Annex for BLE

Test Report No.: CTL2406043071-WF02

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1. Bandwidth

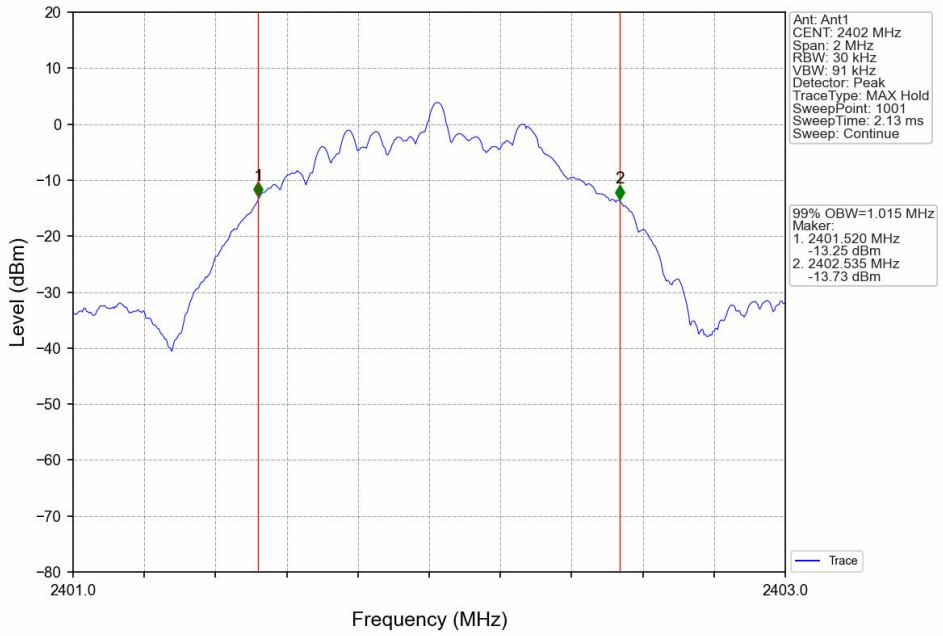
1.1 OBW

1.1.1 Test Result

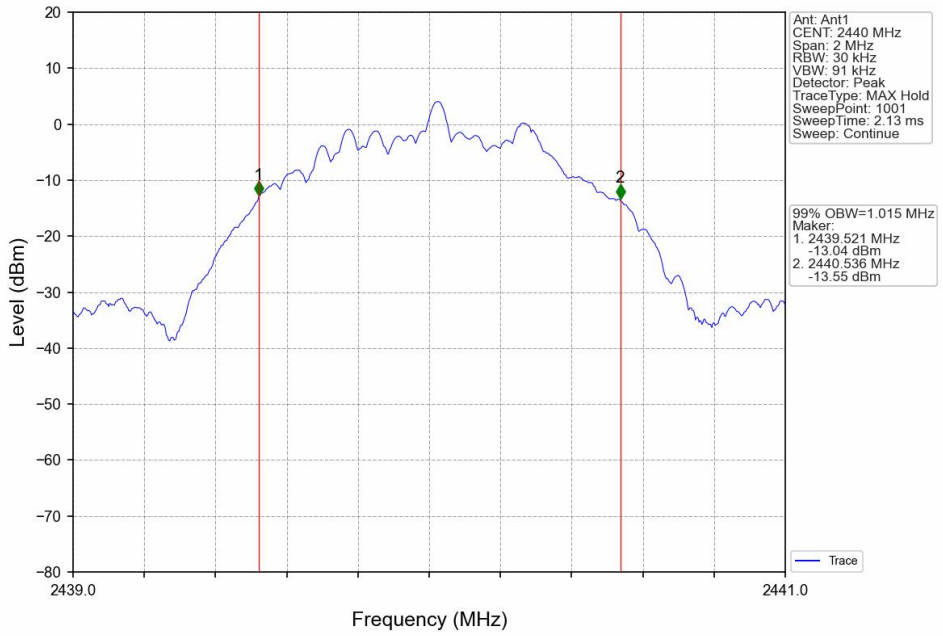
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	1.015	/	Pass
		2440	1	1.015	/	Pass
		2480	1	1.017	/	Pass
2M	SISO	2402	1	2.042	/	Pass
		2440	1	2.039	/	Pass
		2480	1	2.042	/	Pass

