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## Appendix A for SHEM210300243501CR-BT-L

#### 1. Bandwidth

#### 1.1 Test Result

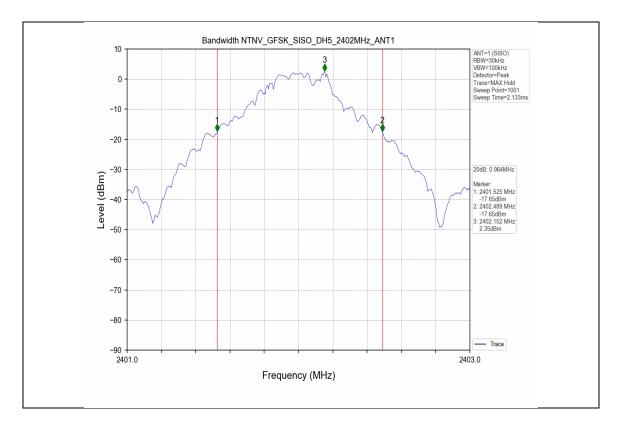
Test Mode	Frequency	TX Type	ANT No.	20dB Bandwidth	Verdict	
	(MHz)			Test Result (MHz)		
	2402	SISO	1	0.964	PASS	
GFSK	2441	SISO	1	0.961	PASS	
	2480	SISO	1	0.963	PASS	
	2402	SISO	1	1.234	PASS	
Pi/4DQPSK	2441	SISO	1	1.234	PASS	
	2480	SISO	1	1.253	PASS	
	2402	SISO	1	1.277	PASS	
8DPSK	2441	SISO	1	1.280	PASS	
	2480	SISO	1	1.277	PASS	

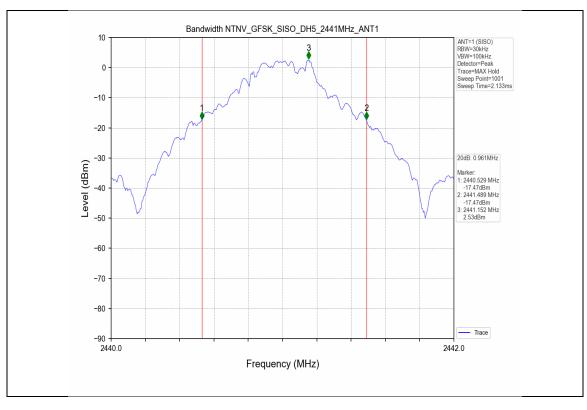
Test Mode	Frequency	y Ty Type	ANT No.	99% Occupied Bandwidth		
rest wode	(MHz)	TX Type		Test Res	sult (MHz)	
	2402	SISO	1	0.885	Only for Report Use	
GFSK	2441	2441 SISO 1 0.883 Only for		Only for Report Use		
	2480	SISO	1	0.884	Only for Report Use	
	2402	SISO	1	1.154	Only for Report Use	
Pi/4DQPSK	2441	SISO	1	1.156	Only for Report Use	
	2480	SISO	1 0.885 1 0.883 1 0.884 1 1.154	Only for Report Use		
8DPSK	2402	SISO	1	1.165	Only for Report Use	
	2441	SISO	1	1.165	Only for Report Use	
	2480	SISO	1	1.161	Only for Report Use	

#### 1.2 Test Graph - 20dB Bandwidth



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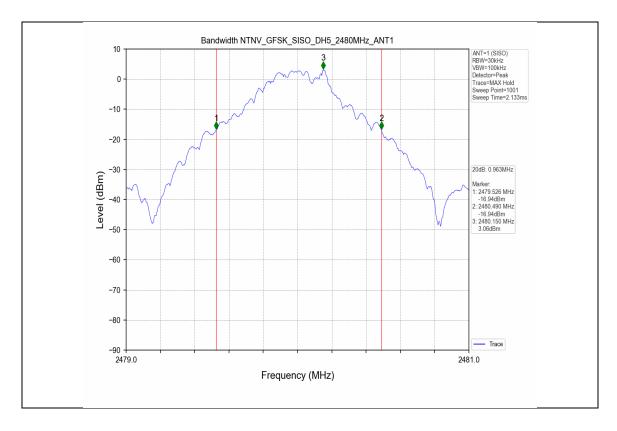


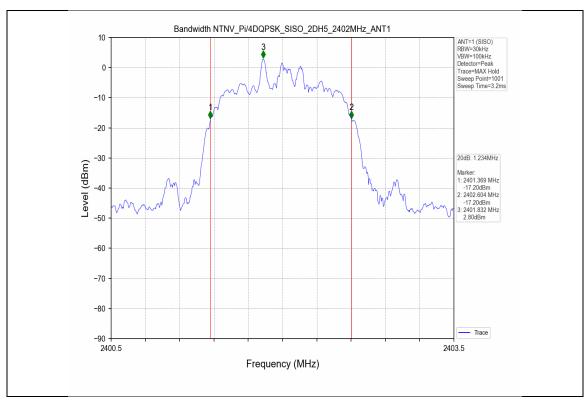


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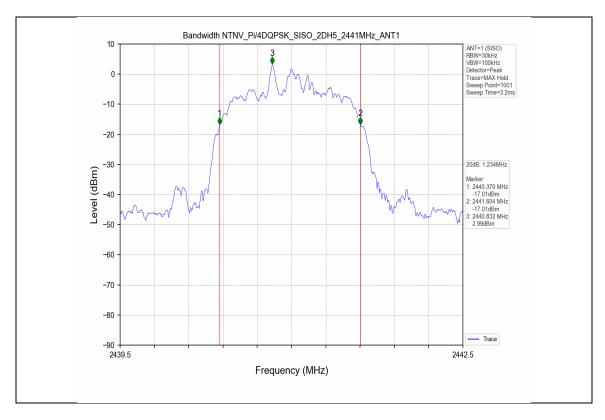
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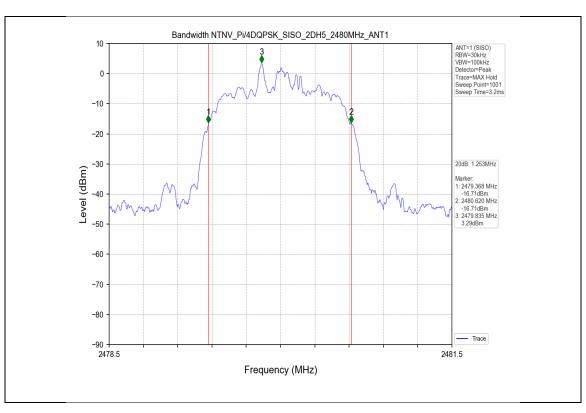






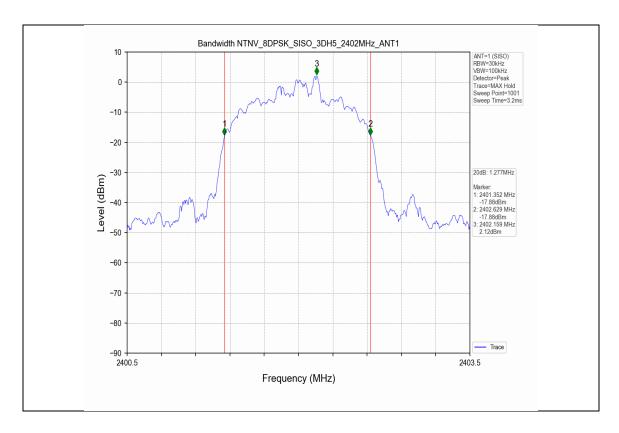
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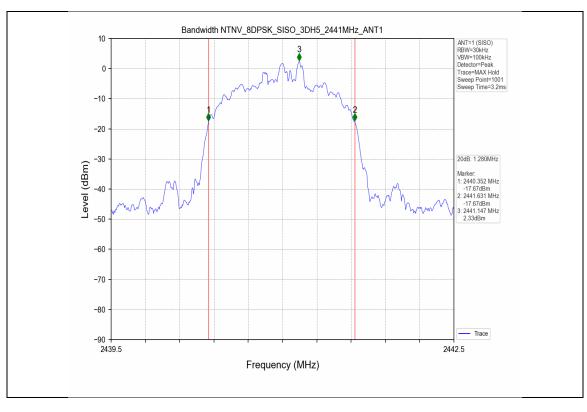




