



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

Annex for BT

Test Report No.: CTL2405087051-WF

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FCCID: 2AE6G-BEATGRIP

1. Bandwidth

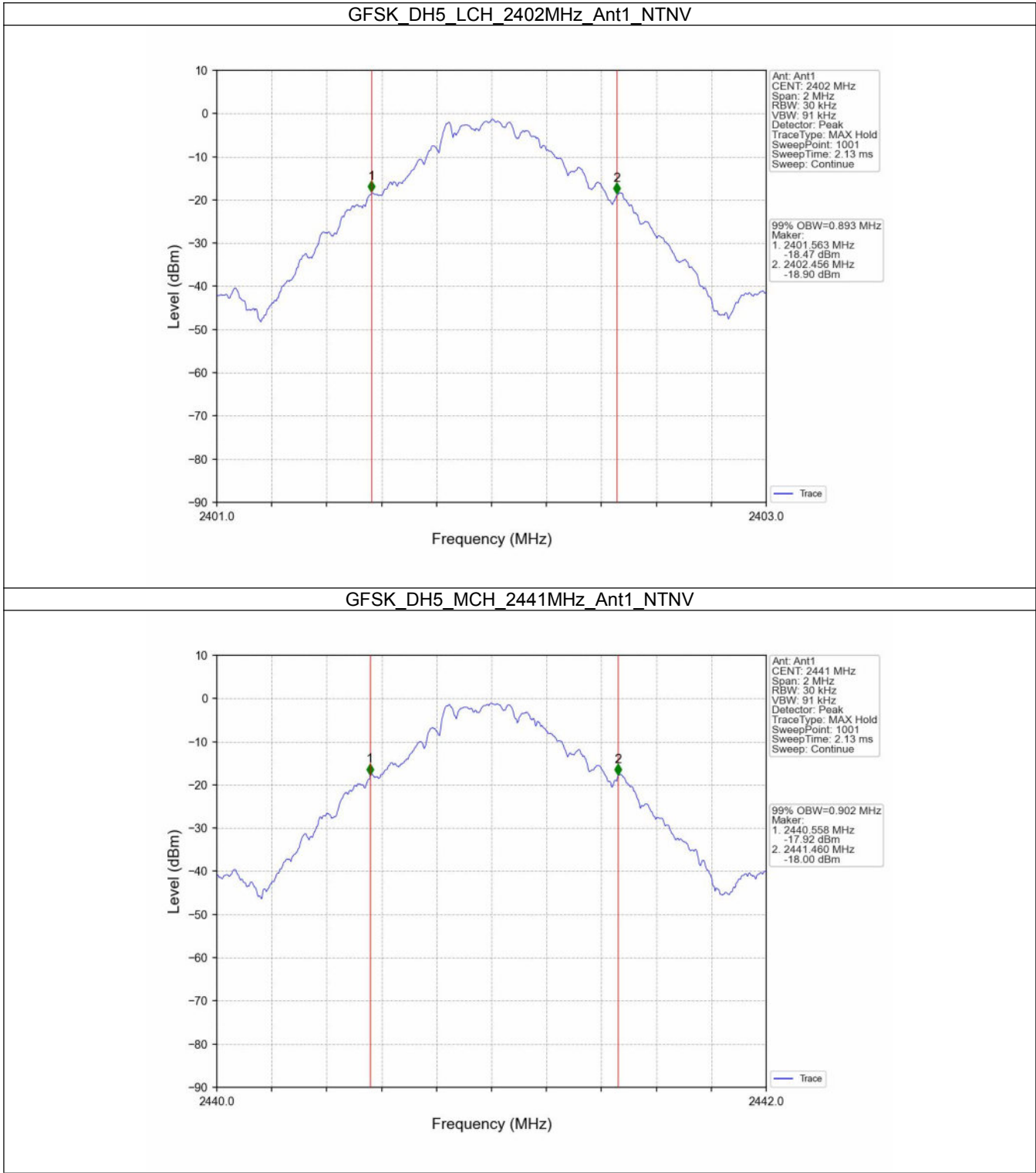
1.1 OBW

1.1.1 Test Result

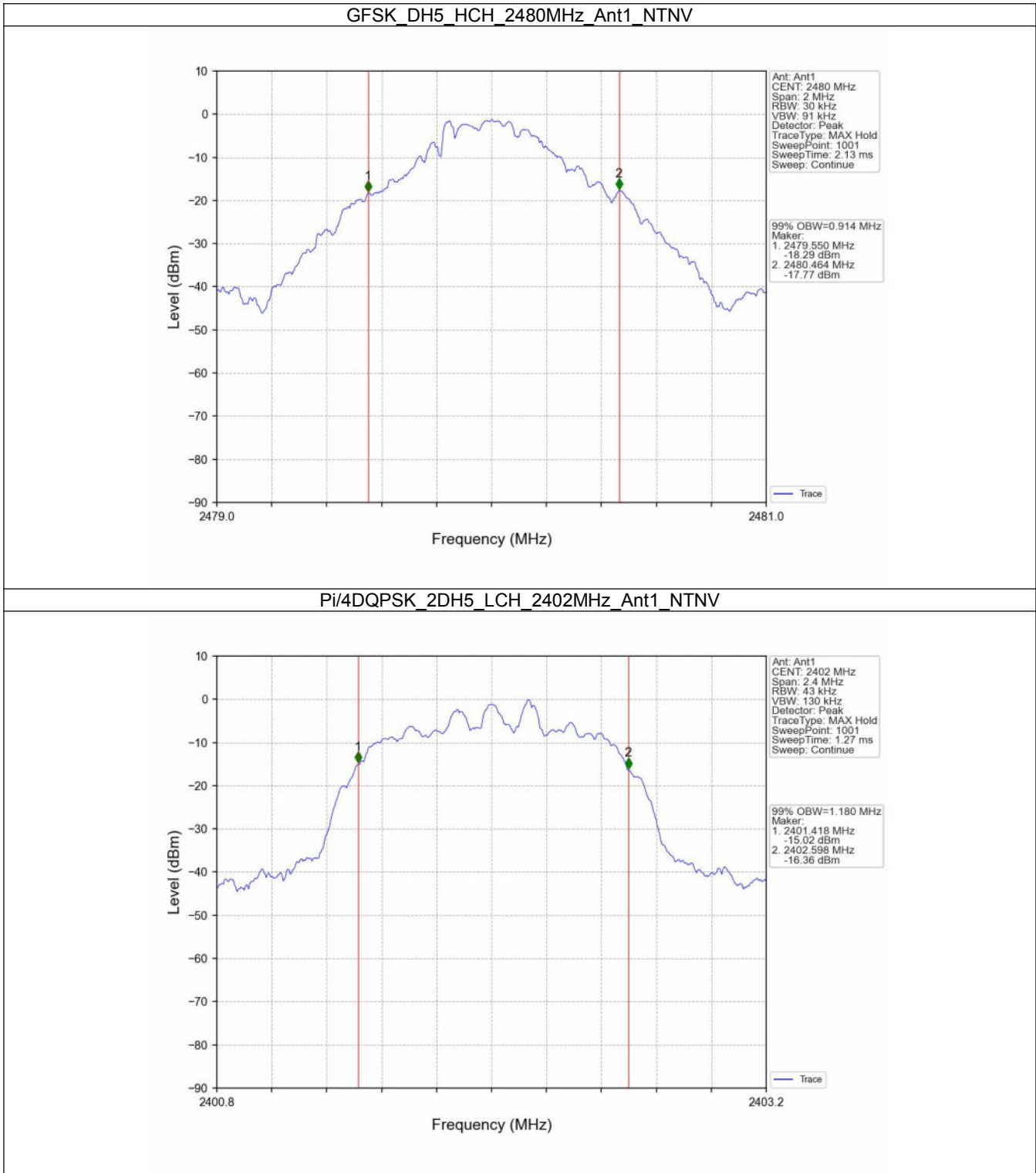
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.893	/	Pass
		2441	DH5	1	0.902	/	Pass
		2480	DH5	1	0.914	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.180	/	Pass
		2441	2DH5	1	1.187	/	Pass
		2480	2DH5	1	1.192	/	Pass
8DPSK	SISO	2402	3DH5	1	1.191	/	Pass
		2441	3DH5	1	1.196	/	Pass
		2480	3DH5	1	1.201	/	Pass

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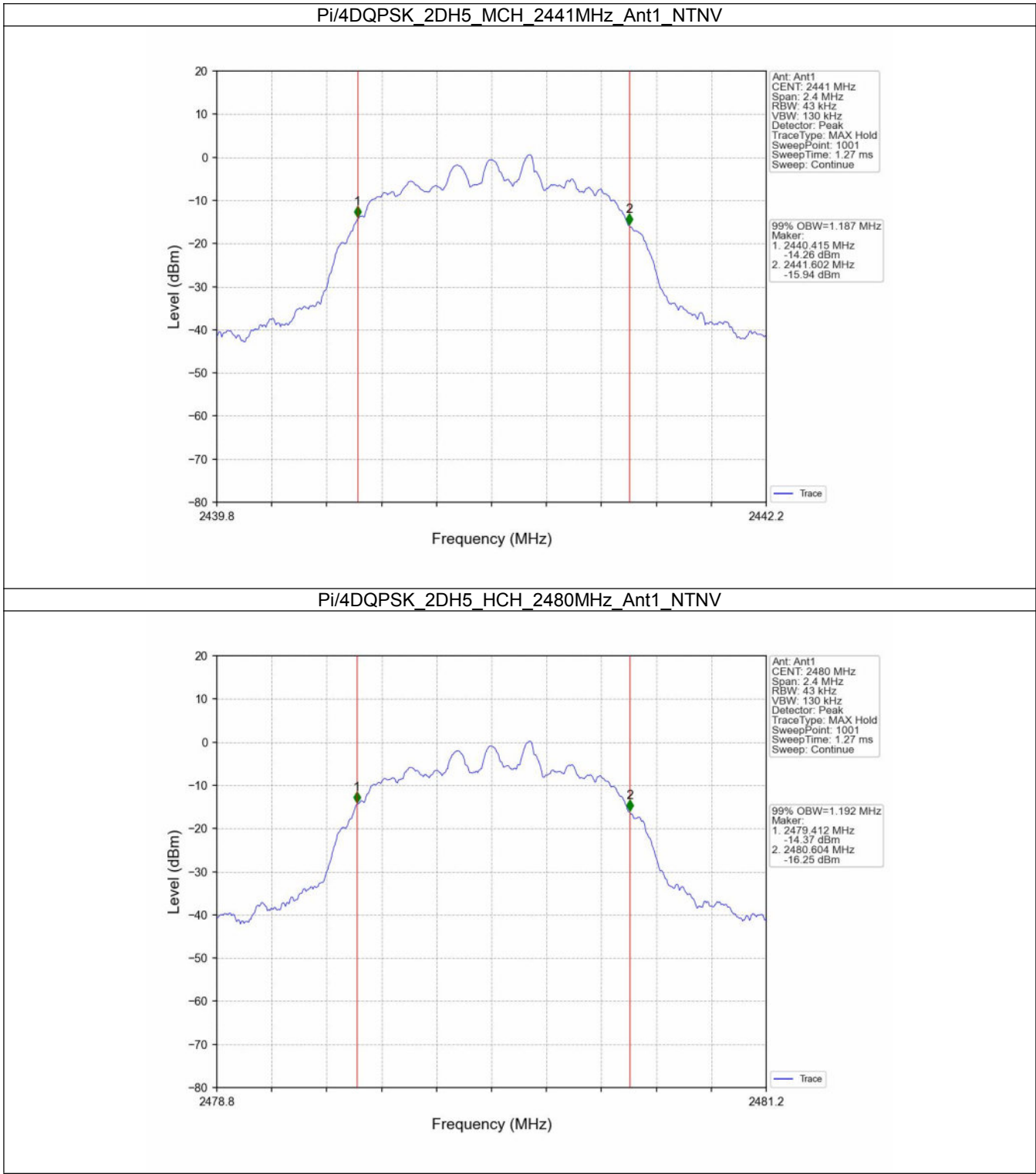
1.1.2 Test Graph



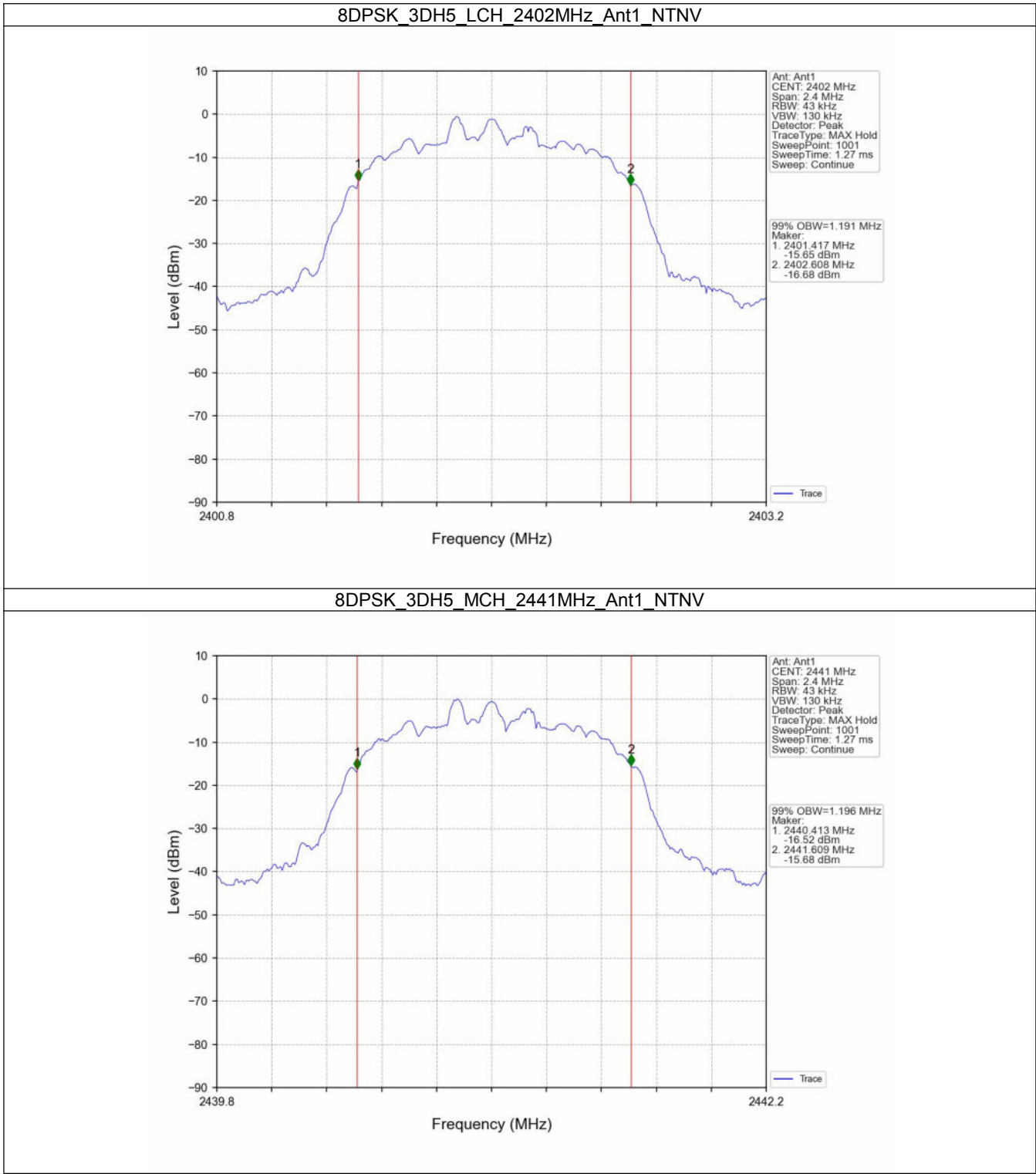
FCCID: 2AE6G-BEATGRIP



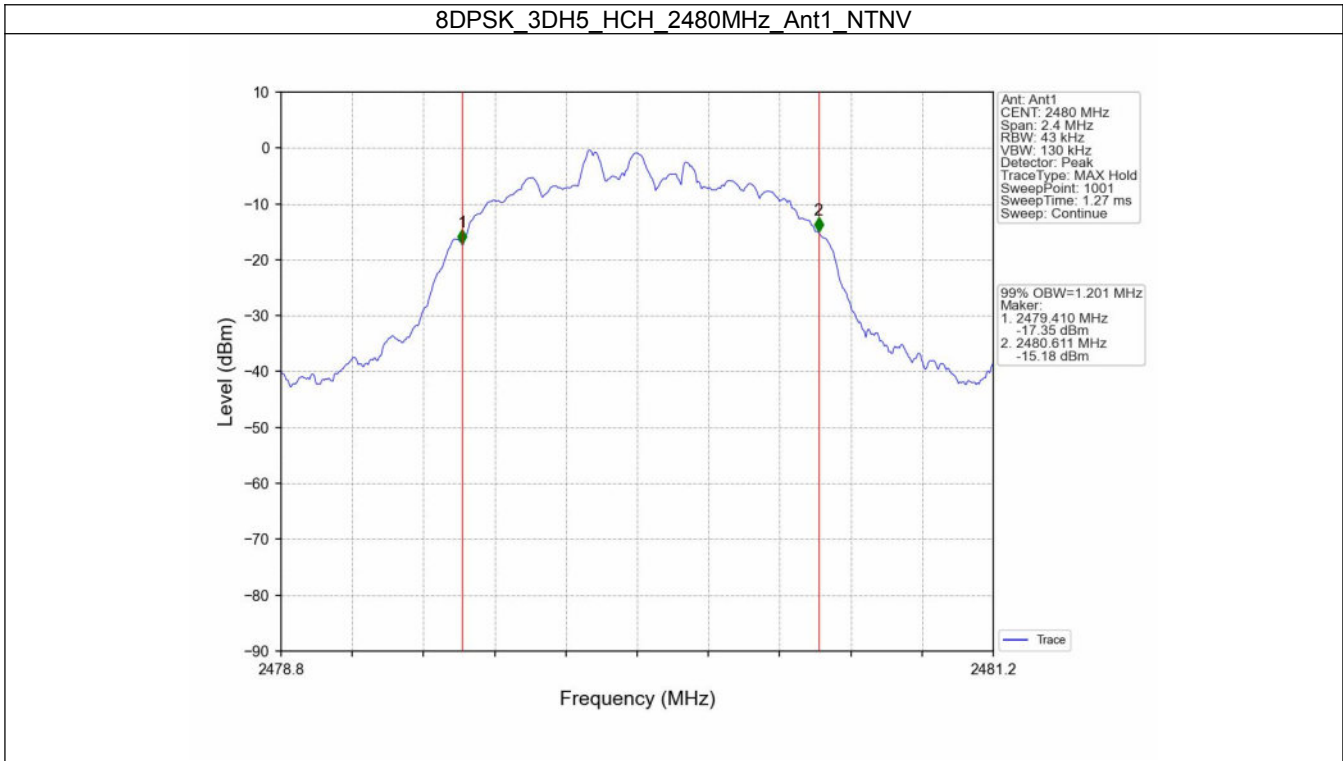
FCCID: 2AE6G-BEATGRIP



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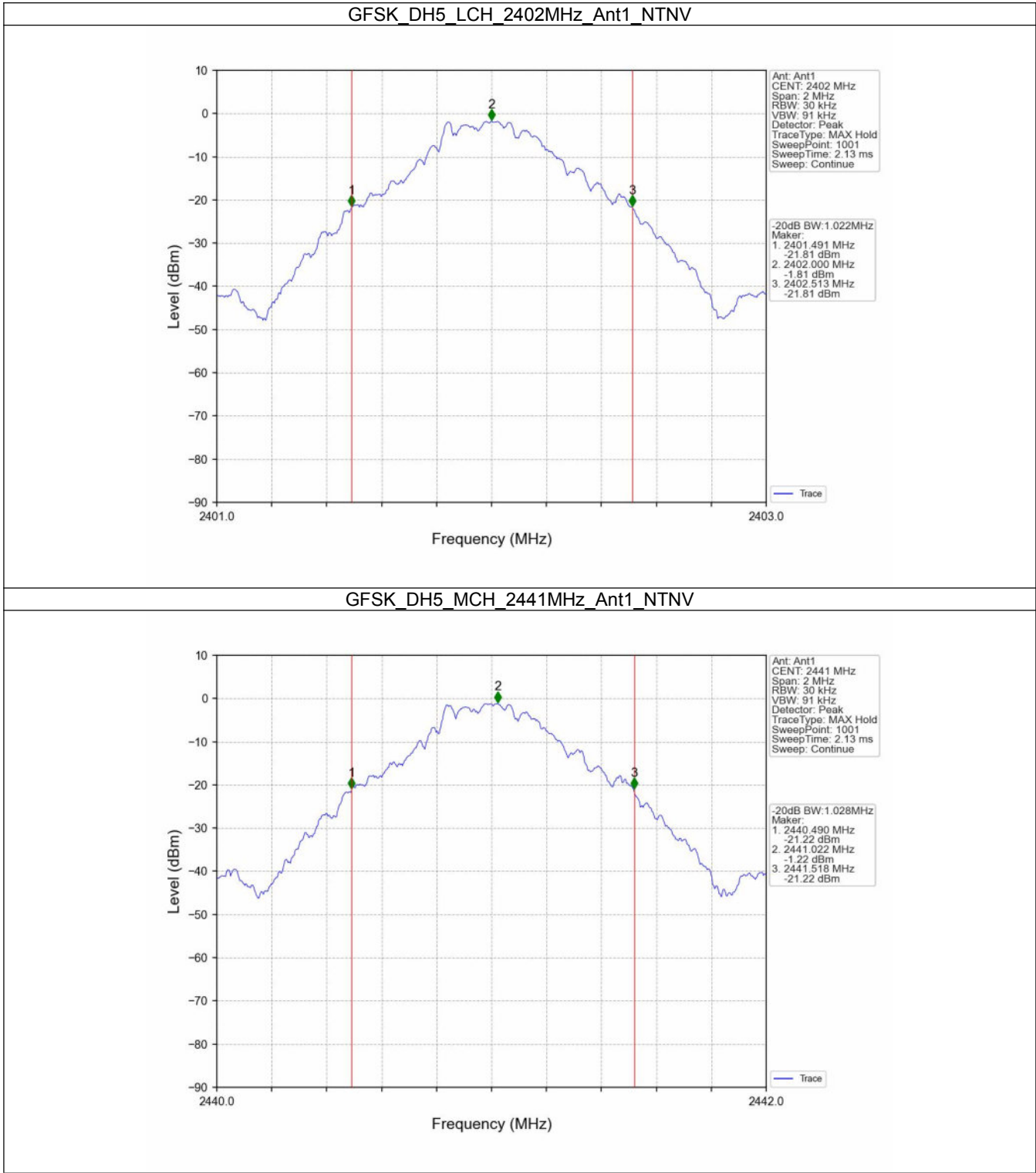
FCCID: 2AE6G-BEATGRIP

