

Appendix Test Data for 2.4GHz (Conducted Measurement)

Product Name: RGB mood tube light

Trade Mark: N/A

Test Model: TL150

FCC ID: 2BL32-TL150

Environmental Conditions

Temperature:	24.3°C
Relative Humidity:	52%
ATM Pressure:	100.0 kPa
Test Engineer:	Tony luo
Supervised by:	Max zhang
NOTE	N/A

1. Duty Cycle

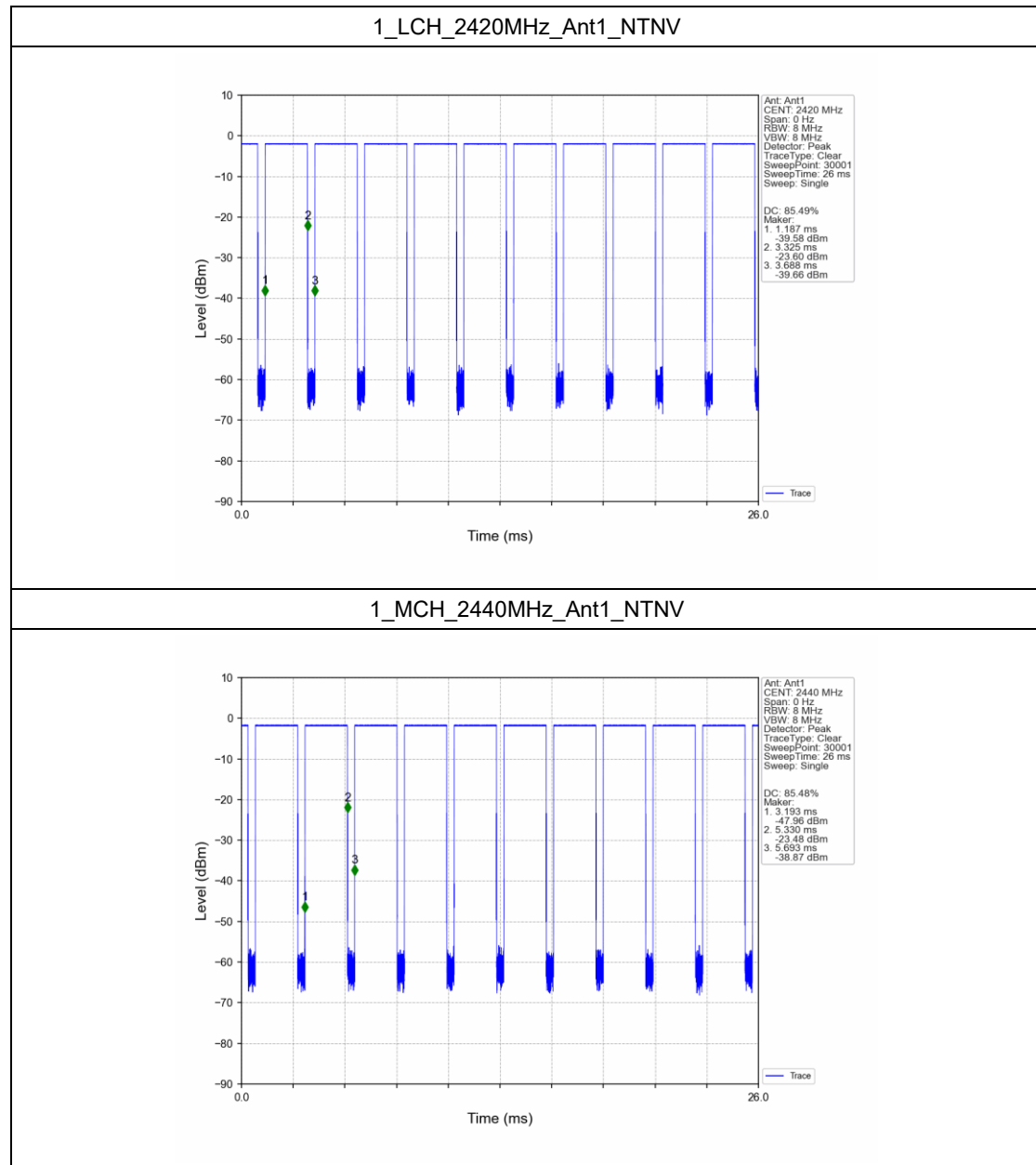
1.1 Test Result

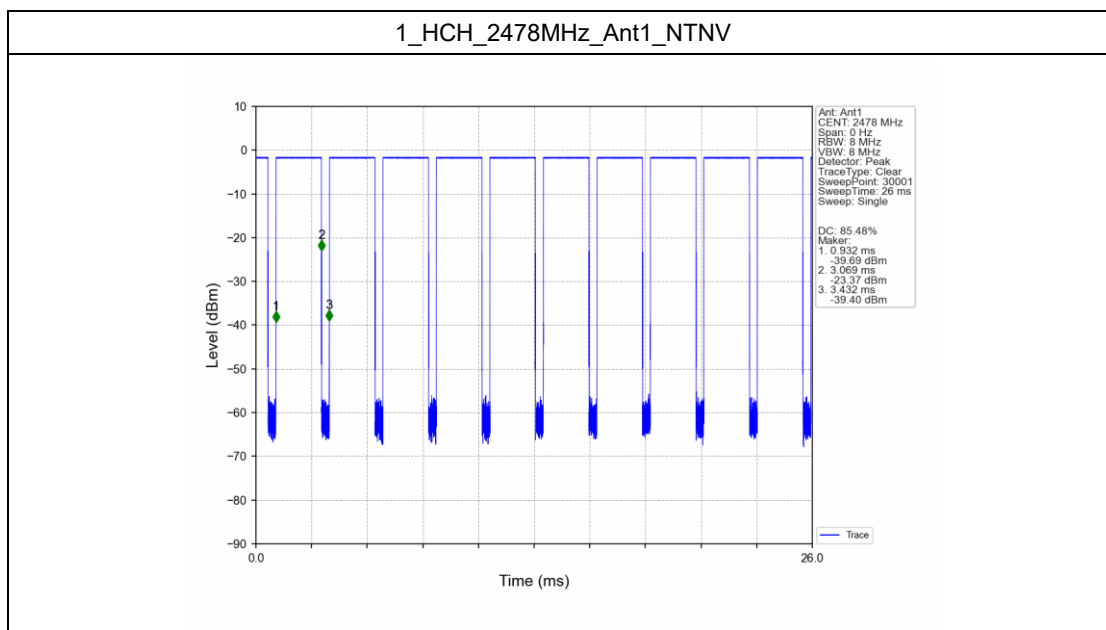
1.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
1	SISO	2420	2.138	2.501	85.49	0.68	0.03
		2440	2.137	2.500	85.48	0.68	0.03
		2478	2.137	2.500	85.48	0.68	0.03

