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Annex for BLE

Test Report No.: CTL2412133013-WF01

TABLE OF CONTENTS

1. Duty Cycle	3
1.1 Test Result	3
1.1.1 Ant1	3
1.2 Test Graph	4
1.2.1 Ant1	4
2. Bandwidth	7
2.1 Test Result	7
2.1.1 OBW	7
2.1.2 6dB BW	7
2.2 Test Graph	8
2.2.1 OBW	8
2.2.2 6dB BW	11
3. Maximum Conducted Output Power	14
3.1 Test Result	14
3.1.1 Power	14
3.2 Test Graph	15
3.2.1 Power	15
4. Maximum Power Spectral Density	18
4.1 Test Result	18

FCCID: 2AN5D-N1804

4.1.1 PSD	18
4.2 Test Graph	19
4.2.1 PSD	19
5. Unwanted Emissions In Non-restricted Frequency Bands	22
5.1 Test Result	22
5.1.1 Ref	22
5.1.2 CSE	22
5.2 Test Graph	23
5.2.1 Ref	23
5.2.2 CSE	26

FCCID: 2AN5D-N1804

1. Duty Cycle

1.1 Test Result

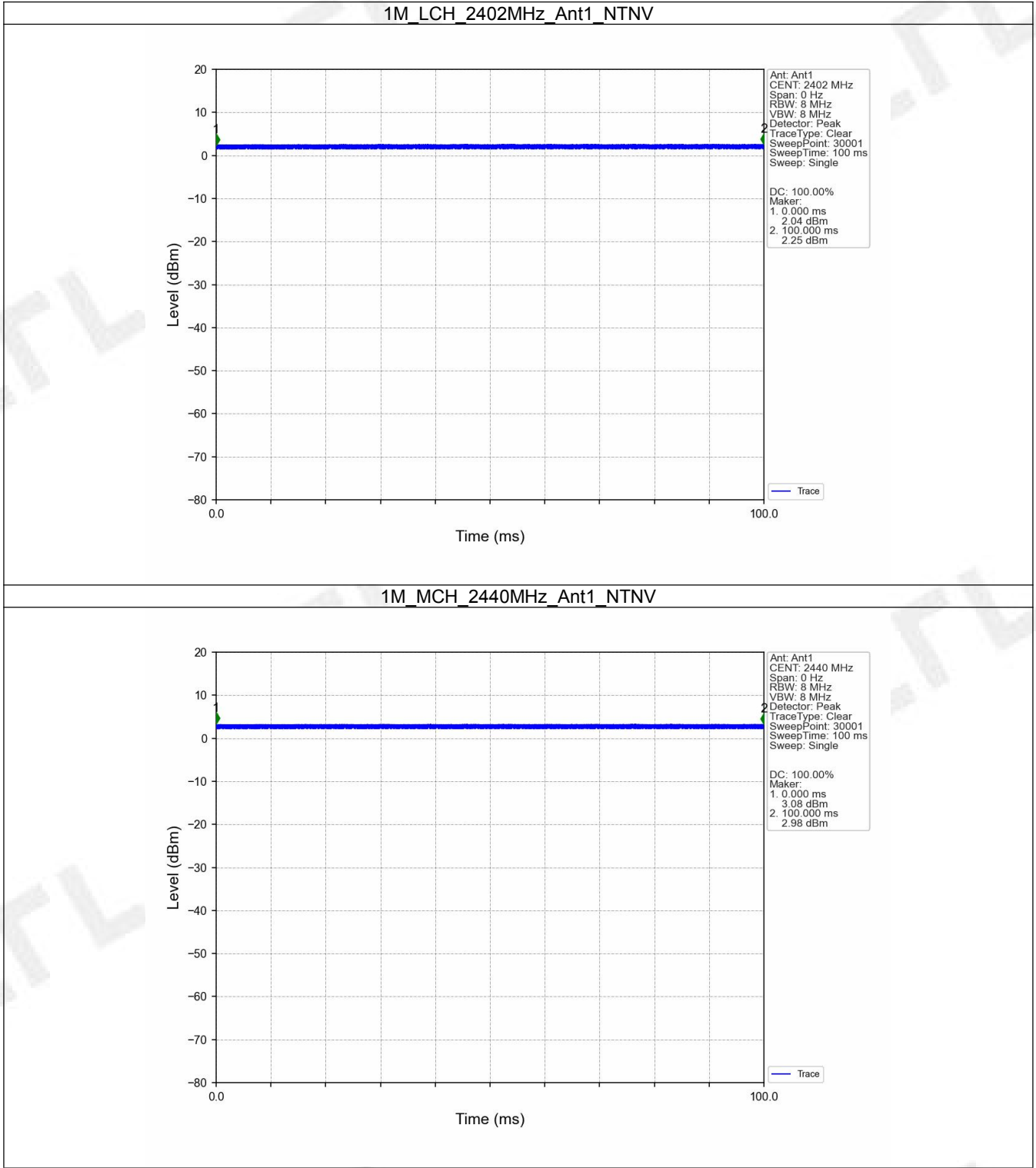
1.1.1 Ant1

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

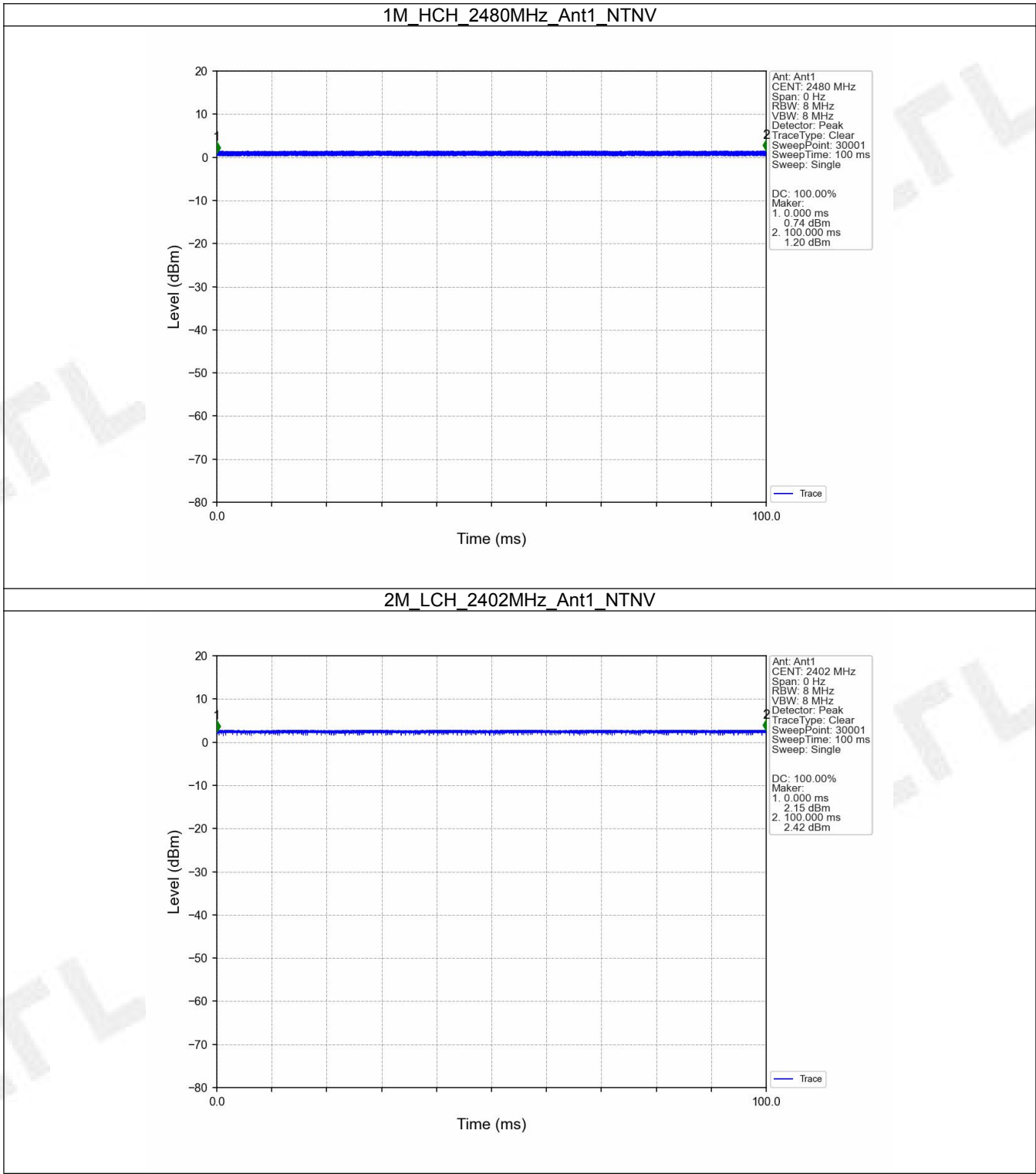
FCCID: 2AN5D-N1804

1.2 Test Graph

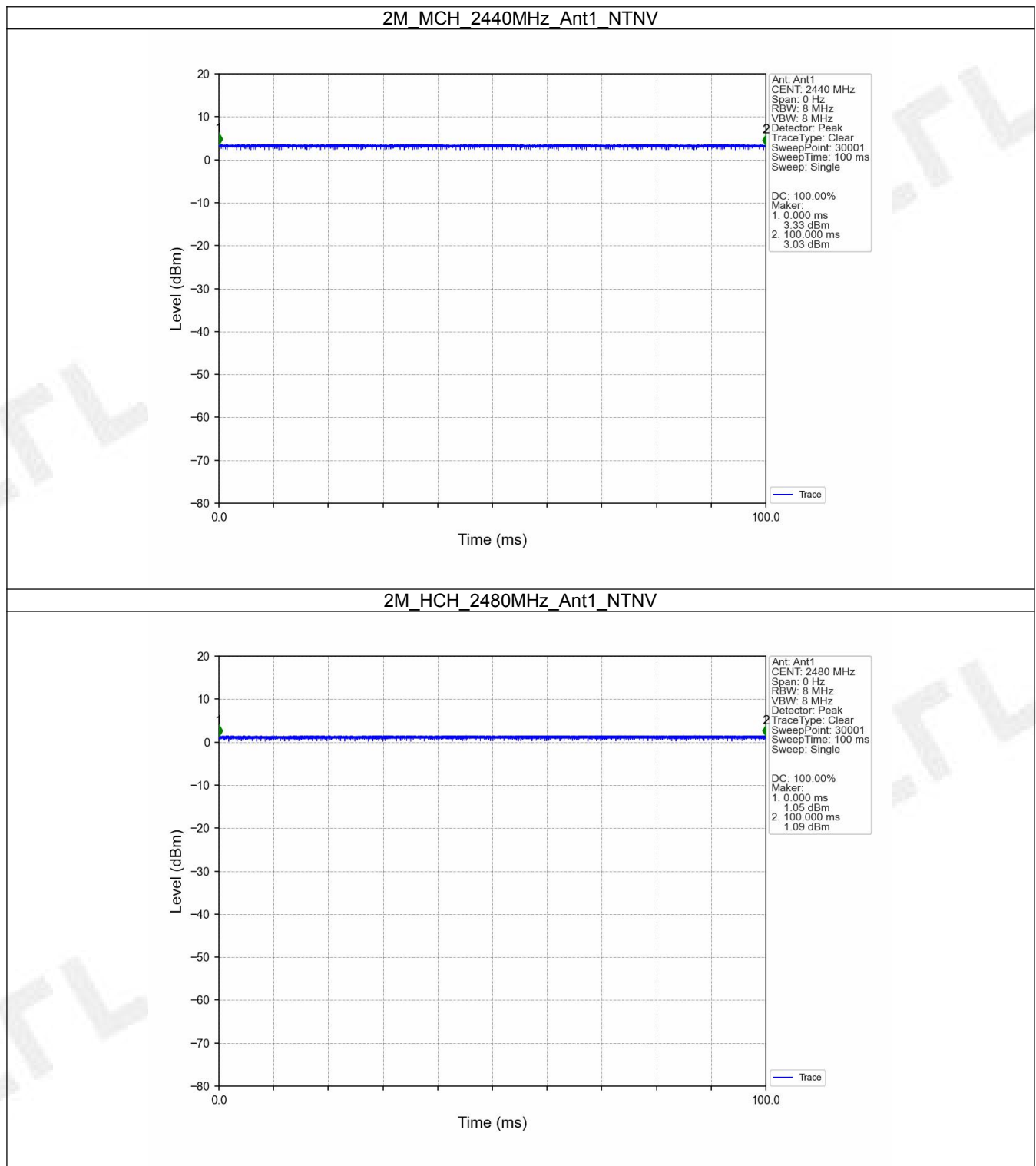
1.2.1 Ant1



