

FCC ID:2BQNI-8D8B

Applicant: Jinming Toys & Crafts Imp. & Exp. Co., Ltd.

Address: CHENGHAI DISTRICT SHANTOU CITY GUANGDONG PROVINCE CHINA

Manufacturer: HAO DAO LE TOY FACTORY

Address: CHENGHAI DISTRICT, SHANTOU, GUANGDONG PROVINCE, CHINA

Product Name: DJ Mixer Toys

Trade Mark: N/A

Model Number: 8D-8B
8D-18

Date of Receipt: Jul. 07, 2025

Test Date: Jul. 07, 2025 - Jul. 15, 2025

Date of Report: Jul. 15, 2025

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1
Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen,
China

Applicable Standards: FCC PART 15 C 15.247
ANSI C63.10:2013

1. Bandwidth

1.1 Test Result

1.1.1 OBW

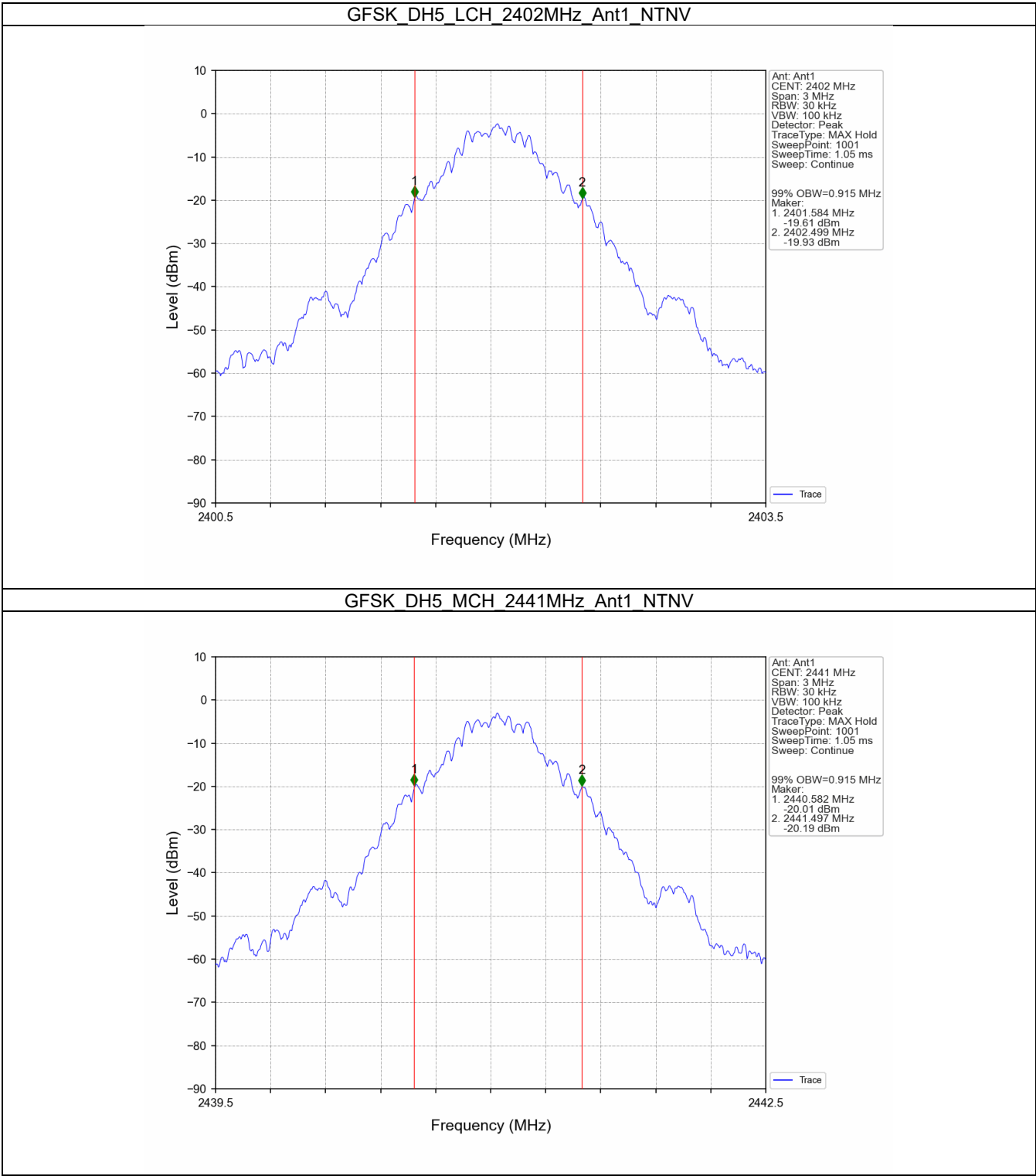
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.915	/	Pass
		2441	DH5	1	0.915	/	Pass
		2480	DH5	1	0.908	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.195	/	Pass
		2441	2DH5	1	1.199	/	Pass
		2480	2DH5	1	1.192	/	Pass

1.1.2 20dB BW

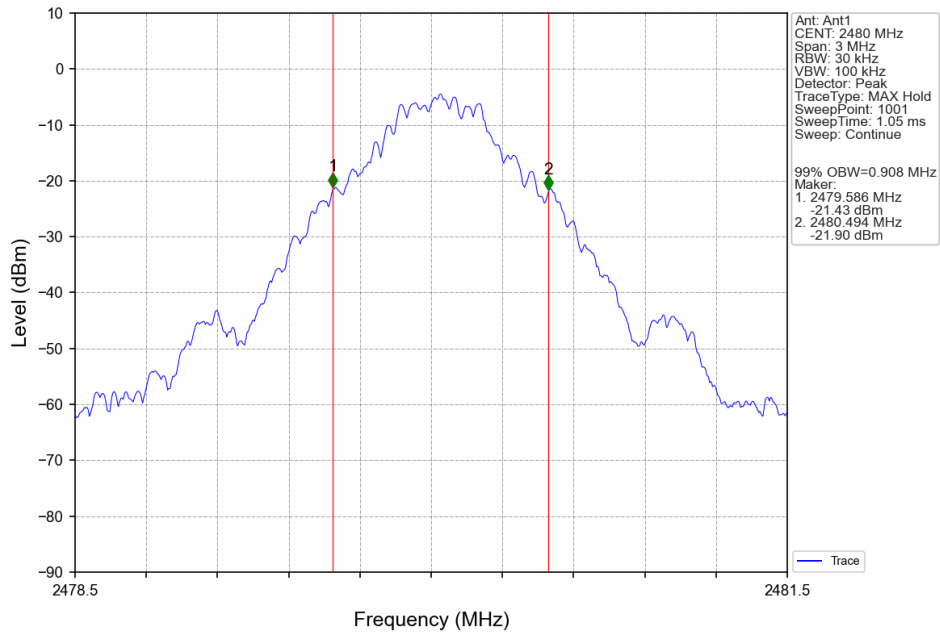
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	1.028	/	Pass
		2441	DH5	1	1.029	/	Pass
		2480	DH5	1	1.012	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.296	/	Pass
		2441	2DH5	1	1.325	/	Pass
		2480	2DH5	1	1.298	/	Pass

1.2 Test Graph

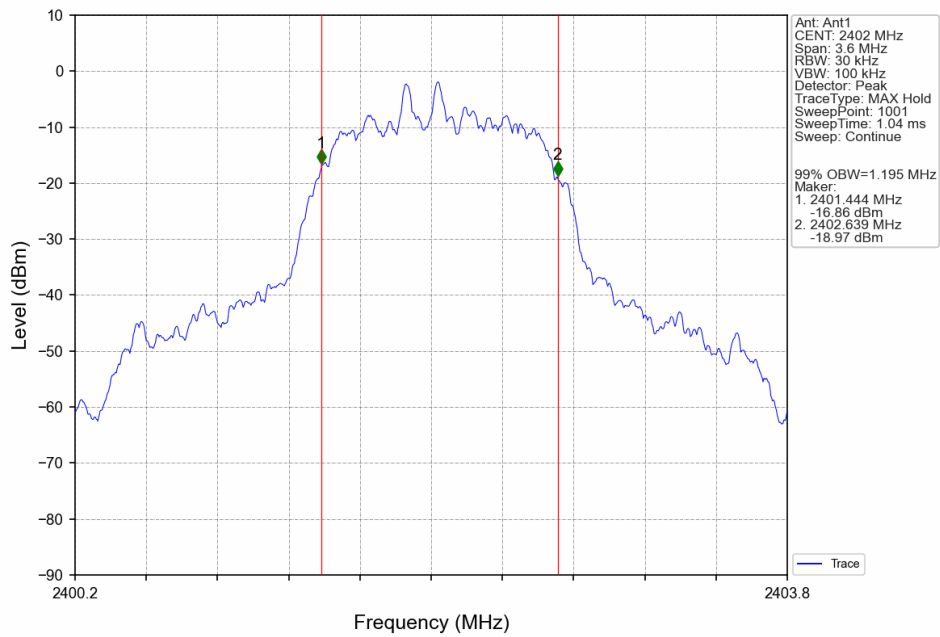
1.2.1 OBW



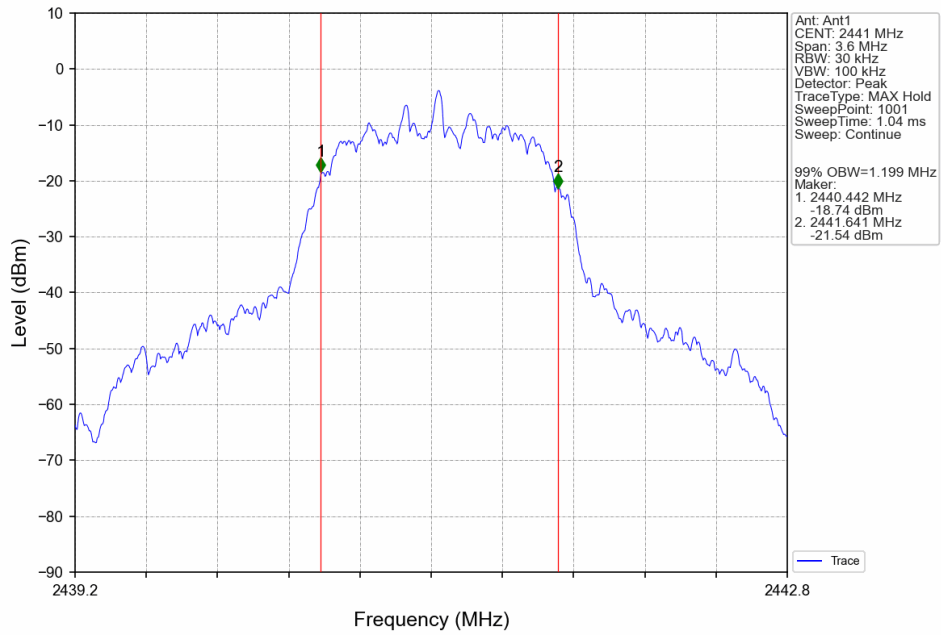
GFSK DH5_HCH_2480MHz_Ant1_NTNV



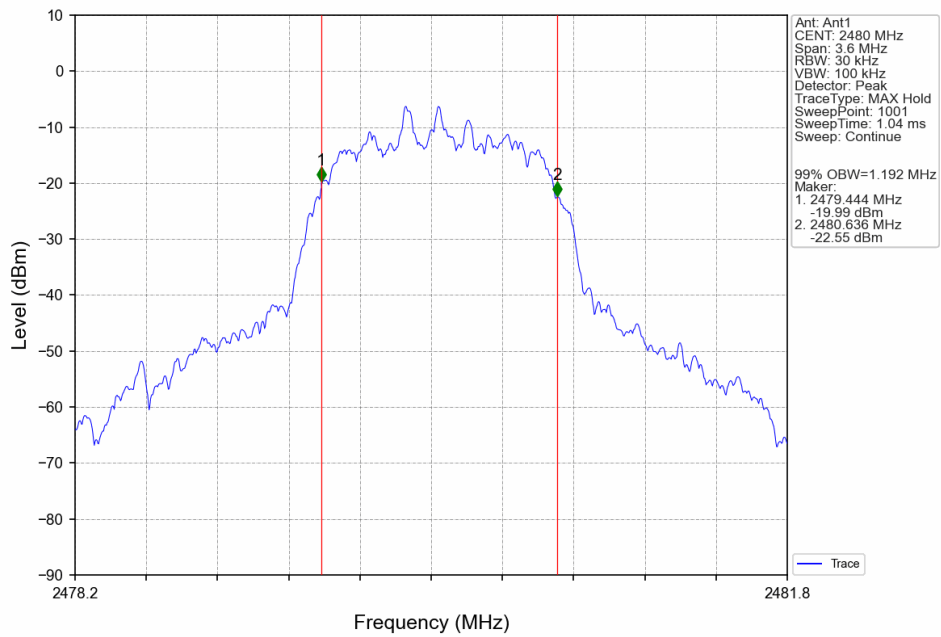
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