1.2 Test Graph

1.2.1 Ant1





2. Bandwidth

2.1 Test Result

2.1.1 OBW

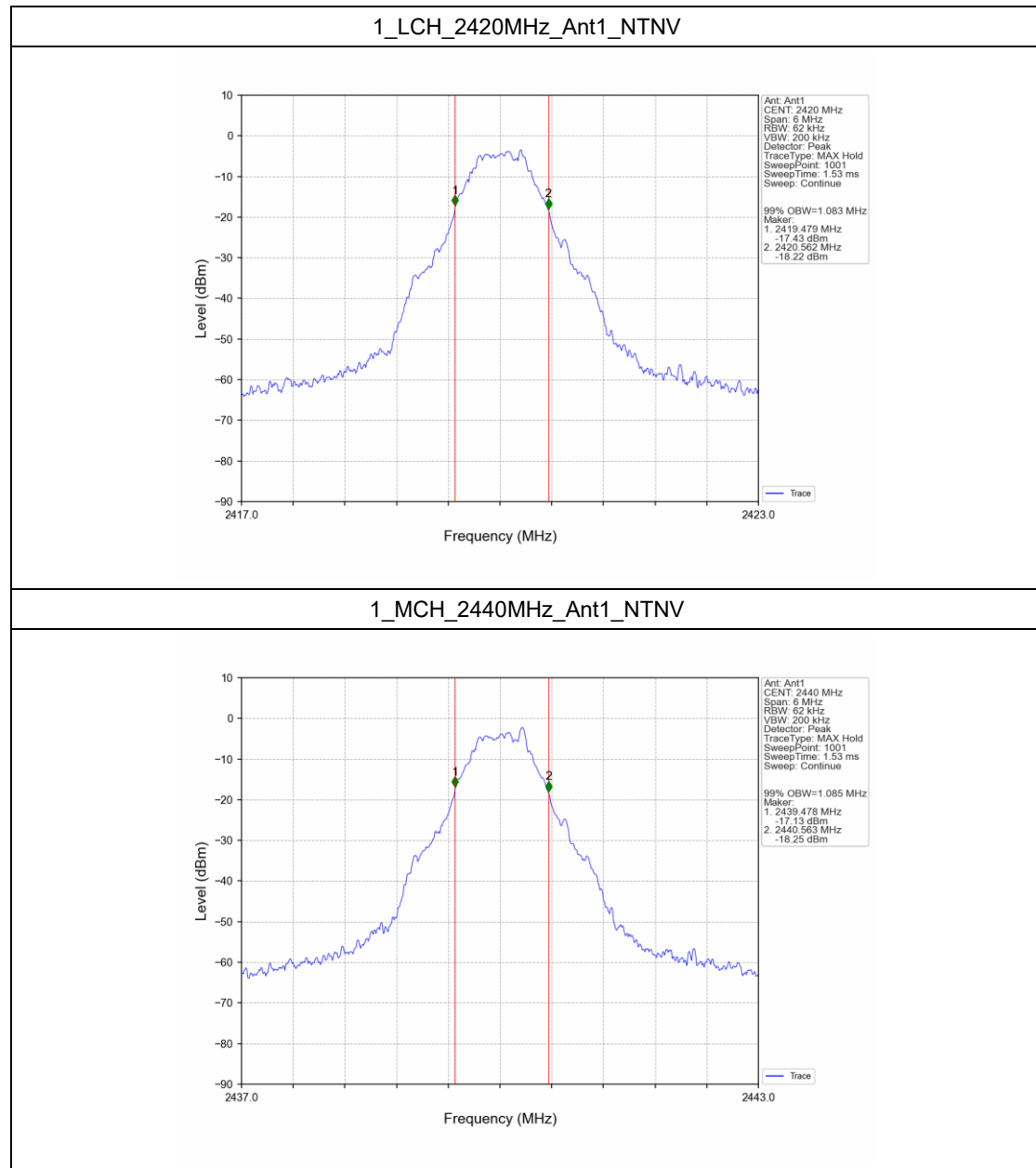
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
1	SISO	2420	1	1.083	/	Pass
		2440	1	1.085	/	Pass
		2478	1	1.089	/	Pass

