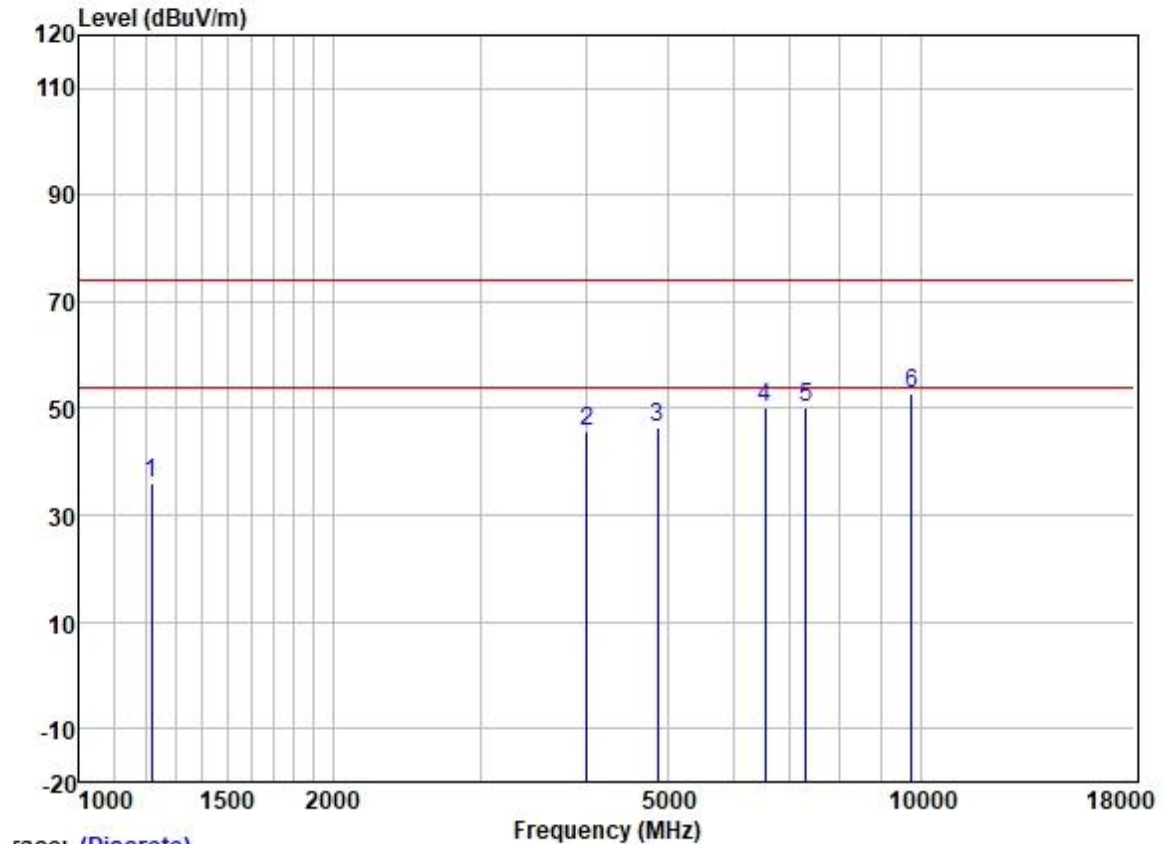


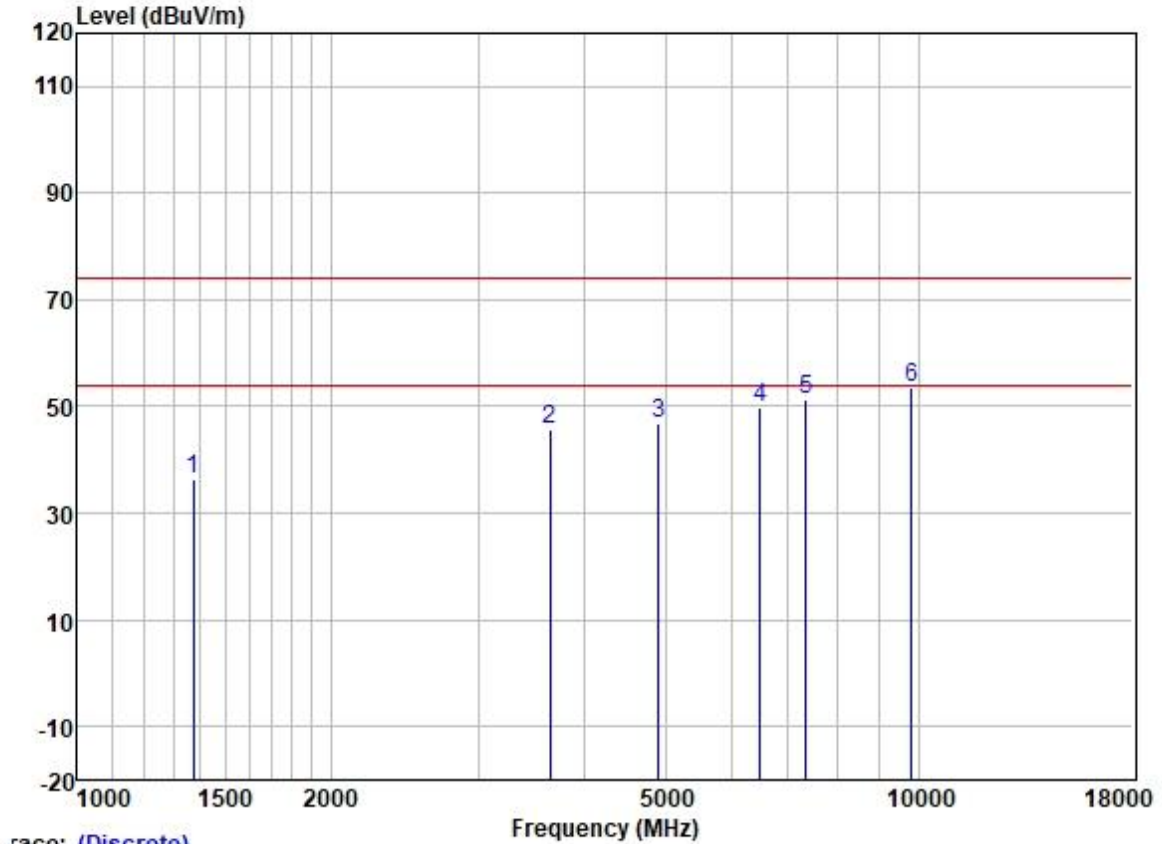
Test Mode: 01; Polarity: Vertical; Modulation: 802.11ax; Bandwidth: 40MHz; Channel: middle



Trace: (Discrete)

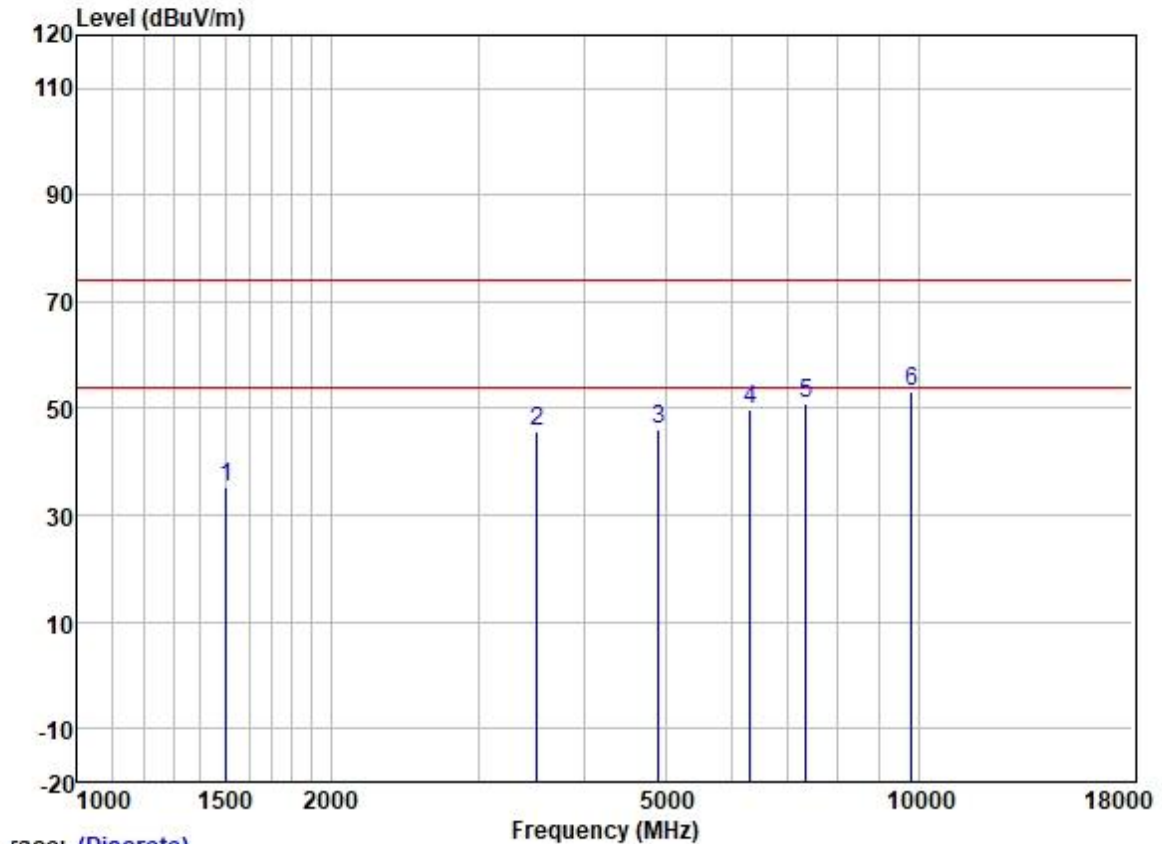
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1217.666	47.27	24.79	2.32	38.37	36.01	74.00	-37.99	VERTICAL	Peak
2	4016.539	48.18	29.82	4.60	36.80	45.80	74.00	-28.20	VERTICAL	Peak
3	4874.000	46.13	31.54	5.50	36.84	46.33	74.00	-27.67	VERTICAL	Peak
4	6532.571	47.23	34.03	5.84	37.02	50.08	74.00	-23.92	VERTICAL	Peak
5	7311.000	45.73	35.93	6.11	37.42	50.35	74.00	-23.65	VERTICAL	Peak
6	9748.000	44.85	38.50	7.02	37.41	52.96	74.00	-21.04	VERTICAL	Peak

Test Mode: 01; Polarity: Horizontal; Modulation:802.11ax; Bandwidth:40MHz; Channel:High



	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
		Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1373.413	46.75	25.35	2.60	38.25	36.45	74.00	-37.55	HORIZONTAL	Peak
2	3647.573	48.77	29.13	4.52	36.89	45.53	74.00	-28.47	HORIZONTAL	Peak
3	4904.000	46.68	31.58	5.55	36.84	46.97	74.00	-27.03	HORIZONTAL	Peak
4	6476.561	47.05	33.92	5.86	37.00	49.83	74.00	-24.17	HORIZONTAL	Peak
5	7356.000	46.47	36.06	6.15	37.44	51.24	74.00	-22.76	HORIZONTAL	Peak
6	9808.000	45.36	38.56	7.00	37.41	53.51	74.00	-20.49	HORIZONTAL	Peak

Test Mode: 01; Polarity: Vertical; Modulation:802.11ax; Bandwidth:40MHz; Channel:High



Trace: (Discrete)

	Freq	Read	Antenna	Cable	Preamp	Limit	Over		
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB		
1	1503.603	45.17	25.50	2.80	38.10	35.37	74.00	-38.63	VERTICAL Peak
2	3517.133	49.38	28.92	4.35	36.93	45.72	74.00	-28.28	VERTICAL Peak
3	4904.000	45.81	31.58	5.55	36.84	46.10	74.00	-27.90	VERTICAL Peak
4	6308.357	47.29	33.44	5.97	36.96	49.74	74.00	-24.26	VERTICAL Peak
5	7356.000	46.29	36.06	6.15	37.44	51.06	74.00	-22.94	VERTICAL Peak
6	9808.000	44.88	38.56	7.00	37.41	53.03	74.00	-20.97	VERTICAL Peak

8 Test Setup Photo

Refer to test setup photos for GZCR2108020804AT

9 EUT Constructional Details (EUT Photos)

Refer to external and internal photos for GZCR2108020804AT

10 Appendix

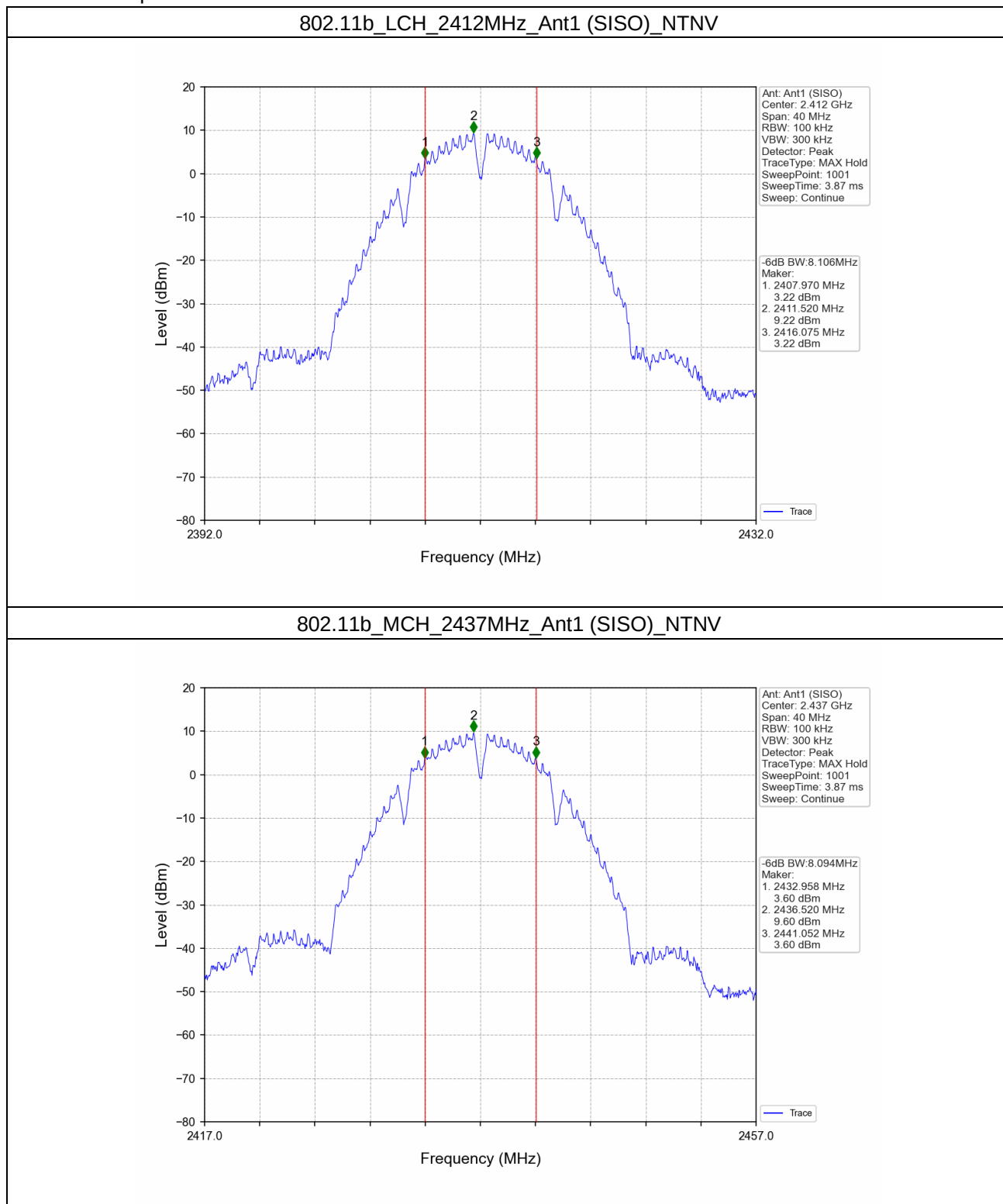
1. Bandwidth

1.1 6dB BW

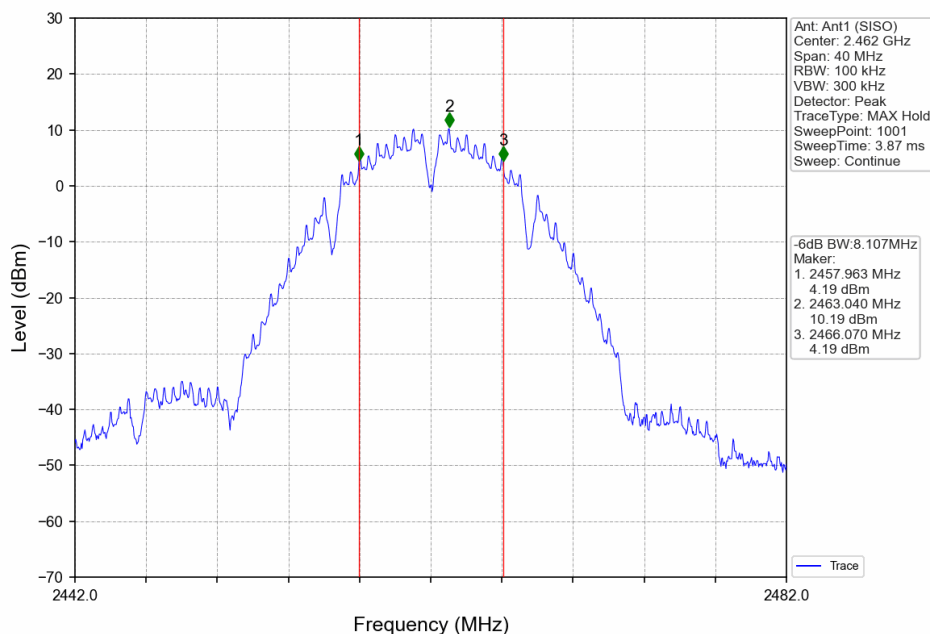
1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Ant	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	8.11	≥ 0.5	Pass
		2437	/	/	1	8.09	≥ 0.5	Pass
		2462	/	/	1	8.11	≥ 0.5	Pass
802.11g	SISO	2412	/	/	1	15.75	≥ 0.5	Pass
		2437	/	/	1	16.06	≥ 0.5	Pass
		2462	/	/	1	16.08	≥ 0.5	Pass
802.11n (HT20)	MIMO	2412	/	/	1	15.988	≥ 0.5	Pass
		2437	/	/	1	16.952	≥ 0.5	Pass
		2462	/	/	1	17.162	≥ 0.5	Pass
802.11n (HT40)	MIMO	2422	/	/	1	35.030	≥ 0.5	Pass
		2437	/	/	1	35.742	≥ 0.5	Pass
		2452	/	/	1	35.760	≥ 0.5	Pass
802.11ax (HEW20)	MIMO	2412	RU242	Left	1	18.021	≥ 0.5	Pass
		2437	RU242	Left	1	18.615	≥ 0.5	Pass
		2462	RU242	Left	1	18.846	≥ 0.5	Pass
802.11ax (HEW40)	MIMO	2422	RU484	Left	1	35.673	≥ 0.5	Pass
		2437	RU484	Left	1	36.430	≥ 0.5	Pass
		2452	RU484	Left	1	37.666	≥ 0.5	Pass