FCCID: 2AN5D-N1804



FCCID: 2AN5D-N1804



FCCID: 2AN5D-N1804

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

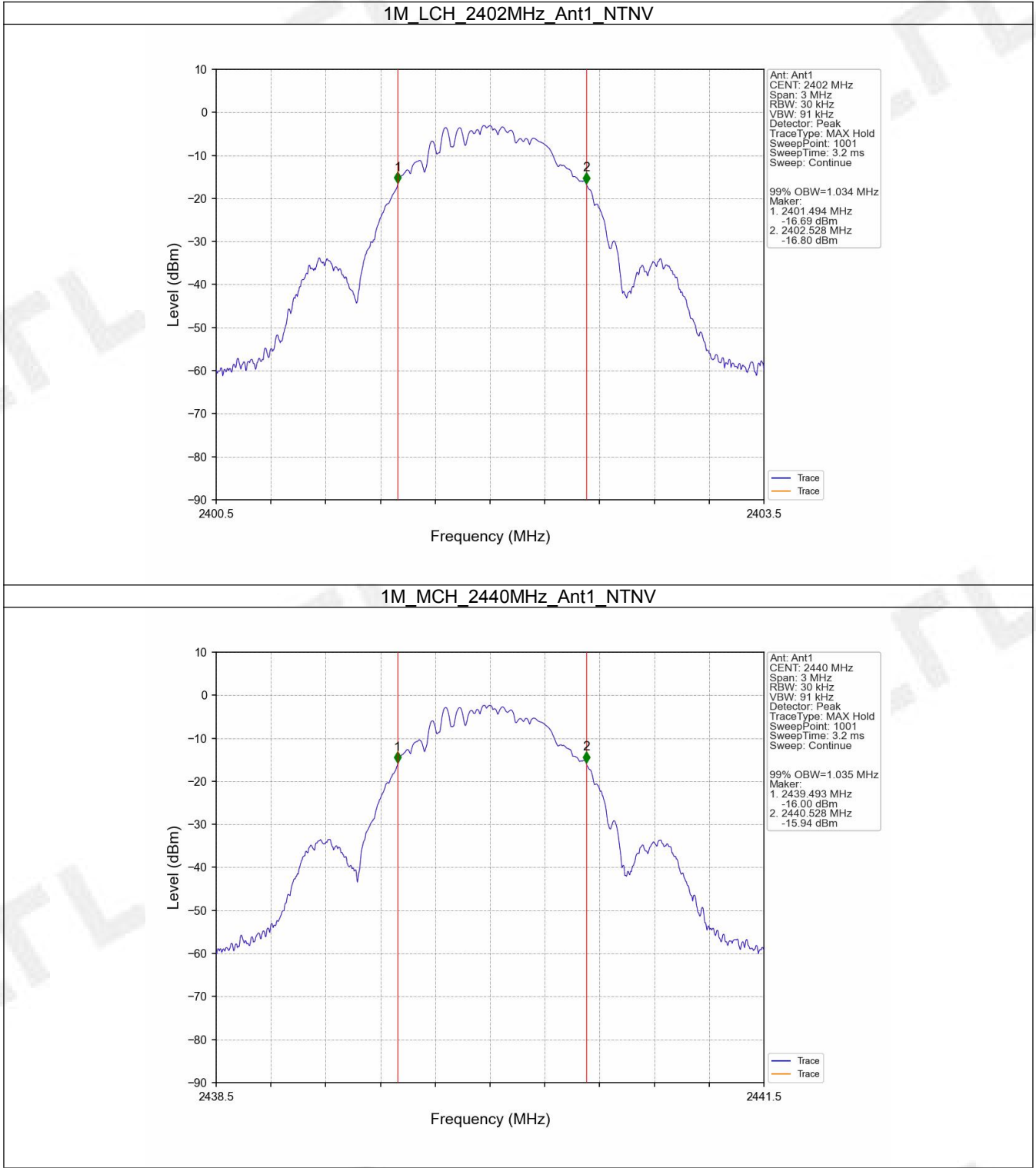
2.1.2 6dB BW

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

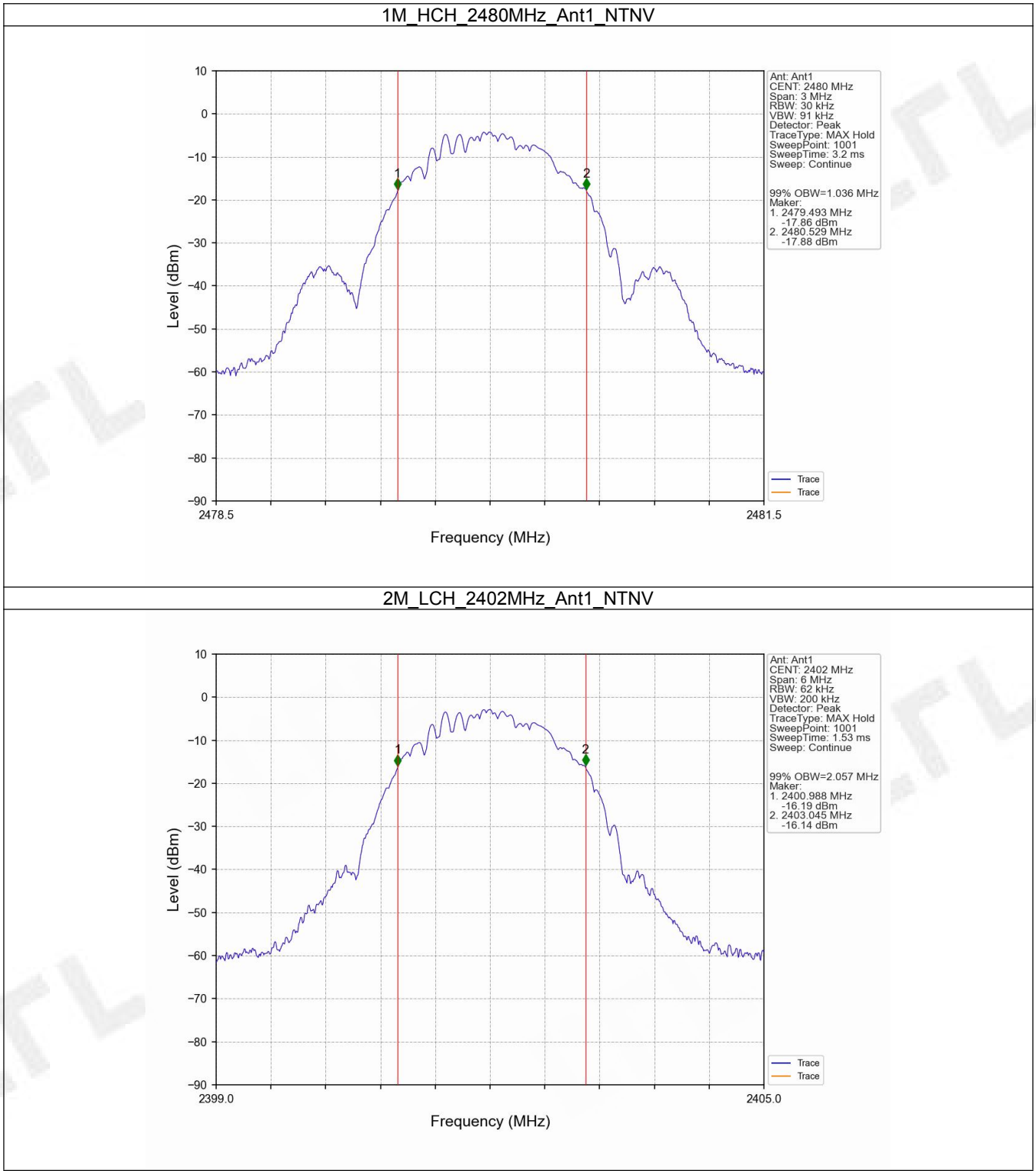
FCCID: 2AN5D-N1804

2.2 Test Graph

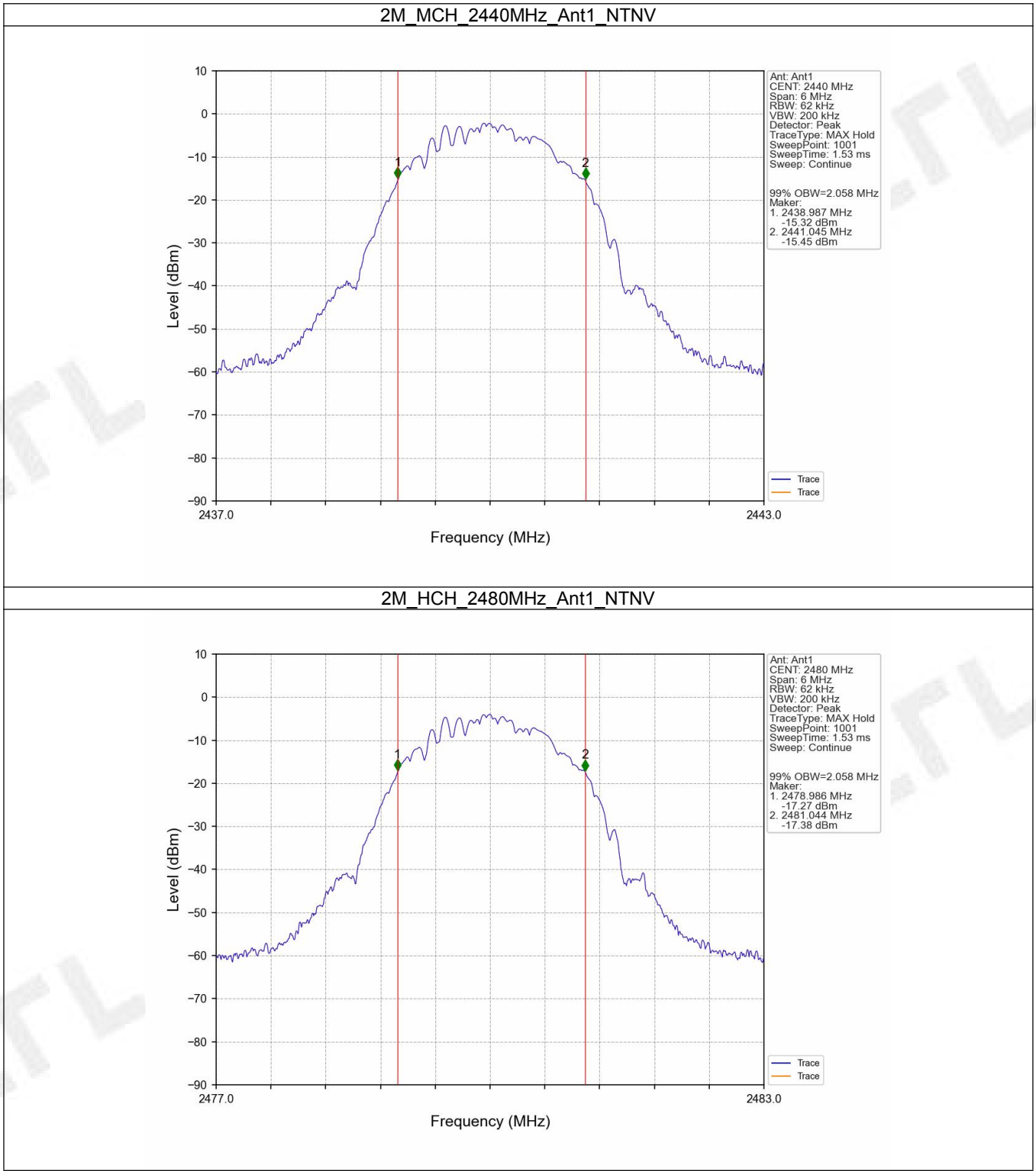
2.2.1 OBW



FCCID: 2AN5D-N1804

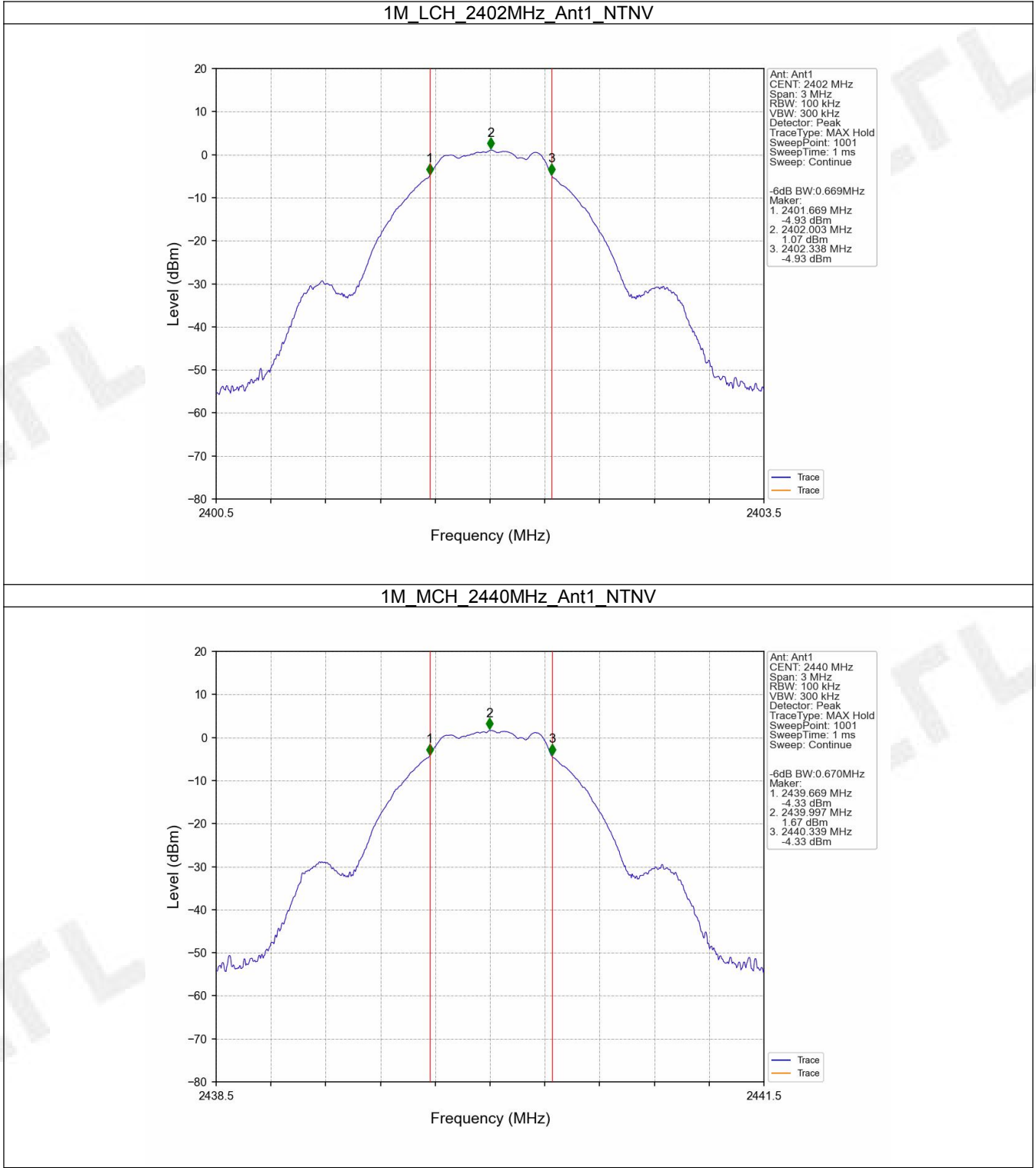


FCCID: 2AN5D-N1804

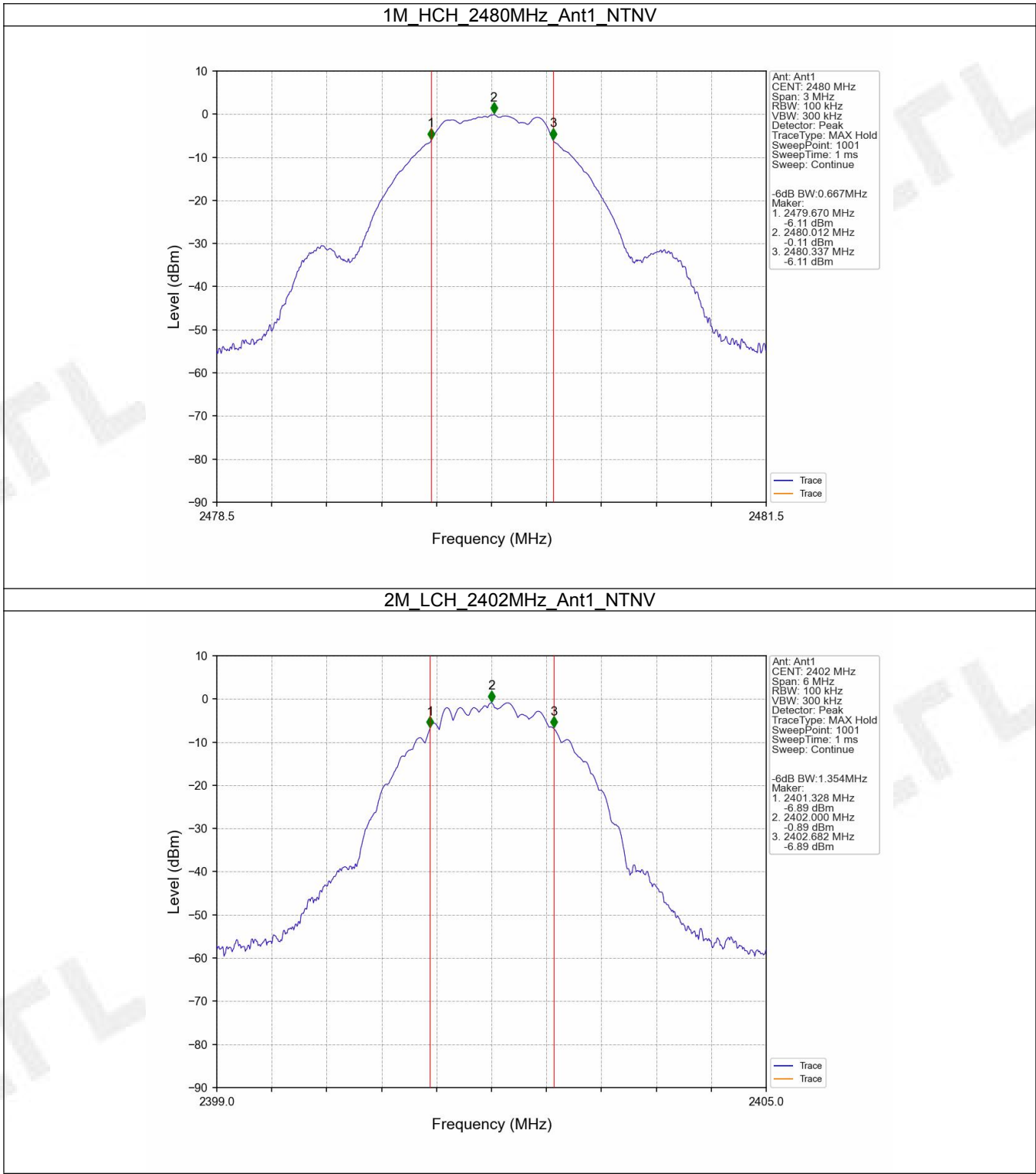