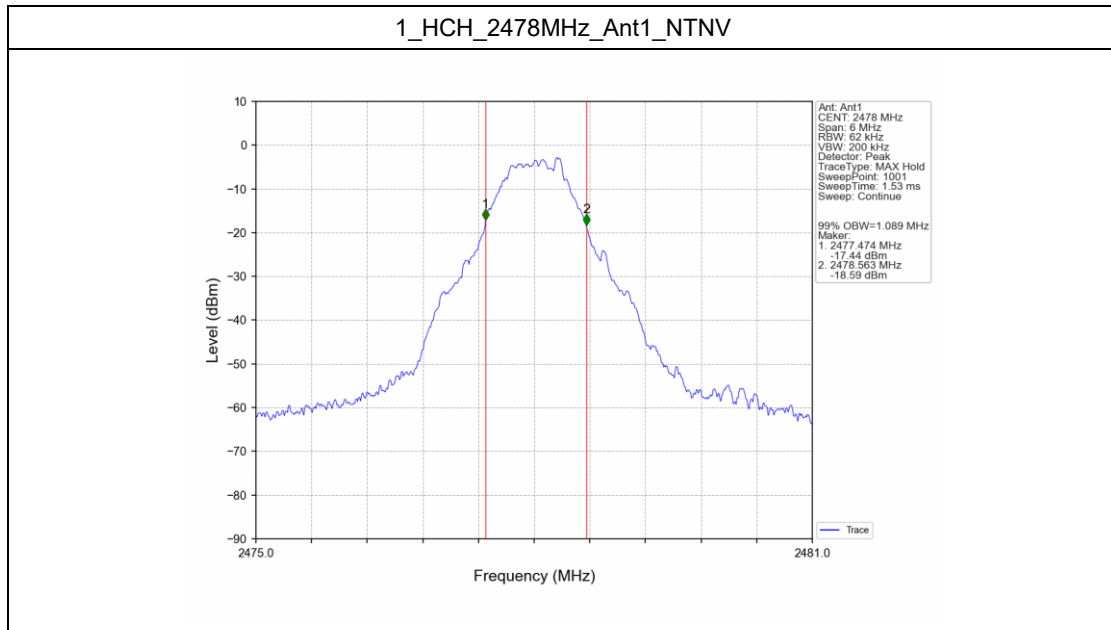
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1	SISO	2420	1	0.743	≥ 0.5	Pass
		2440	1	0.743	≥ 0.5	Pass
		2478	1	0.756	≥ 0.5	Pass

