

Annex for Bluetooth BR&EDR Part 15.247

Test Report No. : CTL2007314031-WF

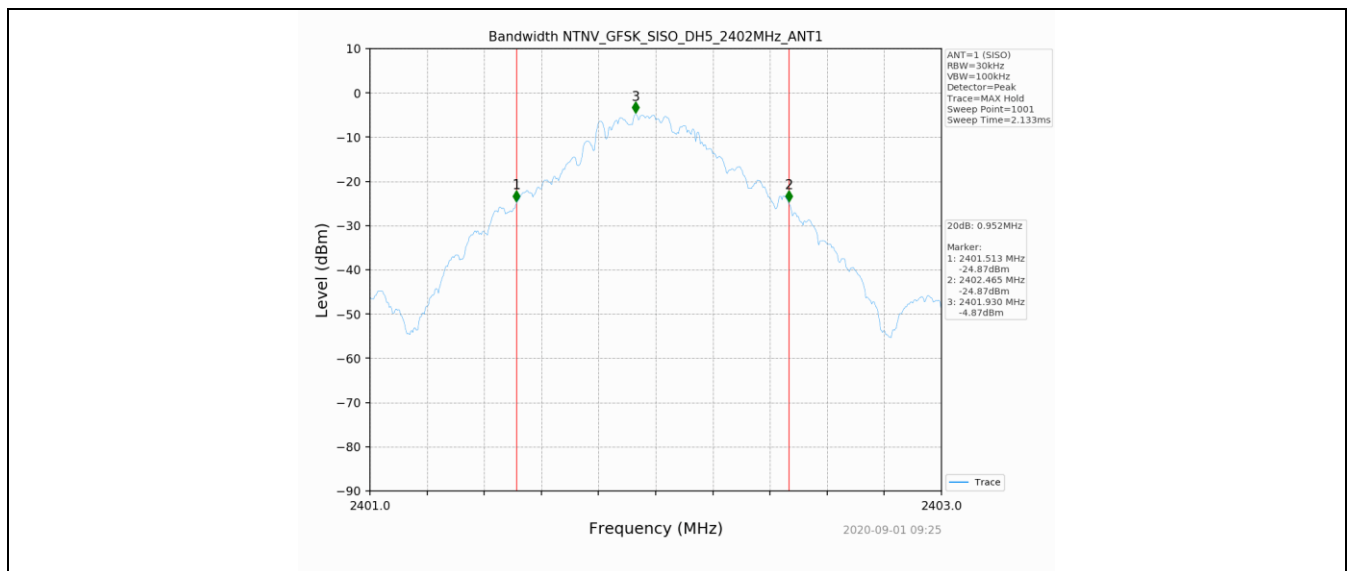
1. Bandwidth

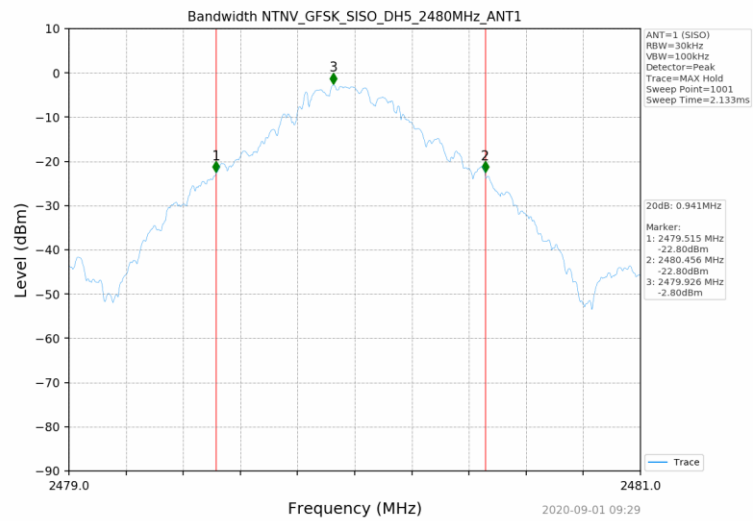
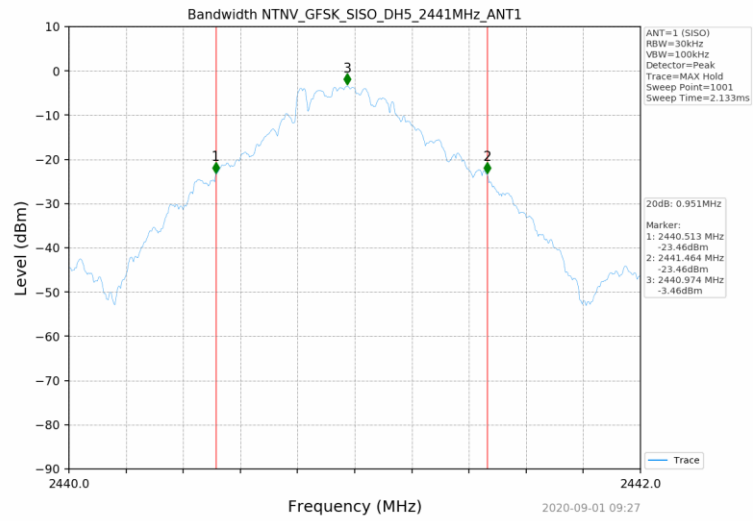
1.1 Test Result

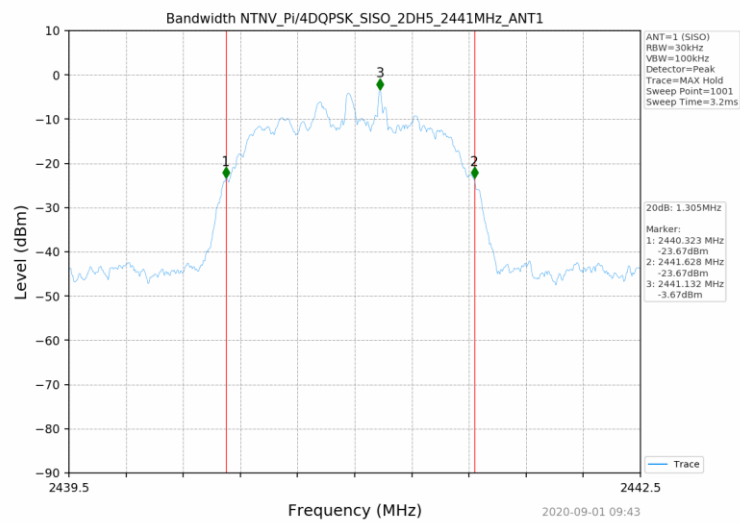
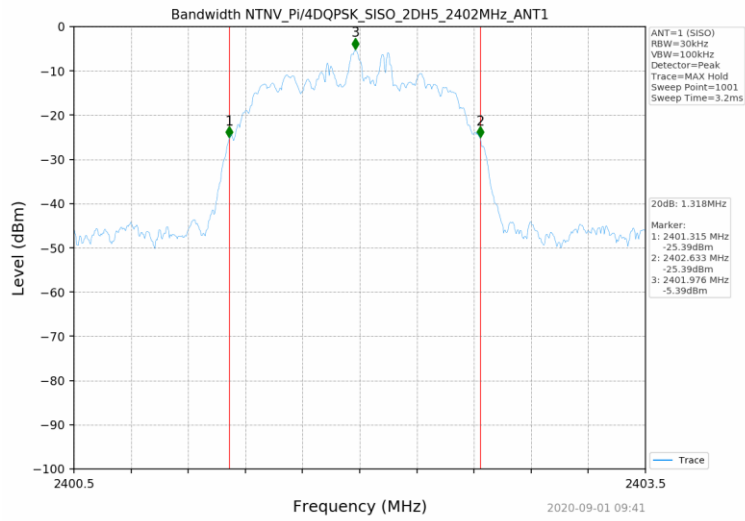
Test Mode	Frequency (MHz)	TX Type	ANT No.	20dB Bandwidth	Verdict
				Test Result (MHz)	
GFSK	2402	SISO	1	0.952	PASS
	2441	SISO	1	0.951	PASS
	2480	SISO	1	0.941	PASS
Pi/4DQPSK	2402	SISO	1	1.318	PASS
	2441	SISO	1	1.305	PASS
	2480	SISO	1	1.317	PASS
8DPSK	2402	SISO	1	1.336	PASS
	2441	SISO	1	1.308	PASS
	2480	SISO	1	1.312	PASS

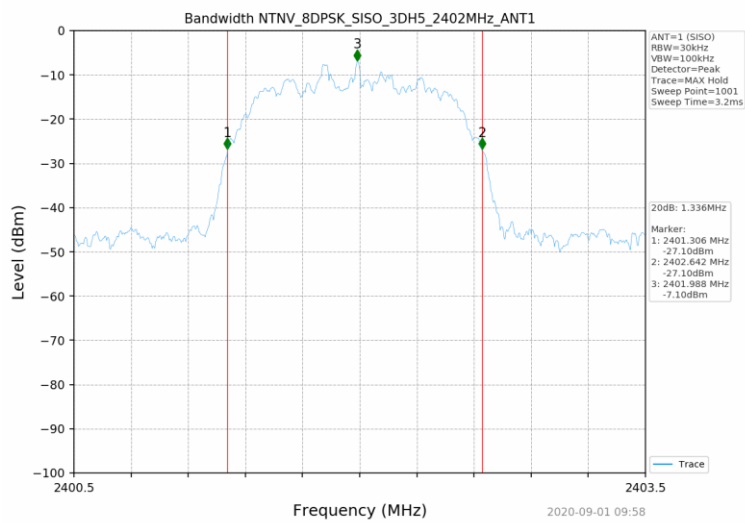
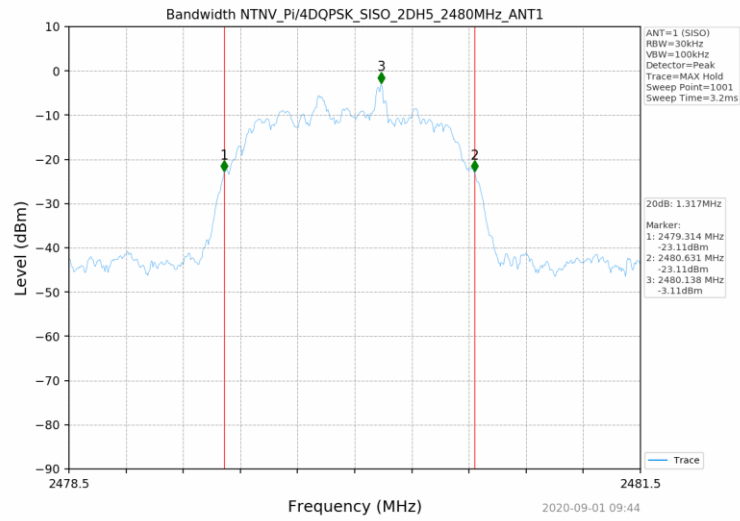
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
GFSK	2402	SISO	1	0.857	Only for Report Use
	2441	SISO	1	0.844	Only for Report Use
	2480	SISO	1	0.843	Only for Report Use
Pi/4DQPSK	2402	SISO	1	1.180	Only for Report Use
	2441	SISO	1	1.176	Only for Report Use
	2480	SISO	1	1.193	Only for Report Use
8DPSK	2402	SISO	1	1.183	Only for Report Use
	2441	SISO	1	1.179	Only for Report Use
	2480	SISO	1	1.184	Only for Report Use

