

ANNEX E TEST DATA

For

Project No.:	8433EU010221W
Client:	Cheerlux (Shenzhen) Electronic Technology Co., Ltd.
Product Name:	Projector
Model No.:	C6
Technology:	WiFi 2.4G
Test Engineer:	<i>Mikoy zhu</i>
Test Date:	2025-06-27

Test Summary

Item	Result
Duty Cycle	Pass
Frequency Error	Pass
Occupied Bandwidth	Pass
Antenna Power	Pass
Spurious Emission Intensity	Pass
Secondary Radiated Emission	Pass

1. Duty Cycle

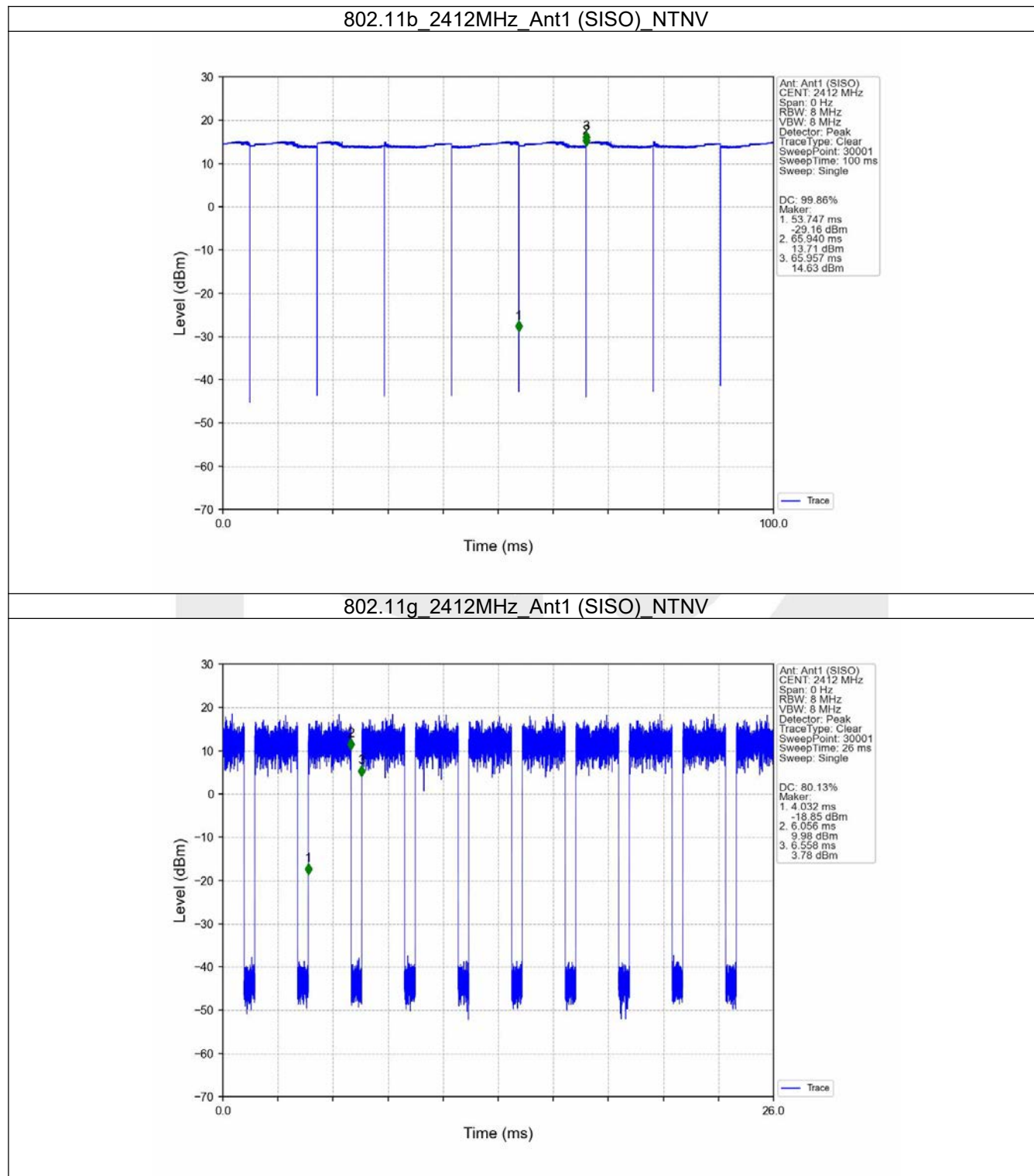
1.1 Test Result

1.1.1 Ant1

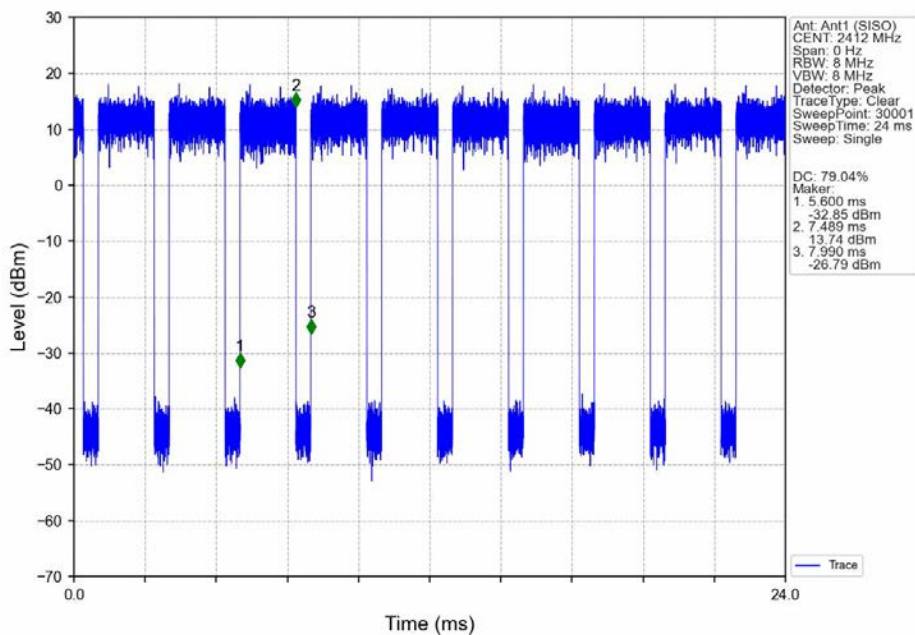
Ant1								
ENV	Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
NTNV	802.11b	SISO	2412	12.193	12.210	99.86	0.01	0.03
	802.11g	SISO	2412	2.024	2.526	80.13	0.96	0.03
	802.11n (HT20)	SISO	2412	1.889	2.390	79.04	1.02	0.03
	802.11n (HT40)	SISO	2422	0.929	1.430	64.97	1.87	0.03

1.2 Test Graph

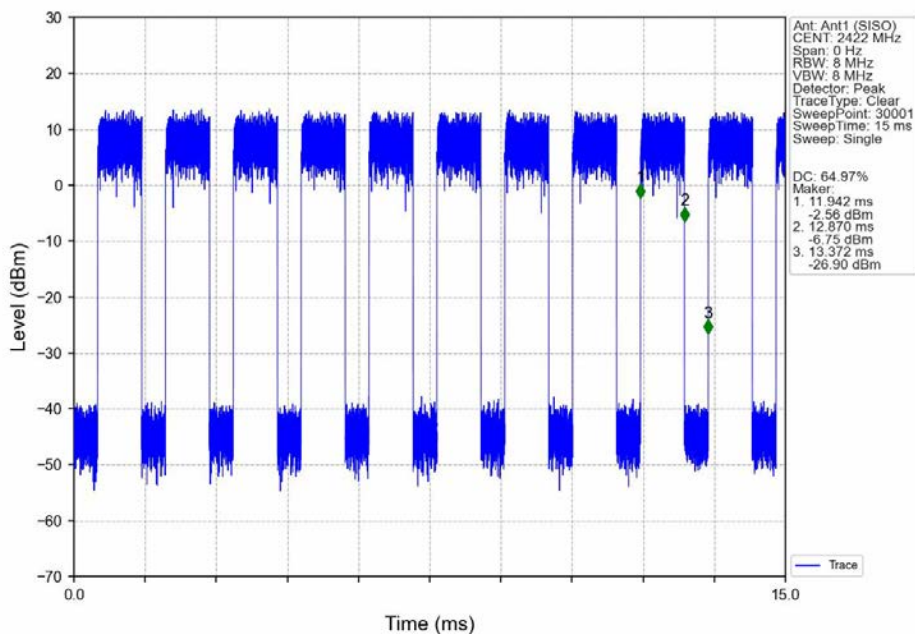
1.2.1 Ant1



802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV



2. Frequency Error

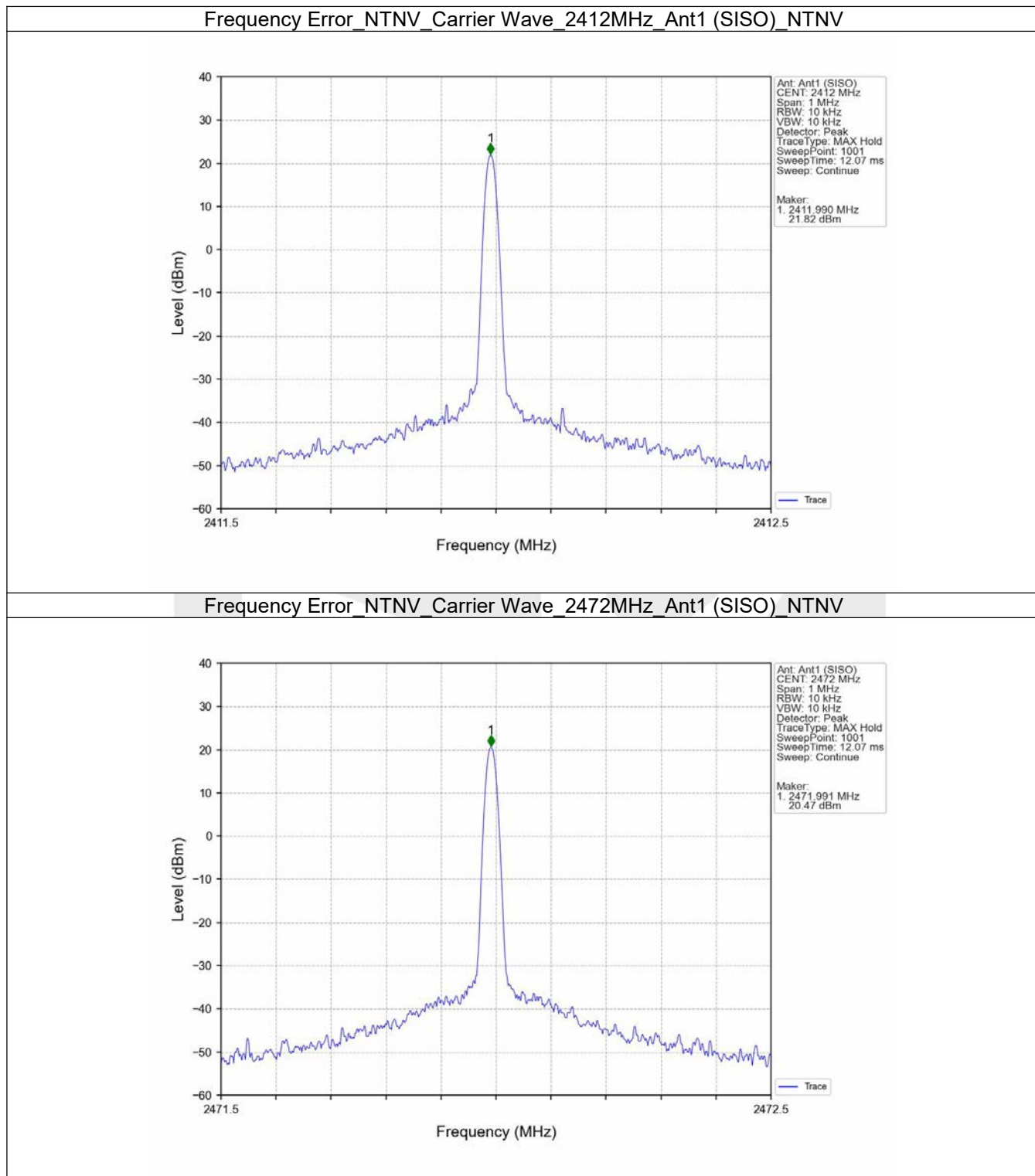
2.1 Test Result

2.1.1 Ant1

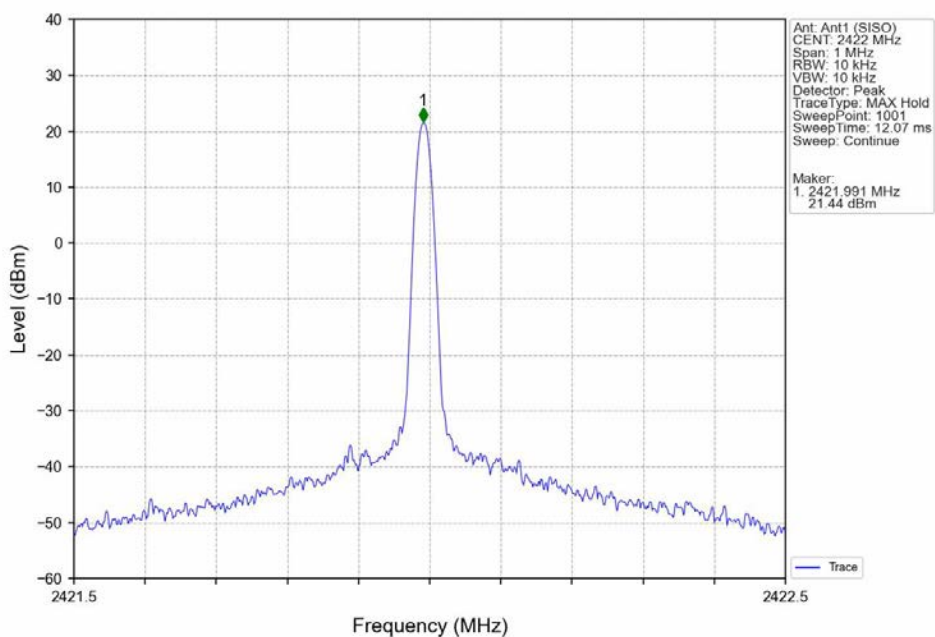
Ant1							
ENV	Mode	TX Type	Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)		Verdict
					Result	Limit	
NTNV	Carrier Wave	SISO	2412	2411.990	-4.15	-50 to 50	Pass
			2472	2471.991	-3.64	-50 to 50	Pass
			2422	2421.991	-3.72	-50 to 50	Pass
			2462	2461.992	-3.25	-50 to 50	Pass

