



Annex for BT

Test Report No.: CTL2403293042-WF01

TABLE OF CONTENTS

1. Bandwidth.....	3
1.1 OBW.....	3
1.1.1 Test Result	3
1.2 20dB BW	9
1.2.1 Test Result	9
2. Maximum Conducted Output Power	15
2.1 Power	15
2.1.1 Test Result	15
3. Carrier Frequency Separation.....	21
3.1 Ant1	21
3.1.1 Test Result	21
4. Number of Hopping Frequencies	24
4.1 HoppNum	24
4.1.1 Test Result	24
5. Time of Occupancy (Dwell Time)	27
5.1 Ant1	27
5.1.1 Test Result	27
6. Unwanted Emissions In Non-restricted Frequency Bands.....	37
6.1 Ref.....	37
6.1.1 Test Result	37



Shenzhen CTL Testing Technology Co., Ltd.

Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road, Nanshan District, Shenzhen, China 518055

Tel: +86-755-89486194 E-mail: ctl@ctl-lab.com

6.2 CSE 43

6.2.1 Test Result 43

FCCID: 2AOM3-P73

1. Bandwidth

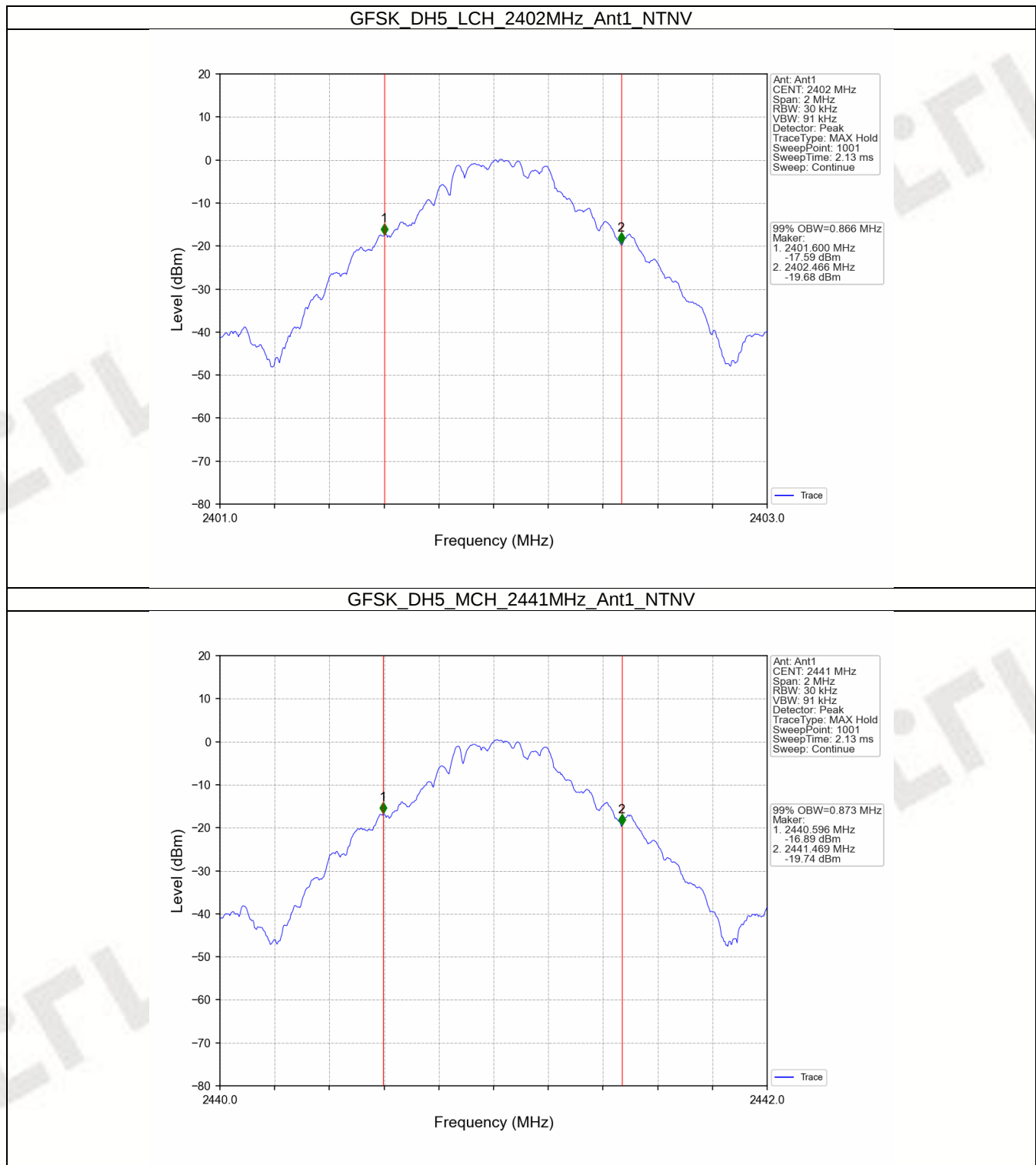
1.1 OBW

1.1.1 Test Result

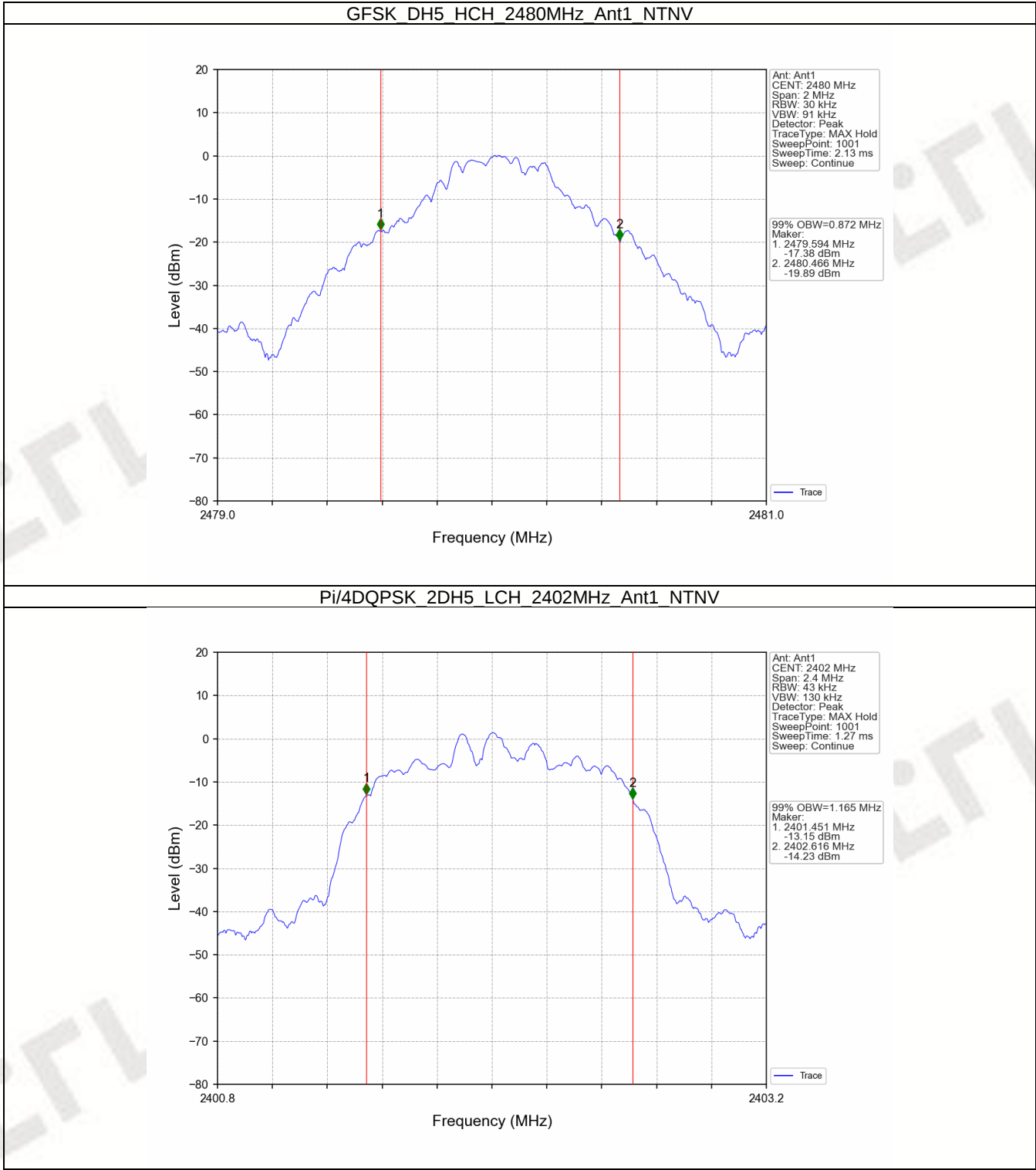
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.866	/	Pass
		2441	DH5	1	0.873	/	Pass
		2480	DH5	1	0.872	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.165	/	Pass
		2441	2DH5	1	1.168	/	Pass
		2480	2DH5	1	1.169	/	Pass
8DPSK	SISO	2402	3DH5	1	1.174	/	Pass
		2441	3DH5	1	1.174	/	Pass
		2480	3DH5	1	1.176	/	Pass

FCCID: 2AOM3-P73

1.1.2 Test Graph

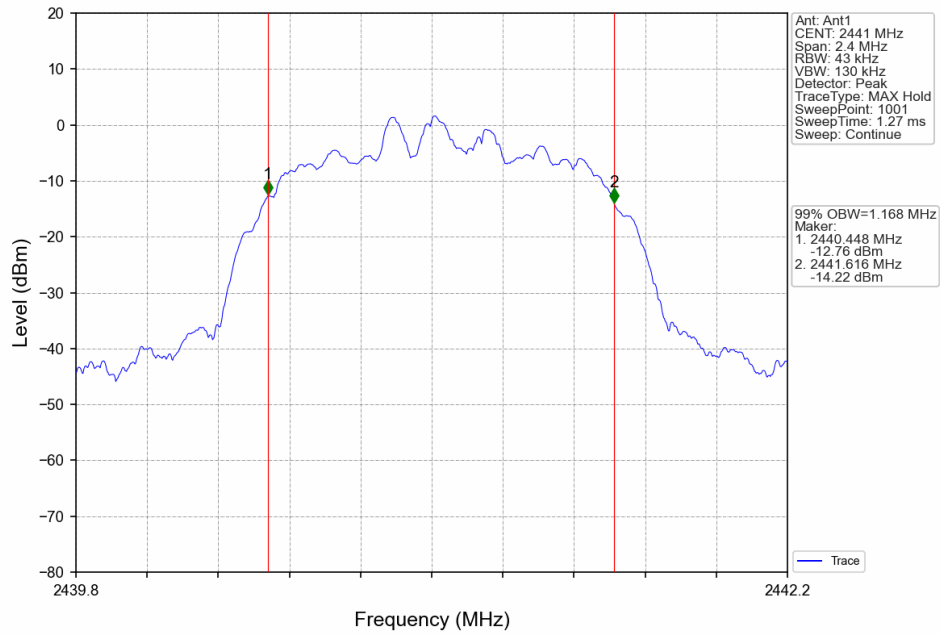


FCCID: 2AOM3-P73

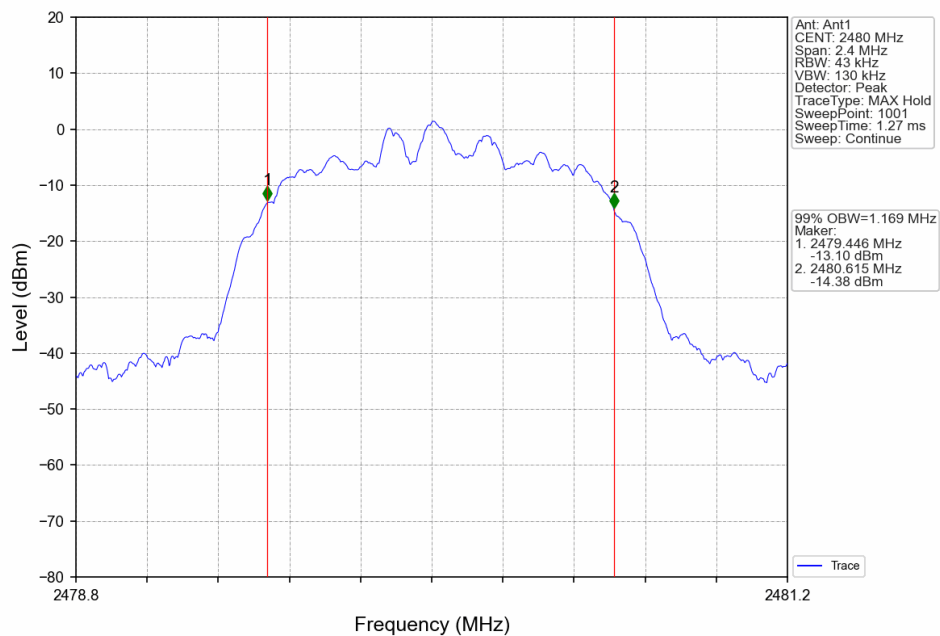


FCCID: 2AOM3-P73

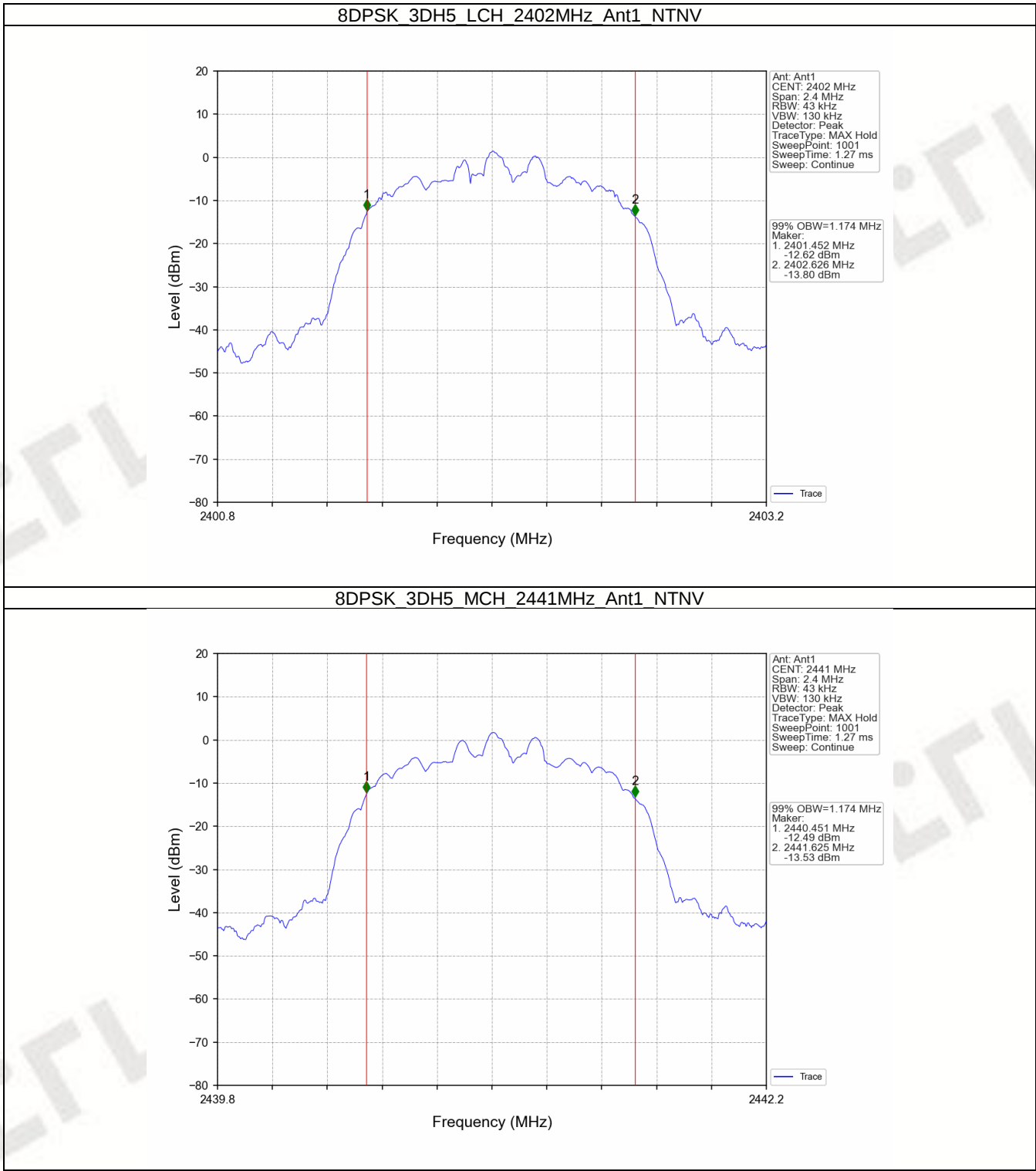
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTNV



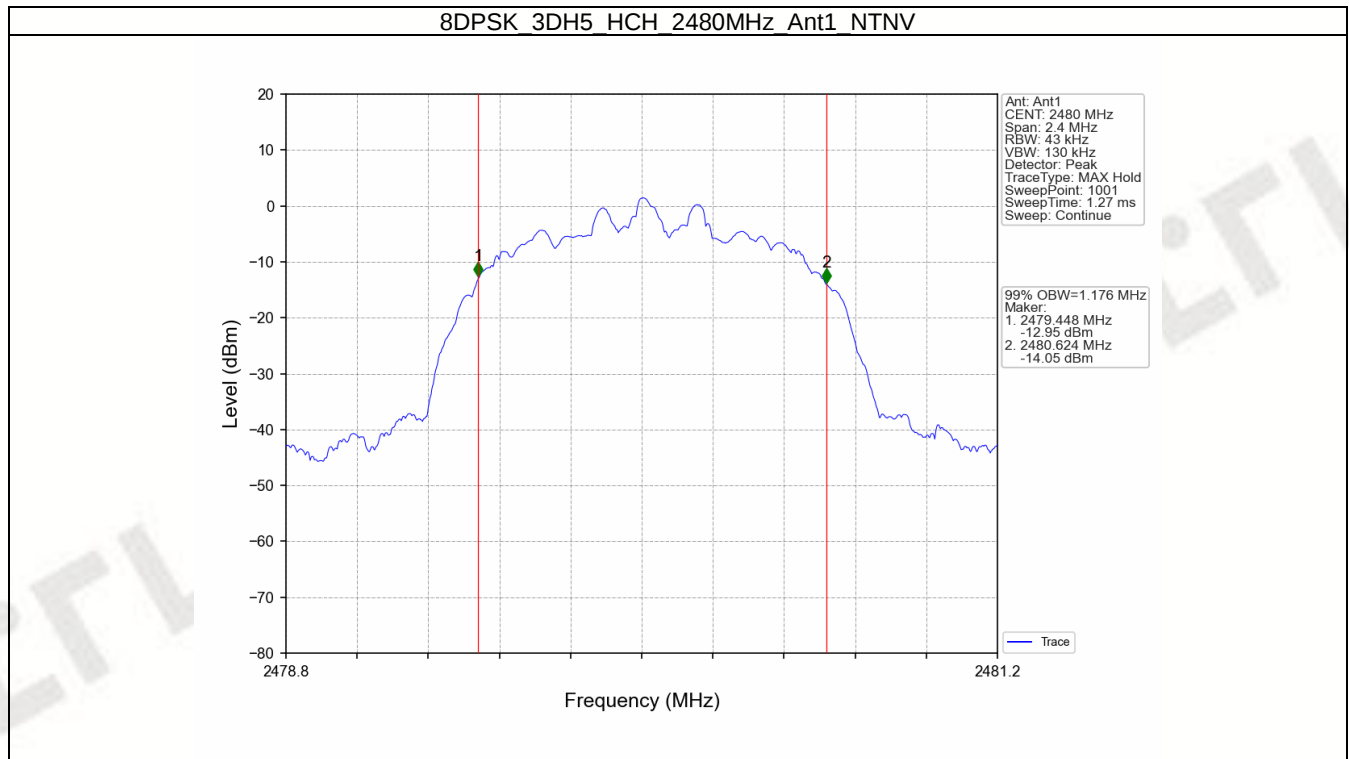
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNV



FCCID: 2AOM3-P73



FCCID: 2AOM3-P73



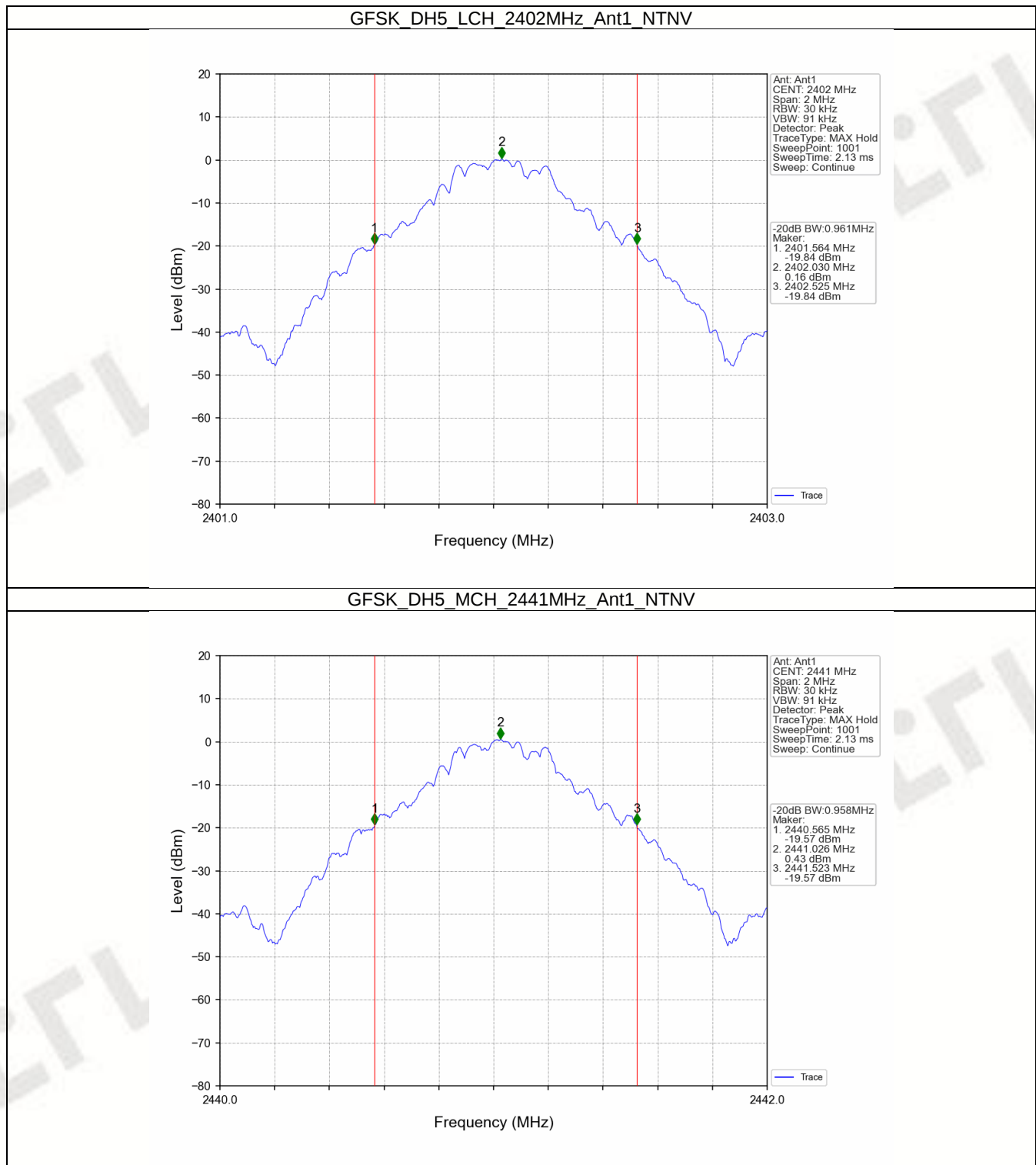
1.2 20dB BW

1.2.1 Test Result

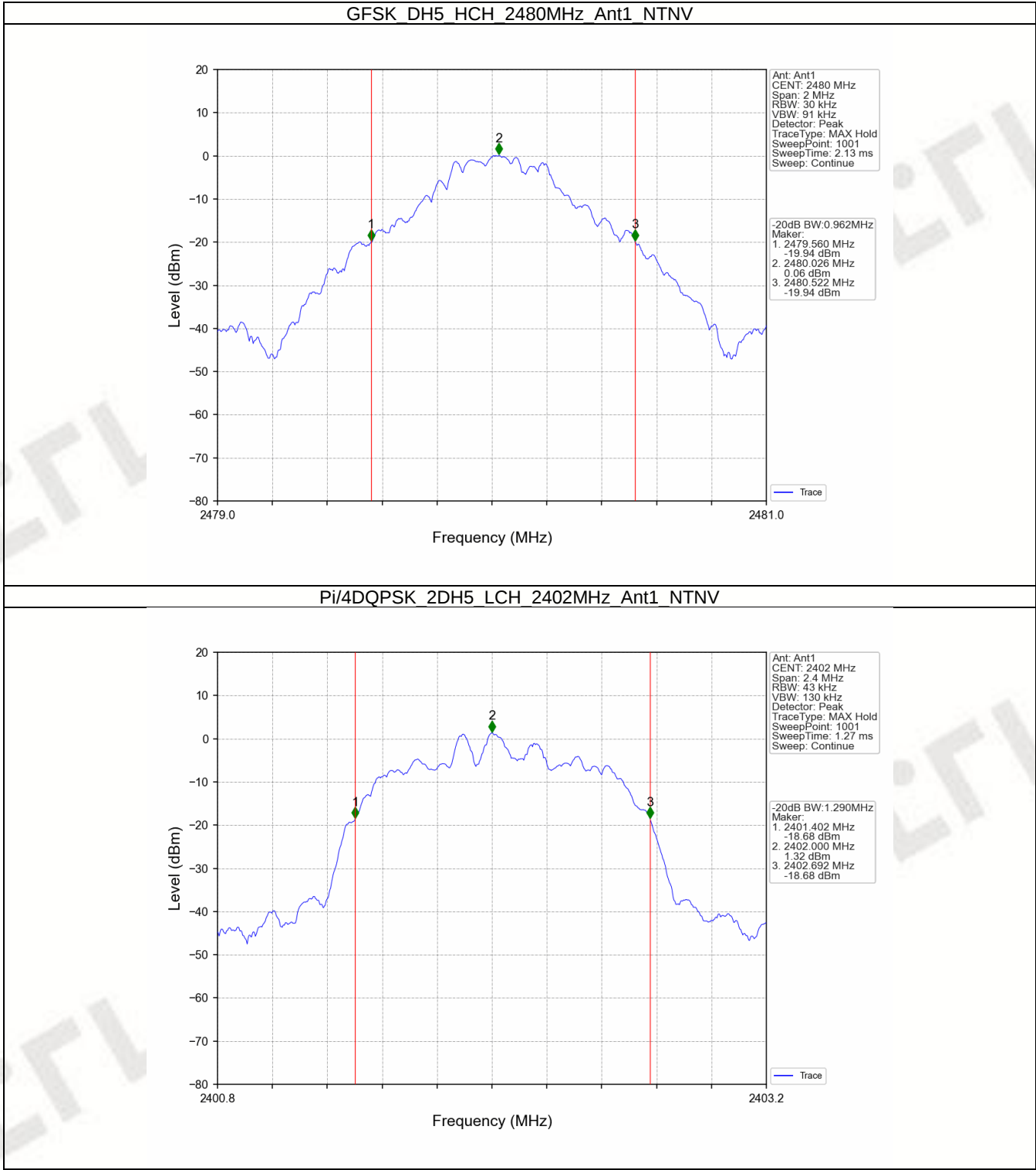
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.961	/	Pass
		2441	DH5	1	0.958	/	Pass
		2480	DH5	1	0.962	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.290	/	Pass
		2441	2DH5	1	1.291	/	Pass
		2480	2DH5	1	1.293	/	Pass
8DPSK	SISO	2402	3DH5	1	1.305	/	Pass
		2441	3DH5	1	1.311	/	Pass
		2480	3DH5	1	1.308	/	Pass

FCCID: 2AOM3-P73

1.2.2 Test Graph

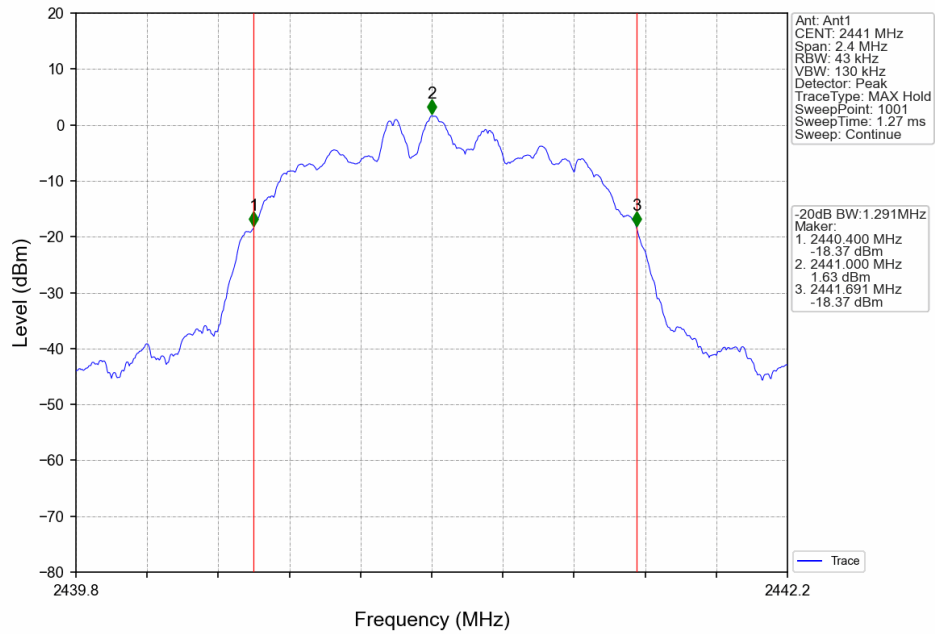


FCCID: 2AOM3-P73

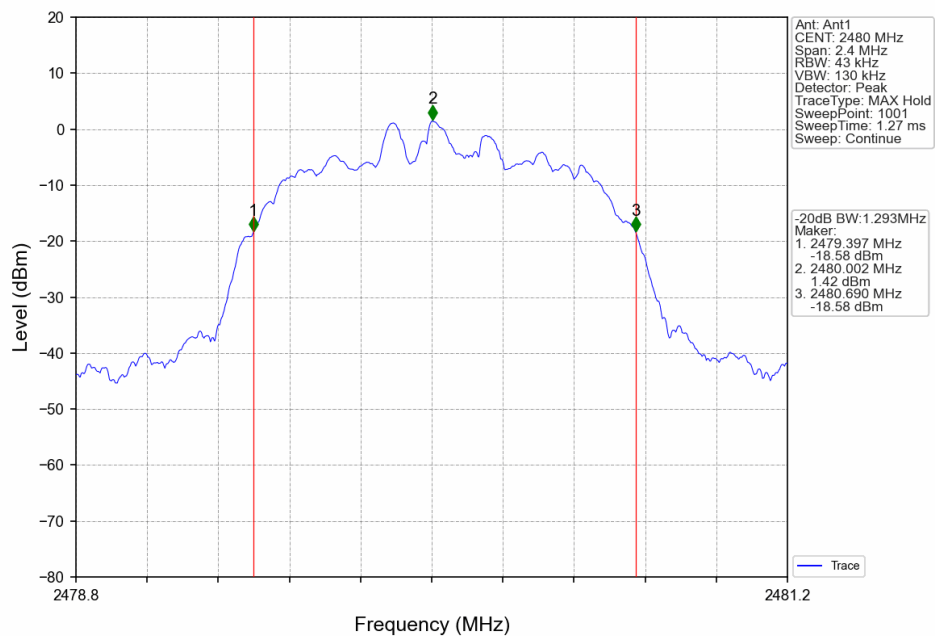


FCCID: 2AOM3-P73

Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN

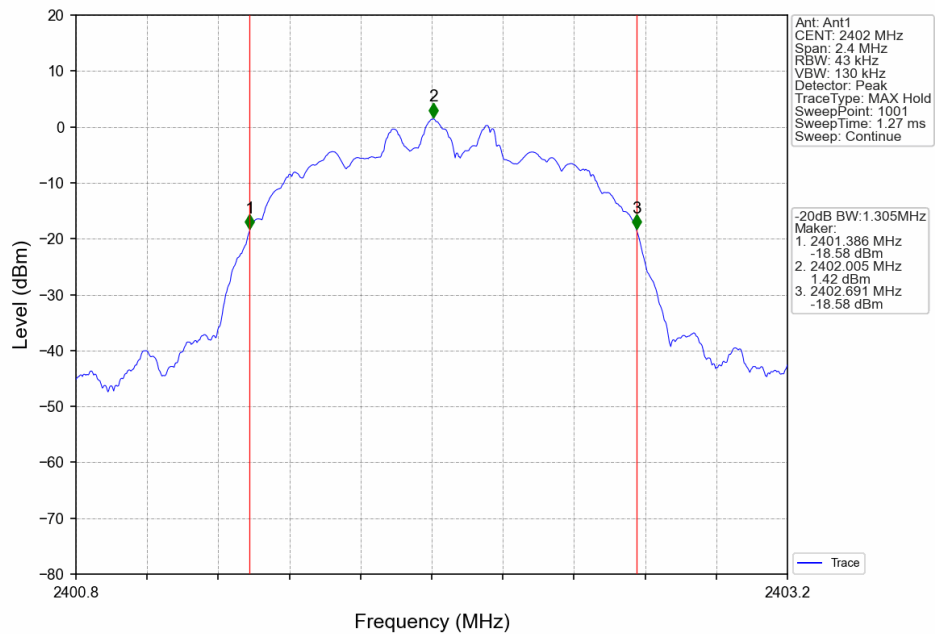


Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTN

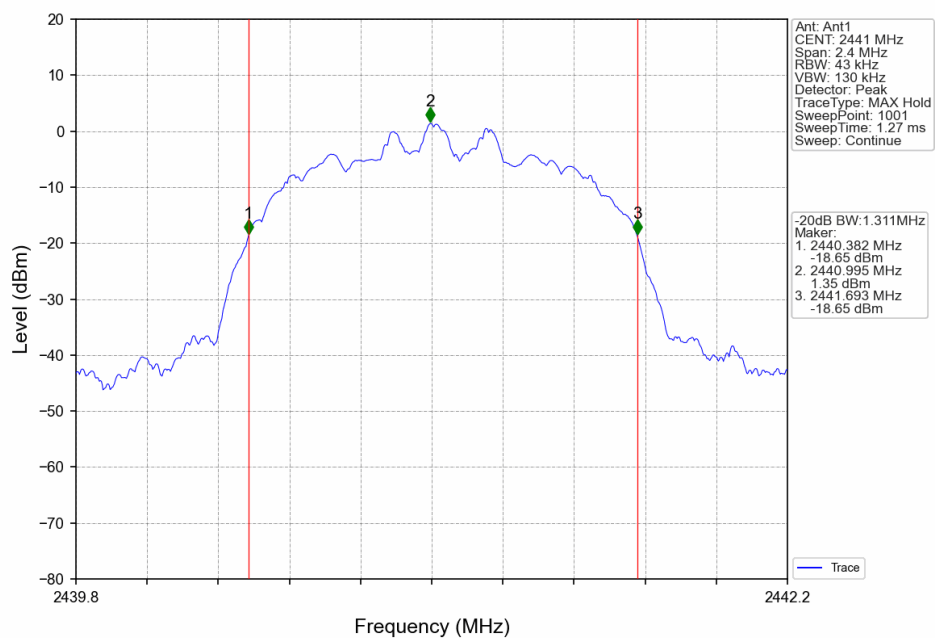


FCCID: 2AOM3-P73

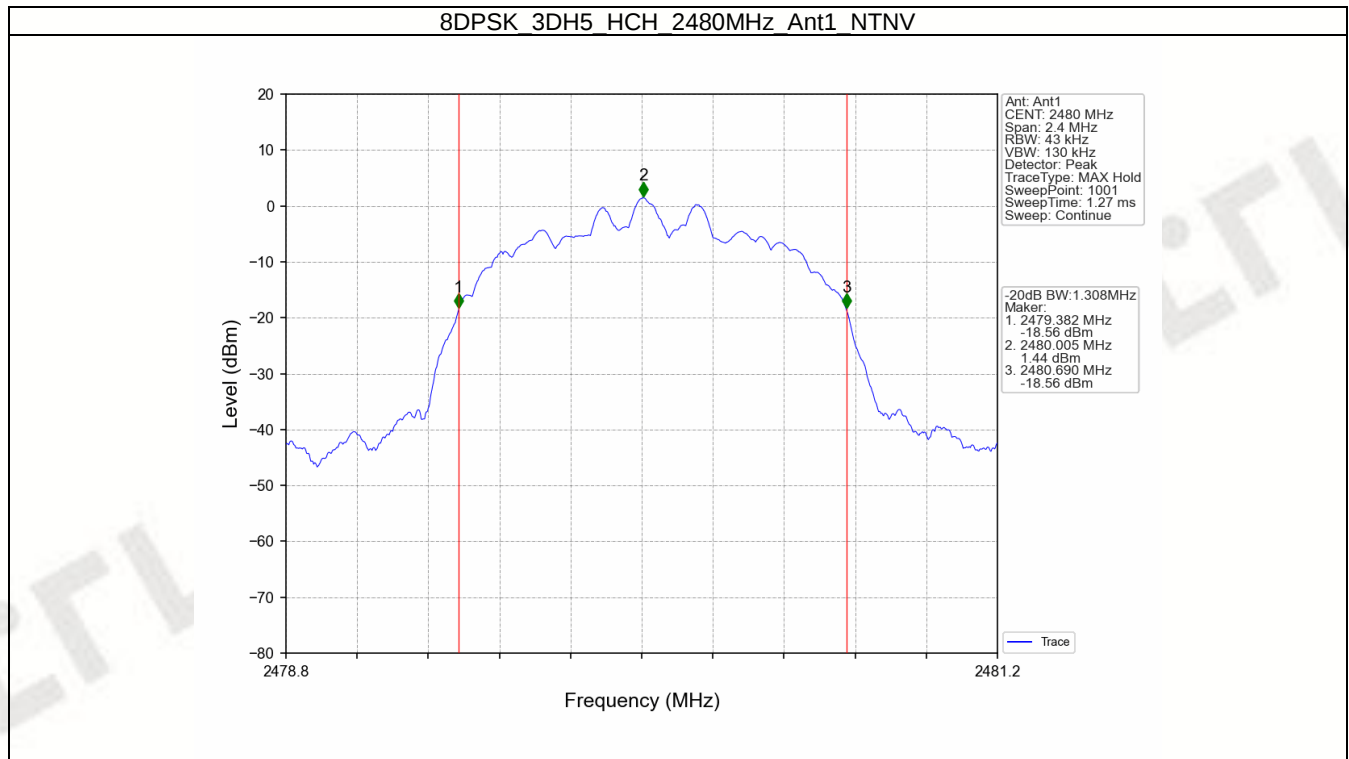
8DPSK 3DH5 LCH 2402MHz Ant1 NTV



8DPSK 3DH5 MCH 2441MHz Ant1 NTV



FCCID: 2AOM3-P73



2. Maximum Conducted Output Power

2.1 Power

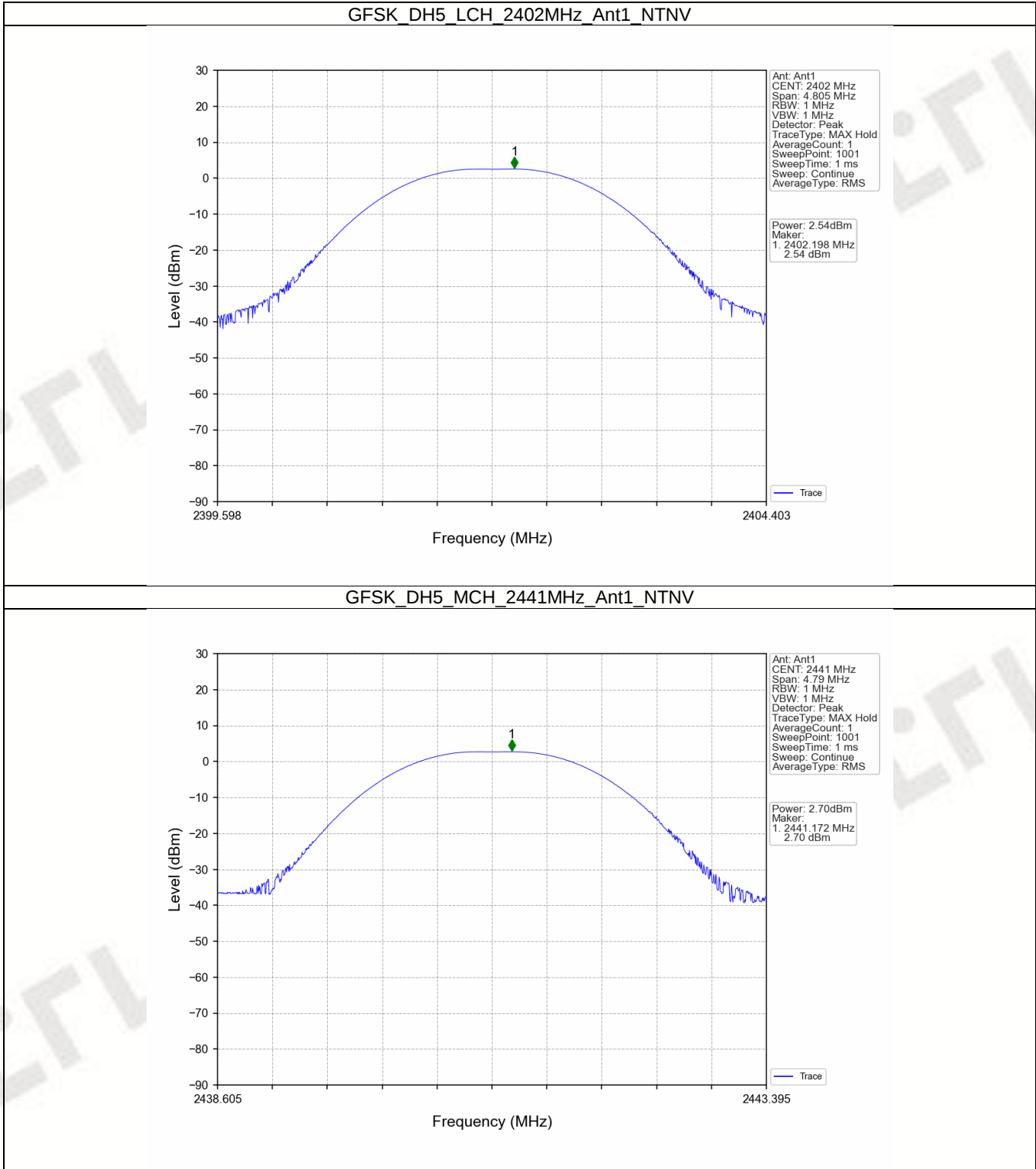
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	2.54	≤ 30	Pass
		2441	DH5	2.70	≤ 30	Pass
		2480	DH5	2.41	≤ 30	Pass
Pi/4DQPSK	SISO	2402	2DH5	3.24	≤ 20.97	Pass
		2441	2DH5	3.50	≤ 20.97	Pass
		2480	2DH5	3.19	≤ 20.97	Pass
8DPSK	SISO	2402	3DH5	3.67	≤ 20.97	Pass
		2441	3DH5	3.93	≤ 20.97	Pass
		2480	3DH5	3.59	≤ 20.97	Pass

