

## Appendix for 15.247

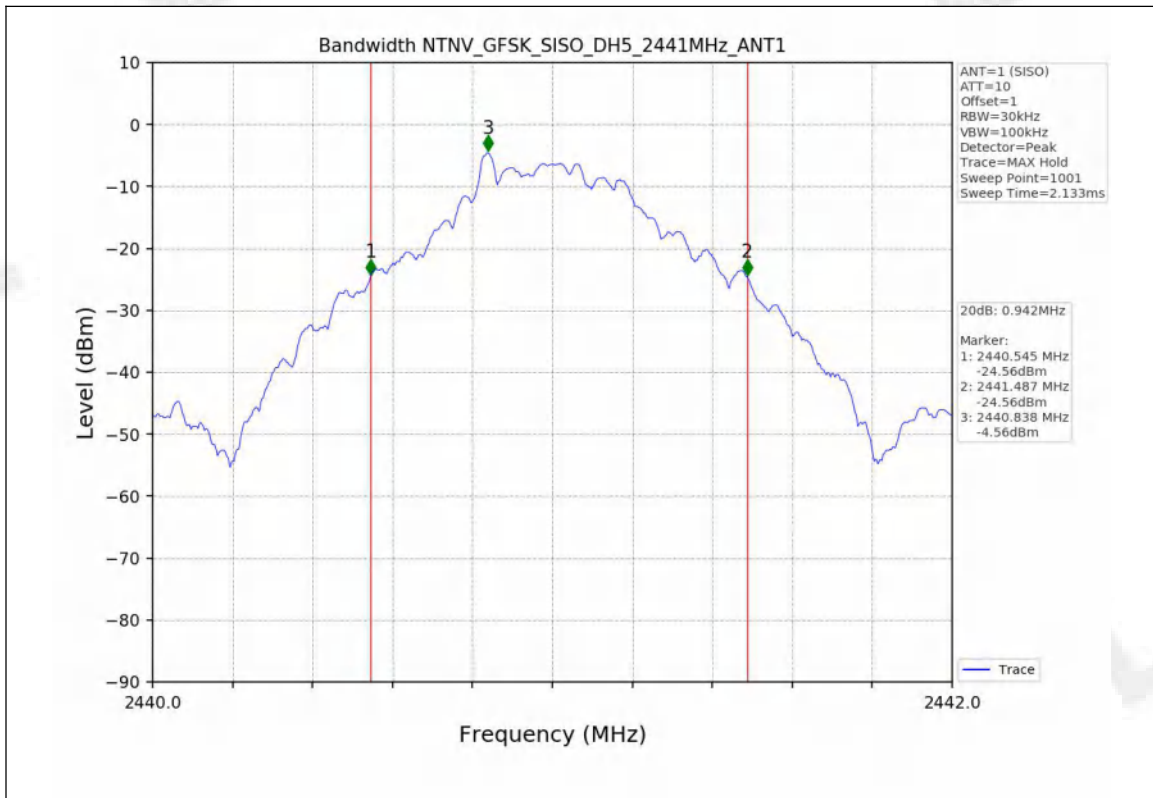
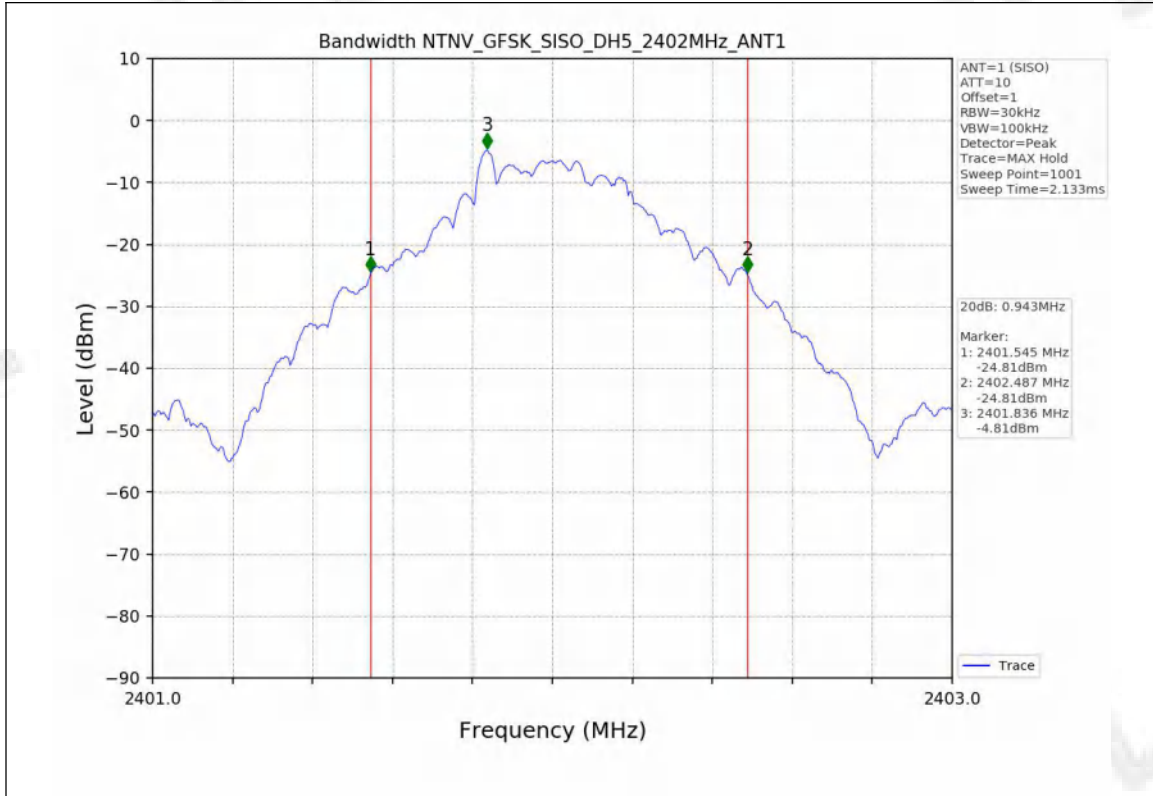
### 1. Bandwidth

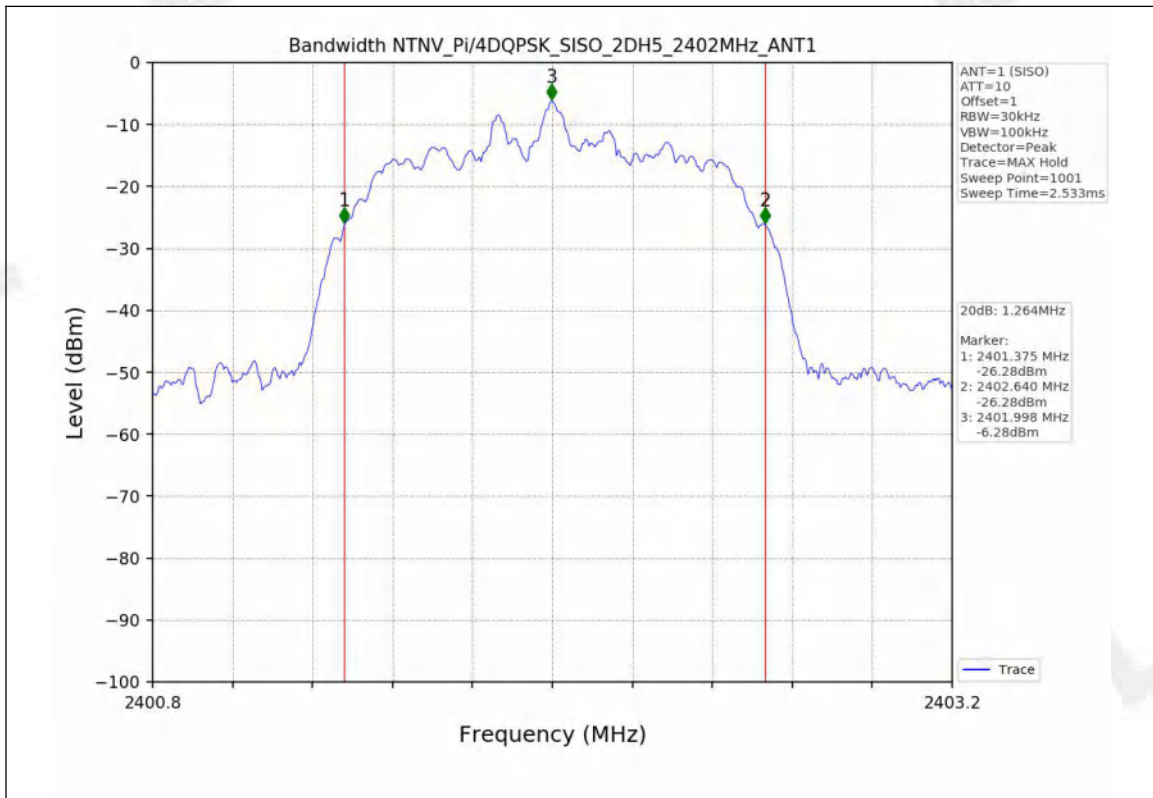
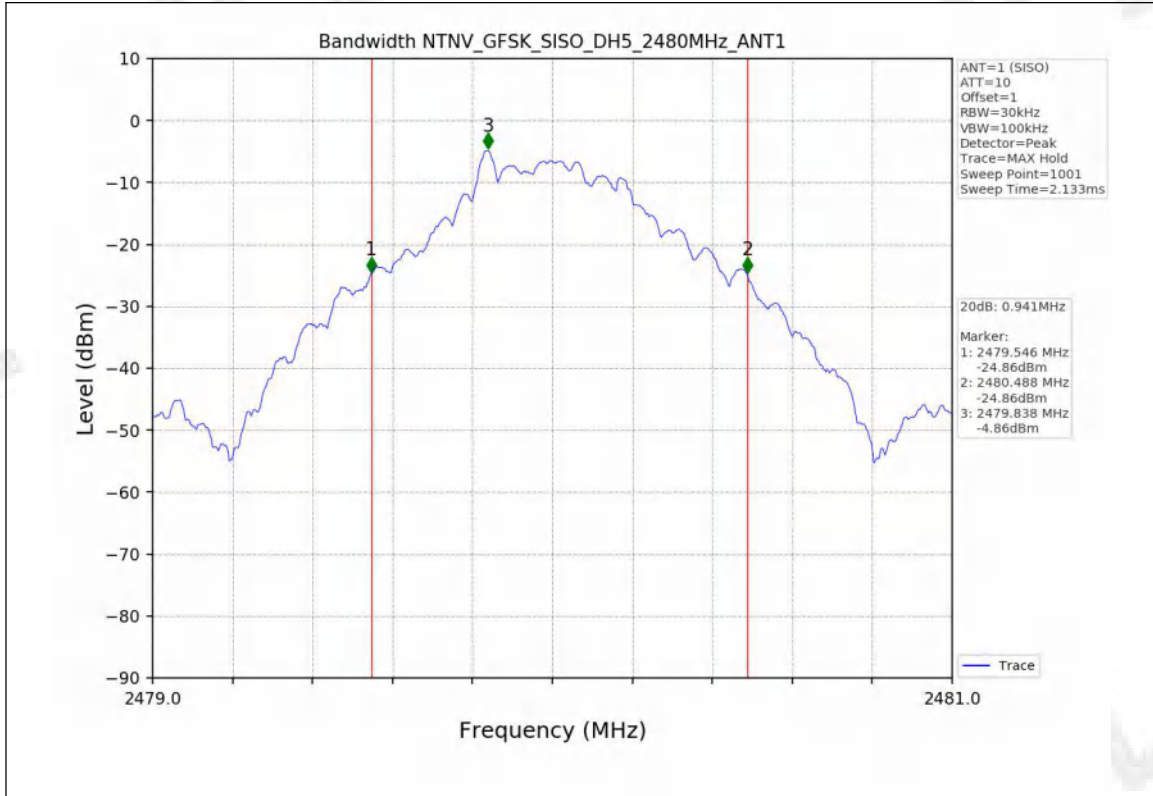
#### 1.1 Test Result

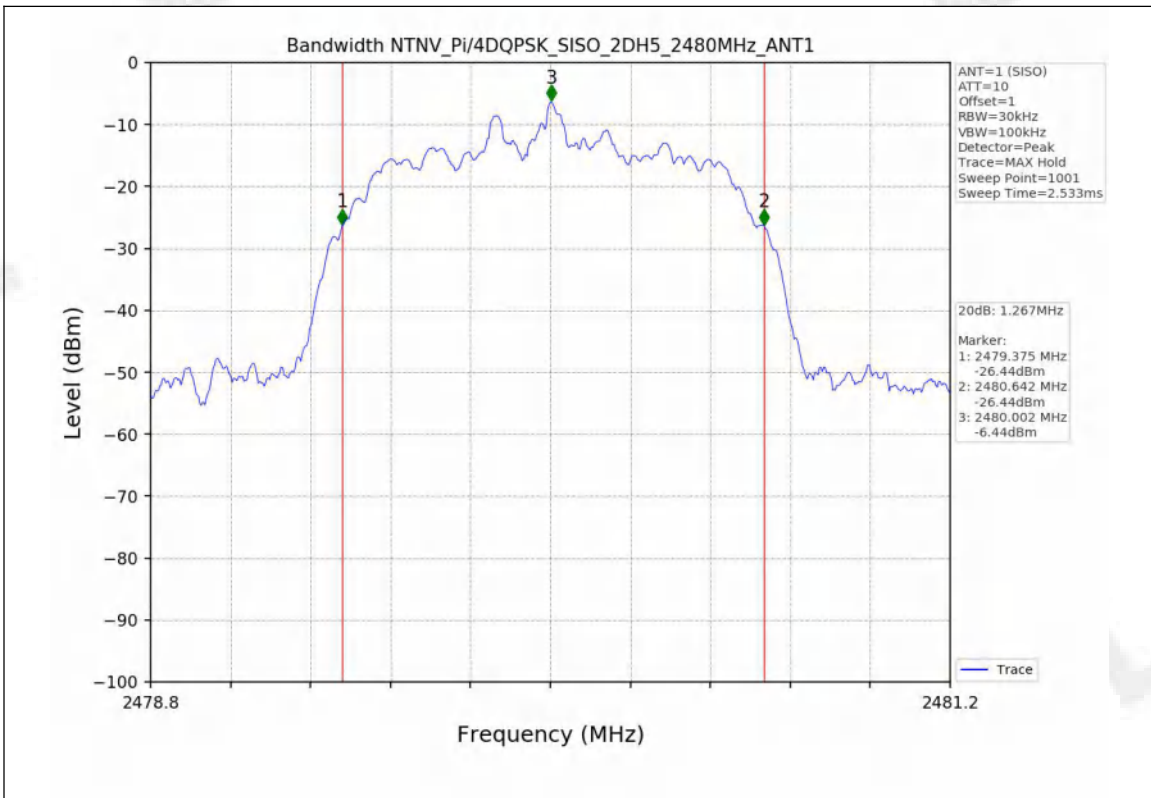
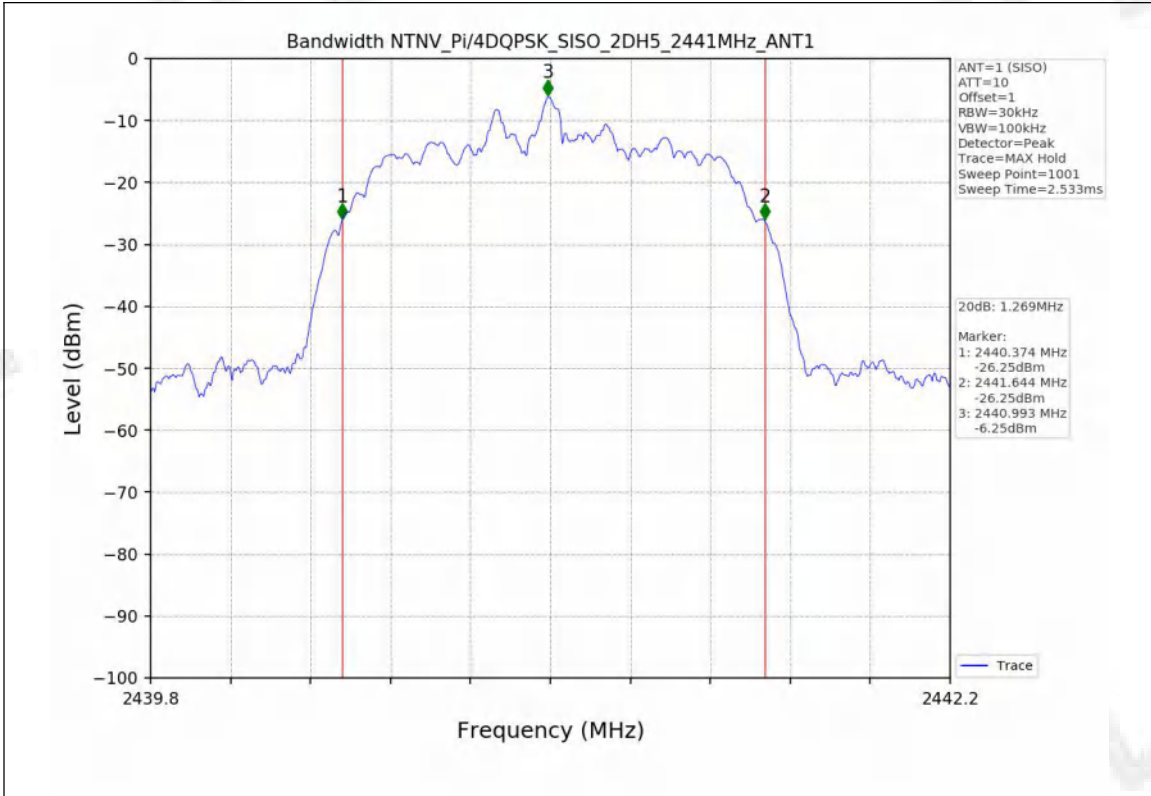
Test Mode	Frequency (MHz)	TX Type	ANT No.	20dB Bandwidth	Verdict
				Test Result (MHz)	
GFSK	2402	SISO	1	0.943	PASS
	2441	SISO	1	0.942	PASS
	2480	SISO	1	0.941	PASS
Pi/4DQPSK	2402	SISO	1	1.264	PASS
	2441	SISO	1	1.269	PASS
	2480	SISO	1	1.267	PASS
8DPSK	2402	SISO	1	1.248	PASS
	2441	SISO	1	1.246	PASS
	2480	SISO	1	1.262	PASS

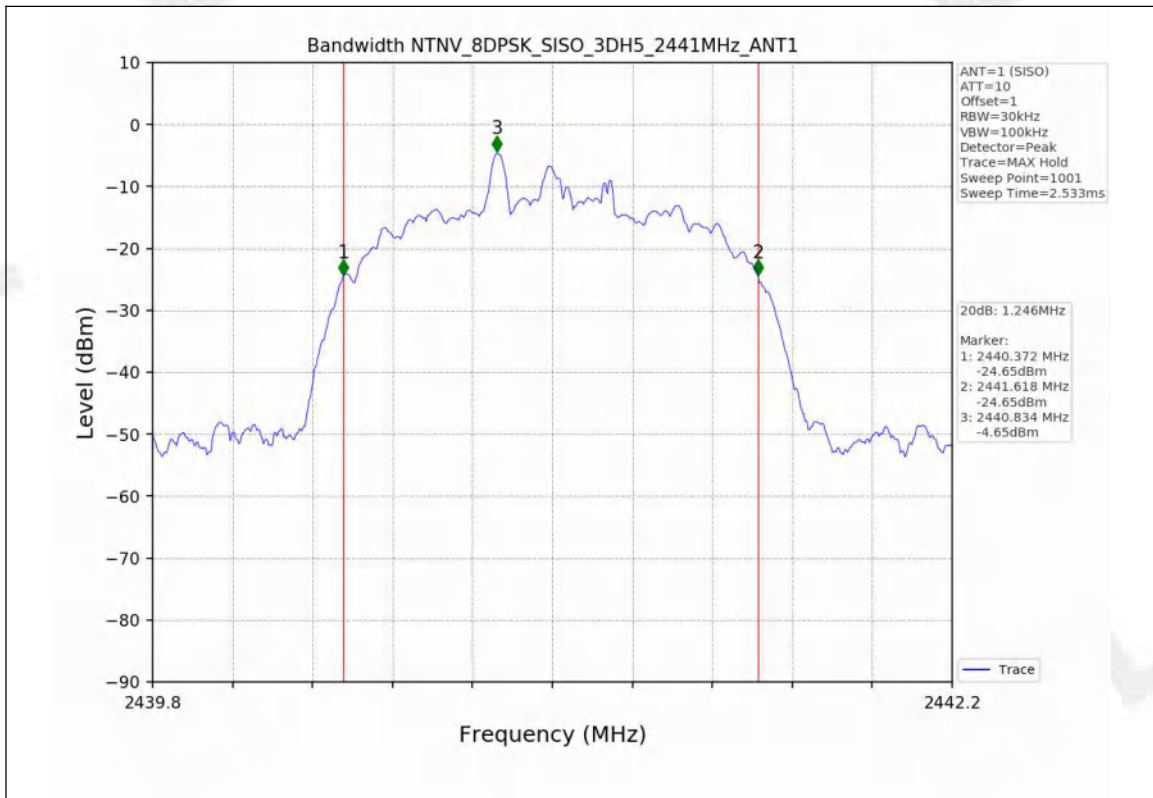
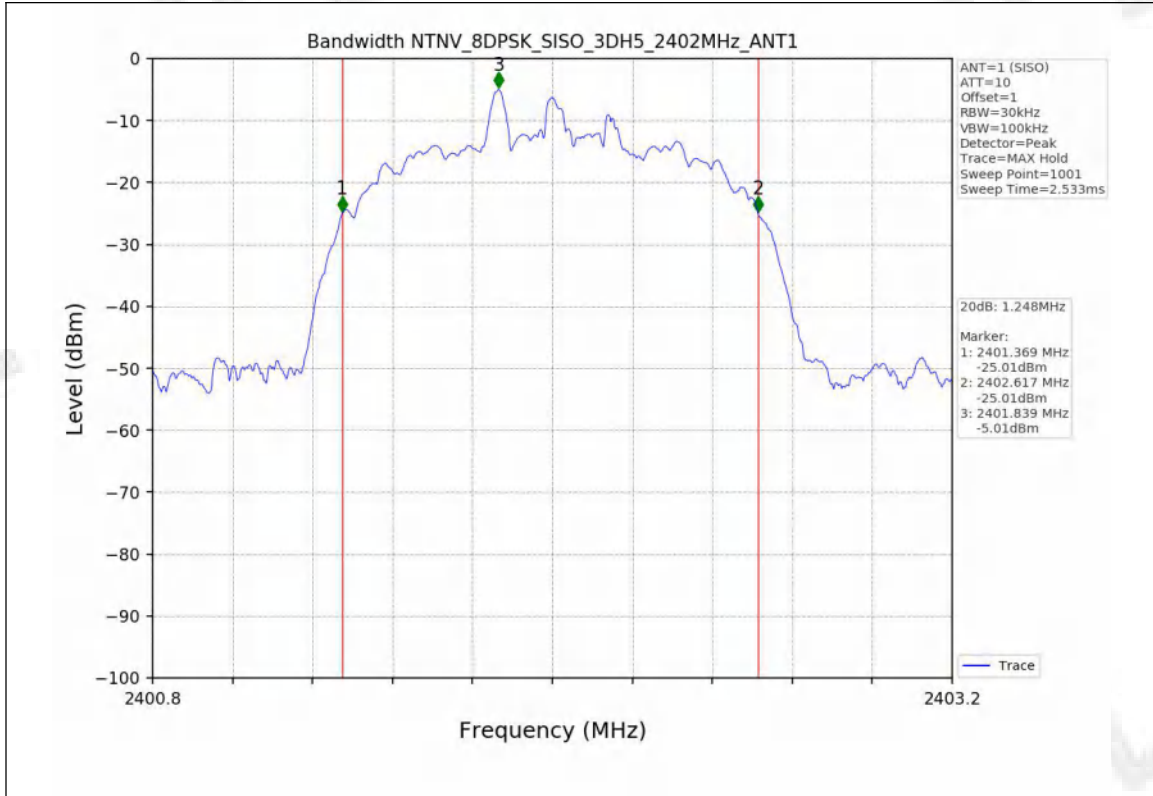
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
GFSK	2402	SISO	1	0.849	Only for Report Use
	2441	SISO	1	0.862	Only for Report Use
	2480	SISO	1	0.847	Only for Report Use
Pi/4DQPSK	2402	SISO	1	1.165	Only for Report Use
	2441	SISO	1	1.165	Only for Report Use
	2480	SISO	1	1.163	Only for Report Use
8DPSK	2402	SISO	1	1.156	Only for Report Use
	2441	SISO	1	1.155	Only for Report Use
	2480	SISO	1	1.153	Only for Report Use

