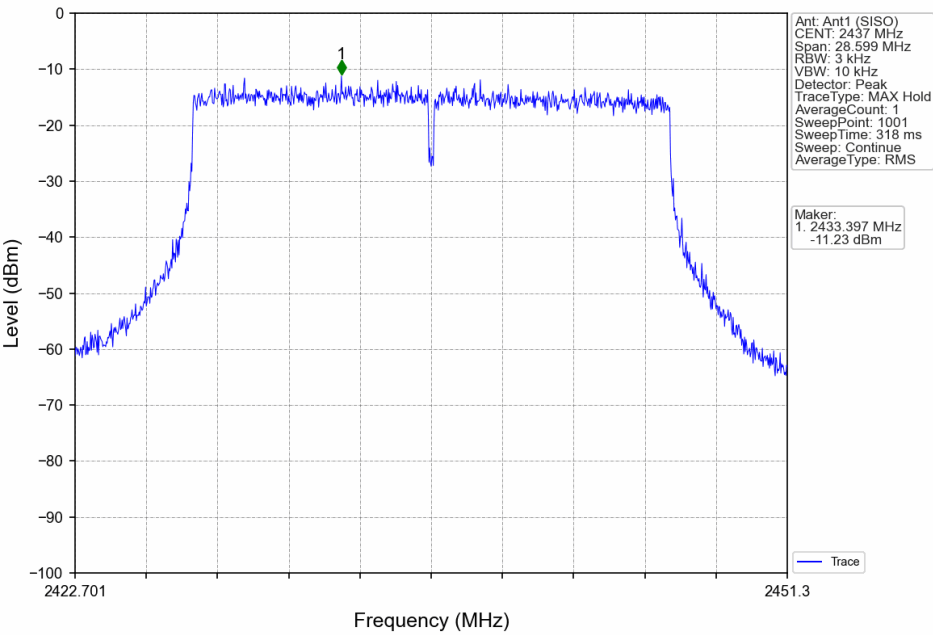
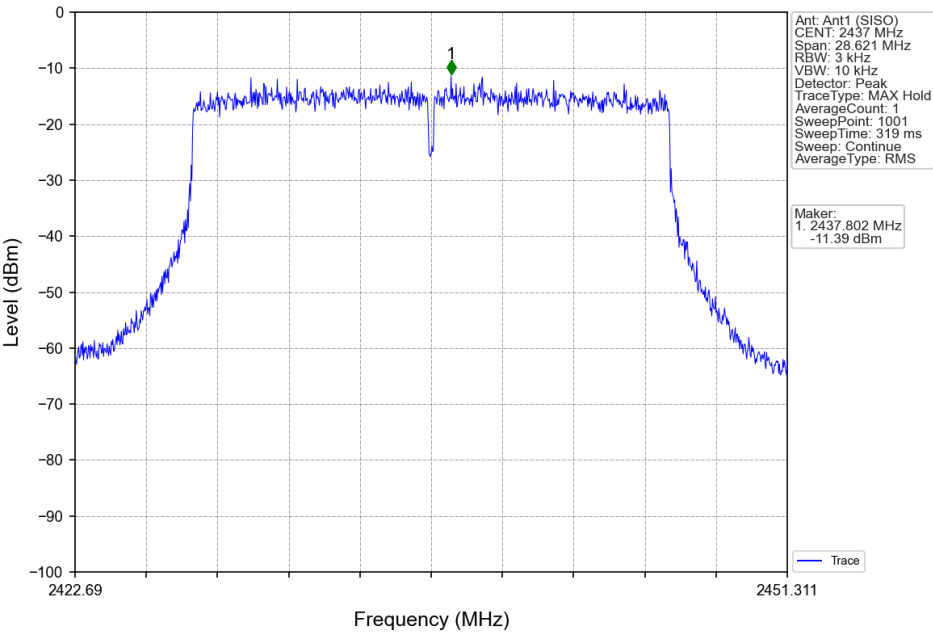




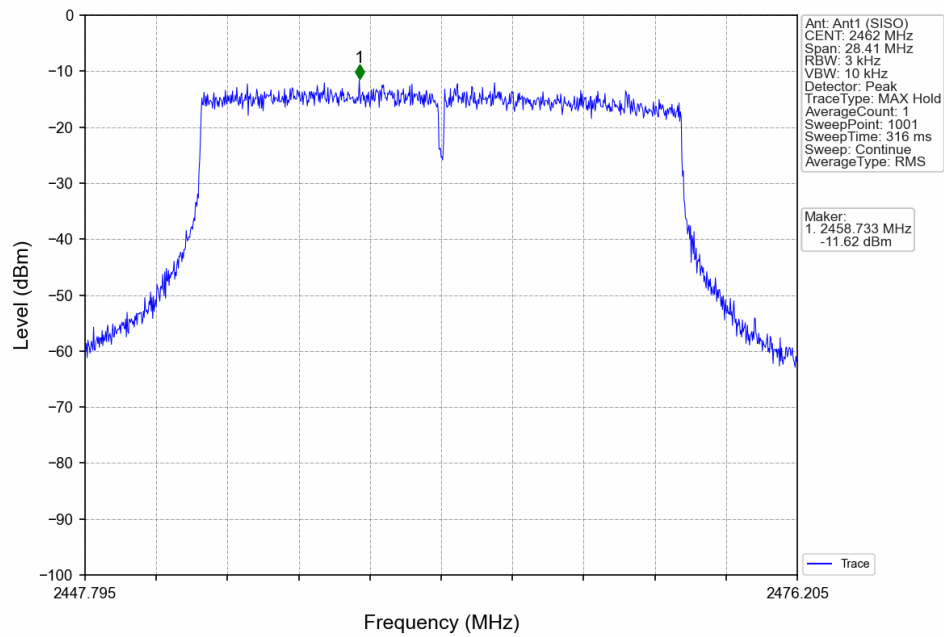
802.11ax(HEW20)_MCH_2437MHz_RU242_61_Ant1 (SISO)_NTNV



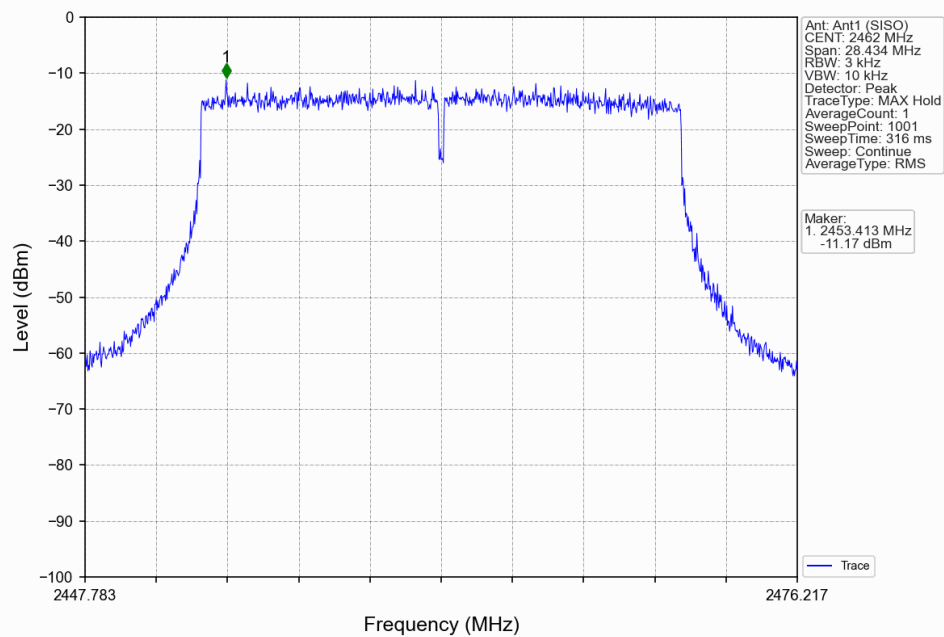
802.11ax(HEW20)_MCH_2437MHz_RU242_61_Ant2 (SISO)_NTNV



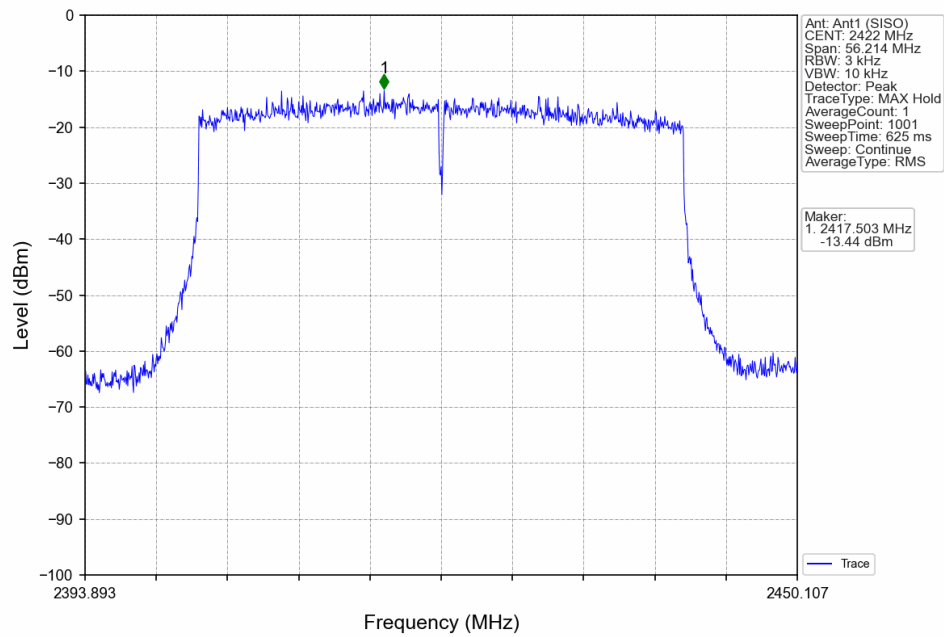
802.11ax(HEW20)_HCH_2462MHz_RU242_61_Ant1 (SISO)_NTNV



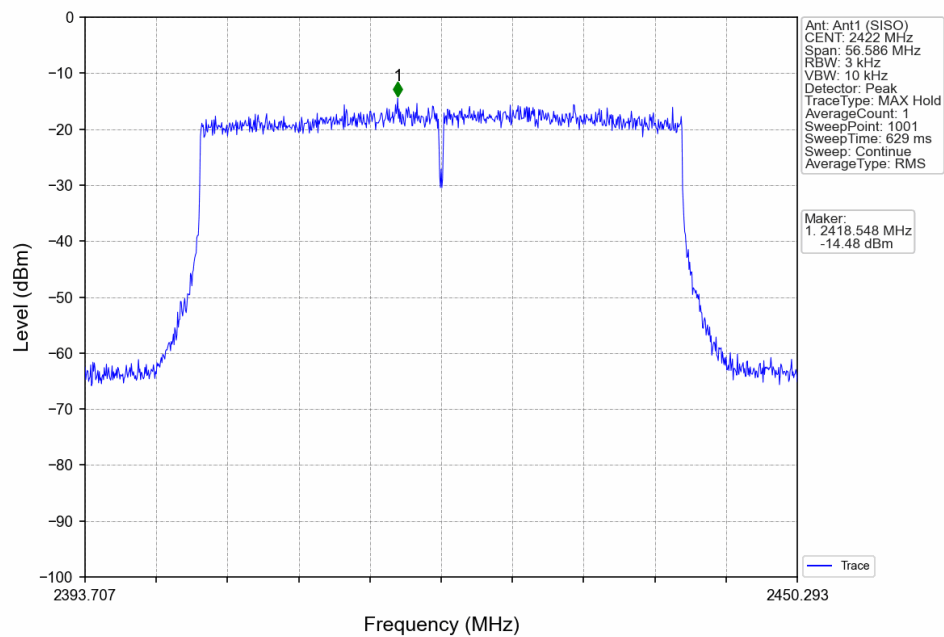
802.11ax(HEW20)_HCH_2462MHz_RU242_61_Ant2 (SISO)_NTNV



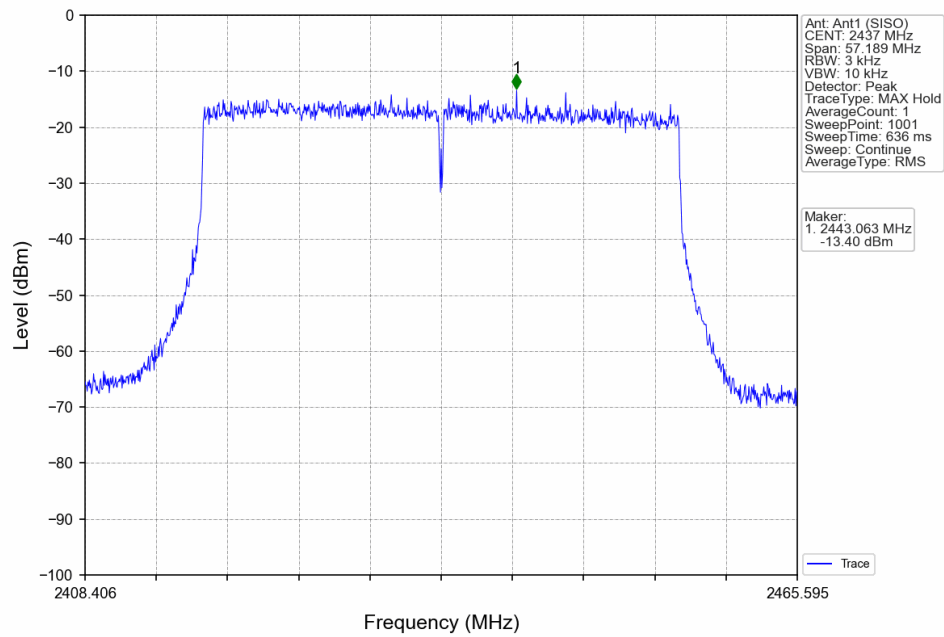
802.11ax(HEW40)_LCH_2422MHz_RU484_65_Ant1 (SISO)_NTNV



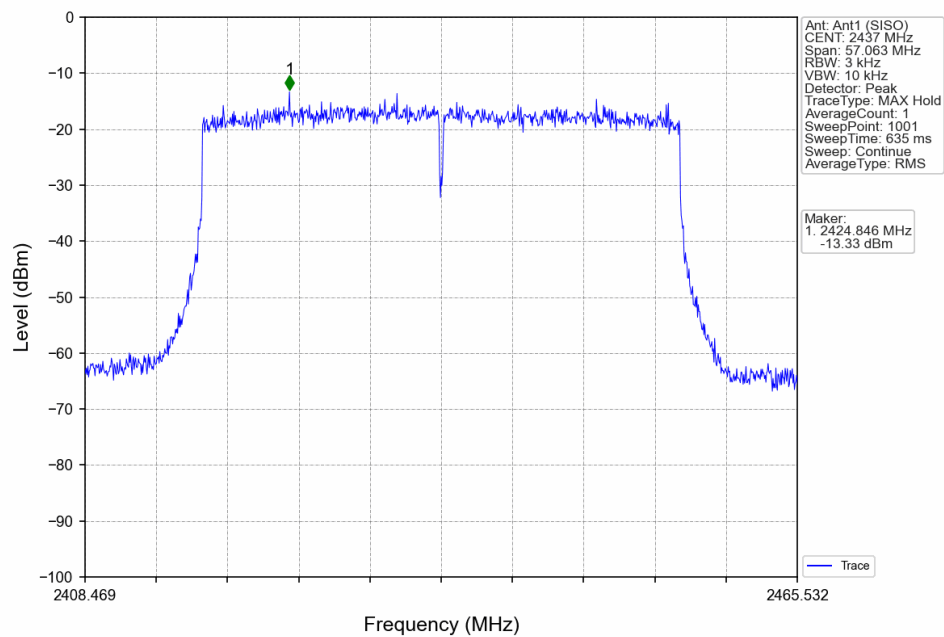
802.11ax(HEW40)_LCH_2422MHz_RU484_65_Ant2 (SISO)_NTNV



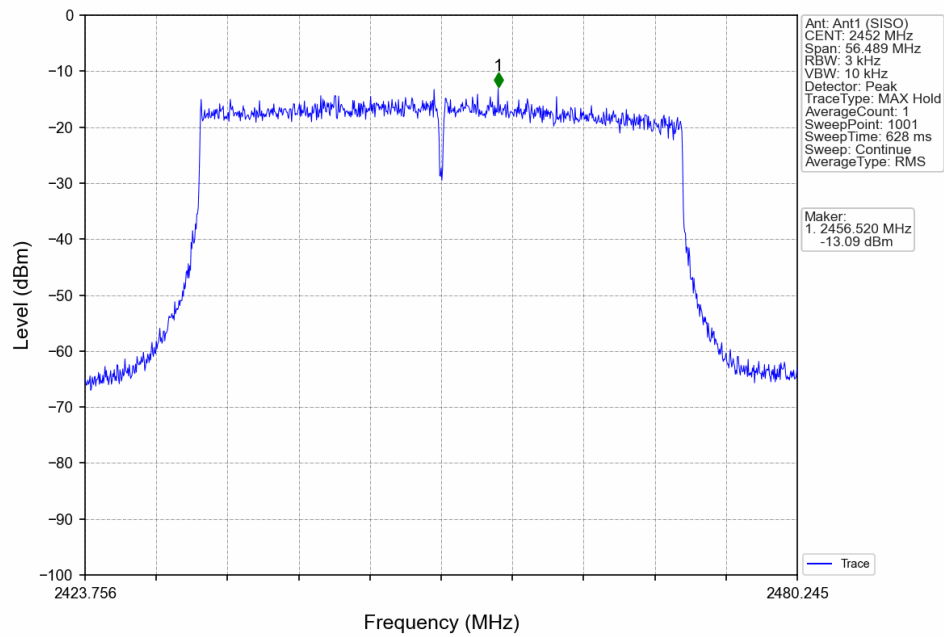
802.11ax(HEW40)_MCH_2437MHz_RU484_65_Ant1 (SISO)_NTNV



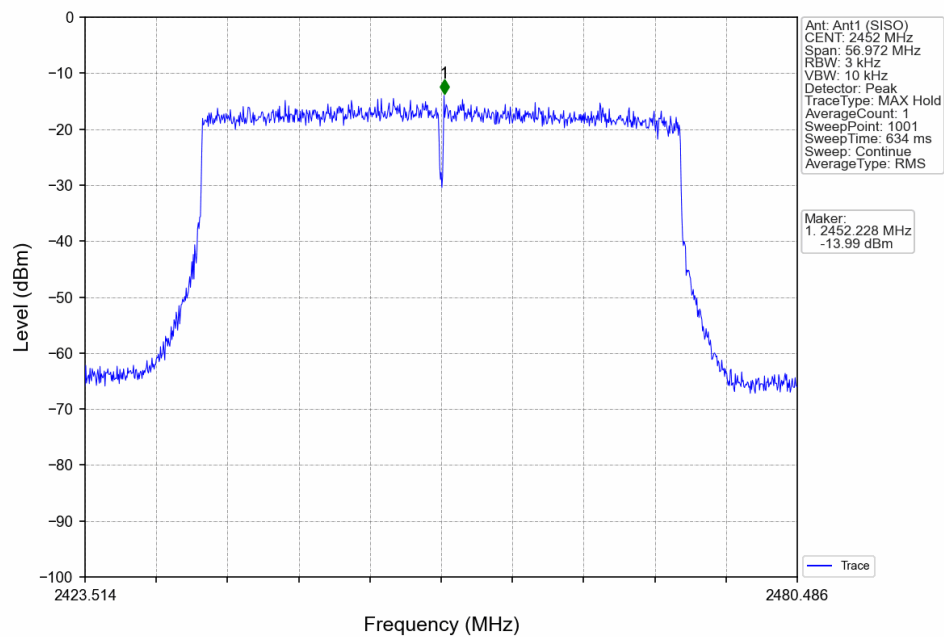
802.11ax(HEW40)_MCH_2437MHz_RU484_65_Ant2 (SISO)_NTNV



802.11ax(HEW40)_HCH_2452MHz_RU484_65_Ant1 (SISO)_NTNV



802.11ax(HEW40)_HCH_2452MHz_RU484_65_Ant2 (SISO)_NTNV



9.5 Spurious RF conducted emissions

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
RBW = 100 kHz, VBW $\geq$ 3RBW, Sweep = auto, Detector function = peak, Trace = max hold
4. Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded.
5. The level displayed must comply with the limit specified in this Section. Submit these plots.
6. Repeat above procedures until all frequencies measured were complete.