Note1: Antenna Gain: Ant1: 2.13dBi;

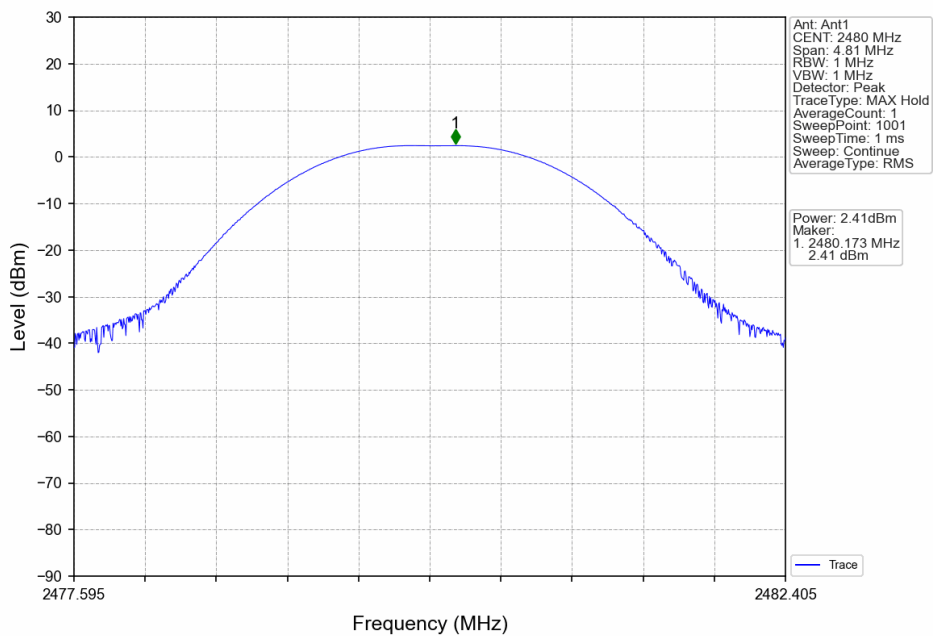
FCCID: 2AOM3-P73

2.1.2 Test Graph

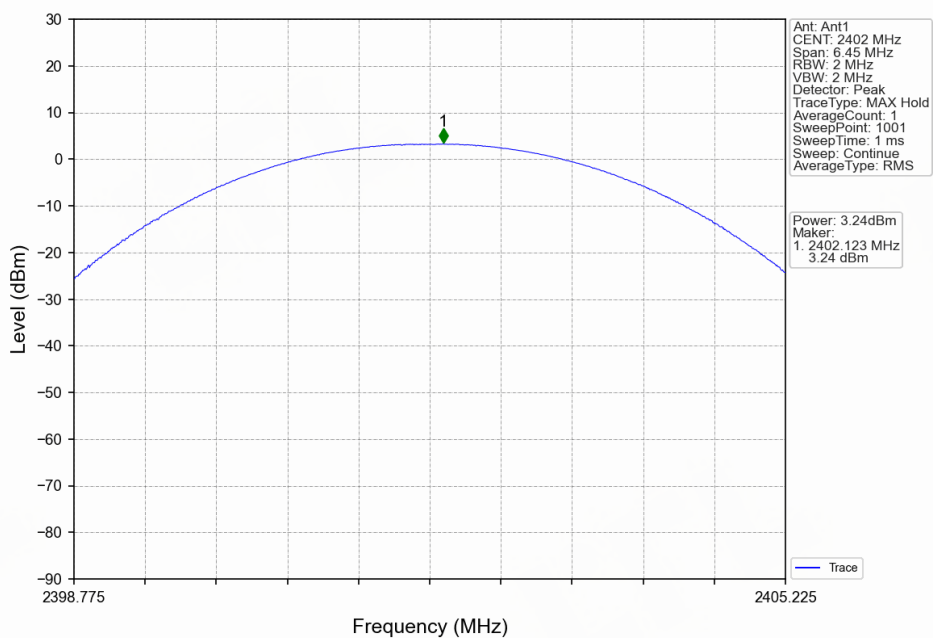


FCCID: 2AOM3-P73

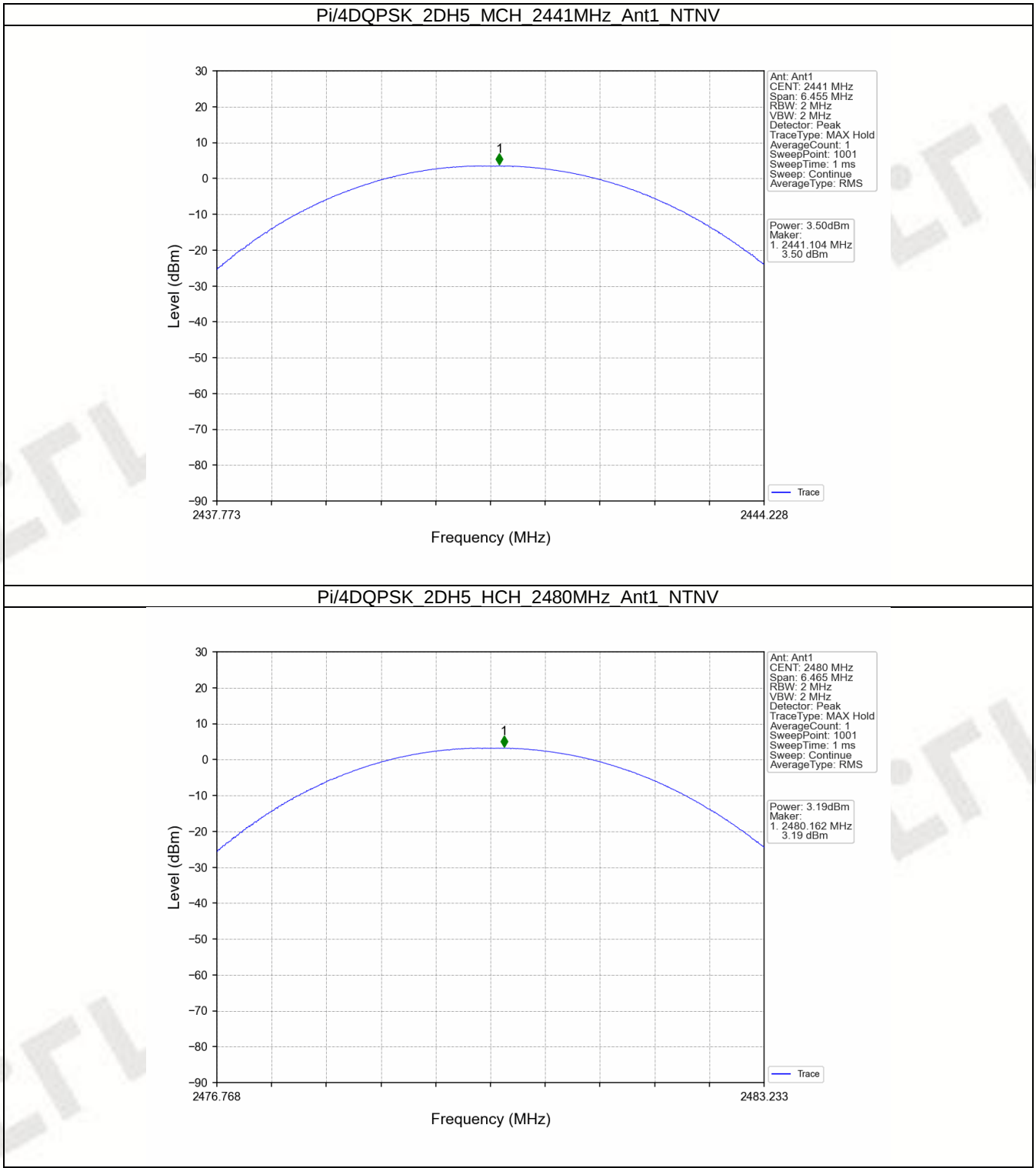
GFSK DH5 HCH 2480MHz Ant1 NTN



Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN

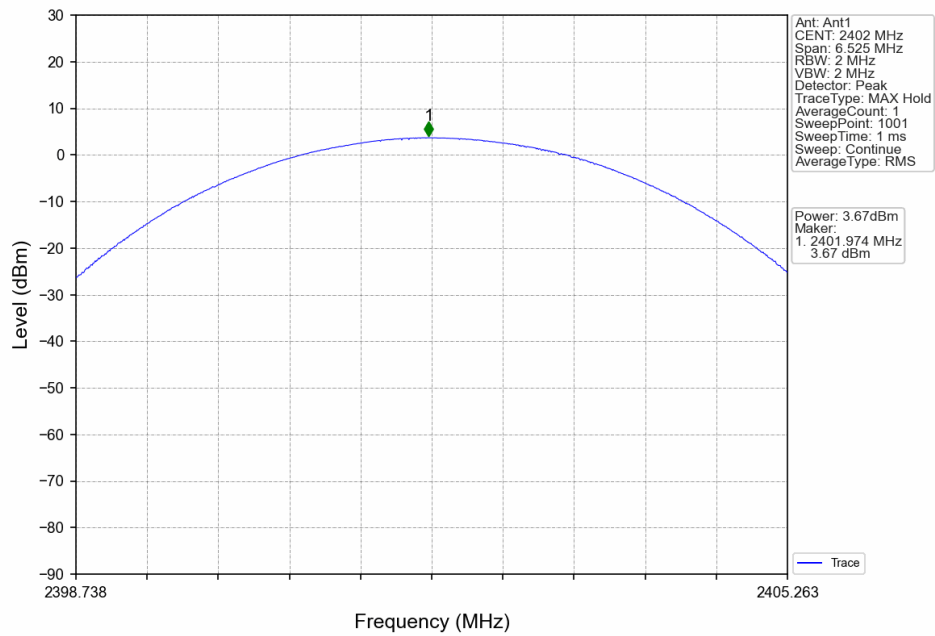


FCCID: 2AOM3-P73

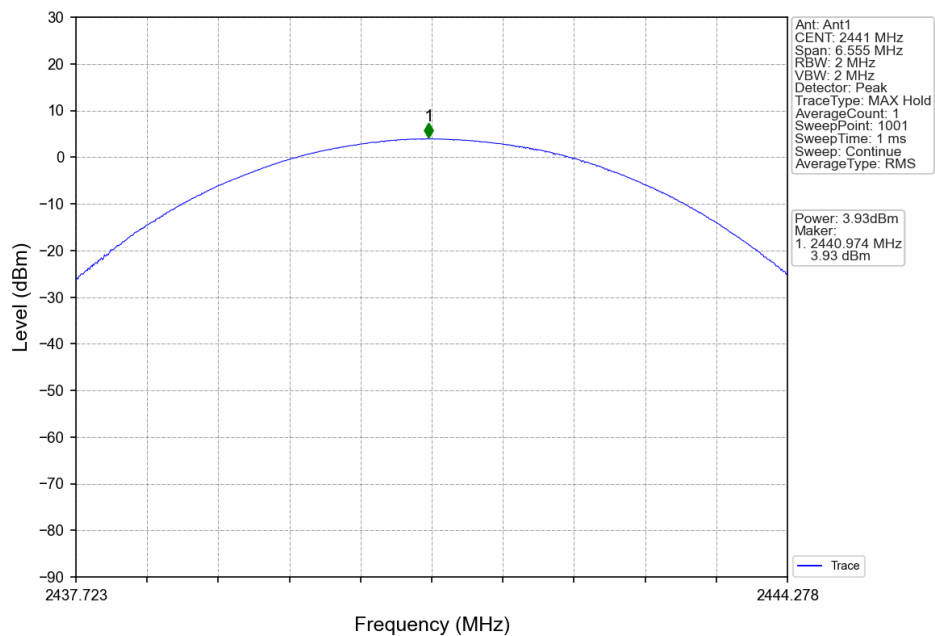


FCCID: 2AOM3-P73

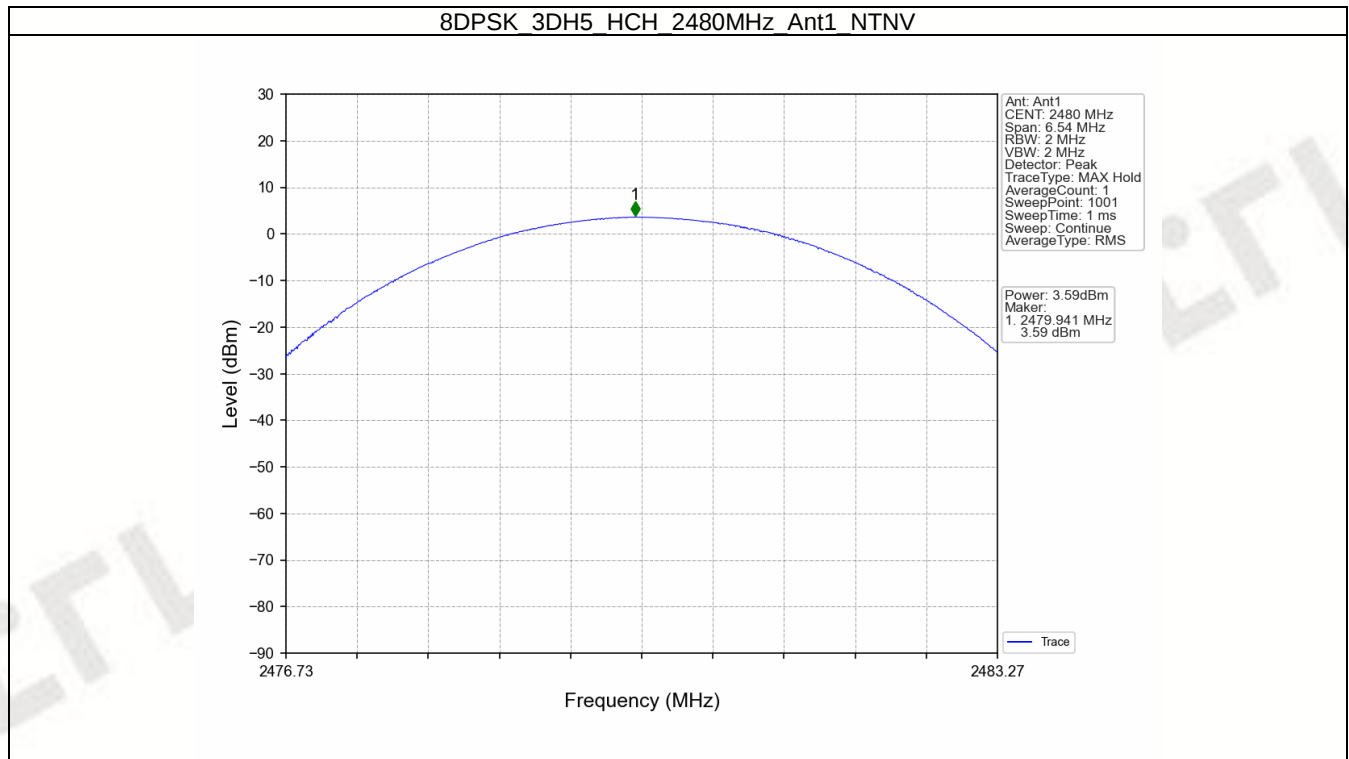
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