1.1.2 Test Graph

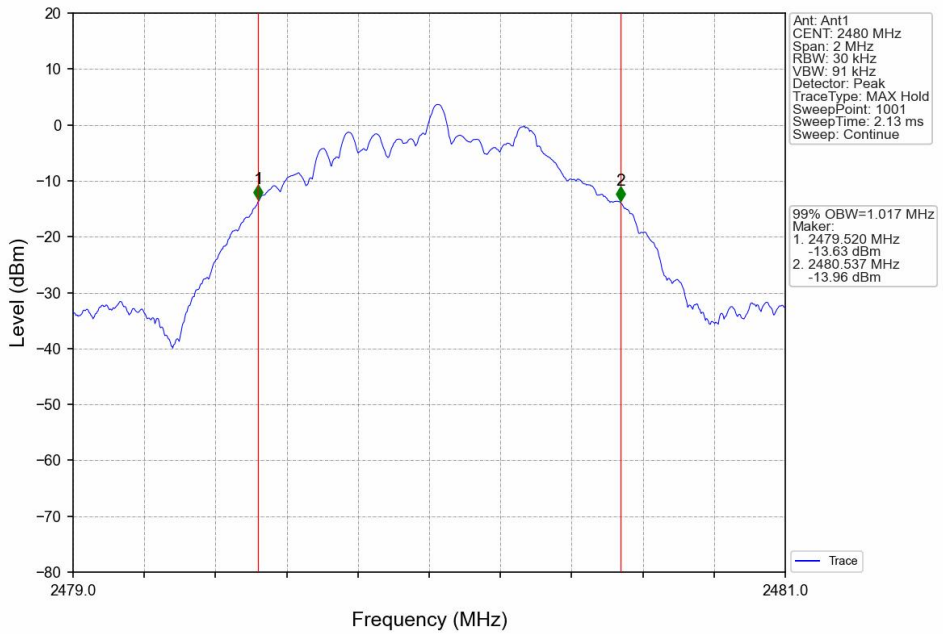
1M_LCH_2402MHz_Ant1_NTNV



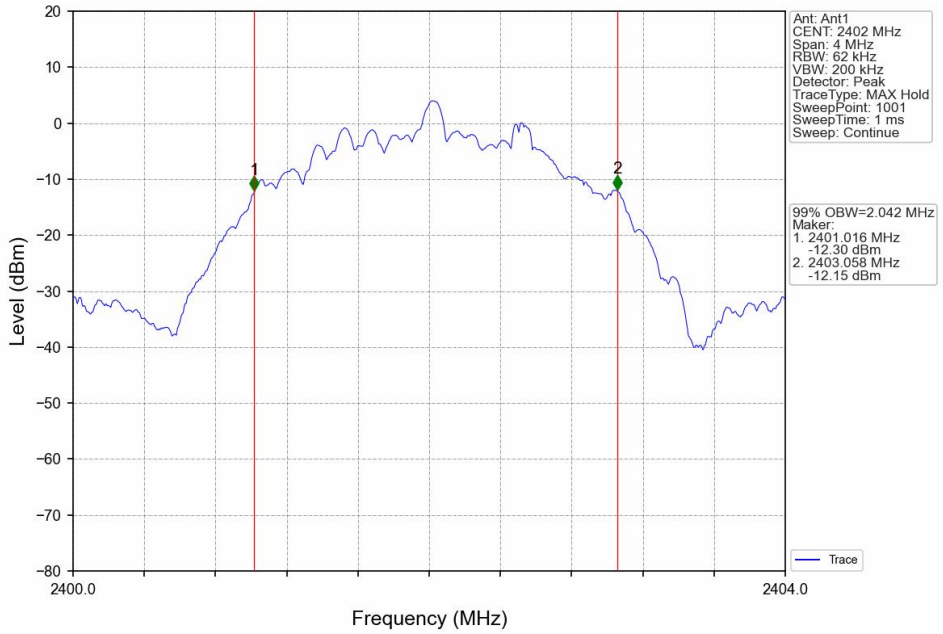
1M_MCH_2440MHz_Ant1_NTNV



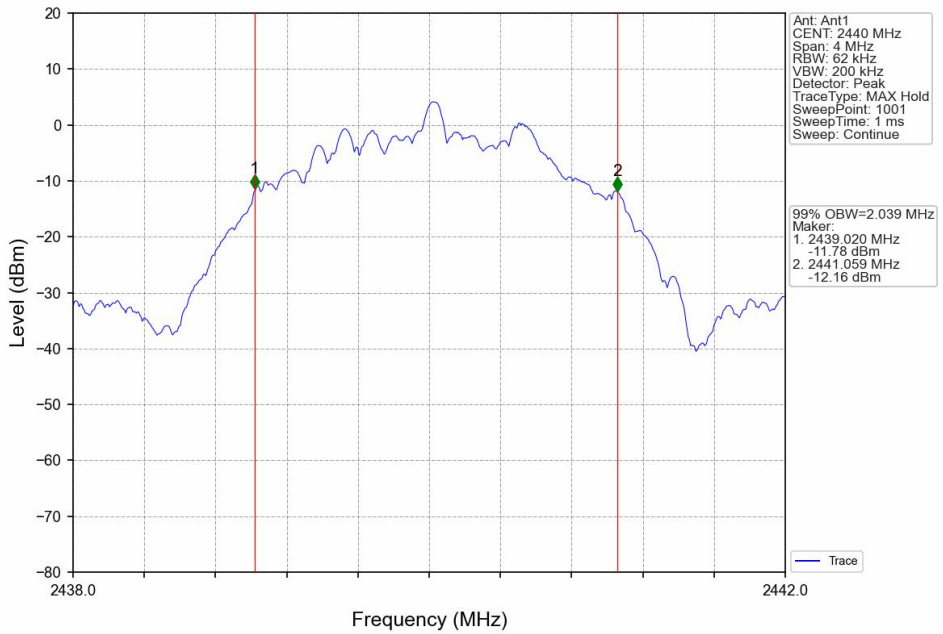
1M_HCH_2480MHz_Ant1_NTNV



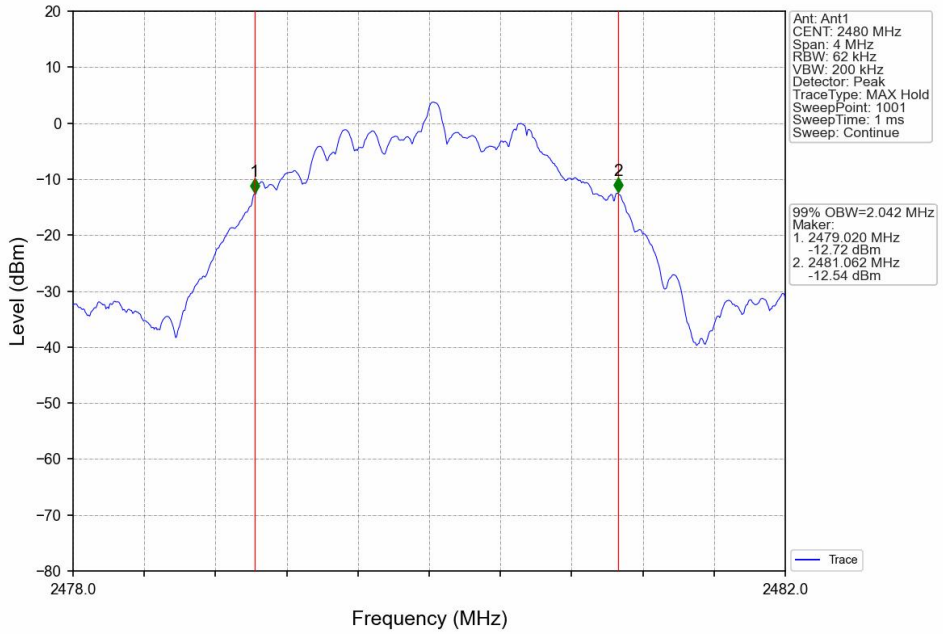
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



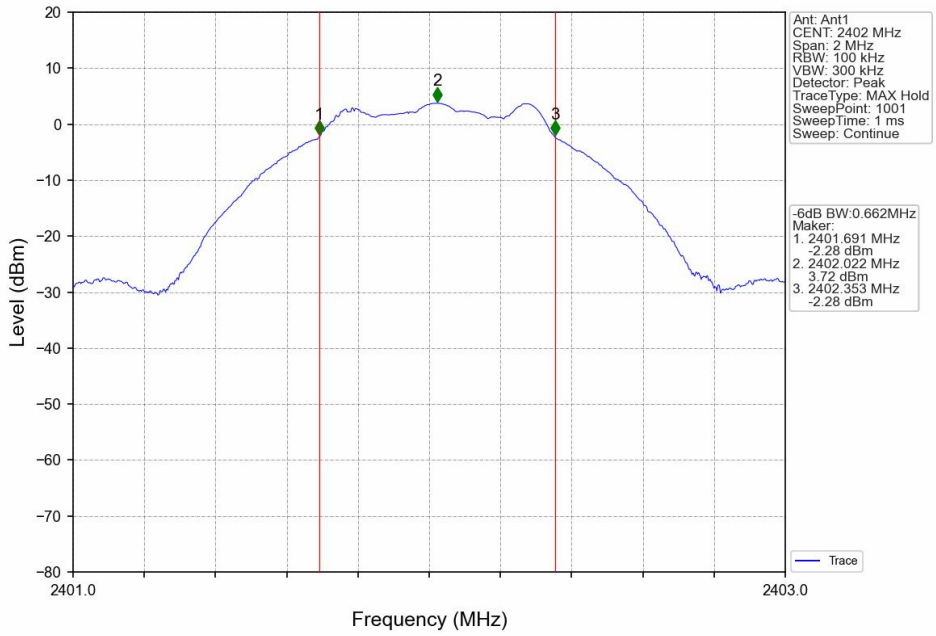
1.2 6dB BW

1.2.1 Test Result

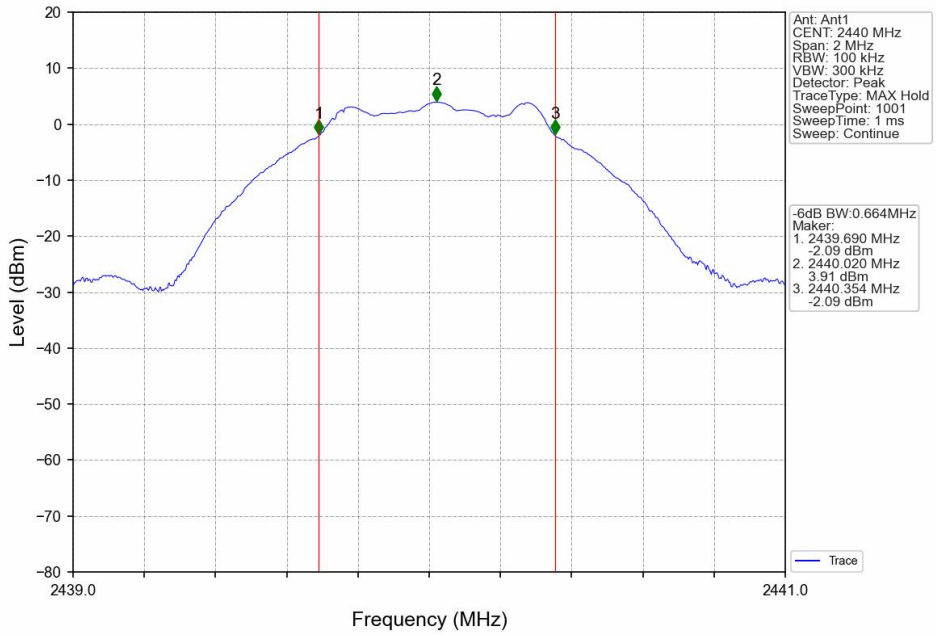
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	0.662	>=0.5	Pass
		2440	1	0.664	>=0.5	Pass
		2480	1	0.668	>=0.5	Pass
2M	SISO	2402	1	1.132	>=0.5	Pass
		2440	1	1.138	>=0.5	Pass
		2480	1	1.136	>=0.5	Pass

