

7.10 Duty Cycle

Test Requirement KDB 558074 D01 v05r02 section 6
Test Method: ANSI C63.10 (2013) Section 11.6

7.10.1 E.U.T. Operation

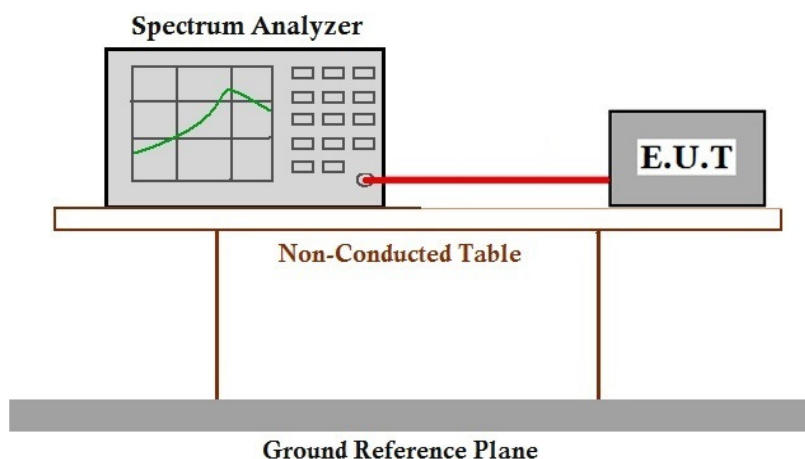
Operating Environment:

Temperature: 23.9 °C Humidity: 50.2 % RH Atmospheric Pressure: 1003 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

7.10.3 Test Setup Diagram



7.10.4 Measurement Procedure and Data

cable loss=0.9dB

Please Refer to Appendix for Details



8 Test Setup Photo

Refer to Appendix – Setup photo.

9 EUT Constructional Details (EUT Photos)

Refer to Appendix – Internal photo and External photo.

10 Appendix**1. Duty Cycle****1.1 Ant1****1.1.1 Test Result**

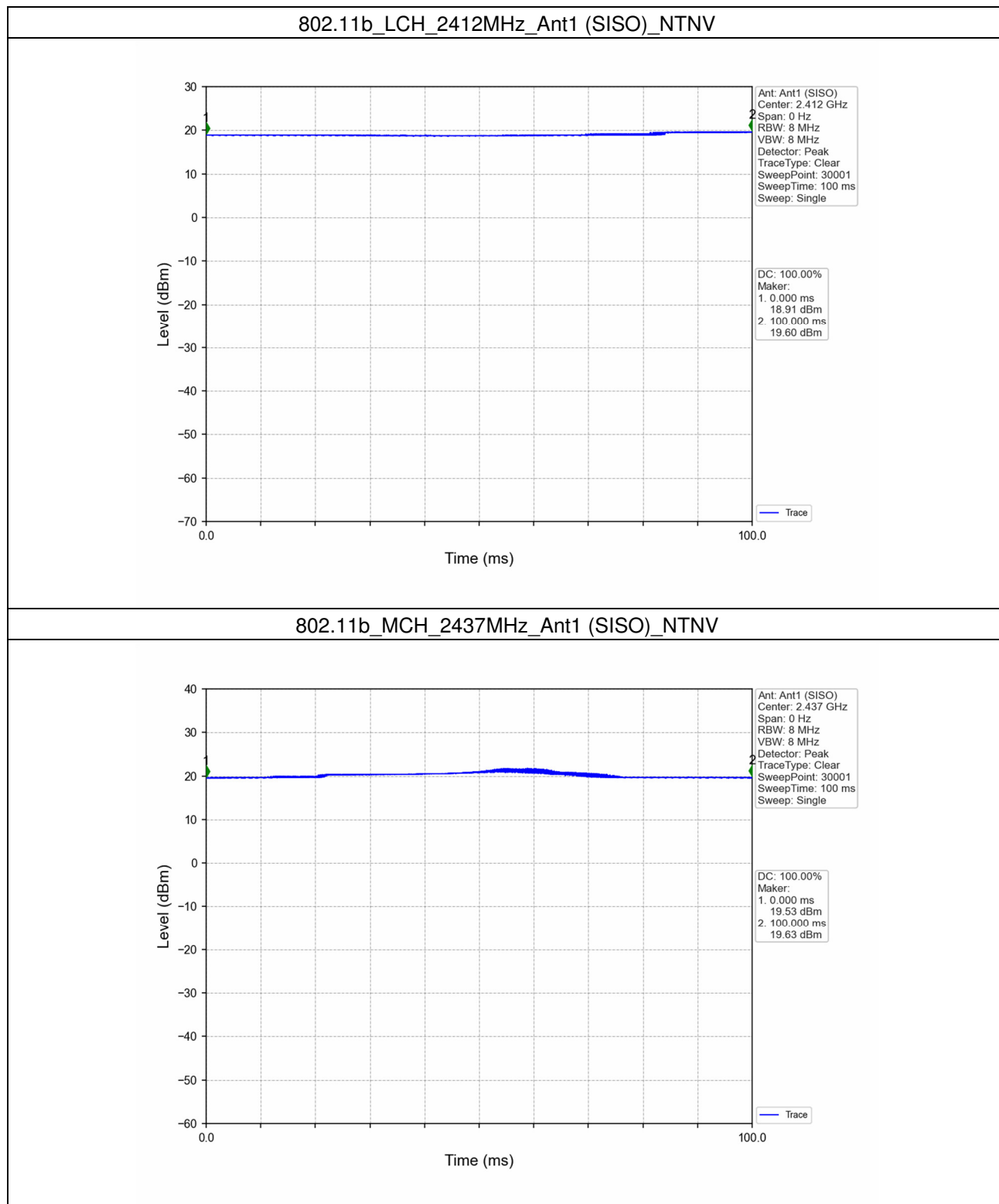
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	100.000	100.000	100.00	0.00	0.00
		2437	100.000	100.000	100.00	0.00	0.00
		2462	100.000	100.000	100.00	0.00	0.00
802.11g	SISO	2412	12.030	12.040	99.92	0.00	0.03
		2437	12.030	12.040	99.92	0.00	0.03
		2462	12.030	12.040	99.92	0.00	0.03
802.11n (HT20)	SISO	2412	1.148	1.158	99.14	0.04	0.03
		2437	1.148	1.157	99.22	0.03	0.03
		2462	1.147	1.157	99.14	0.04	0.03



