

Appendix for 15.247

1. Bandwidth

1.1 OBW

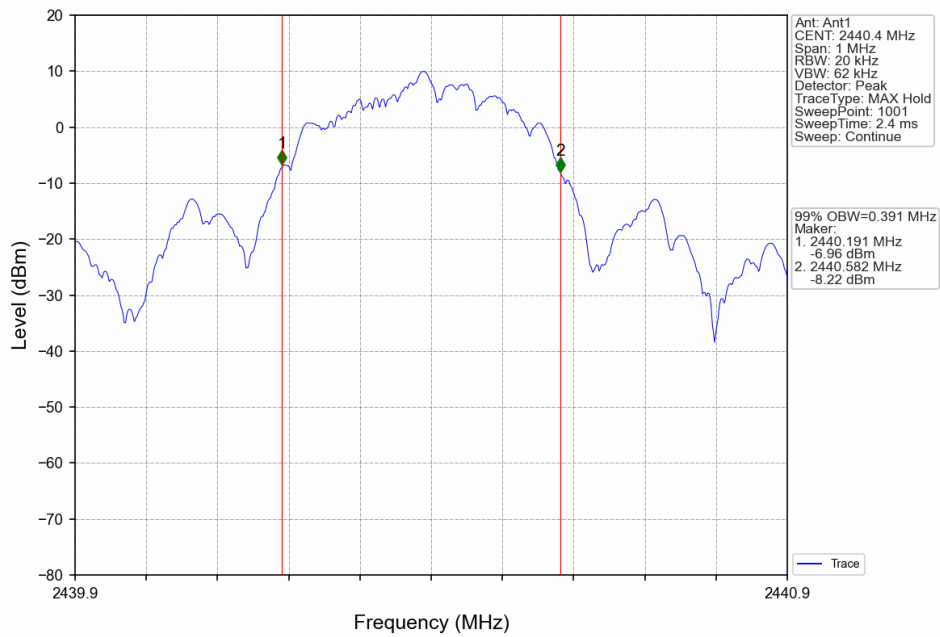
1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
GMSK	SISO	2402.15	1	0.390	Pass
			2	0.392	Pass
		2440.4	1	0.391	Pass
			2	0.389	Pass
		2479.85	1	0.391	Pass
			2	0.390	Pass