1.2.2 Test Graph

1M_LCH_2402MHz_Ant1_NTNV

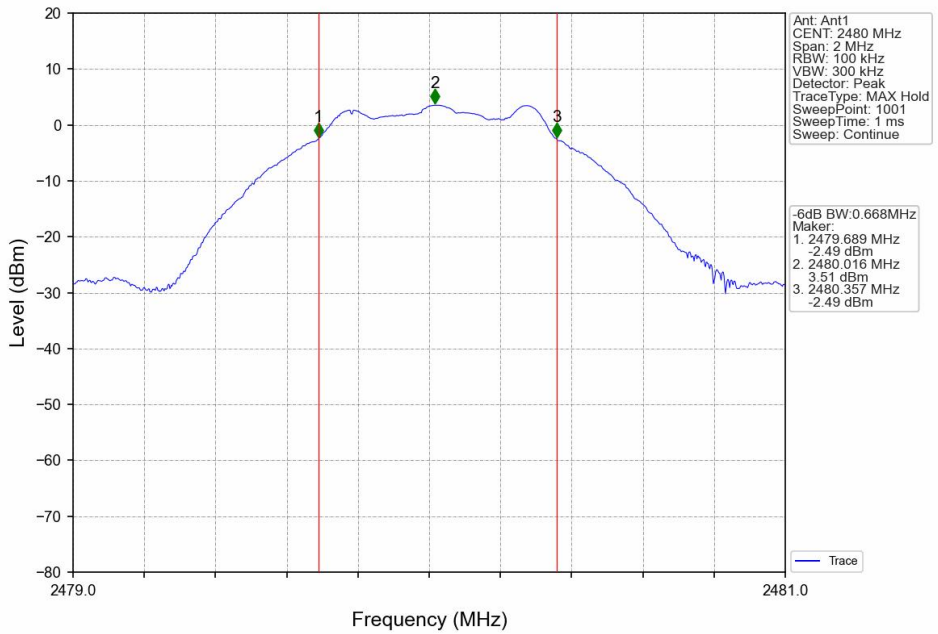


1M_MCH_2440MHz_Ant1_NTNV

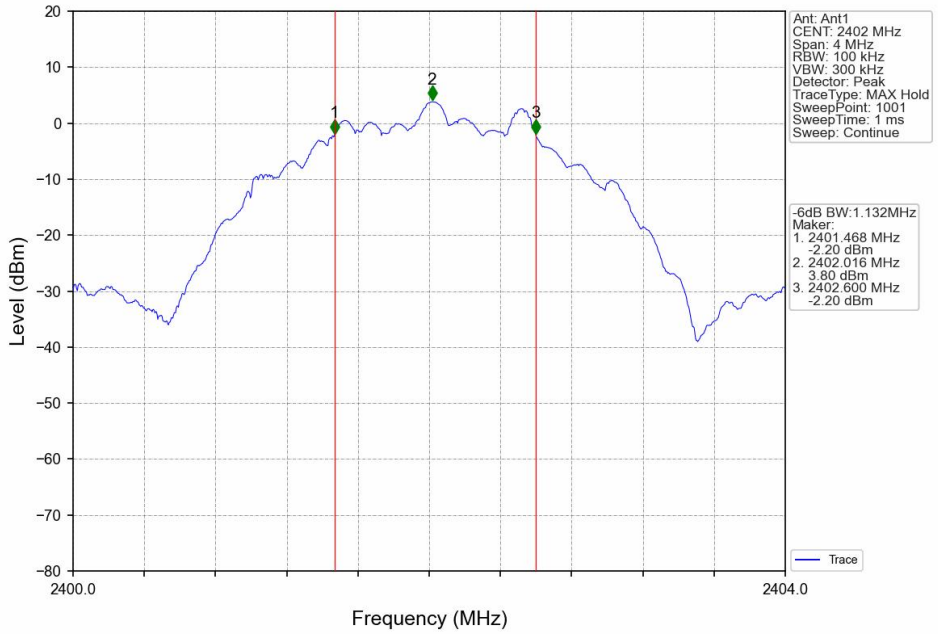


FCCID: 2BG3H-SW50

1M_HCH_2480MHz_Ant1_NTNV

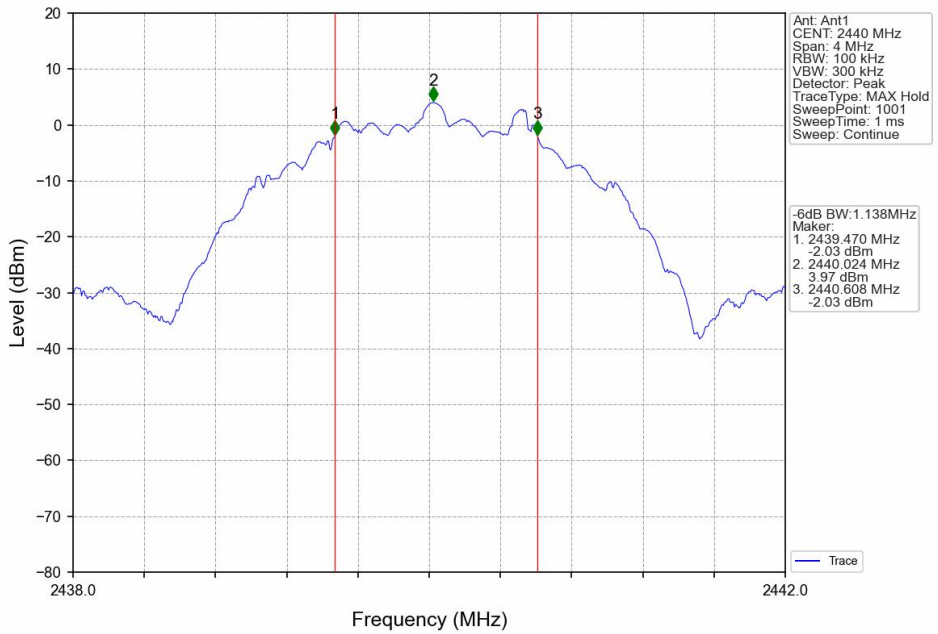


2M_LCH_2402MHz_Ant1_NTNV

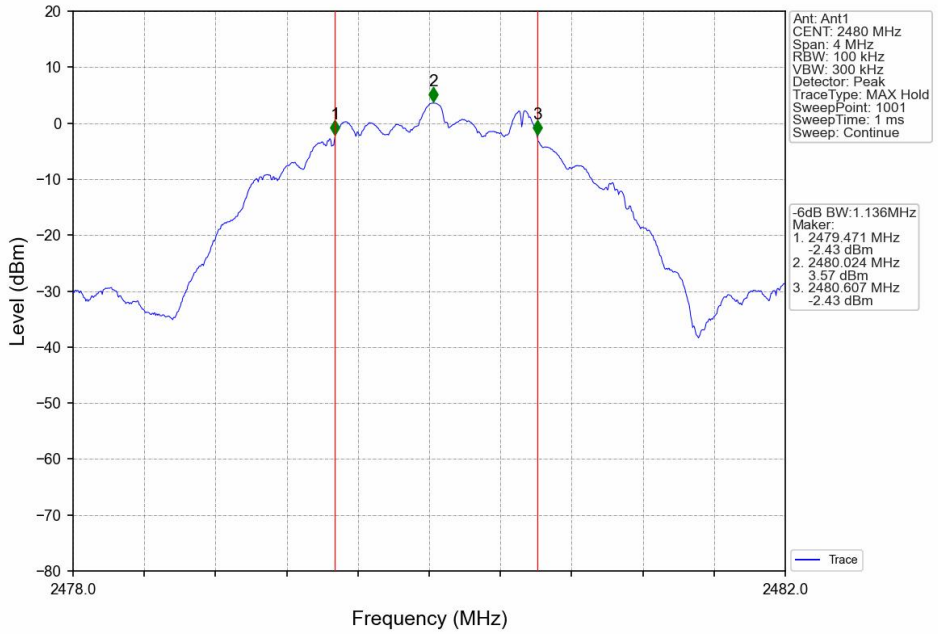


FCCID: 2BG3H-SW50

2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



2. Maximum Conducted Output Power

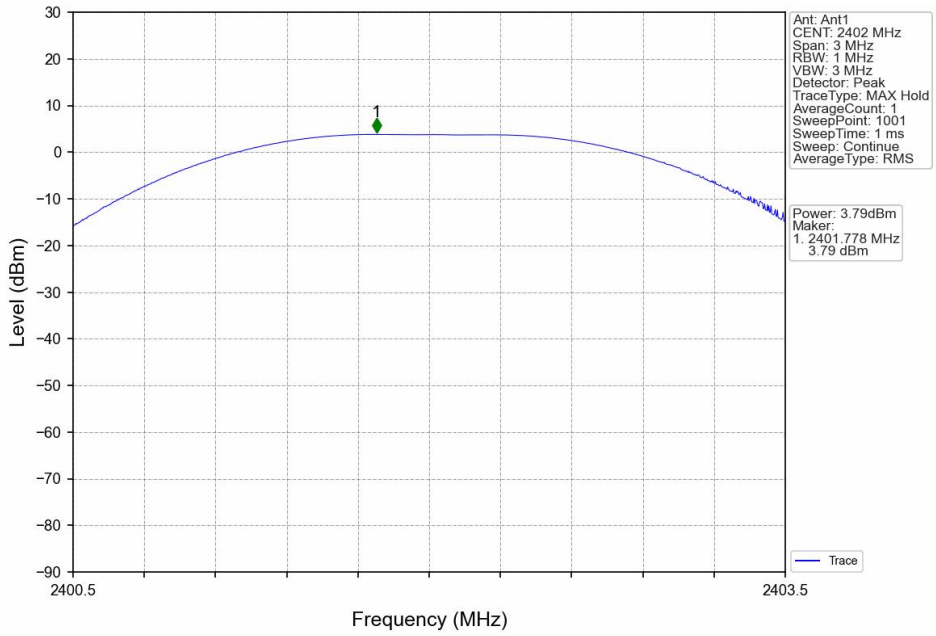
2.1 Power

2.1.1 Test Result

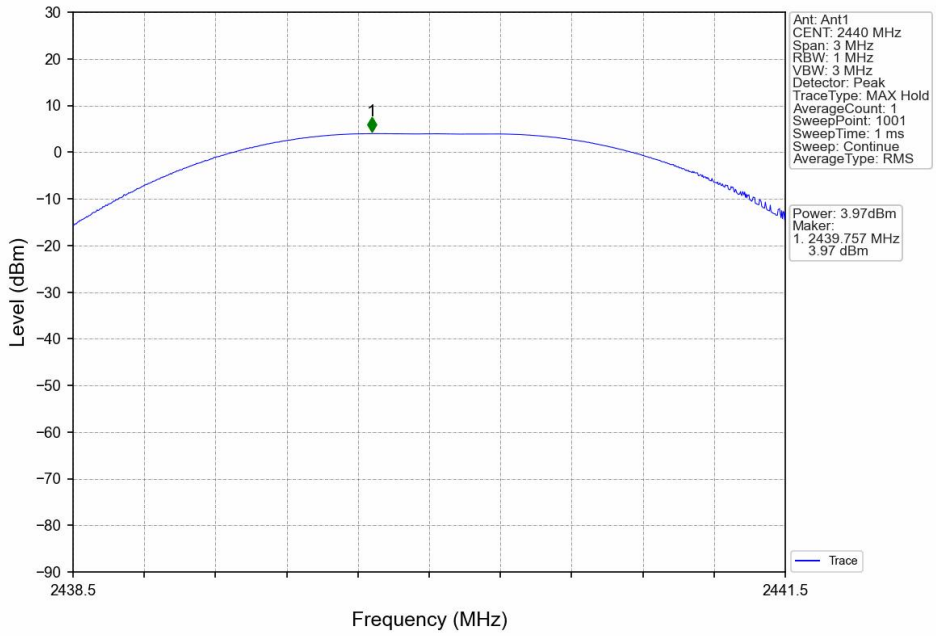
Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	3.79	<=30	Pass
		2440	3.97	<=30	Pass
		2480	3.57	<=30	Pass
2M	SISO	2402	3.90	<=30	Pass
		2440	4.05	<=30	Pass
		2480	3.65	<=30	Pass
Note1: Antenna Gain: Ant1: 0.00dBi;					