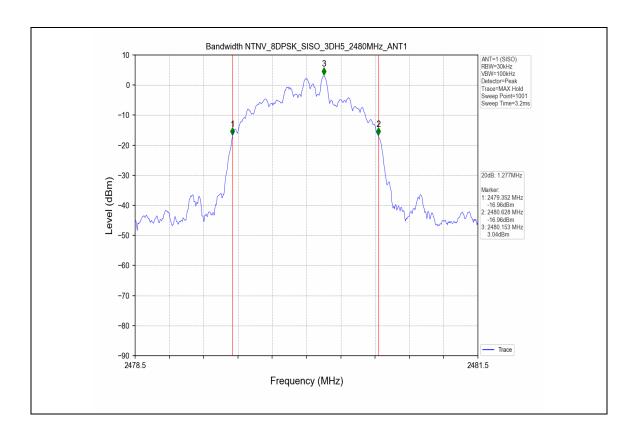


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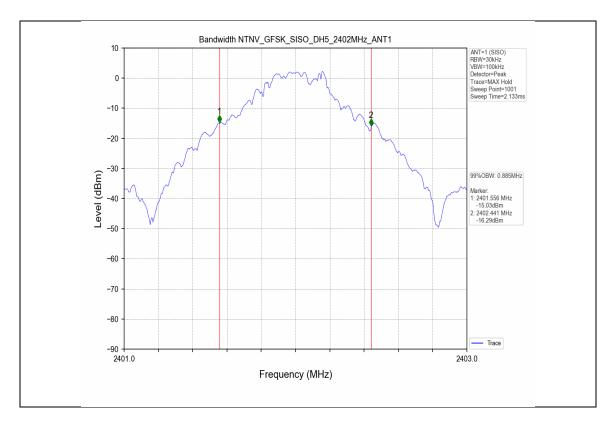
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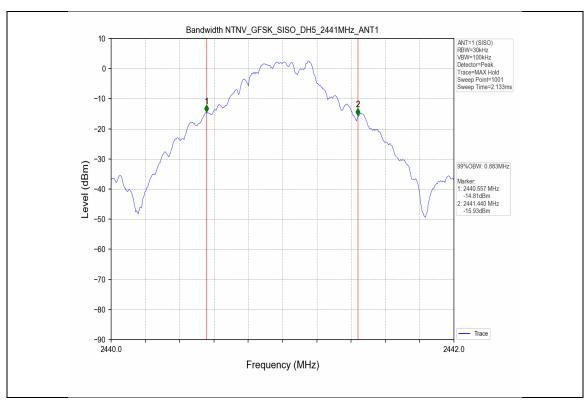


#### 1.3 Test Graph - 99% Occupied Bandwidth



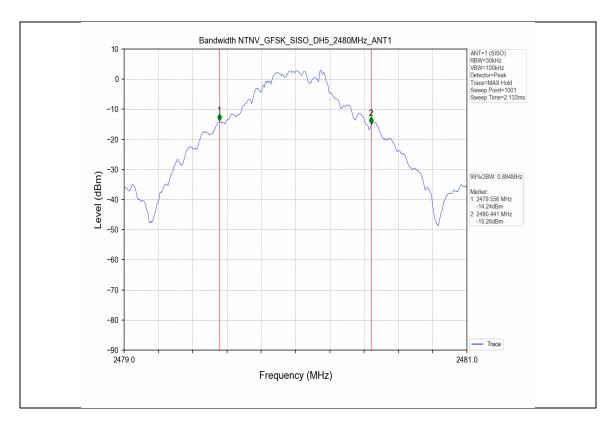
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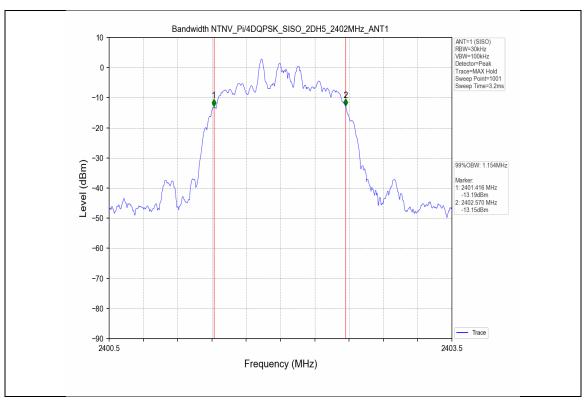






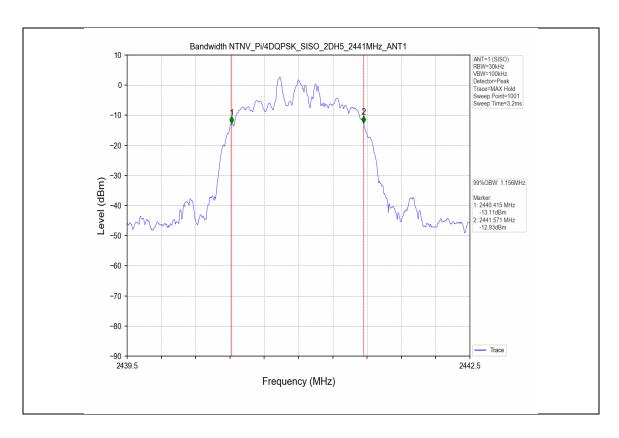
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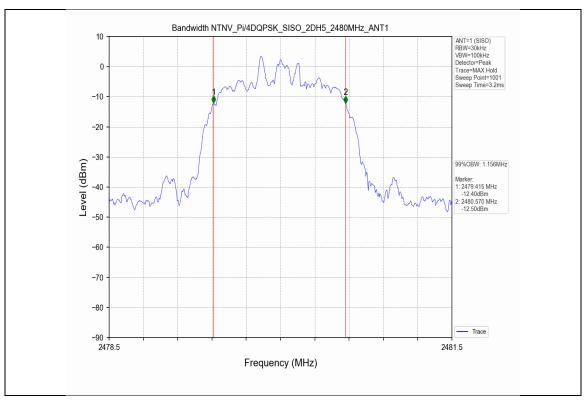






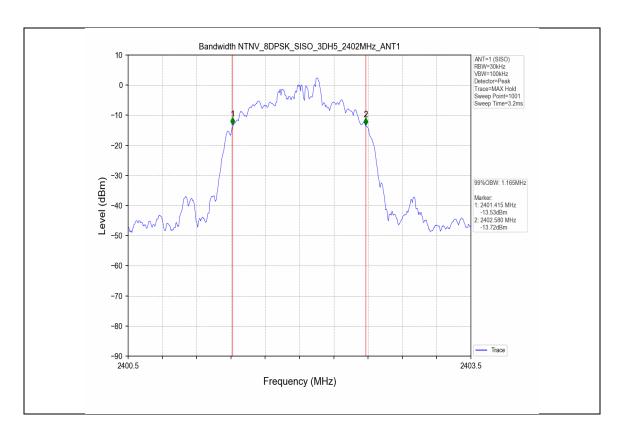
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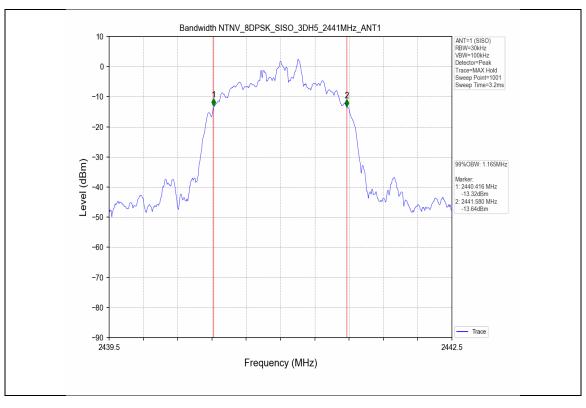






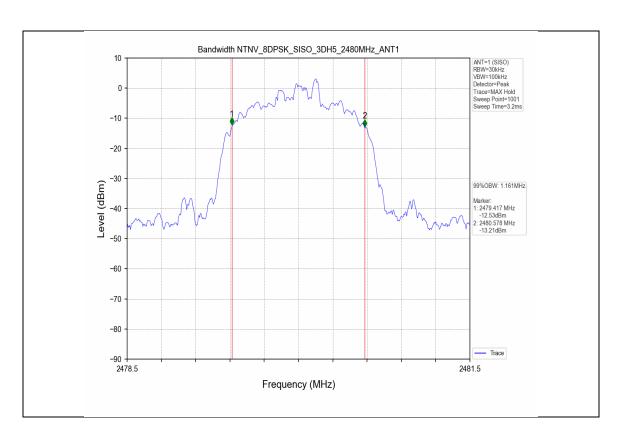
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## 2. Maximum Conducted Output Power

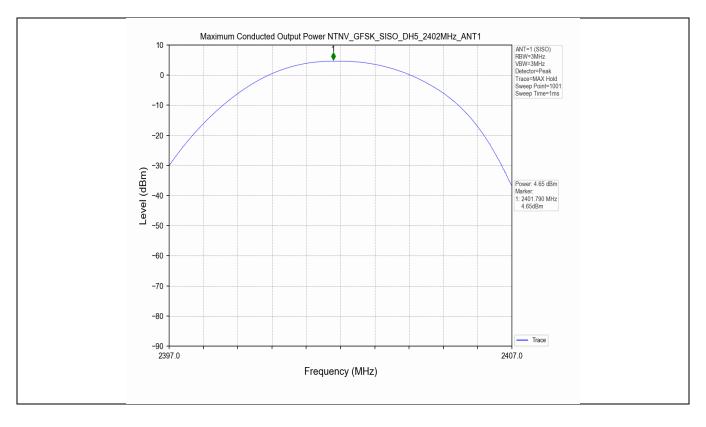
#### 2.1 Test Result

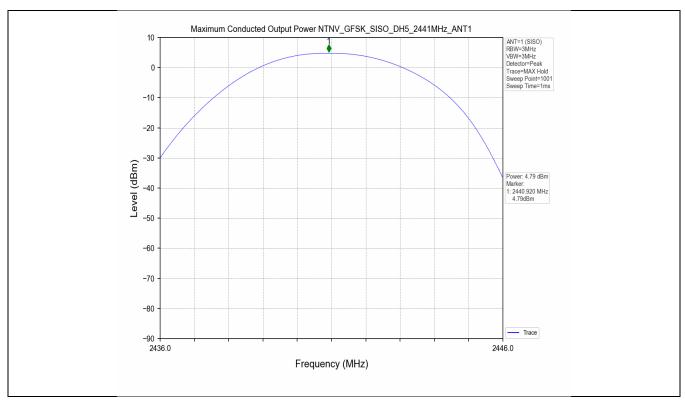
Test Mode	Frequency (MHz)	Тх Туре	Measured Peak Output Power (dBm) Ant 1	Limits (dBm)	Verdict
	2402	SISO	4.65	30	PASS
GFSK	2441	SISO	4.79	30	PASS
	2480	SISO	5.34	30	PASS
	2402	SISO	4.64	20.97	PASS
Pi/4DQPSK	2441	SISO	4.78	20.97	PASS
	2480	SISO	5.32	20.97	PASS
8DPSK	2402	SISO	4.81	20.97	PASS
	2441	SISO	4.94	20.97	PASS
	2480	SISO	5.49	20.97	PASS