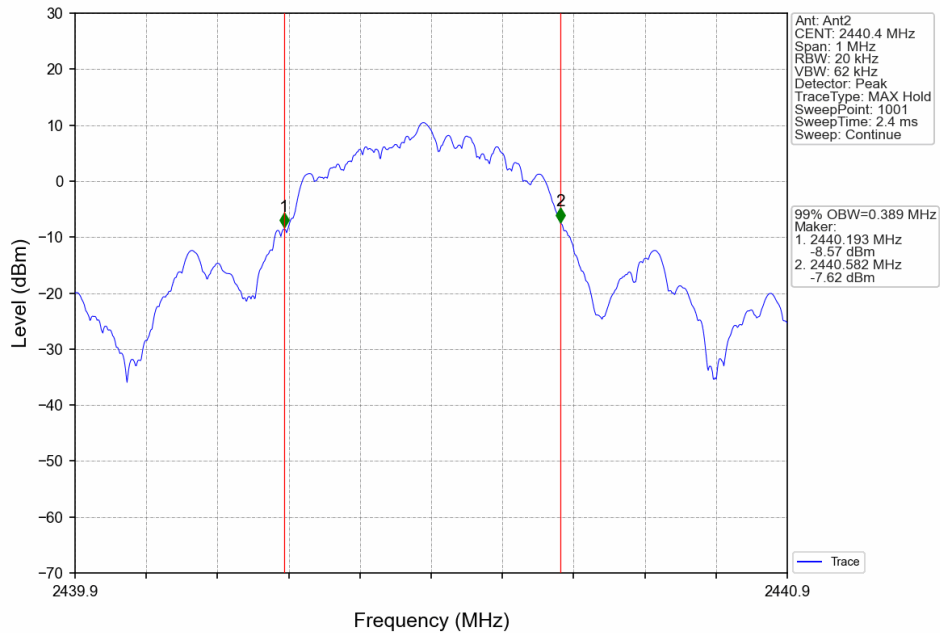
1.1.2 Test Graph



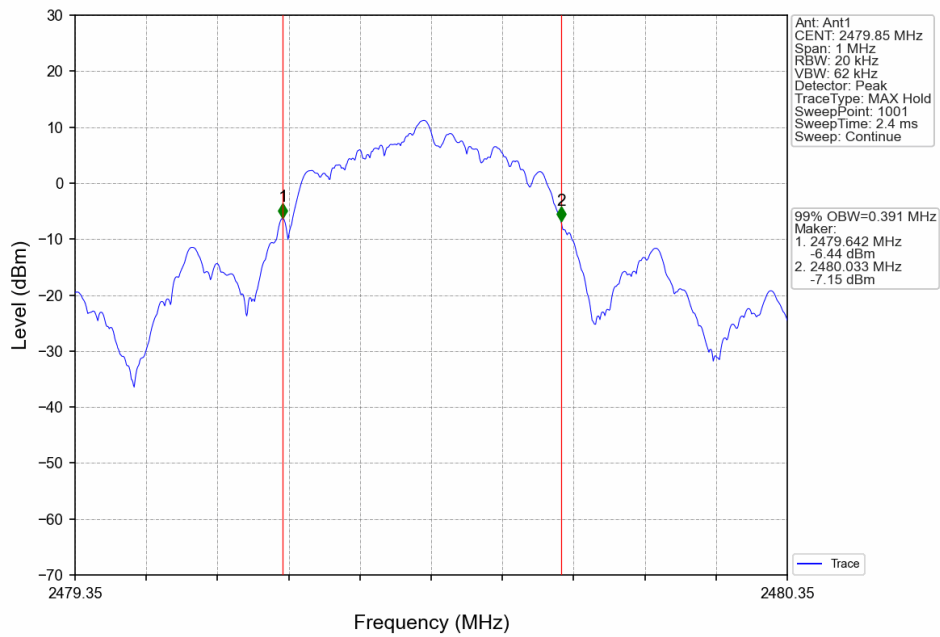
GMSK_MCH_2440.4MHz_Ant1_NTNV



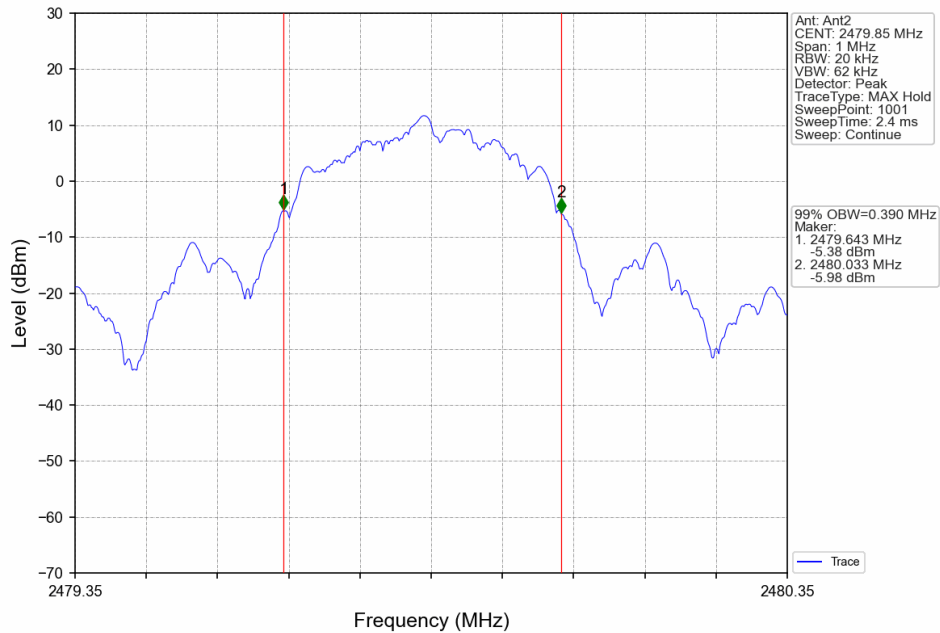
GMSK_MCH_2440.4MHz_Ant2_NTNV



GMSK_HCH_2479.85MHz_Ant1_NTNV



GMSK_HCH_2479.85MHz_Ant2_NTNV

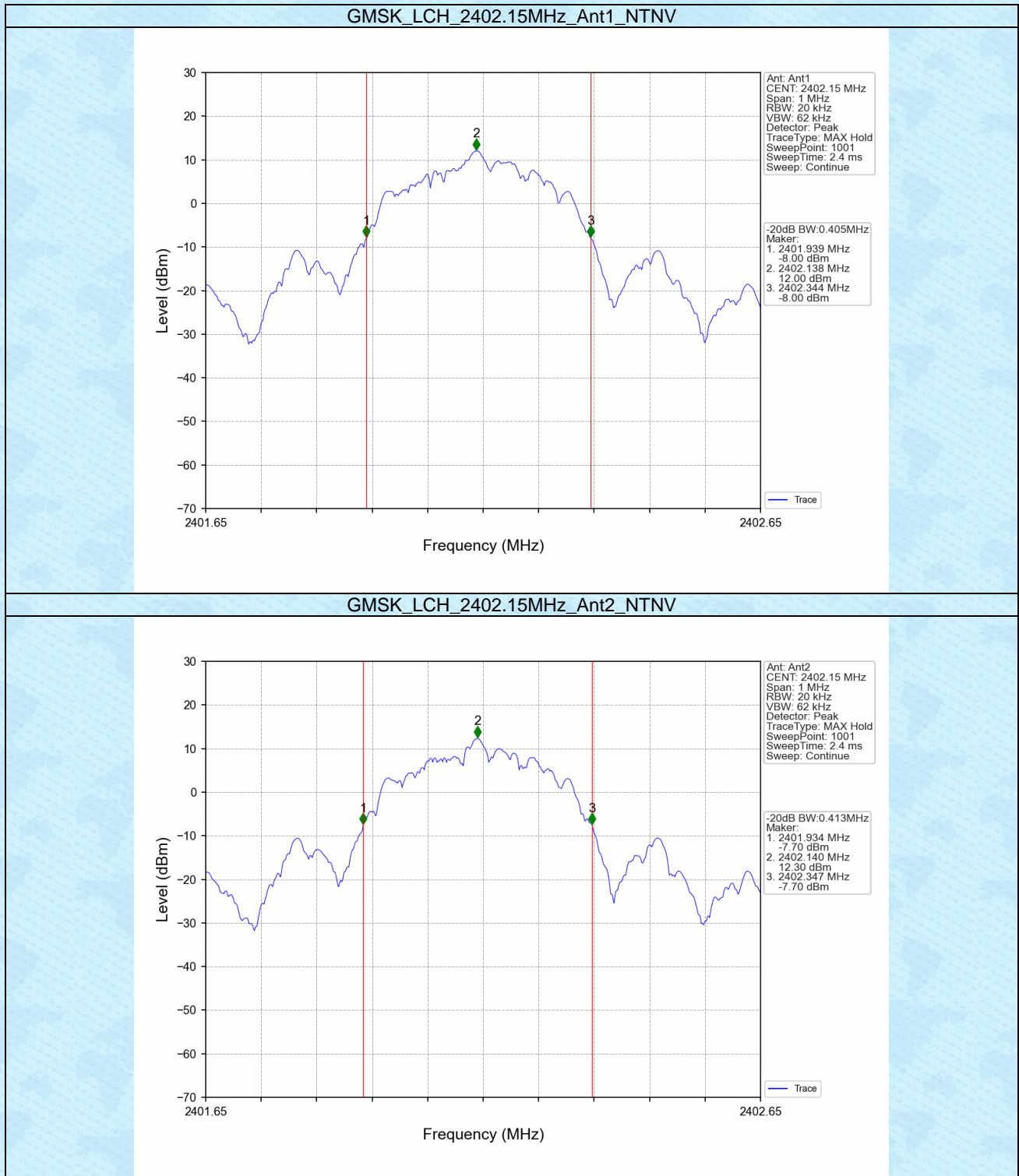


1.2 20dB BW

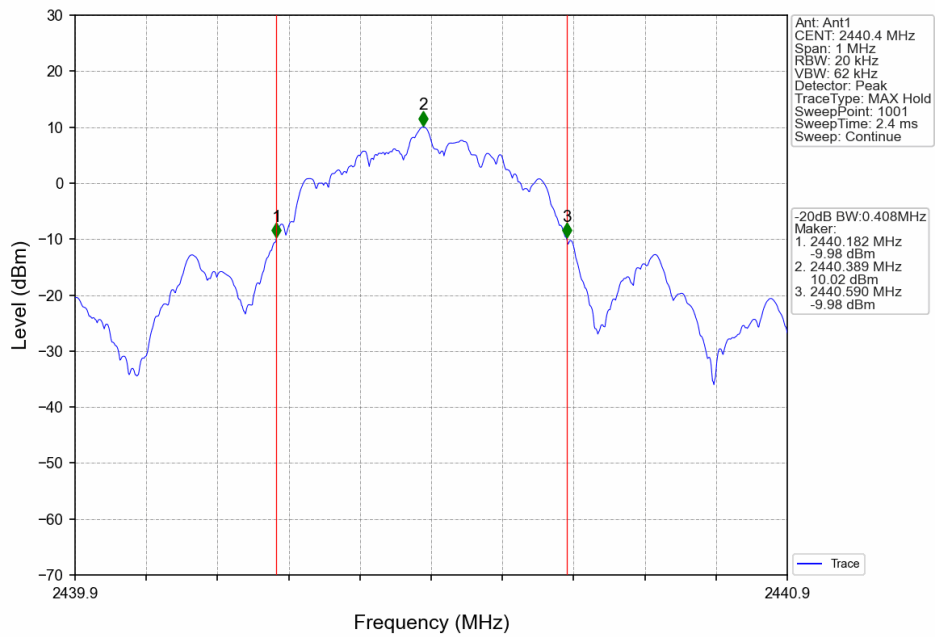
1.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	20dB Bandwidth (MHz)	Verdict
				Result	
GMSK	SISO	2402.15	1	0.405	Pass
			2	0.413	Pass
		2440.4	1	0.408	Pass
			2	0.412	Pass
		2479.85	1	0.407	Pass
			2	0.410	Pass

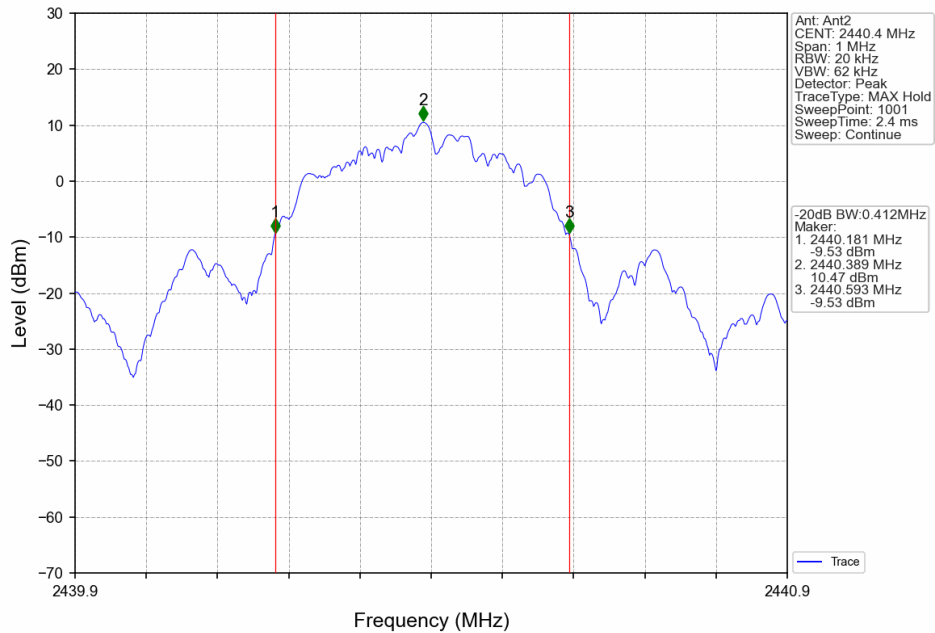
1.2.2 Test Graph



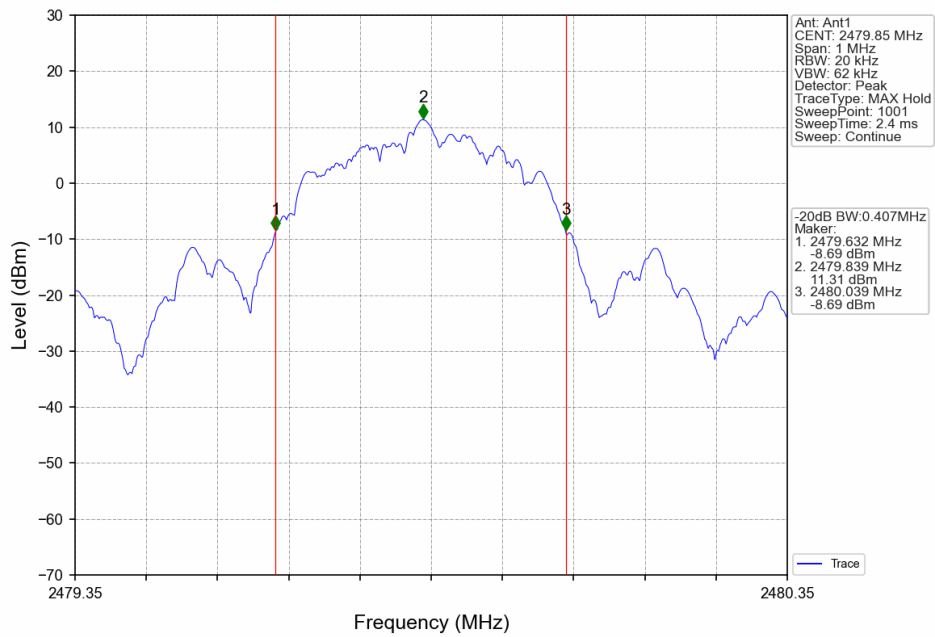
GMSK_MCH_2440.4MHz_Ant1_NTNV



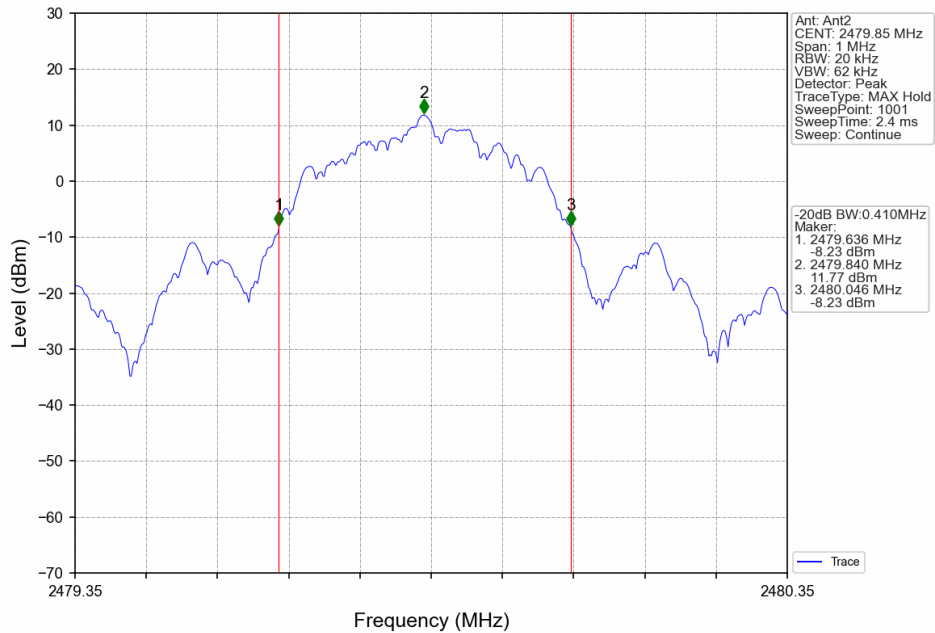
GMSK_MCH_2440.4MHz_Ant2_NTNV



GMSK_HCH_2479.85MHz_Ant1_NTNV



GMSK_HCH_2479.85MHz_Ant2_NTNV

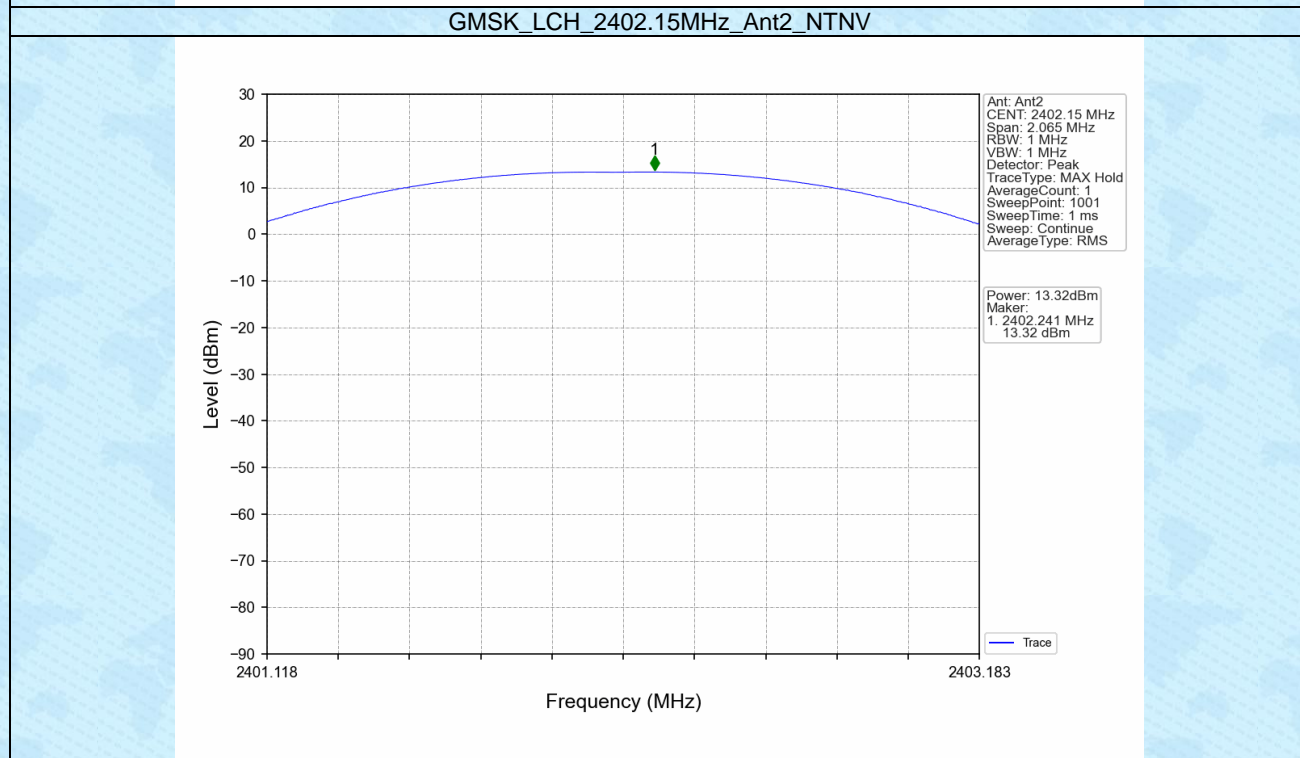
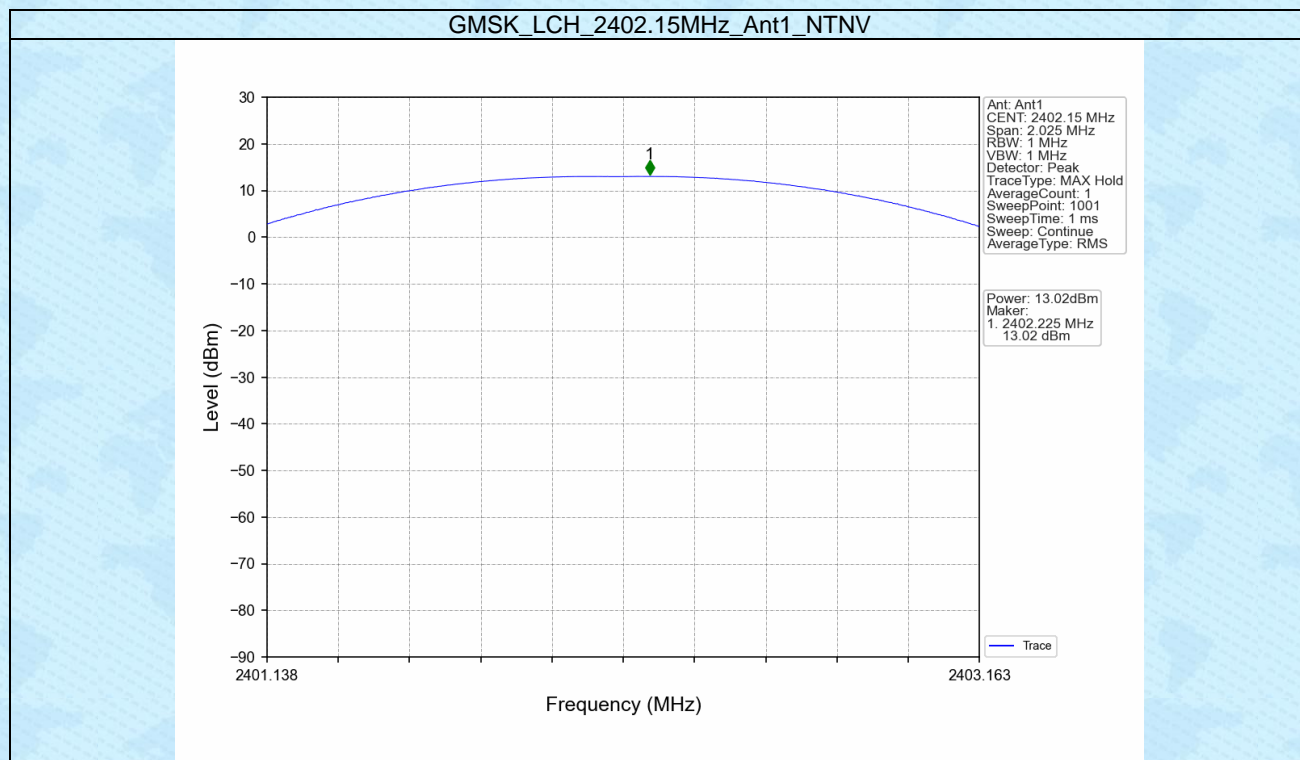


