

ANNEX 1 TEST DATA

FCC ID: 2AXV7-X27

Applicant: Dongguan Kemi Electronic Technology Co., Ltd

Address: Room 201, Floor 2, Building 4, Taixing Science Park, No.3, Taixing Road, Shigu, Tangxia Town, Dongguan city, China

Manufacturer: Dongguan Kemi Electronic Technology Co., Ltd

Address: Room 201, Floor 2, Building 4, Taixing Science Park, No.3, Taixing Road, Shigu, Tangxia Town, Dongguan city, China

Product Name: Wireless bone conductioncarphones

Trade Mark: N/A

Model Number: X27

Date of Receipt: Jul. 22, 2025

Test Date: Jul. 22, 2025 - Jul. 29, 2025

Date of Report: Jul. 29, 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

Test Result: Pass

1. Bandwidth

1.1 Test Result

1.1.1 OBW

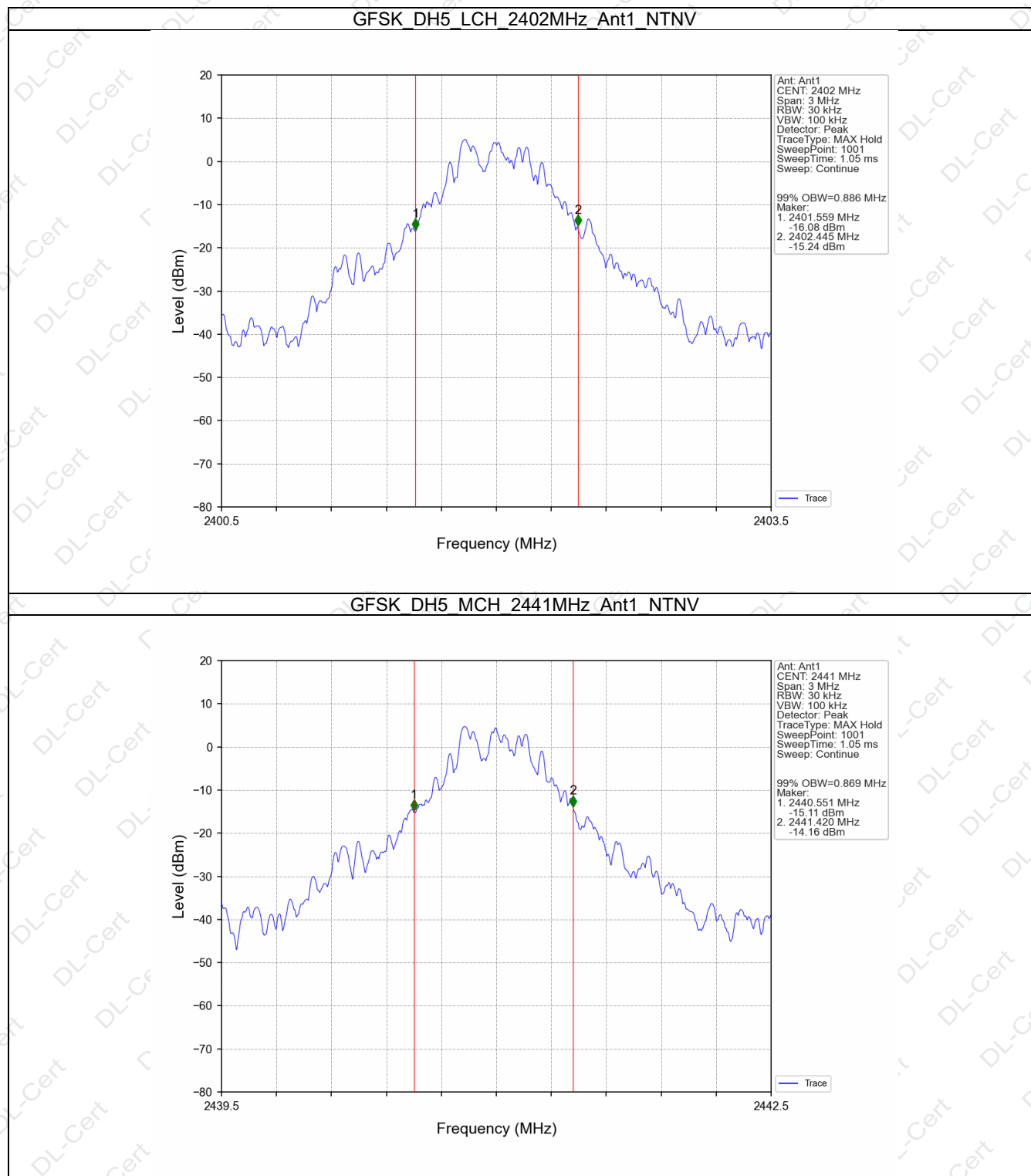
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.886	/	Pass
		2441	DH5	1	0.869	/	Pass
		2480	DH5	1	0.862	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.164	/	Pass
		2441	2DH5	1	1.197	/	Pass
		2480	2DH5	1	1.213	/	Pass
8DPSK	SISO	2402	3DH5	1	1.275	/	Pass
		2441	3DH5	1	1.279	/	Pass
		2480	3DH5	1	1.256	/	Pass

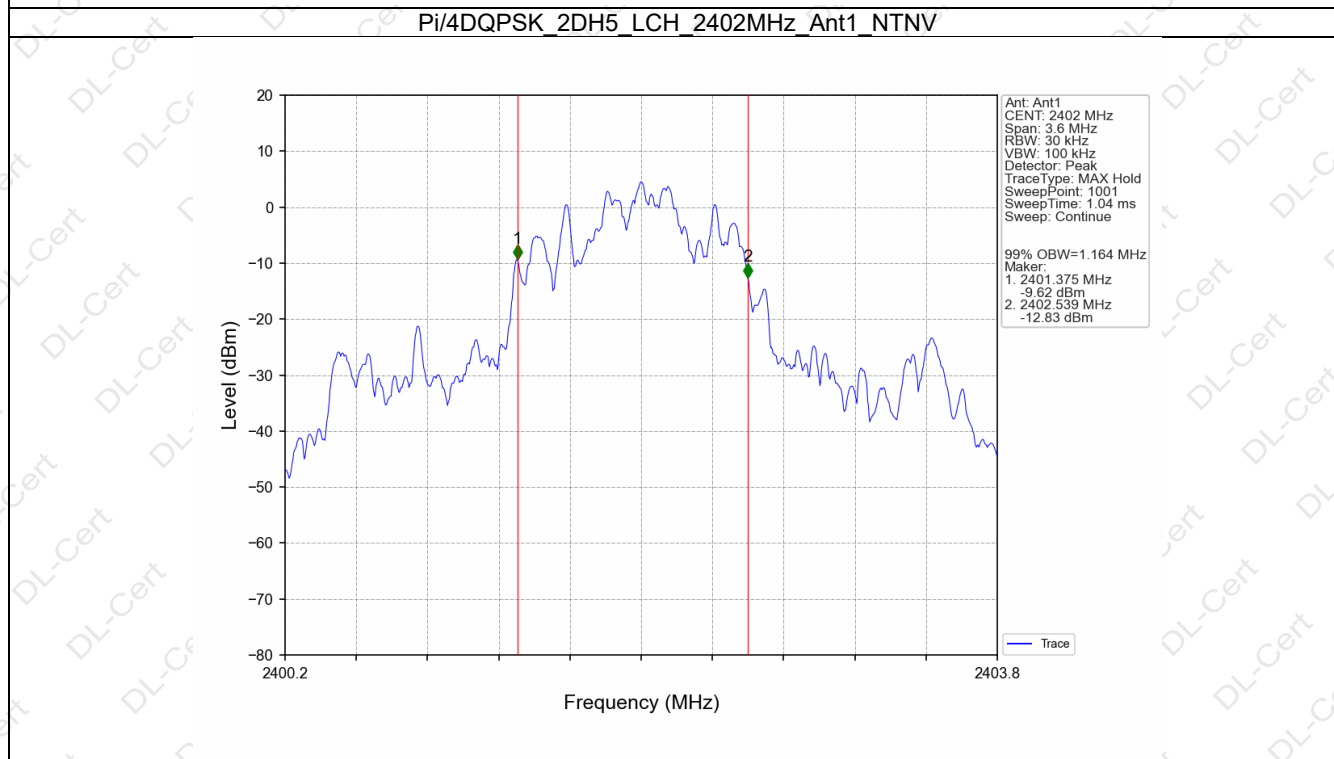
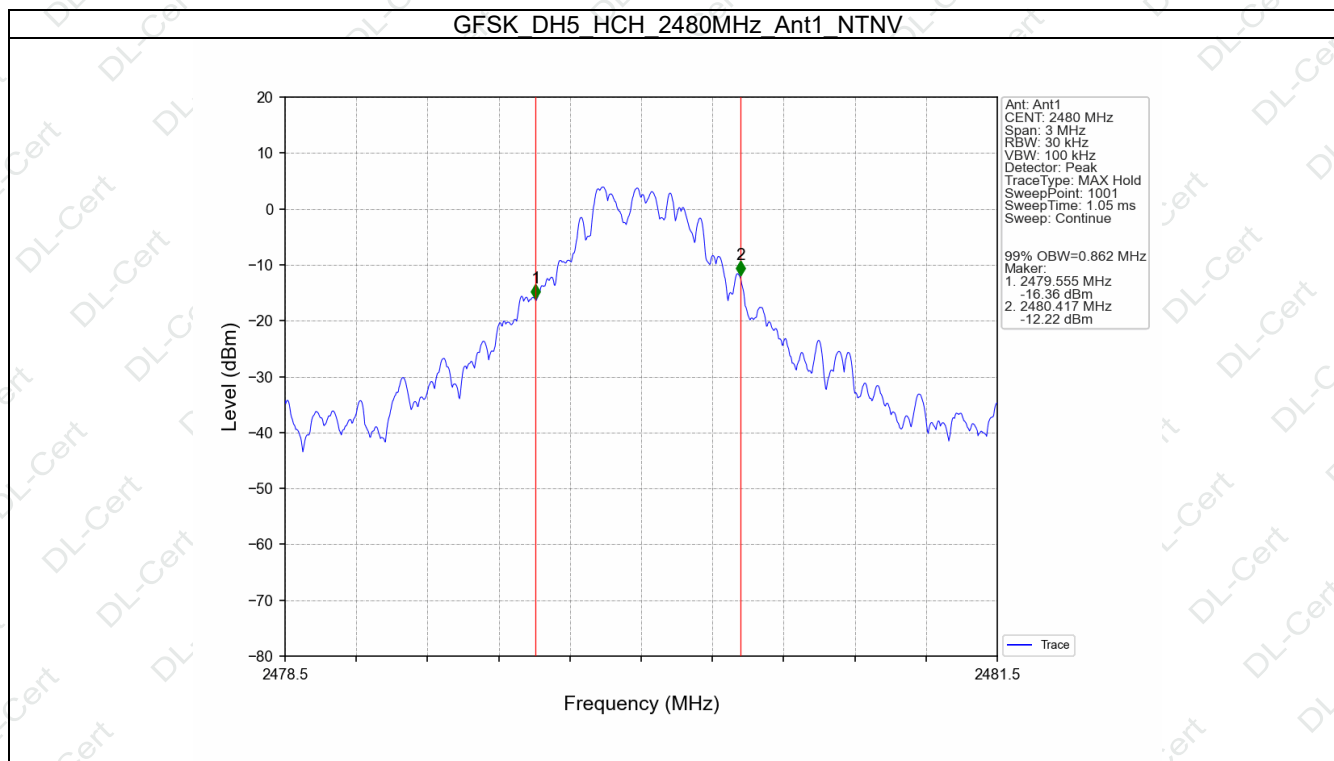
1.1.2 20dB BW

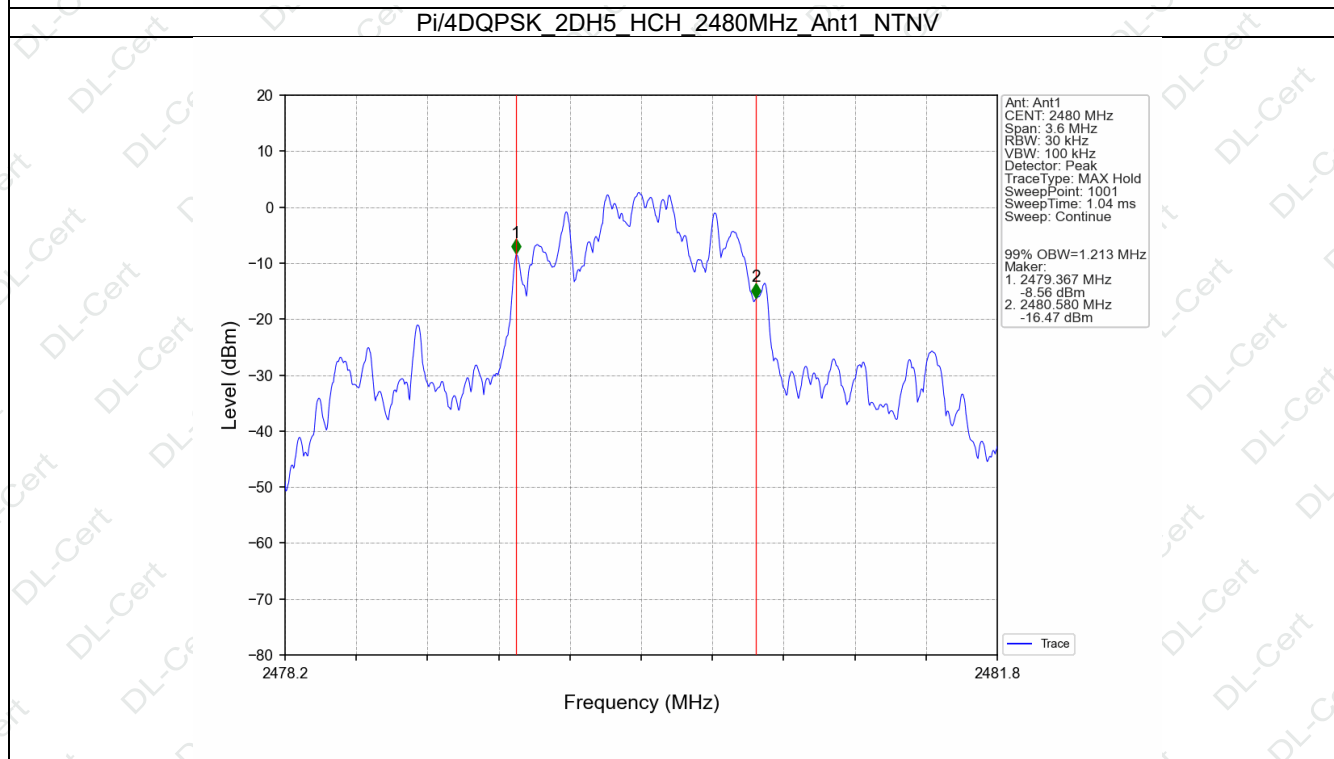
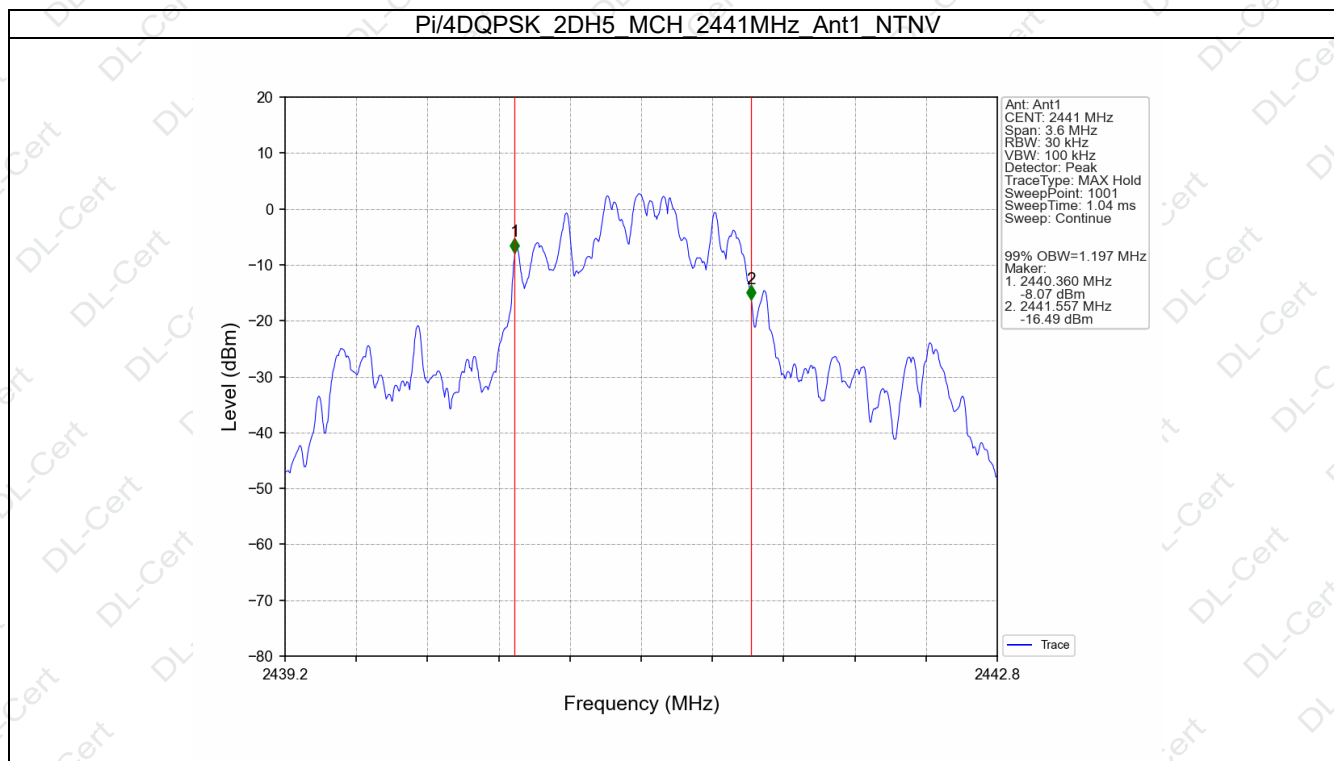
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	1.010	/	Pass
		2441	DH5	1	0.983	/	Pass
		2480	DH5	1	0.919	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.286	/	Pass
		2441	2DH5	1	1.298	/	Pass
		2480	2DH5	1	1.295	/	Pass
8DPSK	SISO	2402	3DH5	1	1.308	/	Pass
		2441	3DH5	1	1.317	/	Pass
		2480	3DH5	1	1.300	/	Pass

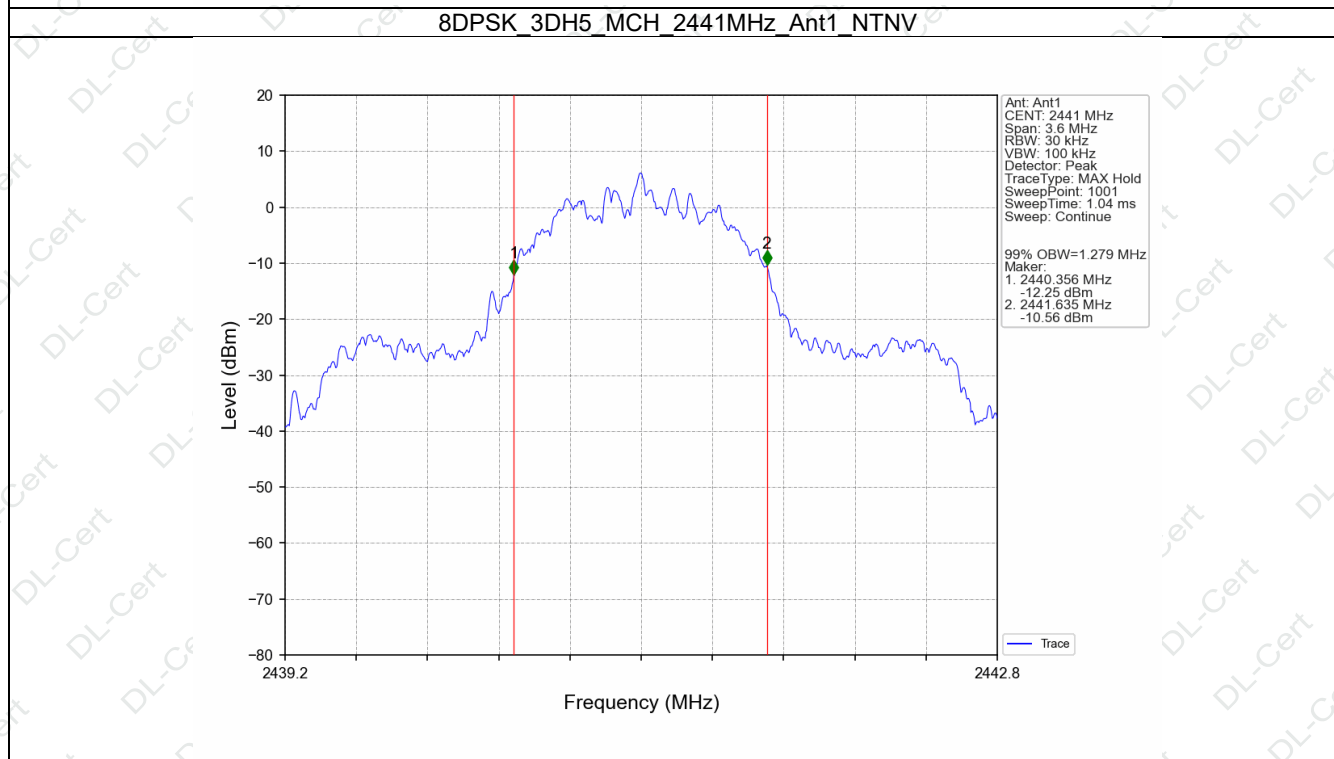
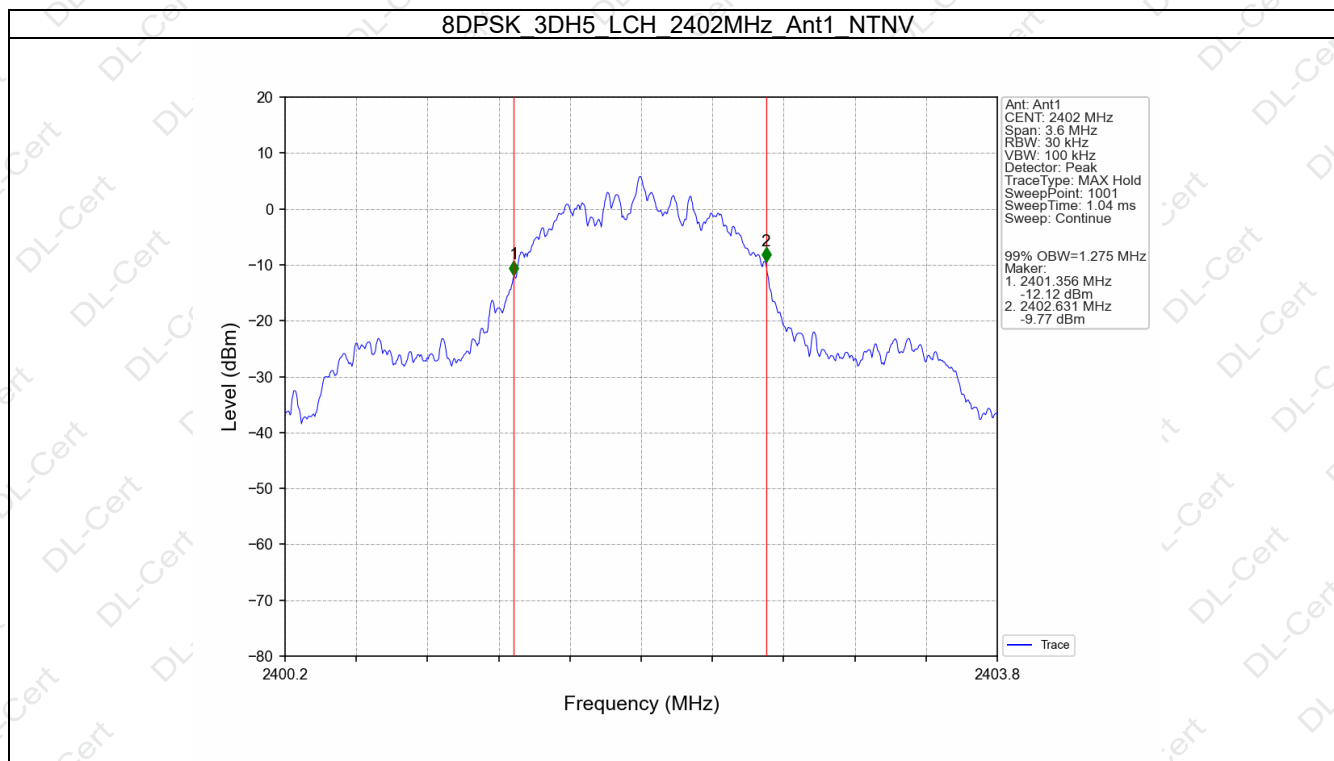
1.2 Test Graph