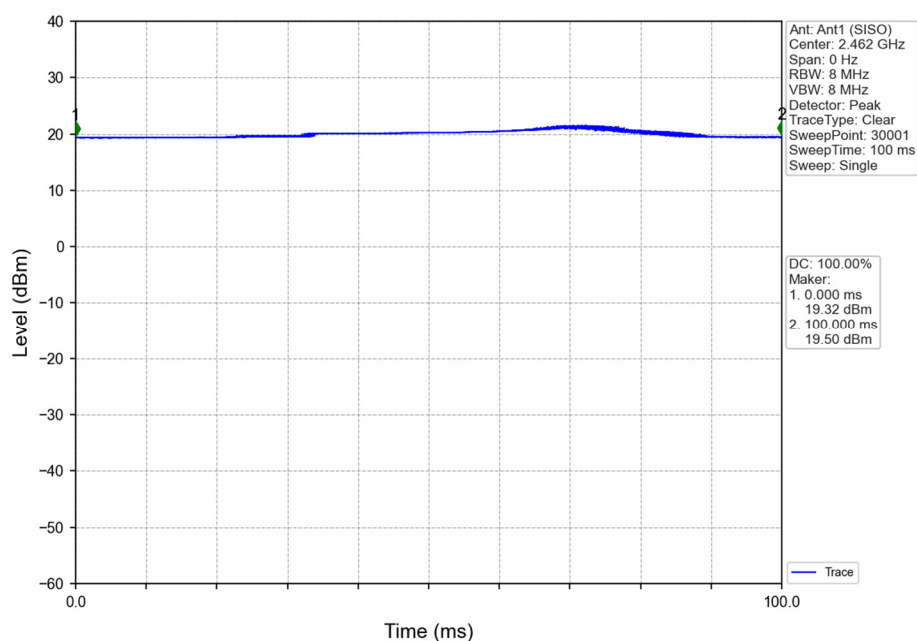
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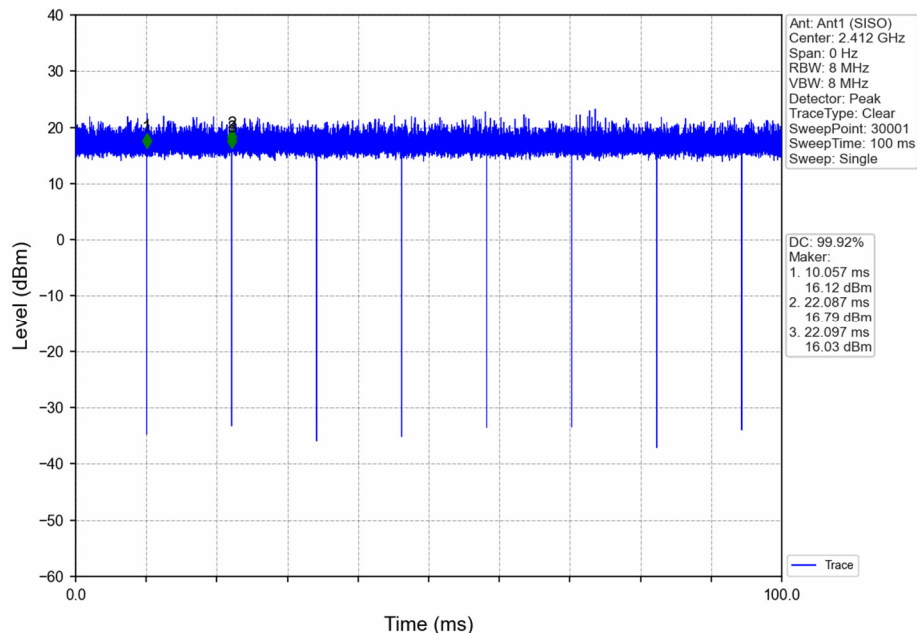
1.1.2 Test Graph



