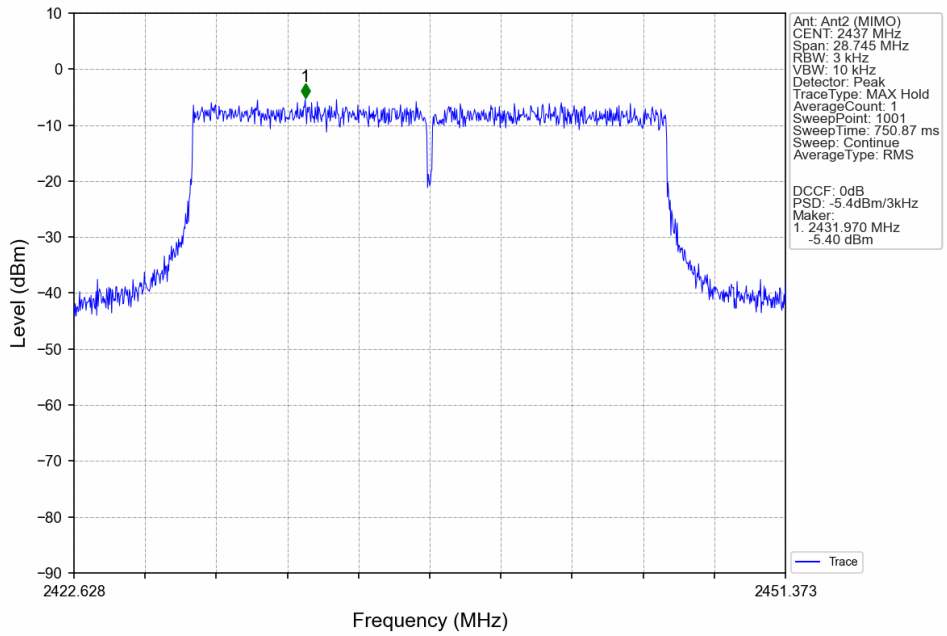
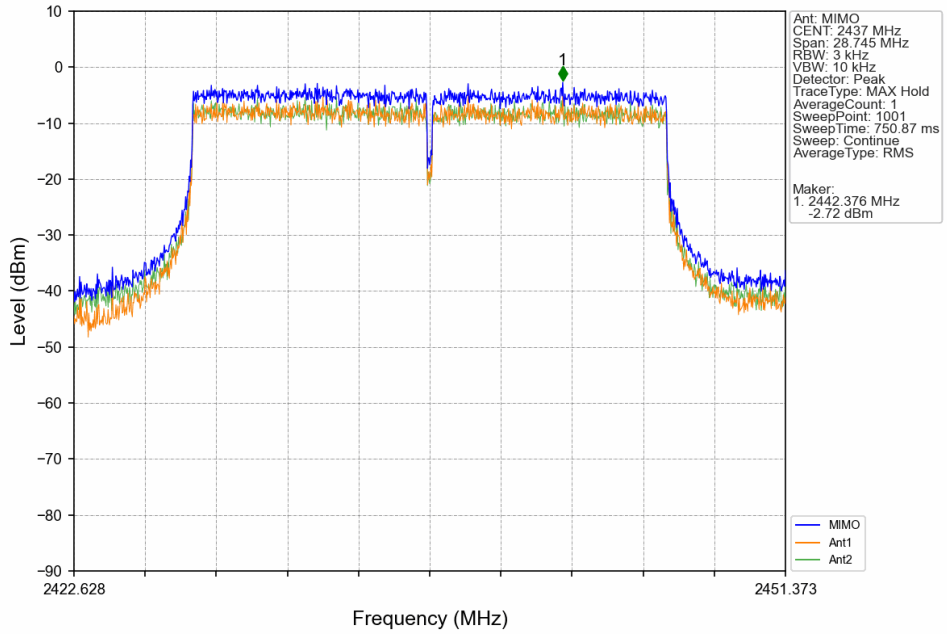
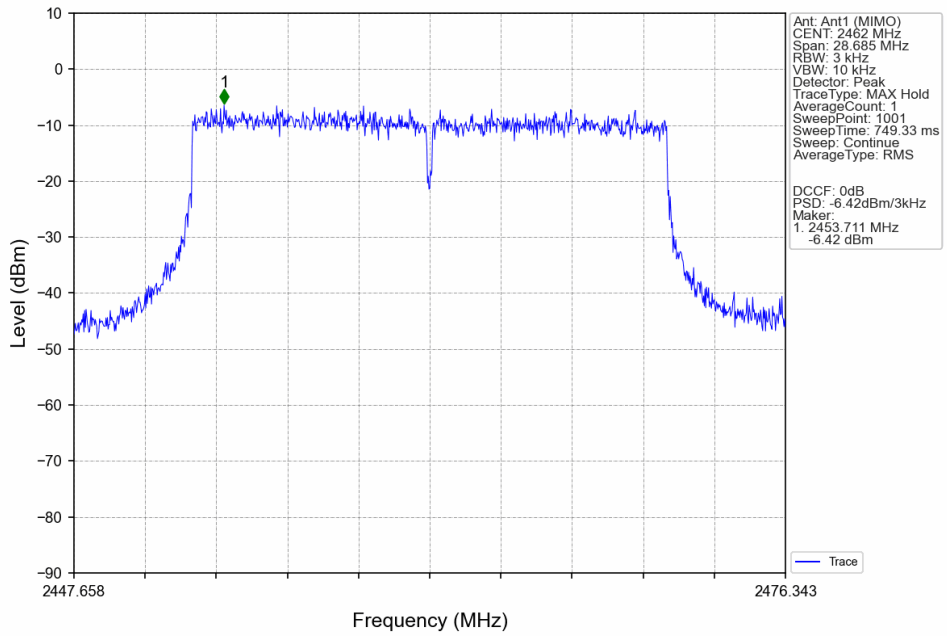
802.11ax(HEW20)_MCH_2437MHz_SU_ / _Ant2 (MIMO)_NTNV



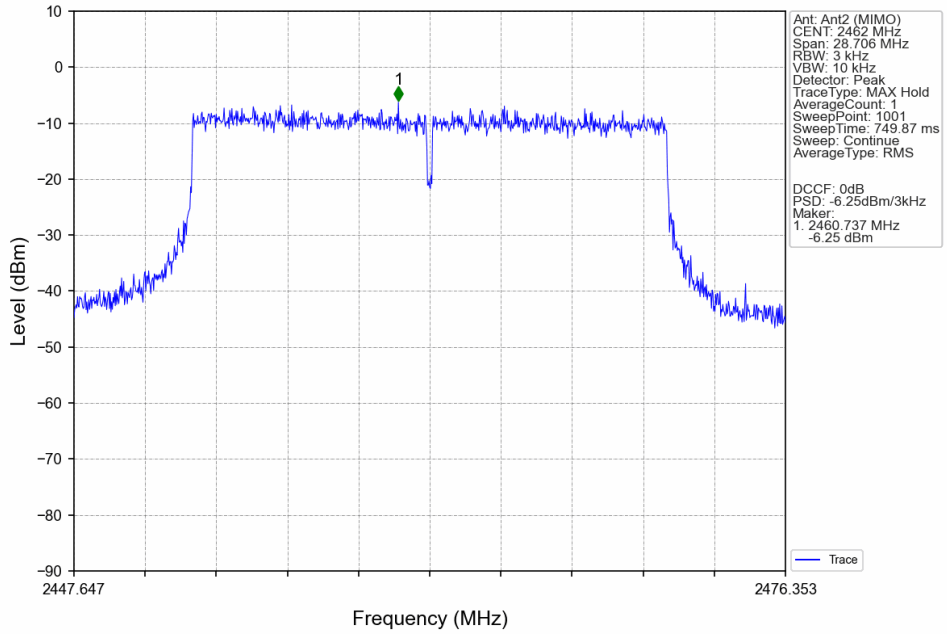
802.11ax(HEW20)_MCH_2437MHz_SU_ / _MIMO_NTNV



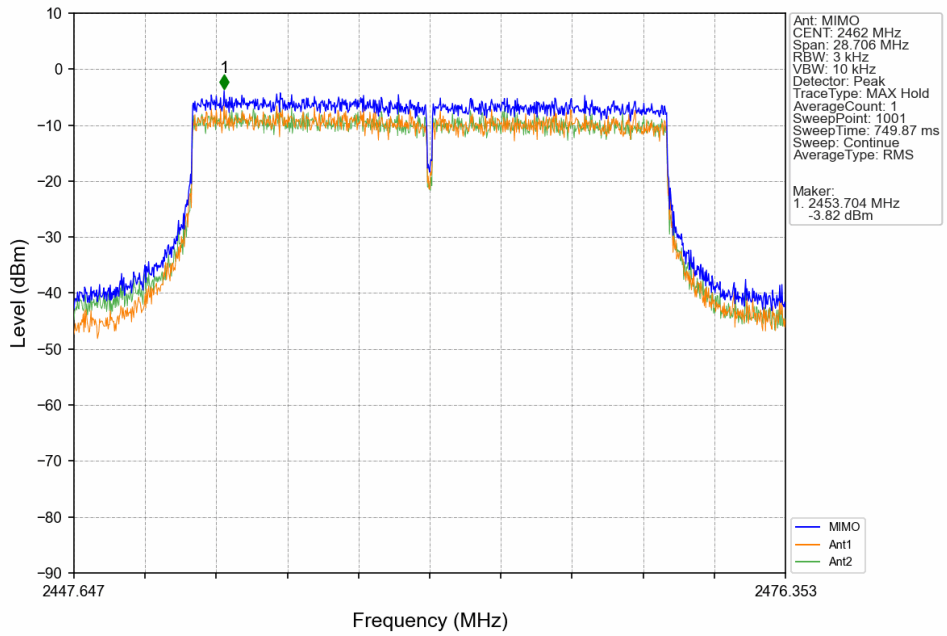
802.11ax(HEW20)_HCH_2462MHz_SU_ / _Ant1 (MIMO)_NTNV



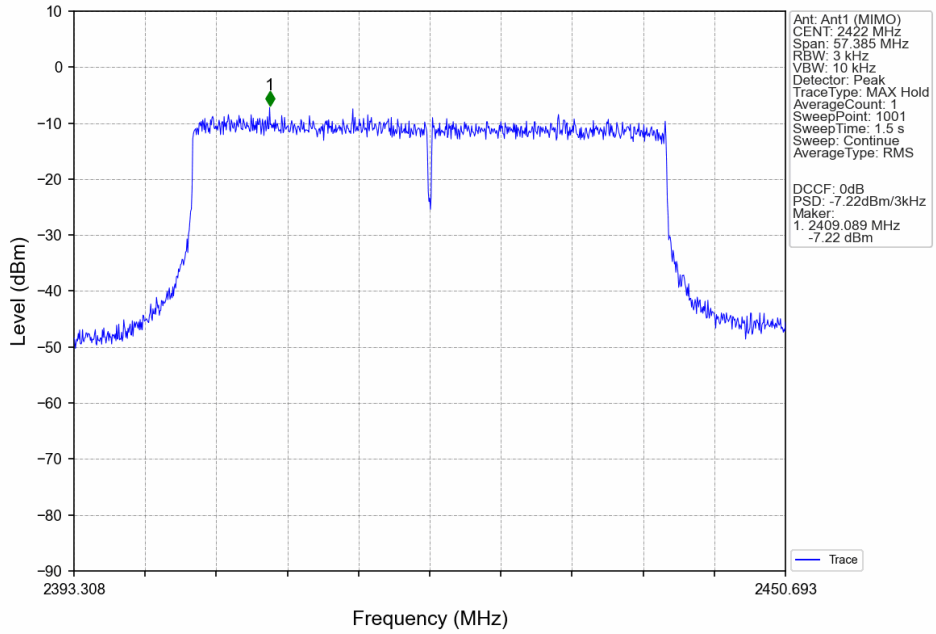
802.11ax(HEW20)_HCH_2462MHz_SU_ / _Ant2 (MIMO)_NTNV



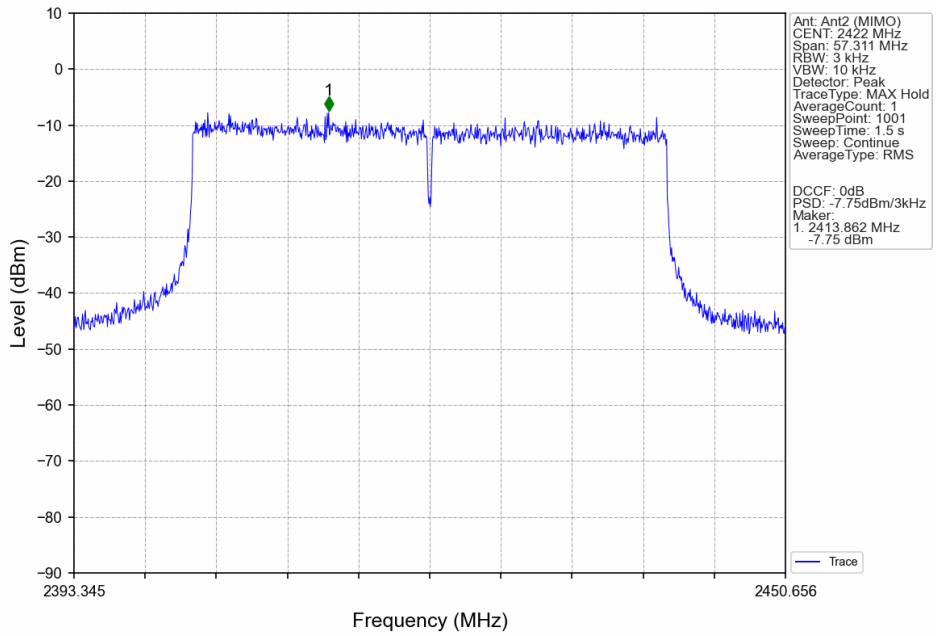
802.11ax(HEW20)_HCH_2462MHz_SU_ / _MIMO_NTNV



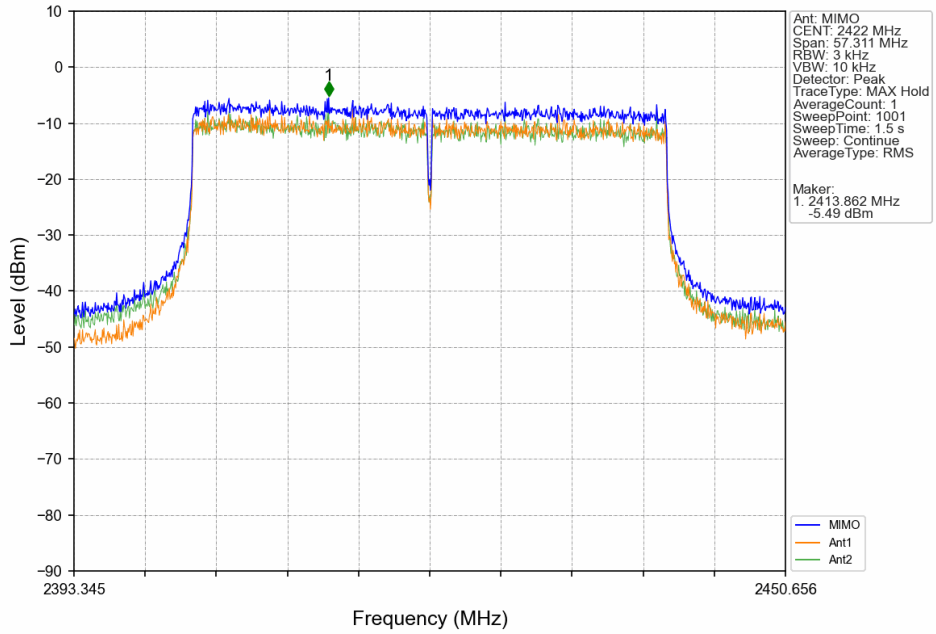
802.11ax(HEW40)_LCH_2422MHz_SU_ / _Ant1 (MIMO)_NTNV



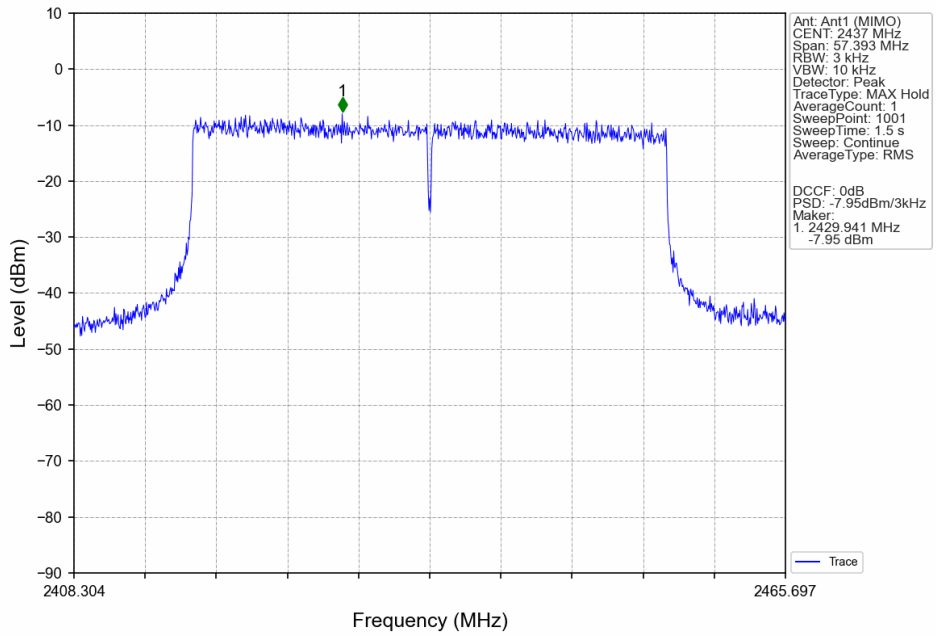
802.11ax(HEW40)_LCH_2422MHz_SU_ / _Ant2 (MIMO)_NTNV



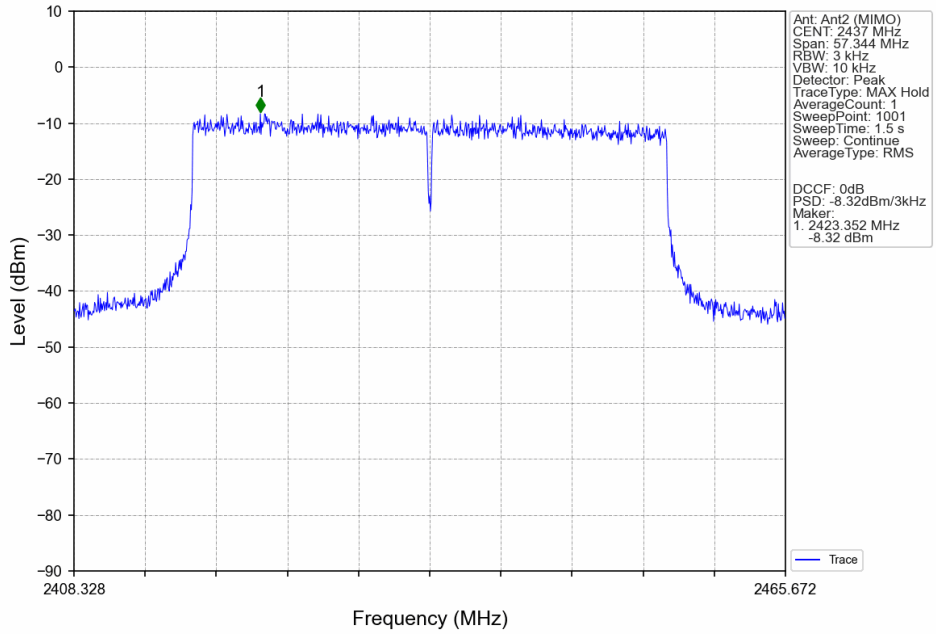
802.11ax(HEW40)_LCH_2422MHz_SU_ / _MIMO_NTNV



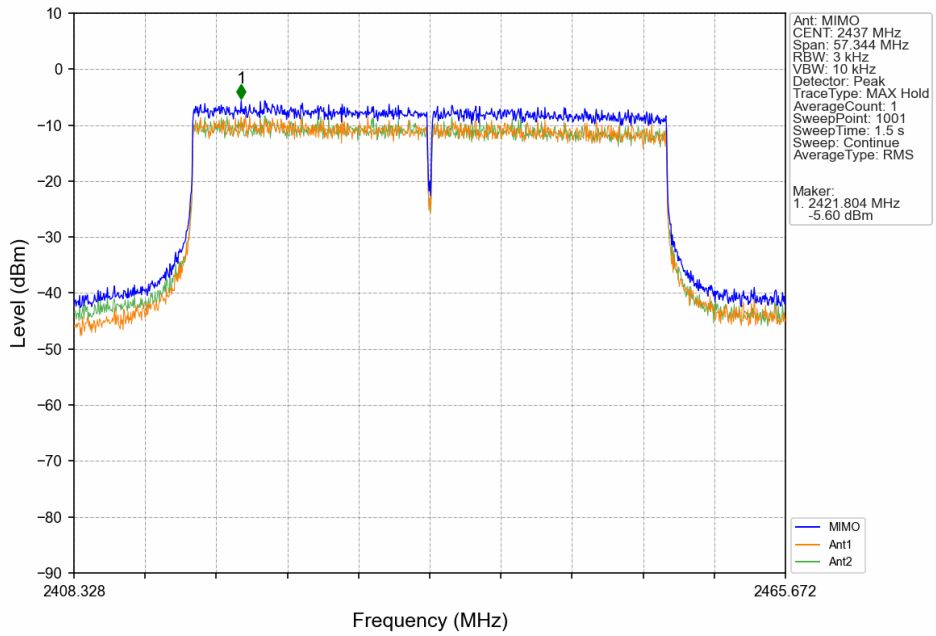
802.11ax(HEW40)_MCH_2437MHz_SU_ / _Ant1 (MIMO)_NTNV



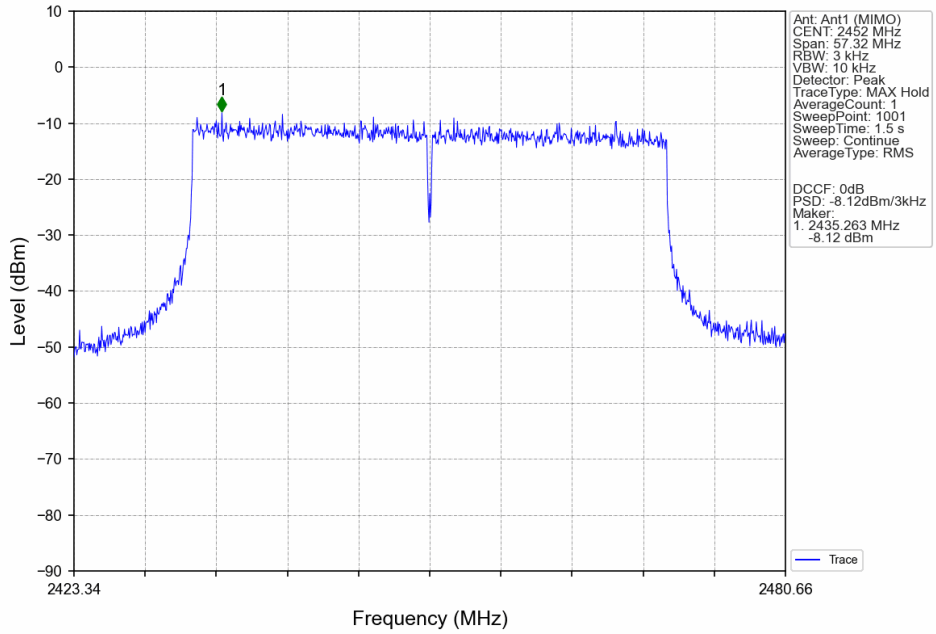
802.11ax(HEW40)_MCH_2437MHz_SU_ / _Ant2 (MIMO)_NTNV