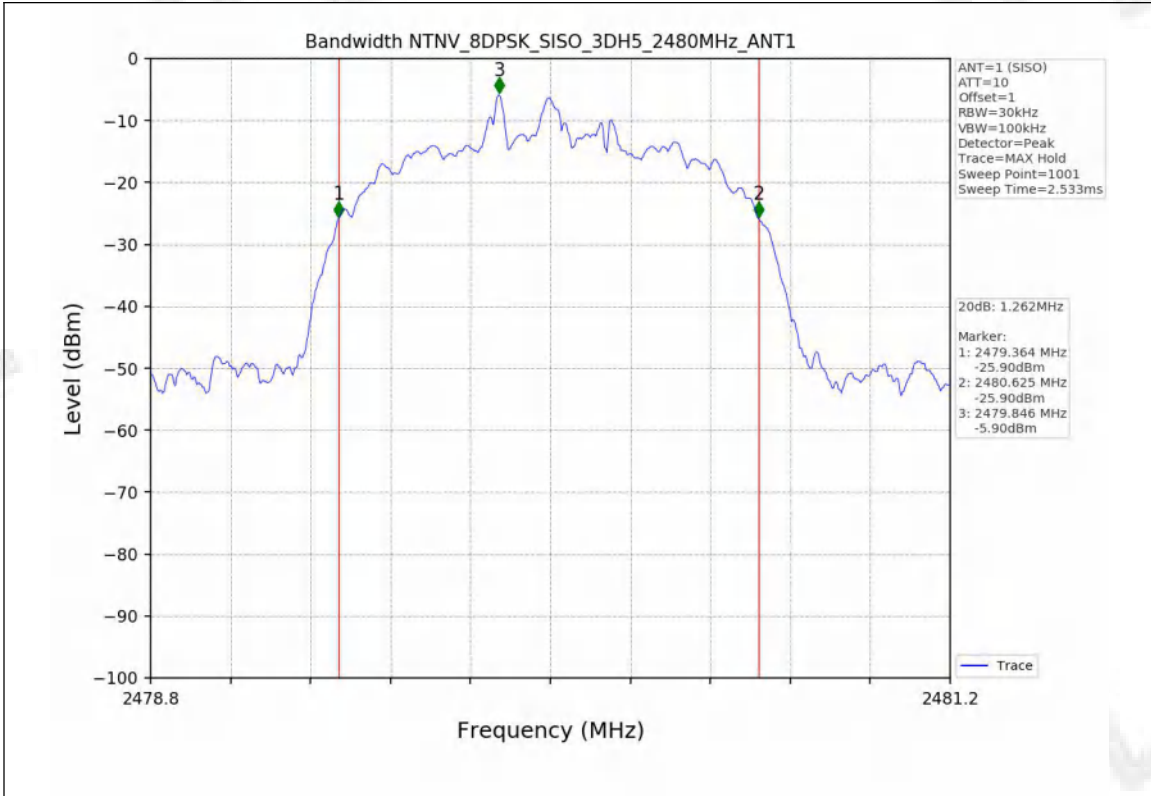
#### 1.2 Test Graph - 20dB Bandwidth



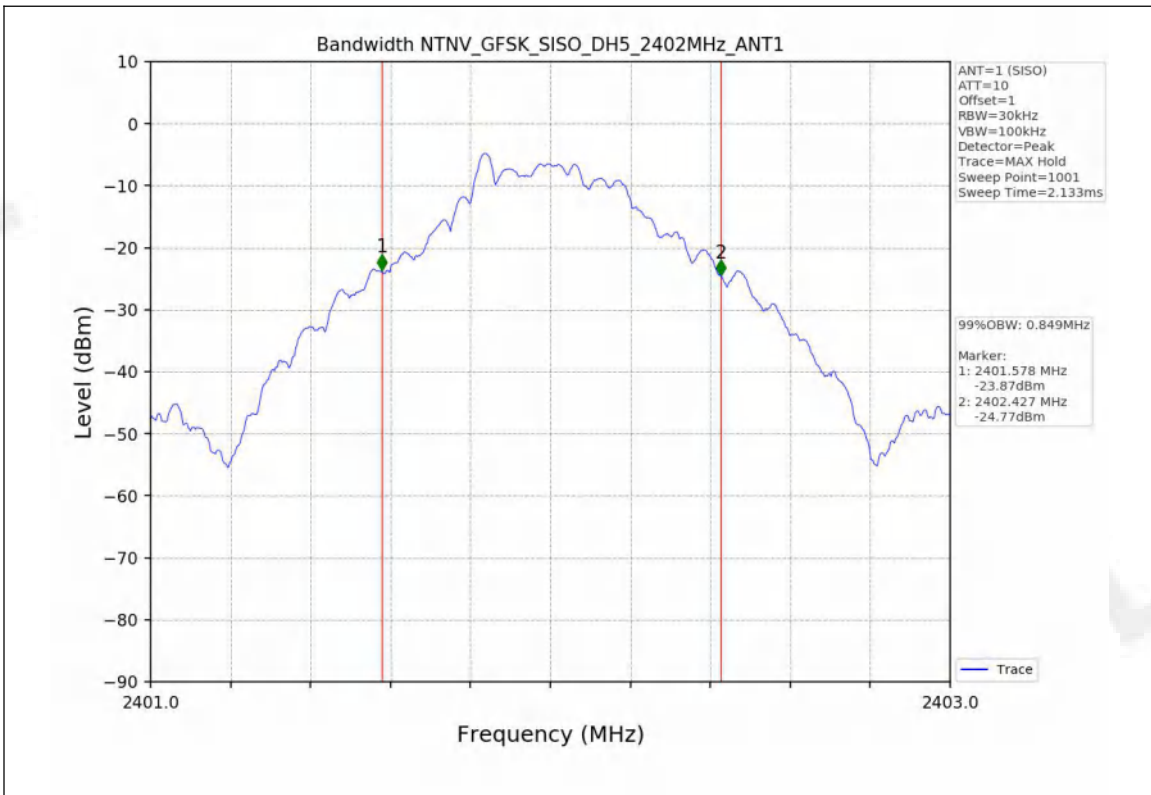


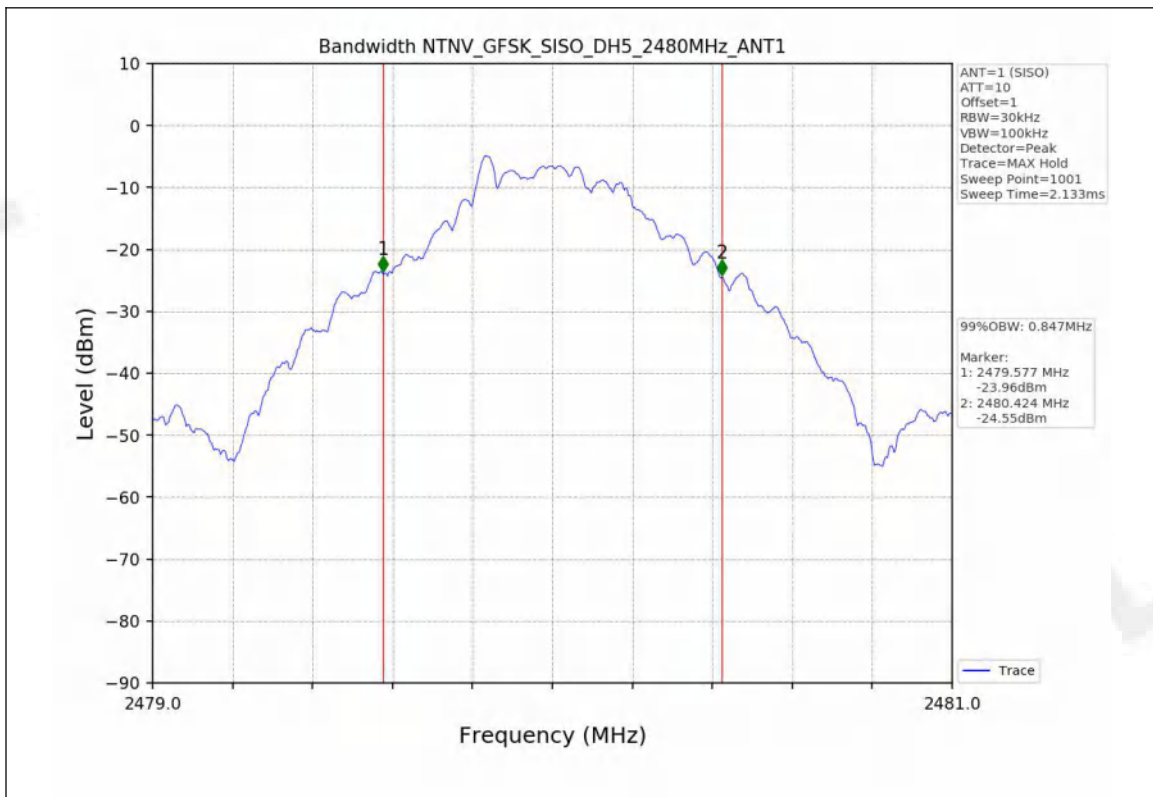
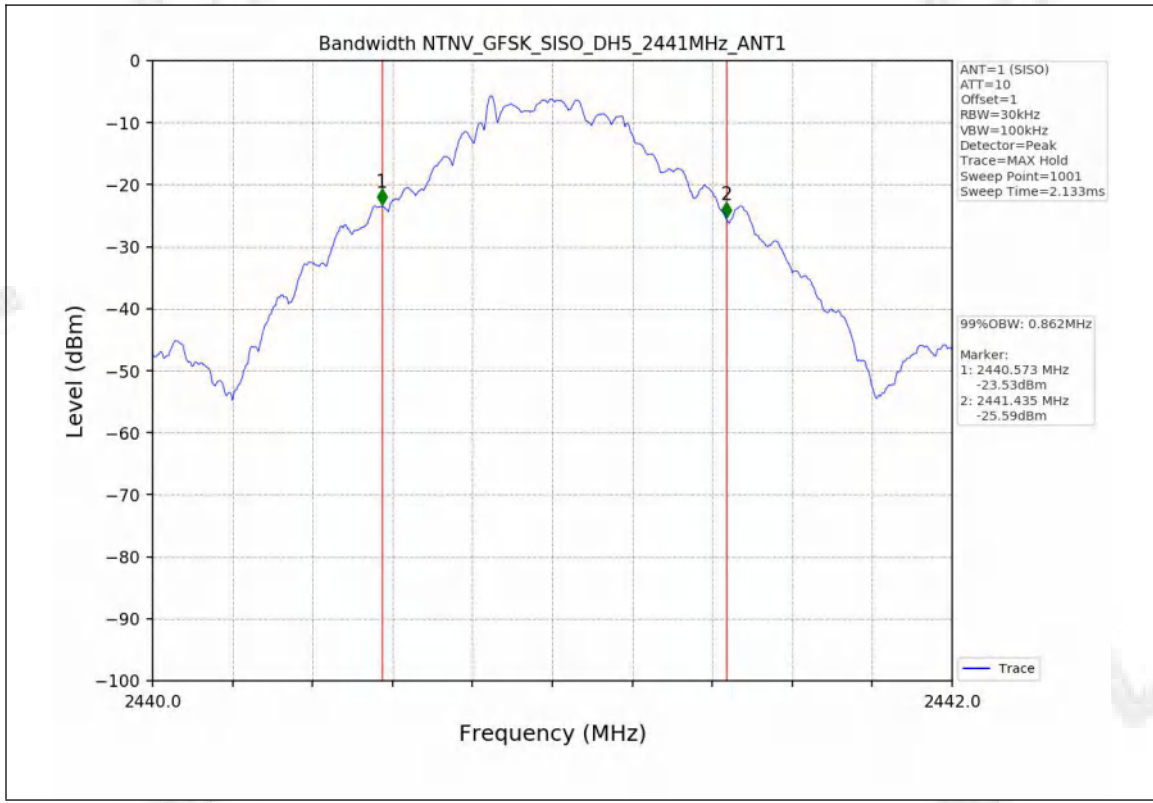


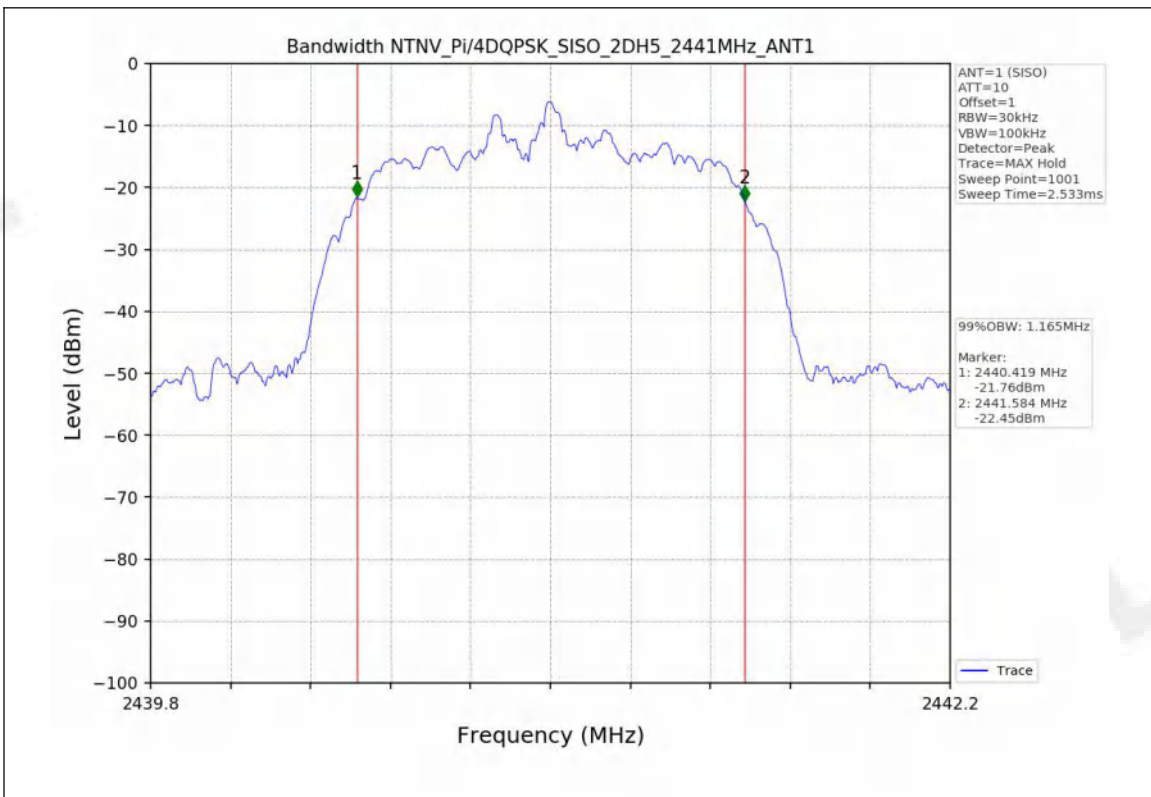
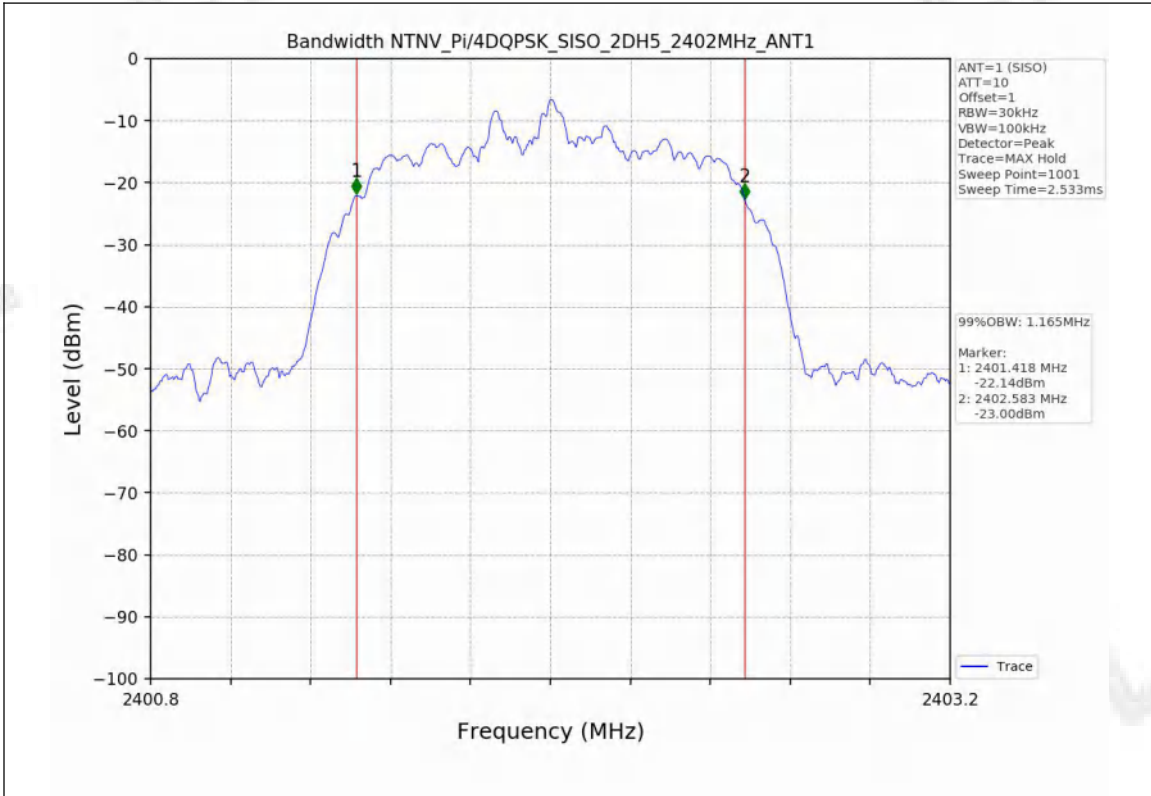




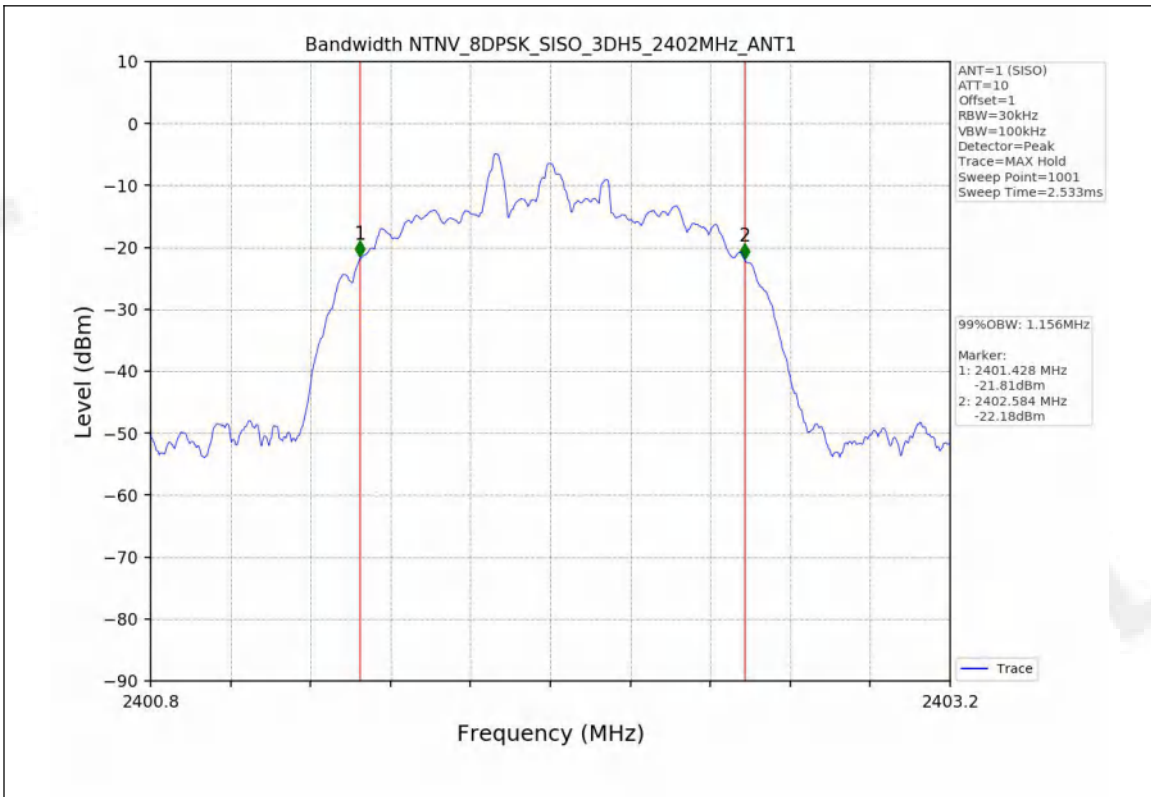
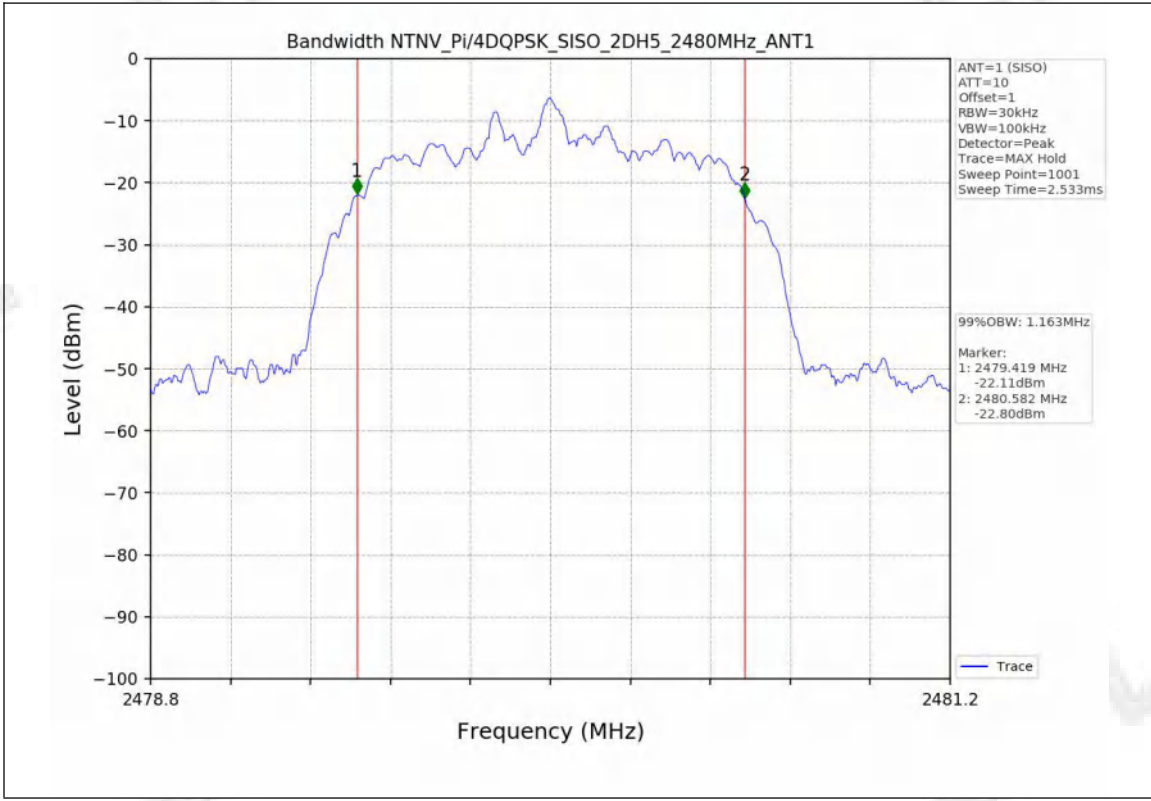
### 1.3 Test Graph - 99% Occupied Bandwidth

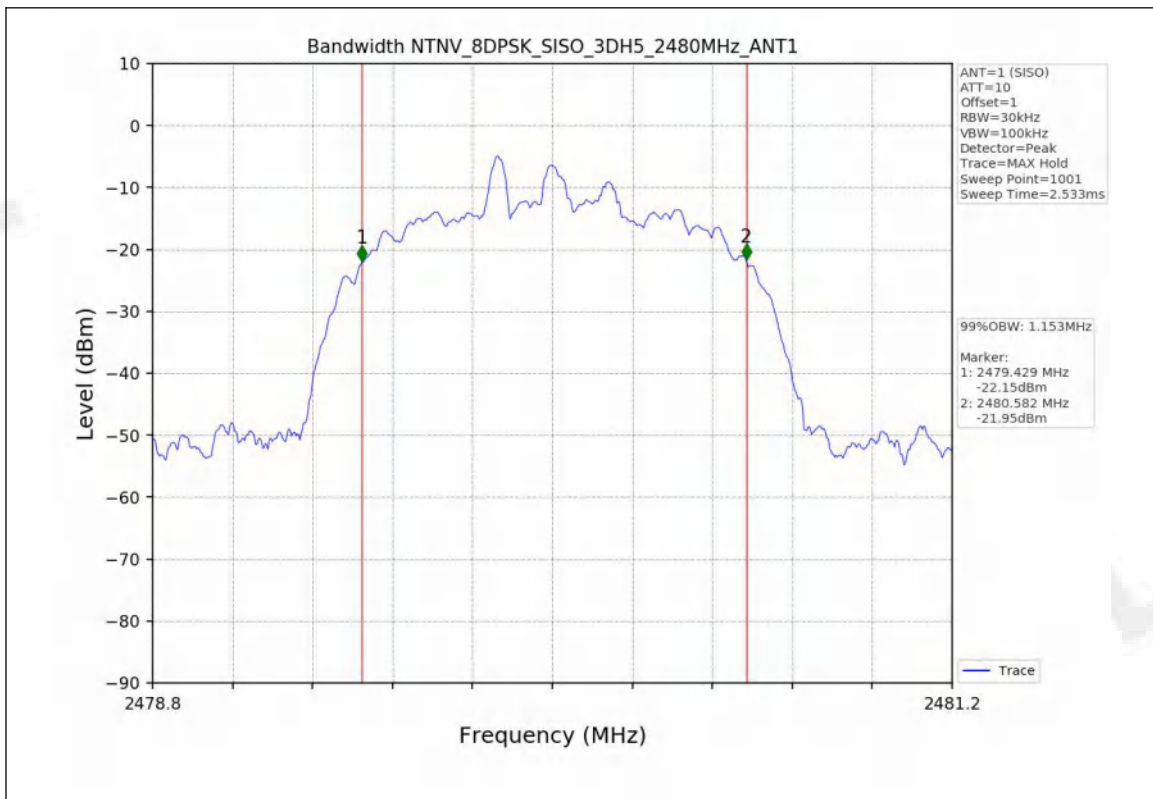
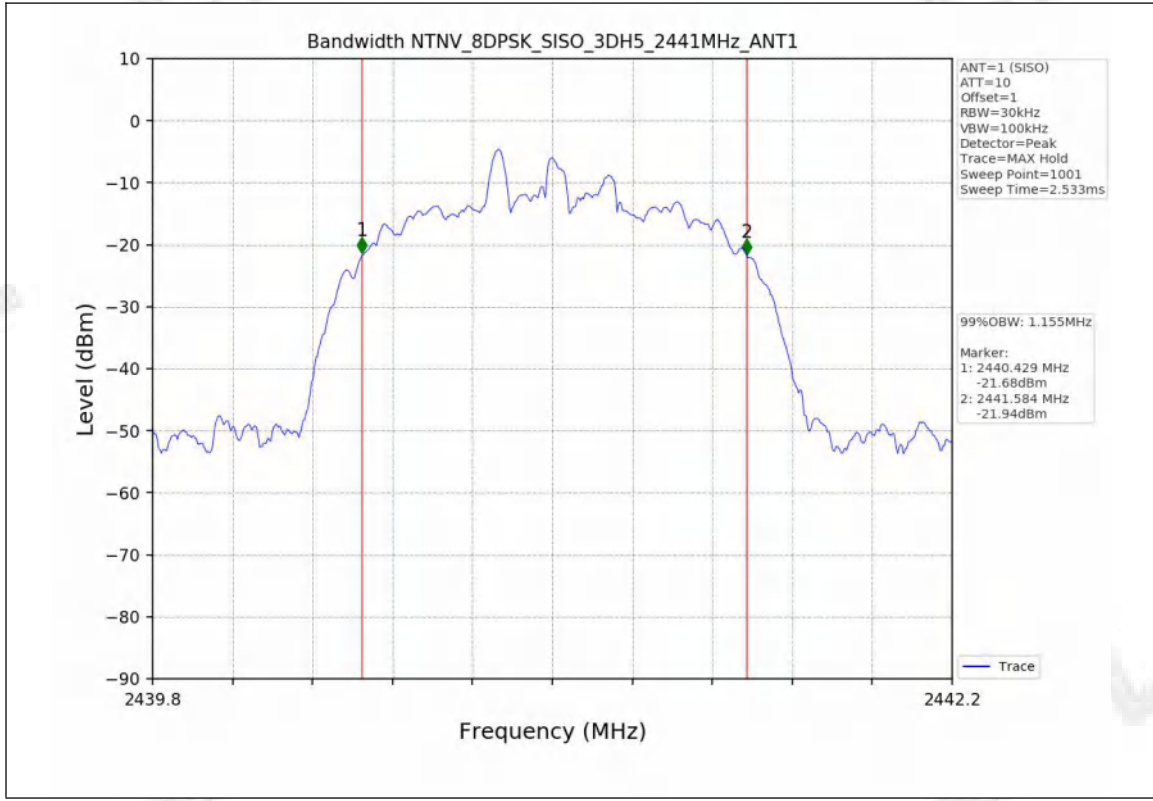










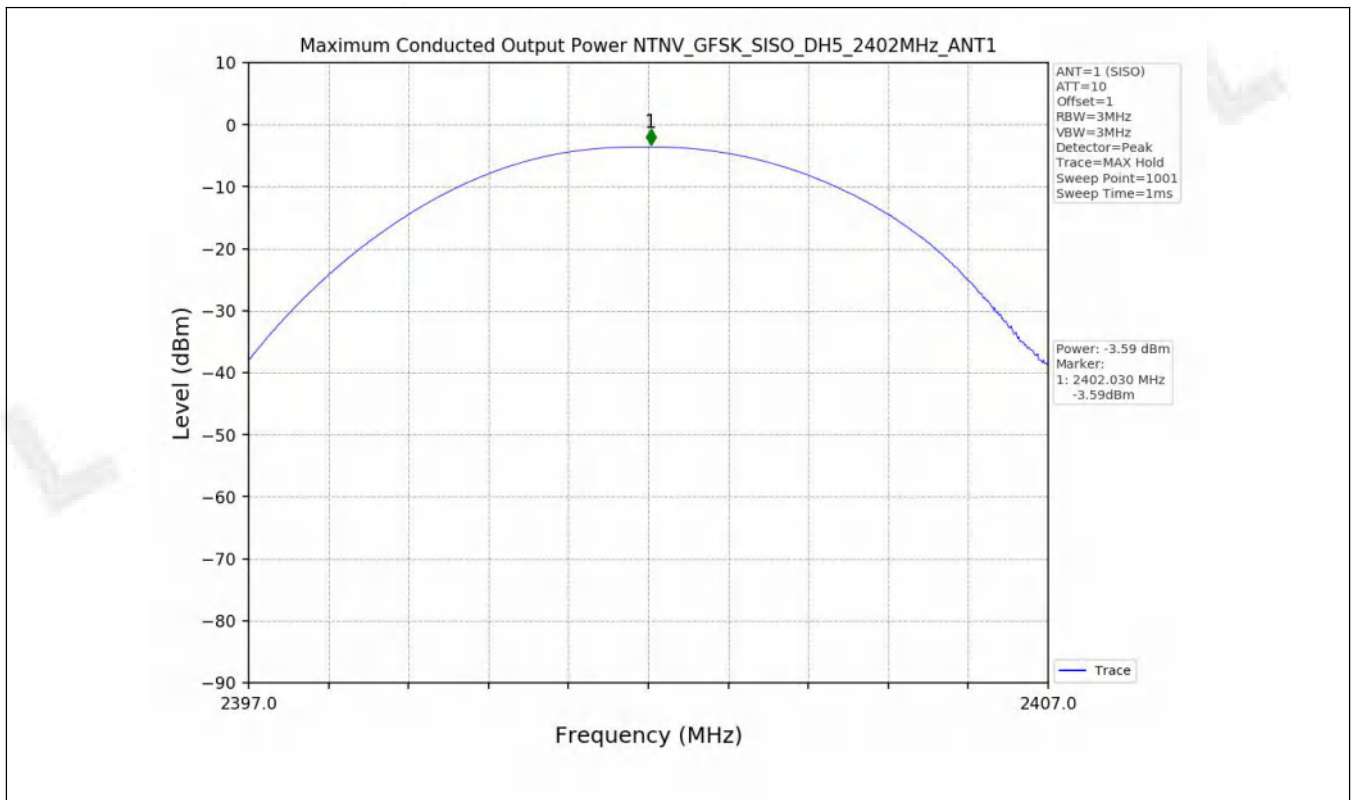


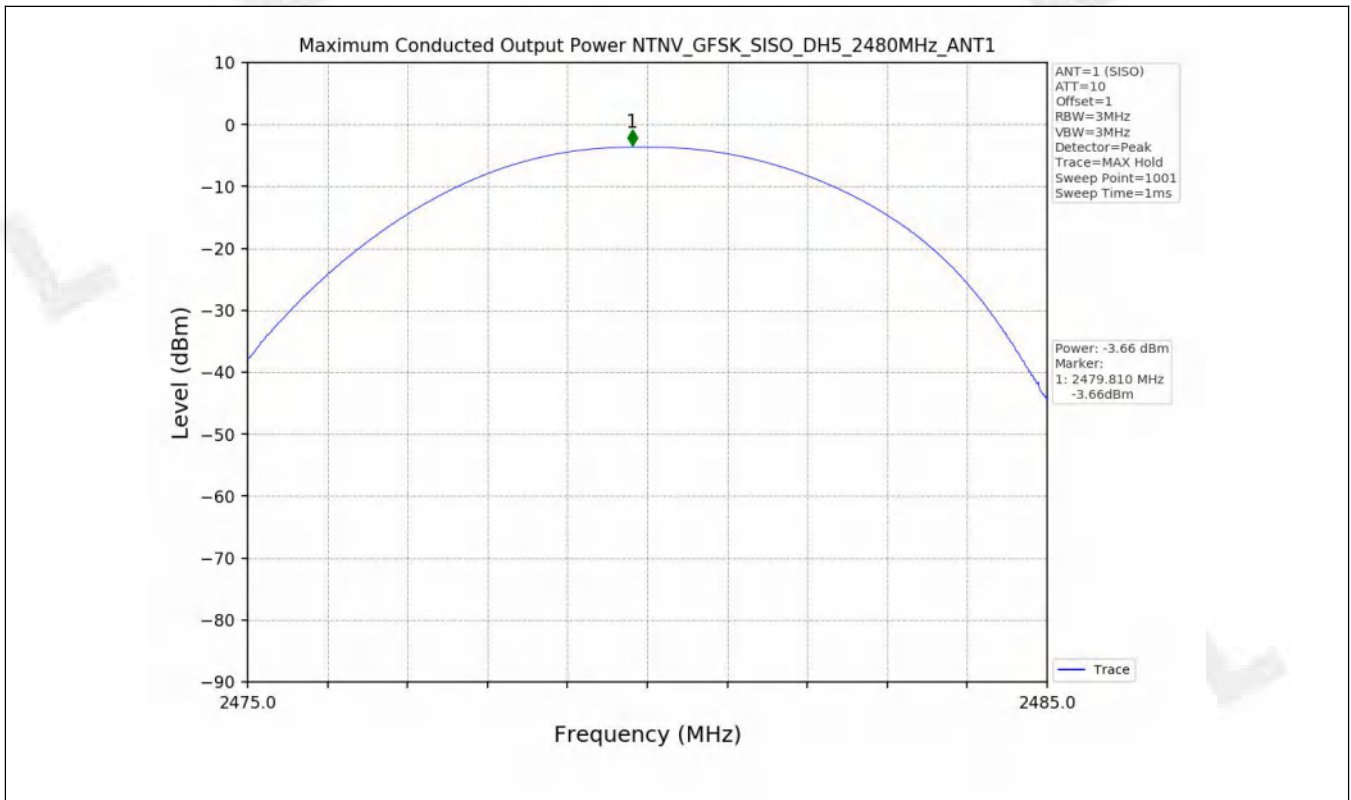
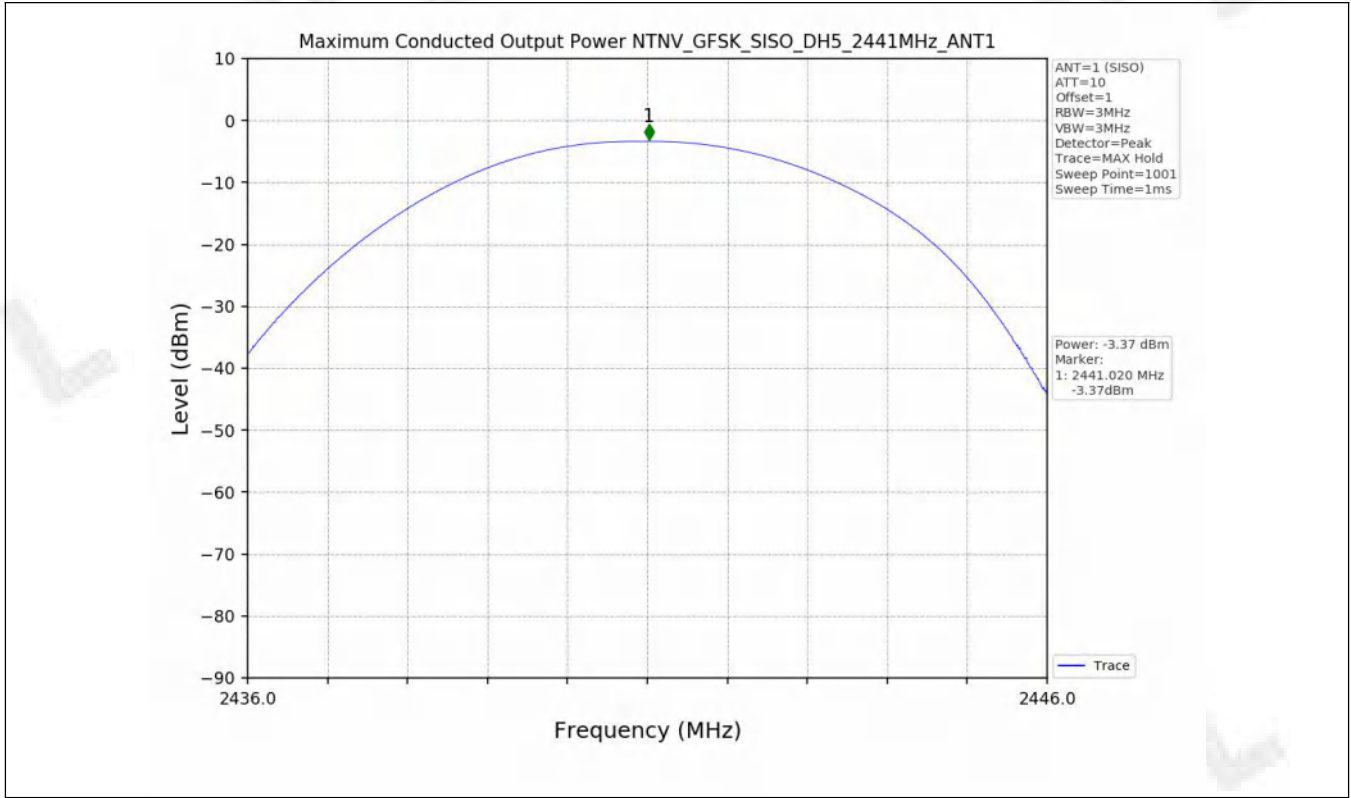
## 2. Maximum Conducted Output Power

