



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

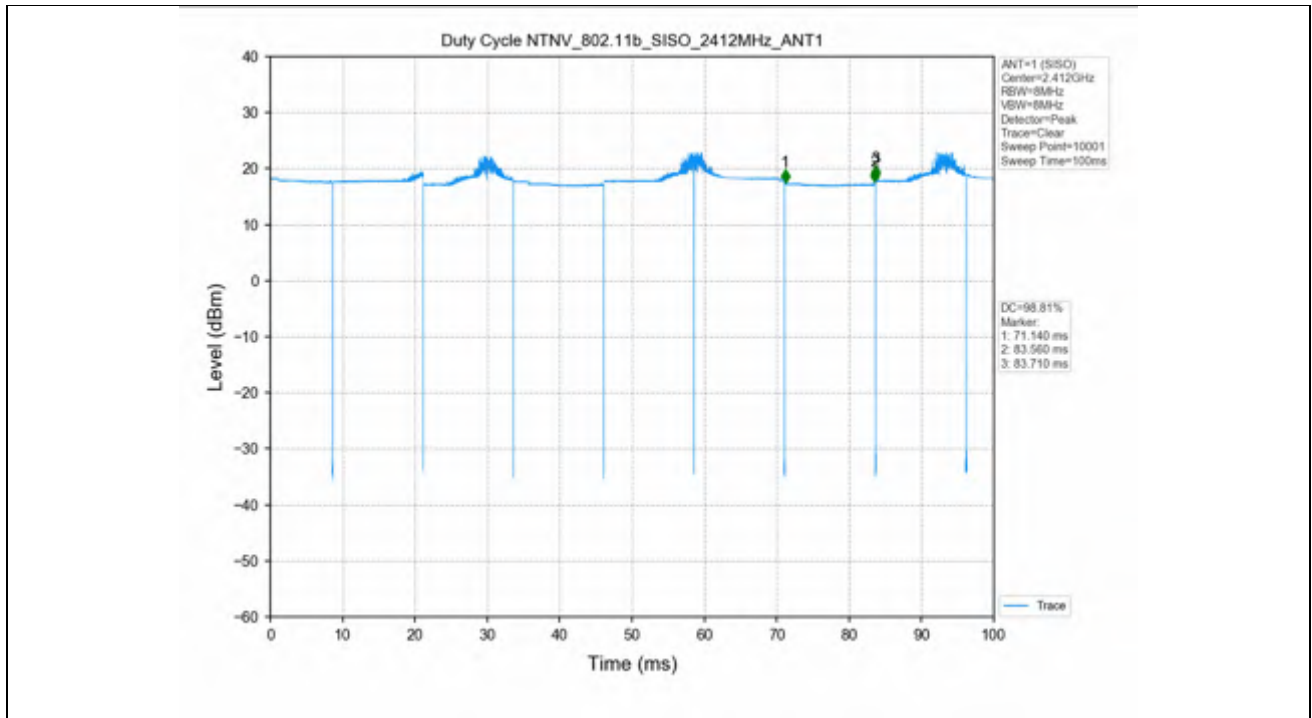
Appendix A for SHEM200500380401

1. Duty Cycle

1.1 Test Result

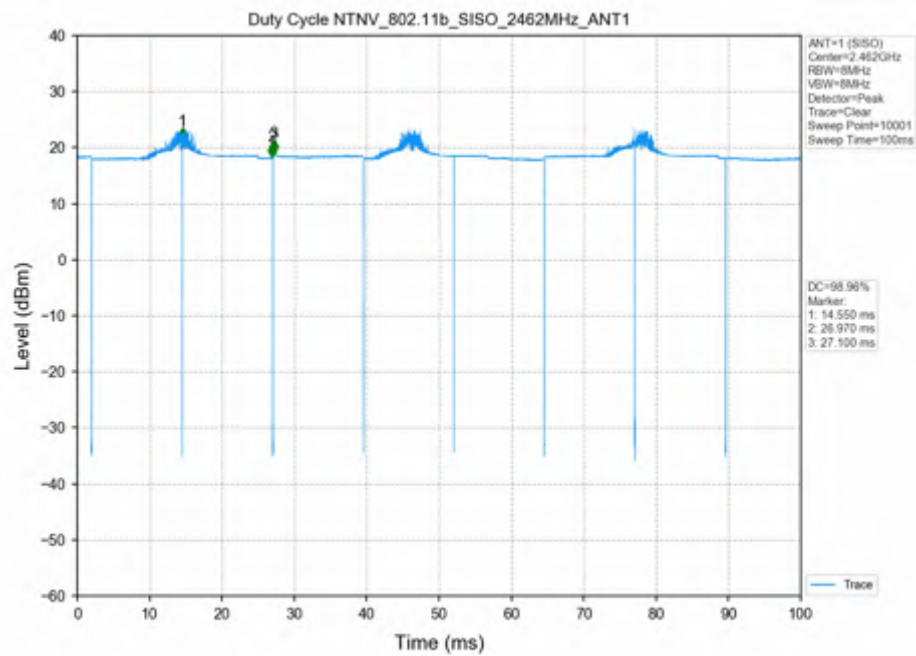
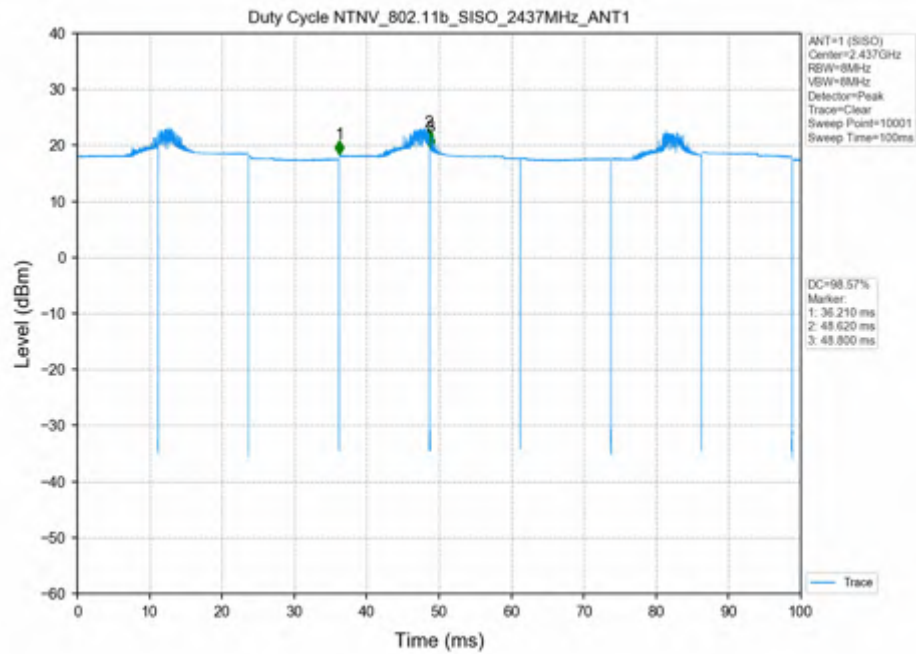
Test Mode	Channel Frequency(MHz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11b	2412	SISO	1	12.420	12.570	98.81	0.05
	2437	SISO	1	12.410	12.590	98.57	0.06
	2462	SISO	1	12.420	12.550	98.96	0.05
802.11g	2412	SISO	1	2.064	2.228	92.64	0.33
	2437	SISO	1	2.034	2.142	94.96	0.22
	2462	SISO	1	2.036	2.204	92.38	0.34
802.11n(HT20)	2412	SISO	1	1.921	2.073	92.67	0.33
	2437	SISO	1	1.892	2.033	93.06	0.31
	2462	SISO	1	1.920	2.072	92.66	0.33
802.11n(HT40)	2422	SISO	1	0.916	1.073	85.37	0.69
	2437	SISO	1	0.917	1.065	86.10	0.65
	2452	SISO	1	0.916	1.065	86.01	0.65

1.2 Test Graph



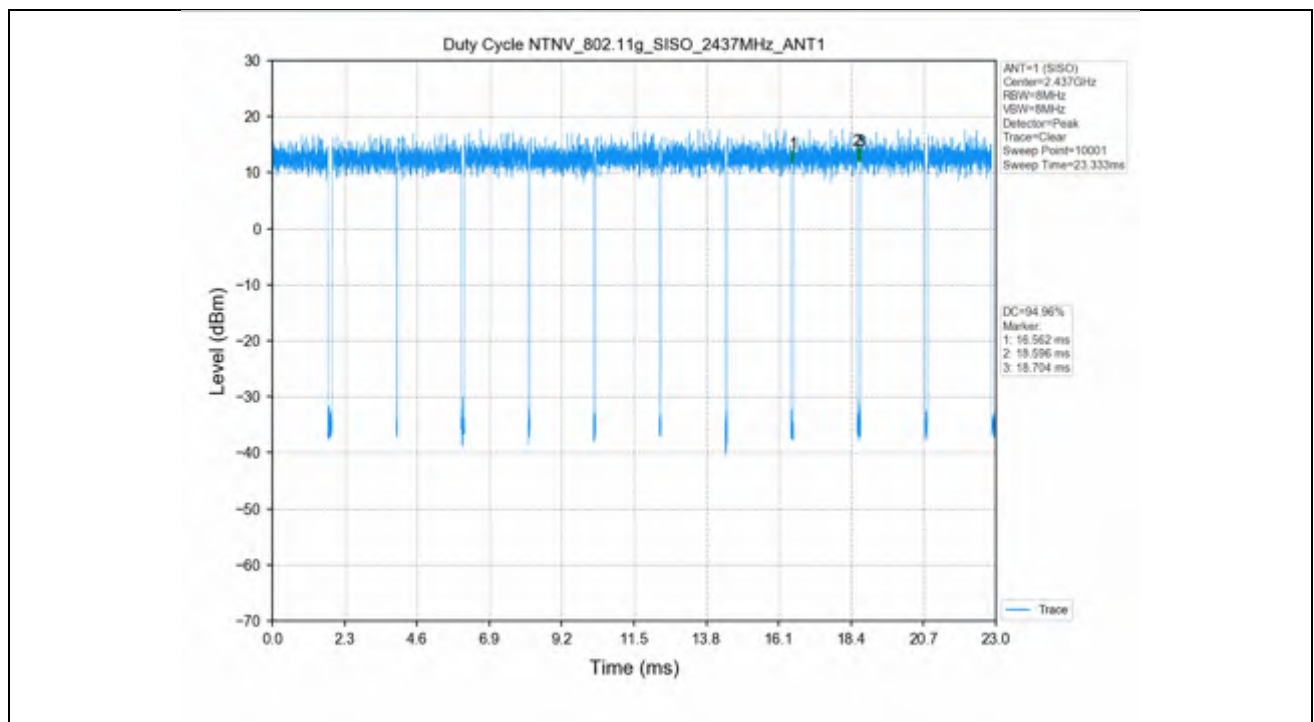
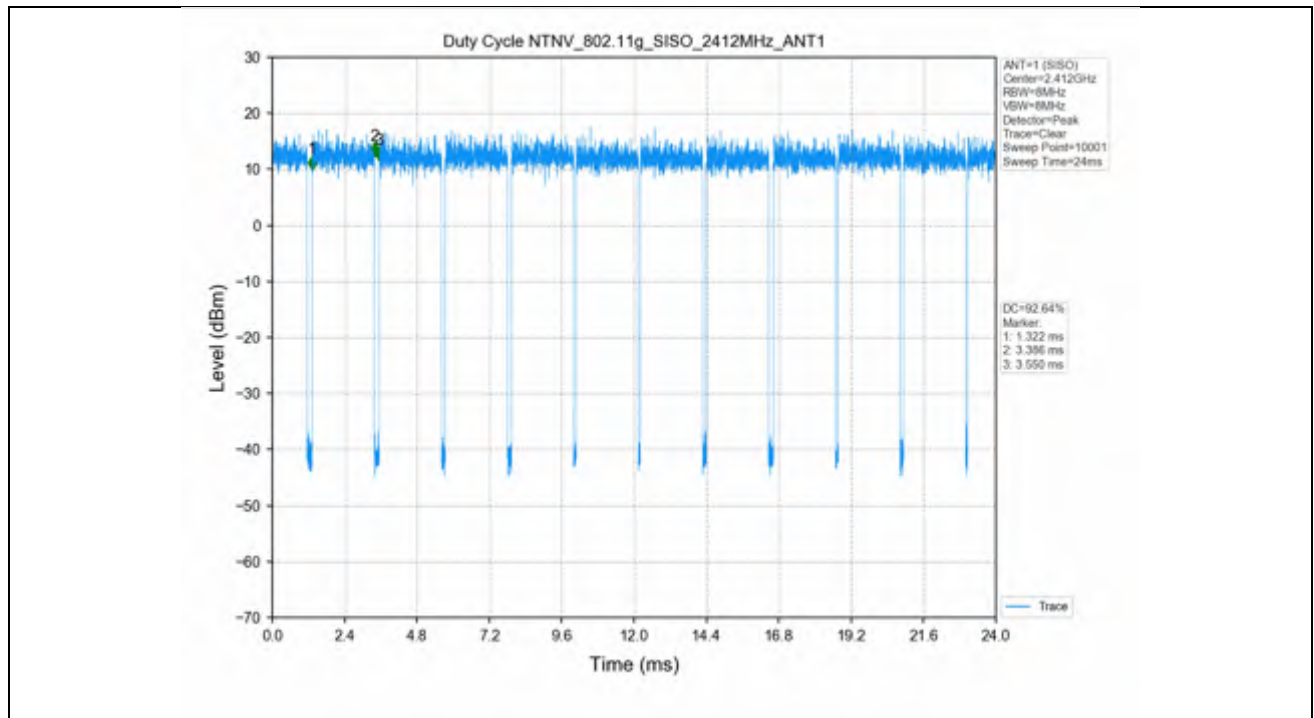


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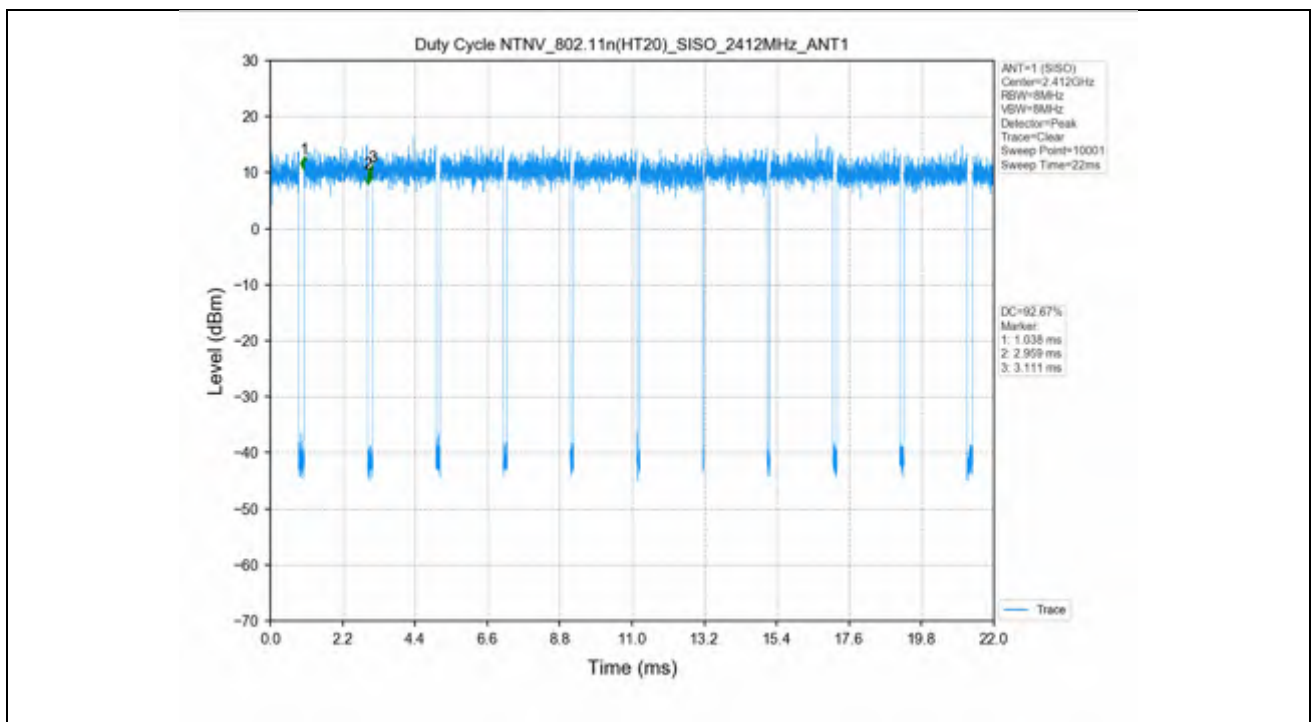
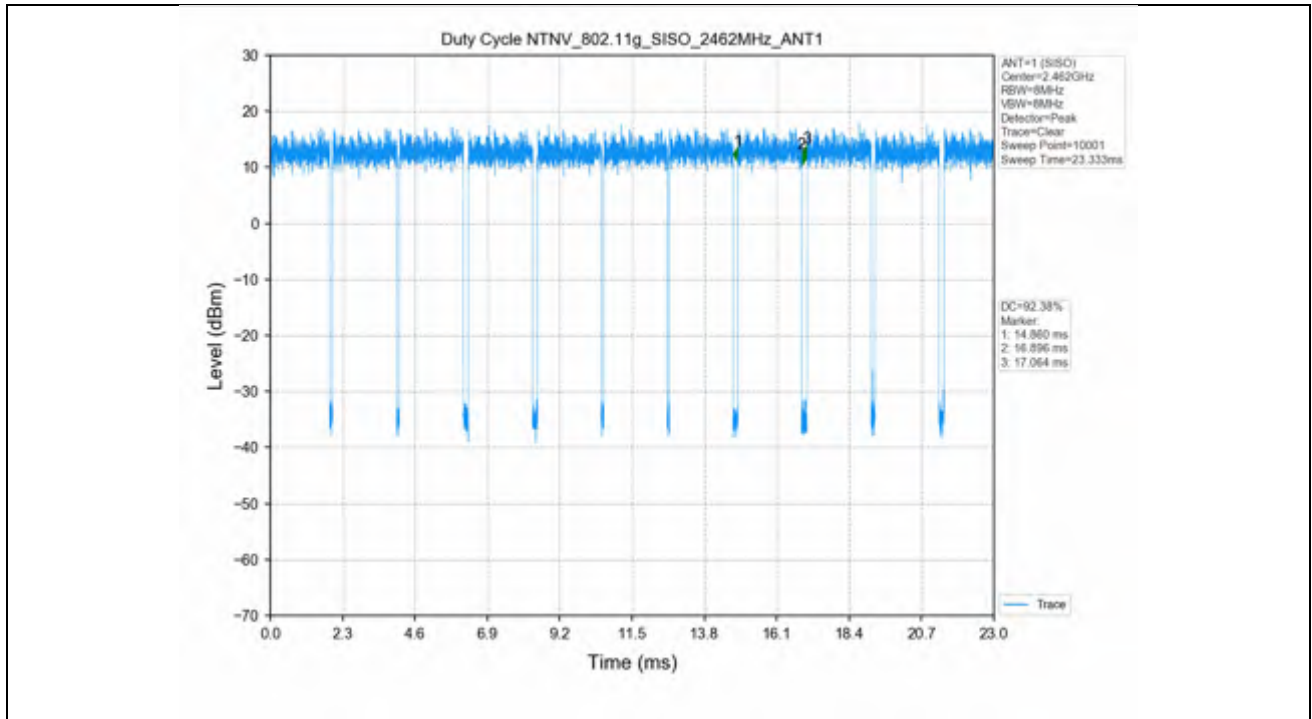


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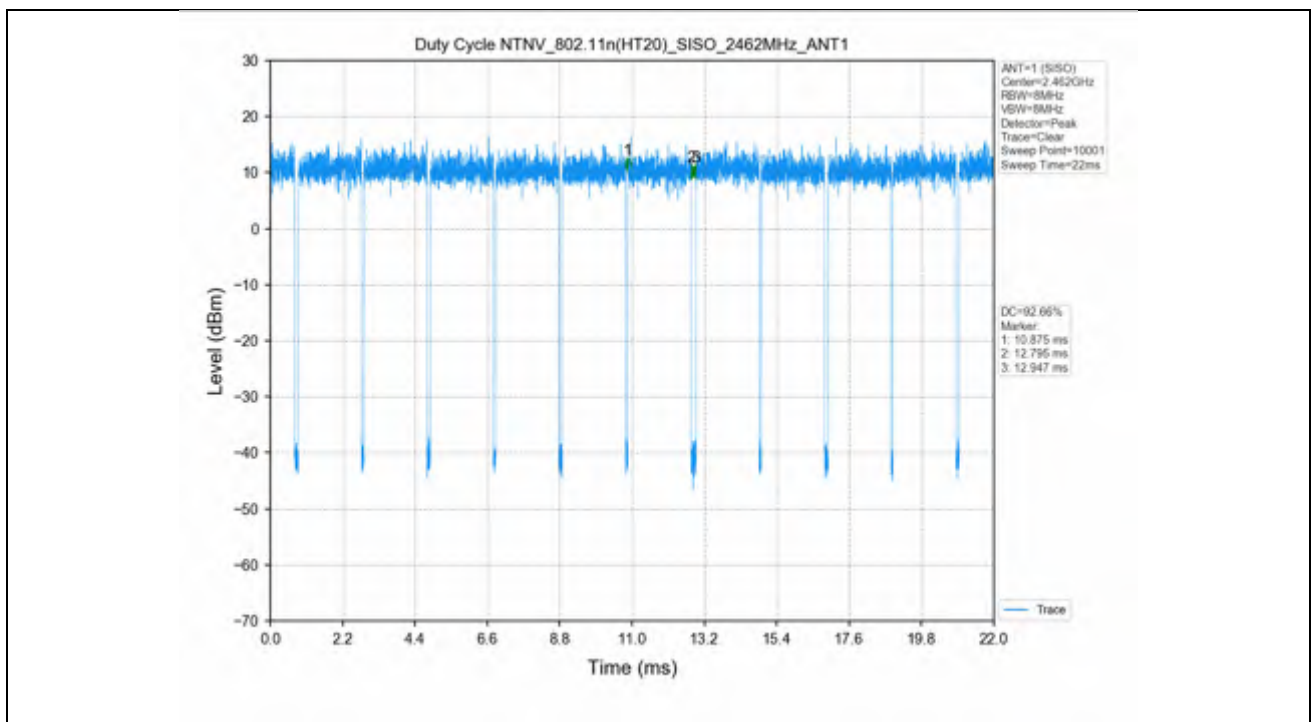
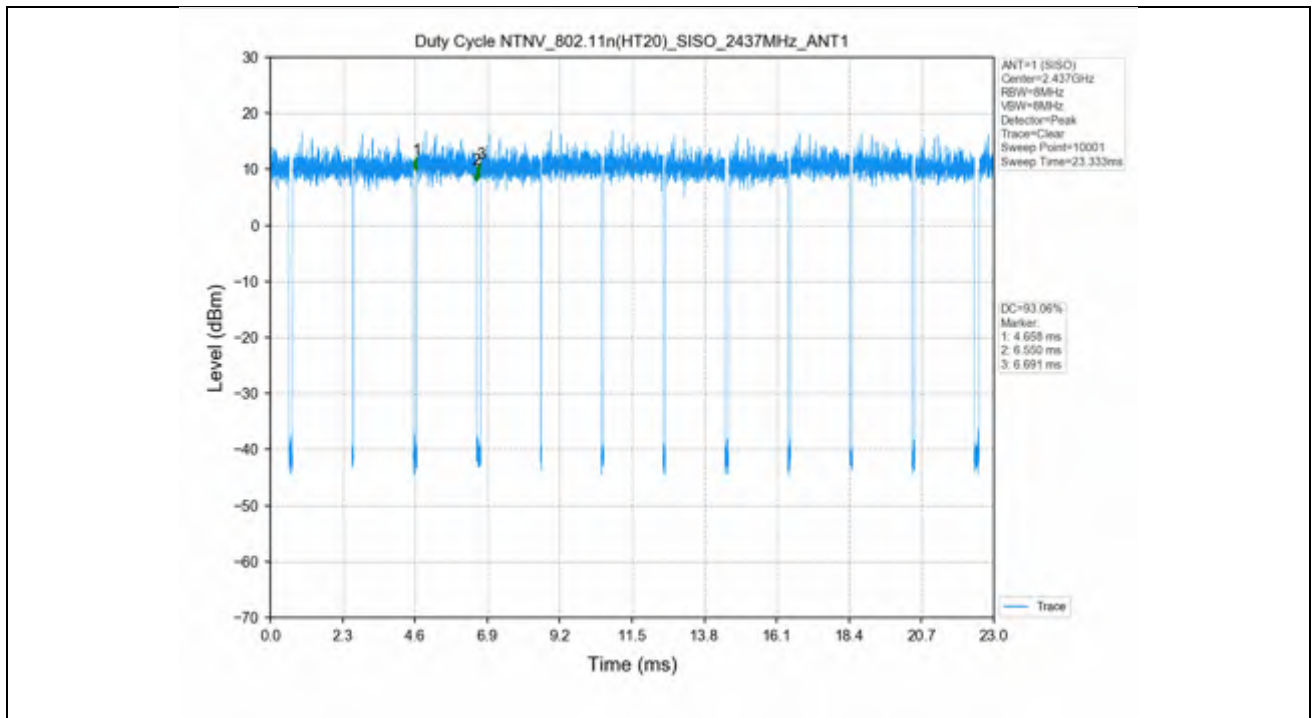


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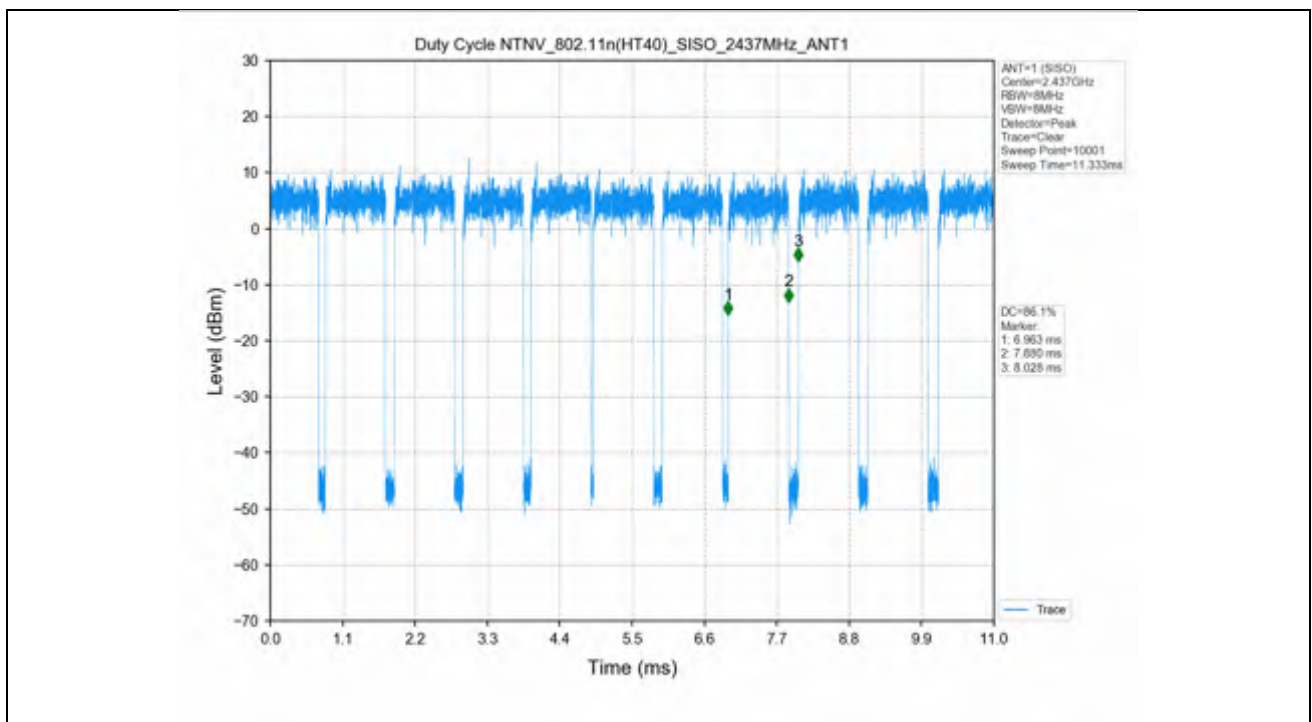
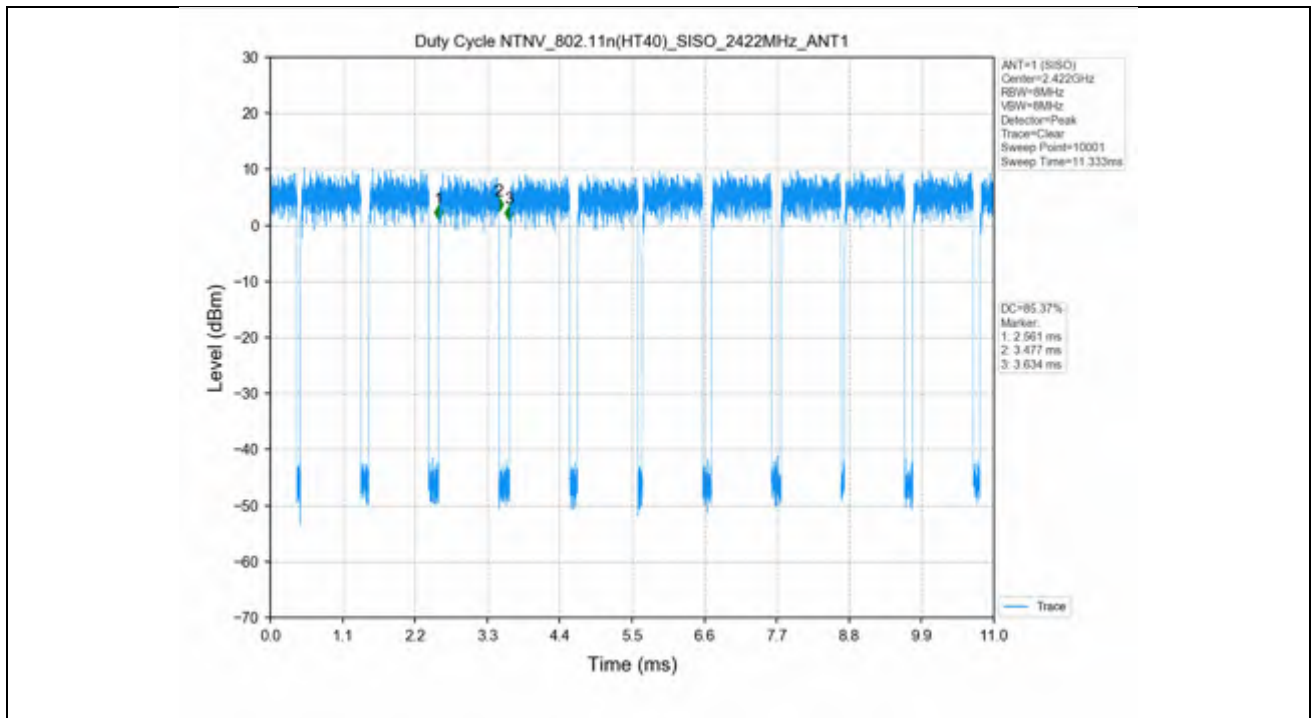


