

Appendix Test Data for 2.4GHz (Conducted Measurement)

Product Name: RGB mood tube light

Trade Mark: N/A

Test Model: TL130Plus

FCC ID: 2BL32-TL130PLUS

Environmental Conditions

Temperature:	24.2°C
Relative Humidity:	52%
ATM Pressure:	100.0 kPa
Test Engineer:	Tony luo
Supervised by:	Max zhang
NOTE	N/A

1. Duty Cycle

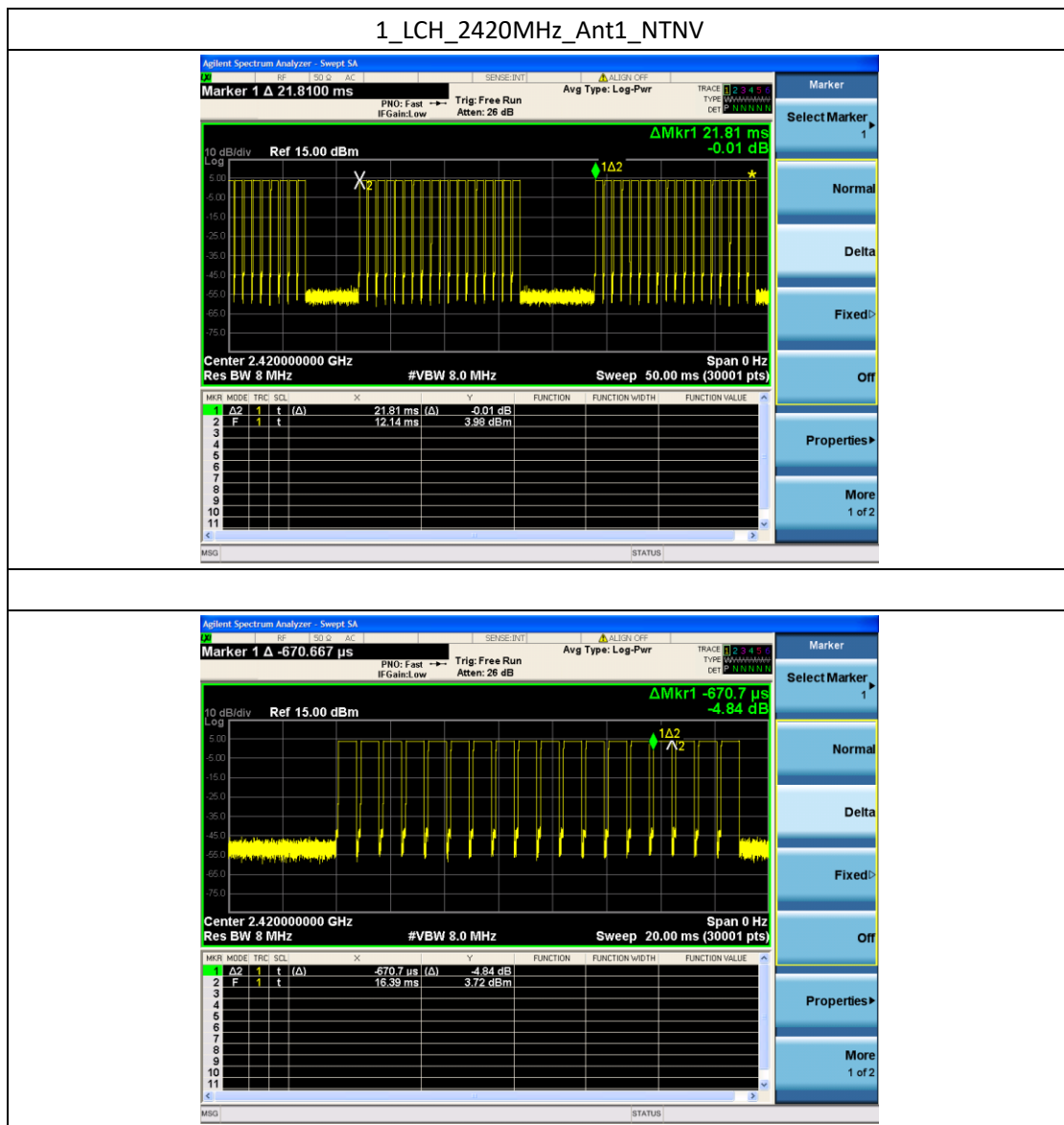
1.1 Test Result

1.1.1 Ant1

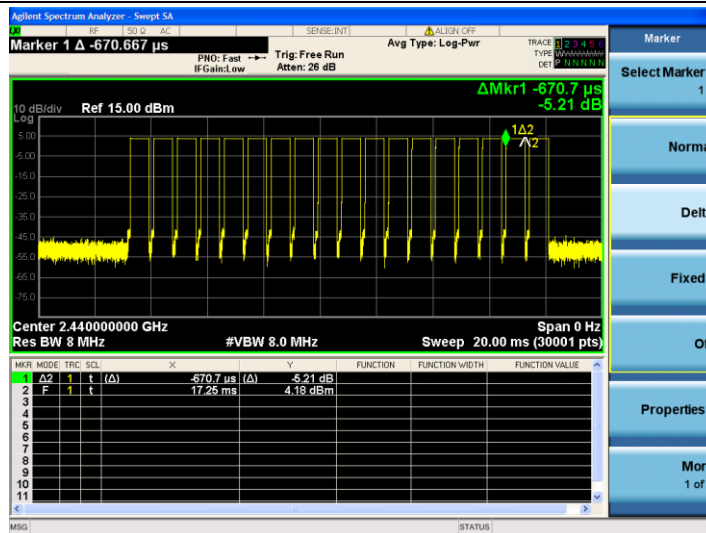
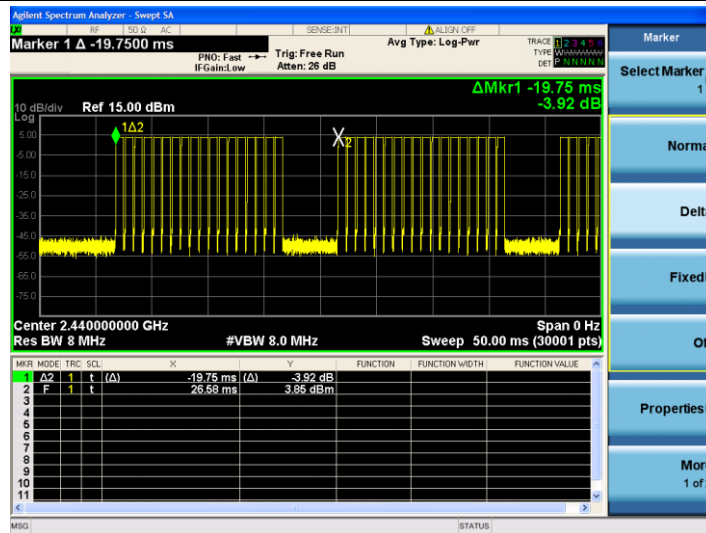
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
1	SISO	2420	12.078	21.81	55.37	2.57
		2440	12.078	19.75	61.15	2.14
		2478	11.88	19.93	59.60	2.25

