

Appendix - BT

1. Bandwidth

1.1 Test Result

1.1.1 OBW

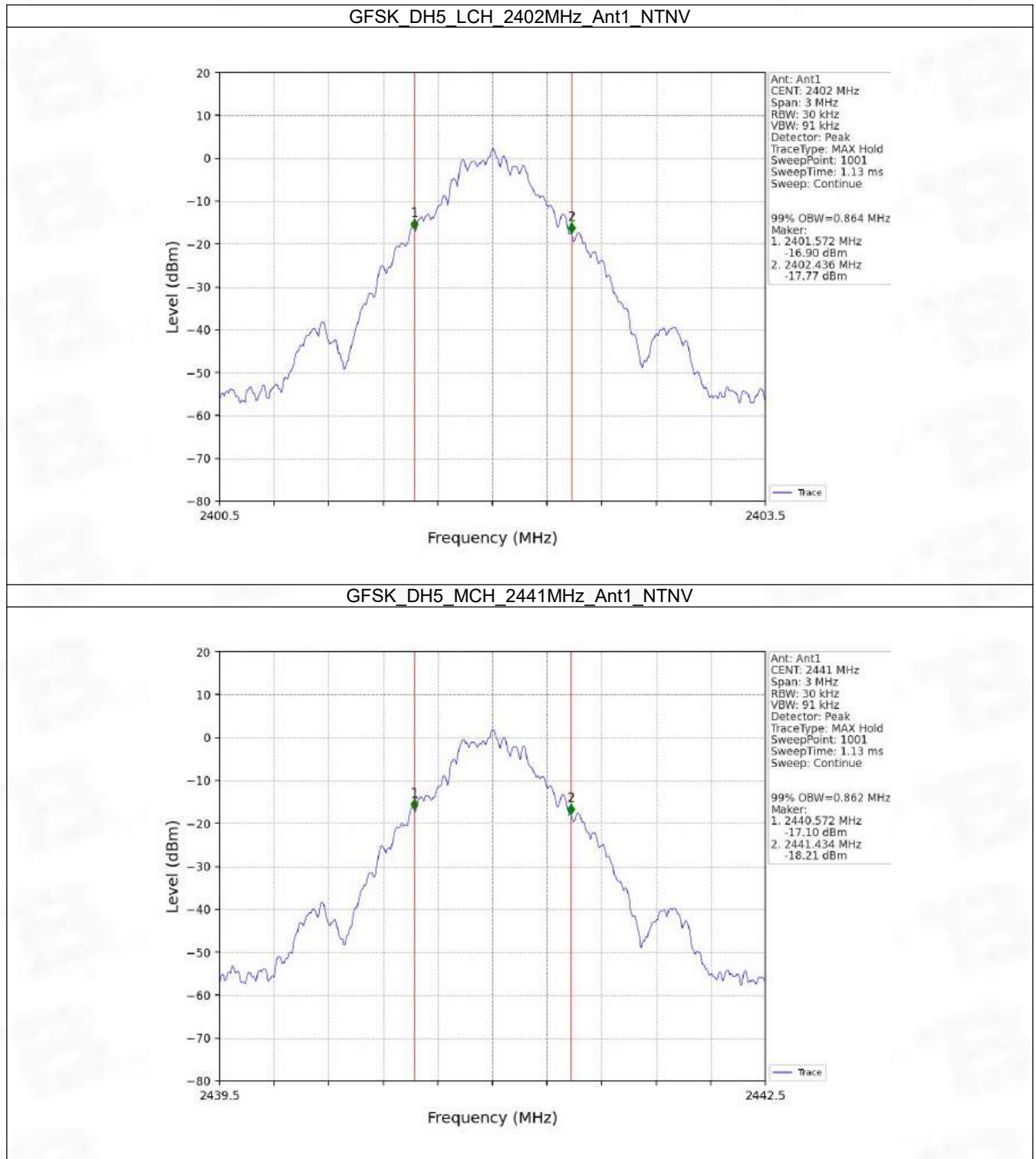
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.864	/	Pass
		2441	DH5	1	0.862	/	Pass
		2480	DH5	1	0.861	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.148	/	Pass
		2441	2DH5	1	1.153	/	Pass
		2480	2DH5	1	1.148	/	Pass
8DPSK	SISO	2402	3DH5	1	1.169	/	Pass
		2441	3DH5	1	1.170	/	Pass
		2480	3DH5	1	1.173	/	Pass

1.1.2 20dB BW

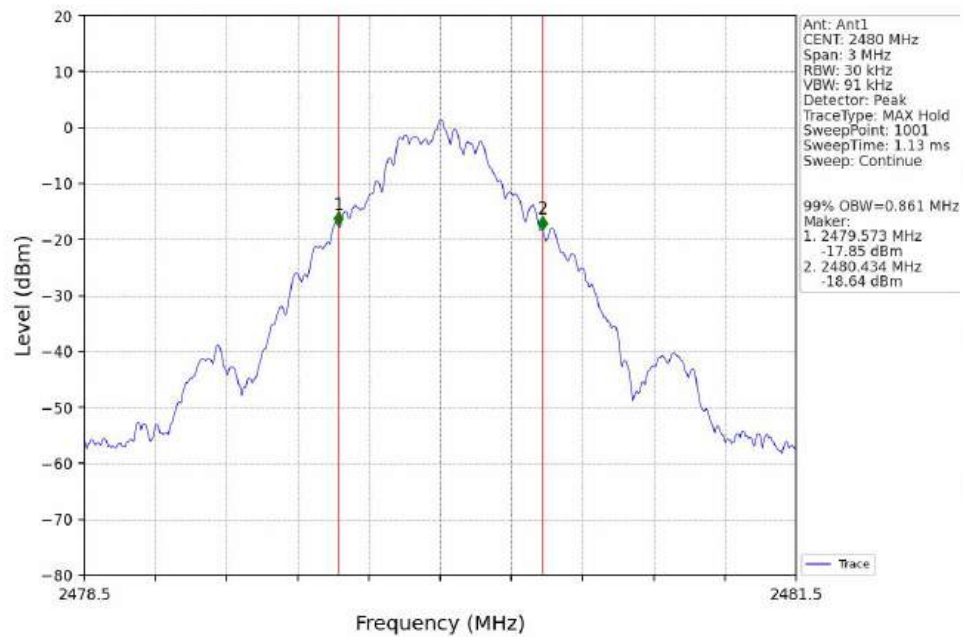
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.938	/	Pass
		2441	DH5	1	0.940	/	Pass
		2480	DH5	1	0.939	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.260	/	Pass
		2441	2DH5	1	1.273	/	Pass
		2480	2DH5	1	1.268	/	Pass
8DPSK	SISO	2402	3DH5	1	1.271	/	Pass
		2441	3DH5	1	1.271	/	Pass
		2480	3DH5	1	1.278	/	Pass

1.2 Test Graph

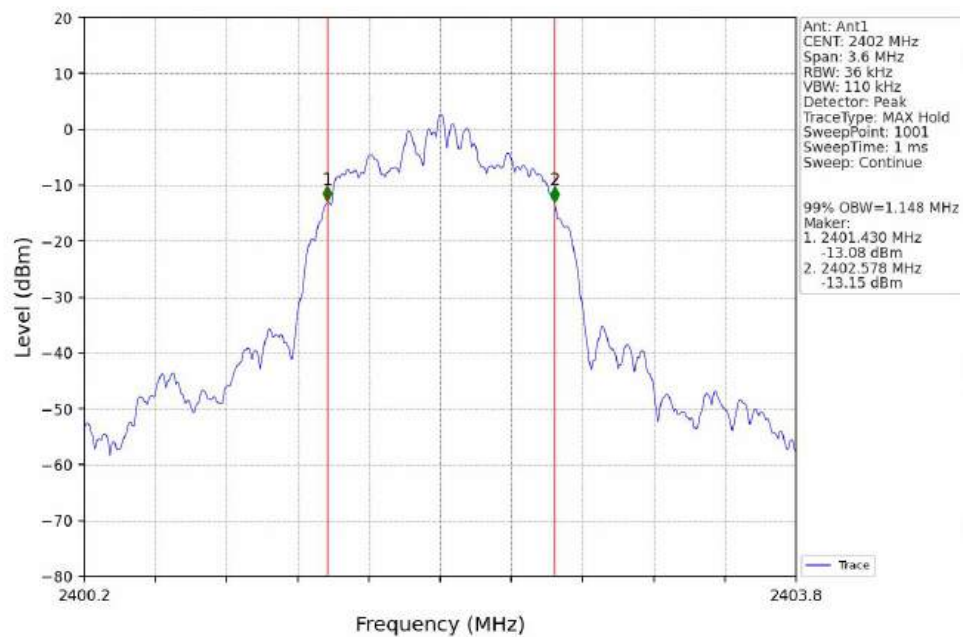
1.2.1 OBW



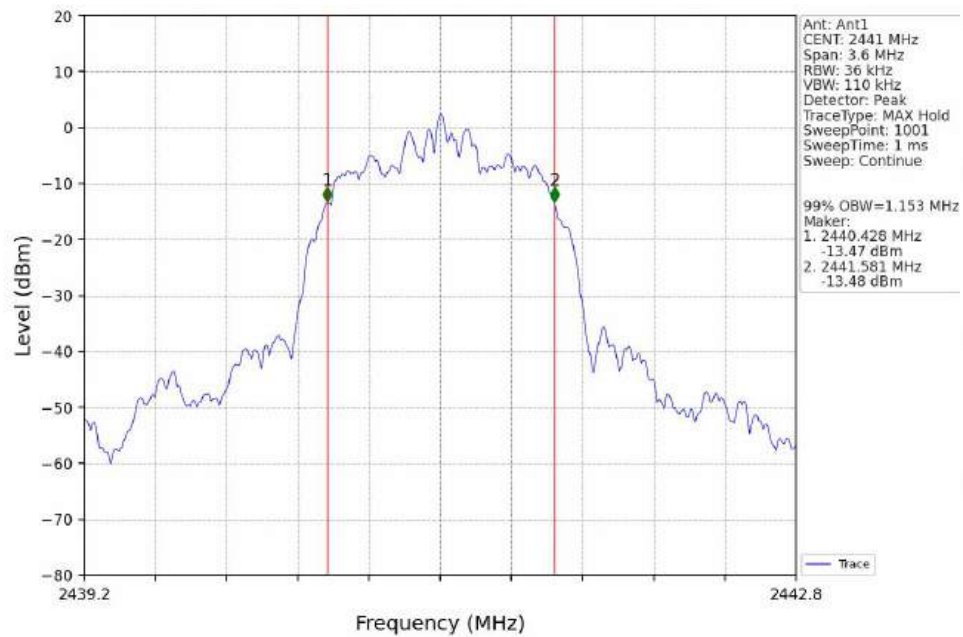
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



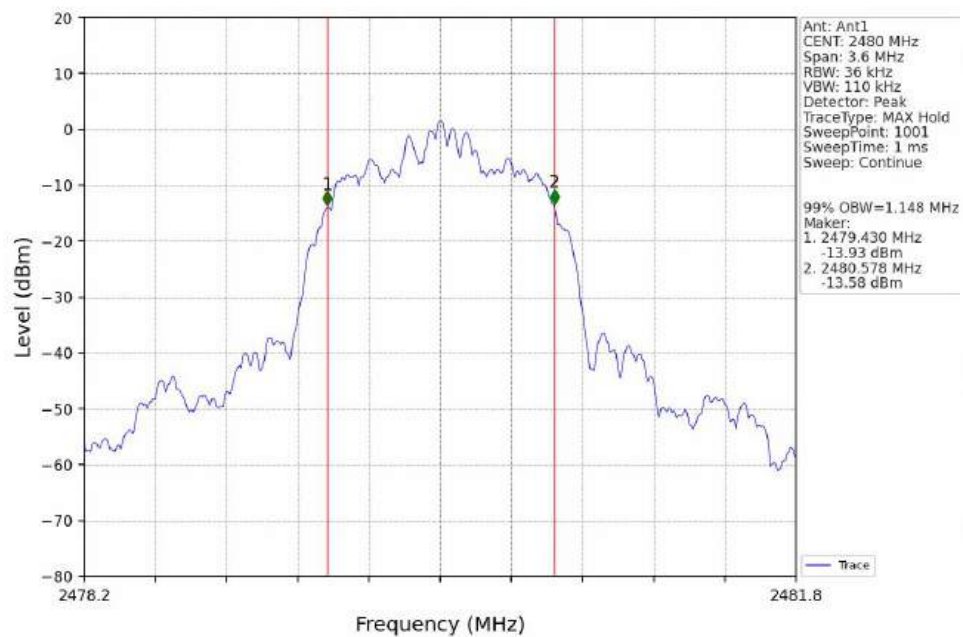
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



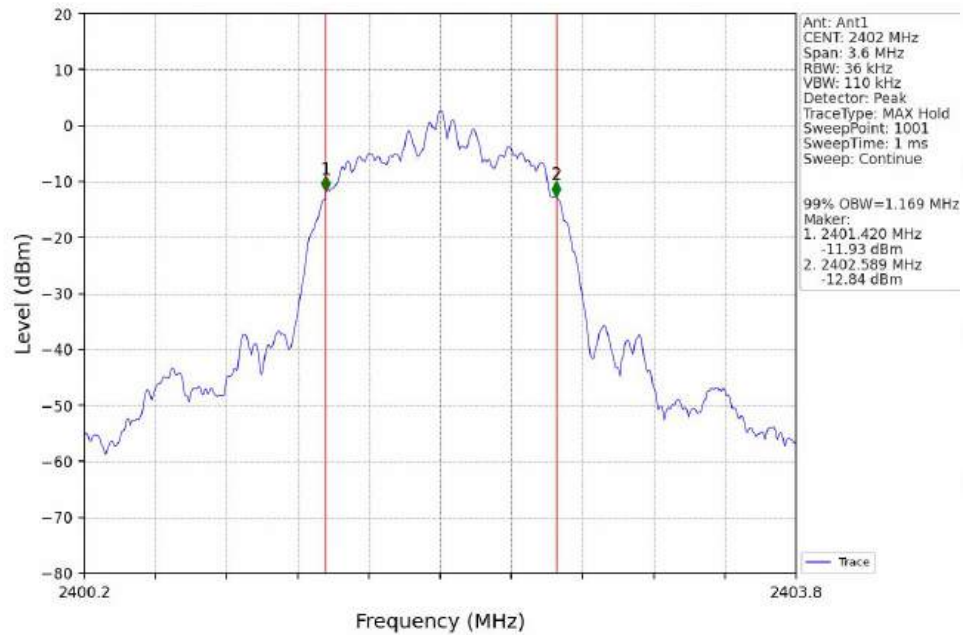
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



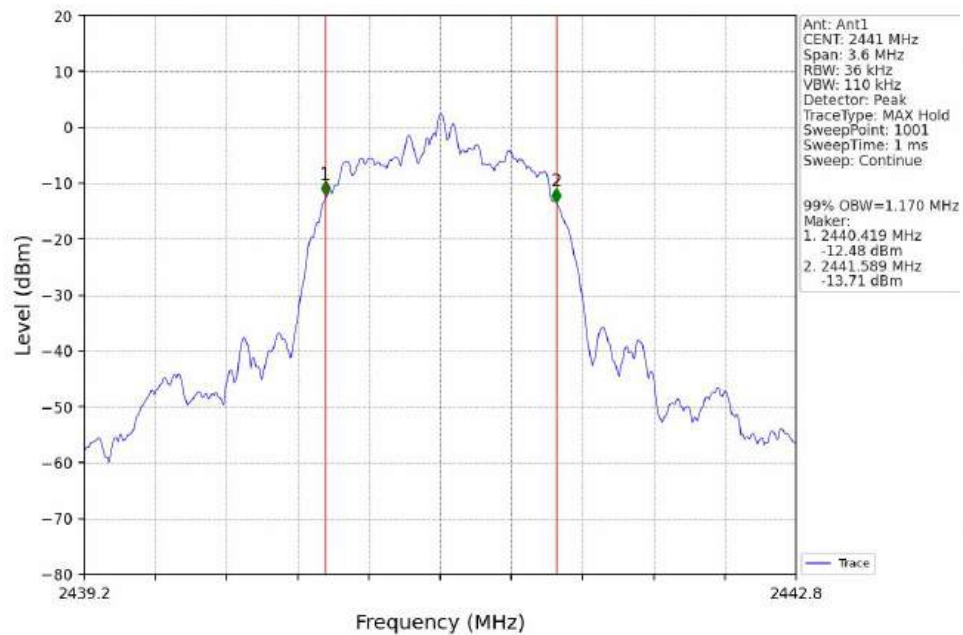
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