1.2.1 OBW

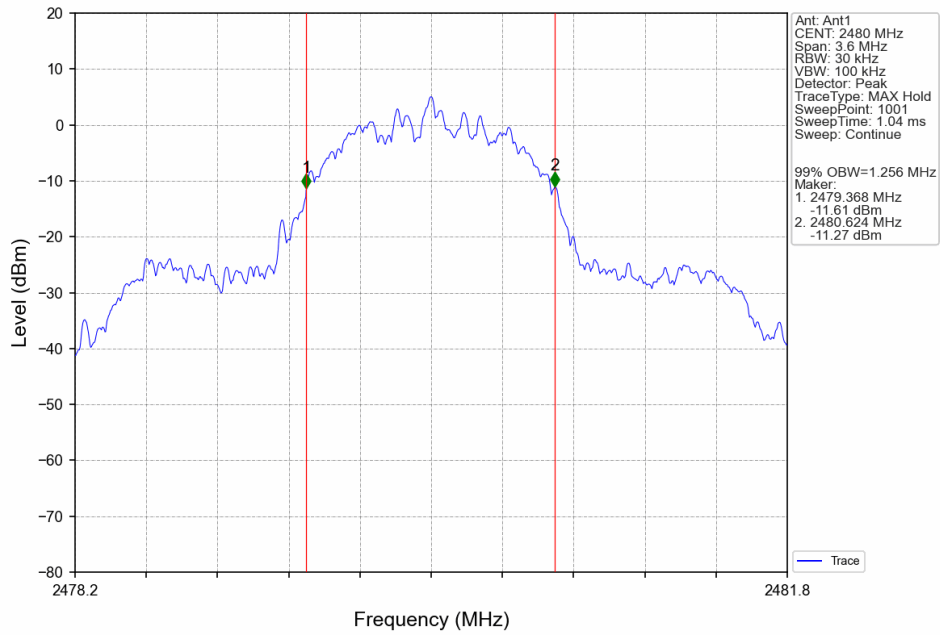




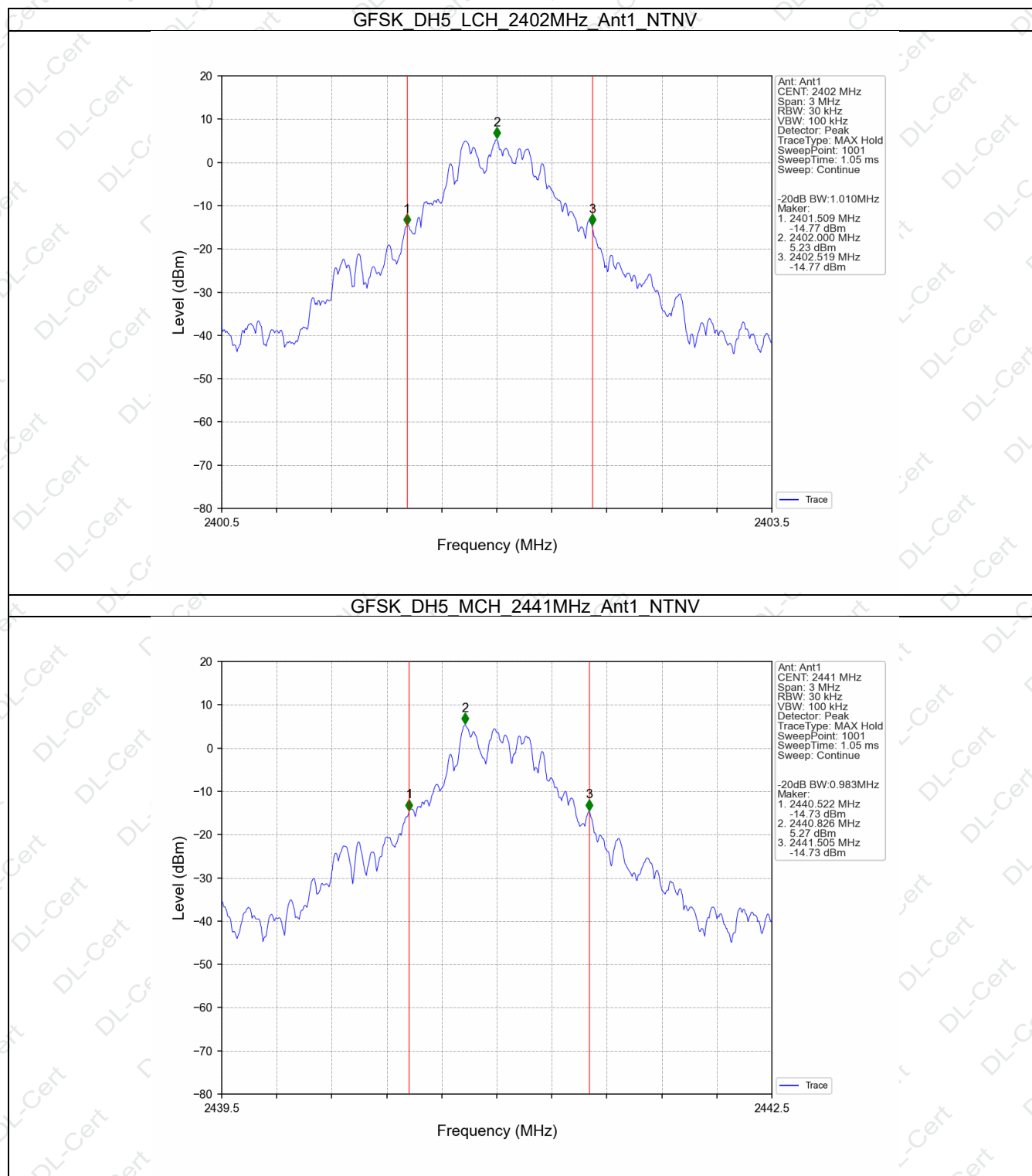


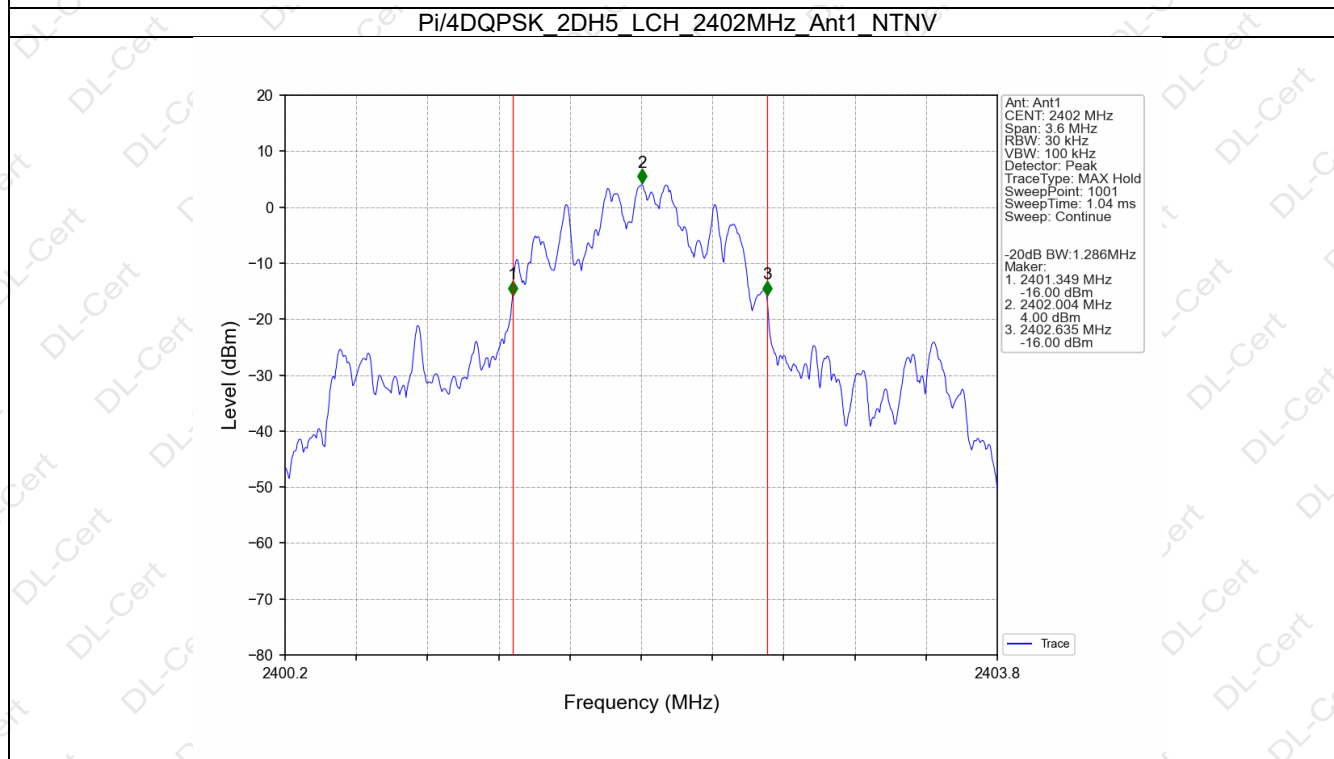
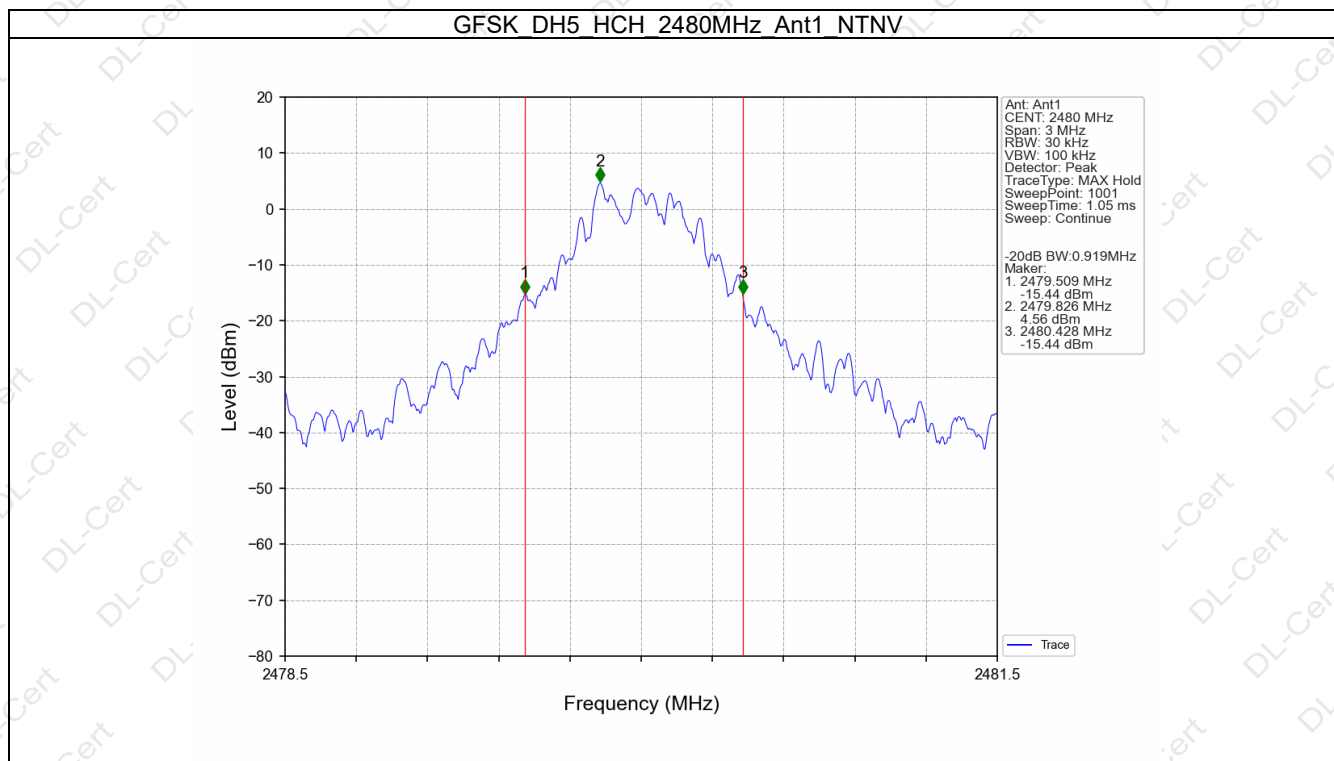


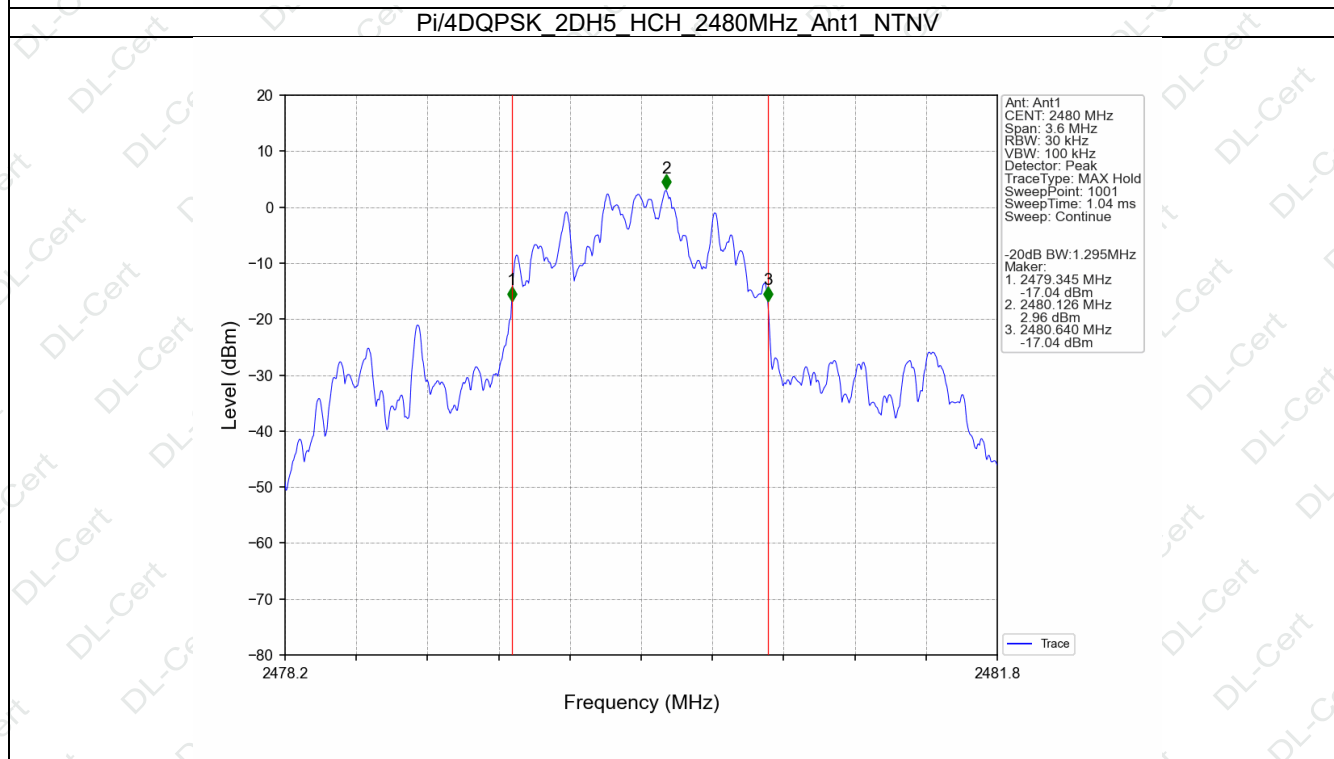
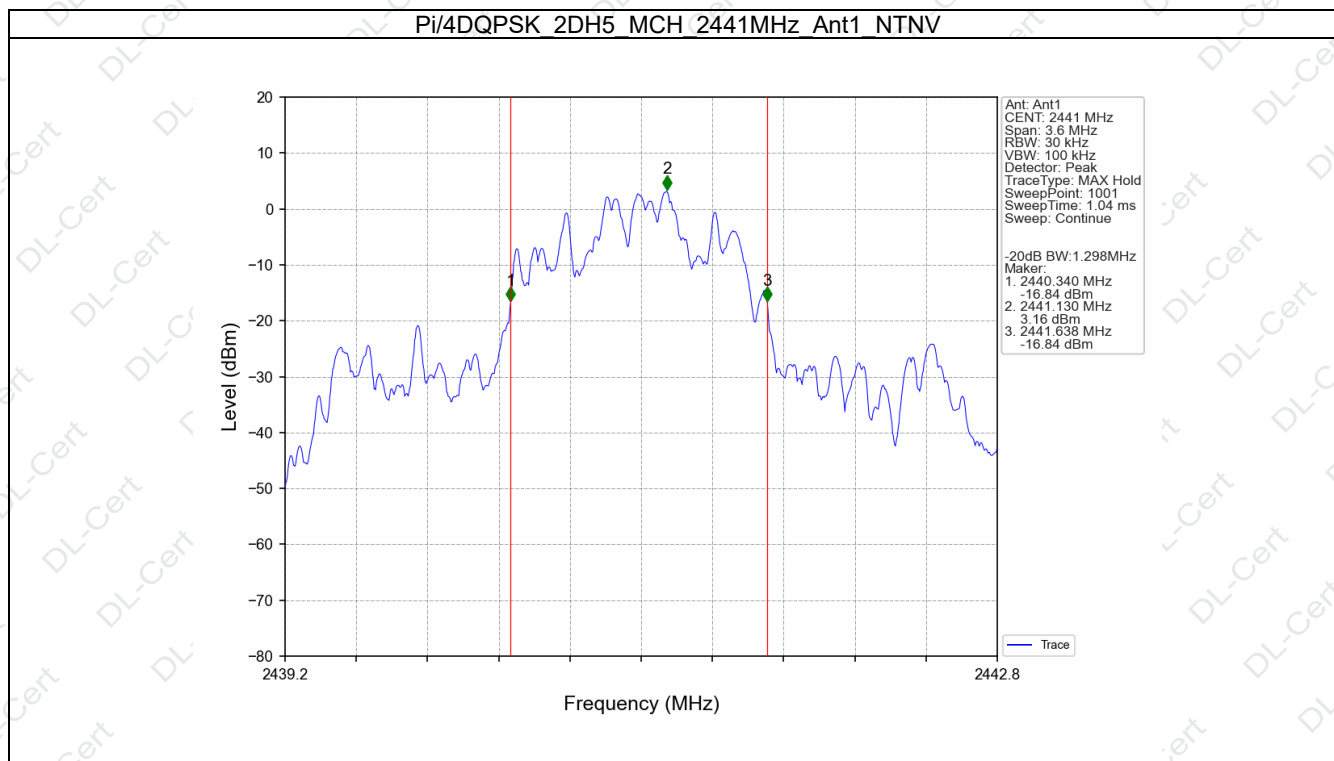
8DPSK 3DH5 HCH 2480MHz Ant1 NTN

