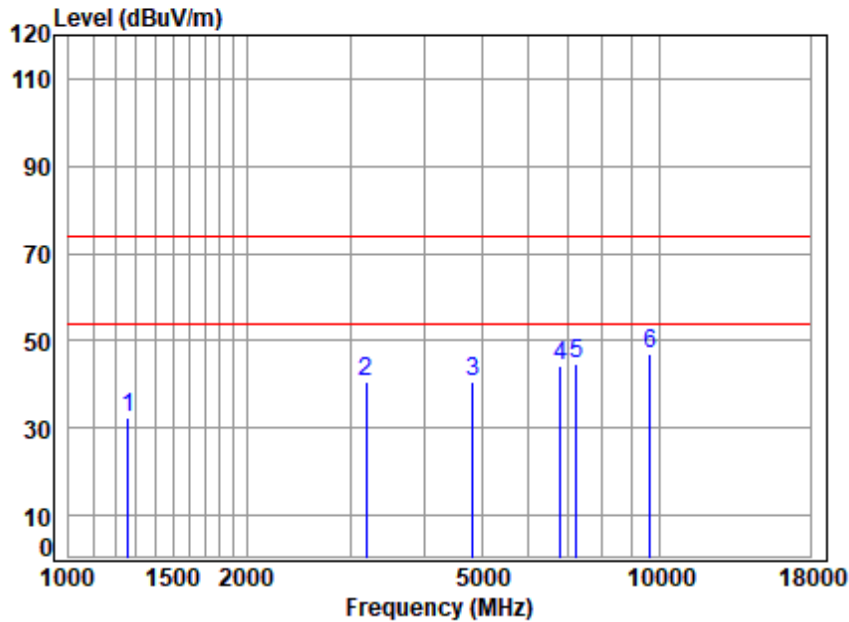


Test Mode: 00; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel: Low



Condition: 3m VERTICAL

Job No : 01740WM

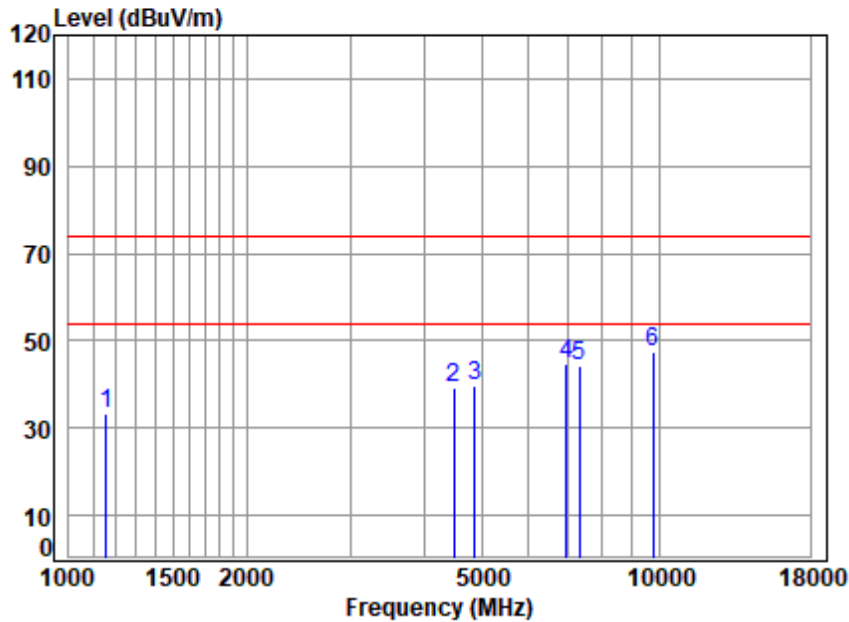
Mode : 2412 TX RSE

: 2.4G Wi-Fi 11b

	Cable	Ant	Preamp	Read		Limit	Over	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	7.17	25.28	54.70	54.66	32.41	74.00	-41.59	peak
2	7.70	29.20	55.11	58.83	40.62	74.00	-33.38	peak
3	8.92	32.00	56.18	55.65	40.39	74.00	-33.61	peak
4	10.97	35.88	56.74	53.98	44.09	74.00	-29.91	peak
5	11.10	36.60	56.51	53.49	44.68	74.00	-29.32	peak
6 pp	12.49	38.70	54.42	50.43	47.20	74.00	-26.80	peak



Test Mode: 00; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel: middle



Condition: 3m HORIZONTAL

Job No : 01740WM

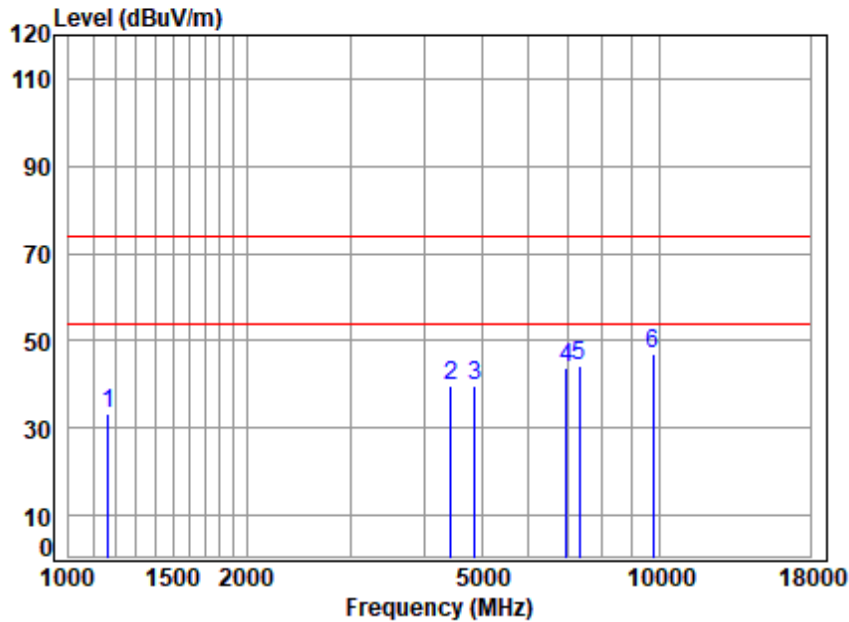
Mode : 2437 TX RSE

: 2.4G Wi-Fi 11b

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1155.483	7.15	25.39	54.70	55.43	33.27	74.00	-40.73	peak
2	4495.125	8.56	31.58	55.95	54.86	39.05	74.00	-34.95	peak
3	4874.000	8.97	32.15	56.21	54.90	39.81	74.00	-34.19	peak
4	6954.852	10.95	36.11	56.71	54.25	44.60	74.00	-29.40	peak
5	7311.000	11.11	36.72	56.45	52.66	44.04	74.00	-29.96	peak
6 pp	9748.000	12.80	38.60	54.33	50.44	47.51	74.00	-26.49	peak



Test Mode: 00; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel: middle



Condition: 3m VERTICAL

Job No : 01740WM

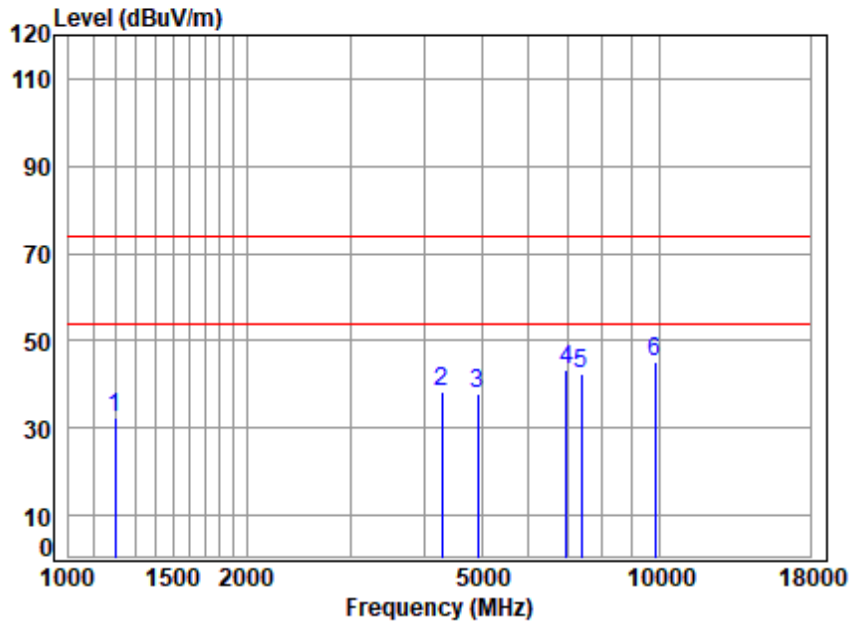
Mode : 2437 TX RSE

: 2.4G Wi-Fi 11b

	Cable	Ant	Preamp	Read	Limit	Over		
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1165.546	7.16	25.37	54.70	55.70	33.53	74.00	-40.47 peak
2	4430.628	8.55	31.32	55.90	55.77	39.74	74.00	-34.26 peak
3	4874.000	8.97	32.15	56.21	54.61	39.52	74.00	-34.48 peak
4	6954.852	10.95	36.11	56.71	53.55	43.90	74.00	-30.10 peak
5	7311.000	11.11	36.72	56.45	53.08	44.46	74.00	-29.54 peak
6 pp	9748.000	12.80	38.60	54.33	49.91	46.98	74.00	-27.02 peak



Test Mode: 00; Polarity: Horizontal; Modulation:802.11b; Bandwidth:20MHz; Channel: High



Condition: 3m HORIZONTAL

Job No : 01740WM

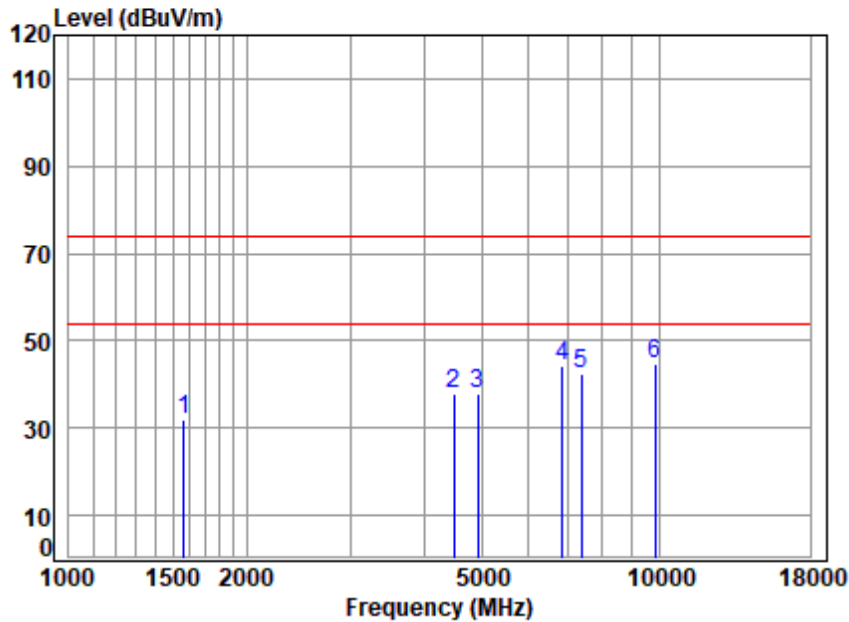
Mode : 2462 TX RSE

: 2.4G Wi-Fi 11b

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1196.264	7.19	25.31	54.70	54.42	32.22	74.00	-41.78	peak
2	4291.977	8.45	31.27	55.80	54.48	38.40	74.00	-35.60	peak
3	4924.000	9.03	32.20	56.25	52.95	37.93	74.00	-36.07	peak
4	6954.852	10.95	36.11	56.71	53.19	43.54	74.00	-30.46	peak
5	7386.000	11.19	36.73	56.39	50.88	42.41	74.00	-31.59	peak
6 pp	9848.000	12.84	37.83	54.24	48.65	45.08	74.00	-28.92	peak



Test Mode: 00; Polarity: Vertical; Modulation:802.11b; Bandwidth:20MHz; Channel: High