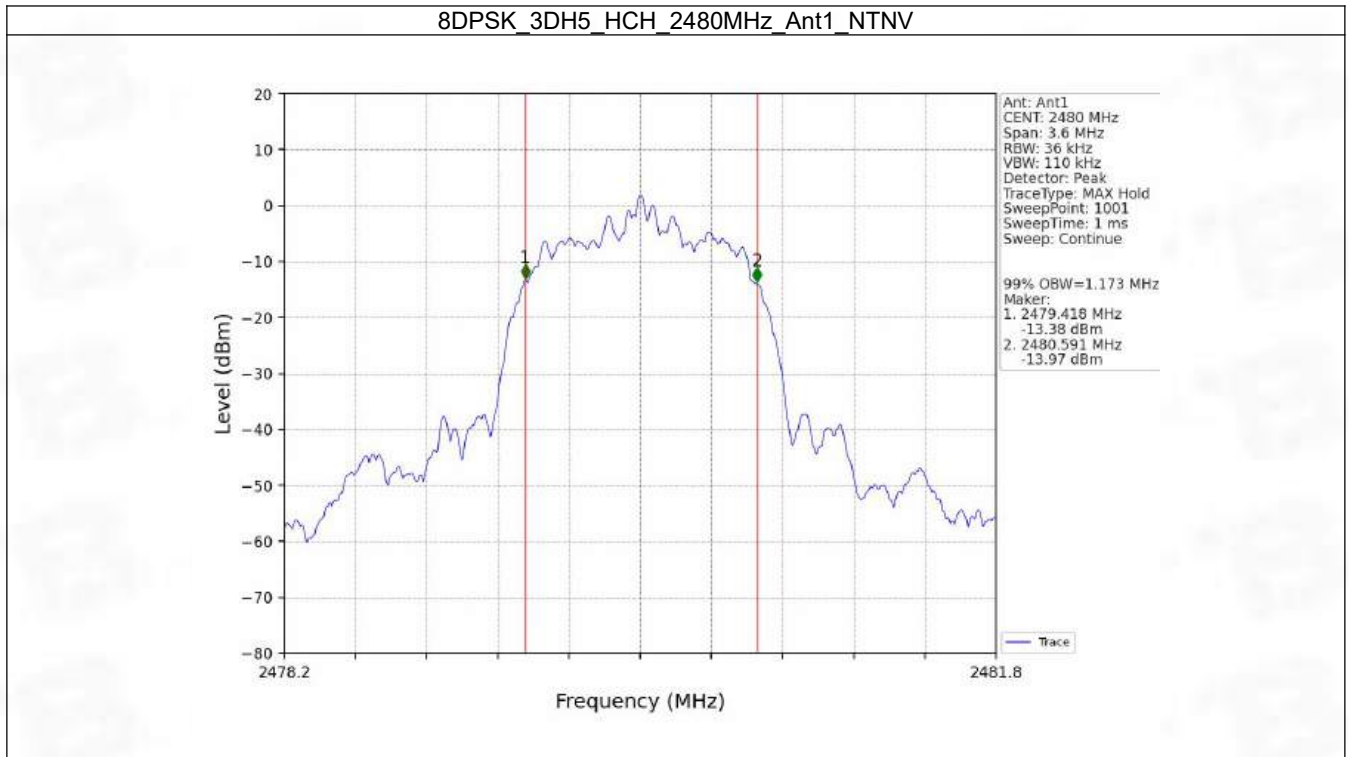


8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV

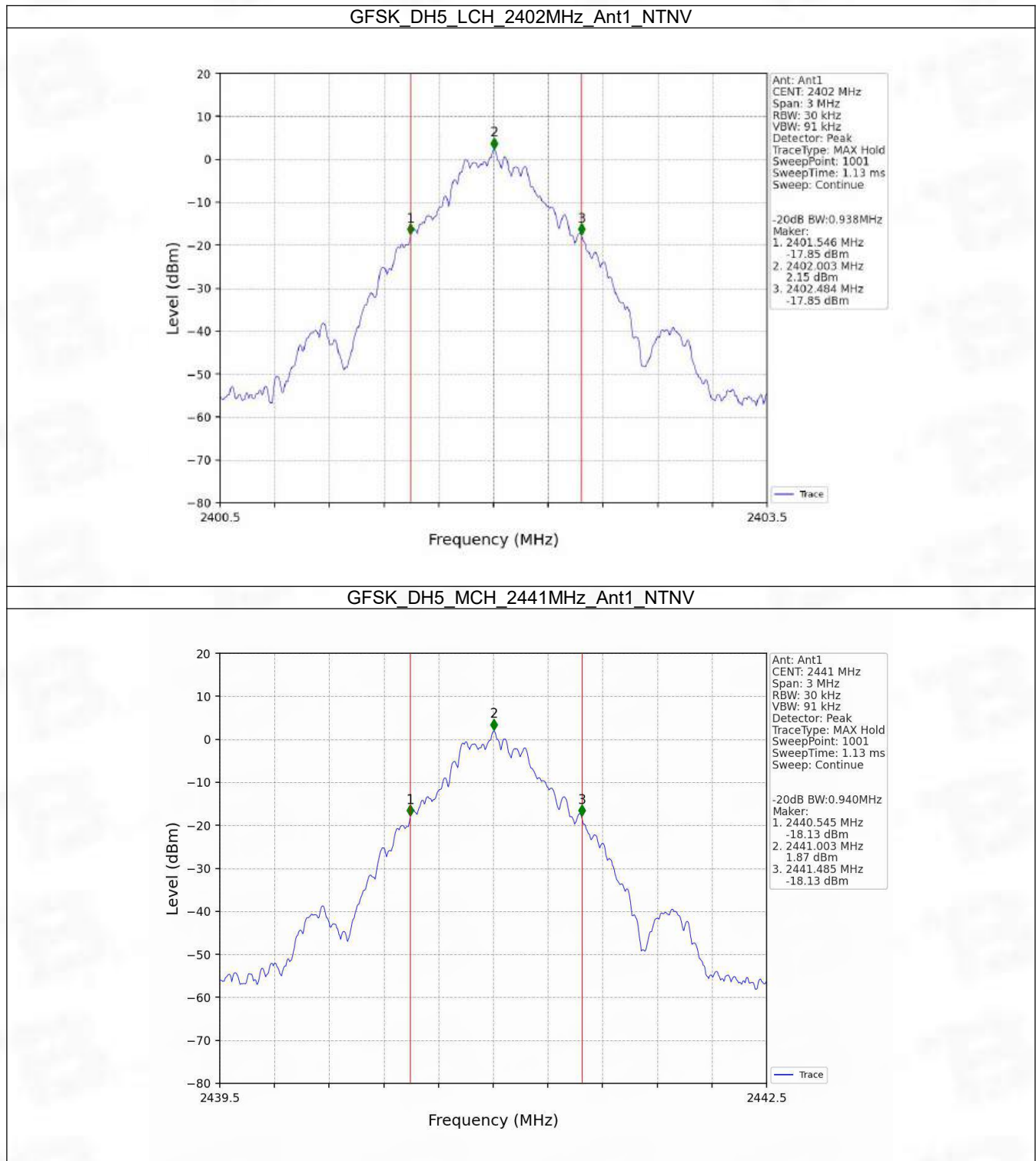


8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV

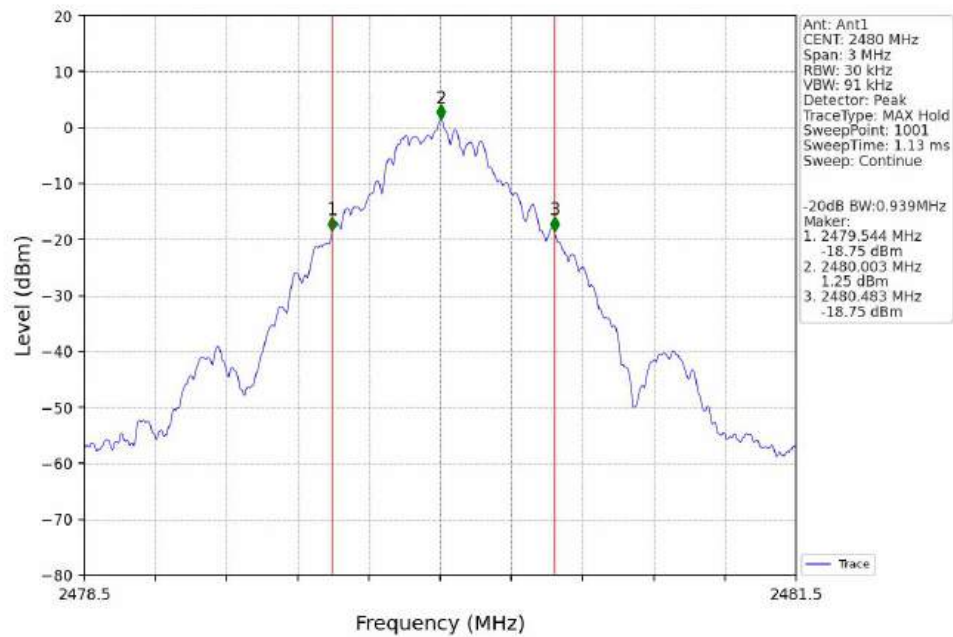




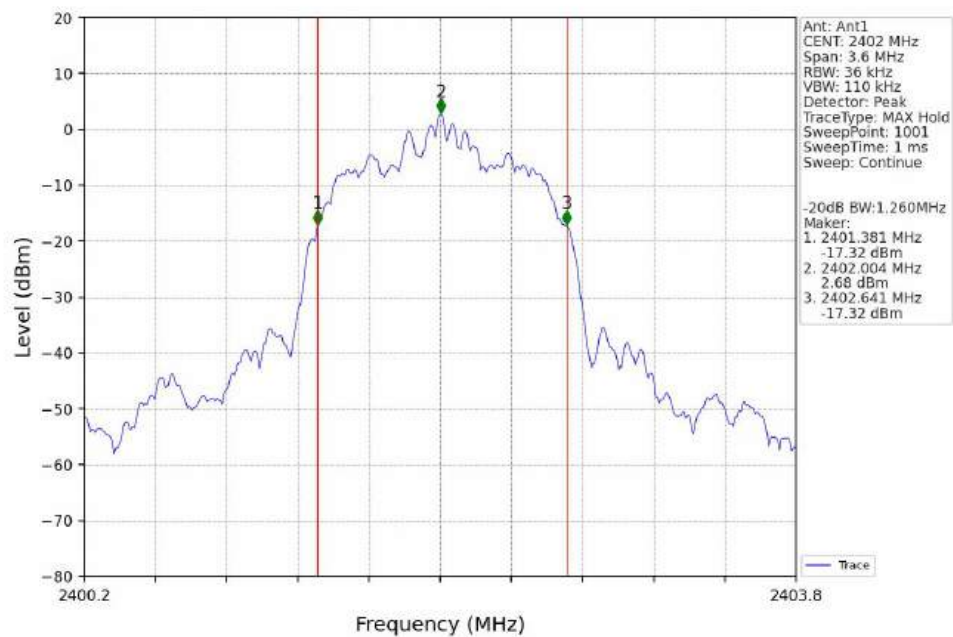
1.2.2 20dB BW



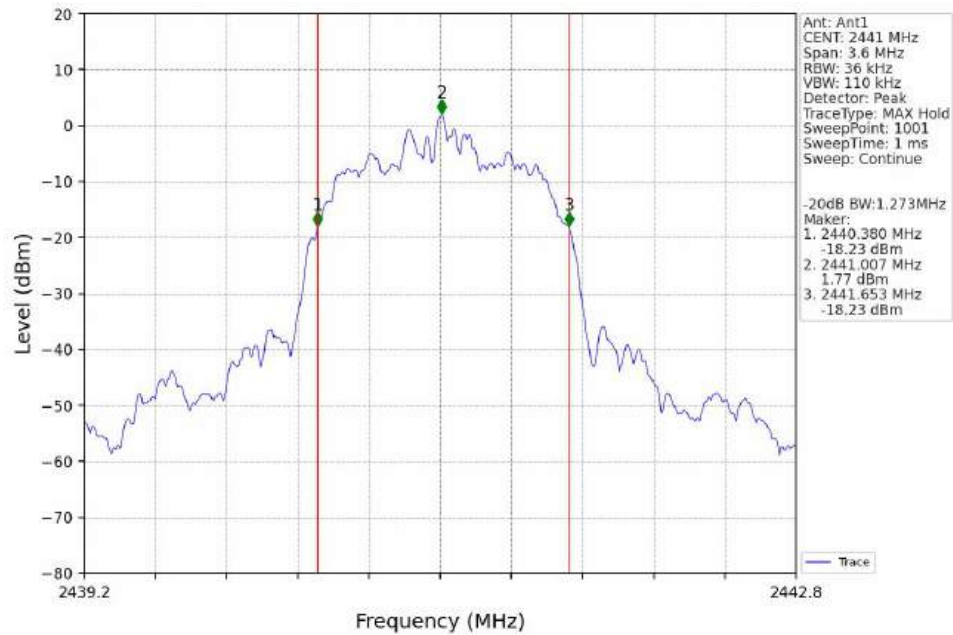
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



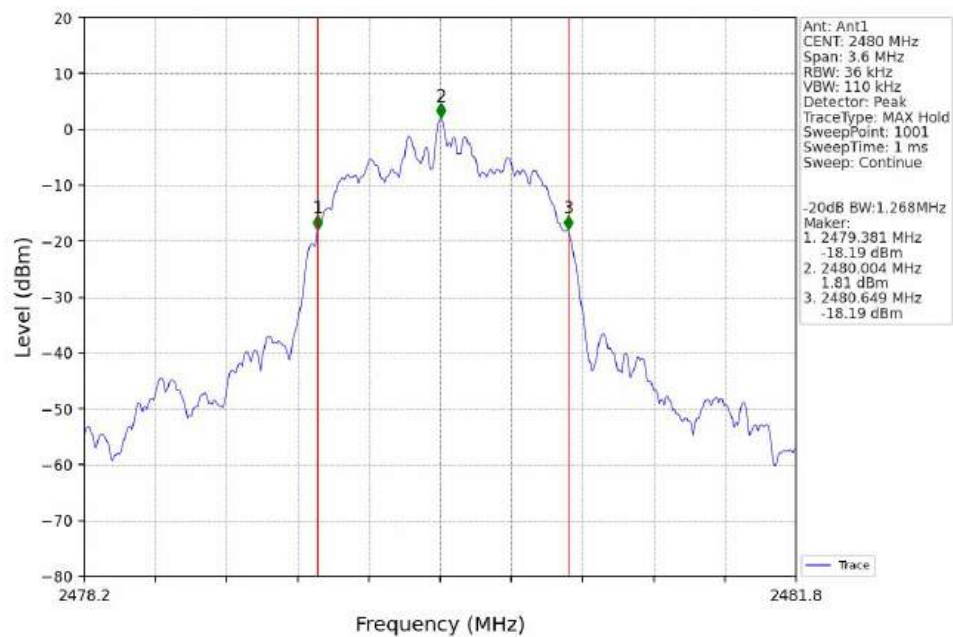
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



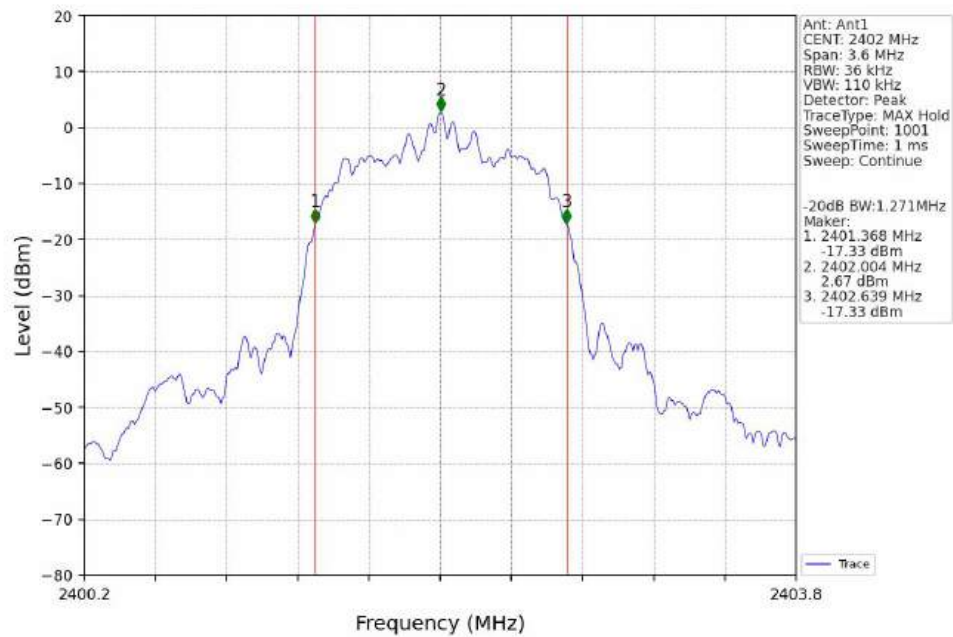
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



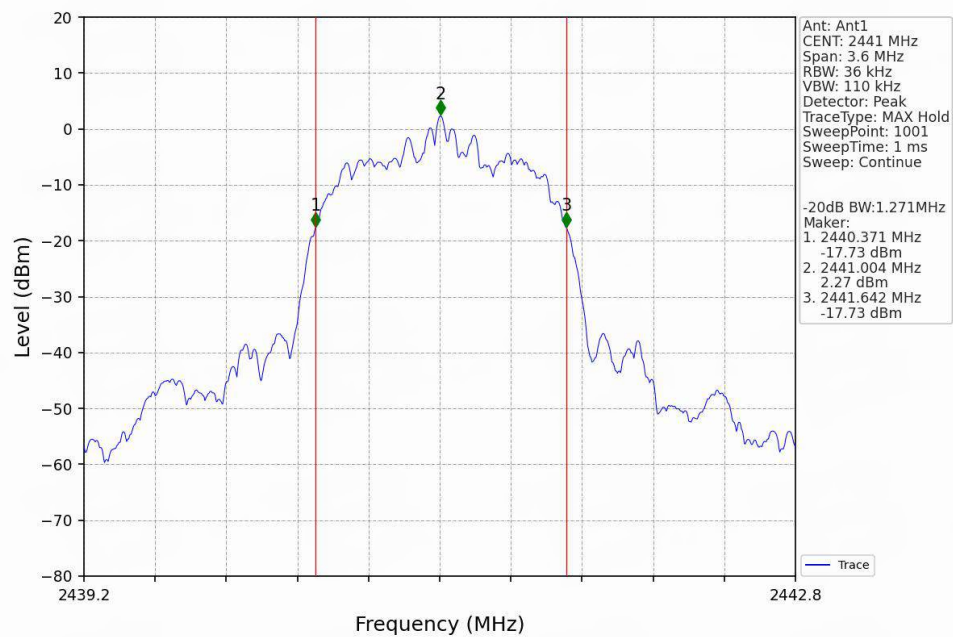
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

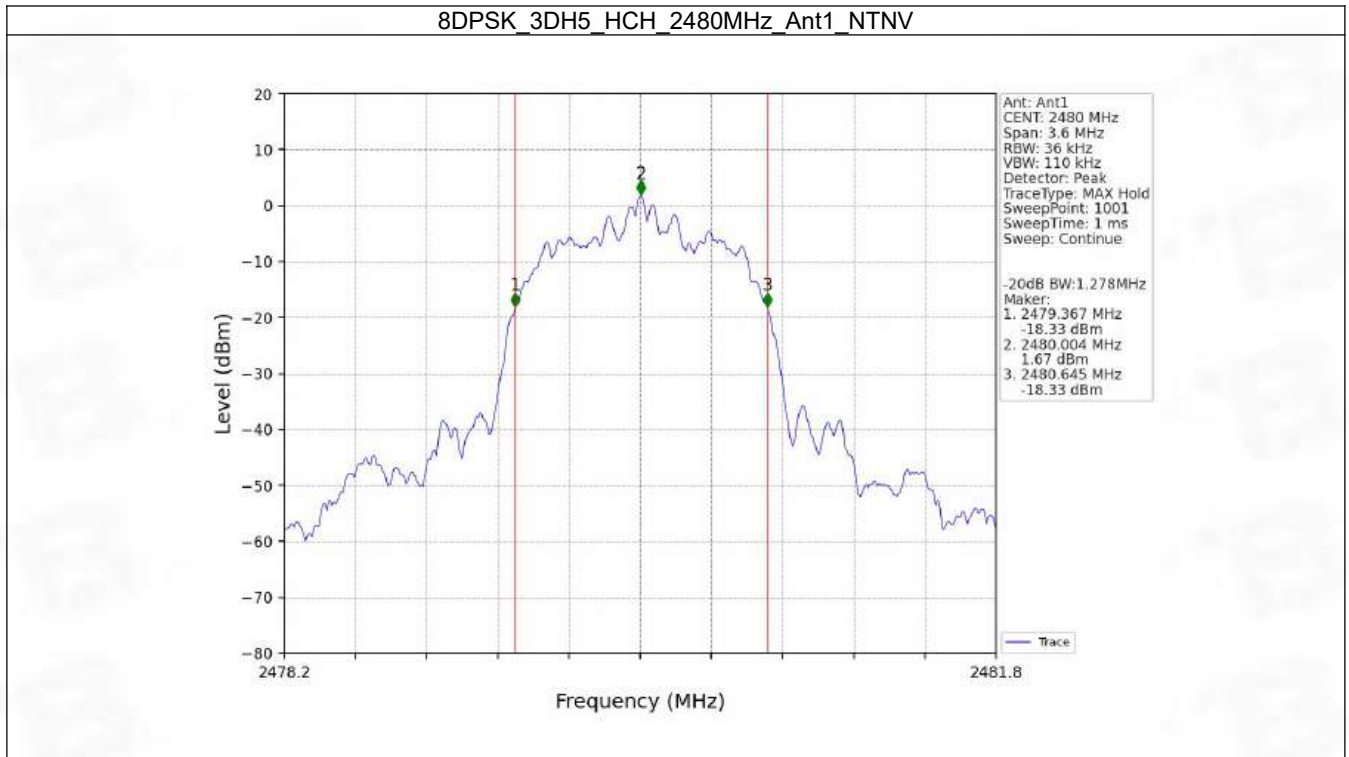


8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV





2. Maximum Conducted Output Power

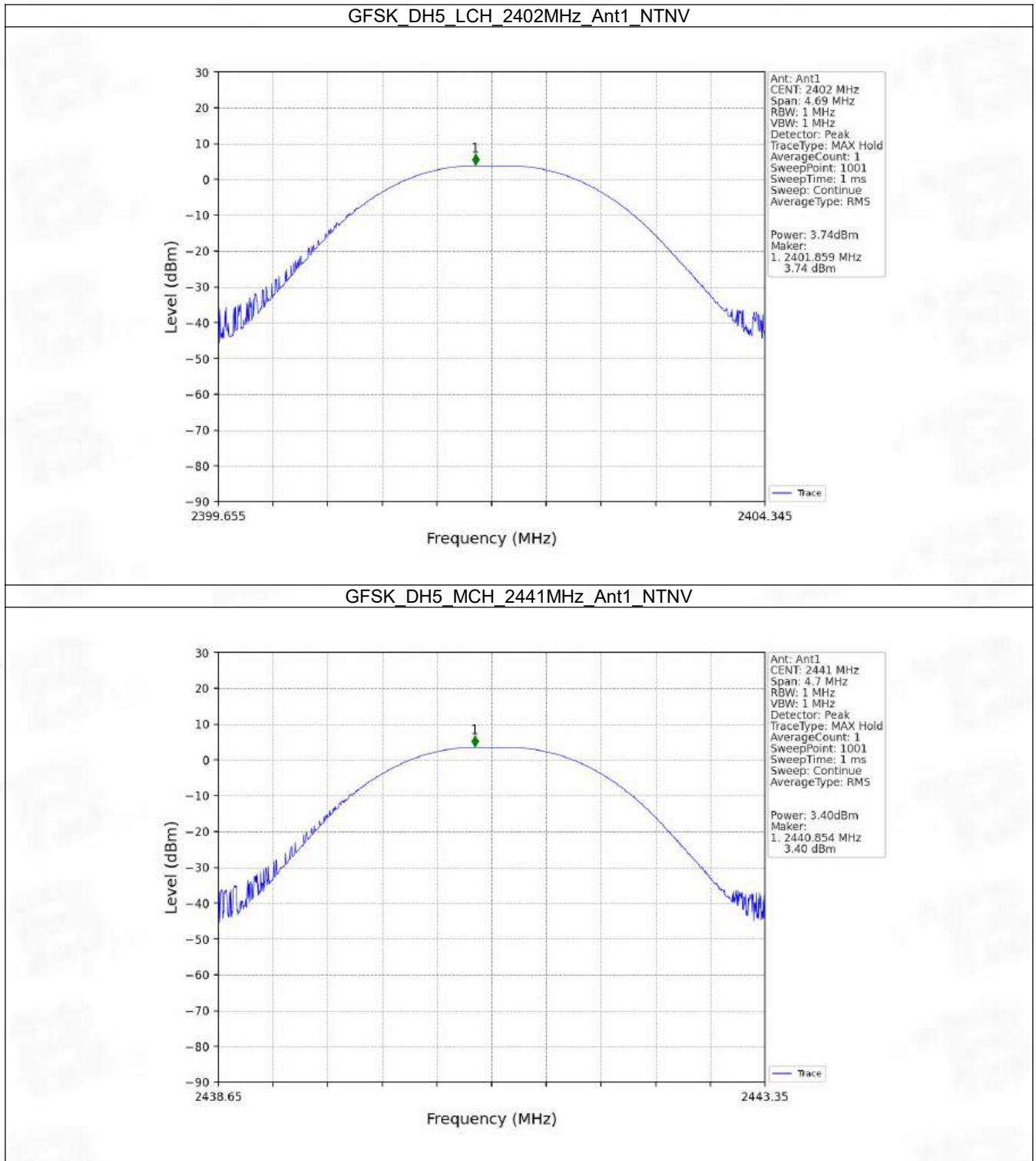
2.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	3.74	<=20.97	Pass
		2441	DH5	3.40	<=20.97	Pass
		2480	DH5	2.89	<=20.97	Pass
Pi/4DQPSK	SISO	2402	2DH5	4.63	<=20.97	Pass
		2441	2DH5	4.23	<=20.97	Pass
		2480	2DH5	3.80	<=20.97	Pass
8DPSK	SISO	2402	3DH5	4.90	<=20.97	Pass
		2441	3DH5	4.46	<=20.97	Pass
		2480	3DH5	4.03	<=20.97	Pass
Note1: Antenna Gain: Ant1: 2.67dBi; Note2: Right leg						

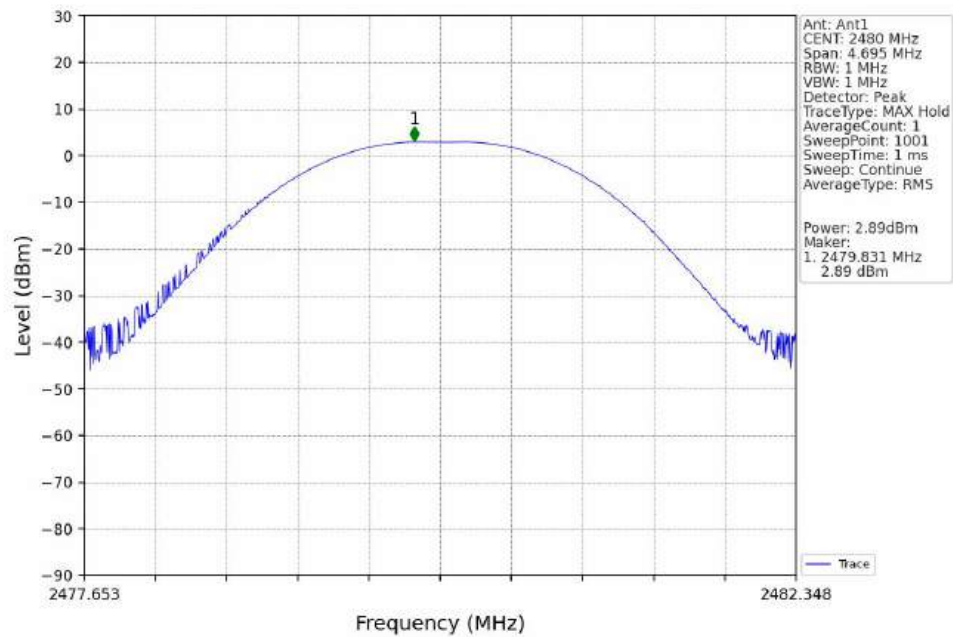
Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	2.65	<=20.97	Pass
		2441	DH5	2.37	<=20.97	Pass
		2480	DH5	1.98	<=20.97	Pass
Pi/4DQPSK	SISO	2402	2DH5	3.45	<=20.97	Pass
		2441	2DH5	3.15	<=20.97	Pass
		2480	2DH5	2.78	<=20.97	Pass
8DPSK	SISO	2402	3DH5	3.74	<=20.97	Pass
		2441	3DH5	3.49	<=20.97	Pass
		2480	3DH5	3.10	<=20.97	Pass
Note1: Antenna Gain: Ant1: 2.67dBi; Note2: Left leg						

3.2 Test Graph

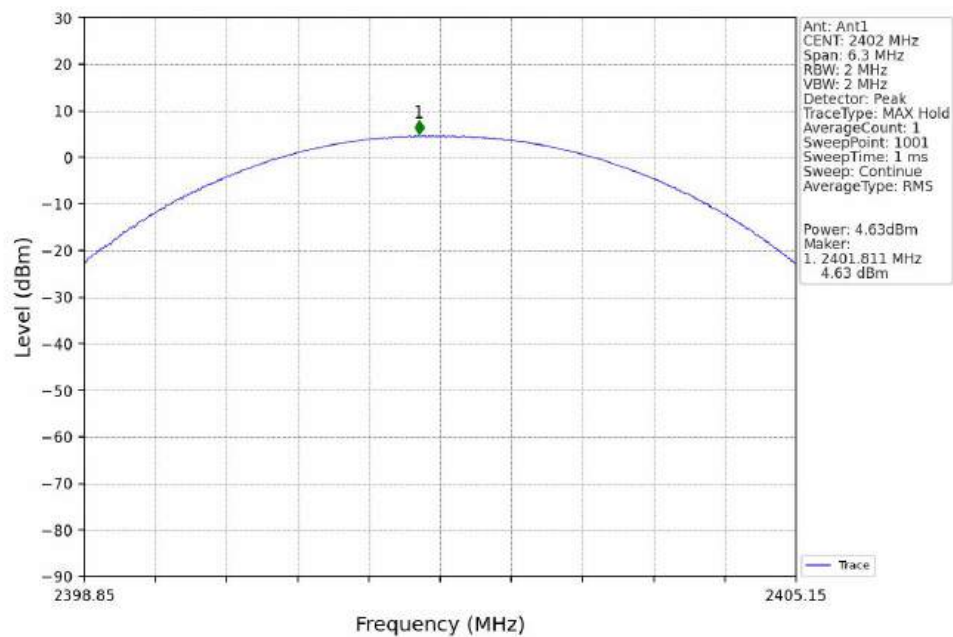
Right leg:



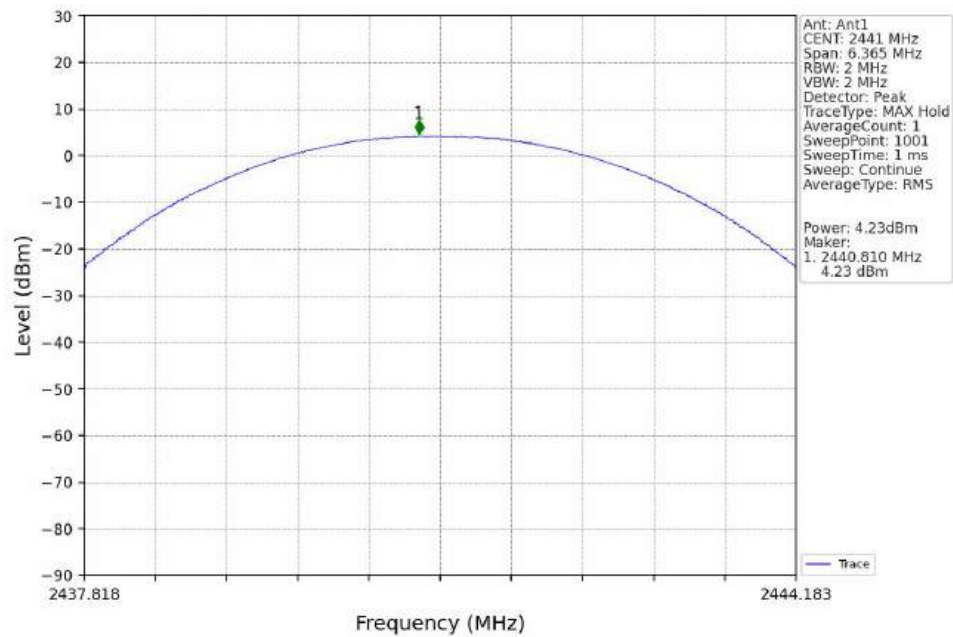
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