8DPSK 3DH5 MCH 2441MHz Ant1 NTN



FCCID: 2AOM3-P73



3. Carrier Frequency Separation

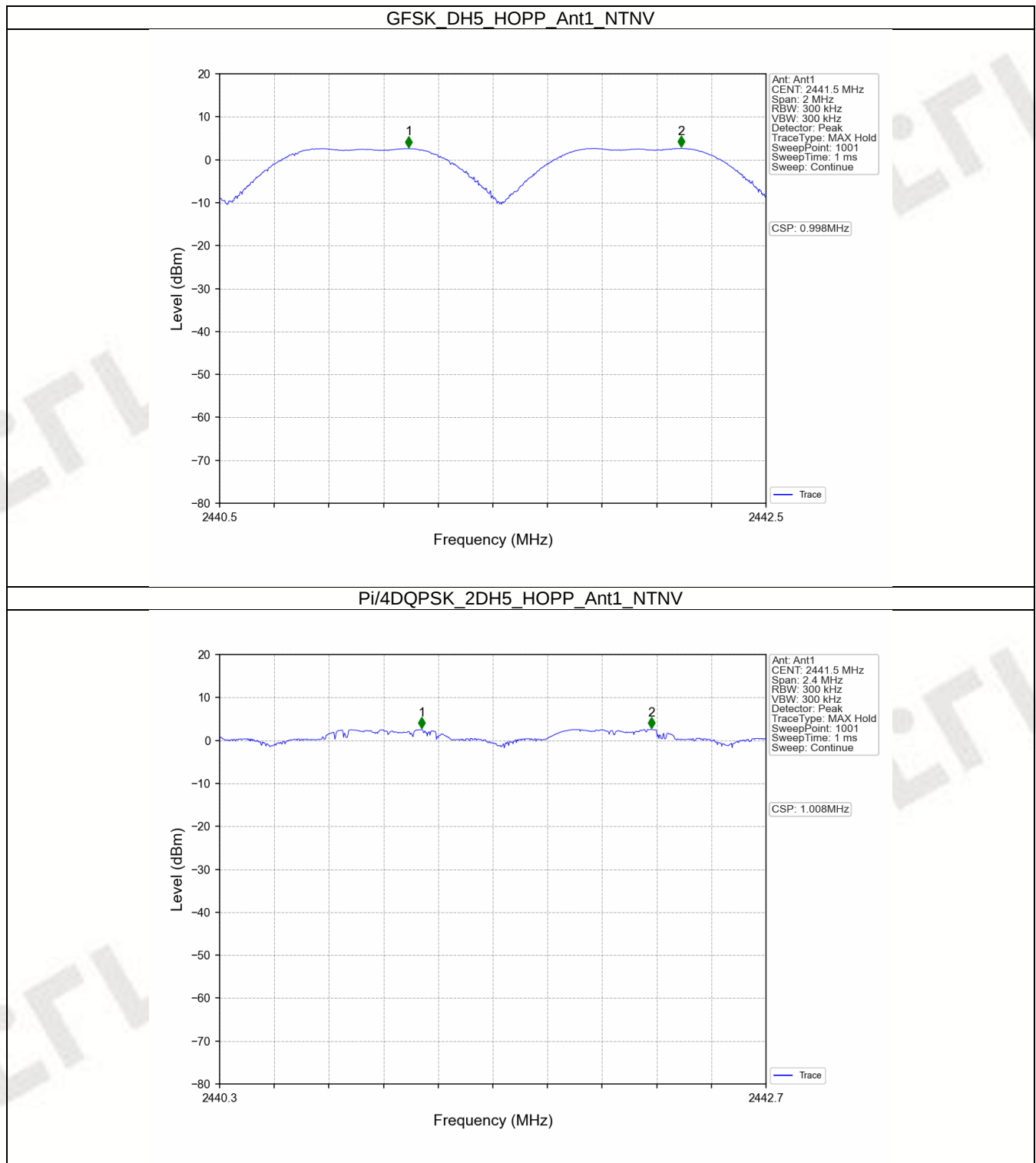
3.1 Ant1

3.1.1 Test Result

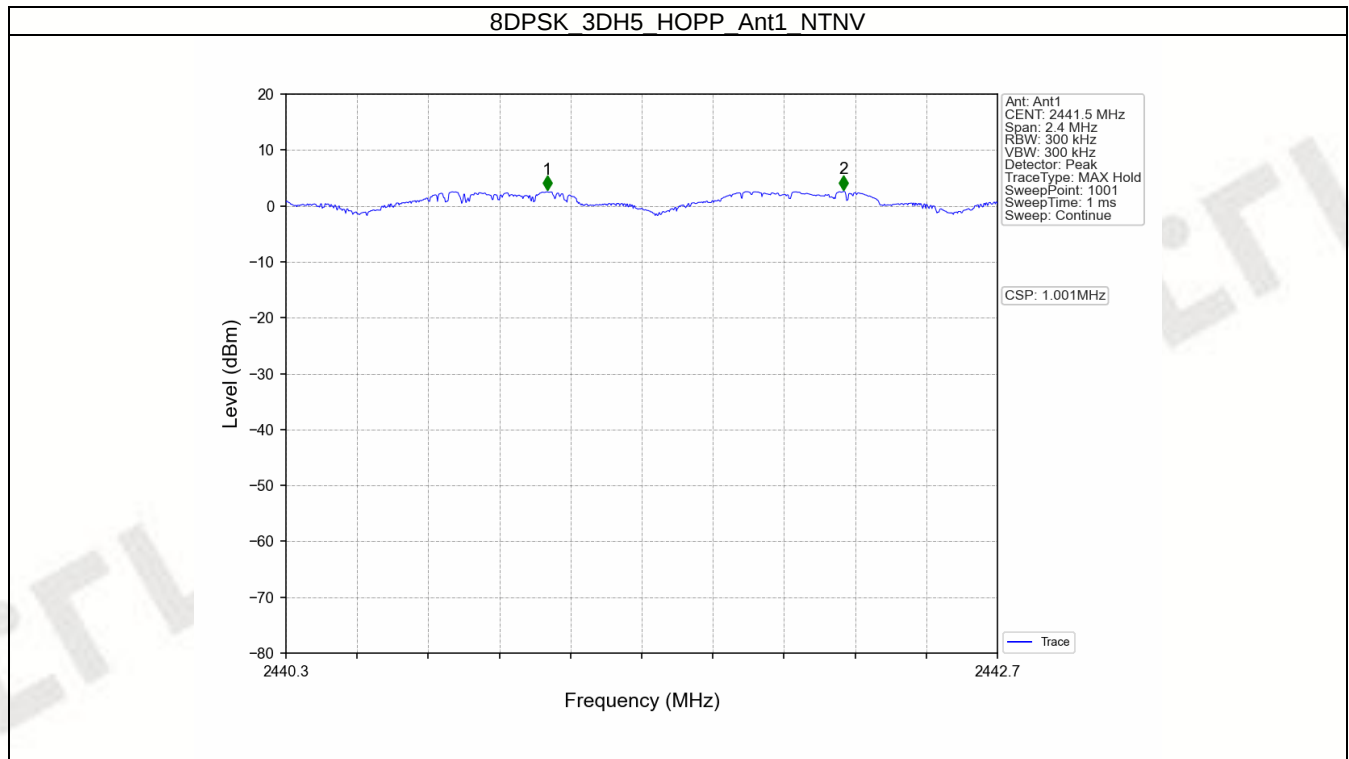
Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	0.998	0.962	≥ 0.962	Pass
PI/4DQPSK	SISO	HOPP	2DH5	1.008	1.293	≥ 0.862	Pass
8DPSK	SISO	HOPP	3DH5	1.001	1.311	≥ 0.874	Pass

FCCID: 2AOM3-P73

3.1.2 Test Graph



FCCID: 2AOM3-P73



FCCID: 2AOM3-P73

4. Number of Hopping Frequencies

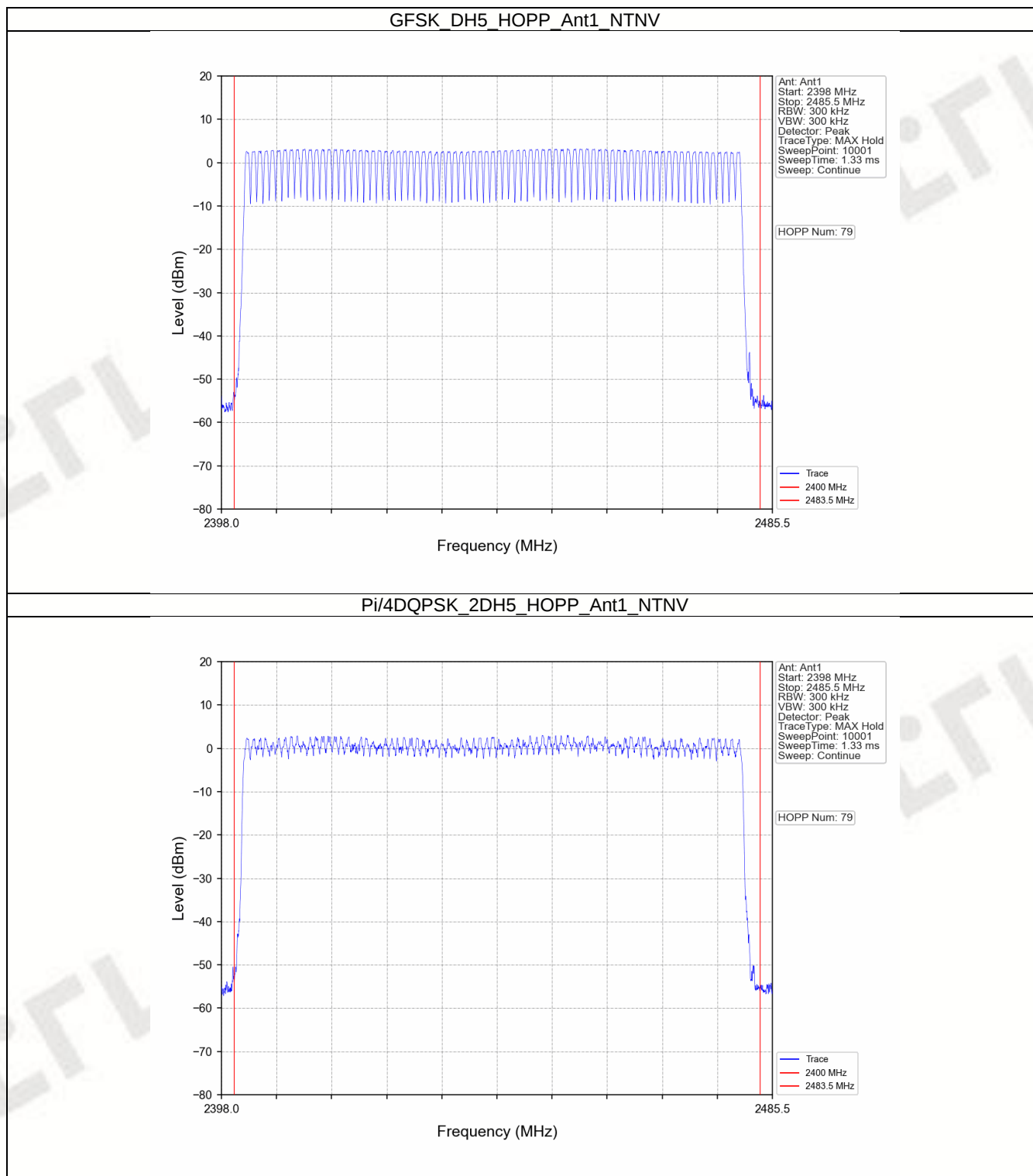
4.1 HoppNum

4.1.1 Test Result

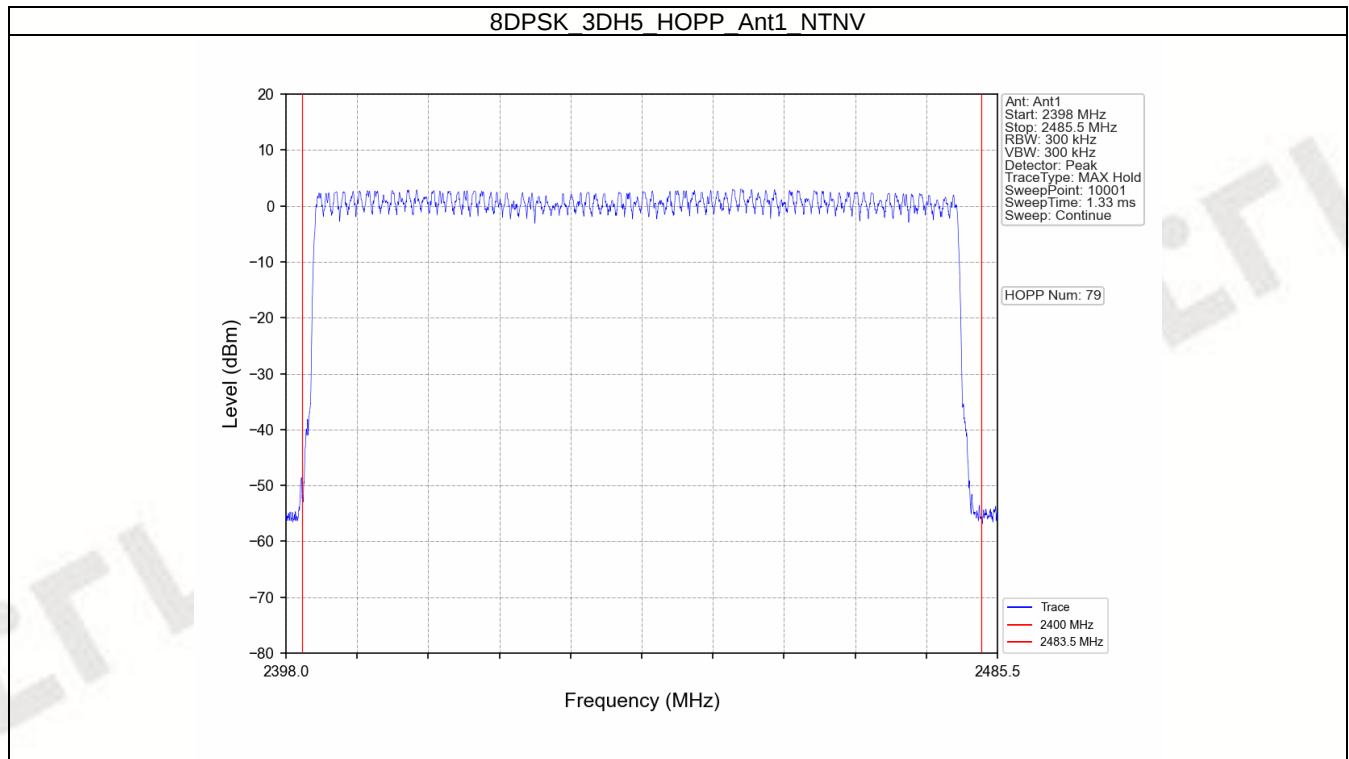
Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	>=15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	>=15	Pass
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass

FCCID: 2AOM3-P73

4.1.2 Test Graph



FCCID: 2AOM3-P73



FCCID: 2AOM3-P73

5. Time of Occupancy (Dwell Time)

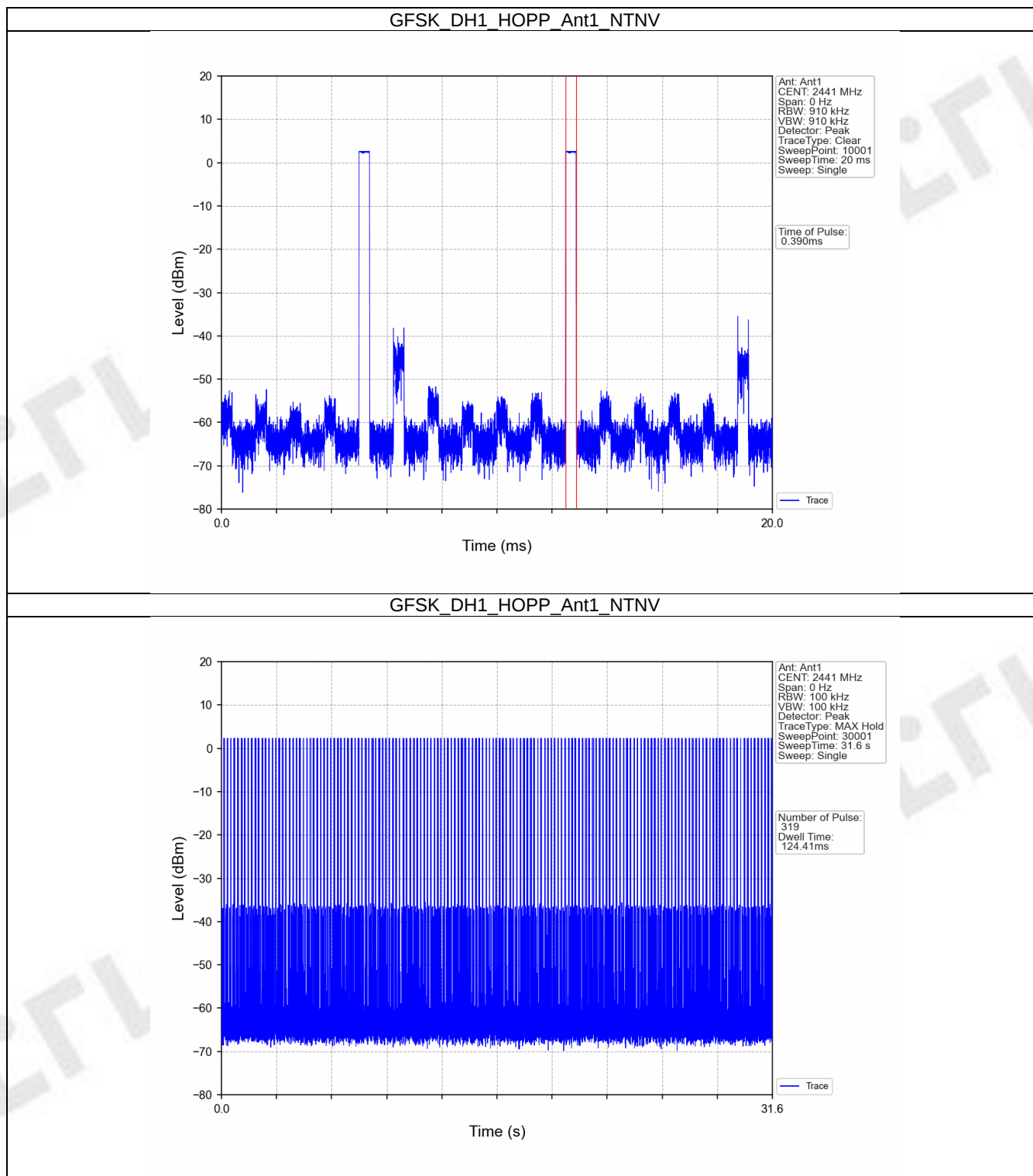
5.1 Ant1

5.1.1 Test Result

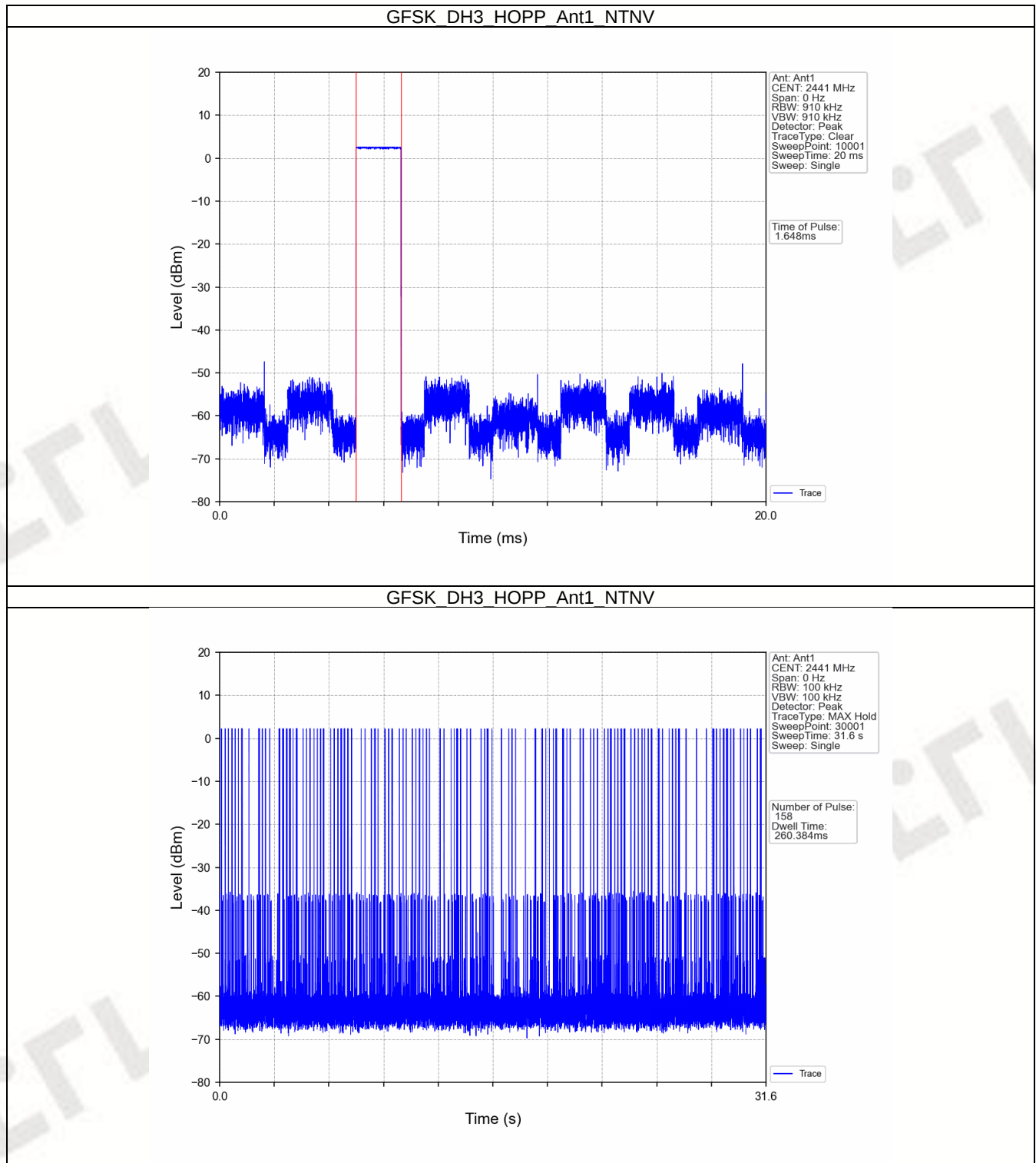
Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.390	31.600	319	124.410	<=400	Pass
			DH3	1.648	31.600	158	260.384	<=400	Pass
			DH5	2.896	31.600	98	283.808	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.396	31.600	319	126.324	<=400	Pass
			2DH3	1.648	31.600	162	266.976	<=400	Pass
			2DH5	2.900	31.600	107	310.300	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.392	31.600	320	125.440	<=400	Pass
			3DH3	1.646	31.600	167	274.882	<=400	Pass
			3DH5	2.904	31.600	106	307.824	<=400	Pass