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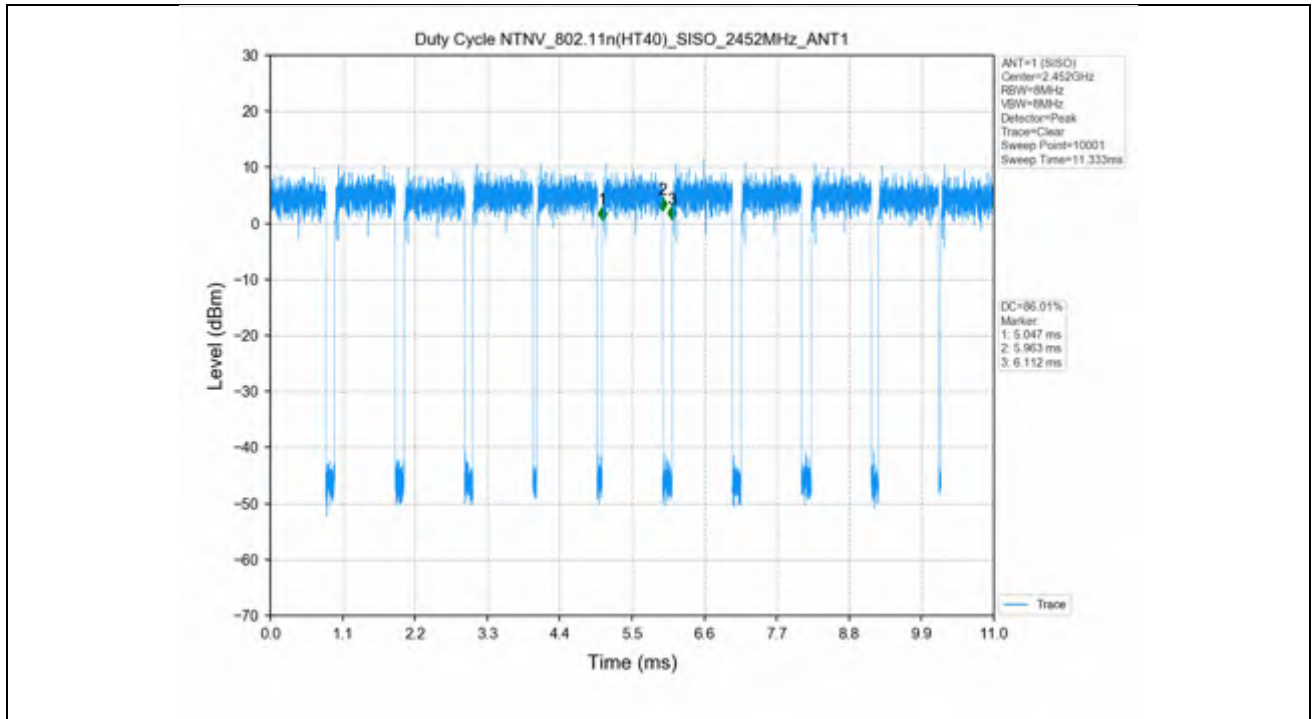


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2. Bandwidth

2.1 Test Result

Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	10.076	≥ 0.5	PASS
	2437	SISO	1	9.573	≥ 0.5	PASS
	2462	SISO	1	10.075	≥ 0.5	PASS
802.11g	2412	SISO	1	16.432	≥ 0.5	PASS
	2437	SISO	1	16.412	≥ 0.5	PASS
	2462	SISO	1	16.417	≥ 0.5	PASS
802.11n(HT20)	2412	SISO	1	17.606	≥ 0.5	PASS
	2437	SISO	1	17.636	≥ 0.5	PASS
	2462	SISO	1	17.629	≥ 0.5	PASS
802.11n(HT40)	2422	SISO	1	35.806	≥ 0.5	PASS
	2437	SISO	1	35.665	≥ 0.5	PASS
	2452	SISO	1	35.487	≥ 0.5	PASS



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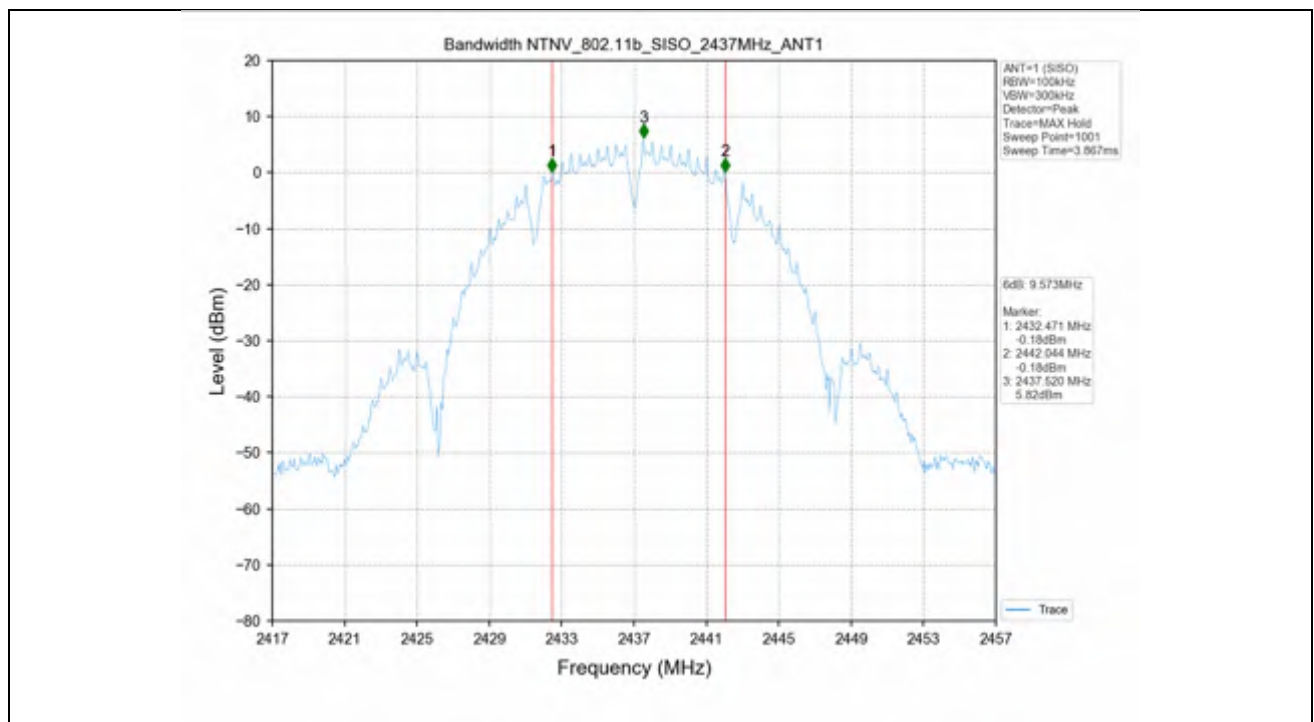
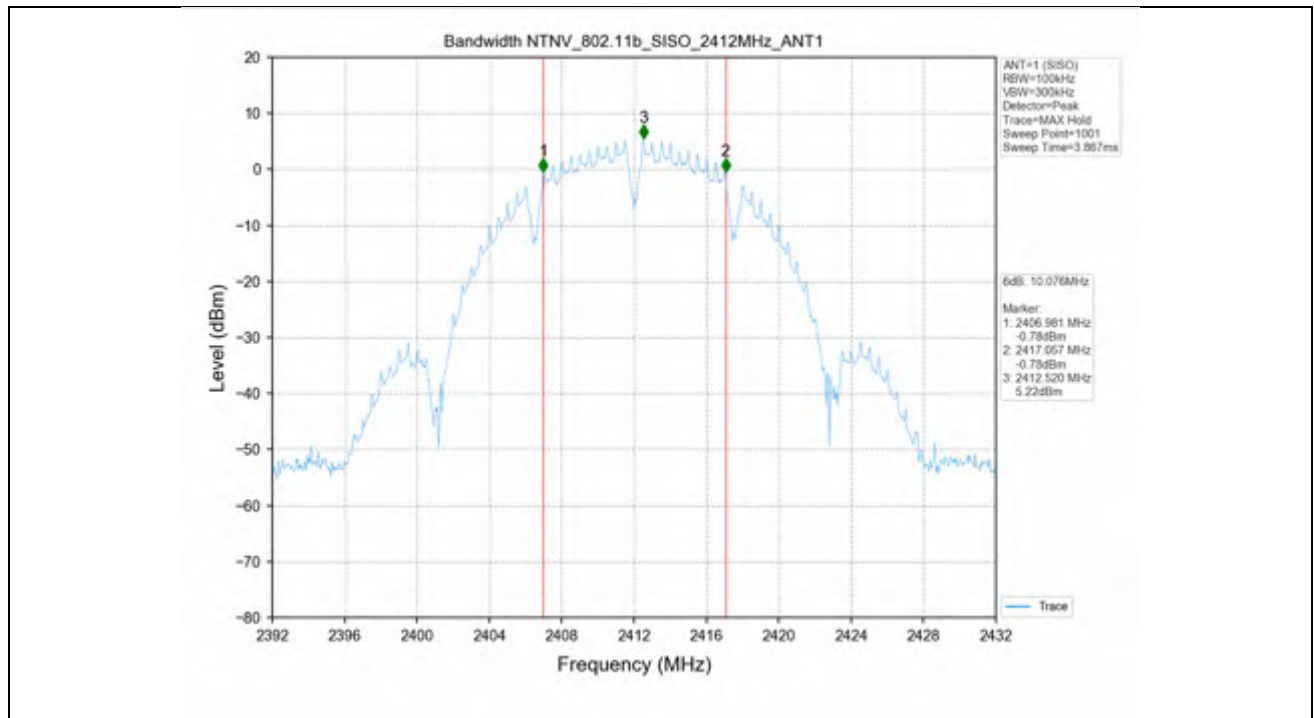
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Span using in PSD(MHz)	Span using in Power(MHz)
				Test Result (MHz)	1.5*BW(MHz)		
802.11b	2412	SISO	1	10.076	15.114	16	23
	2437	SISO	1	9.573	14.360	16	23
	2462	SISO	1	10.075	15.113	16	23
802.11g	2412	SISO	1	16.432	24.648	25	26
	2437	SISO	1	16.412	24.618	25	26
	2462	SISO	1	16.417	24.626	25	26
802.11n(HT20)	2412	SISO	1	17.606	26.409	27	28
	2437	SISO	1	17.636	26.454	27	28
	2462	SISO	1	17.629	26.444	27	28
802.11n(HT40)	2422	SISO	1	35.806	53.709	54	55
	2437	SISO	1	35.665	53.498	54	55
	2452	SISO	1	35.487	53.231	54	56

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	15.089	Only for Report Use
	2437	SISO	1	15.089	Only for Report Use
	2462	SISO	1	15.080	Only for Report Use
802.11g	2412	SISO	1	16.921	Only for Report Use
	2437	SISO	1	16.972	Only for Report Use
	2462	SISO	1	17.102	Only for Report Use
802.11n(HT20)	2412	SISO	1	18.066	Only for Report Use
	2437	SISO	1	18.041	Only for Report Use
	2462	SISO	1	18.088	Only for Report Use
802.11n(HT40)	2422	SISO	1	36.529	Only for Report Use
	2437	SISO	1	36.624	Only for Report Use
	2452	SISO	1	36.764	Only for Report Use

2.2 Test Graph - 6dB Bandwidth

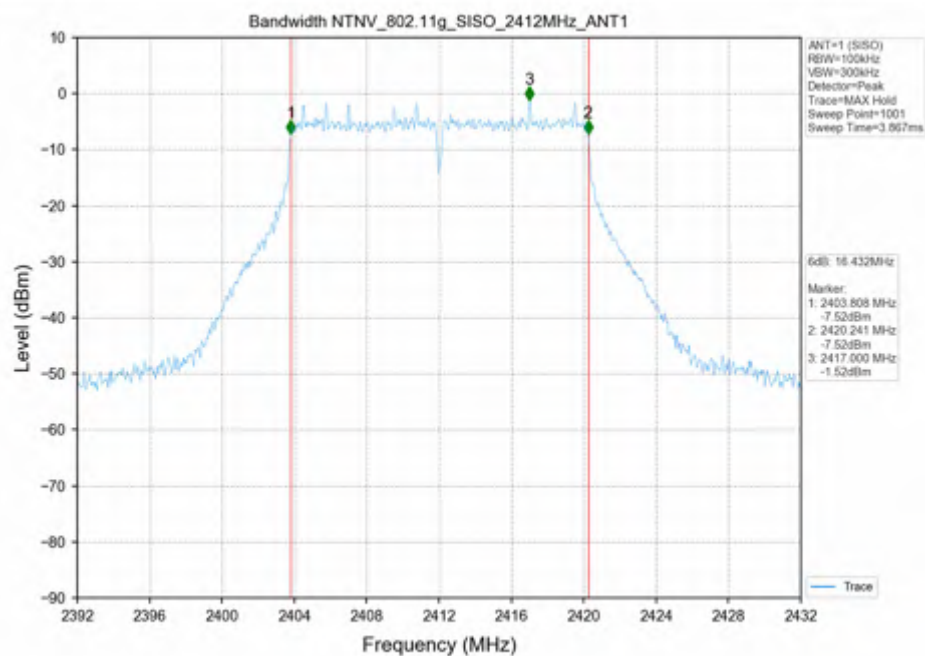
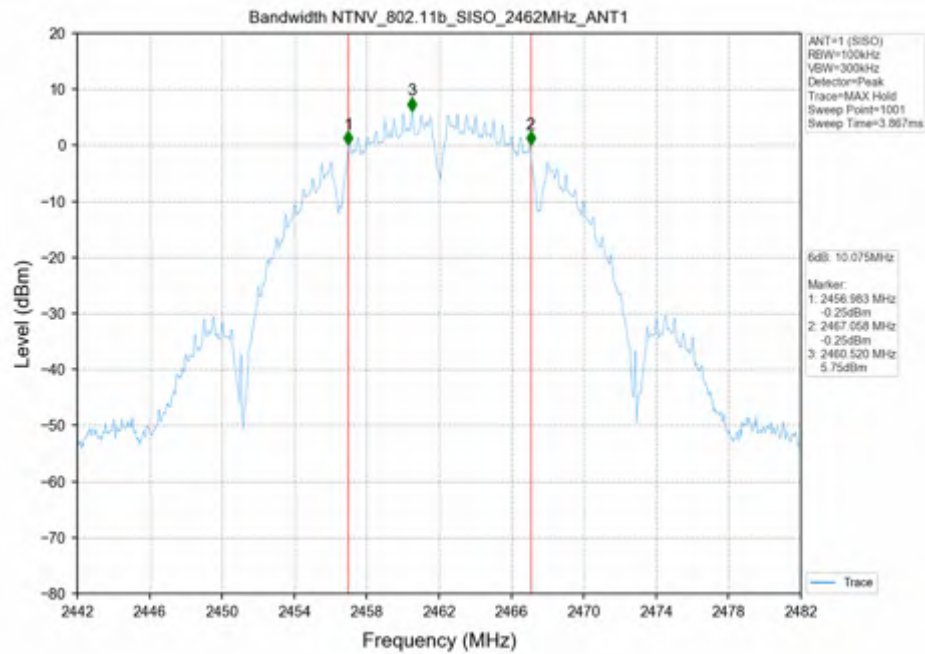


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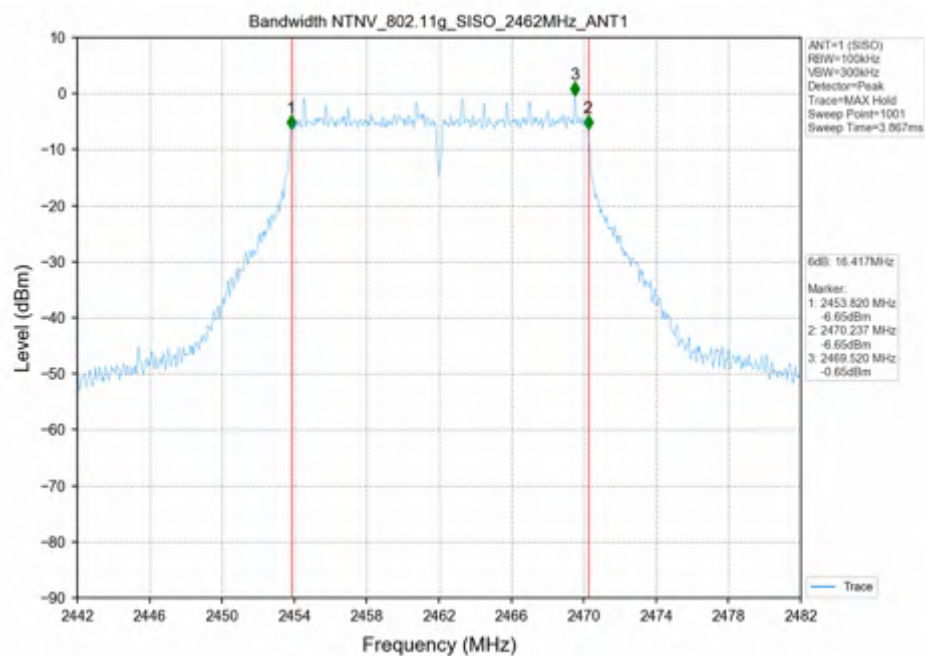
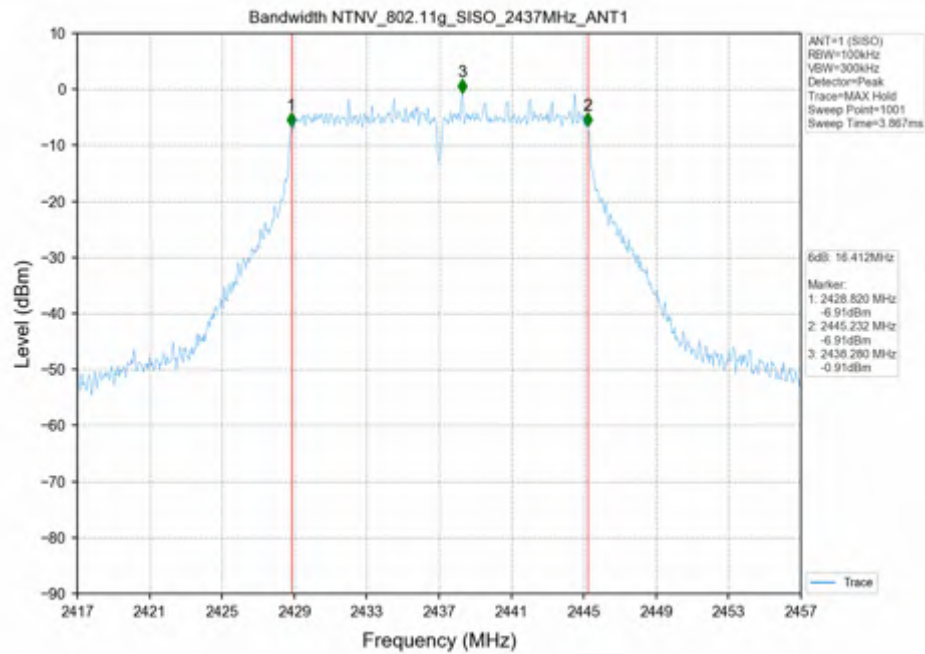


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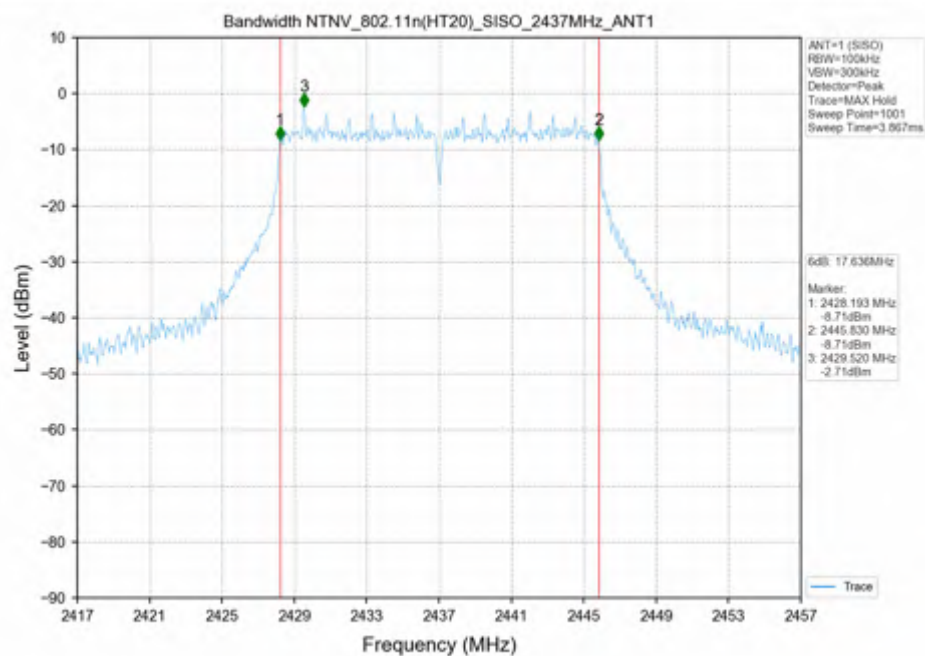
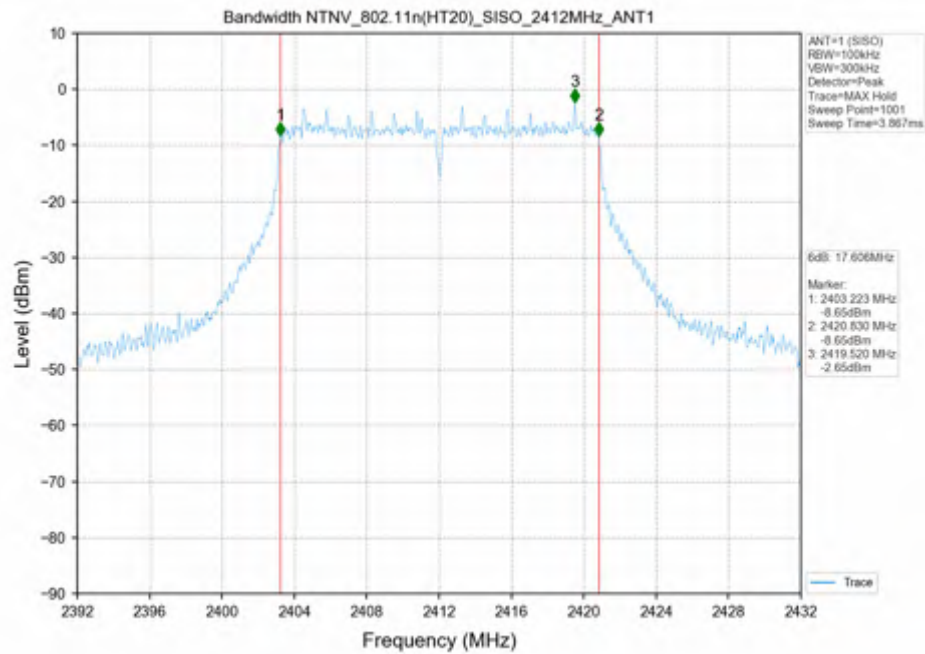


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



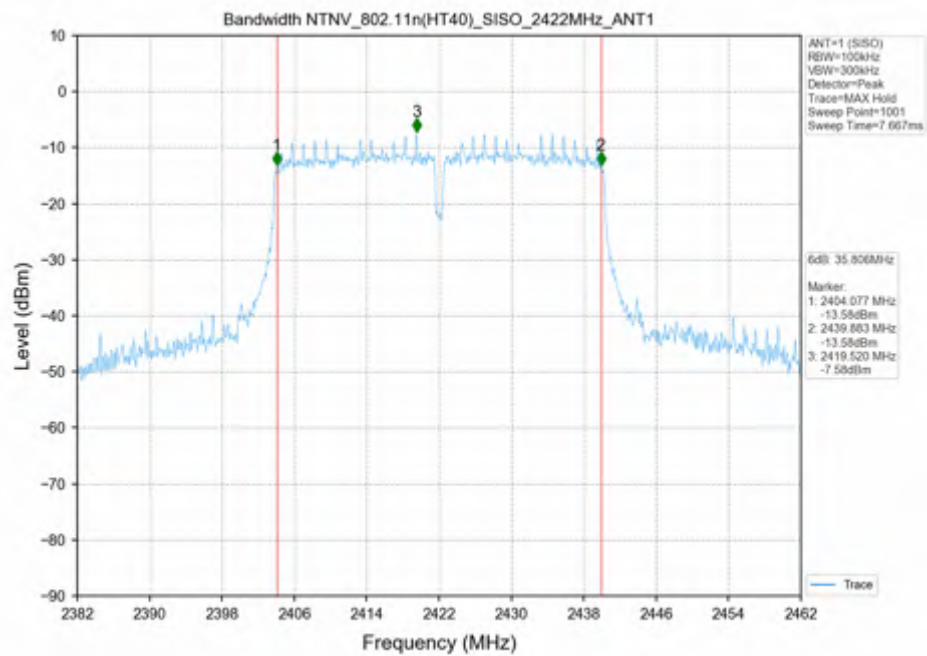
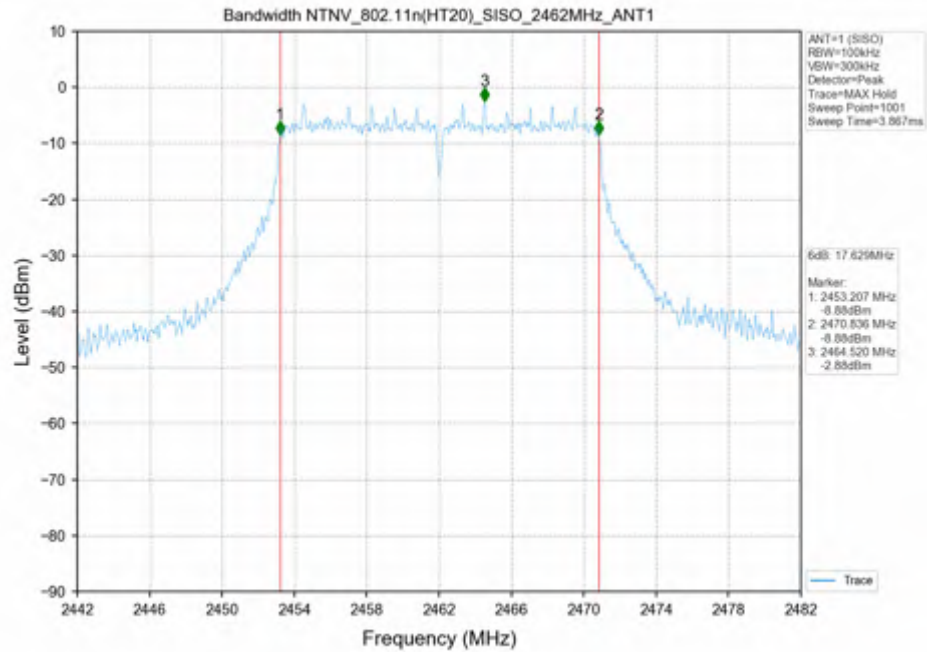


