



Shenzhen CTL Testing Technology Co., Ltd.

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

Appendix for 15.247

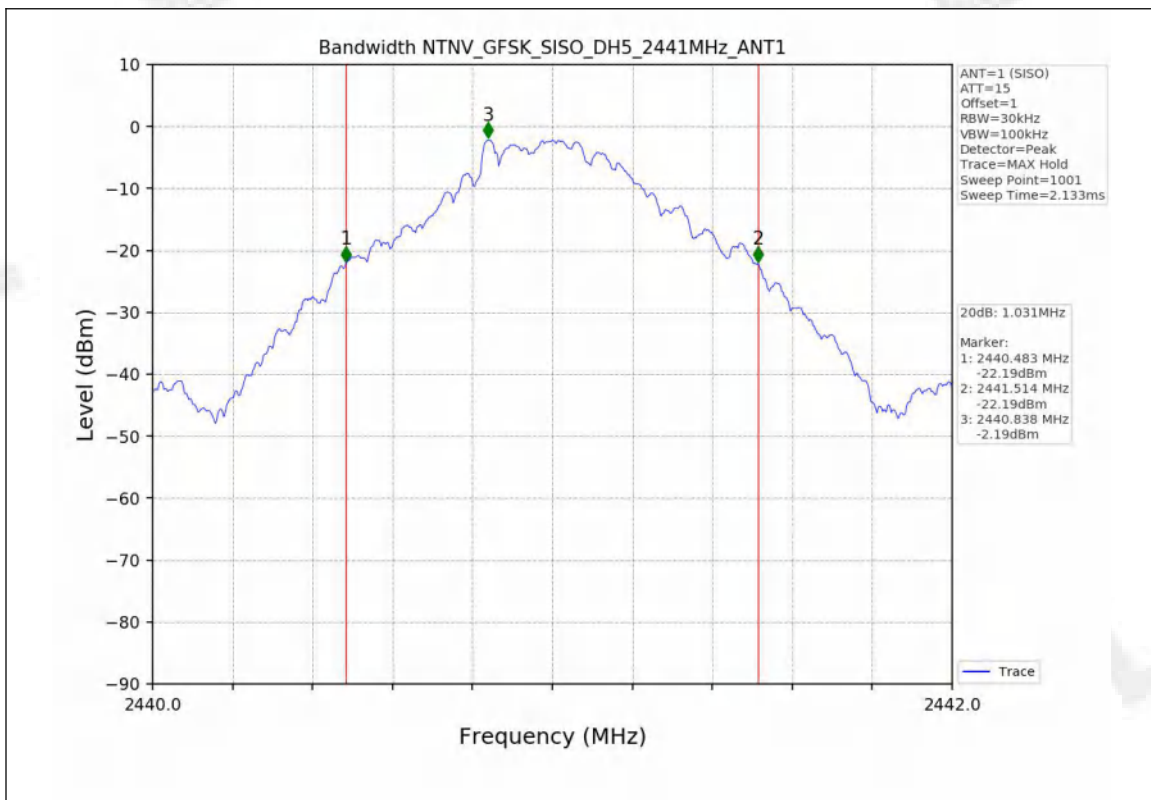
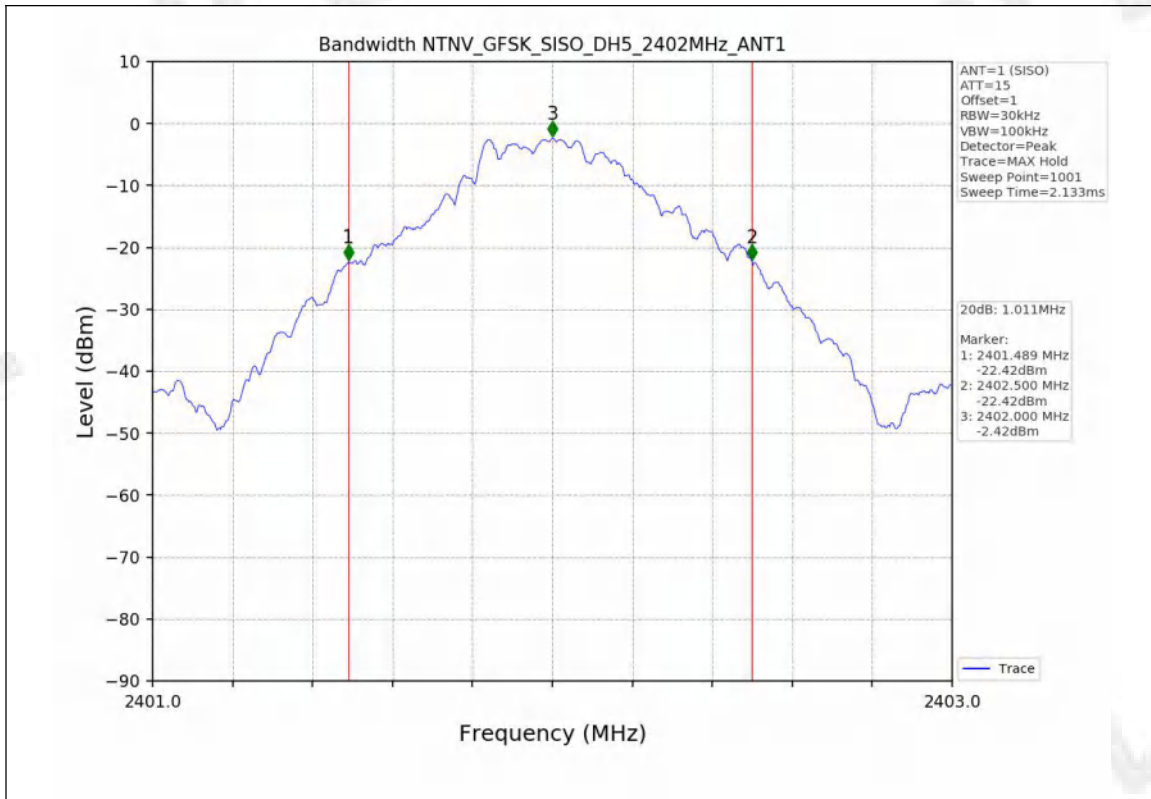
1. Bandwidth

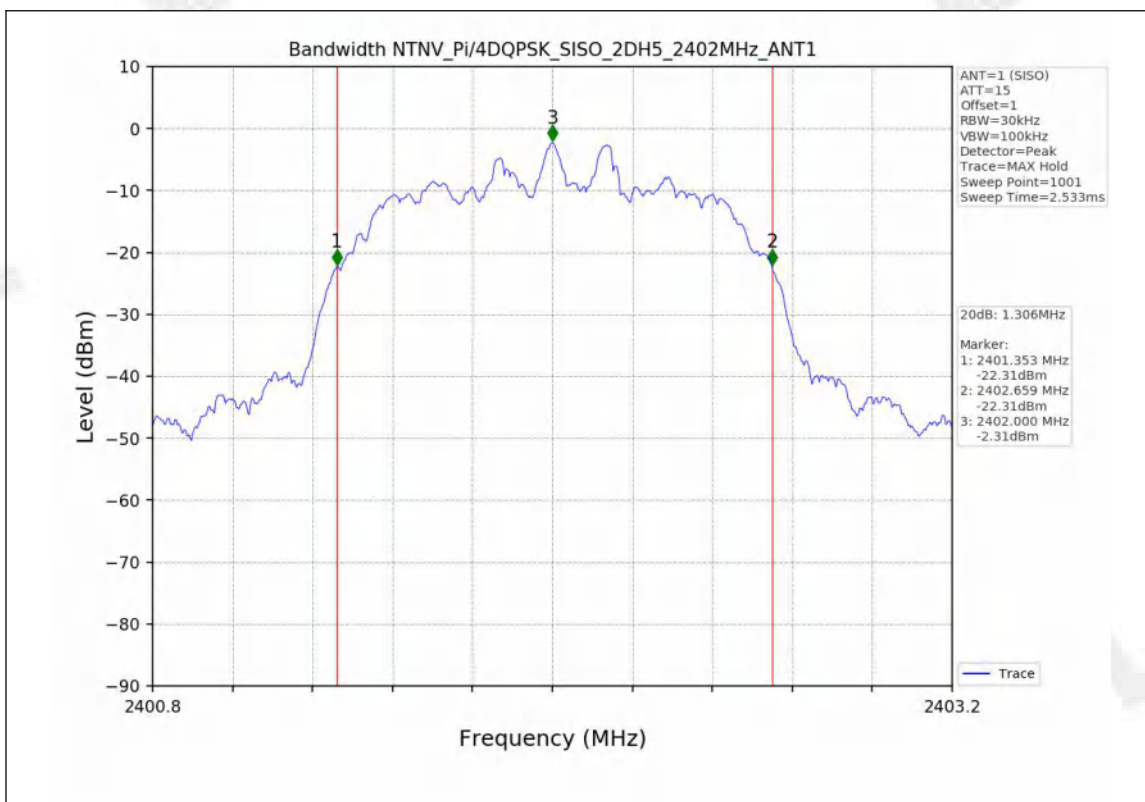
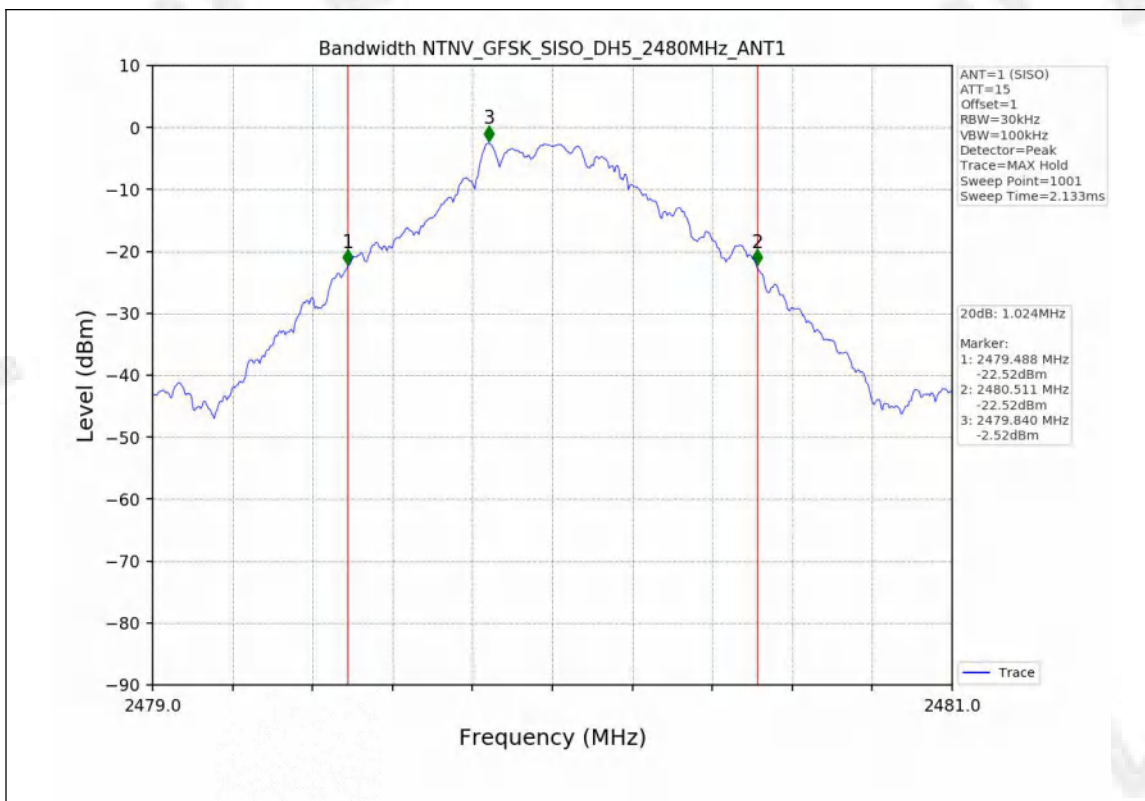
1.1 Test Result

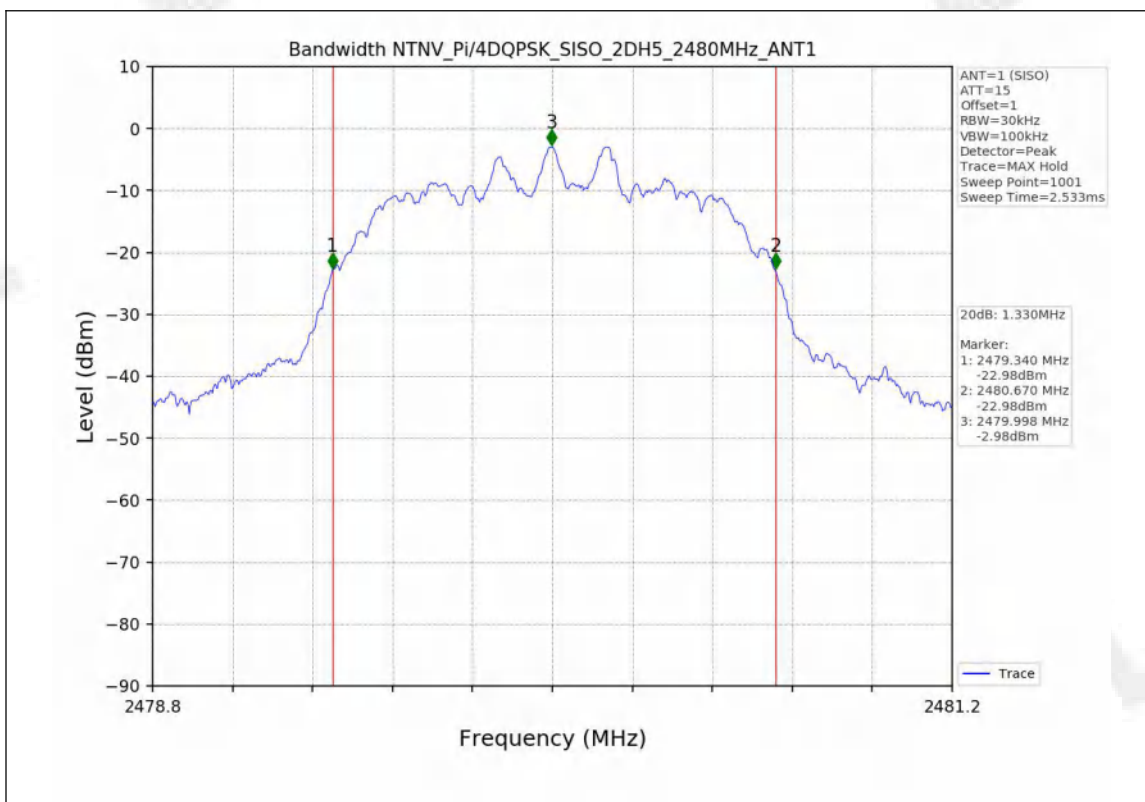
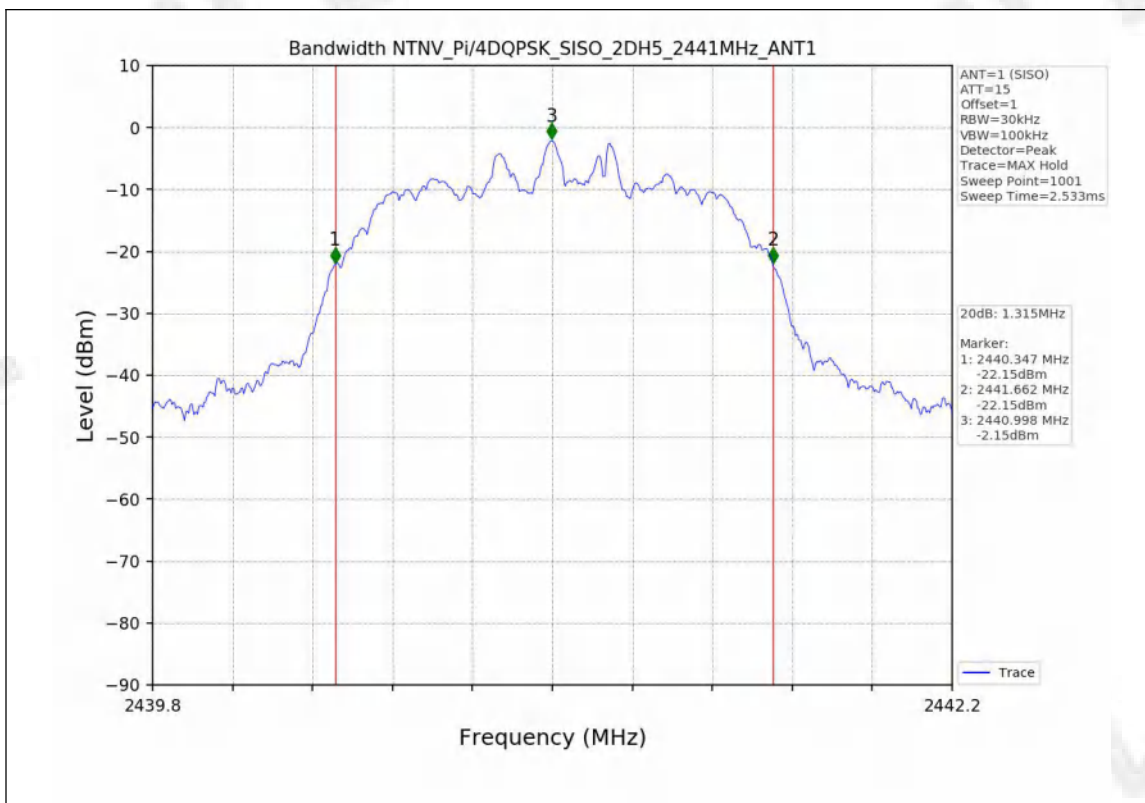
Test Mode	Frequency (MHz)	TX Type	ANT No.	20dB Bandwidth	Verdict
				Test Result (MHz)	
GFSK	2402	SISO	1	1.011	PASS
	2441	SISO	1	1.031	PASS
	2480	SISO	1	1.024	PASS
Pi/4DQPSK	2402	SISO	1	1.306	PASS
	2441	SISO	1	1.315	PASS
	2480	SISO	1	1.330	PASS
8DPSK	2402	SISO	1	1.299	PASS
	2441	SISO	1	1.303	PASS
	2480	SISO	1	1.301	PASS

