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Annex for BLE

Test Report No.: CTL2412133013-WF01

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1. Duty Cycle

1.1 Test Result

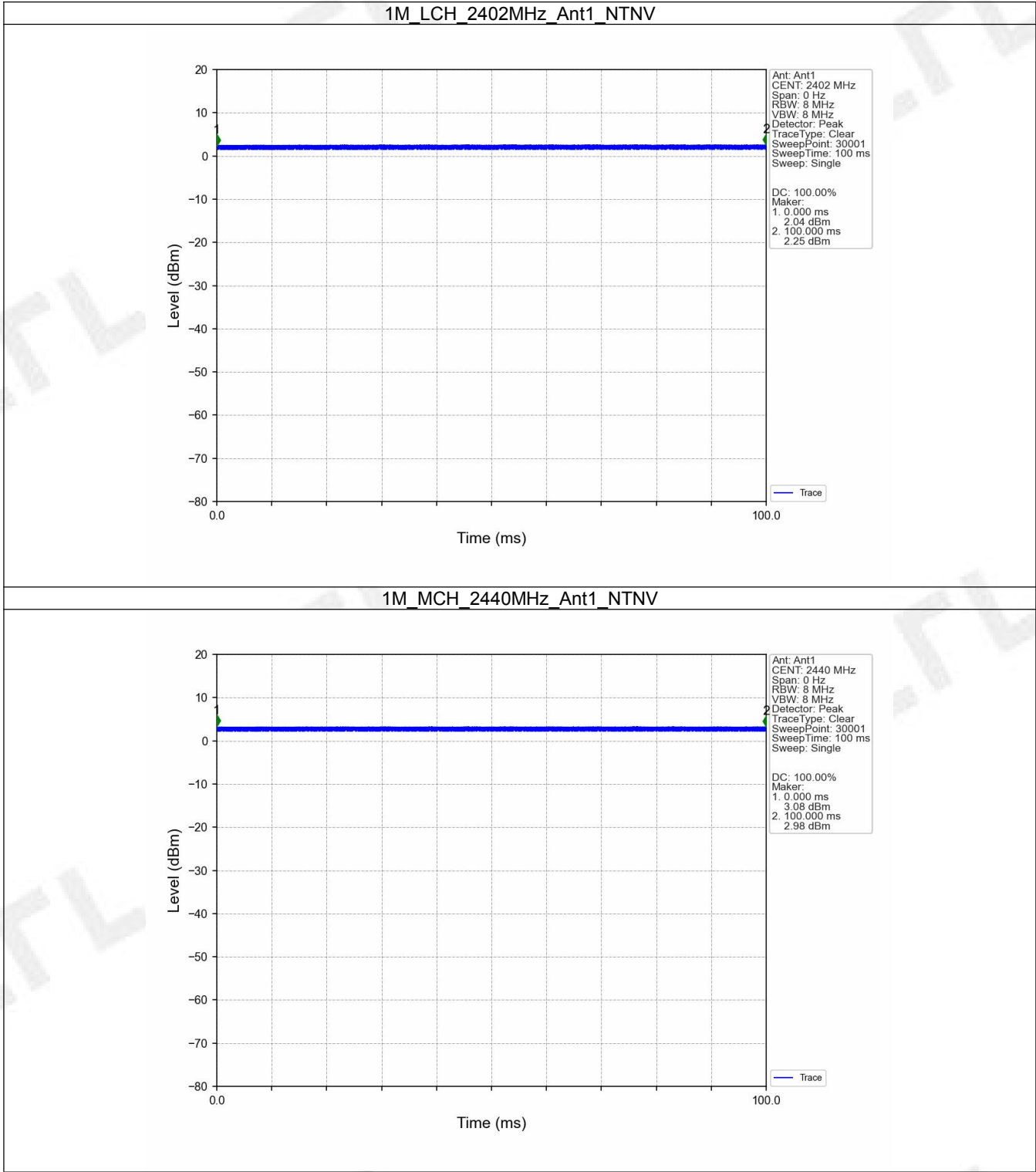
1.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
1M	SISO	2402	100.000	100.000	100.00	0.00	0.00
		2440	100.000	100.000	100.00	0.00	0.00
		2480	100.000	100.000	100.00	0.00	0.00
2M	SISO	2402	100.000	100.000	100.00	0.00	0.00
		2440	100.000	100.000	100.00	0.00	0.00
		2480	100.000	100.000	100.00	0.00	0.00

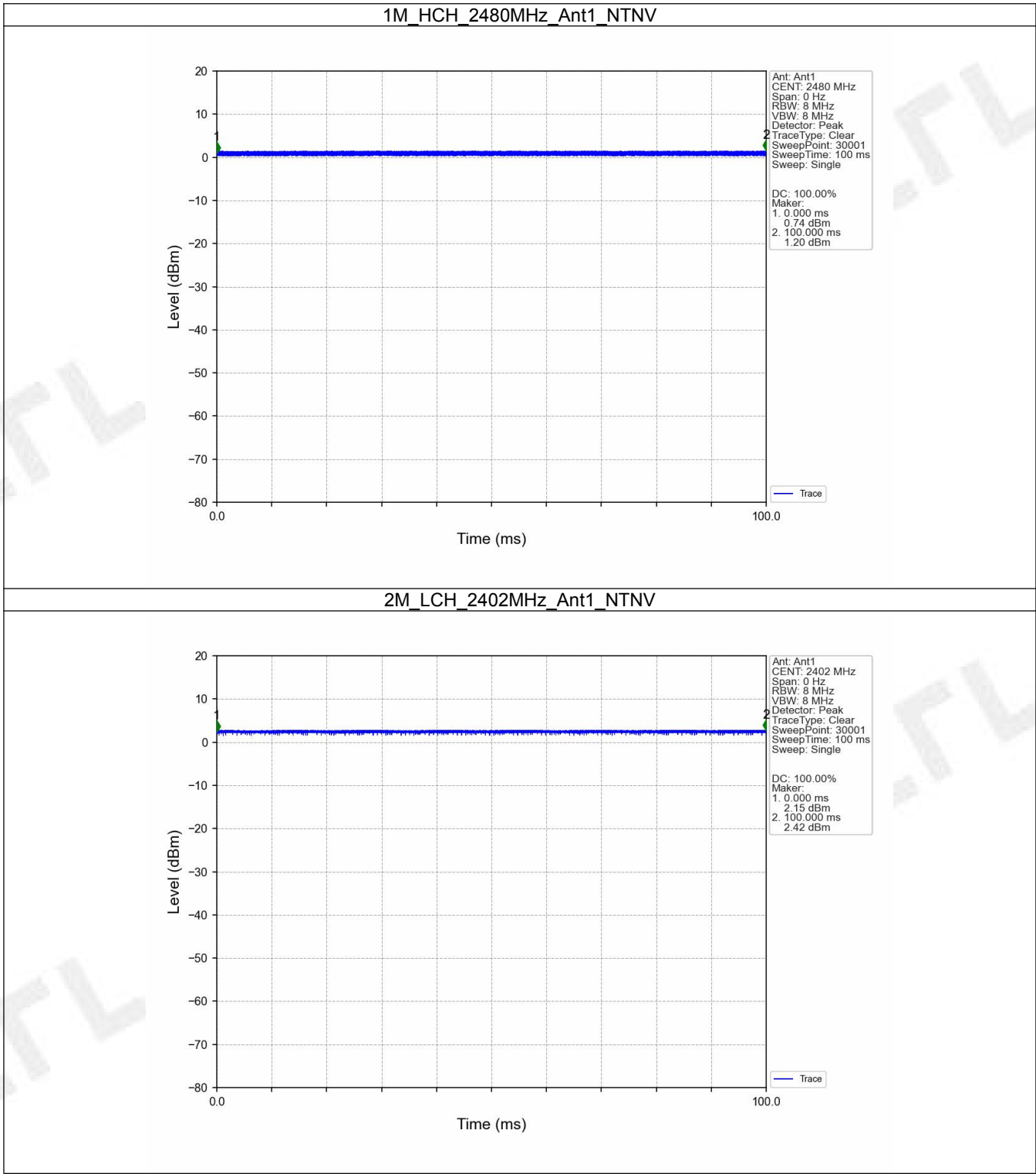
FCCID: 2AN5D-N1804

1.2 Test Graph

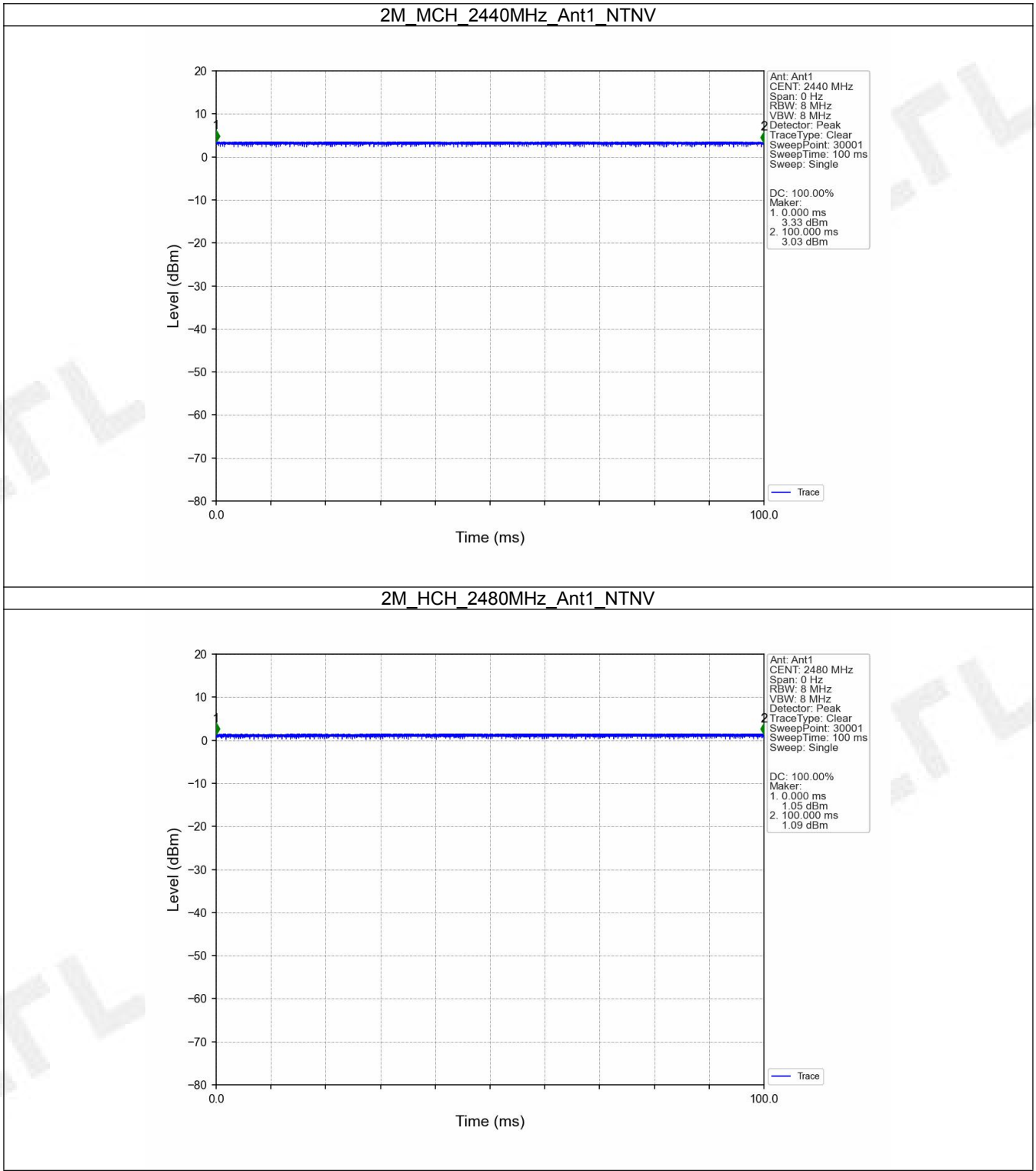
1.2.1 Ant1



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2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	1.034	/	Pass
		2440	1	1.035	/	Pass
		2480	1	1.036	/	Pass
2M	SISO	2402	1	2.057	/	Pass
		2440	1	2.058	/	Pass
		2480	1	2.058	/	Pass