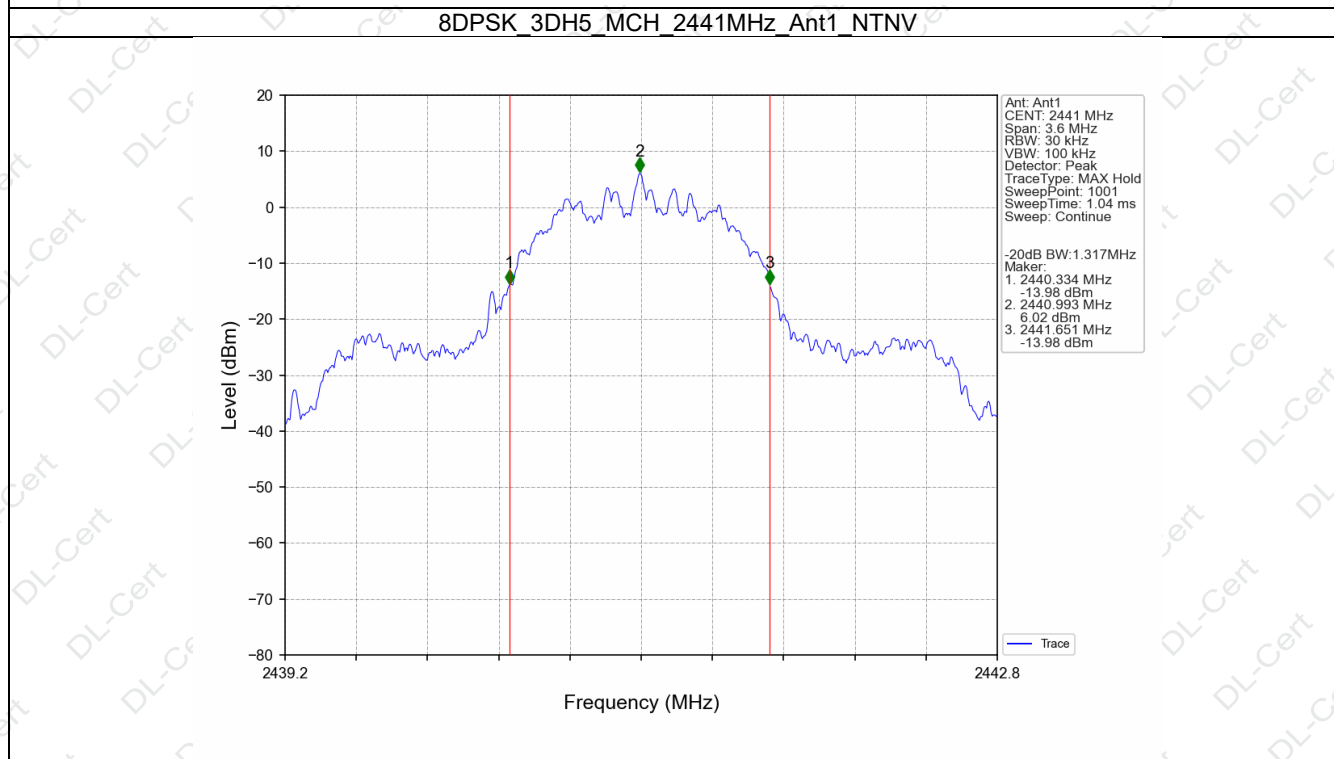
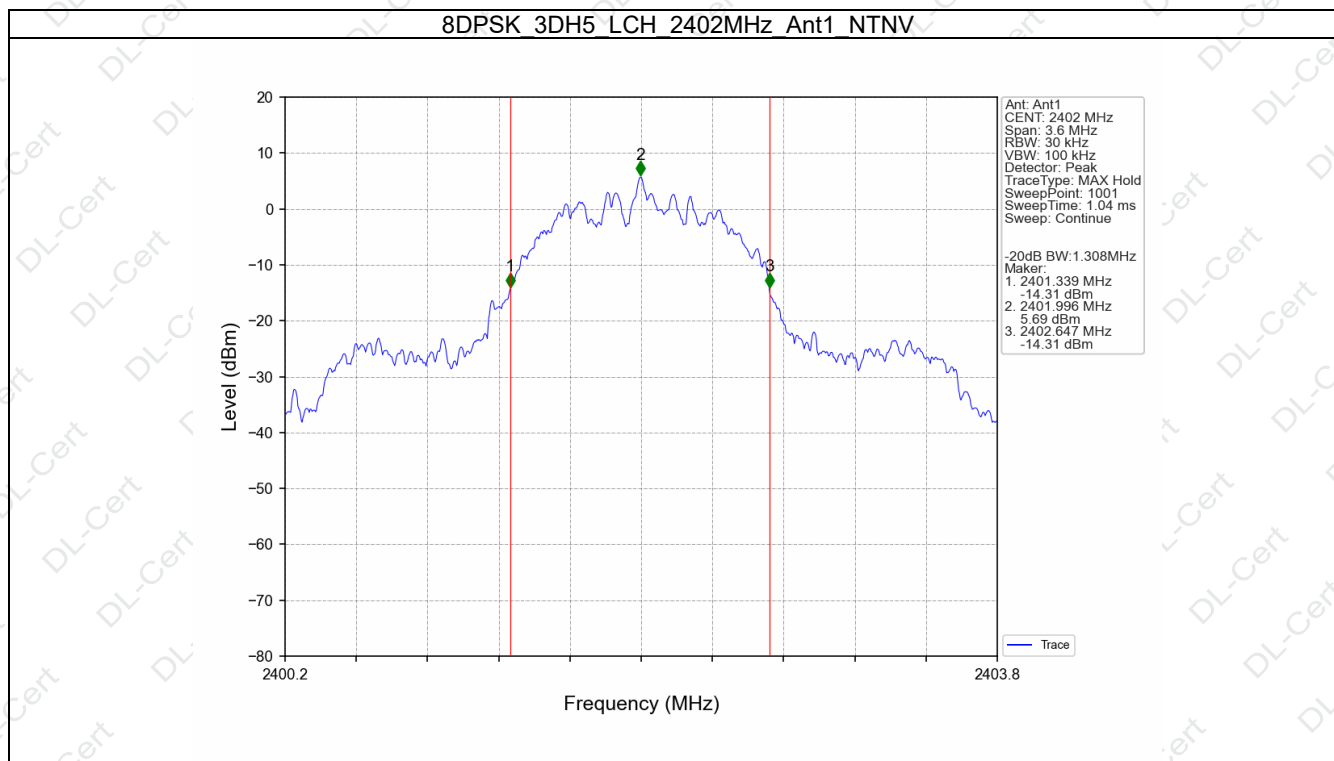


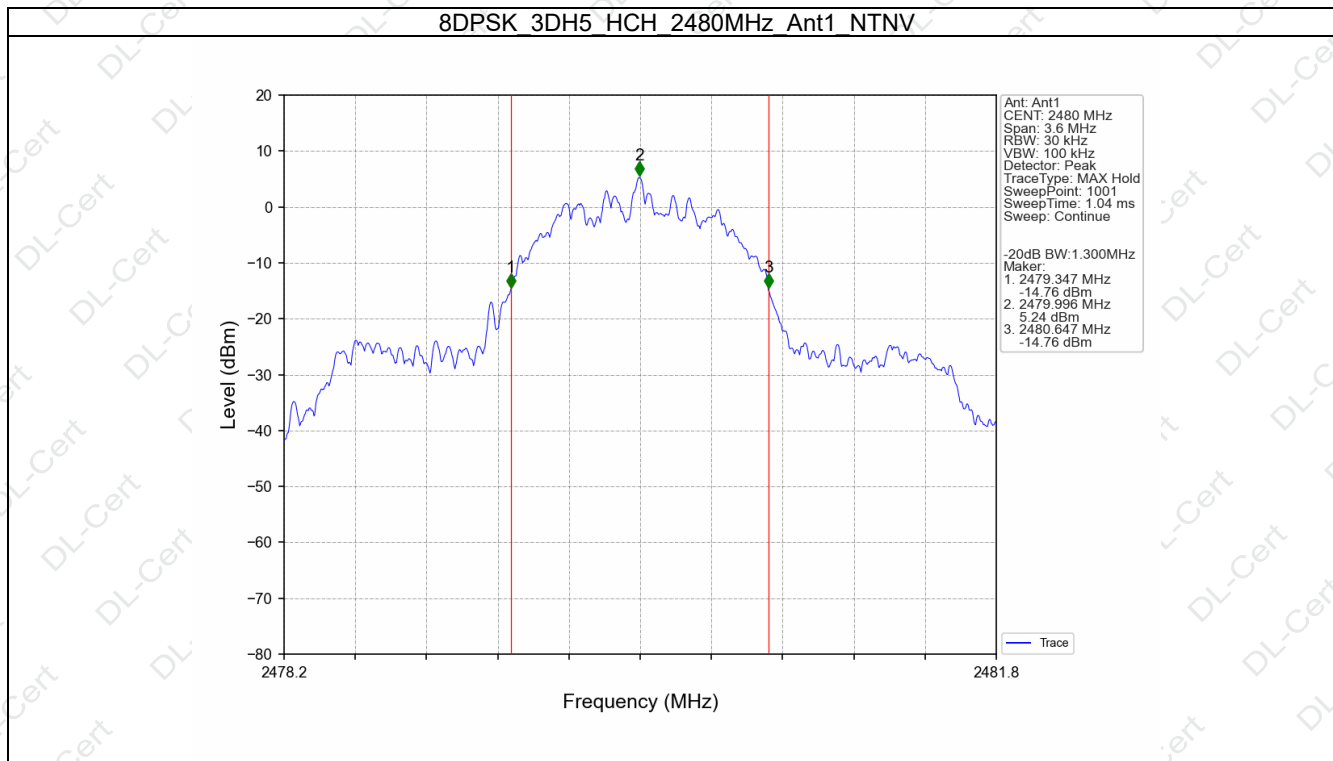
1.2.2 20dB BW











2. Maximum Conducted Output Power

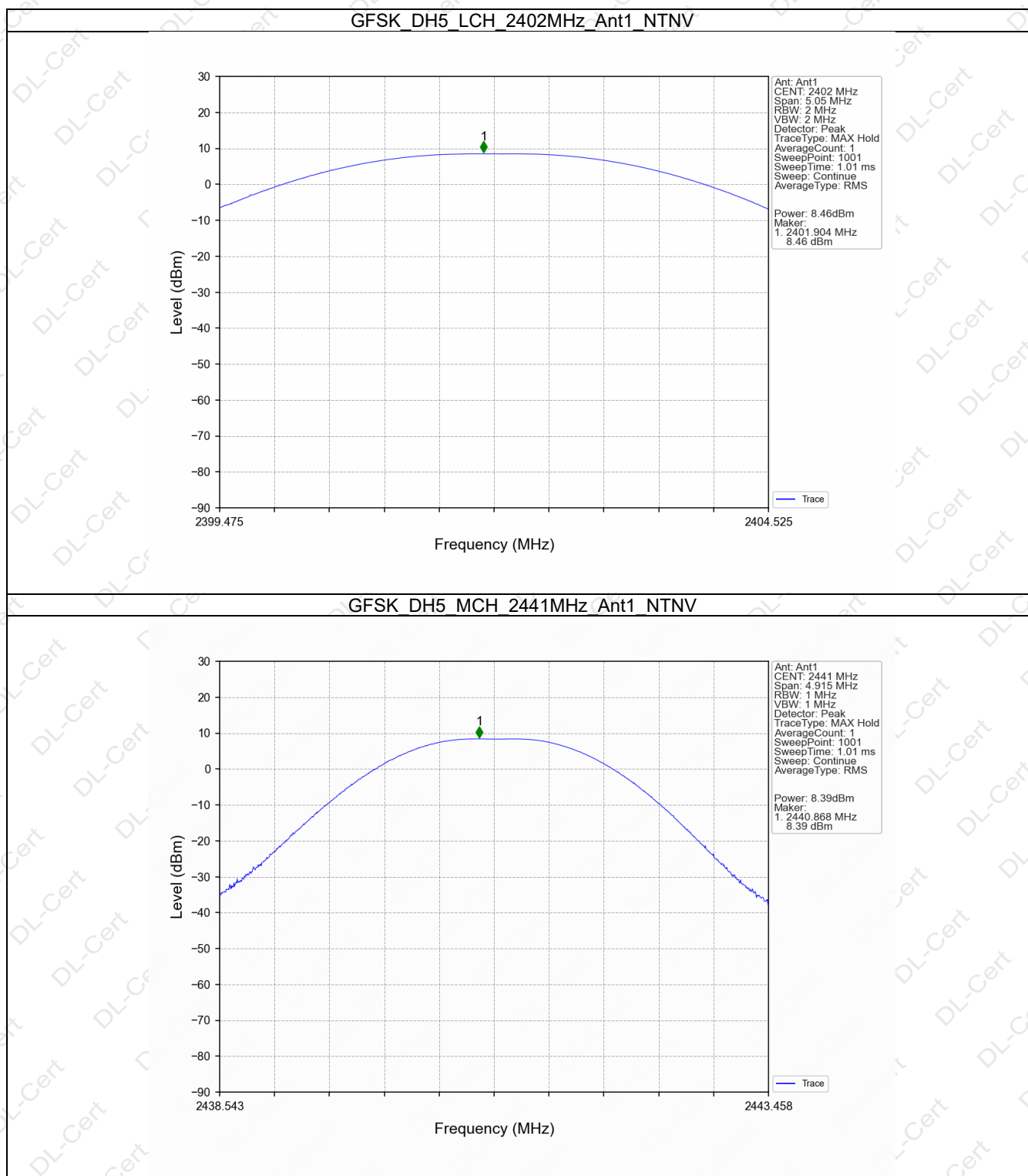
2.1 Test Result

2.1.1 Power

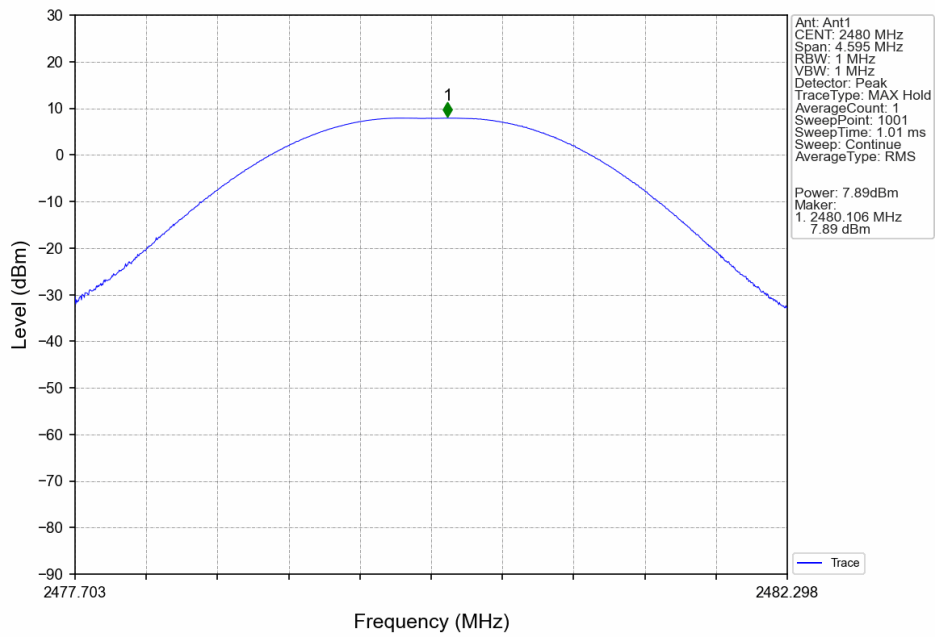
Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	8.46	≤ 20.97	Pass
		2441	DH5	8.39	≤ 20.97	Pass
		2480	DH5	7.89	≤ 20.97	Pass
Pi/4DQPSK	SISO	2402	2DH5	7.78	≤ 20.97	Pass
		2441	2DH5	6.61	≤ 20.97	Pass
		2480	2DH5	6.59	≤ 20.97	Pass
8DPSK	SISO	2402	3DH5	8.16	≤ 20.97	Pass
		2441	3DH5	8.43	≤ 20.97	Pass
		2480	3DH5	7.75	≤ 20.97	Pass

2.2 Test Graph

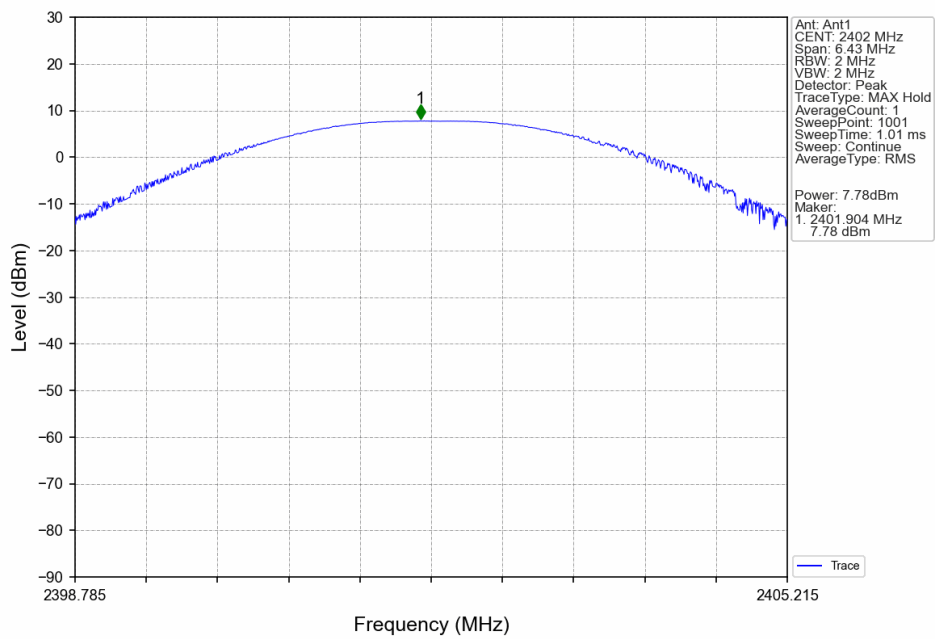
2.2.1 Power

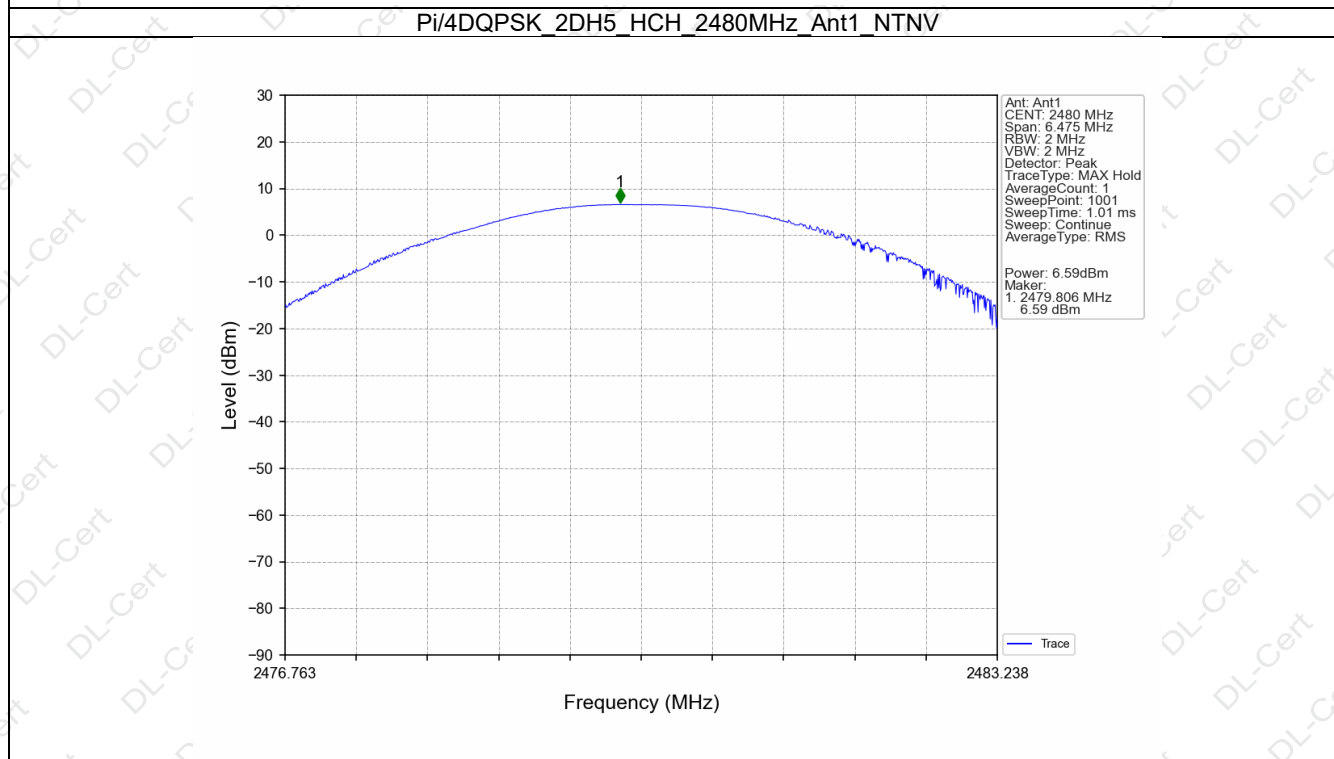
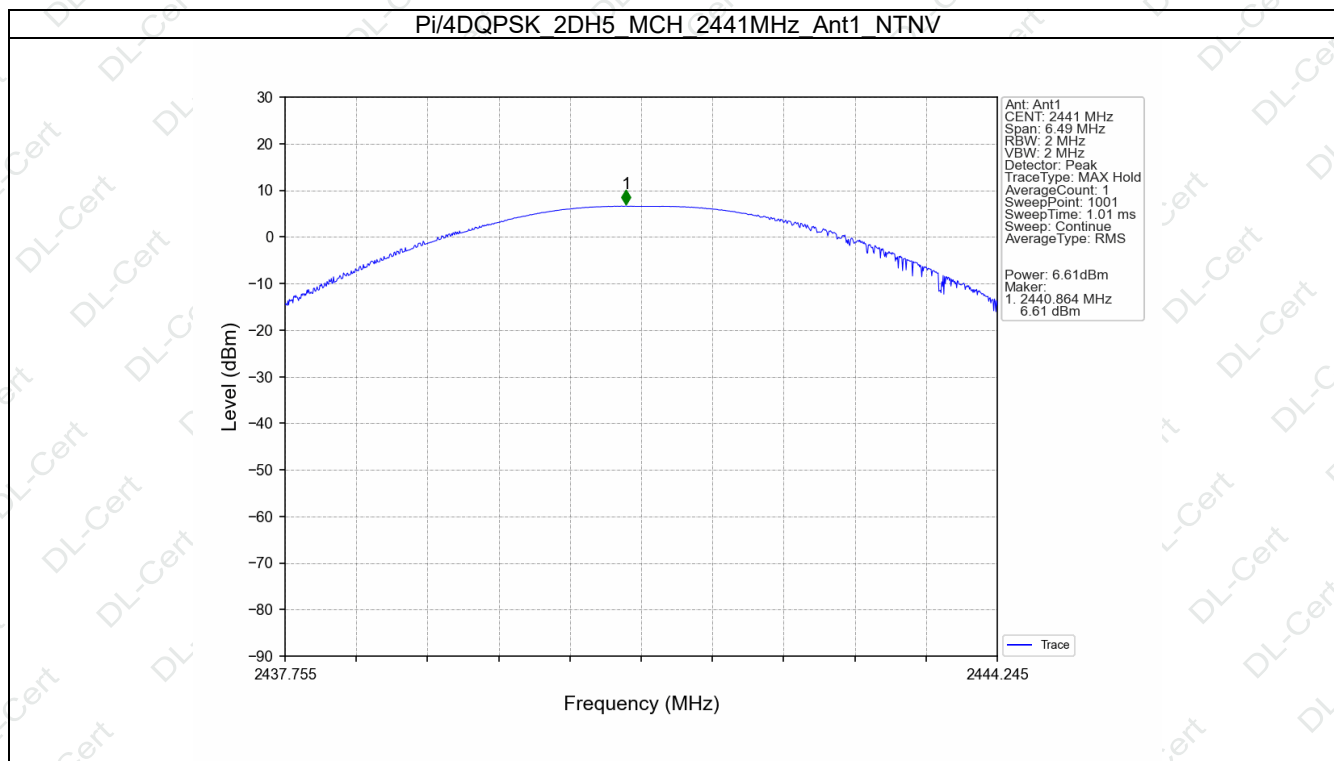


