

## Appendix for 15.247

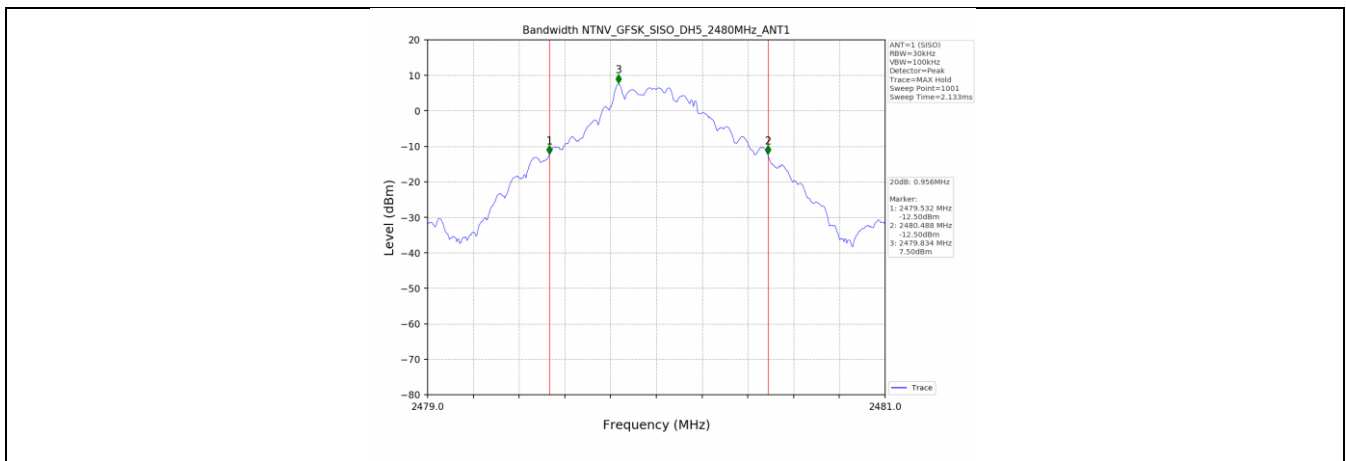
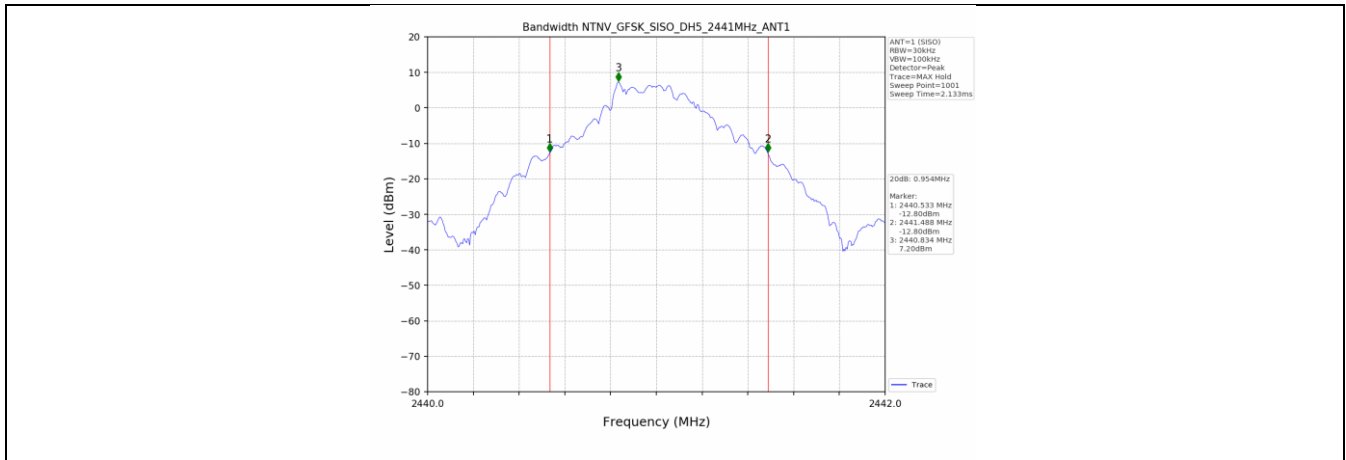
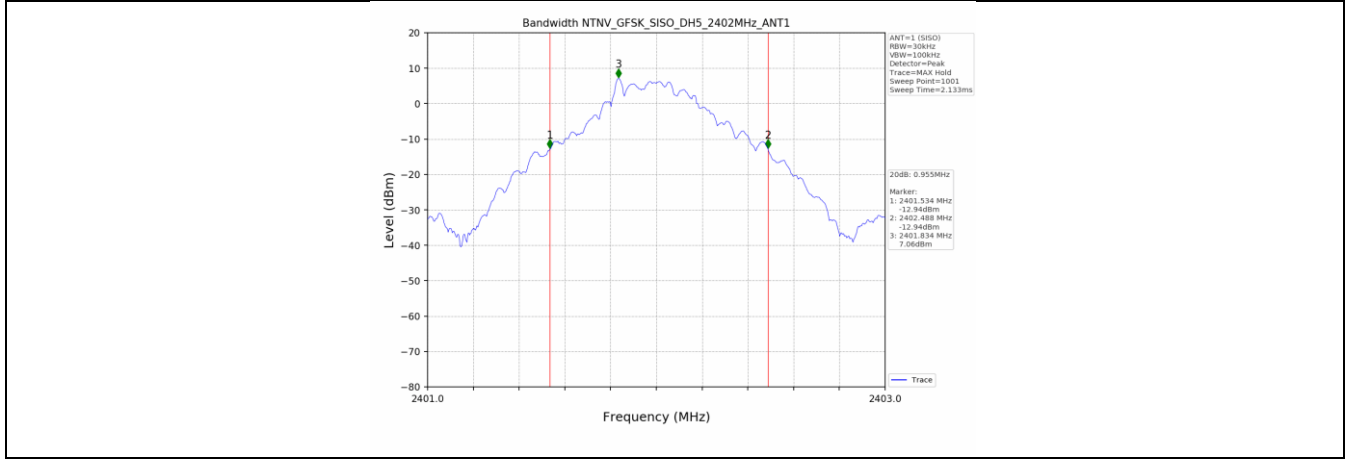
### 1. Bandwidth

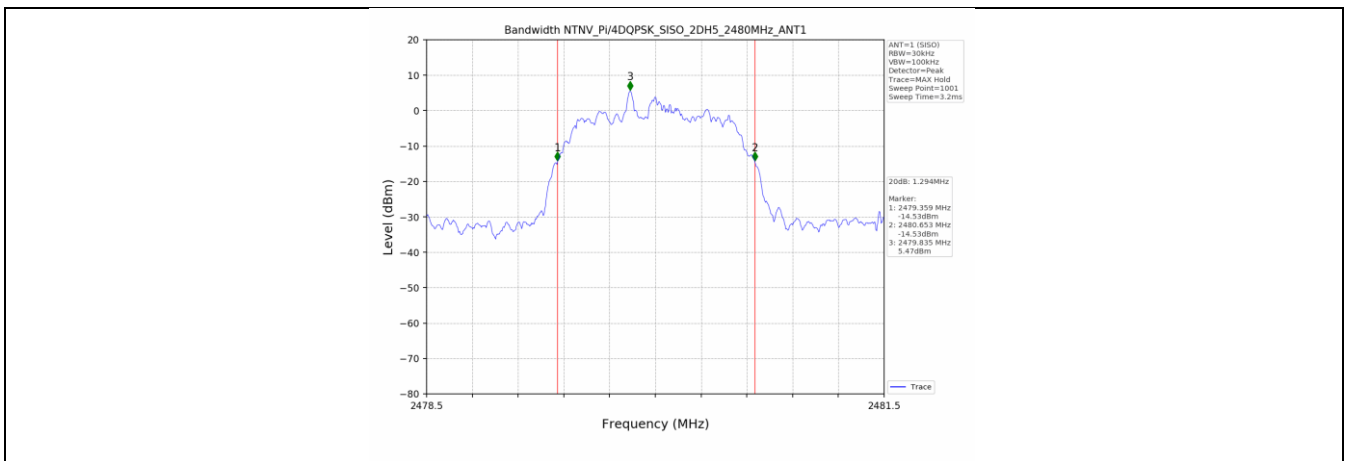
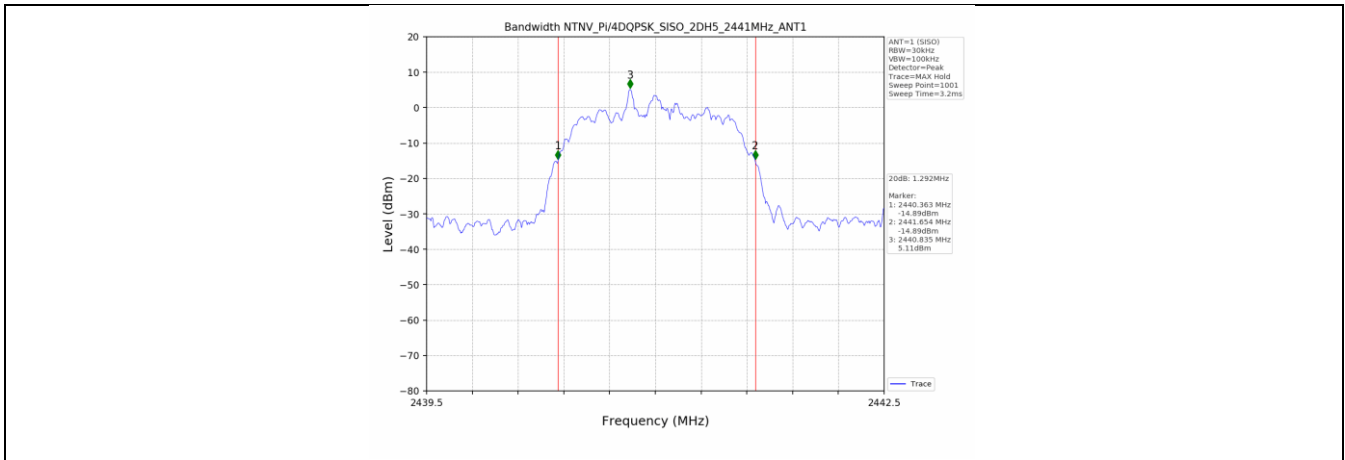
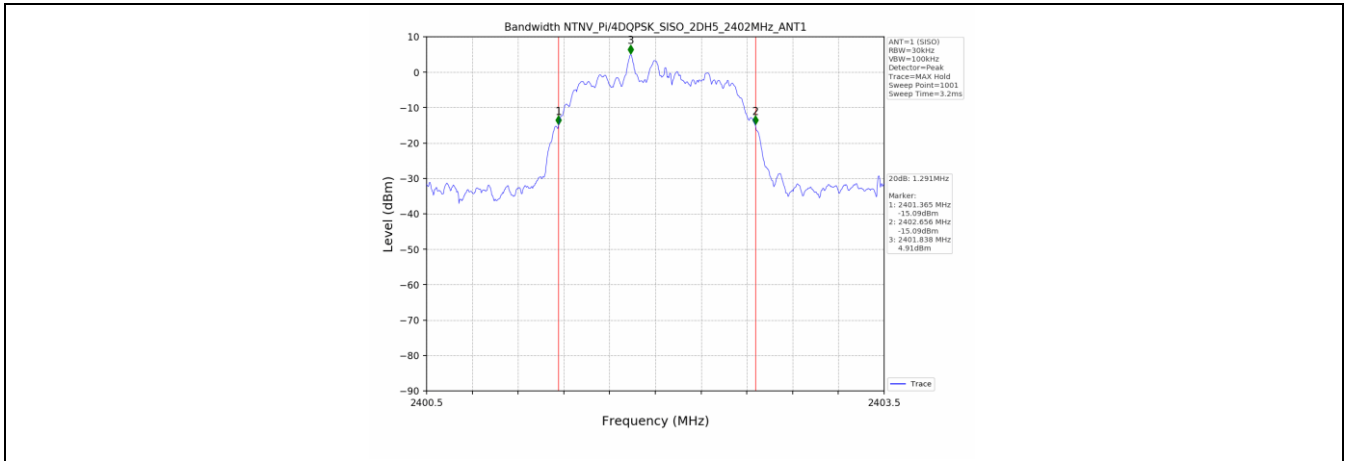
#### 1.1 Test Result

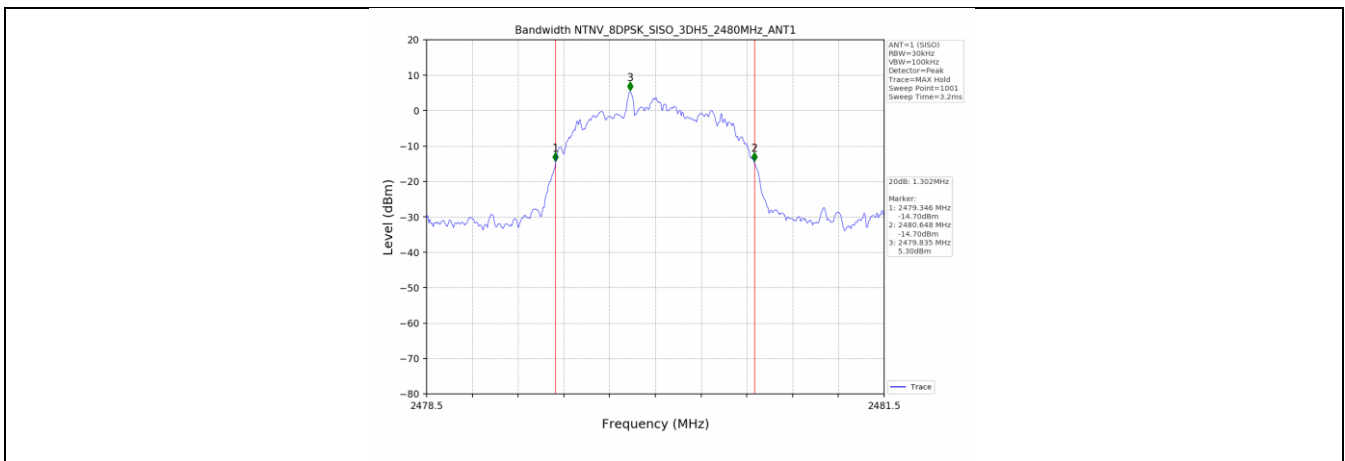
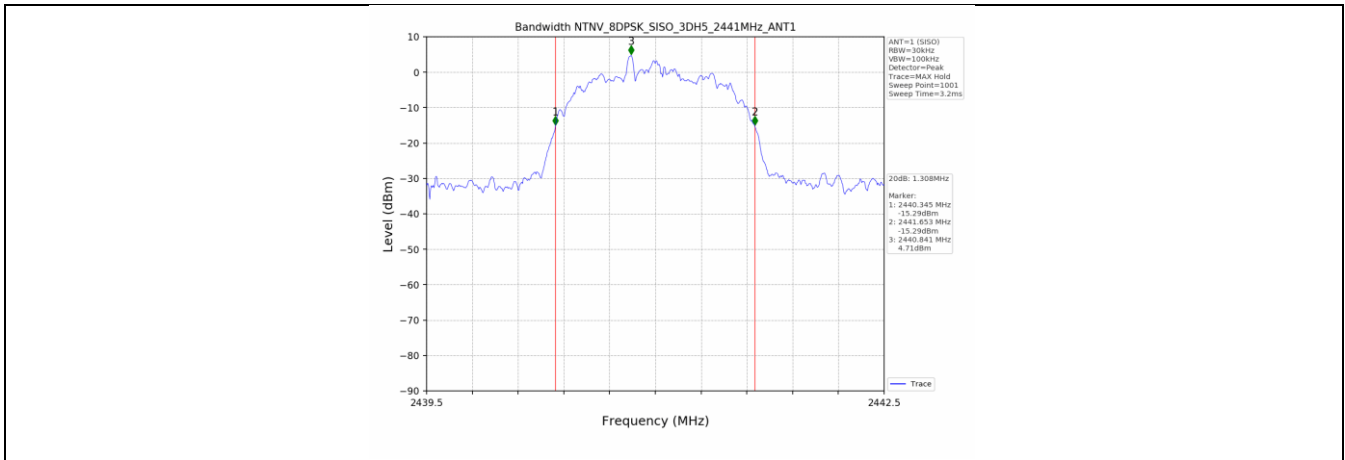
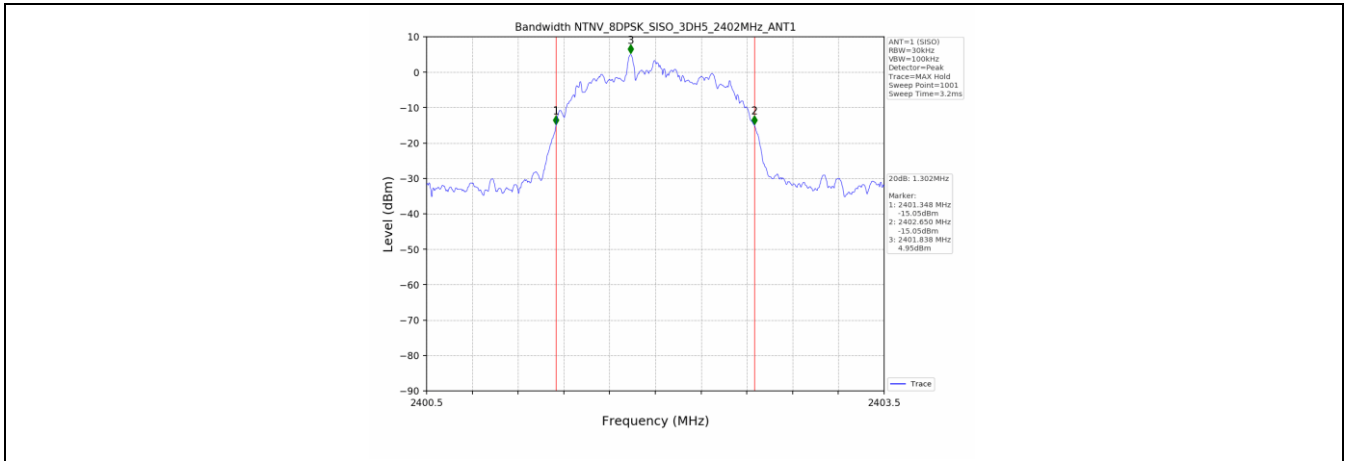
Test Mode	Frequency (MHz)	TX Type	ANT No.	20dB Bandwidth	Verdict
				Test Result (MHz)	
GFSK	2402	SISO	1	0.955	PASS
	2441	SISO	1	0.954	PASS
	2480	SISO	1	0.956	PASS
$\pi/4$ -DQPSK	2402	SISO	1	1.291	PASS
	2441	SISO	1	1.292	PASS
	2480	SISO	1	1.294	PASS
8-DPSK	2402	SISO	1	1.302	PASS
	2441	SISO	1	1.308	PASS
	2480	SISO	1	1.302	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
GFSK	2402	SISO	1	0.890	Only for Report Use
	2441	SISO	1	0.887	Only for Report Use
	2480	SISO	1	0.889	Only for Report Use
$\pi/4$ -DQPSK	2402	SISO	1	1.189	Only for Report Use
	2441	SISO	1	1.196	Only for Report Use
	2480	SISO	1	1.197	Only for Report Use
8-DPSK	2402	SISO	1	1.205	Only for Report Use
	2441	SISO	1	1.208	Only for Report Use
	2480	SISO	1	1.206	Only for Report Use