2. Maximum Conducted Output Power

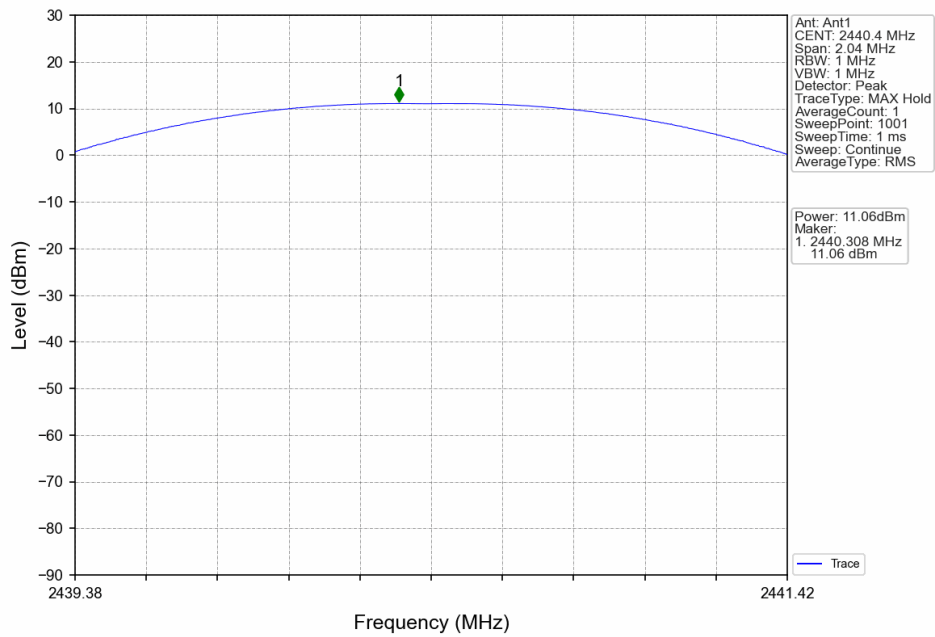
2.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)			Verdict
			ANT1	ANT2	Limit	
GMSK	SISO	2402.15	13.02	13.32	<=20.97	Pass
		2440.4	11.06	11.50	<=20.97	Pass
		2479.85	12.29	12.73	<=20.97	Pass

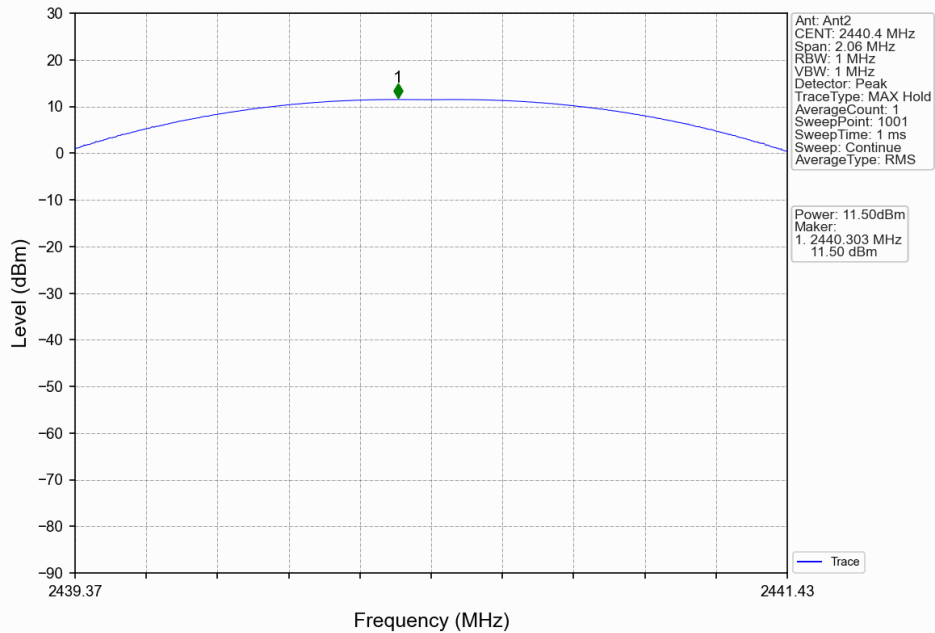
2.2 Test Graph



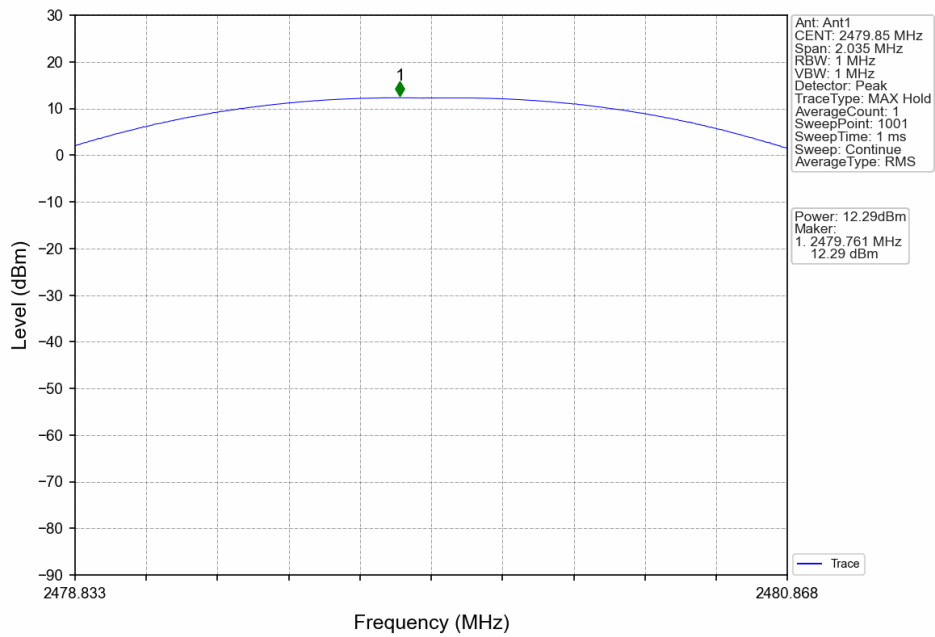
GMSK_MCH_2440.4MHz_Ant1_NTNV



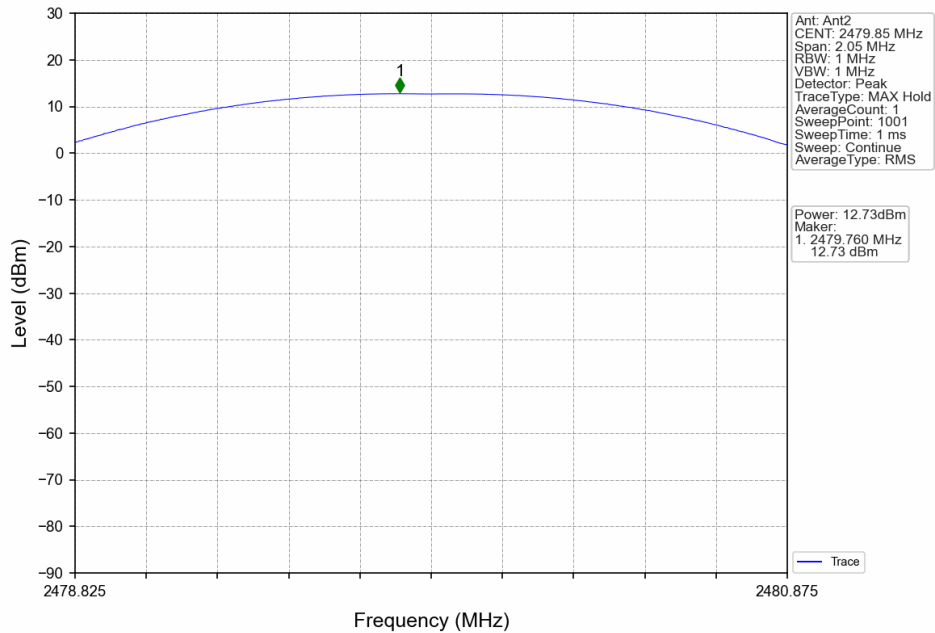
GMSK_MCH_2440.4MHz_Ant2_NTNV



GMSK_HCH_2479.85MHz_Ant1_NTNV



GMSK_HCH_2479.85MHz_Ant2_NTNV



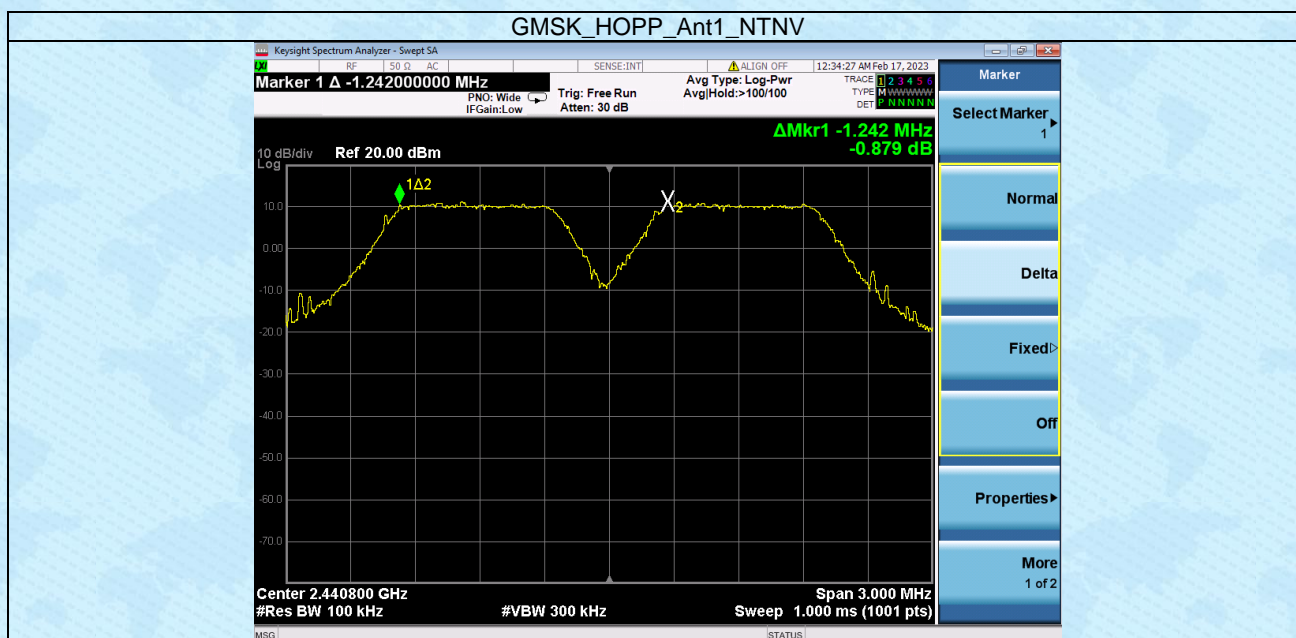
3. Carrier Frequency Separation

3.1 Ant1

3.1.1 Test Result

Ant1						
Mode	TX Type	Frequency (MHz)	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GMSK	SISO	HOPP	1.242	0.413	>=0.413	Pass