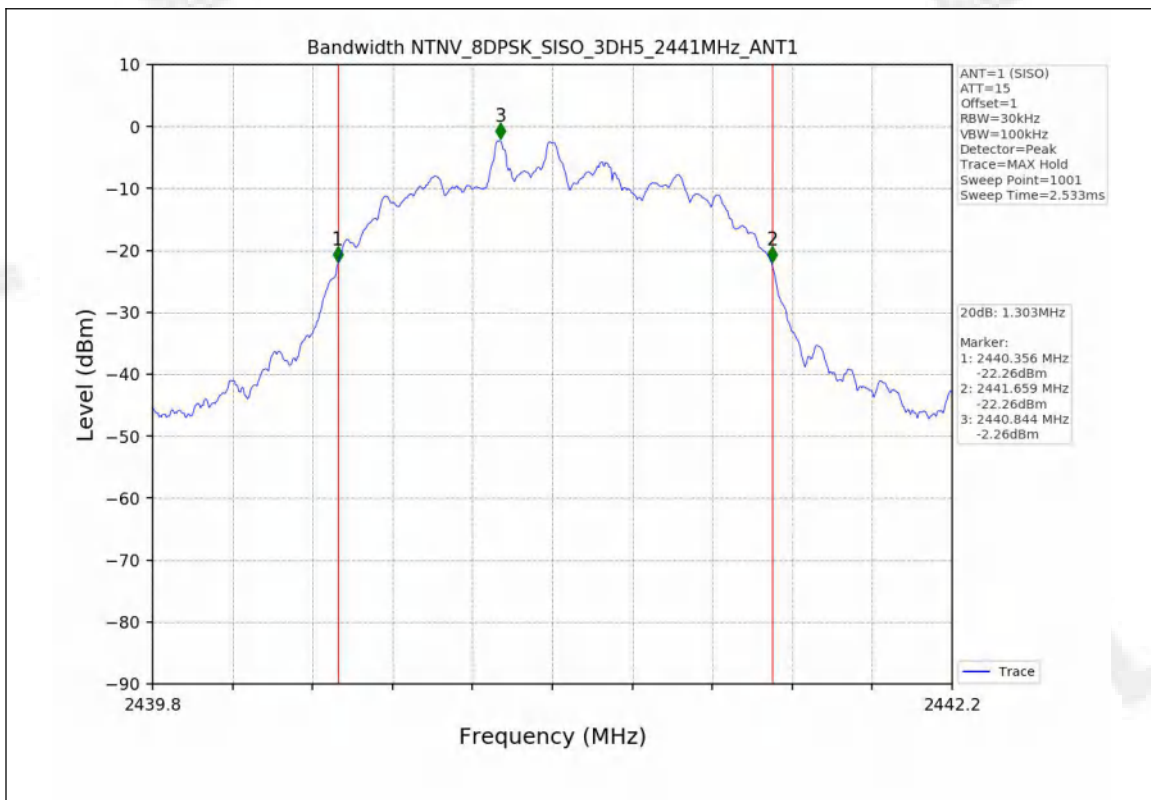
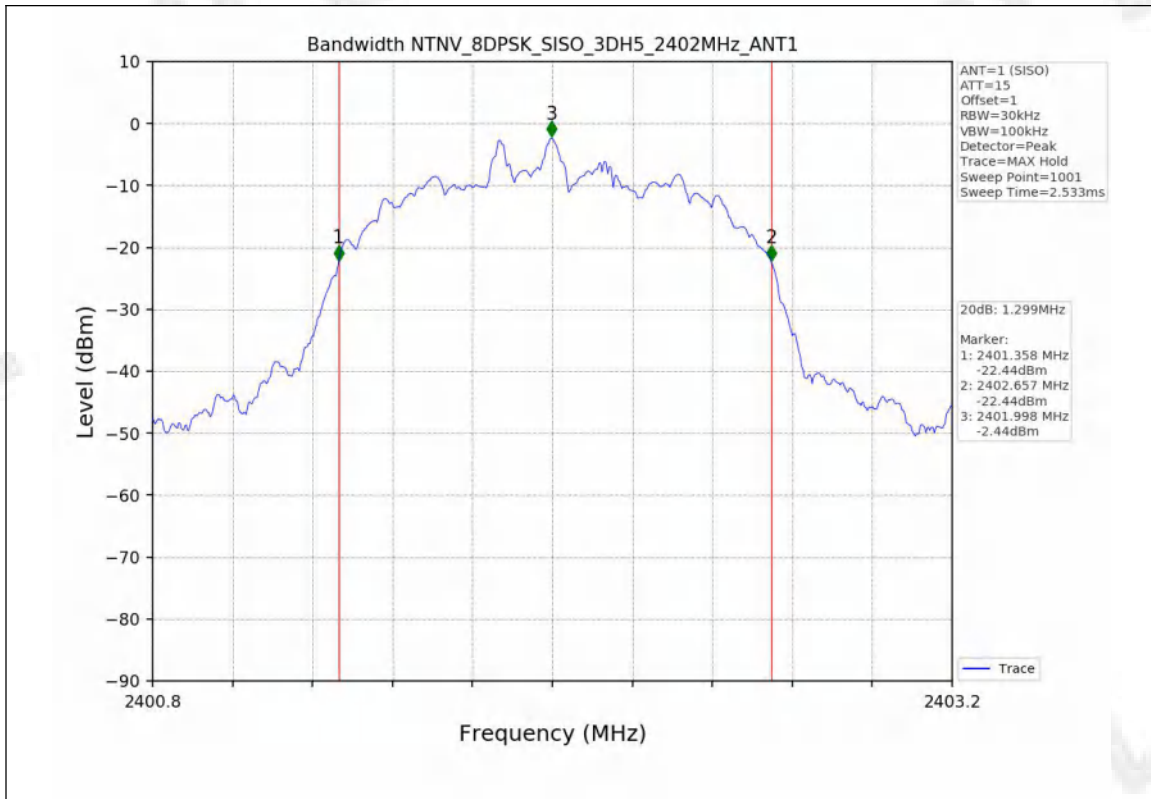
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
GFSK	2402	SISO	1	0.883	Only for Report Use
	2441	SISO	1	0.899	Only for Report Use
	2480	SISO	1	0.918	Only for Report Use
Pi/4DQPSK	2402	SISO	1	1.182	Only for Report Use
	2441	SISO	1	1.190	Only for Report Use
	2480	SISO	1	1.201	Only for Report Use
8DPSK	2402	SISO	1	1.191	Only for Report Use
	2441	SISO	1	1.197	Only for Report Use
	2480	SISO	1	1.199	Only for Report Use

