

Appendix for 15.247

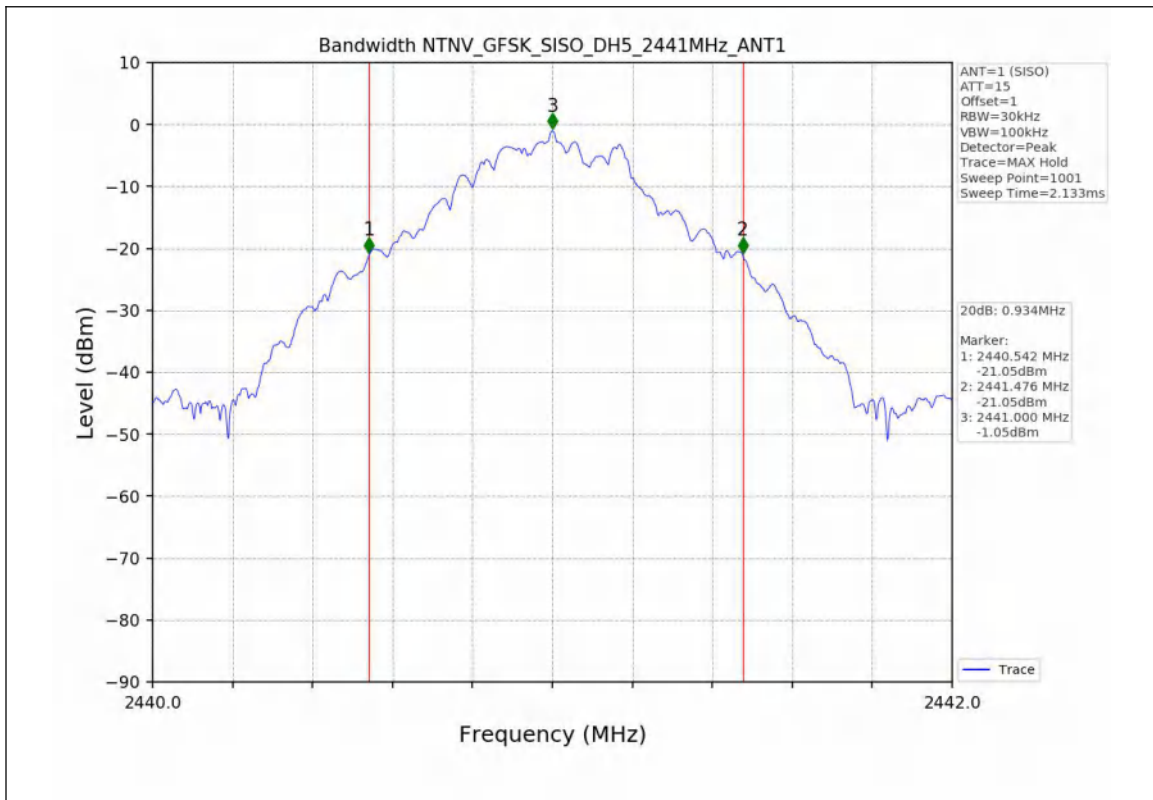
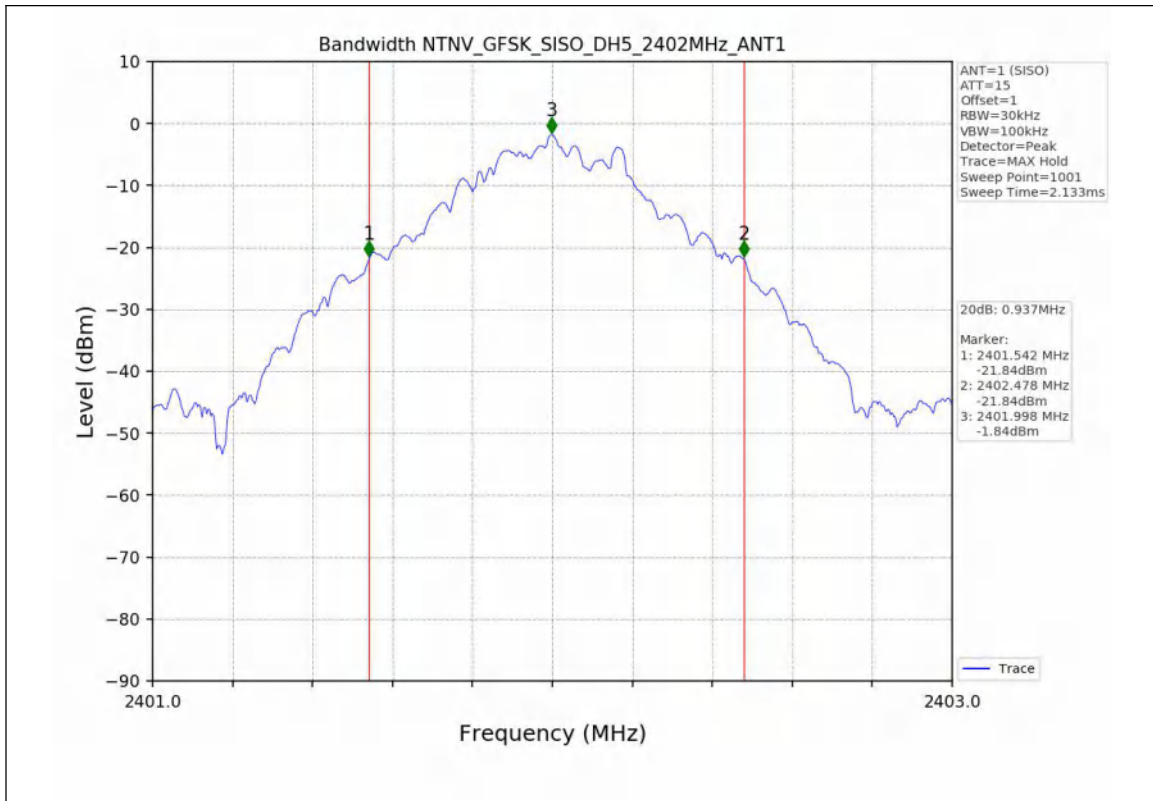
1. Bandwidth

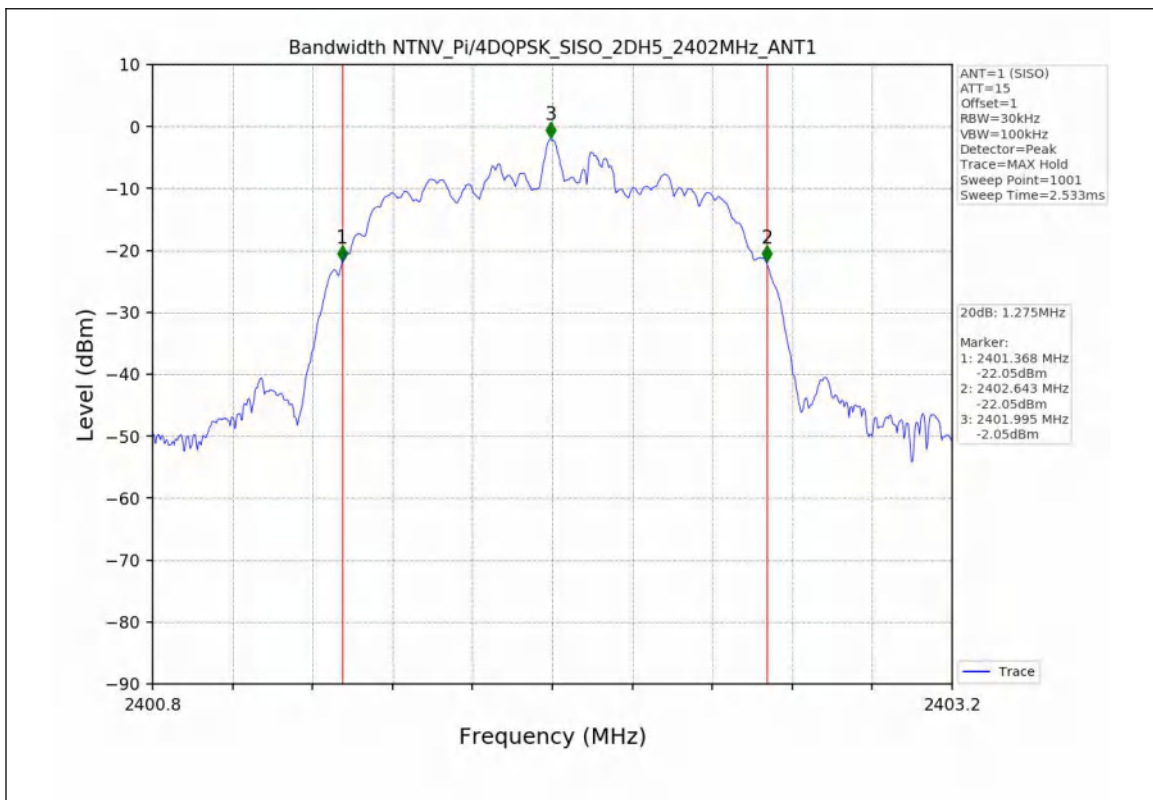
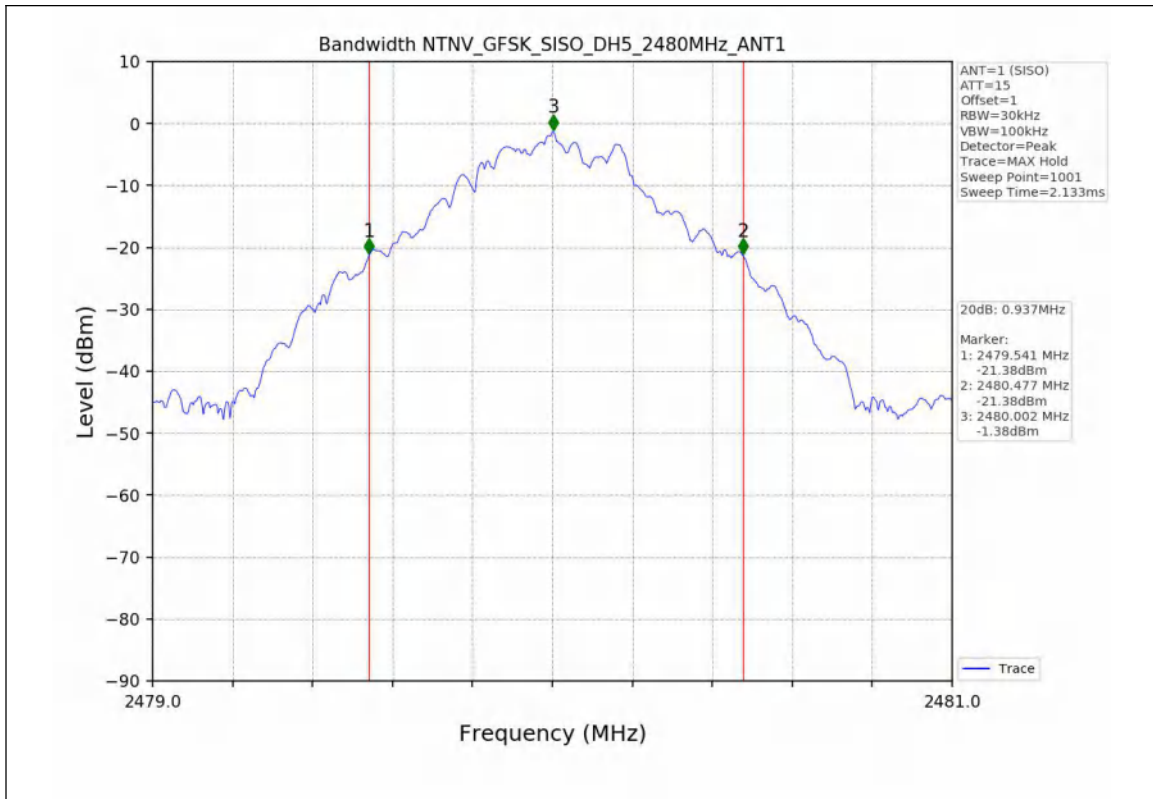
1.1 Test Result

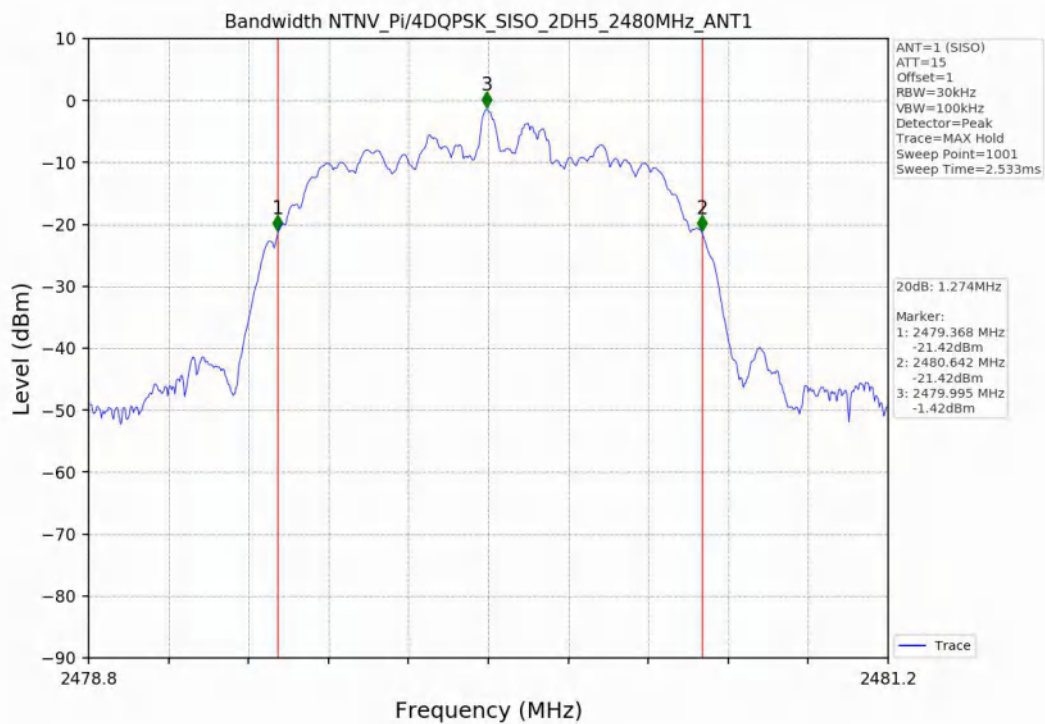
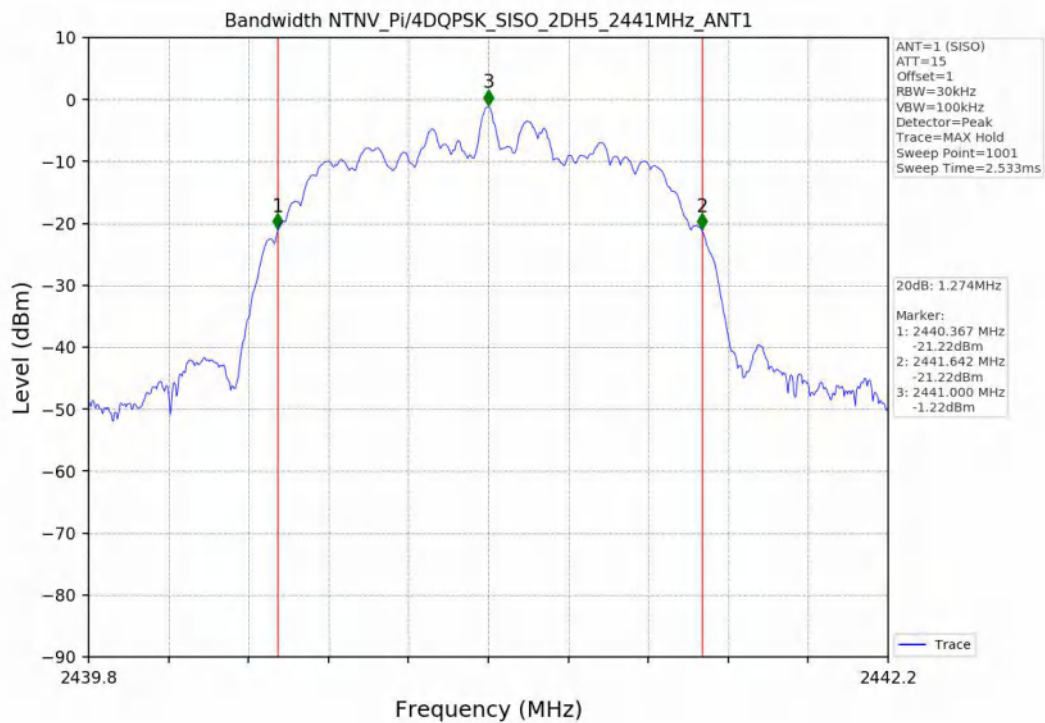
Test Mode	Frequency (MHz)	TX Type	ANT No.	20dB Bandwidth	Verdict
				Test Result (MHz)	
GFSK	2402	SISO	1	0.937	PASS
	2441	SISO	1	0.934	PASS
	2480	SISO	1	0.937	PASS
Pi/4DQPSK	2402	SISO	1	1.275	PASS
	2441	SISO	1	1.274	PASS
	2480	SISO	1	1.274	PASS
8DPSK	2402	SISO	1	1.286	PASS
	2441	SISO	1	1.286	PASS
	2480	SISO	1	1.287	PASS

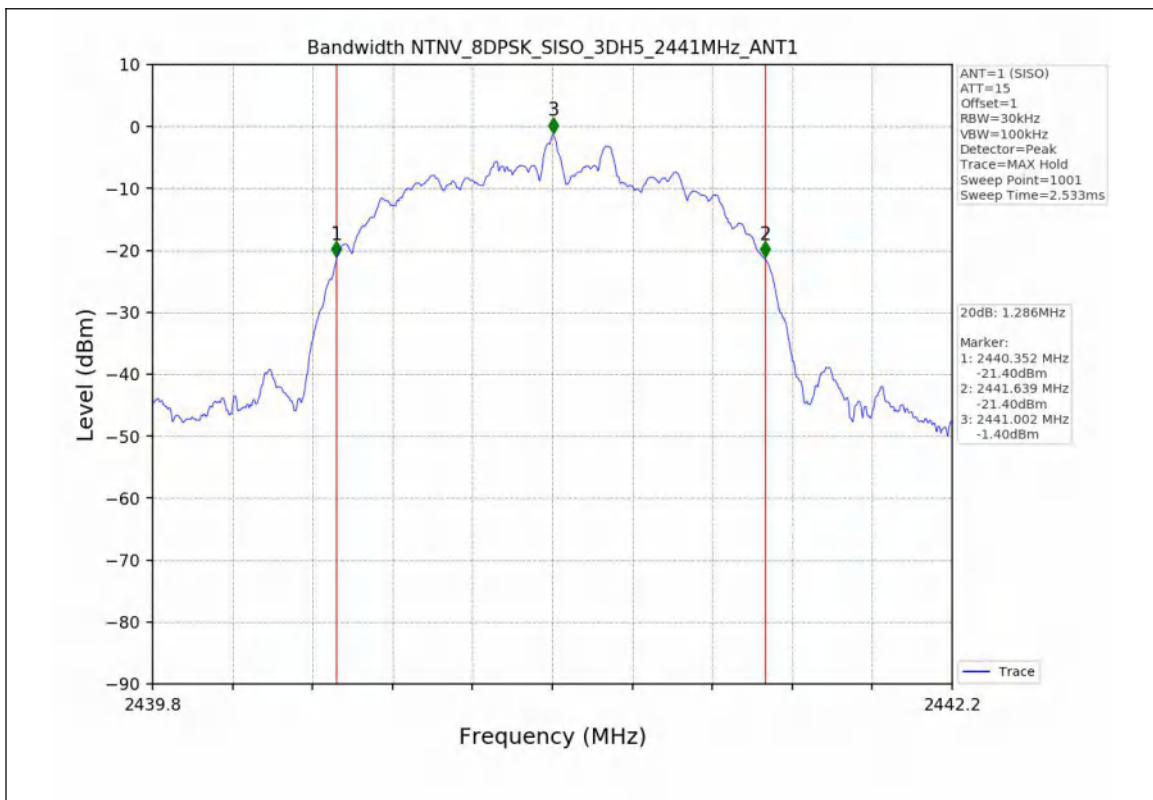
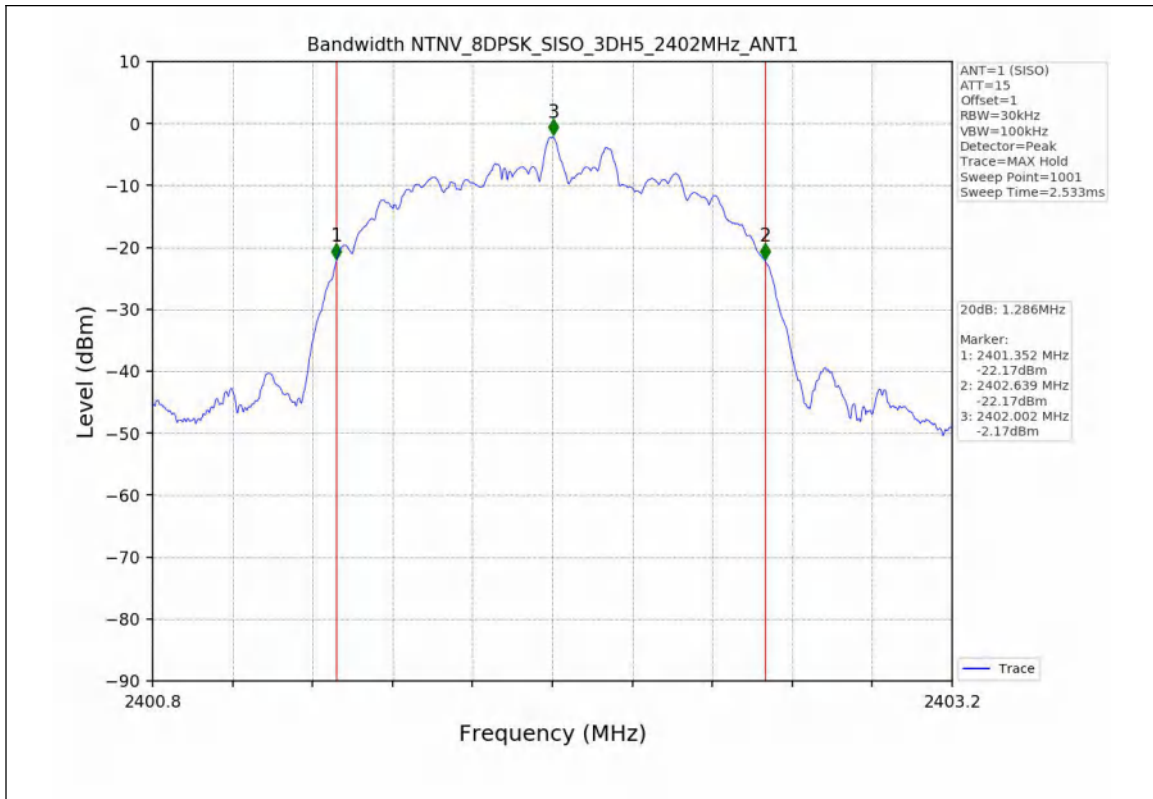
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
GFSK	2402	SISO	1	0.845	Only for Report Use
	2441	SISO	1	0.848	Only for Report Use
	2480	SISO	1	0.844	Only for Report Use
Pi/4DQPSK	2402	SISO	1	1.162	Only for Report Use
	2441	SISO	1	1.164	Only for Report Use
	2480	SISO	1	1.165	Only for Report Use
8DPSK	2402	SISO	1	1.171	Only for Report Use
	2441	SISO	1	1.171	Only for Report Use
	2480	SISO	1	1.173	Only for Report Use