3.1.2 Test Graph

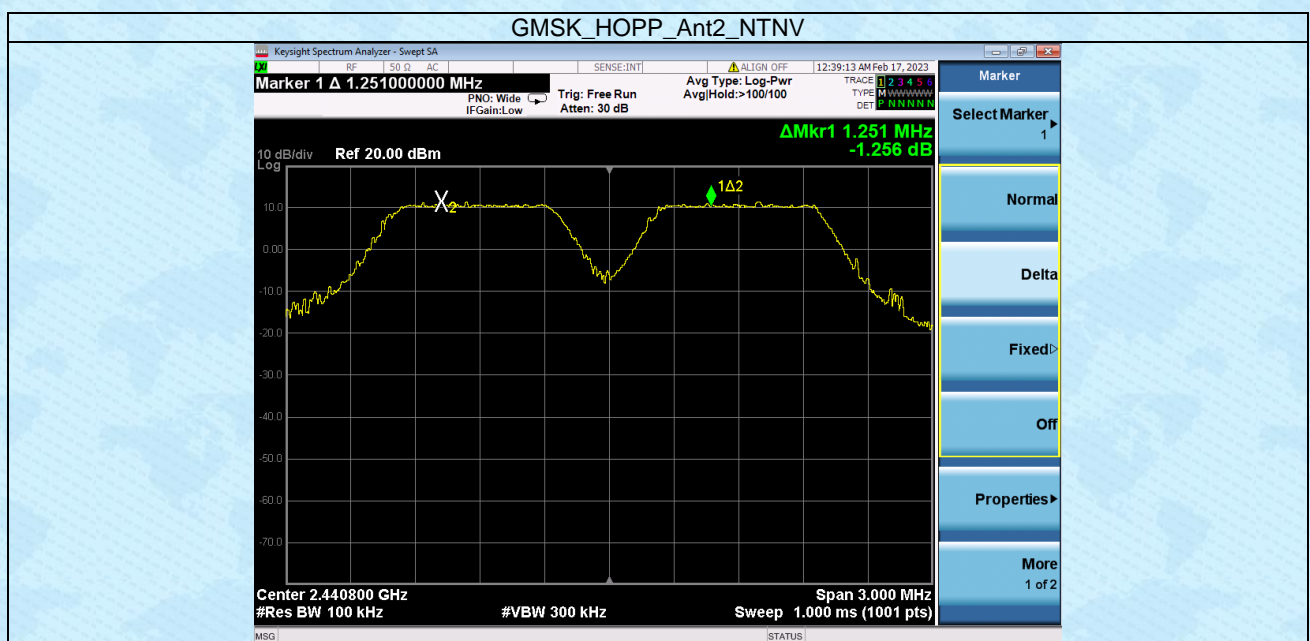


3.2 Ant2

3.2.1 Test Result

Ant2						
Mode	TX Type	Frequency (MHz)	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GMSK	SISO	HOPP	1.251	0.413	≥ 0.413	Pass

3.2.2 Test Graph

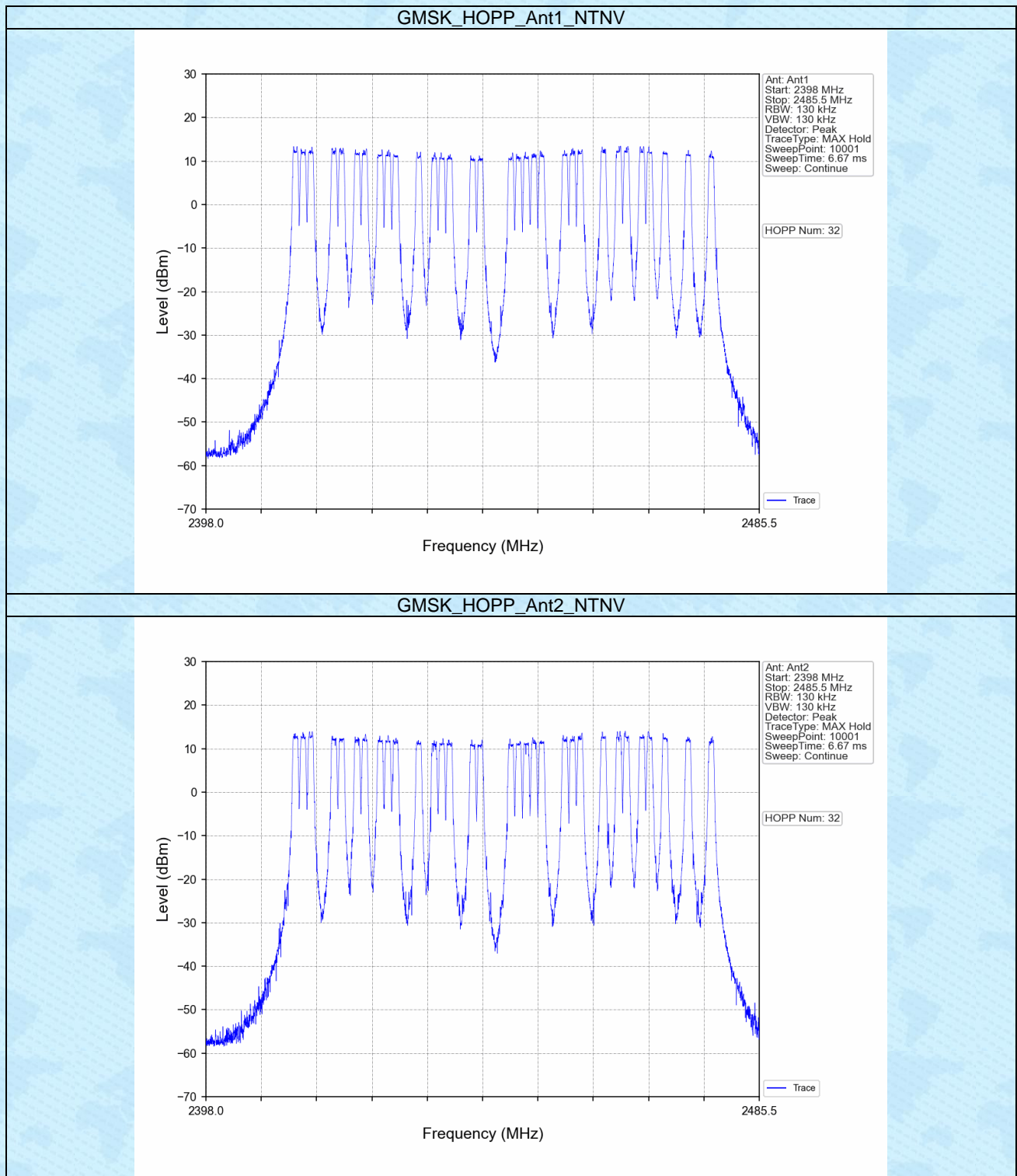


4. Number of Hopping Frequencies

4.1 Test Result

Mode	TX Type	Frequency (MHz)	Num of Hopping Frequencies			Verdict
			ANT1	ANT2	Limit	
GMSK	SISO	HOPP	32	32	≥ 15	Pass

4.1.2 Test Graph



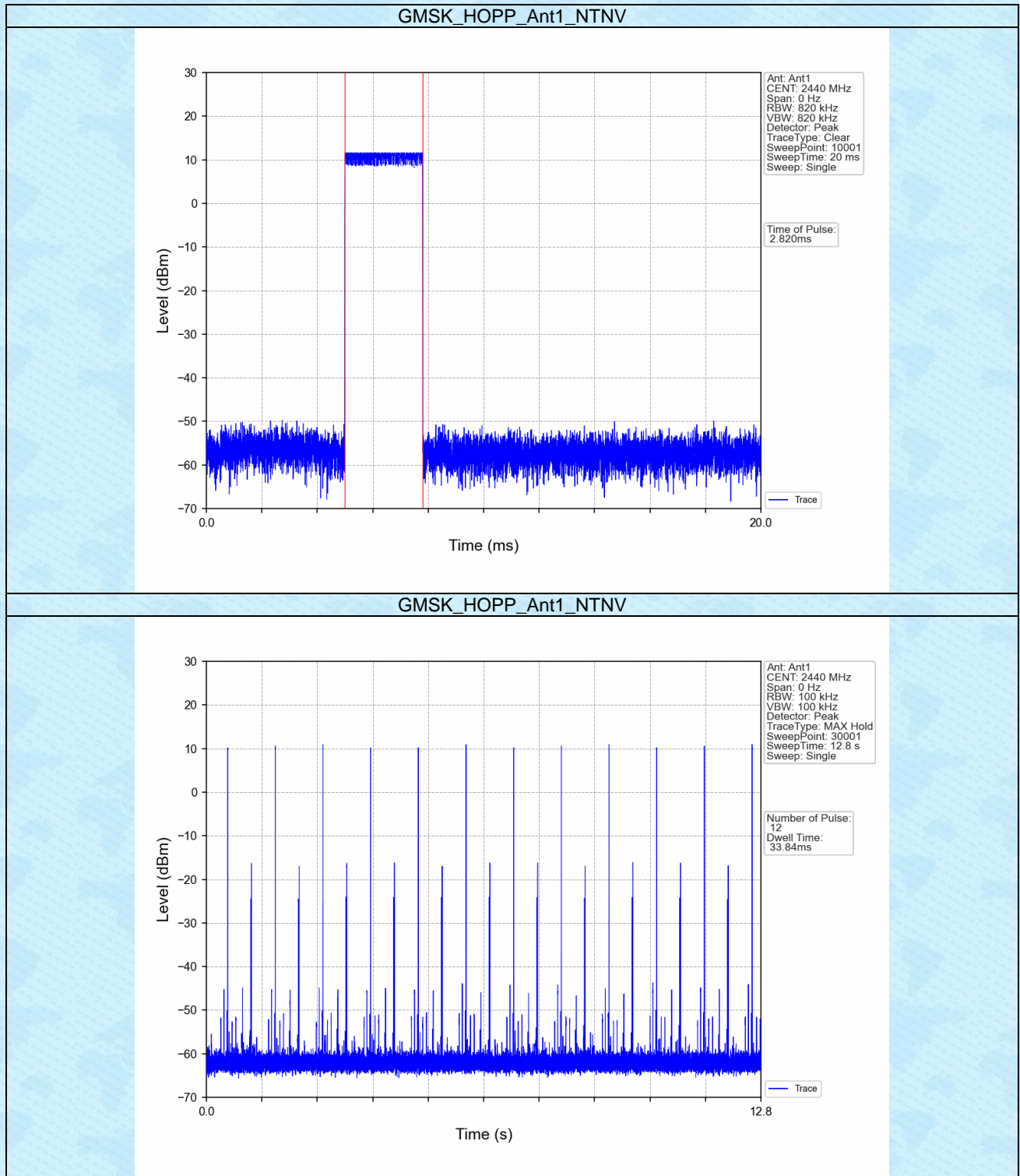
5. Time of Occupancy (Dwell Time)

5.1 Ant1

5.1.1 Test Result

Ant1								
Mode	TX Type	Frequency (MHz)	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GMSK	SISO	HOPP	2.820	12.800	12	33.840	<=400	Pass