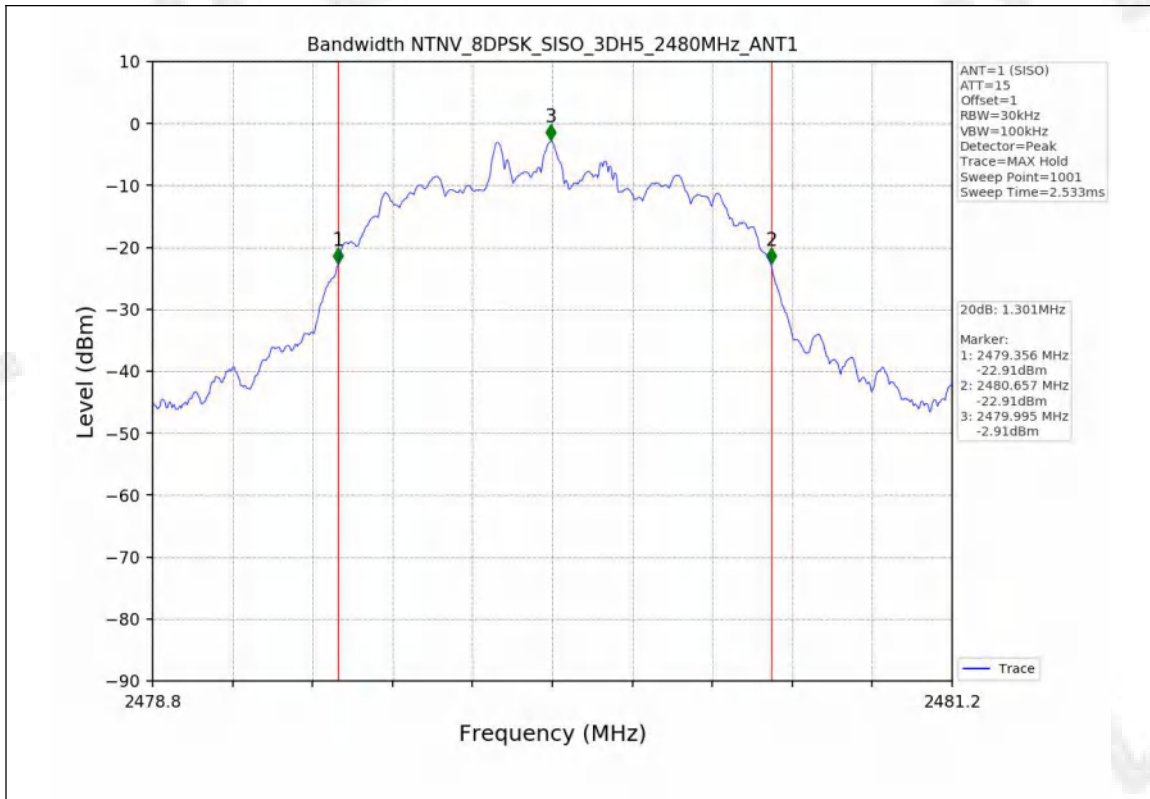
1.2 Test Graph - 20dB Bandwidth



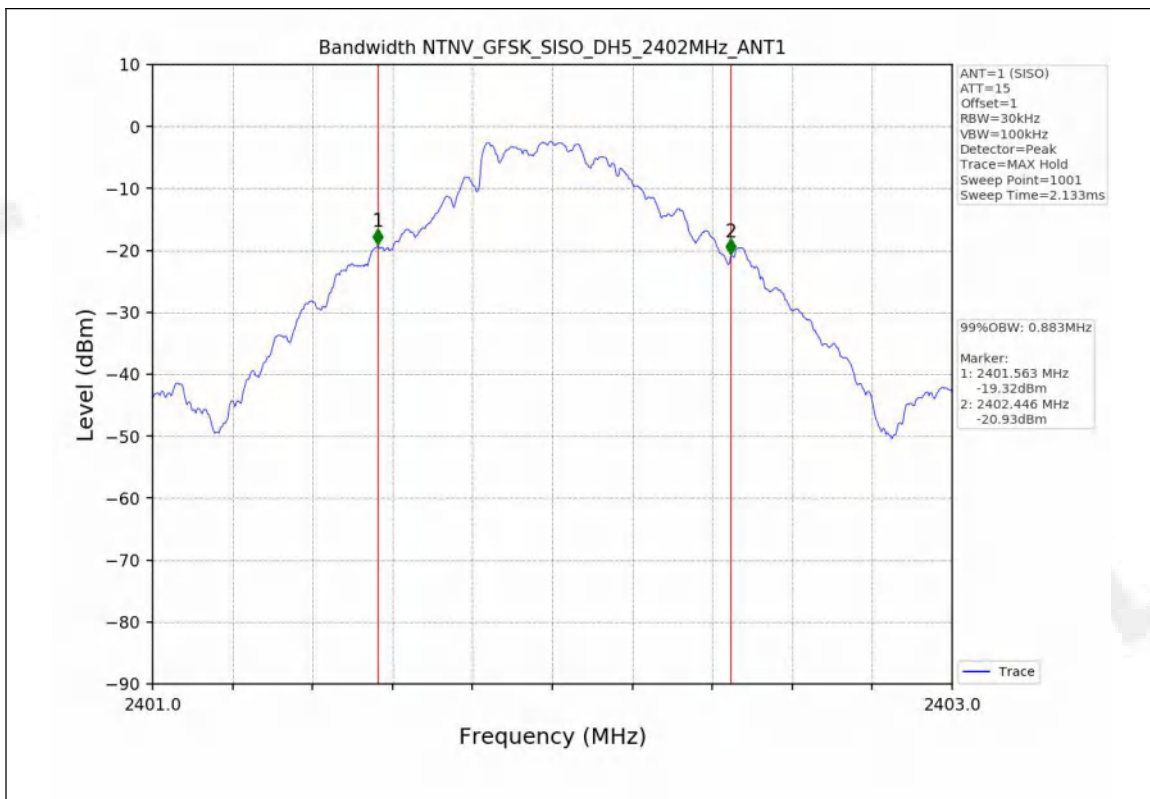


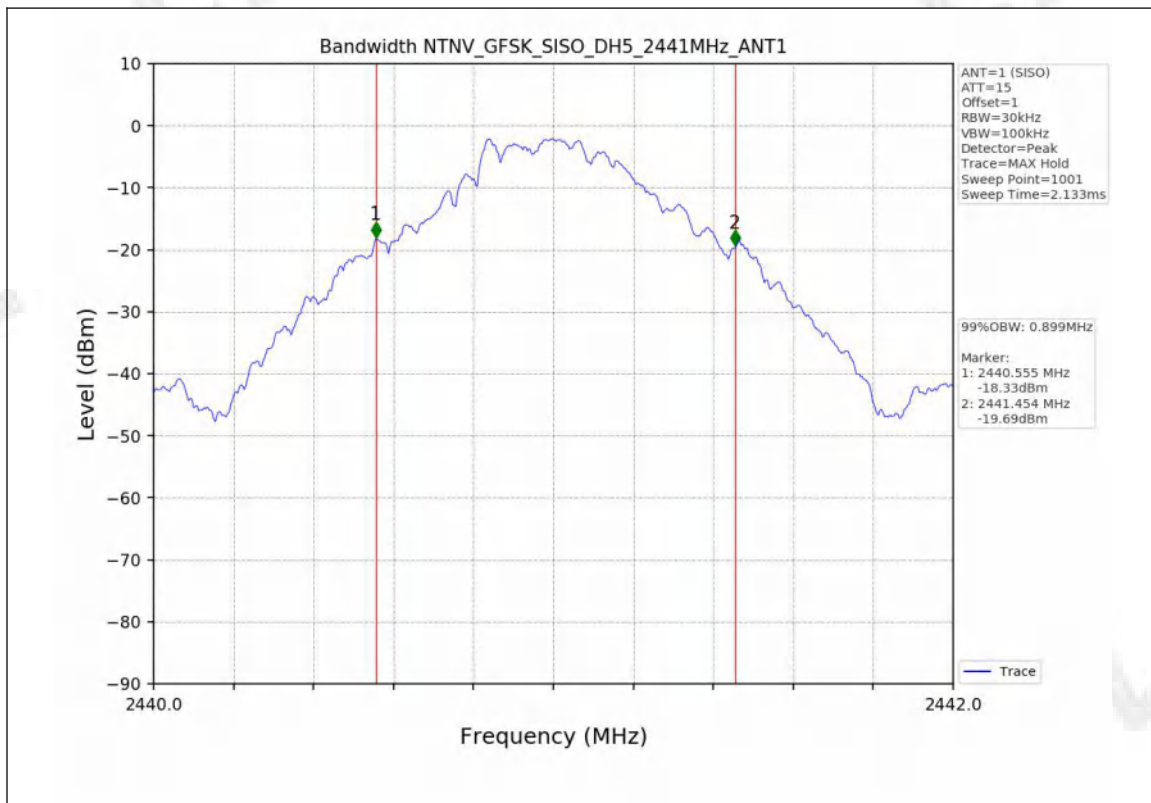


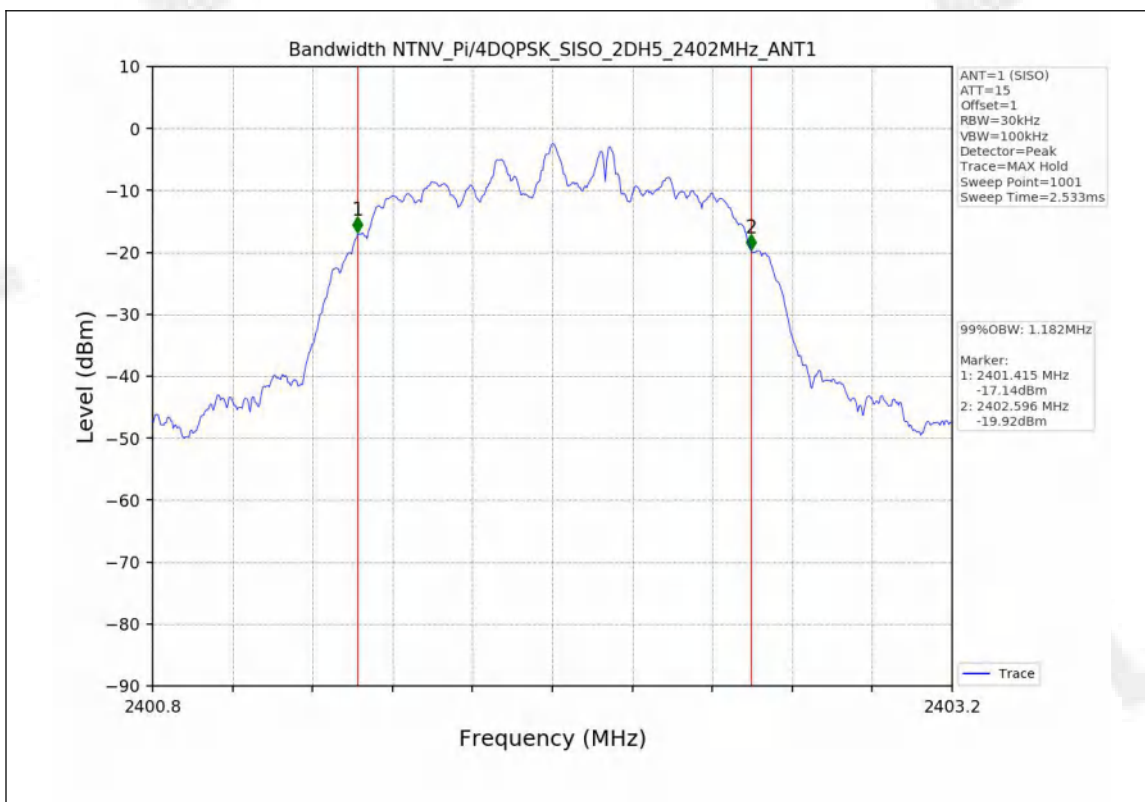
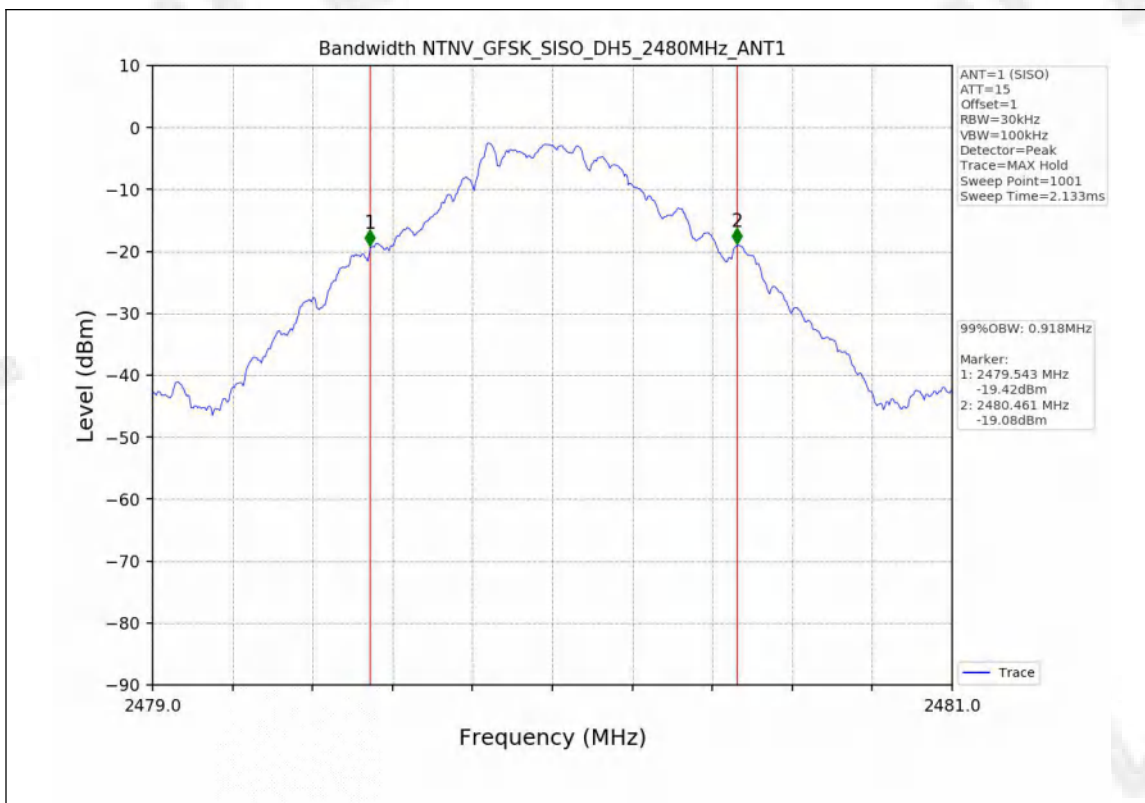


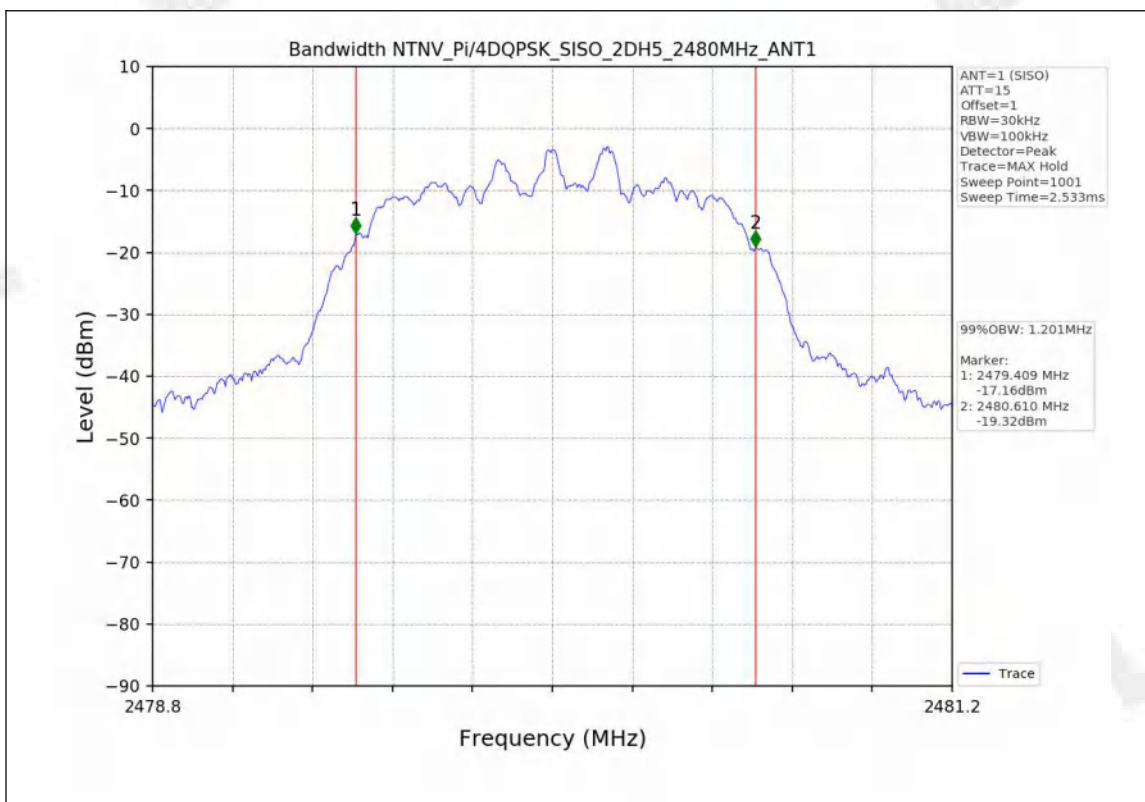
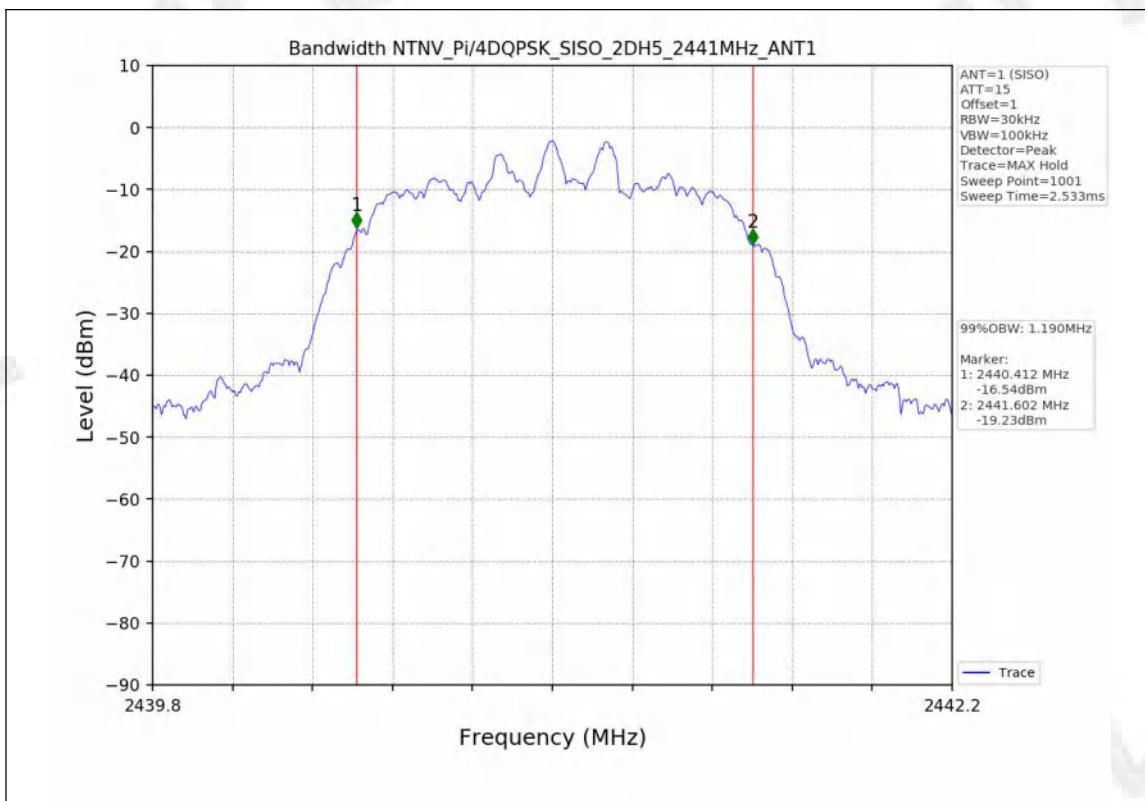


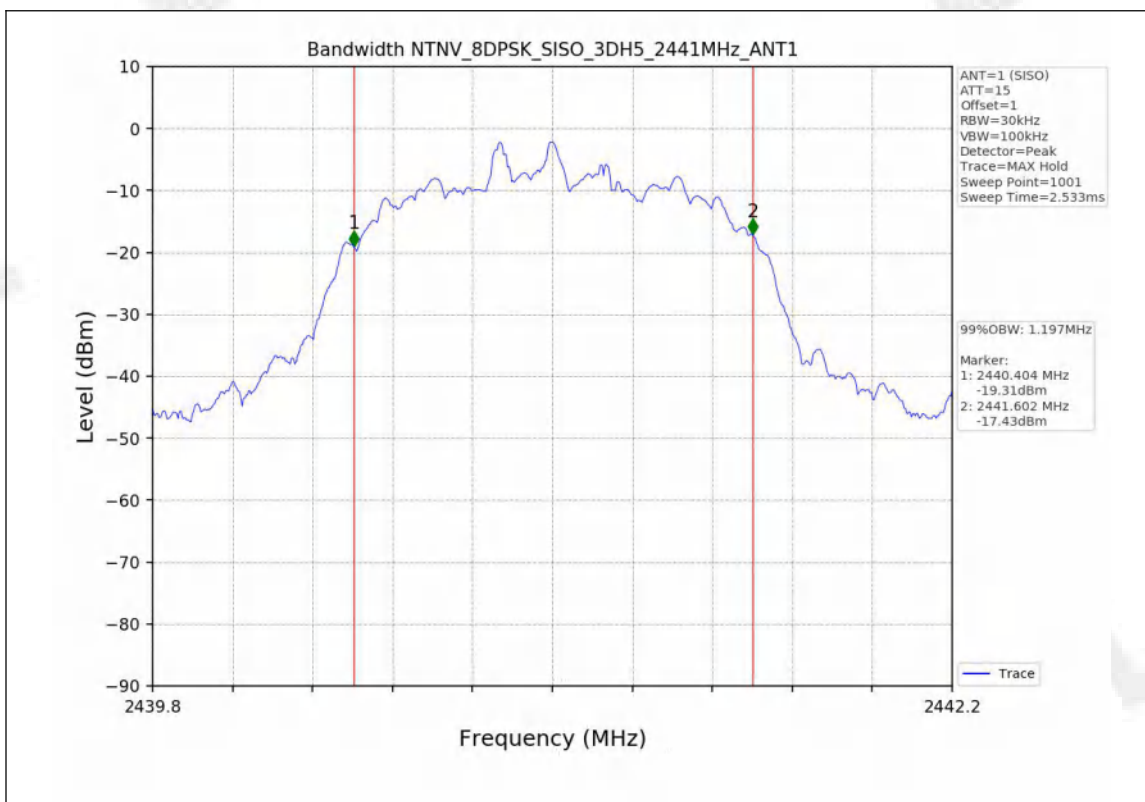
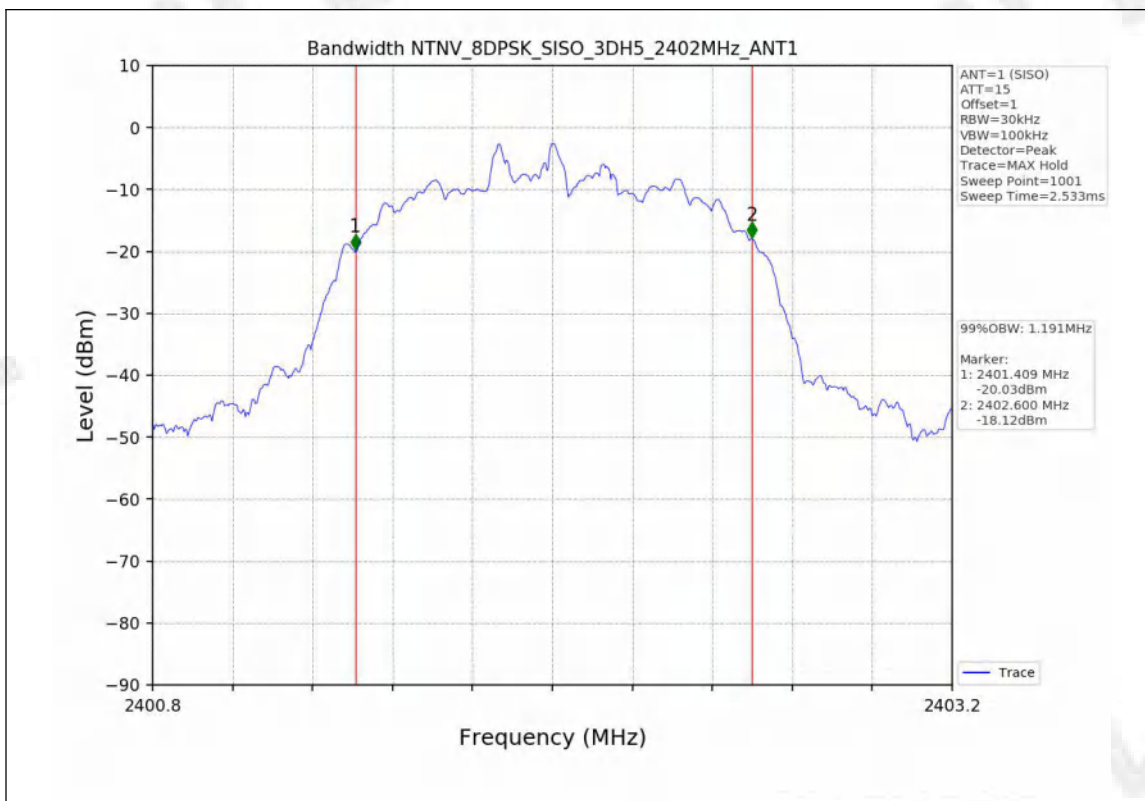
1.3 Test Graph - 99% Occupied Bandwidth

