

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for GZCR230500053002

9 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for GZCR2305000530HS



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10 Appendix

1. Duty Cycle

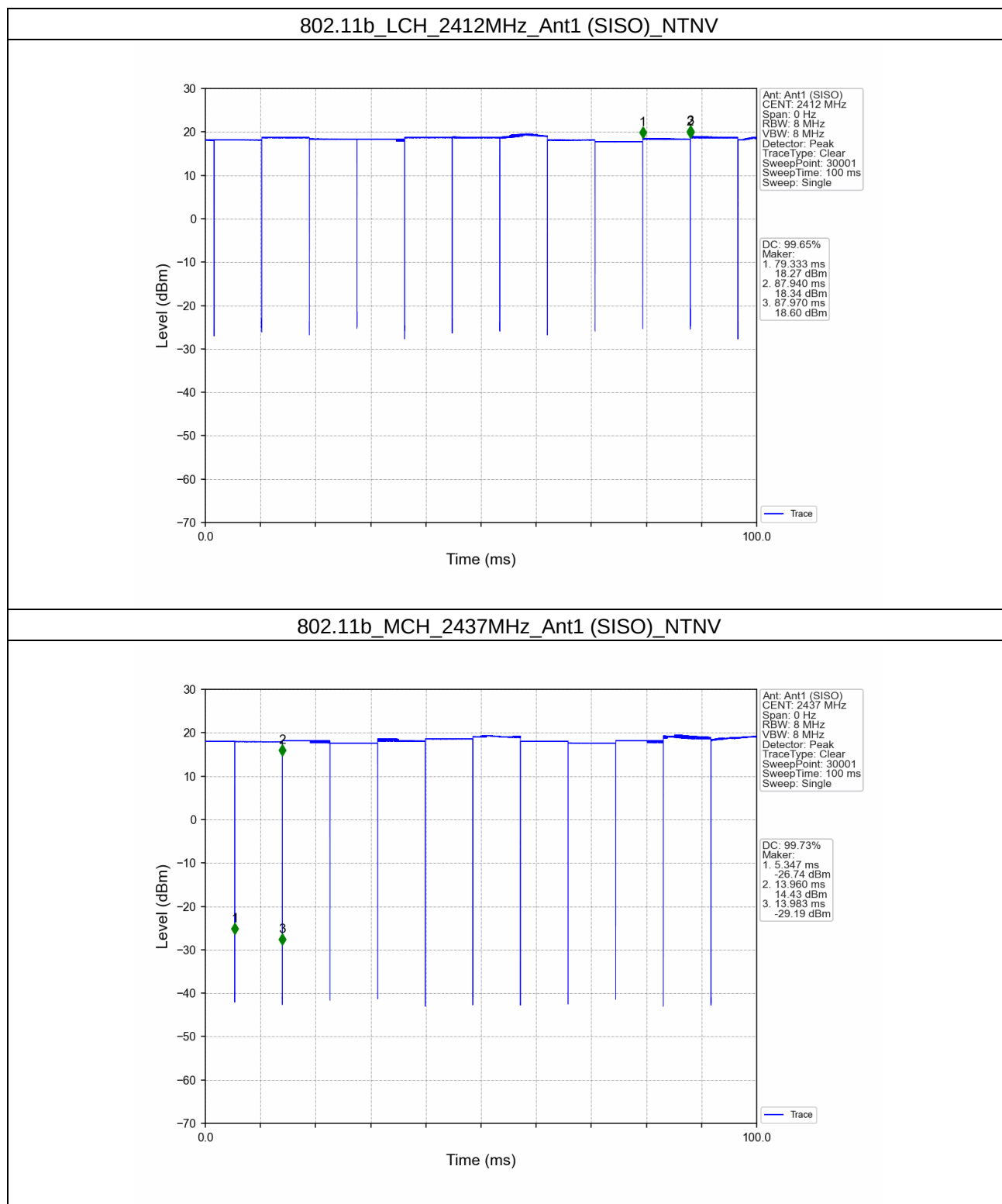
1.1 Ant1

1.1.1 Test Result

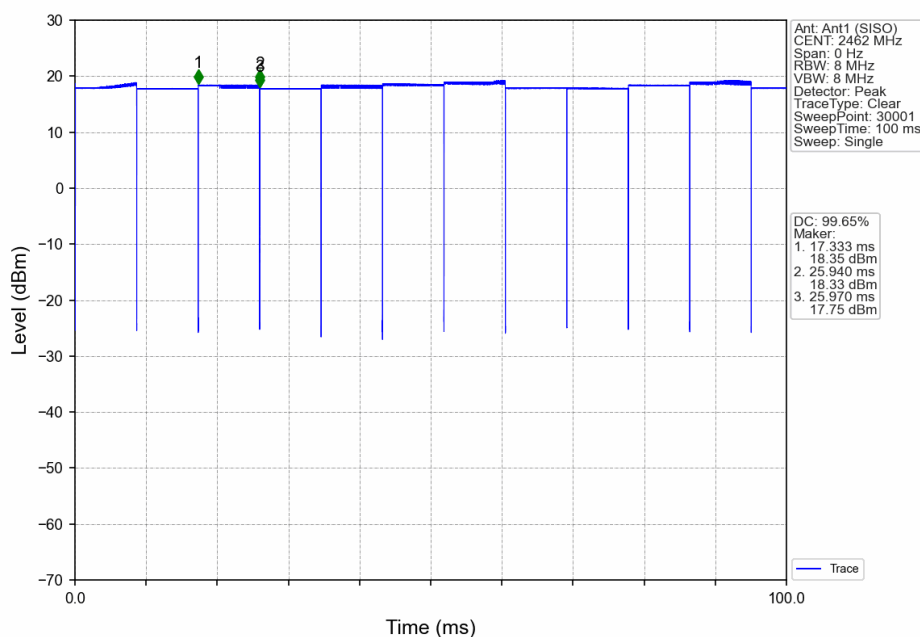
Ant1							
Mode	TX Type	Frequency (MHz)	T _{on} (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	8.607	8.637	99.65	0.02	0.04
		2437	8.613	8.636	99.73	0.01	0.04
		2462	8.607	8.637	99.65	0.02	0.04
802.11g	SISO	2412	1.428	1.458	97.94	0.09	0.07
		2437	1.428	1.458	97.94	0.09	0.03
		2462	1.428	1.459	97.88	0.09	0.03
802.11n (HT20)	SISO	2412	1.336	1.367	97.73	0.10	0.03
		2437	1.336	1.367	97.73	0.10	0.03
		2462	1.336	1.367	97.73	0.10	0.03

Ant2							
900MHz Tech	SISO	915	100.000	100.000	100.00	0.00	0.00
		917.5	100.000	100.000	100.00	0.00	0.00
		920	100.000	100.000	100.00	0.00	0.00

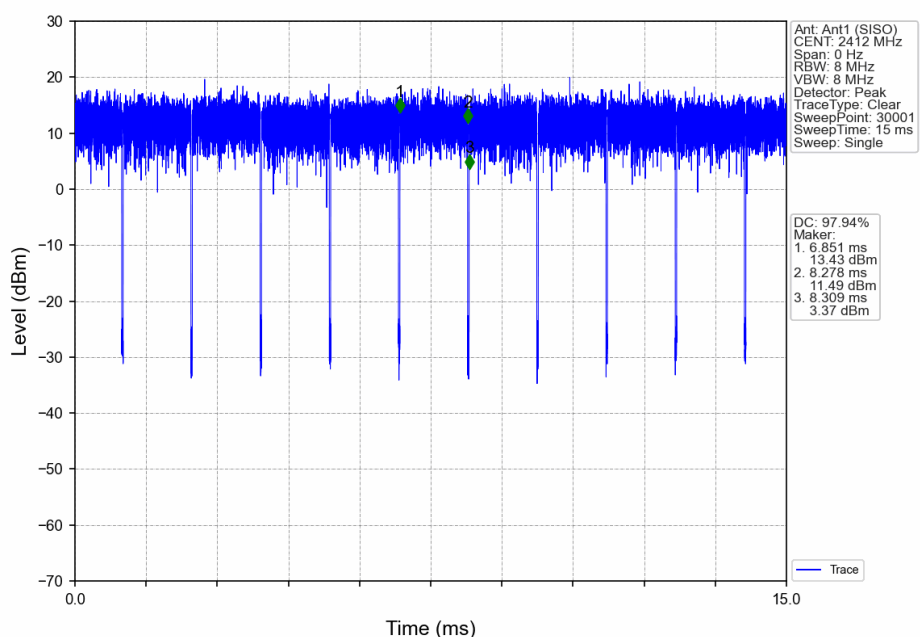
1.1.2 Test Graph



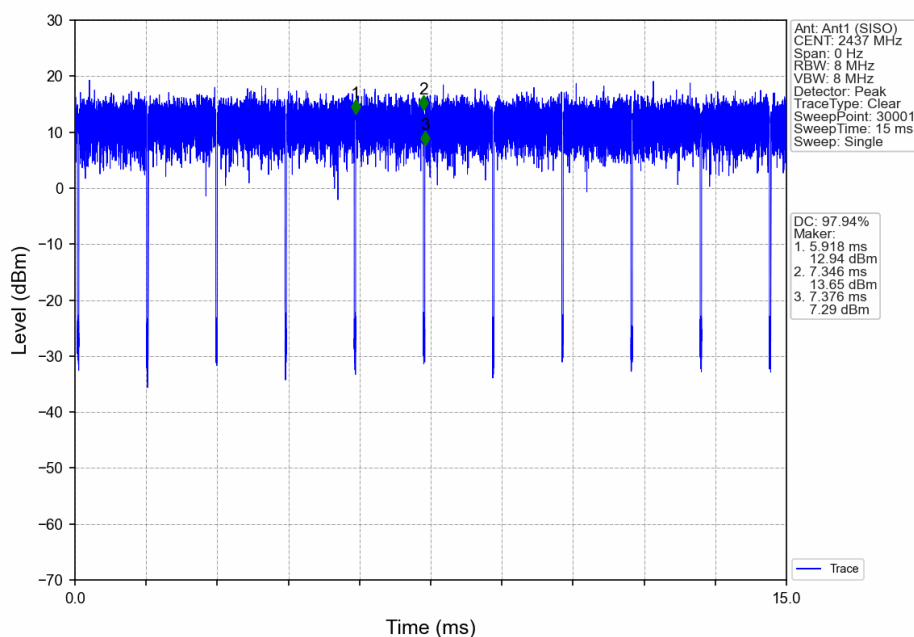
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



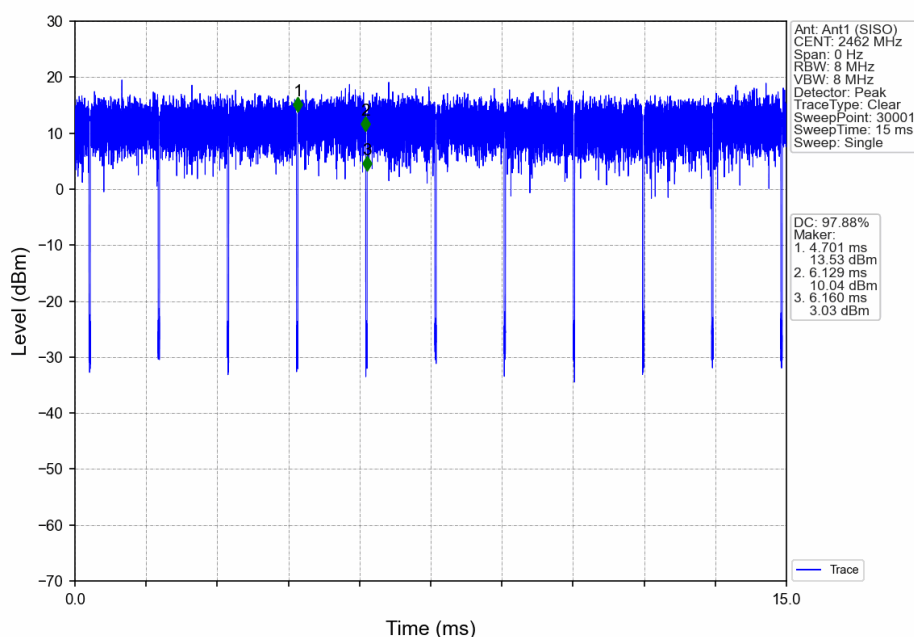
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



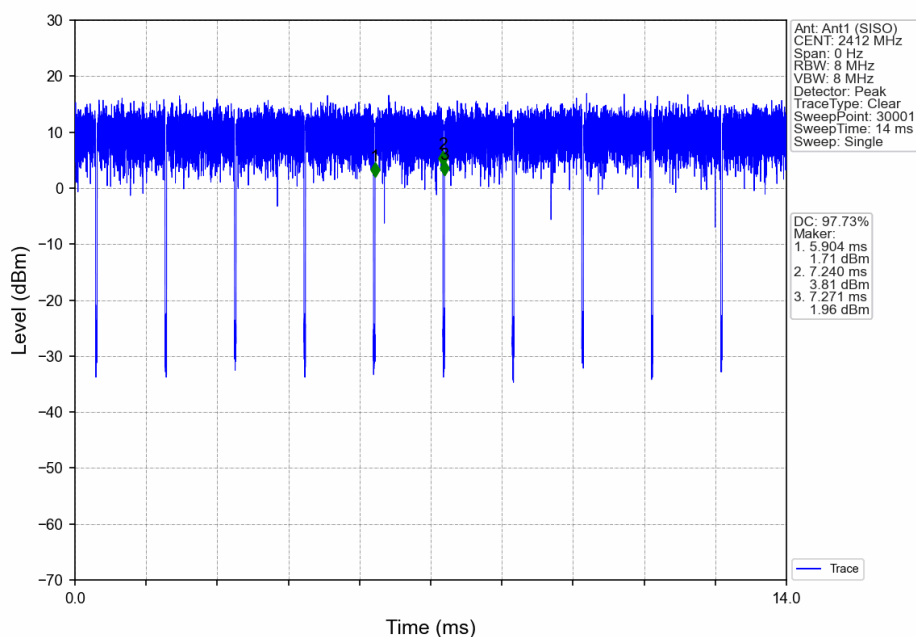
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



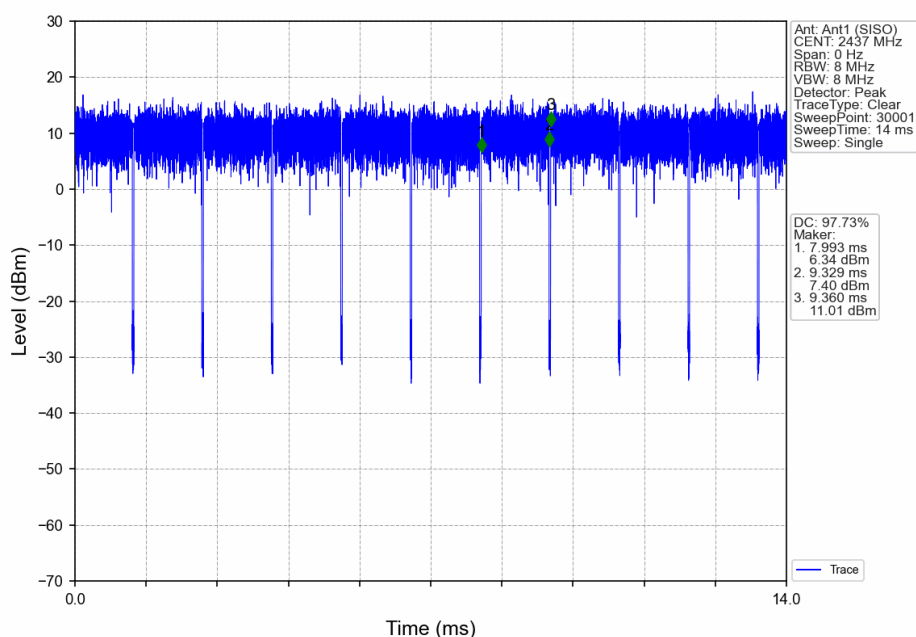
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



