Appendix for 15.247

1. Bandwidth

1.1 Test Result

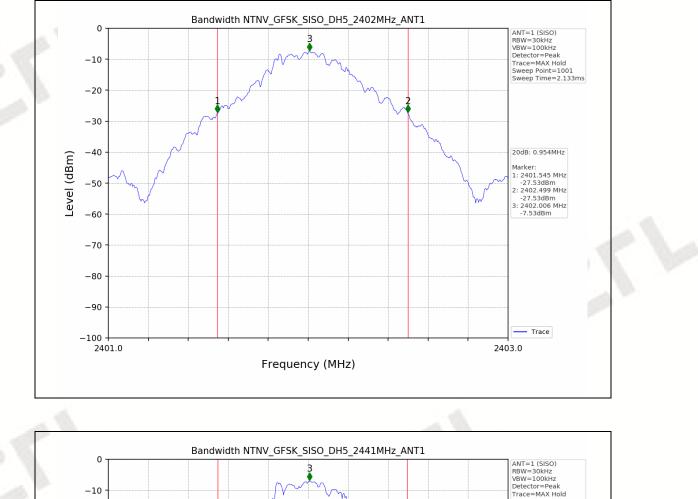
Test Mode	Frequency	ТХ Туре	ANT No.	20dB Bandwidth	Verdict
Test Mode	(MHz)			Test Result (MHz)	veruici
	2402	SISO	1	0.954	PASS
GFSK	2441	SISO	1	0.948	PASS
	2480	SISO	1	0.956	PASS
	2402	SISO	1	1.314	PASS
Pi/4DQPSK	2441	SISO	1	1.308	PASS
	2480	SISO	1	1.317	PASS
	2402	SISO	1	1.302	PASS
8DPSK	2441	SISO	1	1.303	PASS
	2480	SISO	1	1.304	PASS

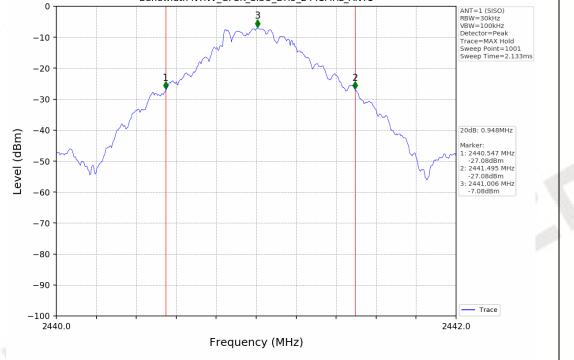
Test Mode	Frequency	ТХ Туре	ANT No.	99% Occupied Bandwidth			
Test Mode	(MHz)		ANT NO.	Test F	Result (MHz)		
GFSK	2402	SISO	1	0.855	Only for Report Use		
	2441	SISO	1	0.851	Only for Report Use		
	2480	SISO	1	0.851	Only for Report Use		
Pi/4DQPSK	2402	SISO	1	1.177	Only for Report Use		
	2441	SISO	1	1.181	Only for Report Use		
	2480	SISO	1	1.191	Only for Report Use		
	2402	SISO	1	1.187	Only for Report Use		
8DPSK	2441	SISO	1	1.192	Only for Report Use		
	2480	SISO	1	1.188	Only for Report Use		

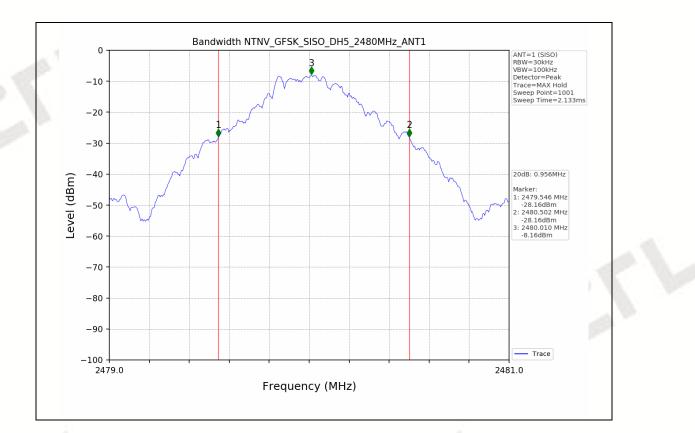
1.2 Test Graph - 20dB Bandwidth

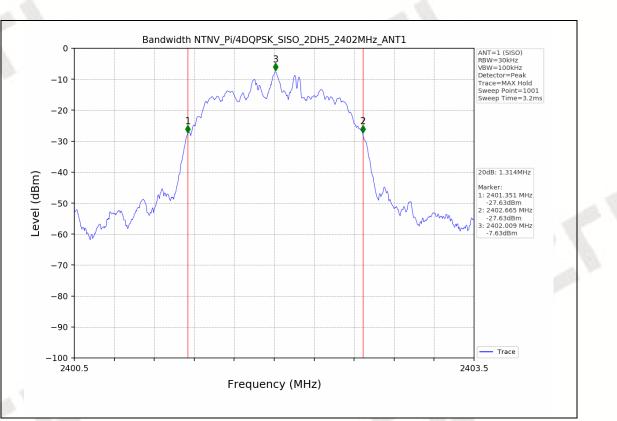




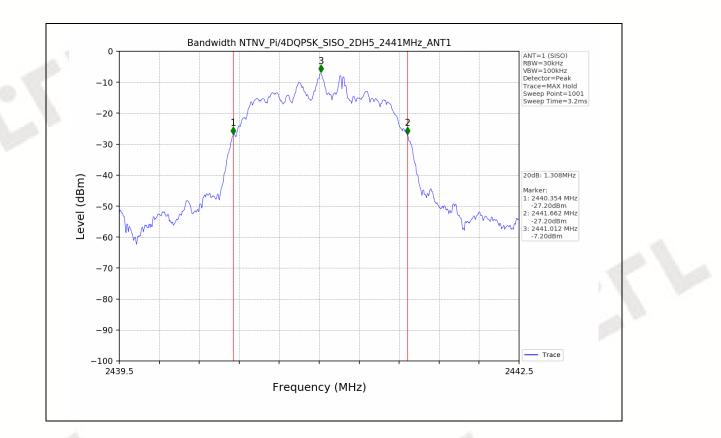


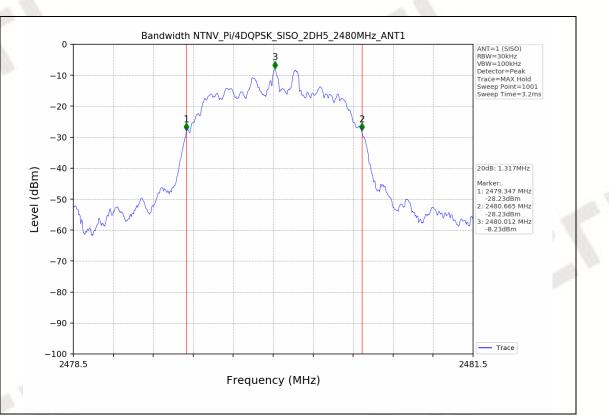




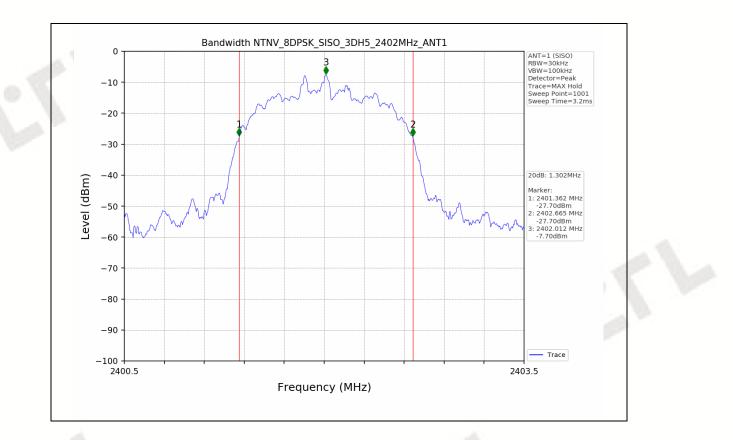


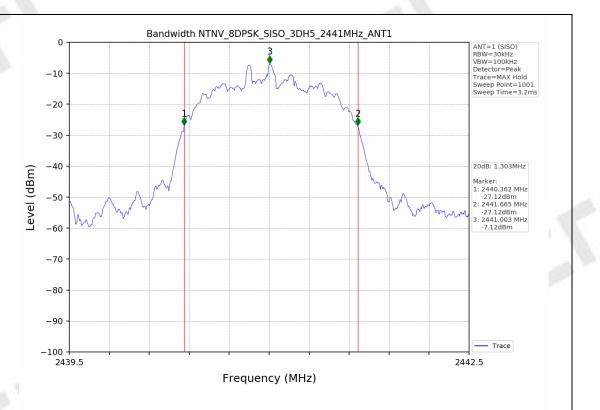
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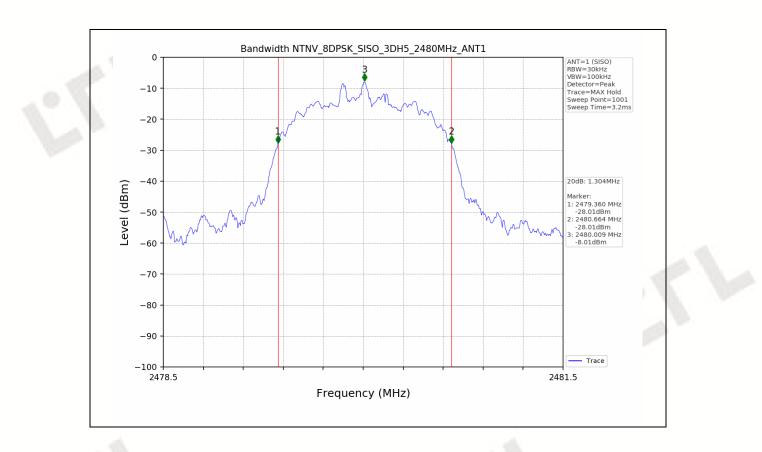