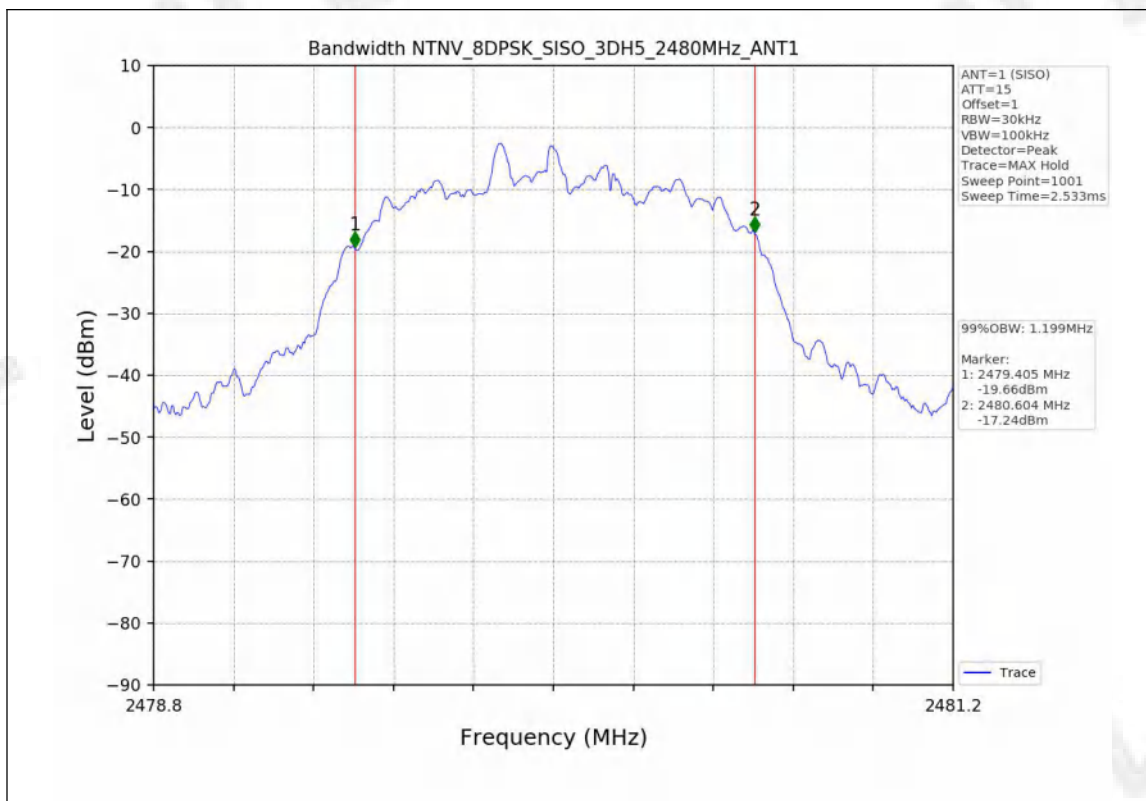










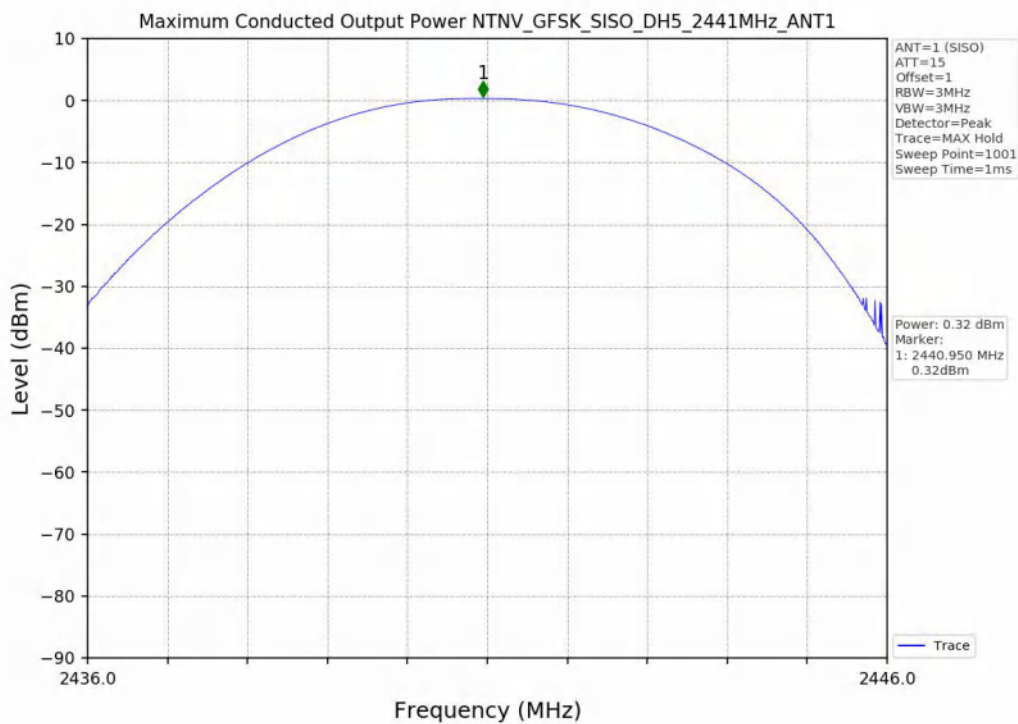
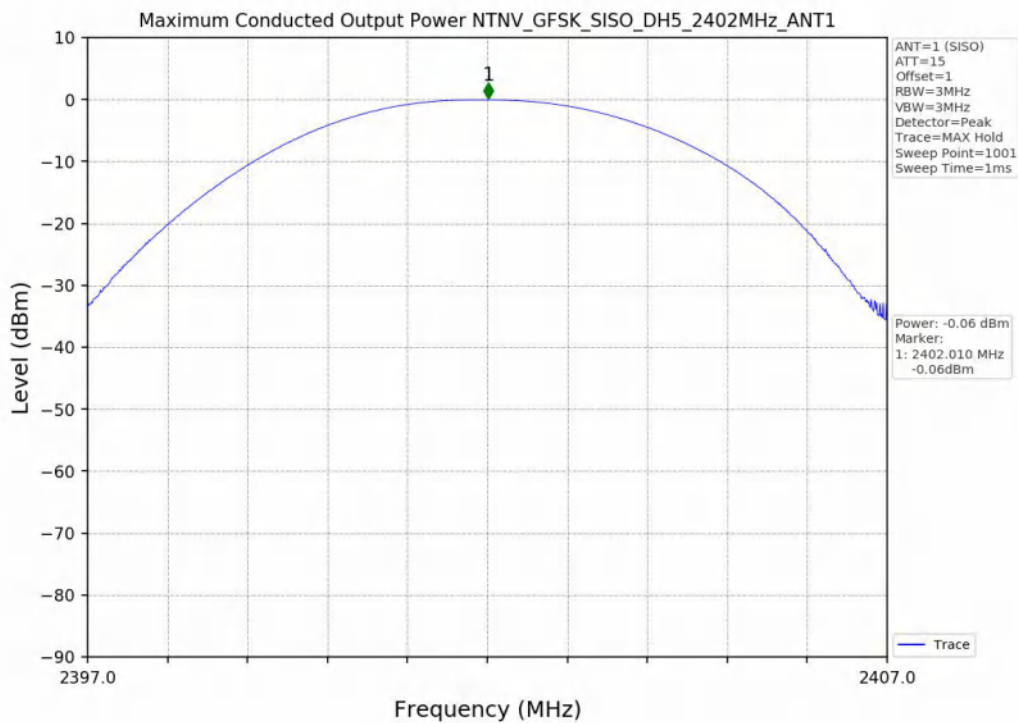


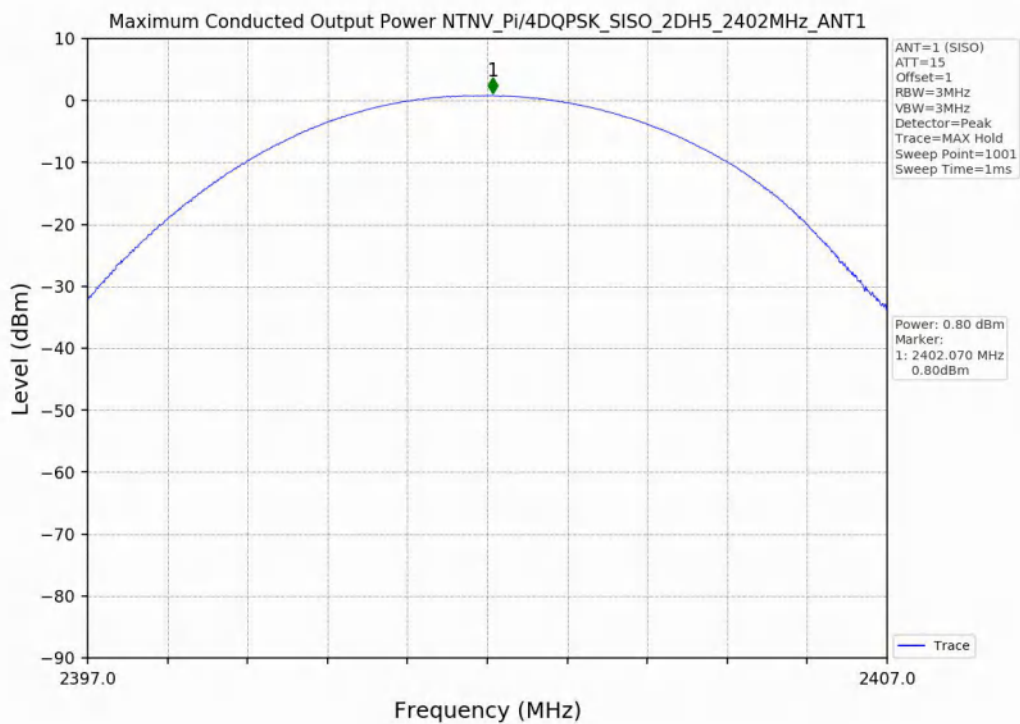
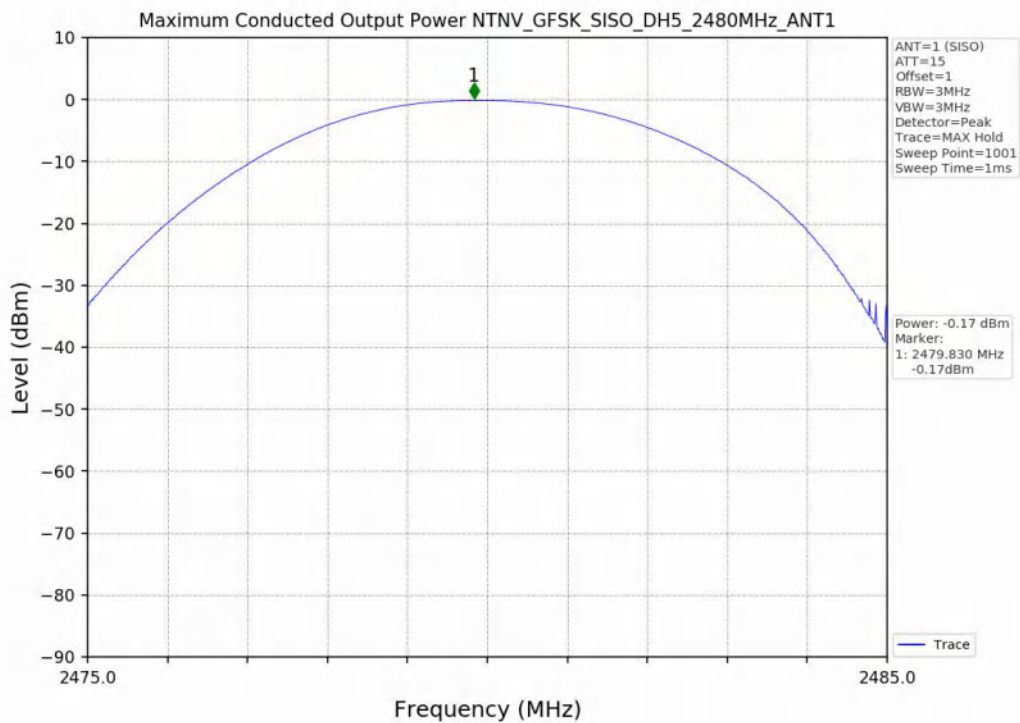
2. Maximum Conducted Output Power

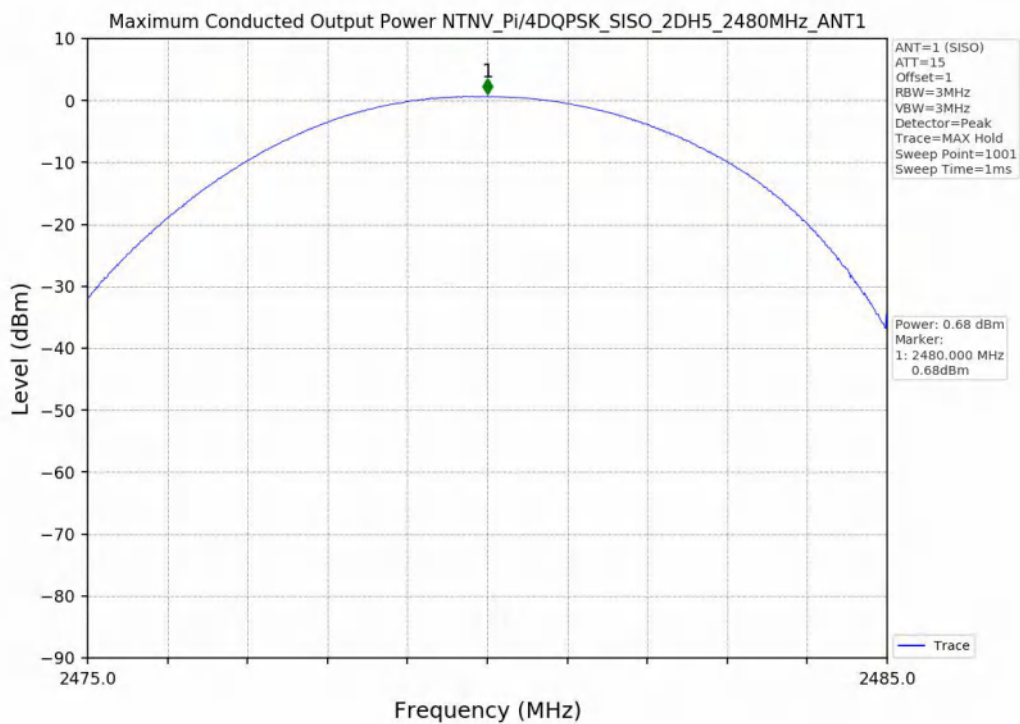
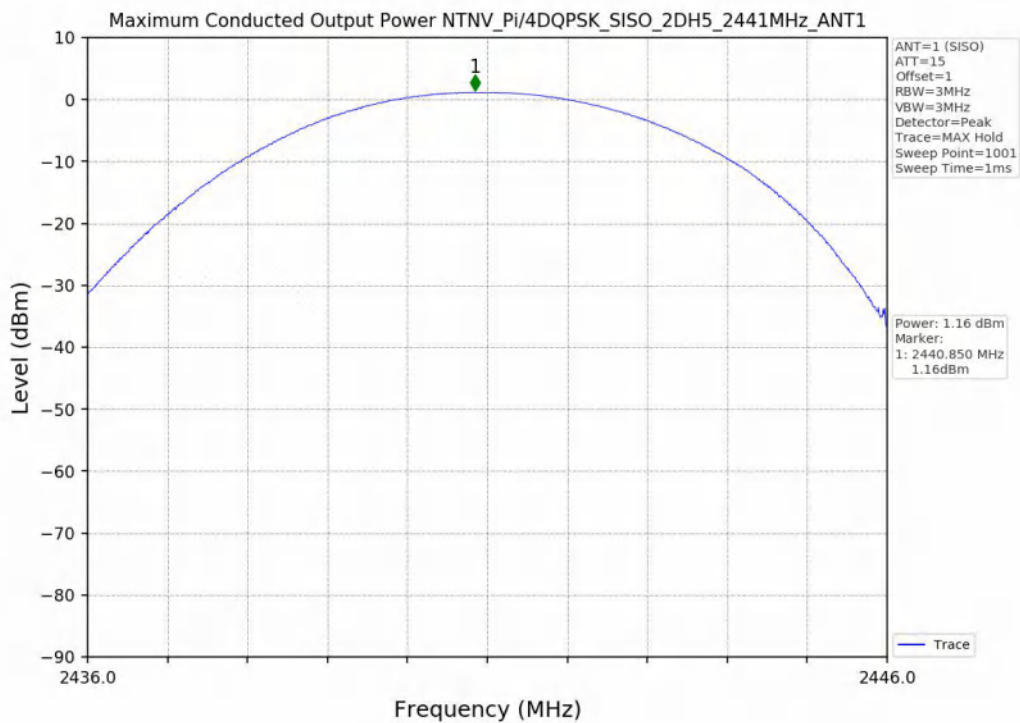
2.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
GFSK	2402	SISO	-0.06	20.97	PASS
	2441	SISO	0.32	20.97	PASS
	2480	SISO	-0.17	20.97	PASS
Pi/4DQPSK	2402	SISO	0.80	20.97	PASS
	2441	SISO	1.16	20.97	PASS
	2480	SISO	0.68	20.97	PASS
8DPSK	2402	SISO	1.21	20.97	PASS
	2441	SISO	1.58	20.97	PASS
	2480	SISO	1.10	20.97	PASS