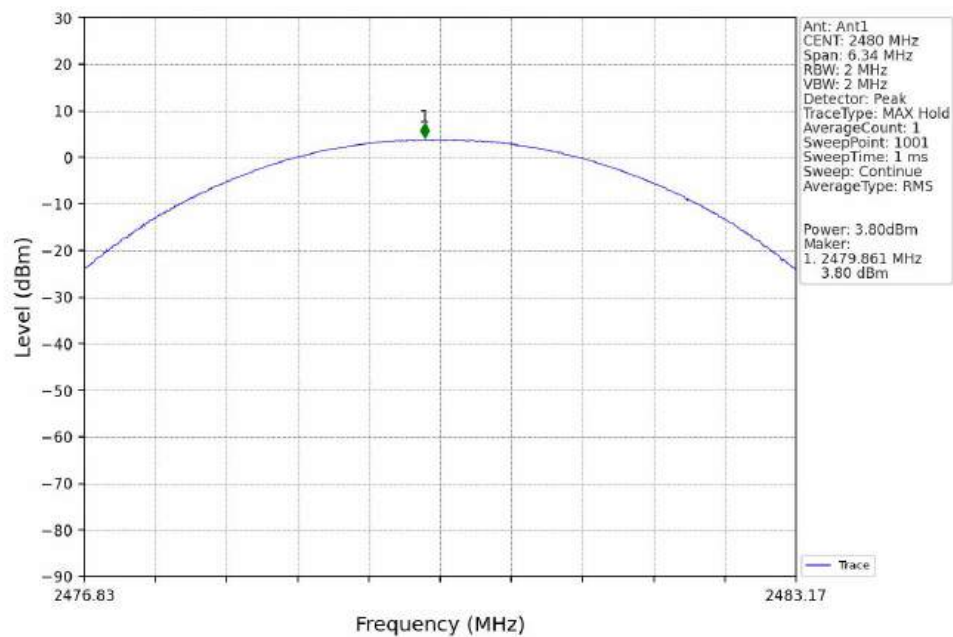
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



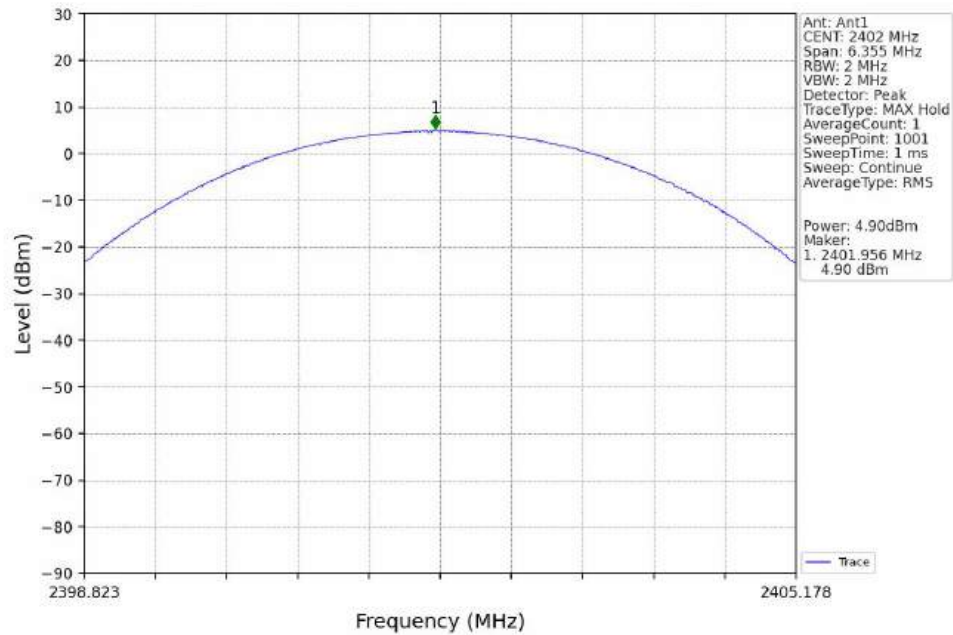
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



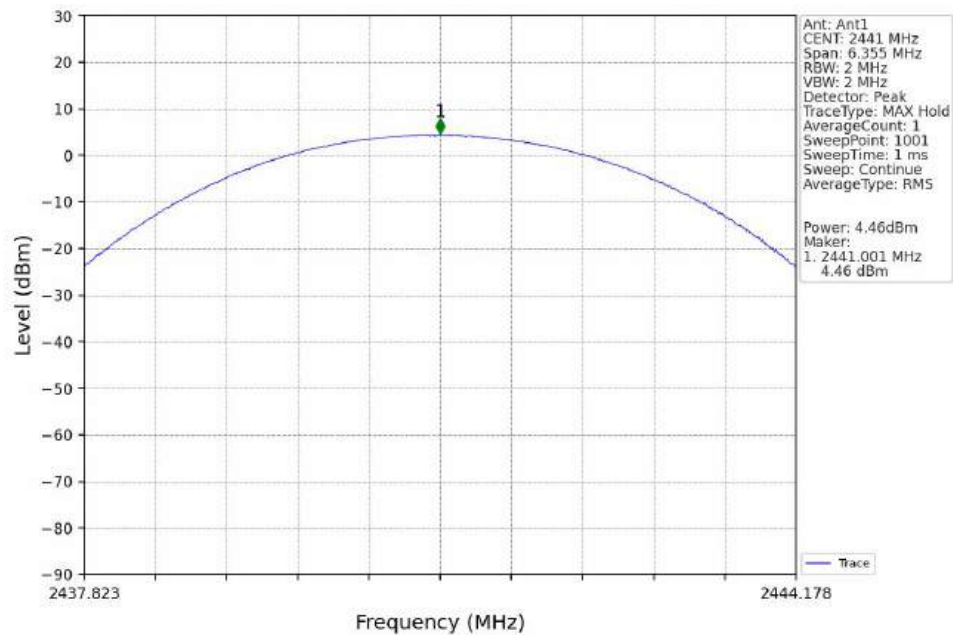
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

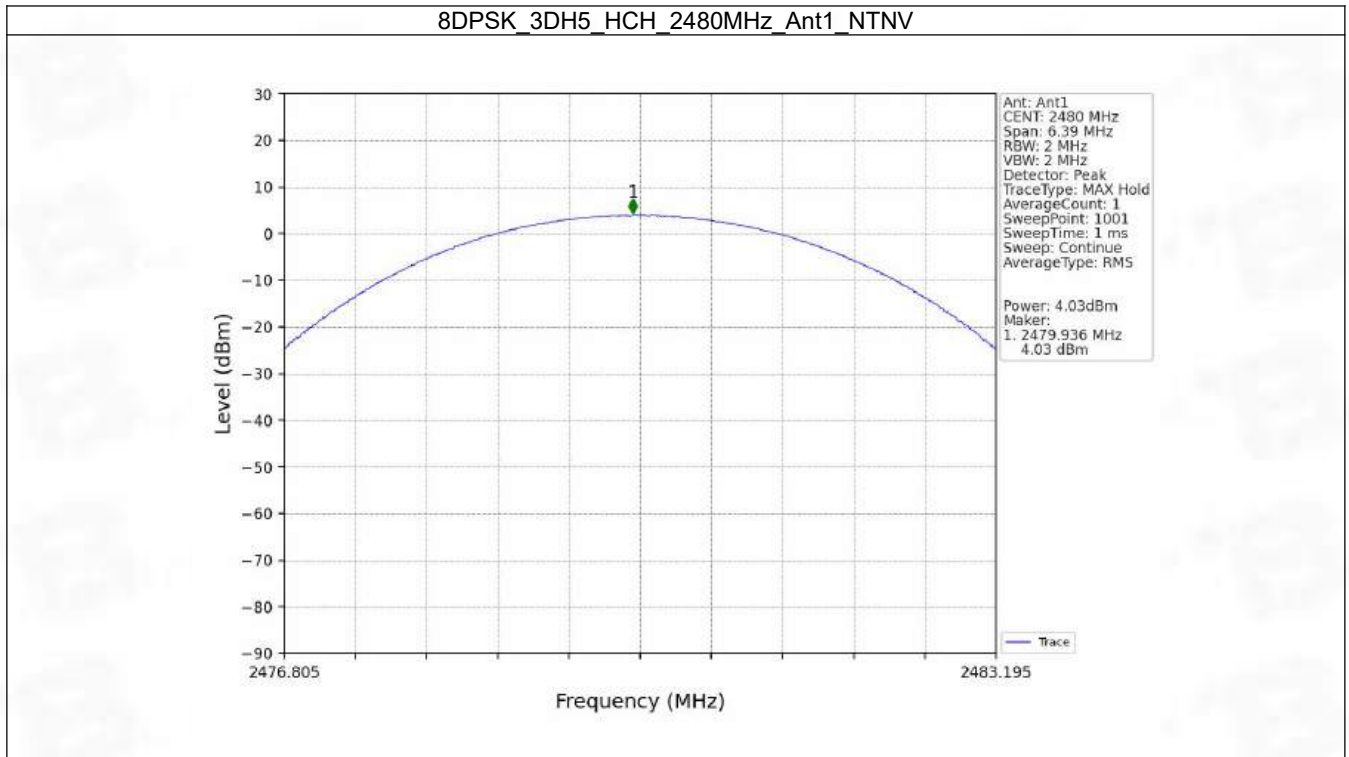


8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV

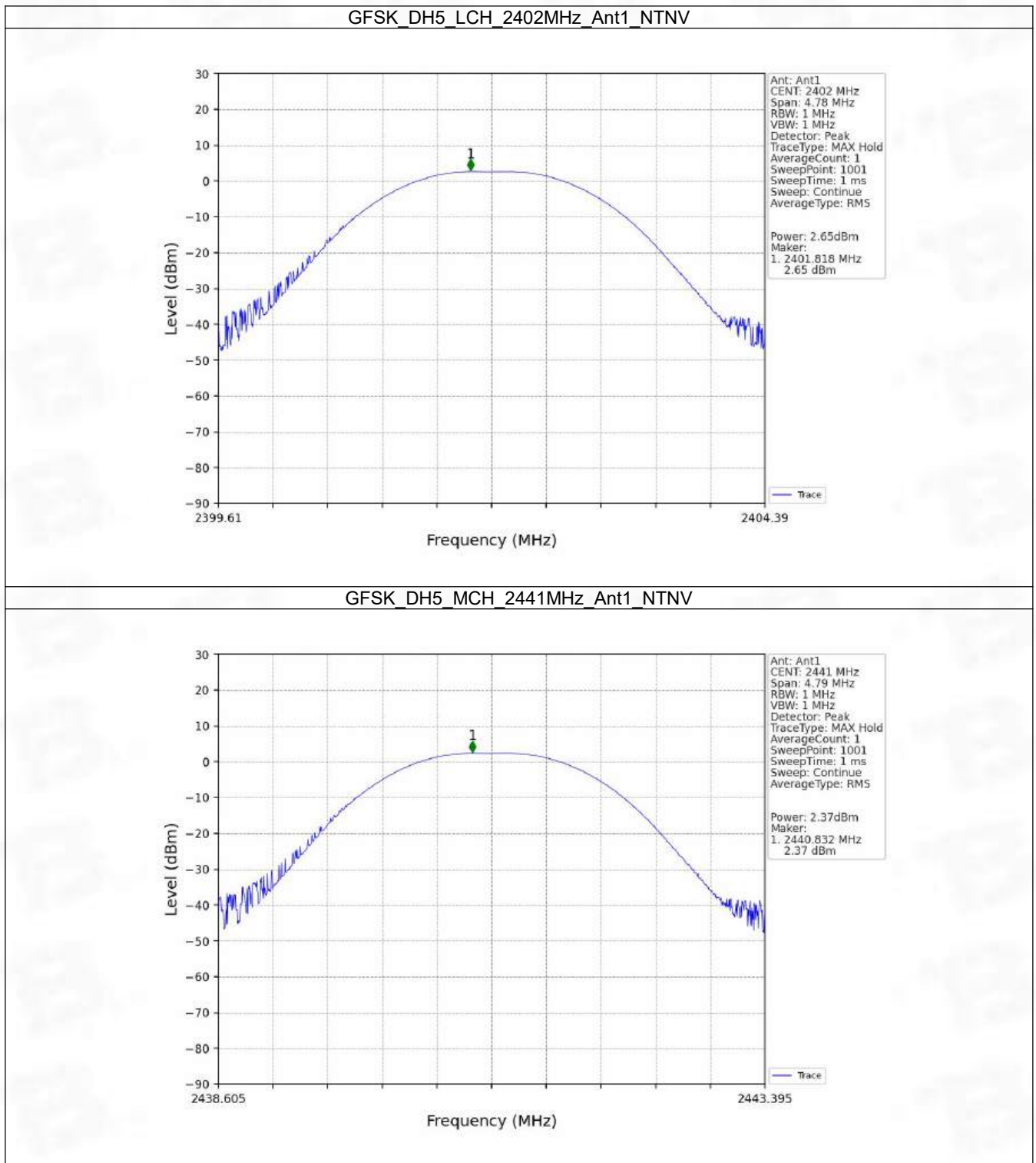


8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV

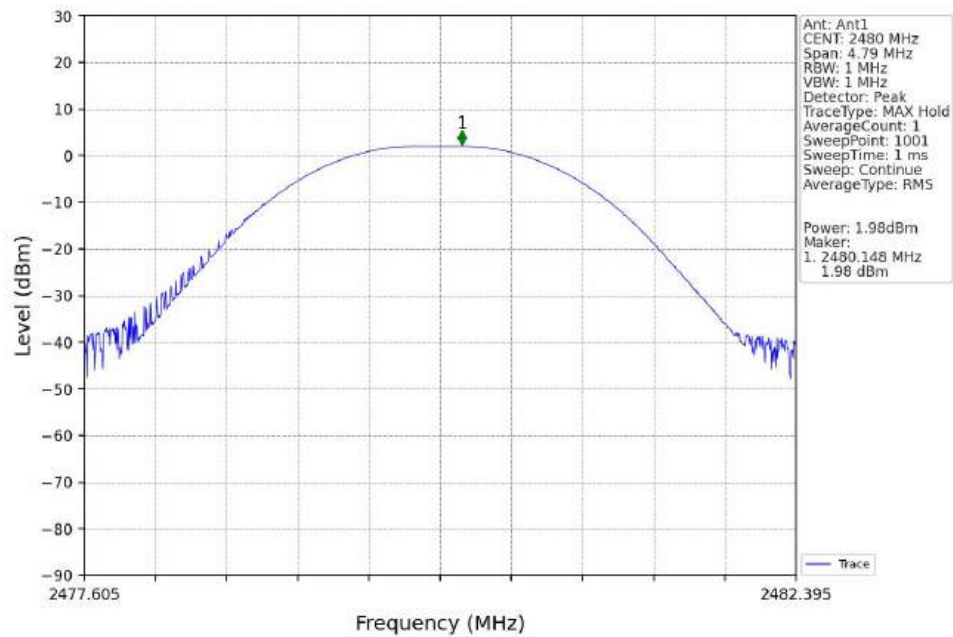




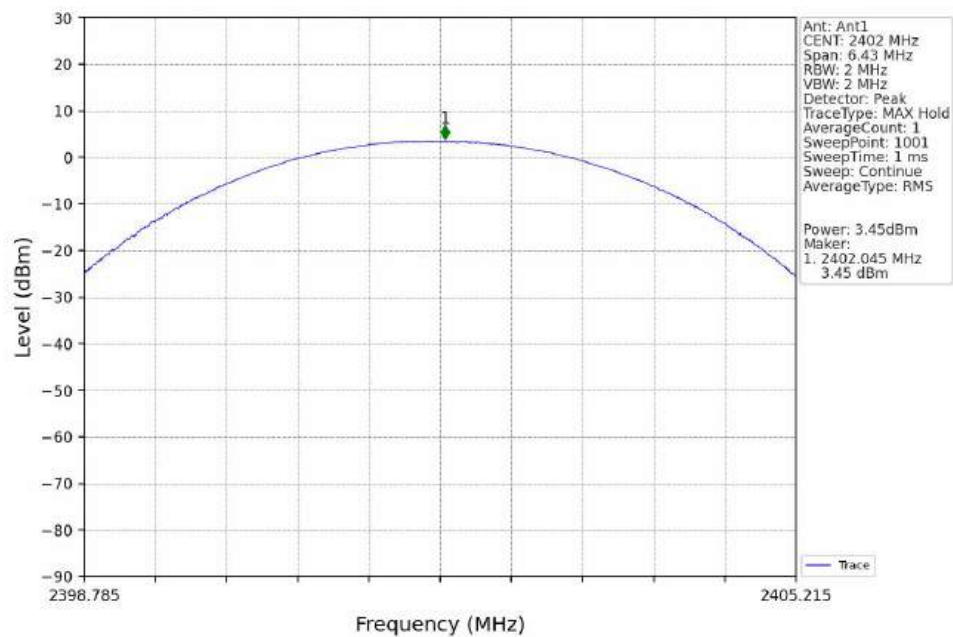
Left leg:



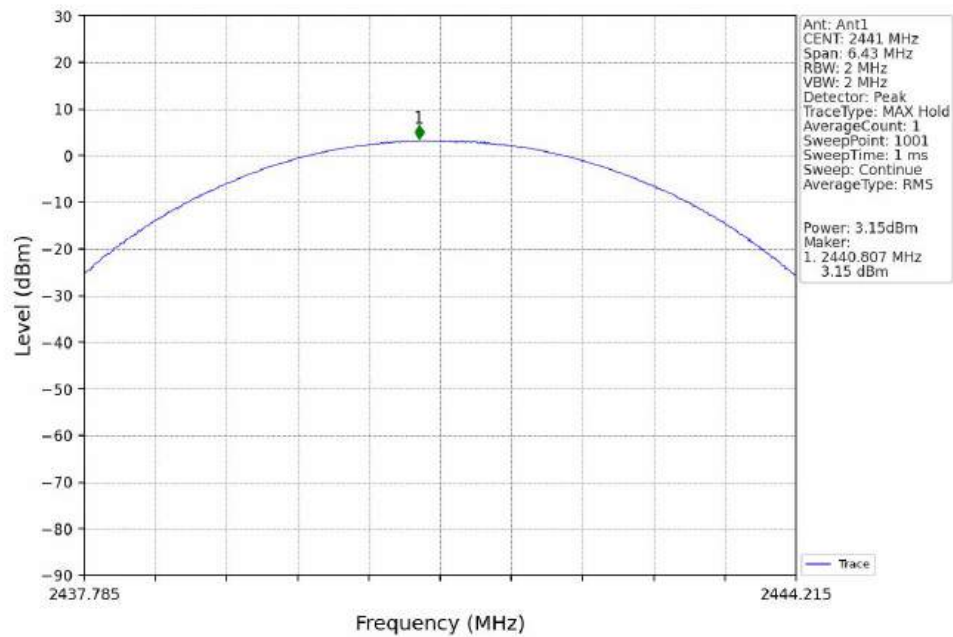
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



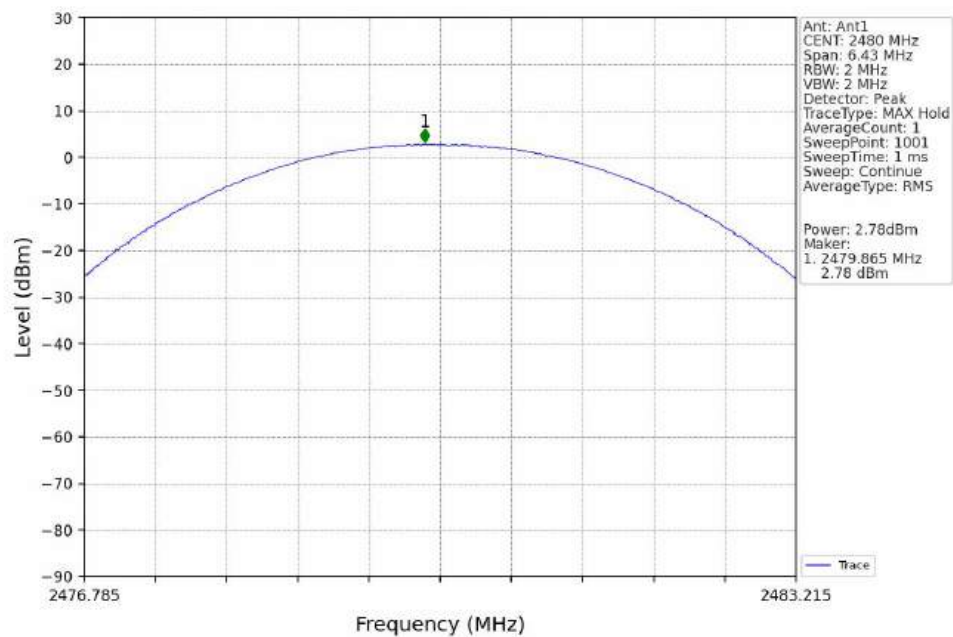
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



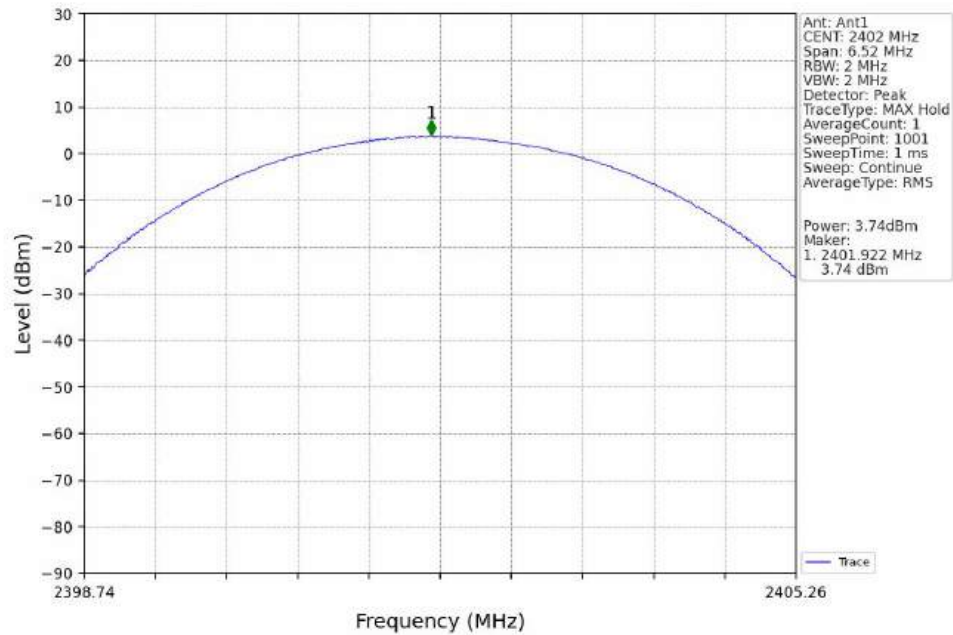
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



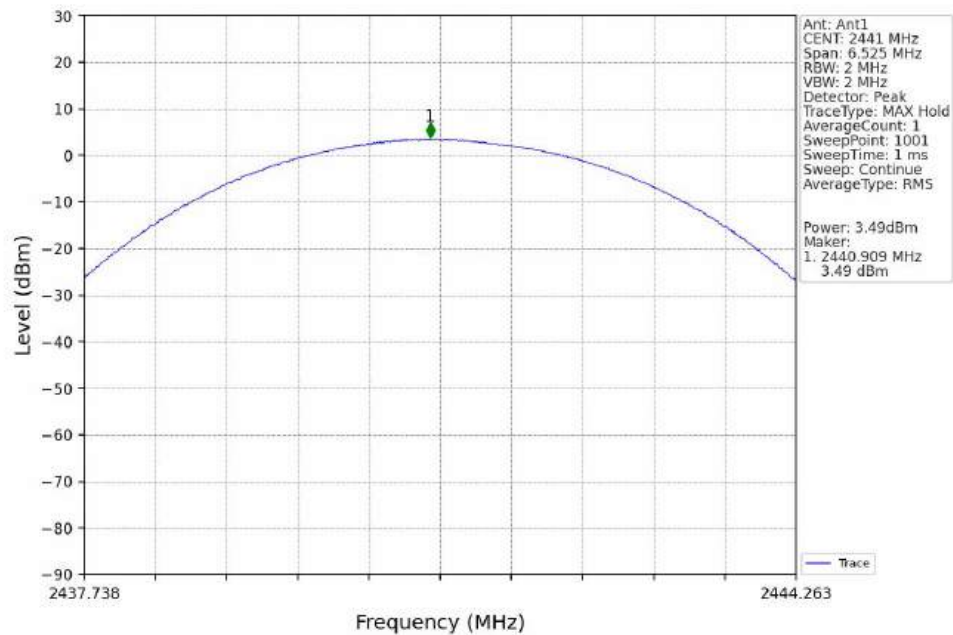
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