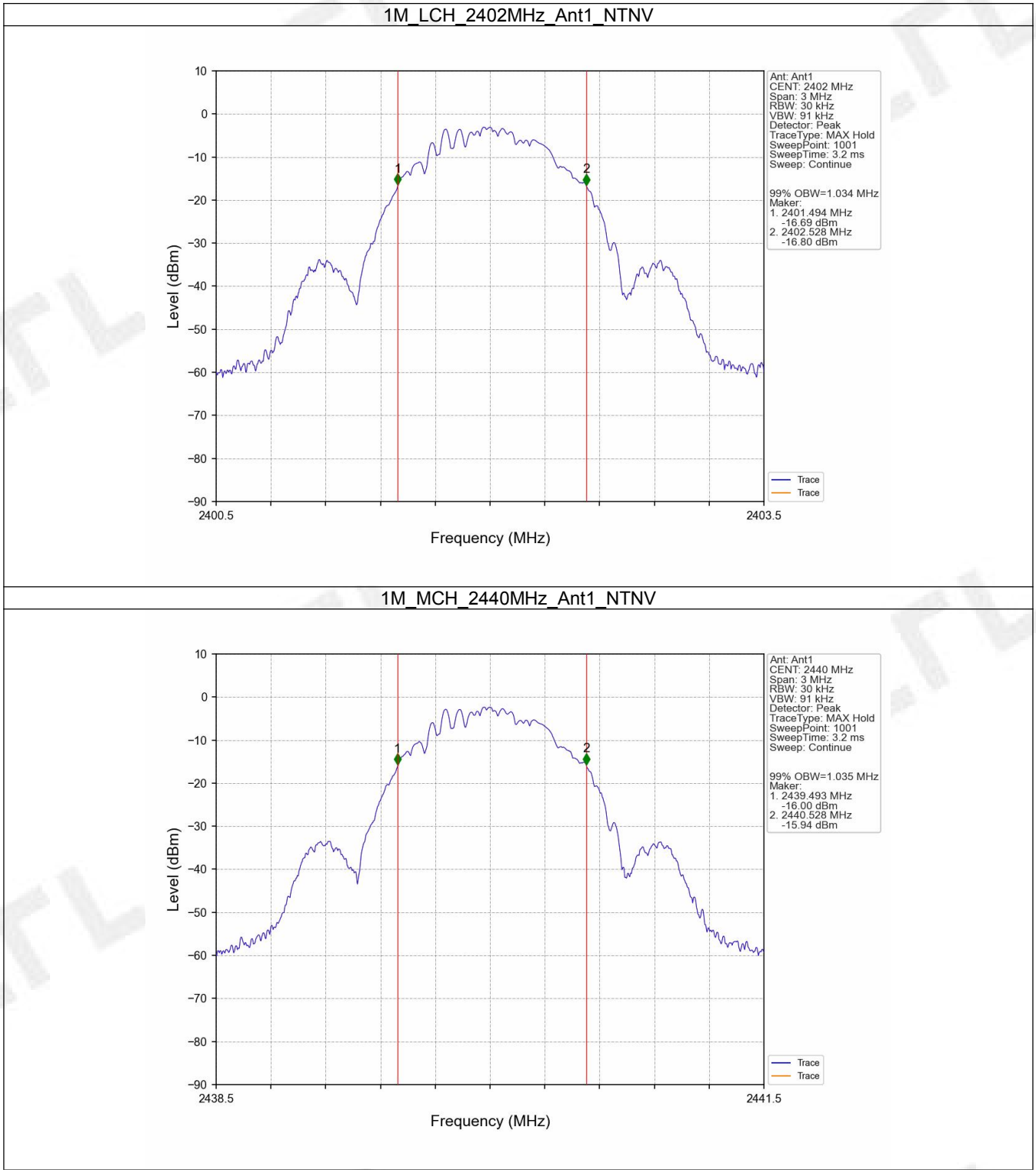
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	0.669	≥ 0.5	Pass
		2440	1	0.670	≥ 0.5	Pass
		2480	1	0.667	≥ 0.5	Pass
2M	SISO	2402	1	1.354	≥ 0.5	Pass
		2440	1	1.357	≥ 0.5	Pass
		2480	1	1.354	≥ 0.5	Pass