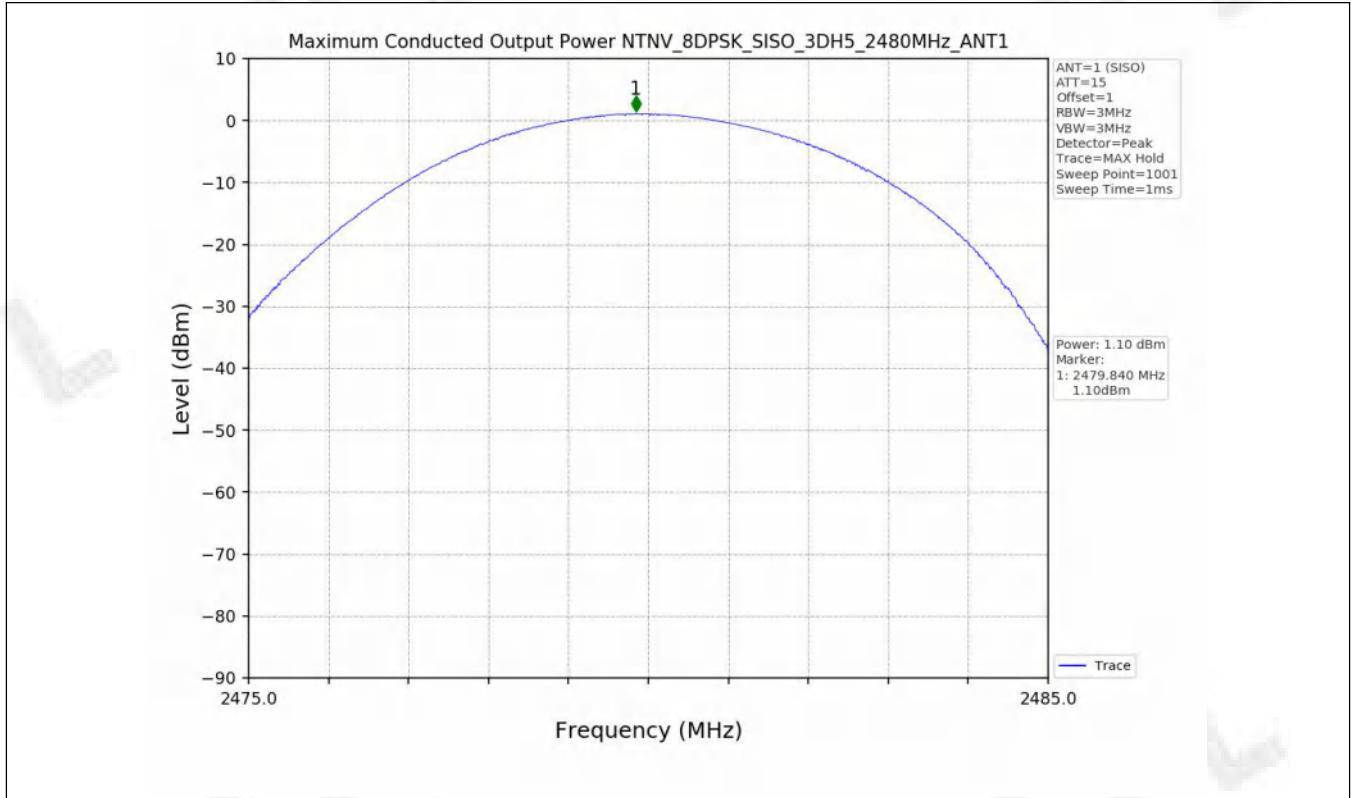
2.2 Test Graph









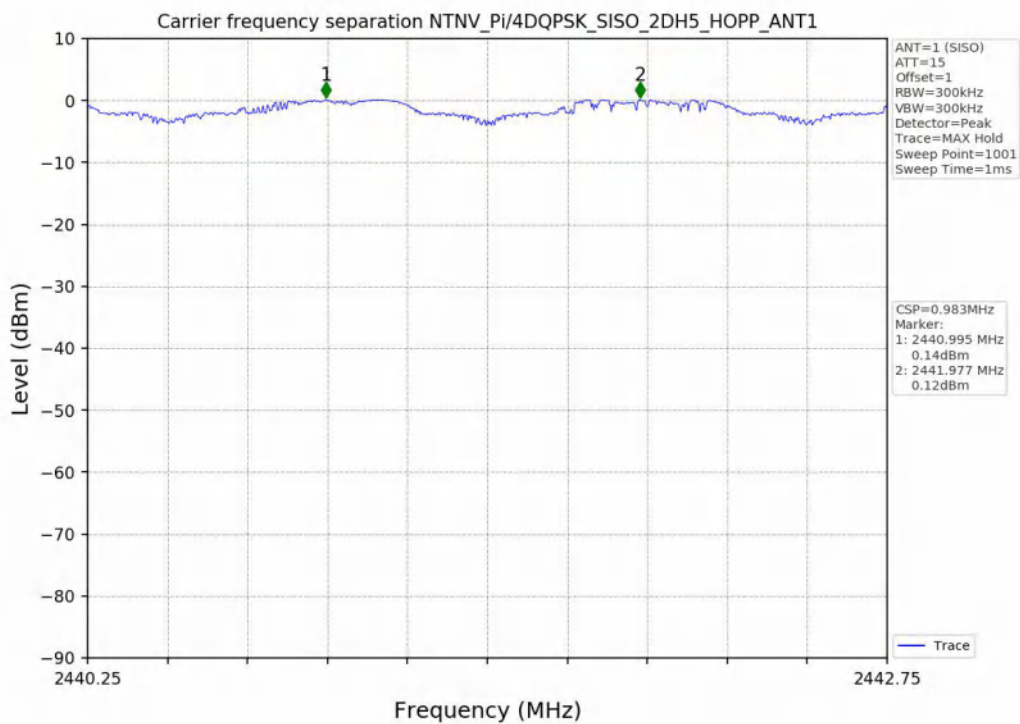
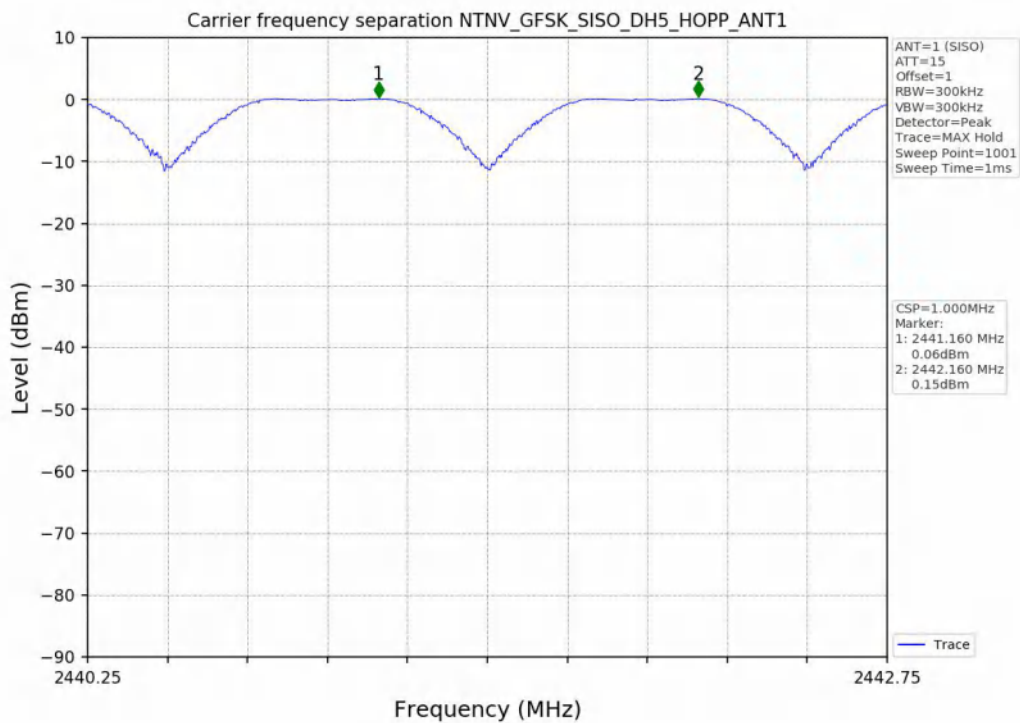


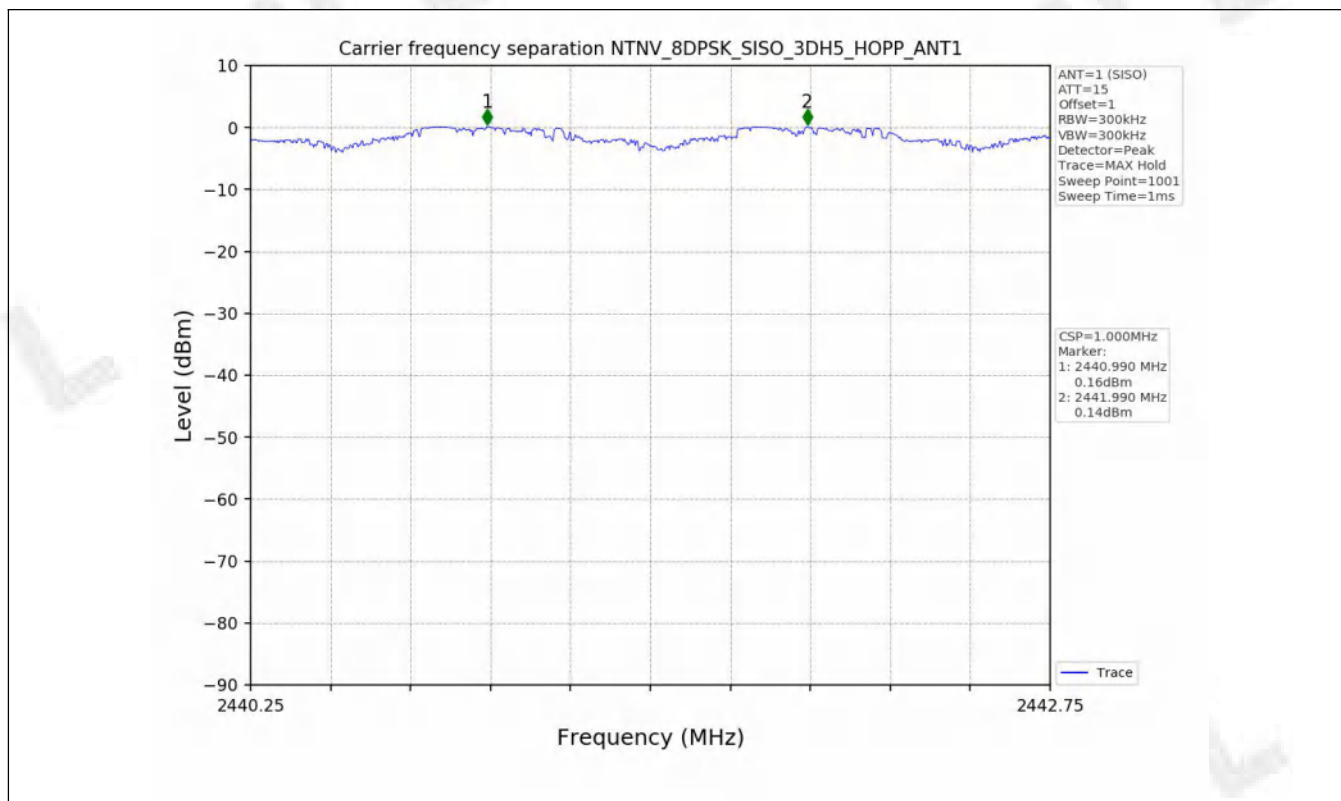
3. Carrier frequency separation

3.1 Test Result

Test Mode	TX Type	ANT No.	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limits (MHz)	Verdict
GFSK	SISO	1	1.000	1.031	≥ 0.687	PASS
Pi/4DQPSK	SISO	1	0.983	1.330	≥ 0.887	PASS
8DPSK	SISO	1	1.000	1.303	≥ 0.869	PASS

3.2 Test Graph



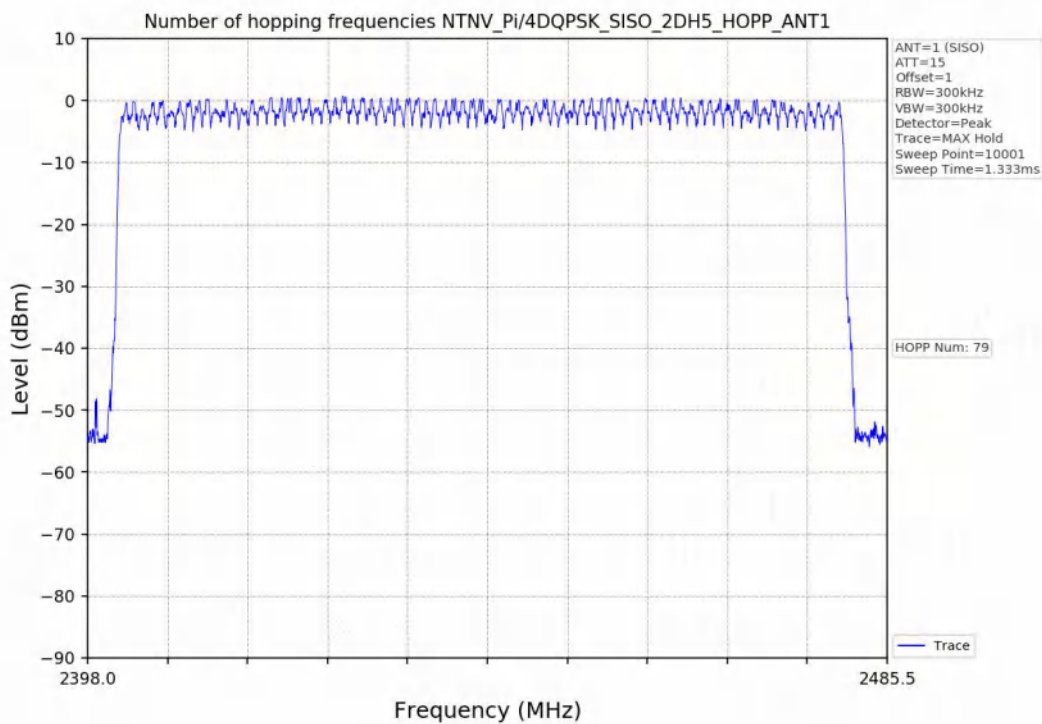
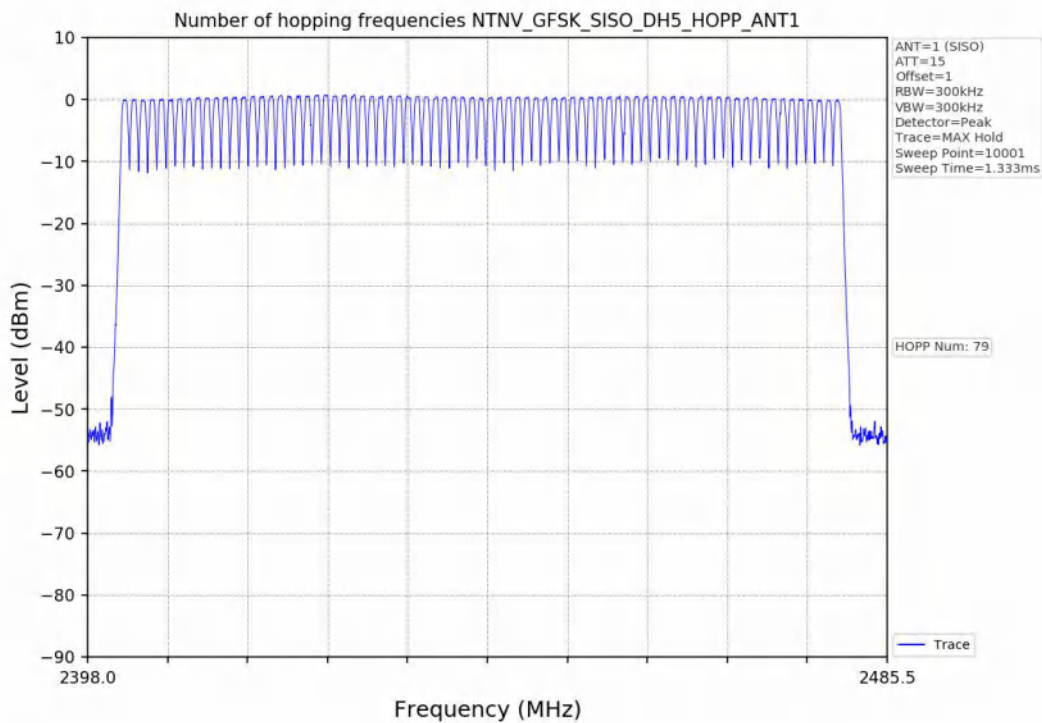