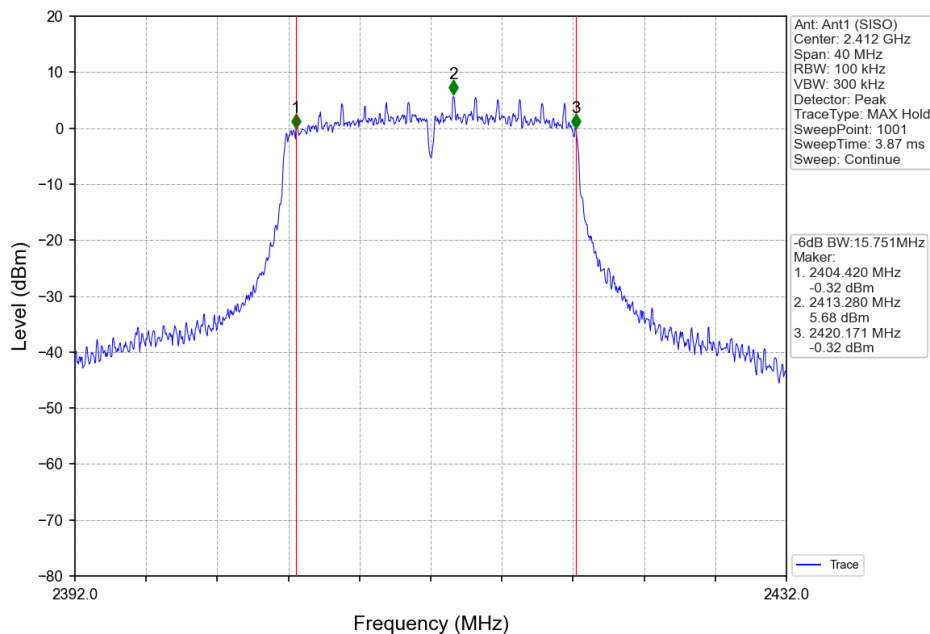
1.1.2 Test Graph



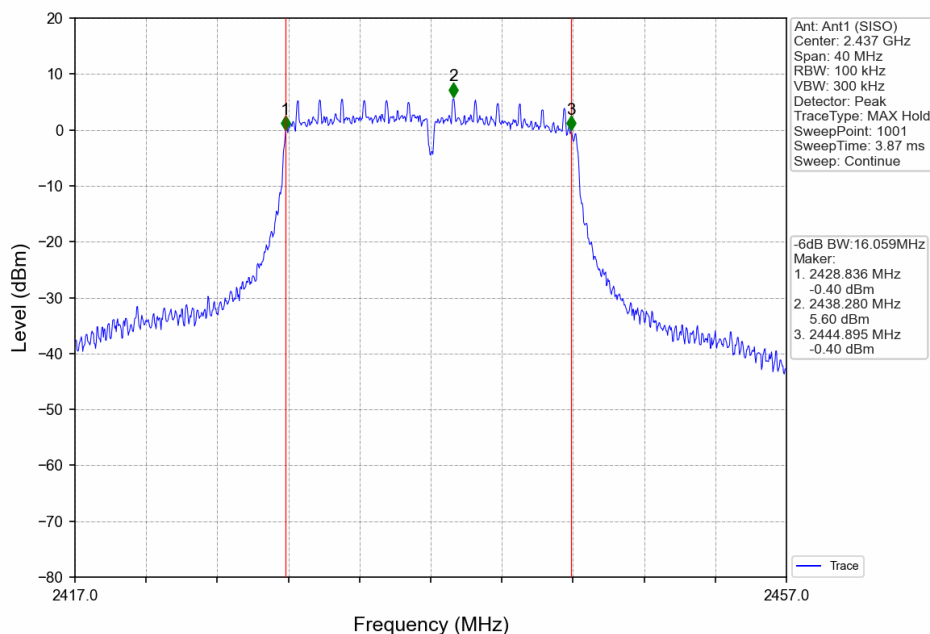
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



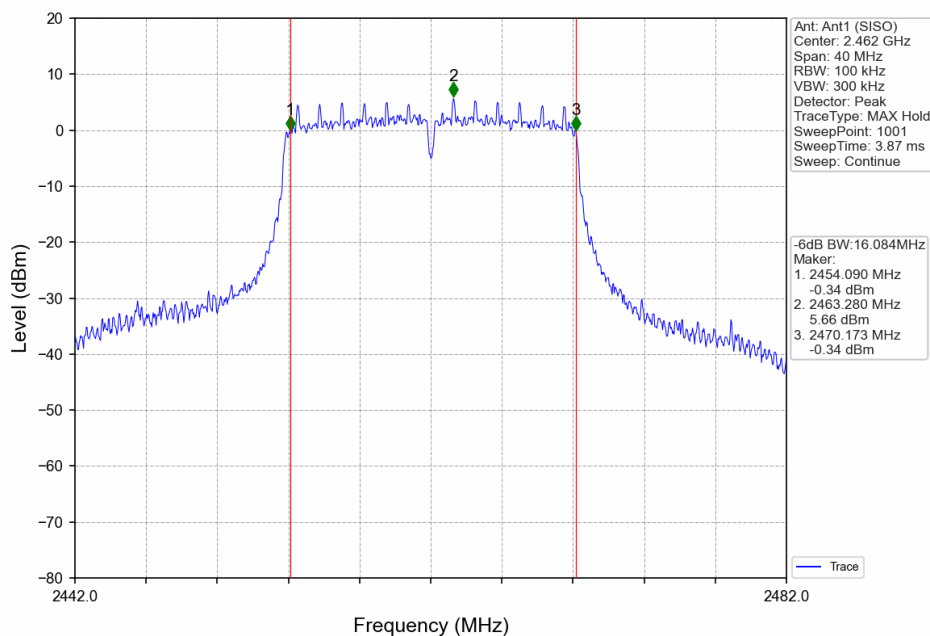
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



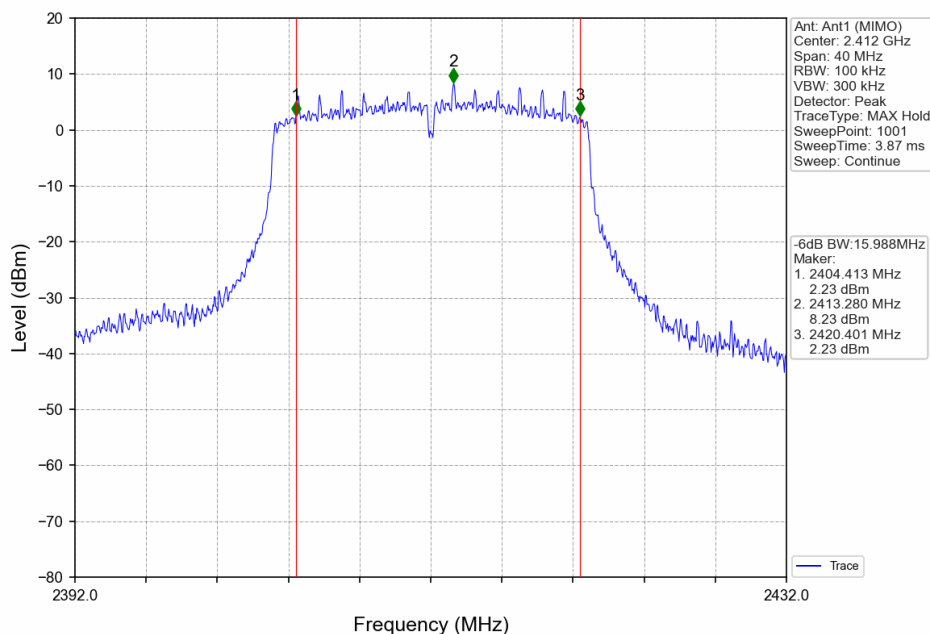
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



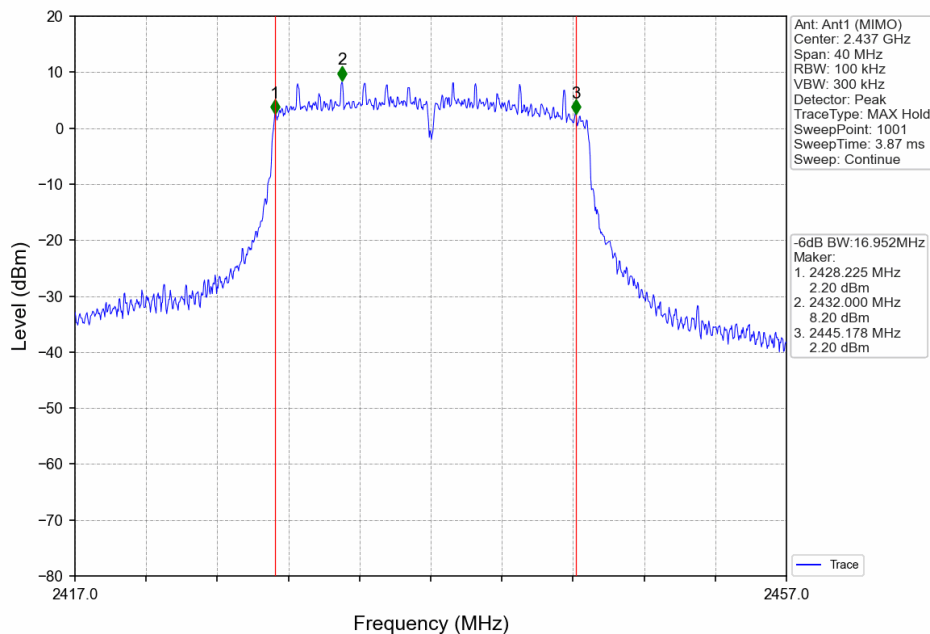
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



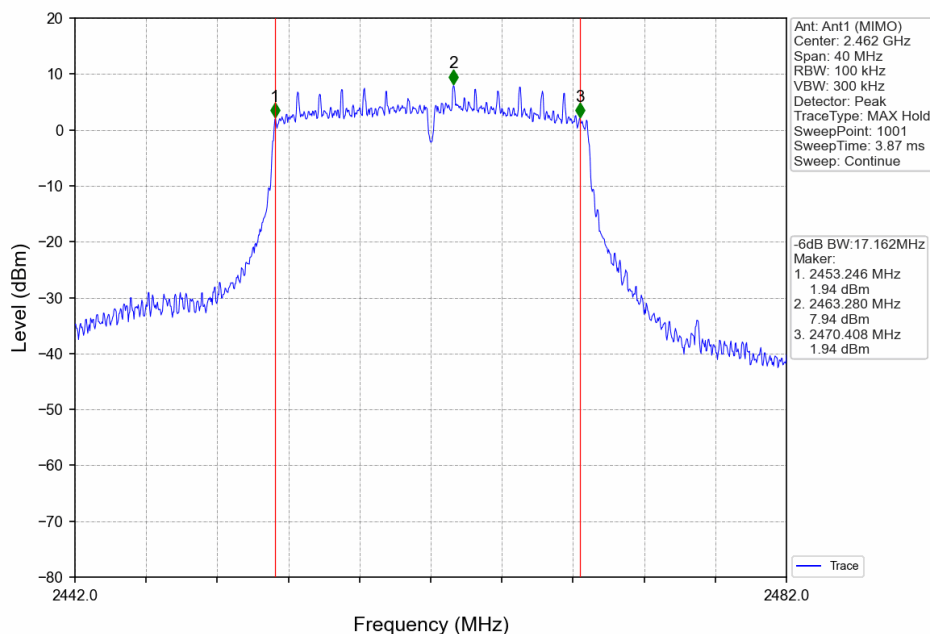
802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



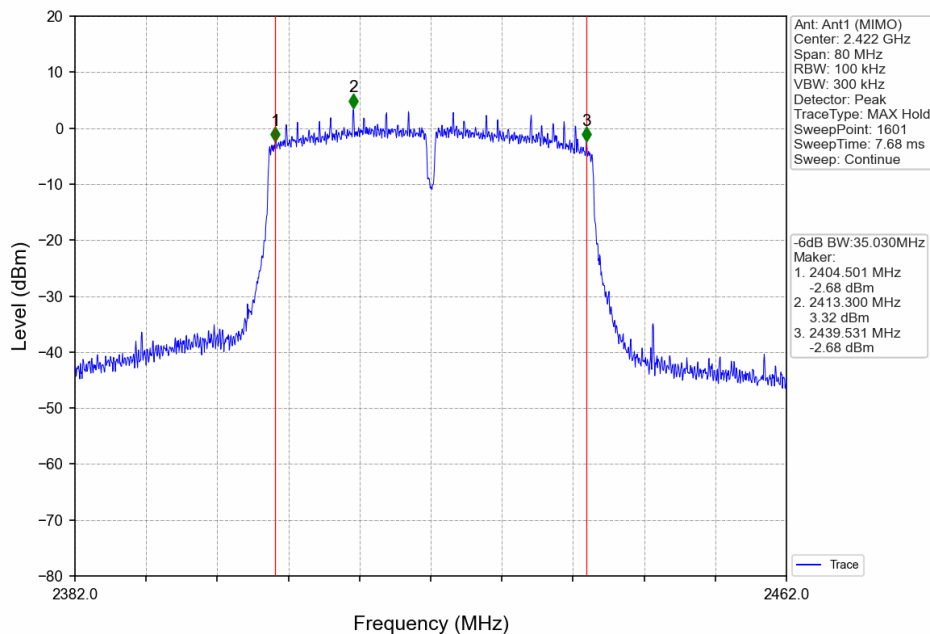
802.11n(HT20)_MCH_2437MHz_Ant1 (MIMO)_NTNV



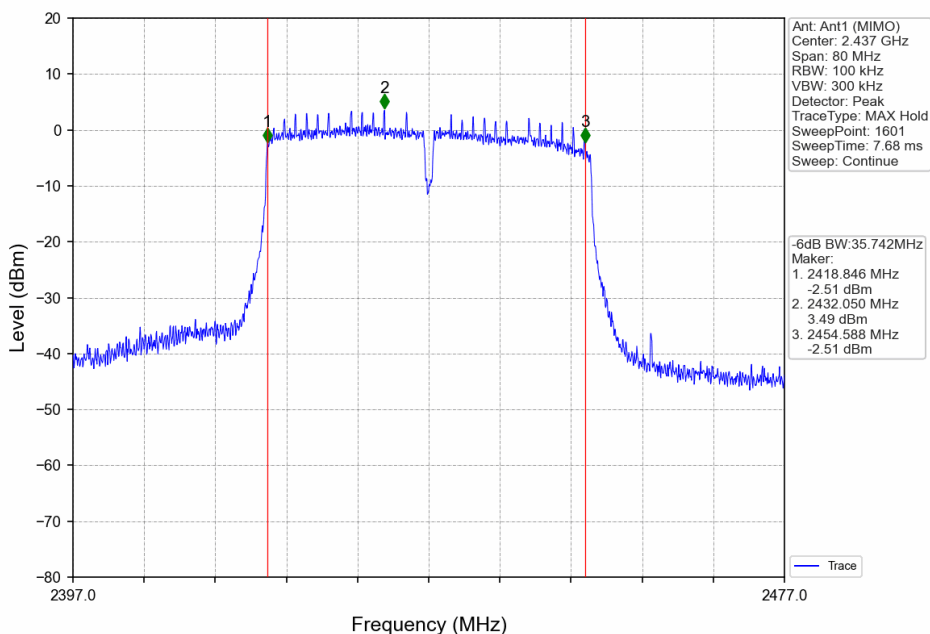
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



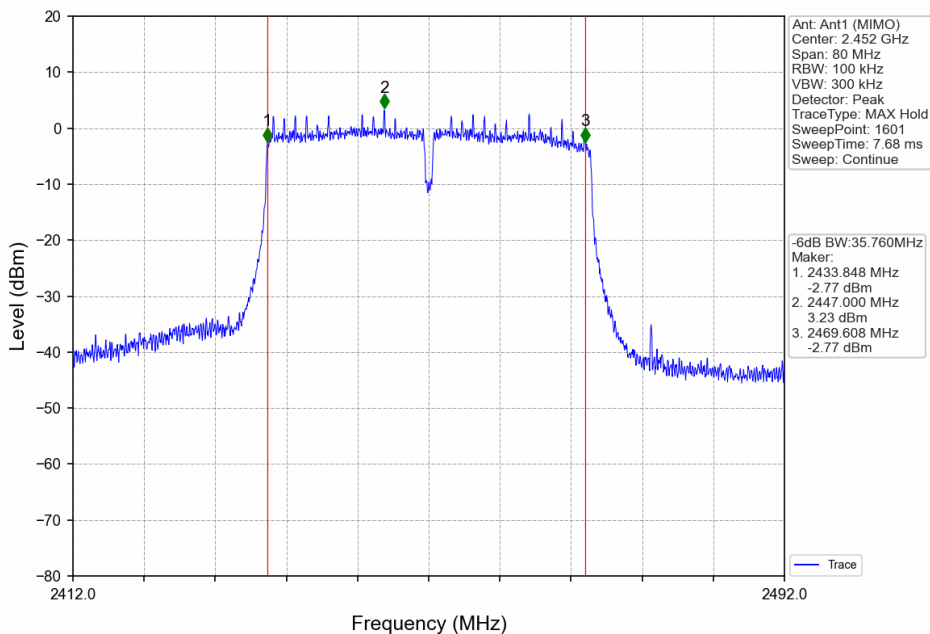
802.11n(HT40)_LCH_2422MHz_Ant1 (MIMO)_NTNV



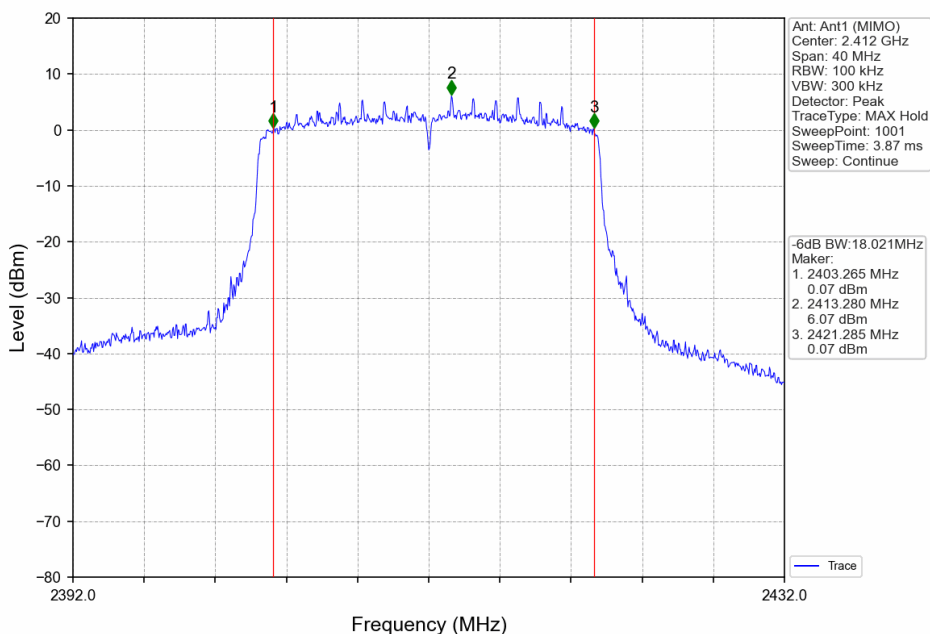
802.11n(HT40)_MCH_2437MHz_Ant1 (MIMO)_NTNV