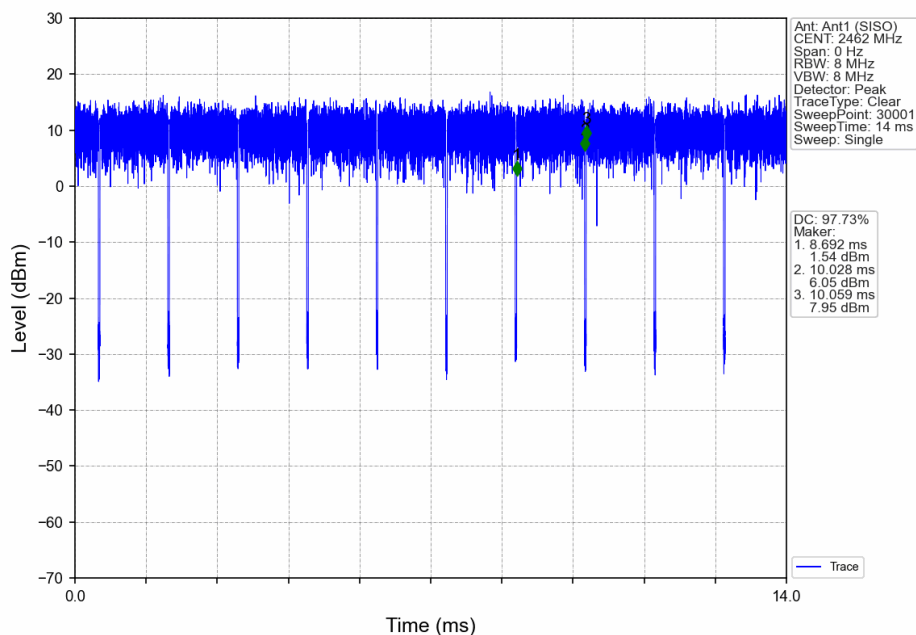
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



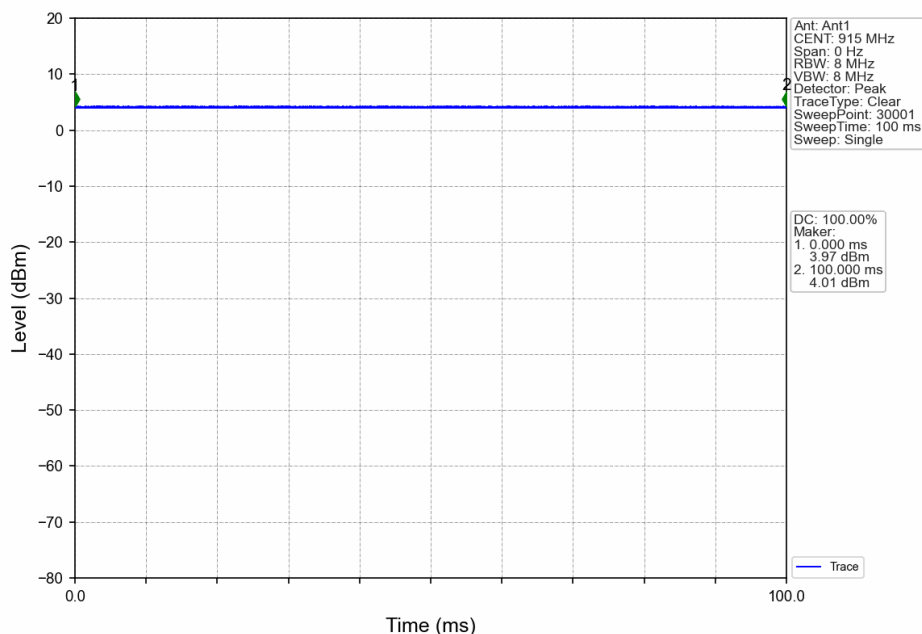
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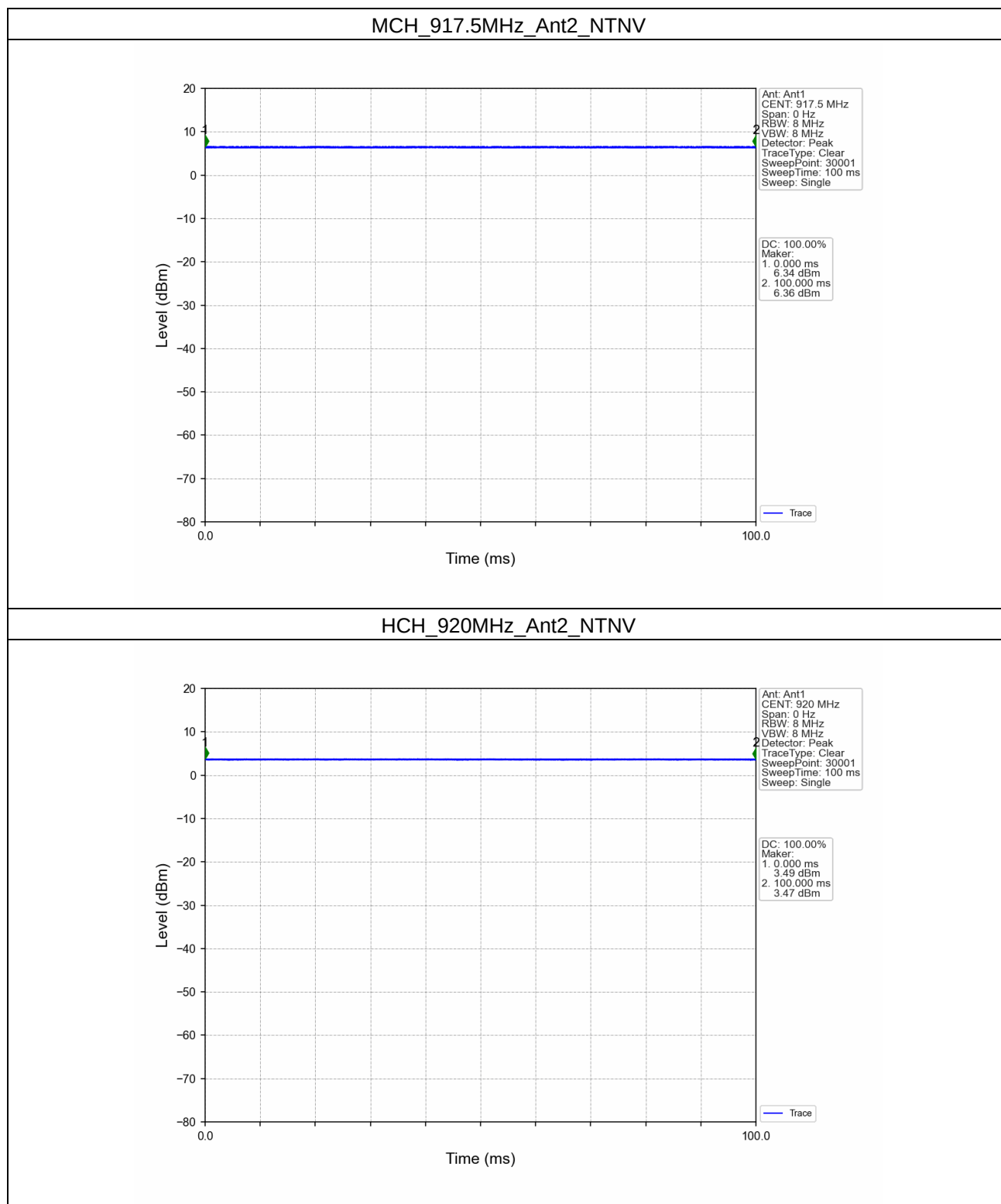


802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



LCH_915MHz_Ant2_NTNV





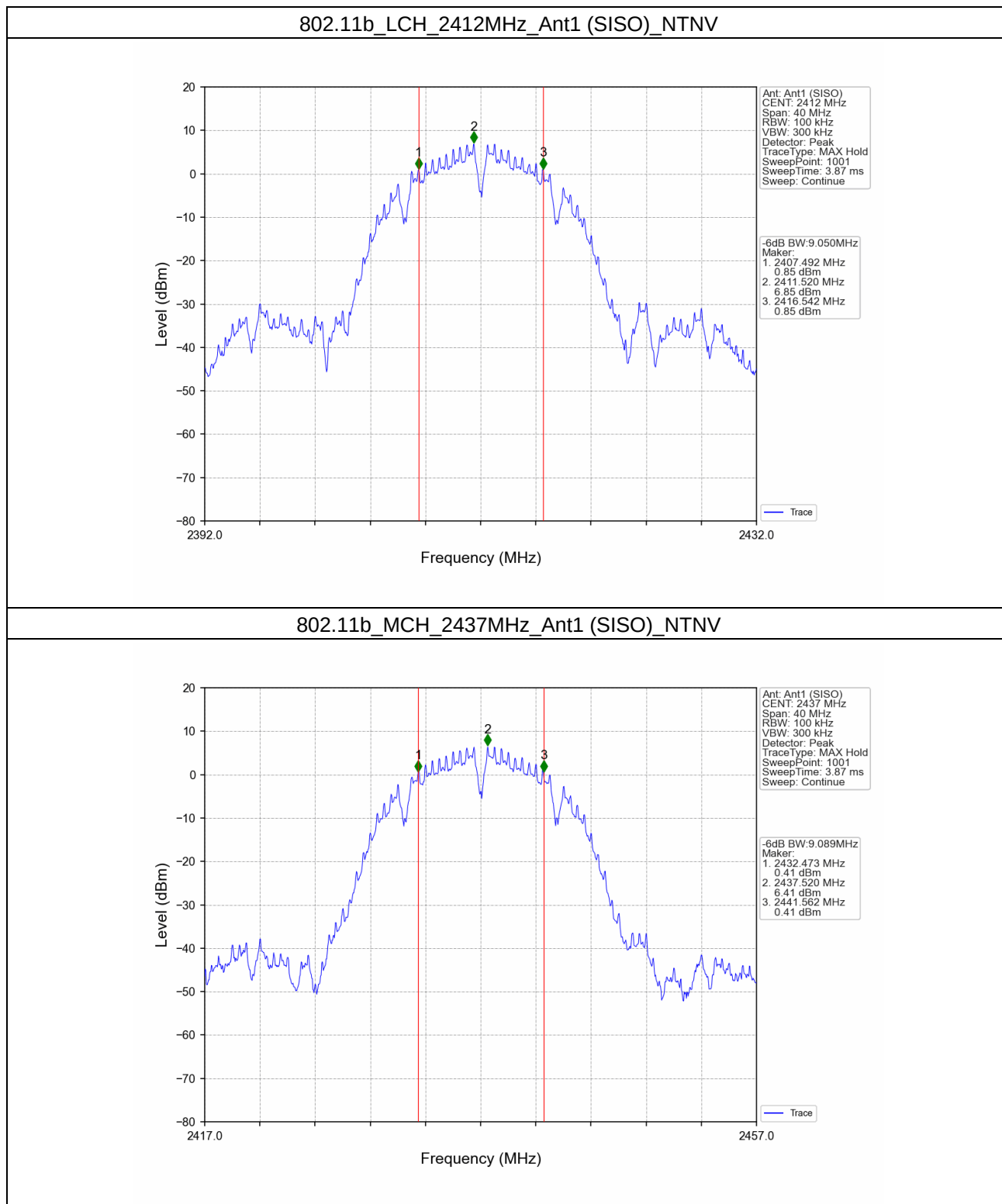
2. Bandwidth

2.1 6dB BW

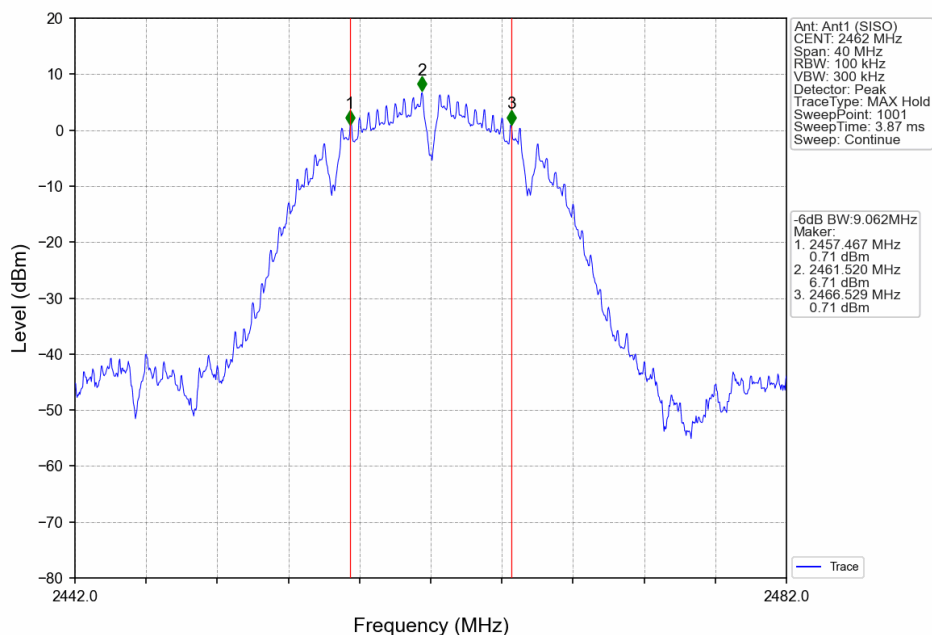
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.050	≥ 0.5	Pass
		2437	1	9.089	≥ 0.5	Pass
		2462	1	9.062	≥ 0.5	Pass
802.11g	SISO	2412	1	15.143	≥ 0.5	Pass
		2437	1	15.143	≥ 0.5	Pass
		2462	1	15.130	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	15.149	≥ 0.5	Pass
		2437	1	15.158	≥ 0.5	Pass
		2462	1	15.137	≥ 0.5	Pass
900MHz Tech	SISO	915	2	0.699	≥ 0.5	Pass
		917.5	2	0.705	≥ 0.5	Pass
		920	2	0.700	≥ 0.5	Pass

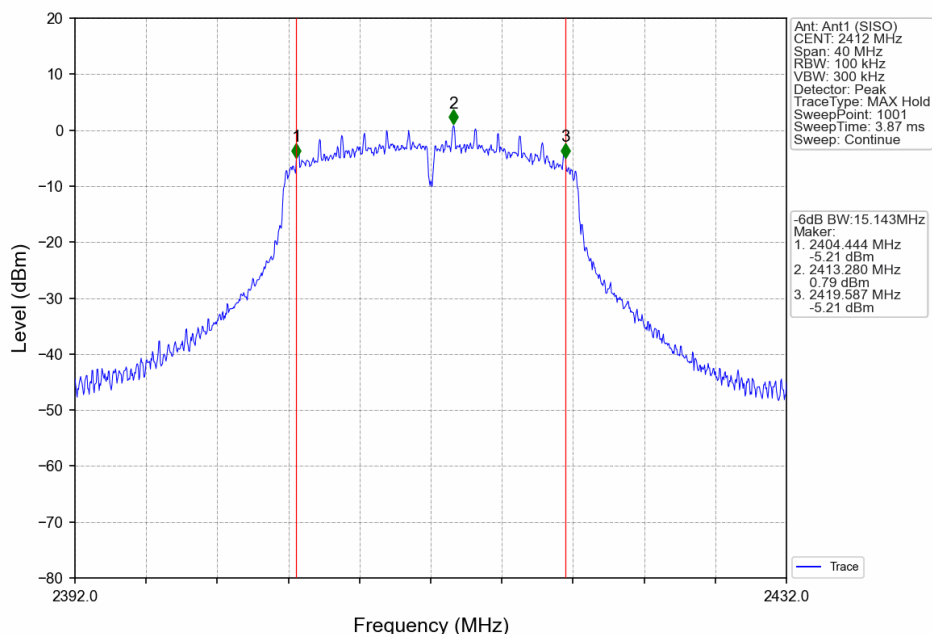
2.1.2 Test Graph



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



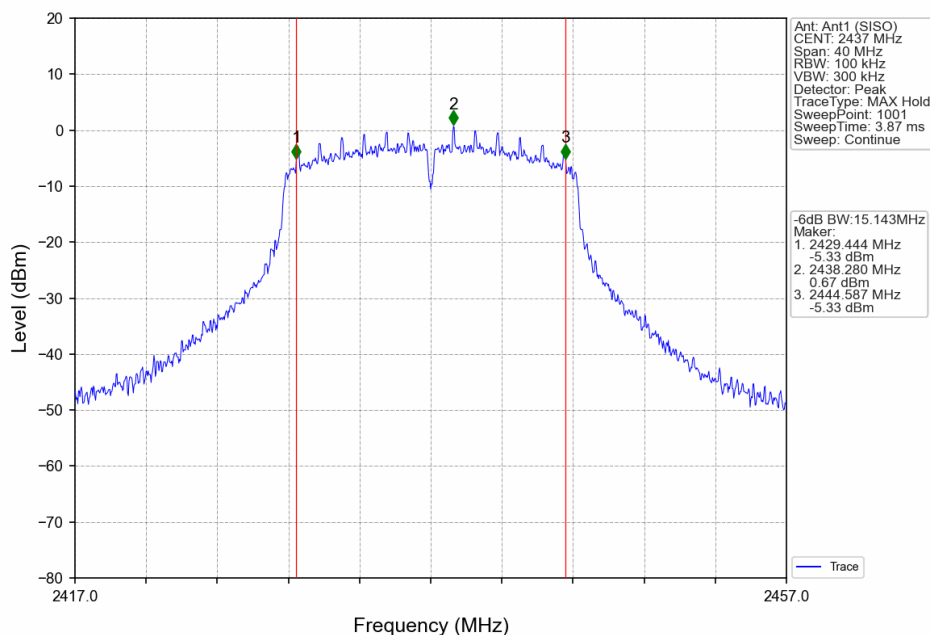
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