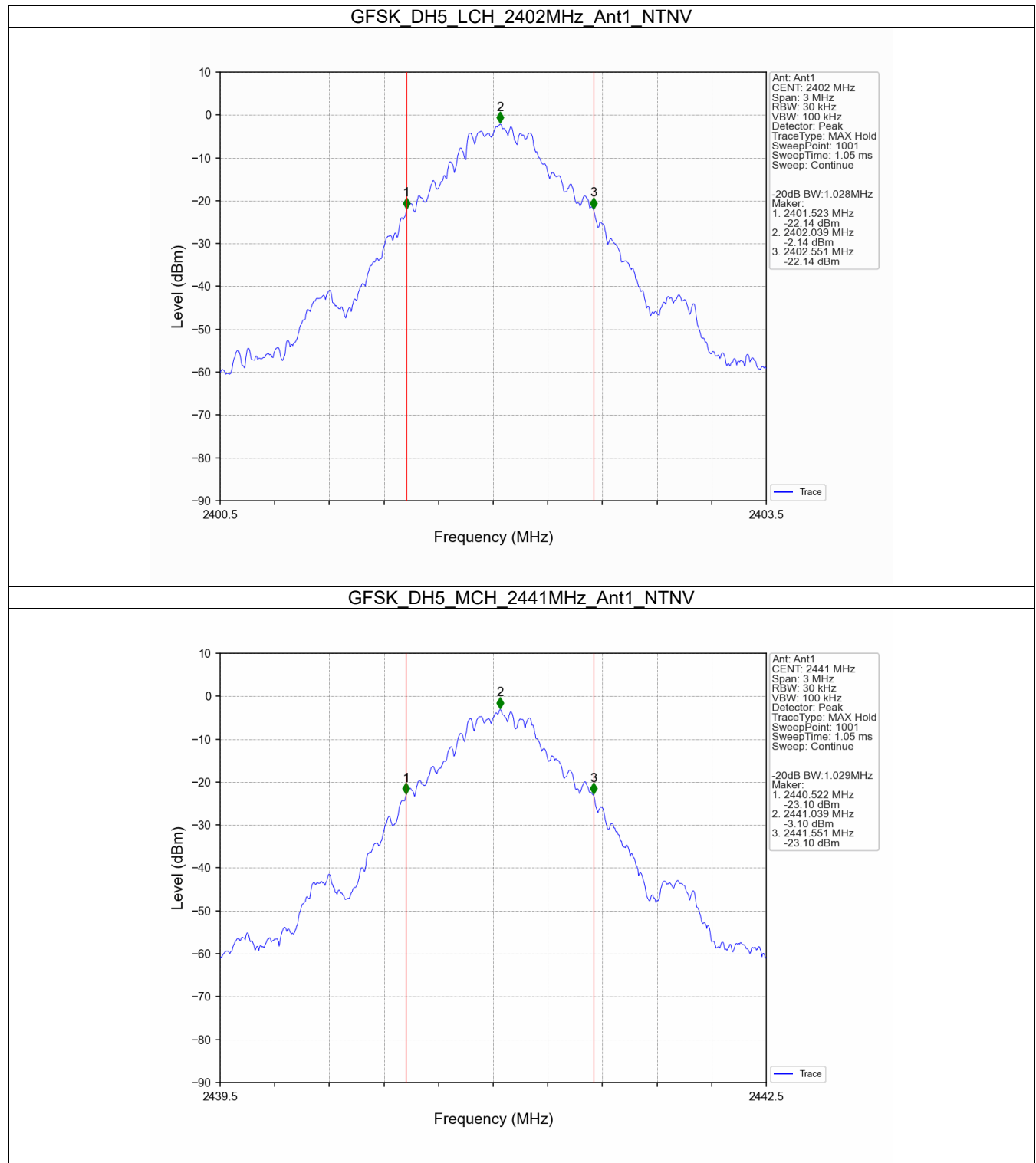
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



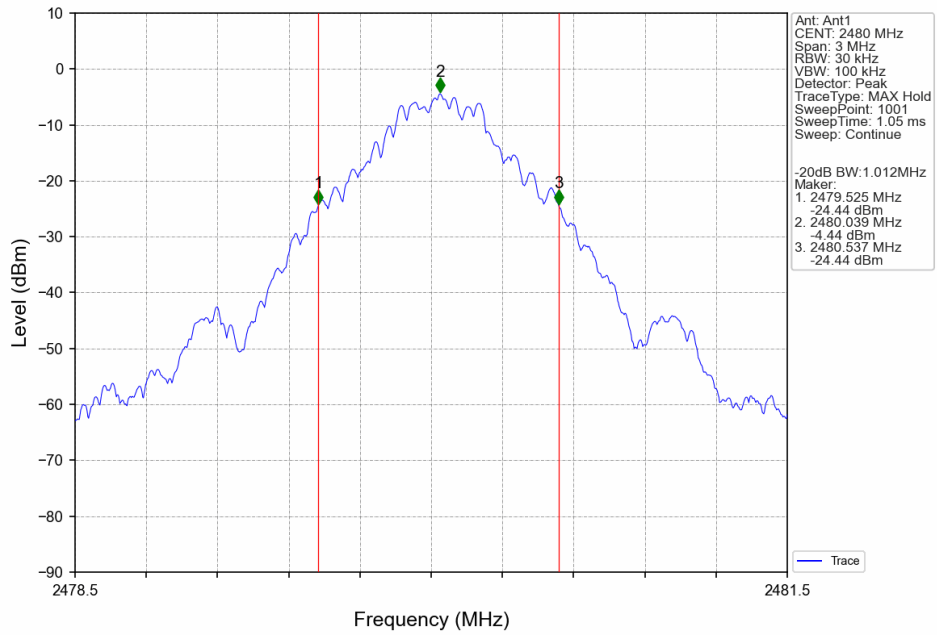
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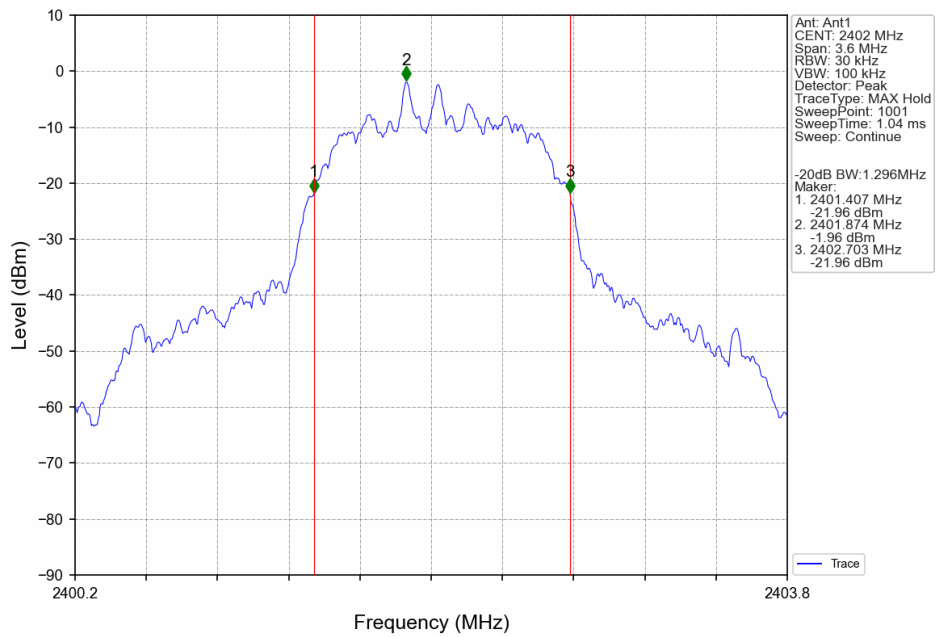
1.2.2 20dB BW



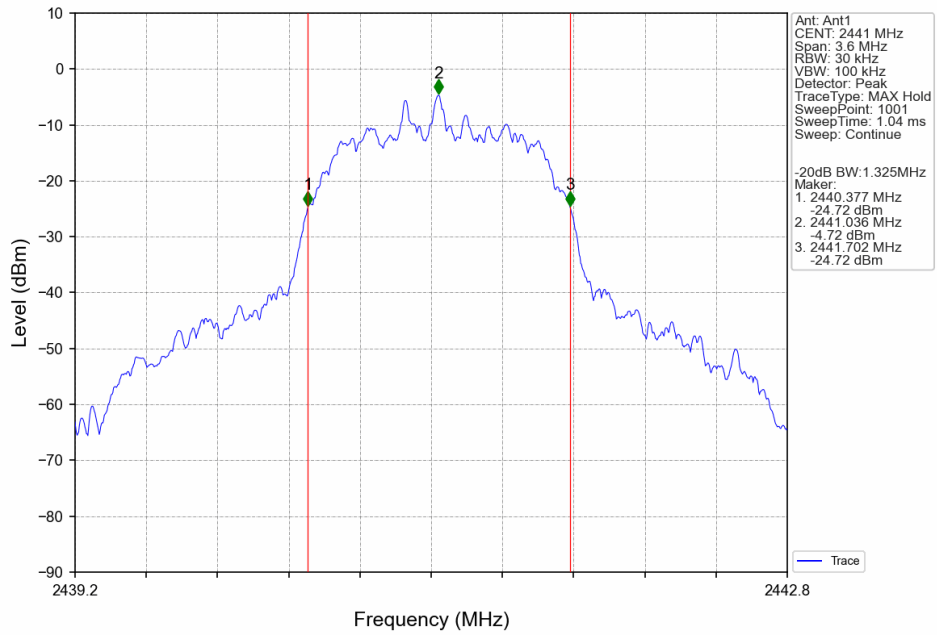
GFSK DH5_HCH_2480MHz_Ant1_NTNV



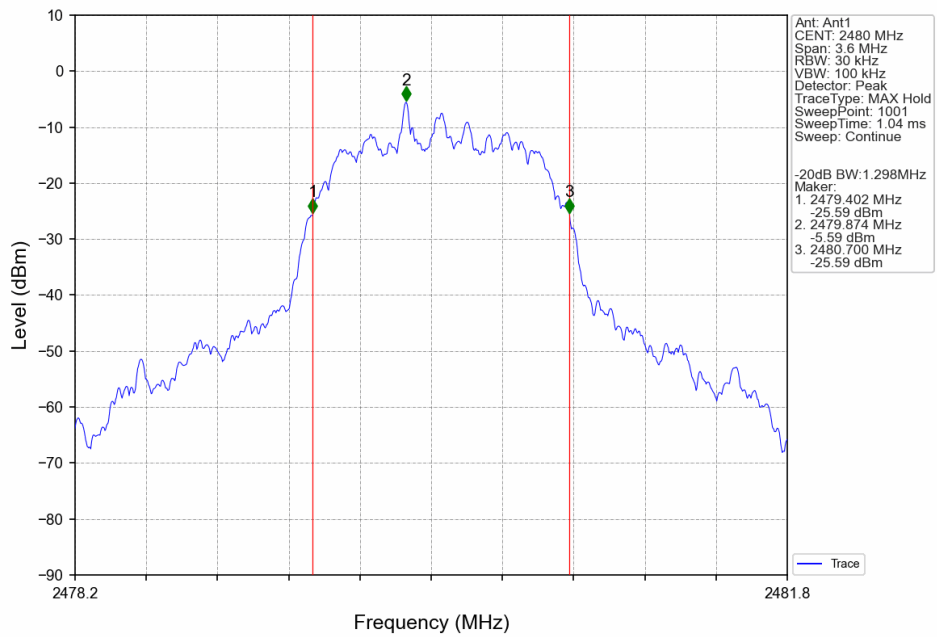
PI/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