Condition: 3m VERTICAL

Job No : 01740WM

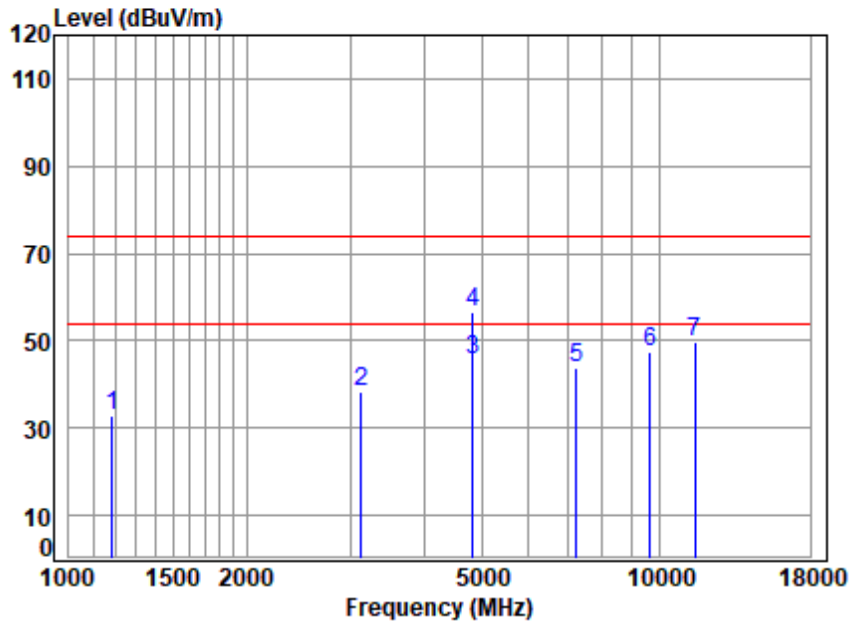
Mode : 2462 TX RSE

: 2.4G Wi-Fi 11b

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1565.191	7.14	25.03	54.70	54.40	31.87	74.00	-42.13	peak
2	4495.125	8.56	31.58	55.95	53.59	37.78	74.00	-36.22	peak
3	4924.000	9.03	32.20	56.25	52.88	37.86	74.00	-36.14	peak
4	6855.063	10.96	36.02	56.73	53.92	44.17	74.00	-29.83	peak
5	7386.000	11.19	36.73	56.39	50.75	42.28	74.00	-31.72	peak
6 pp	9848.000	12.84	37.83	54.24	48.50	44.93	74.00	-29.07	peak



Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel: Low



Condition: 3m HORIZONTAL

Job No : 01740WM

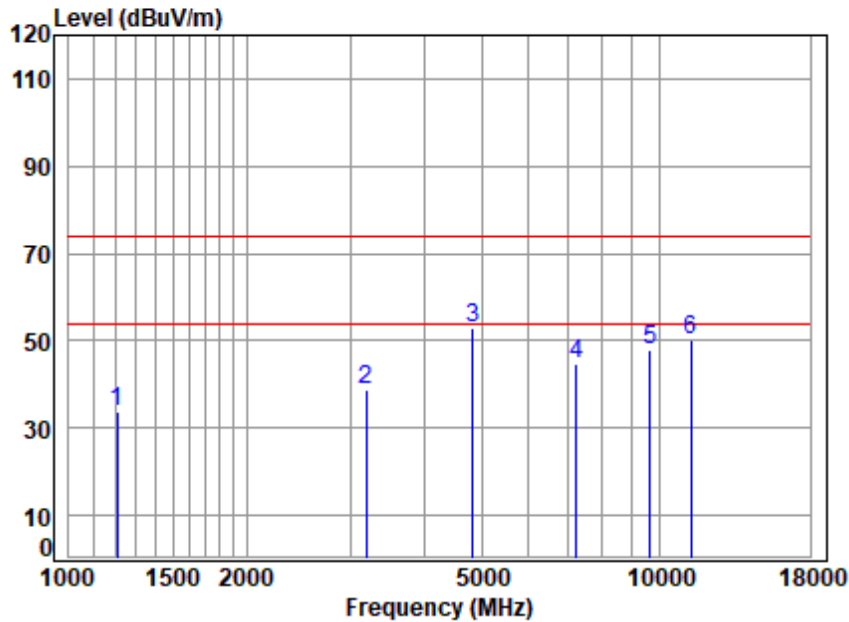
Mode : 2412 TX RSE

: 2.4G Wi-Fi 11n20

		Cable	Ant	Preamp	Read		Limit	Over	
Freq		Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz		dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1182.513	7.17	25.33	54.70	55.22	33.02	74.00	-40.98	peak
2	3132.079	7.71	29.16	55.08	56.35	38.14	74.00	-35.86	peak
3	pp 4824.000	8.92	32.00	56.18	60.66	45.40	54.00	-8.60	Average
4	pk 4824.000	8.92	32.00	56.18	71.73	56.47	74.00	-17.53	peak
5	7236.000	11.10	36.60	56.51	52.66	43.85	74.00	-30.15	peak
6	9648.000	12.49	38.70	54.42	50.72	47.49	74.00	-26.51	peak
7	11467.000	14.19	39.63	53.64	49.49	49.67	74.00	-24.33	peak



Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel: Low



Condition: 3m VERTICAL

Job No : 01740WM

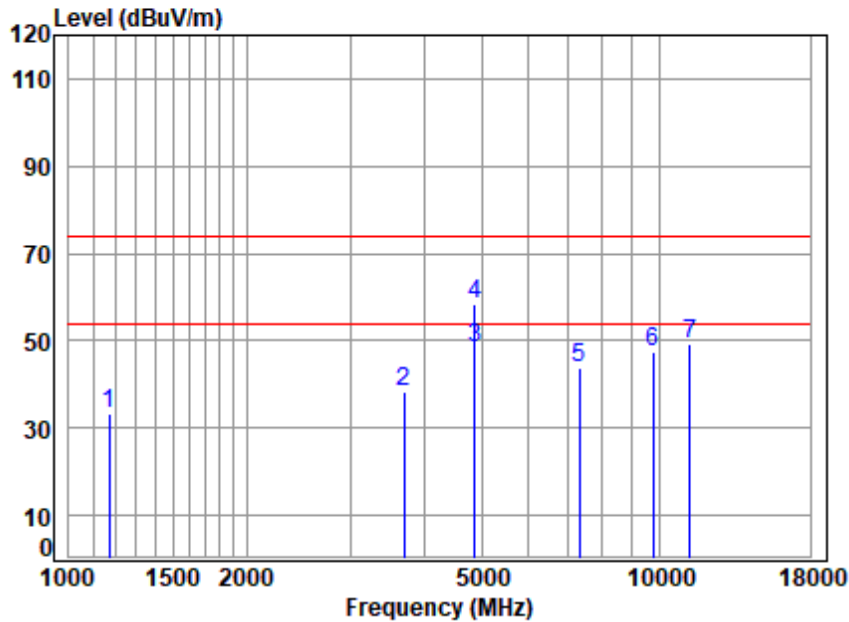
Mode : 2412 TX RSE

: 2.4G Wi-Fi 11n20

	Cable	Ant	Preamp	Read		Limit	Over	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	7.19	25.30	54.70	55.79	33.58	74.00	-40.42	peak
2	7.70	29.20	55.11	56.79	38.58	74.00	-35.42	peak
3 pp	8.92	32.00	56.18	68.13	52.87	74.00	-21.13	peak
4	11.10	36.60	56.51	53.60	44.79	74.00	-29.21	peak
5	12.49	38.70	54.42	51.26	48.03	74.00	-25.97	peak
6	14.39	39.70	53.59	49.78	50.28	74.00	-23.72	peak



Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel: middle



Condition: 3m HORIZONTAL

Job No : 01740WM

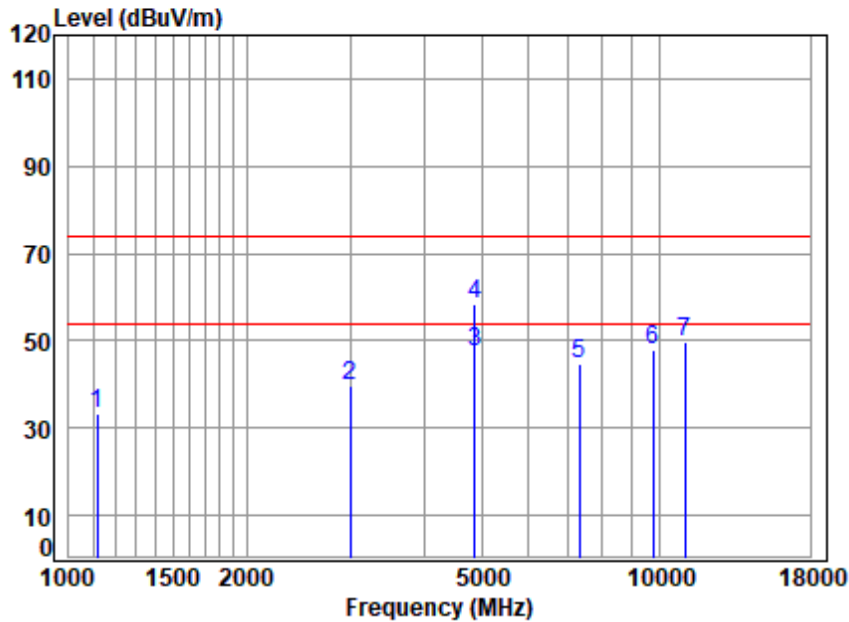
Mode : 2437 TX RSE

: 2.4G Wi-Fi 11n20

		Cable	Ant	Preamp	Read		Limit	Over	
Freq		Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz		dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1168.920	7.16	25.36	54.70	55.50	33.32	74.00	-40.68	peak
2	3693.033	7.88	29.80	55.42	56.13	38.39	74.00	-35.61	peak
3	pp 4874.000	8.97	32.15	56.21	63.30	48.21	54.00	-5.79	Average
4	pk 4874.000	8.97	32.15	56.21	73.66	58.57	74.00	-15.43	peak
5	7311.000	11.11	36.72	56.45	52.52	43.90	74.00	-30.10	peak
6	9748.000	12.80	38.60	54.33	50.35	47.42	74.00	-26.58	peak
7	11269.860	14.35	39.67	53.58	48.83	49.27	74.00	-24.73	peak



Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel: middle



Condition: 3m VERTICAL

Job No : 01740WM

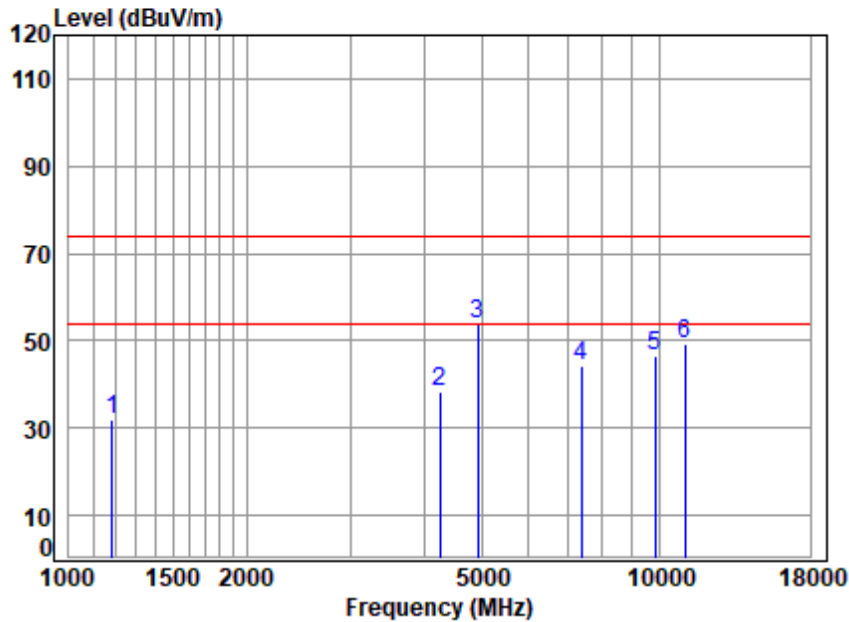
Mode : 2437 TX RSE

: 2.4G Wi-Fi 11n20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1119.323	7.12	25.52	54.70	55.34	33.28	74.00	-40.72	peak
2	2999.187	8.18	29.00	55.00	57.39	39.57	74.00	-34.43	peak
3	4874.000	8.97	32.15	56.21	62.58	47.49	54.00	-6.51	Average
4	4874.000	8.97	32.15	56.21	73.33	58.24	74.00	-15.76	peak
5	7311.000	11.11	36.72	56.45	53.40	44.78	74.00	-29.22	peak
6	9748.000	12.80	38.60	54.33	50.95	48.02	74.00	-25.98	peak
7	11044.130	14.18	39.44	53.51	49.71	49.82	74.00	-24.18	peak



Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel: High



Condition: 3m HORIZONTAL

Job No : 01740WM

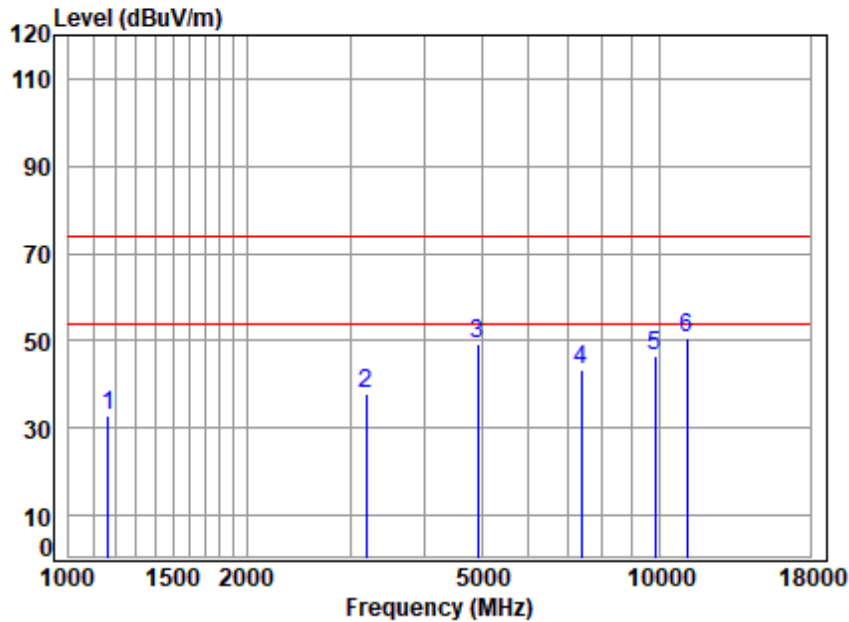
Mode : 2462 TX RSE

: 2.4G Wi-Fi 11n20

	Cable	Ant	Preamp	Read		Limit	Over	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	7.18	25.33	54.70	54.35	32.16	74.00	-41.84	peak
2	8.48	31.06	55.77	54.77	38.54	74.00	-35.46	peak
3 pp	9.03	32.20	56.25	68.76	53.74	74.00	-20.26	peak
4	11.19	36.73	56.39	52.94	44.47	74.00	-29.53	peak
5	12.84	37.83	54.24	50.14	46.57	74.00	-27.43	peak
6	14.18	39.44	53.51	49.38	49.49	74.00	-24.51	peak



Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel: High



Condition: 3m VERTICAL

Job No : 01740WM

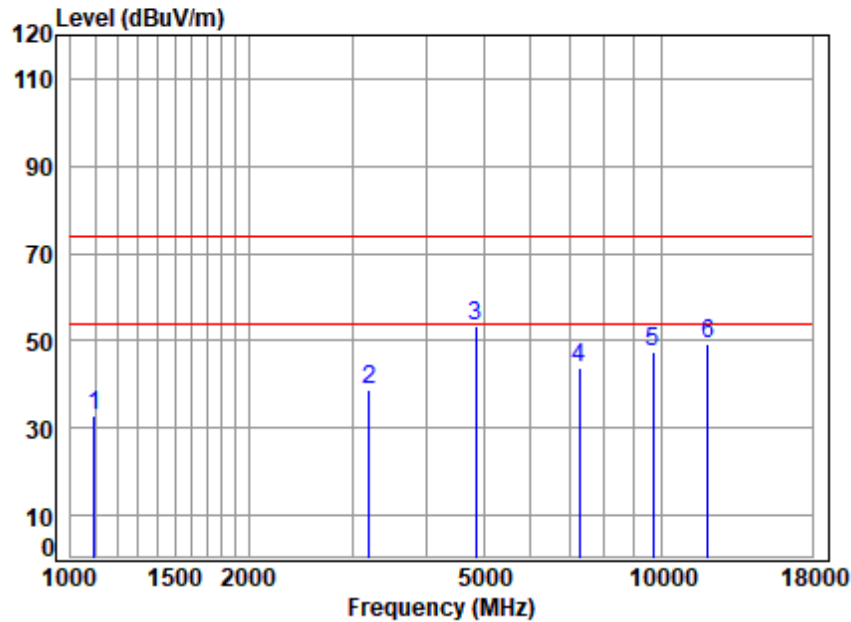
Mode : 2462 TX RSE

: 2.4G Wi-Fi 11n20

	Cable	Ant	Preamp	Read		Limit	Over	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1165.546	7.16	25.37	54.70	54.87	32.70	74.00	-41.30 peak
2	3186.869	7.70	29.20	55.11	56.25	38.04	74.00	-35.96 peak
3	4924.000	9.03	32.20	56.25	64.52	49.50	74.00	-24.50 peak
4	7386.000	11.19	36.73	56.39	51.74	43.27	74.00	-30.73 peak
5	9848.000	12.84	37.83	54.24	50.22	46.65	74.00	-27.35 peak
6	pp11140.310	14.17	39.54	53.54	50.25	50.42	74.00	-23.58 peak



Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel: Low



Condition: 3m HORIZONTAL

Job No : 01740WM

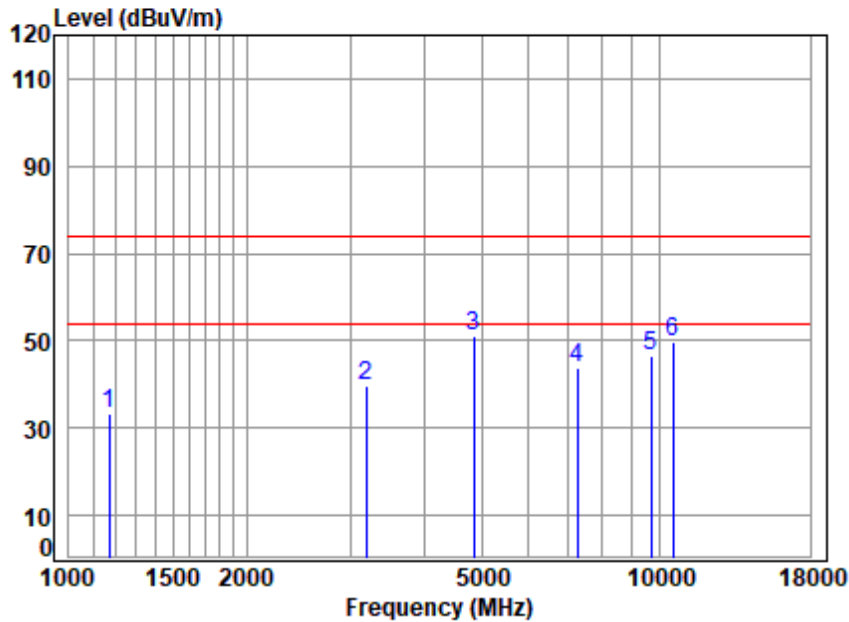
Mode : 2422 TX RSE

: 2.4G Wi-Fi 11n40

	Cable	Ant	Preamp	Read		Limit	Over	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1096.904	7.10	25.59	54.70	54.64	32.63	74.00	-41.37 peak
2	3196.094	7.70	29.20	55.12	56.79	38.57	74.00	-35.43 peak
3	4844.000	8.94	32.08	56.19	68.44	53.27	74.00	-20.73 peak
4	7266.000	11.10	36.63	56.49	52.47	43.71	74.00	-30.29 peak
5	9688.000	12.61	38.70	54.38	50.50	47.43	74.00	-26.57 peak
6	11975.100	14.42	39.78	53.79	48.90	49.31	74.00	-24.69 peak



Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel: Low



Condition: 3m VERTICAL

Job No : 01740WM

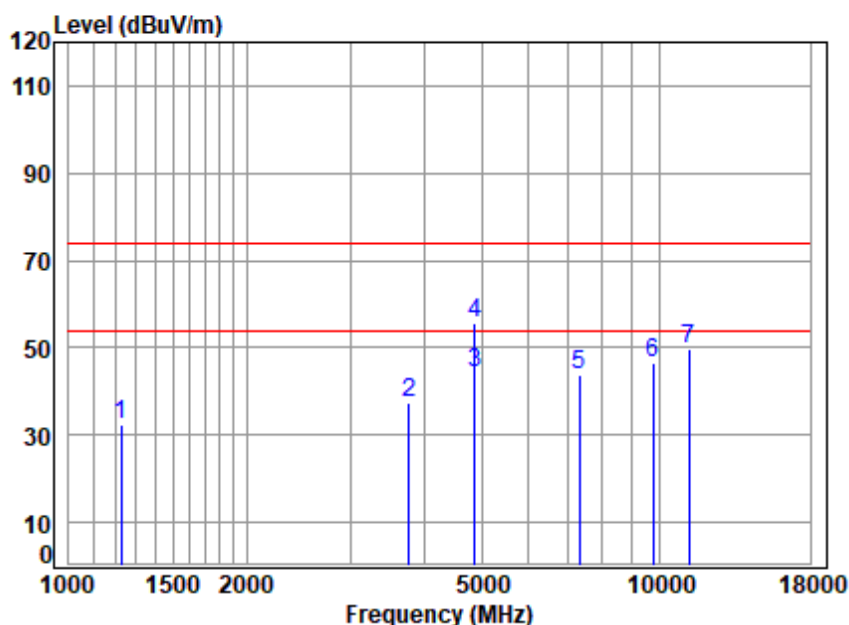
Mode : 2422 TX RSE

: 2.4G Wi-Fi 11n40

	Cable	Ant	Preamp	Read		Limit	Over	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1168.920	7.16	25.36	54.70	55.47	33.29	74.00	-40.71 peak
2	3186.869	7.70	29.20	55.11	57.80	39.59	74.00	-34.41 peak
3 pp	4844.000	8.94	32.08	56.19	66.37	51.20	74.00	-22.80 peak
4	7266.000	11.10	36.63	56.49	52.54	43.78	74.00	-30.22 peak
5	9688.000	12.61	38.70	54.38	49.74	46.67	74.00	-27.33 peak
6	10545.010	13.33	39.19	53.77	51.21	49.96	74.00	-24.04 peak



Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel: middle



Condition: 3m HORIZONTAL

Job No : 01740WM

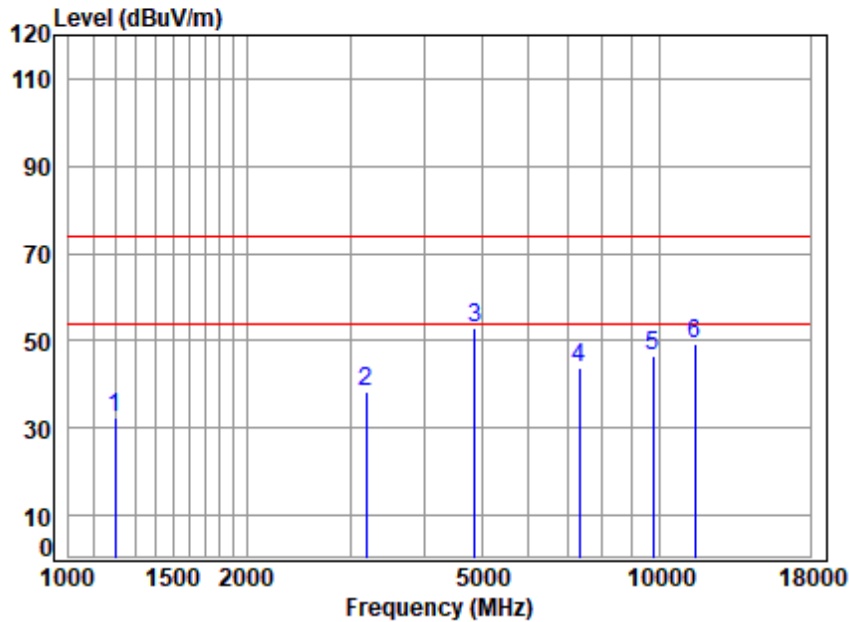
Mode : 2437 TX RSE

: 2.4G Wi-Fi 11n40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1227.791	7.18	25.30	54.70	54.60	32.38	74.00	-41.62	peak
2	3768.513	7.97	29.90	55.46	55.19	37.60	74.00	-36.40	peak
3 pp	4874.000	8.97	32.15	56.21	59.47	44.38	54.00	-9.62	Average
4 pk	4874.000	8.97	32.15	56.21	70.81	55.72	74.00	-18.28	peak
5	7311.000	11.11	36.72	56.45	52.33	43.71	74.00	-30.29	peak
6	9748.000	12.80	38.60	54.33	49.27	46.34	74.00	-27.66	peak
7	11237.330	14.30	39.64	53.57	49.53	49.90	74.00	-24.10	peak



Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel: middle



Condition: 3m VERTICAL

Job No : 01740WM

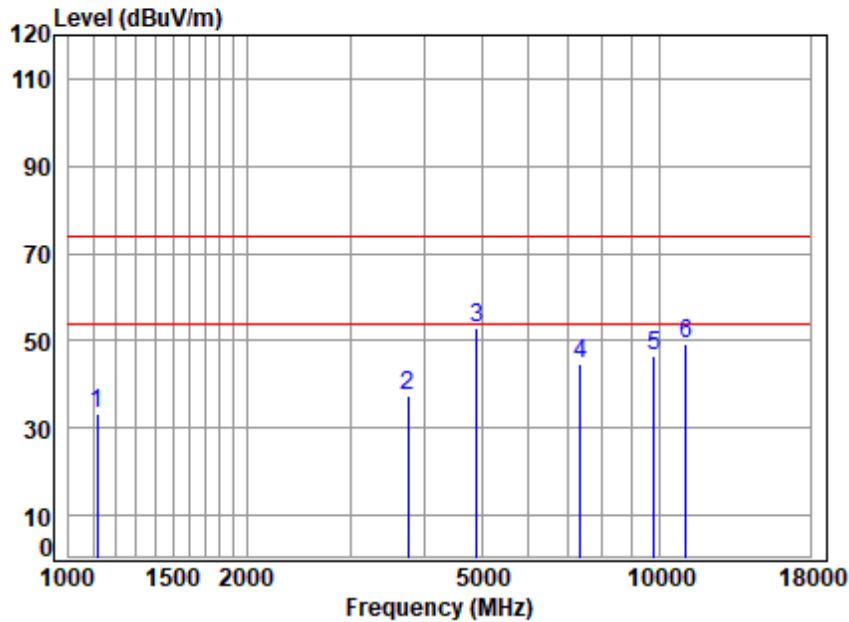
Mode : 2437 TX RSE

: 2.4G Wi-Fi 11n40

	Cable	Ant	Preamp	Read		Limit	Over	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	7.19	25.31	54.70	54.59	32.39	74.00	-41.61	peak
2	7.70	29.20	55.11	56.71	38.50	74.00	-35.50	peak
3 pp	8.97	32.15	56.21	67.84	52.75	74.00	-21.25	peak
4	11.11	36.72	56.45	52.37	43.75	74.00	-30.25	peak
5	12.80	38.60	54.33	49.69	46.76	74.00	-27.24	peak
6	14.23	39.60	53.65	49.23	49.41	74.00	-24.59	peak



Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel: High



Condition: 3m HORIZONTAL

Job No : 01740WM

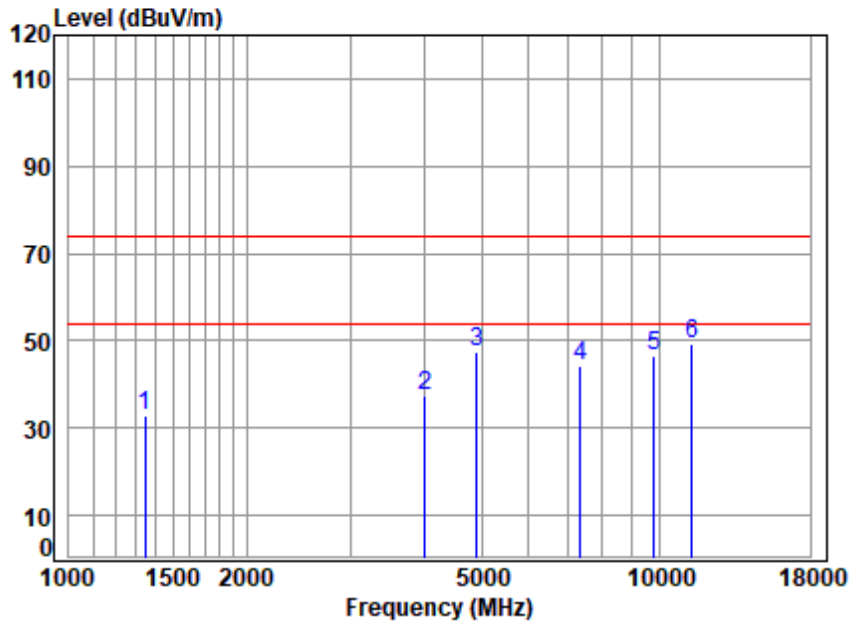
Mode : 2452 TX RSE

: 2.4G Wi-Fi 11n40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1119.323	7.12	25.52	54.70	55.33	33.27	74.00	-40.73	peak
2	3757.637	7.95	29.90	55.45	55.22	37.62	74.00	-36.38	peak
3 pp	4904.000	9.00	32.20	56.23	67.97	52.94	74.00	-21.06	peak
4	7356.000	11.16	36.79	56.42	52.96	44.49	74.00	-29.51	peak
5	9808.000	12.96	38.47	54.27	49.42	46.58	74.00	-27.42	peak
6	11108.160	14.13	39.51	53.53	49.08	49.19	74.00	-24.81	peak



Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel: High



Condition: 3m VERTICAL

Job No : 01740WM

Mode : 2452 TX RSE

: 2.4G Wi-Fi 11n40

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1346.769	7.18	25.11	54.70	55.11	32.70	74.00	-41.30	peak
2	4015.929	8.16	30.23	55.61	54.65	37.43	74.00	-36.57	peak
3	4904.000	9.00	32.20	56.23	62.50	47.47	74.00	-26.53	peak
4	7356.000	11.16	36.79	56.42	52.57	44.10	74.00	-29.90	peak
5	9808.000	12.96	38.47	54.27	49.23	46.39	74.00	-27.61	peak
6	pp11335.190	14.29	39.70	53.60	48.71	49.10	74.00	-24.90	peak



7.5 Conducted Peak Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)

Test Method: ANSI C63.10 (2013) Section 11.9.2

Limit:

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥ 50 hopping channels
	0.25 for $25 \leq$ hopping channels < 50
	1 for digital modulation
2400-2483.5	1 for ≥ 75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 25.7 °C

Humidity: 39.3 % RH

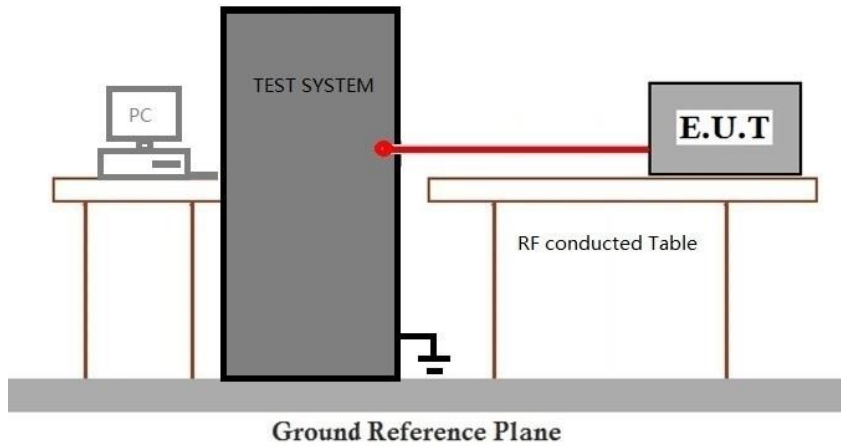
Atmospheric Pressure: 1020 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.



7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

Please Refer to Appendix for Details

7.6 Minimum 6dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.247a(2)

Test Method: ANSI C63.10 (2013) Section 11.8.1

Limit:

≥500 kHz

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 25.7 °C

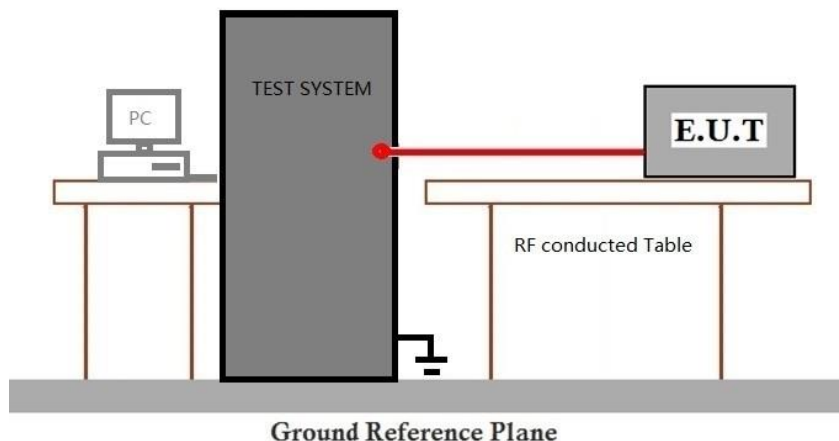
Humidity: 39.3 % RH

Atmospheric Pressure: 1020 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 Power Spectrum Density

Test Requirement 47 CFR Part 15, Subpart C 15.247(e)

Test Method: ANSI C63.10 (2013) Section 11.10.2

Limit:

≤8dBm in any 3 kHz band during any time interval of continuous transmission

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 25.7 °C

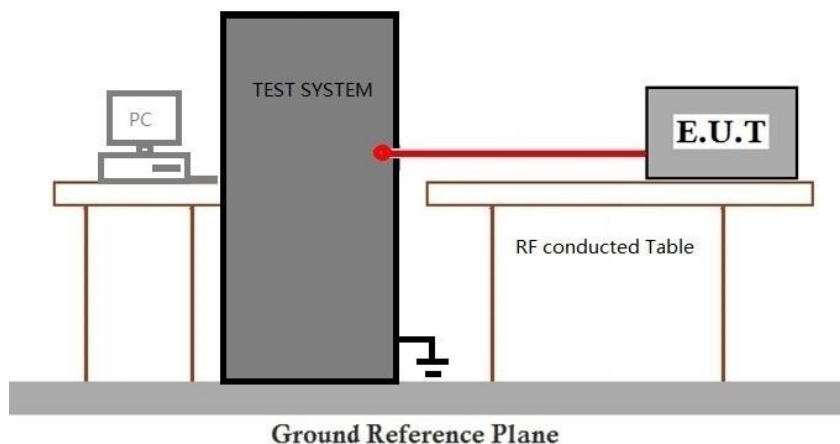
Humidity: 39.3 % RH

Atmospheric Pressure: 1020 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.

7.7.3 Test Setup Diagram



7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 Conducted Band Edges Measurement

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)

Test Method: ANSI C63.10 (2013) Section 11.13.3.2

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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 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 paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

7.8.1 E.U.T. Operation

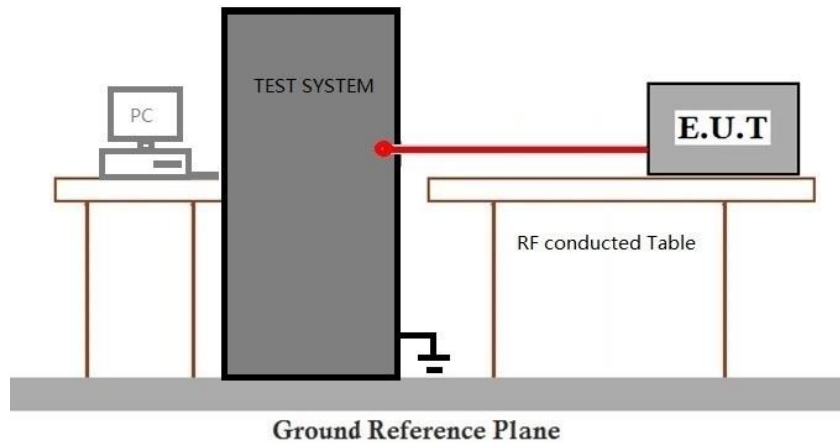
Operating Environment:

Temperature: 25.7 °C Humidity: 39.3 % RH Atmospheric Pressure: 1020 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.

7.8.3 Test Setup Diagram



7.8.4 Measurement Procedure and Data

Please Refer to Appendix for Details

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7.9 Conducted Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)

Test Method: ANSI C63.10 (2013) Section 11.11

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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 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 paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 25.7 °C

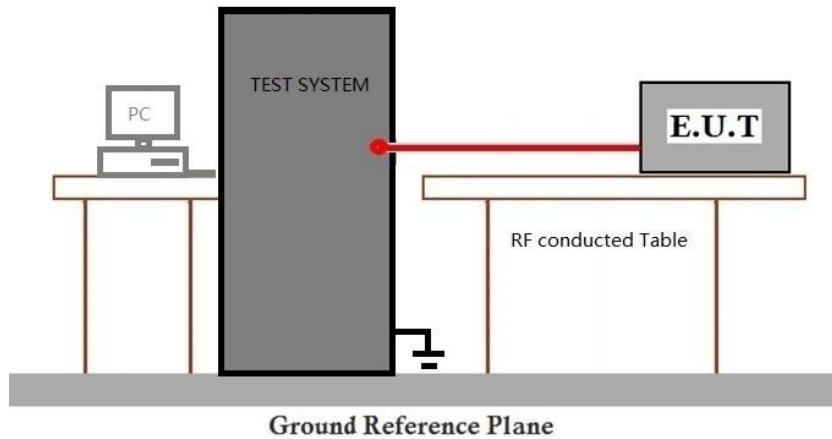
Humidity: 39.3 % RH

Atmospheric Pressure: 1020 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.