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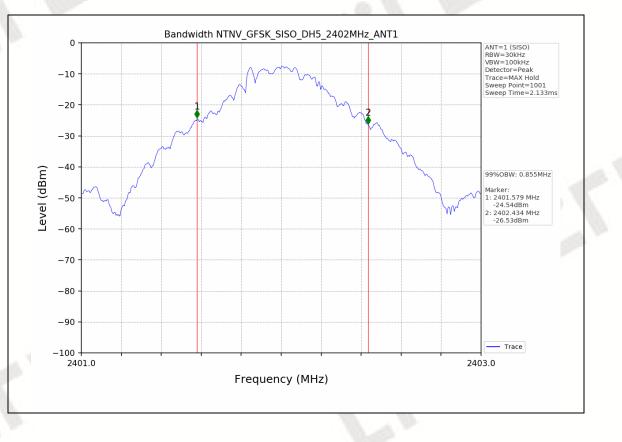


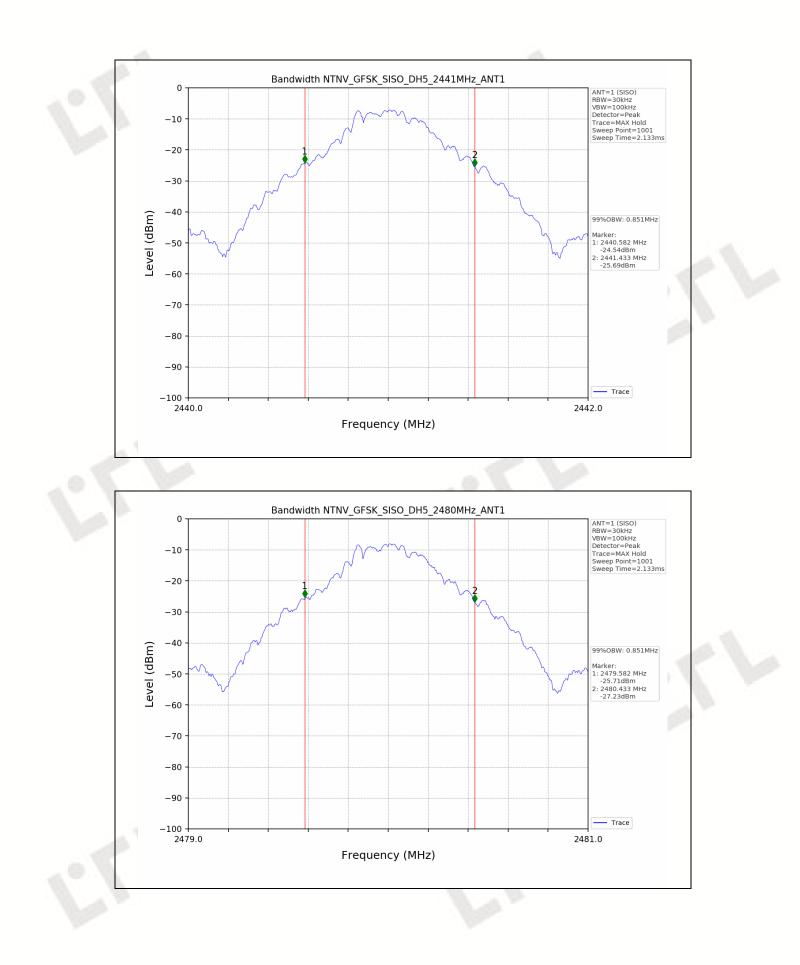


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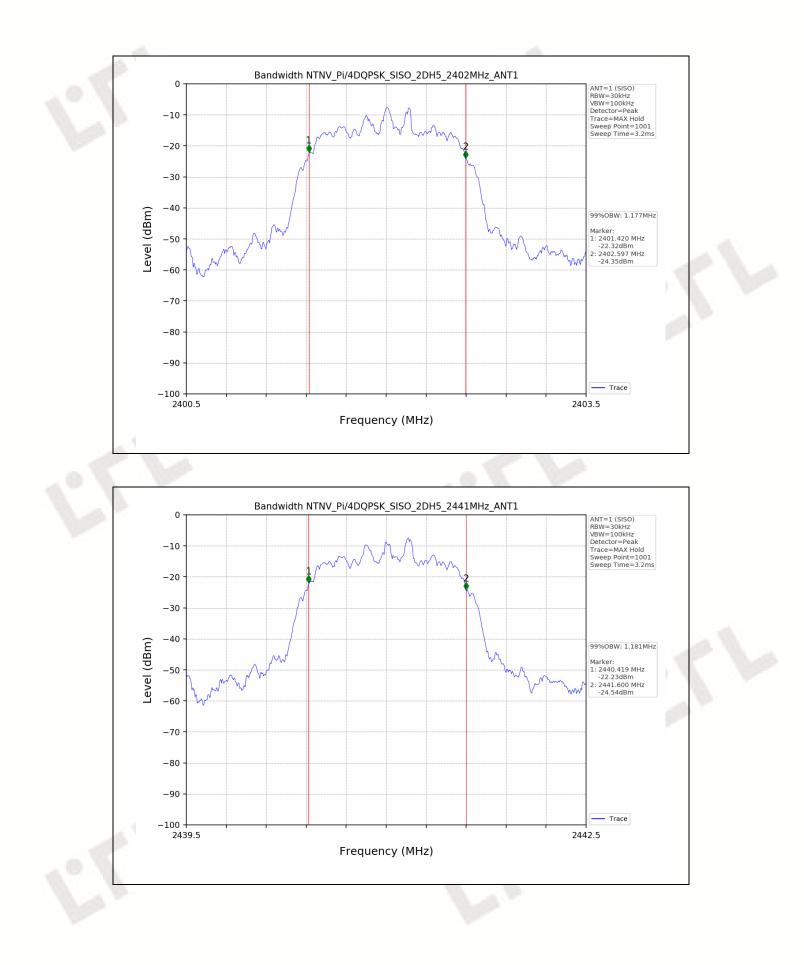