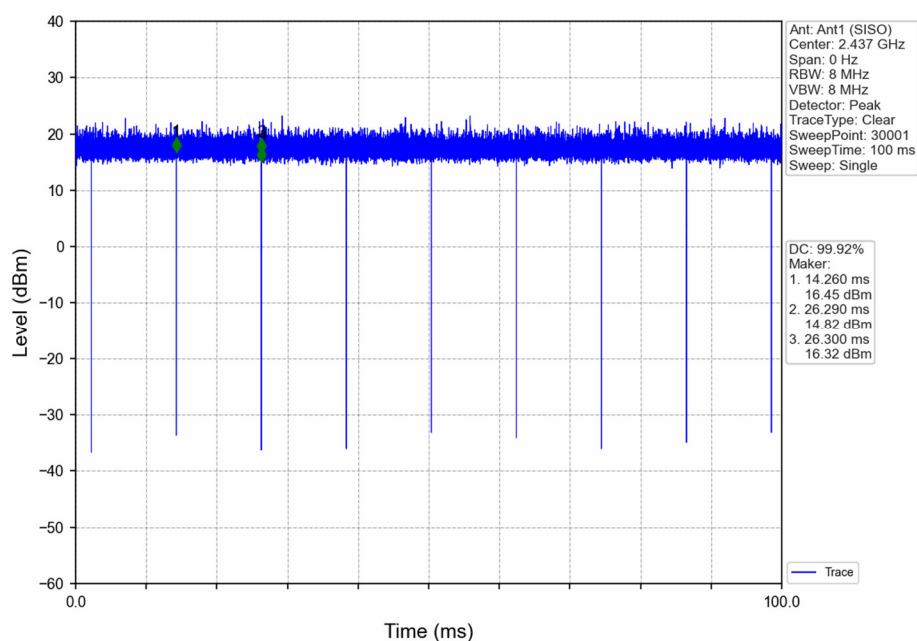
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



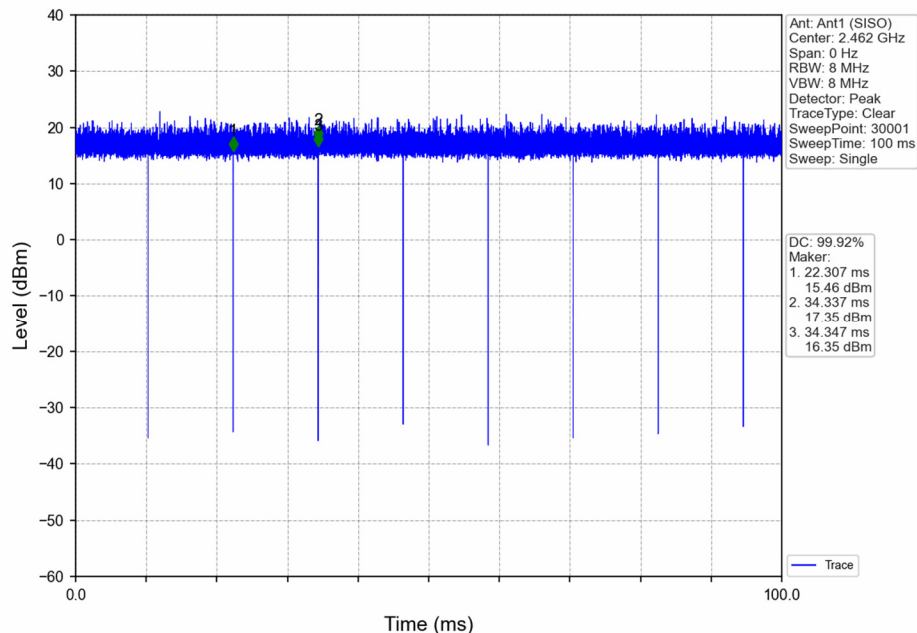
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



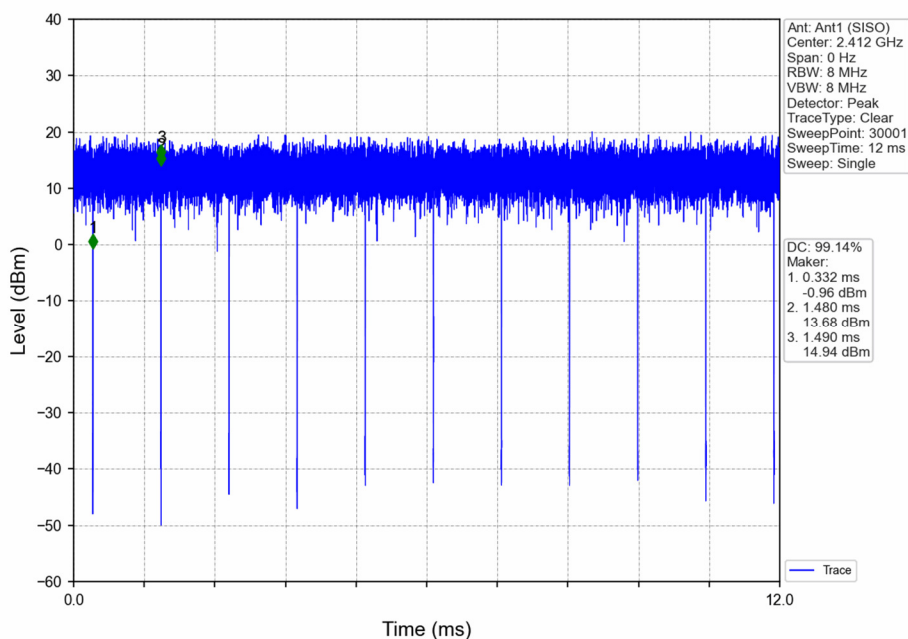
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