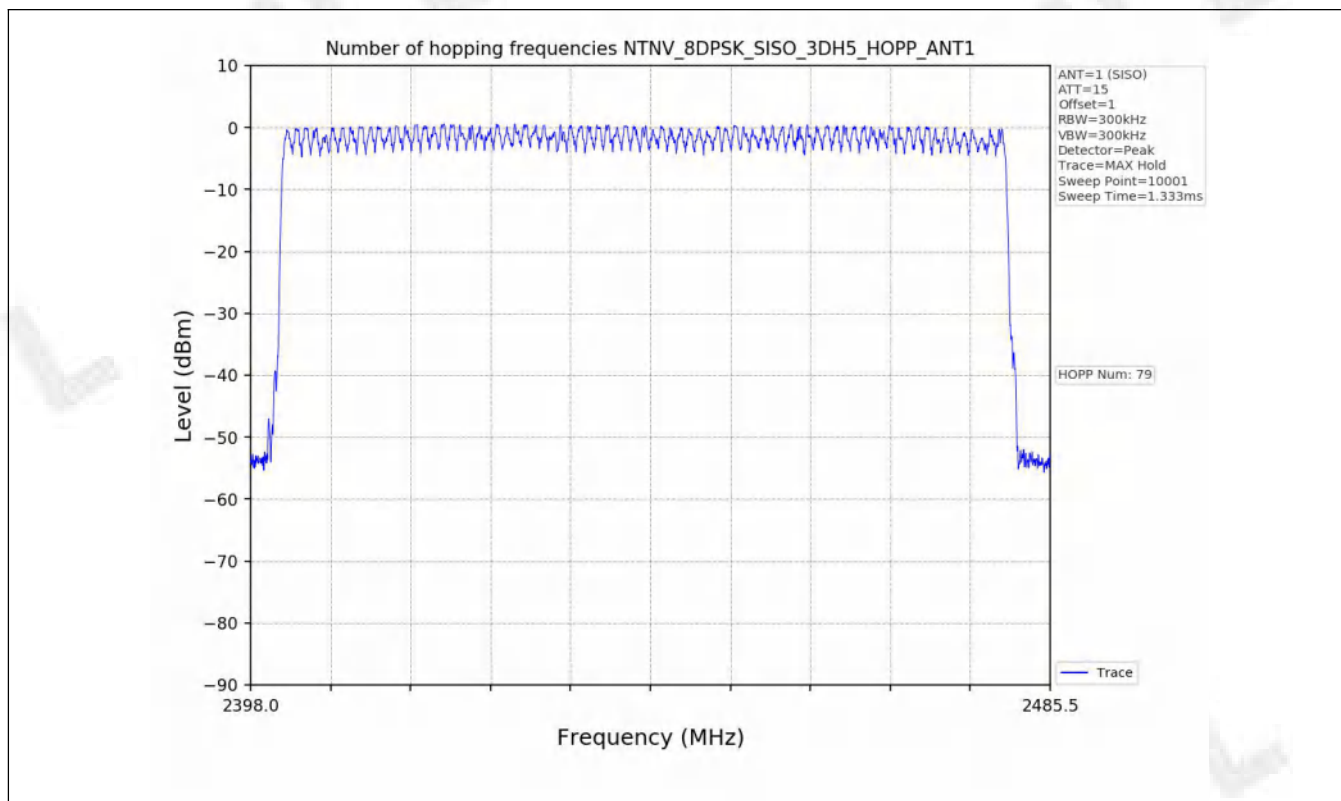
4. Number of hopping frequencies

4.1 Test Result

Test Mode	TX Type	ANT No.	Num of Hopping Frequencies	Limits	Verdict
GFSK	SISO	1	79	≥ 15	PASS
Pi/4DQPSK	SISO	1	79	≥ 15	PASS
8DPSK	SISO	1	79	≥ 15	PASS

4.2 Test Graph



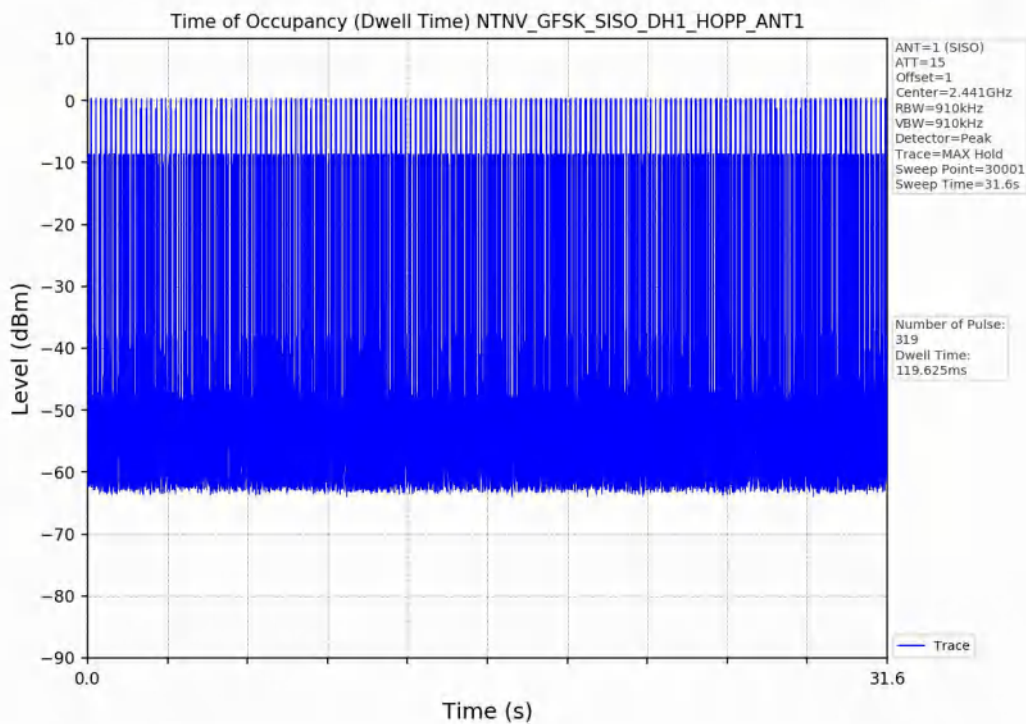
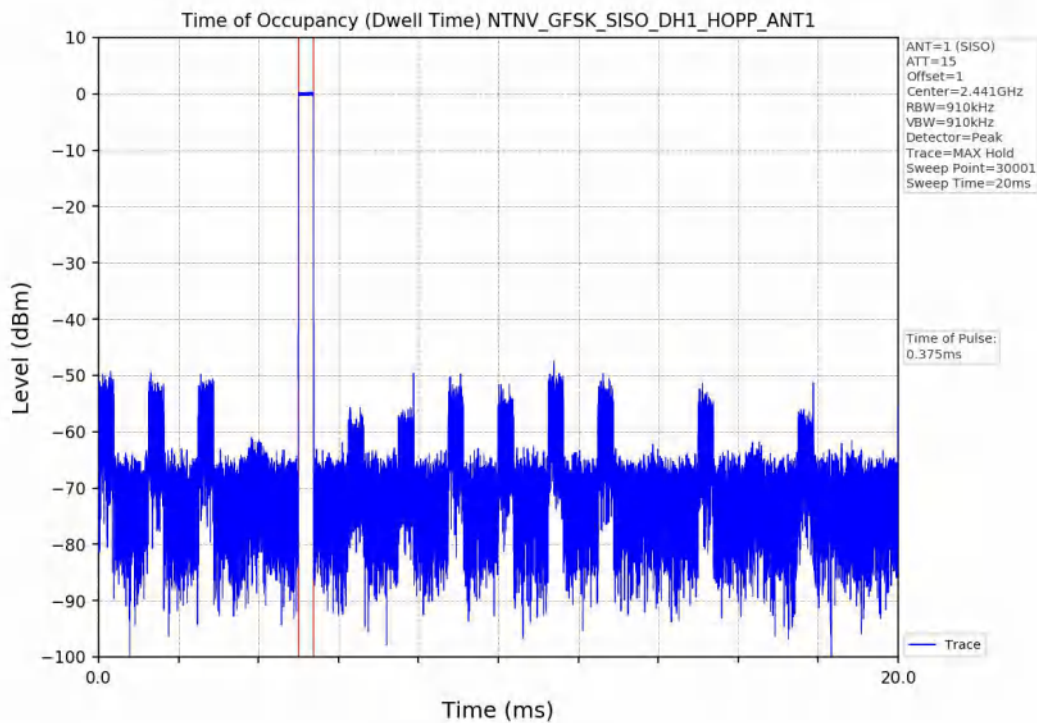


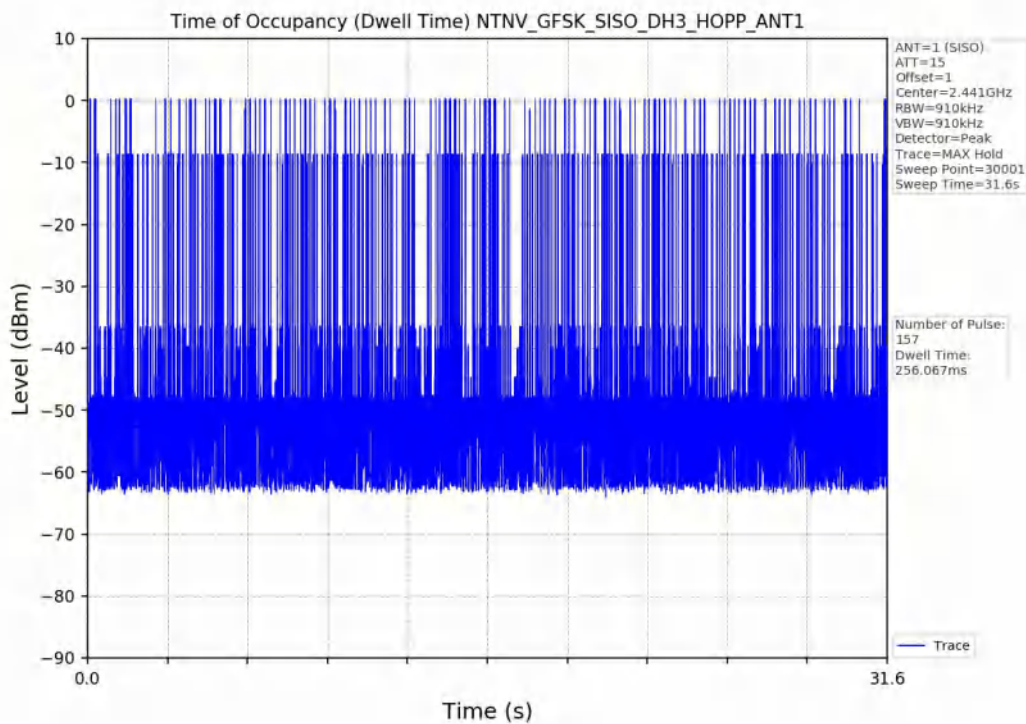
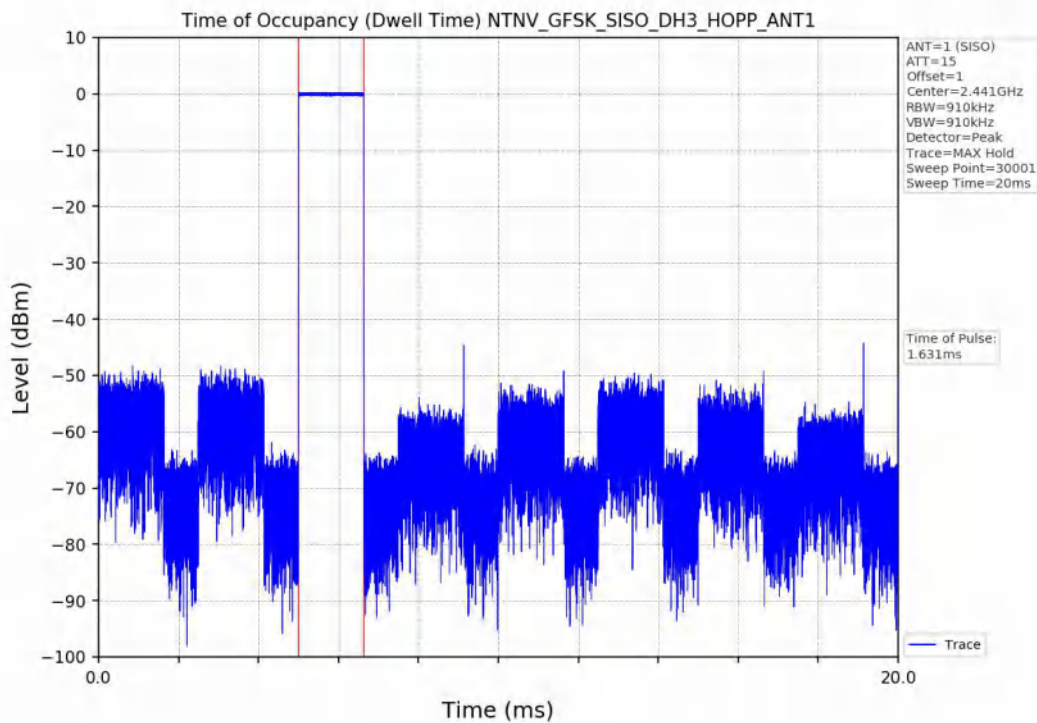
5. Time of Occupancy (Dwell Time)