FCCID: 2AOM3-P73

5.1.2 Test Graph

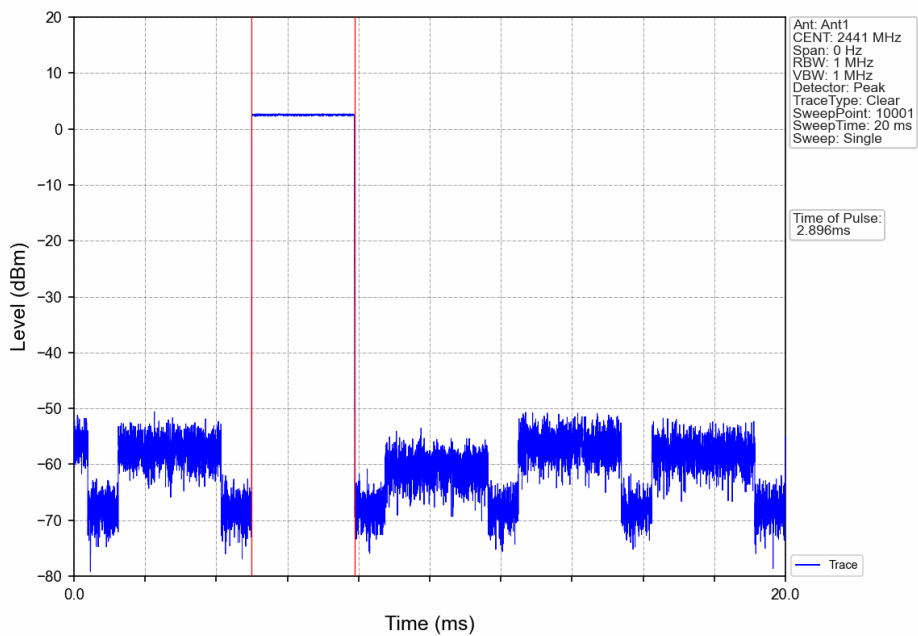


FCCID: 2AOM3-P73

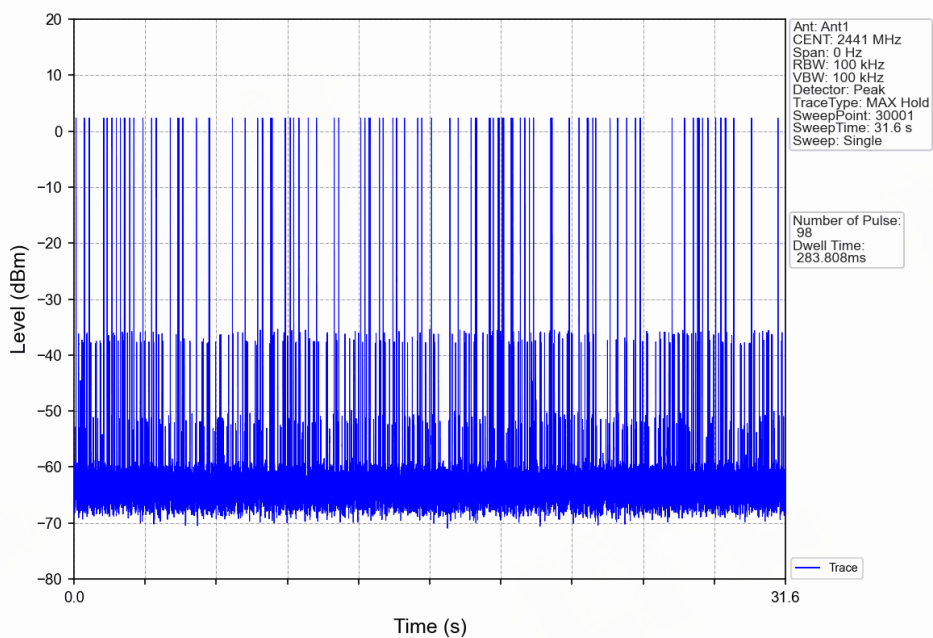


FCCID: 2AOM3-P73

GFSK DH5 HOPP Ant1 NTV

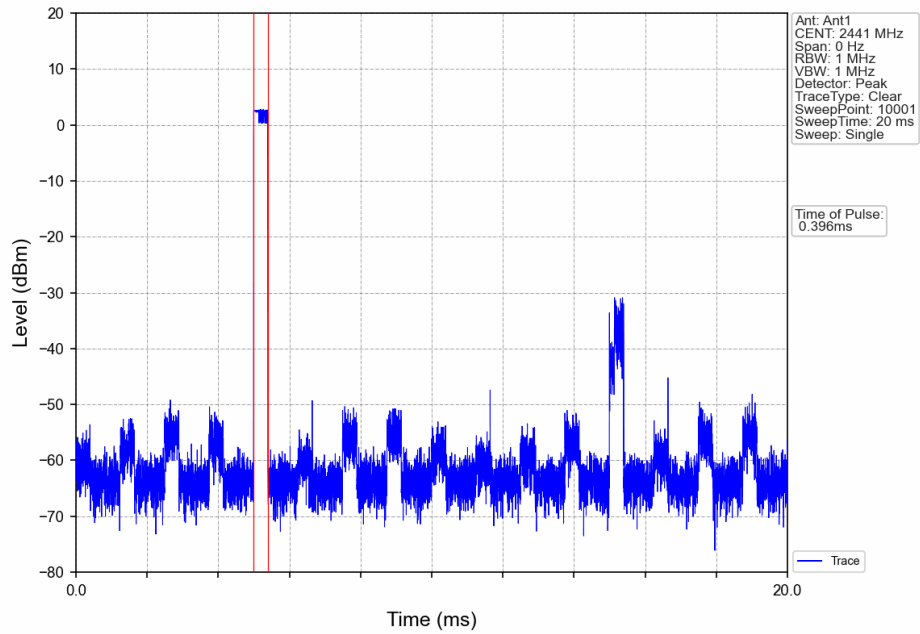


GFSK DH5 HOPP Ant1 NTV

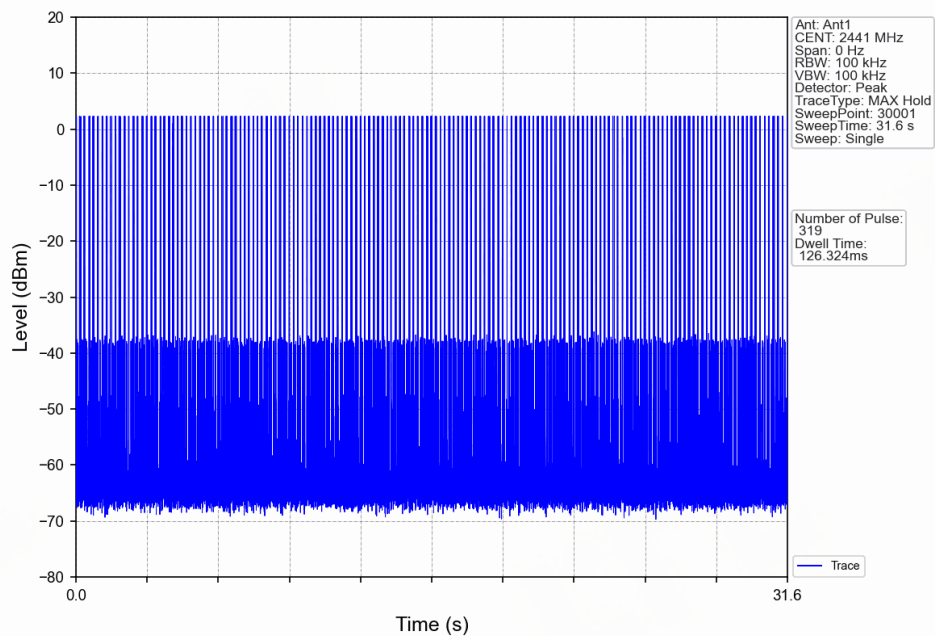


FCCID: 2AOM3-P73

Pi/4DQPSK 2DH1 HOPP Ant1 NTN

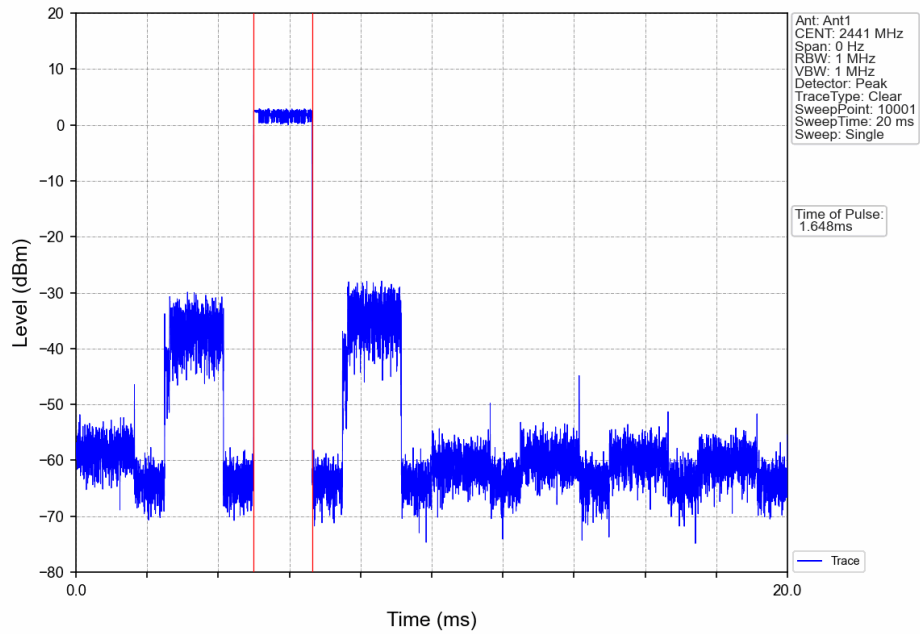


Pi/4DQPSK 2DH1 HOPP Ant1 NTN

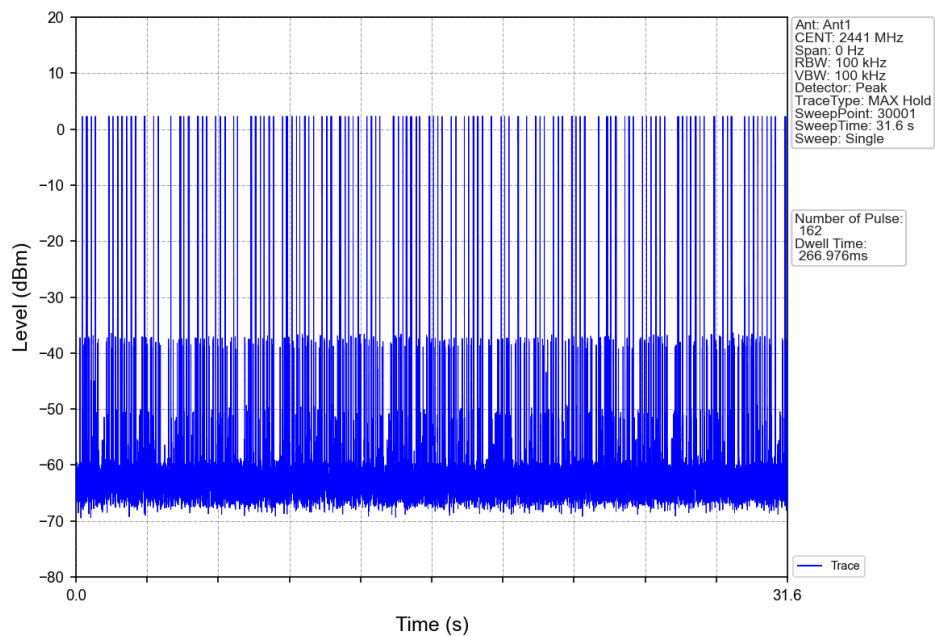


FCCID: 2AOM3-P73

Pi/4DQPSK 2DH3 HOPP Ant1 NTN

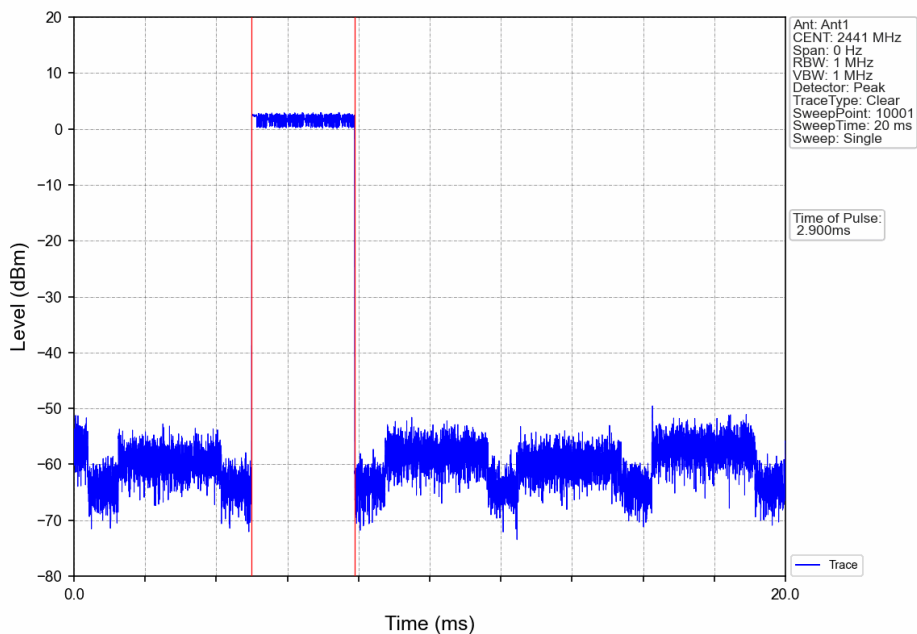


Pi/4DQPSK 2DH3 HOPP Ant1 NTN

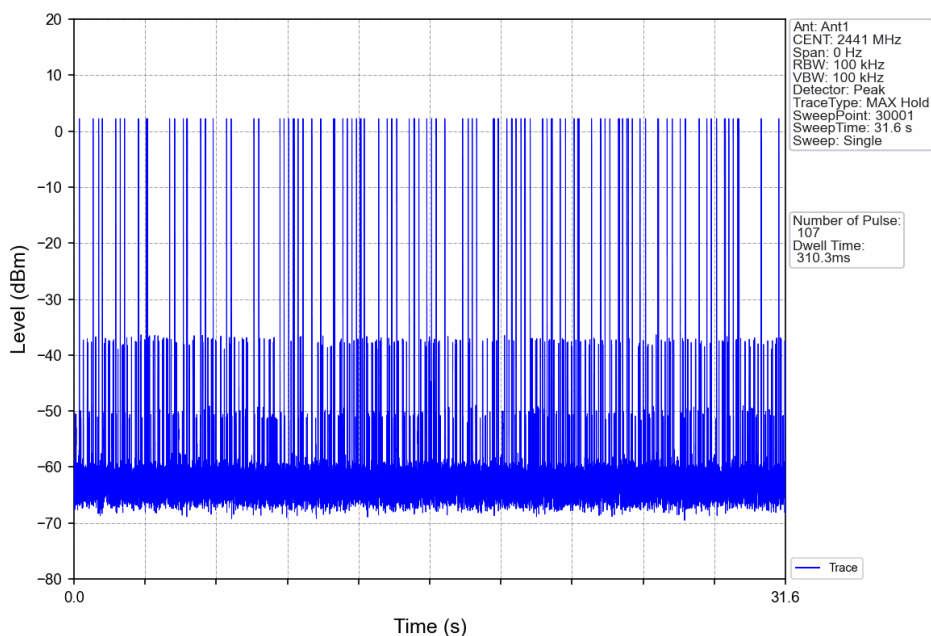


FCCID: 2AOM3-P73

Pi/4DQPSK 2DH5 HOPP Ant1 NTN

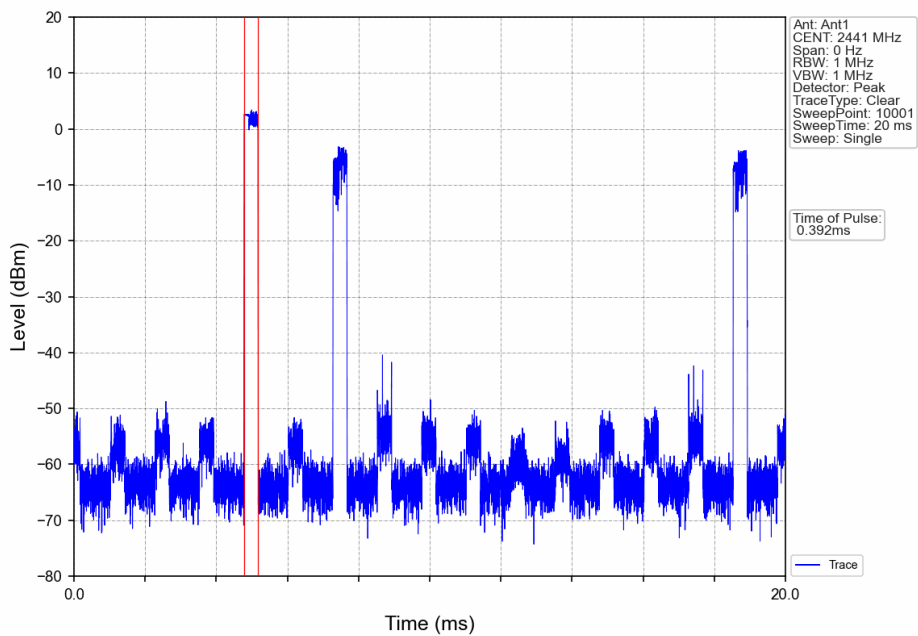


Pi/4DQPSK 2DH5 HOPP Ant1 NTN

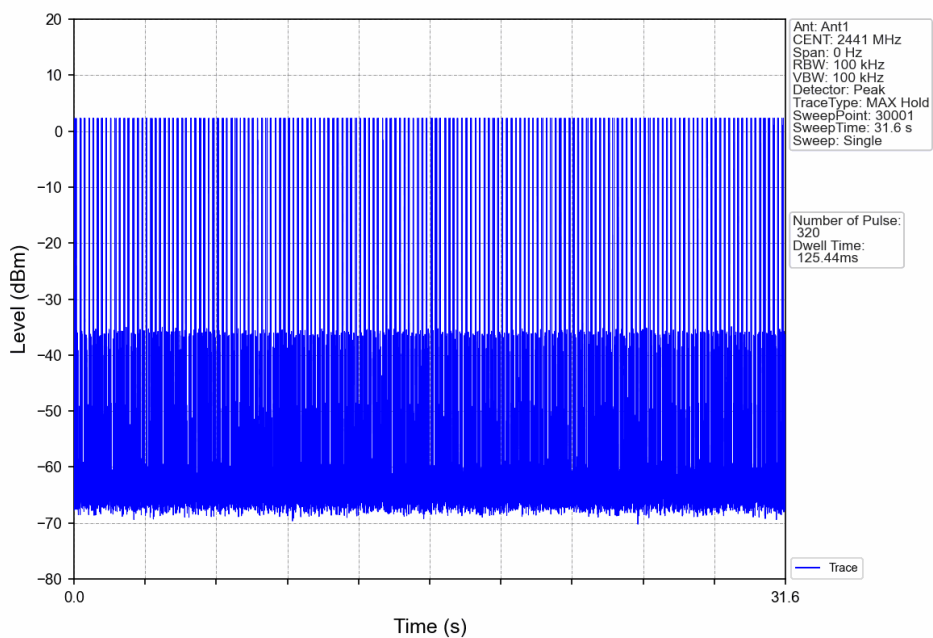


FCCID: 2AOM3-P73

8DPSK 3DH1 HOPP Ant1 NTN

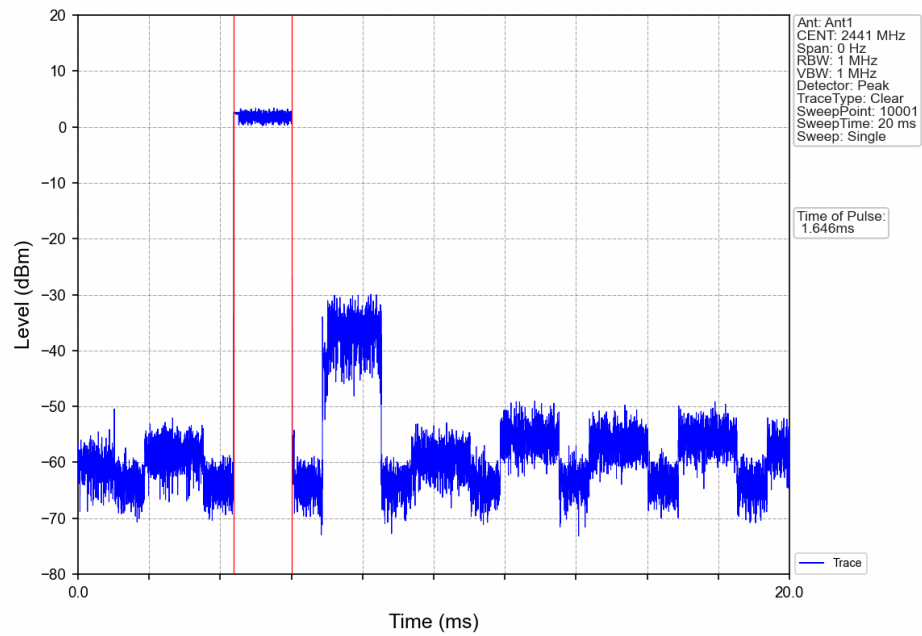


8DPSK 3DH1 HOPP Ant1 NTN

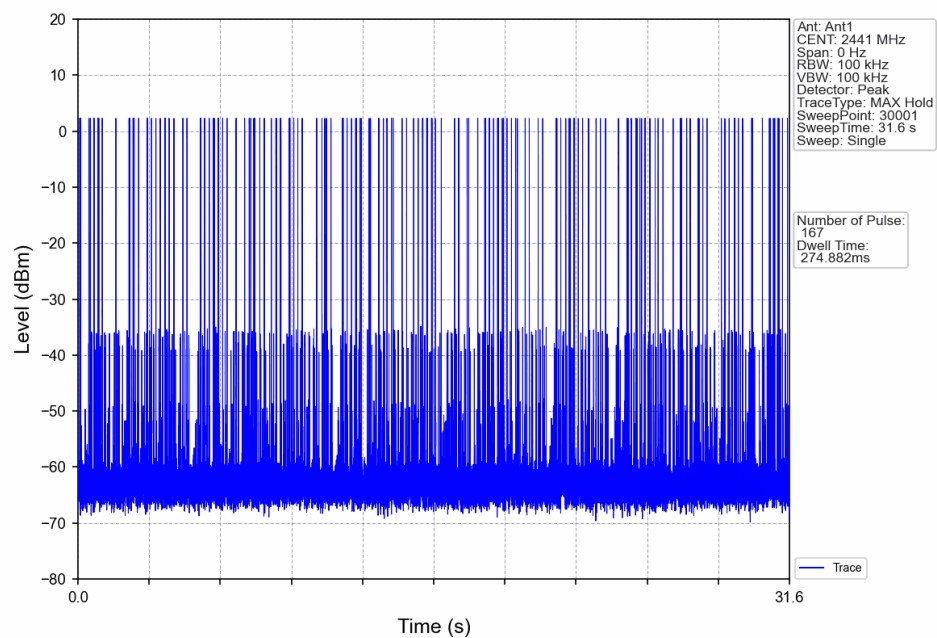


FCCID: 2AOM3-P73

8DPSK 3DH3 HOPP Ant1 NTV

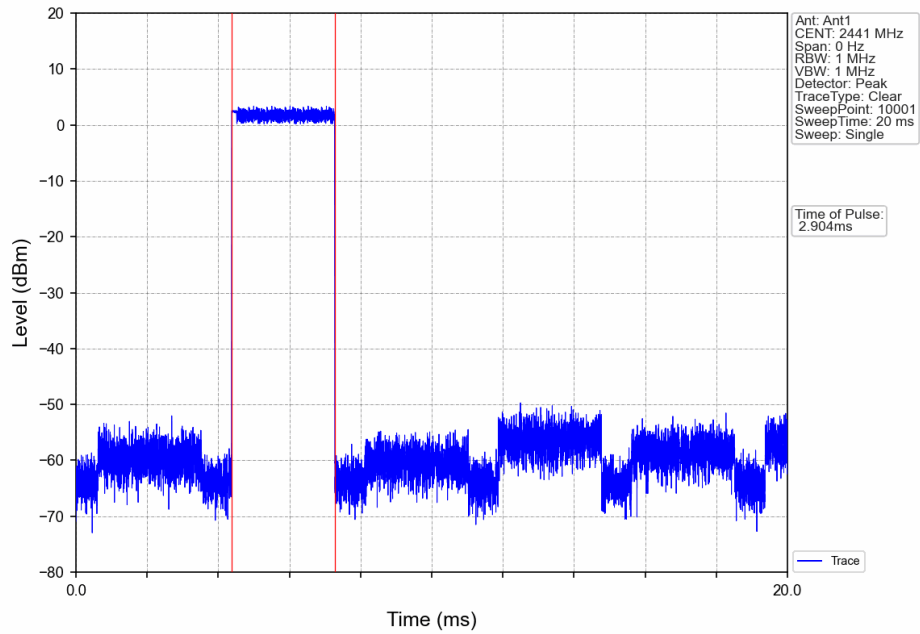