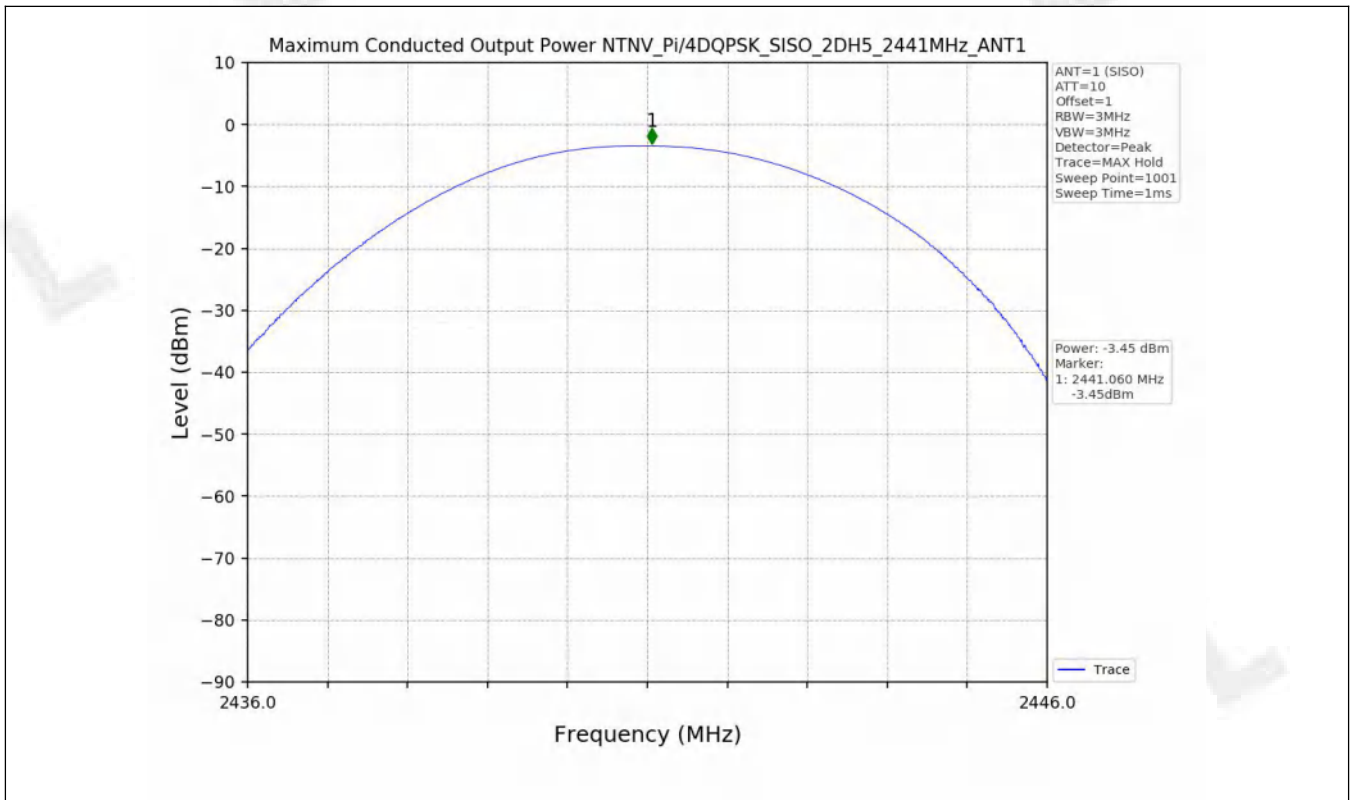
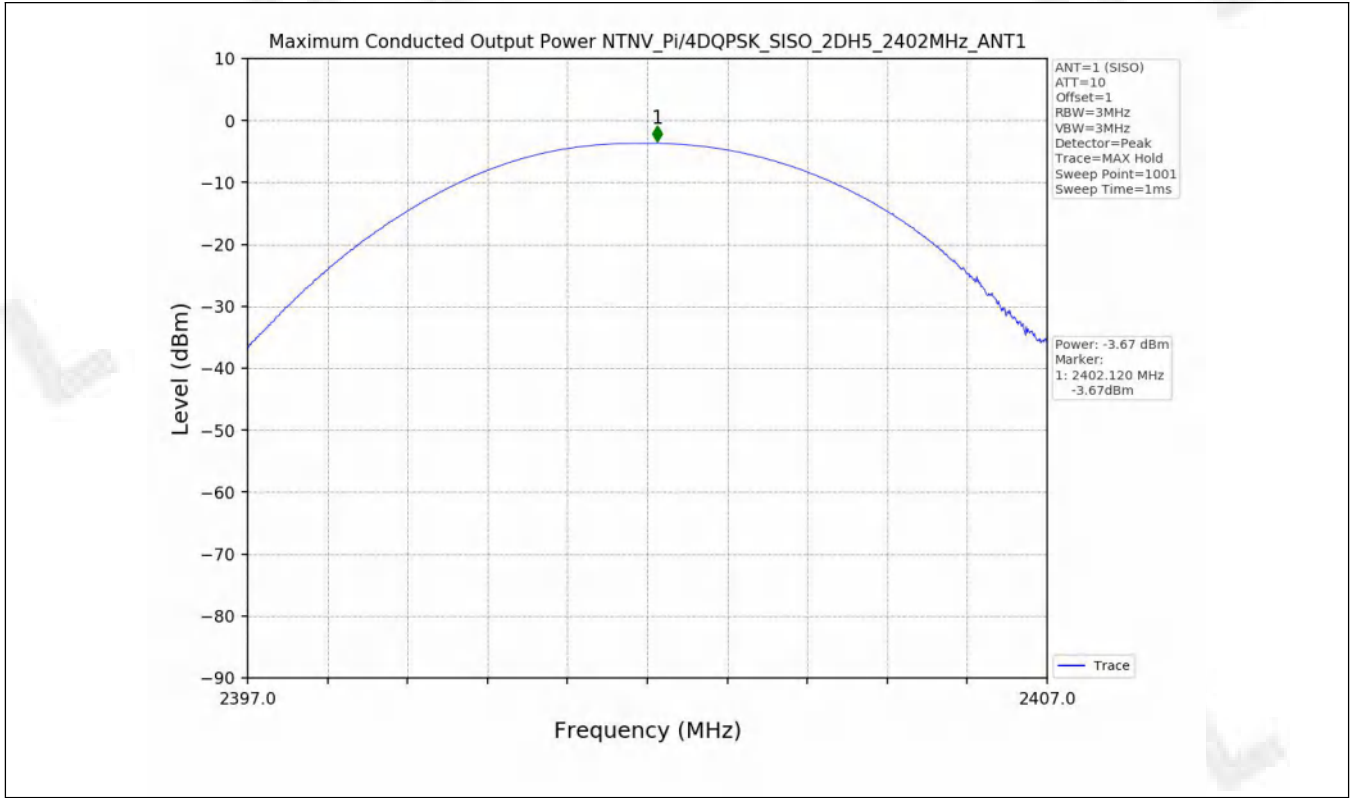
### 2.1 Test Result

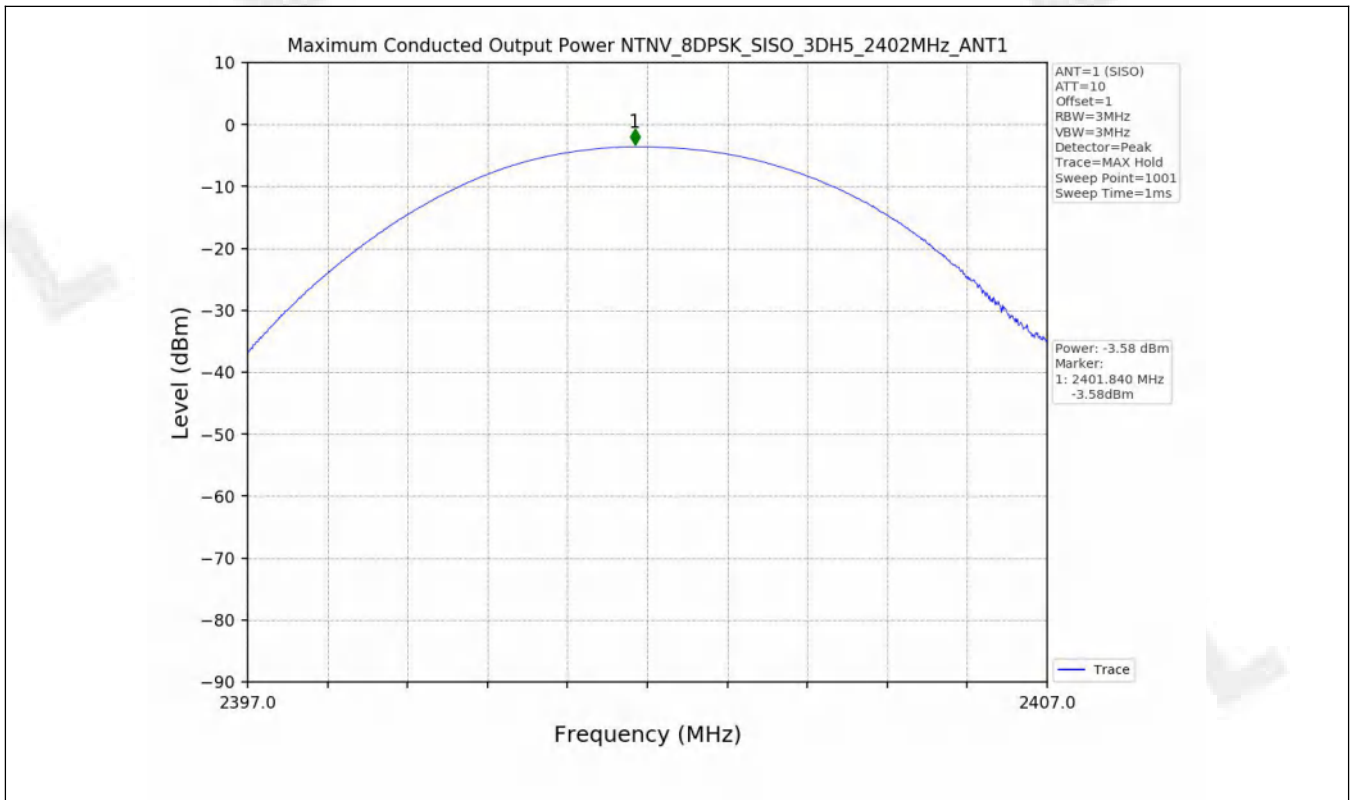
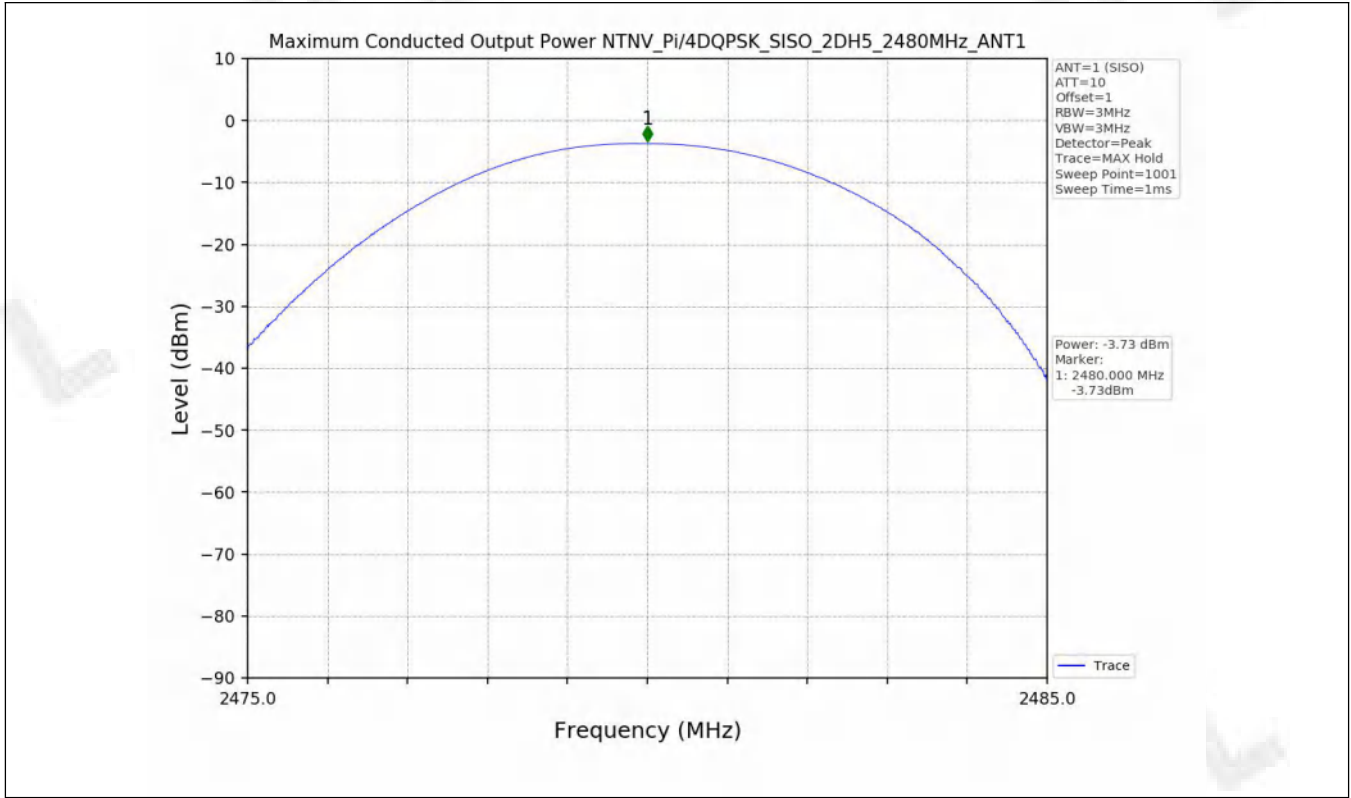
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
GFSK	2402	SISO	-3.59	30	PASS
	2441	SISO	-3.37	30	PASS
	2480	SISO	-3.66	30	PASS
Pi/4DQPSK	2402	SISO	-3.67	20.97	PASS
	2441	SISO	-3.45	20.97	PASS
	2480	SISO	-3.73	20.97	PASS
8DPSK	2402	SISO	-3.58	20.97	PASS
	2441	SISO	-3.32	20.97	PASS
	2480	SISO	-3.59	20.97	PASS

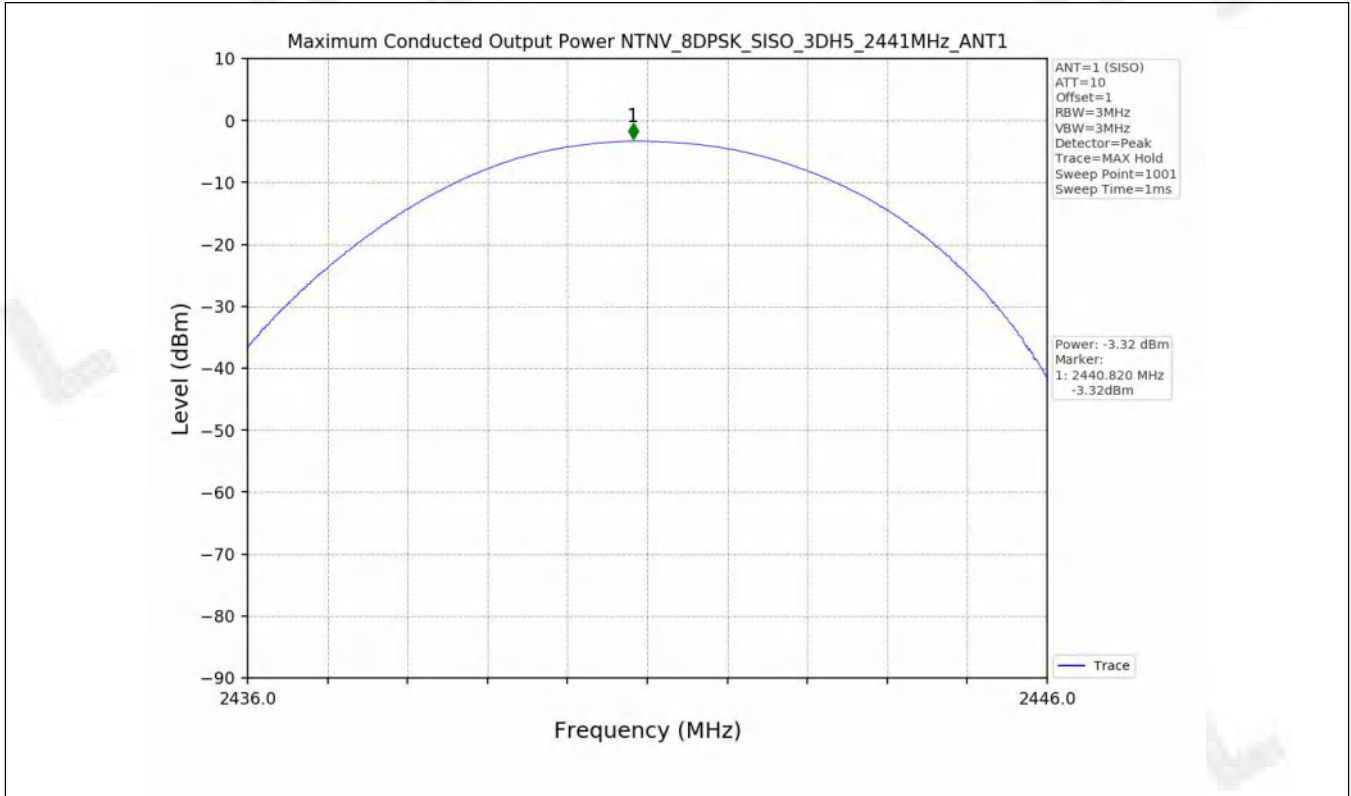
### 2.2 Test Graph









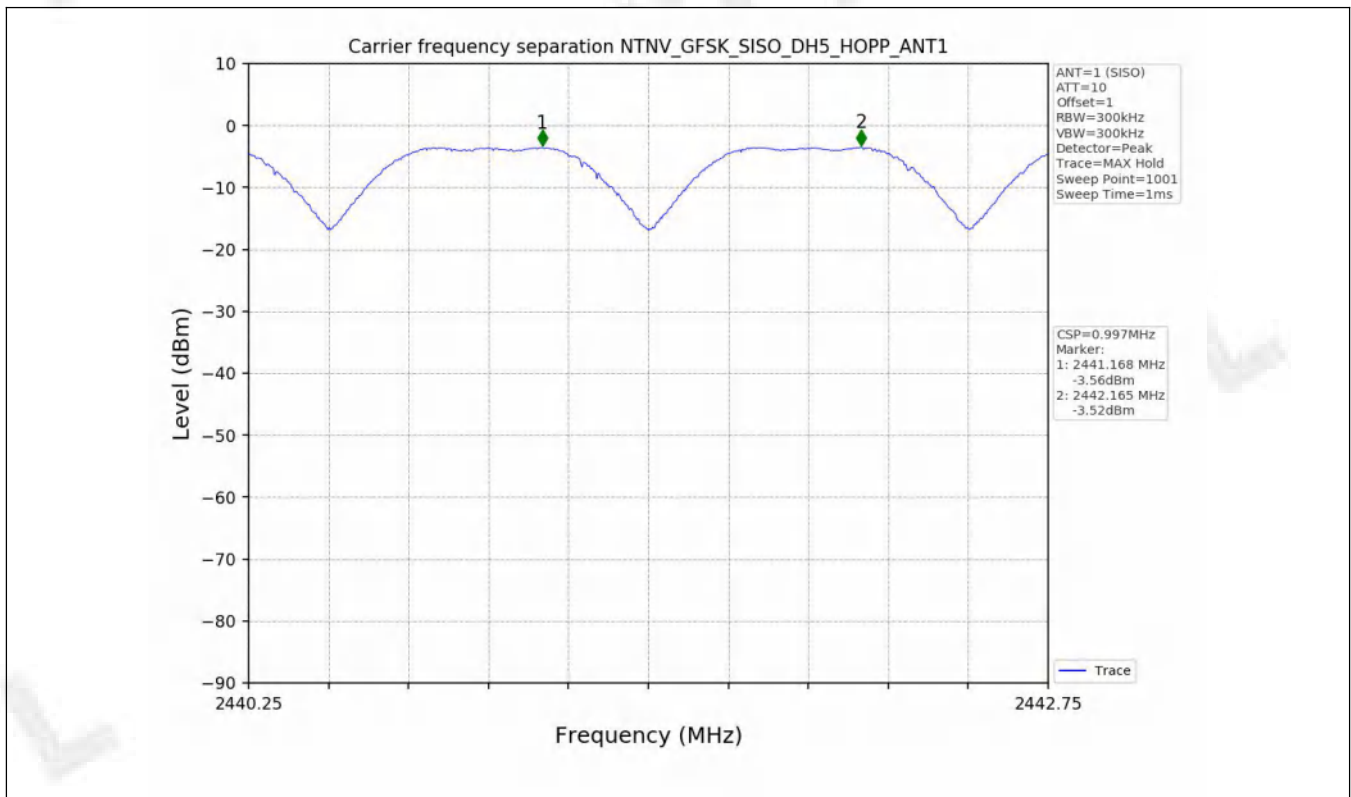


### 3. Carrier frequency separation

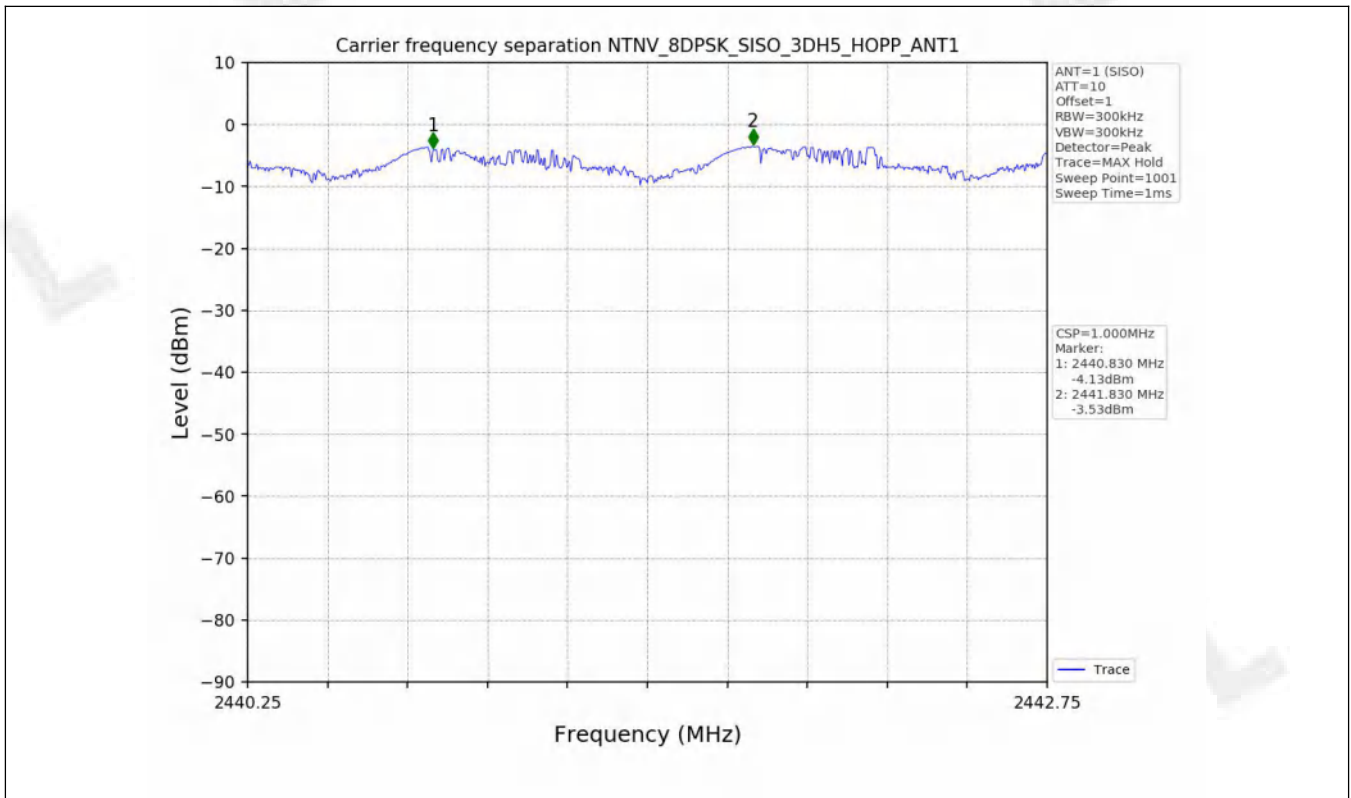
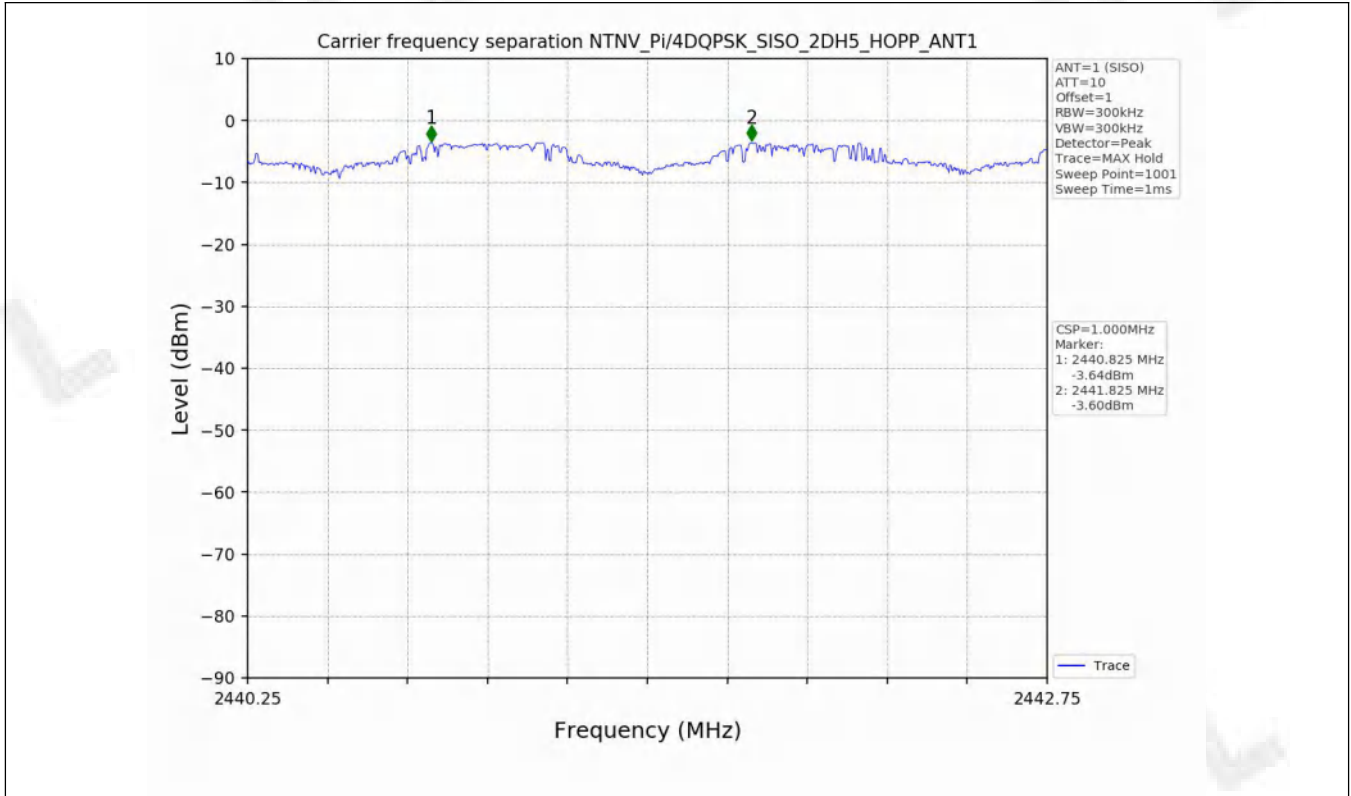
#### 3.1 Test Result

Test Mode	TX Type	ANT No.	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limits (MHz)	Verdict
GFSK	SISO	1	0.997	0.943	$\geq 0.943$	PASS
Pi/4DQPSK	SISO	1	1.000	1.269	$\geq 0.846$	PASS
8DPSK	SISO	1	1.000	1.262	$\geq 0.841$	PASS