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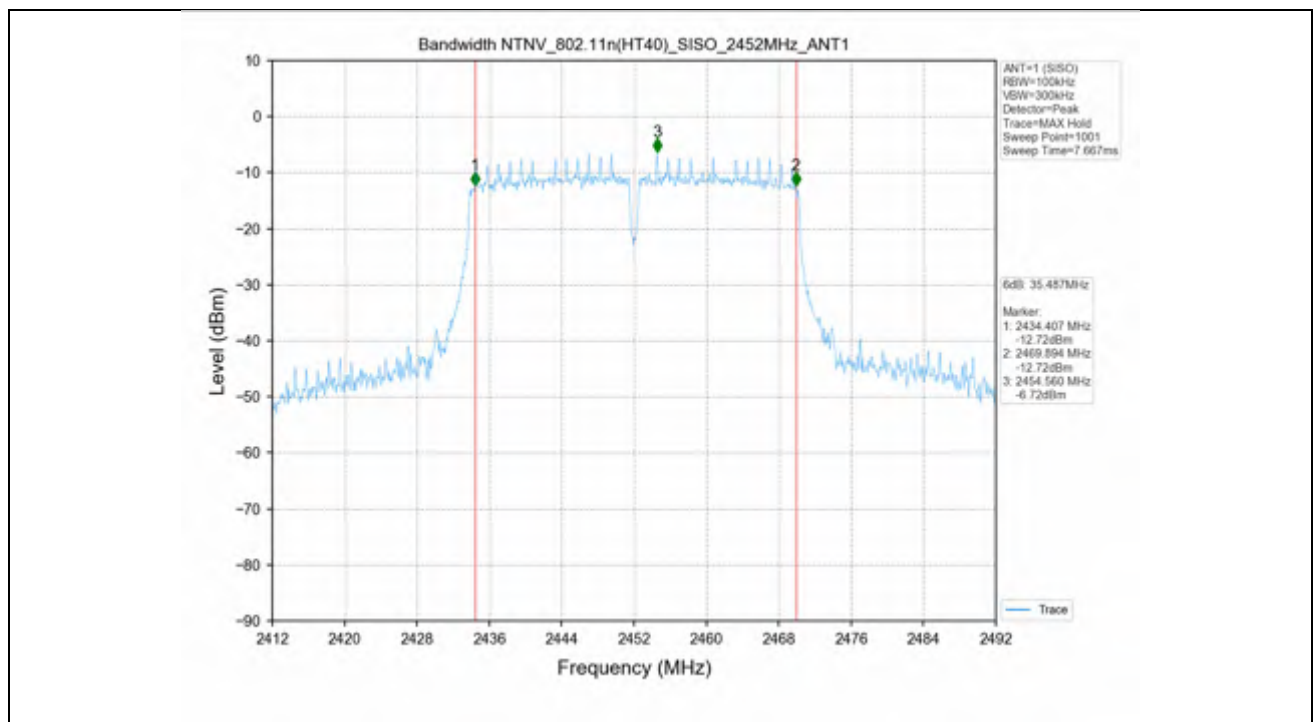
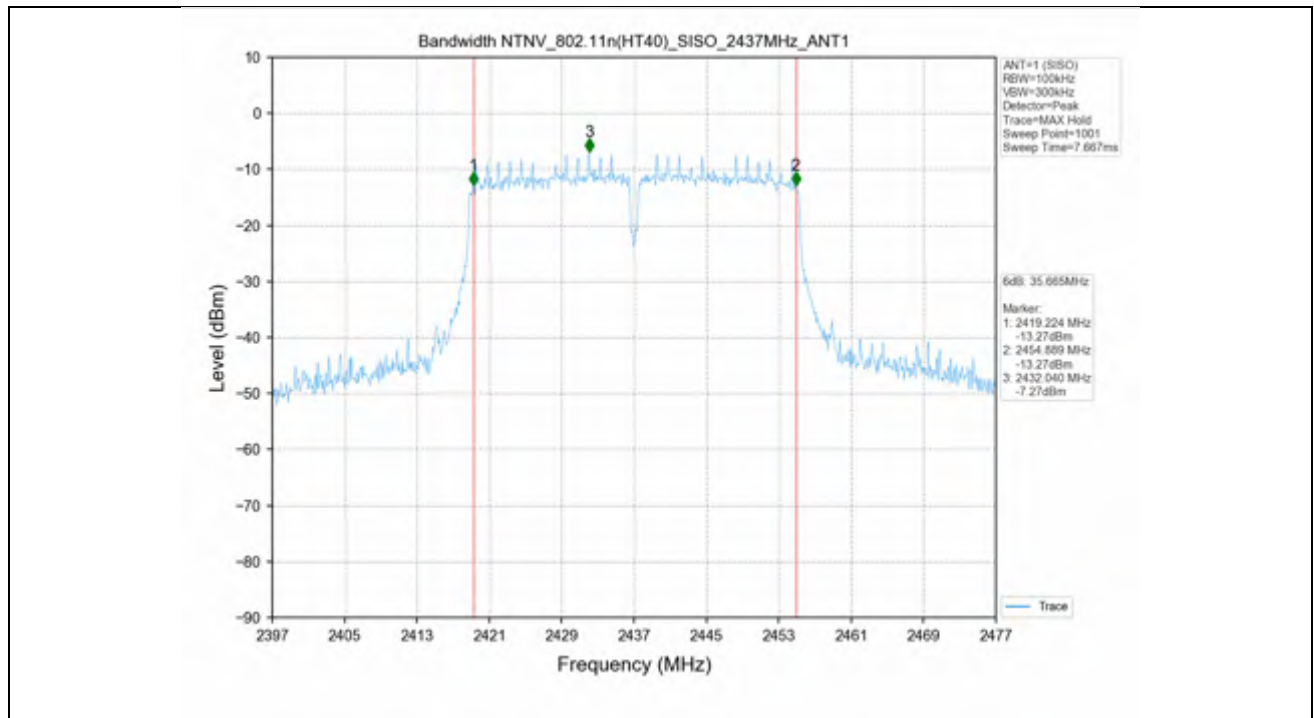


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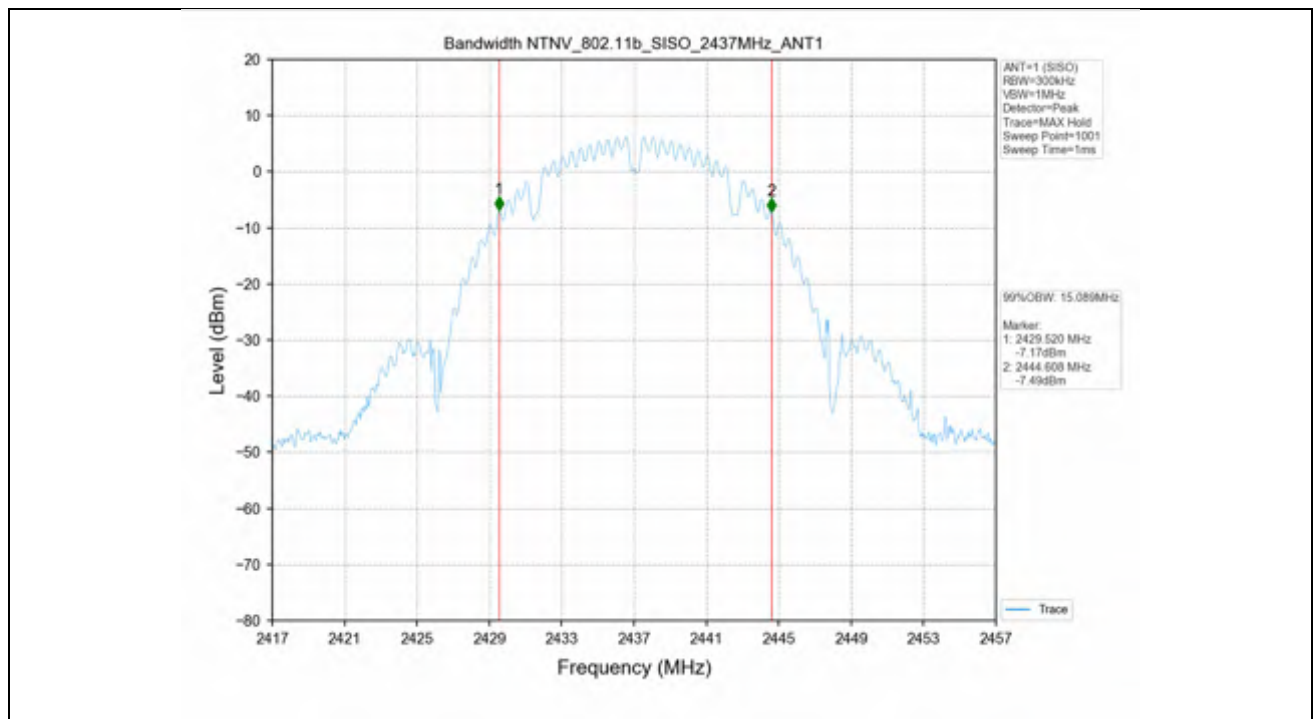
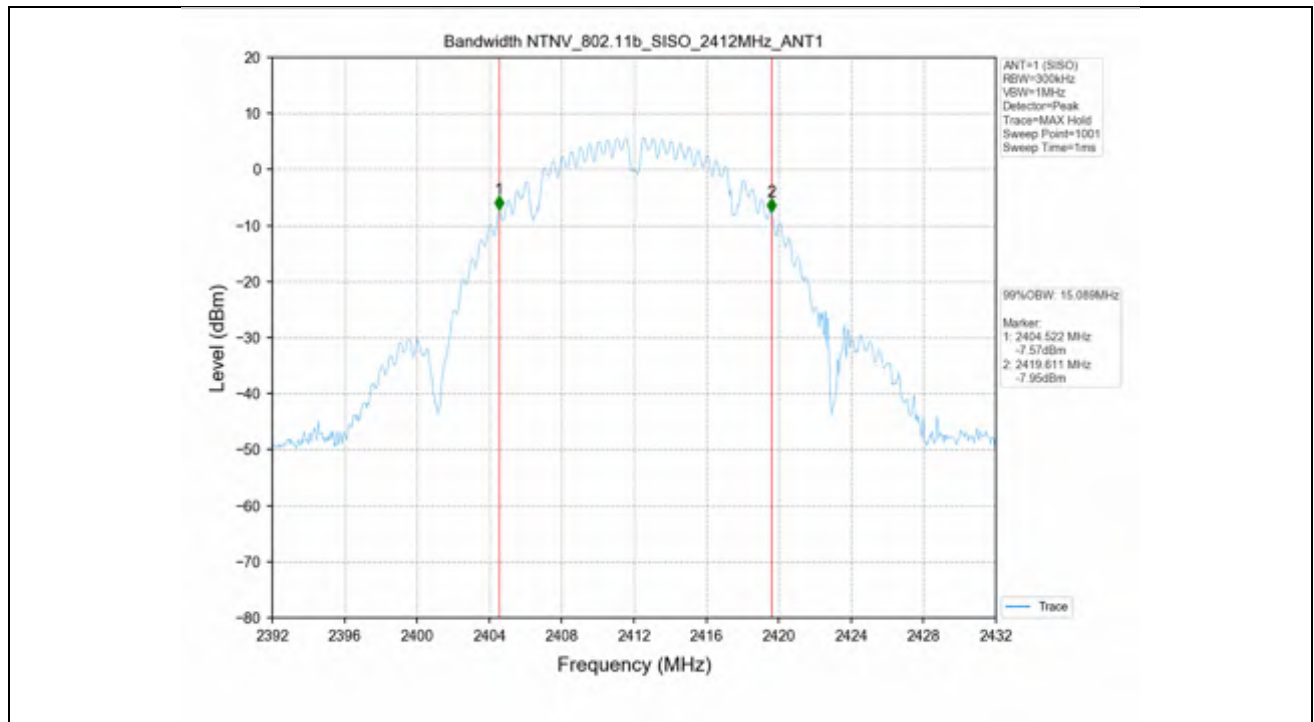


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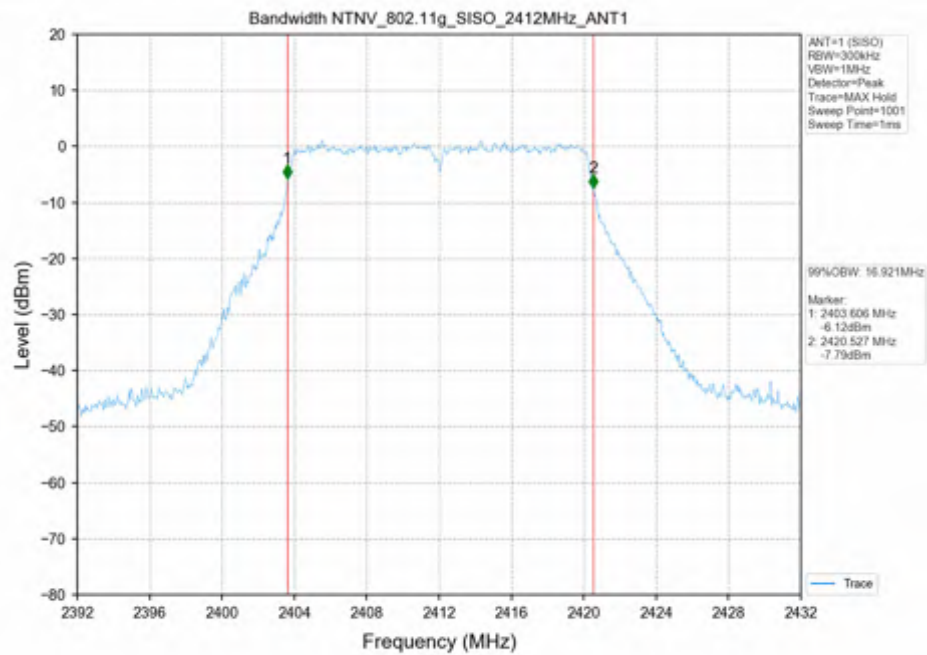
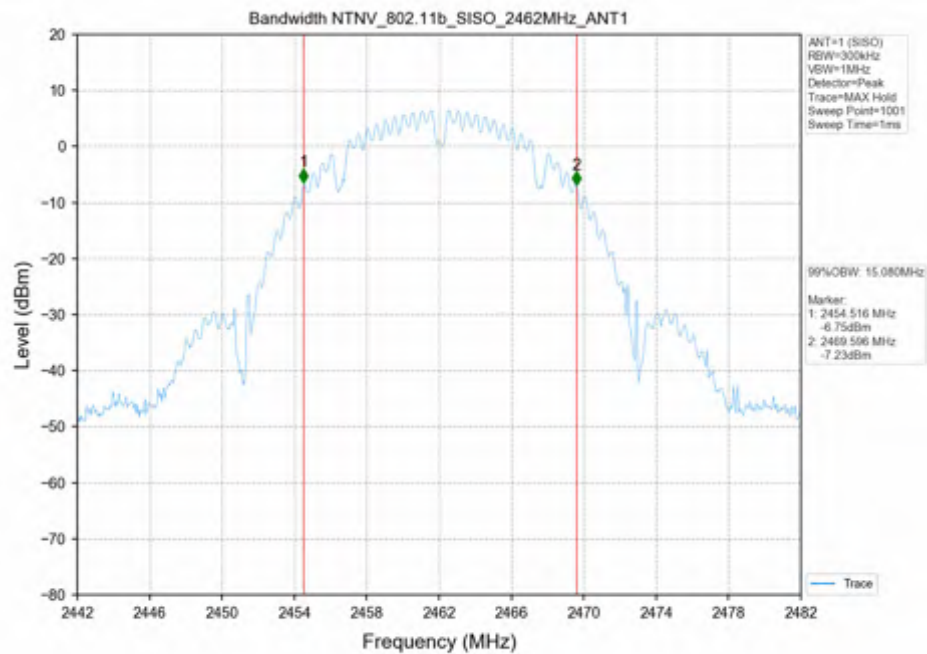


2.3 Test Graph - 99% Occupied Bandwidth



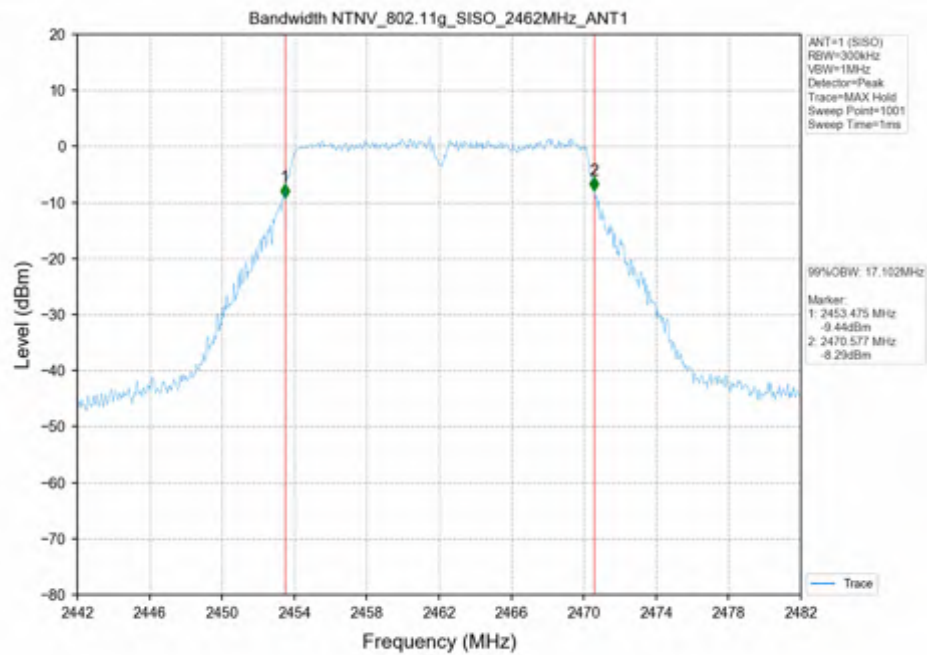
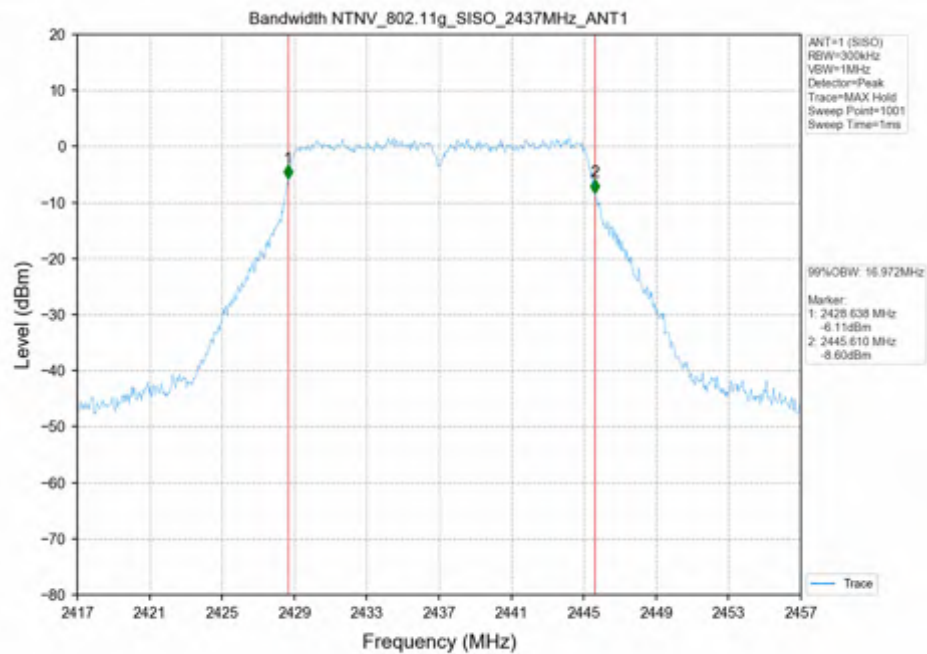


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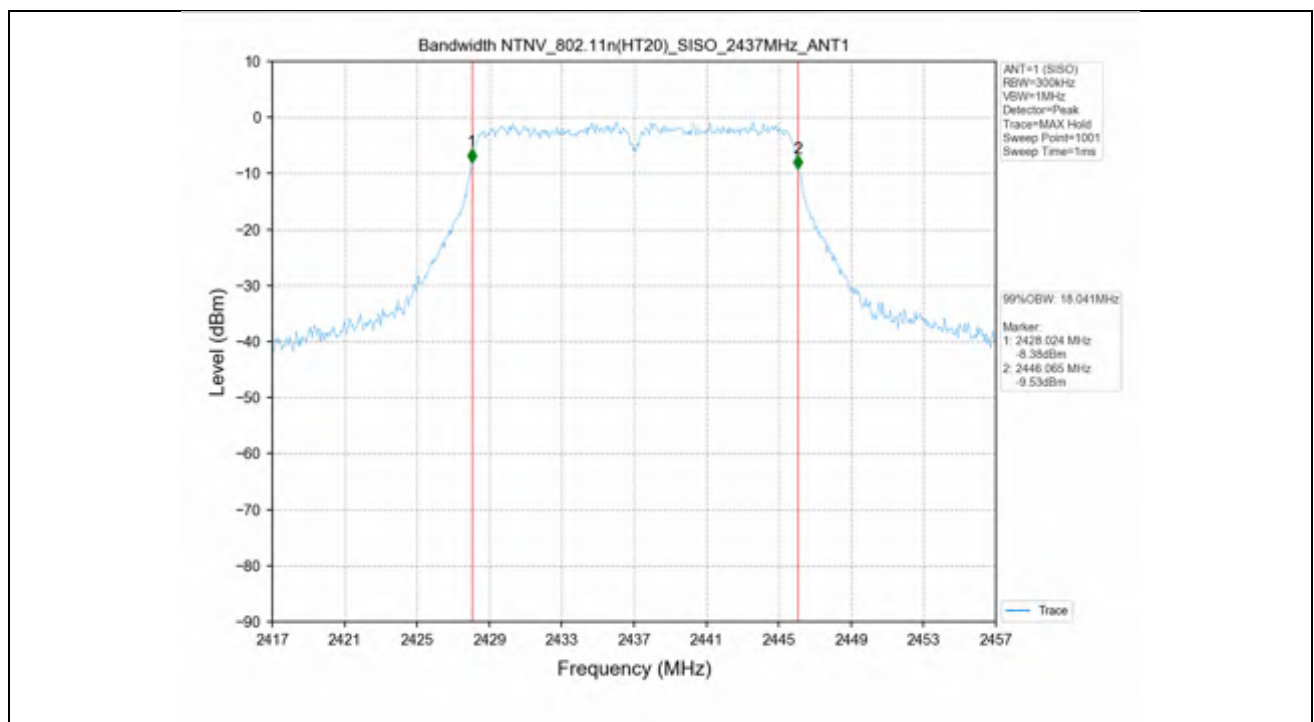
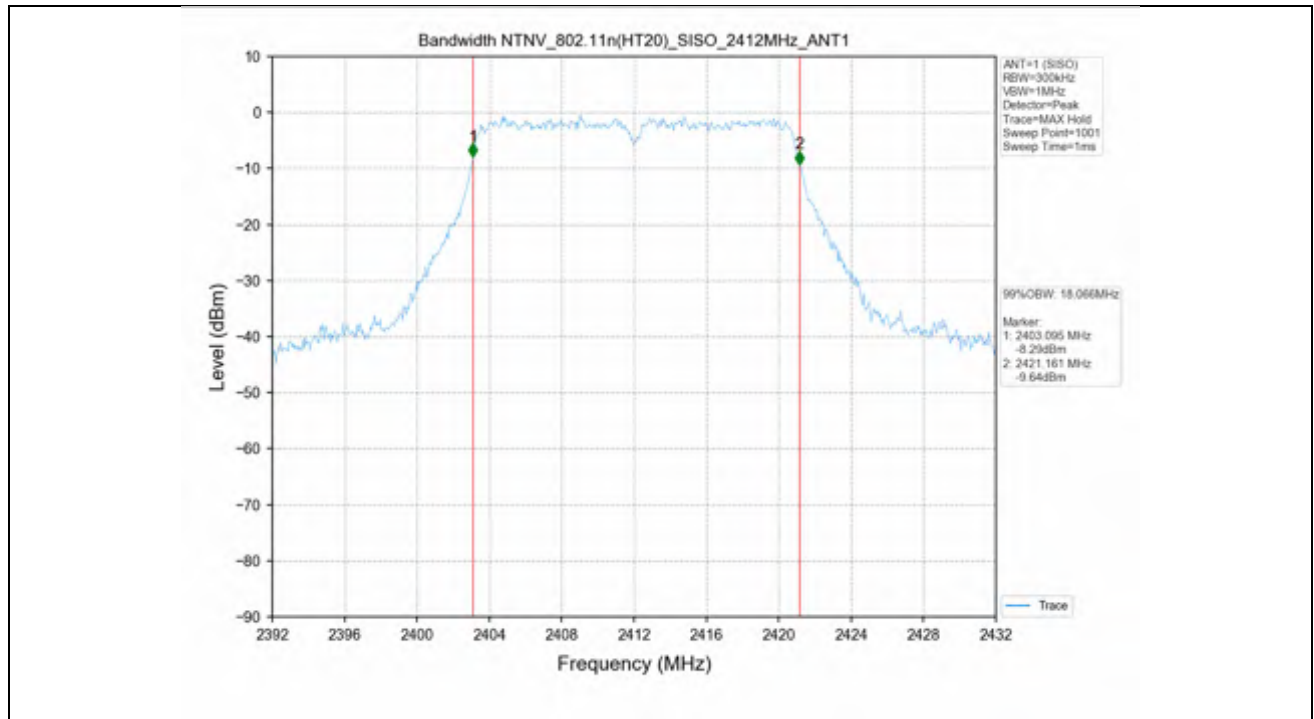