8DPSK 3DH3 HOPP Ant1 NTV

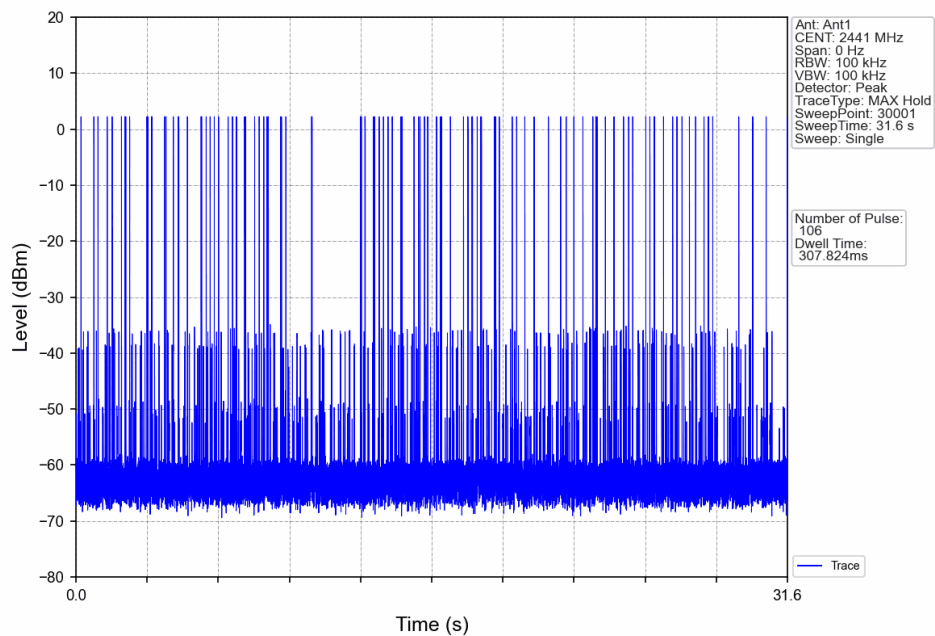


FCCID: 2AOM3-P73

8DPSK 3DH5 HOPP Ant1 NTN



8DPSK 3DH5 HOPP Ant1 NTN



6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Ref

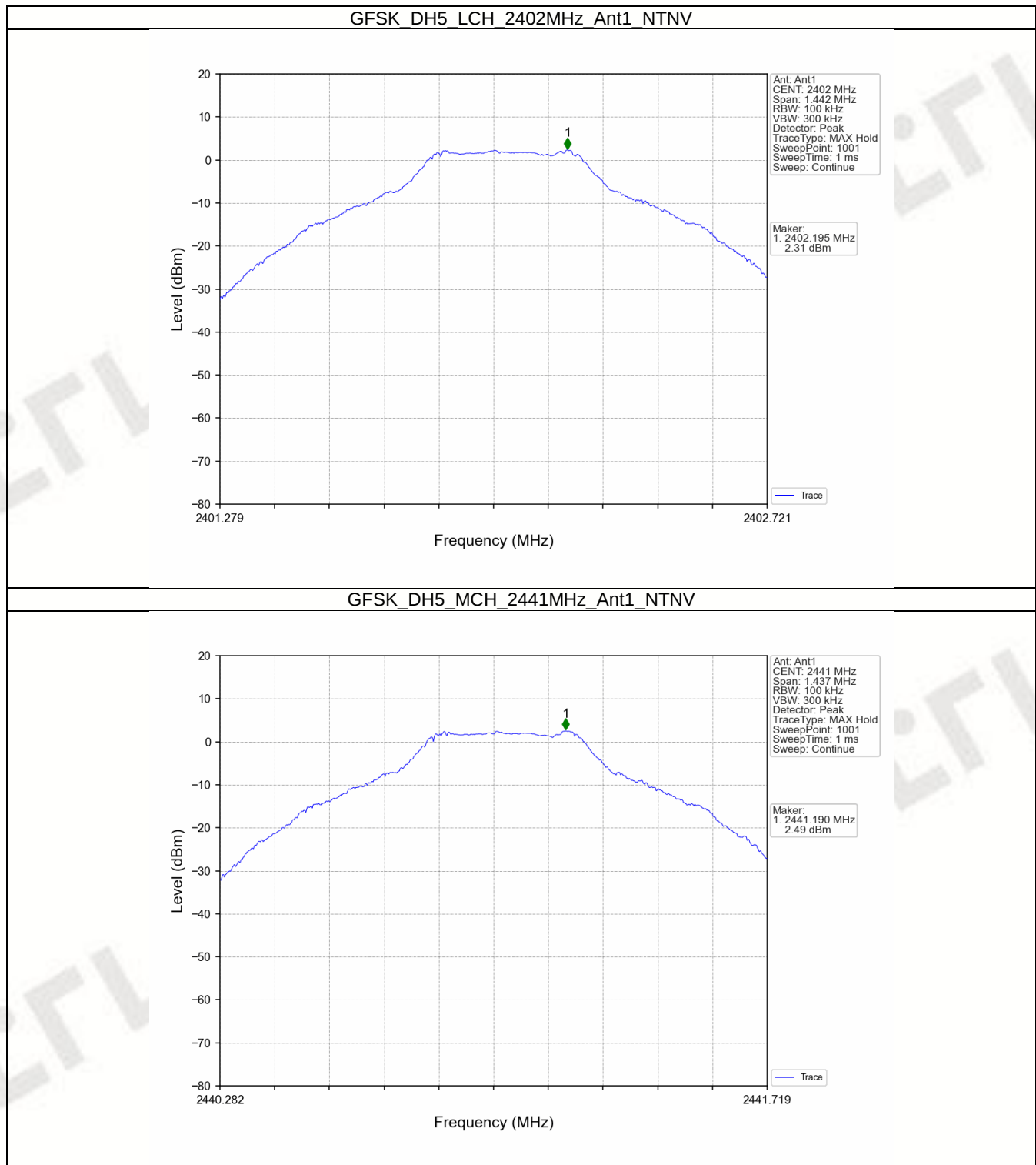
6.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	2.31
		2441	DH5	1	2.49
		2480	DH5	1	2.17
Pi/4DQPSK	SISO	2402	2DH5	1	2.15
		2441	2DH5	1	2.42
		2480	2DH5	1	2.12
8DPSK	SISO	2402	3DH5	1	2.17
		2441	3DH5	1	2.44
		2480	3DH5	1	2.11

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.

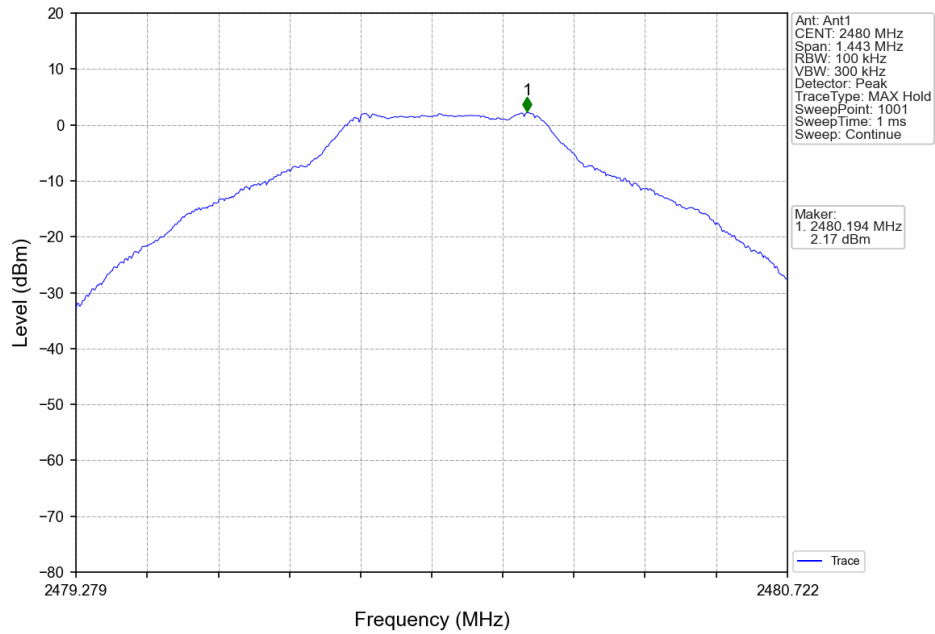
FCCID: 2AOM3-P73

6.1.2 Test Graph

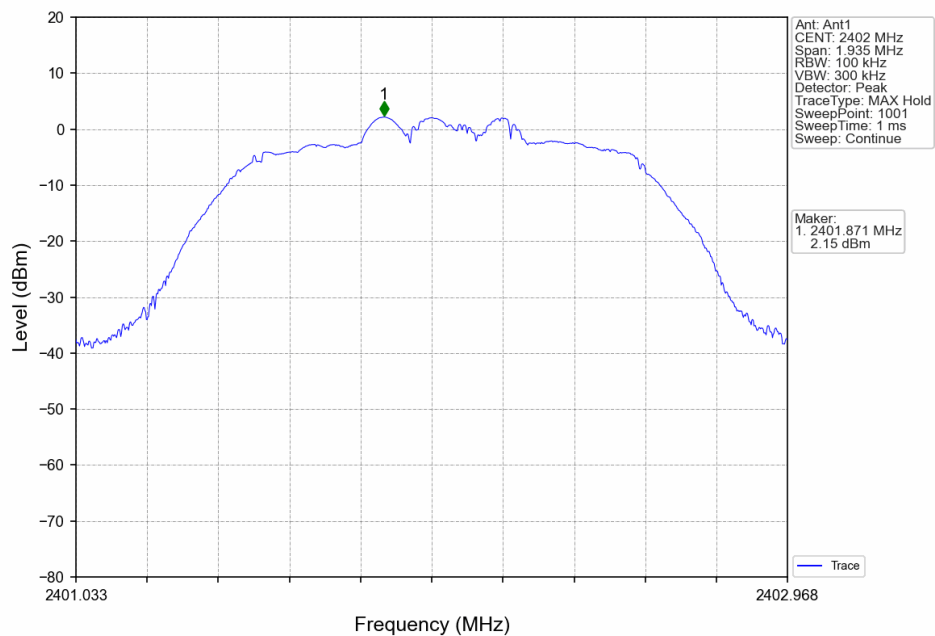


FCCID: 2AOM3-P73

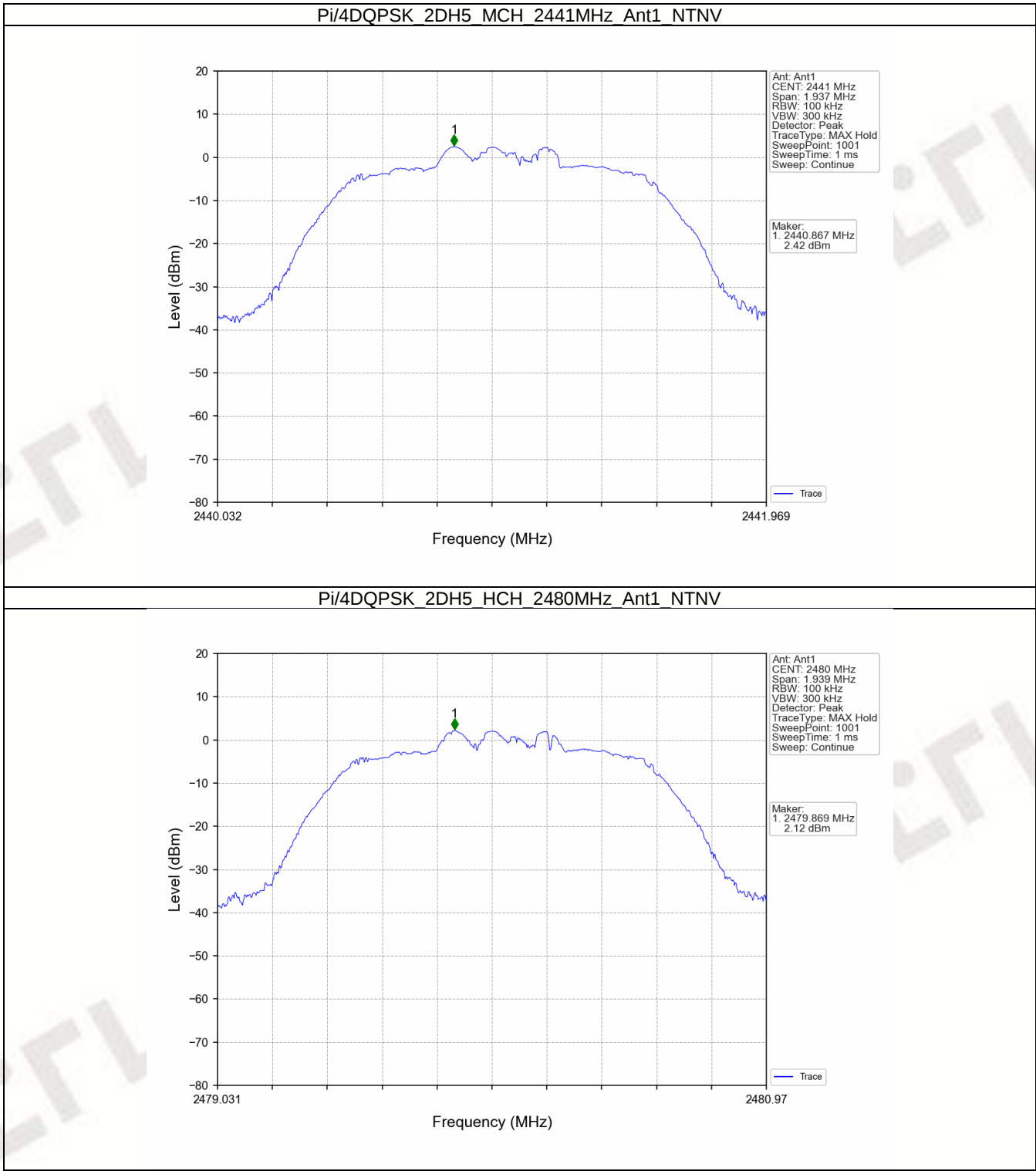
GFSK DH5 HCH 2480MHz Ant1 NTNV



Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTNV

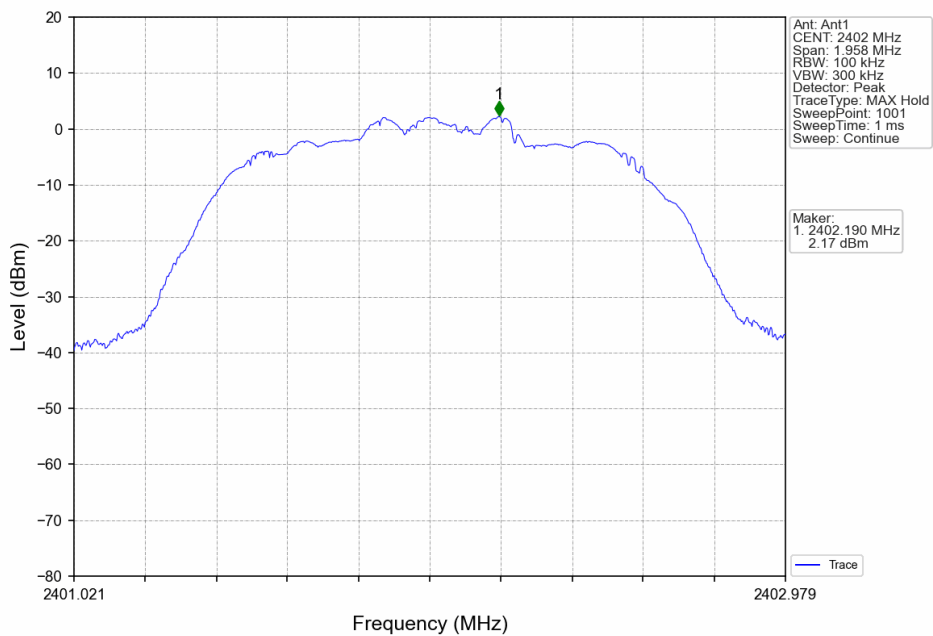


FCCID: 2AOM3-P73

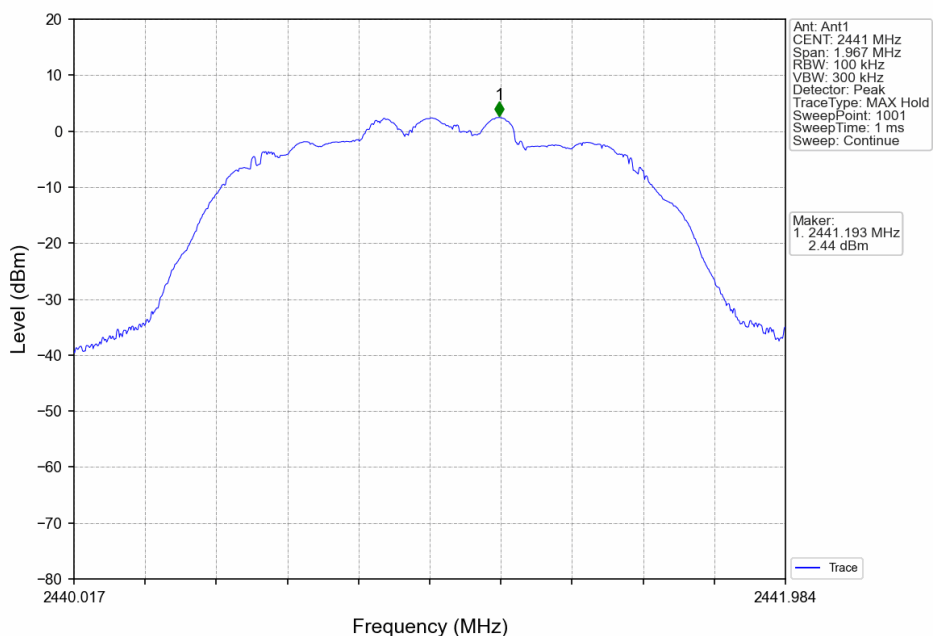


FCCID: 2AOM3-P73

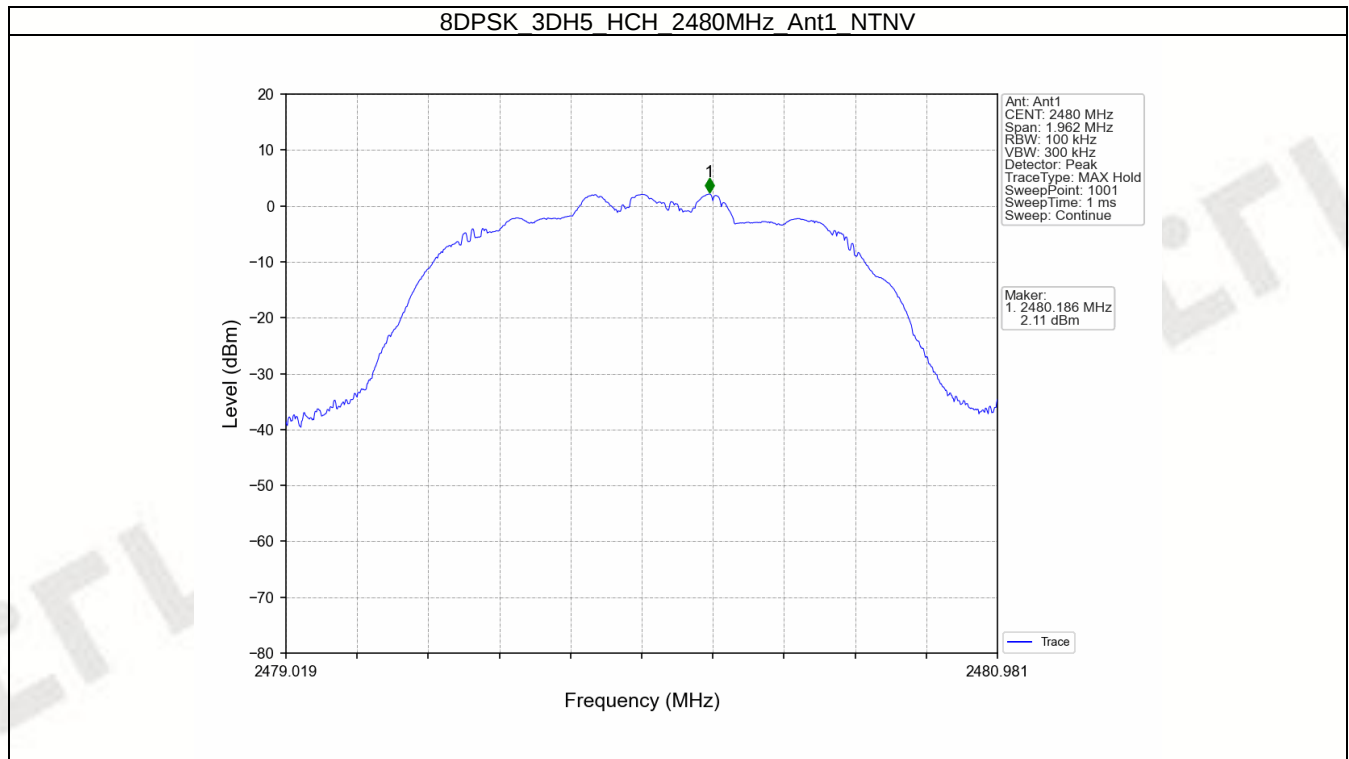
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