#### 3.2 Test Graph





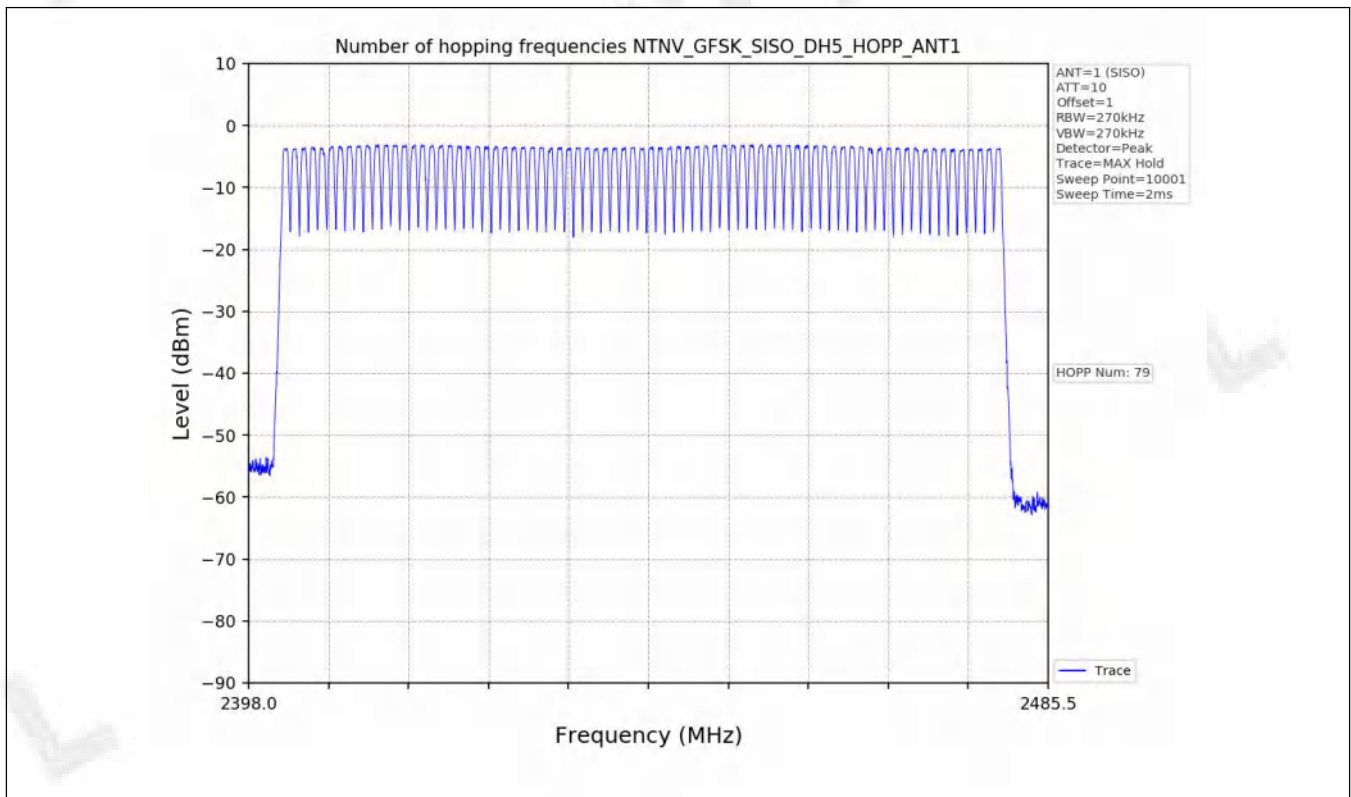


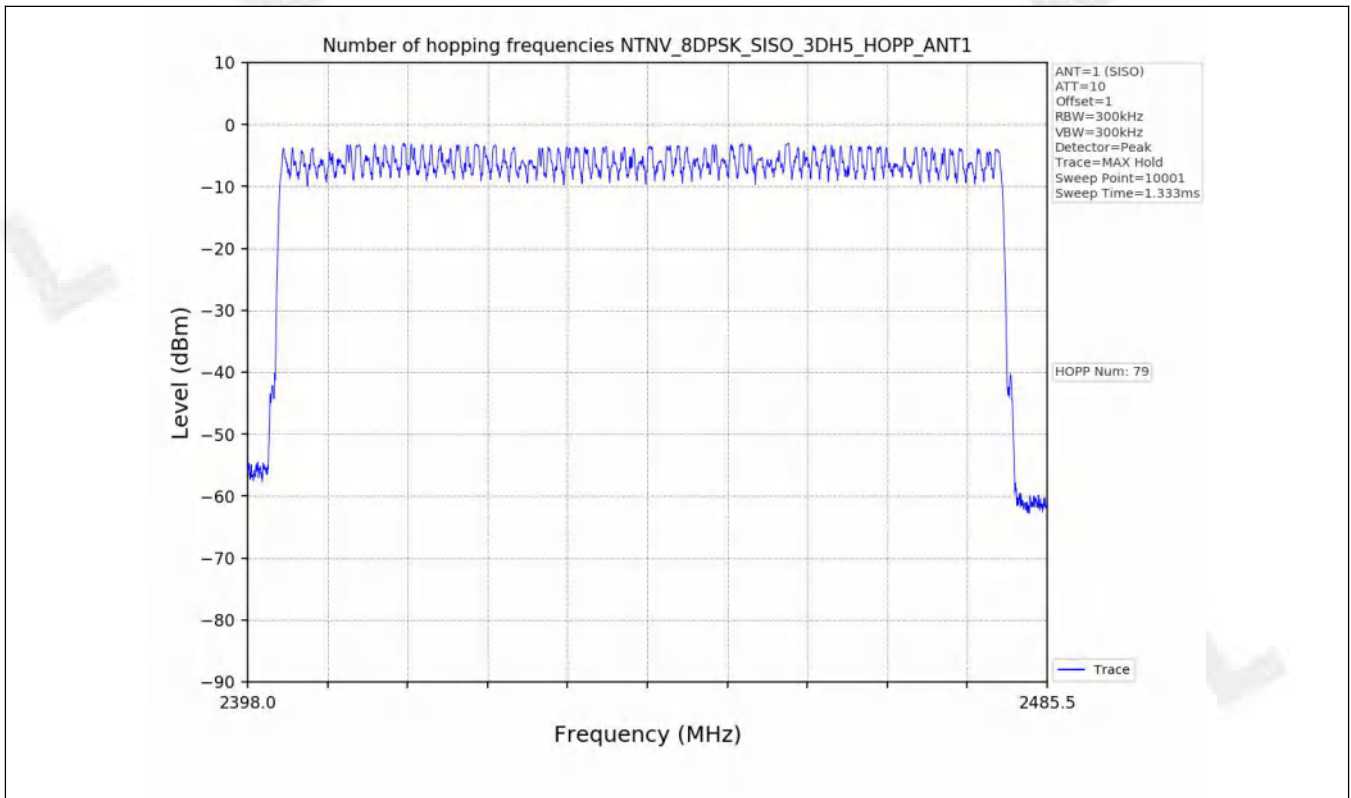
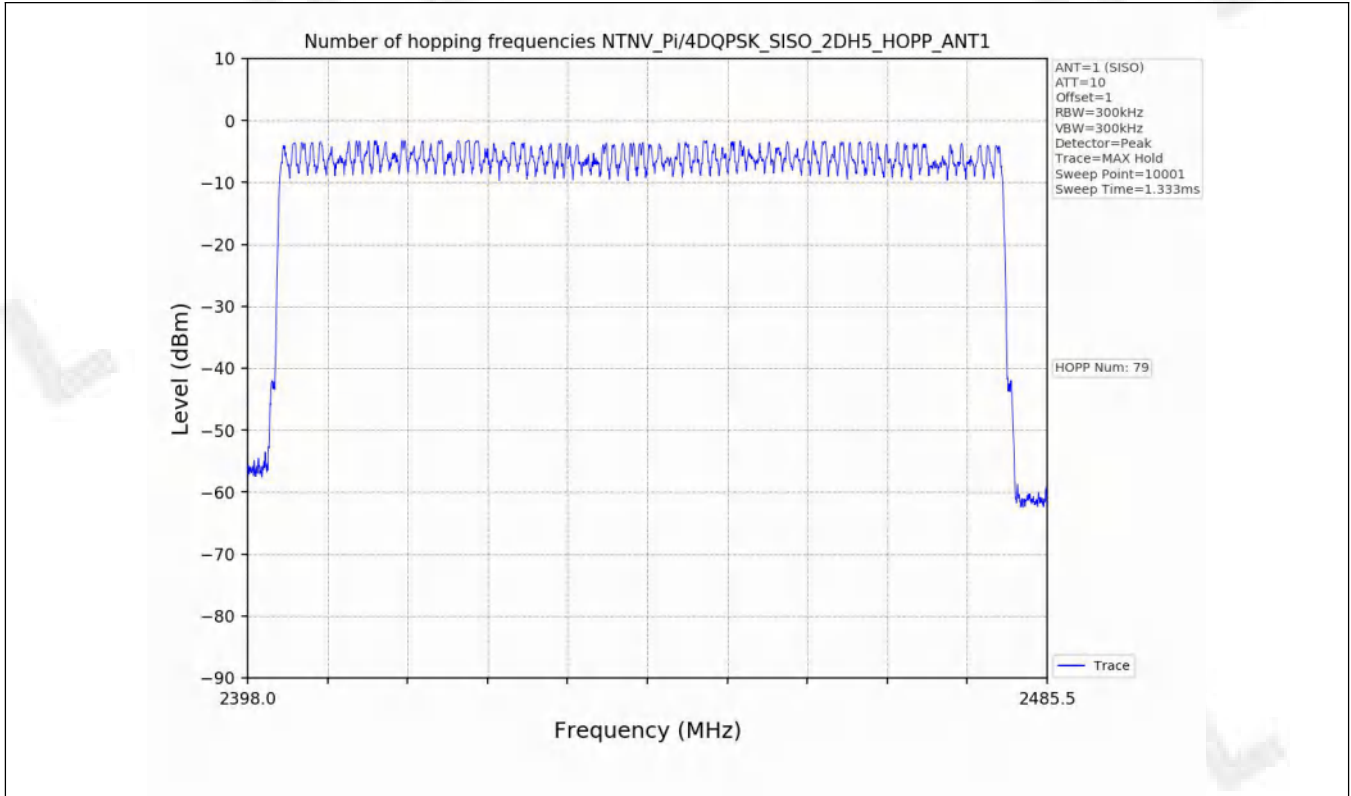
## 4. Number of hopping frequencies

### 4.1 Test Result

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

### 4.2 Test Graph



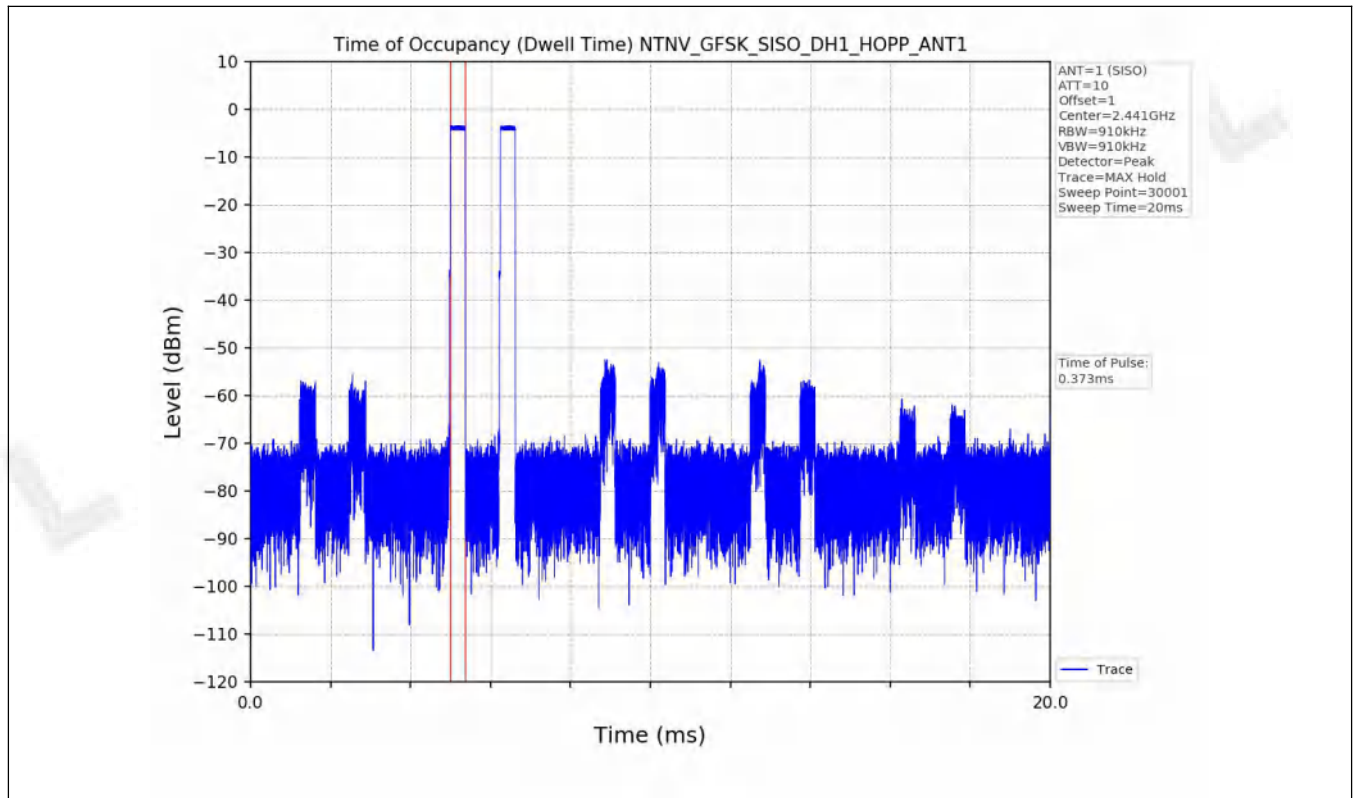


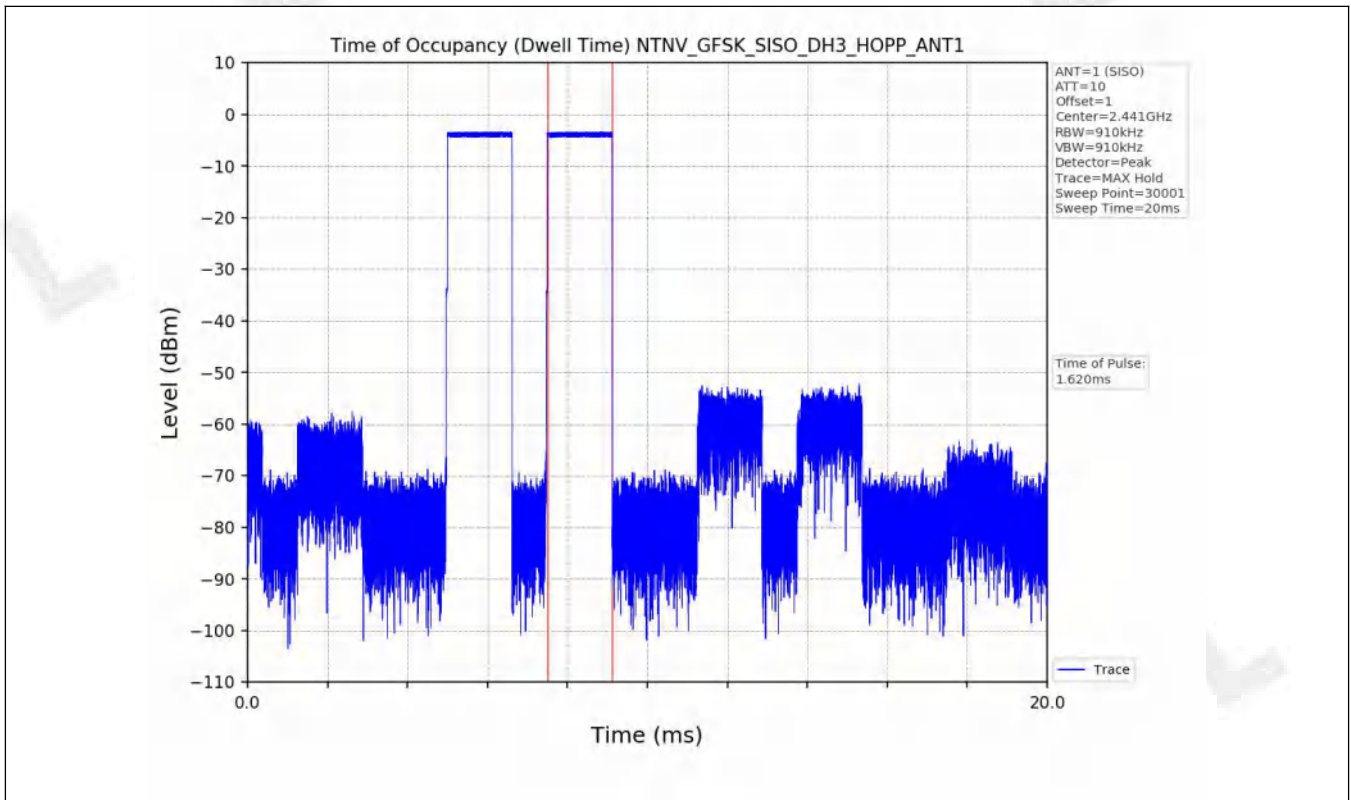
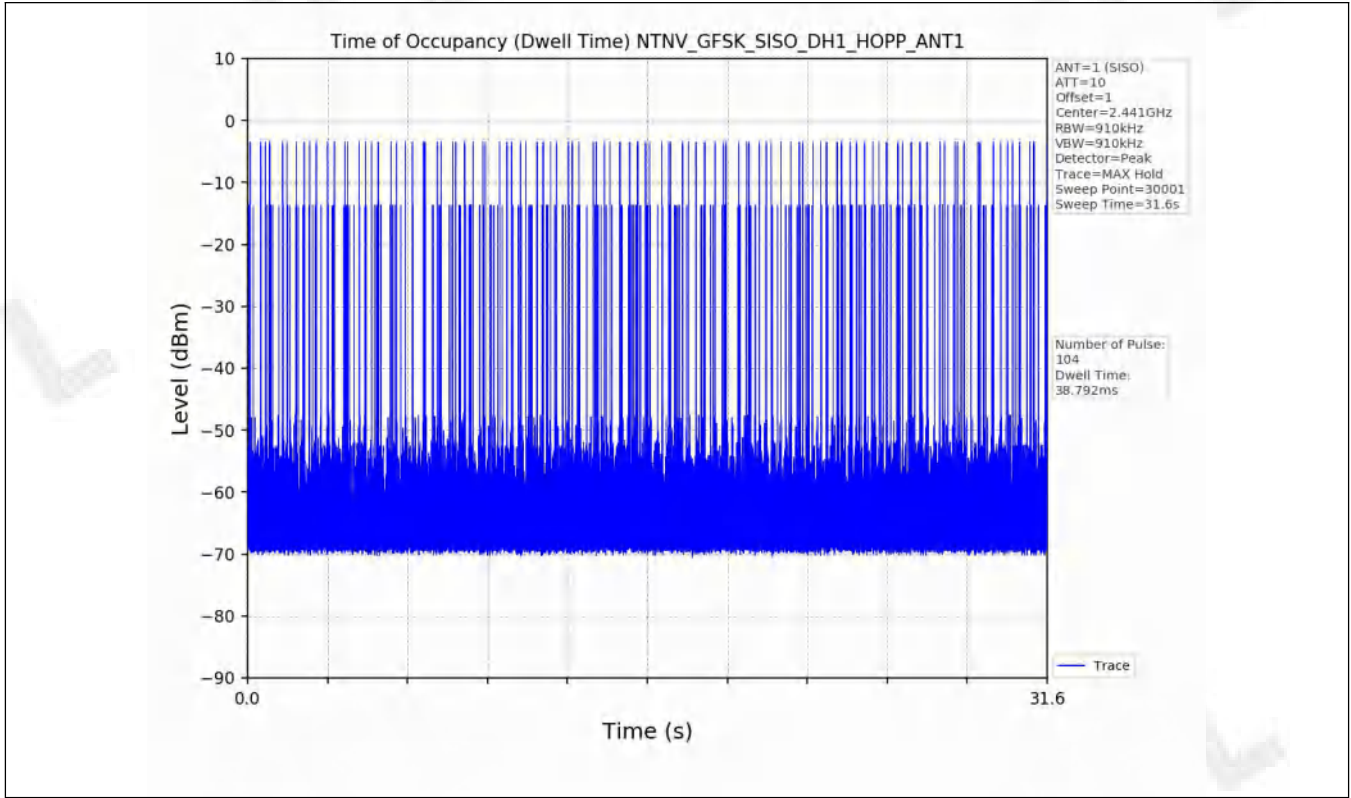
### 5. Time of Occupancy (Dwell Time)

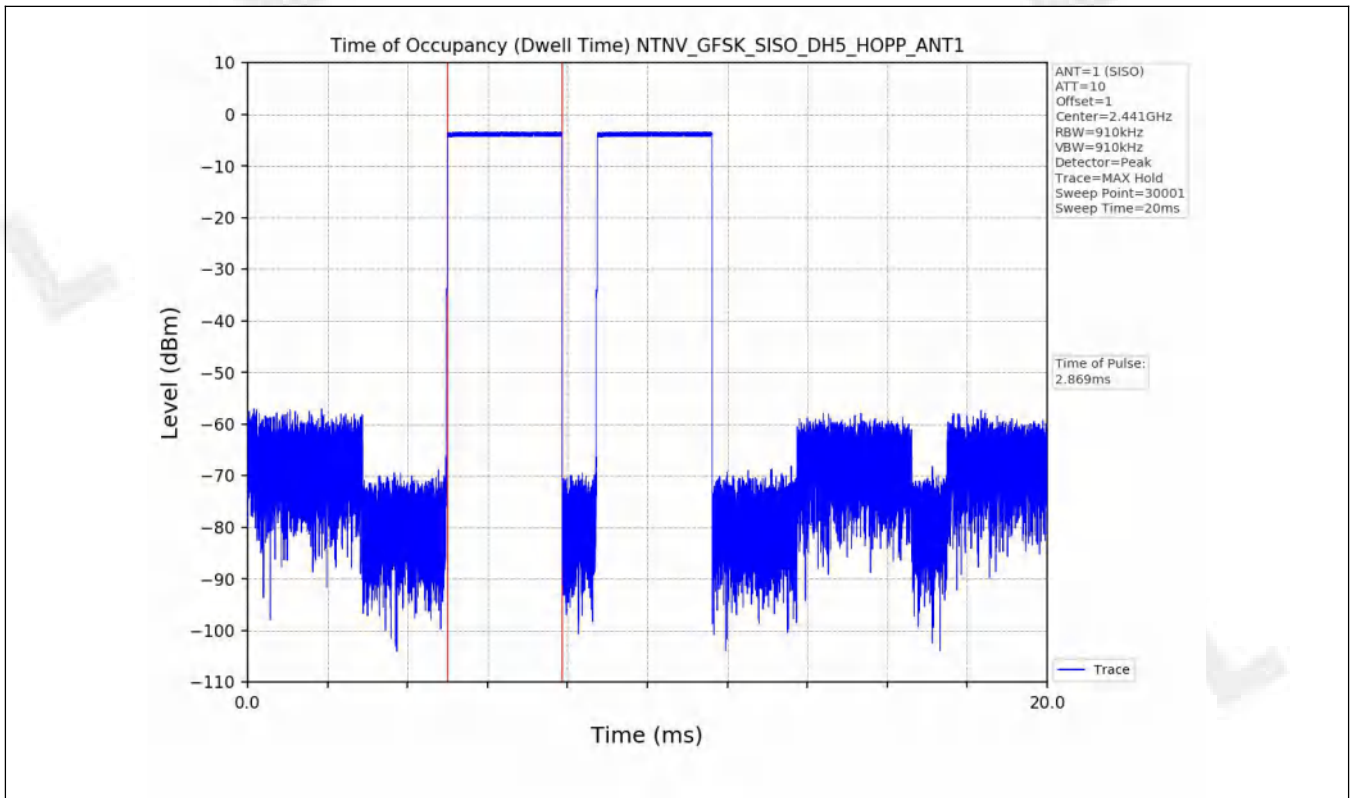
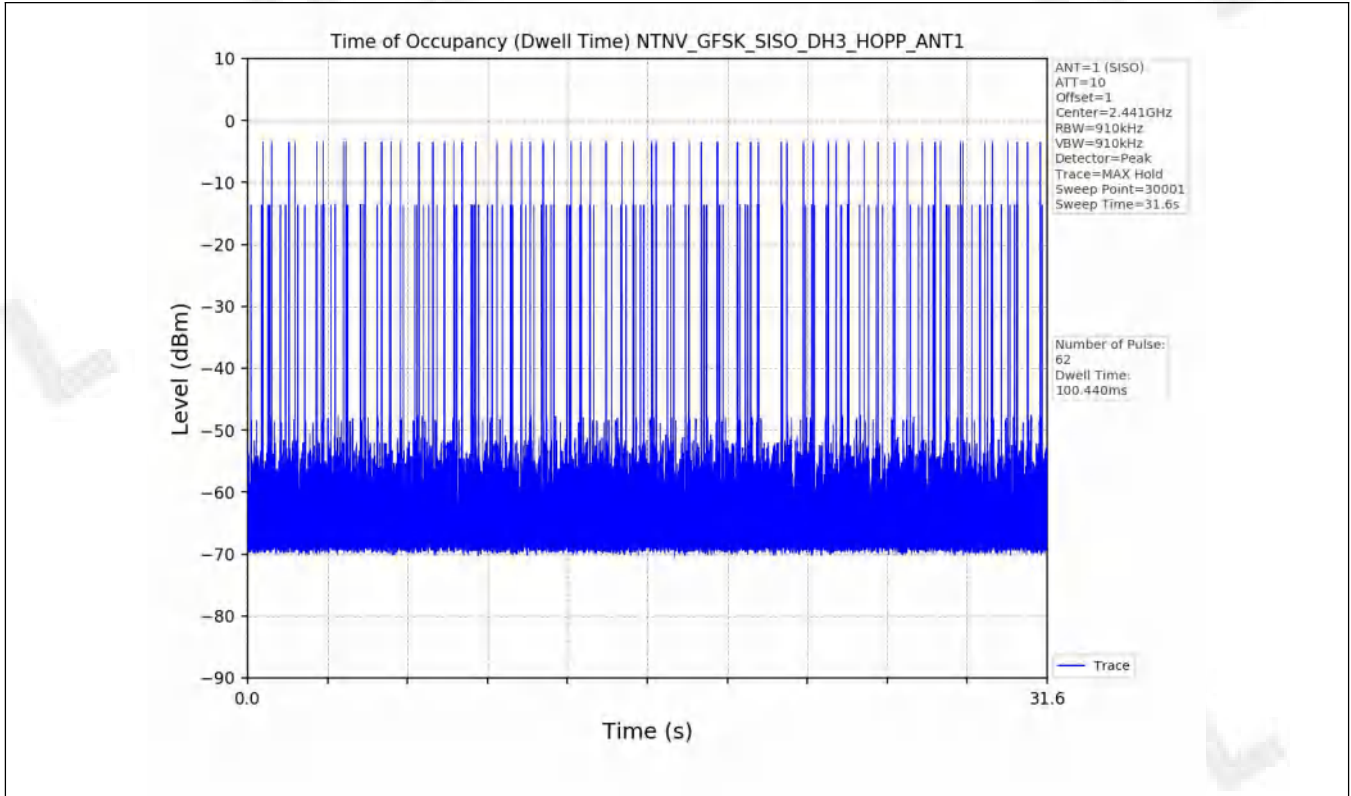
#### 5.1 Test Result

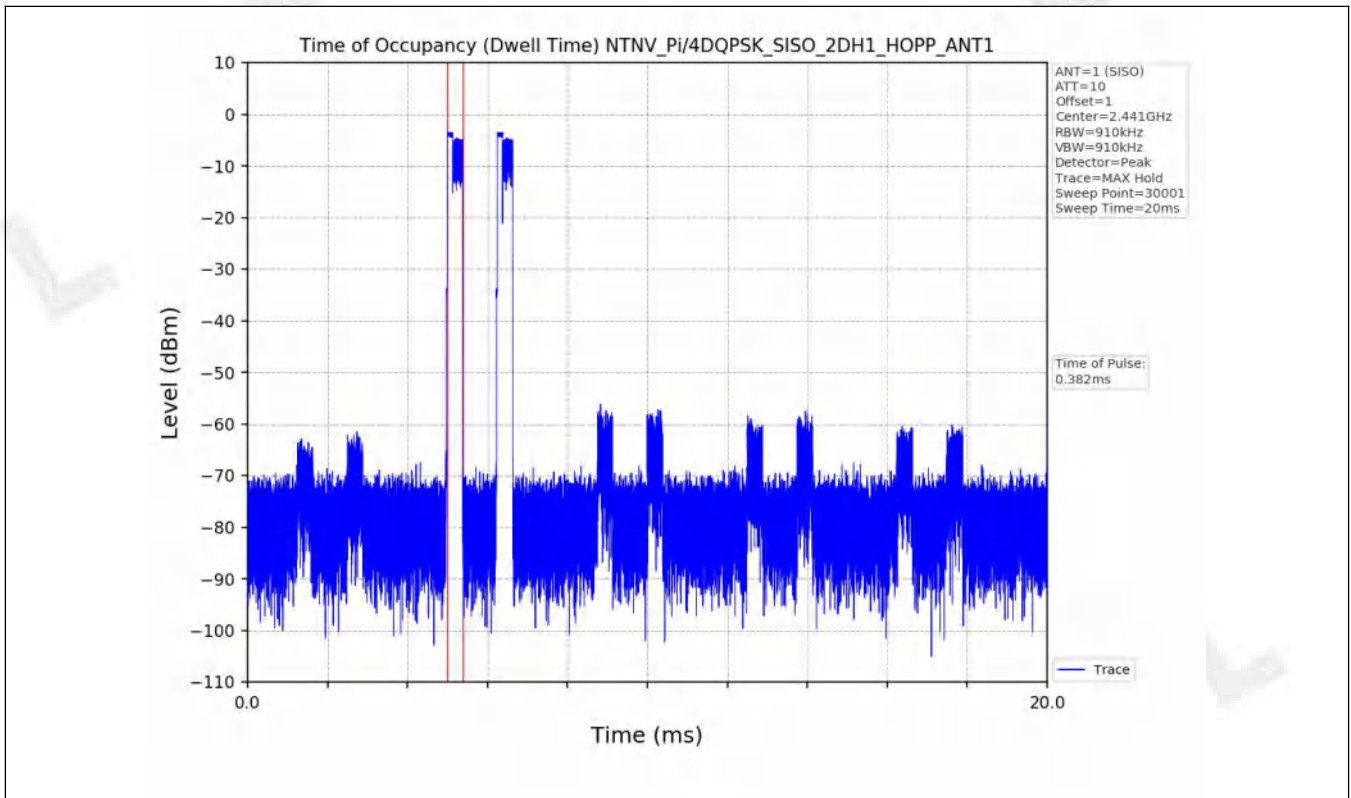
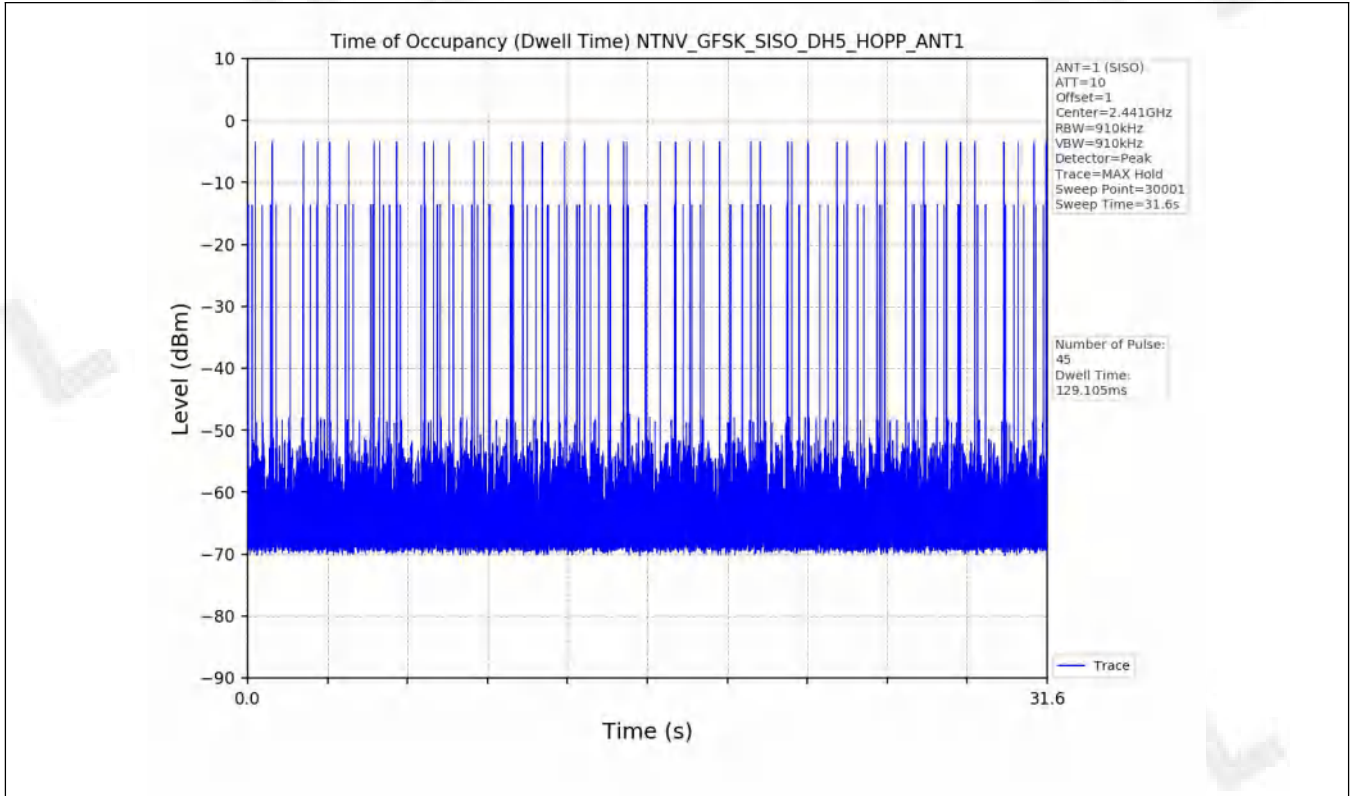
Test Mode	Packet Type	TX Type	ANT No.	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limits (ms)	Verdict
GFSK	DH1	SISO	1	0.373	31.6	104	38.792	≤400	PASS
	DH3	SISO	1	1.620	31.6	62	100.440	≤400	PASS
	DH5	SISO	1	2.869	31.6	45	129.105	≤400	PASS
Pi/4DQPSK	2DH1	SISO	1	0.382	31.6	104	39.728	≤400	PASS
	2DH3	SISO	1	1.660	31.6	62	102.920	≤400	PASS
	2DH5	SISO	1	2.881	31.6	44	126.764	≤400	PASS
8DPSK	3DH1	SISO	1	0.382	31.6	104	39.728	≤400	PASS
	3DH3	SISO	1	1.558	31.6	62	96.596	≤400	PASS
	3DH5	SISO	1	2.883	31.6	25	72.075	≤400	PASS