1.2 20dB BW**1.2.1 Test Result**

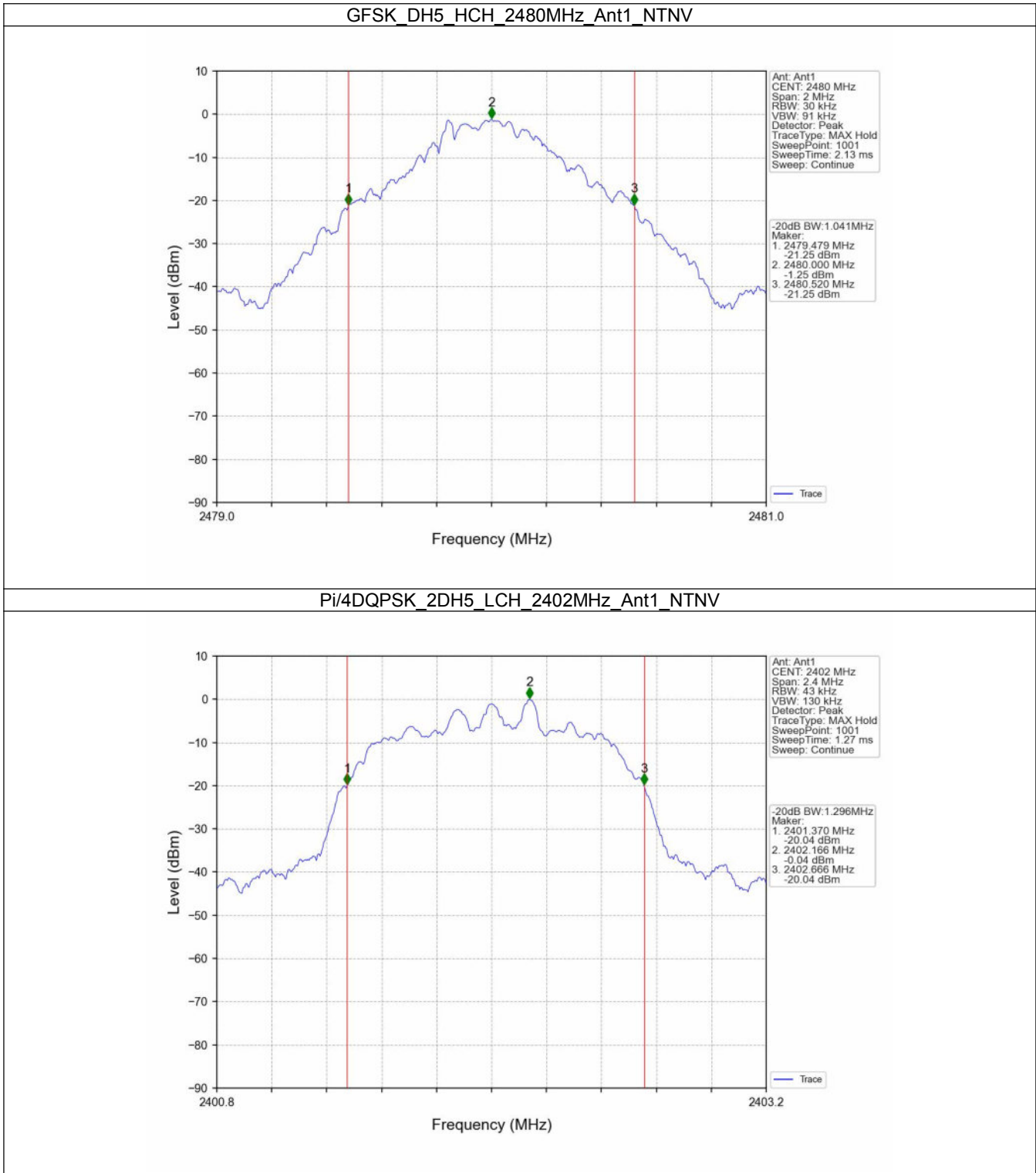
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	1.022	/	Pass
		2441	DH5	1	1.028	/	Pass
		2480	DH5	1	1.041	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.296	/	Pass
		2441	2DH5	1	1.303	/	Pass
		2480	2DH5	1	1.323	/	Pass
8DPSK	SISO	2402	3DH5	1	1.317	/	Pass
		2441	3DH5	1	1.317	/	Pass
		2480	3DH5	1	1.316	/	Pass

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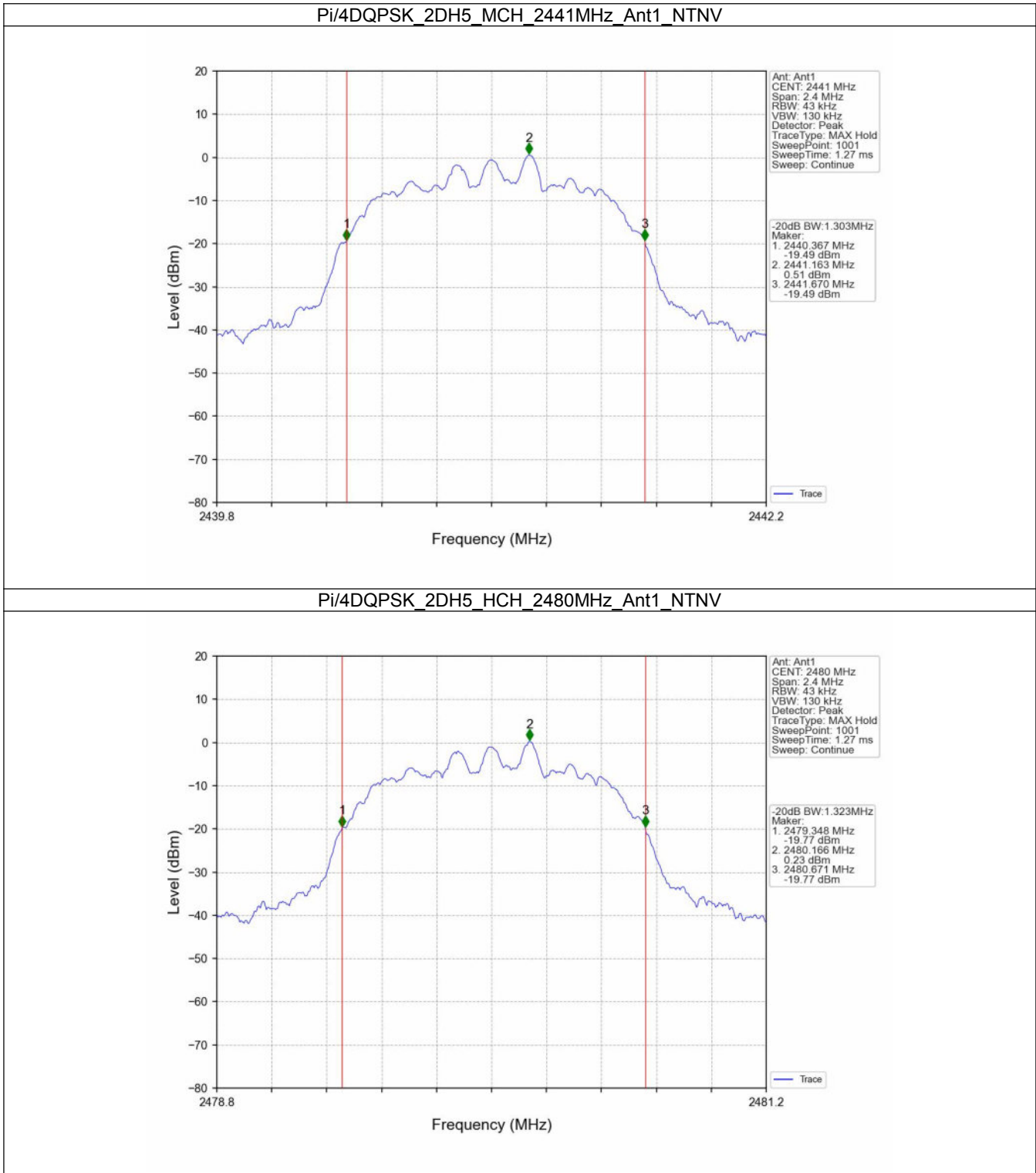
1.2.2 Test Graph



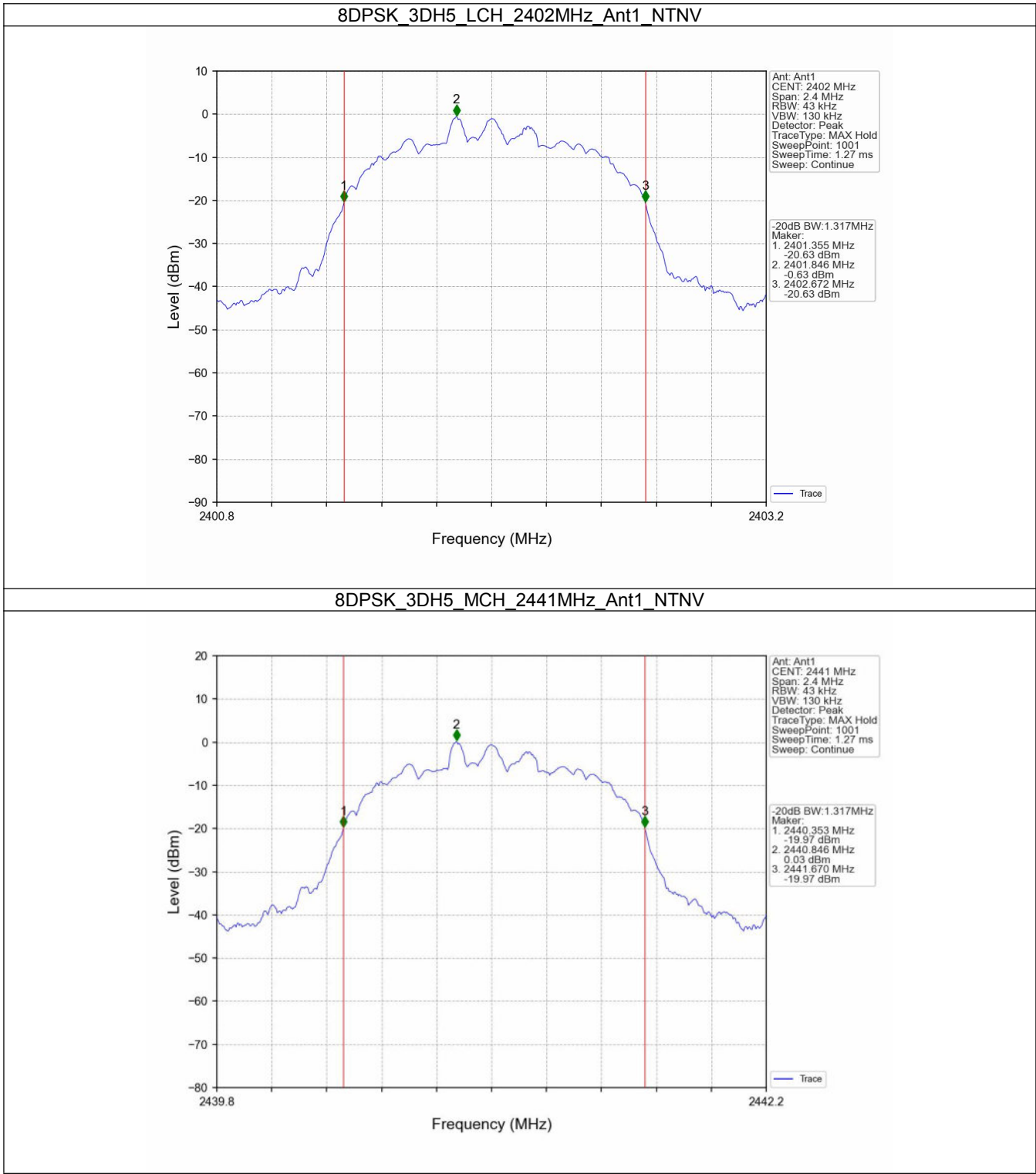
FCCID: 2AE6G-BEATGRIP



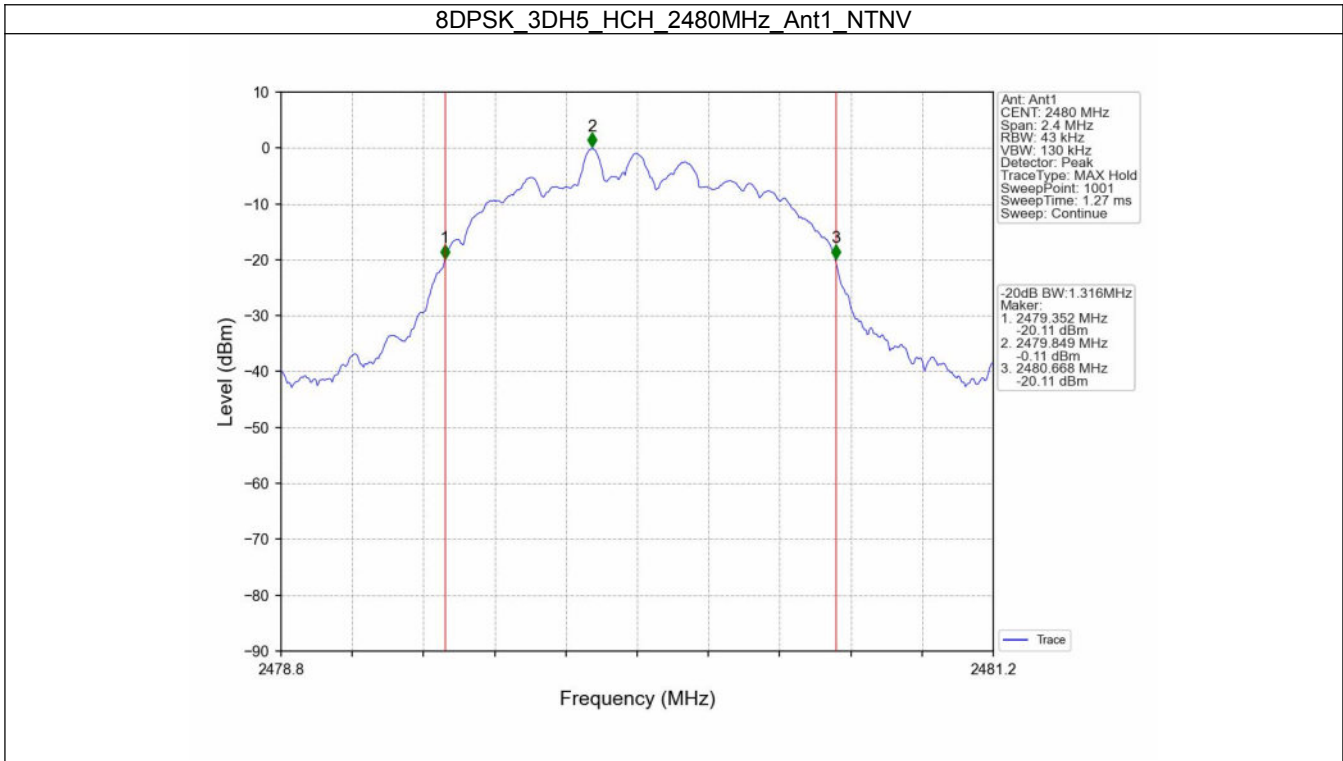
FCCID: 2AE6G-BEATGRIP



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2. Maximum Conducted Output Power