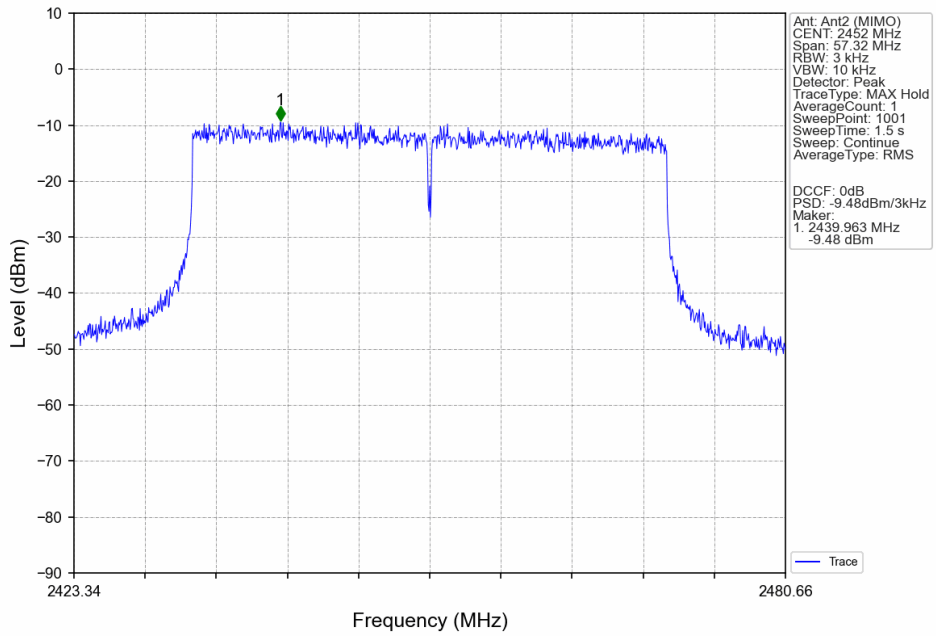
802.11ax(HEW40)_MCH_2437MHz_SU_ / _MIMO_NTNV



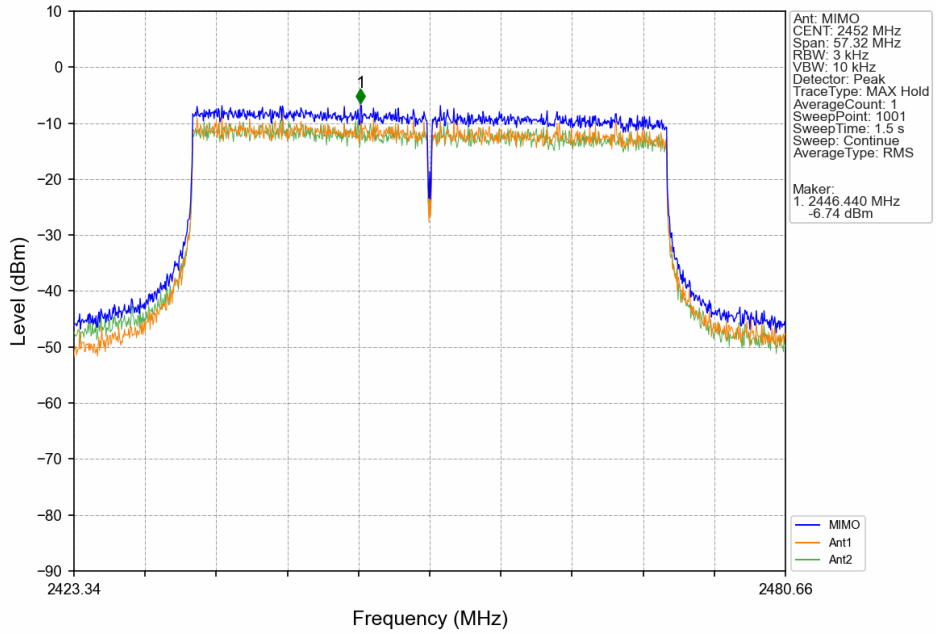
802.11ax(HEW40)_HCH_2452MHz_SU_ / _Ant1 (MIMO)_NTNV



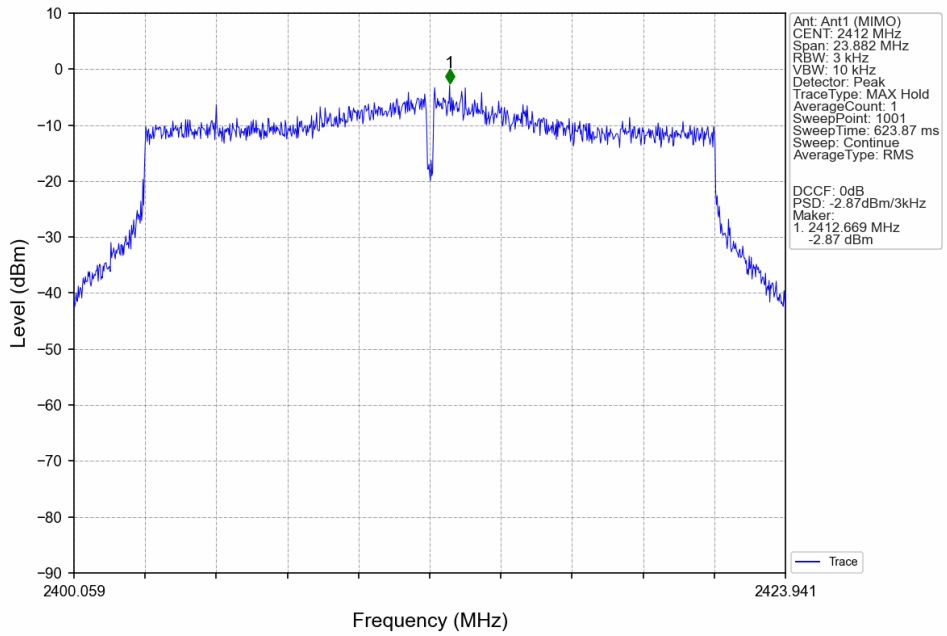
802.11ax(HEW40)_HCH_2452MHz_SU_ / _Ant2 (MIMO)_NTNV



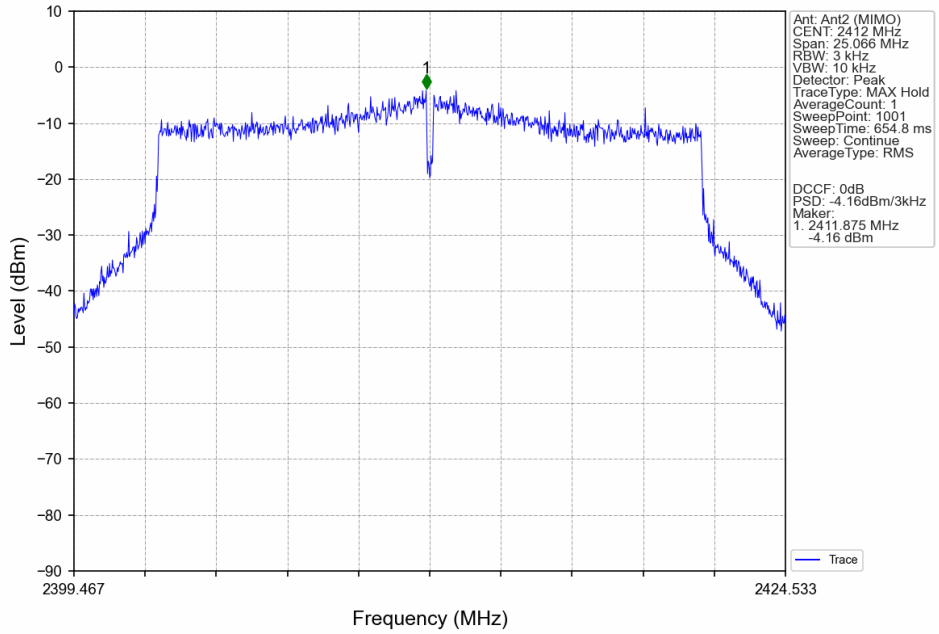
802.11ax(HEW40)_HCH_2452MHz_SU_ / _MIMO_NTNV



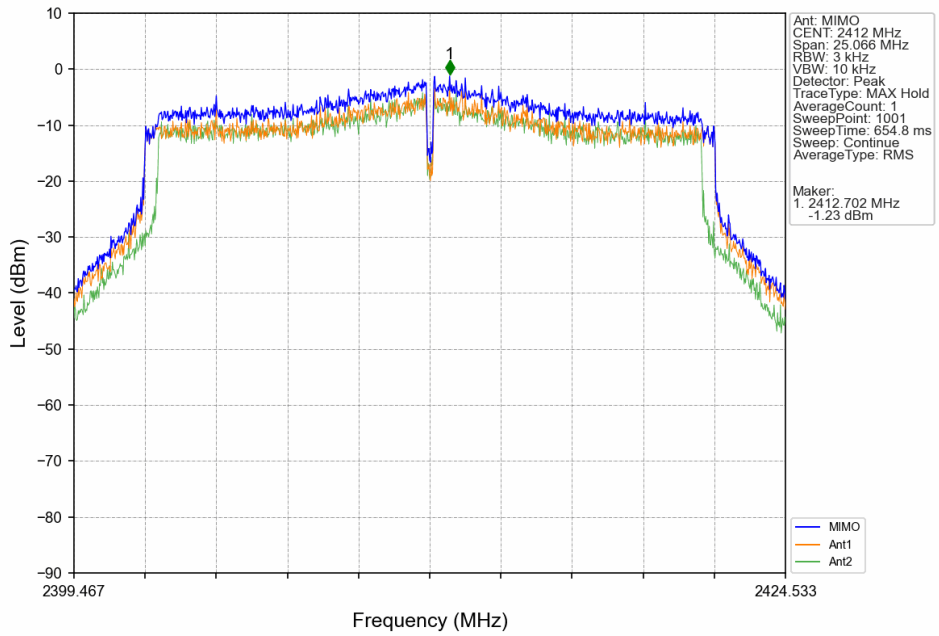
802.11be(EHT20)_LCH_2412MHz_SU_ / _Ant1 (MIMO)_NTNV



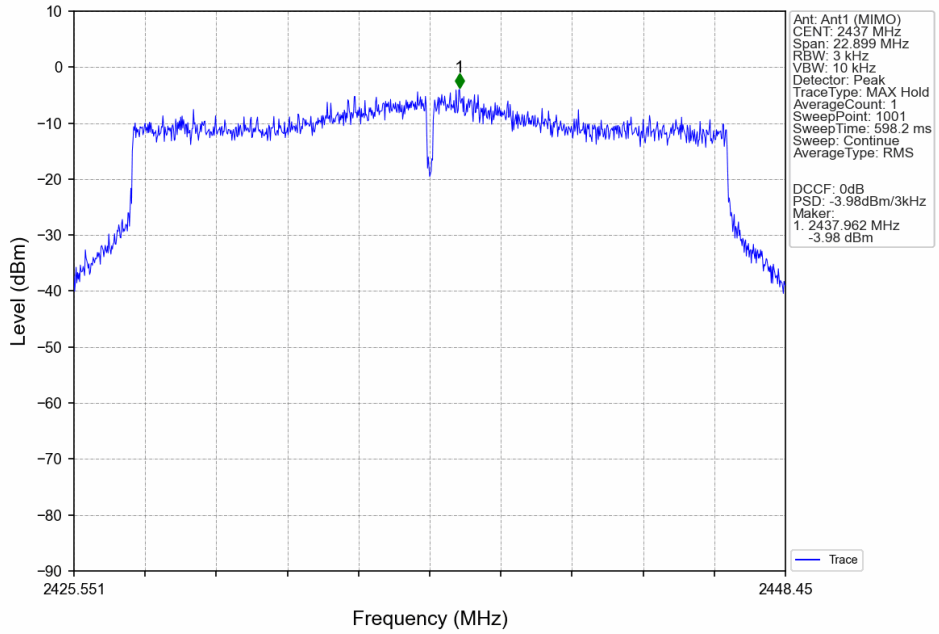
802.11be(EHT20)_LCH_2412MHz_SU_ / _Ant2 (MIMO)_NTNV



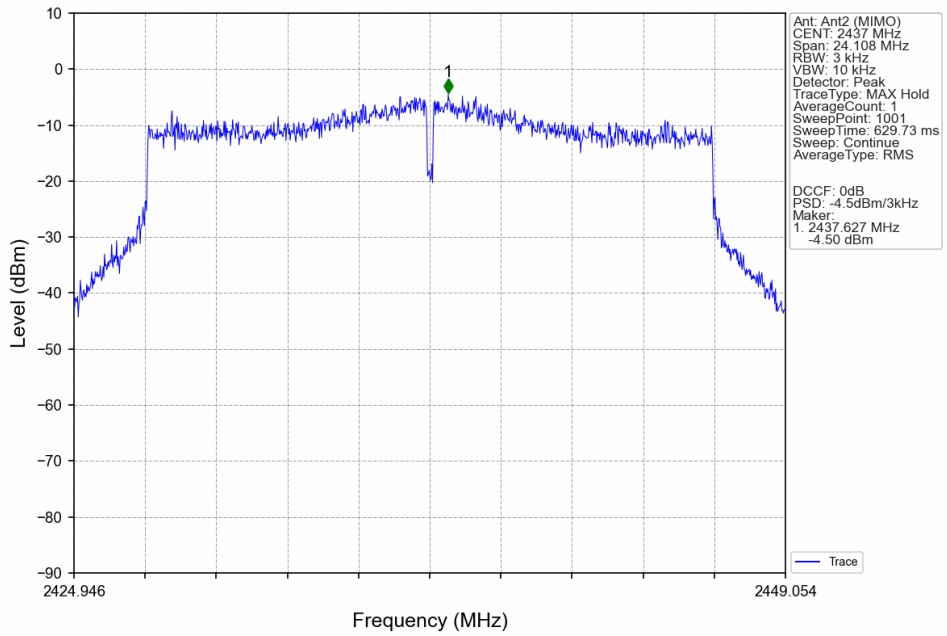
802.11be(EHT20)_LCH_2412MHz_SU_ / _MIMO_NTNV



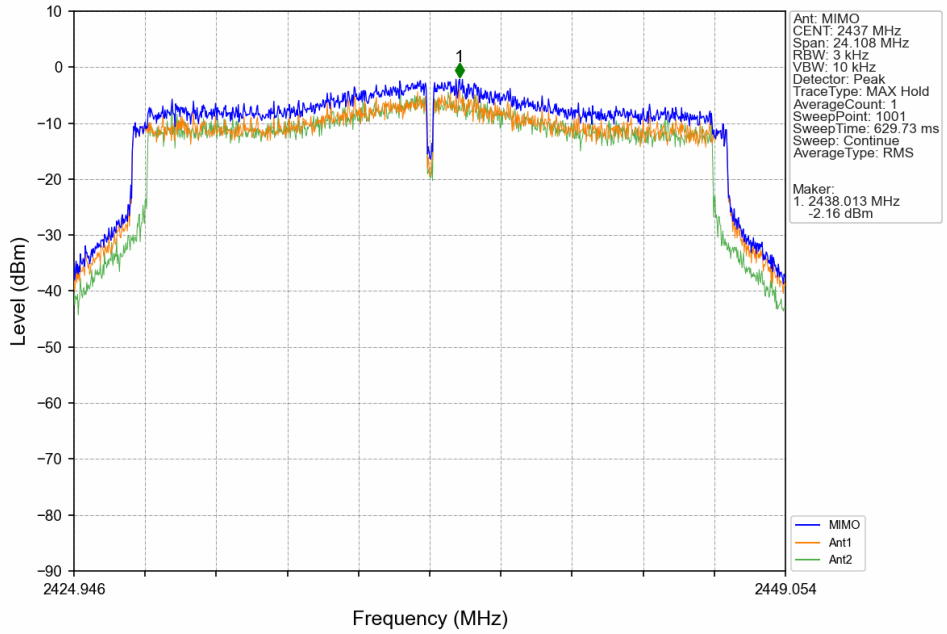
802.11be(EHT20)_MCH_2437MHz_SU_ / _Ant1 (MIMO)_NTNV



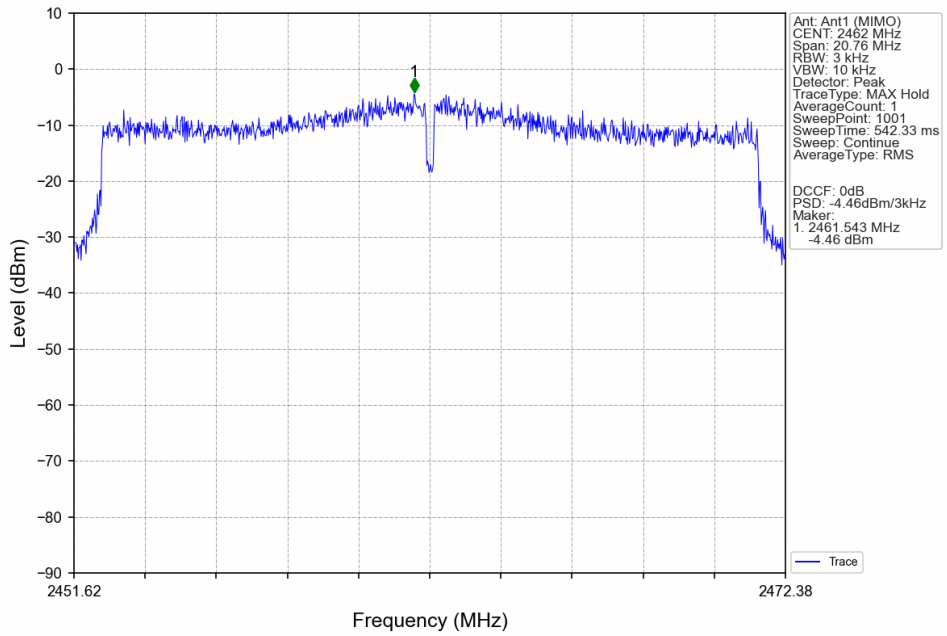
802.11be(EHT20)_MCH_2437MHz_SU_ / _Ant2 (MIMO)_NTNV



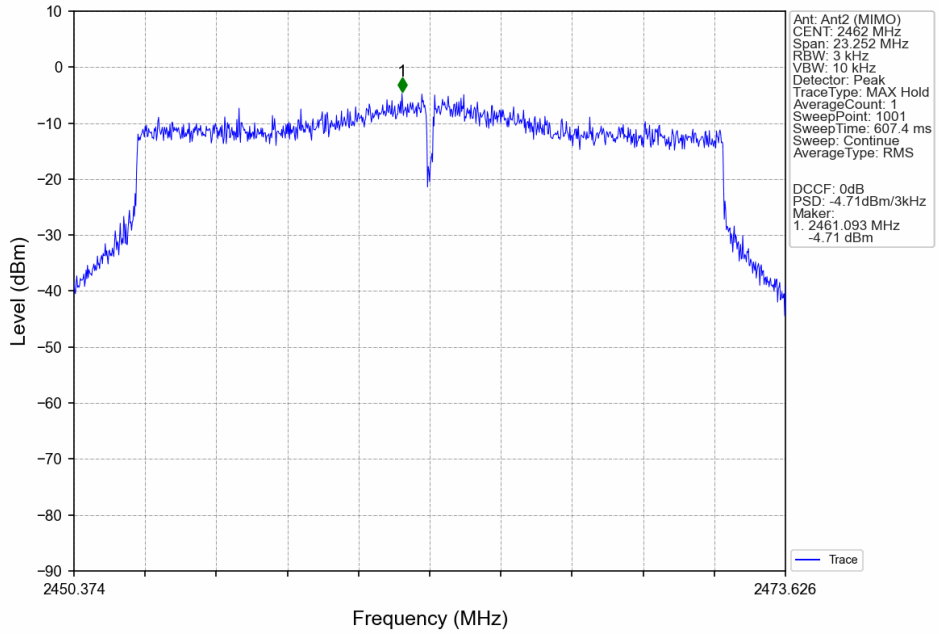
802.11be(EHT20)_MCH_2437MHz_SU_ / _MIMO_NTNV



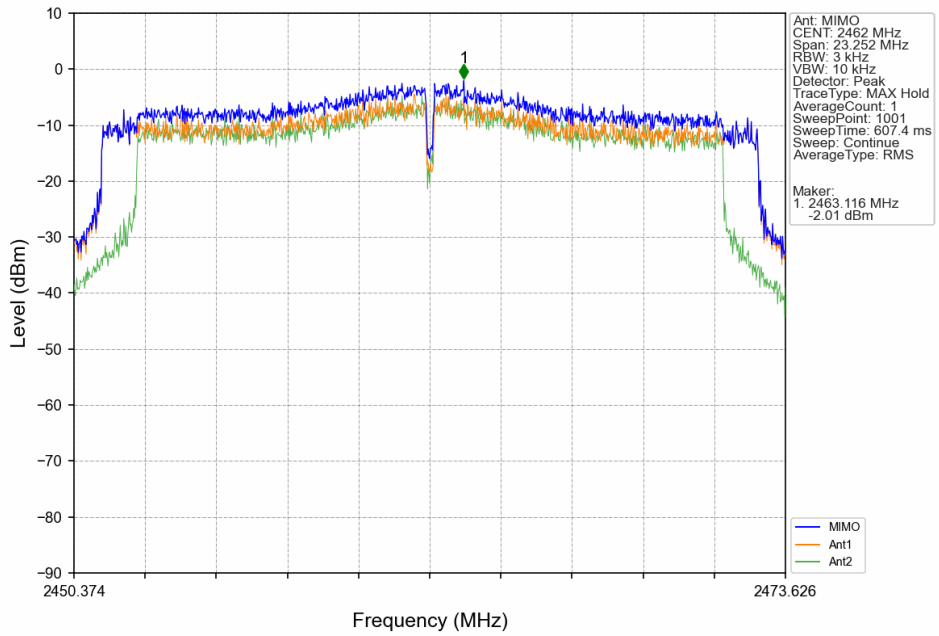
802.11be(EHT20)_HCH_2462MHz_SU_ / _Ant1 (MIMO)_NTNV



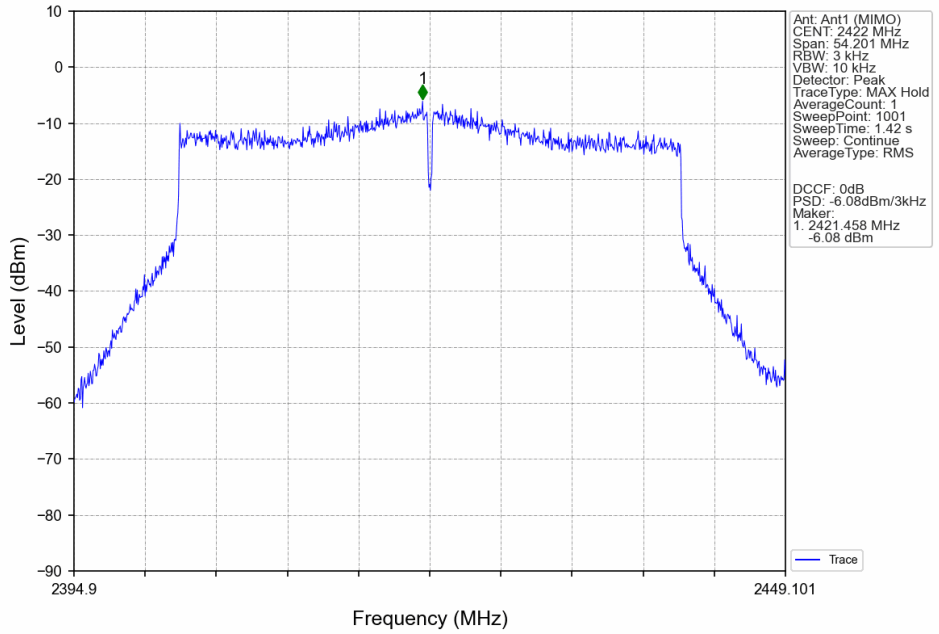
802.11be(EHT20)_HCH_2462MHz_SU_ / _Ant2 (MIMO)_NTNV