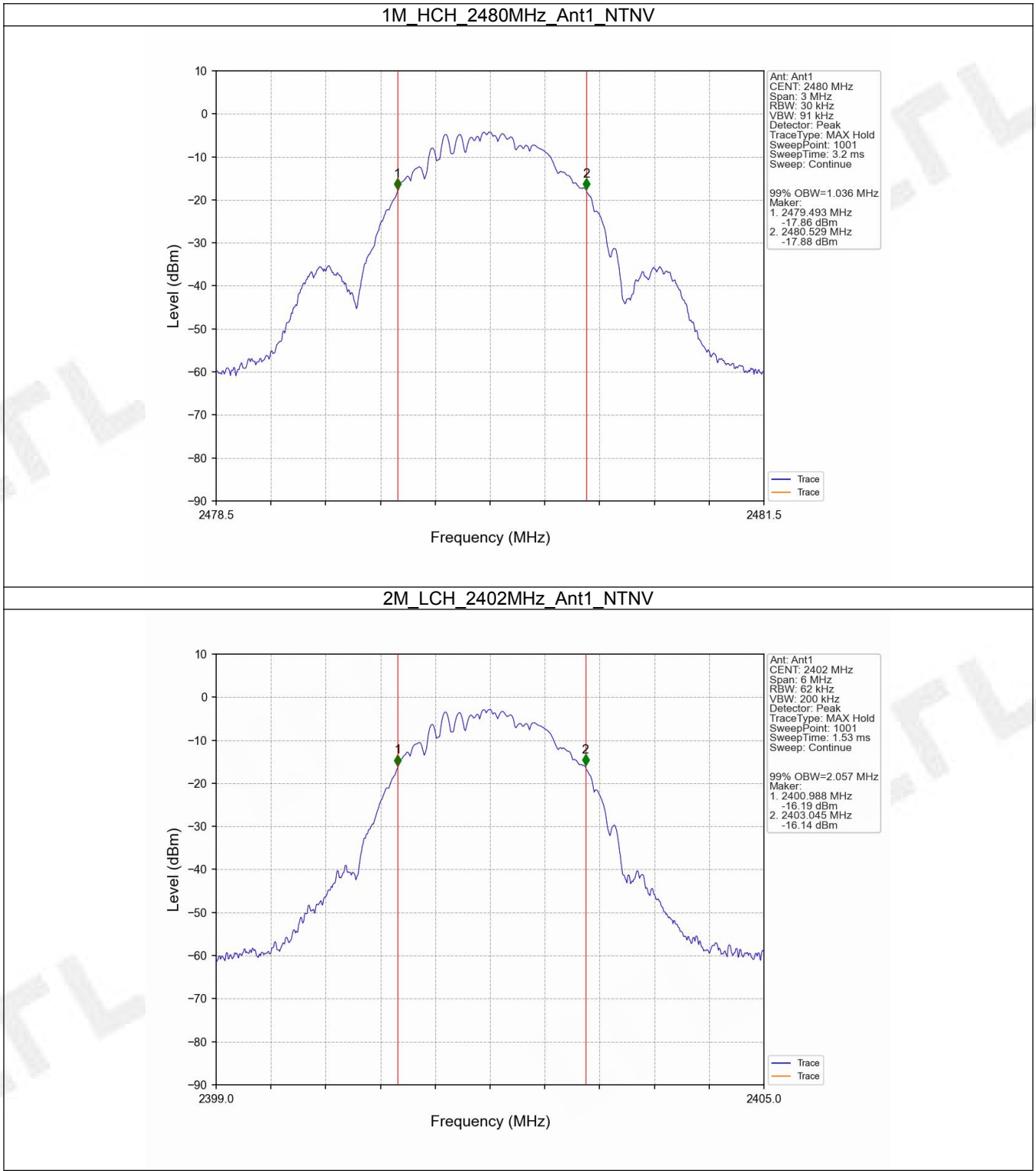
FCCID: 2AN5D-N1804

2.2 Test Graph

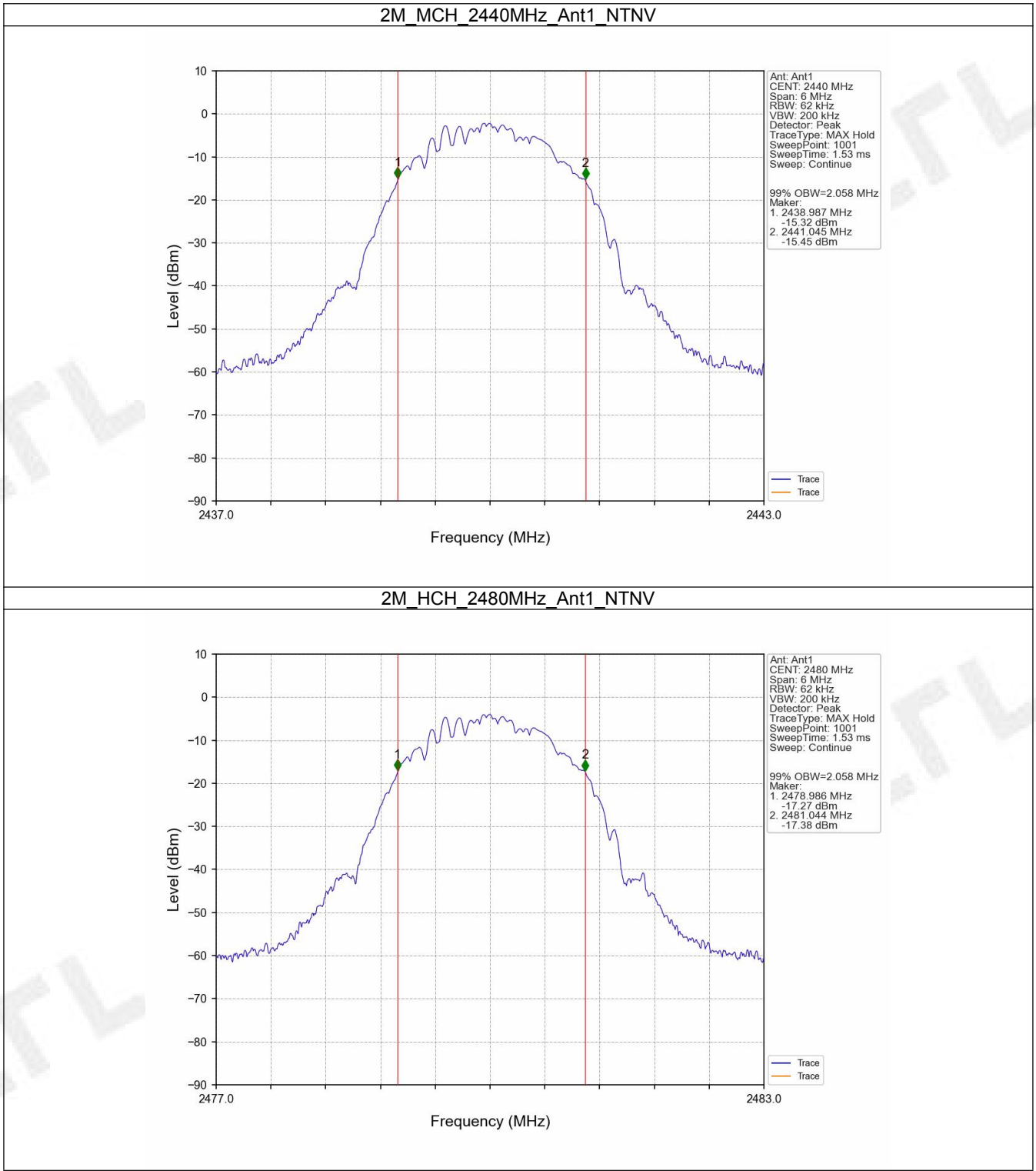
2.2.1 OBW



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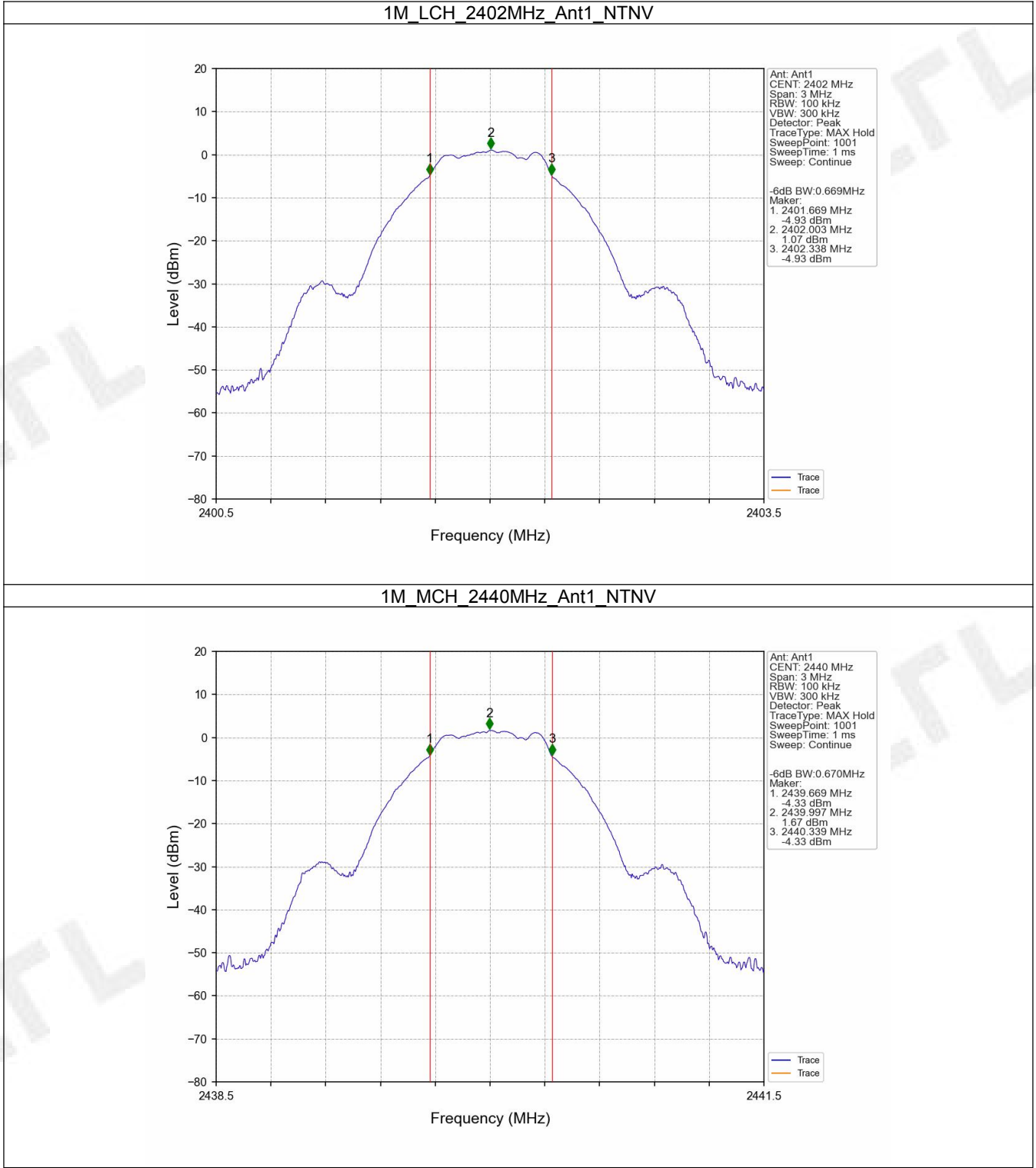


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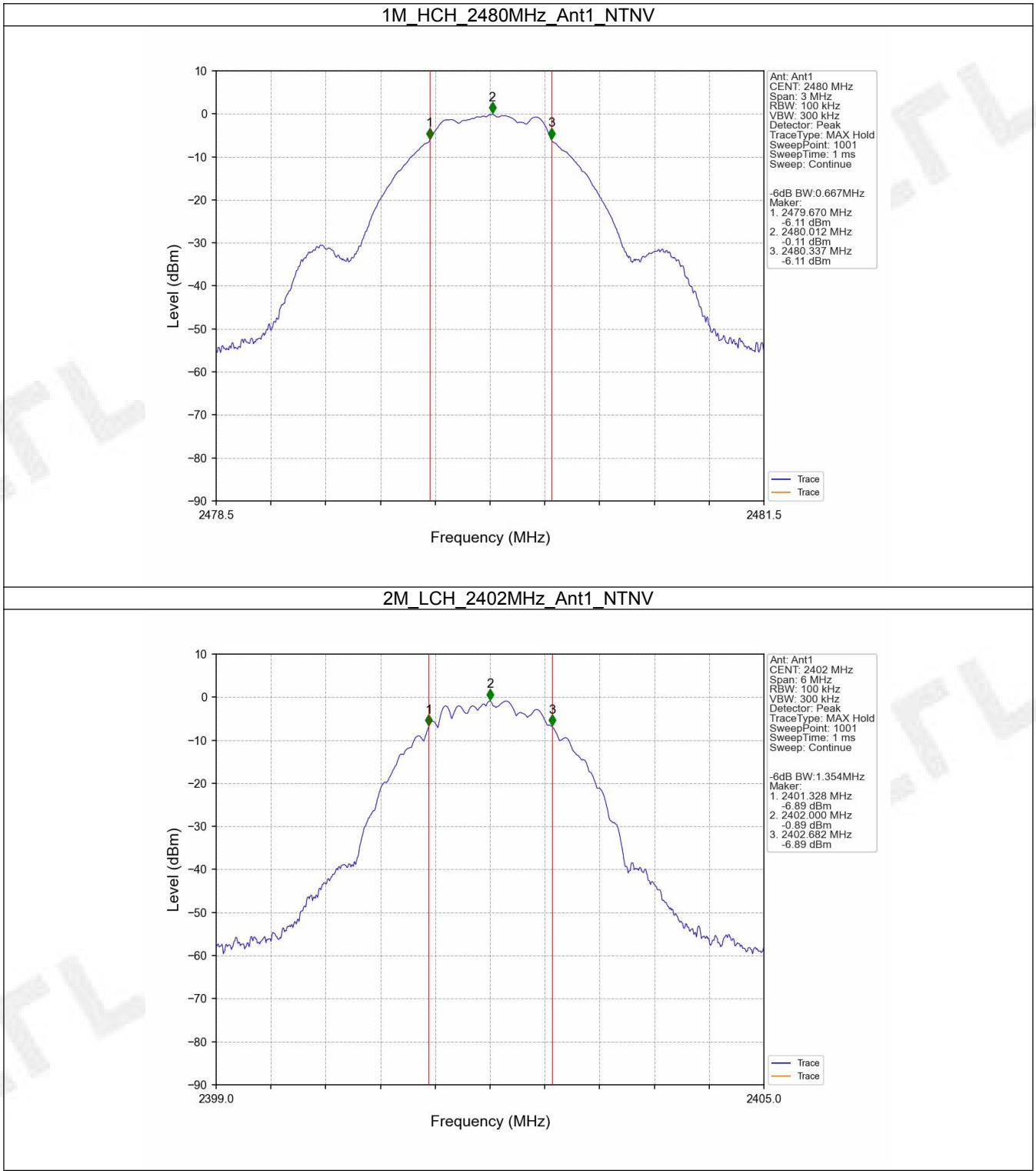