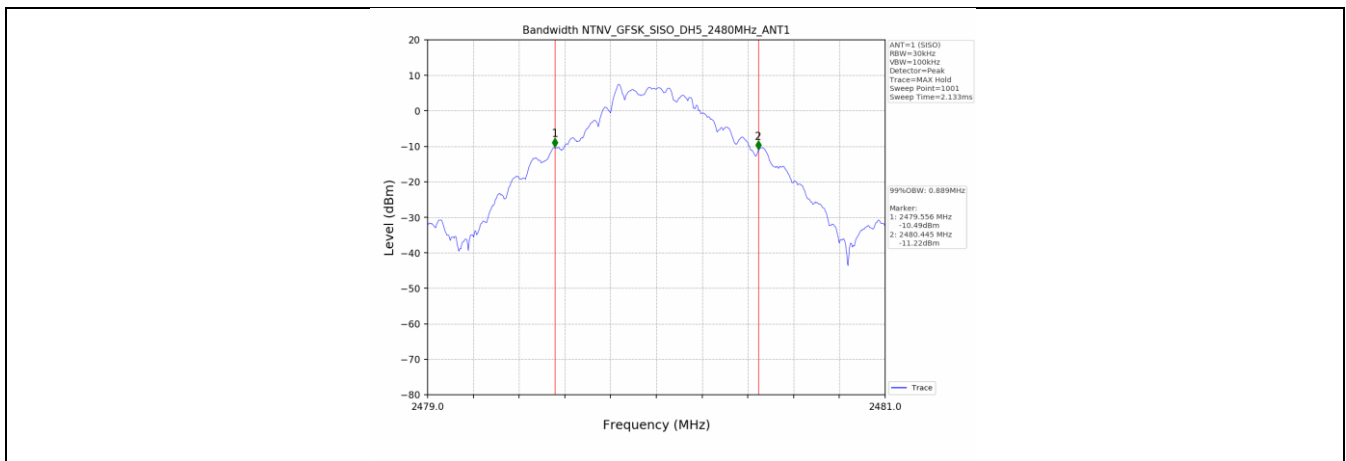
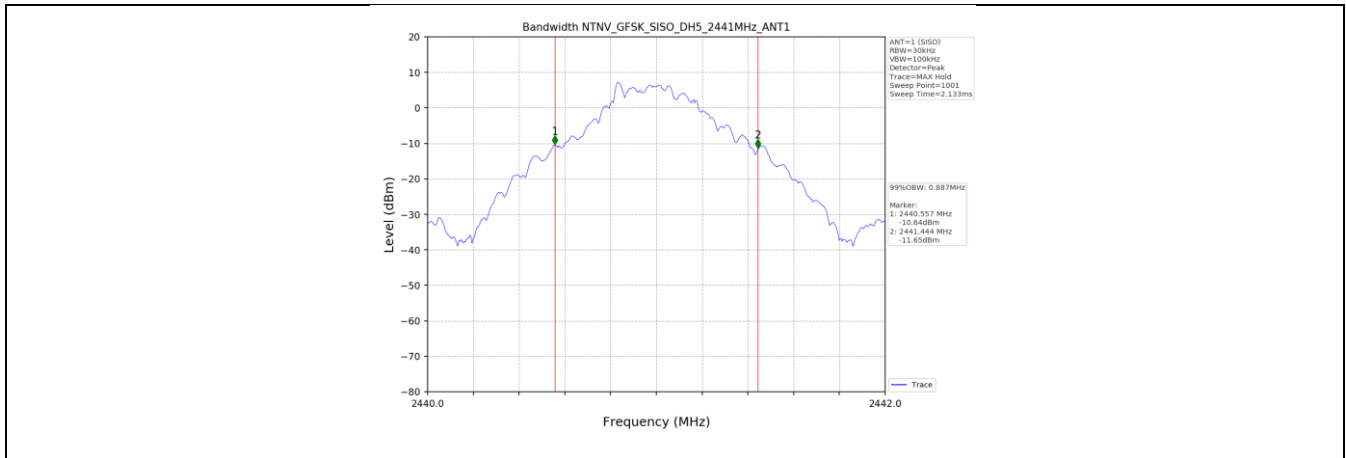
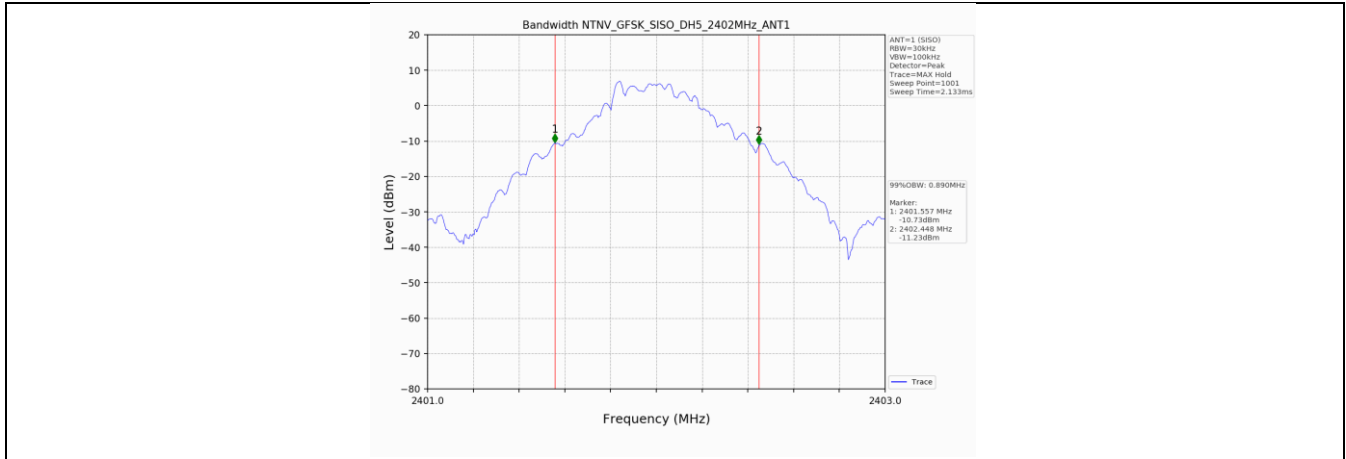
## 1.2 Test Graph - 20dB Bandwidth

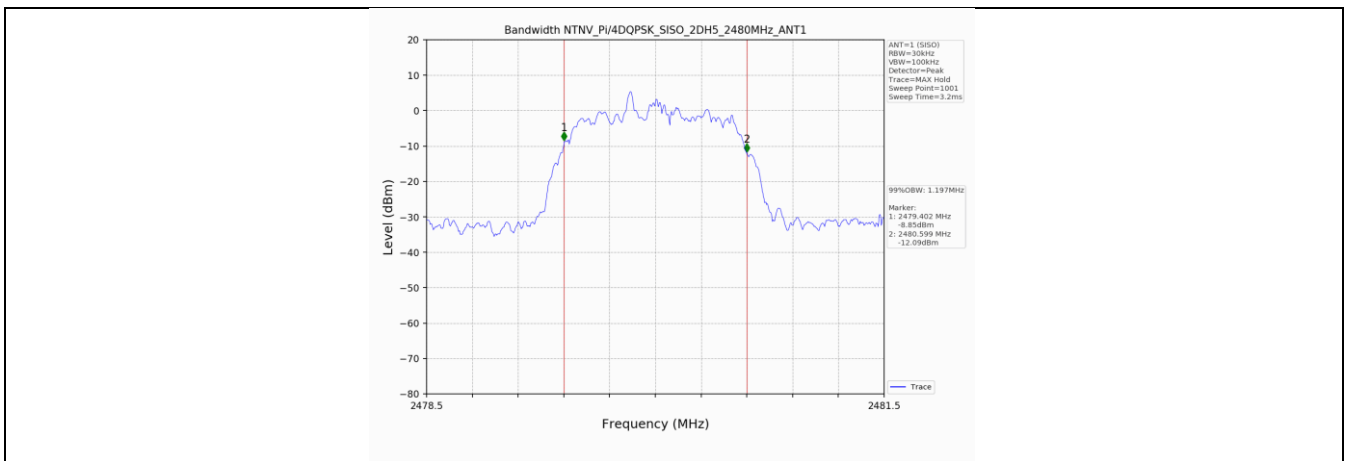
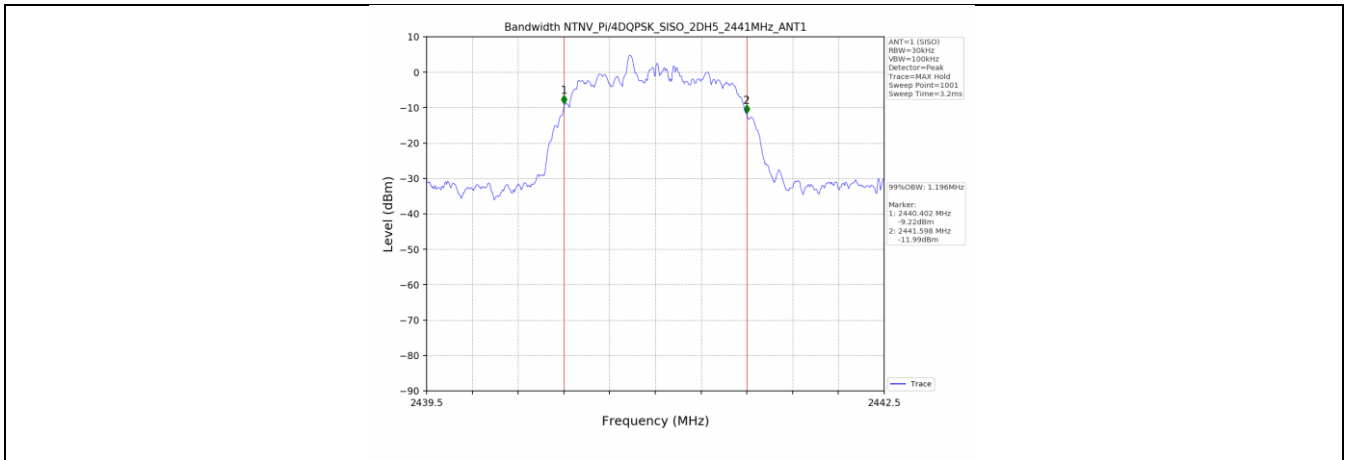
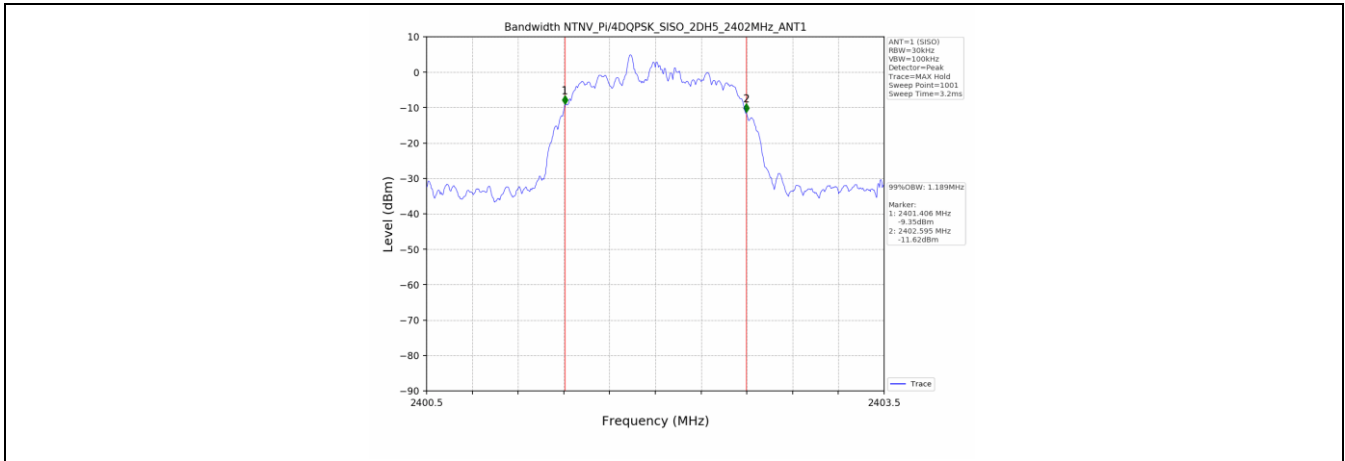