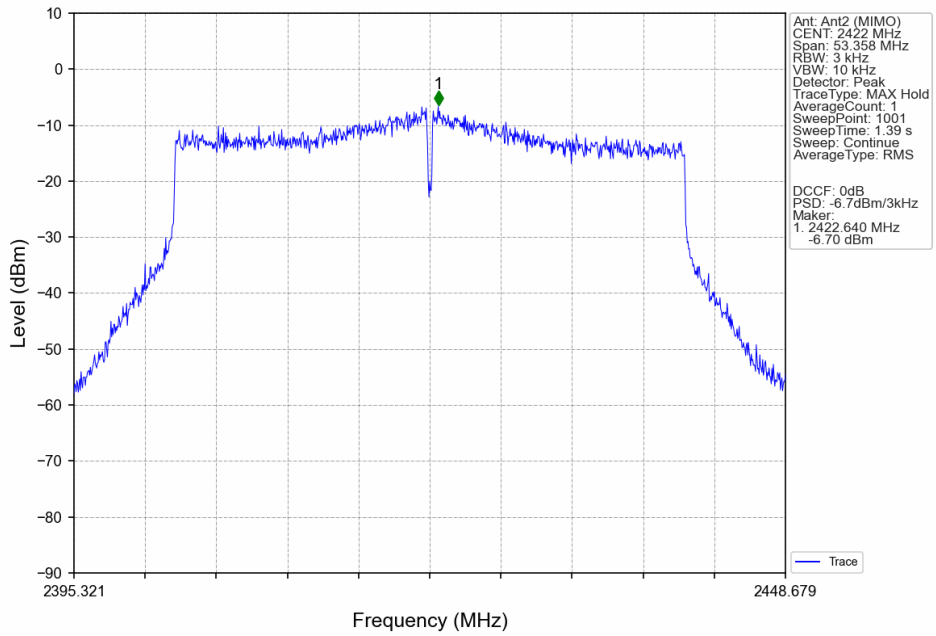
802.11be(EHT20)_HCH_2462MHz_SU_ / _MIMO_NTNV



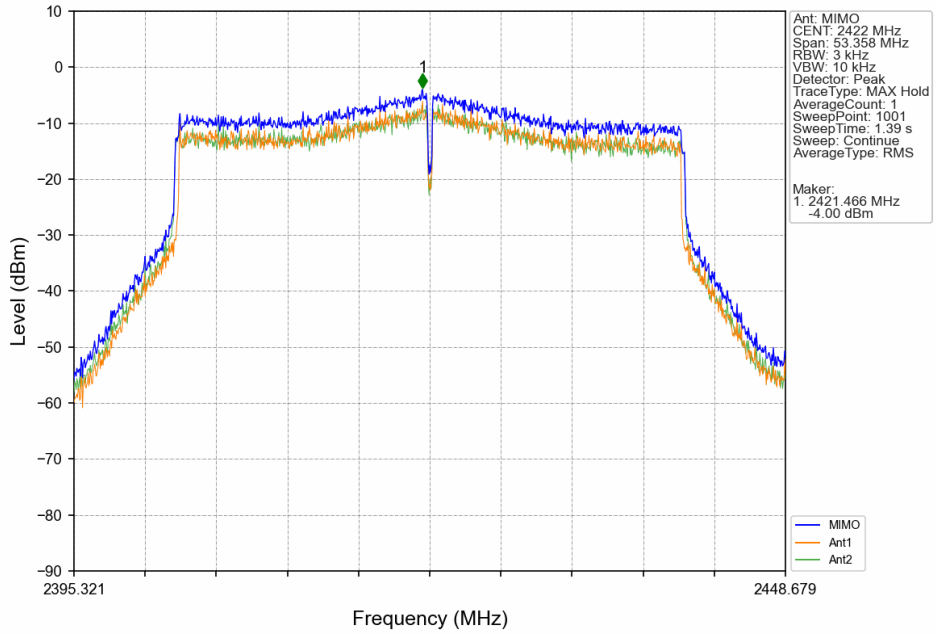
802.11be(EHT40)_LCH_2422MHz_SU_ / _Ant1 (MIMO)_NTNV



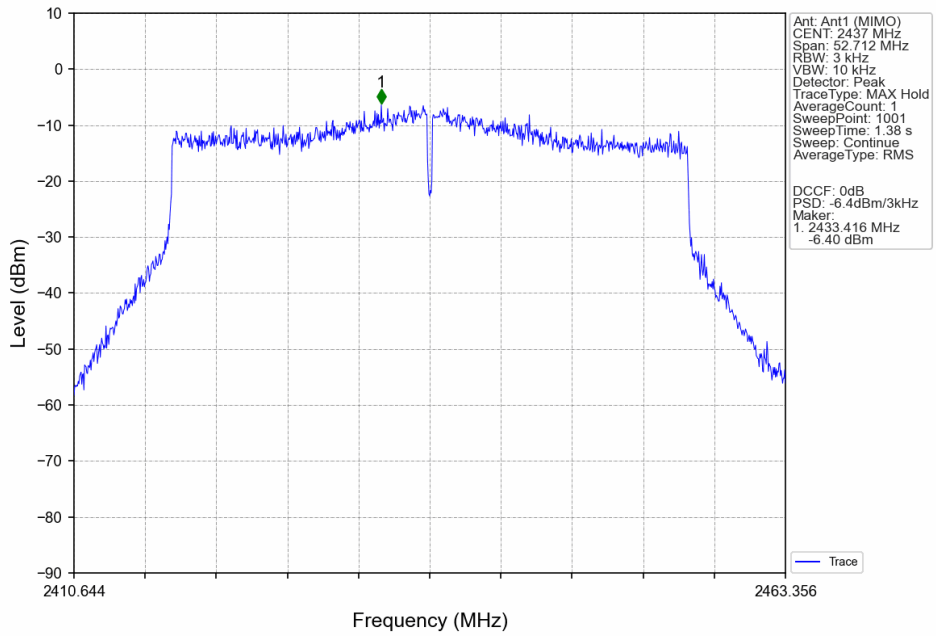
802.11be(EHT40)_LCH_2422MHz_SU_ / _Ant2 (MIMO)_NTNV



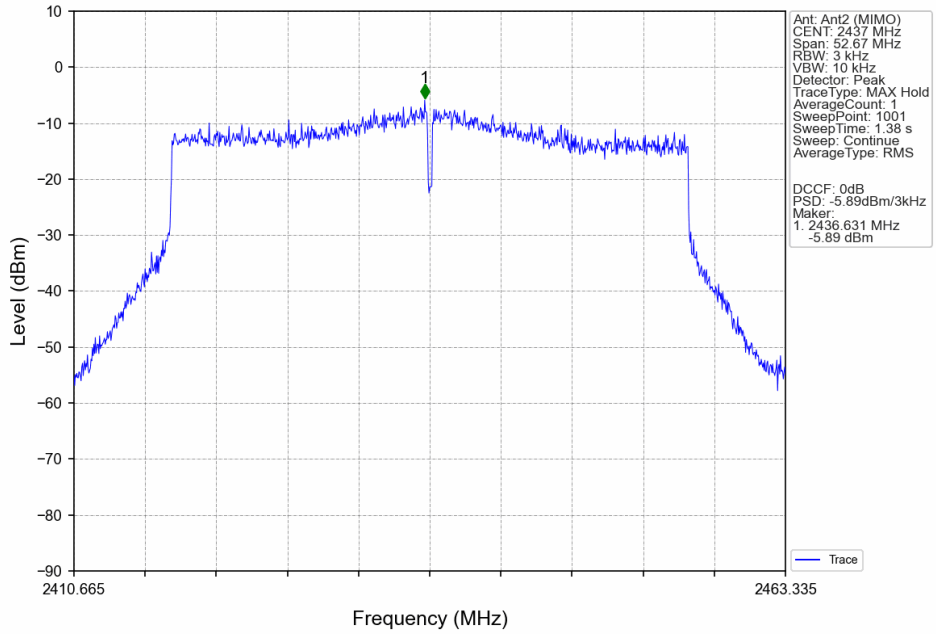
802.11be(EHT40)_LCH_2422MHz_SU_ / _MIMO_NTNV



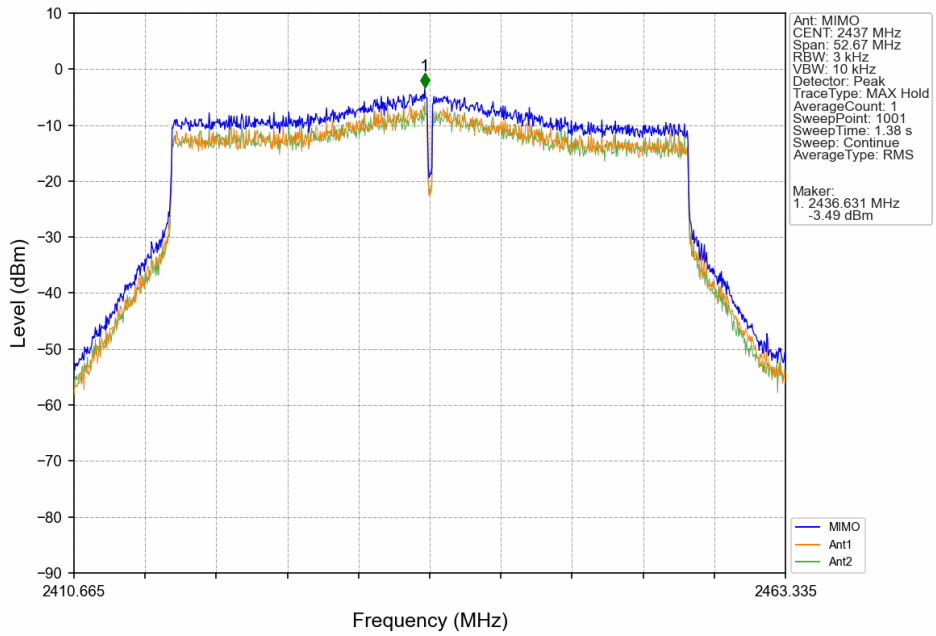
802.11be(EHT40)_MCH_2437MHz_SU_ / _Ant1 (MIMO)_NTNV



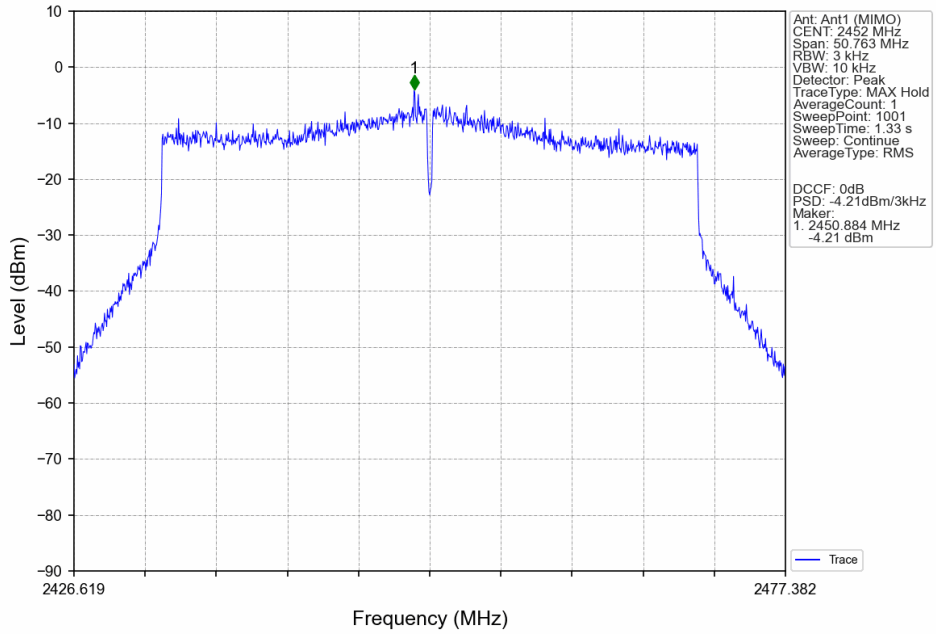
802.11be(EHT40)_MCH_2437MHz_SU_ / _Ant2 (MIMO)_NTNV



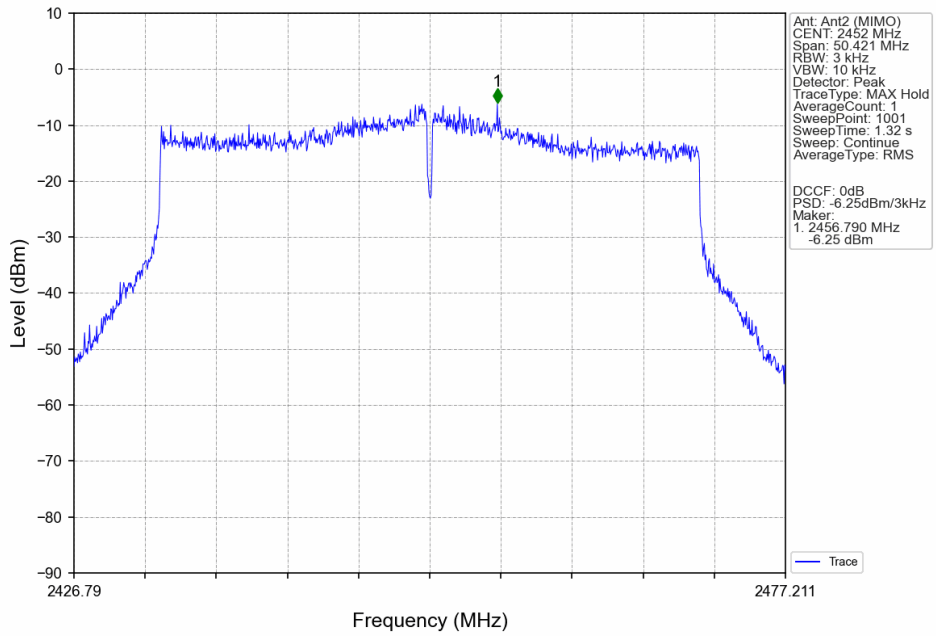
802.11be(EHT40)_MCH_2437MHz_SU_ / _MIMO_NTNV



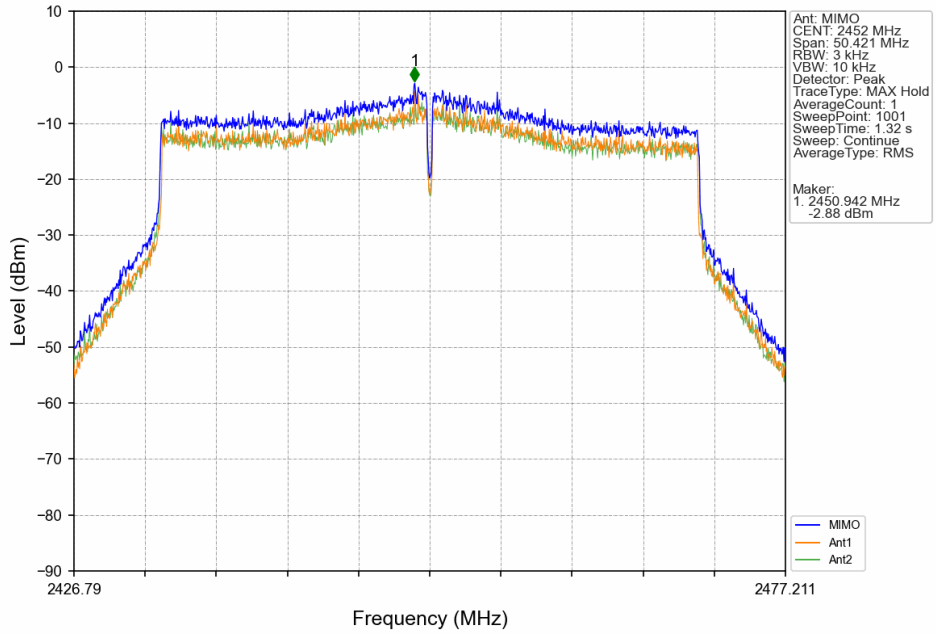
802.11be(EHT40)_HCH_2452MHz_SU_ / _Ant1 (MIMO)_NTNV



802.11be(EHT40)_HCH_2452MHz_SU_ / _Ant2 (MIMO)_NTNV



802.11be(EHT40)_HCH_2452MHz_SU_ / _MIMO_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)
802.11b	SISO	2412	/	/	1	13.16
					2	11.38
		2437	/	/	1	12.70
					2	12.28
		2462	/	/	1	11.74
					2	11.15
802.11g	SISO	2412	/	/	1	11.92
					2	11.69
		2437	/	/	1	11.99
					2	11.61
		2462	/	/	1	11.76
					2	10.98
802.11n (HT20)	MIMO	2412	/	/	1	11.93
					2	10.48
		2437	/	/	1	11.83
					2	11.70
		2462	/	/	1	11.99
					2	11.09
802.11n (HT40)	MIMO	2422	/	/	1	8.48
					2	8.84
		2437	/	/	1	9.27
					2	9.32
		2452	/	/	1	6.95
					2	6.98
802.11ax (HEW20)	MIMO	2412	SU	/	1	11.05
					2	10.57
		2437	SU	/	1	10.49
					2	10.60
		2462	SU	/	1	9.28
					2	8.81
802.11ax (HEW40)	MIMO	2422	SU	/	1	7.39
					2	7.51
		2437	SU	/	1	7.45
					2	7.27
		2452	SU	/	1	6.39
					2	6.65
802.11be (EHT20)	MIMO	2412	SU	/	1	10.71
					2	11.21
		2437	SU	/	1	11.66
					2	10.52
		2462	SU	/	1	11.32
					2	11.27
802.11be (EHT40)	MIMO	2422	SU	/	1	8.26
					2	8.46
		2437	SU	/	1	8.35

					2	9.36
		2452	SU	/	1	9.02
					2	9.14
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.						

5.1.2 CSE

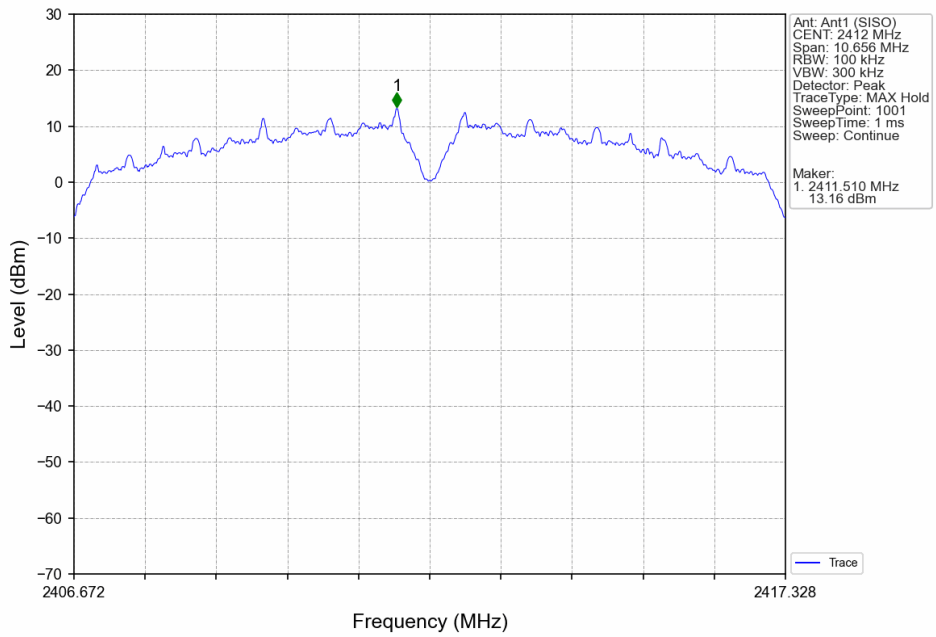
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	/	/	1	13.16	-16.84	Pass
					2	12.28	-17.72	Pass
		2437	/	/	1	13.16	-16.84	Pass
					2	12.28	-17.72	Pass
		2462	/	/	1	13.16	-16.84	Pass
					2	12.28	-17.72	Pass
802.11g	SISO	2412	/	/	1	11.99	-18.01	Pass
					2	11.69	-18.31	Pass
		2437	/	/	1	11.99	-18.01	Pass
					2	11.69	-18.31	Pass
		2462	/	/	1	11.99	-18.01	Pass
					2	11.69	-18.31	Pass
802.11n (HT20)	MIMO	2412	/	/	1	11.99	-18.01	Pass
					2	11.70	-18.30	Pass
		2437	/	/	1	11.99	-18.01	Pass
					2	11.70	-18.30	Pass
		2462	/	/	1	11.99	-18.01	Pass
					2	11.70	-18.30	Pass
802.11n (HT40)	MIMO	2422	/	/	1	9.27	-20.73	Pass
					2	9.32	-20.68	Pass
		2437	/	/	1	9.27	-20.73	Pass
					2	9.32	-20.68	Pass
		2452	/	/	1	9.27	-20.73	Pass
					2	9.32	-20.68	Pass
802.11ax (HEW20)	MIMO	2412	SU	/	1	11.05	-18.95	Pass
					2	10.60	-19.40	Pass
		2437	SU	/	1	11.05	-18.95	Pass
					2	10.60	-19.40	Pass
		2462	SU	/	1	11.05	-18.95	Pass
					2	10.60	-19.40	Pass
802.11ax (HEW40)	MIMO	2422	SU	/	1	7.45	-22.55	Pass
					2	7.51	-22.49	Pass
		2437	SU	/	1	7.45	-22.55	Pass
					2	7.51	-22.49	Pass
		2452	SU	/	1	7.45	-22.55	Pass
					2	7.51	-22.49	Pass
802.11be (EHT20)	MIMO	2412	SU	/	1	11.66	-18.34	Pass
					2	11.27	-18.73	Pass
		2437	SU	/	1	11.66	-18.34	Pass
					2	11.27	-18.73	Pass
		2462	SU	/	1	11.66	-18.34	Pass
					2	11.27	-18.73	Pass
802.11be (EHT40)	MIMO	2422	SU	/	1	9.02	-20.98	Pass
					2	9.36	-20.64	Pass
		2437	SU	/	1	9.02	-20.98	Pass

					2	9.36	-20.64	Pass
		2452	SU	/	1	9.02	-20.98	Pass
					2	9.36	-20.64	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.								