2.2 Test Graph

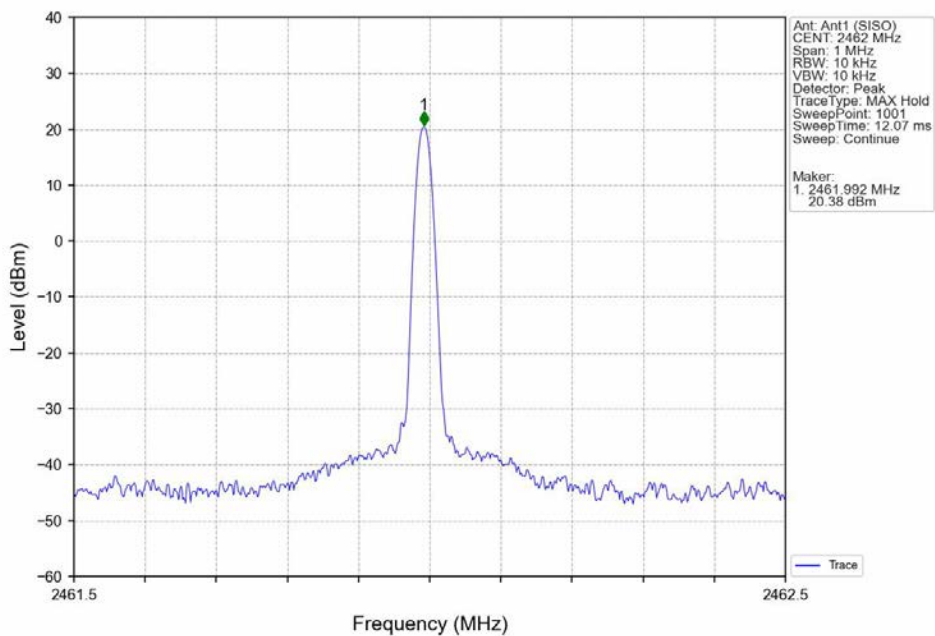
2.2.1 Ant1



Frequency Error_NTNV_Carrier Wave_2422MHz_Ant1 (SISO)_NTNV



Frequency Error_NTNV_Carrier Wave_2462MHz_Ant1 (SISO)_NTNV



3. Occupied Bandwidth

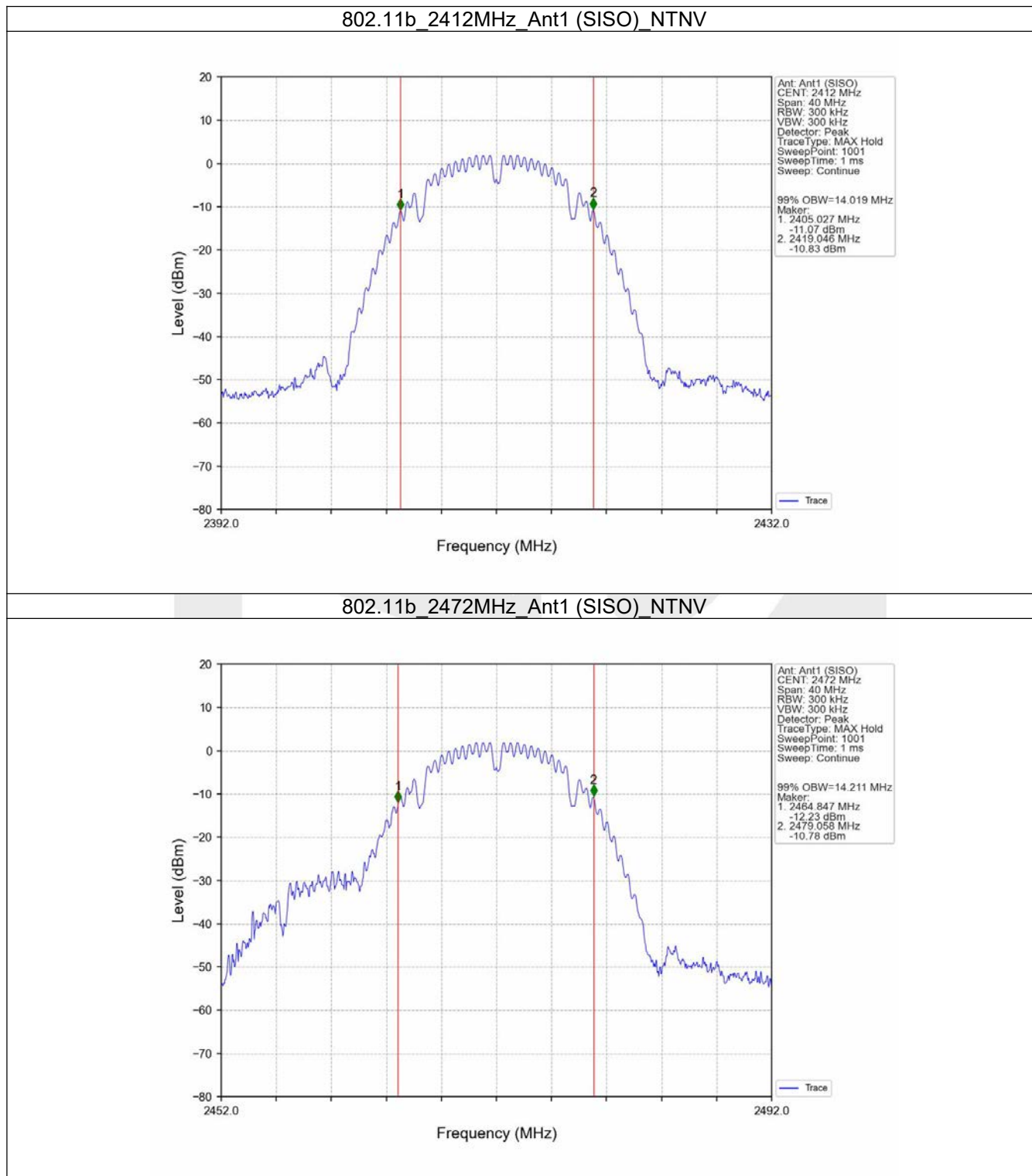
3.1 Test Result

3.1.1 OBW

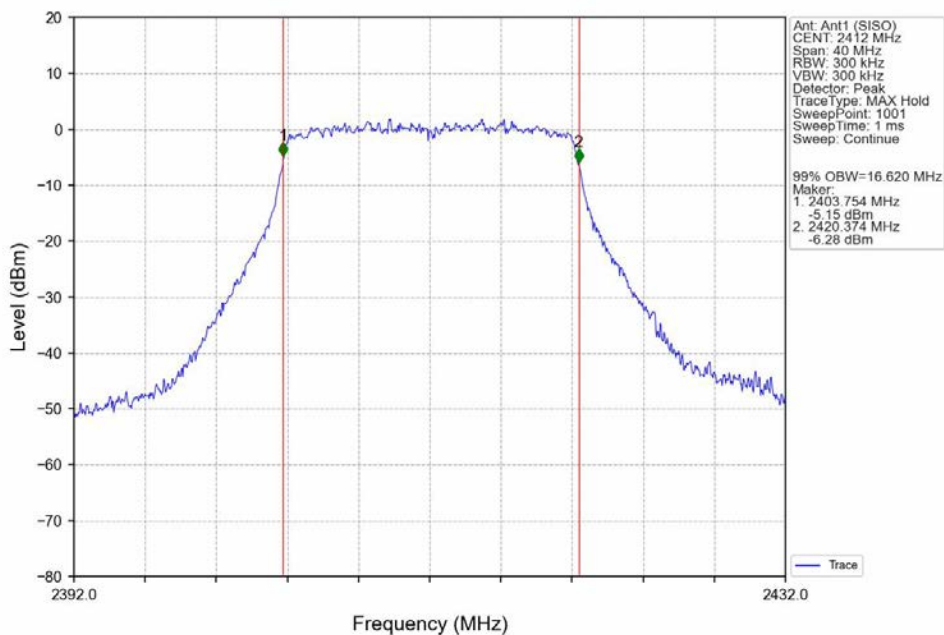
ENV	Mode	TX Type	Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
				ANT1	Limit	
NTNV	802.11b	SISO	2412	14.019	≤ 26	Pass
			2472	14.211	≤ 26	Pass
	802.11g	SISO	2412	16.620	≤ 26	Pass
			2472	16.540	≤ 26	Pass
	802.11n (HT20)	SISO	2412	17.838	≤ 26	Pass
			2472	17.560	≤ 26	Pass
	802.11n (HT40)	SISO	2422	35.814	≤ 40	Pass
			2462	35.854	≤ 40	Pass

3.2 Test Graph

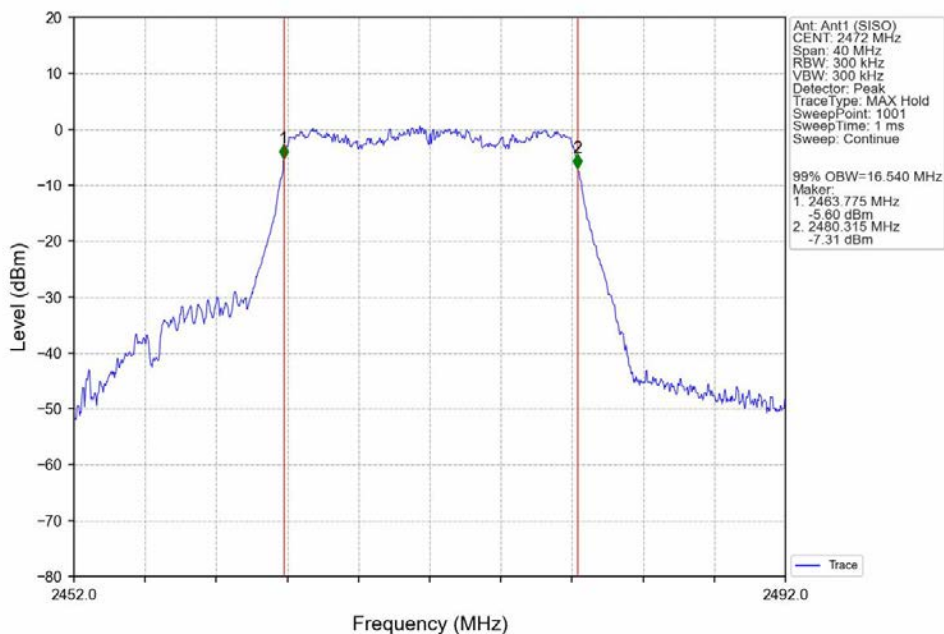
3.2.1 OBW



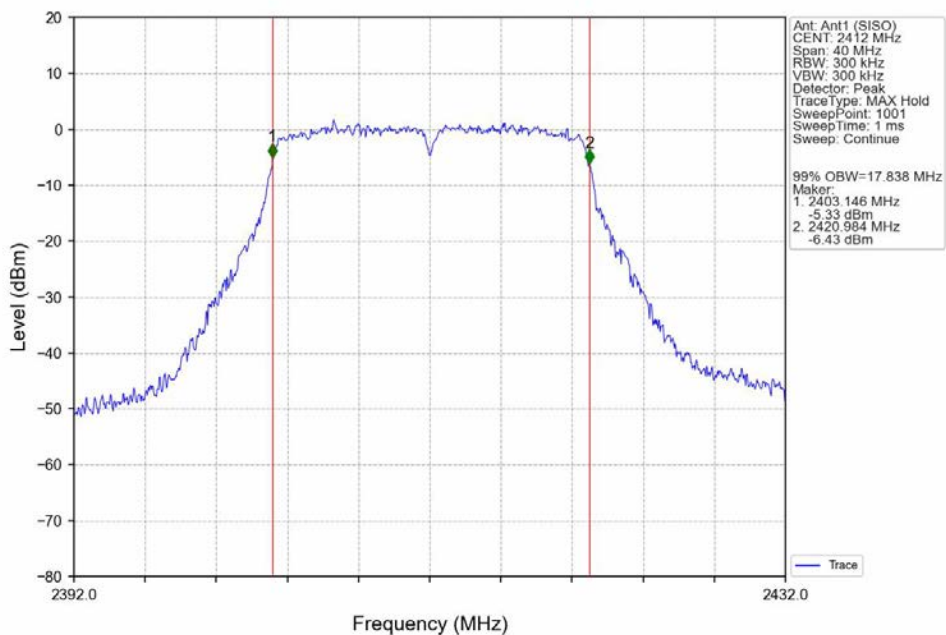
802.11g_2412MHz_Ant1 (SISO)_NTNV



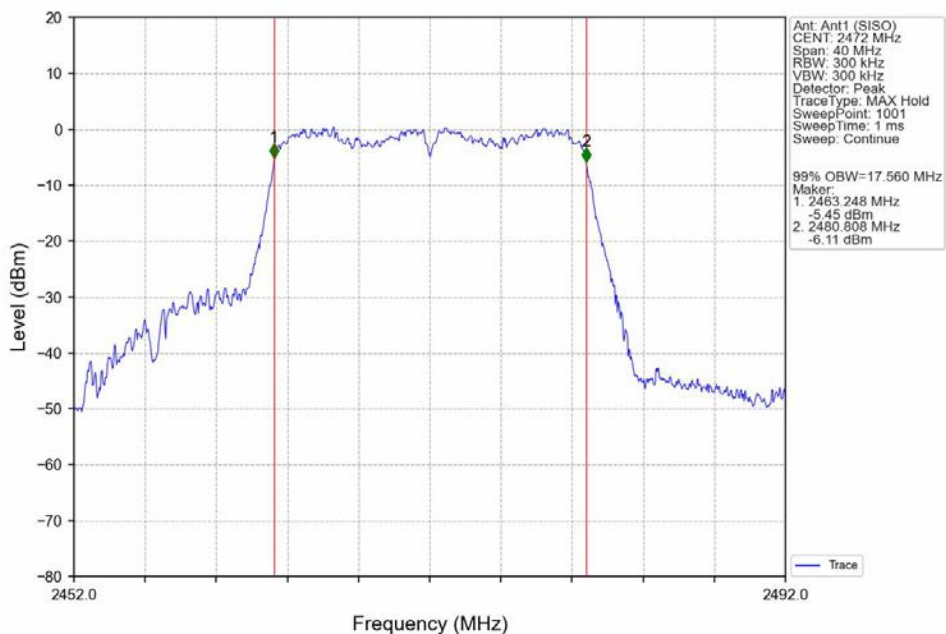
802.11g_2472MHz_Ant1 (SISO)_NTNV



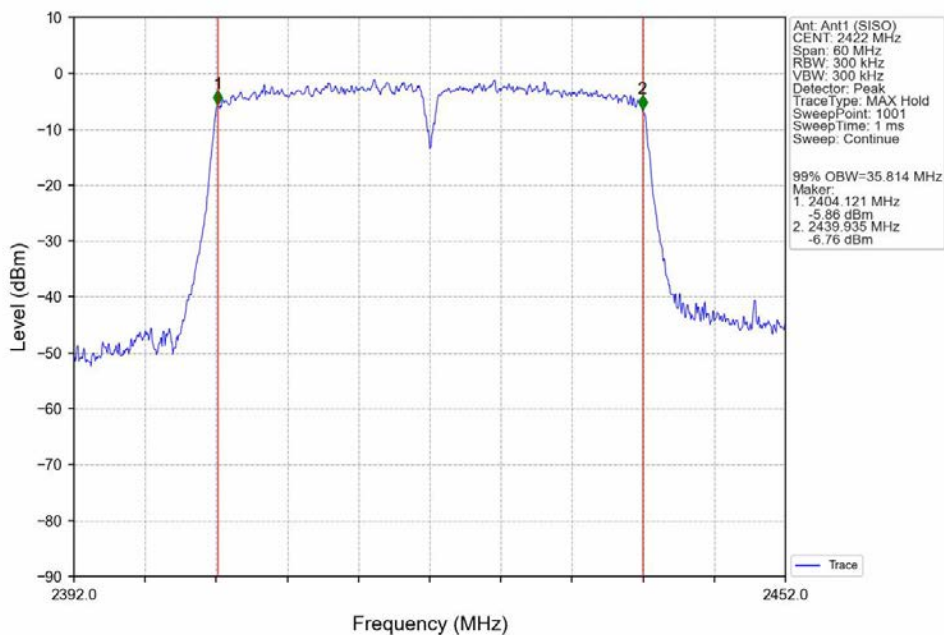
802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV



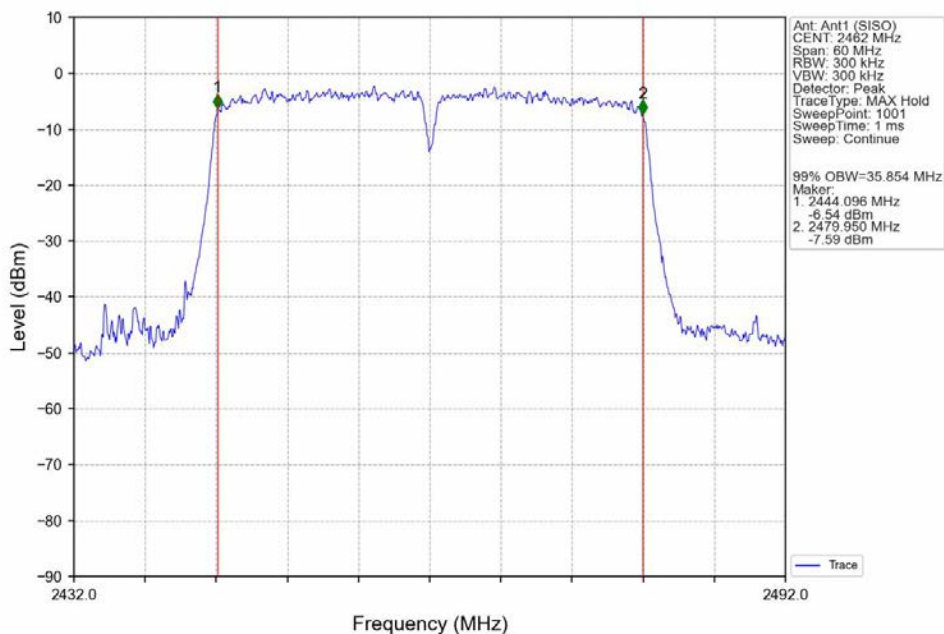
802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_2462MHz_Ant1 (SISO)_NTNV



4. Antenna Power

4.1 Test Result

4.1.1 Power

ENV	Mode	TX Type	Frequency (MHz)	ANT	Antenna Power (mW/MHz)		Nominal Power (mW/MHz)	Tolerance (%)		Verdict
					Measured	Limit		Measured	Limit	
NTNV	802.11b	SISO	2412	1	0.913	<=10.00	0.910	0.33	<=20	Pass
			2472	1	0.909	<=10.00	0.910	-0.11	<=20	Pass
	802.11g	SISO	2412	1	0.584	<=10.00	0.580	0.69	<=20	Pass
			2472	1	0.534	<=10.00	0.580	-7.93	<=20	Pass
	802.11n (HT20)	SISO	2412	1	0.743	<=10.00	0.740	0.41	<=20	Pass
			2472	1	0.630	<=10.00	0.740	-14.86	<=20	Pass
	802.11n (HT40)	SISO	2422	1	0.406	<=5.00	0.410	-0.98	<=20	Pass
			2462	1	0.308	<=5.00	0.410	-24.88	<=20	Pass