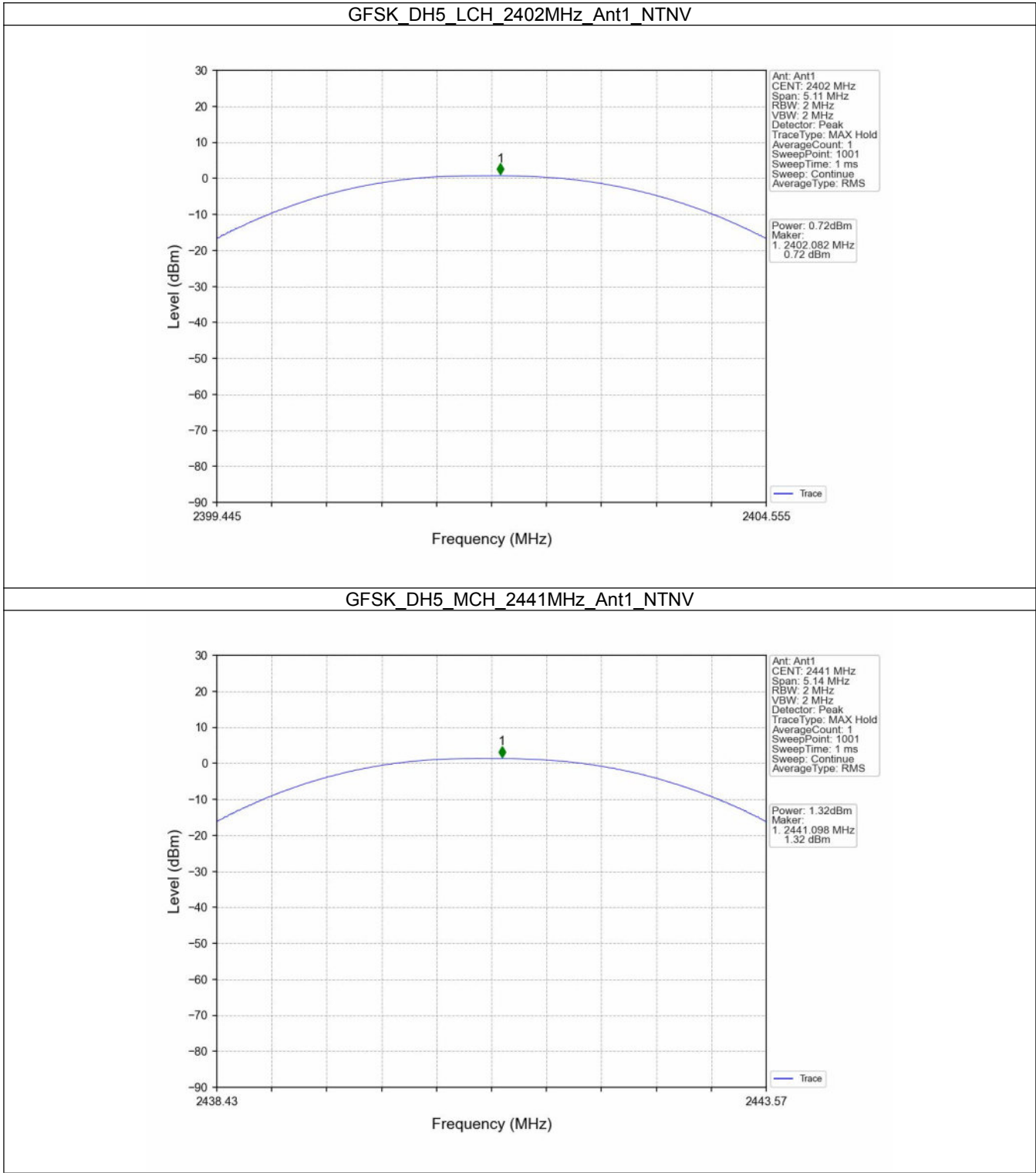
2.1 Power

2.1.1 Test Result

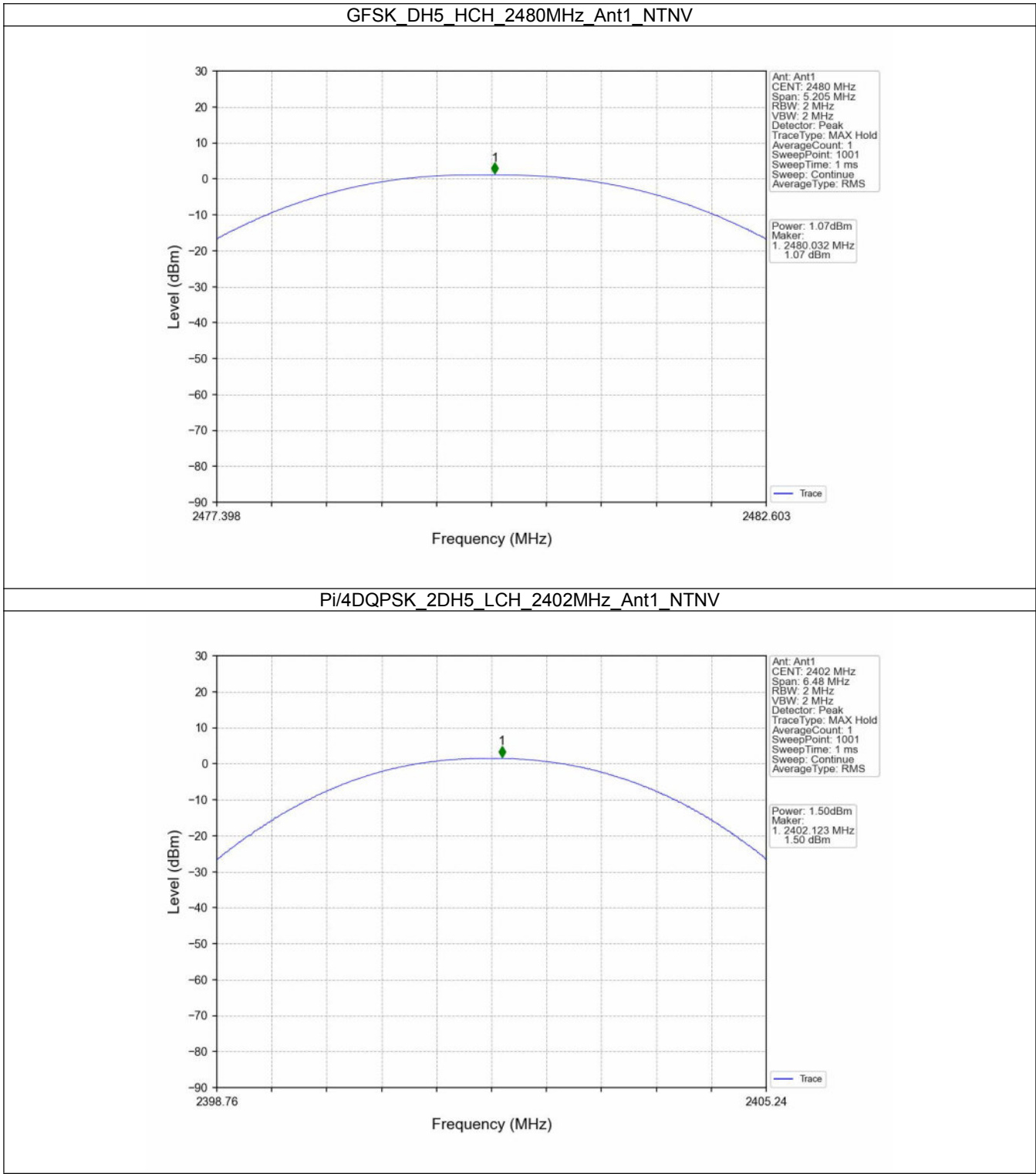
Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	0.72	<=20.97	Pass
		2441	DH5	1.32	<=20.97	Pass
		2480	DH5	1.07	<=20.97	Pass
Pi/4DQPSK	SISO	2402	2DH5	1.50	<=20.97	Pass
		2441	2DH5	2.11	<=20.97	Pass
		2480	2DH5	1.88	<=20.97	Pass
8DPSK	SISO	2402	3DH5	1.84	<=20.97	Pass
		2441	3DH5	2.47	<=20.97	Pass
		2480	3DH5	2.22	<=20.97	Pass
Note1: Antenna Gain: Ant1: 1.08dBi;						

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2.1.2 Test Graph

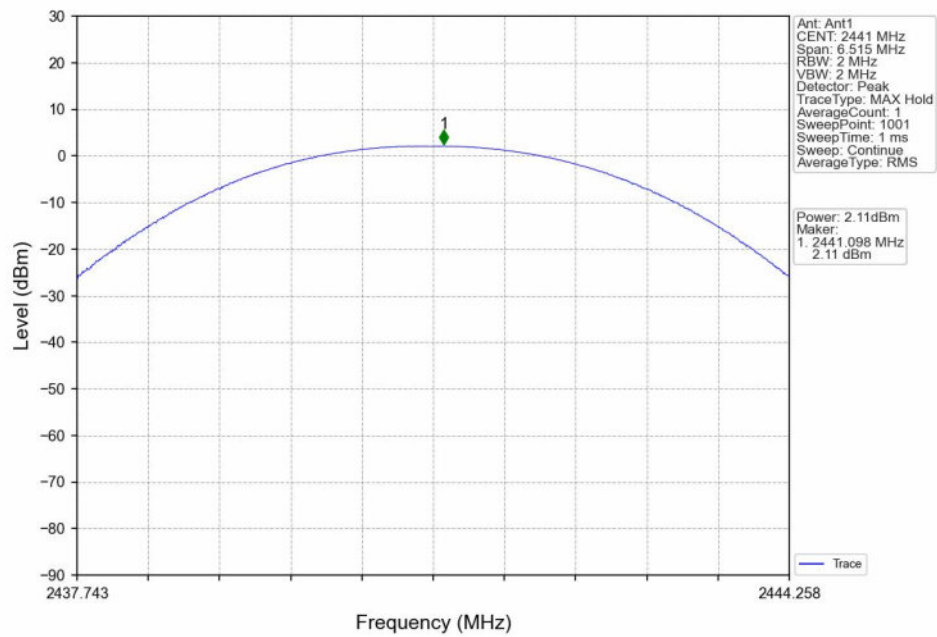


FCCID: 2AE6G-BEATGRIP

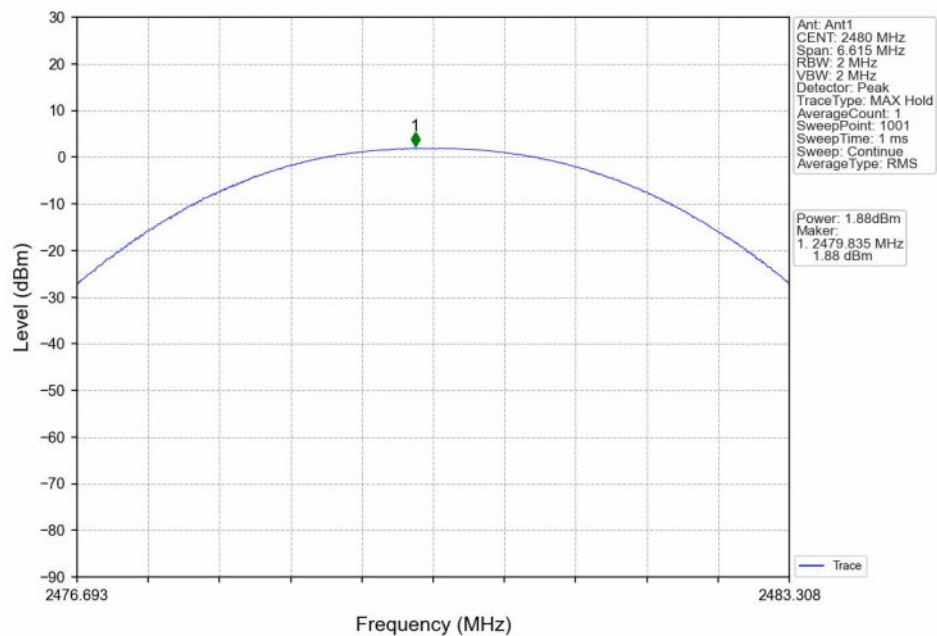


FCCID: 2AE6G-BEATGRIP

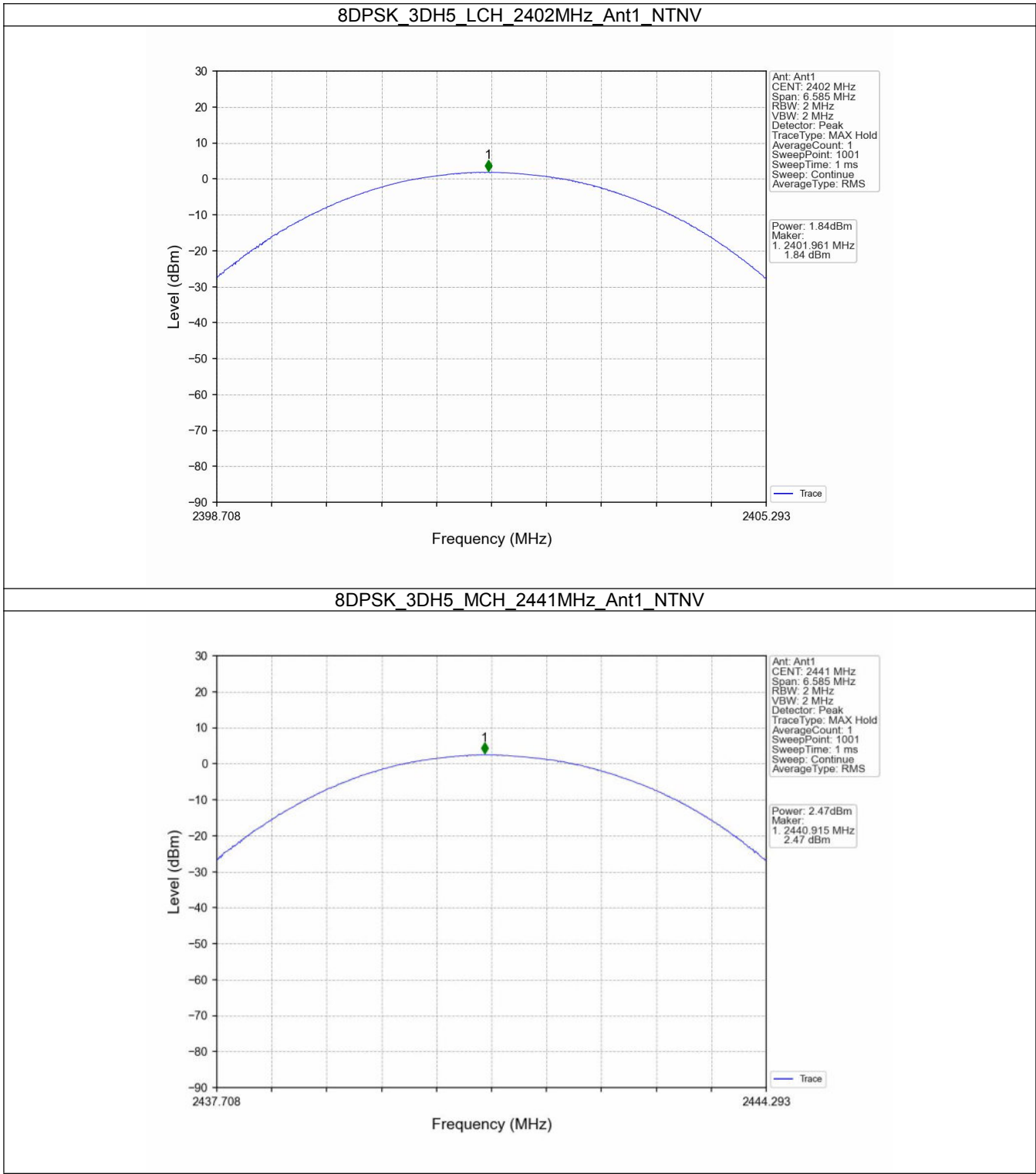
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



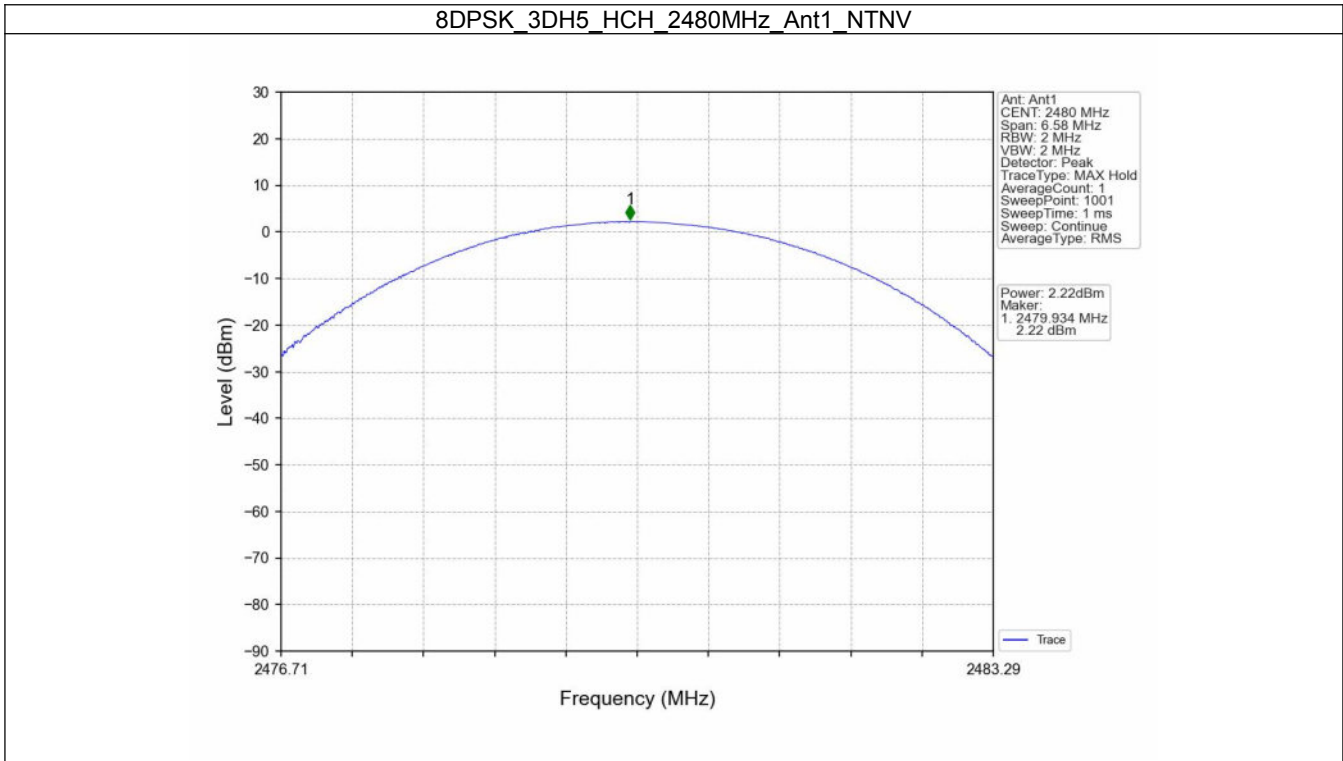
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



FCCID: 2AE6G-BEATGRIP



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3. Carrier Frequency Separation

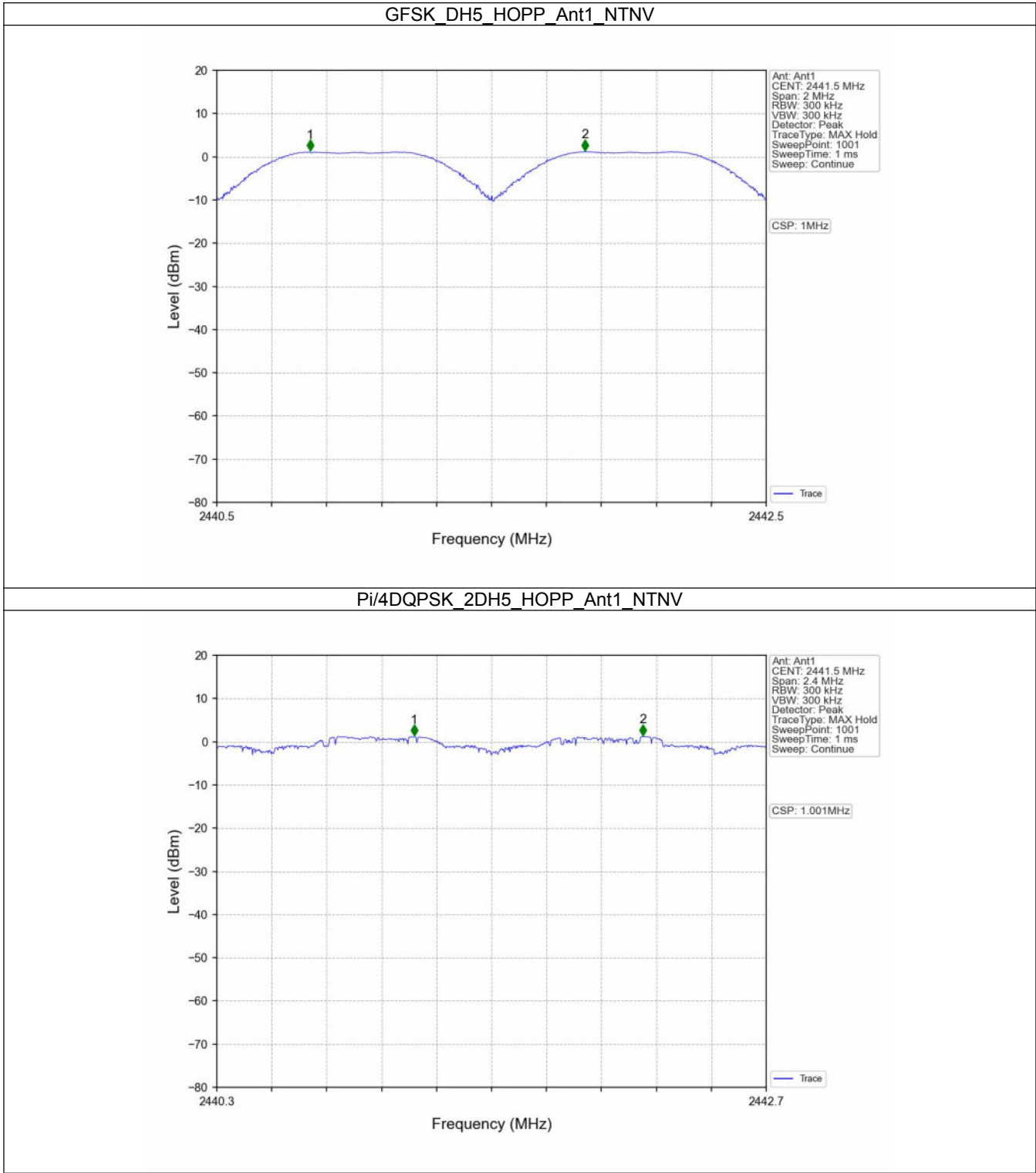
3.1 Ant1

3.1.1 Test Result

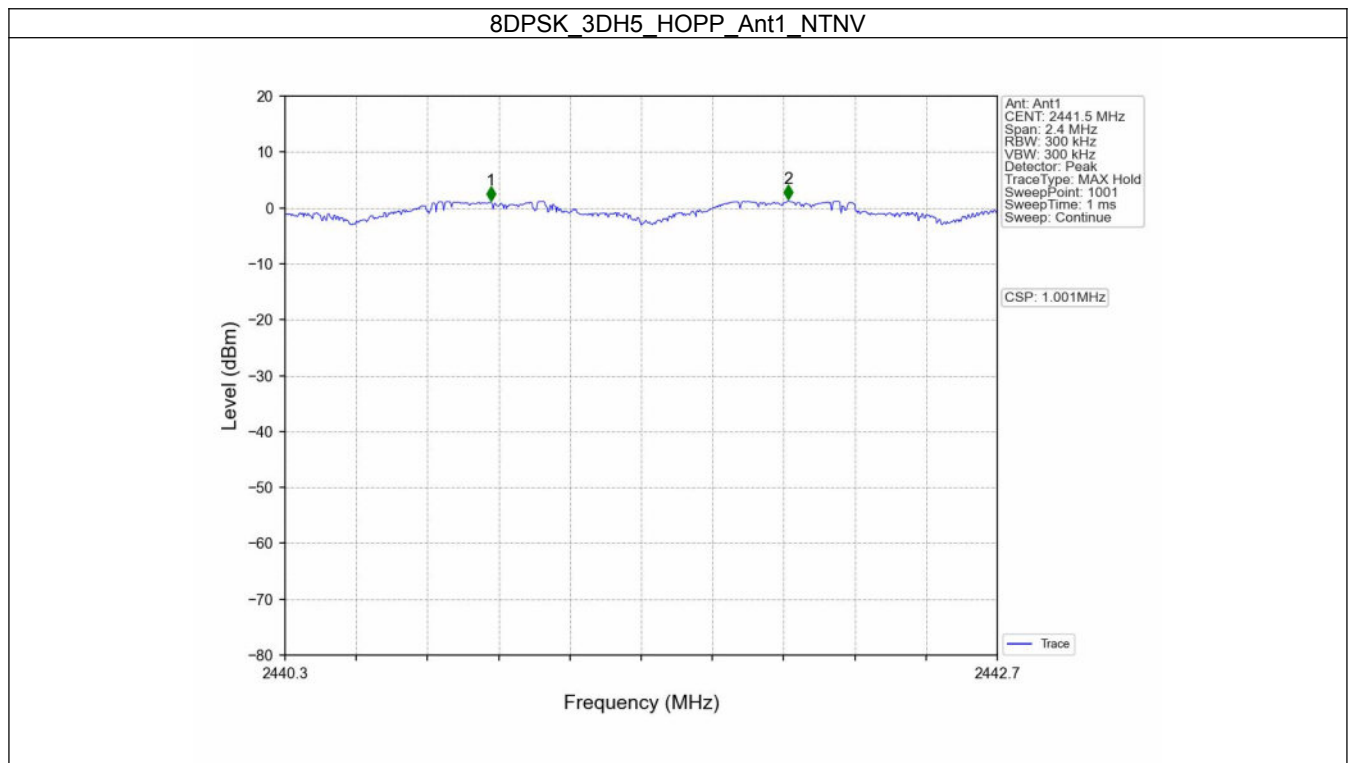
Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.000	1.041	≥ 0.694	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.001	1.323	≥ 0.882	Pass
8DPSK	SISO	HOPP	3DH5	1.001	1.317	≥ 0.878	Pass

