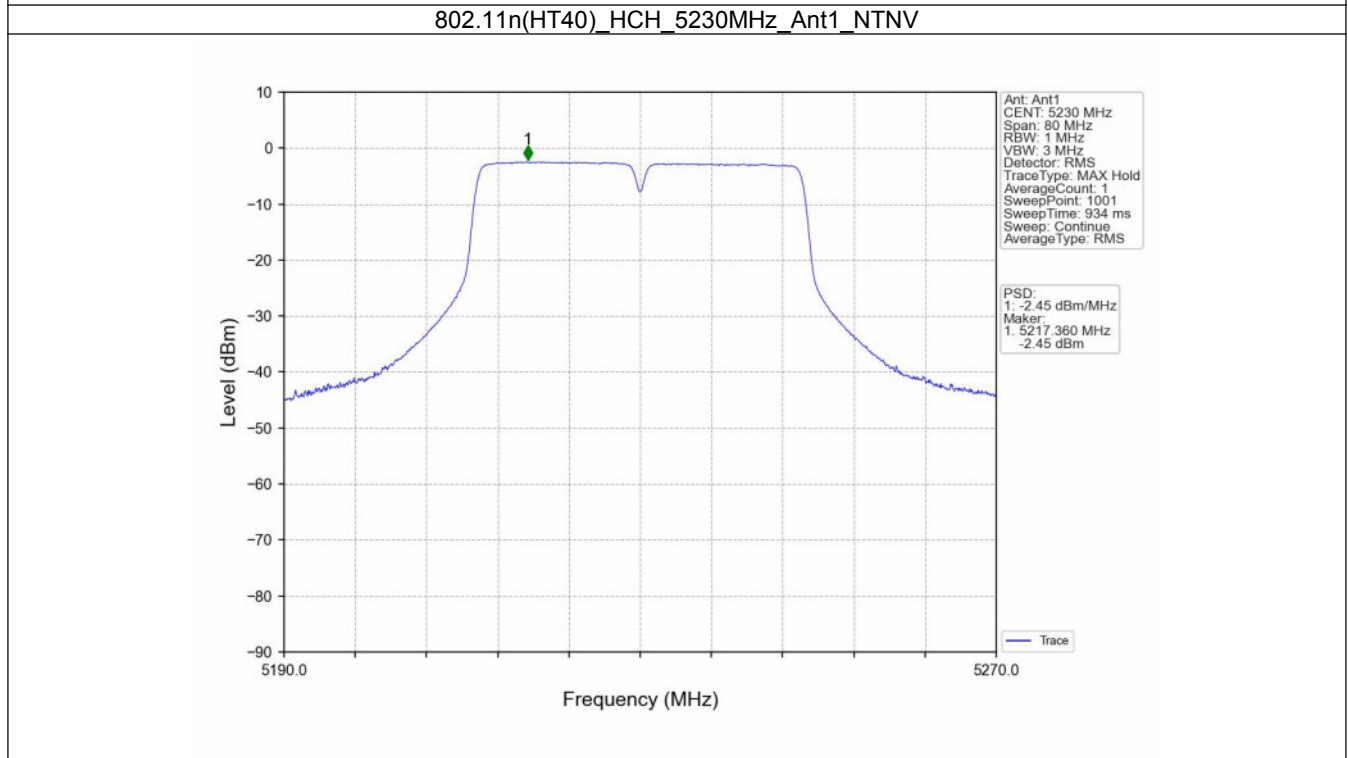
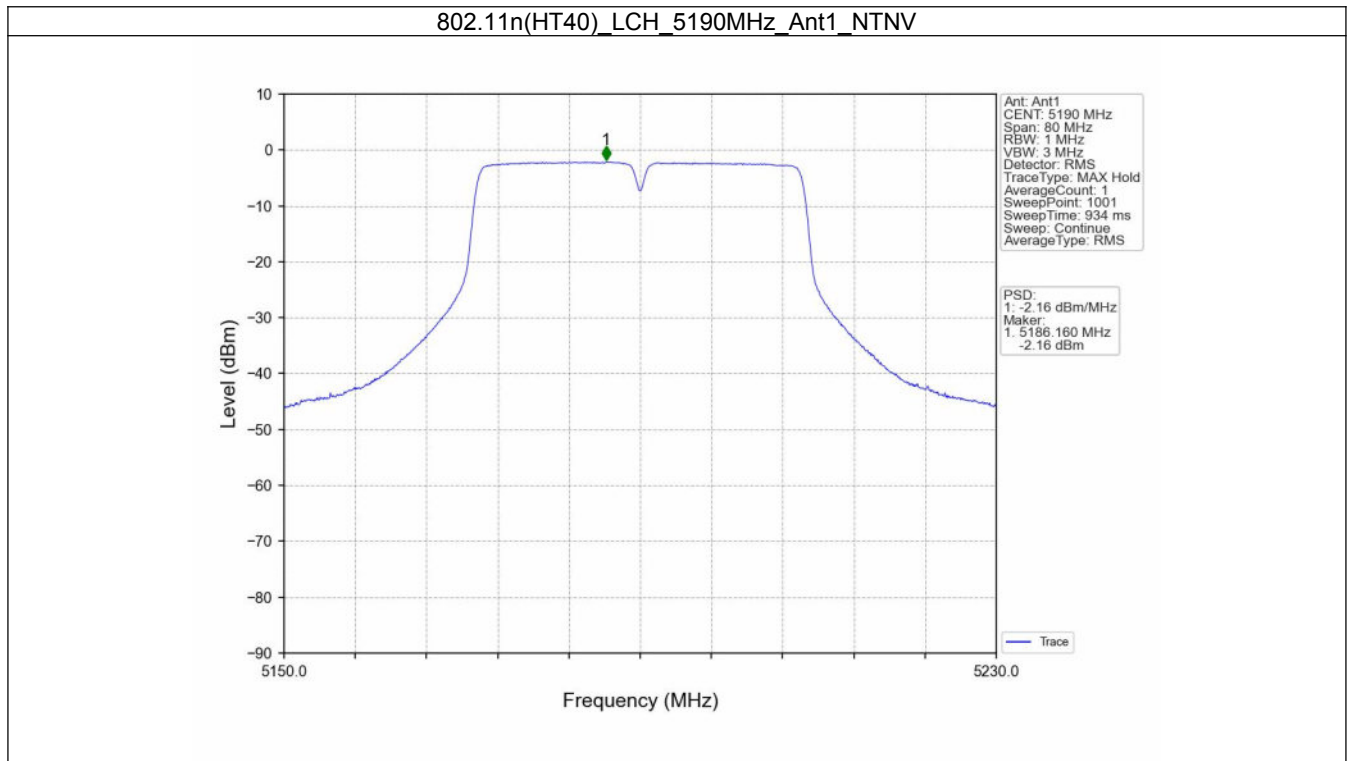
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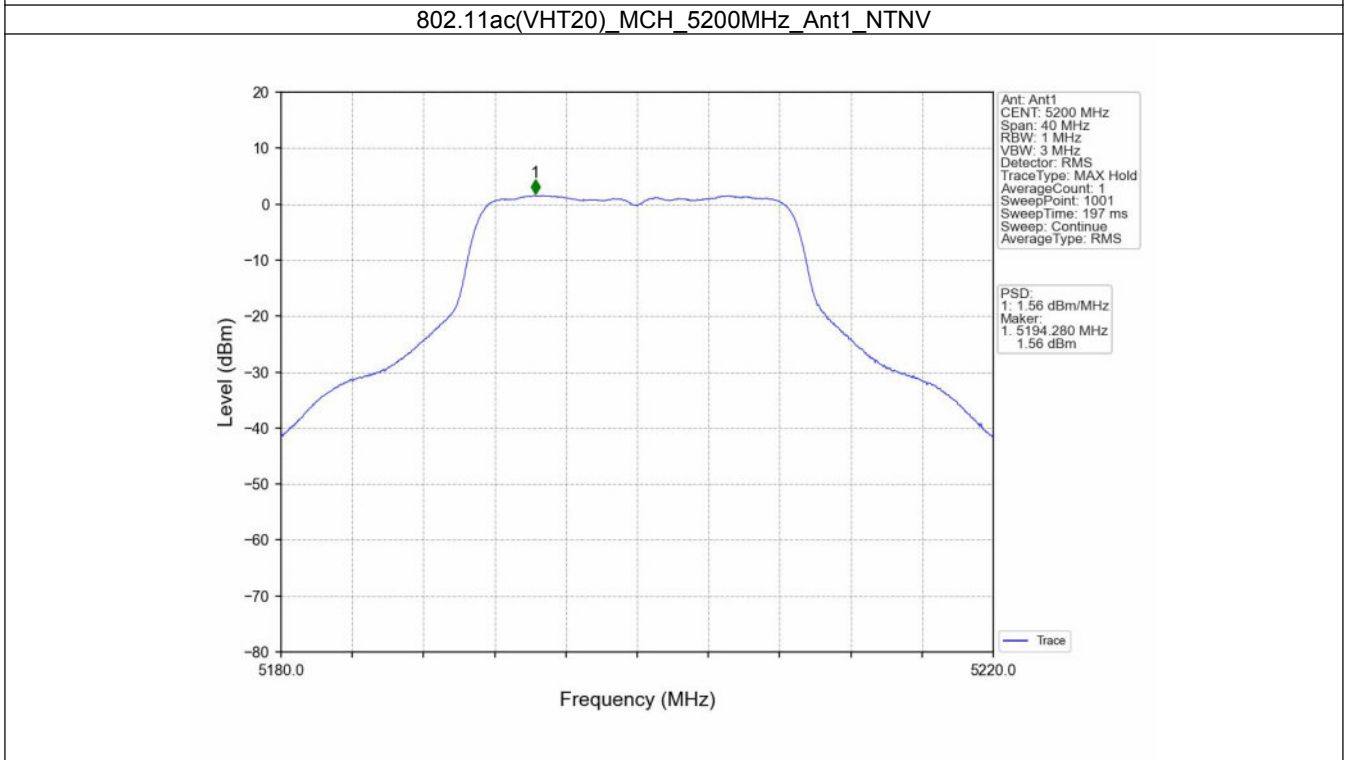
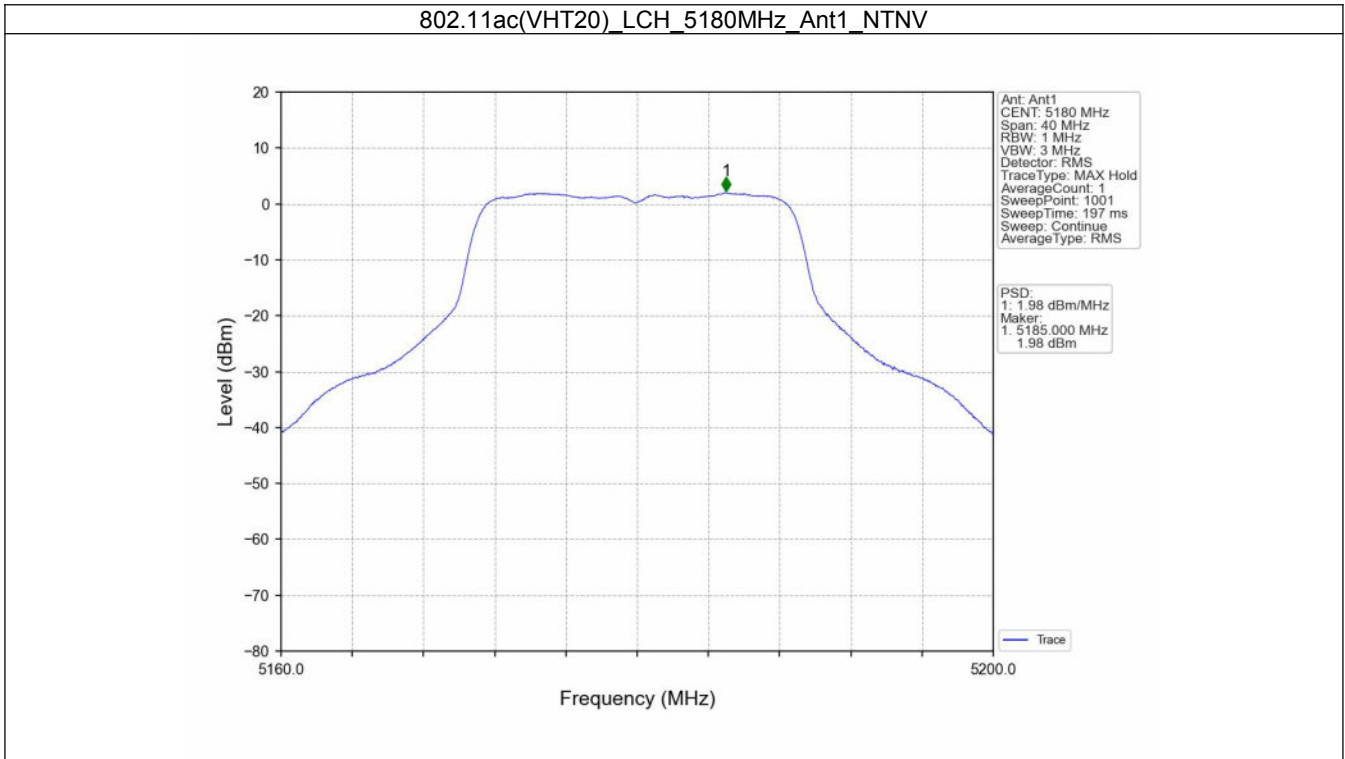
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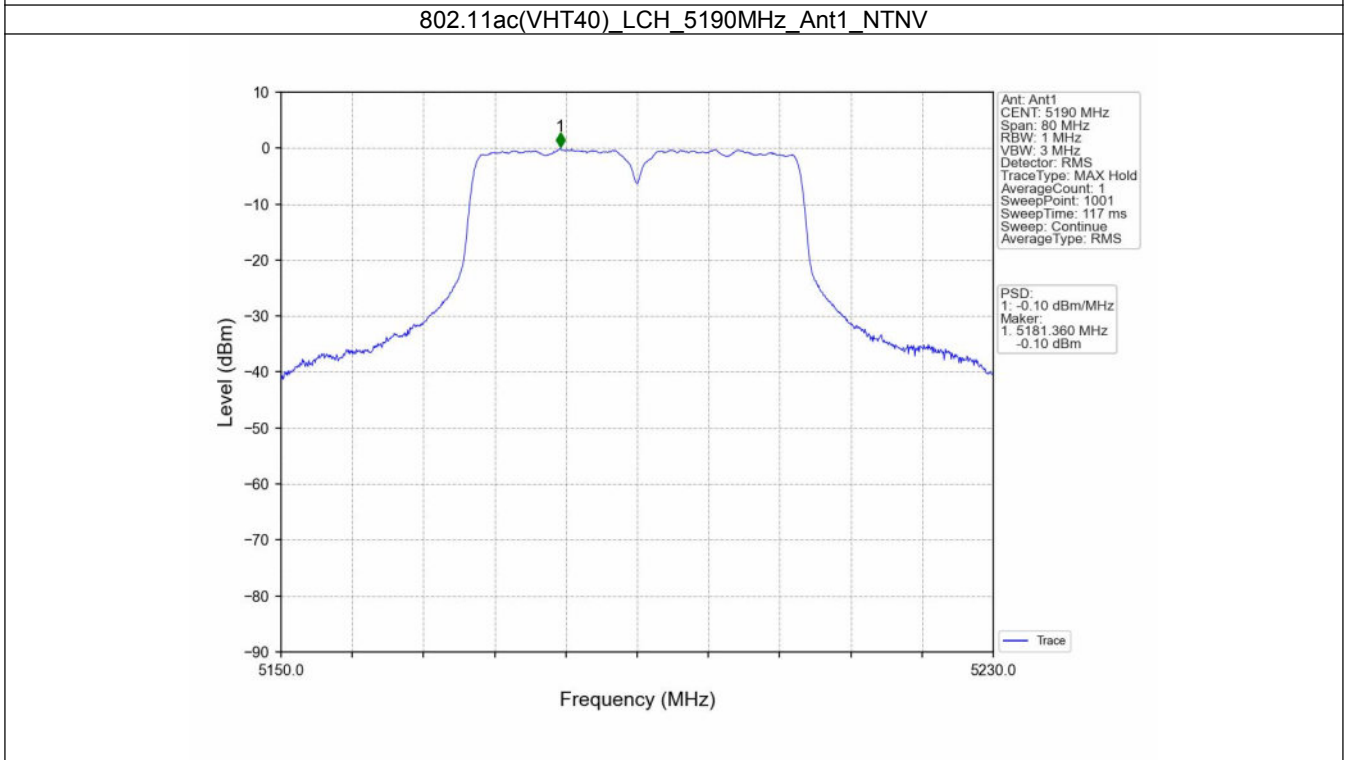
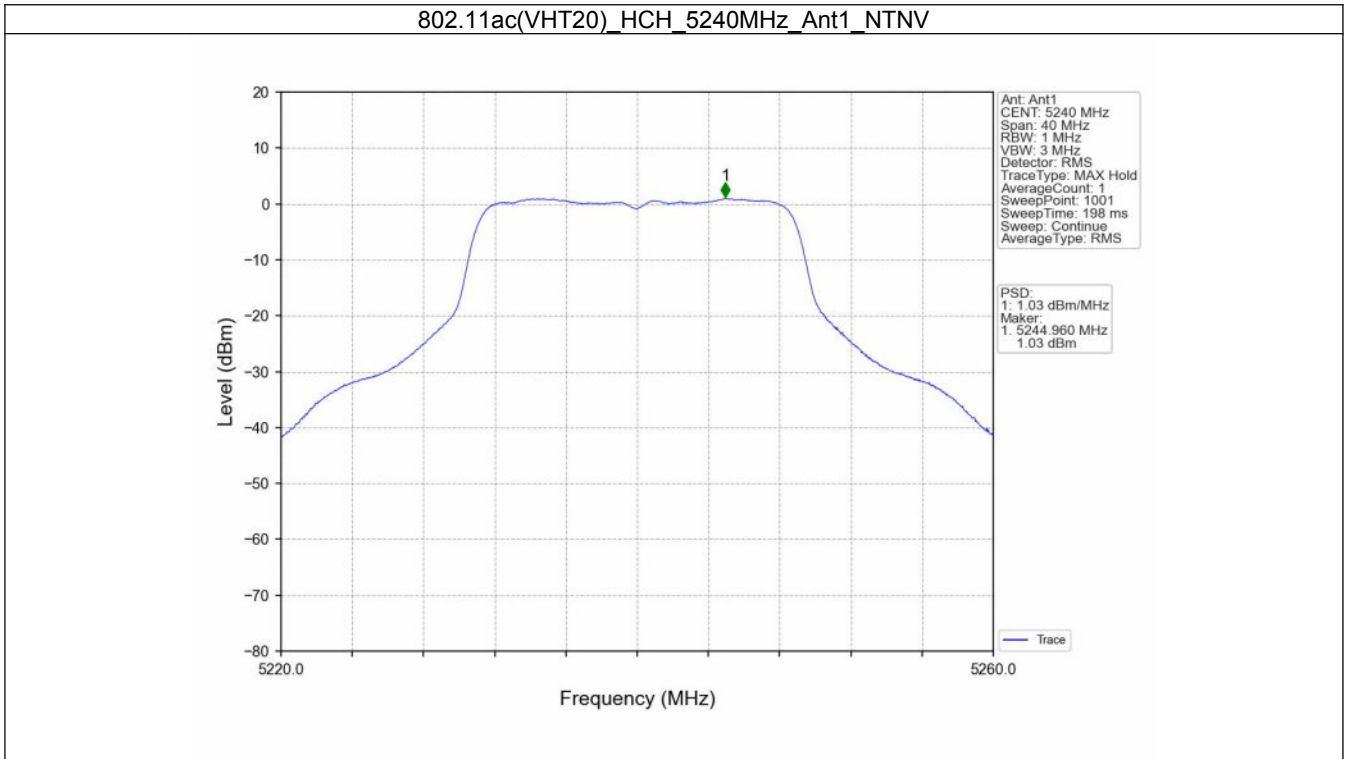
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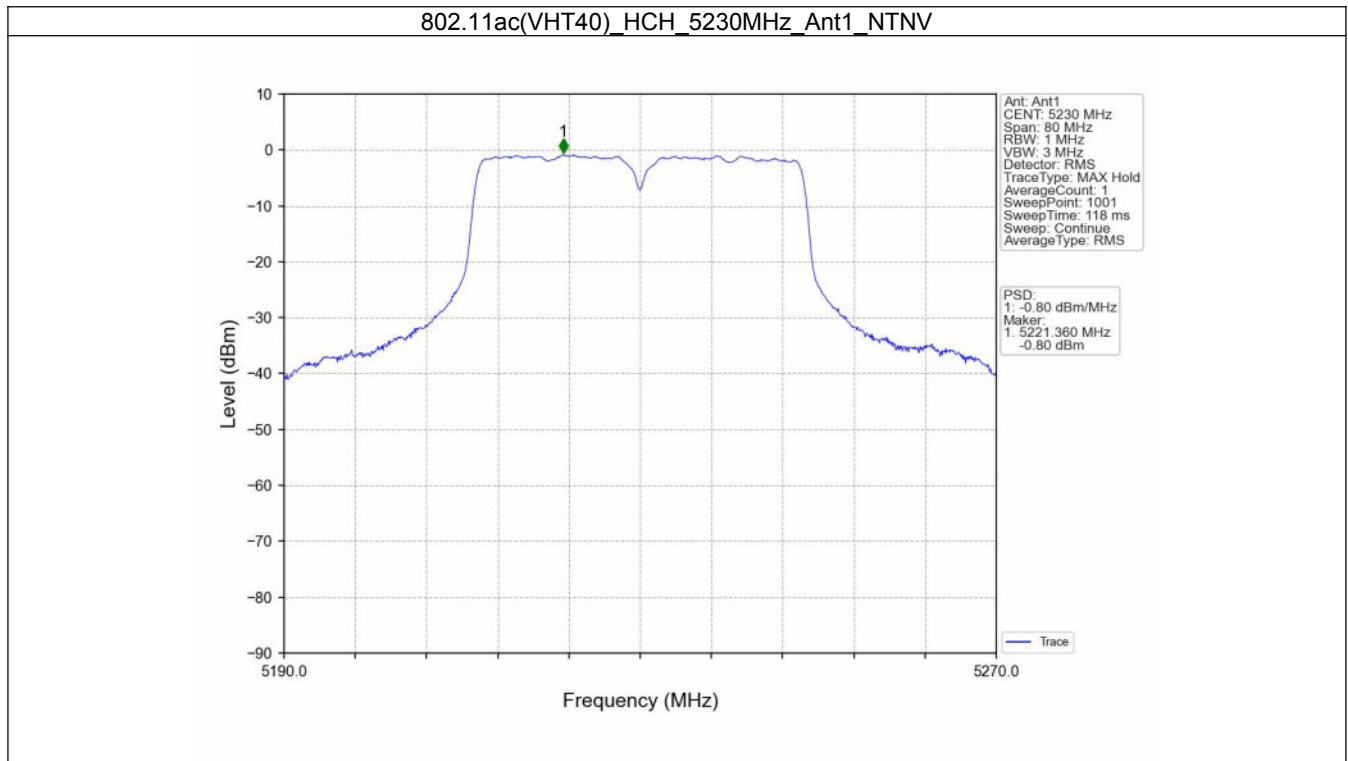