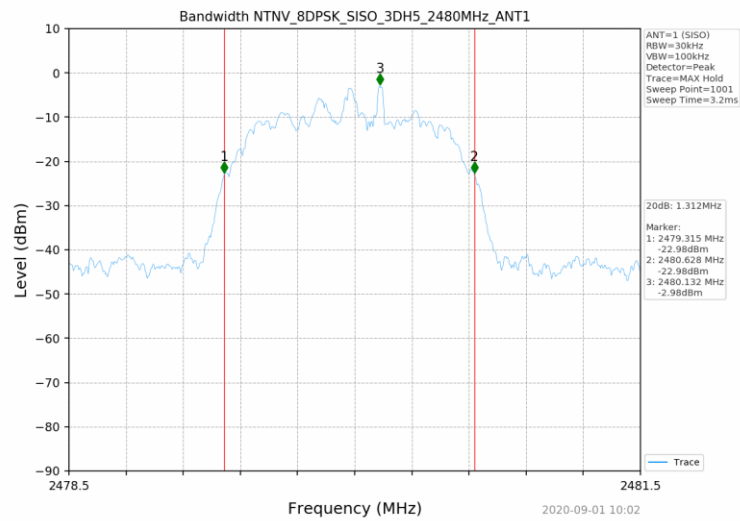
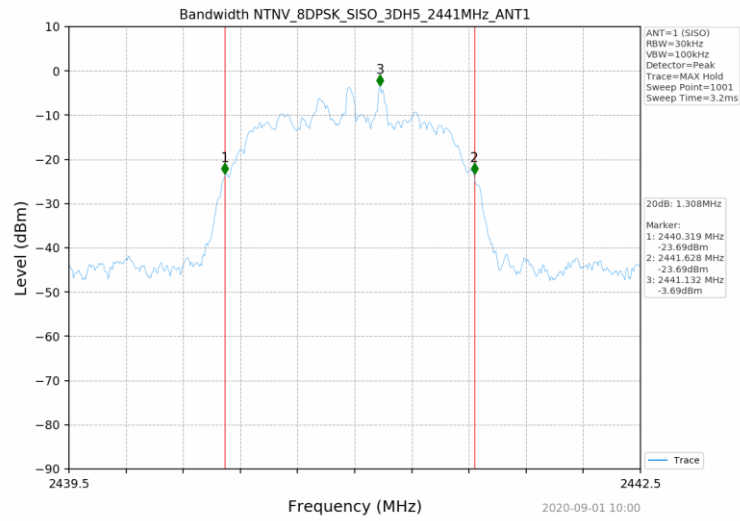
1.2 Test Graph - 20dB Bandwidth



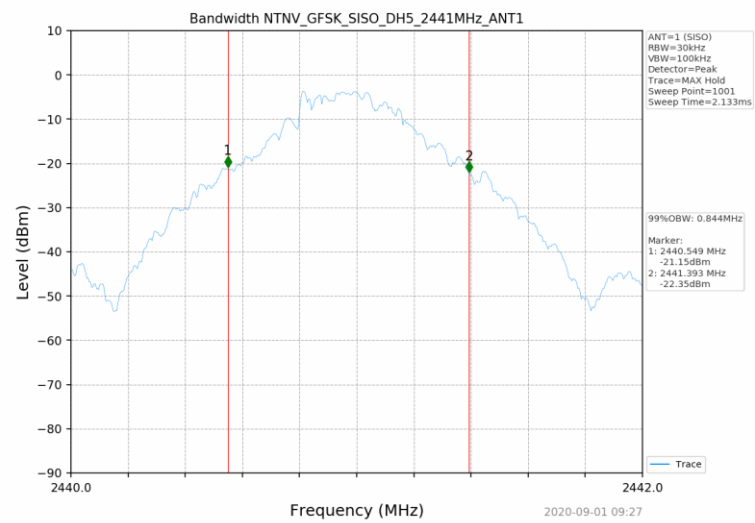
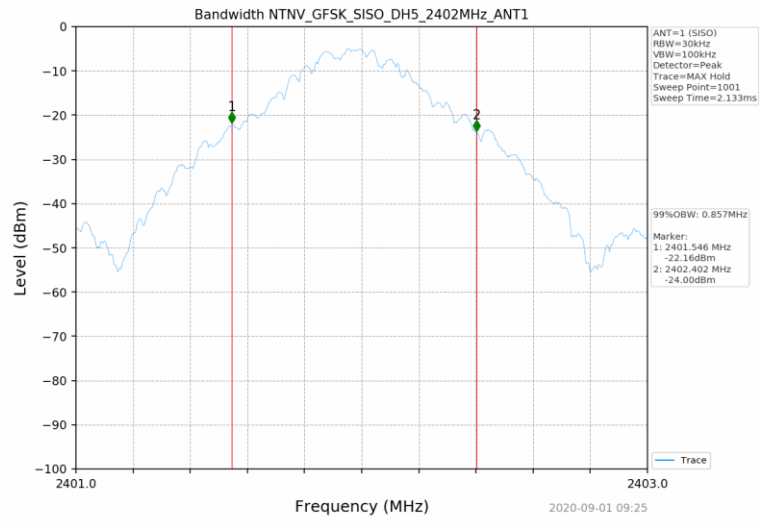


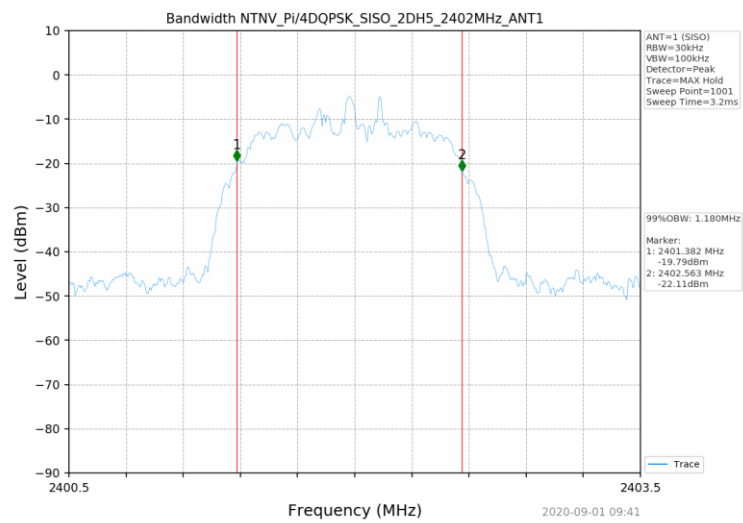
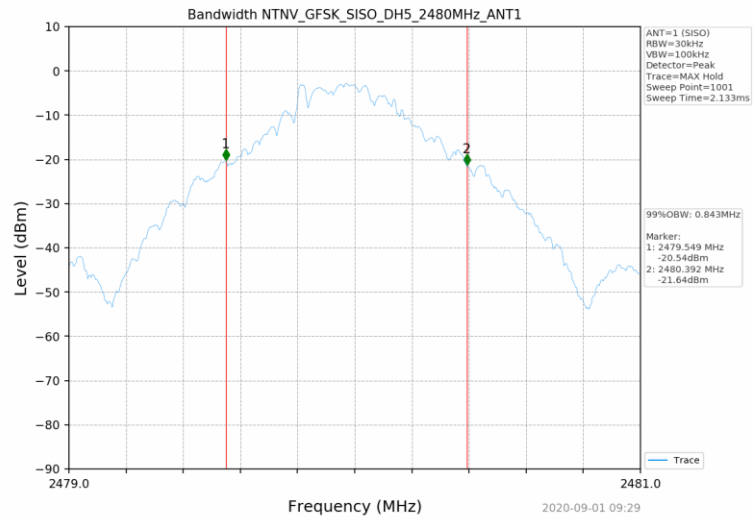