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3.1.2 Test Graph



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FCCID: 2AE6G-BEATGRIP

4. Number of Hopping Frequencies

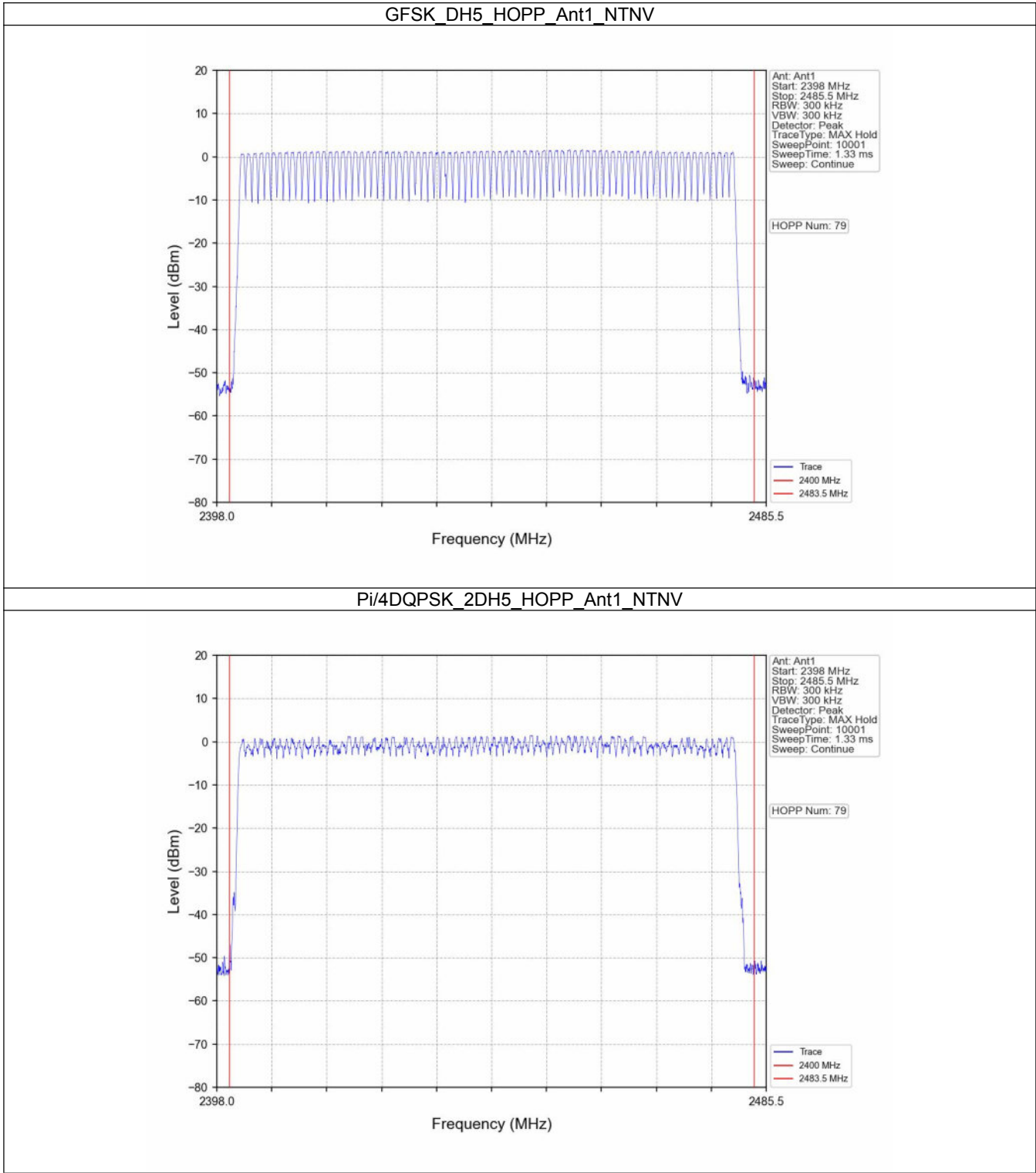
4.1 HoppNum

4.1.1 Test Result

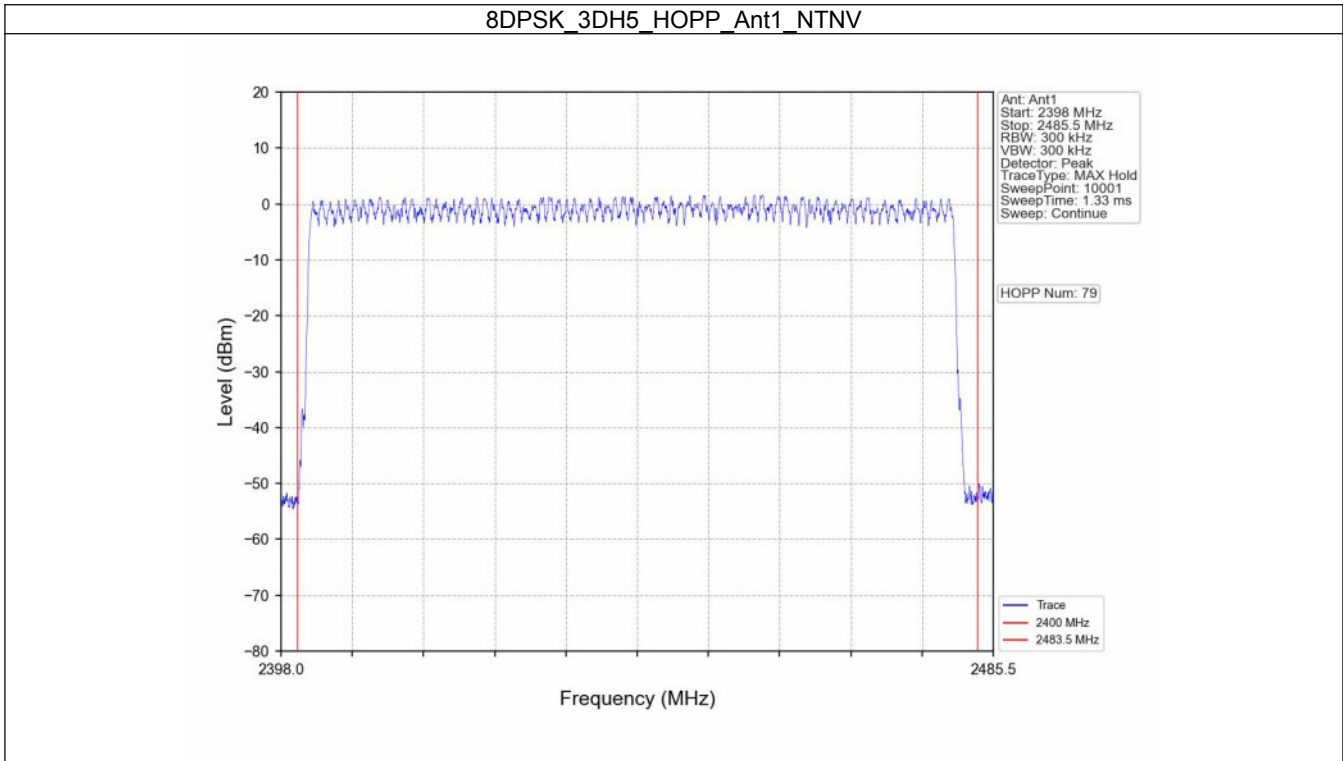
Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	≥ 15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	≥ 15	Pass
8DPSK	SISO	HOPP	3DH5	79	≥ 15	Pass

FCCID: 2AE6G-BEATGRIP

4.1.2 Test Graph



FCCID: 2AE6G-BEATGRIP



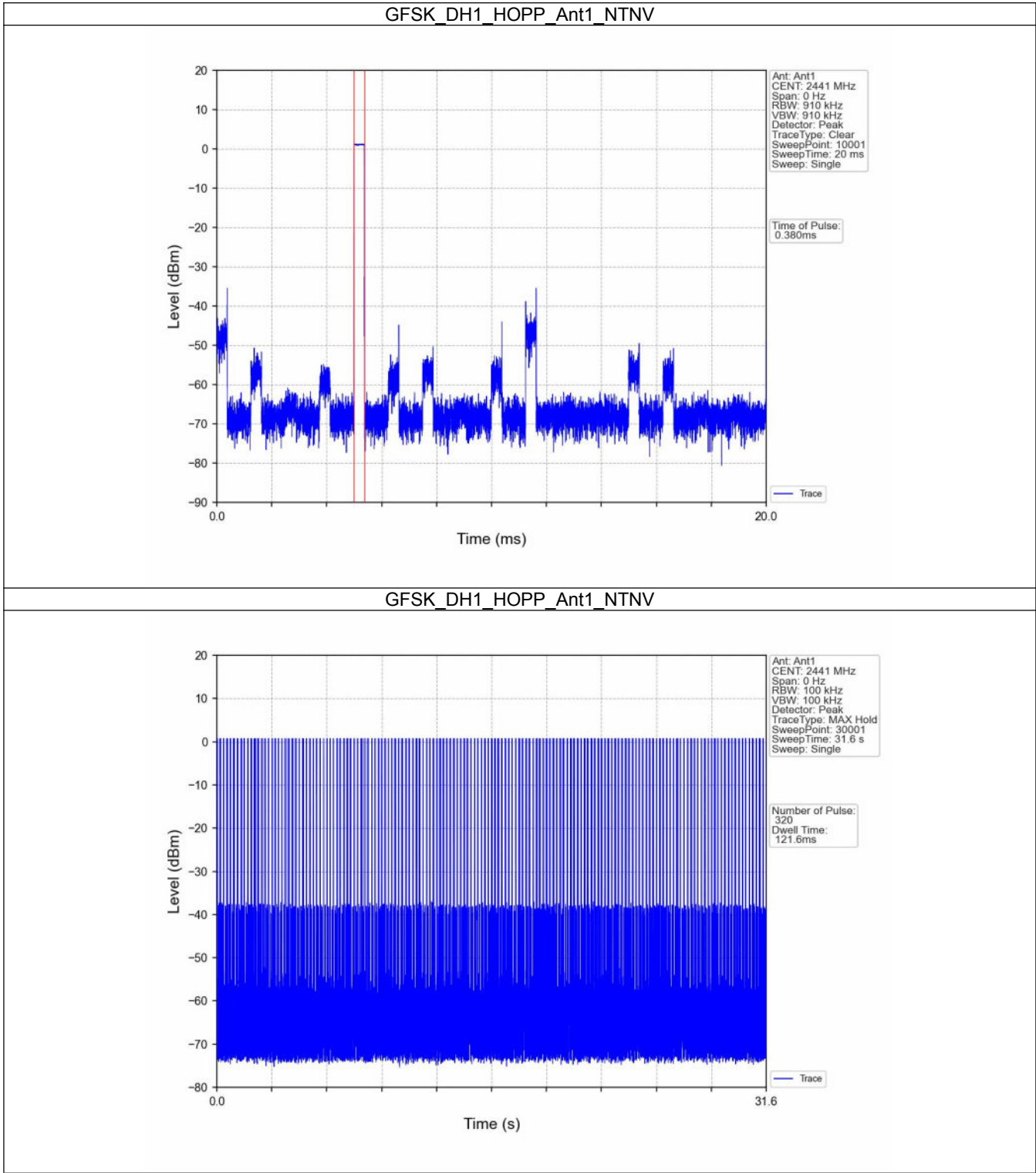
FCCID: 2AE6G-BEATGRIP

5. Time of Occupancy (Dwell Time)**5.1 Ant1****5.1.1 Test Result**

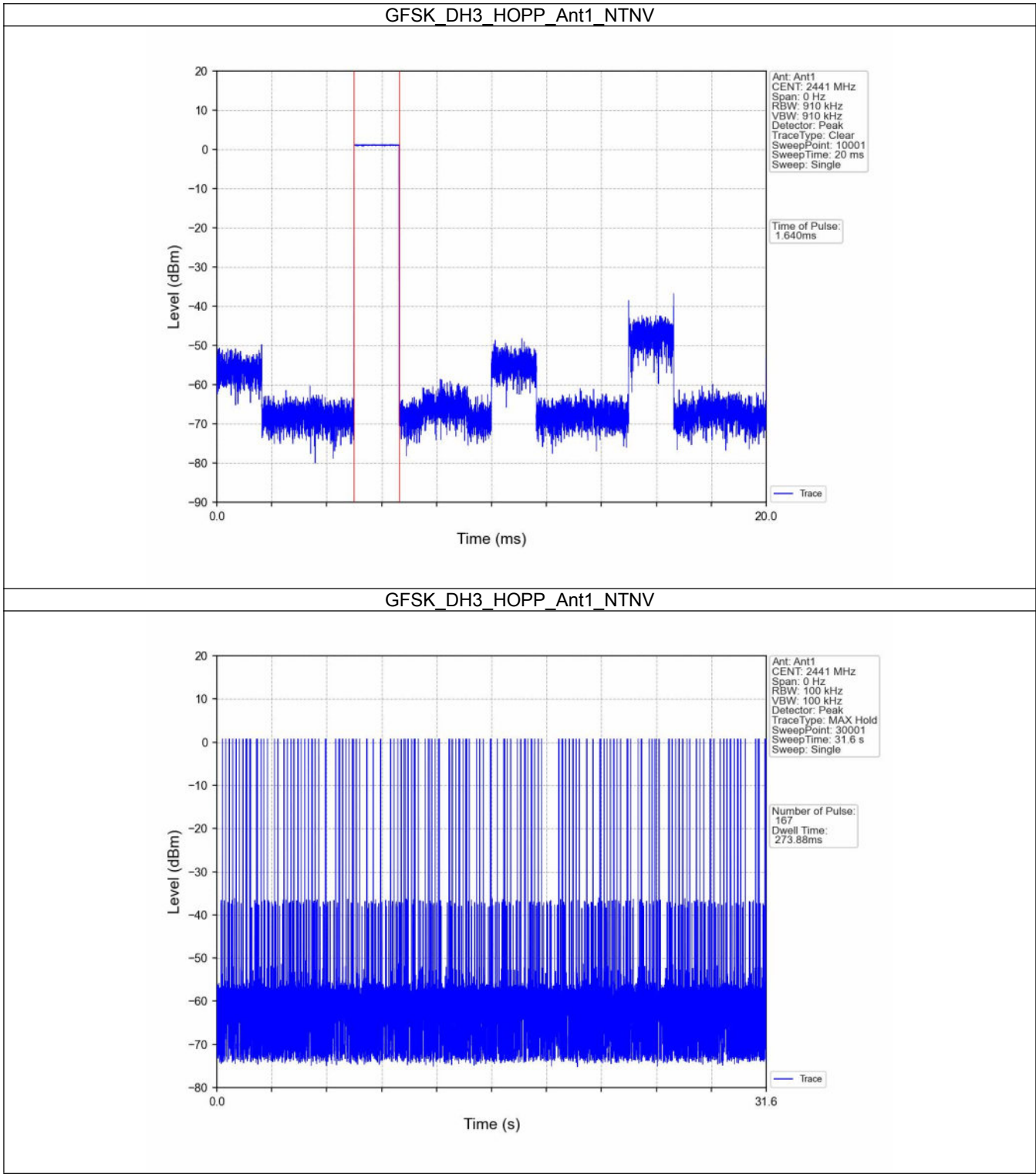
Ant1									
Mode	Tx Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.380	31.600	320	121.600	<=400	Pass
			DH3	1.640	31.600	167	273.880	<=400	Pass
			DH5	2.884	31.600	107	308.588	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.390	31.600	319	124.410	<=400	Pass
			2DH3	1.640	31.600	156	255.840	<=400	Pass
			2DH5	2.890	31.600	113	326.570	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.396	31.600	317	125.532	<=400	Pass
			3DH3	1.642	31.600	163	267.646	<=400	Pass
			3DH5	2.892	31.600	113	326.796	<=400	Pass