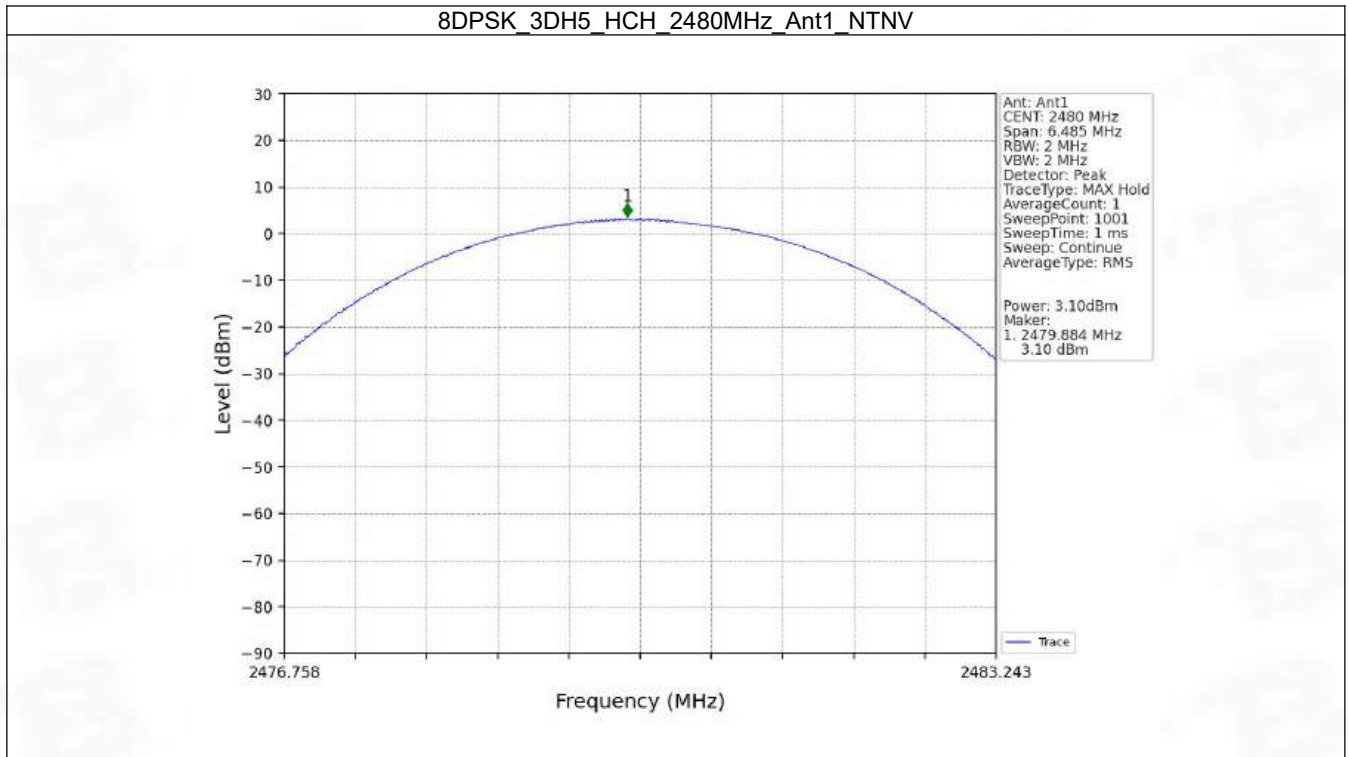


8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



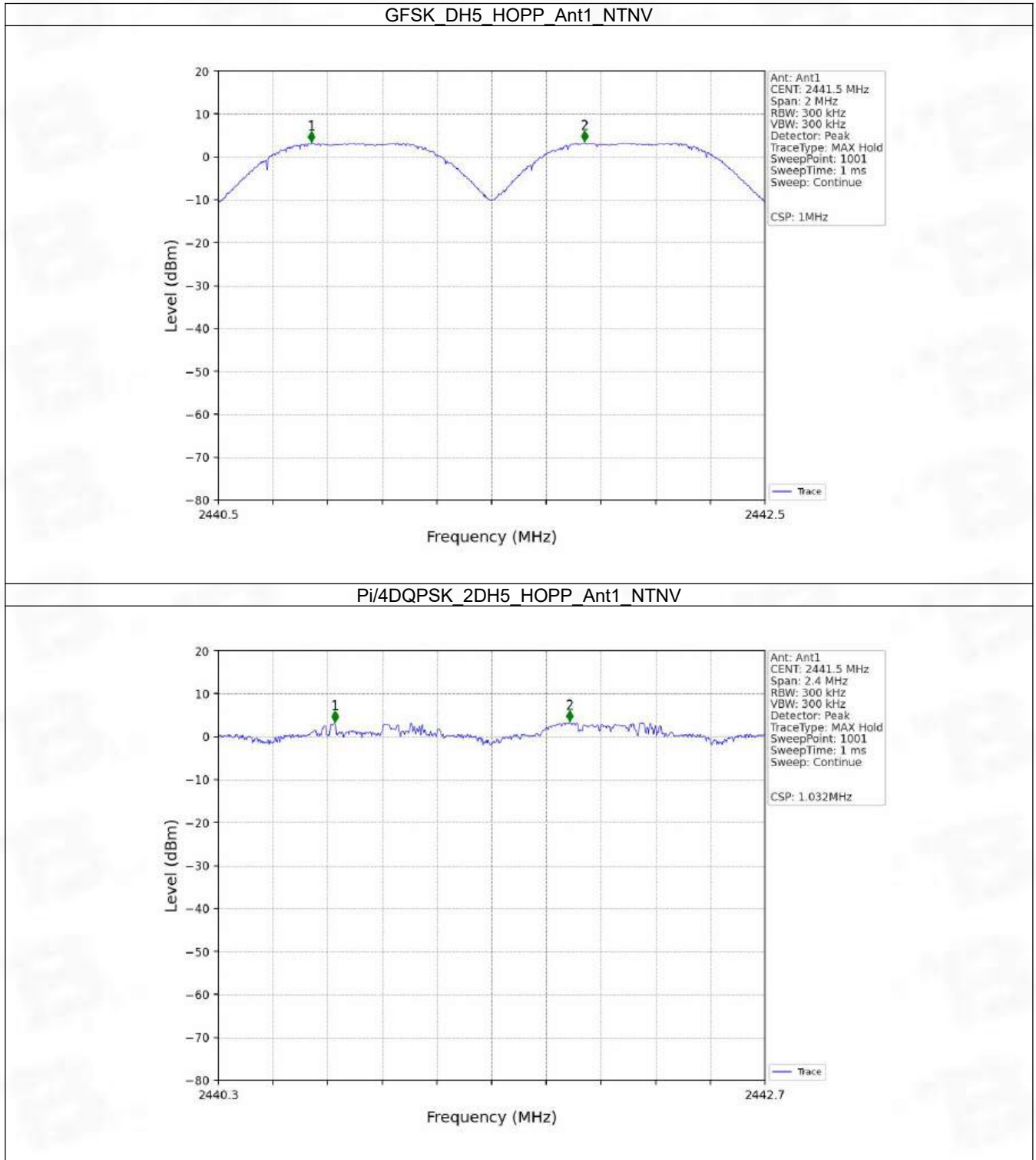


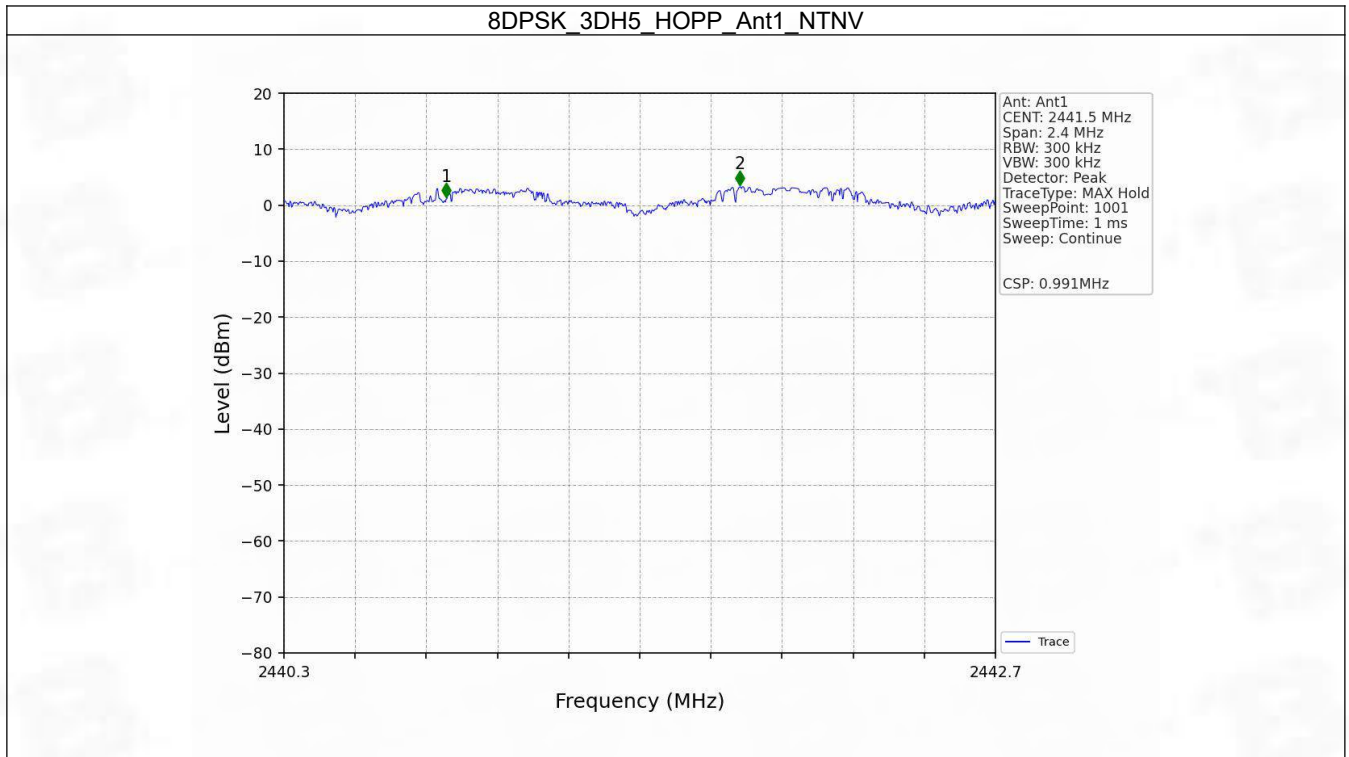
4. Carrier Frequency Separation

4.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.000	0.940	≥ 0.627	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.032	1.273	≥ 0.849	Pass
8DPSK	SISO	HOPP	3DH5	0.991	1.278	≥ 0.852	Pass

4.2 Test Graph



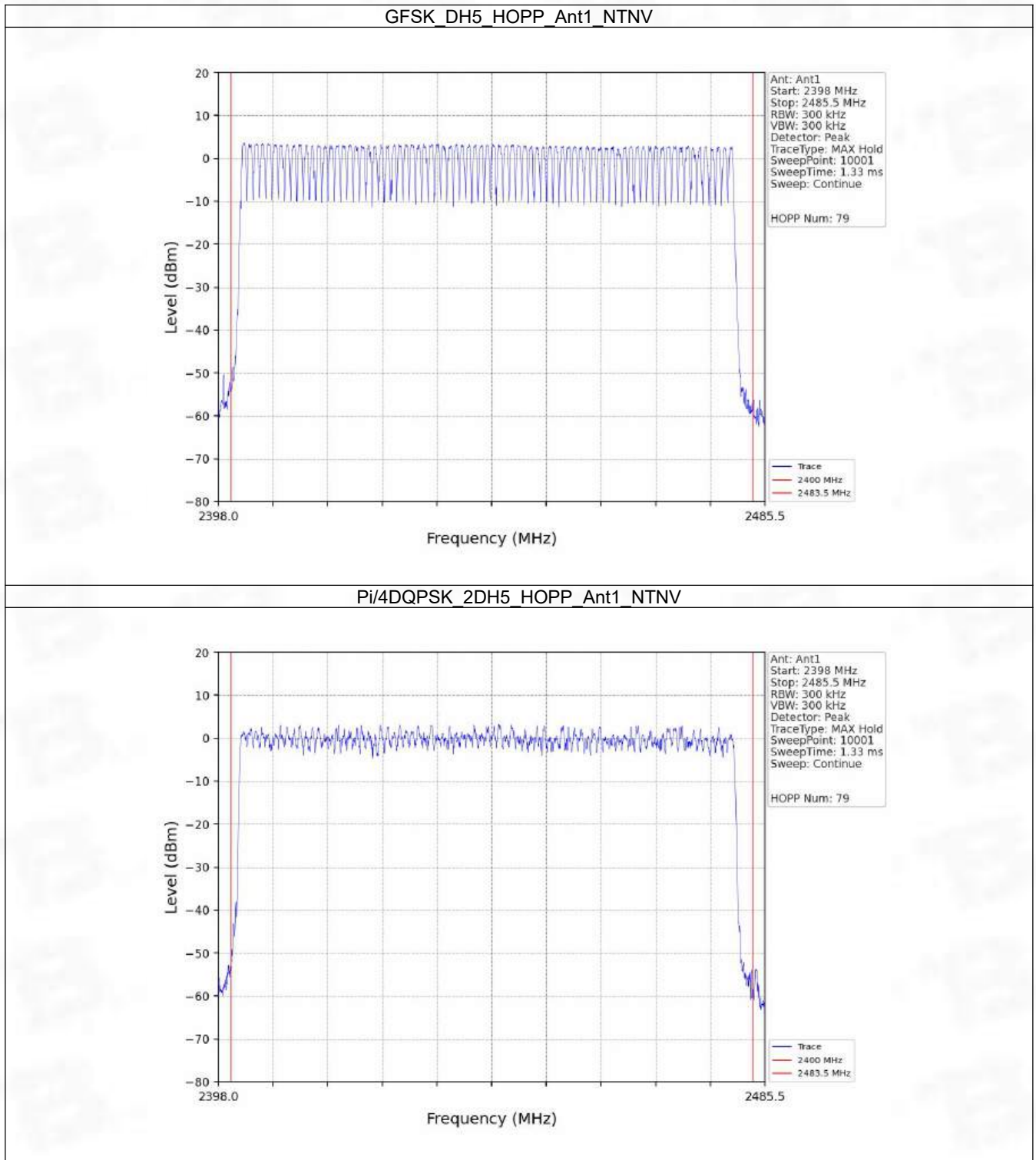


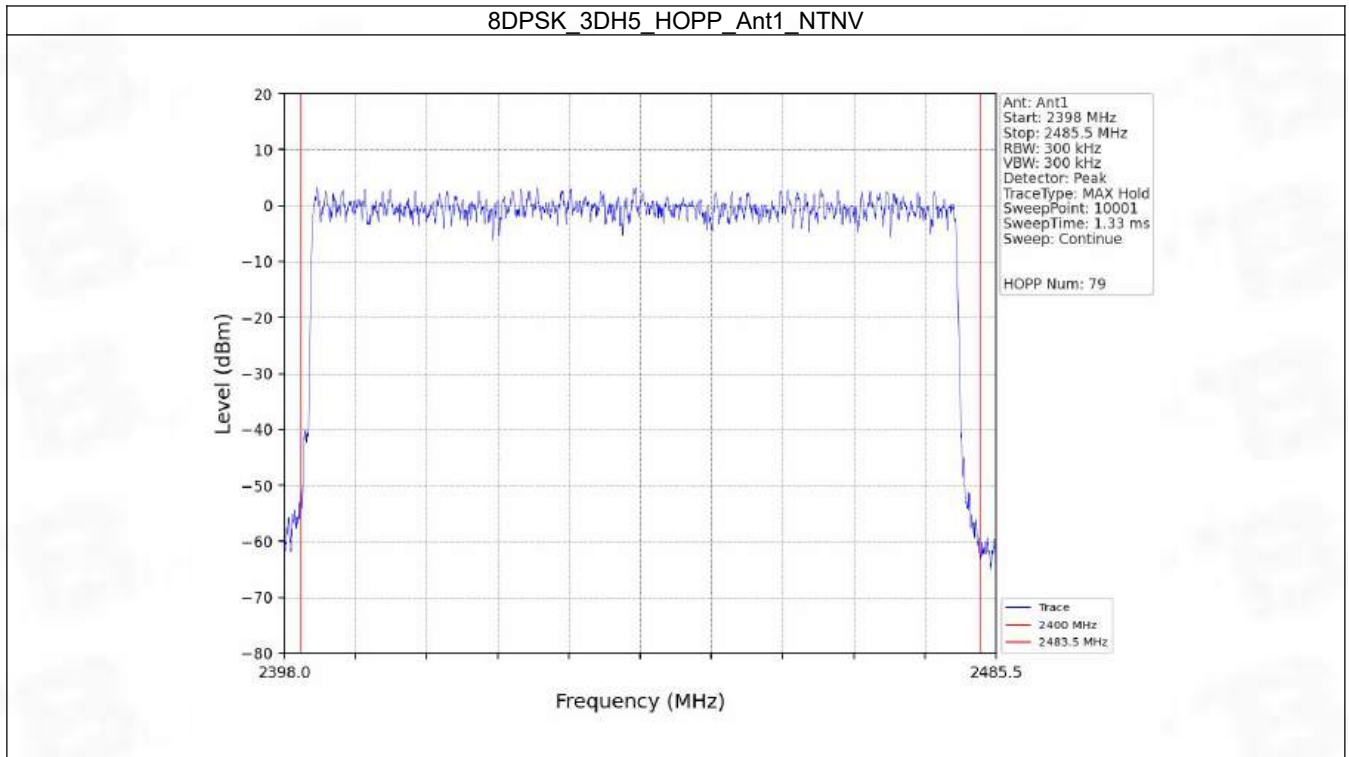
5. Number of Hopping Frequencies

5.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	≥ 15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	≥ 15	Pass
8DPSK	SISO	HOPP	3DH5	79	≥ 15	Pass

5.2 Test Graph



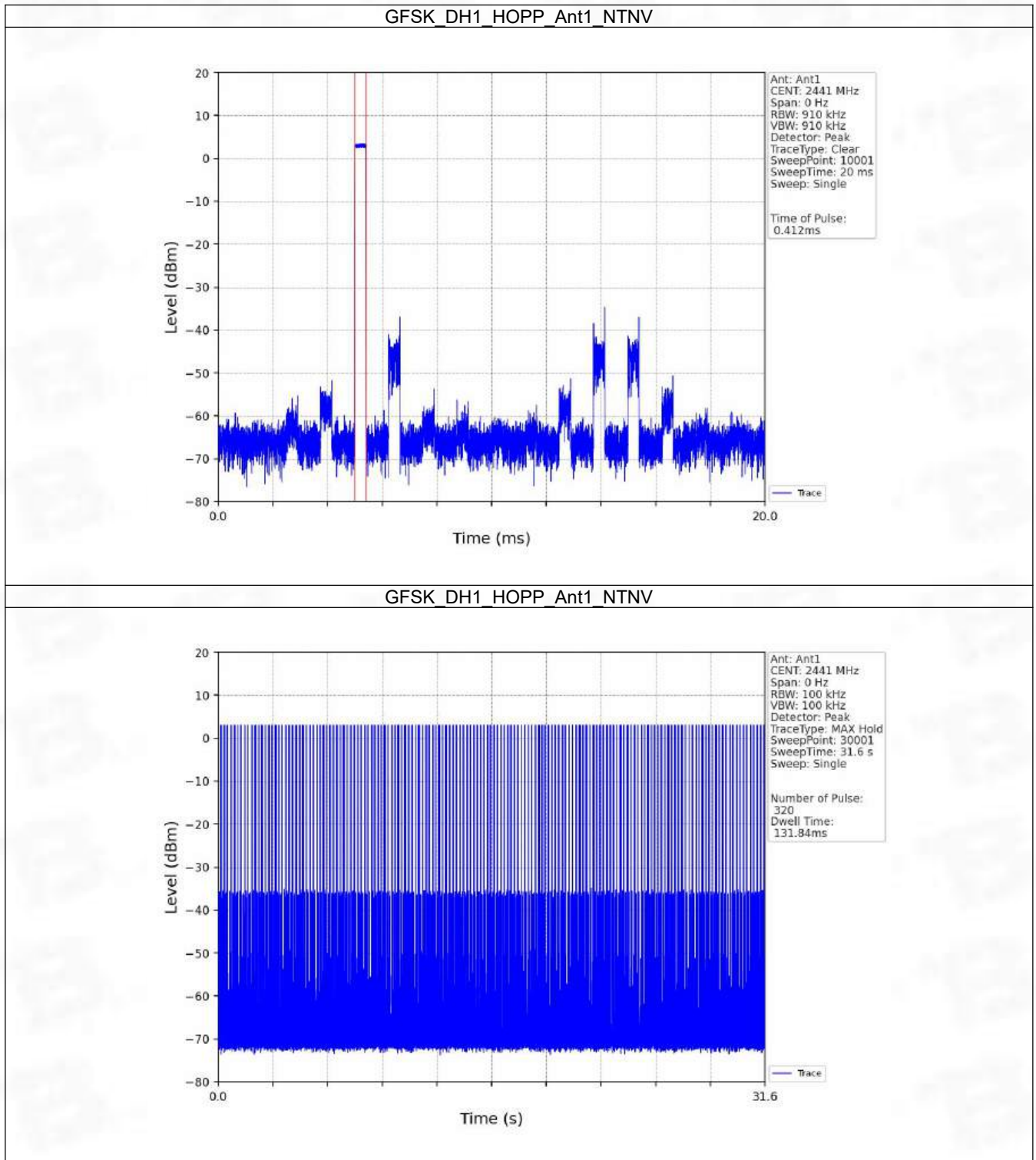


6. Time of Occupancy (Dwell Time)

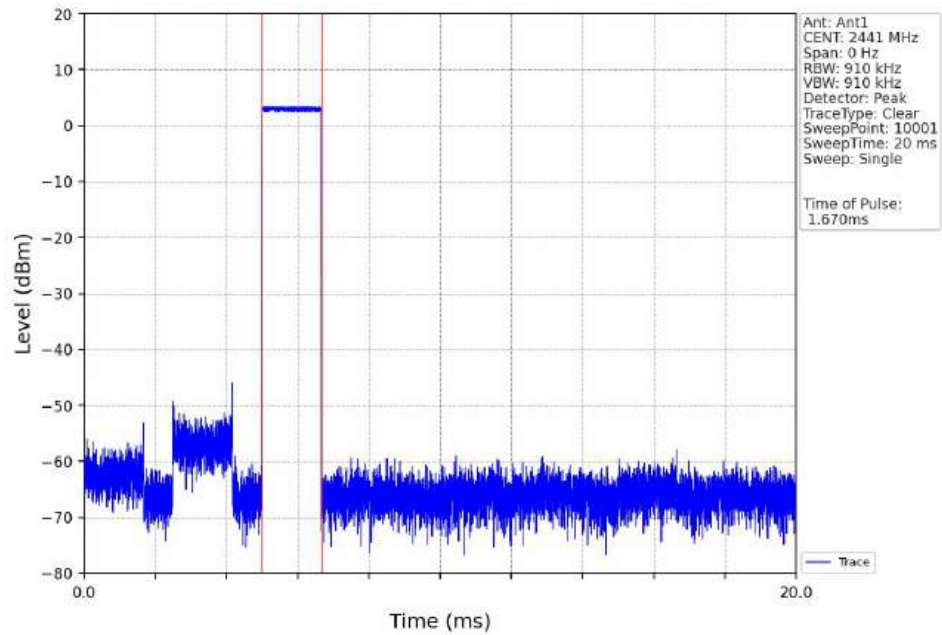
6.1 Test Result

Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.412	31.600	320	131.840	<=400	Pass
			DH3	1.670	31.600	154	257.180	<=400	Pass
			DH5	2.916	31.600	105	306.180	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.424	31.600	320	135.680	<=400	Pass
			2DH3	1.676	31.600	155	259.780	<=400	Pass
			2DH5	2.924	31.600	115	336.260	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.424	31.600	320	135.680	<=400	Pass
			3DH3	1.672	31.600	156	260.832	<=400	Pass
			3DH5	2.926	31.600	109	318.934	<=400	Pass