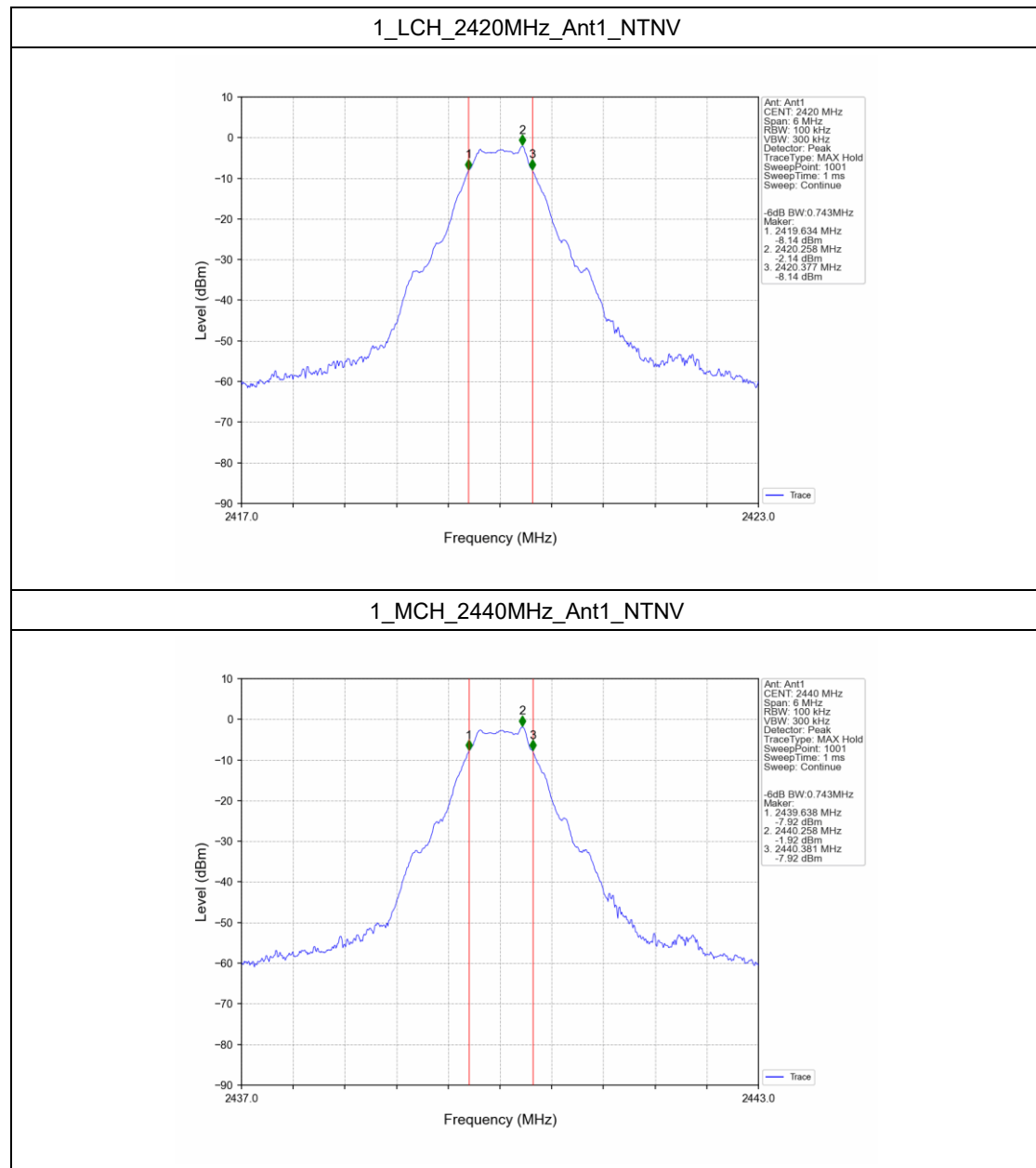
2.2 Test Graph

2.2.1 OBW

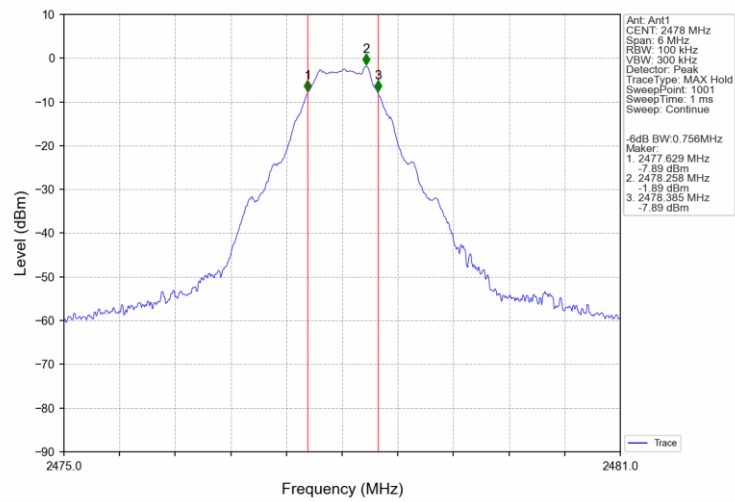




2.2.2 6dB BW



1_HCH_2478MHz_Ant1_NTNV



3. Maximum Conducted Output Power

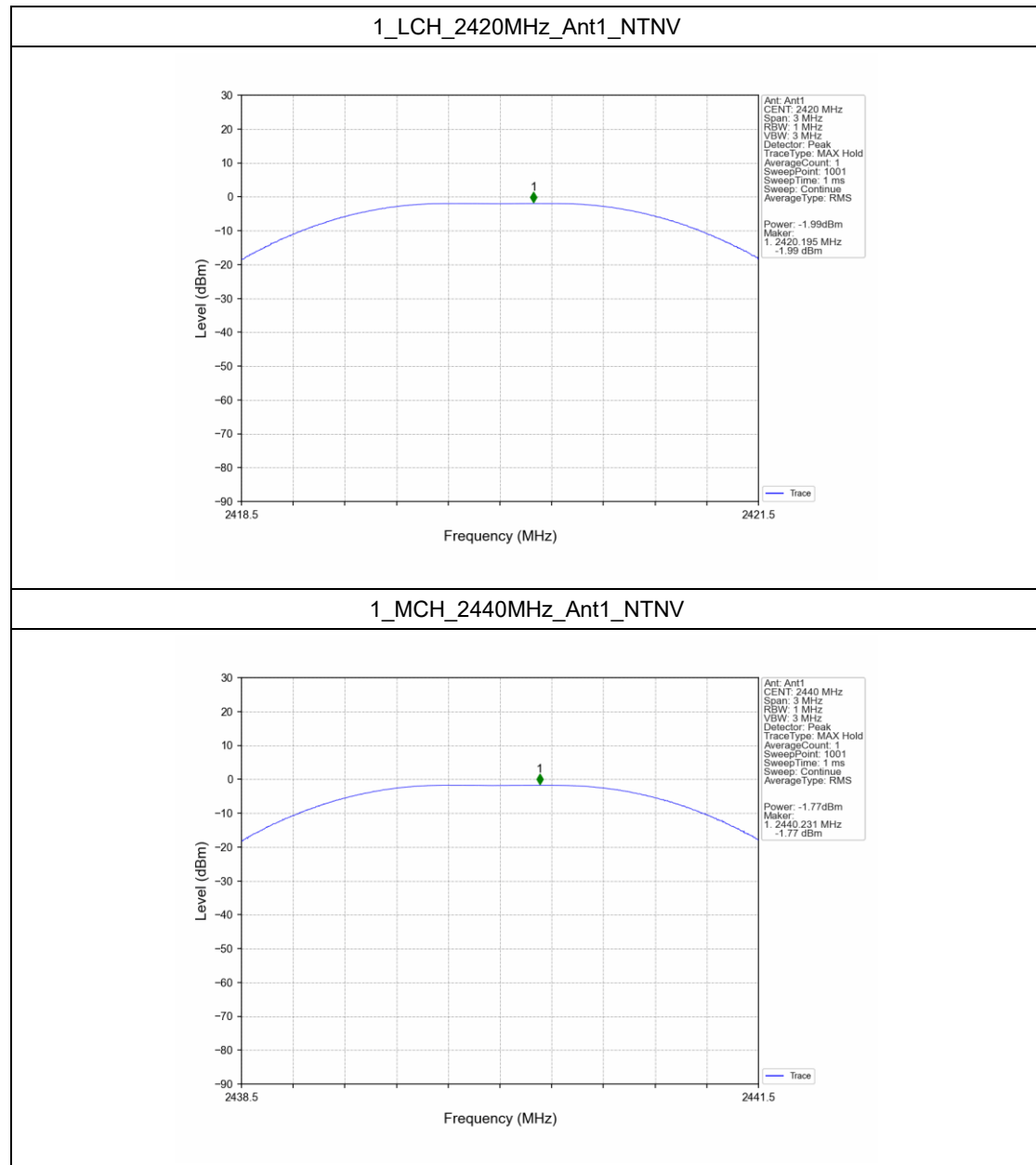