2. Maximum Conducted Output Power

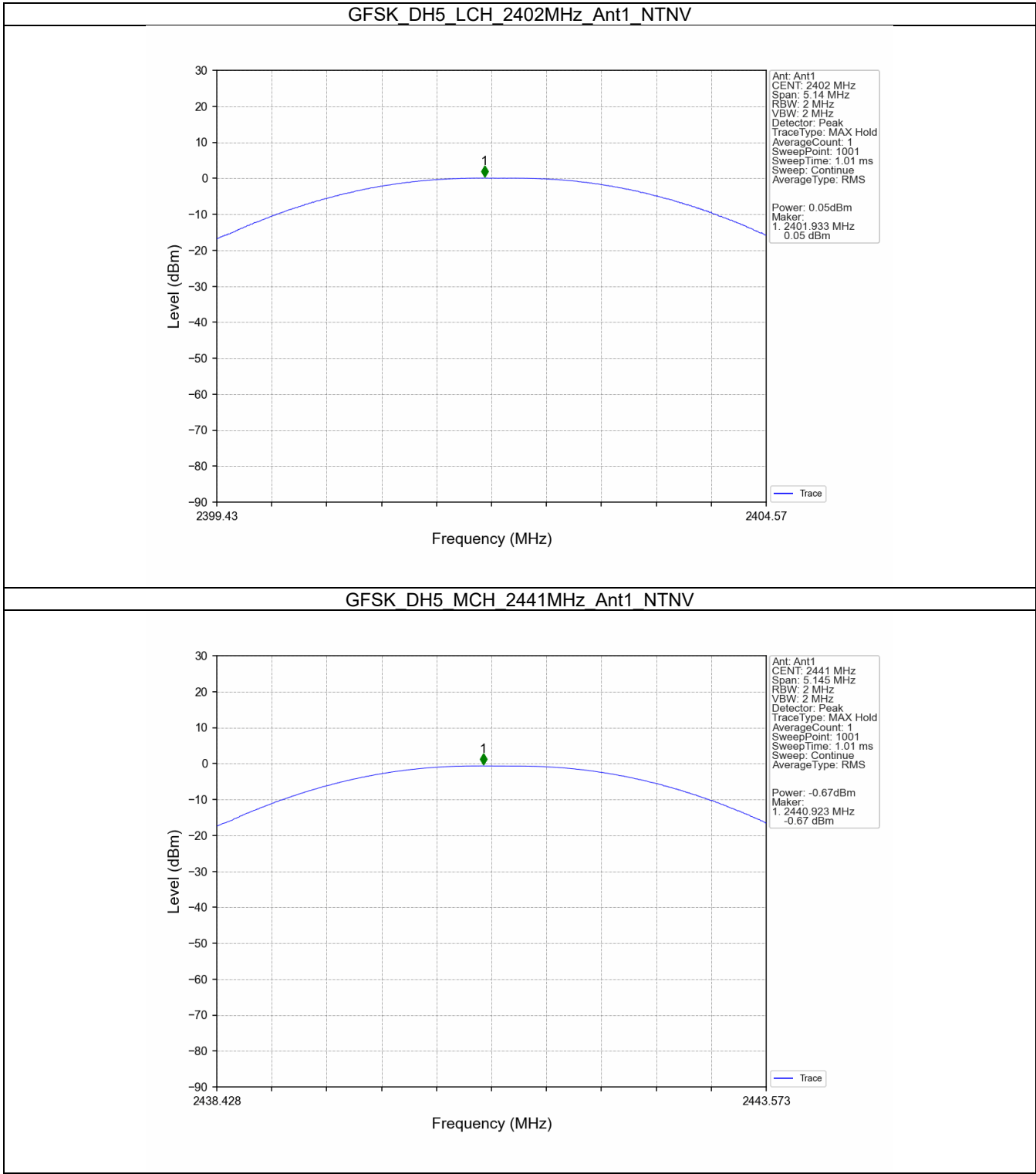
2.1 Test Result

2.1.1 Power

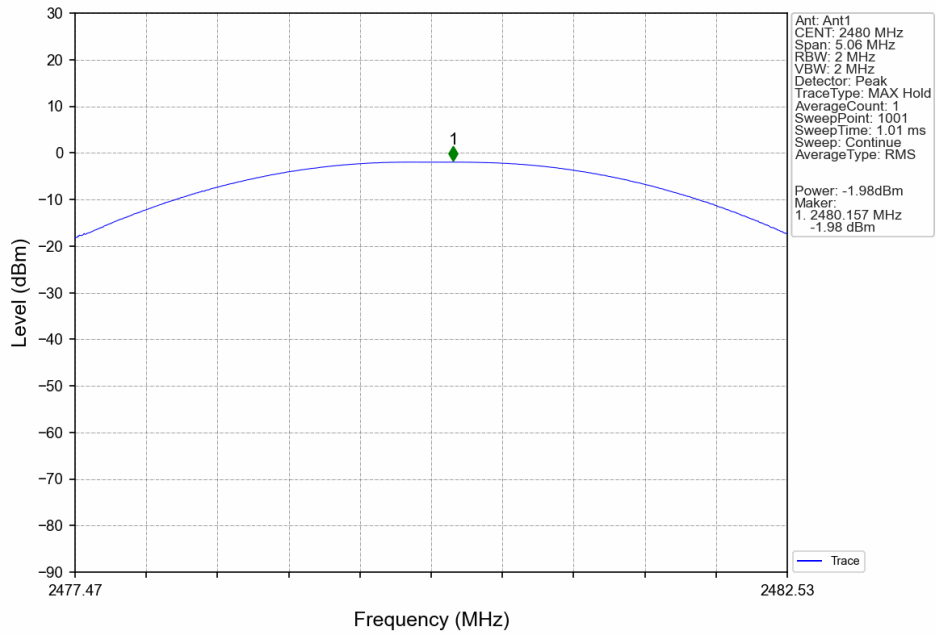
Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	0.05	<=20.97	Pass
		2441	DH5	-0.67	<=20.97	Pass
		2480	DH5	-1.98	<=20.97	Pass
Pi/4DQPSK	SISO	2402	2DH5	1.85	<=20.97	Pass
		2441	2DH5	-0.71	<=20.97	Pass
		2480	2DH5	-1.00	<=20.97	Pass
Note1: Antenna Gain: Ant1: 2.499dBi;						

2.2 Test Graph

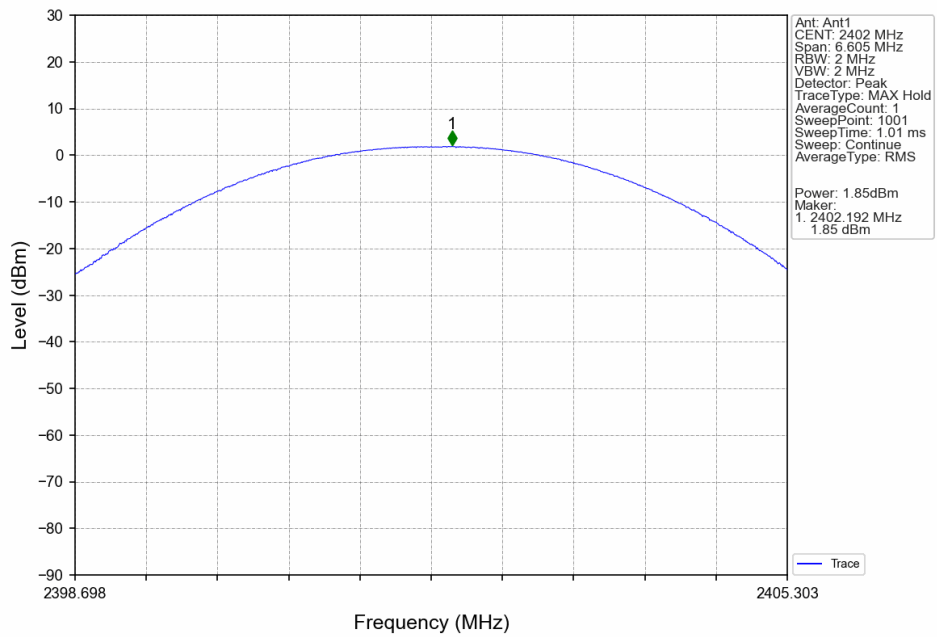
2.2.1 Power



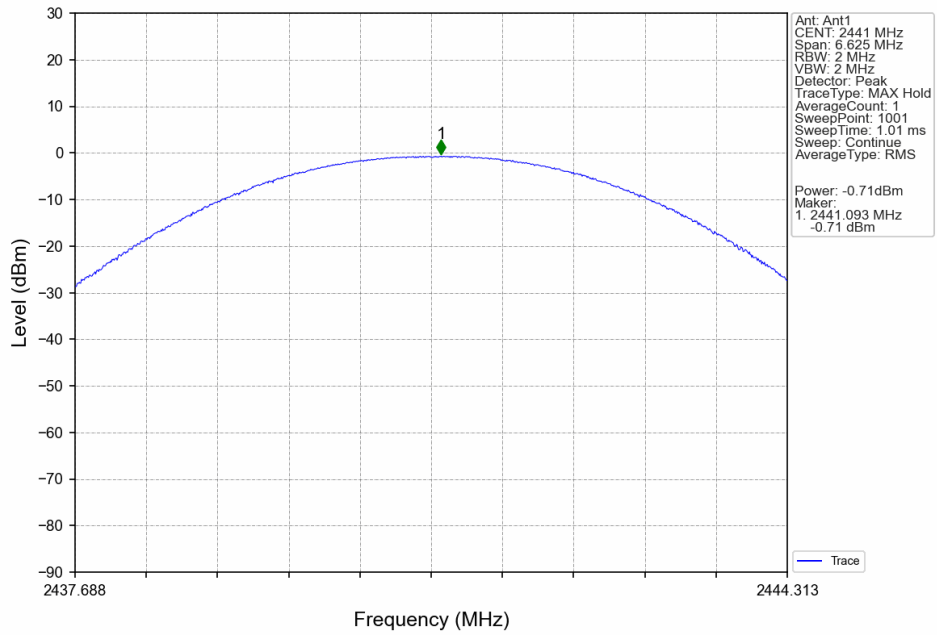
GFSK DH5_HCH_2480MHz_Ant1_NTNV



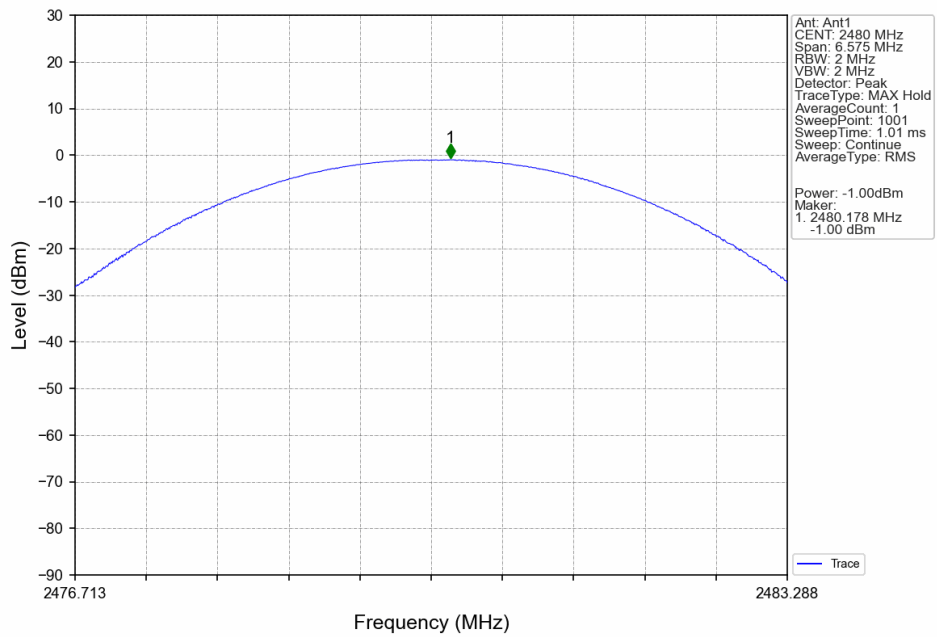
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



3. Carrier Frequency Separation

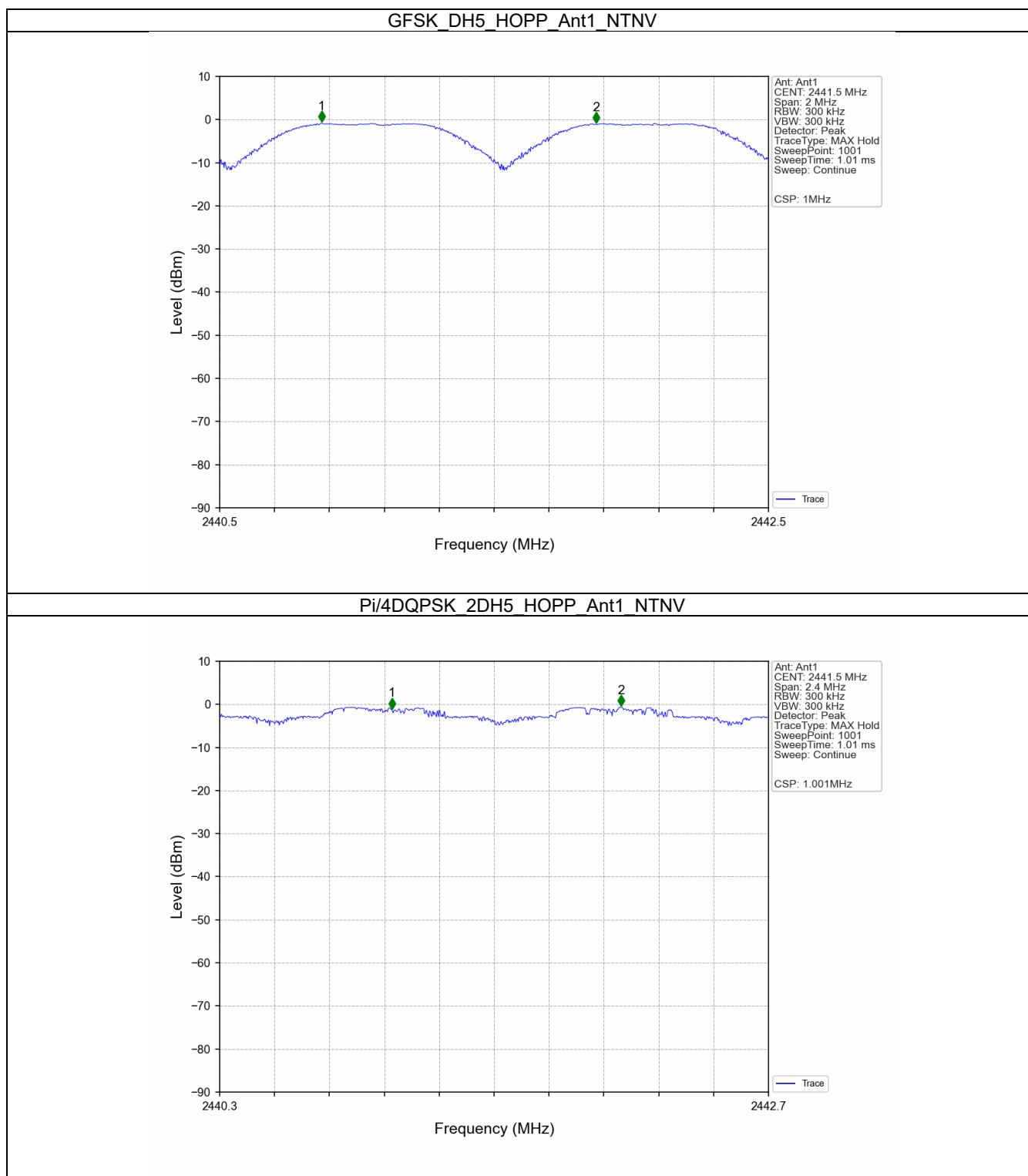
3.1 Test Result

3.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.000	1.029	≥ 0.686	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.001	1.321	≥ 0.881	Pass