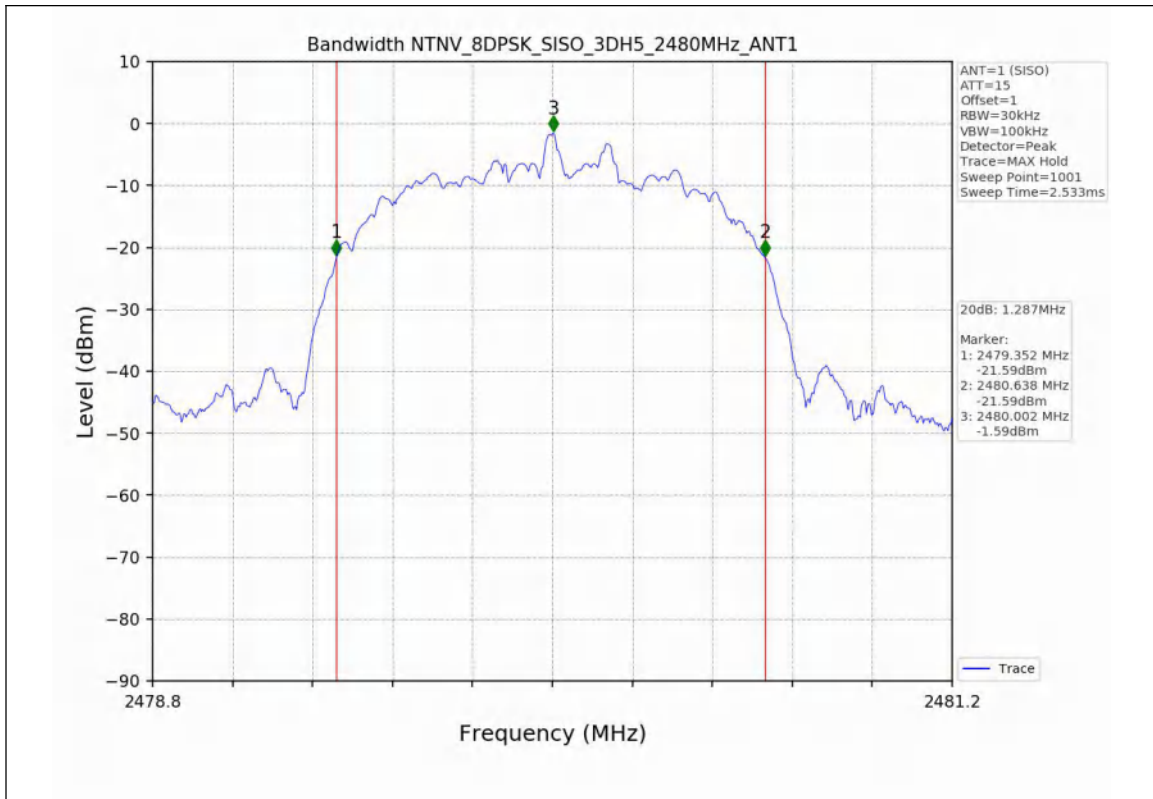
1.2 Test Graph - 20dB Bandwidth



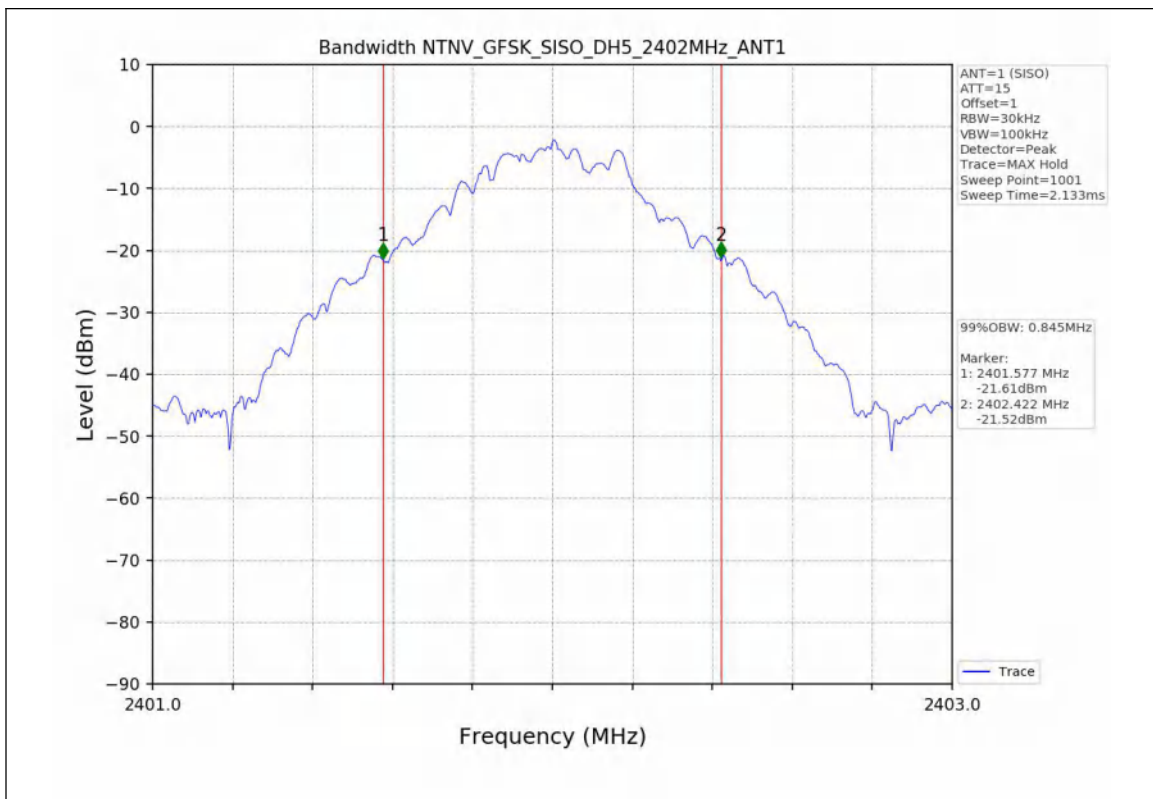


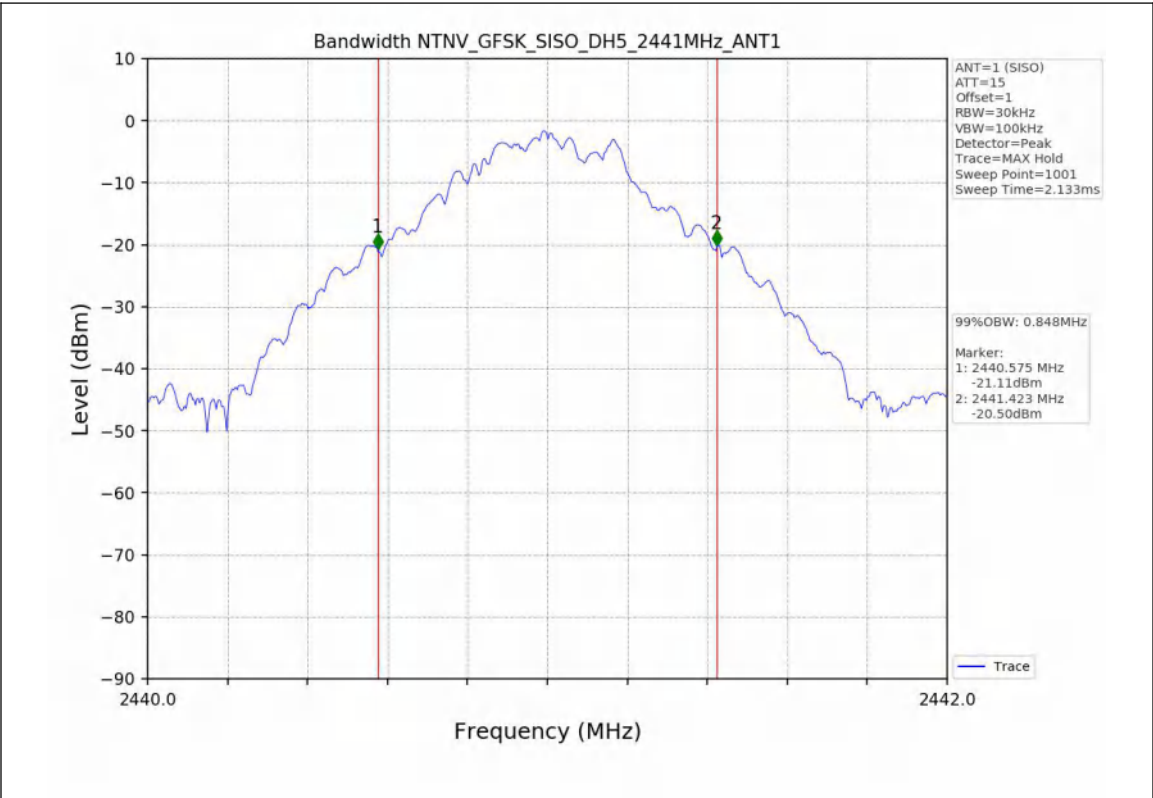


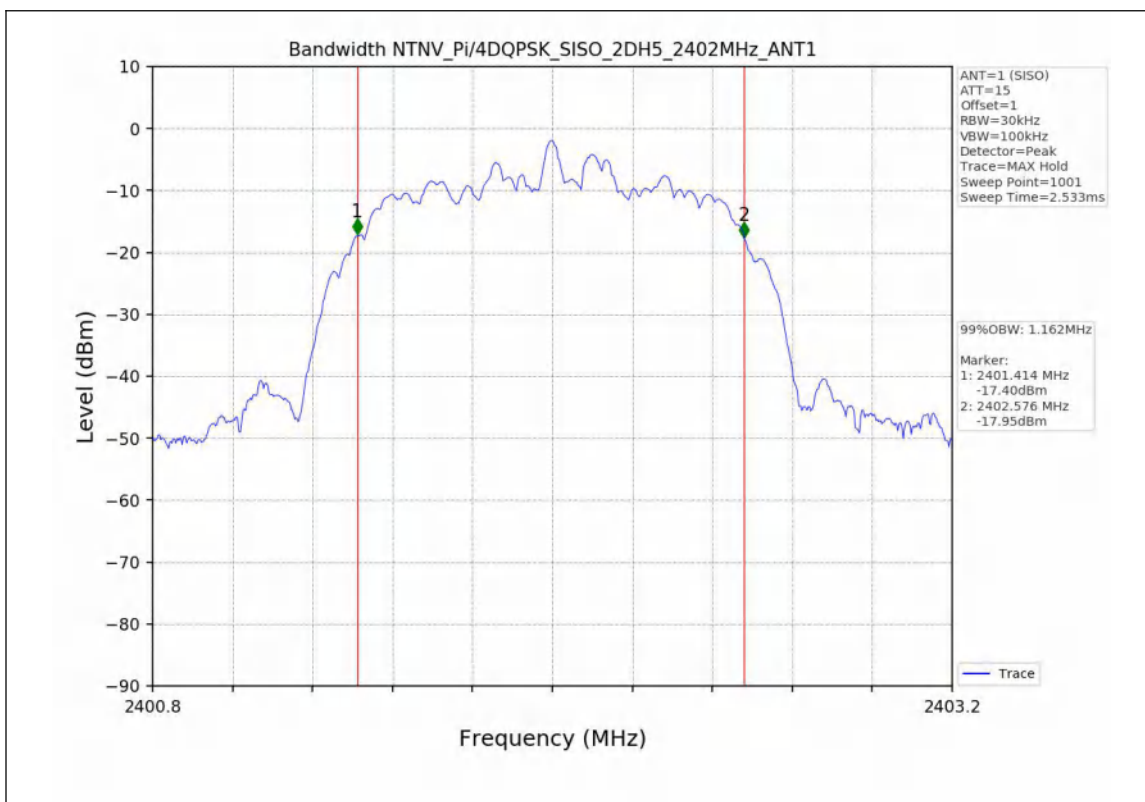
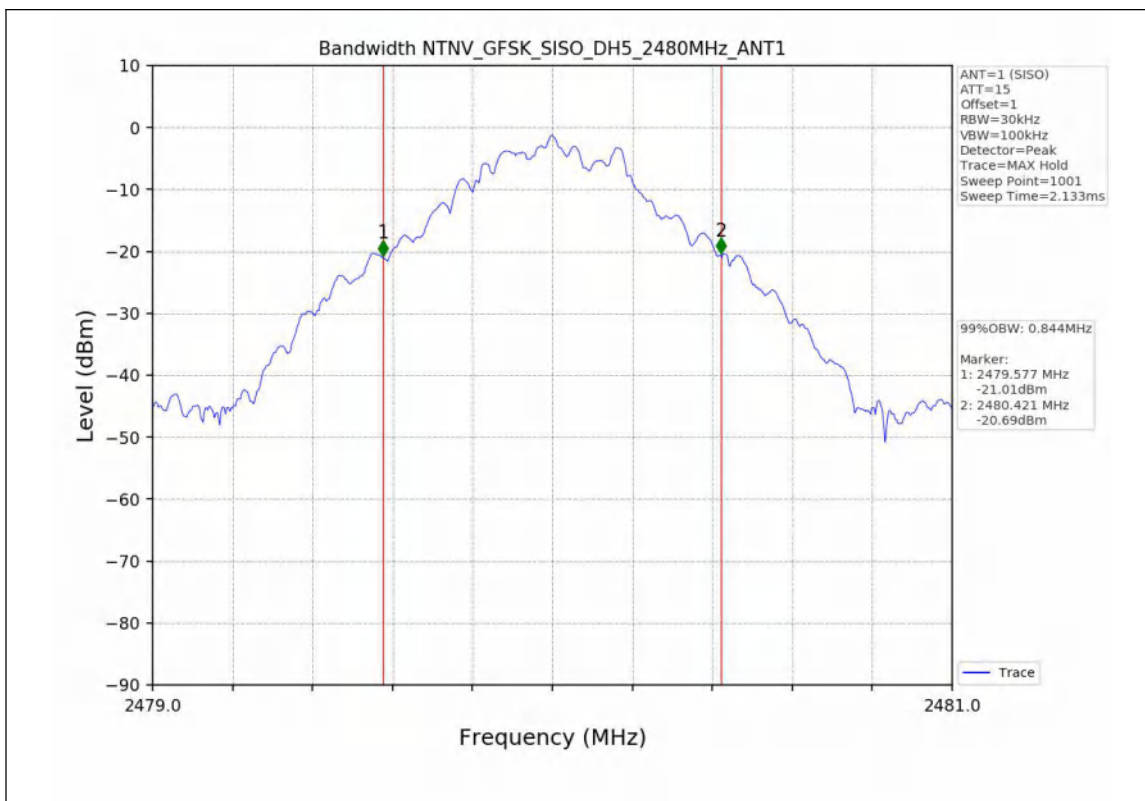


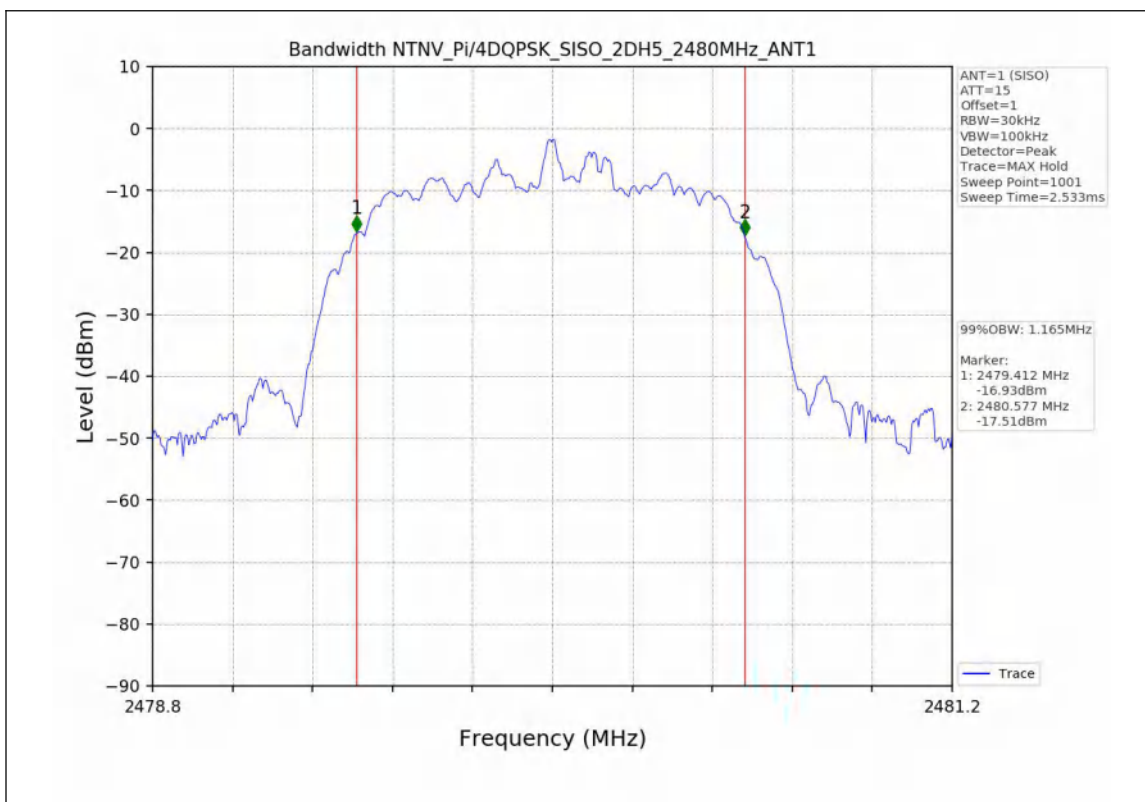
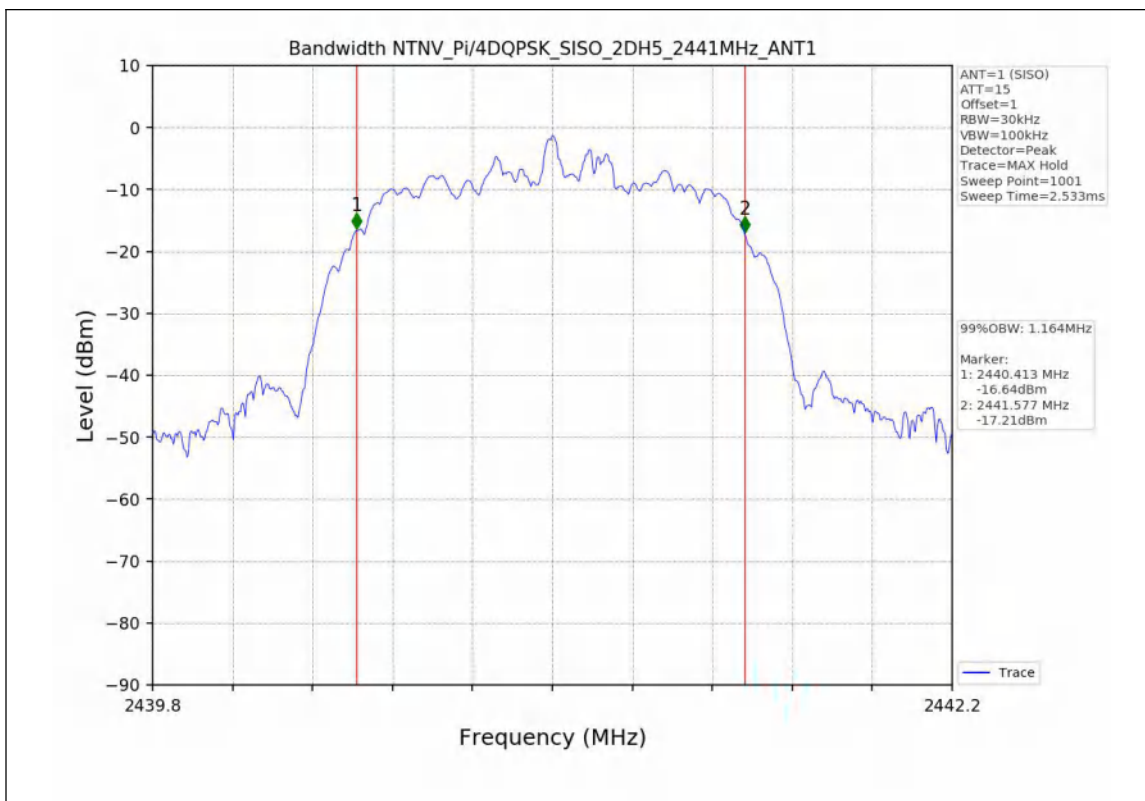


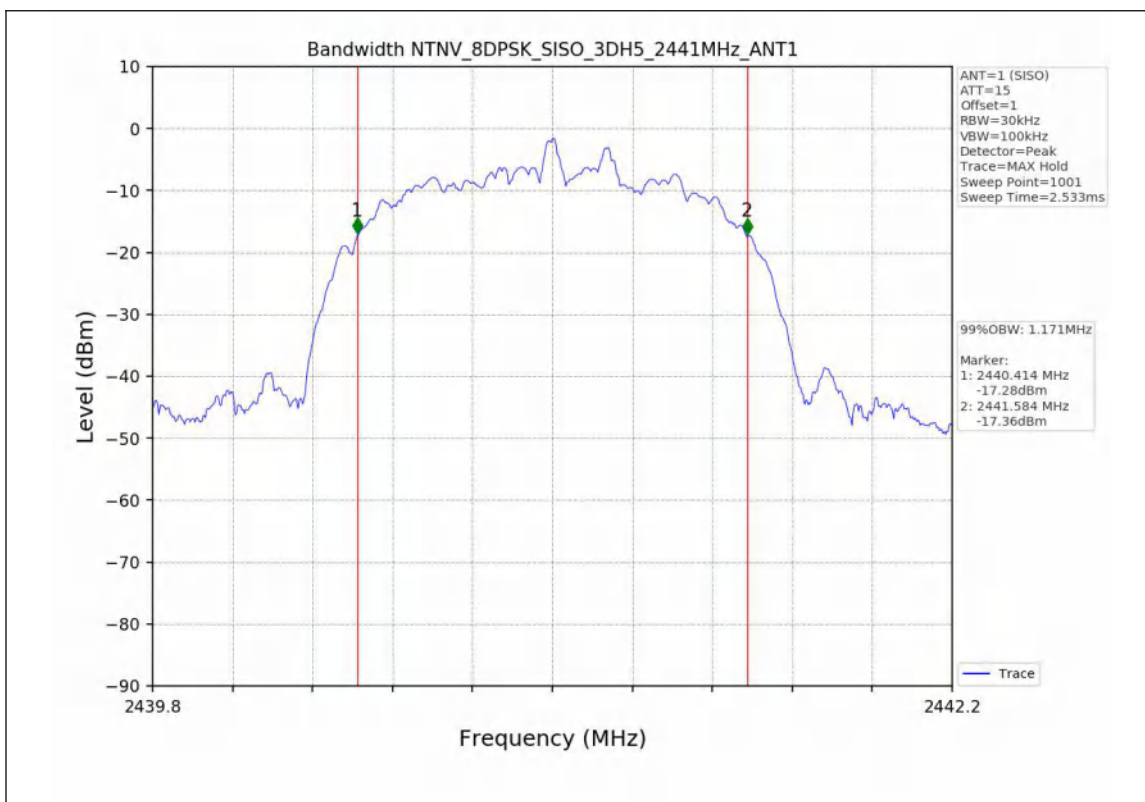
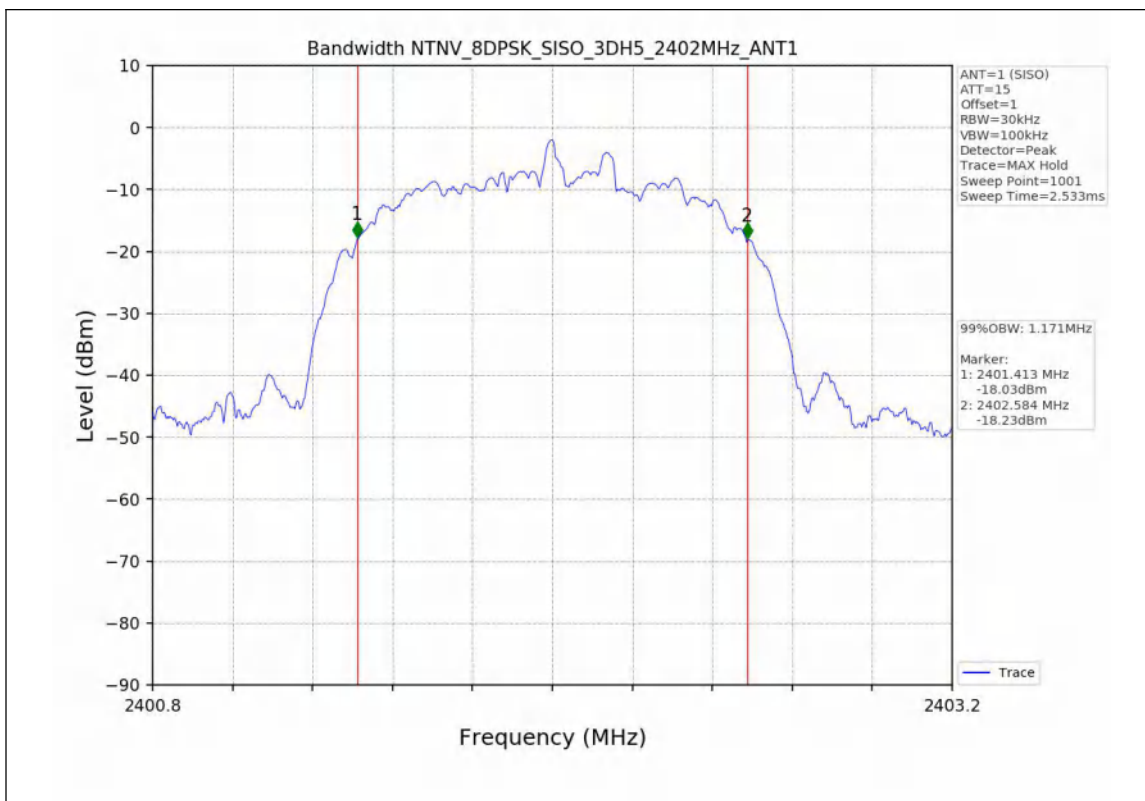
1.3 Test Graph - 99% Occupied Bandwidth