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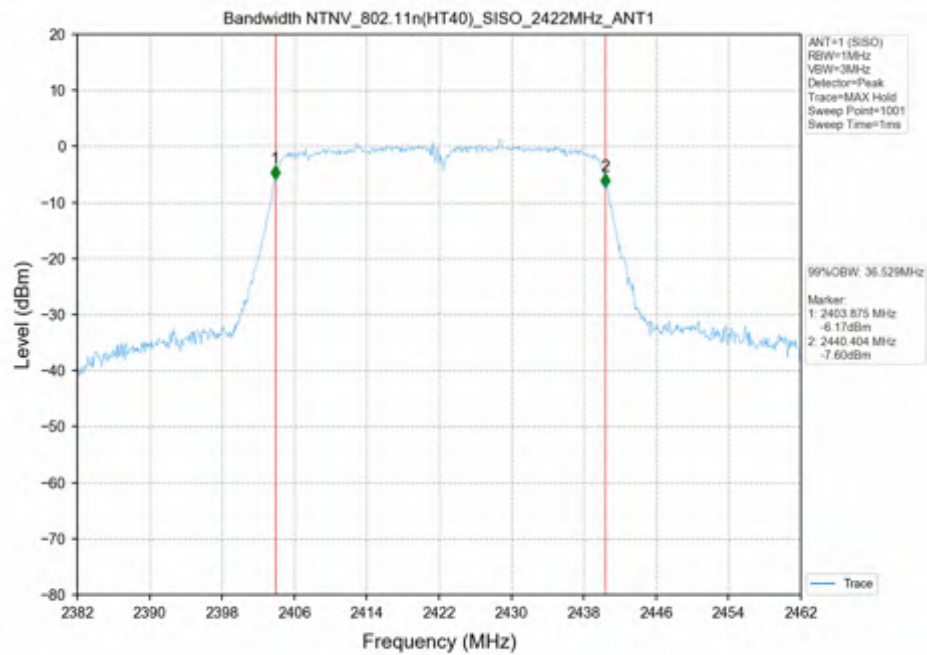
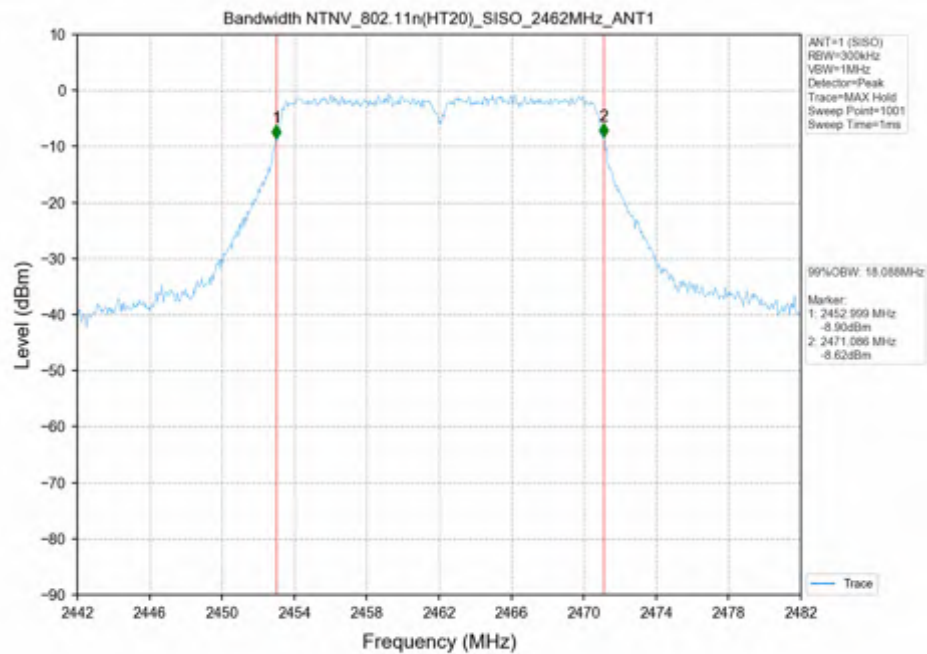


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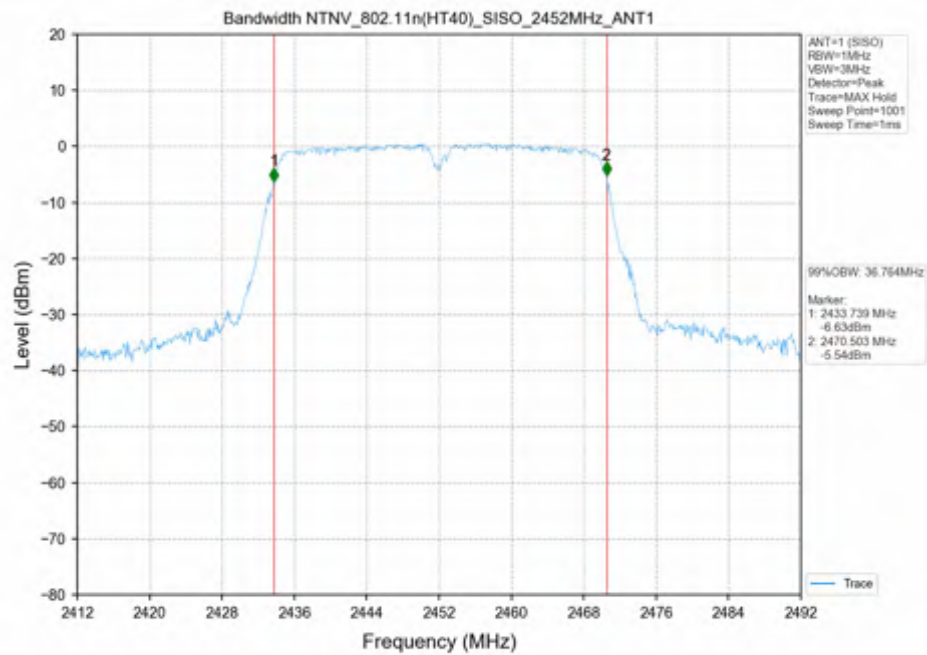
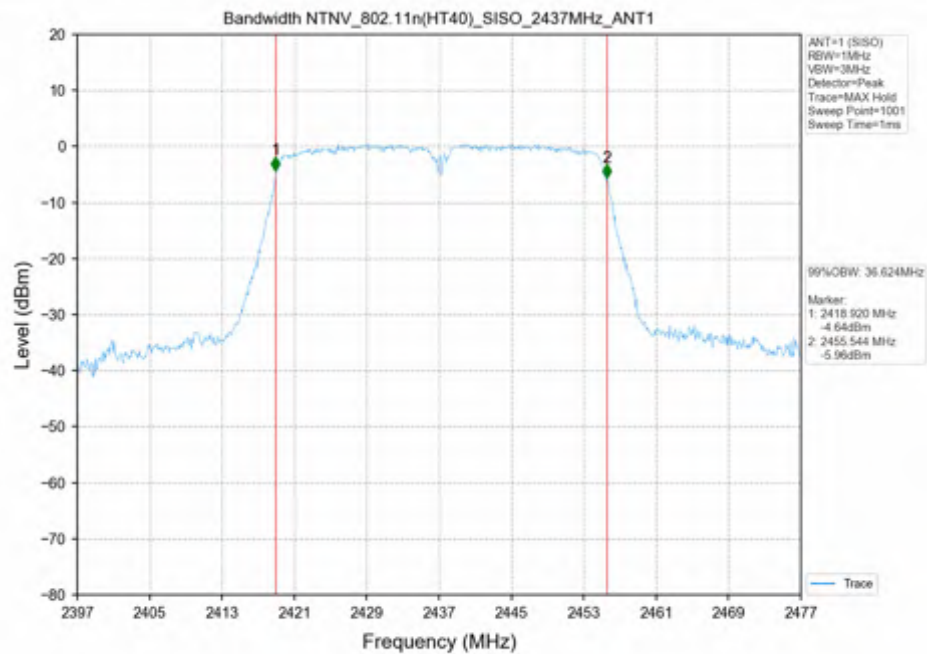


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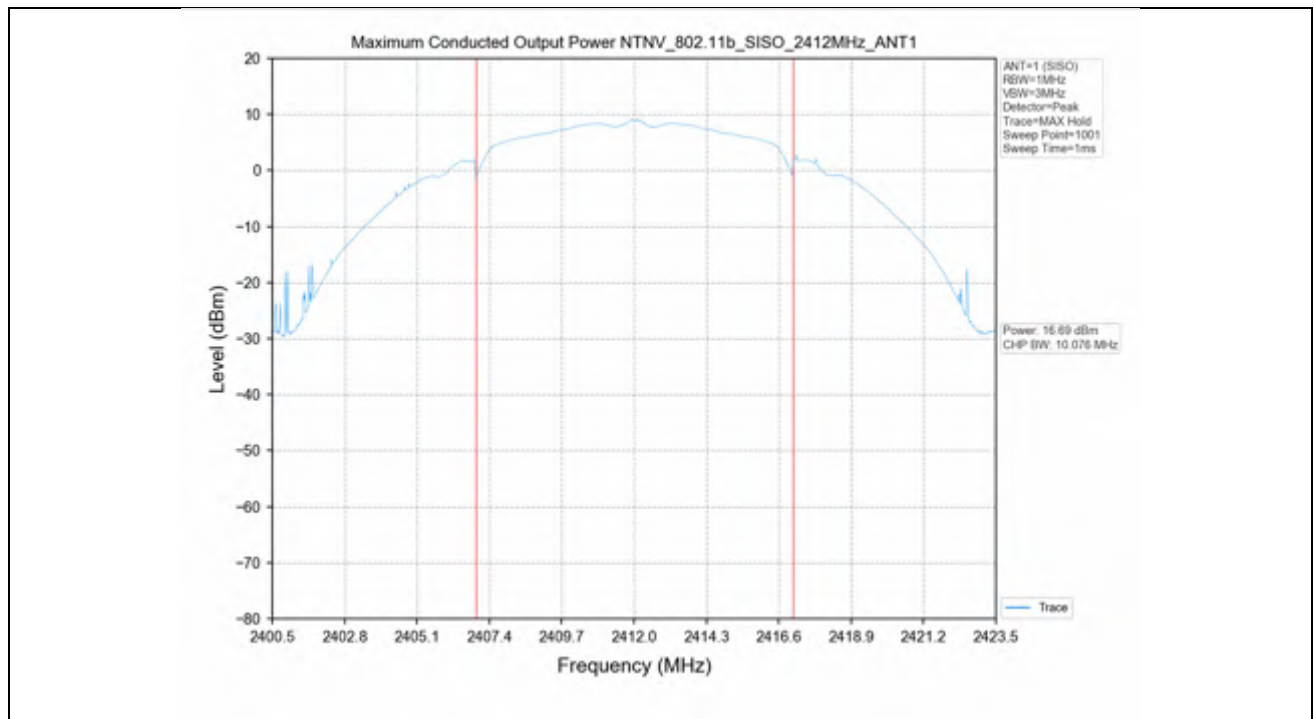
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3. Maximum Conducted Output Power

3.1 Test Result

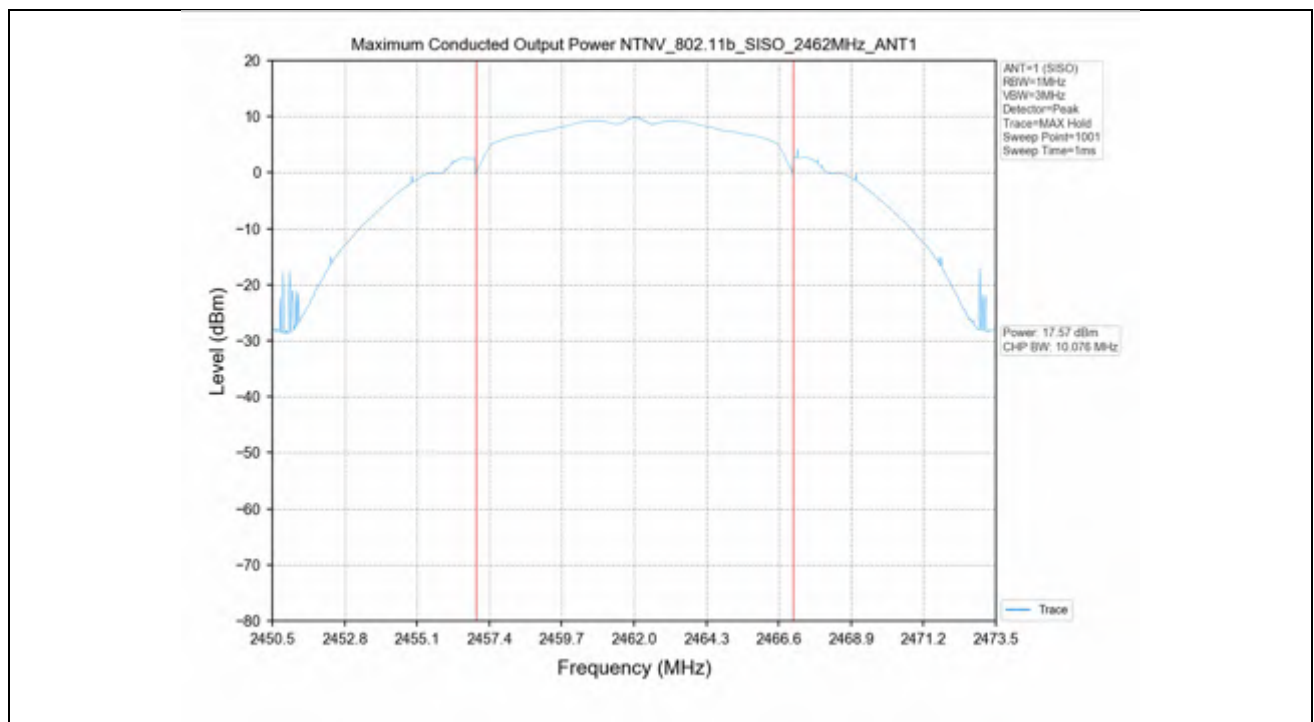
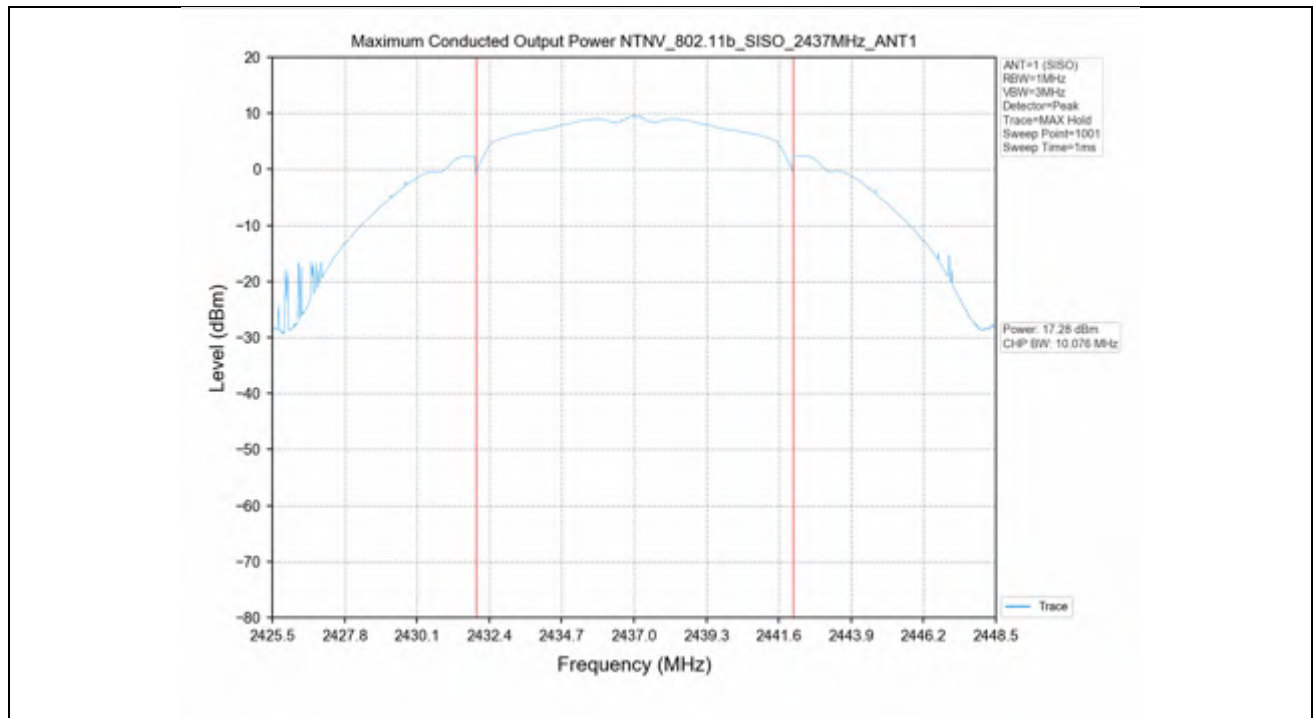
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
802.11b	2412	SISO	16.69	30	PASS
	2437	SISO	17.28	30	PASS
	2462	SISO	17.57	30	PASS
802.11g	2412	SISO	17.55	30	PASS
	2437	SISO	17.98	30	PASS
	2462	SISO	18.13	30	PASS
802.11n(HT20)	2412	SISO	16.20	30	PASS
	2437	SISO	16.30	30	PASS
	2462	SISO	16.41	30	PASS
802.11n(HT40)	2422	SISO	14.41	30	PASS
	2437	SISO	14.45	30	PASS
	2452	SISO	14.88	30	PASS

3.2 Test Graph



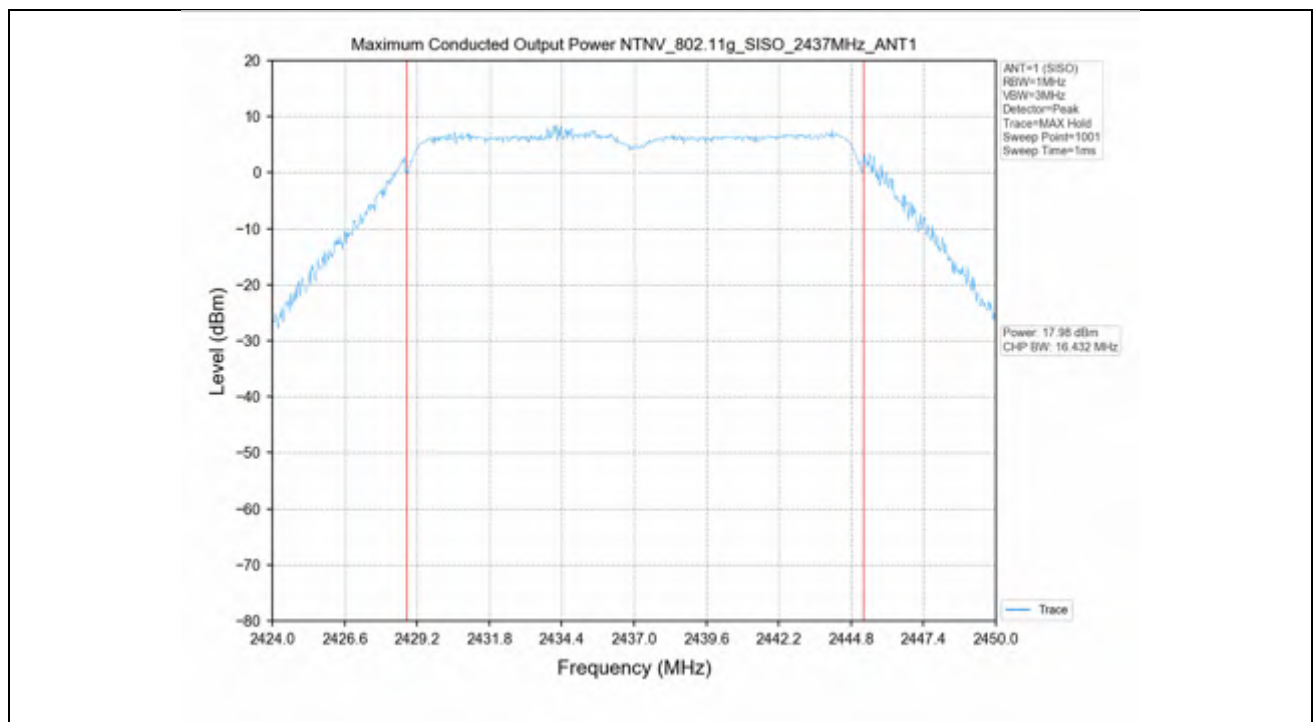
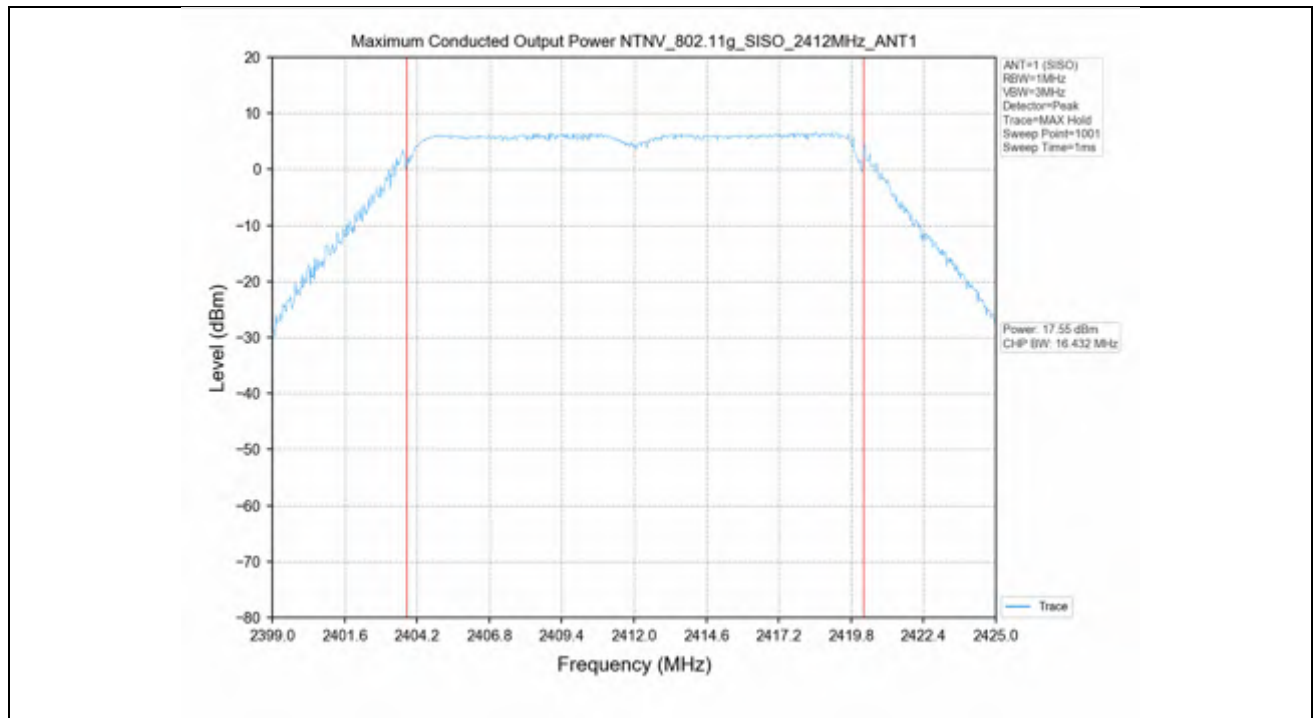


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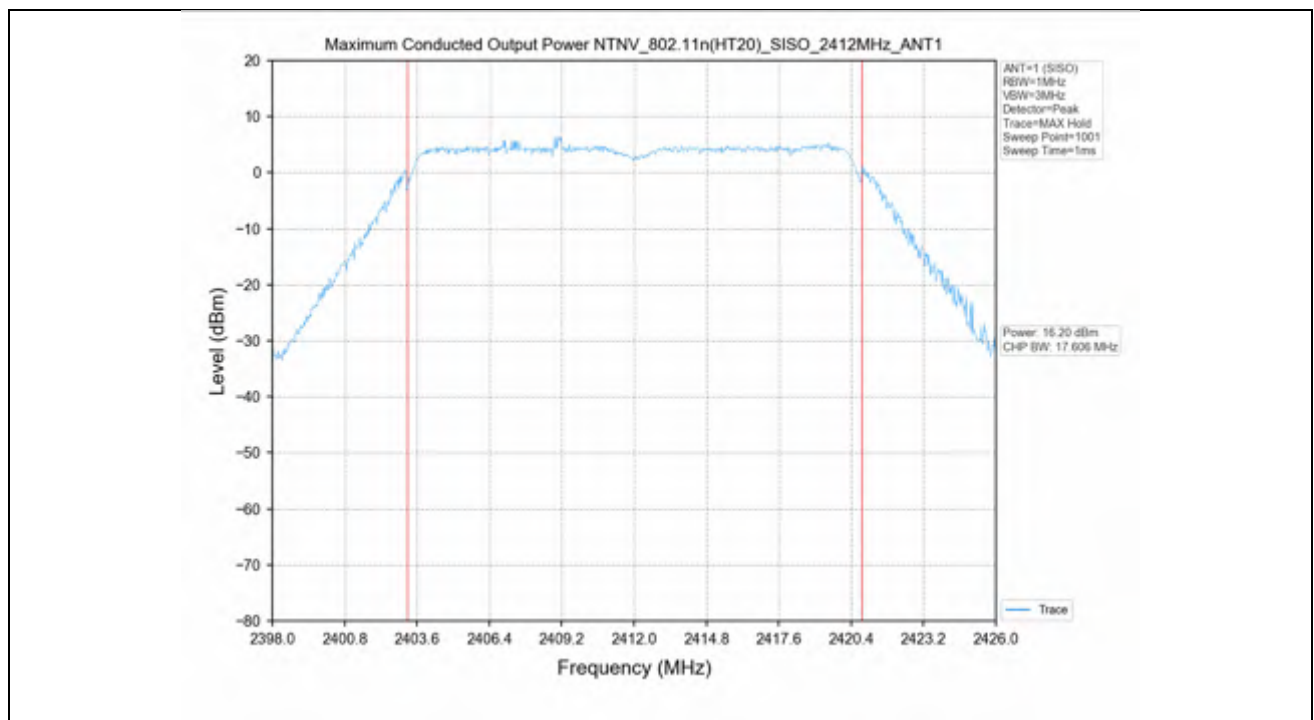
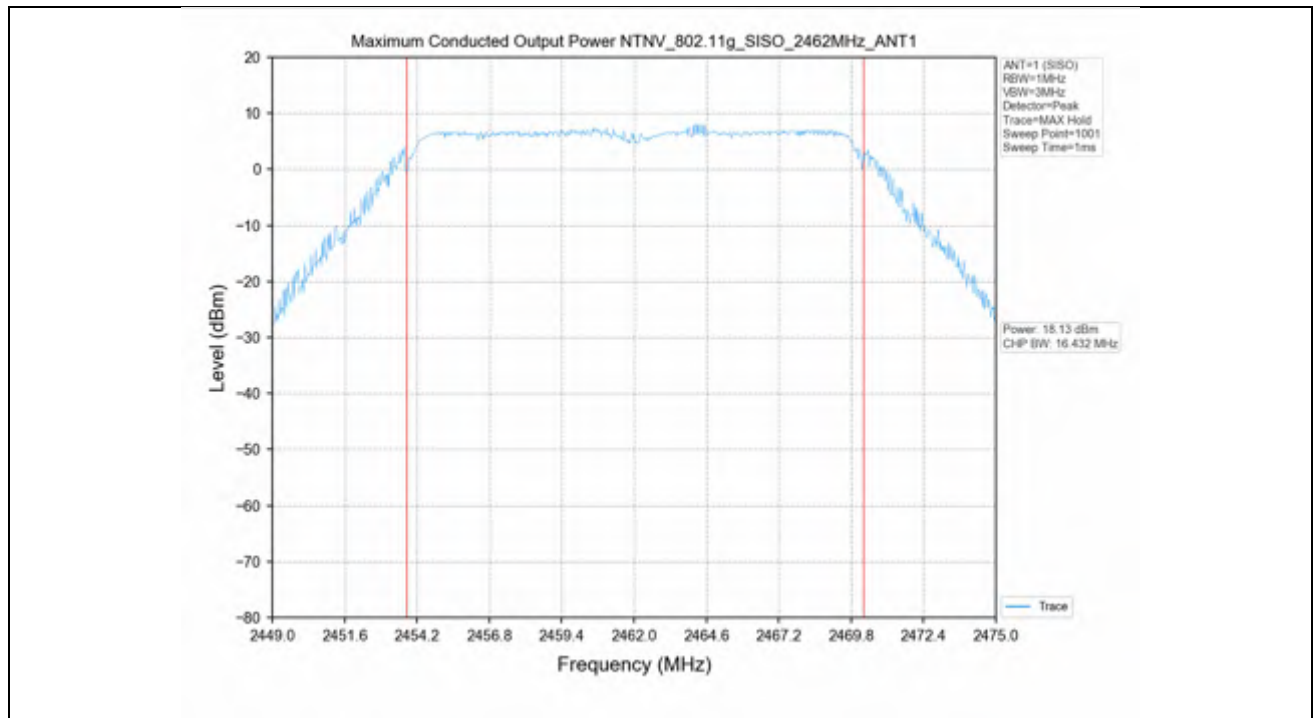