Limit

Frequency Range MHz	Limit (dBc)
30-25000	-20

Test results

Reference:

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	7.52
		2412	2	7.21
		2437	1	7.08
		2437	2	7.63
		2462	1	8.08
		2462	2	7.20
802.11g	SISO	2412	1	5.64
		2412	2	5.24
		2437	1	5.08
		2437	2	4.76
		2462	1	5.26
		2462	2	5.15
802.11n (HT20)	SISO	2412	1	5.01
		2412	2	4.00
		2437	1	4.54
		2437	2	4.16
		2462	1	5.51
		2462	2	4.02
802.11n (HT40)		2422	1	3.03
		2422	2	2.12
		2437	1	2.44
		2437	2	2.27
		2452	1	3.02
		2452	2	2.35
802.11ax (HEW20)		2412	1	3.82
		2412	2	3.62
		2437	1	3.59
		2437	2	2.98
		2462	1	2.52
		2462	2	3.34
802.11ax (HEW40)		2422	1	2.08
		2422	2	0.94
		2437	1	1.47
		2437	2	1.07
		2452	1	1.90
		2452	2	1.70

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.

Conducted spurious emission:

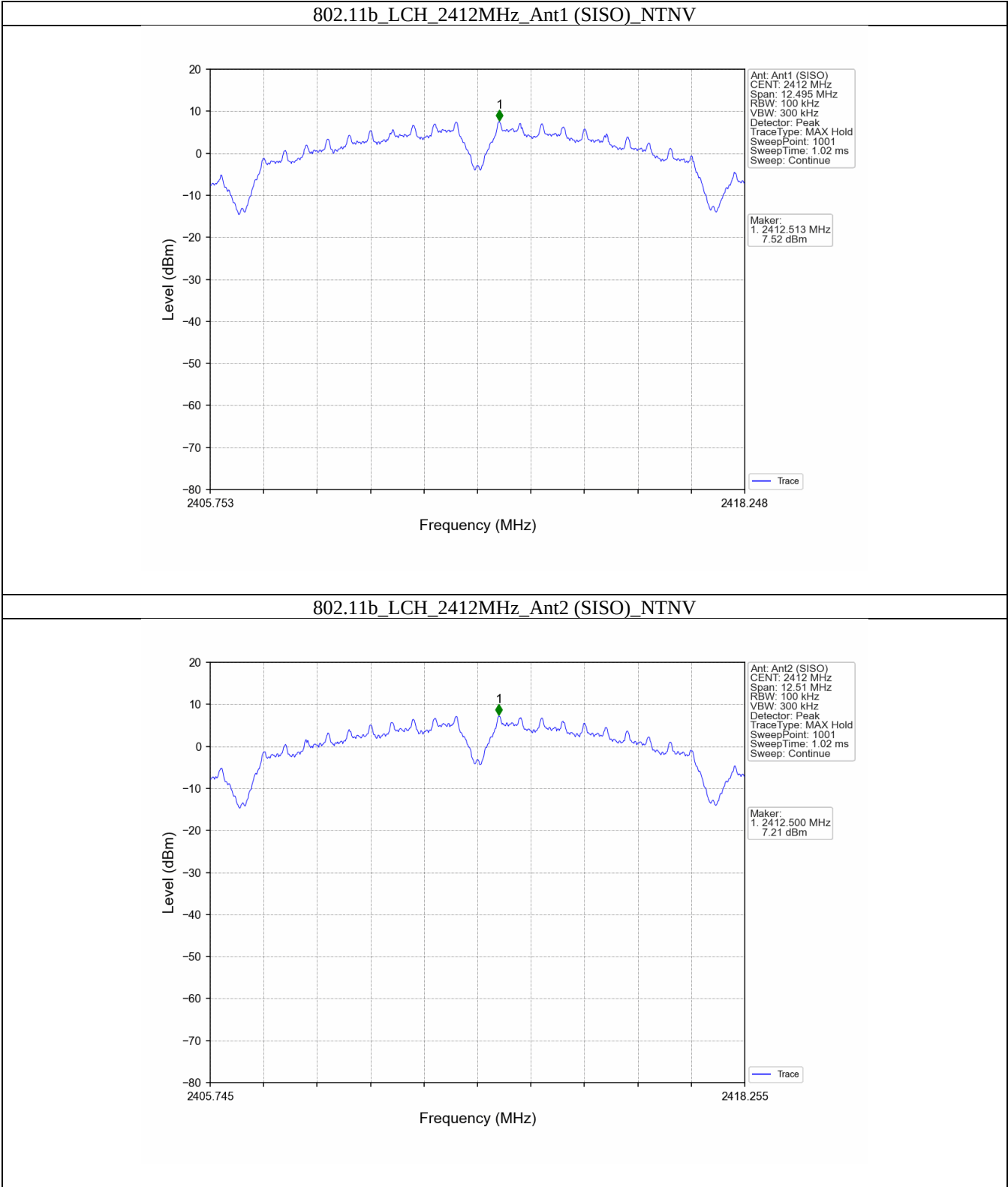
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)
802.11b	SISO	2412	1	7.52	-12.48
		2412	2	7.21	-12.79
		2437	1	7.08	-12.92
		2437	2	7.63	-12.37
		2462	1	8.08	-11.92
		2462	2	7.20	-12.80
802.11g	SISO	2412	1	5.64	-14.36
		2412	2	5.24	-14.76
		2437	1	5.08	-14.92
		2437	2	4.76	-15.24
		2462	1	5.26	-14.74
		2462	2	5.15	-14.85
802.11n (HT20)	SISO	2412	1	5.01	-14.99
		2412	2	4.00	-16.00
		2437	1	4.54	-15.46
		2437	2	4.16	-15.84

		2462	1	5.51	-14.49
		2462	2	4.02	-15.98
802.11n (HT40)		2422	1	3.03	-16.97
		2422	2	2.12	-17.88
		2437	1	2.44	-17.56
		2437	2	2.27	-17.73
		2452	1	3.02	-16.98
		2452	2	2.35	-17.65
802.11ax (HEW20)		2412	1	3.82	-16.18
		2412	2	3.62	-16.38
		2437	1	3.59	-16.41
		2437	2	2.98	-17.02
		2462	1	2.52	-17.48
		2462	2	3.34	-16.66
802.11ax (HEW40)		2422	1	2.08	-17.92
		2422	2	0.94	-19.06
		2437	1	1.47	-18.53
		2437	2	1.07	-18.93
		2452	1	1.90	-18.10
		2452	2	1.70	-18.30

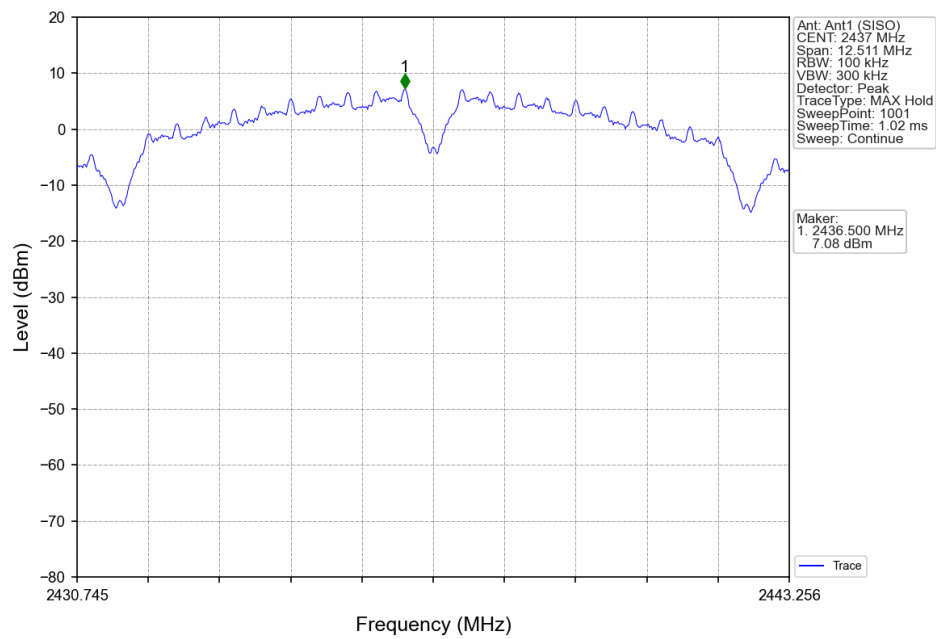
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

Test Graphs

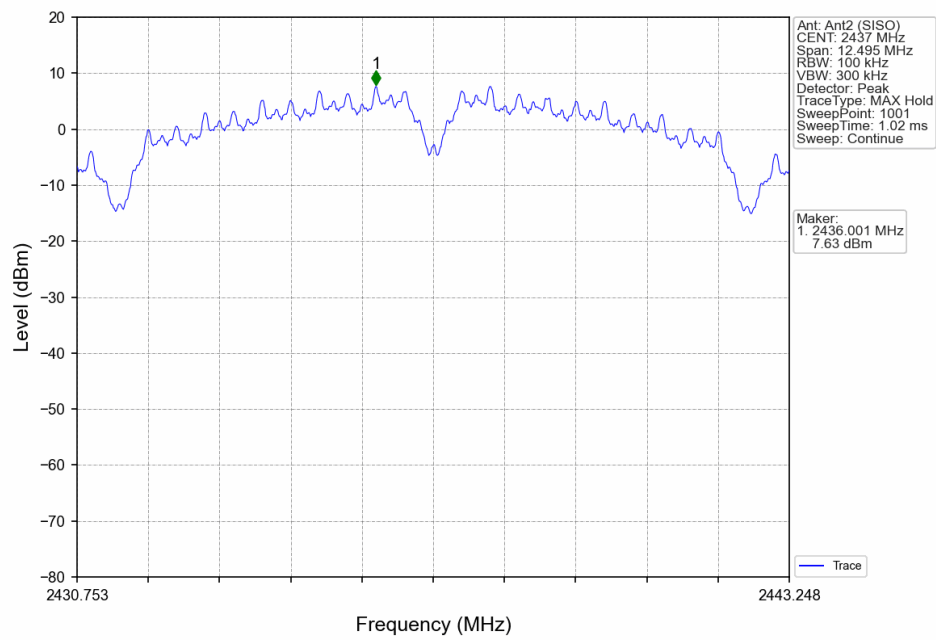
Reference



802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV

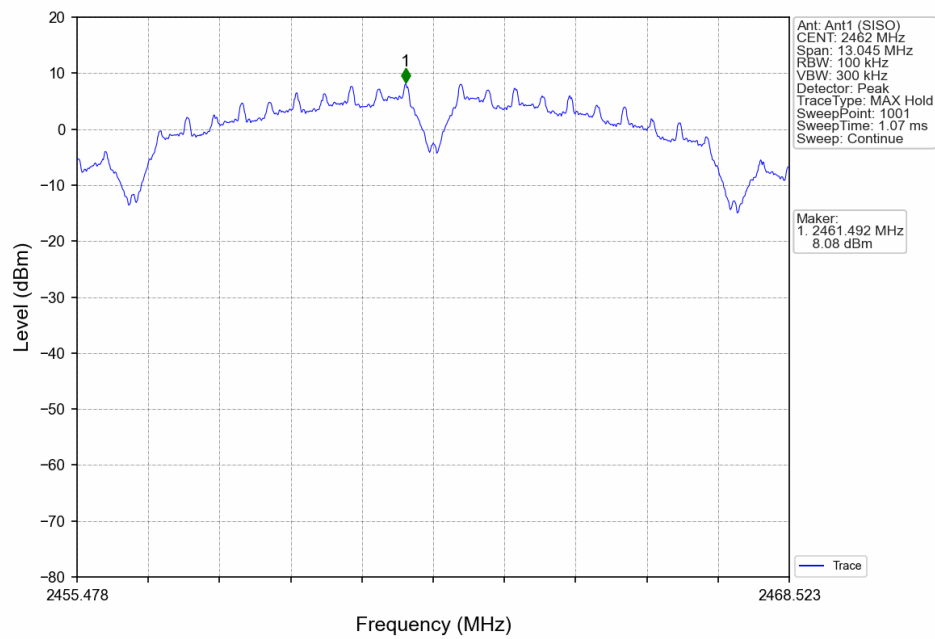


802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV

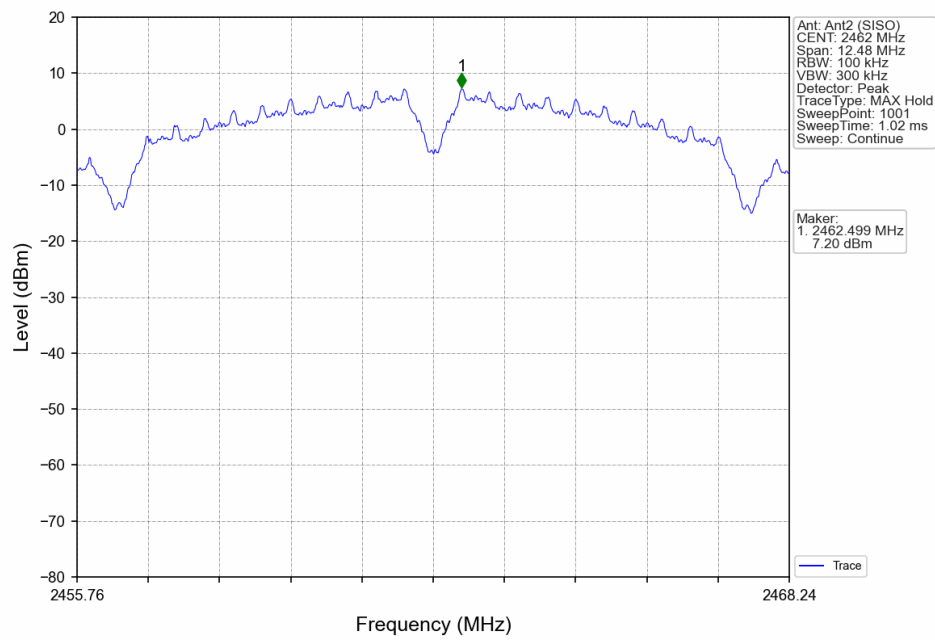




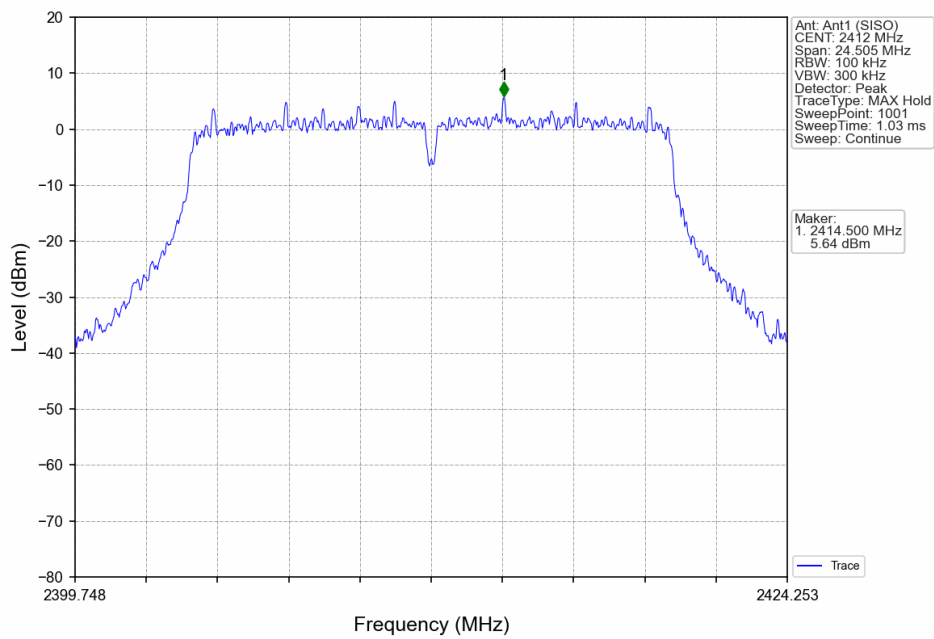
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



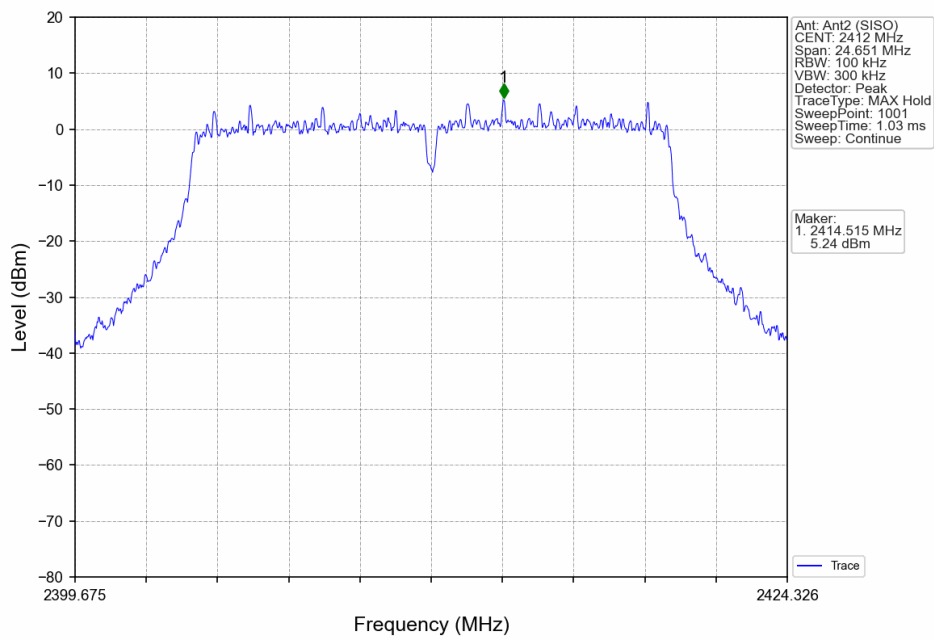
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



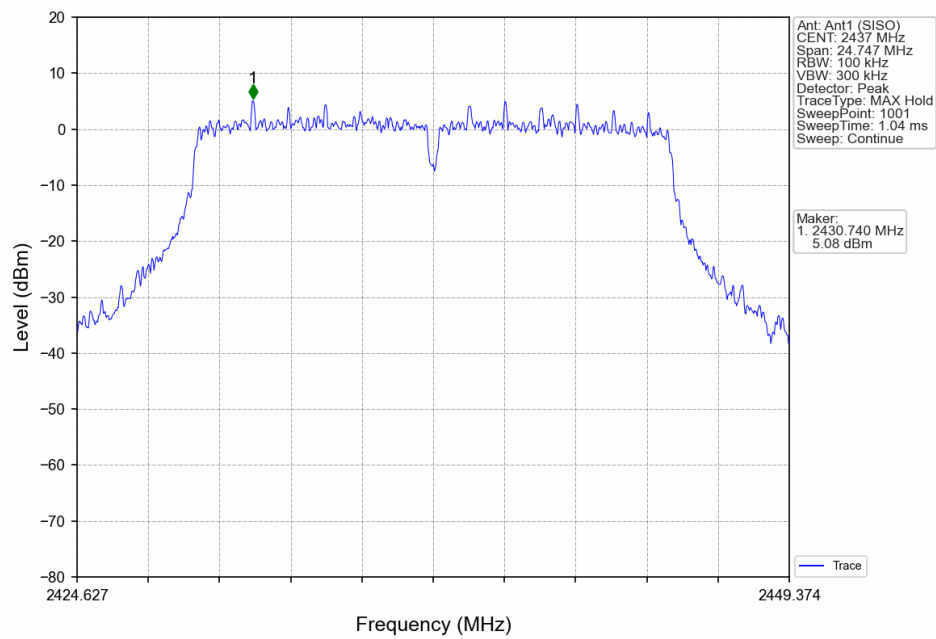
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



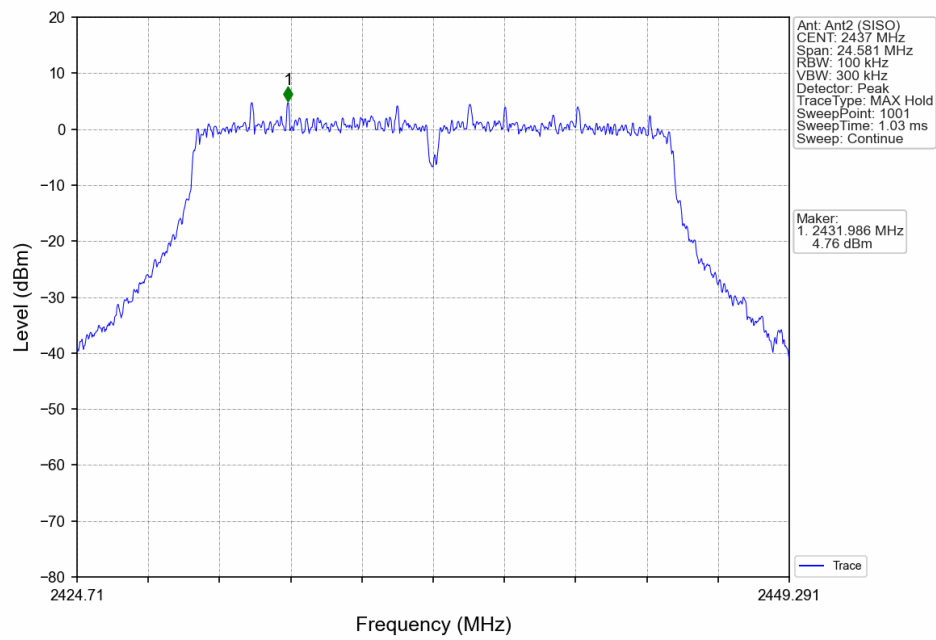
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