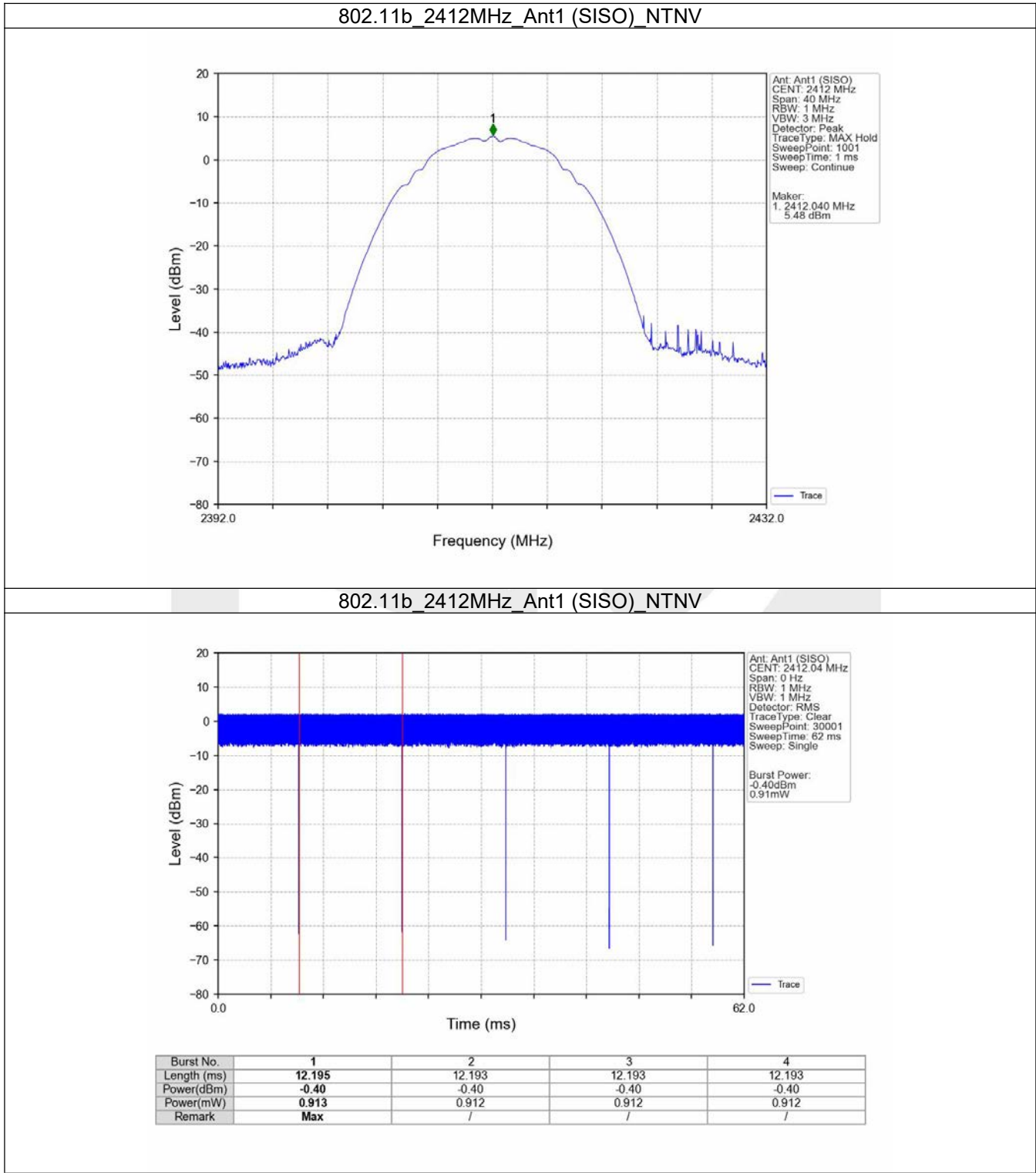
4.1.2 EIRP

ENV	Mode	TX Type	Frequency (MHz)	ANT	Gain (dBi)	Measured Power (dBm/MHz)	EIRP (dBm/MHz)		Verdict
							Result	Limit	
NTNV	802.11b	SISO	2412	1	2.86	-0.40	2.47	12.14	Pass
			2472	1	2.86	-0.41	2.45	12.14	Pass
	802.11g	SISO	2412	1	2.86	-2.34	0.52	12.14	Pass
			2472	1	2.86	-2.73	0.14	12.14	Pass
	802.11n (HT20)	SISO	2412	1	2.86	-1.29	1.57	12.14	Pass
			2472	1	2.86	-2.01	0.85	12.14	Pass
	802.11n (HT40)	SISO	2422	1	2.86	-3.92	-1.06	12.14	Pass
			2462	1	2.86	-5.11	-2.25	12.14	Pass

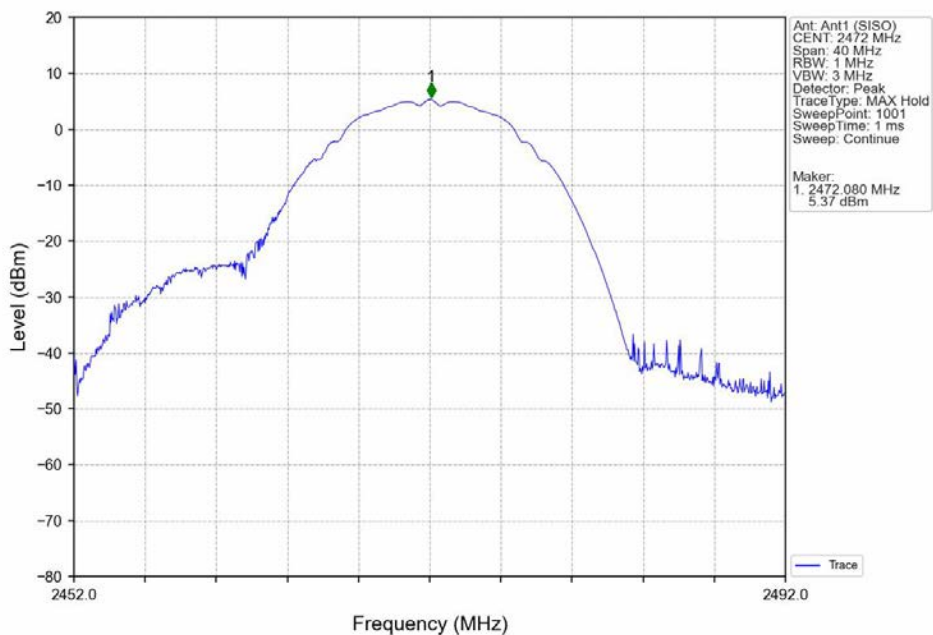
Note: E.I.R.P = Measured Power + Antenna Gain

4.2 Test Graph

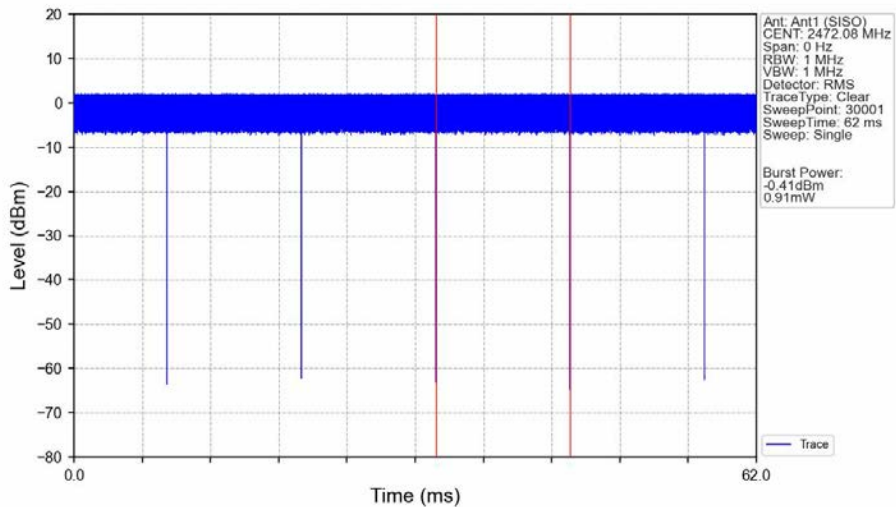
4.2.1 Power



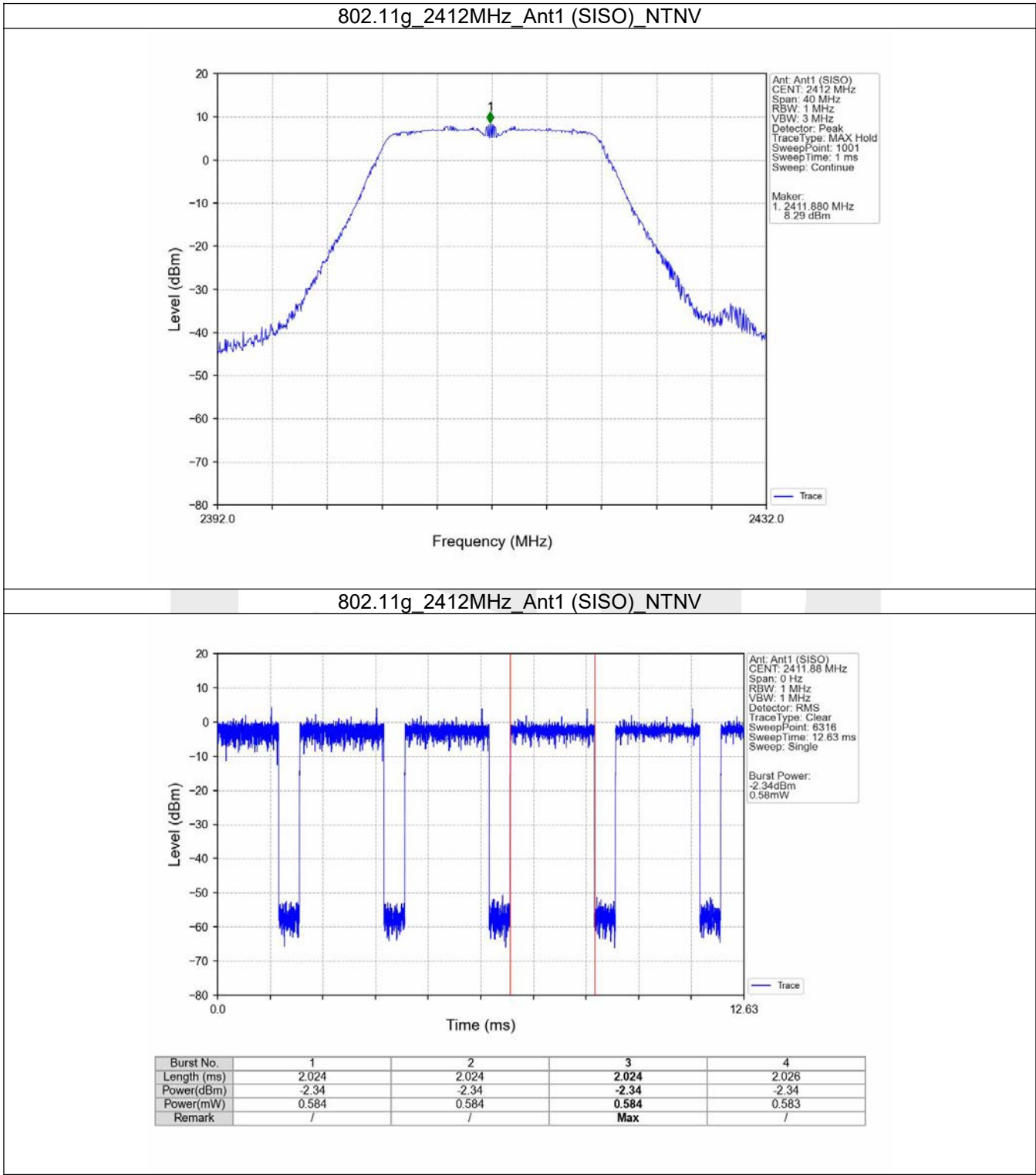
802.11b_2472MHz_Ant1 (SISO)_NTNV



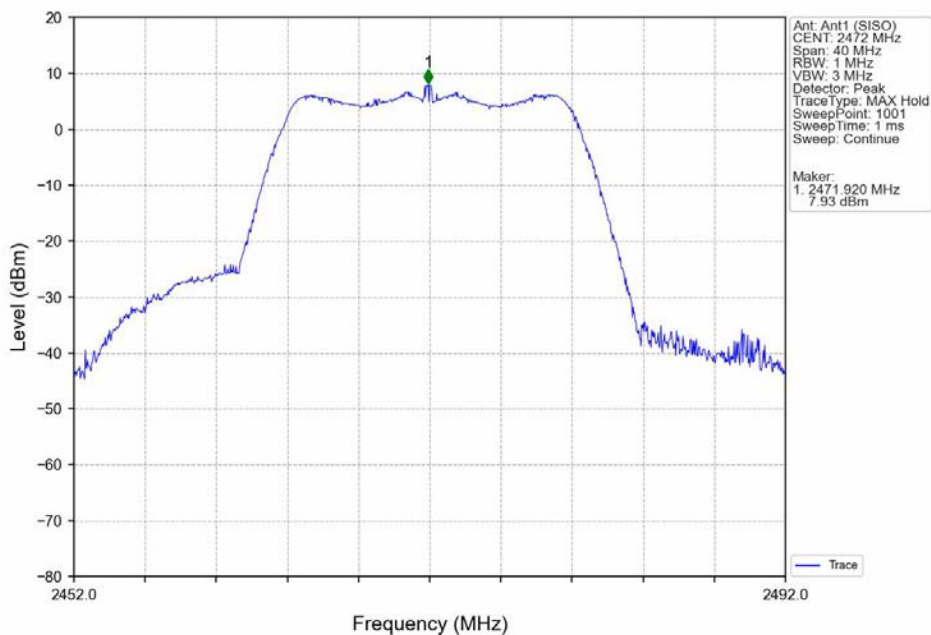
802.11b_2472MHz_Ant1 (SISO)_NTNV



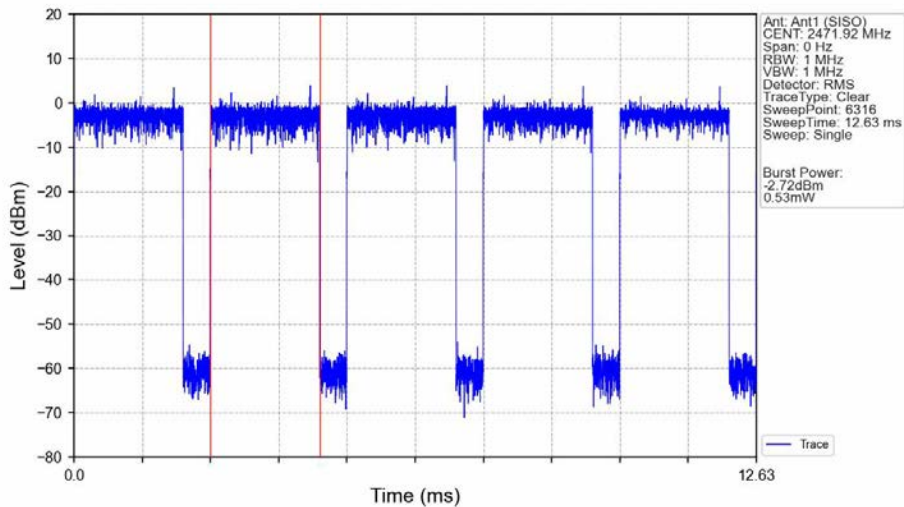
Burst No.	1	2	3	4
Length (ms)	12.193	12.195	12.193	12.193
Power(dBm)	-0.42	-0.42	-0.41	-0.42
Power(mW)	0.907	0.908	0.909	0.909
Remark	/	/	Max	/