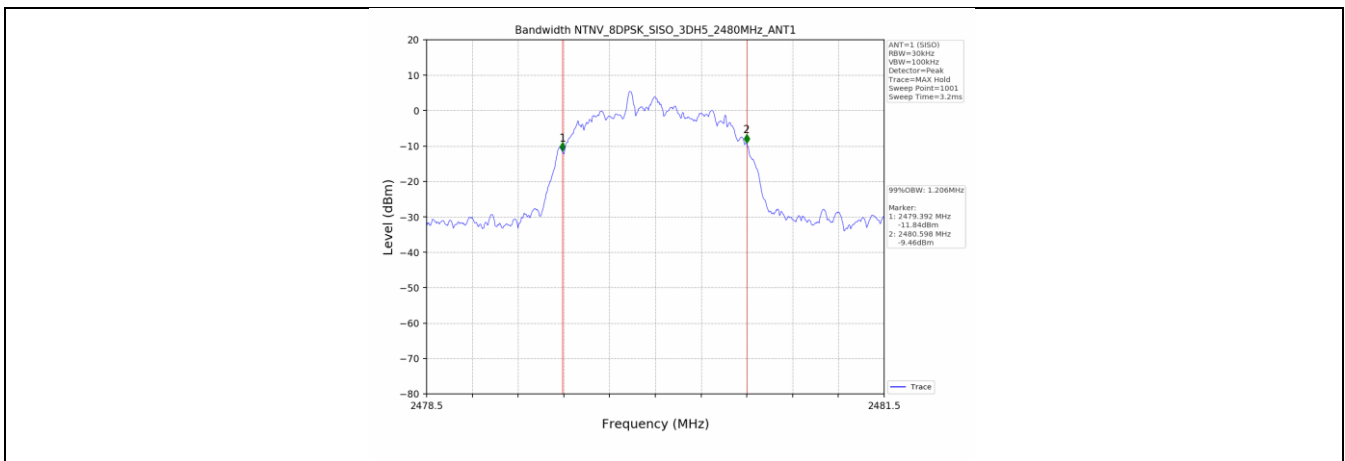
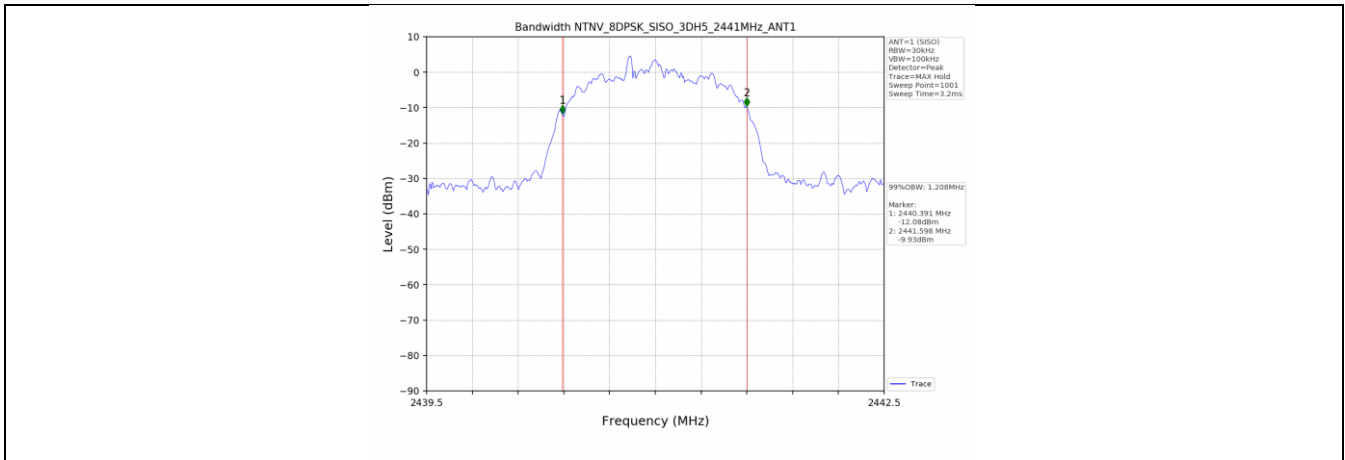
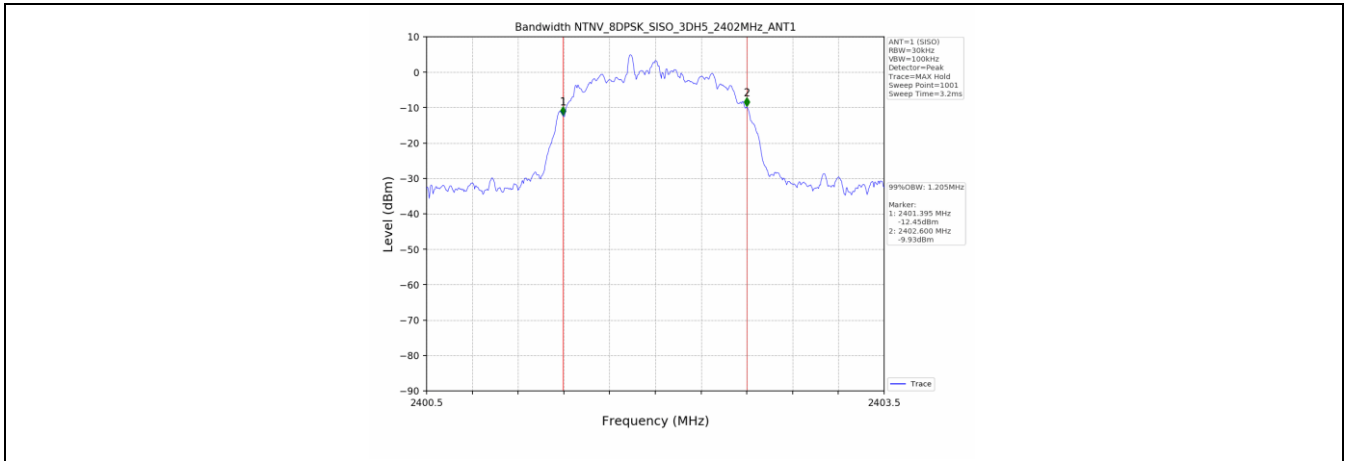




### 1.3 Test Graph - 99% Occupied Bandwidth







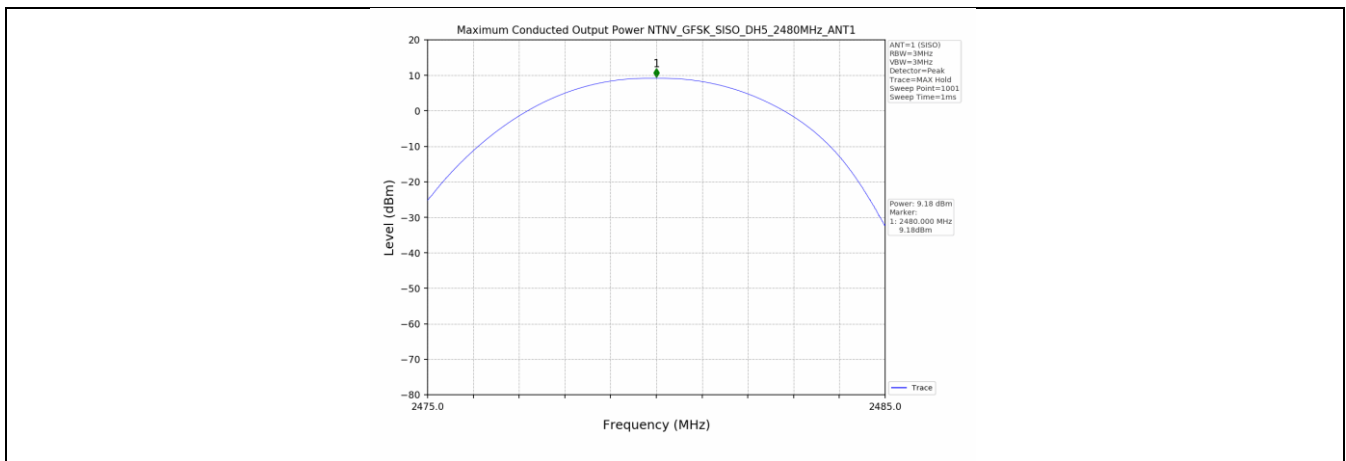
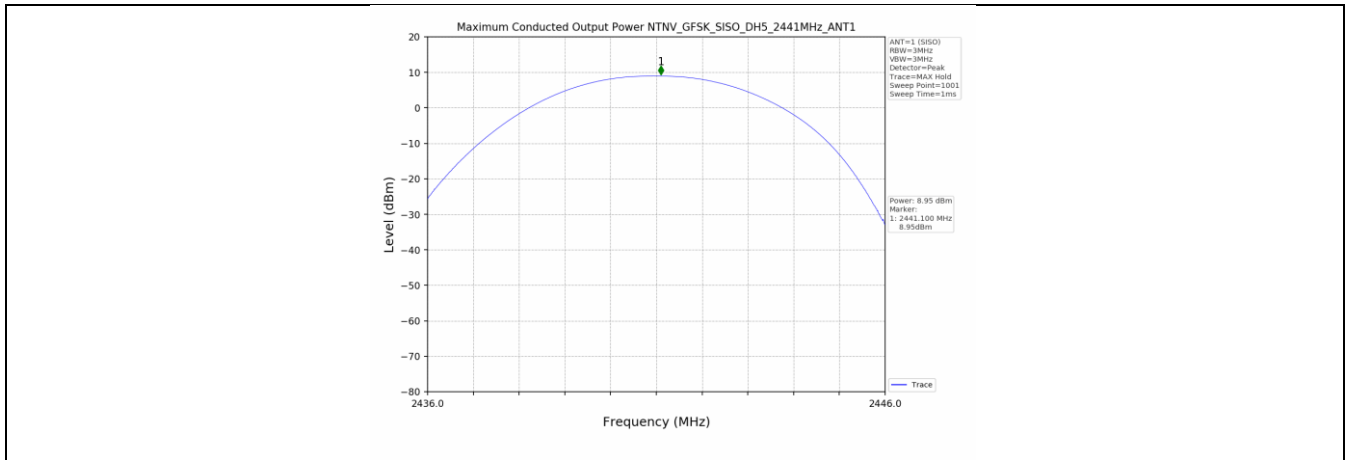
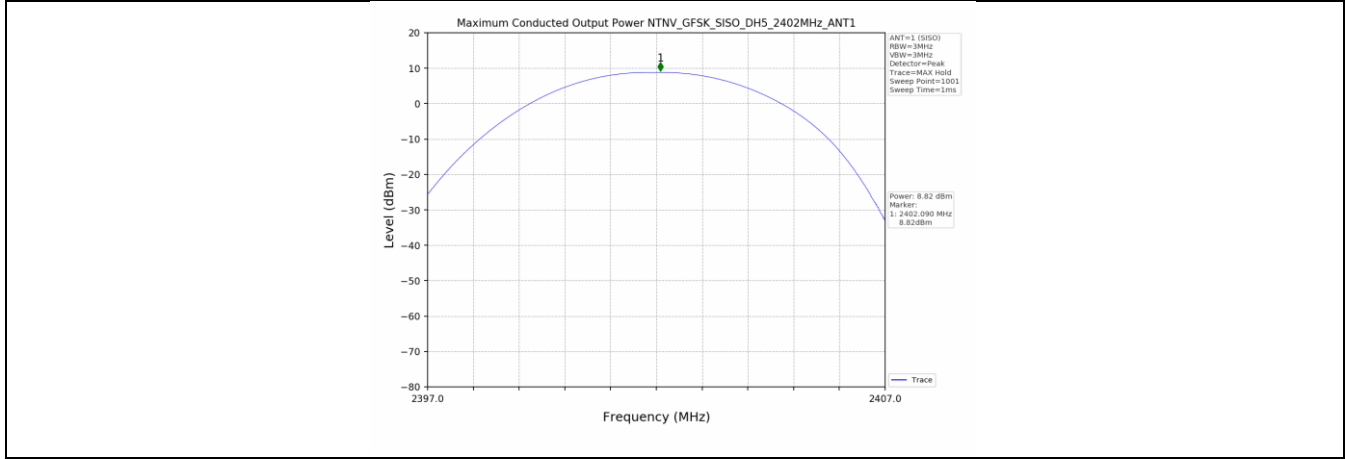
## 2. Maximum Conducted Output Power

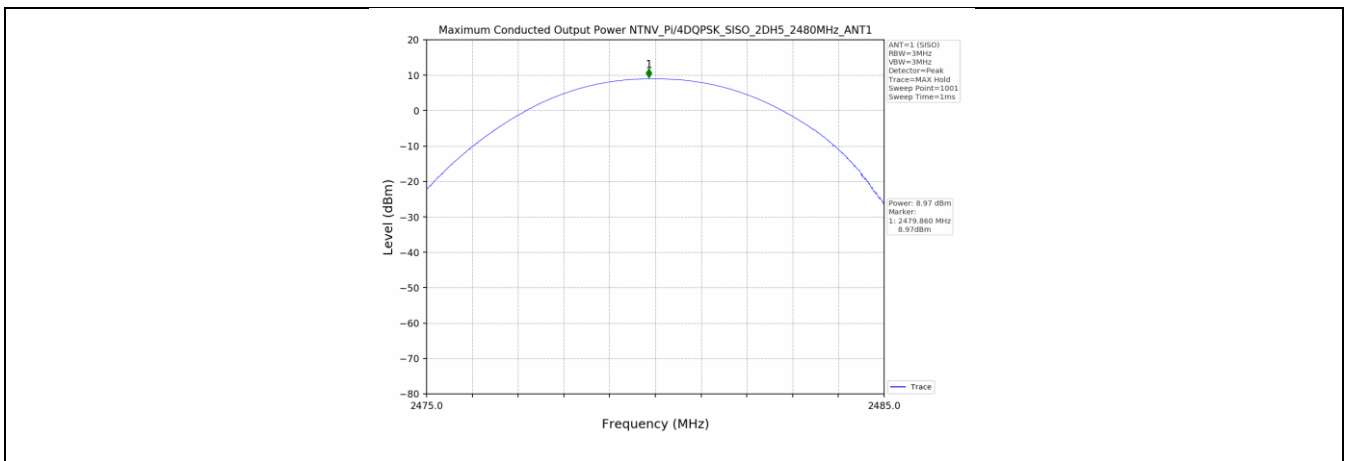
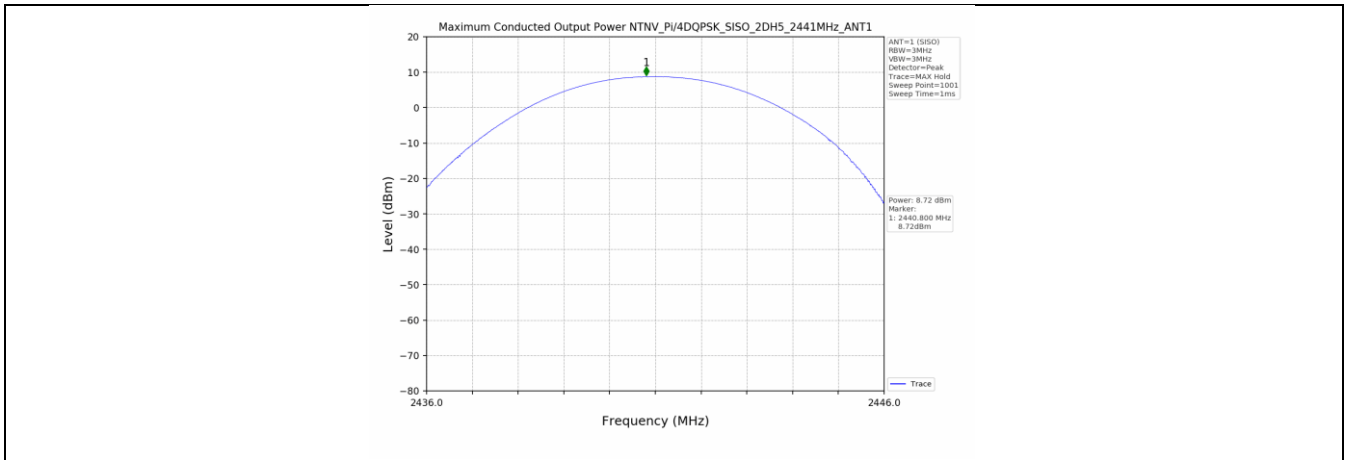
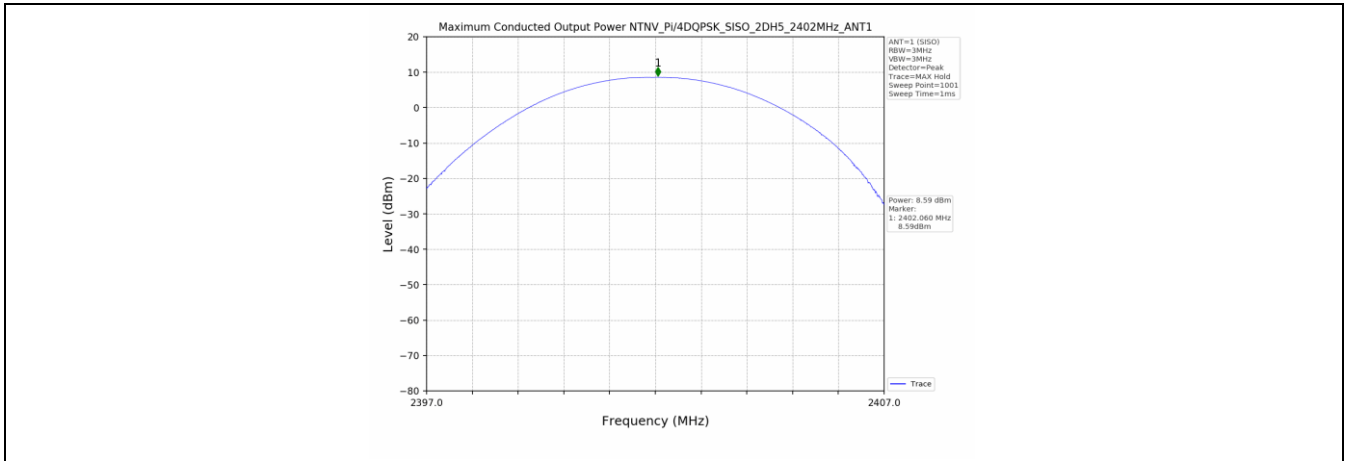
### 2.1 Test Result