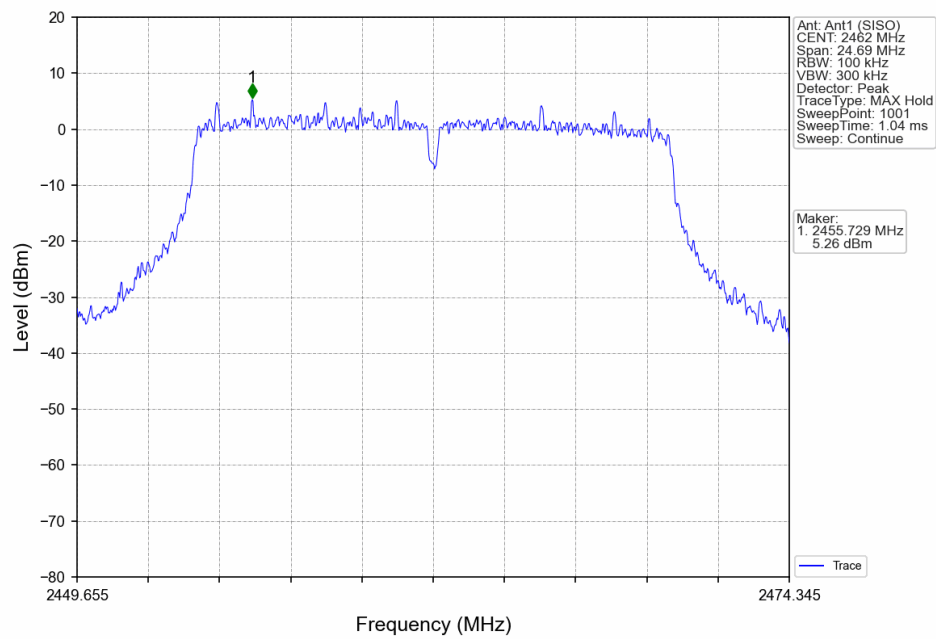
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



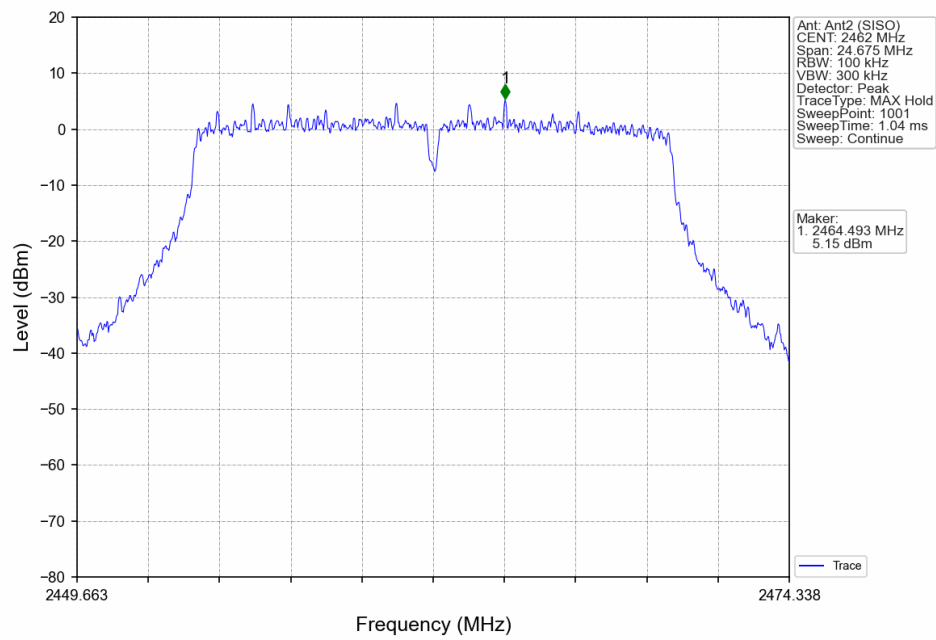
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

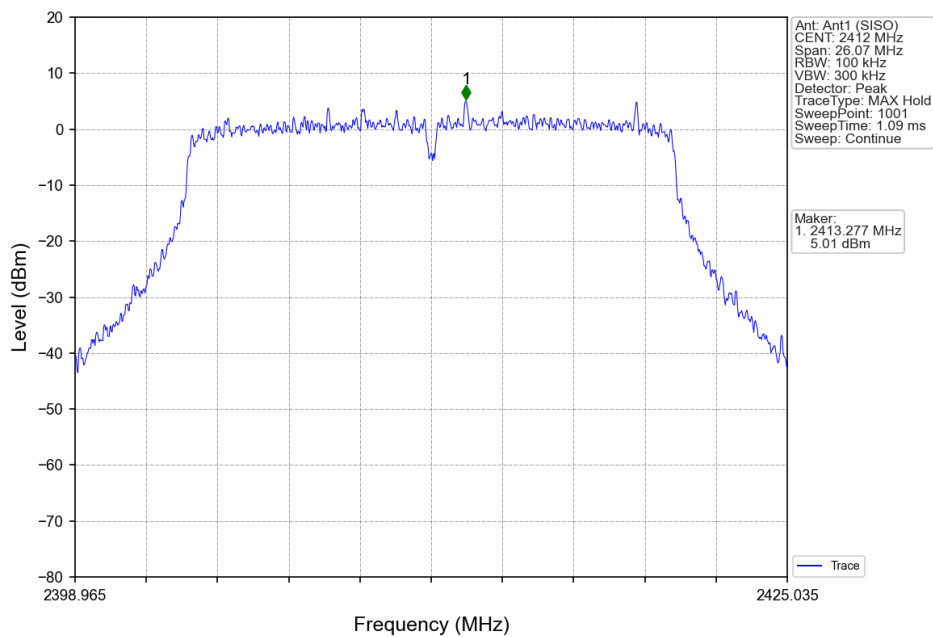


802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV

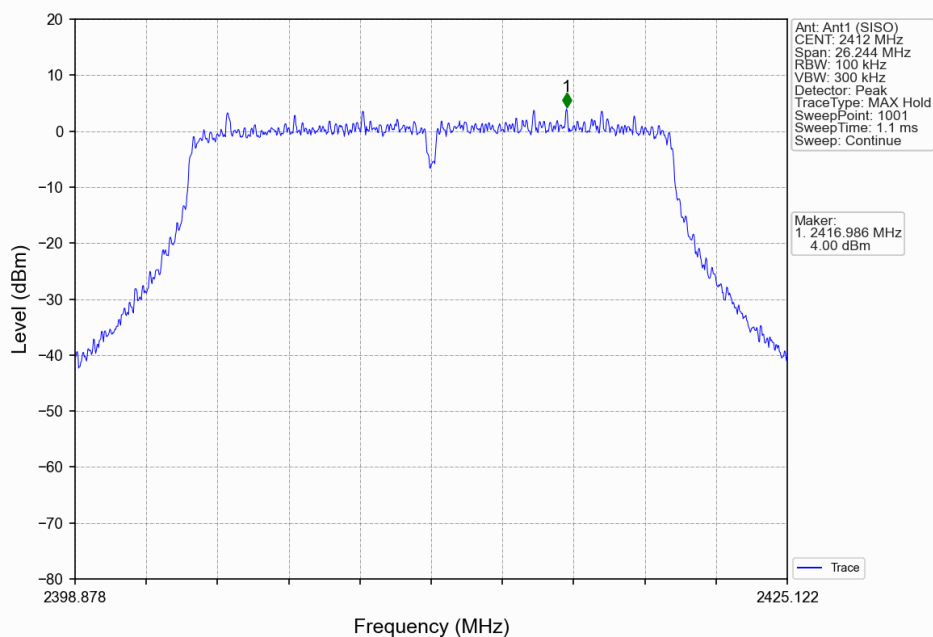




802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

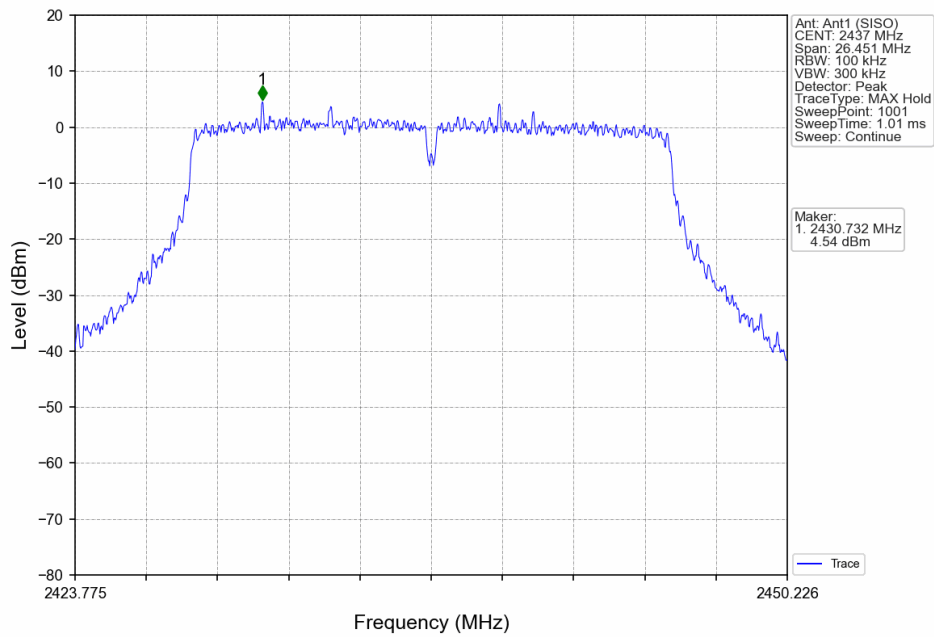


802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

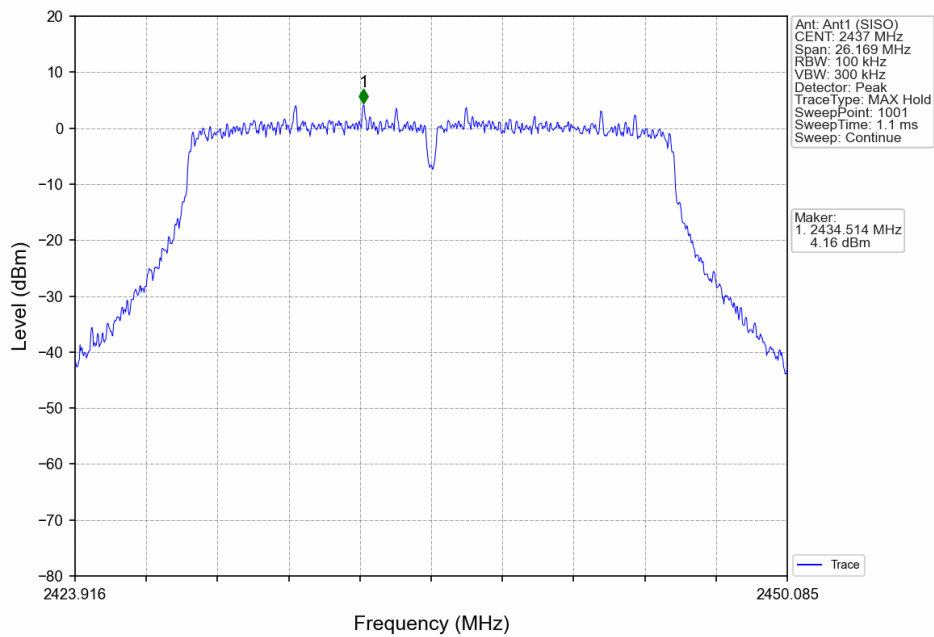




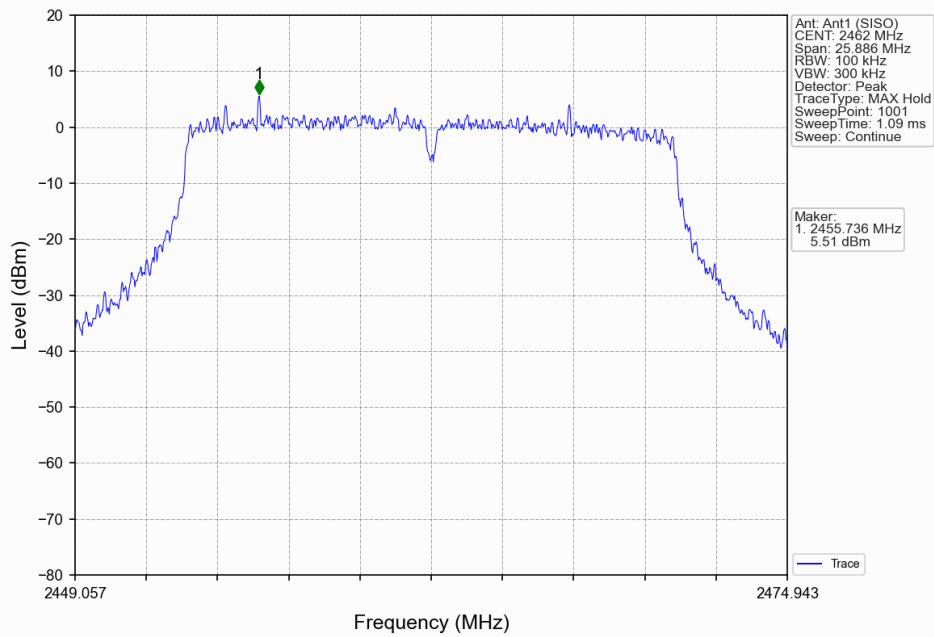
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



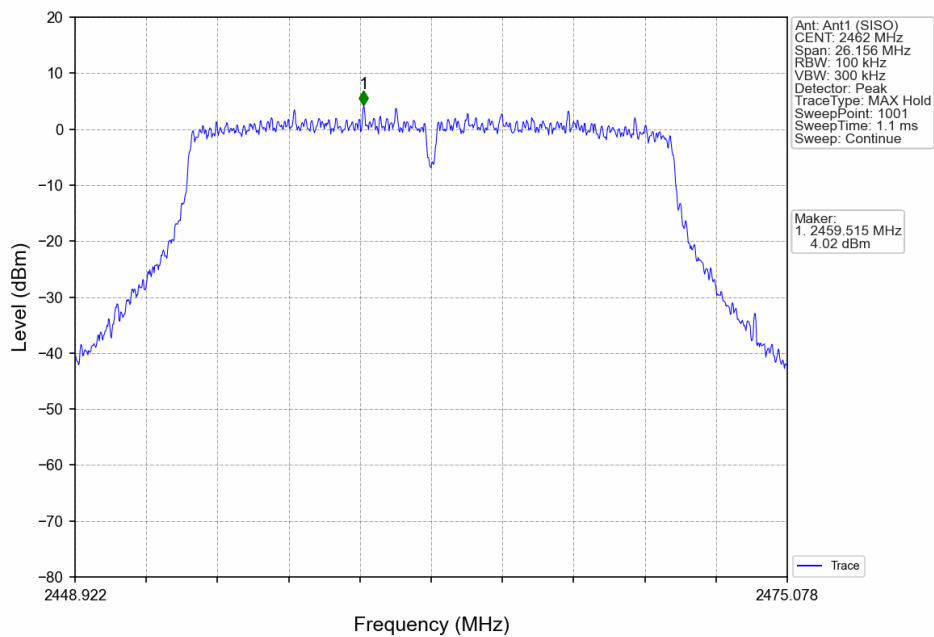
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



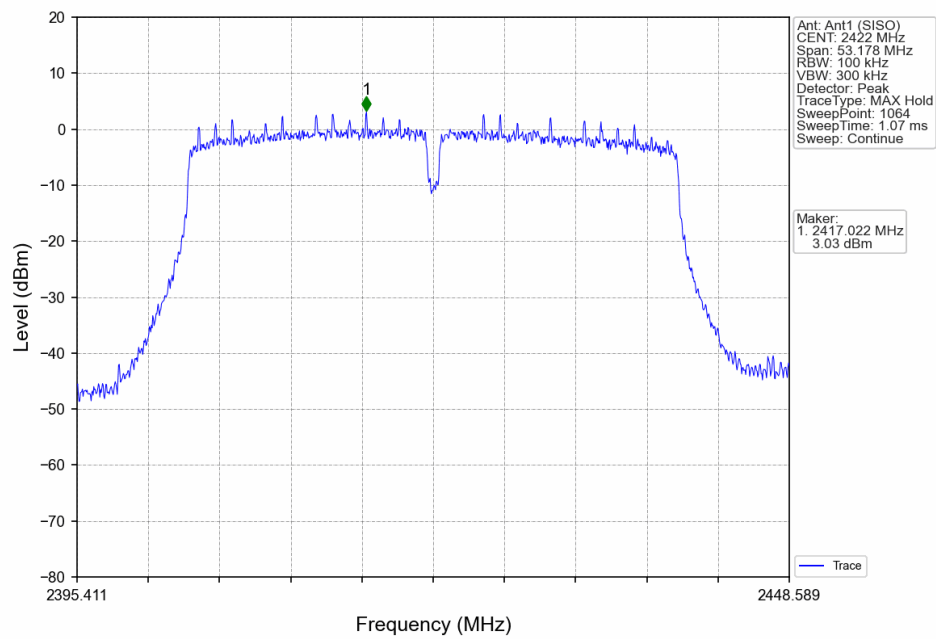
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



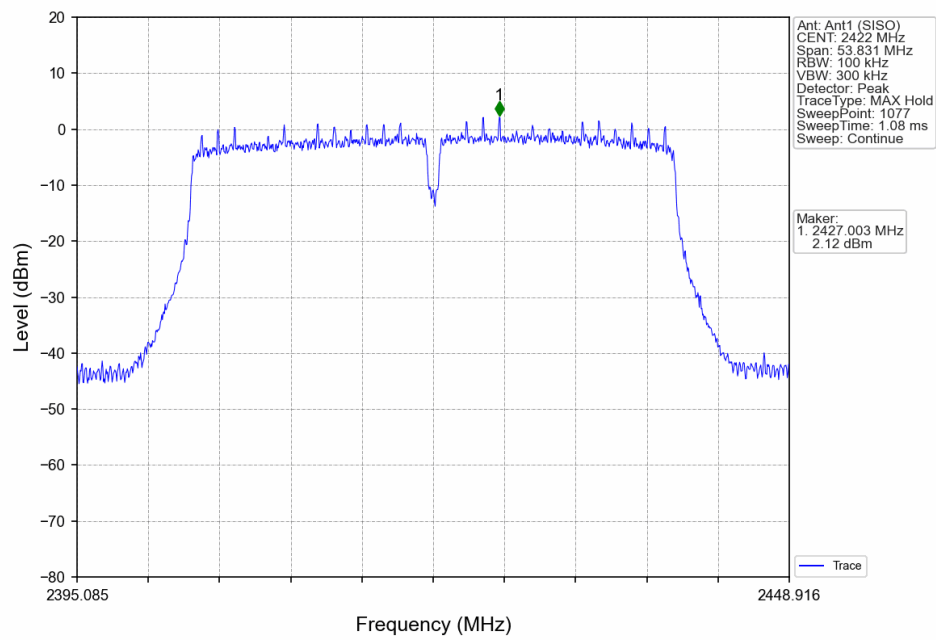
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