3.2 Test Graph

3.2.1 Ant1



4. Number of Hopping Frequencies

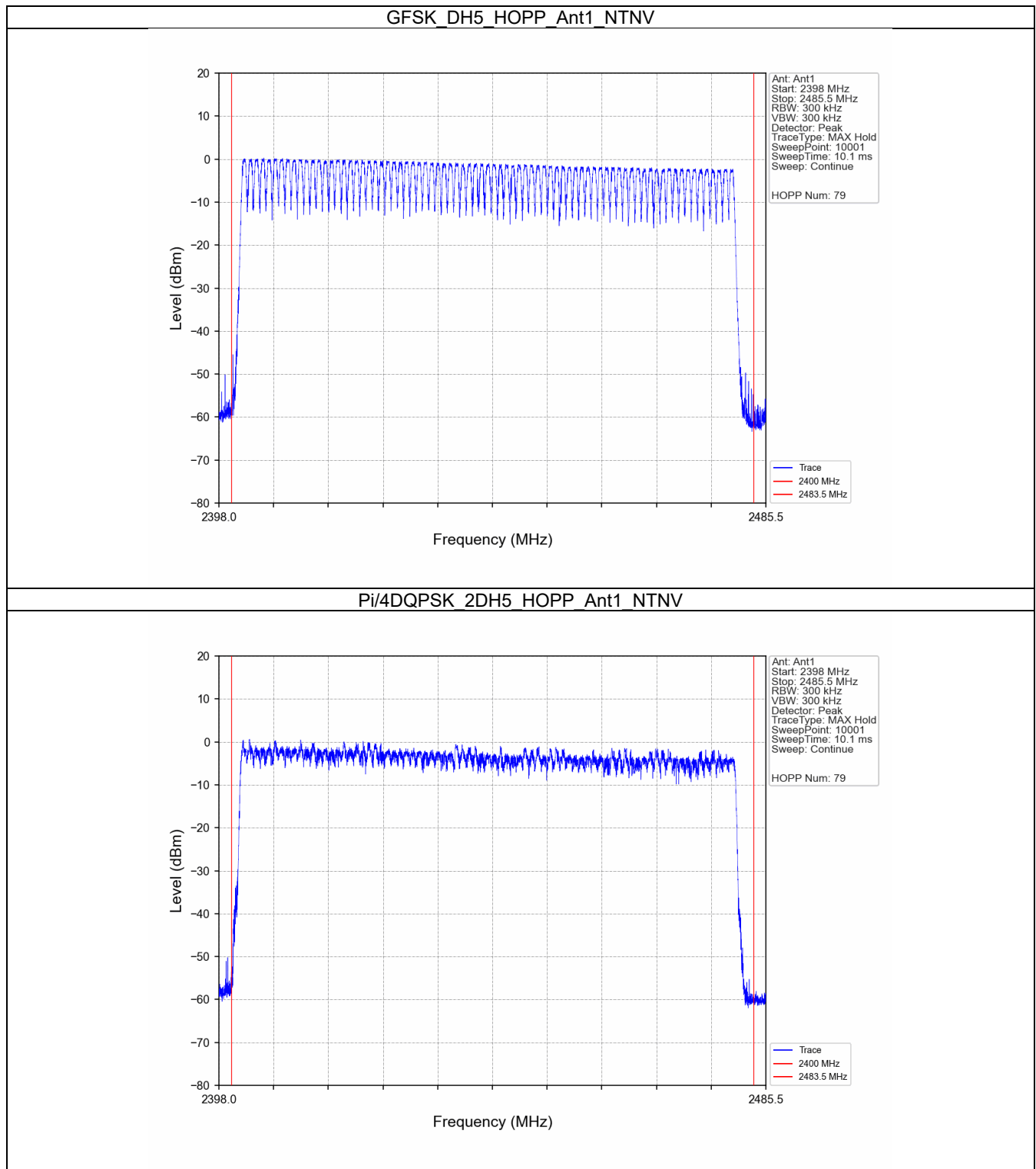
4.1 Test Result

4.1.1 HoppNum

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

4.2 Test Graph

4.2.1 HoppNum



5. Time of Occupancy (Dwell Time)

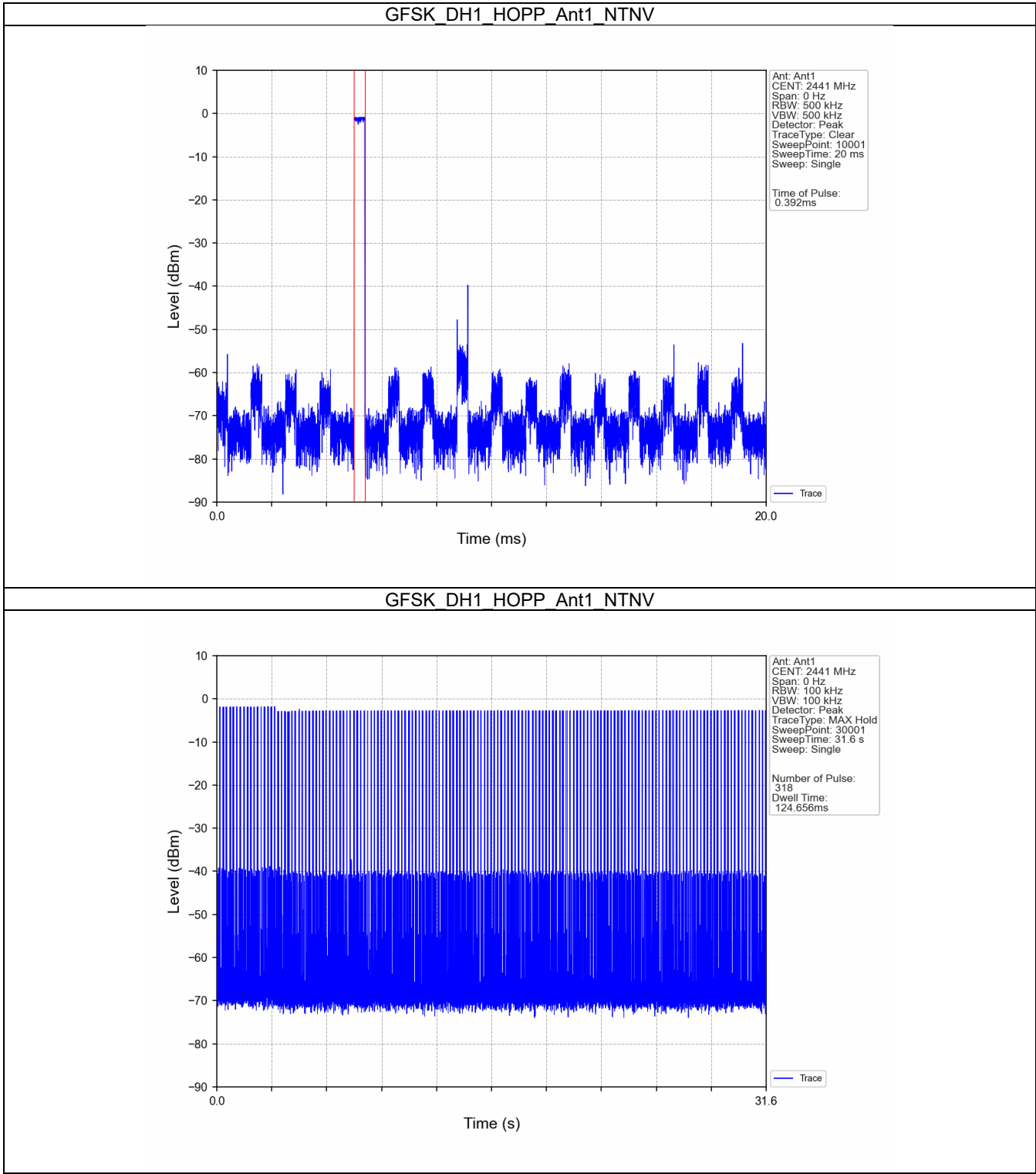
5.1 Test Result

5.1.1 Ant1

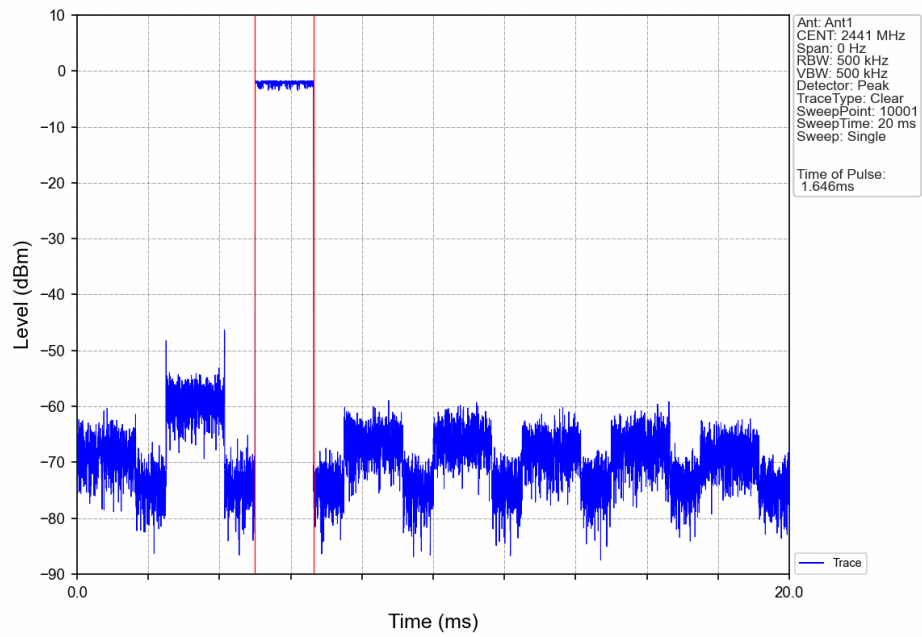
Ant1									
Mode	Tx Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.392	31.600	318	124.656	<=400	Pass
			DH3	1.646	31.600	157	258.422	<=400	Pass
			DH5	2.898	31.600	105	304.290	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.394	31.600	319	125.686	<=400	Pass
			2DH3	1.652	31.600	171	282.492	<=400	Pass
			2DH5	2.902	31.600	106	307.612	<=400	Pass