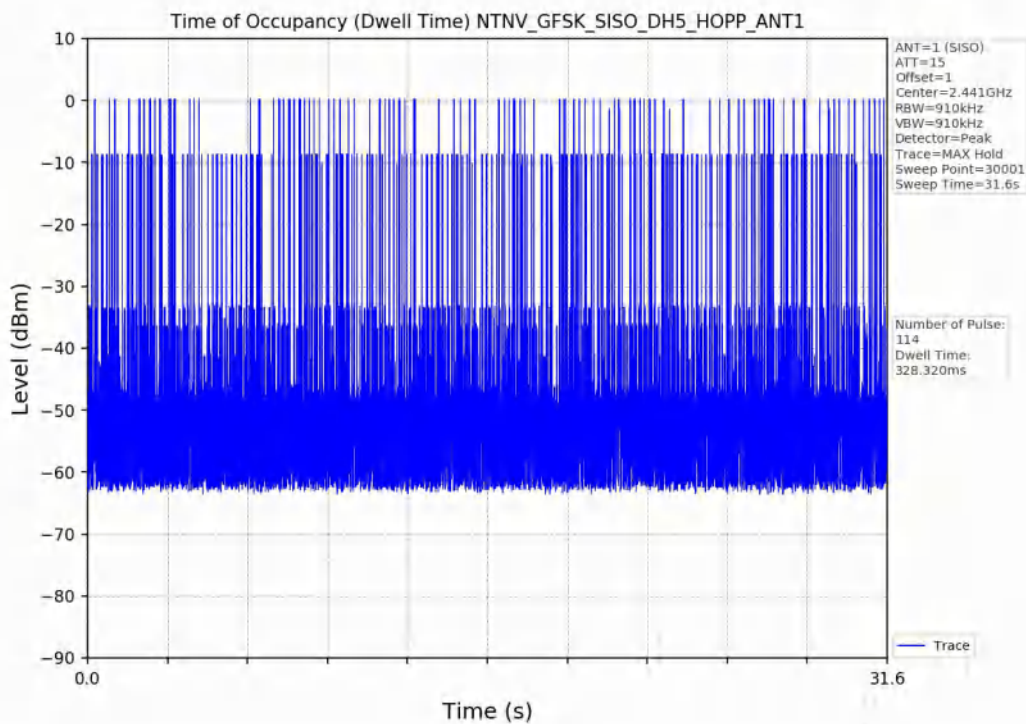
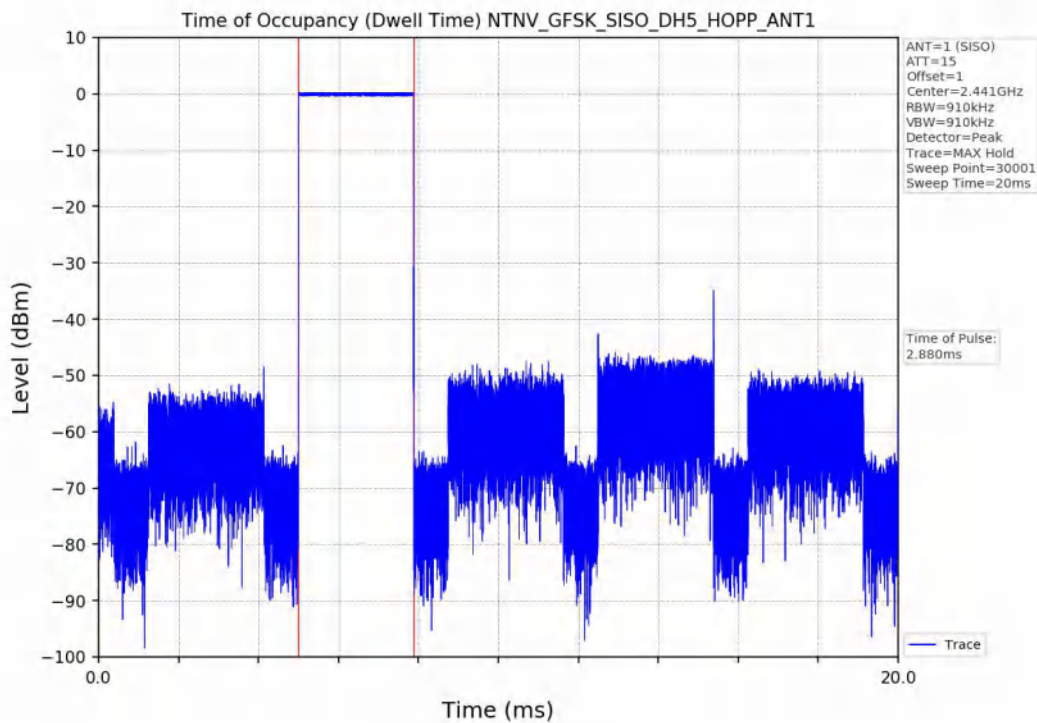
5.1 Test Result

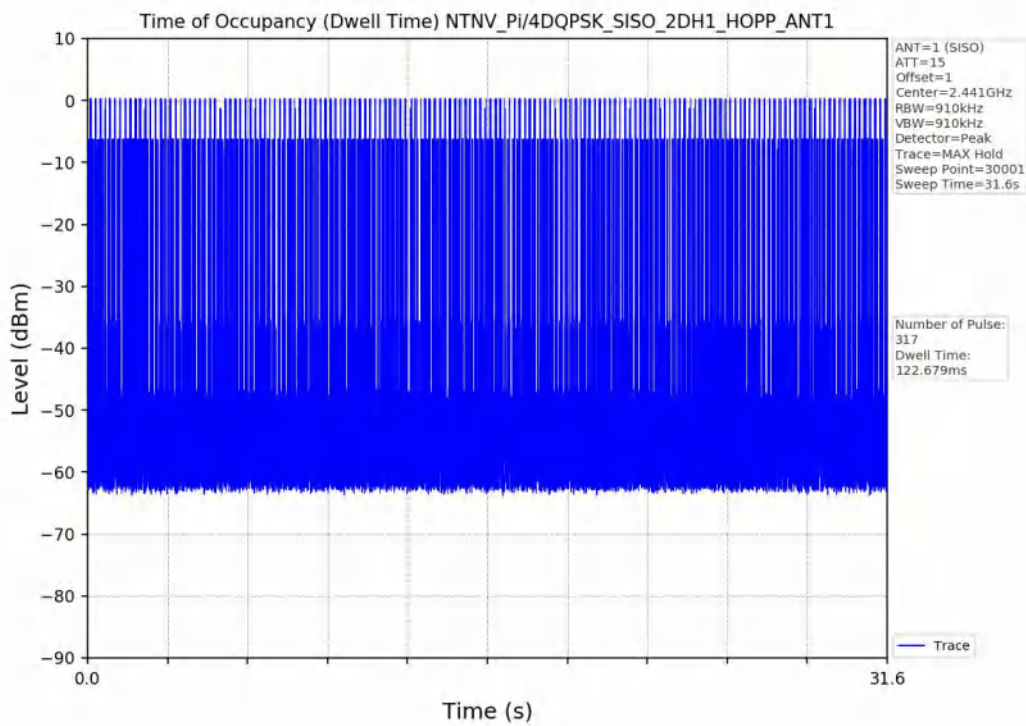
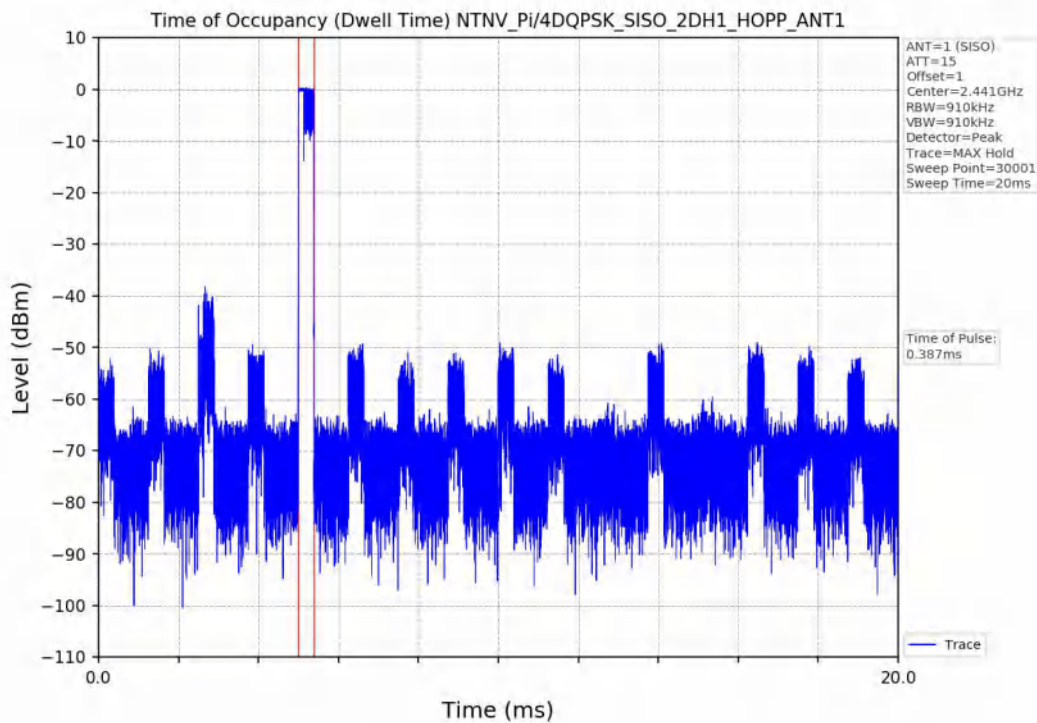
Test Mode	Packet Type	TX Type	ANT No.	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limits (ms)	Verdict
GFSK	DH1	SISO	1	0.375	31.6	319	119.625	≤400	PASS
	DH3	SISO	1	1.631	31.6	157	256.067	≤400	PASS
	DH5	SISO	1	2.880	31.6	114	328.320	≤400	PASS
Pi/4DQPSK	2DH1	SISO	1	0.387	31.6	317	122.679	≤400	PASS
	2DH3	SISO	1	1.639	31.6	159	260.601	≤400	PASS
	2DH5	SISO	1	2.886	31.6	111	320.346	≤400	PASS
8DPSK	3DH1	SISO	1	0.388	31.6	317	122.996	≤400	PASS
	3DH3	SISO	1	1.638	31.6	158	258.804	≤400	PASS
	3DH5	SISO	1	2.889	31.6	106	306.234	≤400	PASS

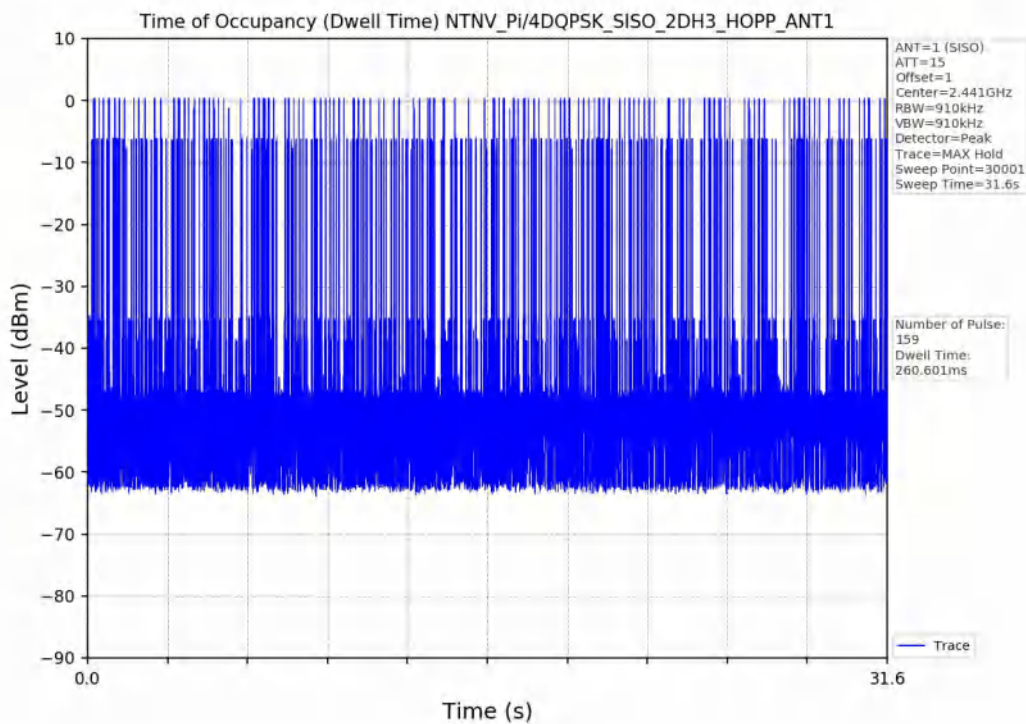
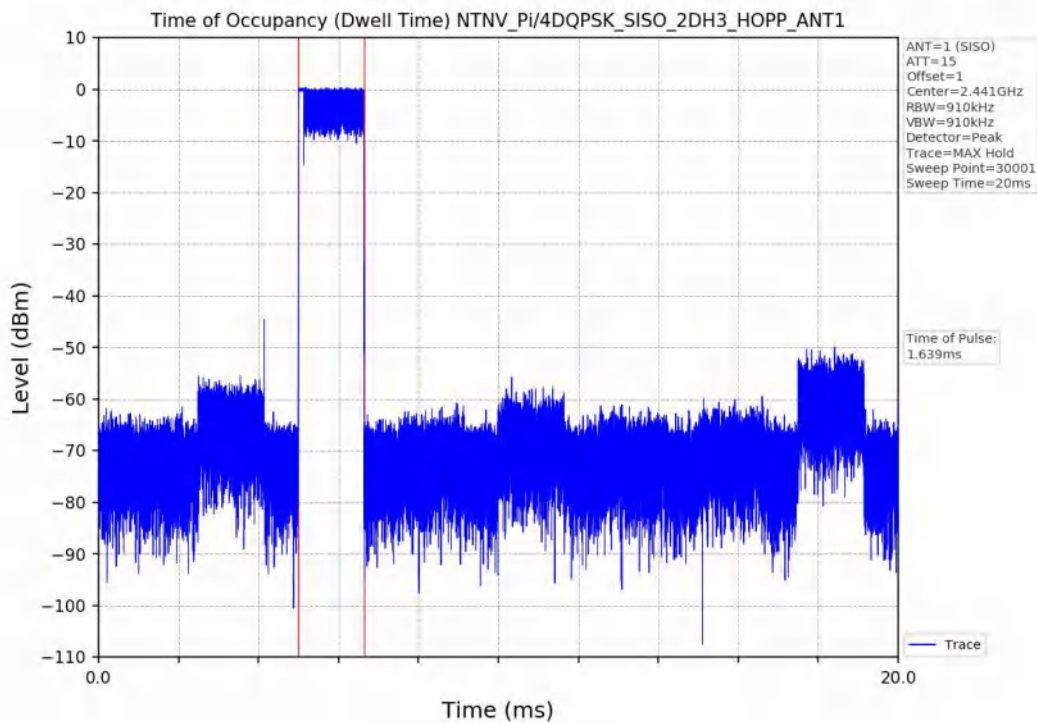
5.2 Test Graph

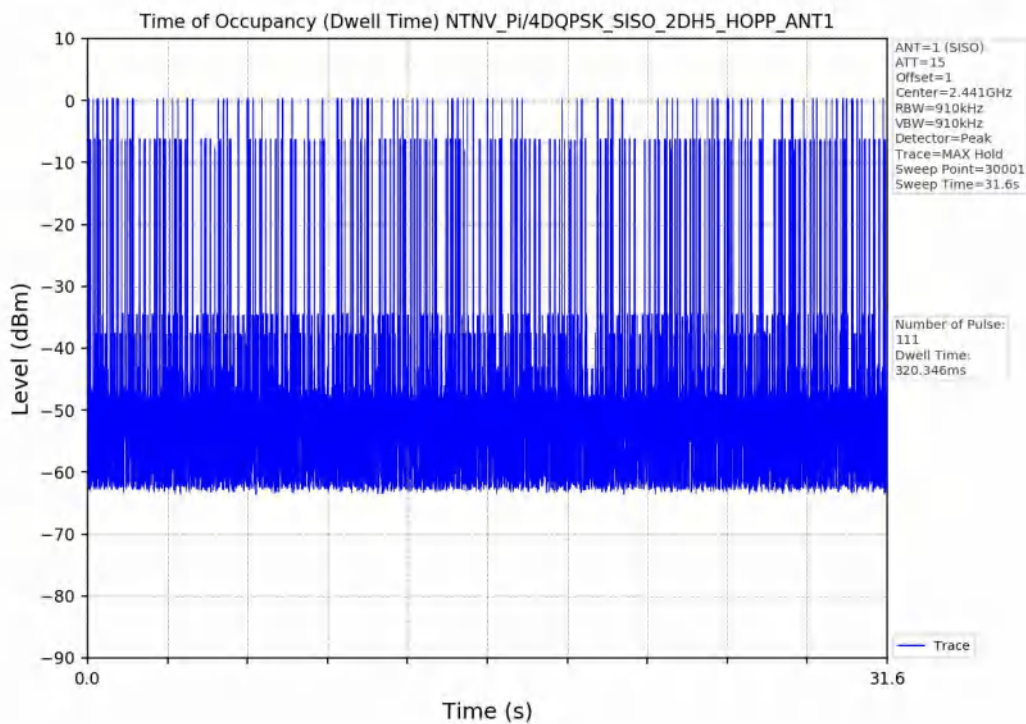
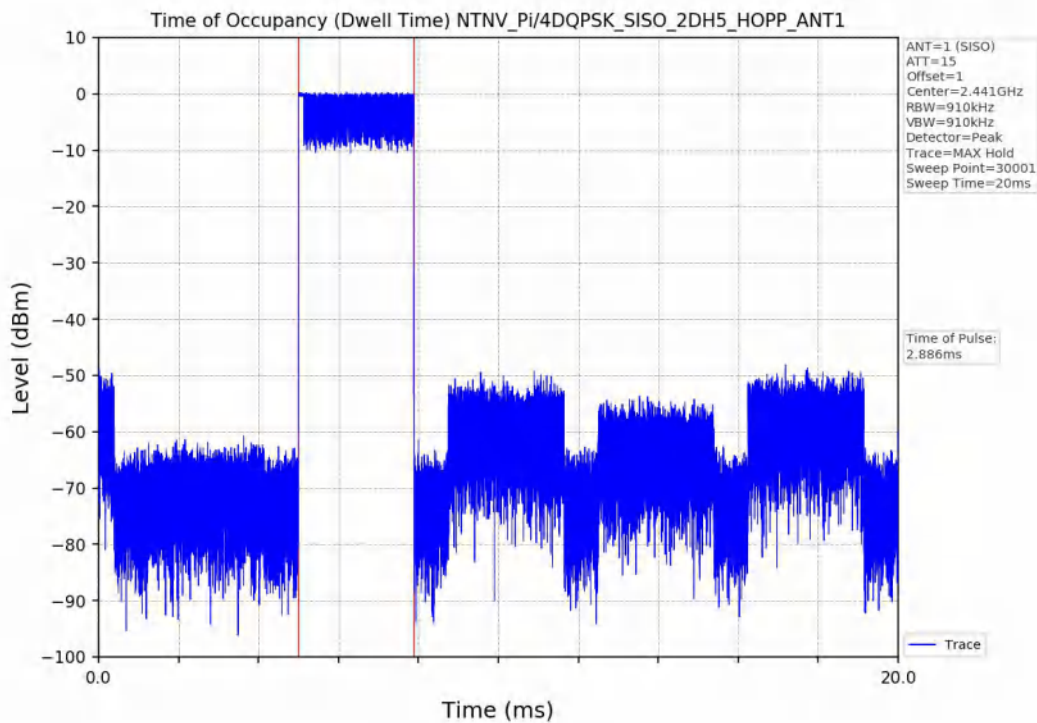