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## 4. Frequency Stability

### 4.1 Test Result

#### 4.1.1 Ant1

Mode	TX Type	Frequency (MHz)	Temperature (°C)	Ant1			Verdict		
				Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)			
Carrier Wave	SISO	5180	20	102	5179.983	5150 to 5250	Pass		
				120	5179.983	5150 to 5250	Pass		
				138	5179.983	5150 to 5250	Pass		
			5200	-30	120	5179.983	5150 to 5250	Pass	
					-20	120	5179.983	5150 to 5250	Pass
						-10	120	5179.983	5150 to 5250
				0			120	5179.983	5150 to 5250
					10		120	5179.983	5150 to 5250
						30	120	5179.983	5150 to 5250
		40		120			5179.983	5150 to 5250	Pass
				50	120		5179.983	5150 to 5250	Pass
					5240	20	102	5199.984	5150 to 5250
		120	5199.984				5150 to 5250	Pass	
		138	5199.984	5150 to 5250			Pass		
		5190	-30	120		5199.984	5150 to 5250	Pass	
				-20		120	5199.984	5150 to 5250	Pass
						-10	120	5199.985	5150 to 5250
			0				120	5199.984	5150 to 5250
				10			120	5199.985	5150 to 5250
						30	120	5199.985	5150 to 5250
			40		120		5199.984	5150 to 5250	Pass
				50	120		5199.985	5150 to 5250	Pass
					5230	20	102	5239.985	5150 to 5250
		120	5239.985				5150 to 5250	Pass	