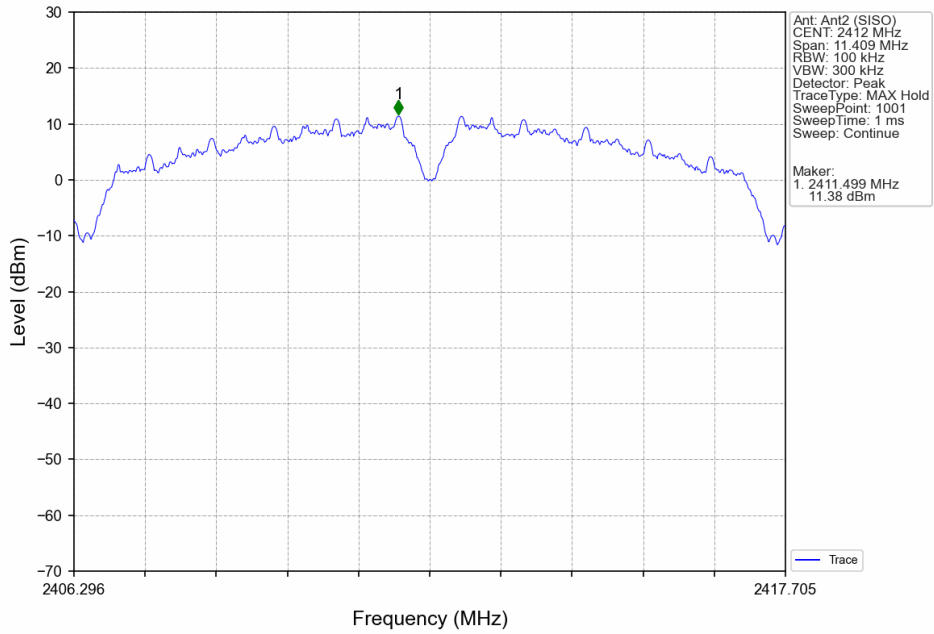
5.2 Test Graph

5.2.1 Ref

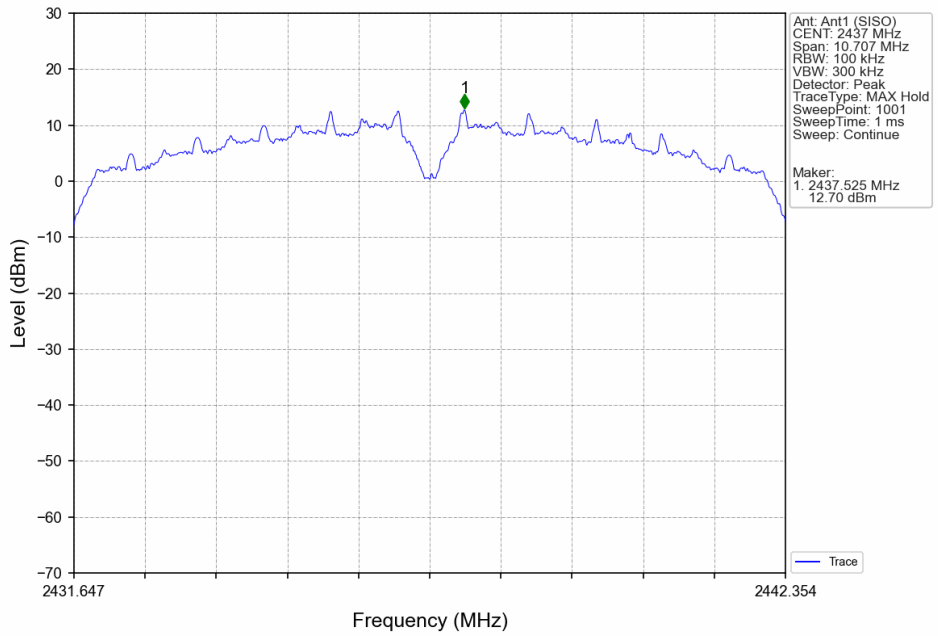
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



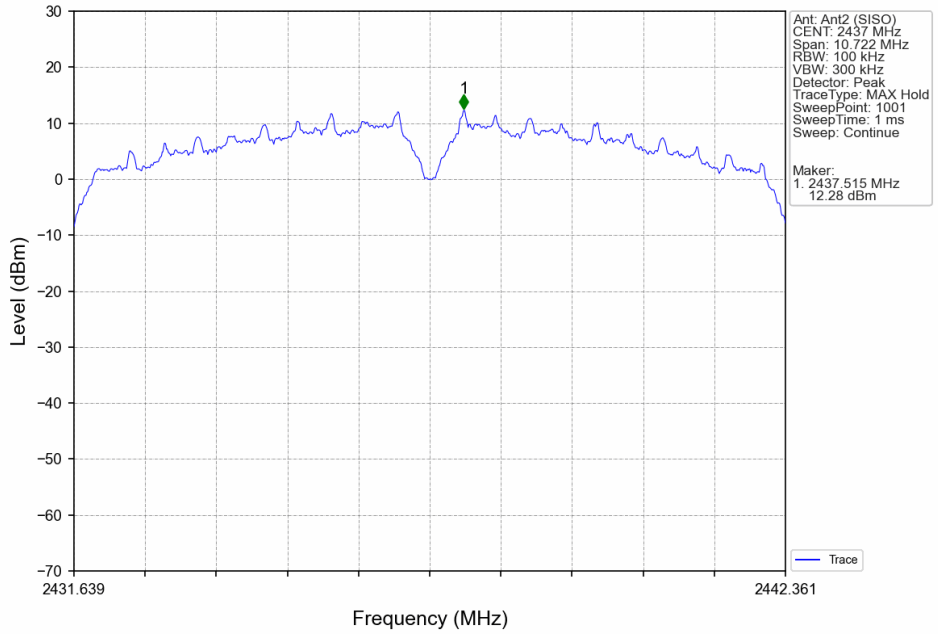
802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV


Ant: Ant2 (SISO)
CENT: 2412 MHz
Span: 11.409 MHz
RBW: 100 kHz
VBW: 300 kHz
Detector: Peak
TraceType: MAX Hold
SweepPoint: 1001
SweepTime: 1 ms
Sweep: Continue
Maker:
1. 2411.499 MHz
11.38 dBm
Trace
Level (dBm)
Frequency (MHz)
2406.296
2417.705
30
20
10
0
−10
−20
−30
−40
−50
−60
−70
1

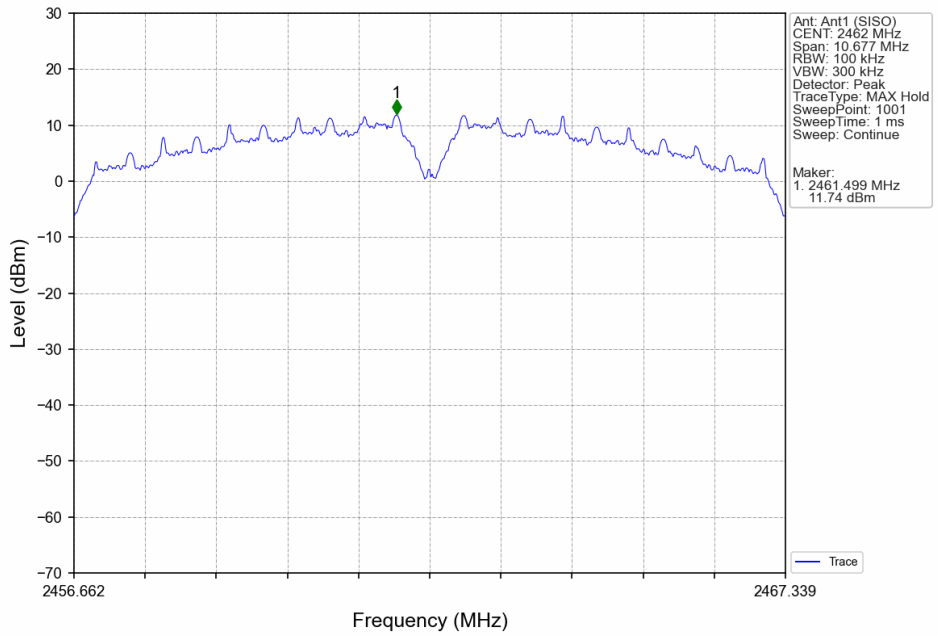
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



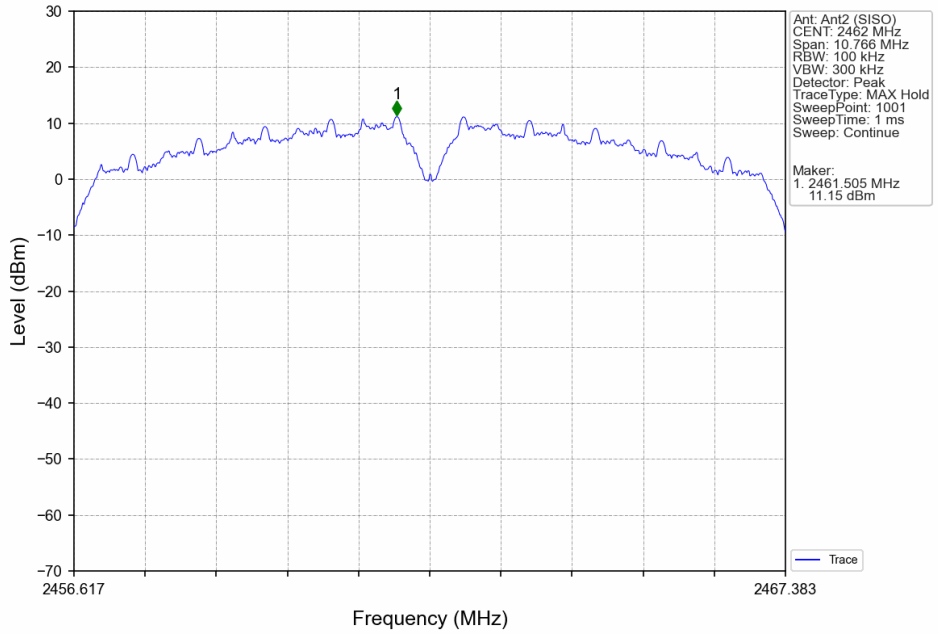
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



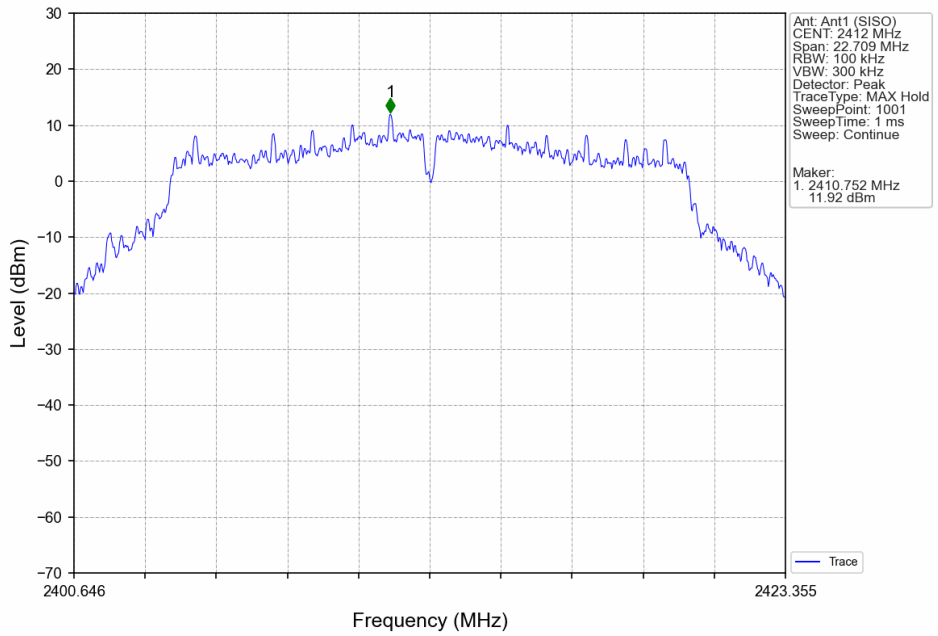
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



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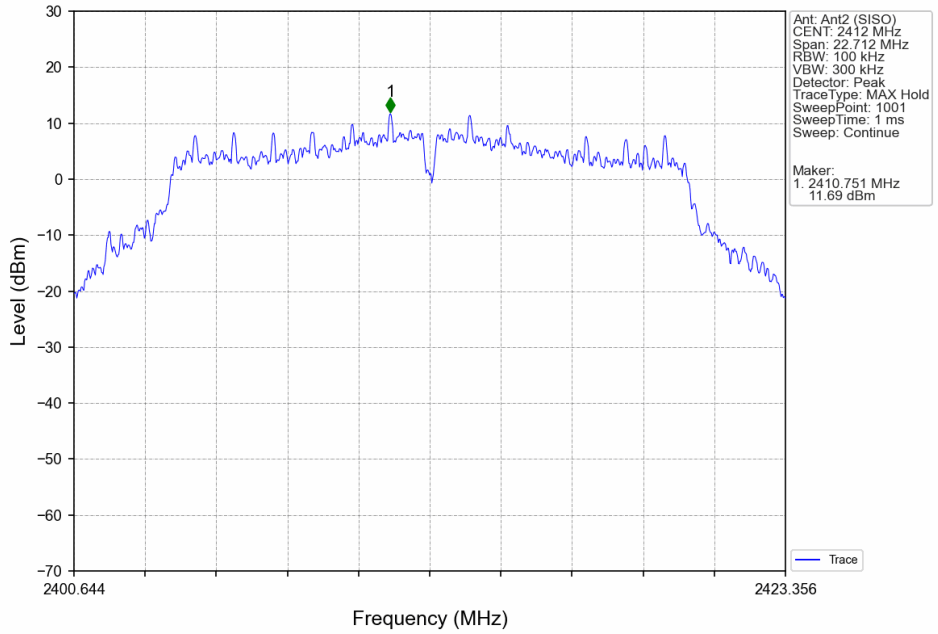
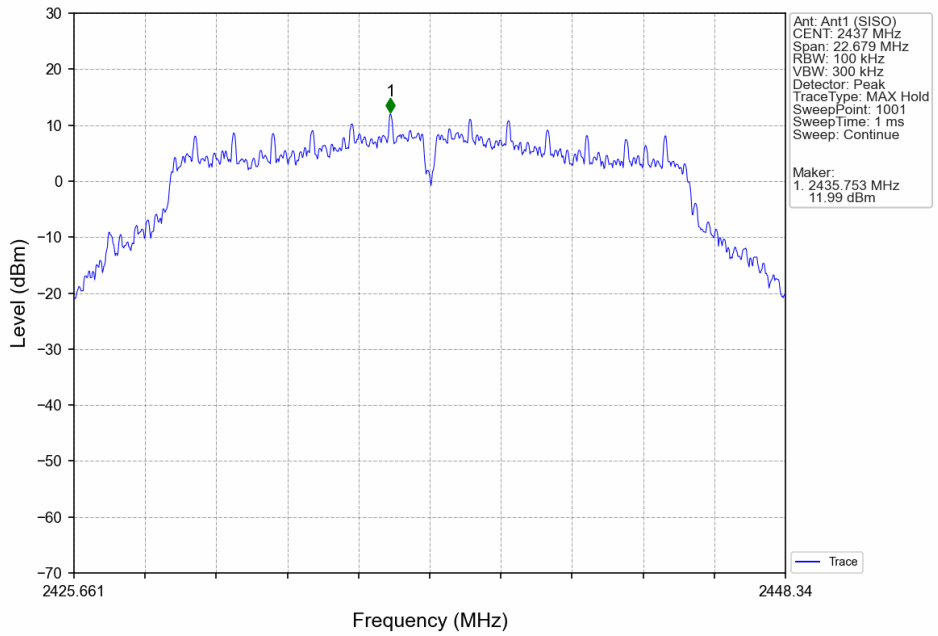


802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



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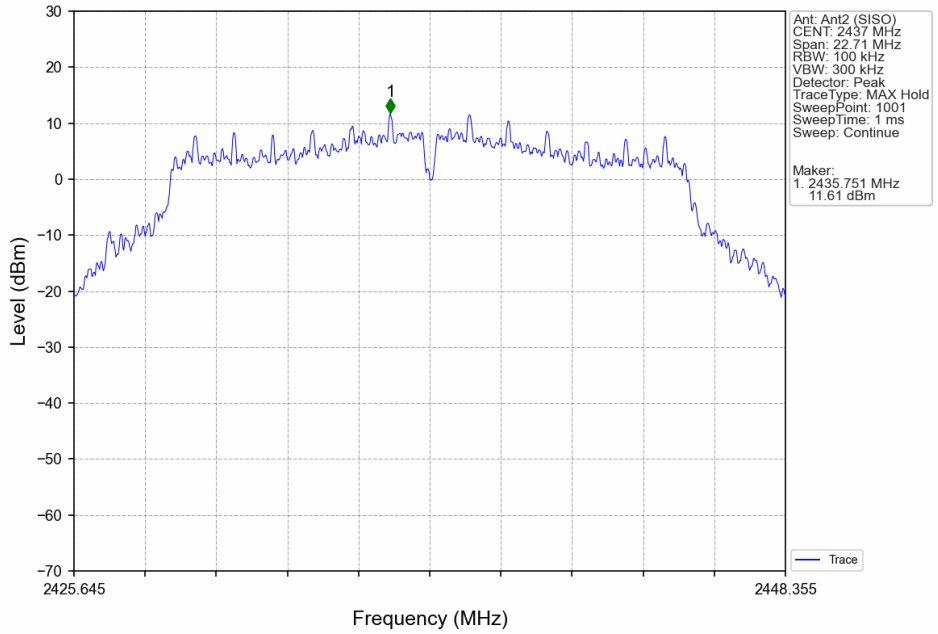

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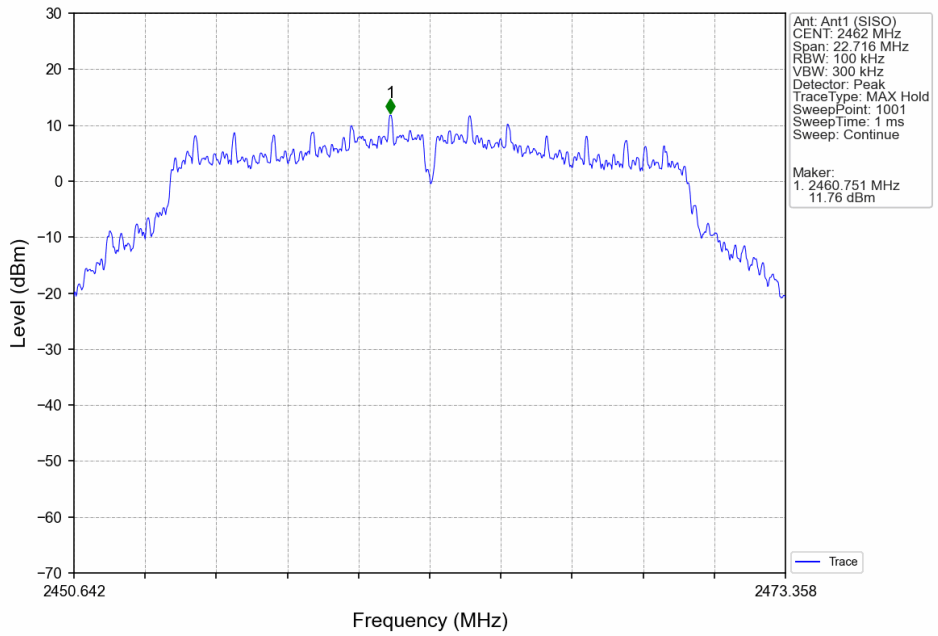

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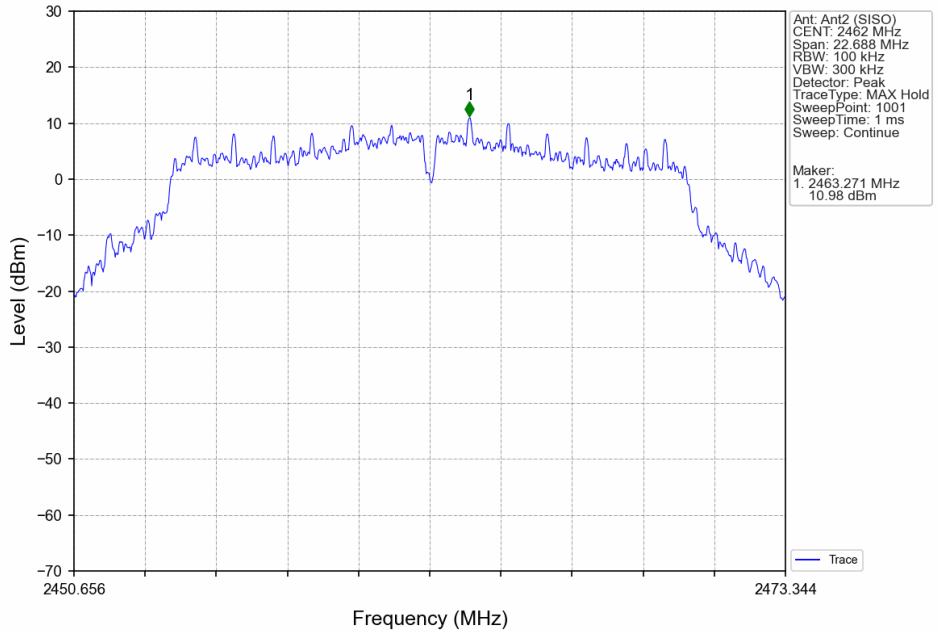
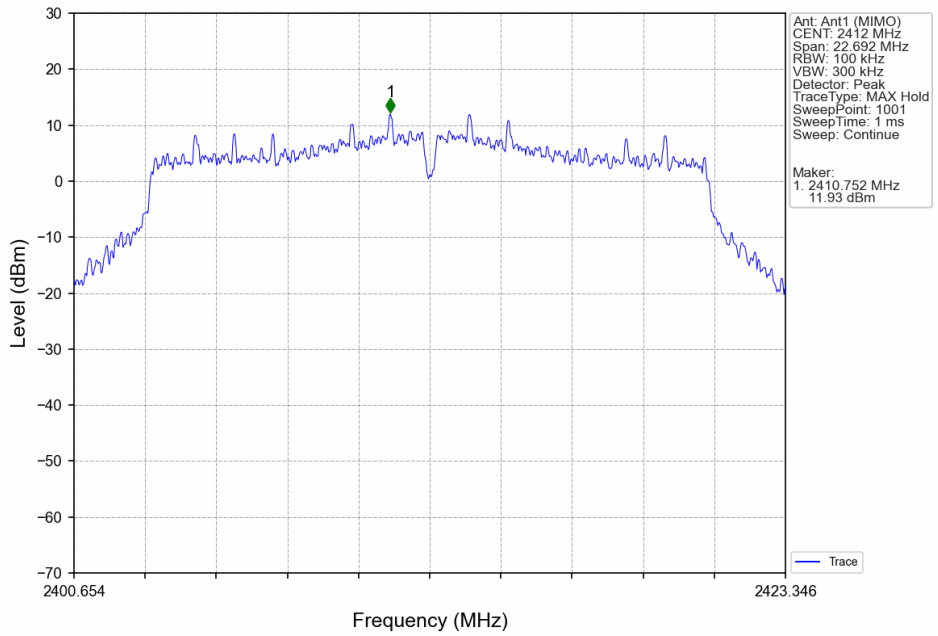


802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



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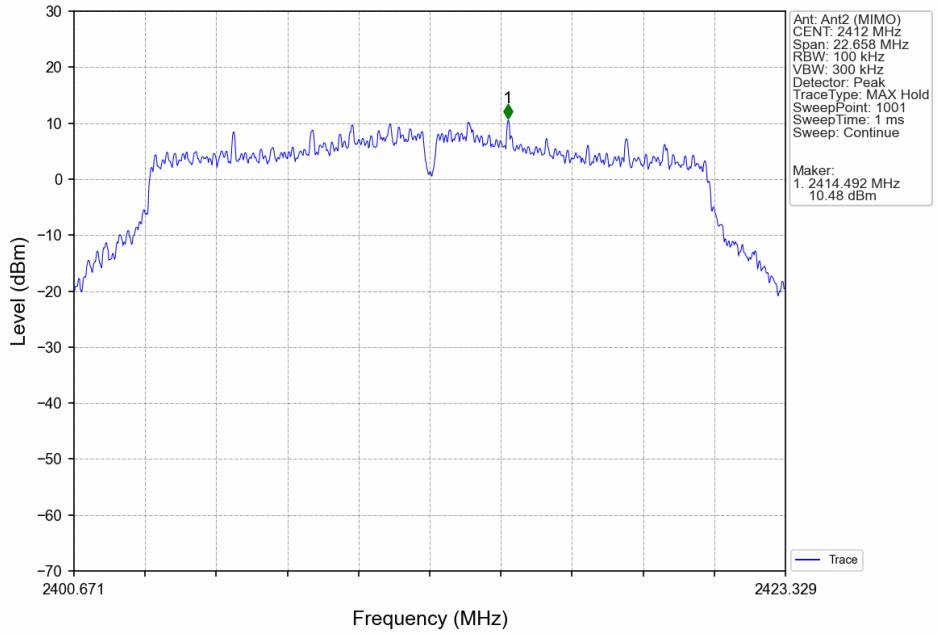