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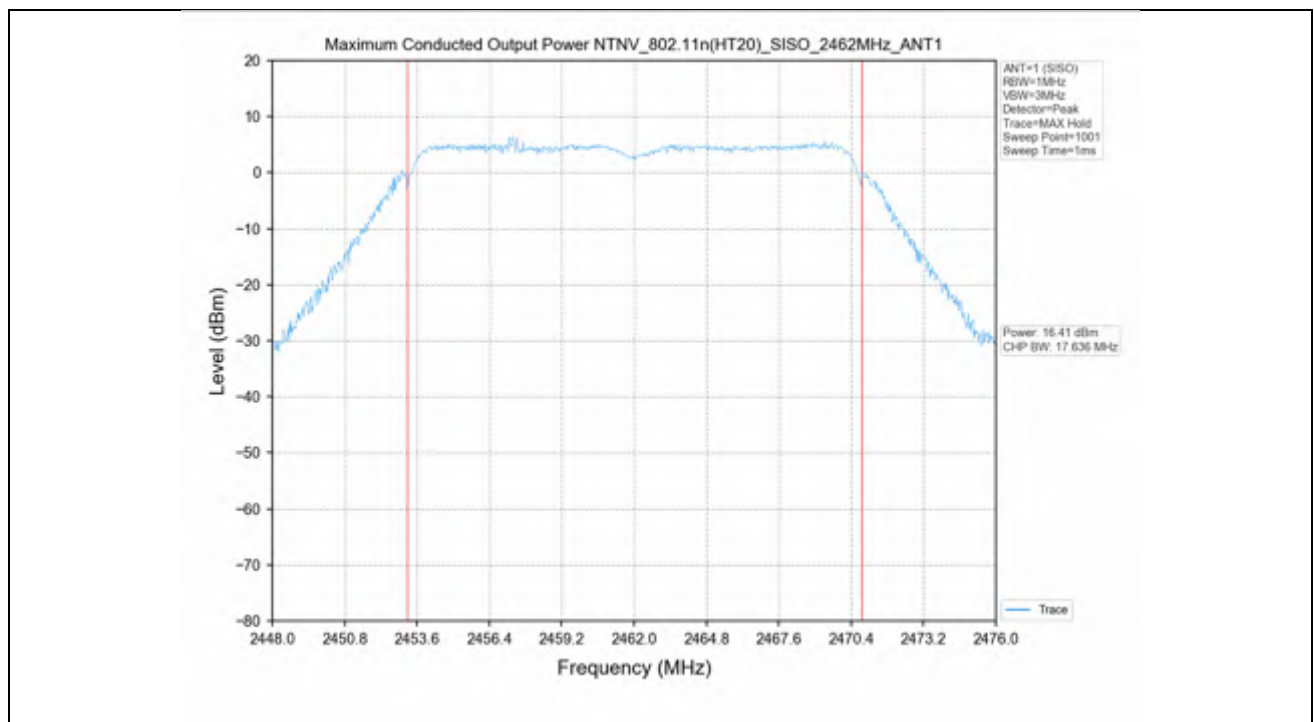
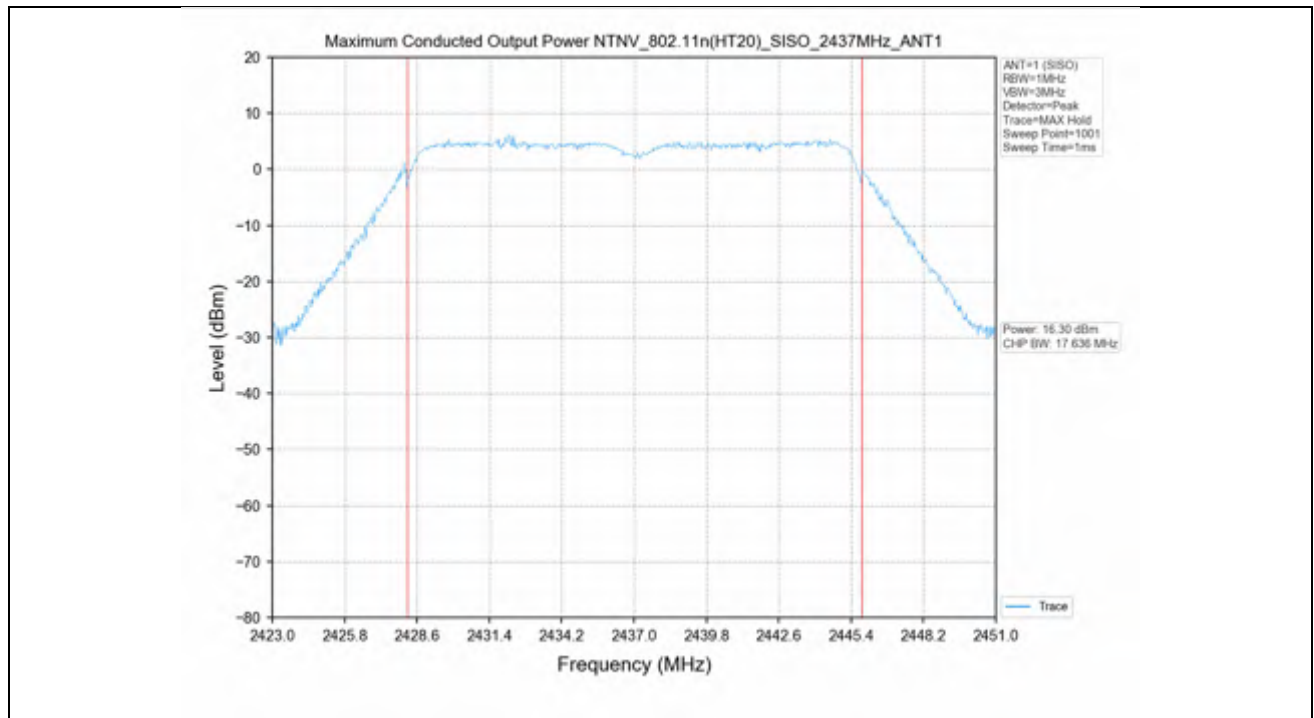


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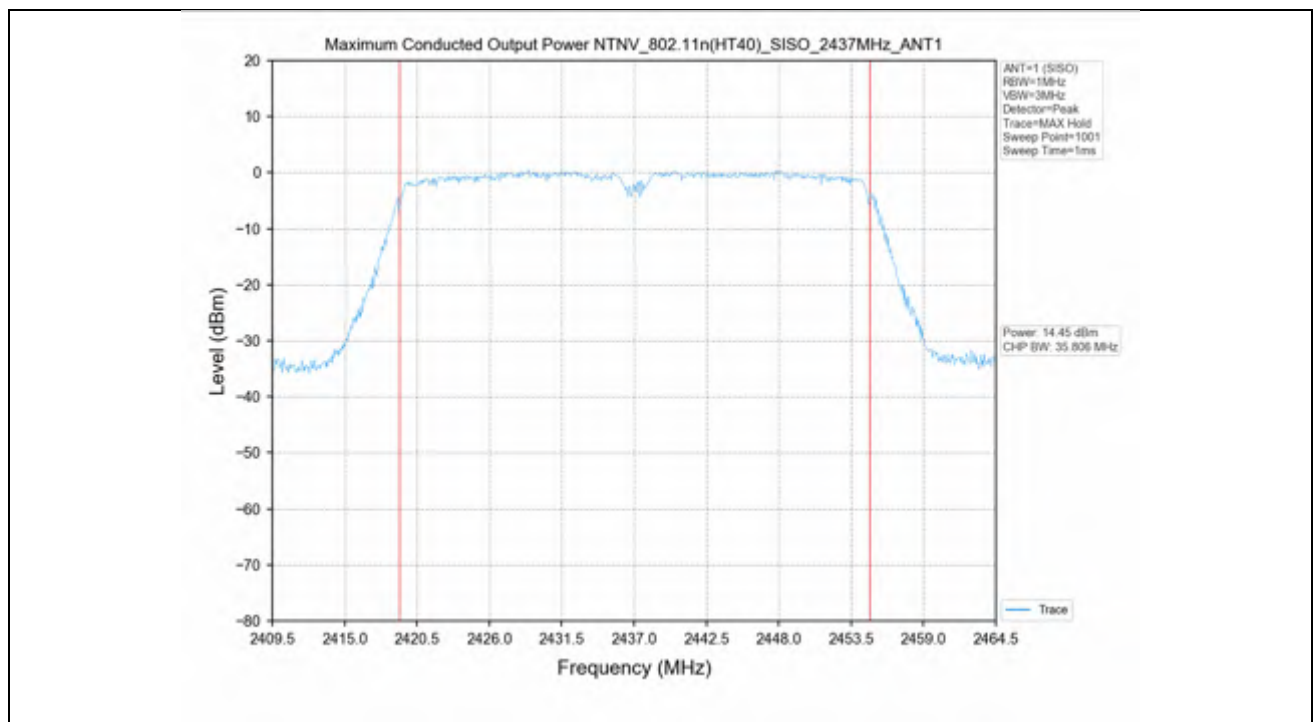
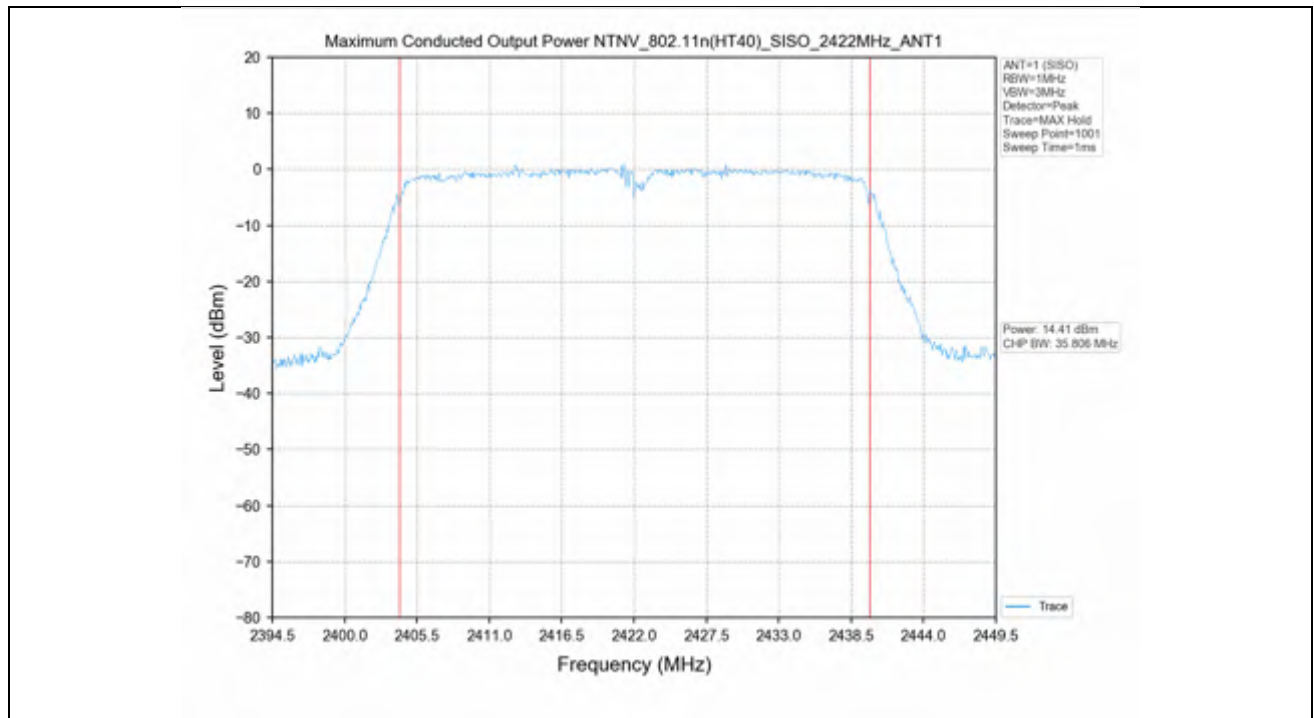


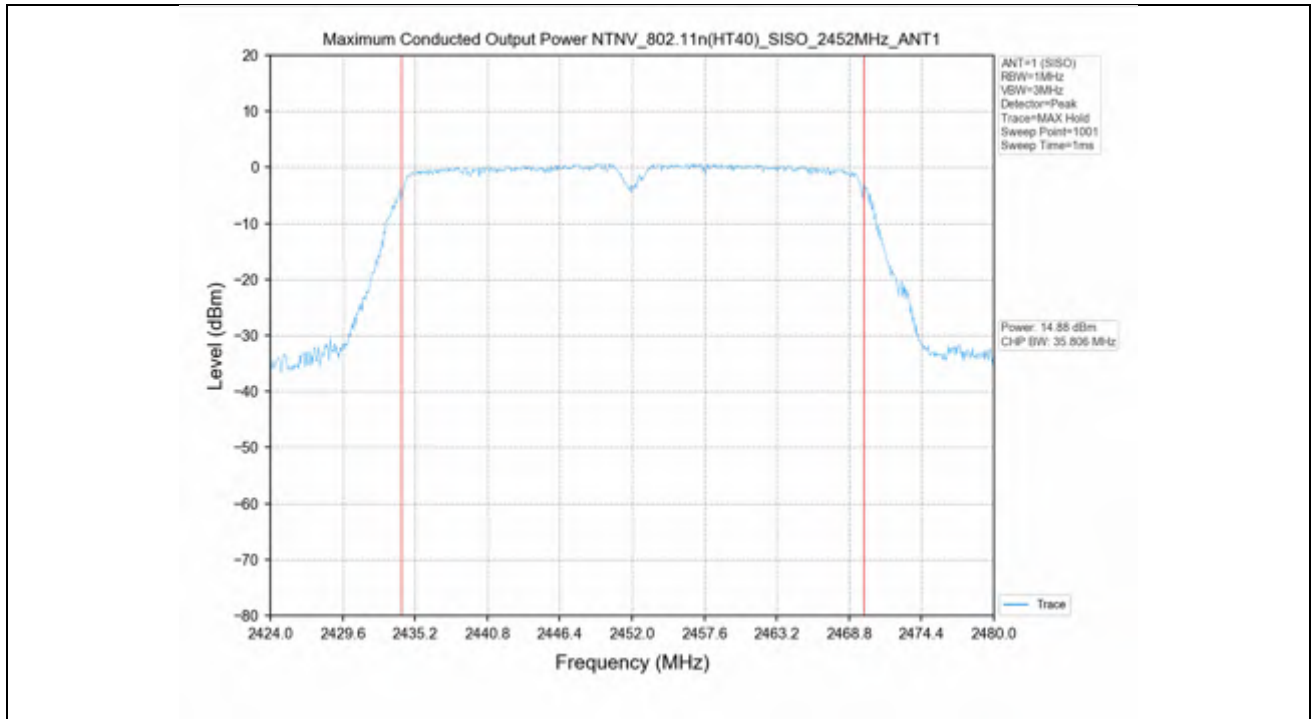
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4. Maximum Power Spectral Density (PSD)

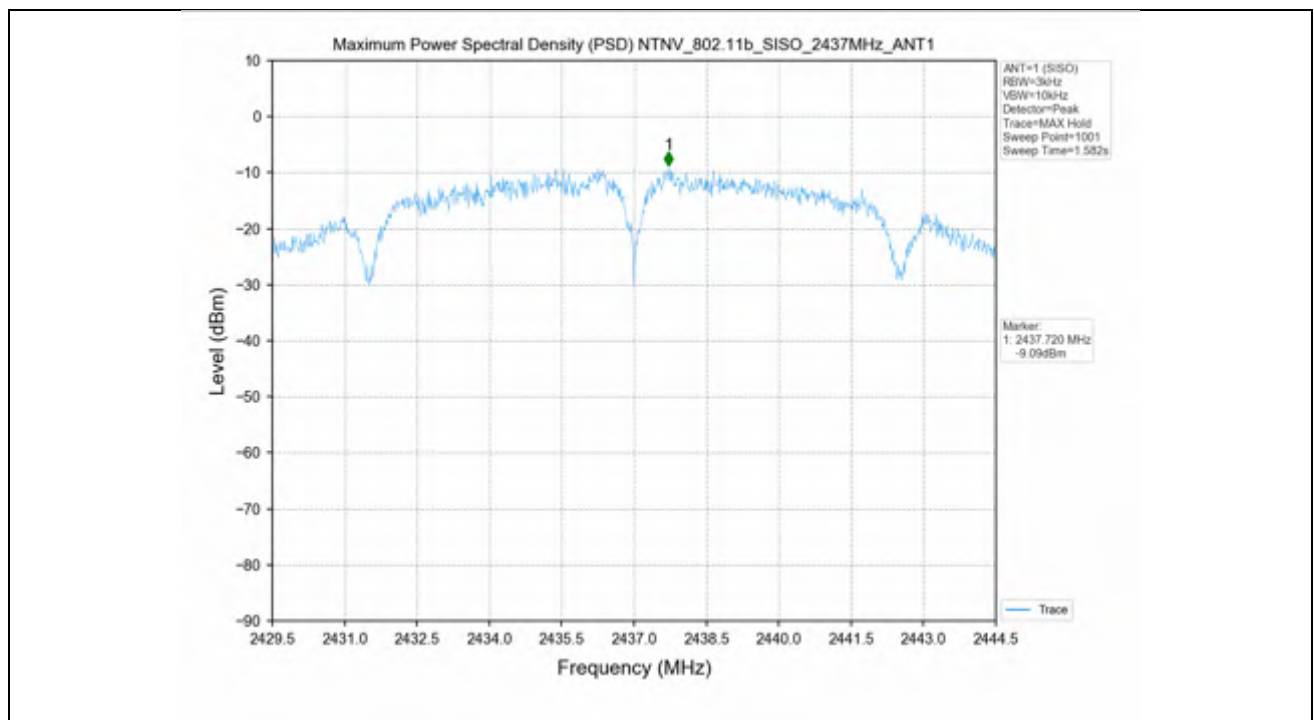
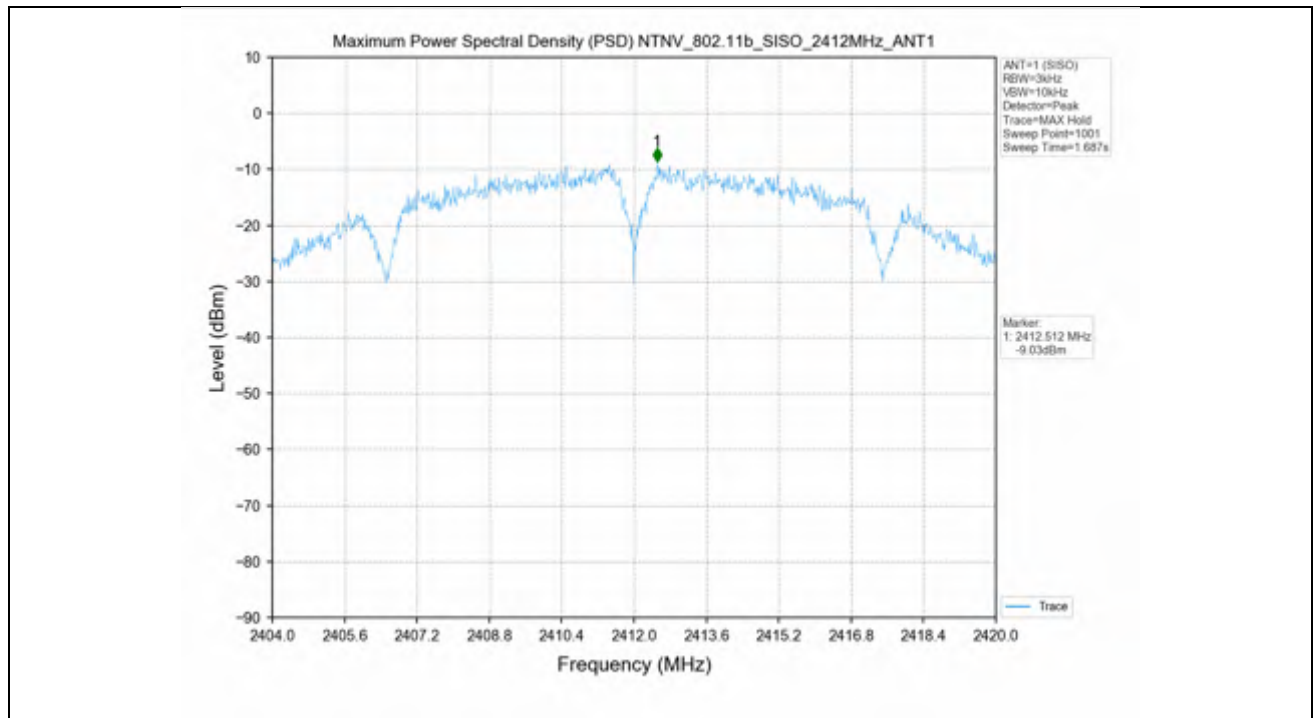
4.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
			Ant 1		
802.11b	2412	SISO	-9.03	≤8	PASS
	2437	SISO	-9.09	≤8	PASS
	2462	SISO	-8.13	≤8	PASS
802.11g	2412	SISO	-15.53	≤8	PASS
	2437	SISO	-14.99	≤8	PASS
	2462	SISO	-15.37	≤8	PASS
802.11n(HT20)	2412	SISO	-16.41	≤8	PASS
	2437	SISO	-17.04	≤8	PASS
	2462	SISO	-16.95	≤8	PASS
802.11n(HT40)	2422	SISO	-21.79	≤8	PASS
	2437	SISO	-21.45	≤8	PASS
	2452	SISO	-20.71	≤8	PASS

4.2 Test Graph

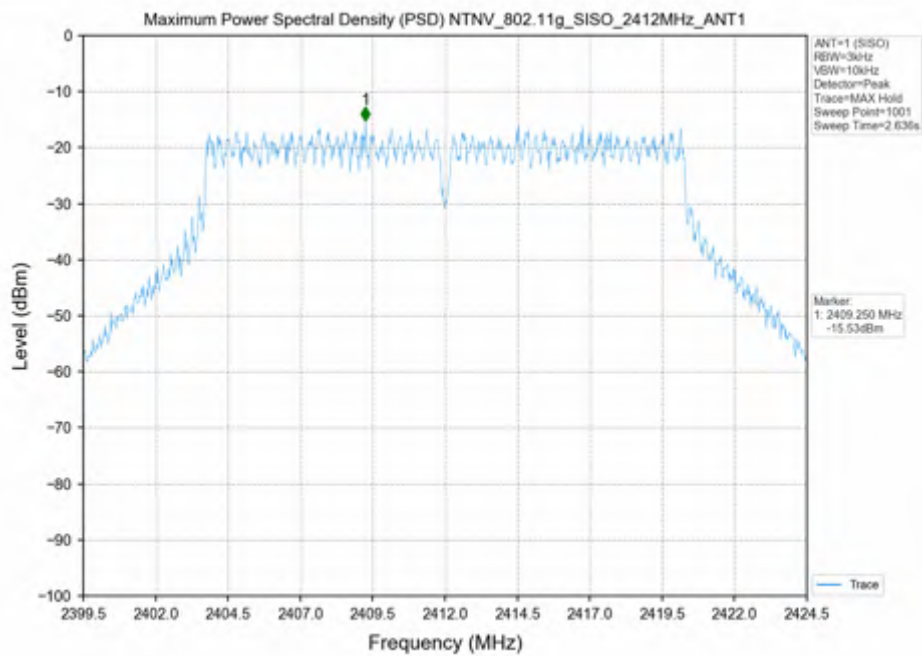
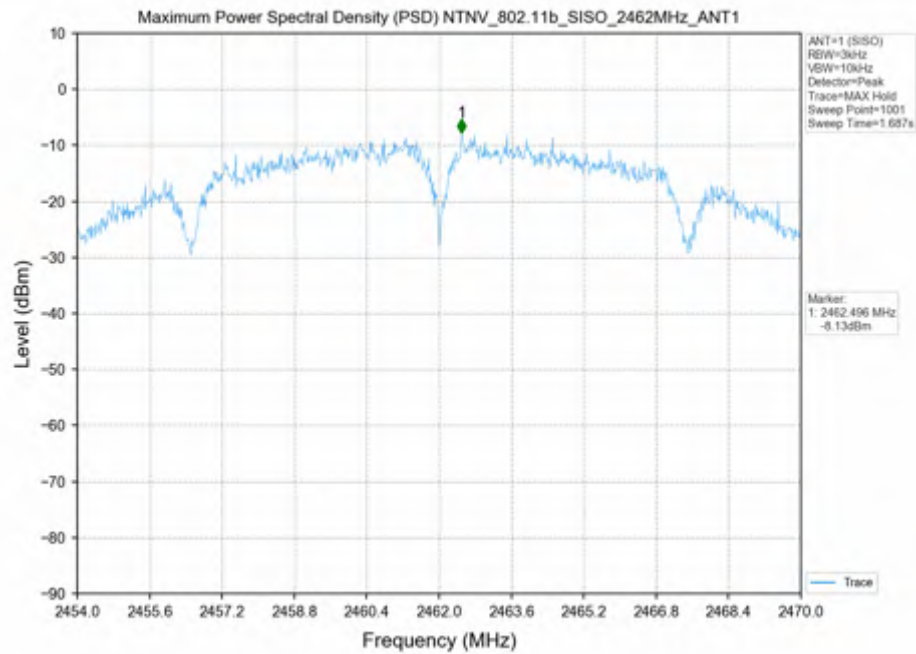


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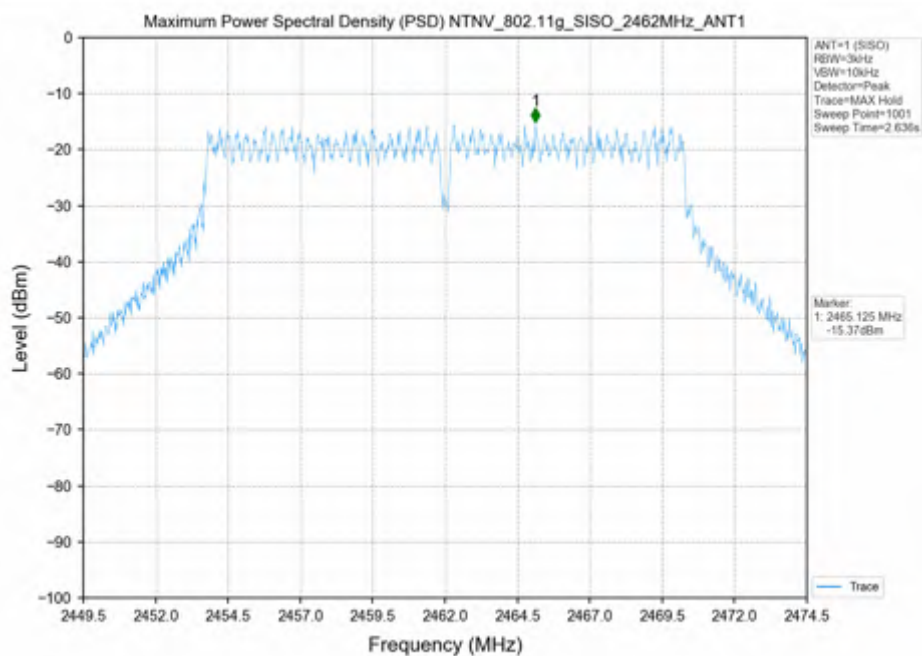
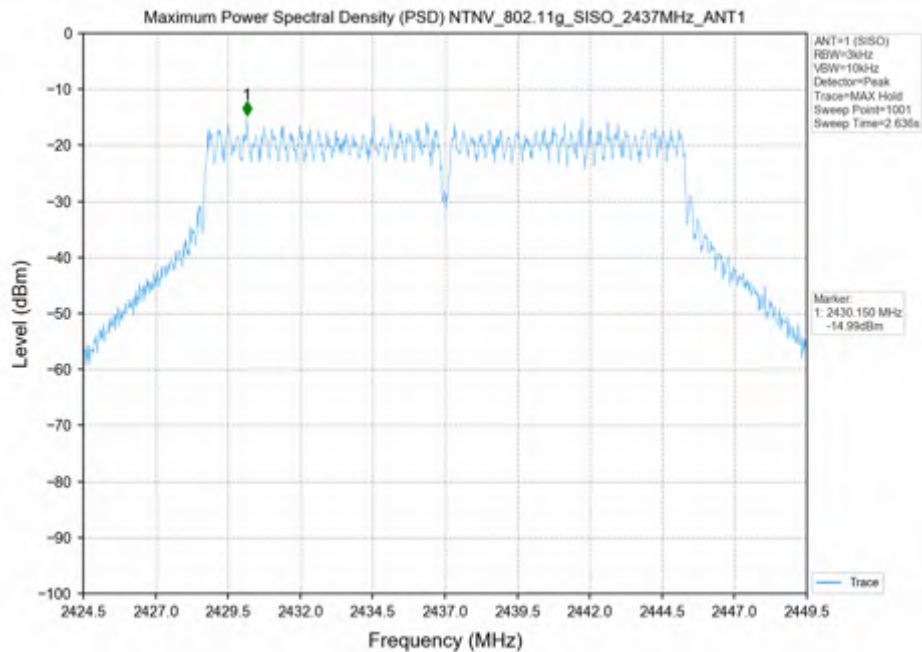