		138	5239.985	5150 to 5250			Pass		
		5180	-30	120		5239.984	5150 to 5250	Pass	
				-20		120	5239.985	5150 to 5250	Pass
						-10	120	5239.985	5150 to 5250
			0				120	5239.985	5150 to 5250
				10			120	5239.985	5150 to 5250
						30	120	5239.985	5150 to 5250
			40		120		5239.985	5150 to 5250	Pass
				50	120		5239.985	5150 to 5250	Pass
					5190	20	102	5189.986	5150 to 5250
		120	5189.986				5150 to 5250	Pass	
		138	5189.986	5150 to 5250			Pass		
		5230	-30	120		5189.986	5150 to 5250	Pass	
				-20		120	5189.986	5150 to 5250	Pass
						-10	120	5189.986	5150 to 5250
			0				120	5189.986	5150 to 5250
				10			120	5189.986	5150 to 5250
						30	120	5189.986	5150 to 5250
			40		120		5189.987	5150 to 5250	Pass
				50	120		5189.986	5150 to 5250	Pass
					20	102	5229.986	5150 to 5250	Pass
120	5229.987	5150 to 5250	Pass						
138	5229.987	5150 to 5250	Pass						

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			-30	120	5229.987	5150 to 5250	Pass
			-20	120	5229.987	5150 to 5250	Pass
			-10	120	5229.987	5150 to 5250	Pass
			0	120	5229.987	5150 to 5250	Pass
			10	120	5229.987	5150 to 5250	Pass
			30	120	5229.987	5150 to 5250	Pass
			40	120	5229.987	5150 to 5250	Pass
			50	120	5229.987	5150 to 5250	Pass