5.1.2 Test Graph

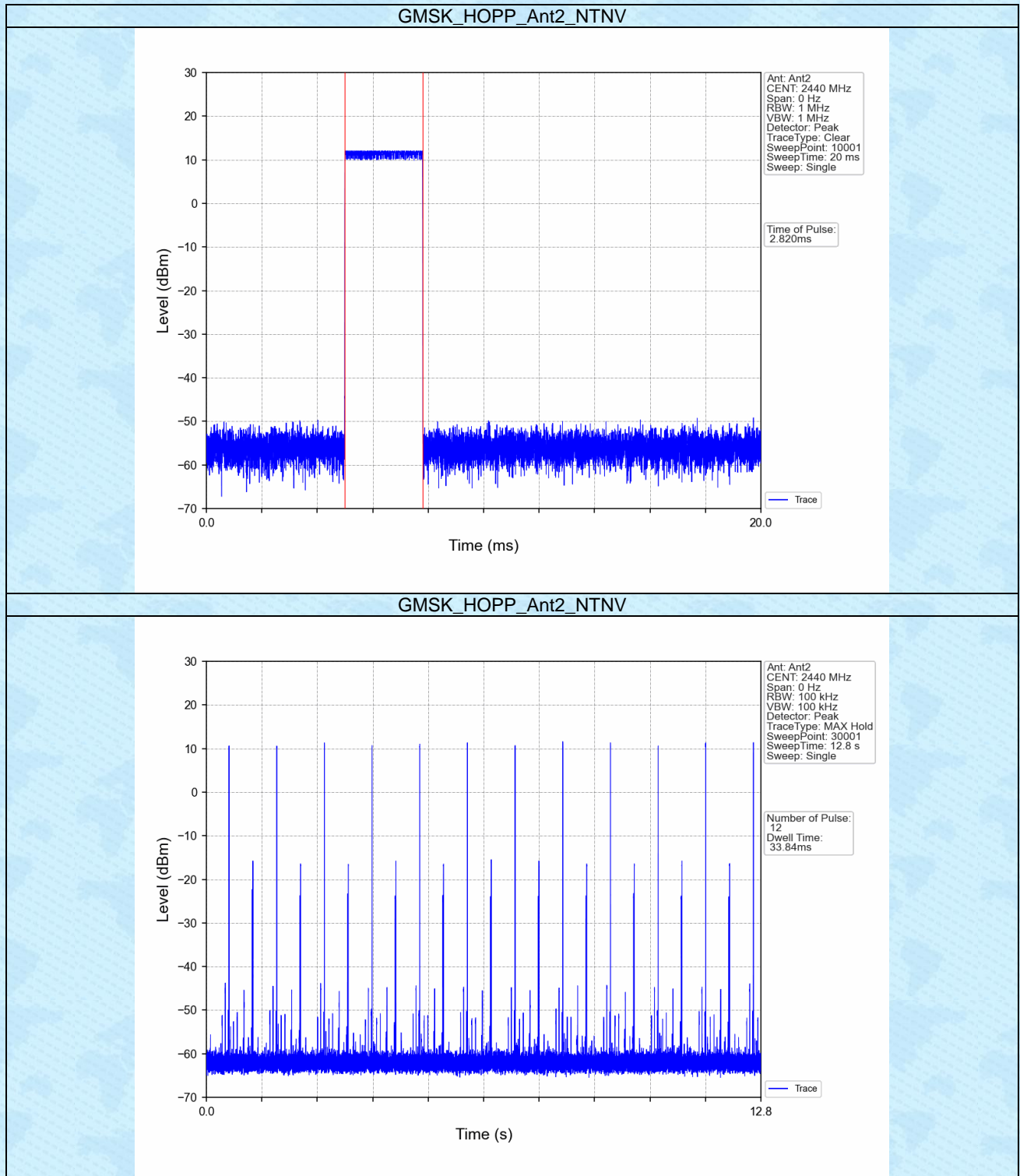


5.2 Ant2

5.2.1 Test Result

Ant2								
Mode	TX Type	Frequency (MHz)	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GMSK	SISO	HOPP	2.820	12.800	12	33.840	<=400	Pass

5.2.2 Test Graph



6. Unwanted Emissions In Non-restricted Frequency Bands

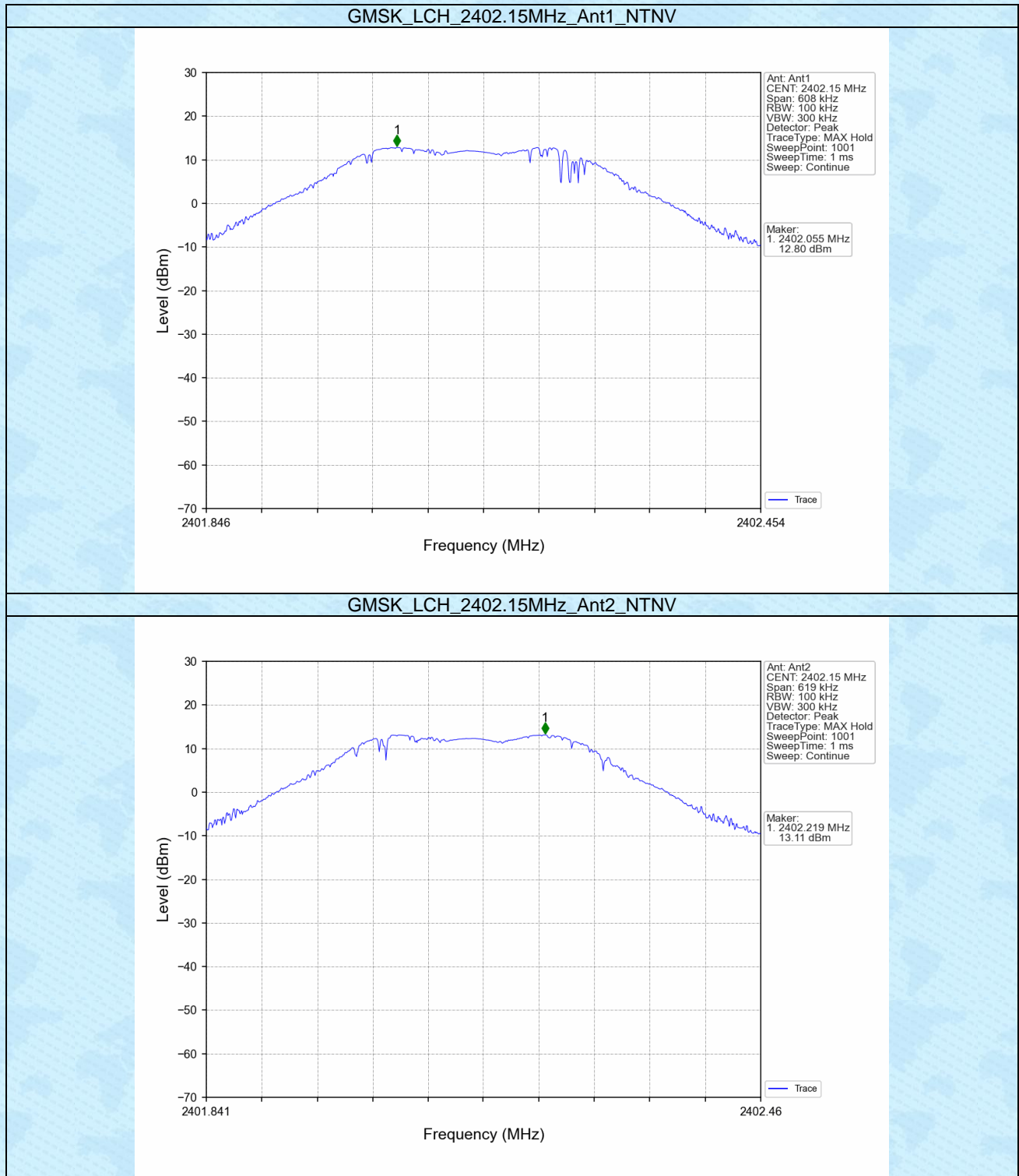
6.1 Ref

6.1.1 Test Result

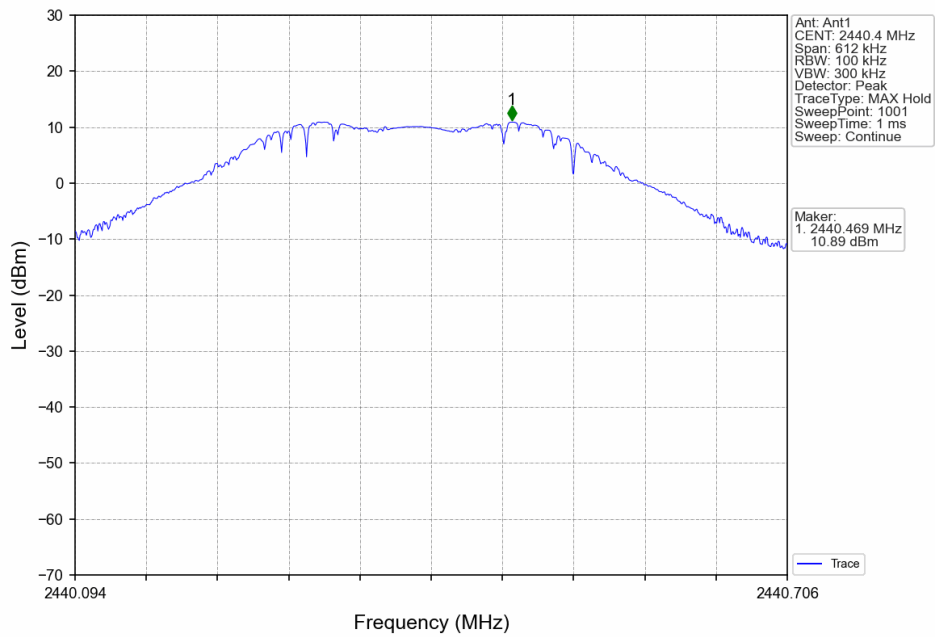
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
GMSK	SISO	2402.15	1	12.80
			2	13.11
		2440.4	1	10.89
			2	11.32
		2479.85	1	12.09
			2	12.50

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.