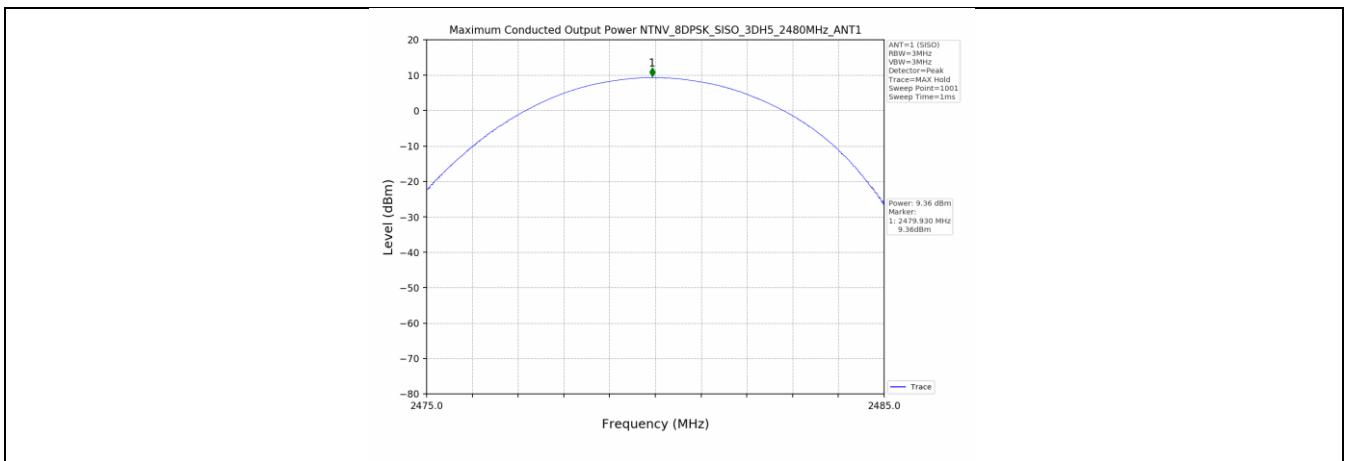
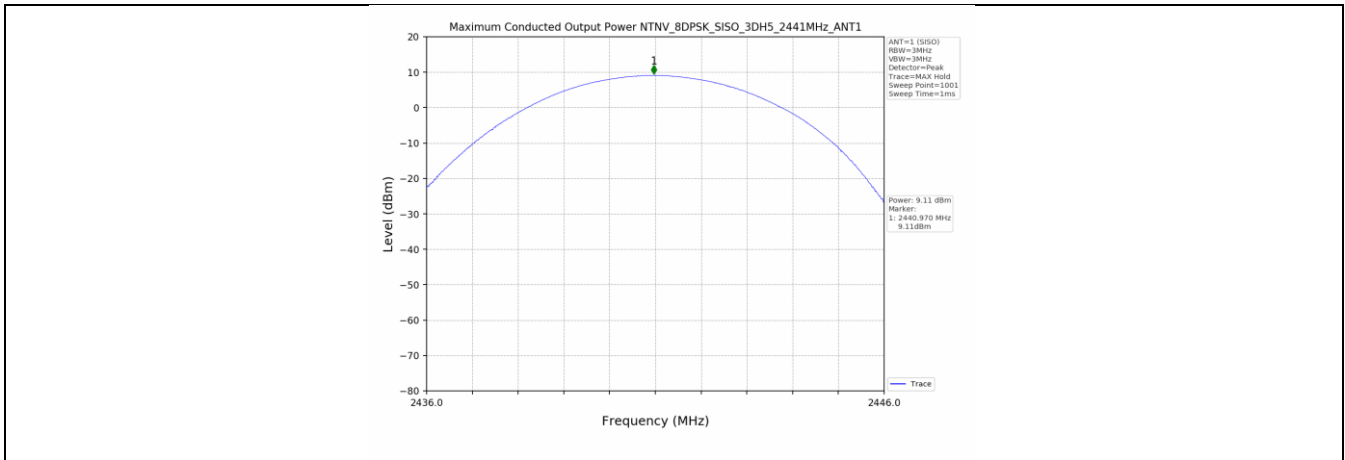
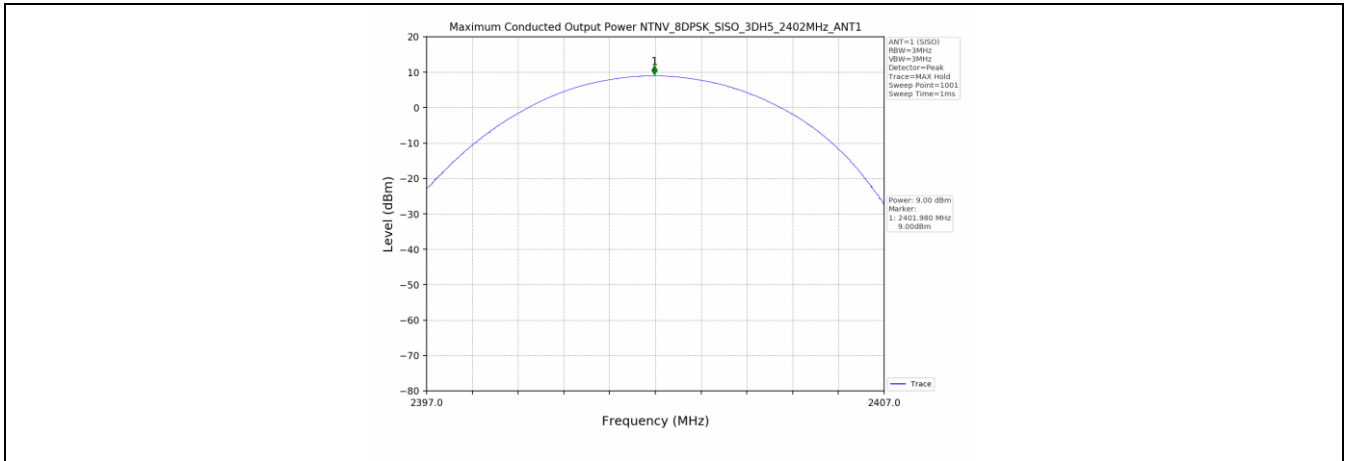
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
GFSK	2402	SISO	8.82	30	PASS
	2441	SISO	8.95	30	PASS
	2480	SISO	9.18	30	PASS
$\pi/4$ -DQPSK	2402	SISO	8.59	20.97	PASS
	2441	SISO	8.72	20.97	PASS
	2480	SISO	8.97	20.97	PASS
8-DPSK	2402	SISO	9.00	20.97	PASS
	2441	SISO	9.11	20.97	PASS
	2480	SISO	9.36	20.97	PASS



## 2.2 Test Graph





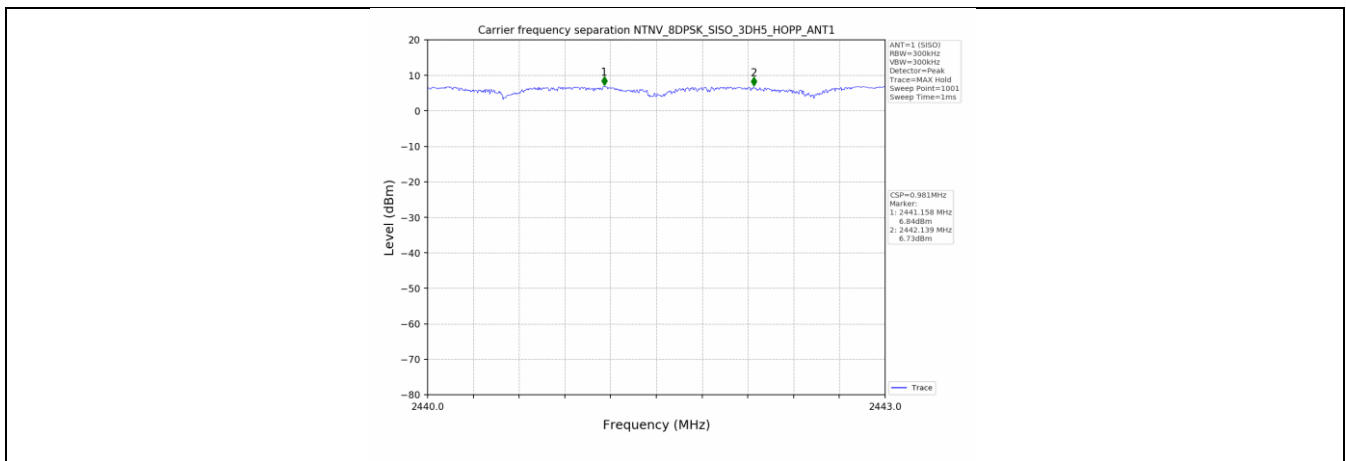
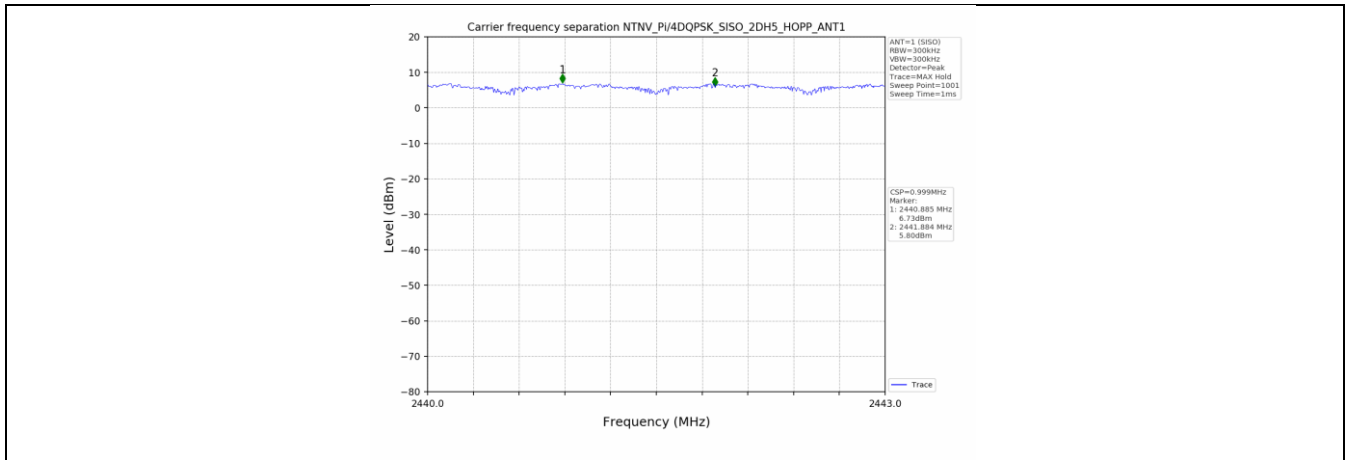
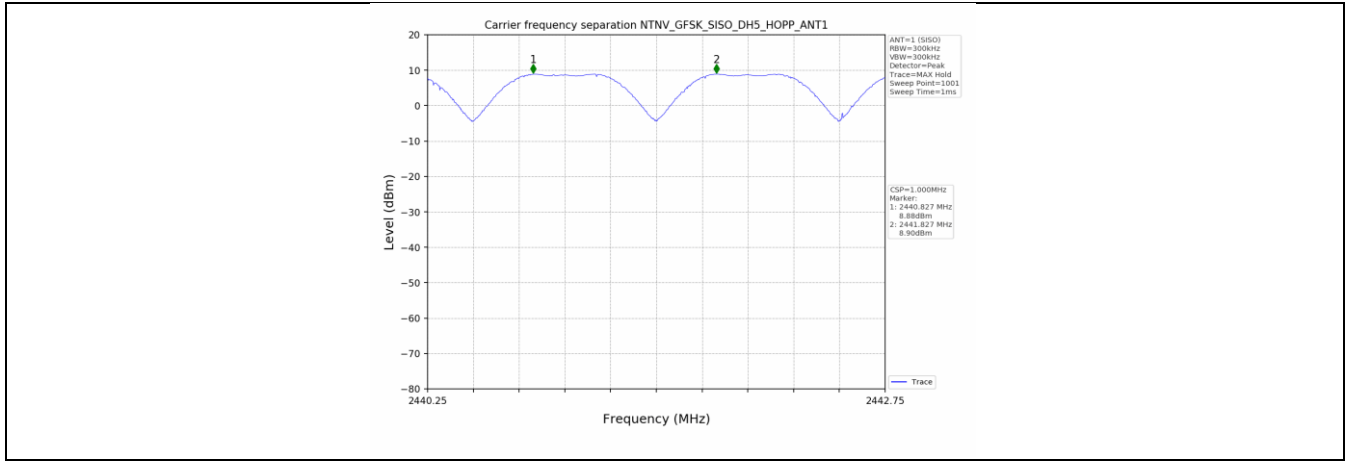


### 3. Carrier frequency separation

#### 3.1 Test Result

Test Mode	TX Type	ANT No.	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limits (MHz)	Verdict
GFSK	SISO	1	1.000	0.956	$\geq 0.956$	PASS
$\pi/4$ -DQPSK	SISO	1	0.999	1.294	$\geq 0.863$	PASS
8-DPSK	SISO	1	0.981	1.308	$\geq 0.872$	PASS

### 3.2 Test Graph

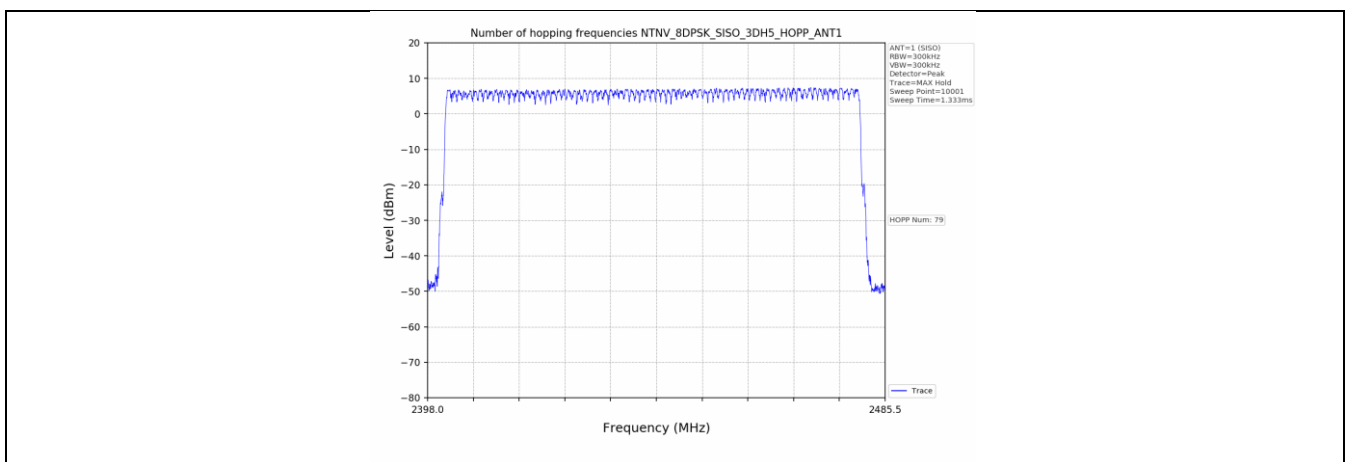
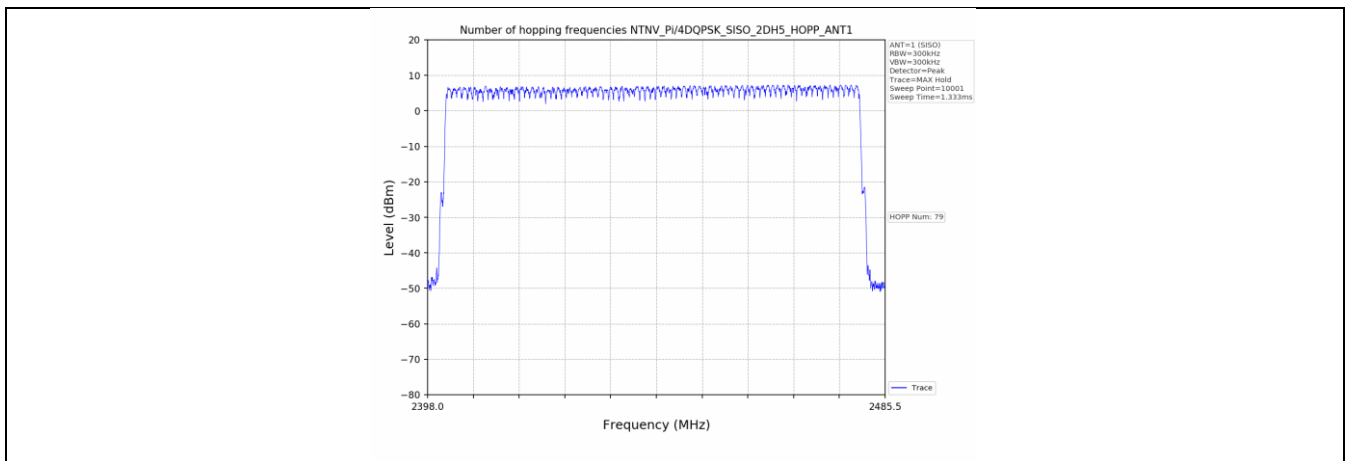
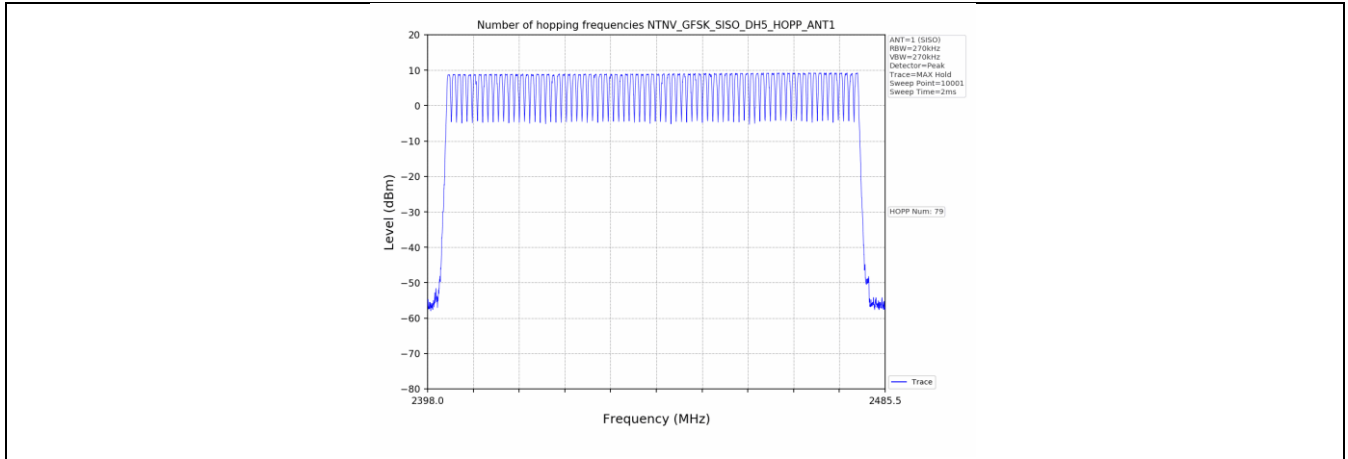