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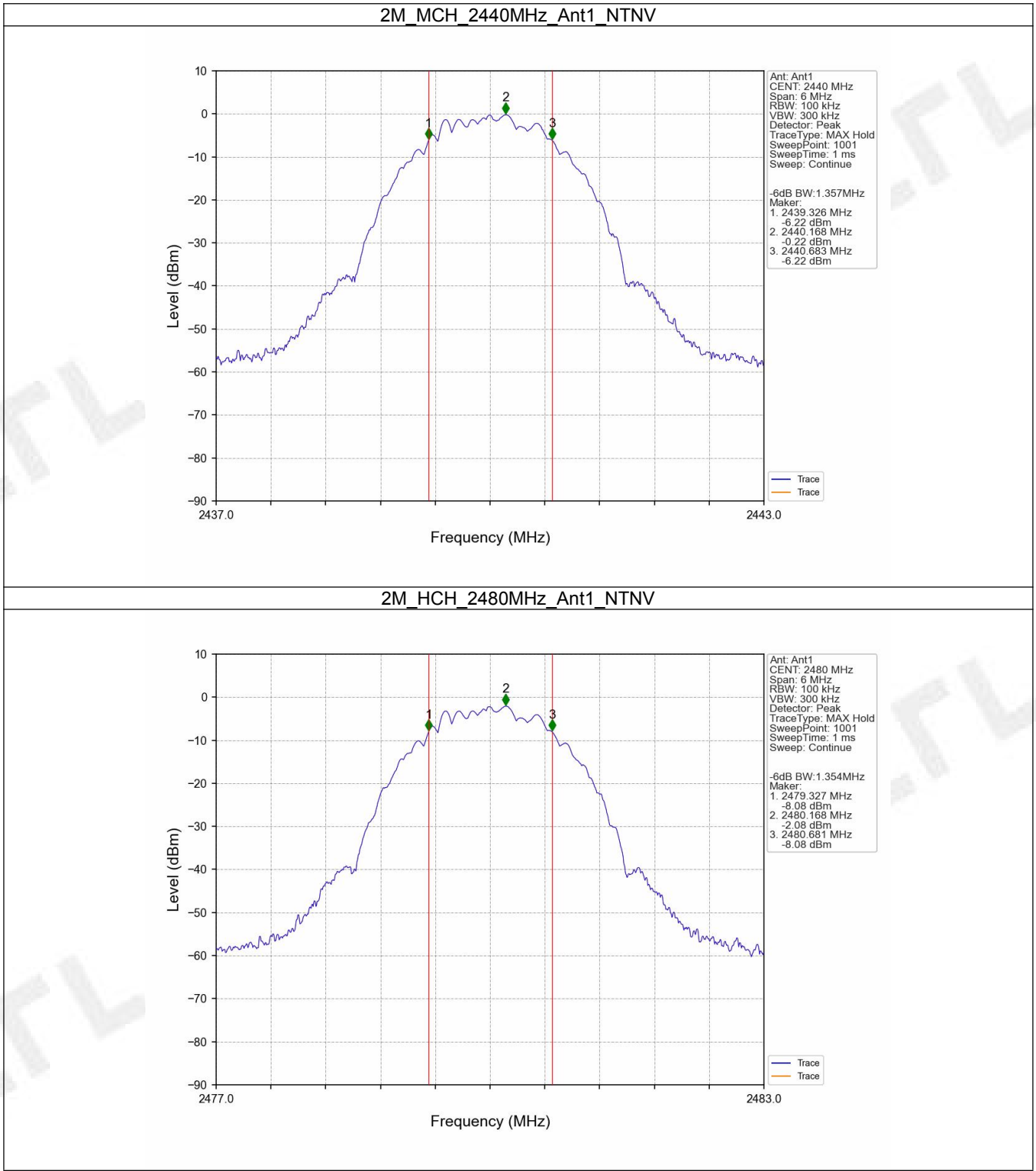
2.2.2 6dB BW



FCCID: 2AN5D-N1804



FCCID: 2AN5D-N1804



FCCID: 2AN5D-N1804

3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

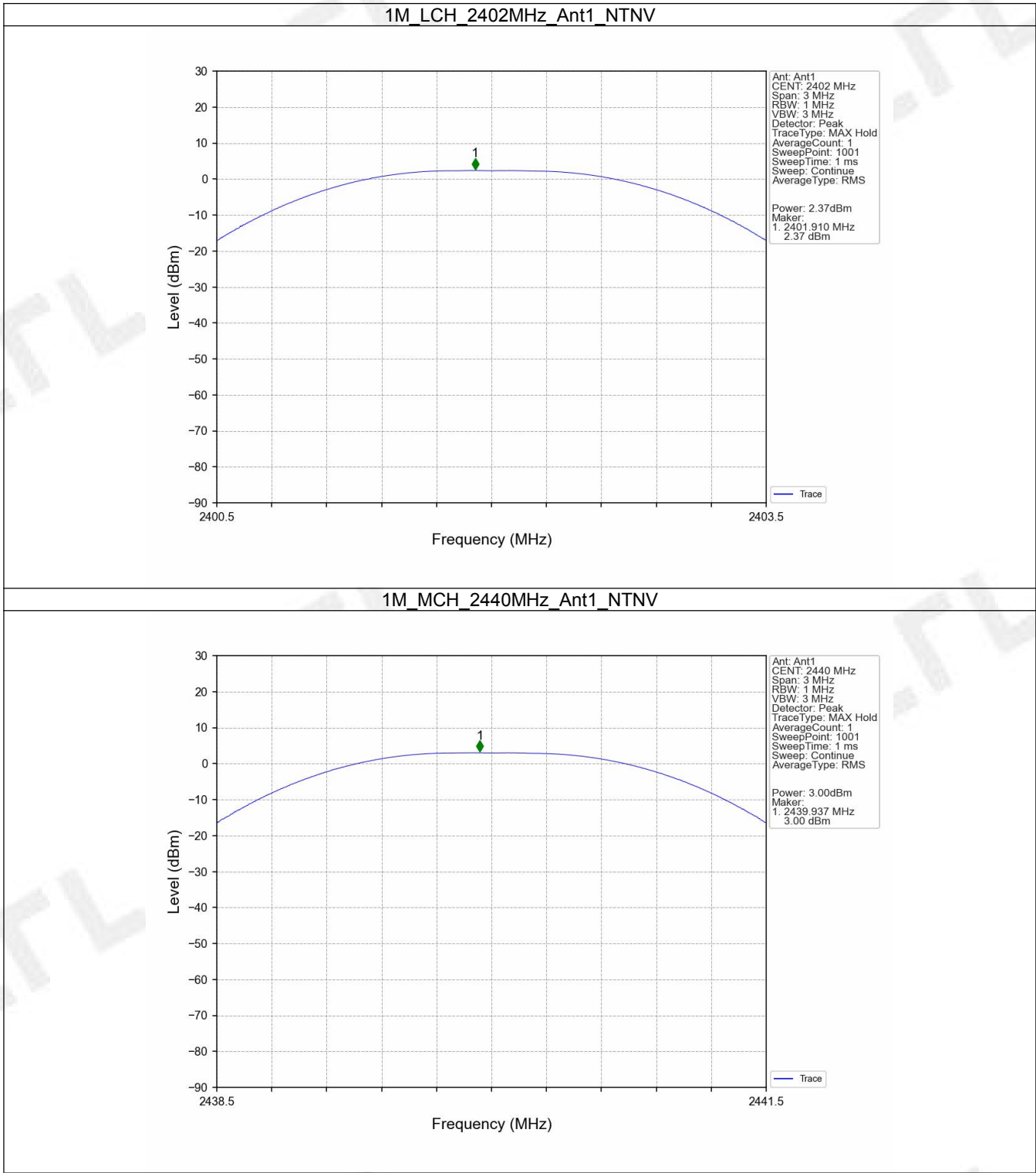
Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	2.37	<=30	Pass
		2440	3.00	<=30	Pass
		2480	1.19	<=30	Pass
2M	SISO	2402	2.41	<=30	Pass
		2440	3.05	<=30	Pass
		2480	1.25	<=30	Pass

Note1: Antenna Gain: Ant1: -3.35dBi;