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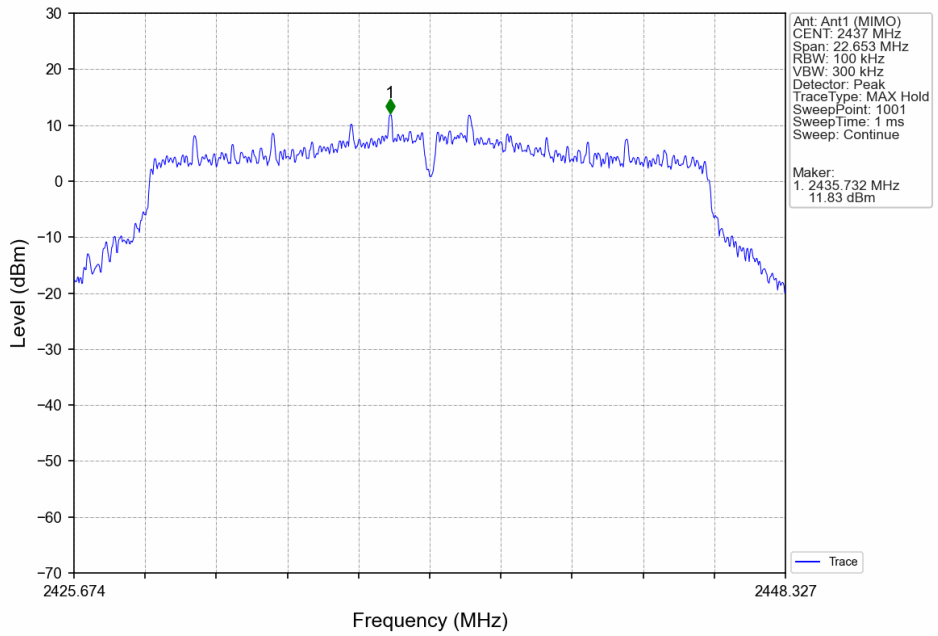
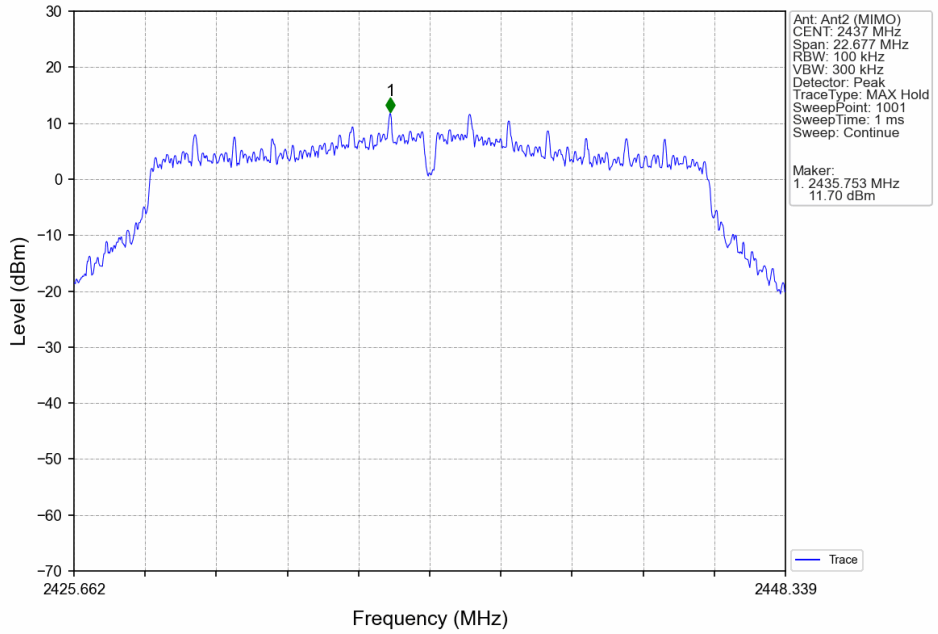
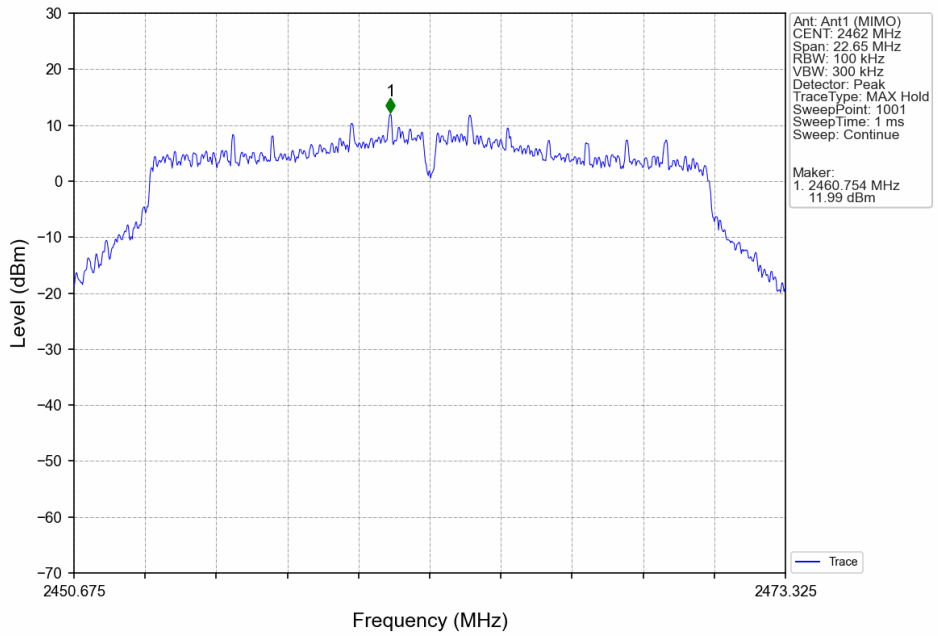


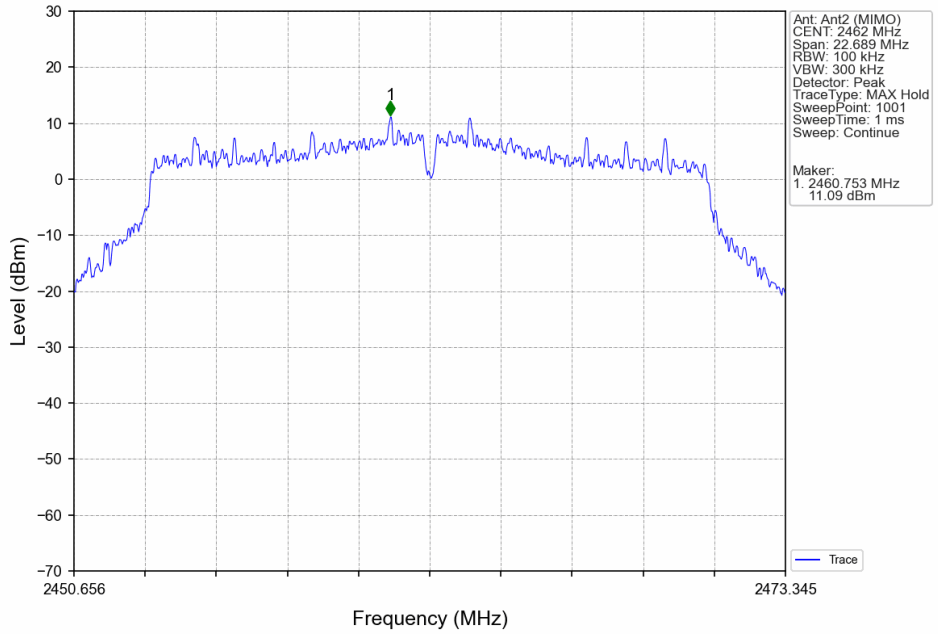
802.11n(HT20)_MCH_2437MHz_Ant2 (MIMO)_NTNV



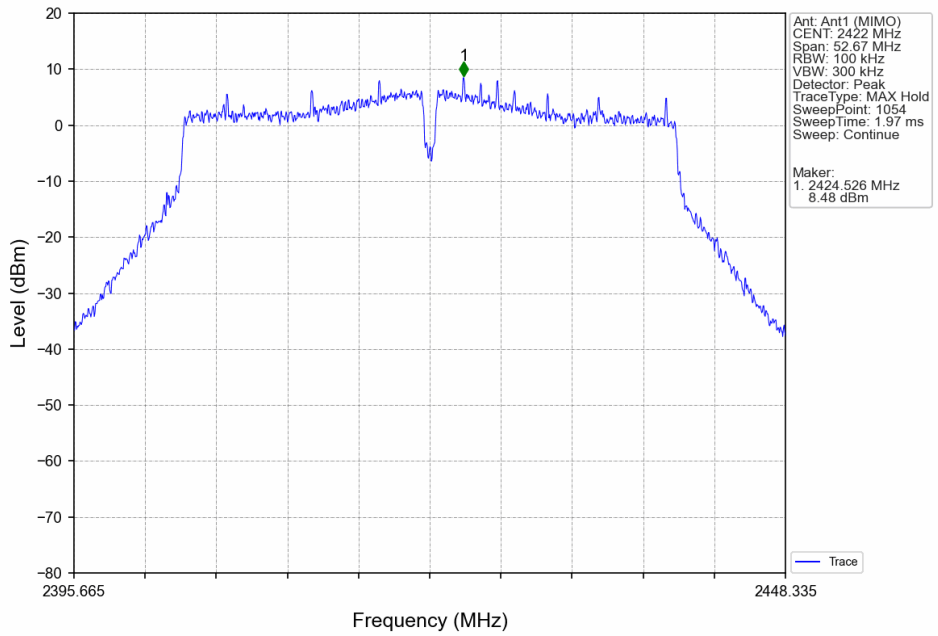
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



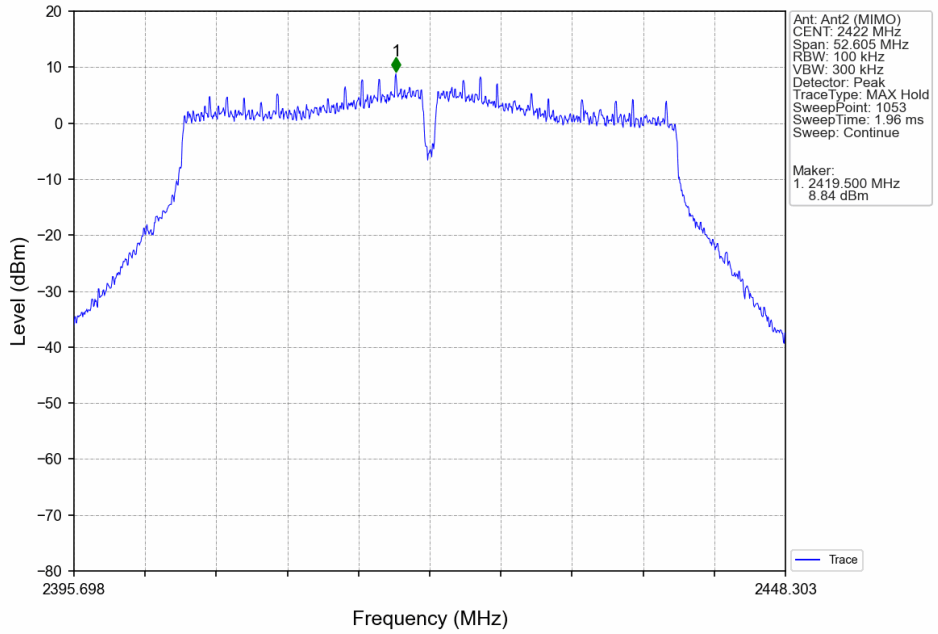
802.11n(HT20)_HCH_2462MHz_Ant2 (MIMO)_NTNV



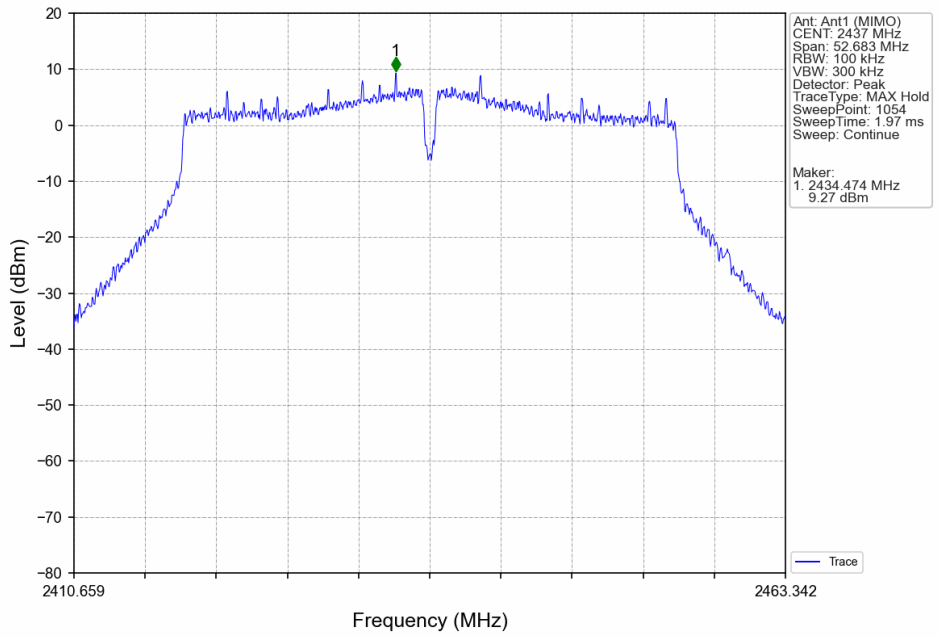
802.11n(HT40)_LCH_2422MHz_Ant1 (MIMO)_NTNV



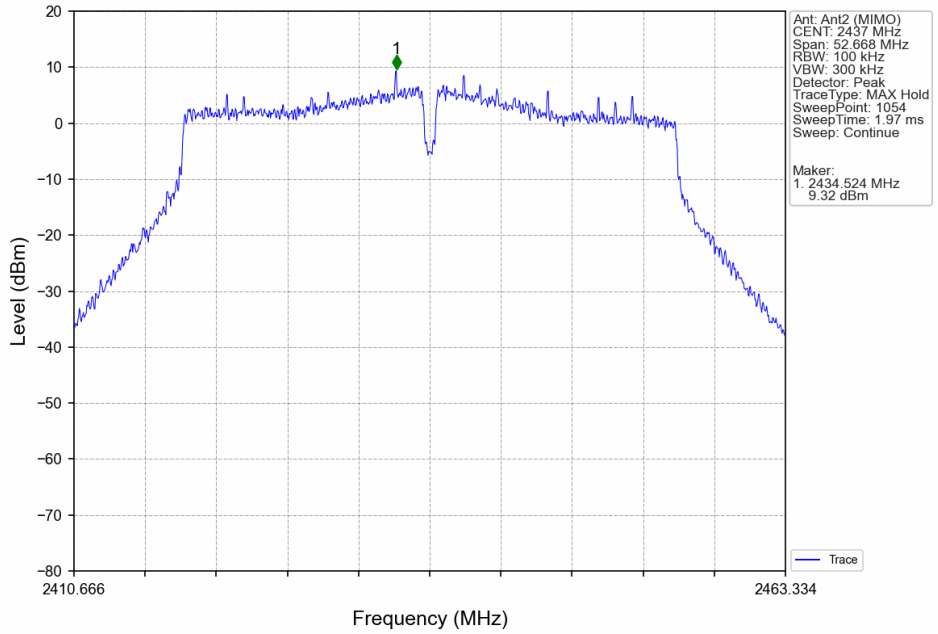
802.11n(HT40)_LCH_2422MHz_Ant2 (MIMO)_NTNV



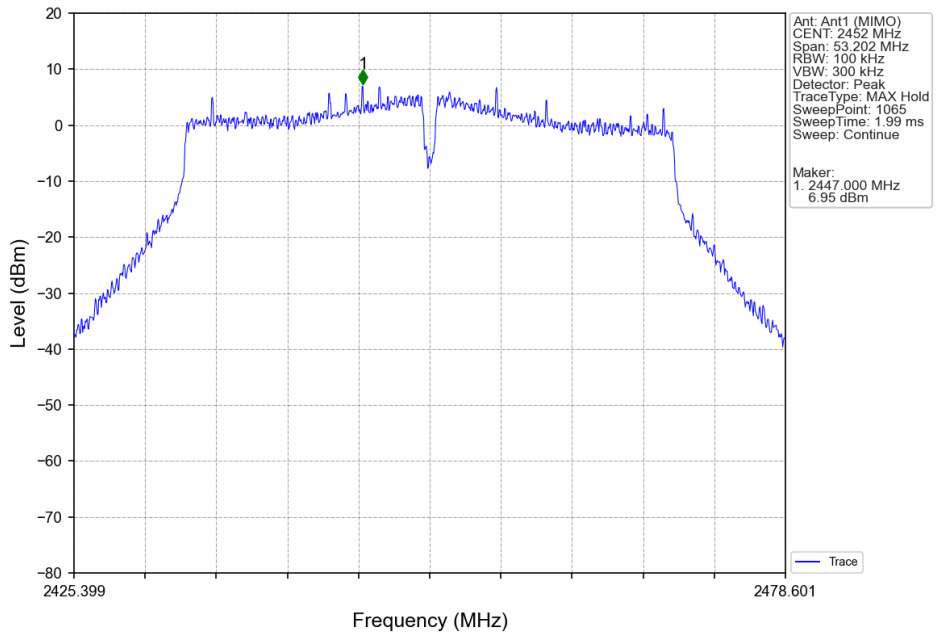
802.11n(HT40)_MCH_2437MHz_Ant1 (MIMO)_NTNV



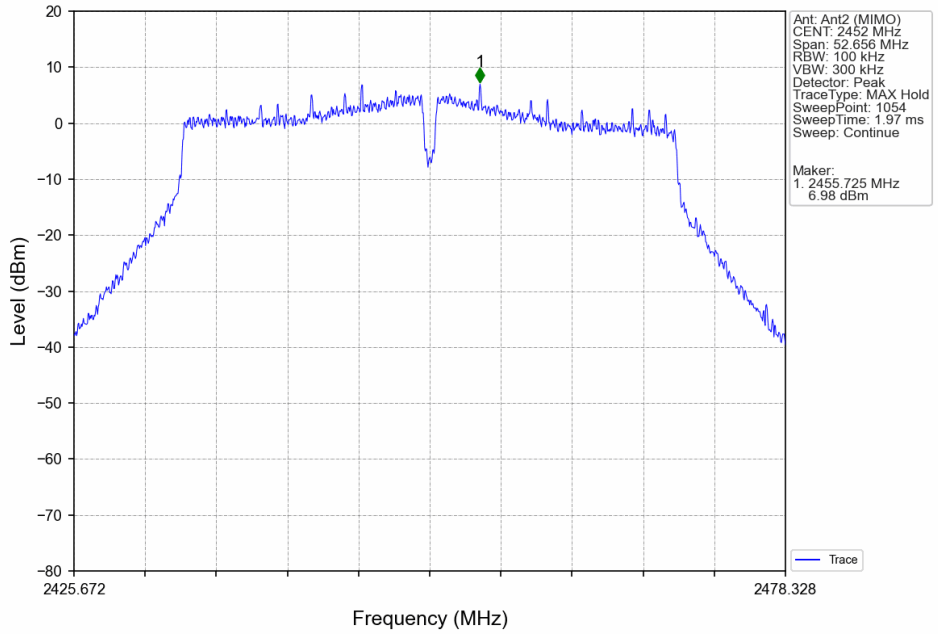
802.11n(HT40)_MCH_2437MHz_Ant2 (MIMO)_NTNV



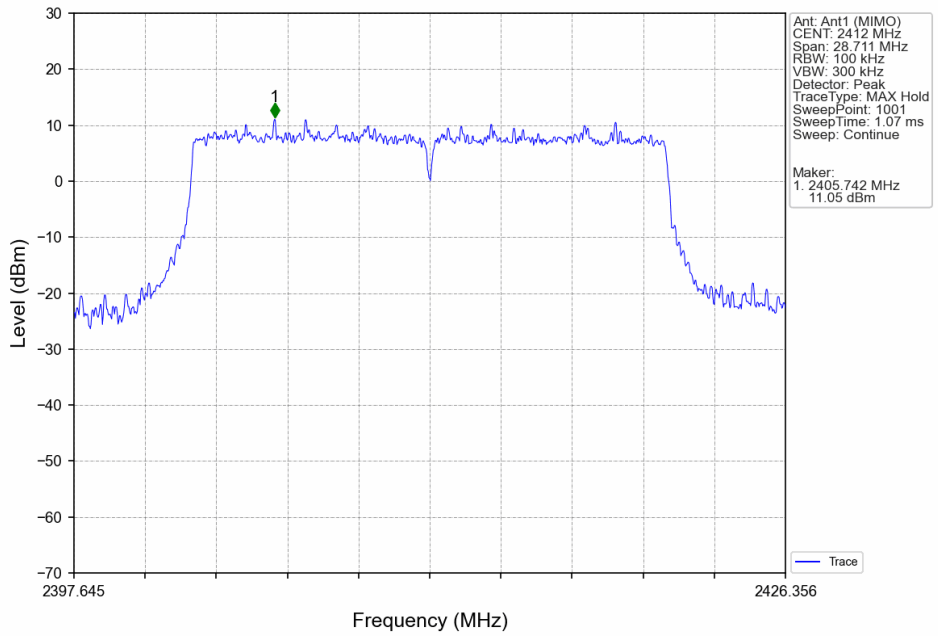
802.11n(HT40)_HCH_2452MHz_Ant1 (MIMO)_NTNV



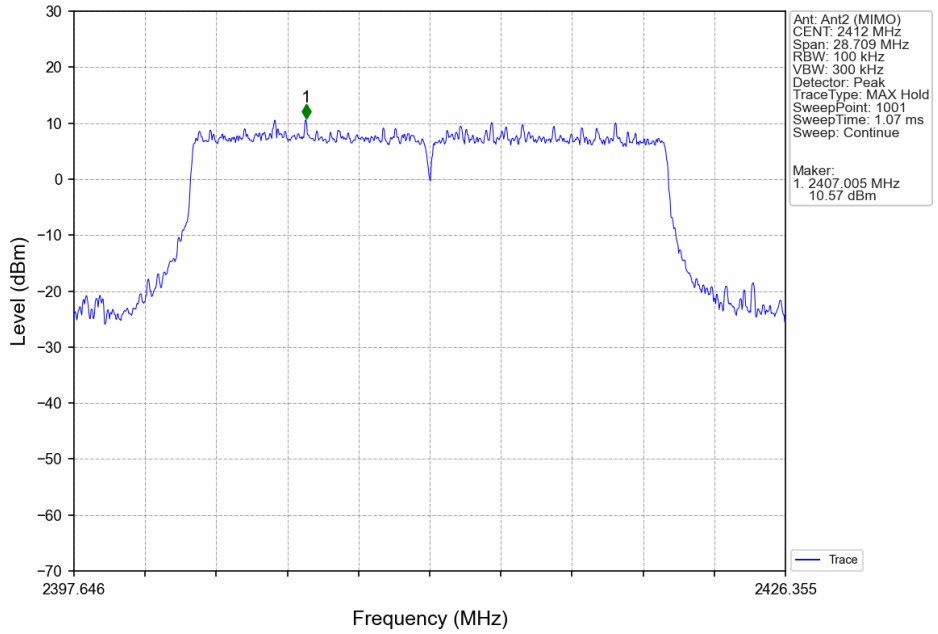
802.11n(HT40)_HCH_2452MHz_Ant2 (MIMO)_NTNV



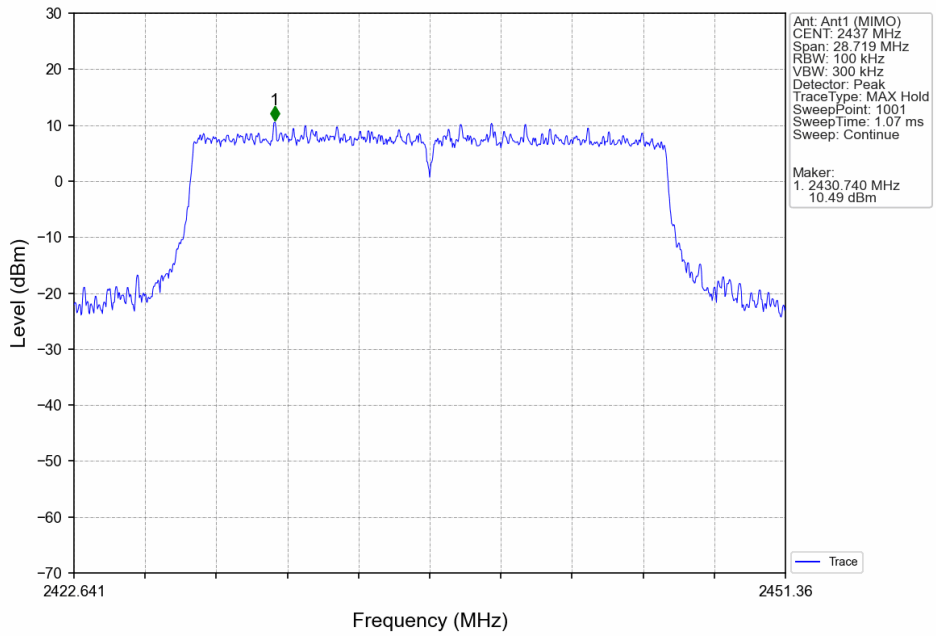
802.11ax(HEW20)_LCH_2412MHz_SU_ / _Ant1 (MIMO)_NTNV