5.2 Test Graph

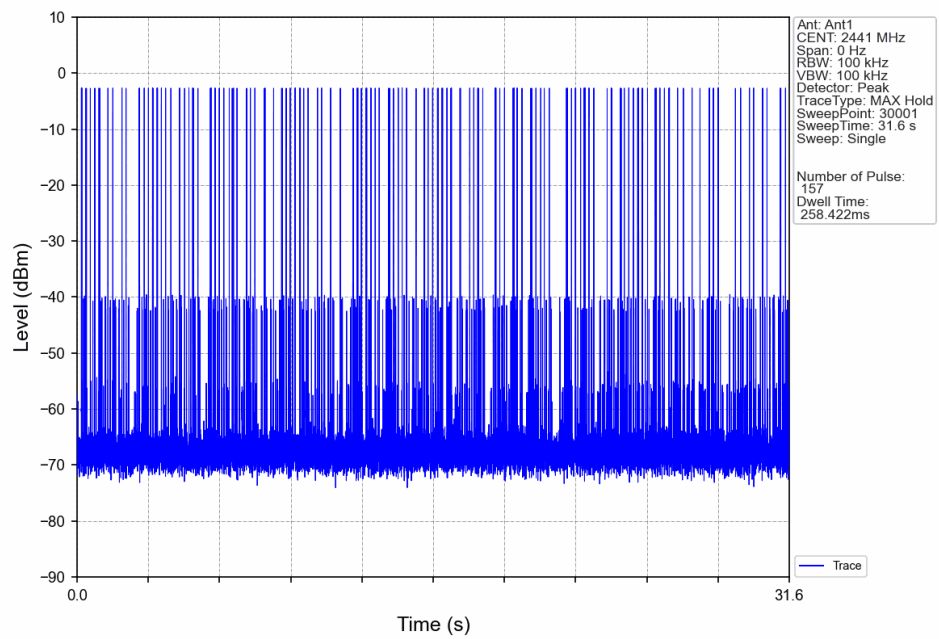
5.2.1 Ant1



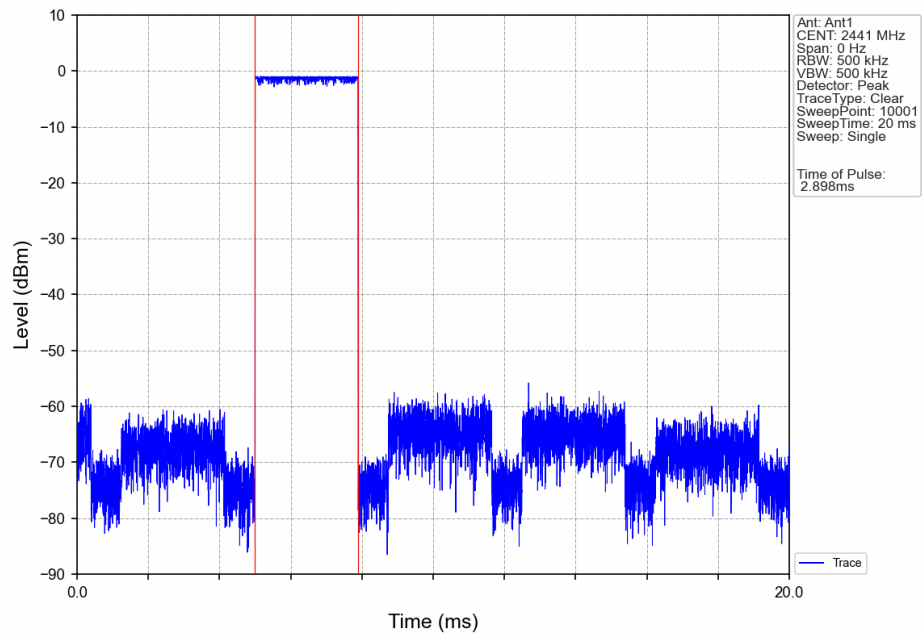
GFSK_DH3_HOPP_Ant1_NTNV



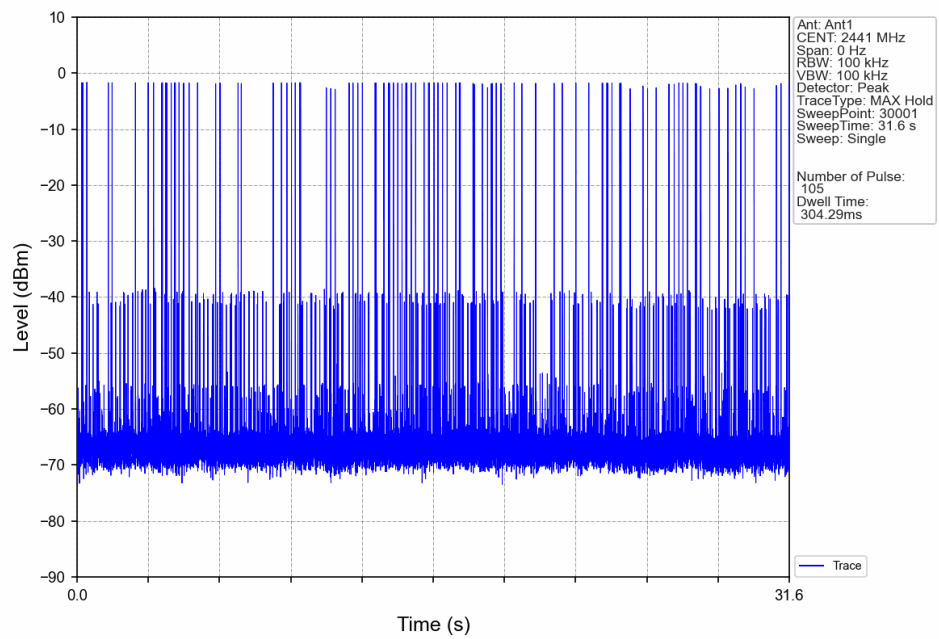
GFSK_DH3_HOPP_Ant1_NTNV



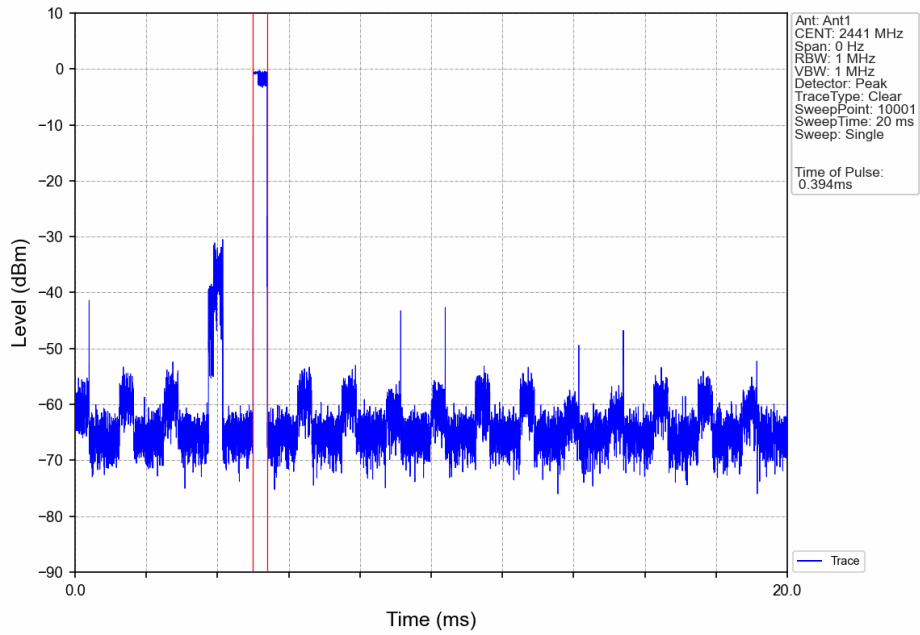
GFSK_DH5_HOPP_Ant1_NTNV



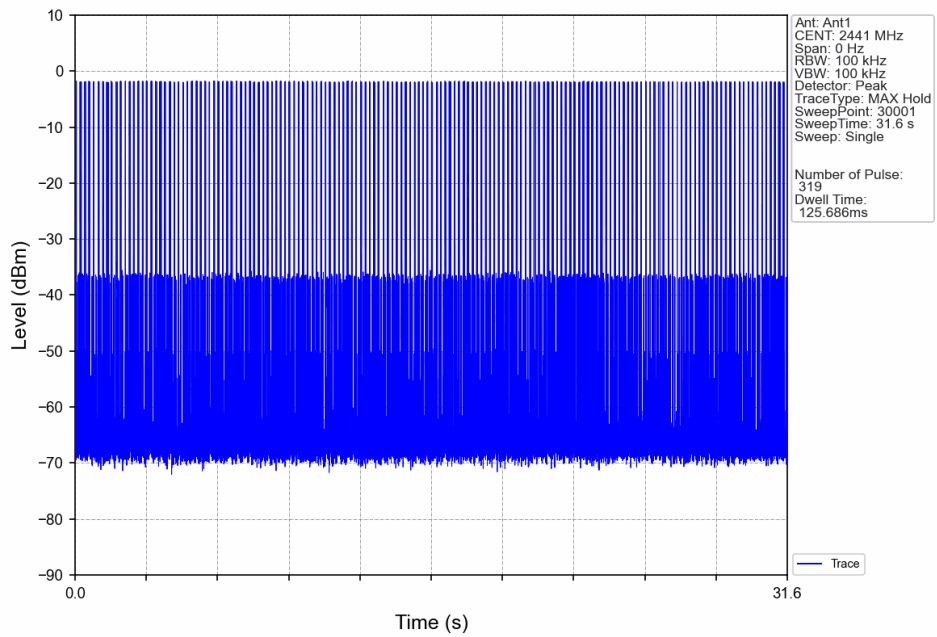
GFSK_DH5_HOPP_Ant1_NTNV



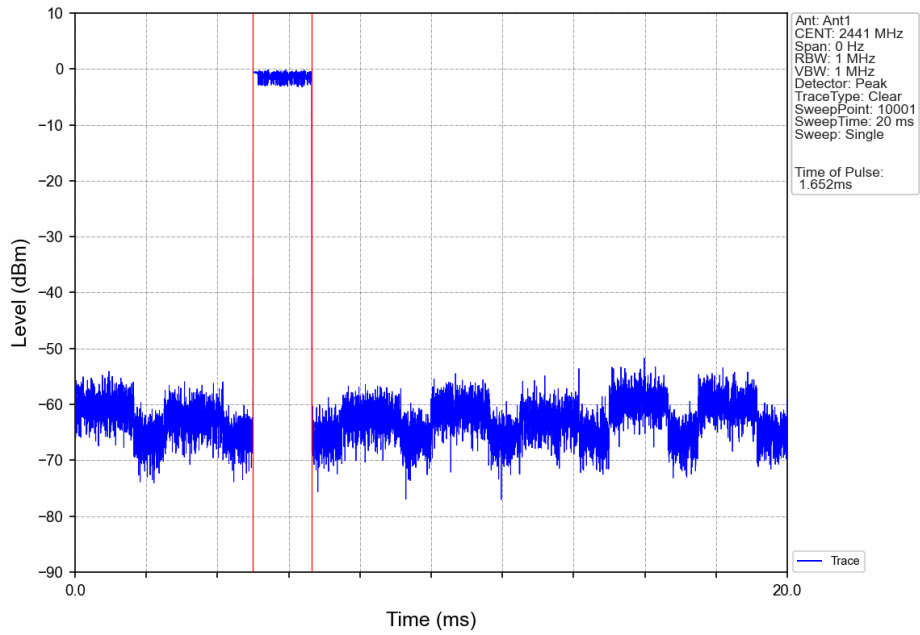
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



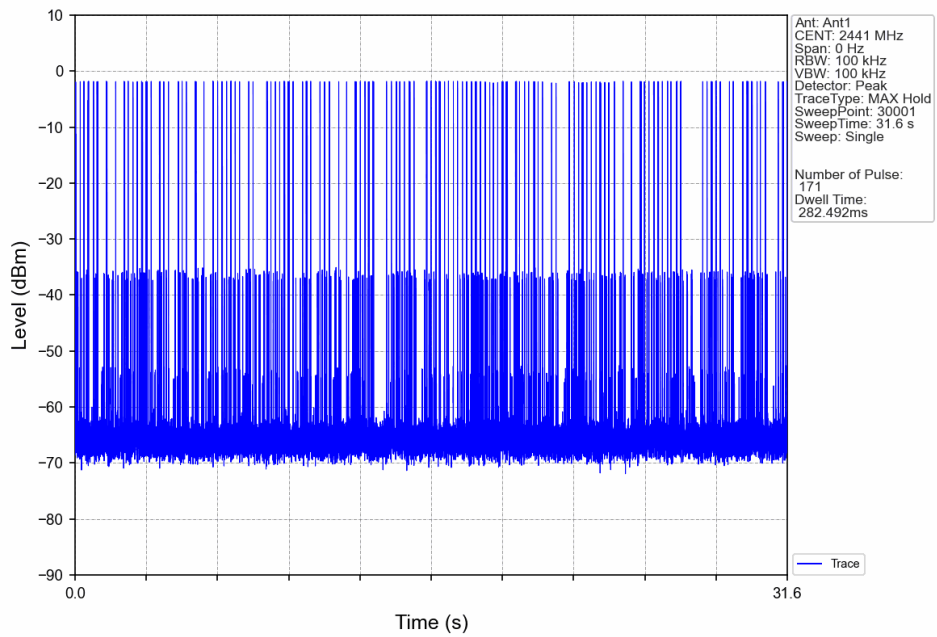
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



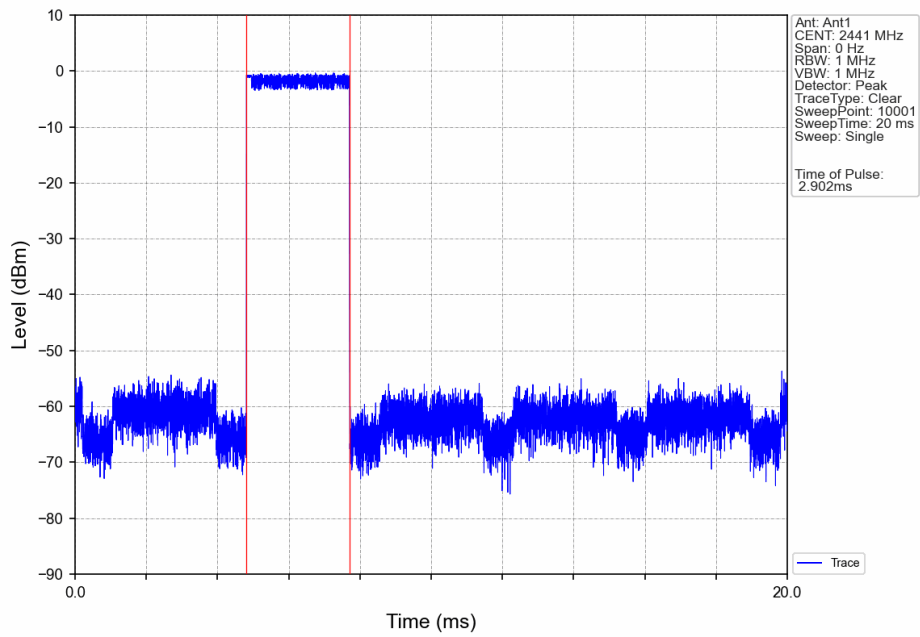
Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



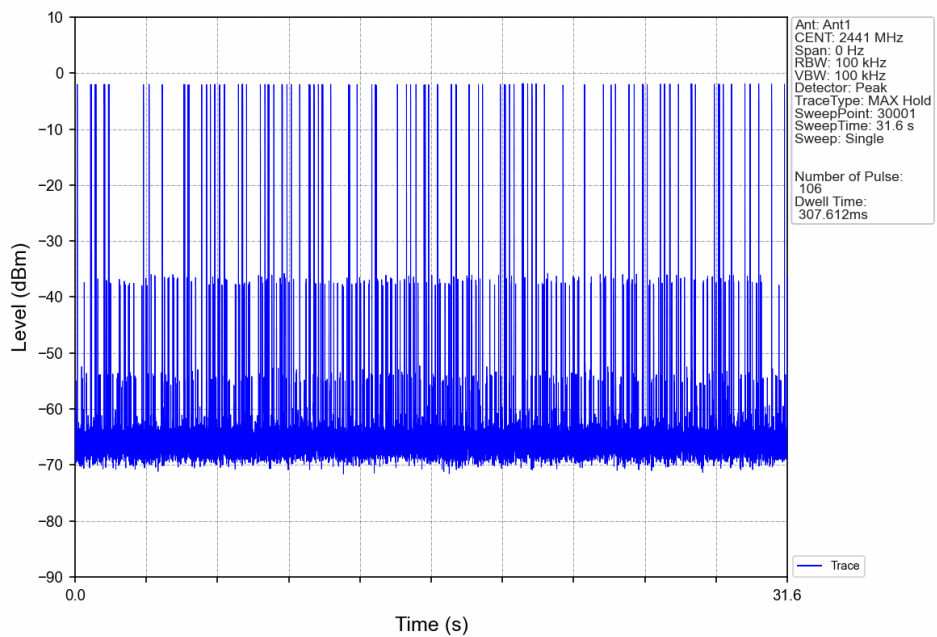
Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Test Result

6.1.1 Ref

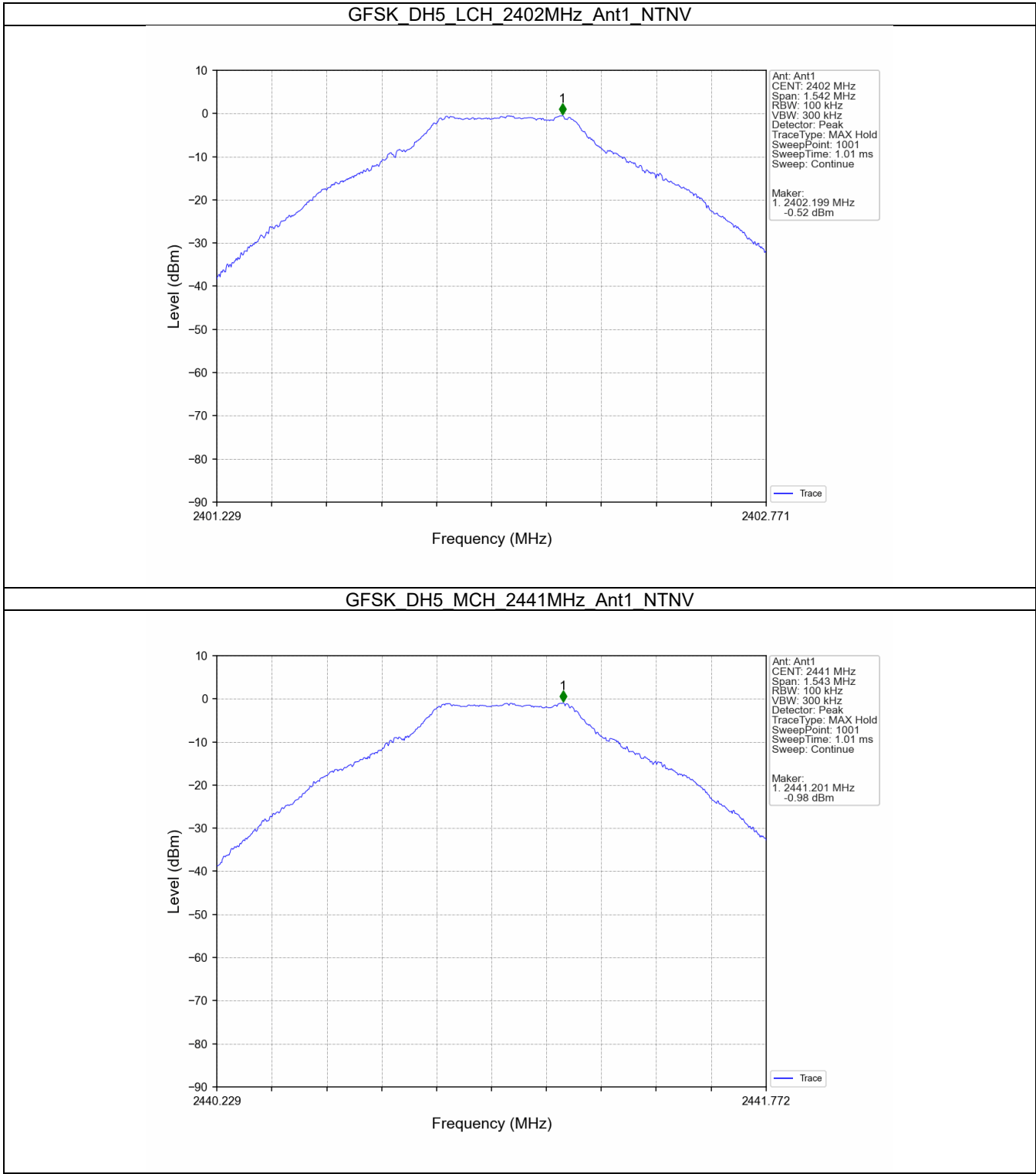
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	-0.52
		2441	DH5	1	-0.98
		2480	DH5	1	-2.33
		HOPP	DH5	1	-0.46
					-0.46
Pi/4DQPSK	SISO	2402	2DH5	1	0.15
		2441	2DH5	1	-1.81
		2480	2DH5	1	-2.91
		HOPP	2DH5	1	-0.60
					-0.60
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.					