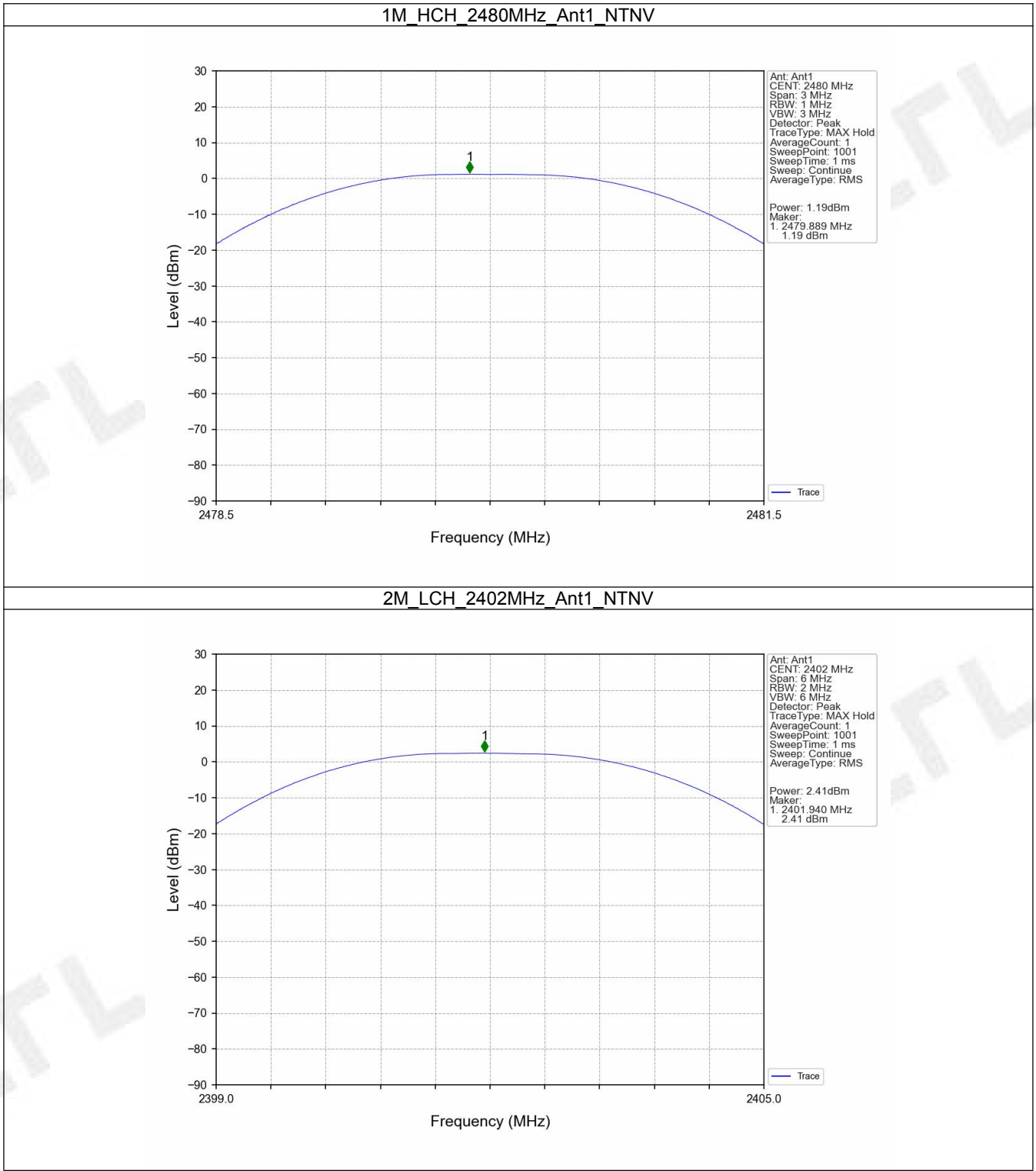
FCCID: 2AN5D-N1804

3.2 Test Graph

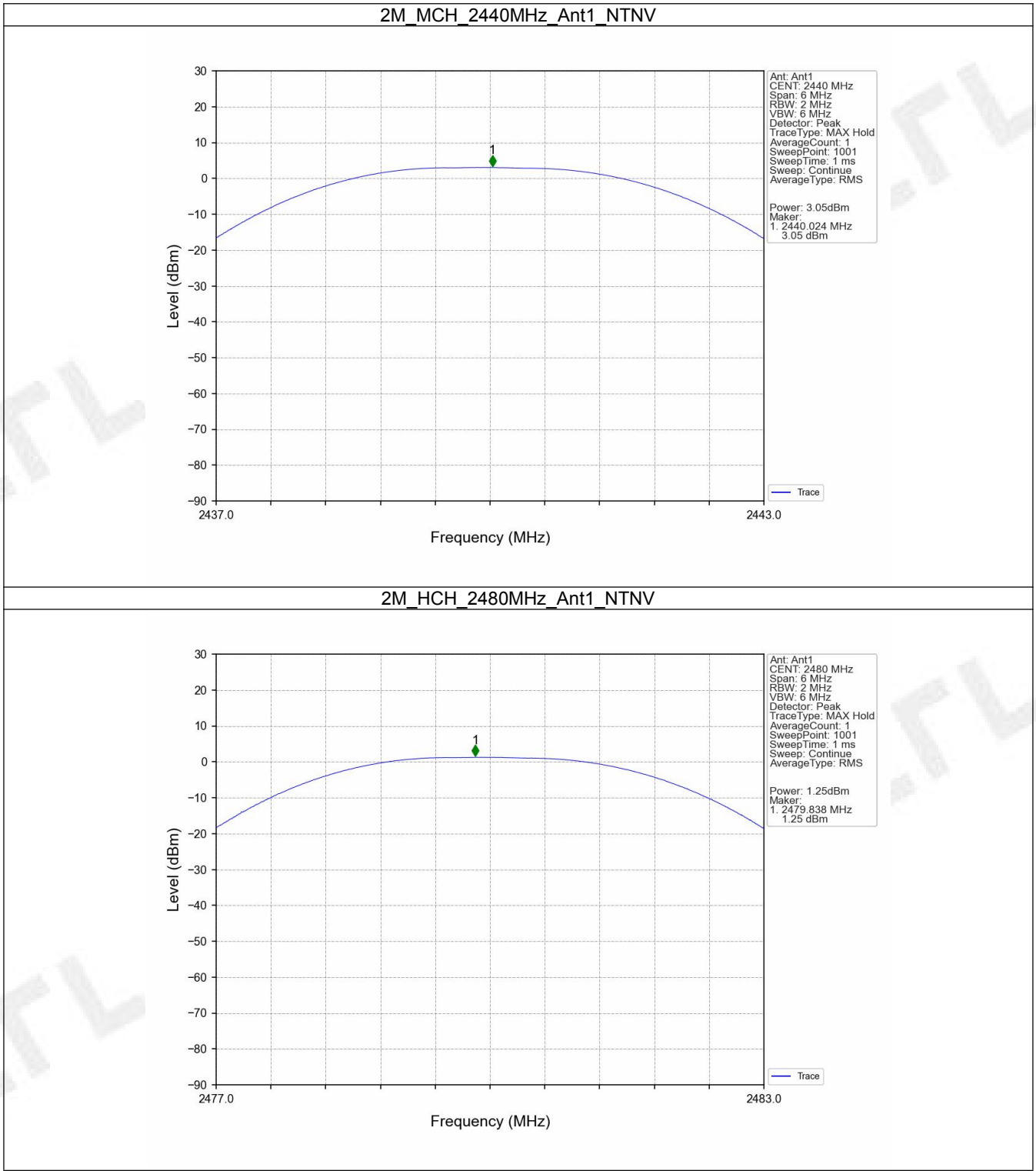
3.2.1 Power



FCCID: 2AN5D-N1804



FCCID: 2AN5D-N1804



FCCID: 2AN5D-N1804

4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

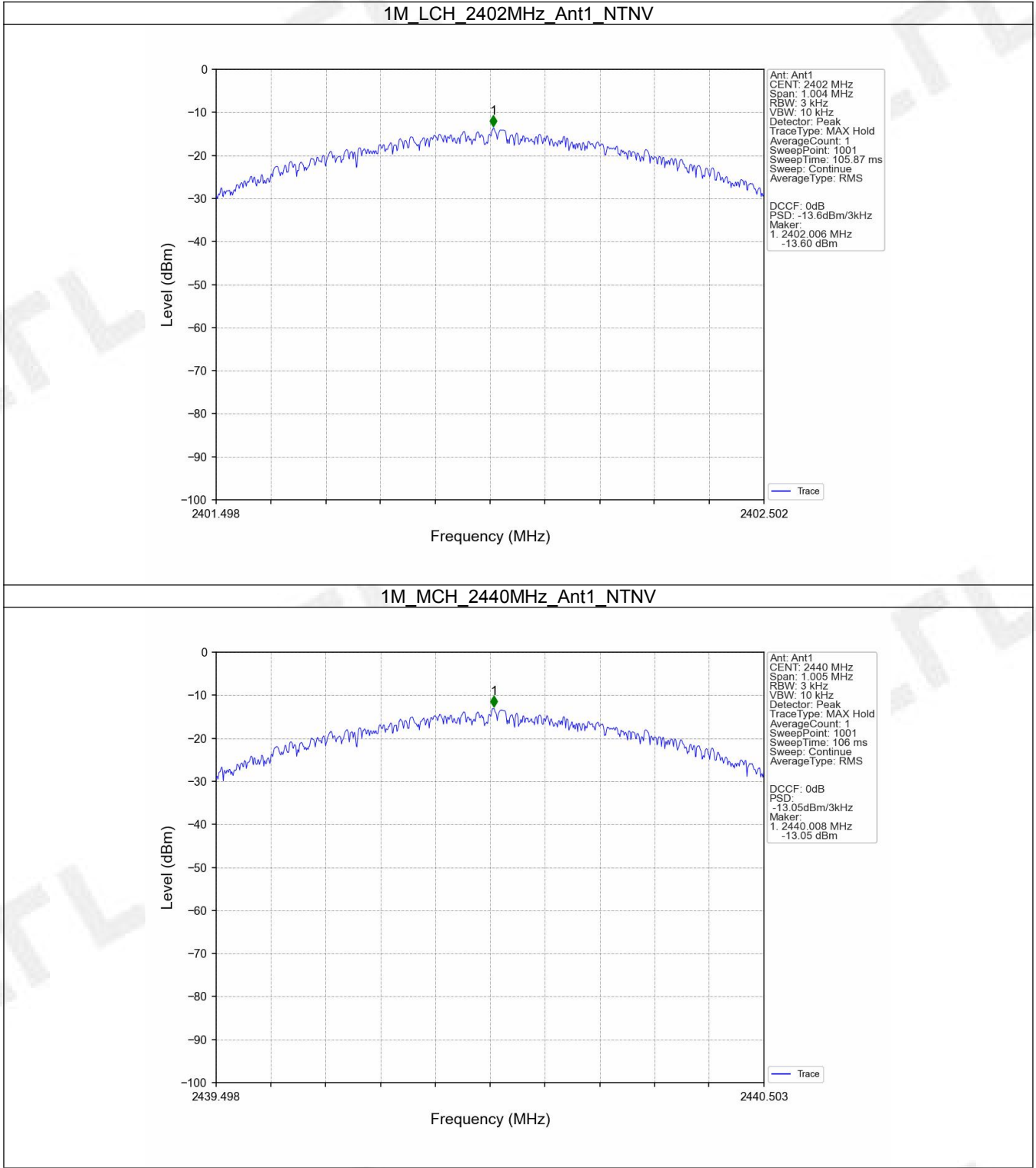
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1M	SISO	2402	-13.60	<=8	Pass
		2440	-13.05	<=8	Pass
		2480	-14.39	<=8	Pass
2M	SISO	2402	-18.19	<=8	Pass
		2440	-17.77	<=8	Pass
		2480	-19.10	<=8	Pass

Note1: Antenna Gain: Ant1: -3.35dBi;