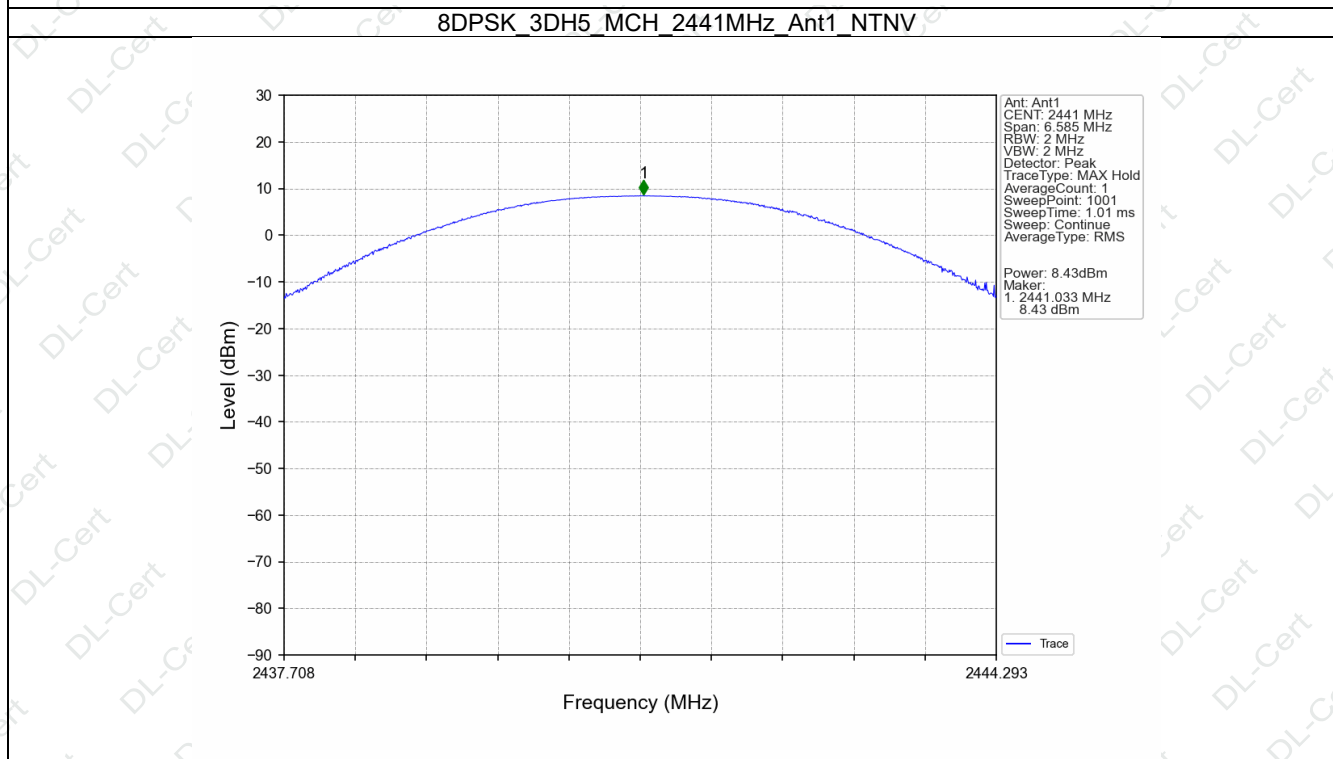
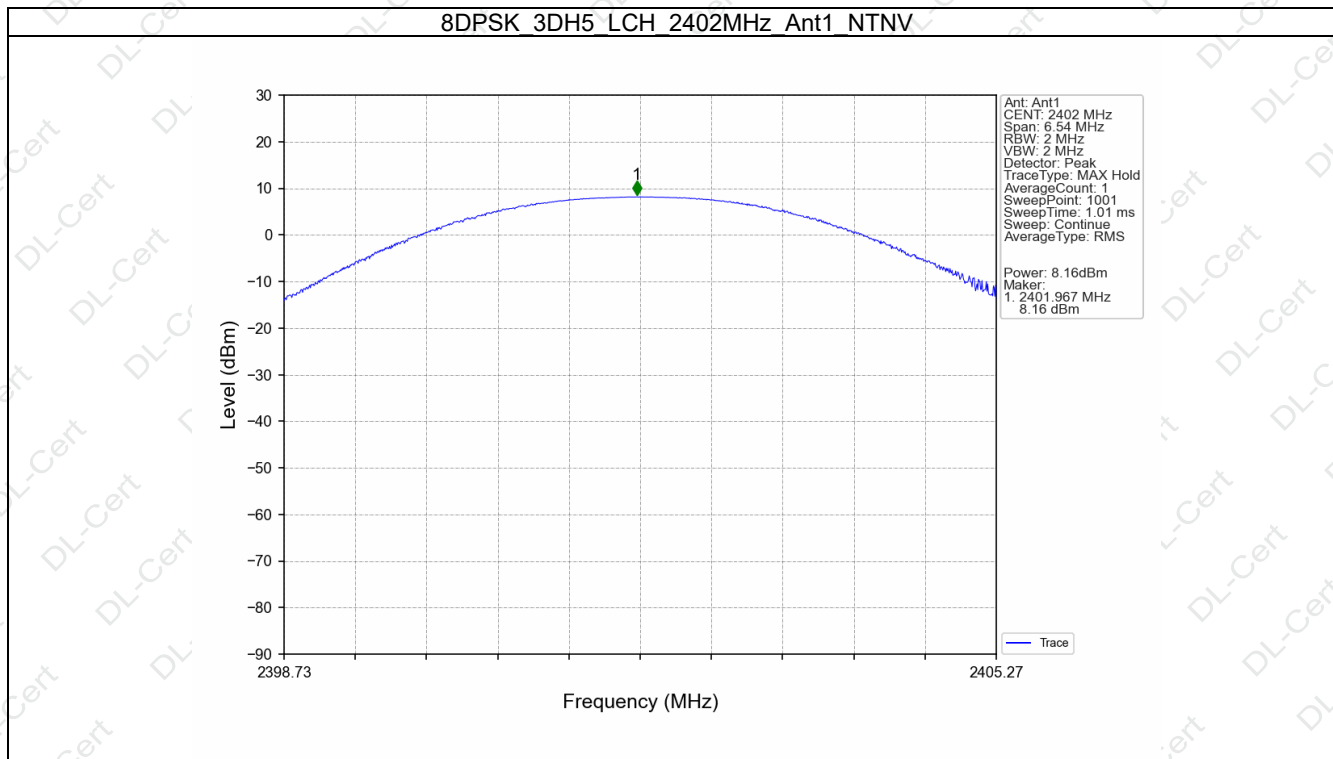
GFSK DH5 HCH 2480MHz Ant1 NTN

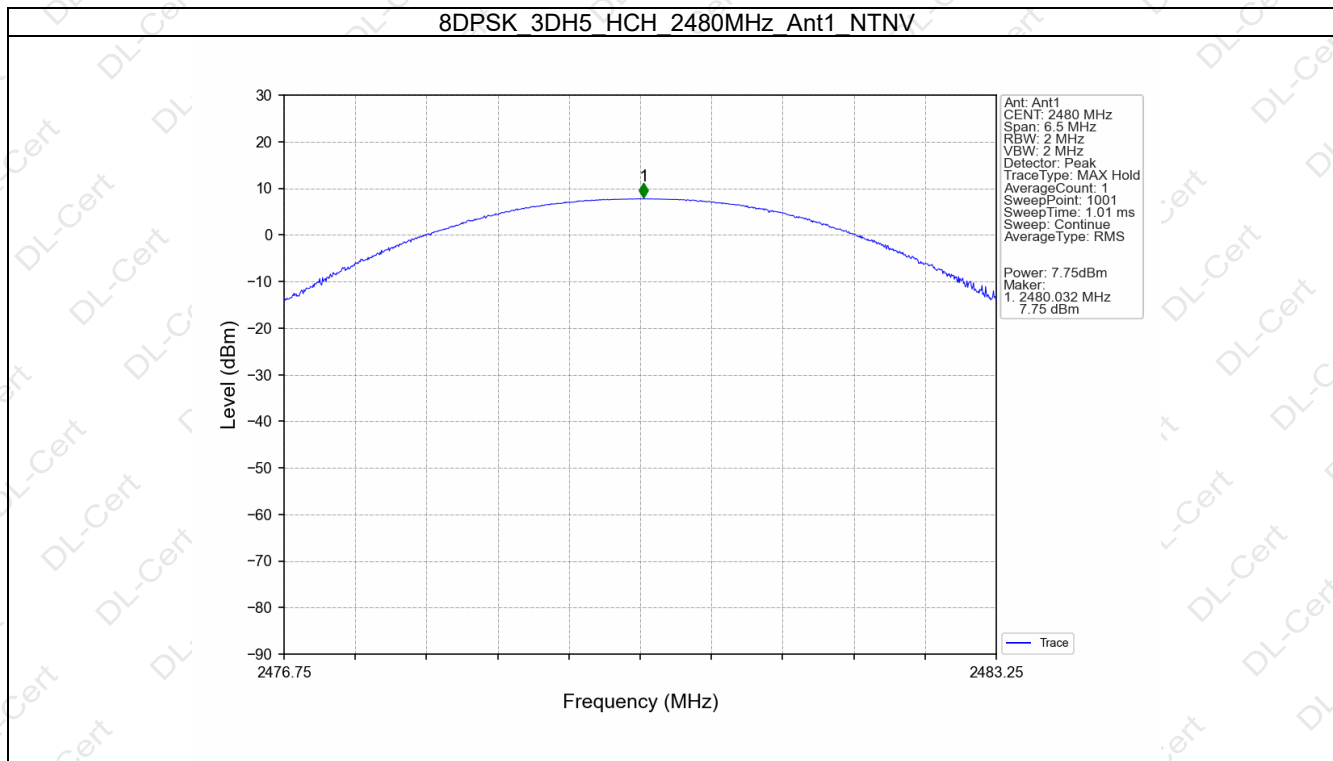


PI/4DQPSK_2DH5_LCH_2402MHz_Ant1 NTN









3. Carrier Frequency Separation

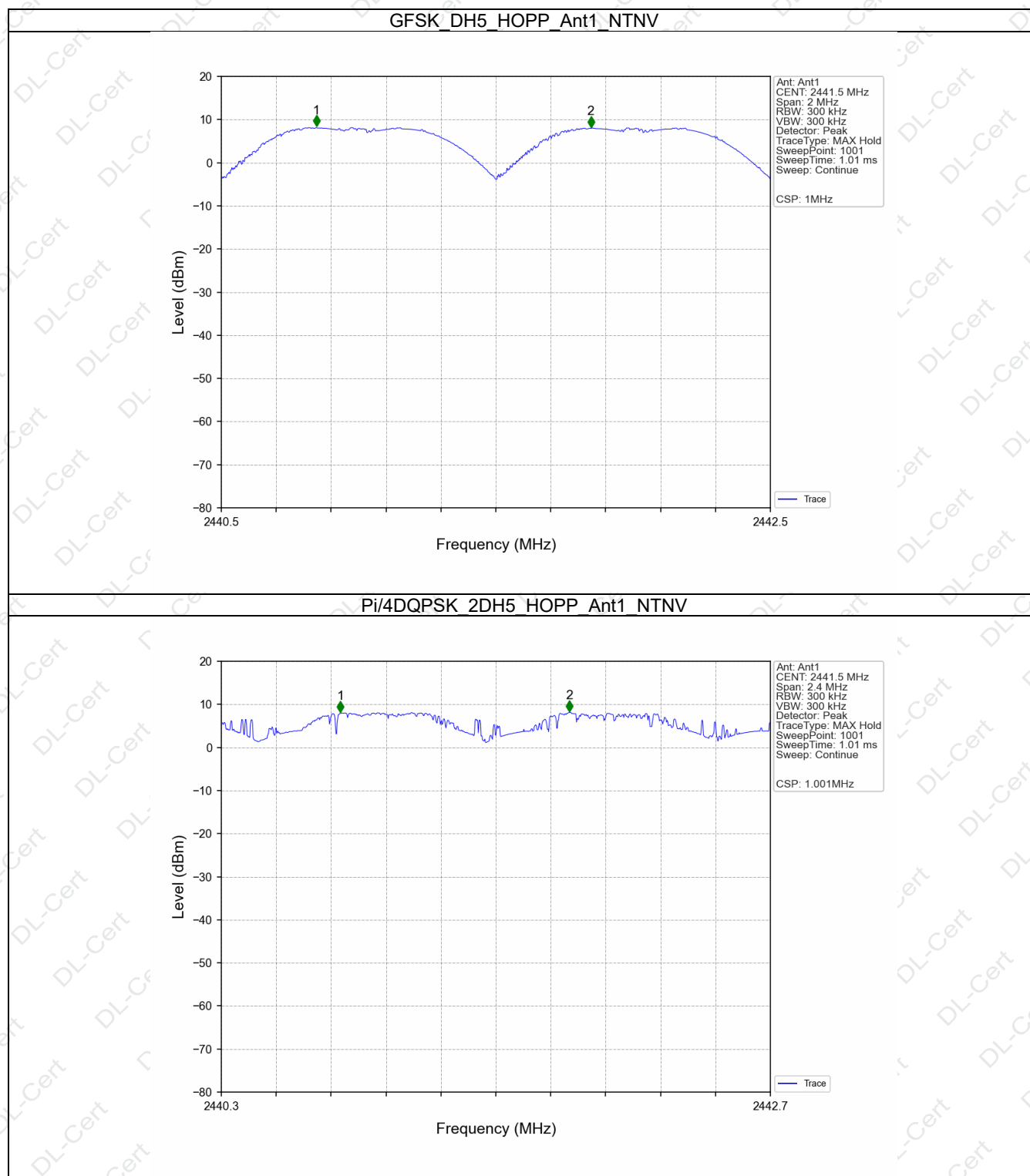
3.1 Test Result

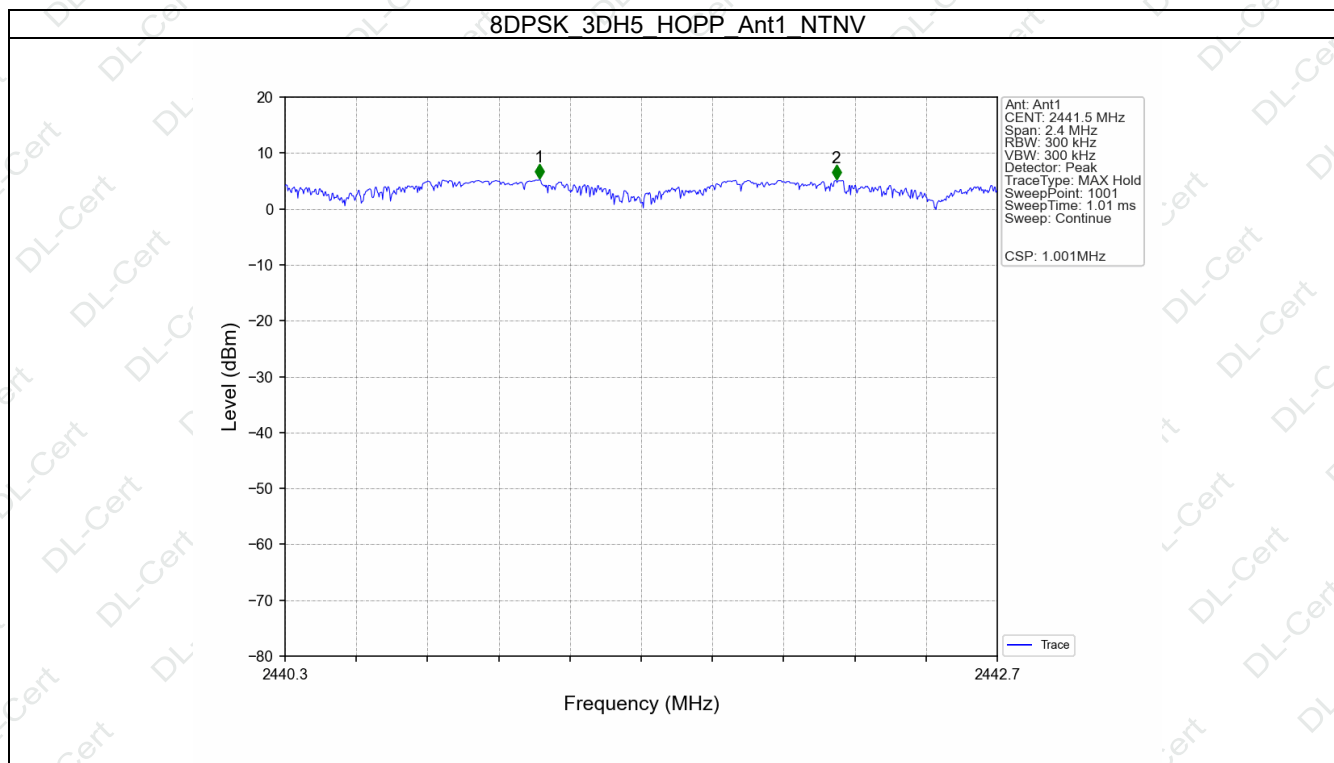
3.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.000	1.010	≥ 0.673	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.001	1.298	≥ 0.865	Pass
8DPSK	SISO	HOPP	3DH5	1.001	1.317	≥ 0.878	Pass

3.2 Test Graph

3.2.1 Ant1





4. Number of Hopping Frequencies

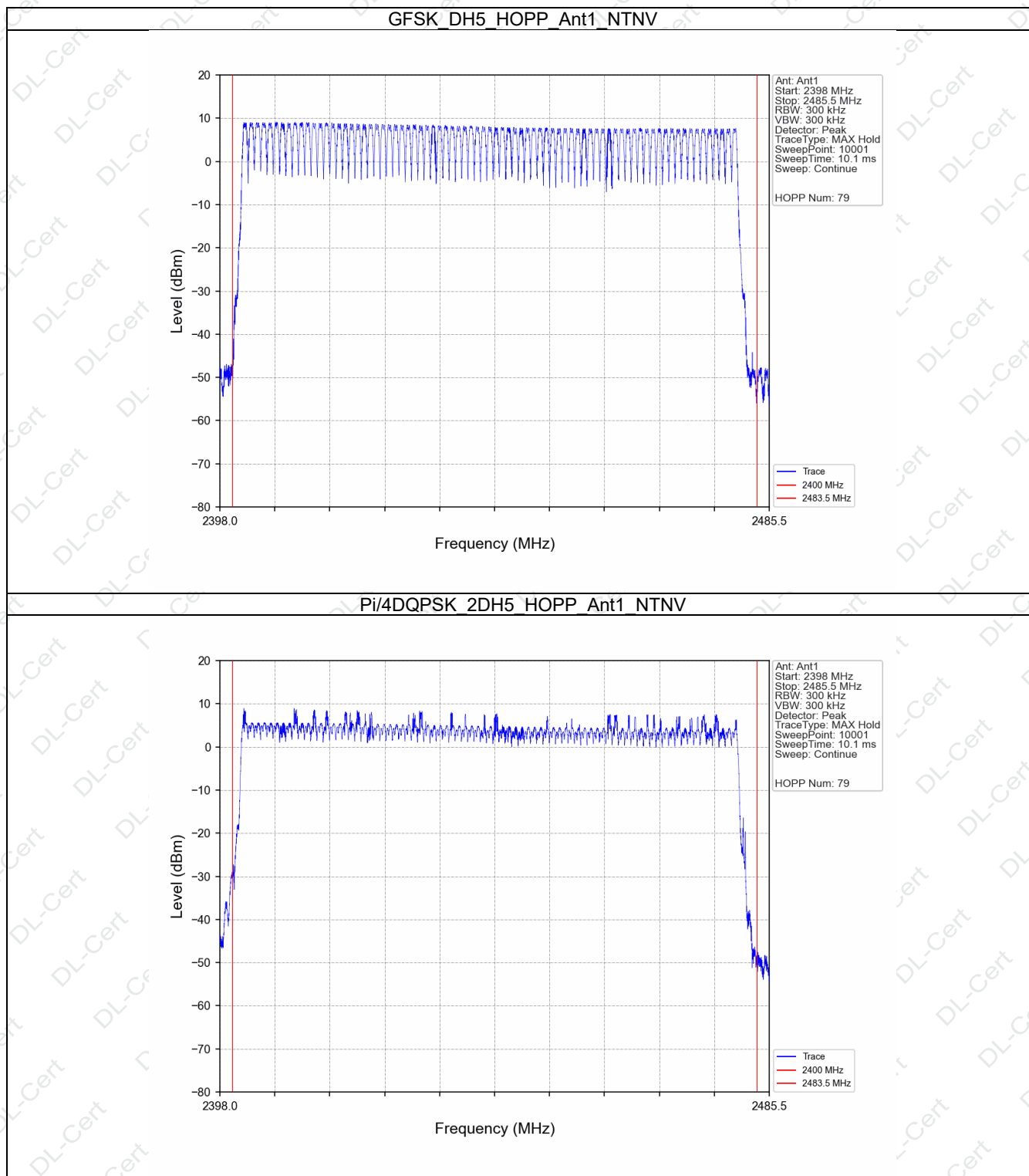
4.1 Test Result

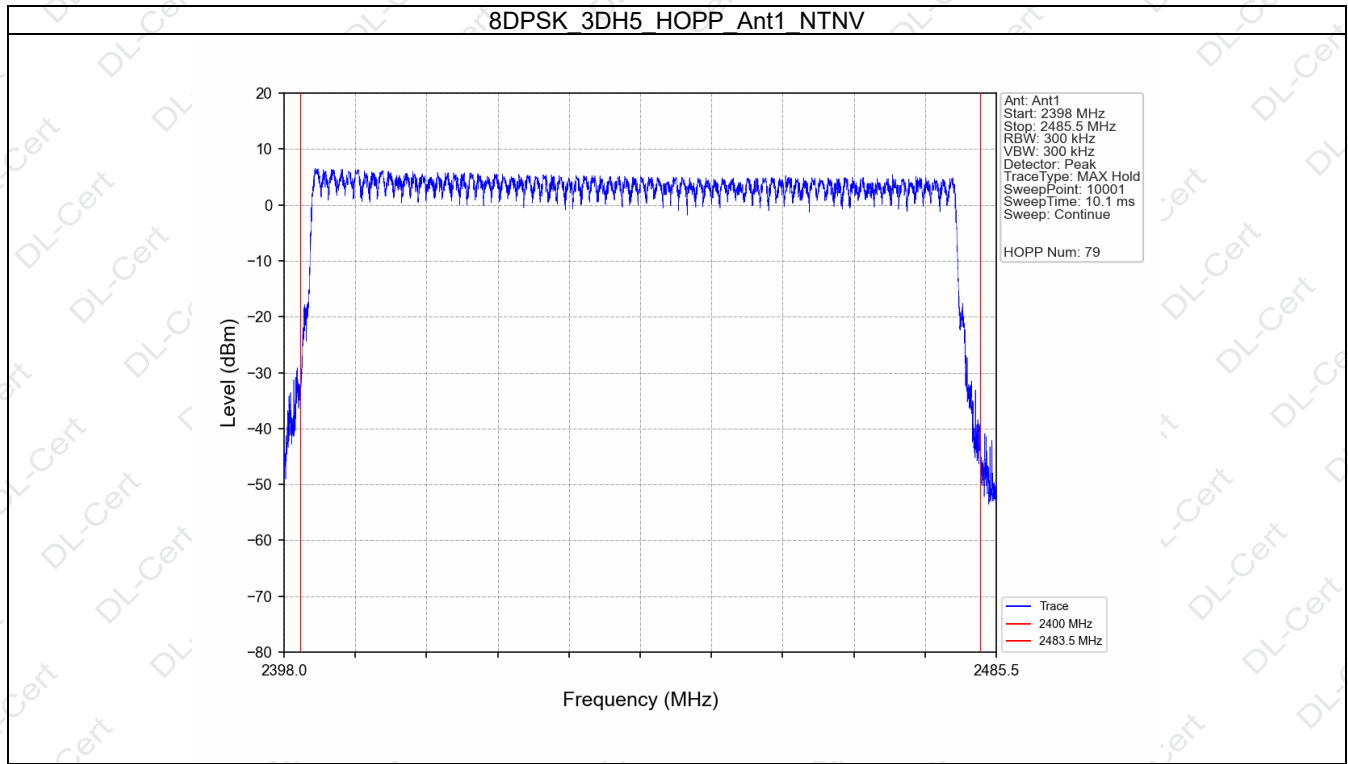
4.1.1 HoppNum

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
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass

4.2 Test Graph

4.2.1 HoppNum





5. Time of Occupancy (Dwell Time)

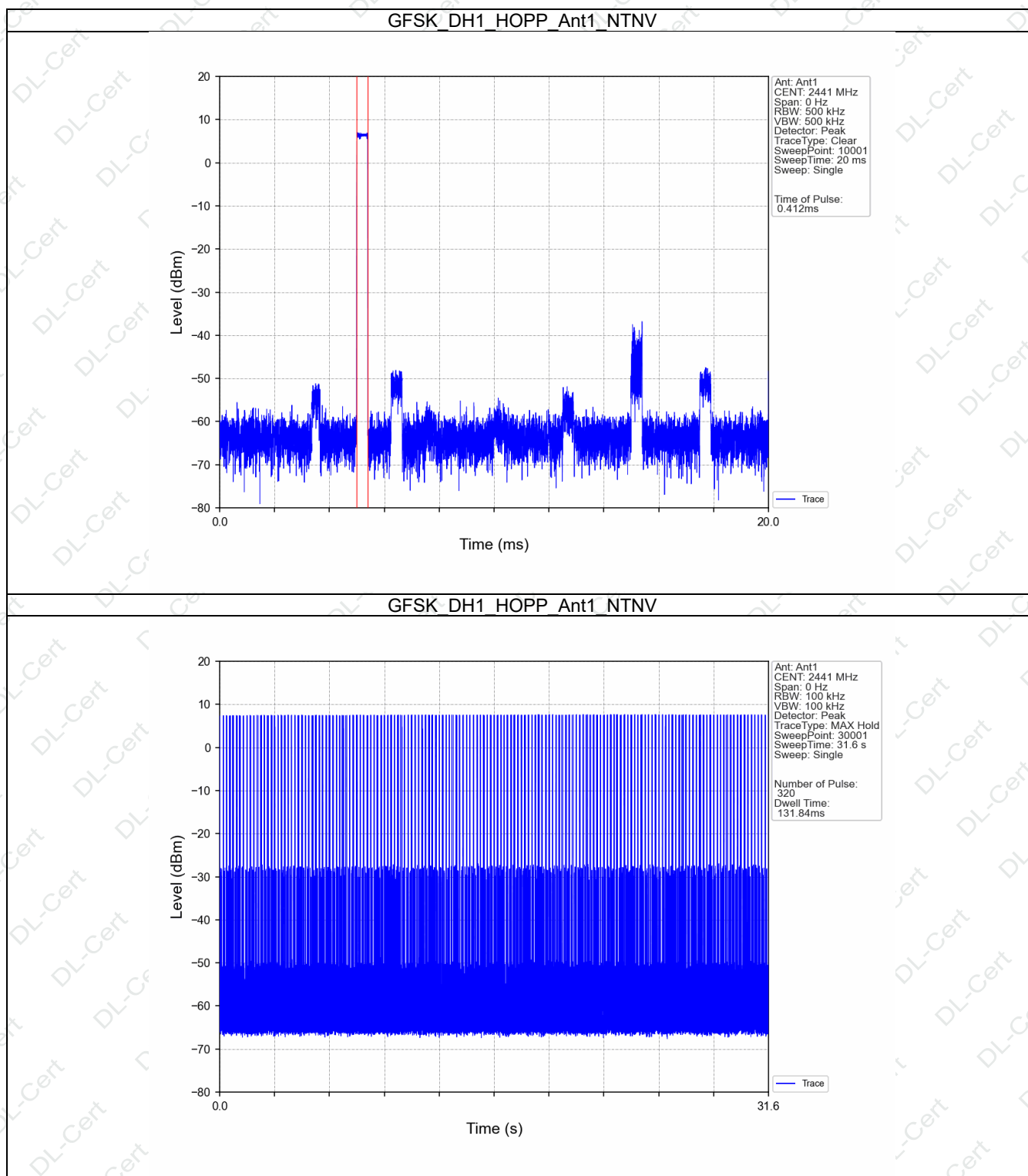
5.1 Test Result

5.1.1 Ant1

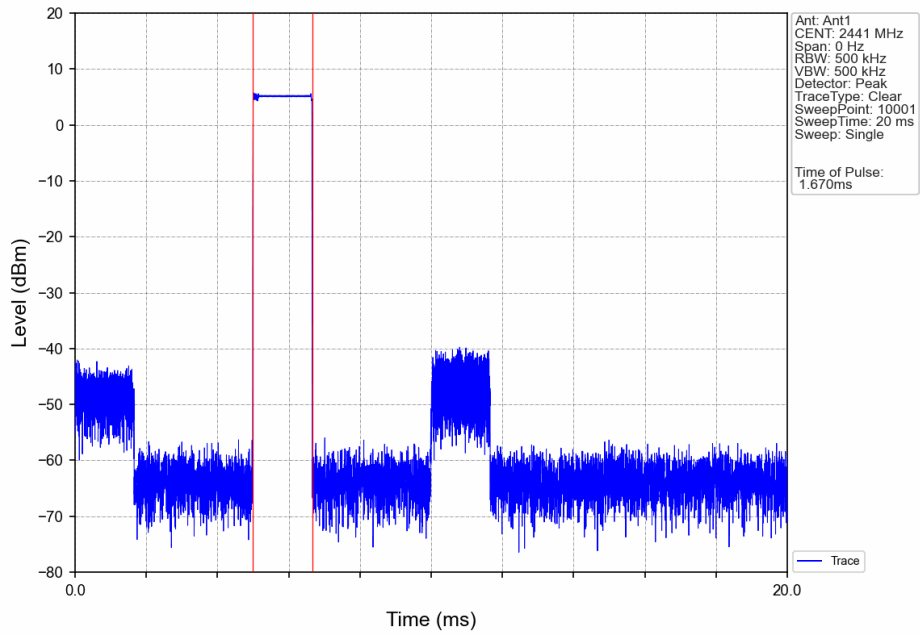
Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.412	31.600	320	131.840	<=400	Pass
			DH3	1.670	31.600	57	95.190	<=400	Pass
			DH5	2.918	31.600	108	315.144	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.418	31.600	320	133.760	<=400	Pass
			2DH3	1.668	31.600	45	75.060	<=400	Pass
			2DH5	2.922	31.600	125	365.250	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.422	31.600	320	135.040	<=400	Pass
			3DH3	1.674	31.600	24	40.176	<=400	Pass
			3DH5	2.928	31.600	105	307.440	<=400	Pass

5.2 Test Graph

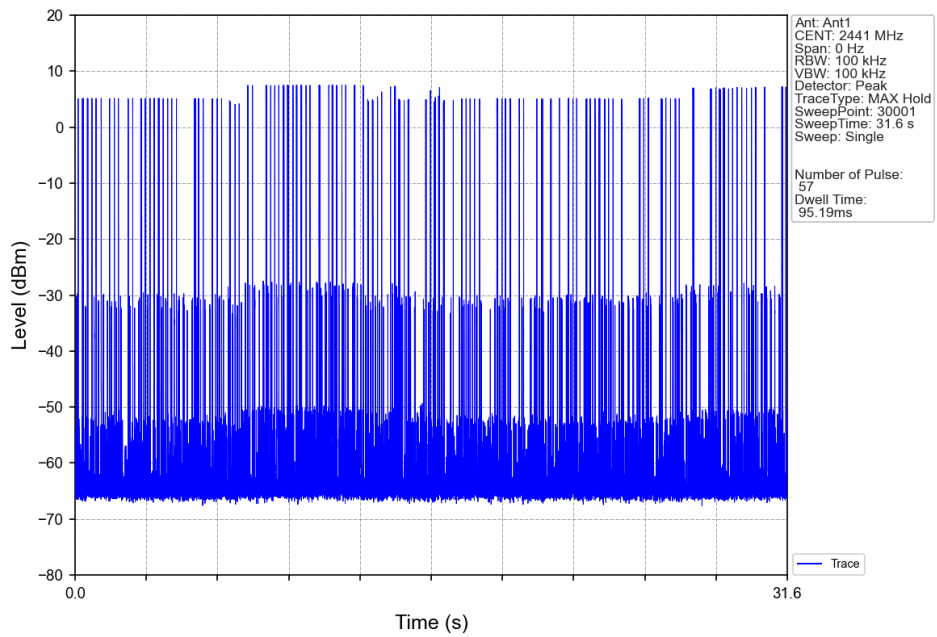
5.2.1 Ant1



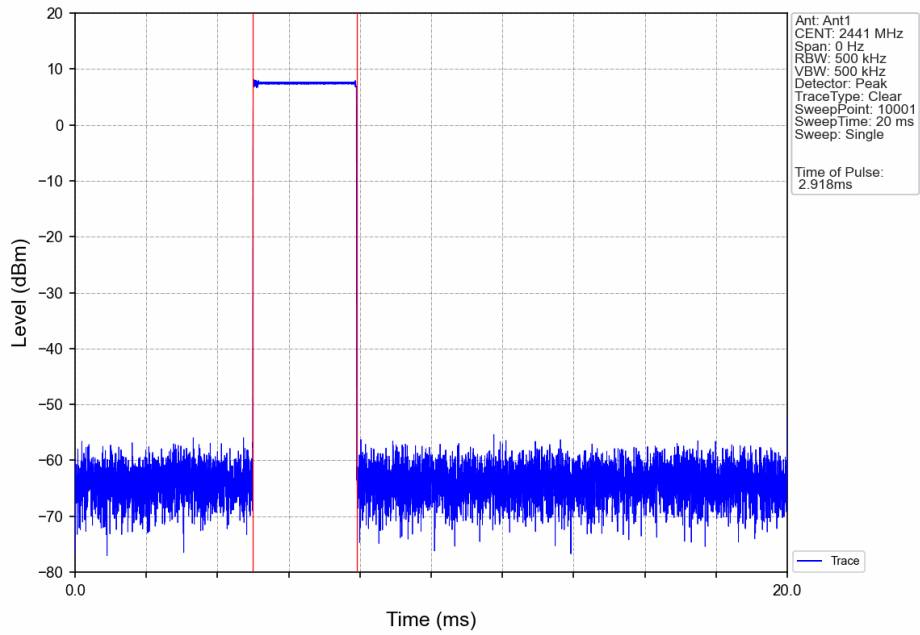
GFSK DH3 HOPP Ant1 NTN



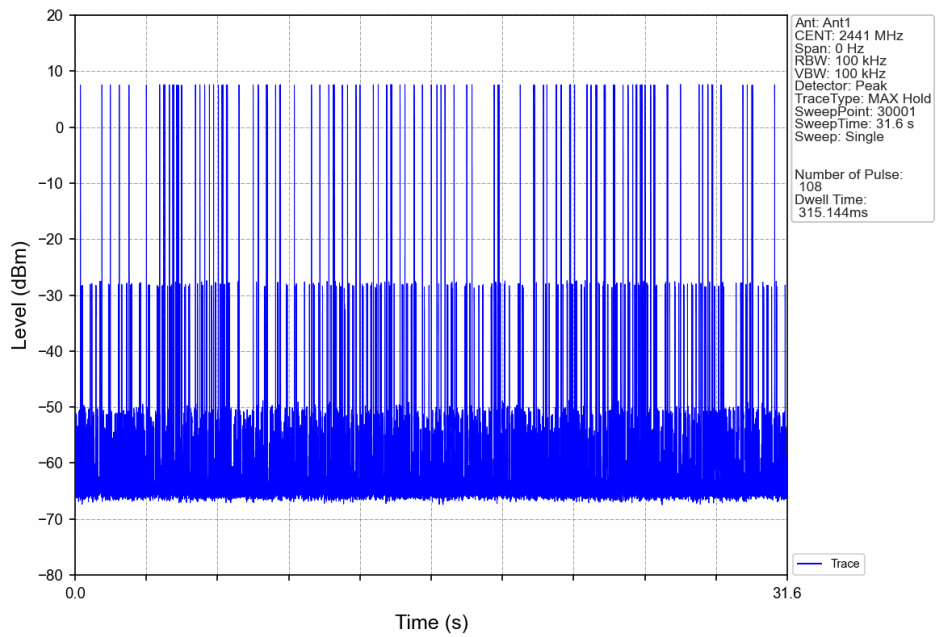
GFSK_DH3_HOPP_Ant1_NTNV



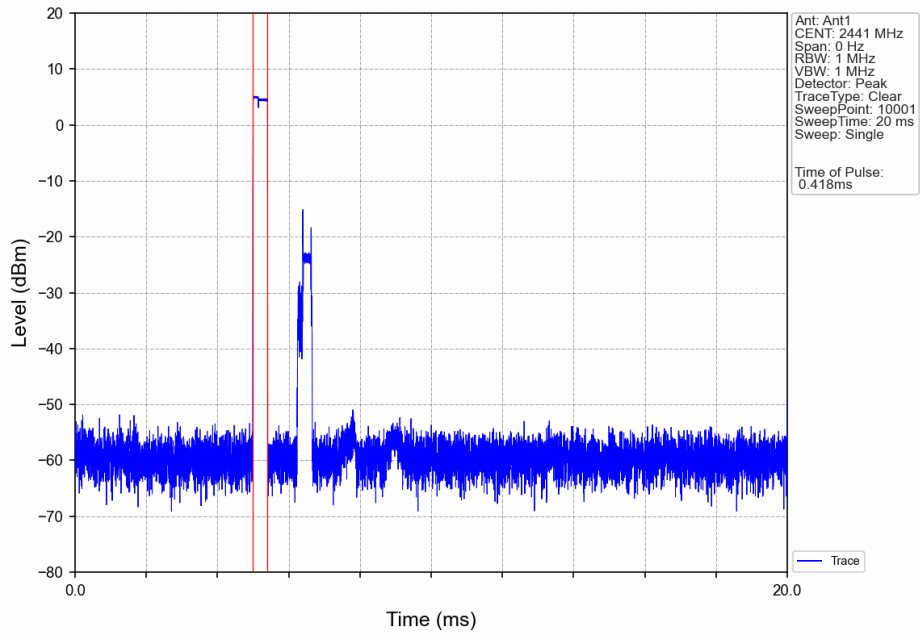
GFSK DH5 HOPP Ant1 NTN



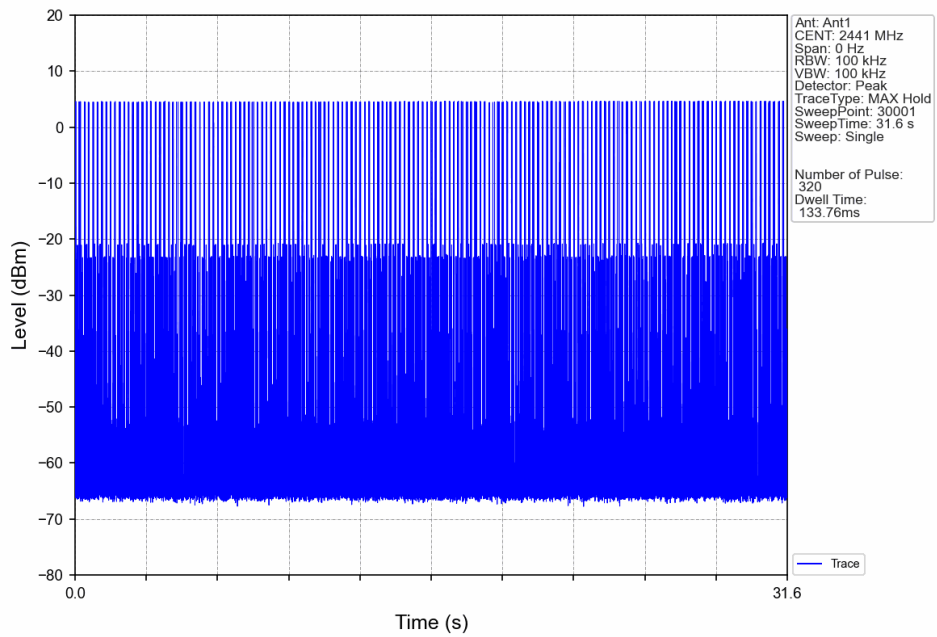
GFSK_DH5_HOPP_Ant1_NTNV

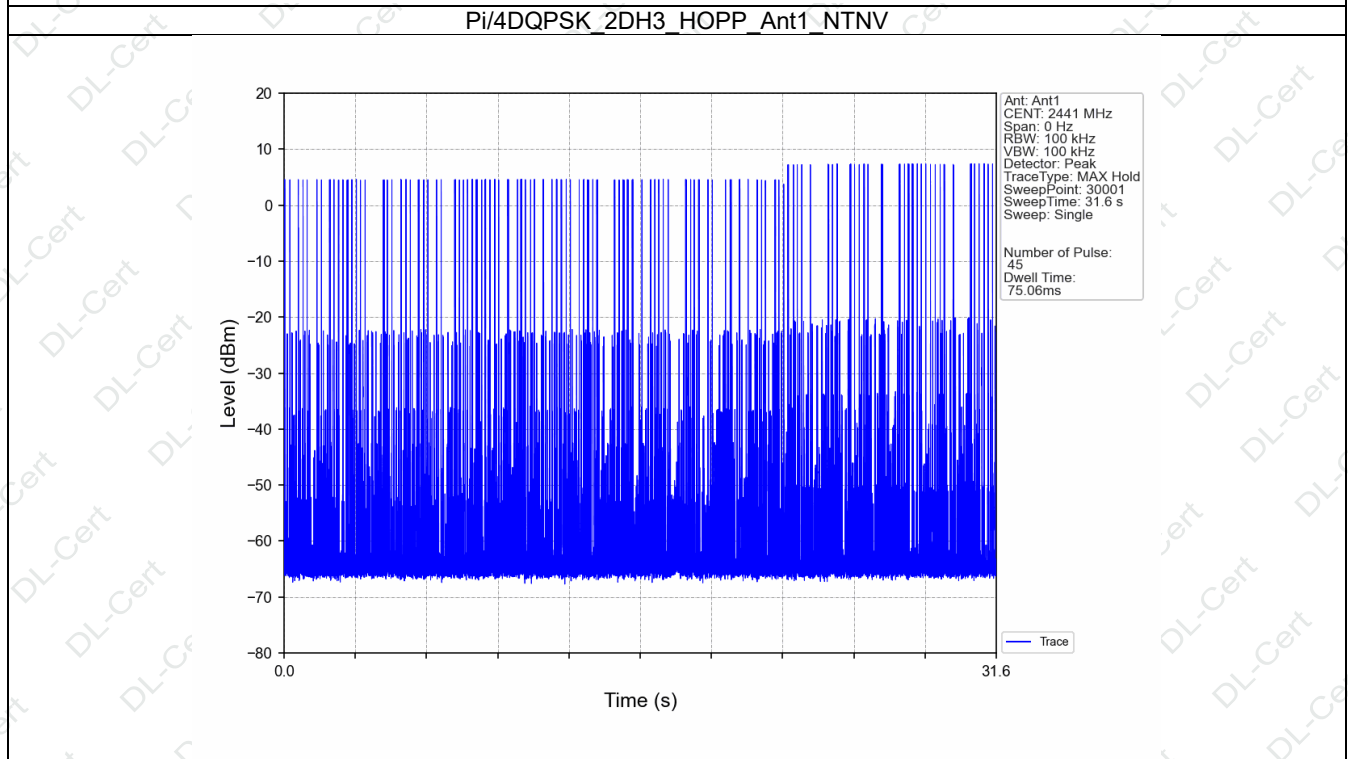
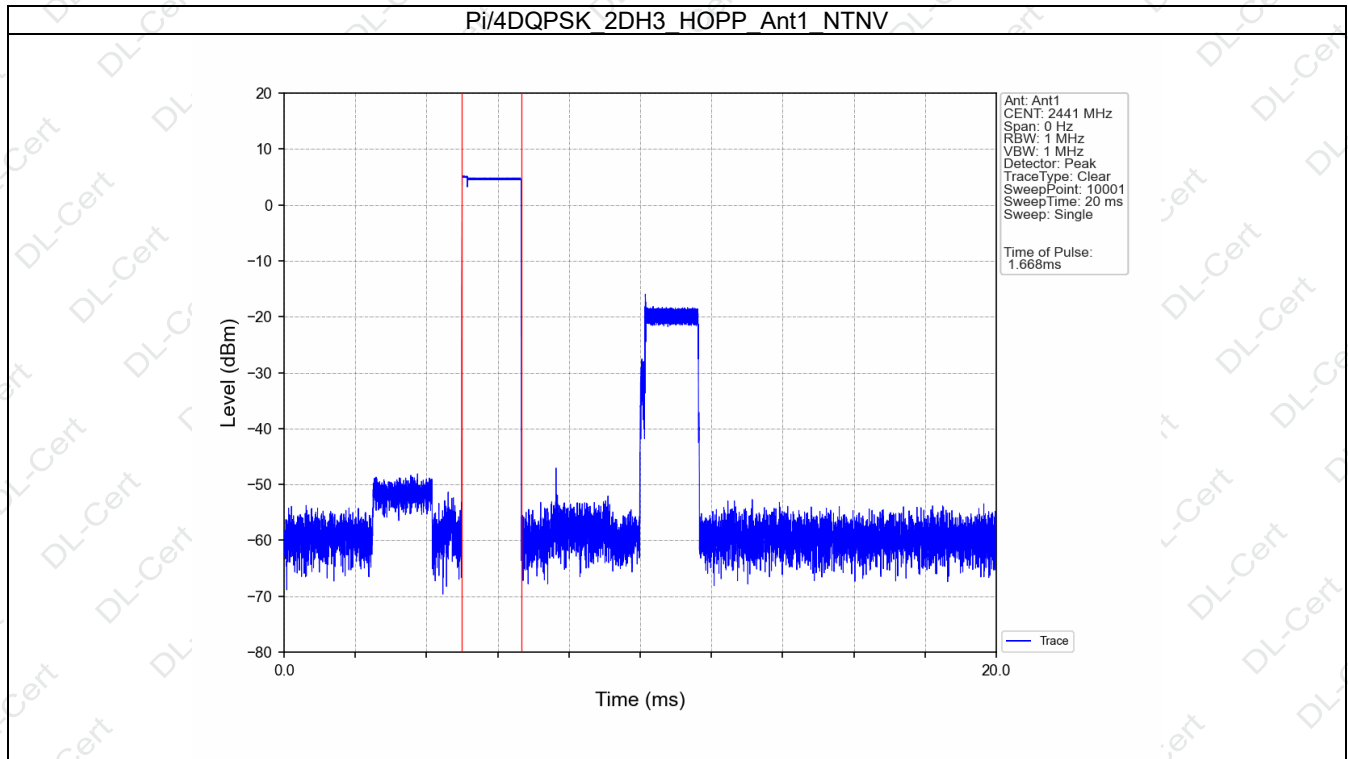