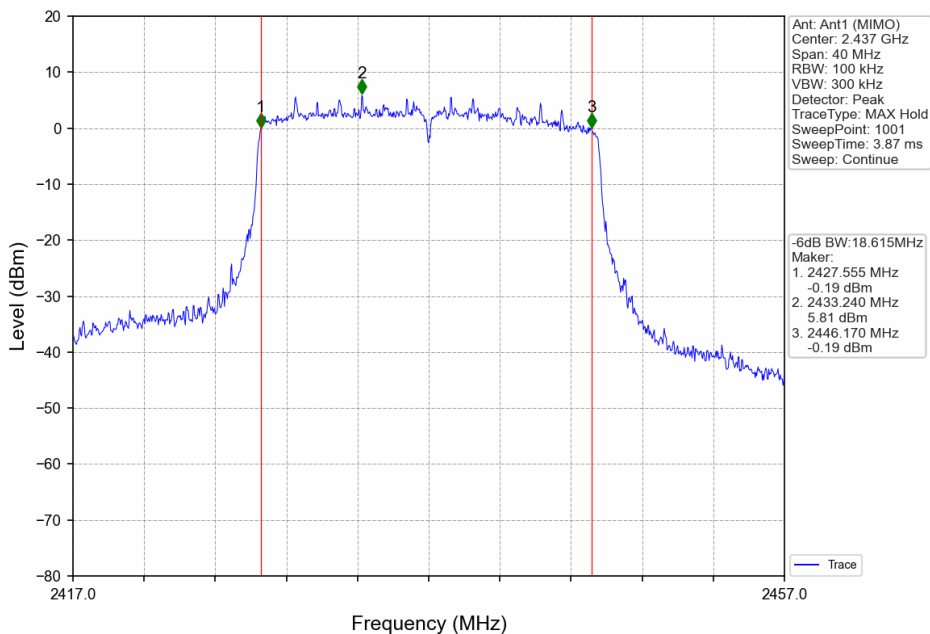
802.11n(HT40)_HCH_2452MHz_Ant1 (MIMO)_NTNV



802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant1 (MIMO)_NTNV



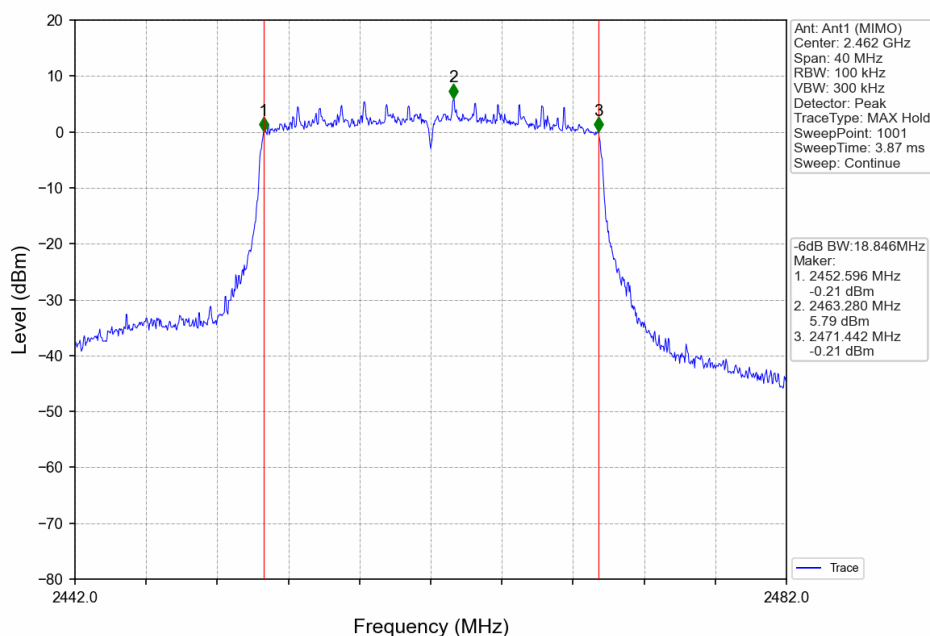
802.11ax(HEW20)_MCH_2437MHz_RU242_Left_Ant1 (MIMO)_NTNV



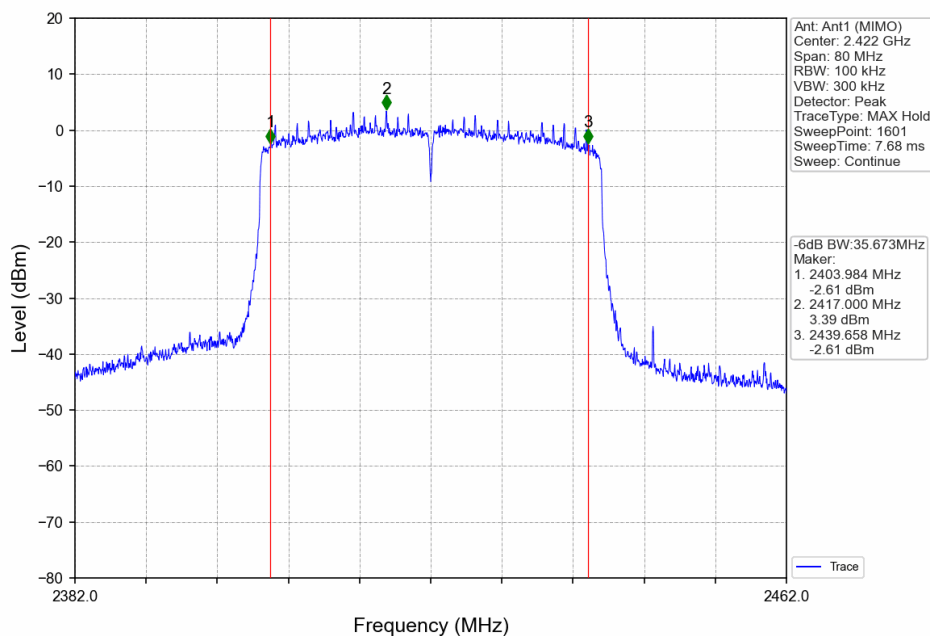
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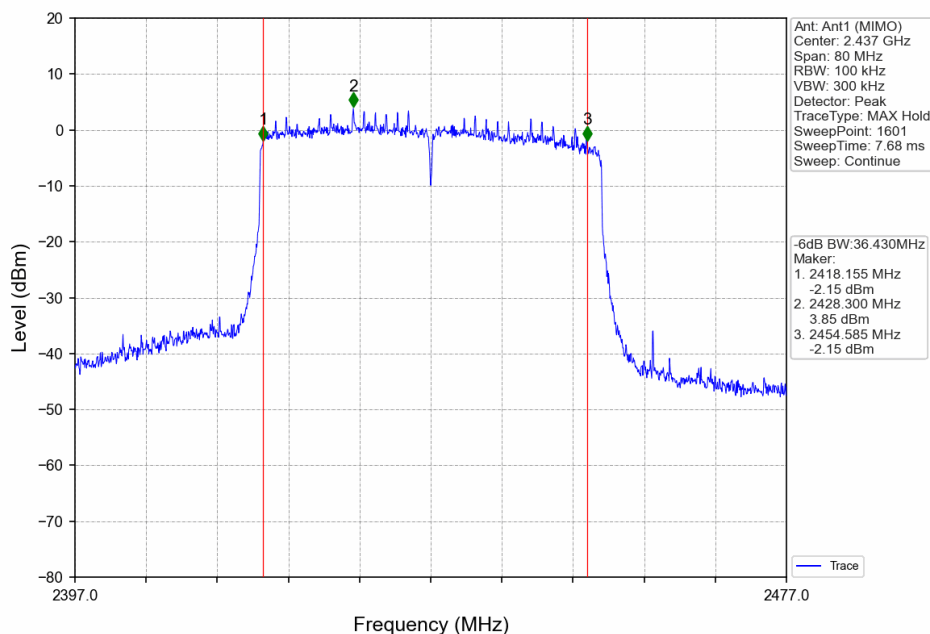
802.11ax(HEW20)_HCH_2462MHz_RU242_Left_Ant1 (MIMO)_NTNV



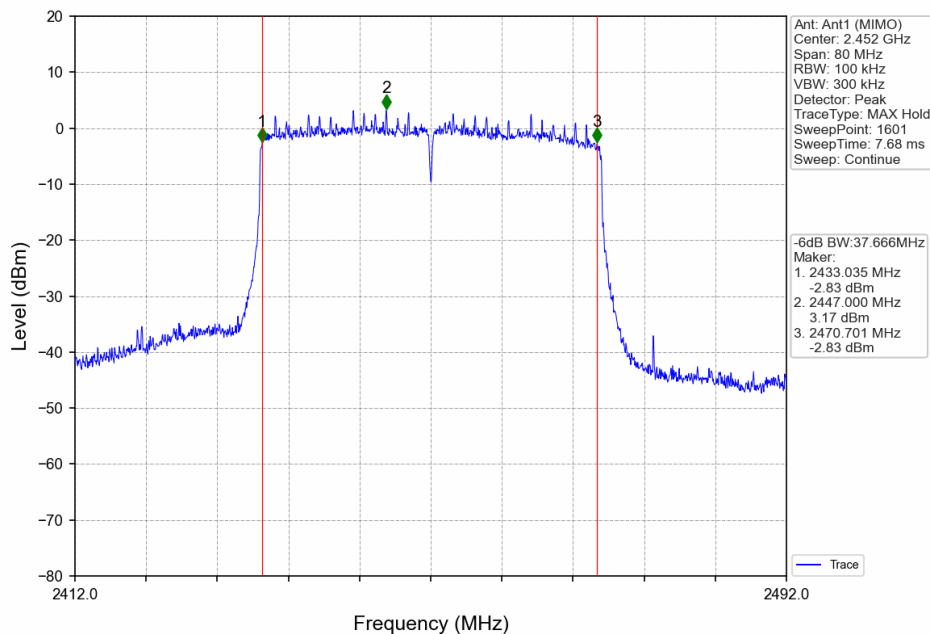
802.11ax(HEW40)_LCH_2422MHz_RU484_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW40)_MCH_2437MHz_RU484_Left_Ant1 (MIMO)_NTNV



802.11ax(HEW40)_HCH_2452MHz_RU484_Left_Ant1 (MIMO)_NTNV



2. Maximum Conducted Output Power

2.1 Power

2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Conducted Output Power (dBm)				Verdict
					Ant1	Ant2	MIMO	Limit	
802.11b	SISO	2412	/	/	18.06	20.32	/	<=30	Pass
		2437	/	/	18.48	20.44	/	<=30	Pass
		2462	/	/	18.25	19.97	/	<=30	Pass
802.11g	SISO	2412	/	/	16.02	17.99	/	<=30	Pass
		2437	/	/	16.31	18.37	/	<=30	Pass
		2462	/	/	18.06	20.32	/	<=30	Pass
802.11n (HT20)	MIMO	2412	/	/	18.25	16.31	20.40	<=30	Pass
		2437	/	/	18.87	16.68	20.92	<=30	Pass
		2462	/	/	18.20	16.57	20.47	<=30	Pass
802.11n (HT40)	MIMO	2422	/	/	16.67	14.85	18.86	<=30	Pass
		2437	/	/	17.02	15.16	19.20	<=30	Pass
		2452	/	/	16.79	15.37	19.15	<=30	Pass
802.11ax (HEW20)	MIMO	2412	RU242	Left	16.30	14.53	18.51	<=30	Pass
		2437	RU242	Left	16.77	14.79	18.90	<=30	Pass
		2462	RU242	Left	16.28	14.82	18.62	<=30	Pass
802.11ax (HEW40)	MIMO	2422	RU484	Left	16.55	14.73	18.74	<=30	Pass
		2437	RU484	Left	17.00	15.01	19.13	<=30	Pass
		2452	RU484	Left	16.68	15.29	19.05	<=30	Pass

Note1: Antenna Gain: Ant1: 3.46dBi; Ant2: 3.46dBi.

Note2: The number of transmit antennas are less than 4, array gain=0dB.

Note3: The Directional gain= $G_{ANT}=3.46$ dBi.

3. Maximum Power Spectral Density

3.1 PSD

3.1.1 Test Result

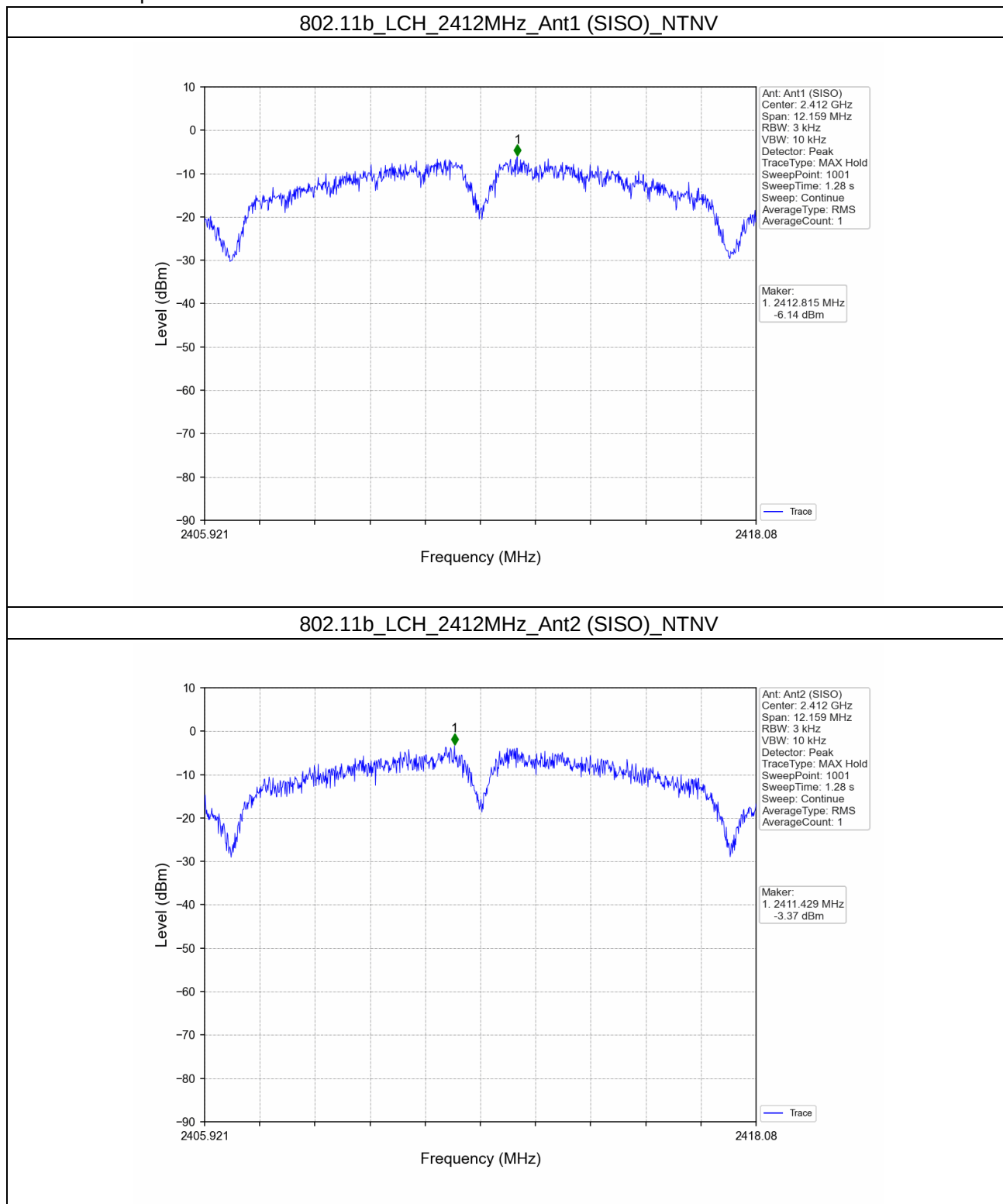
Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum PSD (dBm/3kHz)				Verdict
					Ant1	Ant2	MIMO	Limit	
802.11b	SISO	2412	/	/	-6.14	-3.37	/	<=8	Pass
		2437	/	/	-5.85	-1.67	/	<=8	Pass
		2462	/	/	-5.48	-3.77	/	<=8	Pass
802.11g	SISO	2412	/	/	-9.08	-7.26	/	<=8	Pass
		2437	/	/	-8.51	-6.81	/	<=8	Pass
		2462	/	/	-7.67	-7.41	/	<=8	Pass
802.11n (HT20)	MIMO	2412	/	/	-7.40	-8.04	-5.23	<=8	Pass
		2437	/	/	-5.40	-7.87	-4.28	<=8	Pass
		2462	/	/	-6.74	-8.49	-4.87	<=8	Pass
802.11n (HT40)	MIMO	2422	/	/	-11.48	-12.39	-9.99	<=8	Pass
		2437	/	/	-10.48	-12.54	-9.12	<=8	Pass
		2452	/	/	-11.21	-12.56	-9.52	<=8	Pass
802.11ax (HEW20)	MIMO	2412	RU242	Left	-9.32	-11.46	-8.13	<=8	Pass
		2437	RU242	Left	-8.96	-11.58	-8.00	<=8	Pass
		2462	RU242	Left	-9.70	-11.30	-8.32	<=8	Pass
802.11ax (HEW40)	MIMO	2422	RU484	Left	-12.20	-13.00	-10.72	<=8	Pass
		2437	RU484	Left	-11.75	-12.71	-10.24	<=8	Pass
		2452	RU484	Left	-11.92	-13.41	-10.42	<=8	Pass

Note1: Antenna Gain: Ant1: 3.46dBi; Ant2: 3.46dBi.

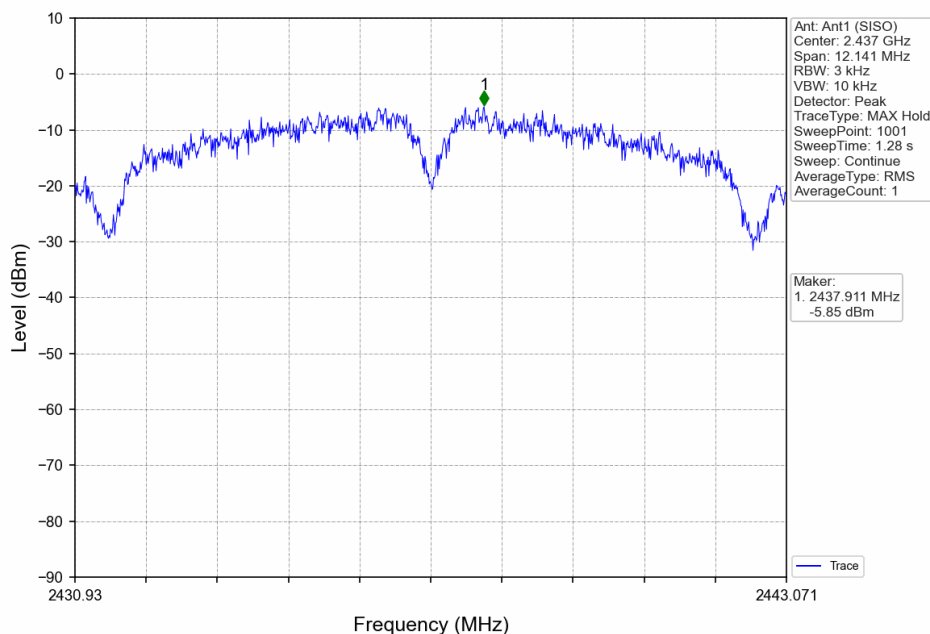
Note2: The number of transmit antennas are less than 4, array gain=0dB.

Note3: The Directional gain= $3.46+10\log(2)$ dBi=6.47 dBi.