#### 2.2 Test Graph



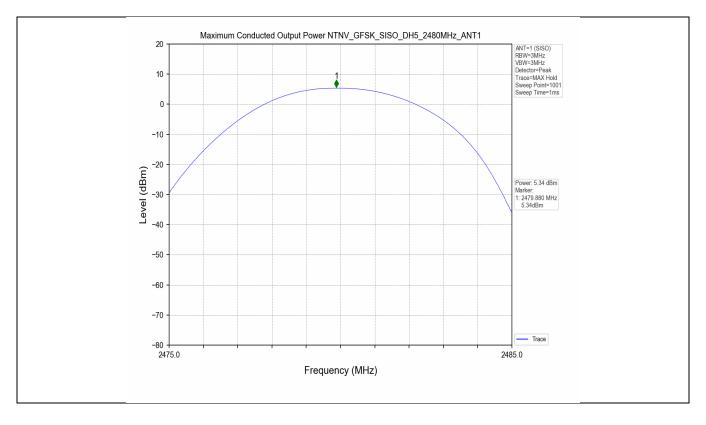
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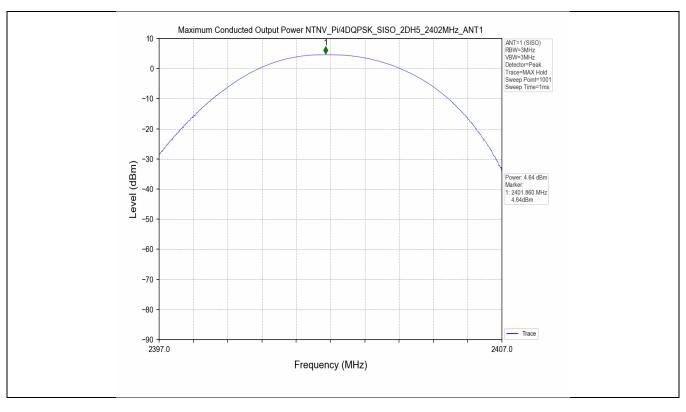






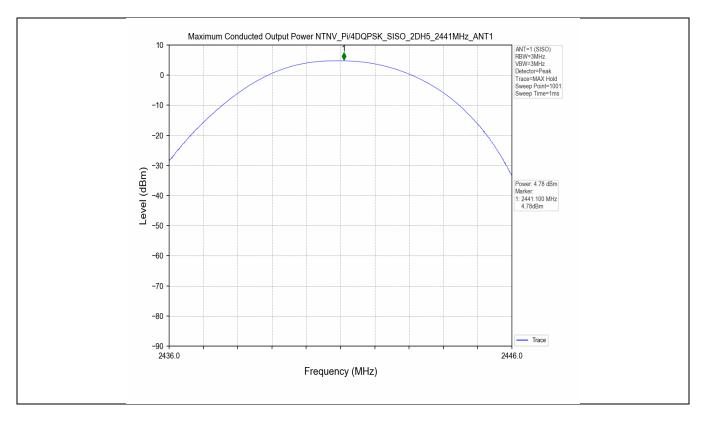
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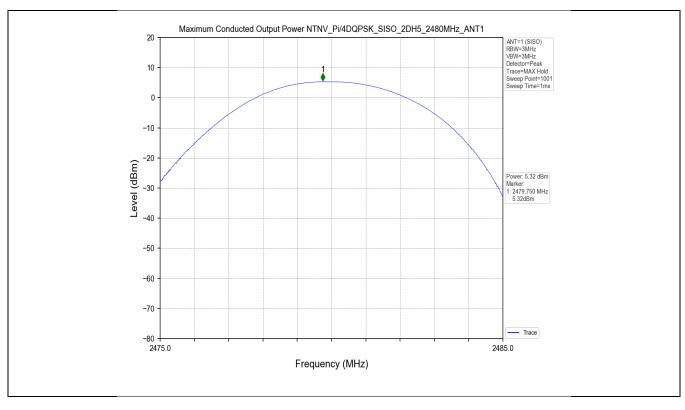






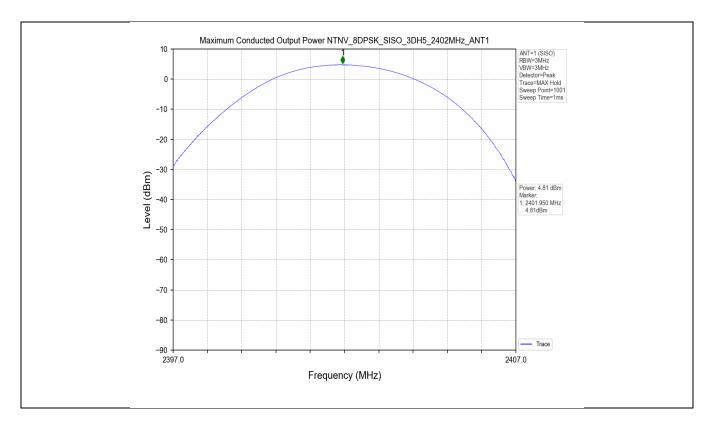
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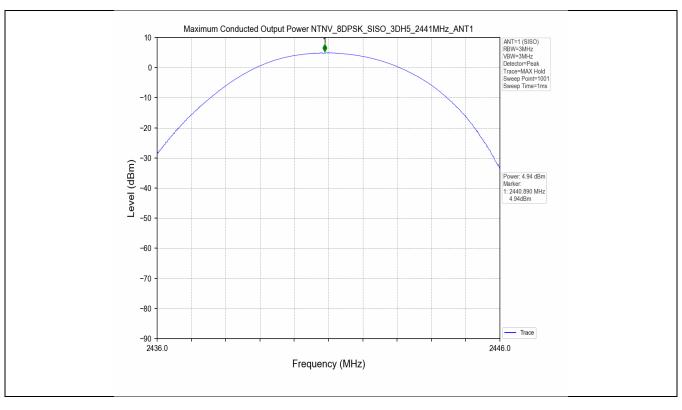






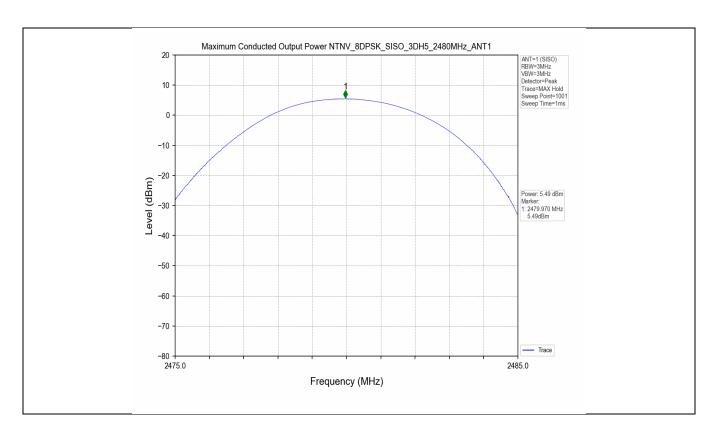
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#### 3. Carrier frequency separation

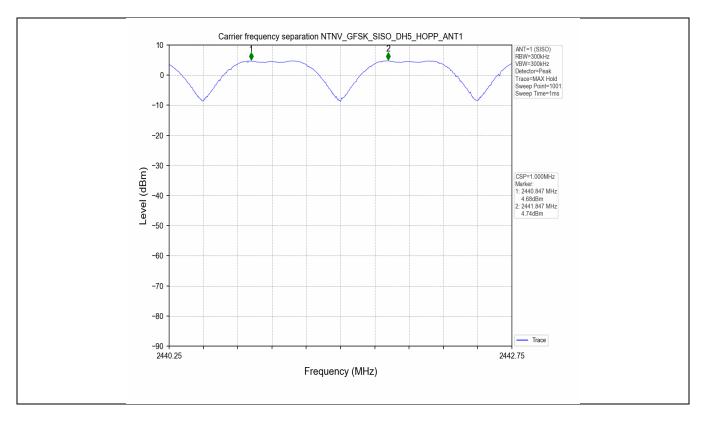
#### 3.1 Test Result

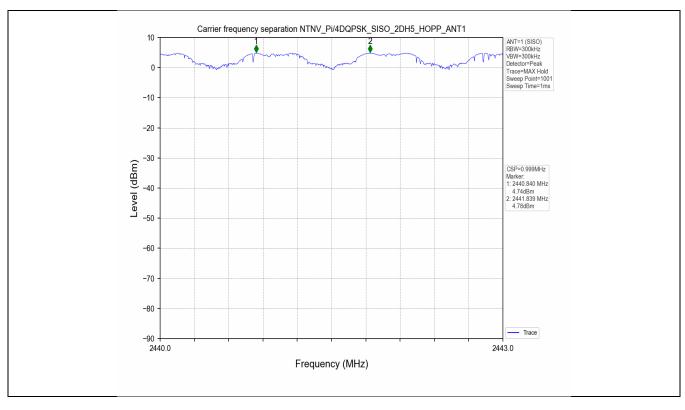
Test Mode	TX Type	ANT No.	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limits (MHz)	Verdict
GFSK	SISO	1	1.000	0.964	≥0.964	PASS
Pi/4DQPSK	SISO	1	0.999	1.253	≥0.835	PASS
8DPSK	SISO	1	1.011	1.280	≥0.853	PASS