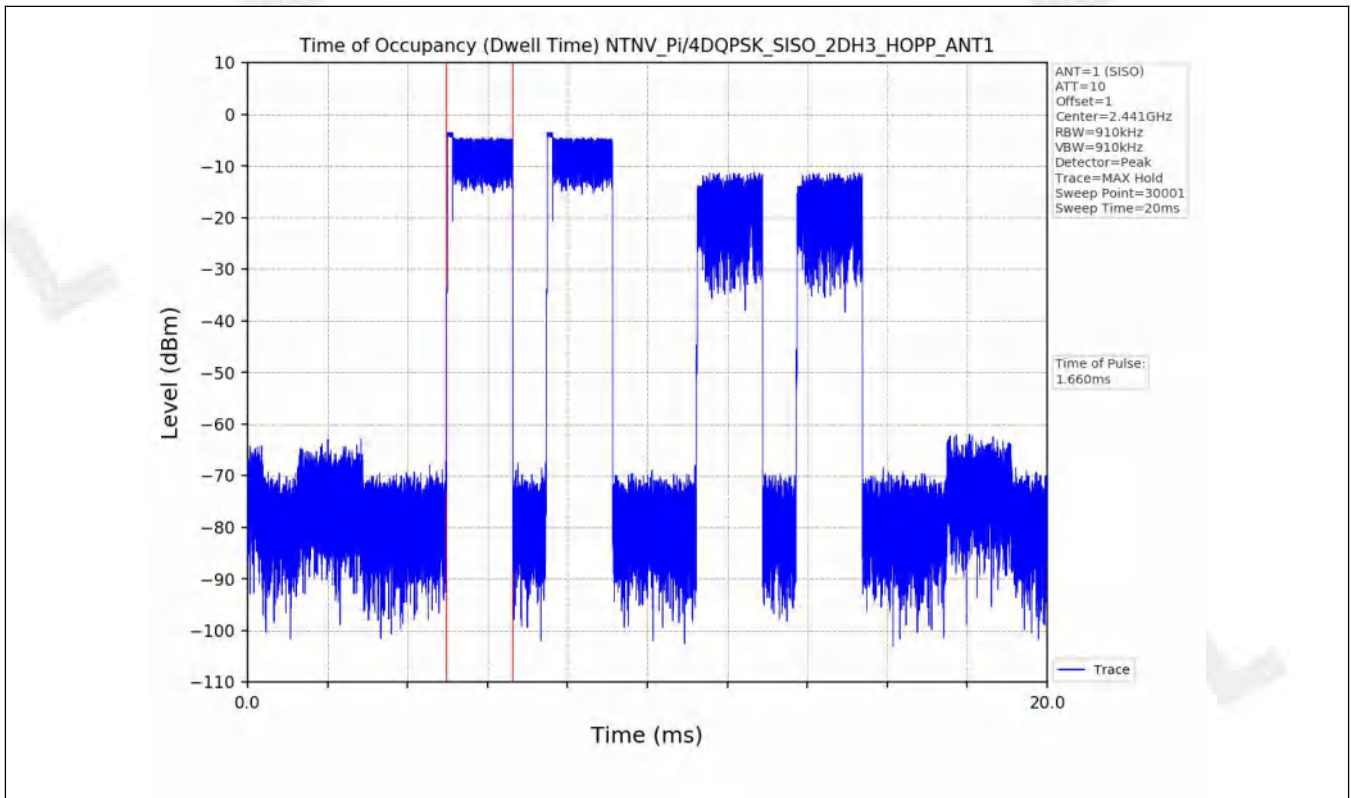
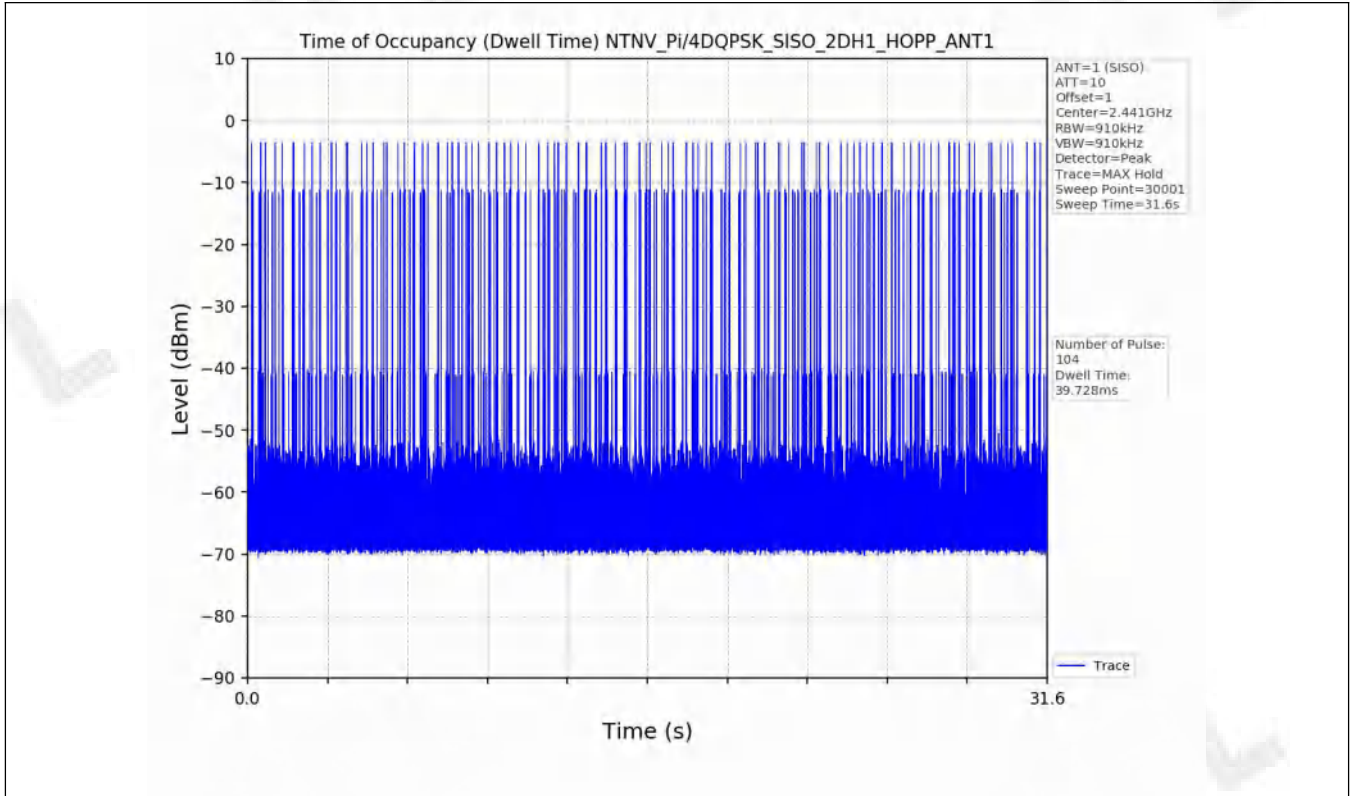
#### 5.2 Test Graph



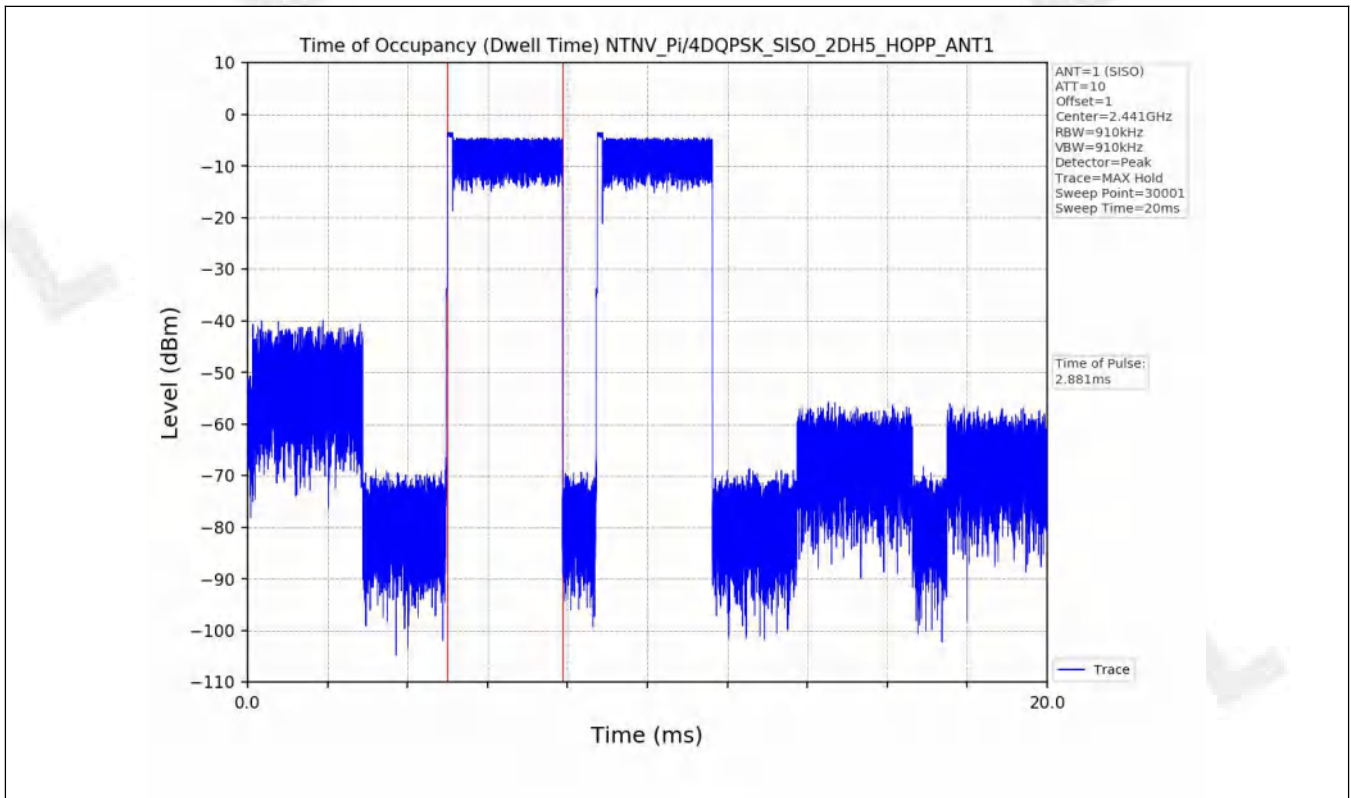
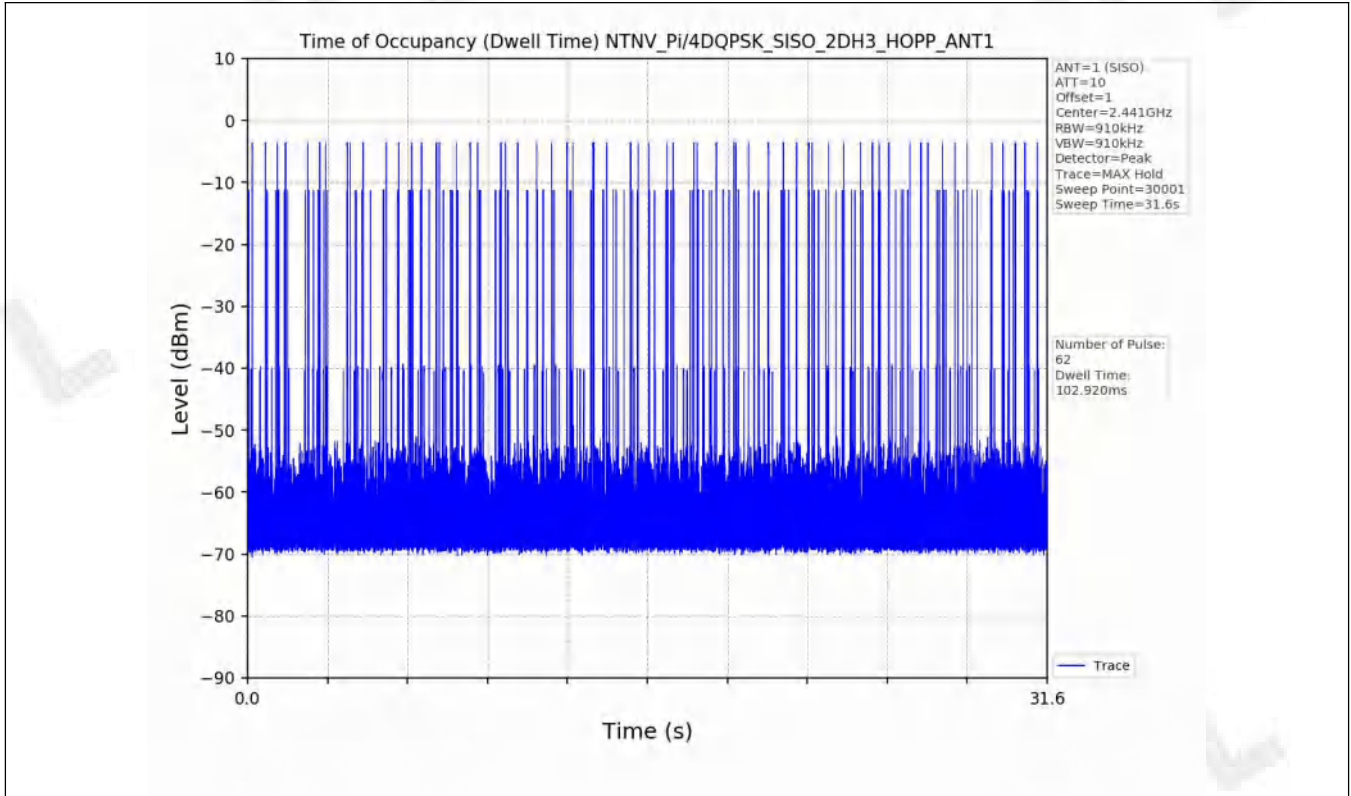


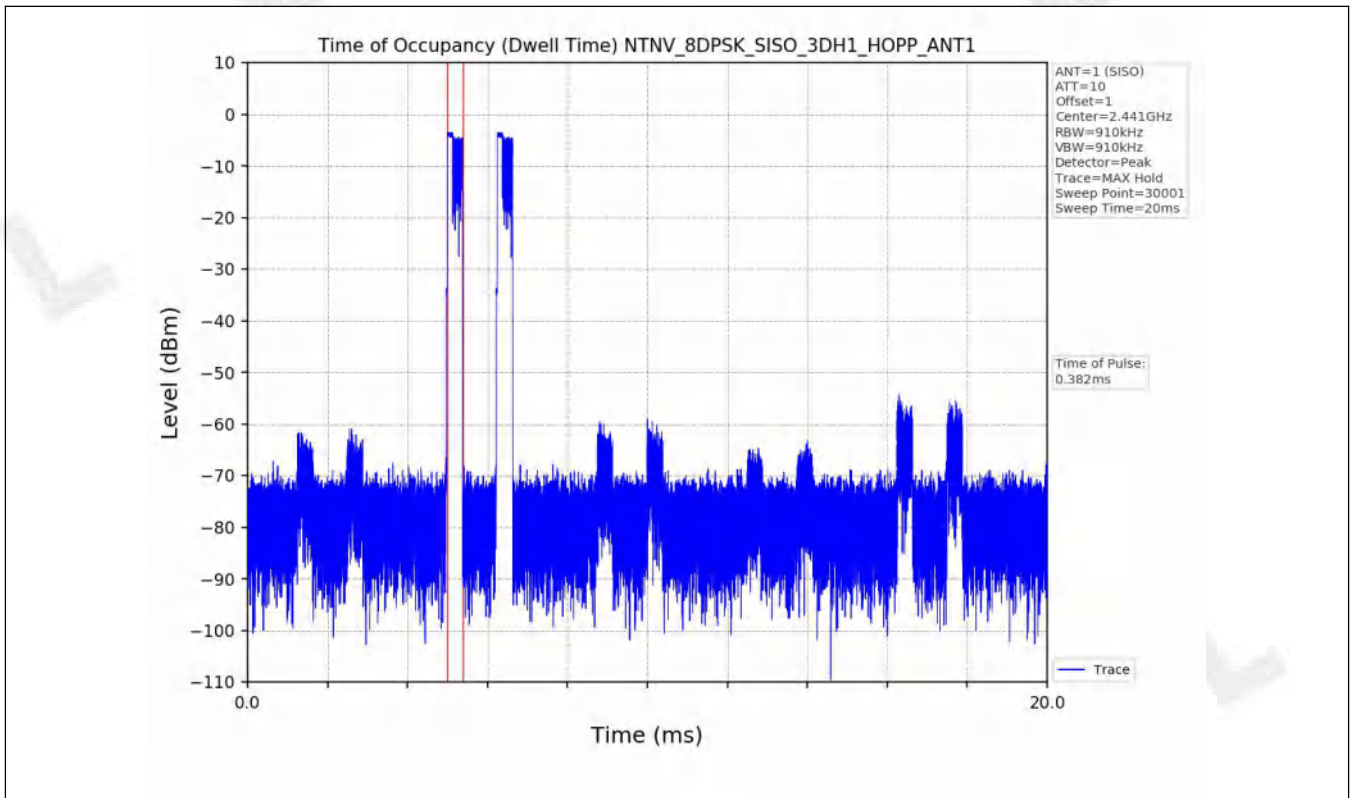
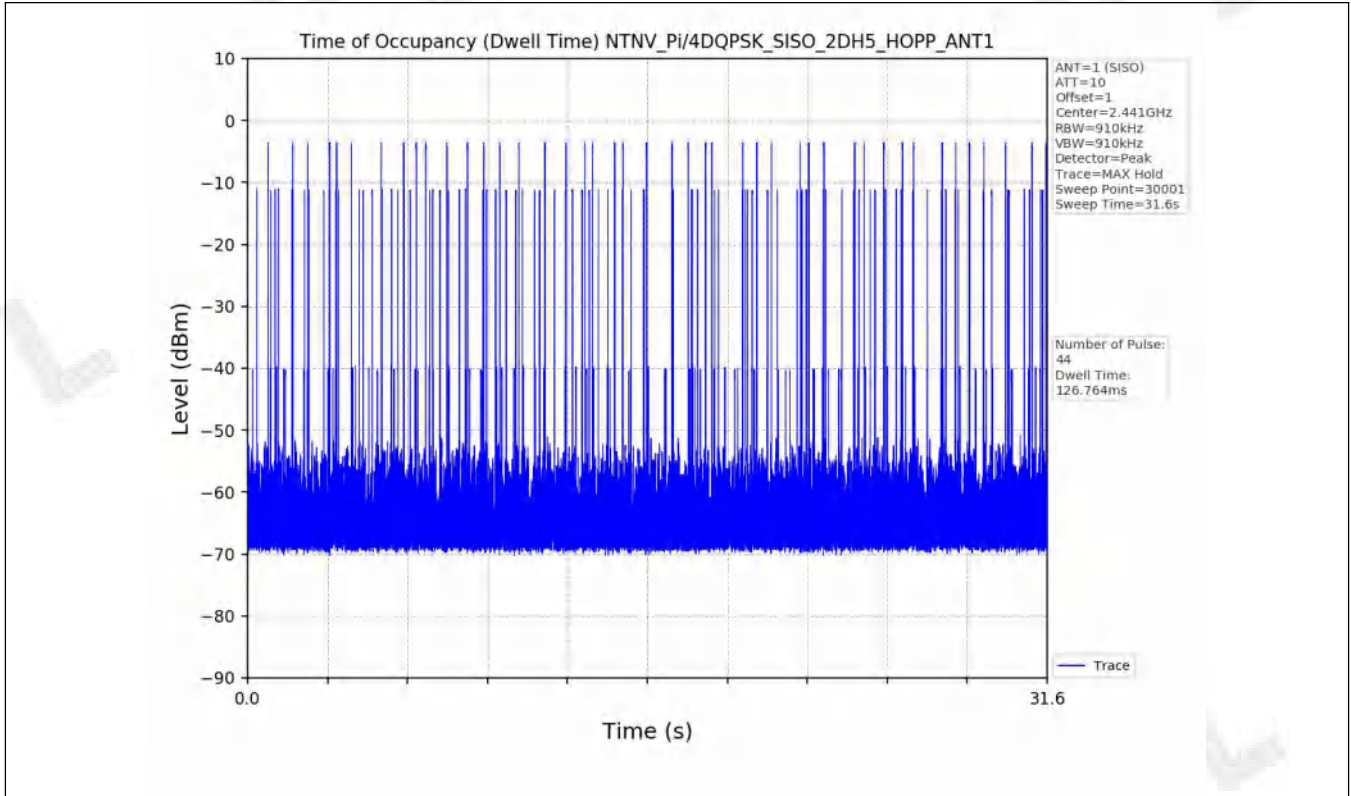


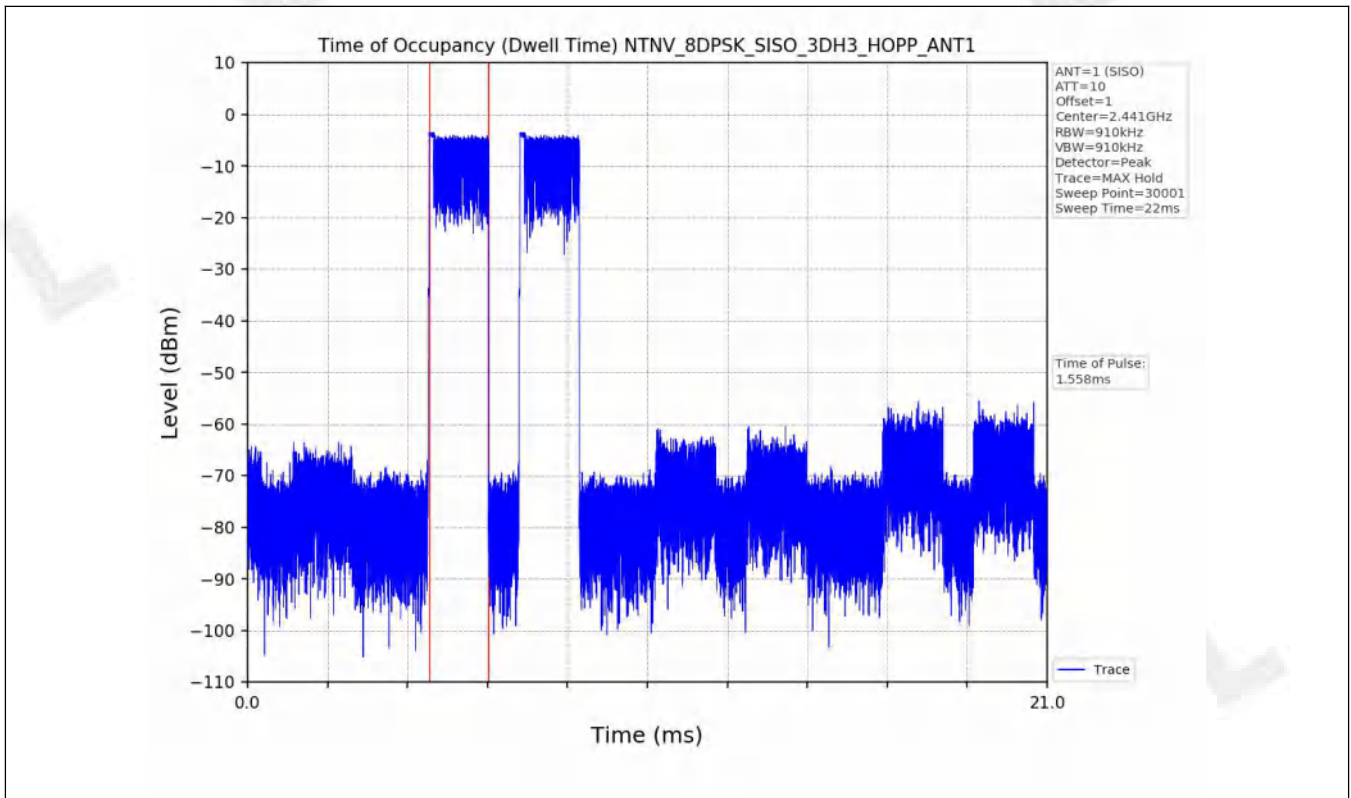
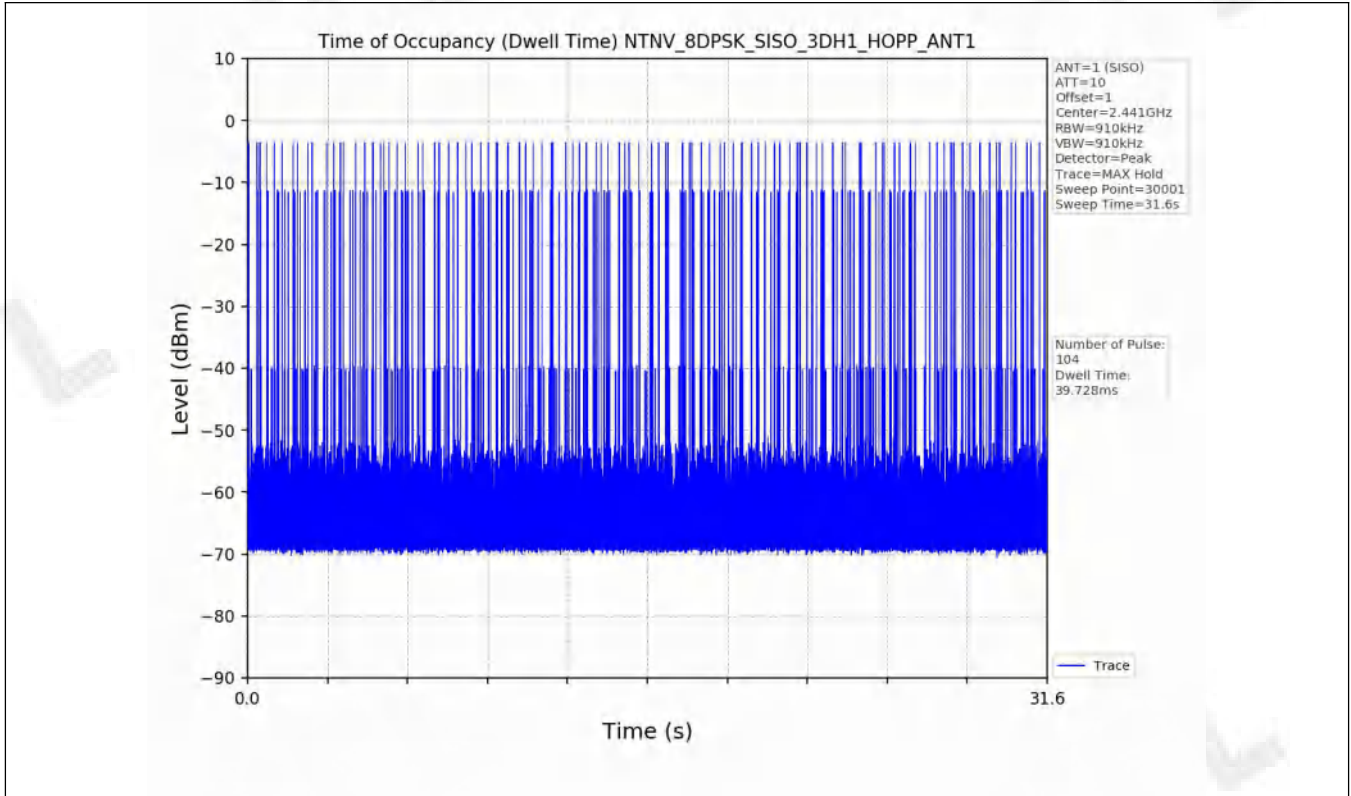