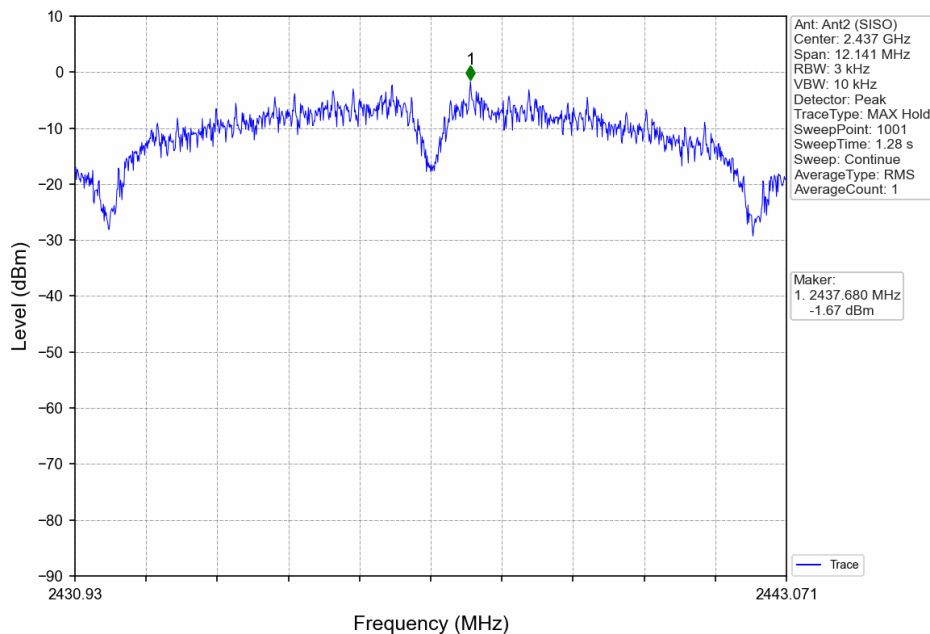
3.1.2 Test Graph



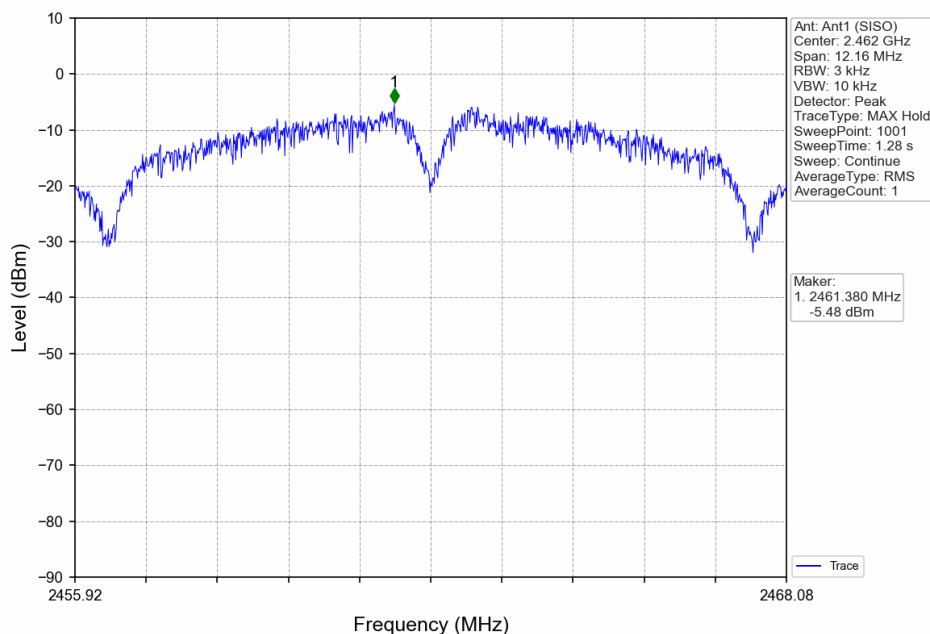
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



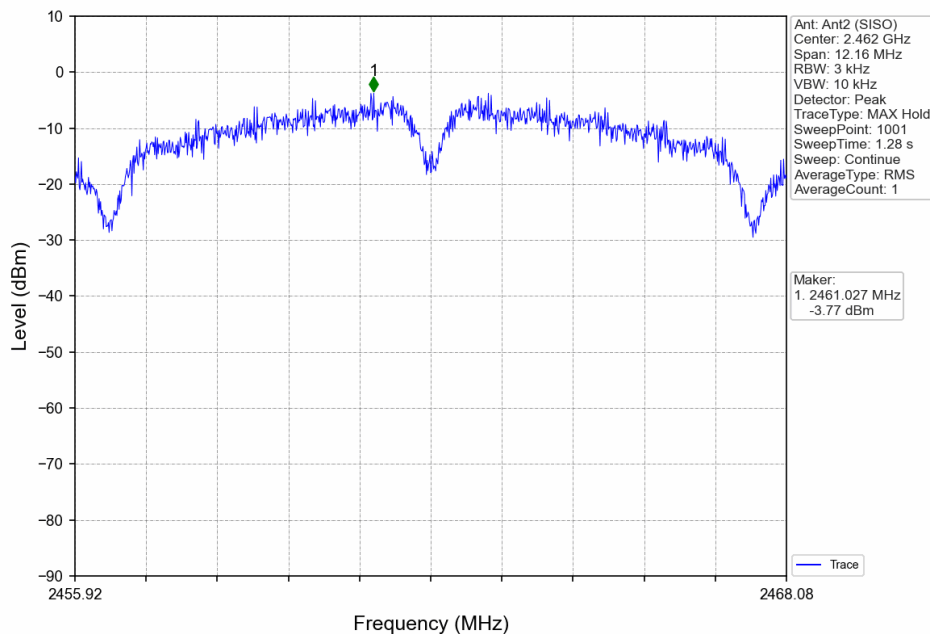
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



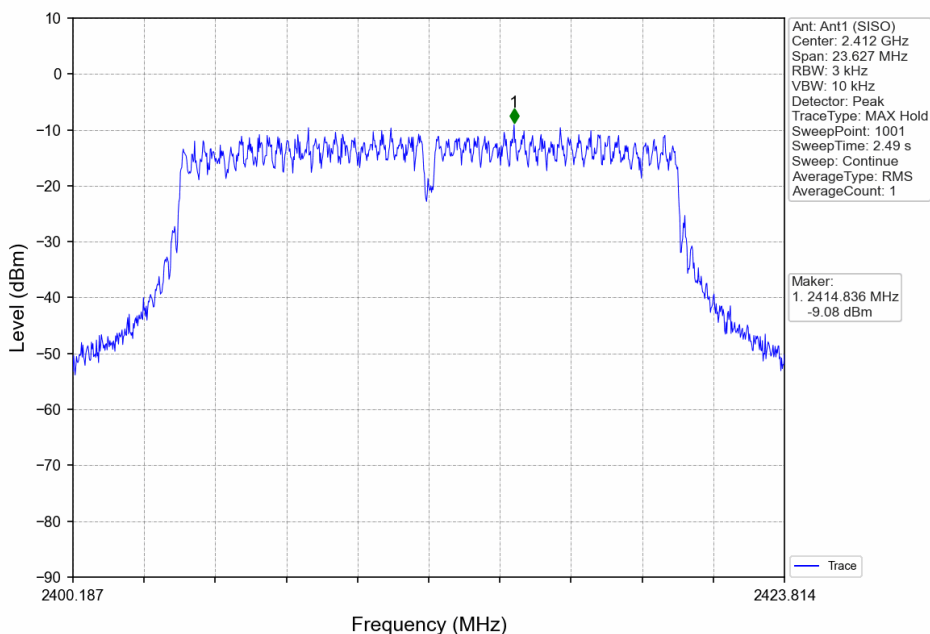
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



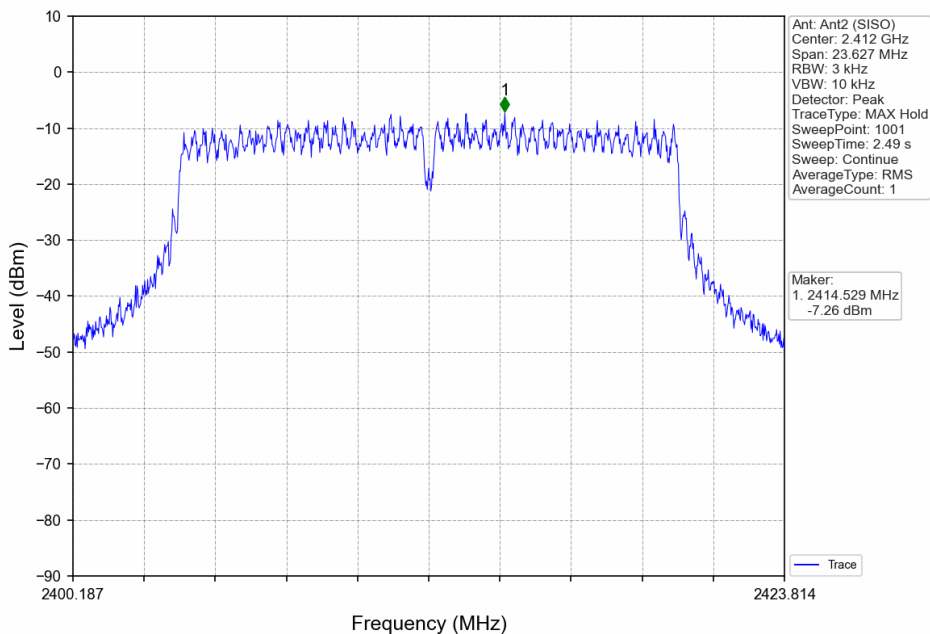
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



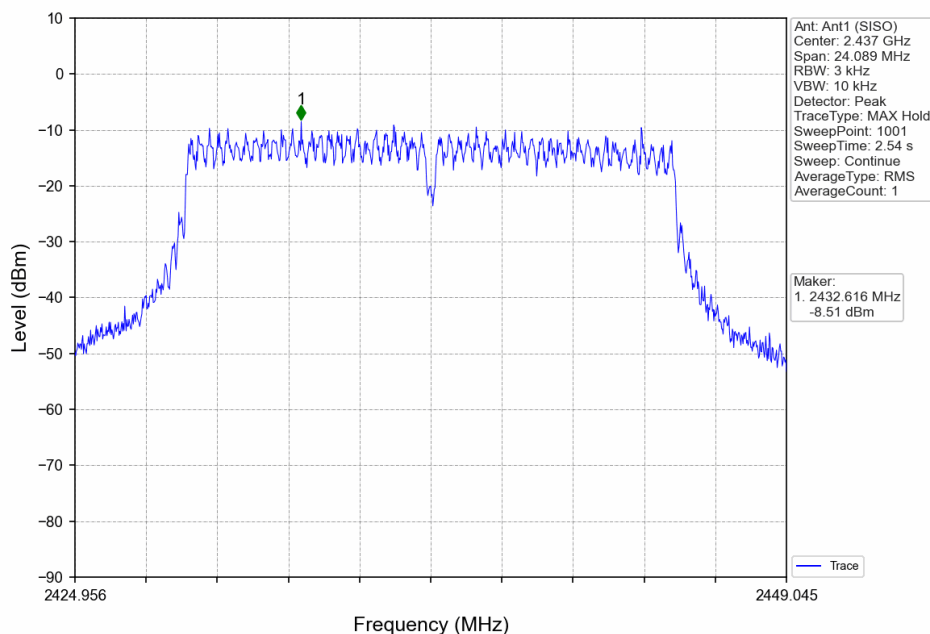
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



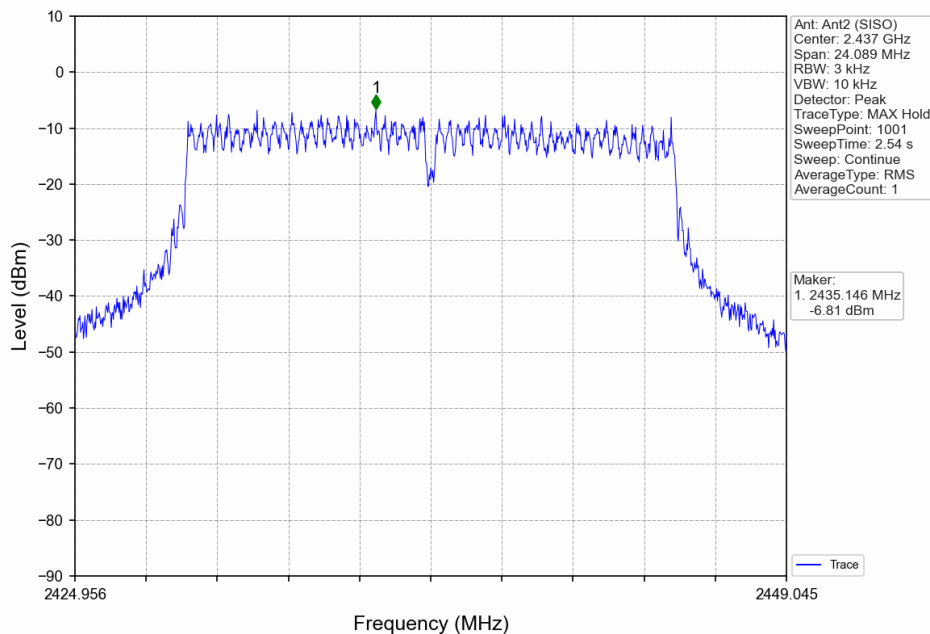
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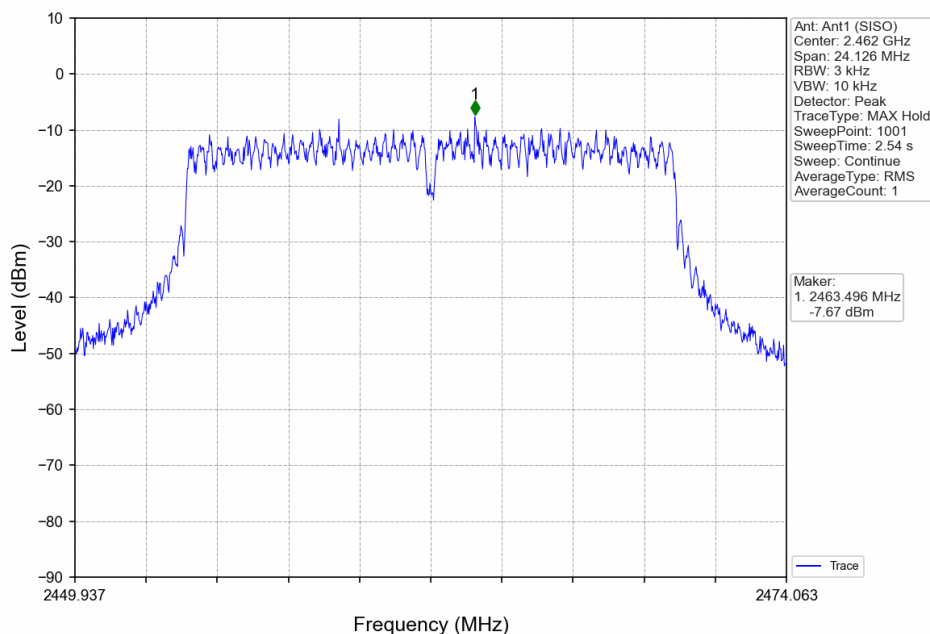
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



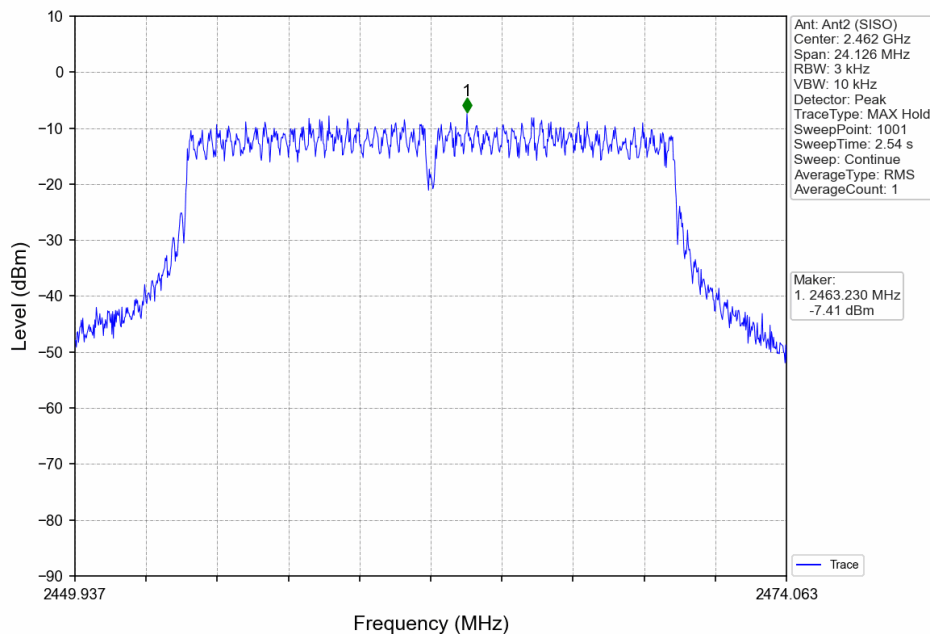
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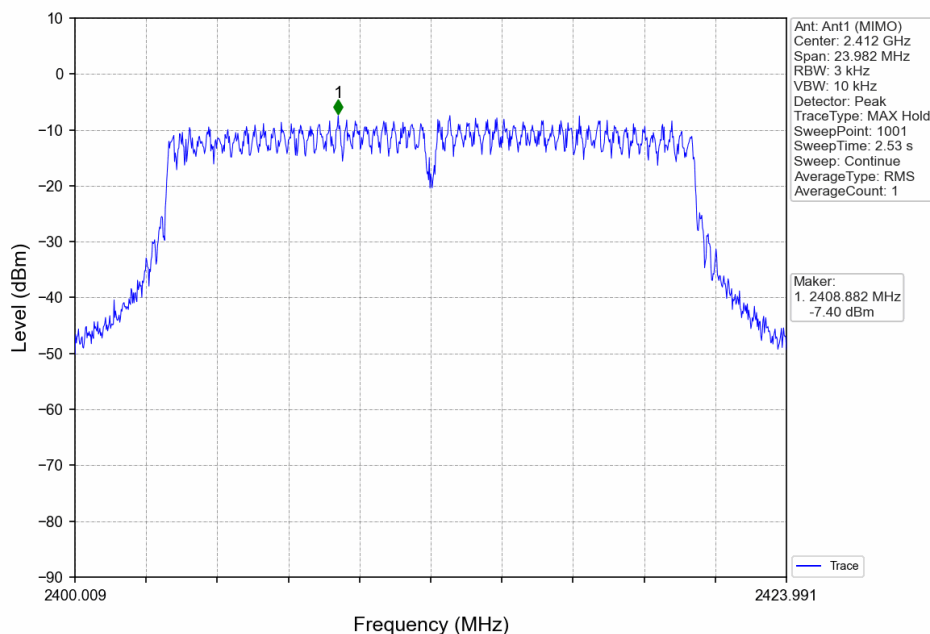
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



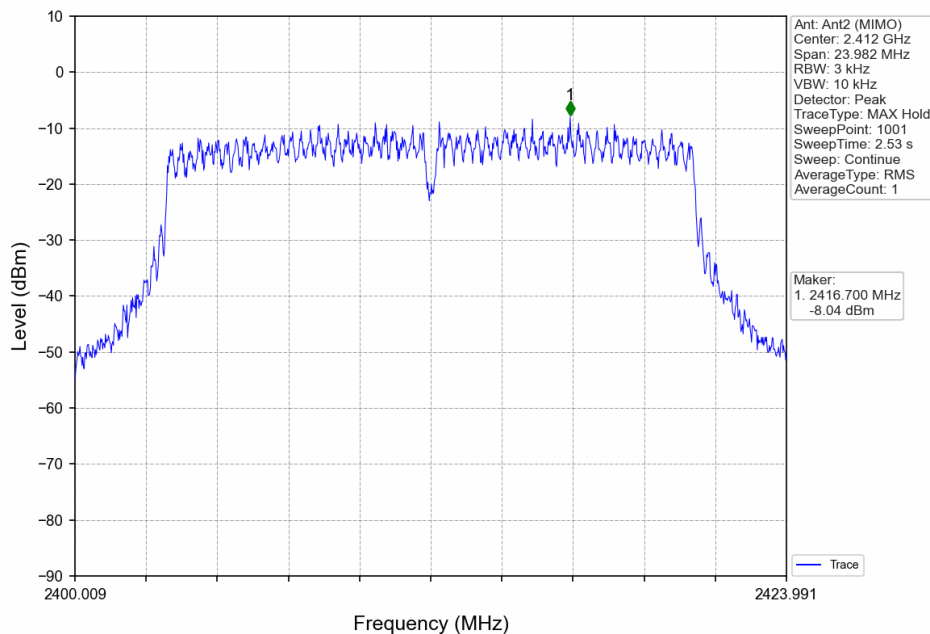
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