FCCID: 2AE6G-BEATGRIP

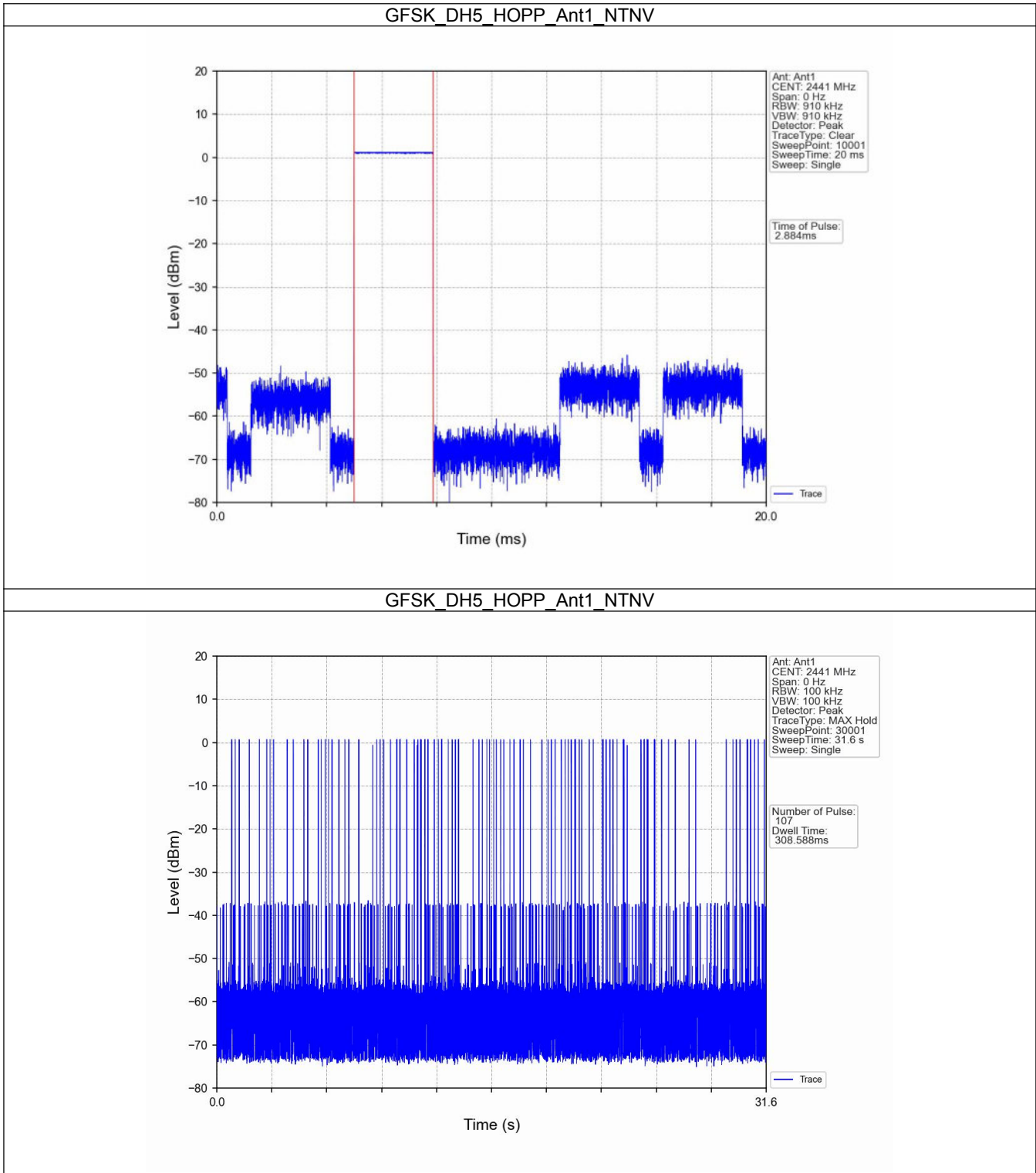
5.1.2 Test Graph



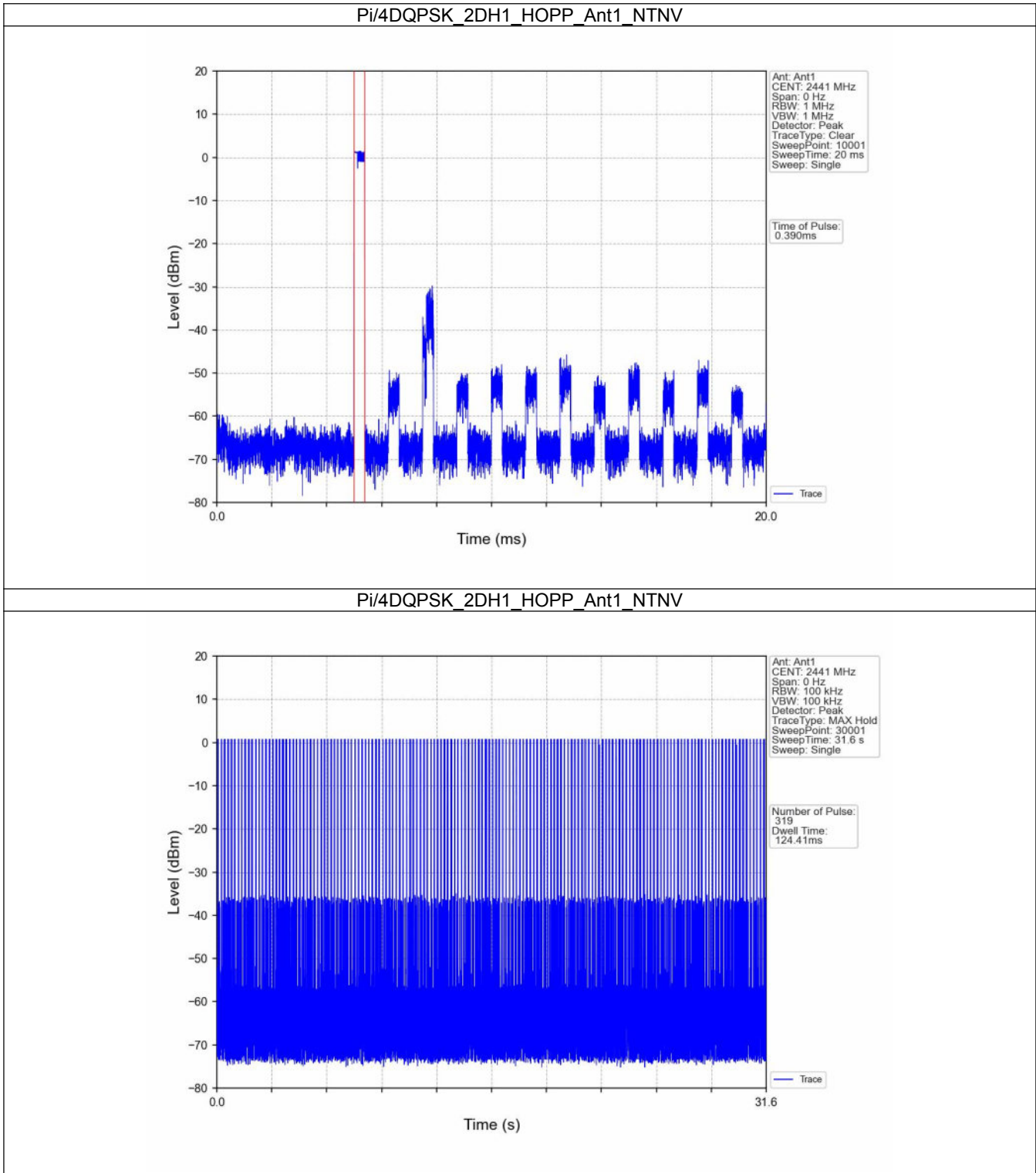
FCCID: 2AE6G-BEATGRIP



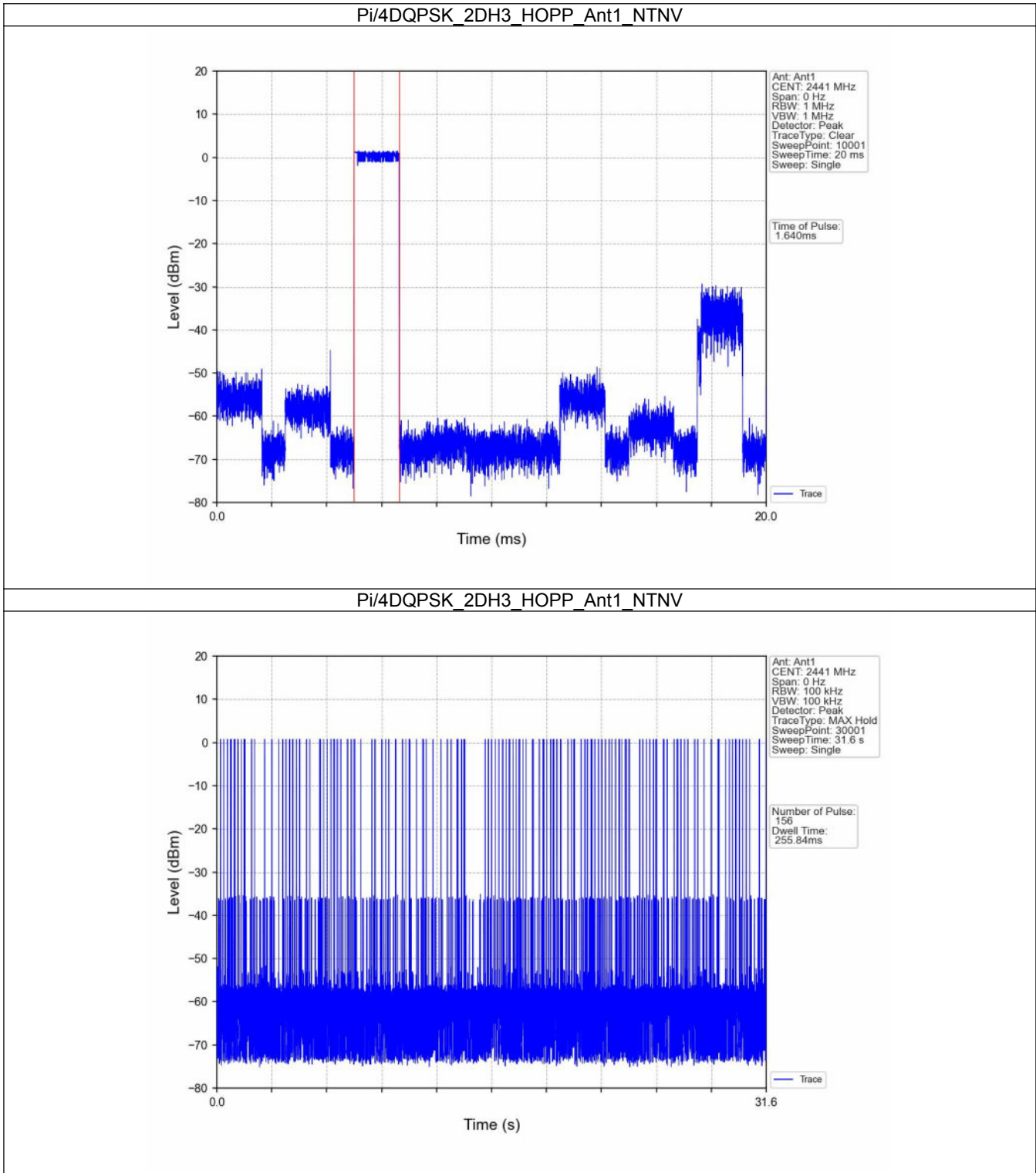
FCCID: 2AE6G-BEATGRIP



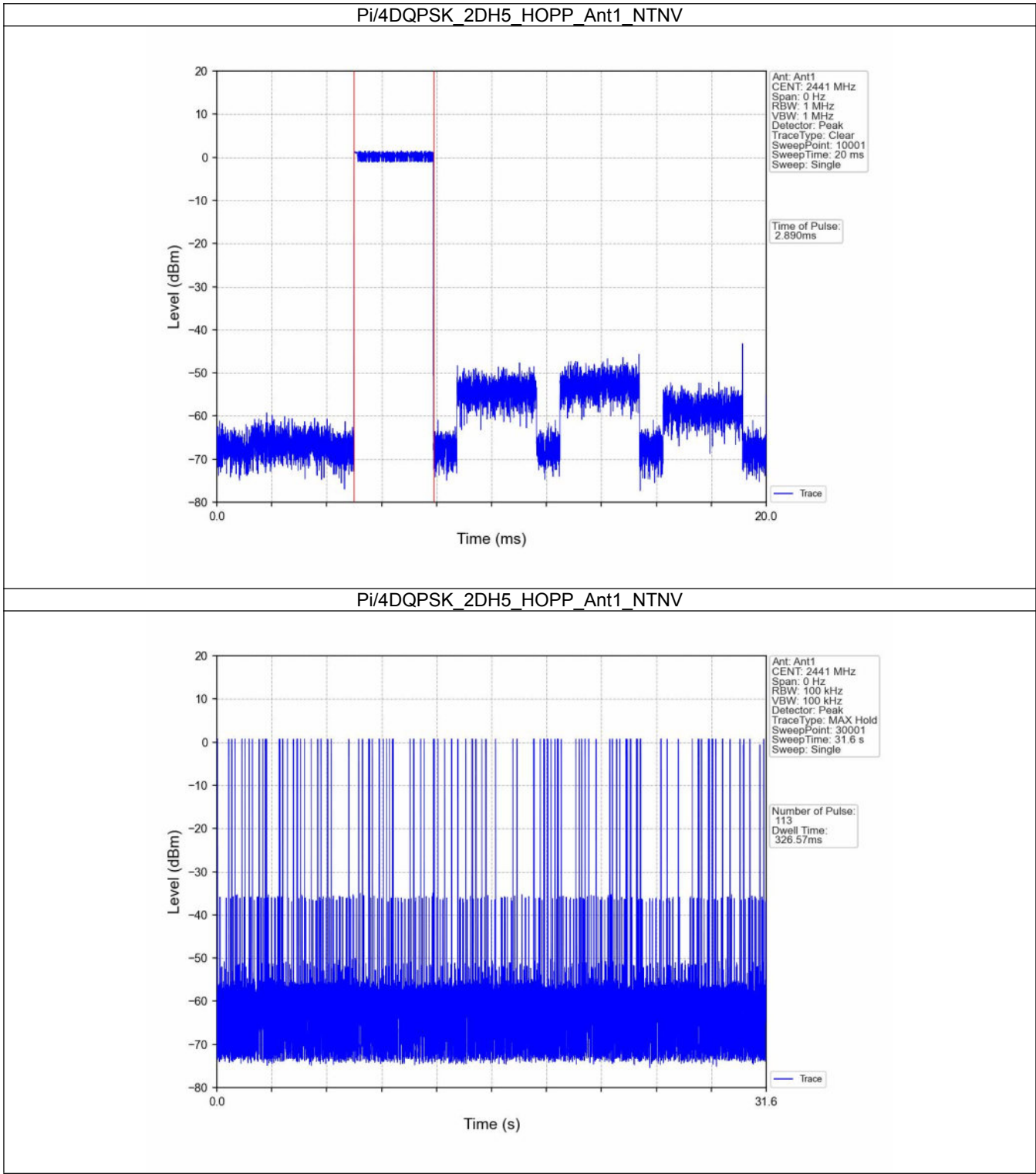
FCCID: 2AE6G-BEATGRIP



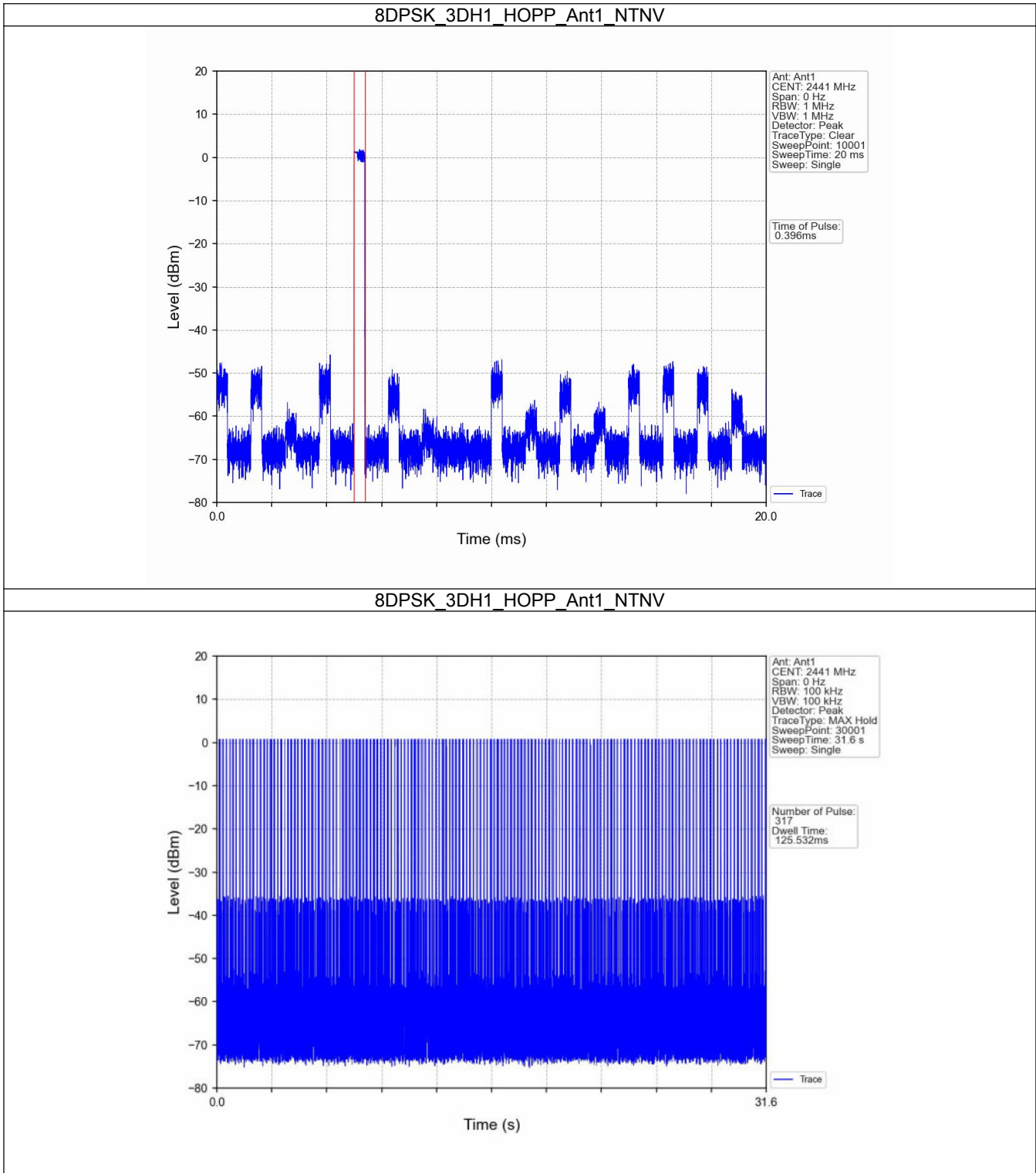
FCCID: 2AE6G-BEATGRIP



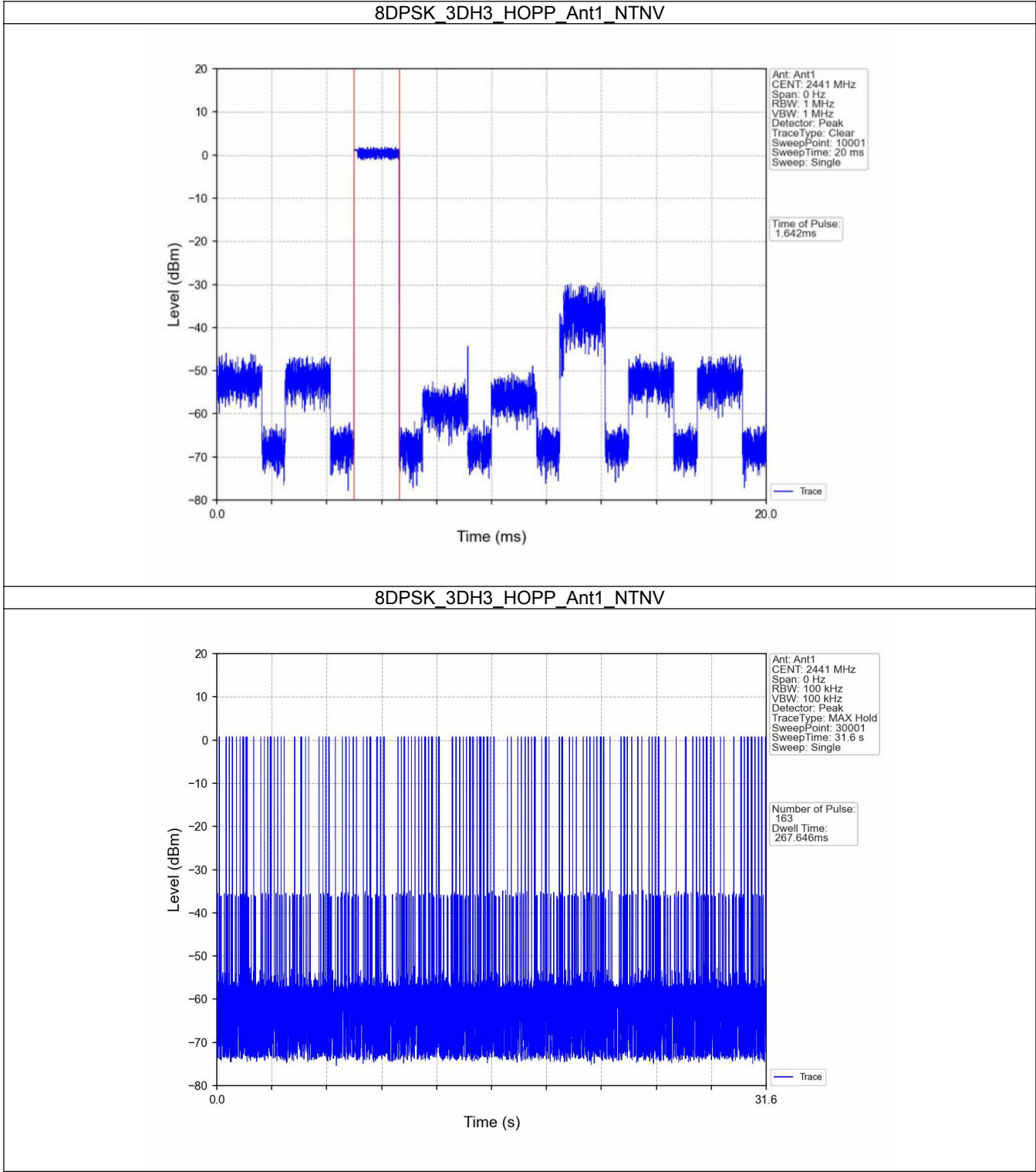
FCCID: 2AE6G-BEATGRIP



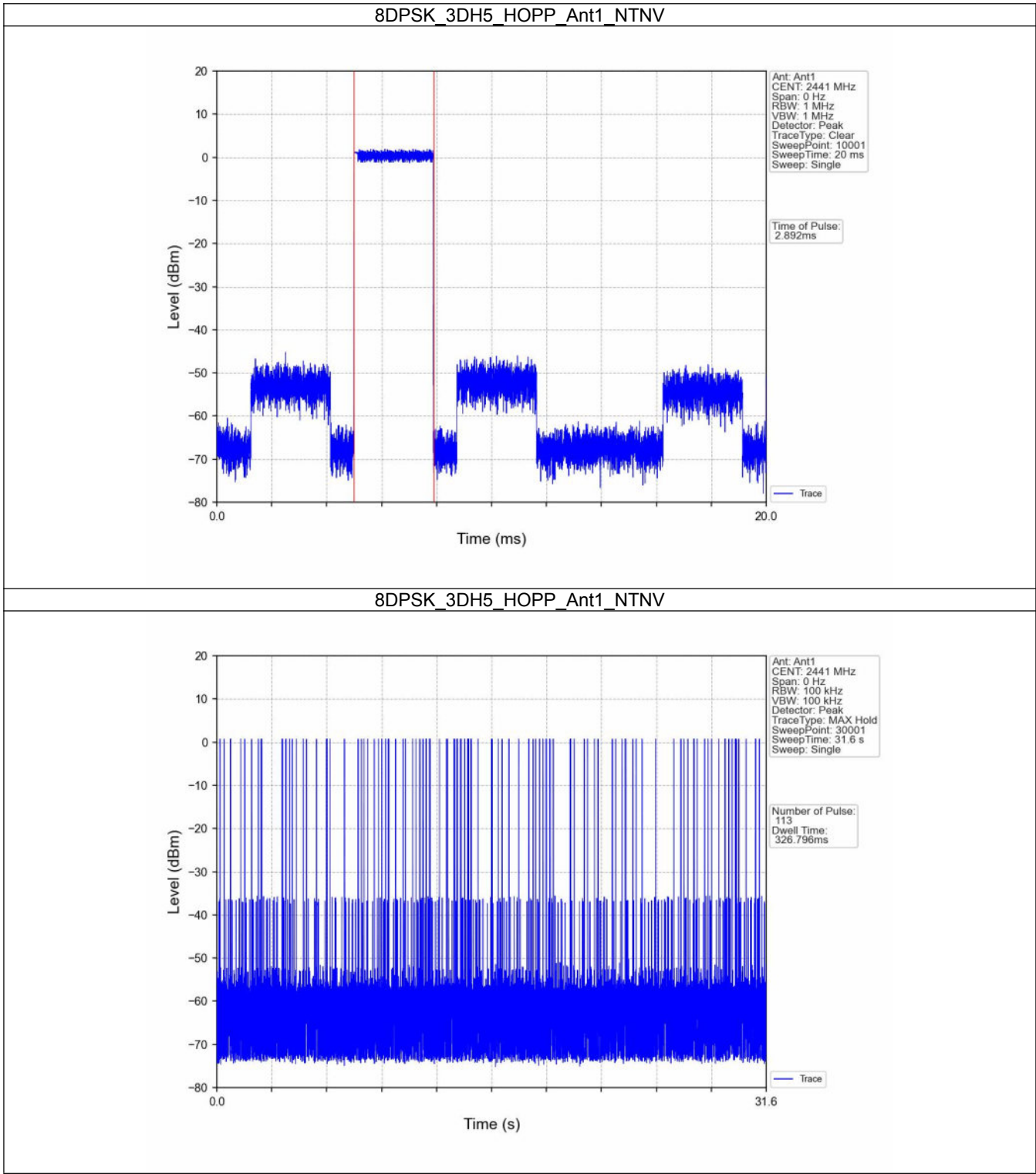
FCCID: 2AE6G-BEATGRIP



FCCID: 2AE6G-BEATGRIP



FCCID: 2AE6G-BEATGRIP



FCCID: 2AE6G-BEATGRIP

6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Ref

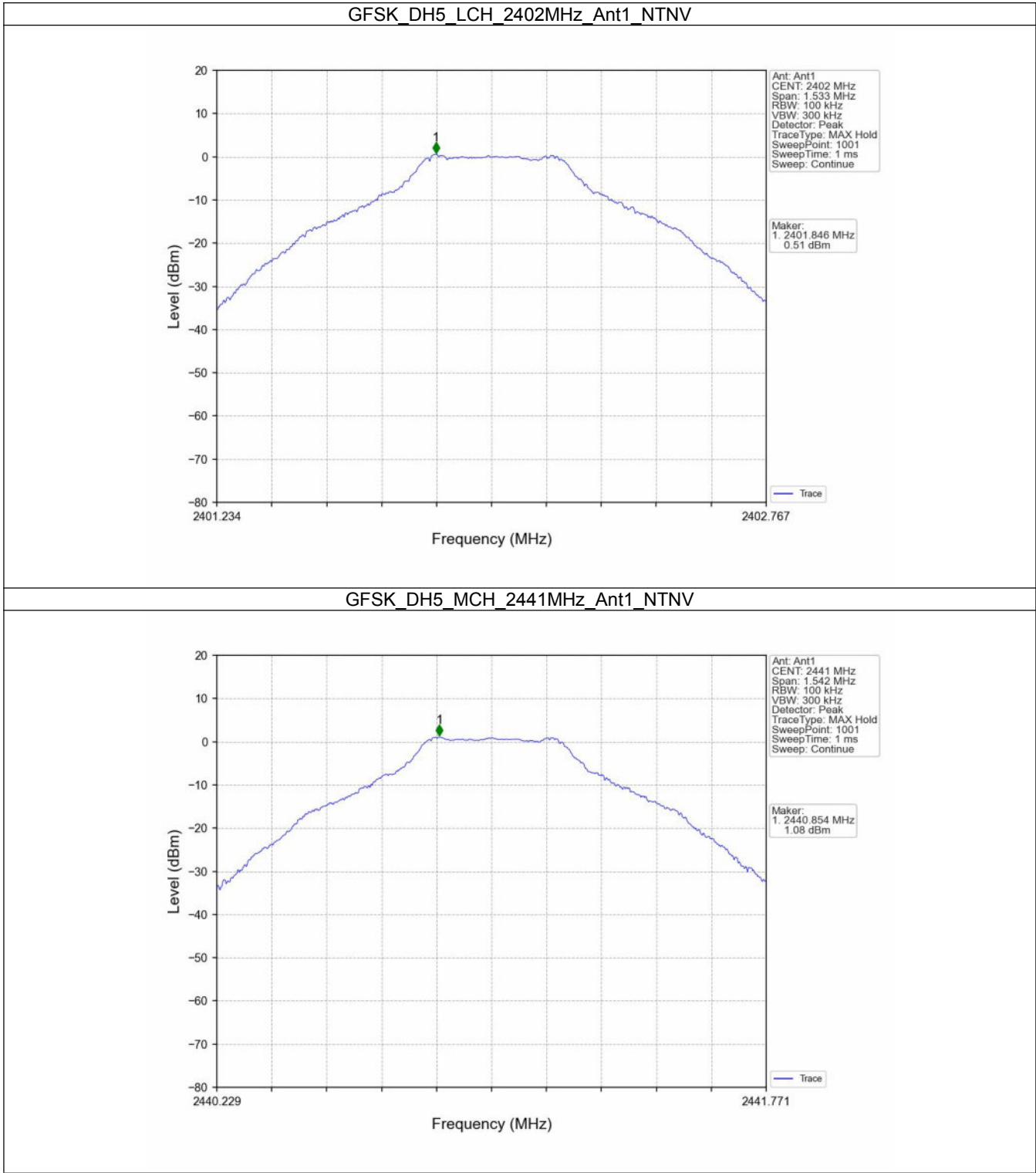
6.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	0.51
		2441	DH5	1	1.08