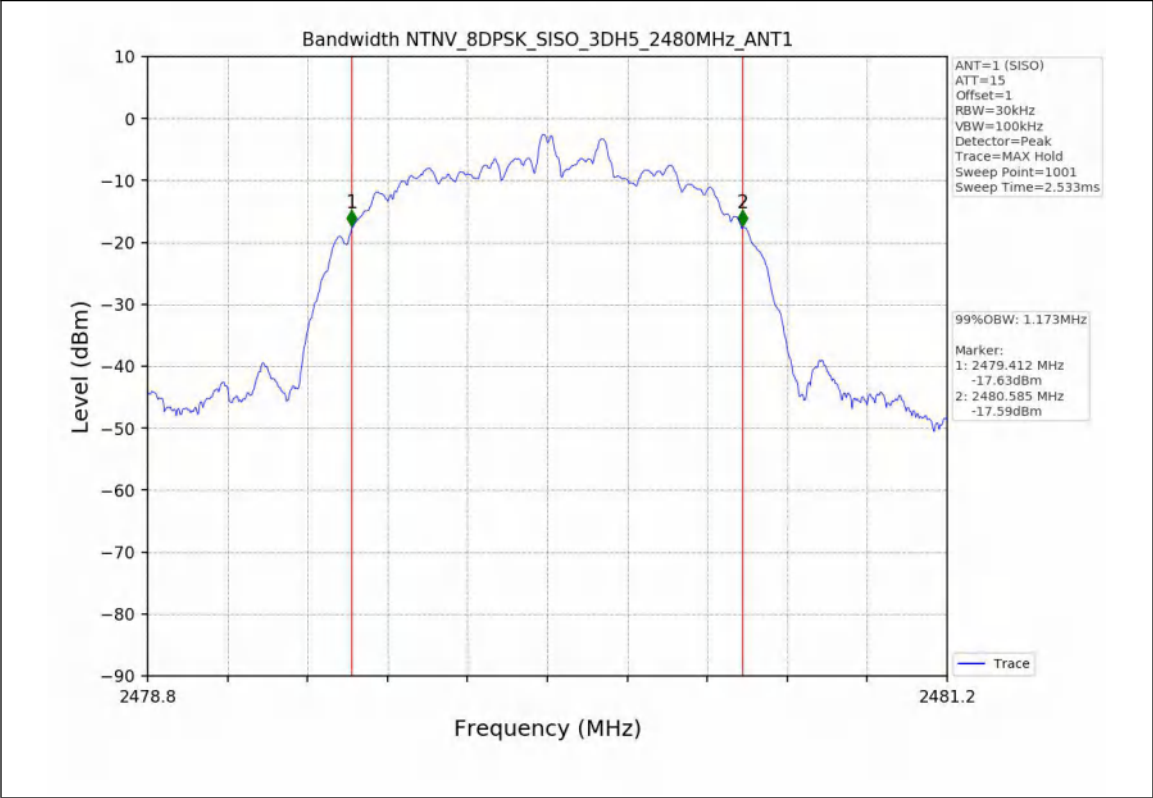










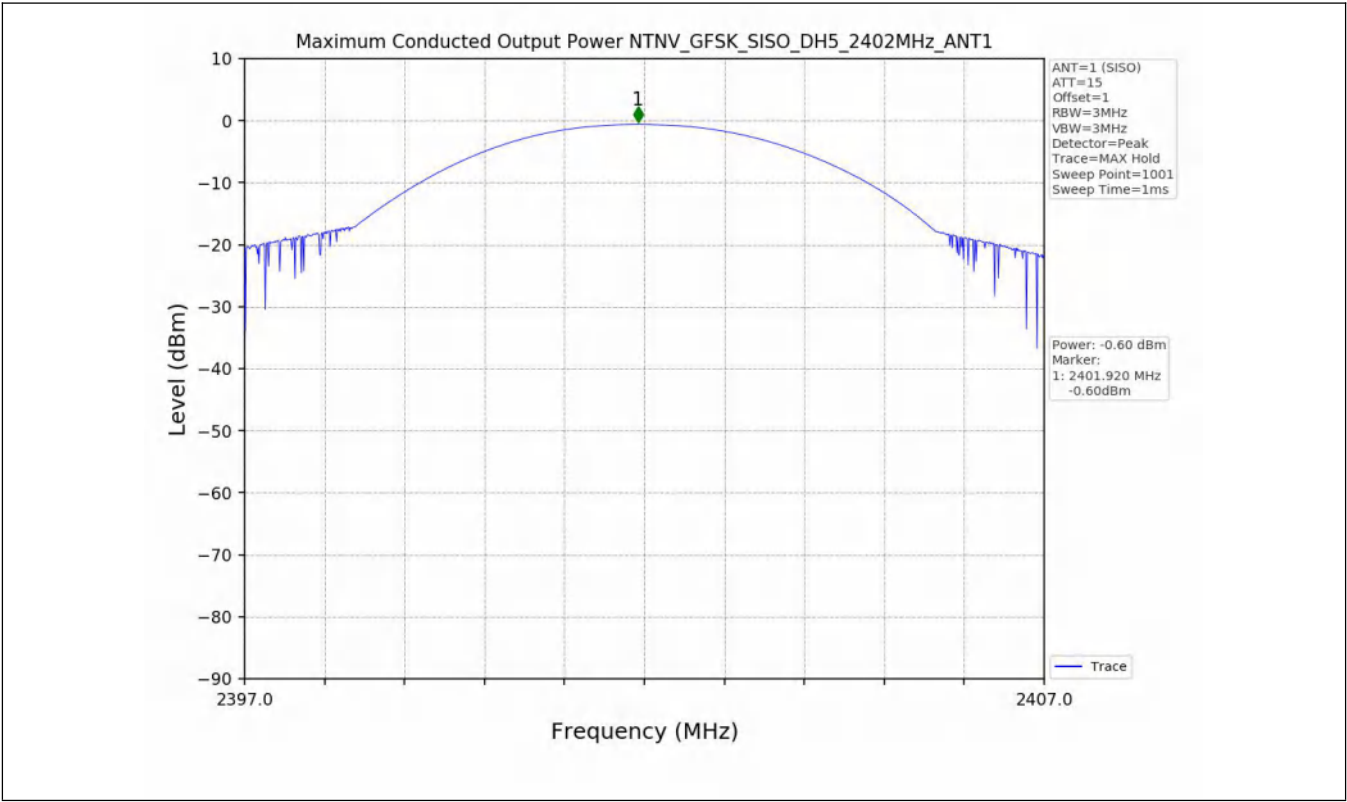


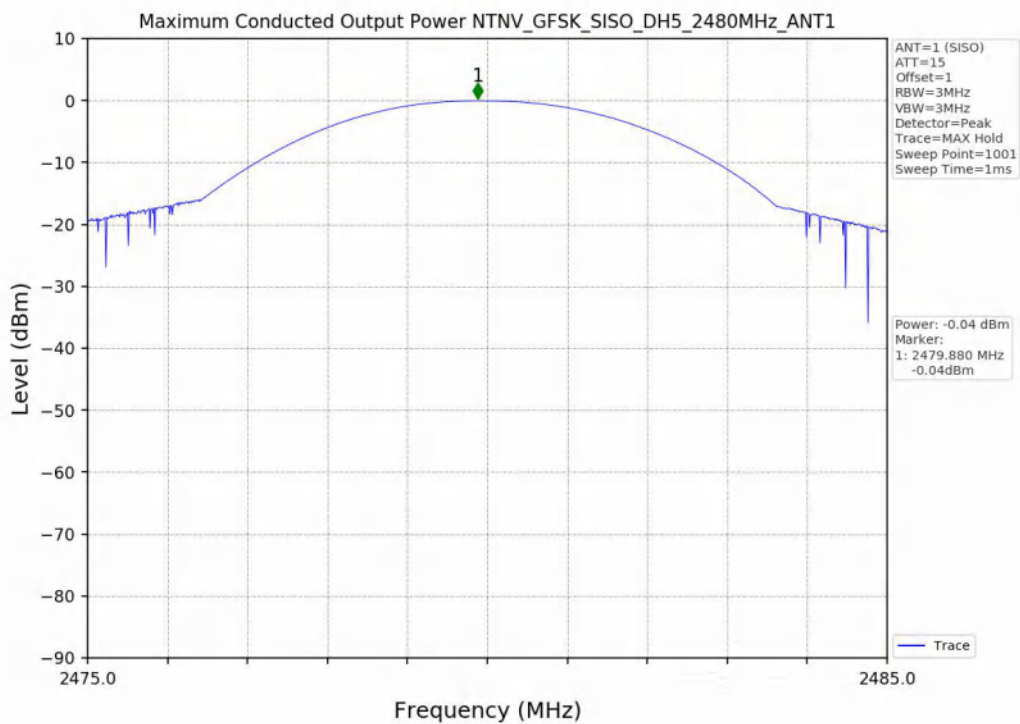
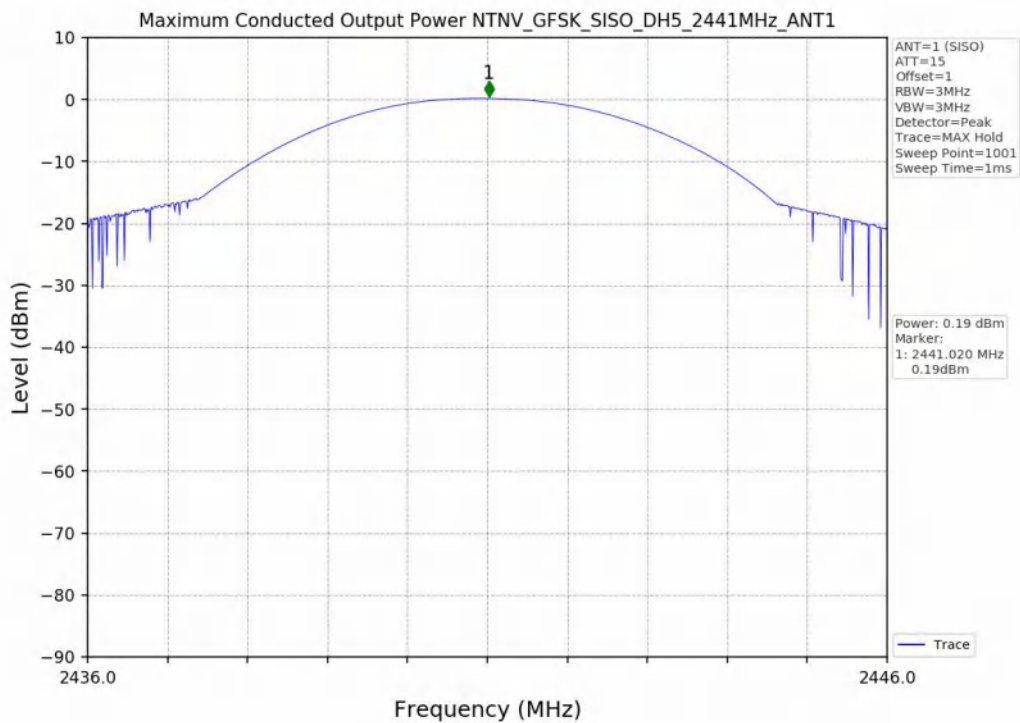
2. Maximum Conducted Output Power

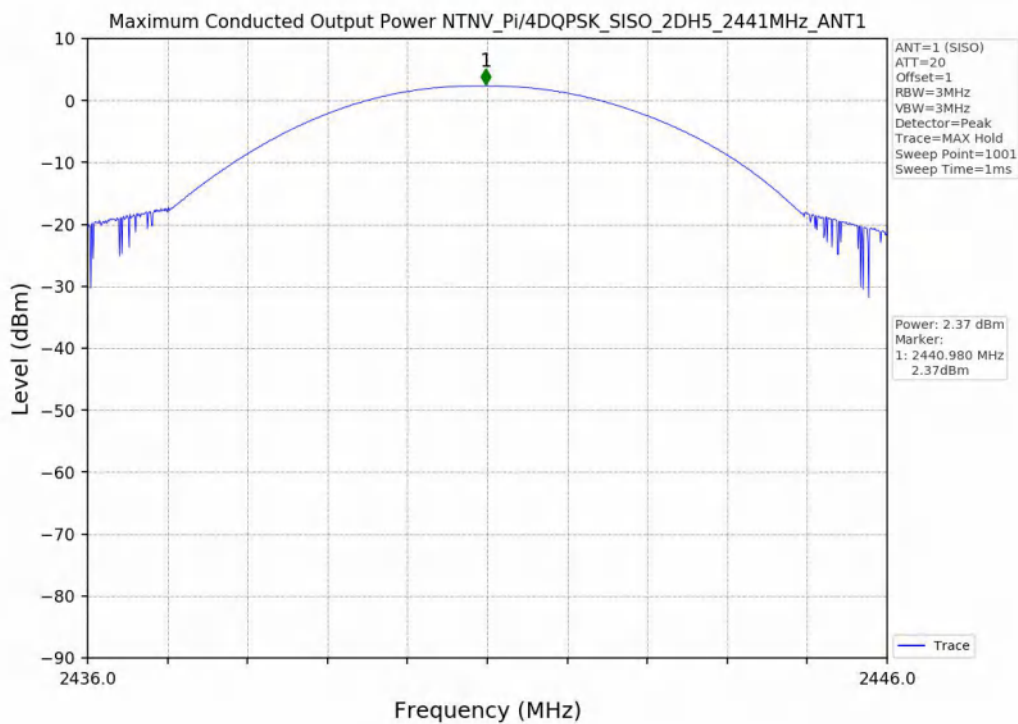
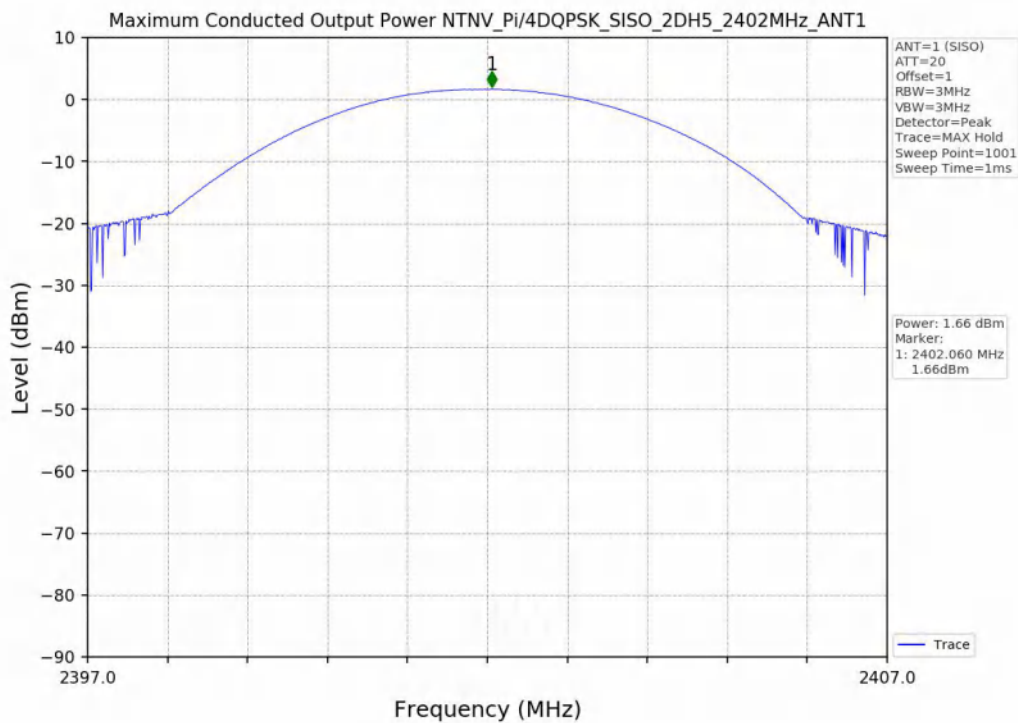
2.1 Test Result

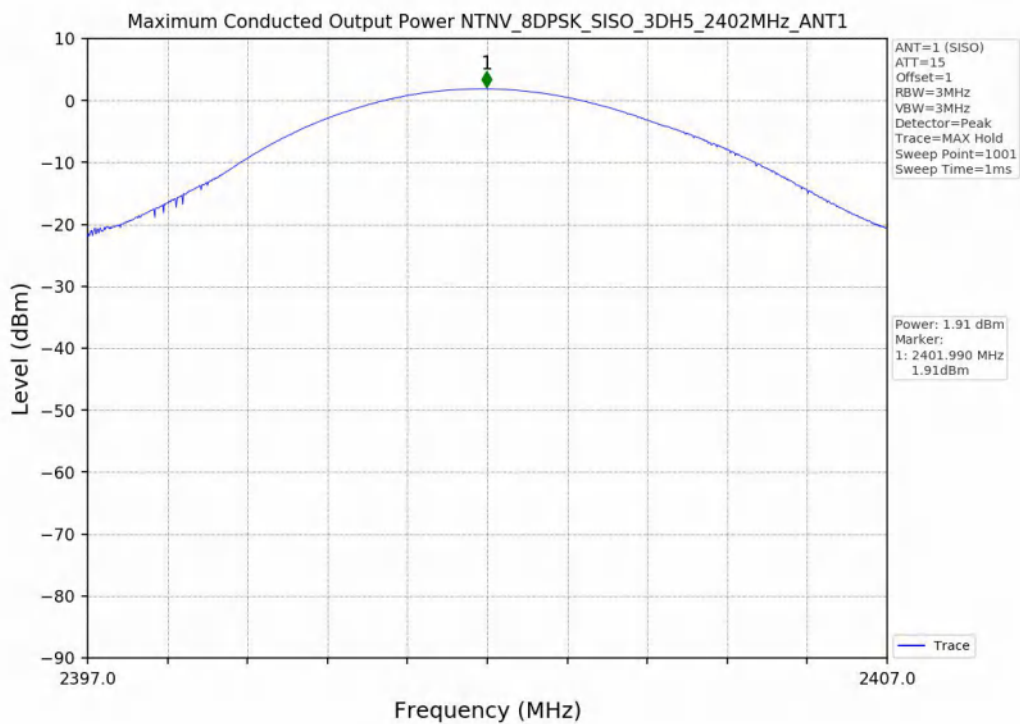
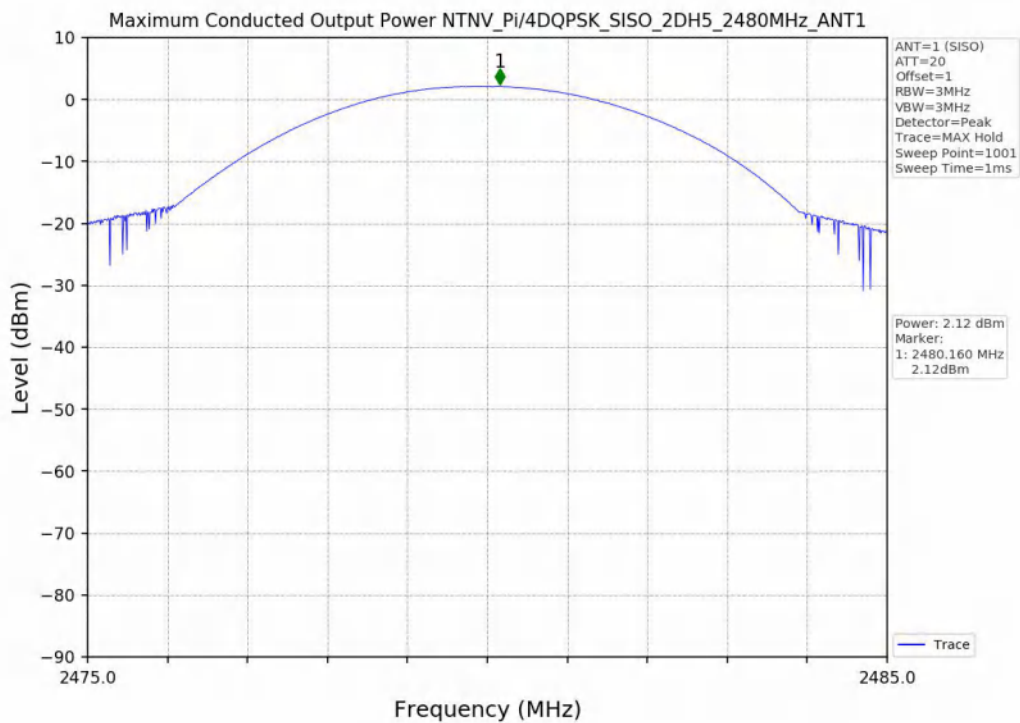
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
GFSK	2402	SISO	-0.60	30	PASS
	2441	SISO	0.19	30	PASS
	2480	SISO	-0.04	30	PASS
Pi/4DQPSK	2402	SISO	1.66	20.97	PASS
	2441	SISO	2.37	20.97	PASS
	2480	SISO	2.12	20.97	PASS
8DPSK	2402	SISO	1.91	20.97	PASS
	2441	SISO	2.67	20.97	PASS
	2480	SISO	2.46	20.97	PASS

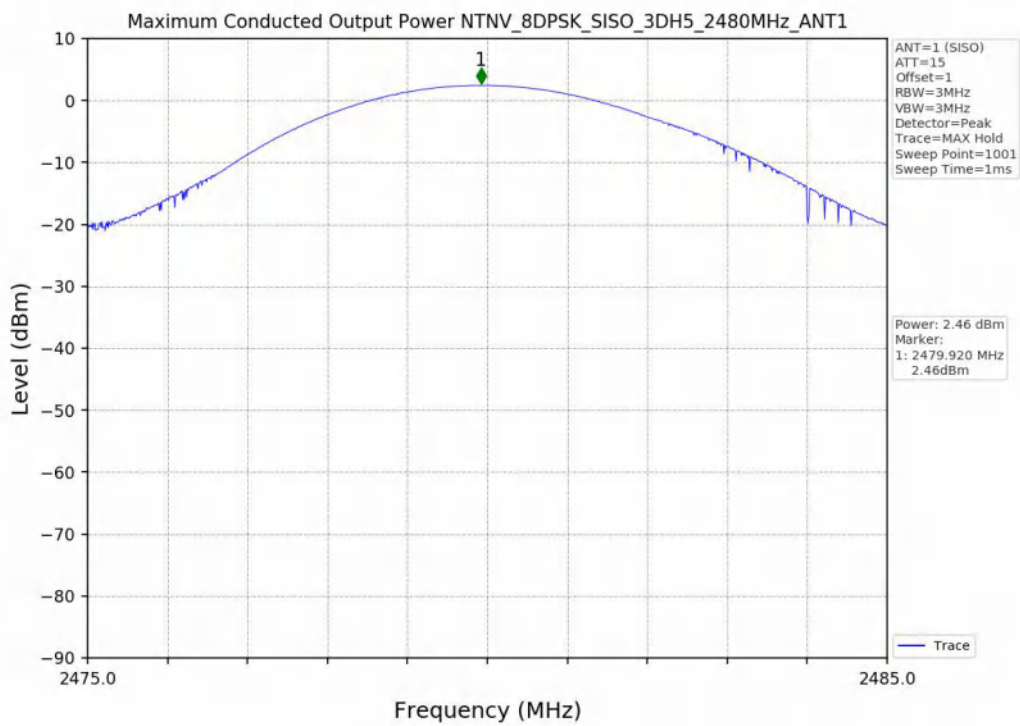
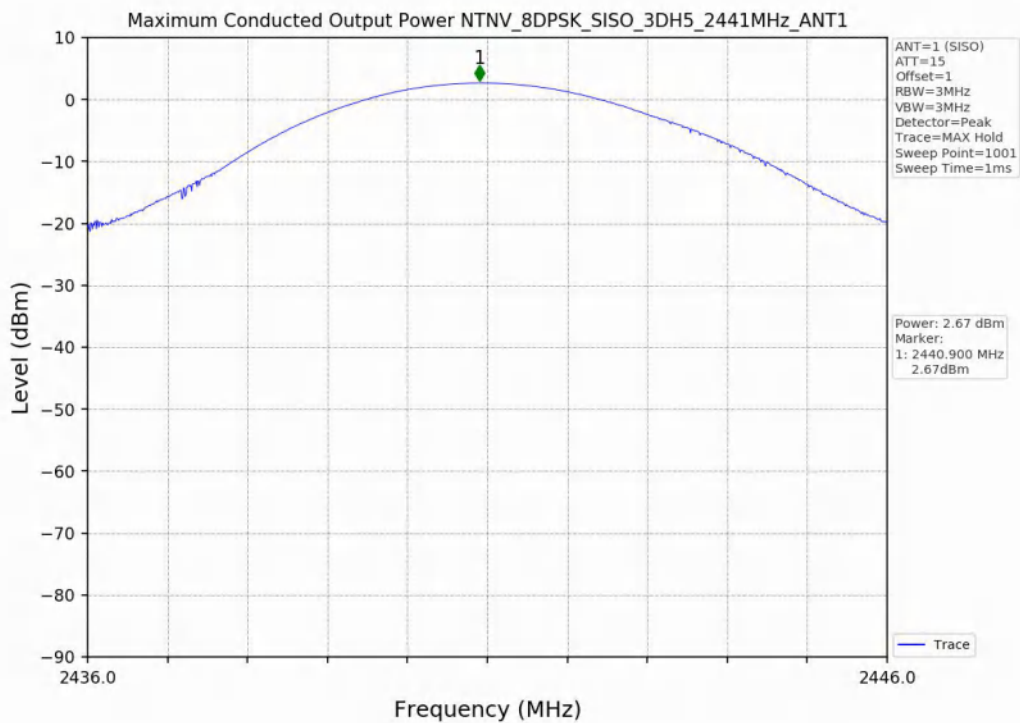
2.2 Test Graph