1.2 Test Graph

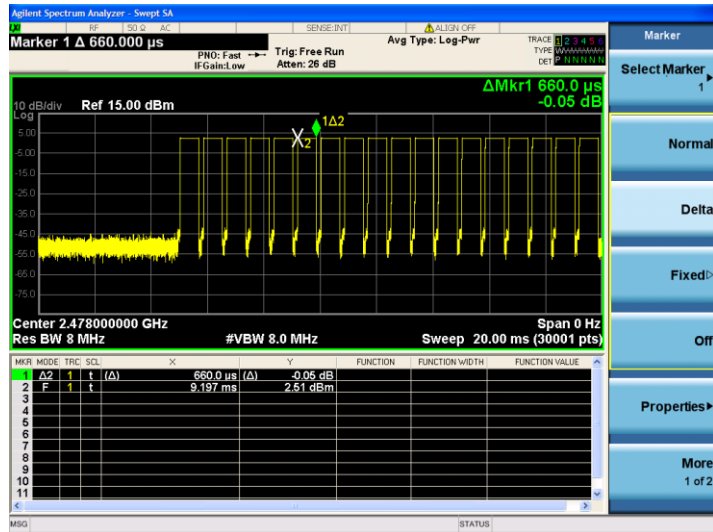
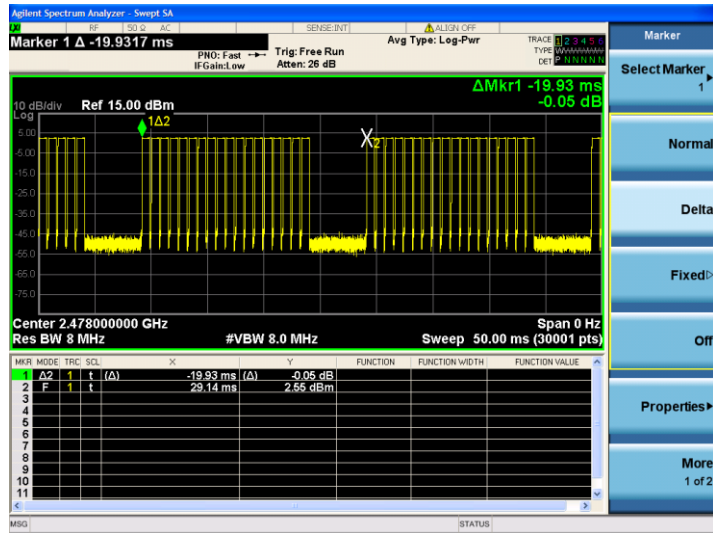
1.2.1 Ant1



1_MCH_2440MHz_Ant1_NTNV



1_HCH_2478MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

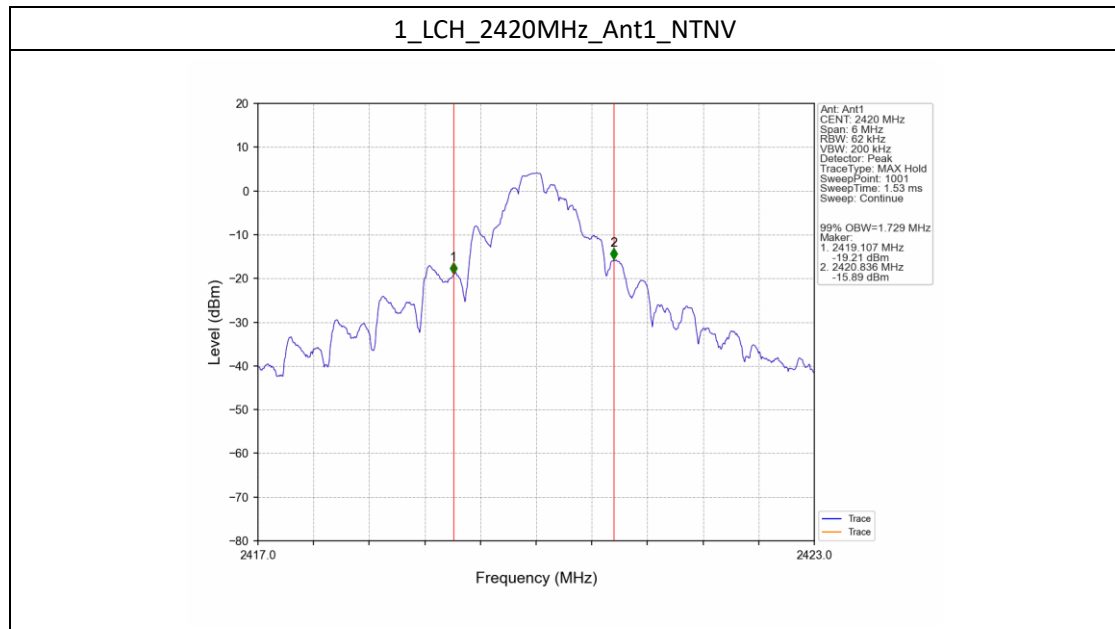
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
1	SISO	2420	1	1.729	/	Pass
		2440	1	1.138	/	Pass
		2478	1	1.255	/	Pass