2.1.2 Test Graph

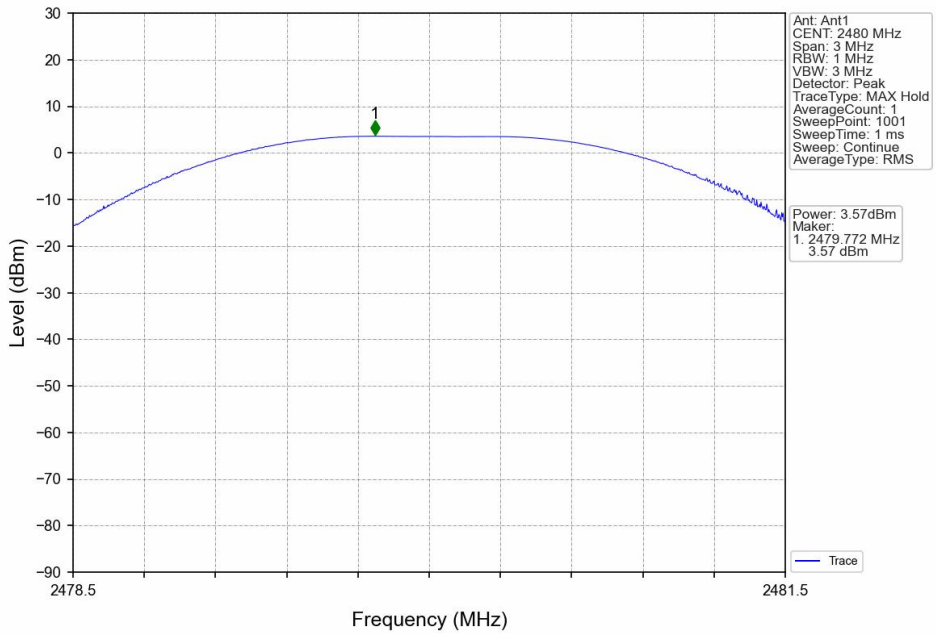
1M_LCH_2402MHz_Ant1_NTNV



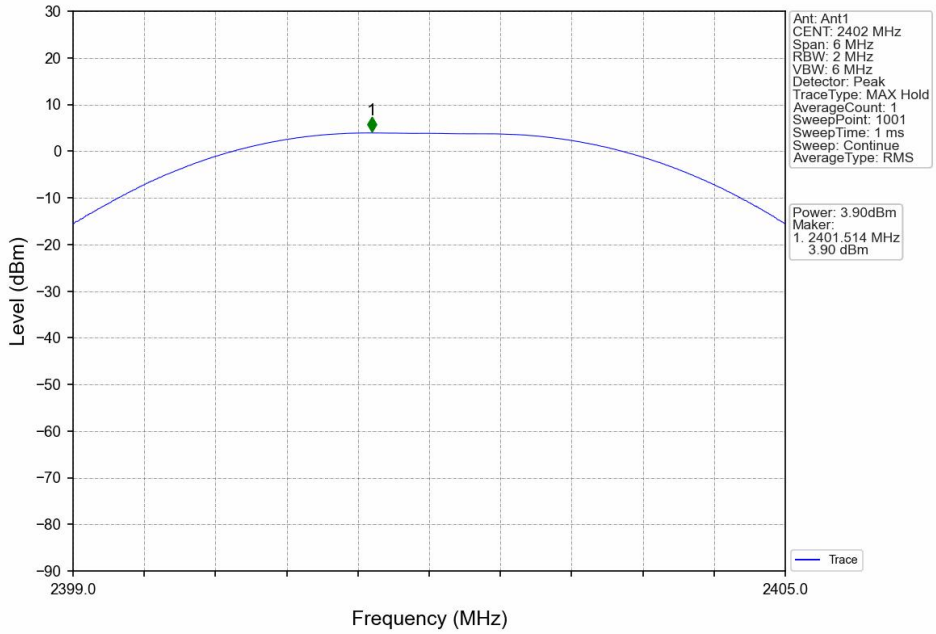
1M_MCH_2440MHz_Ant1_NTNV



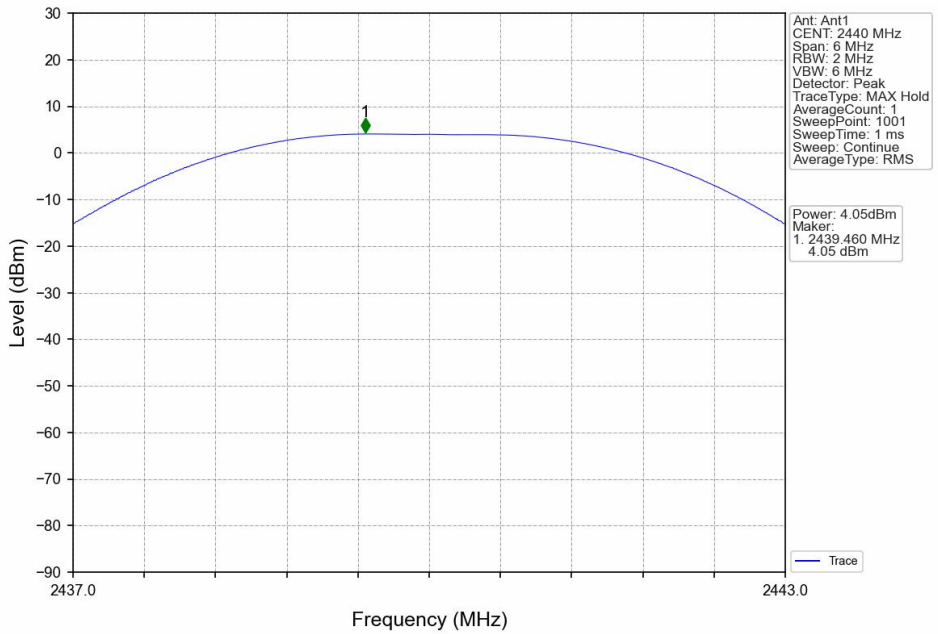
1M_HCH_2480MHz_Ant1_NTNV



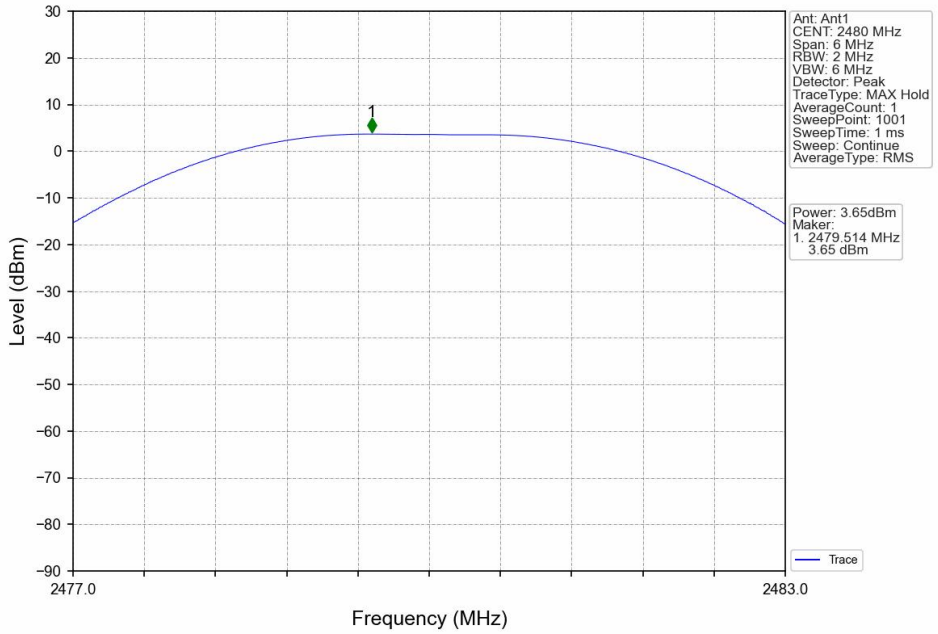
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



3. Maximum Power Spectral Density

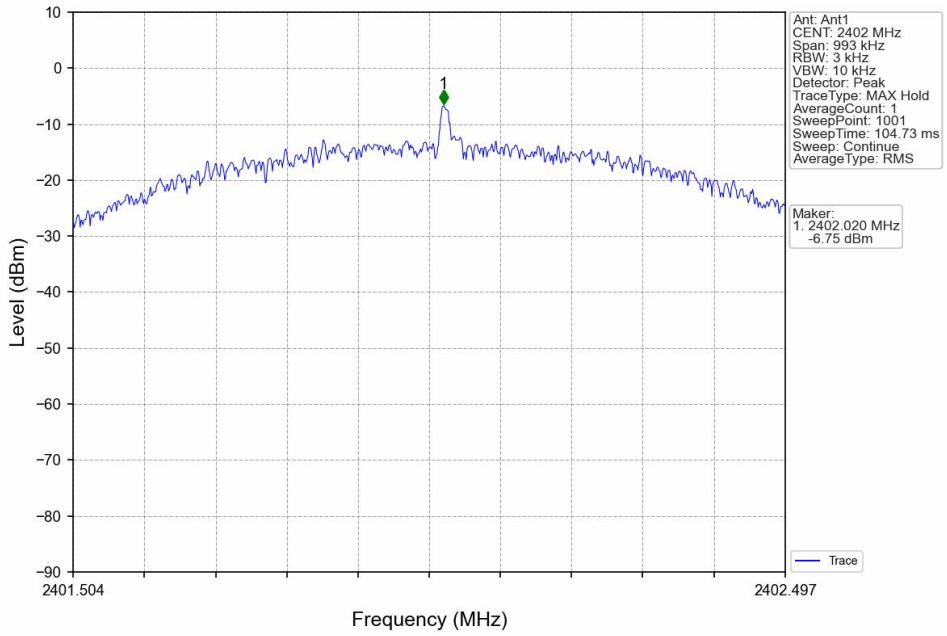
3.1 PSD

3.1.1 Test Result

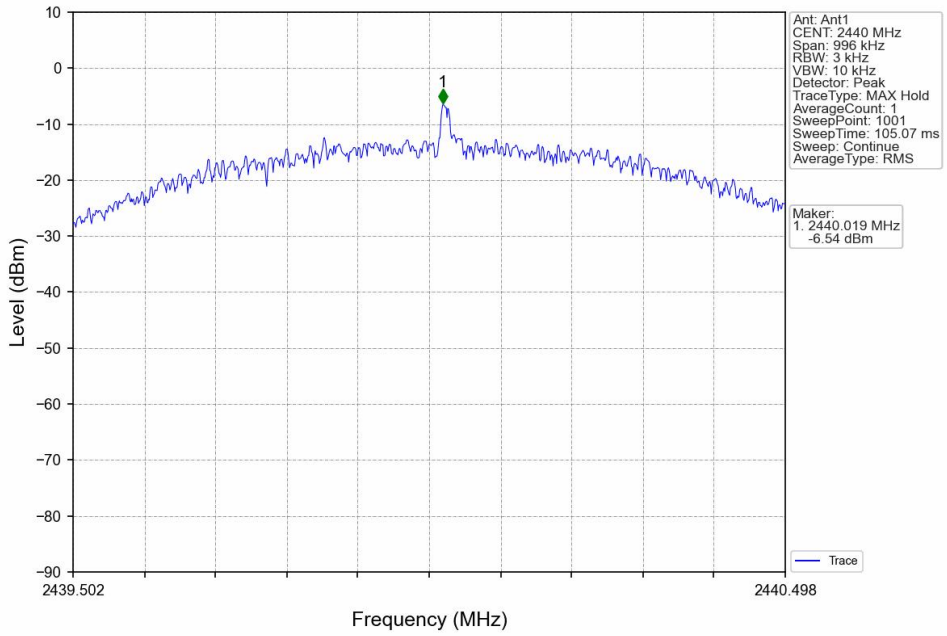
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1M	SISO	2402	-6.75	<=8	Pass
		2440	-6.54	<=8	Pass
		2480	-6.97	<=8	Pass
2M	SISO	2402	-7.30	<=8	Pass
		2440	-7.02	<=8	Pass
		2480	-7.38	<=8	Pass
Note1: Antenna Gain: Ant1: 0.00dBi;					