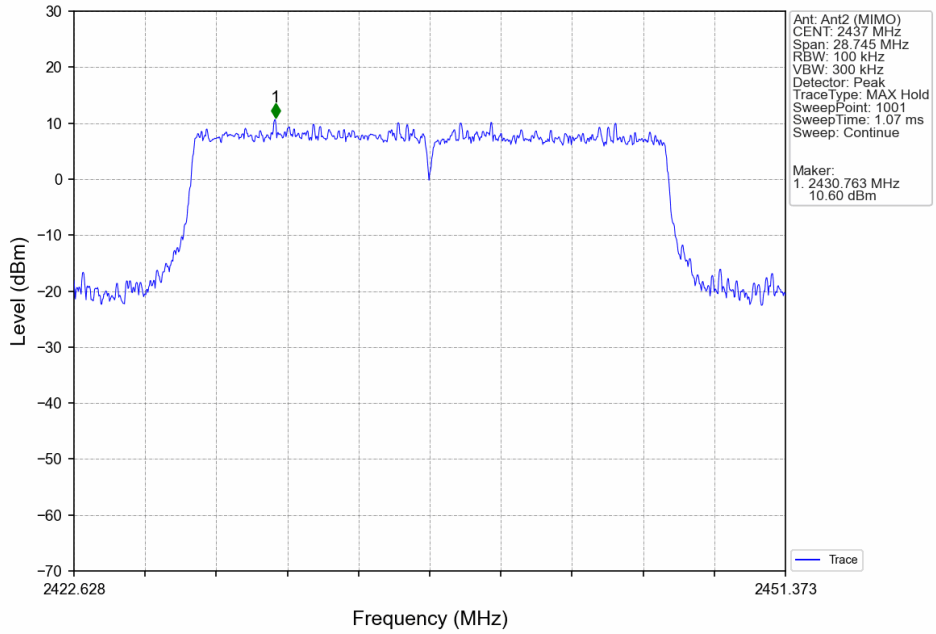
802.11ax(HEW20)_LCH_2412MHz_SU_ / _Ant2 (MIMO)_NTNV



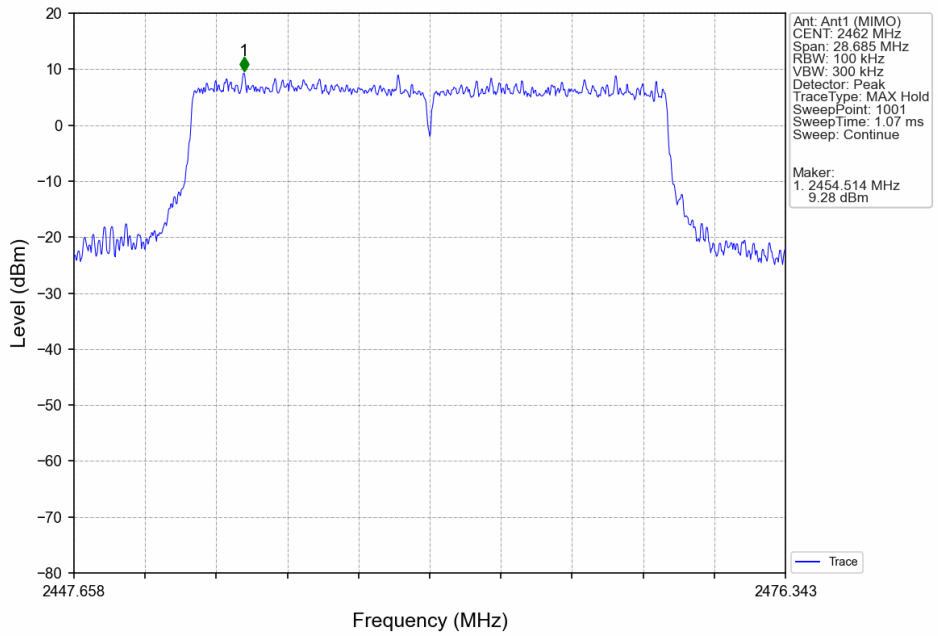
802.11ax(HEW20)_MCH_2437MHz_SU_ / _Ant1 (MIMO)_NTNV



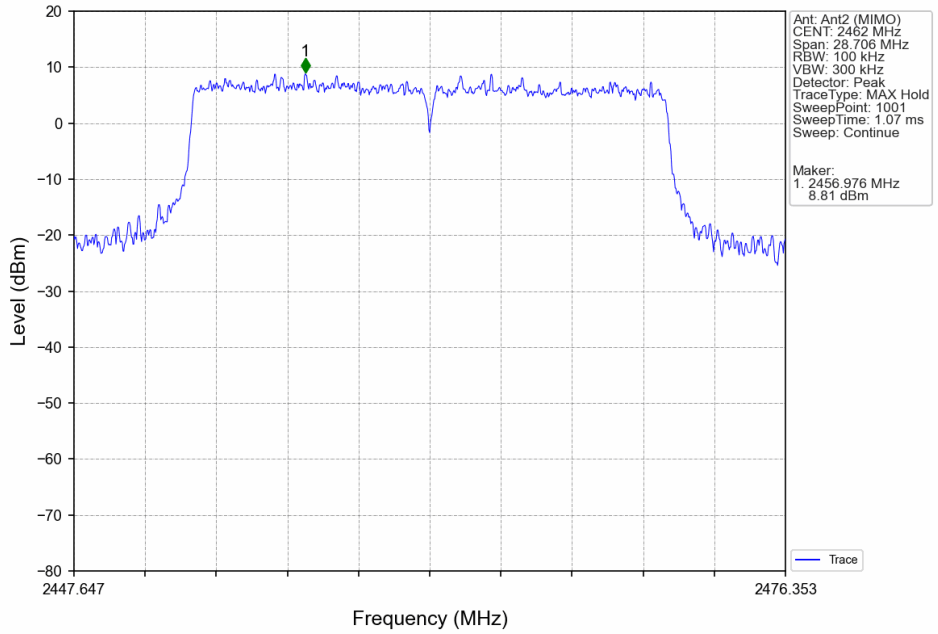
802.11ax(HEW20)_MCH_2437MHz_SU_ / _Ant2 (MIMO)_NTNV



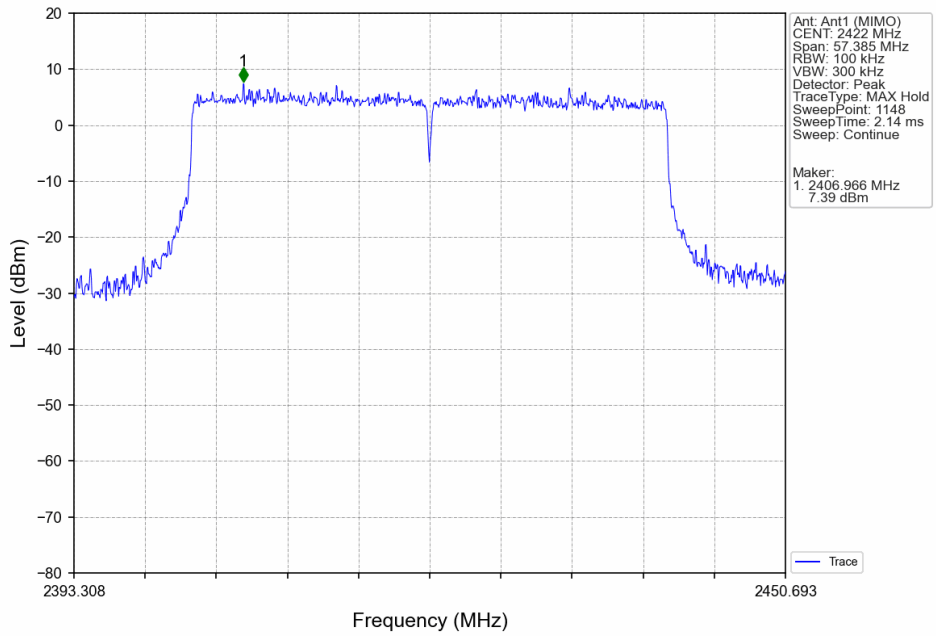
802.11ax(HEW20)_HCH_2462MHz_SU_ / _Ant1 (MIMO)_NTNV



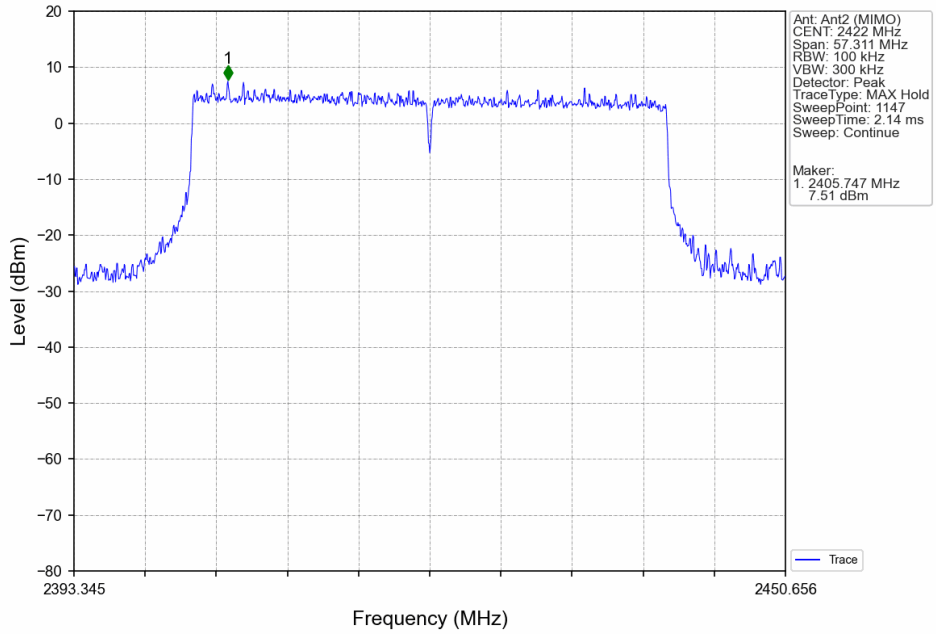
802.11ax(HEW20)_HCH_2462MHz_SU_ / _Ant2 (MIMO)_NTNV



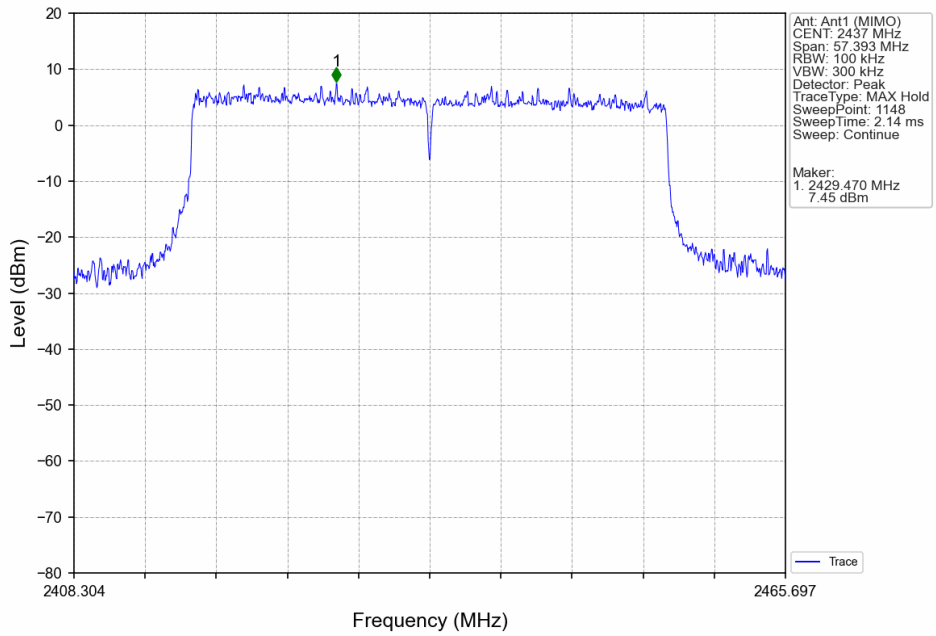
802.11ax(HEW40)_LCH_2422MHz_SU_ / _Ant1 (MIMO)_NTNV



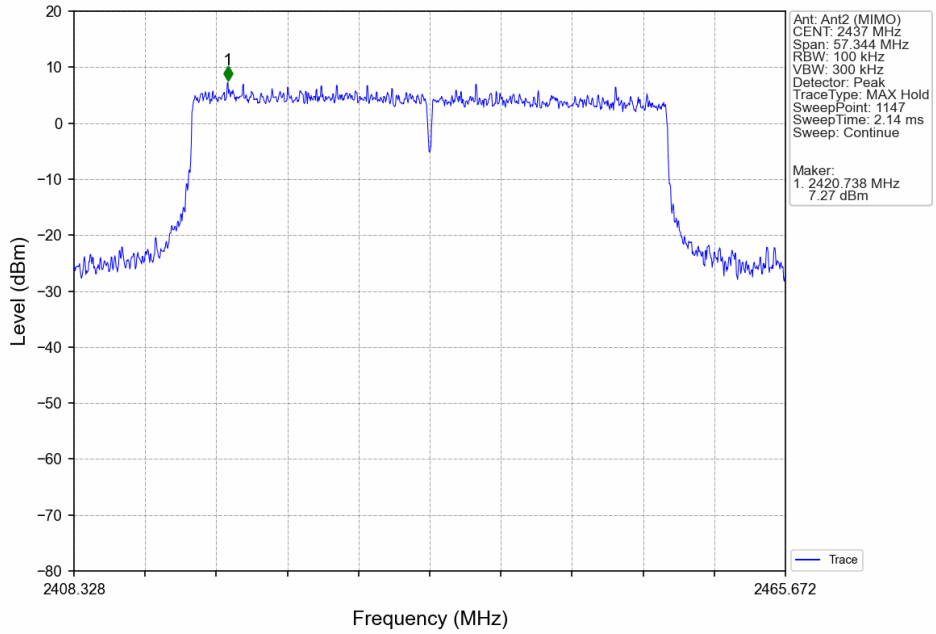
802.11ax(HEW40)_LCH_2422MHz_SU_ / _Ant2 (MIMO)_NTNV



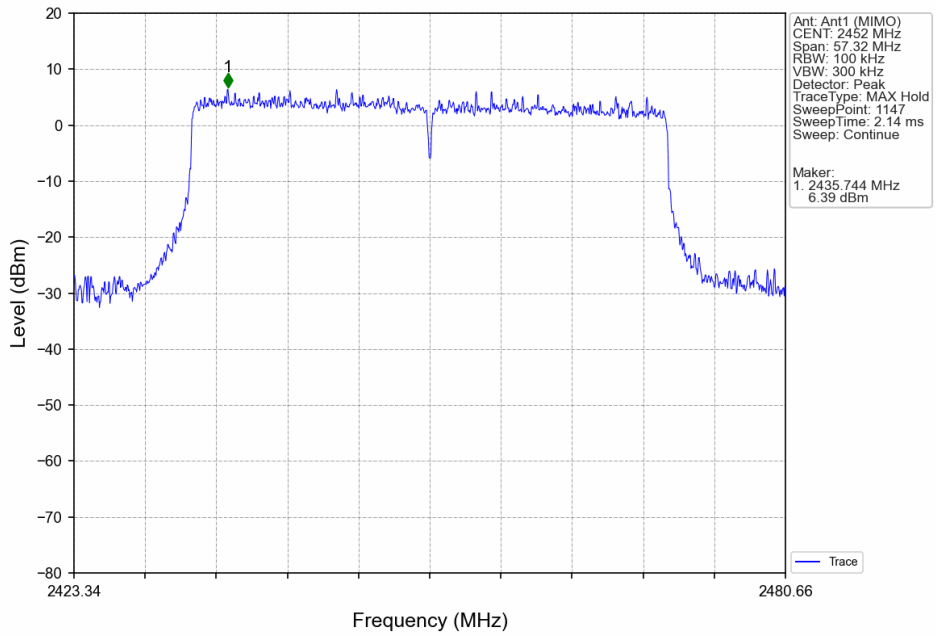
802.11ax(HEW40)_MCH_2437MHz_SU_ / _Ant1 (MIMO)_NTNV



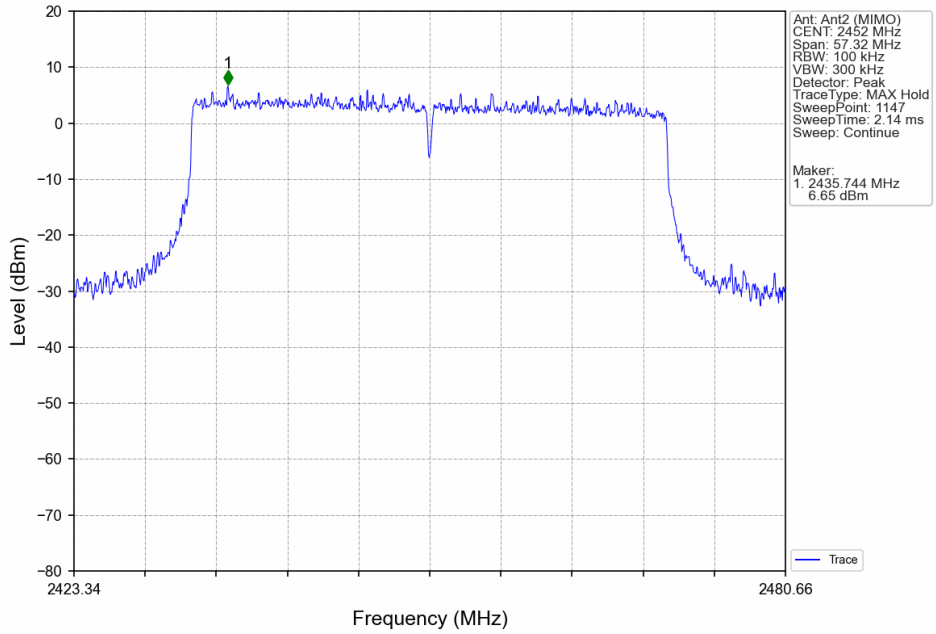
802.11ax(HEW40)_MCH_2437MHz_SU_ / _Ant2 (MIMO)_NTNV



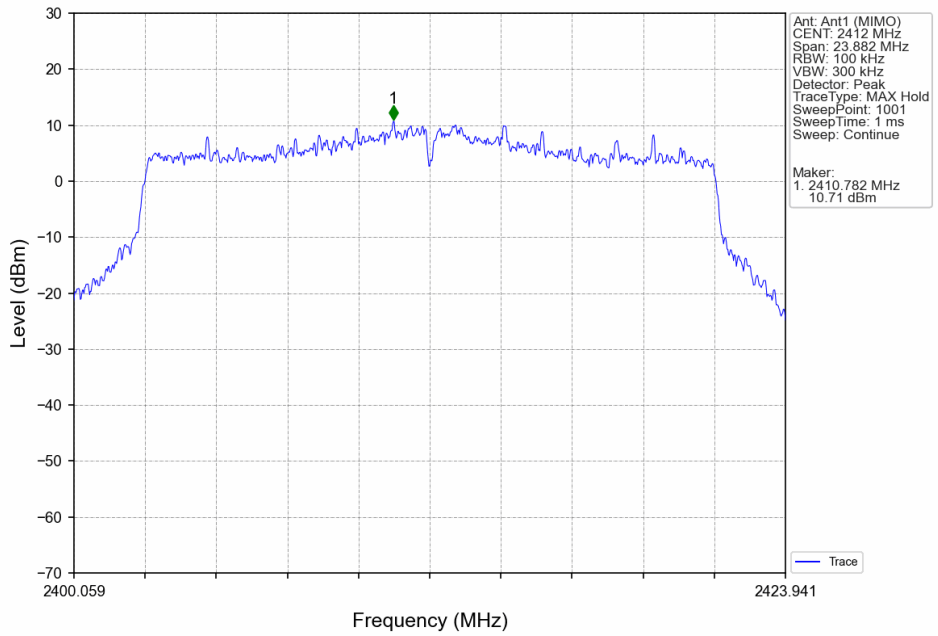
802.11ax(HEW40)_HCH_2452MHz_SU_ / _Ant1 (MIMO)_NTNV



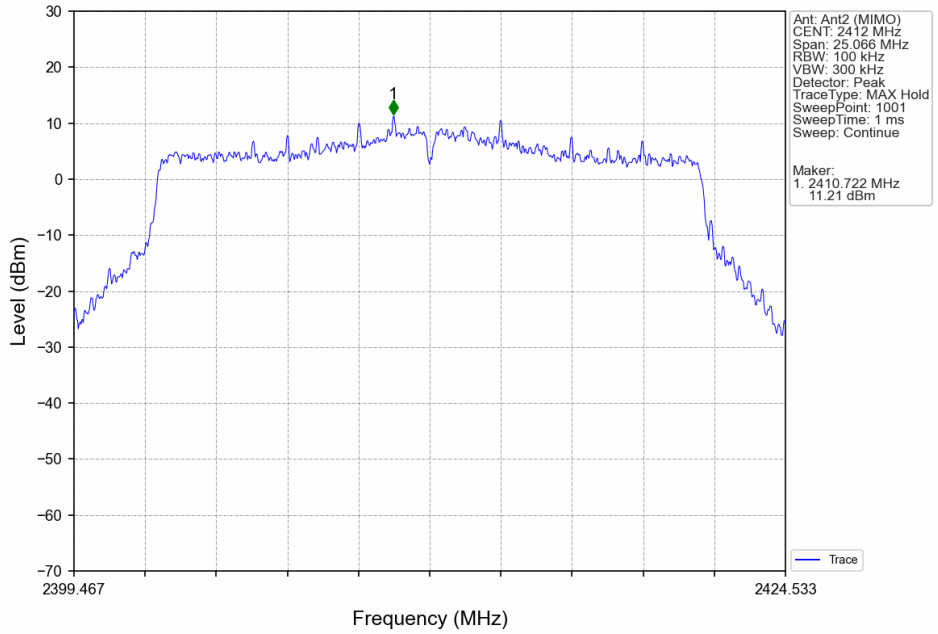
802.11ax(HEW40)_HCH_2452MHz_SU_ / _Ant2 (MIMO)_NTNV



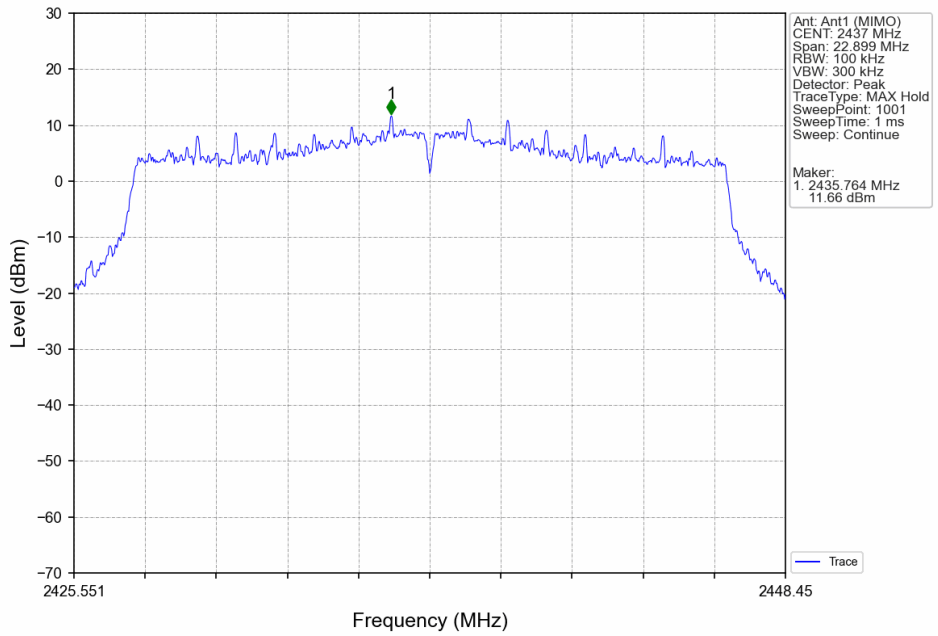
802.11be(EHT20)_LCH_2412MHz_SU_ / _Ant1 (MIMO)_NTNV



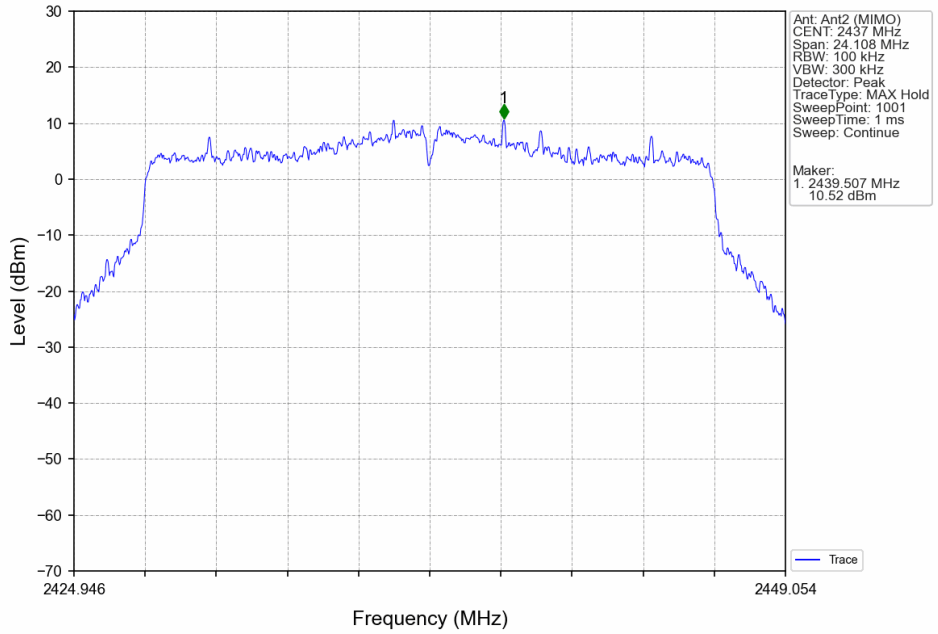
802.11be(EHT20)_LCH_2412MHz_SU_ / _Ant2 (MIMO)_NTNV