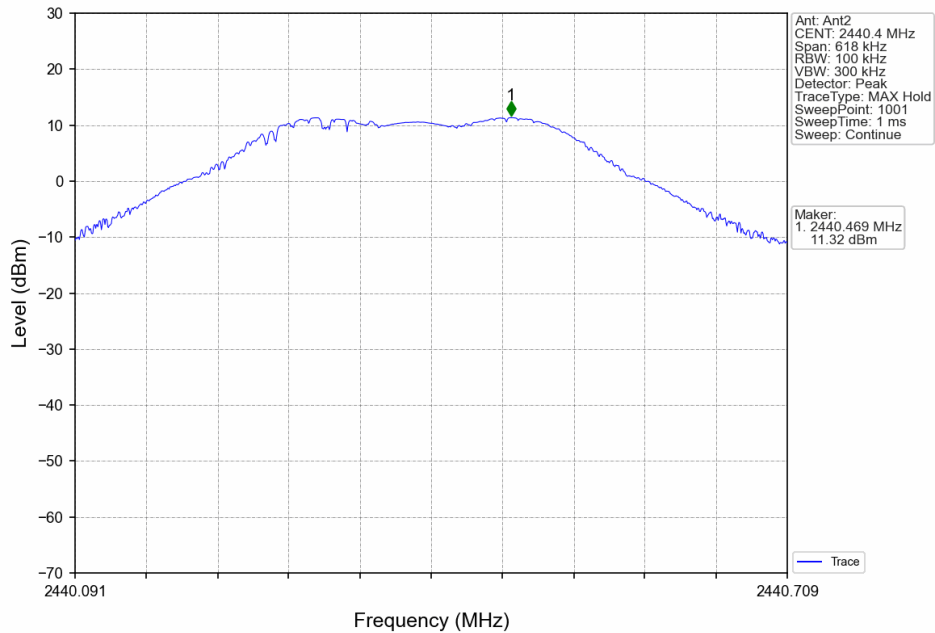
6.1.2 Test Graph



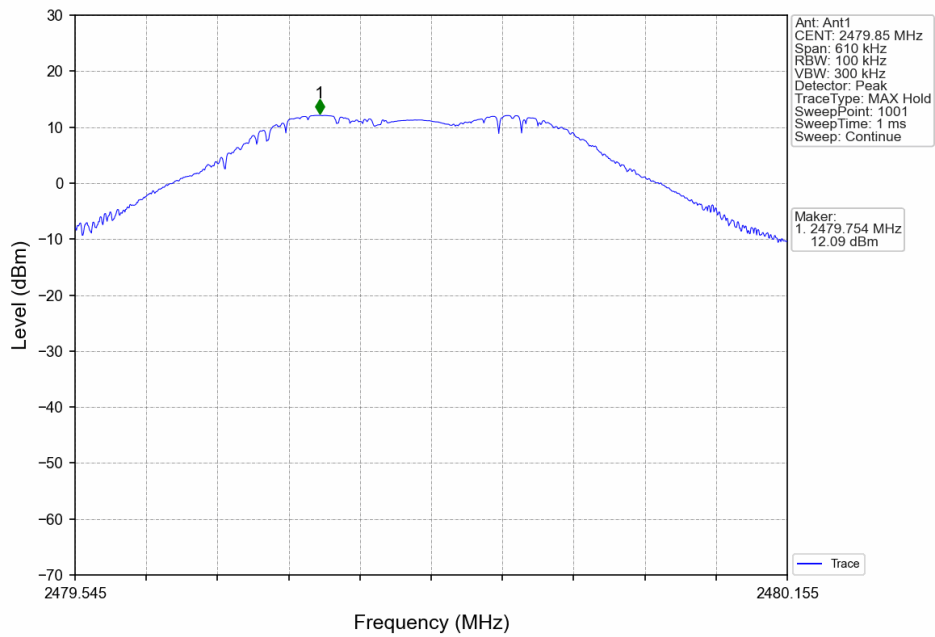
GMSK_MCH_2440.4MHz_Ant1_NTNV



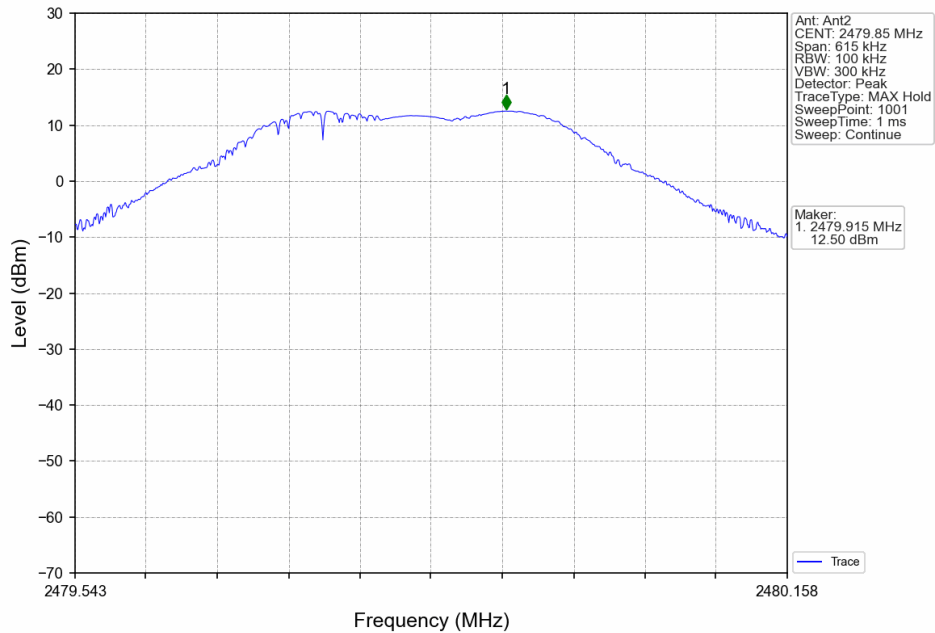
GMSK_MCH_2440.4MHz_Ant2_NTNV



GMSK_HCH_2479.85MHz_Ant1_NTNV



GMSK_HCH_2479.85MHz_Ant2_NTNV

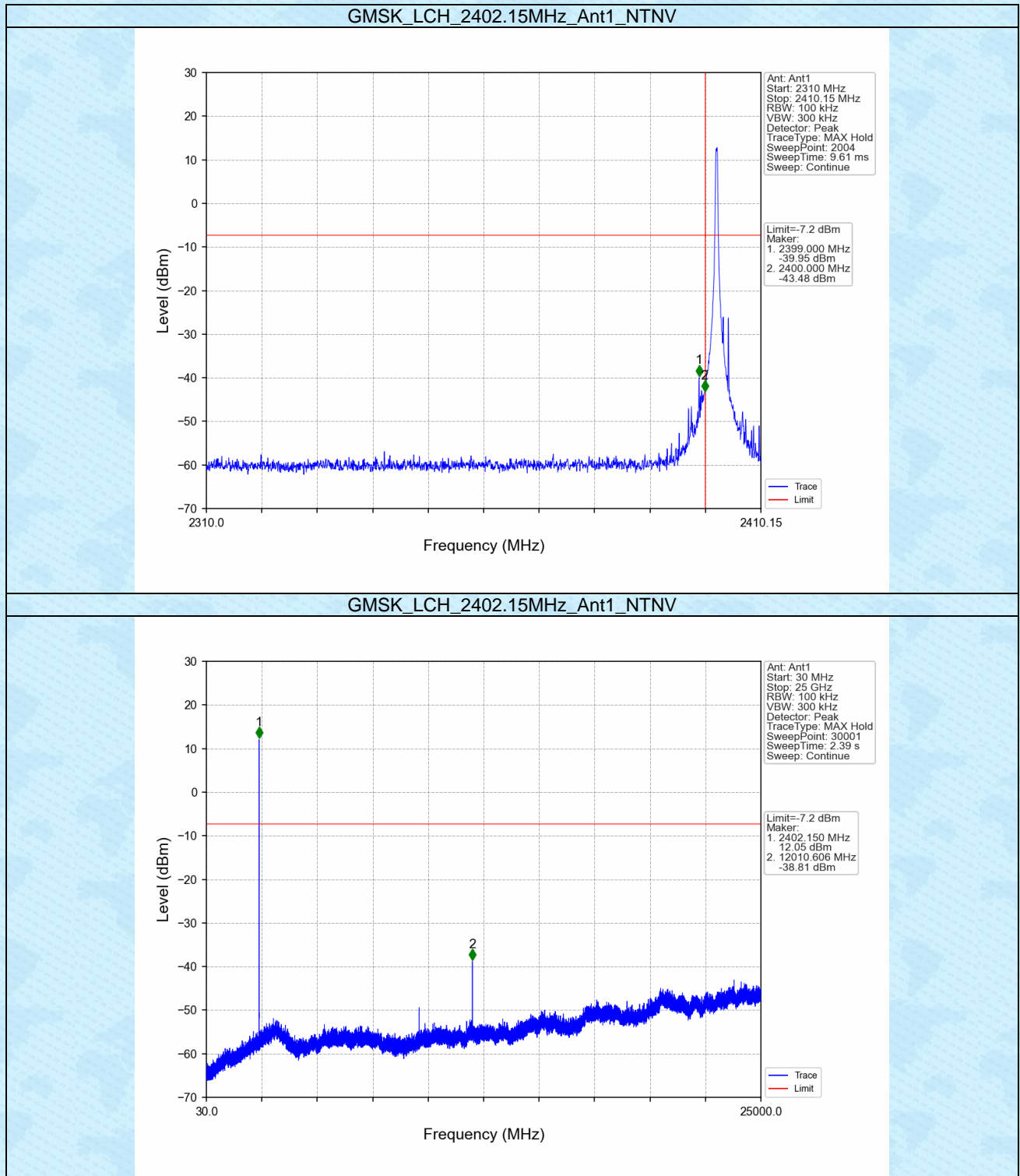


6.2 CSE

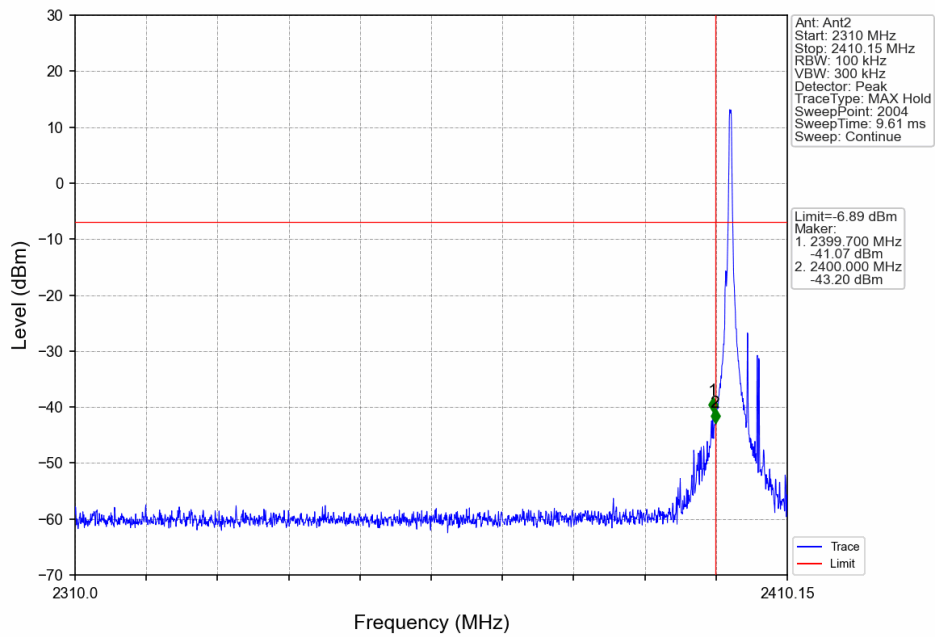
6.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict		
GMSK	SISO	2402.15	1	12.80	-7.20	Pass		
			2	13.11	-6.89	Pass		
		2440.4	1	10.89	-9.11	Pass		
			2	11.32	-8.68	Pass		
		2479.85	1	12.80	-7.20	Pass		
			2	13.11	-6.89	Pass		
		HOPP	1	12.80	-7.20	Pass		
			2	13.11	-6.89	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.						