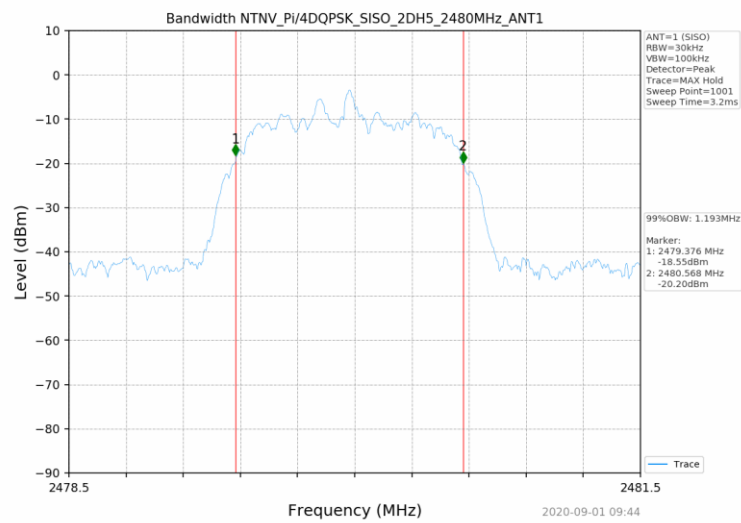
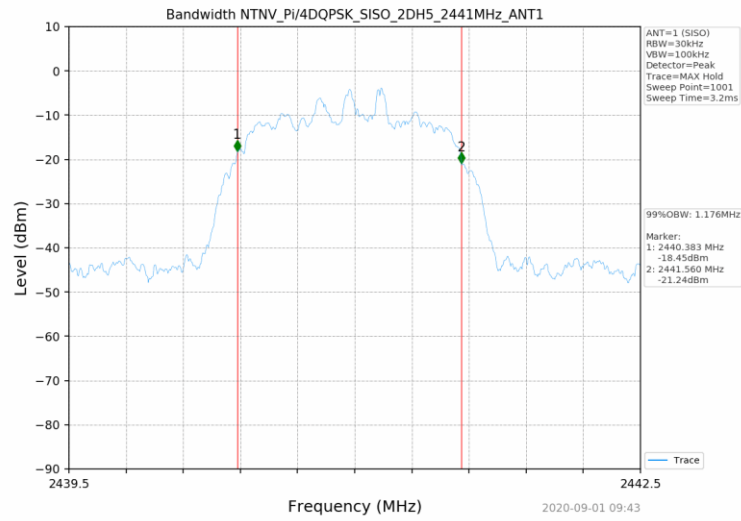


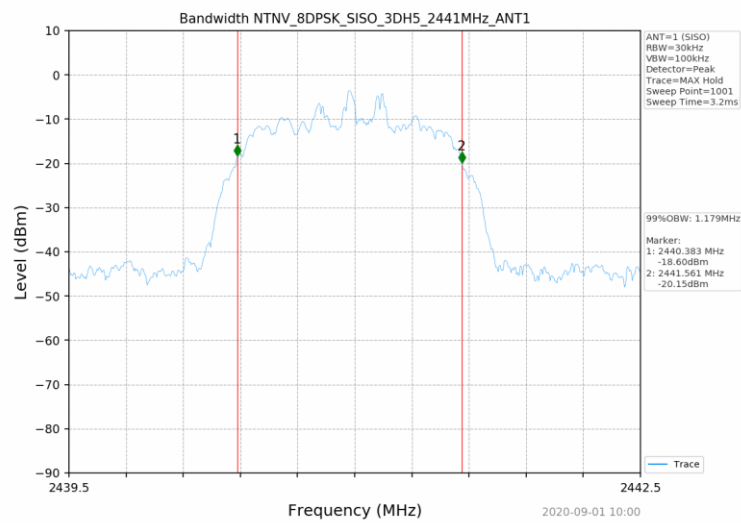
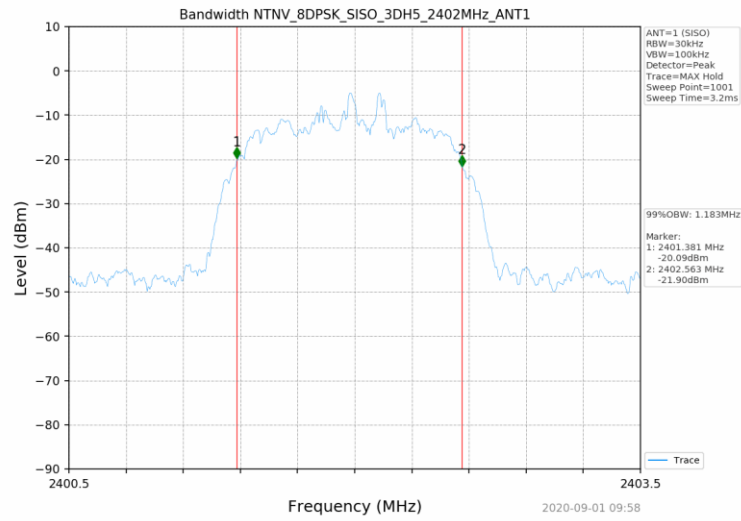


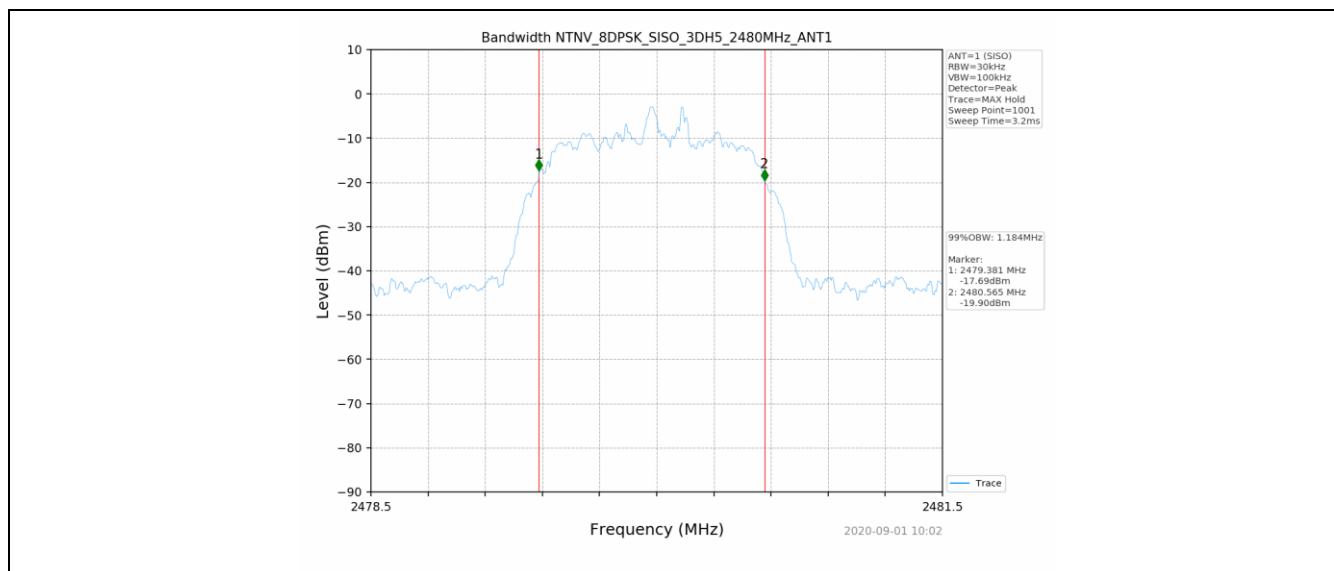
1.3 Test Graph - 99% Occupied Bandwidth









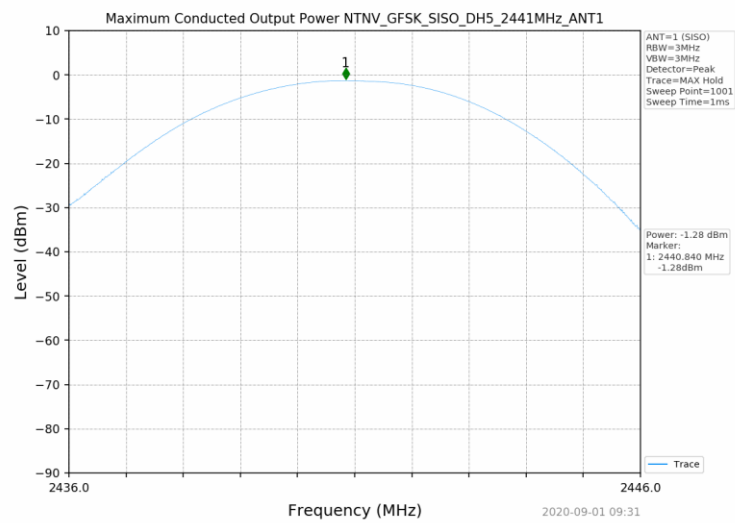
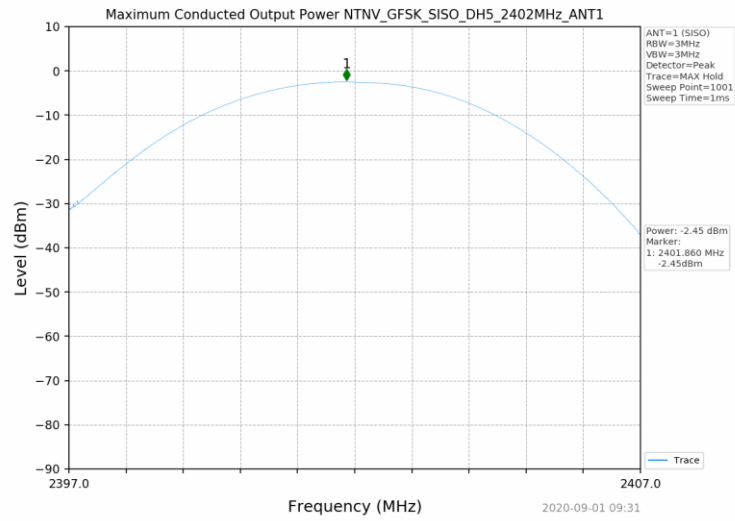