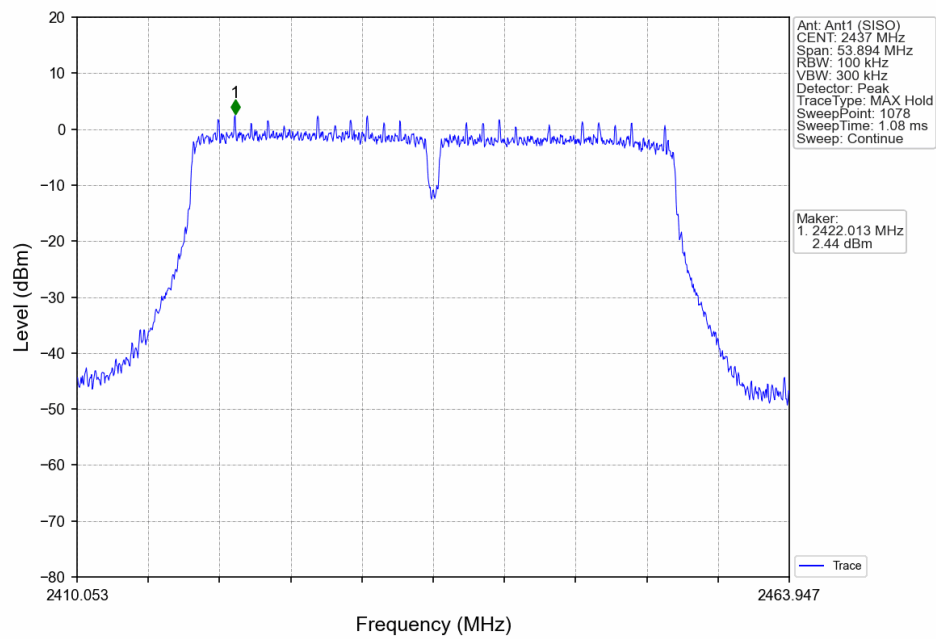
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



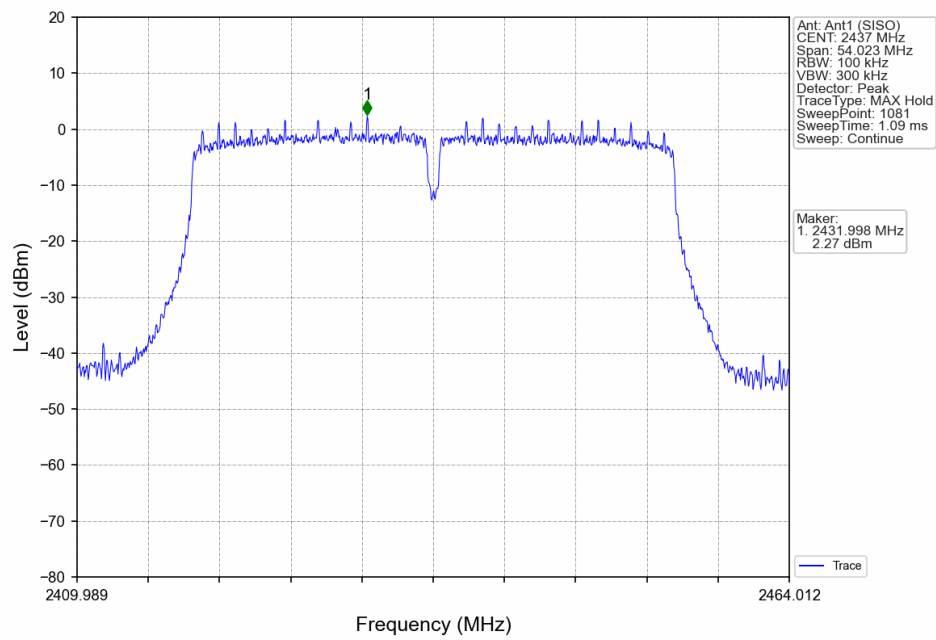
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



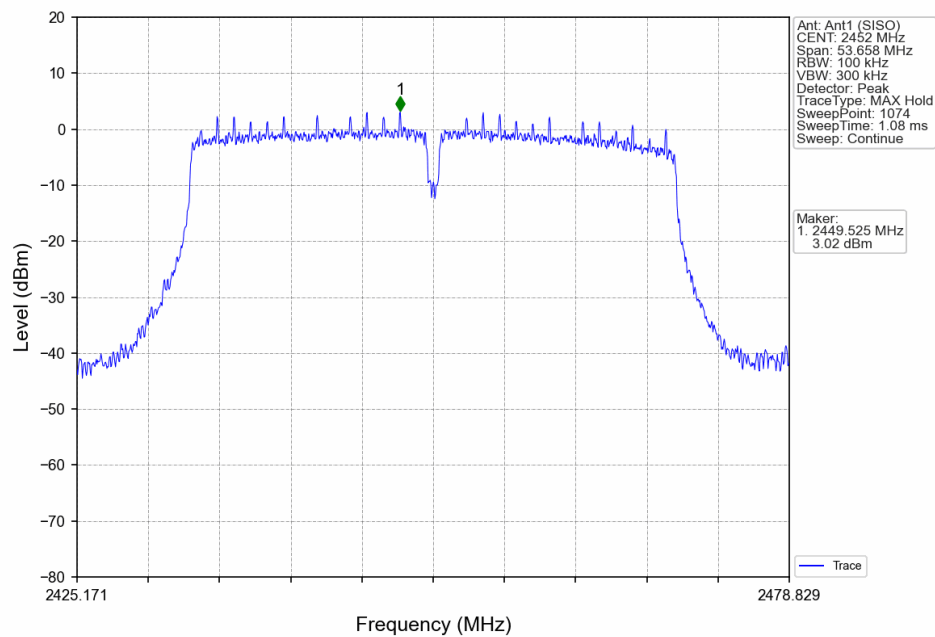
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



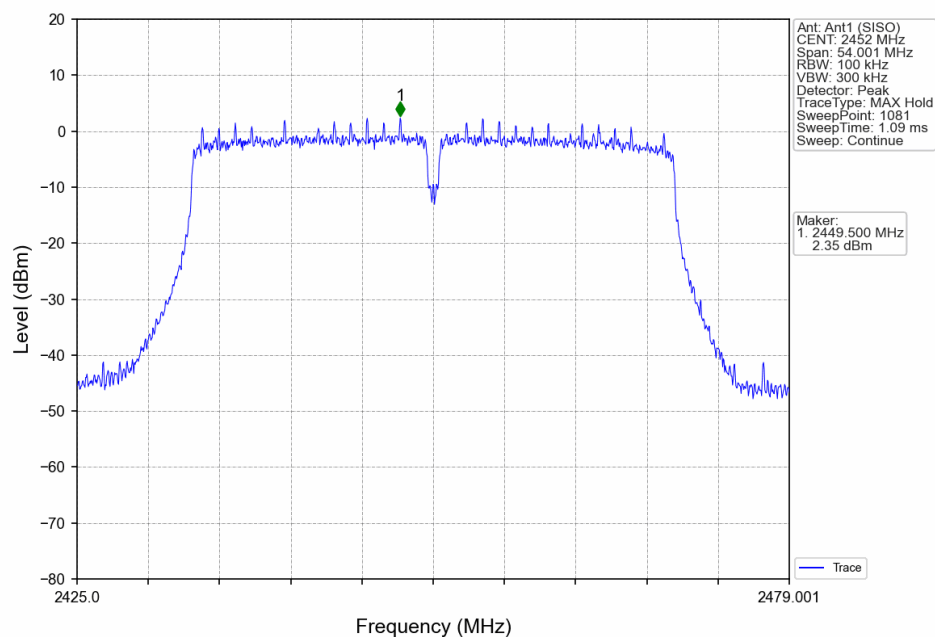
802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



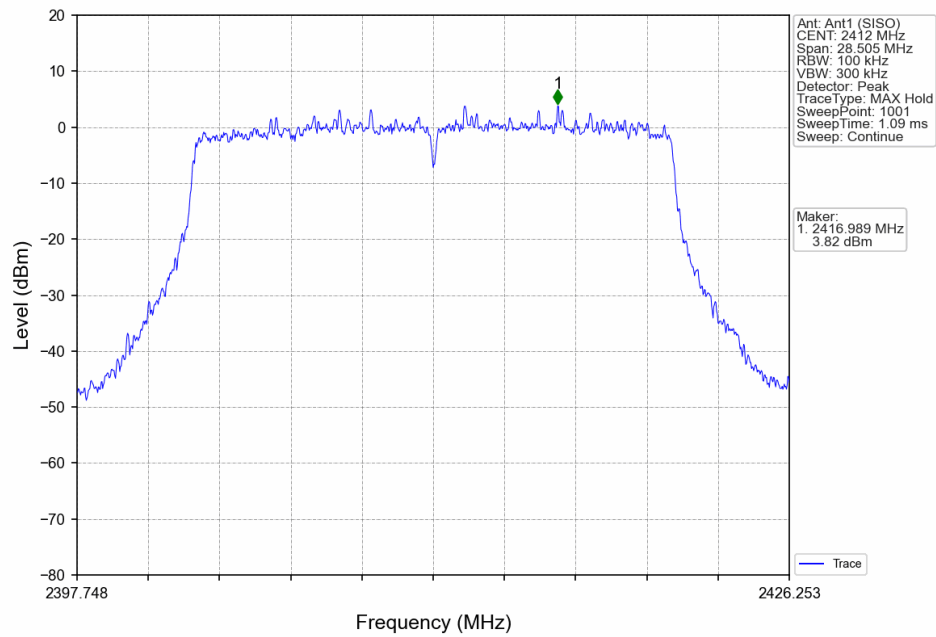
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



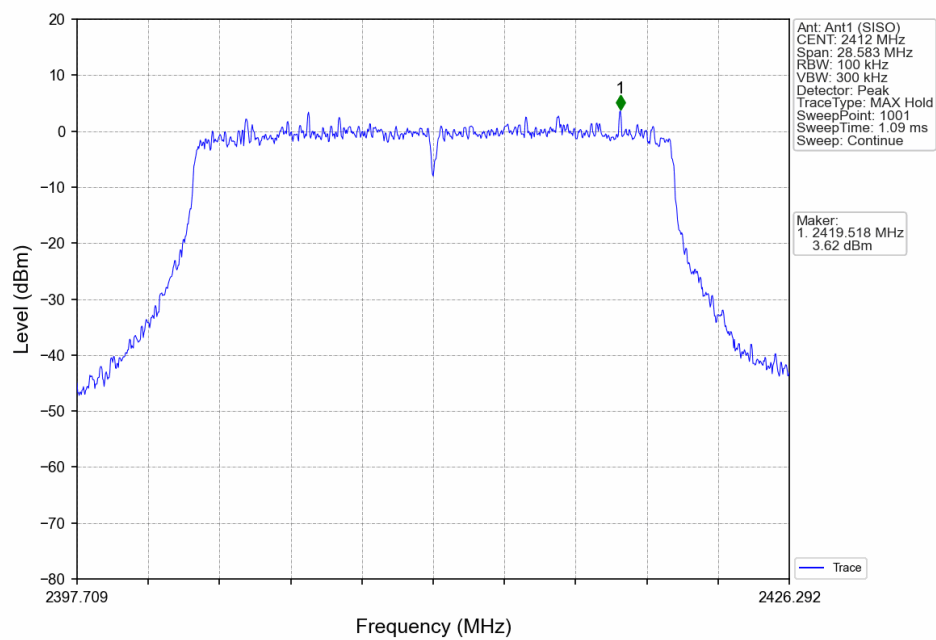
802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



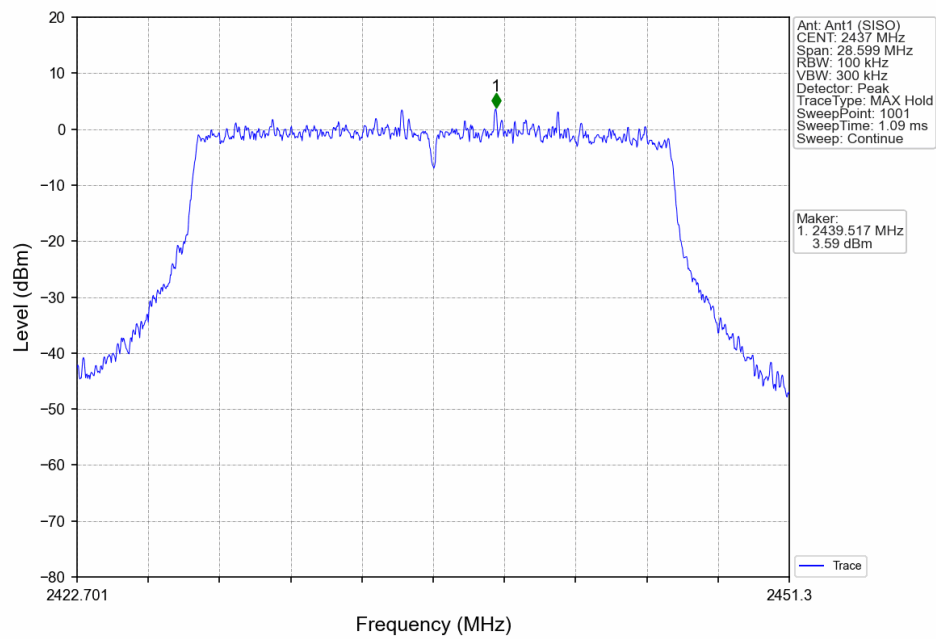
802.11ax(HEW20)_LCH_2412MHz_RU242_61_Ant1 (SISO)_NTNV



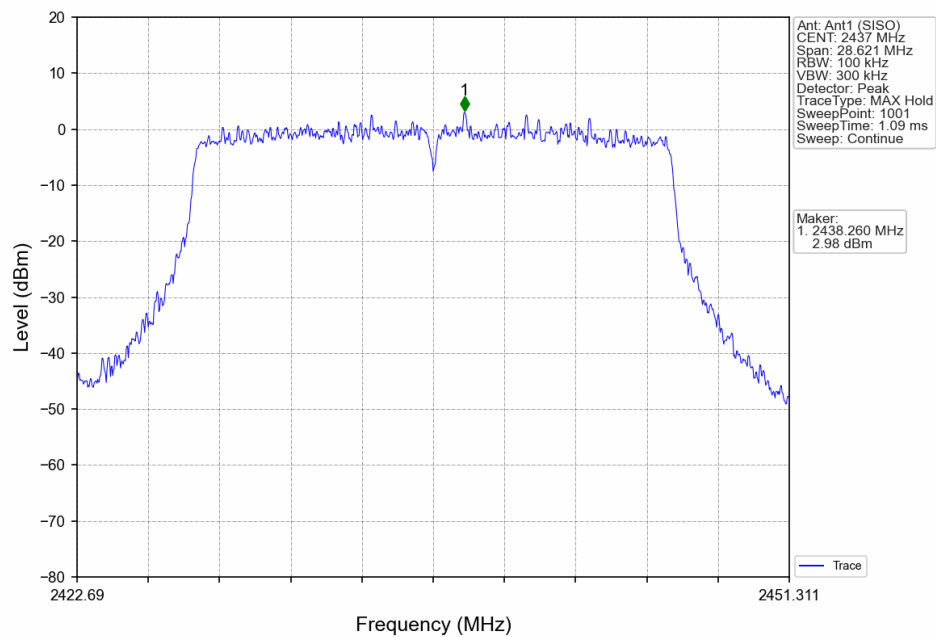
802.11ax(HEW20)_LCH_2412MHz_RU242_61_Ant2 (SISO)_NTNV



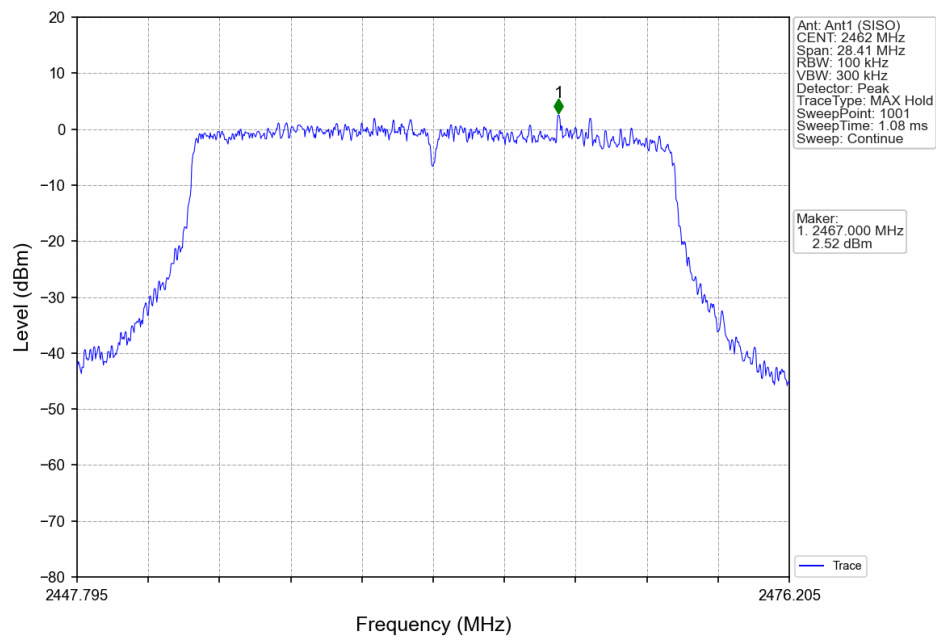
802.11ax(HEW20)_MCH_2437MHz_RU242_61_Ant1 (SISO)_NTNV



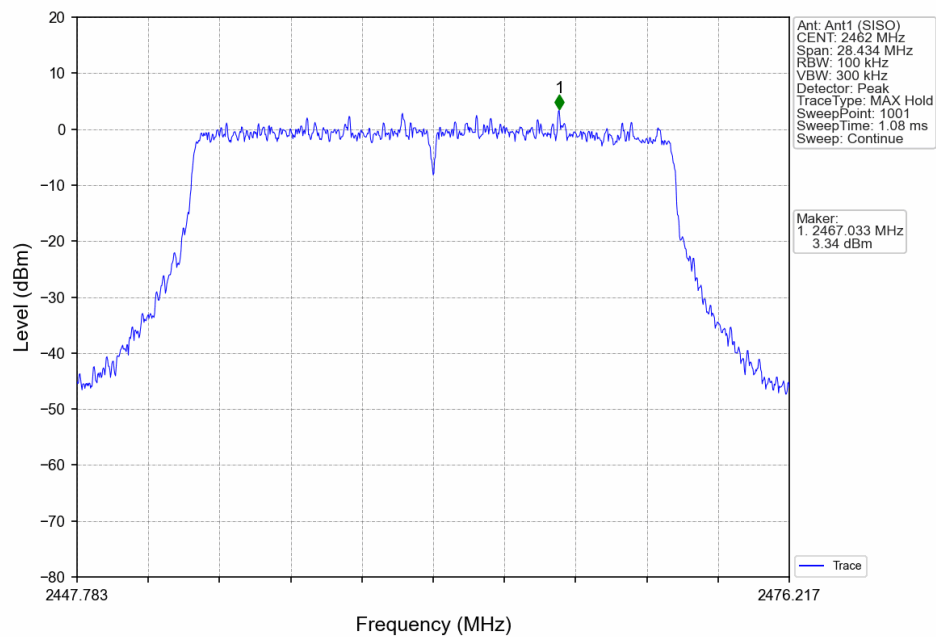
802.11ax(HEW20)_MCH_2437MHz_RU242_61_Ant2 (SISO)_NTNV



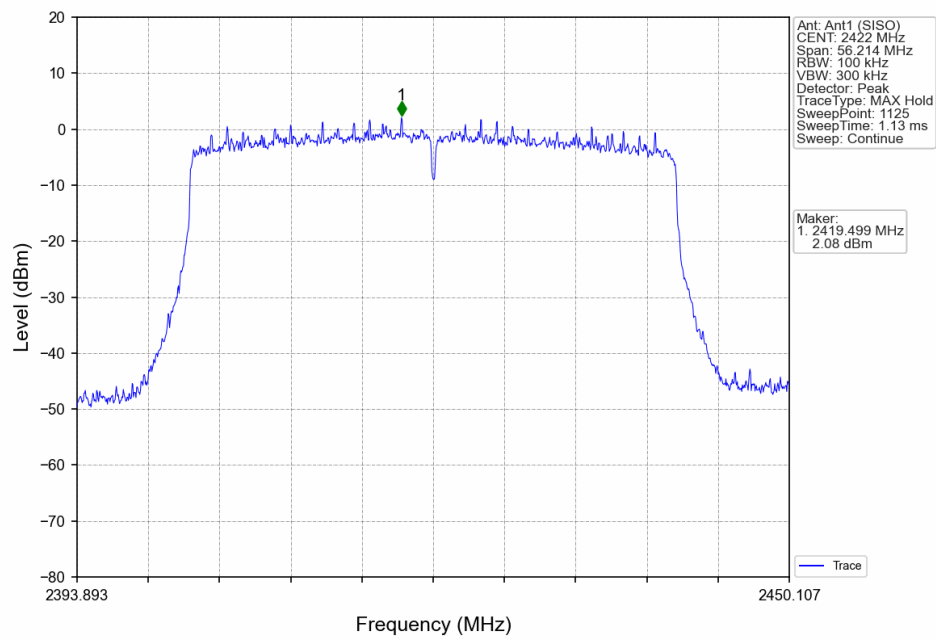
802.11ax(HEW20)_HCH_2462MHz_RU242_61_Ant1 (SISO)_NTNV