2.1.2 6dB BW

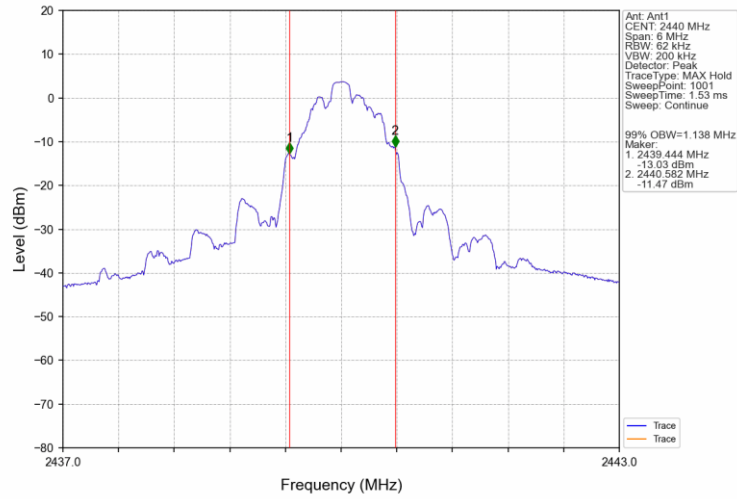
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1	SISO	2420	1	0.707	>=0.5	Pass
		2440	1	0.734	>=0.5	Pass
		2478	1	0.912	>=0.5	Pass