7.9.3 Test Setup Diagram



7.9.4 Measurement Procedure and Data

Please Refer to Appendix for Details



8 Test Setup Photo

Please refer to SZCR2504001740 Appendix_Setup Photo

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for SZCR2504001740WM



10 Appendix

1. Duty Cycle

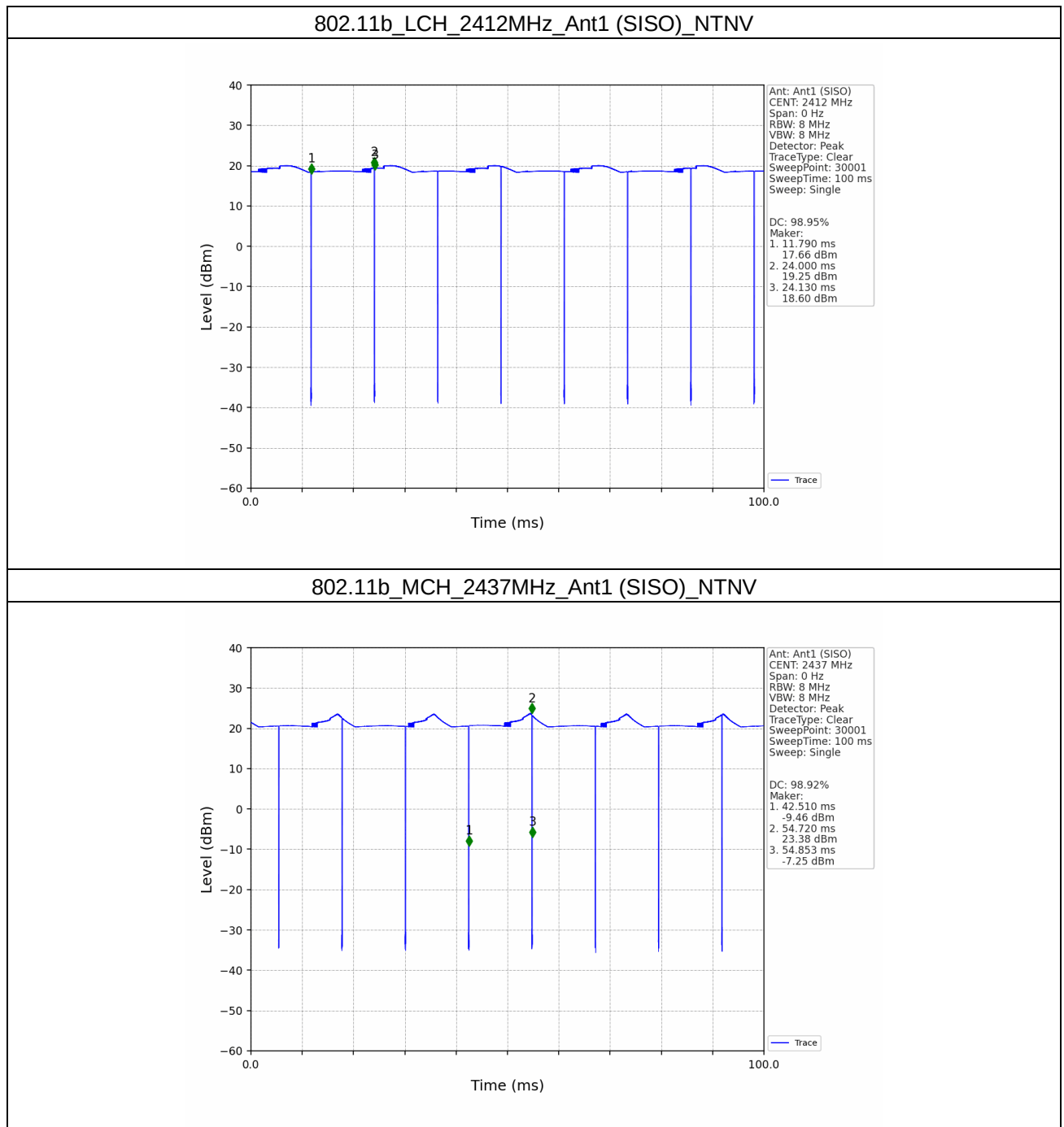
1.1 Test Result

1.1.1 Ant1

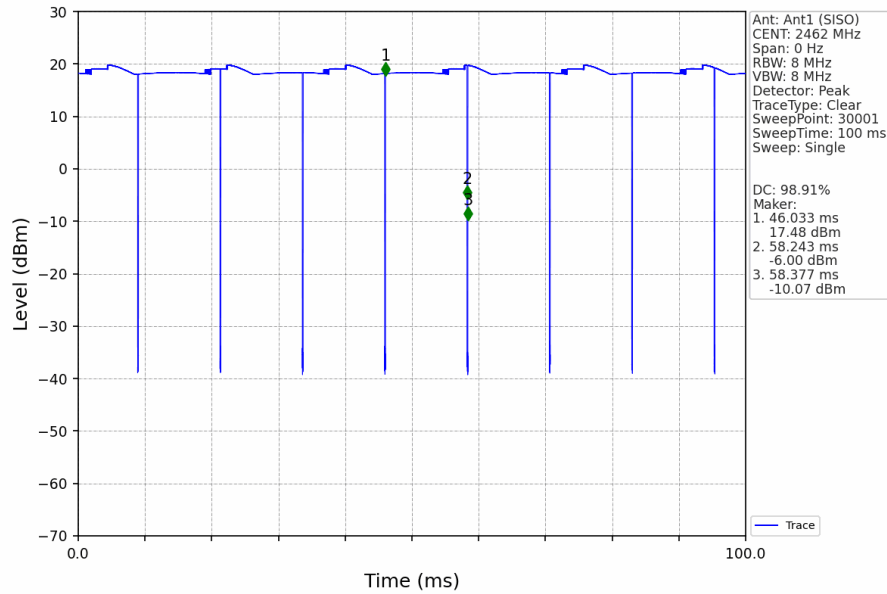
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	12.210	12.340	98.95	0.05	0.03
		2437	12.210	12.343	98.92	0.05	0.08
		2462	12.210	12.344	98.91	0.05	0.05
802.11g	SISO	2412	2.030	2.065	98.31	0.07	0.04
		2437	2.030	2.065	98.31	0.07	0.04
		2462	2.030	2.065	98.31	0.07	0.04
802.11n (HT20)	SISO	2412	1.890	1.924	98.23	0.08	0.00
		2437	1.890	1.926	98.13	0.08	0.03
		2462	1.890	1.925	98.18	0.08	0.03
802.11n (HT40)	SISO	2422	0.929	0.979	94.89	0.23	0.00
		2437	0.930	0.979	94.99	0.22	0.03
		2452	0.930	0.979	94.99	0.22	0.00

1.2 Test Graph

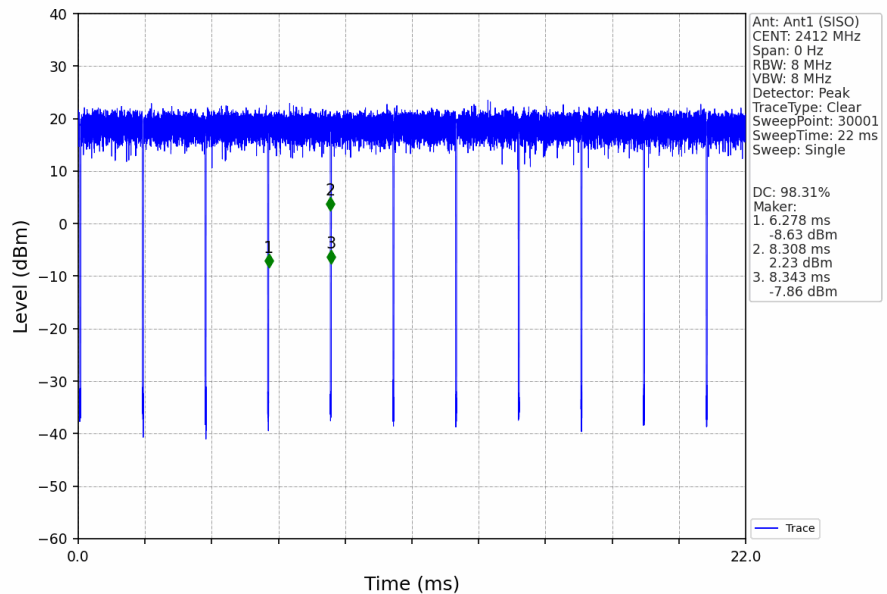
1.2.1 Ant1



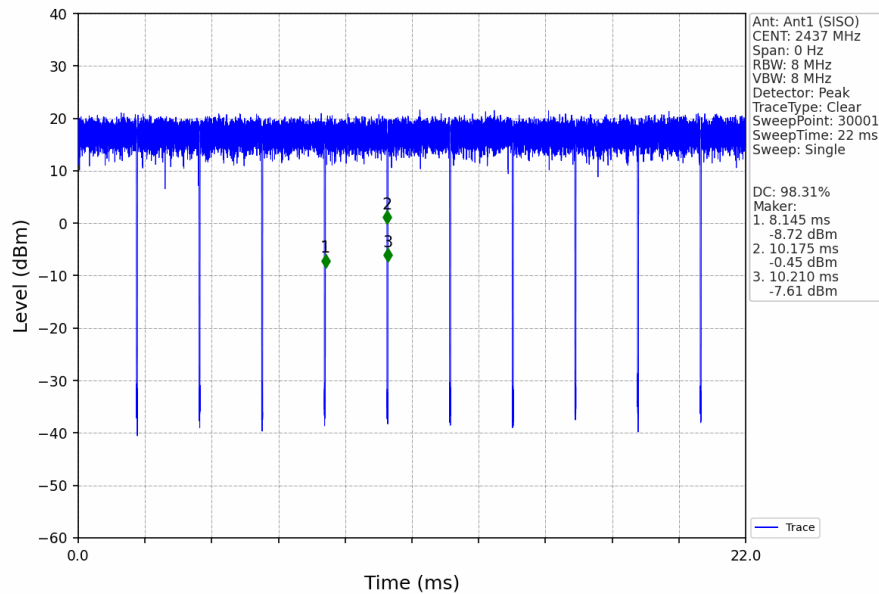
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



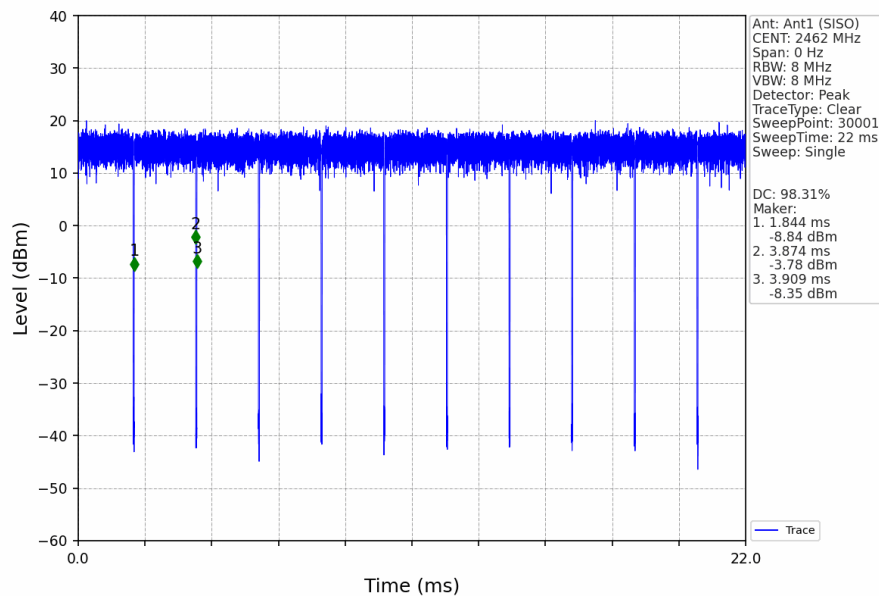
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