		2480	DH5	1	0.83
Pi/4DQPSK	SISO	2402	2DH5	1	0.52
		2441	2DH5	1	1.11
		2480	2DH5	1	0.87
8DPSK	SISO	2402	3DH5	1	0.47
		2441	3DH5	1	1.08
		2480	3DH5	1	0.67

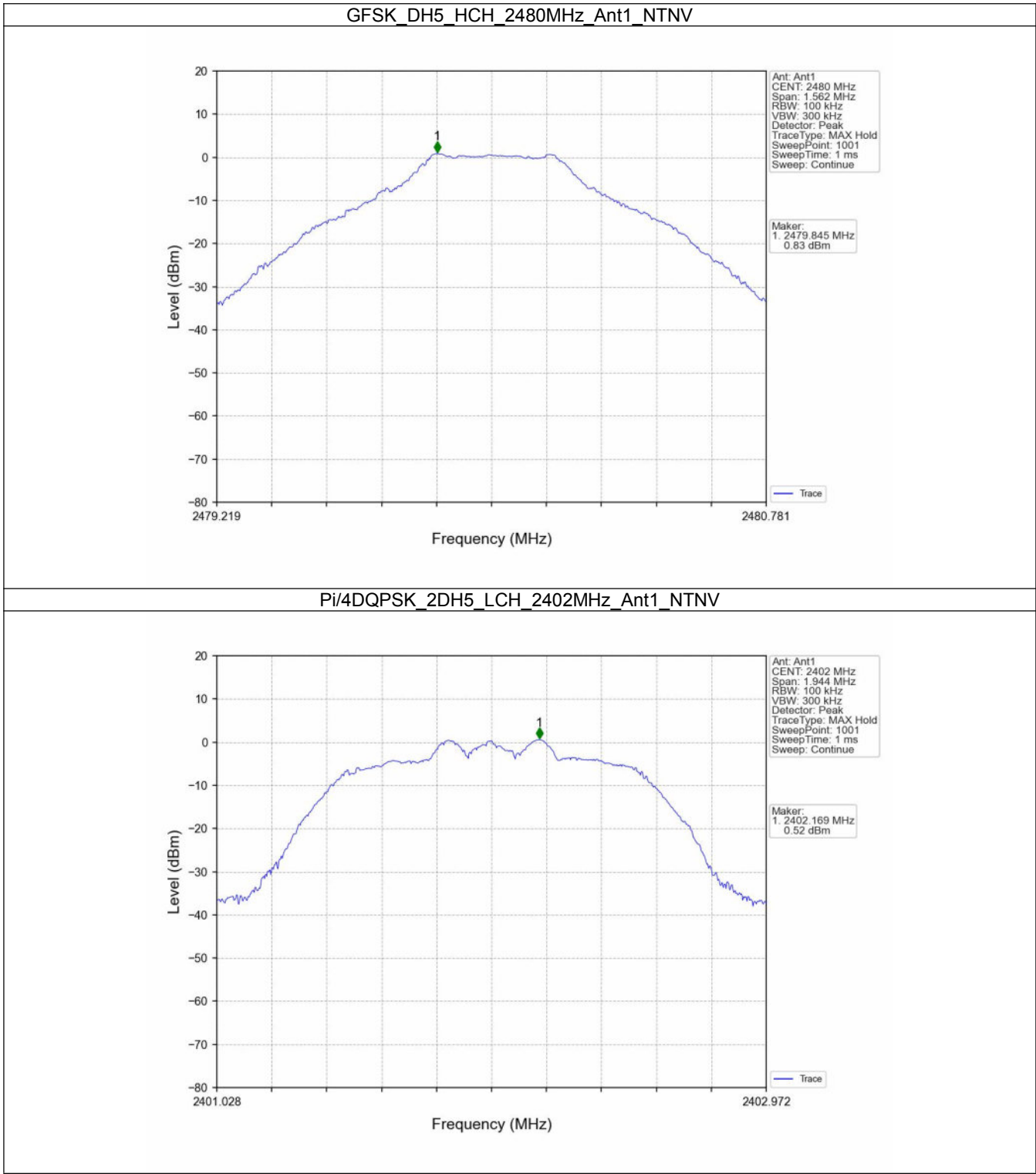
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

FCCID: 2AE6G-BEATGRIP

6.1.2 Test Graph

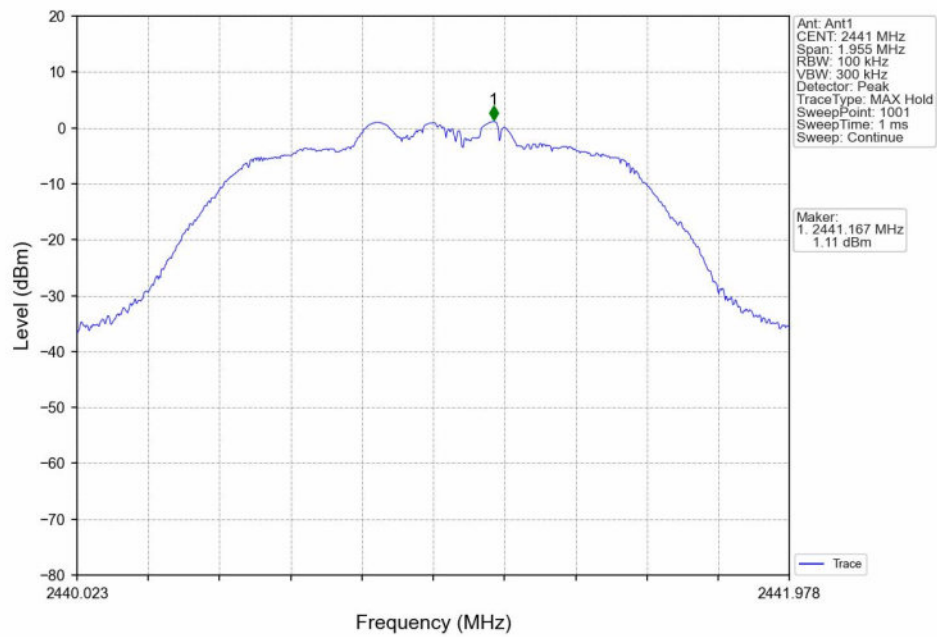


FCCID: 2AE6G-BEATGRIP

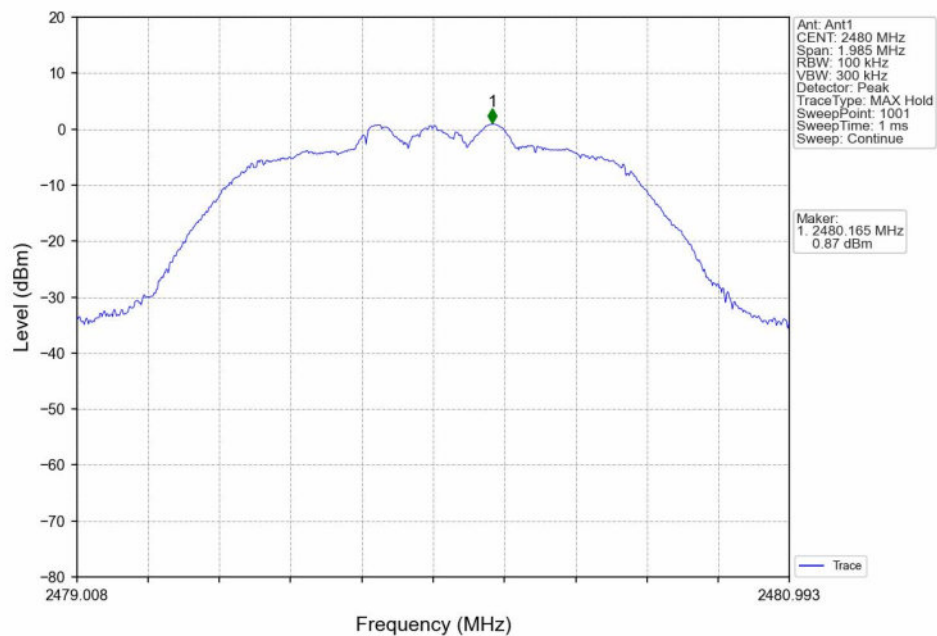


FCCID: 2AE6G-BEATGRIP

Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV

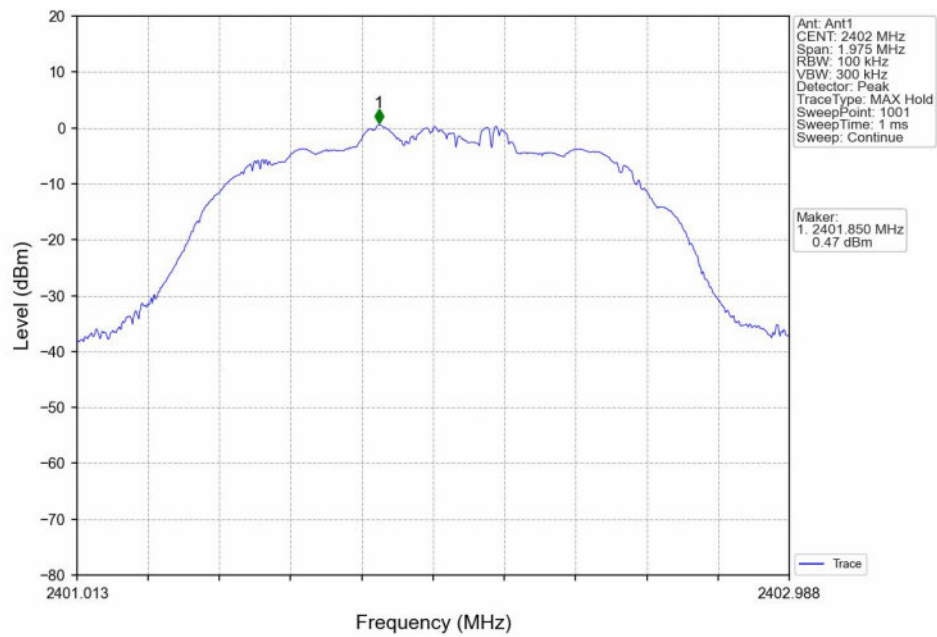


Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

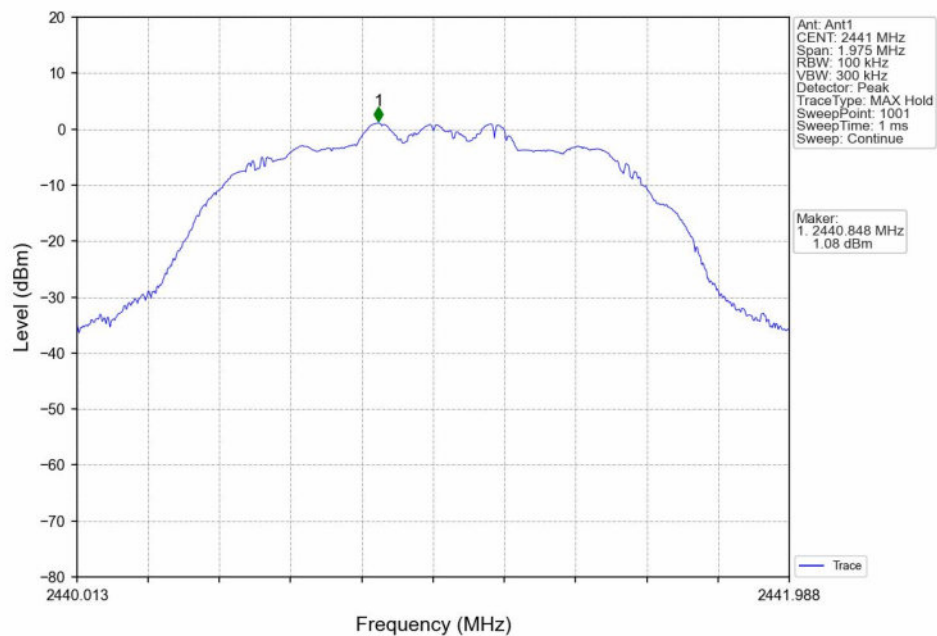


FCCID: 2AE6G-BEATGRIP

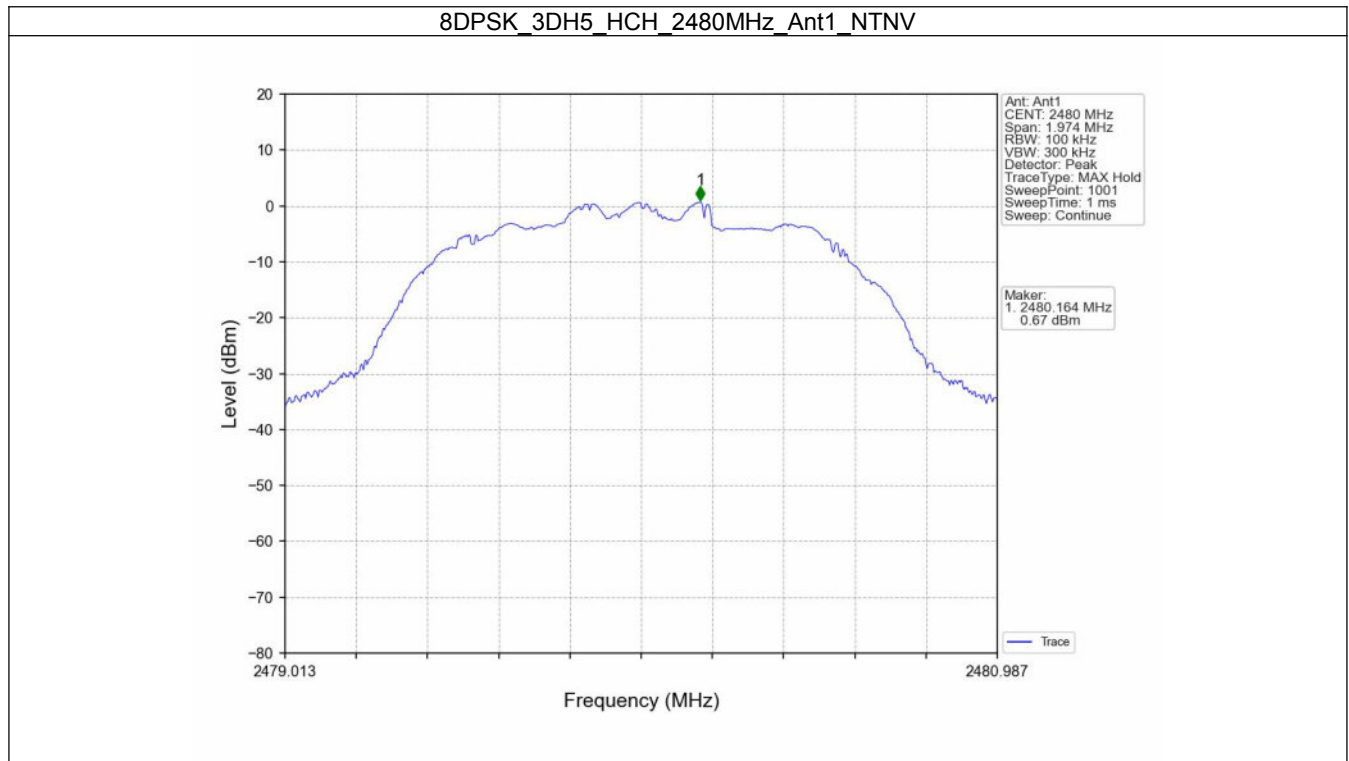
8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