3.1.2 Test Graph

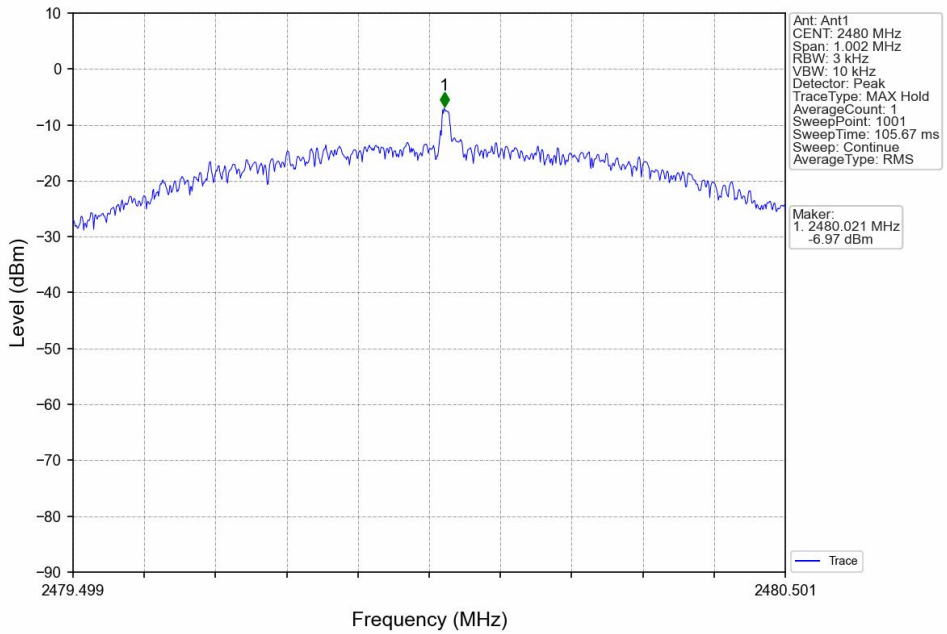
1M_LCH_2402MHz_Ant1_NTNV



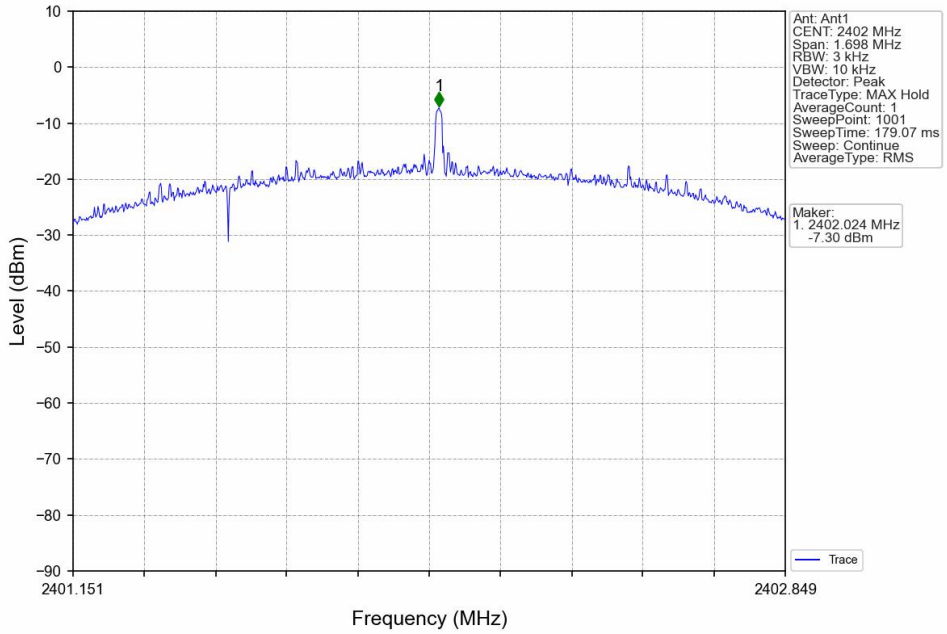
1M_MCH_2440MHz_Ant1_NTNV



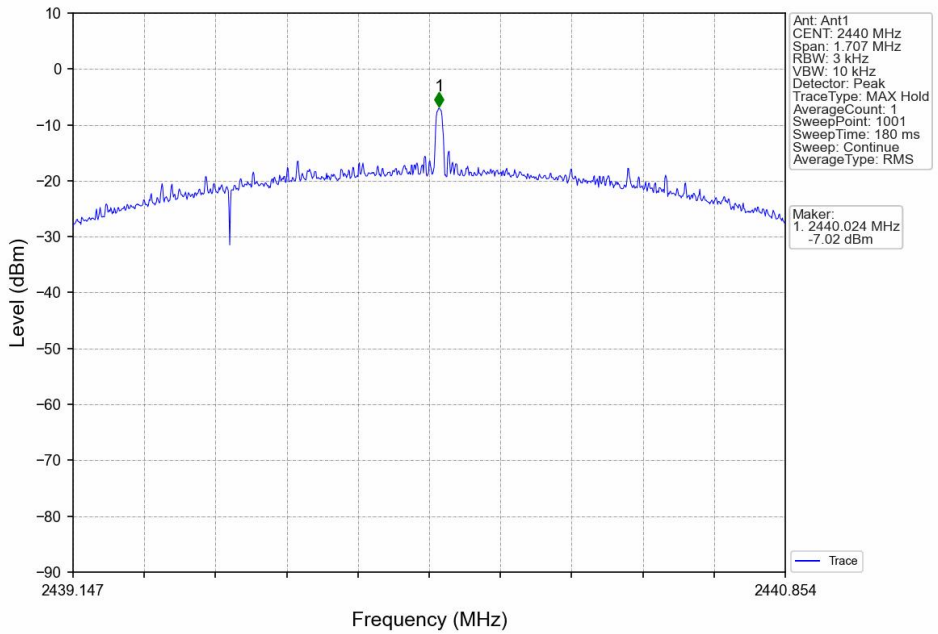
1M_HCH_2480MHz_Ant1_NTNV



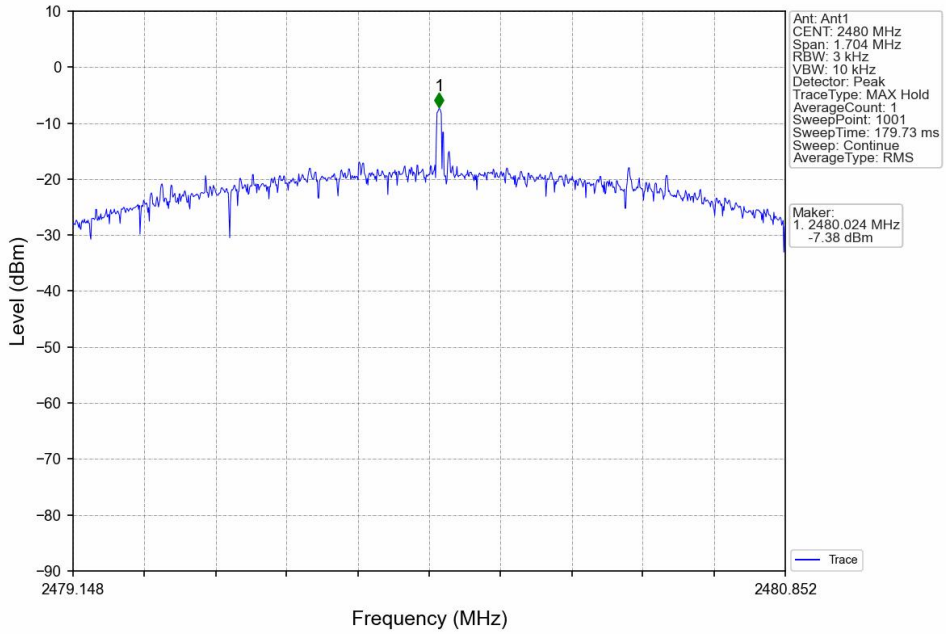
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