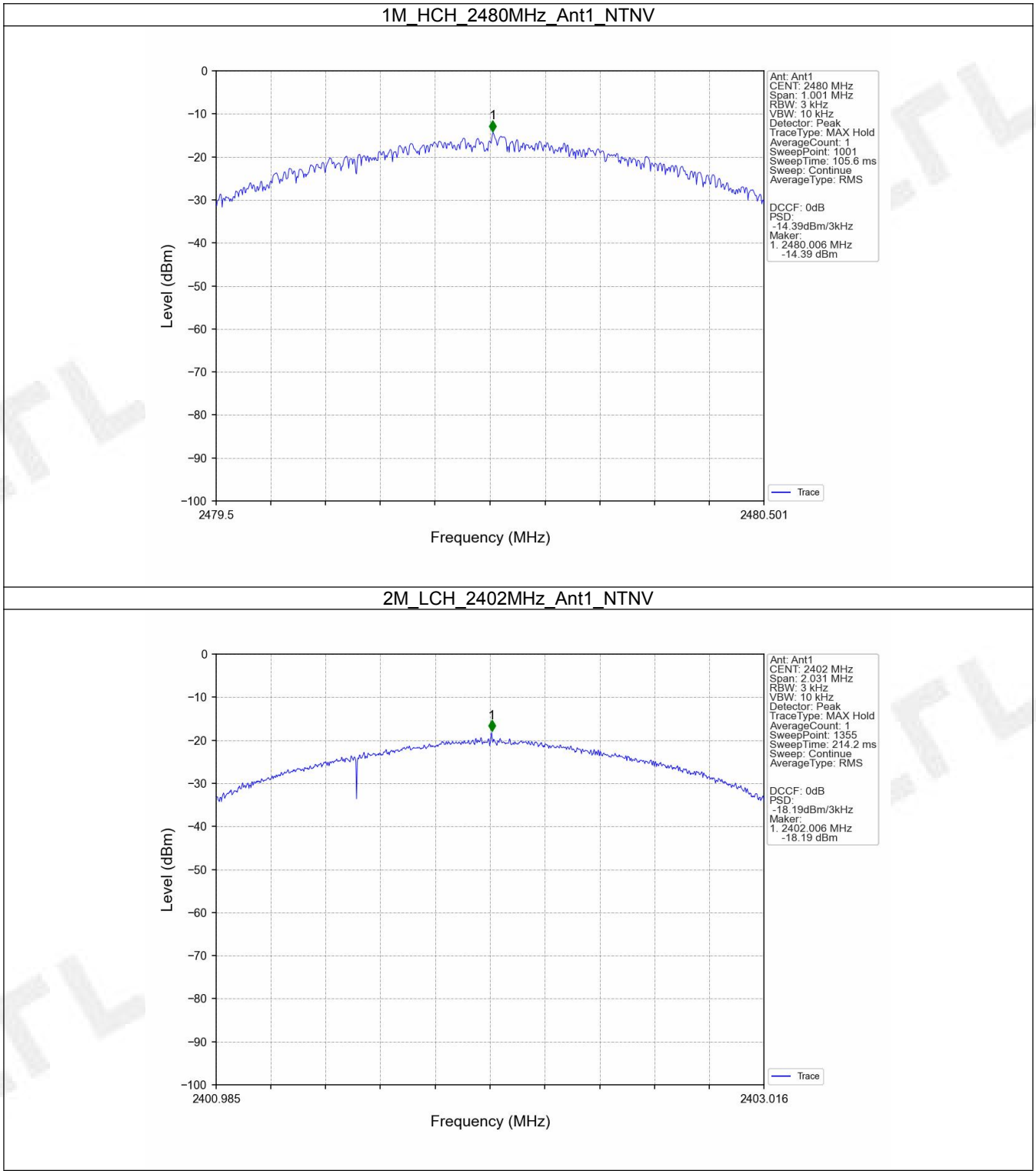
FCCID: 2AN5D-N1804

4.2 Test Graph

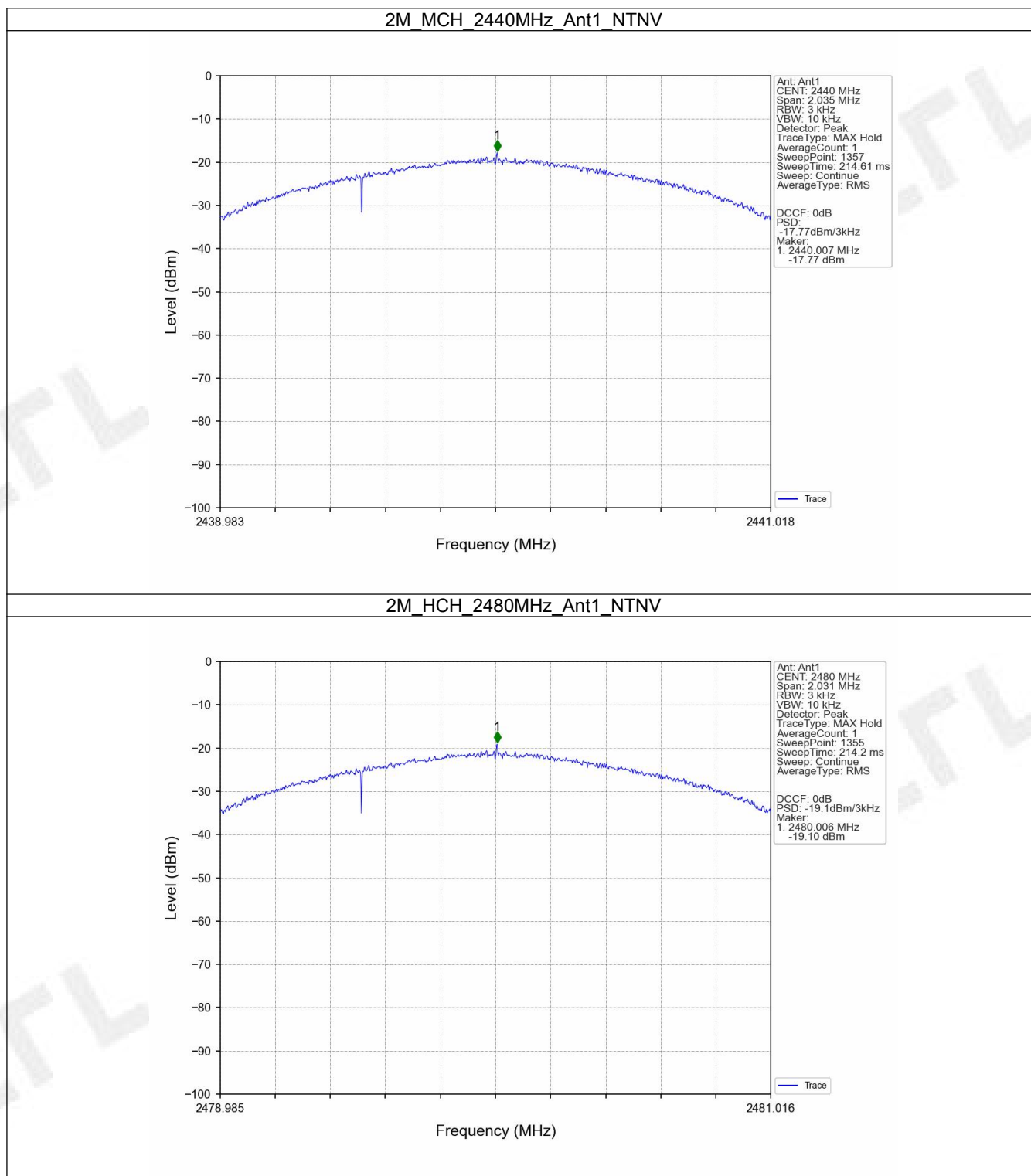
4.2.1 PSD



FCCID: 2AN5D-N1804



FCCID: 2AN5D-N1804



FCCID: 2AN5D-N1804

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

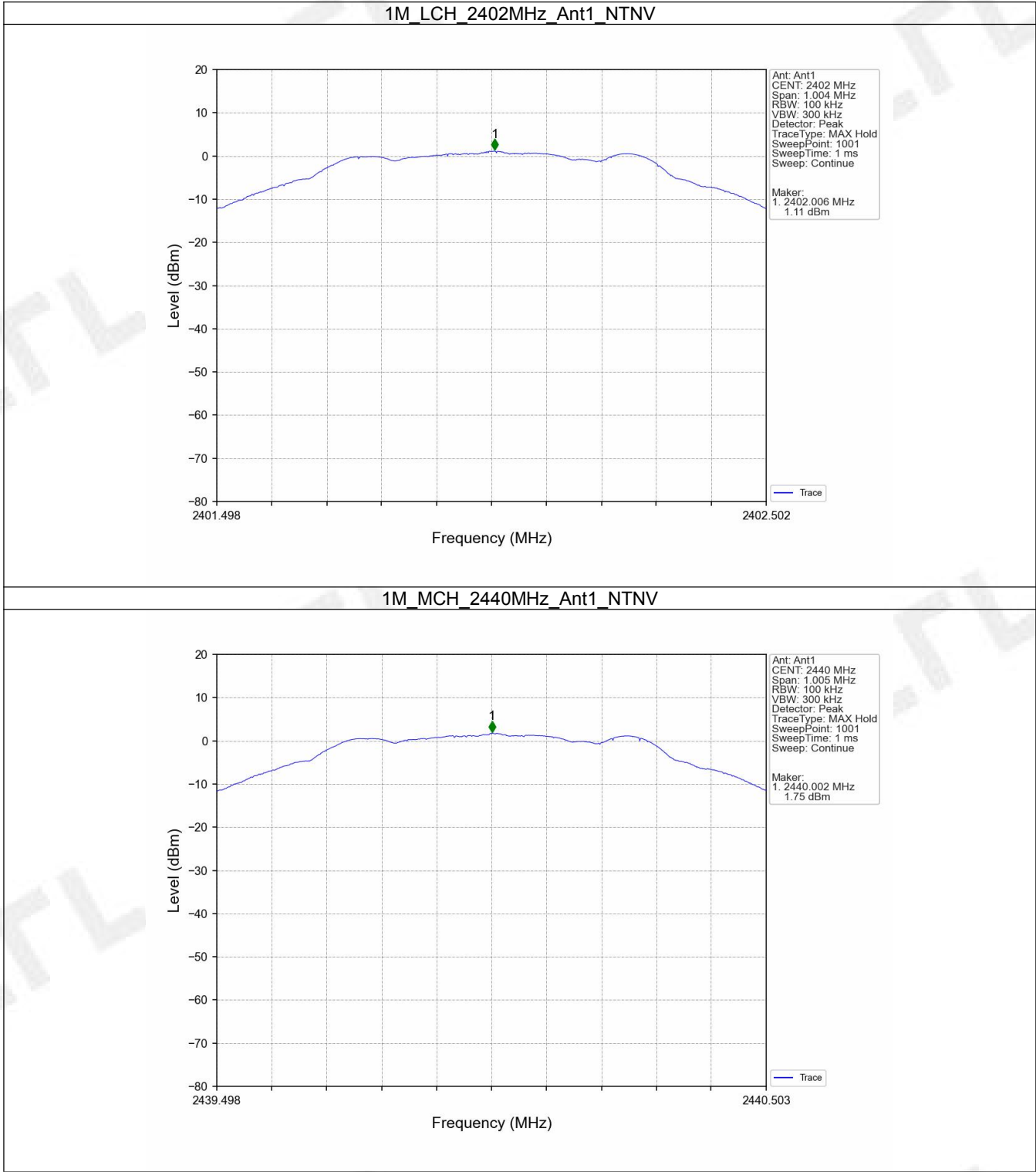
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	1.75	-18.25	Pass
		2440	1	1.75	-18.25	Pass
		2480	1	1.75	-18.25	Pass
2M	SISO	2402	1	-0.33	-20.33	Pass
		2440	1	-0.33	-20.33	Pass
		2480	1	-0.33	-20.33	Pass

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.