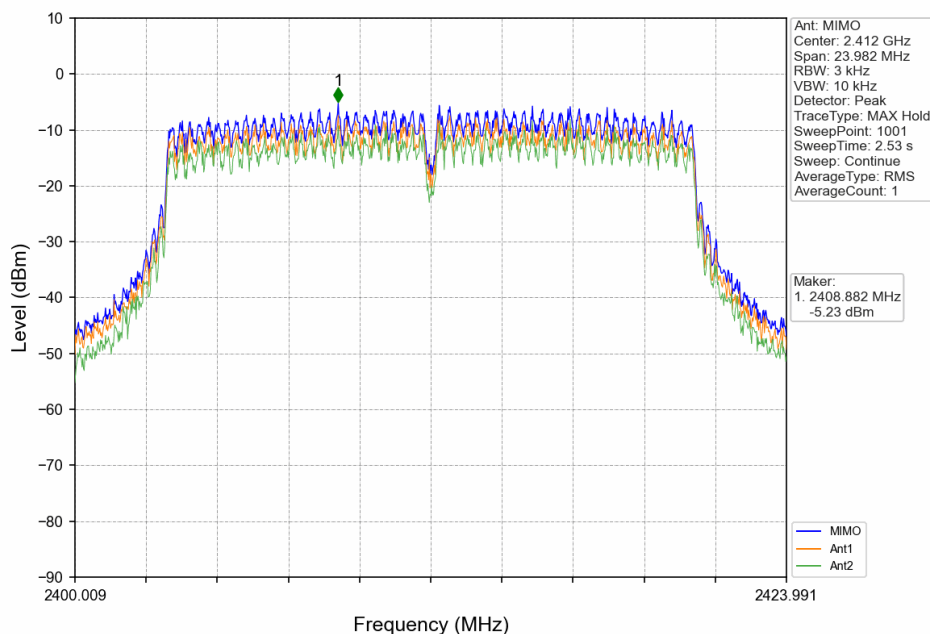
802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



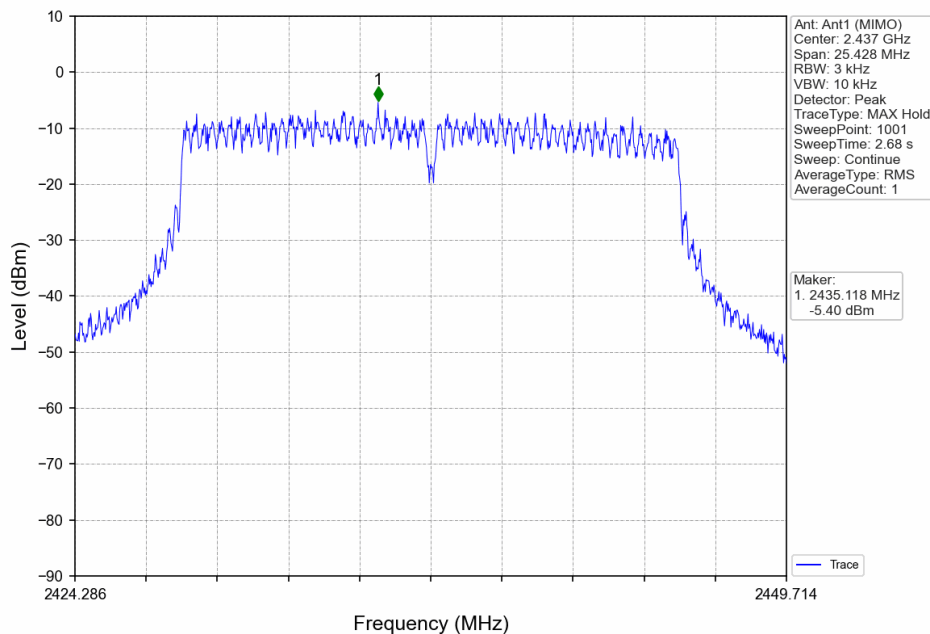
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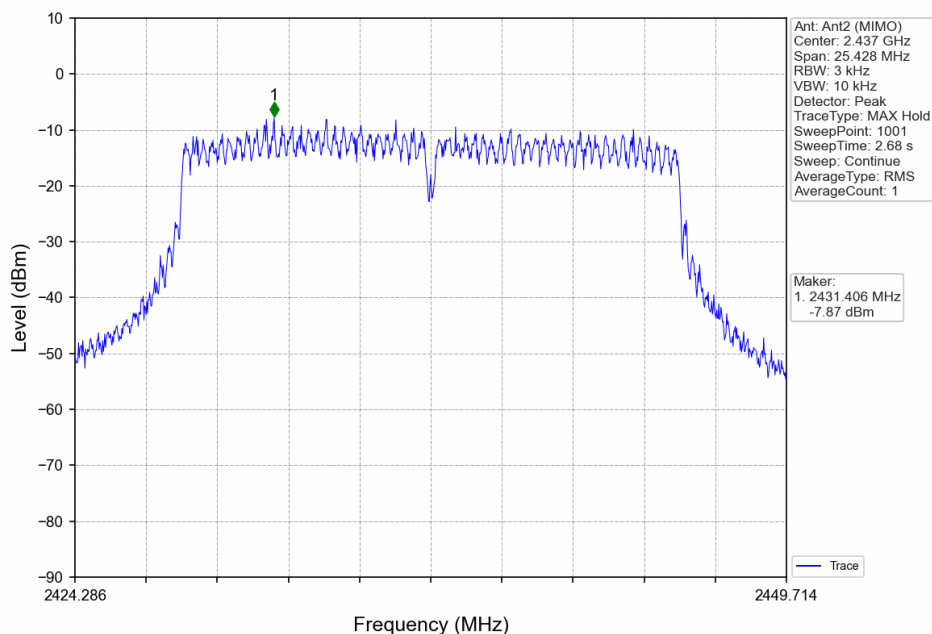
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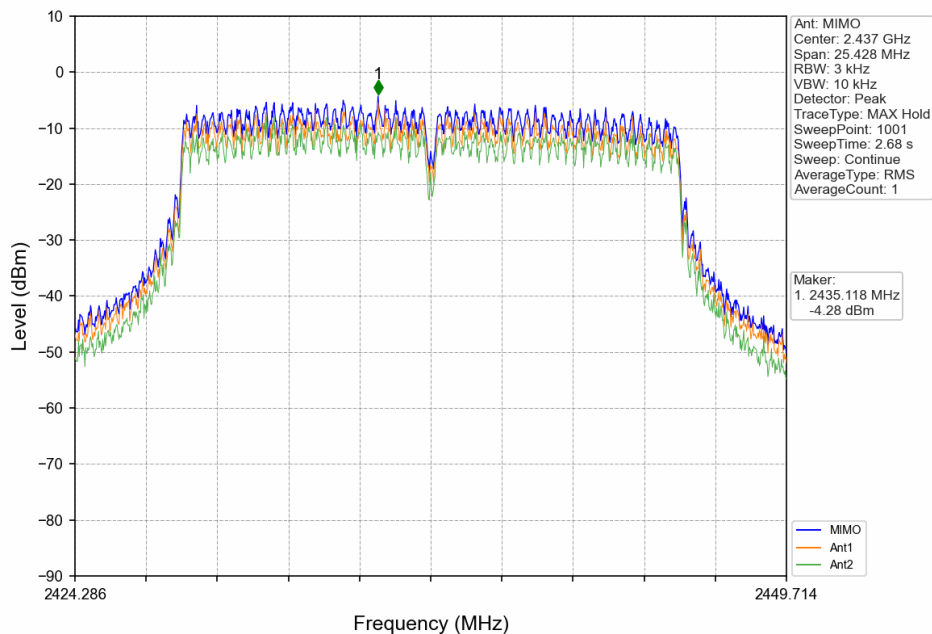
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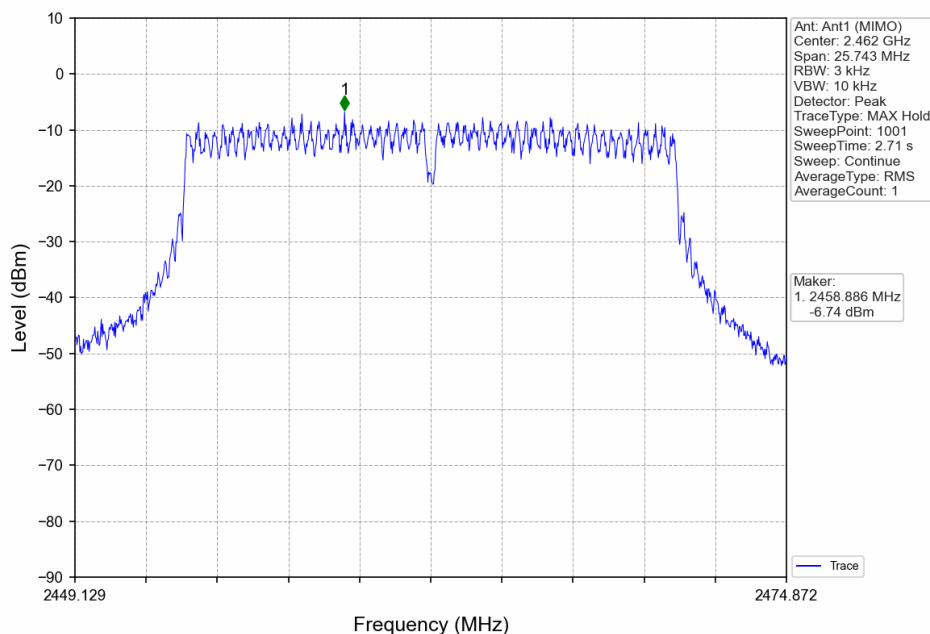
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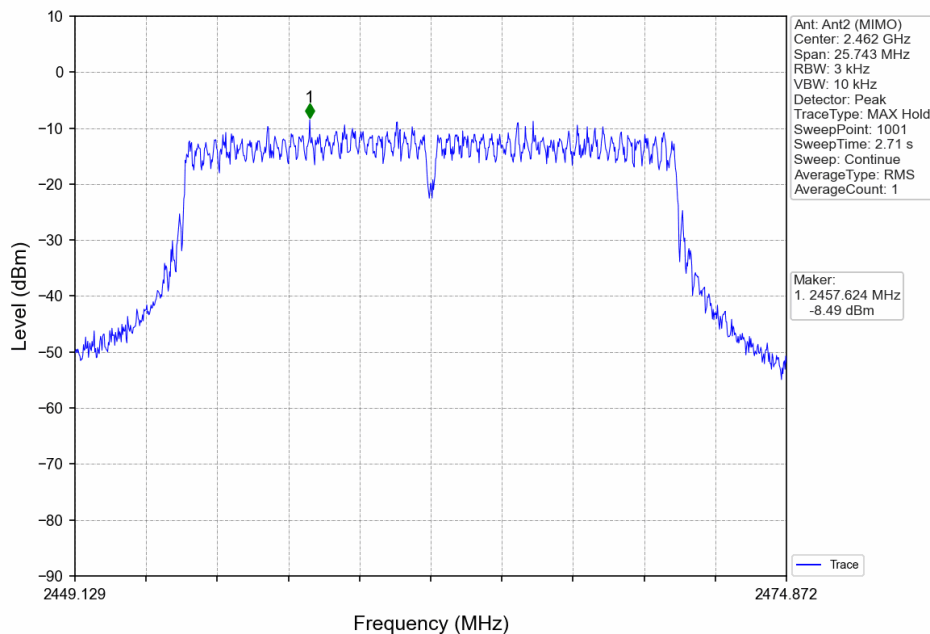
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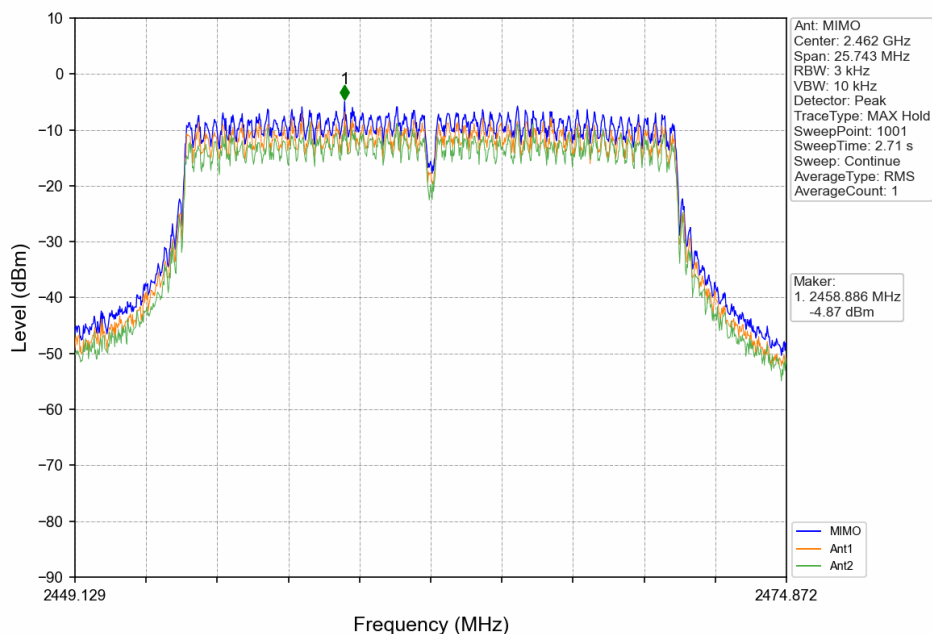
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



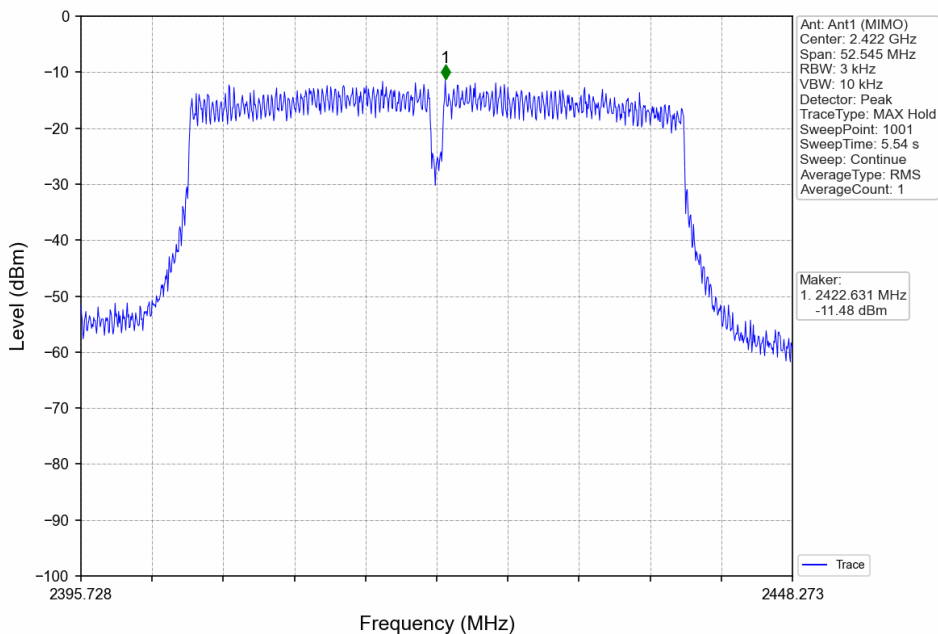
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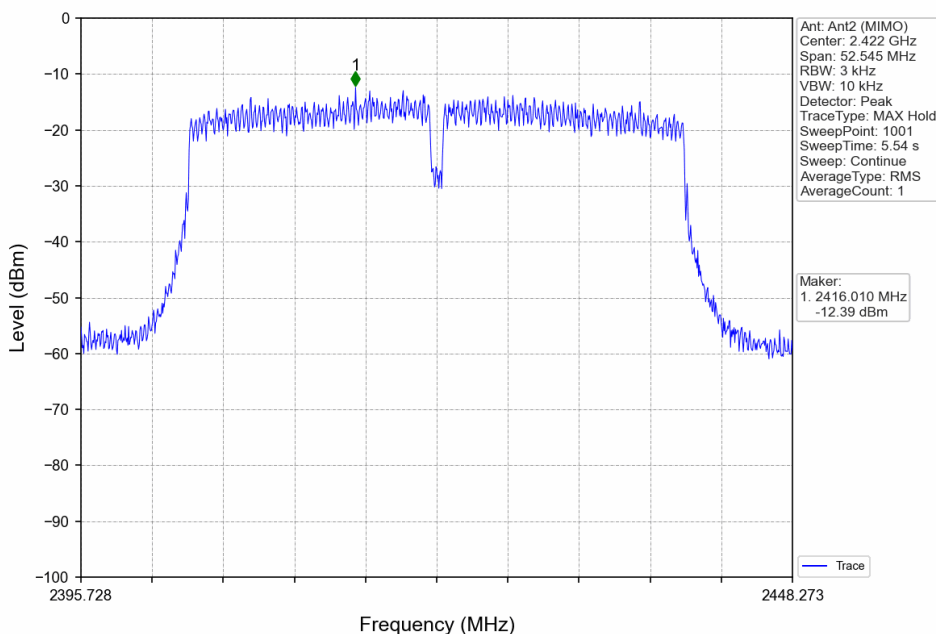
802.11n(HT20)_HCH_2462MHz_MIMO_NTNV



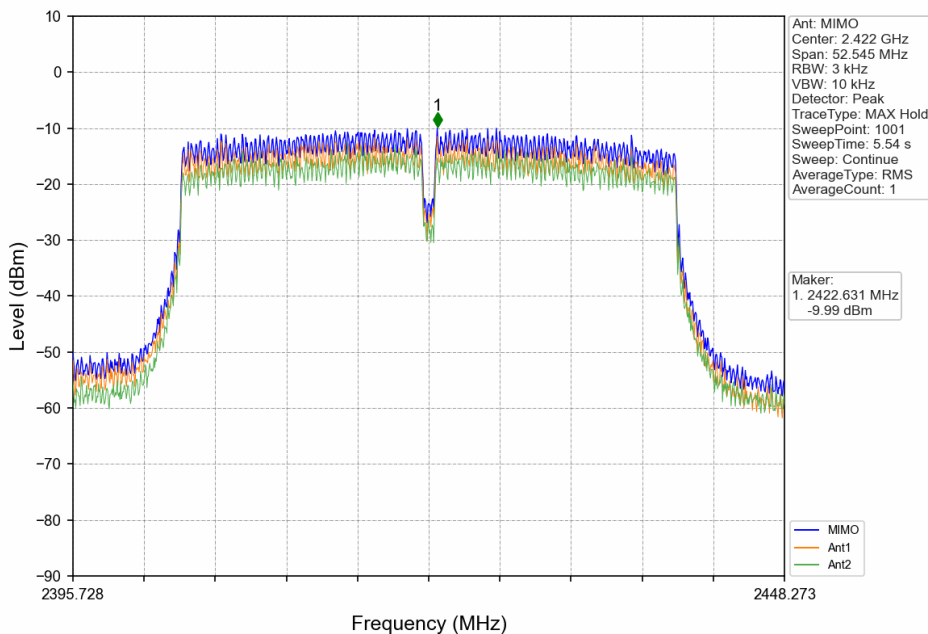
802.11n(HT40)_LCH_2422MHz_Ant1 (MIMO)_NTNV