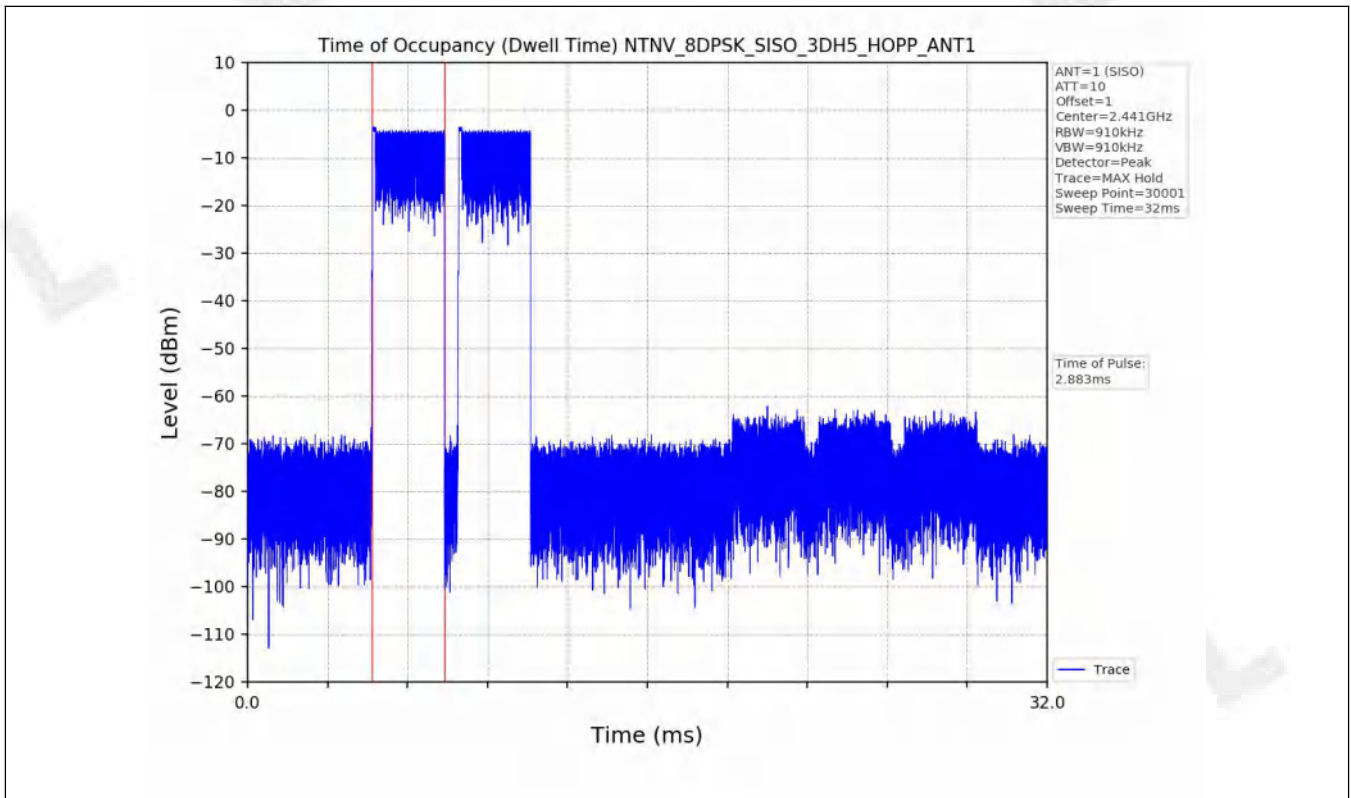
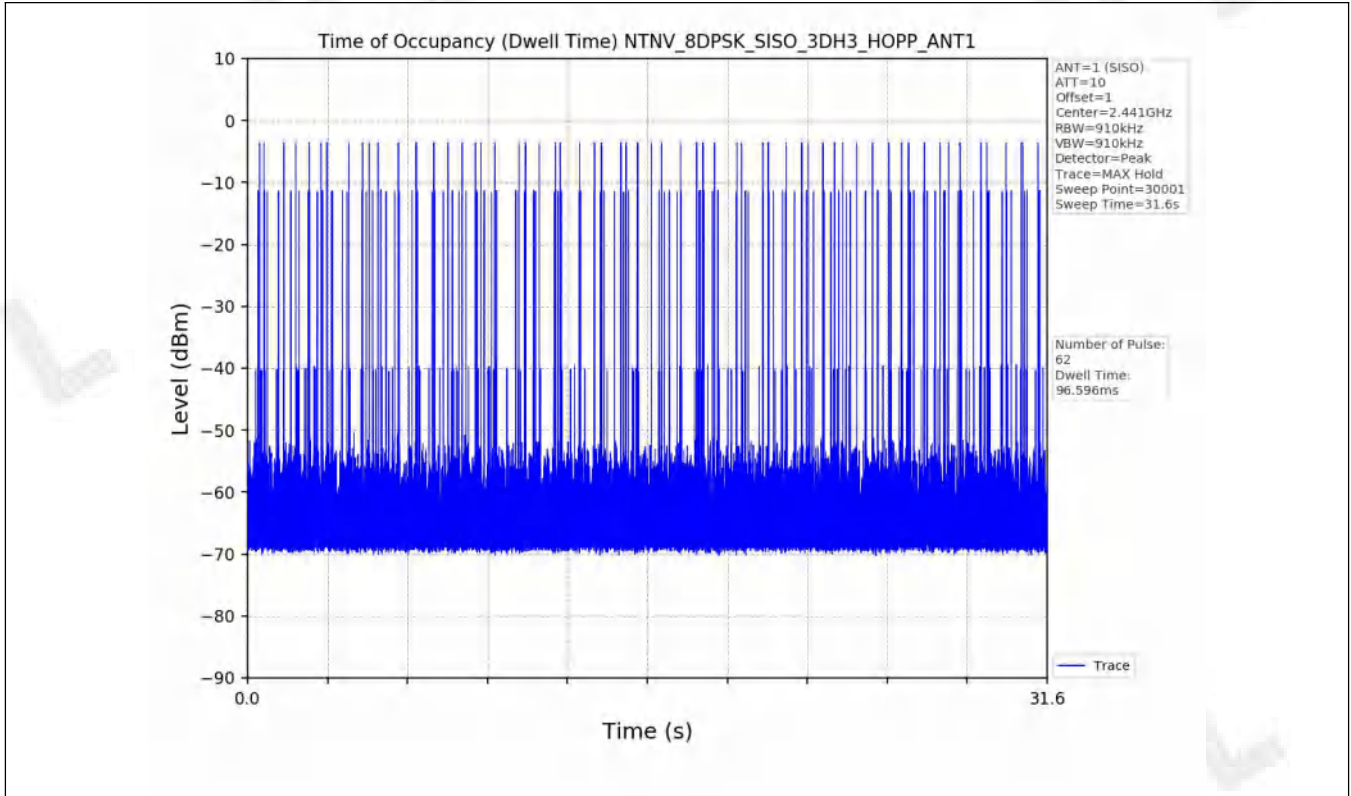


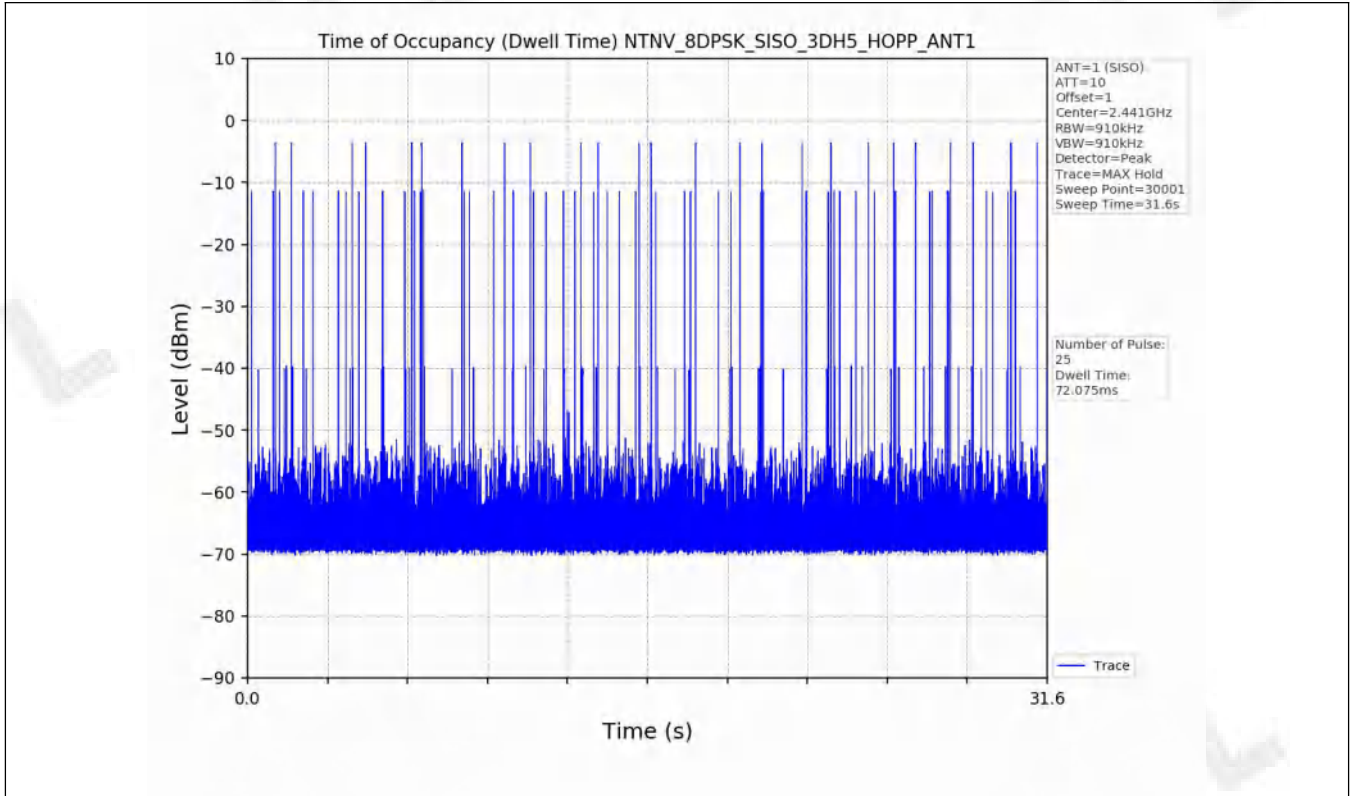












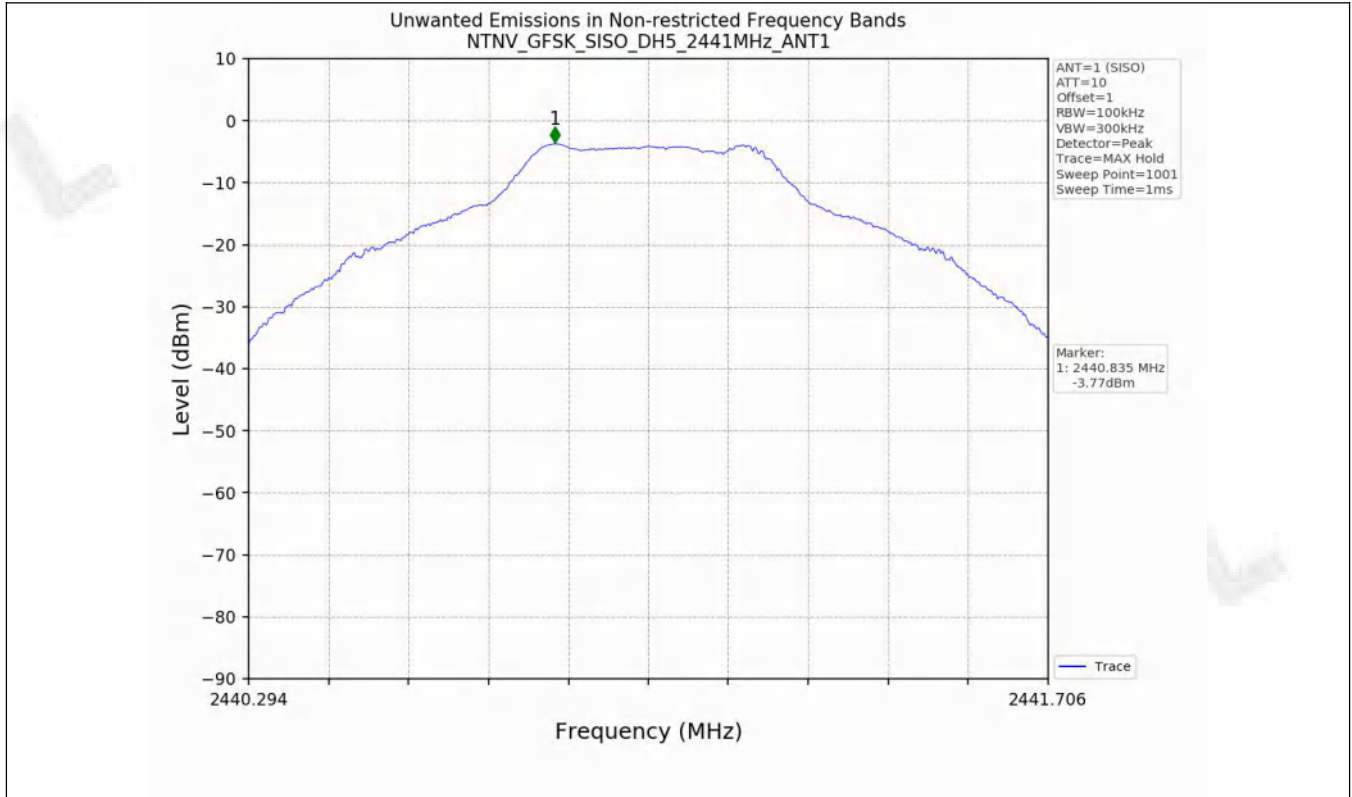
## 6. Unwanted Emissions in Non-restricted Frequency Bands

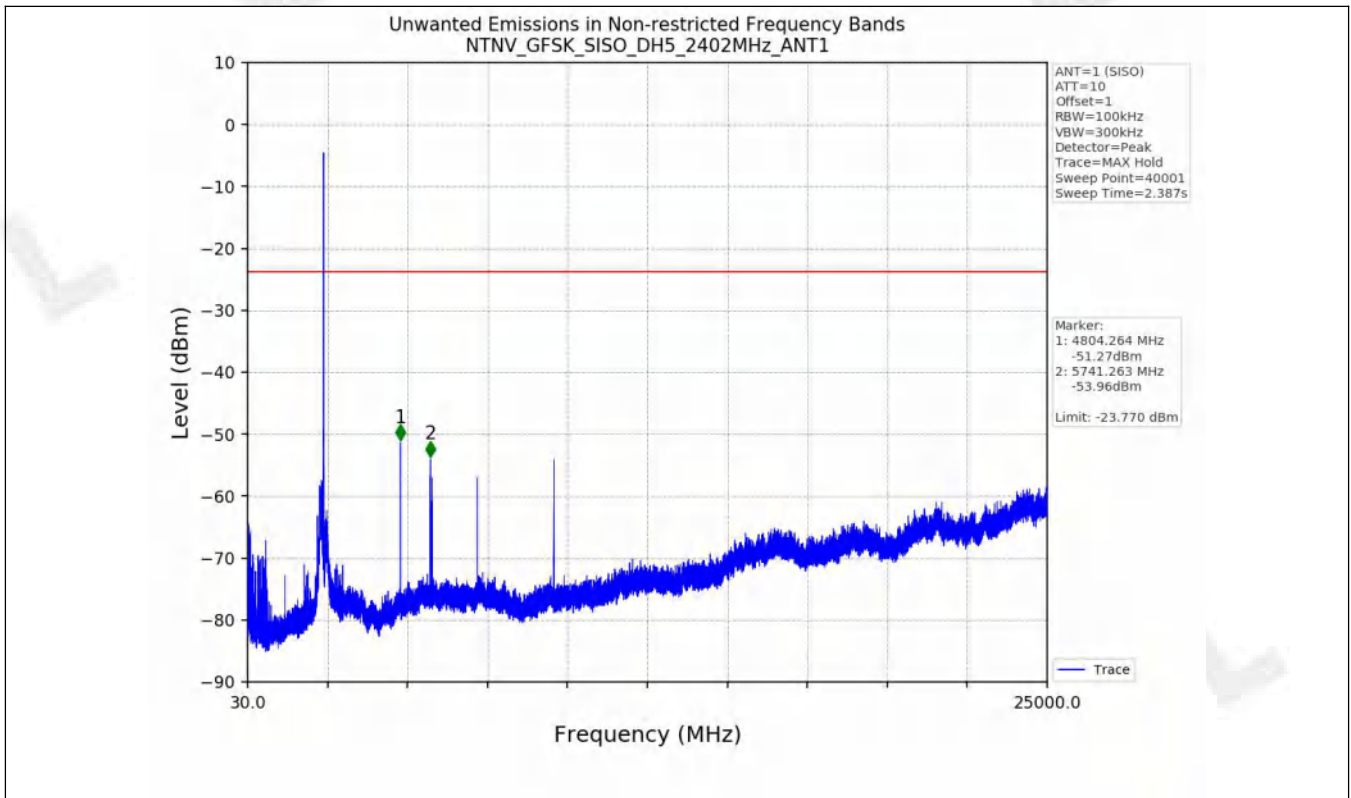
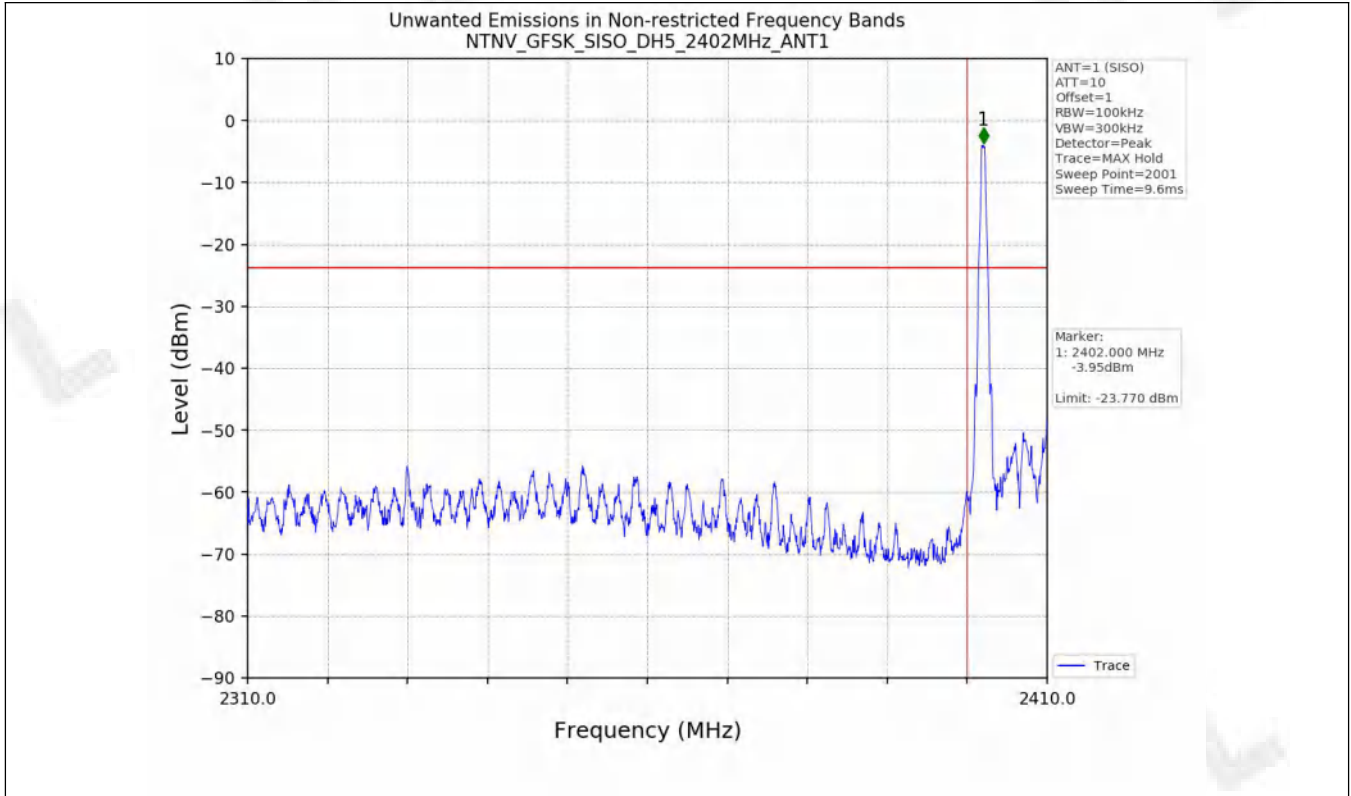
### 6.1 Test Result

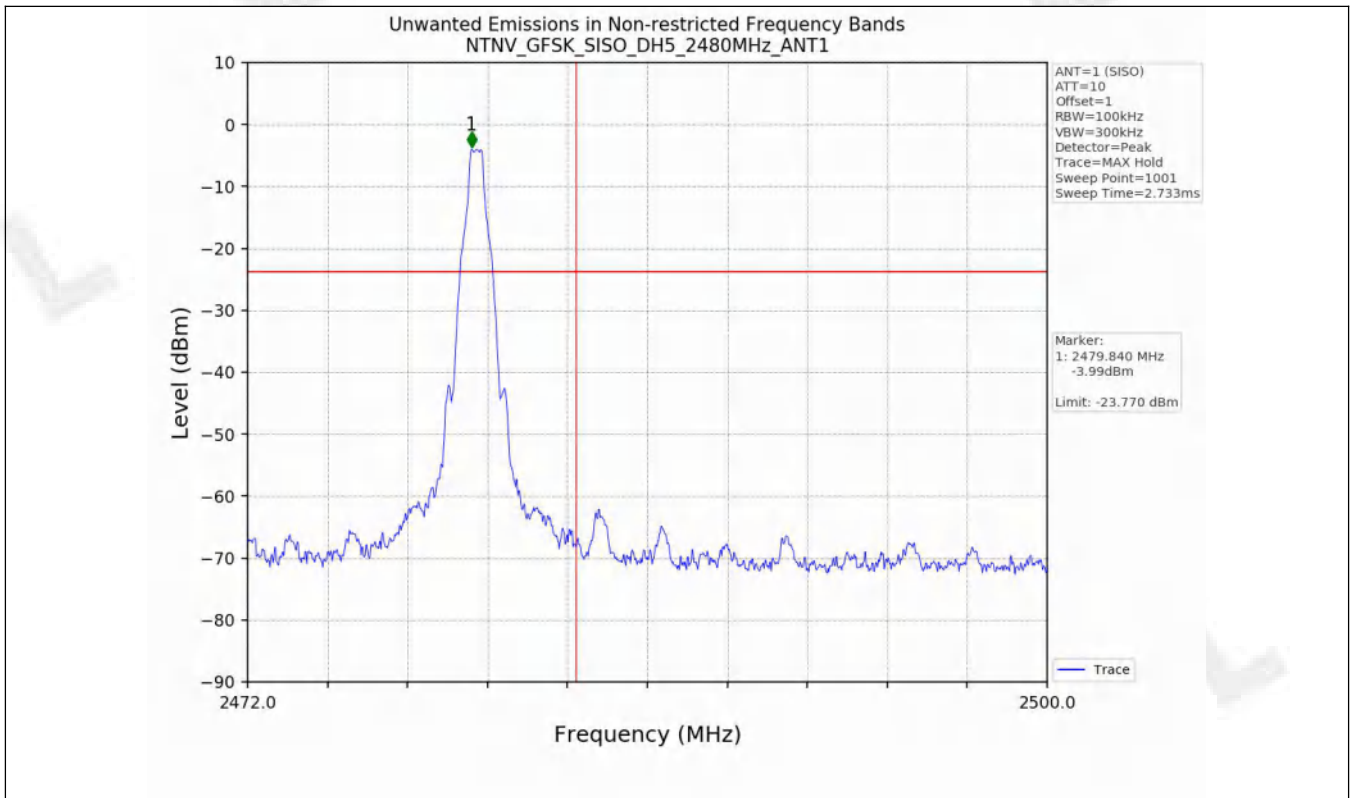
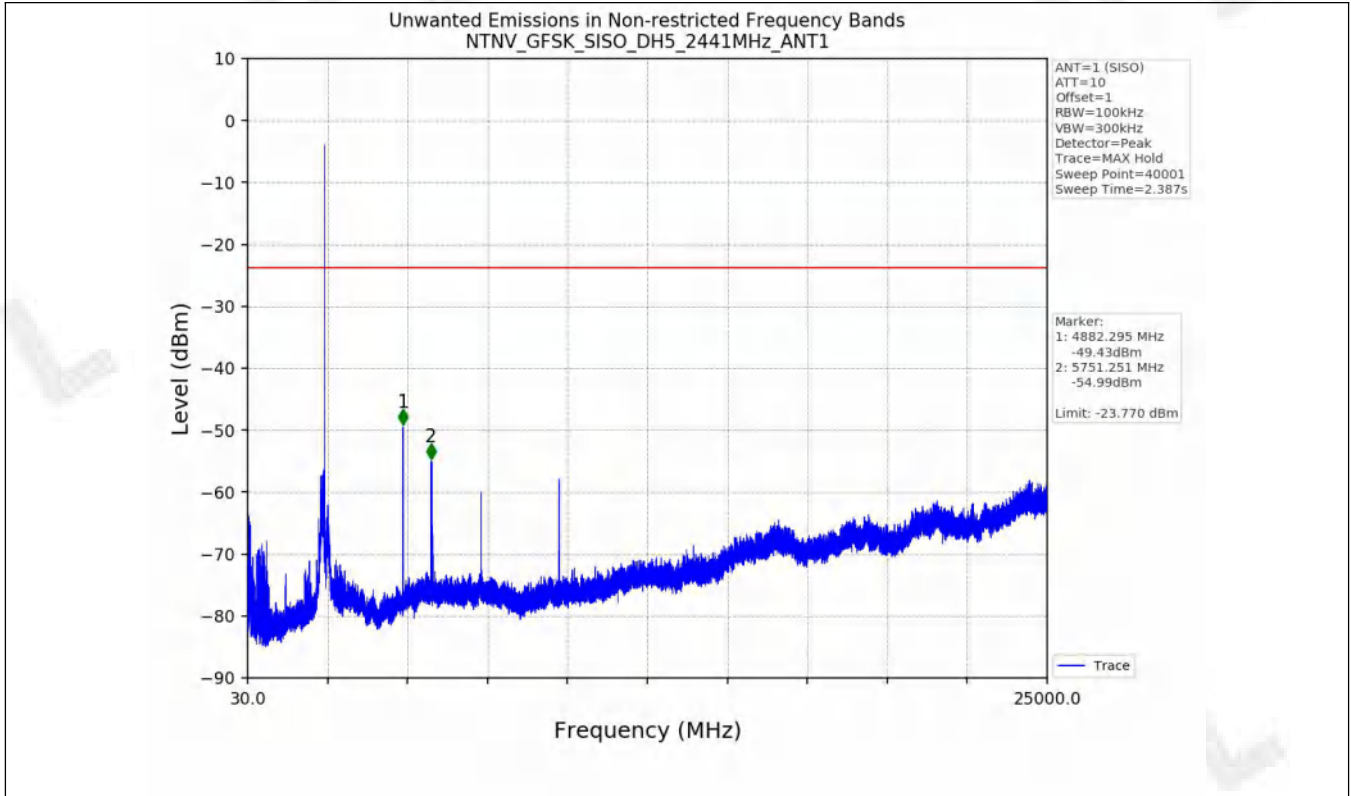
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
GFSK	2402	SISO	1	Refer to test graph	-23.77	PASS
	2441	SISO	1	Refer to test graph	-23.77	PASS
	2480	SISO	1	Refer to test graph	-23.77	PASS
	Hopping	SISO	1	Refer to test graph	-23.77	PASS
Pi/4DQPSK	2402	SISO	1	Refer to test graph	-24.01	PASS
	2441	SISO	1	Refer to test graph	-24.01	PASS
	2480	SISO	1	Refer to test graph	-24.01	PASS
	Hopping	SISO	1	Refer to test graph	-24.01	PASS
8DPSK	2402	SISO	1	Refer to test graph	-23.85	PASS
	2441	SISO	1	Refer to test graph	-23.85	PASS
	2480	SISO	1	Refer to test graph	-23.85	PASS