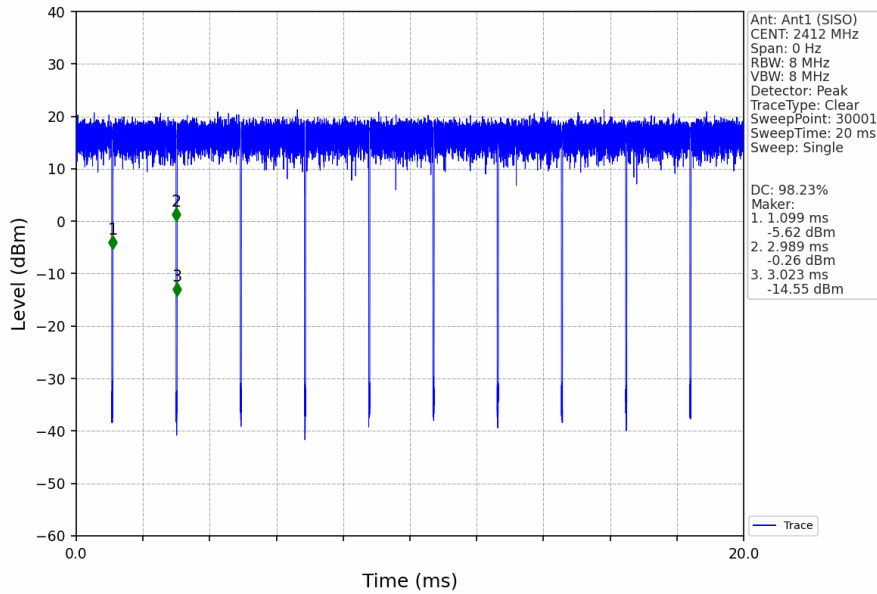
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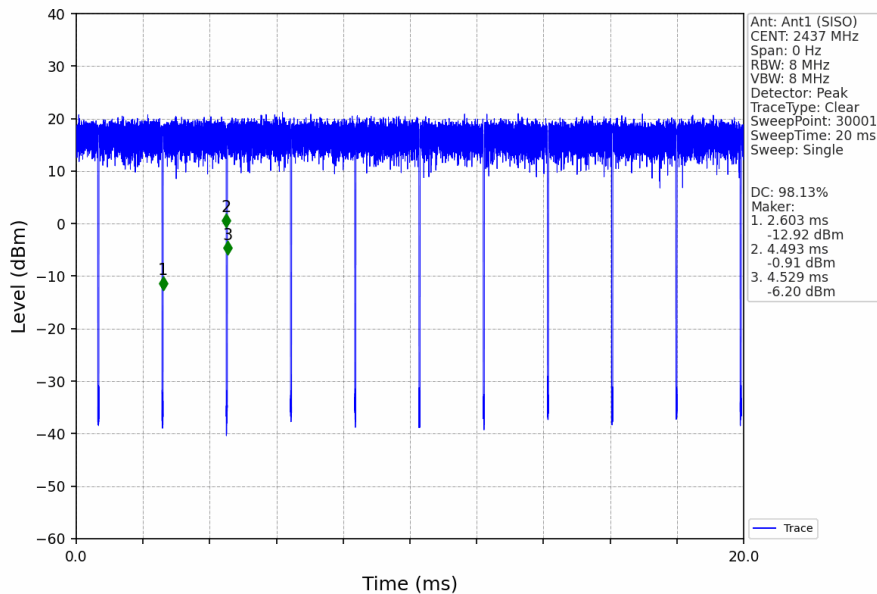
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



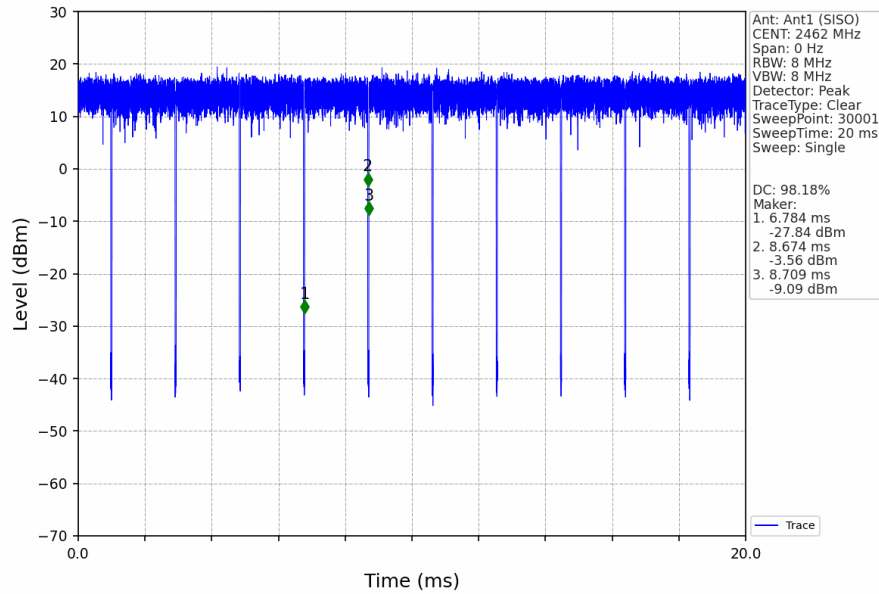
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



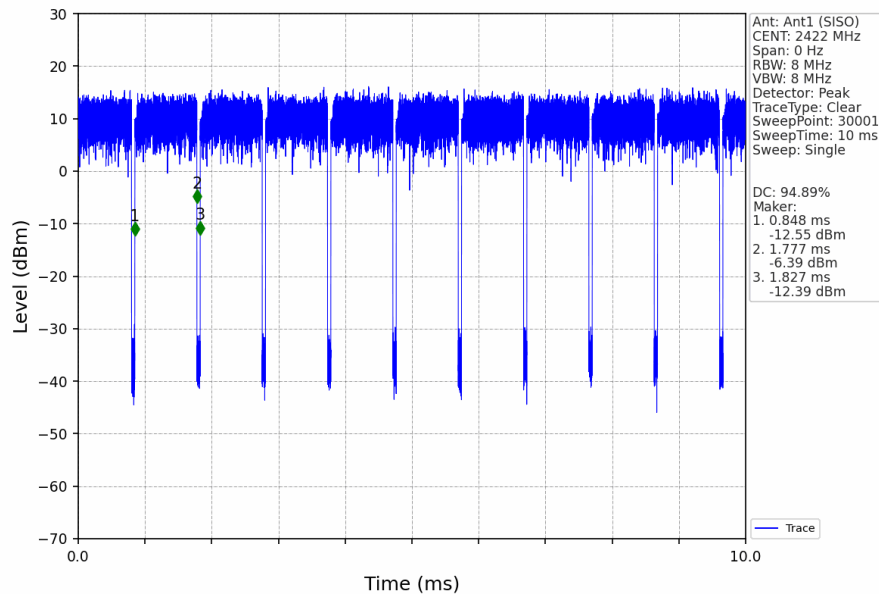
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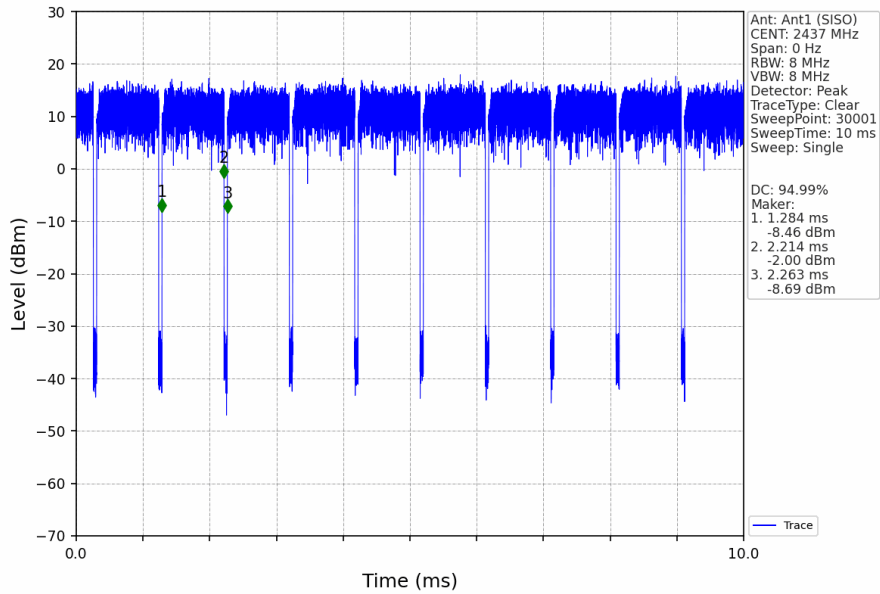
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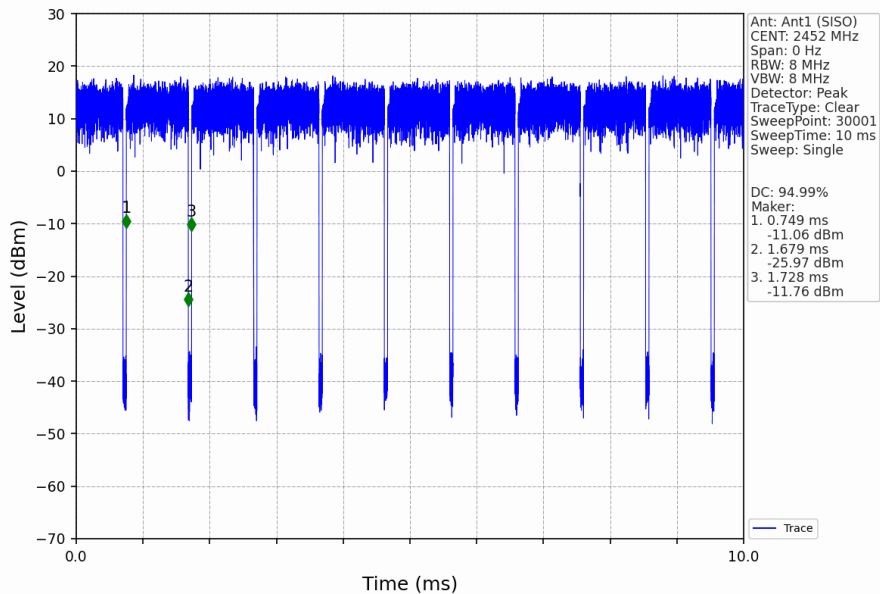
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



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2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	13.236	/	Pass
		2437	1	14.157	/	Pass
		2462	1	14.324	/	Pass
802.11g	SISO	2412	1	17.260	/	Pass
		2437	1	17.801	/	Pass
		2462	1	18.296	/	Pass
802.11n (HT20)	SISO	2412	1	18.082	/	Pass
		2437	1	18.739	/	Pass
		2462	1	19.300	/	Pass
802.11n (HT40)	SISO	2422	1	36.745	/	Pass
		2437	1	36.556	/	Pass
		2452	1	36.346	/	Pass

2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	8.077	≥ 0.5	Pass
		2437	1	9.075	≥ 0.5	Pass
		2462	1	8.605	≥ 0.5	Pass
802.11g	SISO	2412	1	15.147	≥ 0.5	Pass
		2437	1	15.760	≥ 0.5	Pass
		2462	1	16.399	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	15.129	≥ 0.5	Pass
		2437	1	16.365	≥ 0.5	Pass
		2462	1	17.612	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	35.352	≥ 0.5	Pass
		2437	1	33.899	≥ 0.5	Pass
		2452	1	33.838	≥ 0.5	Pass