4. Unwanted Emissions In Non-restricted Frequency Bands

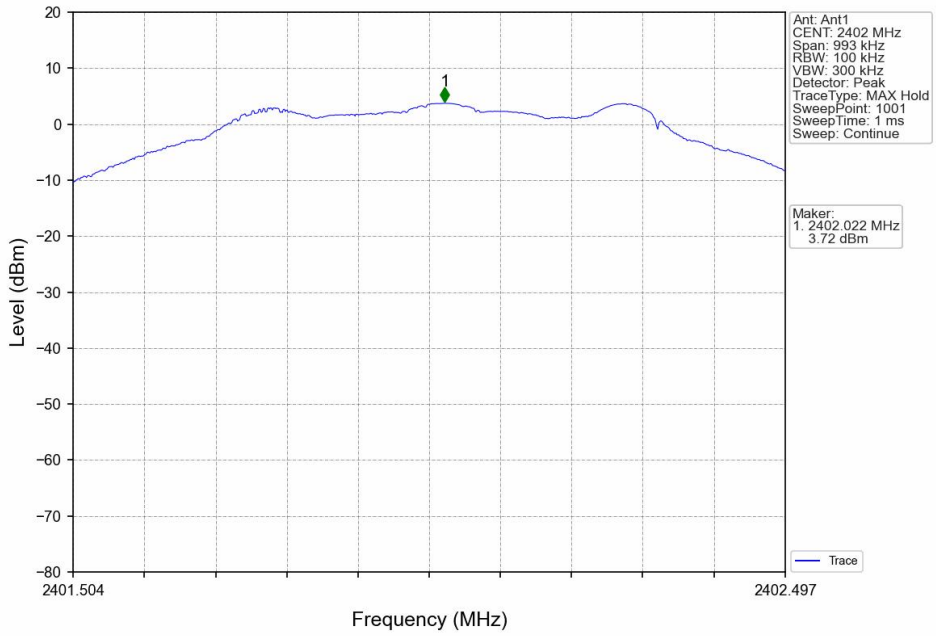
4.1 Ref

4.1.1 Test Result

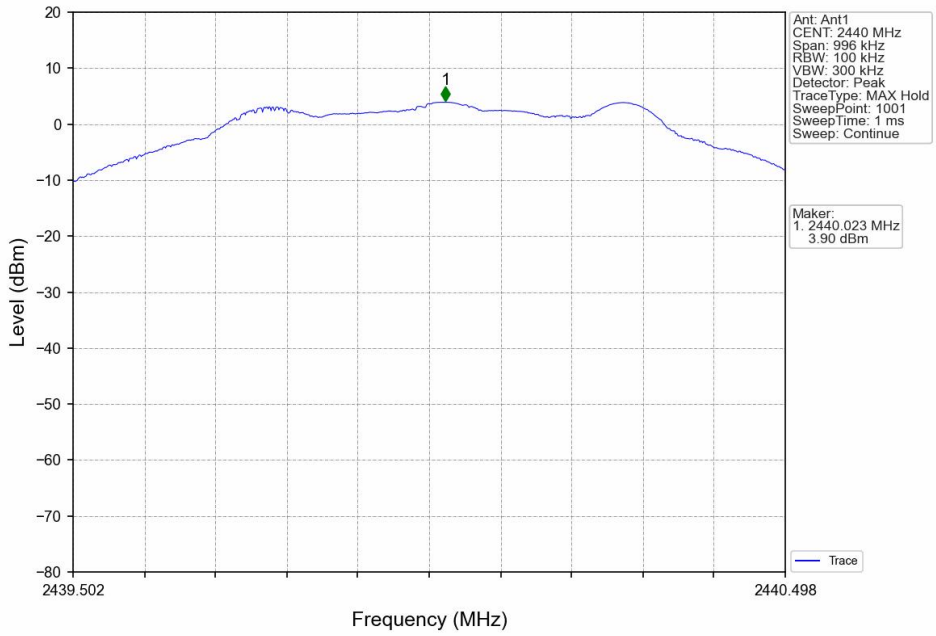
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
1M	SISO	2402	1	3.72
		2440	1	3.90
		2480	1	3.49
2M	SISO	2402	1	3.78
		2440	1	3.94
		2480	1	3.54
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.				

4.1.2 Test Graph

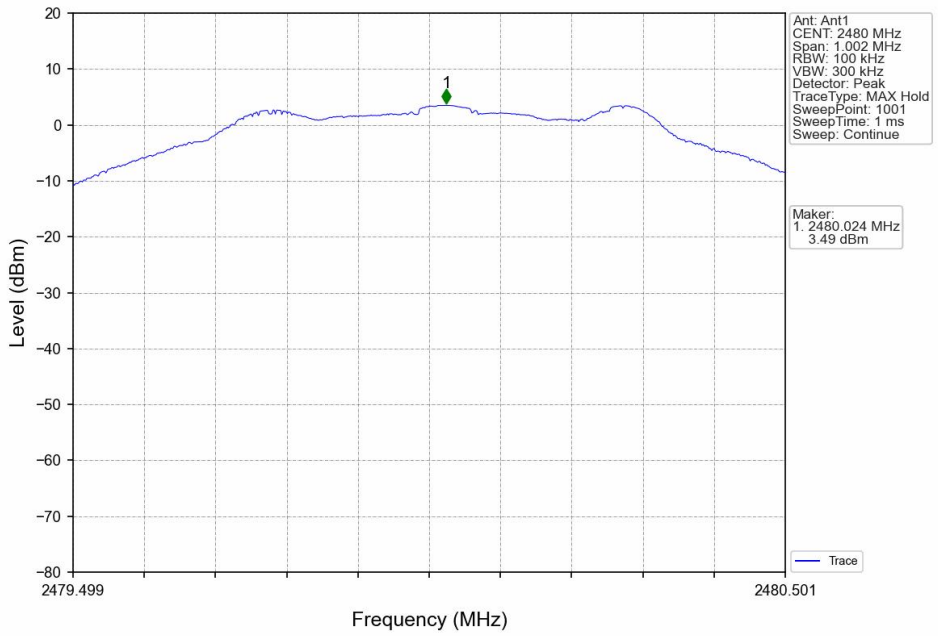
1M_LCH_2402MHz_Ant1_NTNV



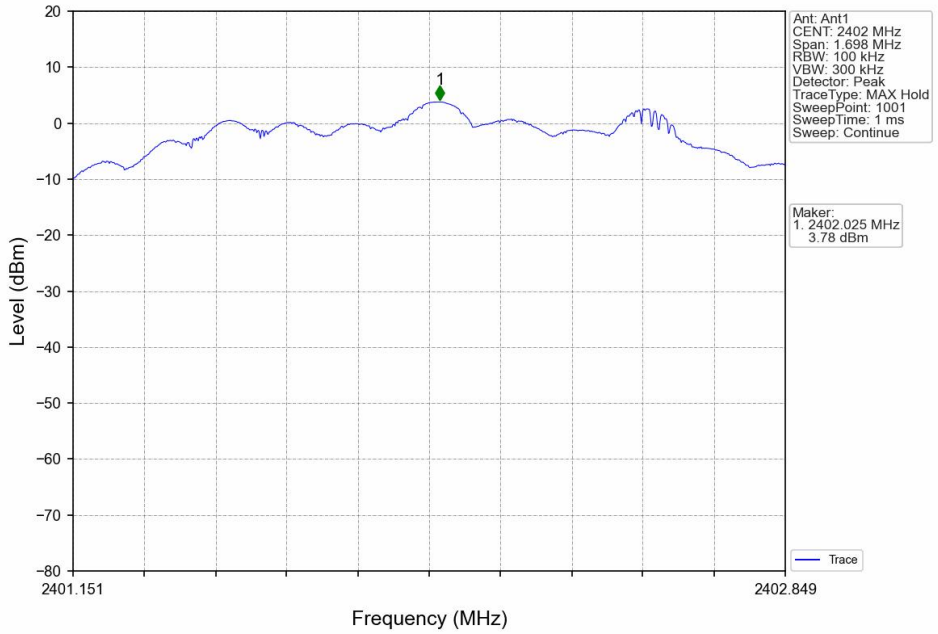
1M_MCH_2440MHz_Ant1_NTNV



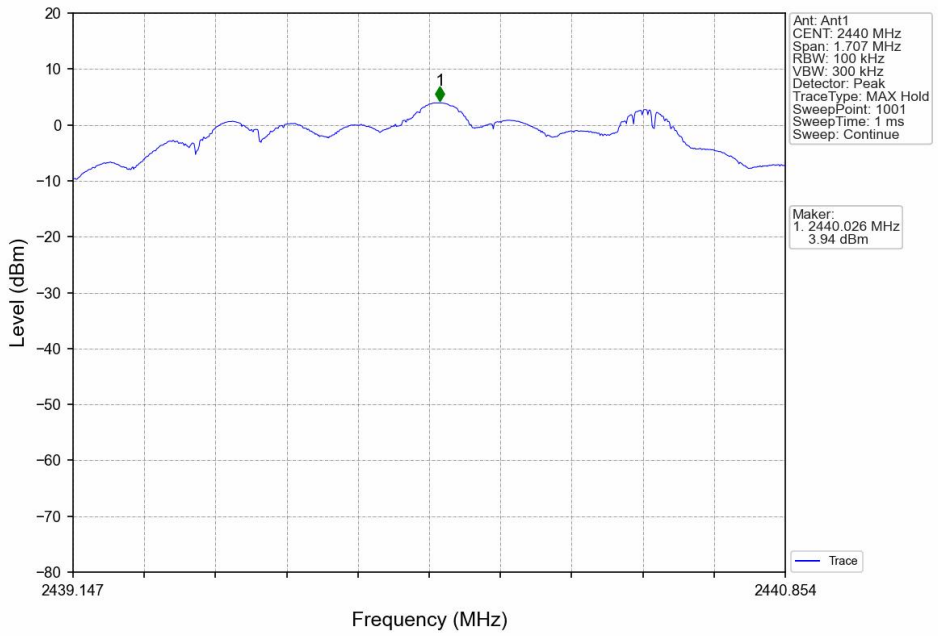
1M_HCH_2480MHz_Ant1_NTNV



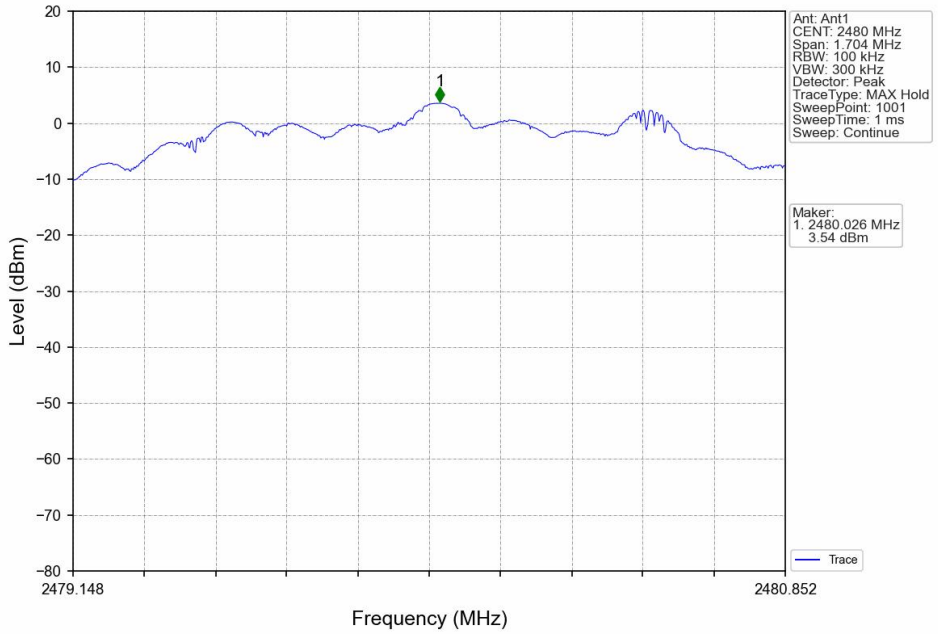
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