2.2 Test Graph

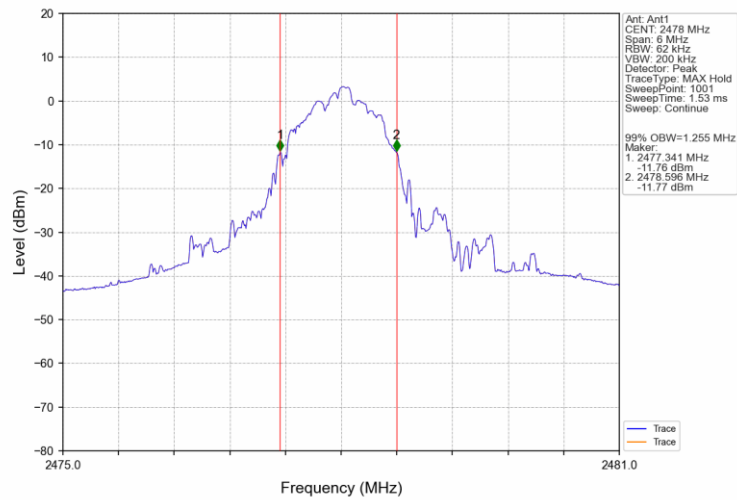
2.2.1 OBW



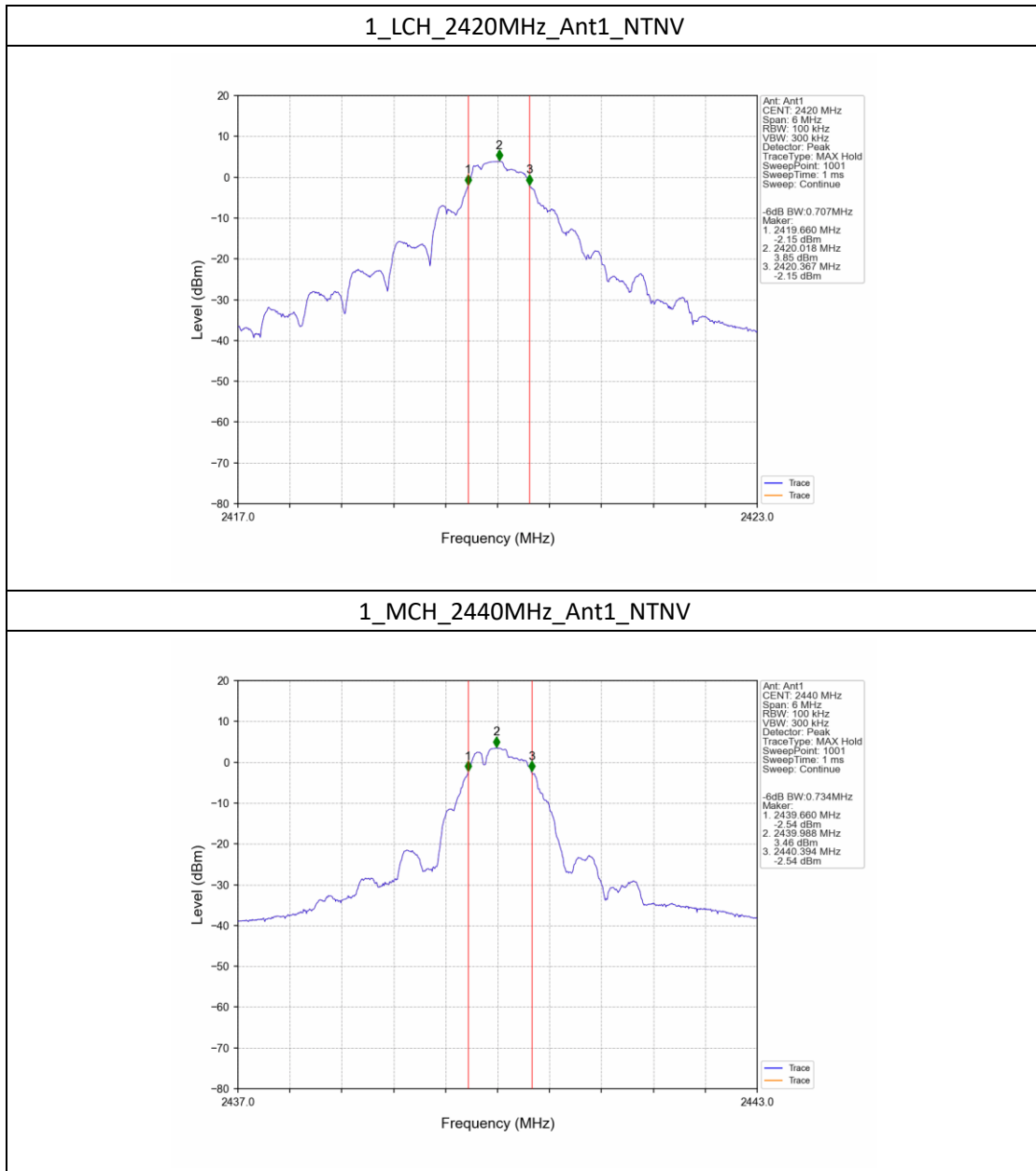
1_MCH_2440MHz_Ant1_NTNV

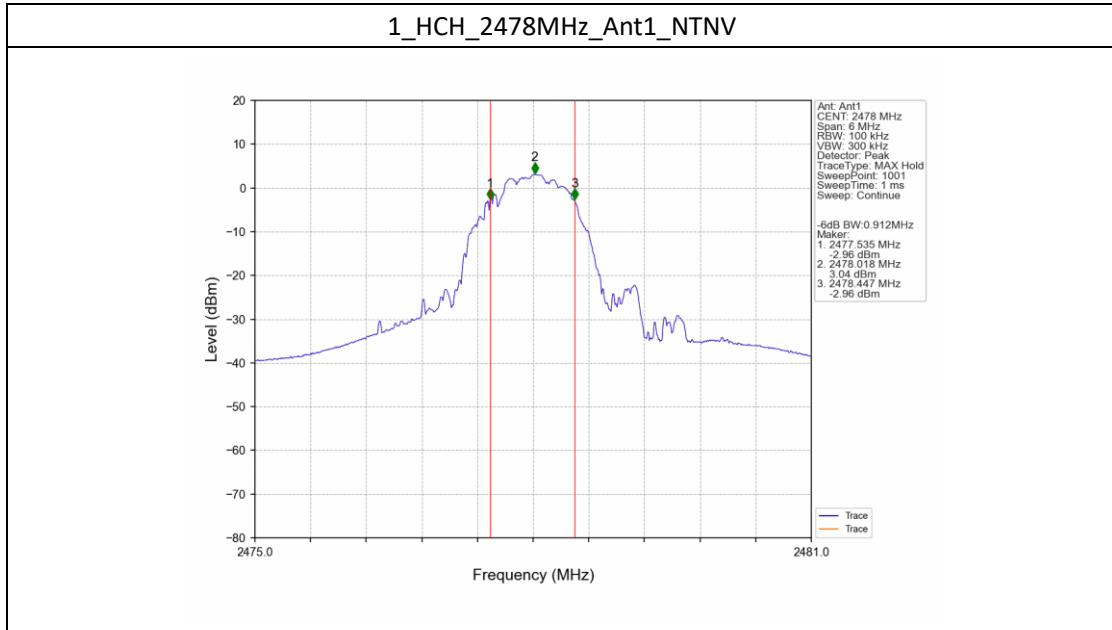


1_HCH_2478MHz_Ant1_NTNV



2.2.2 6dB BW





3. Maximum Conducted Output Power

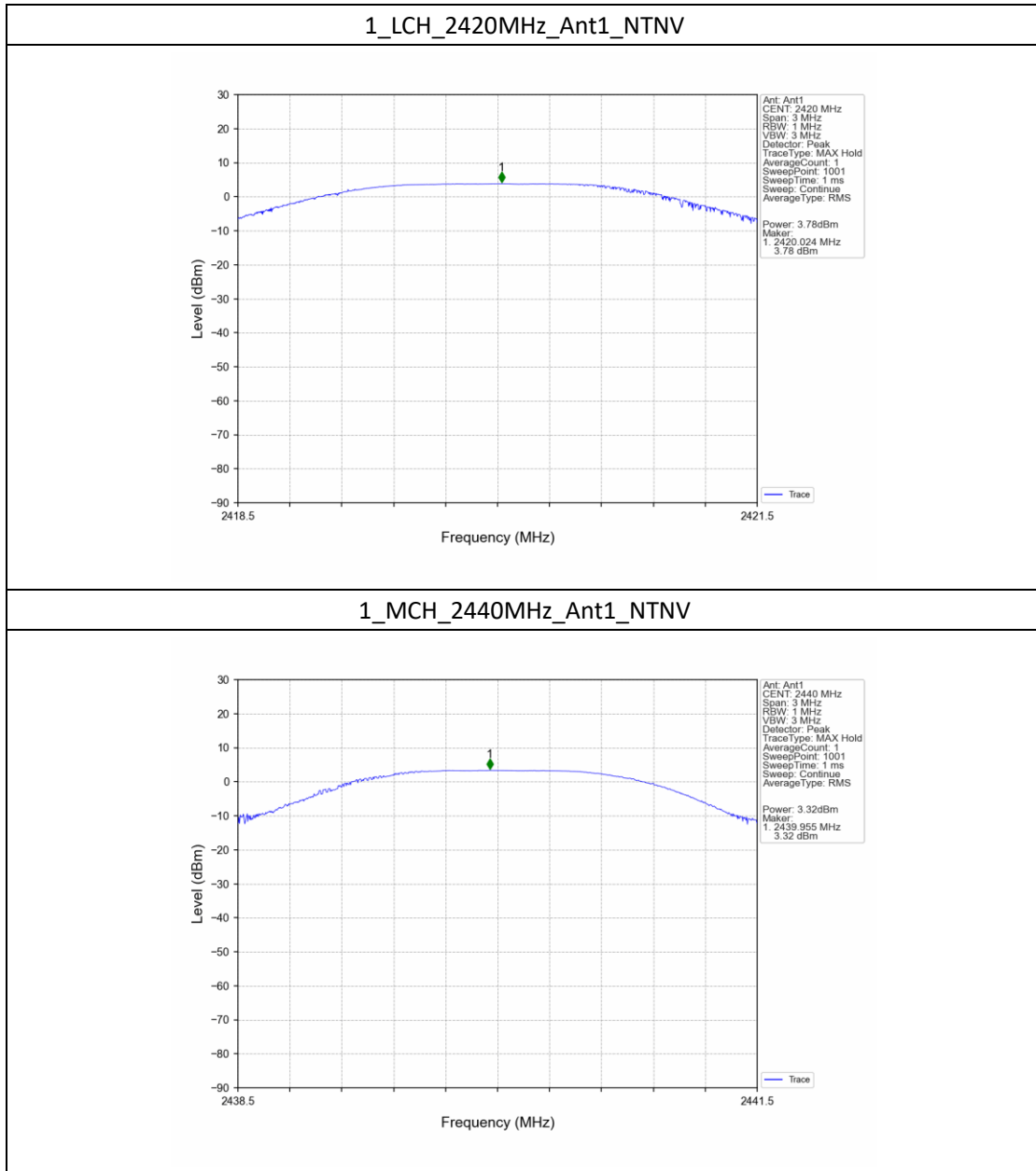
3.1 Test Result

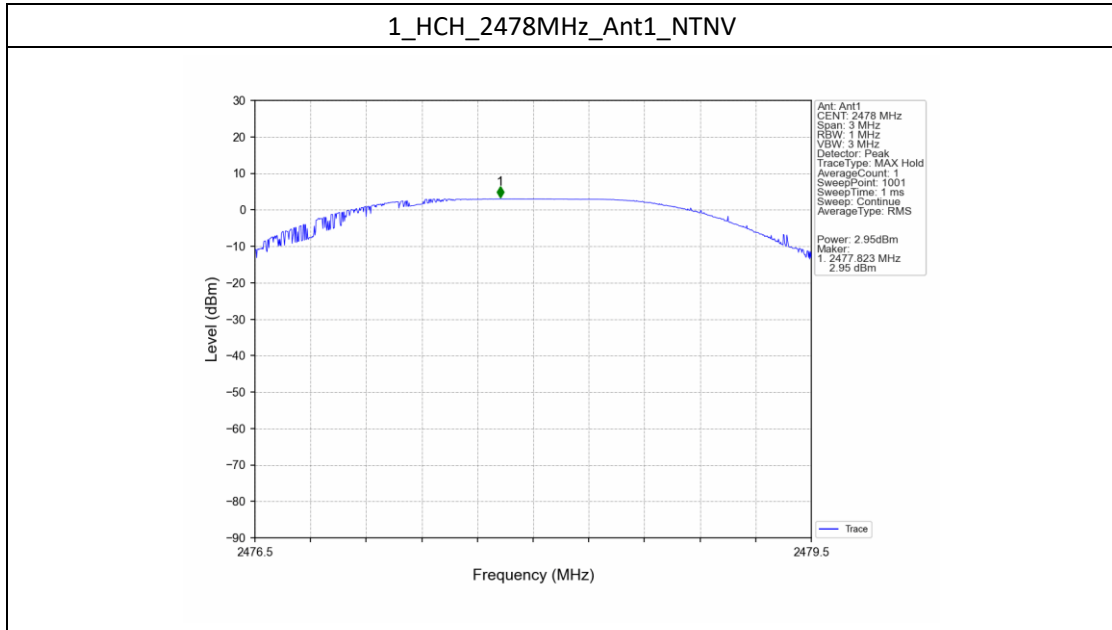