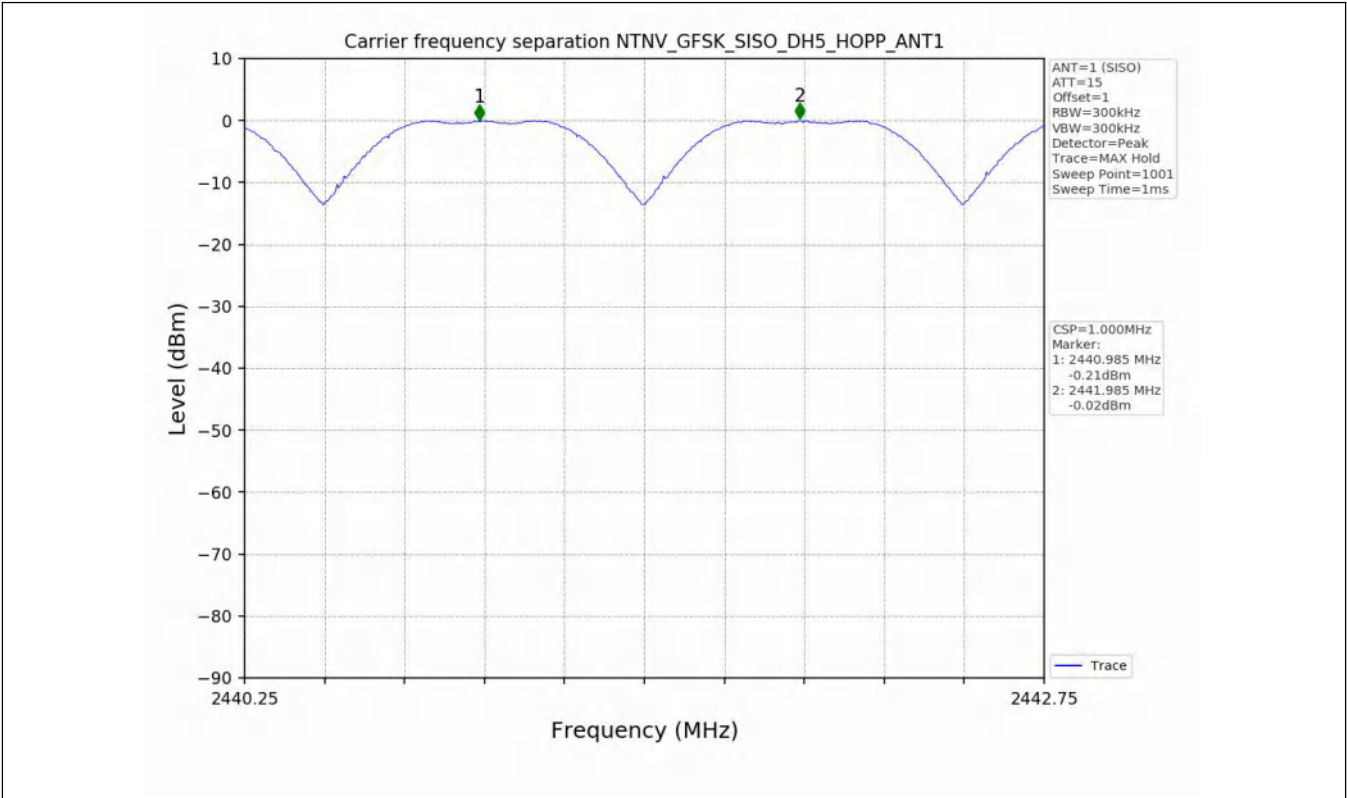


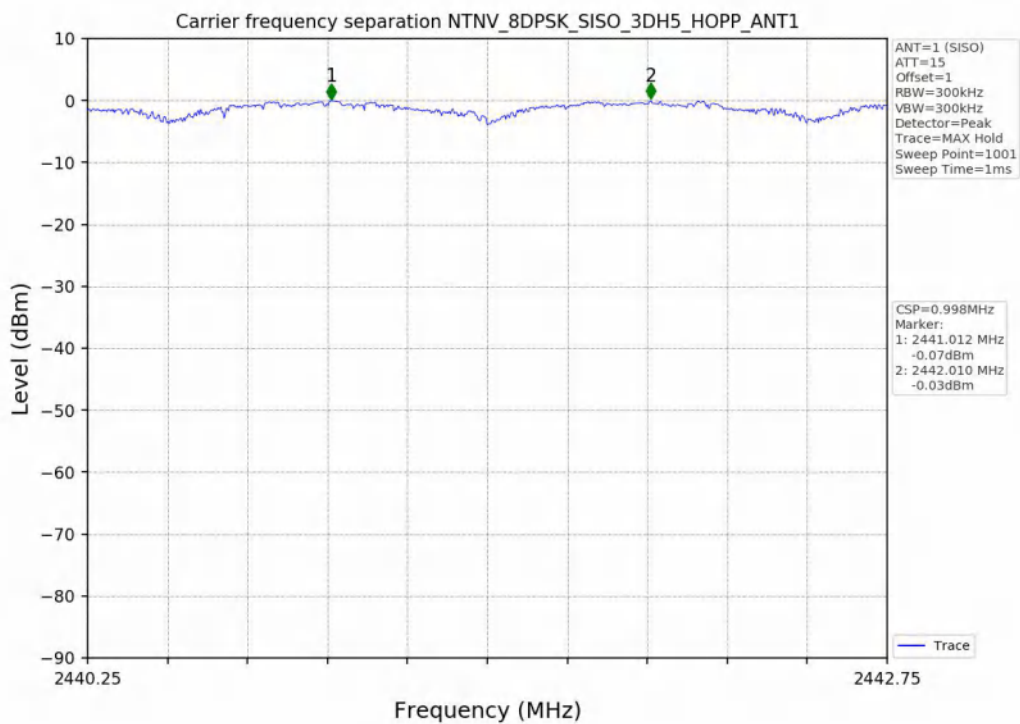
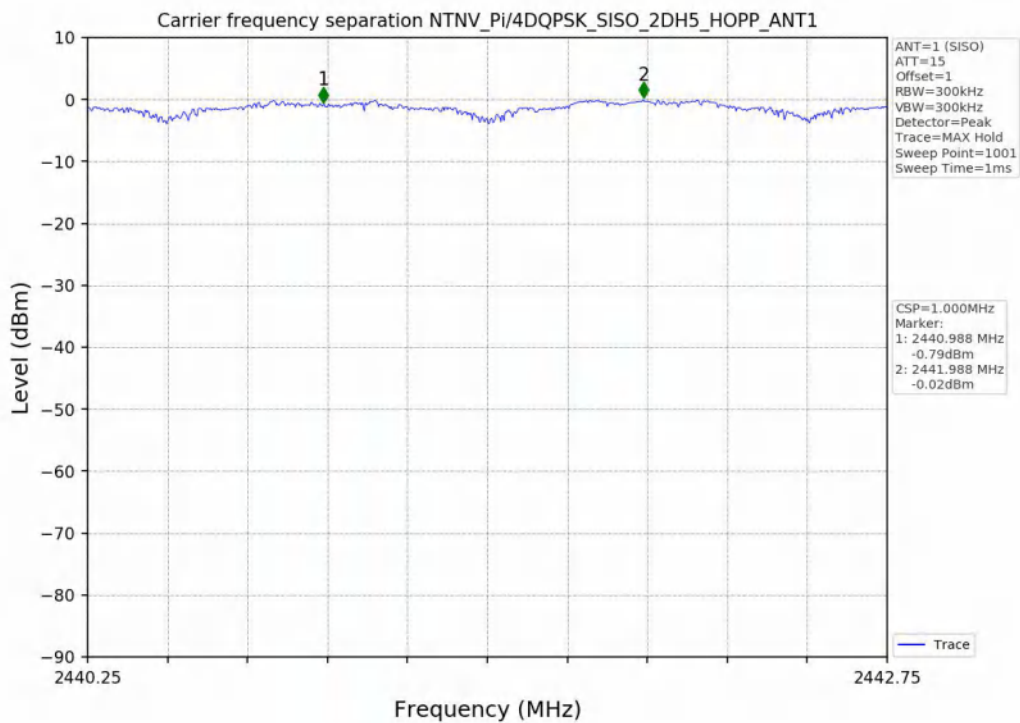
3. Carrier frequency separation

3.1 Test Result

Test Mode	TX Type	ANT No.	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limits (MHz)	Verdict
GFSK	SISO	1	1.000	0.937	≥ 0.937	PASS
Pi/4DQPSK	SISO	1	1.000	1.275	≥ 0.850	PASS
8DPSK	SISO	1	0.998	1.287	≥ 0.858	PASS

3.2 Test Graph



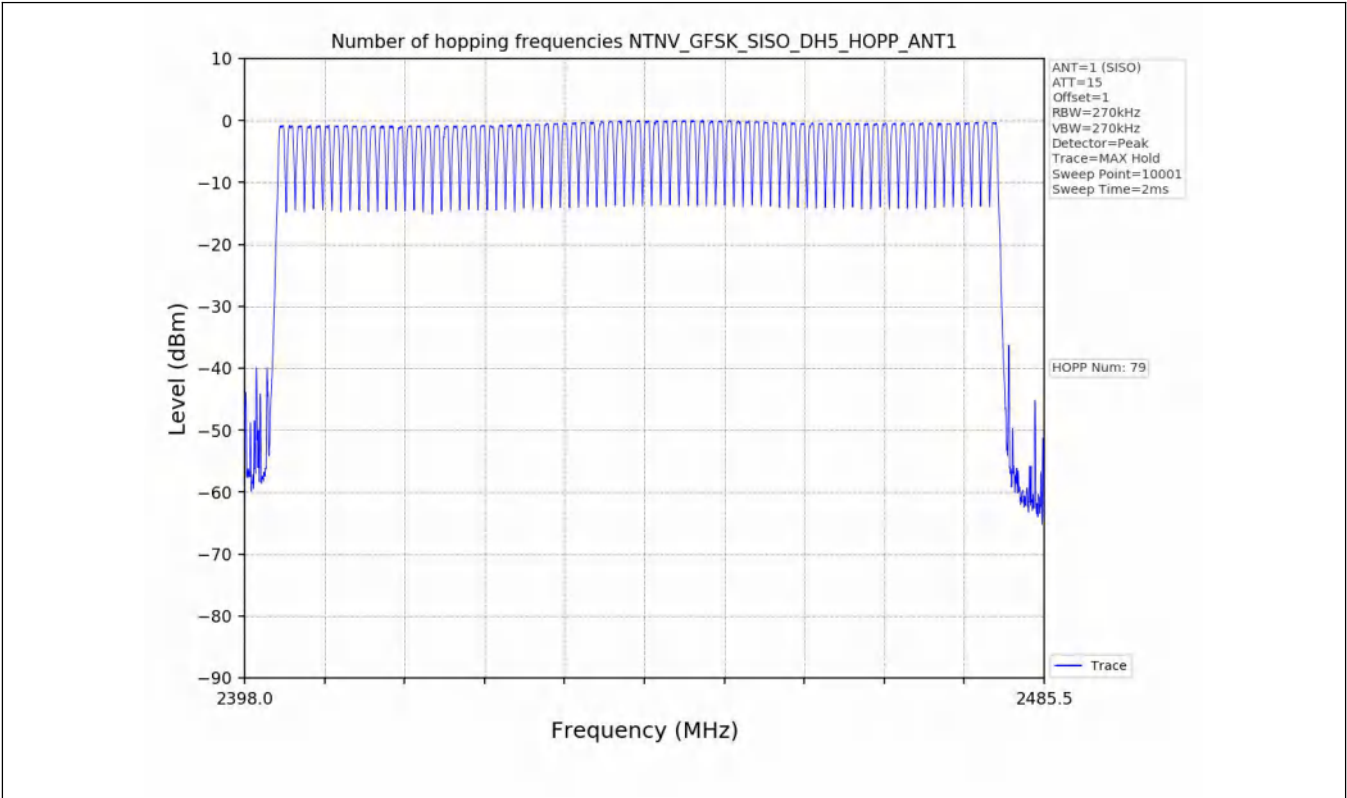


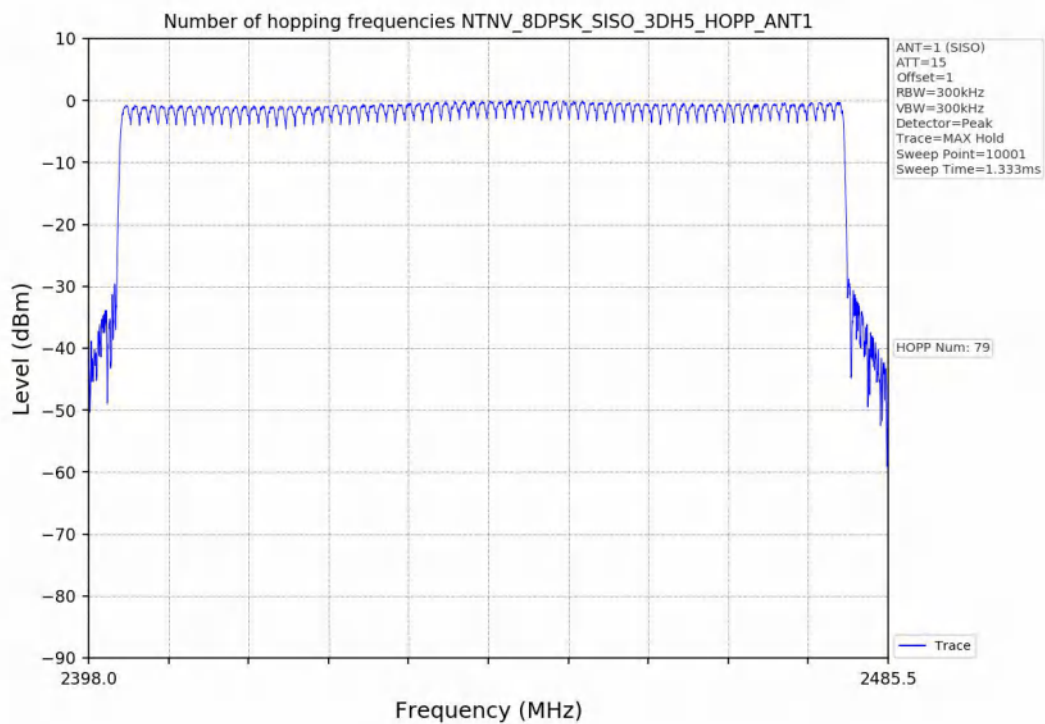
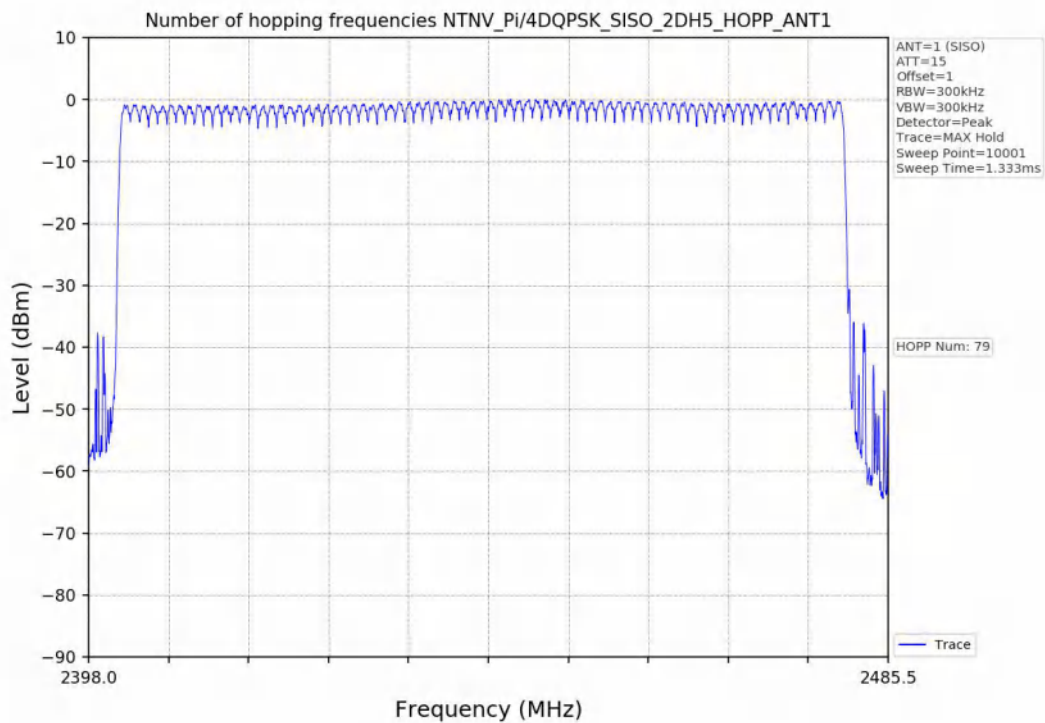
4. Number of hopping frequencies

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



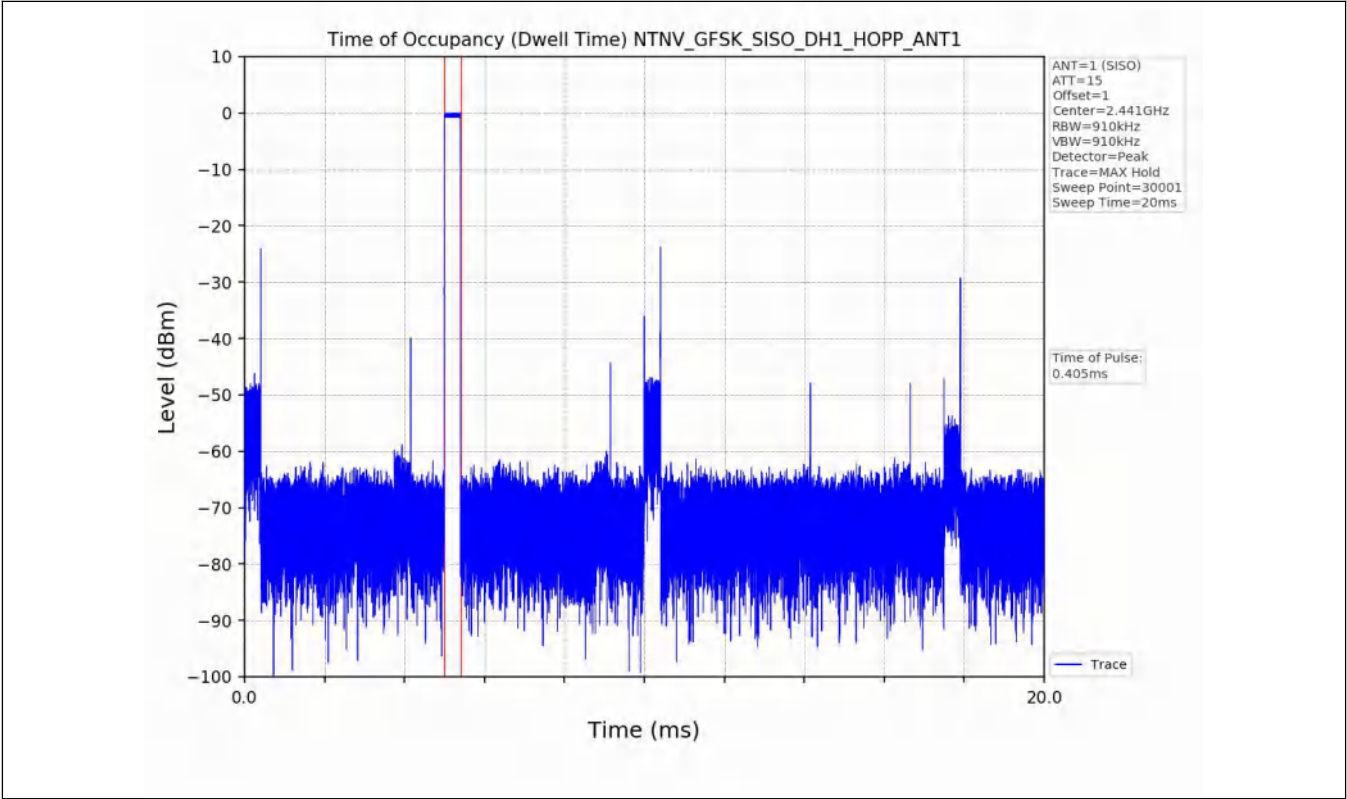


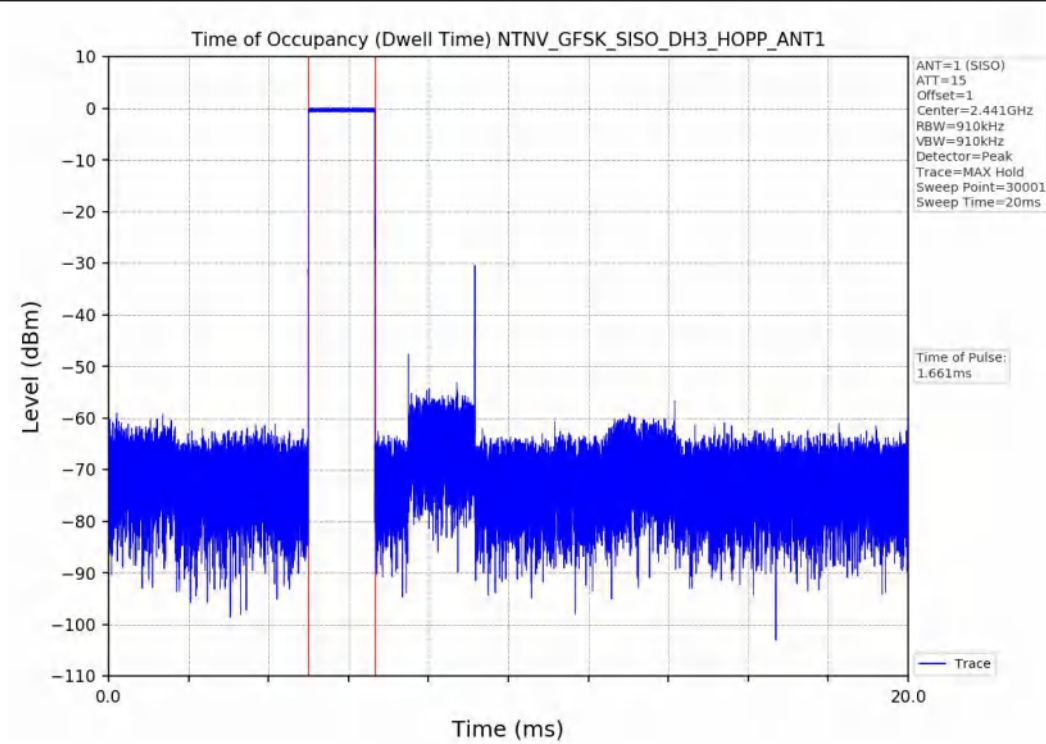
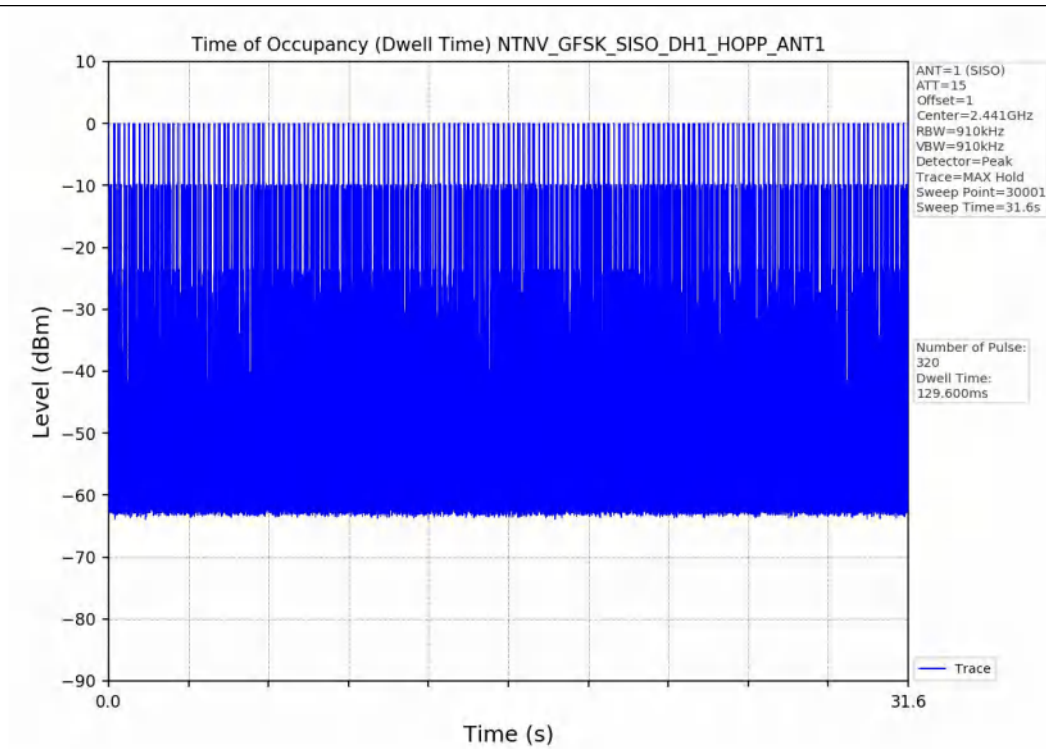
5. Time of Occupancy (Dwell Time)