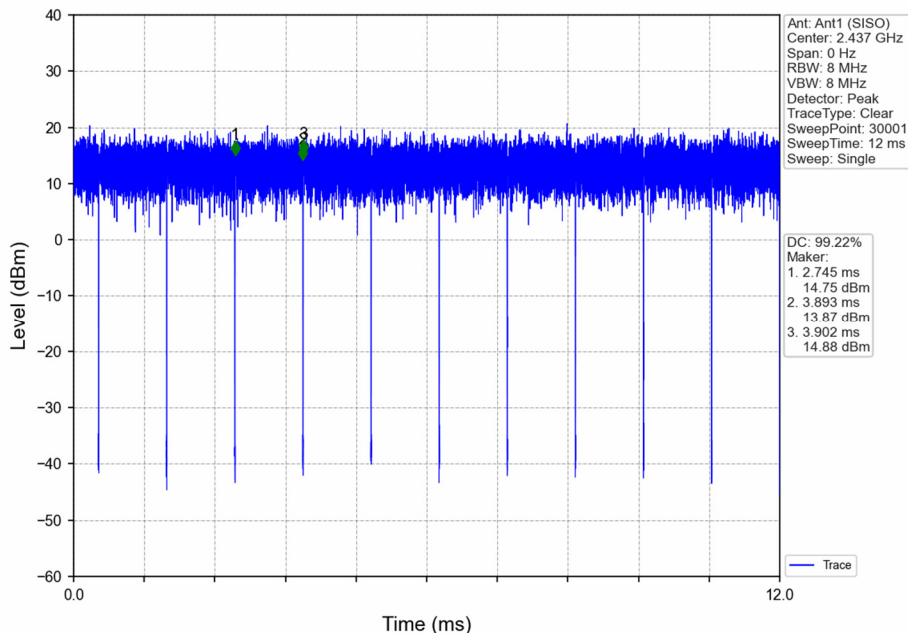
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



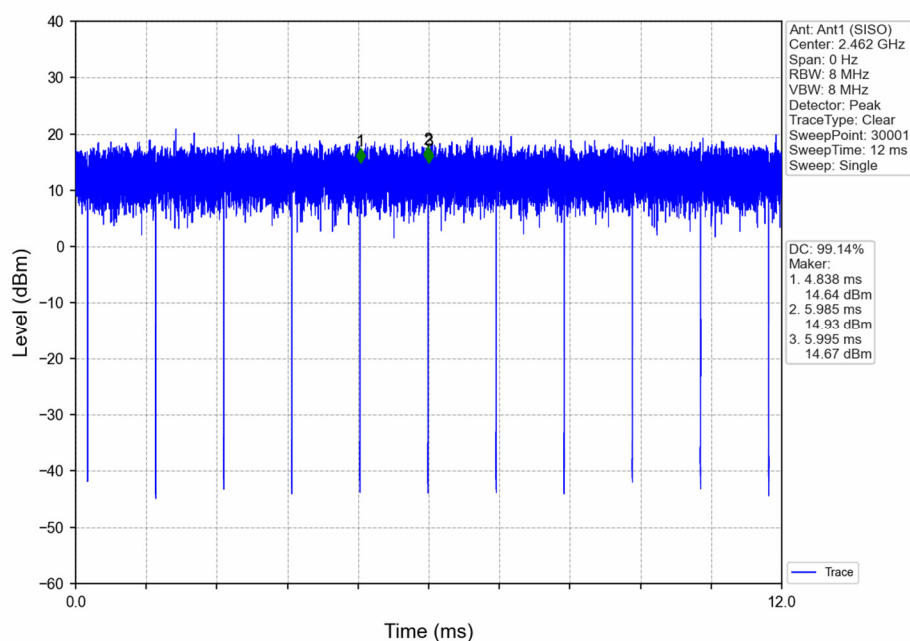
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



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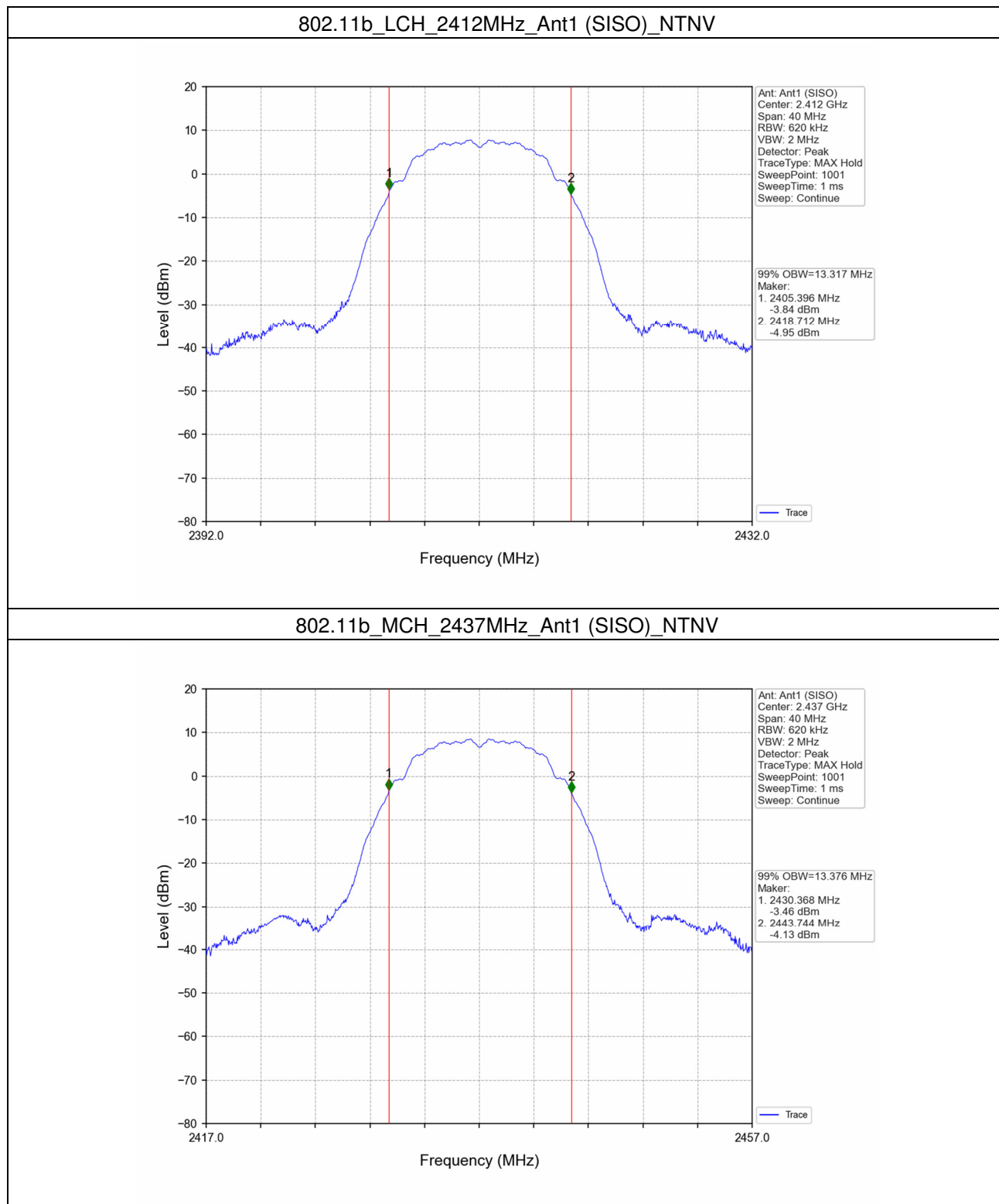
2. Bandwidth