3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1	SISO	2420	3.78	<=30	Pass
		2440	3.32	<=30	Pass
		2478	2.95	<=30	Pass
Note1: Antenna Gain: Ant1: 3.05dBi;					

3.2 Test Graph

3.2.1 Power





4. Maximum Power Spectral Density

4.1 Test Result

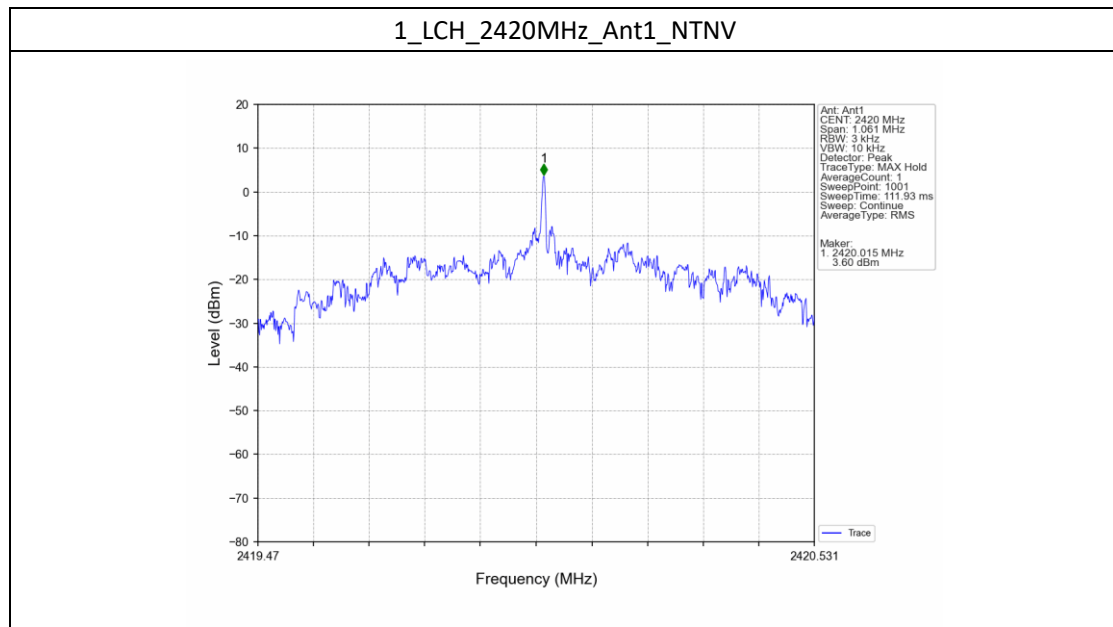
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1	SISO	2420	3.60	<=8	Pass
		2440	3.03	<=8	Pass
		2478	2.76	<=8	Pass