	Hopping	SISO	1	Refer to test graph	-23.85	PASS
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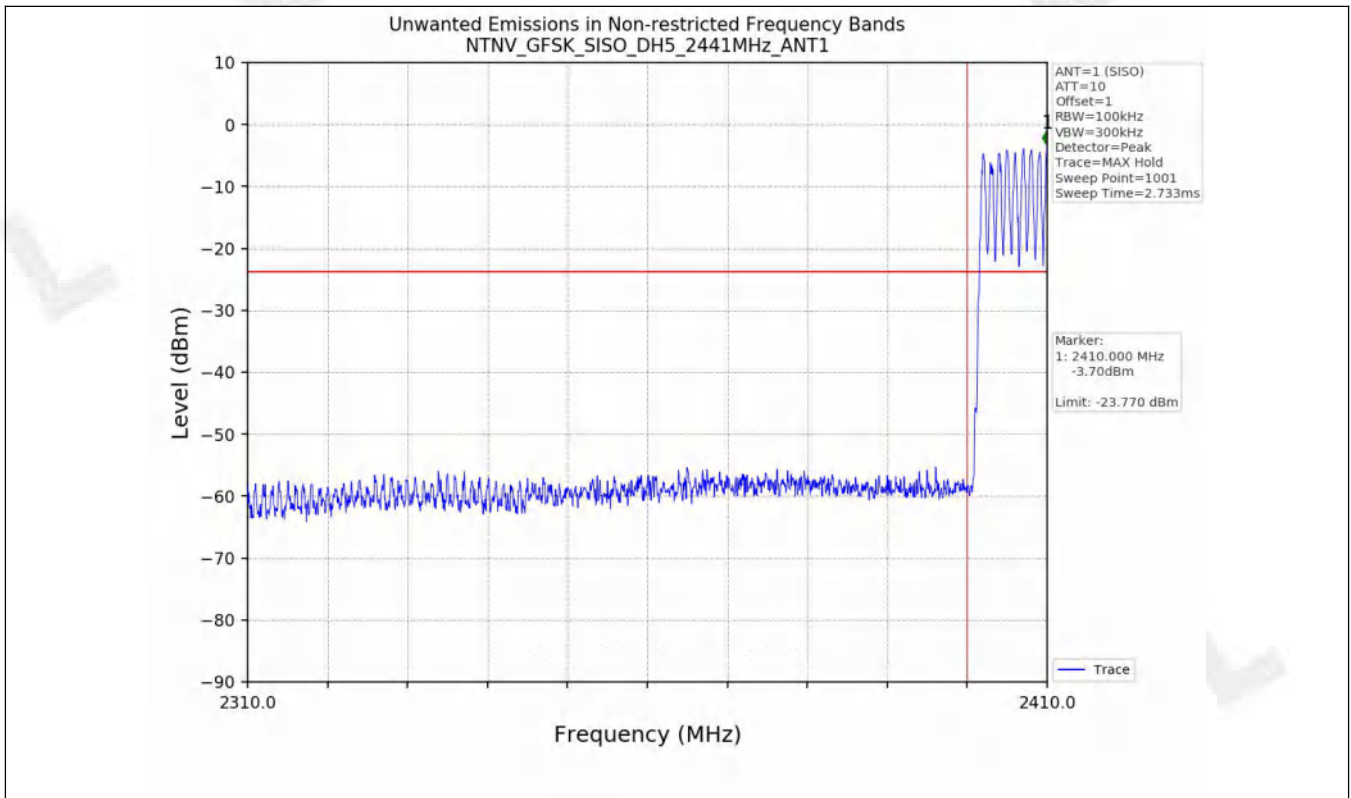
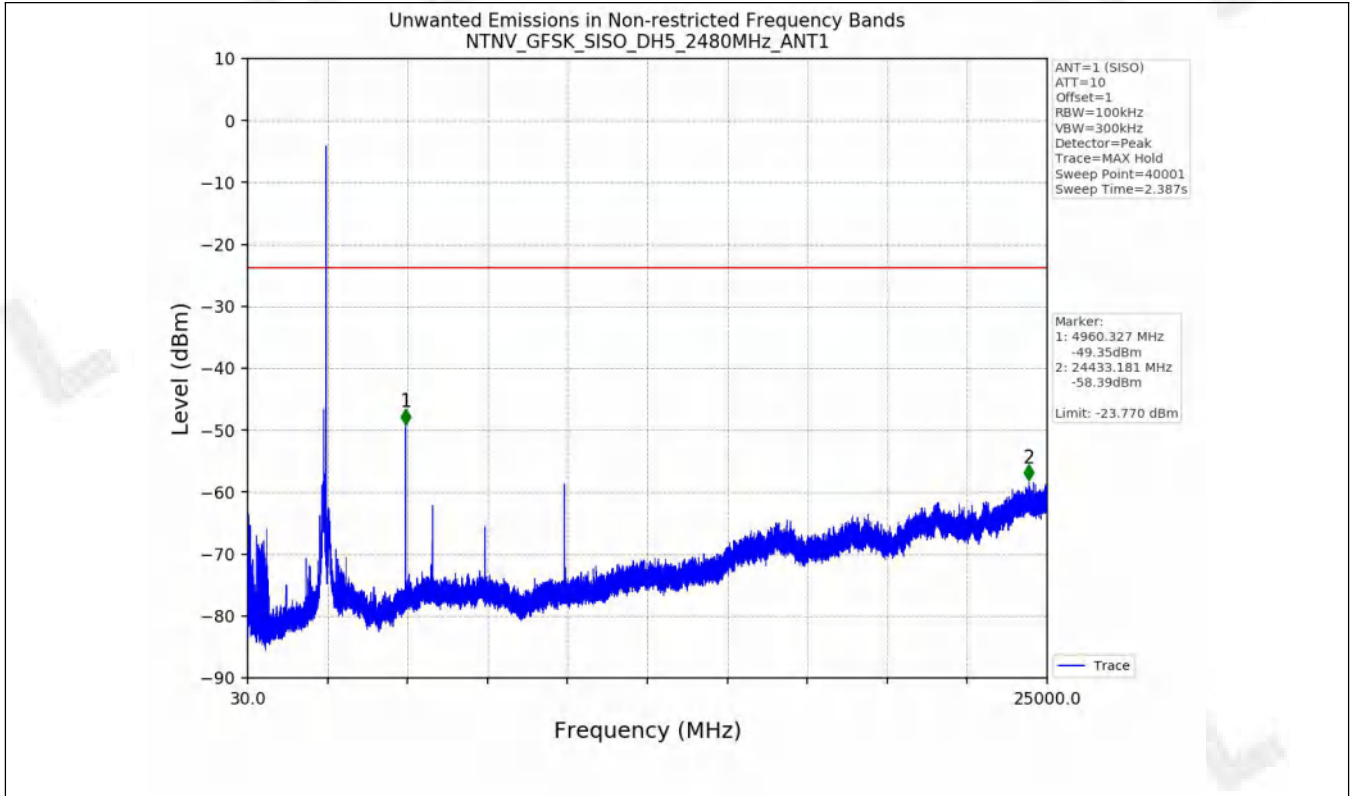
### 6.2 Test Graph

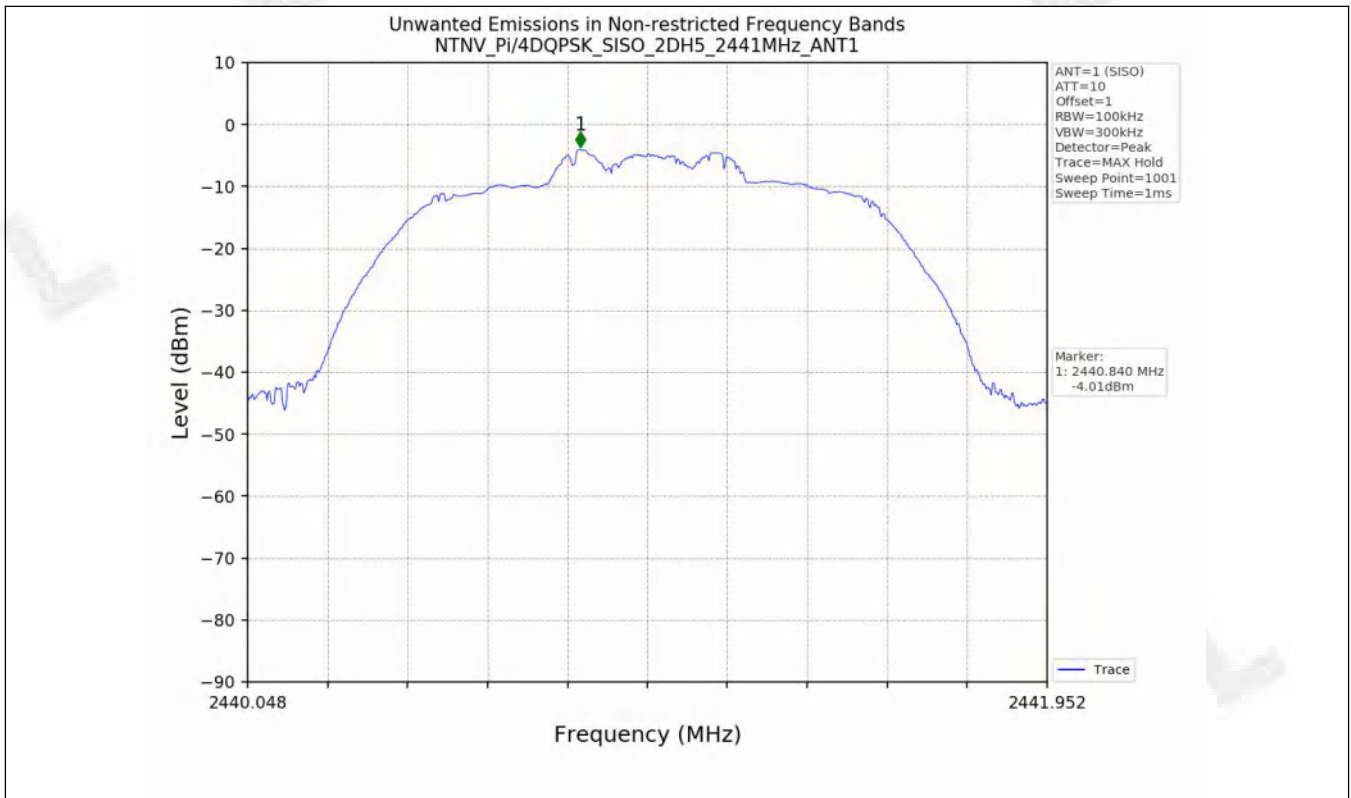
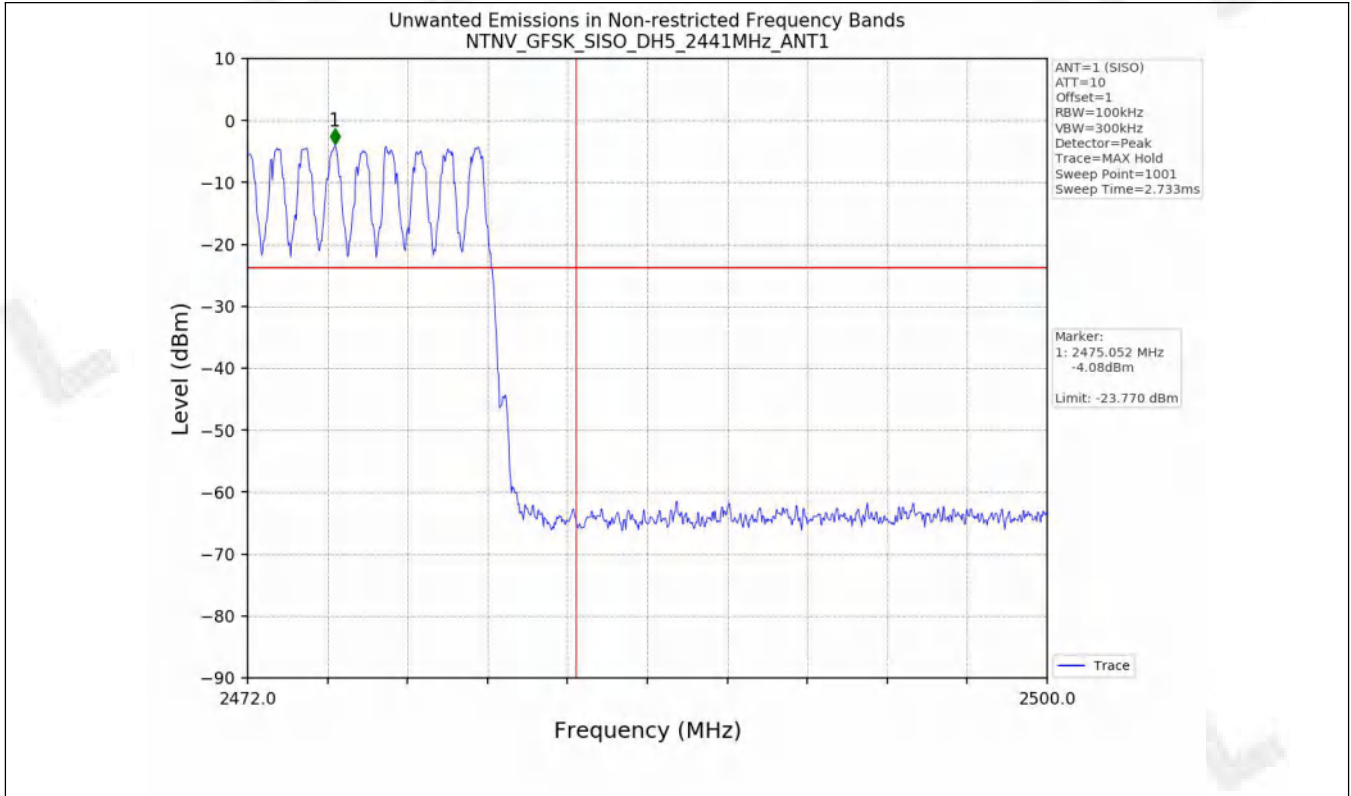


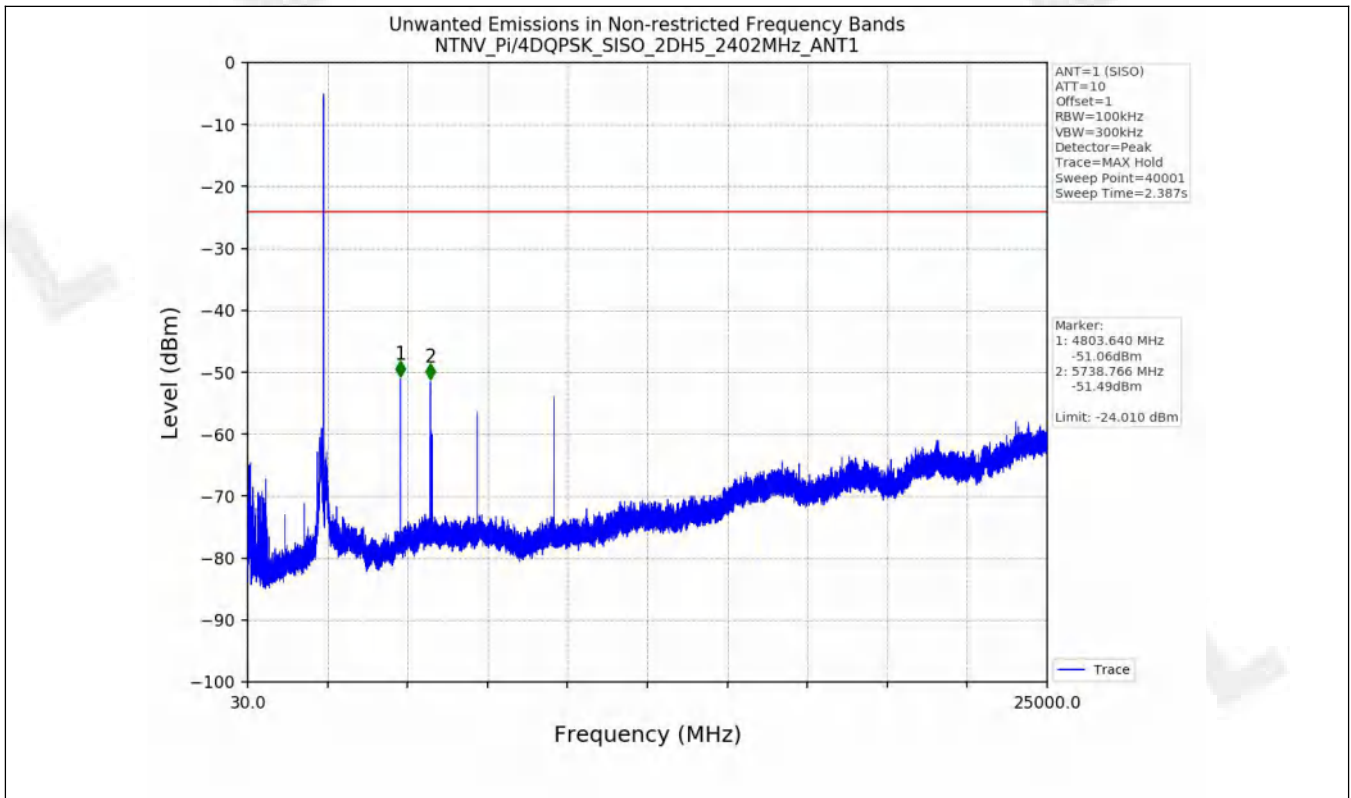
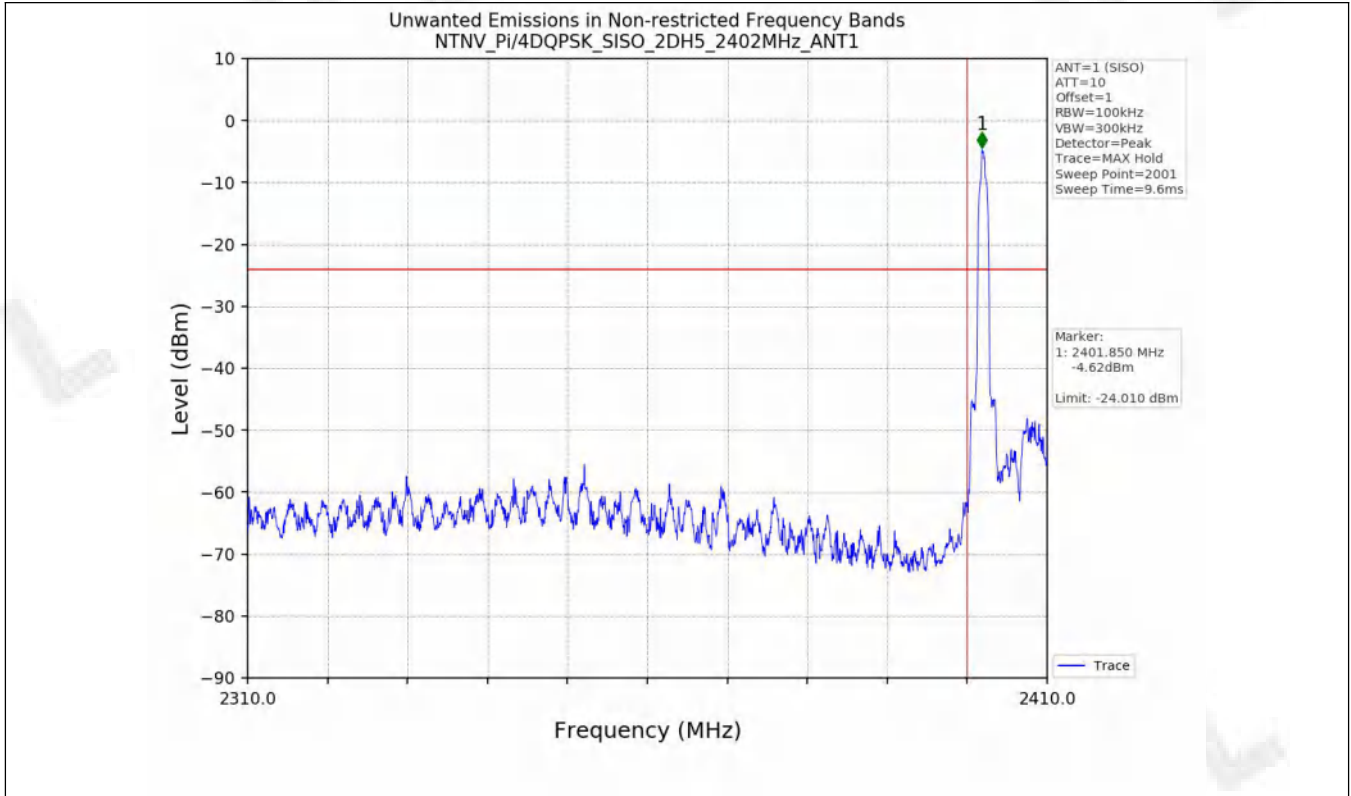


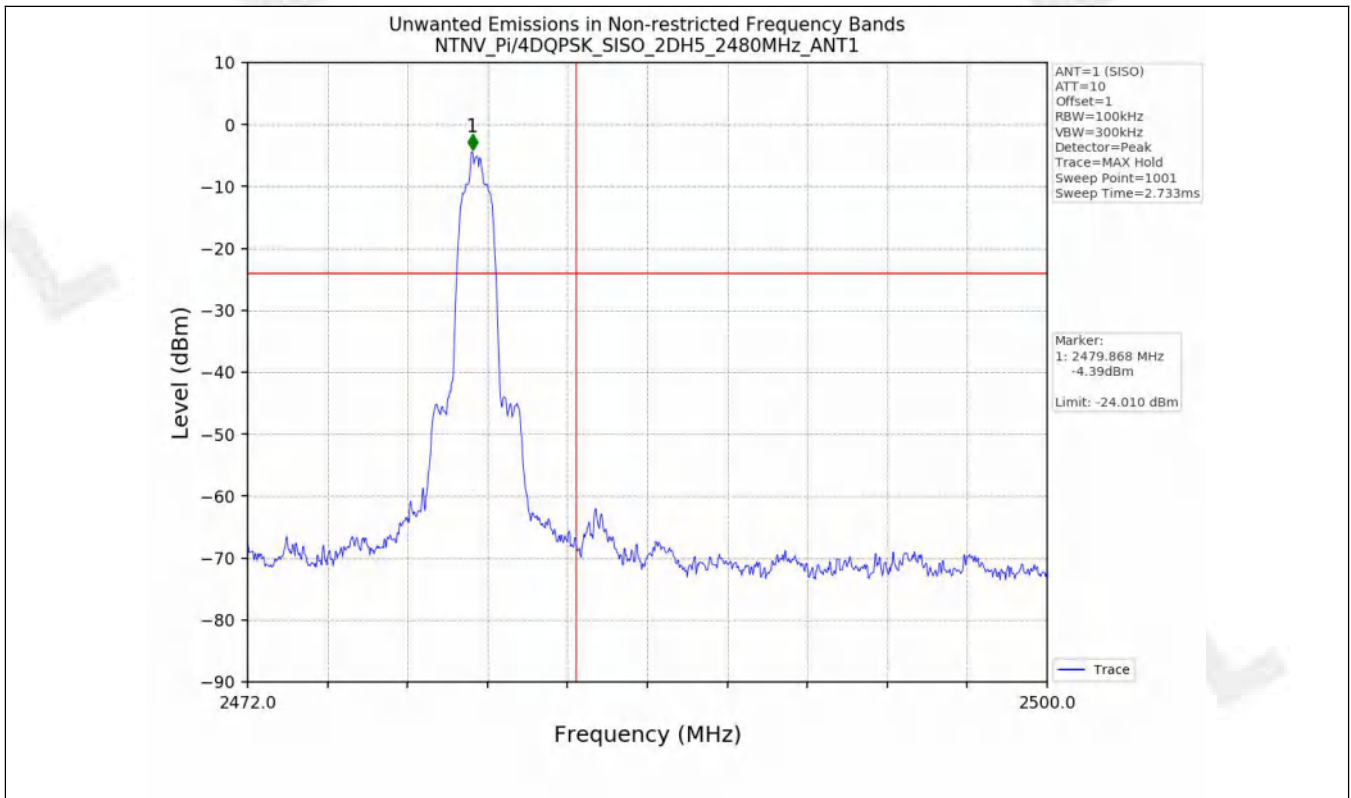
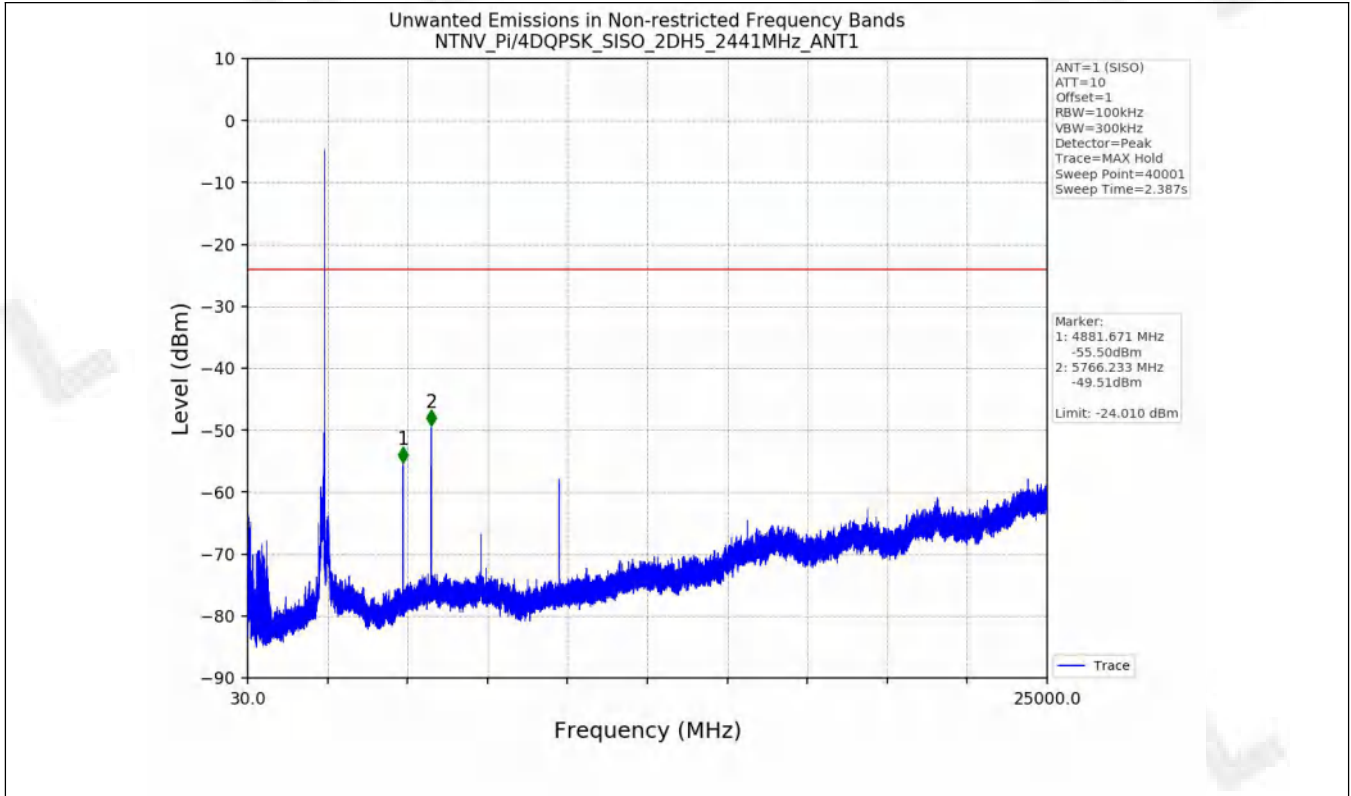


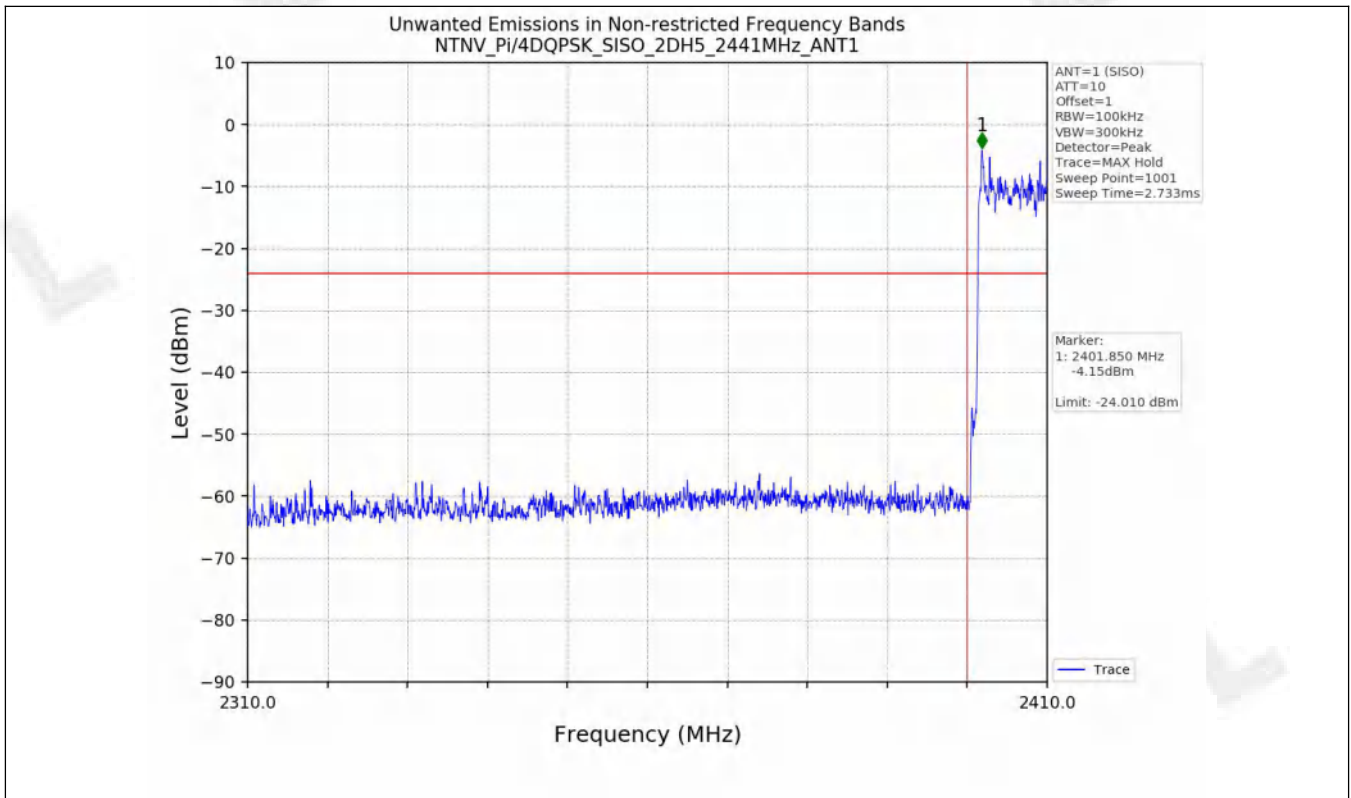
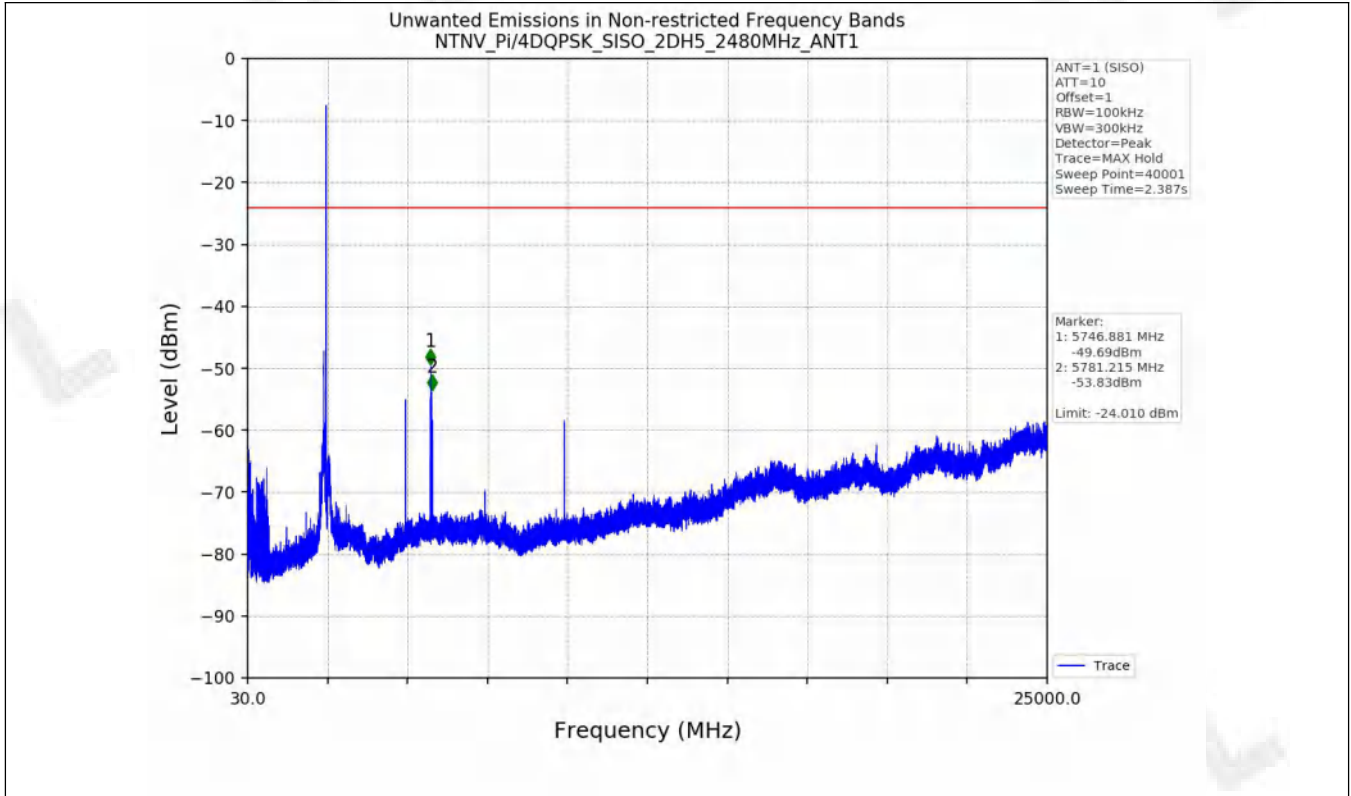