3.1 Test Result

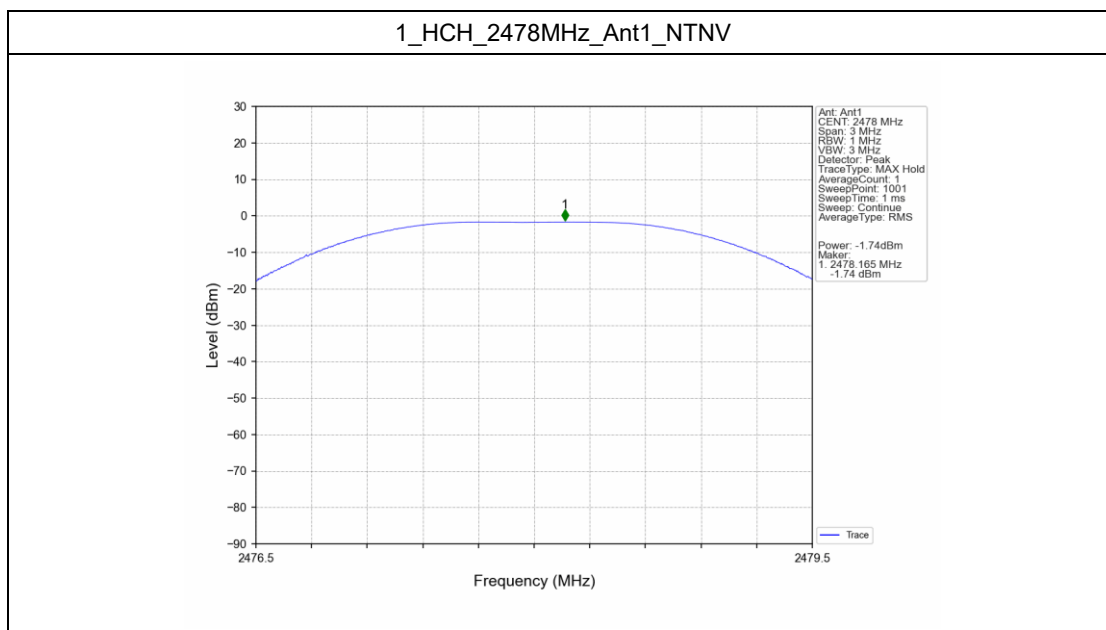
3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1	SISO	2420	-1.99	<=30	Pass
		2440	-1.77	<=30	Pass
		2478	-1.74	<=30	Pass
Note1: Antenna Gain: Ant1: 1.67dBi;					