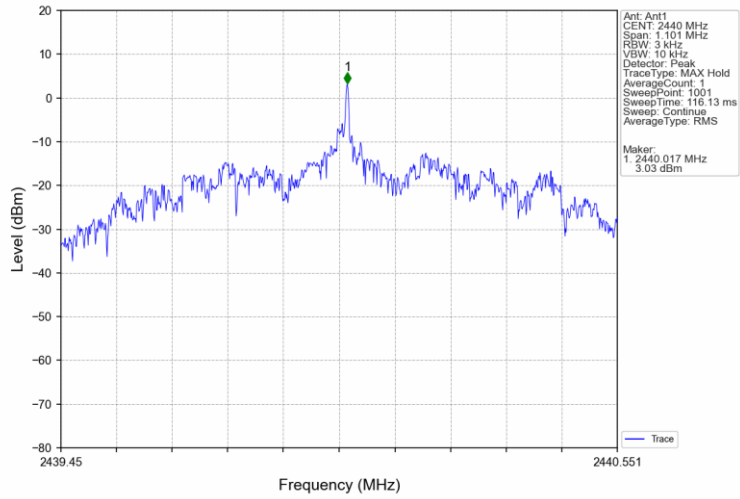
Note1: Antenna Gain: Ant1: 3.05dBi;

4.2 Test Graph

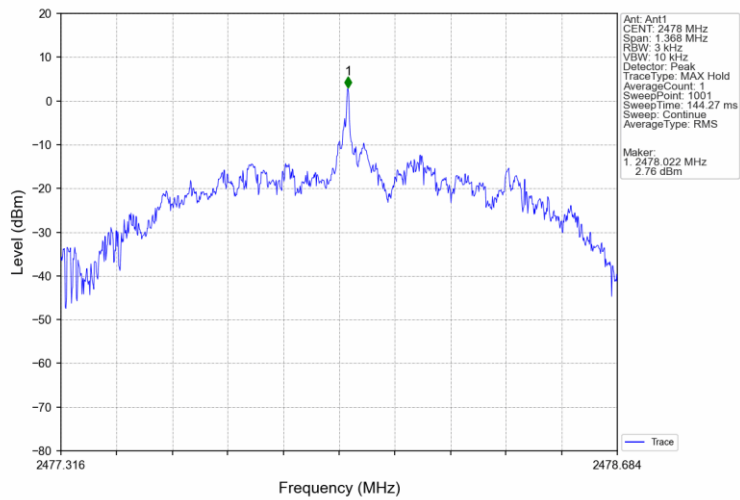
4.2.1 PSD



1_MCH_2440MHz_Ant1_NTNV



1_HCH_2478MHz_Ant1_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)
1	SISO	2420	1	3.81
		2440	1	3.29
		2478	1	2.90

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.

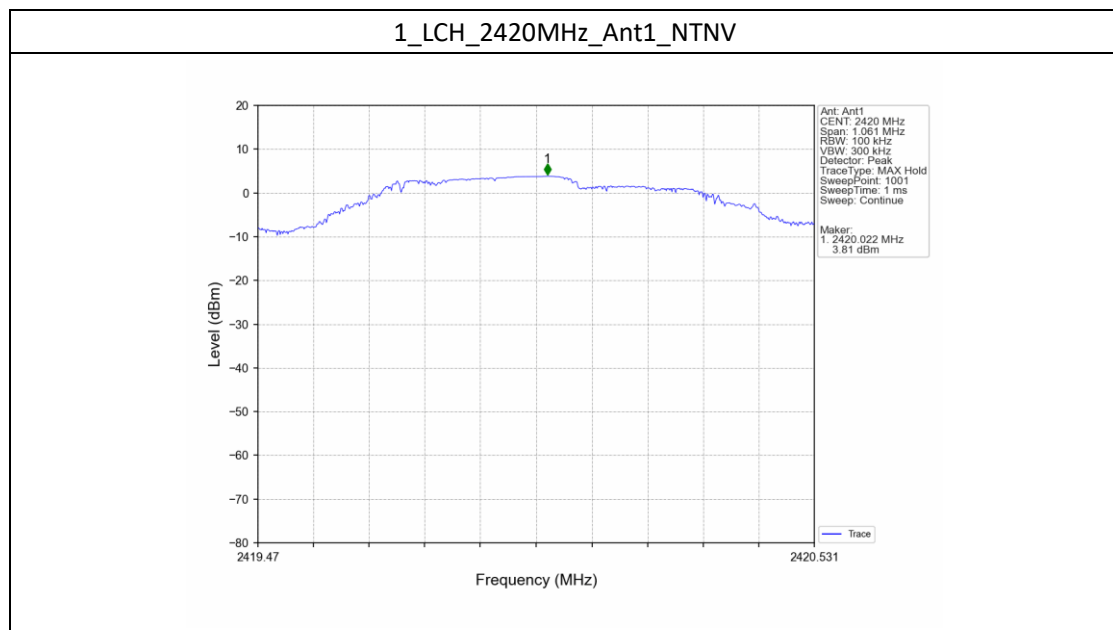
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1	SISO	2420	1	3.81	-16.19	Pass
		2440	1	3.81	-16.19	Pass
		2478	1	3.81	-16.19	Pass