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



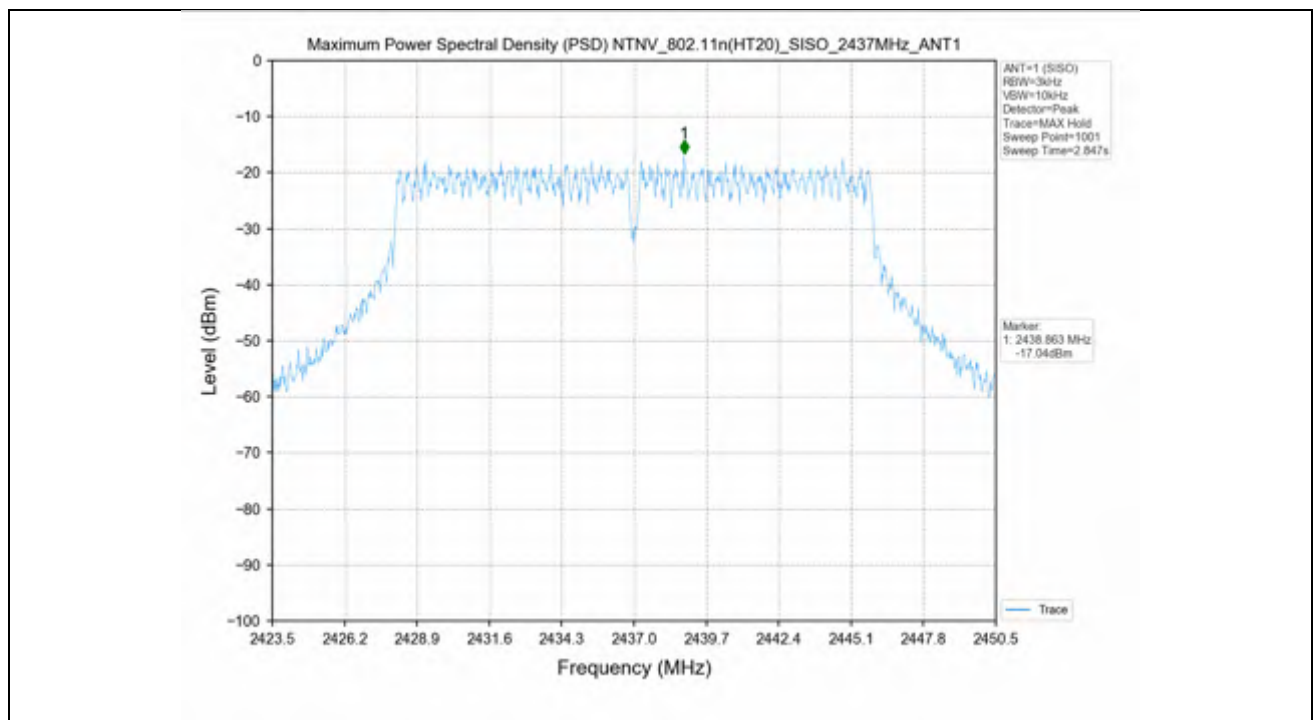
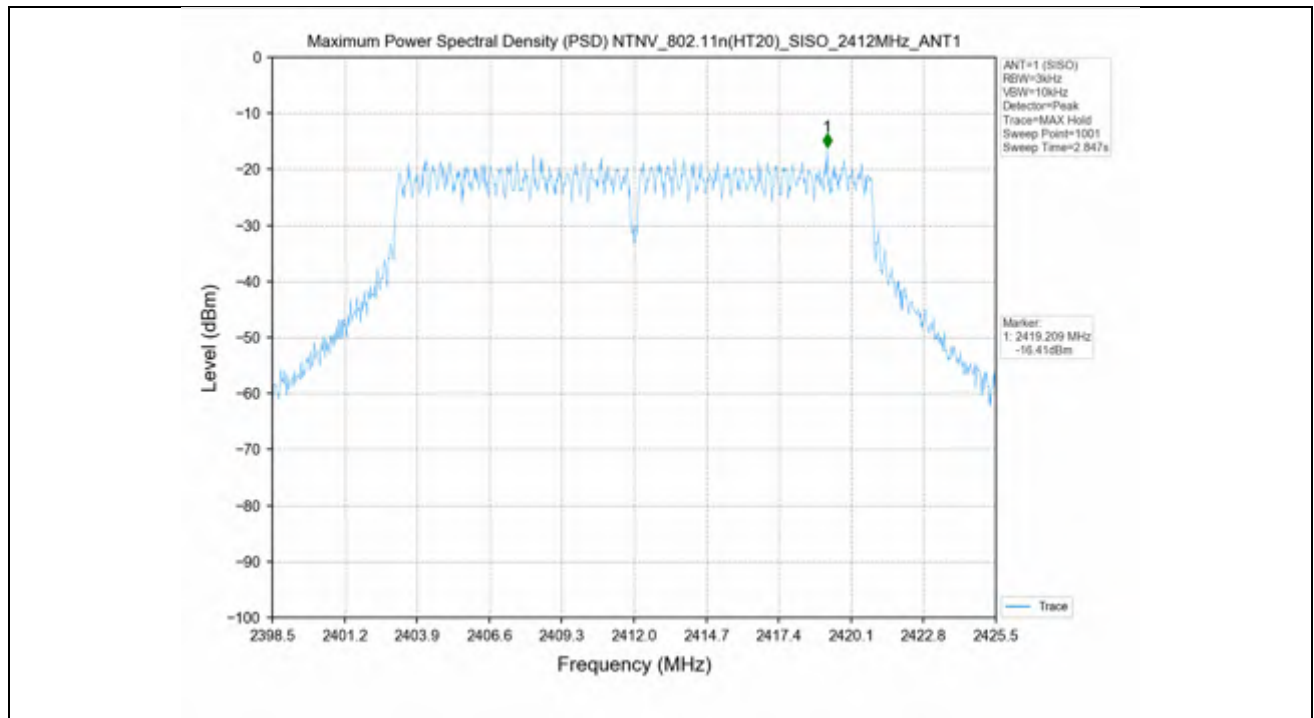


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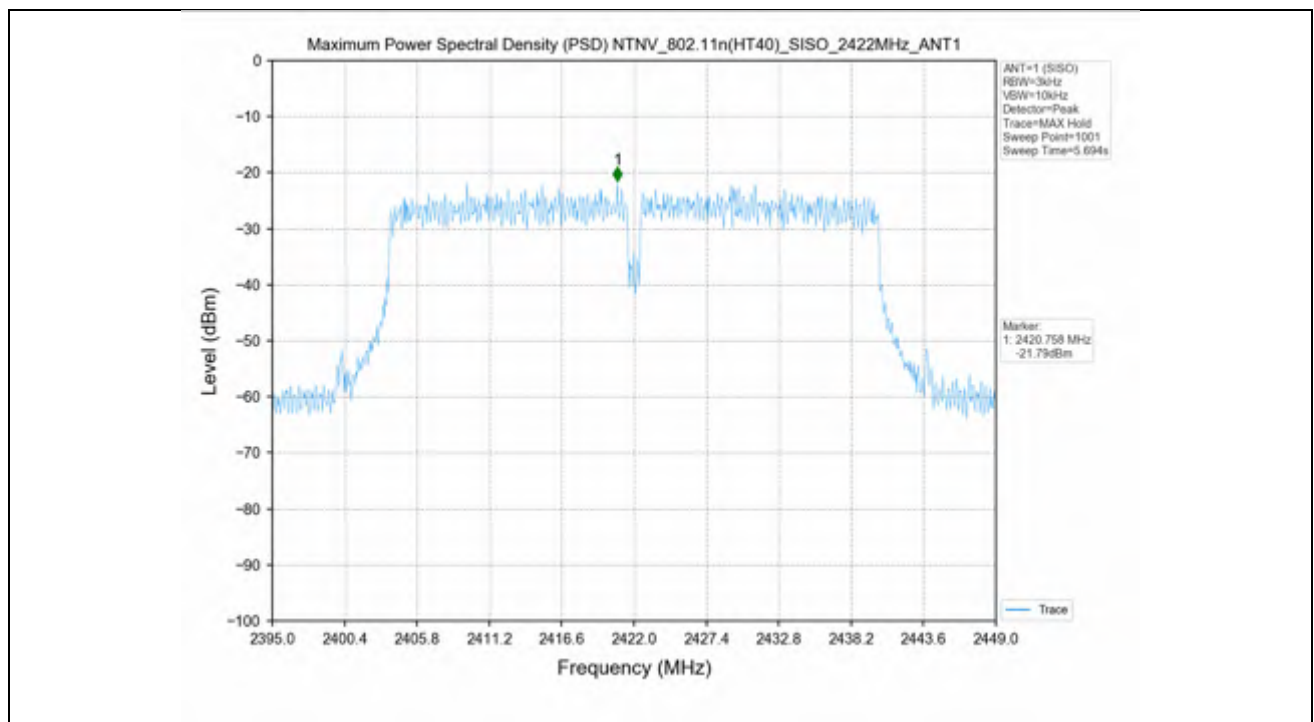
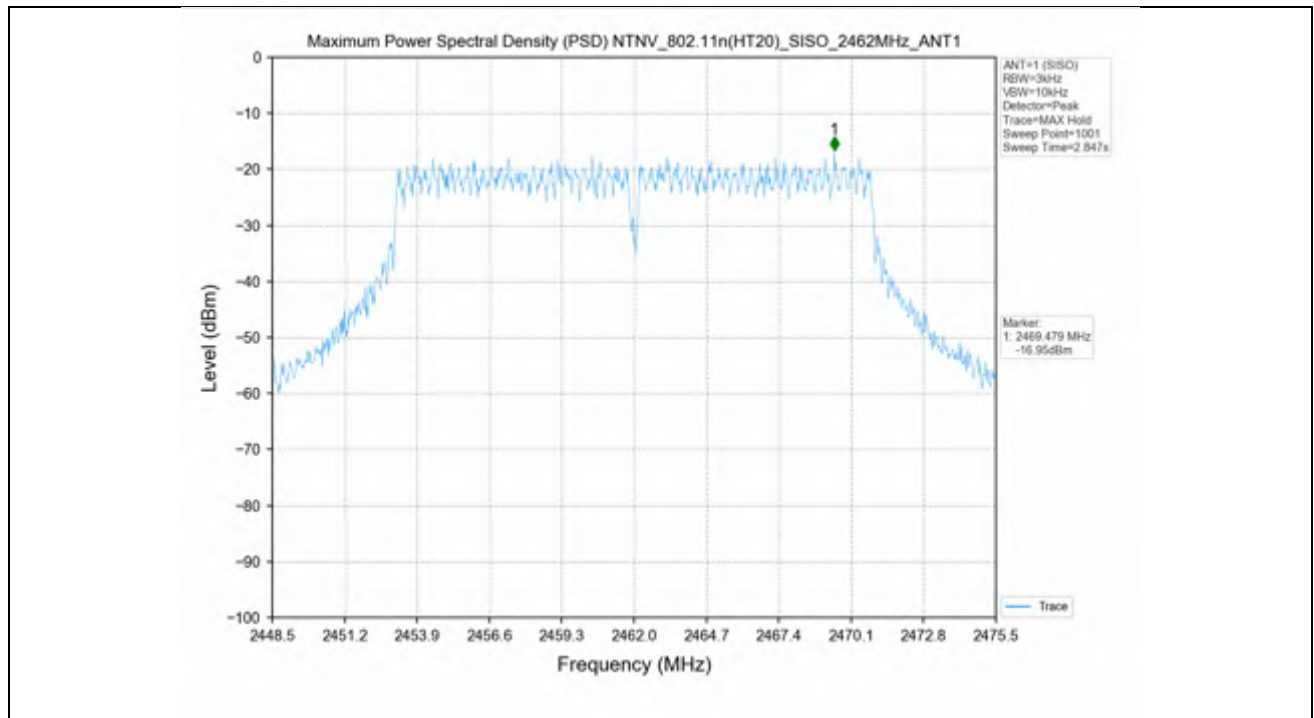


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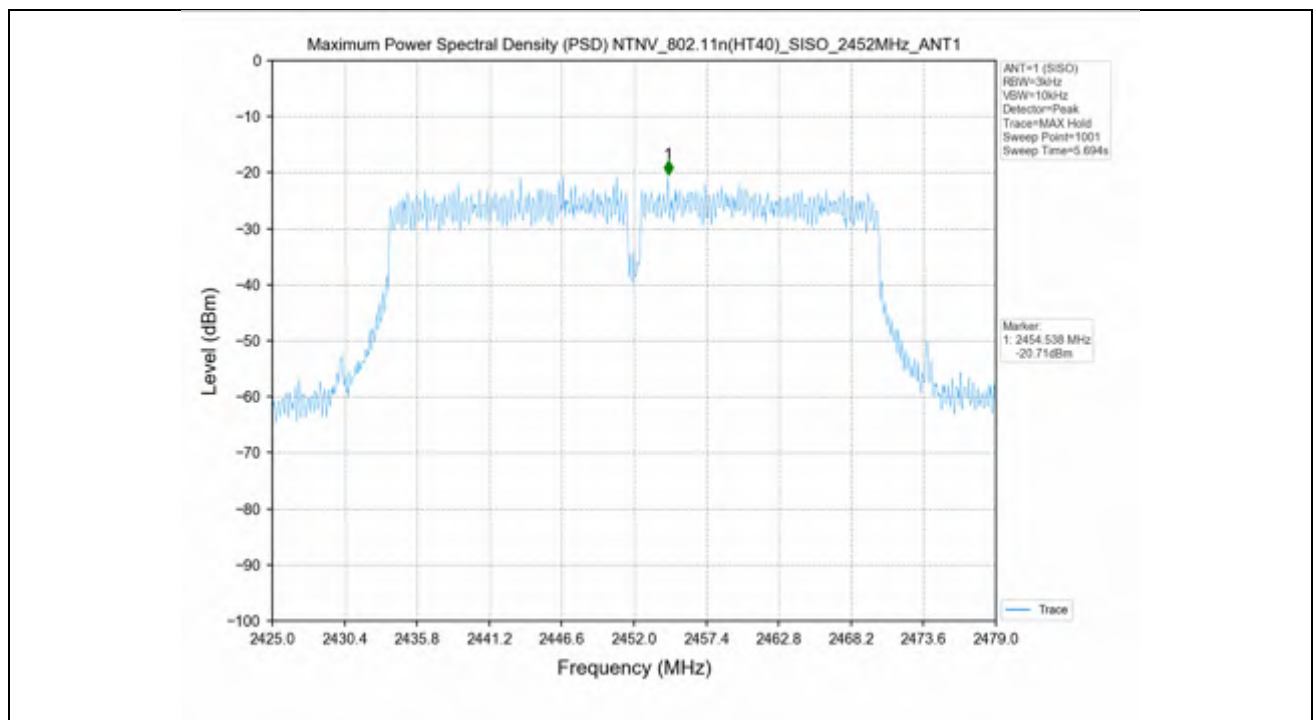
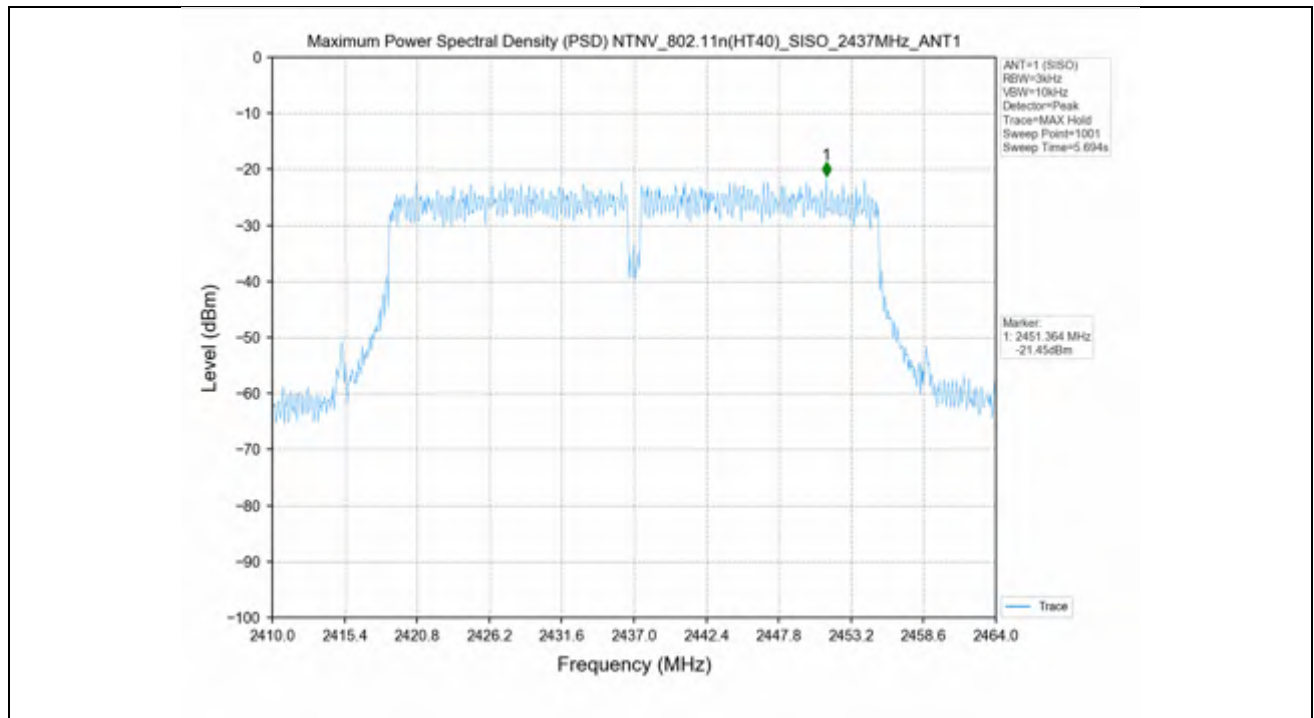


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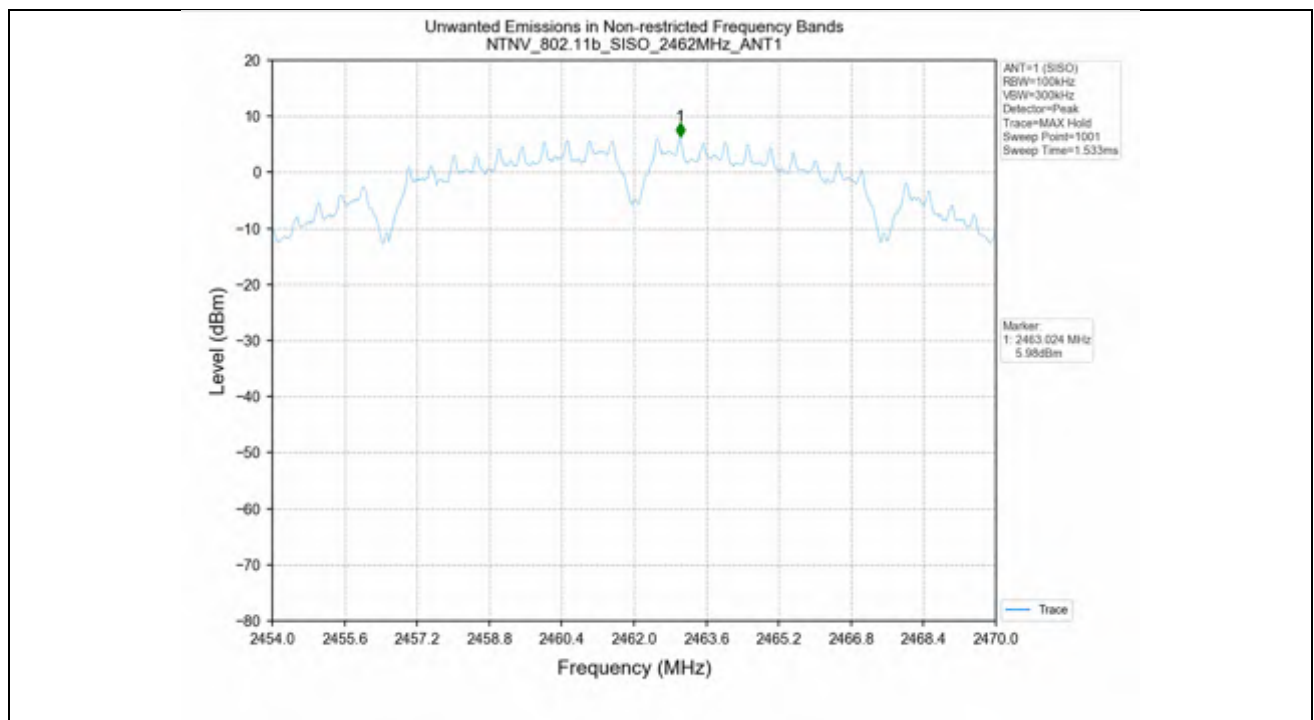


5. Unwanted Emissions in Non-restricted Frequency Bands

5.1 Test Result

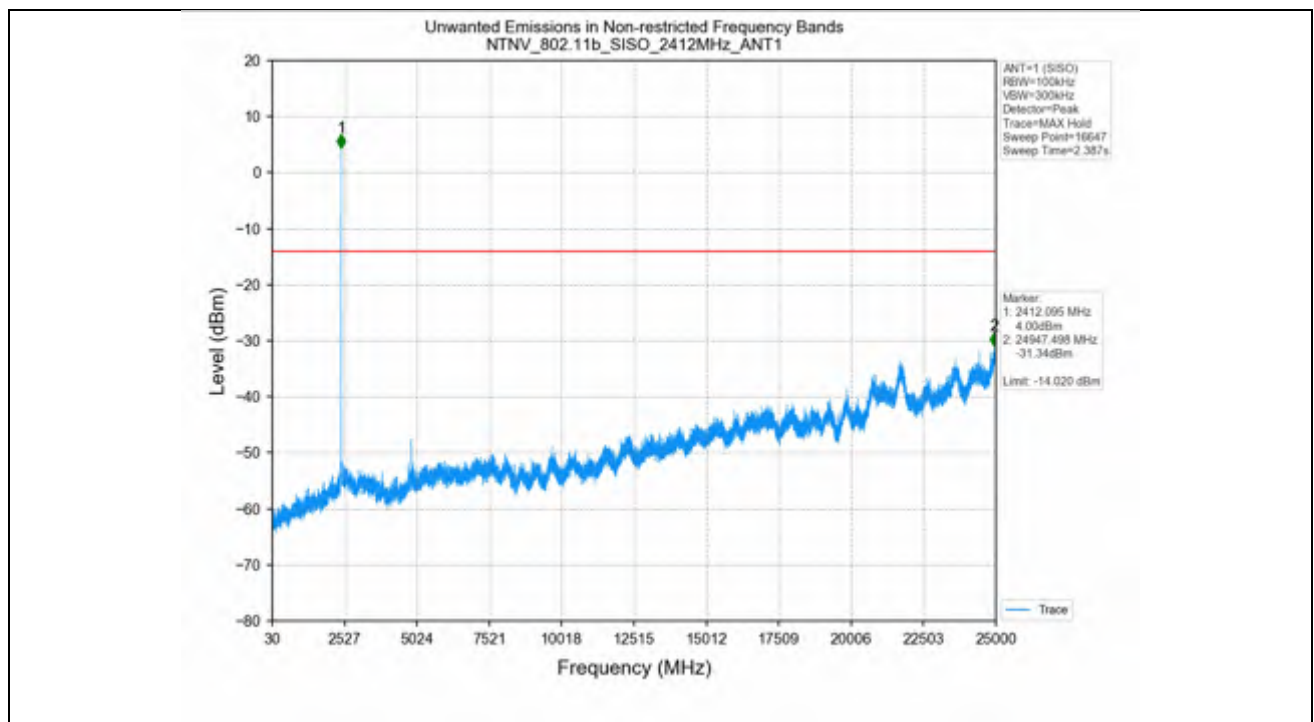
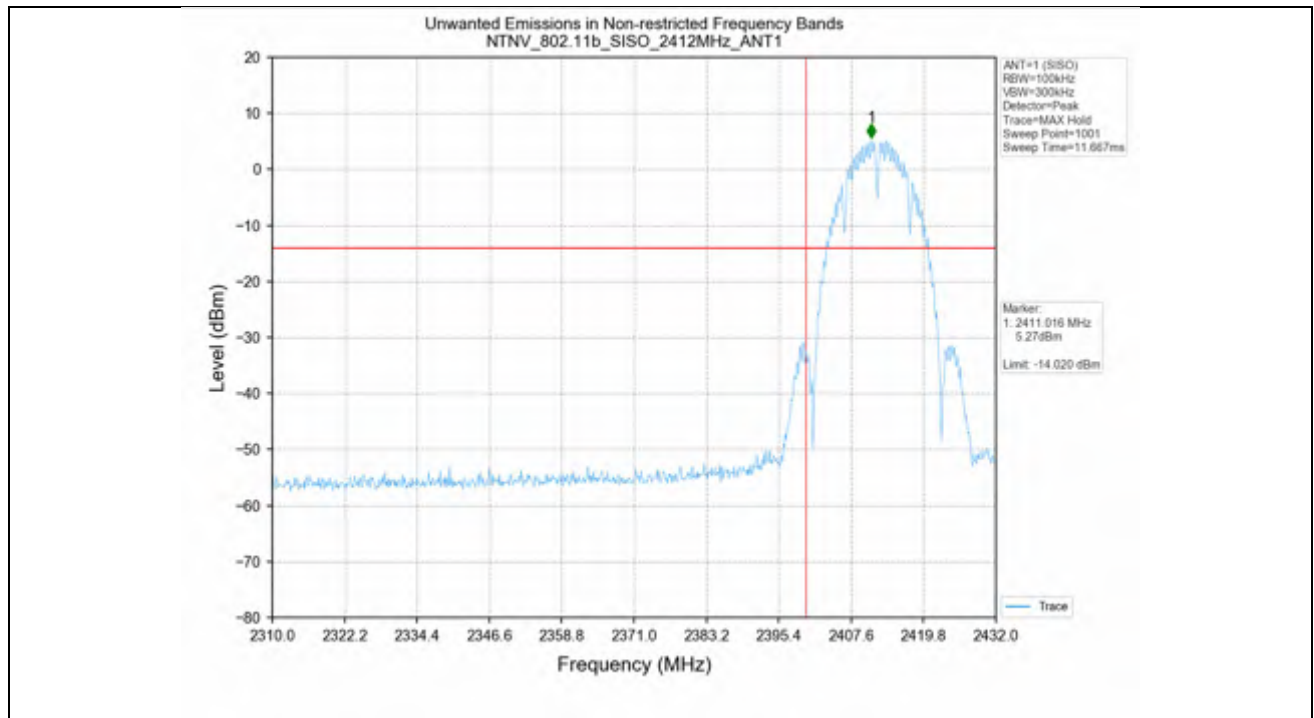
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
802.11b	2412	SISO	1	Refer to test graph	-14.02	PASS
	2437	SISO	1	Refer to test graph	-14.02	PASS
	2462	SISO	1	Refer to test graph	-14.02	PASS
802.11g	2412	SISO	1	Refer to test graph	-20.71	PASS
	2437	SISO	1	Refer to test graph	-20.71	PASS
	2462	SISO	1	Refer to test graph	-20.71	PASS
802.11n(HT20)	2412	SISO	1	Refer to test graph	-22.63	PASS
	2437	SISO	1	Refer to test graph	-22.63	PASS
	2462	SISO	1	Refer to test graph	-22.63	PASS
802.11n(HT40)	2422	SISO	1	Refer to test graph	-26.92	PASS
	2437	SISO	1	Refer to test graph	-26.92	PASS
	2452	SISO	1	Refer to test graph	-26.92	PASS