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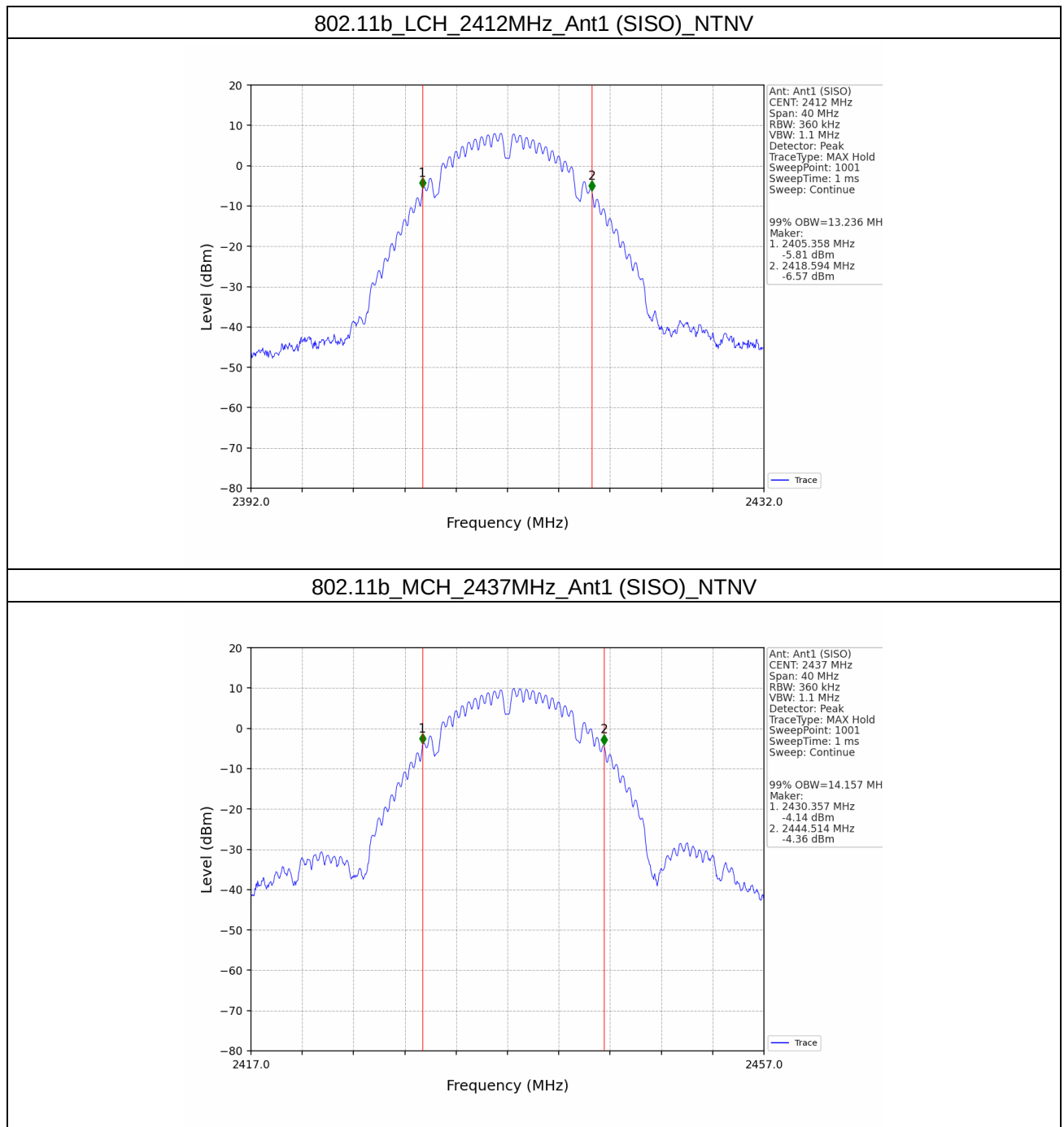
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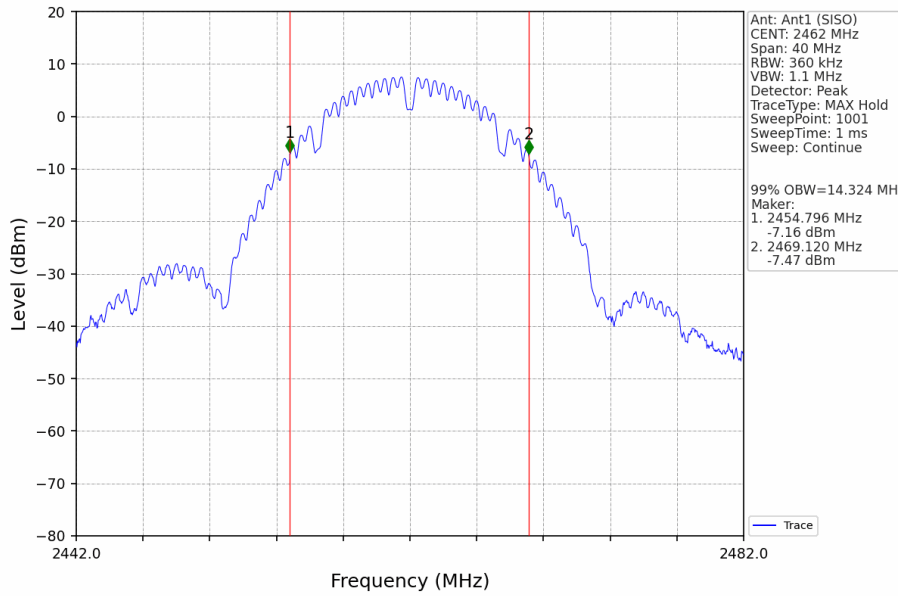
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2.2 Test Graph

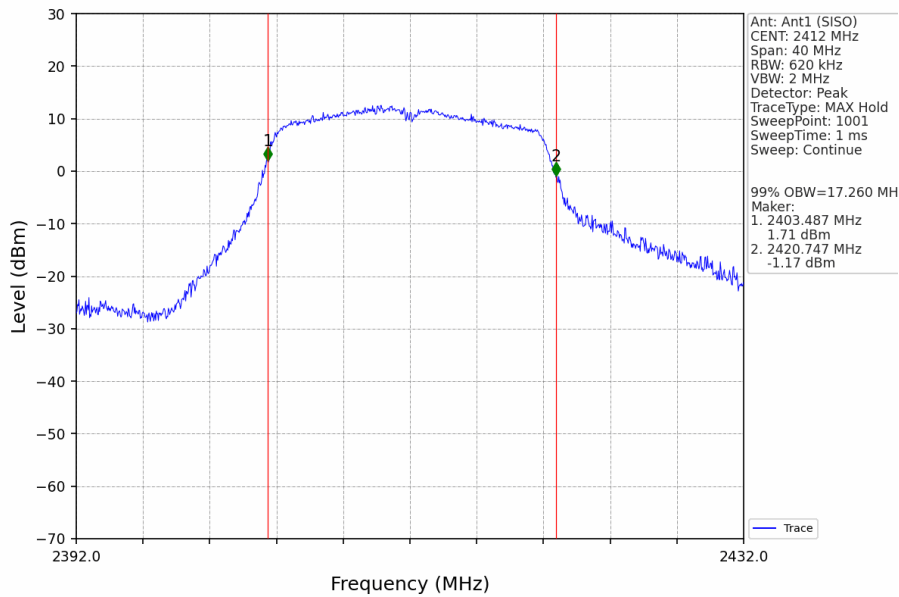
2.2.1 OBW



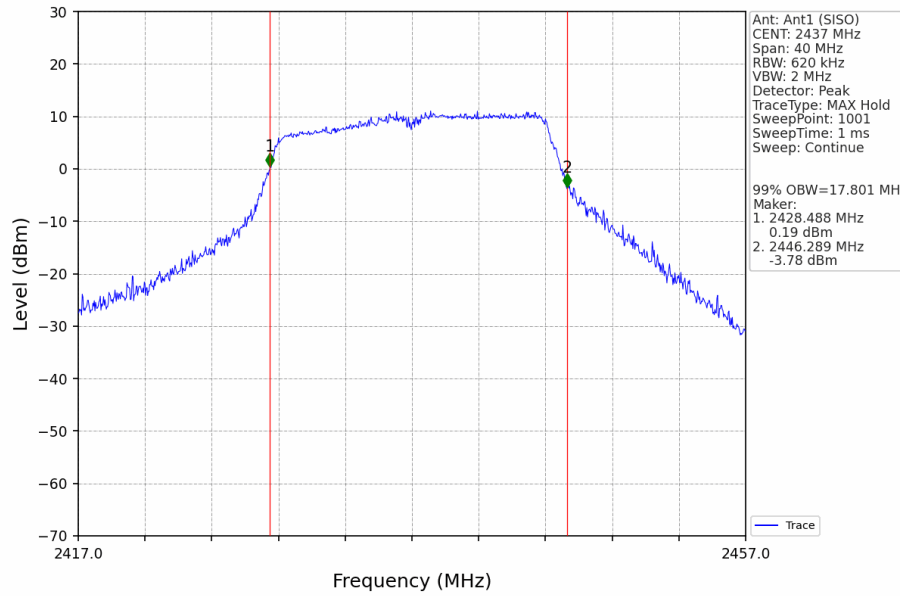
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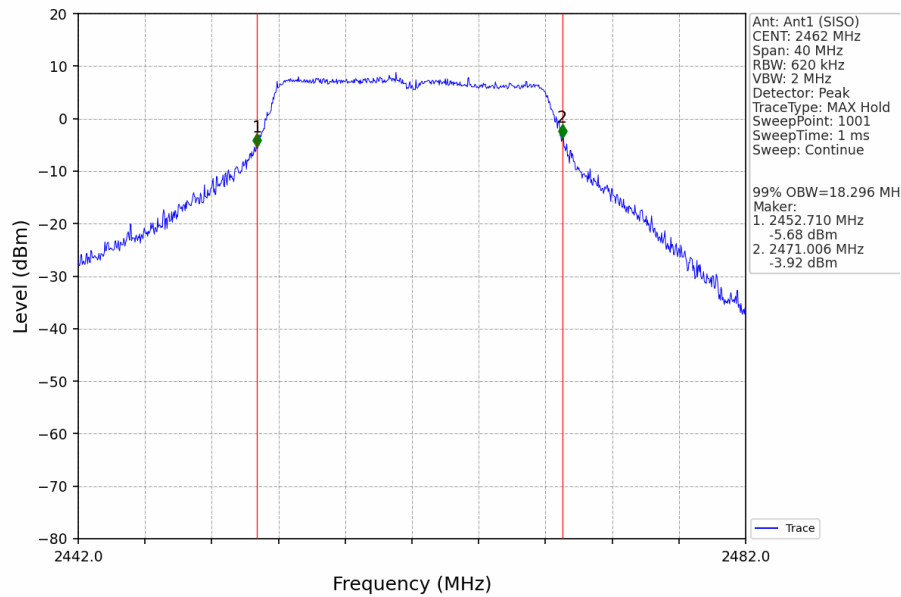
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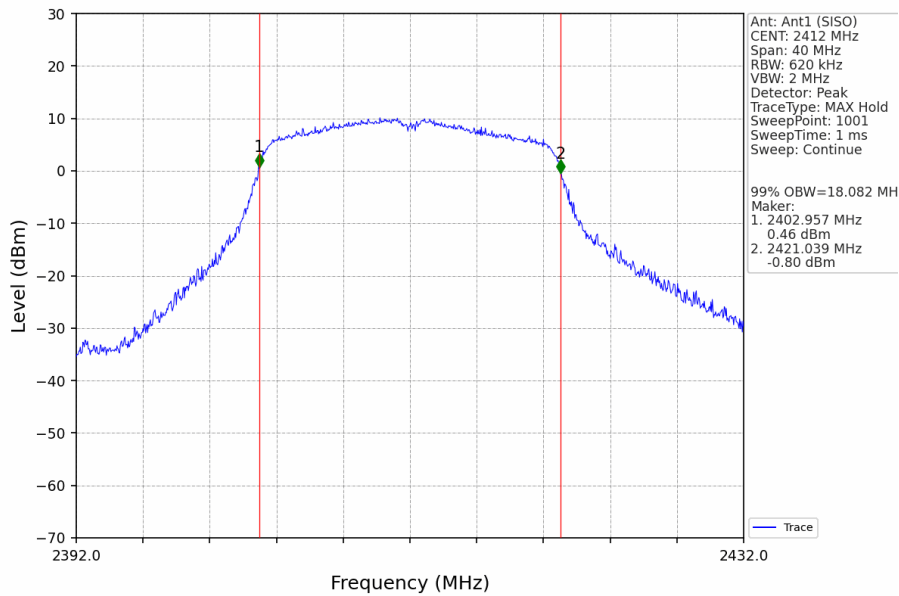
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



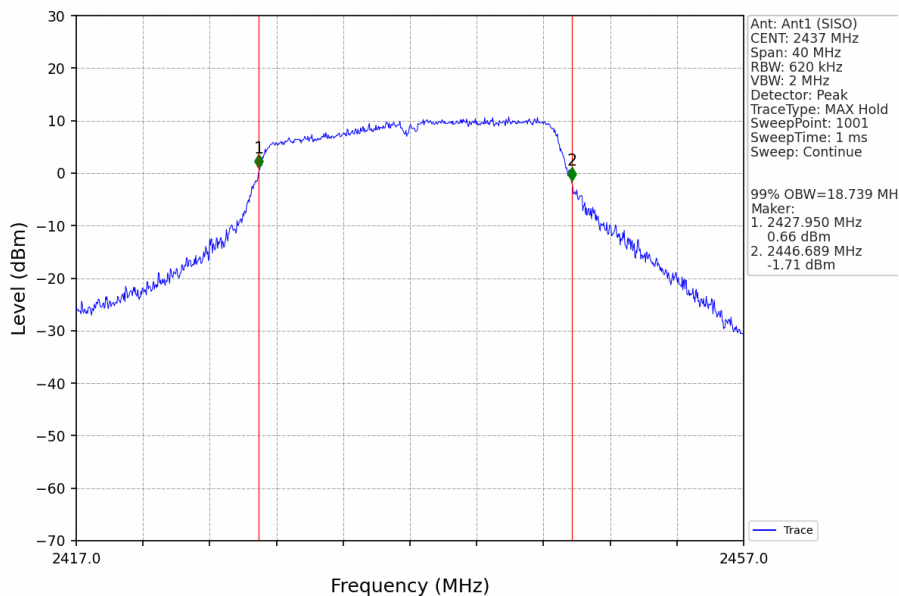
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