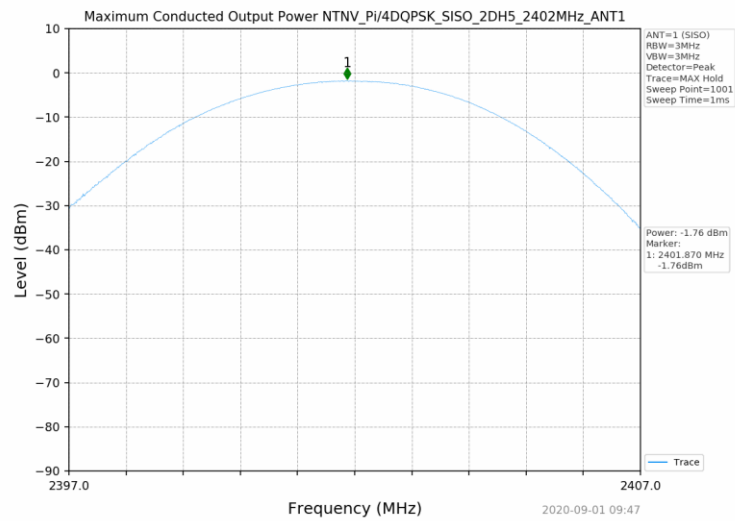
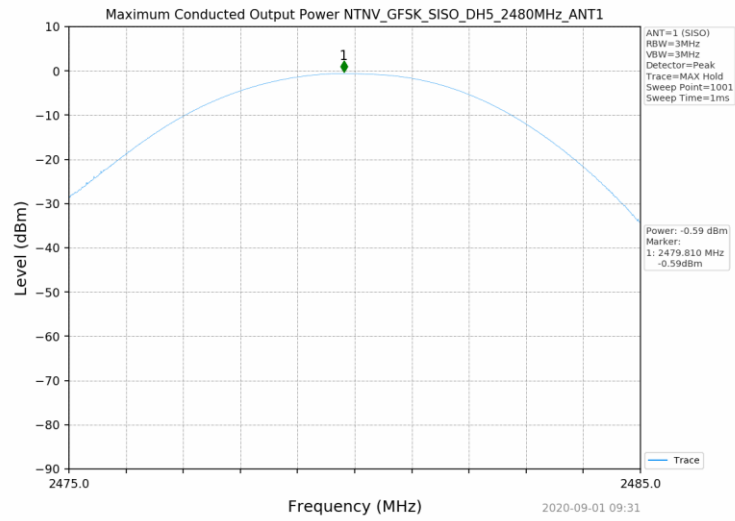
2. Maximum Conducted Output Power

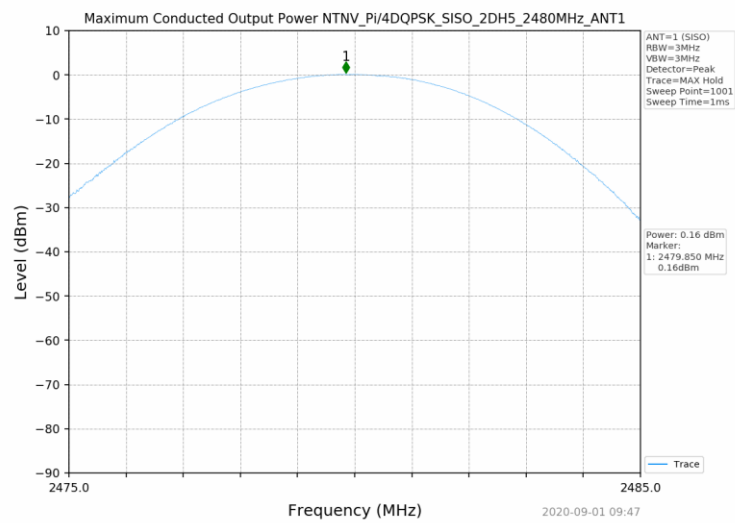
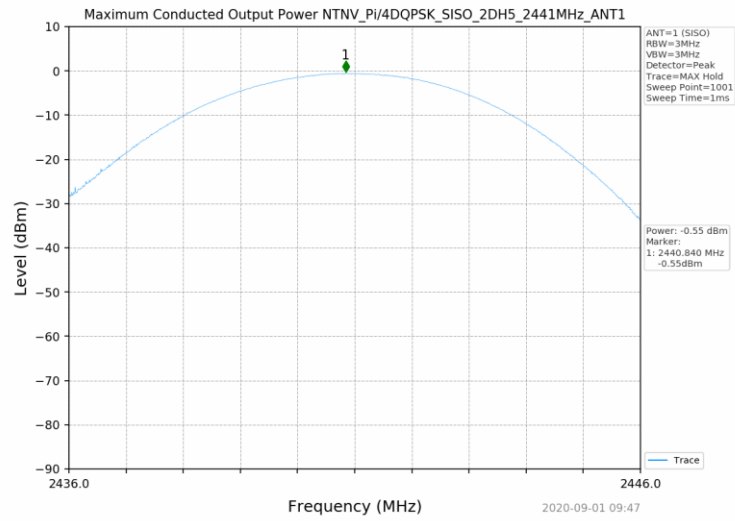
2.1 Test Result

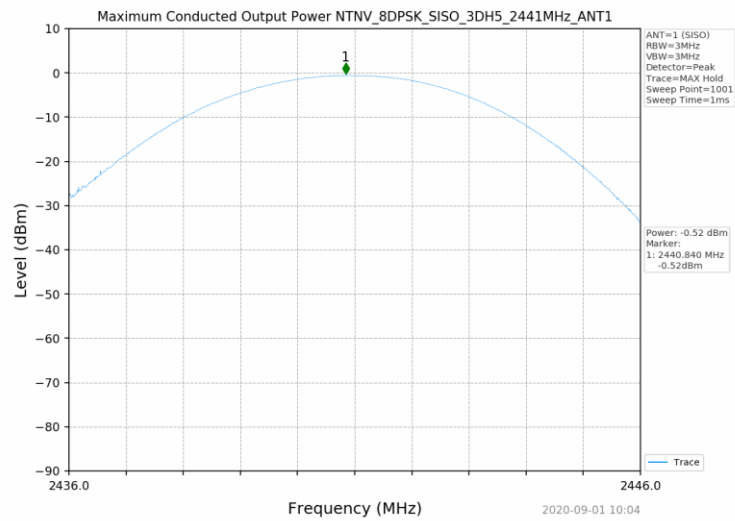
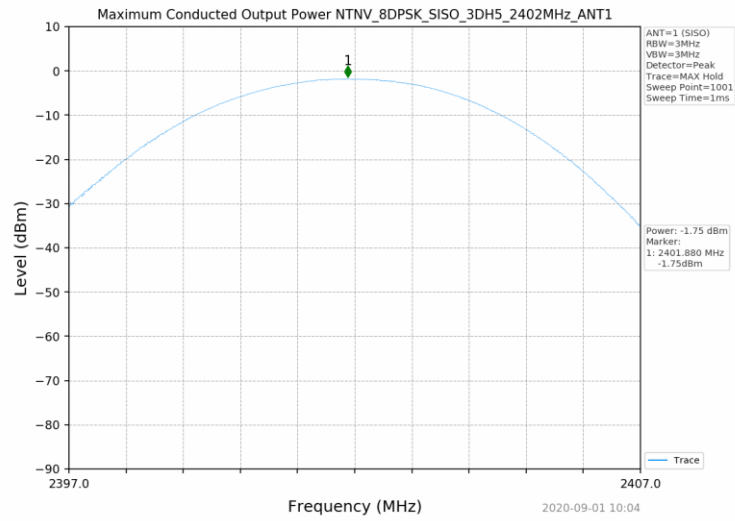
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
GFSK	2402	SISO	-2.45	30	PASS
	2441	SISO	-1.28	30	PASS
	2480	SISO	-0.59	30	PASS
Pi/4DQPSK	2402	SISO	-1.76	20.97	PASS
	2441	SISO	-0.55	20.97	PASS
	2480	SISO	0.16	20.97	PASS
8DPSK	2402	SISO	-1.75	20.97	PASS
	2441	SISO	-0.52	20.97	PASS
	2480	SISO	0.16	20.97	PASS