802.11g_2472MHz_Ant1 (SISO)_NTNV

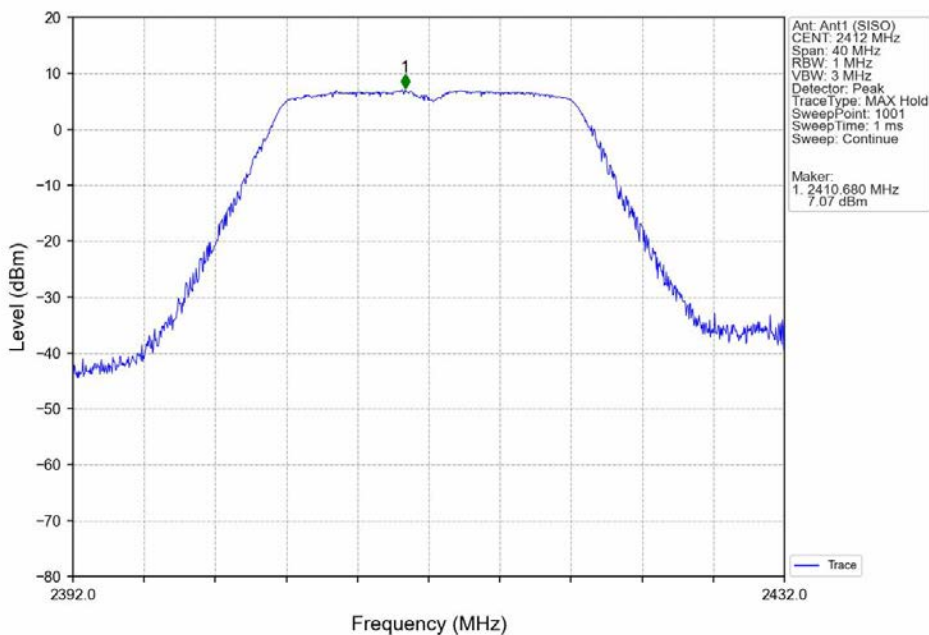


802.11g_2472MHz_Ant1 (SISO)_NTNV

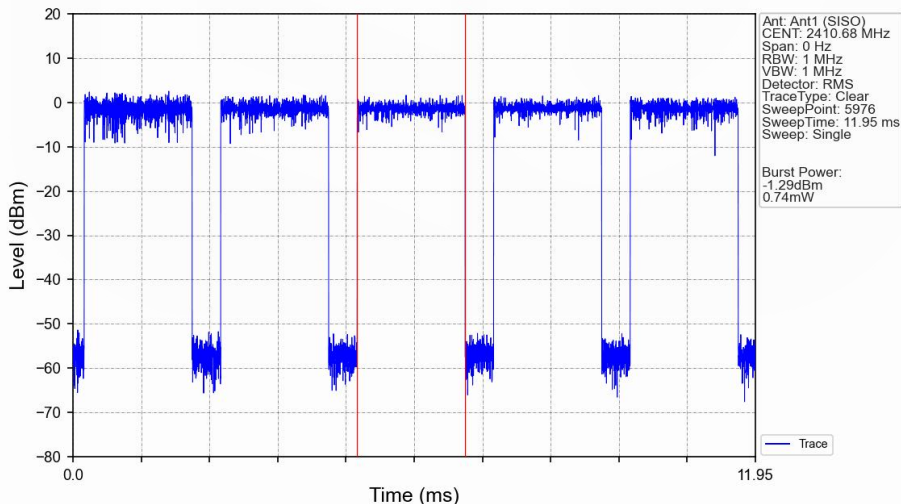


Burst No.	1	2	3	4
Length (ms)	2.024	2.024	2.024	2.024
Power(dBm)	-2.72	-2.73	-2.73	-2.73
Power(mW)	0.534	0.534	0.534	0.534
Remark	Max	/	/	/

802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV

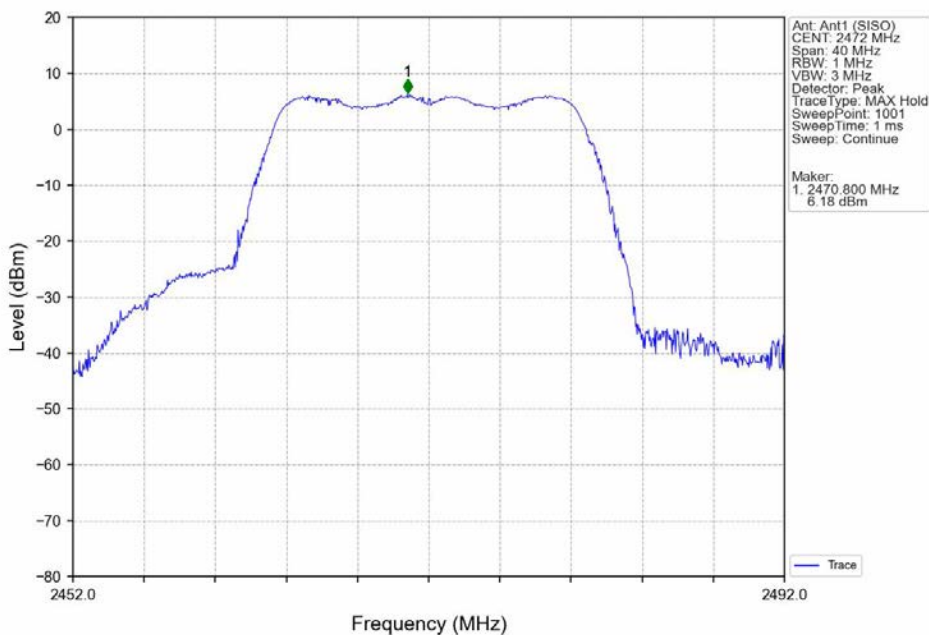


802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV

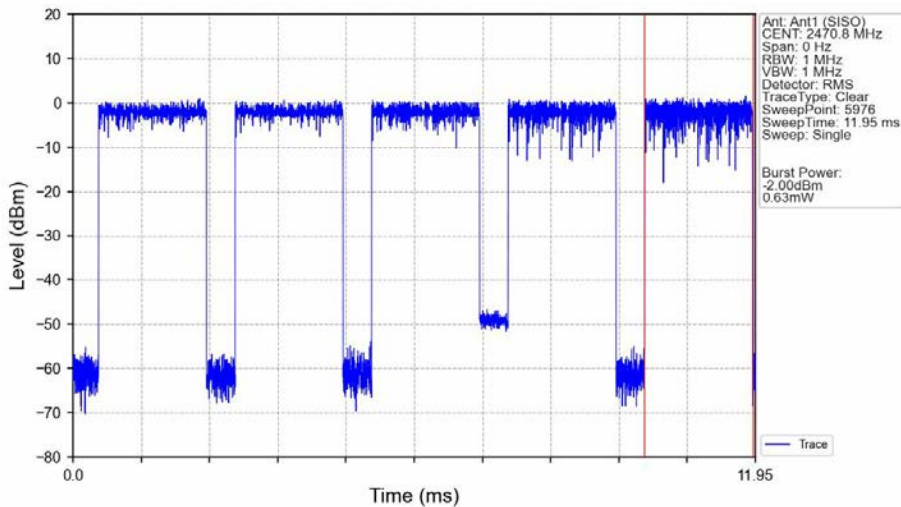


Burst No.	1	2	3	4	5
Length (ms)	1.888	1.888	1.888	1.890	1.890
Power(dBm)	-1.29	-1.29	-1.29	-1.29	-1.29
Power(mW)	0.743	0.743	0.743	0.743	0.743
Remark	/	/	Max	/	/

802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV

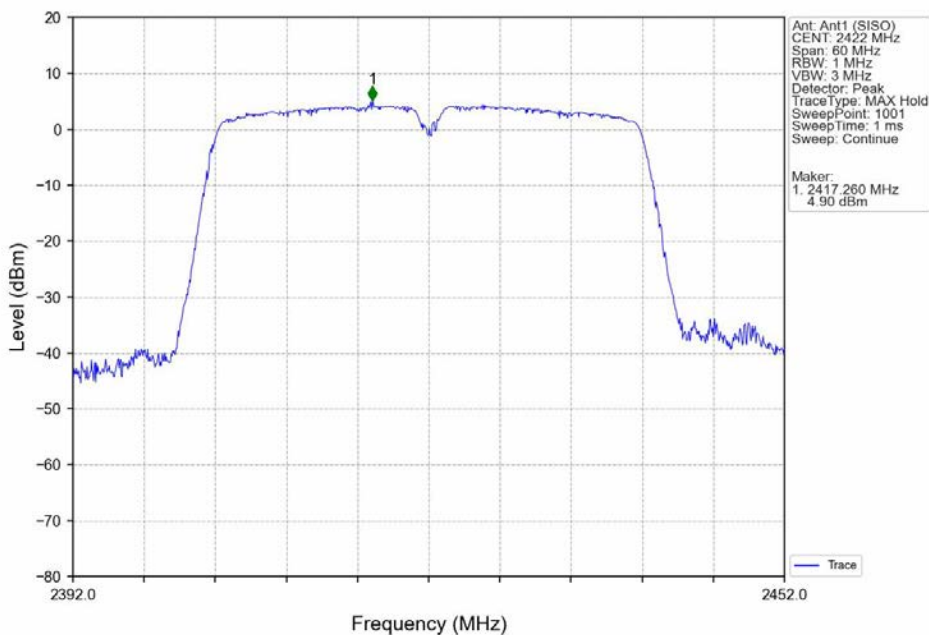


802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV

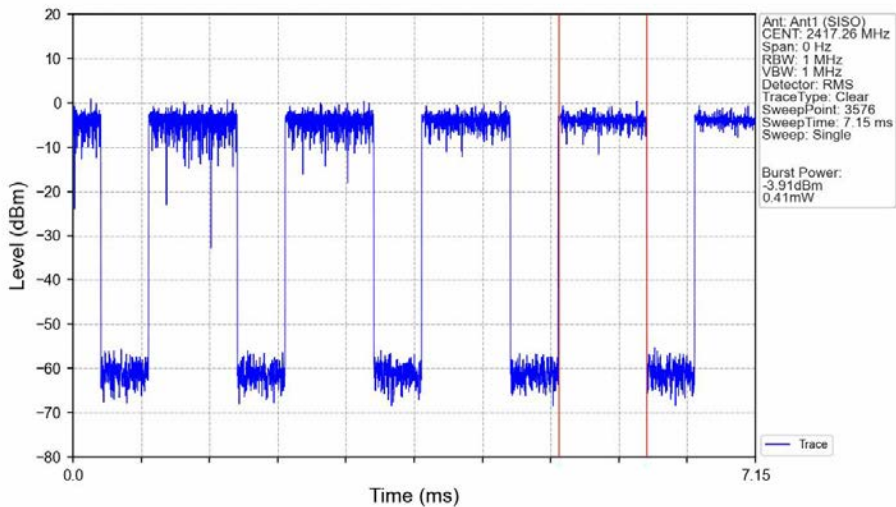


Burst No.	1	2	3	4	5
Length (ms)	1.898	1.898	1.904	1.904	1.898
Power(dBm)	-2.01	-2.01	-2.02	-2.02	-2.00
Power(mW)	0.630	0.630	0.628	0.628	0.630
Remark	/	/	/	/	Max

802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV

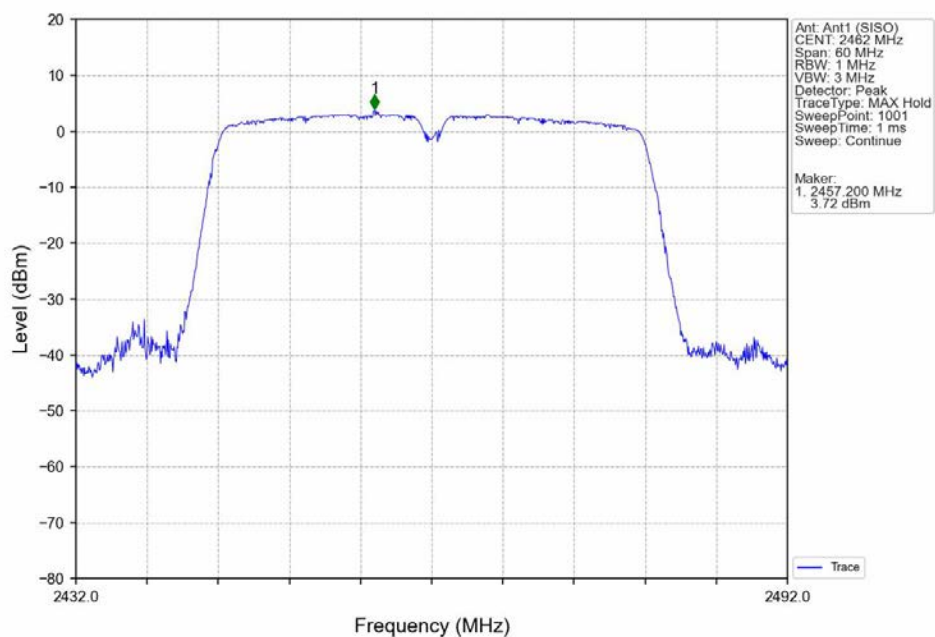


802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV

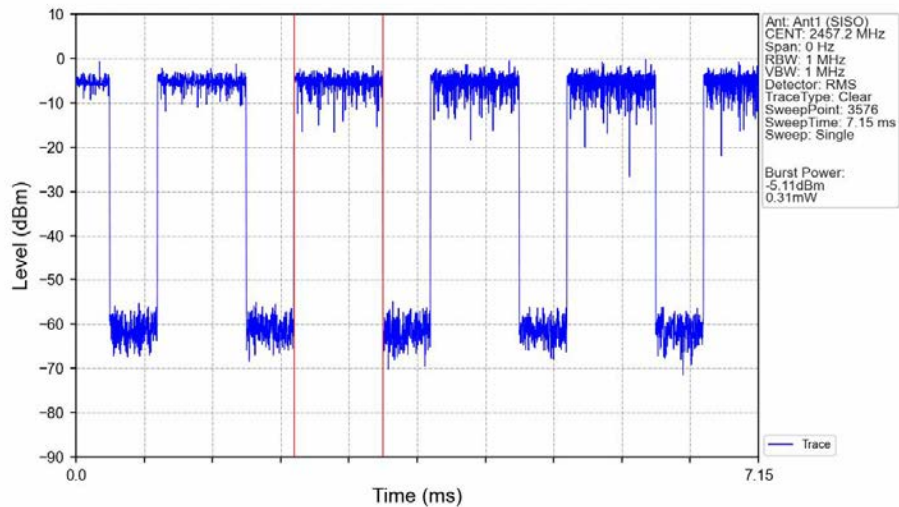


Burst No.	1	2	3	4
Length (ms)	0.928	0.928	0.928	0.928
Power(dBm)	-3.91	-3.92	-3.91	-3.91
Power(mW)	0.406	0.406	0.406	0.406
Remark	/	/	/	Max

802.11n(HT40)_2462MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_2462MHz_Ant1 (SISO)_NTNV



Burst No.	1	2	3	4
Length (ms)	0.930	0.930	0.930	0.930
Power(dBm)	-5.11	-5.11	-5.11	-5.11
Power(mW)	0.308	0.308	0.308	0.308
Remark	/	Max	/	/

5. Spurious Emission Intensity

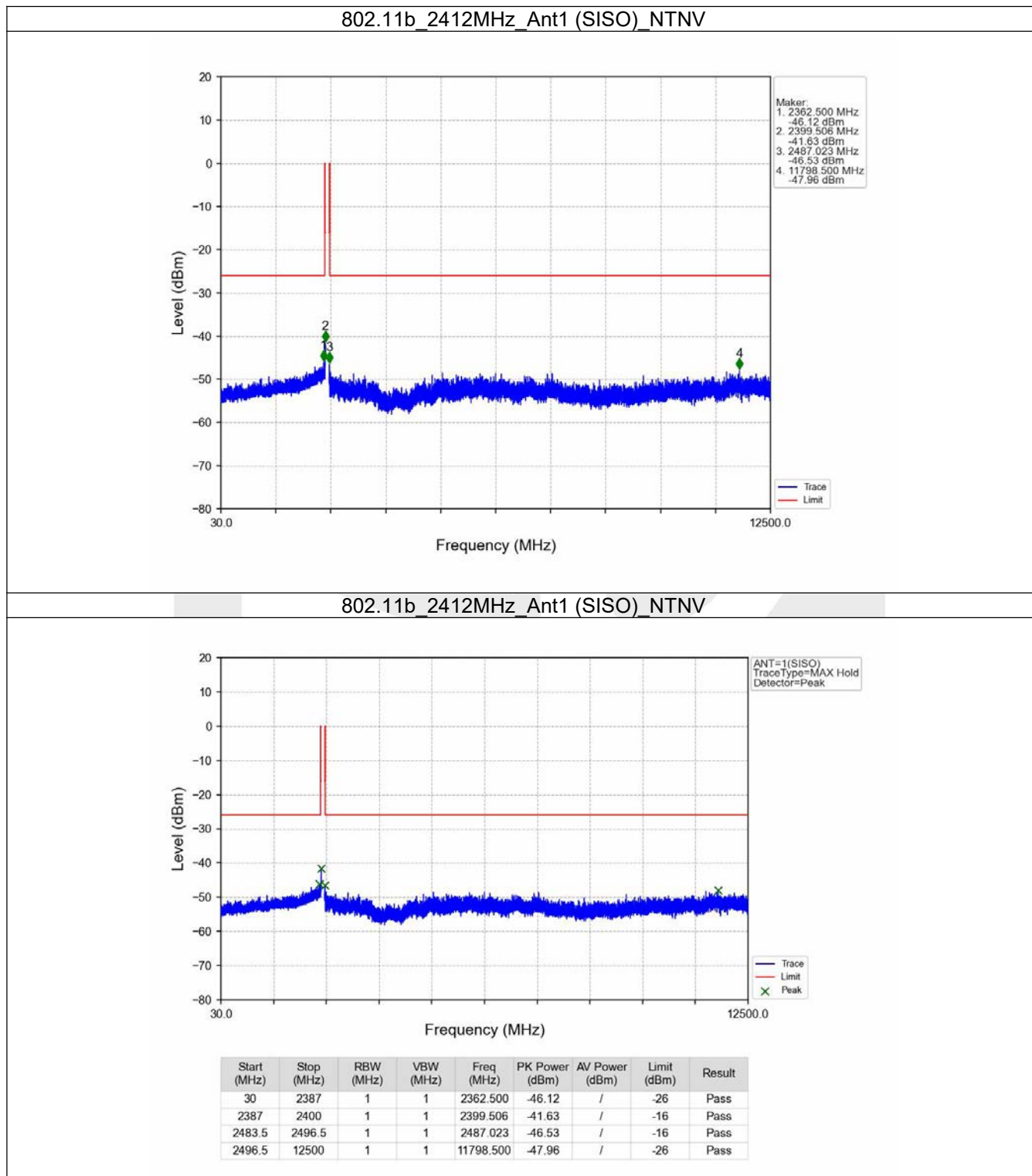
5.1 Test Result

5.1.1 TxSe_NTNV

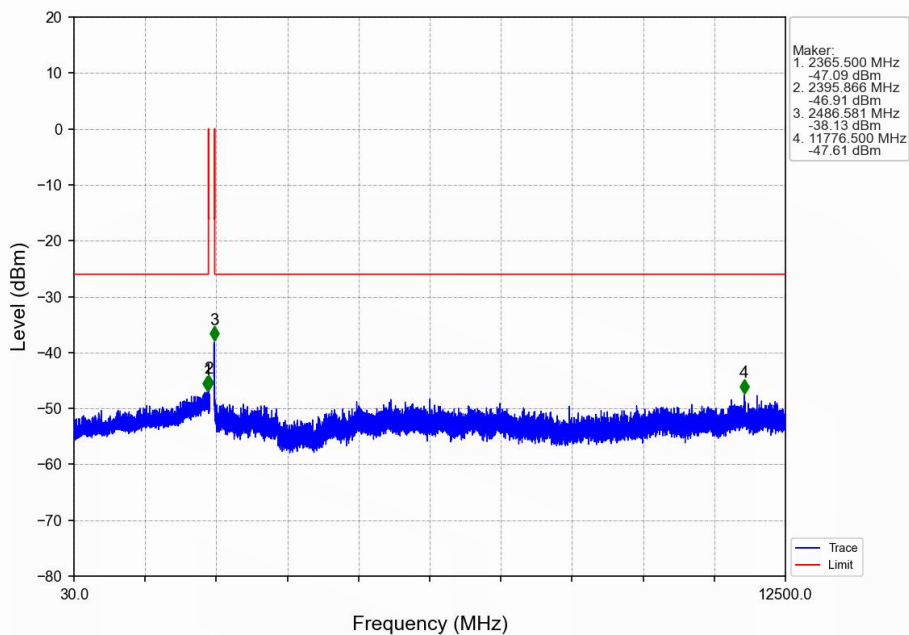
NTNV												
Mode	TX Type	Freq. (MHz)	ANT	Freq. Range		Marker					Limit (uW /MHz)	Verdict
				Start (MHz)	Stop (MHz)	Freq. (MHz)	PK Power (dBm /MHz)	PK Power (uW /MHz)	AV Power (dBm /MHz)	AV Power (uW /MHz)		
802.11b	SISO	2412	1	30	2387	2362.5	-46.12	0.024	/	/	2.5	Pass
				2387	2400	2399.506	-41.63	0.069	/	/	25	Pass
				2483.5	2496.5	2487.023	-46.53	0.022	/	/	25	Pass
				2496.5	12500	11798.5	-47.96	0.016	/	/	2.5	Pass
		2472	1	30	2387	2365.5	-47.09	0.020	/	/	2.5	Pass
				2387	2400	2395.866	-46.91	0.020	/	/	25	Pass
				2483.5	2496.5	2486.581	-38.13	0.154	/	/	25	Pass
				2496.5	12500	11776.5	-47.61	0.017	/	/	2.5	Pass
802.11g	SISO	2412	1	30	2387	2276	-43.96	0.040	/	/	2.5	Pass
				2387	2400	2399.974	-22.52	5.598	/	/	25	Pass
				2483.5	2496.5	2492.639	-44.16	0.038	/	/	25	Pass
				2496.5	12500	11700	-43.83	0.041	/	/	2.5	Pass
		2472	1	30	2387	2382	-47.45	0.018	/	/	2.5	Pass
				2387	2400	2390.614	-47.58	0.017	/	/	25	Pass
				2483.5	2496.5	2483.552	-34.31	0.371	/	/	25	Pass
				2496.5	12500	12134.5	-48.03	0.016	/	/	2.5	Pass
802.11n (HT20)	SISO	2412	1	30	2387	2250.5	-43.96	0.040	/	/	2.5	Pass
				2387	2400	2399.818	-19.97	10.069	/	/	25	Pass
				2483.5	2496.5	2485.931	-44.35	0.037	/	/	25	Pass
				2496.5	12500	11215.5	-44.32	0.037	/	/	2.5	Pass
		2472	1	30	2387	2372.5	-47.31	0.019	/	/	2.5	Pass
				2387	2400	2388.079	-46.86	0.021	/	/	25	Pass
				2483.5	2496.5	2483.526	-31.81	0.659	/	/	25	Pass
				2496.5	12500	10328	-47.94	0.016	/	/	2.5	Pass
802.11n (HT40)	SISO	2422	1	30	2387	2385.5	-45.20	0.030	/	/	2.5	Pass
				2387	2400	2397.478	-38.65	0.136	/	/	25	Pass
				2483.5	2496.5	2483.643	-44.94	0.032	/	/	25	Pass
				2496.5	12500	11192.5	-47.87	0.016	/	/	2.5	Pass
		2462	1	30	2387	2292.5	-47.49	0.018	/	/	2.5	Pass
				2387	2400	2399.909	-46.56	0.022	/	/	25	Pass
				2483.5	2496.5	2484.605	-37.31	0.186	/	/	25	Pass
				2496.5	12500	2500.5	-44.04	0.039	/	/	2.5	Pass

5.2 Test Graph

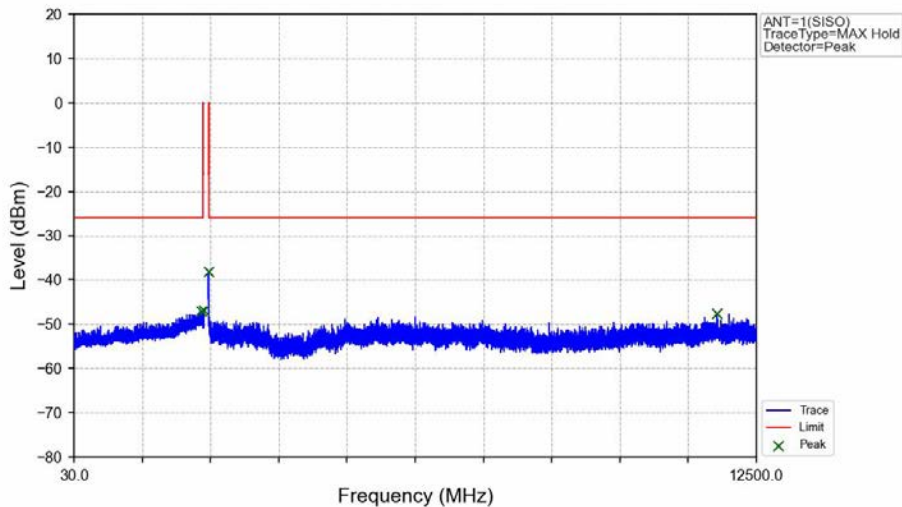
5.2.1 TxSe_NTNV



802.11b_2472MHz_Ant1 (SISO)_NTNV

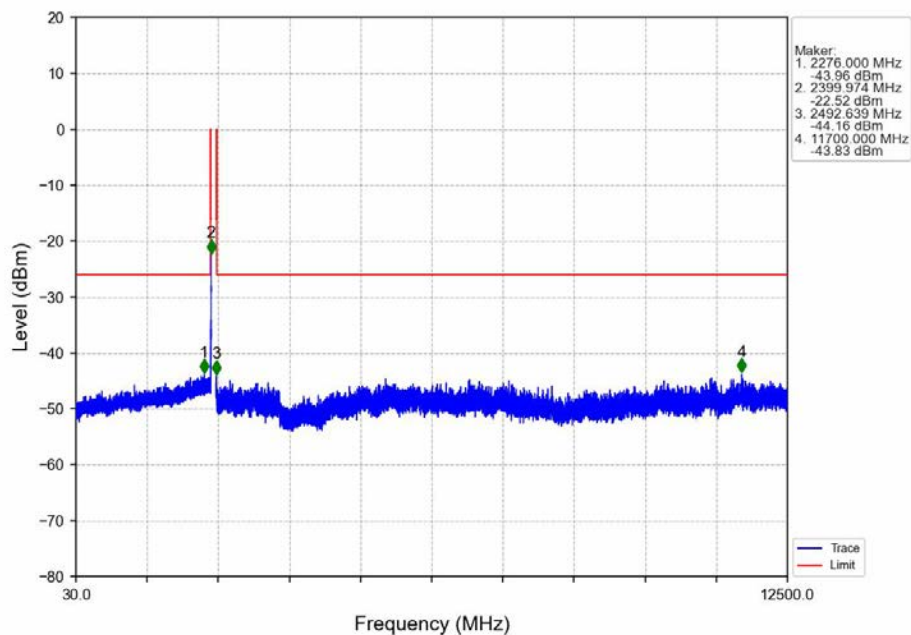


802.11b_2472MHz_Ant1 (SISO)_NTNV

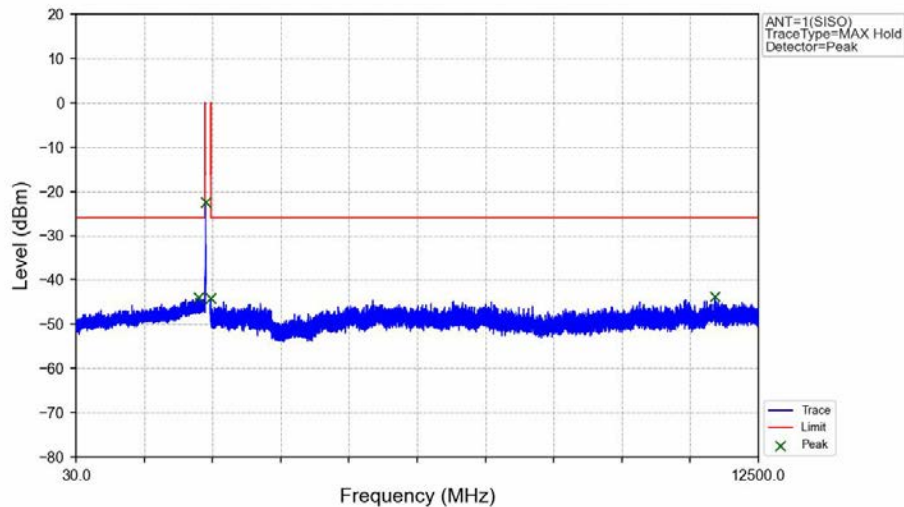


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2365.500	-47.09	/	-26	Pass
2387	2400	1	1	2395.866	-46.91	/	-16	Pass
2483.5	2496.5	1	1	2486.581	-38.13	/	-16	Pass
2496.5	12500	1	1	11776.500	-47.61	/	-26	Pass

802.11g_2412MHz_Ant1 (SISO)_NTNV

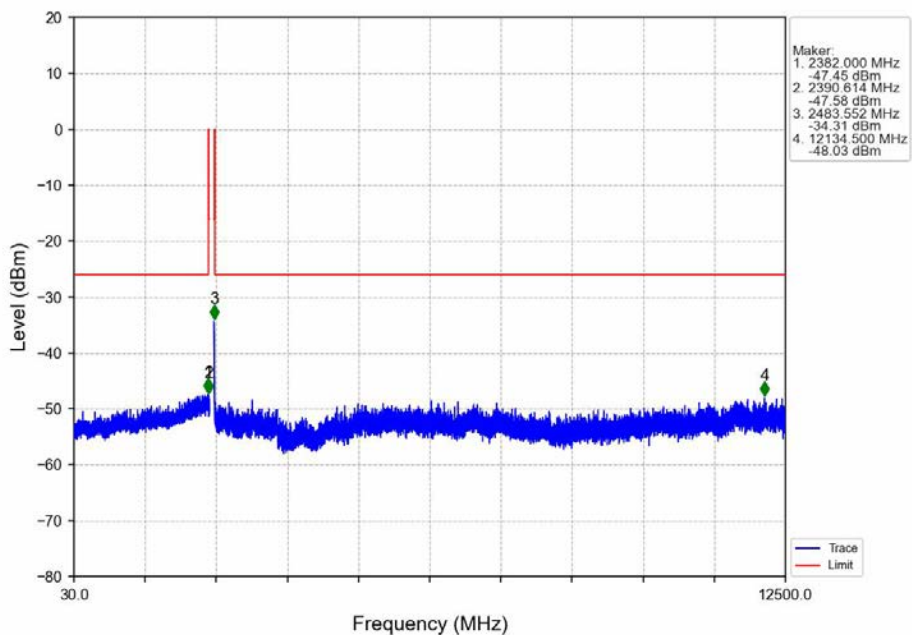


802.11g_2412MHz_Ant1 (SISO)_NTNV

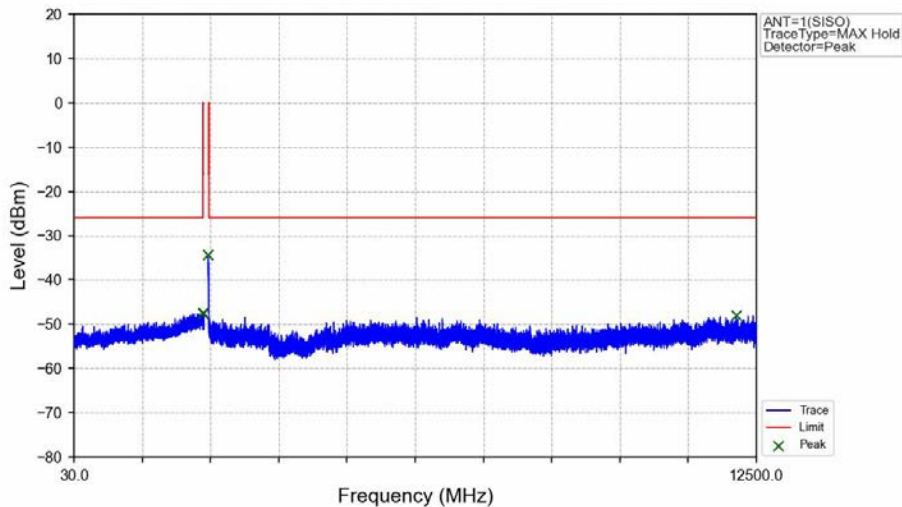


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2276.000	-43.96	/	-26	Pass
2387	2400	1	1	2399.974	-22.52	/	-16	Pass
2483.5	2496.5	1	1	2492.639	-44.16	/	-16	Pass
2496.5	12500	1	1	11700.000	-43.83	/	-26	Pass

802.11g_2472MHz_Ant1 (SISO)_NTNV

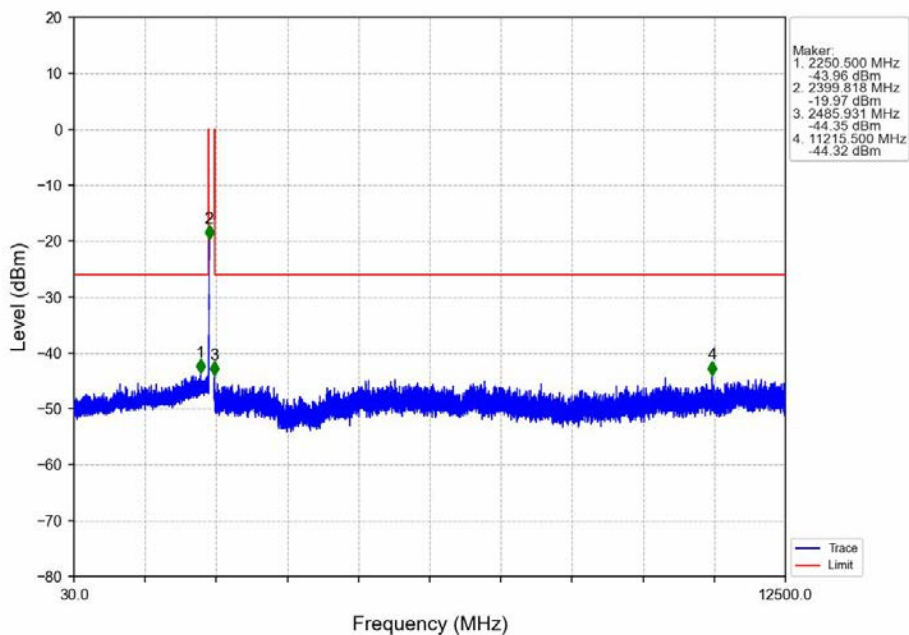


802.11g_2472MHz_Ant1 (SISO)_NTNV

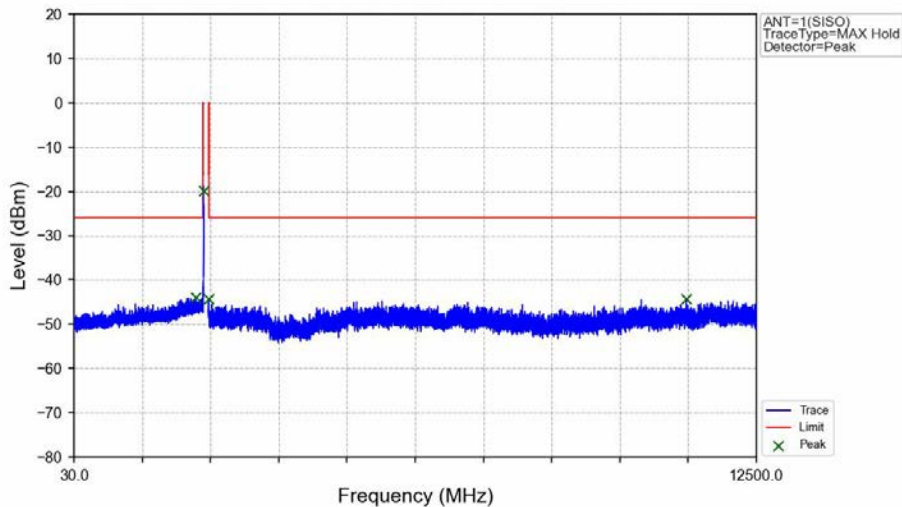


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2382.000	-47.45	/	-26	Pass
2387	2400	1	1	2390.614	-47.58	/	-16	Pass
2483.5	2496.5	1	1	2483.552	-34.31	/	-16	Pass
2496.5	12500	1	1	12134.500	-48.03	/	-26	Pass