5.2 Test Graph



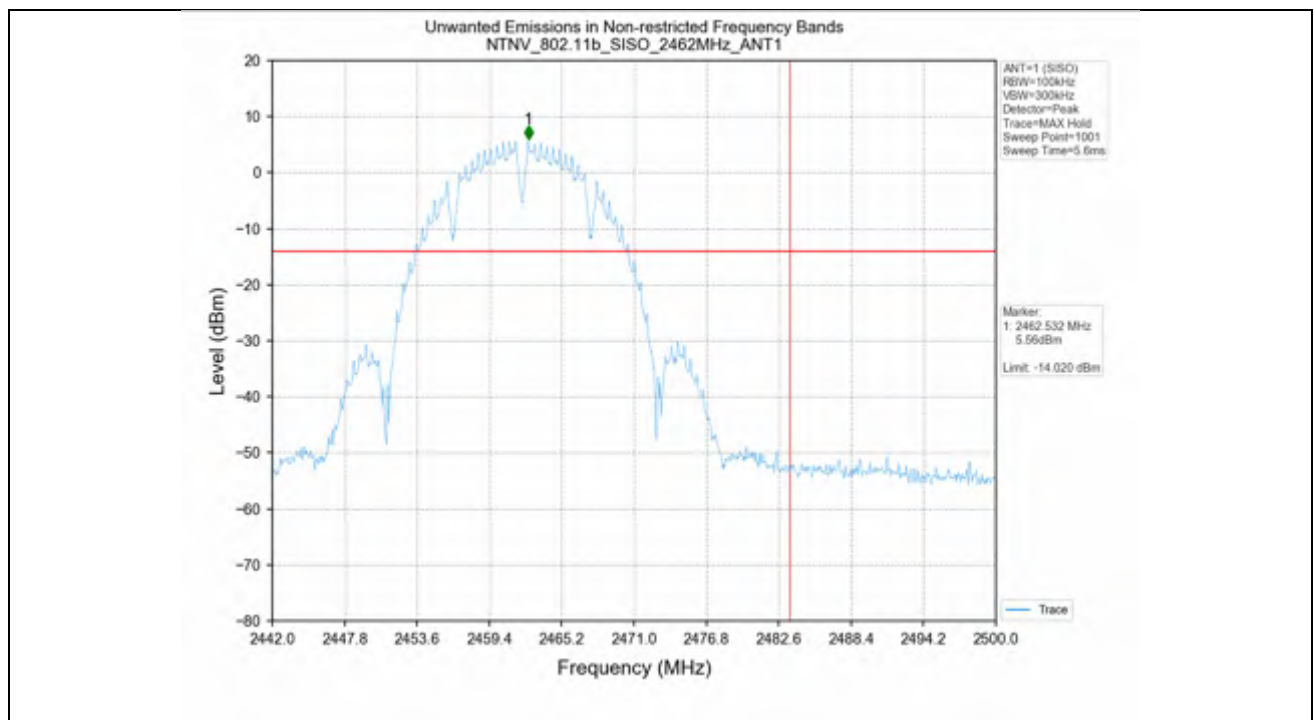
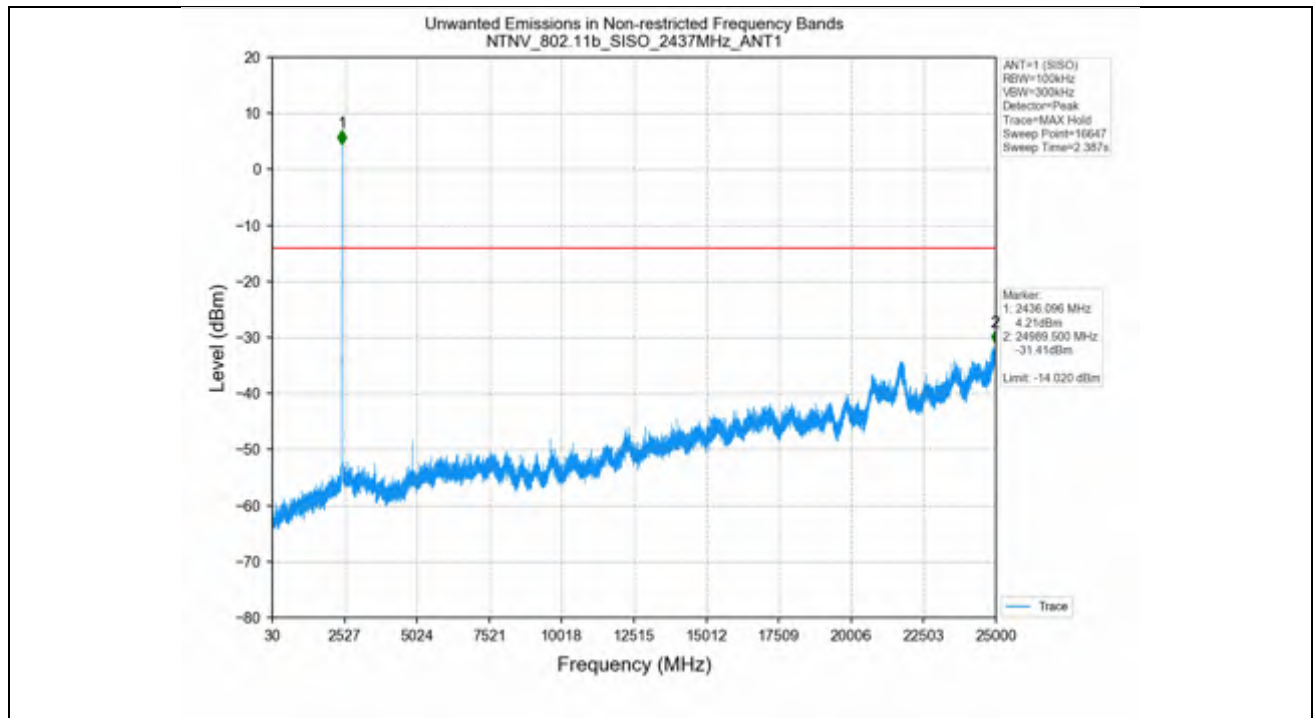


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



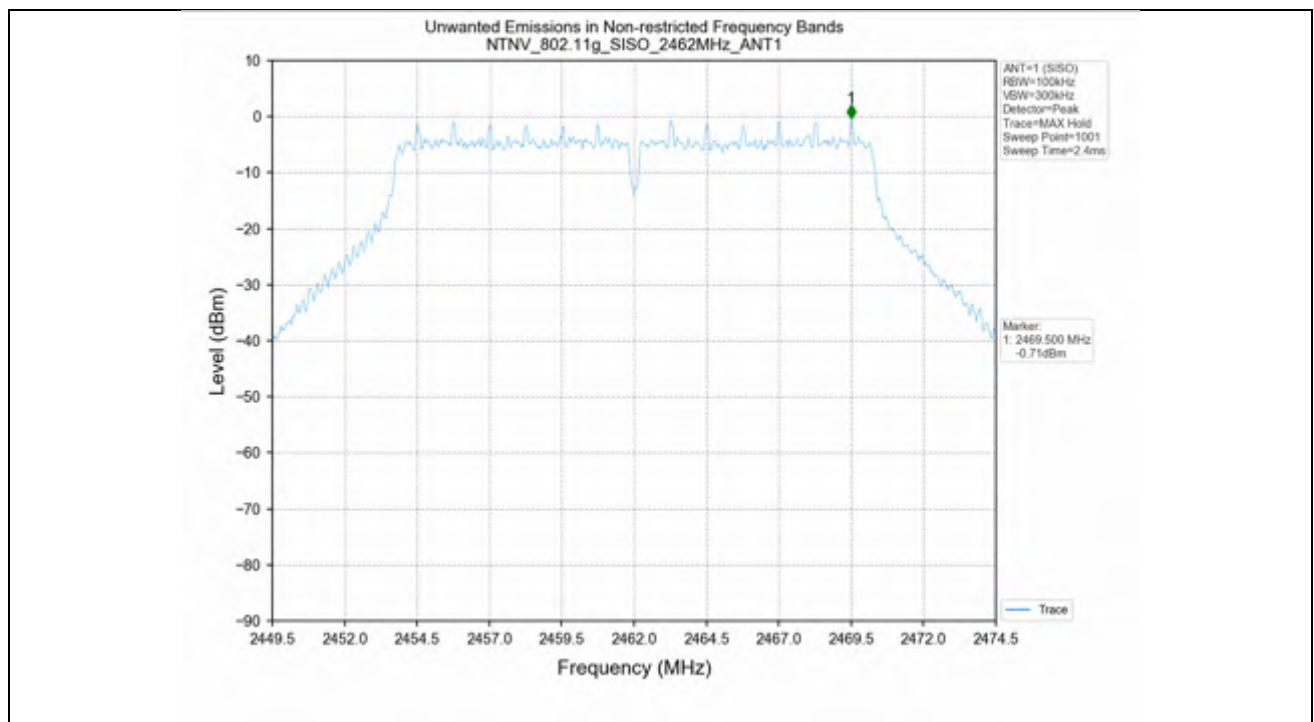
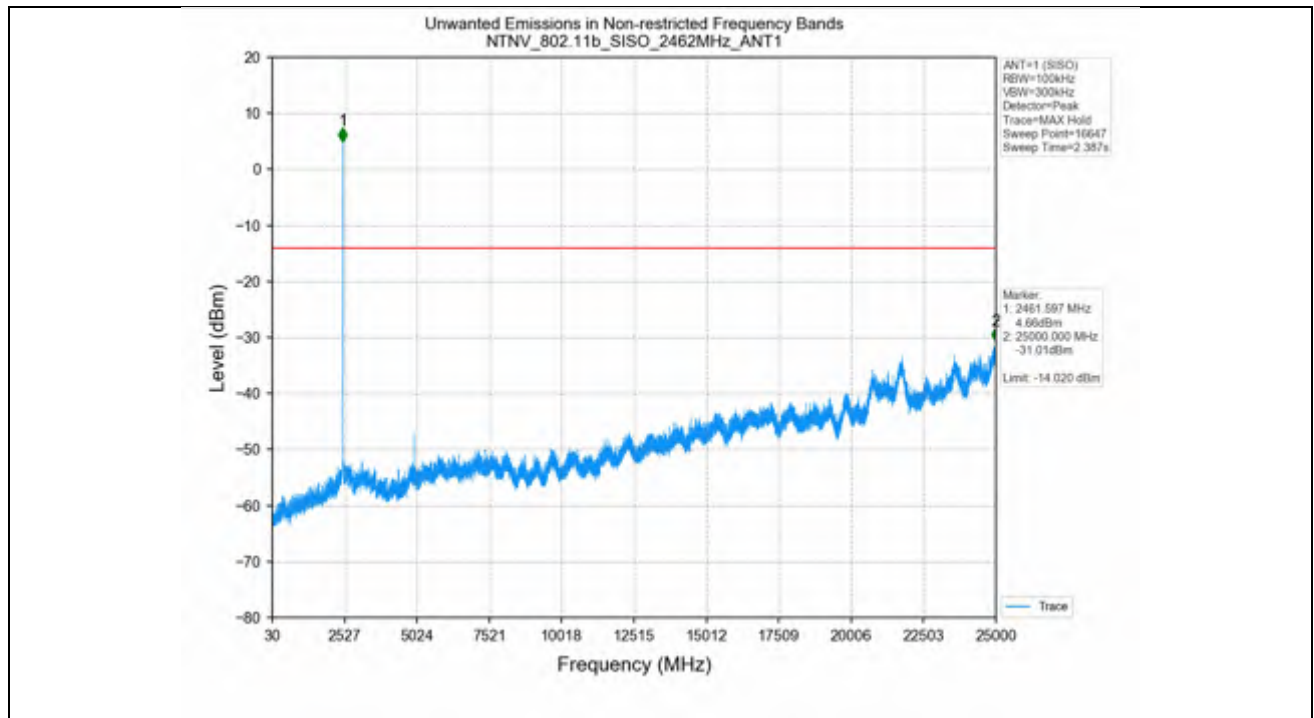


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



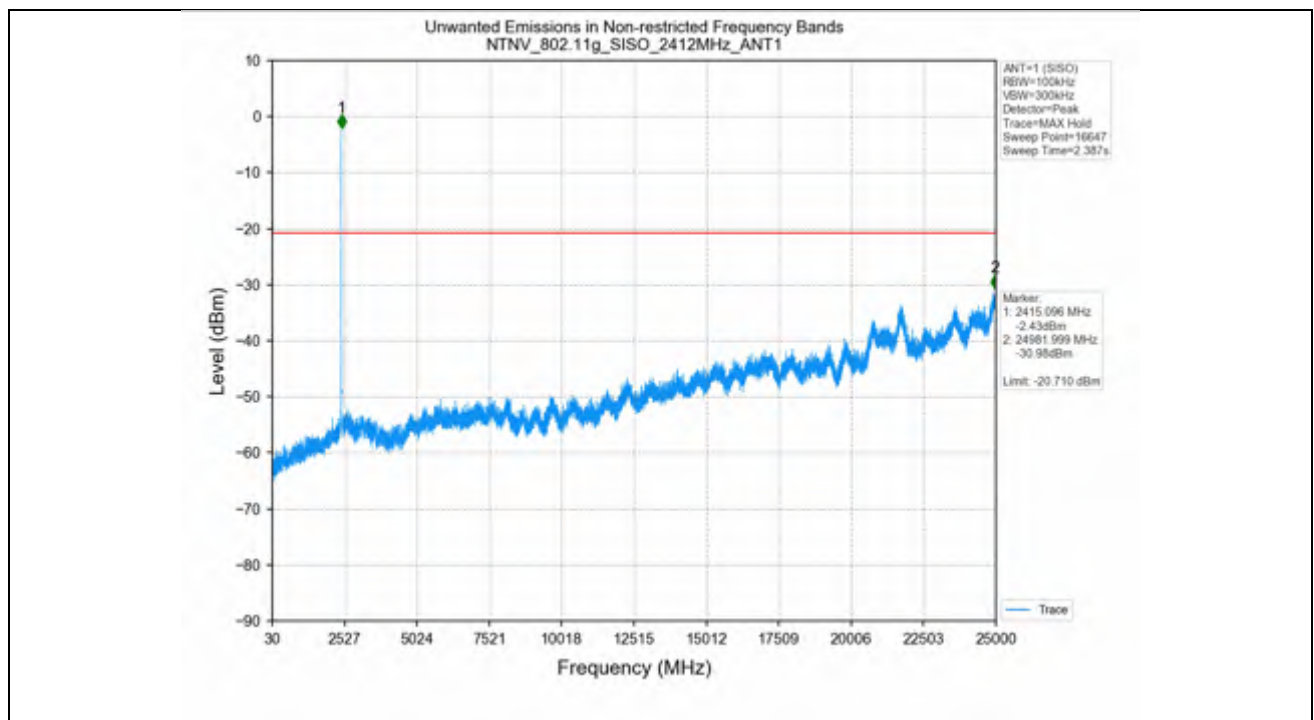
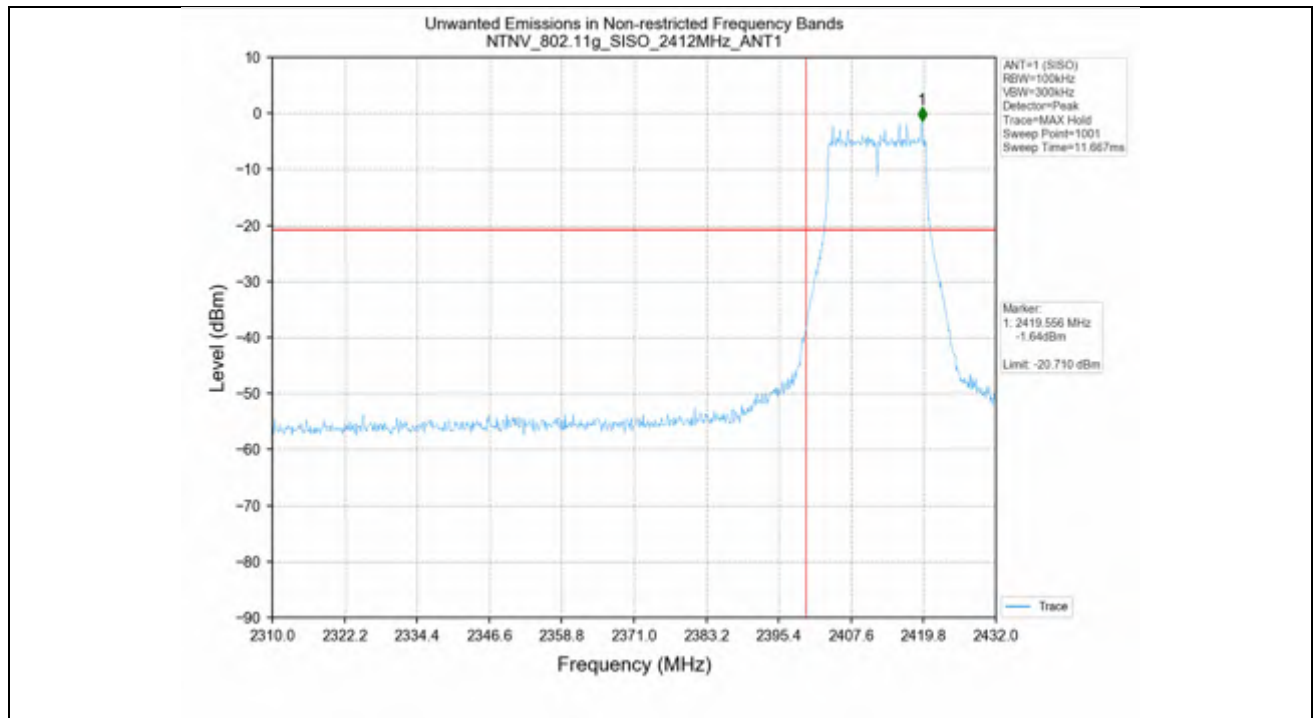


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



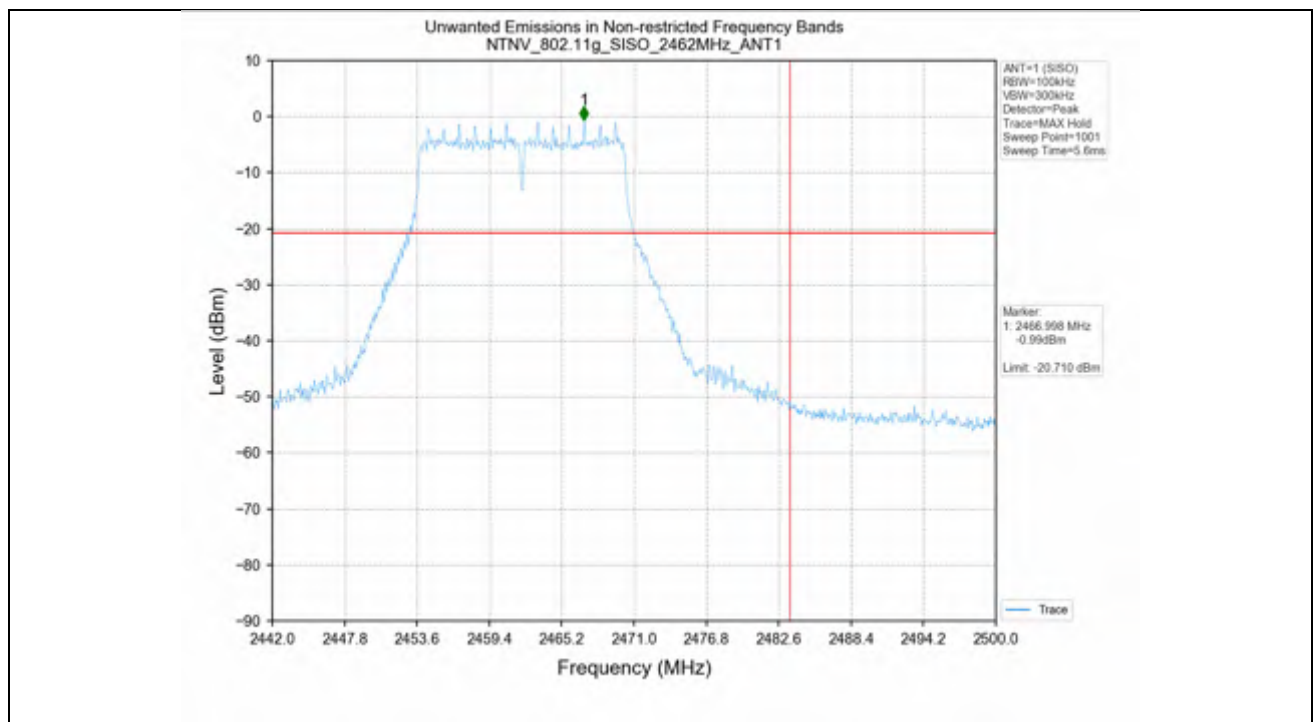
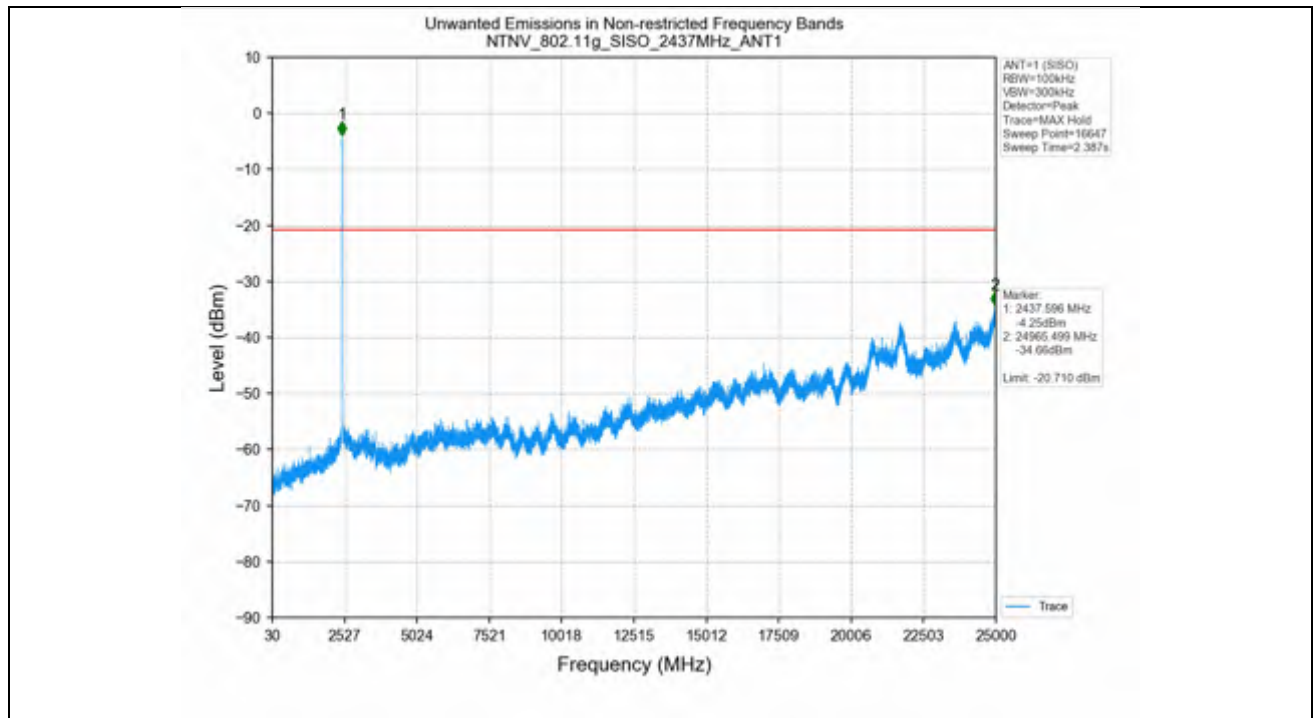


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



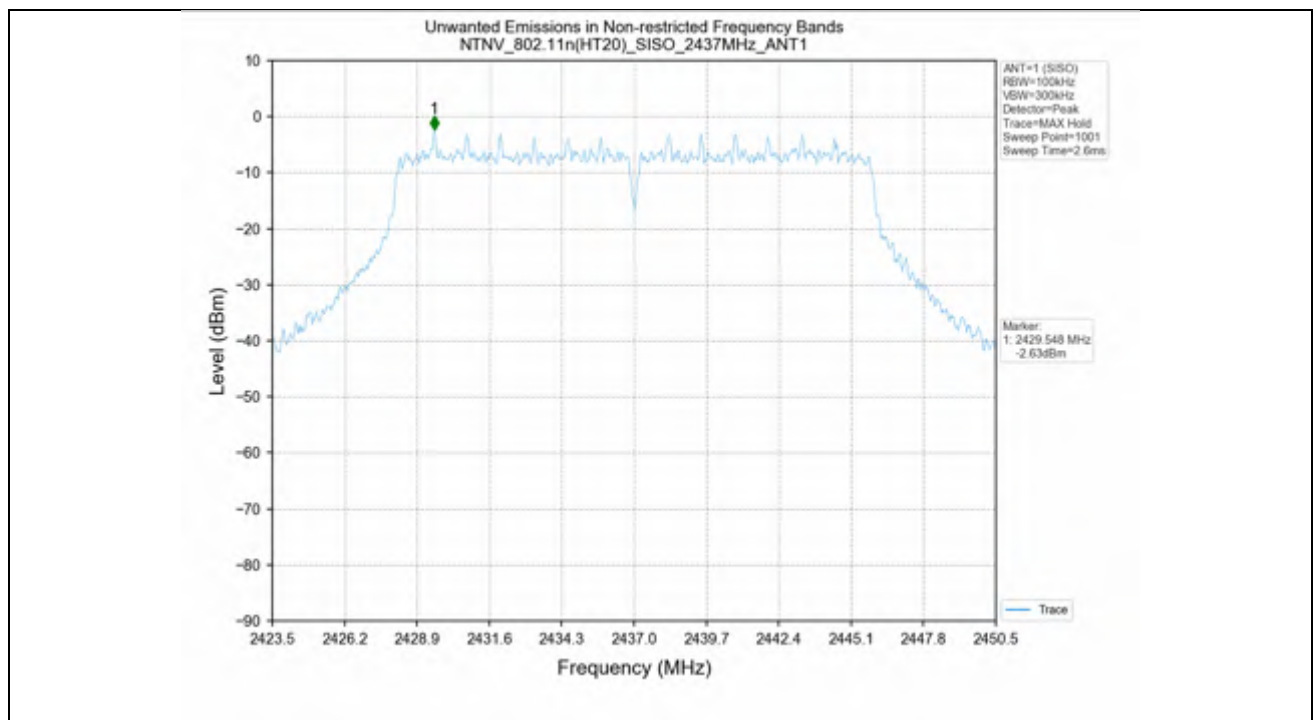
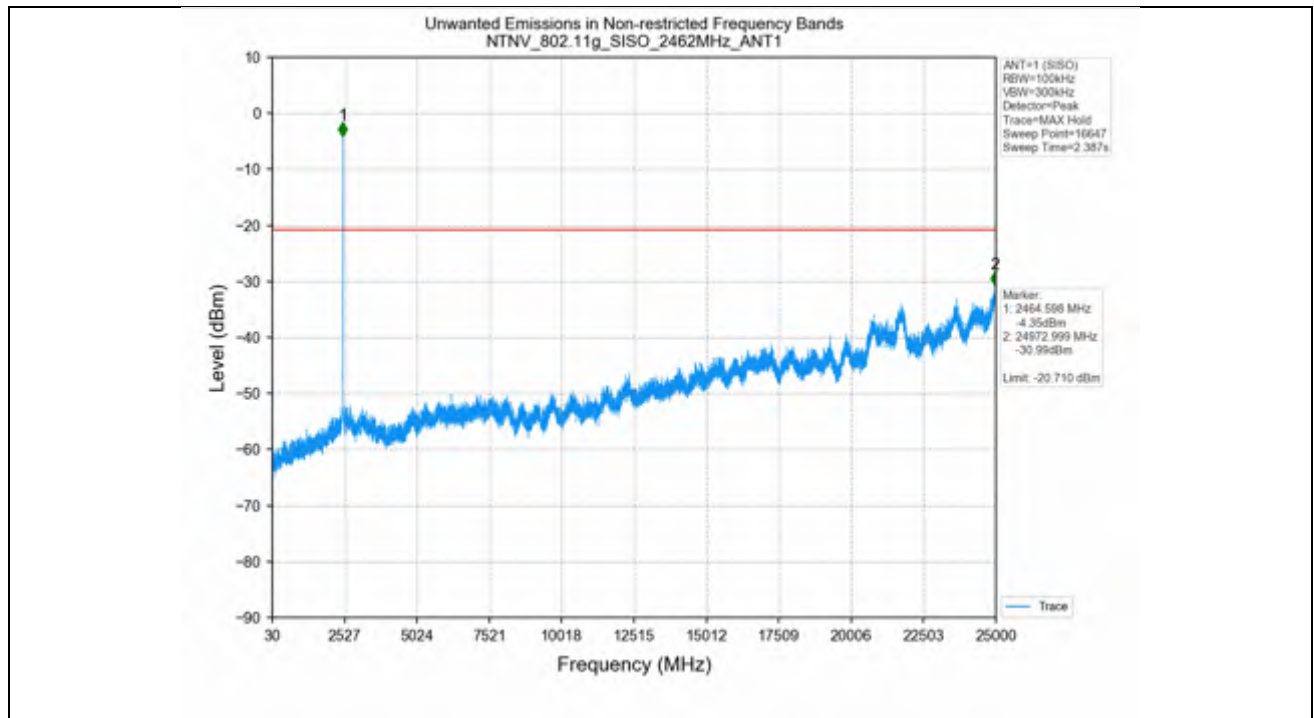