## 4. Number of hopping frequencies

### 4.1 Test Result

Test Mode	TX Type	ANT No.	Num of Hopping Frequencies	Limits	Verdict
GFSK	SISO	1	79	≥15	PASS
π/4-DQPSK	SISO	1	79	≥15	PASS
8-DPSK	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)	Dwell Time (ms)	Limits (ms)	Verdict
GFSK	DH1	SISO	1	0.400	31.6	128.00	≤400	PASS
	DH3	SISO	1	1.603	31.6	256.48	≤400	PASS
	DH5	SISO	1	2.815	31.6	300.27	≤400	PASS
π/4-DQPSK	2DH1	SISO	1	0.401	31.6	128.32	≤400	PASS
	2DH3	SISO	1	1.687	31.6	269.92	≤400	PASS
	2DH5	SISO	1	2.911	31.6	310.51	≤400	PASS
8-DPSK	3DH1	SISO	1	0.402	31.6	128.64	≤400	PASS
	3DH3	SISO	1	1.688	31.6	270.08	≤400	PASS
	3DH5	SISO	1	2.912	31.6	310.61	≤400	PASS

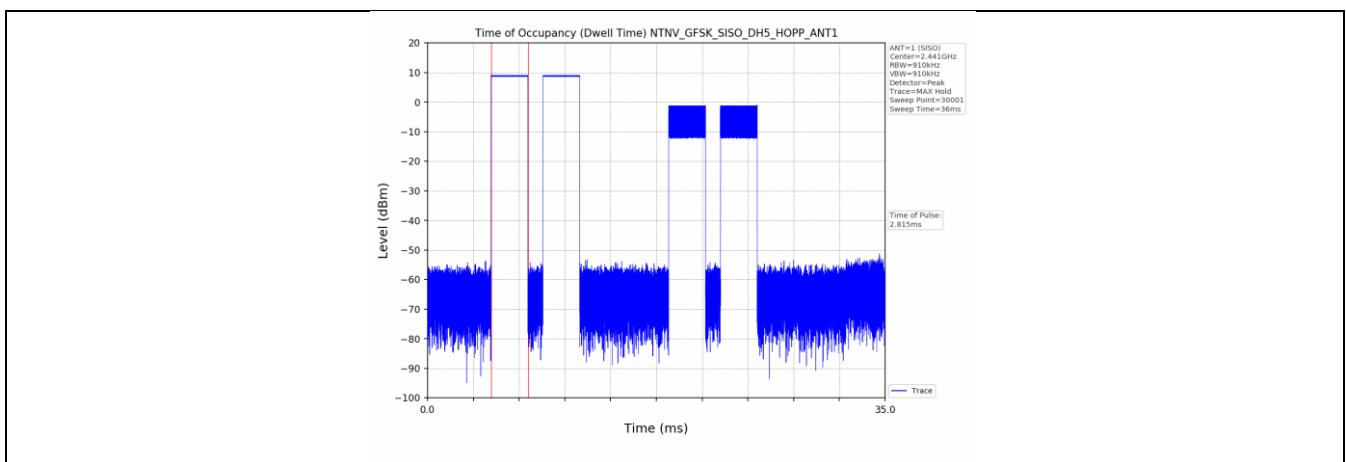
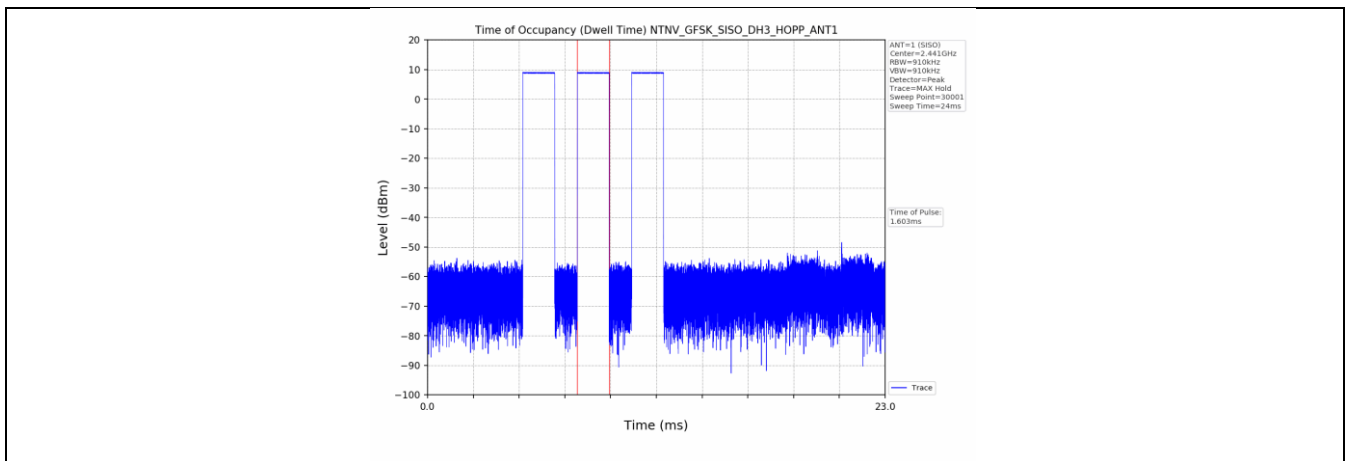
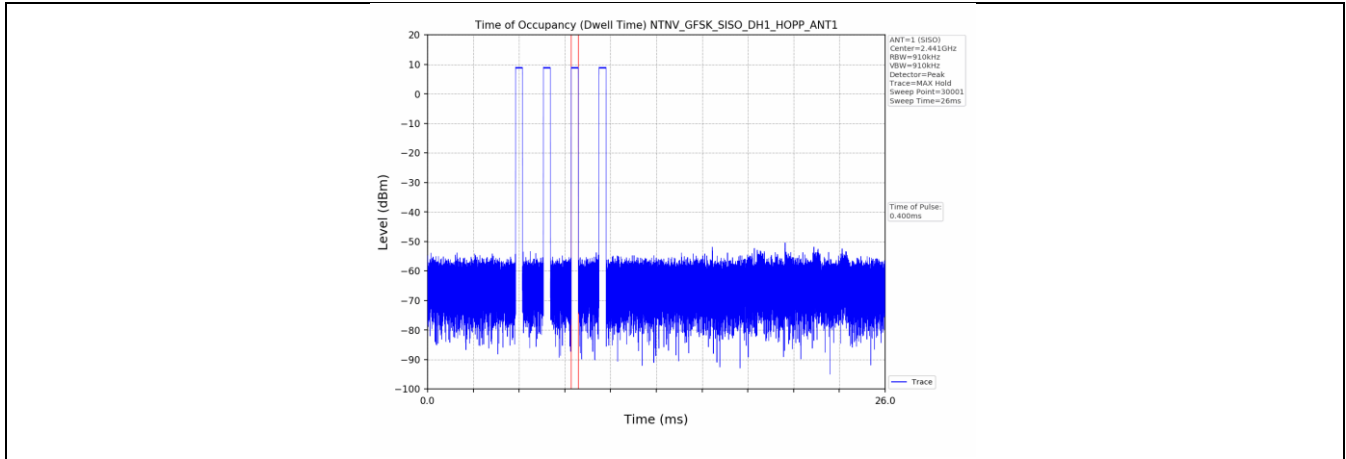
DH1/2DH1/3DH1 time slot=  $Ton(ms) * (1600 / (2 * 79)) * 31.6$

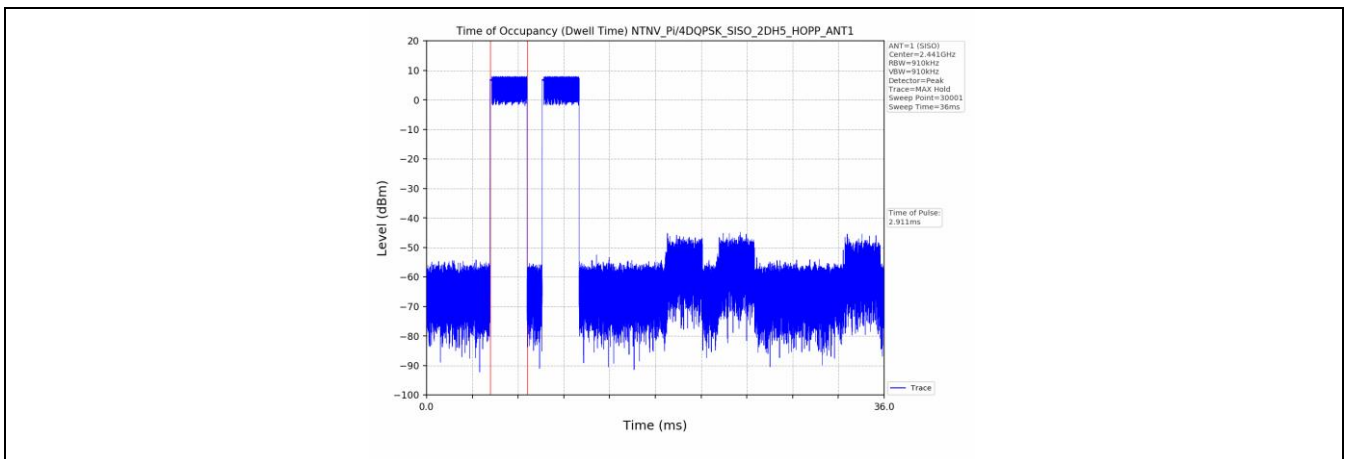
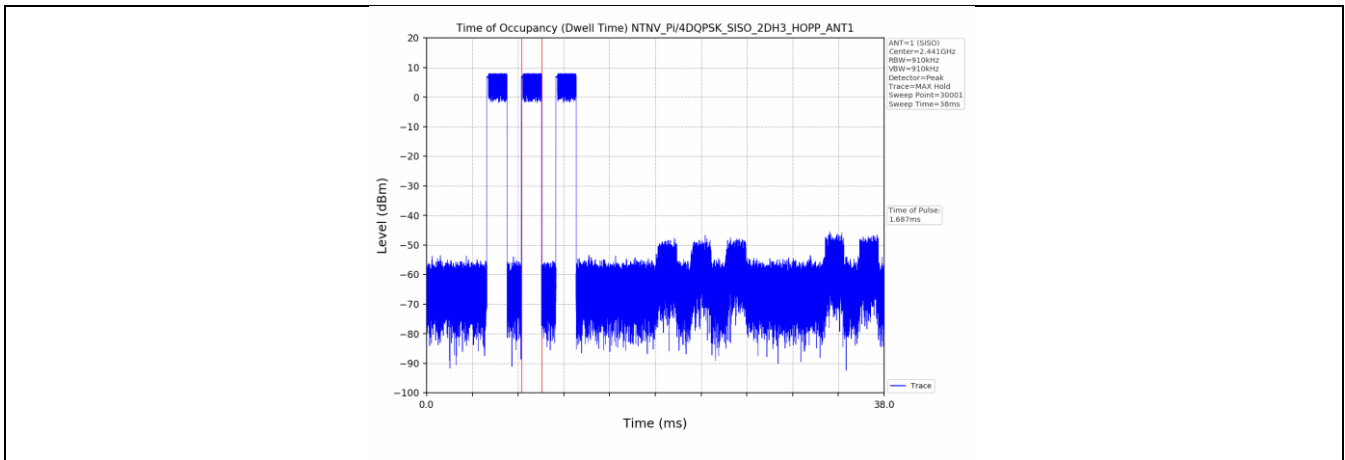
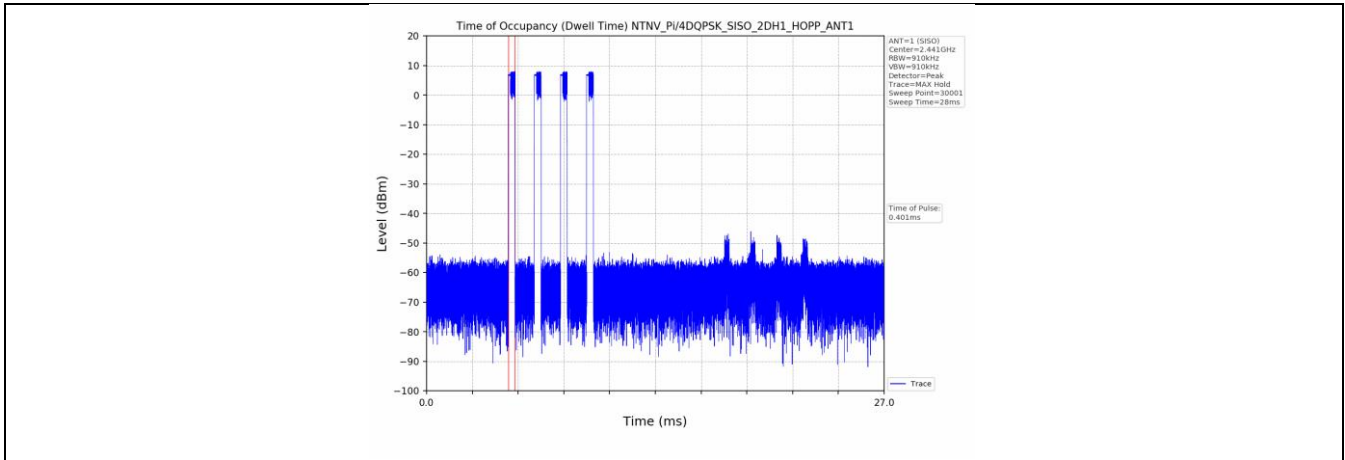
DH3/2DH3/3DH3 time slot=  $Ton (ms) * (1600 / (4 * 79)) * 31.6$

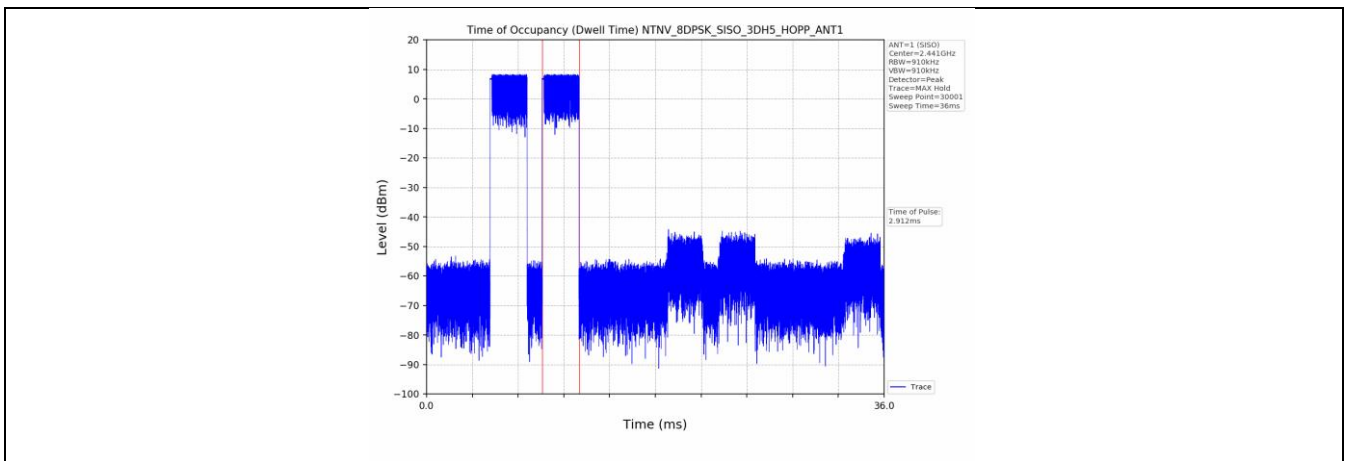
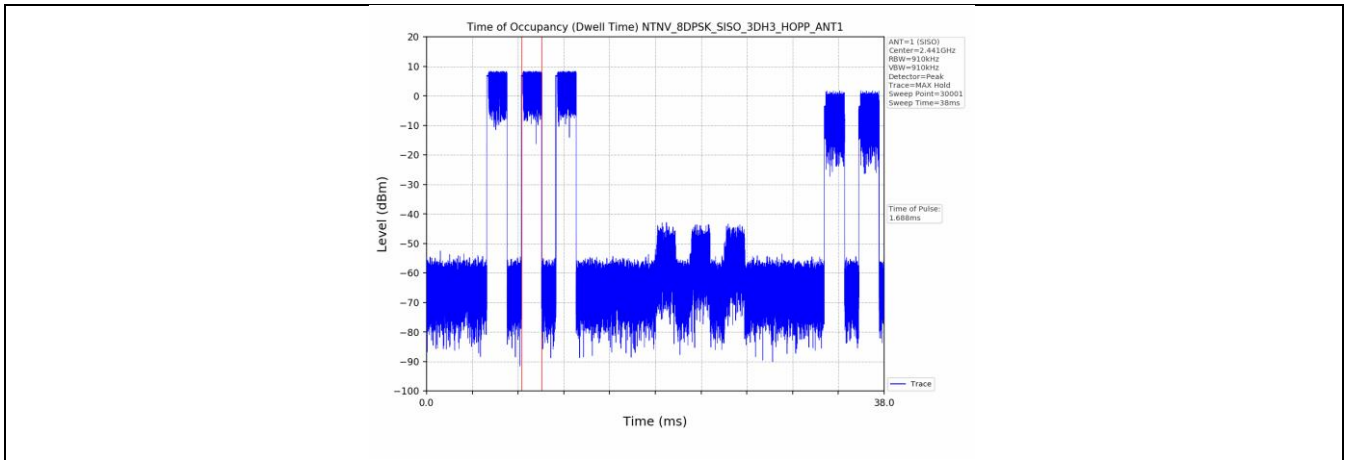
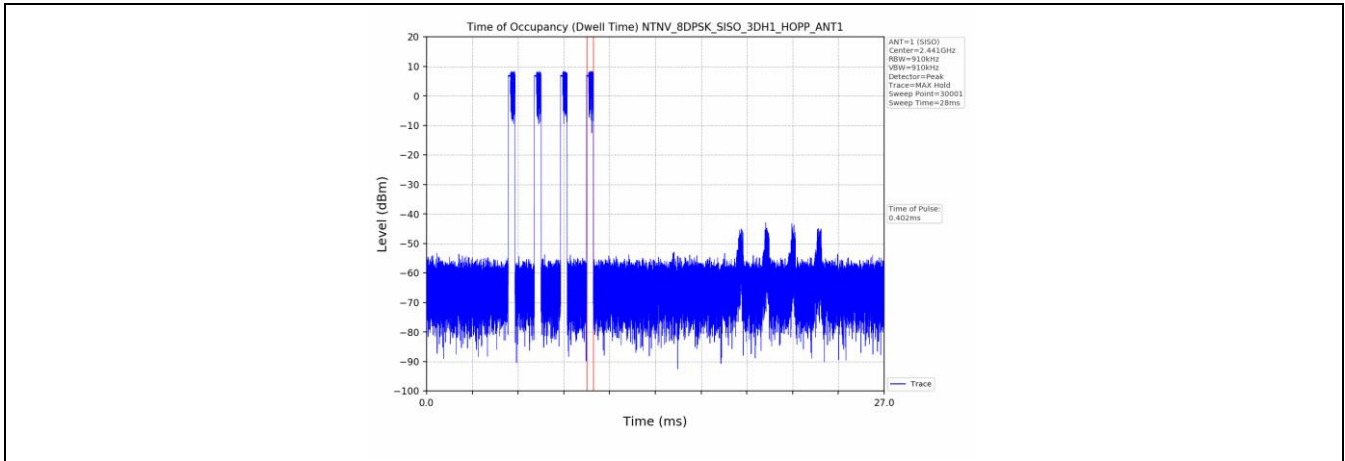
DH5/2DH5/3DH5 time slot=  $Ton (ms) * (1600 / (6 * 79)) * 31.6$