8DPSK 3DH5 MCH 2441MHz Ant1 NTN



FCCID: 2AOM3-P73



FCCID: 2AOM3-P73

6.2 CSE

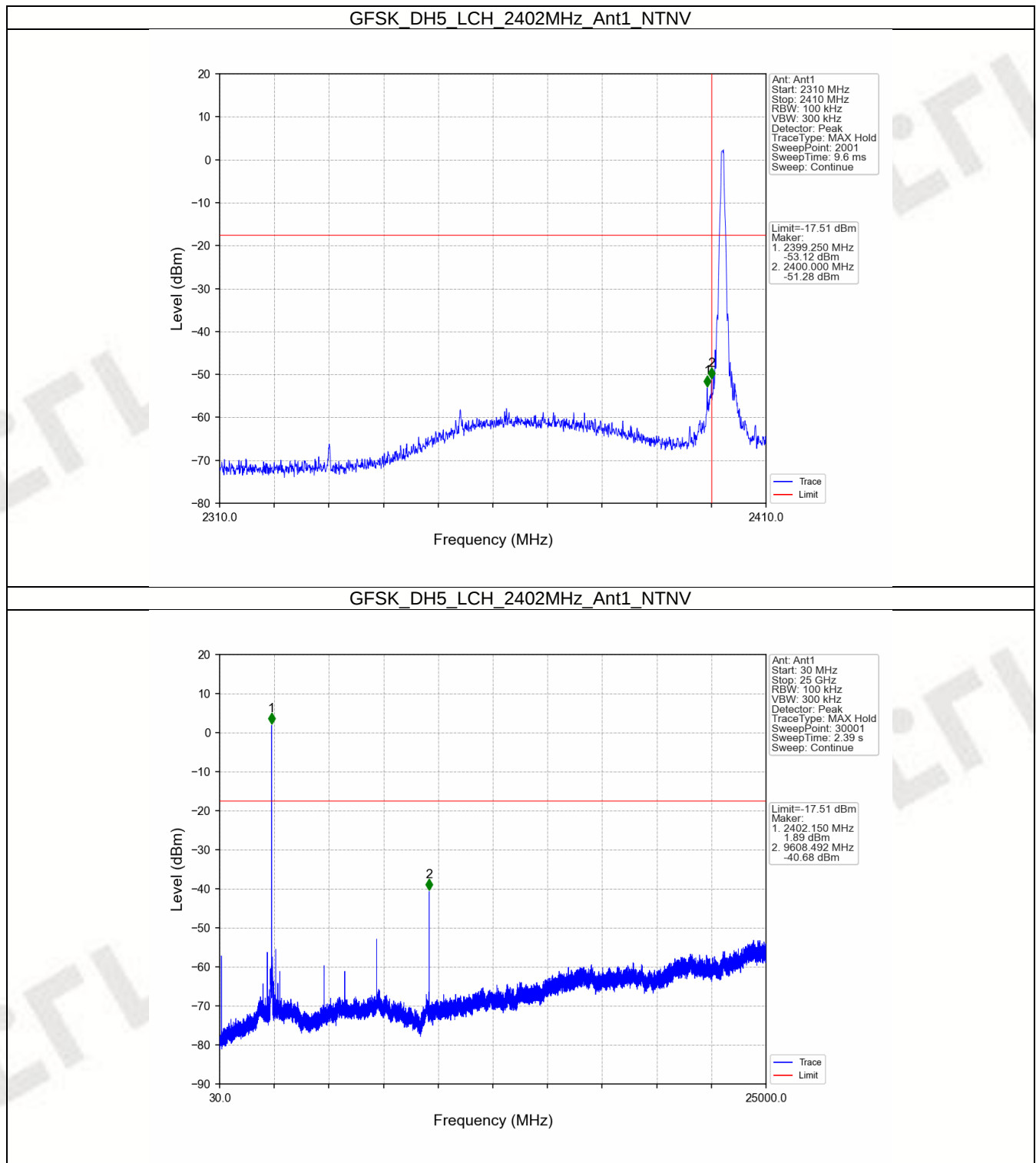
6.2.1 Test Result

Mode	Tx Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	2.49	-17.51	Pass
		2441	DH5	1	2.49	-17.51	Pass
		2480	DH5	1	2.49	-17.51	Pass
		HOPP	DH5	1	2.49	-17.51	Pass
					2.49	-17.51	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	2.42	-17.58	Pass
		2441	2DH5	1	2.42	-17.58	Pass
		2480	2DH5	1	2.42	-17.58	Pass
		HOPP	2DH5	1	2.42	-17.58	Pass
					2.42	-17.58	Pass
8DPSK	SISO	2402	3DH5	1	2.44	-17.56	Pass
		2441	3DH5	1	2.44	-17.56	Pass
		2480	3DH5	1	2.44	-17.56	Pass
		HOPP	3DH5	1	2.44	-17.56	Pass
					2.44	-17.56	Pass

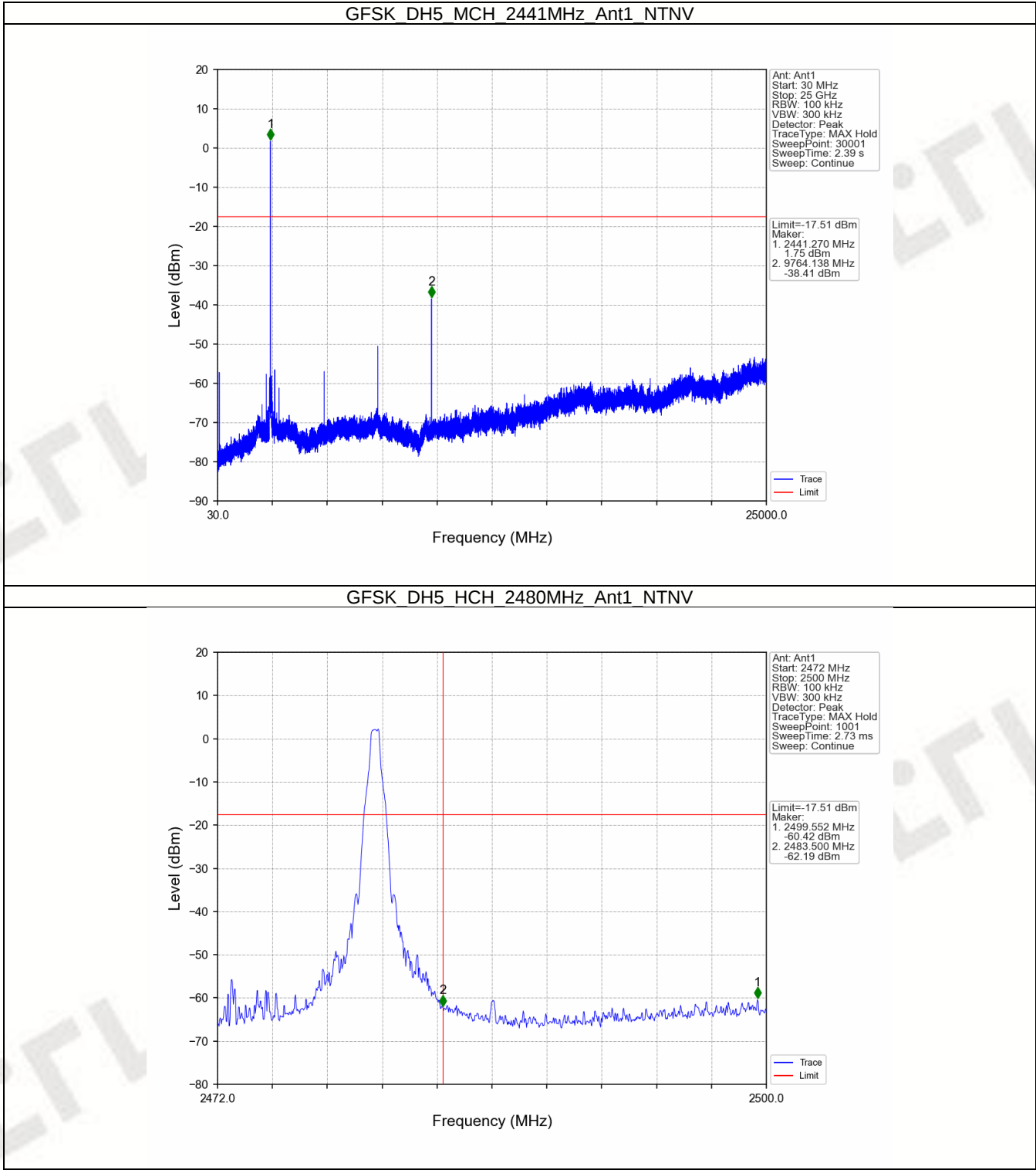
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