Pi/4DQPSK 2DH1 HOPP Ant1 NTNV

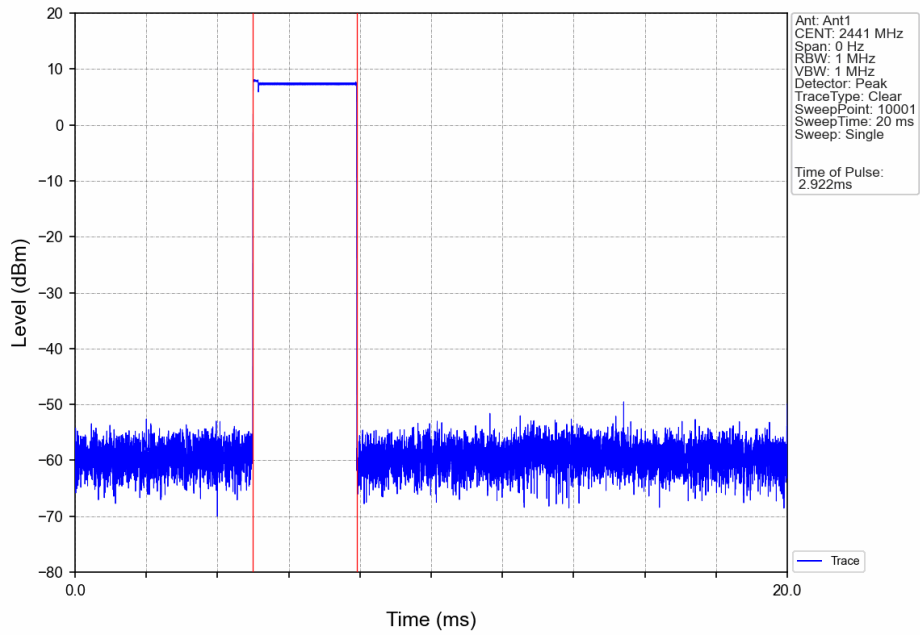


Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV

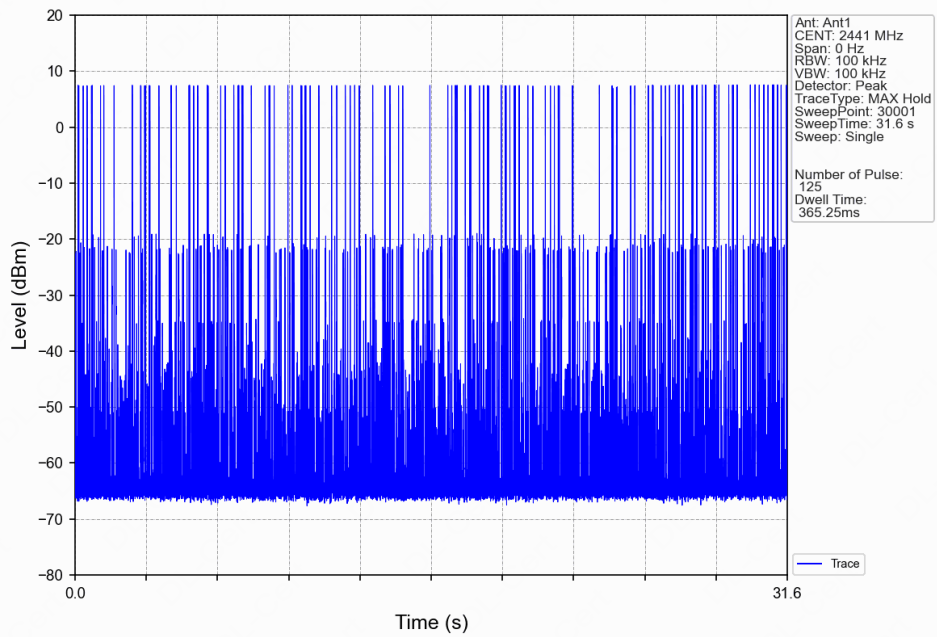


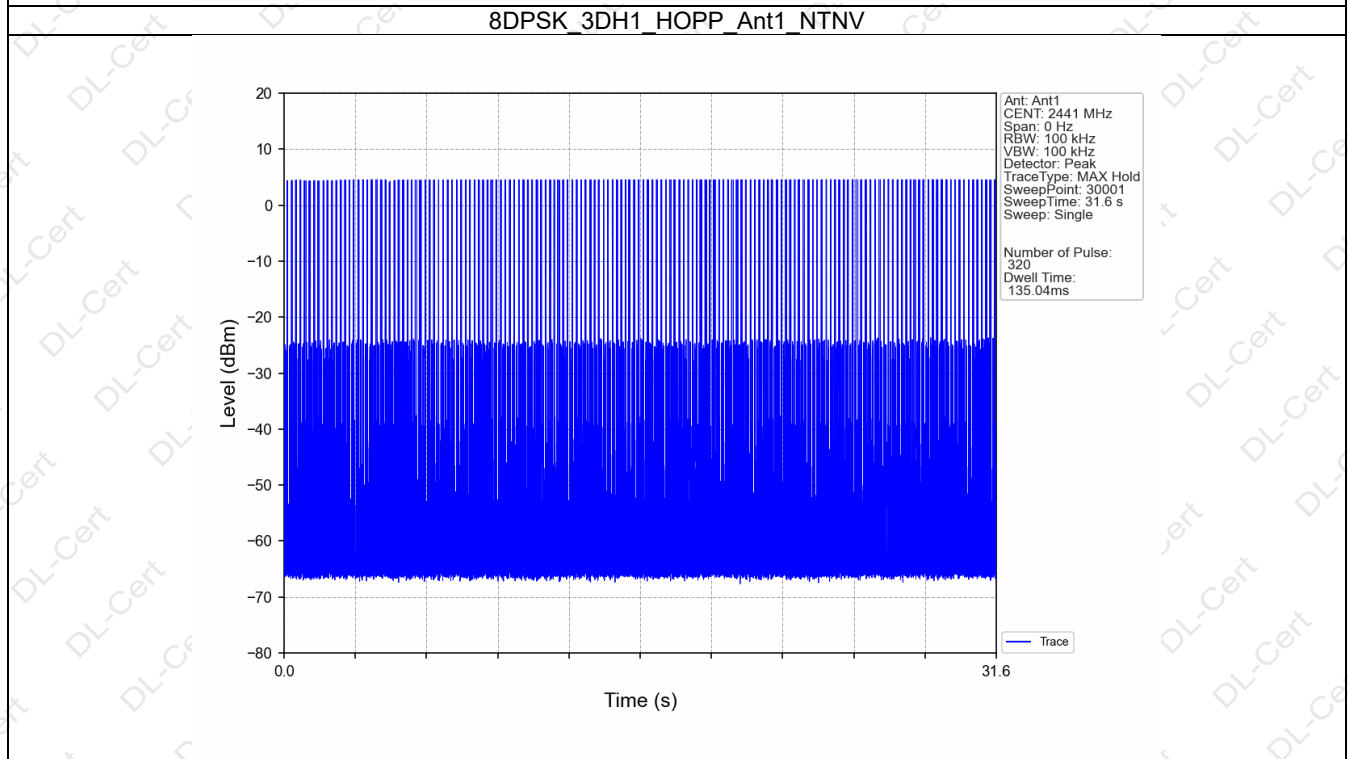
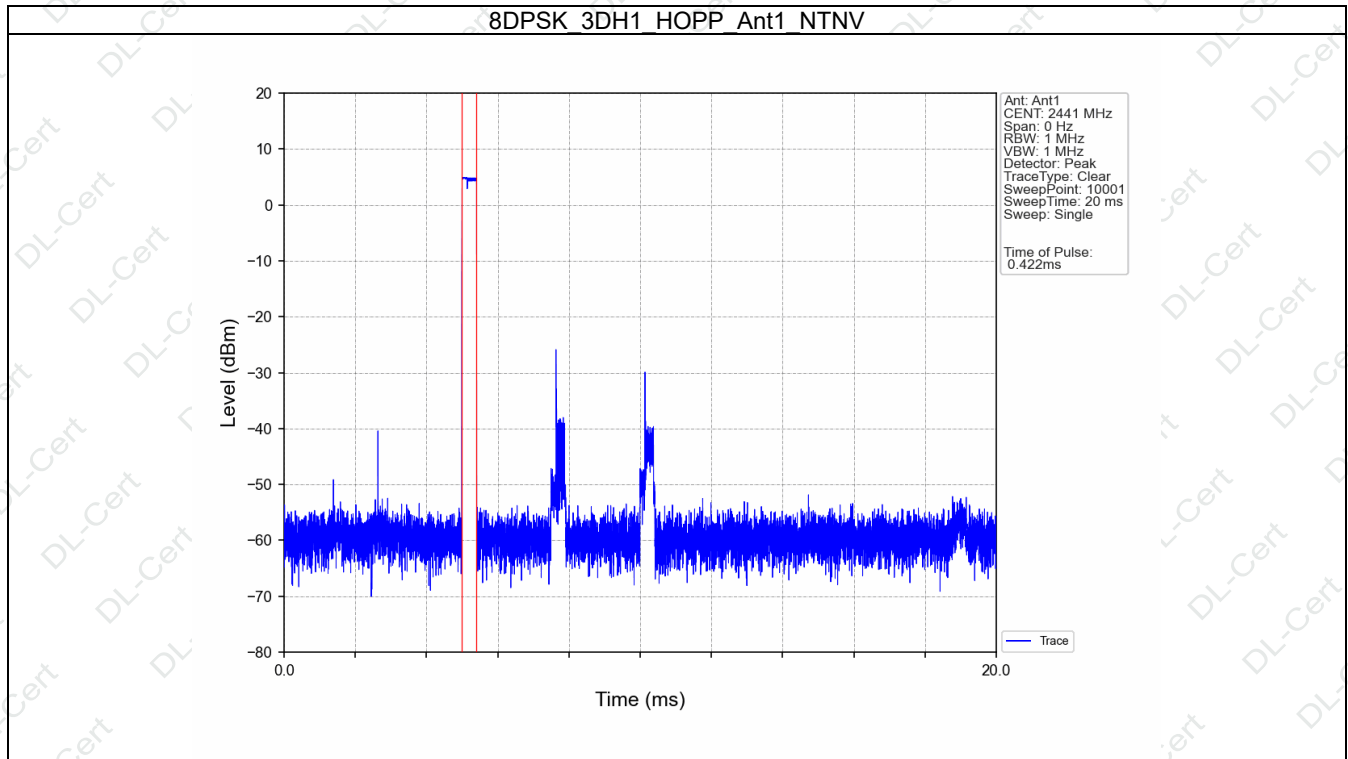


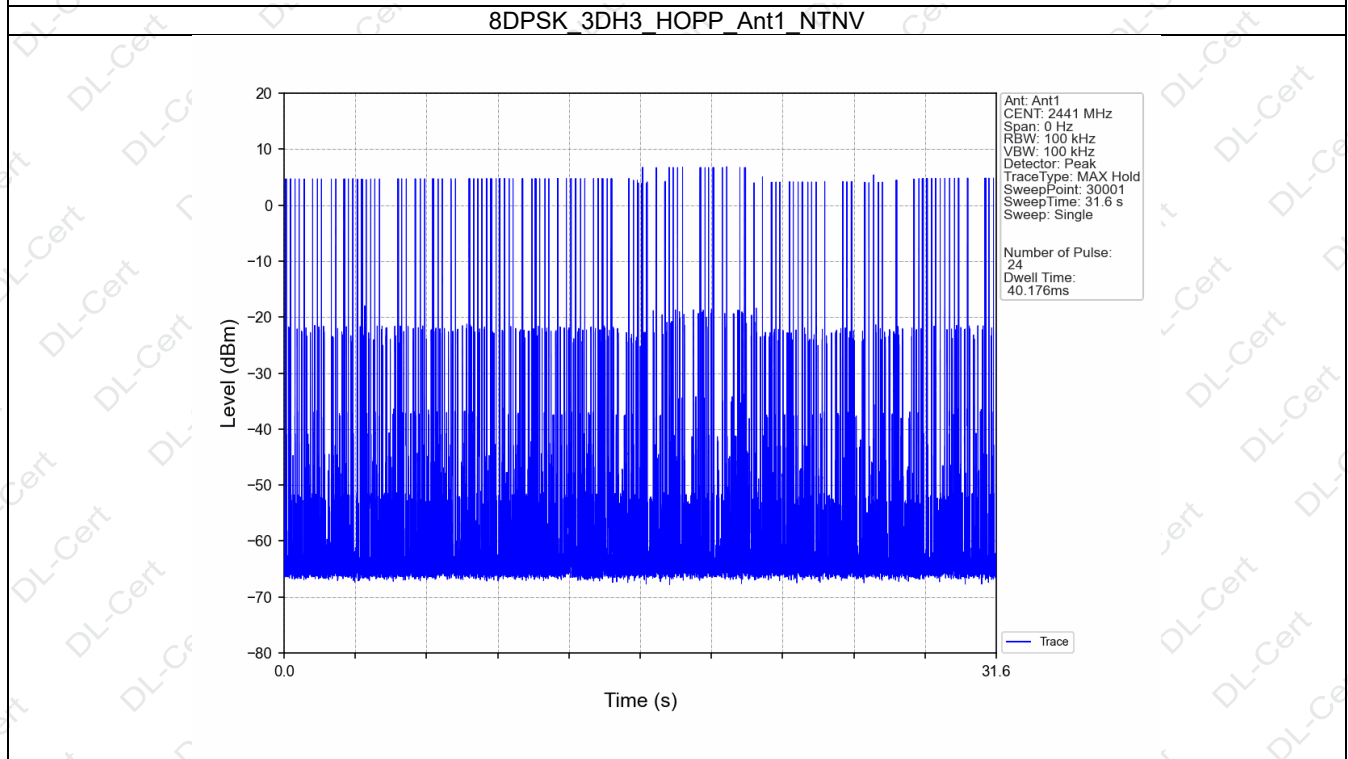
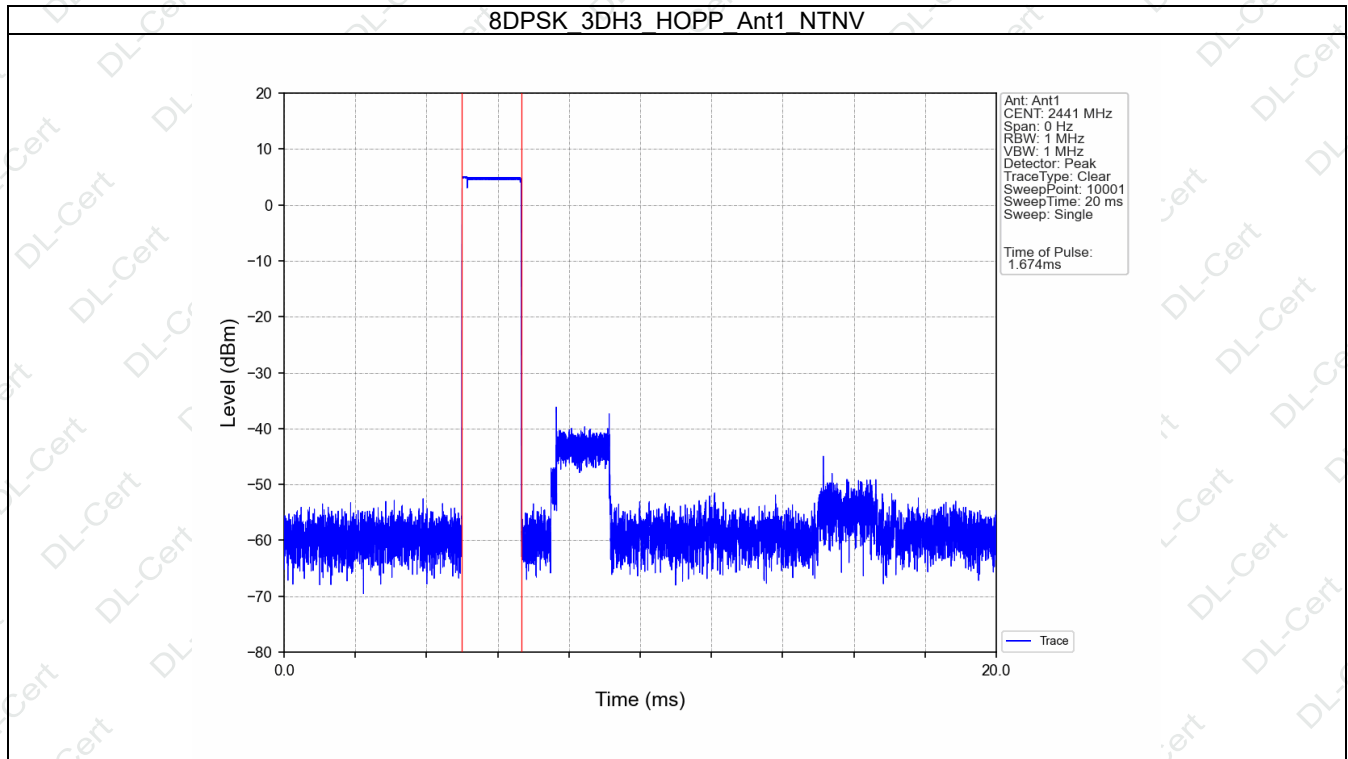
Pi/4DQPSK 2DH5 HOPP Ant1 NTNV

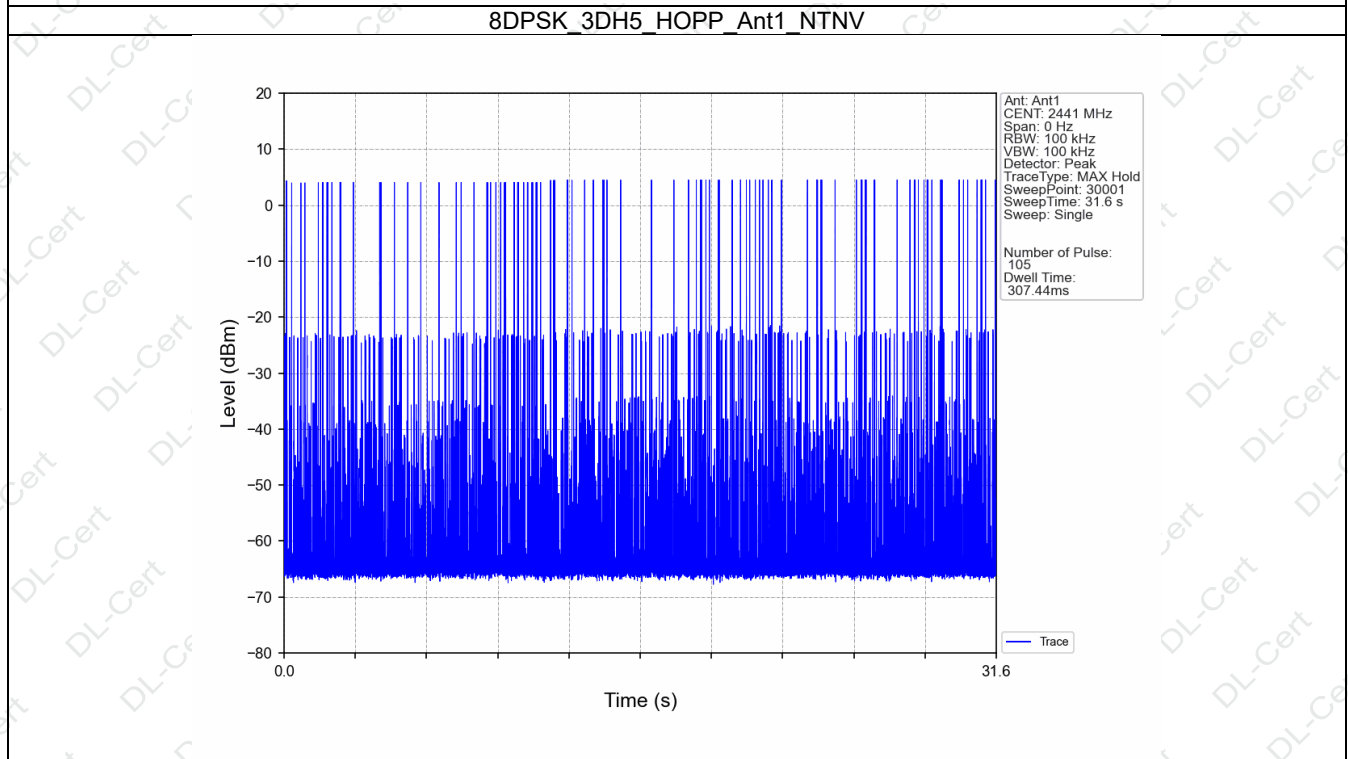
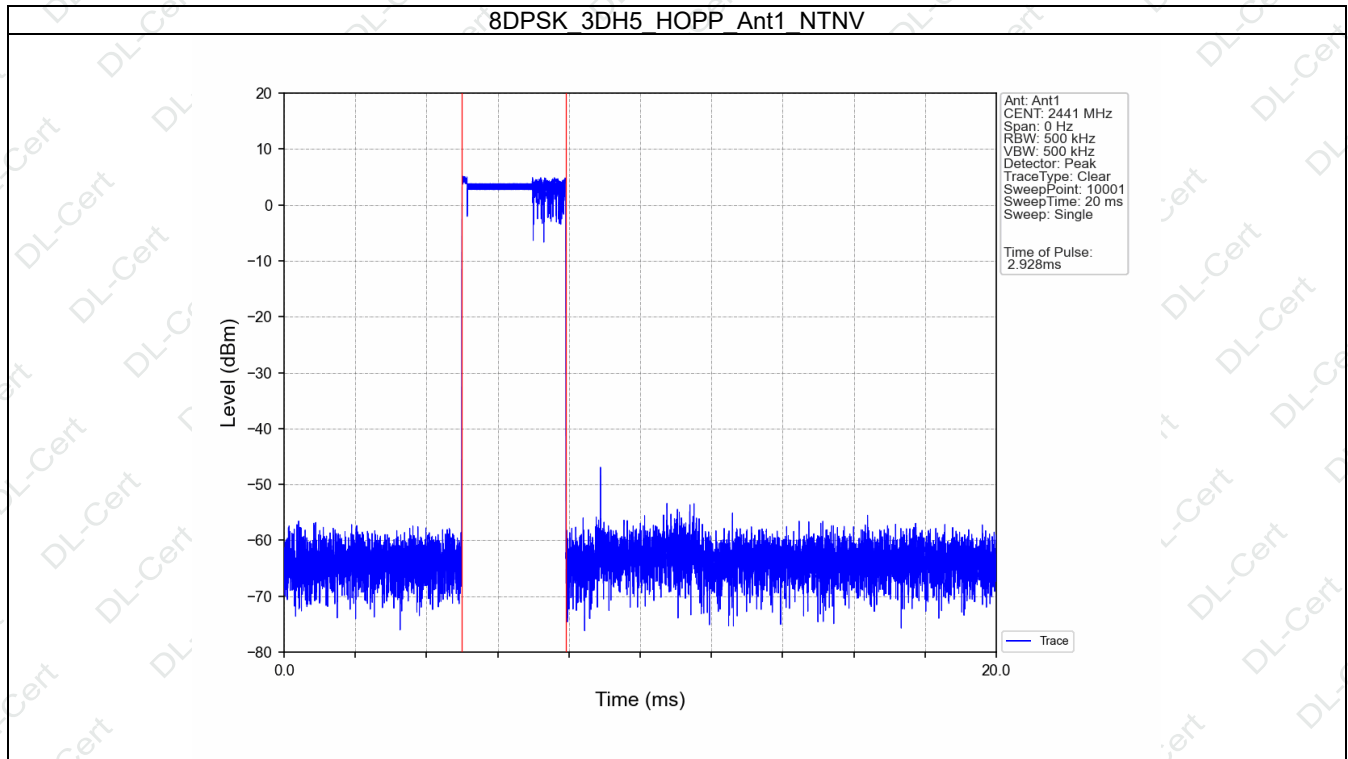


Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV









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	7.96
		2441	DH5	1	8.26
		2480	DH5	1	7.78
		HOPP	DH5	1	7.93
					7.93
Pi/4DQPSK	SISO	2402	2DH5	1	7.50
		2441	2DH5	1	6.24
		2480	2DH5	1	6.19
		HOPP	2DH5	1	8.90
					8.90
8DPSK	SISO	2402	3DH5	1	8.94
		2441	3DH5	1	7.88
		2480	3DH5	1	7.13
		HOPP	3DH5	1	5.58
					5.58

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.