1.3 Test Graph - 99% Occupied Bandwidth



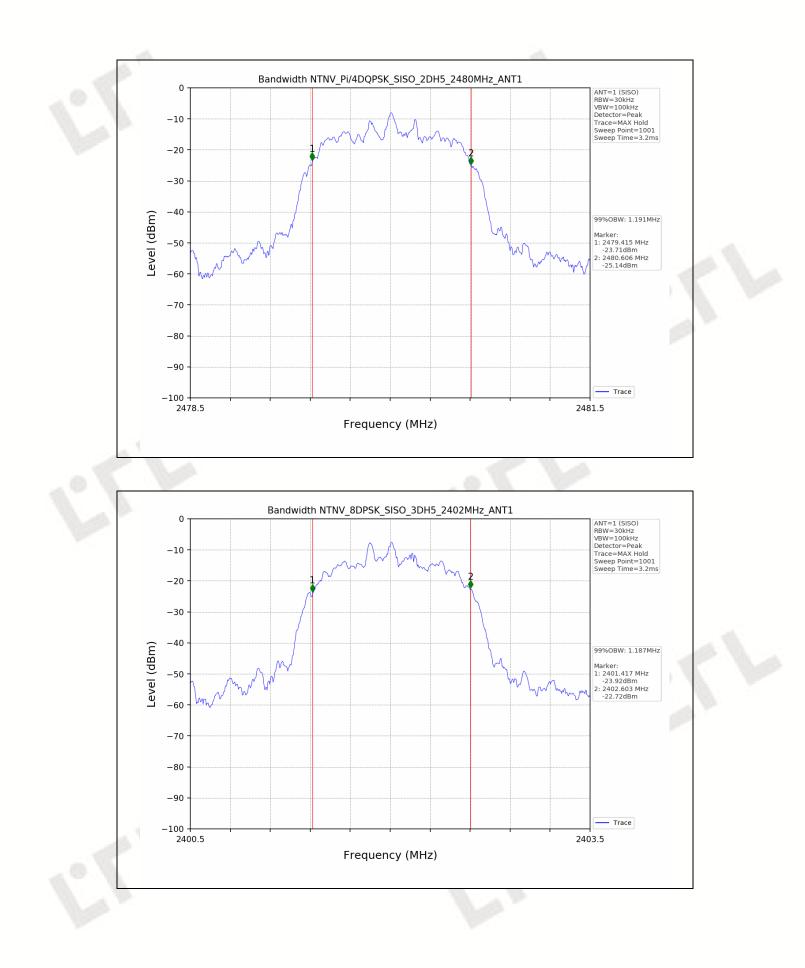


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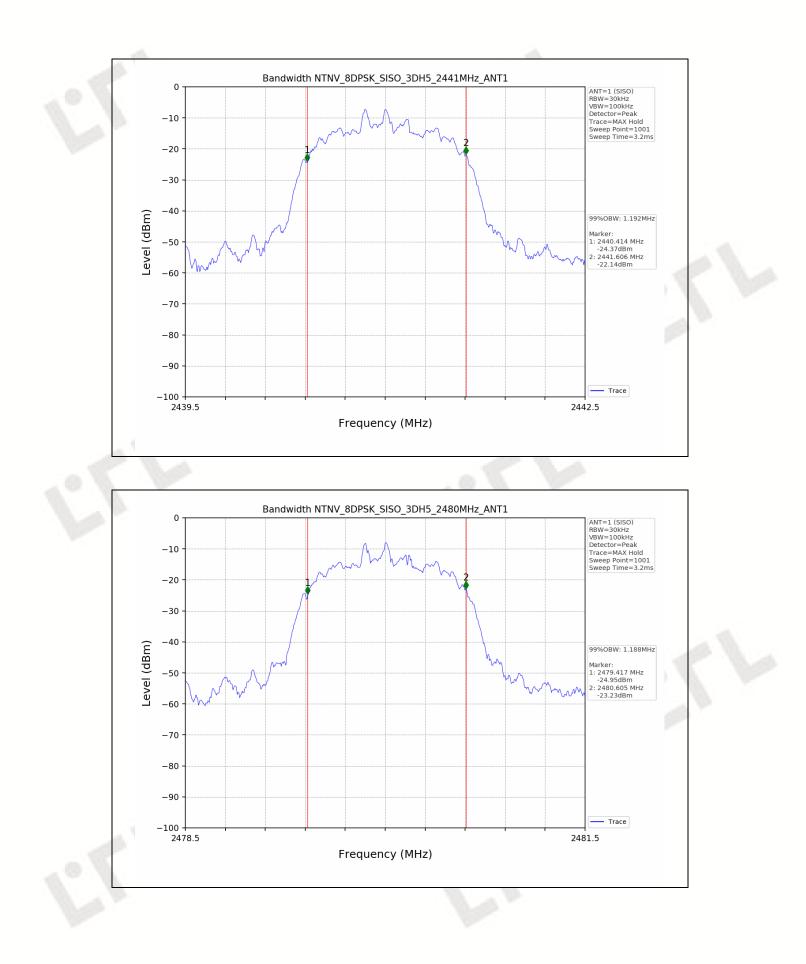


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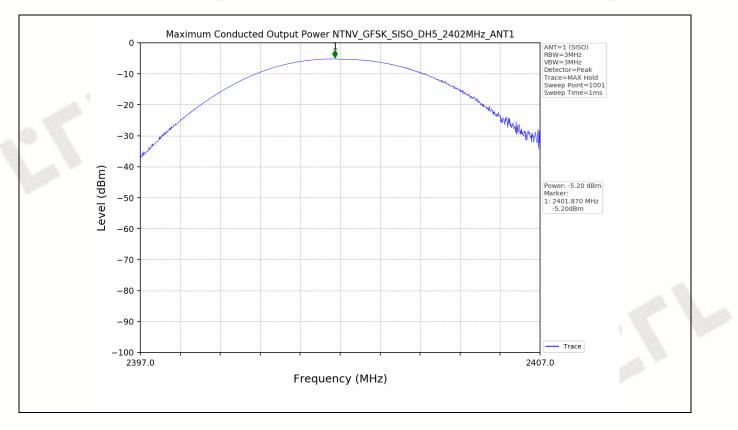


2. Maximum Conducted Output Power

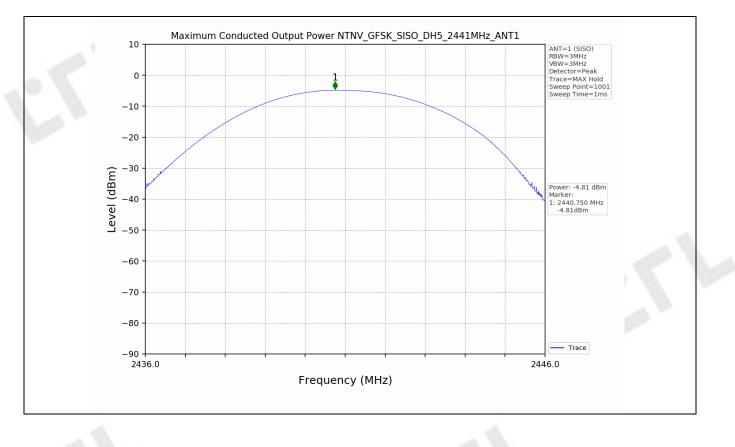
2.1 Test Result

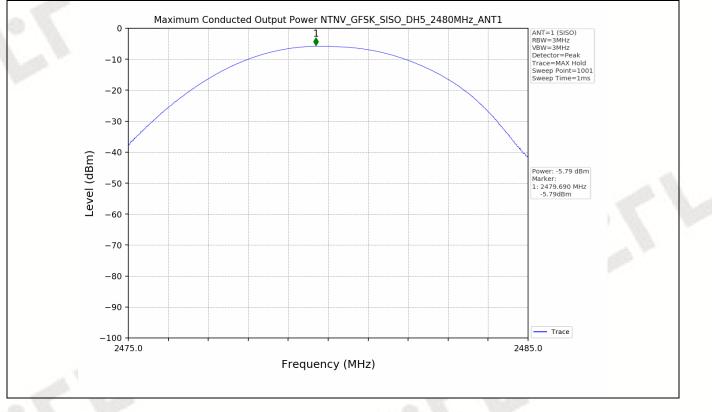
Test Mode	Frequency (MHz)	Тх Туре	Measured Peak Output Power (dBm) Ant 1	Limits (dBm)	Verdict
	2402	SISO	-5.20	30	PASS
GFSK	2441	SISO	-4.81	30	PASS
	2480	SISO	-5.79	30	PASS
	2402	SISO	-4.43	20.97	PASS
Pi/4DQPSK	2441	SISO	-4.00	20.97	PASS
	2480	SISO	-4.93	20.97	PASS
	2402	SISO	-3.90	20.97	PASS
8DPSK	2441	SISO	-3.53	20.97	PASS
	2480	SISO	-4.50	20.97	PASS