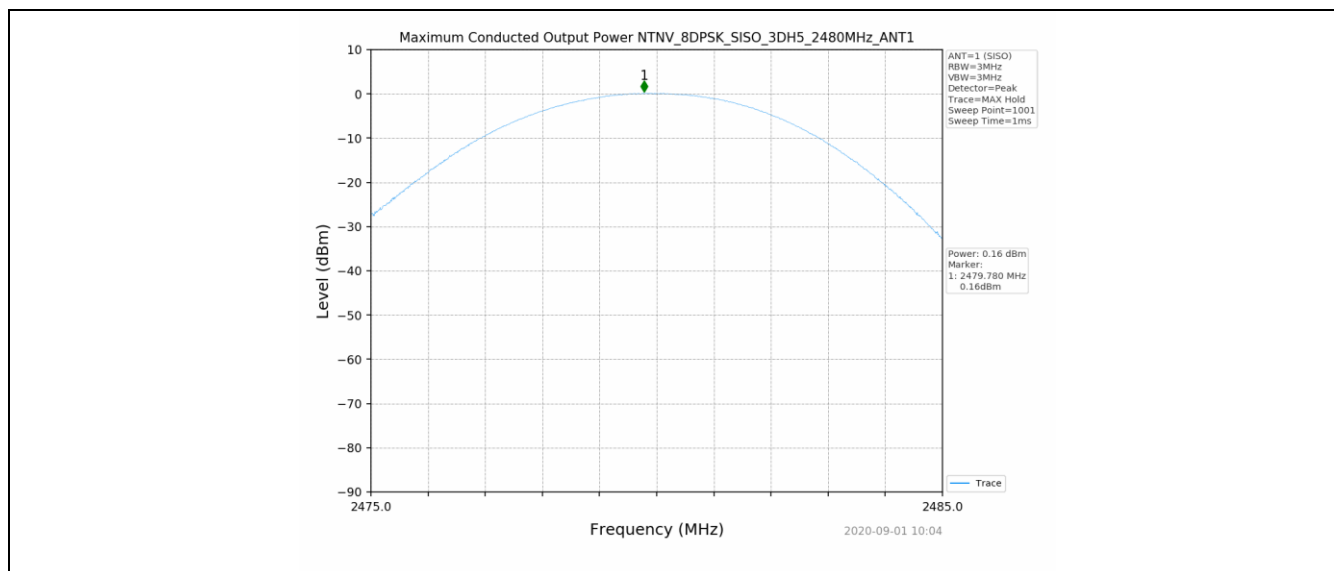
2.2 Test Graph









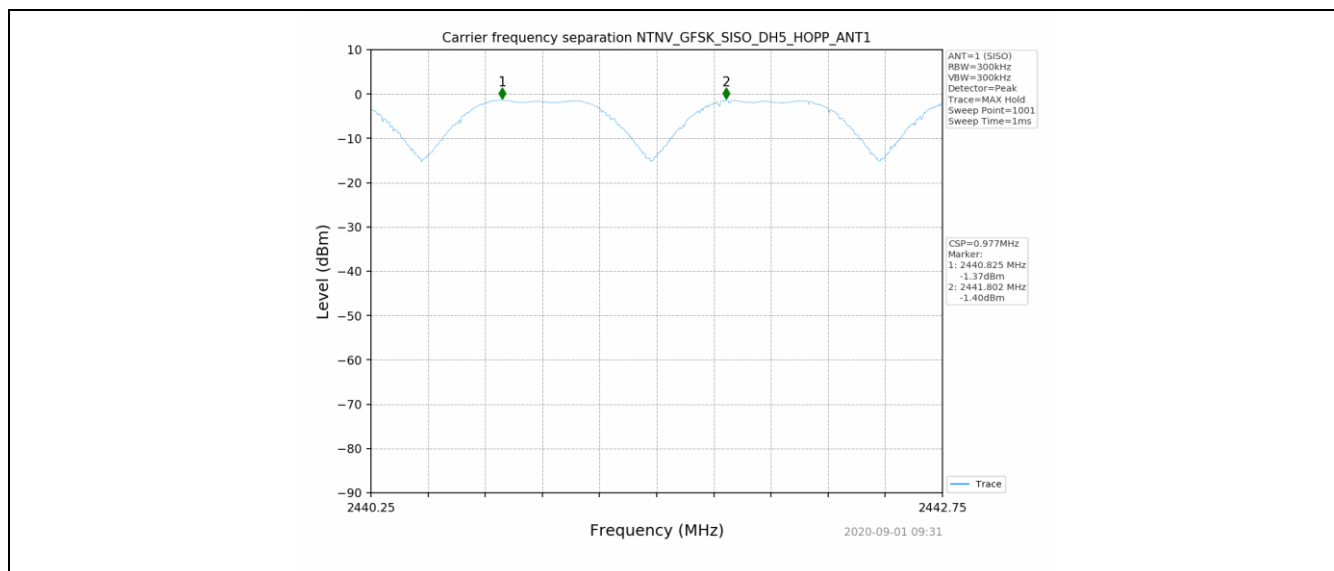


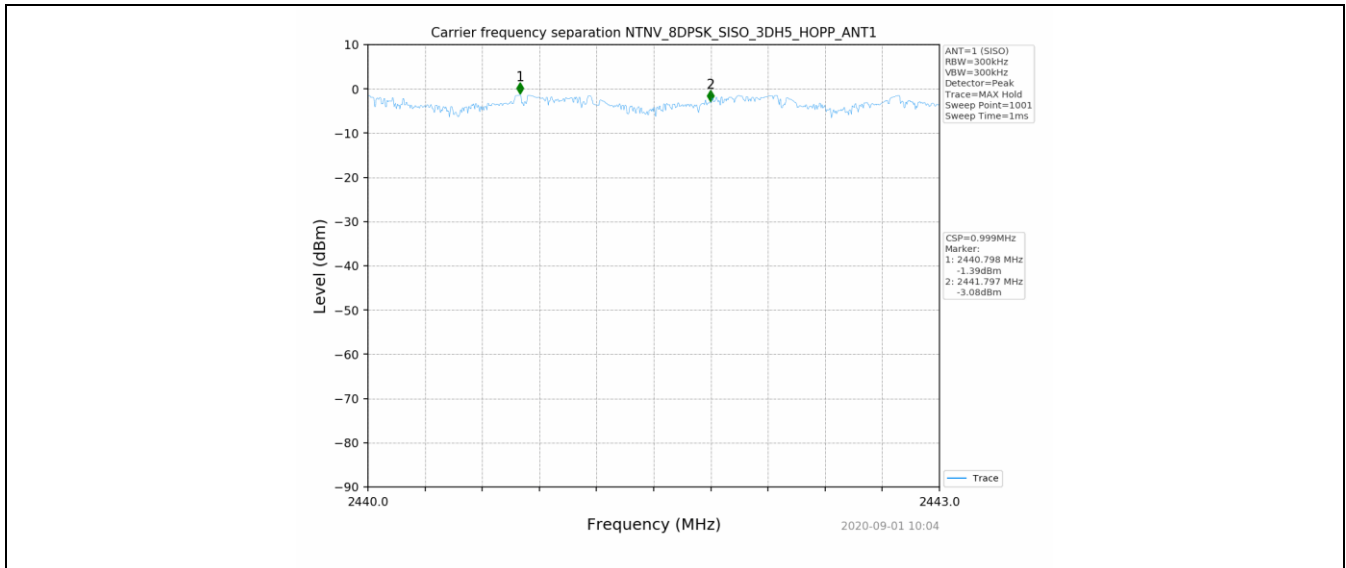
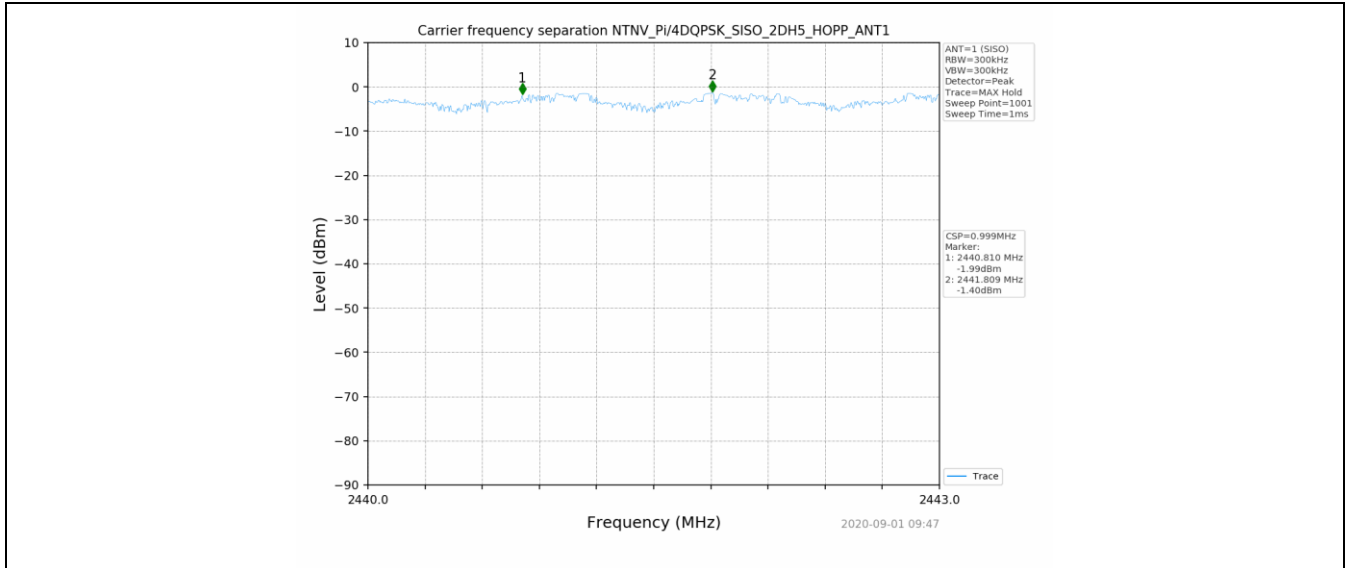
3. Carrier frequency separation

3.1 Test Result

Test Mode	TX Type	ANT No.	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limits (MHz)	Verdict
GFSK	SISO	1	0.977	0.952	≥ 0.635	PASS
Pi/4DQPSK	SISO	1	0.999	1.318	≥ 0.879	PASS
8DPSK	SISO	1	0.999	1.336	≥ 0.891	PASS

3.2 Test Graph



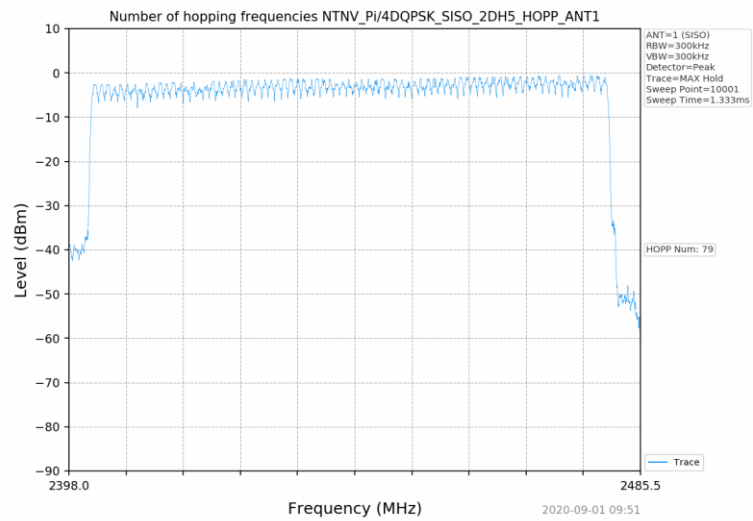
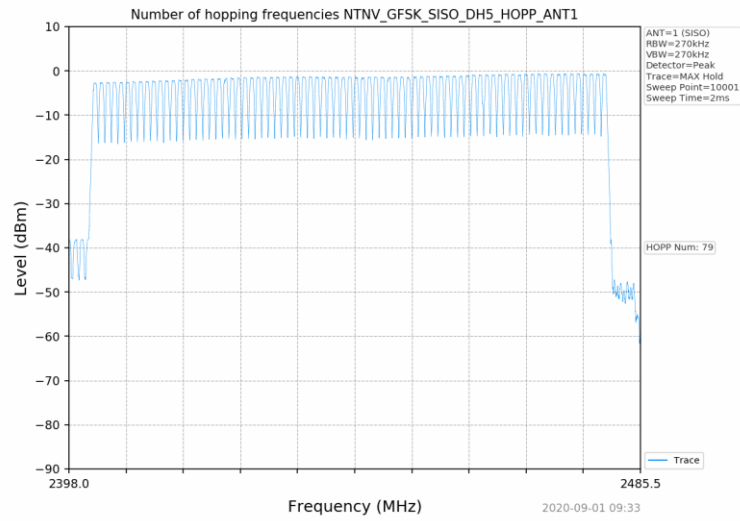