FCCID: 2AE6G-BEATGRIP



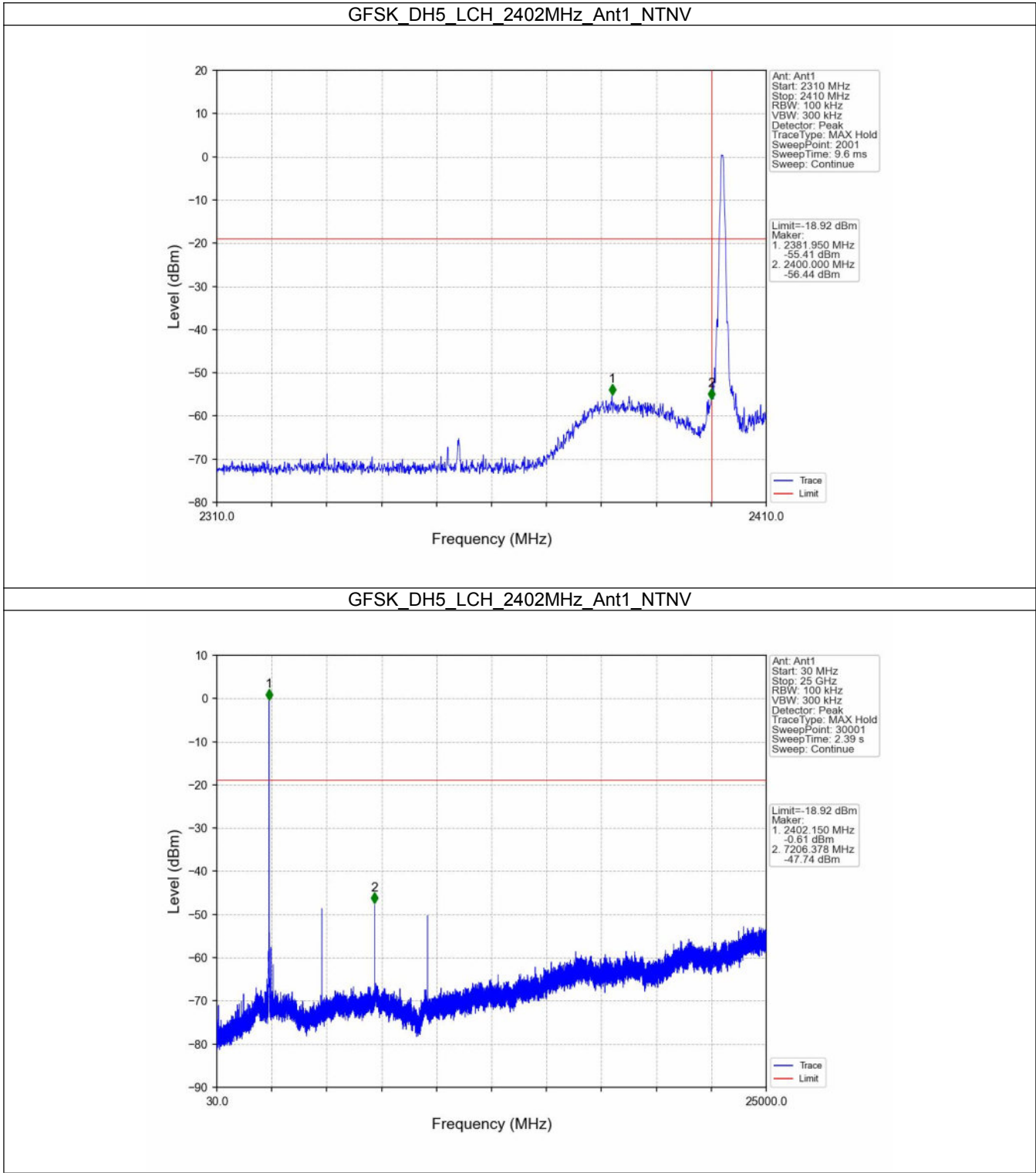
FCCID: 2AE6G-BEATGRIP

6.2 CSE**6.2.1 Test Result**

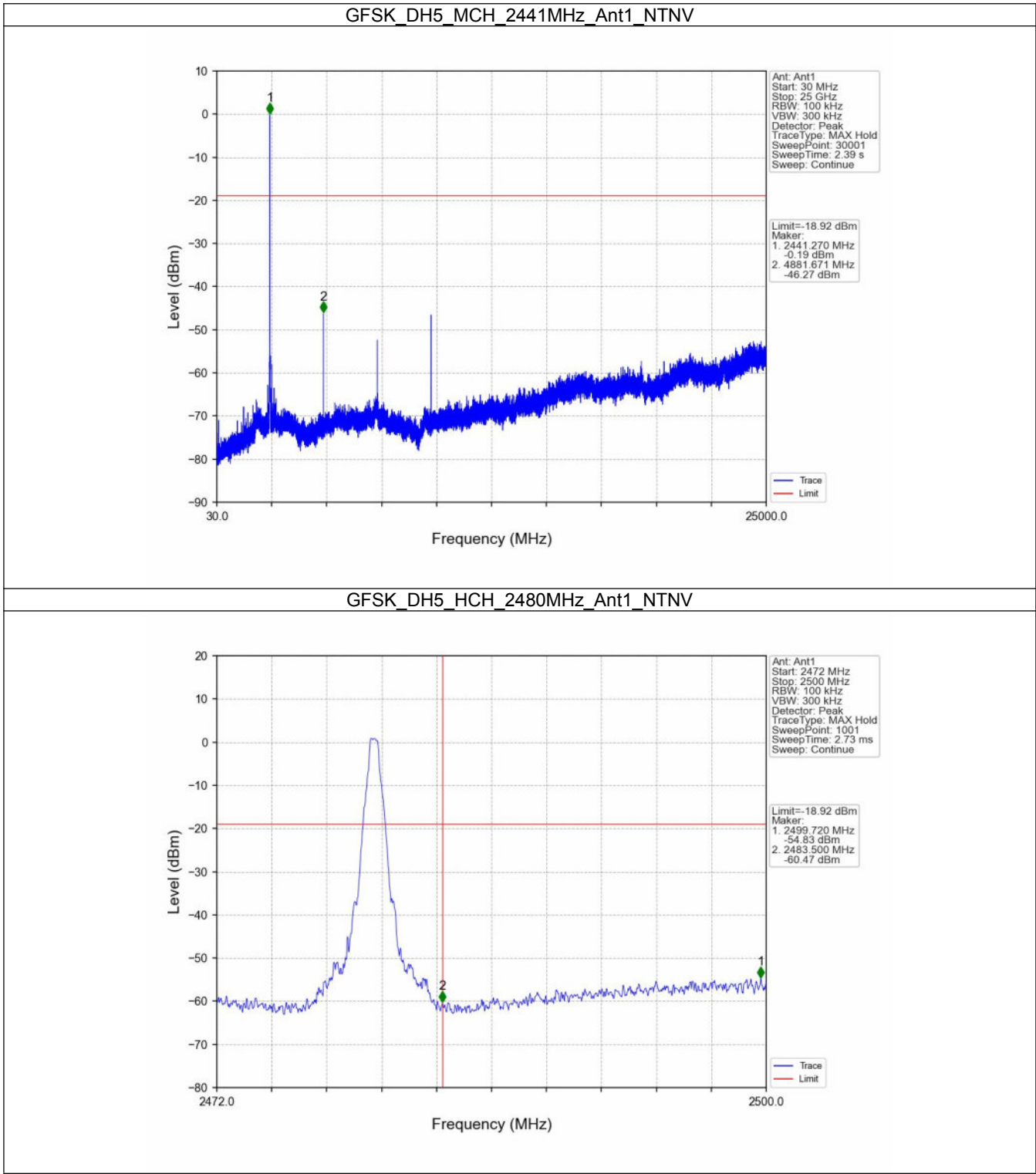
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	1.08	-18.92	Pass
		2441	DH5	1	1.08	-18.92	Pass
		2480	DH5	1	1.08	-18.92	Pass
		HOPP	DH5	1	1.08	-18.92	Pass
					1.08	-18.92	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.11	-18.89	Pass
		2441	2DH5	1	1.11	-18.89	Pass
		2480	2DH5	1	1.11	-18.89	Pass
		HOPP	2DH5	1	1.11	-18.89	Pass
					1.11	-18.89	Pass
8DPSK	SISO	2402	3DH5	1	1.08	-18.92	Pass
		2441	3DH5	1	1.08	-18.92	Pass
		2480	3DH5	1	1.08	-18.92	Pass
		HOPP	3DH5	1	1.08	-18.92	Pass
					1.08	-18.92	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: 2AE6G-BEATGRIP

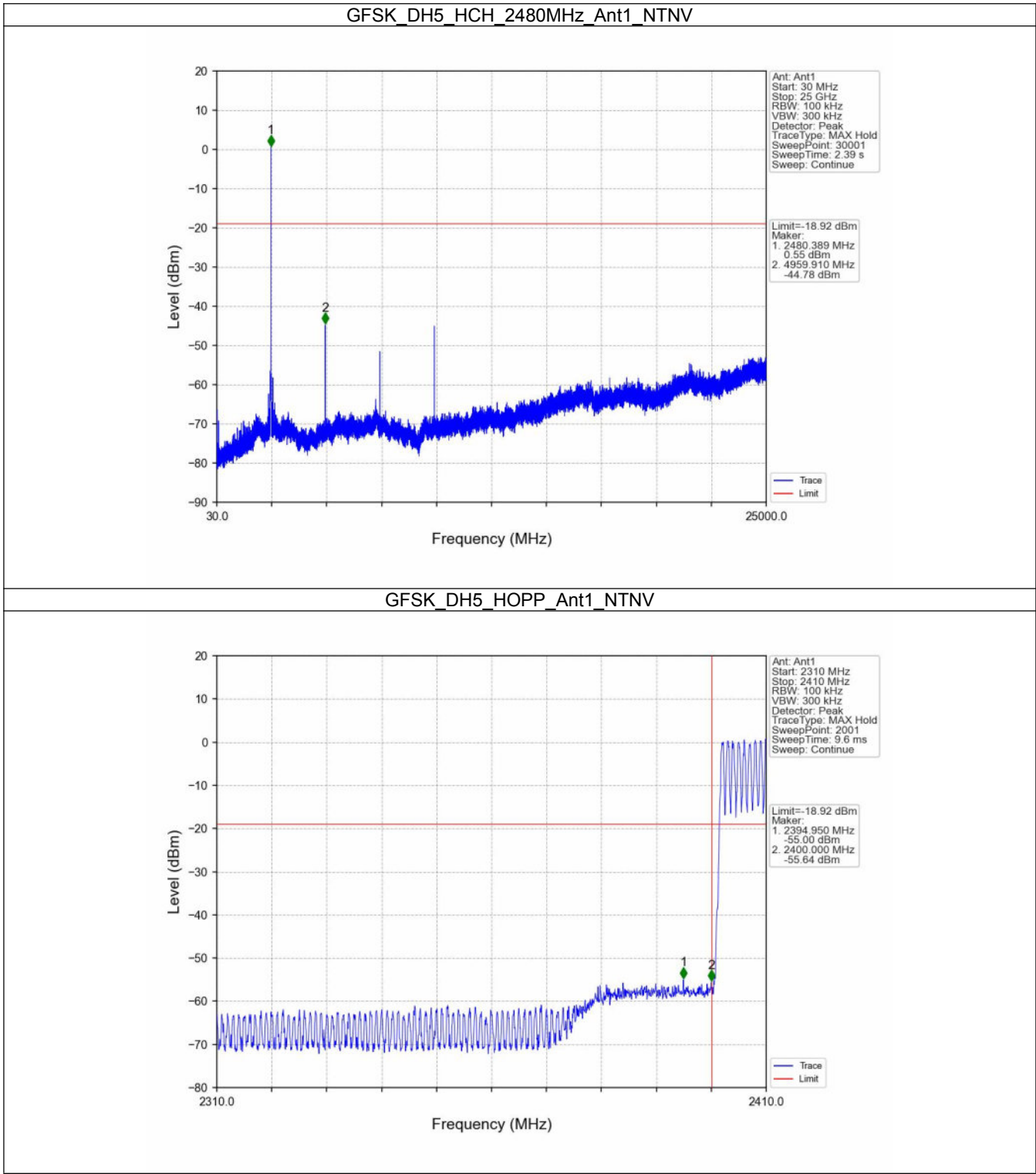
6.2.2 Test Graph



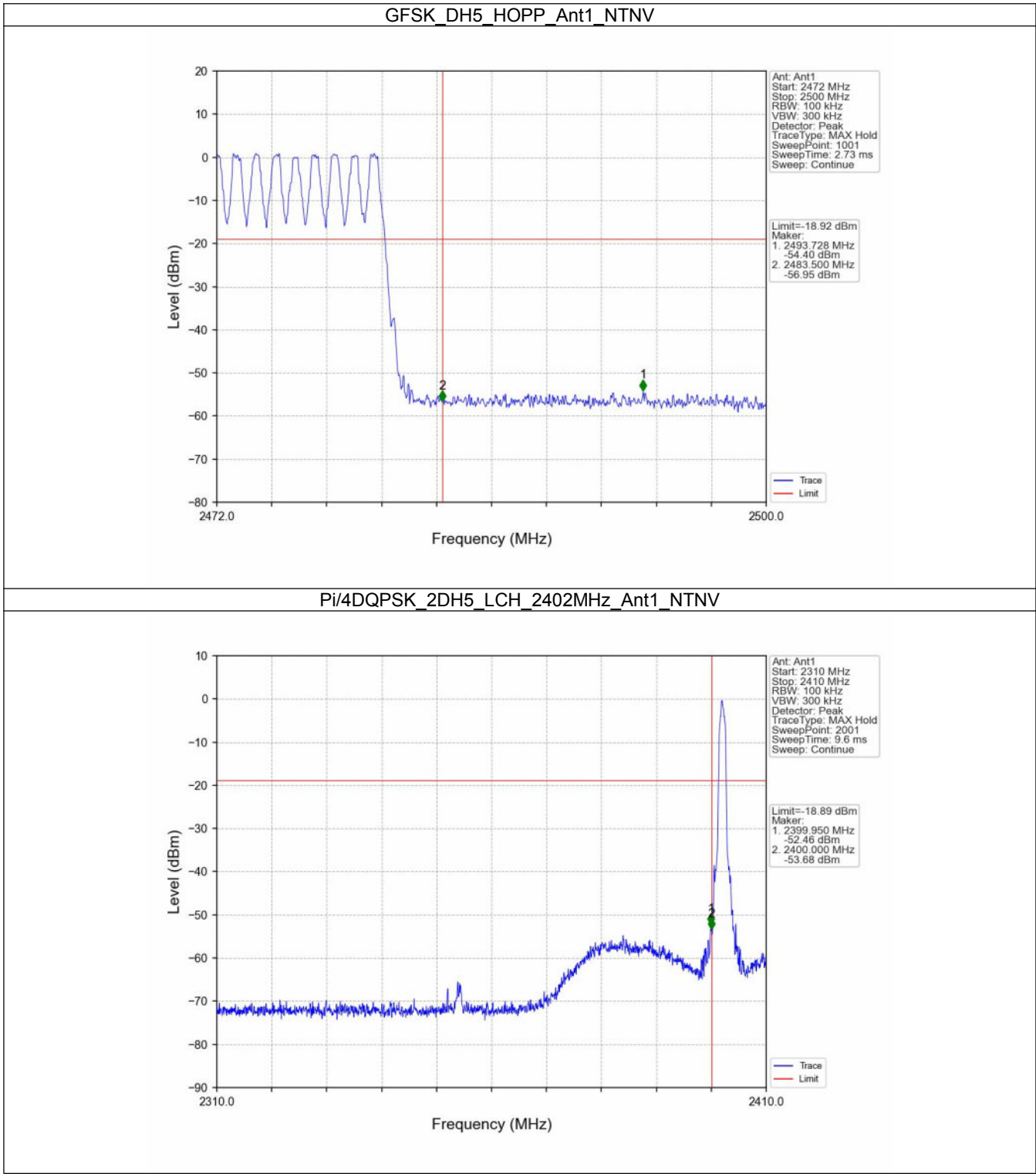
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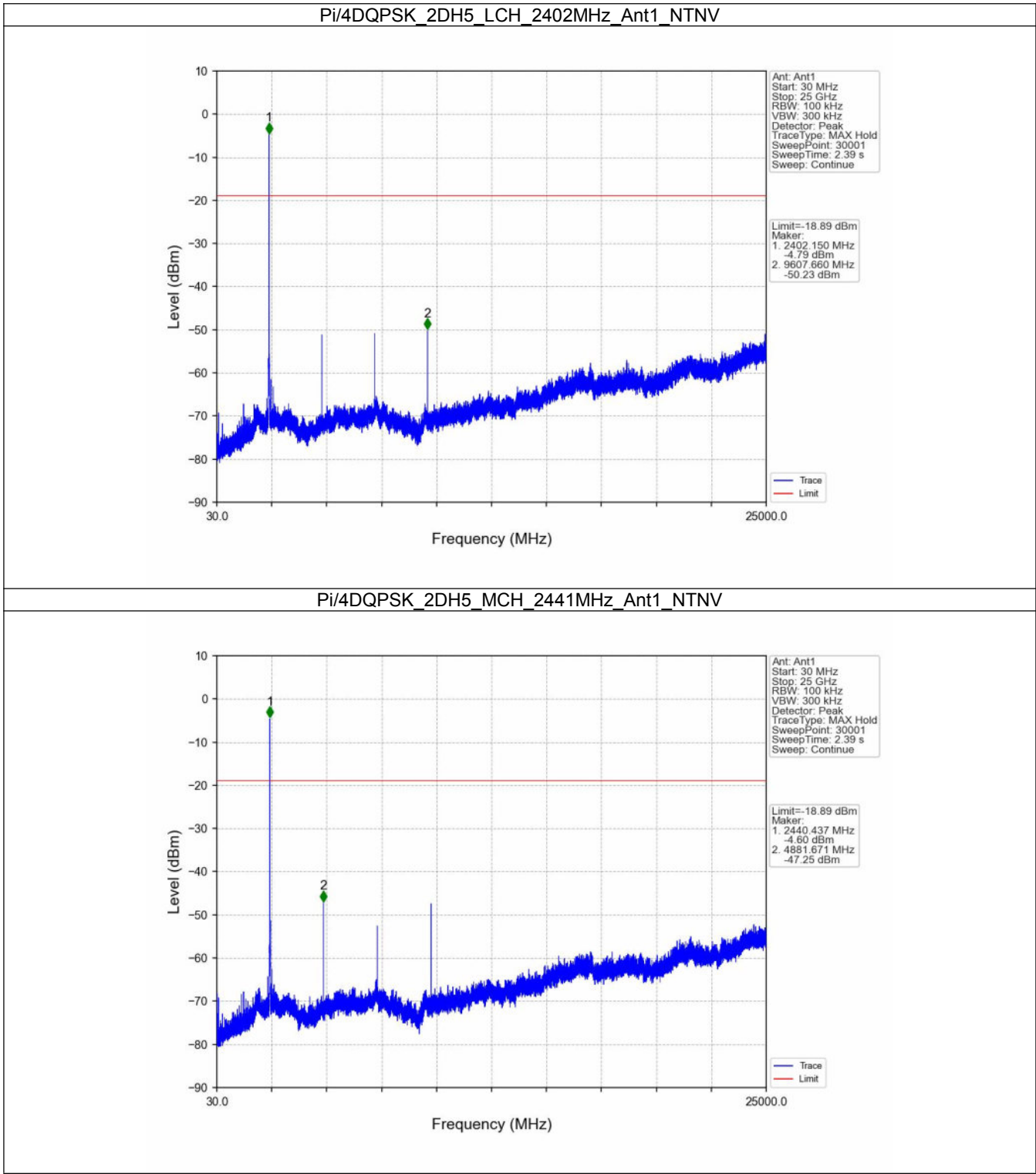
FCCID: 2AE6G-BEATGRIP