6.1.2 CSE

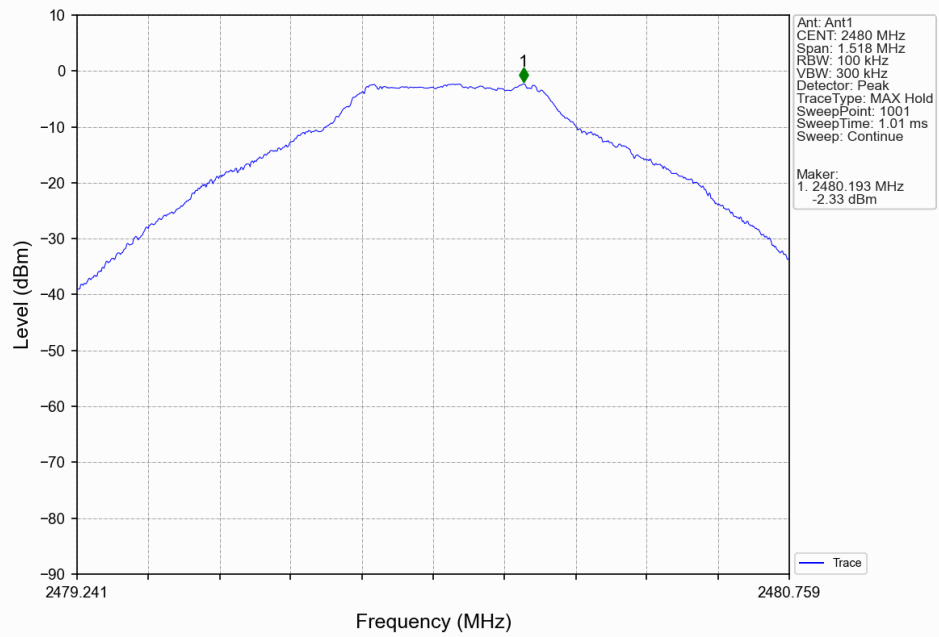
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	-0.52	-20.52	Pass
		2441	DH5	1	-0.98	-20.98	Pass
		2480	DH5	1	-2.33	-22.33	Pass
		HOPP	DH5	1	-0.46	-20.46	Pass
					-0.46	-20.46	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	0.15	-19.85	Pass
		2441	2DH5	1	-1.81	-21.81	Pass
		2480	2DH5	1	-2.91	-22.91	Pass
		HOPP	2DH5	1	-0.60	-20.60	Pass
					-0.60	-20.60	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 Test Graph

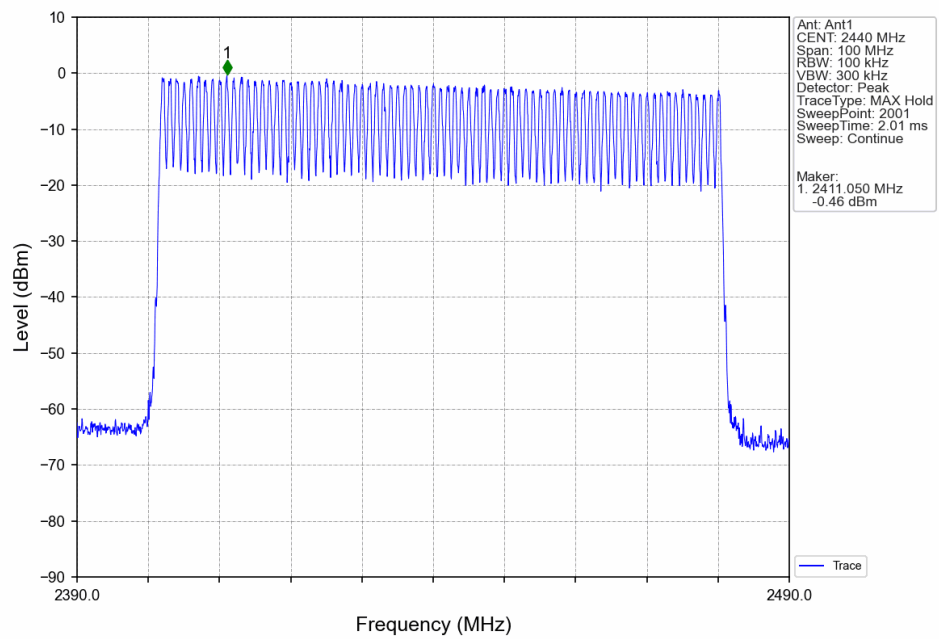
6.2.1 Ref



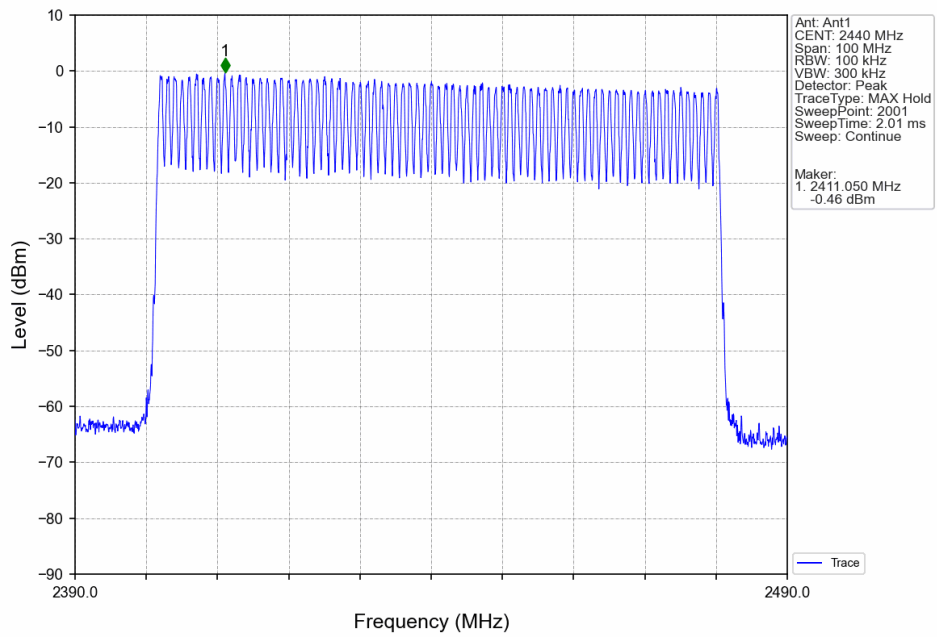
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