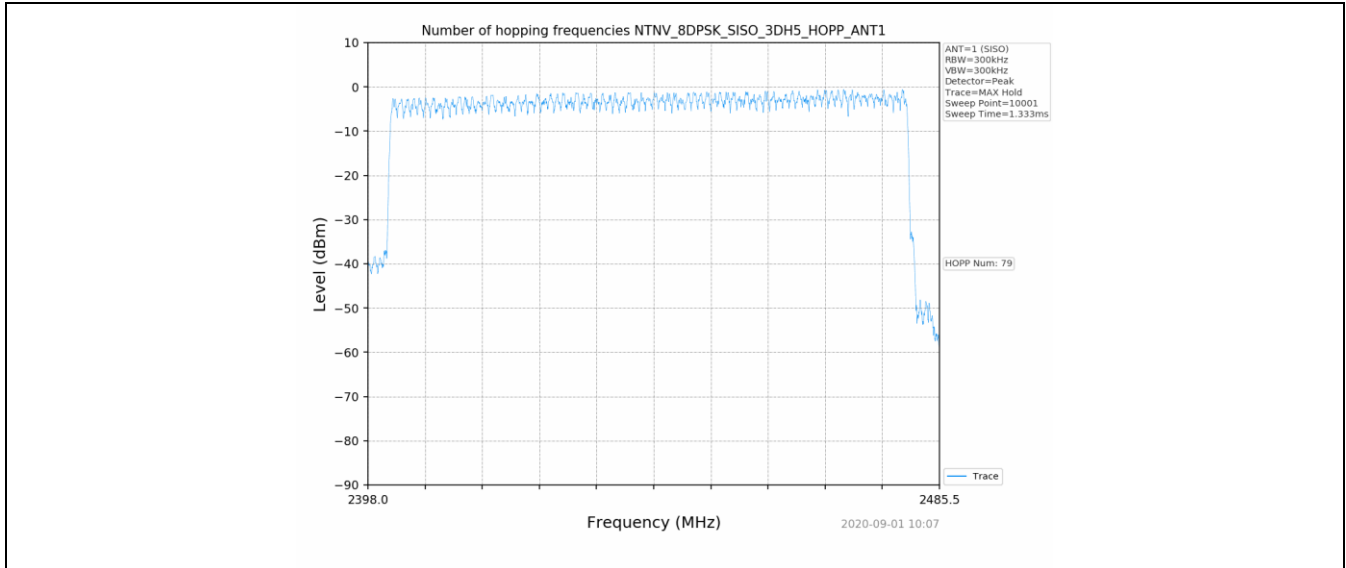
4. Number of hopping frequencies

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



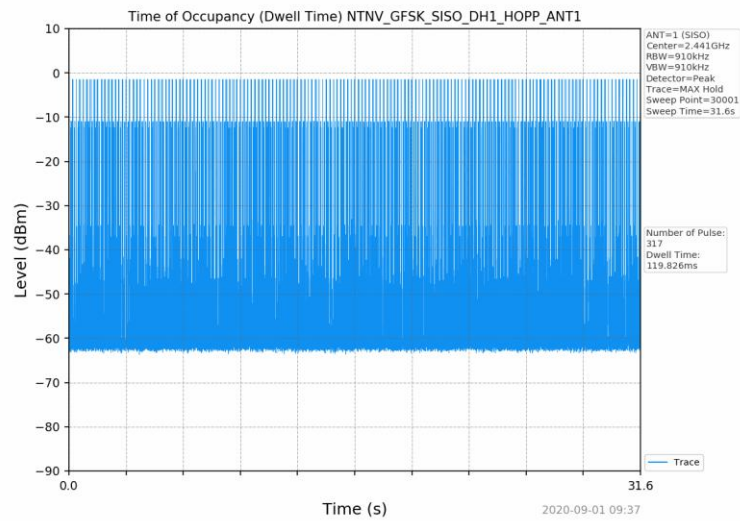
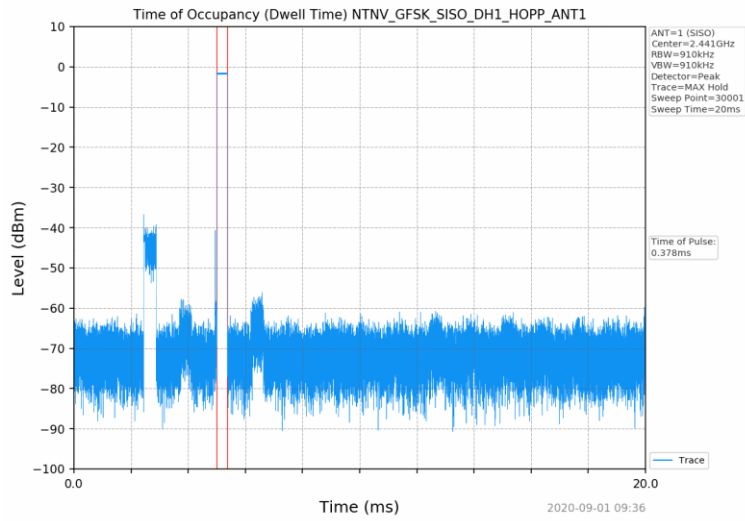


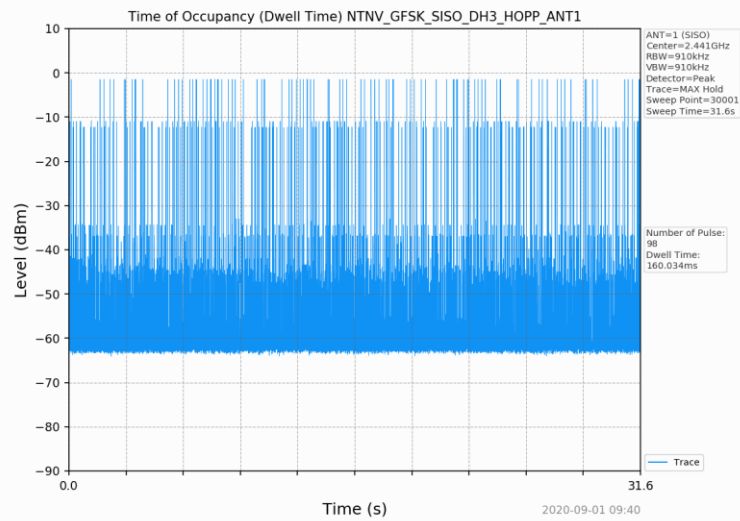
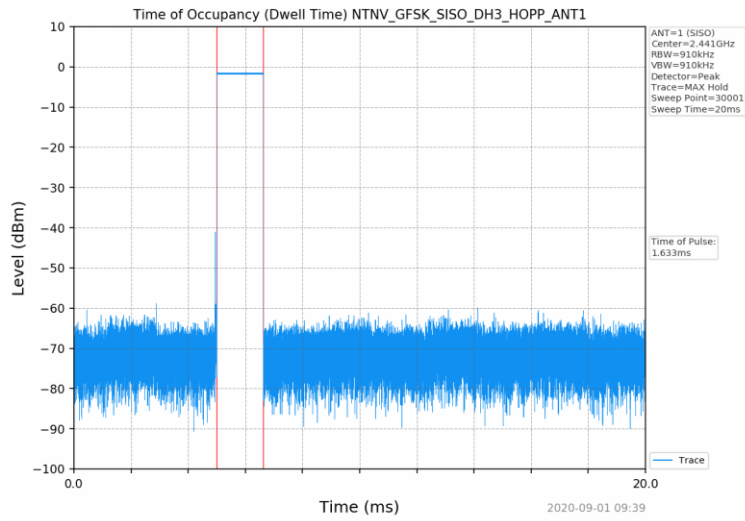
5. Time of Occupancy (Dwell Time)

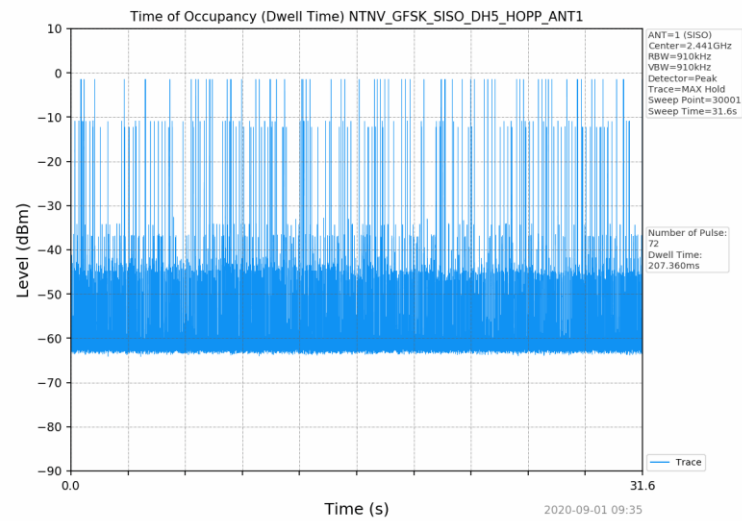
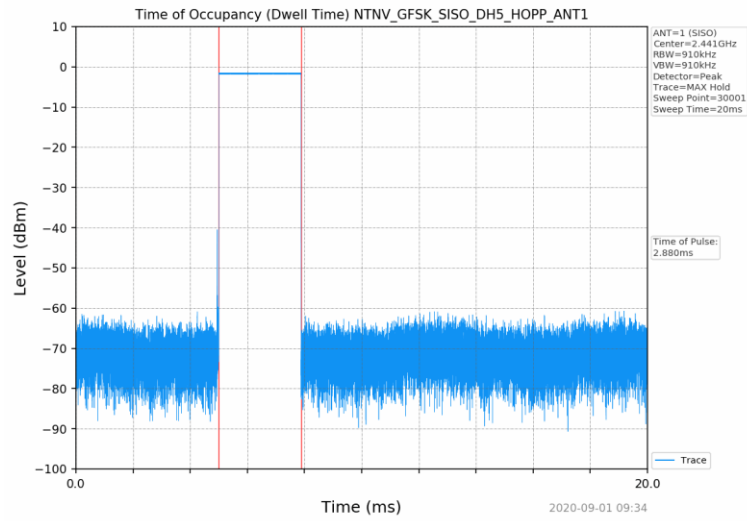
5.1 Test Result