2.1 OBW

2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11b	SISO	2412	1	13.317	Pass
		2437	1	13.376	Pass
		2462	1	13.352	Pass
802.11g	SISO	2412	1	17.026	Pass
		2437	1	16.900	Pass
		2462	1	17.020	Pass
802.11n (HT20)	SISO	2412	1	17.627	Pass
		2437	1	17.685	Pass
		2462	1	17.629	Pass

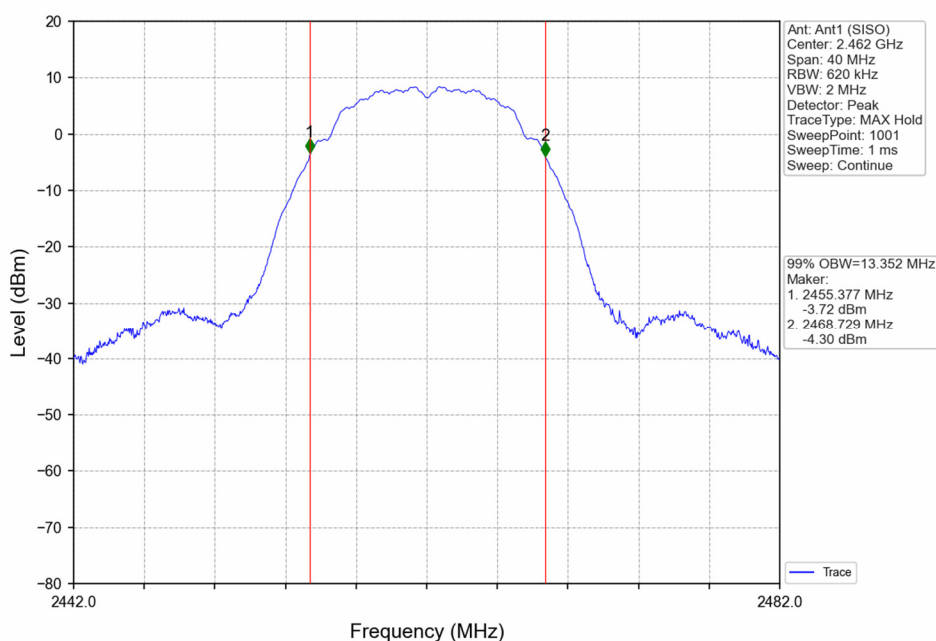
2.1.2 Test Graph



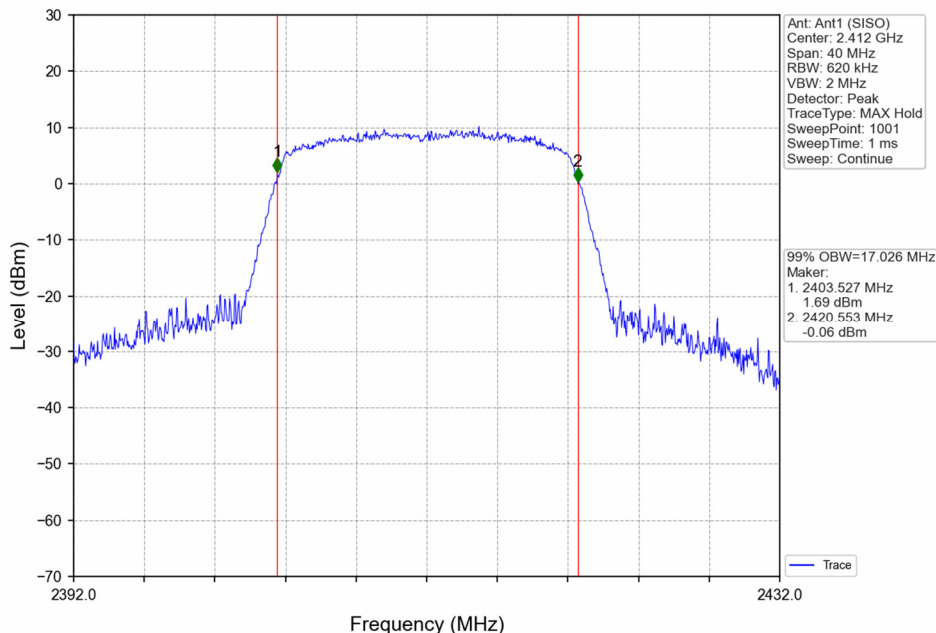
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802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