#### 3.2 Test Graph



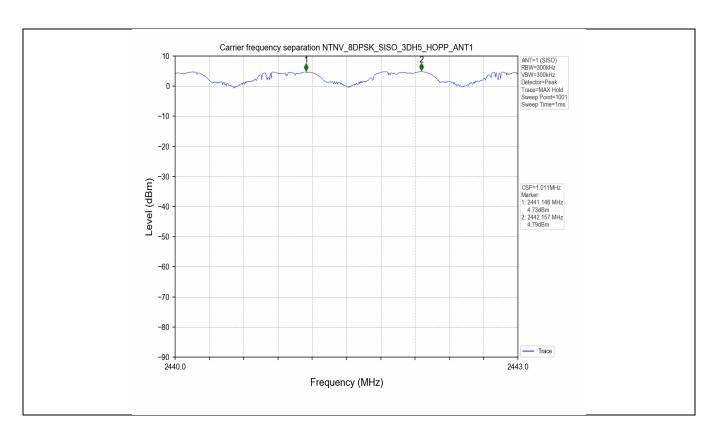
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#### 4. Number of hopping frequencies

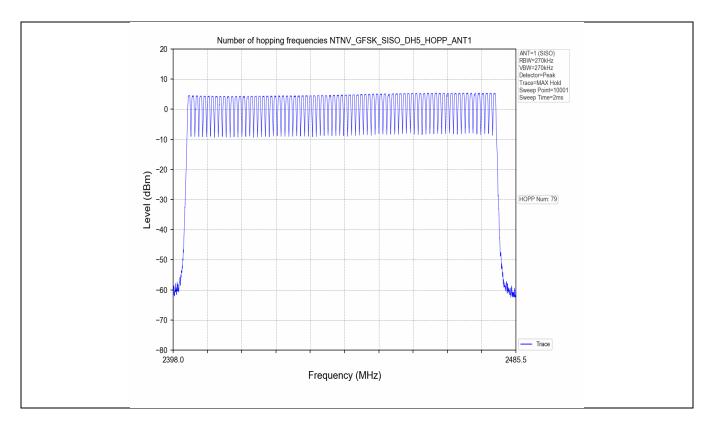
#### 4.1 Test Result

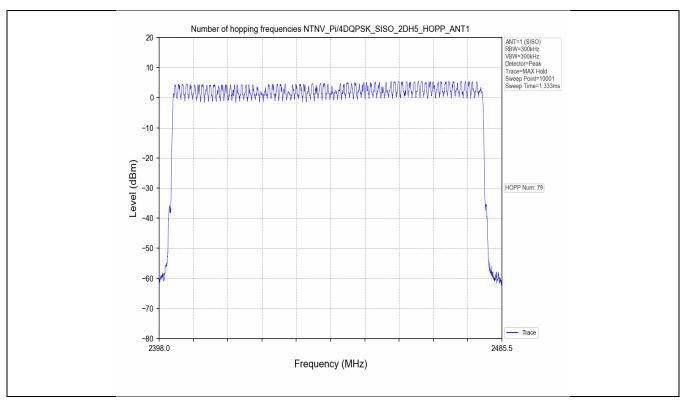
Test Mode	TX Type	ANT No.	Num of Hopping Frequencies	Limits	Verdict
GFSK	SISO	1	79	≥15	PASS
Pi/4DQPSK	SISO	1	79	≥15	PASS
8DPSK	SISO	1	79	≥15	PASS

#### 4.2 Test Graph



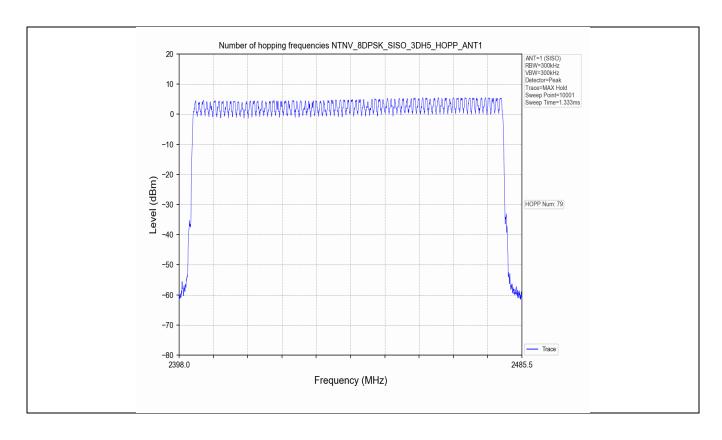
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## 5. Time of Occupancy (Dwell Time)

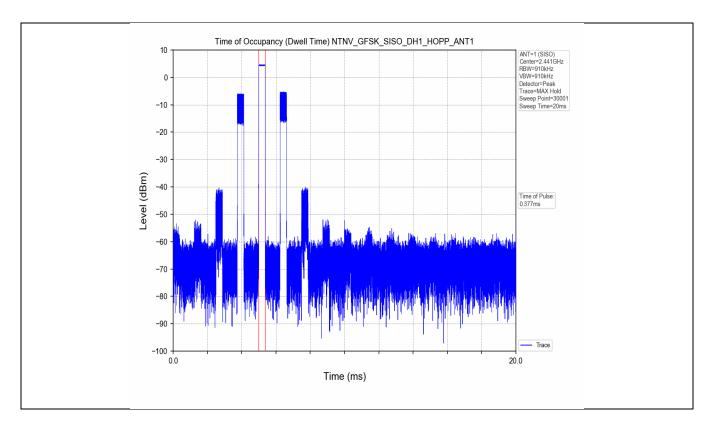
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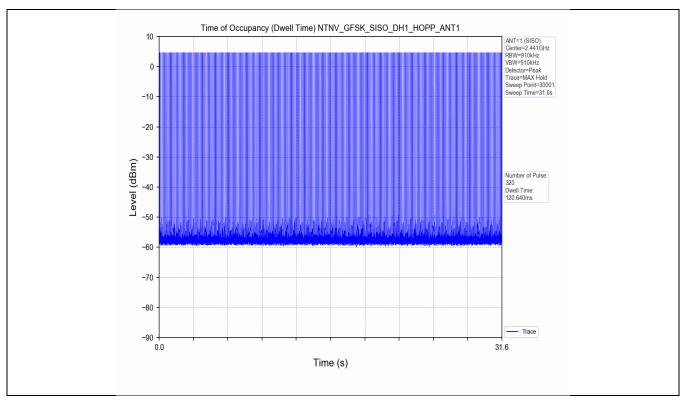
Test Mode	Packet Type	ТХ Туре	ANT No.	Duration of Single Pulse (ms)	Obeservation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limits (ms)	Verdict
	DH1	SISO	1	0.377	31.6	320	120.640	≤400	PASS
GFSK	DH3	SISO	1	1.633	31.6	160	261.280	≤400	PASS
	DH5	SISO	1	2.883	31.6	107	308.481	≤400	PASS
	2DH1	SISO	1	0.384	31.6	320	122.880	≤400	PASS
Pi/4DQPSK	2DH3	SISO	1	1.635	31.6	160	261.600	≤400	PASS
	2DH5	SISO	1	2.838	31.6	107	303.666	≤400	PASS
	3DH1	SISO	1	0.383	31.6	320	122.560	≤400	PASS
	3DH3	SISO	1	1.634	31.6	160	261.440	≤400	PASS
	3DH5	SISO	1	2.885	31.6	107	308.695	≤400	PASS