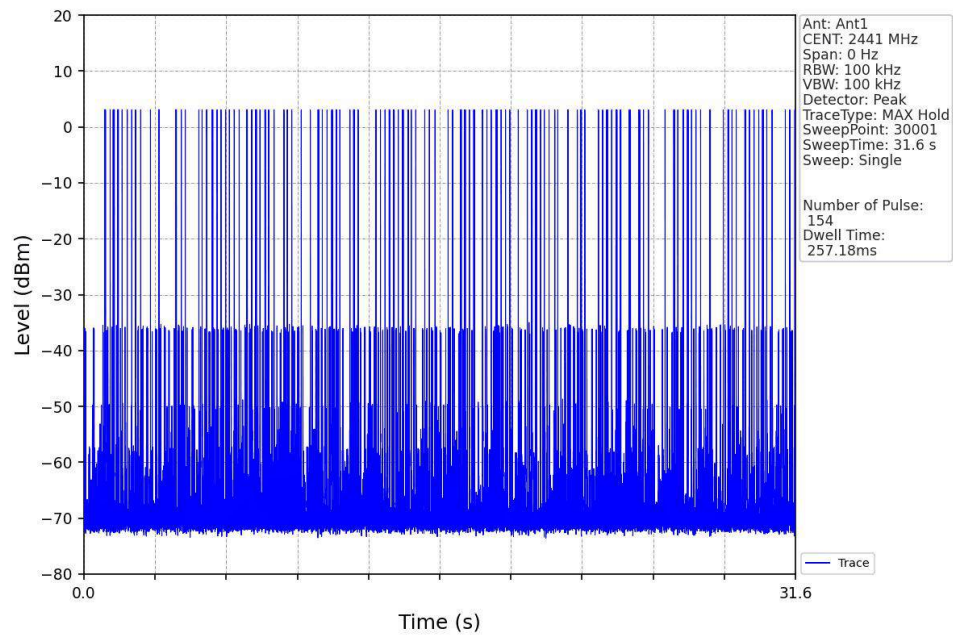
6.2 Test Graph



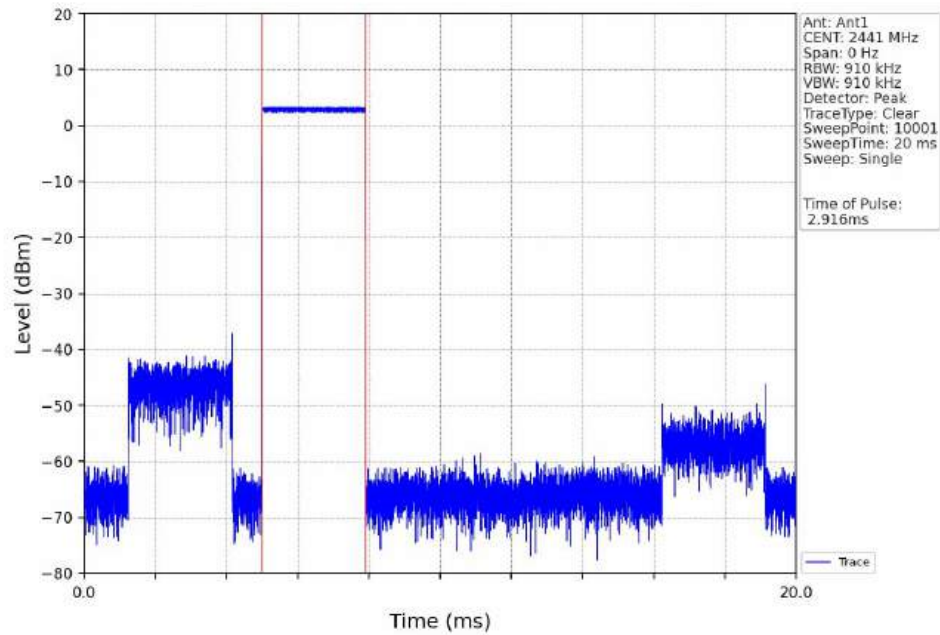
GFSK_DH3_HOPP_Ant1_NTNV



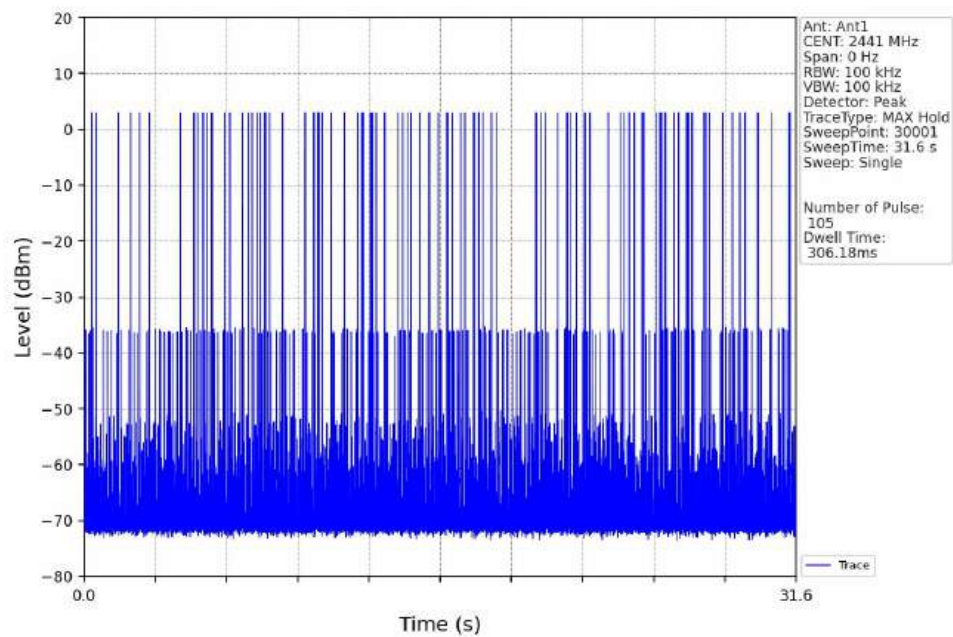
GFSK_DH3_HOPP_Ant1_NTNV



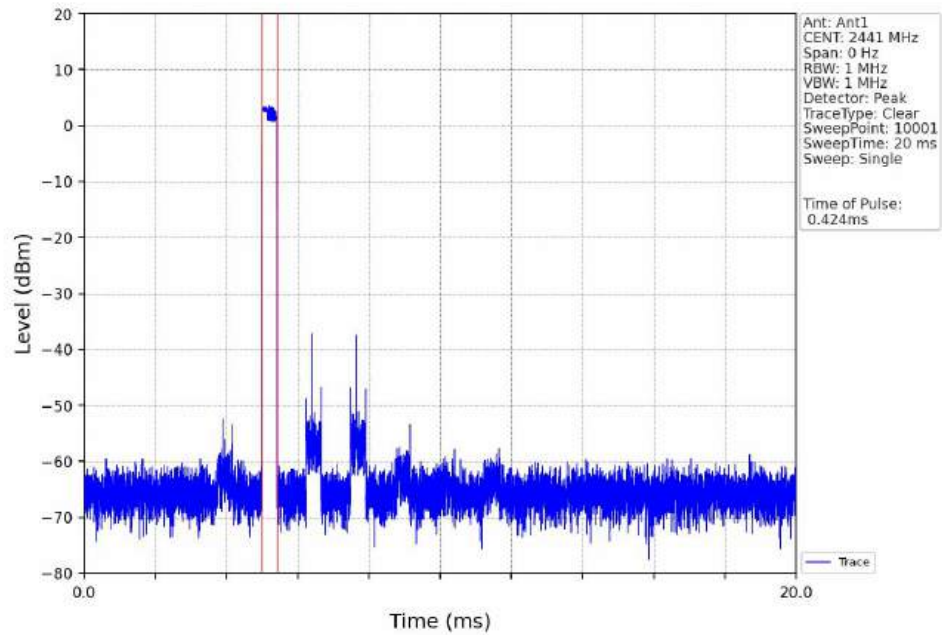
GFSK_DH5_HOPP_Ant1_NTNV



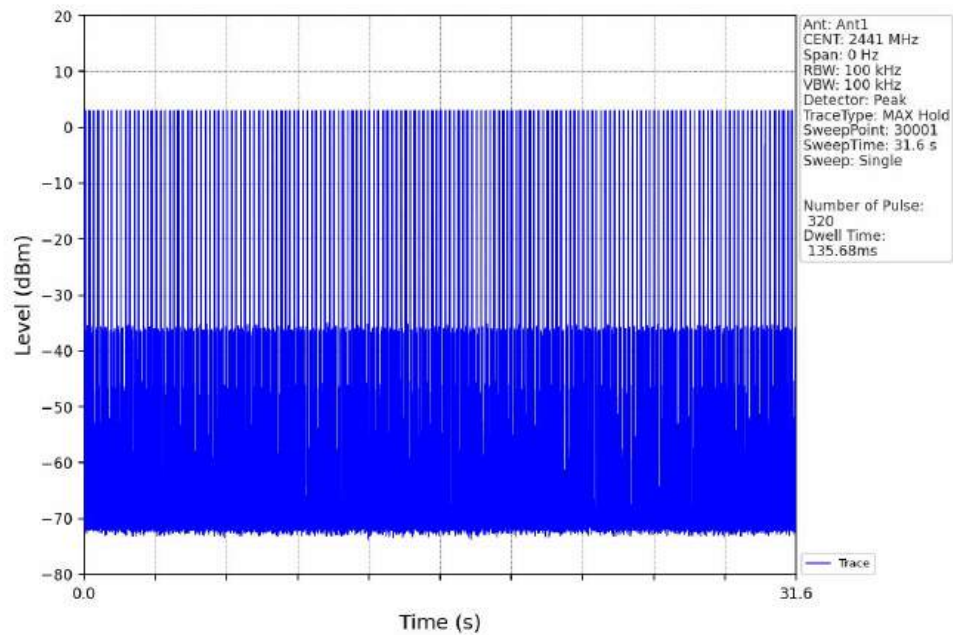
GFSK_DH5_HOPP_Ant1_NTNV



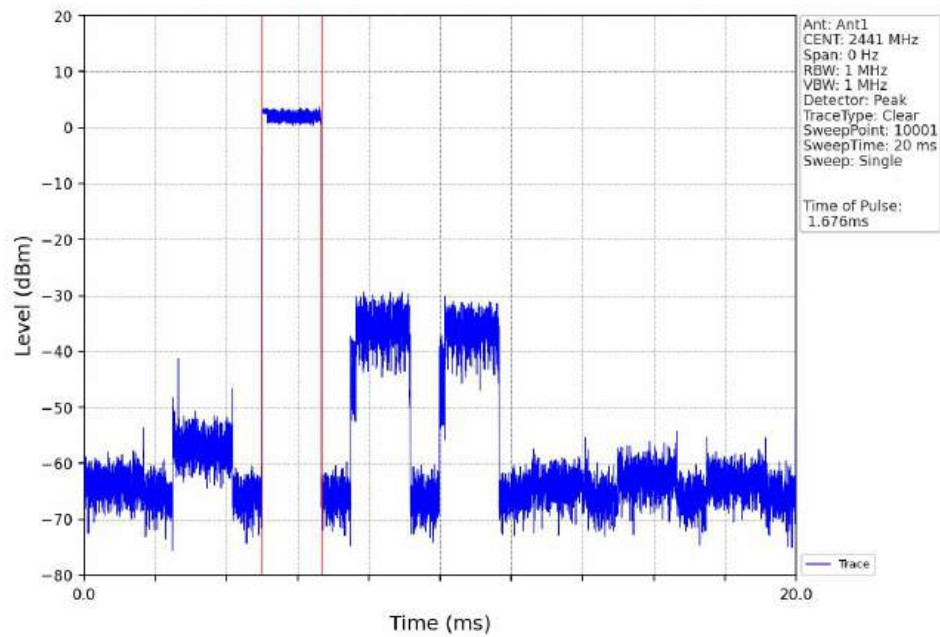
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



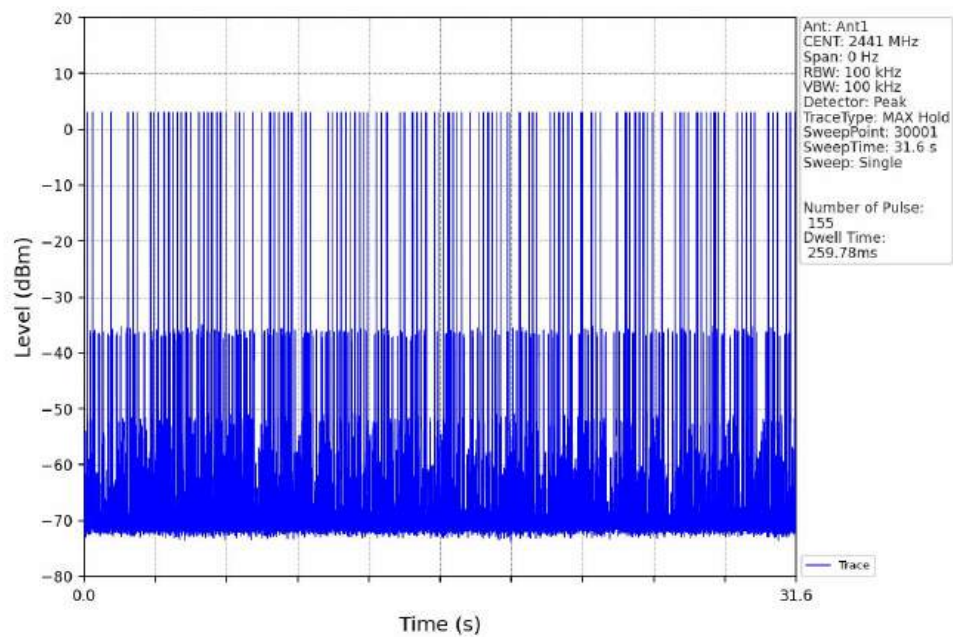
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



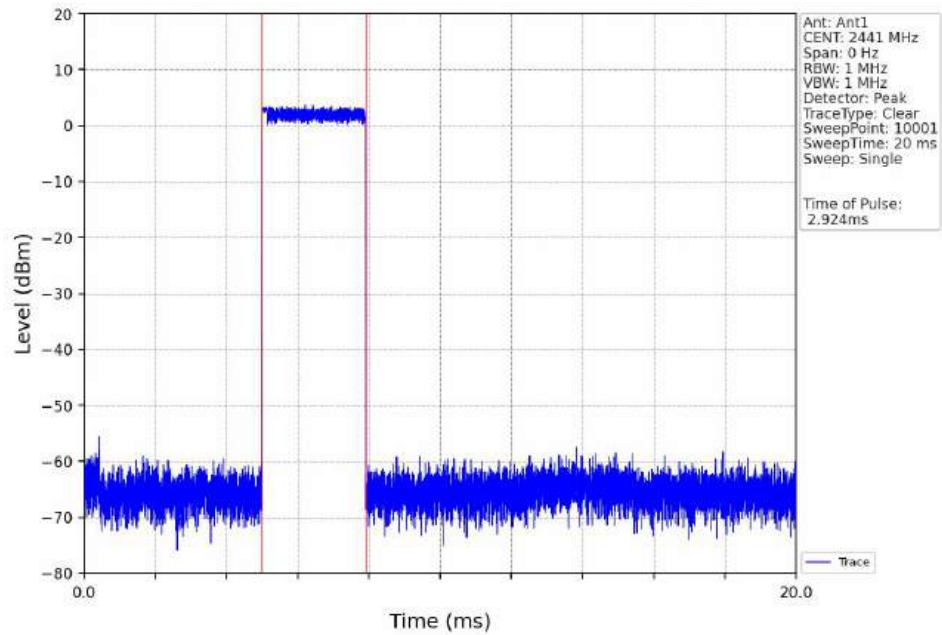
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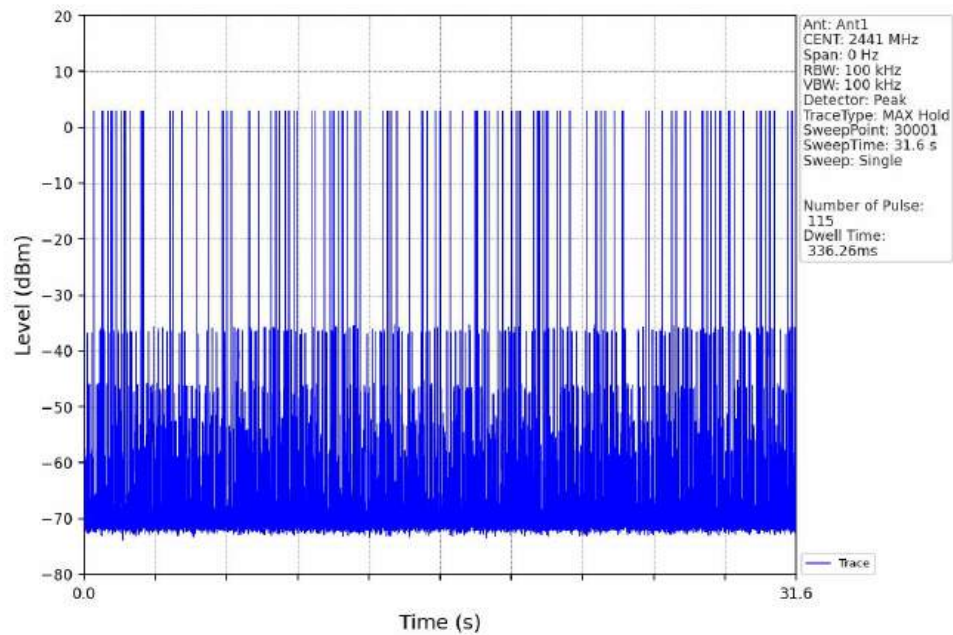
Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



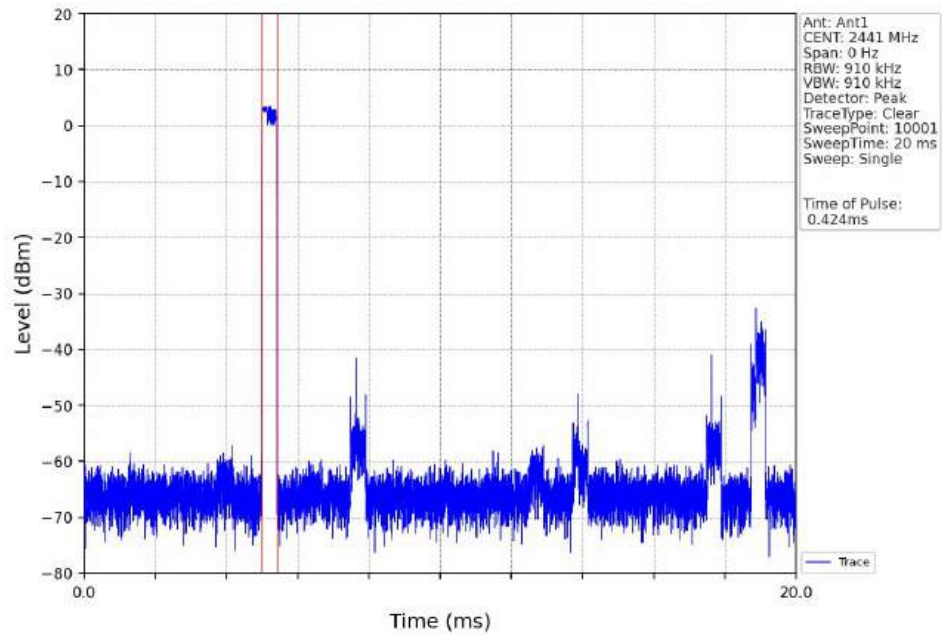
Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



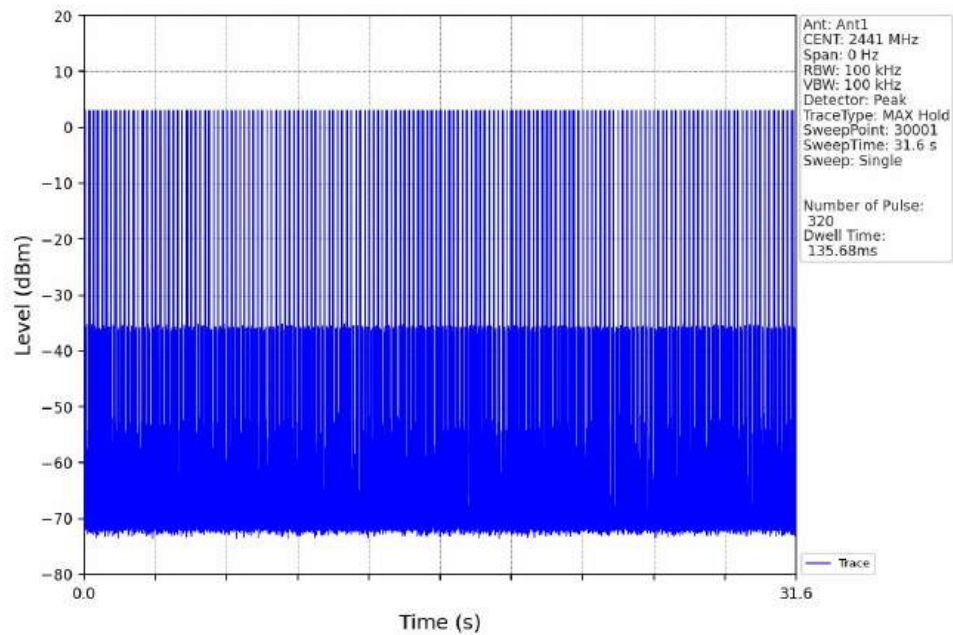
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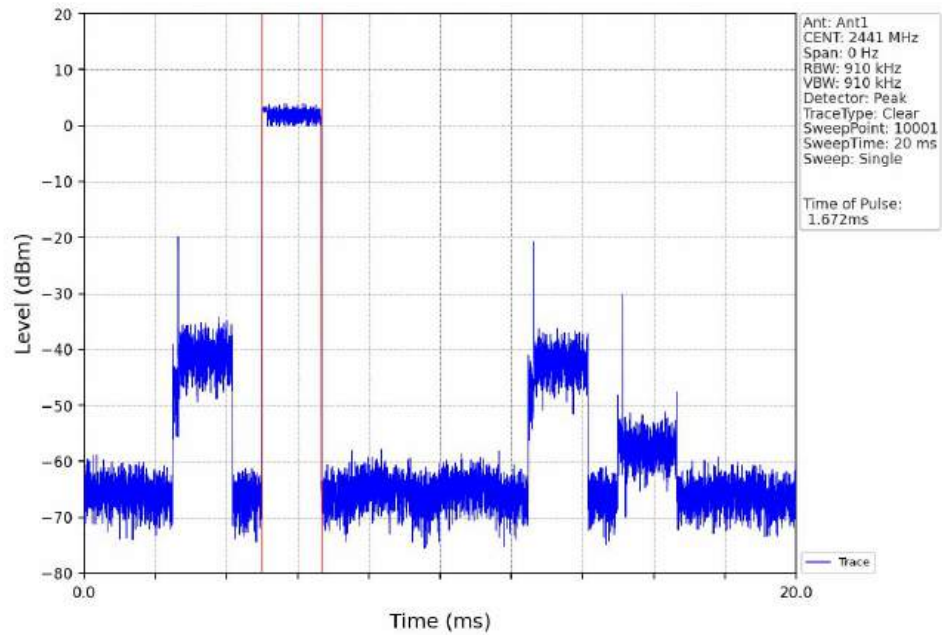
8DPSK_3DH1_HOPP_Ant1_NTNV