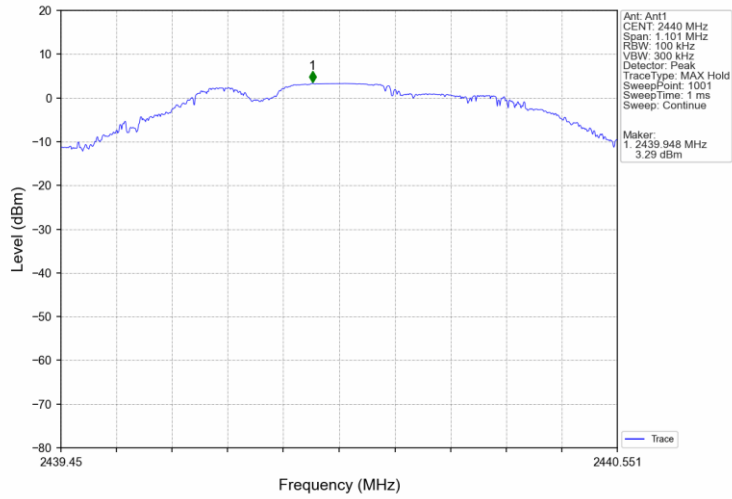
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

5.2 Test Graph

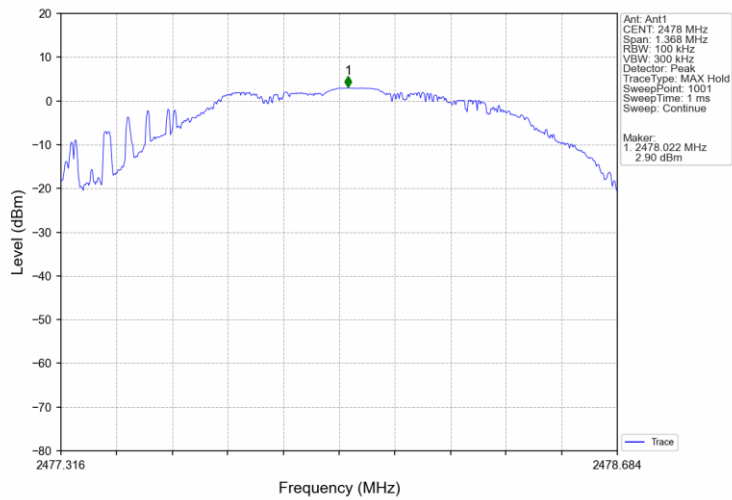
5.2.1 Ref



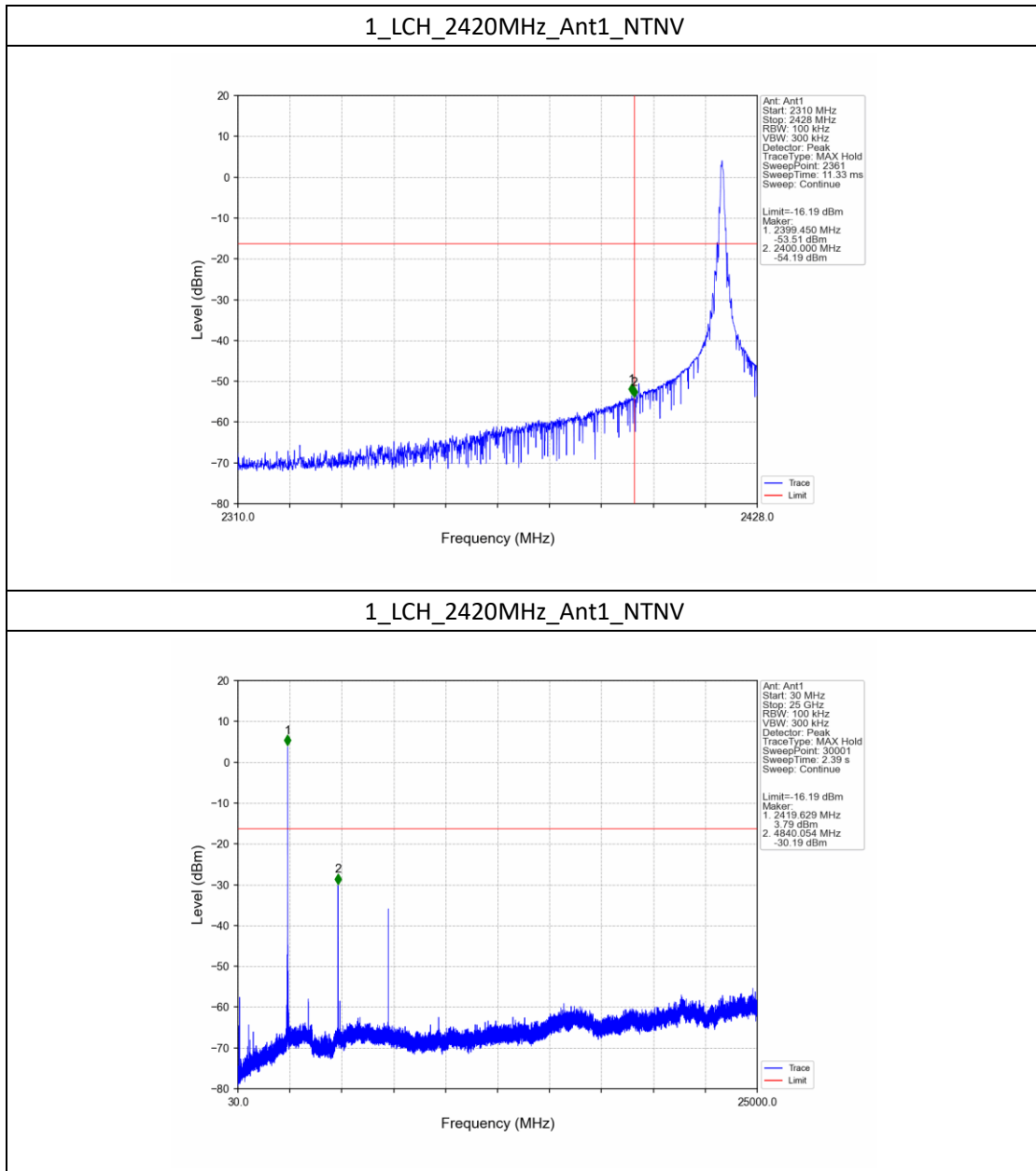
1_MCH_2440MHz_Ant1_NTNV



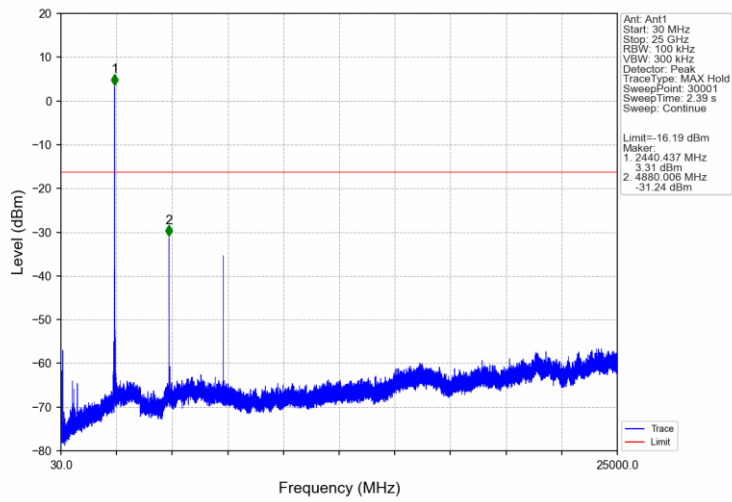