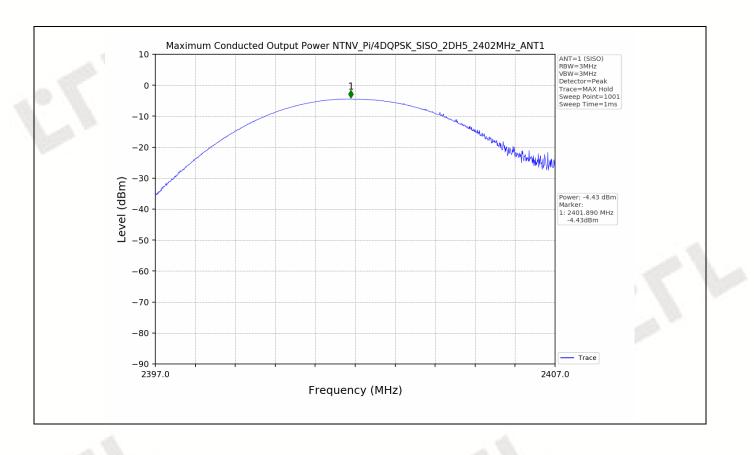
2.2 Test Graph

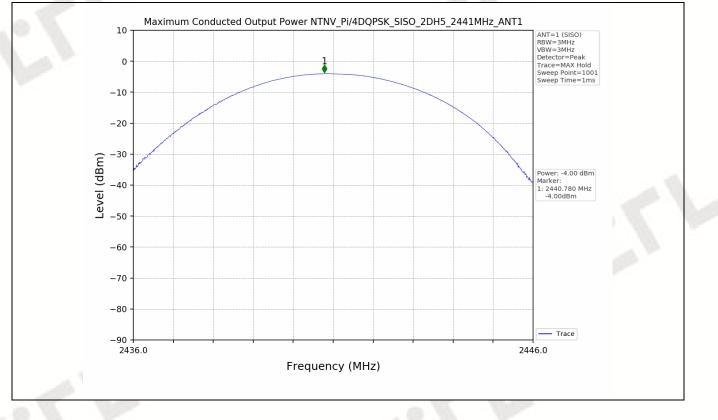


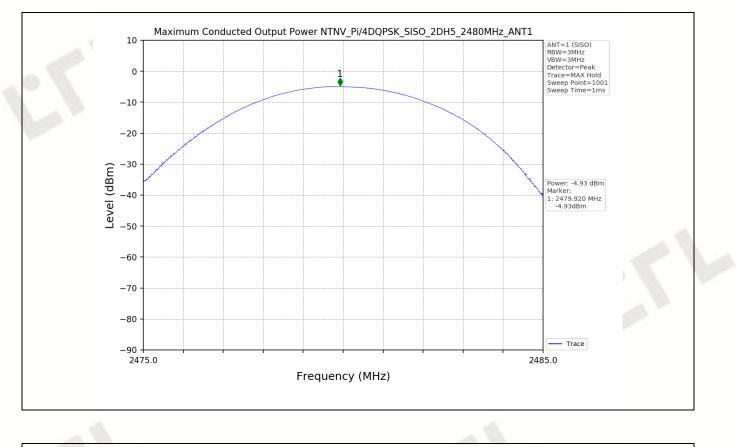


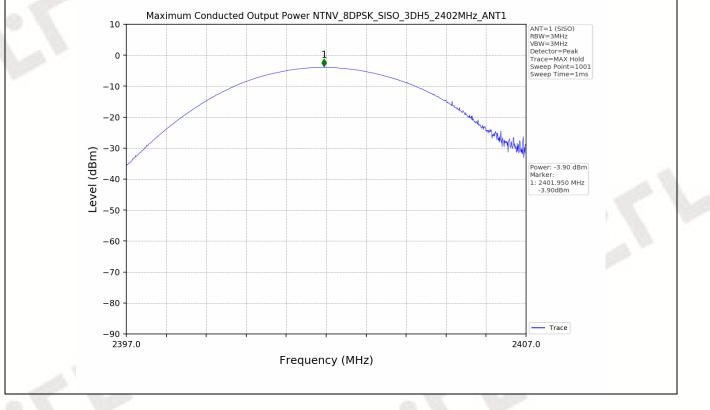


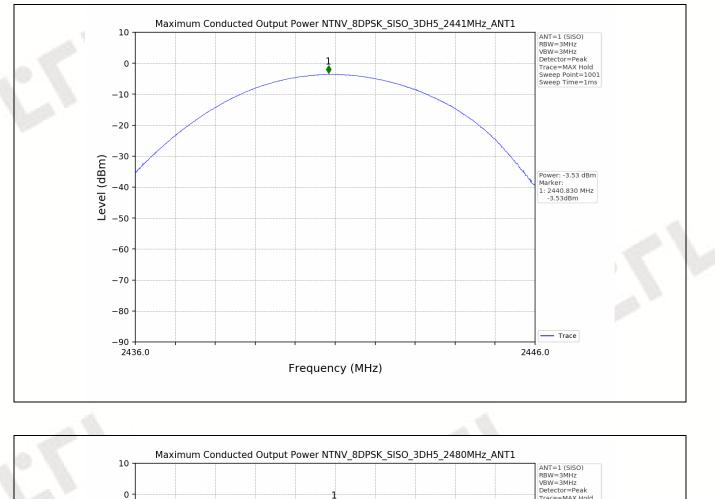


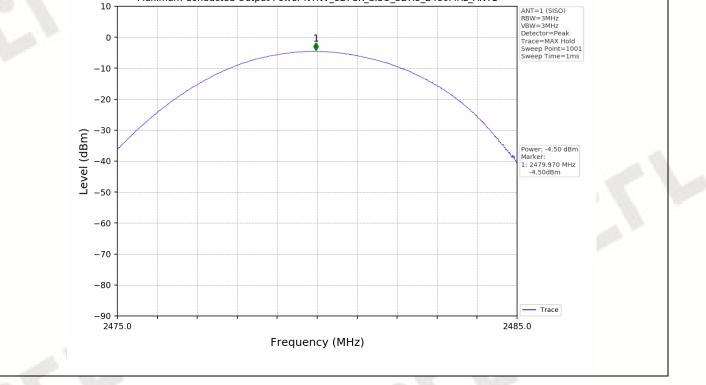










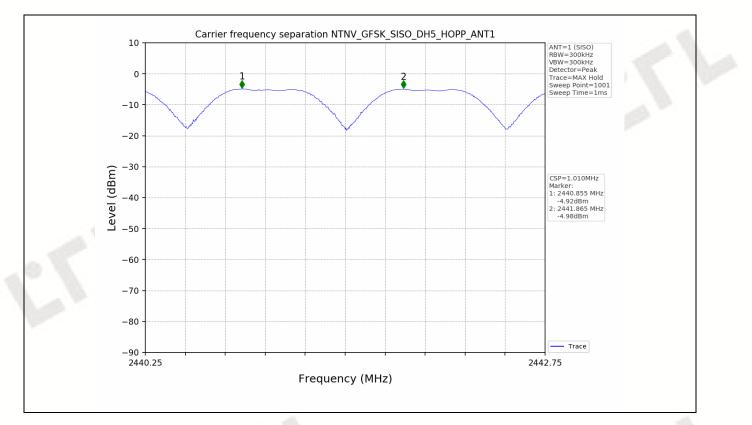


3. Carrier frequency separation

3.1 Test Result

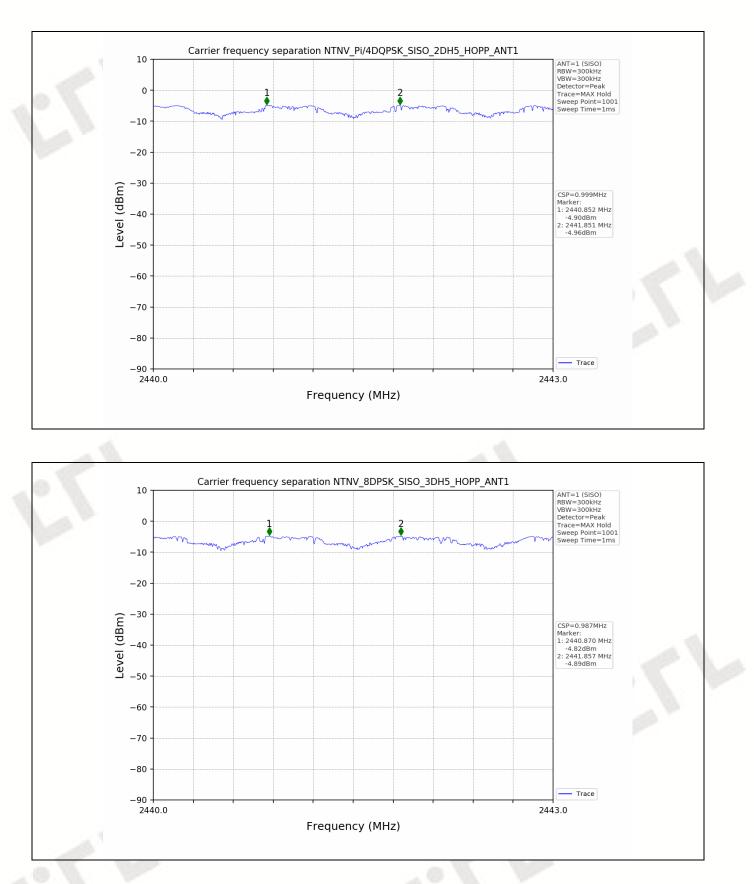
Test Mode	ТХ Туре	ANT No.	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limits (MHz)	Verdict
GFSK	SISO	1	1.010	0.956	≥0.956	PASS
Pi/4DQPSK	SISO	1	0.999	1.317	≥0.878	PASS
8DPSK	SISO	1	0.987	1.304	≥0.869	PASS

3.2 Test Graph







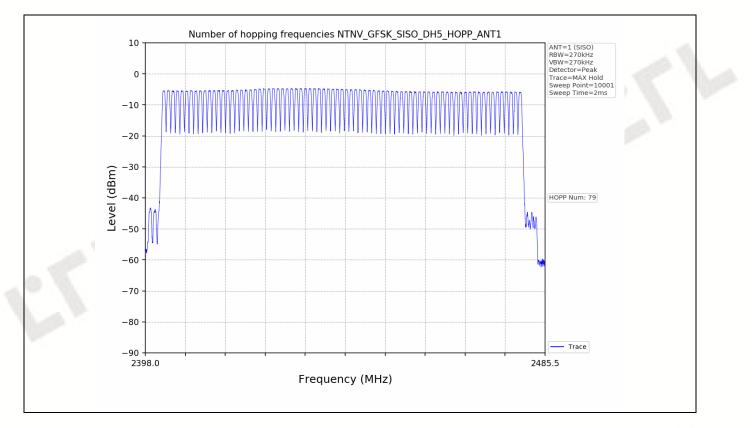


4. Number of hopping frequencies

4.1 Test Result

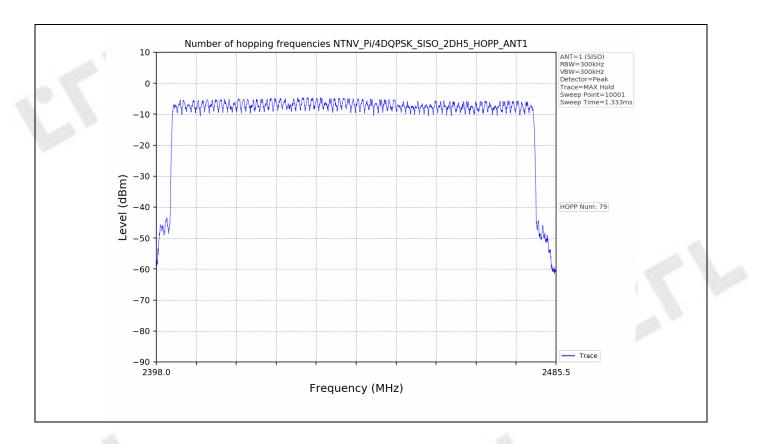
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	Test Mode	ТХ Туре	ANT No.	Num of Hopping Frequencies	Limits	Verdict
	GFSK	SISO	1	79	≥15	PASS
	Pi/4DQPSK	SISO	1	79	≥15	PASS
	8DPSK	SISO	1	79	≥15	PASS