#### 5.2 Test Graph



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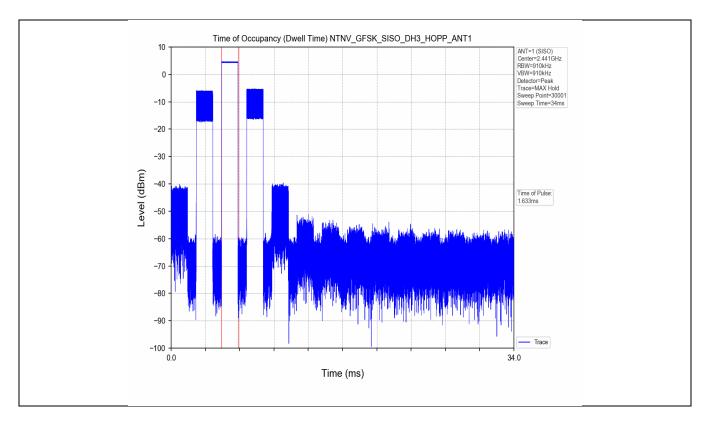
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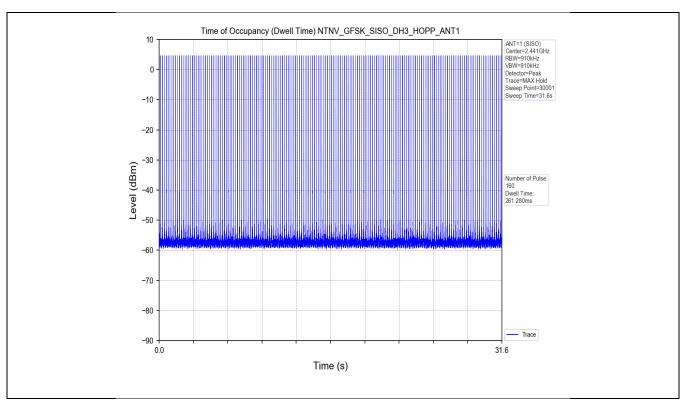
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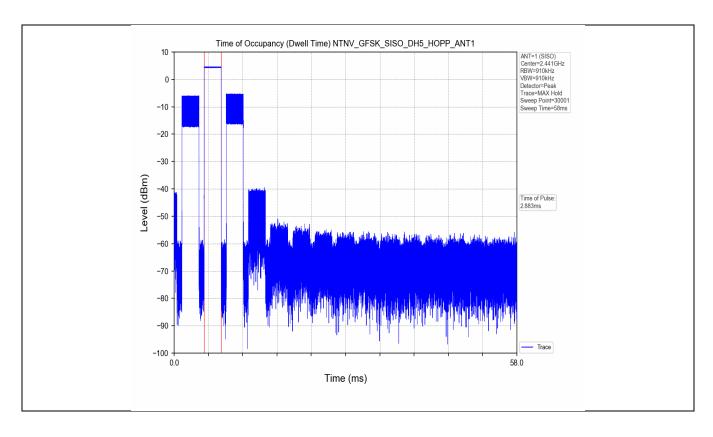
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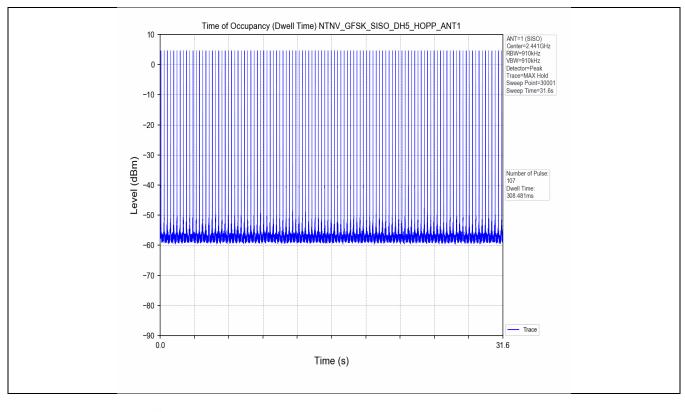






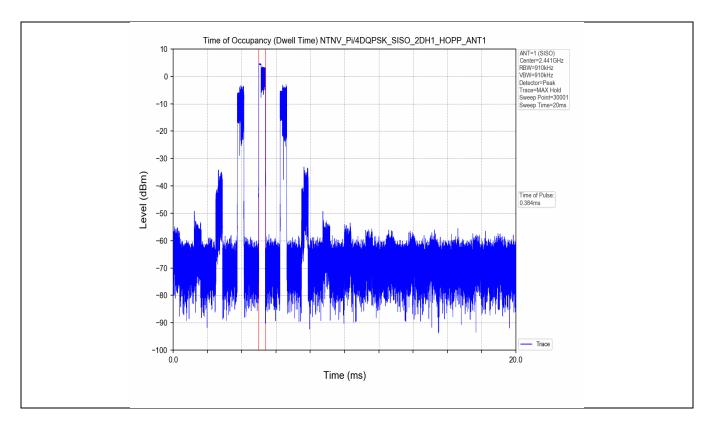
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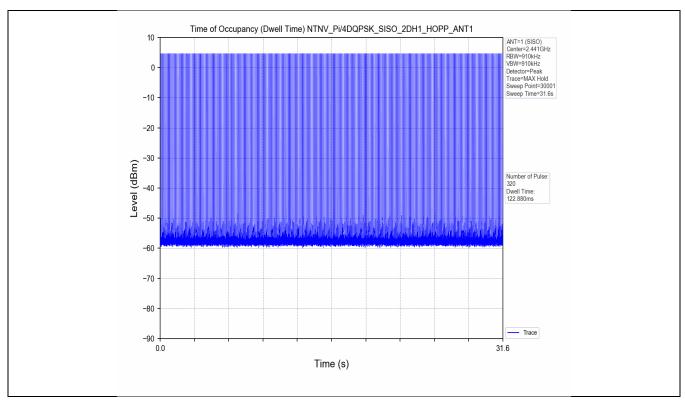






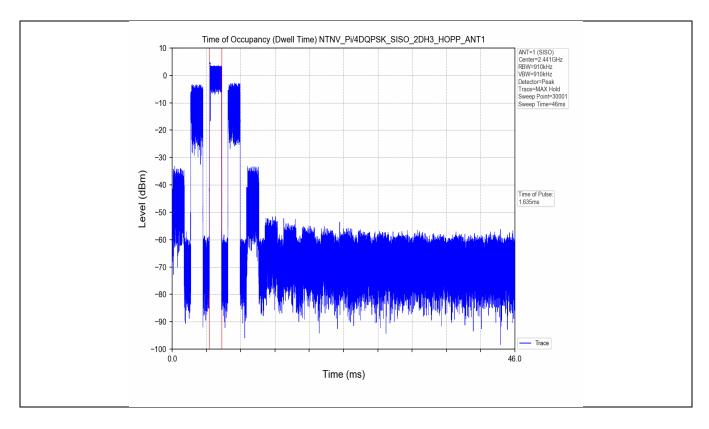
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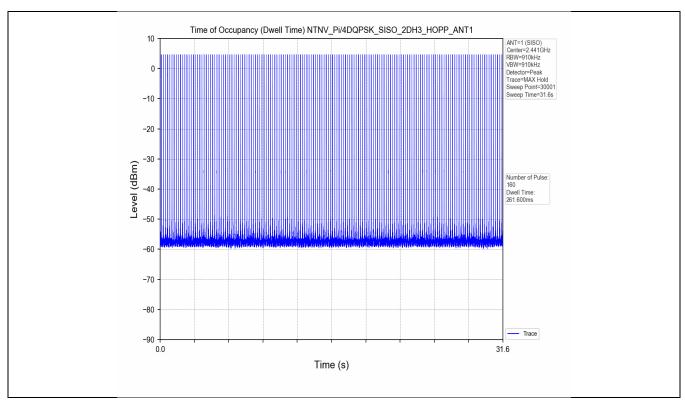






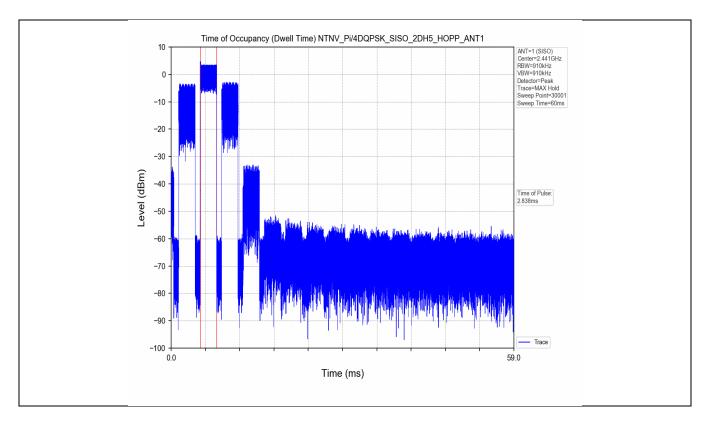
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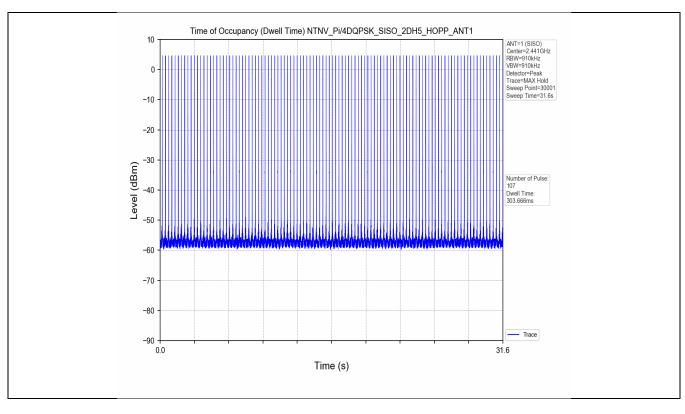






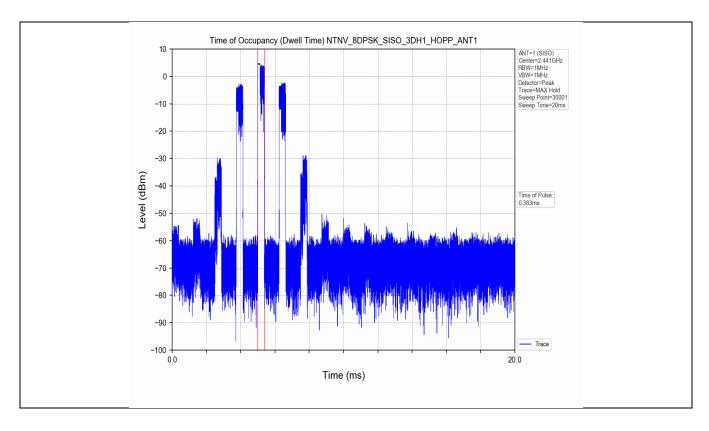
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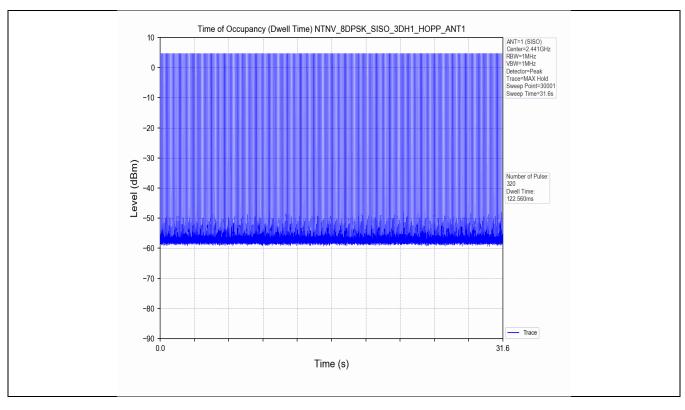






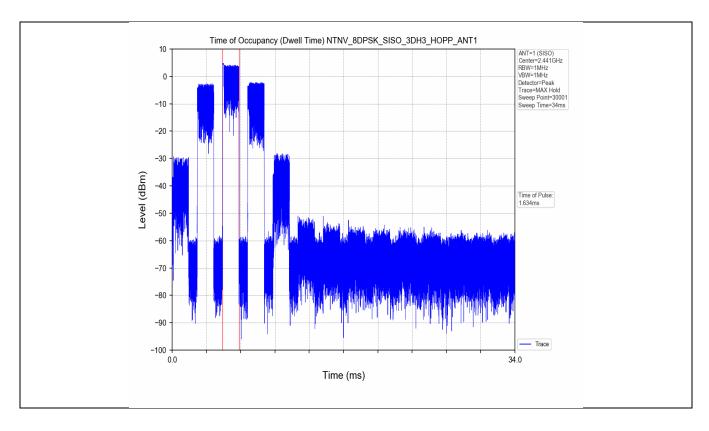
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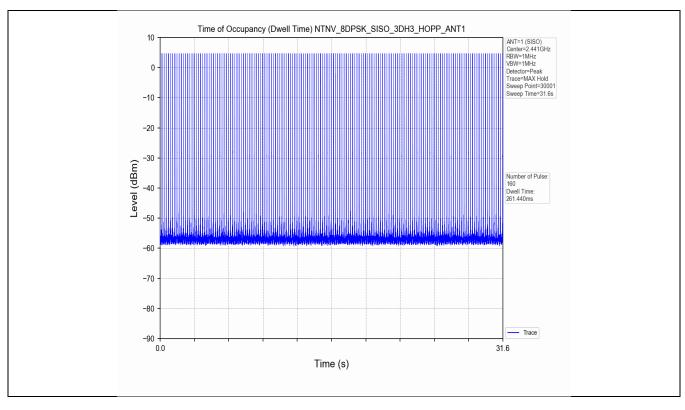






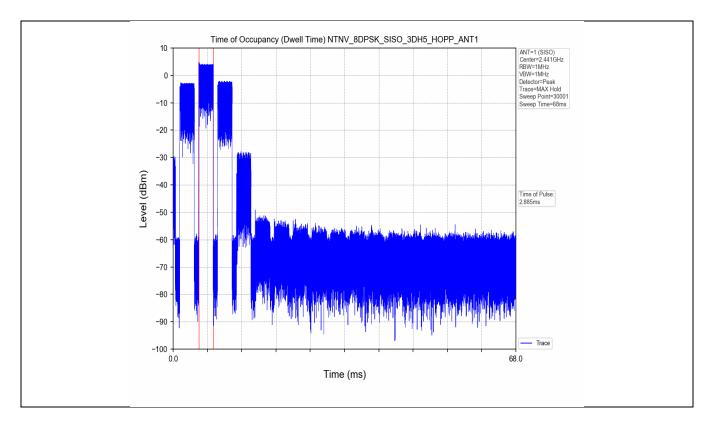
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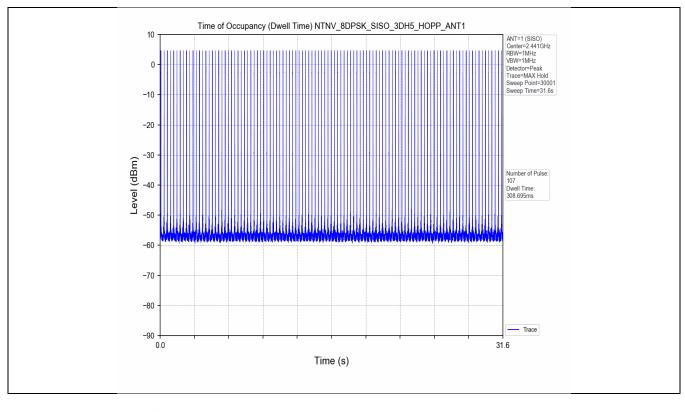






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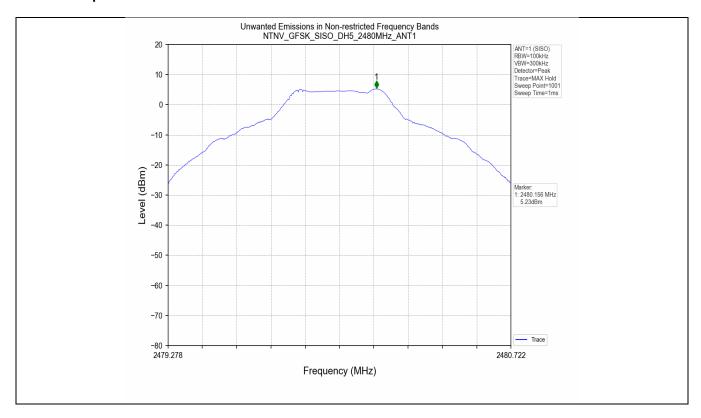
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## 6. Unwanted Emissions in Non-restricted Frequency Bands

#### 6.1 Test Result

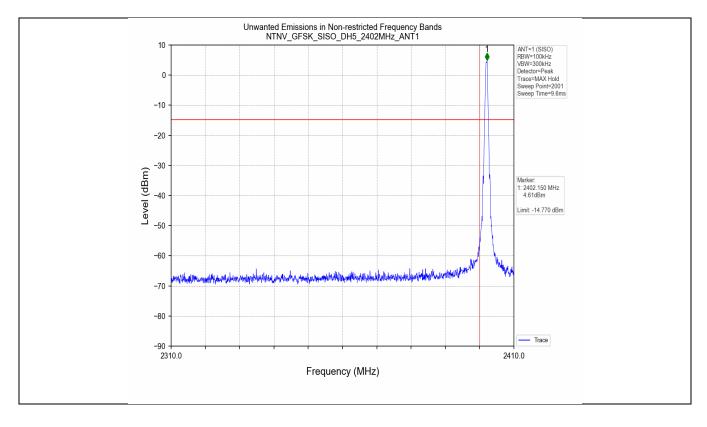
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
	2402	SISO	1	Refer to test graph	-14.77	PASS
GFSK	2441	SISO	1	Refer to test graph	-14.77	PASS
Gran	2480	SISO	1	Refer to test graph	-14.77	PASS
	Hopping	SISO	1	Refer to test graph	-14.77	PASS
	2402	SISO	1	Refer to test graph	-14.76	PASS
Pi/4DQPSK	2441	SISO	1	Refer to test graph	-14.76	PASS
PI/4DQPSK	2480	SISO	1	Refer to test graph	-14.76	PASS
	Hopping	SISO	1	Refer to test graph	-14.76	PASS
	2402	SISO	1	Refer to test graph	-14.75	PASS
8DPSK	2441	SISO	1	Refer to test graph	-14.75	PASS
	2480	SISO	1	Refer to test graph	-14.75	PASS
	Hopping	SISO	1	Refer to test graph	-14.75	PASS

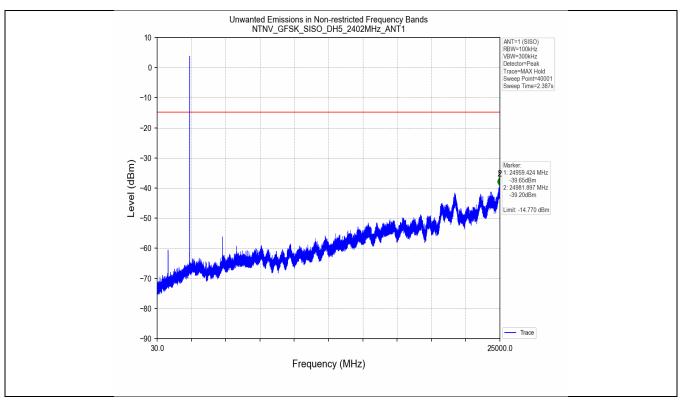
#### 6.2 Test Graph





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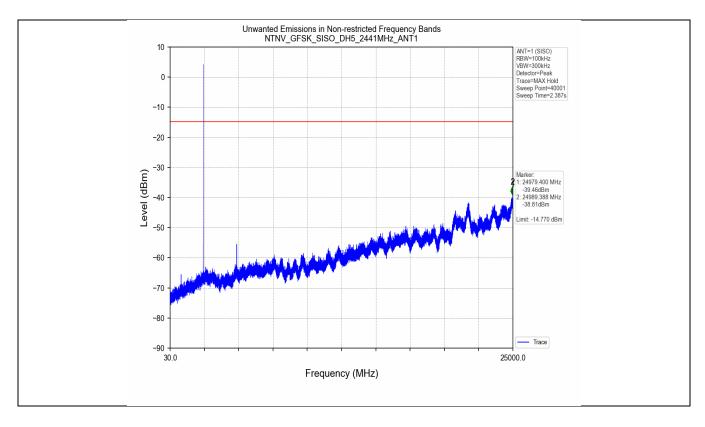
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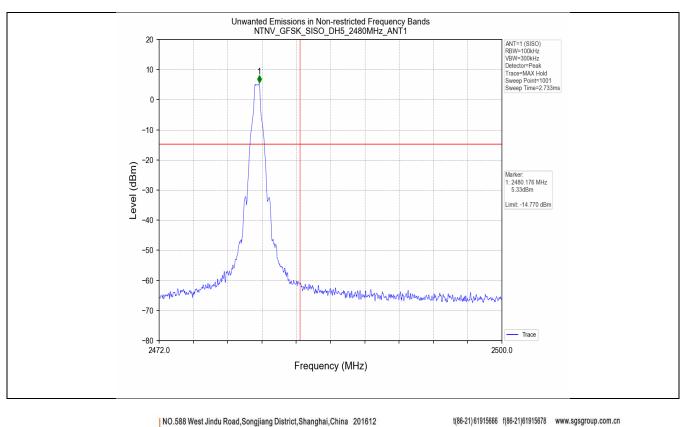
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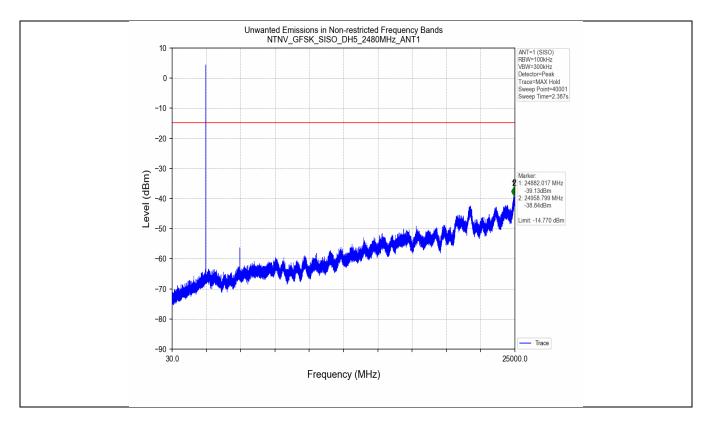


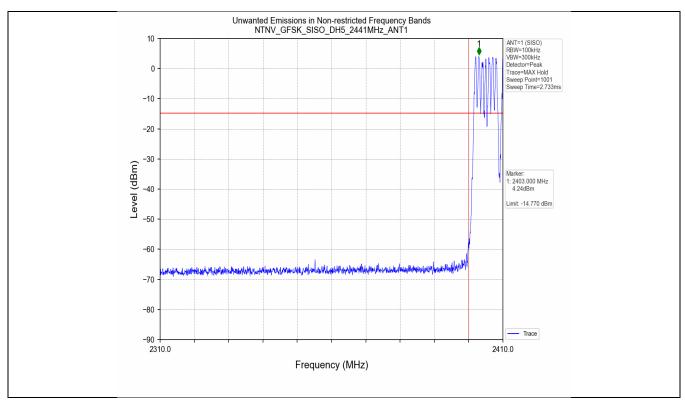
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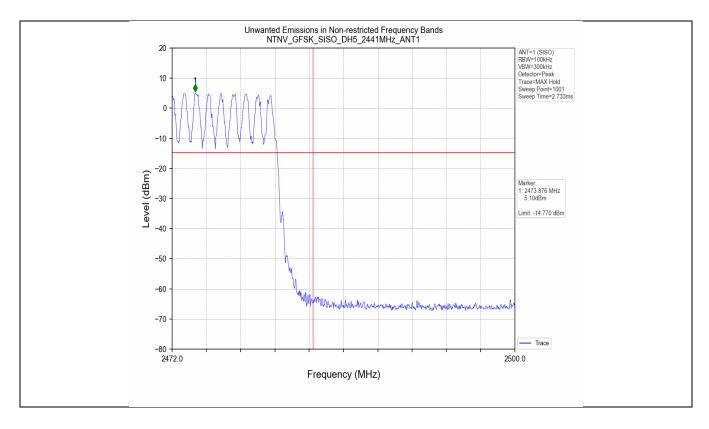
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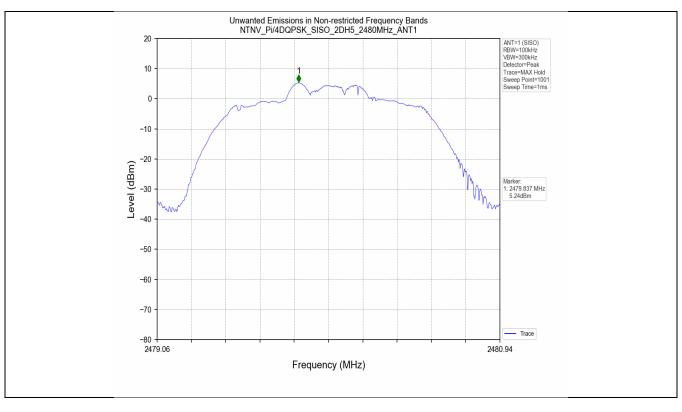






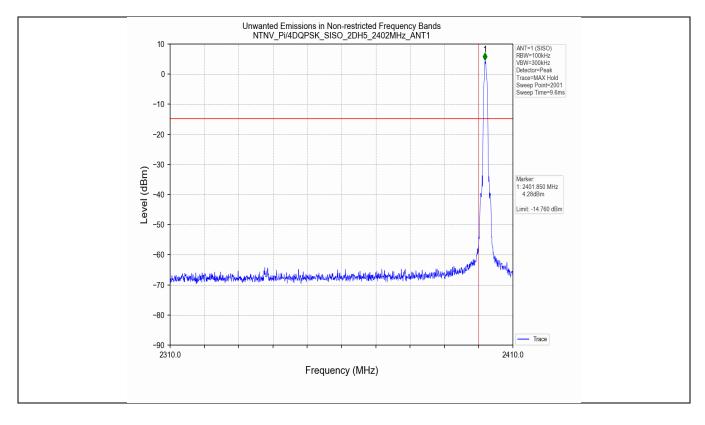
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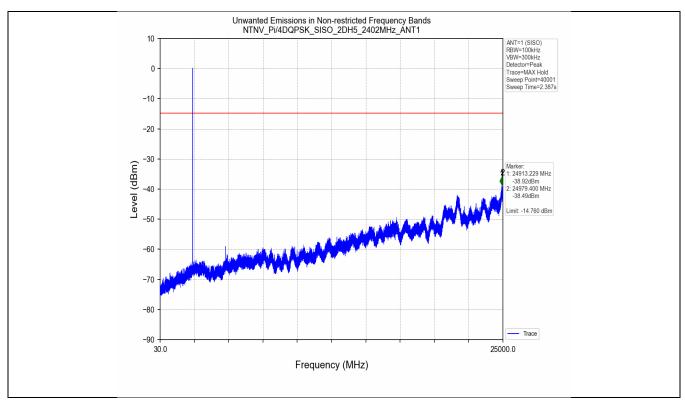






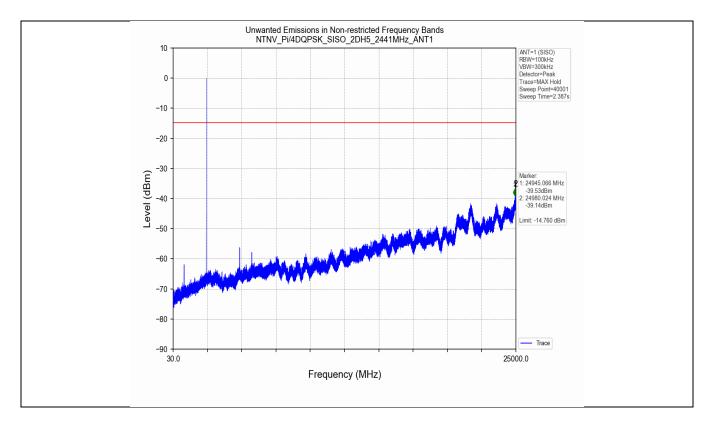
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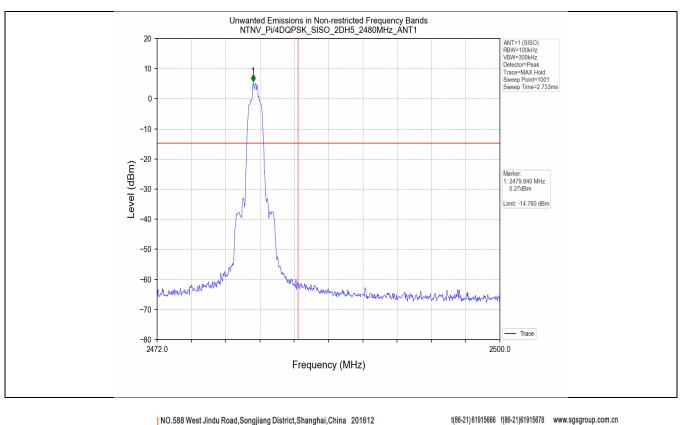






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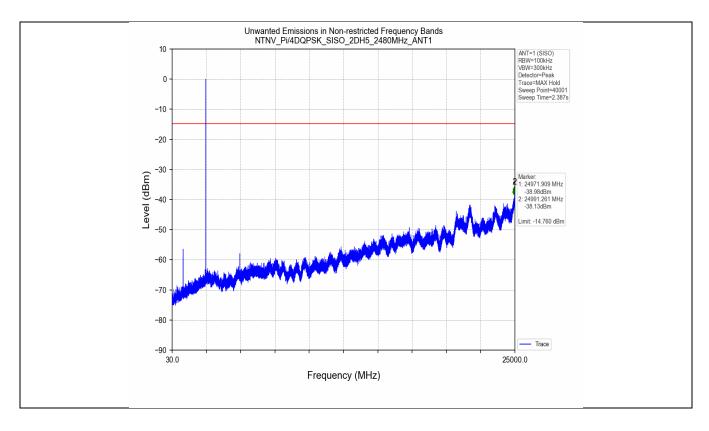
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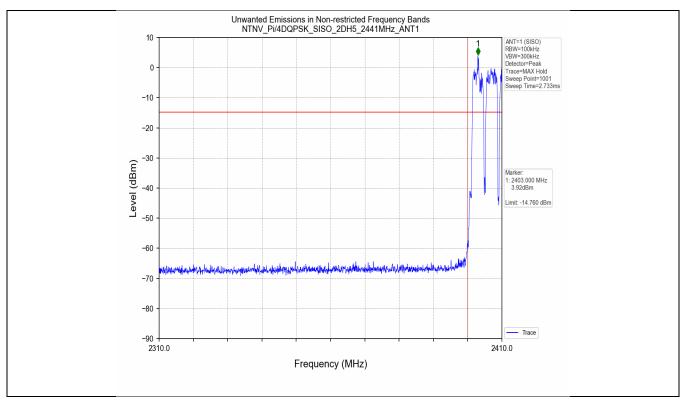
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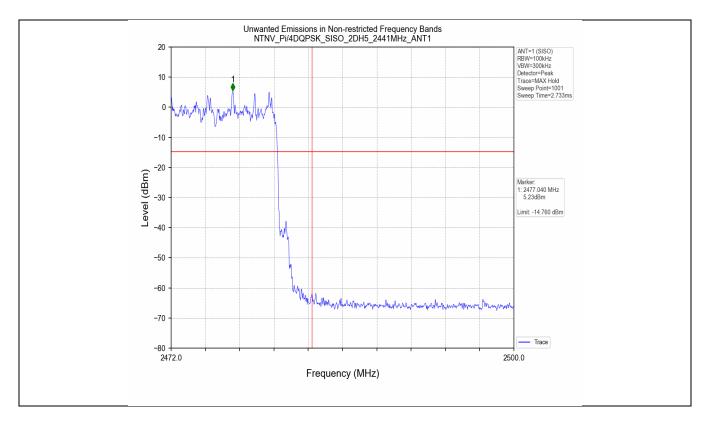
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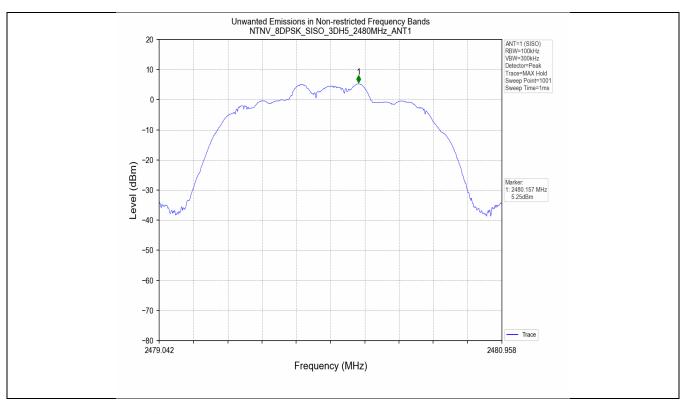
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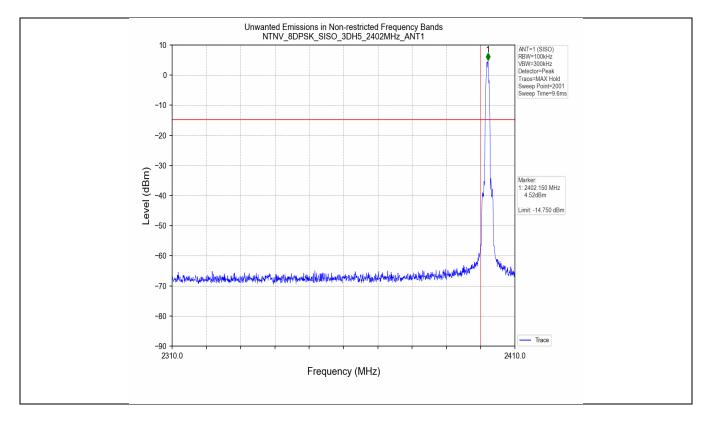
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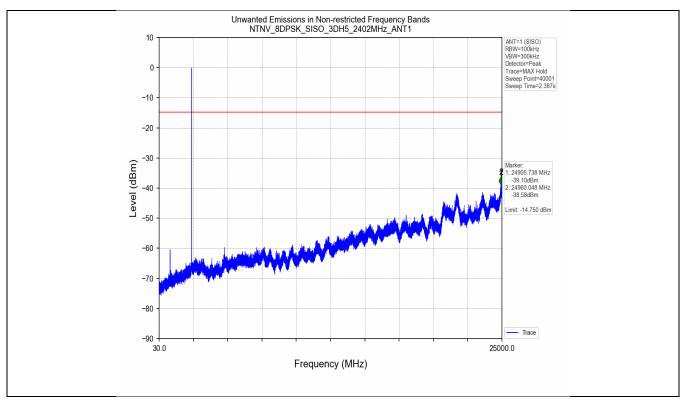






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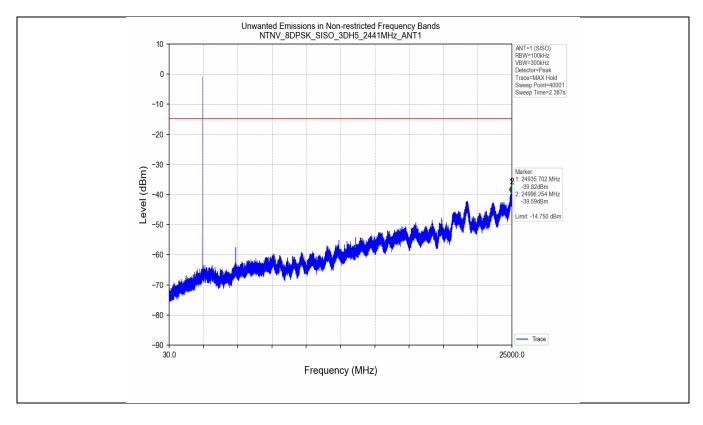
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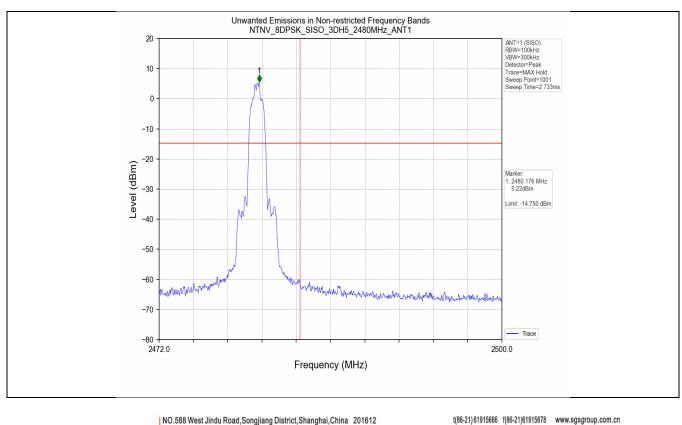
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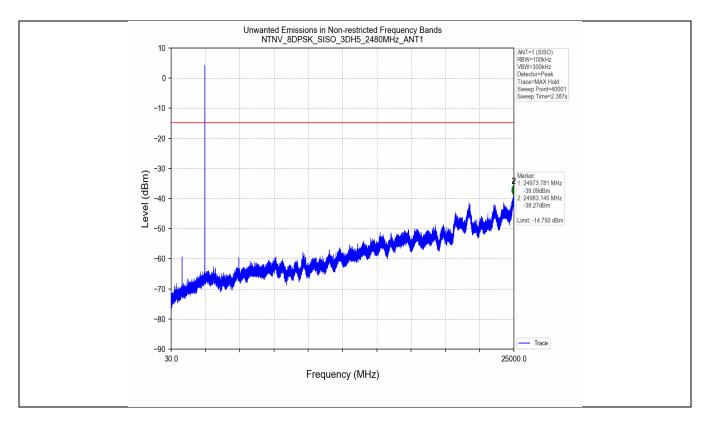
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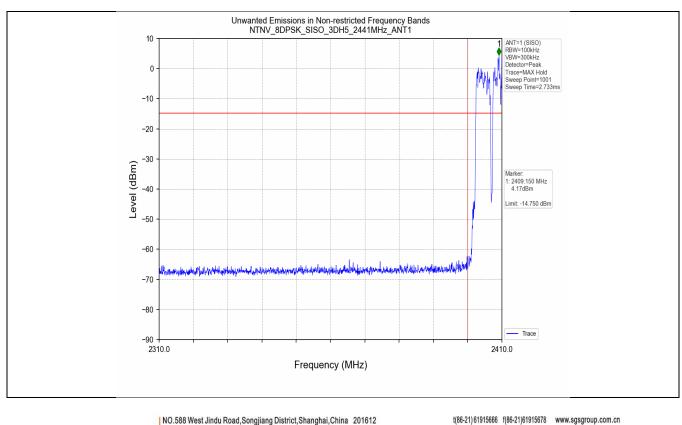
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