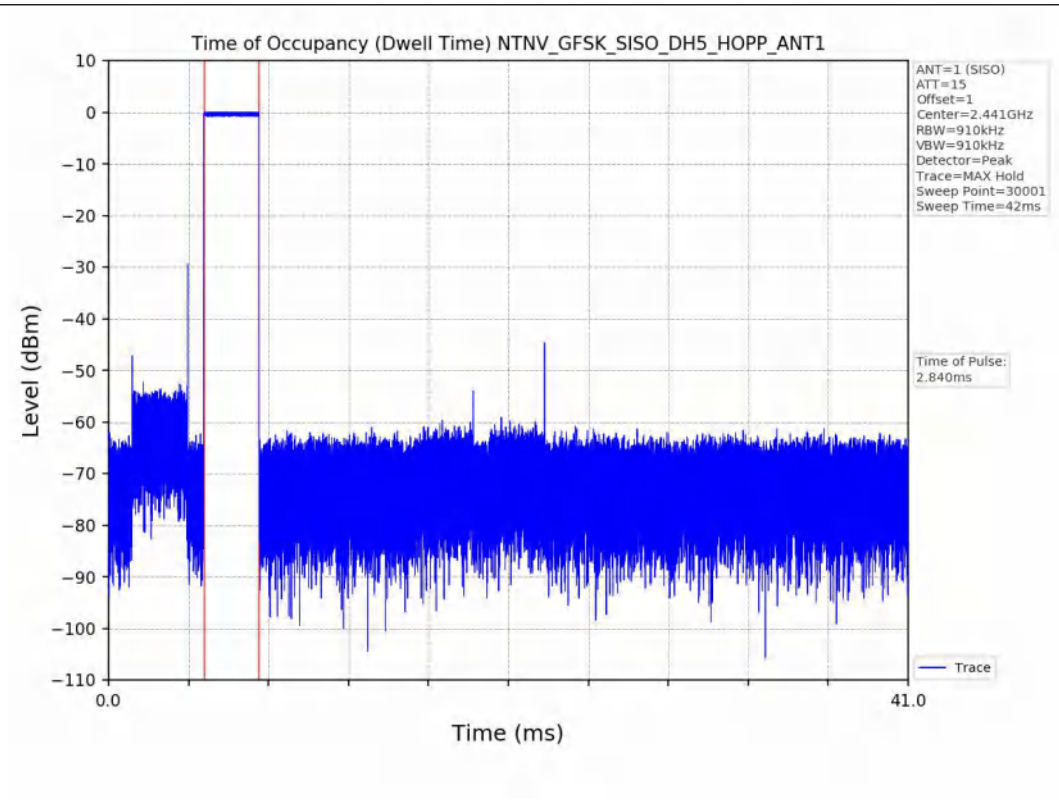
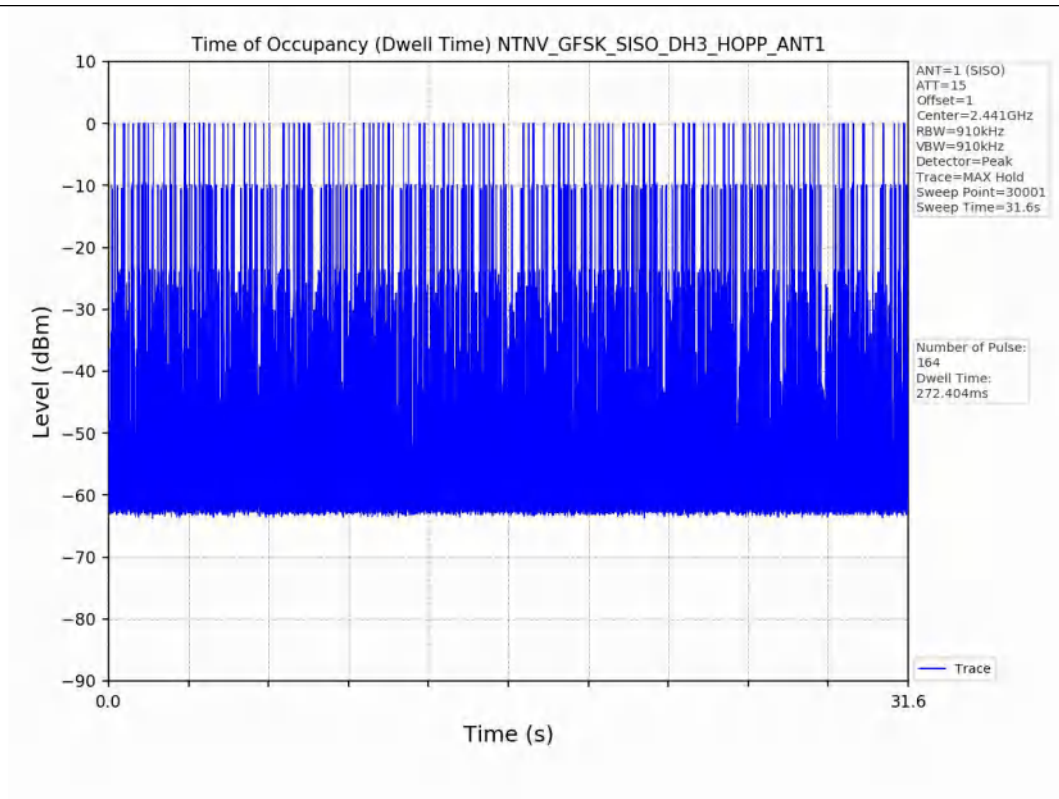
5.1 Test Result

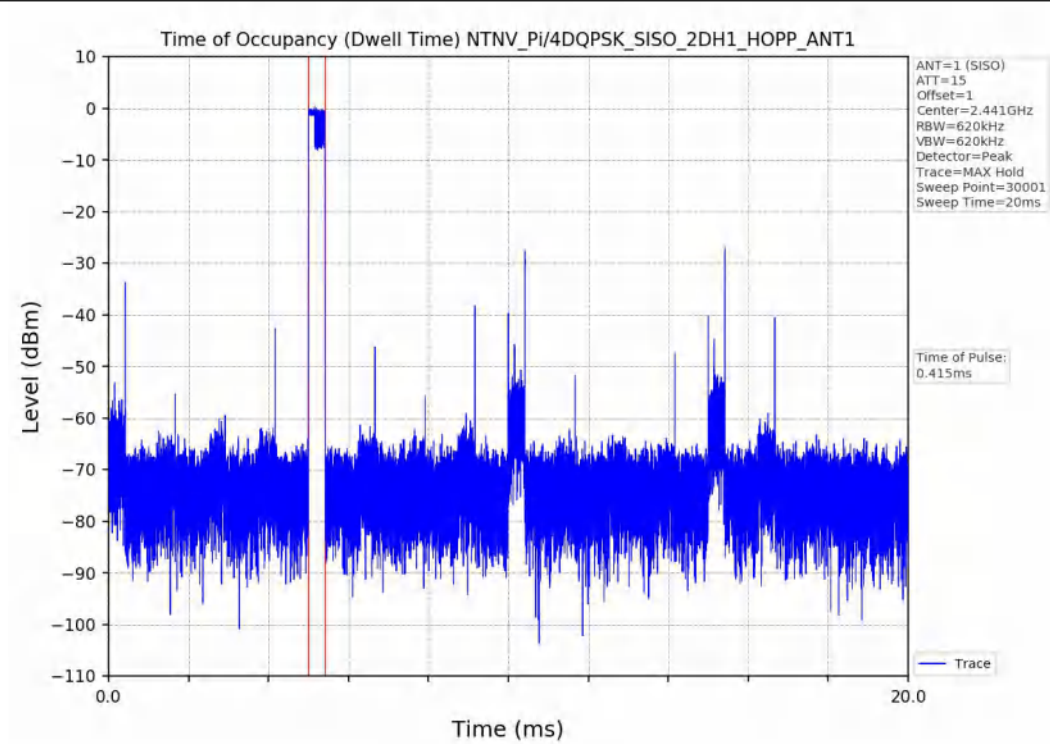
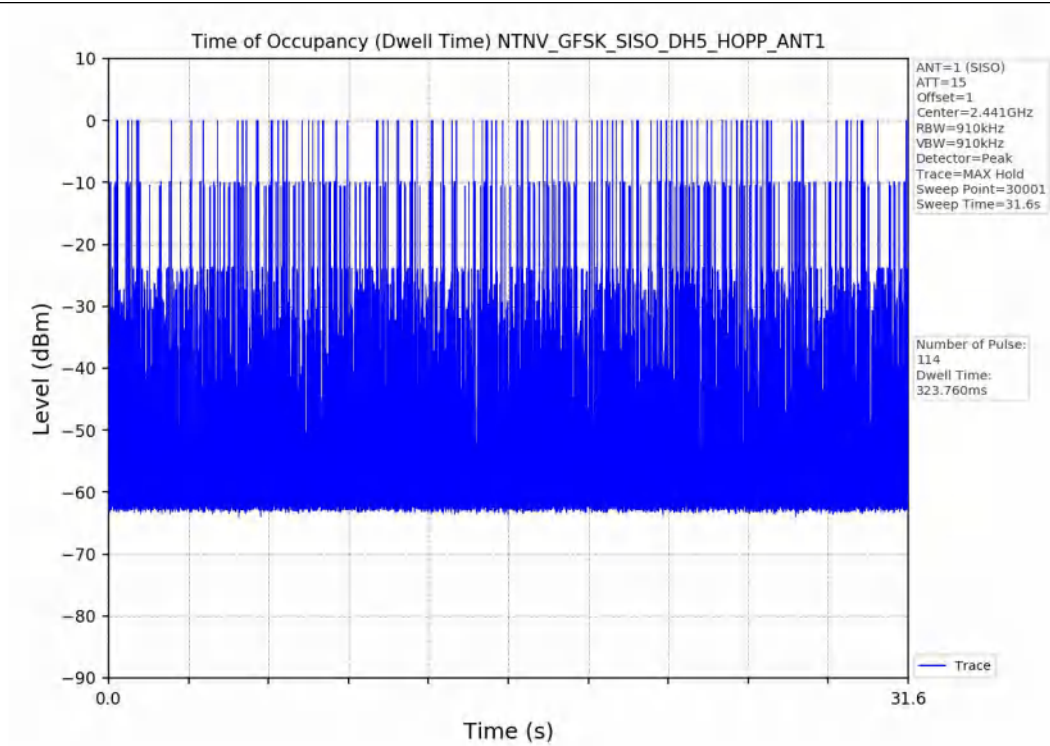
Test Mode	Packet Type	TX Type	ANT No.	Duration of Single Pulse (ms)	Obeservation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limits (ms)	Verdict
GFSK	DH1	SISO	1	0.405	31.6	320	129.600	≤400	PASS
	DH3	SISO	1	1.661	31.6	164	272.404	≤400	PASS
	DH5	SISO	1	2.840	31.6	114	323.760	≤400	PASS
Pi/4DQPSK	2DH1	SISO	1	0.415	31.6	320	132.800	≤400	PASS
	2DH3	SISO	1	1.675	31.6	169	283.075	≤400	PASS
	2DH5	SISO	1	2.916	31.6	106	309.096	≤400	PASS
8DPSK	3DH1	SISO	1	0.417	31.6	320	133.440	≤400	PASS
	3DH3	SISO	1	1.666	31.6	157	261.562	≤400	PASS
	3DH5	SISO	1	2.850	31.6	110	313.500	≤400	PASS

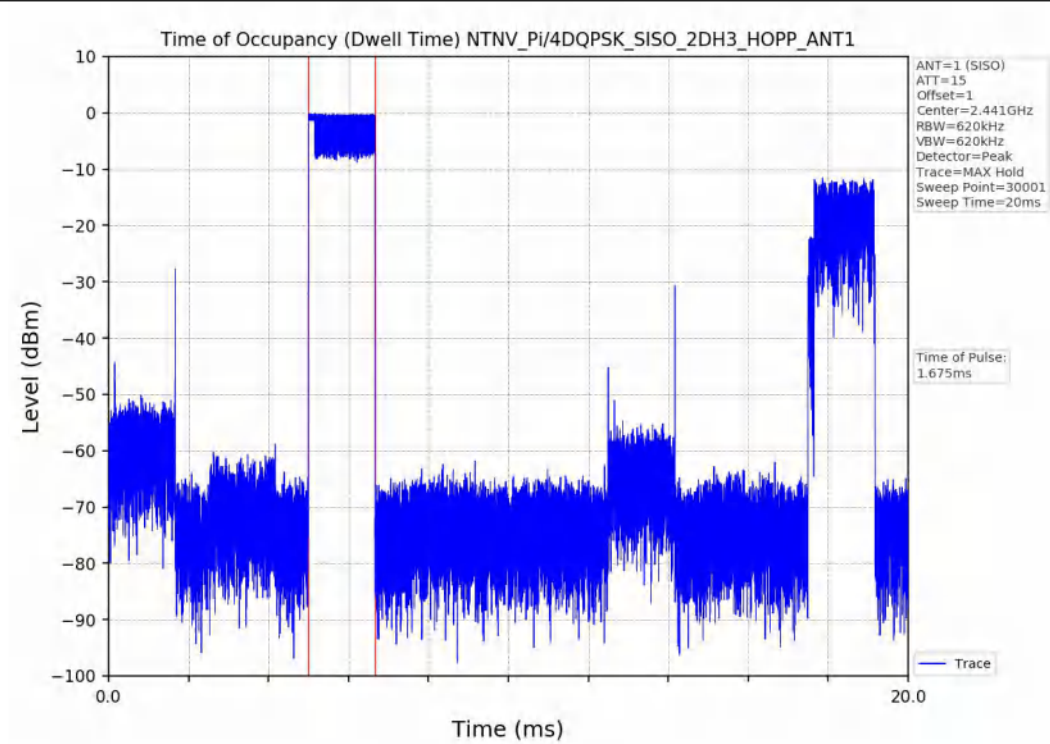
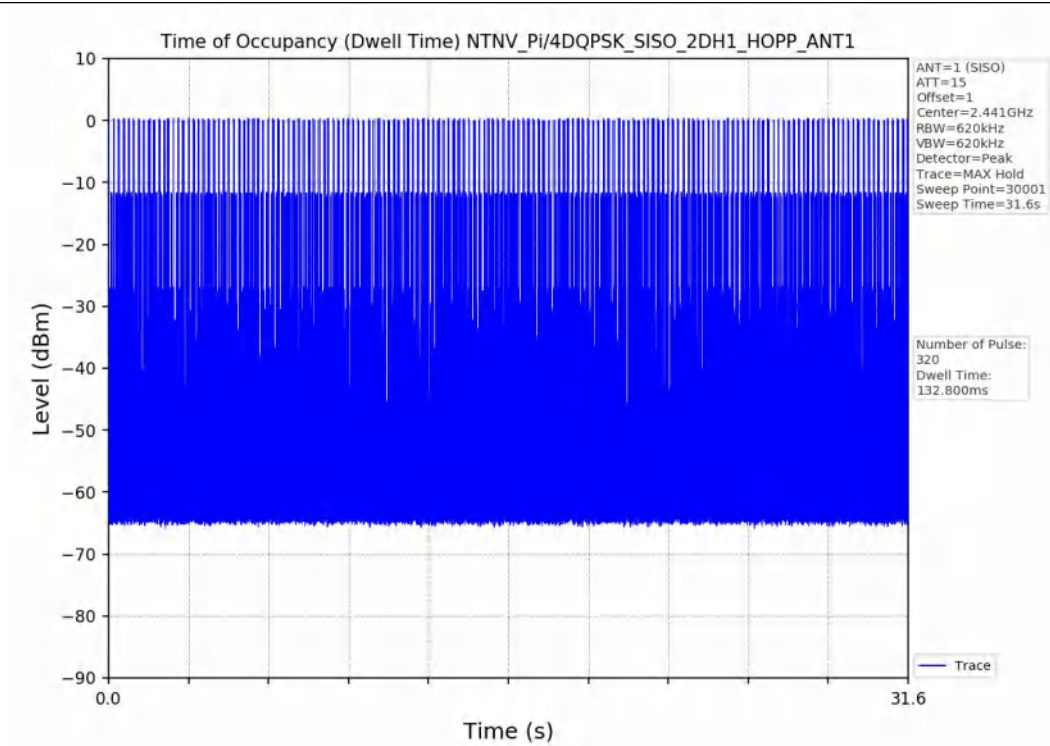
5.2 Test Graph

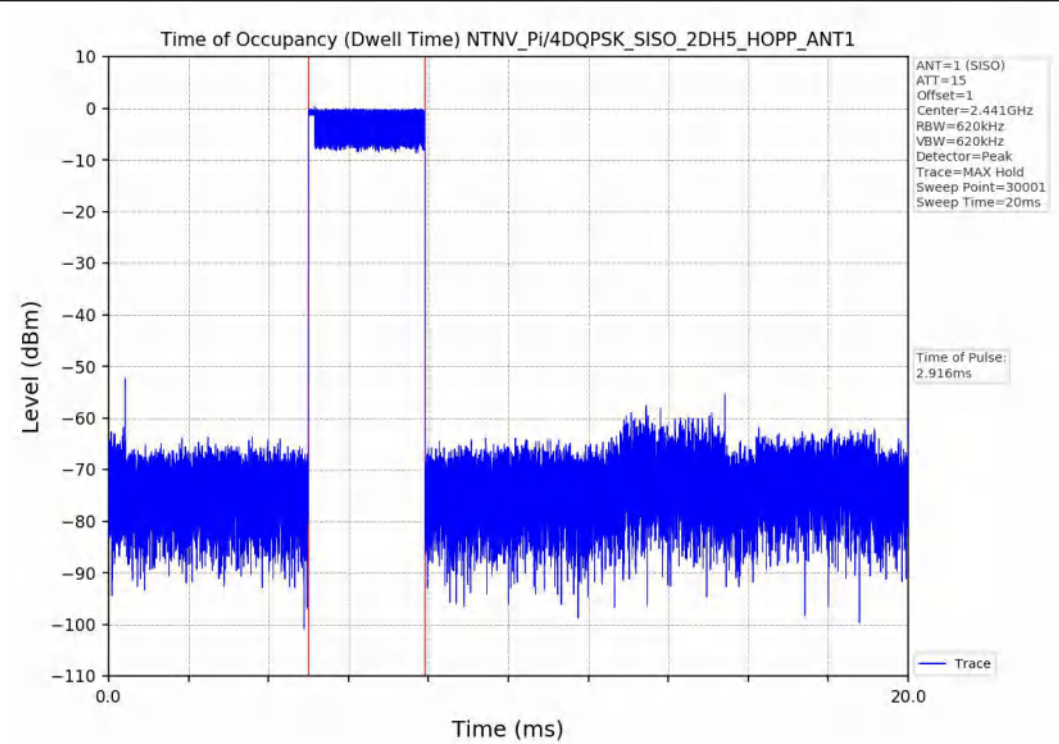
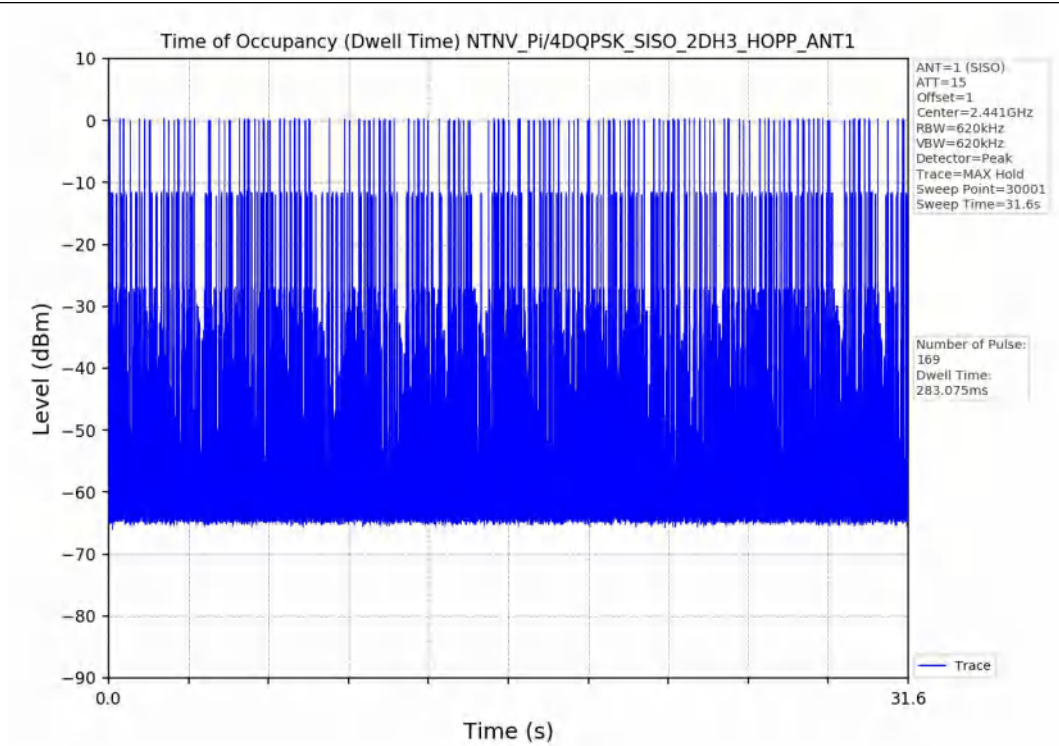


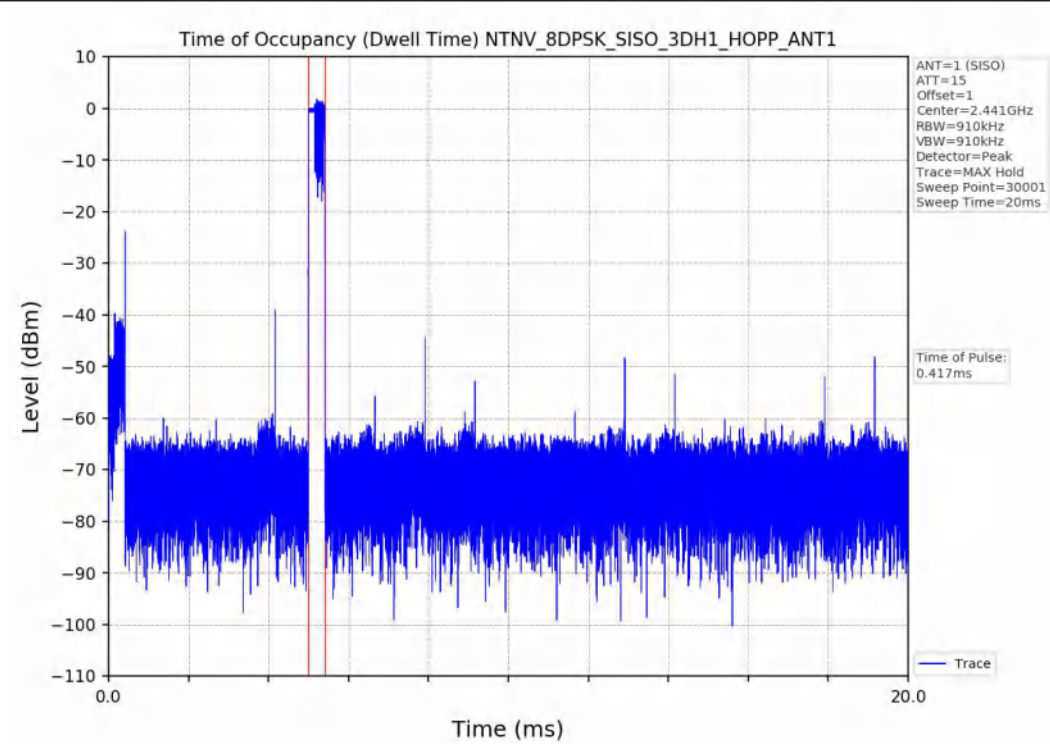
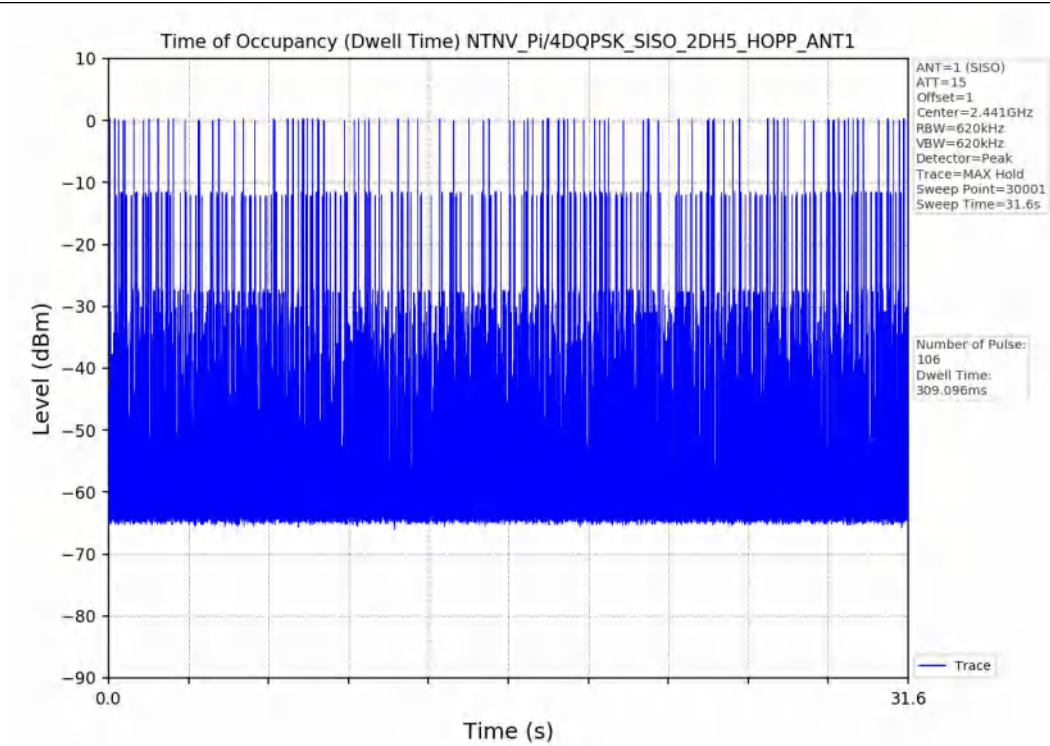