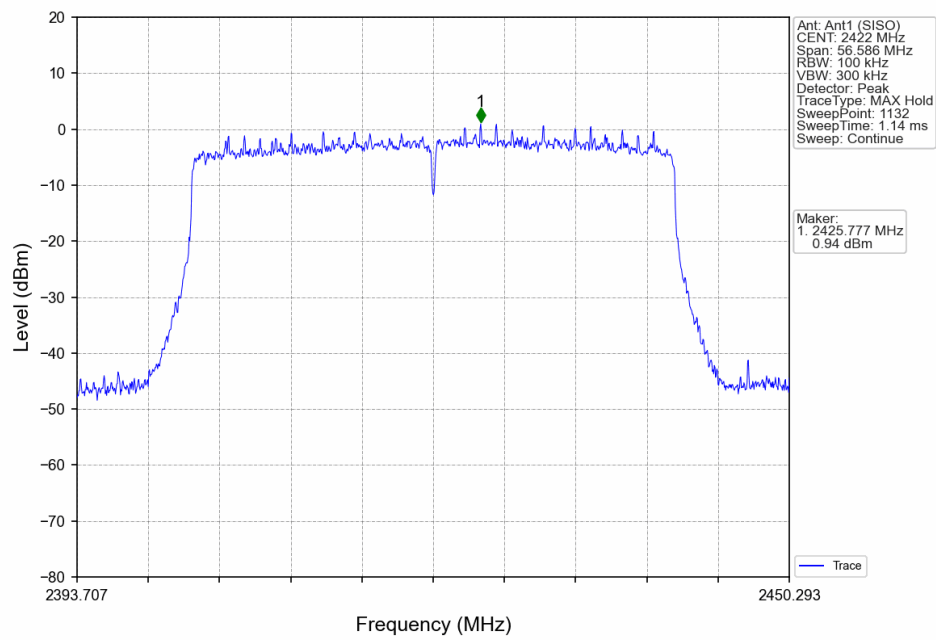
802.11ax(HEW20)_HCH_2462MHz_RU242_61_Ant2 (SISO)_NTNV



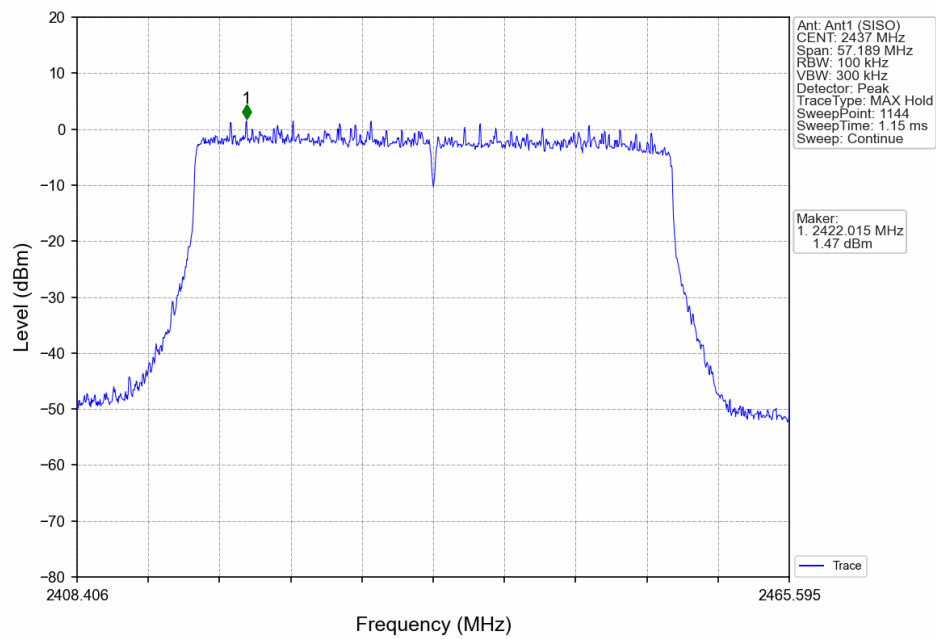
802.11ax(HEW40)_LCH_2422MHz_RU484_65_Ant1 (SISO)_NTNV



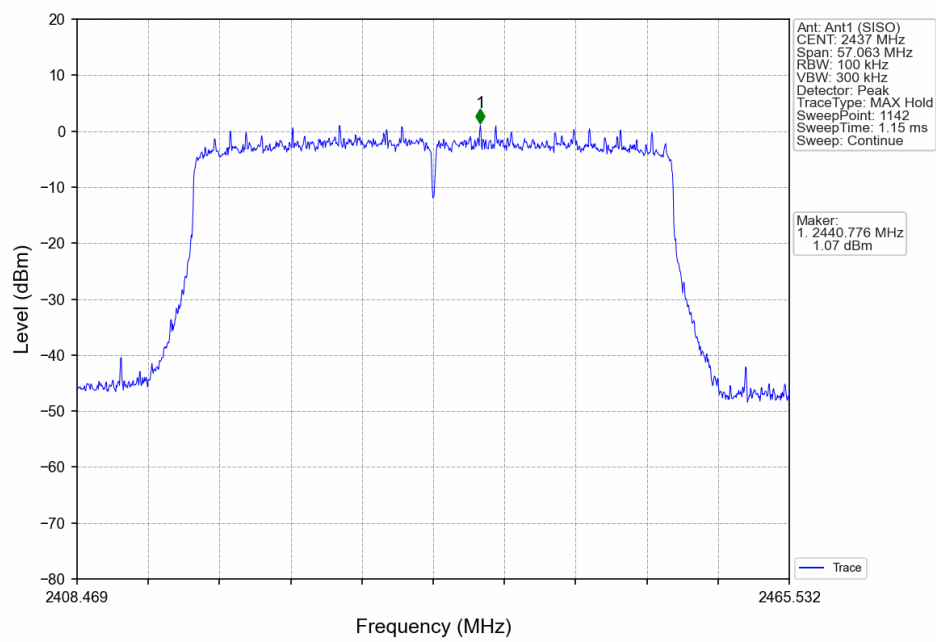
802.11ax(HEW40)_LCH_2422MHz_RU484_65_Ant2 (SISO)_NTNV



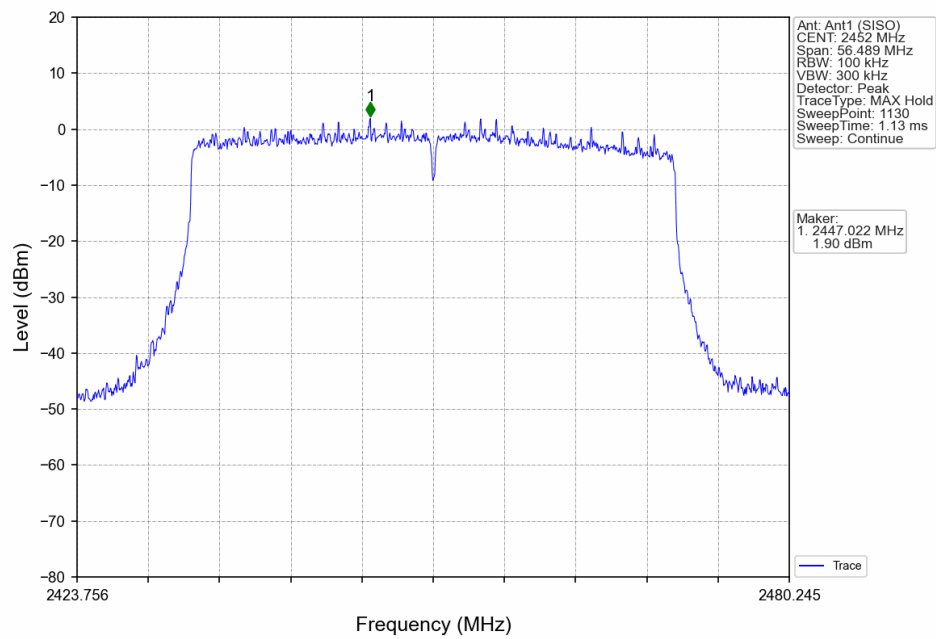
802.11ax(HEW40)_MCH_2437MHz_RU484_65_Ant1 (SISO)_NTNV



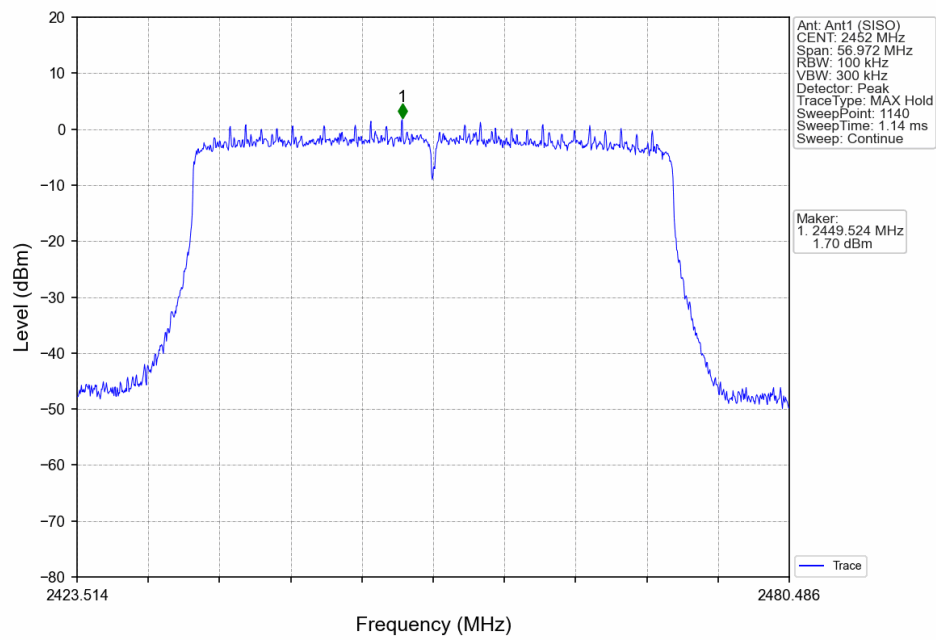
802.11ax(HEW40)_MCH_2437MHz_RU484_65_Ant2 (SISO)_NTNV



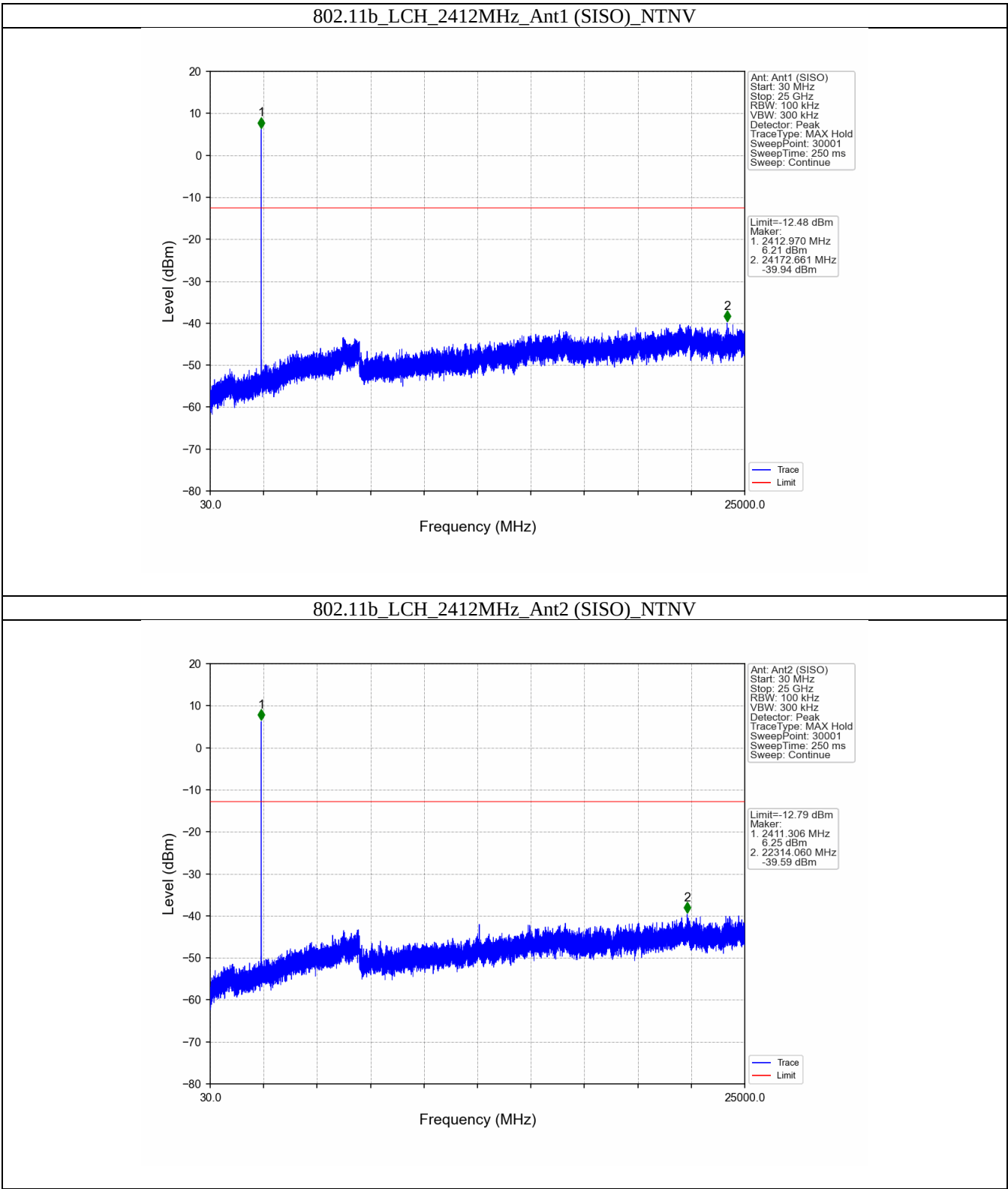
802.11ax(HEW40)_HCH_2452MHz_RU484_65_Ant1 (SISO)_NTNV



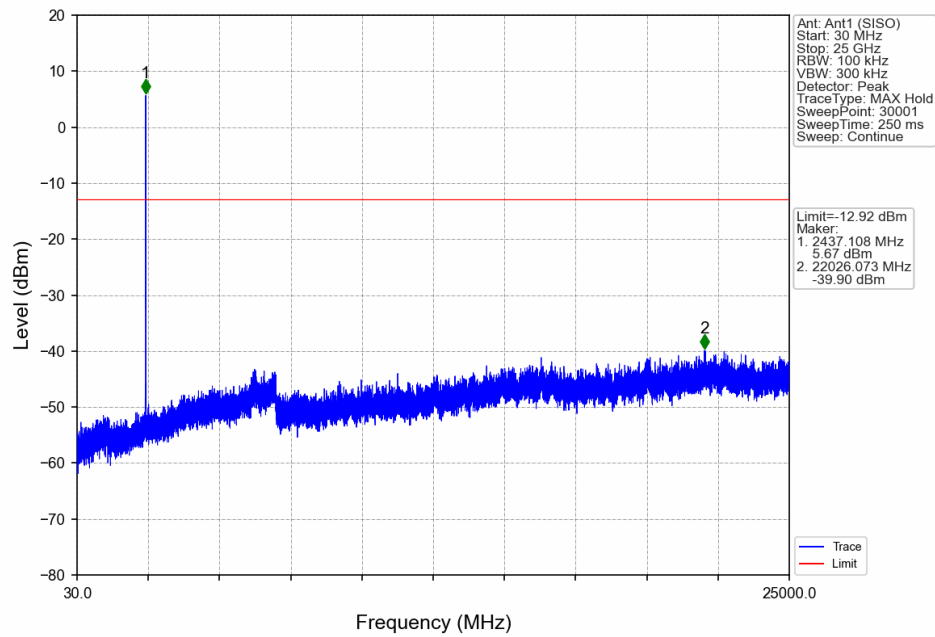
802.11ax(HEW40)_HCH_2452MHz_RU484_65_Ant2 (SISO)_NTNV



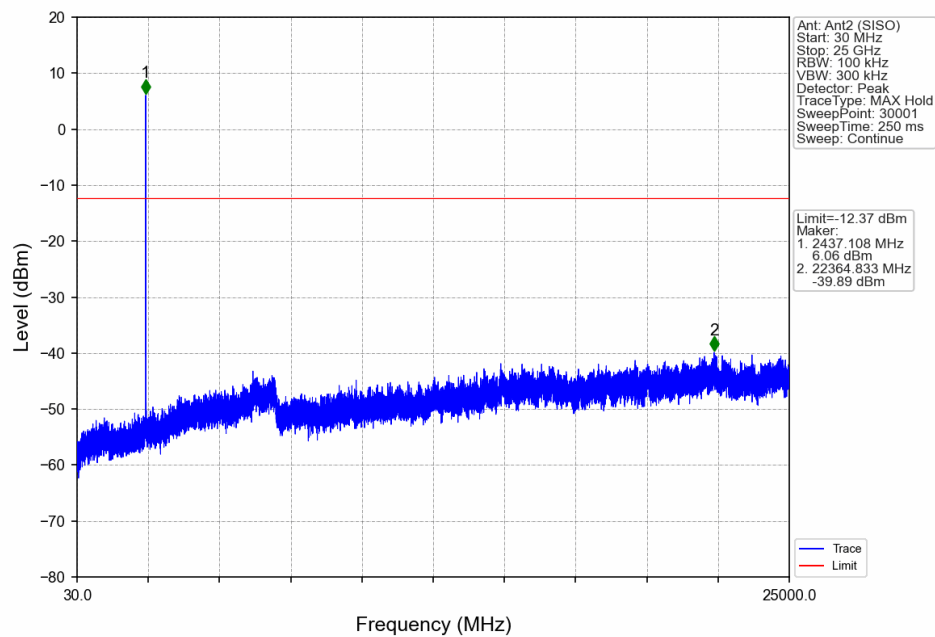
CSE:



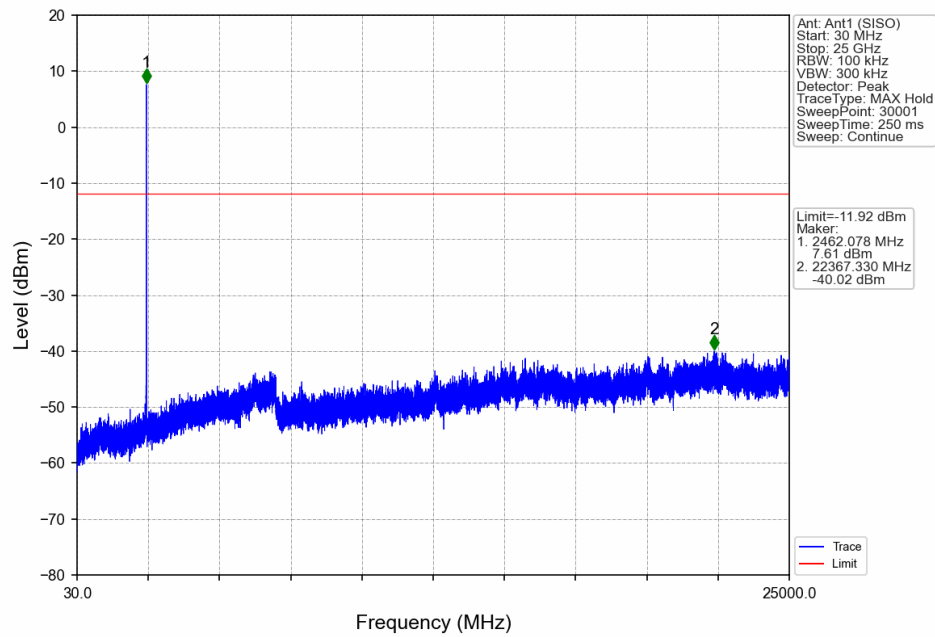
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