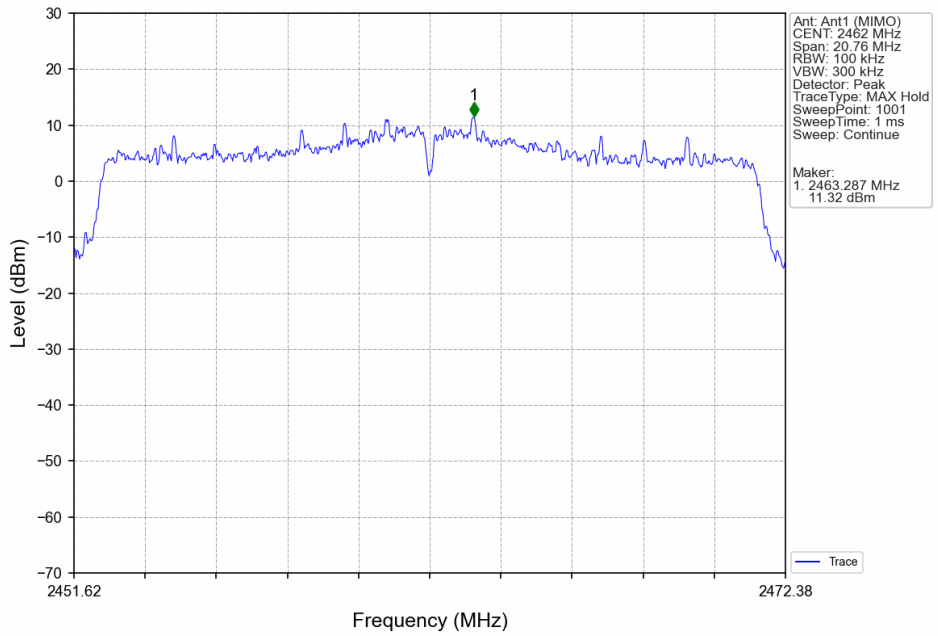
802.11be(EHT20)_MCH_2437MHz_SU_ / _Ant1 (MIMO)_NTNV



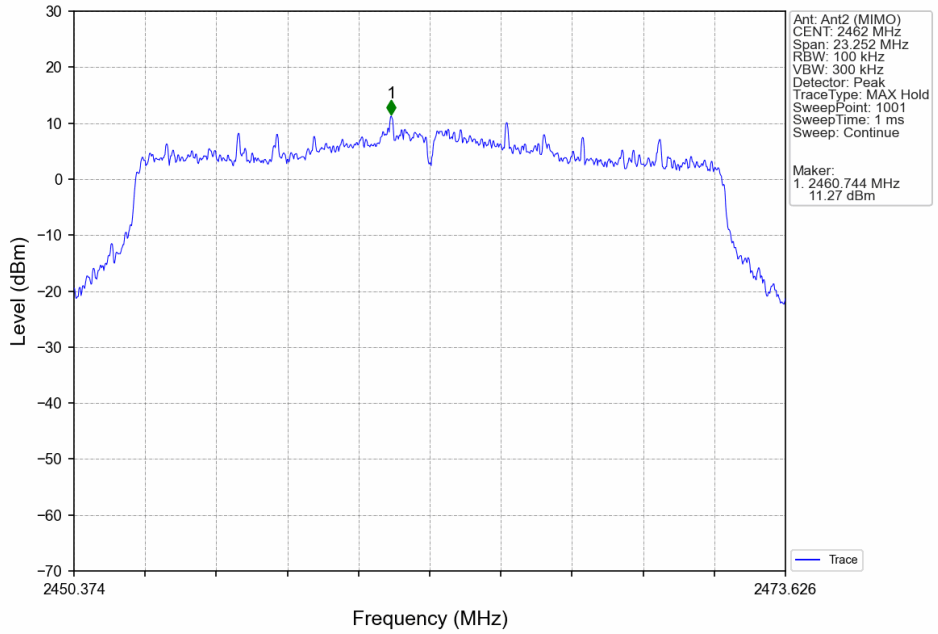
802.11be(EHT20)_MCH_2437MHz_SU_ / _Ant2 (MIMO)_NTNV



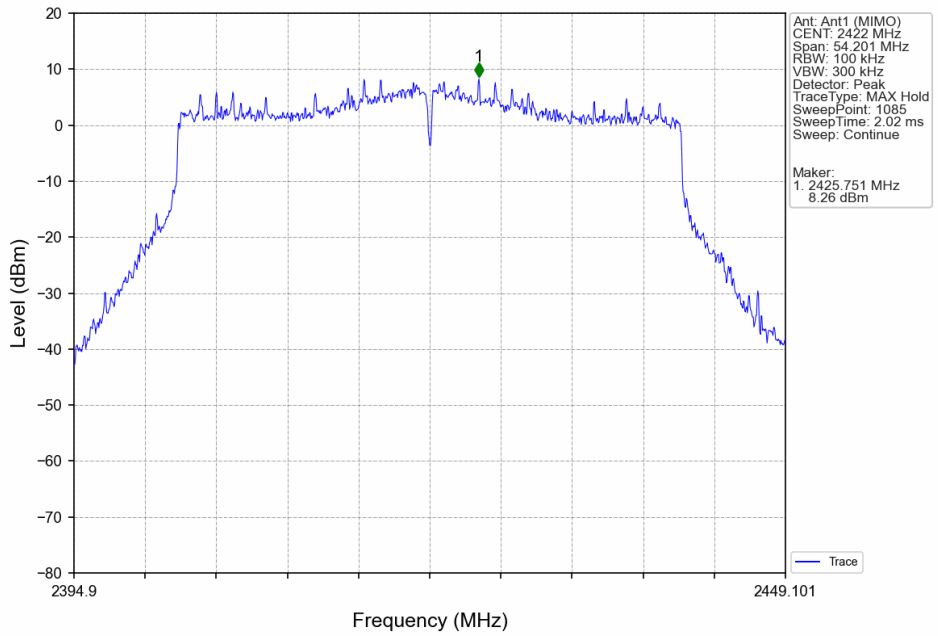
802.11be(EHT20)_HCH_2462MHz_SU_ / _Ant1 (MIMO)_NTNV



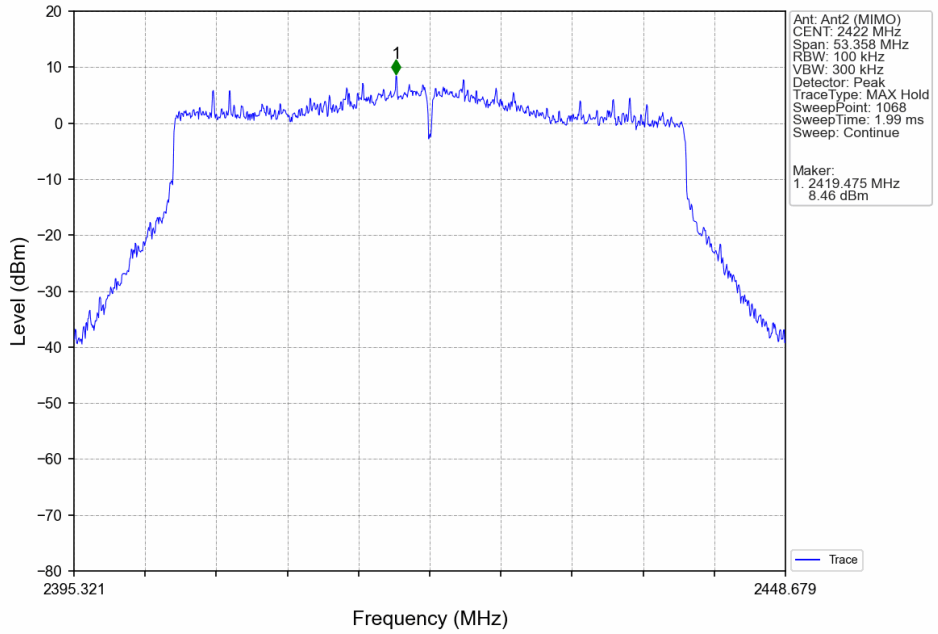
802.11be(EHT20)_HCH_2462MHz_SU_ / _Ant2 (MIMO)_NTNV



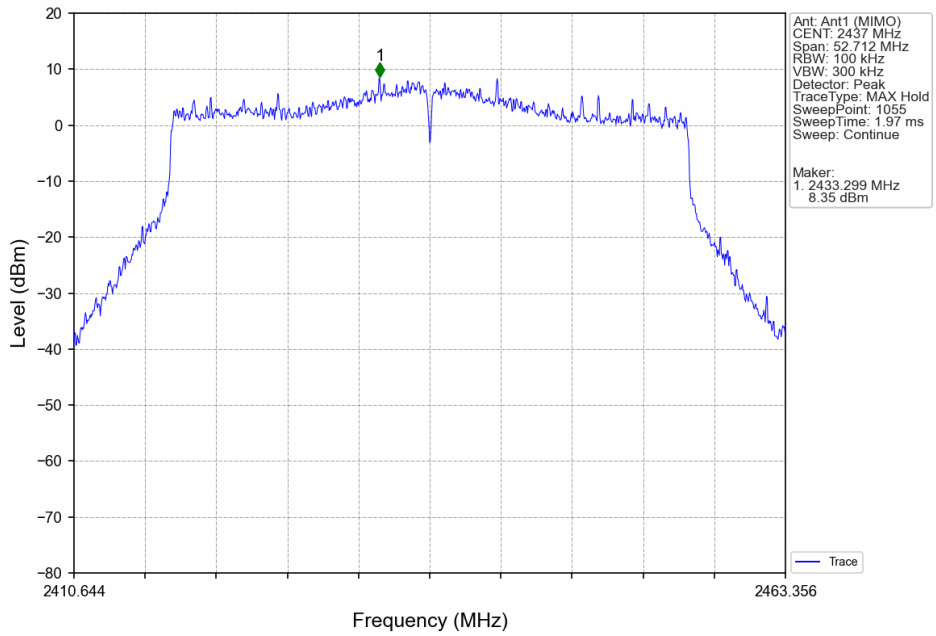
802.11be(EHT40)_LCH_2422MHz_SU_ / _Ant1 (MIMO)_NTNV



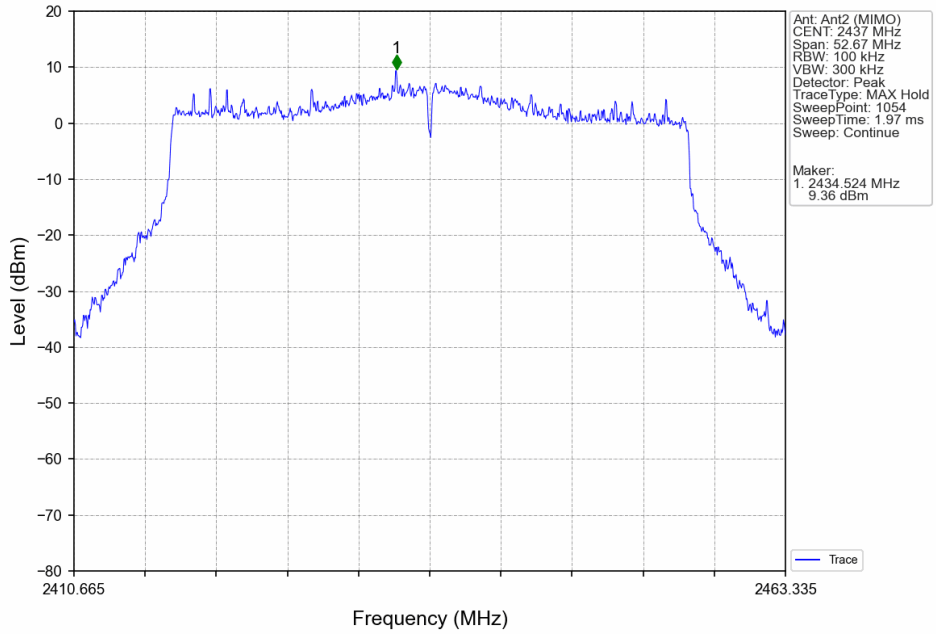
802.11be(EHT40)_LCH_2422MHz_SU_ / _Ant2 (MIMO)_NTNV



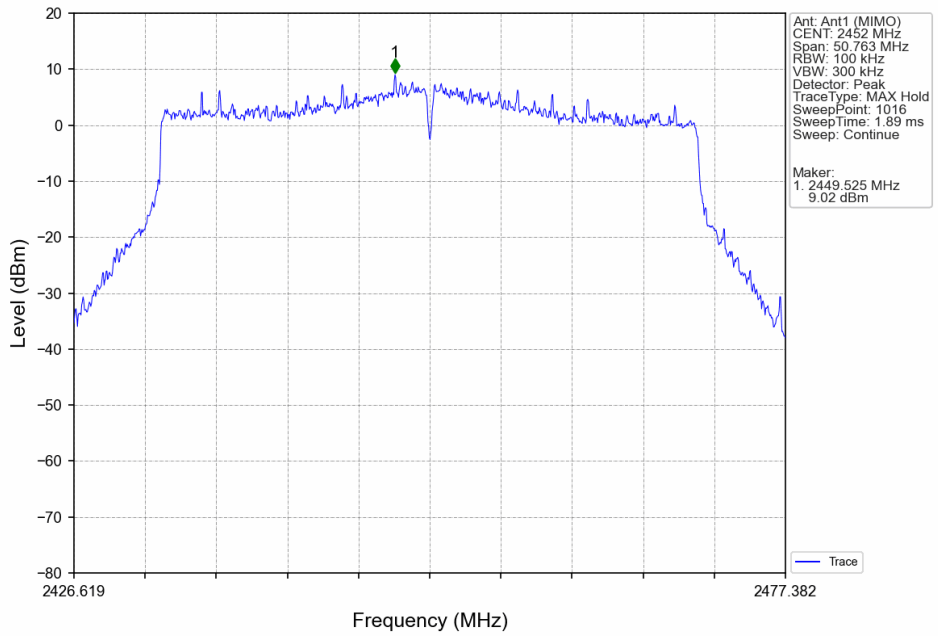
802.11be(EHT40)_MCH_2437MHz_SU_ / _Ant1 (MIMO)_NTNV



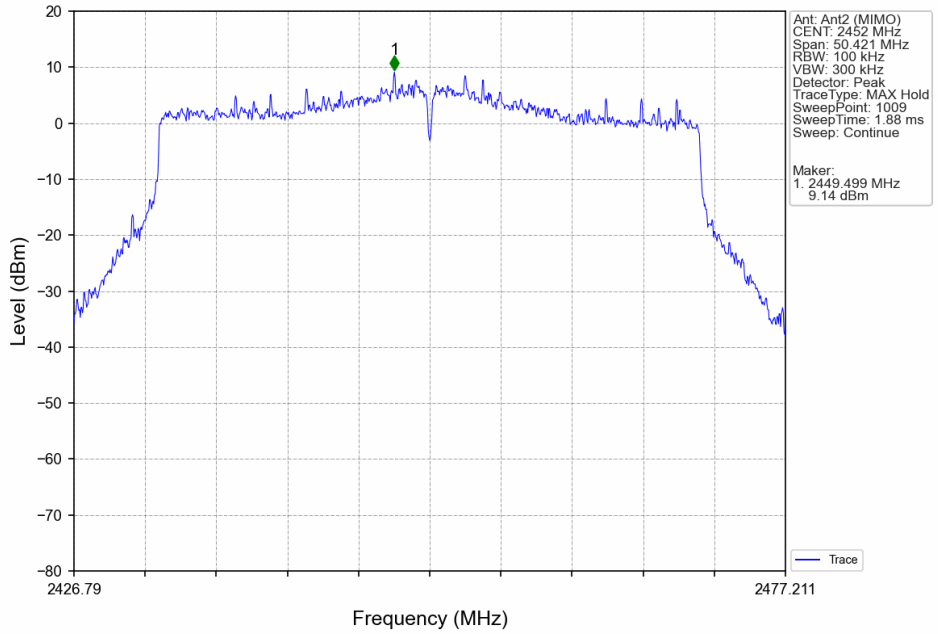
802.11be(EHT40)_MCH_2437MHz_SU_ / _Ant2 (MIMO)_NTNV



802.11be(EHT40)_HCH_2452MHz_SU_ / _Ant1 (MIMO)_NTNV

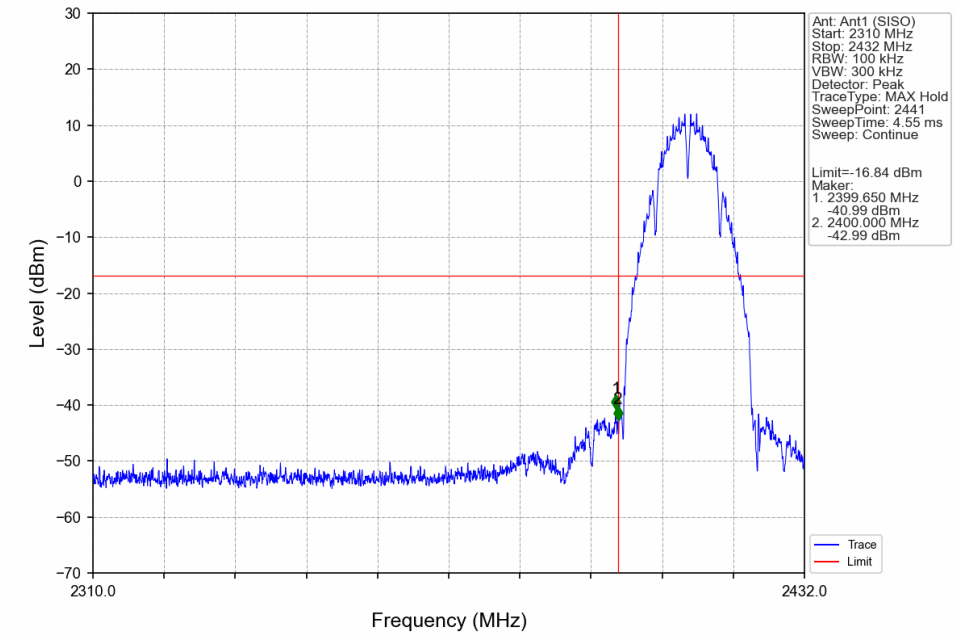


802.11be(EHT40)_HCH_2452MHz_SU_ / _Ant2 (MIMO)_NTNV

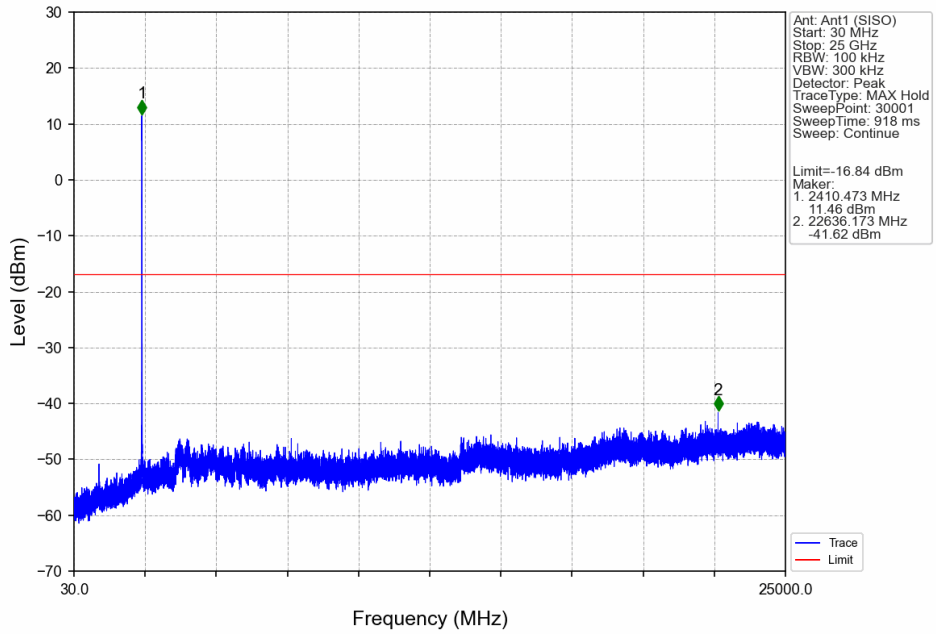


5.2.2 CSE

802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV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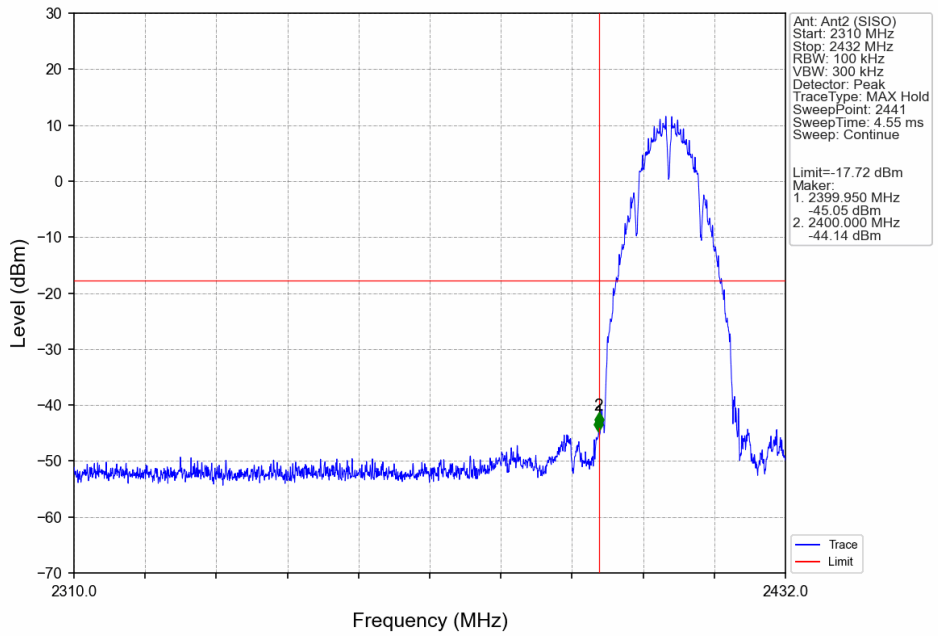
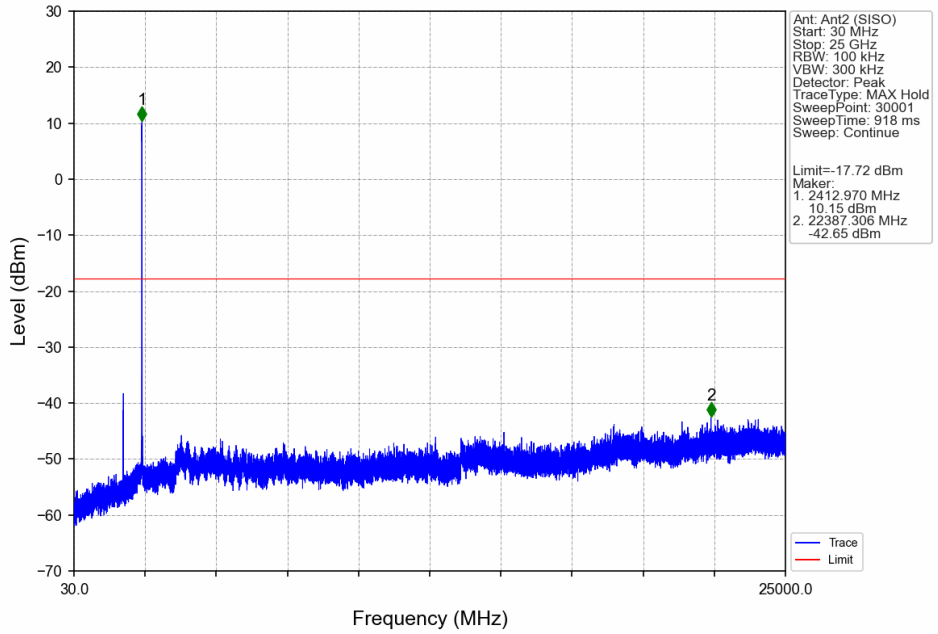
Start: 30 MHz
Stop: 25 GHz
RBW: 100 kHz
VBW: 300 kHz
Detector: Peak
TraceType: MAX Hold
SweepPoint: 30001
SweepTime: 918 ms
Sweep: Continue
Limit=-16.84 dBm
Maker:
1. 2410.473 MHz
11.46 dBm
2. 22636.173 MHz
-41.62 dBm
Trace
Limit
Level (dBm)
Frequency (MHz)
30.0
25000.0
30
20
10
0
−10
−20
−30
−40
−50
−60
−70
1
2