3.2 Test Graph

3.2.1 Power





4. Maximum Power Spectral Density

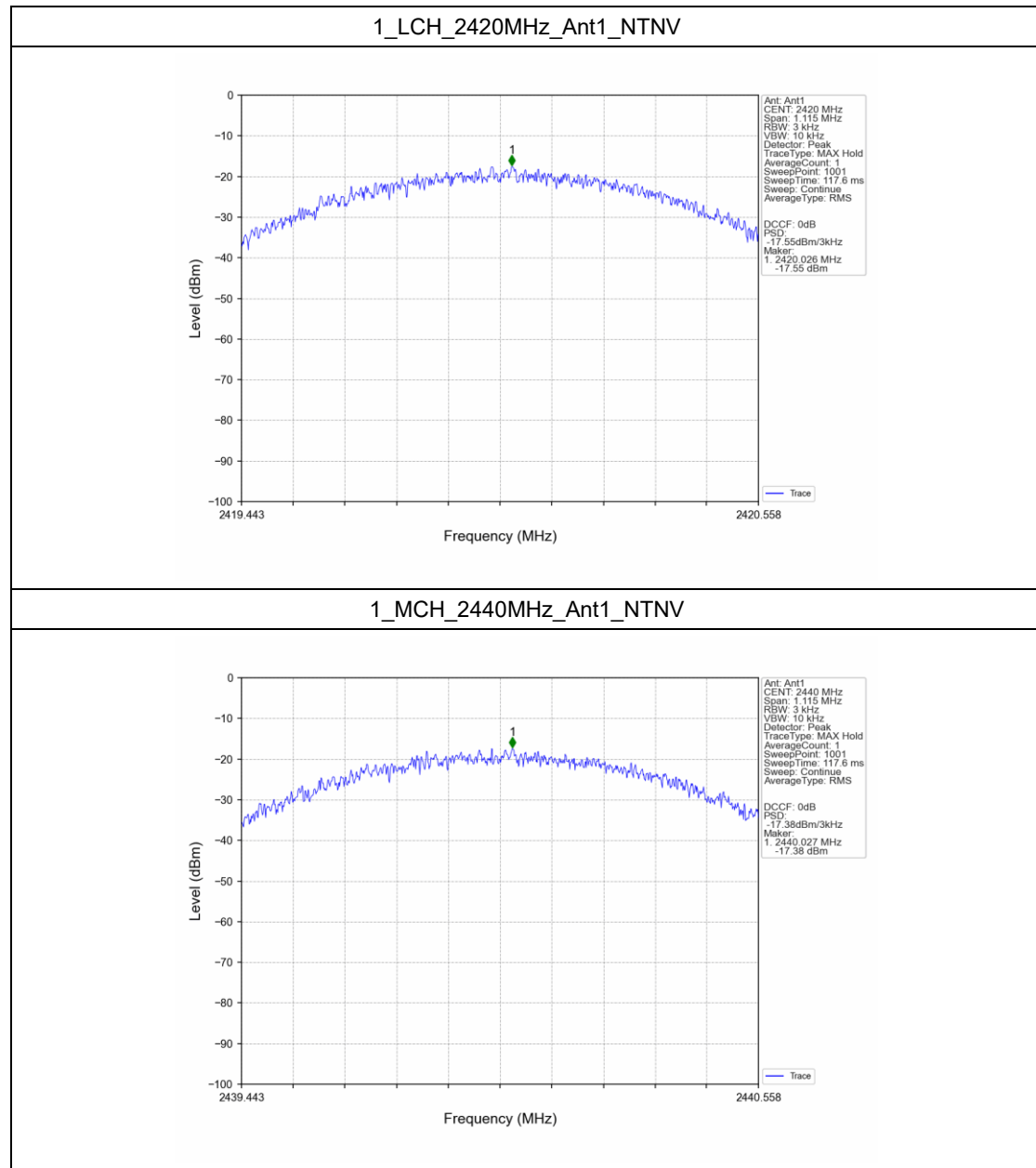
4.1 Test Result

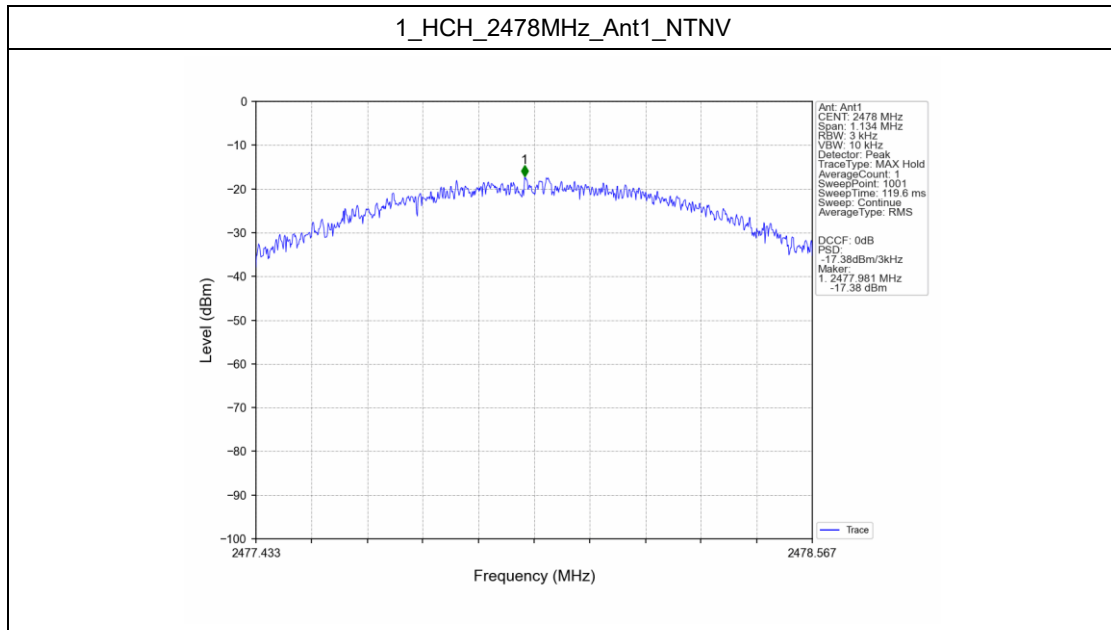
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1	SISO	2420	-17.55	<=8	Pass
		2440	-17.38	<=8	Pass
		2478	-17.38	<=8	Pass
Note1: Antenna Gain: Ant1: 1.67dBi;					