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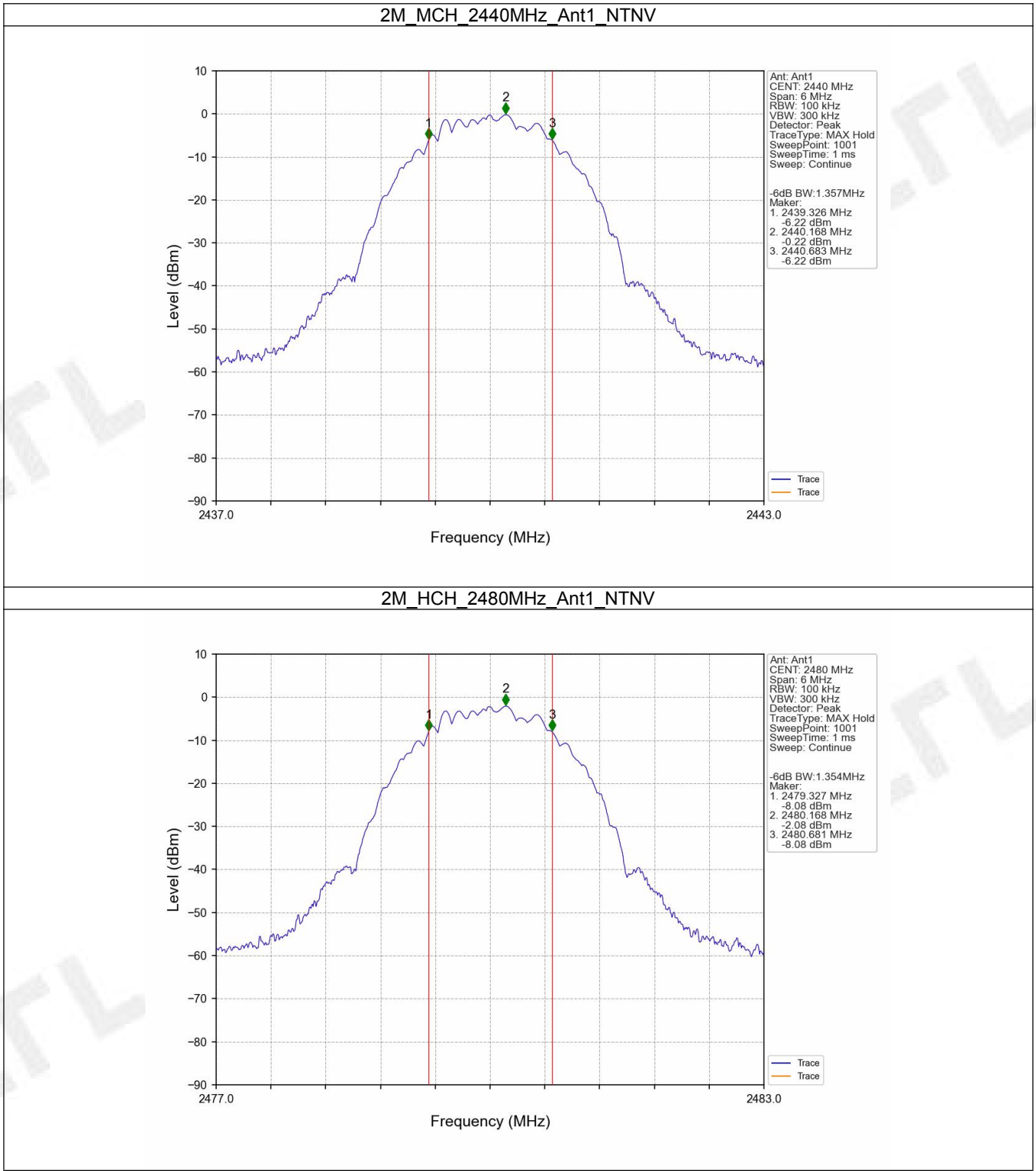
2.2.2 6dB BW



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3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

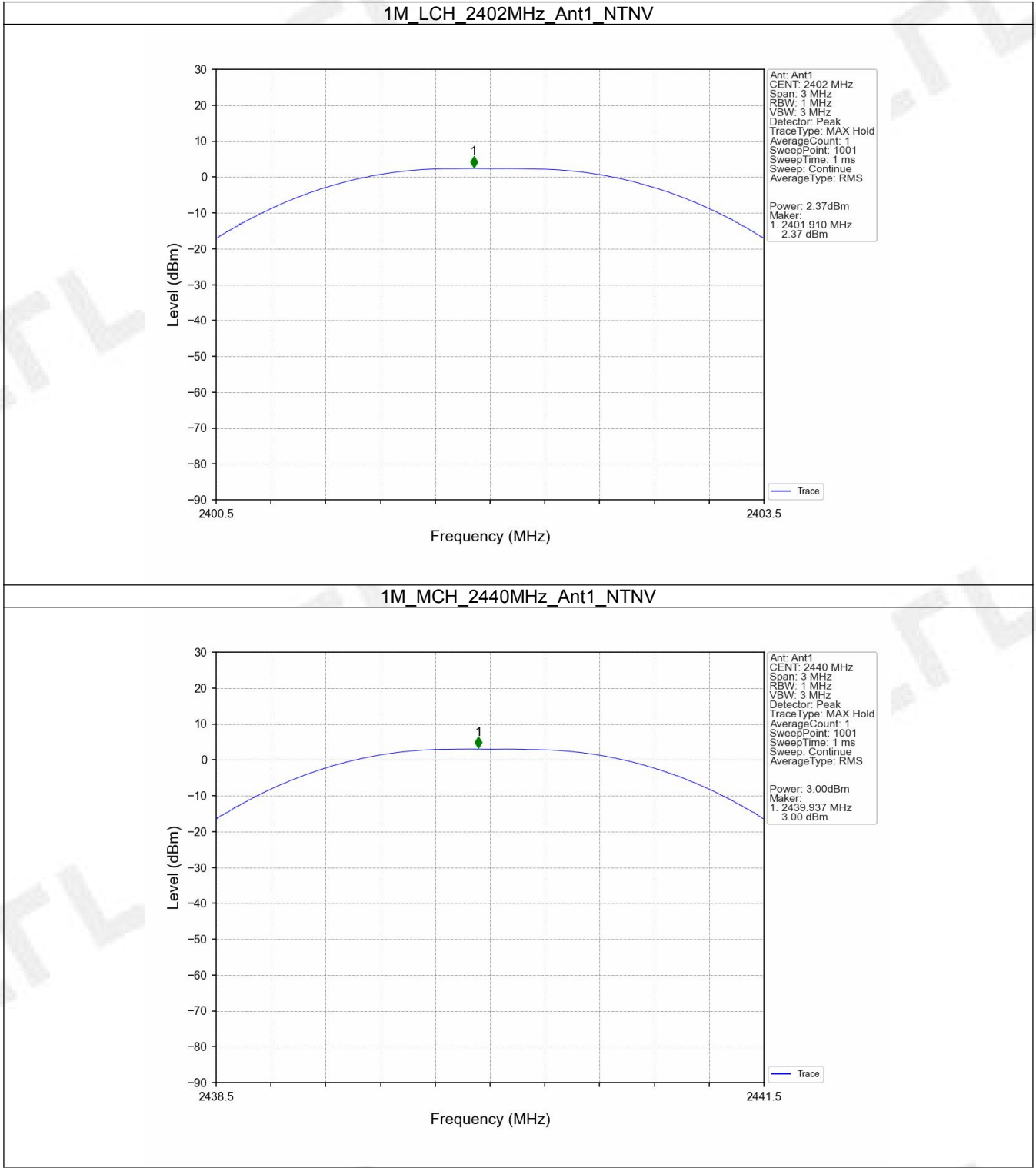
Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	2.37	<=30	Pass
		2440	3.00	<=30	Pass
		2480	1.19	<=30	Pass
2M	SISO	2402	2.41	<=30	Pass
		2440	3.05	<=30	Pass
		2480	1.25	<=30	Pass

Note1: Antenna Gain: Ant1: -3.35dBi;