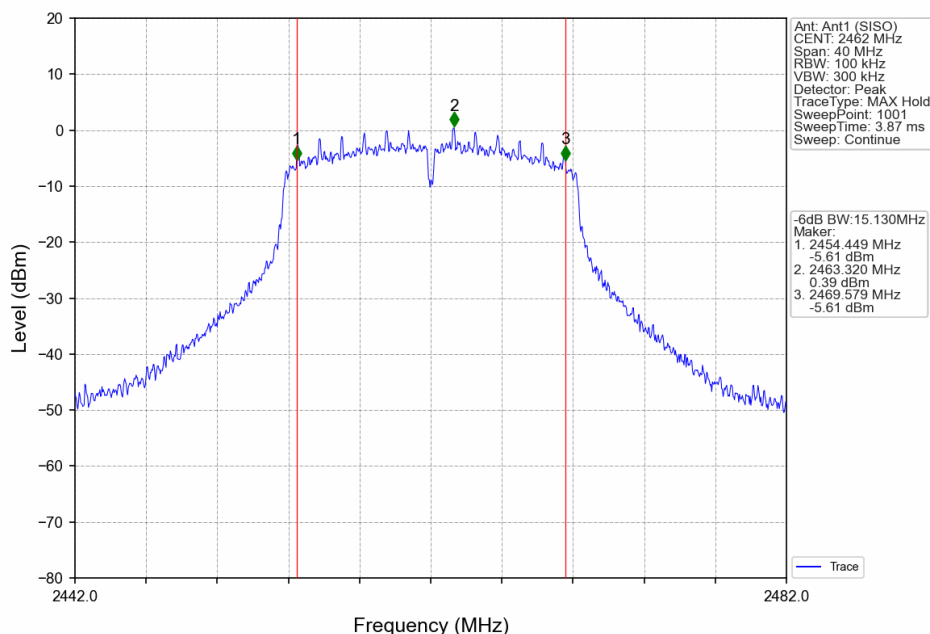
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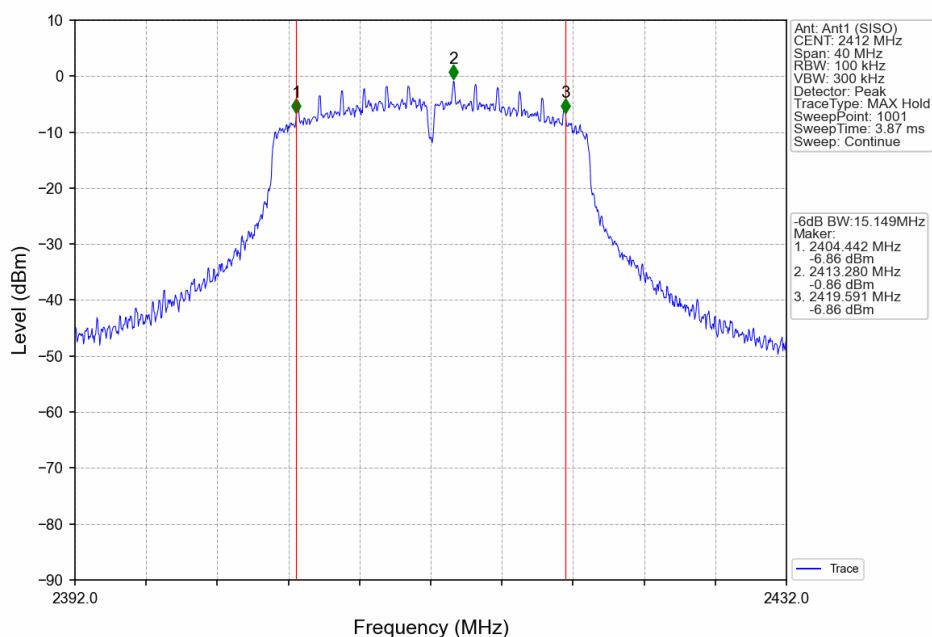
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



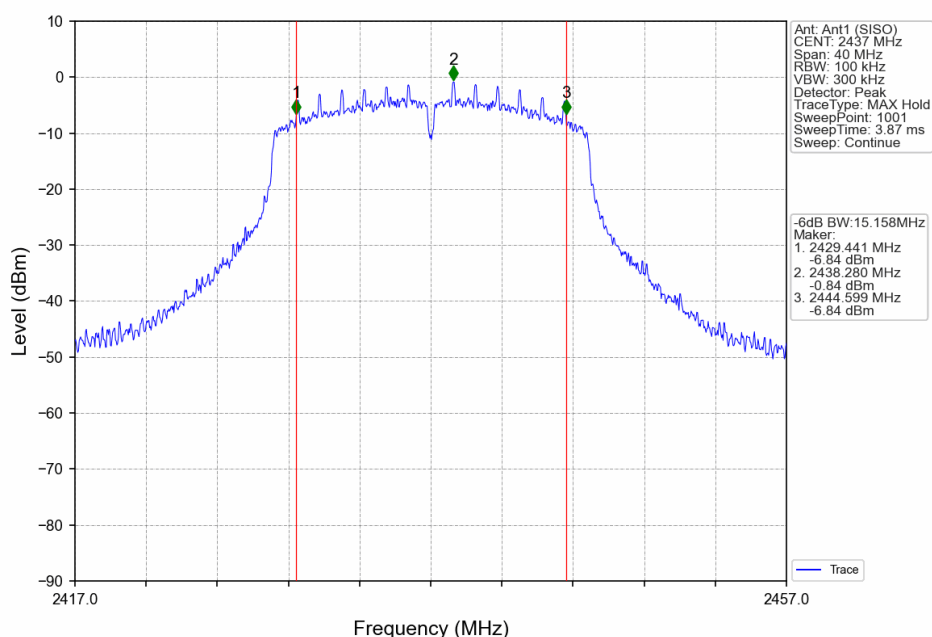
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



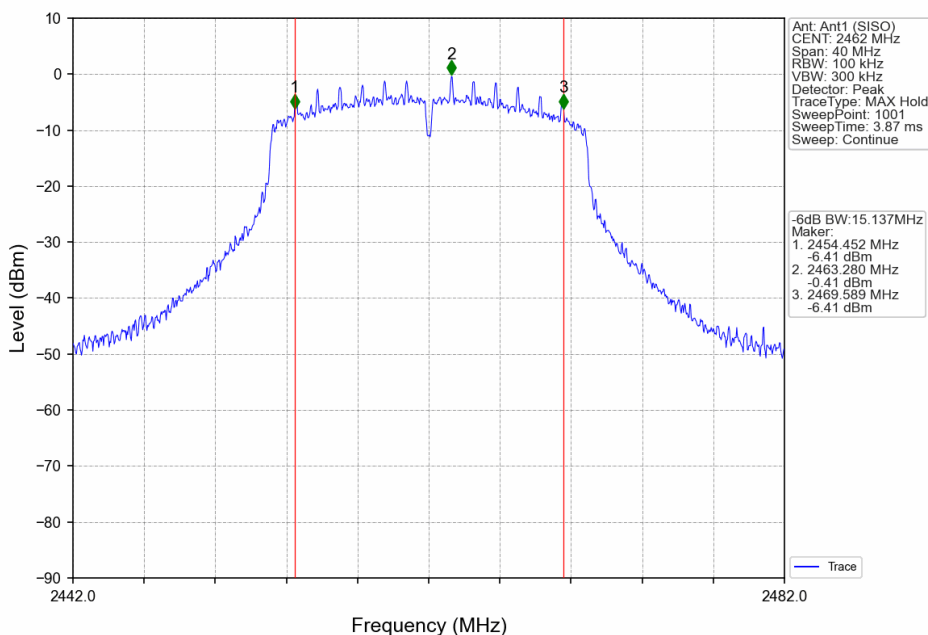
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



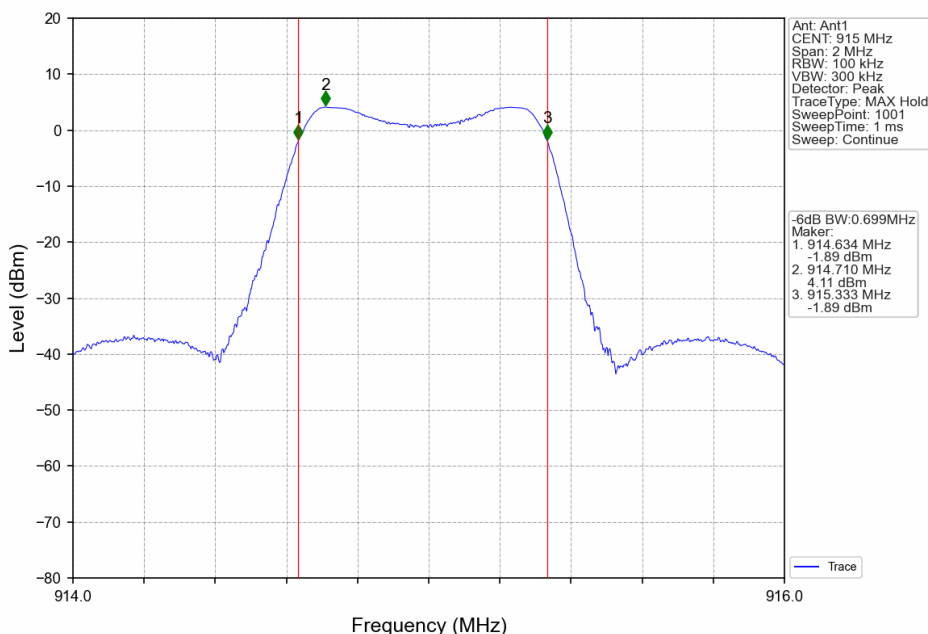
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

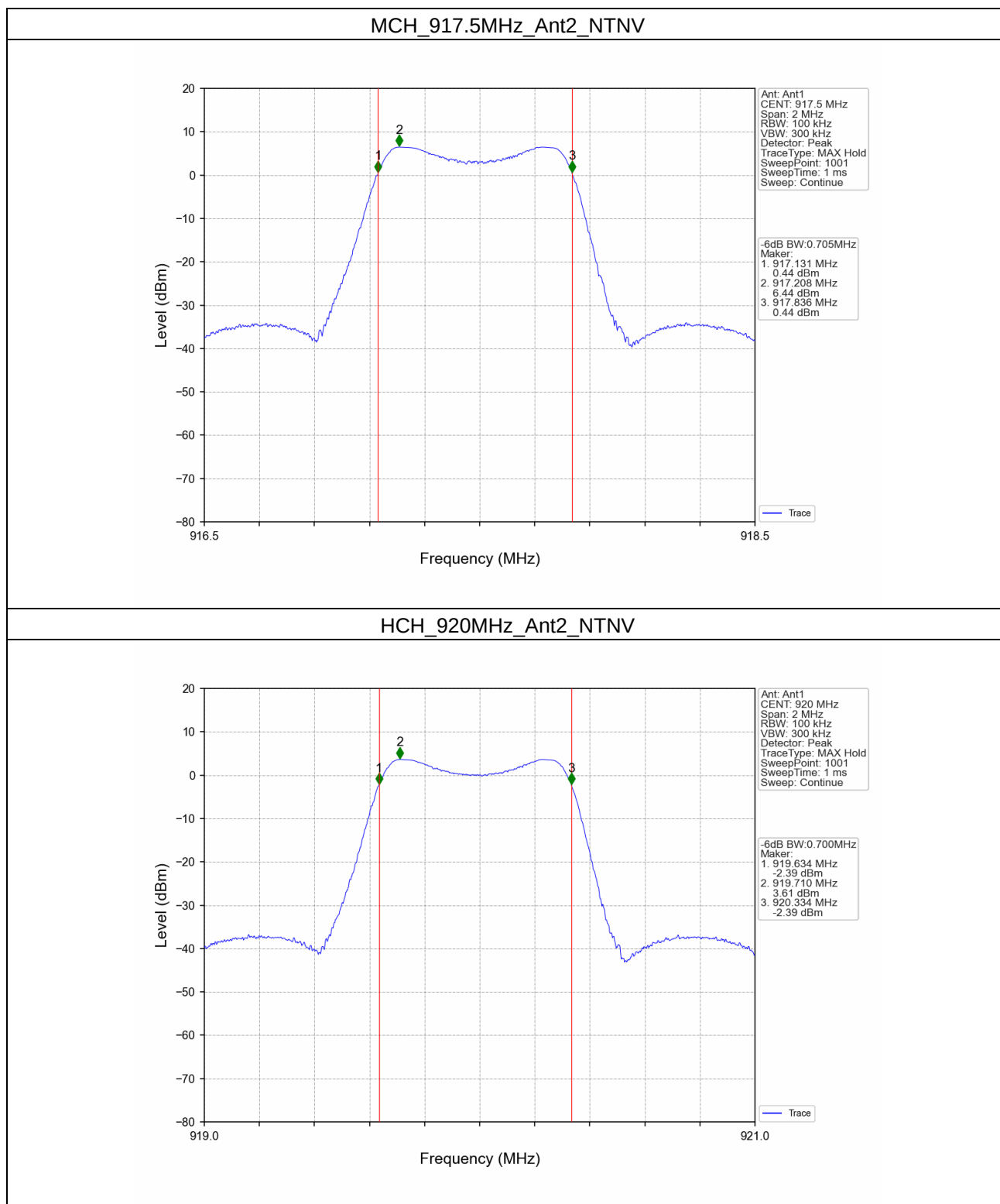


802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



LCH_915MHz_Ant2_NTNV





3. Maximum Conducted Output Power

3.1 Power

3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	17.54	<=30	Pass
		2437	17.12	<=30	Pass
		2462	17.05	<=30	Pass
802.11g	SISO	2412	18.61	<=30	Pass
		2437	18.47	<=30	Pass
		2462	18.50	<=30	Pass
802.11n (HT20)	SISO	2412	16.68	<=30	Pass
		2437	16.89	<=30	Pass
		2462	17.02	<=30	Pass
Note1: Antenna Gain: Ant1: 0.6dBi;					
Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT2	Limit	
900MHz Tech	SISO	915	4.30	<=30	Pass
		917.5	6.59	<=30	Pass
		920	3.80	<=30	Pass
Note1: Antenna Gain: Ant2: 0.50dBi;					

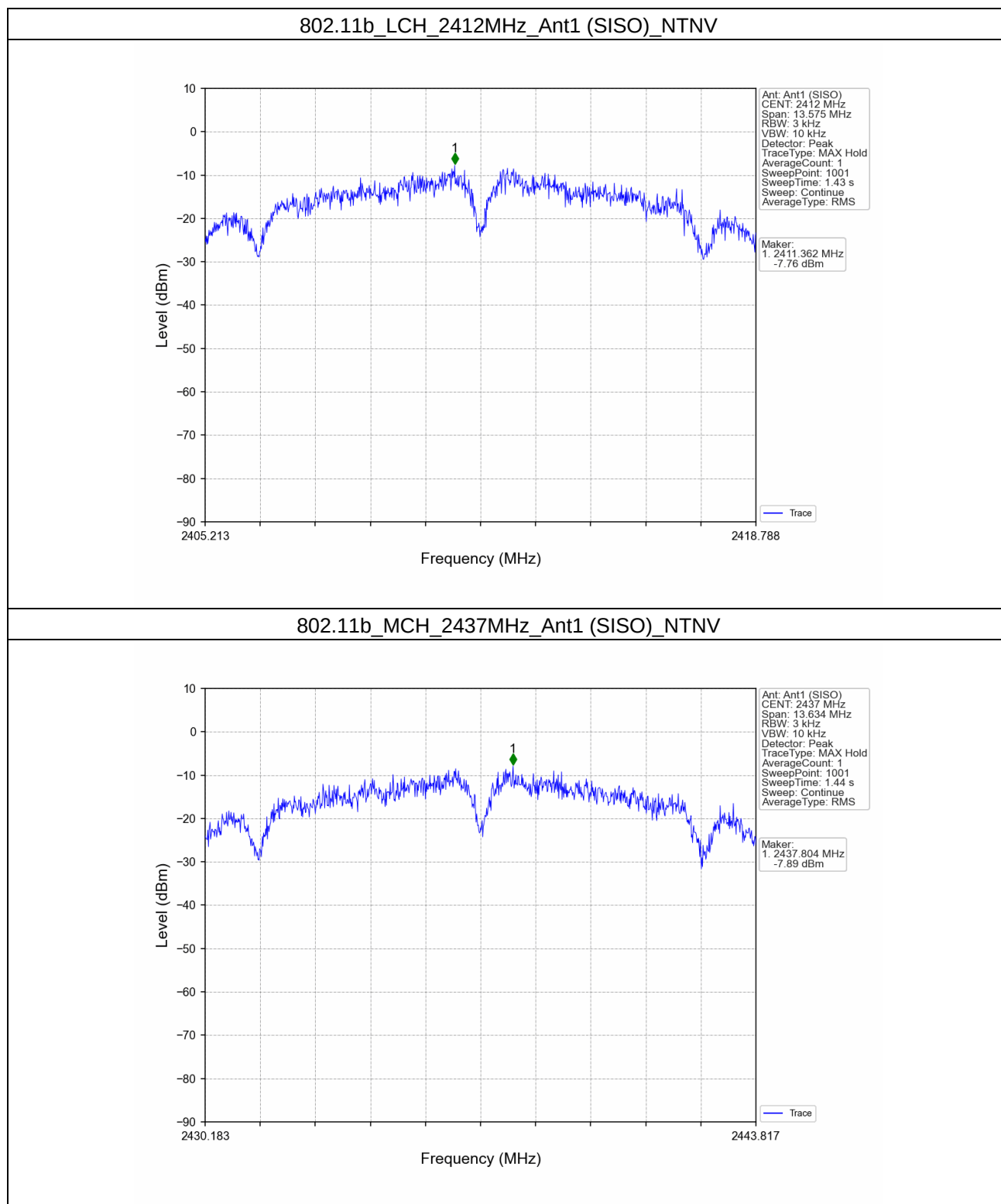
4. Maximum Power Spectral Density

4.1 PSD

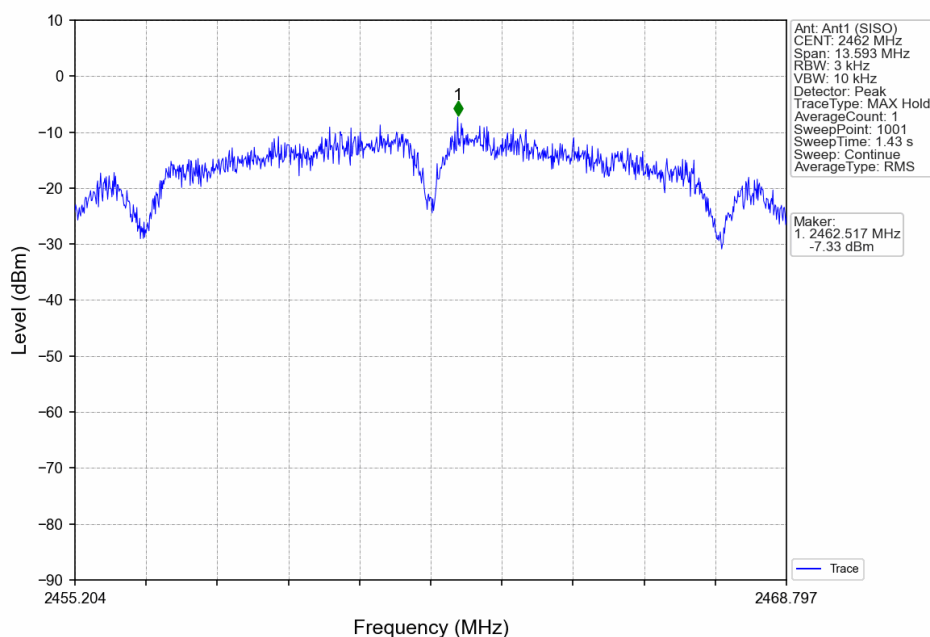
4.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	-7.76	<=8	Pass
		2437	-7.89	<=8	Pass
		2462	-7.33	<=8	Pass
802.11g	SISO	2412	-14.28	<=8	Pass
		2437	-13.98	<=8	Pass
		2462	-13.01	<=8	Pass
802.11n (HT20)	SISO	2412	-15.25	<=8	Pass
		2437	-16.03	<=8	Pass
		2462	-16.35	<=8	Pass
Note1: Antenna Gain: Ant1: 0.60dBi;					
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT2	Limit	
900MHz Tech	SISO	915	0.05	<=8	Pass
		917.5	3.40	<=8	Pass
		920	-0.55	<=8	Pass
Note1: Antenna Gain: Ant2: 0.50dBi;					

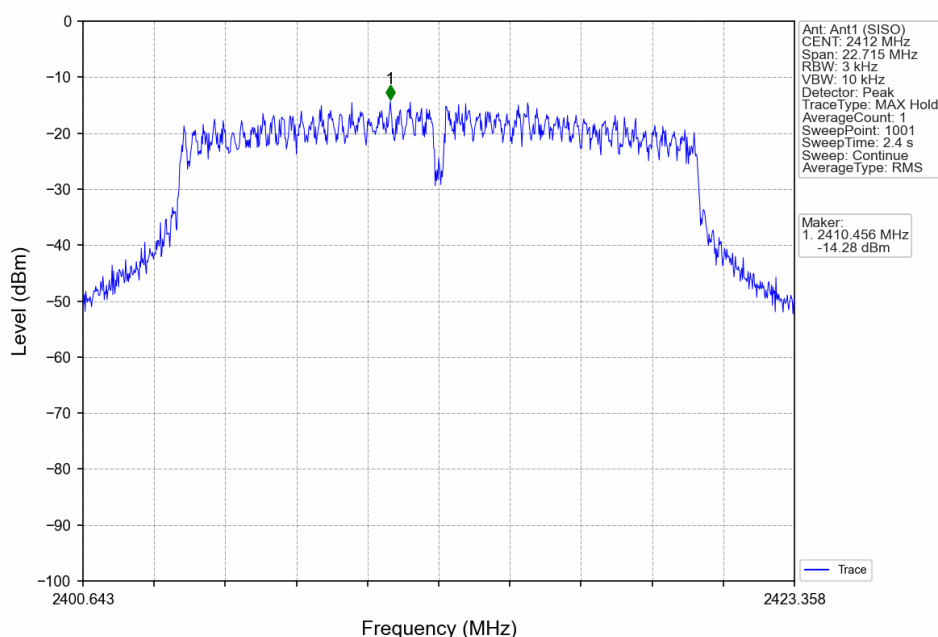
4.1.2 Test Graph



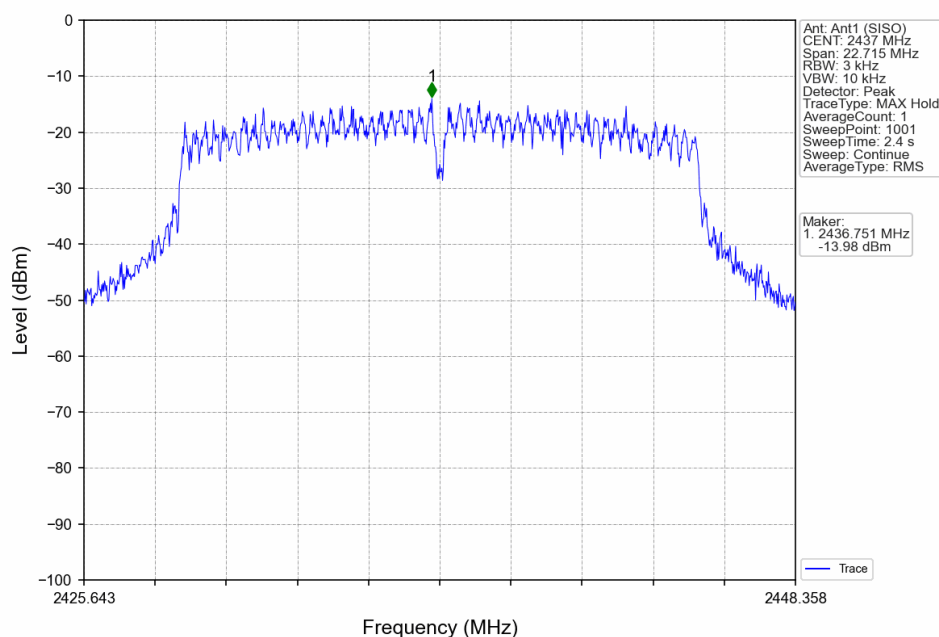
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



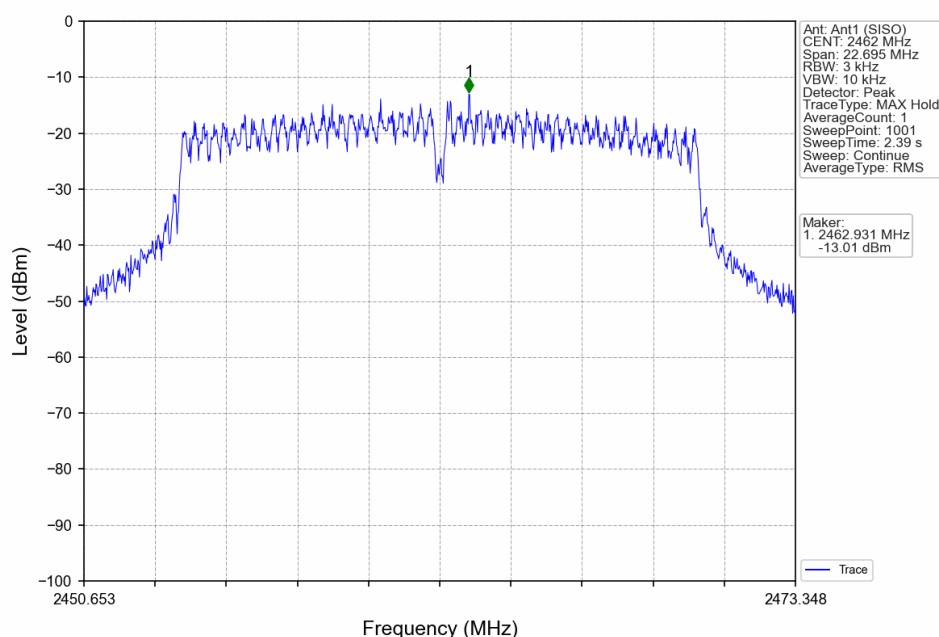
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



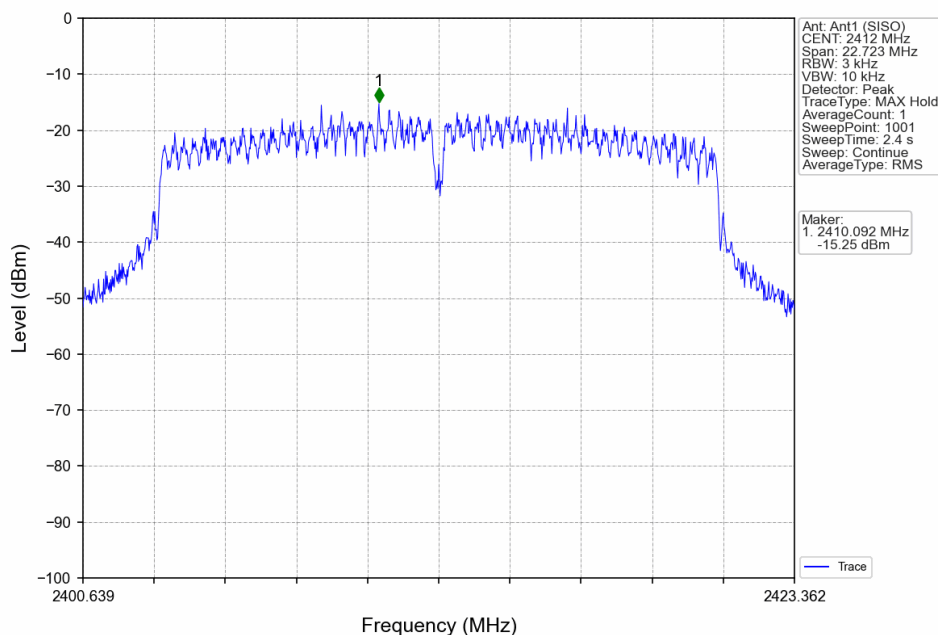
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



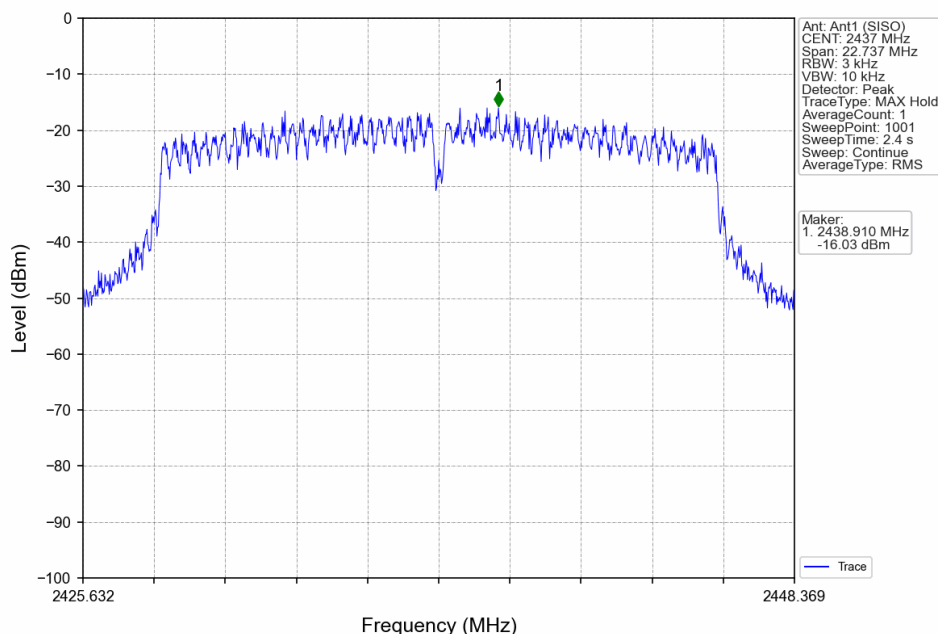
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



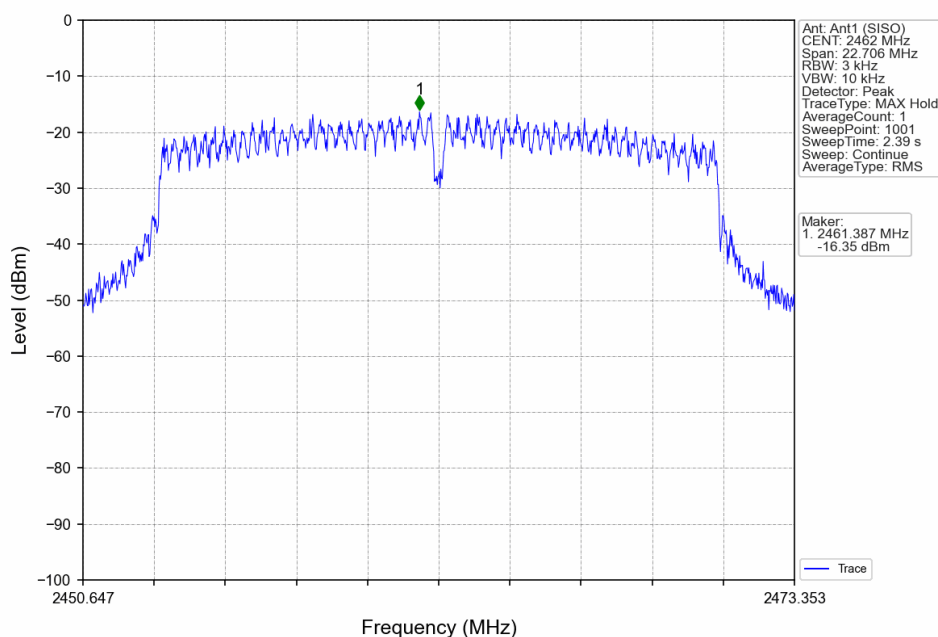
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



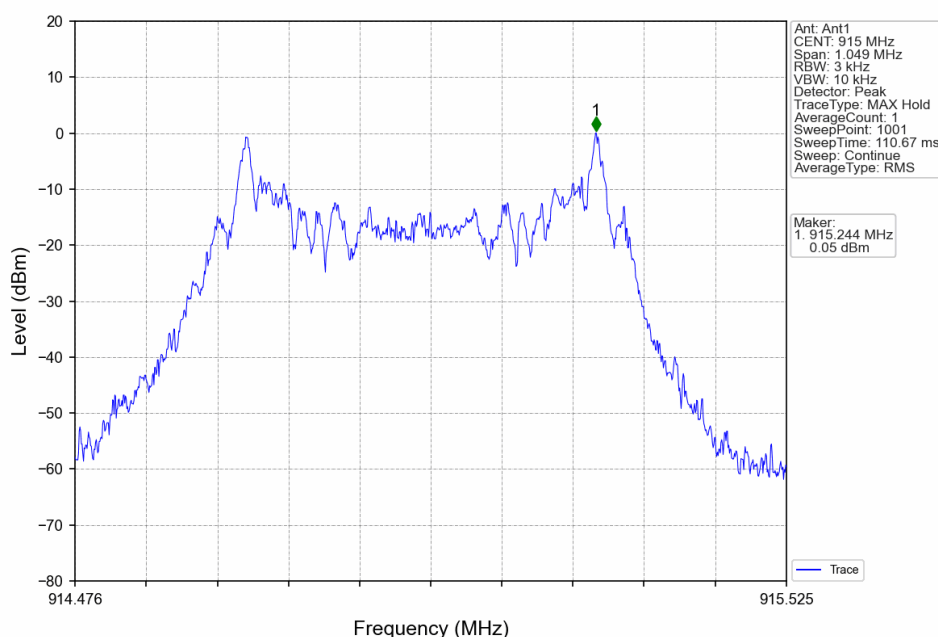
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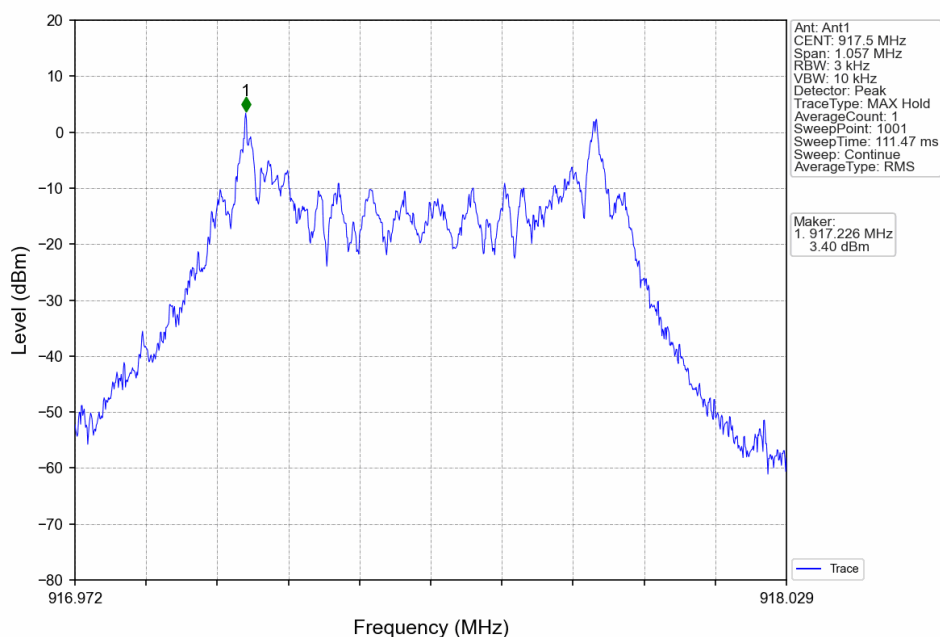
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



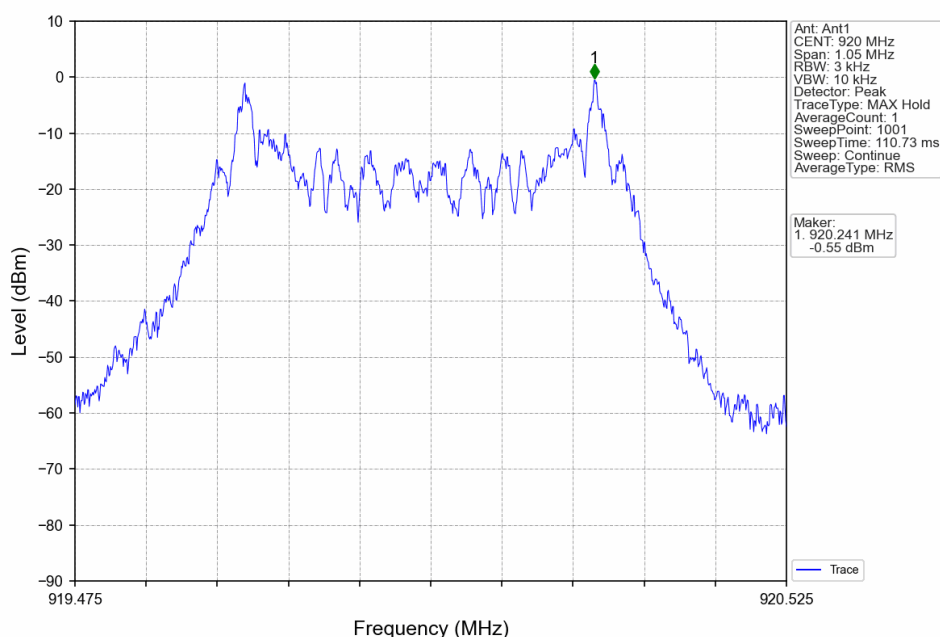
LCH_915MHz_Ant2_NTNV



MCH_917.5MHz_Ant2_NTNV



HCH_920MHz_Ant2_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Ref

5.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	7.33
		2437	1	6.90
		2462	1	6.80
802.11g	SISO	2412	1	0.51
		2437	1	0.24
		2462	1	0.62
802.11n (HT20)	SISO	2412	1	-1.07
		2437	1	-1.23
		2462	1	-0.46

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
900MHz Tech	SISO	915	2	4.09
		917.5	2	6.44
		920	2	3.59

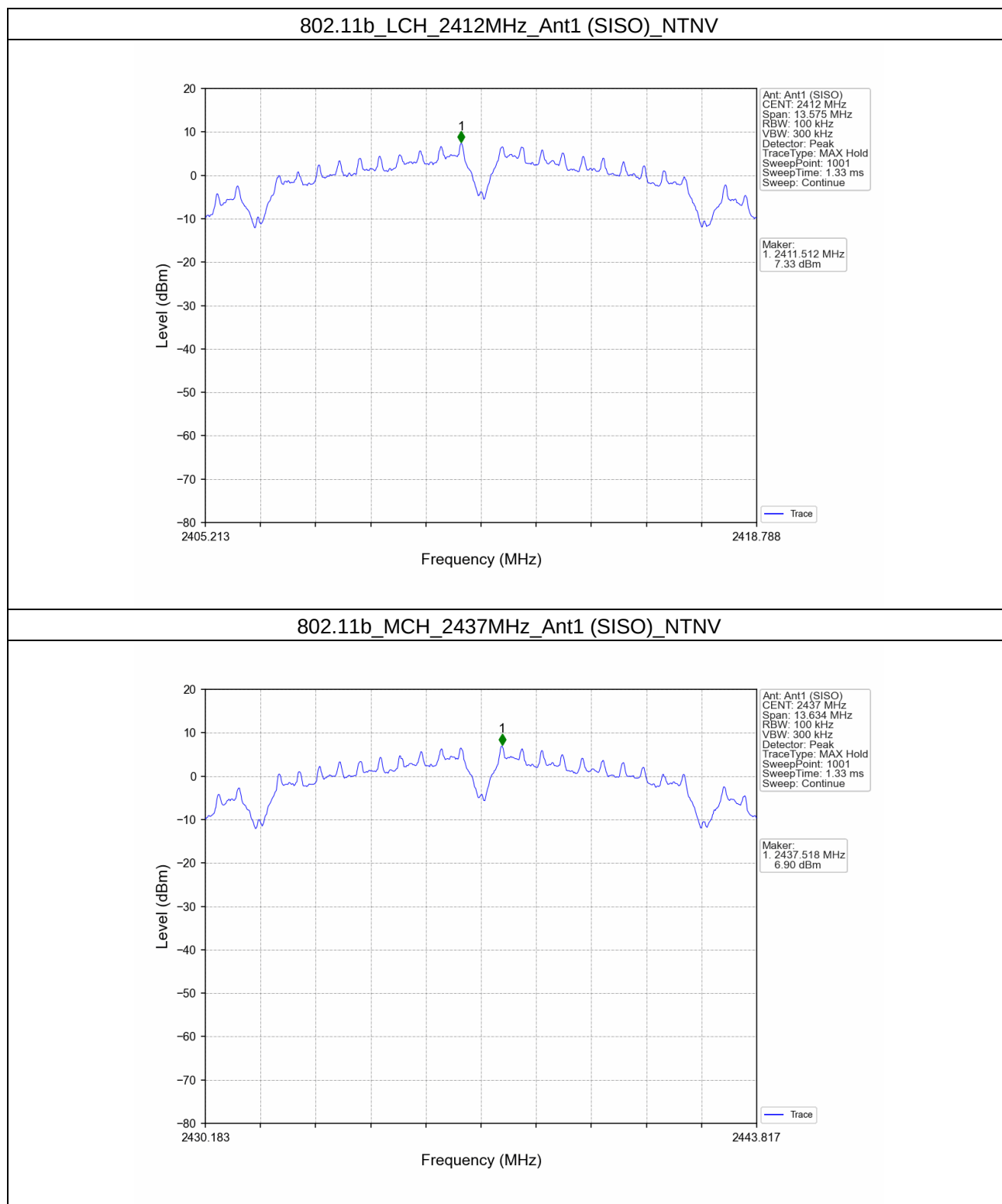
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.



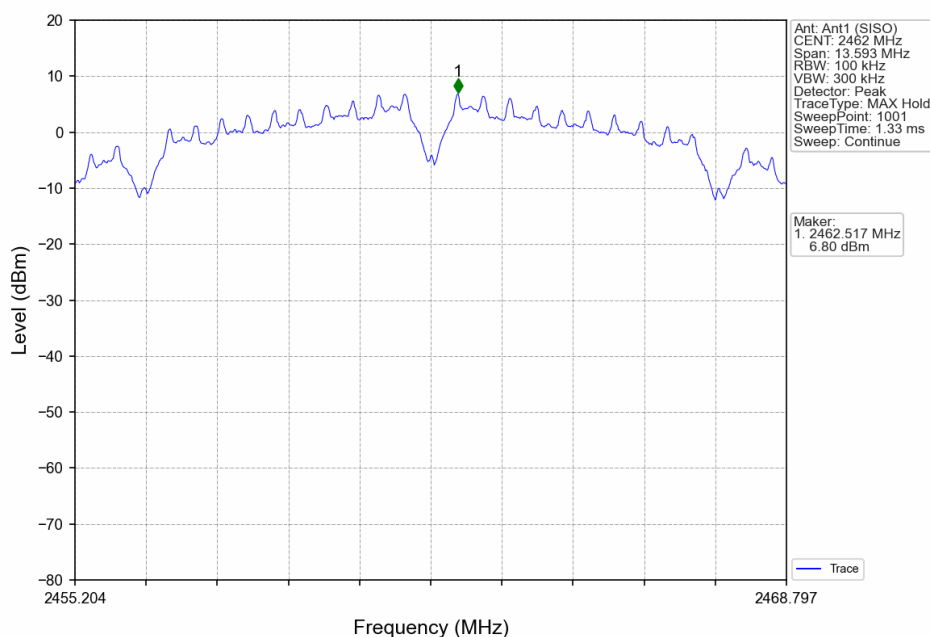
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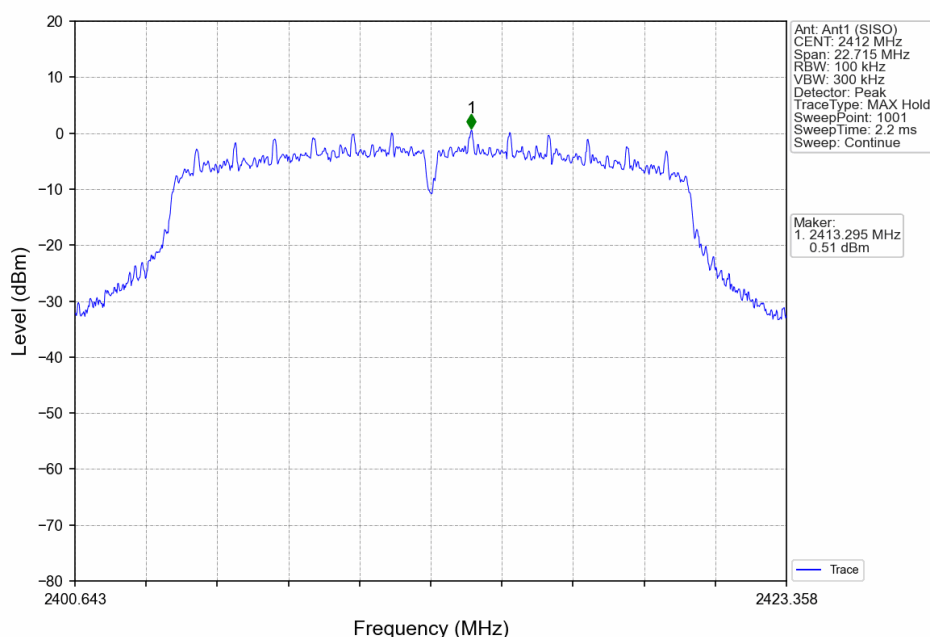
5.1.2 Test Graph



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



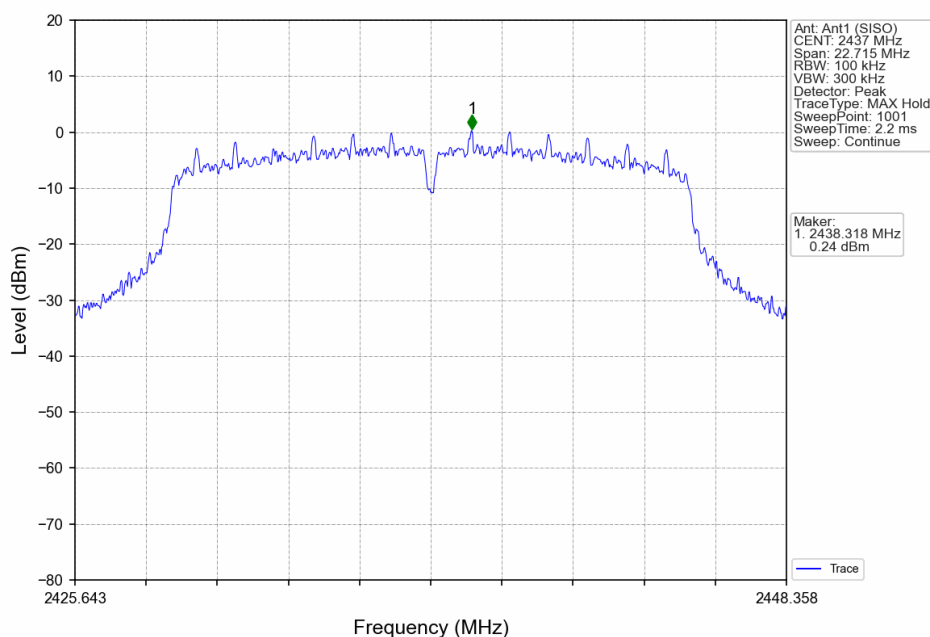
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



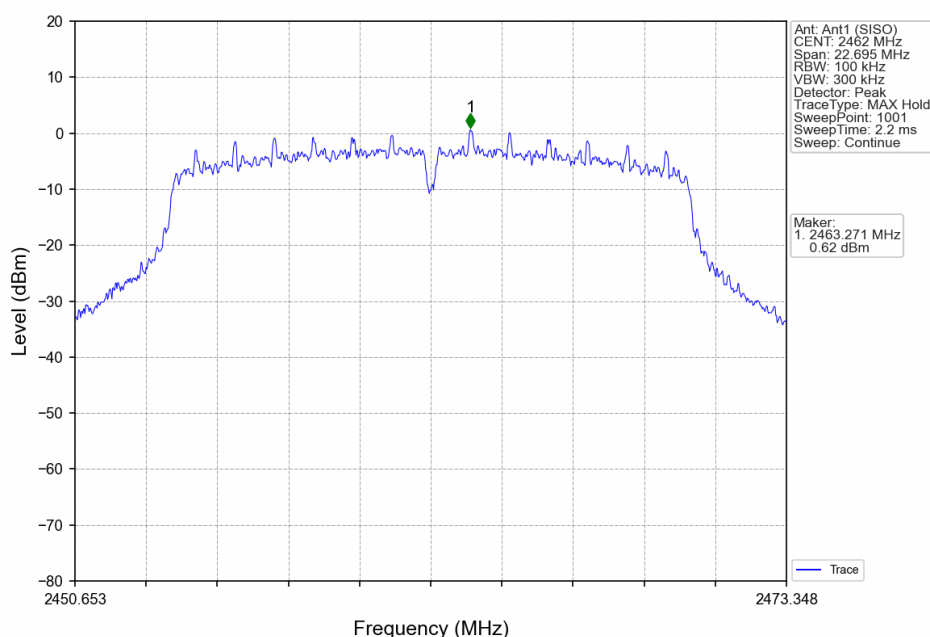
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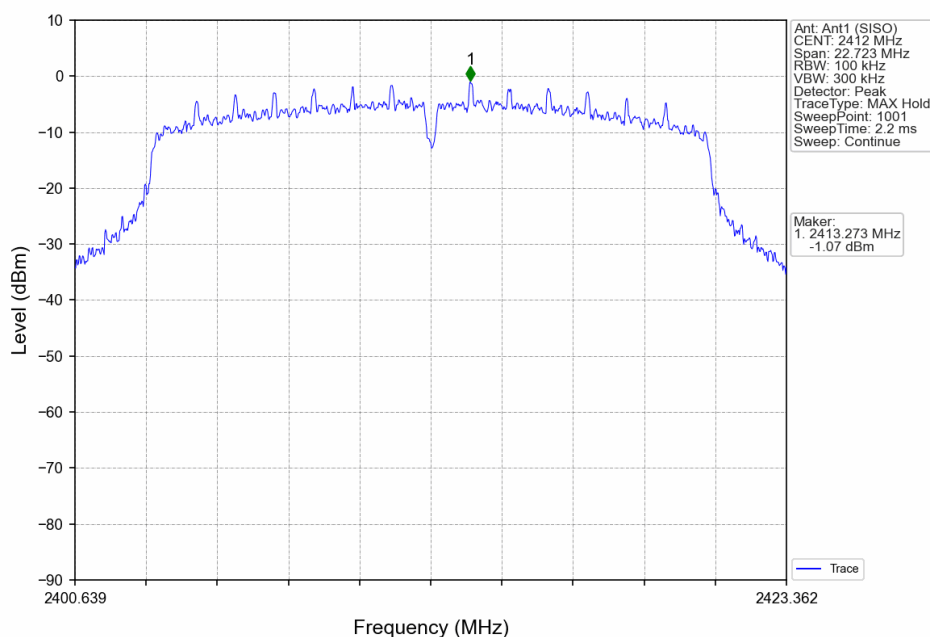
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



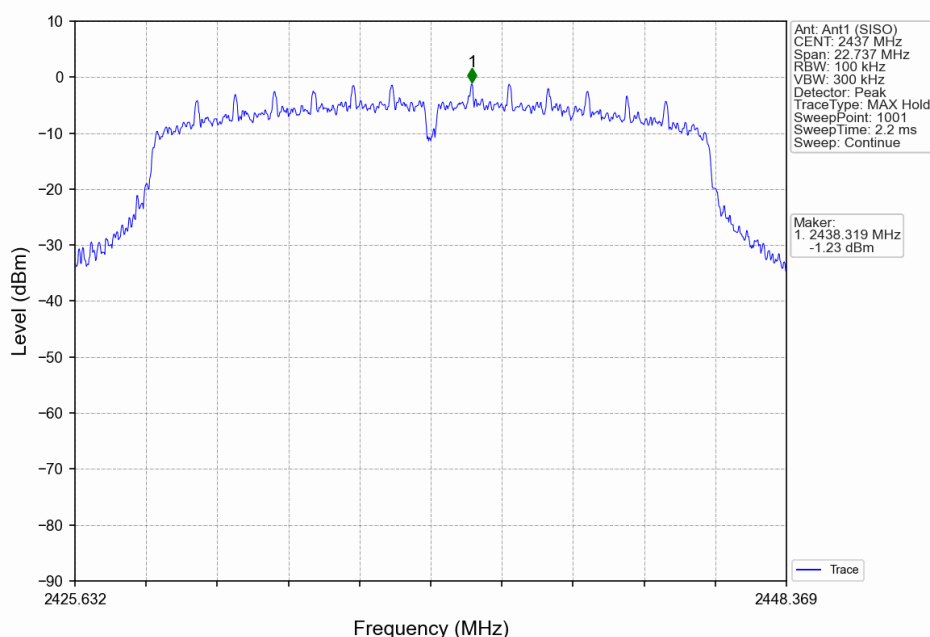
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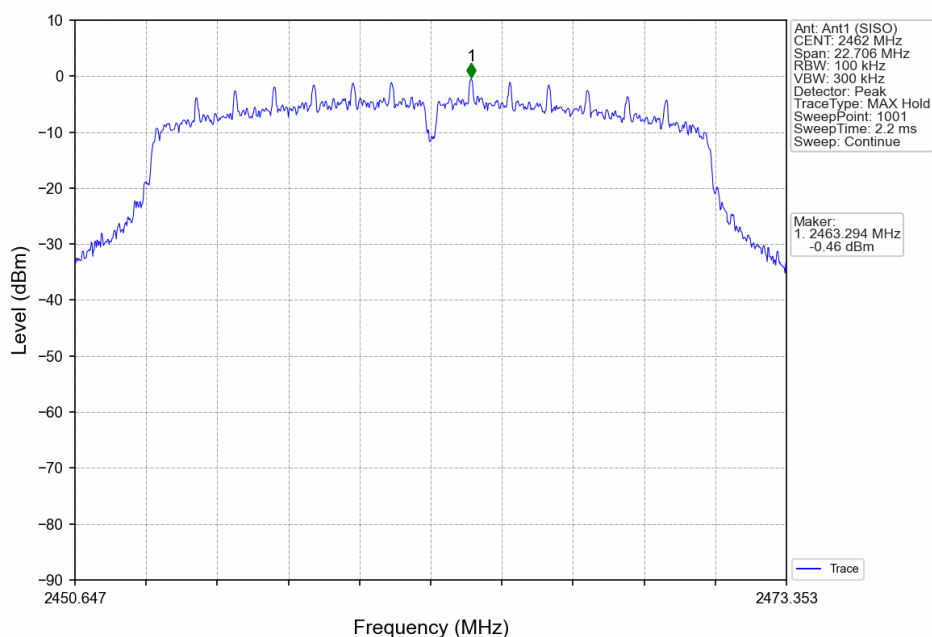
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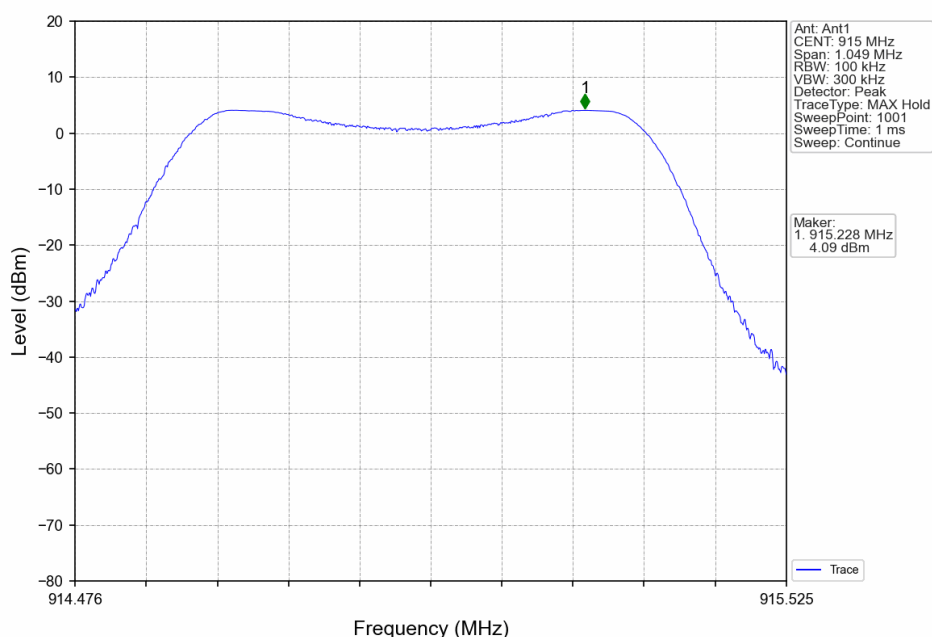
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

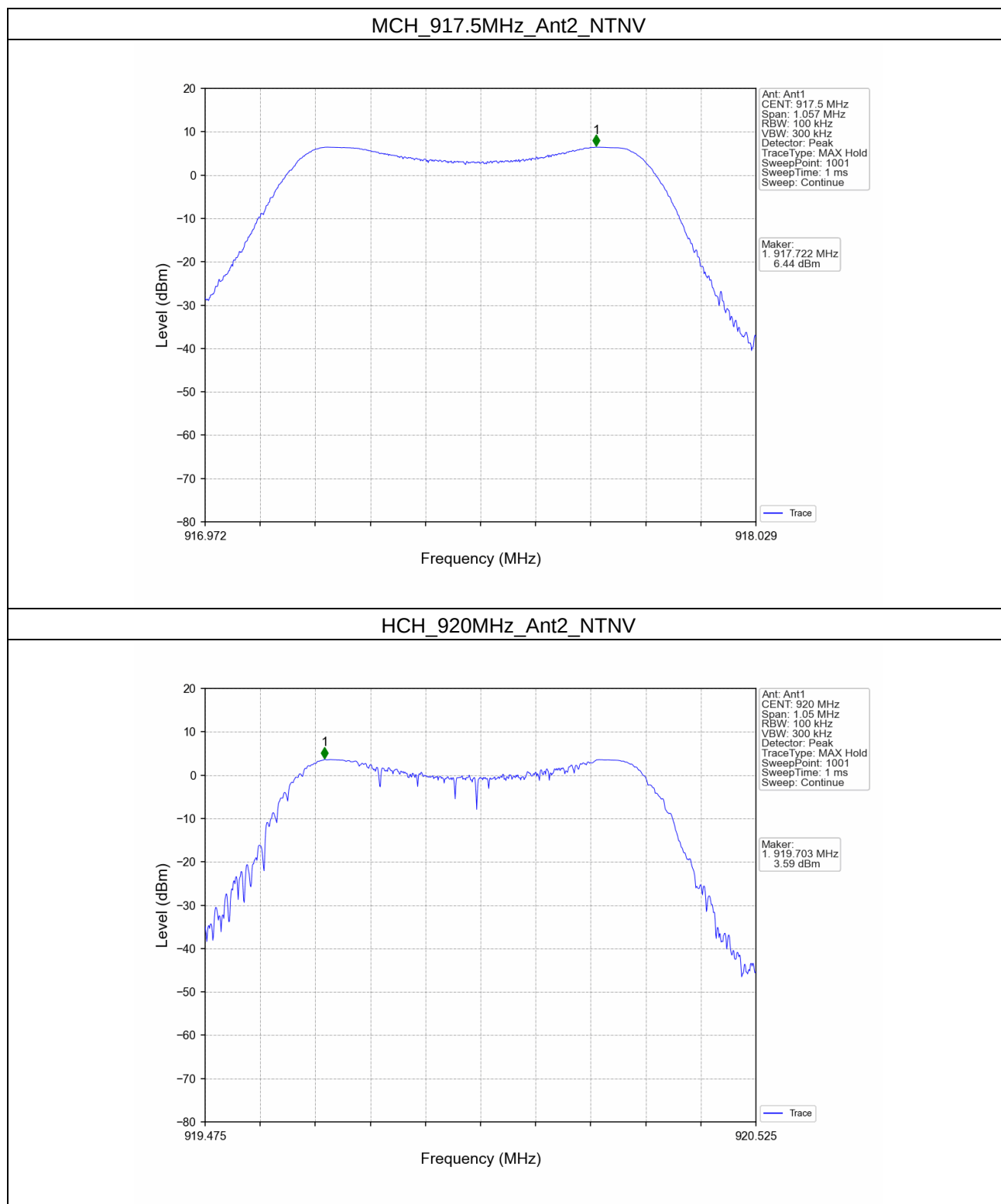


LCH_915MHz_Ant2_NTNV



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5.2 CSE and Band Edges

5.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	7.33	-12.67	Pass
		2437	1	7.33	-12.67	Pass
		2462	1	7.33	-12.67	Pass
802.11g	SISO	2412	1	0.62	-19.38	Pass
		2437	1	0.62	-19.38	Pass
		2462	1	0.62	-19.38	Pass
802.11n (HT20)	SISO	2412	1	-0.46	-20.46	Pass
		2437	1	-0.46	-20.46	Pass
		2462	1	-0.46	-20.46	Pass

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
900MHz Tech	SISO	915	2	6.44	-13.56	Pass
		917.5	2	6.44	-13.56	Pass
		920	2	6.44	-13.56	Pass

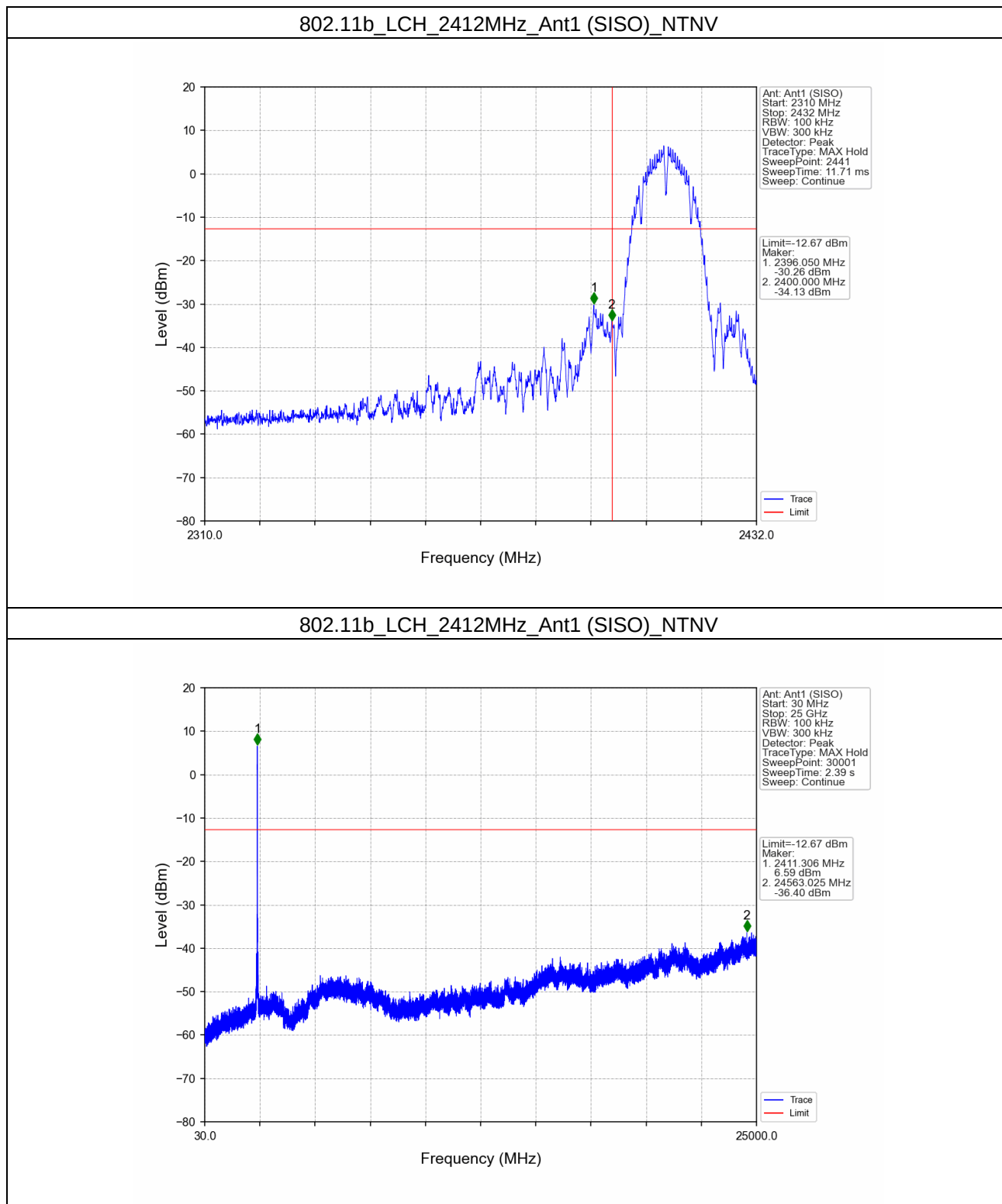
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.



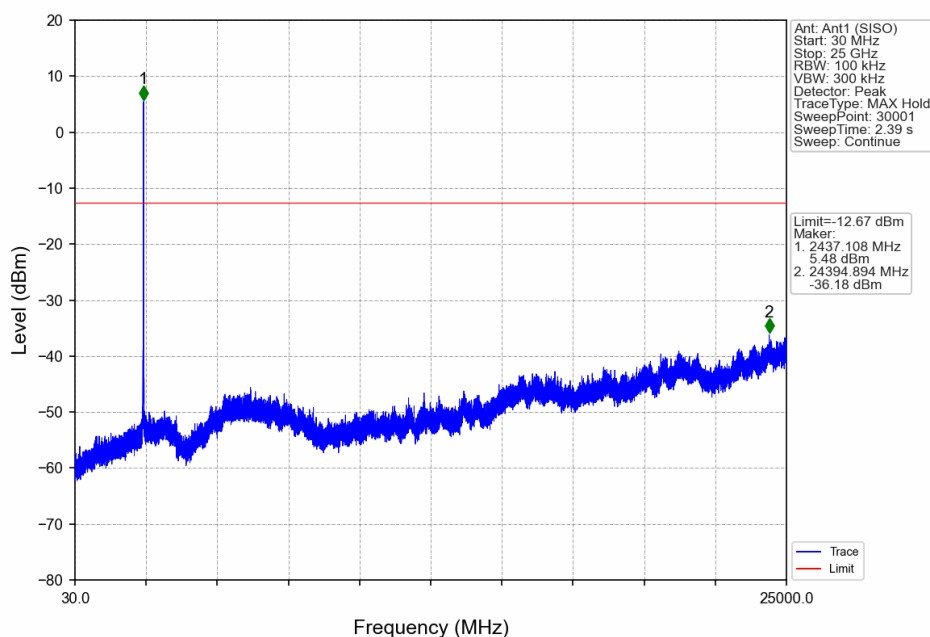
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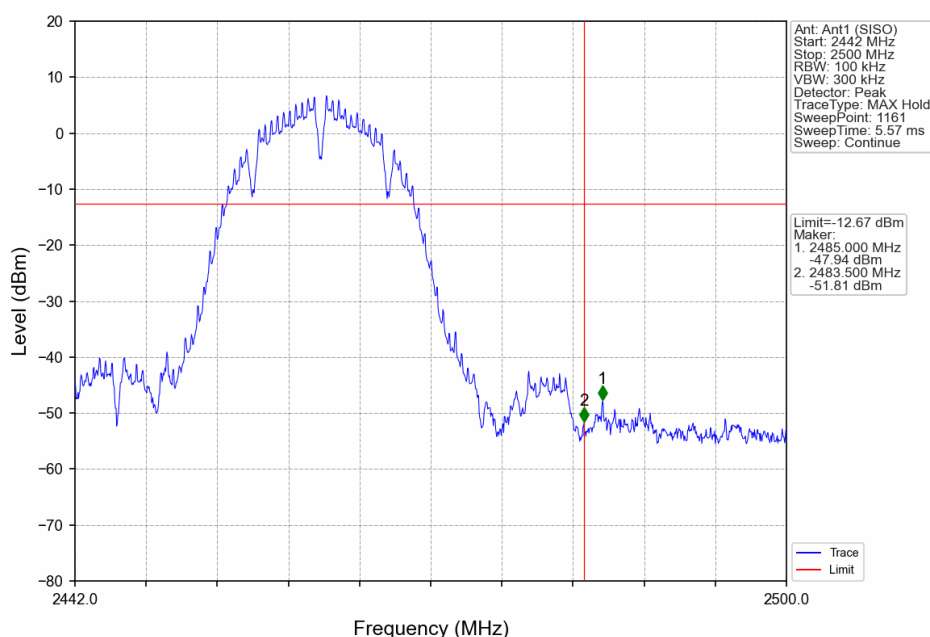
5.2.2 Test Graph



802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



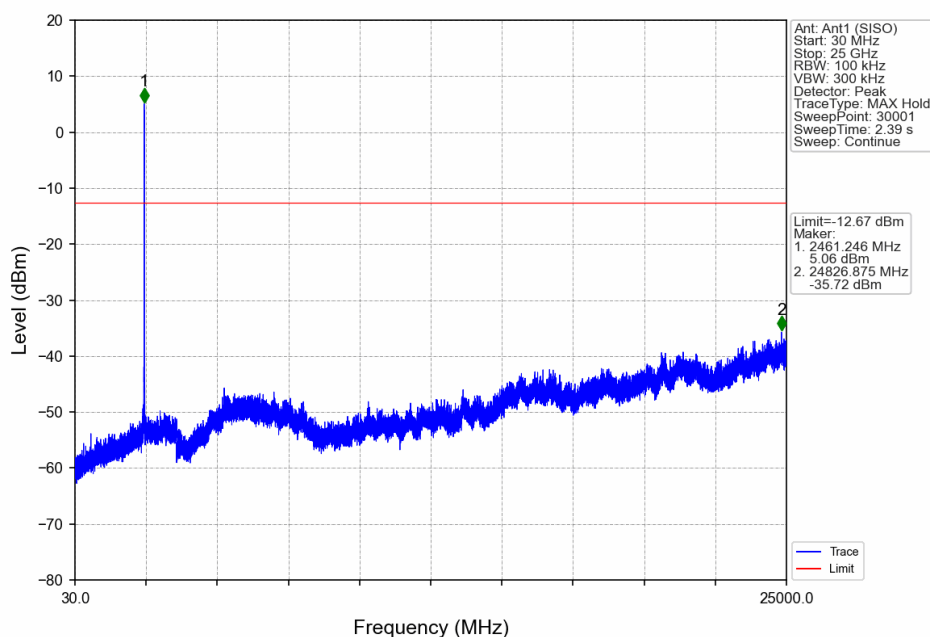
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



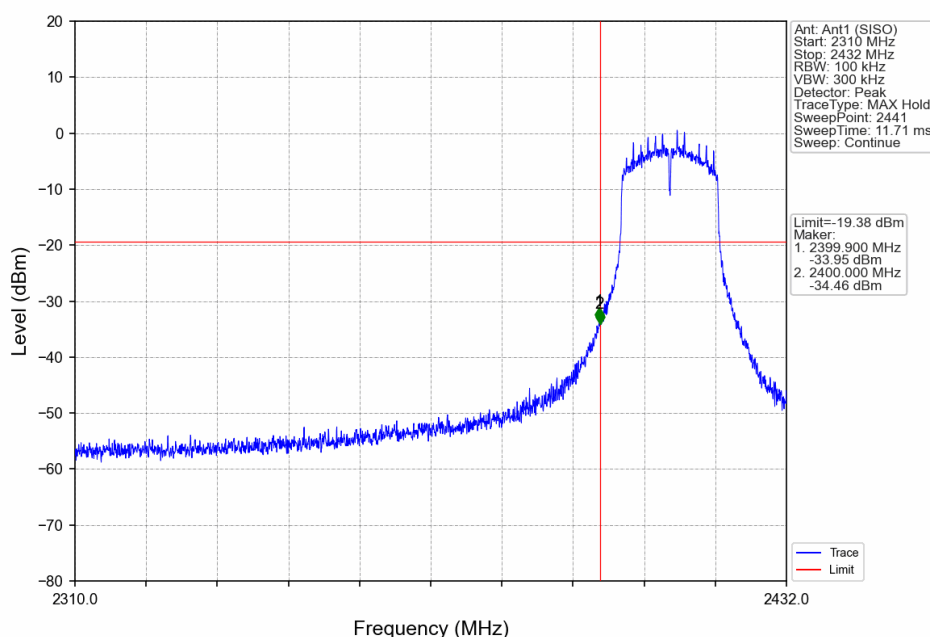
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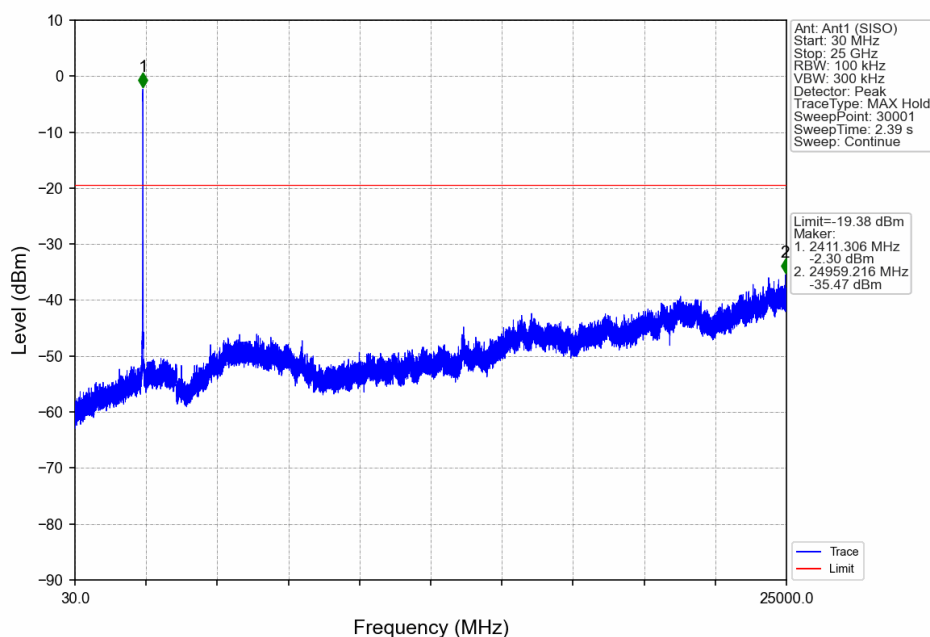
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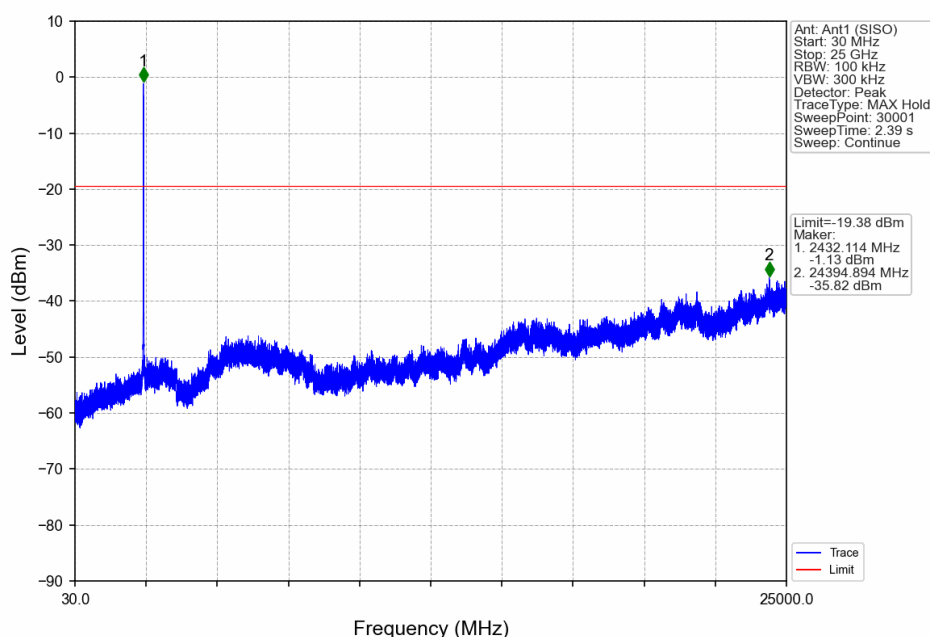
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



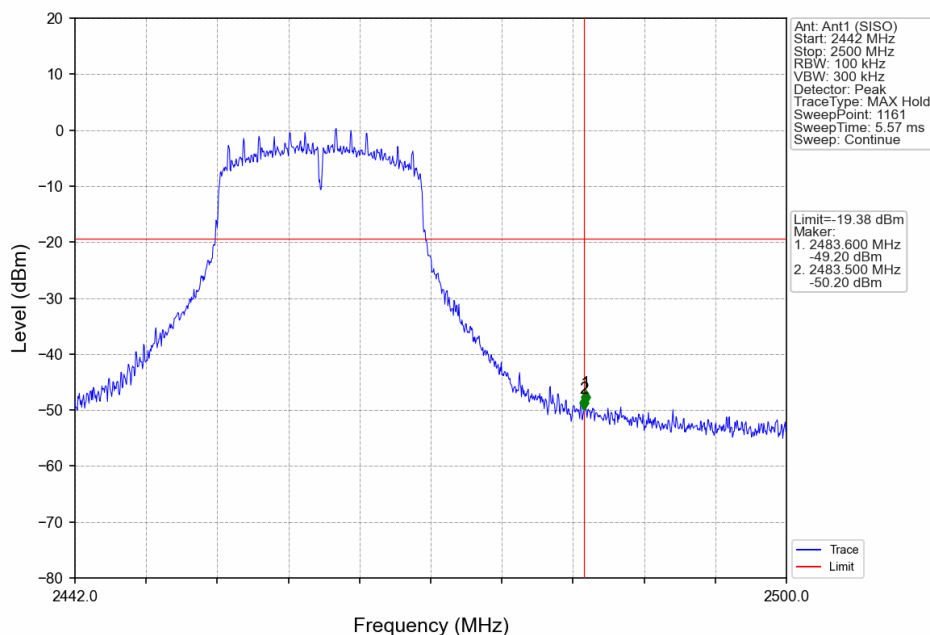
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



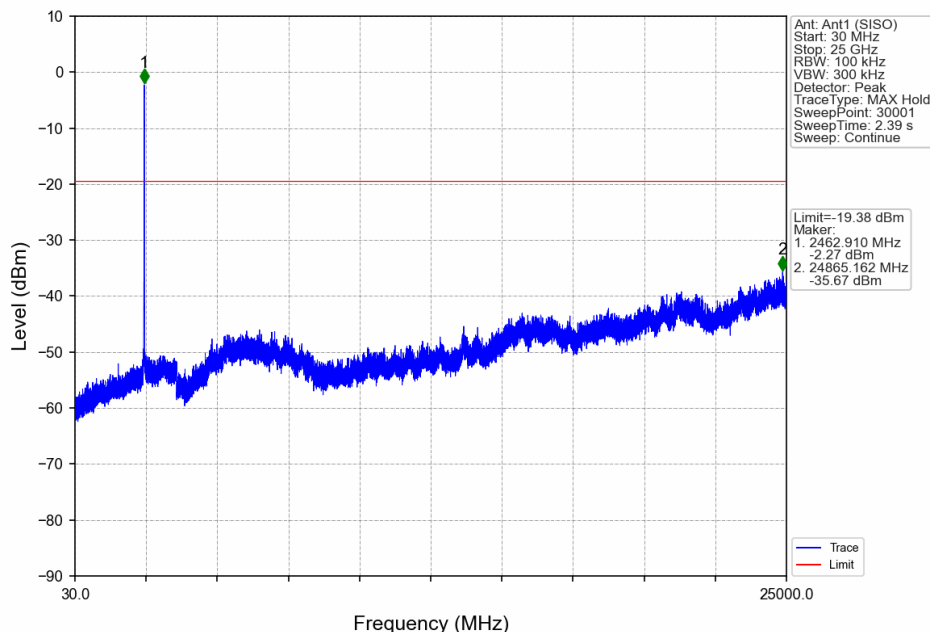
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



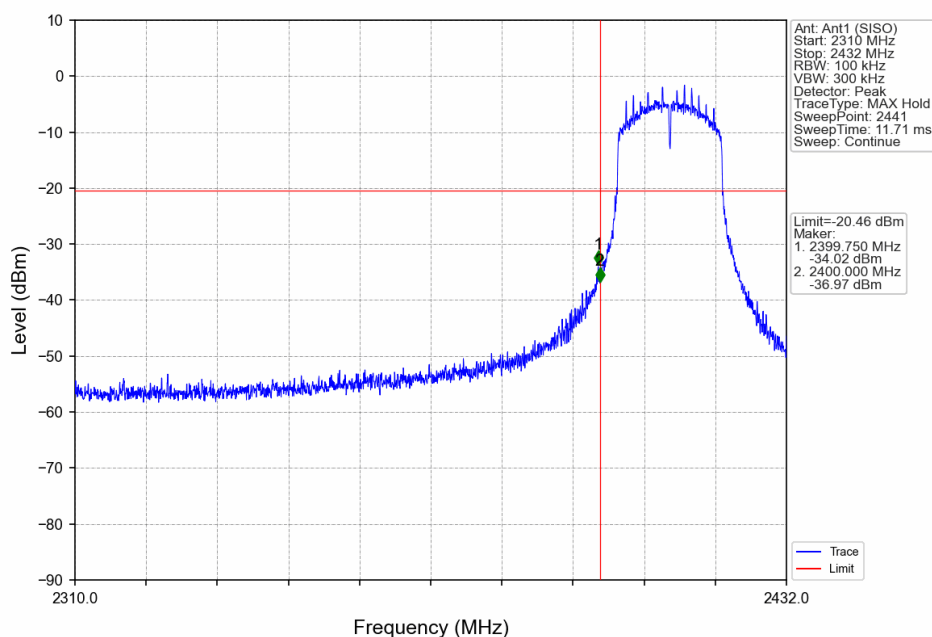
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



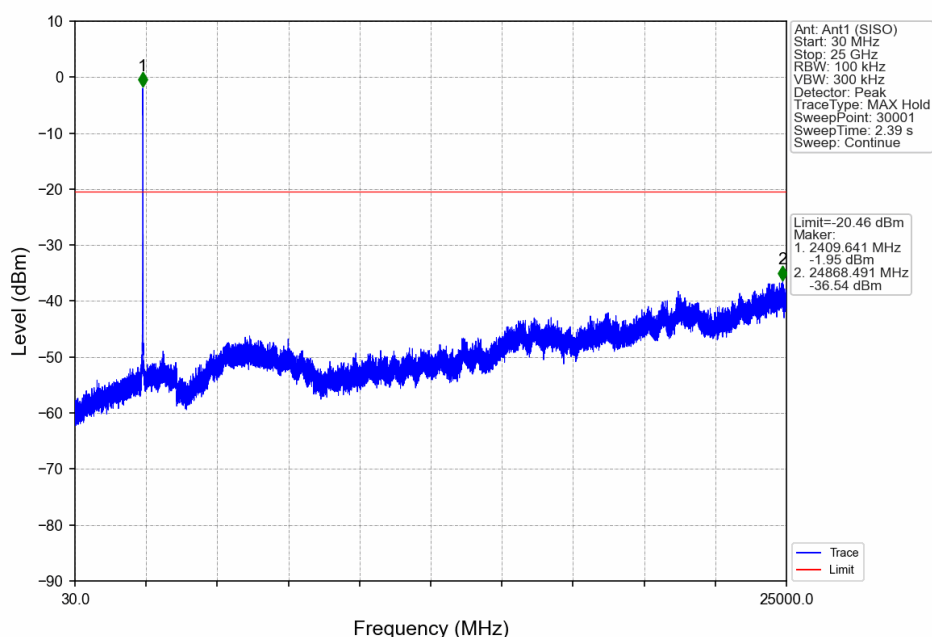
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



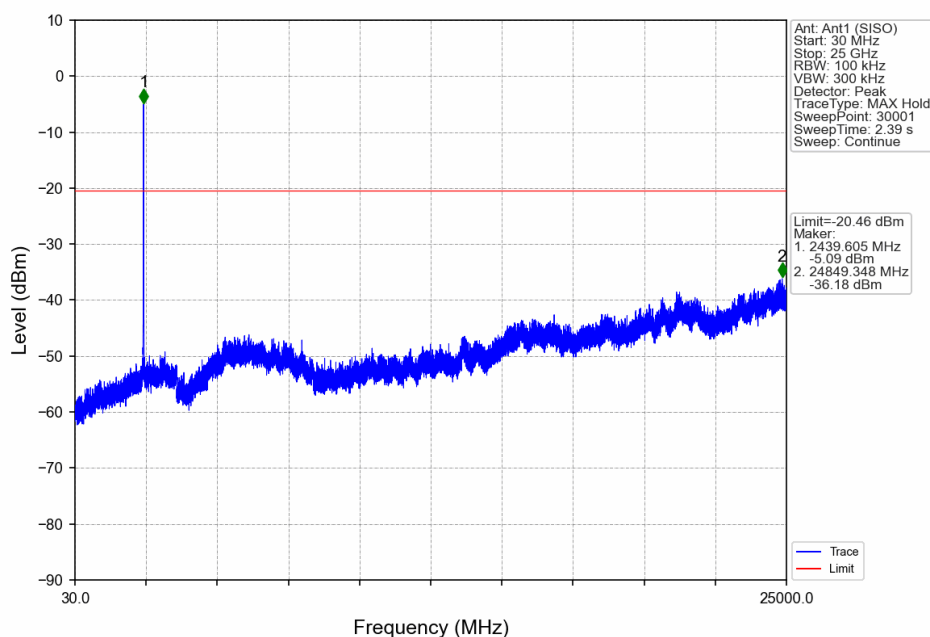
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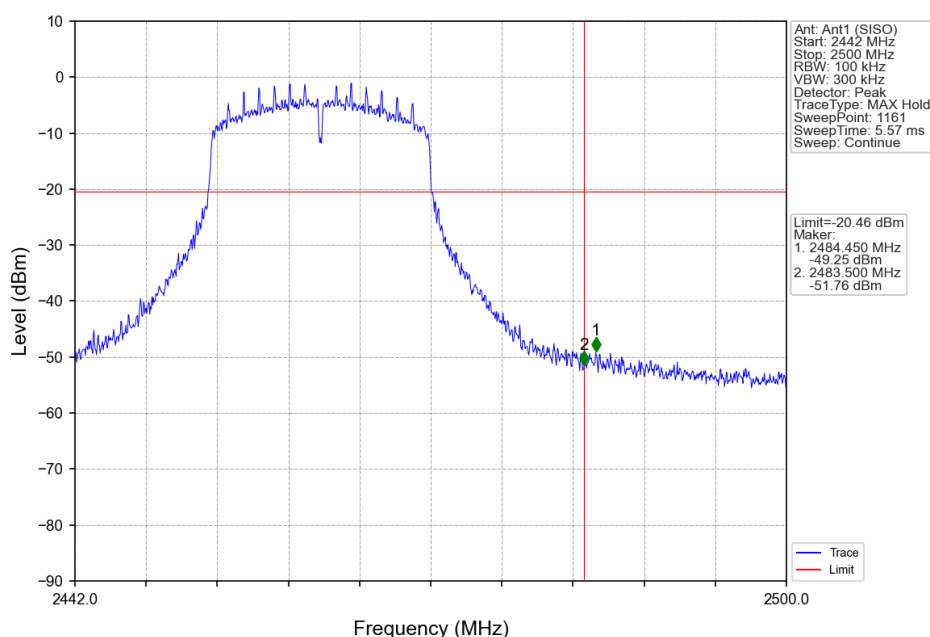
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802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



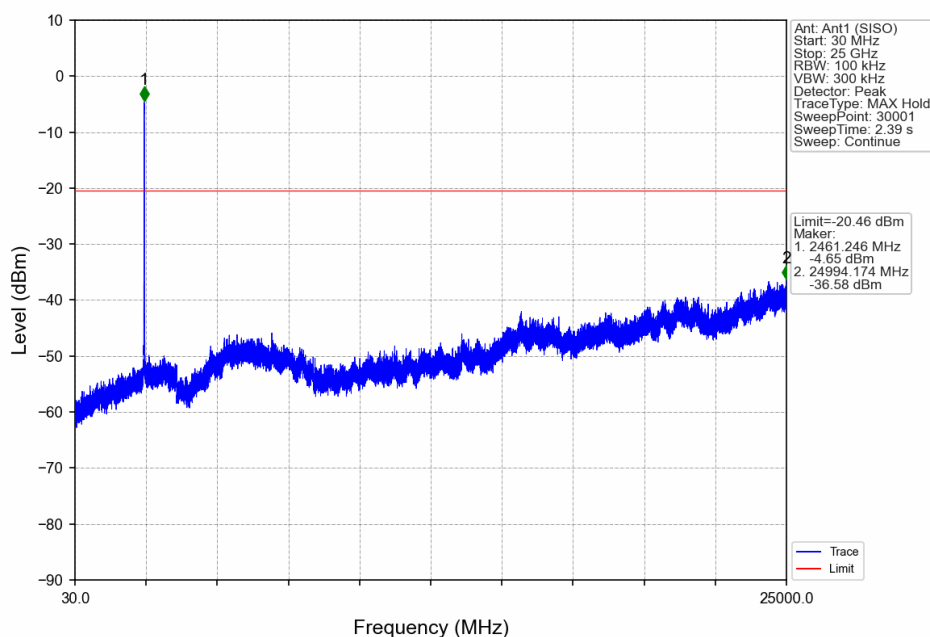
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



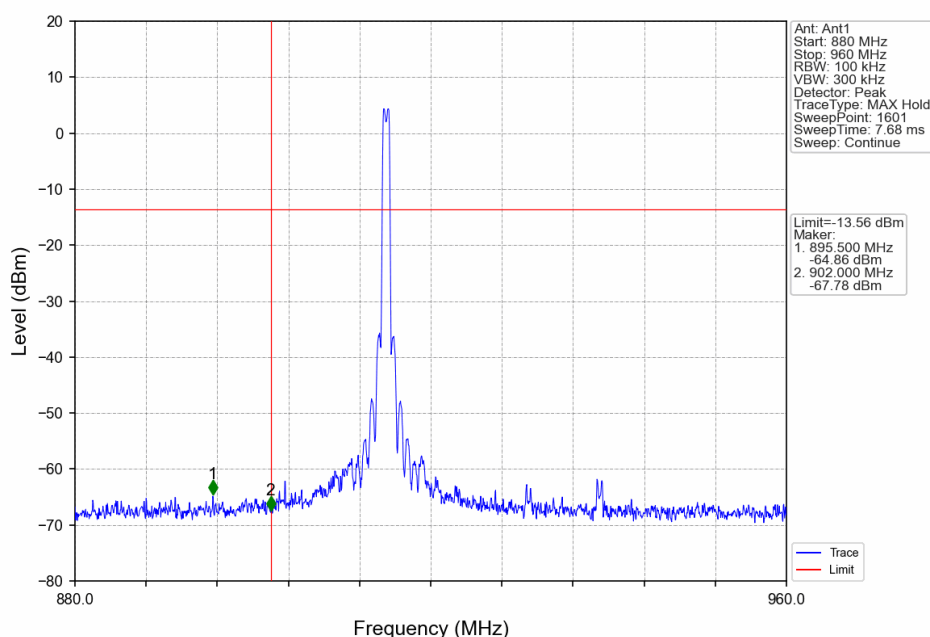
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802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



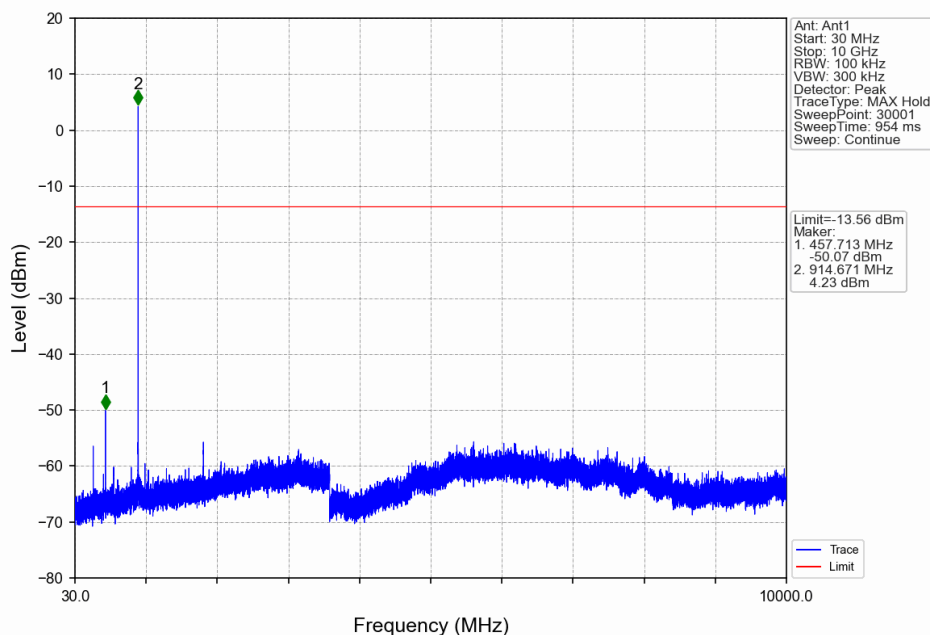
LCH_915MHz_Ant2_NTNV



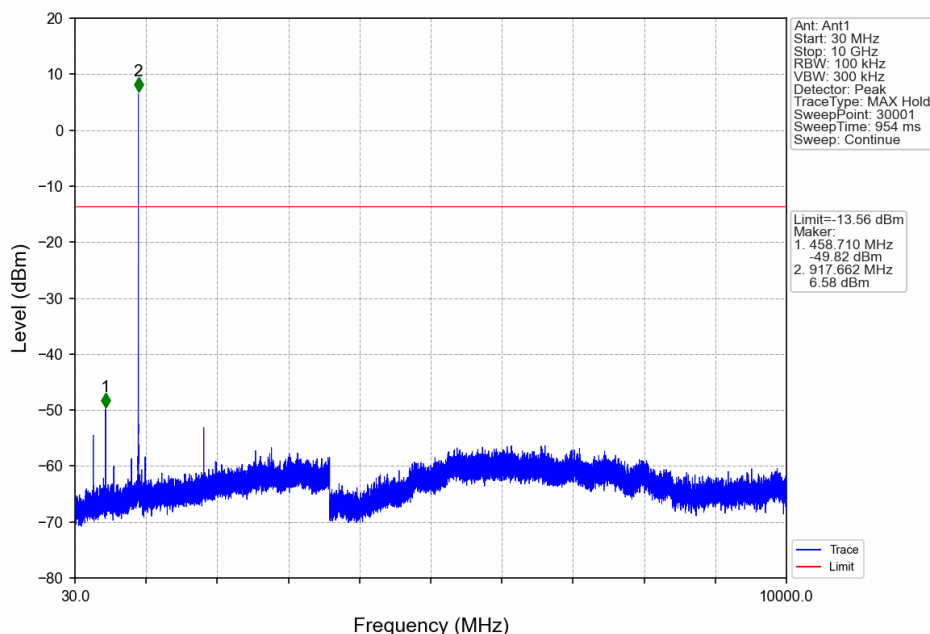
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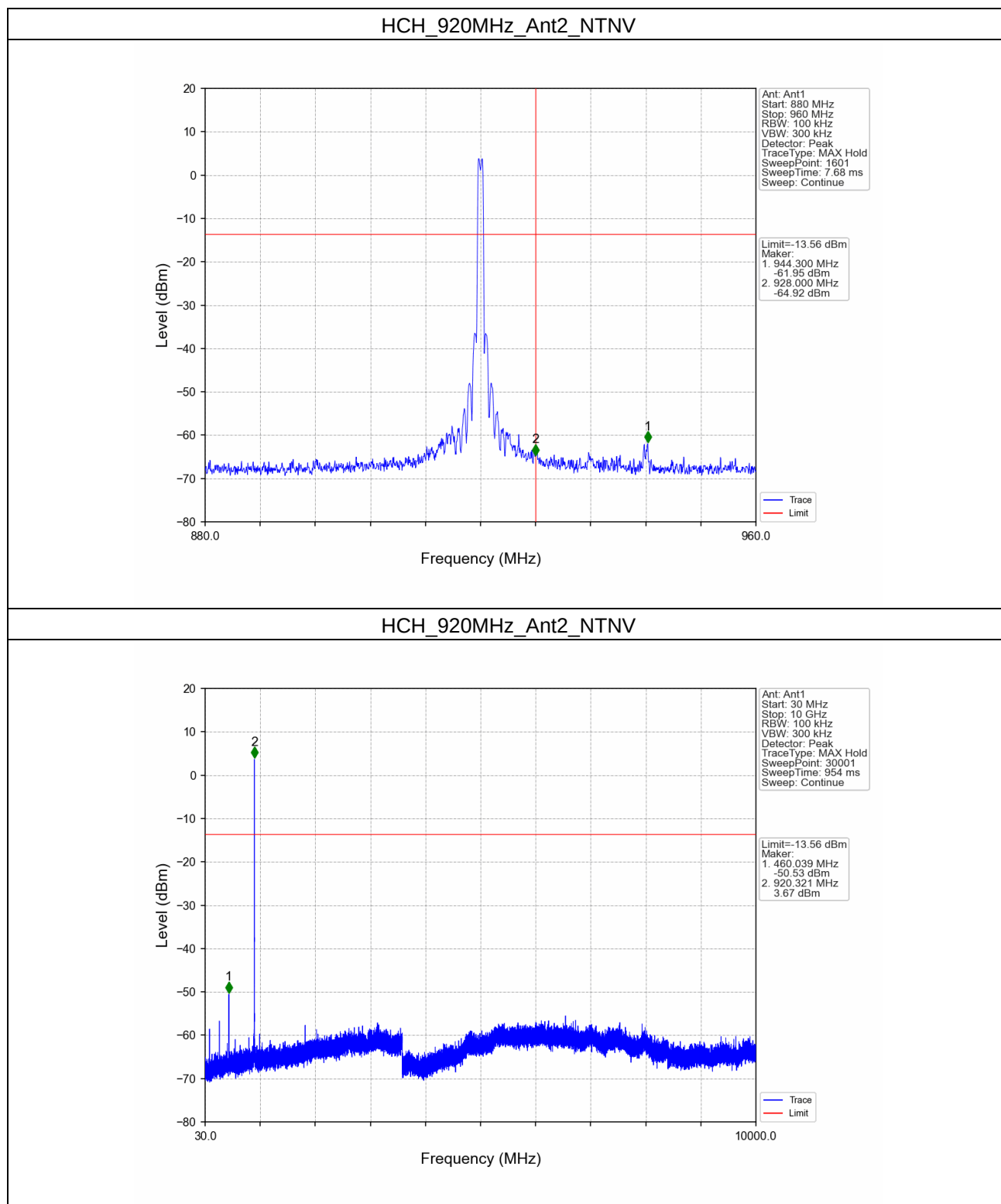
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LCH_915MHz_Ant2_NTNV



MCH_917.5MHz_Ant2_NTNV





- End of the Report -