802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV

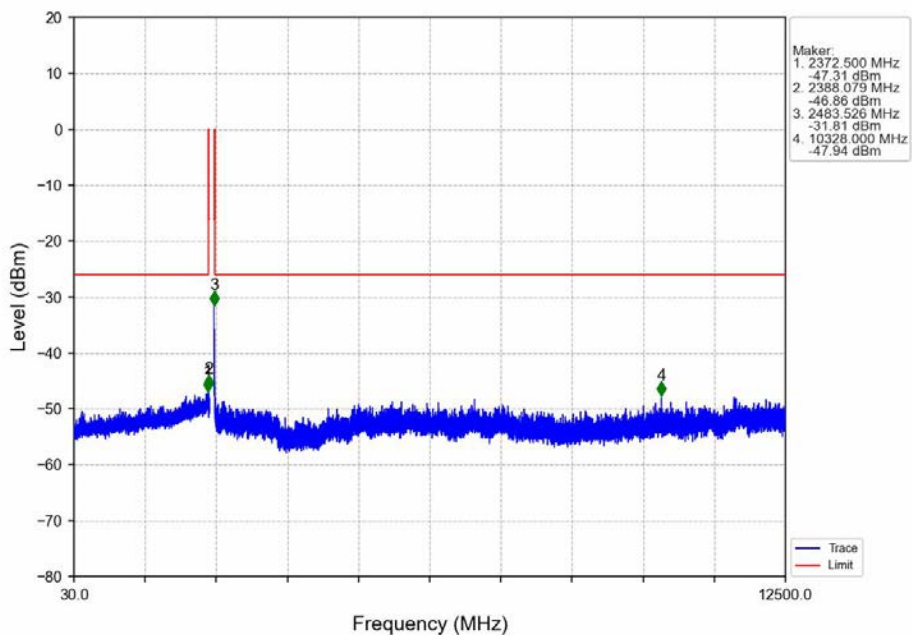


802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV

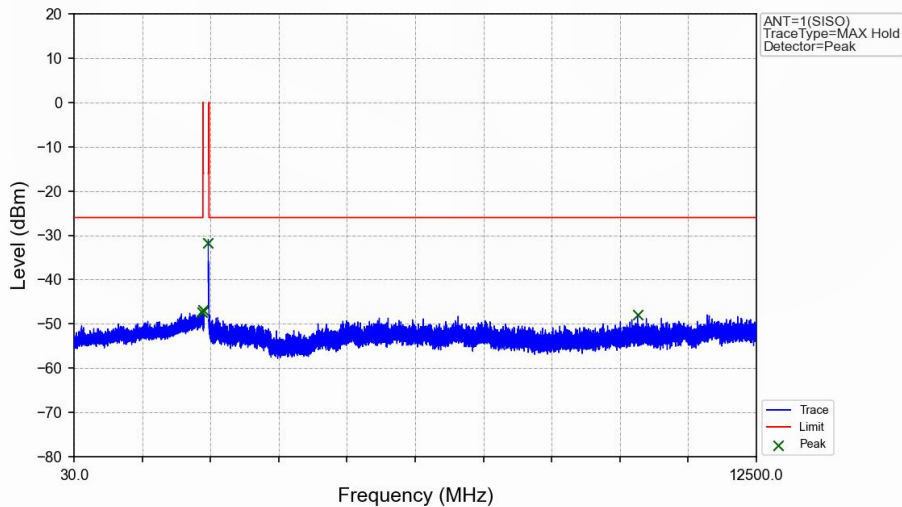


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2250.500	-43.96	/	-26	Pass
2387	2400	1	1	2399.818	-19.97	/	-16	Pass
2483.5	2496.5	1	1	2485.931	-44.35	/	-16	Pass
2496.5	12500	1	1	11215.500	-44.32	/	-26	Pass

802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV

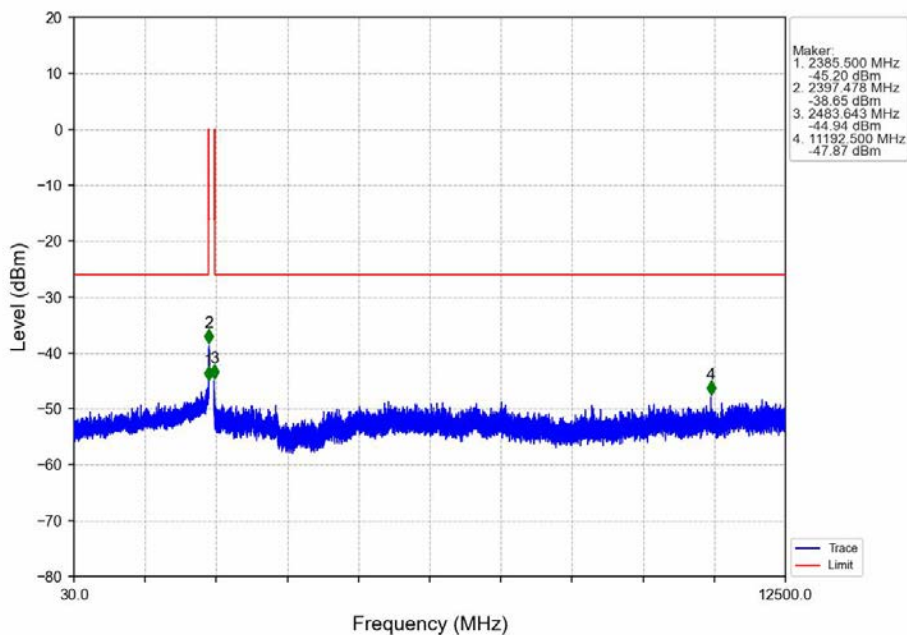


802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV

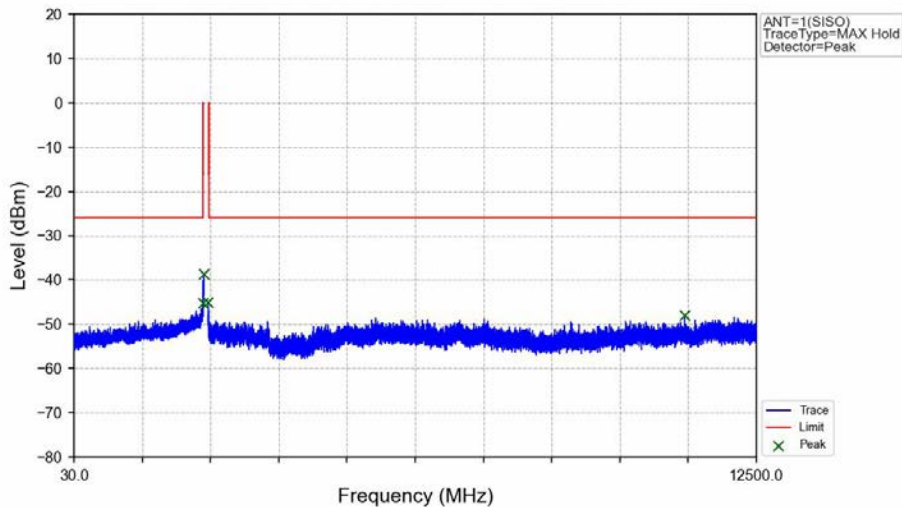


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2372.500	-47.31	/	-26	Pass
2387	2400	1	1	2388.079	-46.86	/	-16	Pass
2483.5	2496.5	1	1	2483.526	-31.81	/	-16	Pass
2496.5	12500	1	1	10328.000	-47.94	/	-26	Pass

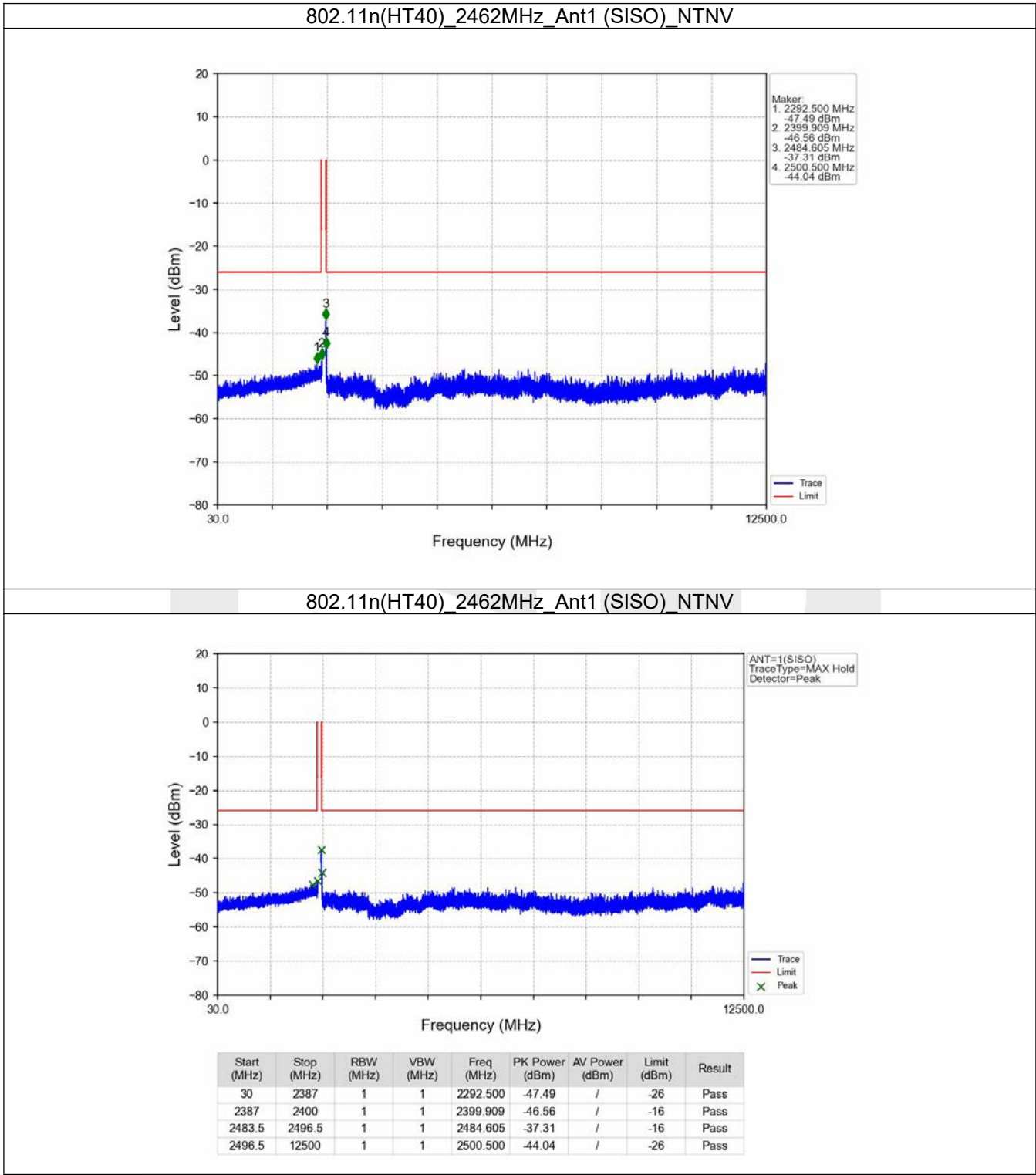
802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2385.500	-45.20	/	-26	Pass
2387	2400	1	1	2397.478	-38.65	/	-16	Pass
2483.5	2496.5	1	1	2483.643	-44.94	/	-16	Pass
2496.5	12500	1	1	11192.500	-47.87	/	-26	Pass