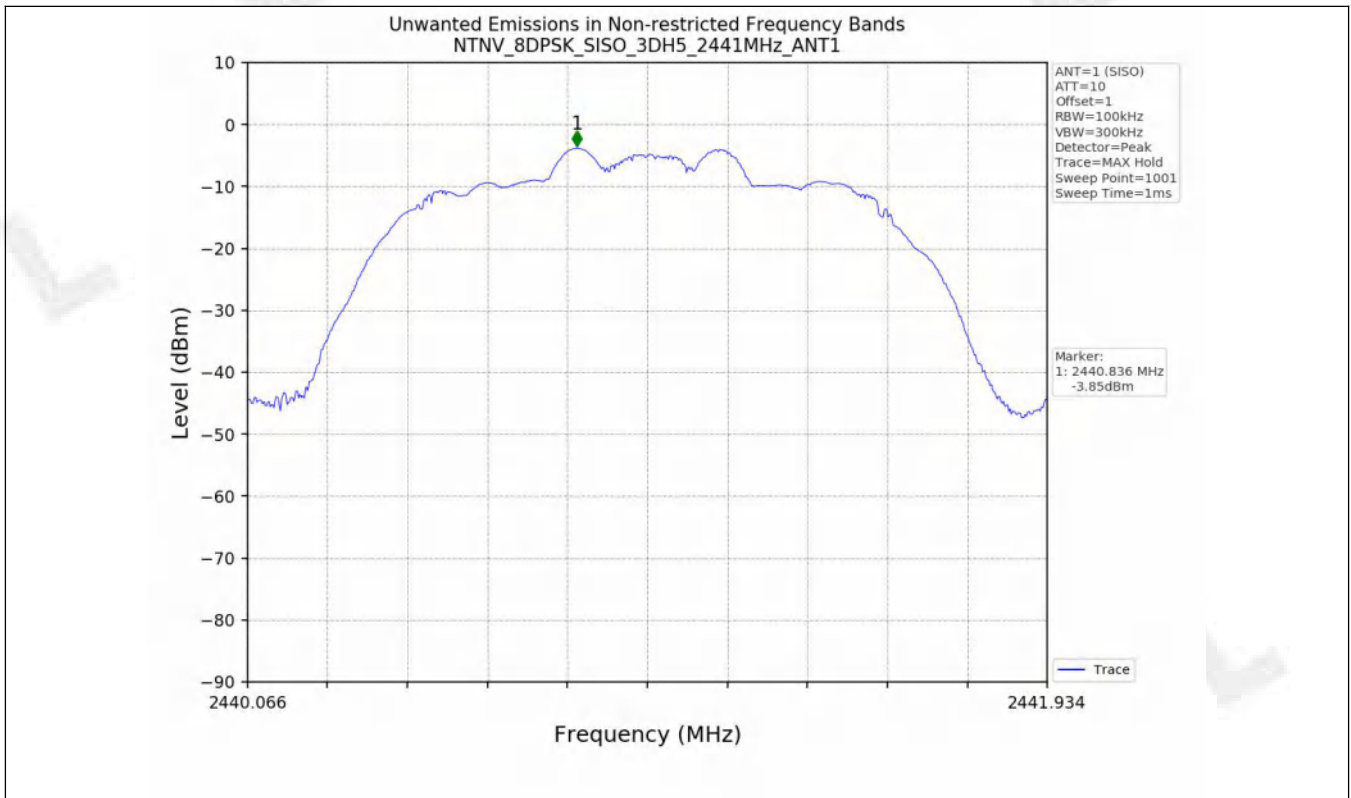
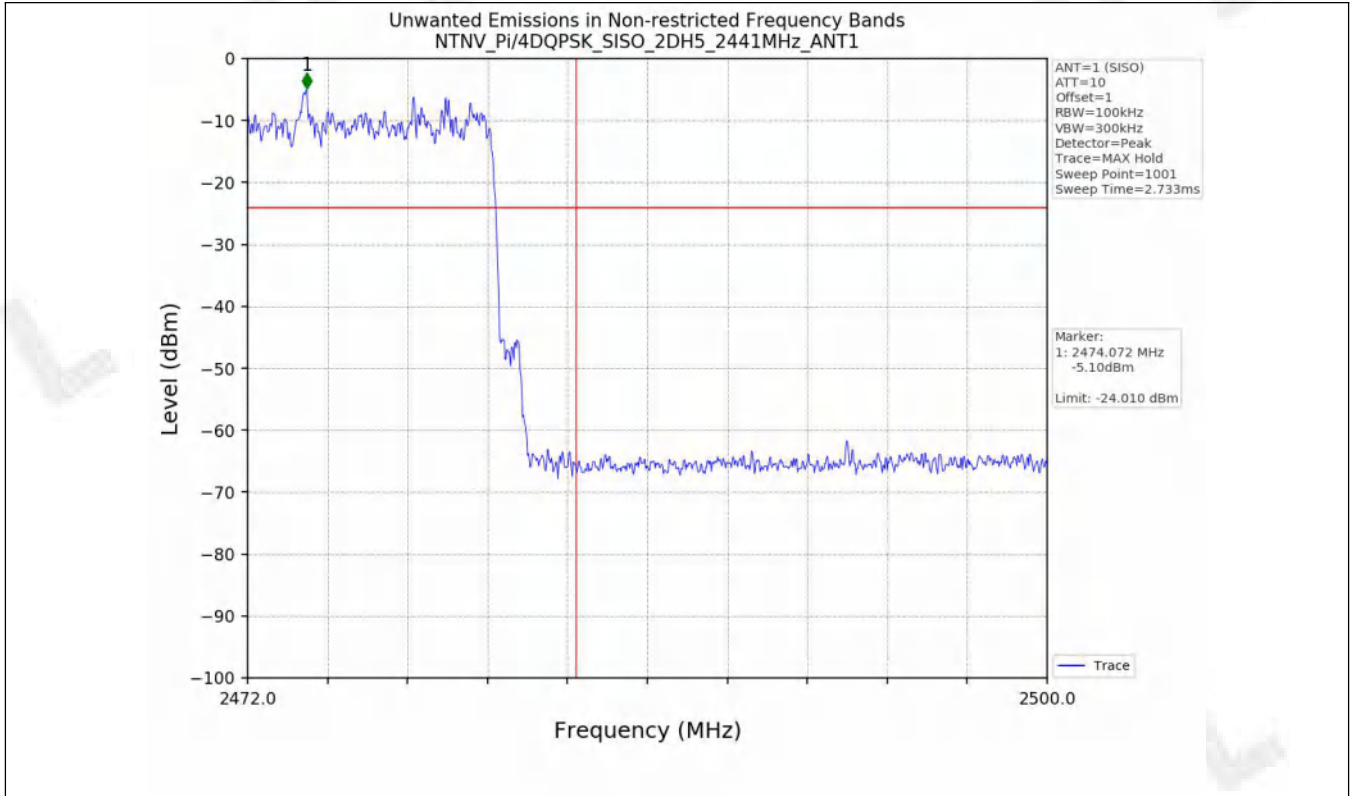


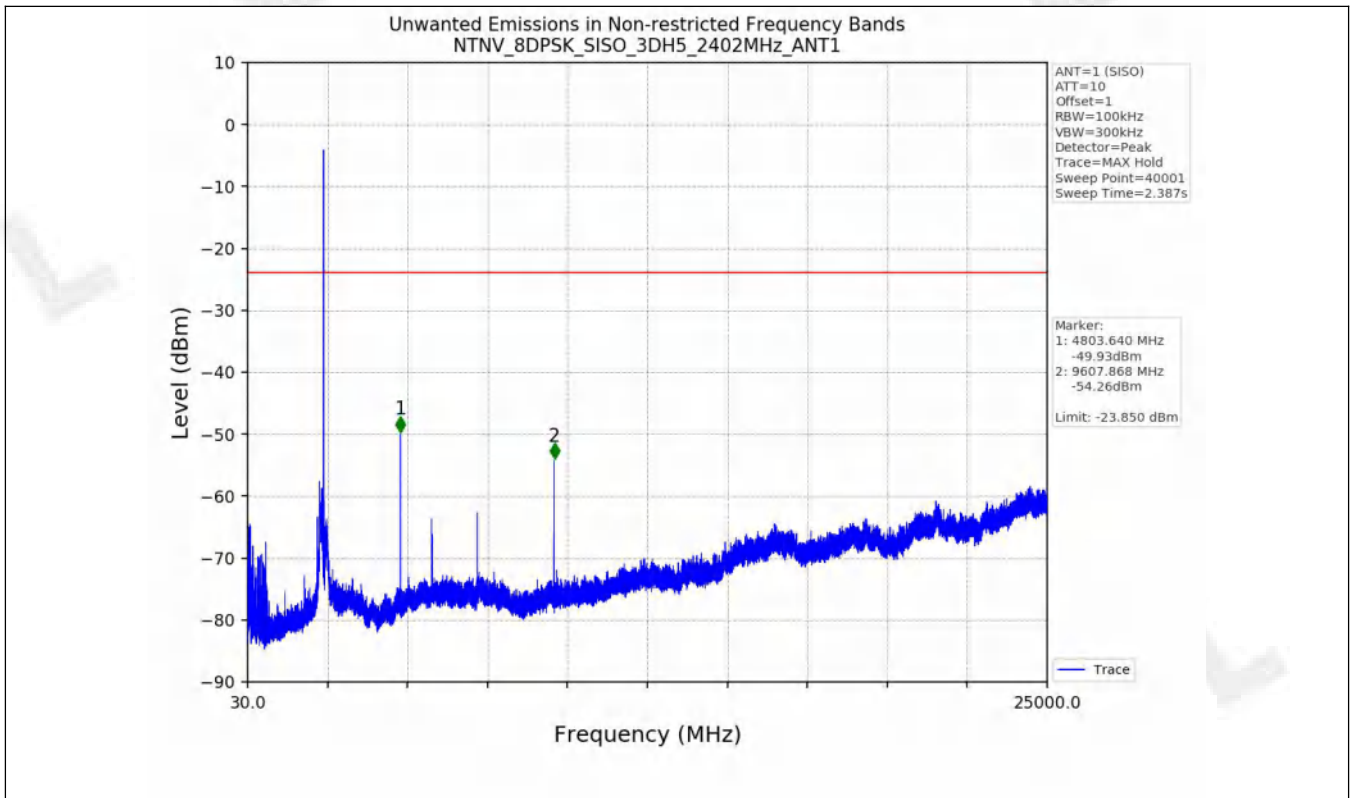
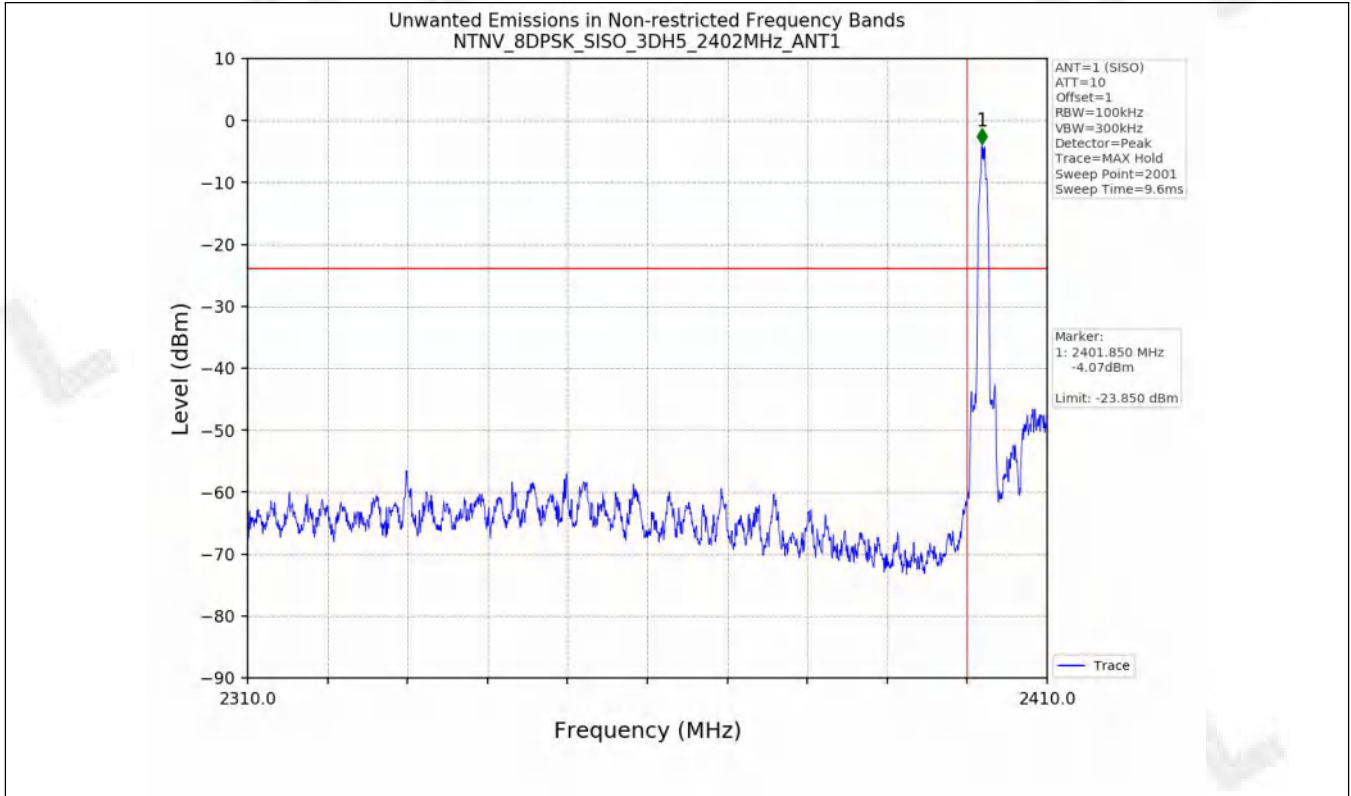


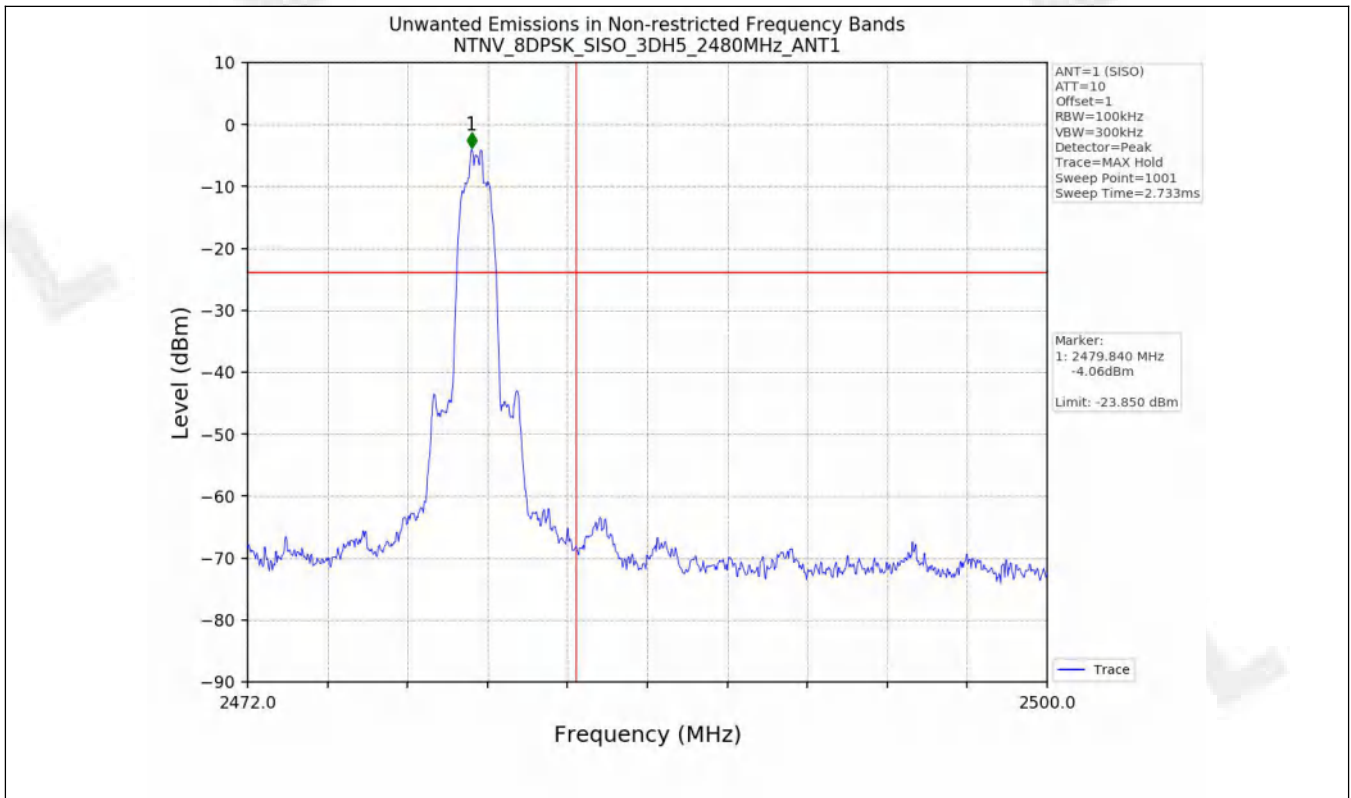
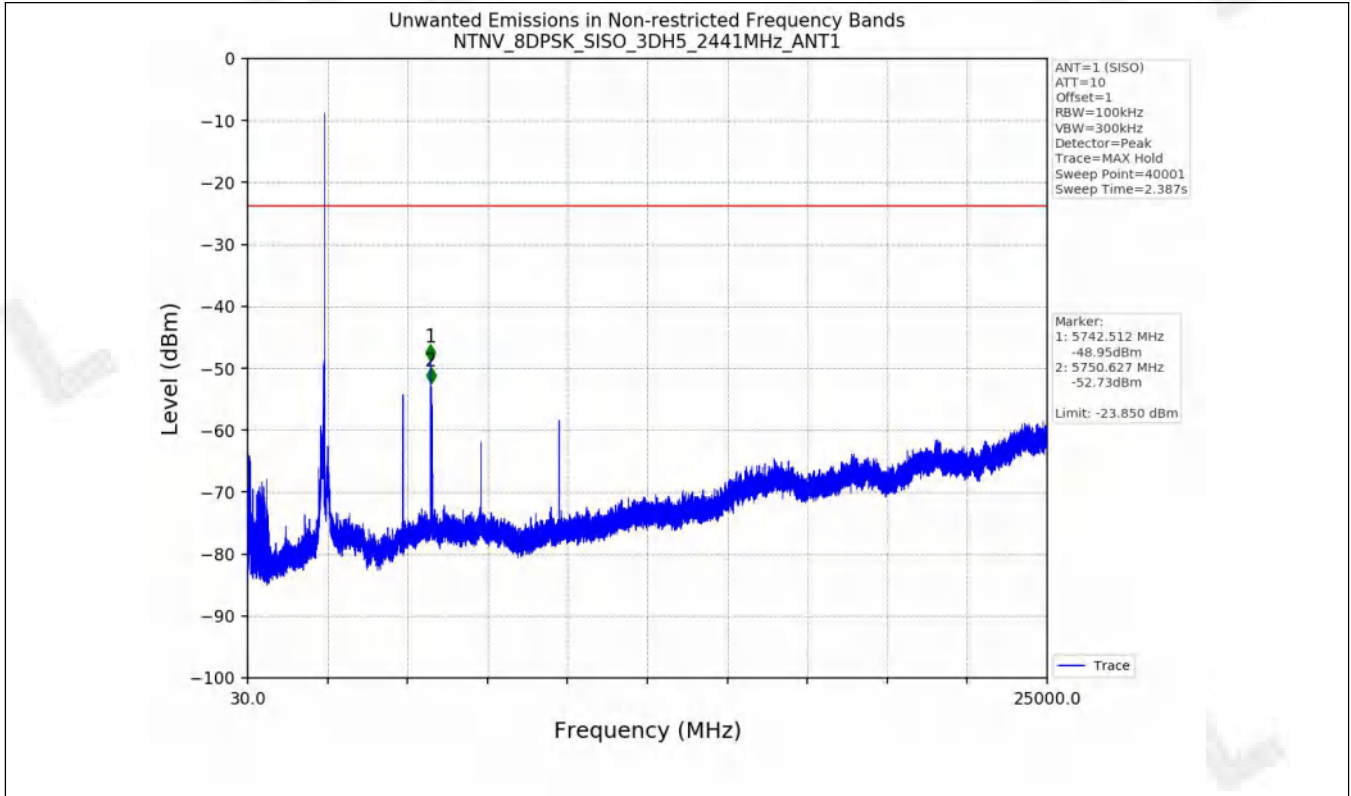




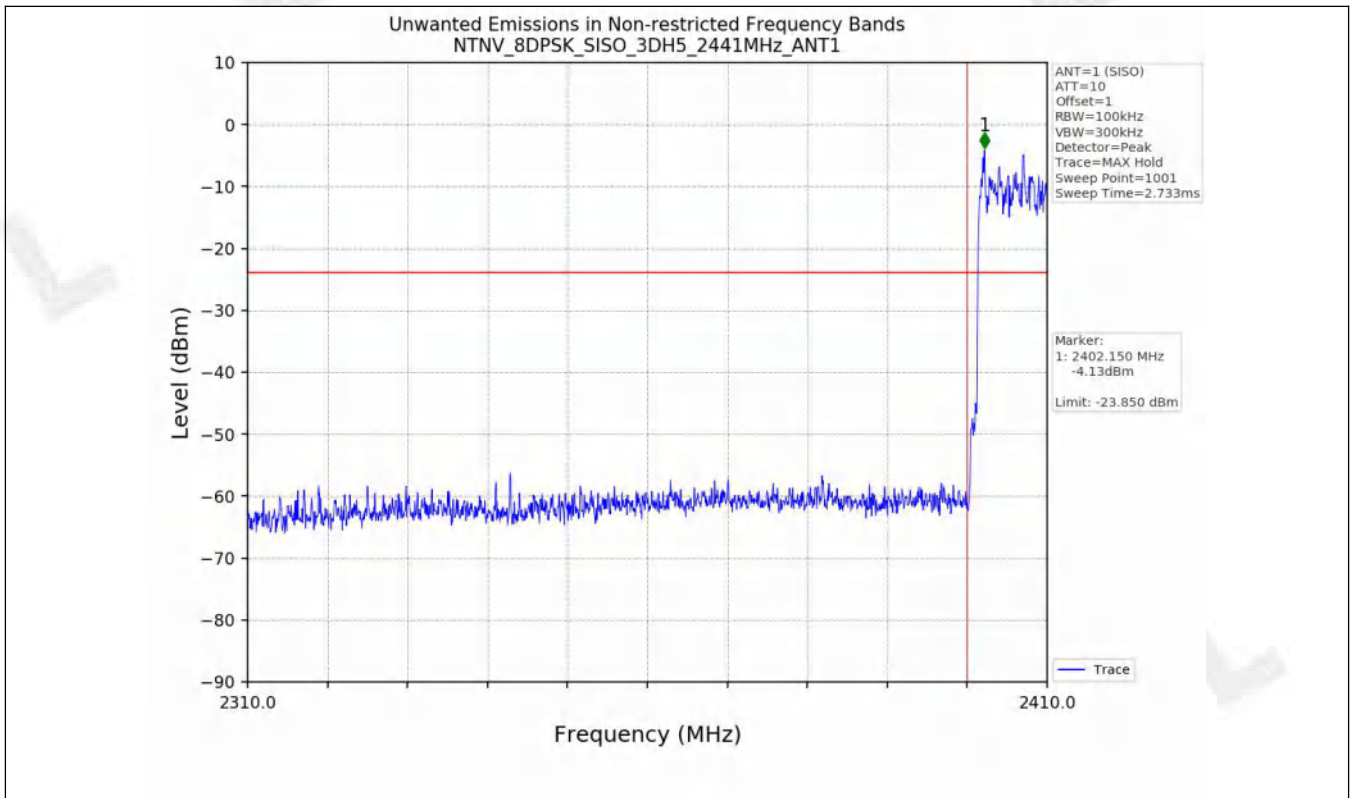
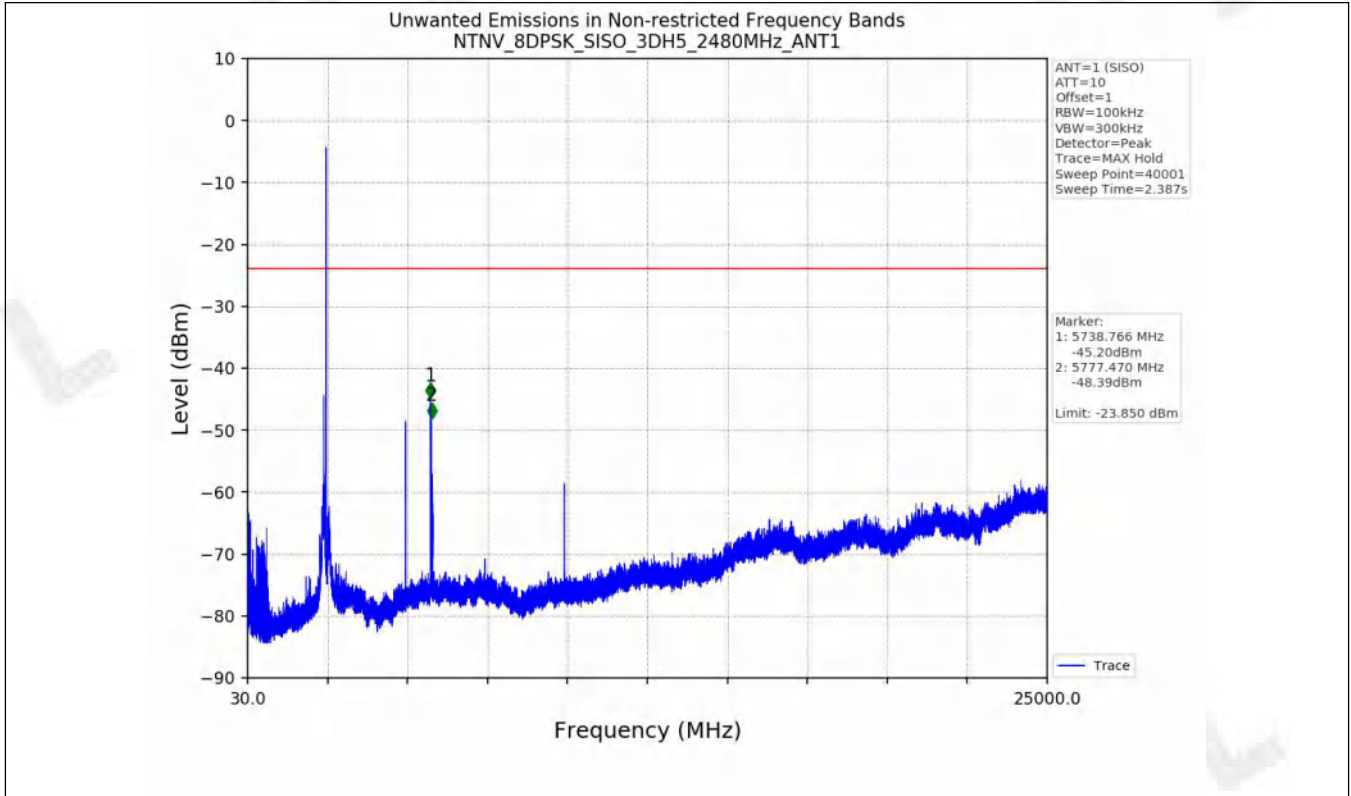


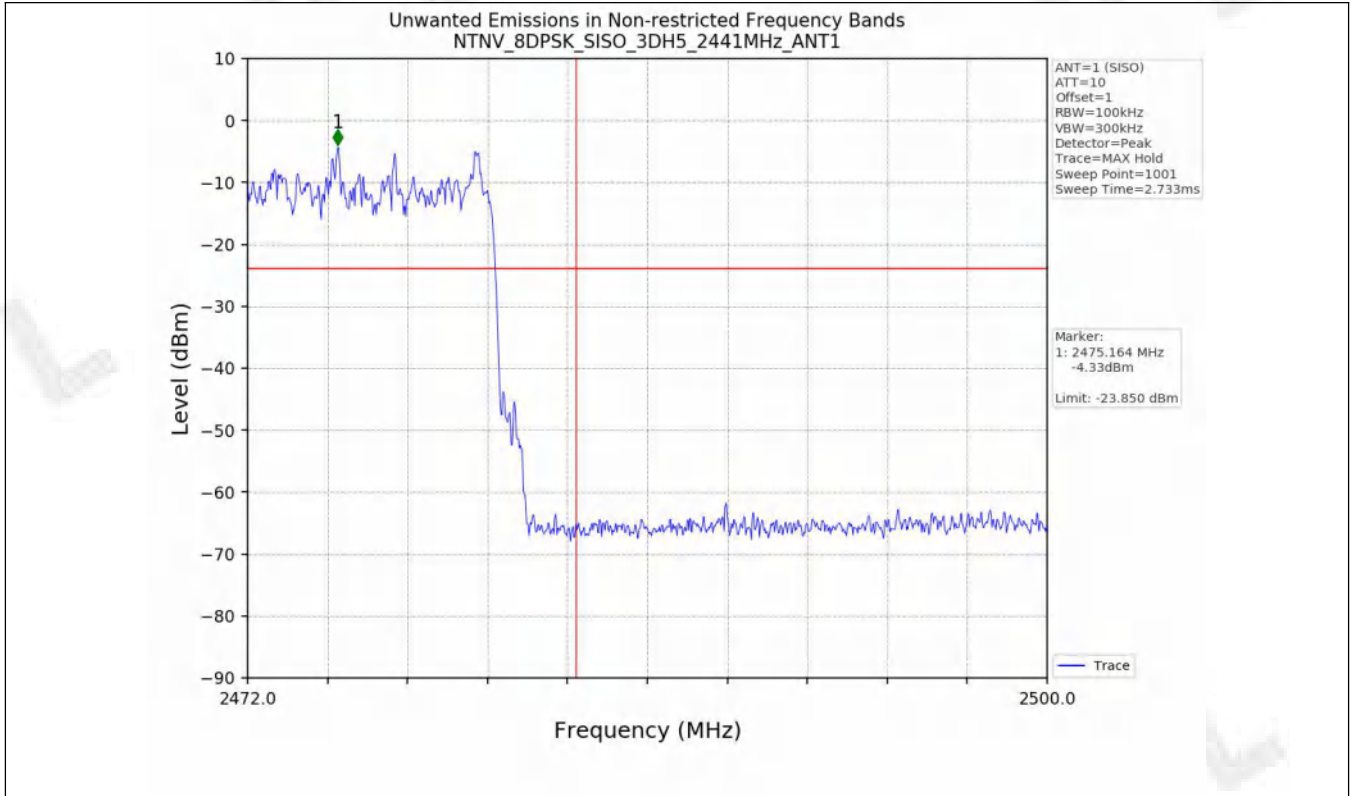












## 7. Frequency Error

### 7.1 Test Result

Test Mode	Frequency (MHz)	TX Type	ANT	Measured Frequency (MHz)		Verdict
				Test Result	Limit	
GFSK	2402	SISO	1	2402.01	2400-2483.5	PASS
	2441	SISO	1	2441.00	2400-2483.5	PASS
	2480	SISO	1	2480.01	2400-2483.5	PASS
Pi/4DQPSK	2402	SISO	1	2402.01	2400-2483.5	PASS
	2441	SISO	1	2441.01	2400-2483.5	PASS
	2480	SISO	1	2480.00	2400-2483.5	PASS

### 7.2 Test Graph

