



Annex for BT

Test Report No.: CTL2404153021-WF01

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6.2 CSE 43

6.2.1 Test Result 43

FCCID: 2BGZO-CP001

1. Bandwidth

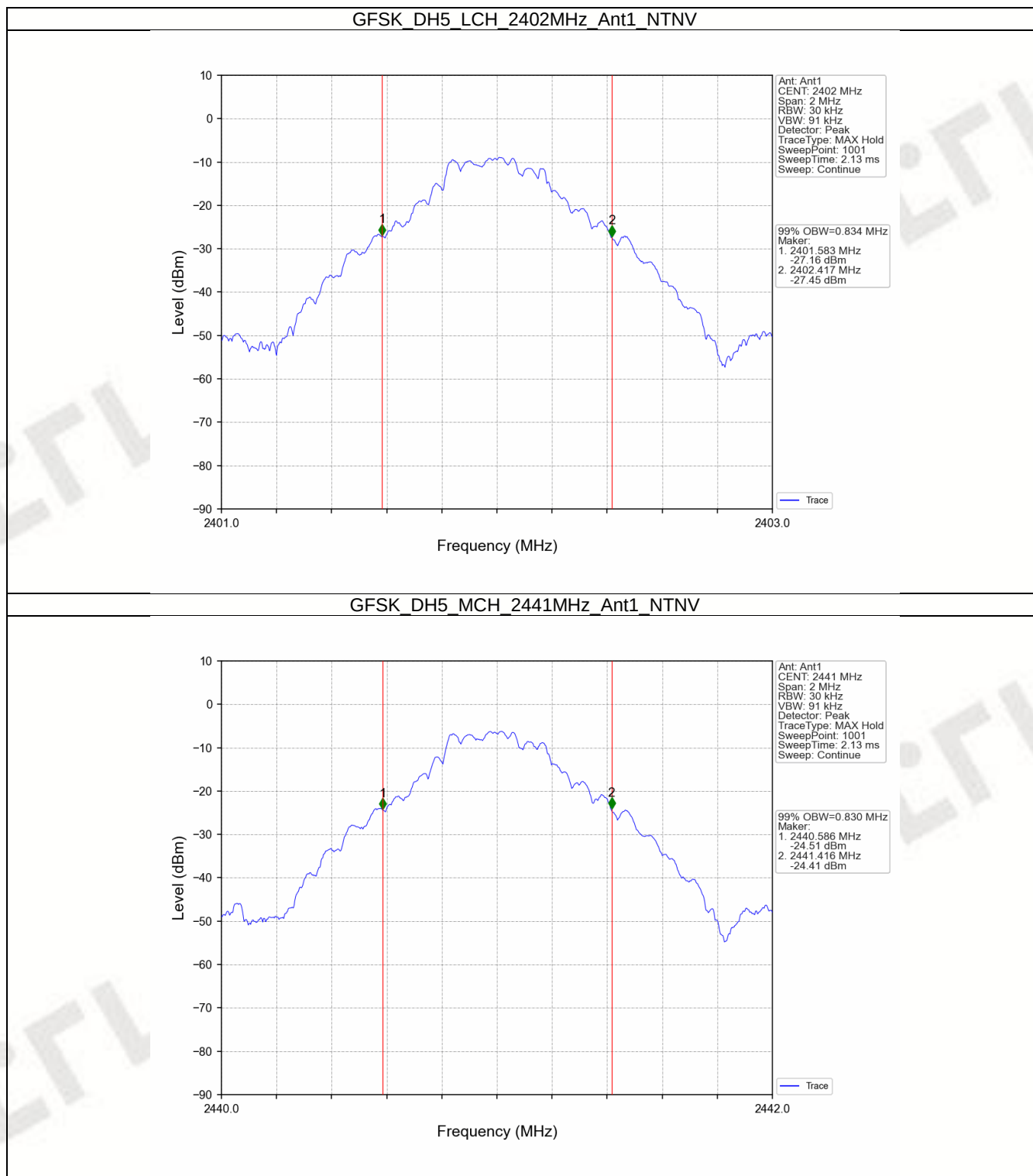
1.1 OBW

1.1.1 Test Result

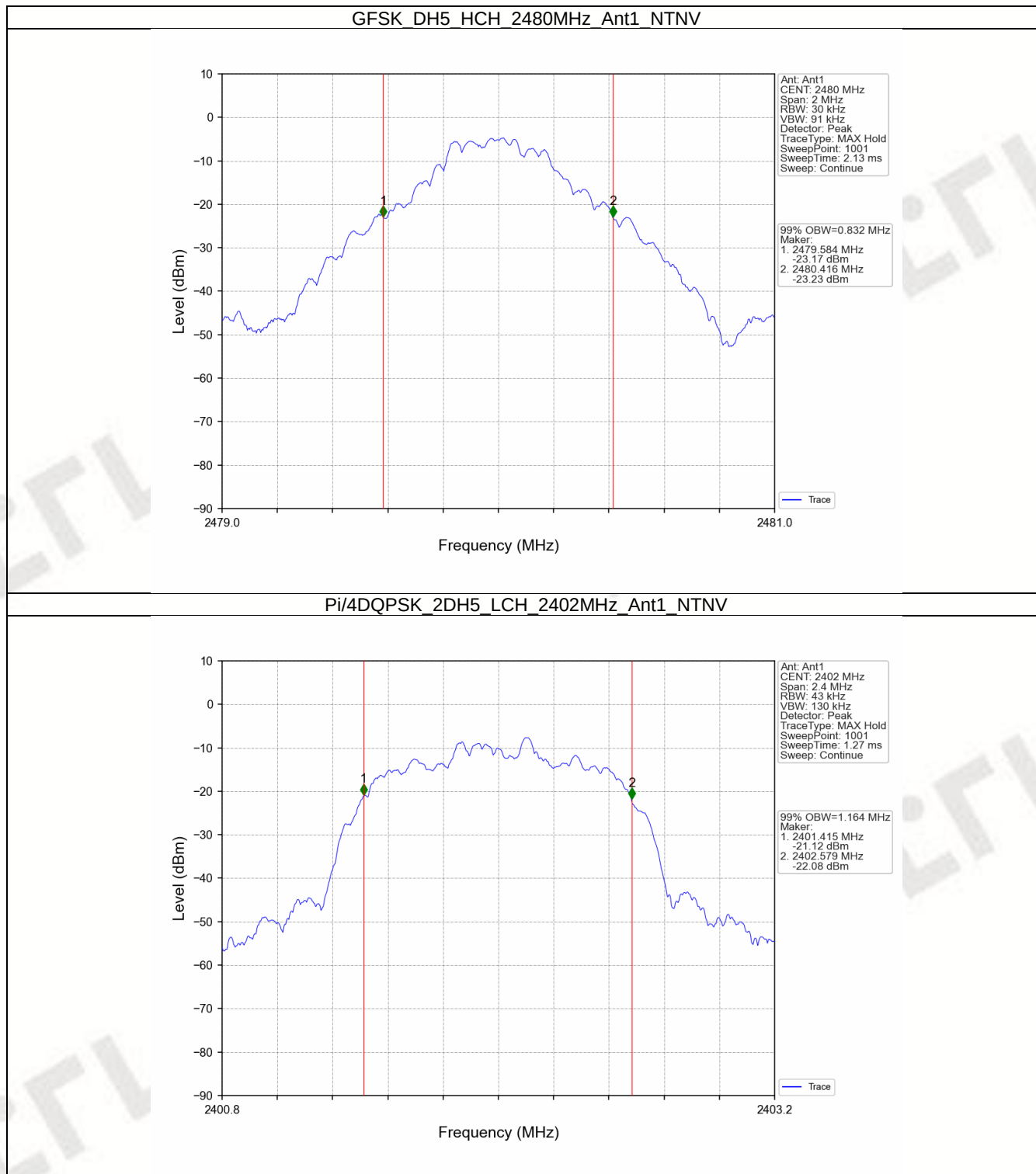
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.834	/	Pass
		2441	DH5	1	0.830	/	Pass
		2480	DH5	1	0.832	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.164	/	Pass
		2441	2DH5	1	1.168	/	Pass
		2480	2DH5	1	1.164	/	Pass
8DPSK	SISO	2402	3DH5	1	1.176	/	Pass
		2441	3DH5	1	1.176	/	Pass
		2480	3DH5	1	1.176	/	Pass