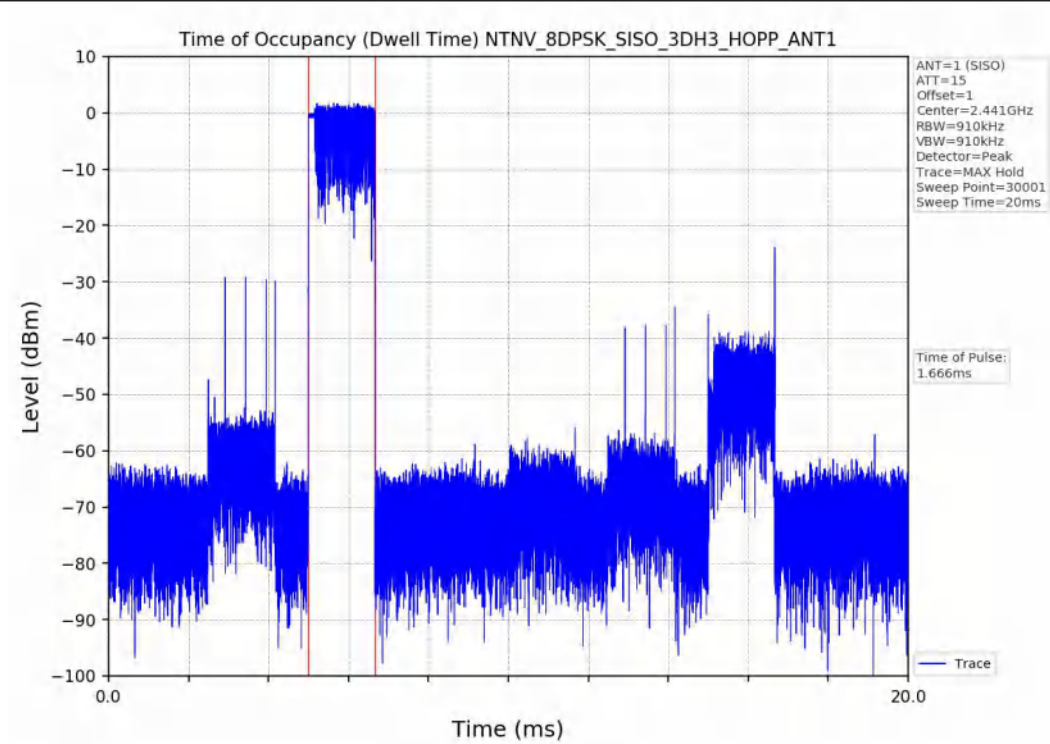
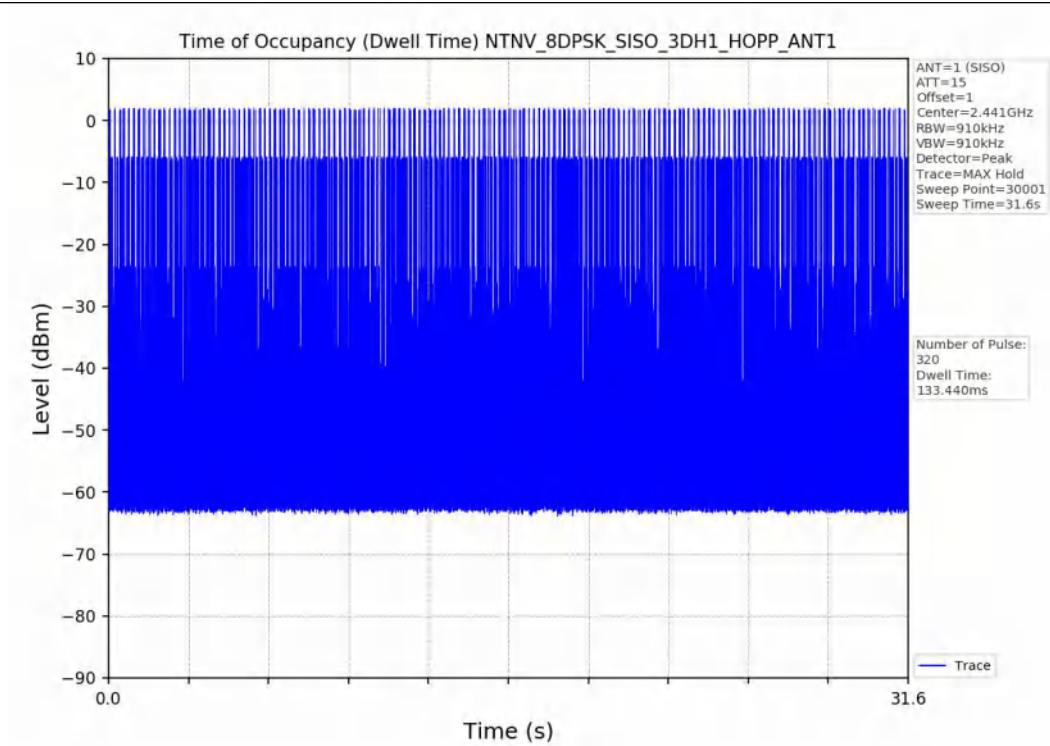


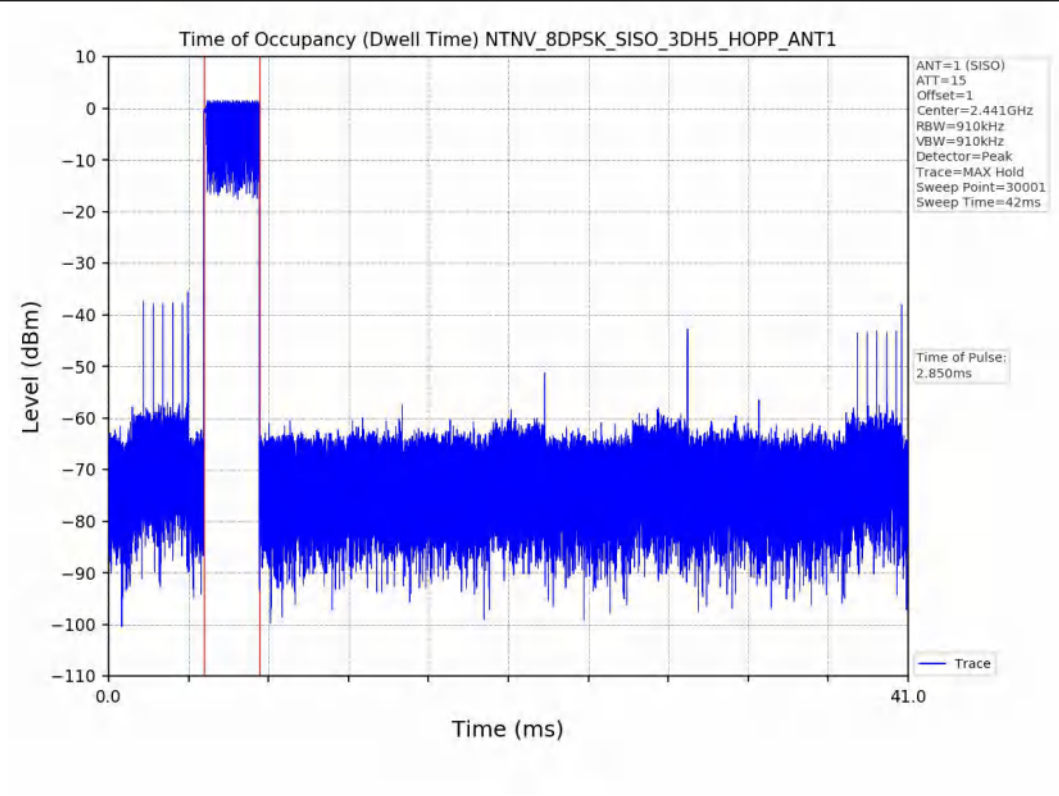
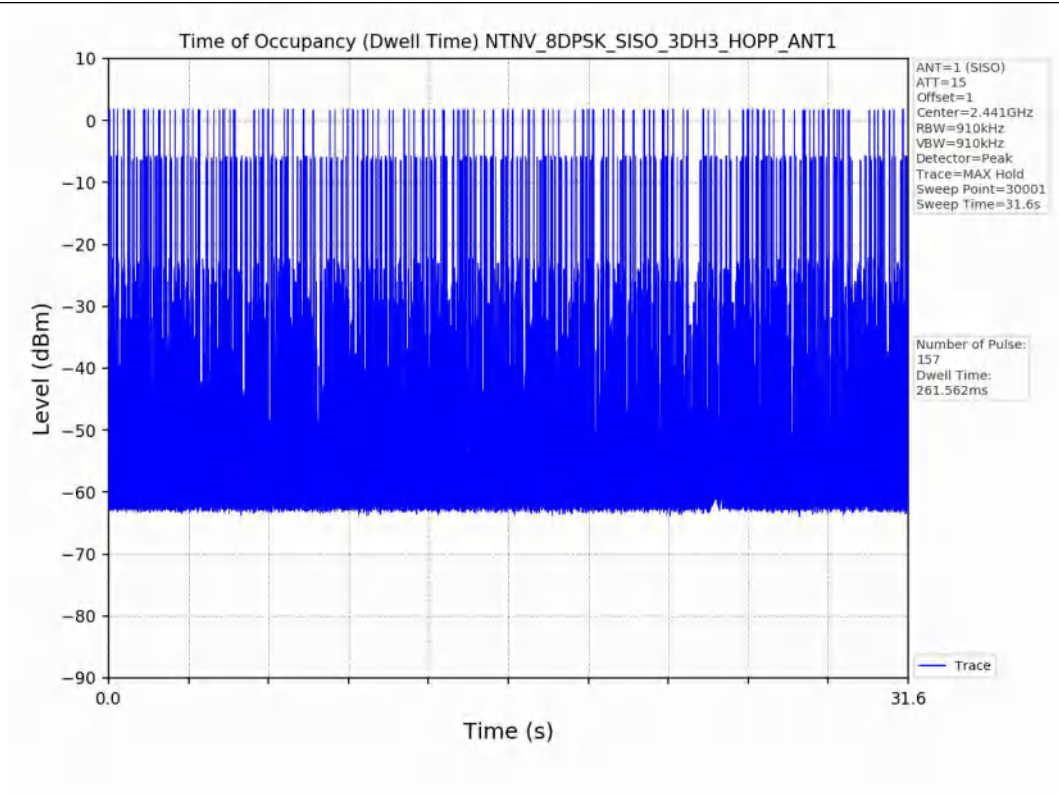


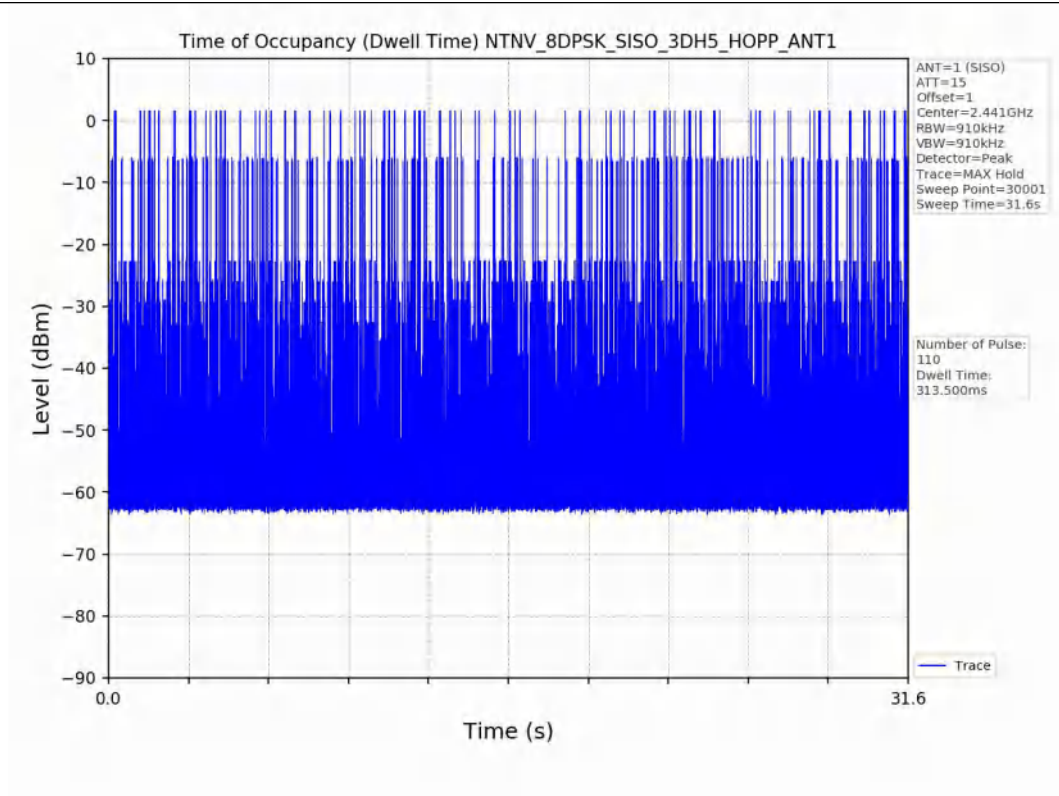










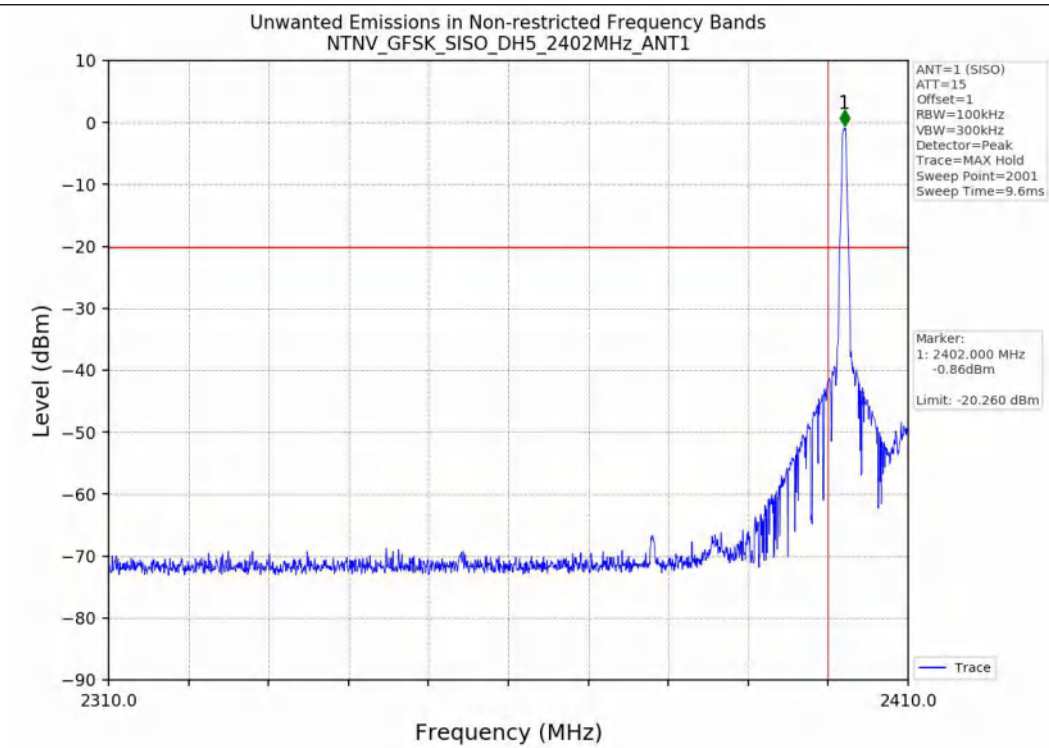
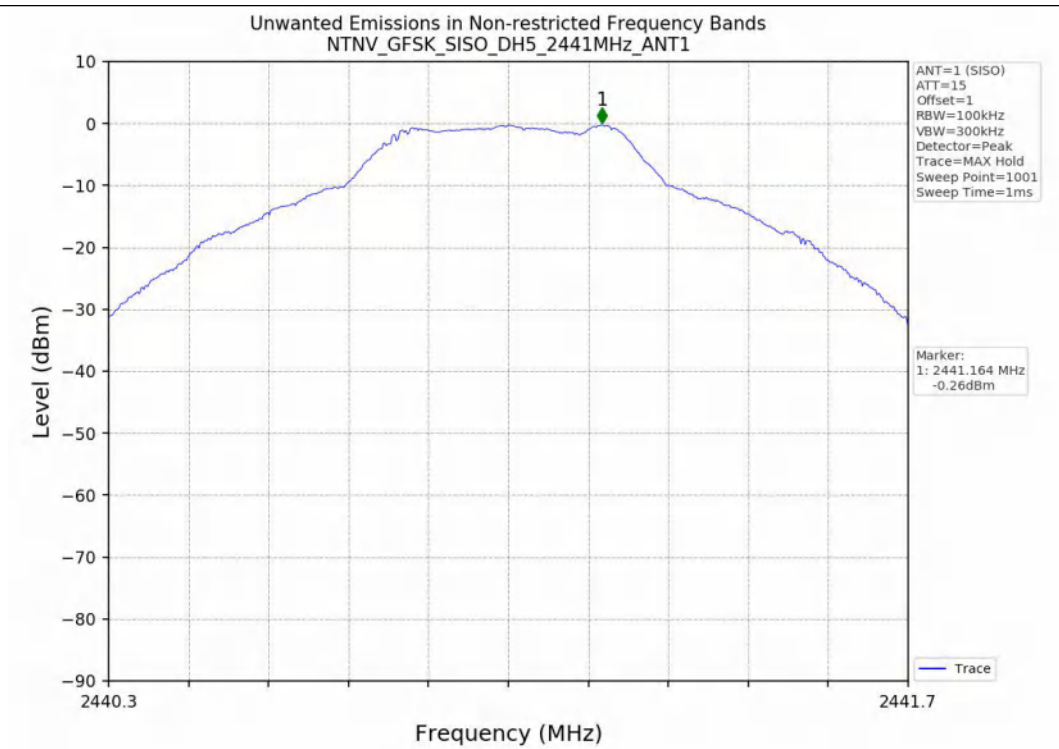


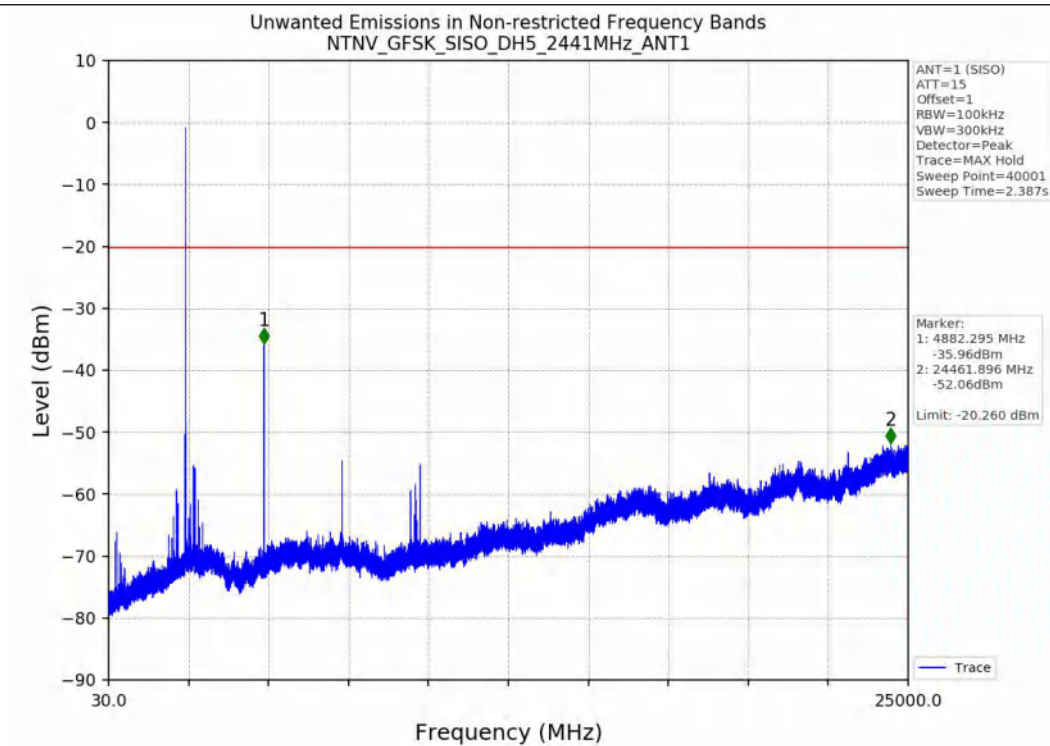
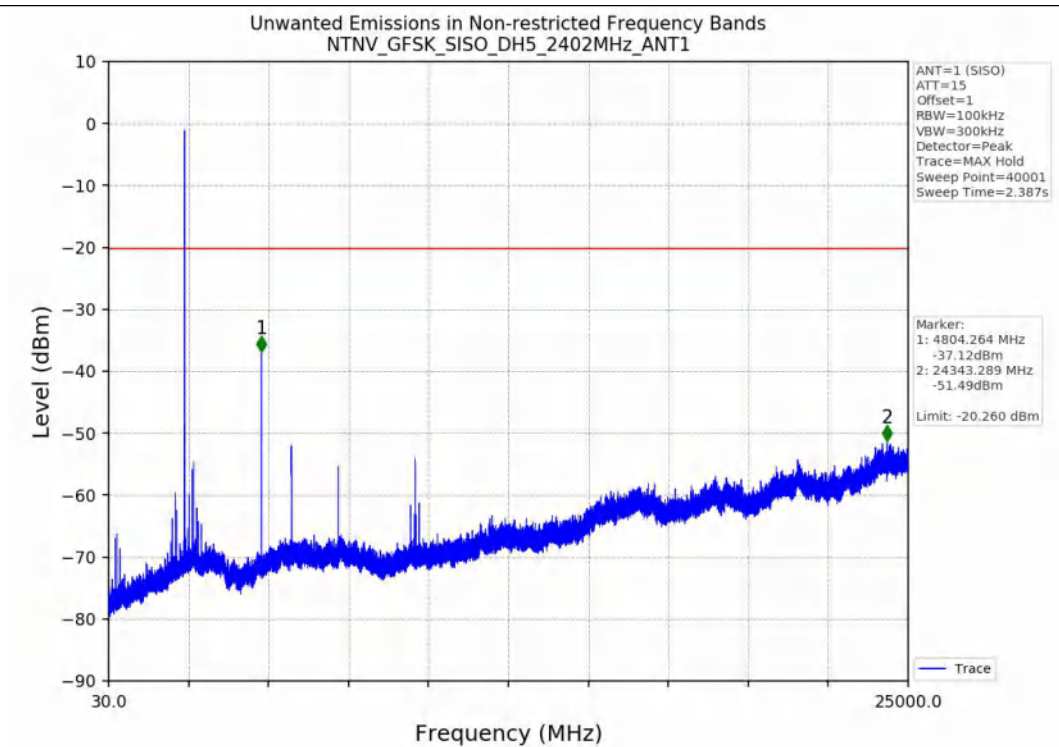
6. Unwanted Emissions in Non-restricted Frequency Bands