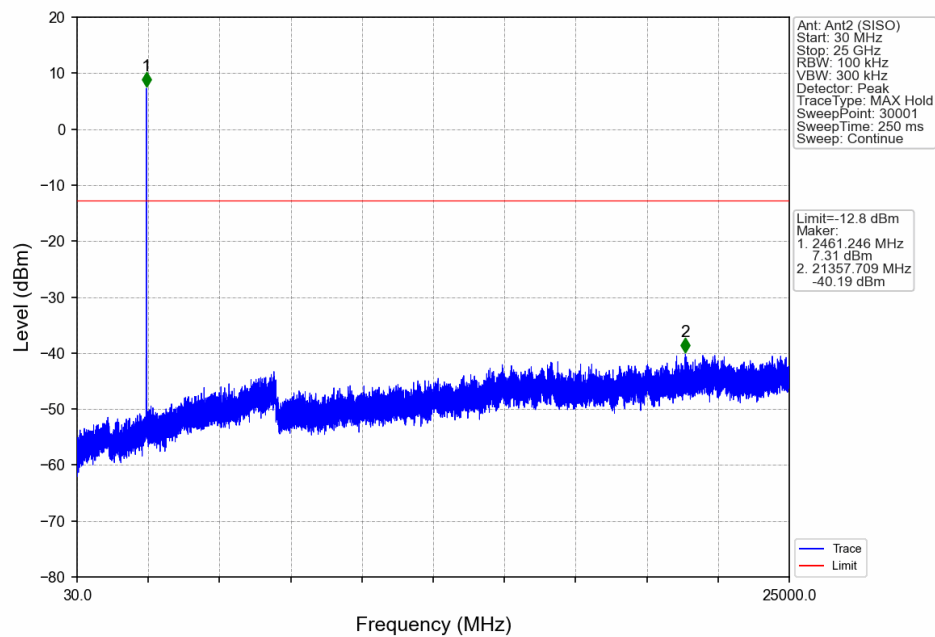
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

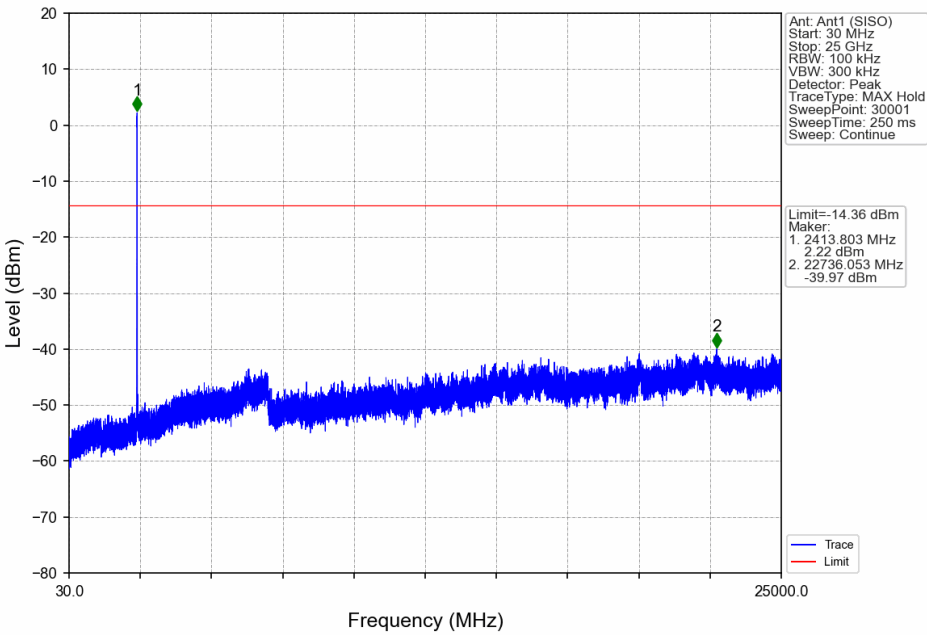


802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV

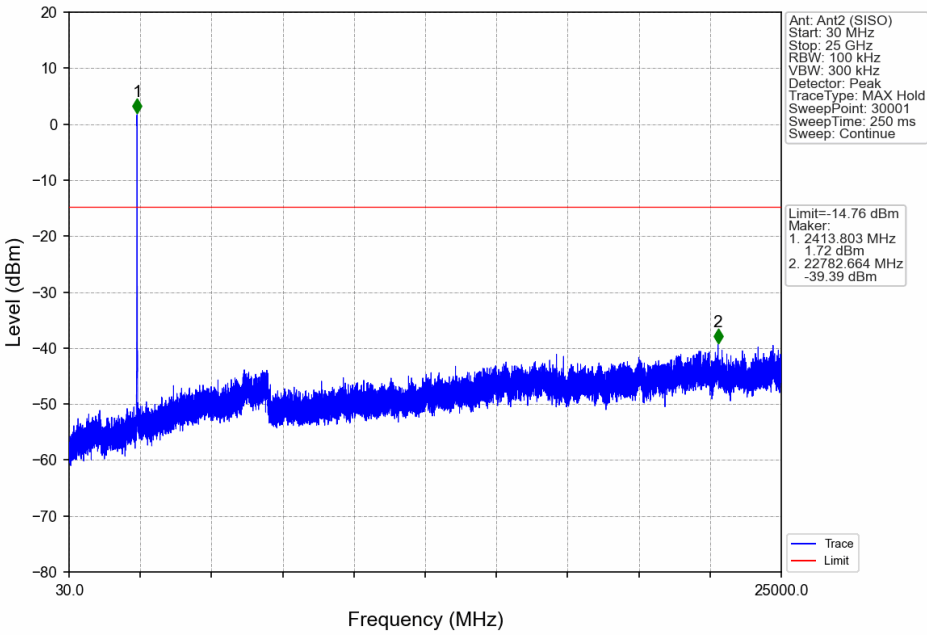




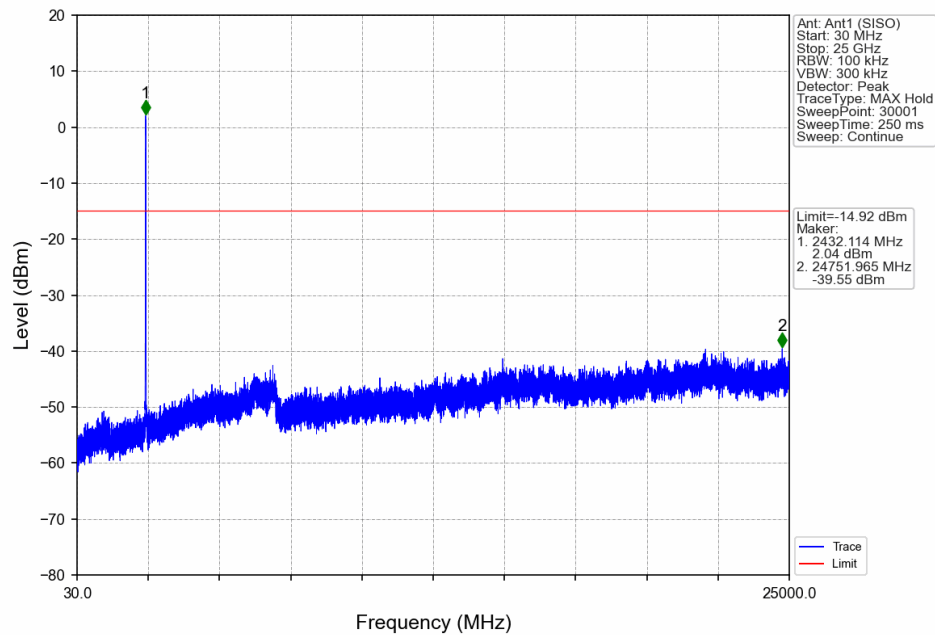
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



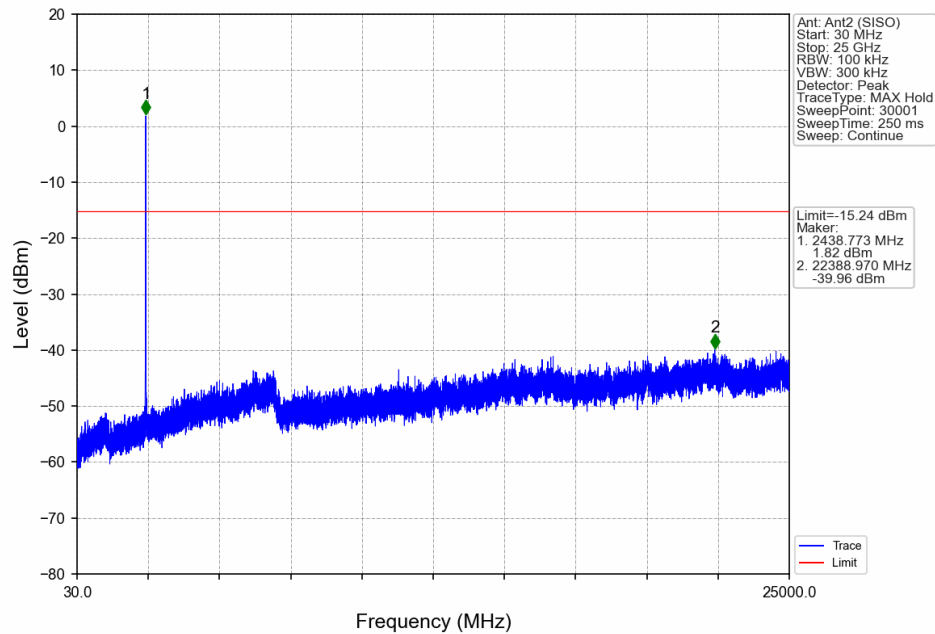
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

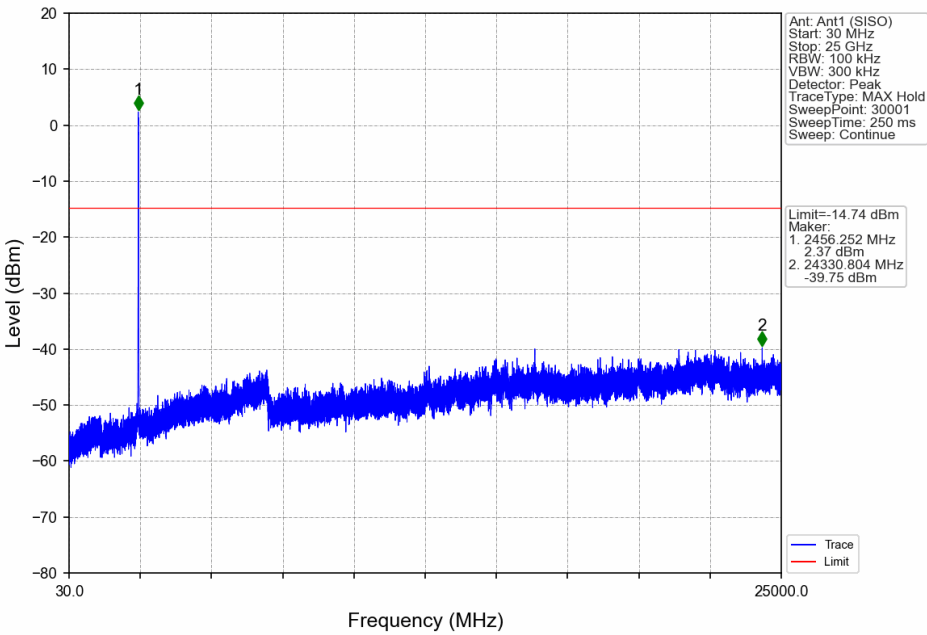


802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV

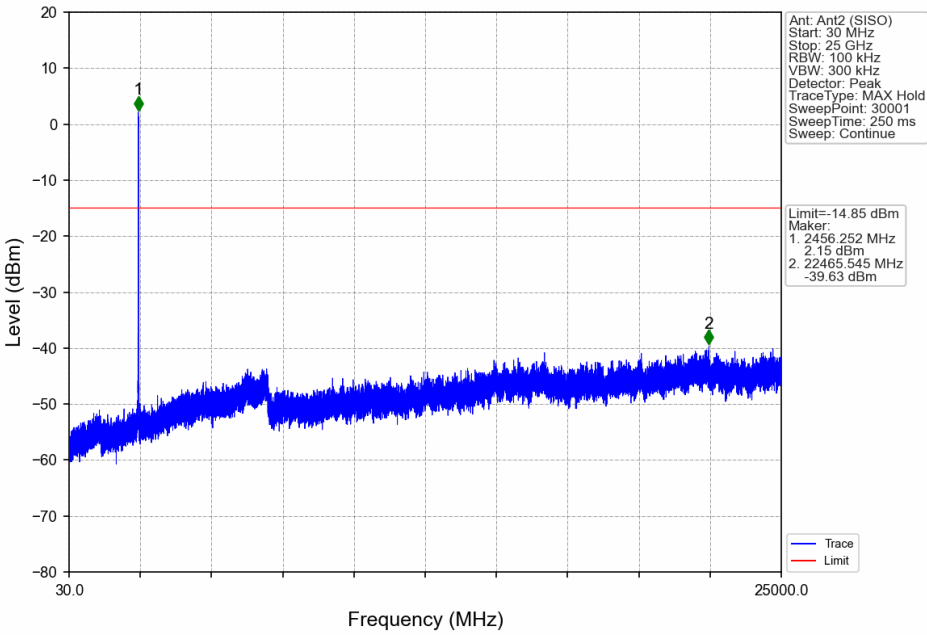




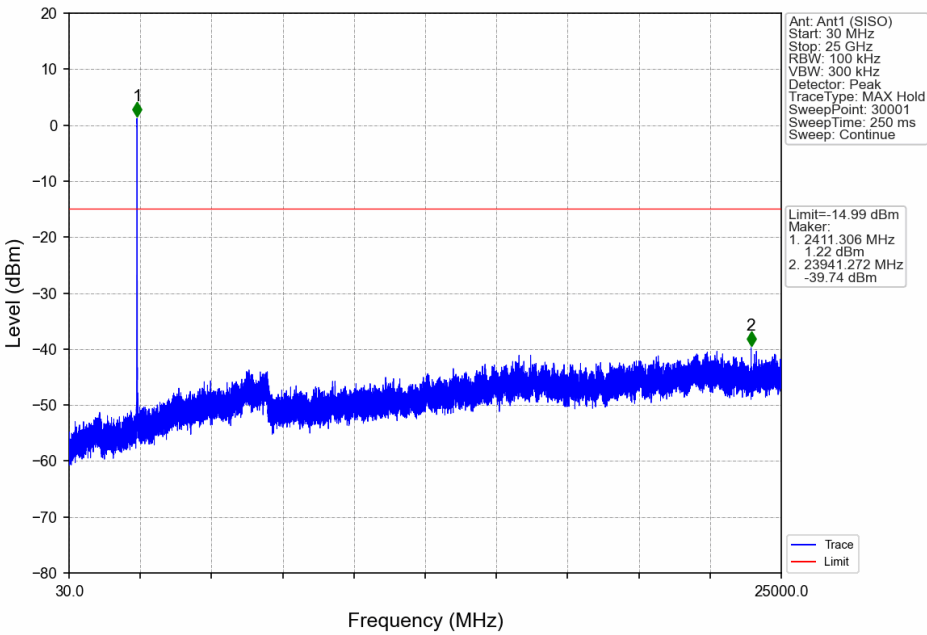
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



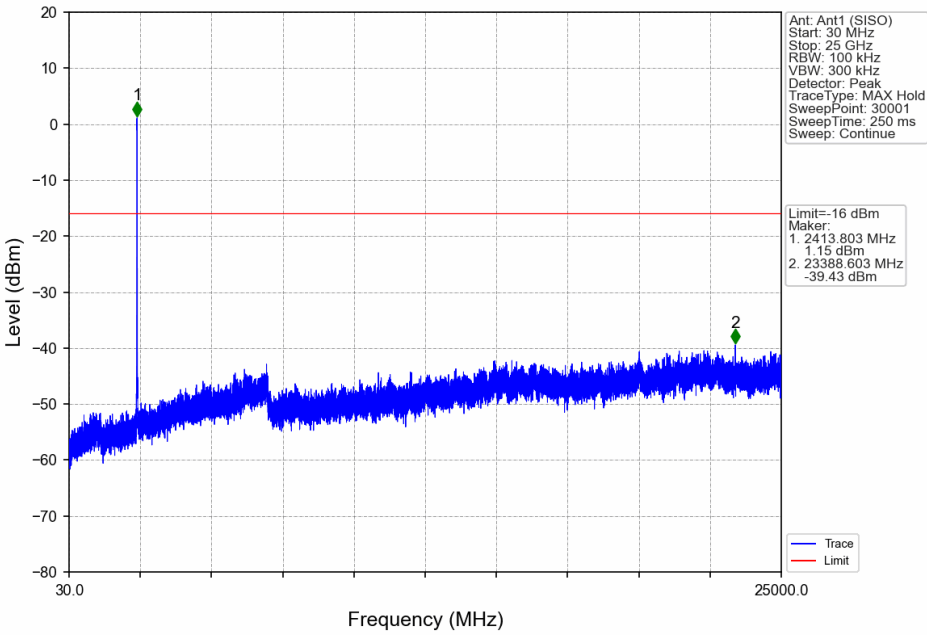
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



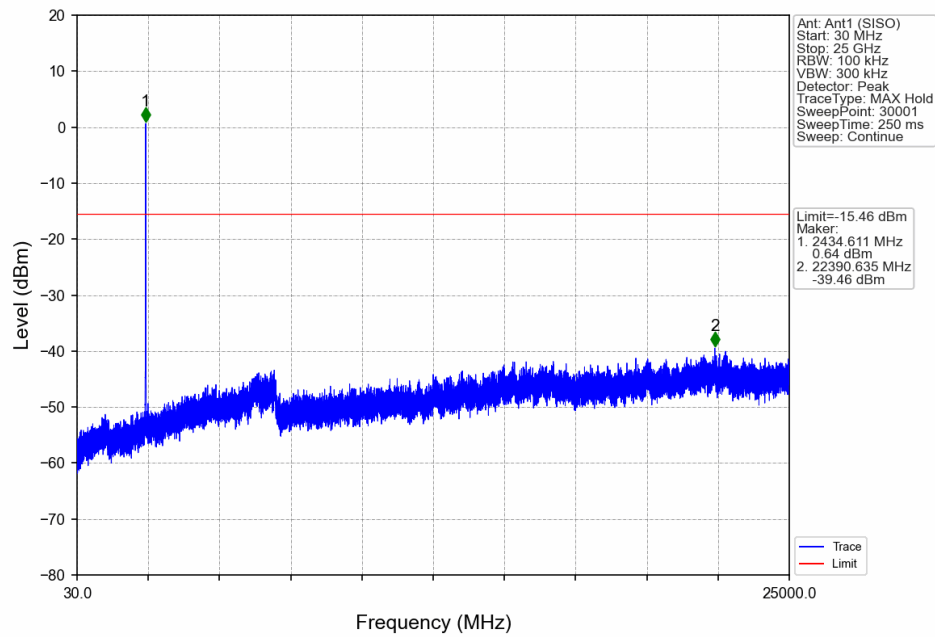
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



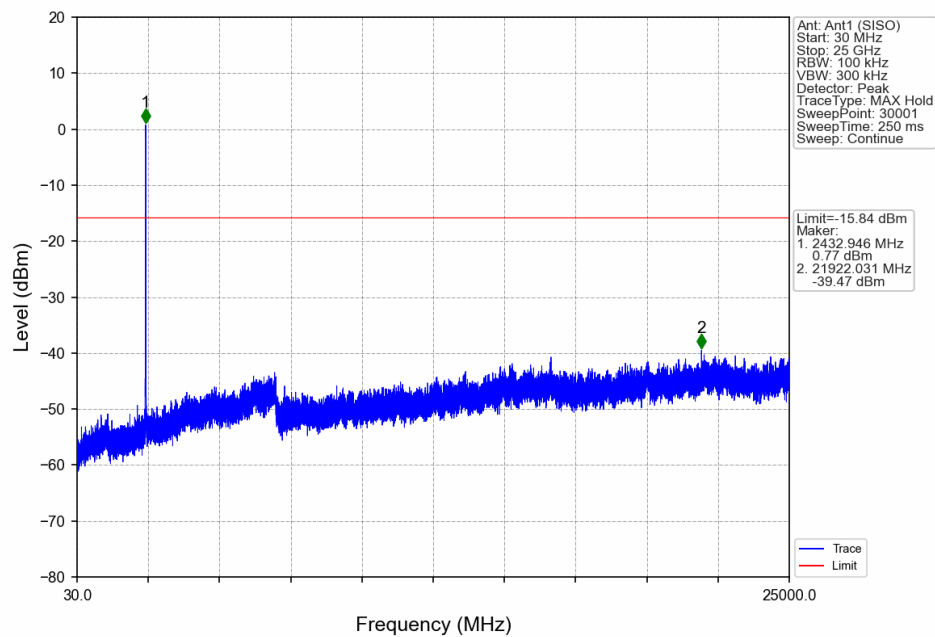
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