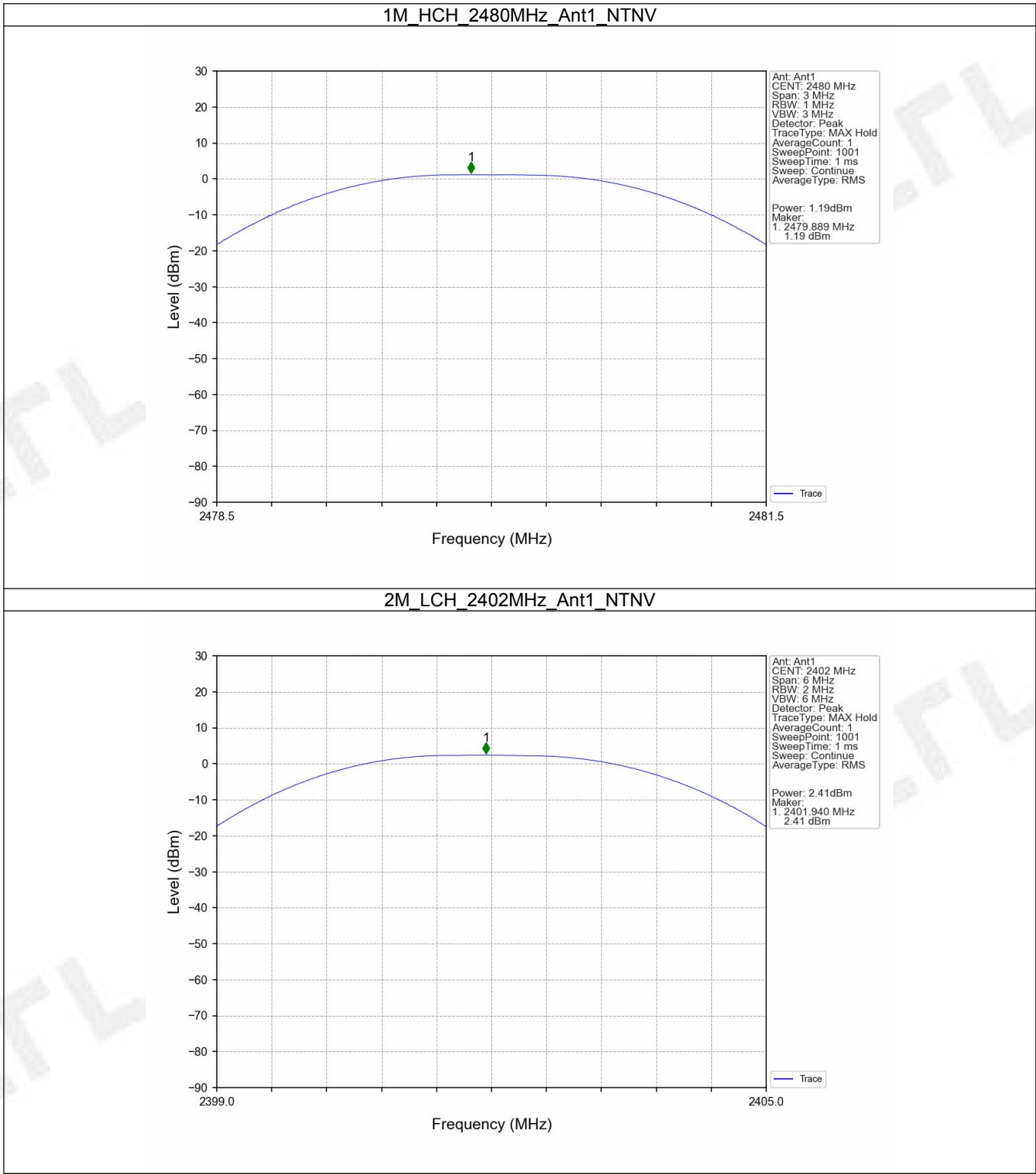
FCCID: 2AN5D-N1804

3.2 Test Graph

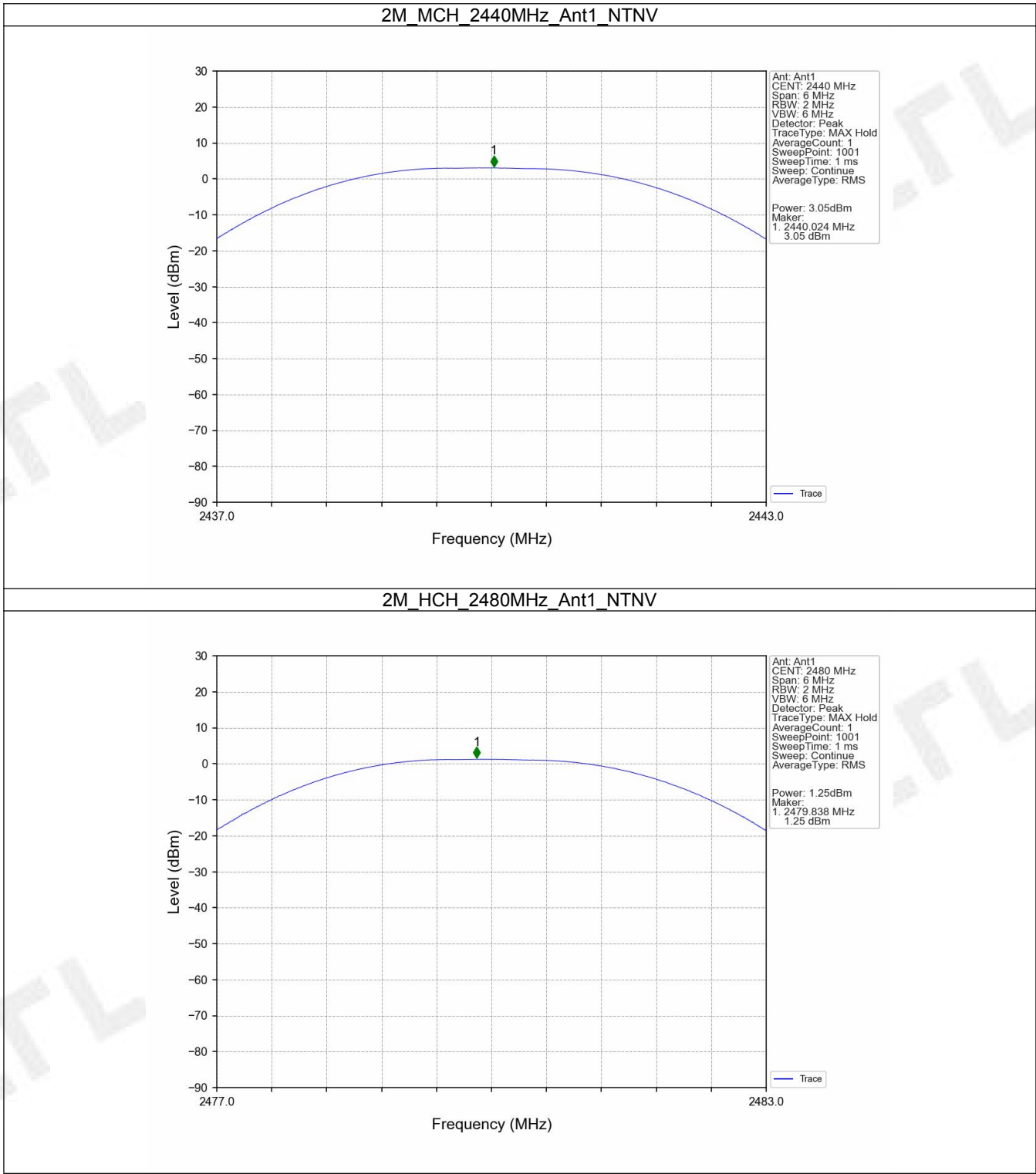
3.2.1 Power



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4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

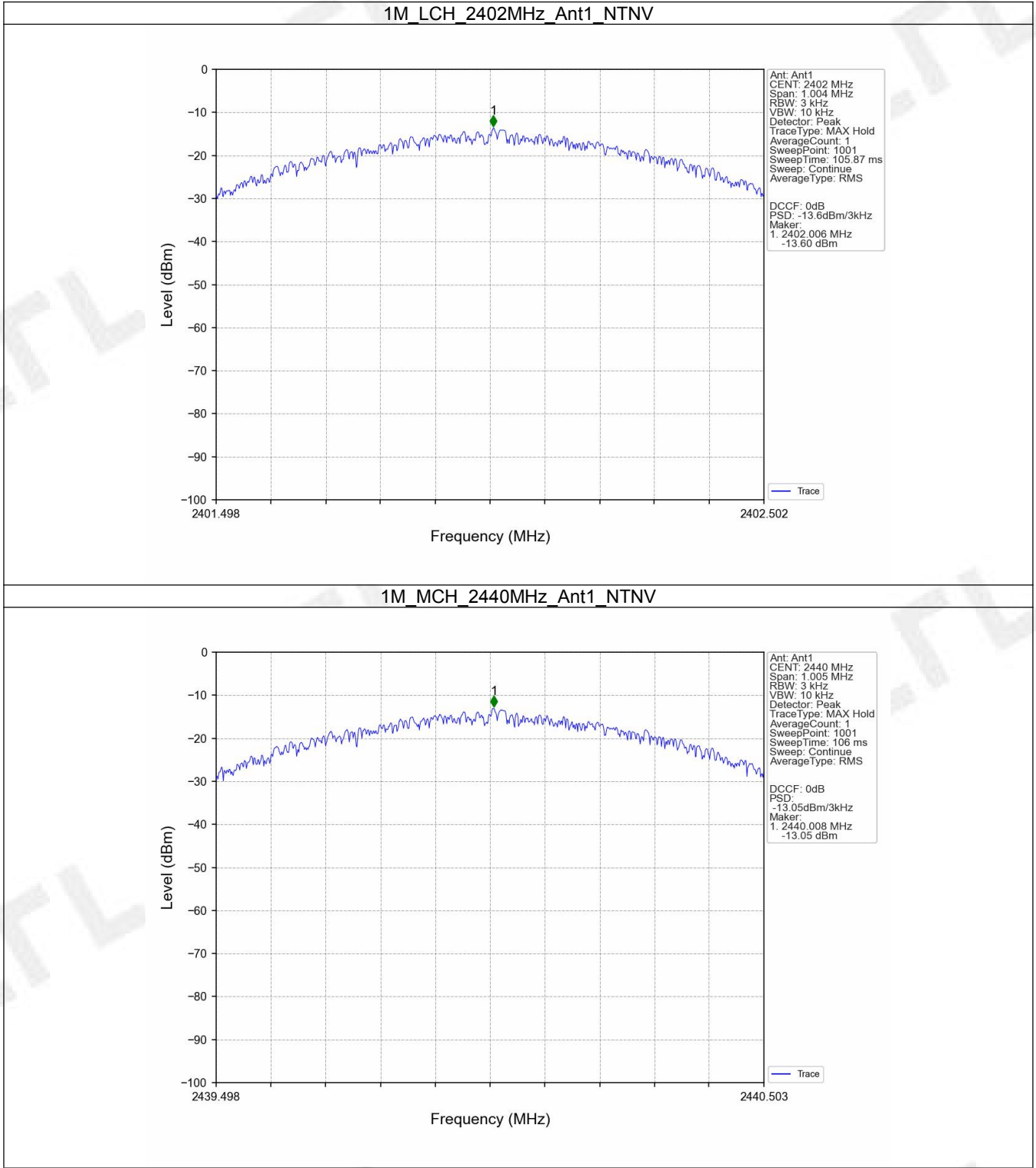
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1M	SISO	2402	-13.60	<=8	Pass
		2440	-13.05	<=8	Pass
		2480	-14.39	<=8	Pass
2M	SISO	2402	-18.19	<=8	Pass
		2440	-17.77	<=8	Pass
		2480	-19.10	<=8	Pass

Note1: Antenna Gain: Ant1: -3.35dBi;