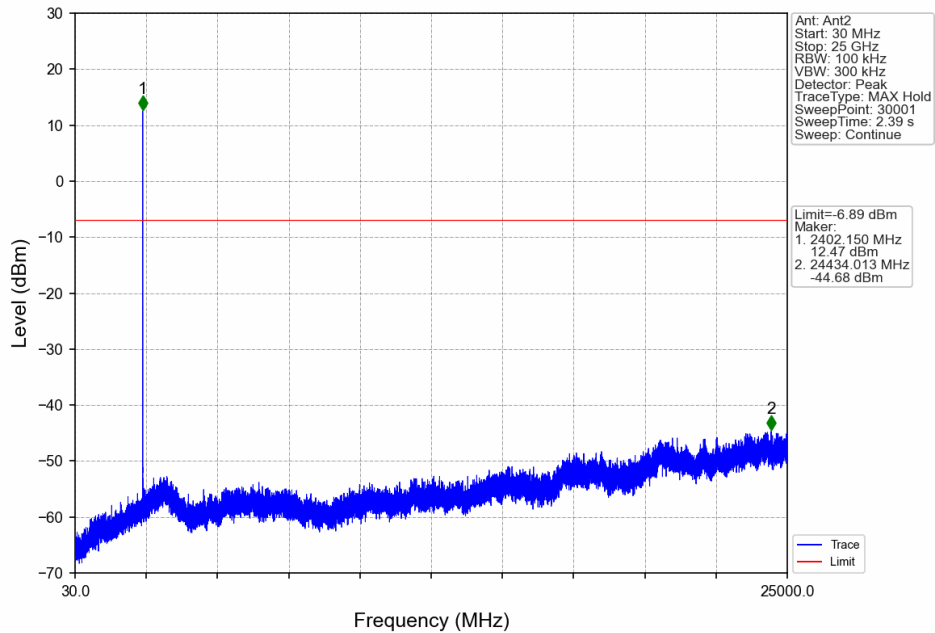
6.2.2 Test Graph



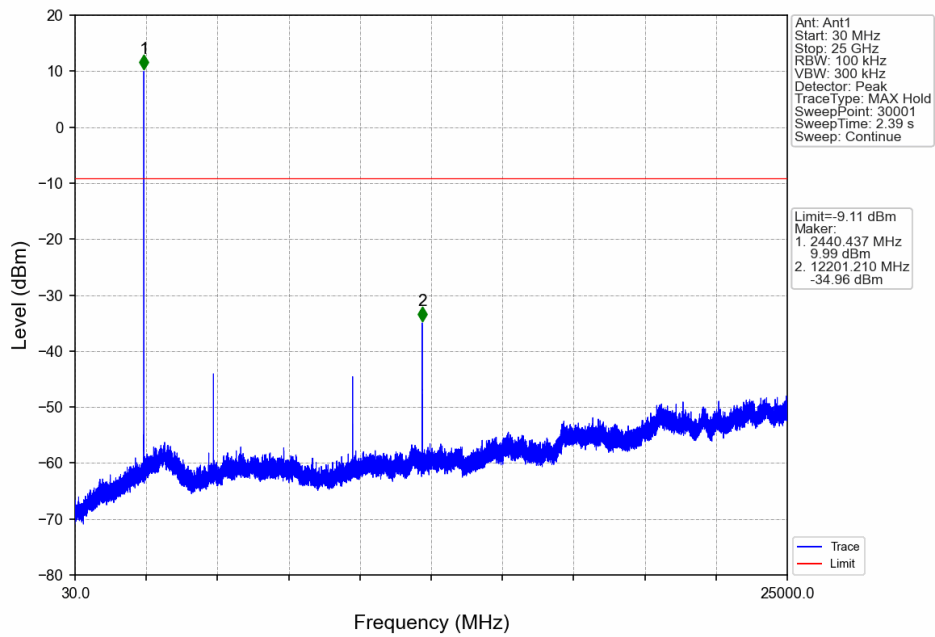
GMSK_LCH_2402.15MHz_Ant2_NTNV



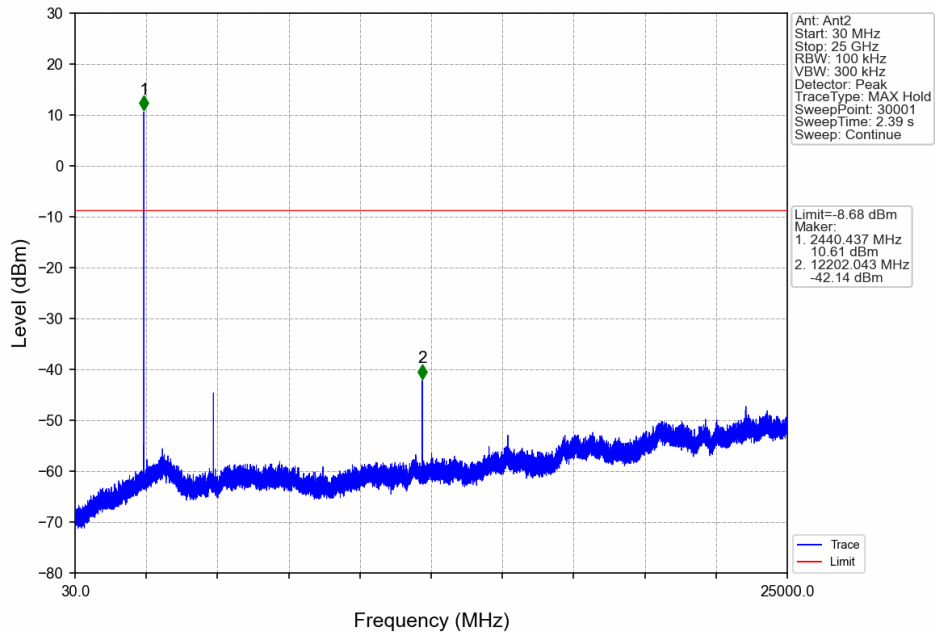
GMSK_LCH_2402.15MHz_Ant2_NTNV



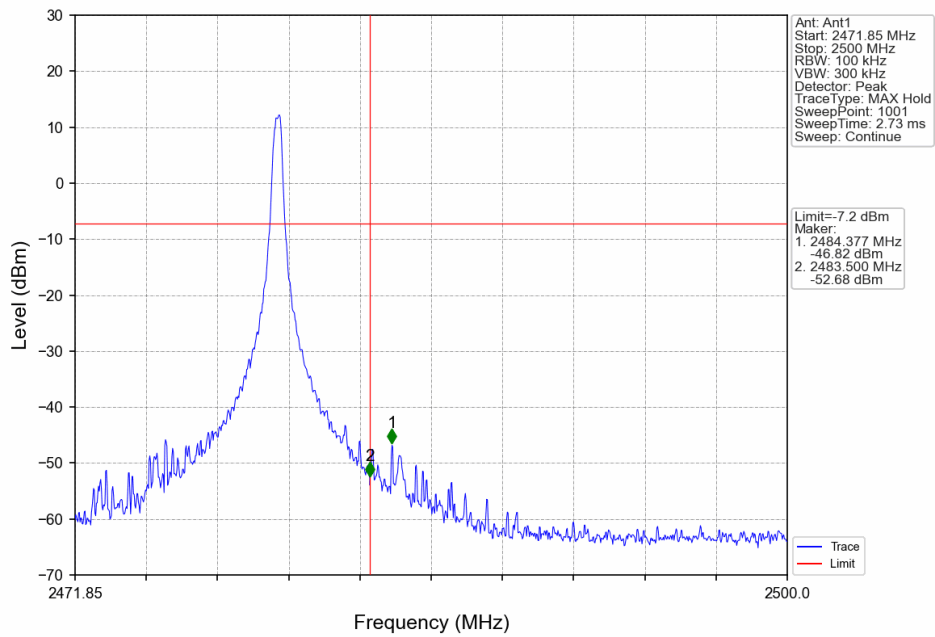
GMSK_MCH_2440.4MHz_Ant1_NTNV



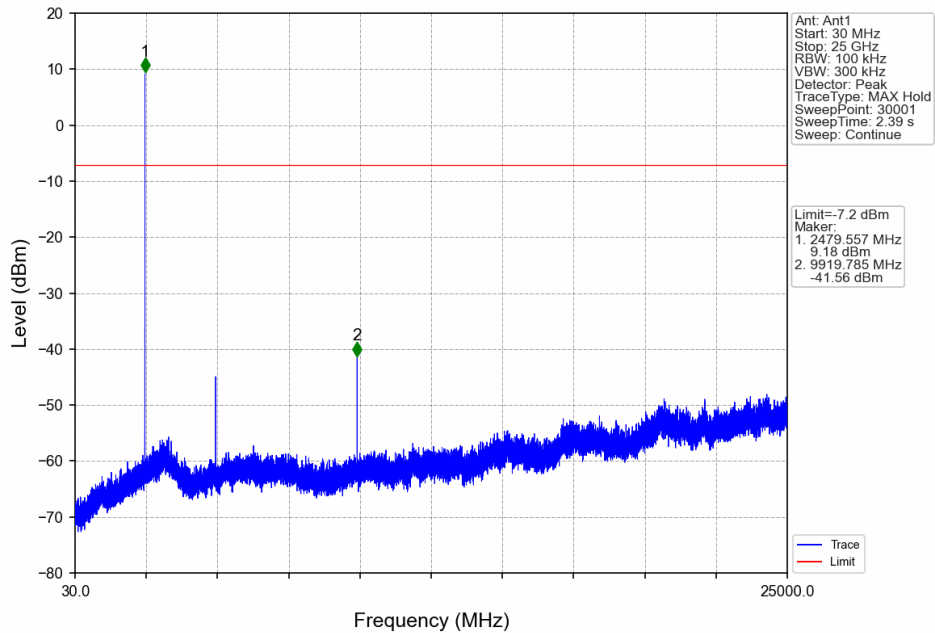
GMSK_MCH_2440.4MHz_Ant2_NTNV



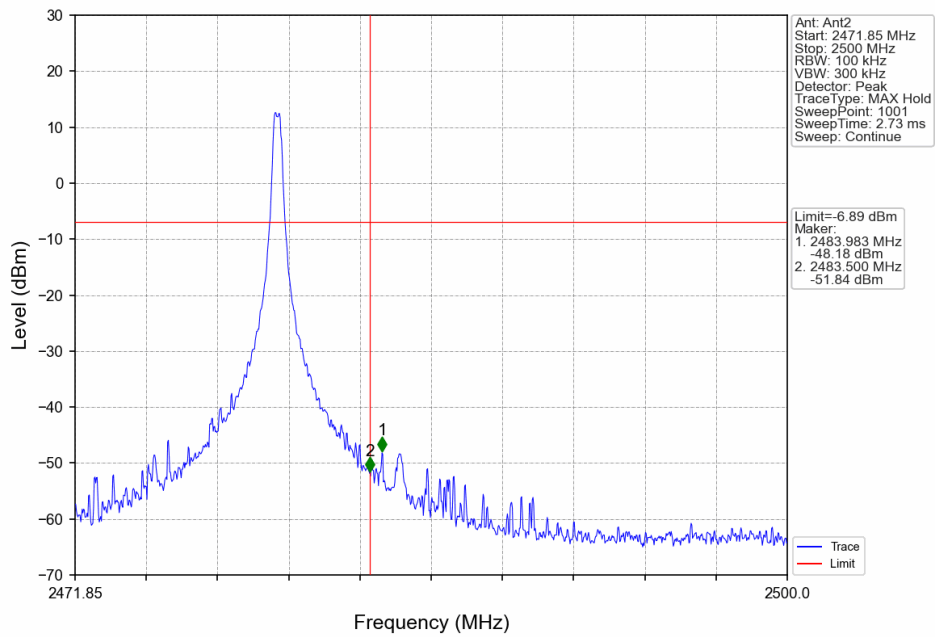