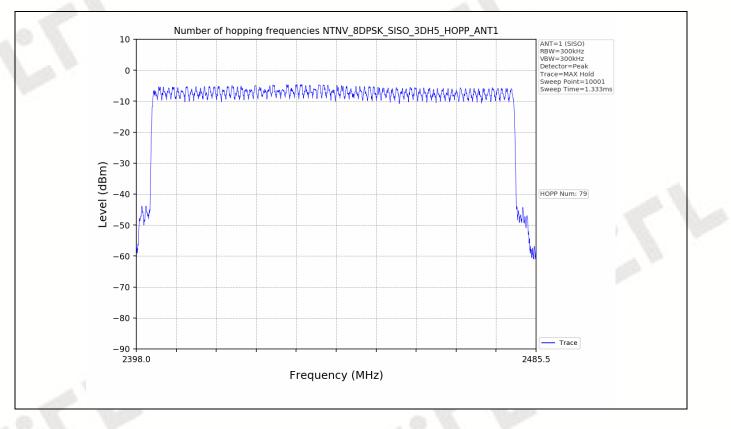
4.2 Test Graph









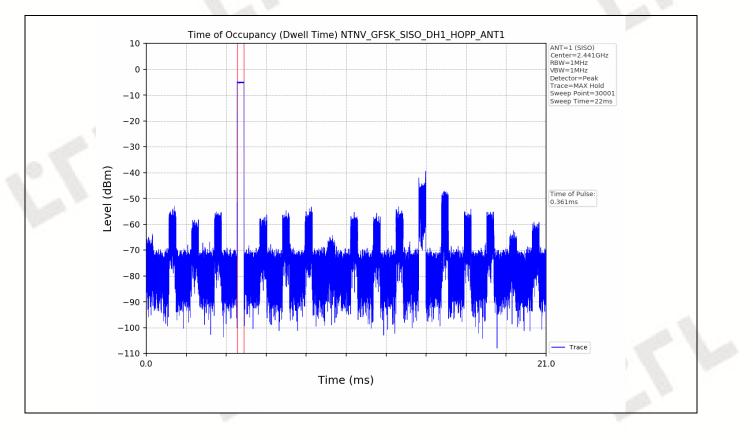


5. Time of Occupancy (Dwell Time)

5.1 Test Result

						and the second se			
Test Mode	Packet Type	ТХ Туре	ANT No.			Num of Pulse in Observation Period	Dwell Time (ms)	Limits (ms)	Verdict
	DH1	SISO	1	0.361	31.6	318	114.798	≤400	PASS
GFSK	DH3	SISO	1	1.632	31.6	152	248.064	≤400	PASS
	DH5	SISO	1	2.881	31.6	98	282.338	≤400	PASS
Pi/4DQ	2DH1	SISO	1	0.388	31.6	319	123.772	≤400	PASS
PI/4DQ PSK	2DH3	SISO	1	1.639	31.6	165	270.435	≤400	PASS
FOR	2DH5	SISO	1	2.887	31.6	112	323.344	≤400	PASS
	3DH1	SISO	1	0.389	31.6	320	124.480	≤400	PASS
8DPSK	3DH3	SISO	1	1.639	31.6	168	275.352	≤400	PASS
	3DH5	SISO	1	2.889	31.6	105	303.345	≤400	PASS

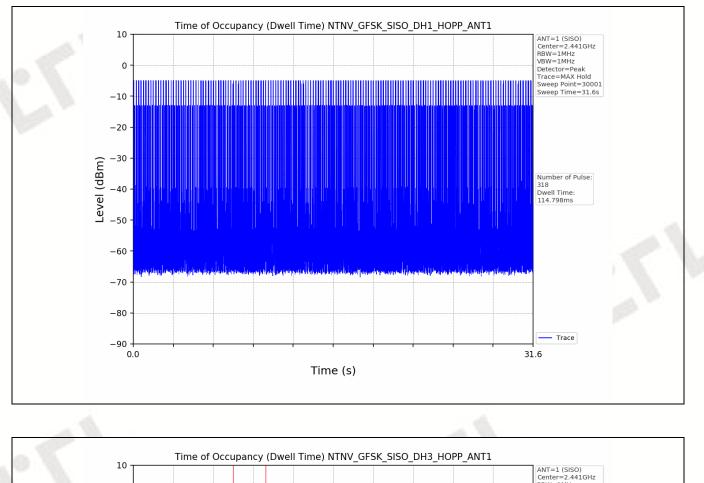
5.2 Test Graph

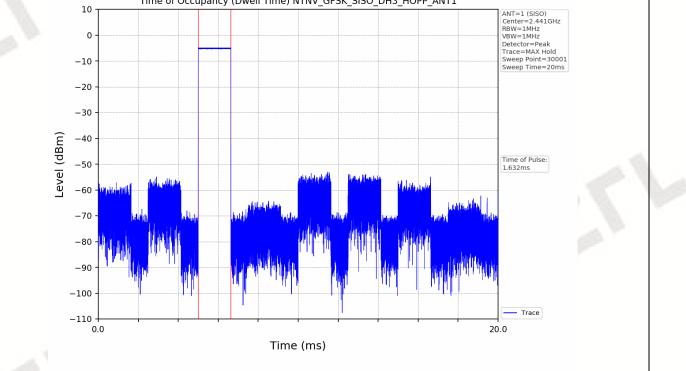






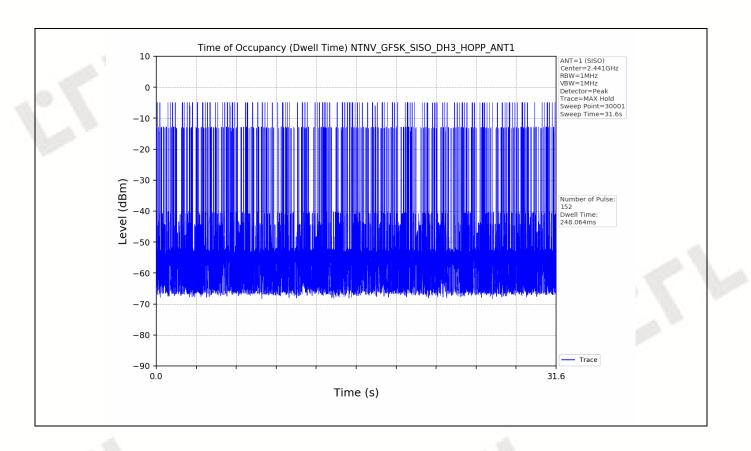
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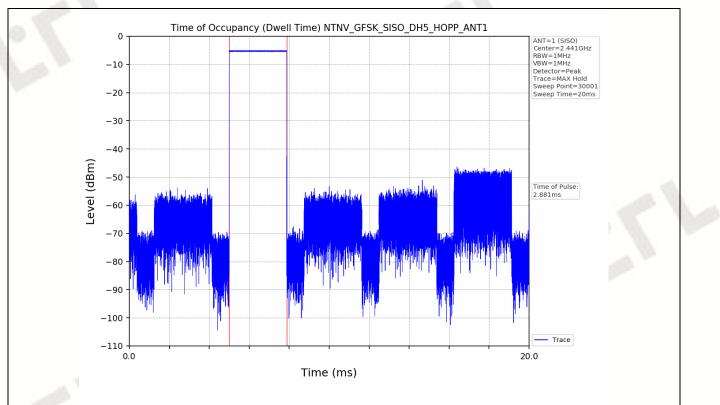


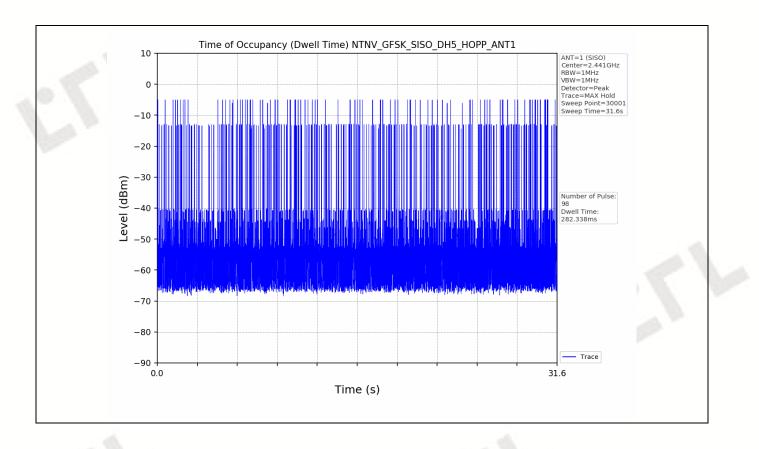


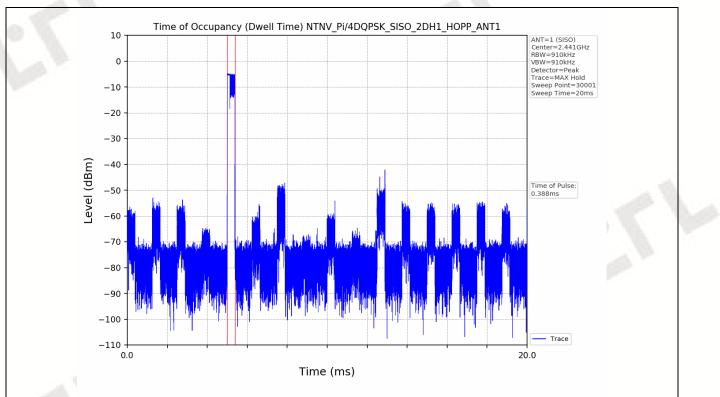
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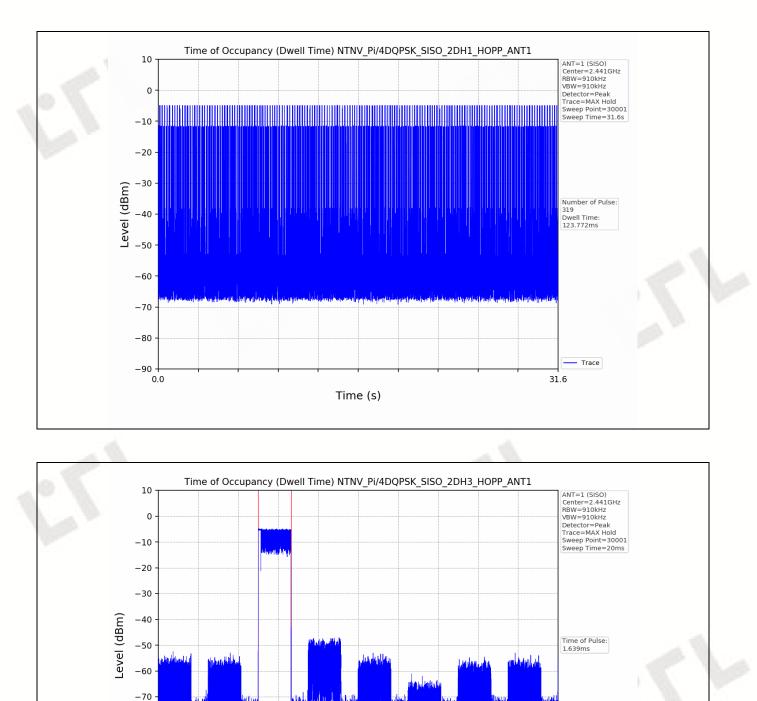


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Trace

20.0

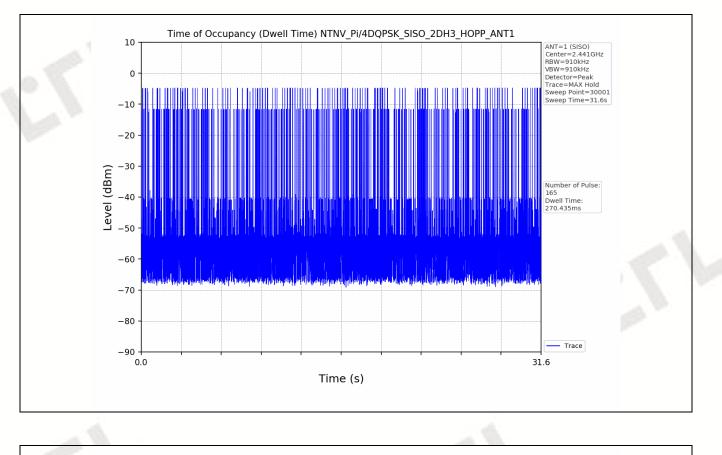


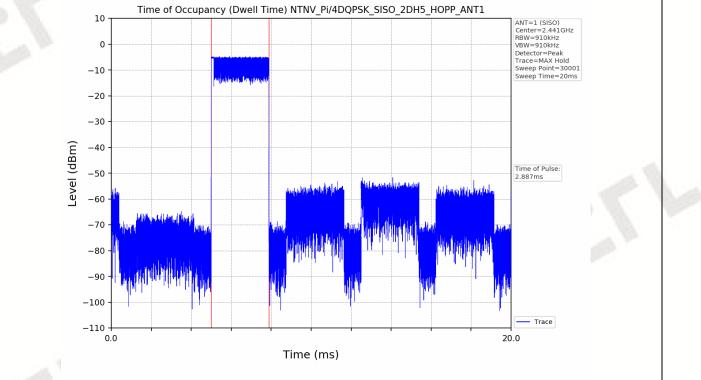
Time (ms)

-80 -90 -100

-110 + 0.0 Page 25 of 41

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V1.0

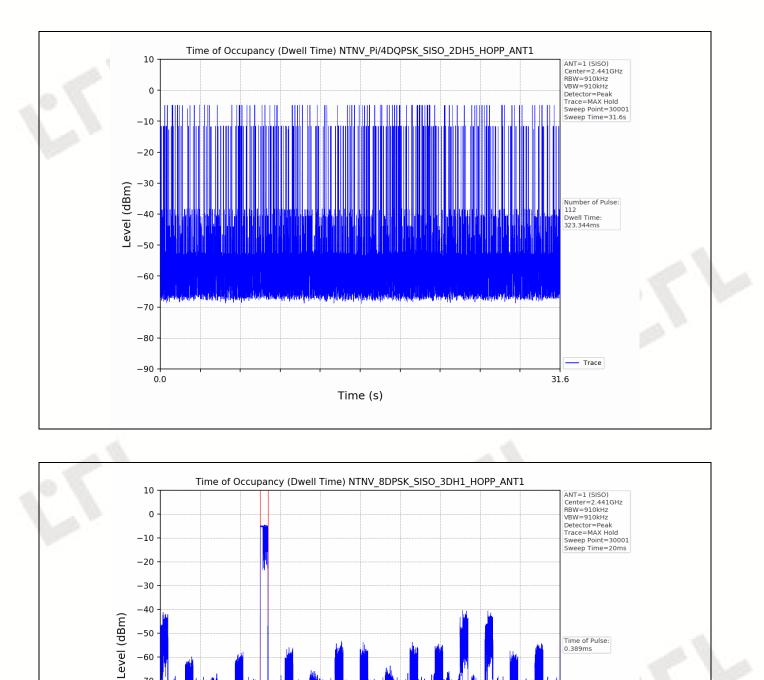
-70 -80 -90 -100 -110

-120 + 0.0

Report No.: CTL2103232081-WF01

Trace

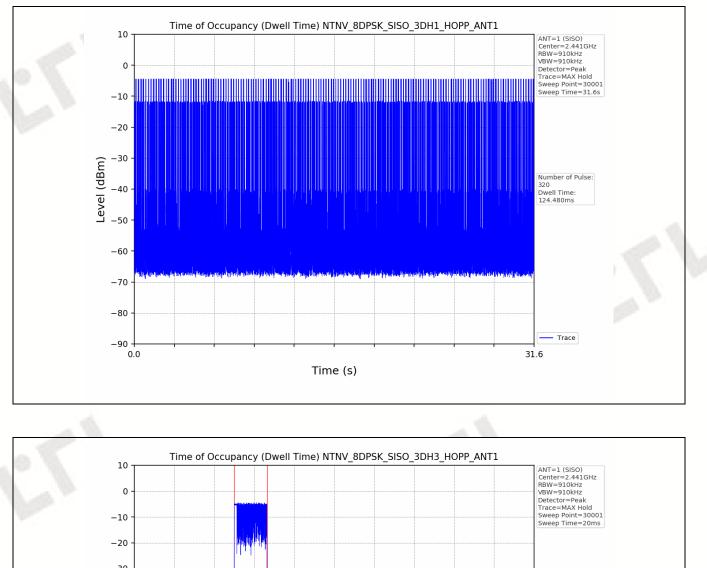
20.0

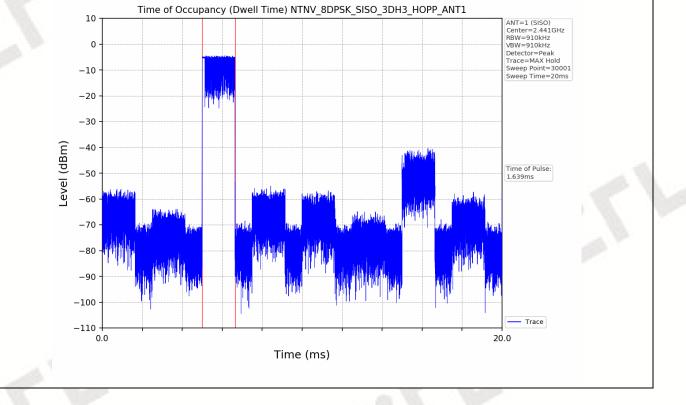


Time (ms)

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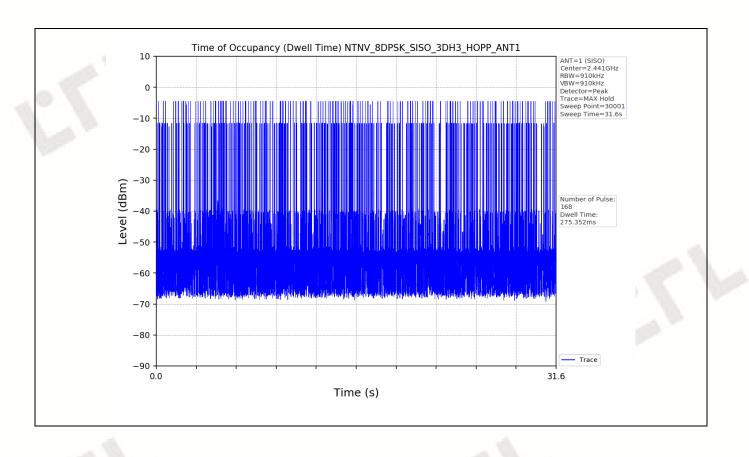
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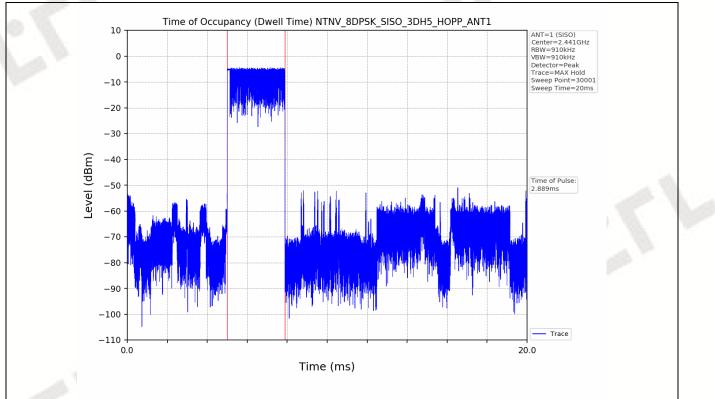




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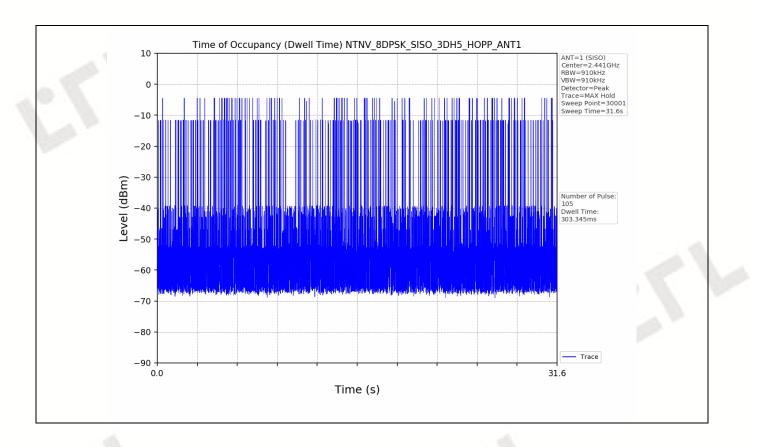
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6. Unwanted Emissions in Non-restricted Frequency Bands

6.1 Test Result

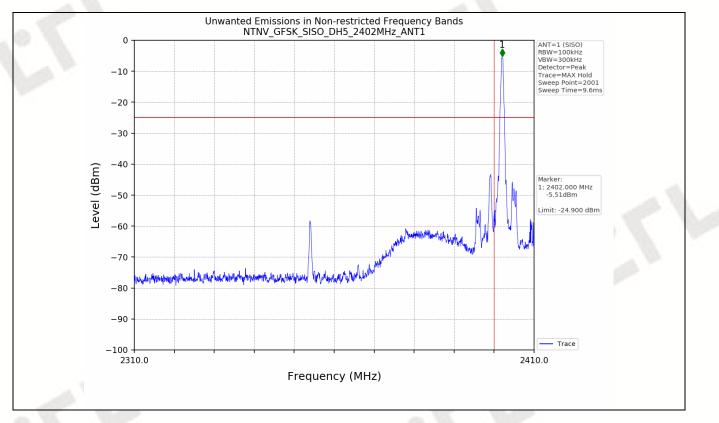
Test Mode	Frequency (MHz)	ТХ Туре	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
GFSK	2402	SISO	1	Refer to test graph	-24.90	PASS
	2441	SISO	1	Refer to test graph	-24.90	PASS
	2480	SISO	1	Refer to test graph	-24.90	PASS
	Hopping	SISO	1	Refer to test graph	-24.90	PASS
	2402	SISO	1	Refer to test graph	-24.97	PASS
	2441	SISO	1	Refer to test graph	-24.97	PASS
Pi/4DQPSK	2480	SISO	1	Refer to test graph	-24.97	PASS
	Hopping	SISO	1	Refer to test graph	-24.97	PASS
	2402	SISO	1	Refer to test graph	-24.93	PASS
8DPSK	2441	SISO	1	Refer to test graph	-24.93	PASS
	2480	SISO	1	Refer to test graph	-24.93	PASS
	Hopping	SISO	1	Refer to test graph	-24.93	PASS

6.2 Test Graph

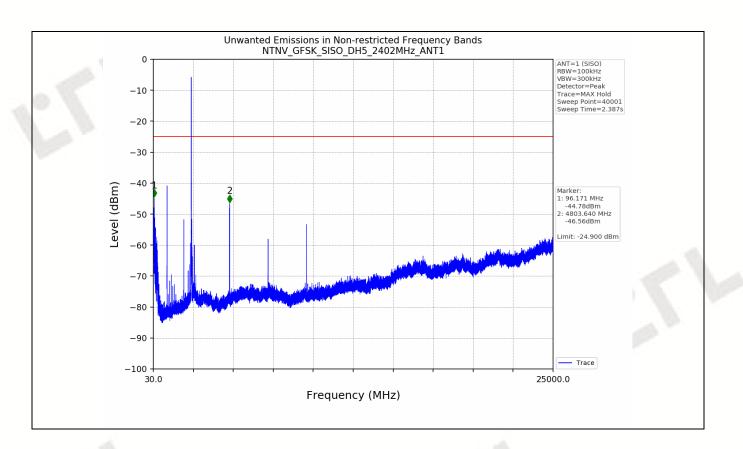


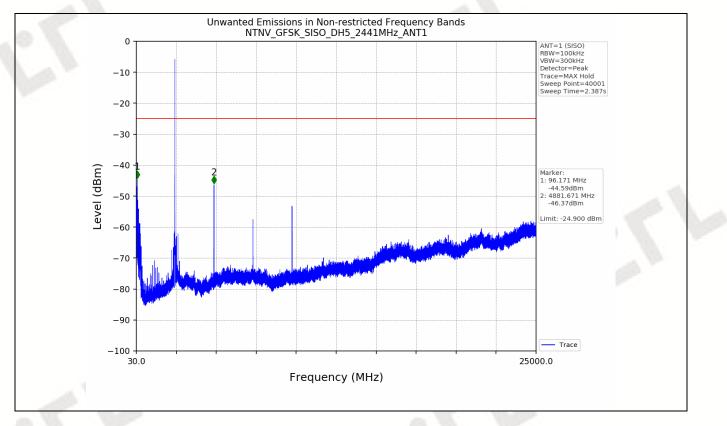


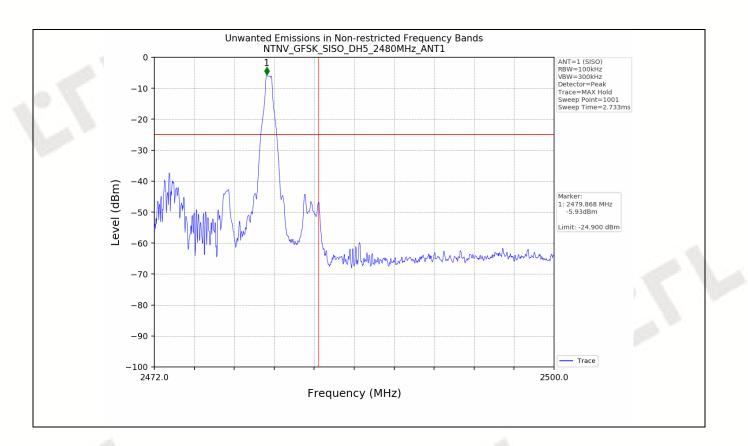


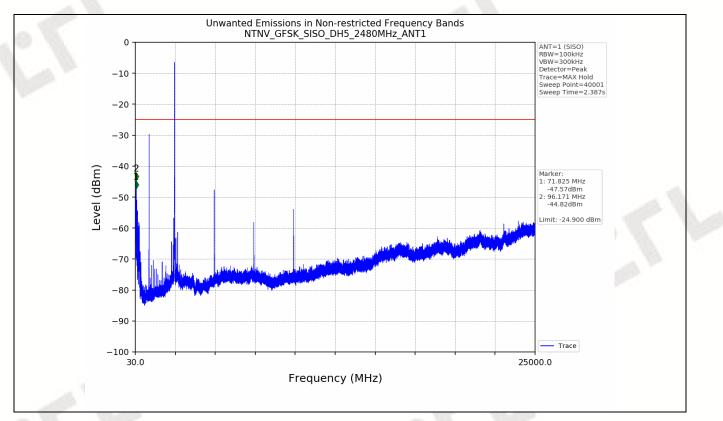


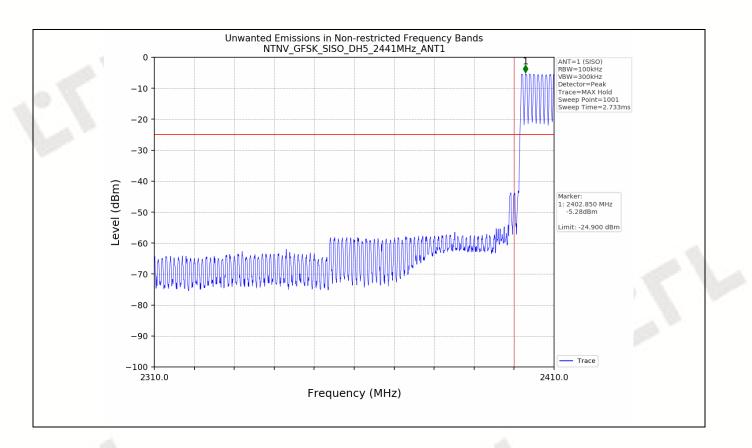
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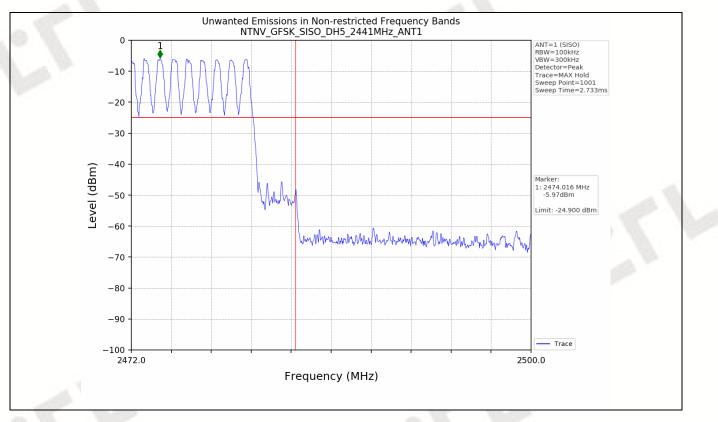


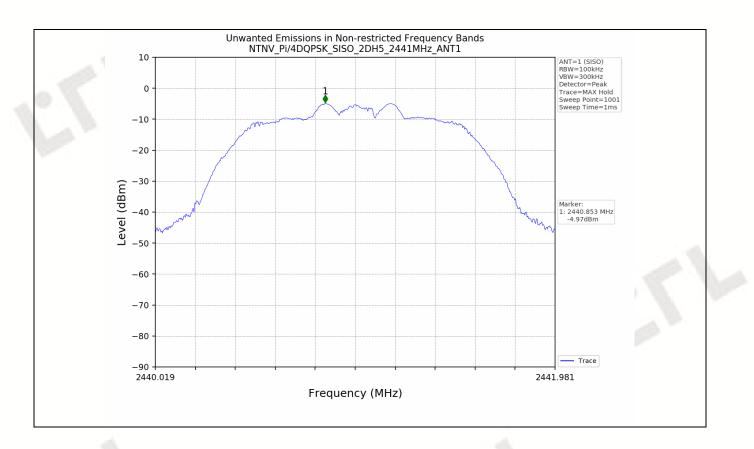


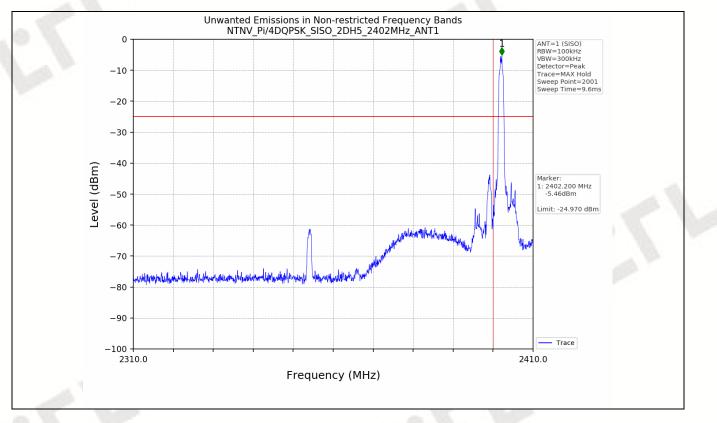






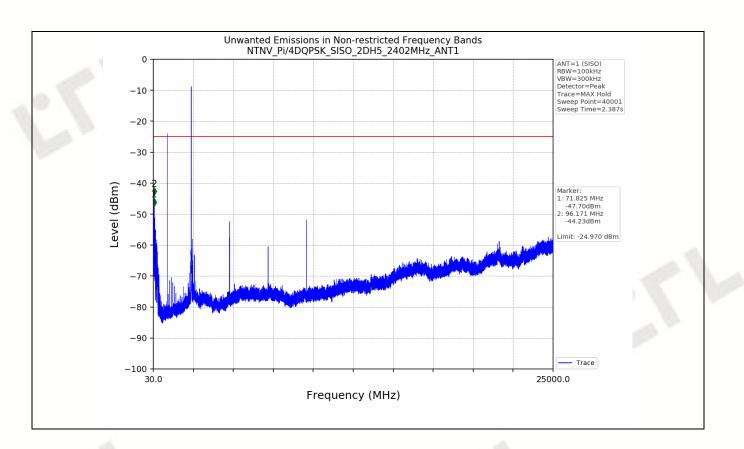


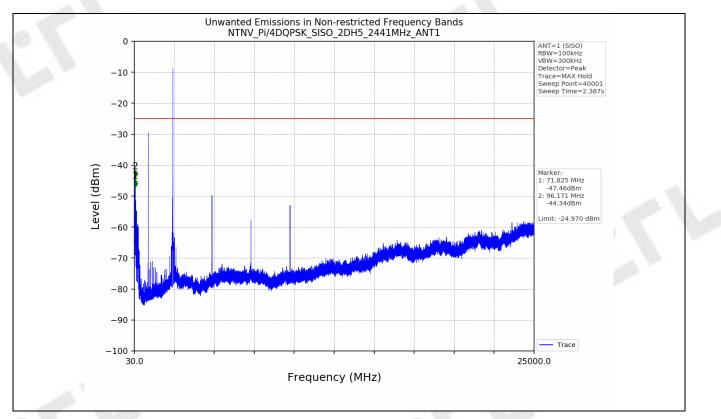


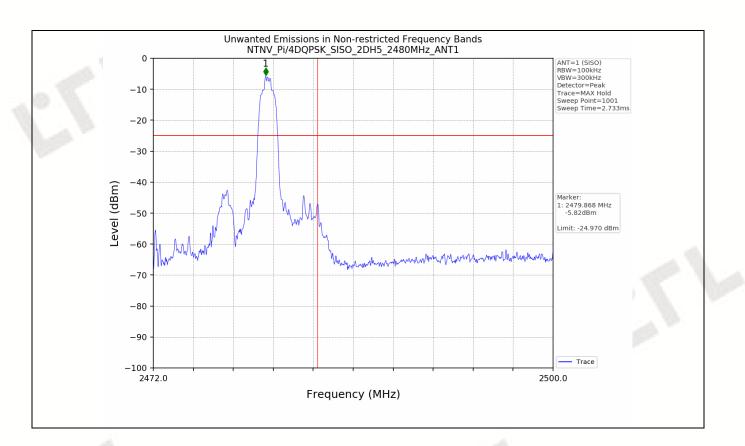


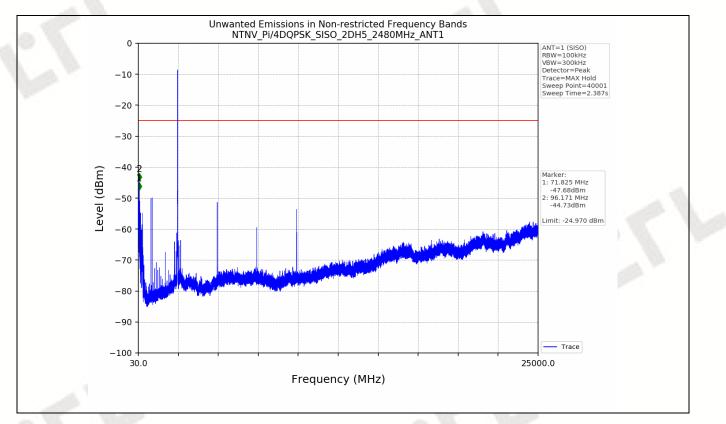
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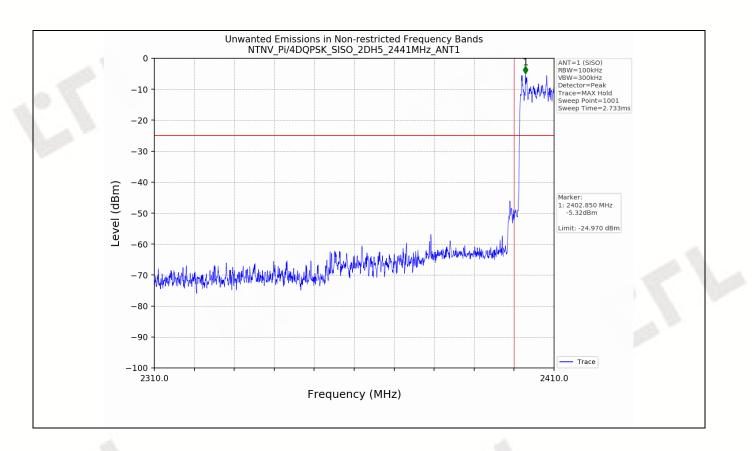
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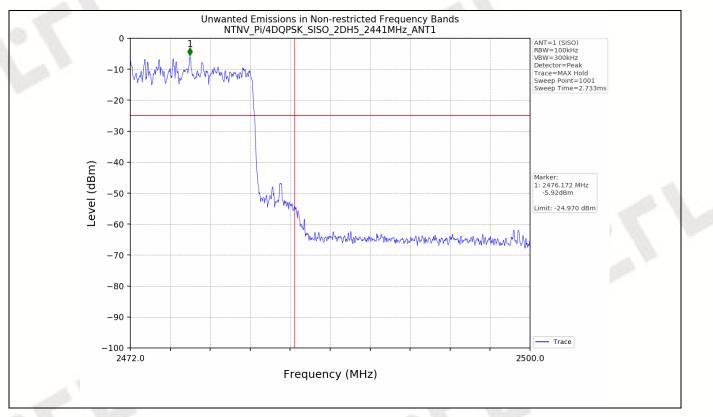


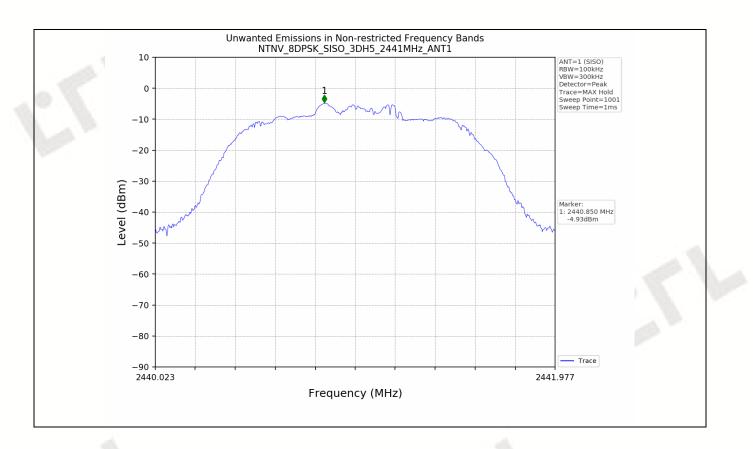


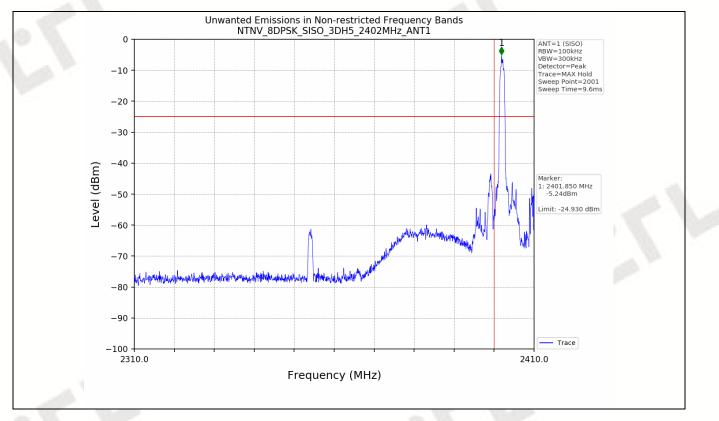












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