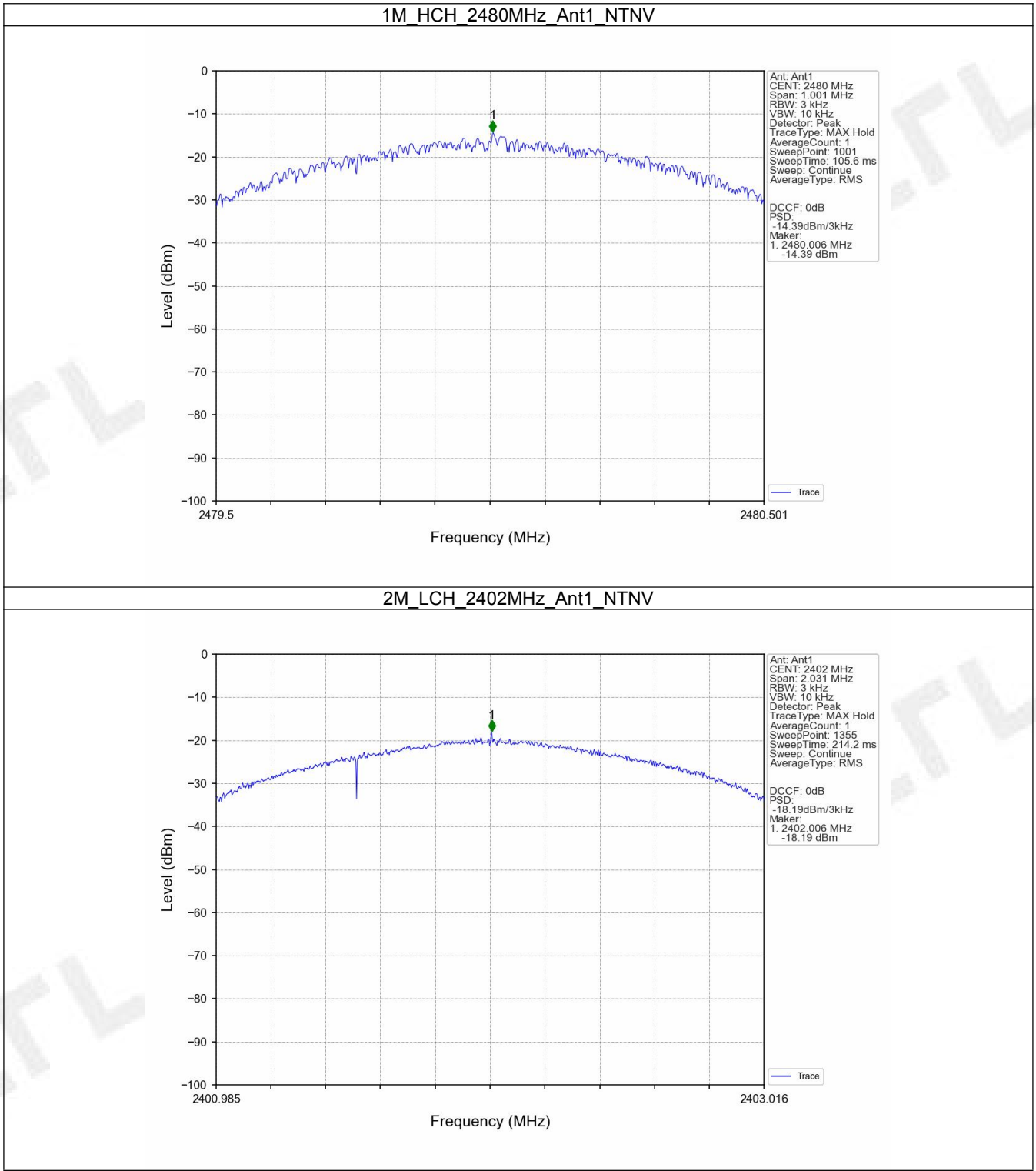
FCCID: 2AN5D-N1804

4.2 Test Graph

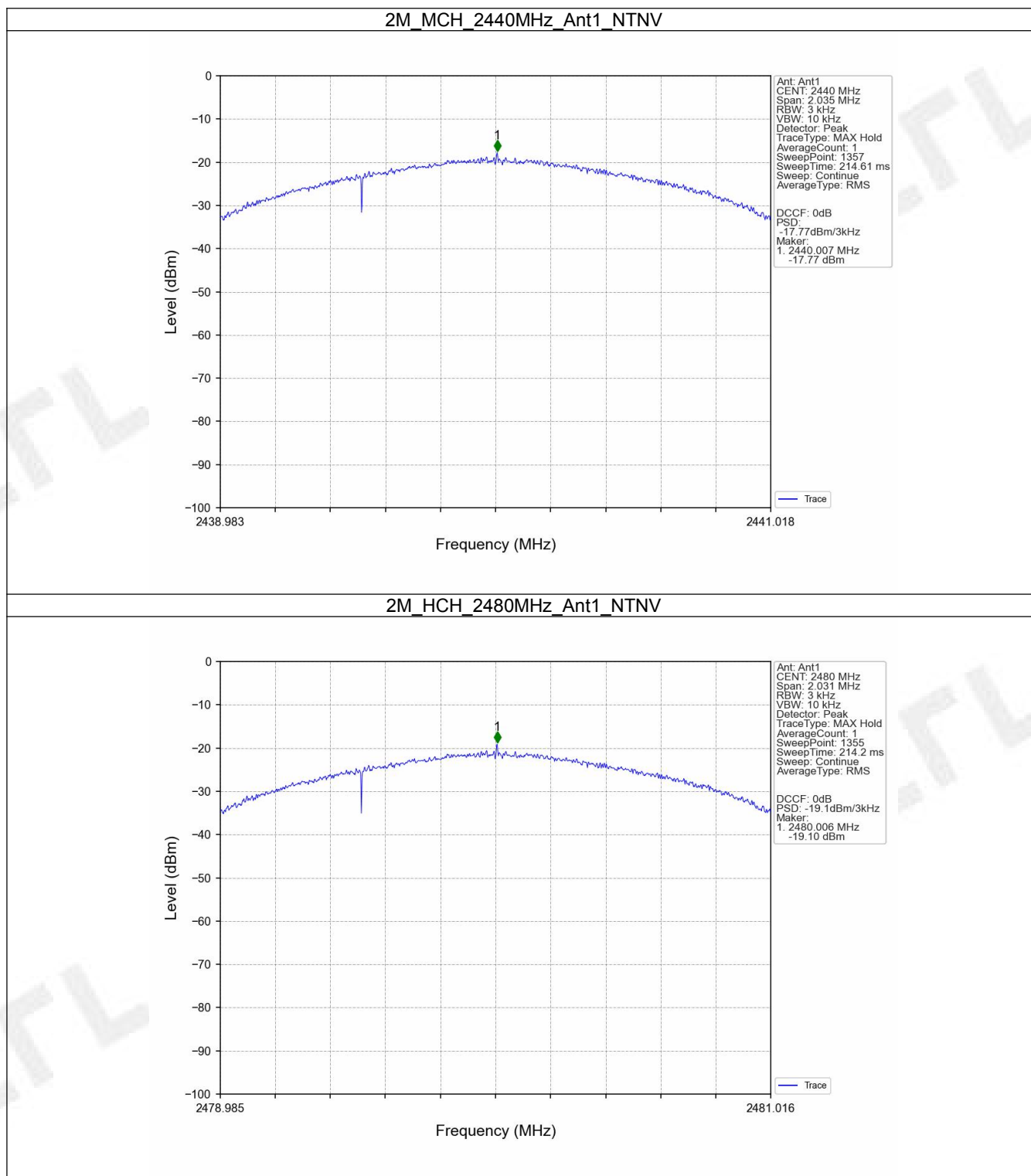
4.2.1 PSD



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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)
1M	SISO	2402	1	1.11
		2440	1	1.75
		2480	1	-0.07
2M	SISO	2402	1	-0.93
		2440	1	-0.33
		2480	1	-2.10

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 CSE

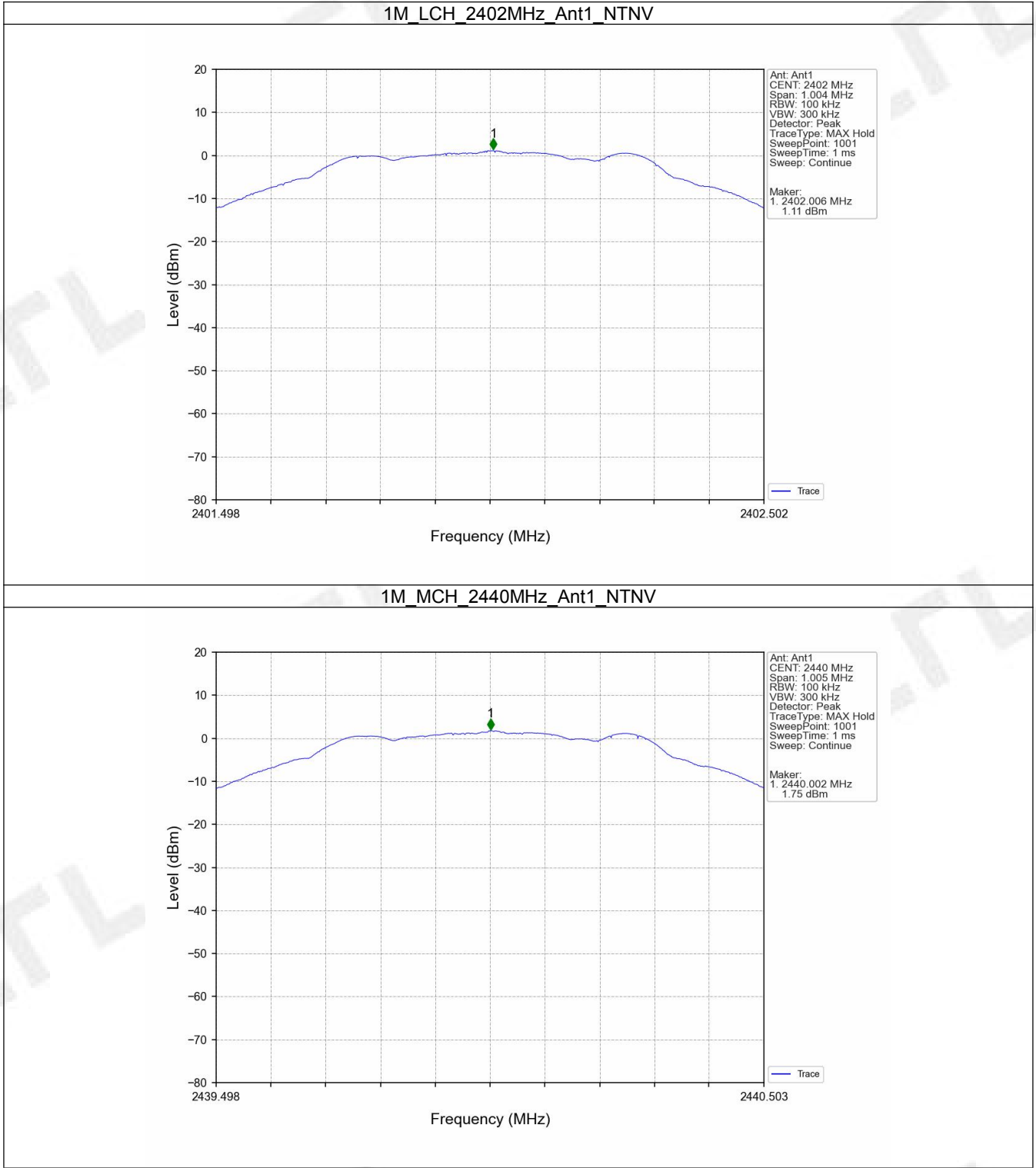
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	1.75	-18.25	Pass
		2440	1	1.75	-18.25	Pass
		2480	1	1.75	-18.25	Pass
2M	SISO	2402	1	-0.33	-20.33	Pass
		2440	1	-0.33	-20.33	Pass
		2480	1	-0.33	-20.33	Pass

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.