GMSK_HCH_2479.85MHz_Ant1_NTNV



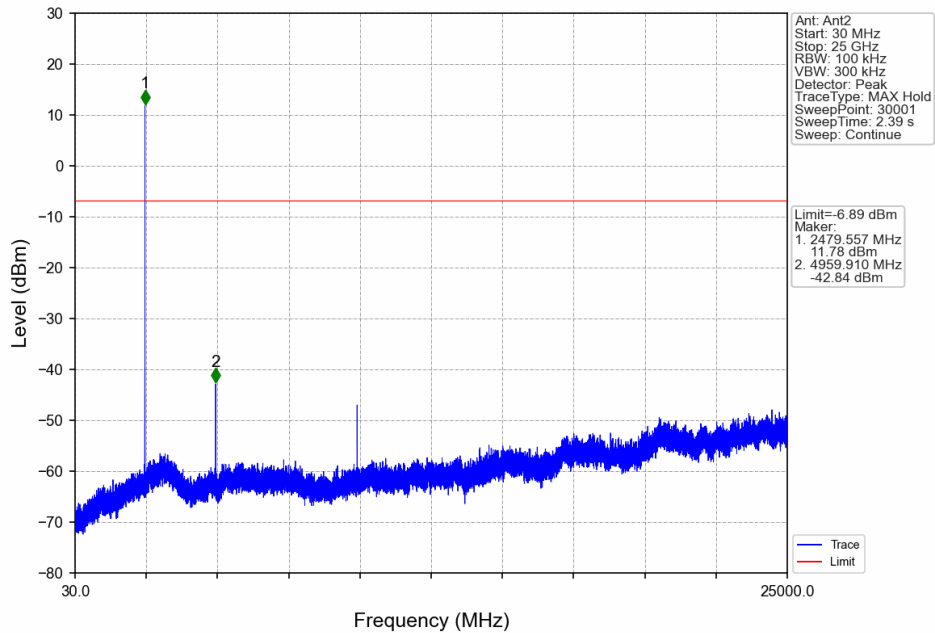
GMSK_HCH_2479.85MHz_Ant1_NTNV

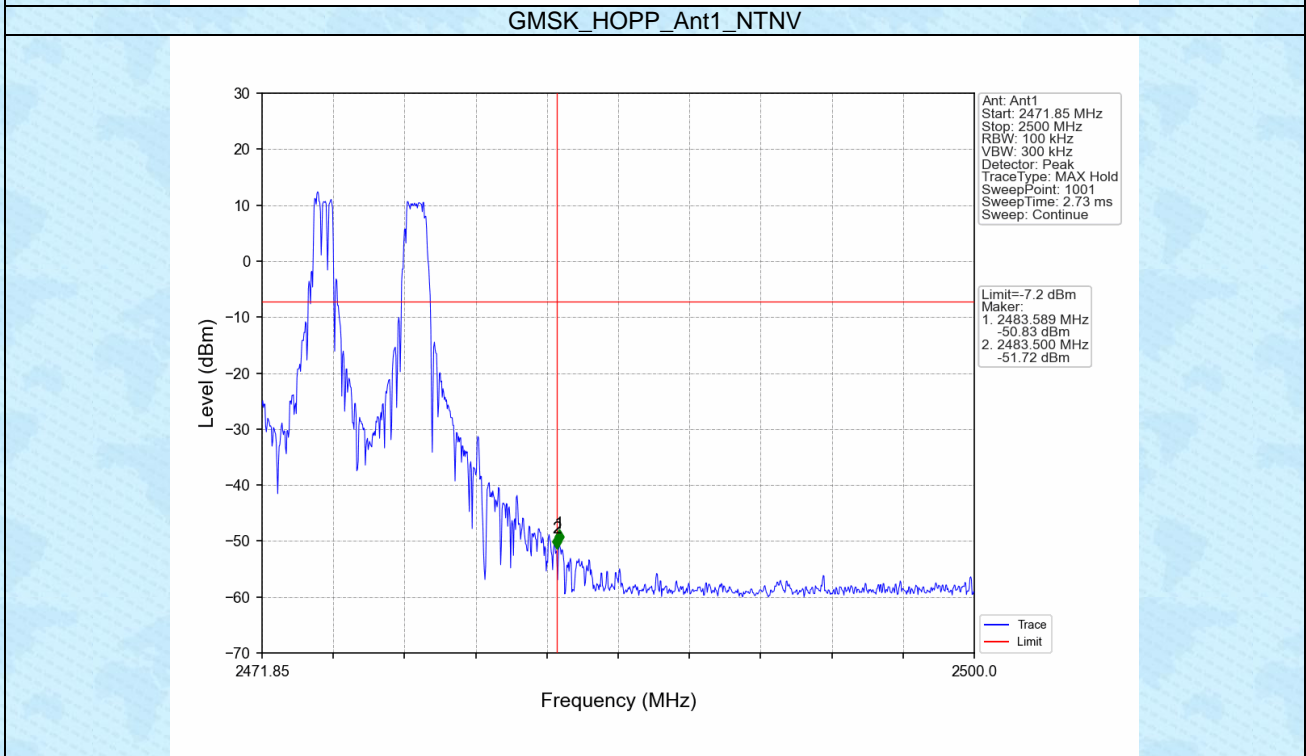
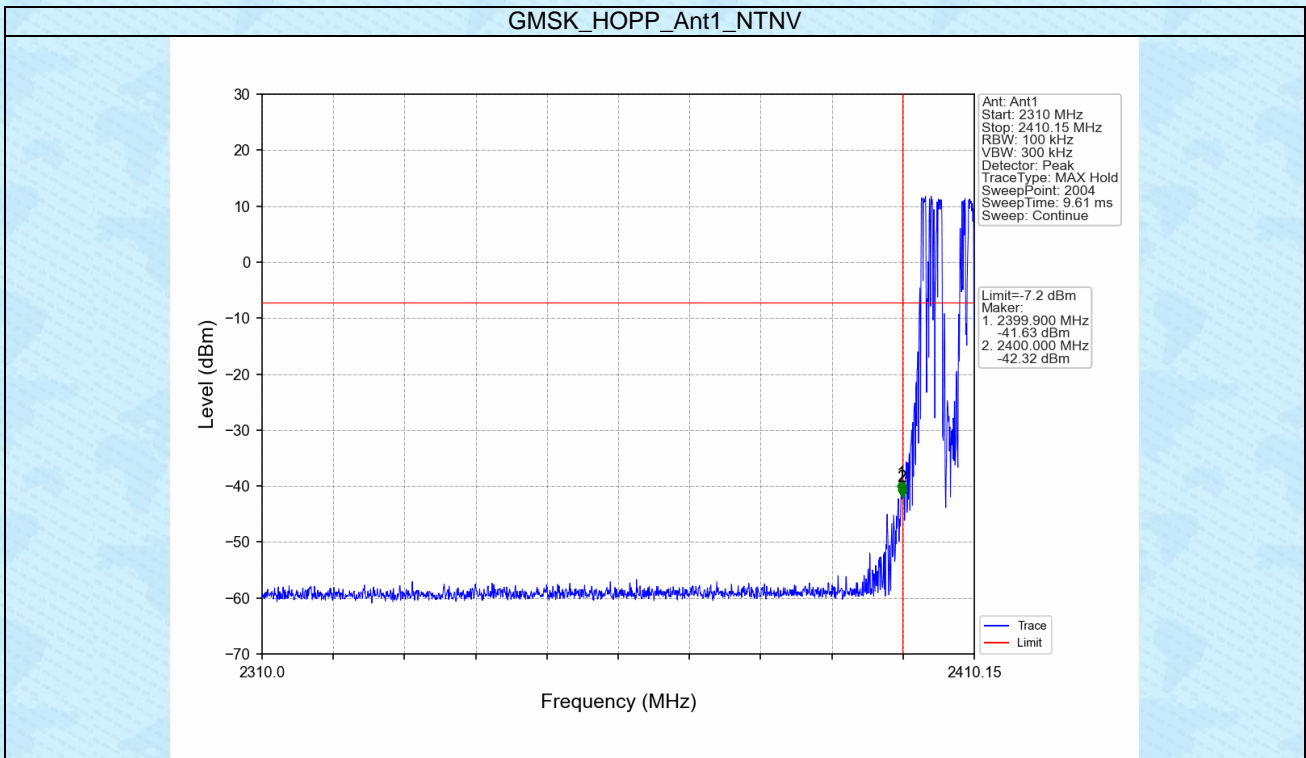


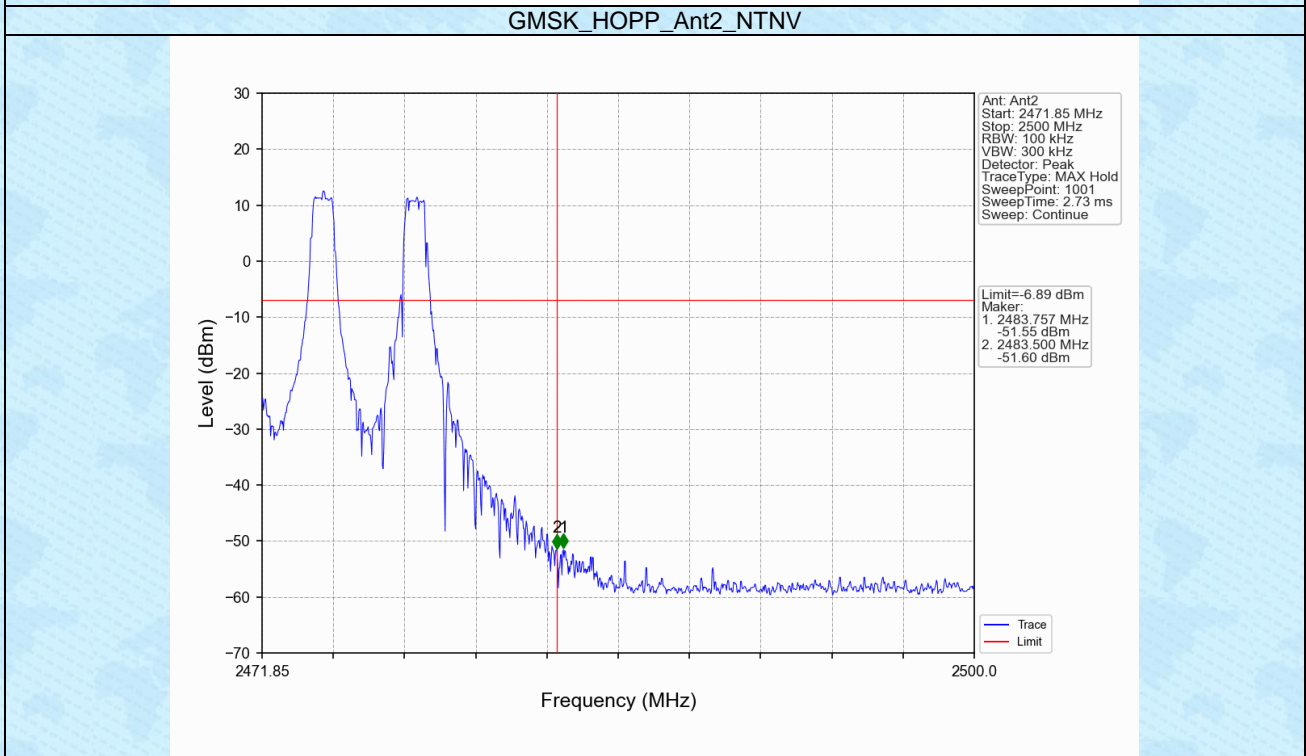
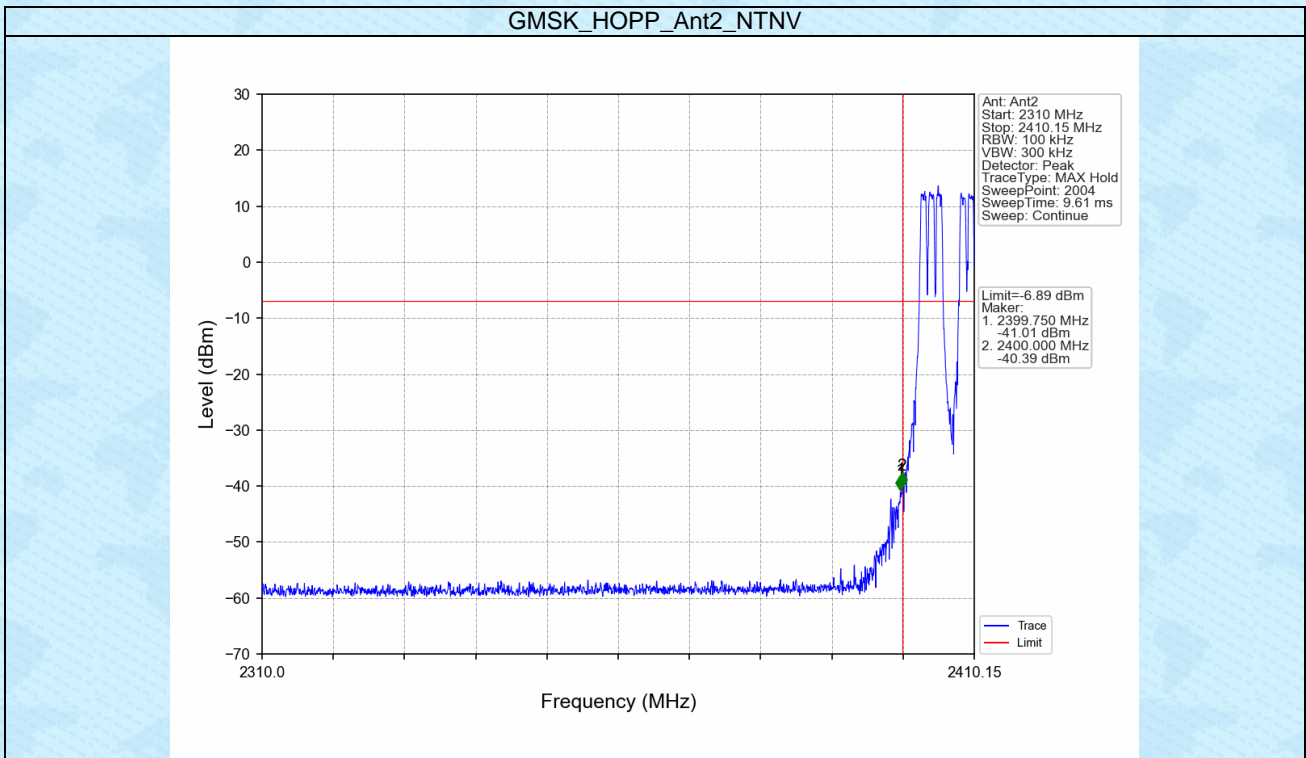
GMSK_HCH_2479.85MHz_Ant2_NTNV



GMSK_HCH_2479.85MHz_Ant2_NTNV







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