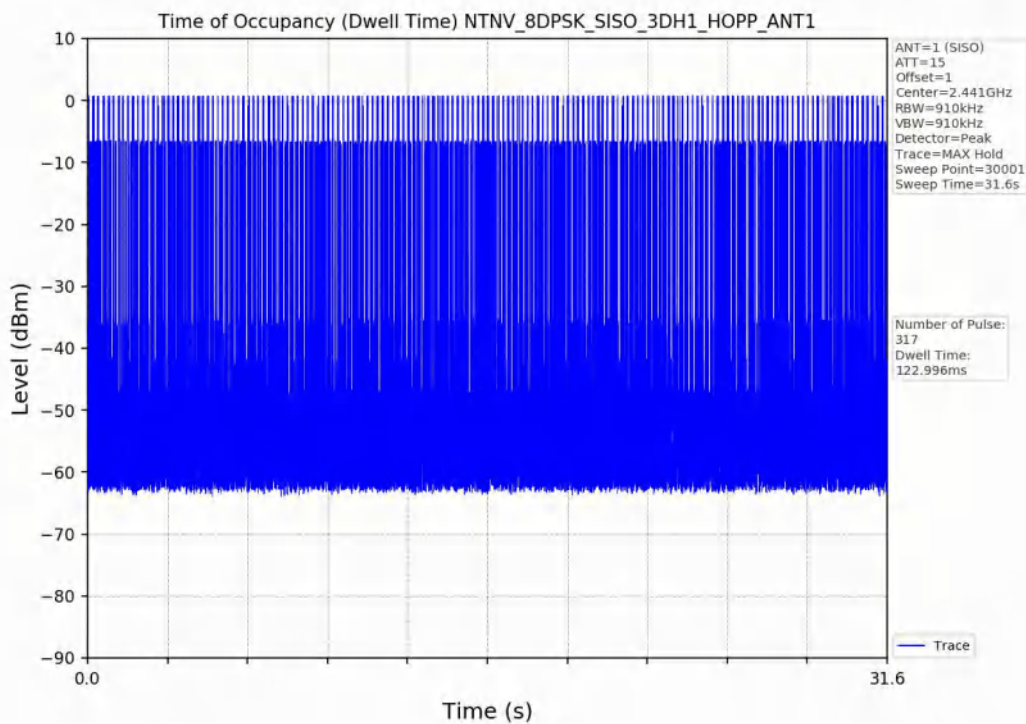
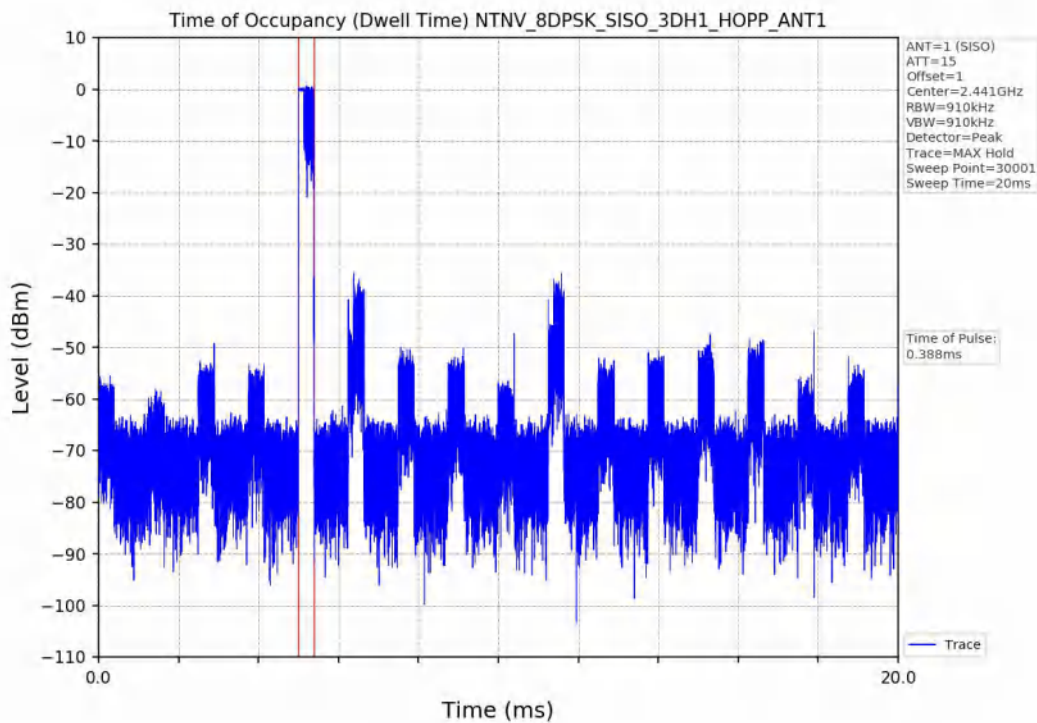


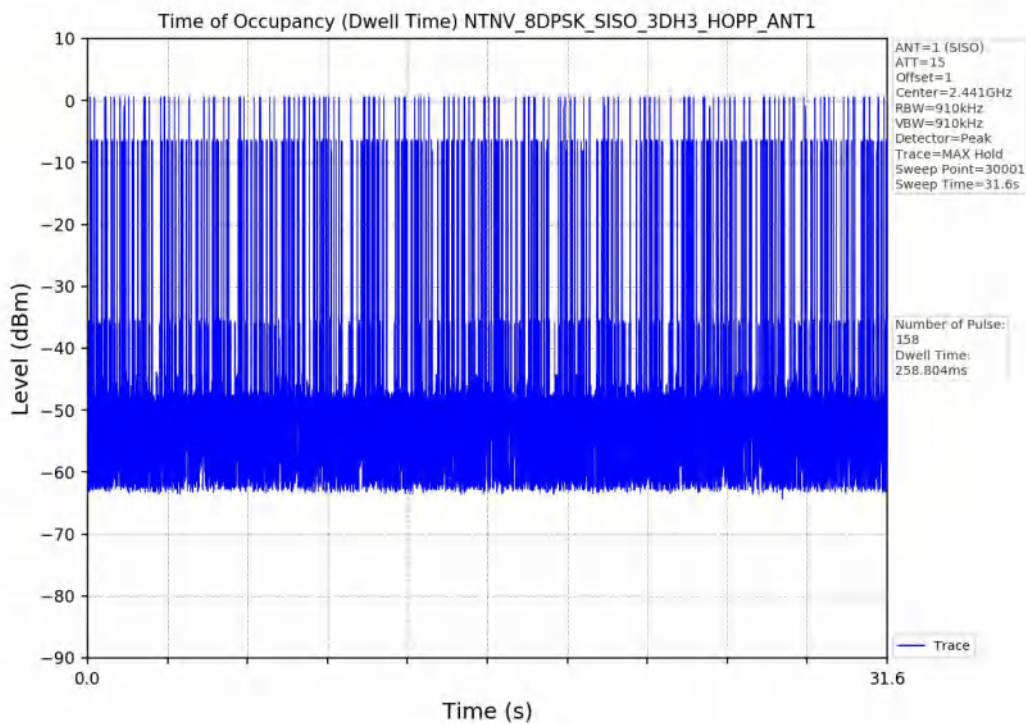
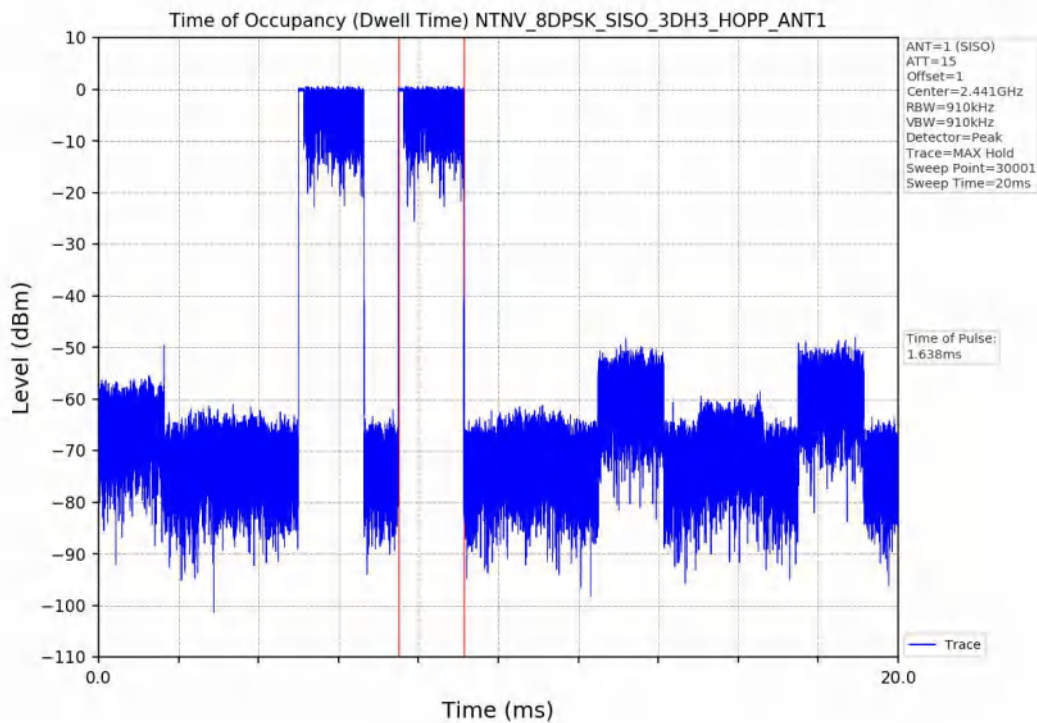


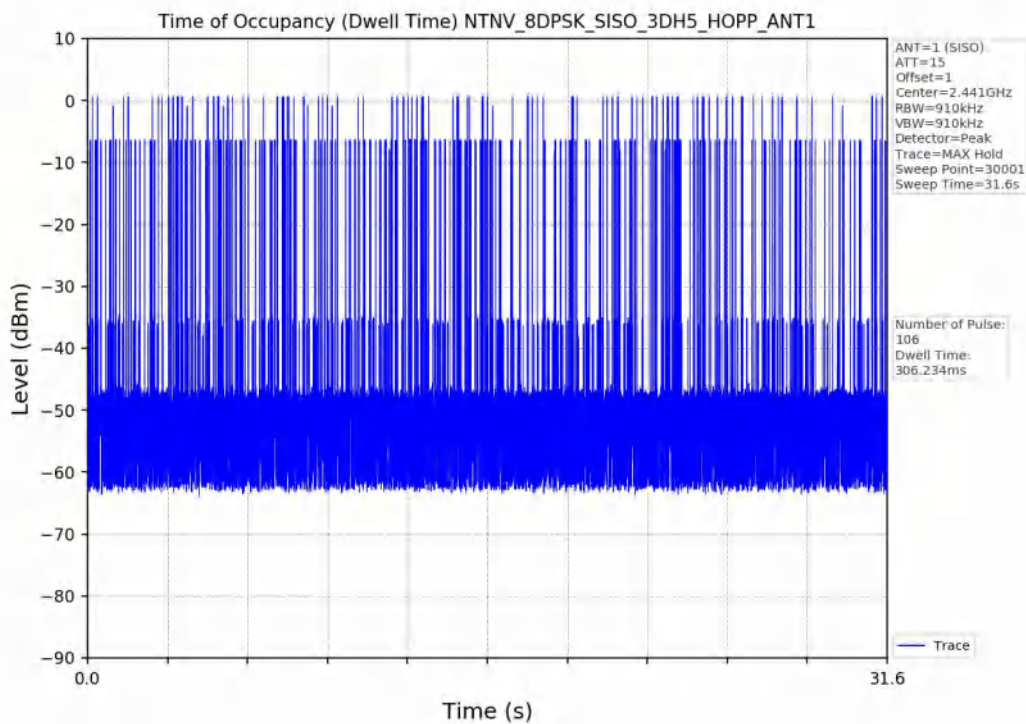
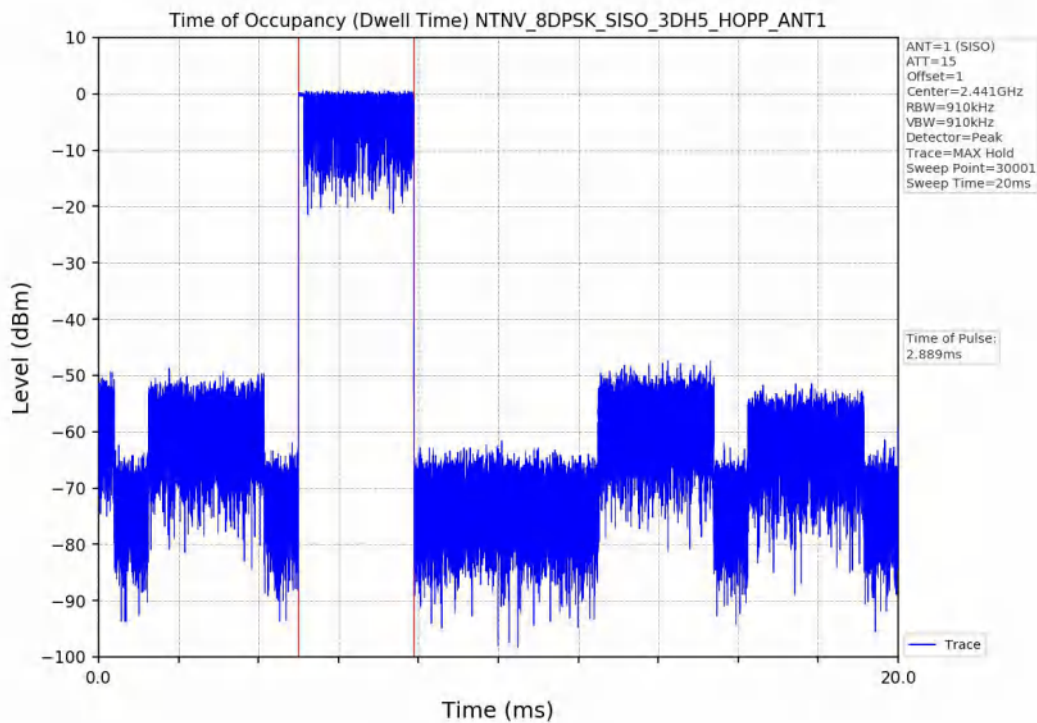












6. Unwanted Emissions in Non-restricted Frequency Bands

6.1 Test Result

Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
GFSK	2402	SISO	1	Refer to test graph	-19.91	PASS
	2441	SISO	1	Refer to test graph	-19.91	PASS
	2480	SISO	1	Refer to test graph	-19.91	PASS
	Hopping	SISO	1	Refer to test graph	-19.91	PASS
Pi/4DQPSK	2402	SISO	1	Refer to test graph	-19.92	PASS
	2441	SISO	1	Refer to test graph	-19.92	PASS
	2480	SISO	1	Refer to test graph	-19.92	PASS
	Hopping	SISO	1	Refer to test graph	-19.92	PASS
8DPSK	2402	SISO	1	Refer to test graph	-19.97	PASS
	2441	SISO	1	Refer to test graph	-19.97	PASS
	2480	SISO	1	Refer to test graph	-19.97	PASS
	Hopping	SISO	1	Refer to test graph	-19.97	PASS

6.2 Test Graph