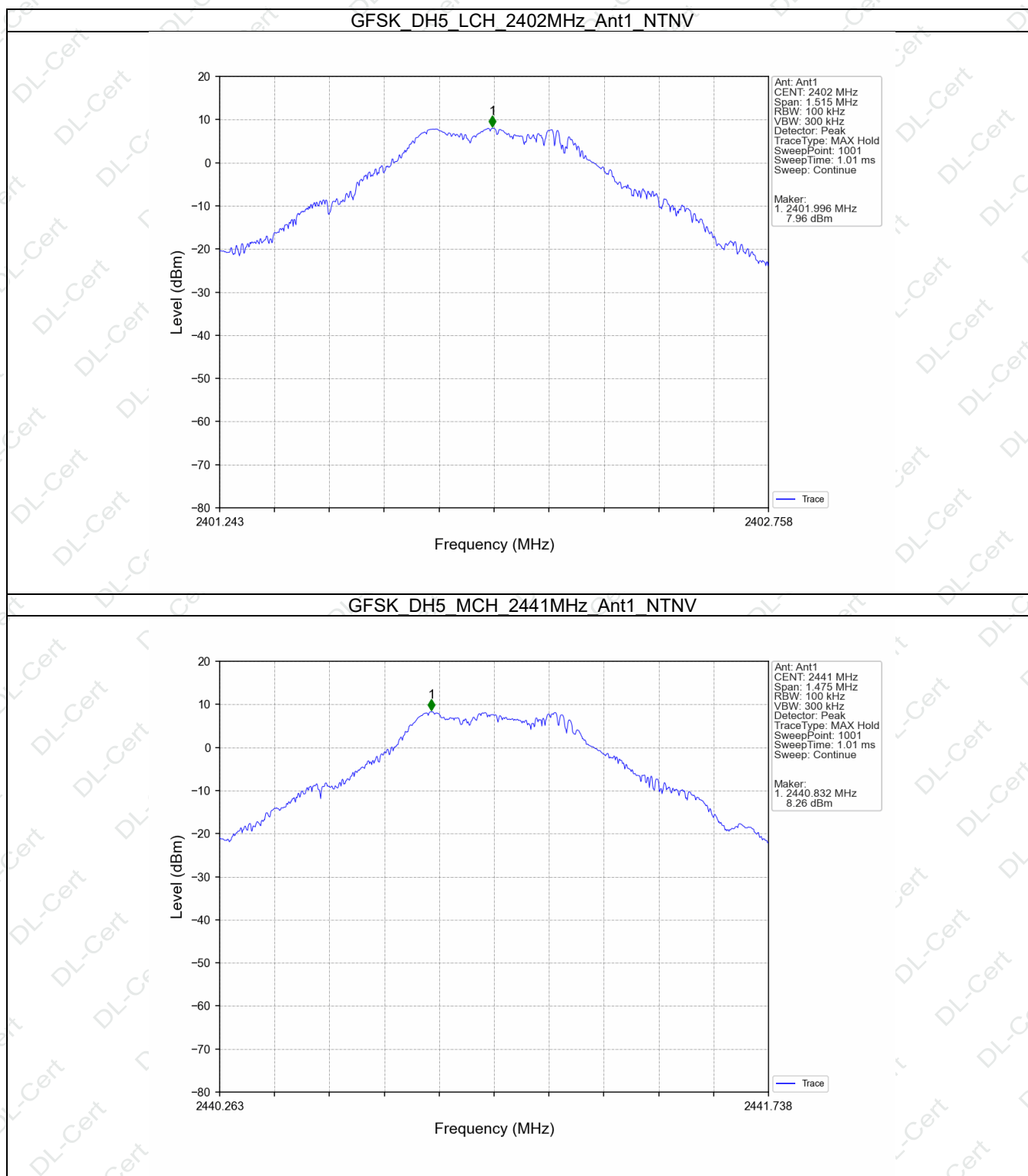
6.1.2 CSE

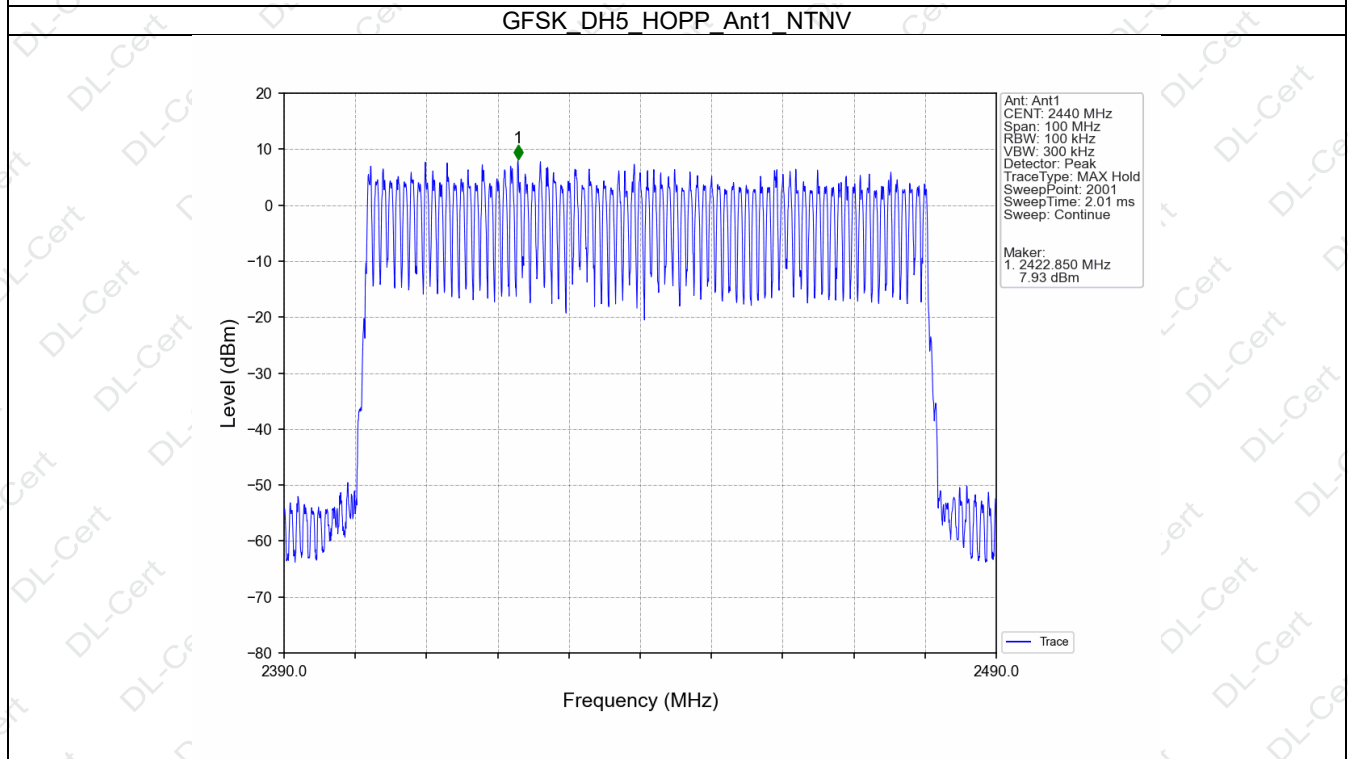
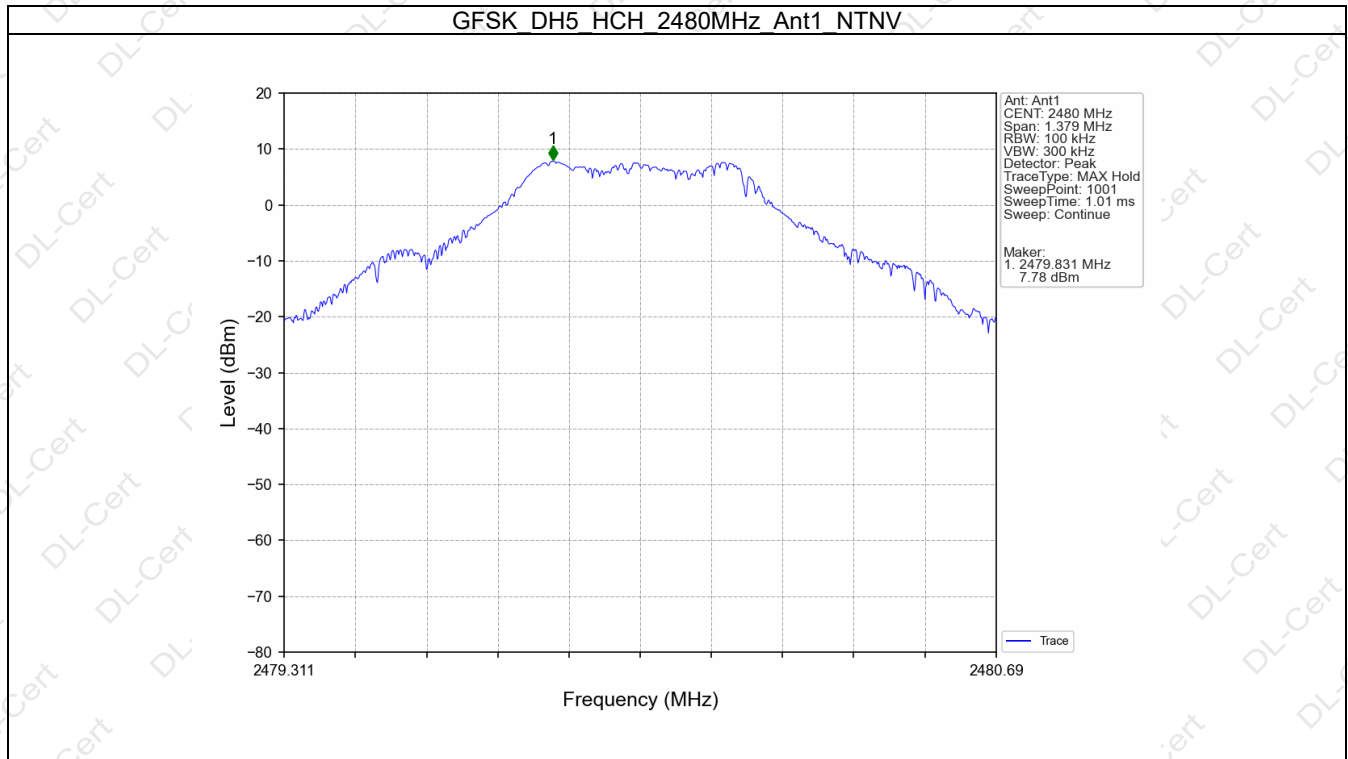
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	7.96	-12.04	Pass
		2441	DH5	1	8.26	-11.74	Pass
		2480	DH5	1	7.78	-12.22	Pass
		HOPP	DH5	1	7.93	-12.07	Pass
					7.93	-12.07	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	7.50	-12.50	Pass
		2441	2DH5	1	6.24	-13.76	Pass
		2480	2DH5	1	6.19	-13.81	Pass
		HOPP	2DH5	1	8.90	-11.10	Pass
					8.90	-11.10	Pass
8DPSK	SISO	2402	3DH5	1	8.94	-11.06	Pass
		2441	3DH5	1	7.88	-12.12	Pass
		2480	3DH5	1	7.13	-12.87	Pass
		HOPP	3DH5	1	5.58	-14.42	Pass
					5.58	-14.42	Pass

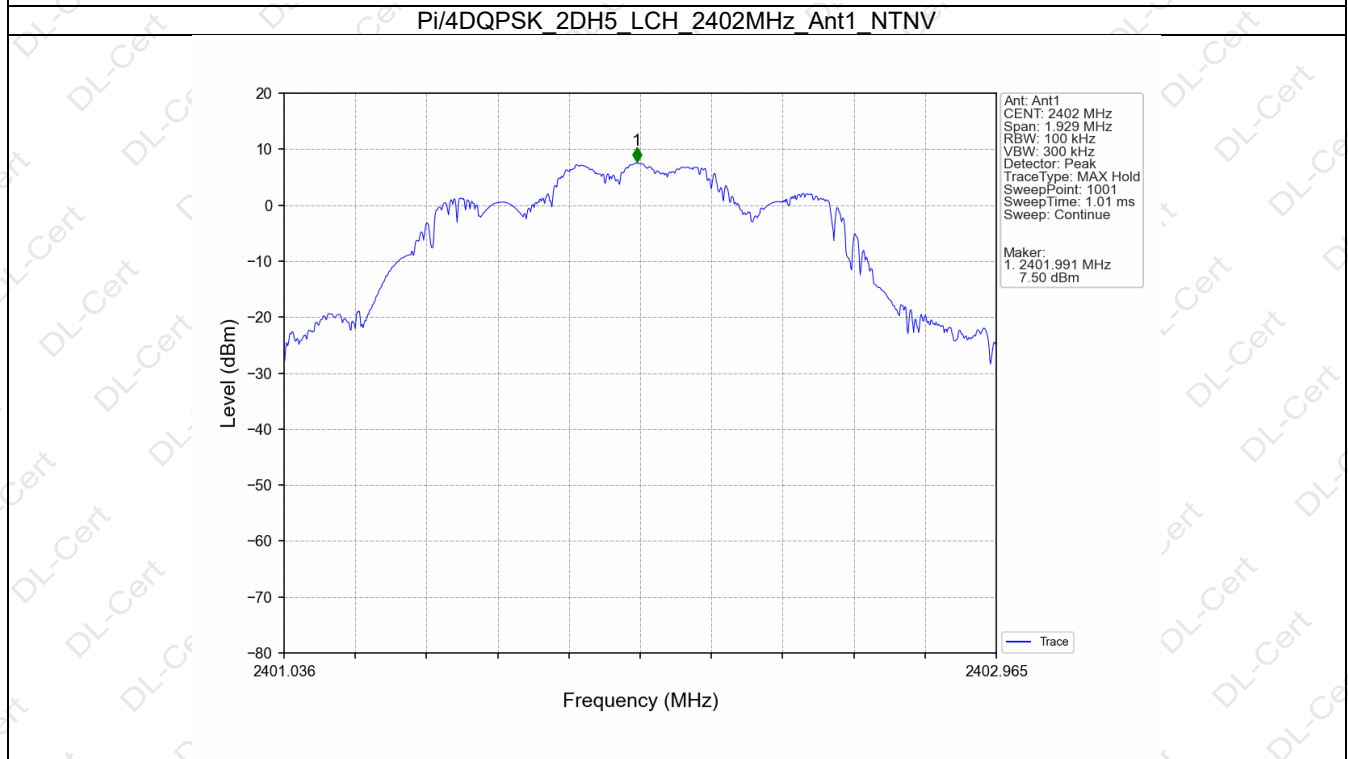
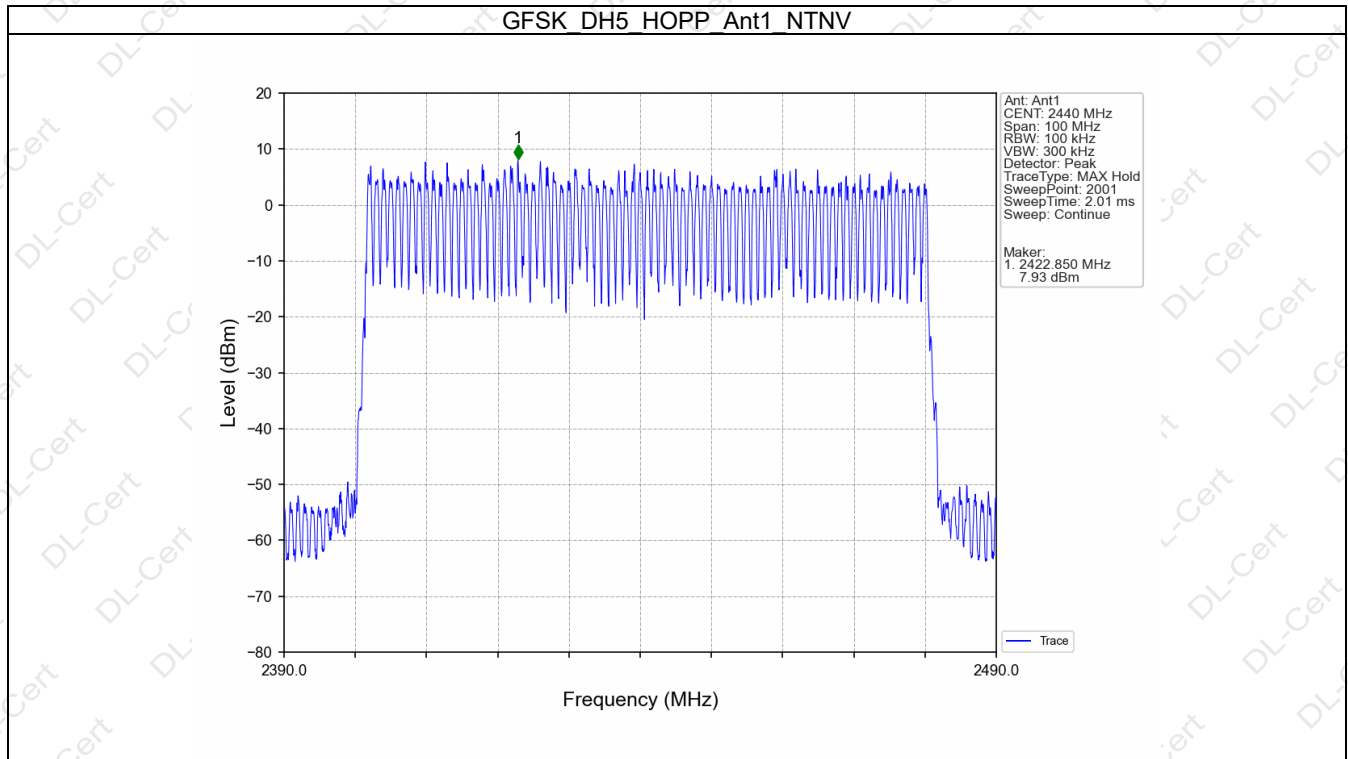
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

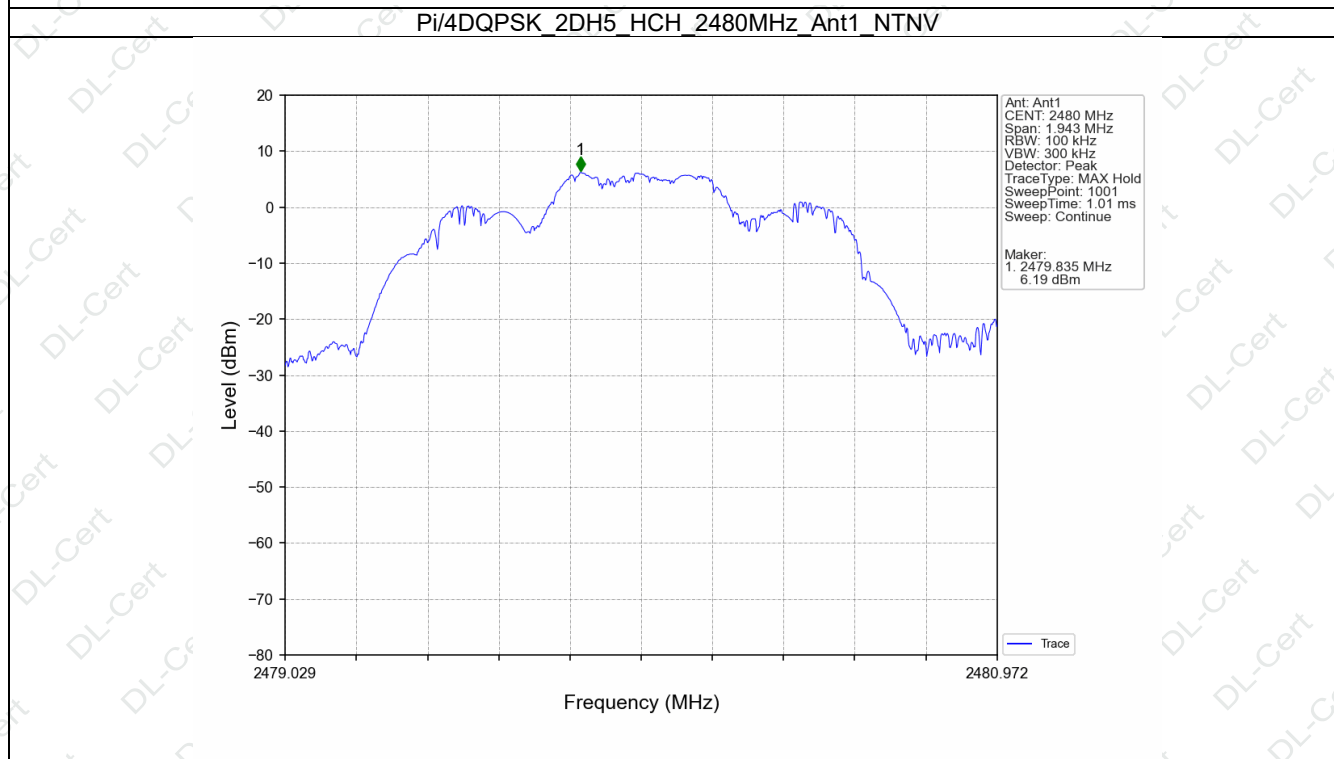
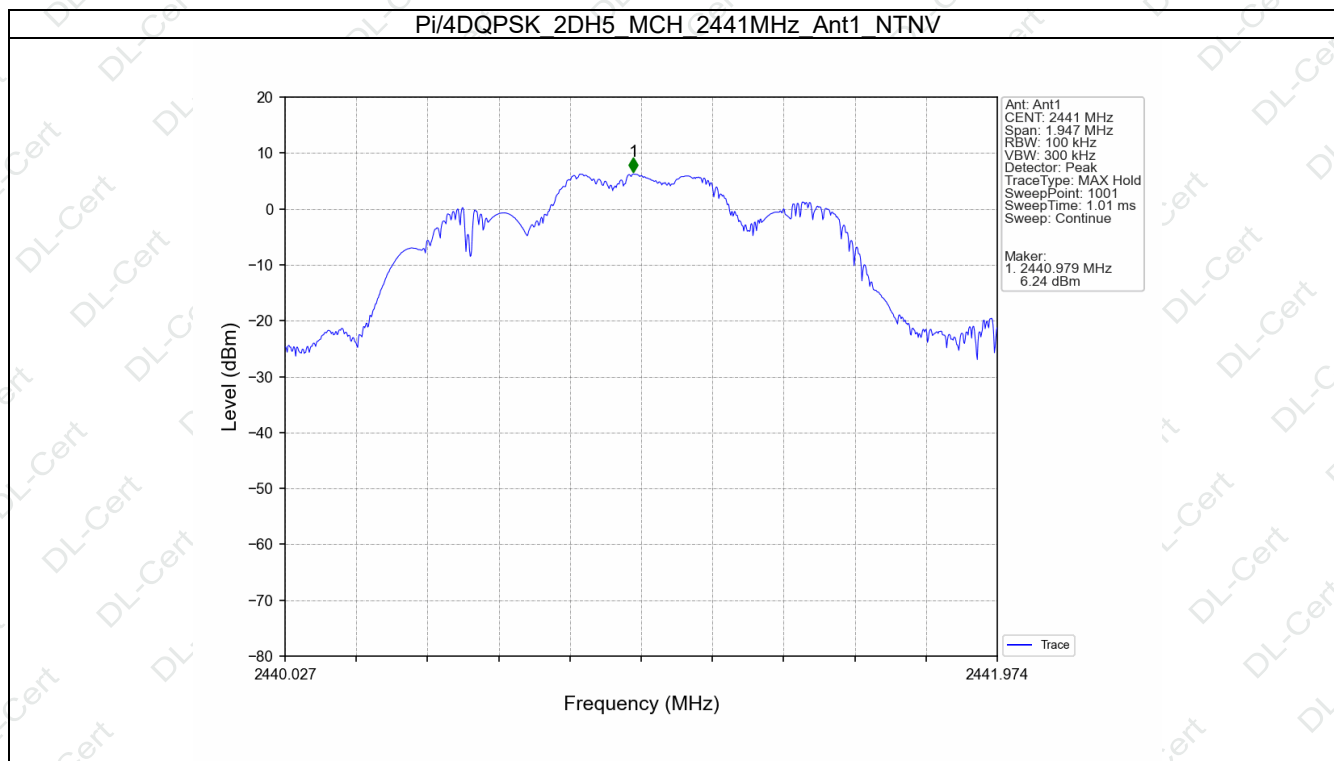
6.2 Test Graph