4.2 Test Graph

4.2.1 PSD





5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

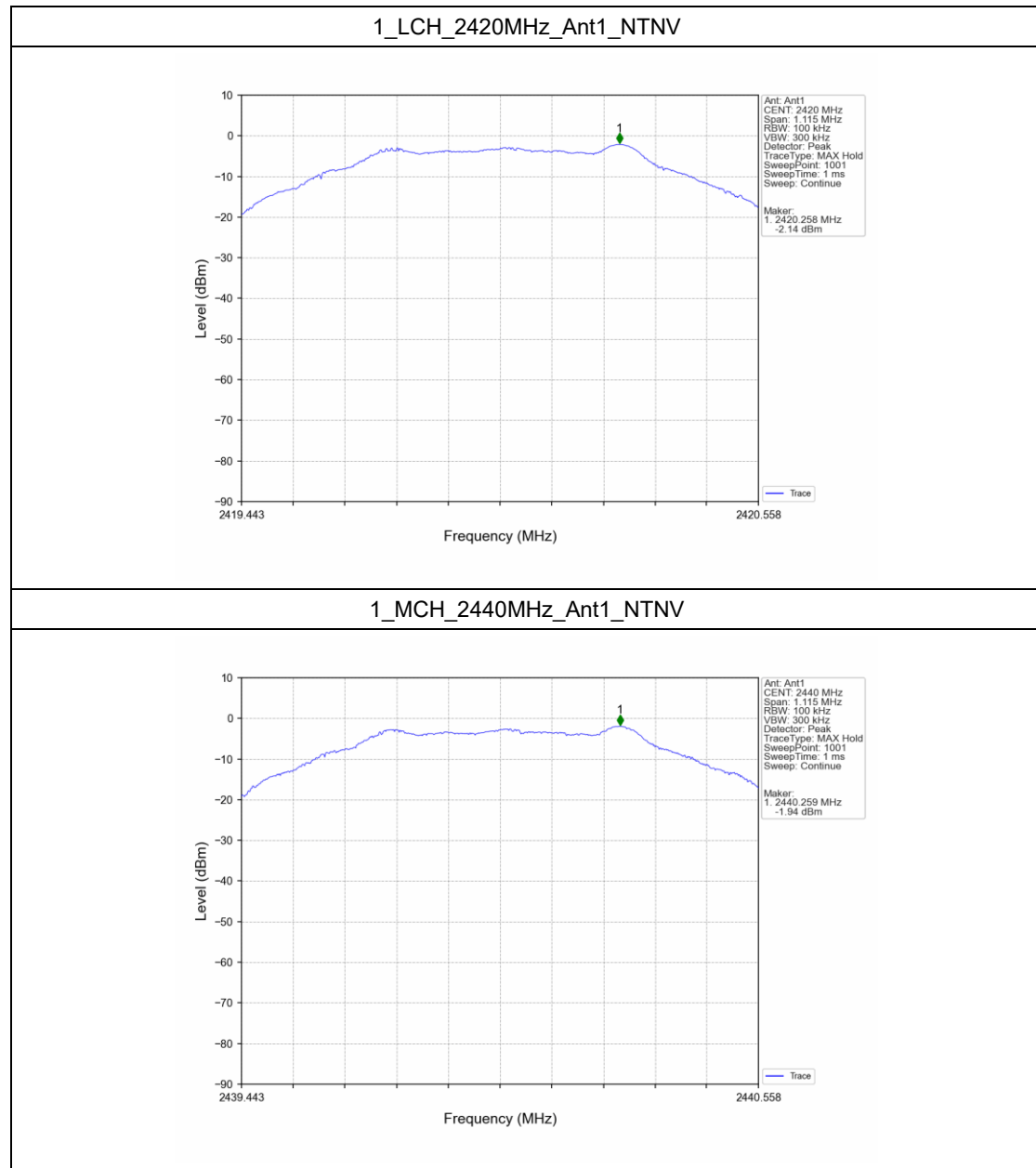
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
1	SISO	2420	1	-2.14
		2440	1	-1.94
		2478	1	-1.94
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.				

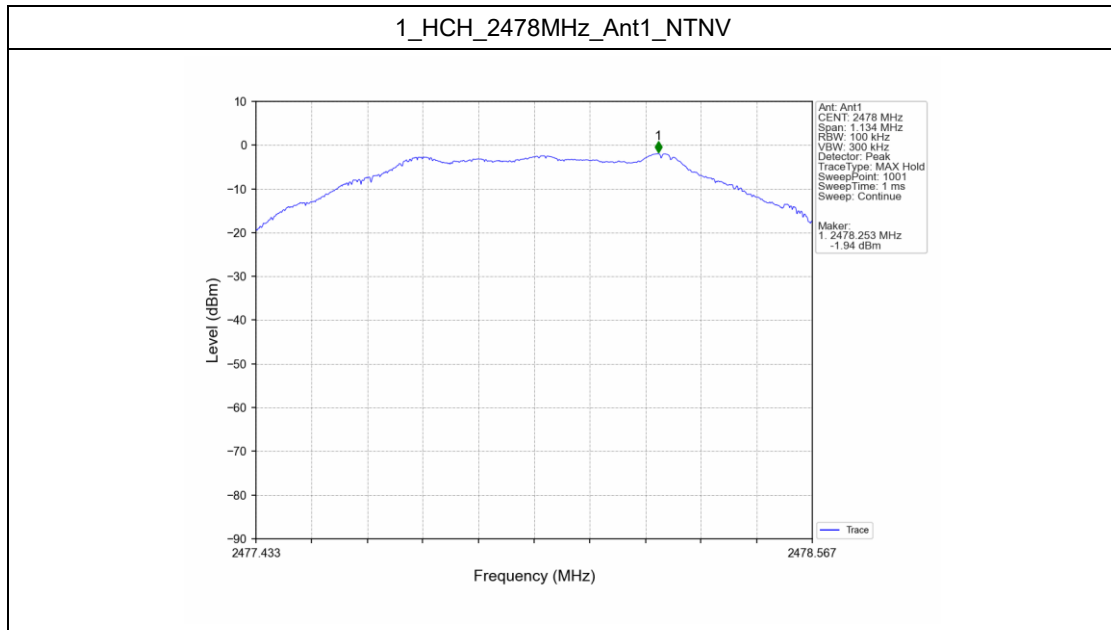
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1	SISO	2420	1	-1.94	-21.94	Pass
		2440	1	-1.94	-21.94	Pass
		2478	1	-1.94	-21.94	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.						