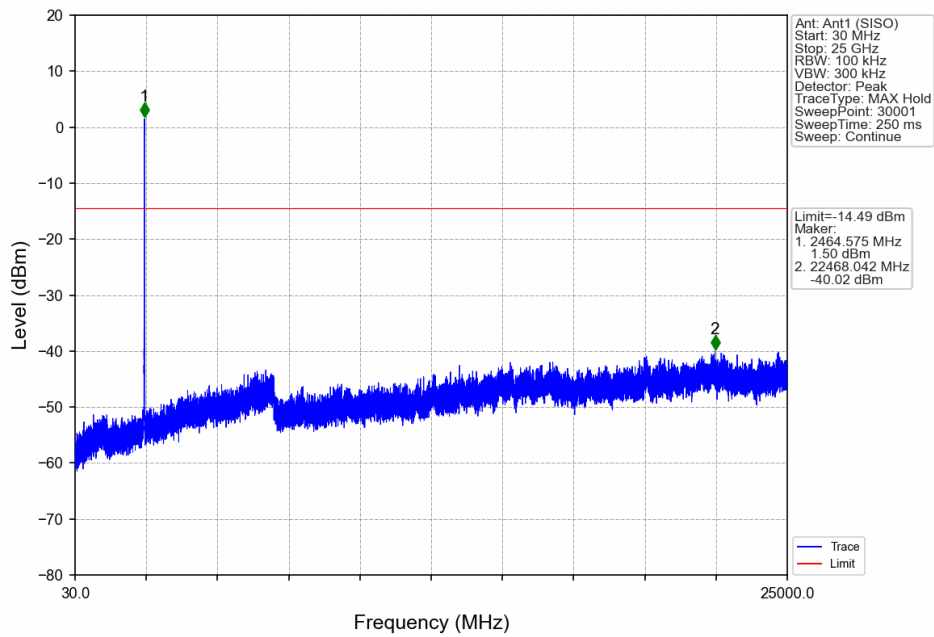


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

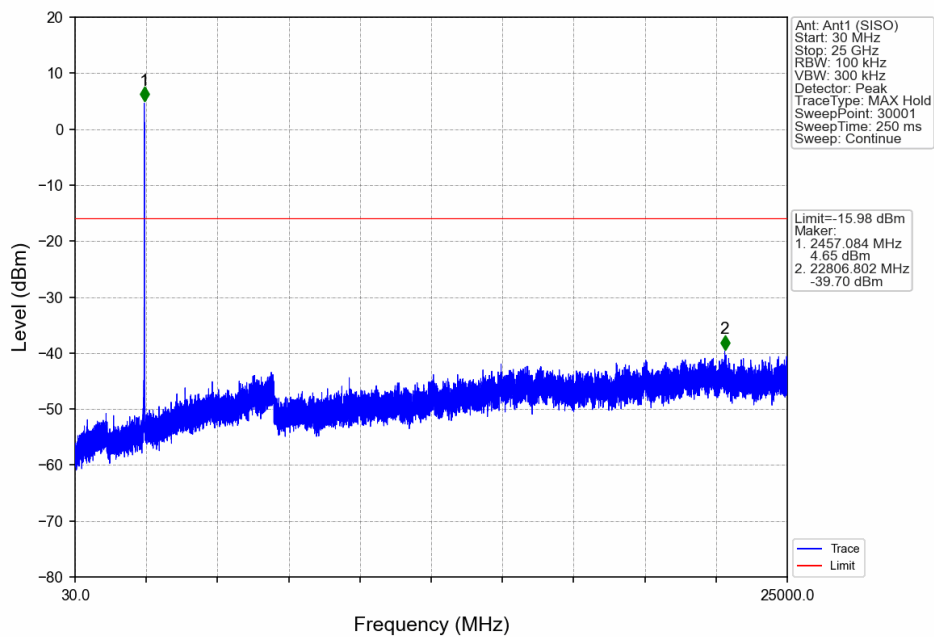




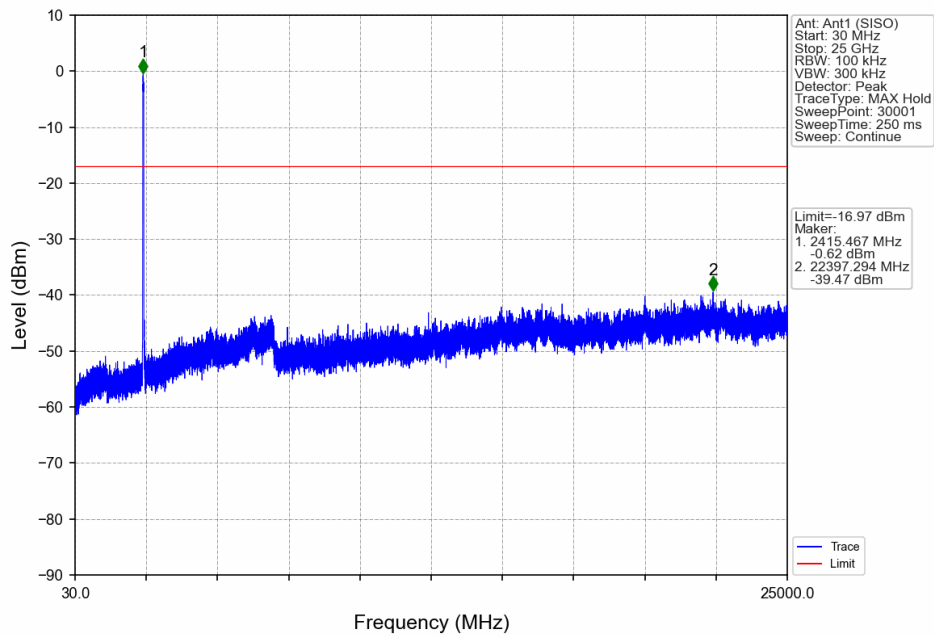
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



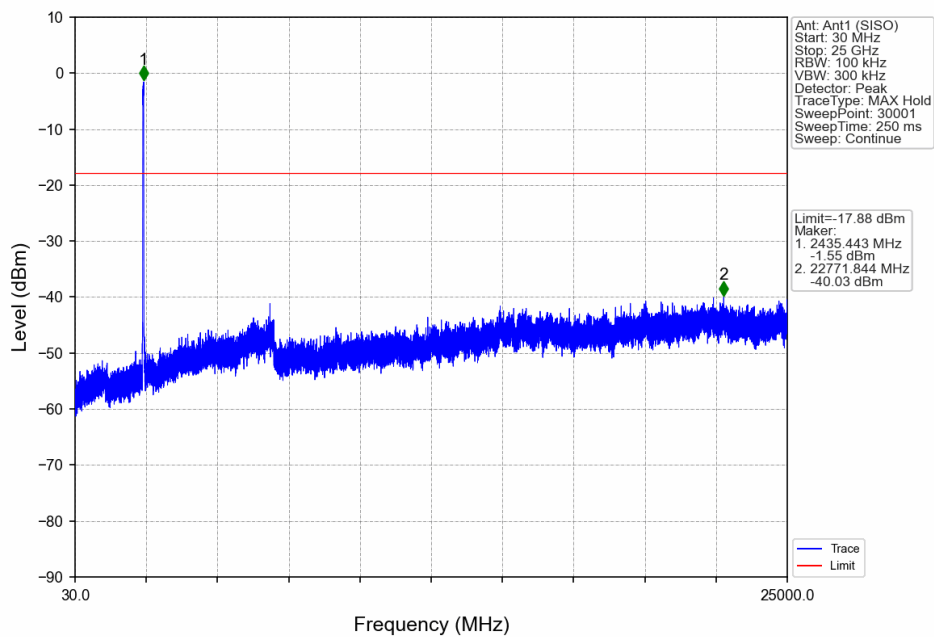
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



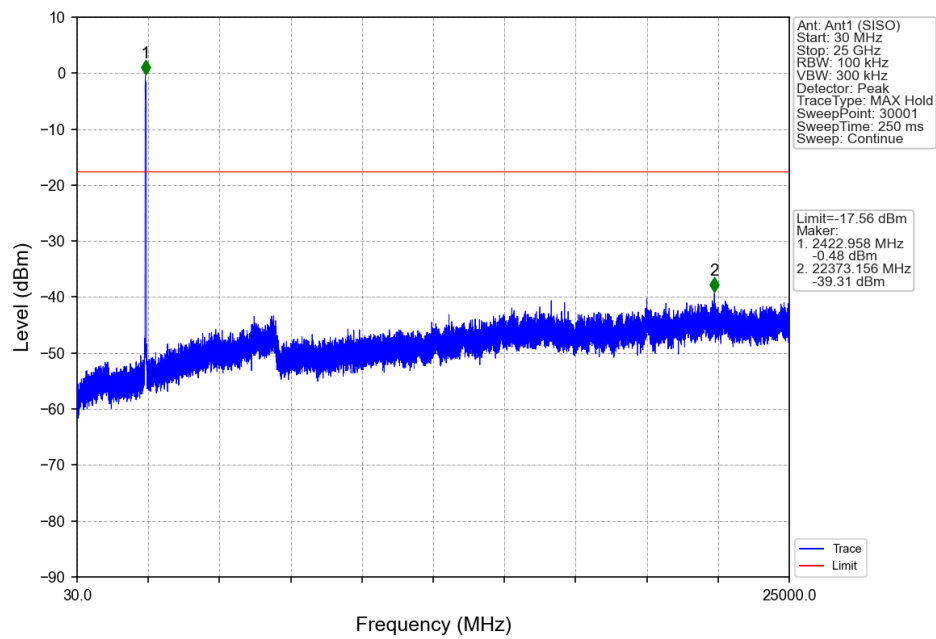
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



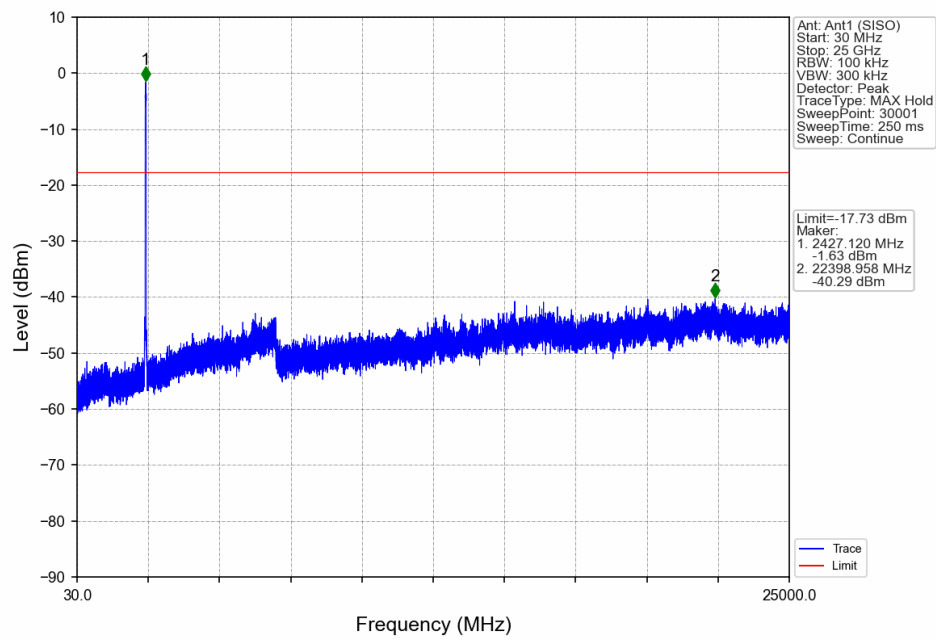
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



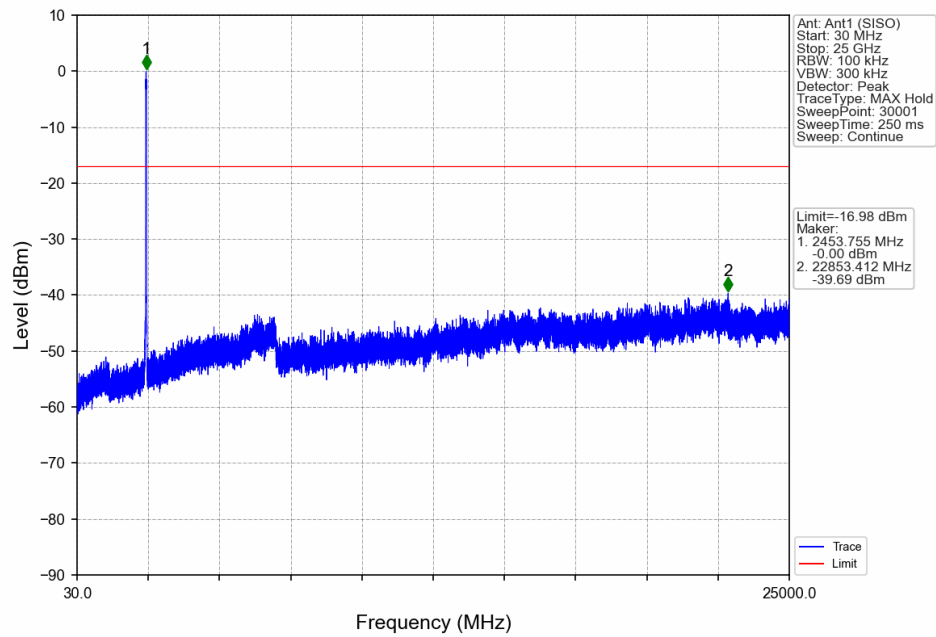
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



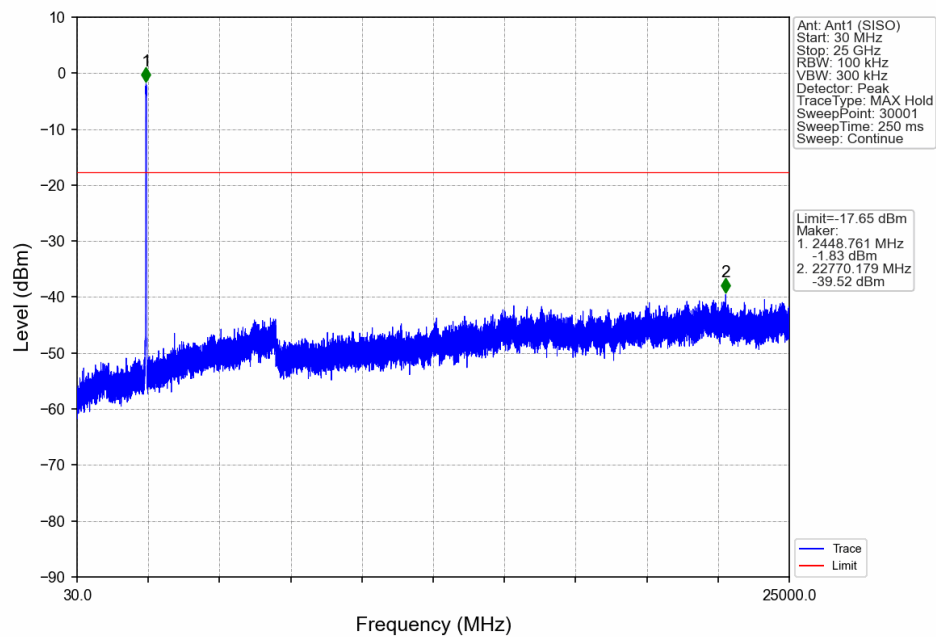
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



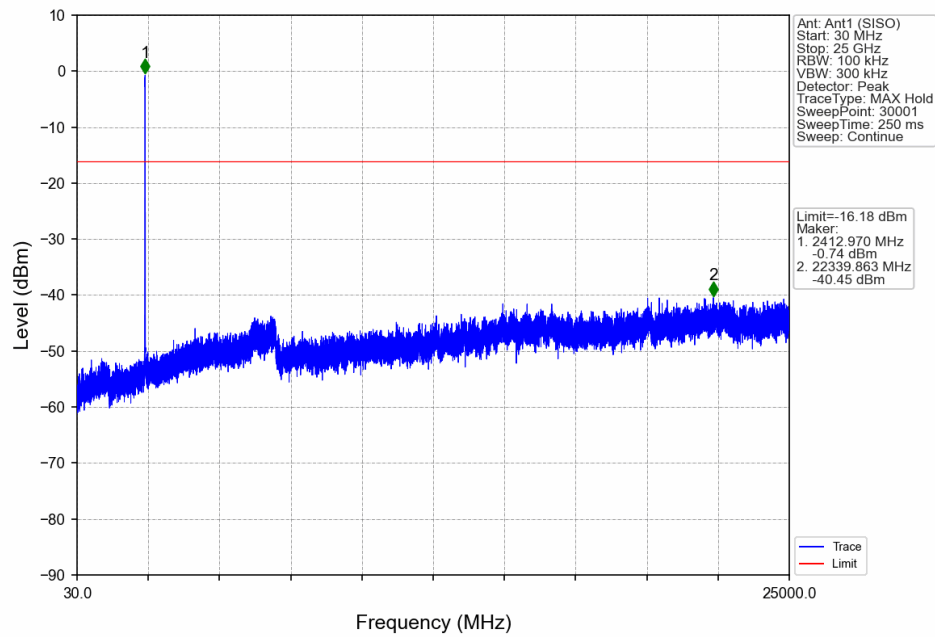
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



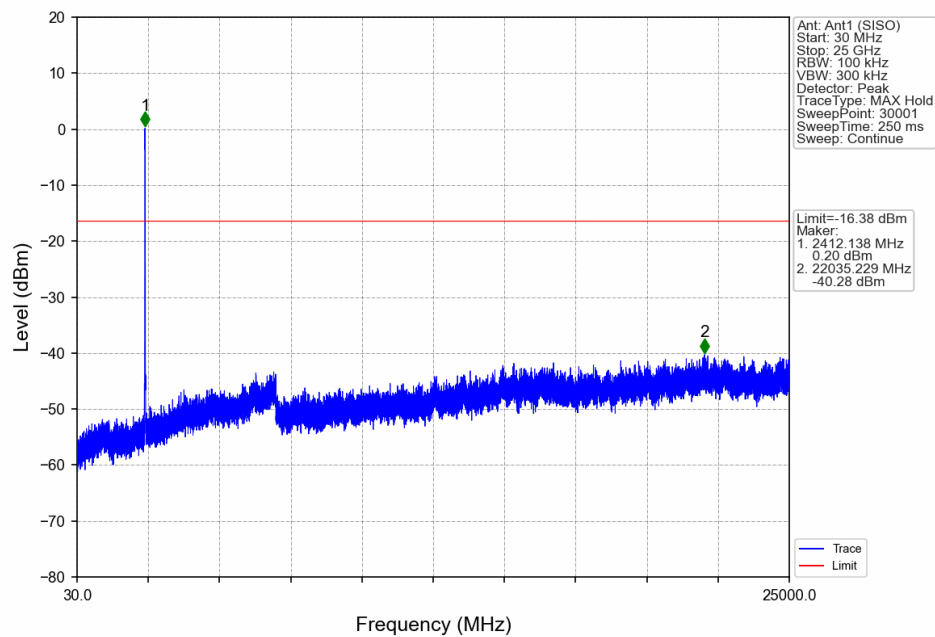
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



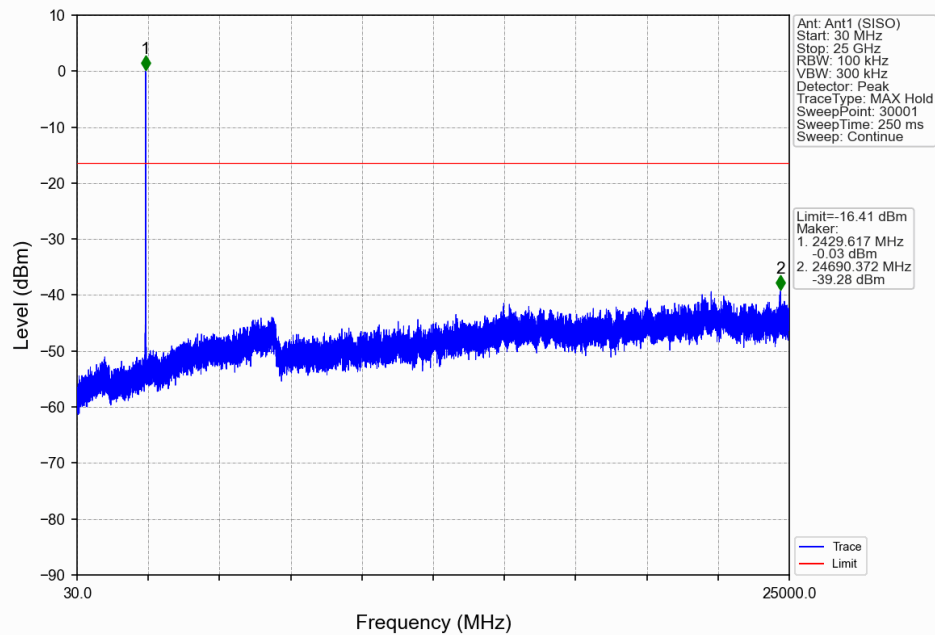
802.11ax(HEW20)_LCH_2412MHz_RU242_61_Ant1 (SISO)_NTNV