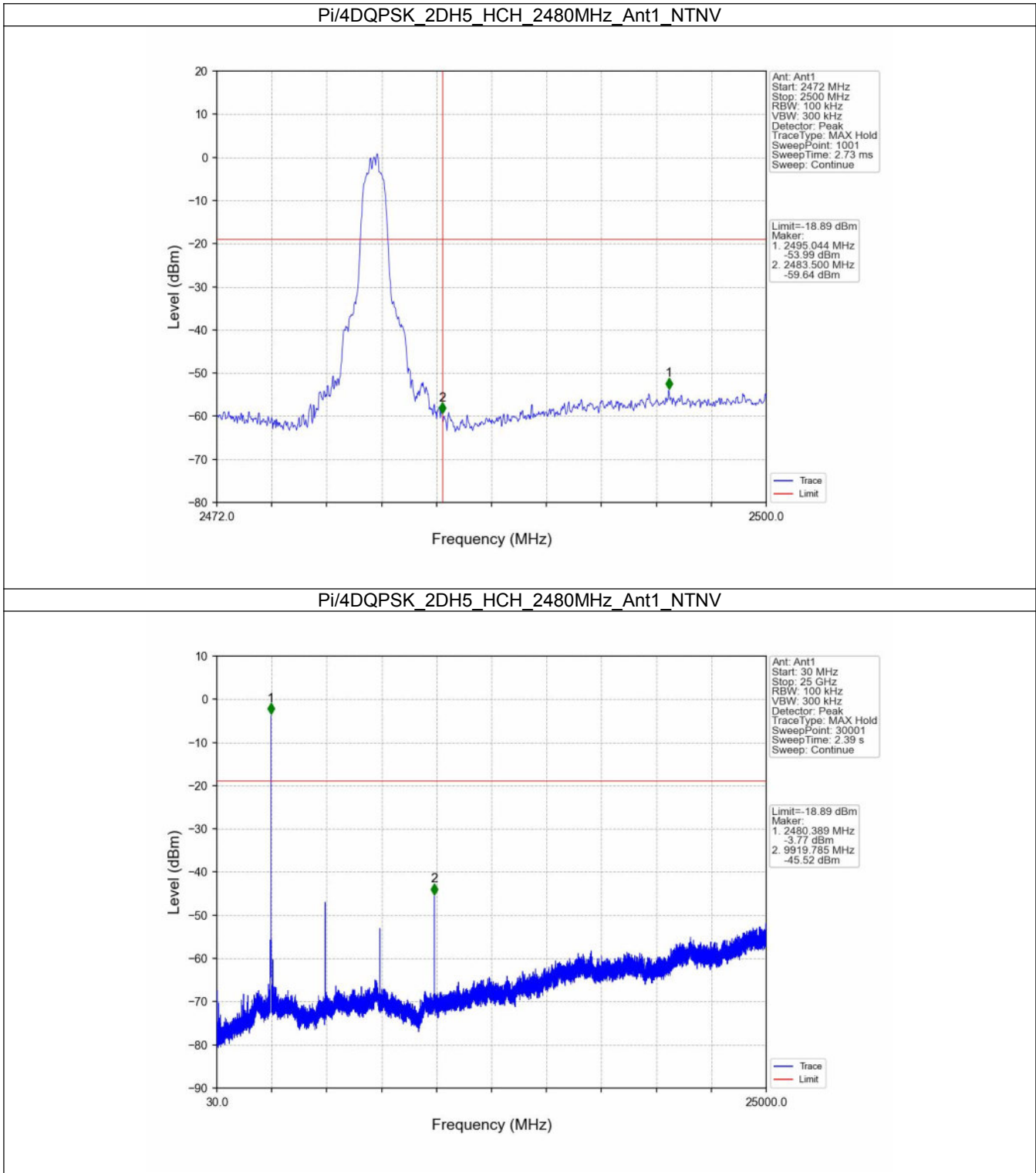
FCCID: 2AE6G-BEATGRIP



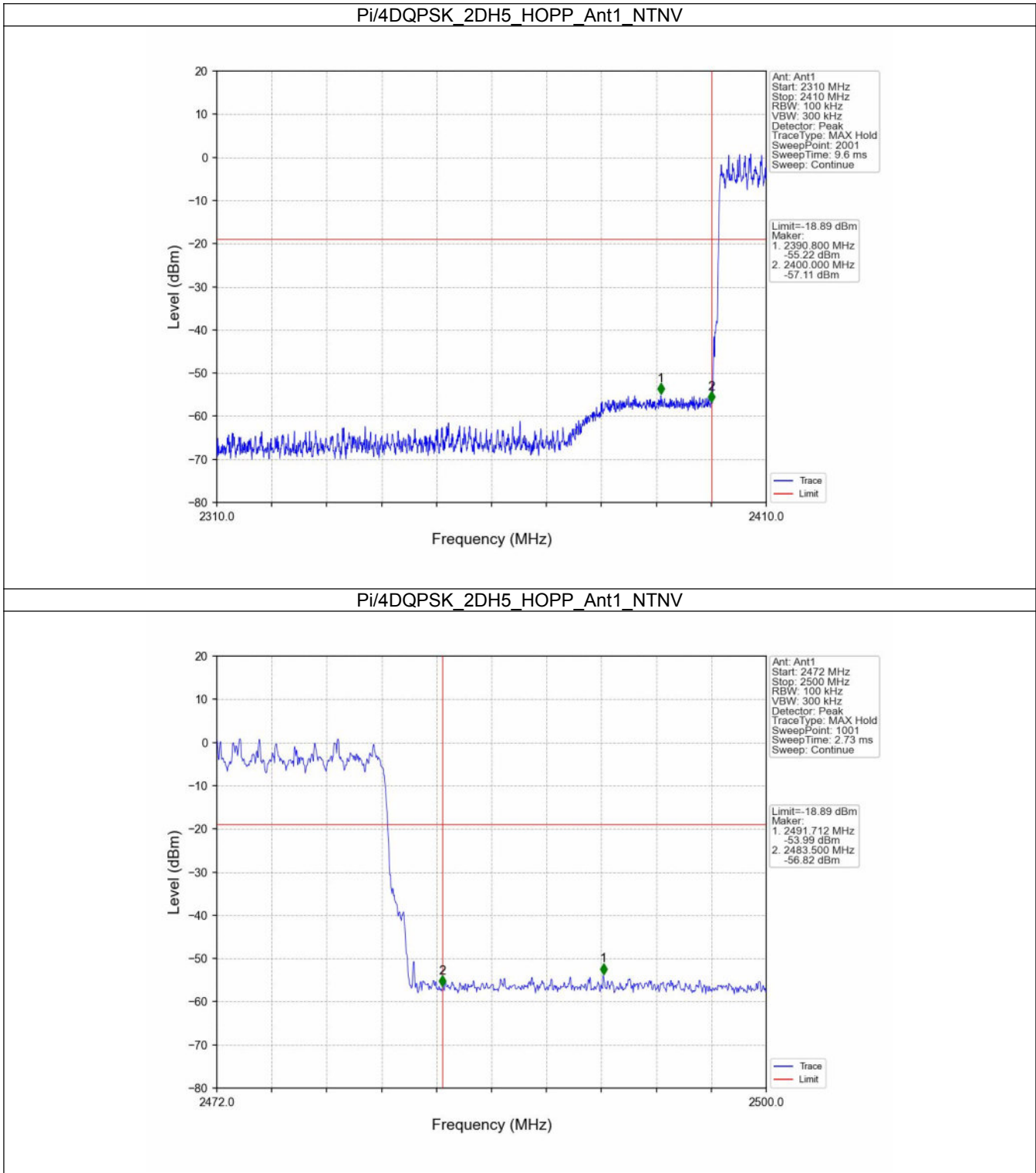
FCCID: 2AE6G-BEATGRIP



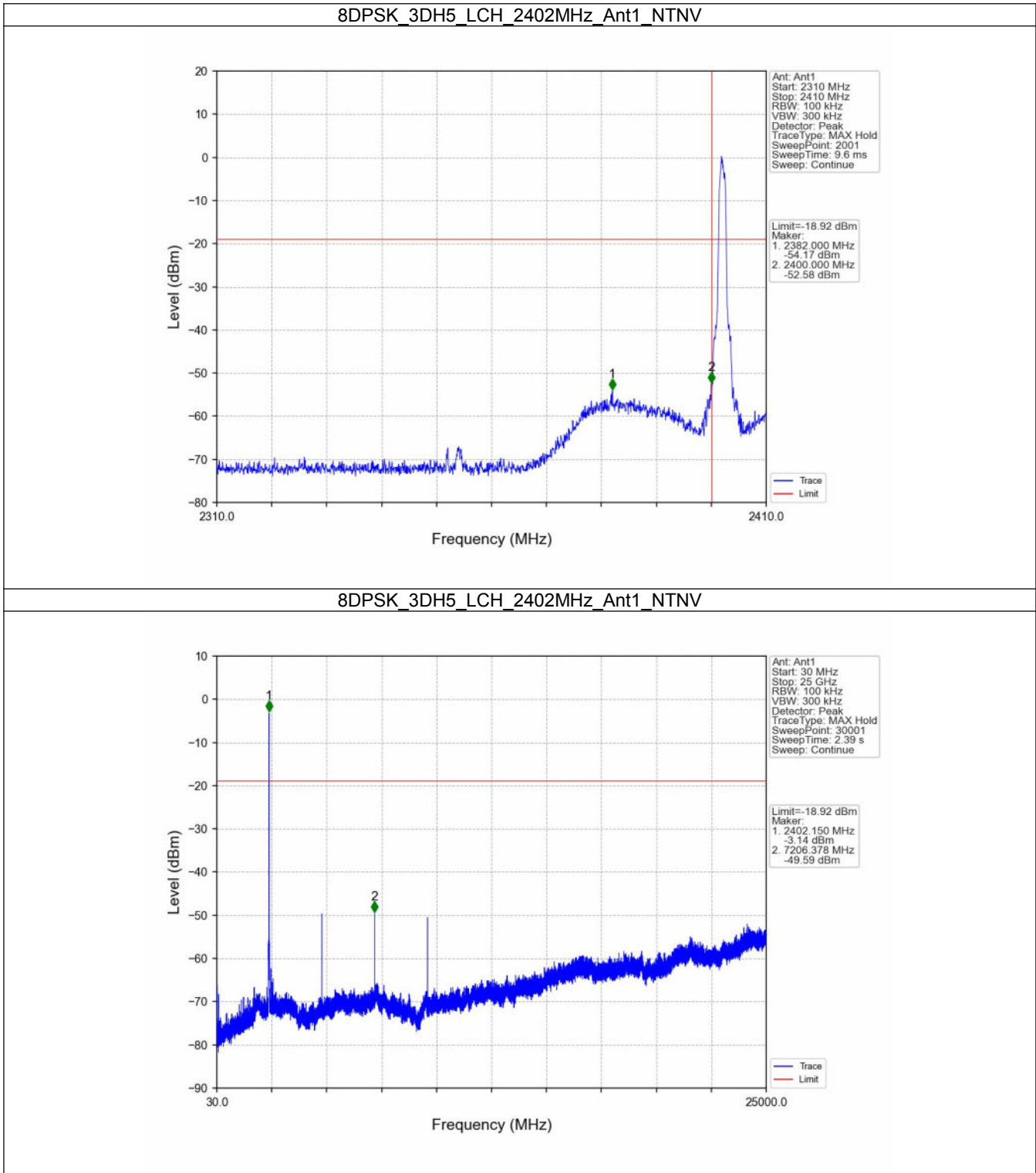
FCCID: 2AE6G-BEATGRIP



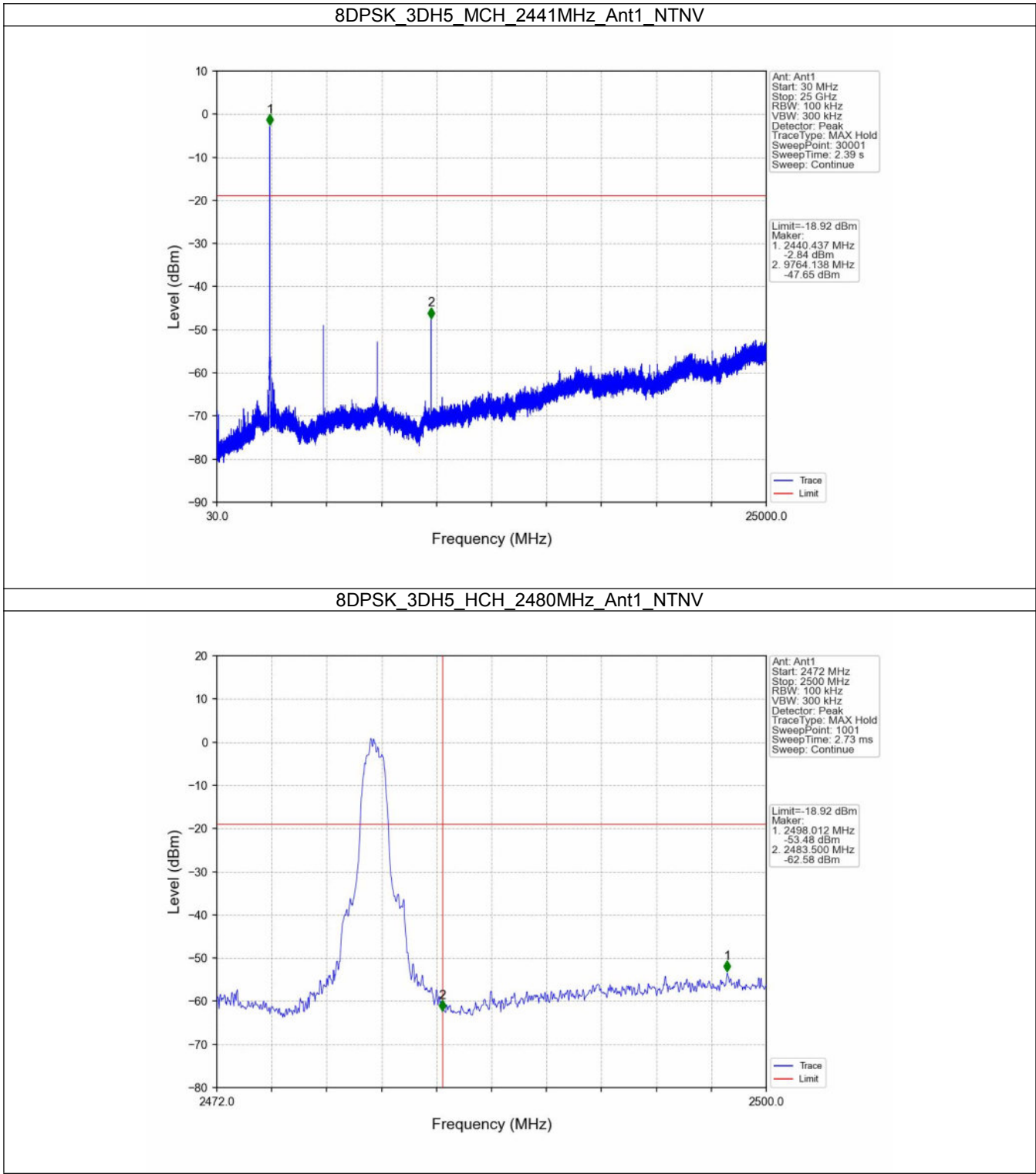
FCCID: 2AE6G-BEATGRIP



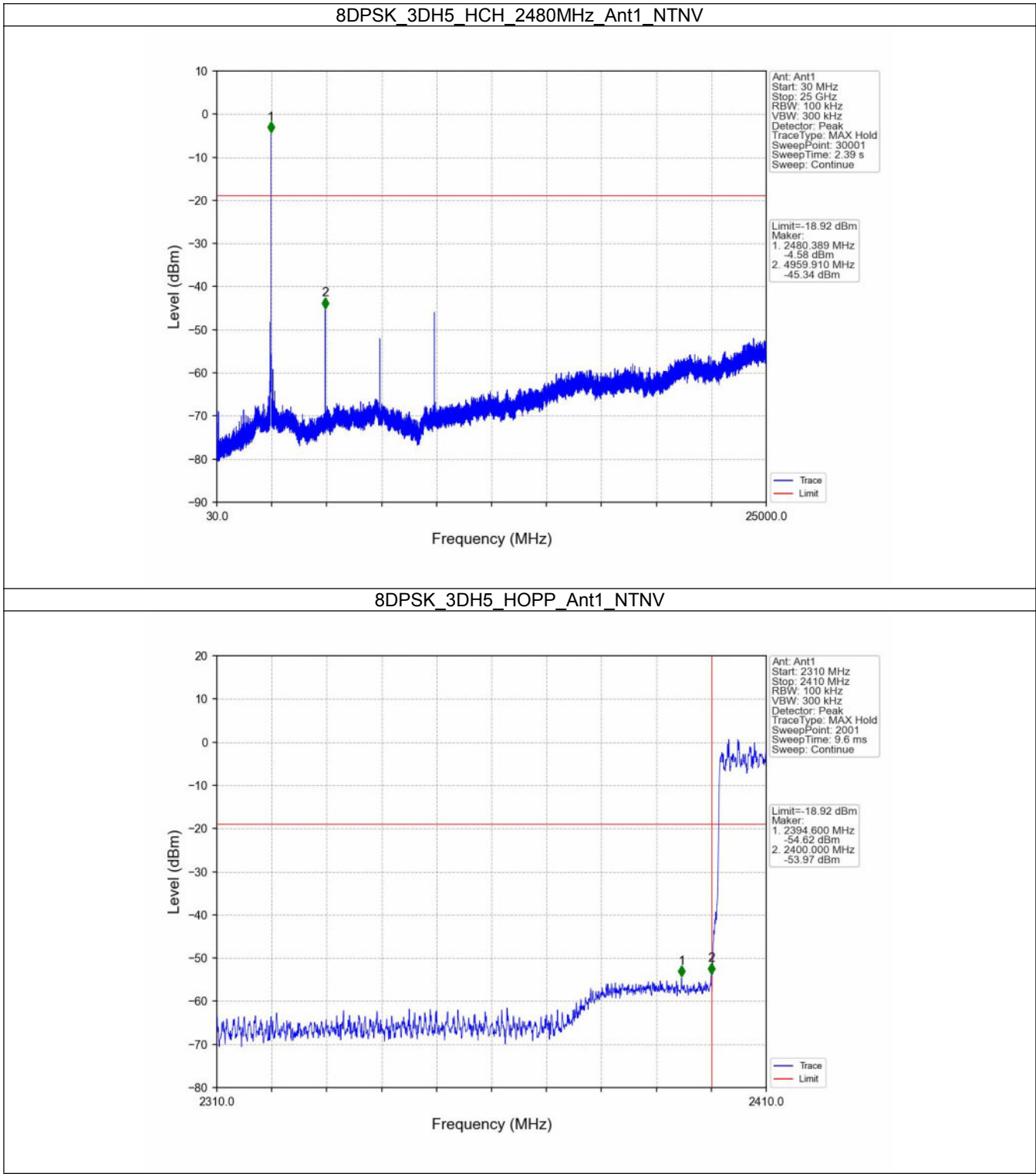
FCCID: 2AE6G-BEATGRIP



FCCID: 2AE6G-BEATGRIP



FCCID: 2AE6G-BEATGRIP



FCCID: 2AE6G-BEATGRIP