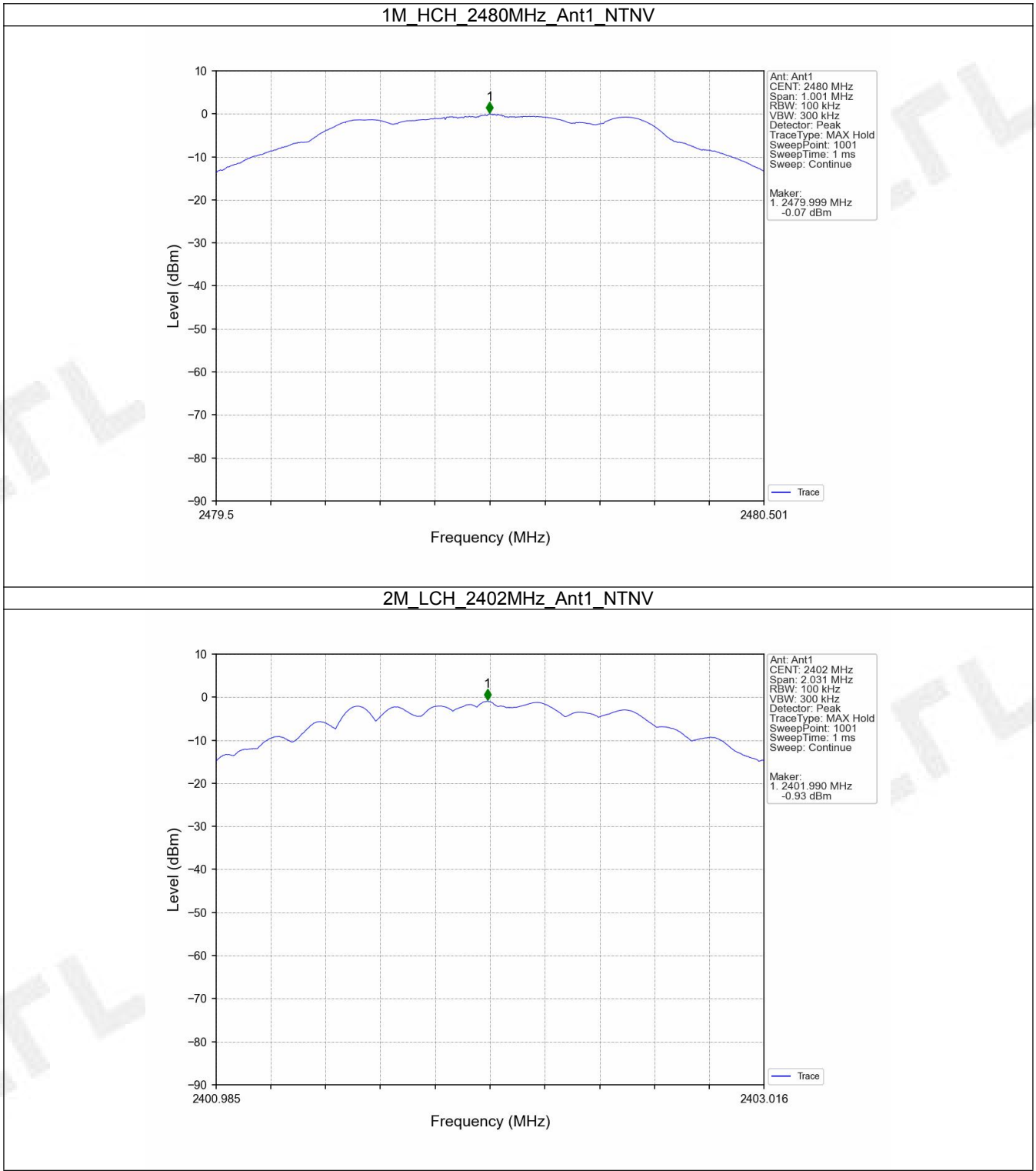
FCCID: 2AN5D-N1804

5.2 Test Graph

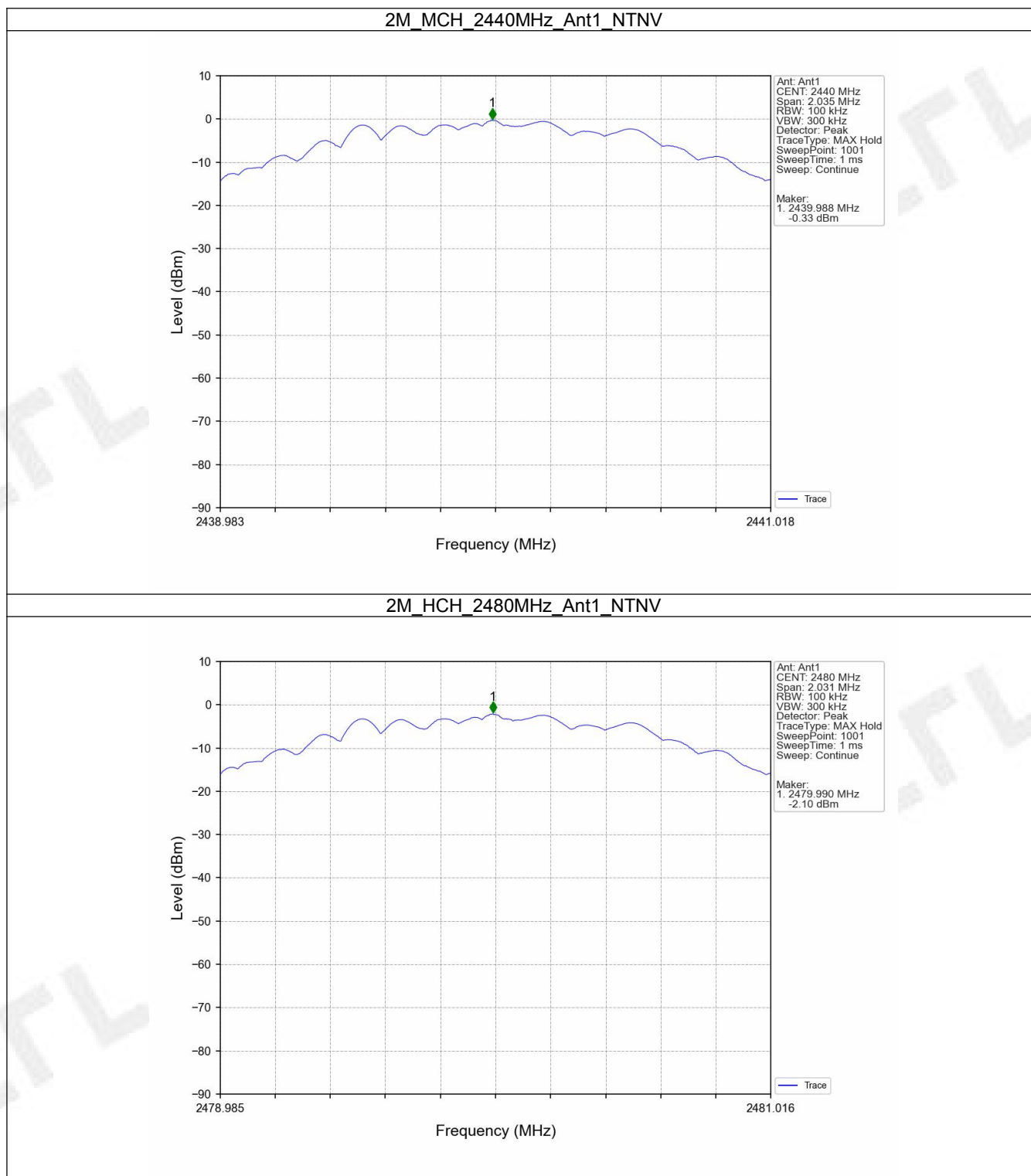
5.2.1 Ref



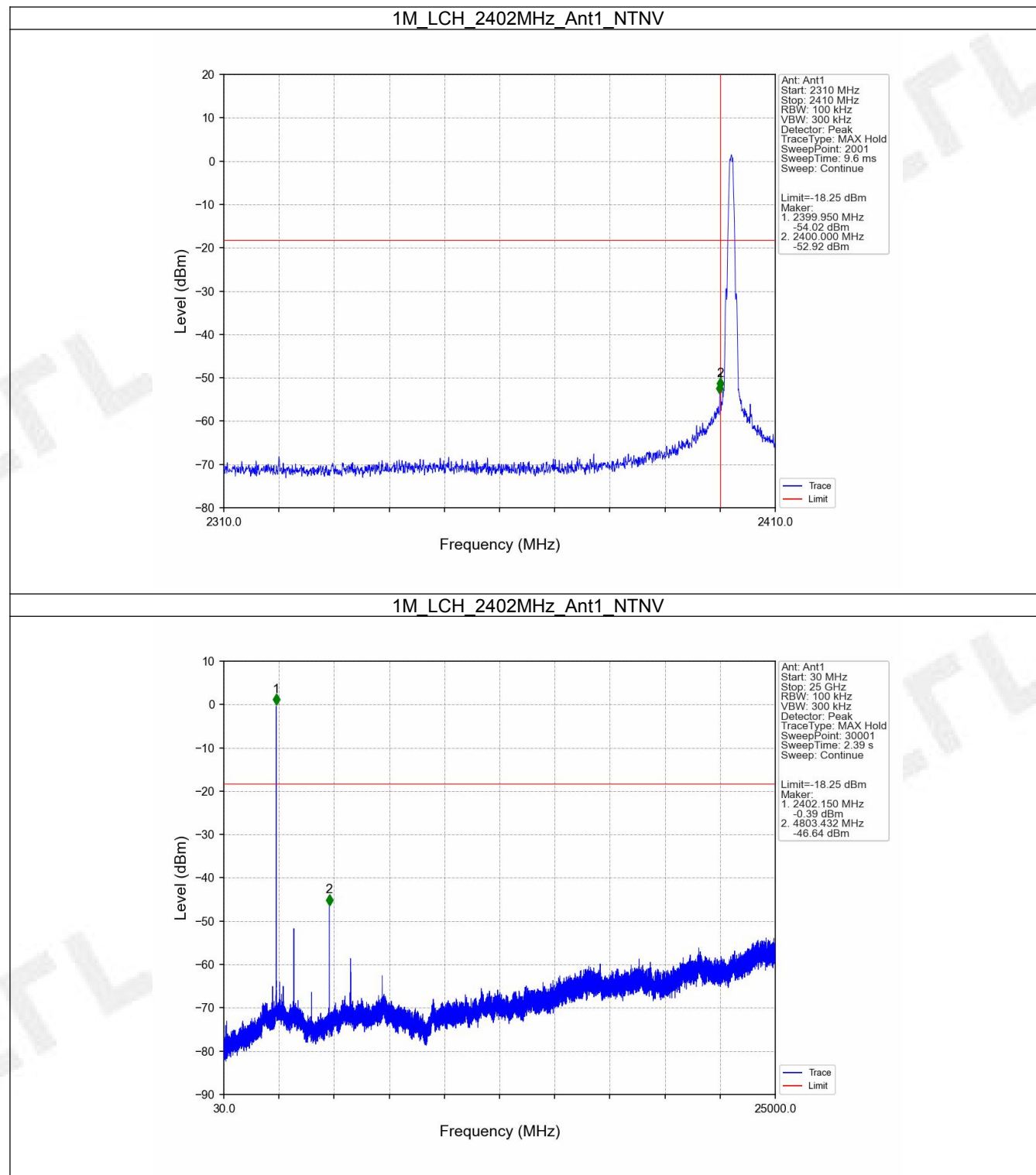
FCCID: 2AN5D-N1804