FCCID: 2BGZO-CP001

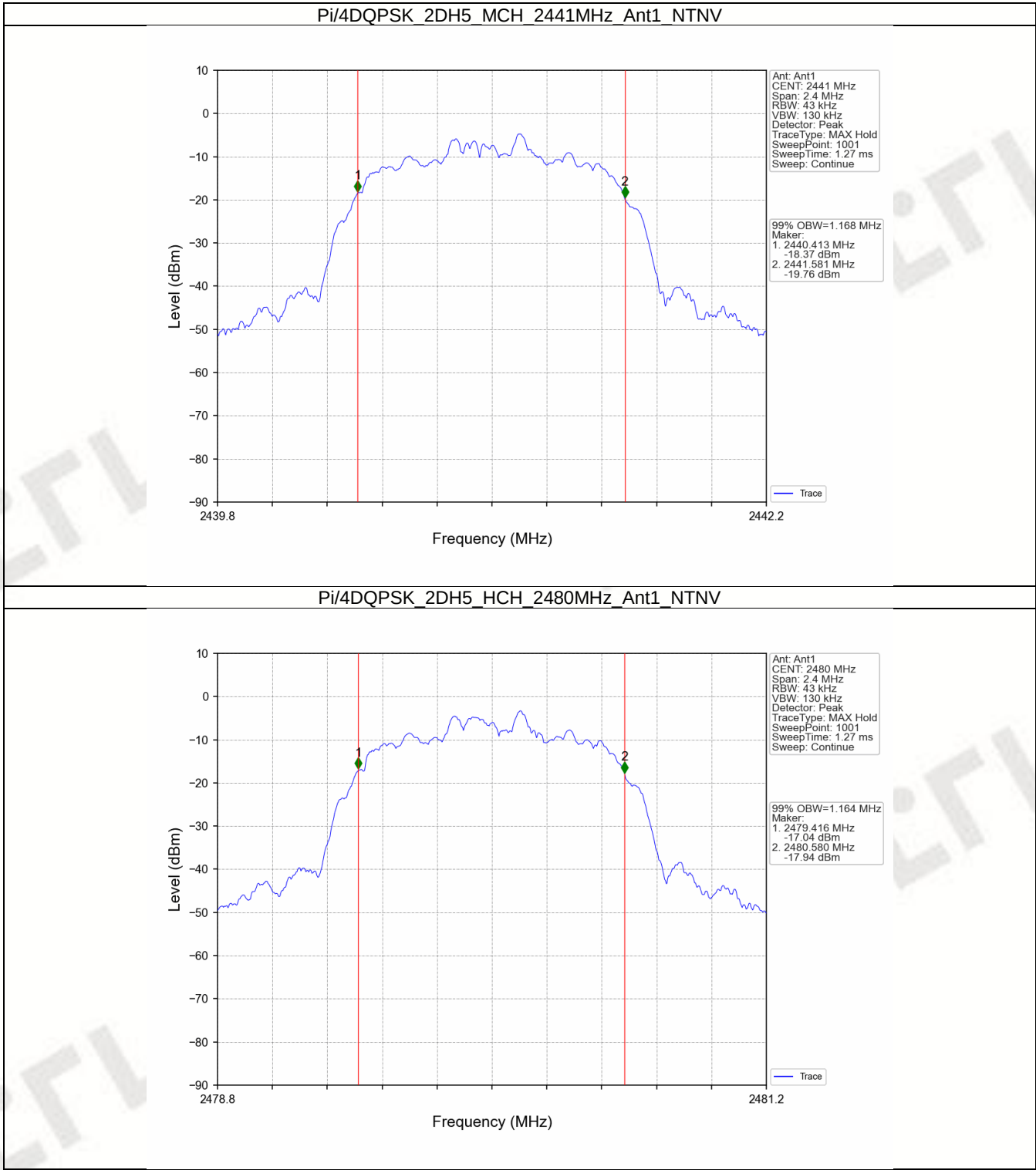
1.1.2 Test Graph



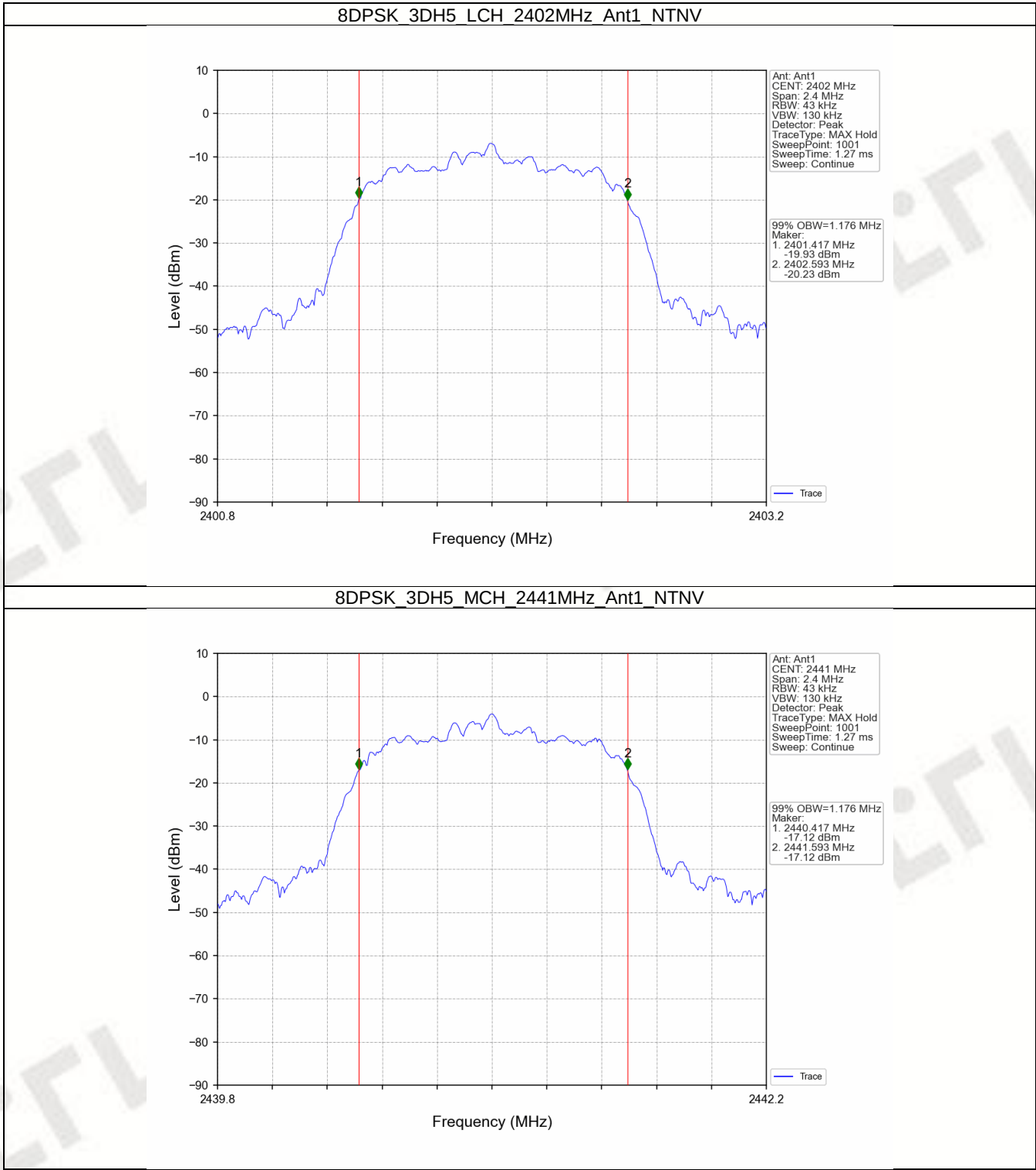
FCCID: 2BGZO-CP001



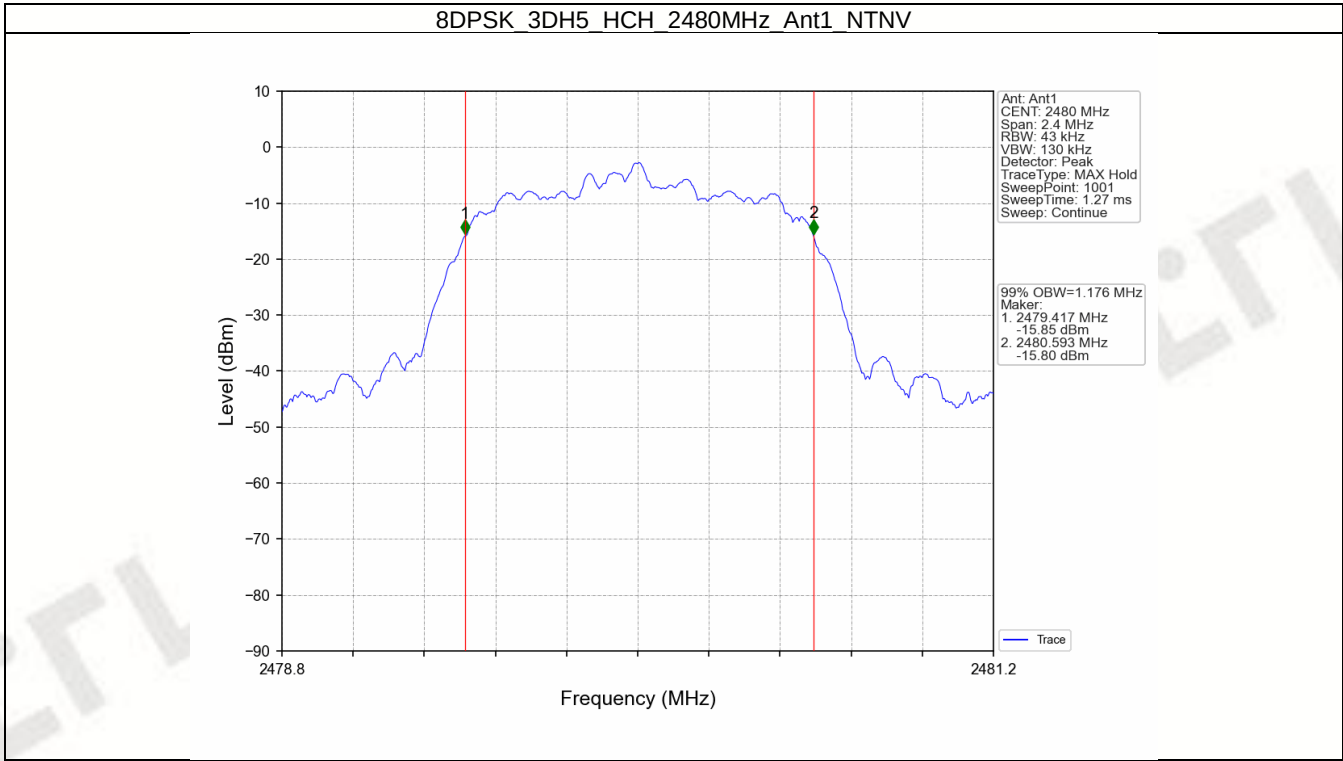
FCCID: 2BGZO-CP001



FCCID: 2BGZO-CP001



FCCID: 2BGZO-CP001



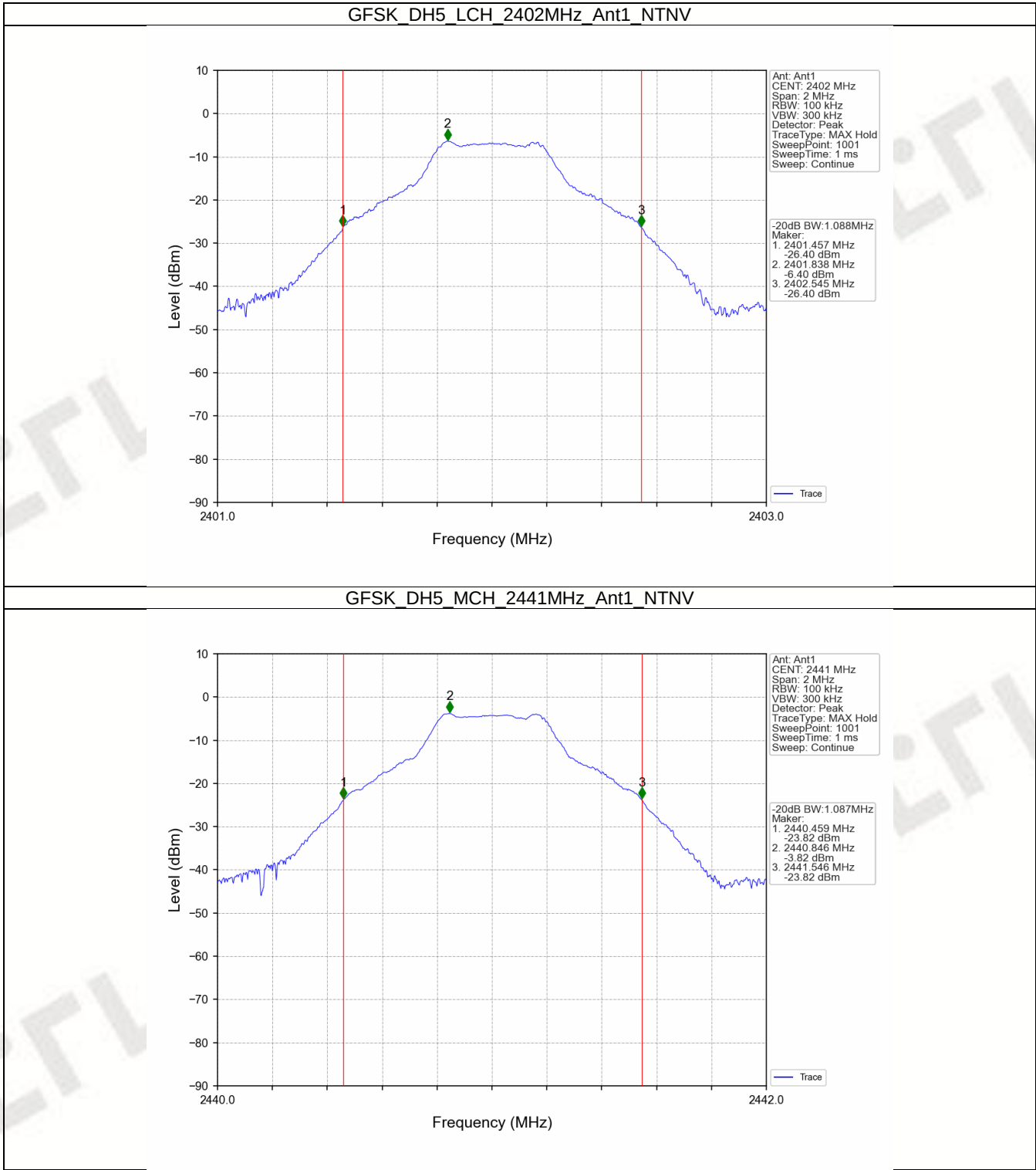
1.2 20dB BW

1.2.1 Test Result

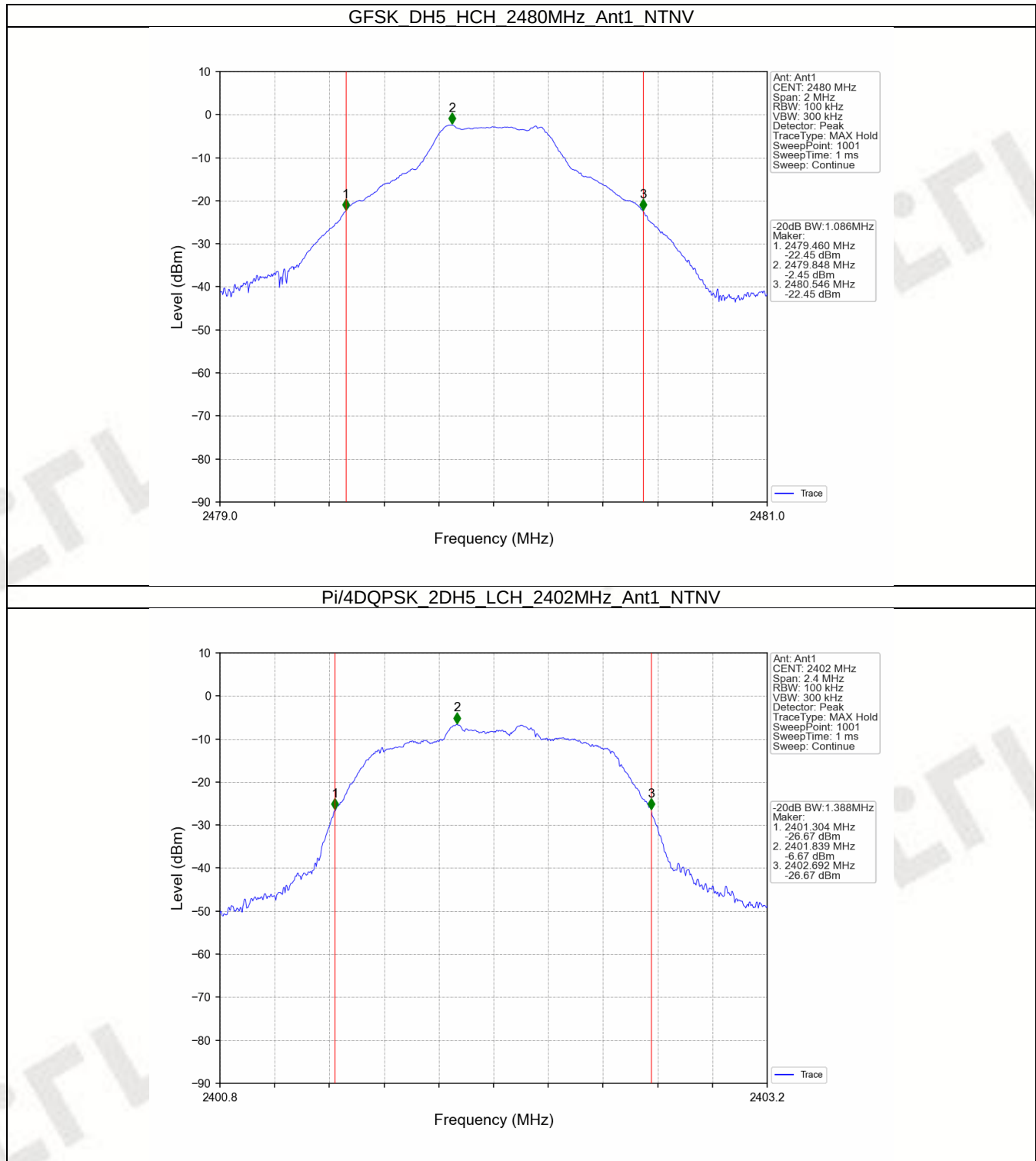
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	1.088	/	Pass
		2441	DH5	1	1.087	/	Pass
		2480	DH5	1	1.086	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.388	/	Pass
		2441	2DH5	1	1.384	/	Pass
		2480	2DH5	1	1.389	/	Pass
8DPSK	SISO	2402	3DH5	1	1.380	/	Pass
		2441	3DH5	1	1.380	/	Pass
		2480	3DH5	1	1.382	/	Pass

FCCID: 2BGZO-CP001

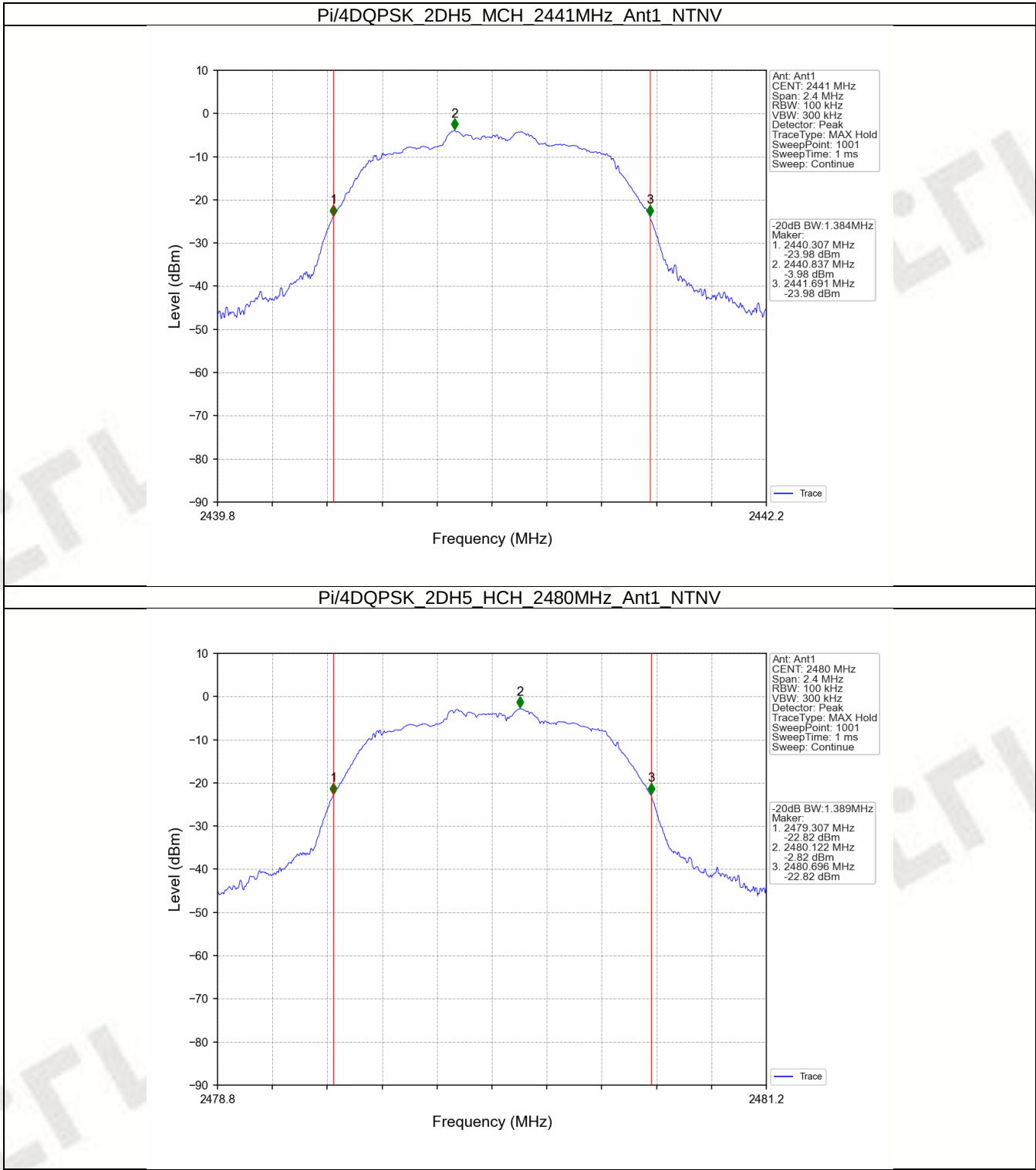
1.2.2 Test Graph



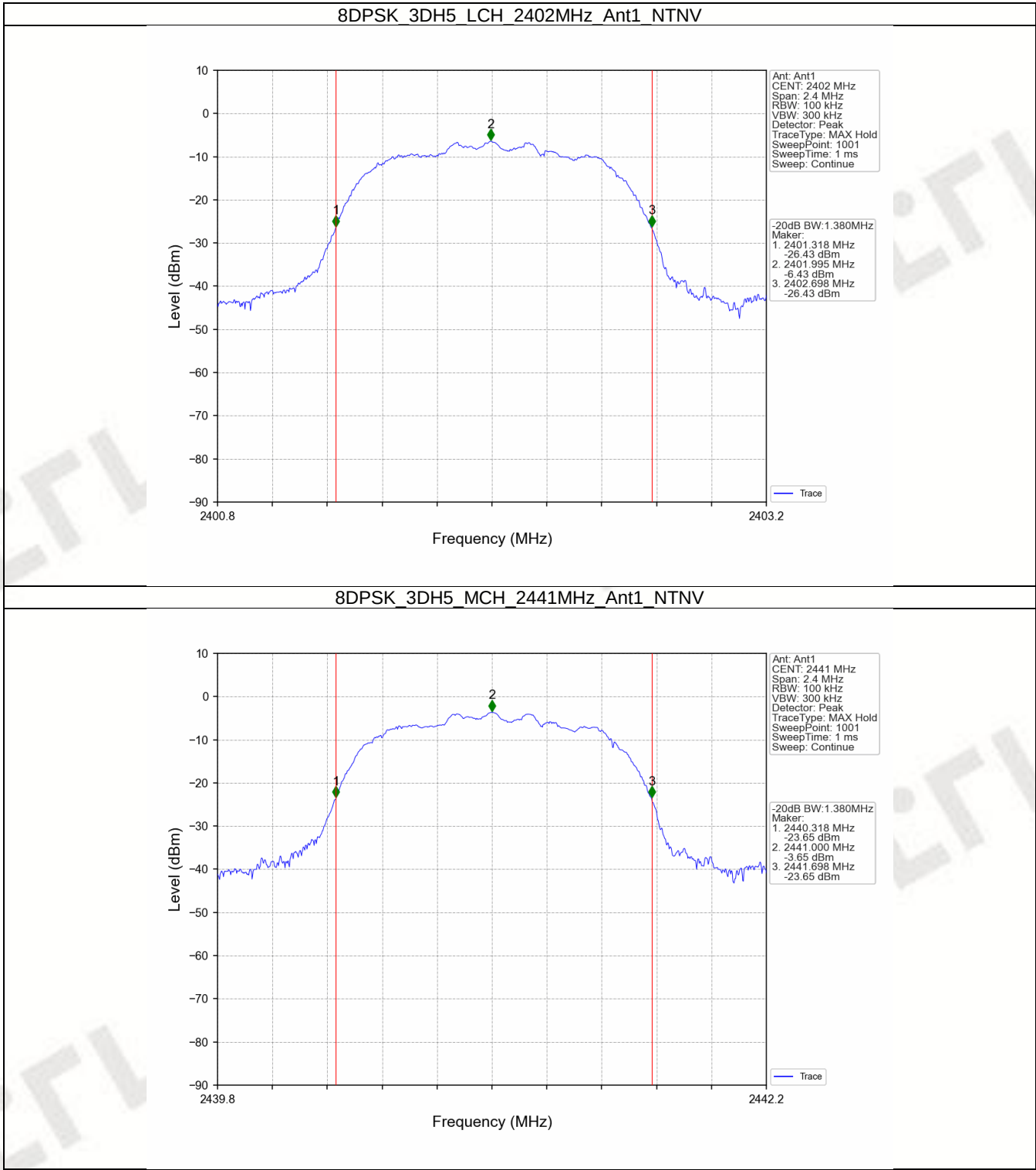
FCCID: 2BGZO-CP001



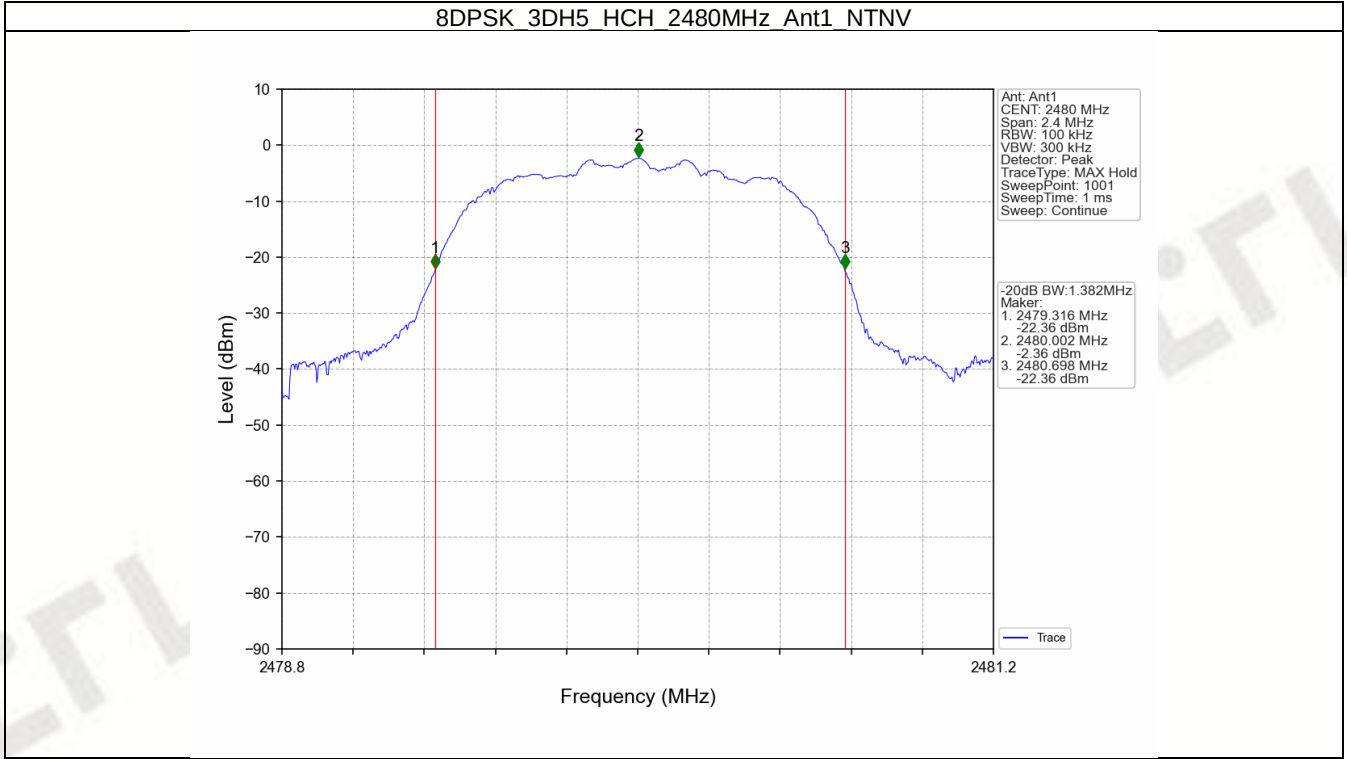
FCCID: 2BGZO-CP001



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2. Maximum Conducted Output Power

2.1 Power

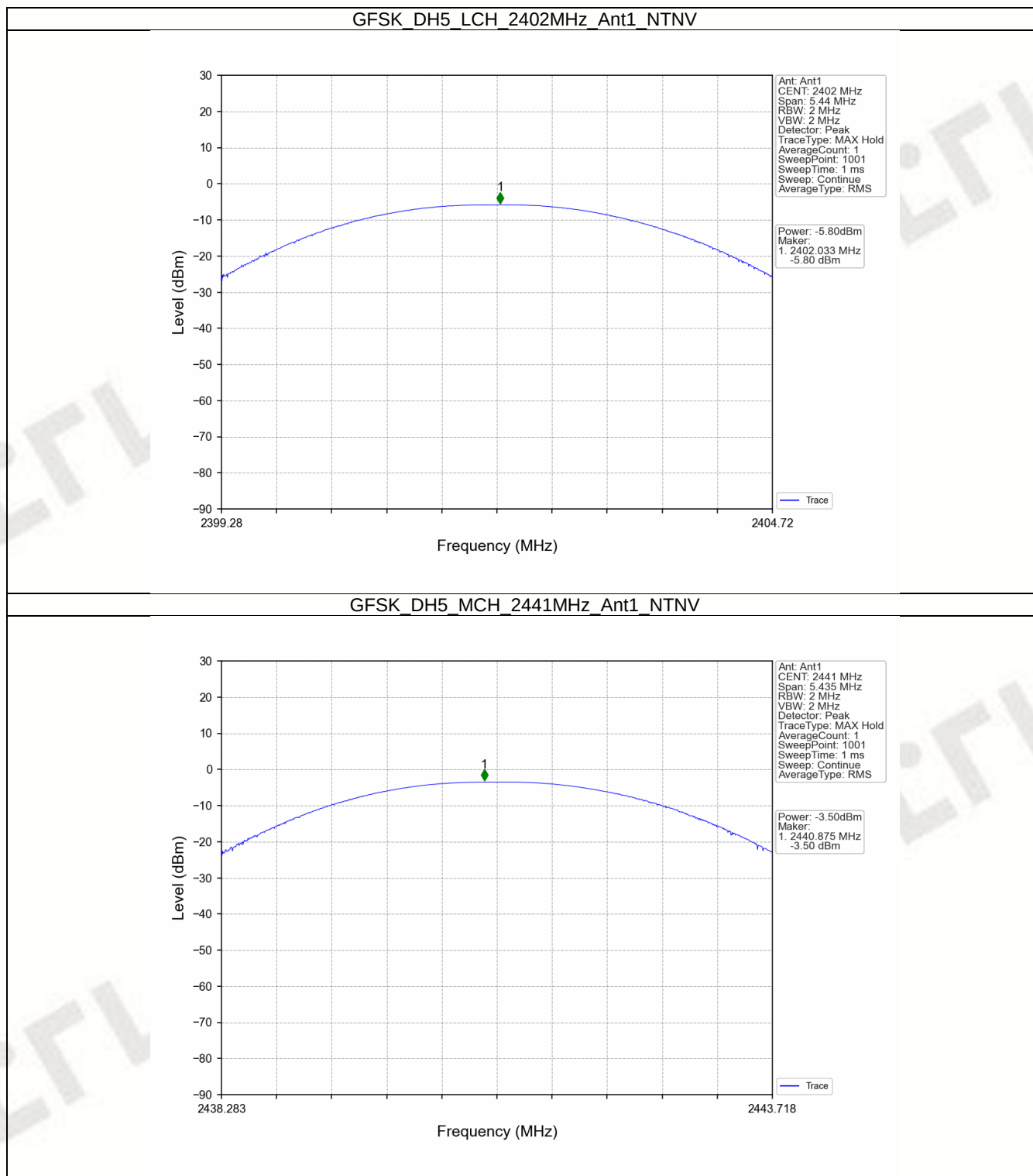
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	-5.80	<=20.97	Pass
		2441	DH5	-3.50	<=20.97	Pass
		2480	DH5	-2.17	<=20.97	Pass
Pi/4DQPSK	SISO	2402	2DH5	-3.76	<=20.97	Pass
		2441	2DH5	-1.25	<=20.97	Pass
		2480	2DH5	0.01	<=20.97	Pass
8DPSK	SISO	2402	3DH5	-2.97	<=20.97	Pass
		2441	3DH5	-0.47	<=20.97	Pass
		2480	3DH5	0.76	<=20.97	Pass