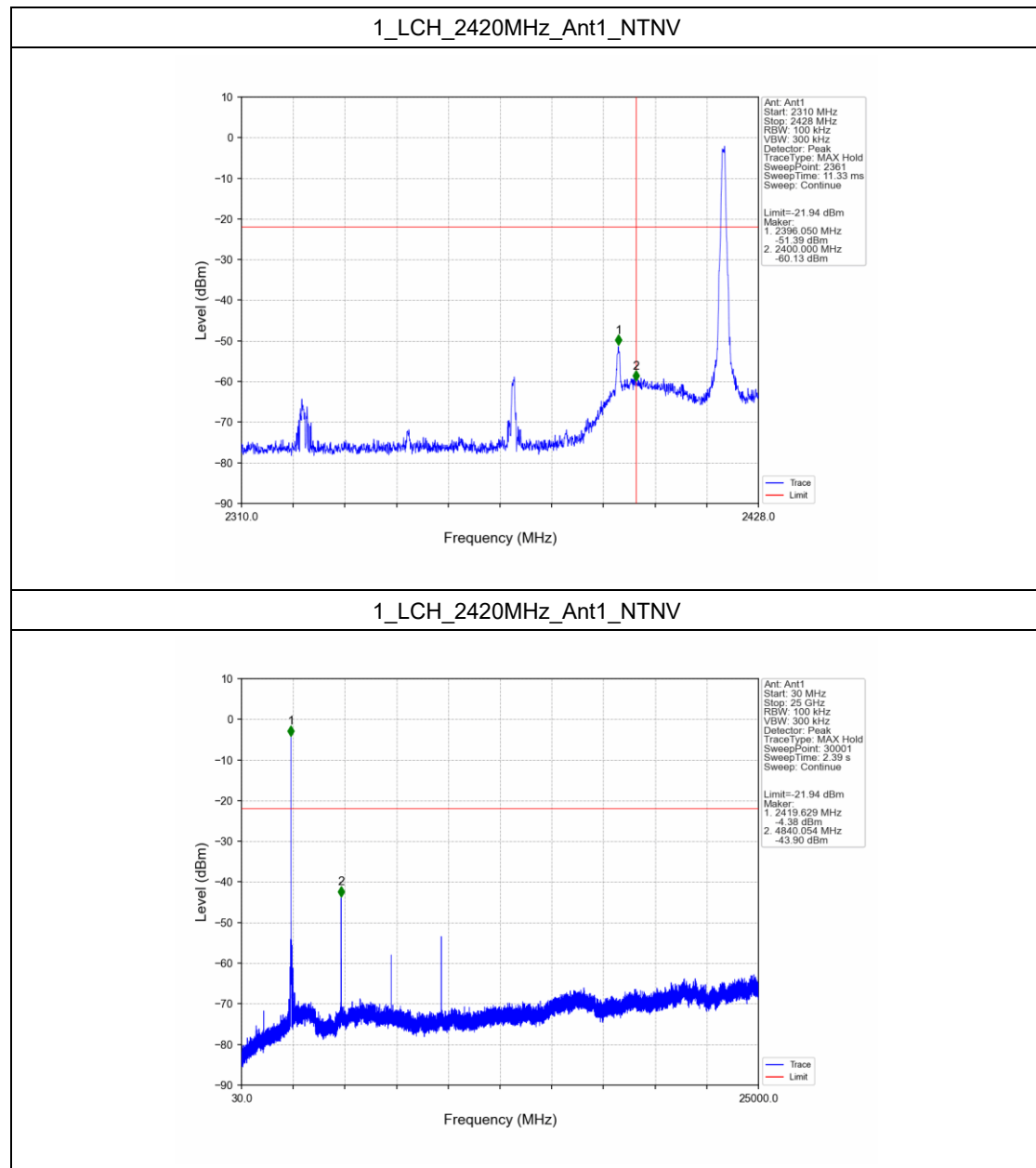
5.2 Test Graph

5.2.1 Ref

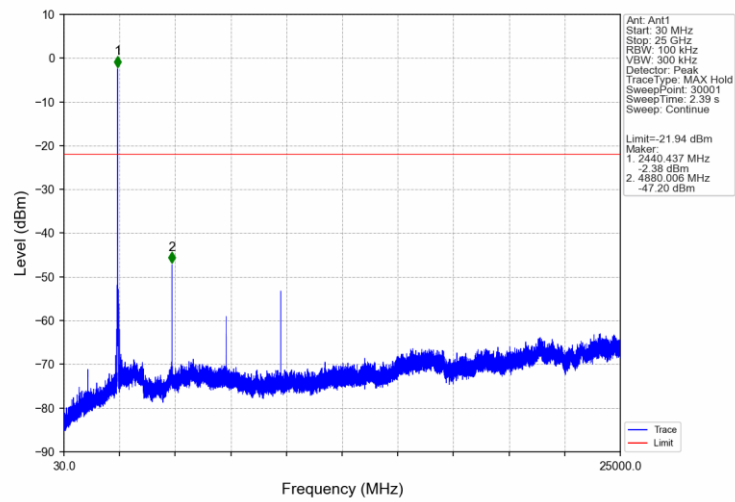




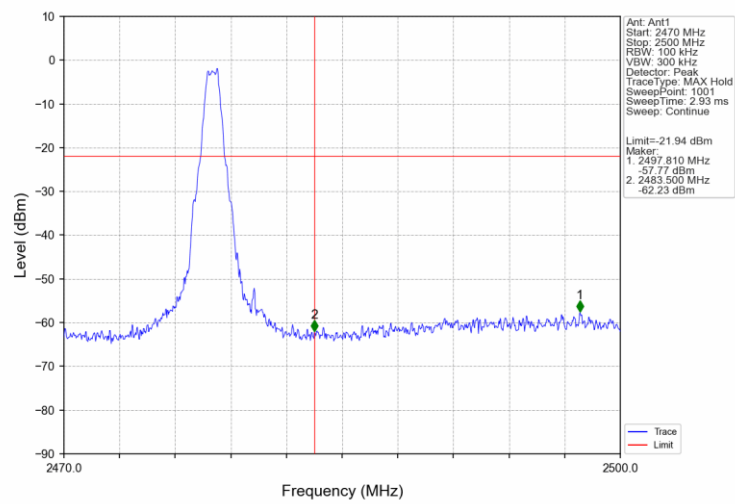
5.2.2 CSE



1_MCH_2440MHz_Ant1_NTNV



1_HCH_2478MHz_Ant1_NTNV



1_HCH_2478MHz_Ant1_NTNV