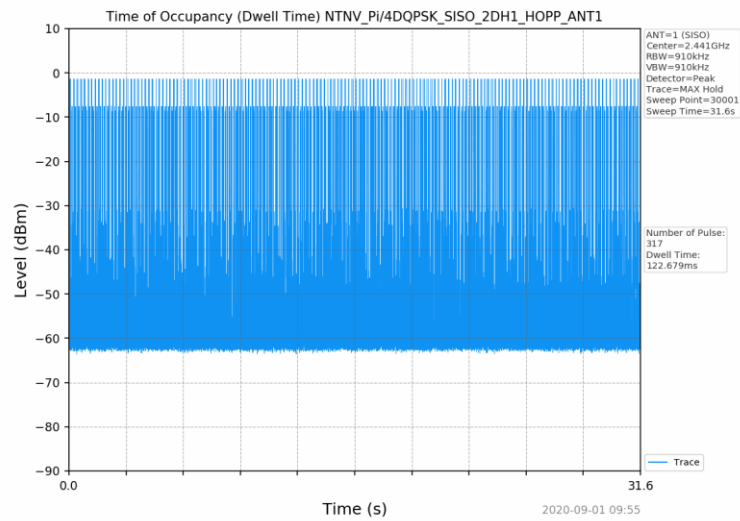
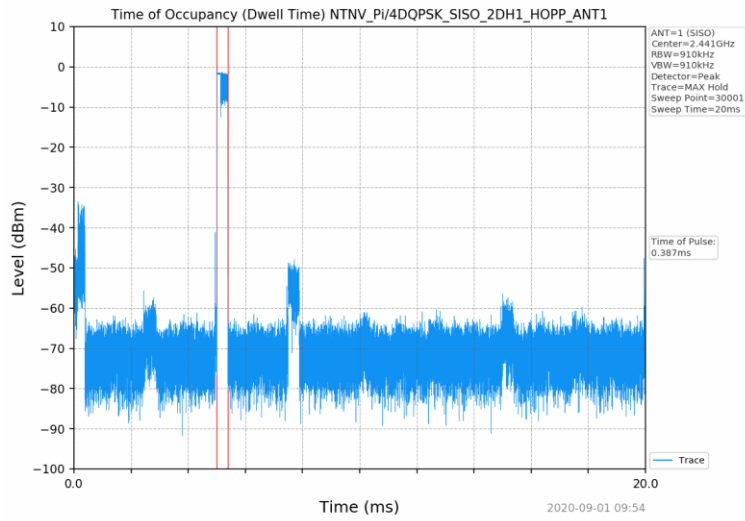
Test Mode	Packet Type	TX Type	ANT No.	Duration of Single Pulse (ms)	Obeservation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limits (ms)	Verdict
GFSK	DH1	SISO	1	0.378	31.6	317	119.826	≤400	PASS
	DH3	SISO	1	1.633	31.6	98	160.034	≤400	PASS
	DH5	SISO	1	2.880	31.6	72	207.360	≤400	PASS
Pi/4D QPS K	2DH1	SISO	1	0.387	31.6	317	122.679	≤400	PASS
	2DH3	SISO	1	1.639	31.6	119	195.041	≤400	PASS
	2DH5	SISO	1	2.888	31.6	72	207.936	≤400	PASS
8DPS K	3DH1	SISO	1	0.387	31.6	321	124.227	≤400	PASS
	3DH3	SISO	1	1.640	31.6	110	180.400	≤400	PASS
	3DH5	SISO	1	2.888	31.6	58	167.504	≤400	PASS

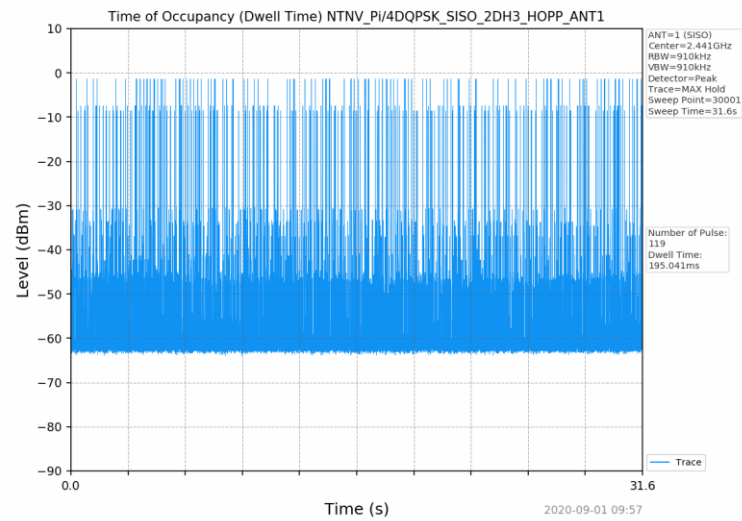
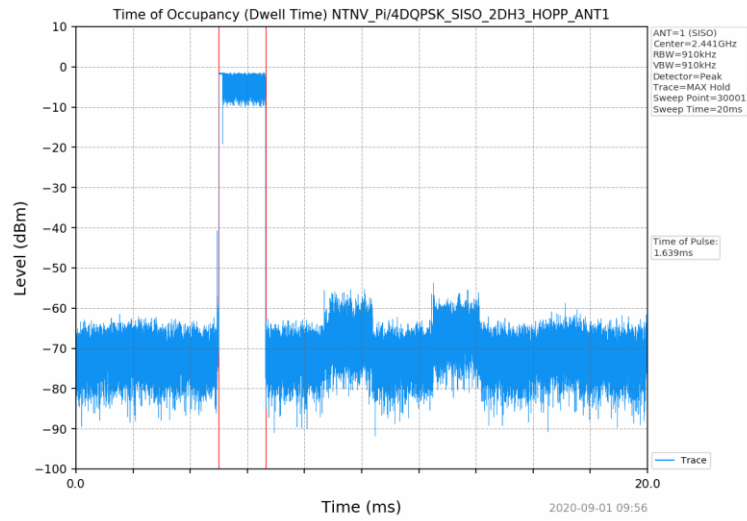
5.2 Test Graph

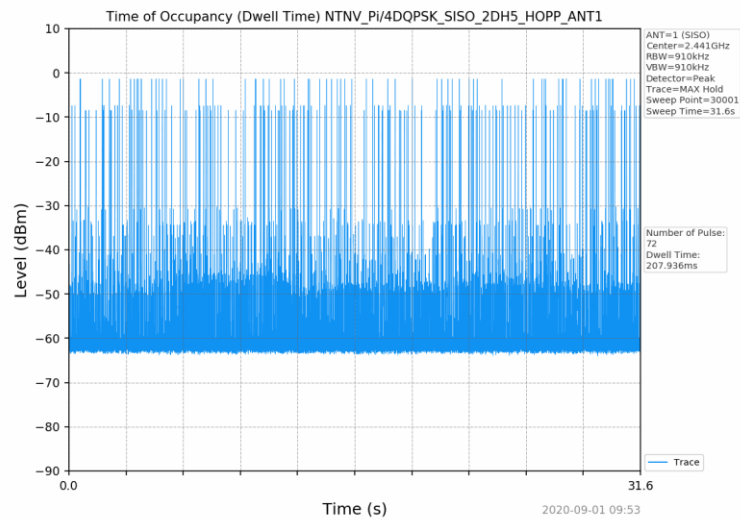
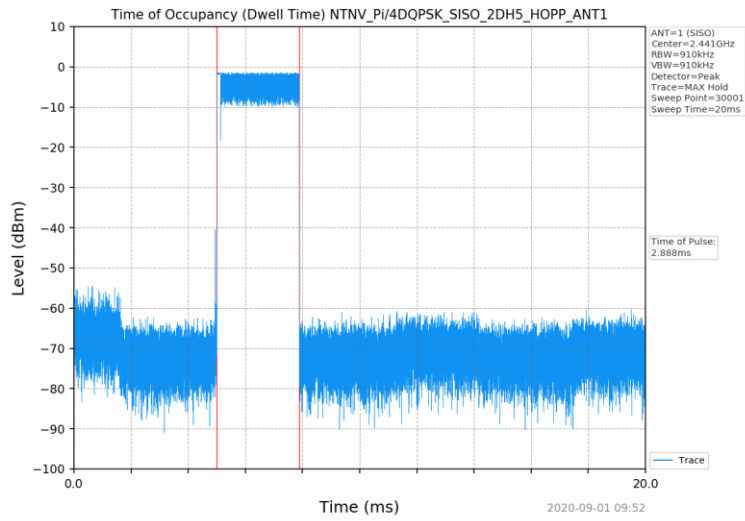