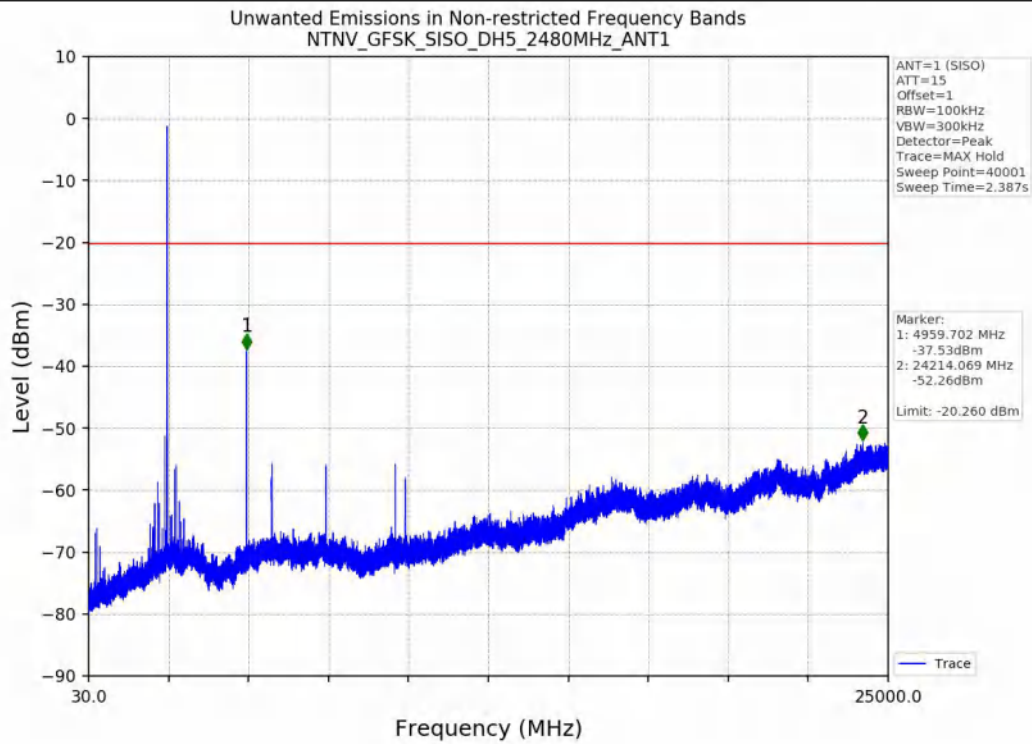
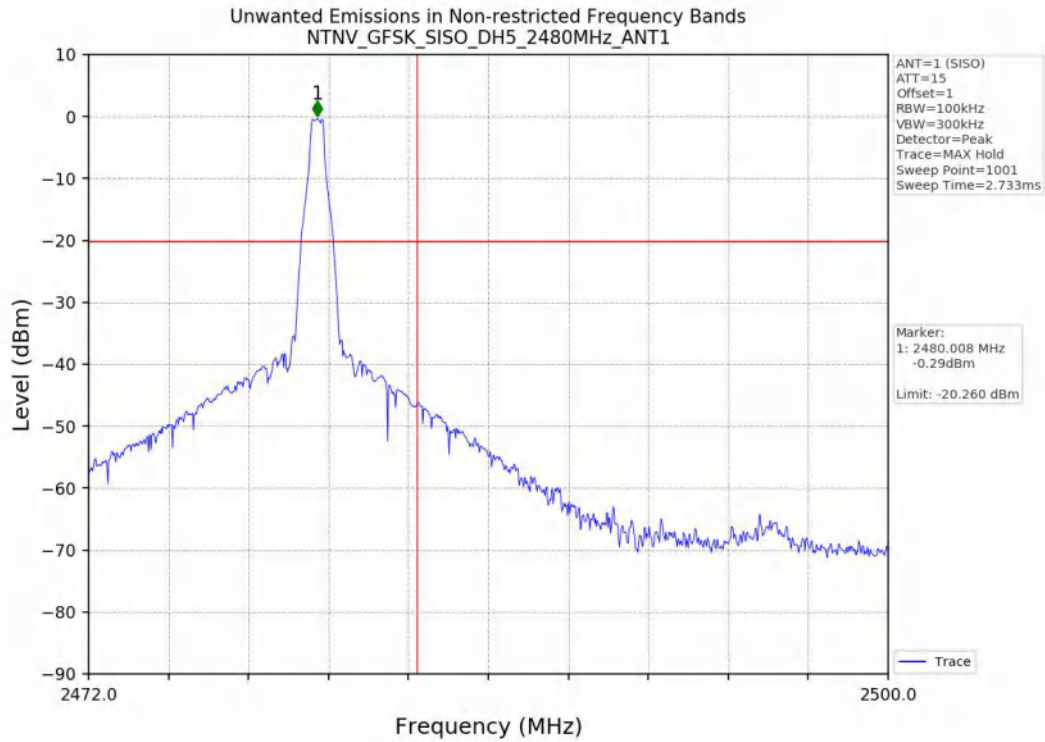
6.1 Test Result

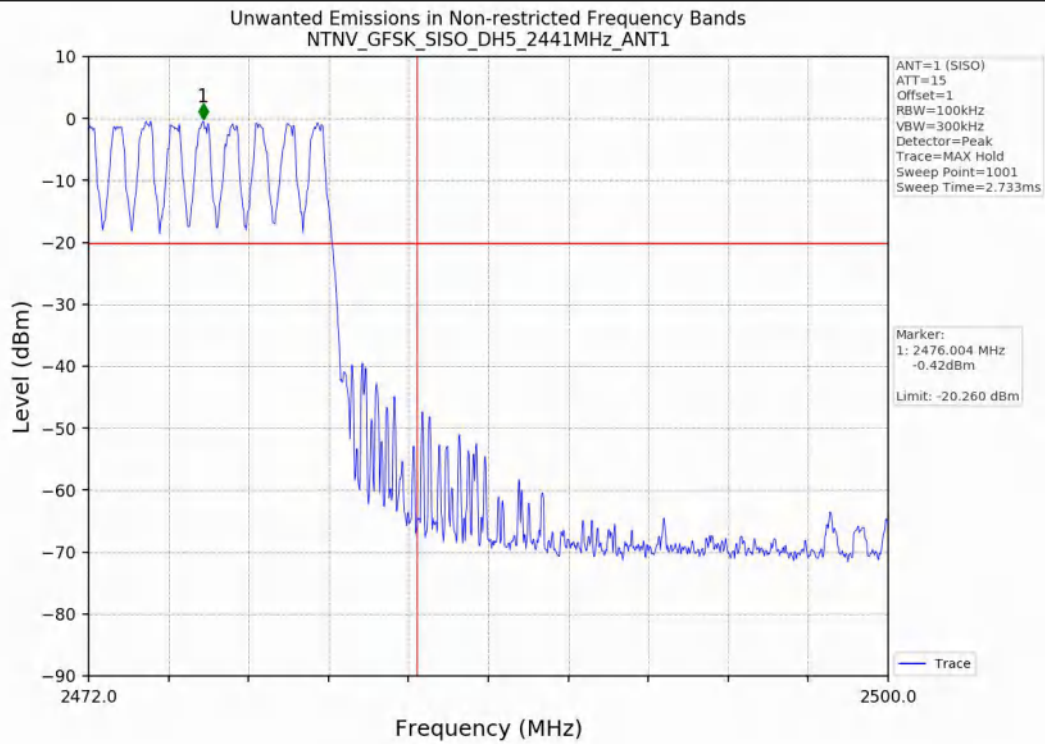
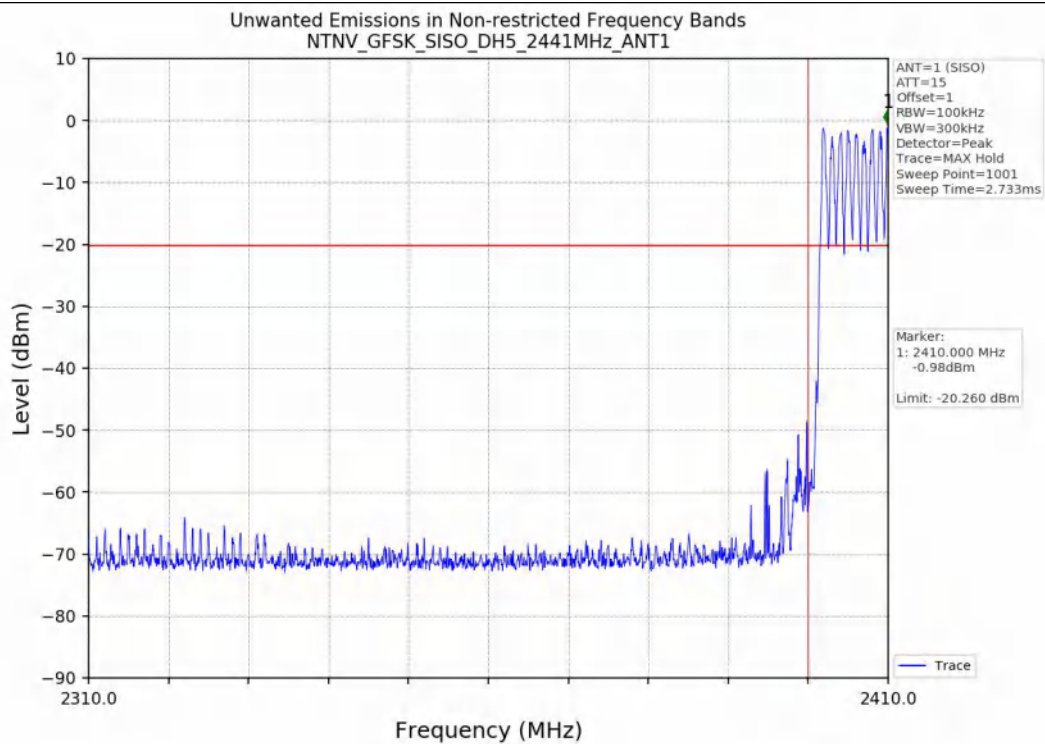
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
GFSK	2402	SISO	1	Refer to test graph	-20.26	PASS
	2441	SISO	1	Refer to test graph	-20.26	PASS
	2480	SISO	1	Refer to test graph	-20.26	PASS
	Hopping	SISO	1	Refer to test graph	-20.26	PASS
Pi/4DQPSK	2402	SISO	1	Refer to test graph	-20.40	PASS
	2441	SISO	1	Refer to test graph	-20.40	PASS
	2480	SISO	1	Refer to test graph	-20.40	PASS
	Hopping	SISO	1	Refer to test graph	-20.40	PASS
8DPSK	2402	SISO	1	Refer to test graph	-20.06	PASS
	2441	SISO	1	Refer to test graph	-20.06	PASS
	2480	SISO	1	Refer to test graph	-20.06	PASS
	Hopping	SISO	1	Refer to test graph	-20.06	PASS

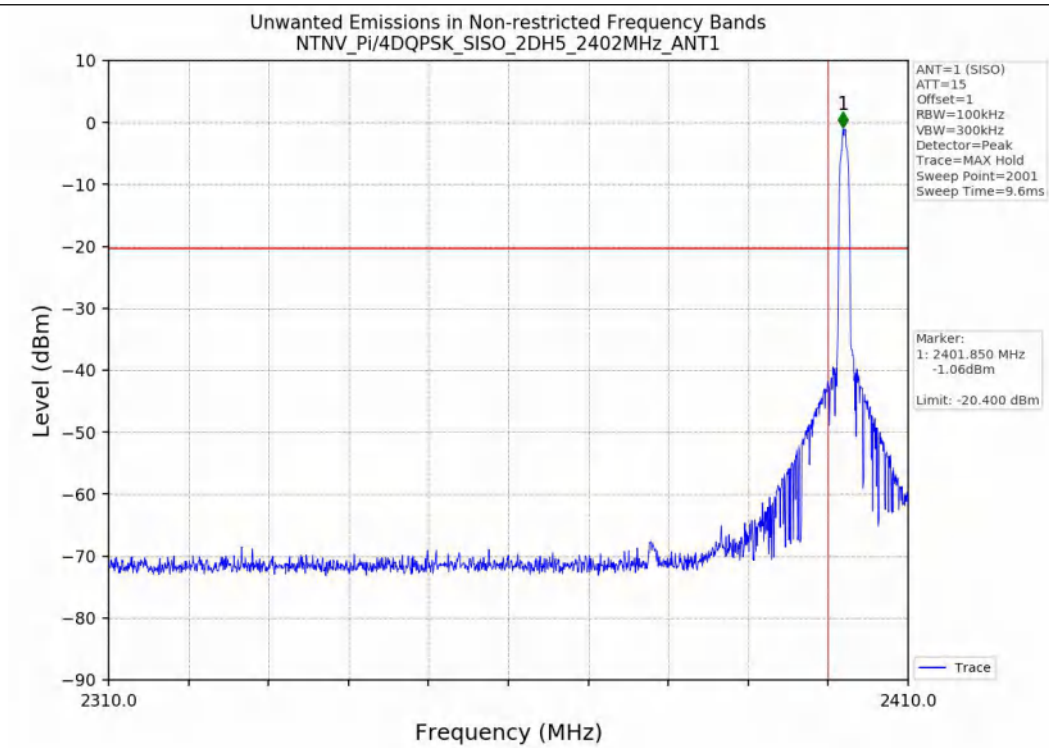
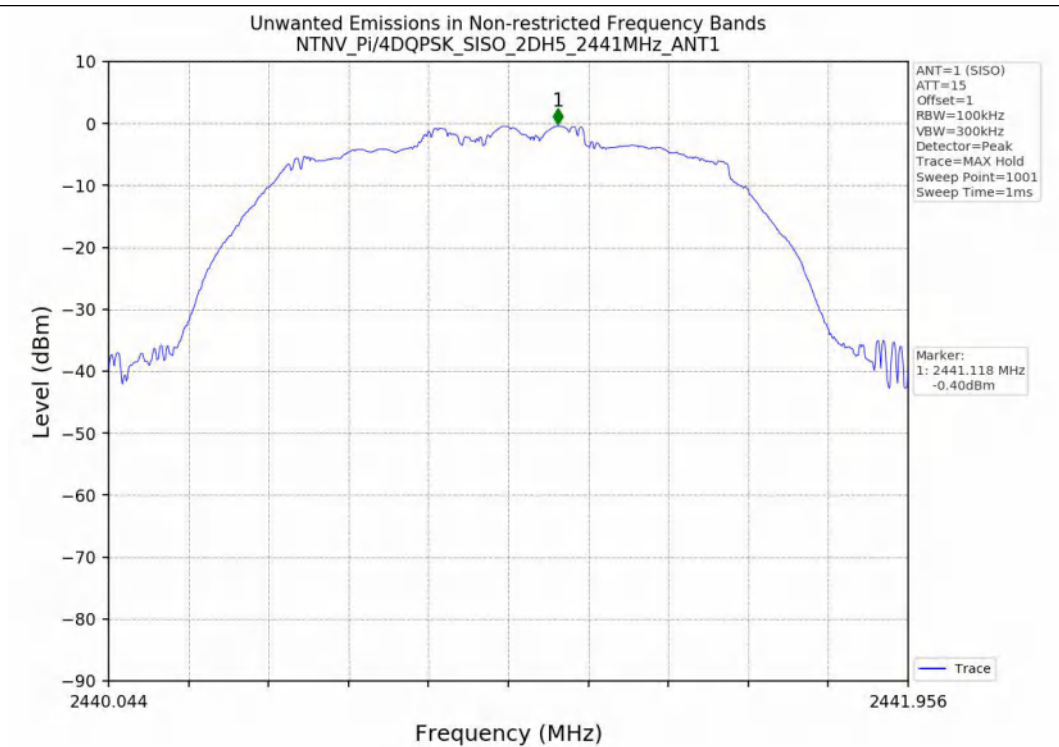
6.2 Test Graph



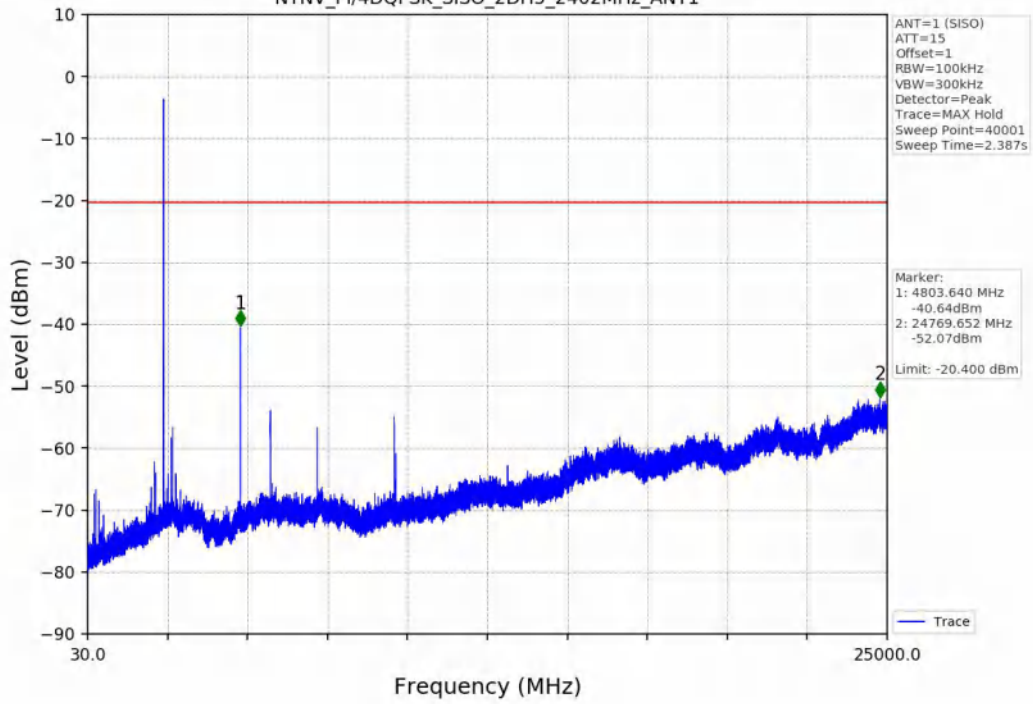




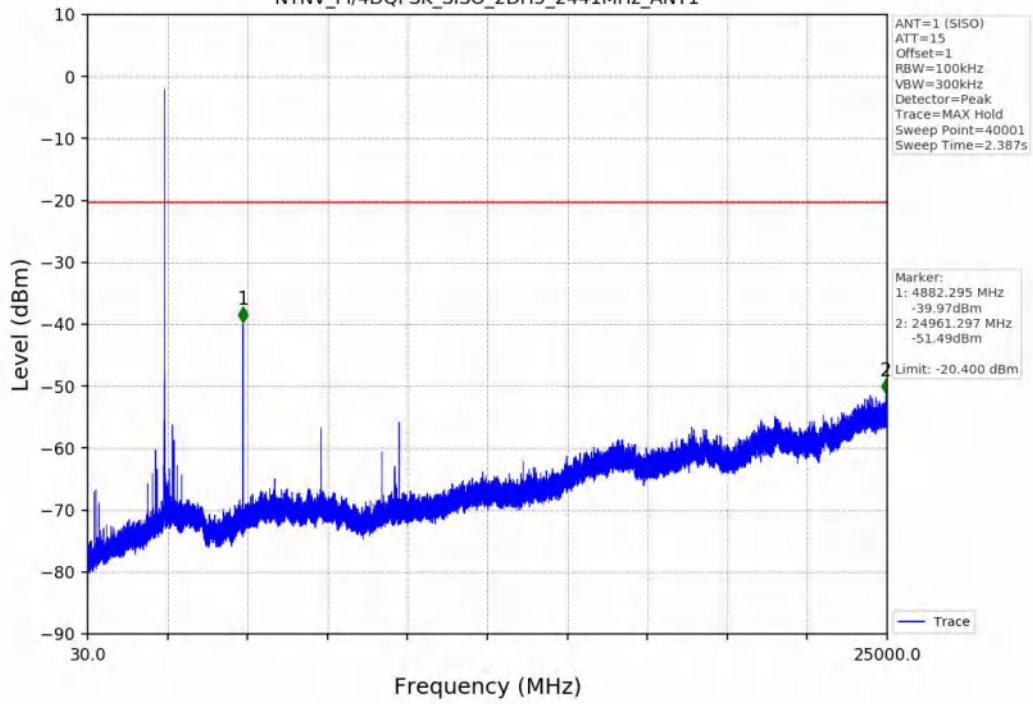


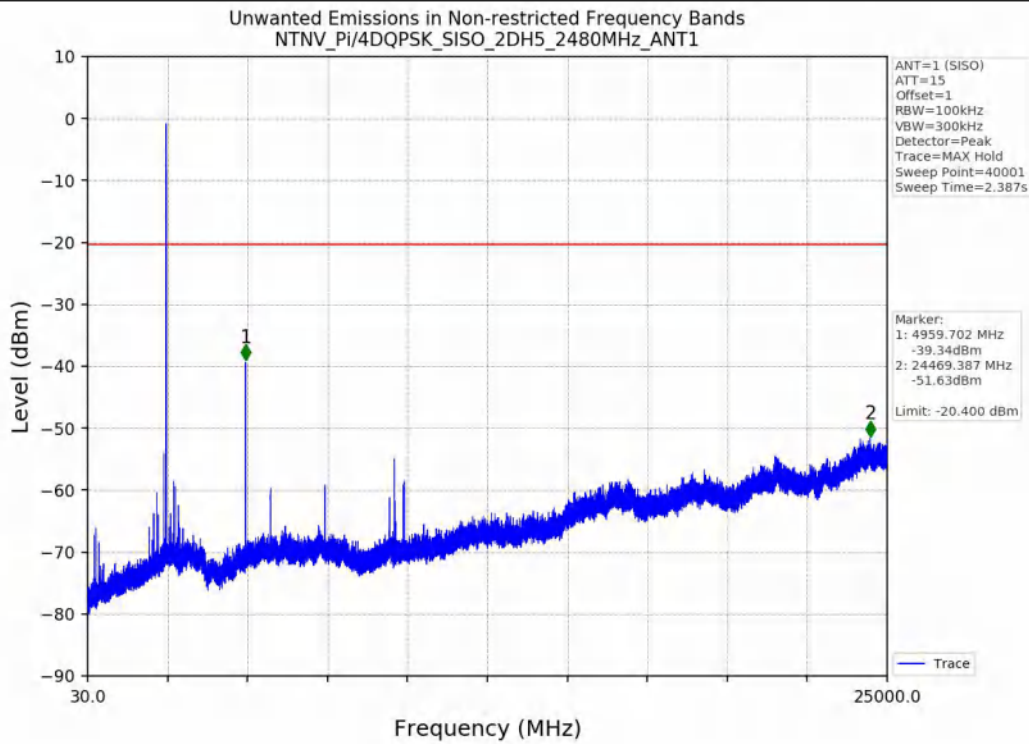
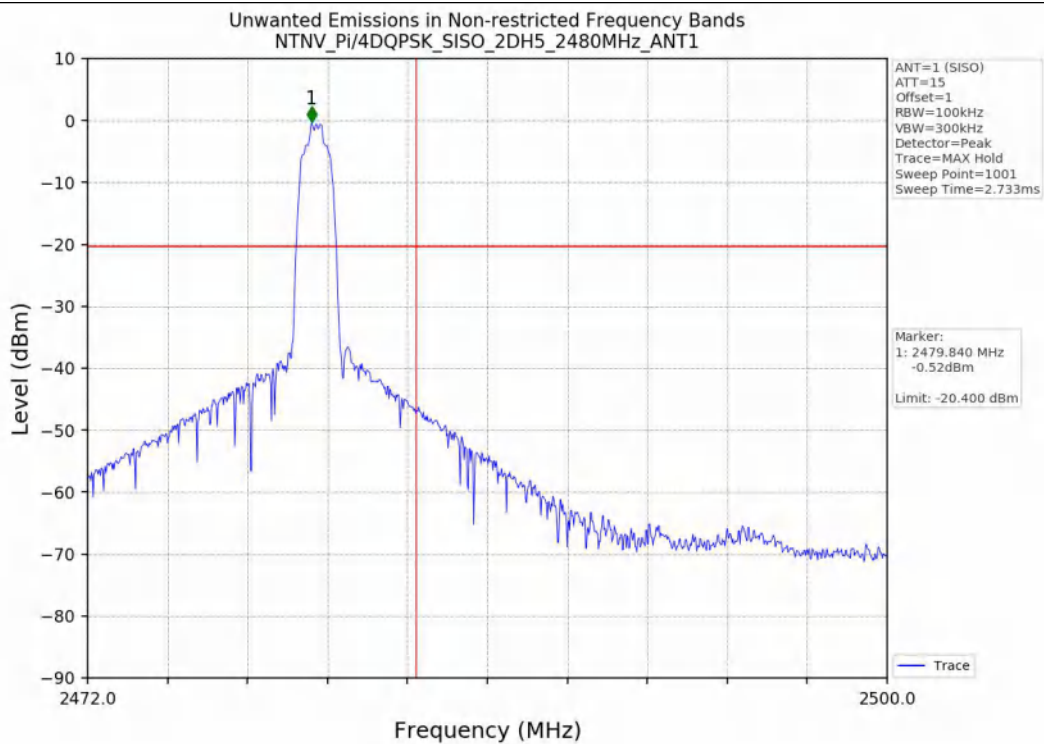


Unwanted Emissions in Non-restricted Frequency Bands
NTNV_Pi/4DQPSK_SISO_2DH5_2402MHz_ANT1