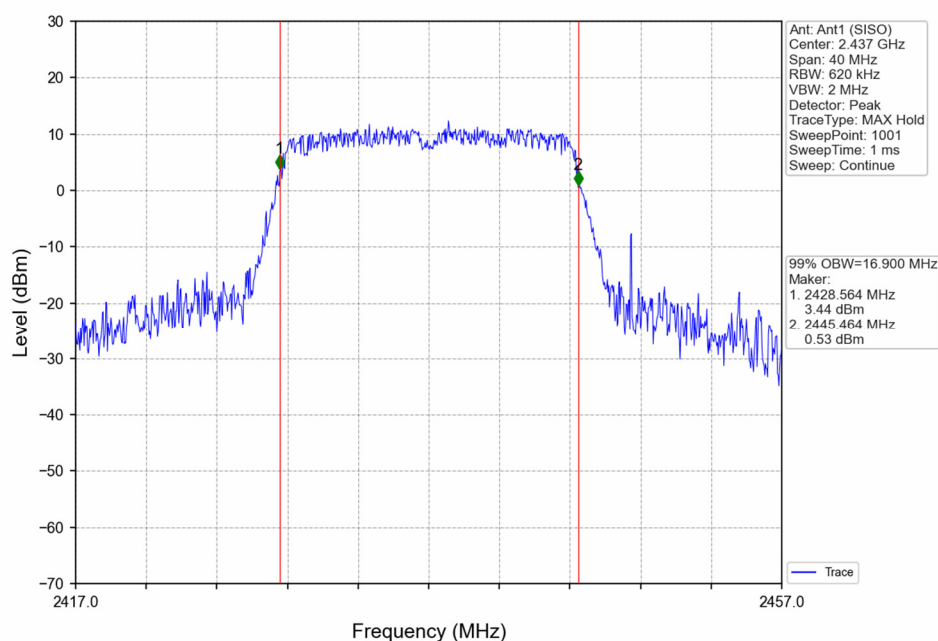
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



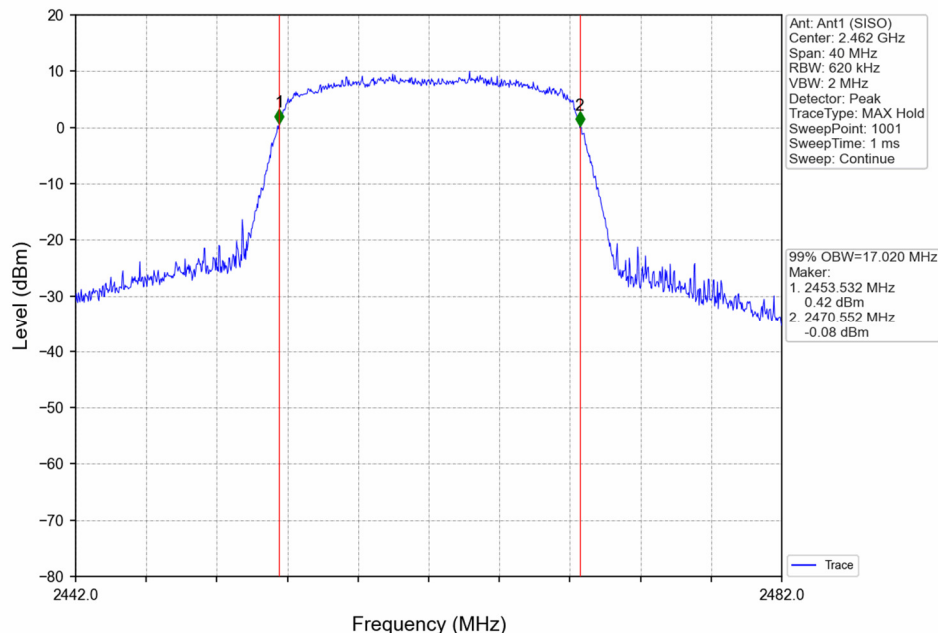
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802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



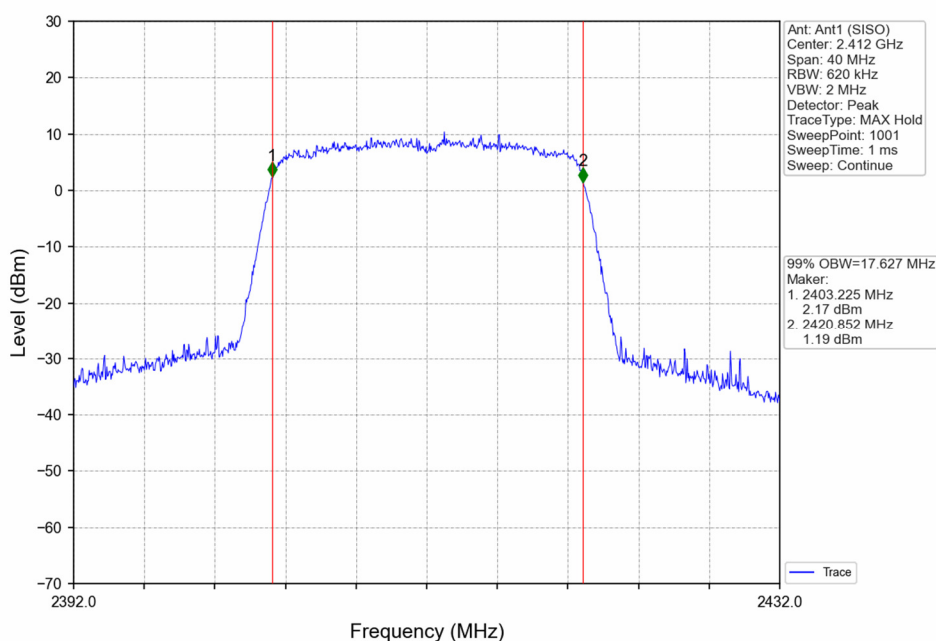
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