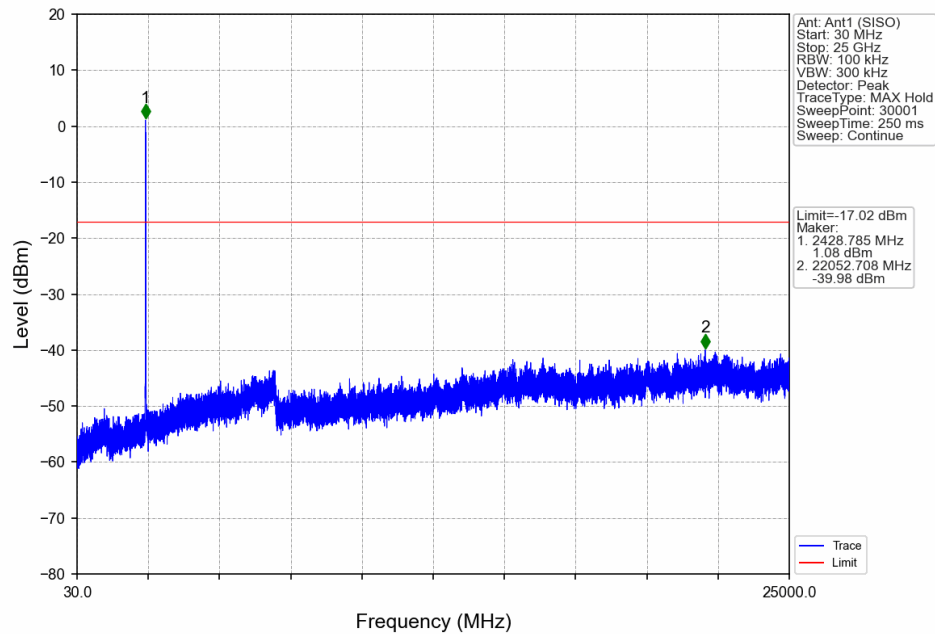
802.11ax(HEW20)_LCH_2412MHz_RU242_61_Ant1 (SISO)_NTNV



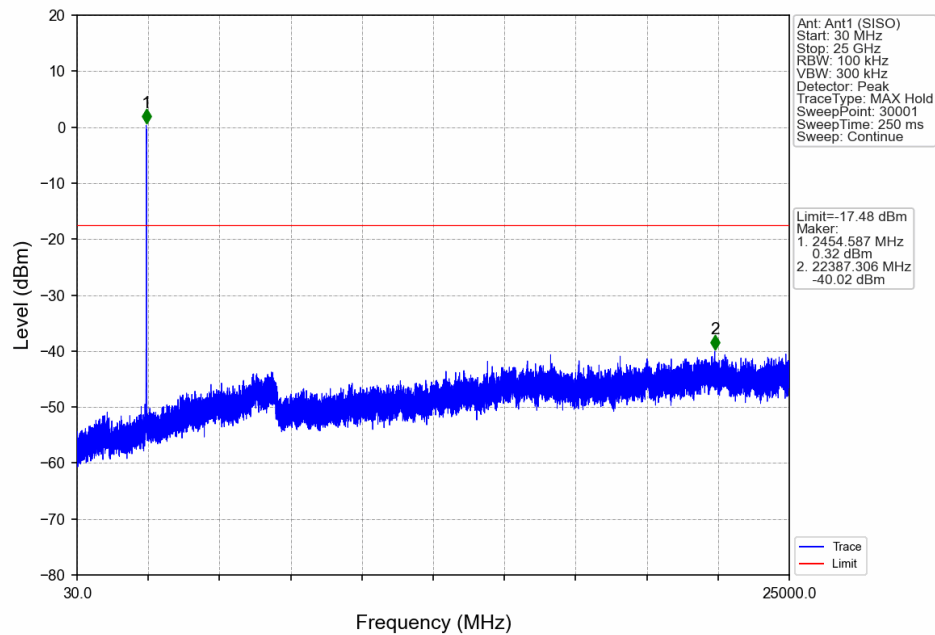
802.11ax(HEW20)_MCH_2437MHz_RU242_61_Ant1 (SISO)_NTNV



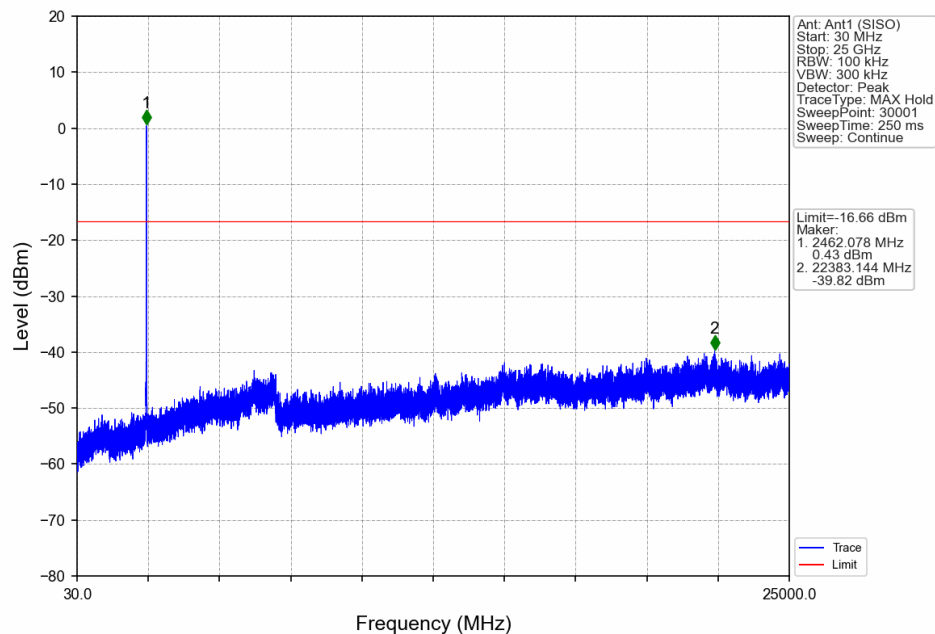
802.11ax(HEW20)_MCH_2437MHz_RU242_61_Ant1 (SISO)_NTNV



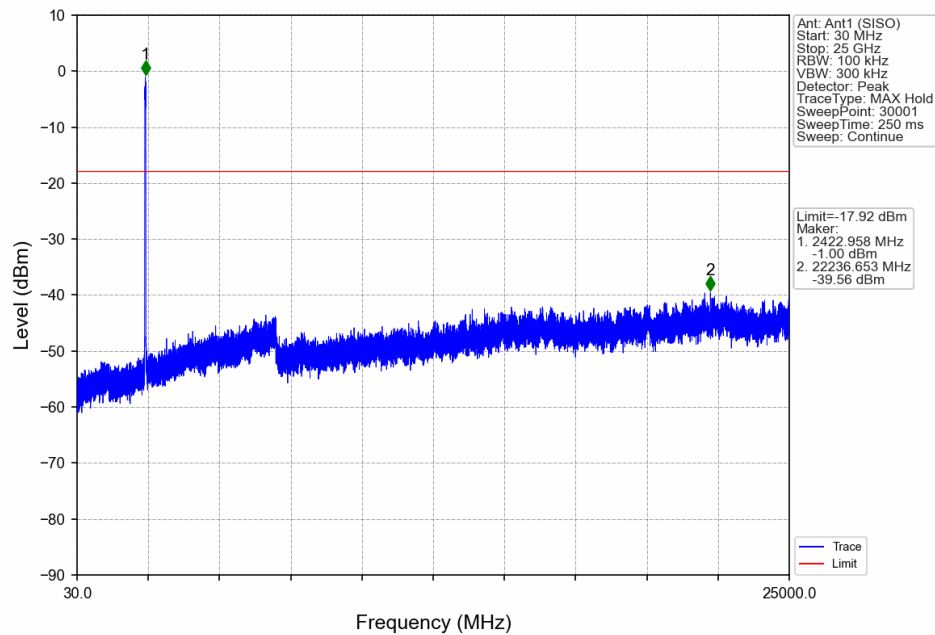
802.11ax(HEW20)_HCH_2462MHz_RU242_61_Ant1 (SISO)_NTNV



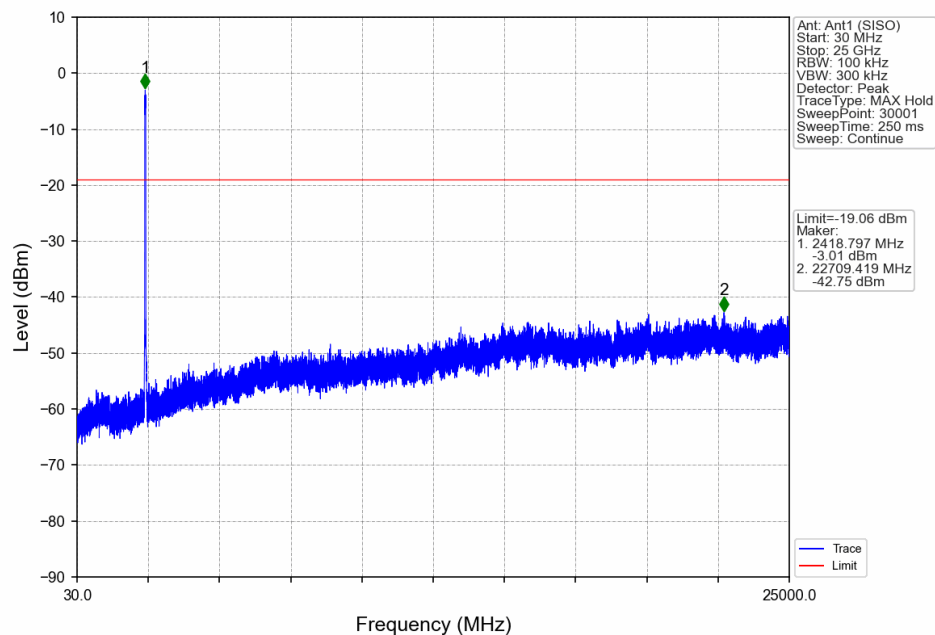
802.11ax(HEW20)_HCH_2462MHz_RU242_61_Ant1 (SISO)_NTNV



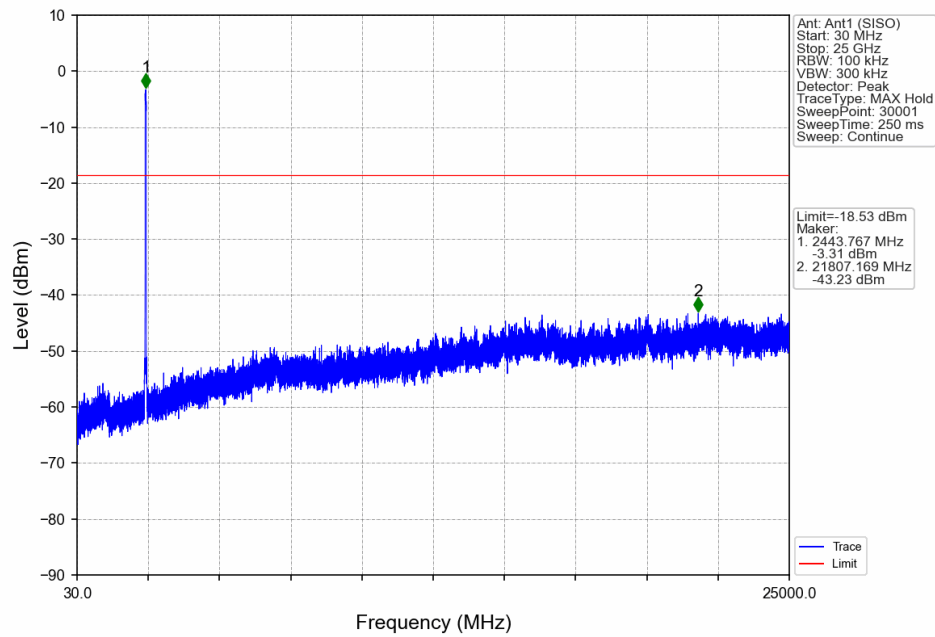
802.11ax(HEW40)_LCH_2422MHz_RU484_65_Ant1 (SISO)_NTNV



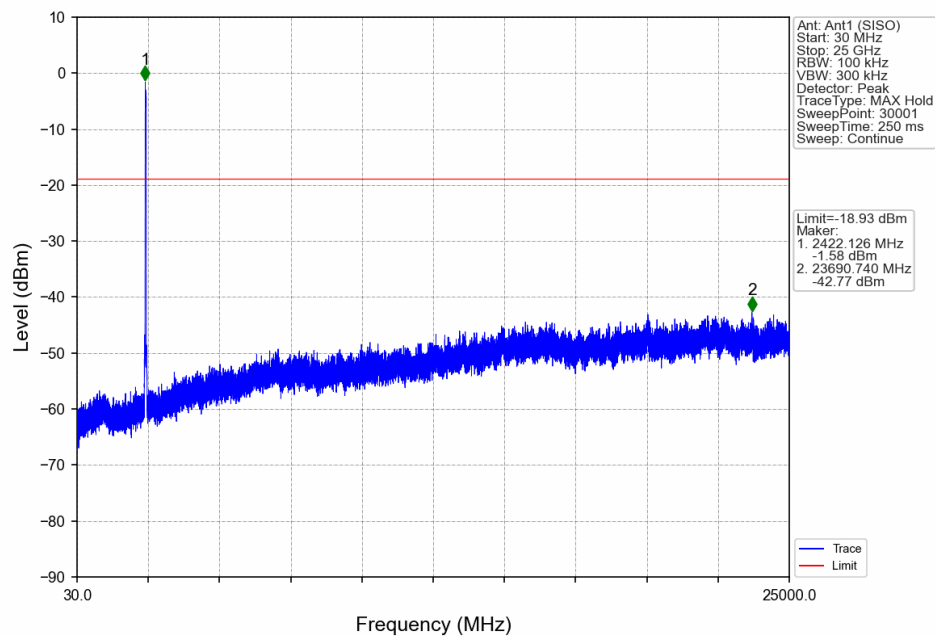
802.11ax(HEW40)_LCH_2422MHz_RU484_65_Ant1 (SISO)_NTNV



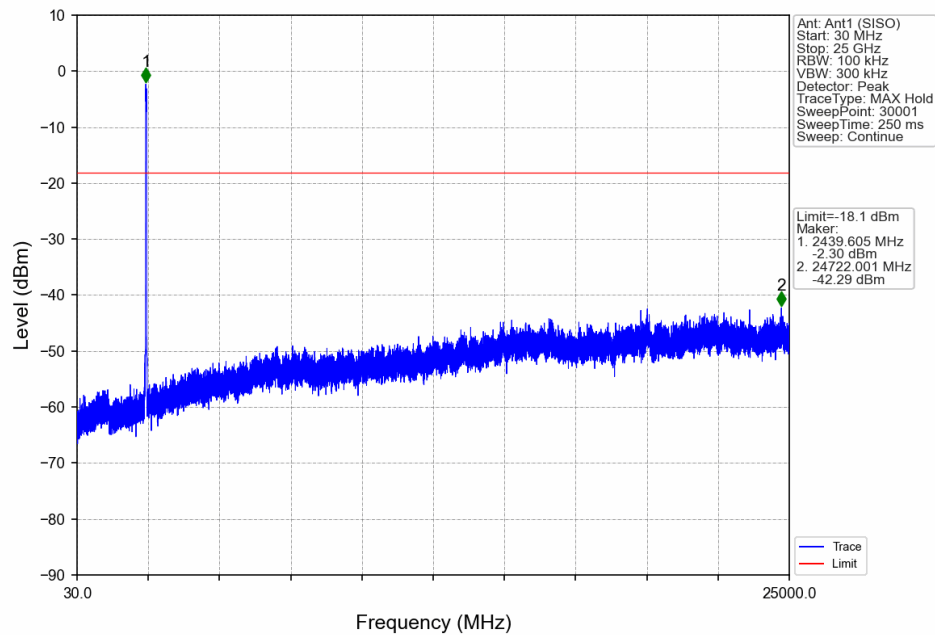
802.11ax(HEW40)_MCH_2437MHz_RU484_65_Ant1 (SISO)_NTNV



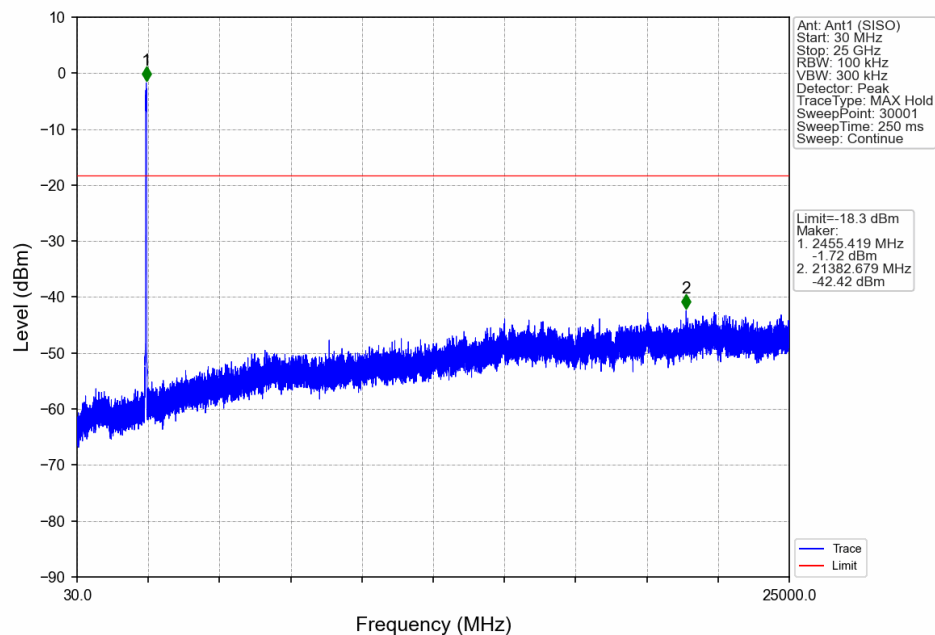
802.11ax(HEW40)_MCH_2437MHz_RU484_65_Ant1 (SISO)_NTNV



802.11ax(HEW40)_HCH_2452MHz_RU484_65_Ant1 (SISO)_NTNV



802.11ax(HEW40)_HCH_2452MHz_RU484_65_Ant1 (SISO)_NTNV



9.6 Band edge

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 100 kHz, VBW $\geq$ 3RBW, Sweep = auto, Detector function = peak, Trace = max hold
4. Allow the trace to stabilize, use the peak and delta measurement to record the result.
5. The level displayed must comply with the limit specified in this Section.
6. Repeat above procedures until all frequencies measured were complete and submit all the plots.

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under § 15.247(b)(3) and RSS-247 section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB.

Frequency Range MHz	Limit (dBc)
30-25000	-20

Test results

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	7.52	-12.48	Pass
		2412	2	7.21	-12.79	Pass
		2437	1	7.08	-12.92	Pass
		2437	2	7.63	-12.37	Pass
		2462	1	8.08	-11.92	Pass
		2462	2	7.20	-12.80	Pass
802.11g	SISO	2412	1	5.64	-14.36	Pass
		2412	2	5.24	-14.76	Pass
		2437	1	5.08	-14.92	Pass
		2437	2	4.76	-15.24	Pass
		2462	1	5.26	-14.74	Pass
		2462	2	5.15	-14.85	Pass
802.11n (HT20)	SISO	2412	1	5.01	-14.99	Pass
		2412	2	4.00	-16.00	Pass
		2437	1	4.54	-15.46	Pass
		2437	2	4.16	-15.84	Pass
		2462	1	5.51	-14.49	Pass
		2462	2	4.02	-15.98	Pass
802.11n (HT40)	SISO	2422	1	3.03	-16.97	Pass
		2422	2	2.12	-17.88	Pass
		2437	1	2.44	-17.56	Pass
		2437	2	2.27	-17.73	Pass
		2452	1	3.02	-16.98	Pass
		2452	2	2.35	-17.65	Pass
802.11ax (HEW20)	SISO	2412	1	3.82	-16.18	Pass
		2412	2	3.62	-16.38	Pass
		2437	1	3.59	-16.41	Pass
		2437	2	2.98	-17.02	Pass
		2462	1	2.52	-17.48	Pass
		2462	2	3.34	-16.66	Pass
802.11ax (HEW40)	SISO	2422	1	2.08	-17.92	Pass
		2422	2	0.94	-19.06	Pass
		2437	1	1.47	-18.53	Pass
		2437	2	1.07	-18.93	Pass
		2452	1	1.90	-18.10	Pass
		2452	2	1.70	-18.30	Pass

Test Graphs