1_HCH_2478MHz_Ant1_NTNV



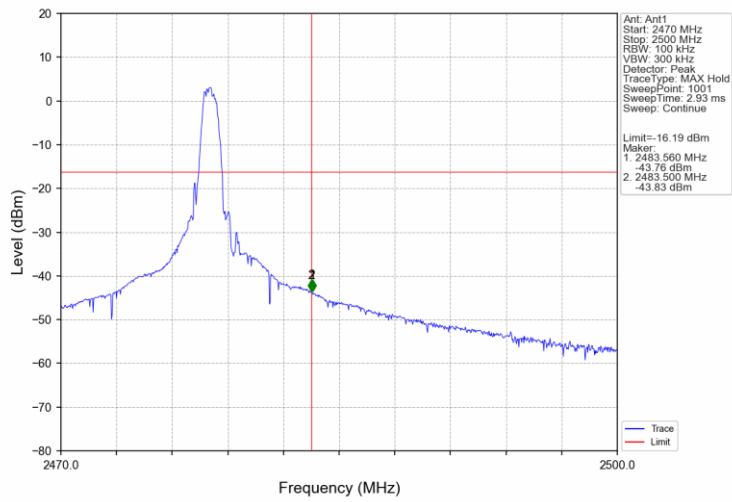
5.2.2 CSE

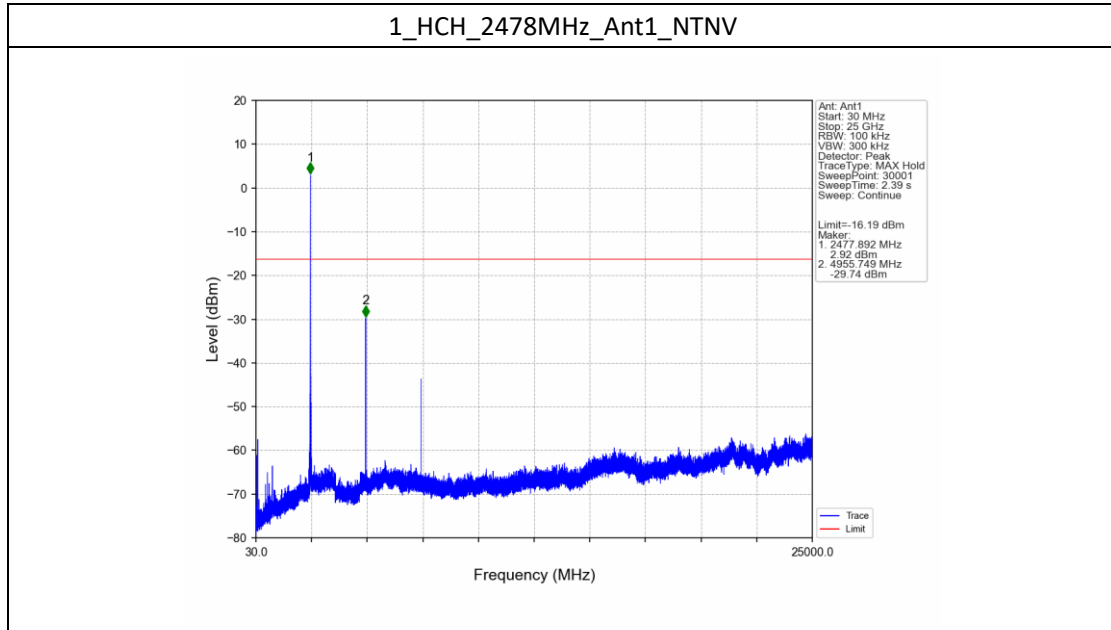


1_MCH_2440MHz_Ant1_NTNV



1_HCH_2478MHz_Ant1_NTNV





6. Form731

6.1 Test Result

6.1.1 Form731

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
2420	2478	0.0024	3.78