## 5.2 Test Graph





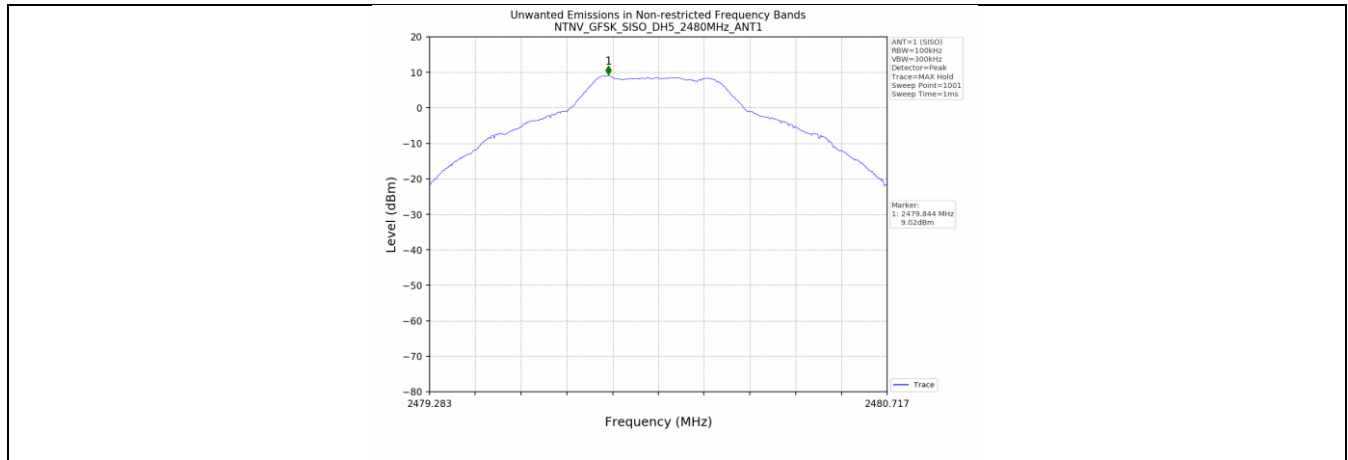


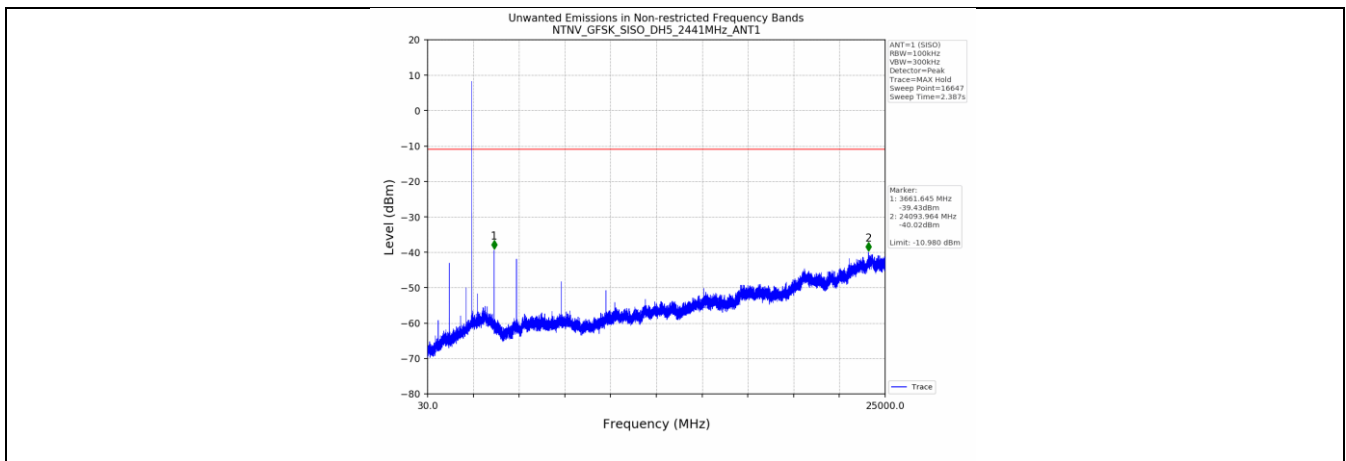
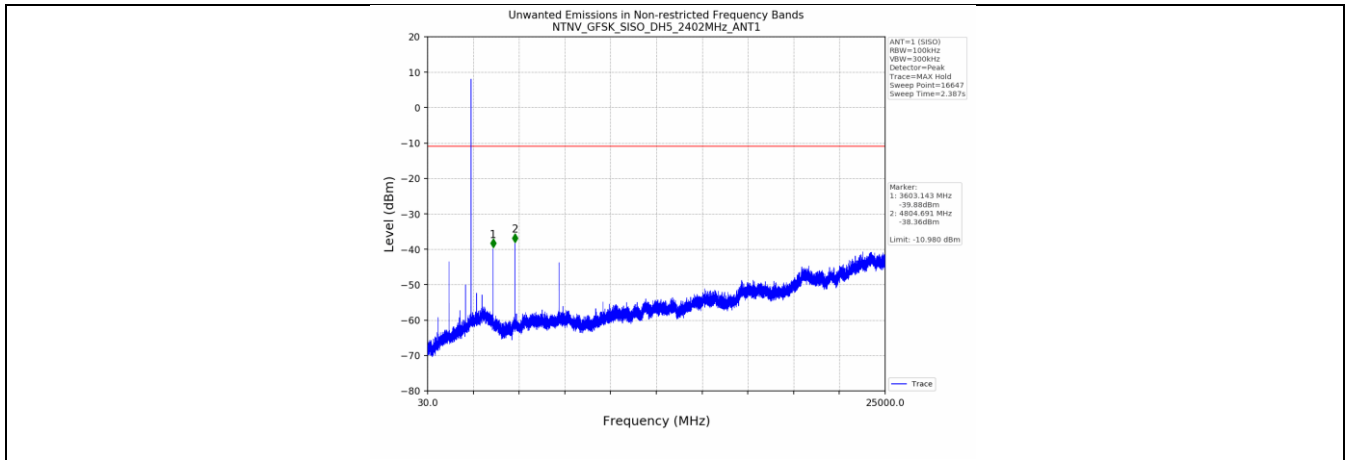
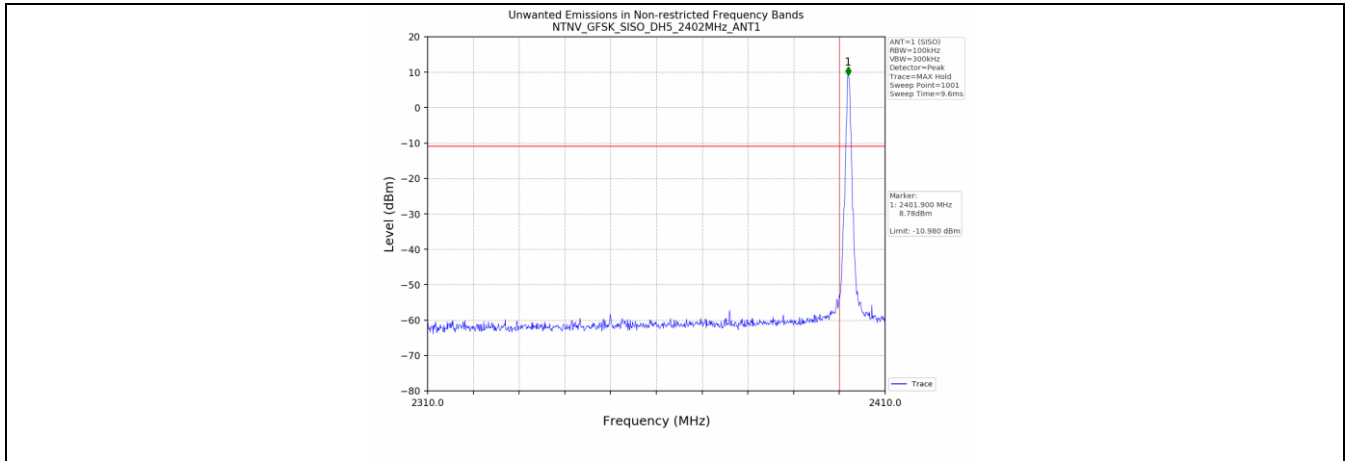
## 6. Unwanted Emissions in Non-restricted Frequency Bands

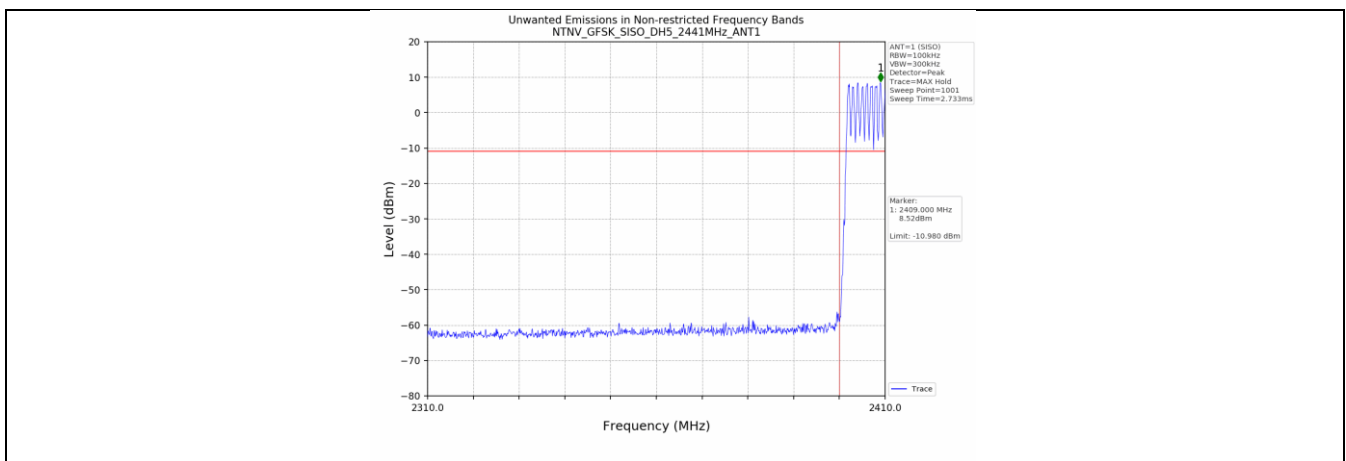
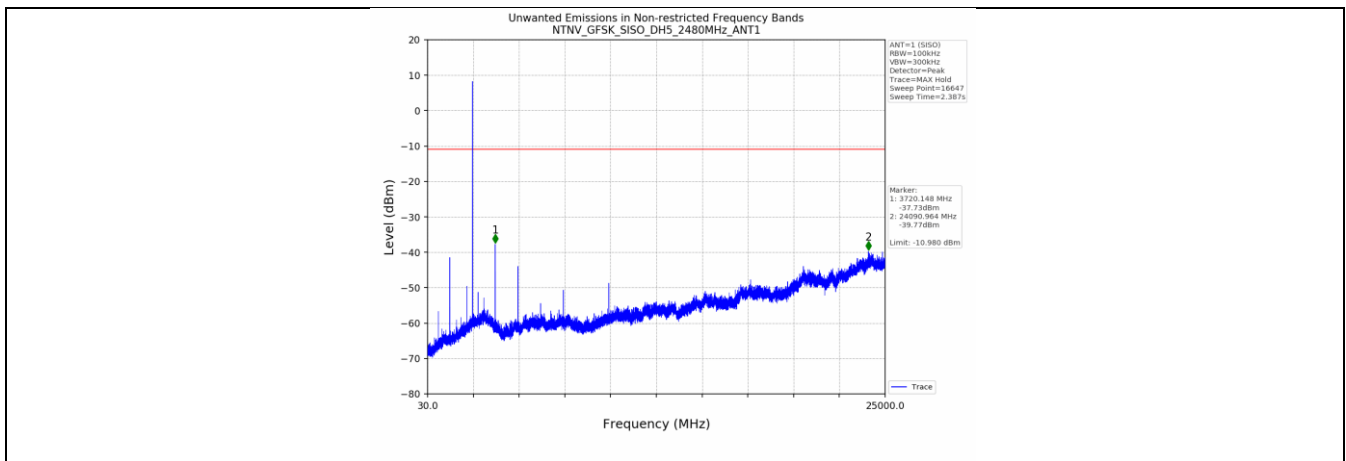
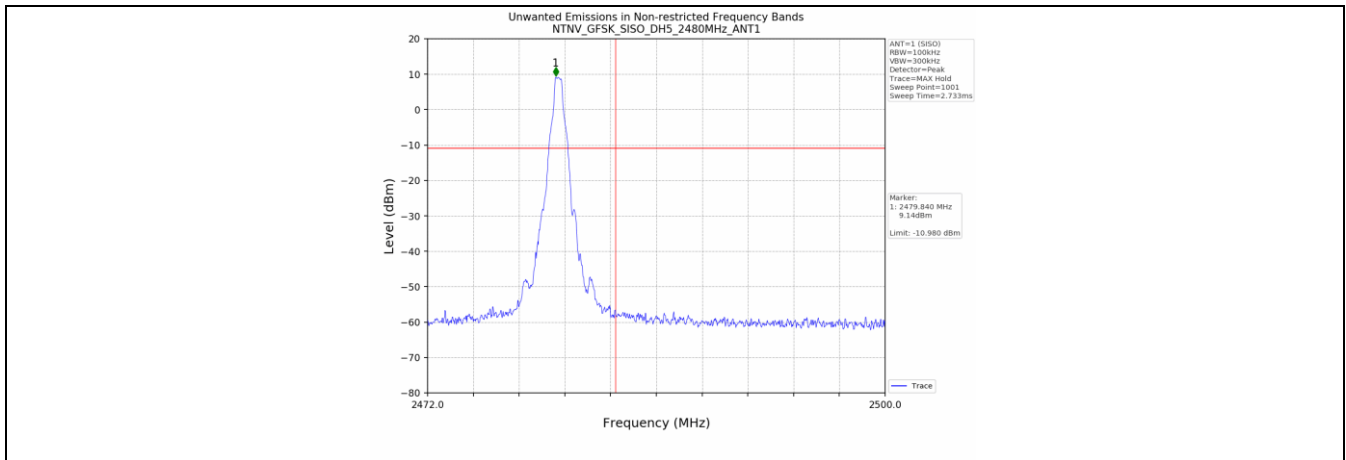
### 6.1 Test Result