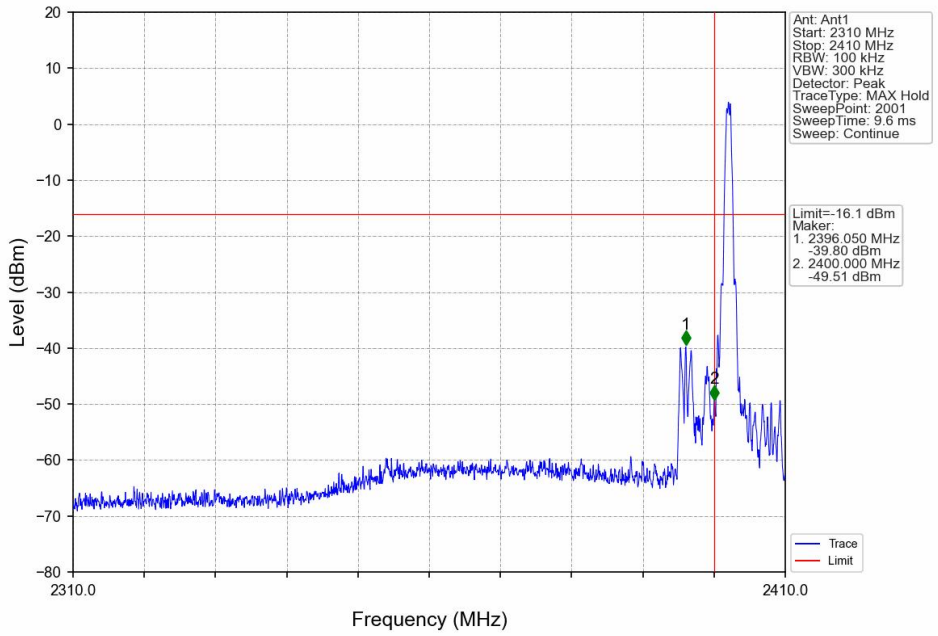
4.2 CSE

4.2.1 Test Result

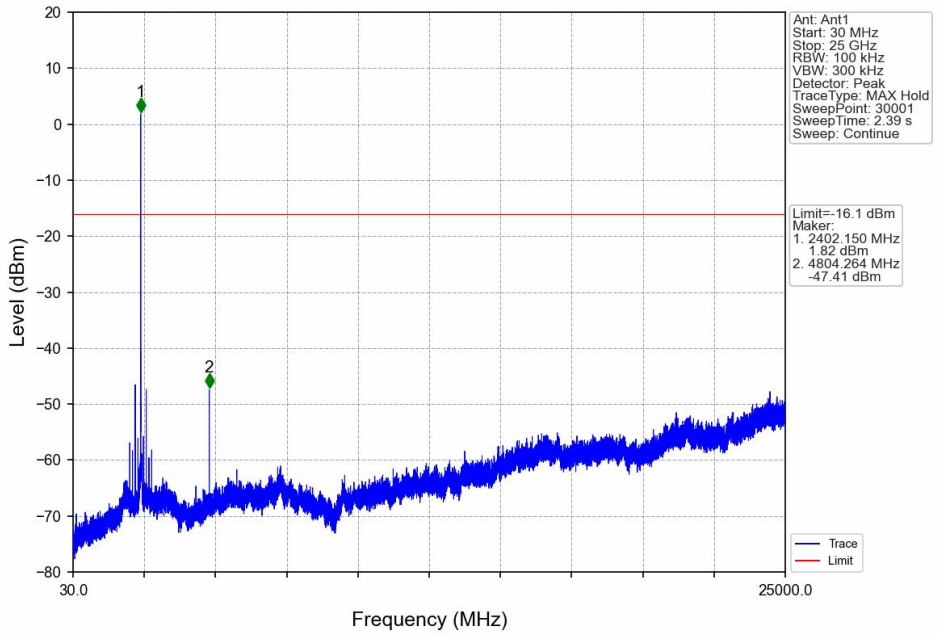
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	3.90	-16.10	Pass
		2440	1	3.90	-16.10	Pass
		2480	1	3.90	-16.10	Pass
2M	SISO	2402	1	3.94	-16.06	Pass
		2440	1	3.94	-16.06	Pass
		2480	1	3.94	-16.06	Pass
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.						

4.2.2 Test Graph

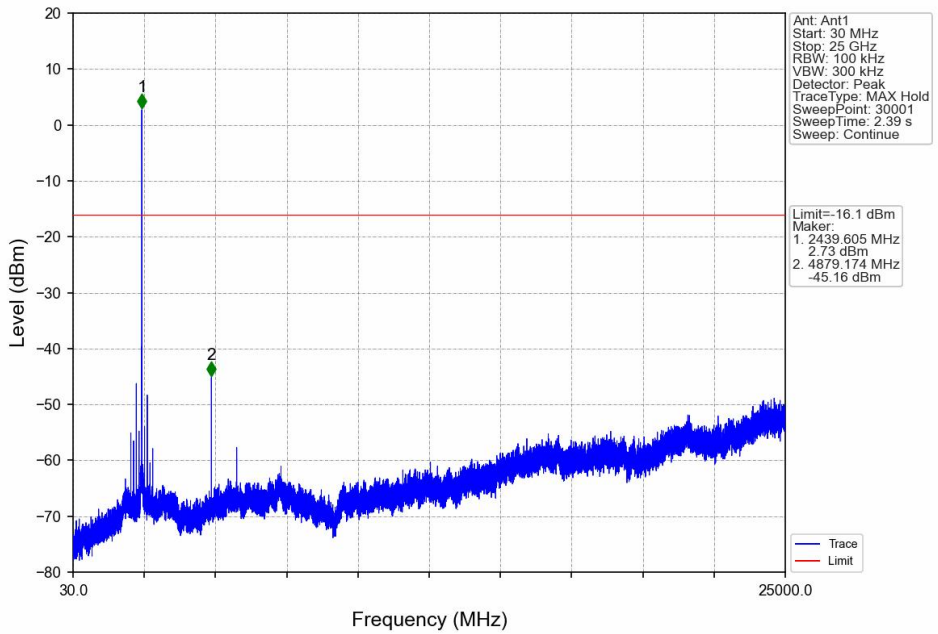
1M_LCH_2402MHz_Ant1_NTNV



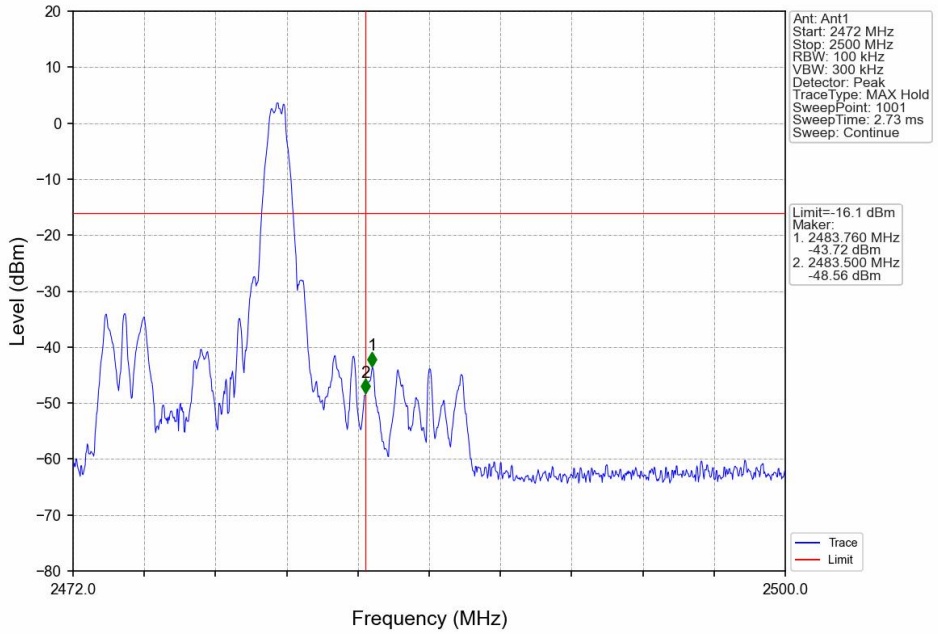
1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV