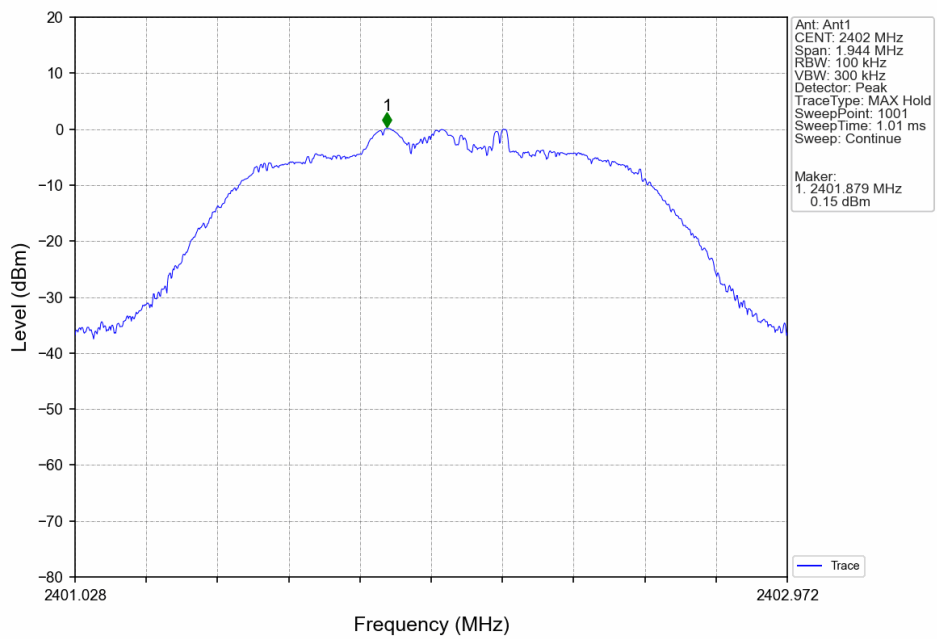
GFSK_DH5_HOPP_Ant1_NTNV



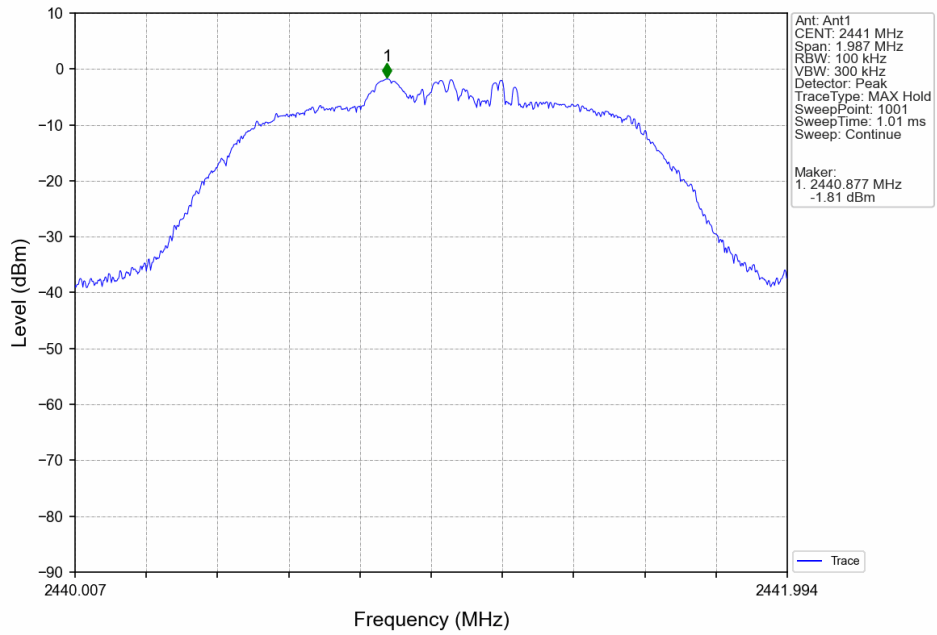
GFSK_DH5_HOPP_Ant1_NTNV



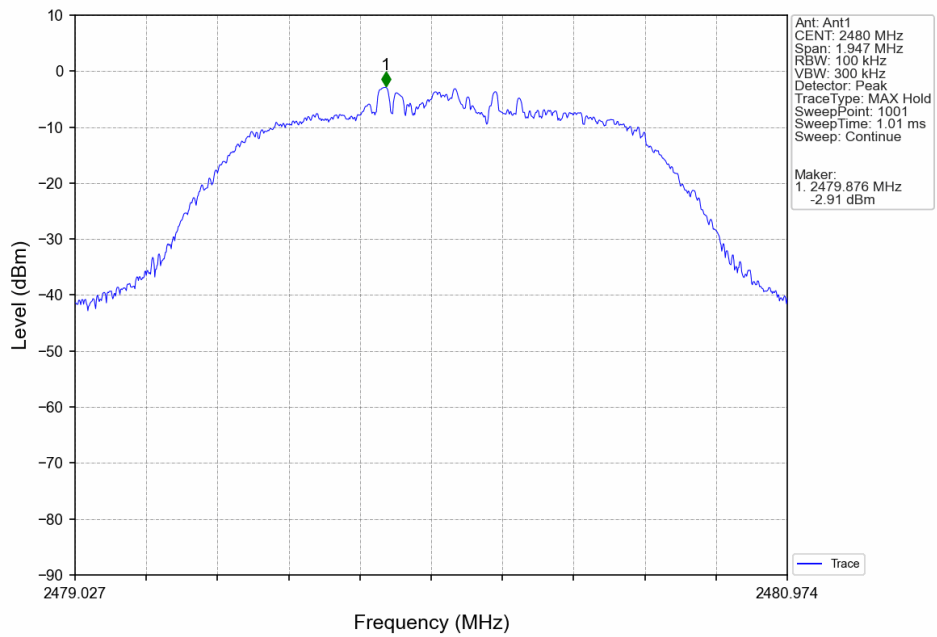
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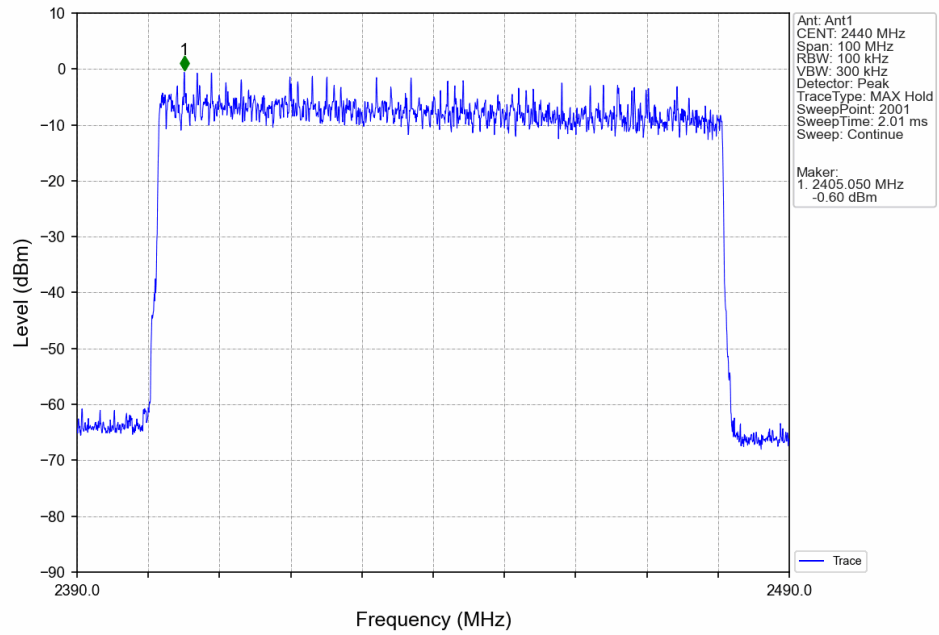
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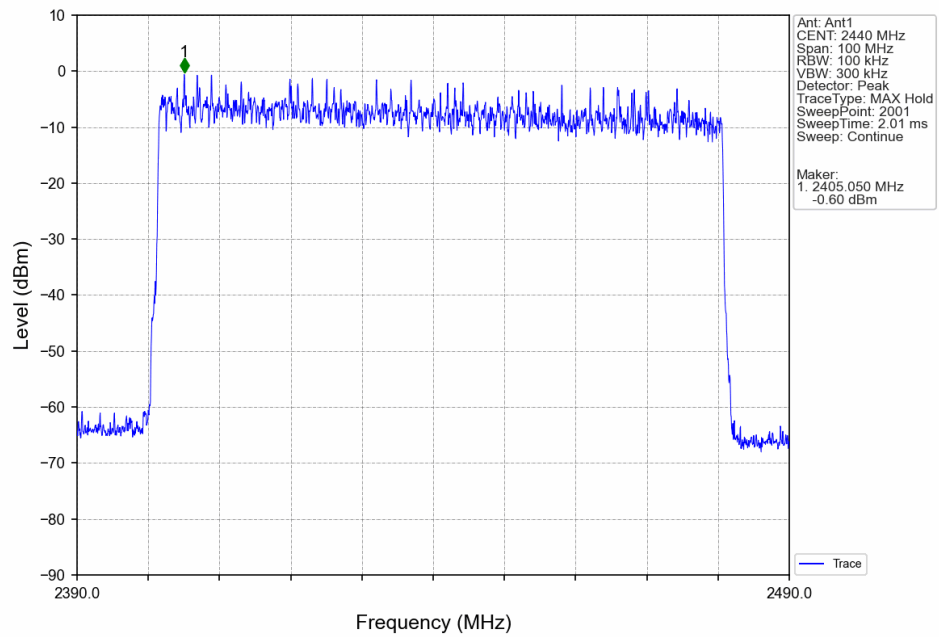
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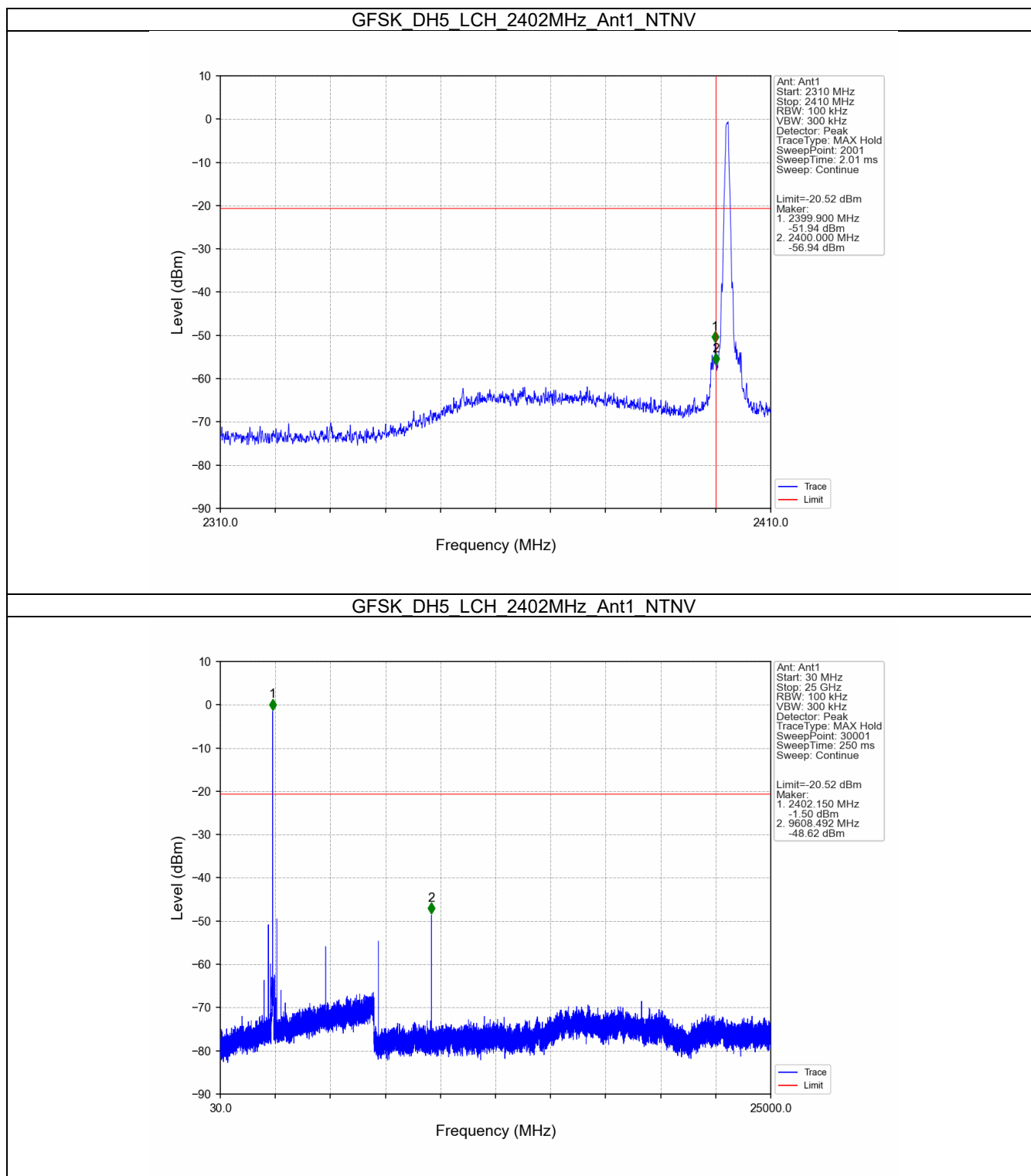
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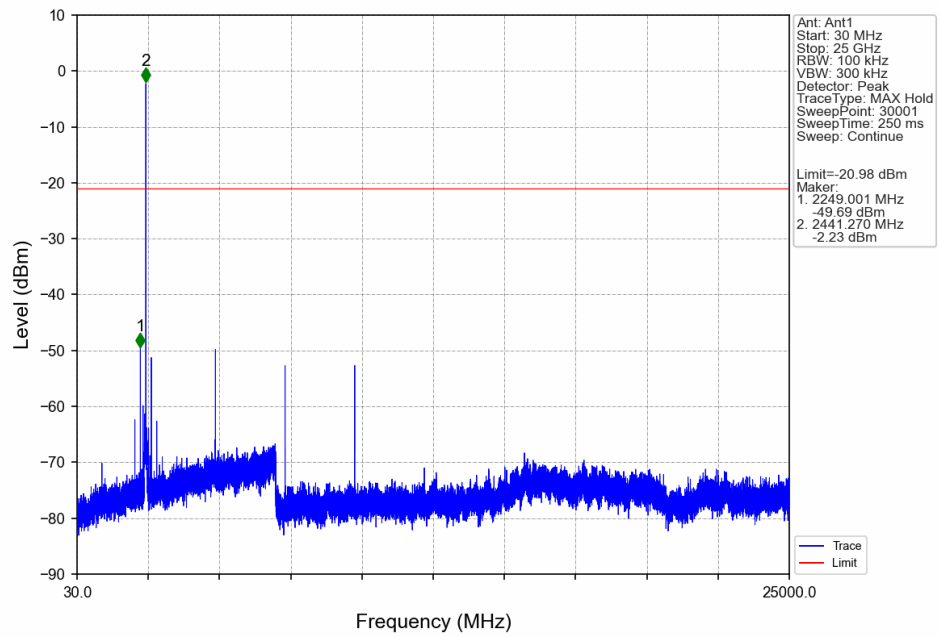
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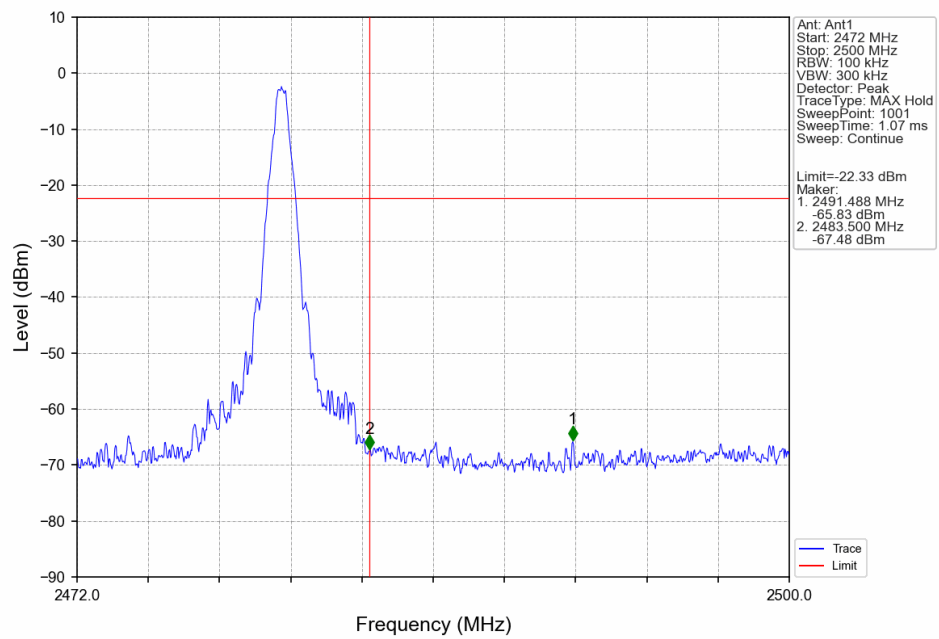
6.2.2 CSE



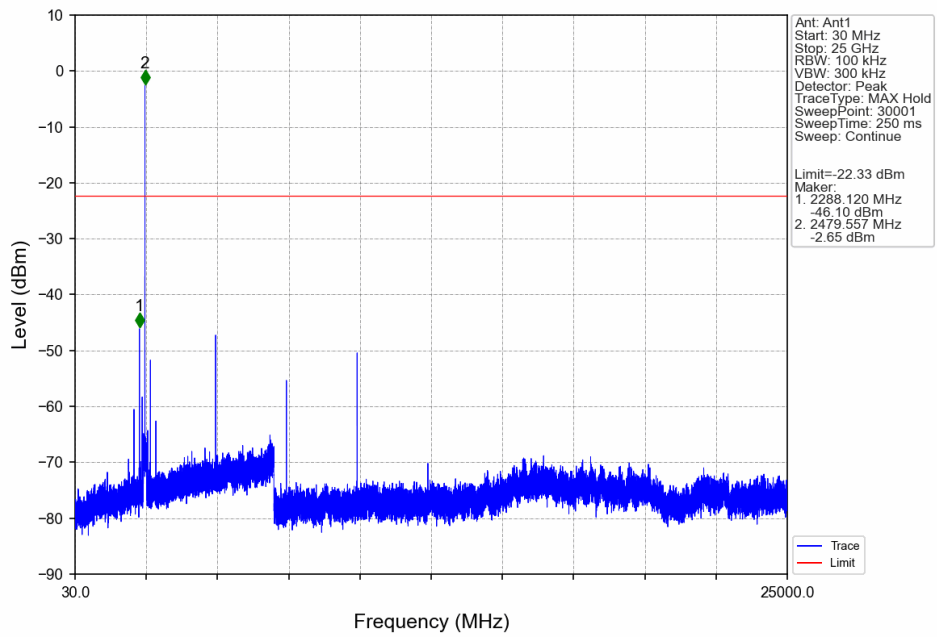
GFSK_DH5_MCH_2441MHz_Ant1_NTNV



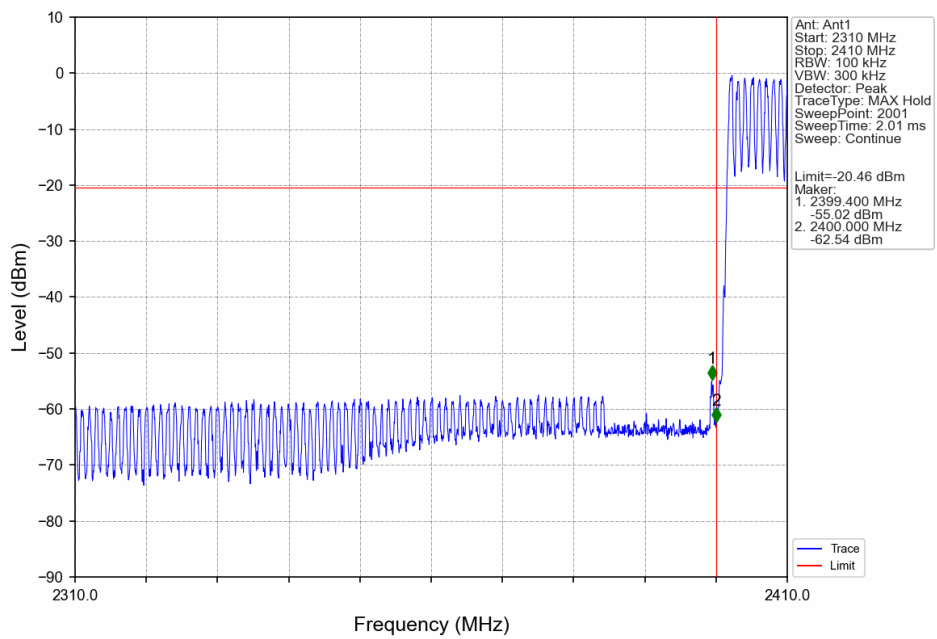
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