FCCID: 2AOM3-P73

6.2.2 Test Graph

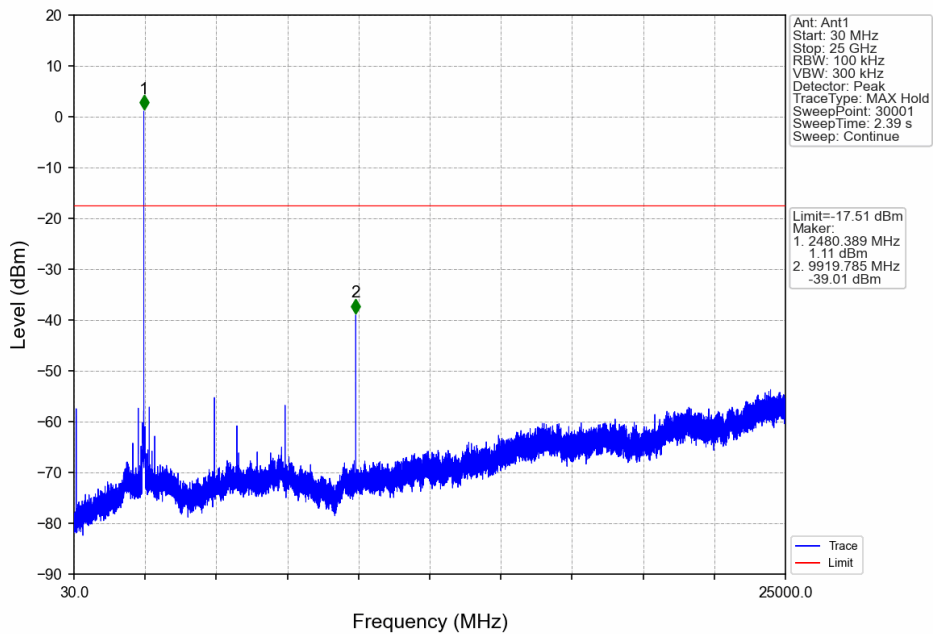


FCCID: 2AOM3-P73

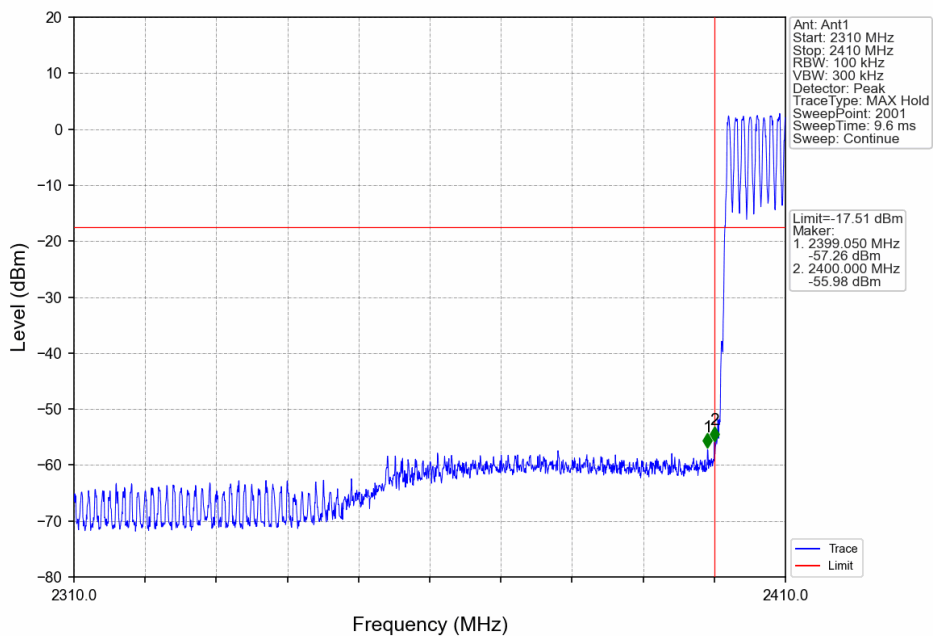


FCCID: 2AOM3-P73

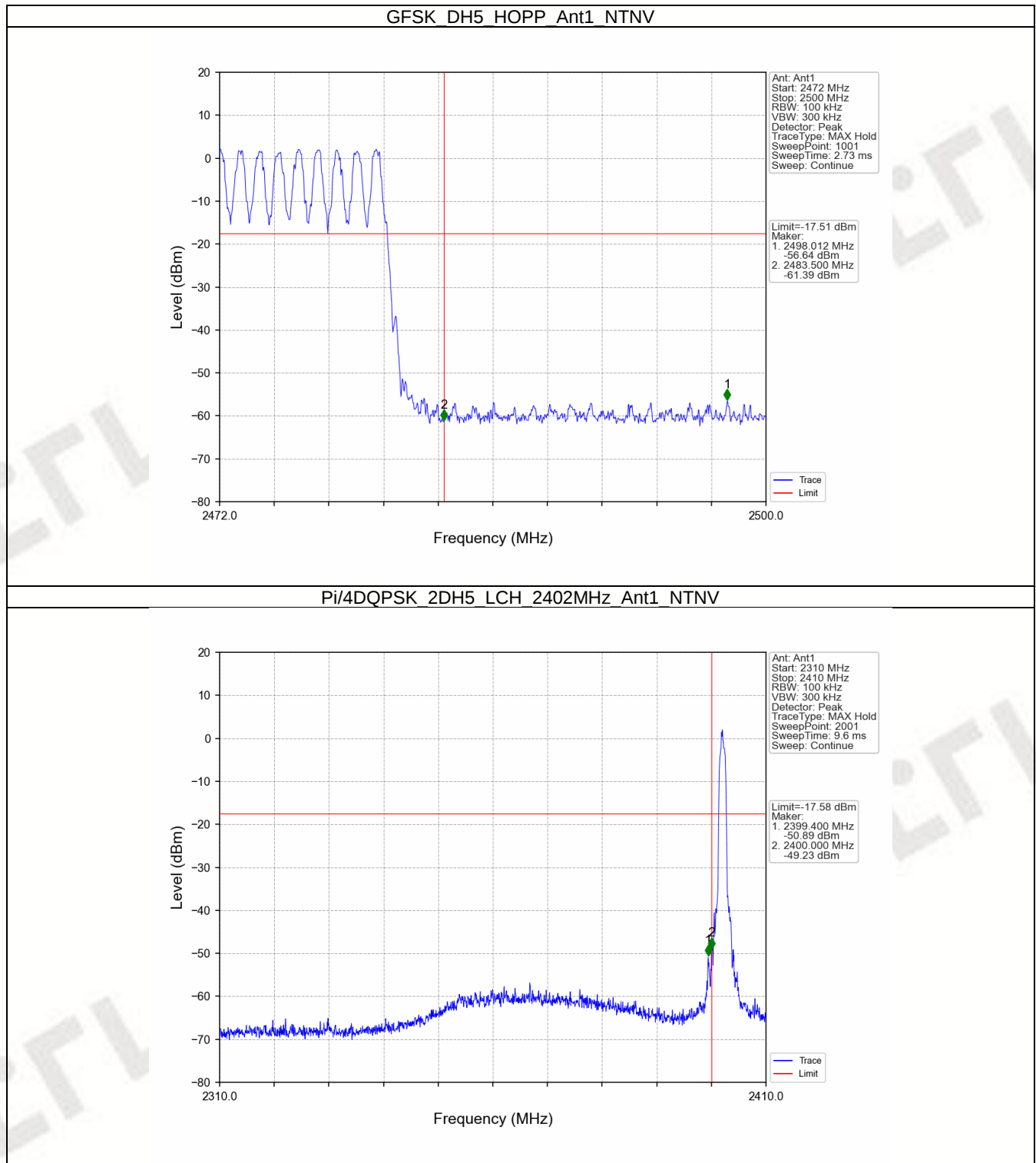
GFSK DH5 HCH 2480MHz Ant1 NTN



GFSK DH5 HOPP Ant1 NTN

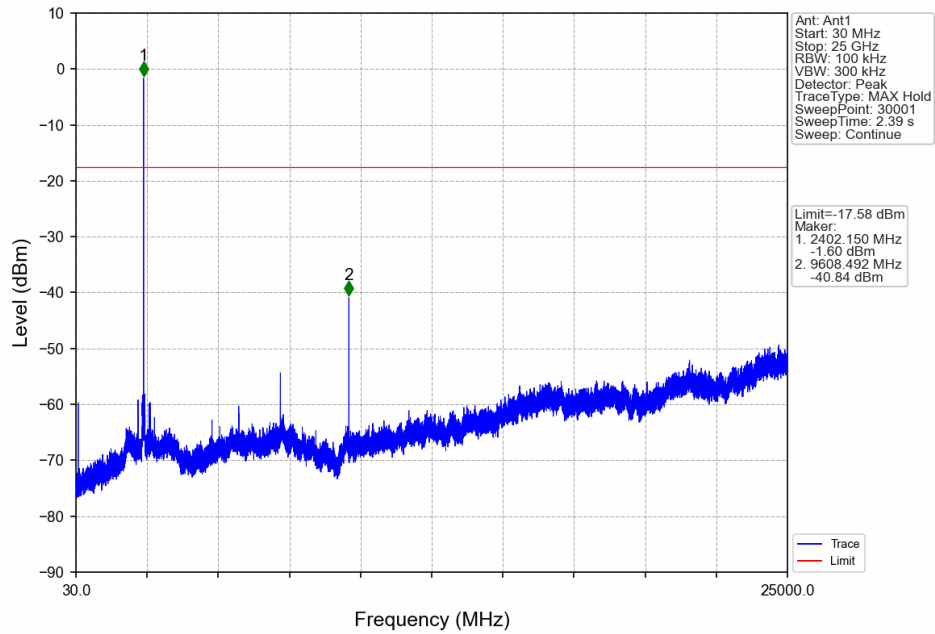


FCCID: 2AOM3-P73

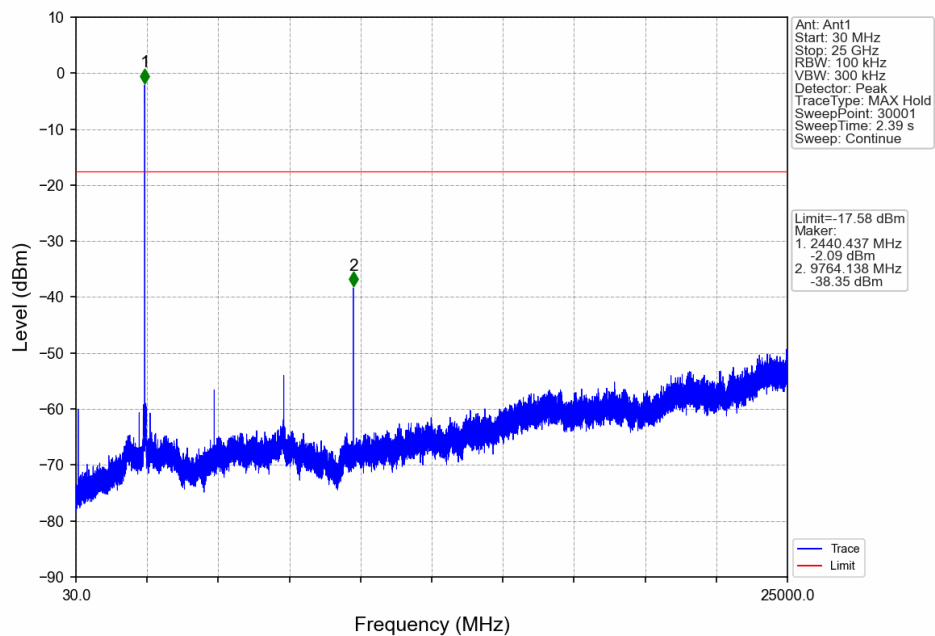


FCCID: 2AOM3-P73

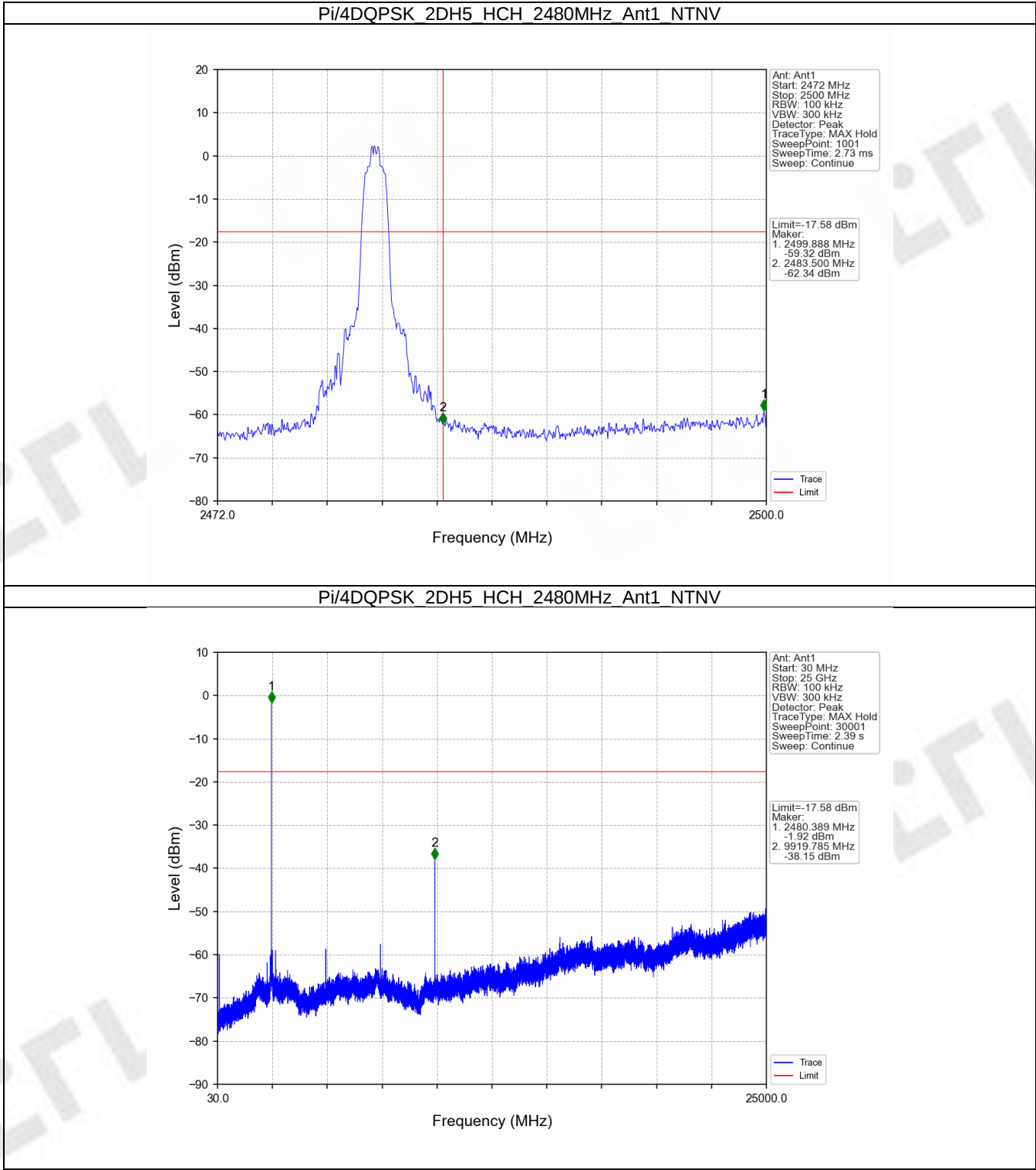
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



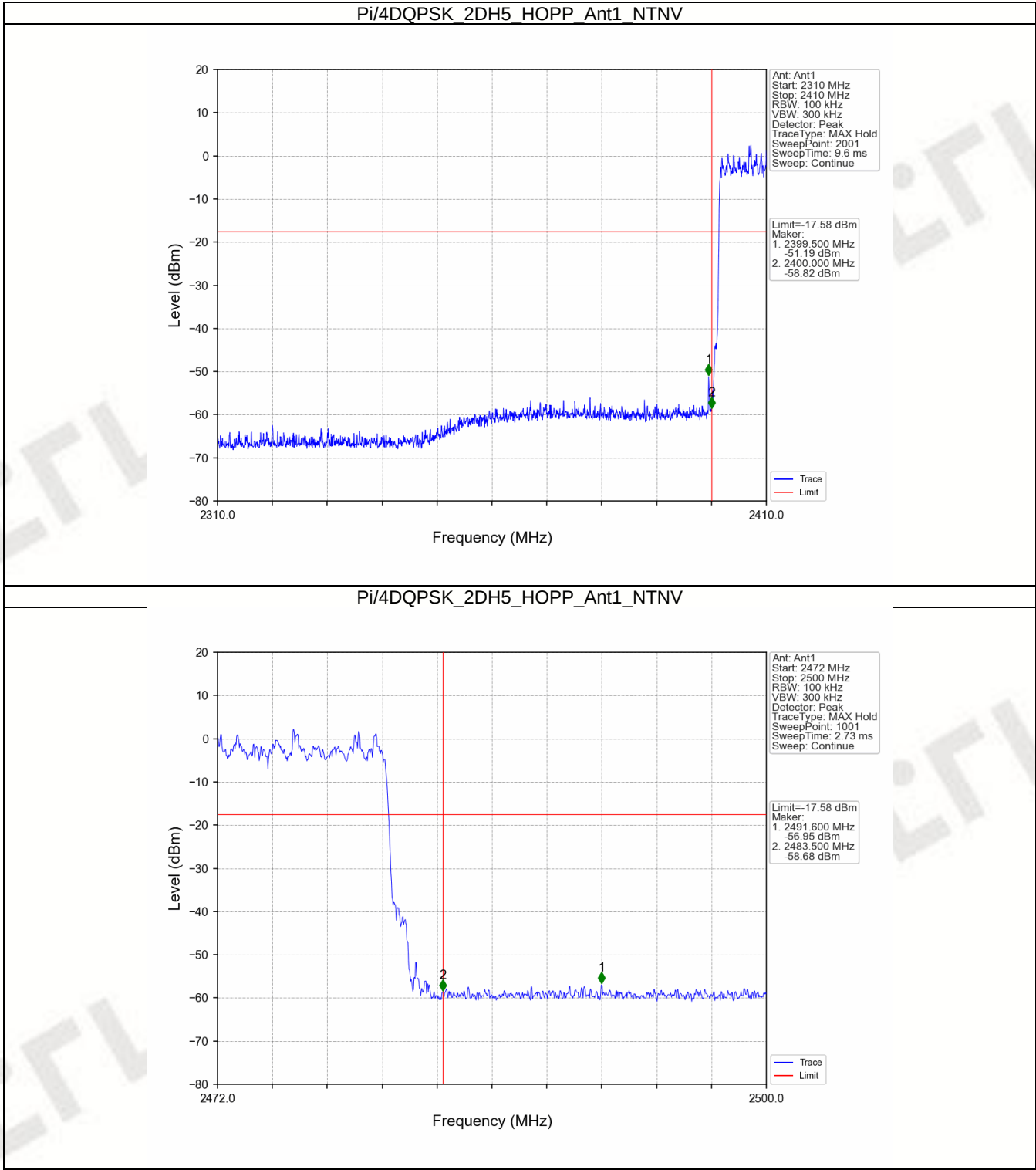
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN



FCCID: 2AOM3-P73

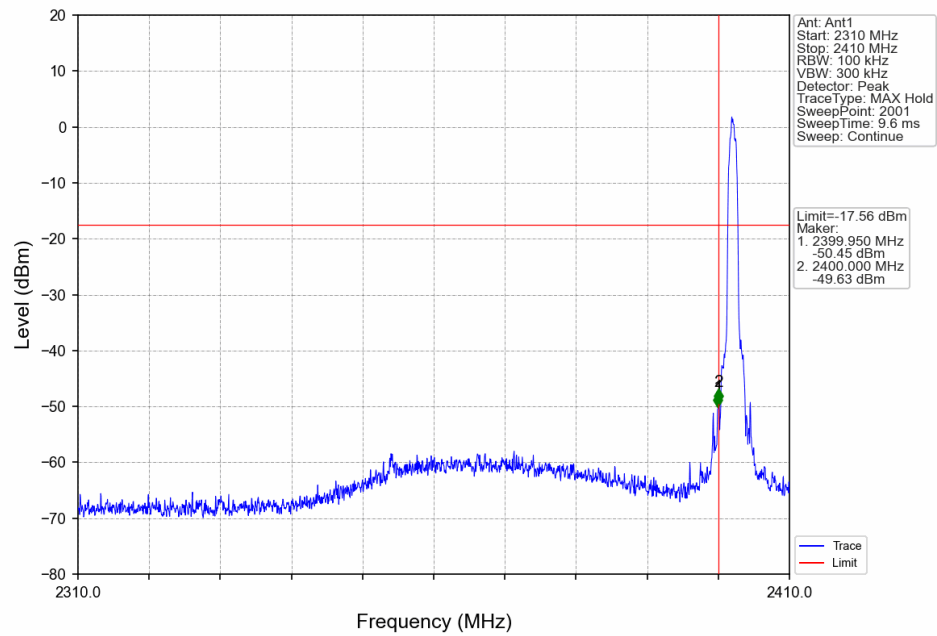


FCCID: 2AOM3-P73

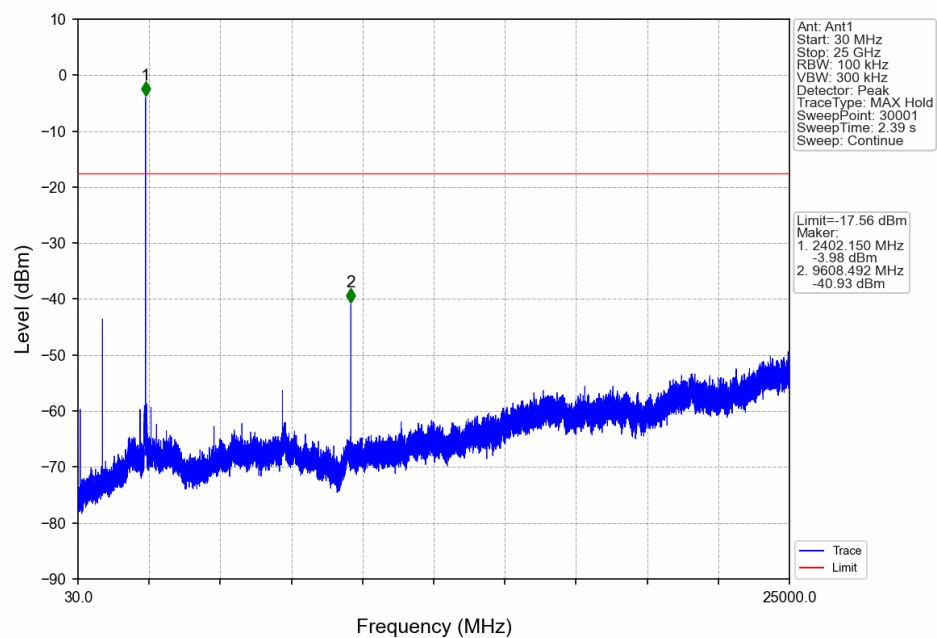


FCCID: 2AOM3-P73

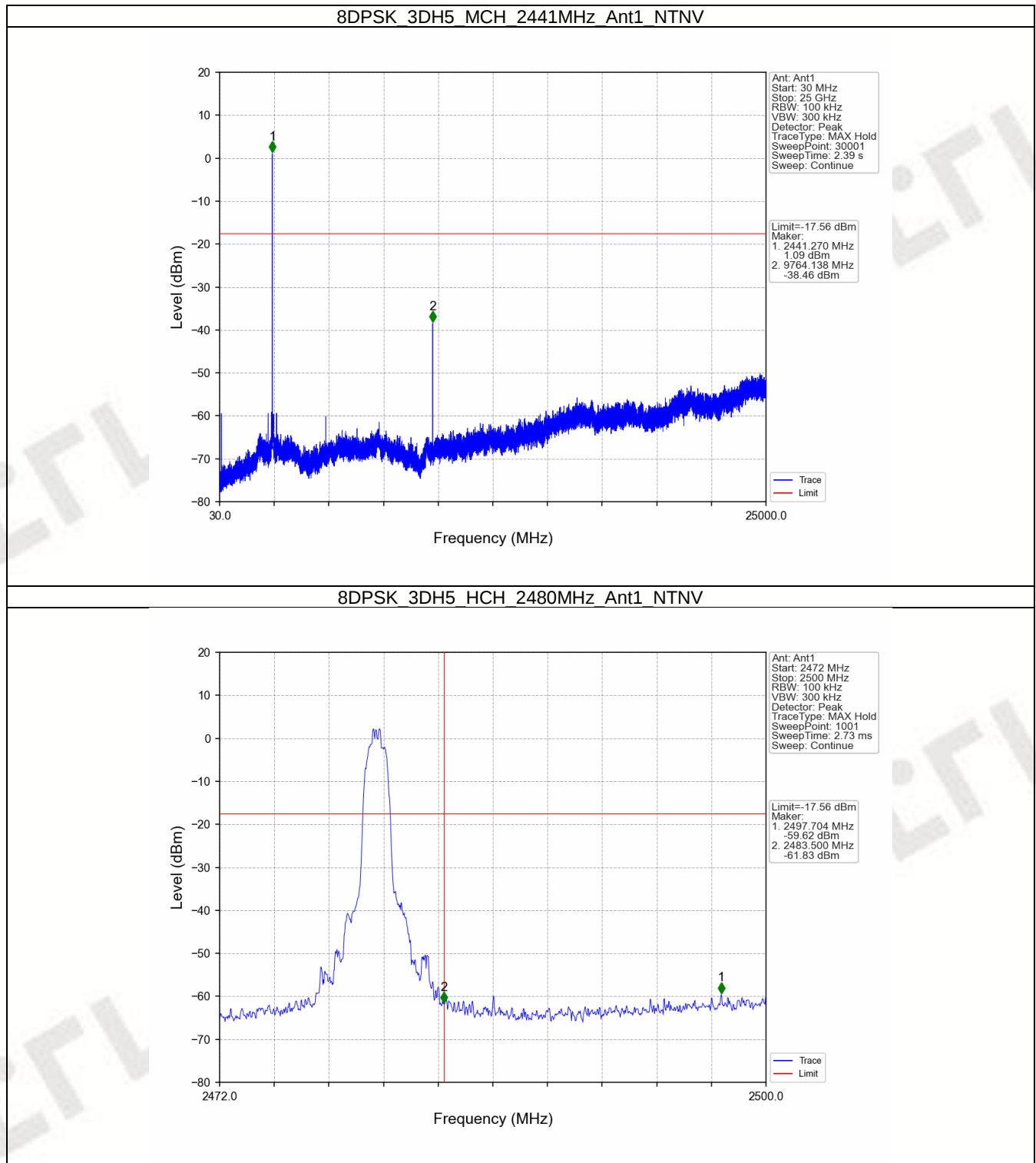
8DPSK 3DH5 LCH 2402MHz Ant1 NTNV



8DPSK 3DH5 LCH 2402MHz Ant1 NTNV

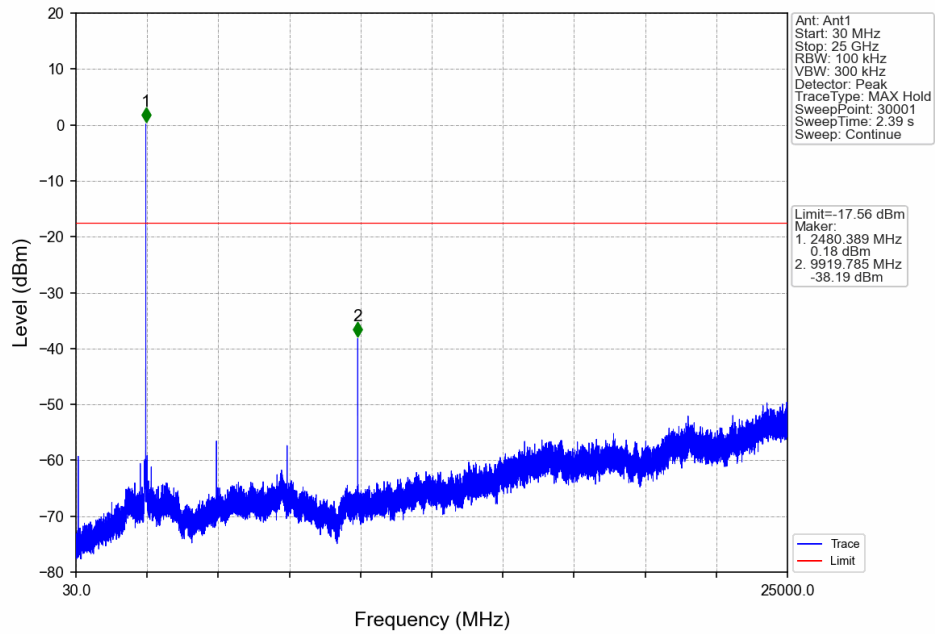


FCCID: 2AOM3-P73

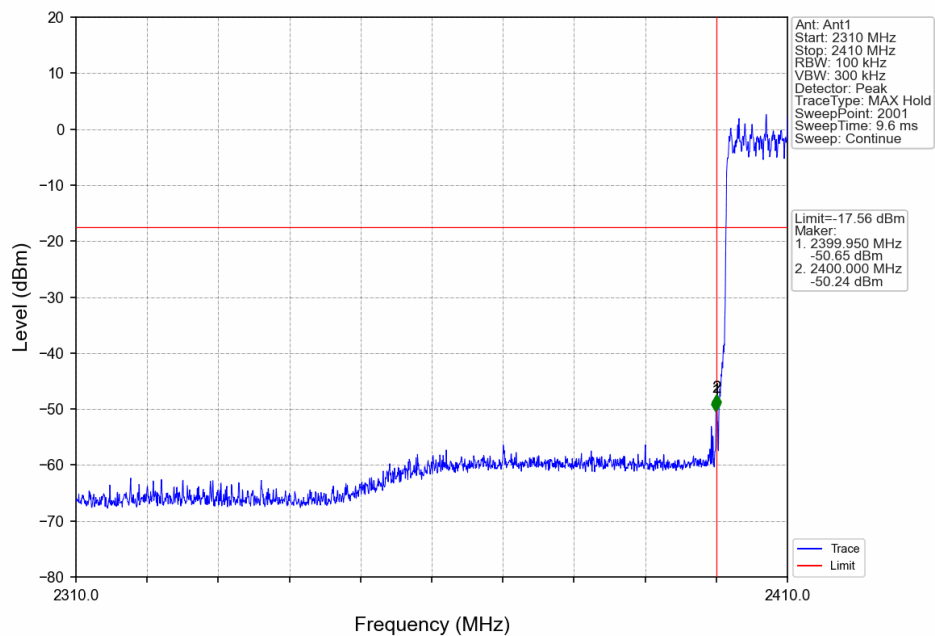


FCCID: 2AOM3-P73

8DPSK 3DH5 HCH 2480MHz Ant1 NTN



8DPSK 3DH5 HOPP Ant1 NTN



FCCID: 2AOM3-P73