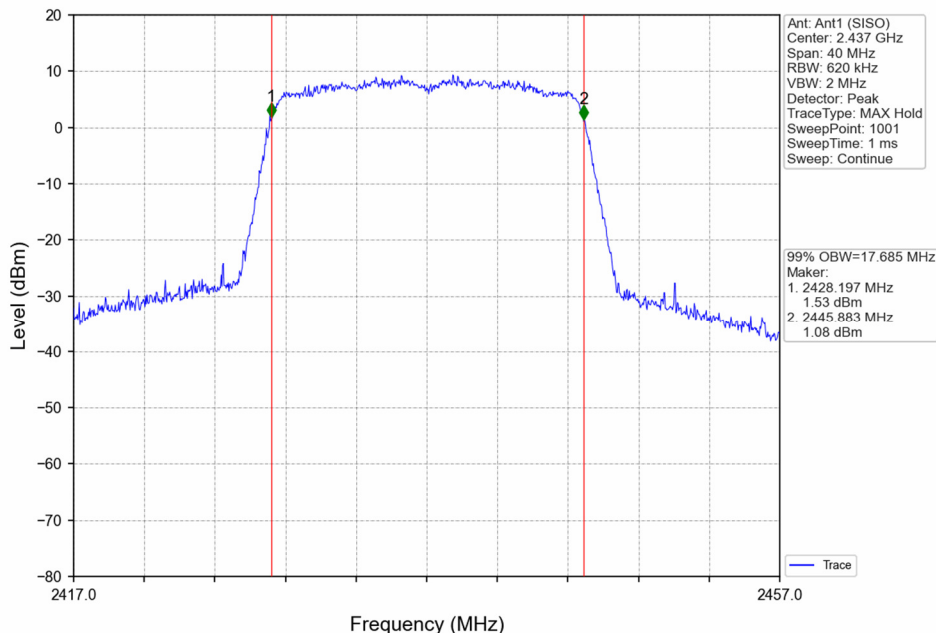
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802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



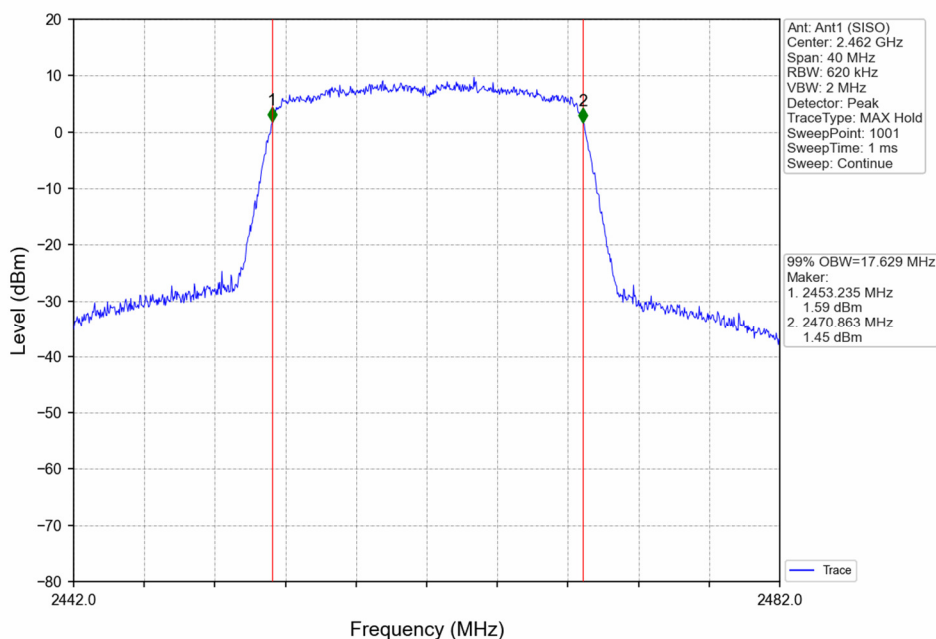
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



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802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



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2.2 6dB BW

2.2.1 Test Result

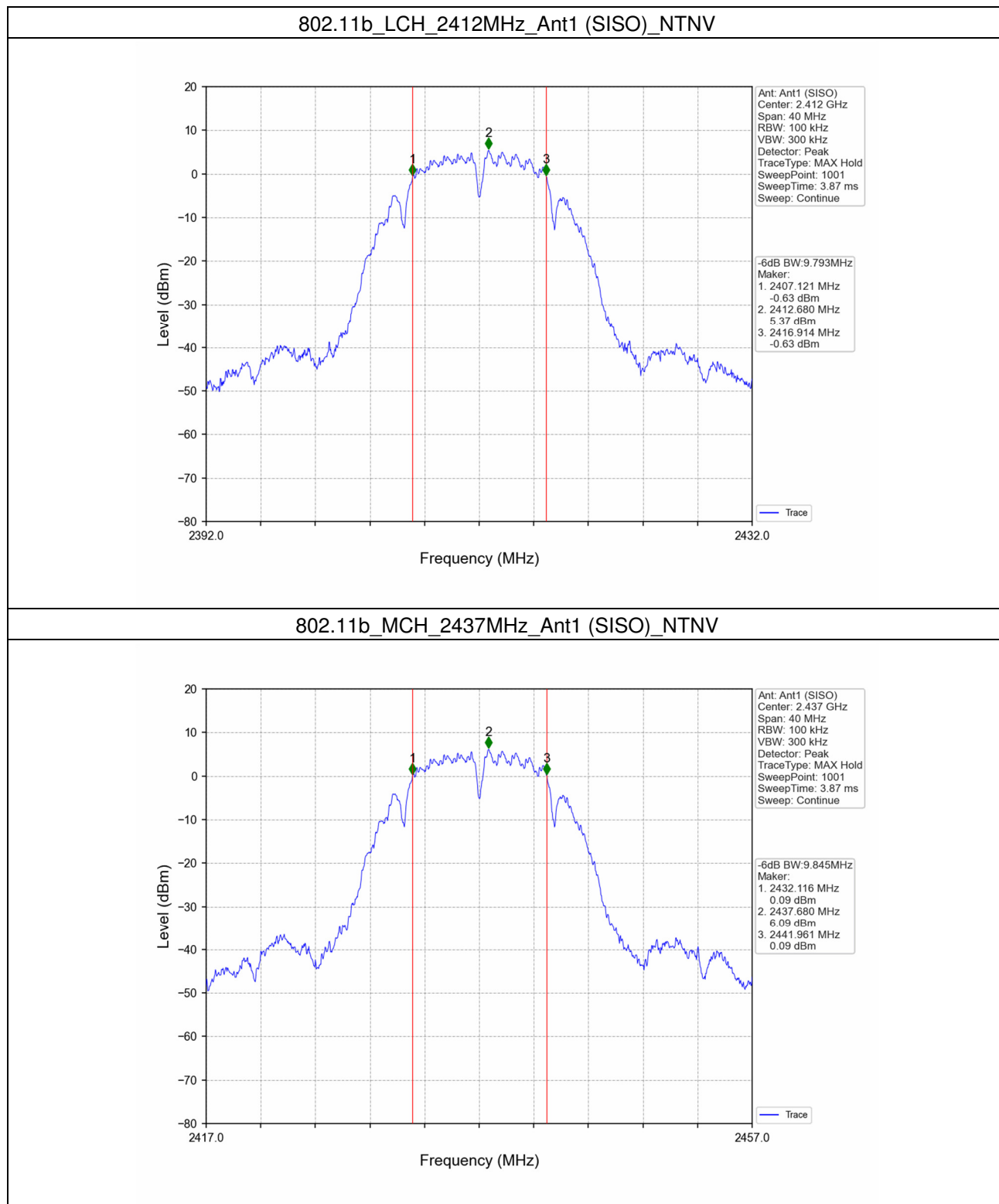
Mode	TX Type	Frequency (MHz)	Ant	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.793	≥ 0.5	Pass
		2437	1	9.845	≥ 0.5	Pass
		2462	1	9.796	≥ 0.5	Pass
802.11g	SISO	2412	1	15.873	≥ 0.5	Pass
		2437	1	16.125	≥ 0.5	Pass
		2462	1	16.312	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.144	≥ 0.5	Pass
		2437	1	17.012	≥ 0.5	Pass
		2462	1	17.099	≥ 0.5	Pass



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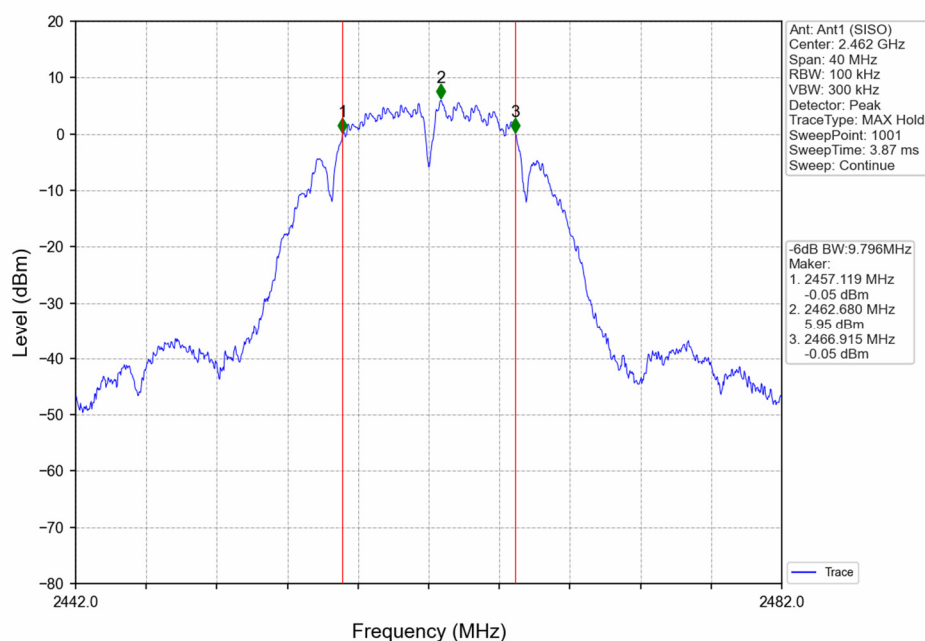
2.2.2 Test Graph



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802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