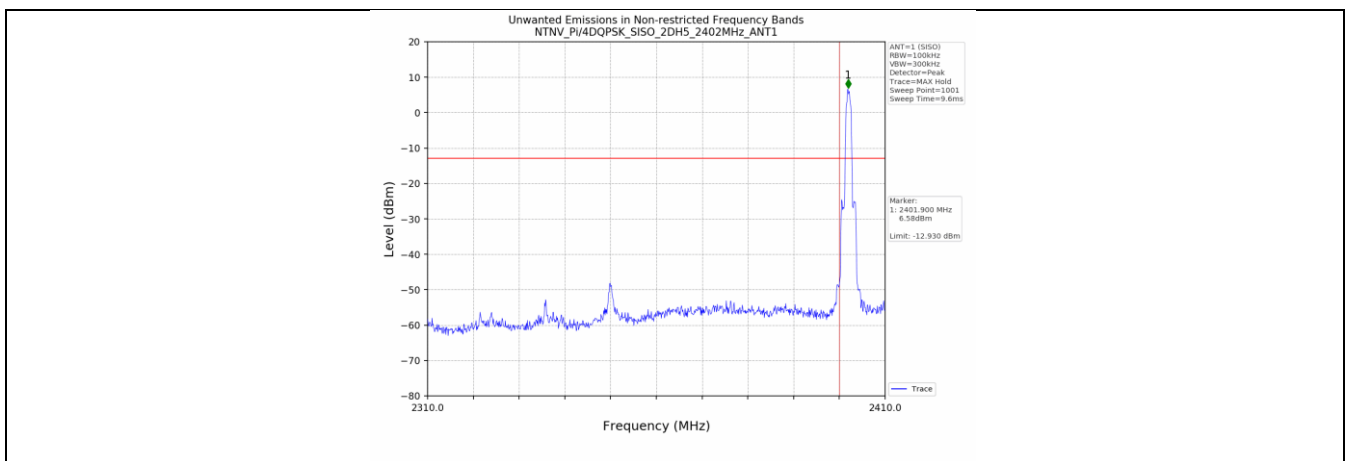
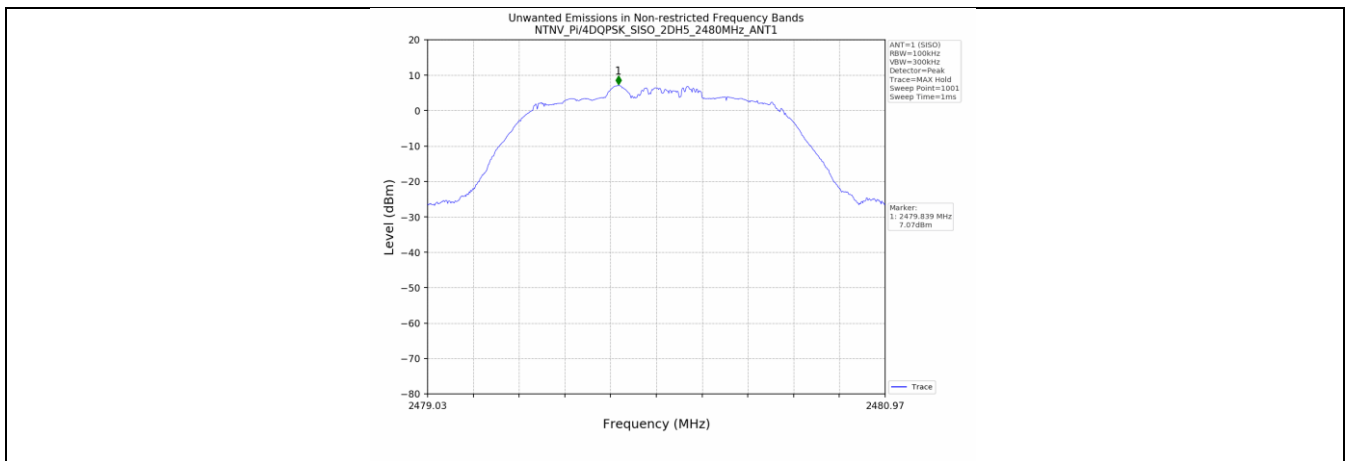
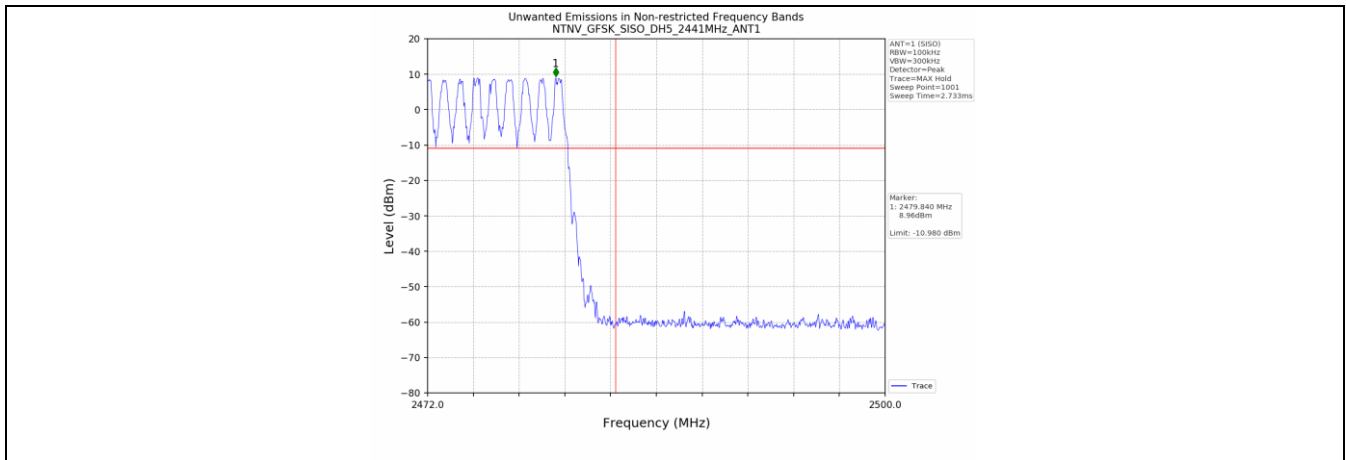
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
GFSK	2402	SISO	1	Refer to test graph	-10.98	PASS
	2441	SISO	1	Refer to test graph	-10.98	PASS
	2480	SISO	1	Refer to test graph	-10.98	PASS
	Hopping	SISO	1	Refer to test graph	-10.98	PASS
$\pi/4$ -DQPSK	2402	SISO	1	Refer to test graph	-12.93	PASS
	2441	SISO	1	Refer to test graph	-12.93	PASS
	2480	SISO	1	Refer to test graph	-12.93	PASS
	Hopping	SISO	1	Refer to test graph	-12.93	PASS
8-DPSK	2402	SISO	1	Refer to test graph	-12.92	PASS
	2441	SISO	1	Refer to test graph	-12.92	PASS
	2480	SISO	1	Refer to test graph	-12.92	PASS
	Hopping	SISO	1	Refer to test graph	-12.92	PASS

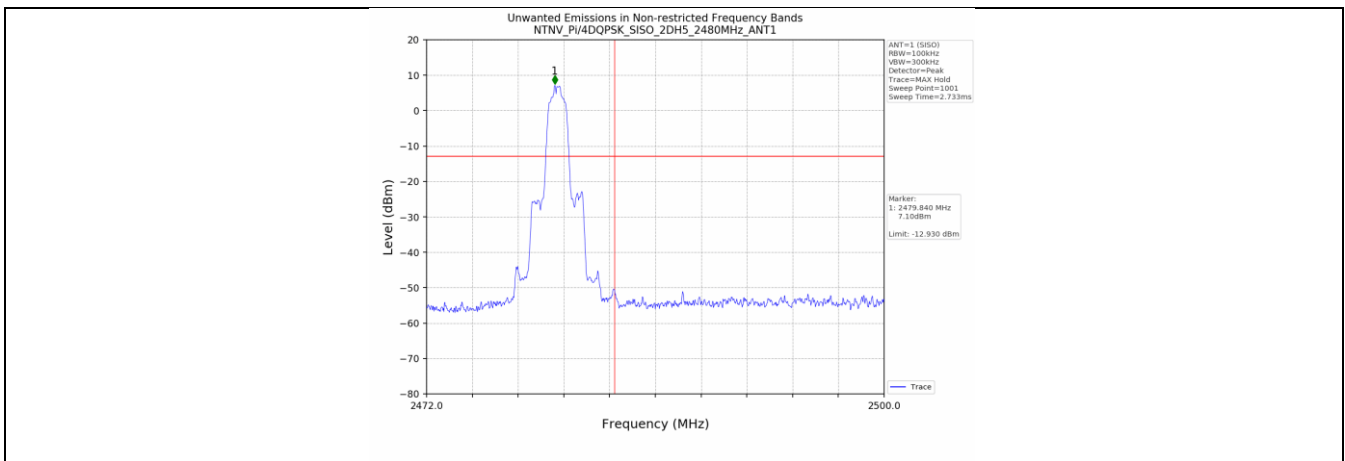
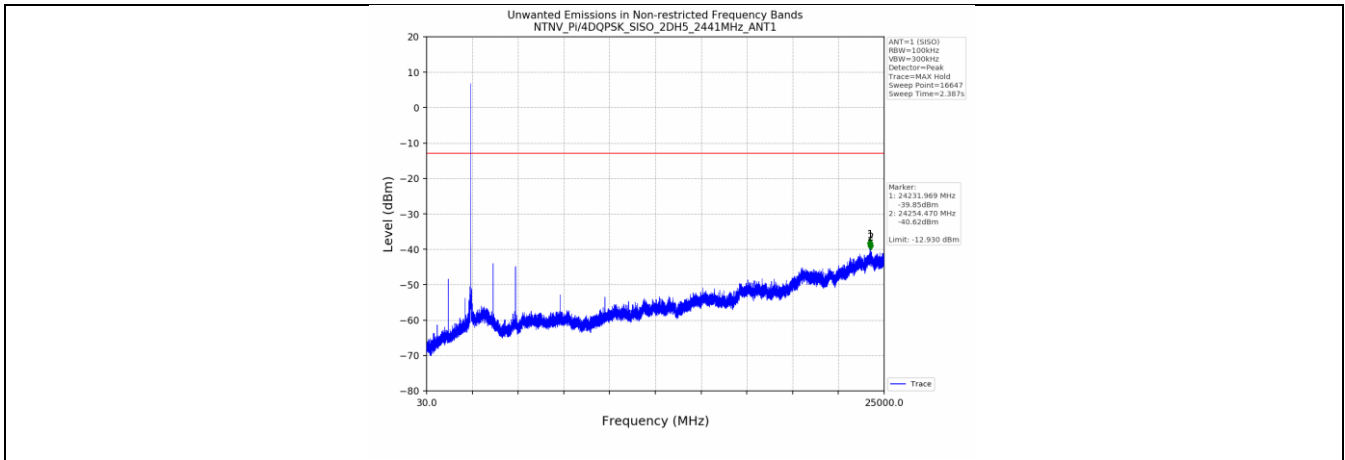
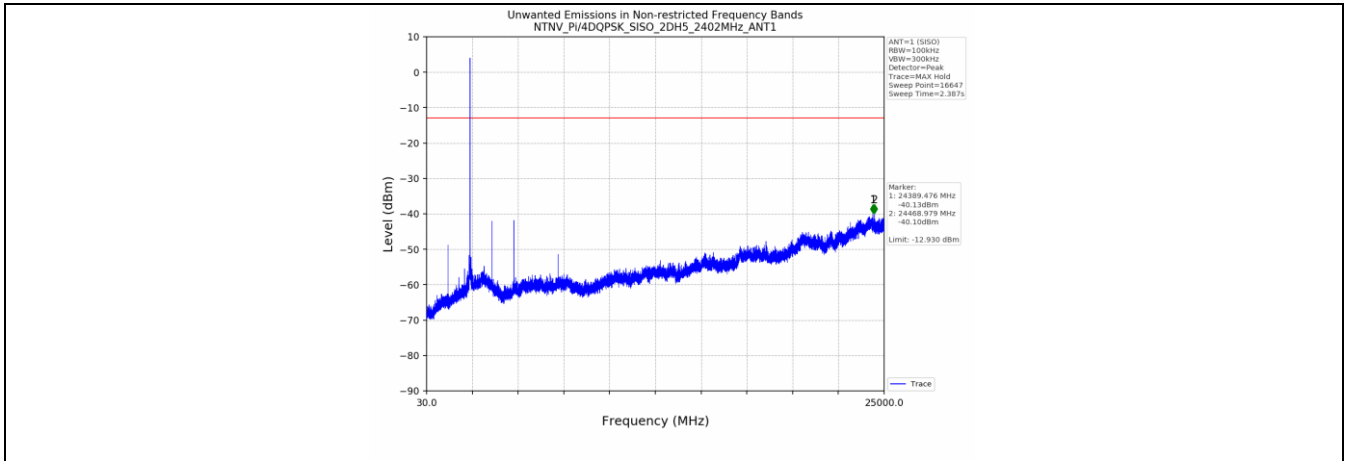
### 6.2 Test Graph



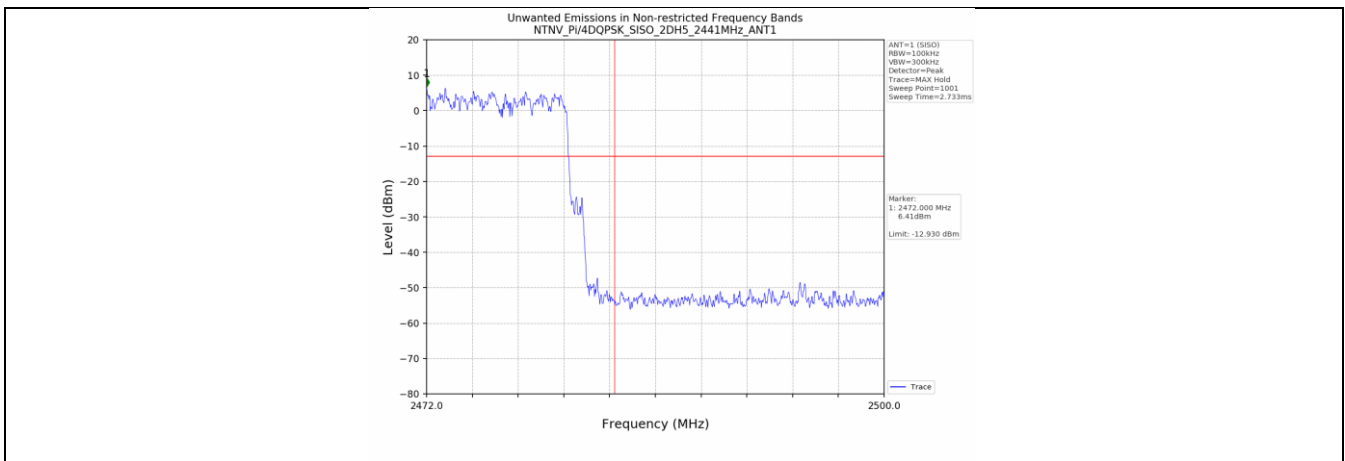
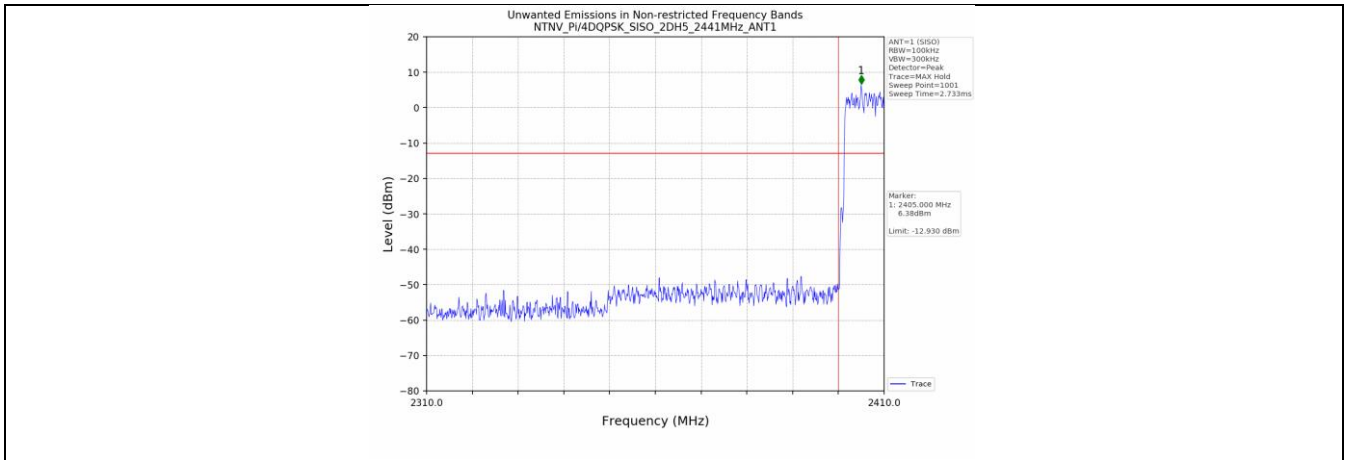
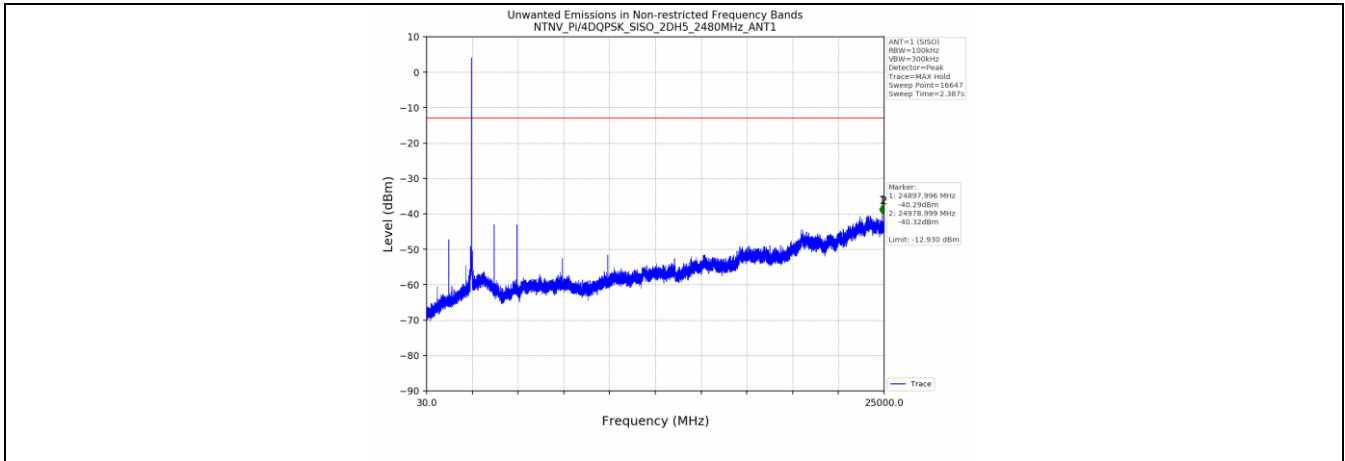