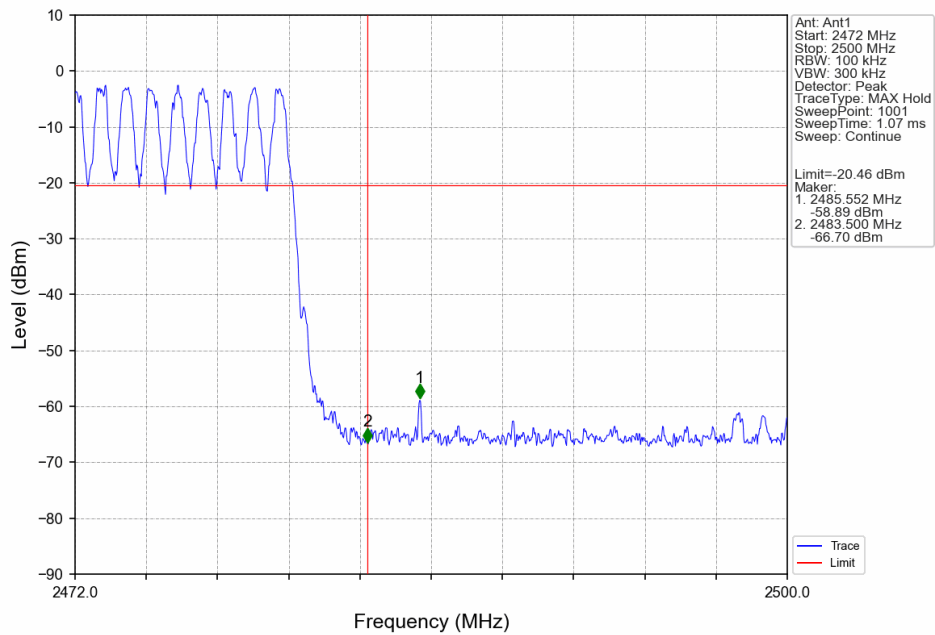
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



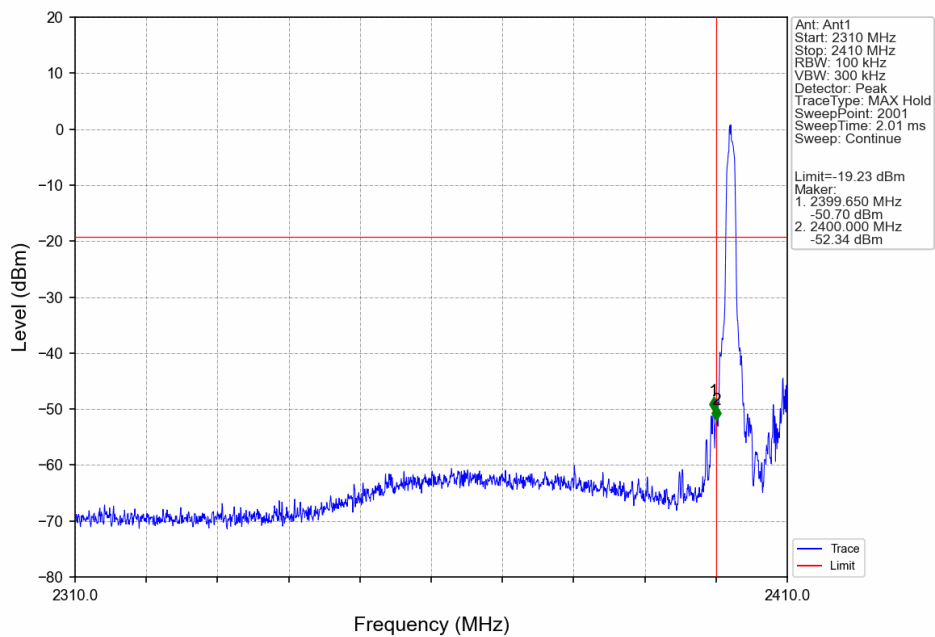
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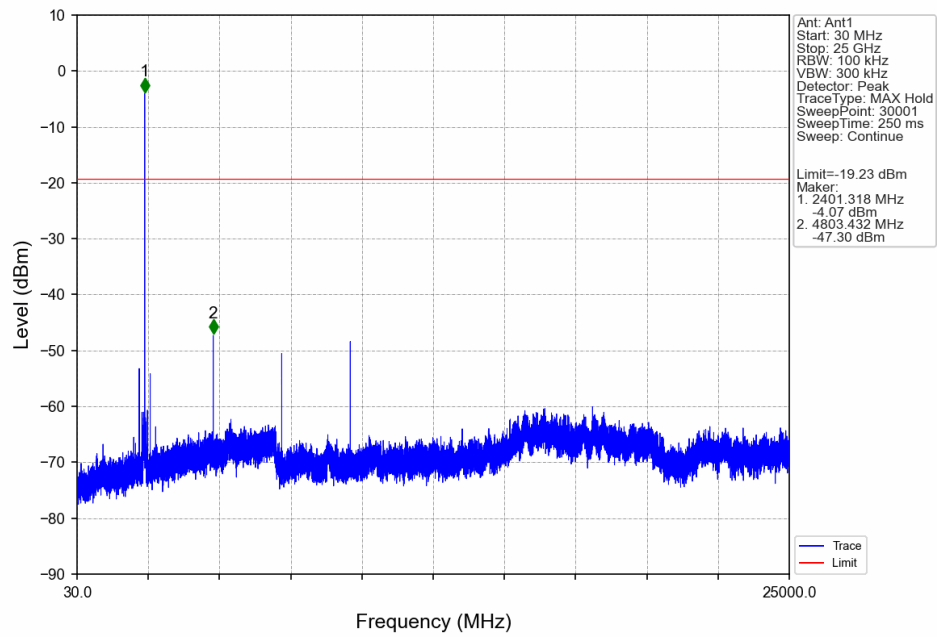
GFSK_DH5_HOPP_Ant1_NTNV



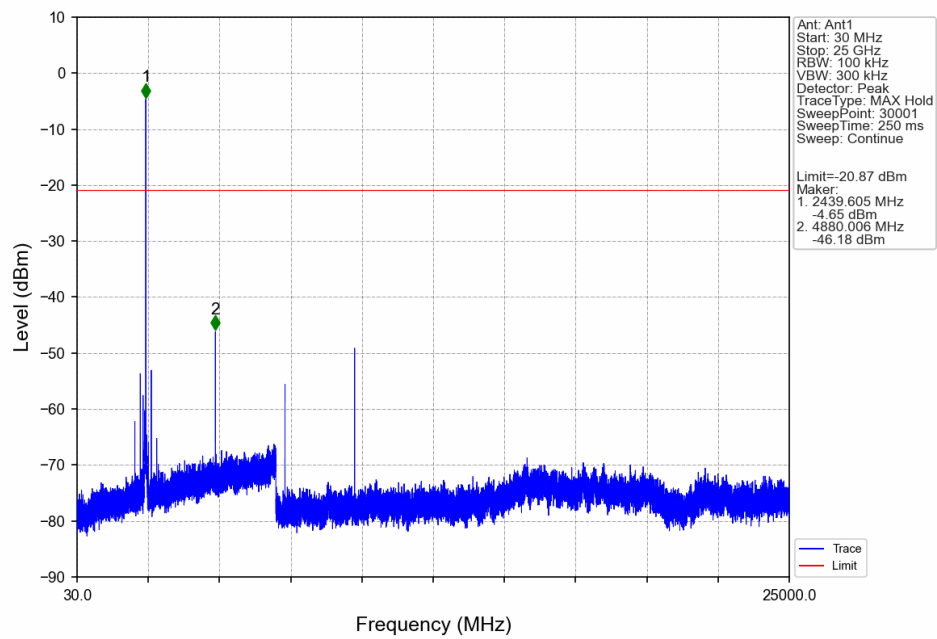
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



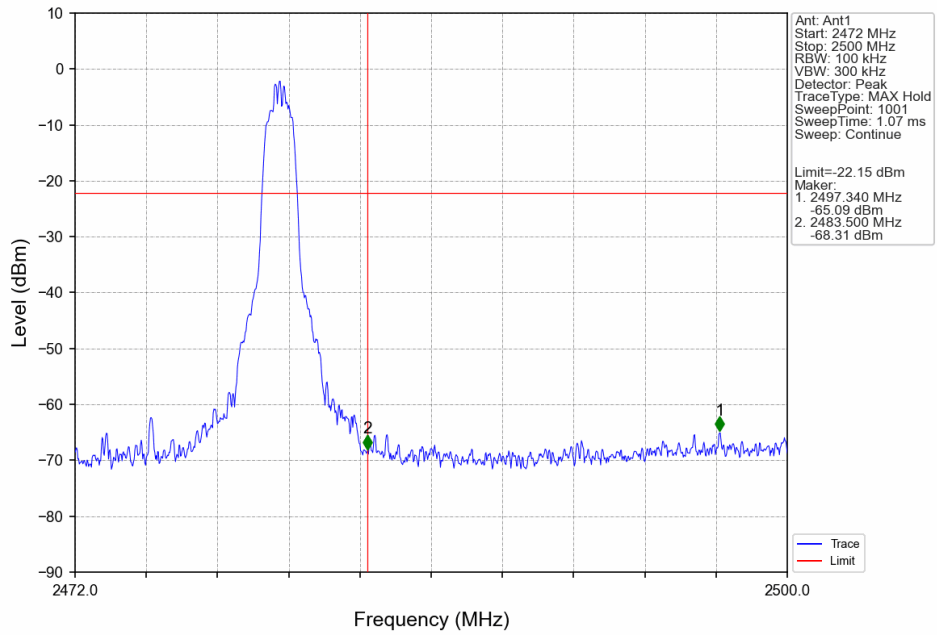
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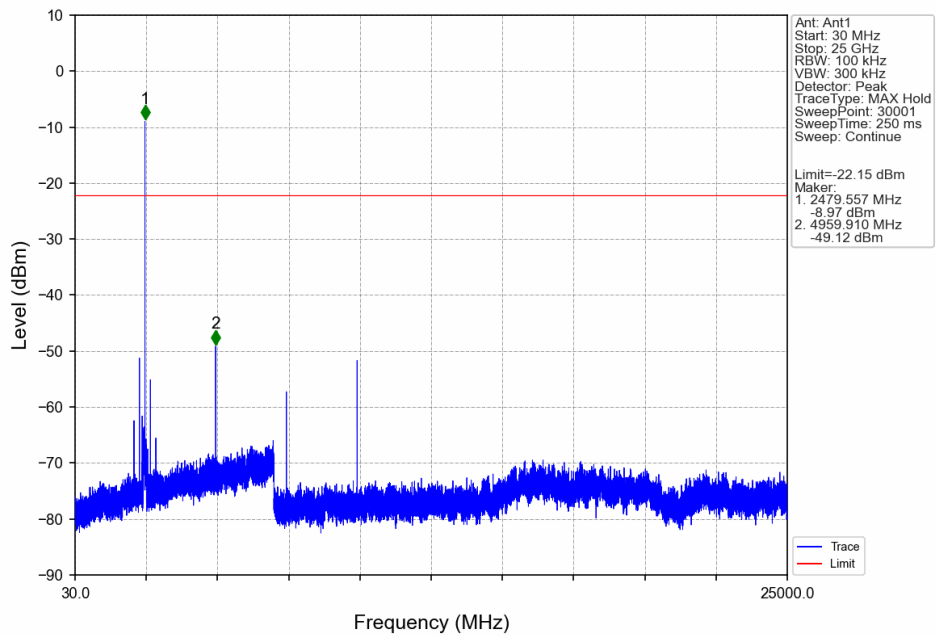
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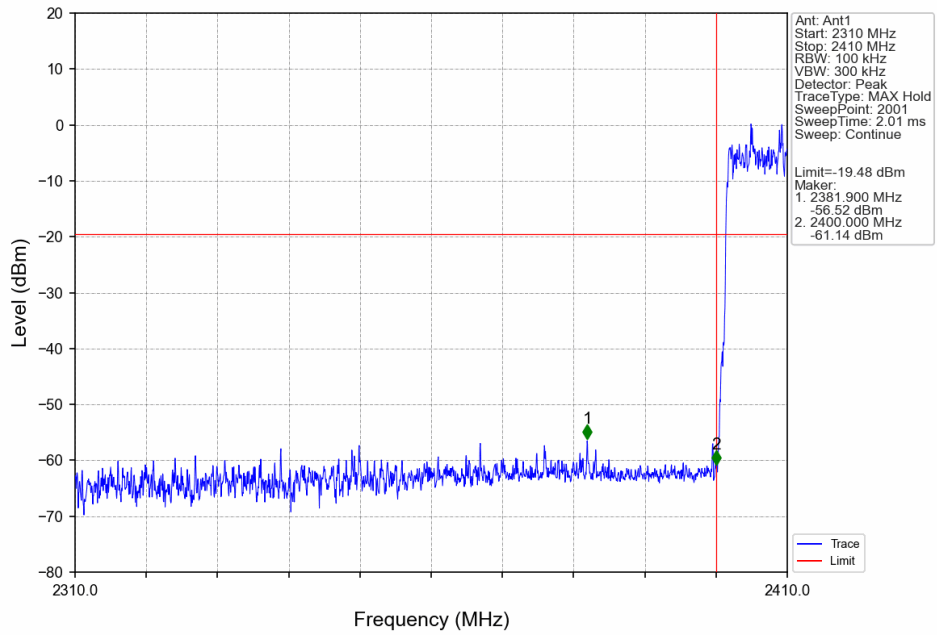
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV