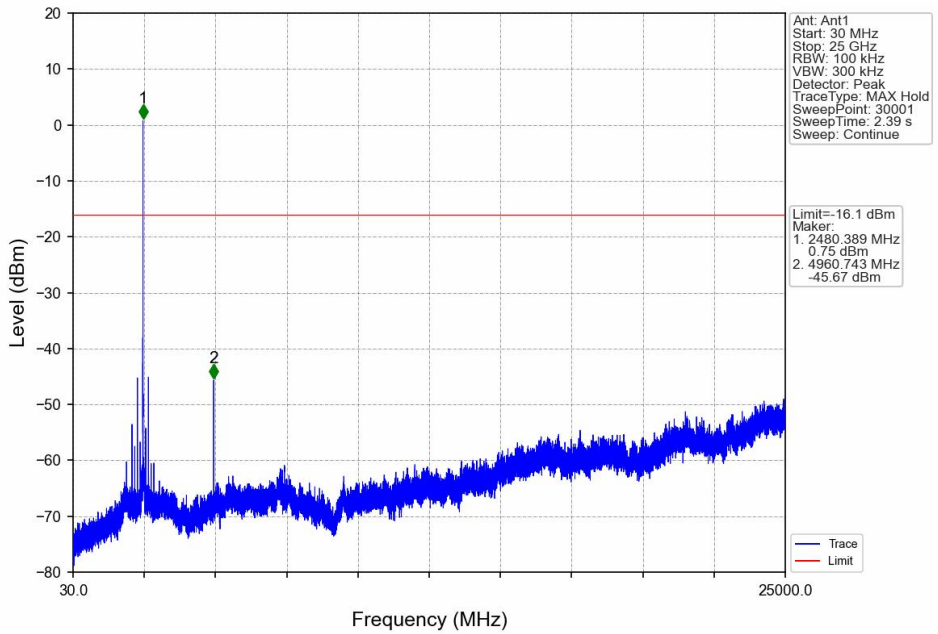


1M_HCH_2480MHz_Ant1_NTNV

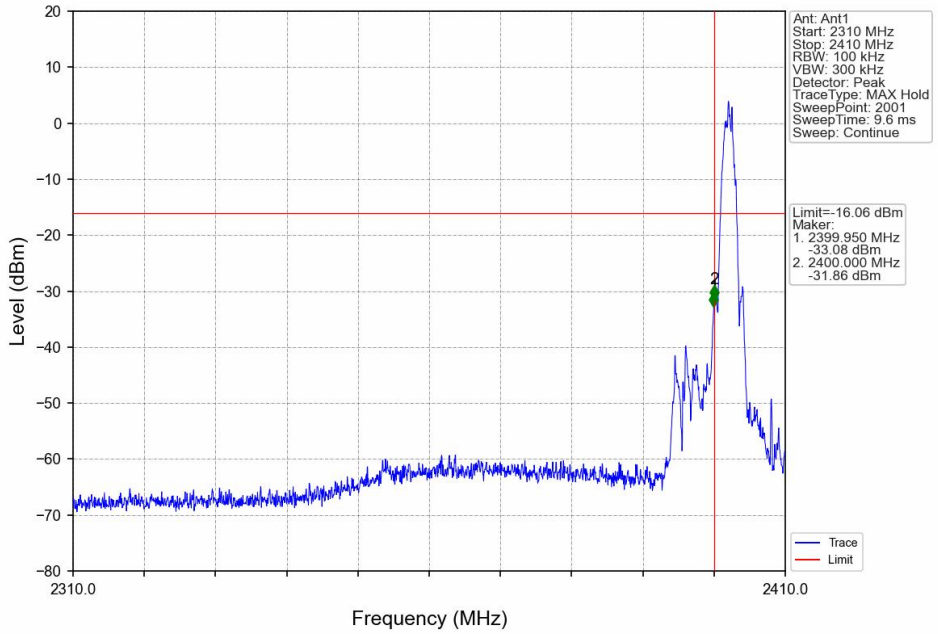


FCCID: 2BG3H-SW50

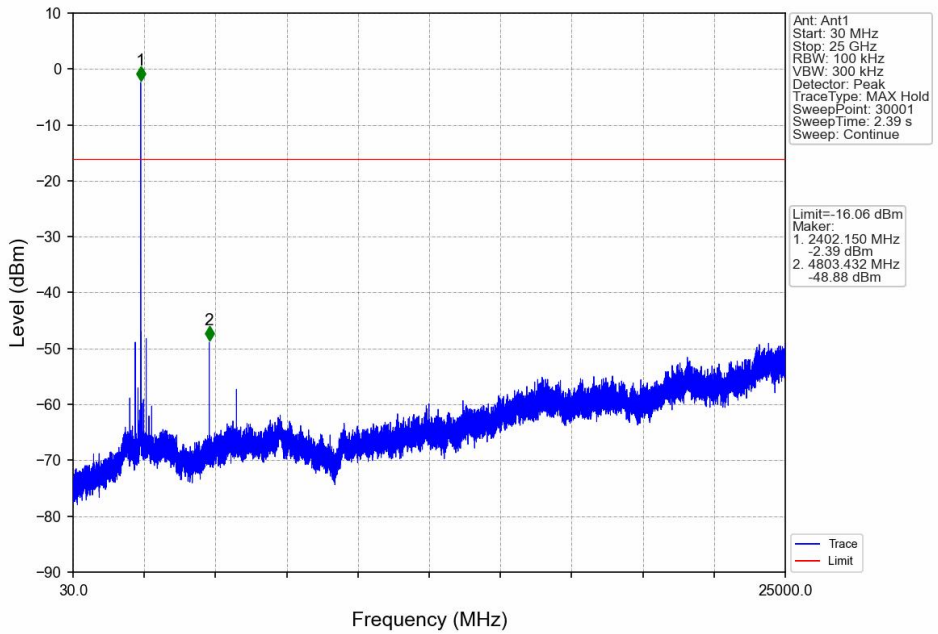
1M_HCH_2480MHz_Ant1_NTNV



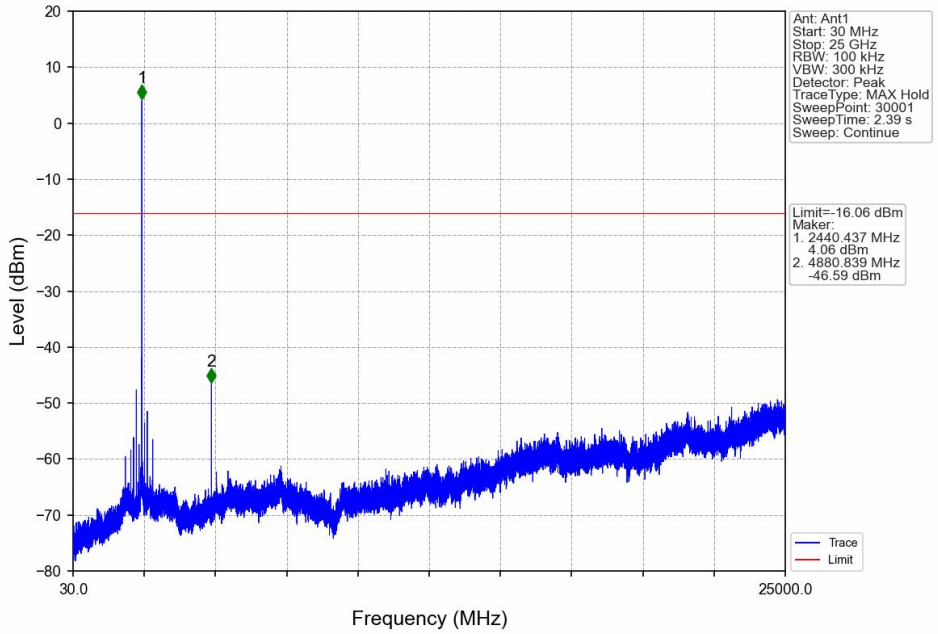
2M_LCH_2402MHz_Ant1_NTNV



2M_LCH_2402MHz_Ant1_NTNV

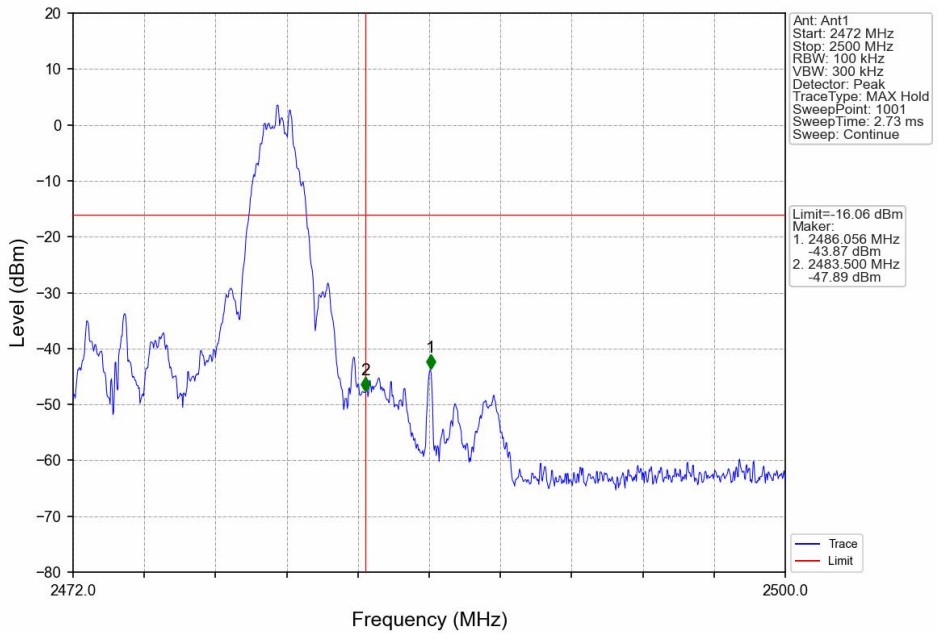


2M_MCH_2440MHz_Ant1_NTNV

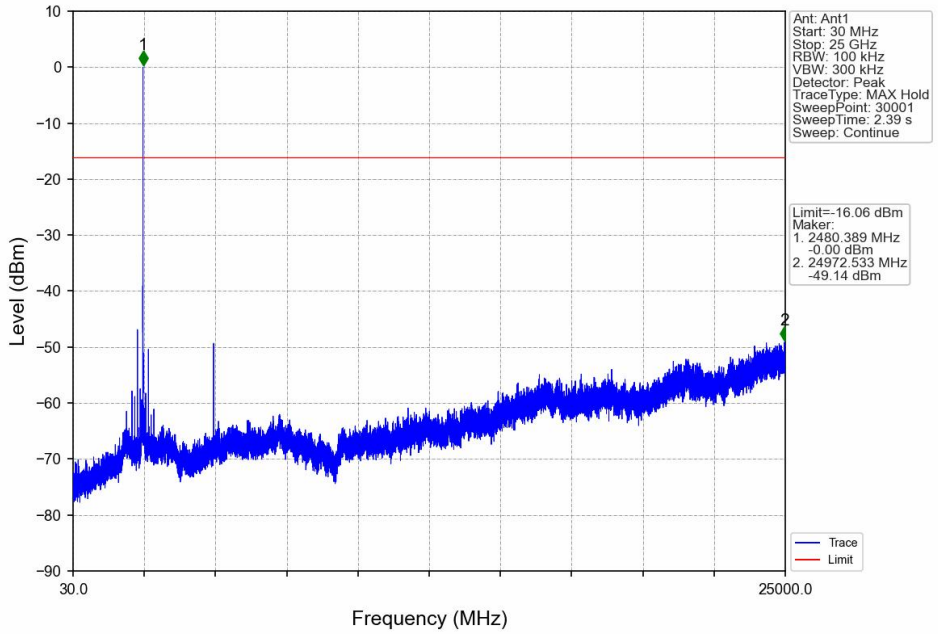


FCCID: 2BG3H-SW50

2M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



5. Form731

5.1 Form731

5.1.1 Test Result

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
2402	2480	0.0025	4.05