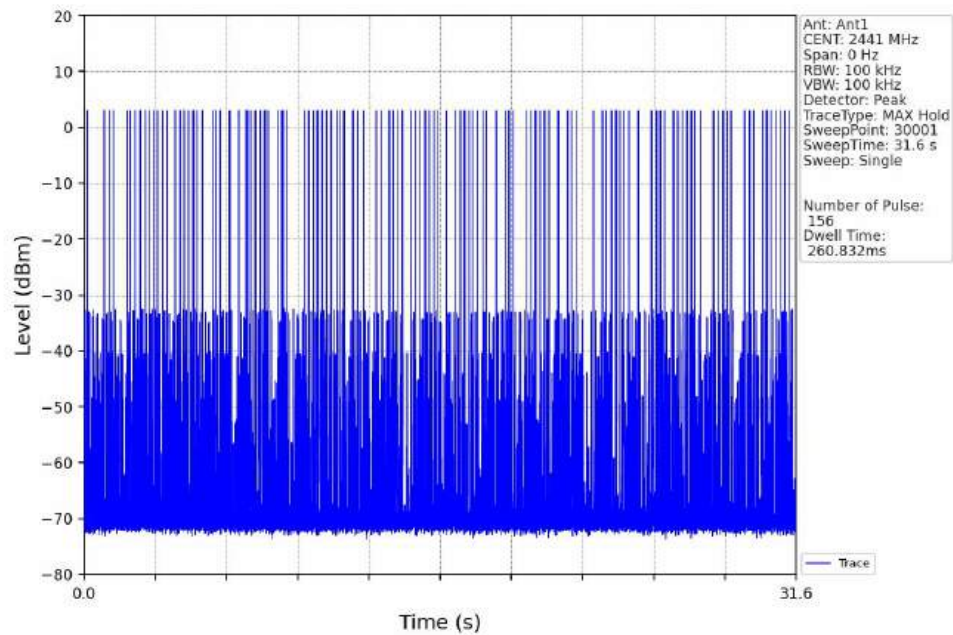
8DPSK_3DH1_HOPP_Ant1_NTNV



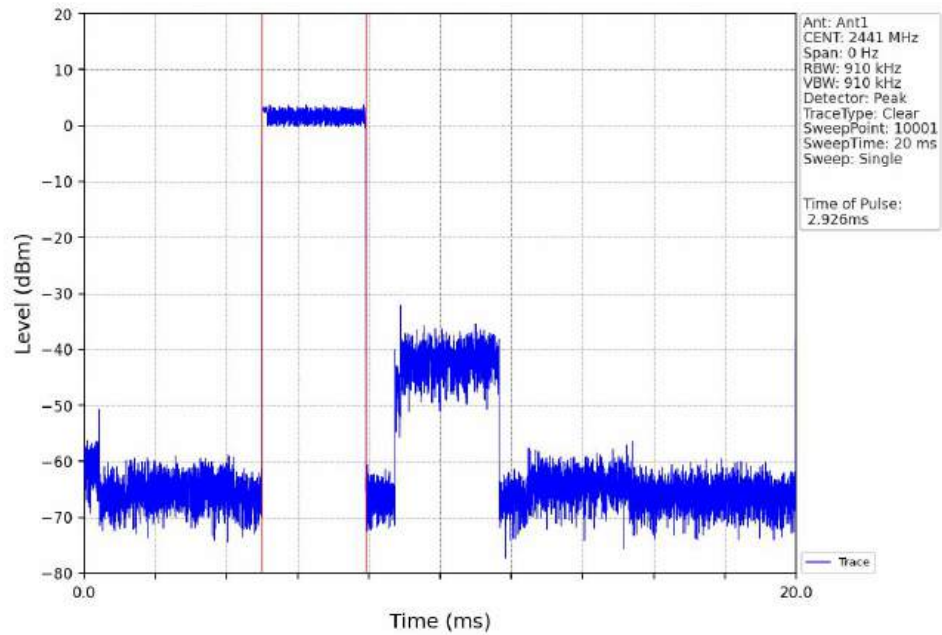
8DPSK_3DH3_HOPP_Ant1_NTNV



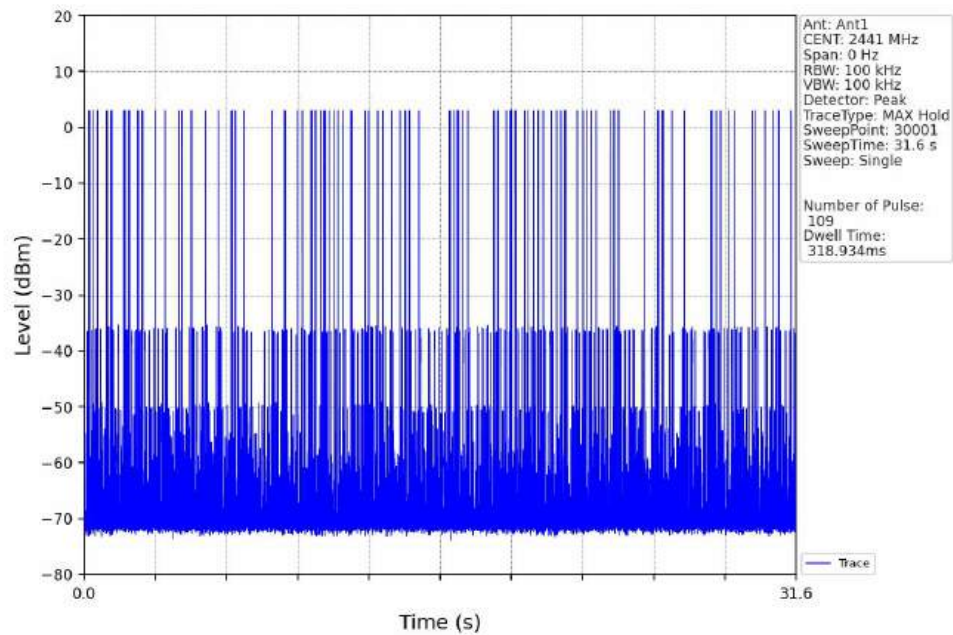
8DPSK_3DH3_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



7. Unwanted Emissions In Non-restricted Frequency Bands

7.1 Test Result

7.1.1 Ref

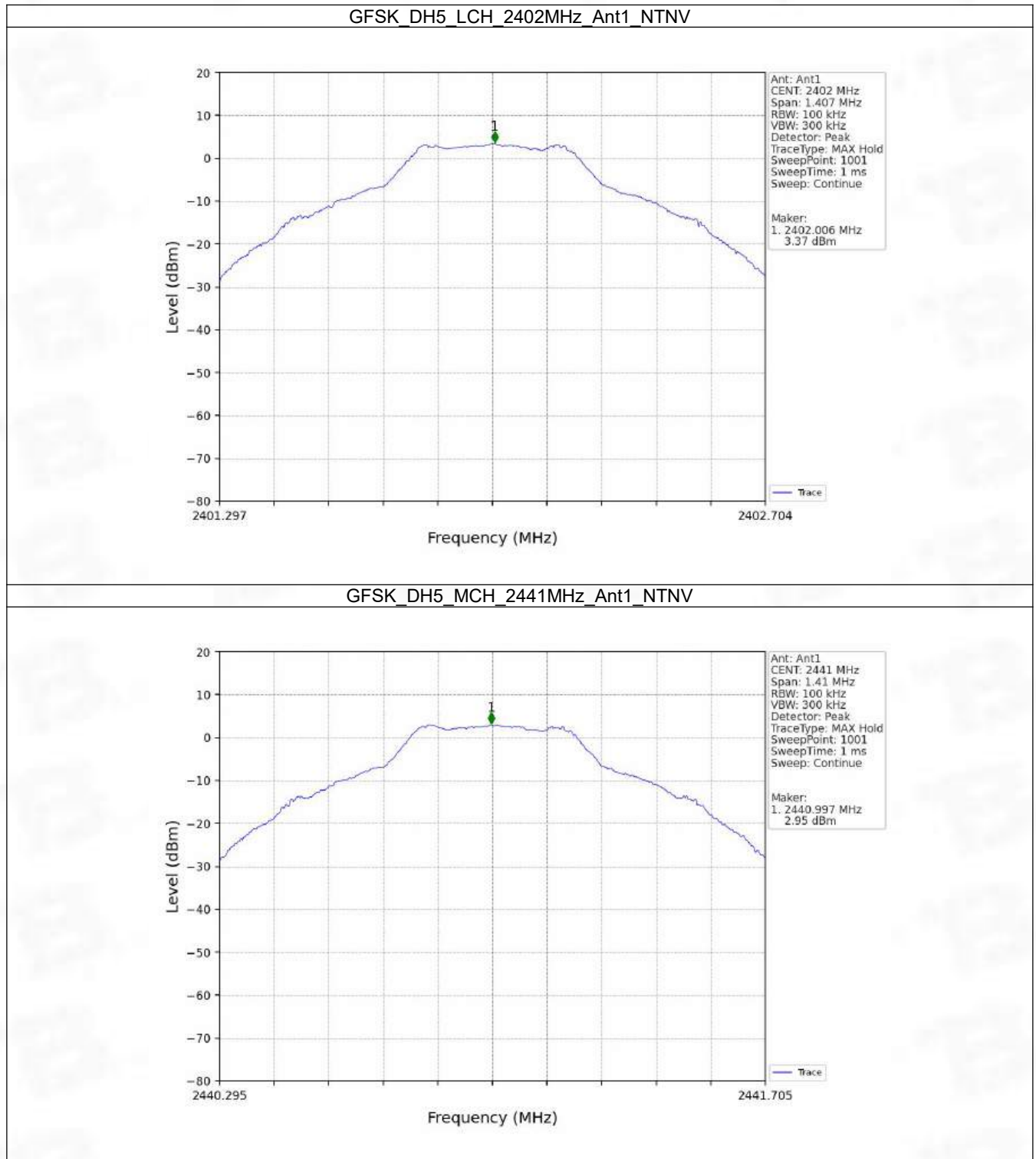
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	3.37
		2441	DH5	1	2.95
		2480	DH5	1	2.51
		HOPP	DH5	1	3.30
					3.30
Pi/4DQPSK	SISO	2402	2DH5	1	3.42
		2441	2DH5	1	2.99
		2480	2DH5	1	2.50
		HOPP	2DH5	1	3.20
					3.20
8DPSK	SISO	2402	3DH5	1	3.46
		2441	3DH5	1	3.02
		2480	3DH5	1	2.59
		HOPP	3DH5	1	3.19
					3.19

7.1.2 CSE

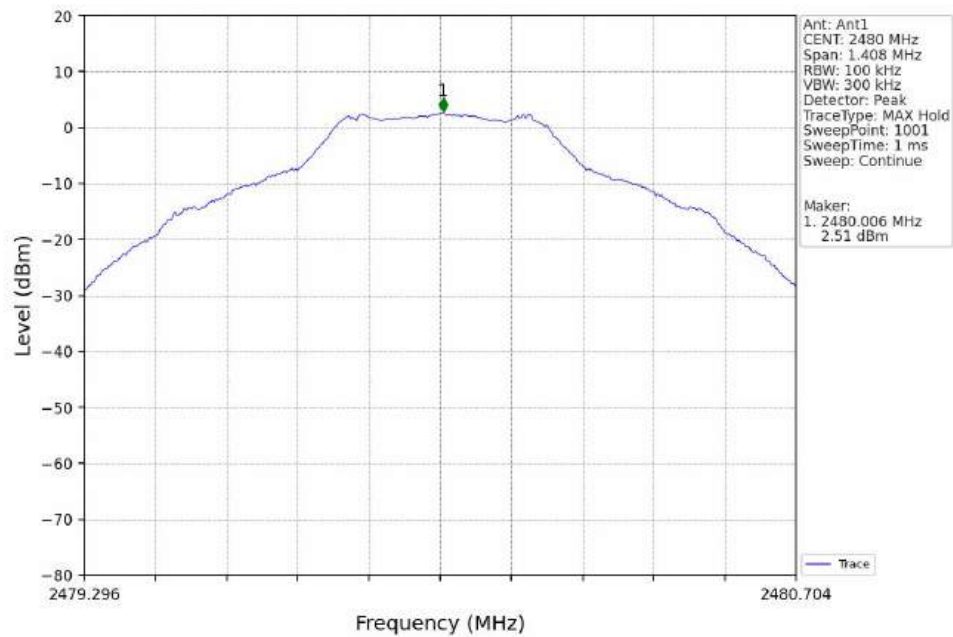
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	3.37	-16.63	Pass
		2441	DH5	1	2.95	-17.05	Pass
		2480	DH5	1	2.51	-17.49	Pass
		HOPP	DH5	1	3.30	-16.70	Pass
					3.30	-16.70	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	3.42	-16.58	Pass
		2441	2DH5	1	2.99	-17.01	Pass
		2480	2DH5	1	2.50	-17.50	Pass
		HOPP	2DH5	1	3.20	-16.80	Pass
					3.20	-16.80	Pass
8DPSK	SISO	2402	3DH5	1	3.46	-16.54	Pass
		2441	3DH5	1	3.02	-16.98	Pass
		2480	3DH5	1	2.59	-17.41	Pass
		HOPP	3DH5	1	3.19	-16.81	Pass
					3.19	-16.81	Pass

7.2 Test Graph

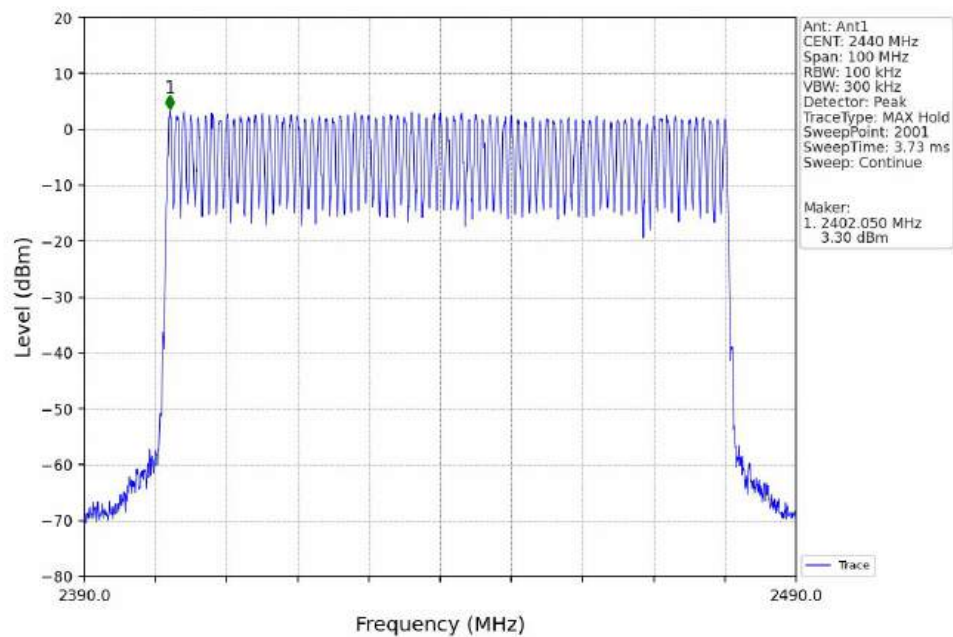
7.2.1 Ref



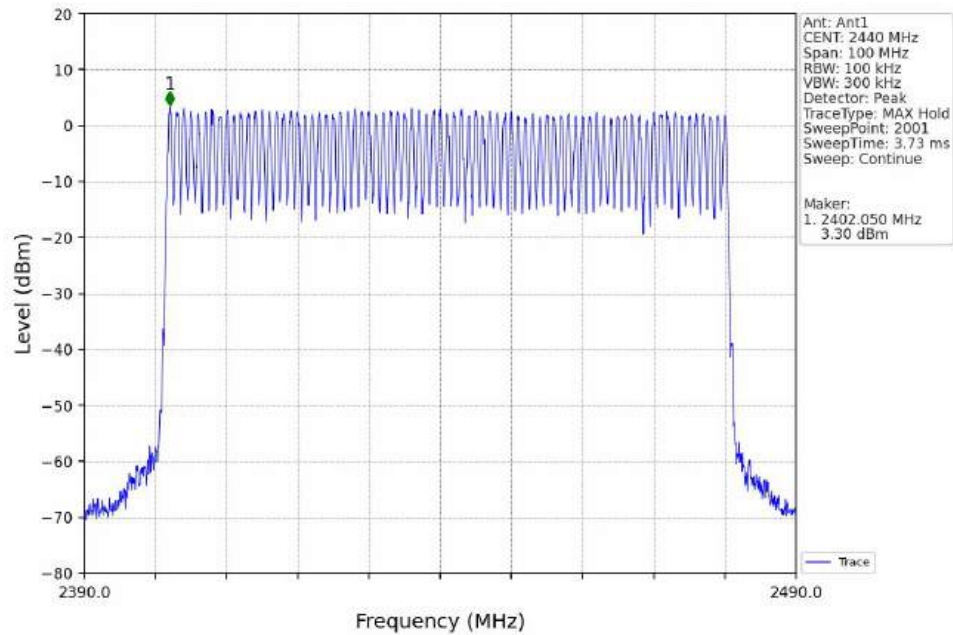
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