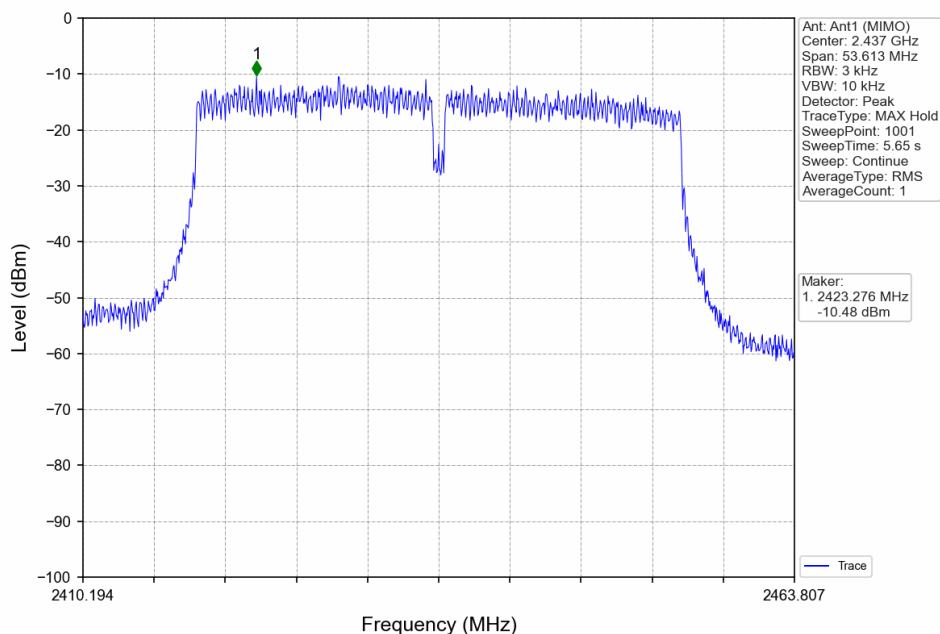
802.11n(HT40)_LCH_2422MHz_Ant2 (MIMO)_NTNV



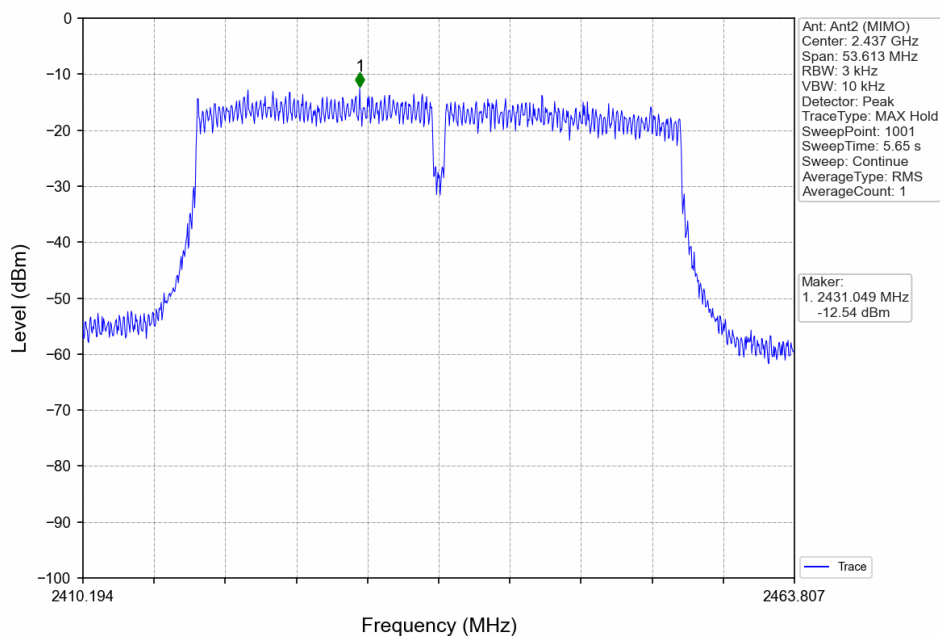
802.11n(HT40)_LCH_2422MHz_MIMO_NTNV



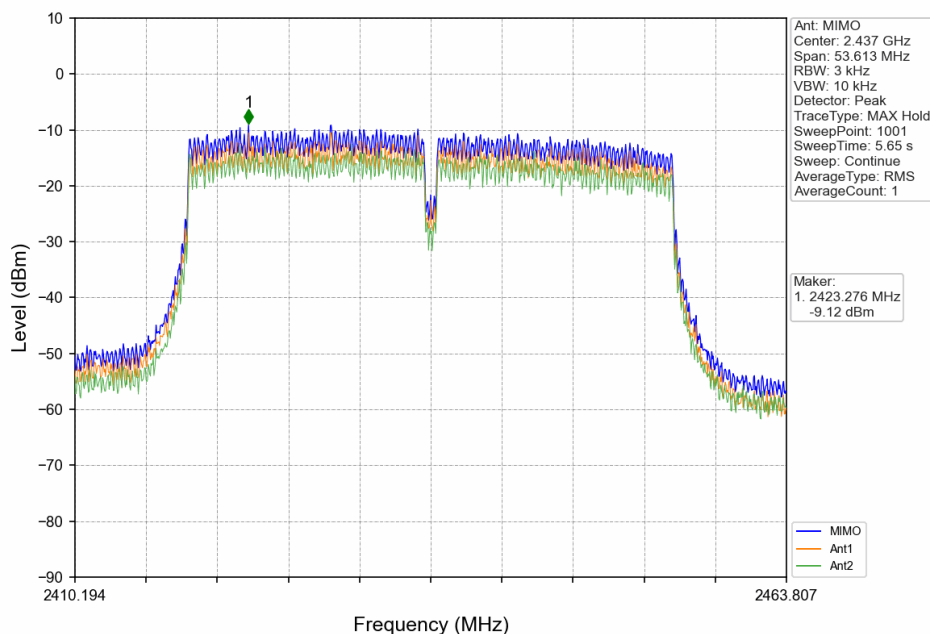
802.11n(HT40)_MCH_2437MHz_Ant1 (MIMO)_NTNV



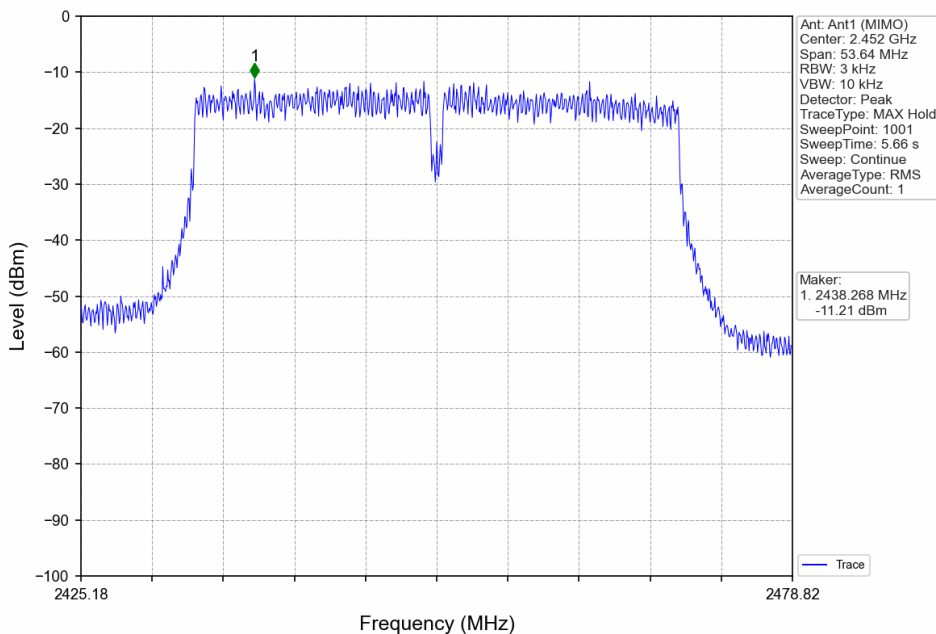
802.11n(HT40)_MCH_2437MHz_Ant2 (MIMO)_NTNV



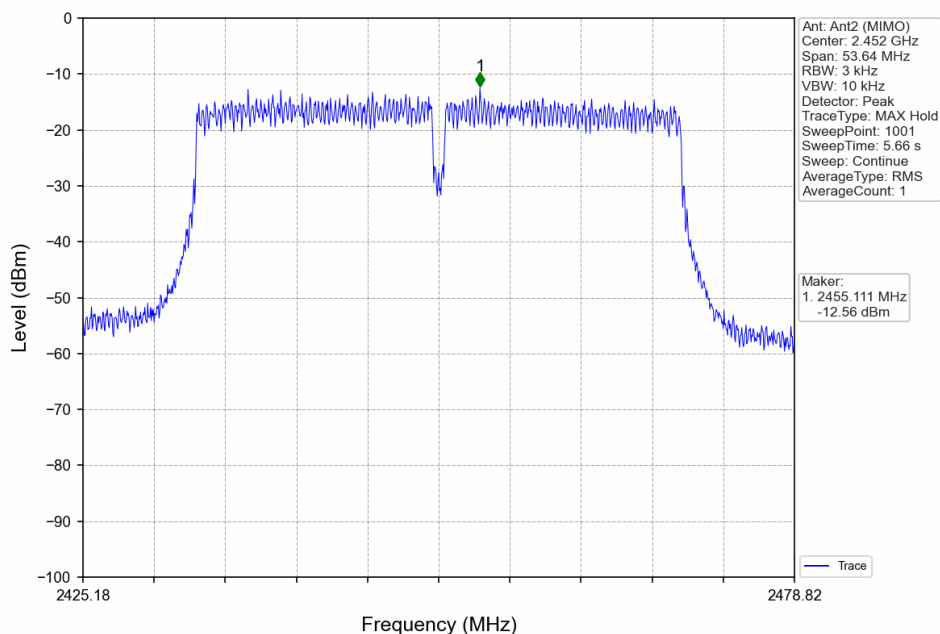
802.11n(HT40)_MCH_2437MHz_MIMO_NTNV



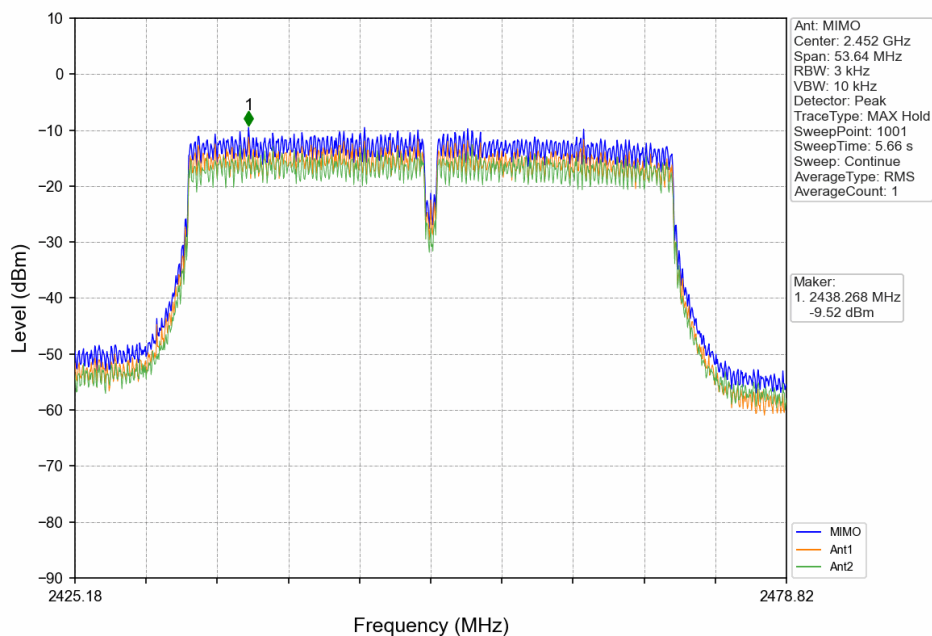
802.11n(HT40)_HCH_2452MHz_Ant1 (MIMO)_NTNV



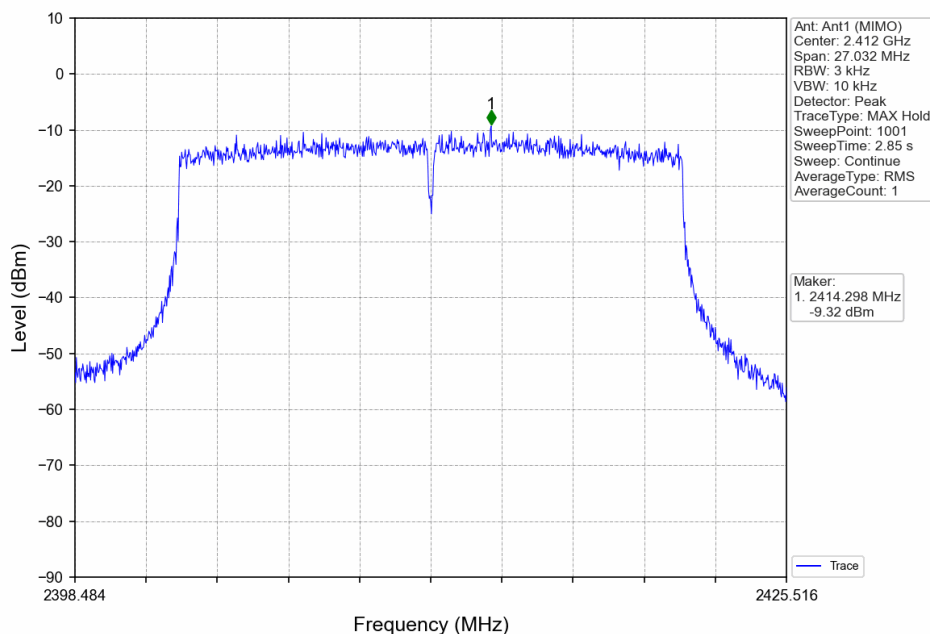
802.11n(HT40)_HCH_2452MHz_Ant2 (MIMO)_NTNV



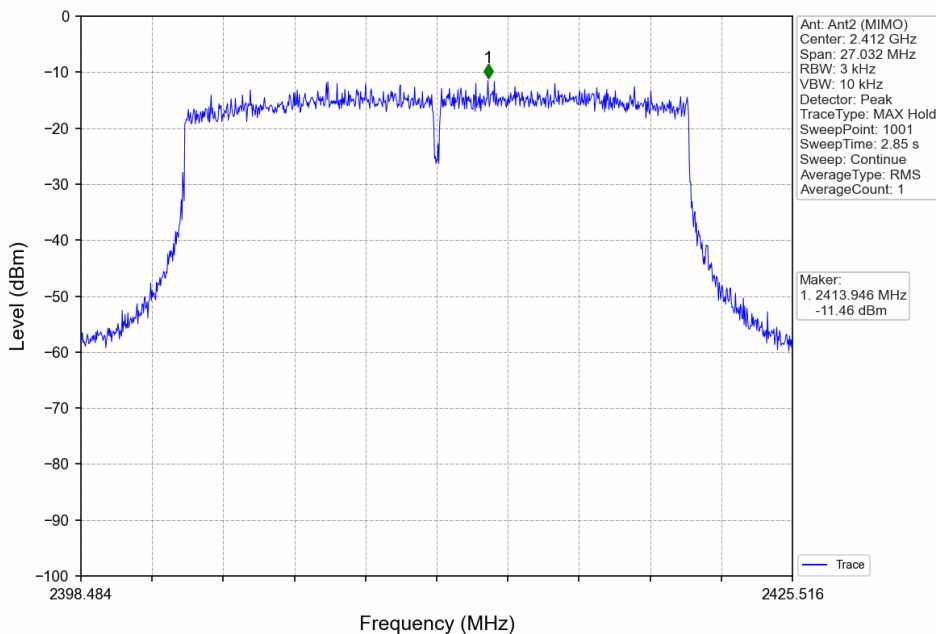
802.11n(HT40)_HCH_2452MHz_MIMO_NTNV



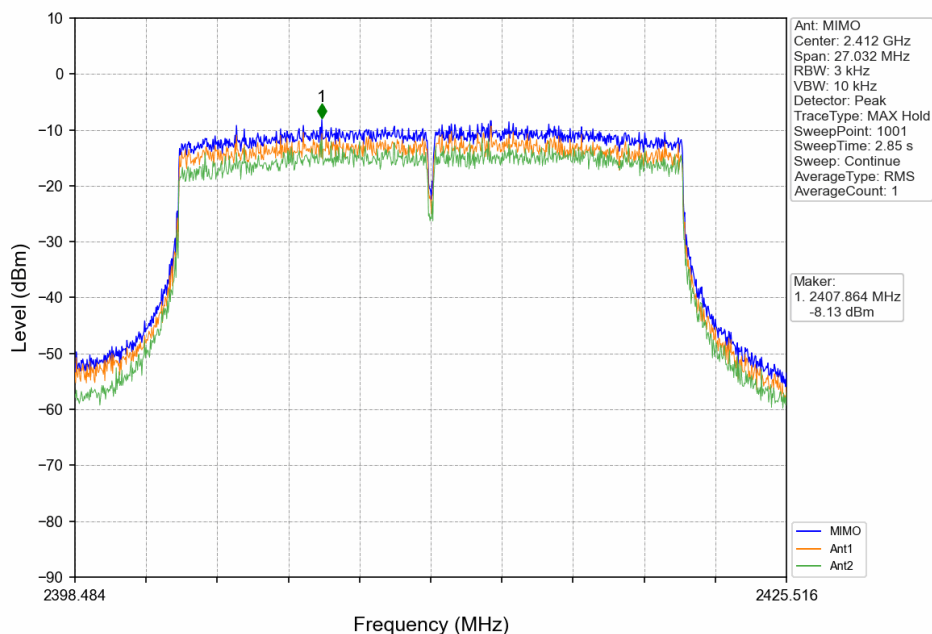
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant1 (MIMO)_NTNV



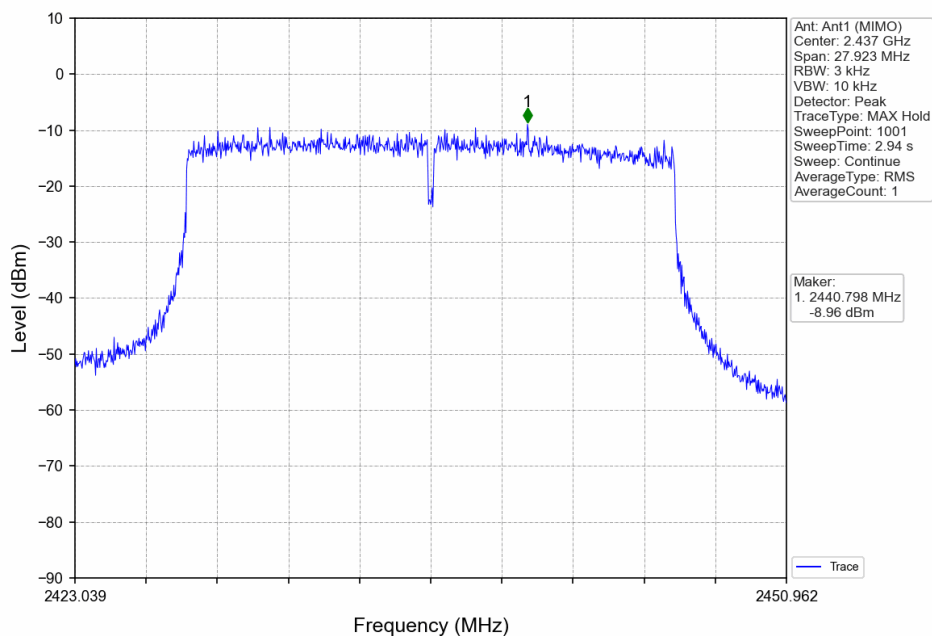
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_Ant2 (MIMO)_NTNV



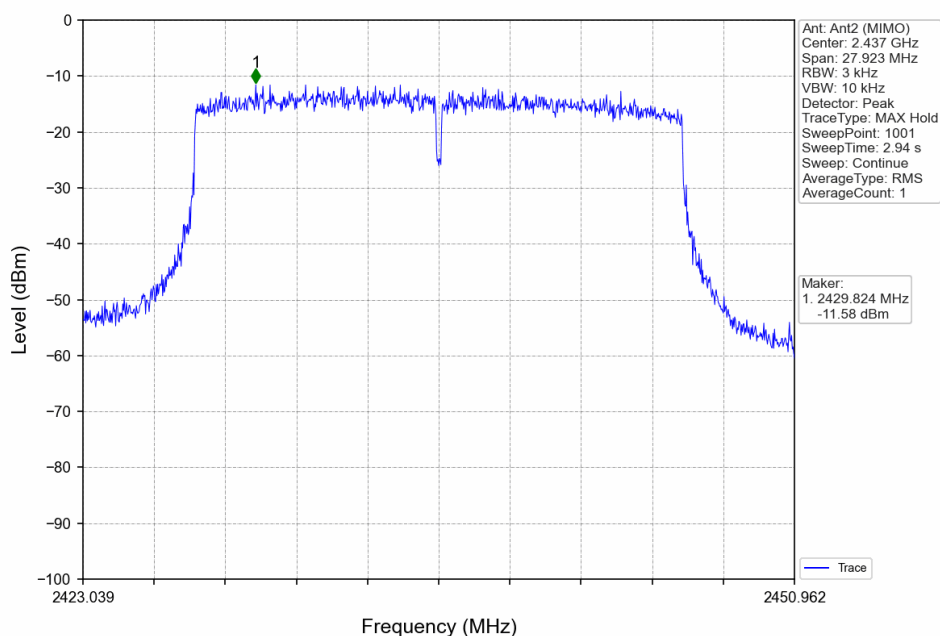
802.11ax(HEW20)_LCH_2412MHz_RU242_Left_MIMO_NTNV



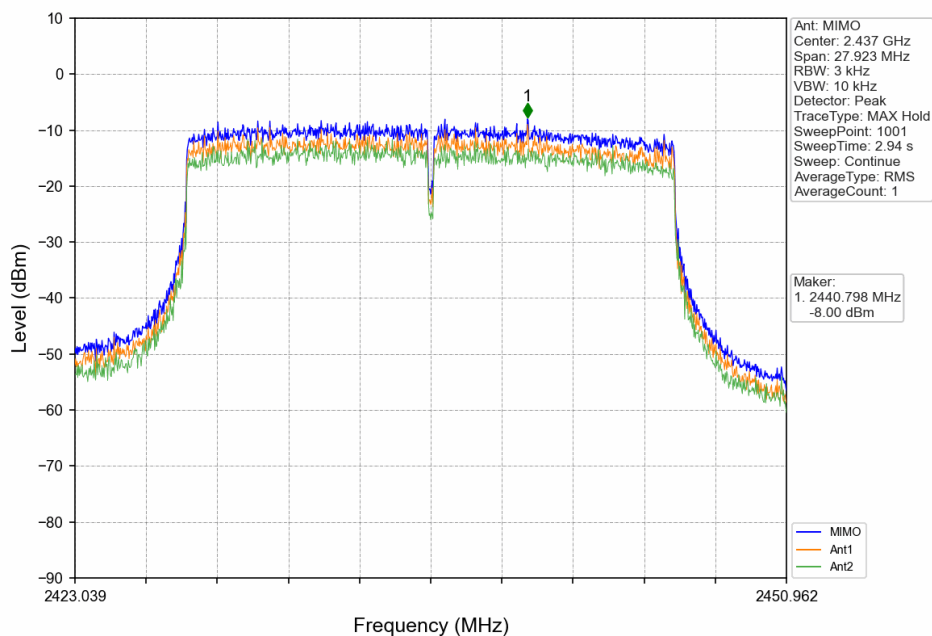
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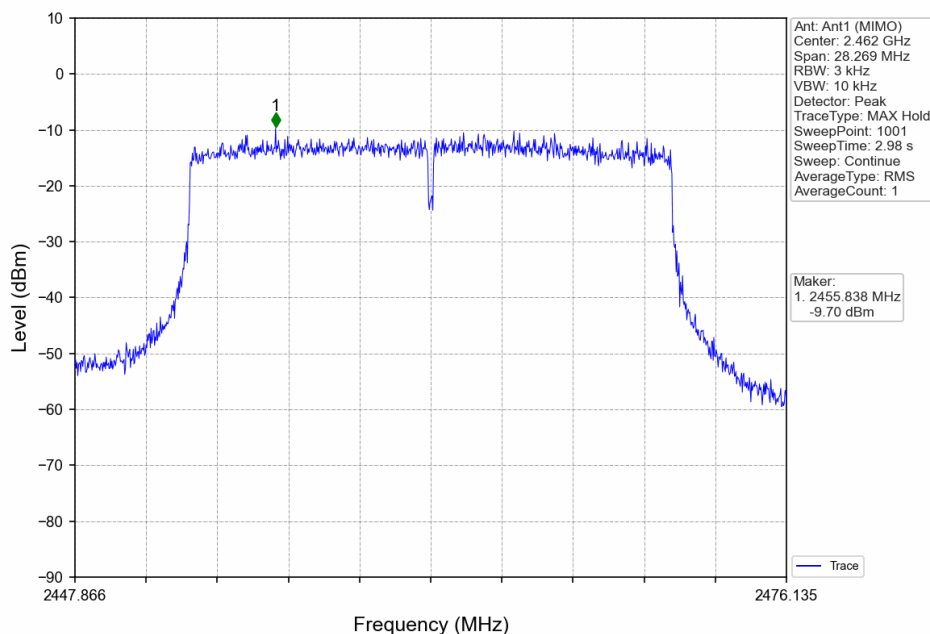
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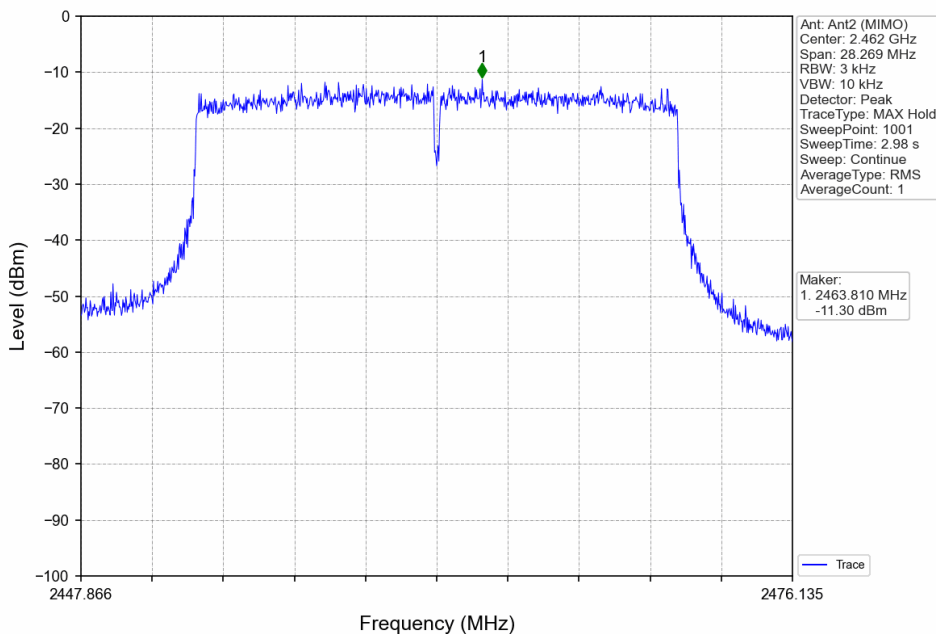
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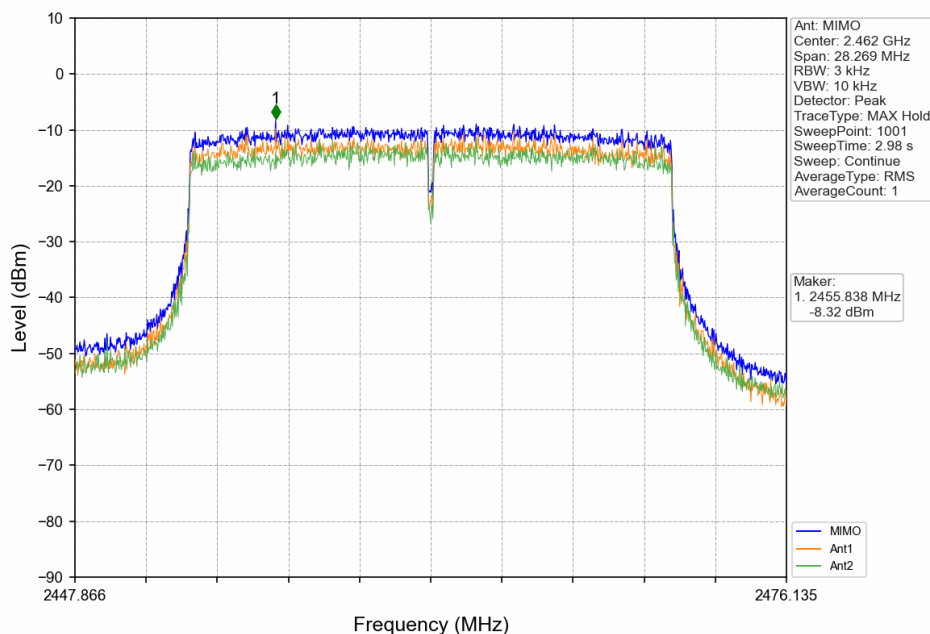
802.11ax(HEW20)_HCH_2462MHz_RU242_Left_Ant1 (MIMO)_NTNV



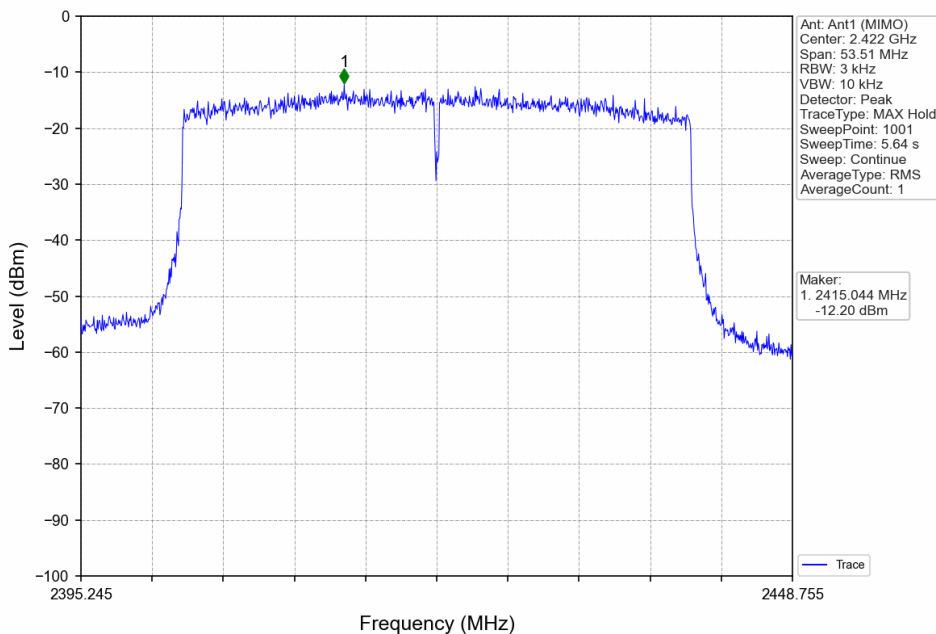
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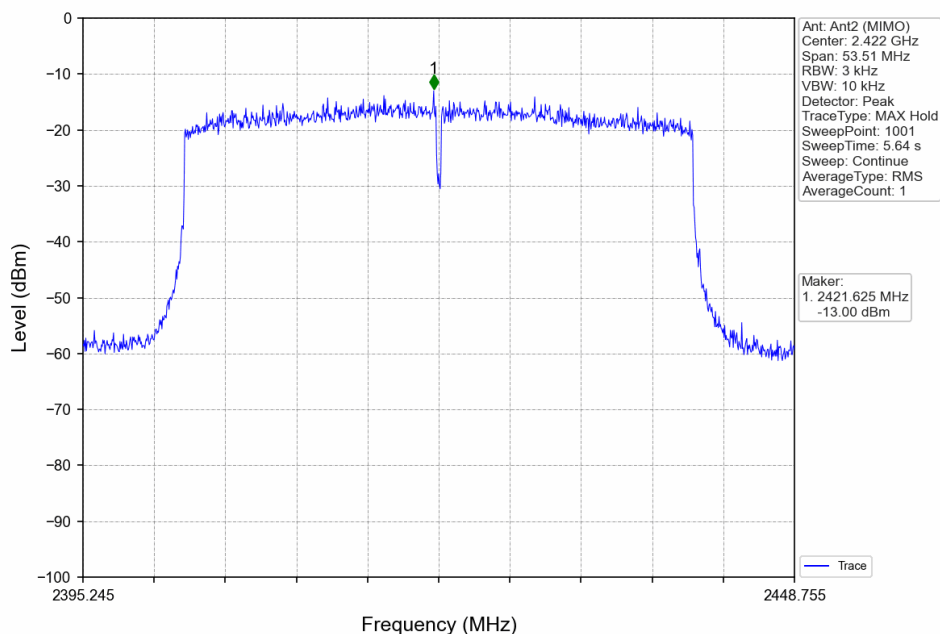
802.11ax(HEW20)_HCH_2462MHz_RU242_Left_MIMO_NTNV



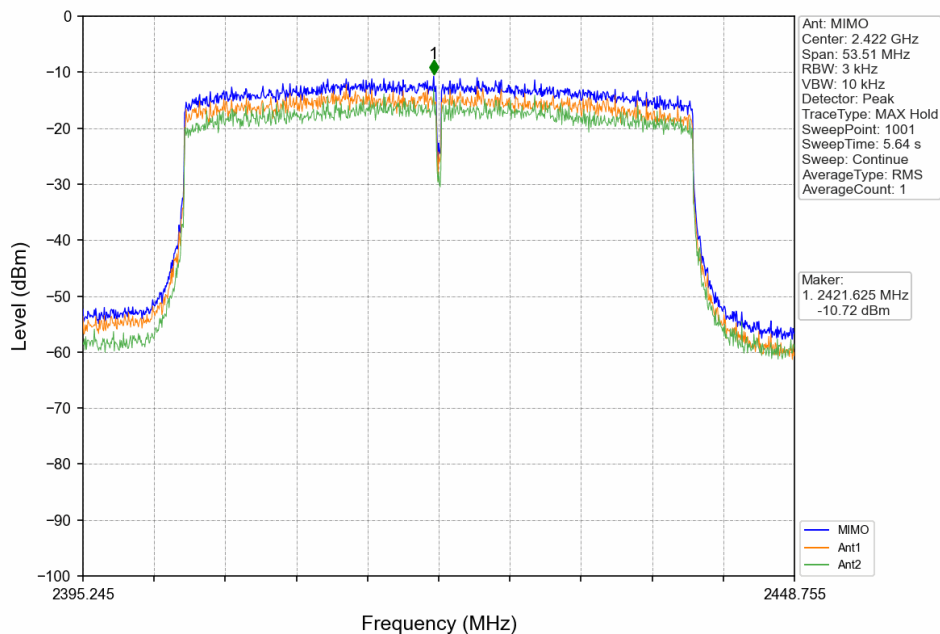
802.11ax(HEW40)_LCH_2422MHz_RU484_Left_Ant1 (MIMO)_NTNV



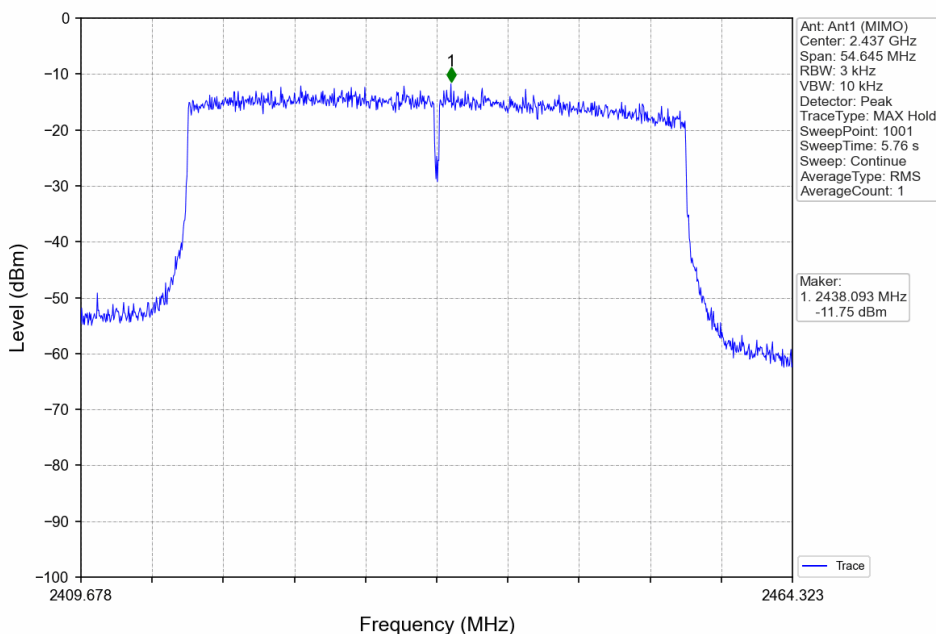
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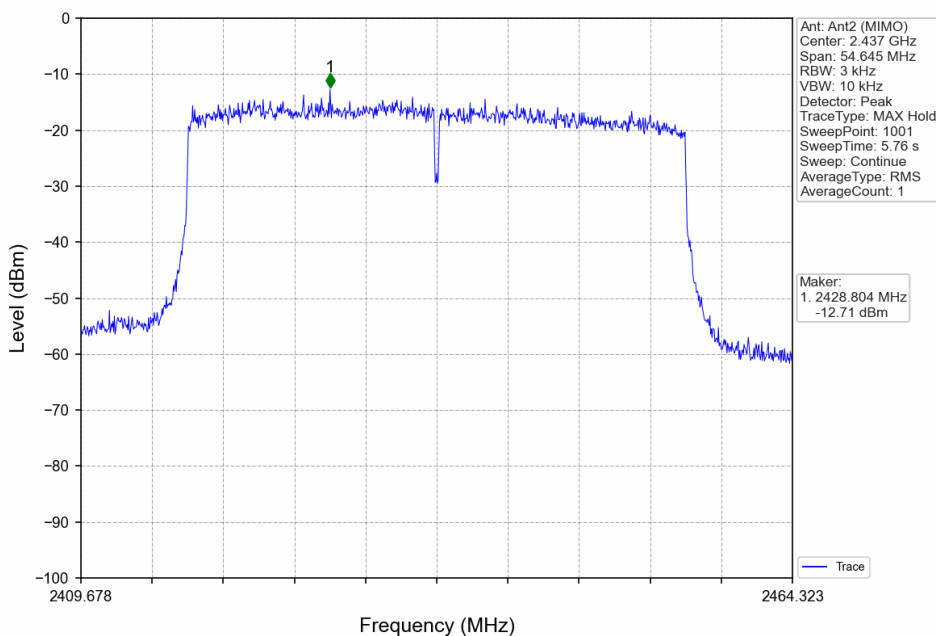
802.11ax(HEW40)_LCH_2422MHz_RU484_Left_MIMO_NTNV



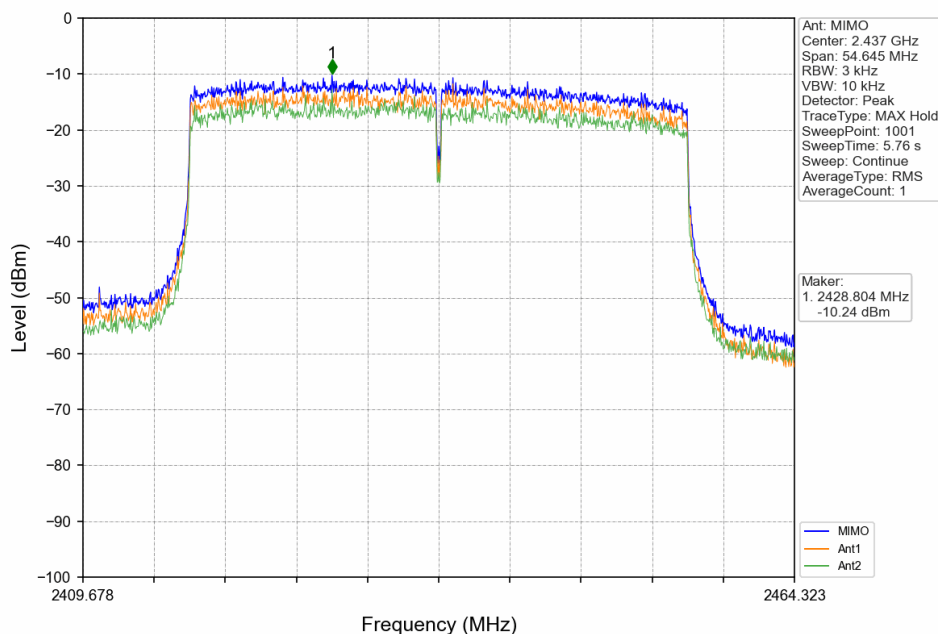
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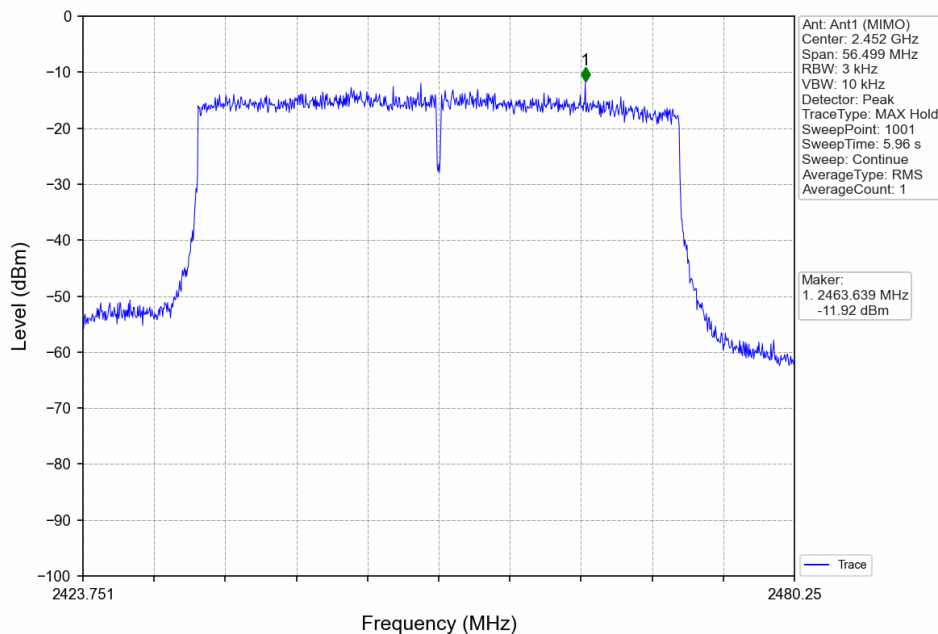
802.11ax(HEW40)_MCH_2437MHz_RU484_Left_Ant2 (MIMO)_NTNV



802.11ax(HEW40)_MCH_2437MHz_RU484_Left_MIMO_NTNV



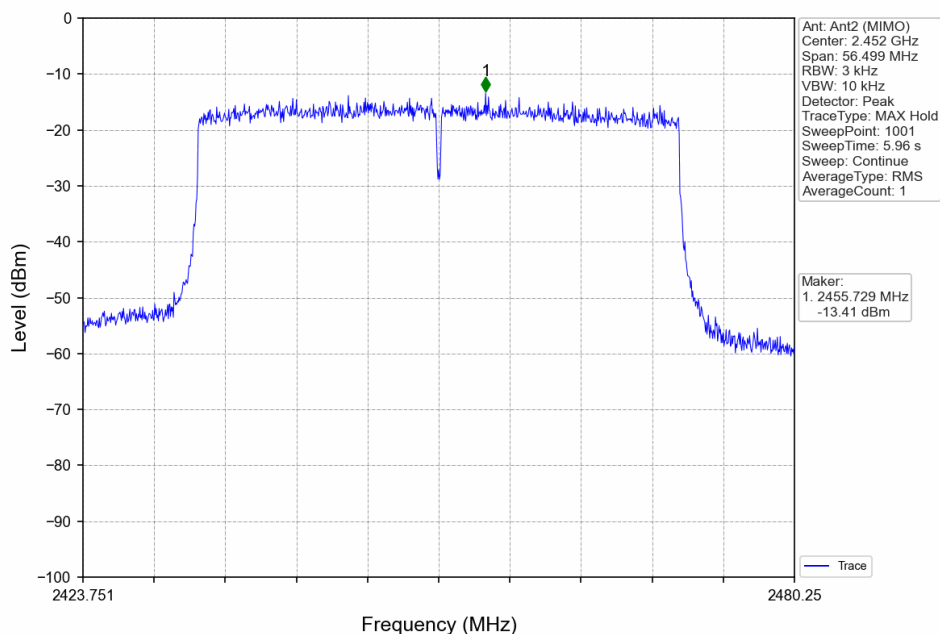
802.11ax(HEW40)_HCH_2452MHz_RU484_Left_Ant1 (MIMO)_NTNV



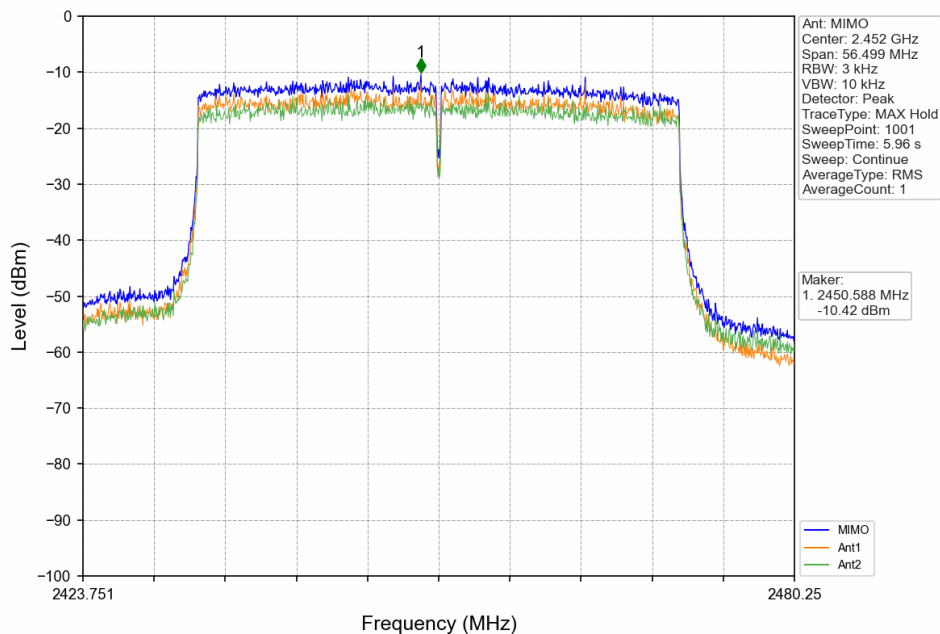
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802.11ax(HEW40)_HCH_2452MHz_RU484_Left_Ant2 (MIMO)_NTNV



802.11ax(HEW40)_HCH_2452MHz_RU484_Left_MIMO_NTNV



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4. Unwanted Emissions In Non-restricted Frequency Bands

4.1 Ref

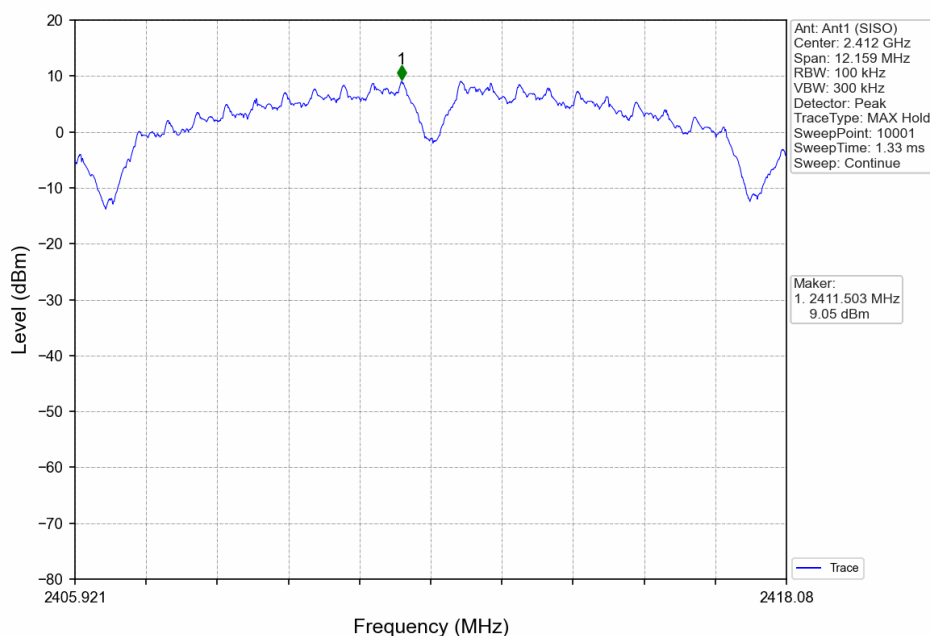
4.1.1 Test Result

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Ant	Level of Reference (dBm)
802.11b	SISO	2412	/	/	1	9.05
					2	12.33
		2437	/	/	1	9.49
					2	11.78
		2462	/	/	1	9.17
					2	10.88
802.11g	SISO	2412	/	/	1	5.02
					2	7.27
		2437	/	/	1	5.52
					2	7.73
		2462	/	/	1	5.43
					2	6.93
802.11n (HT20)	MIMO	2412	/	/	1	7.53
					2	4.99
		2437	/	/	1	7.95
					2	5.94
		2462	/	/	1	7.22
					2	5.57
802.11n (HT40)	MIMO	2422	/	/	1	3.38
					2	1.21
		2437	/	/	1	3.79
					2	1.38
		2452	/	/	1	3.30
					2	1.49
802.11ax (HEW20)	MIMO	2412	RU242	Left	1	5.20
					2	4.03
		2437	RU242	Left	1	5.95
					2	3.79
		2462	RU242	Left	1	5.65
					2	3.77
802.11ax (HEW40)	MIMO	2422	RU484	Left	1	2.82
					2	1.16
		2437	RU484	Left	1	3.00
					2	0.50
		2452	RU484	Left	1	3.05
					2	1.11

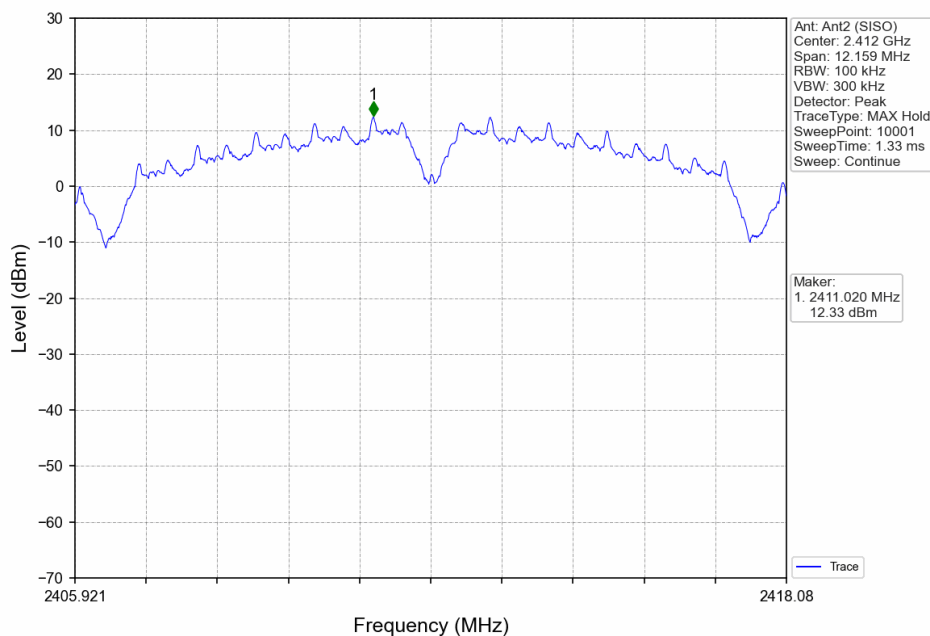
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

4.1.2 Test Graph

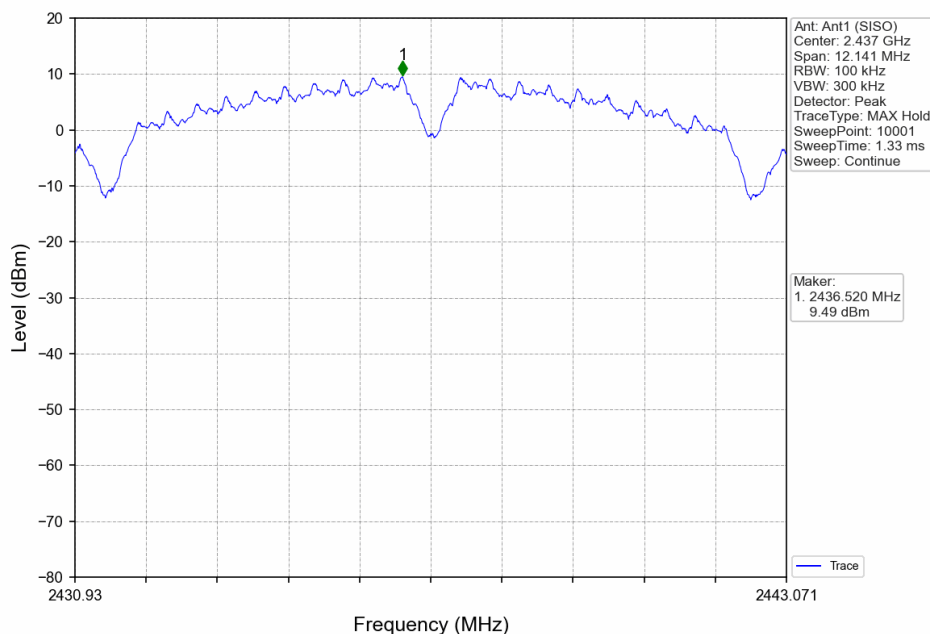
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



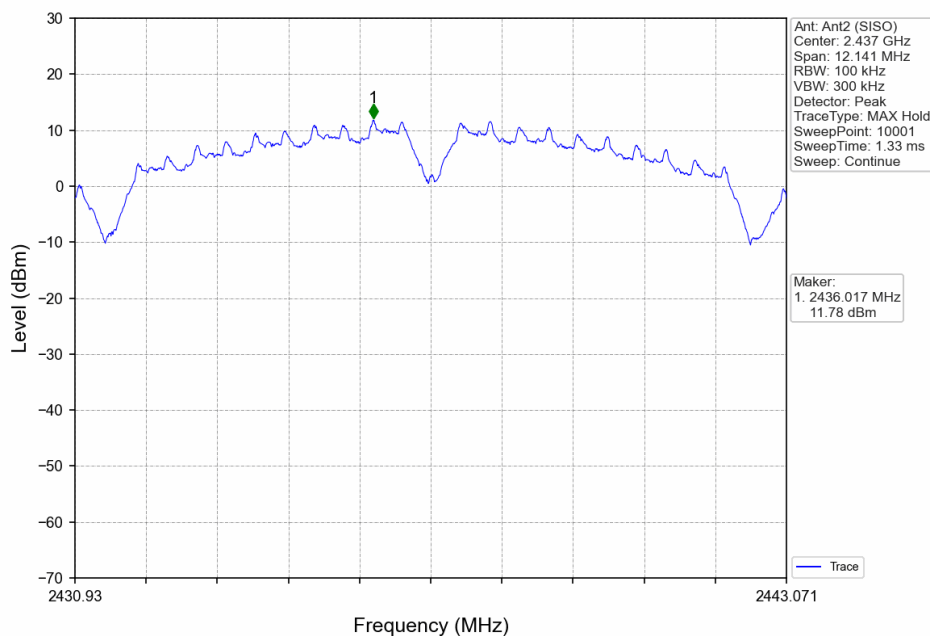
802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV



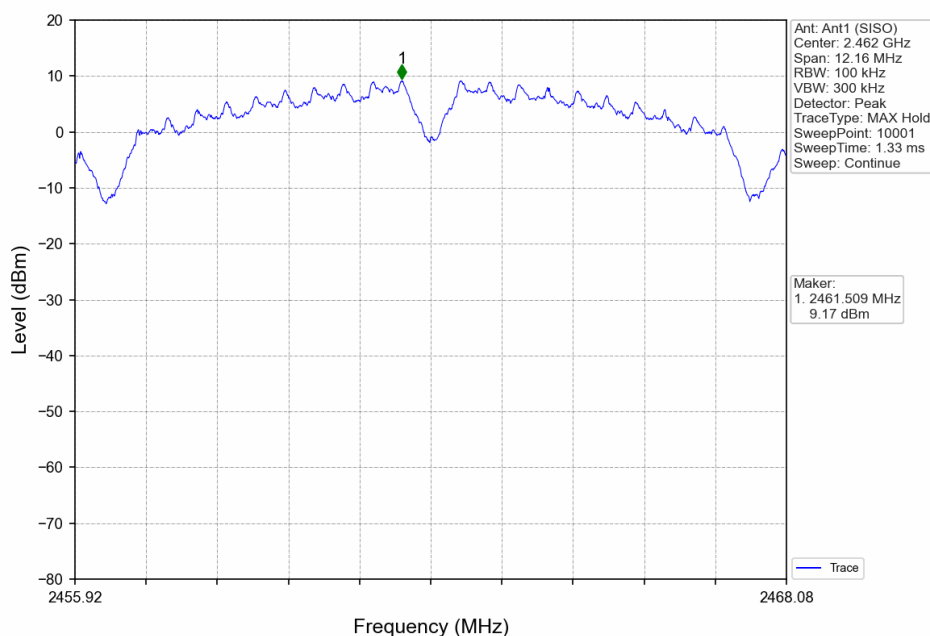
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV