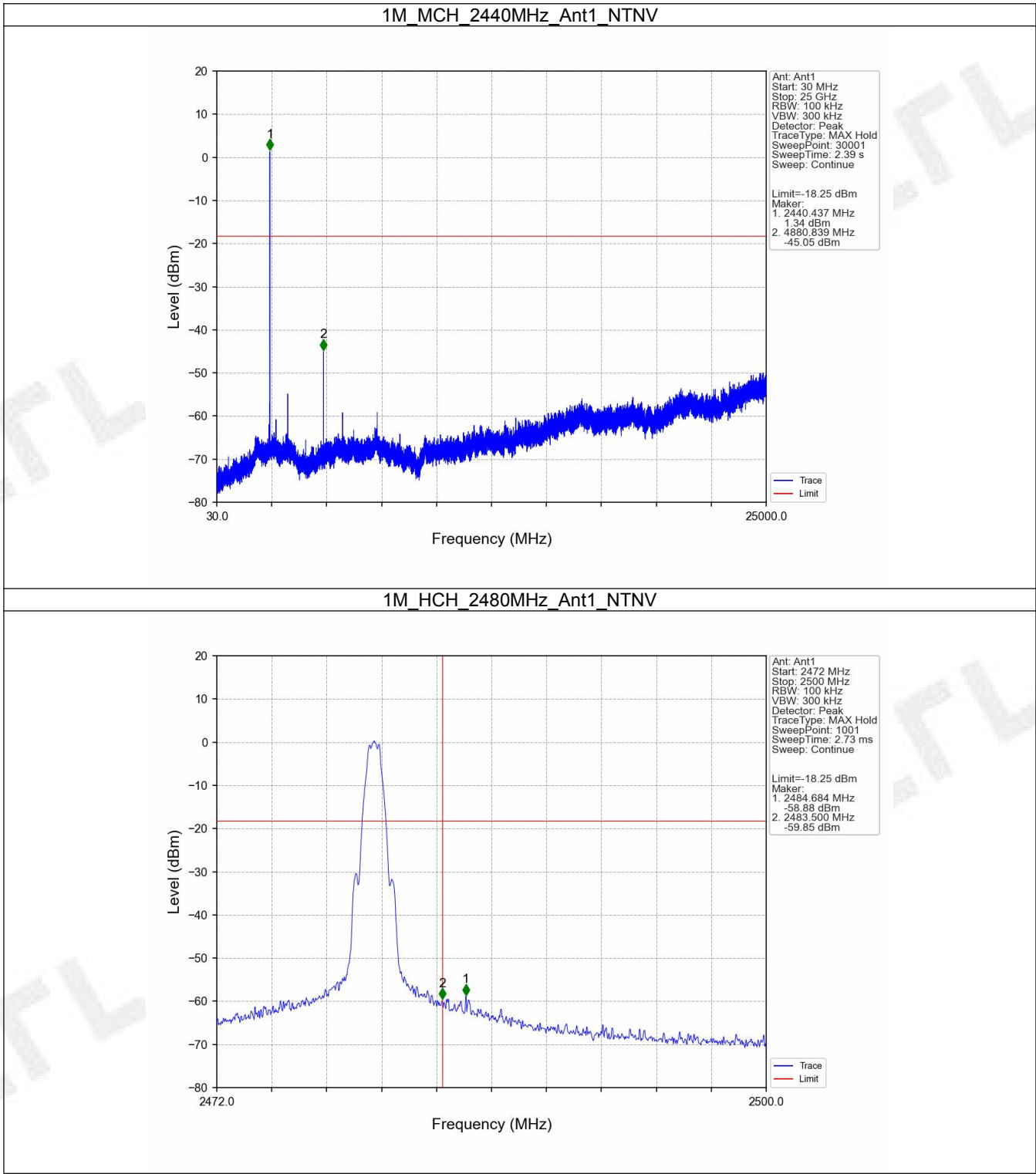
FCCID: 2AN5D-N1804



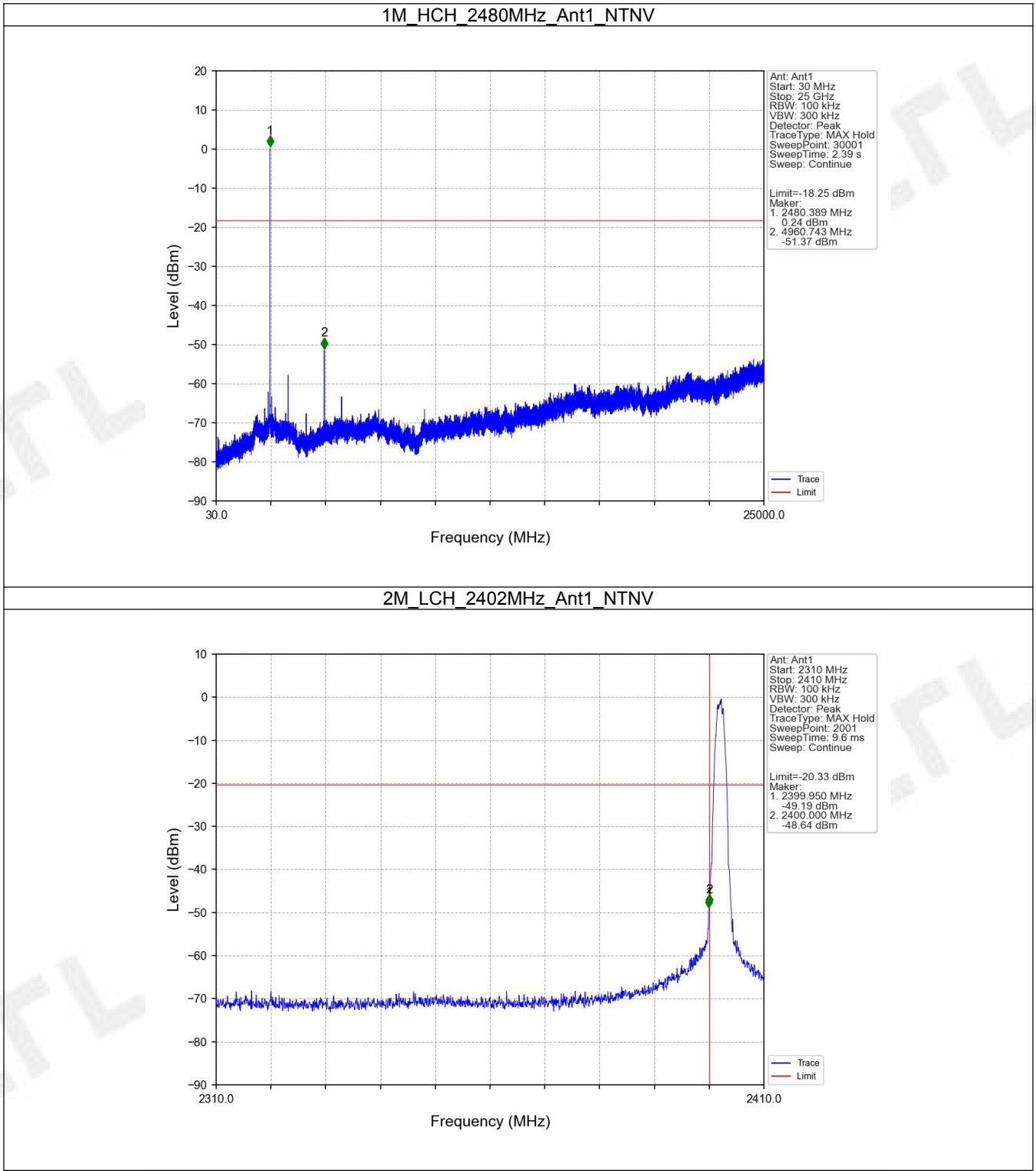
FCCID: 2AN5D-N1804

5.2.2 CSE

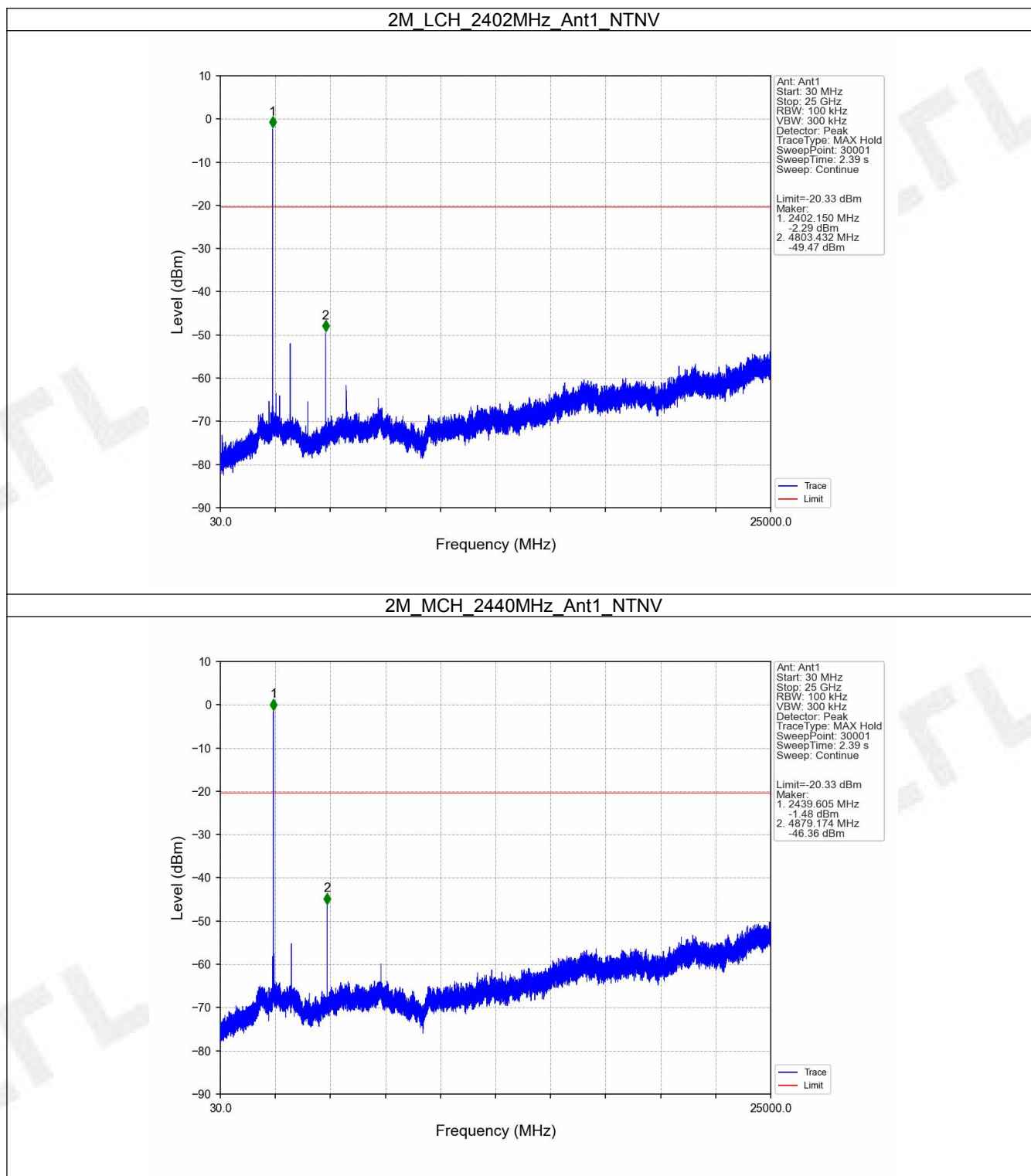
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