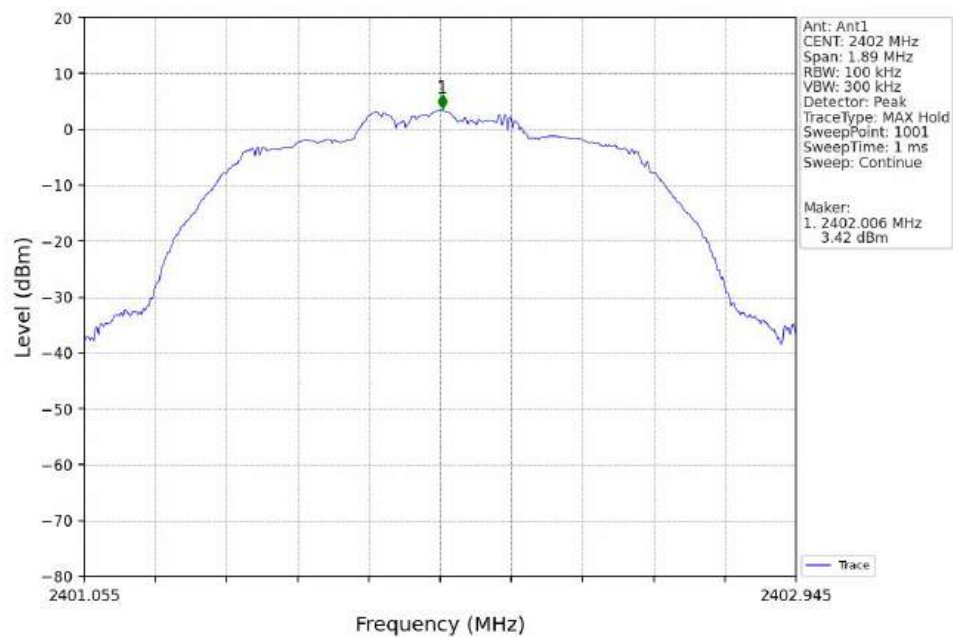
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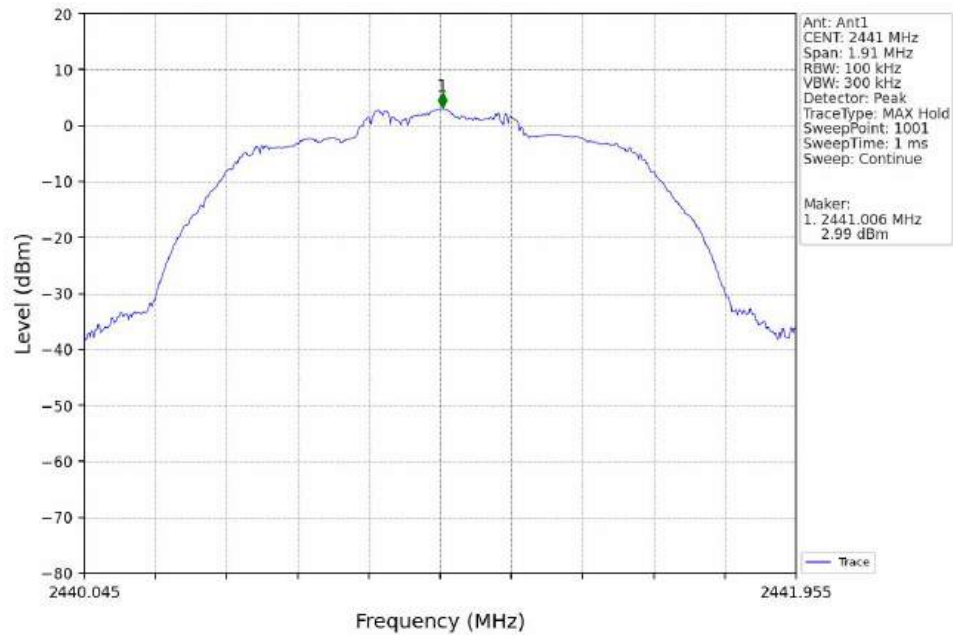
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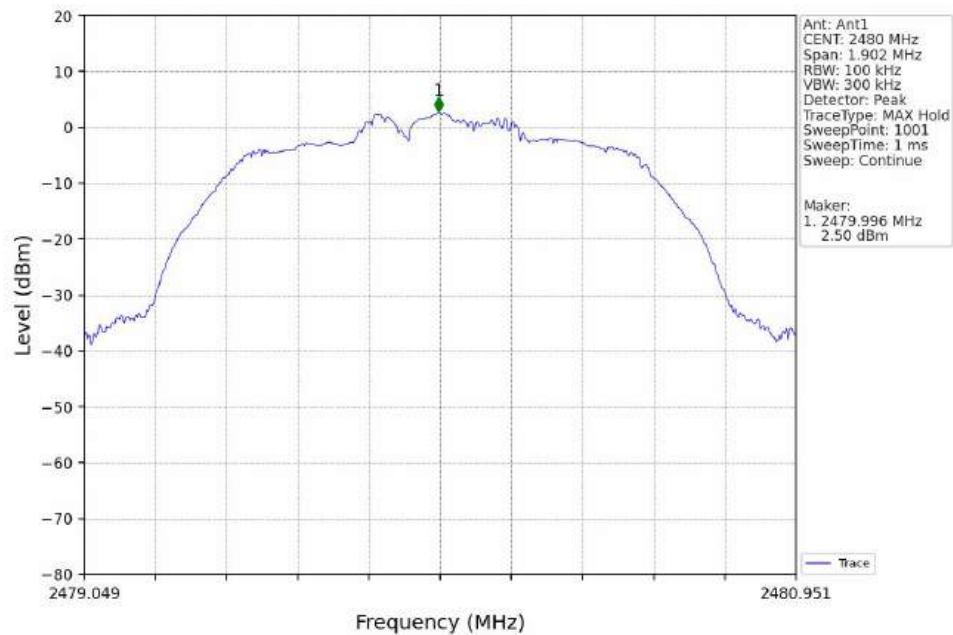
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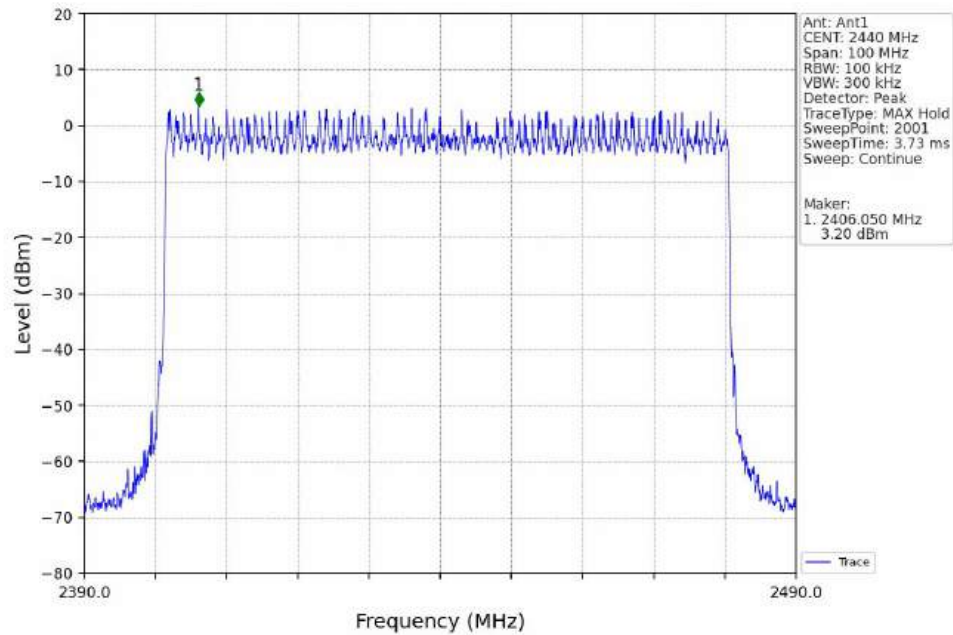
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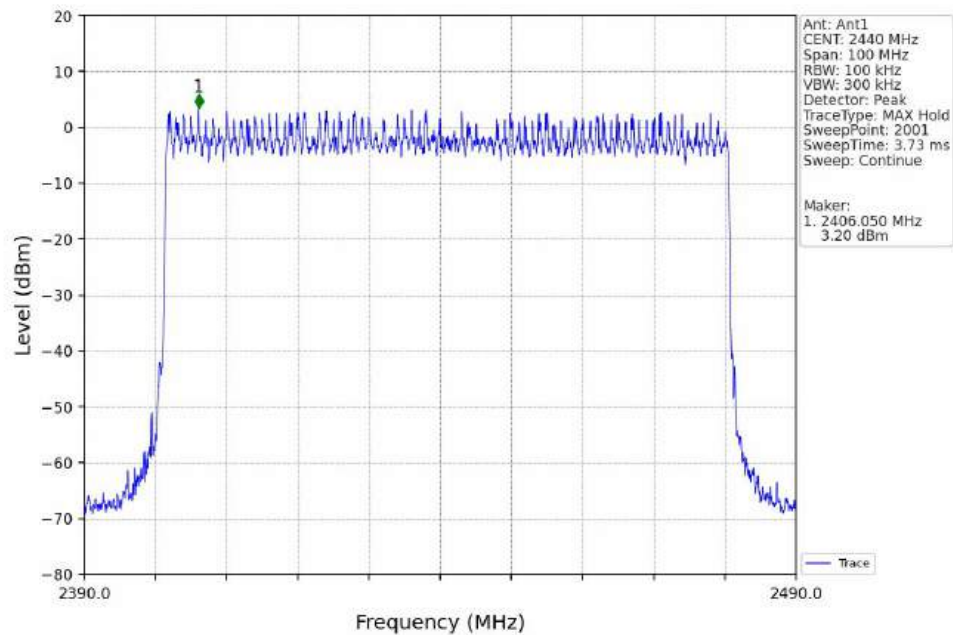
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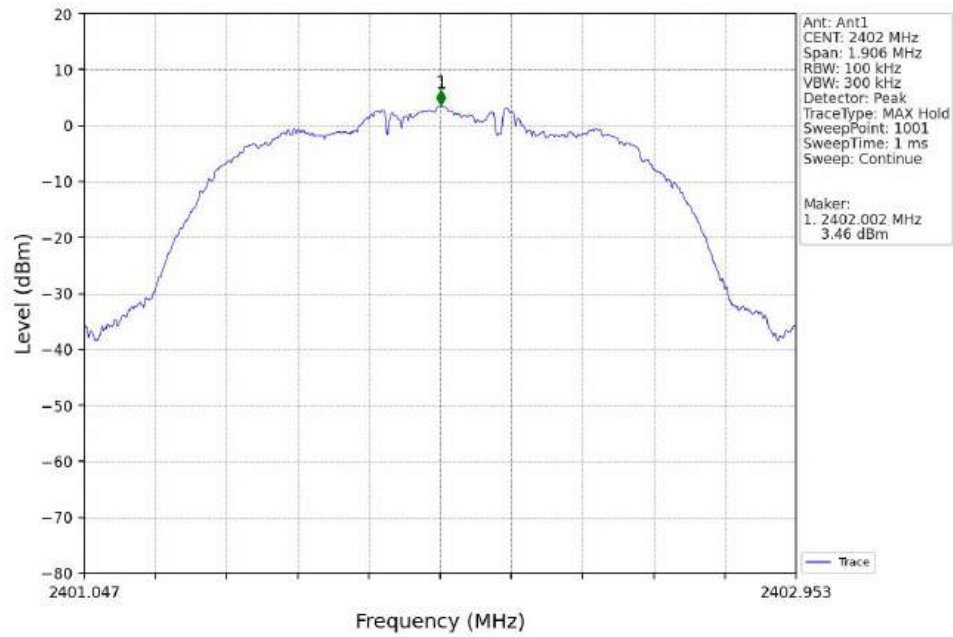
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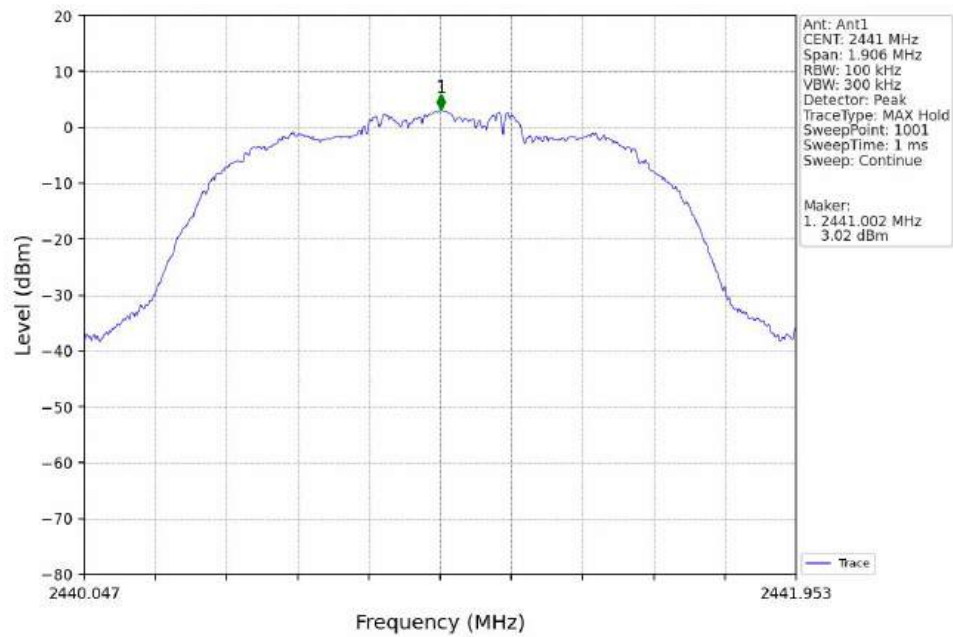
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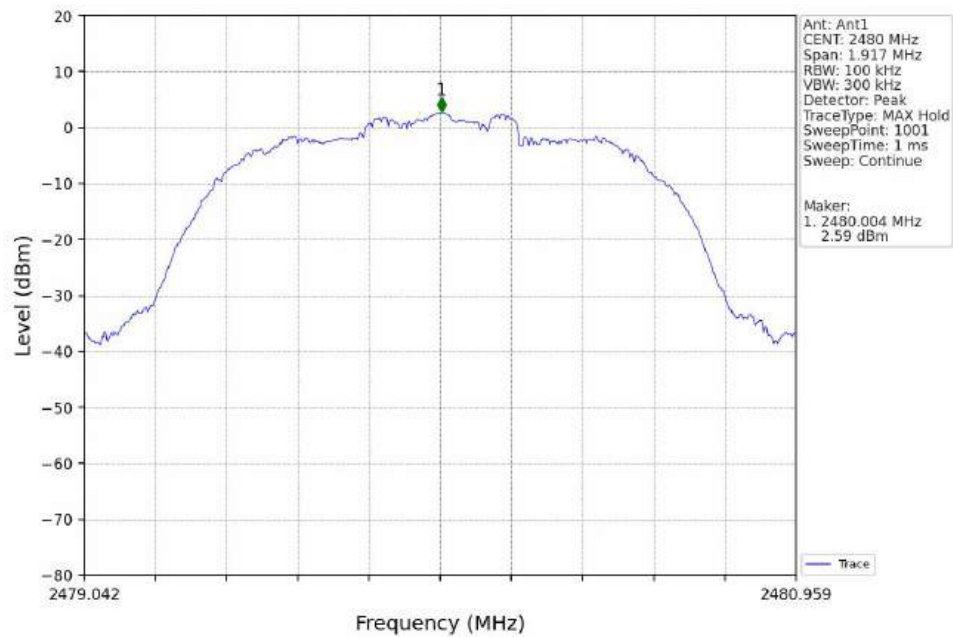
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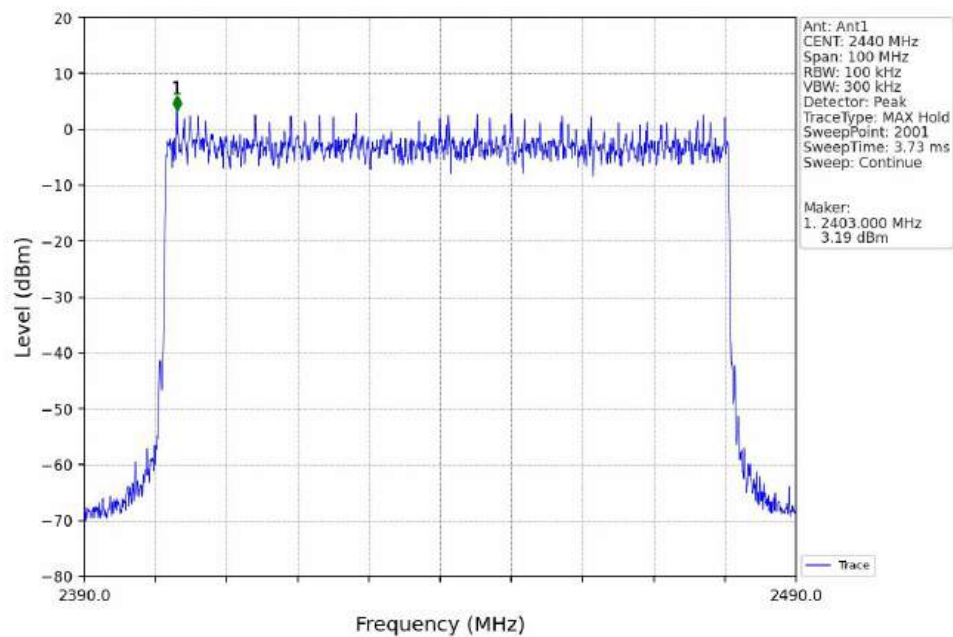
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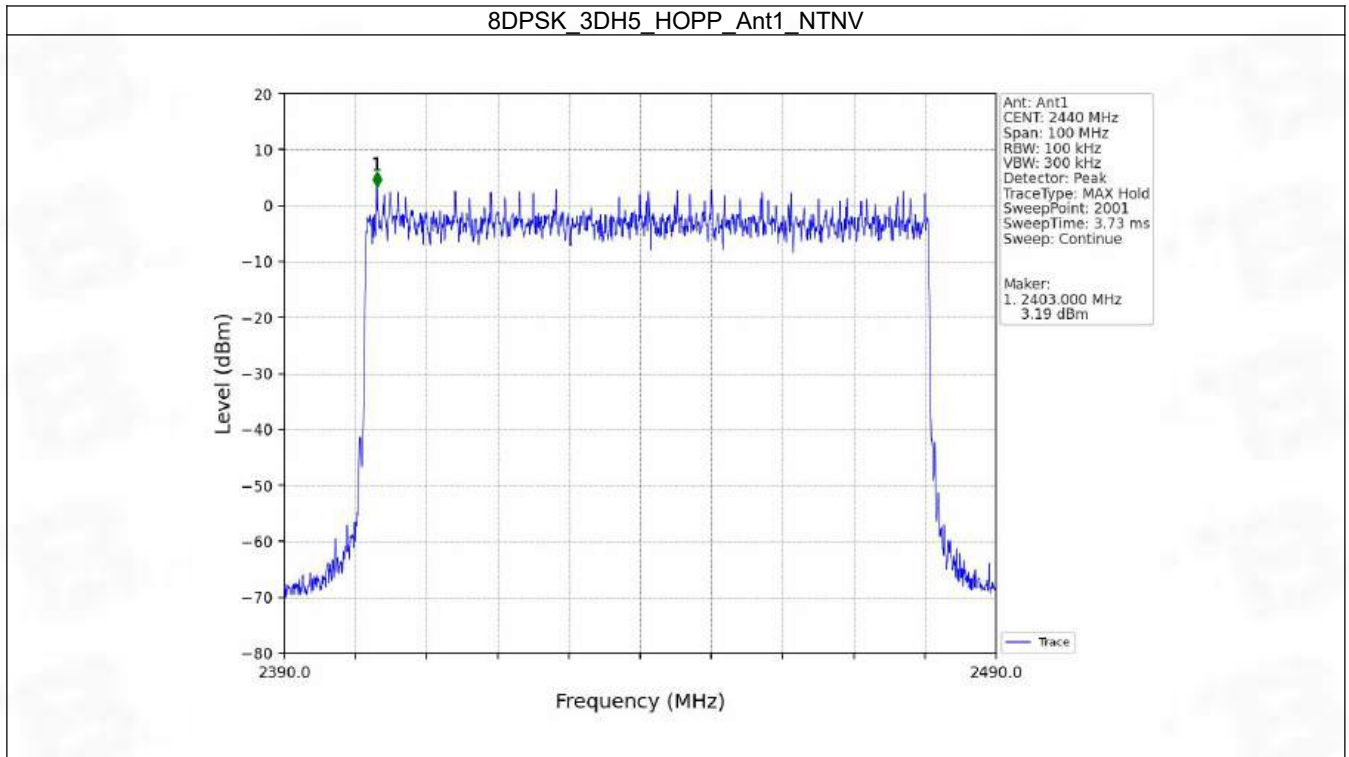


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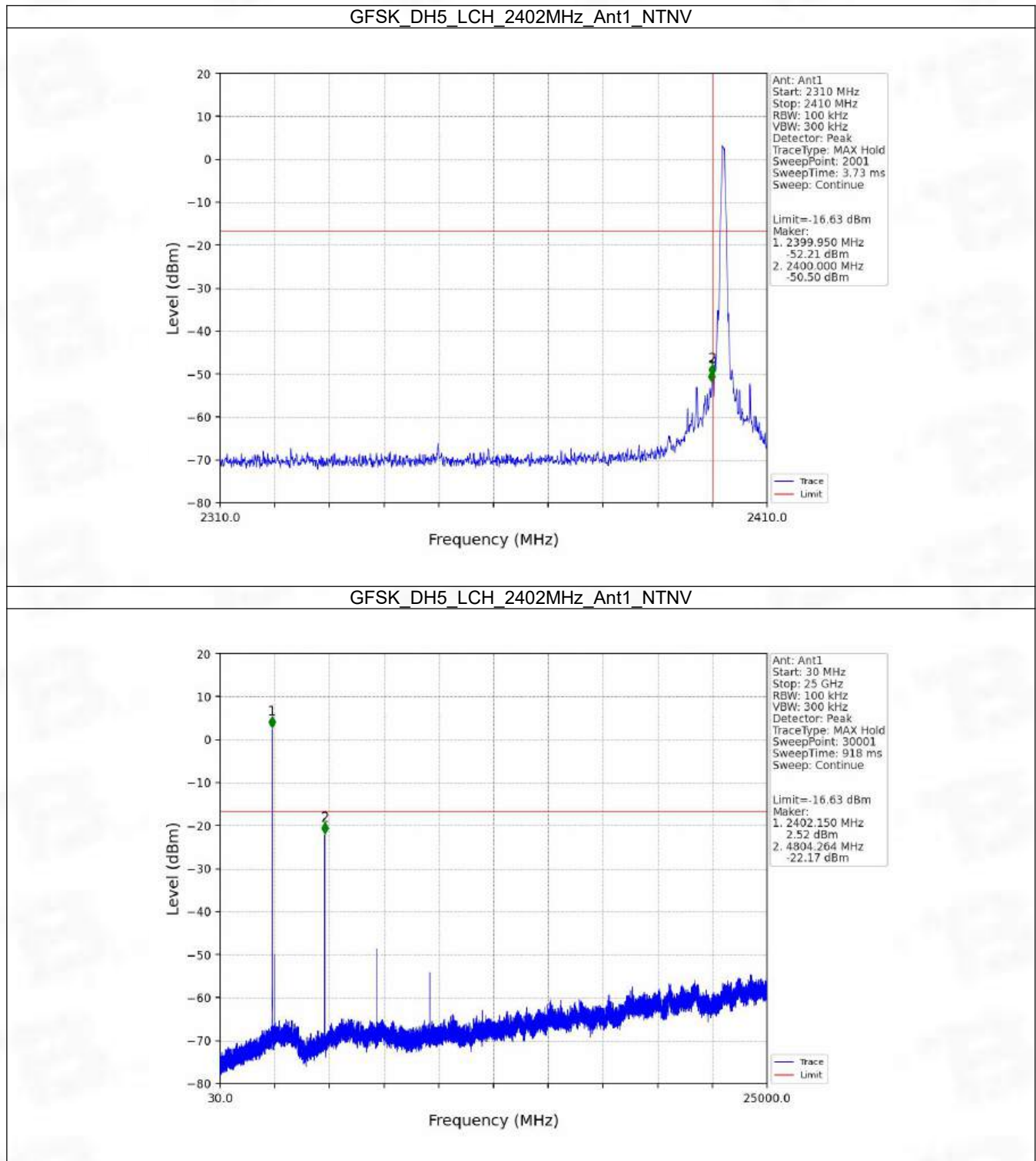


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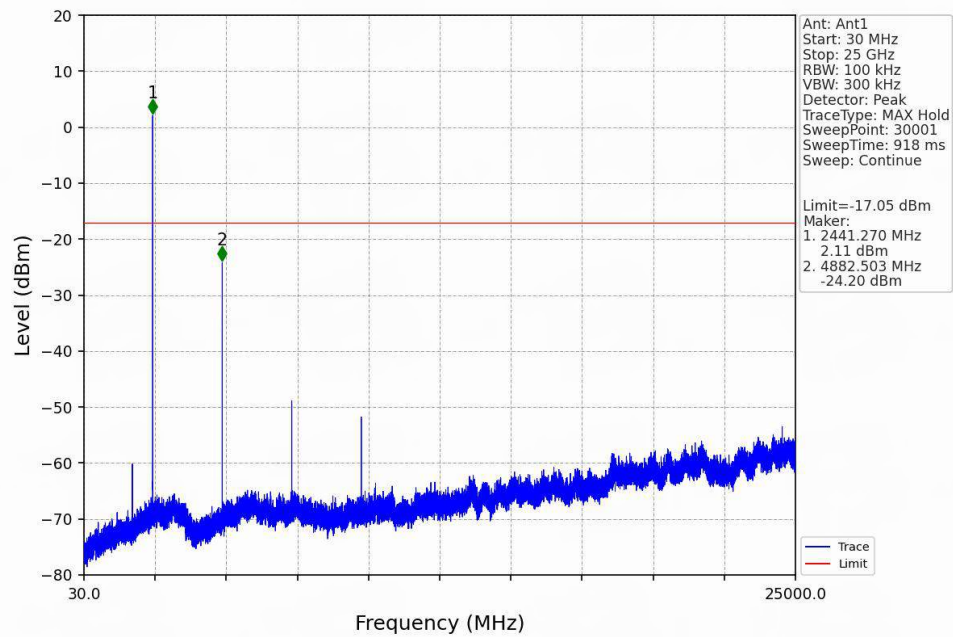