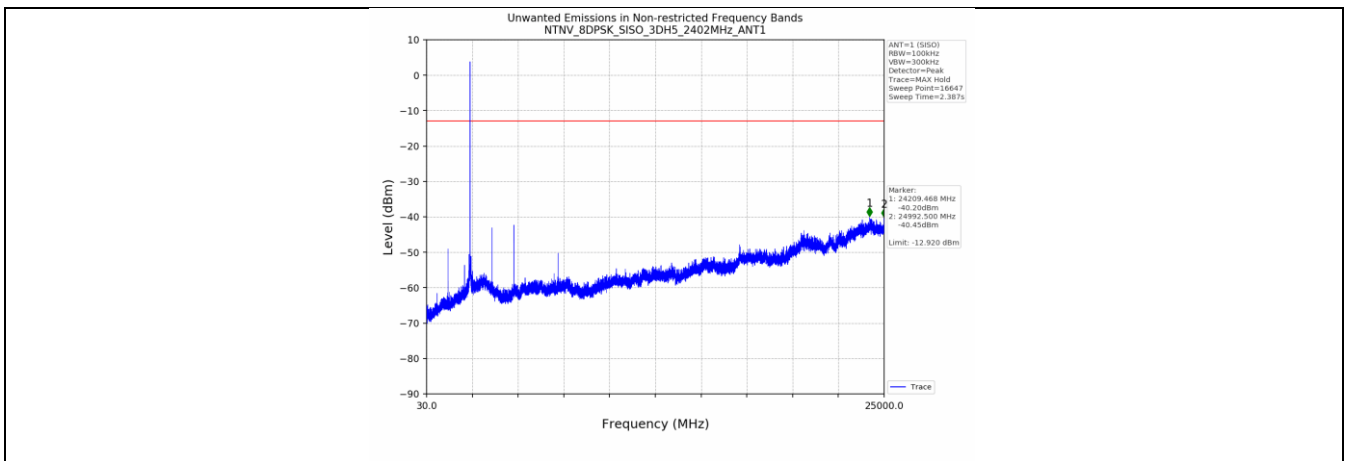
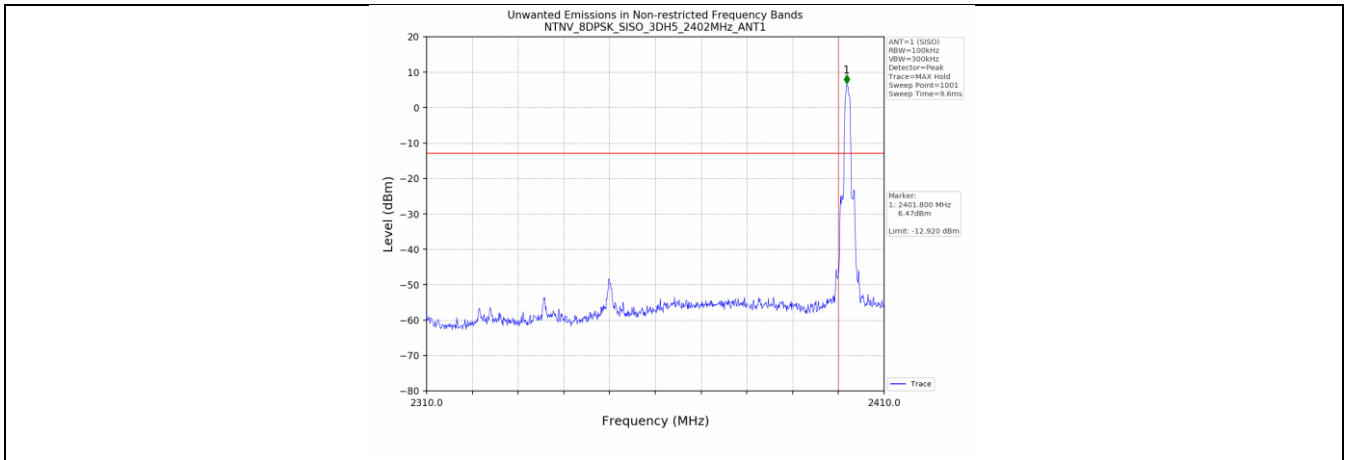
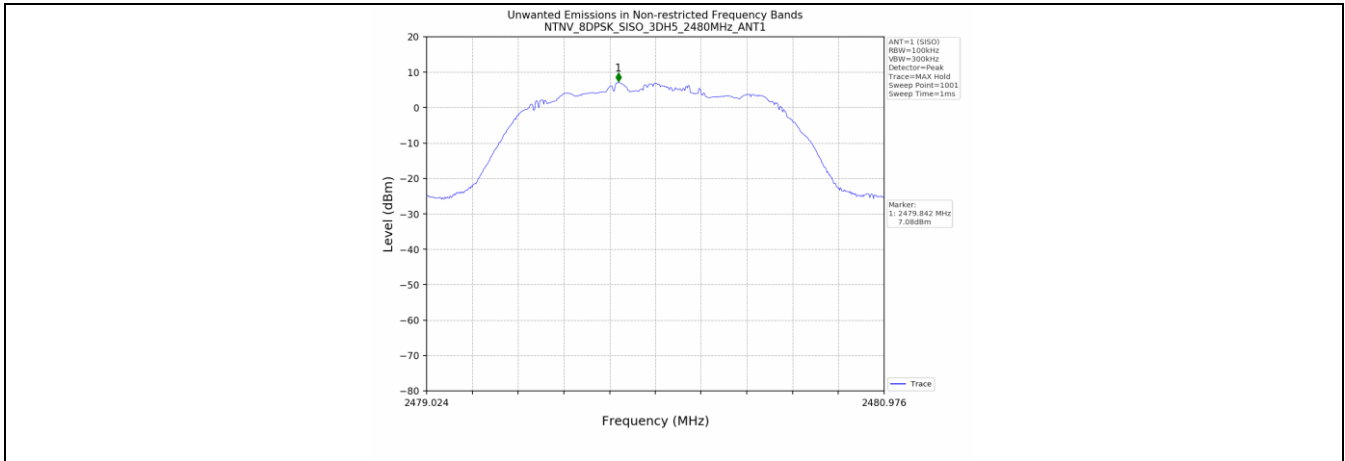


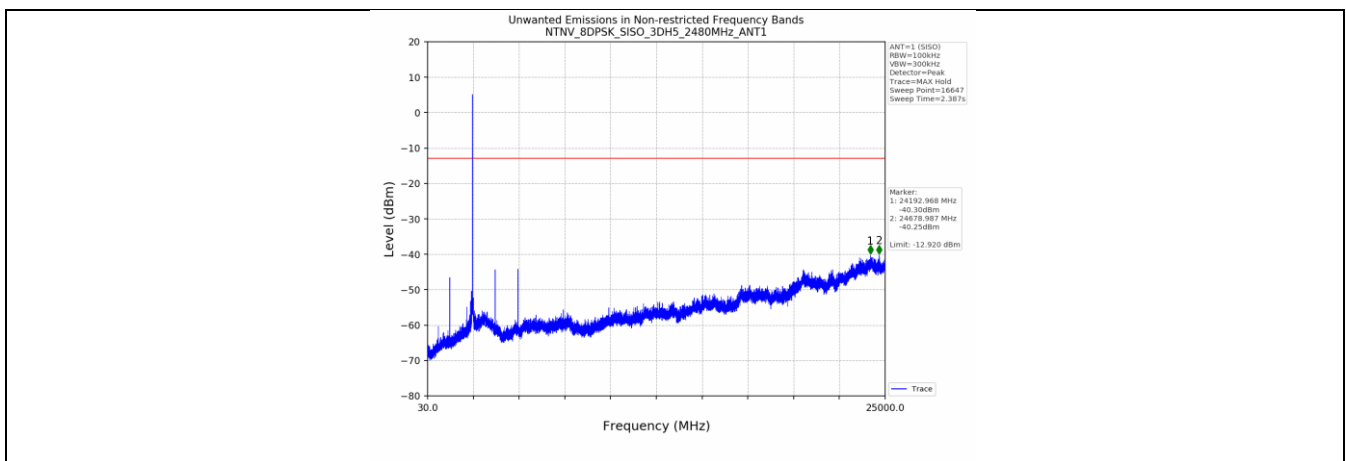
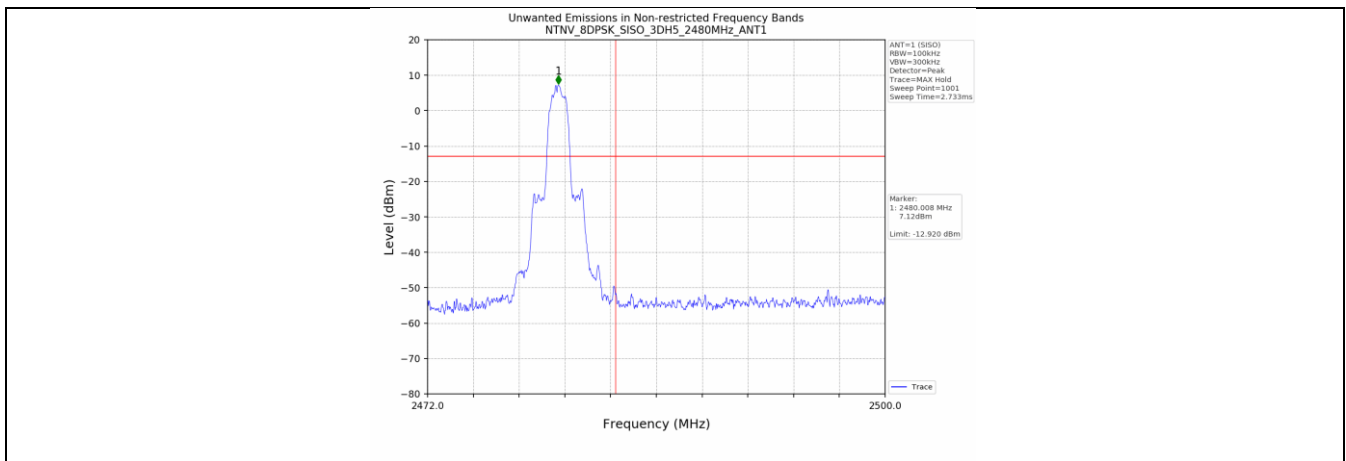
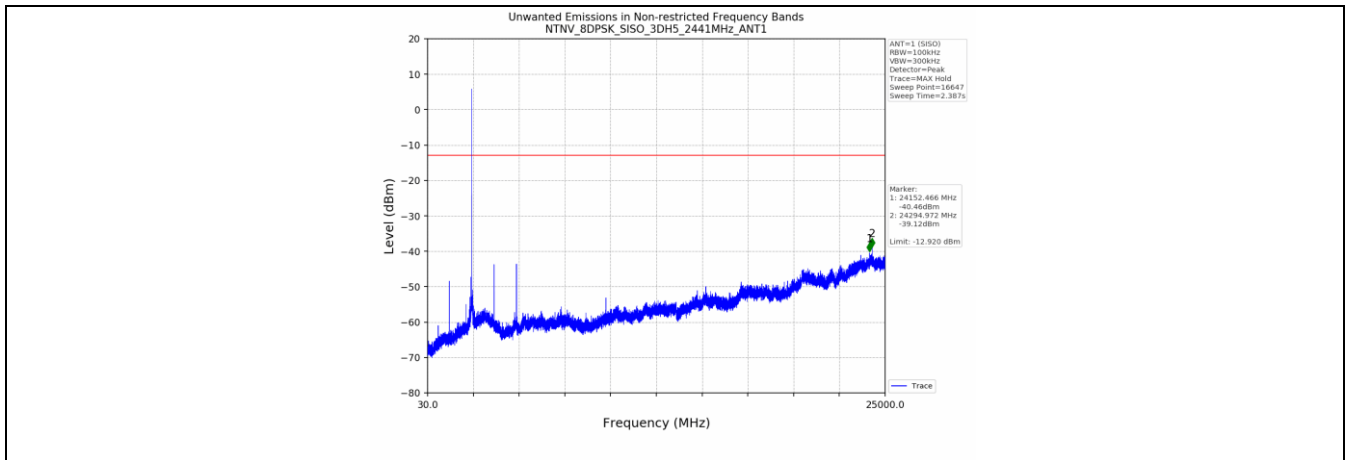


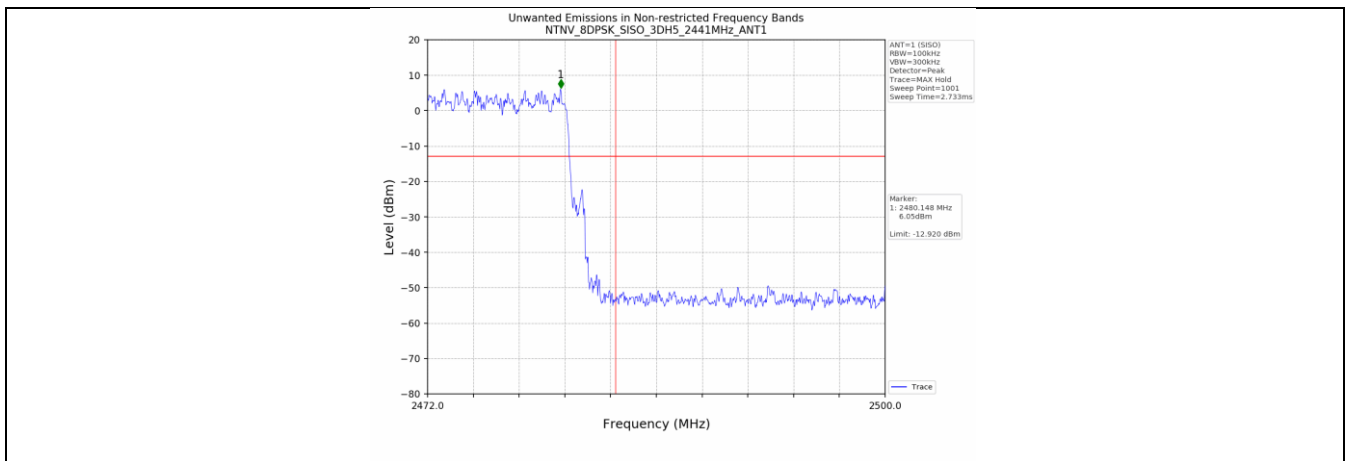
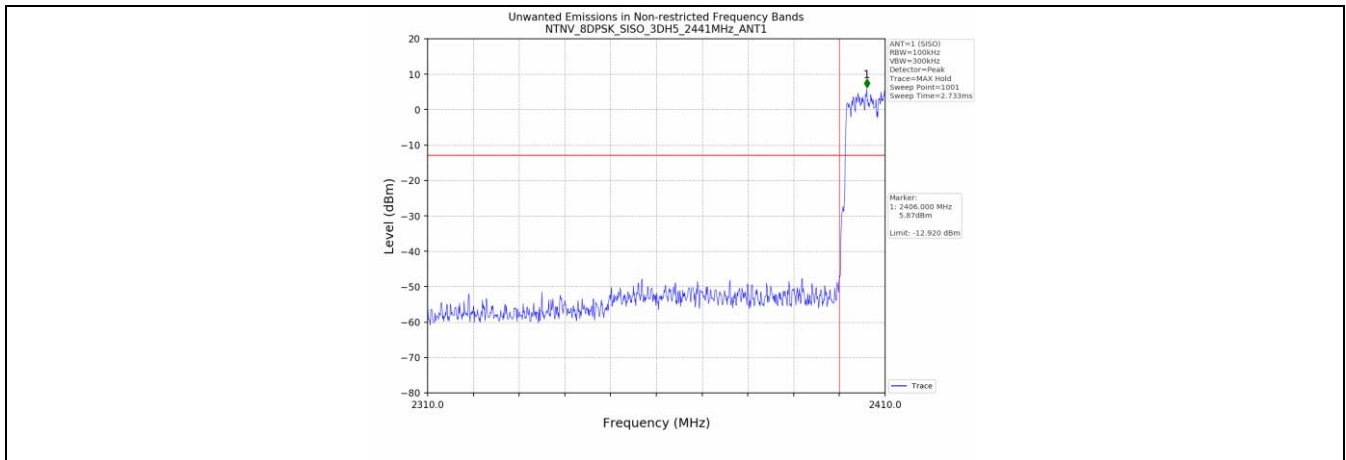












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