6. Secondary Radiated Emission

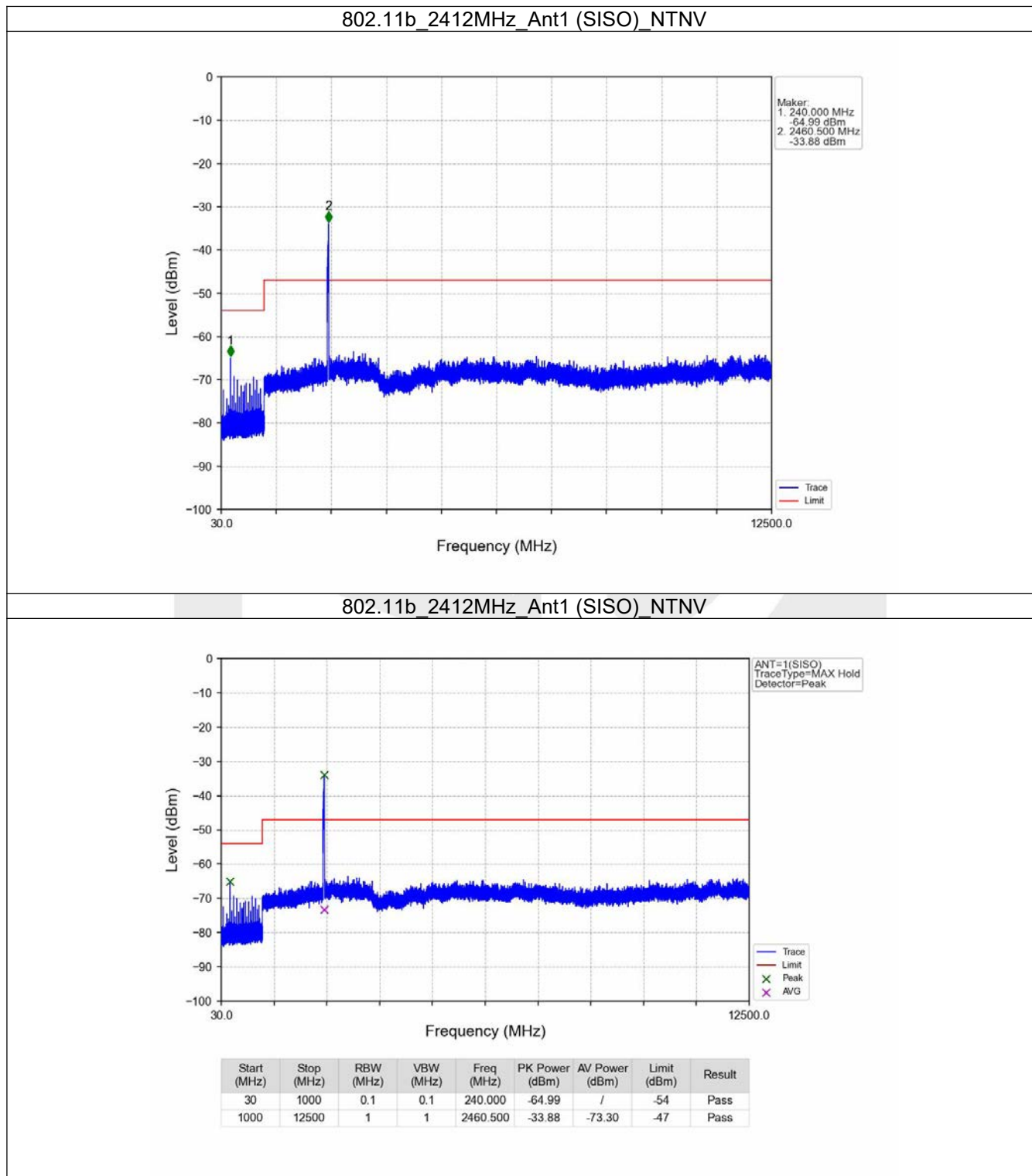
6.1 Test Result

6.1.1 RxSe_NTNV

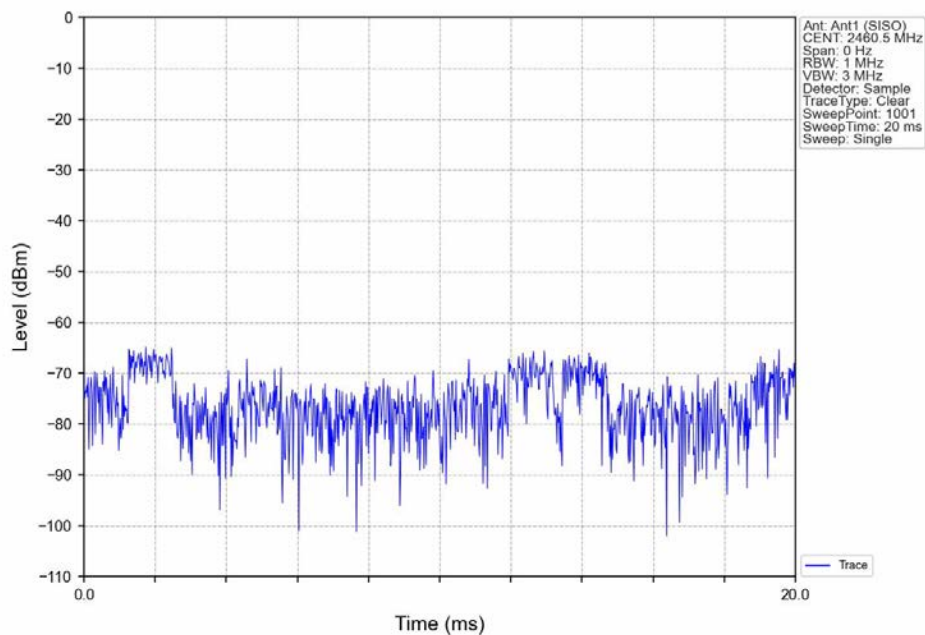
NTNV												
Mode	TX Type	Freq. (MHz)	ANT	Freq. Range		Marker					Limit (nW)	Verdict
				Start (MHz)	Stop (MHz)	Freq. (MHz)	PK Power (dBm)	PK Power (nW)	AV Power (dBm)	AV Power (nW)		
802.11b	SISO	2412	1	30	1000	240	-64.99	0.317	/	/	4	Pass
				1000	12500	2460.5	-33.88	409.261	-73.30	0.047	20	Pass
		2472	1	30	1000	240	-63.64	0.433	/	/	4	Pass
				1000	12500	11801	-63.36	0.461	/	/	20	Pass
802.11g	SISO	2412	1	30	1000	240	-64.46	0.358	/	/	4	Pass
				1000	12500	2995	-63.15	0.484	/	/	20	Pass
		2472	1	30	1000	240	-63.97	0.401	/	/	4	Pass
				1000	12500	2644.5	-62.98	0.504	/	/	20	Pass
802.11n (HT20)	SISO	2412	1	30	1000	240	-63.04	0.497	/	/	4	Pass
				1000	12500	2461.5	-29.74	1061.696	-76.84	0.021	20	Pass
		2472	1	30	1000	240	-64.53	0.352	/	/	4	Pass
				1000	12500	11761.5	-63.54	0.443	/	/	20	Pass
802.11n (HT40)	SISO	2422	1	30	1000	240	-64.86	0.327	/	/	4	Pass
				1000	12500	2461.5	-27.70	1698.244	-77.06	0.020	20	Pass
		2462	1	30	1000	240	-63.12	0.488	/	/	4	Pass
				1000	12500	2461.5	-32.61	548.277	-76.86	0.021	20	Pass

6.2 Test Graph

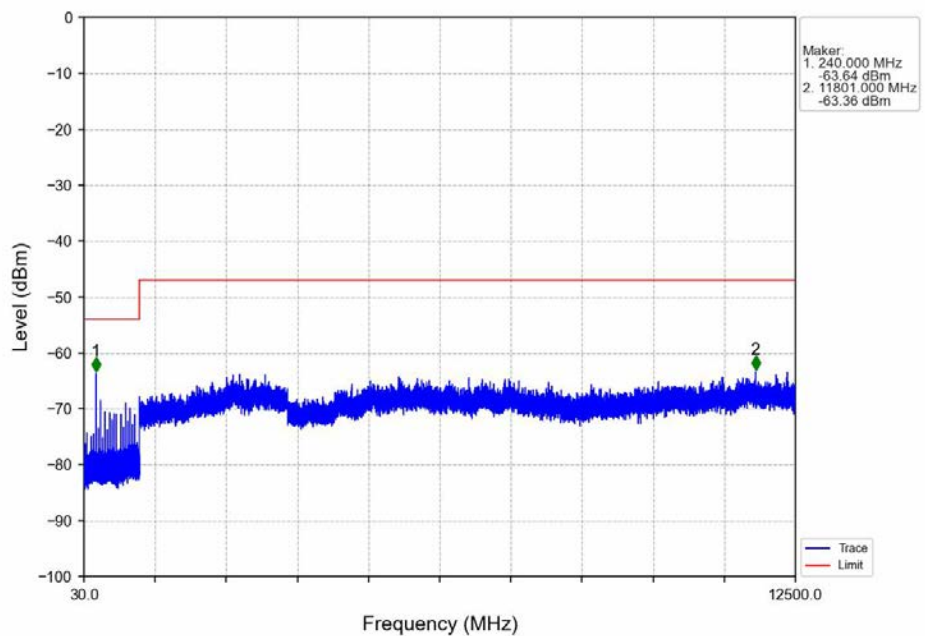
6.2.1 RxSe_NTNV



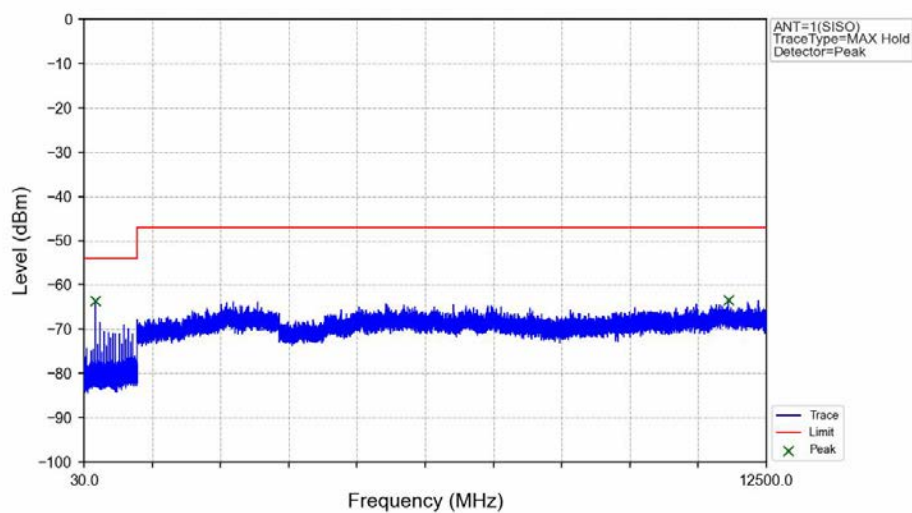
802.11b_2412MHz_Ant1 (SISO)_NTNV



802.11b_2472MHz_Ant1 (SISO)_NTNV

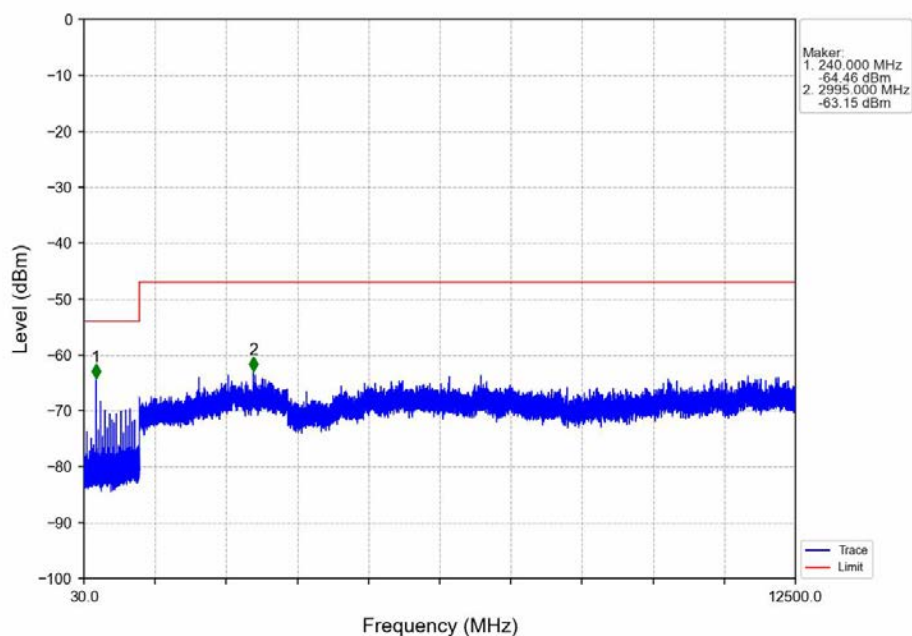


802.11b_2472MHz_Ant1 (SISO)_NTNV

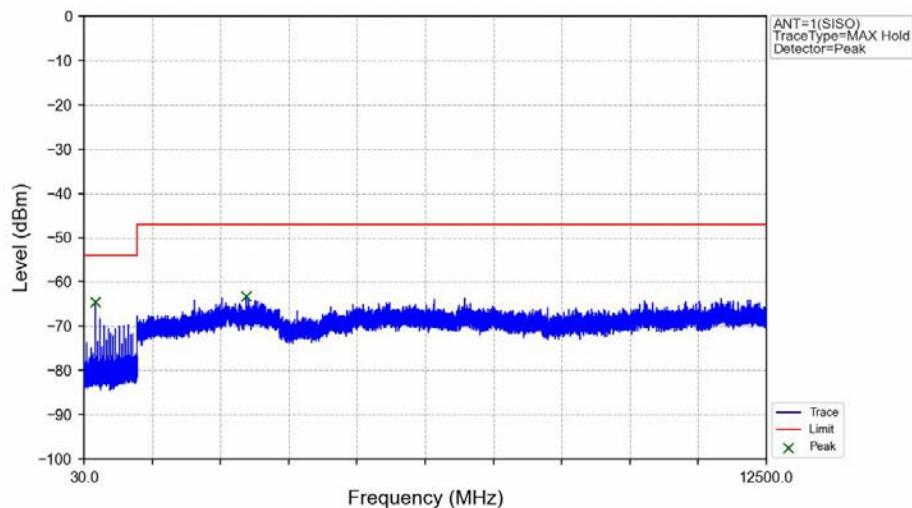


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	240.000	-63.64	/	-54	Pass
1000	12500	1	1	11801.000	-63.36	/	-47	Pass

802.11g_2412MHz_Ant1 (SISO)_NTNV

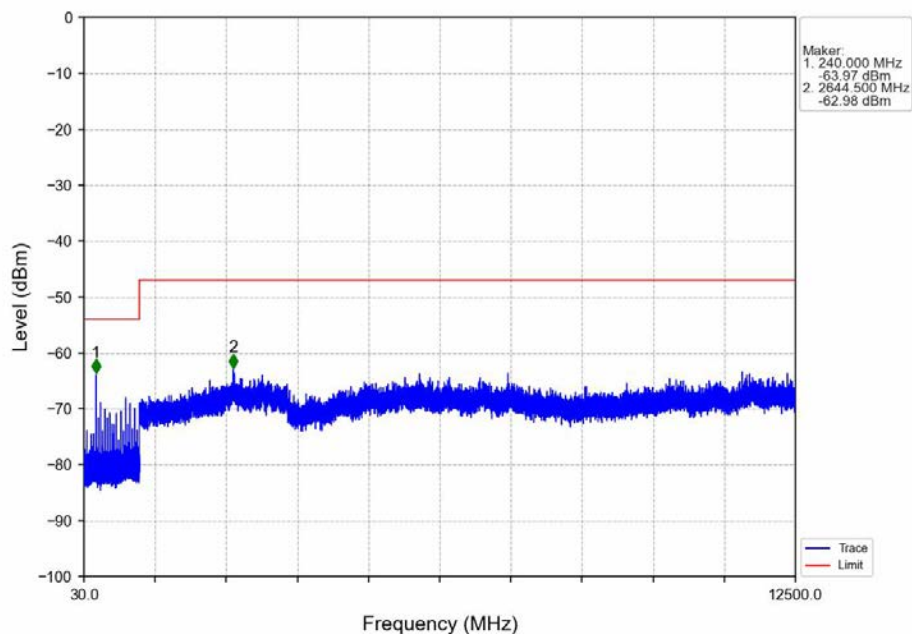


802.11g_2412MHz_Ant1 (SISO)_NTNV

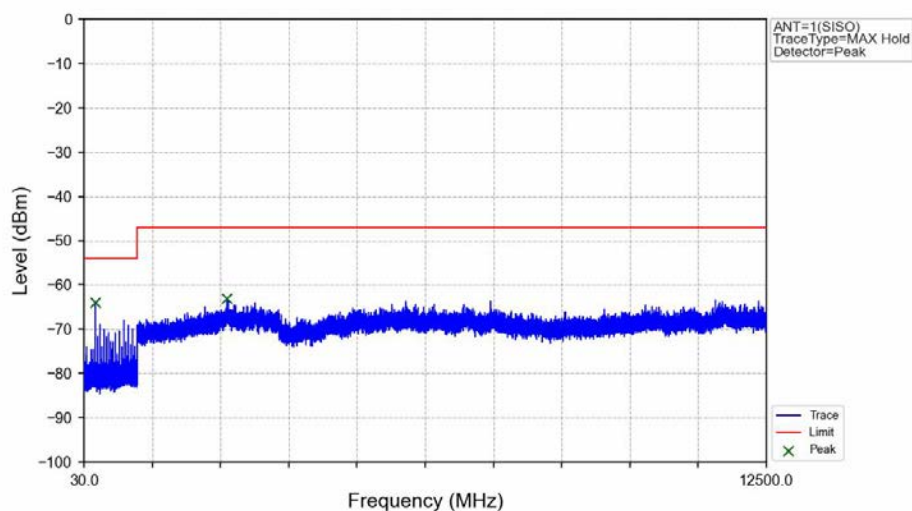


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	240.000	-64.46	/	-54	Pass
1000	12500	1	1	2995.000	-63.15	/	-47	Pass

802.11g_2472MHz_Ant1 (SISO)_NTNV

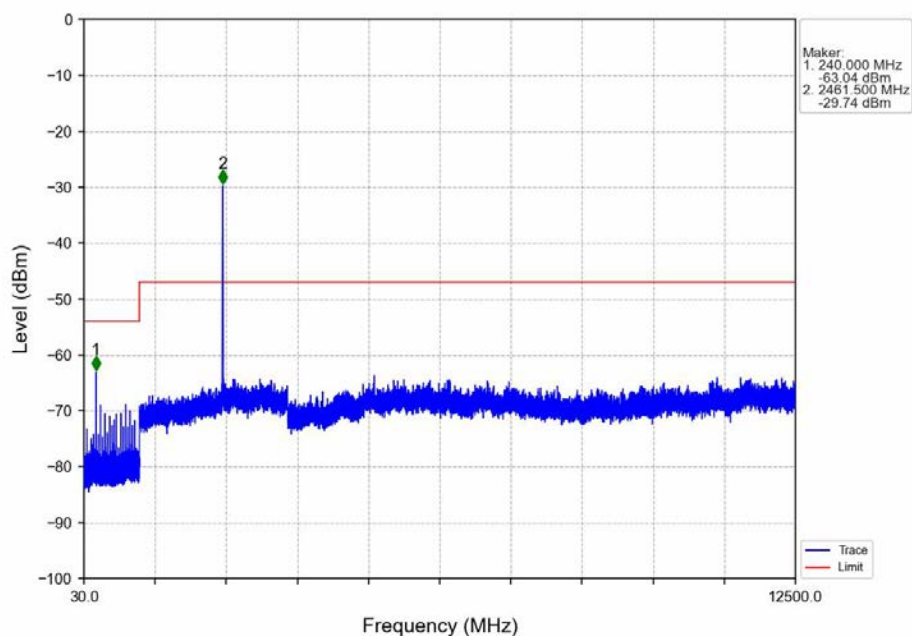


802.11g_2472MHz_Ant1 (SISO)_NTNV

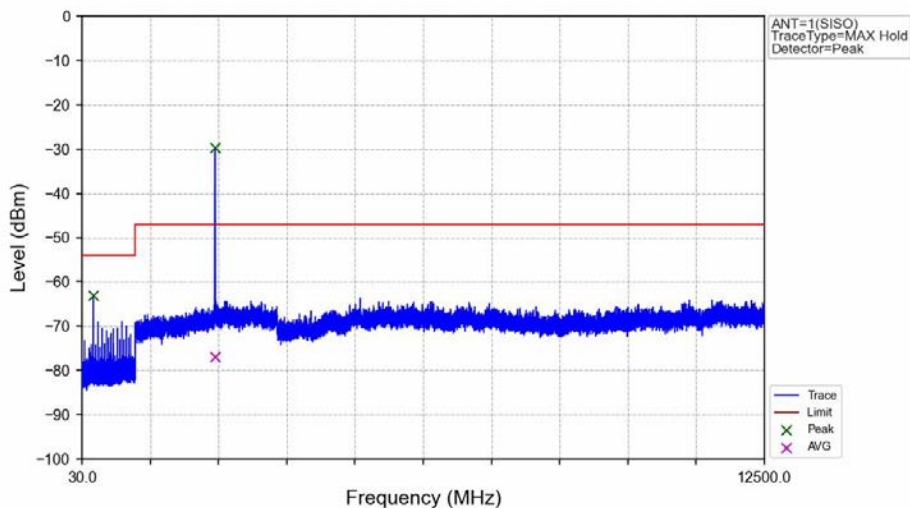


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	240.000	-63.97	/	-54	Pass
1000	12500	1	1	2644.500	-62.98	/	-47	Pass

802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV

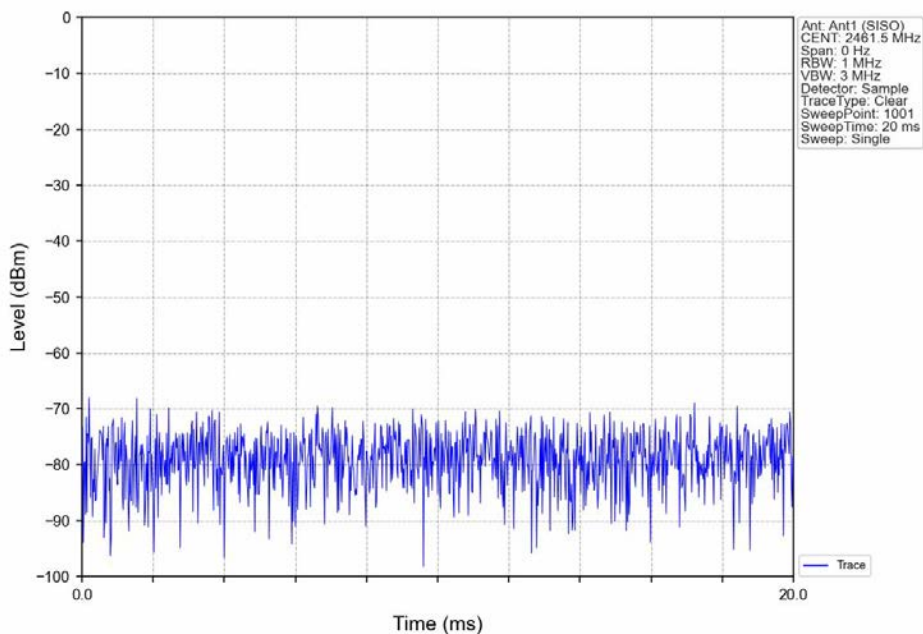


802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV

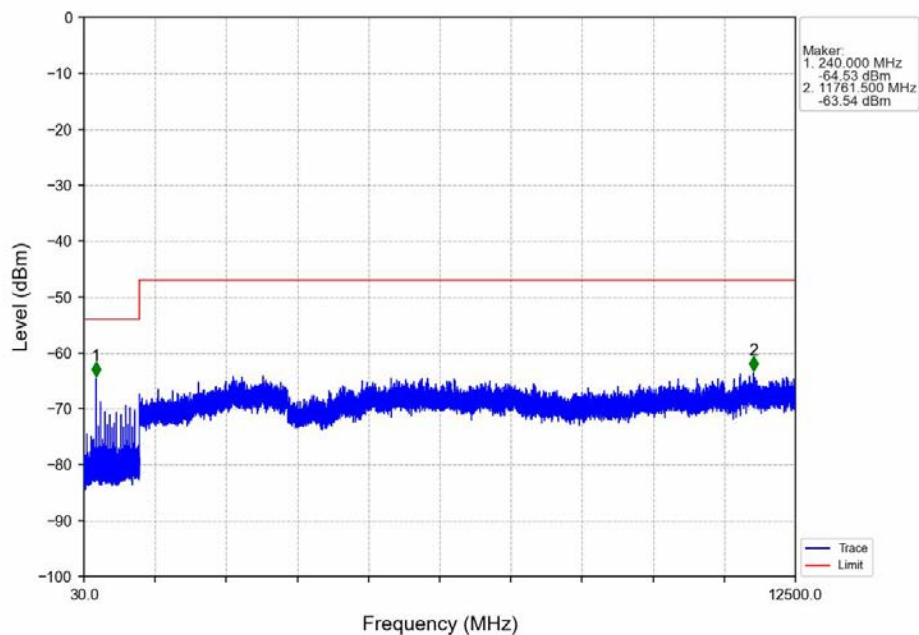


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	240.000	-63.04	/	-54	Pass
1000	12500	1	1	2461.500	-29.74	-76.84	-47	Pass

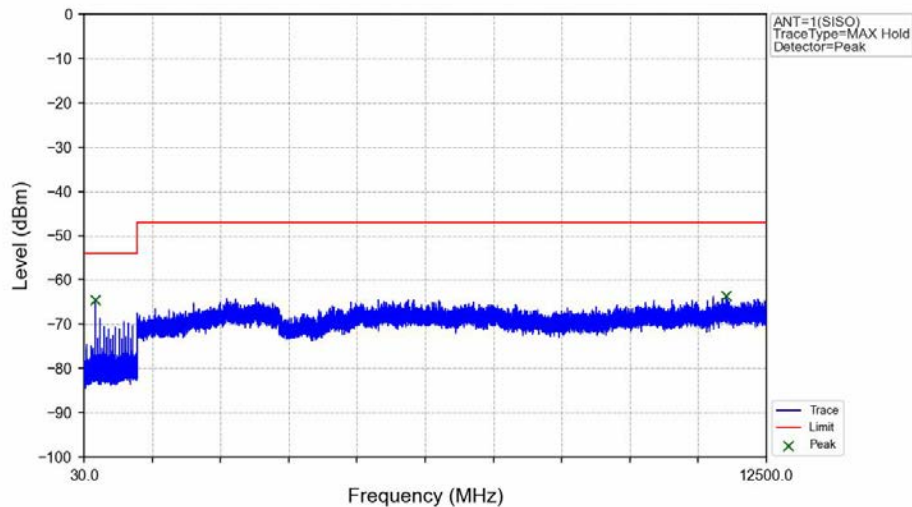
802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV

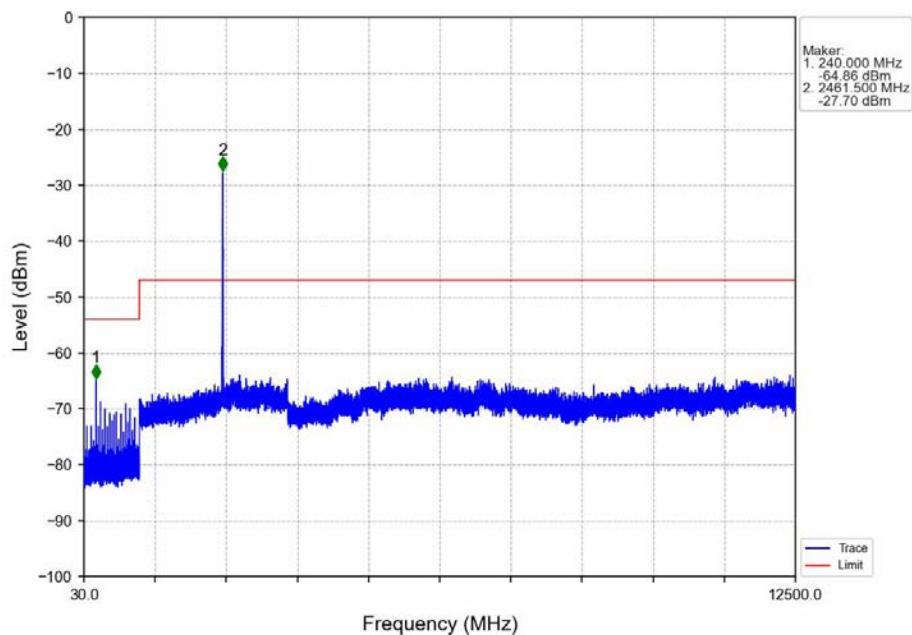


802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV

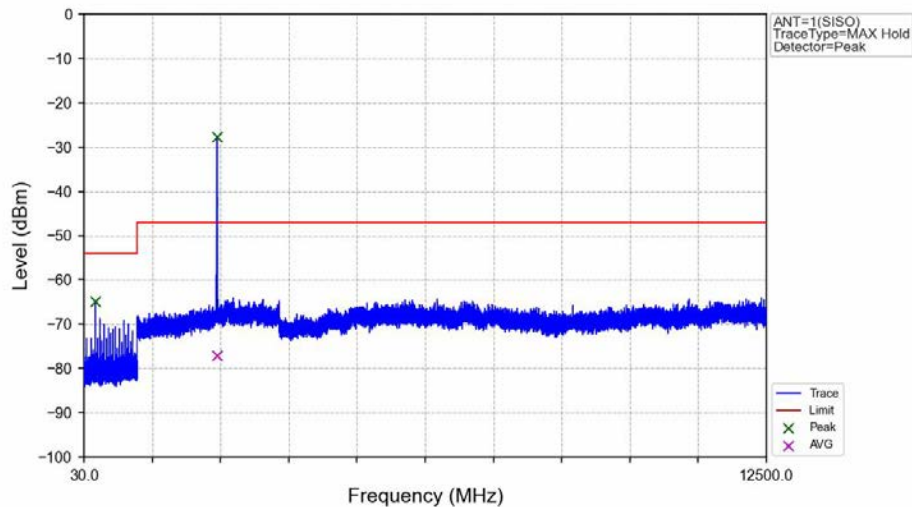


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	240.000	-64.53	/	-54	Pass
1000	12500	1	1	11761.500	-63.54	/	-47	Pass

802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV

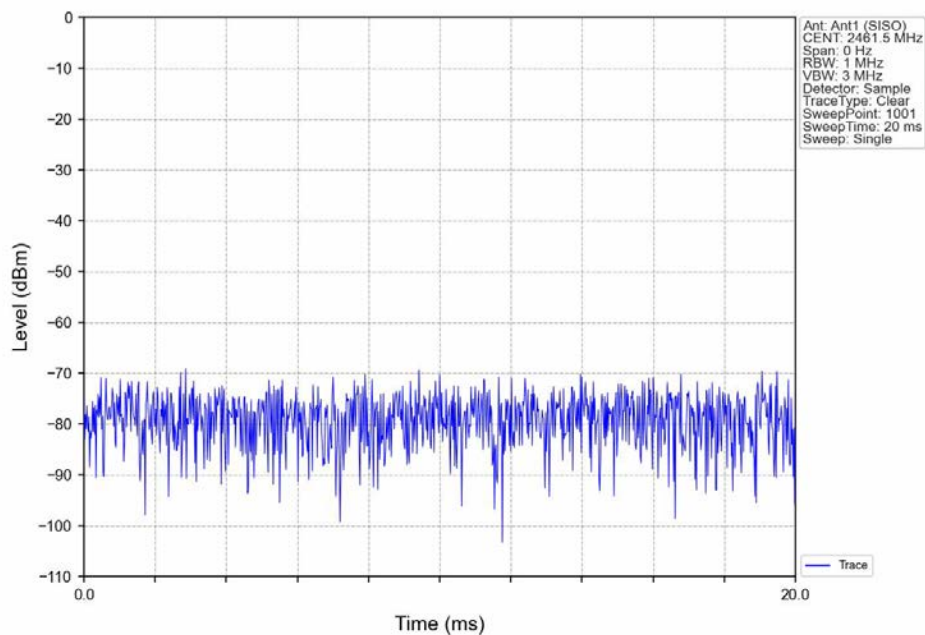


802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV

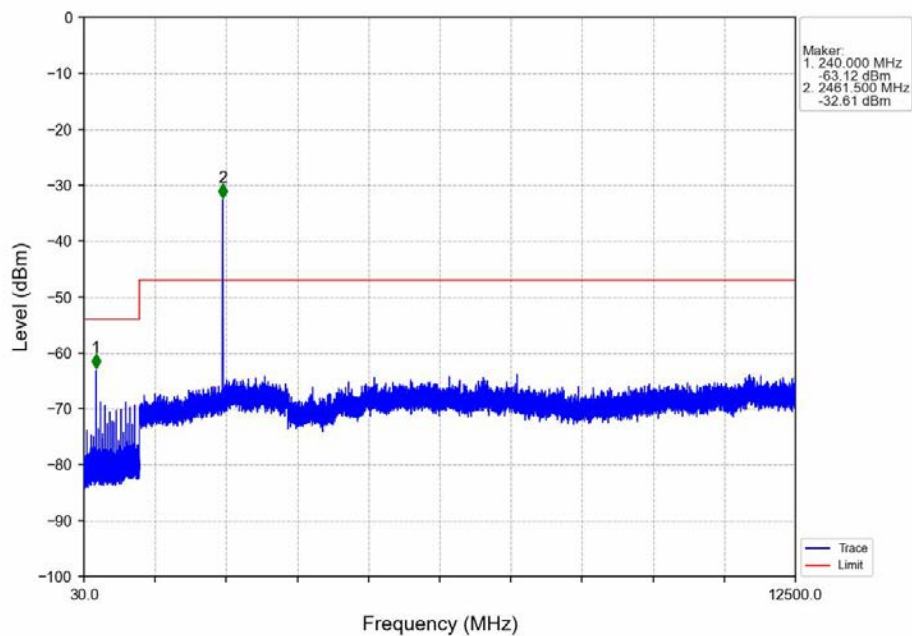


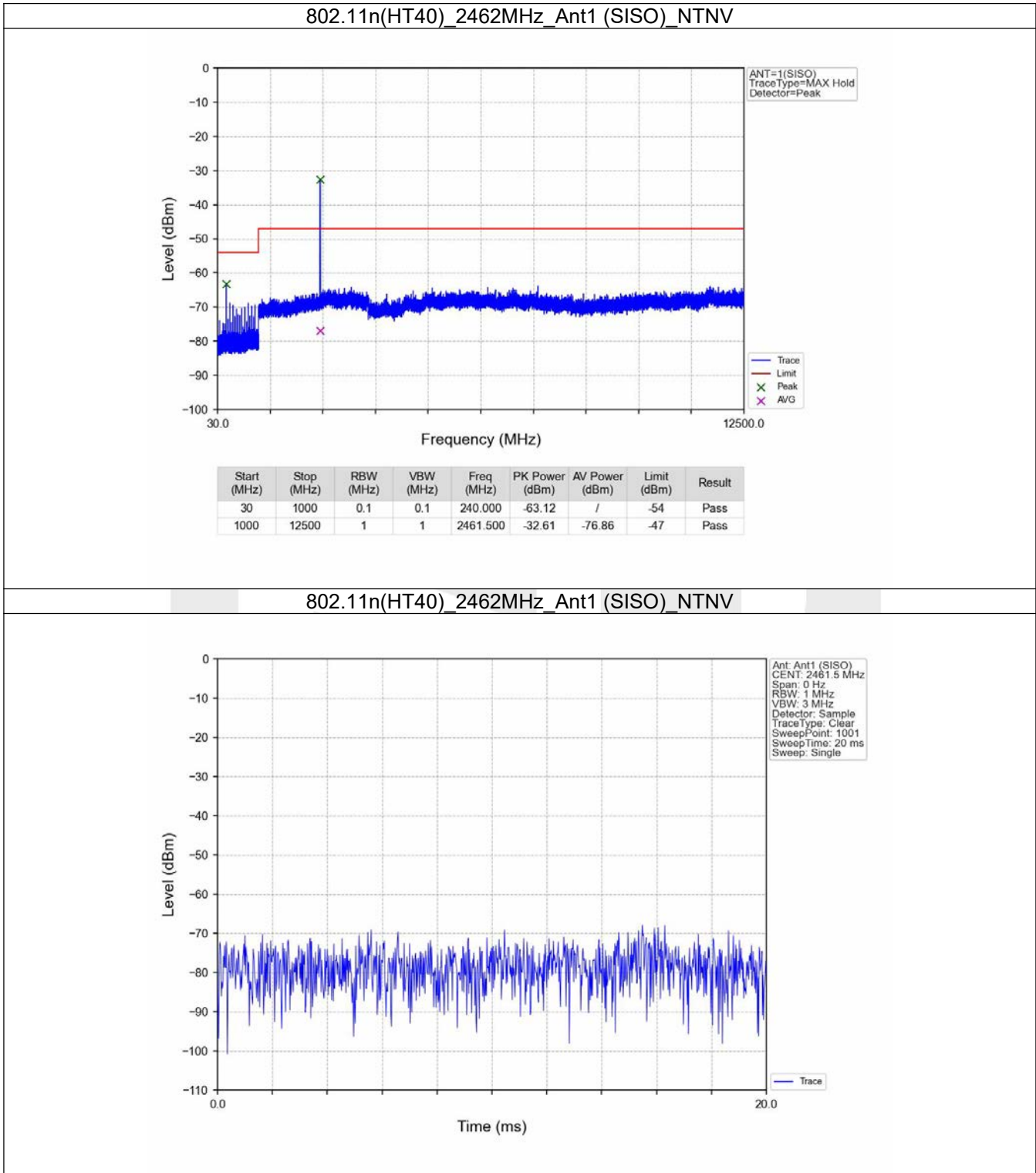
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	240.000	-64.86	/	-54	Pass
1000	12500	1	1	2461.500	-27.70	-77.06	-47	Pass

802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_2462MHz_Ant1 (SISO)_NTNV





----- End of Report -----