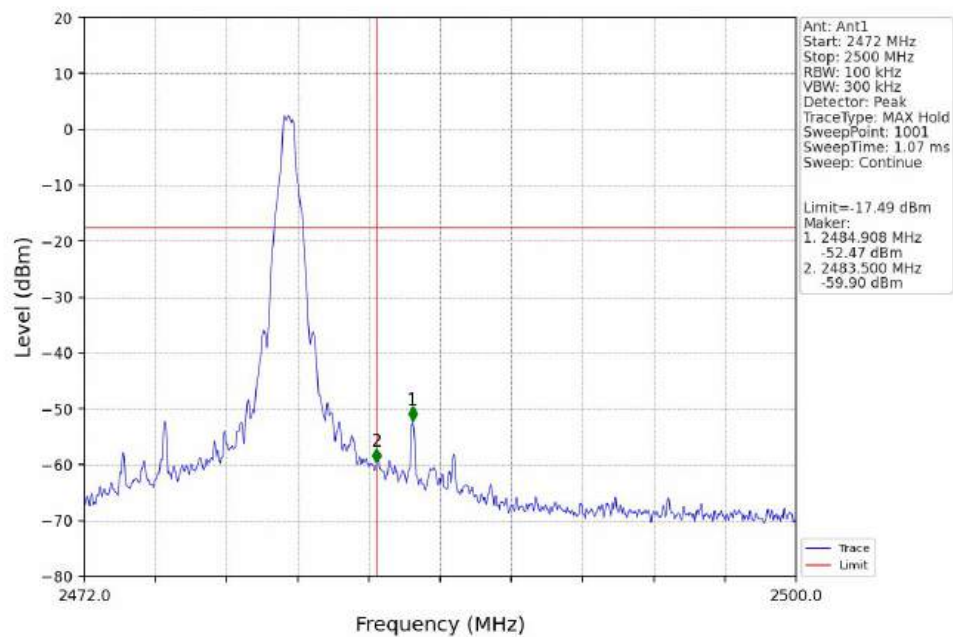
7.2.2 CSE



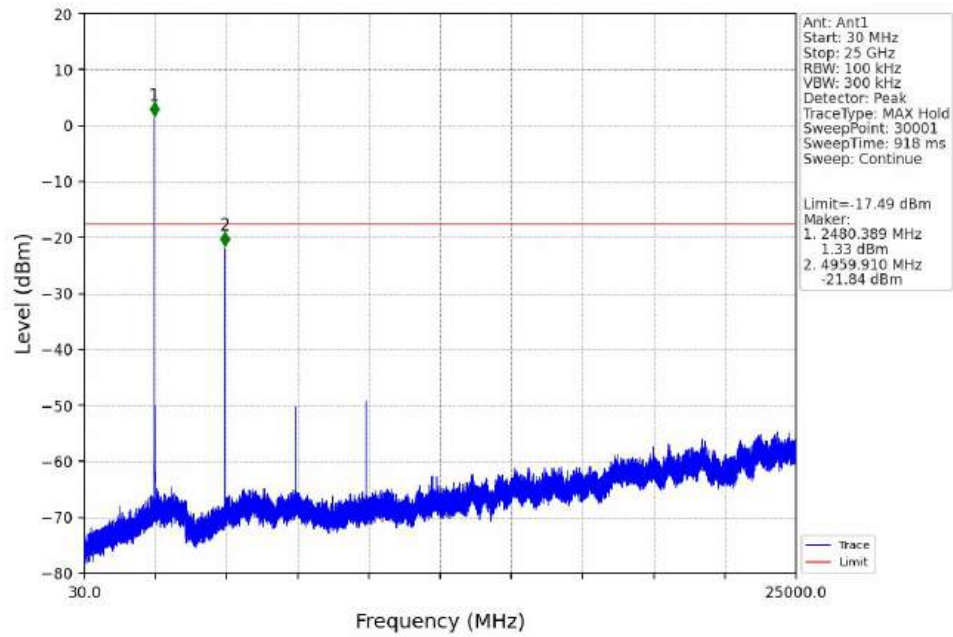
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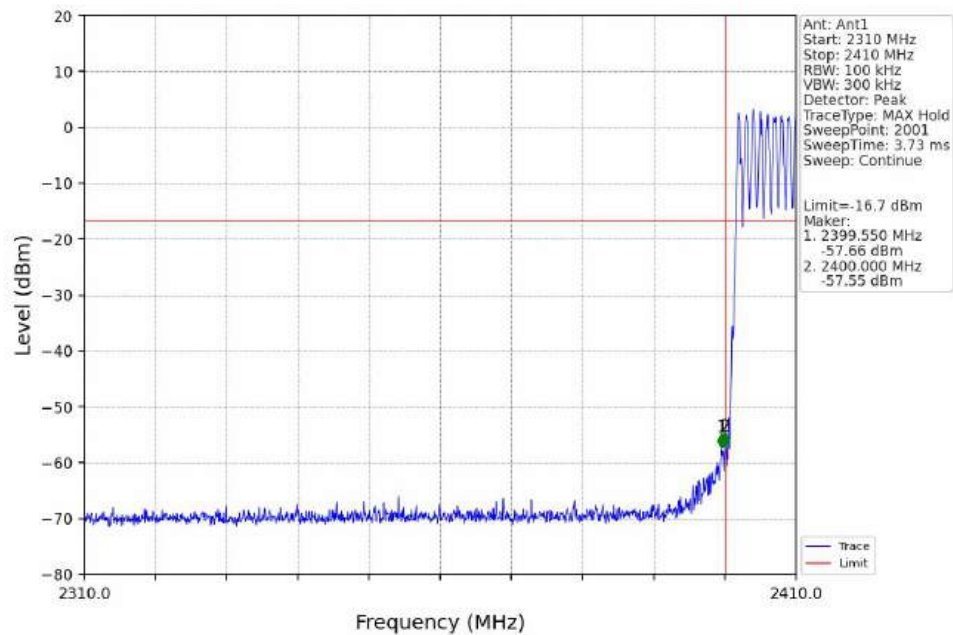
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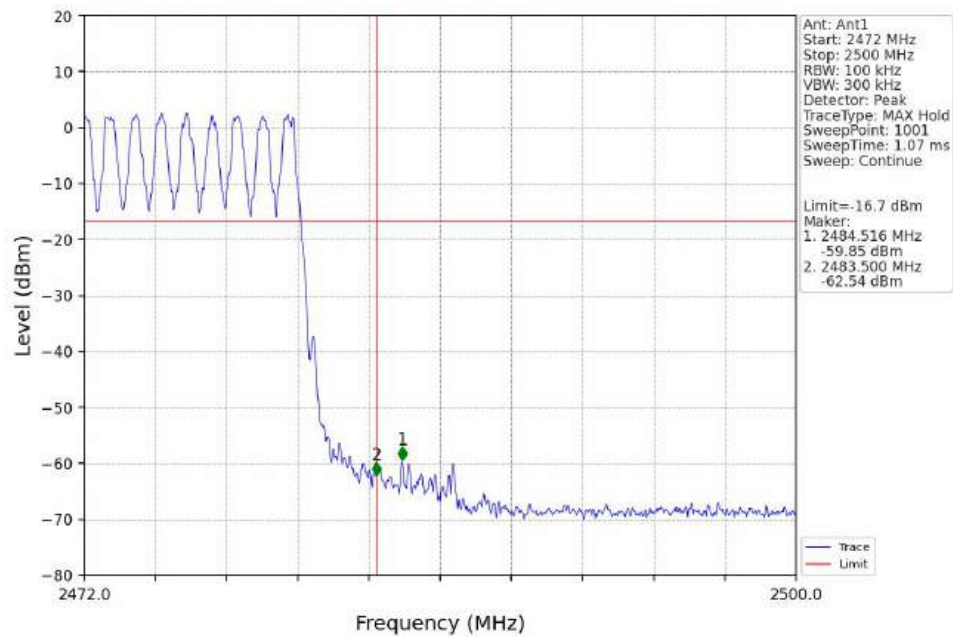
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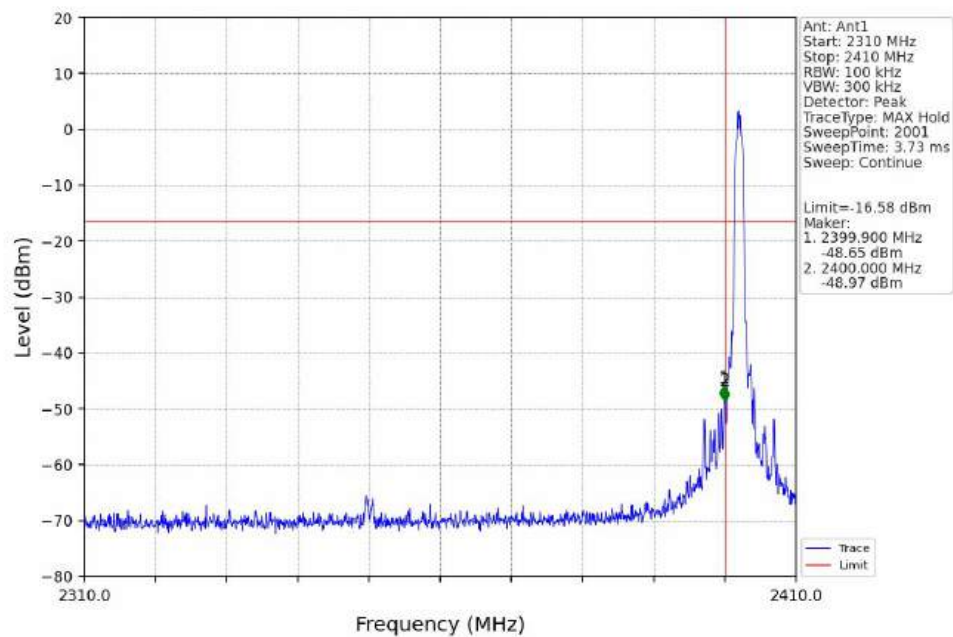
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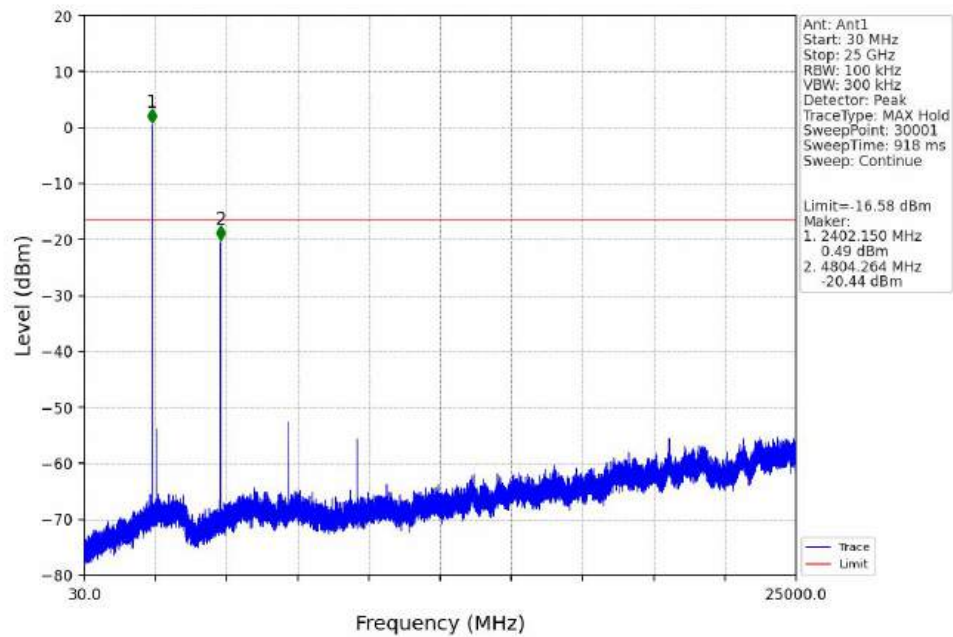
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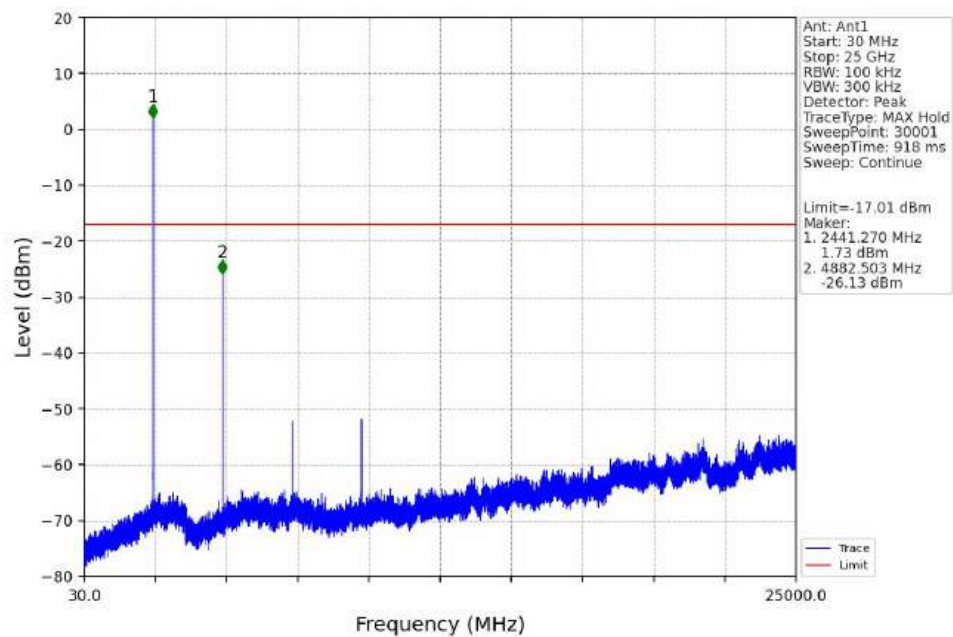
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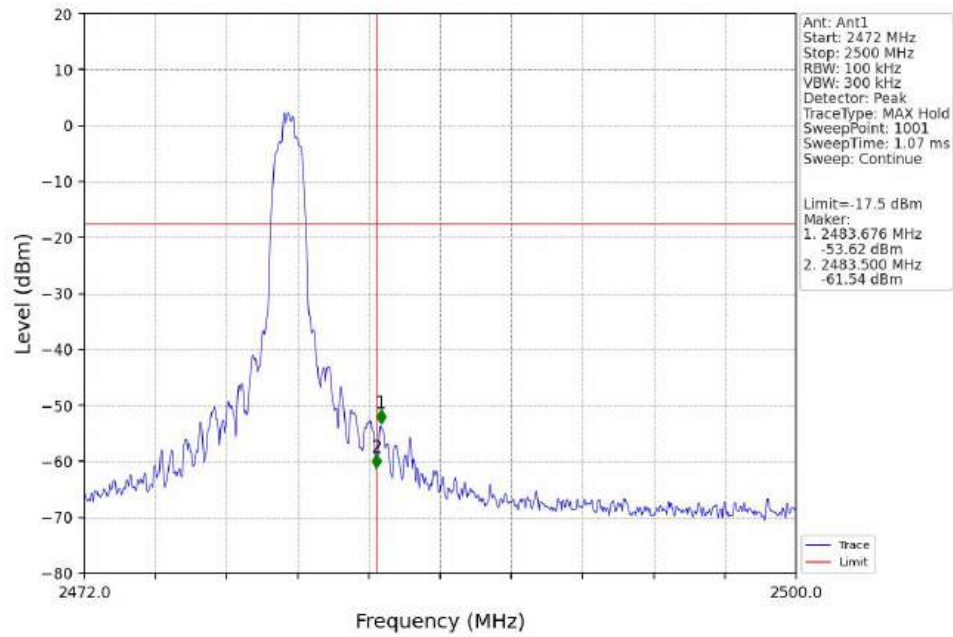
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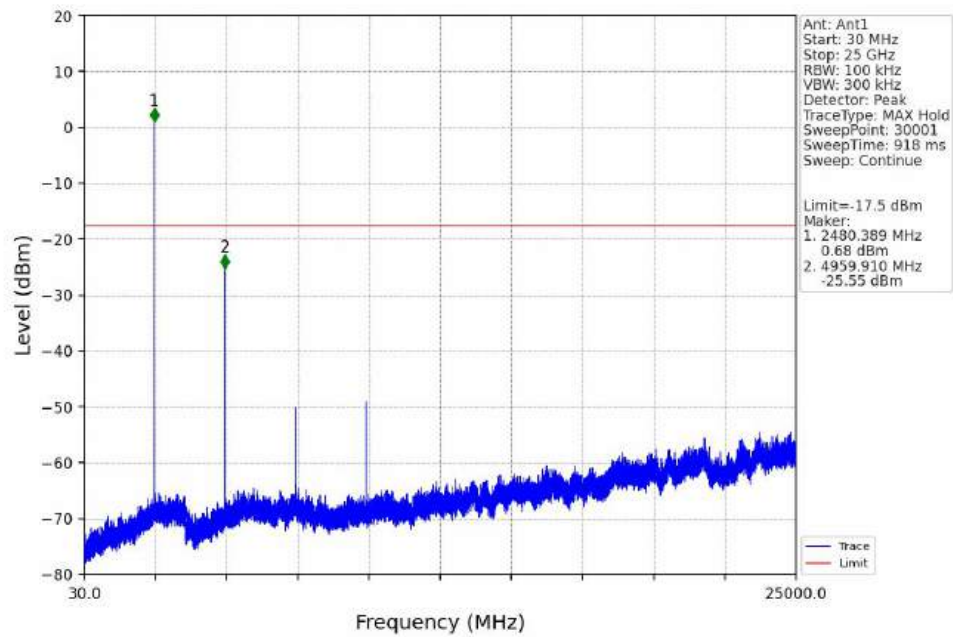
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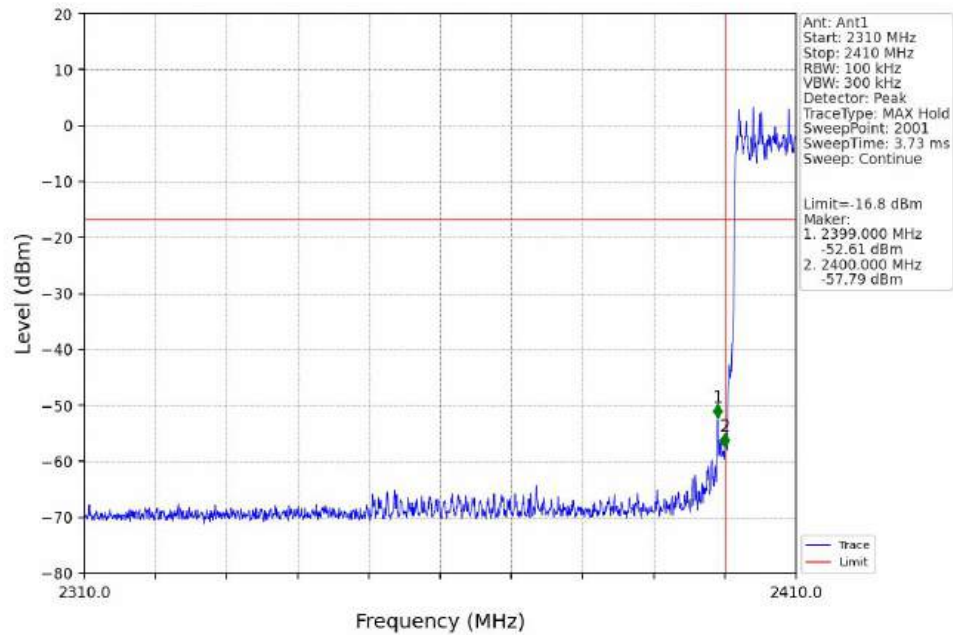
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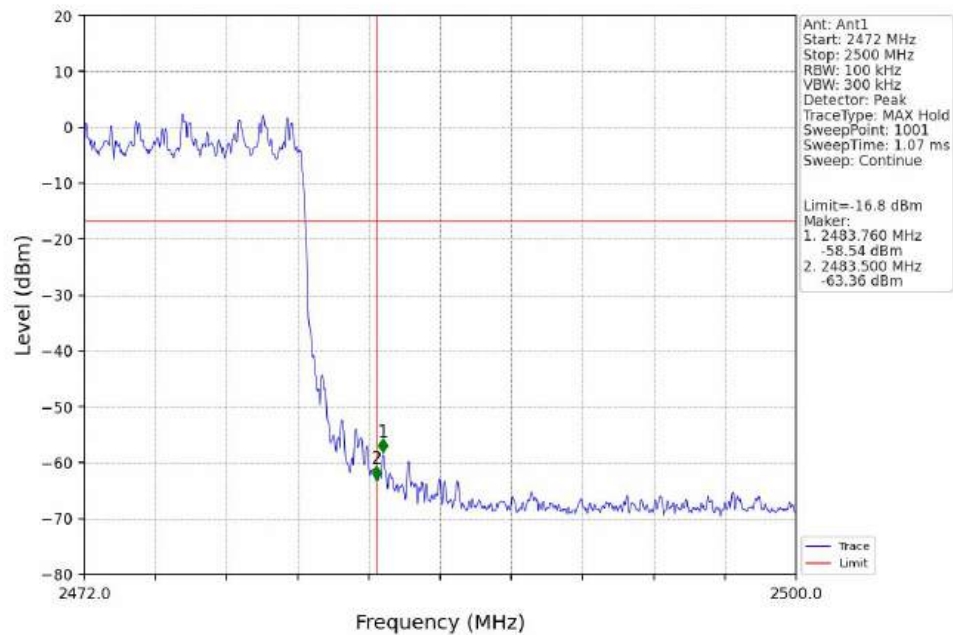
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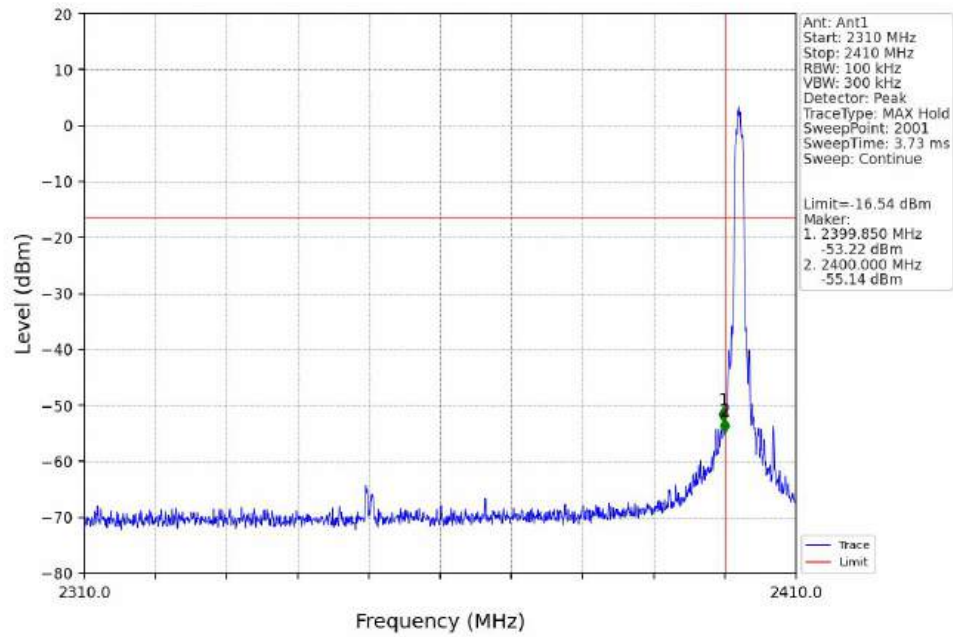
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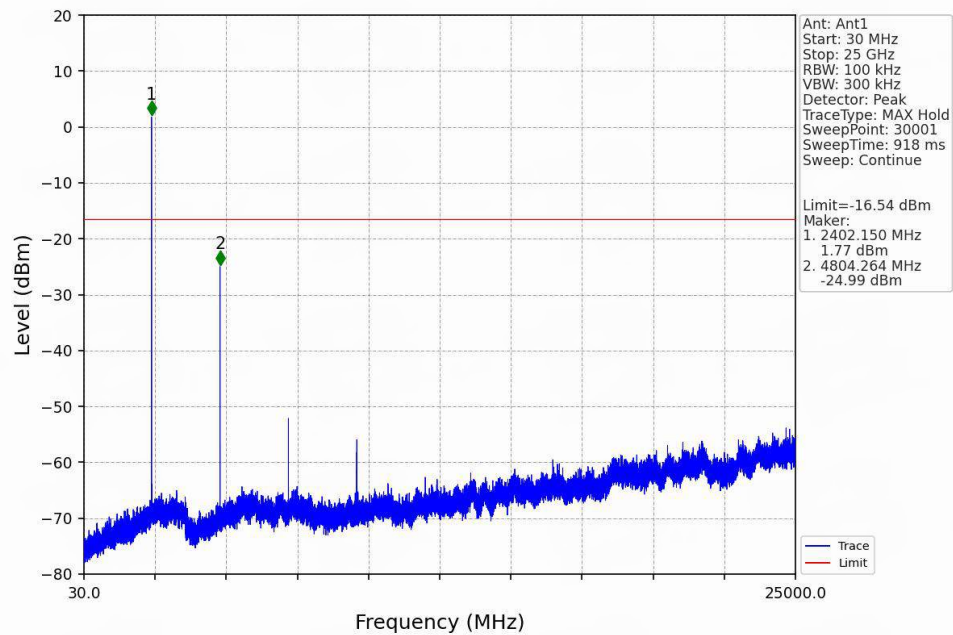
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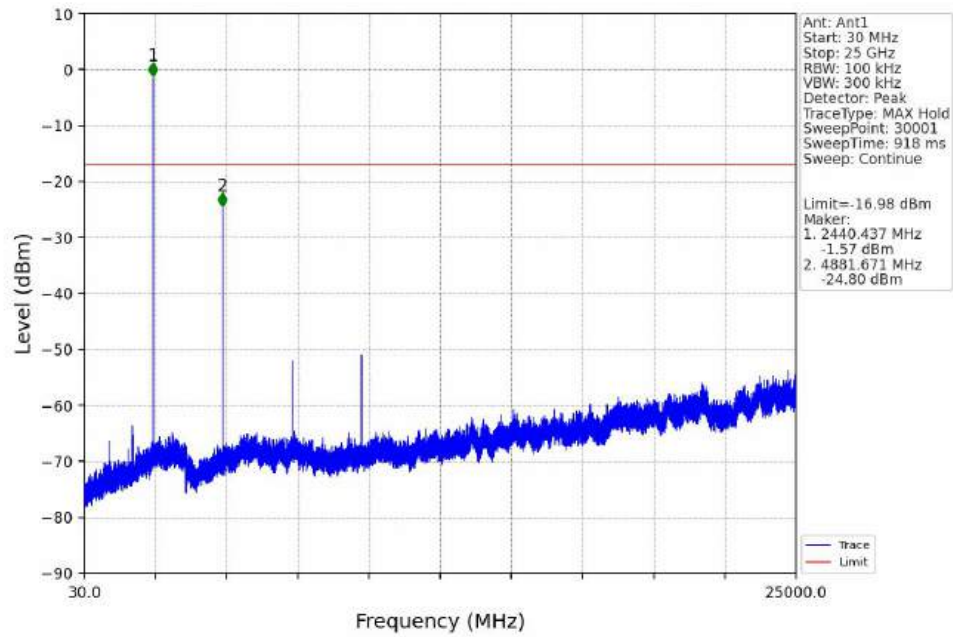
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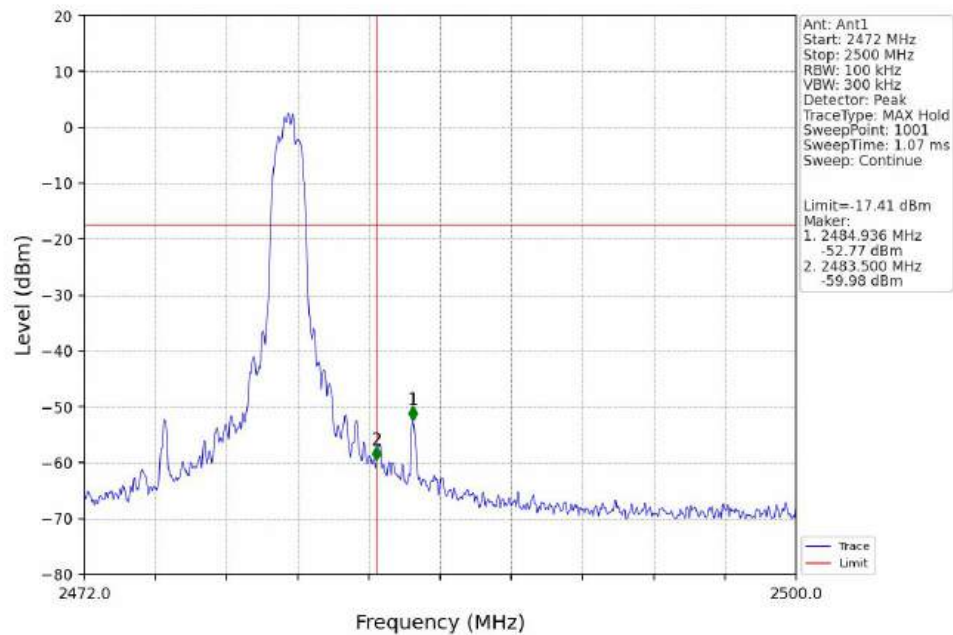
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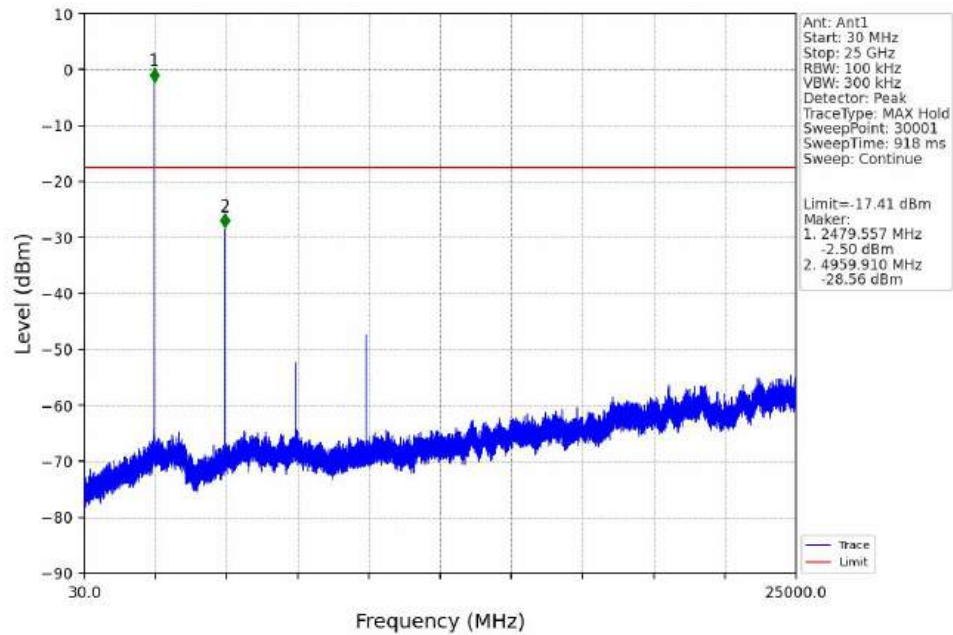
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8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV