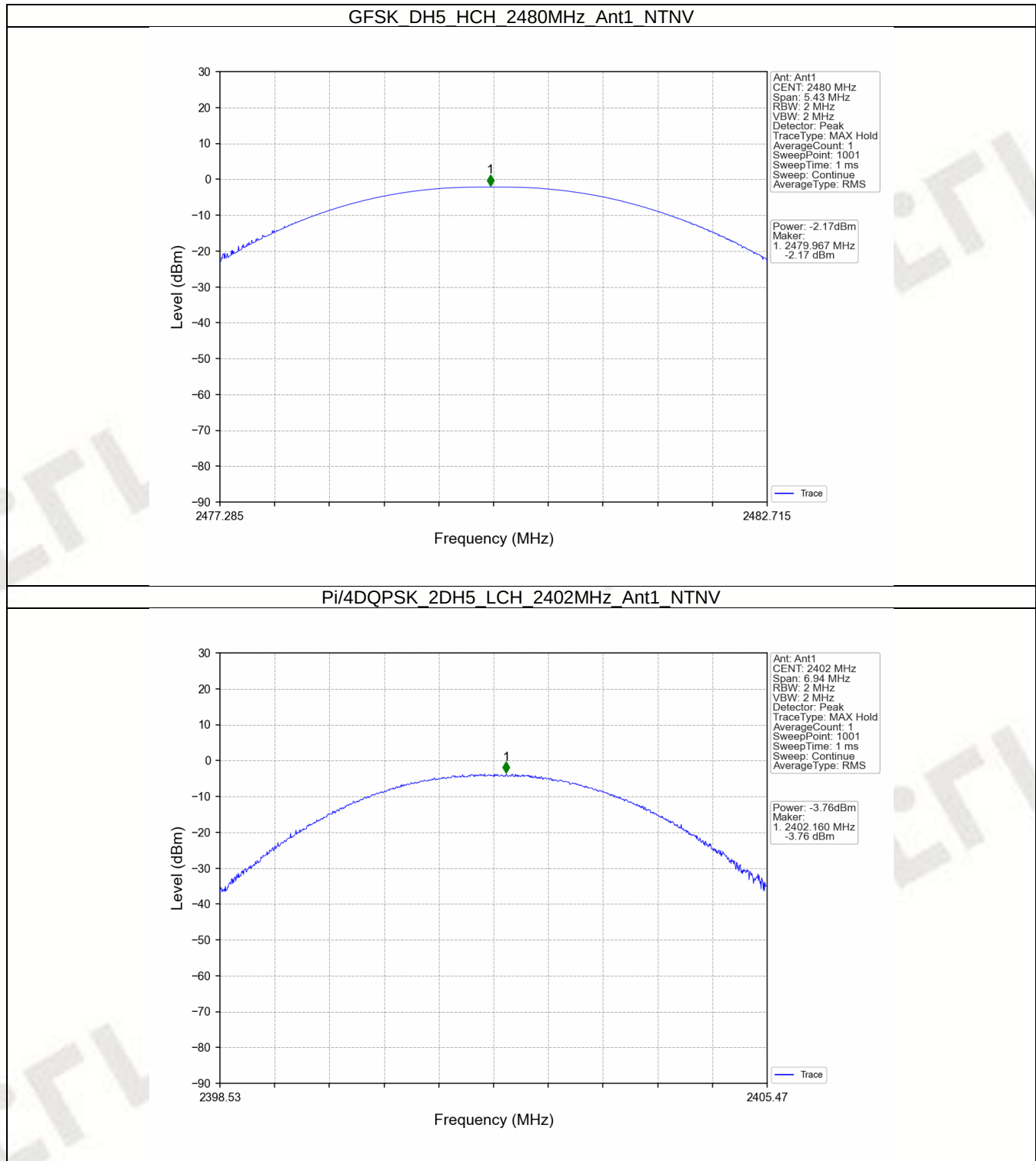
Note1: Antenna Gain: Ant1: 4.20dBi;

FCCID: 2BGZO-CP001

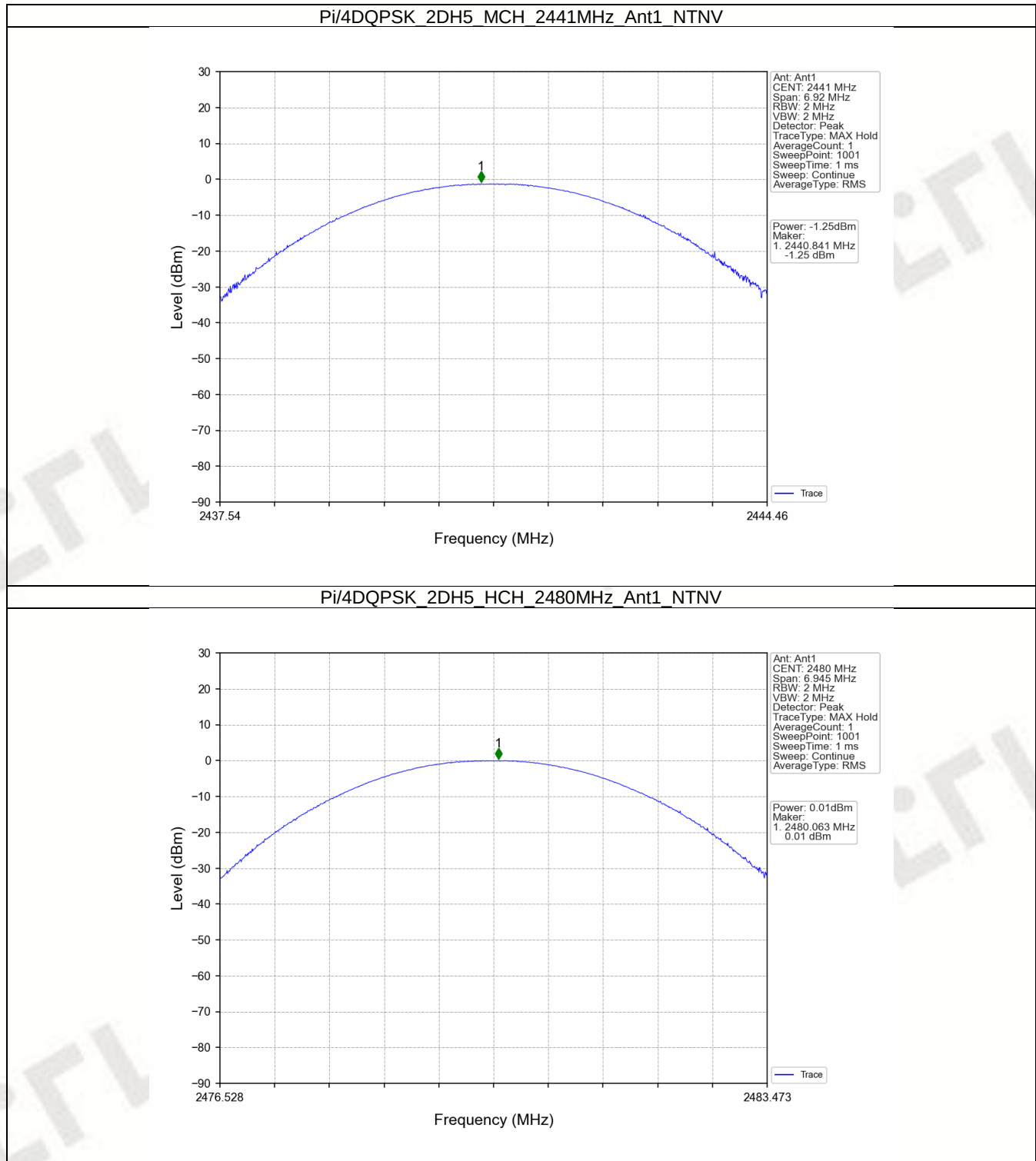
2.1.2 Test Graph



FCCID: 2BGZO-CP001

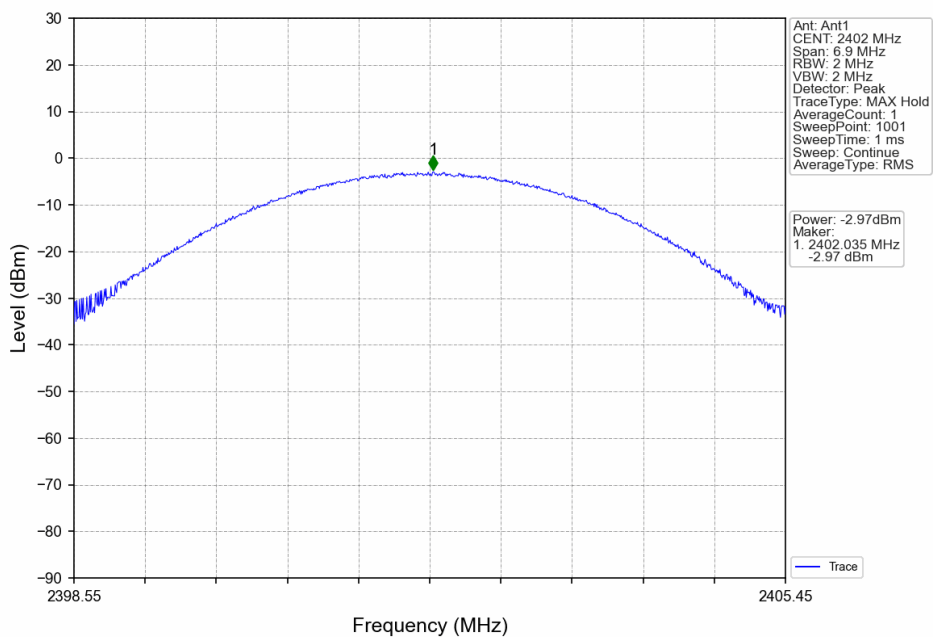


FCCID: 2BGZO-CP001

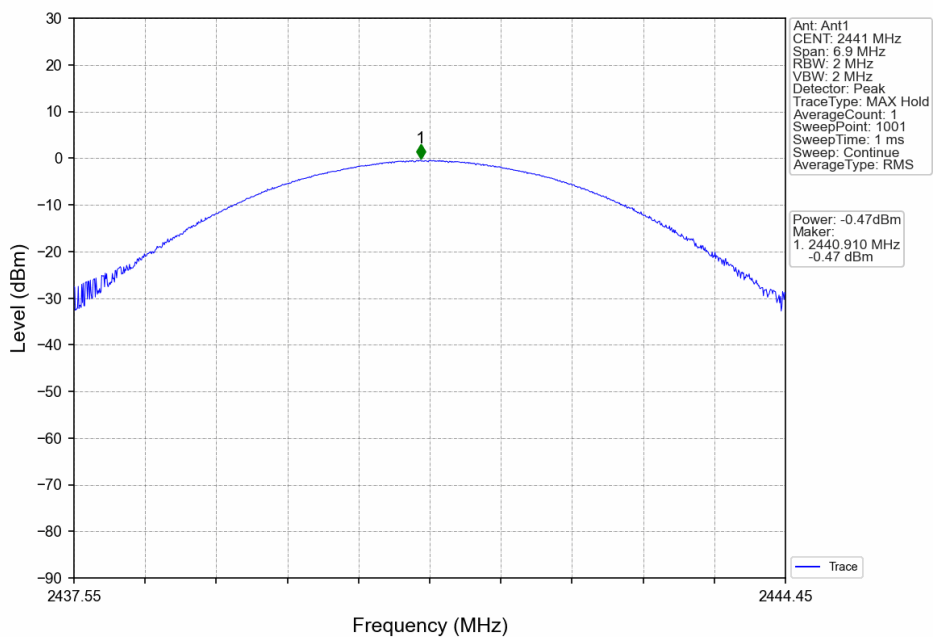


FCCID: 2BGZO-CP001

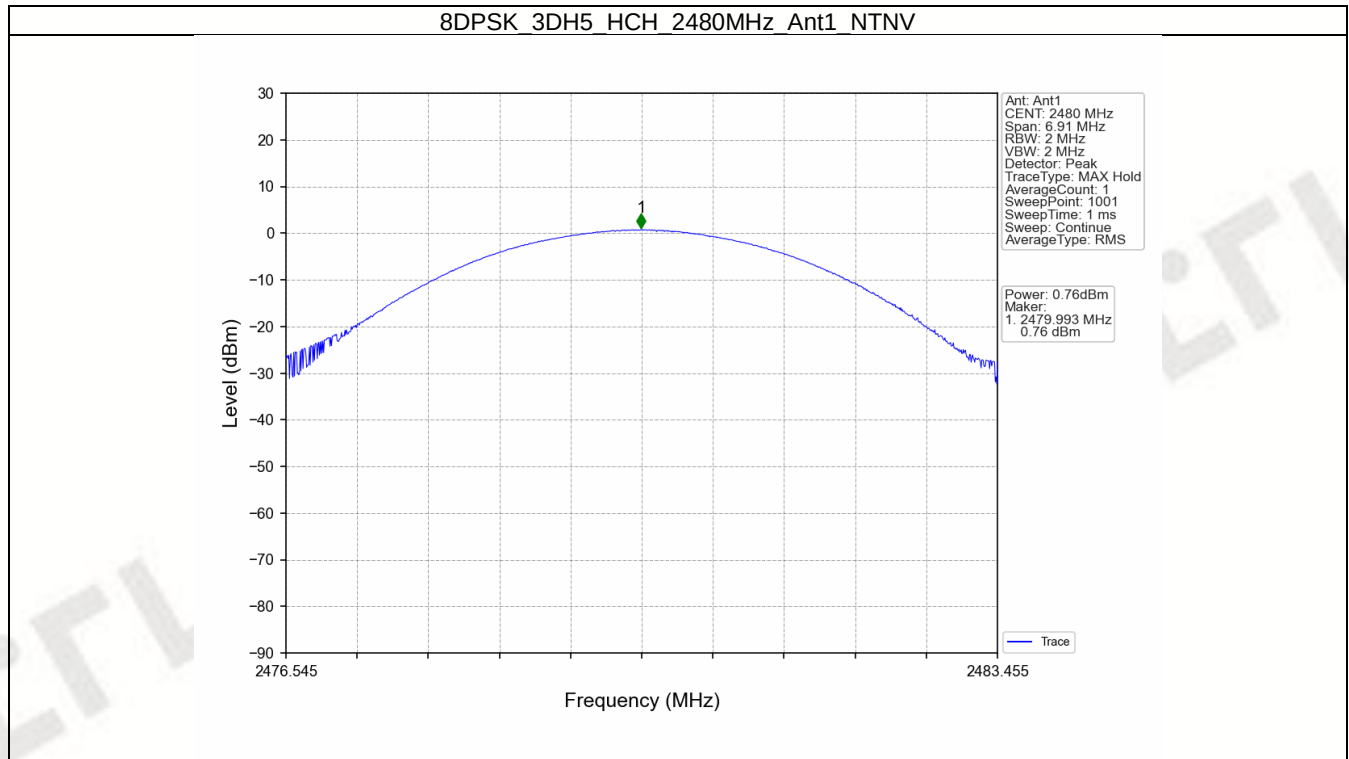
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



8DPSK 3DH5 MCH 2441MHz Ant1 NTN



FCCID: 2BGZO-CP001



3. Carrier Frequency Separation

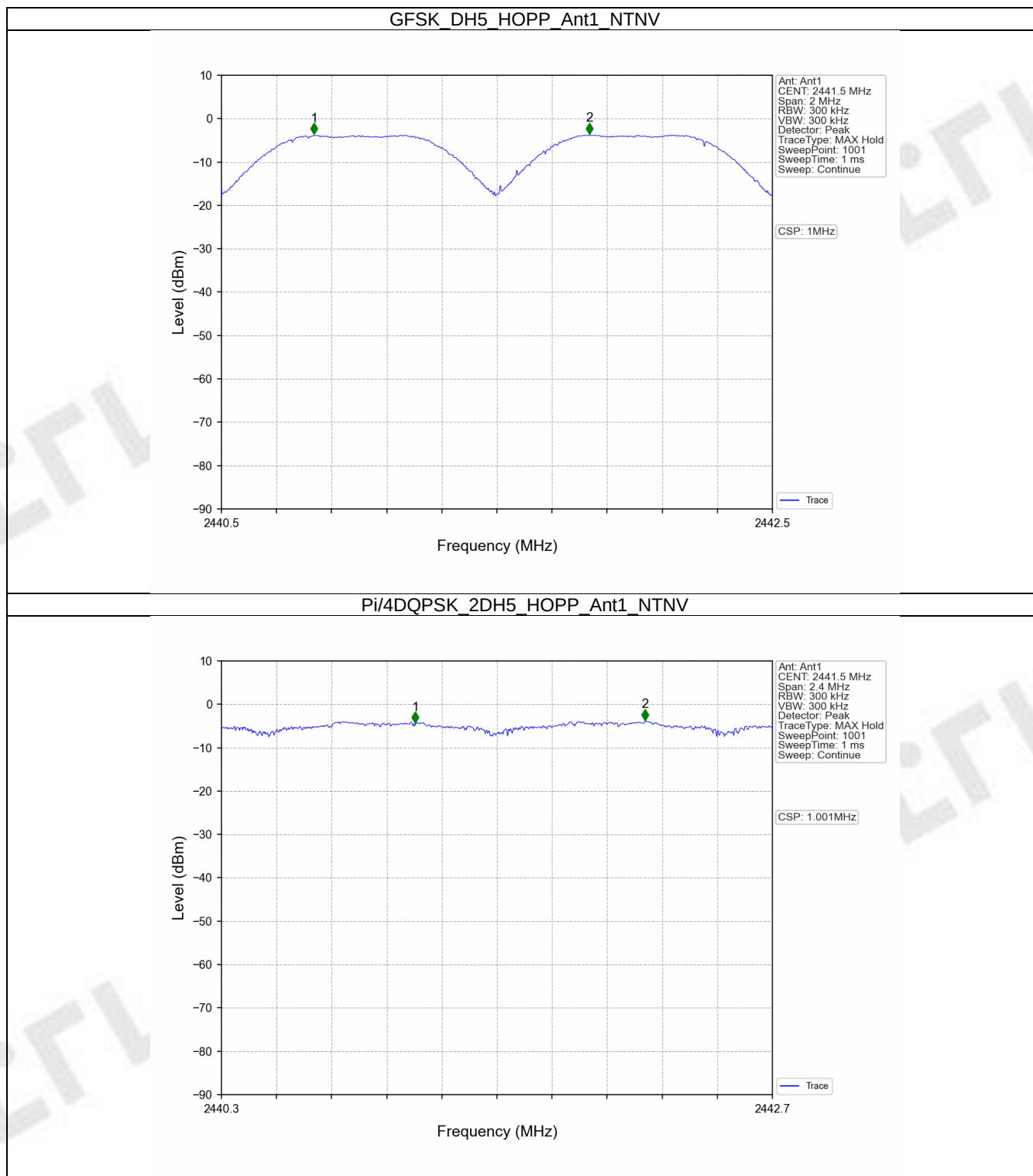
3.1 Ant1

3.1.1 Test Result

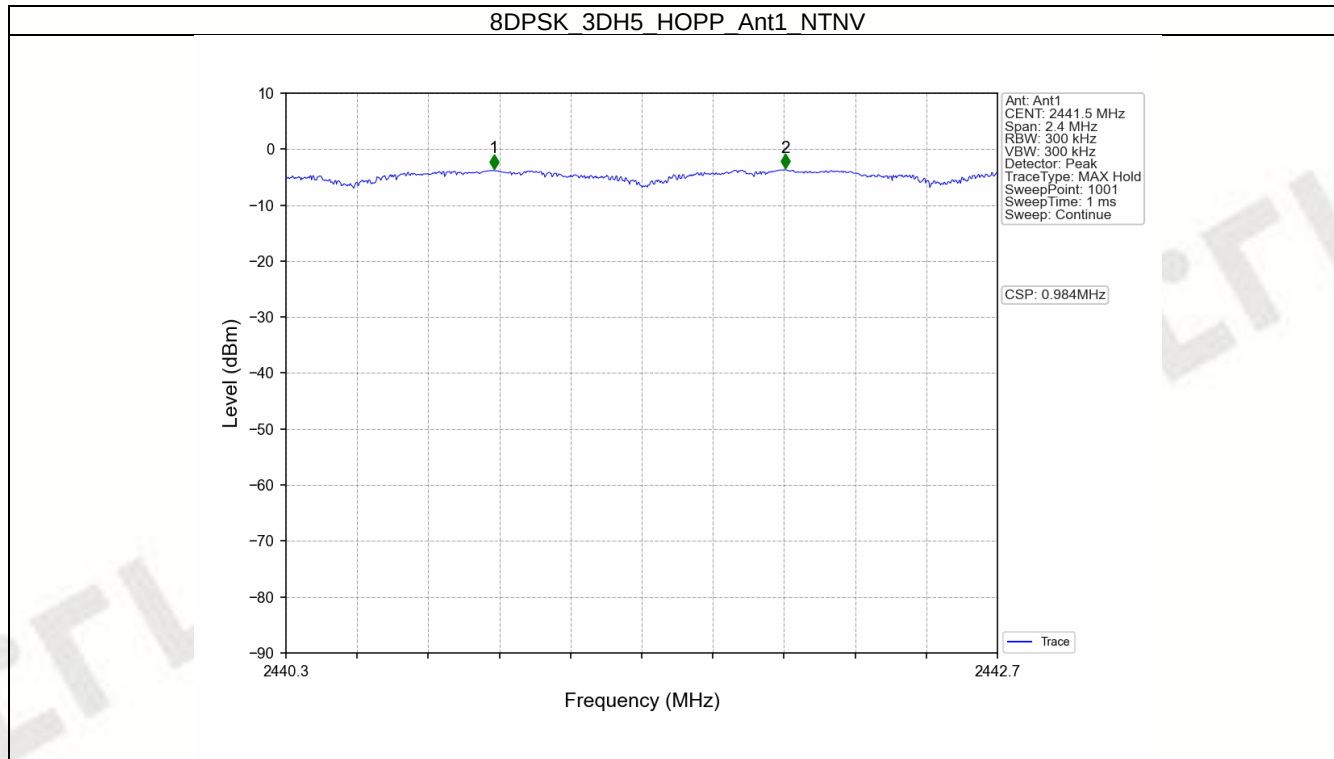
Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.000	1.088	≥ 0.725	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.001	1.389	≥ 0.926	Pass
8DPSK	SISO	HOPP	3DH5	0.984	1.382	≥ 0.921	Pass

FCCID: 2BGZO-CP001

3.1.2 Test Graph



FCCID: 2BGZO-CP001



4. Number of Hopping Frequencies

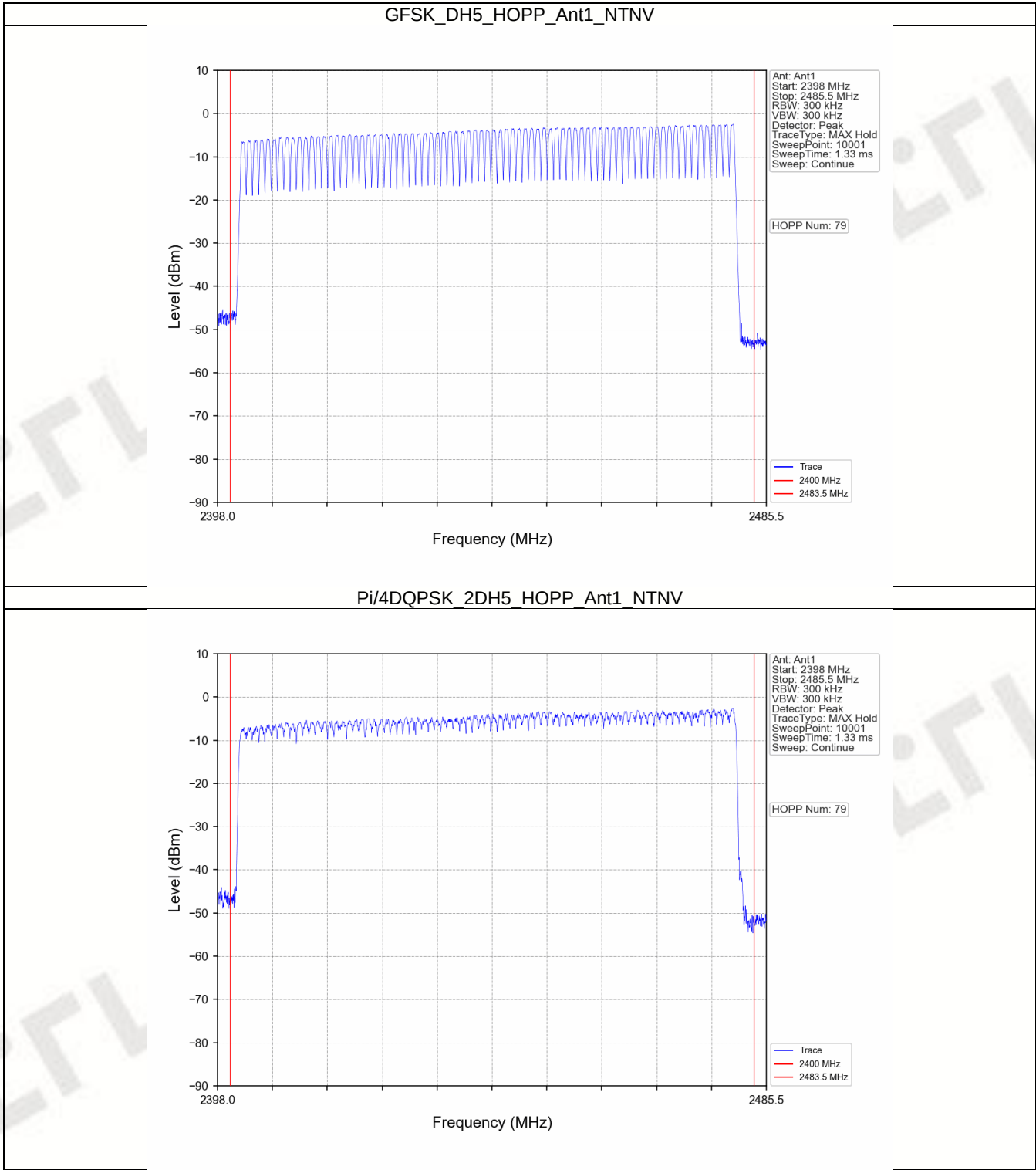
4.1 HoppNum

4.1.1 Test Result

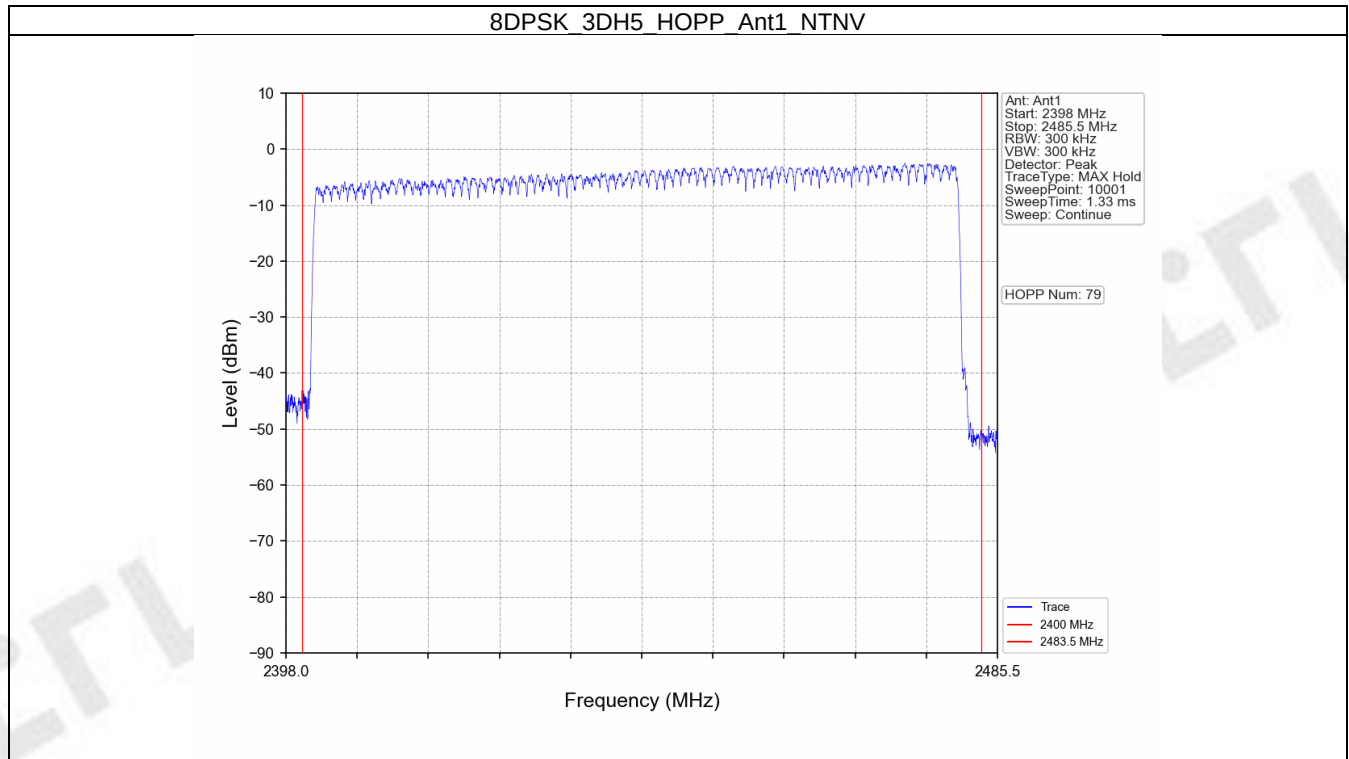
Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	>=15	Pass
PI/4DQPSK	SISO	HOPP	2DH5	79	>=15	Pass
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass

FCCID: 2BGZO-CP001

4.1.2 Test Graph



FCCID: 2BGZO-CP001



FCCID: 2BGZO-CP001

5. Time of Occupancy (Dwell Time)

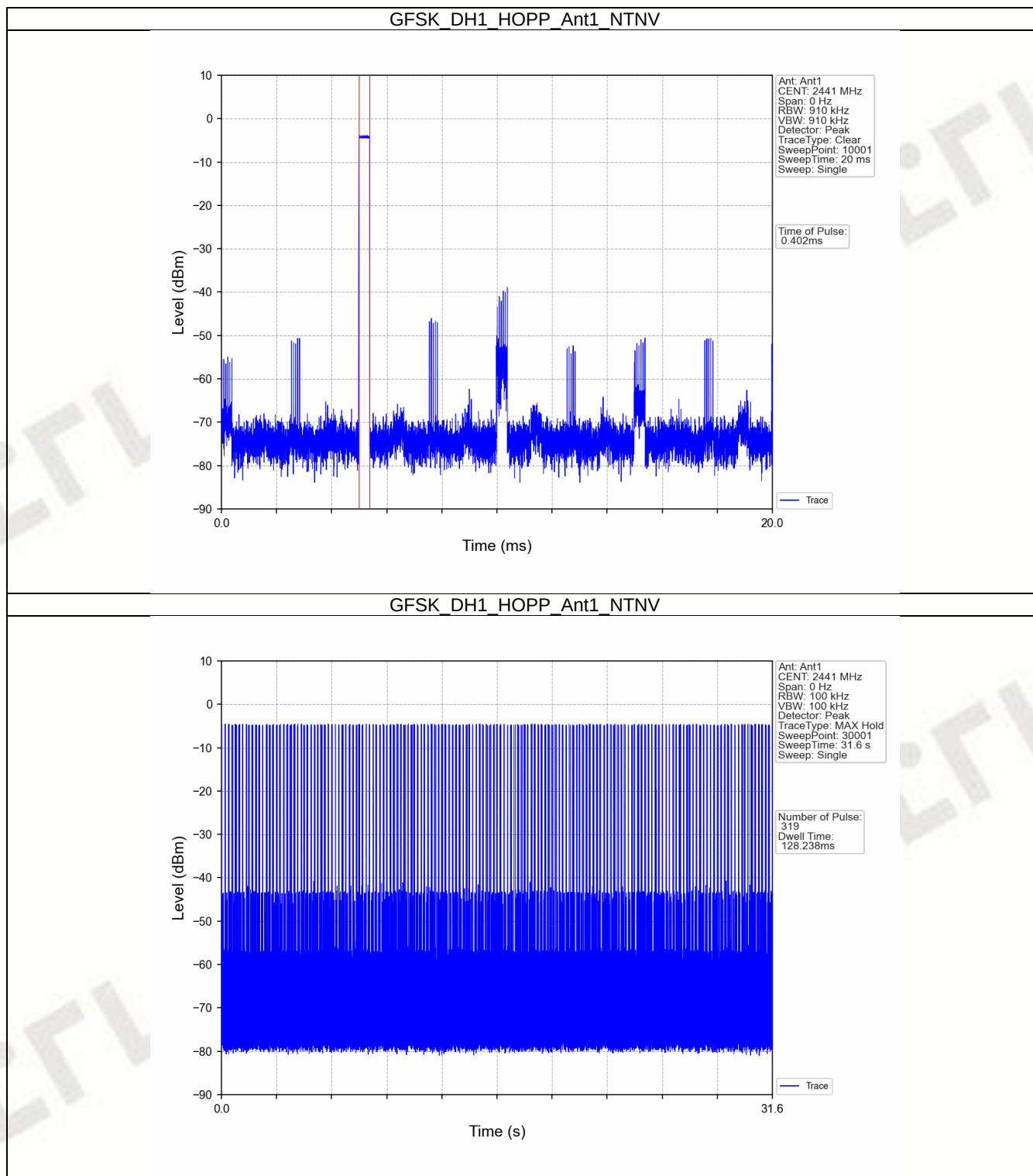
5.1 Ant1

5.1.1 Test Result

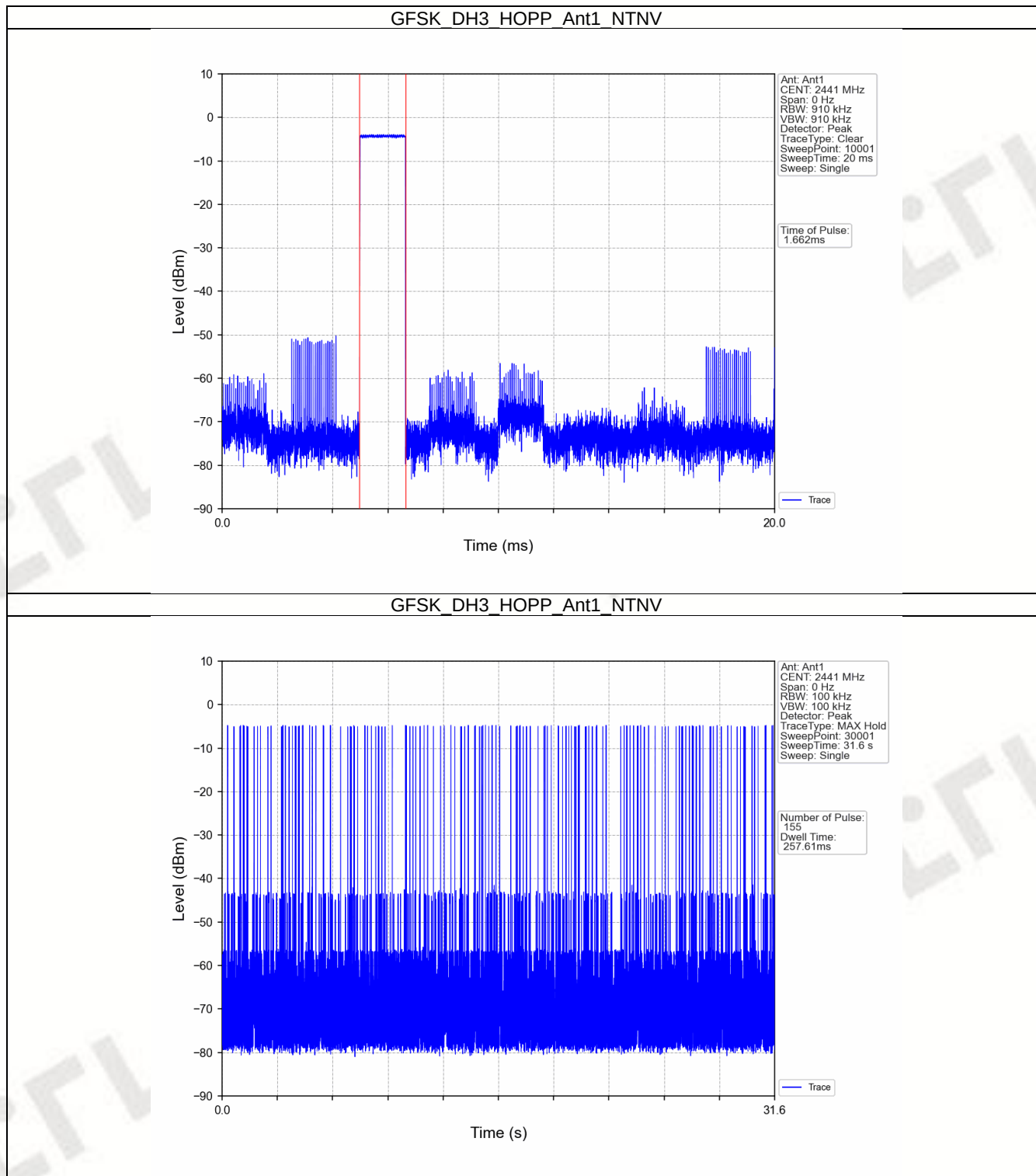
Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.402	31.600	319	128.238	<=400	Pass
			DH3	1.662	31.600	155	257.610	<=400	Pass
			DH5	2.904	31.600	99	287.496	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.410	31.600	320	131.200	<=400	Pass
			2DH3	1.662	31.600	155	257.610	<=400	Pass
			2DH5	2.914	31.600	111	323.454	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.412	31.600	320	131.840	<=400	Pass
			3DH3	1.664	31.600	155	257.920	<=400	Pass
			3DH5	2.912	31.600	102	297.024	<=400	Pass

FCCID: 2BGZO-CP001

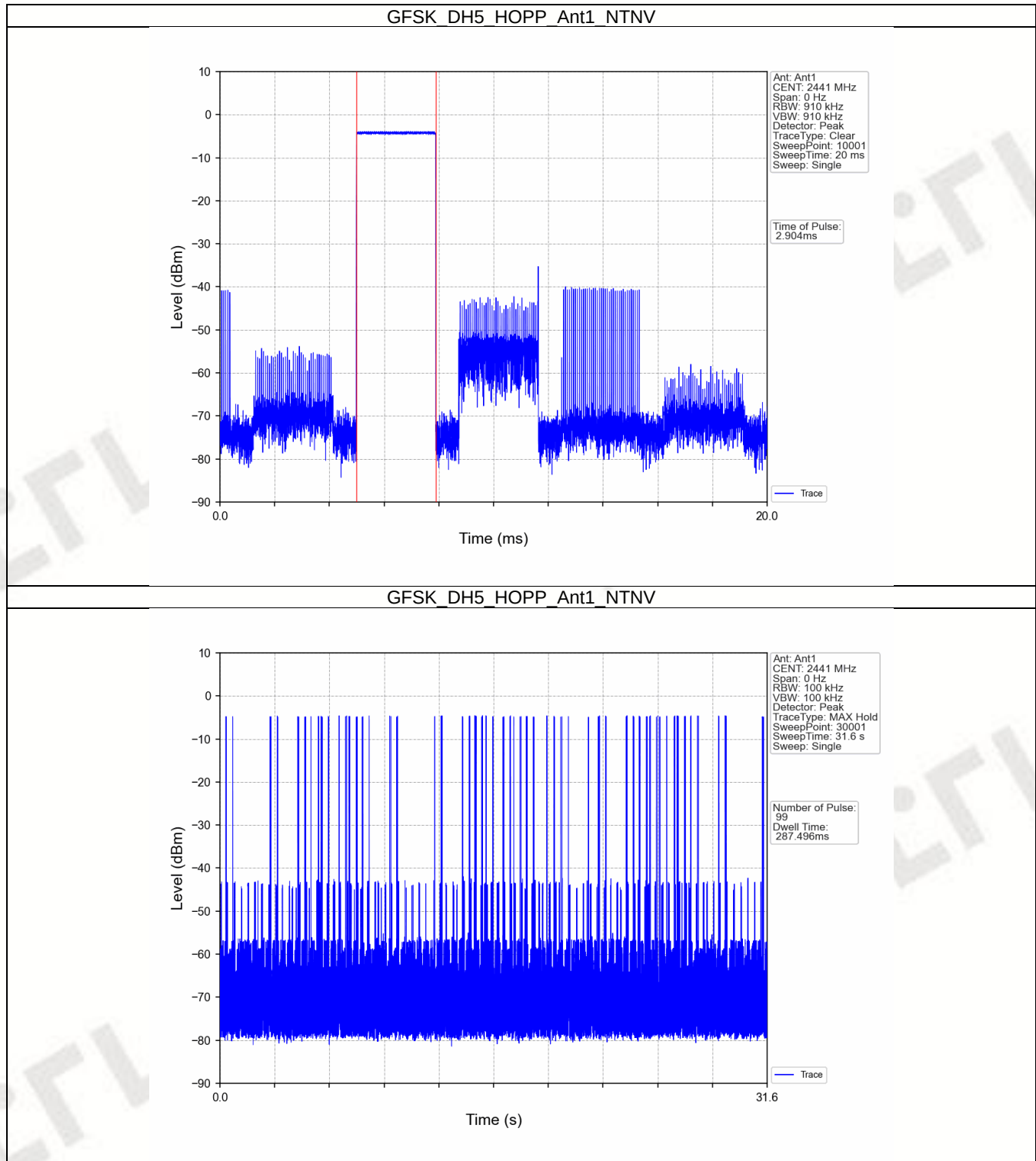
5.1.2 Test Graph



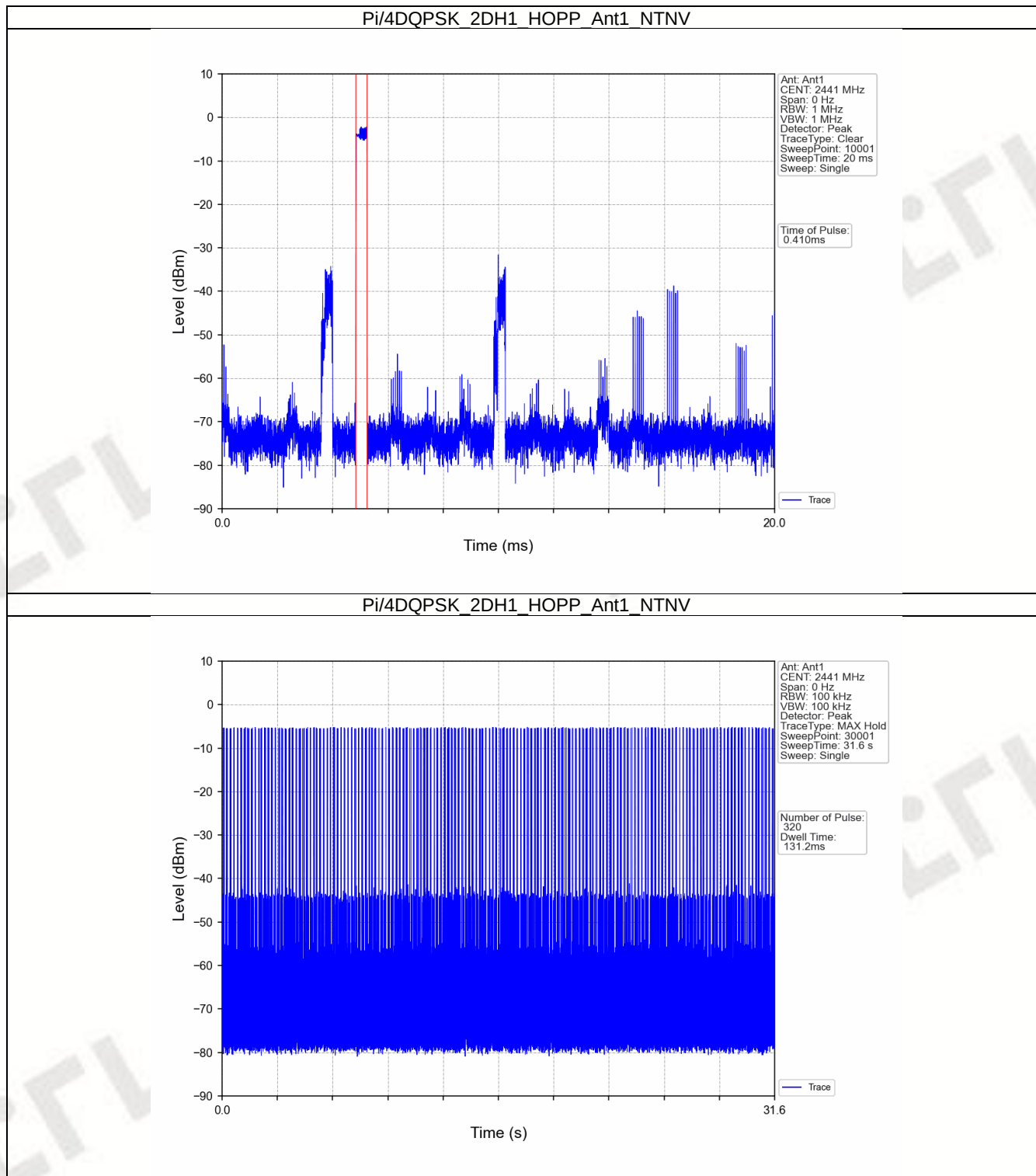
FCCID: 2BGZO-CP001



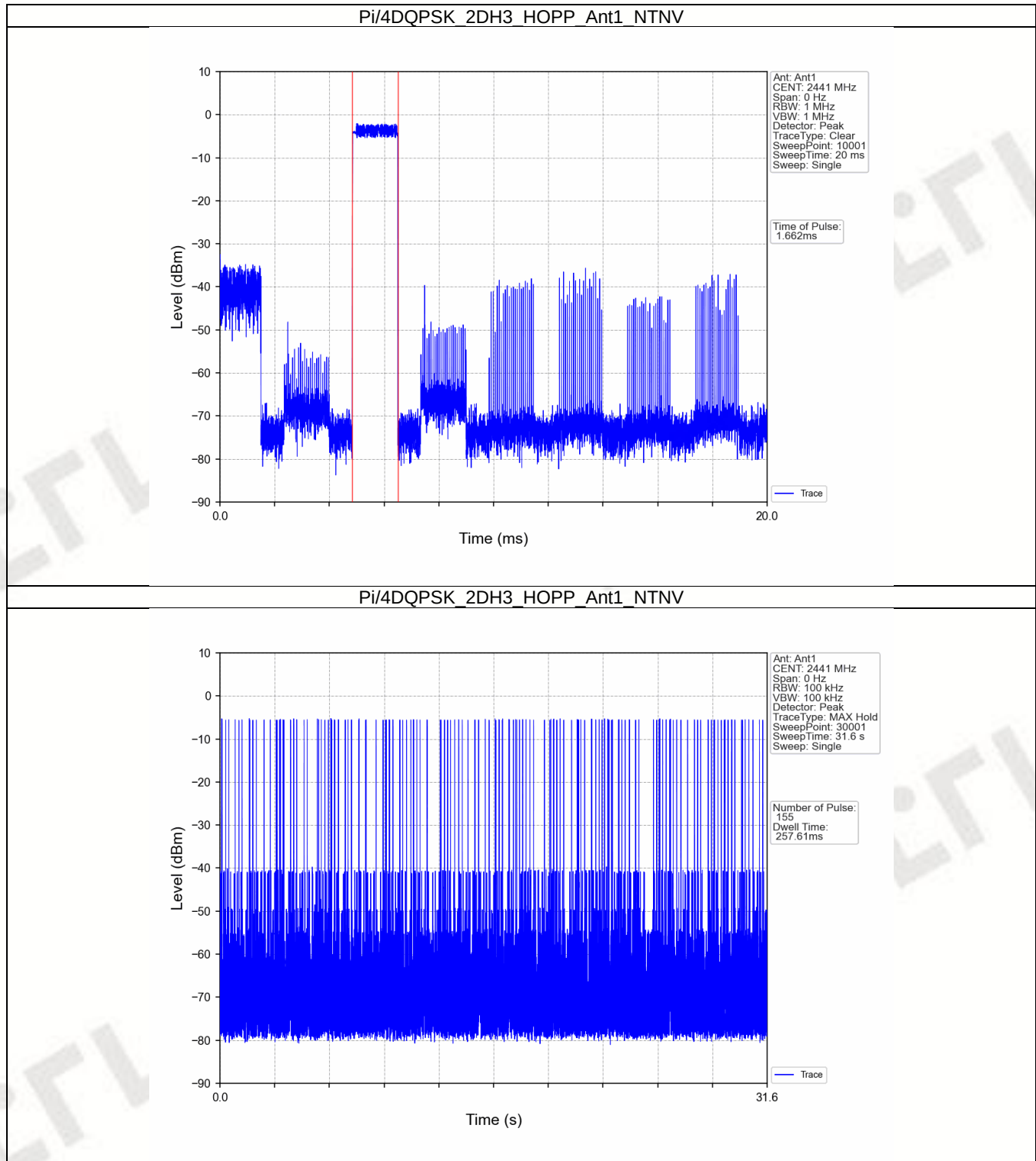
FCCID: 2BGZO-CP001



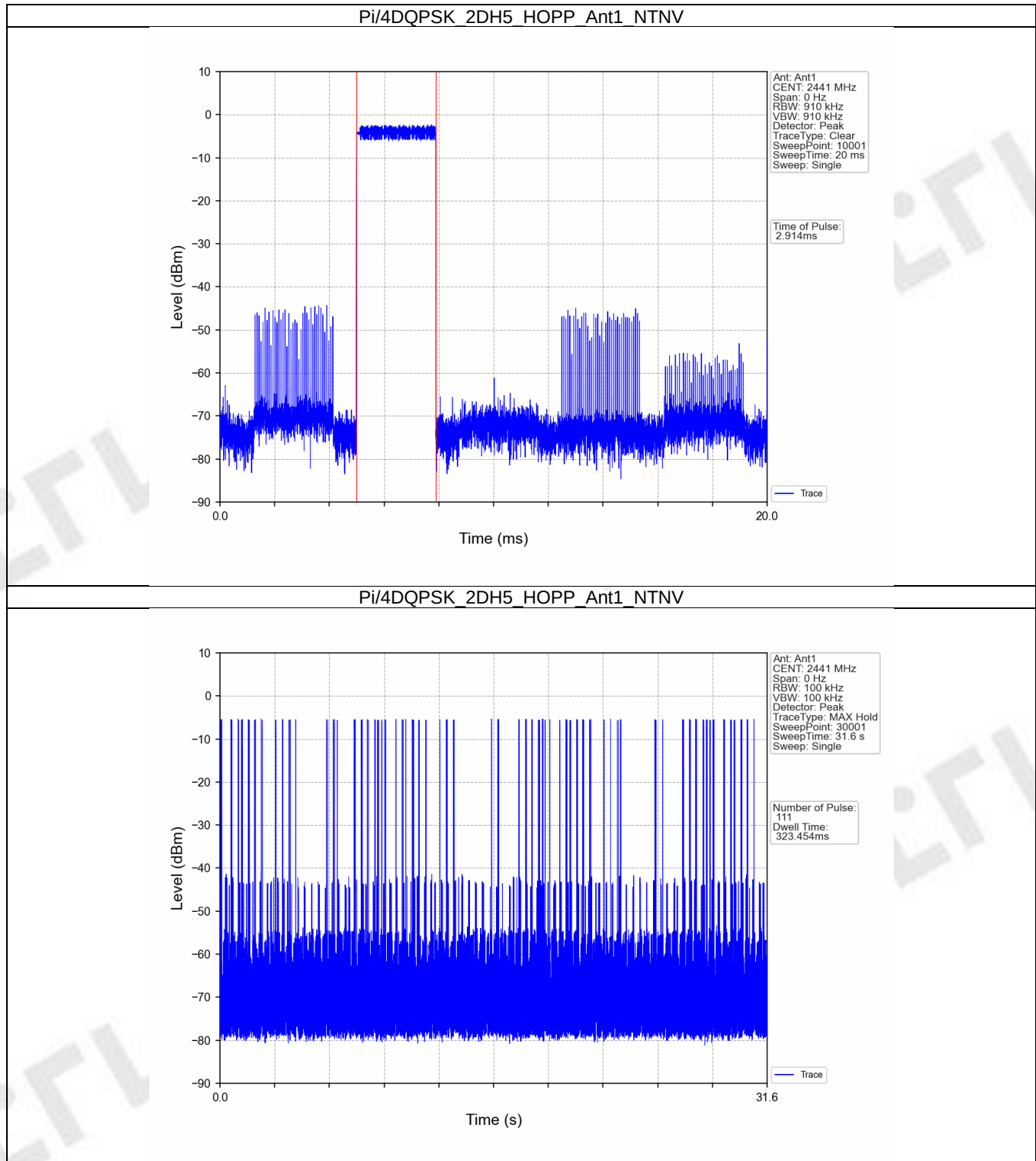
FCCID: 2BGZO-CP001



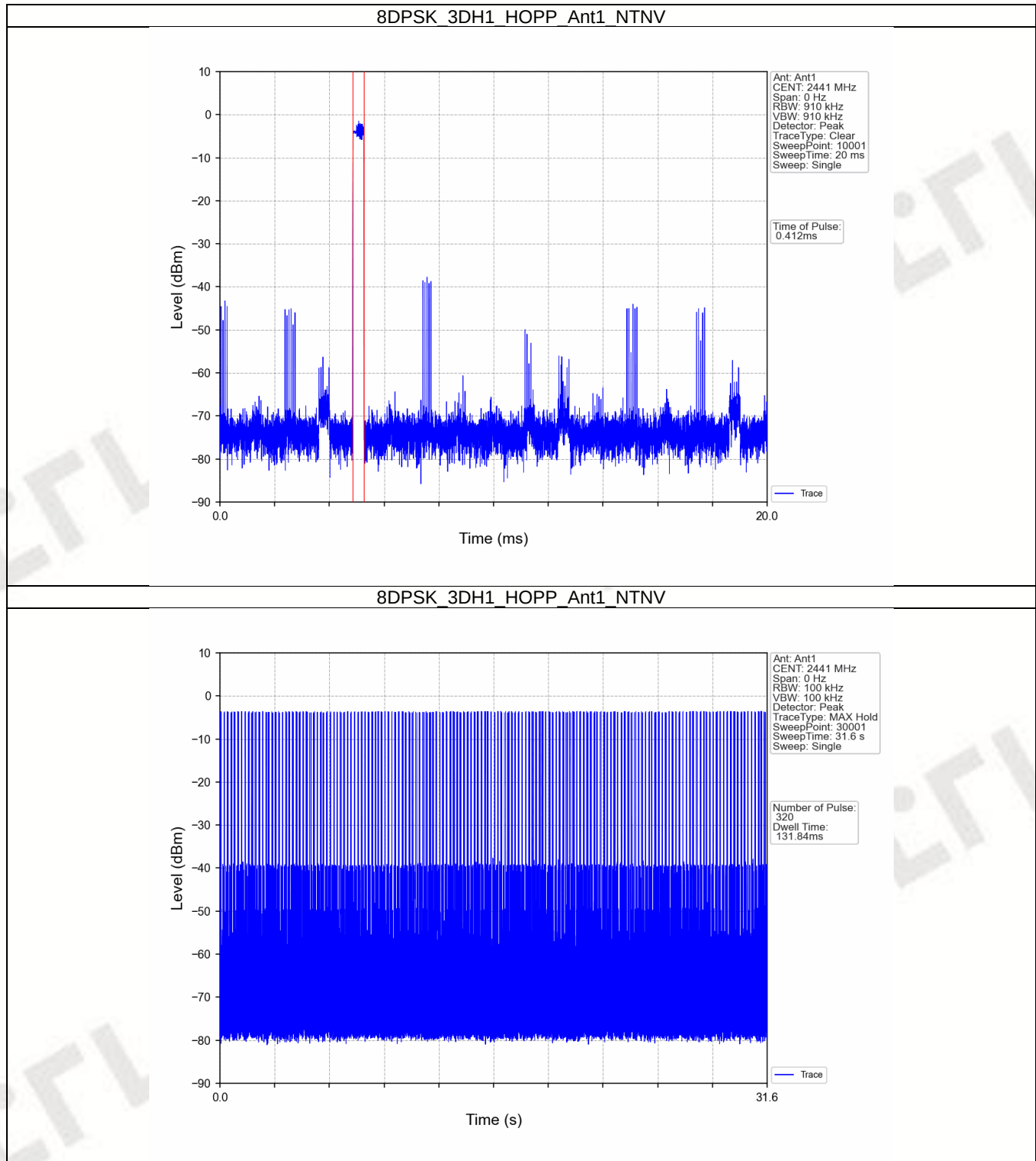
FCCID: 2BGZO-CP001



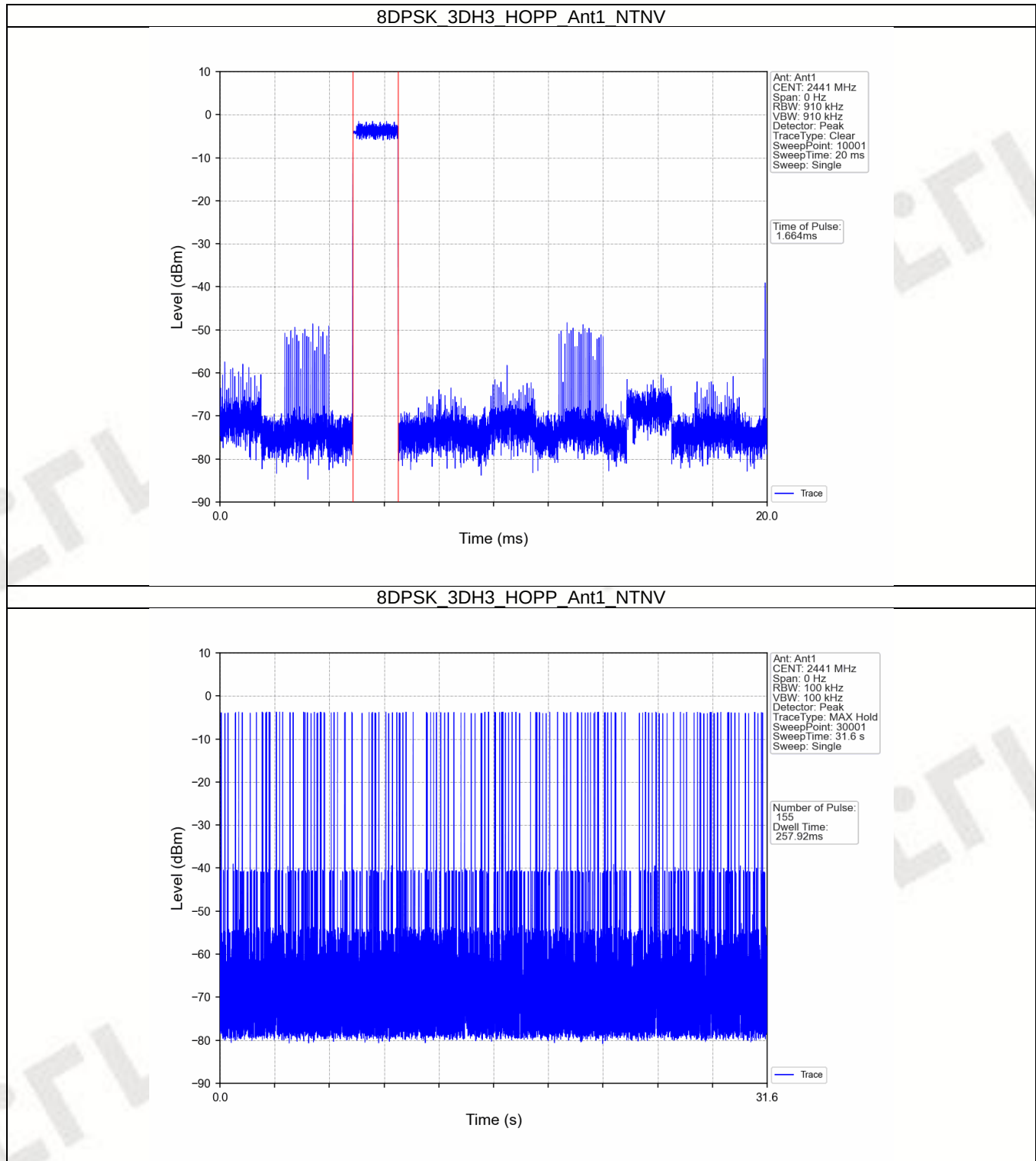
FCCID: 2BGZO-CP001



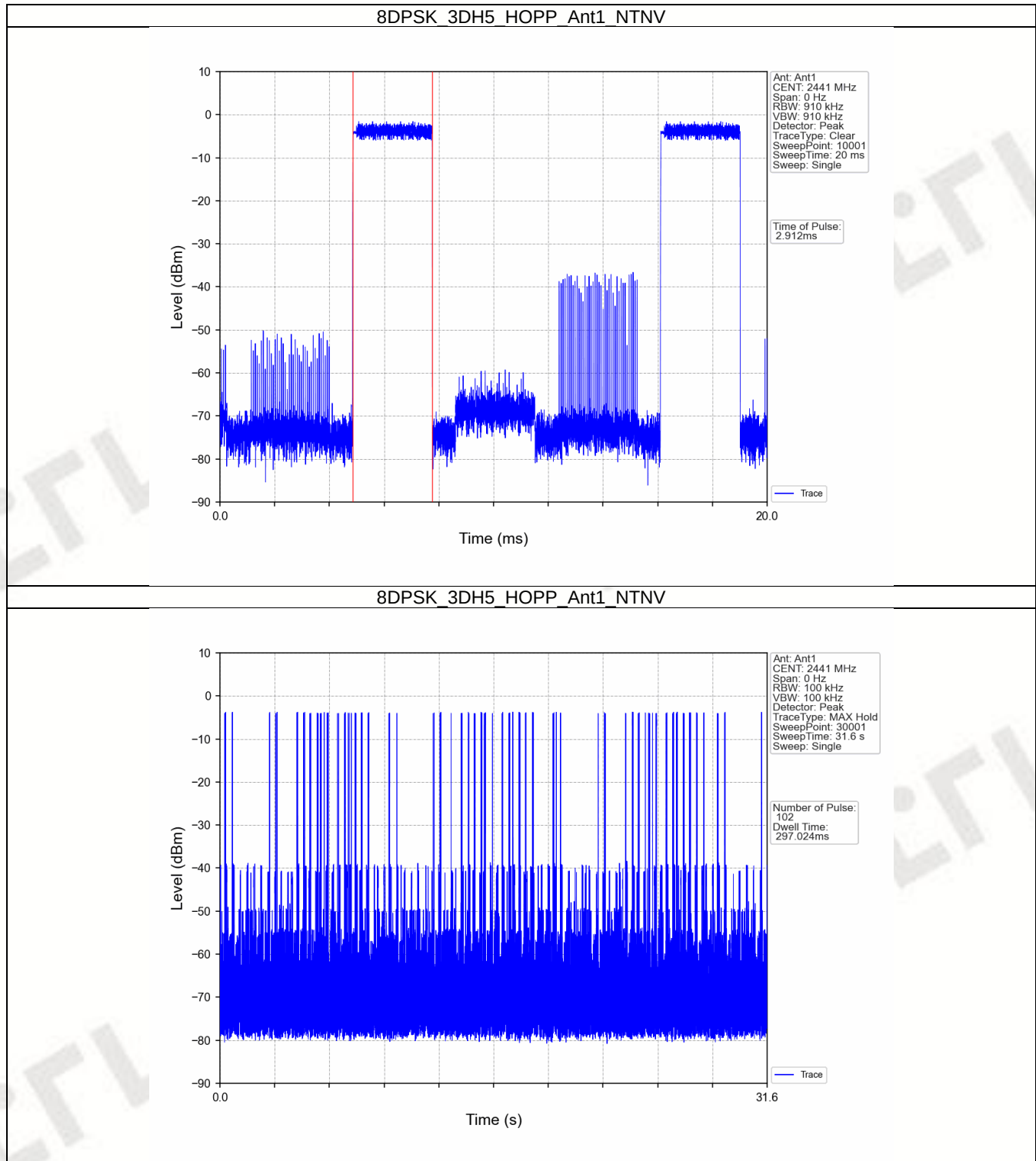
FCCID: 2BGZO-CP001



FCCID: 2BGZO-CP001



FCCID: 2BGZO-CP001



6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Ref

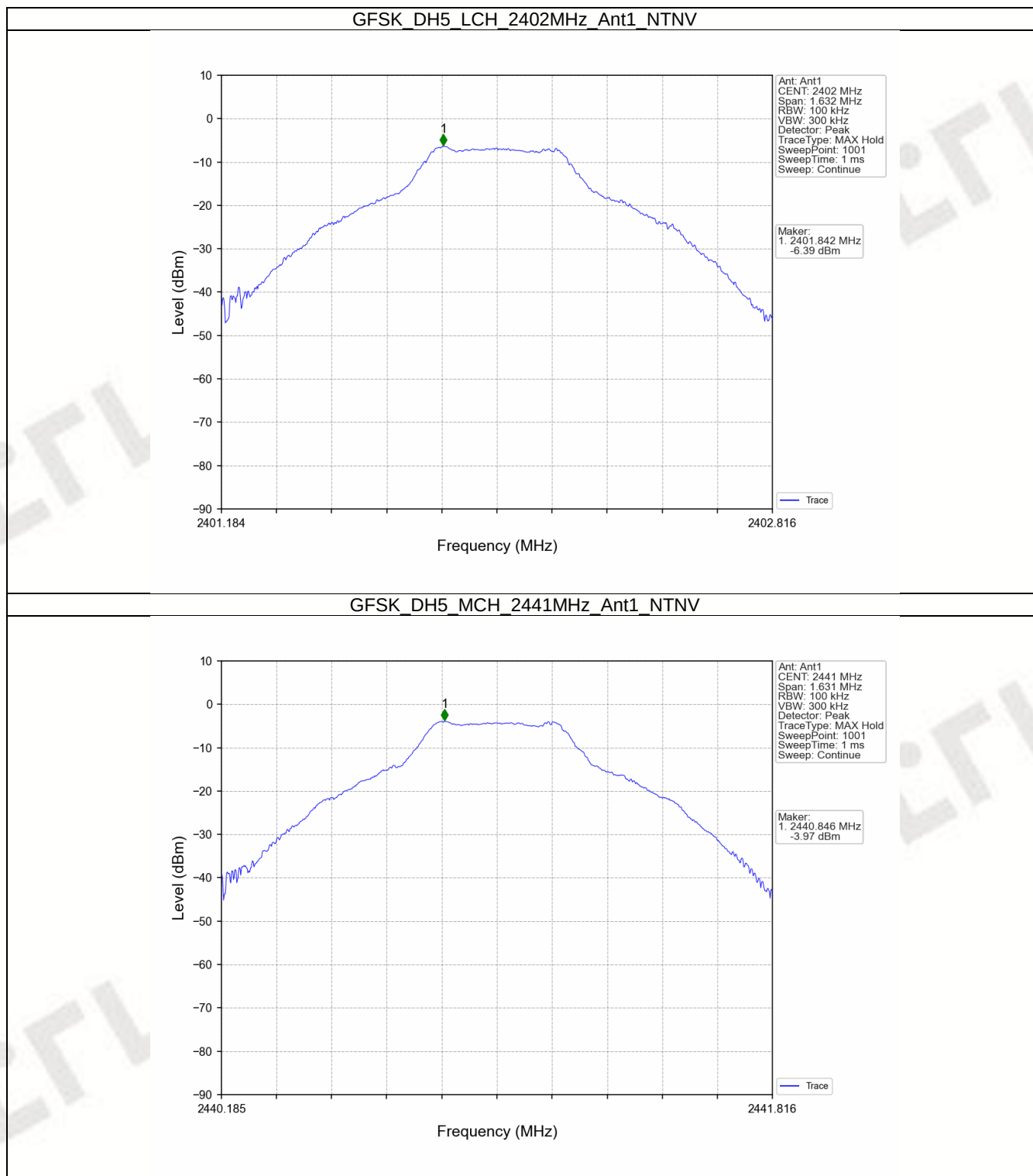
6.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	-6.39
		2441	DH5	1	-3.97
		2480	DH5	1	-2.63
Pi/4DQPSK	SISO	2402	2DH5	1	-6.70
		2441	2DH5	1	-4.04
		2480	2DH5	1	-2.72
8DPSK	SISO	2402	3DH5	1	-6.70
		2441	3DH5	1	-3.79
		2480	3DH5	1	-2.41

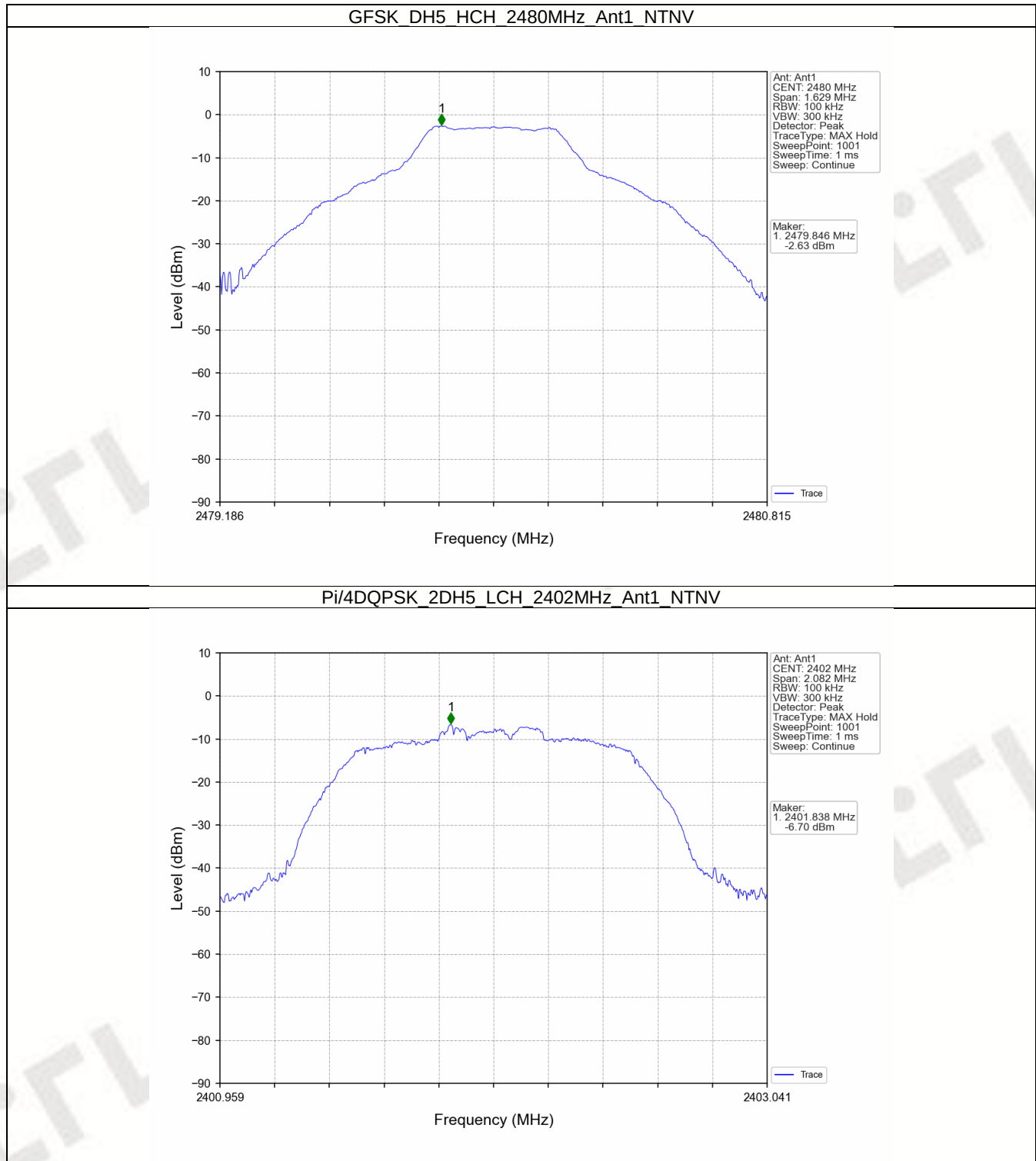
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

FCCID: 2BGZO-CP001

6.1.2 Test Graph

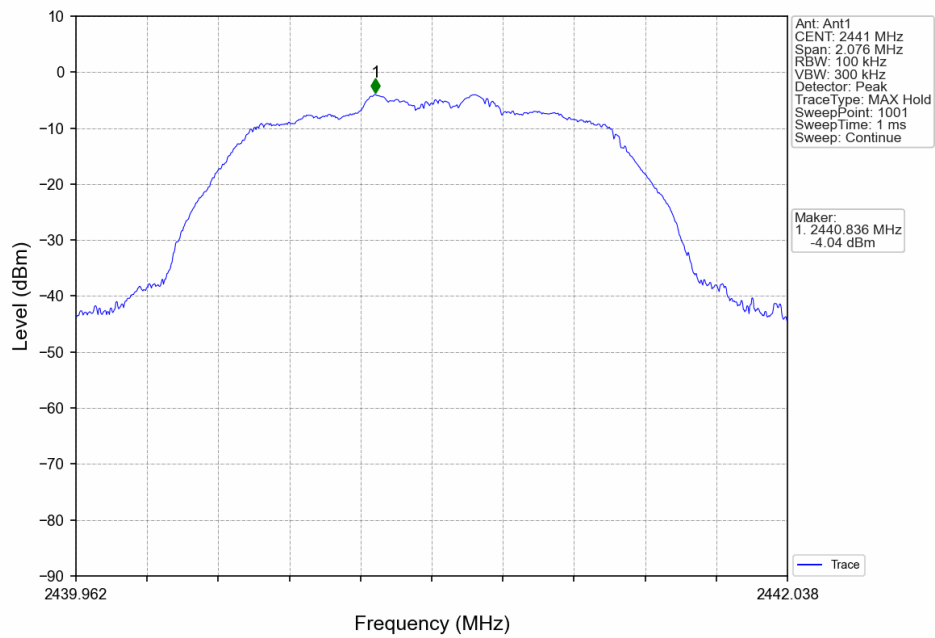


FCCID: 2BGZO-CP001

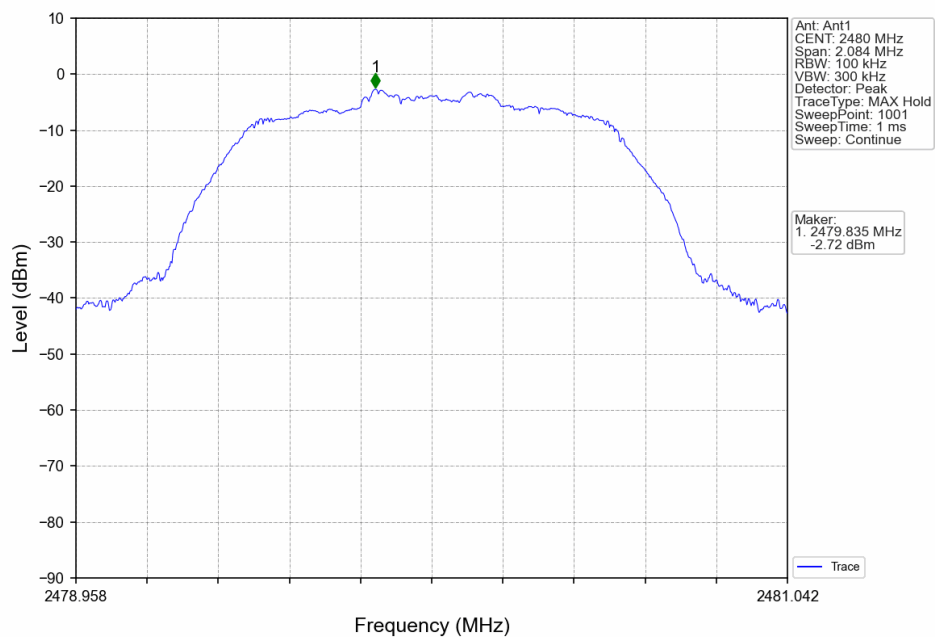


FCCID: 2BGZO-CP001

Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN

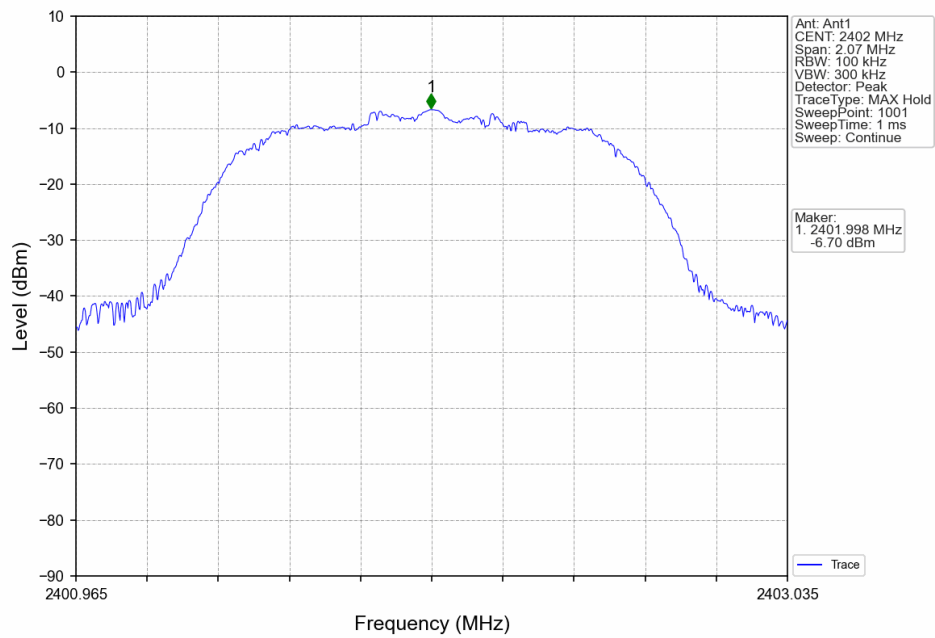


Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTN

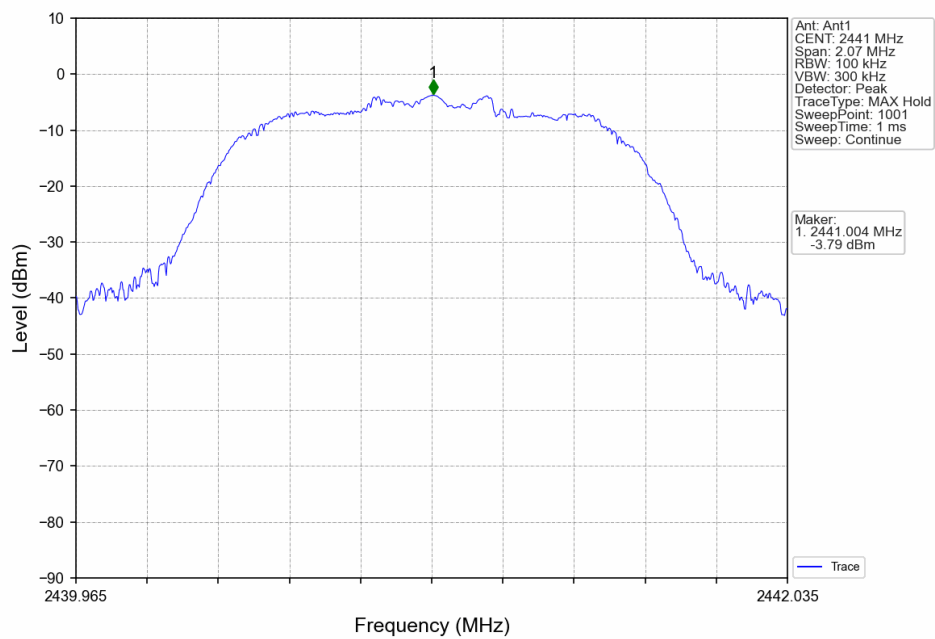


FCCID: 2BGZO-CP001

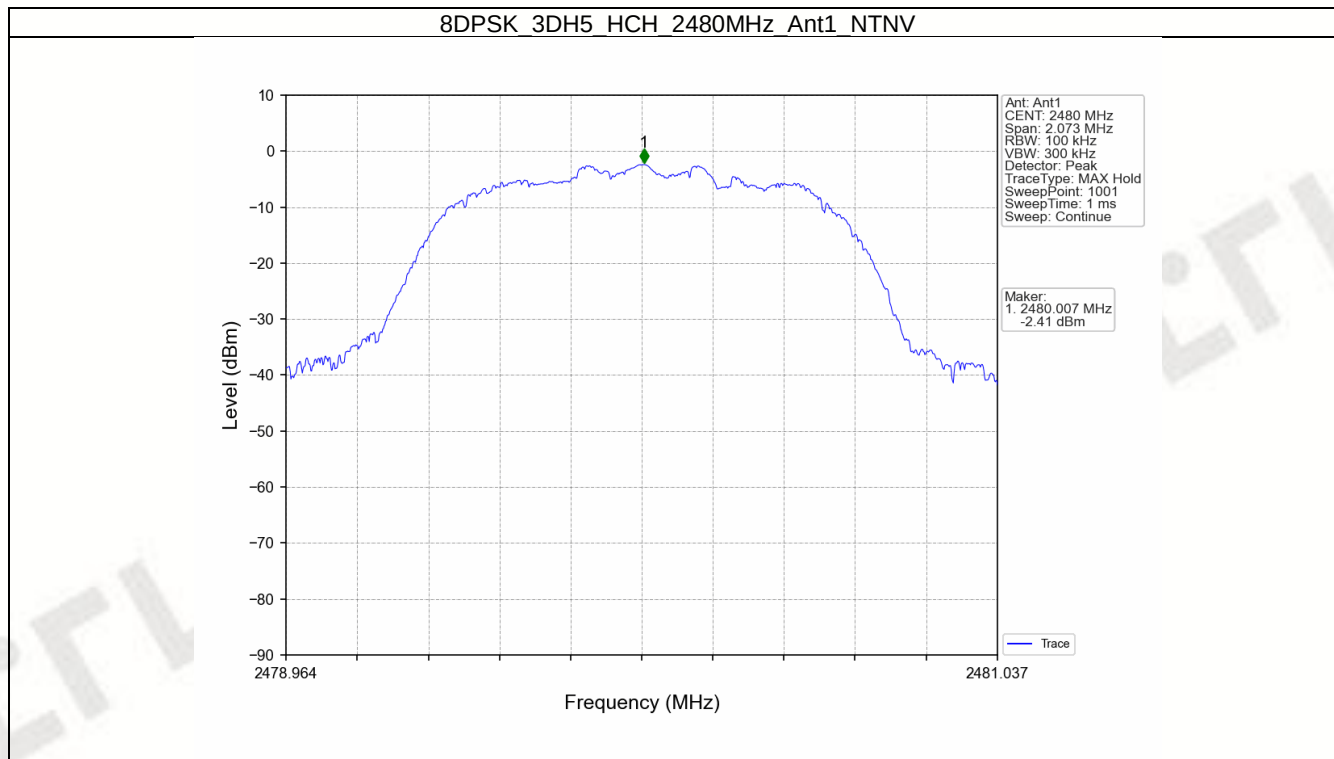
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



8DPSK 3DH5 MCH 2441MHz Ant1 NTN



FCCID: 2BGZO-CP001



FCCID: 2BGZO-CP001

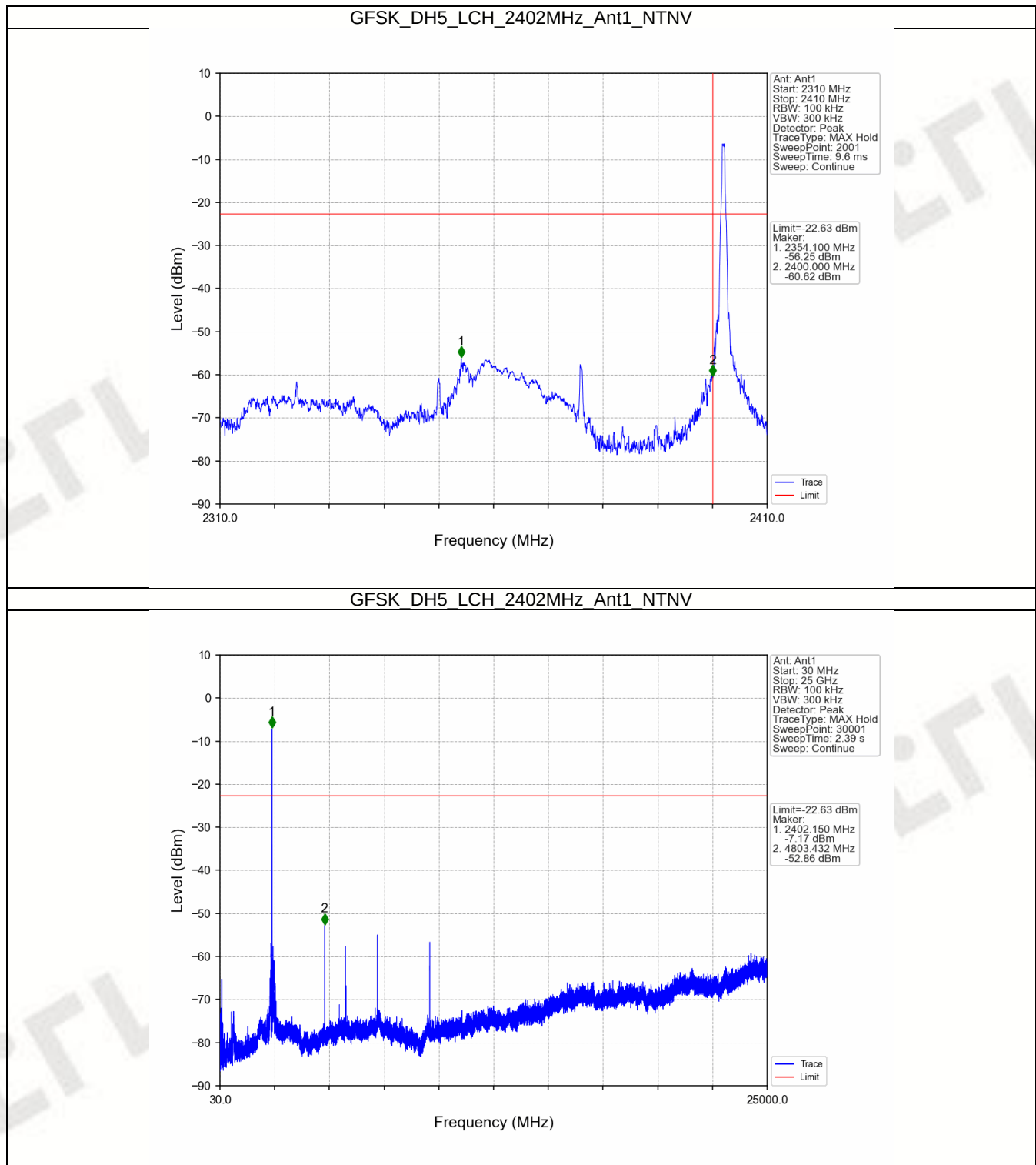
6.2 CSE

6.2.1 Test Result

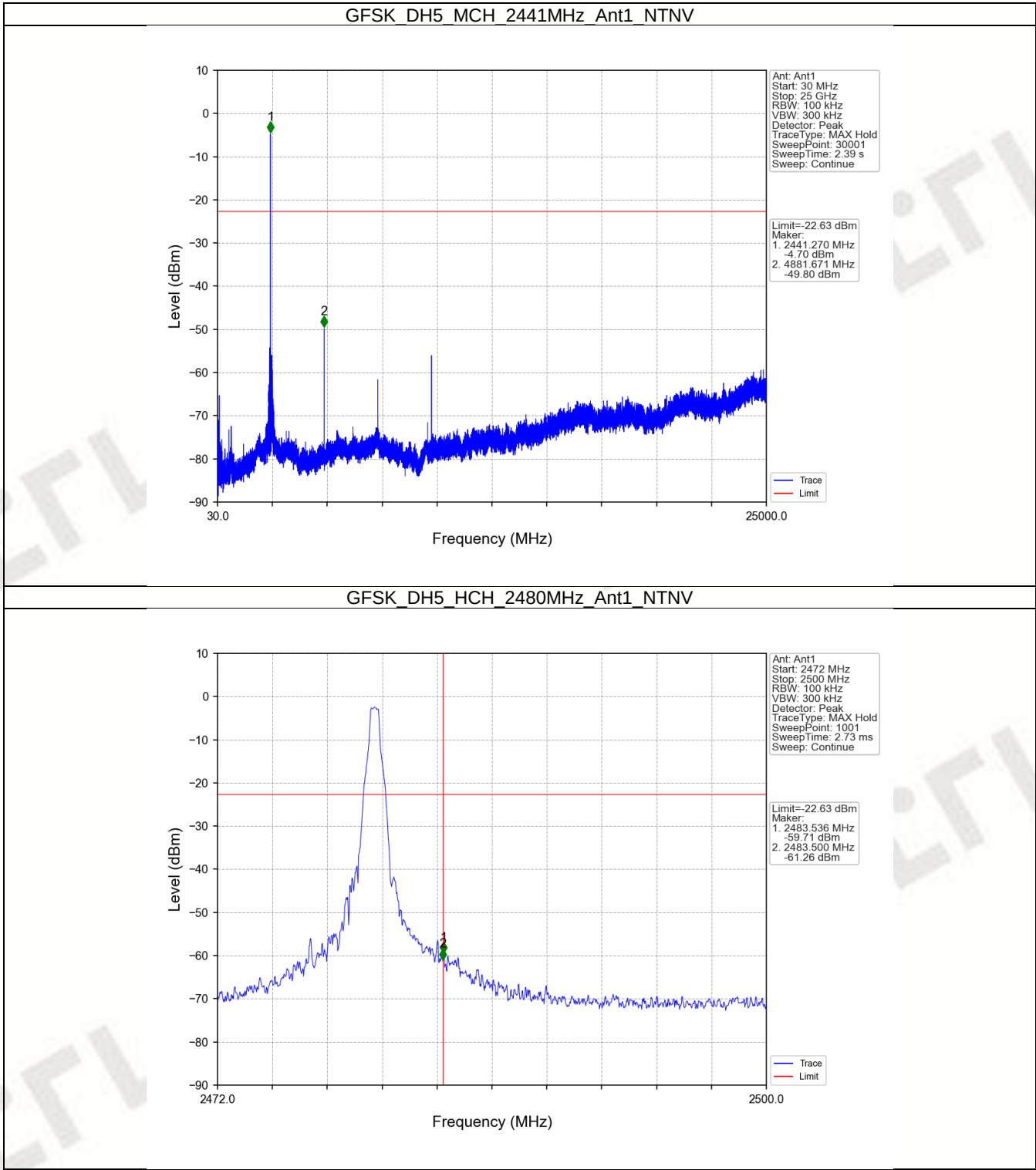
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	-2.63	-22.63	Pass
		2441	DH5	1	-2.63	-22.63	Pass
		2480	DH5	1	-2.63	-22.63	Pass
		HOPP	DH5	1	-2.63	-22.63	Pass
					-2.63	-22.63	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	-2.72	-22.72	Pass
		2441	2DH5	1	-2.72	-22.72	Pass
		2480	2DH5	1	-2.72	-22.72	Pass
		HOPP	2DH5	1	-2.72	-22.72	Pass
					-2.72	-22.72	Pass
8DPSK	SISO	2402	3DH5	1	-2.41	-22.41	Pass
		2441	3DH5	1	-2.41	-22.41	Pass
		2480	3DH5	1	-2.41	-22.41	Pass
		HOPP	3DH5	1	-2.41	-22.41	Pass
					-2.41	-22.41	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: 2BGZO-CP001

6.2.2 Test Graph

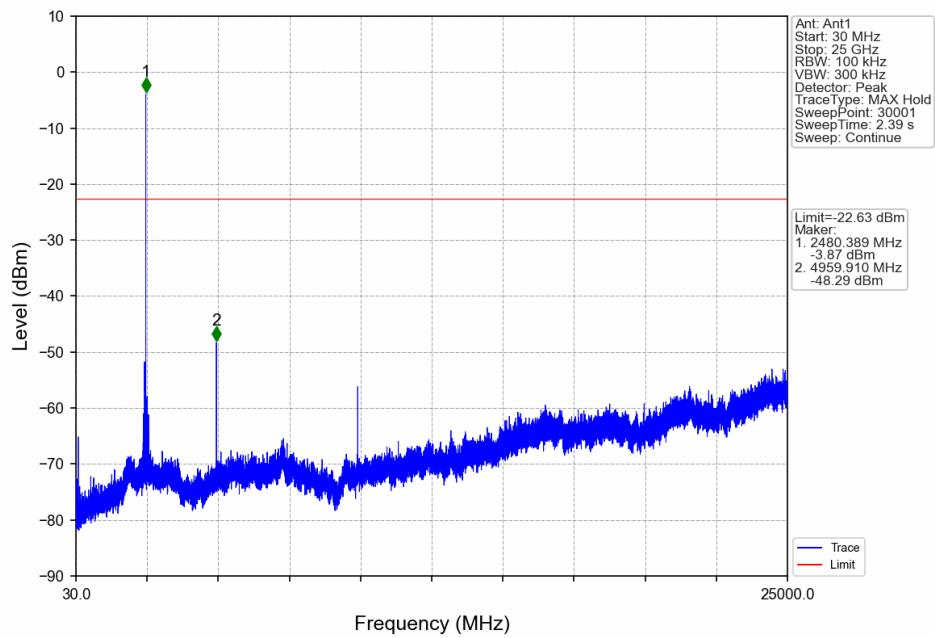


FCCID: 2BGZO-CP001

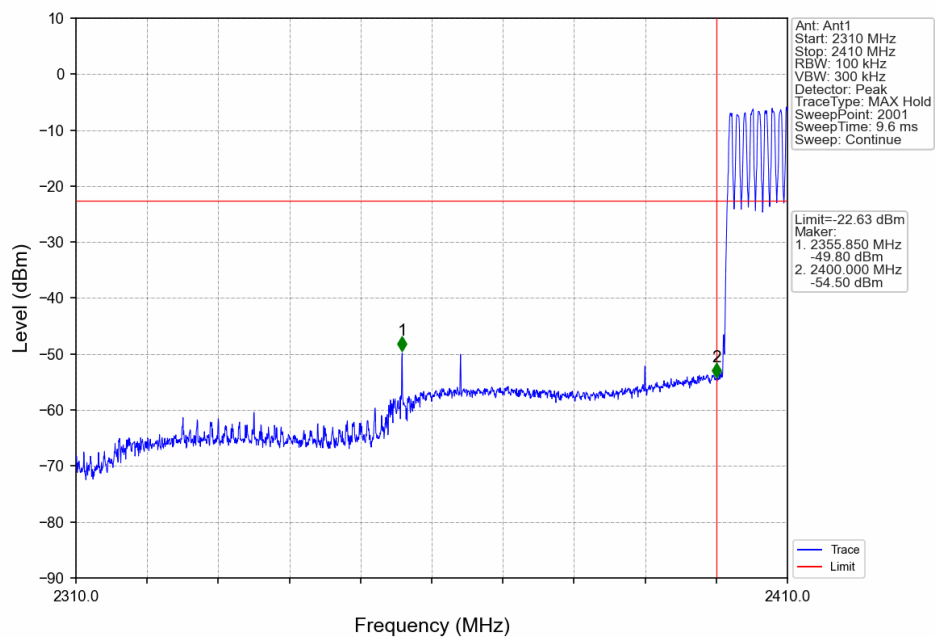


FCCID: 2BGZO-CP001

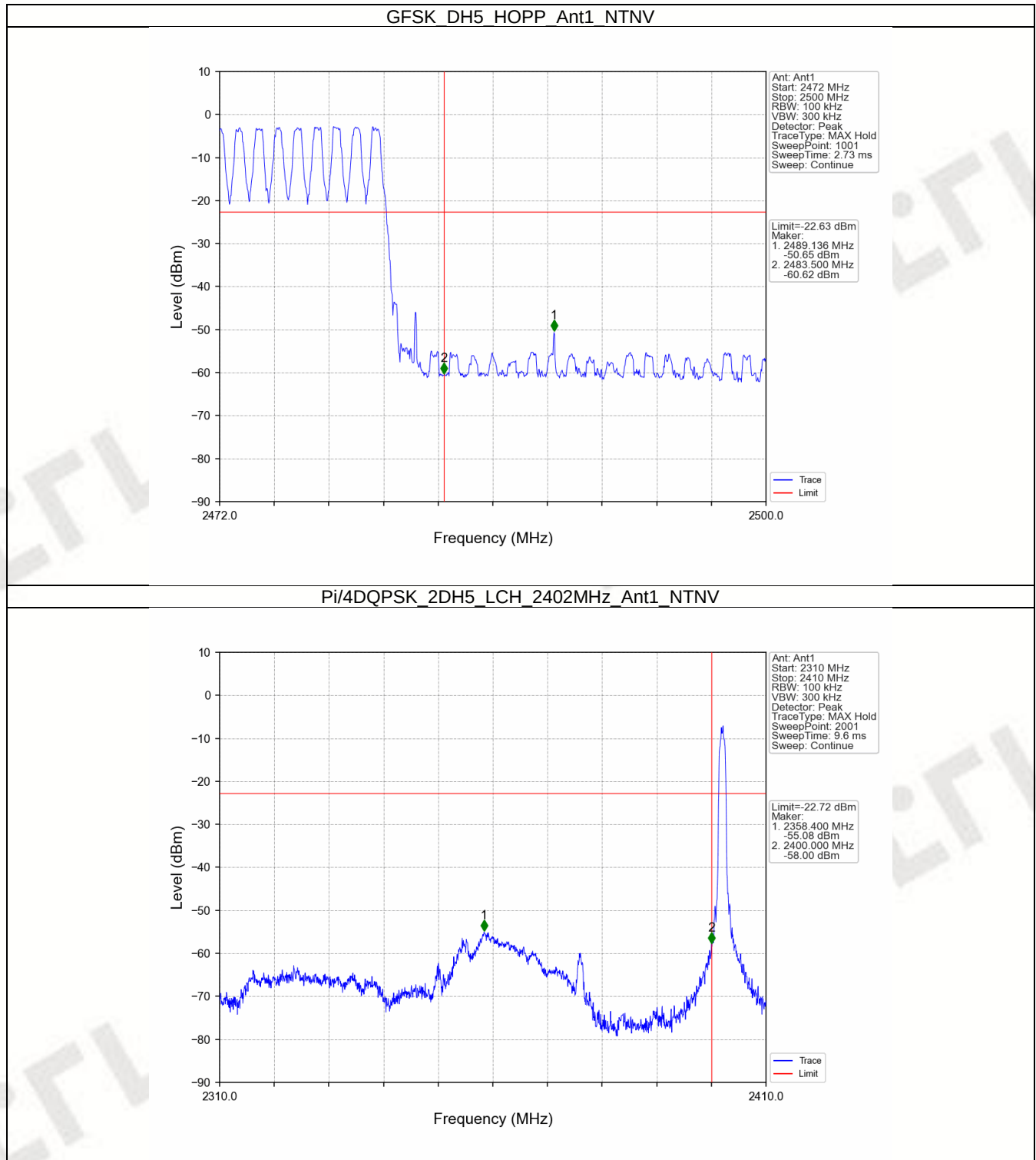
GFSK DH5 HCH 2480MHz Ant1 NTN



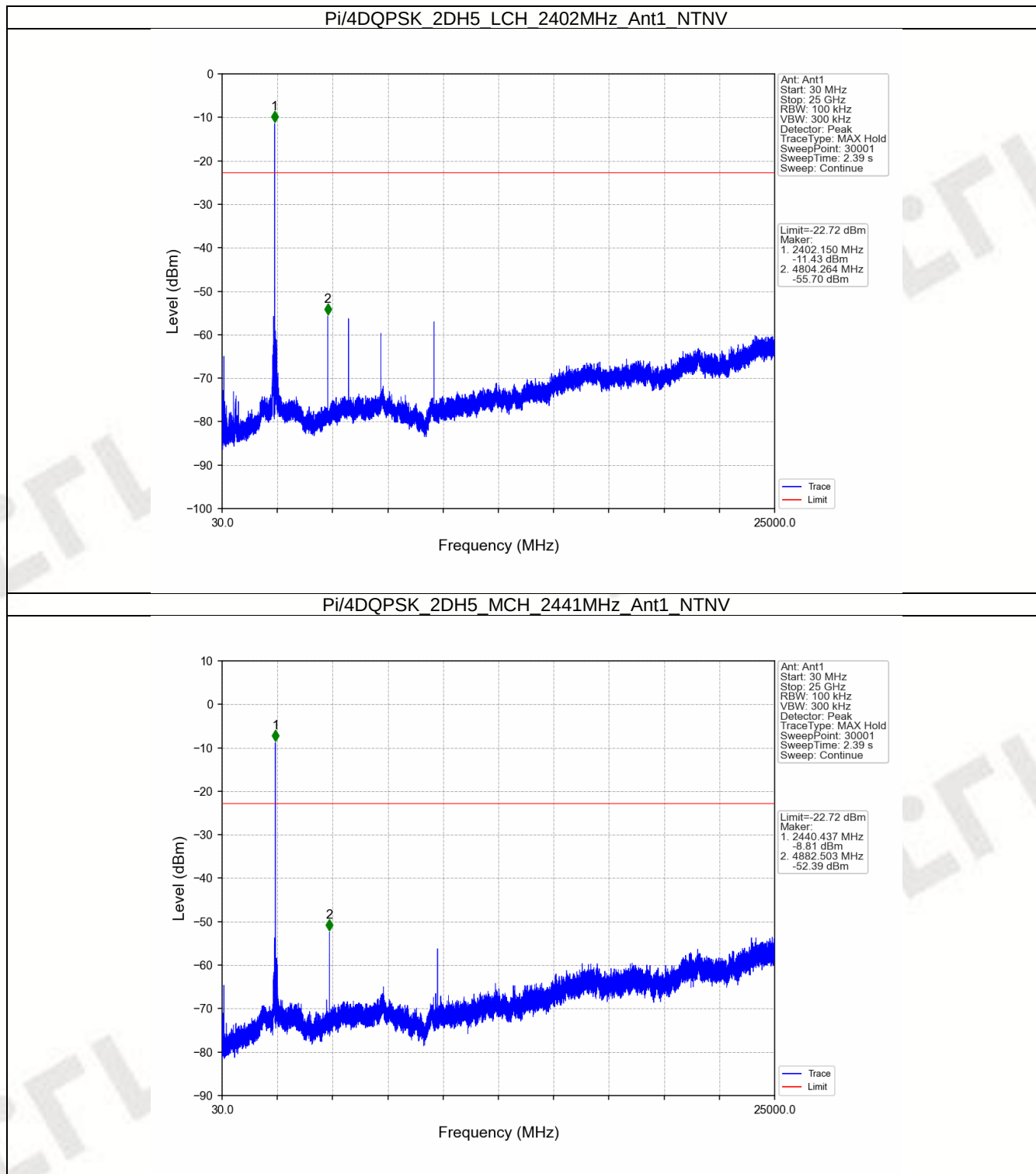
GFSK_DH5_HOPP_Ant1_NTNV



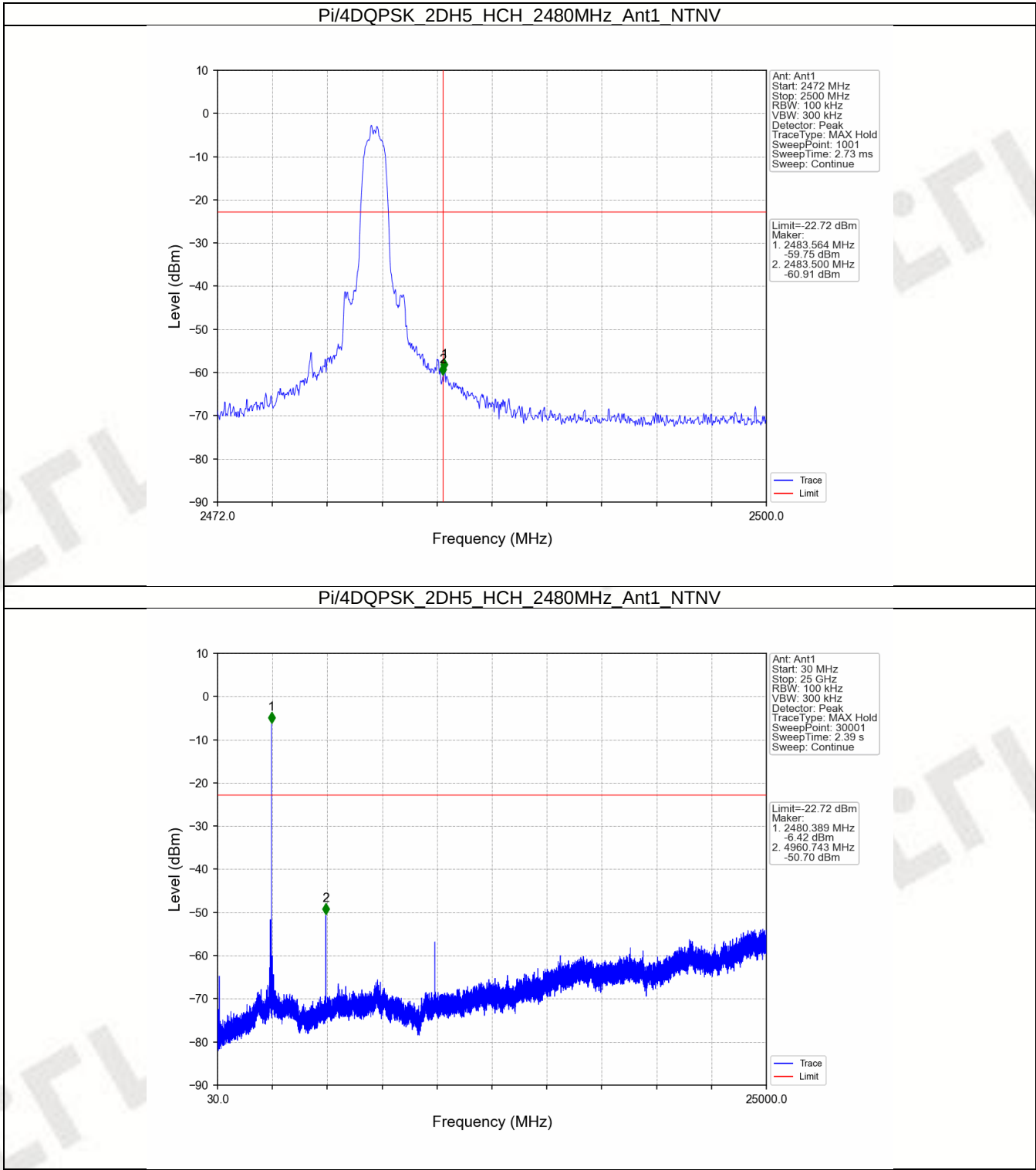
FCCID: 2BGZO-CP001



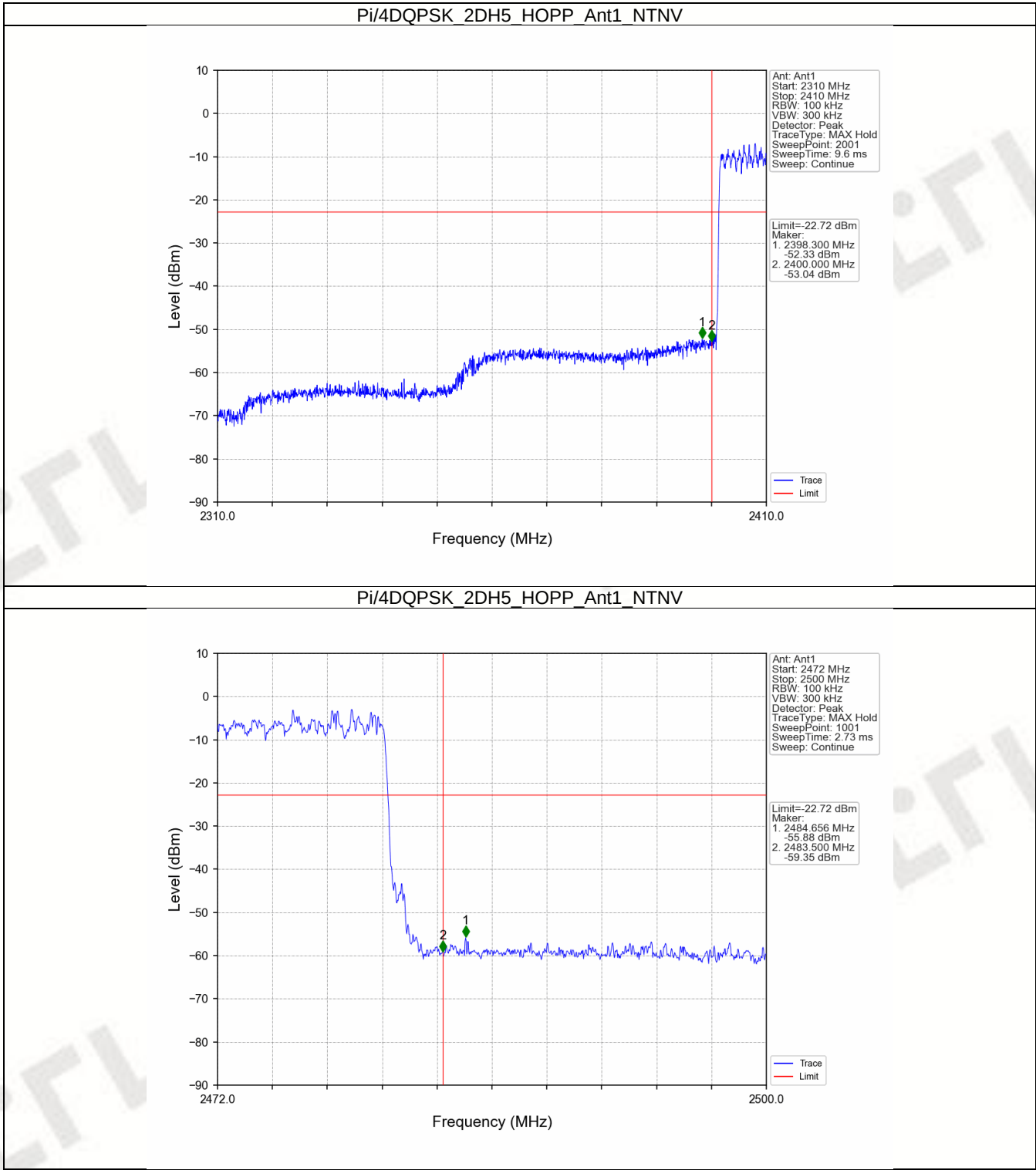
FCCID: 2BGZO-CP001



FCCID: 2BGZO-CP001

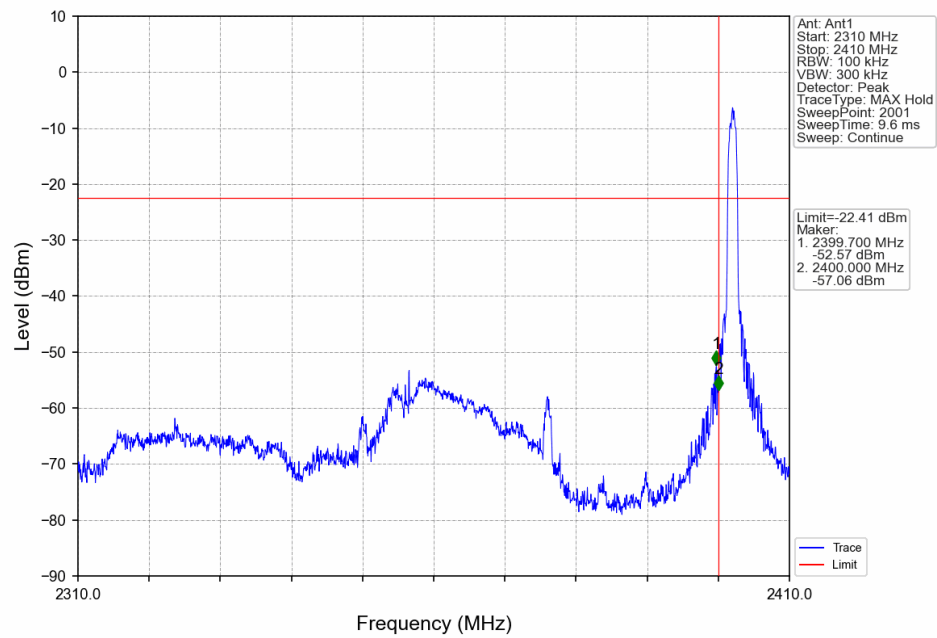


FCCID: 2BGZO-CP001

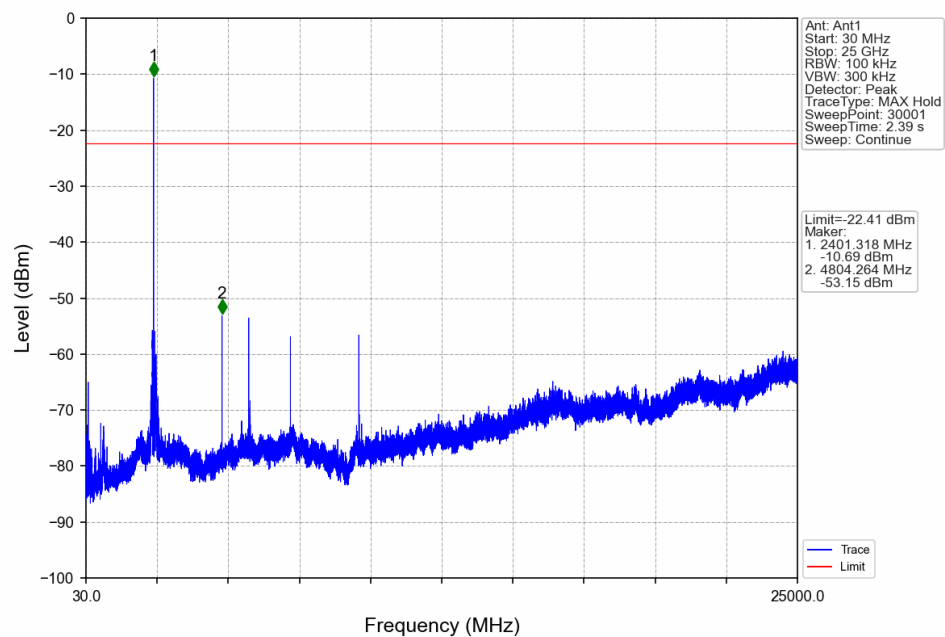


FCCID: 2BGZO-CP001

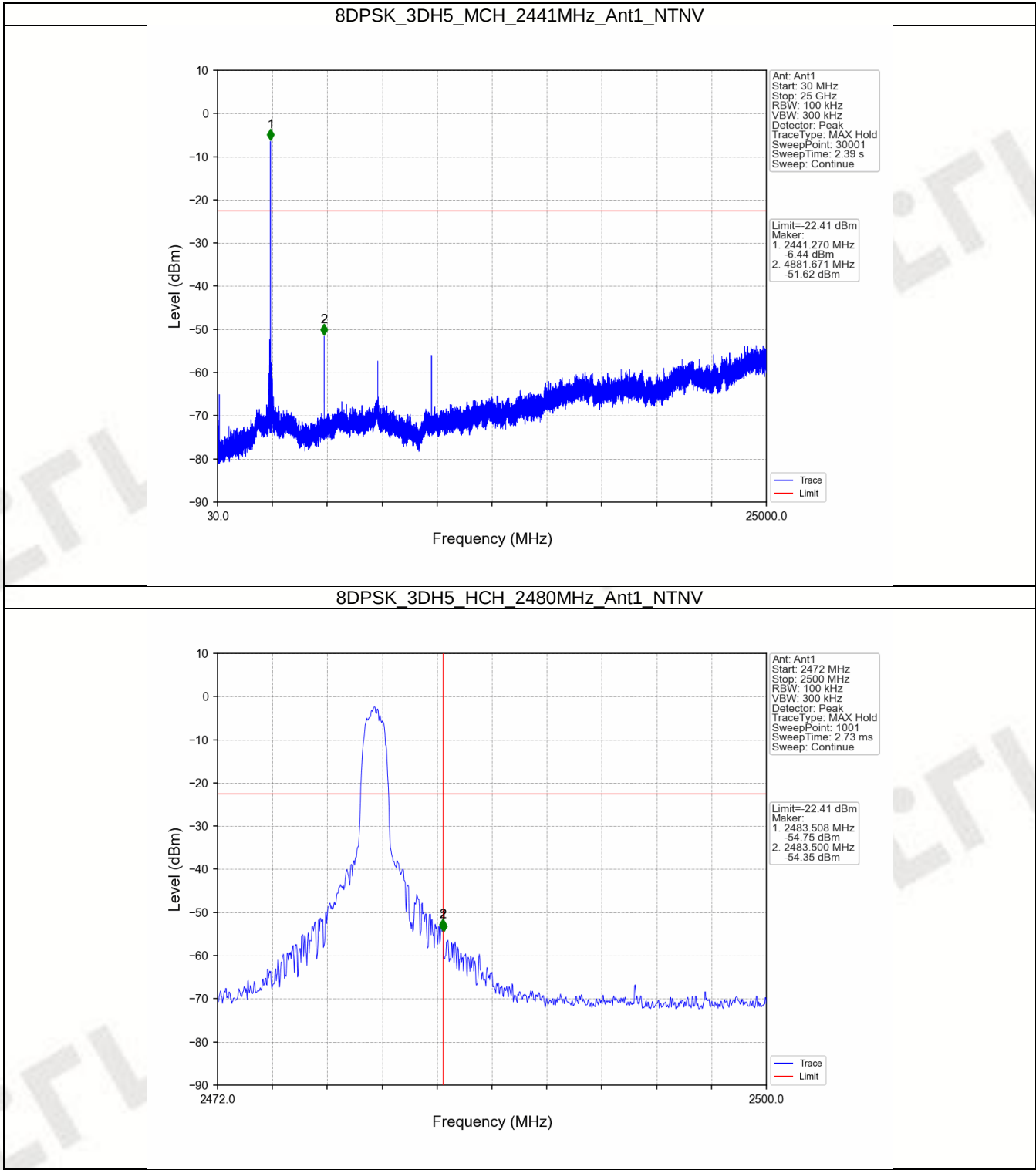
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



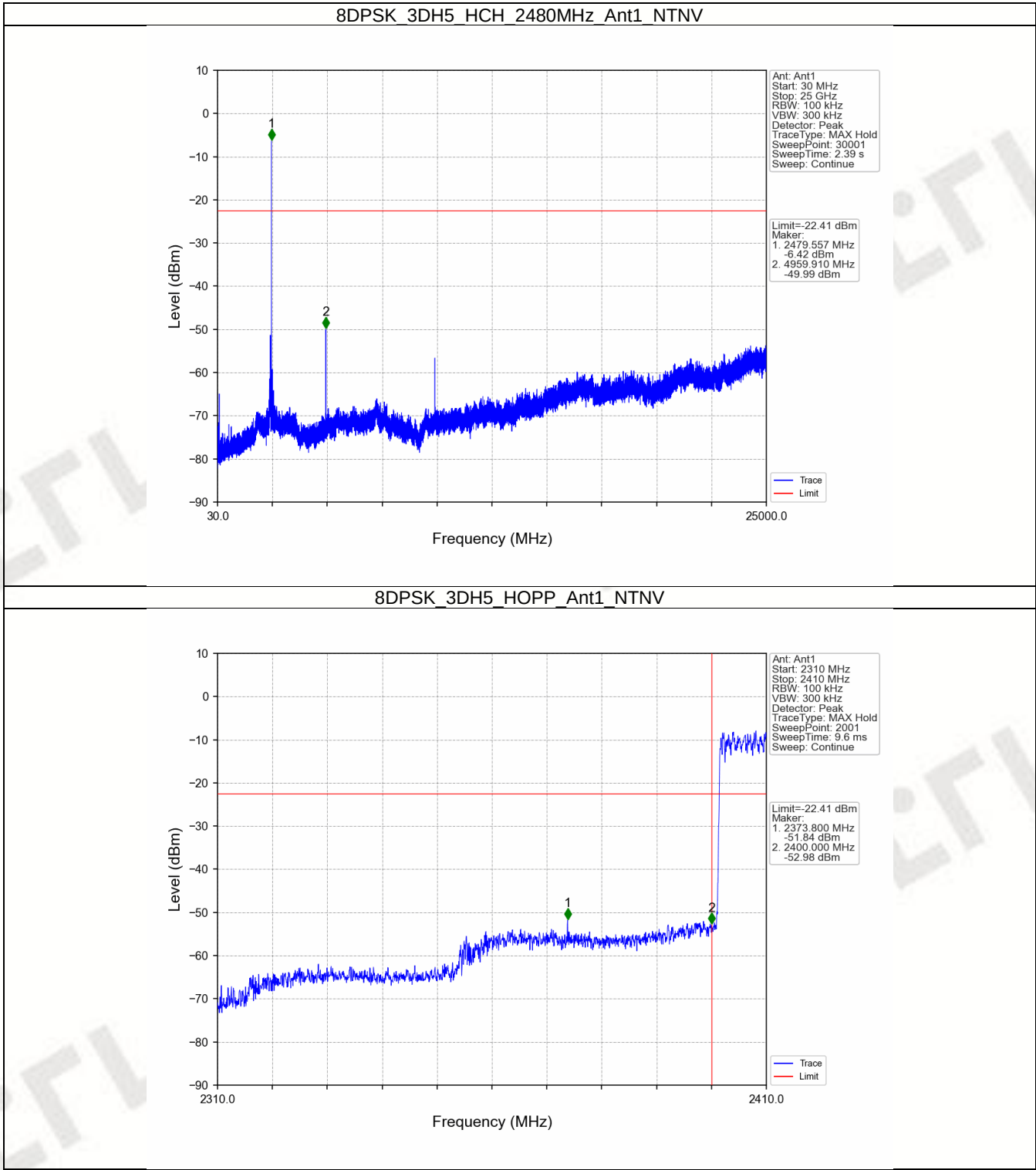
8DPSK_3DH5_LCH_2402MHz_Ant1_NTN



FCCID: 2BGZO-CP001



FCCID: 2BGZO-CP001



FCCID: 2BGZO-CP001