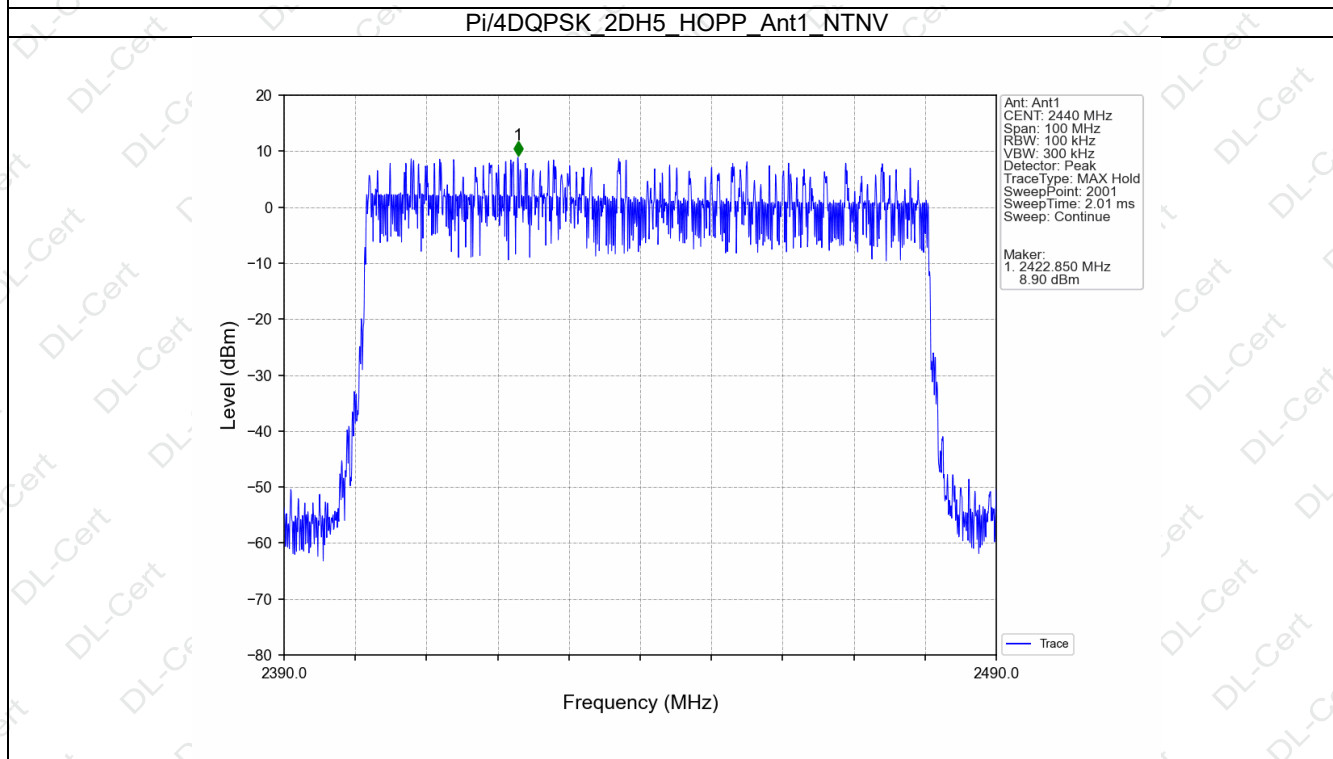
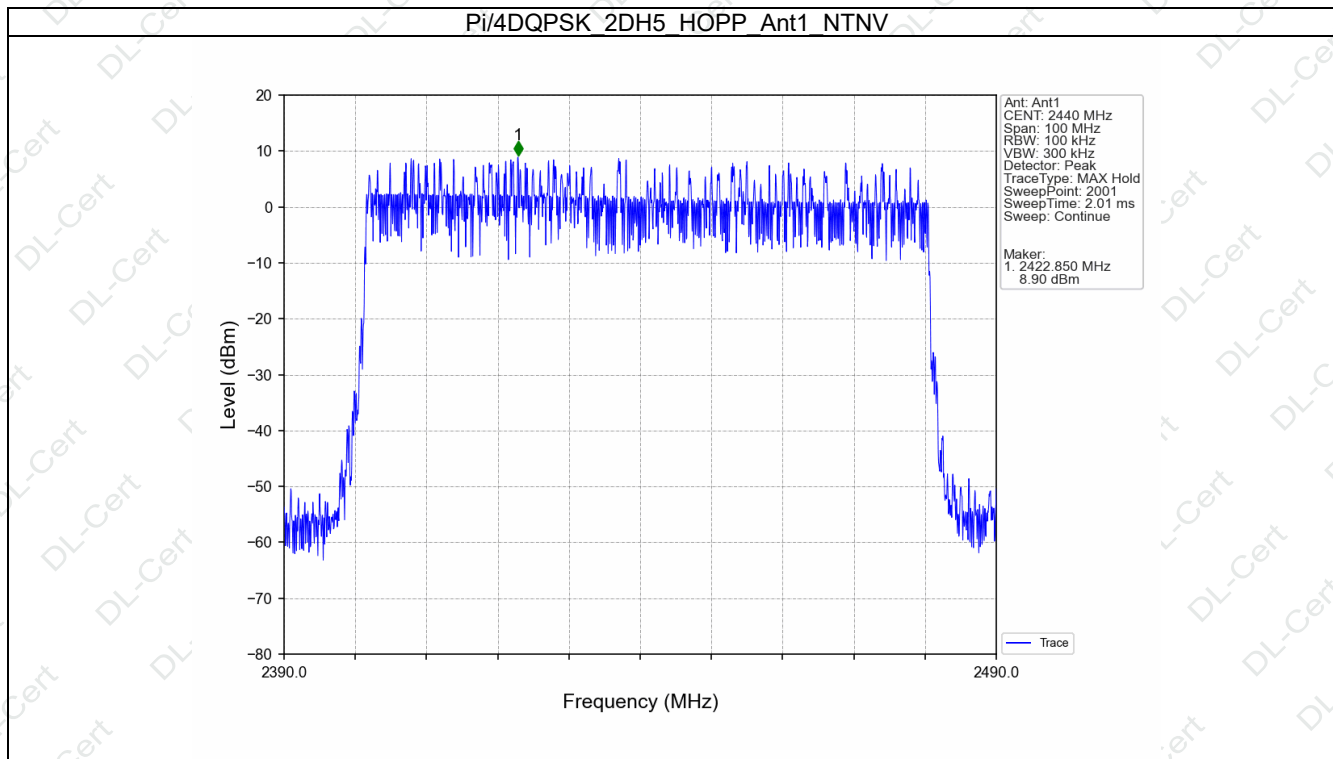
6.2.1 Ref



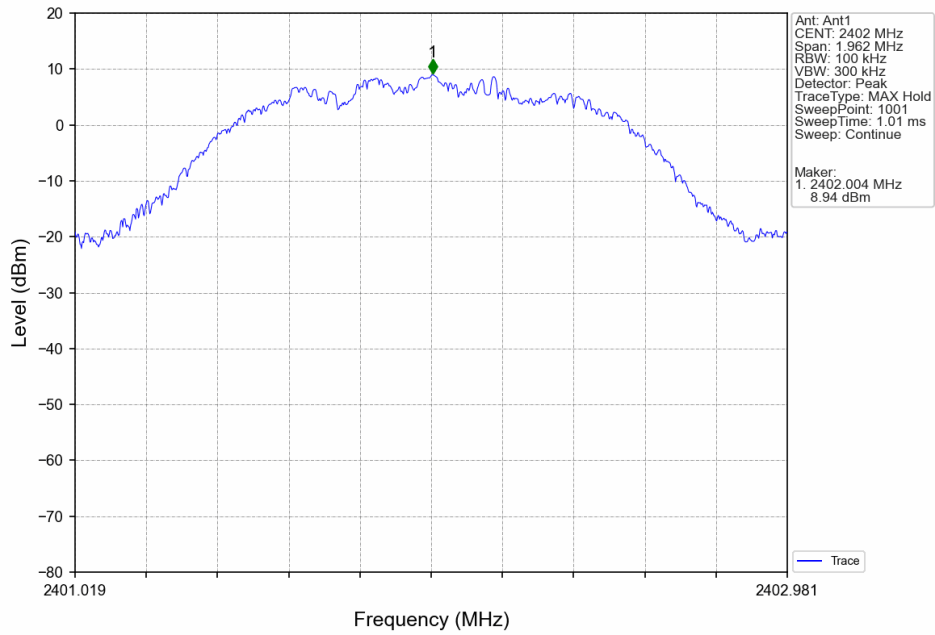




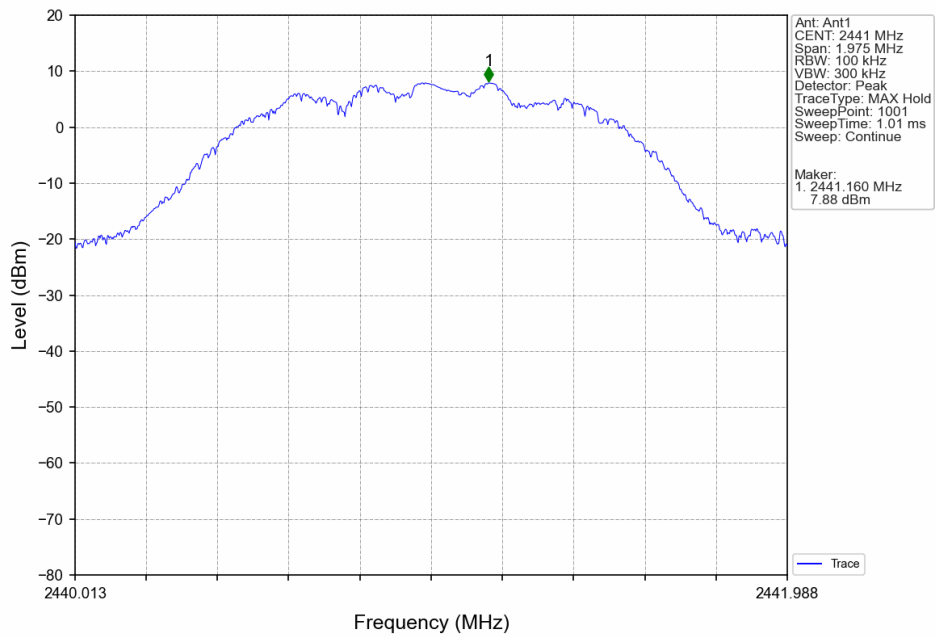


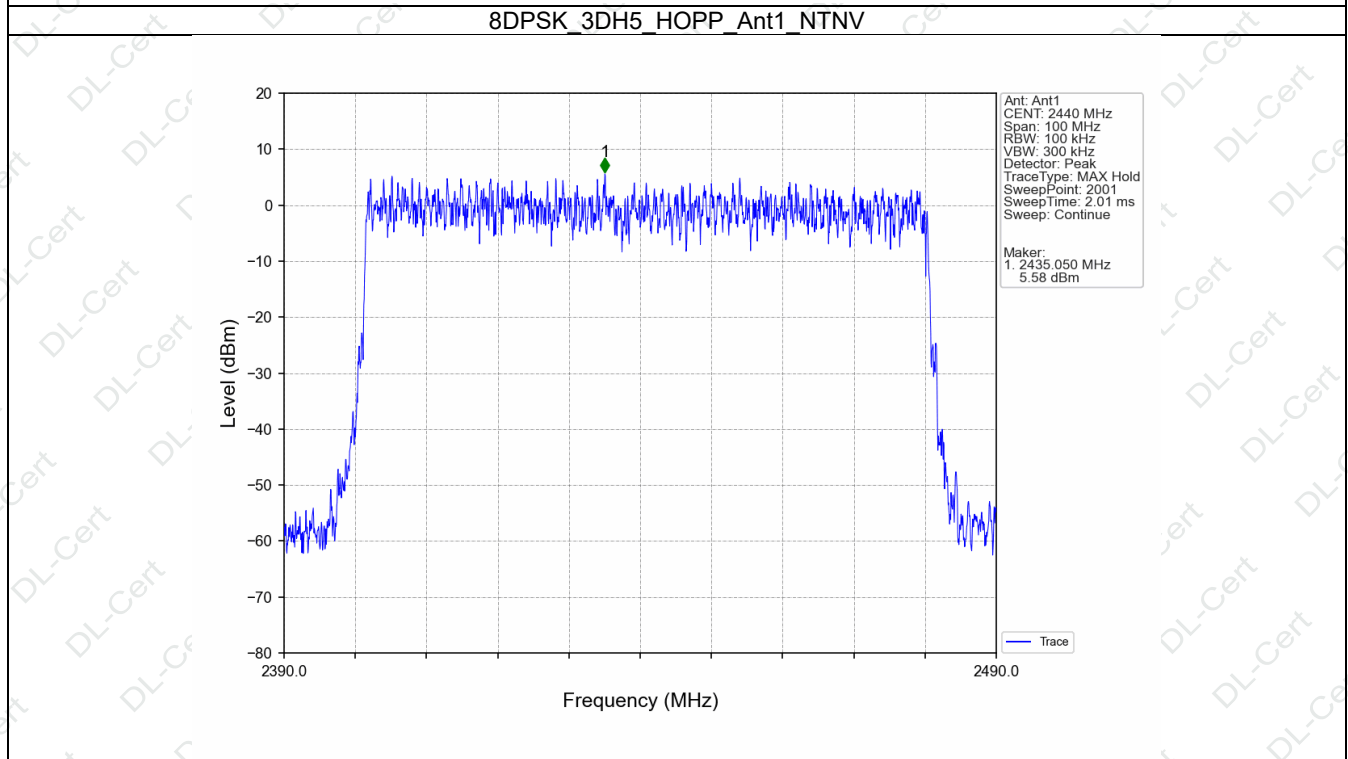
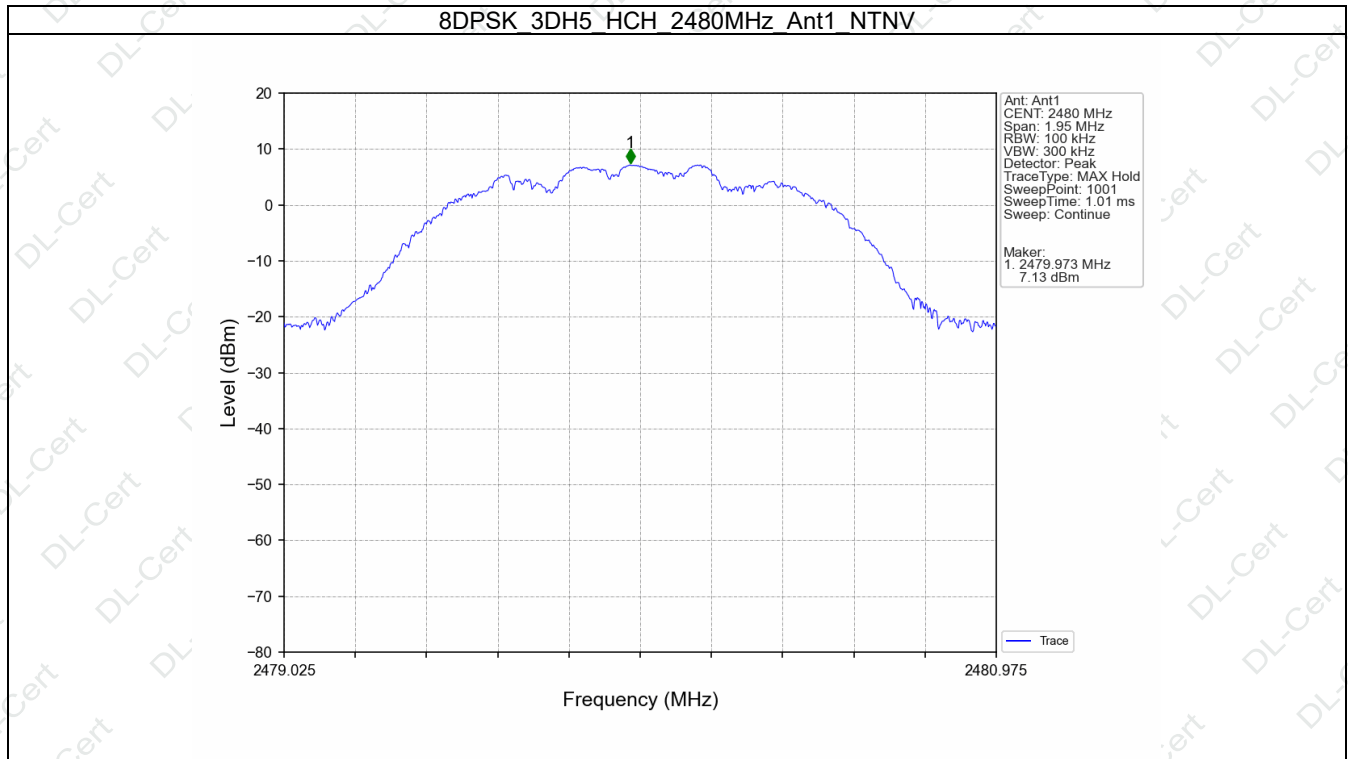


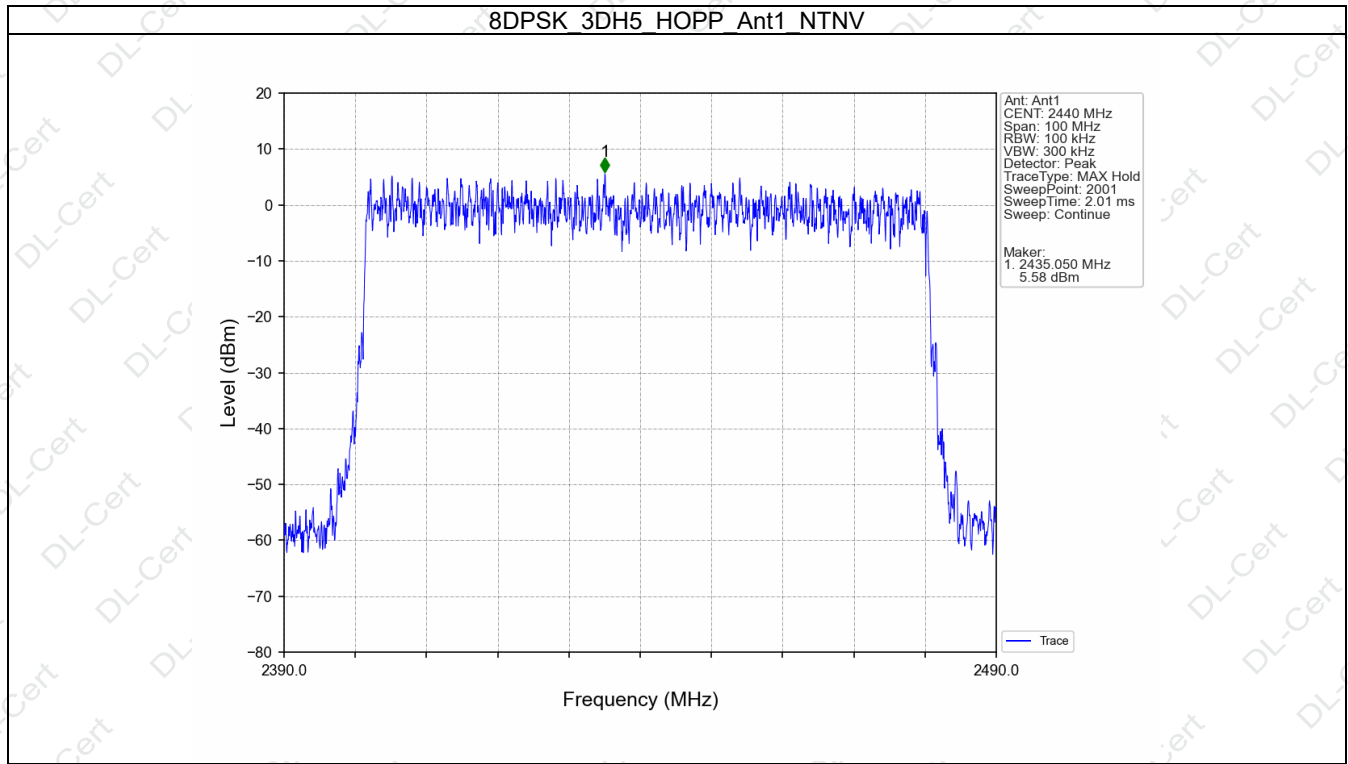
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



8DPSK 3DH5 MCH 2441MHz Ant1 NTN







6.2.2 CSE