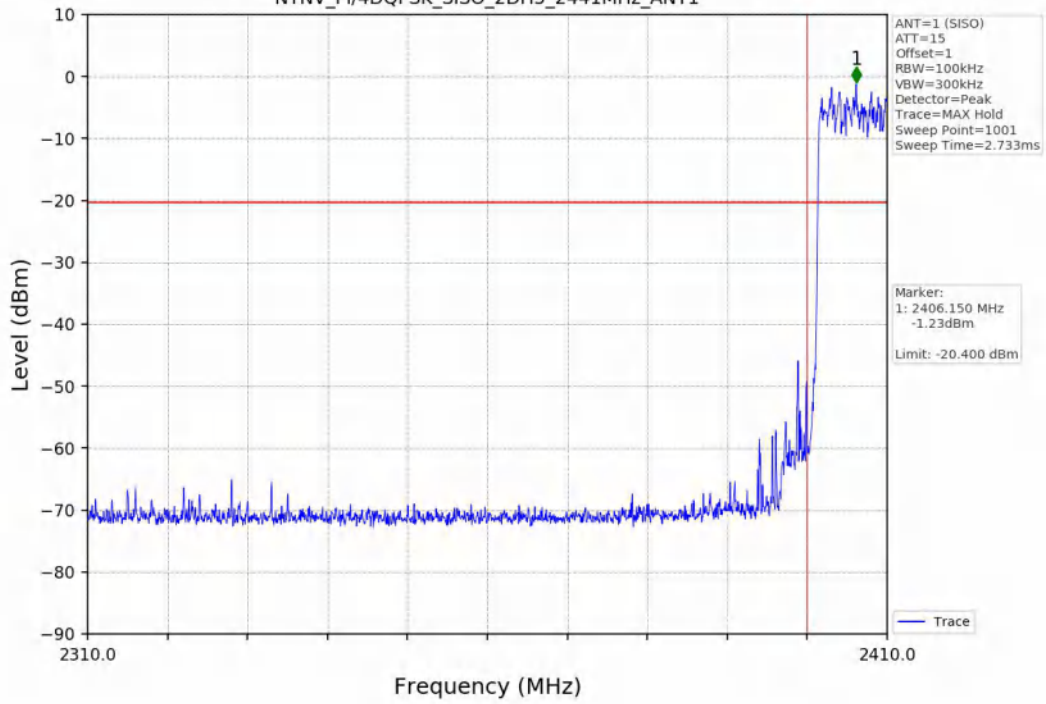


Unwanted Emissions in Non-restricted Frequency Bands
NTNV_Pi/4DQPSK_SISO_2DH5_2441MHz_ANT1

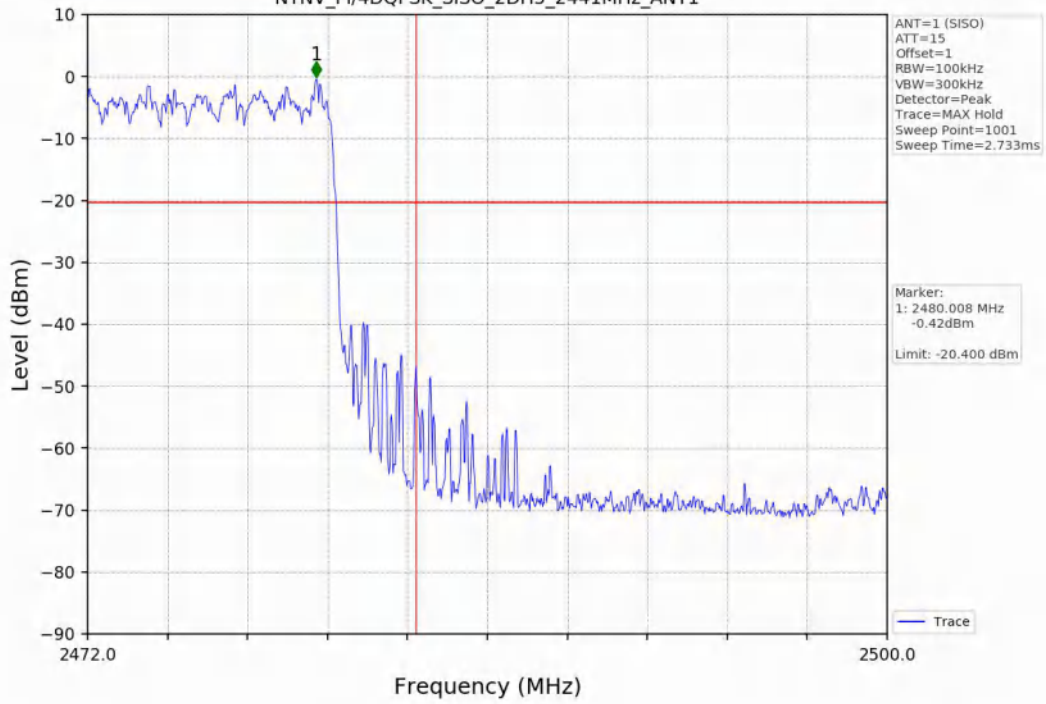


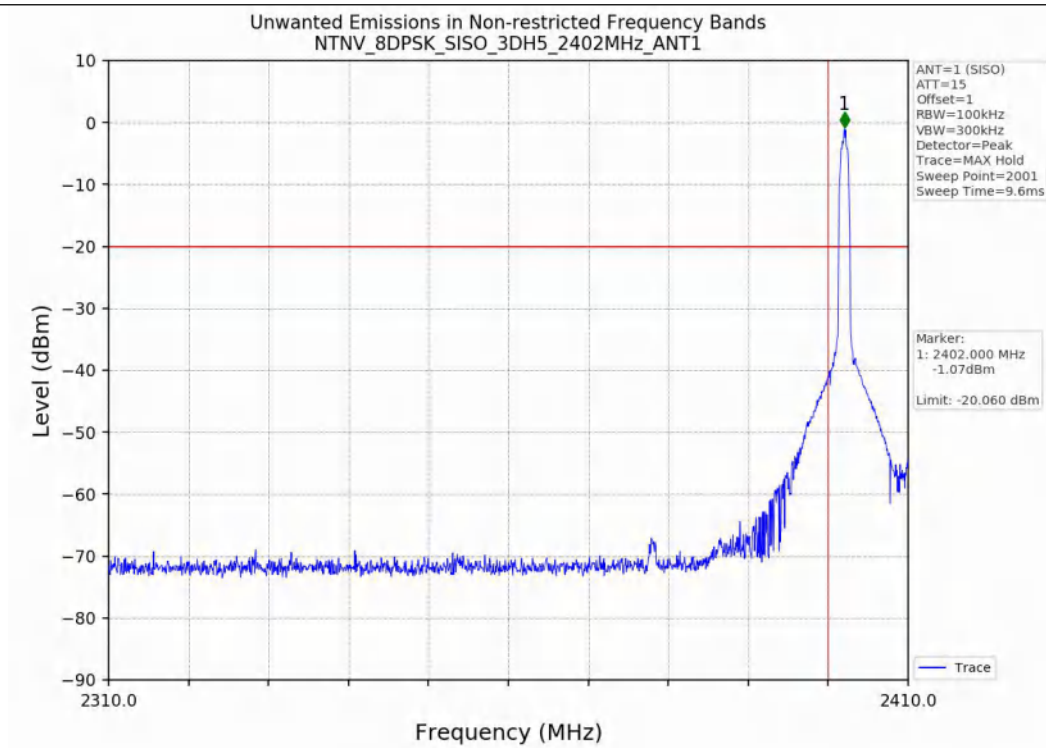
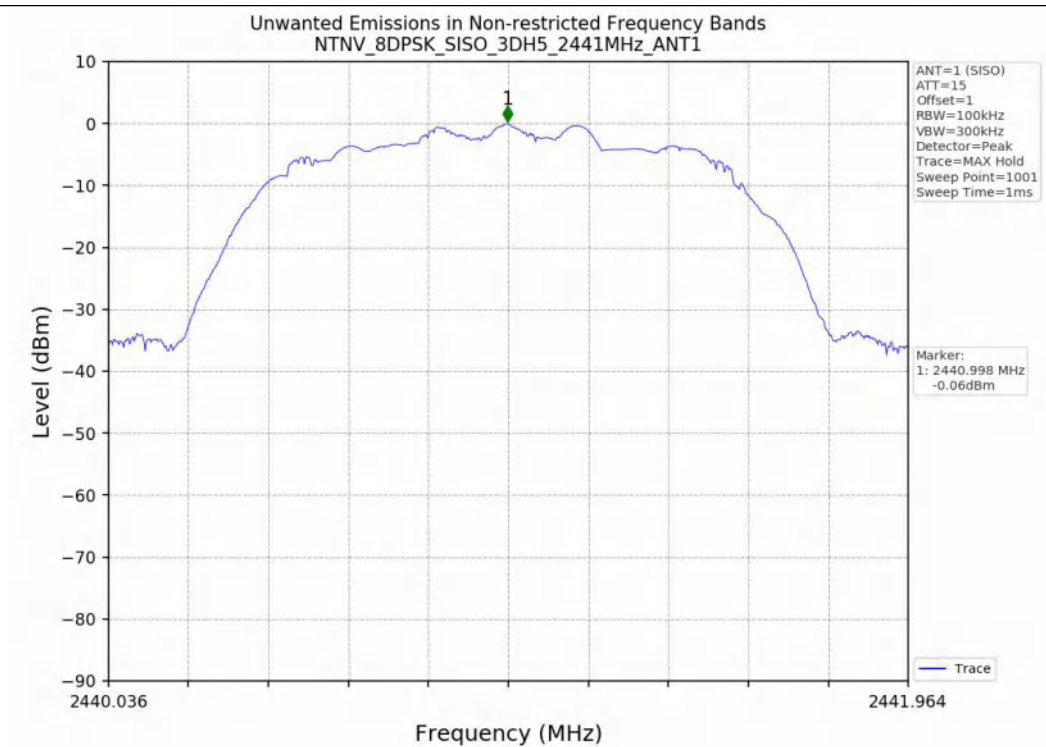


Unwanted Emissions in Non-restricted Frequency Bands
NTNV_Pi/4DQPSK_SISO_2DH5_2441MHz_ANT1

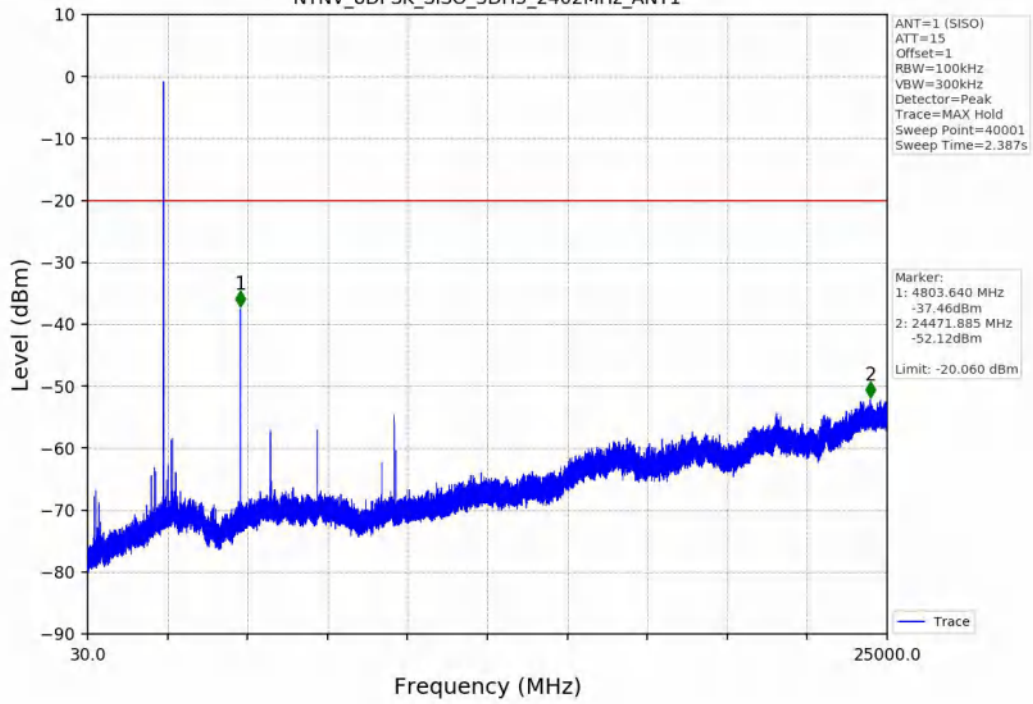


Unwanted Emissions in Non-restricted Frequency Bands
NTNV_Pi/4DQPSK_SISO_2DH5_2441MHz_ANT1

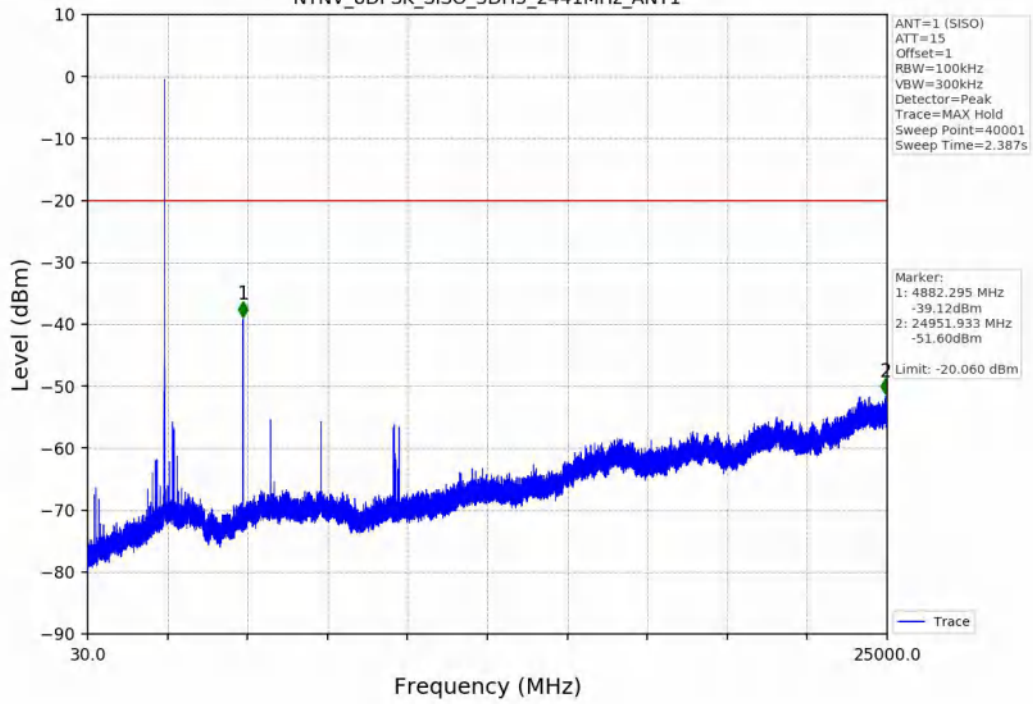


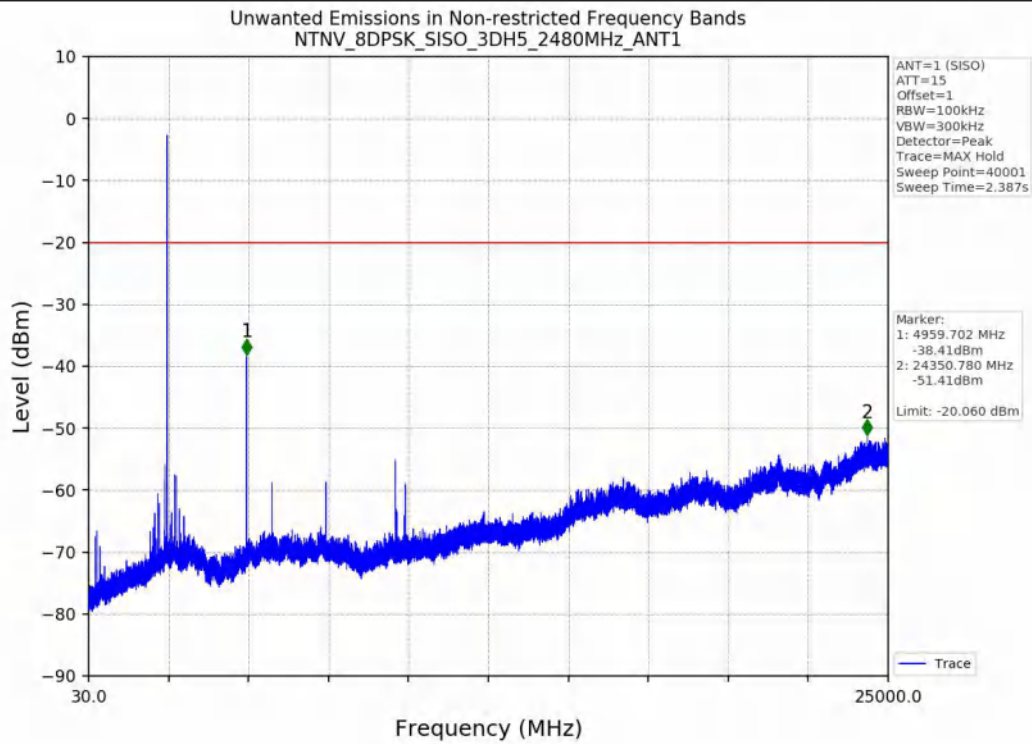
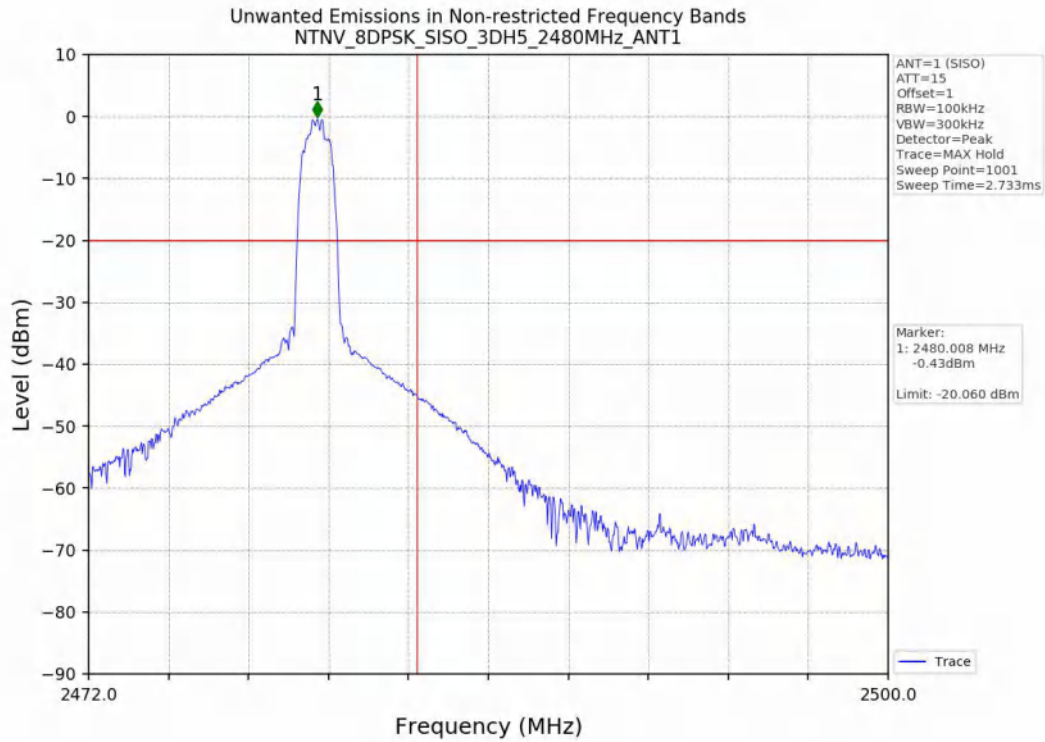


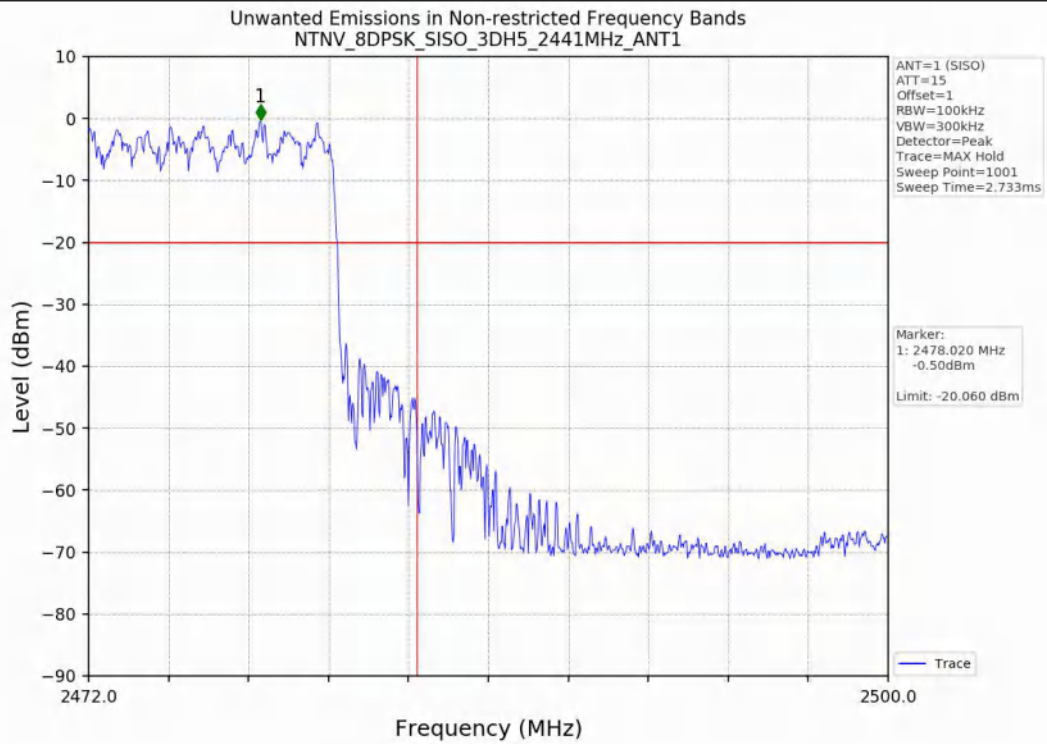
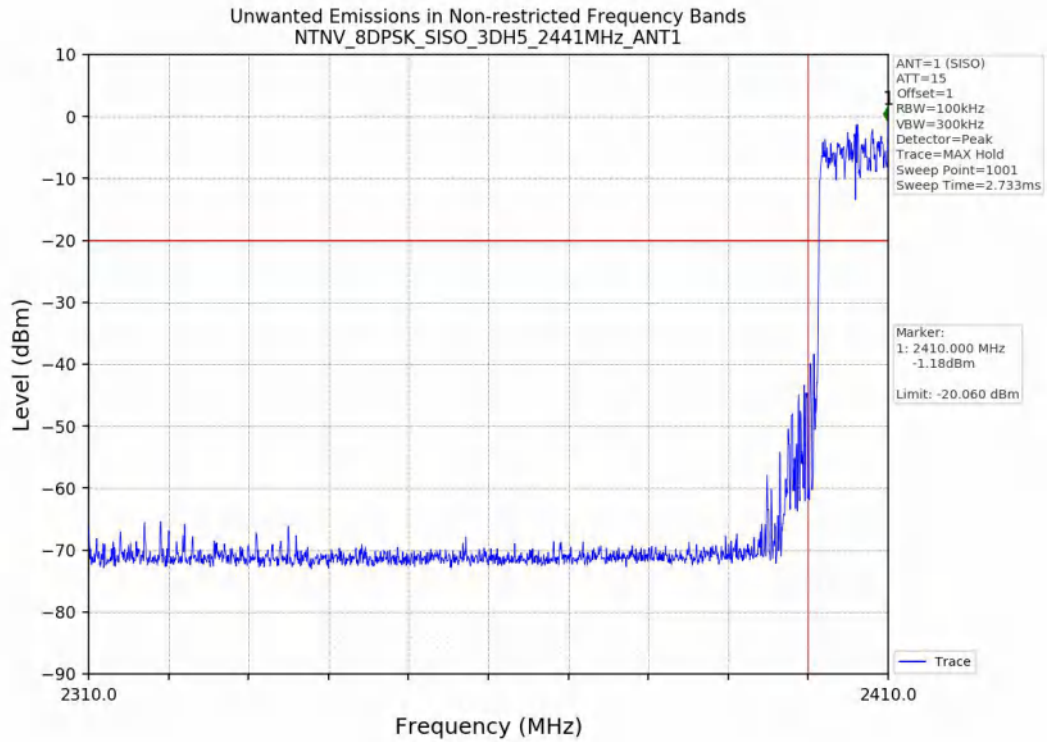
Unwanted Emissions in Non-restricted Frequency Bands
NTNV_8DPSK_SISO_3DH5_2402MHz_ANT1



Unwanted Emissions in Non-restricted Frequency Bands
NTNV_8DPSK_SISO_3DH5_2441MHz_ANT1







7. Frequency Error

7.1 Test Result

Test Mode	Frequency (MHz)	TX Type	ANT	Measured Frequency (MHz)		Verdict
				Test Result	Limit	
GFSK	2402	SISO	1	2402.00	2400-2483.5	PASS
	2441	SISO	1	2441.00	2400-2483.5	PASS
	2480	SISO	1	2480.00	2400-2483.5	PASS
Pi/4DQPSK	2402	SISO	1	2402.00	2400-2483.5	PASS
	2441	SISO	1	2441.00	2400-2483.5	PASS
	2480	SISO	1	2480.00	2400-2483.5	PASS

7.2 Test Graph