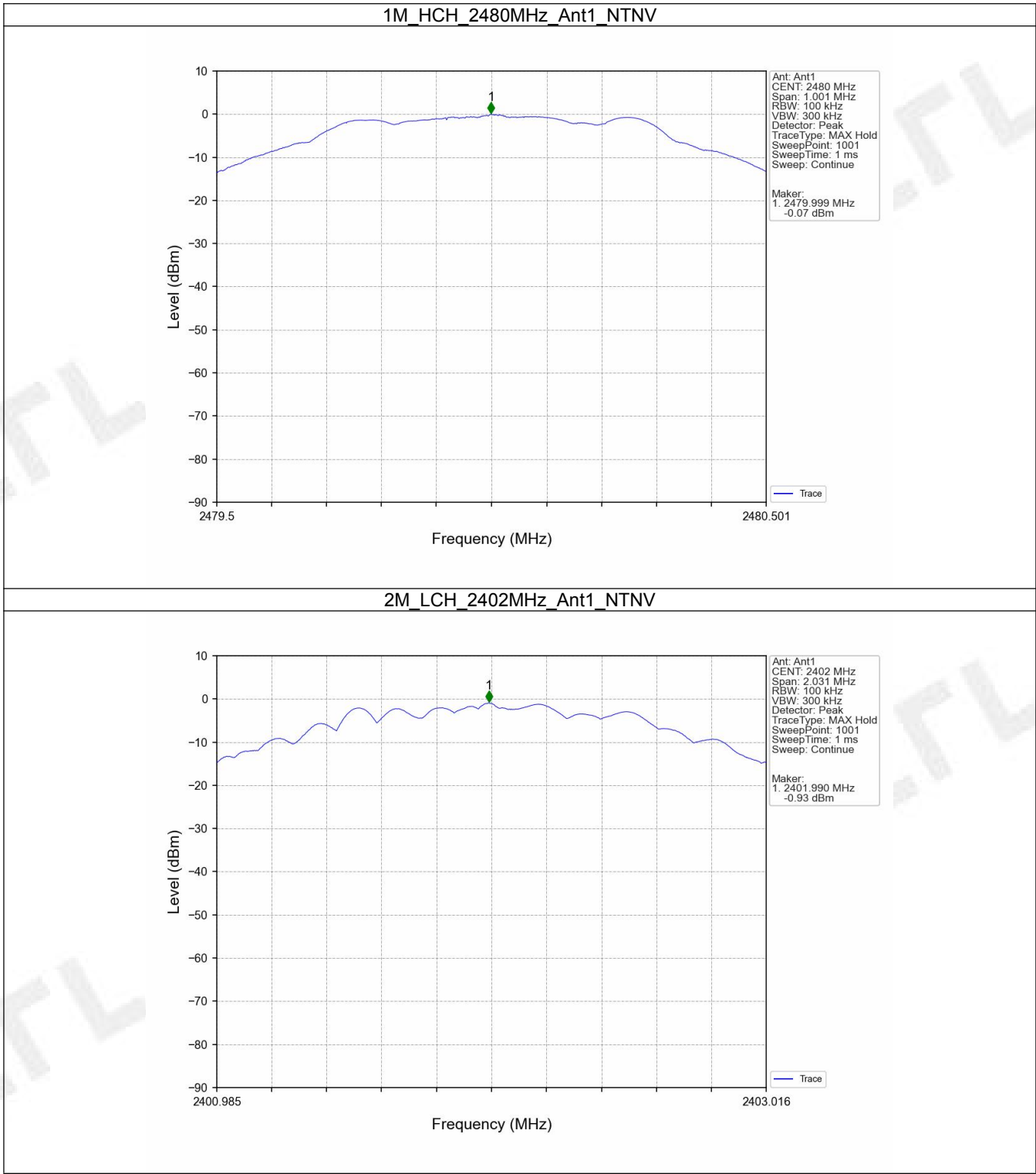
FCCID: 2AN5D-N1804

5.2 Test Graph

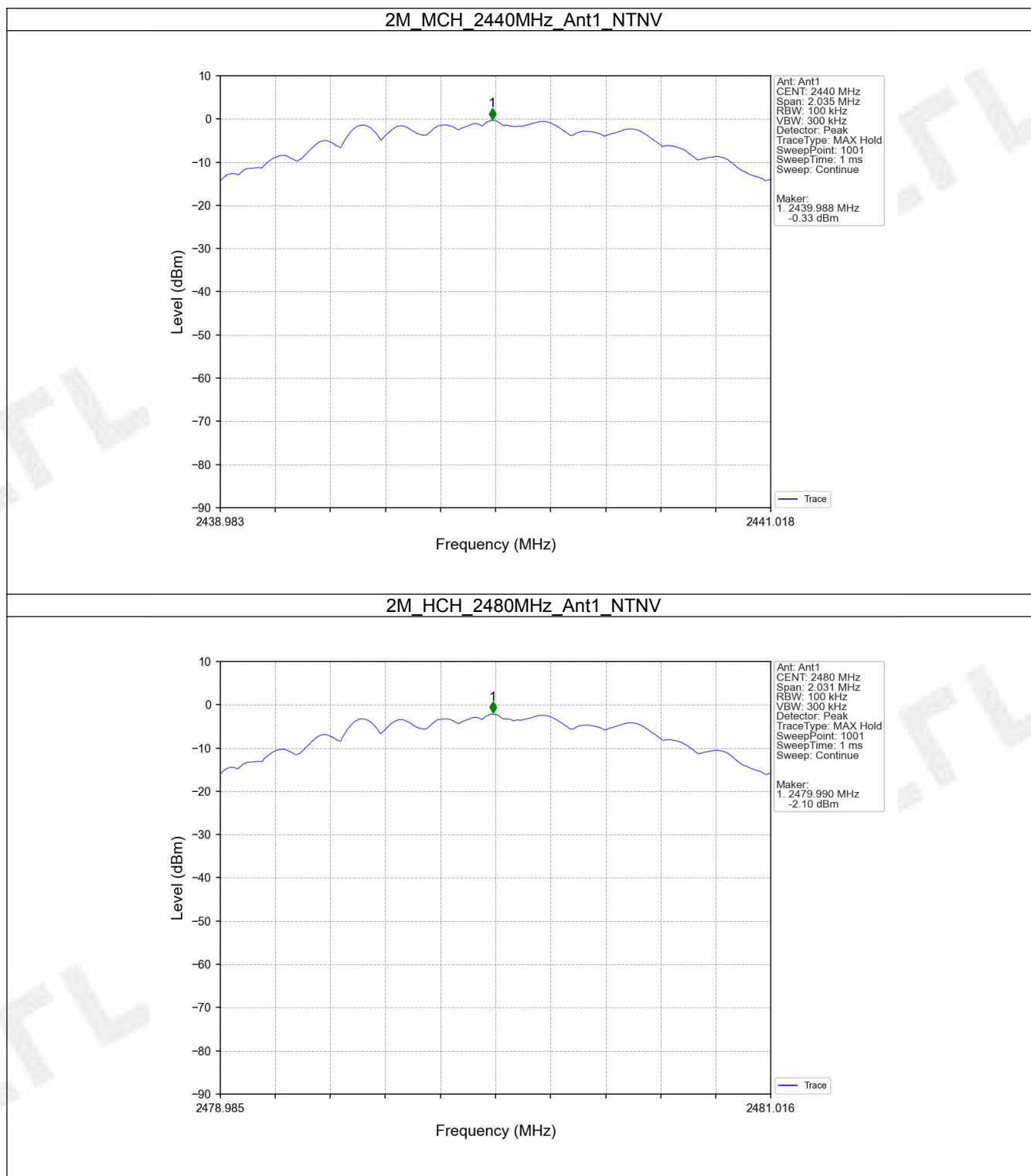
5.2.1 Ref



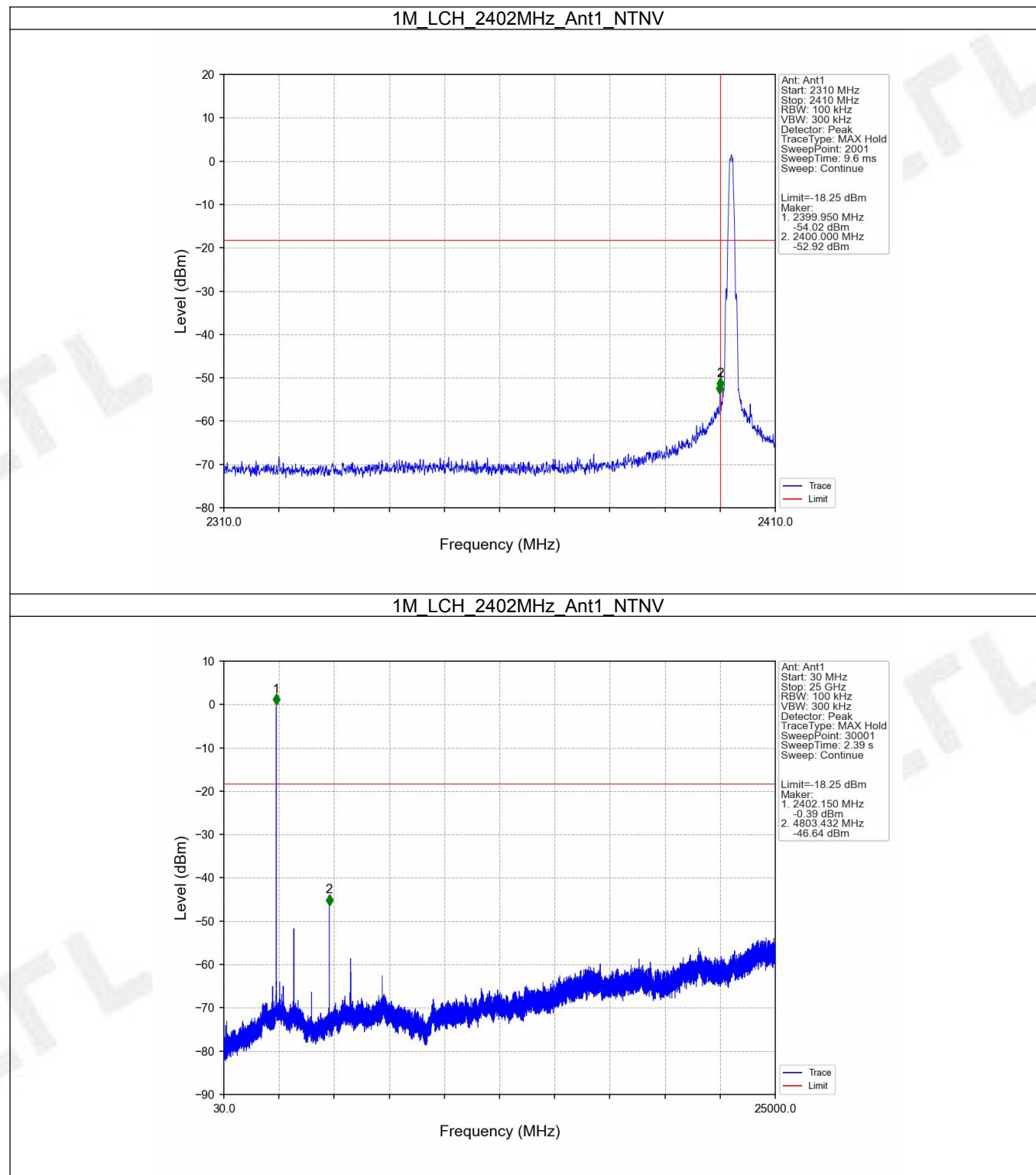
FCCID: 2AN5D-N1804



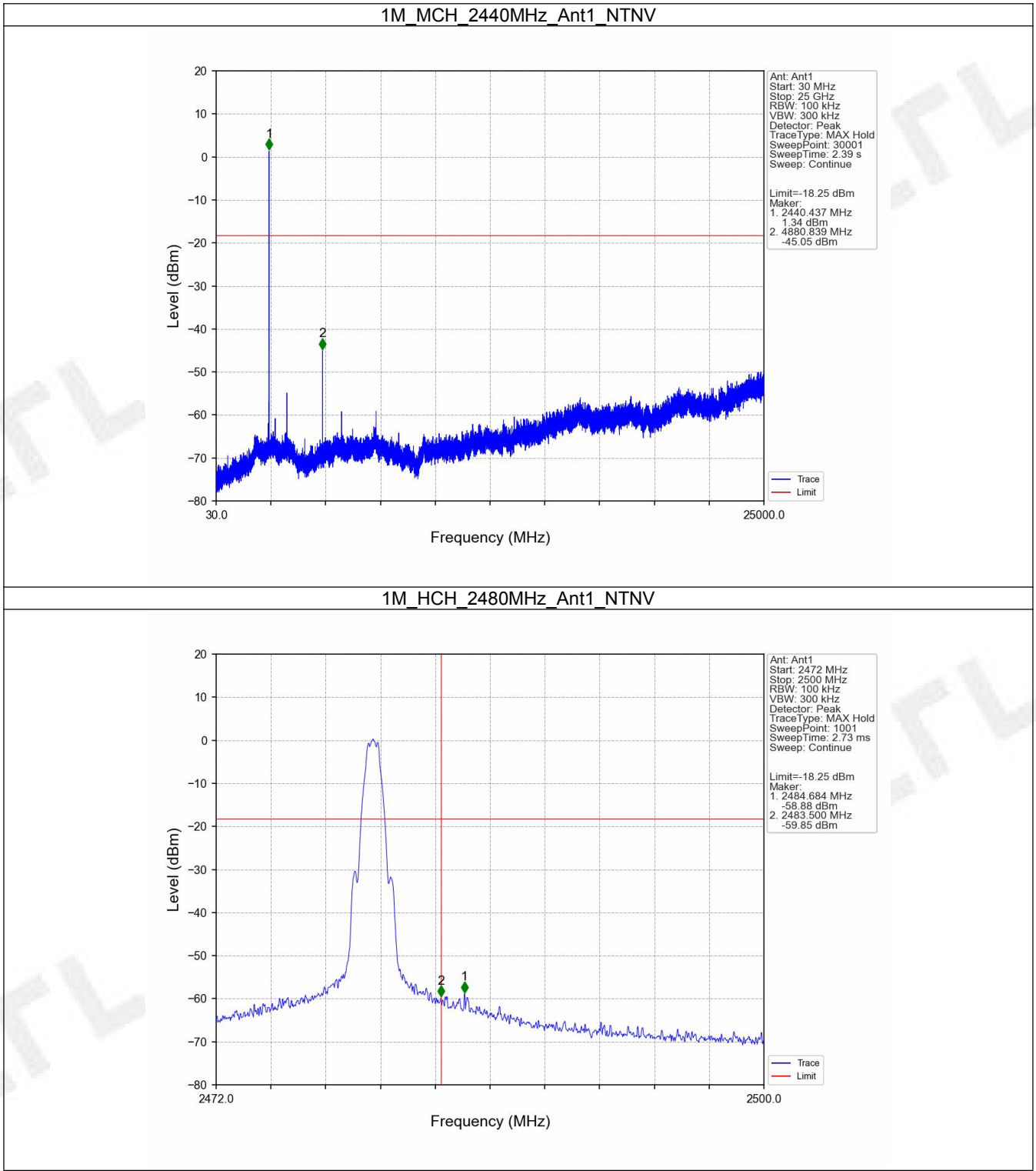
FCCID: 2AN5D-N1804



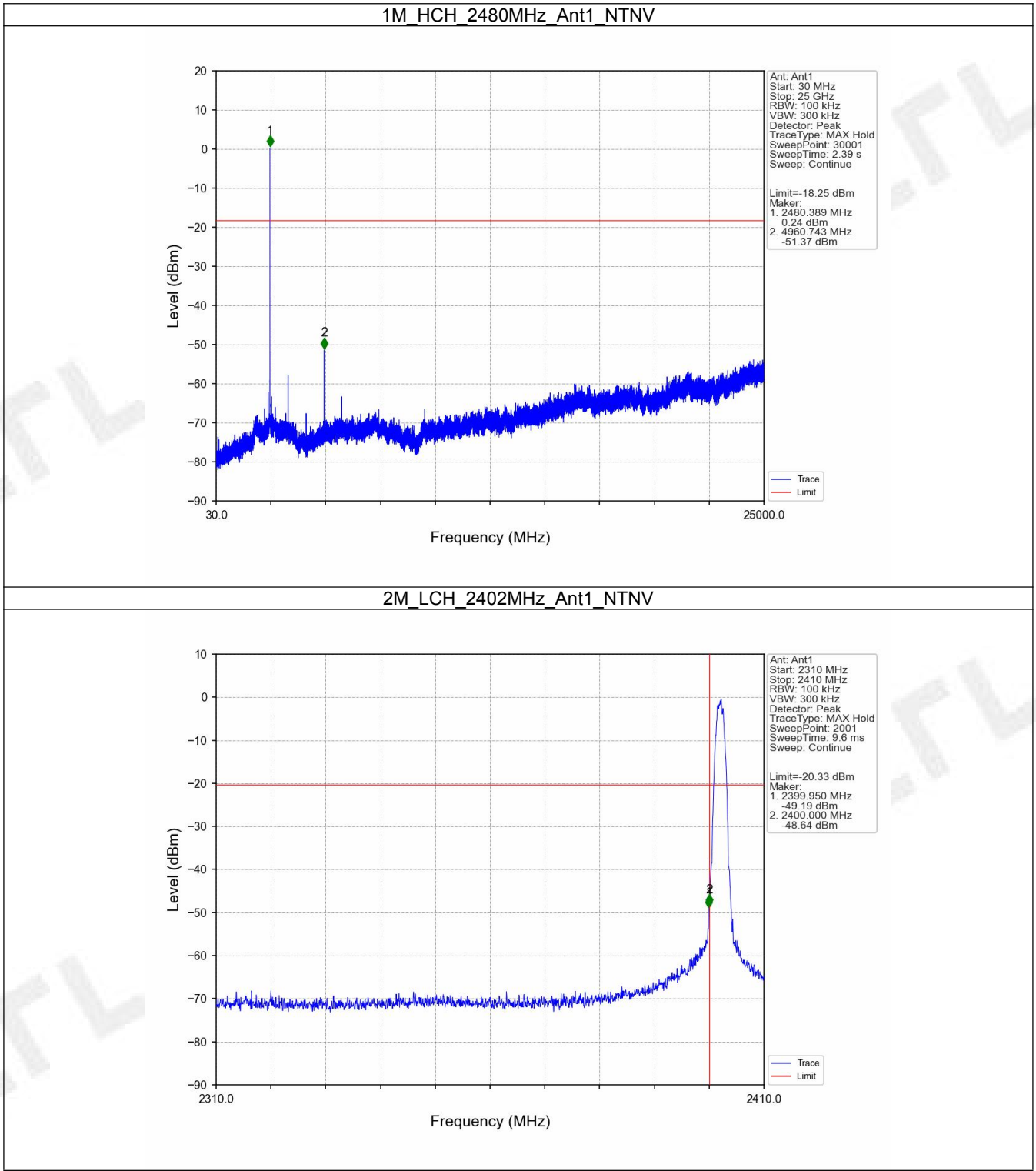
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5.2.2 CSE

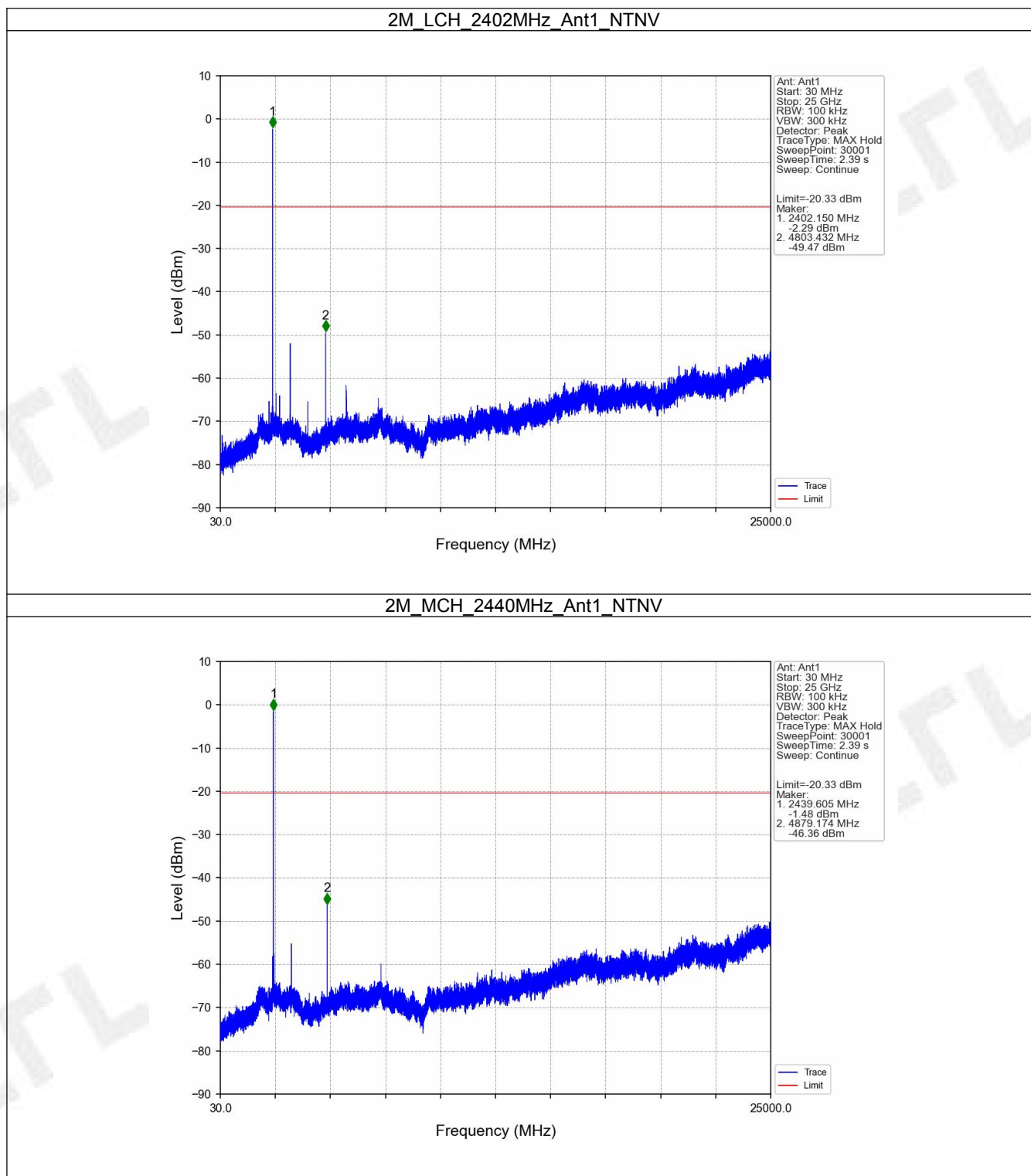
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