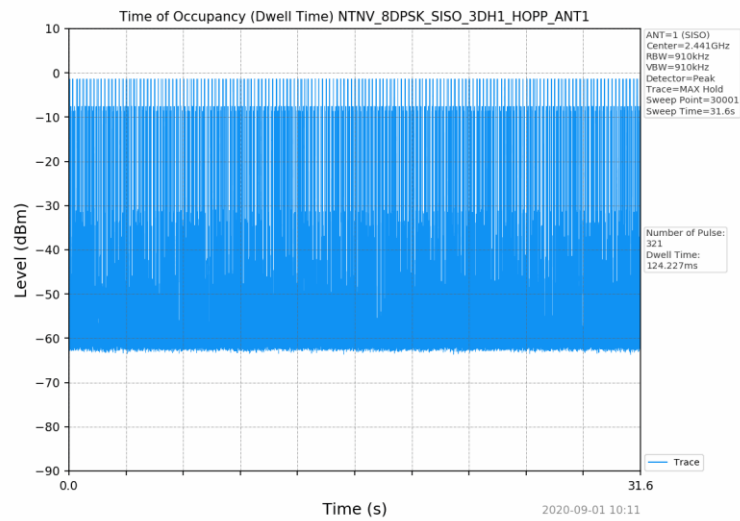
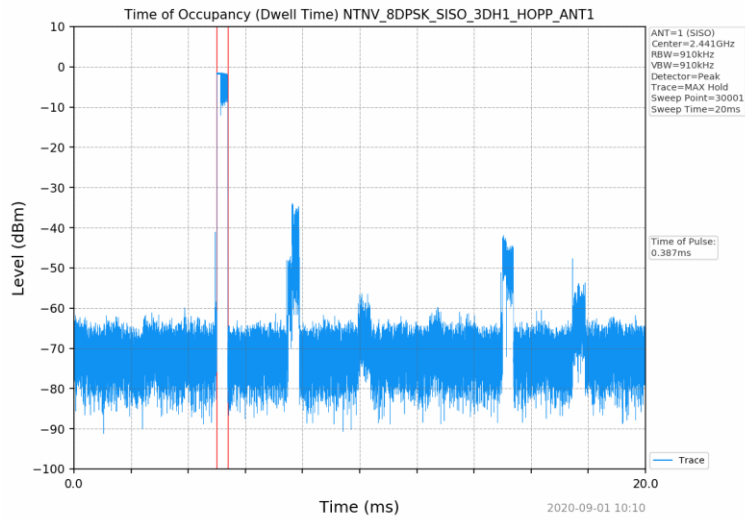


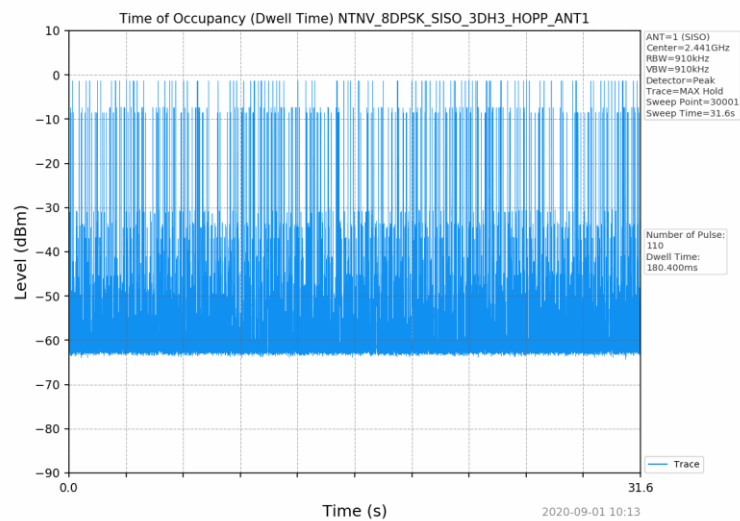
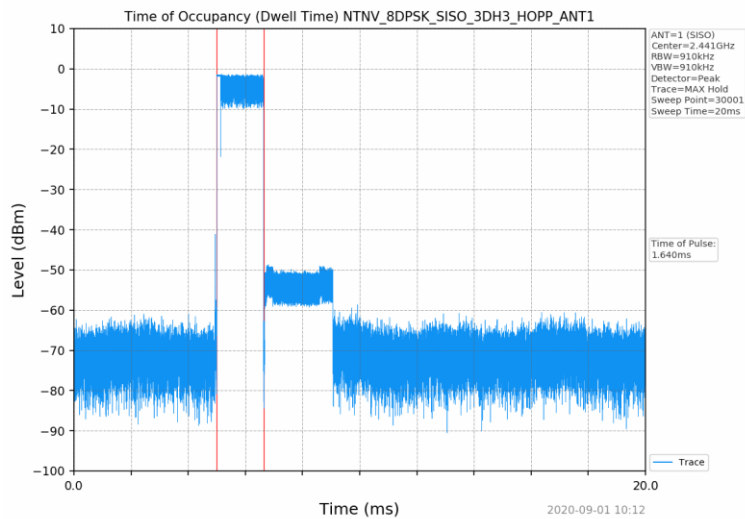


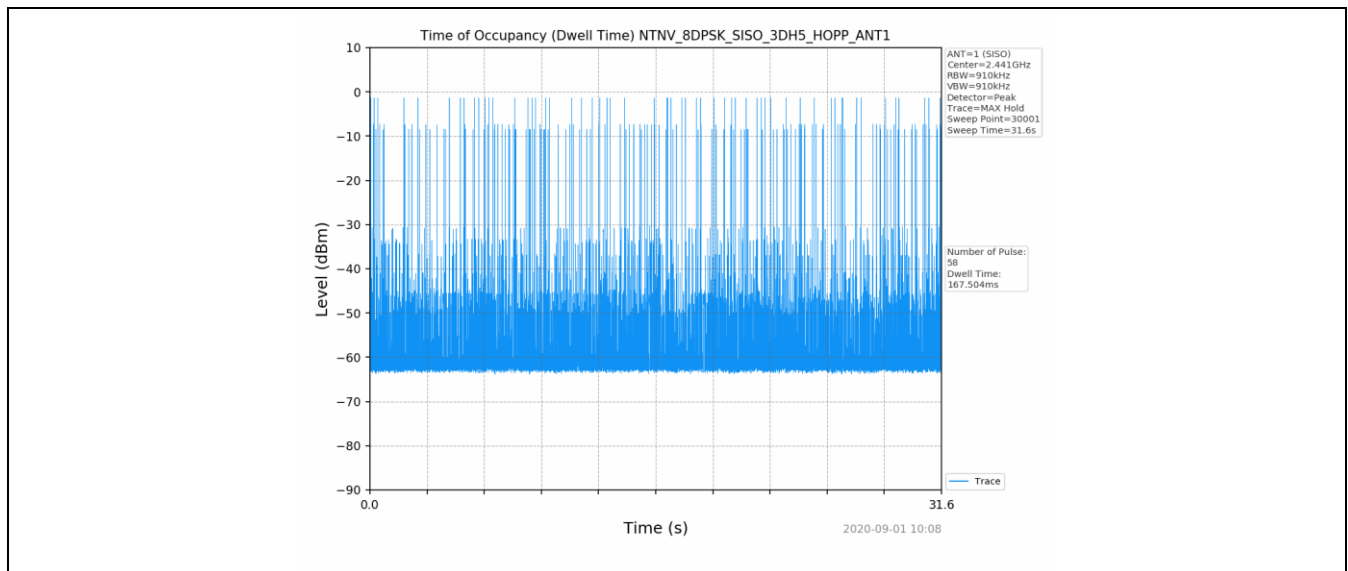
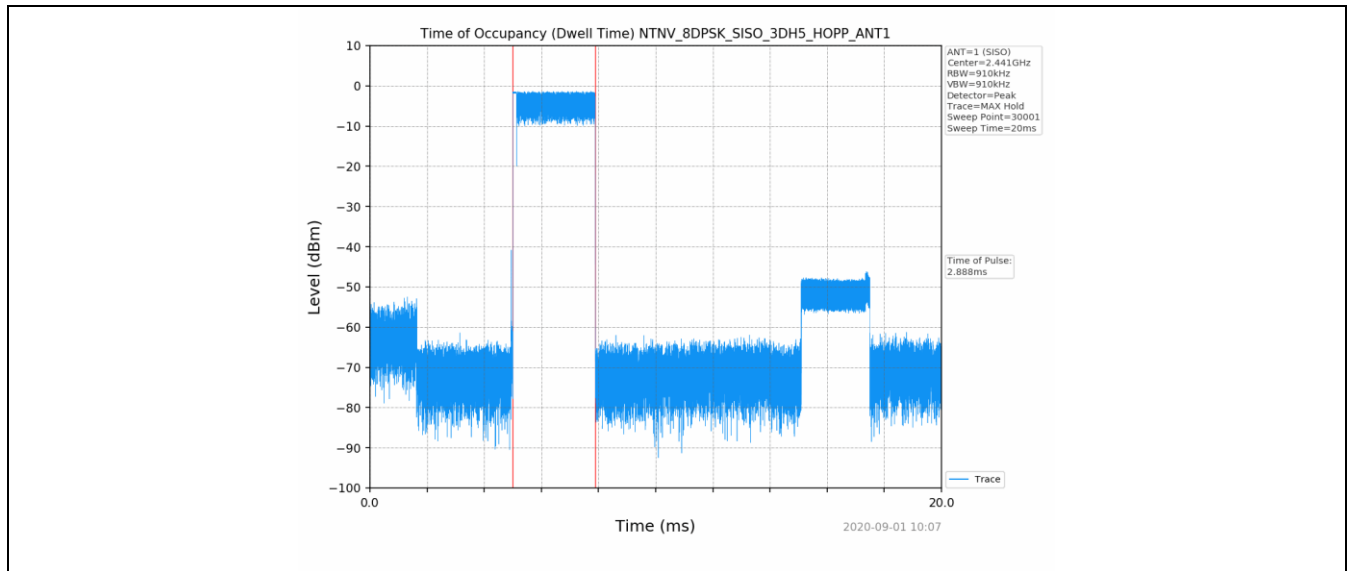












6. Unwanted Emissions in Non-restricted Frequency Bands

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	-20.67	PASS
	2441	SISO	1	Refer to test graph	-20.67	PASS
	2480	SISO	1	Refer to test graph	-20.67	PASS
	Hopping	SISO	1	Refer to test graph	-20.67	PASS
Pi/4DQPSK	2402	SISO	1	Refer to test graph	-20.78	PASS
	2441	SISO	1	Refer to test graph	-20.78	PASS
	2480	SISO	1	Refer to test graph	-20.78	PASS
	Hopping	SISO	1	Refer to test graph	-20.78	PASS
8DPSK	2402	SISO	1	Refer to test graph	-20.73	PASS

	2441	SISO	1	Refer to test graph	-20.73	PASS
	2480	SISO	1	Refer to test graph	-20.73	PASS
	Hopping	SISO	1	Refer to test graph	-20.73	PASS

6.2 Test Graph