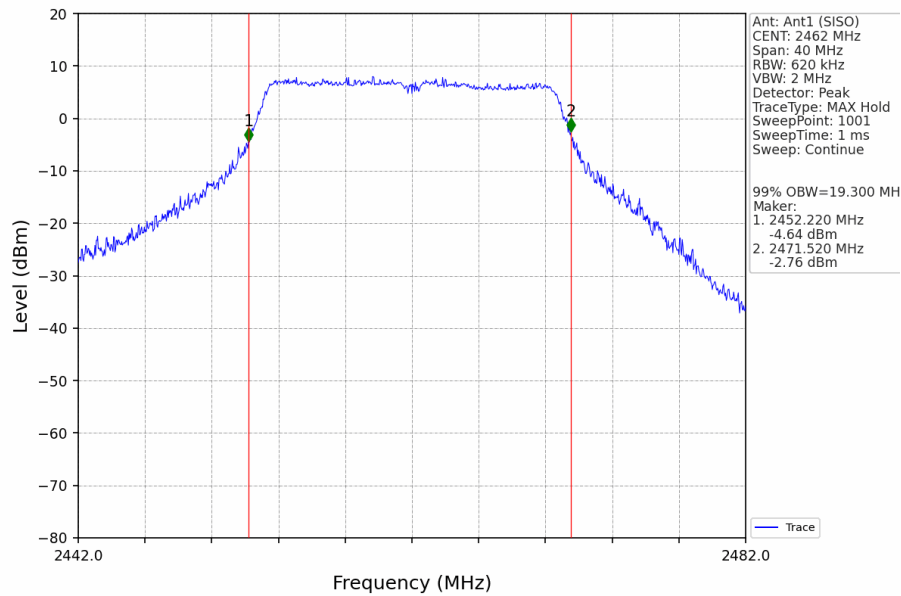
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



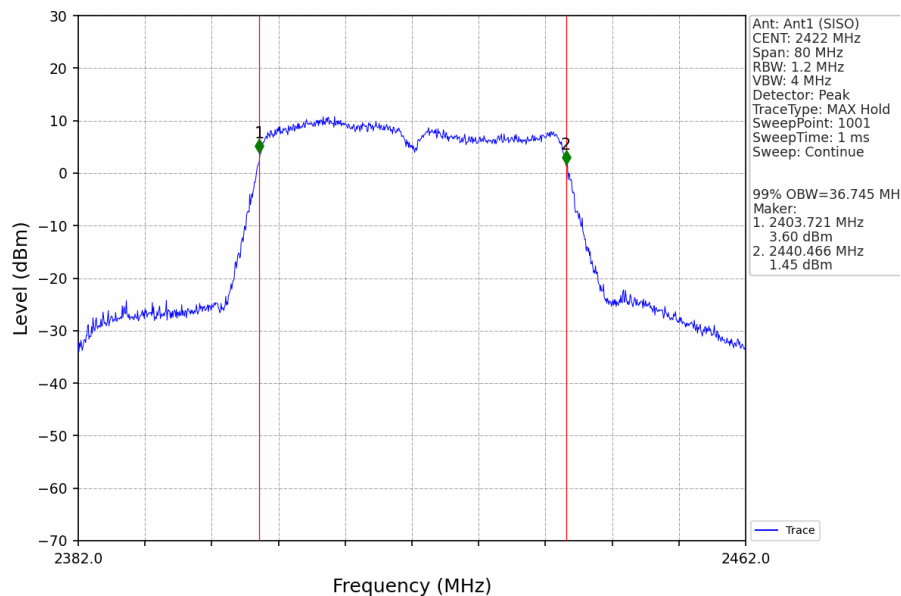
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



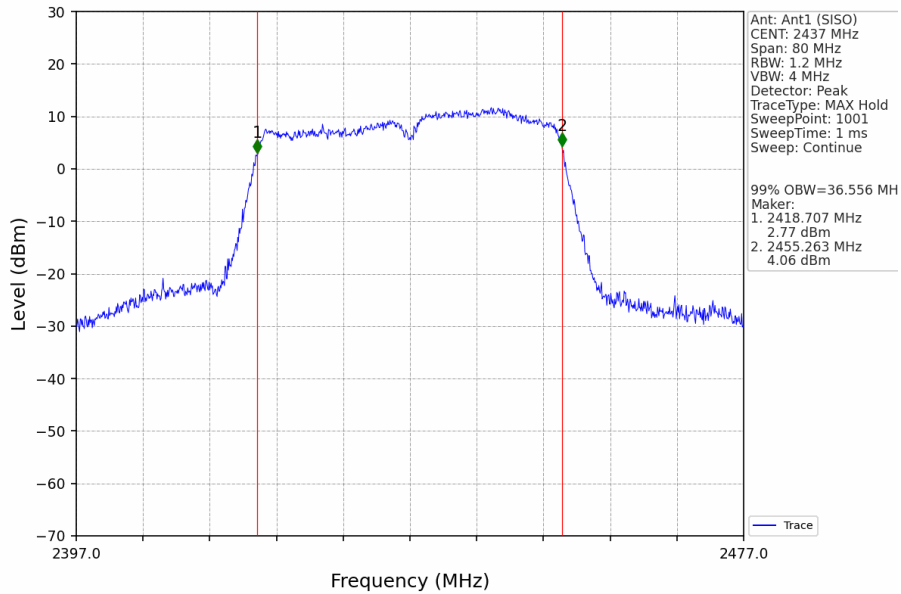
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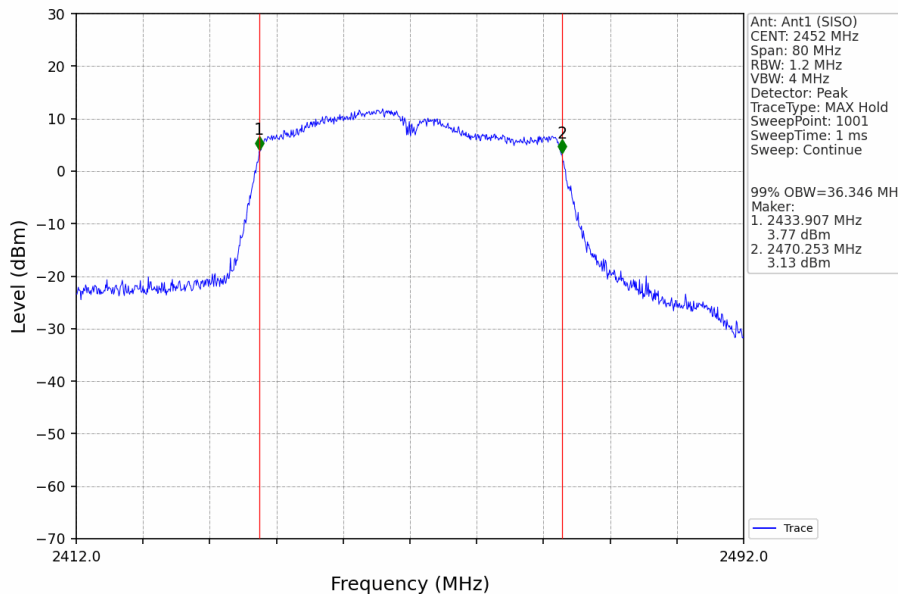
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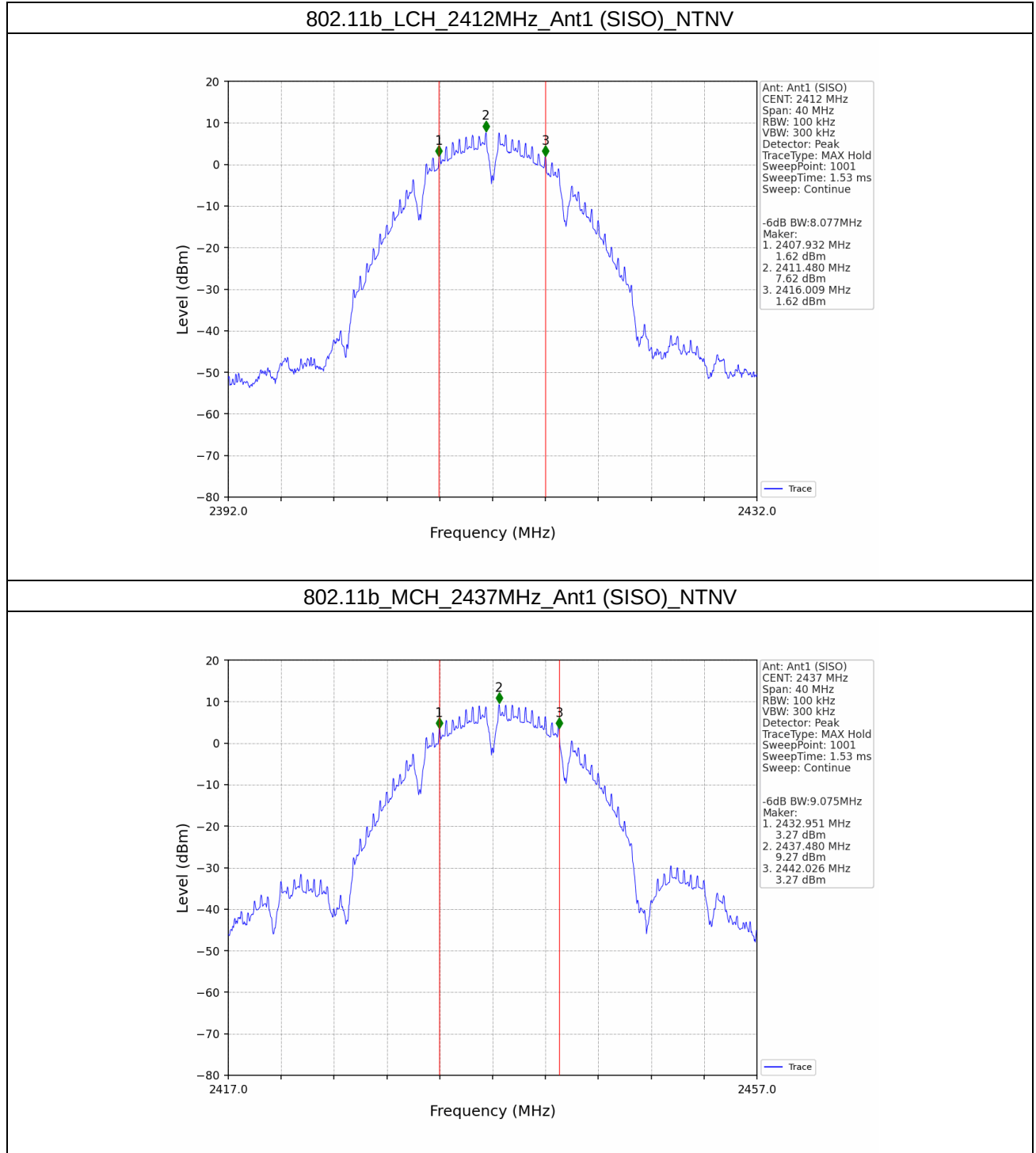
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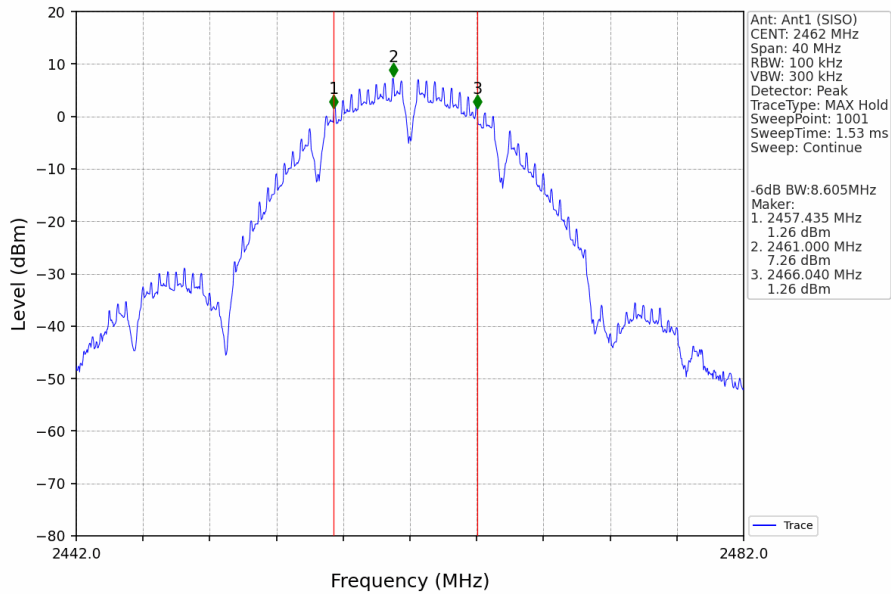
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



2.2.2 6dB BW



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