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



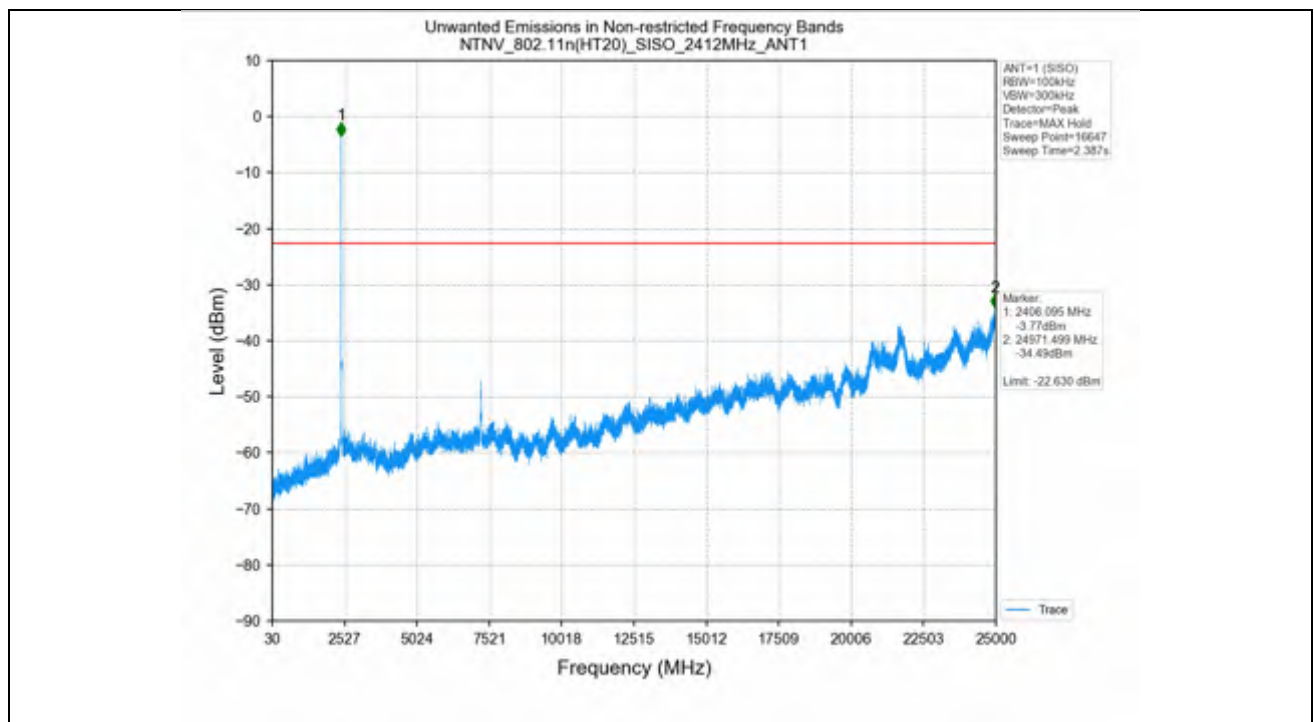
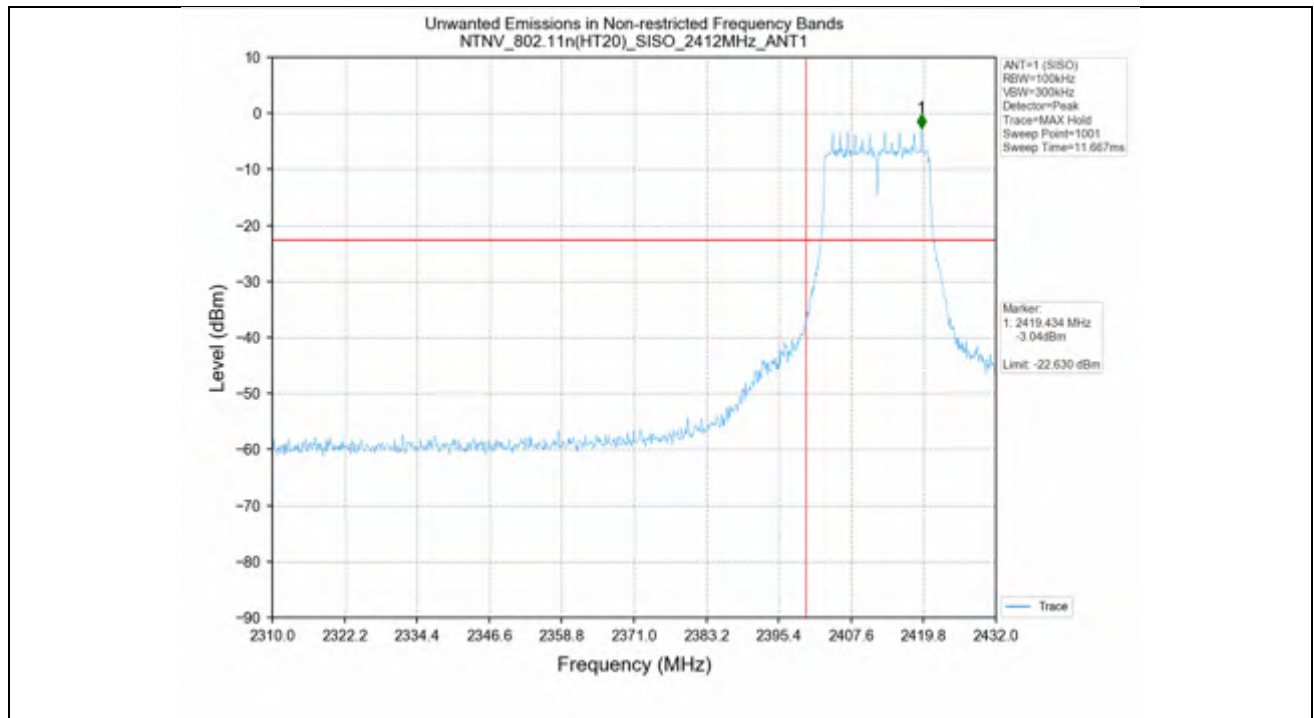


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



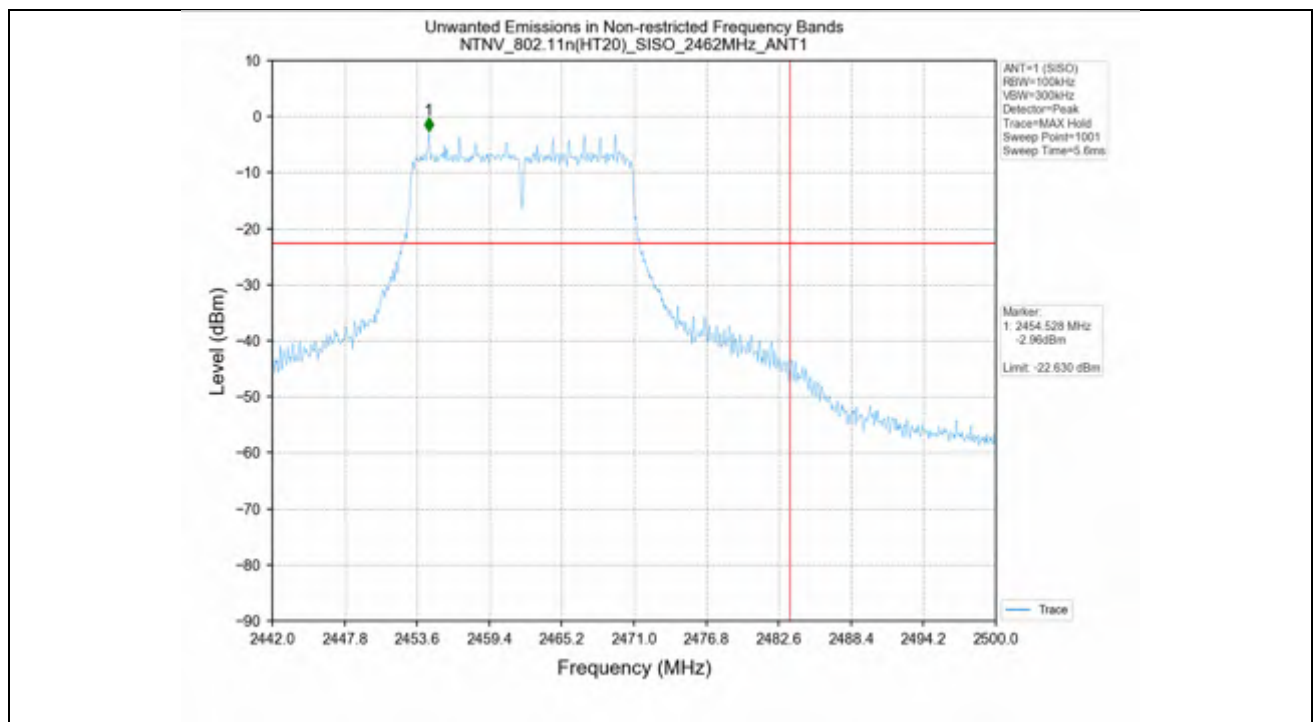
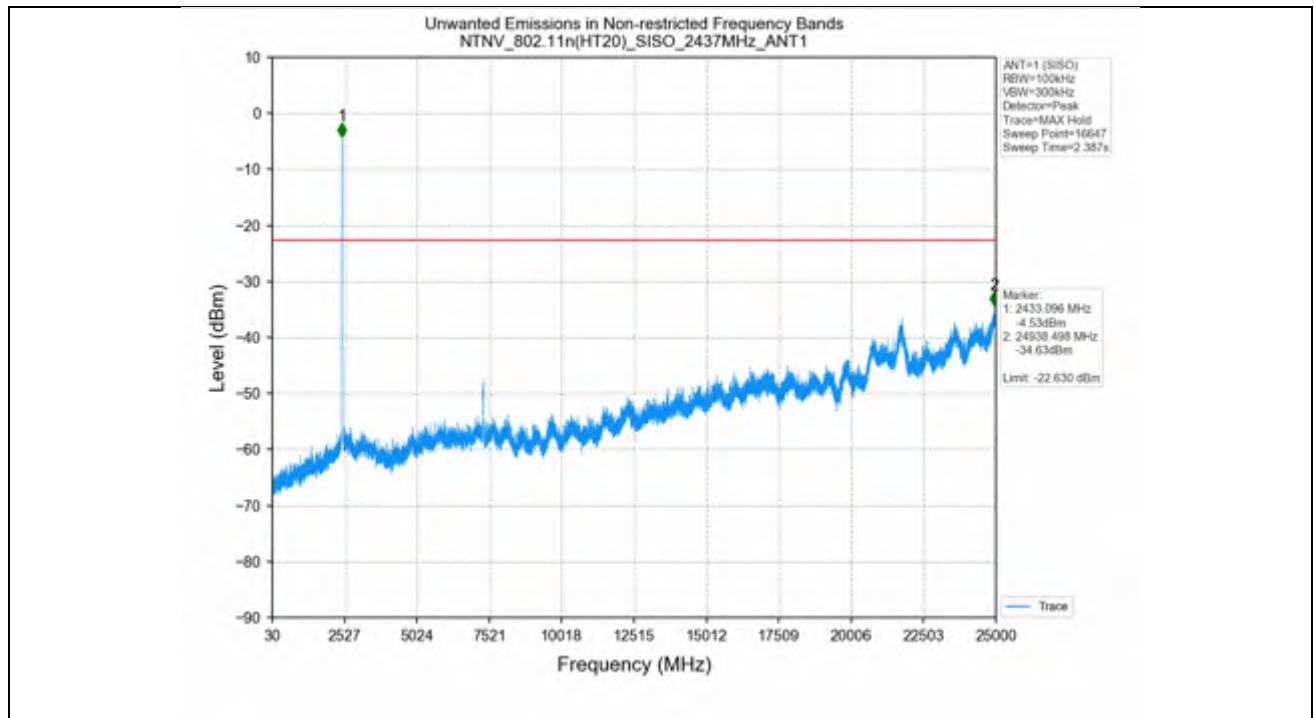


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



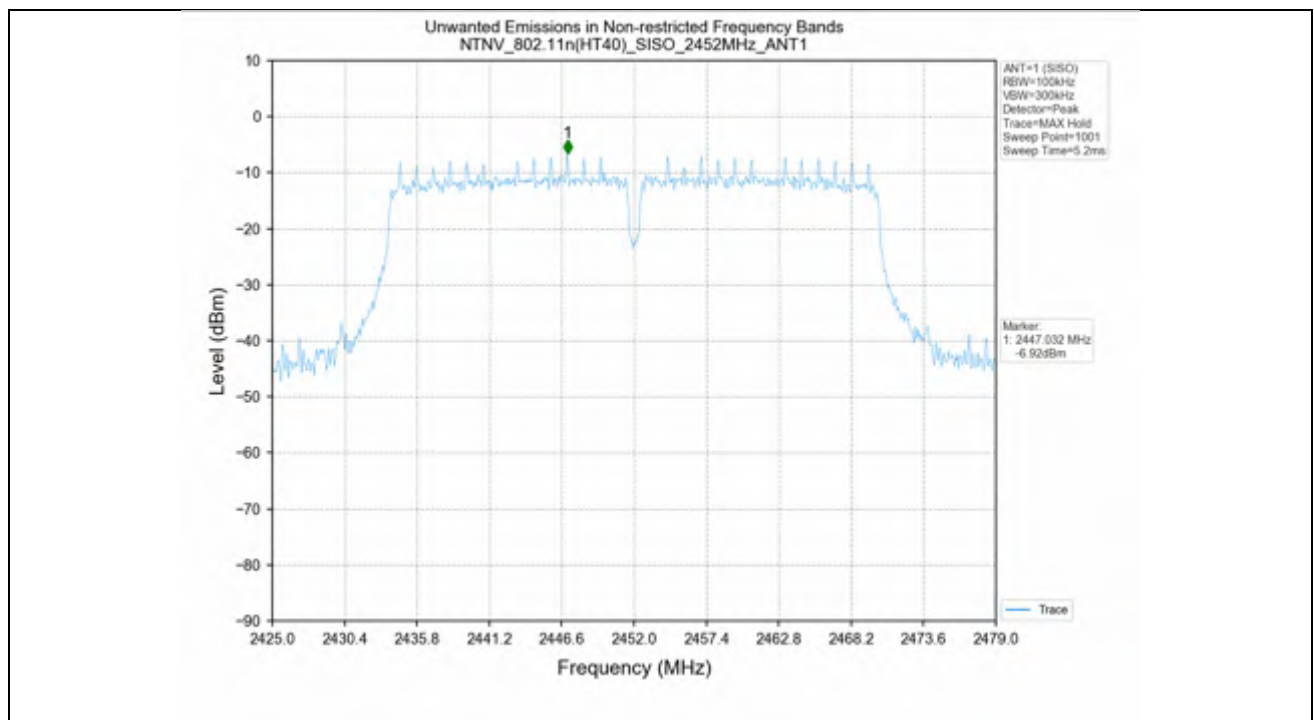
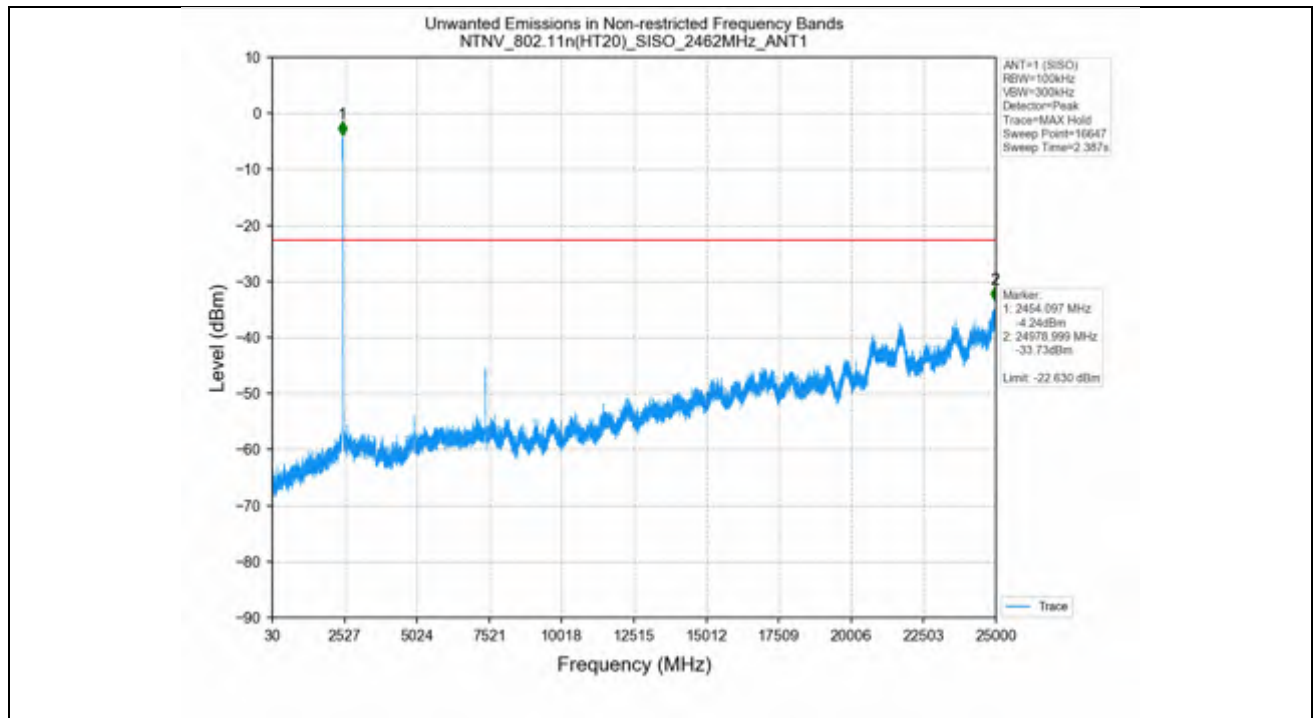


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



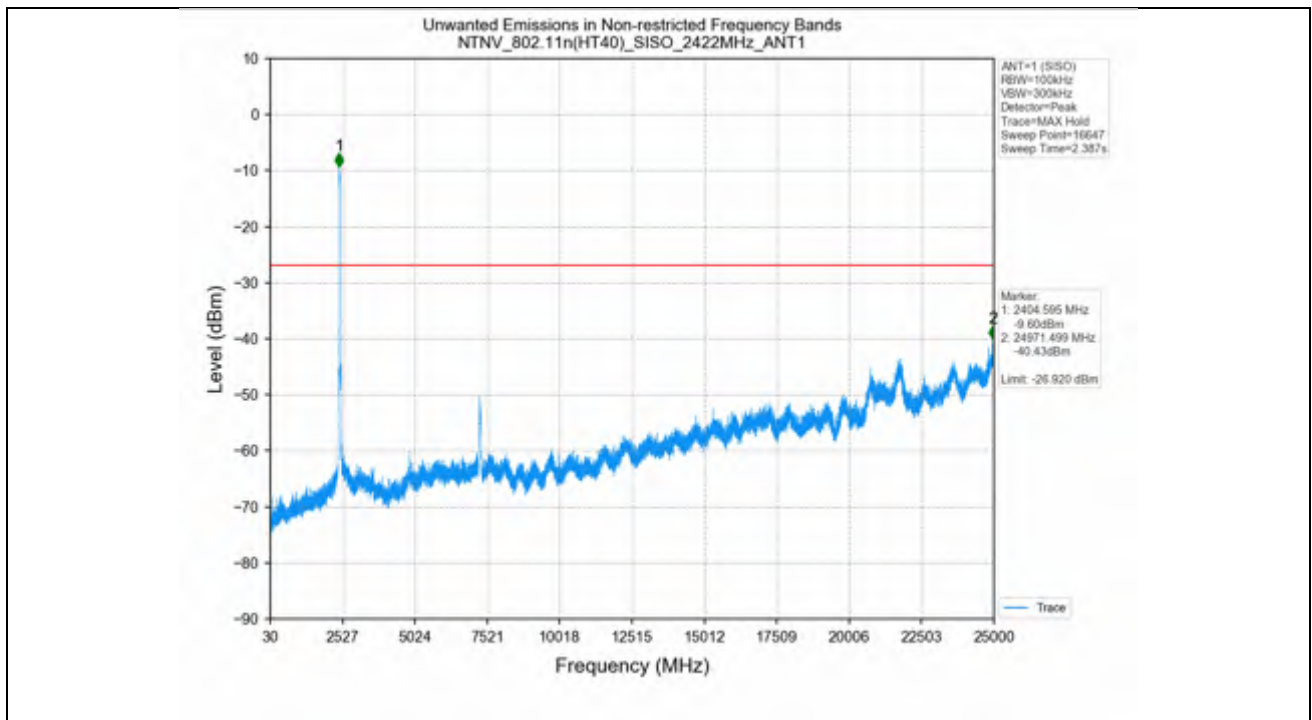
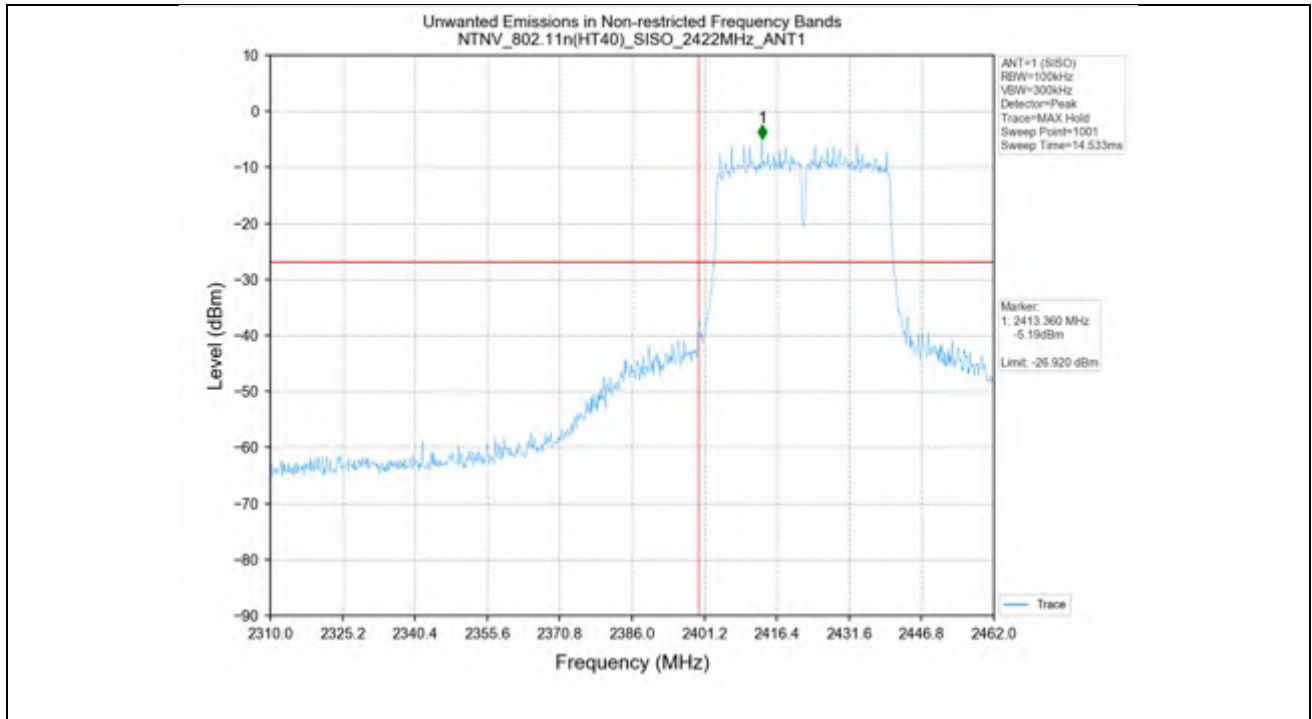


SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



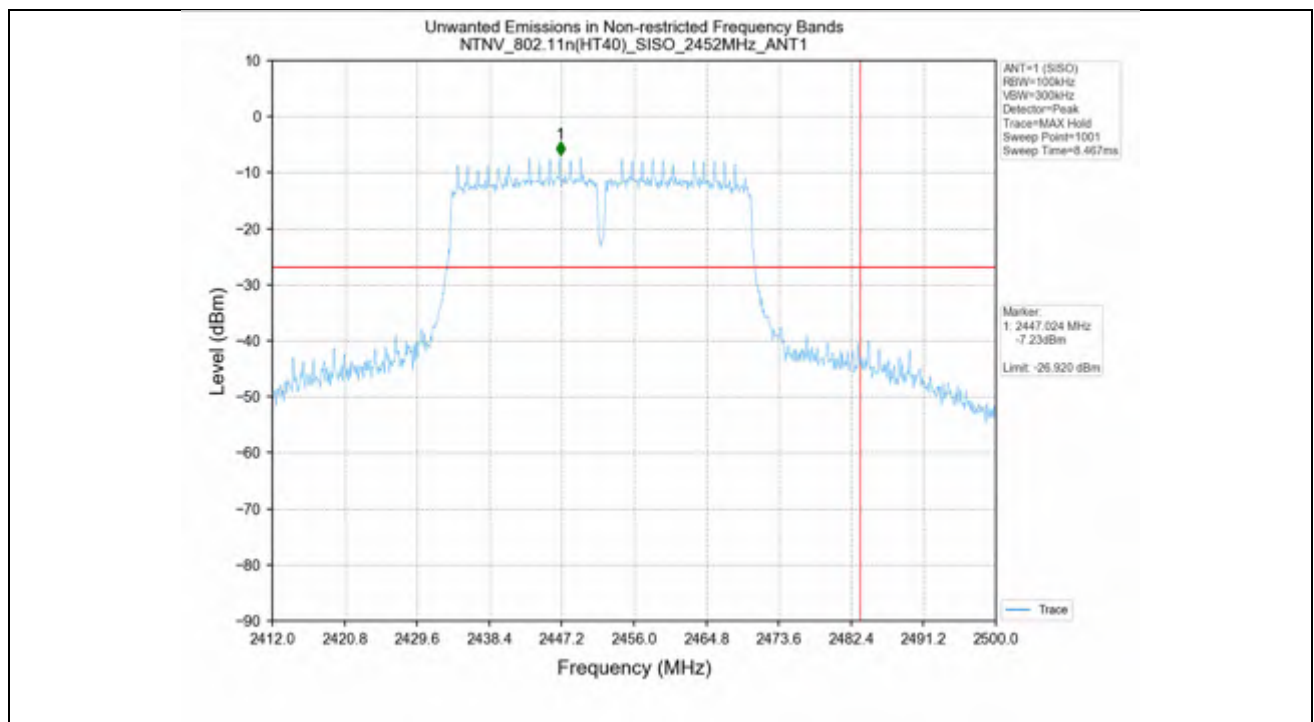
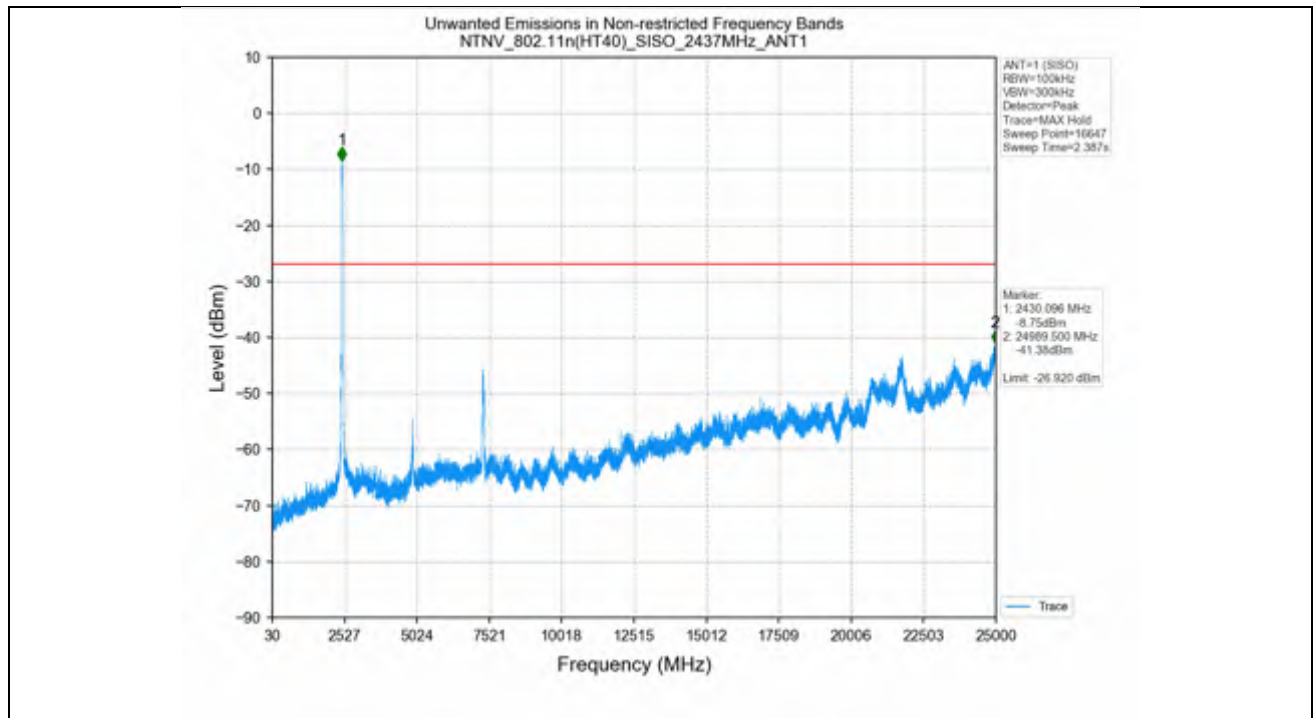


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