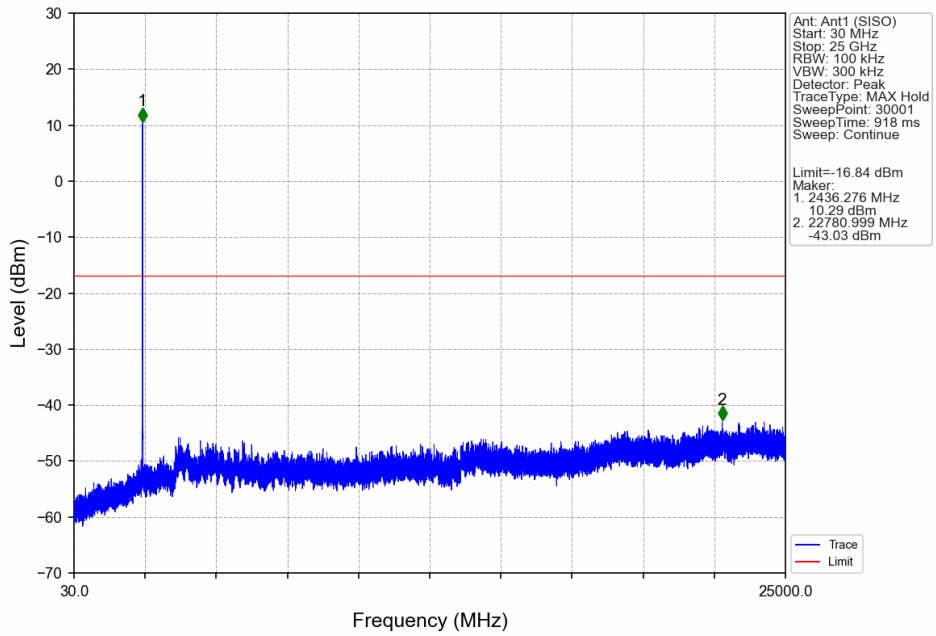
802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV



802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV



802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



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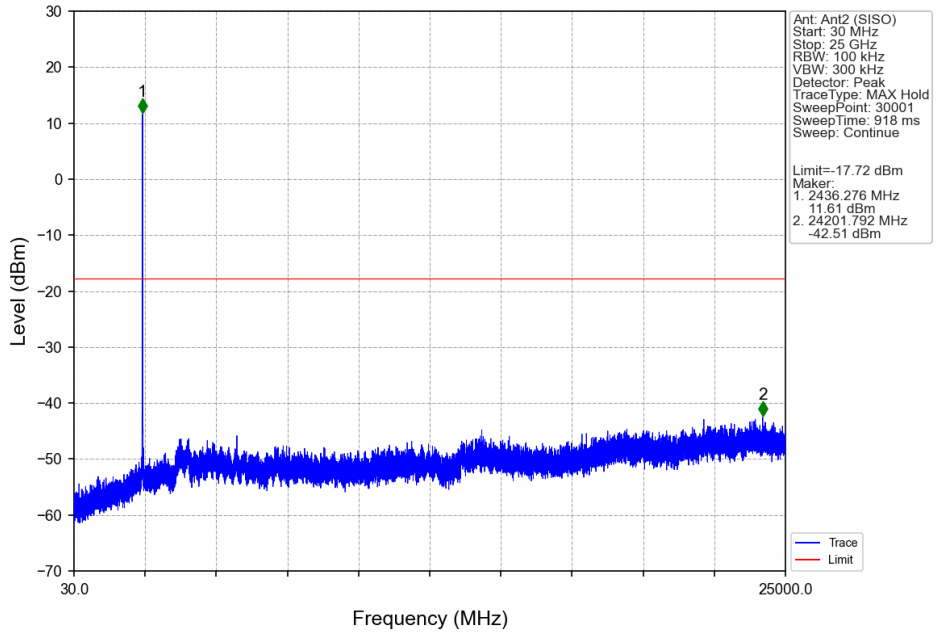
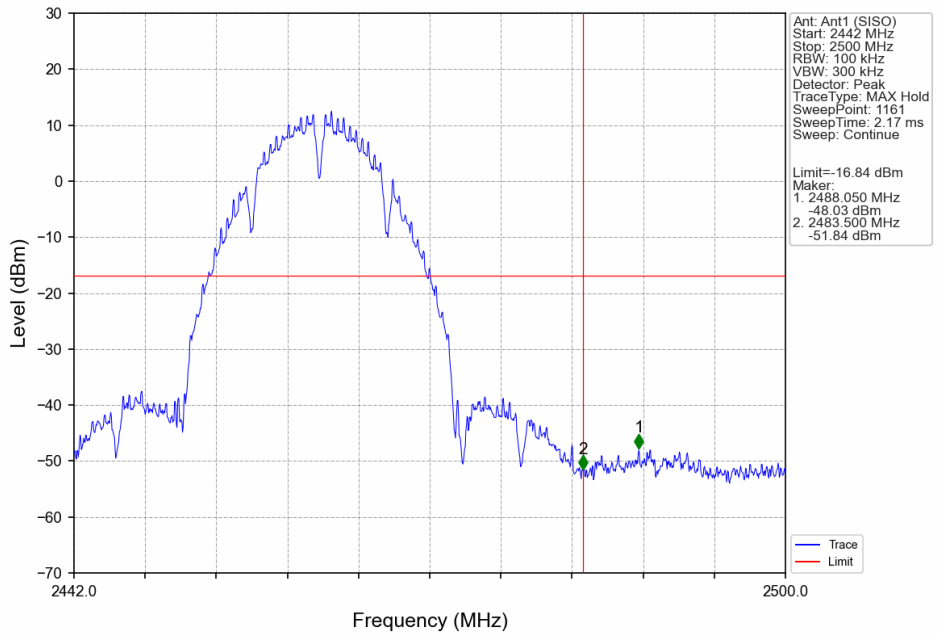


802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



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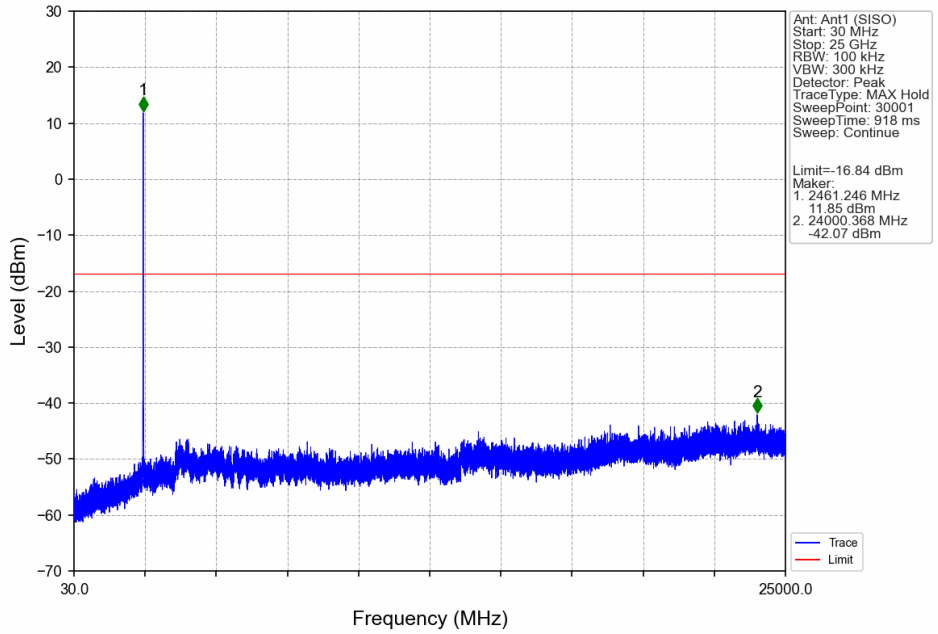

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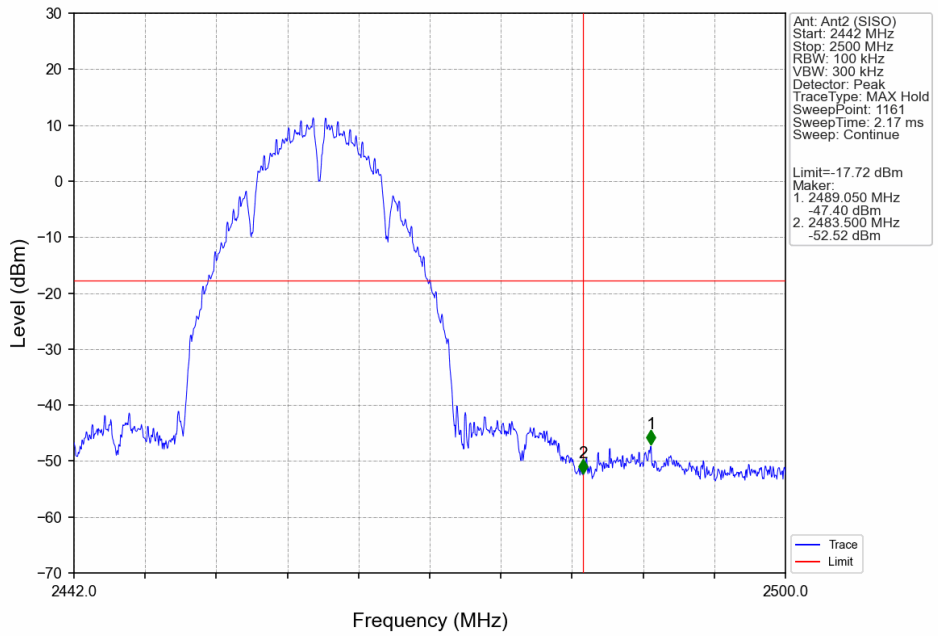

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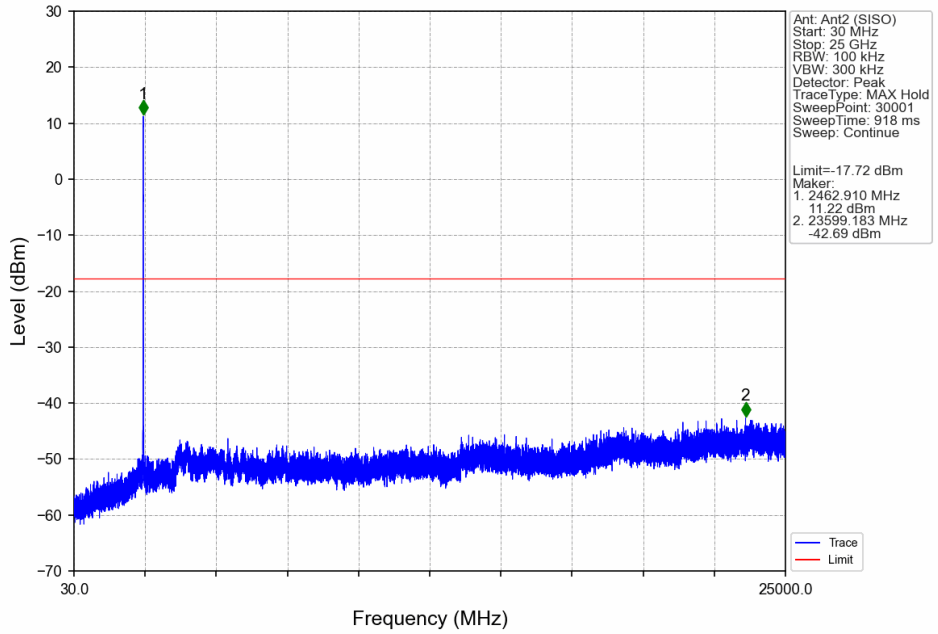
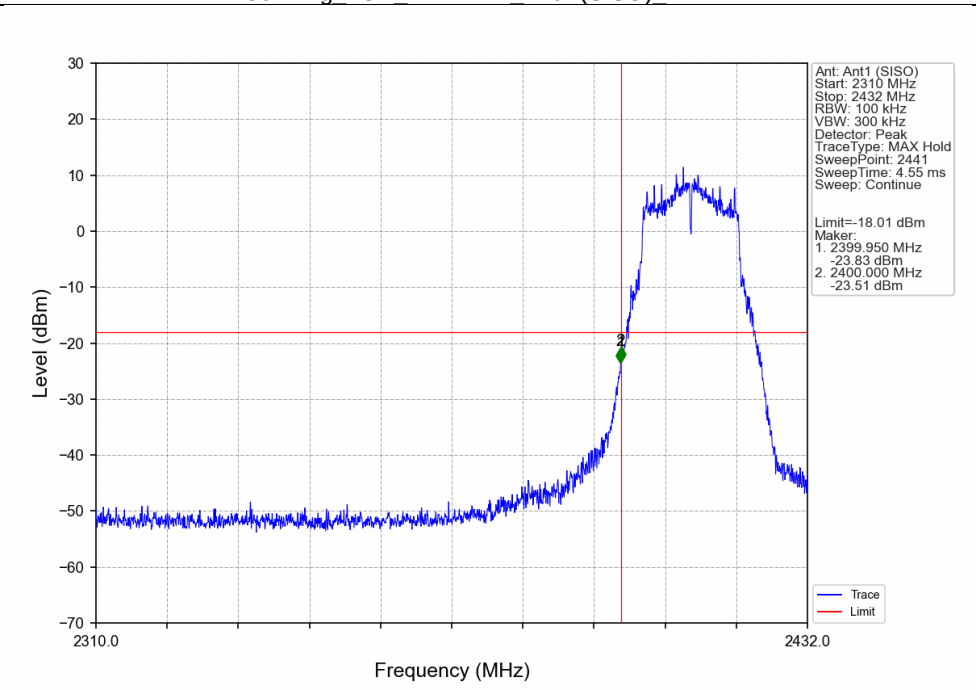


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



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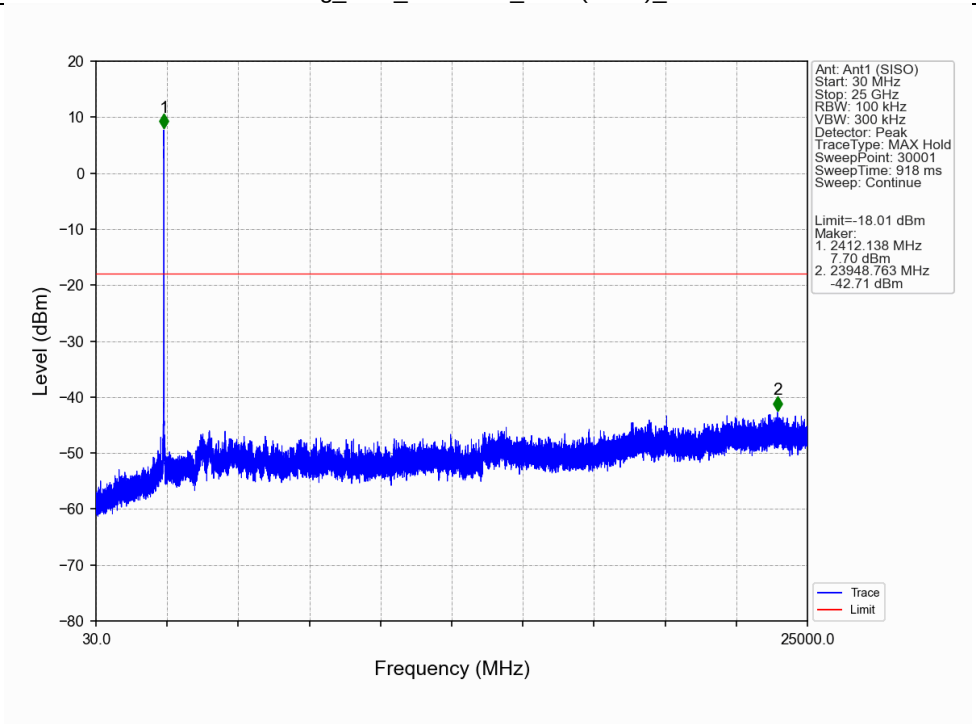
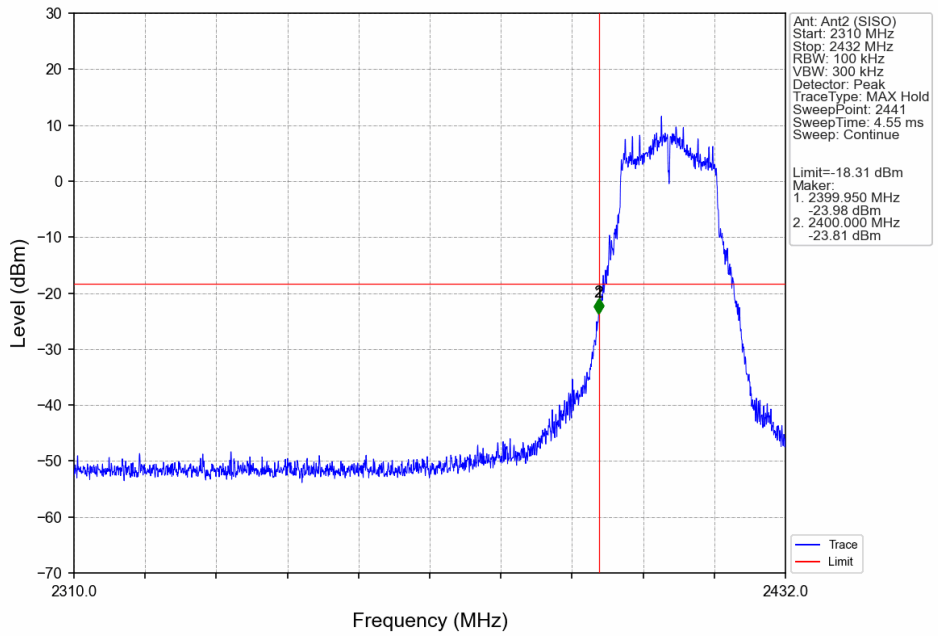
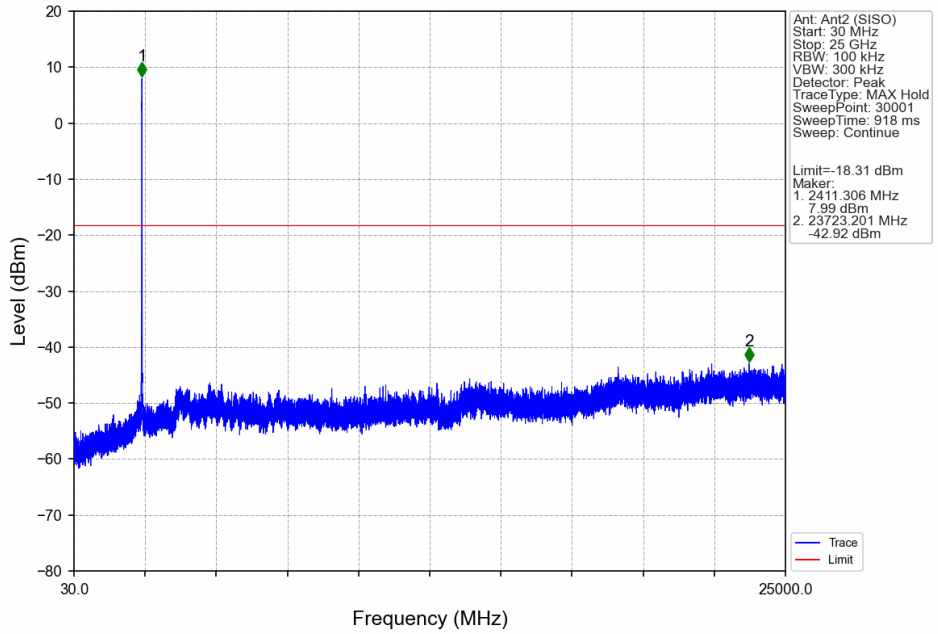


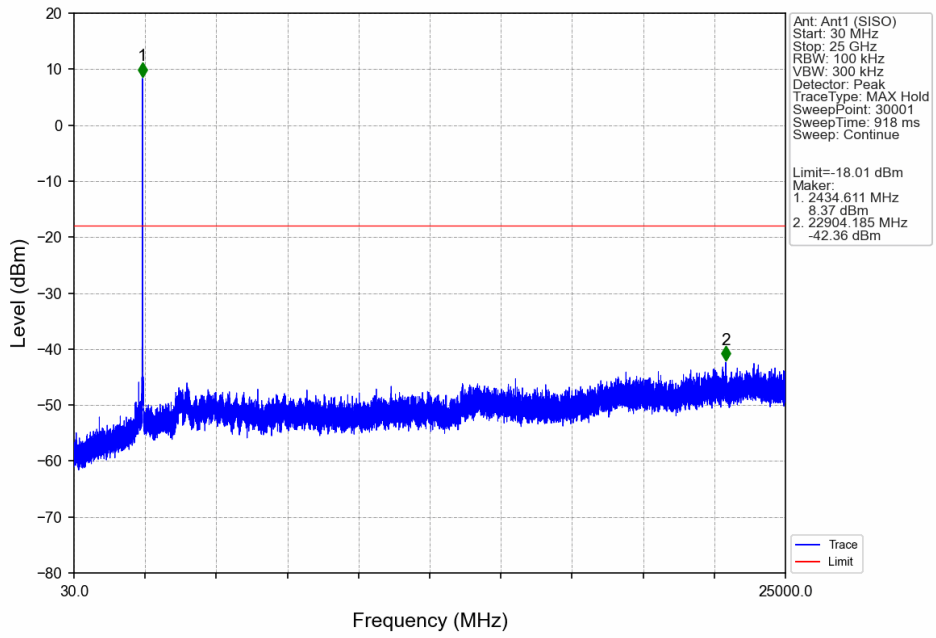
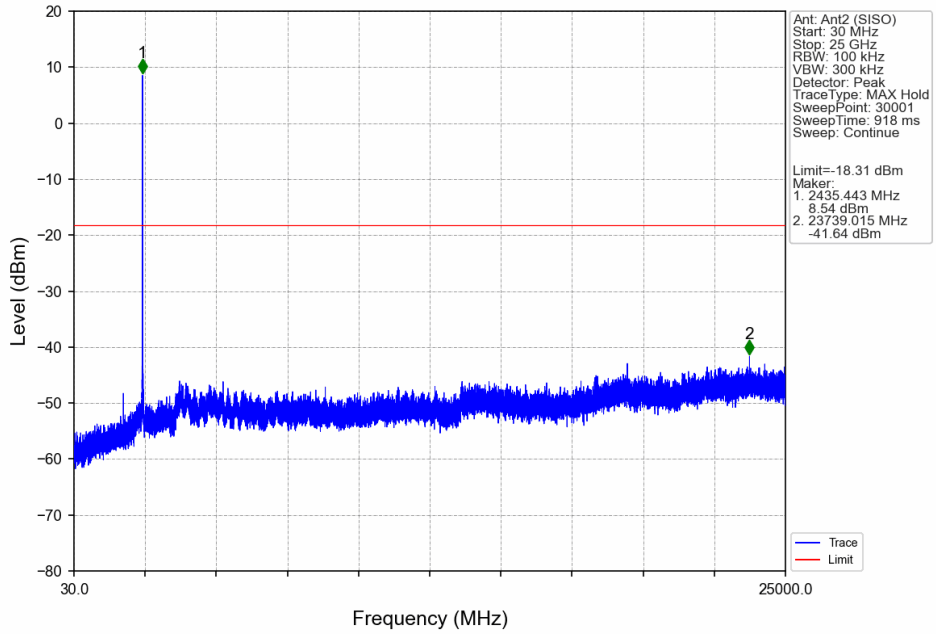
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV