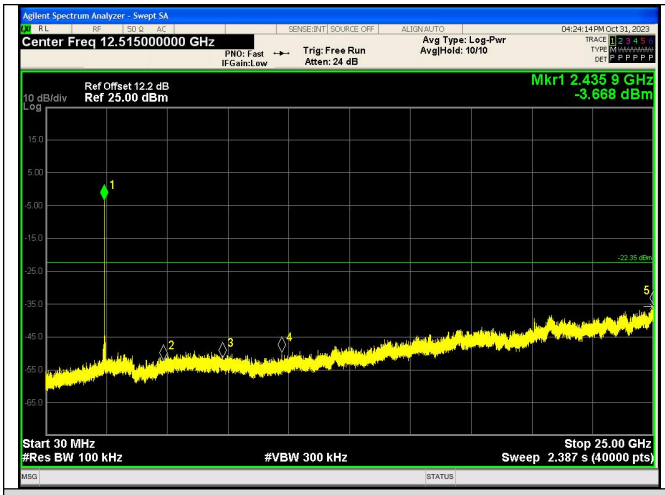
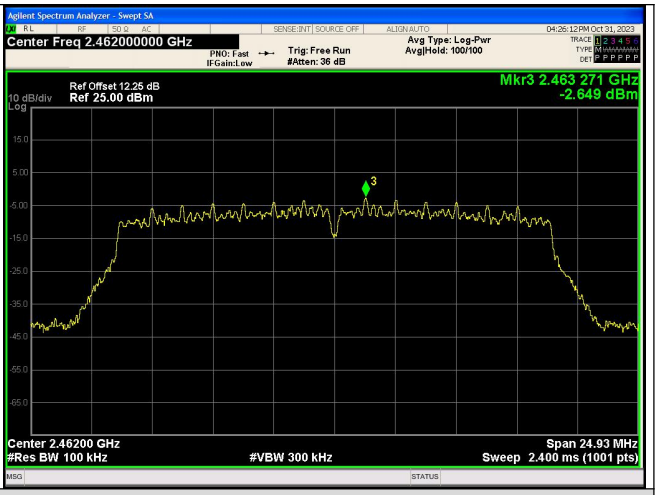


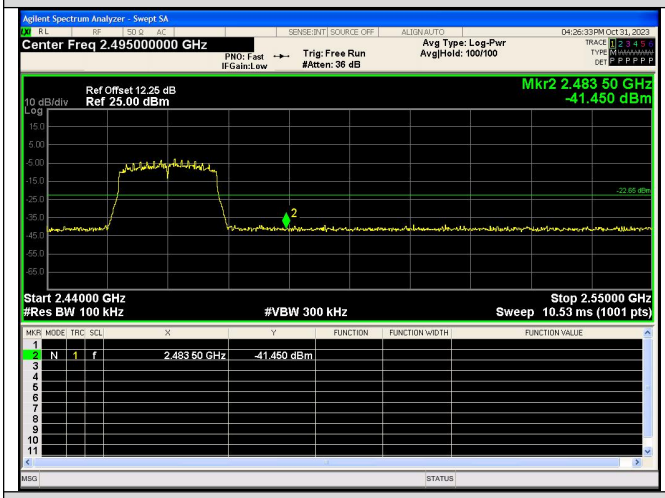

Spurious Emissions

IEEE 802.11n_Channel 6_20MHz_Antenna 0



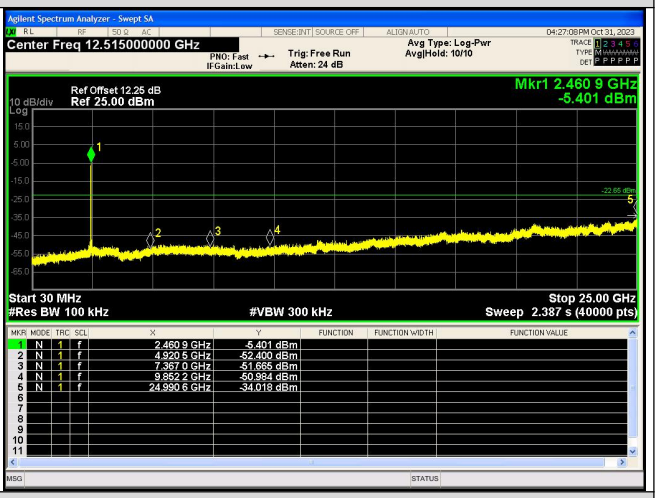

In-Band Reference Level

IEEE 802.11n_Channel 11_20MHz_Antenna 0



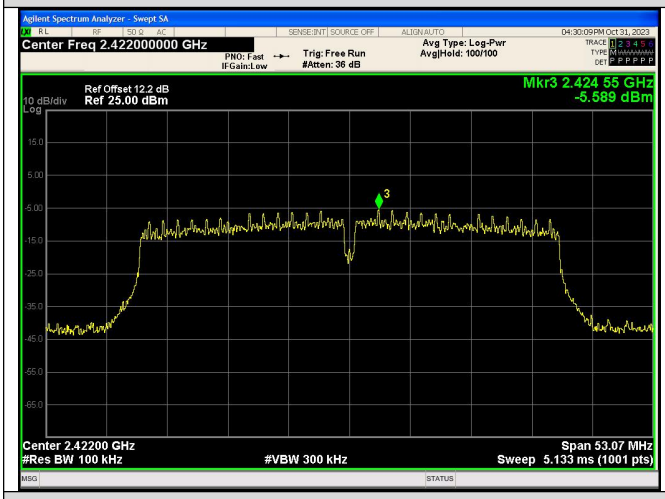

Out Of Band Emission

IEEE 802.11n_Channel 11_20MHz_Antenna 0



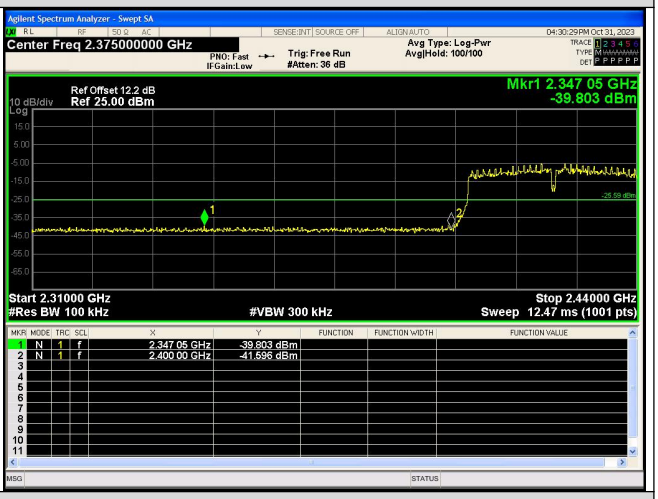

Spurious Emission

IEEE 802.11n_Channel 11_20MHz_Antenna 0



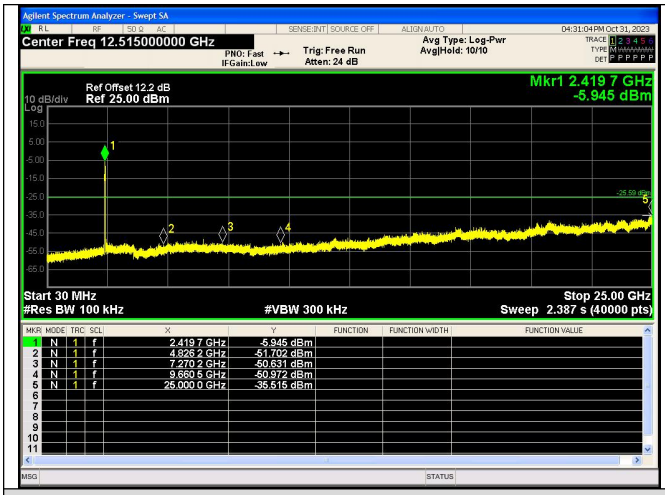

In-Band Reference Level

IEEE 802.11n_Channel 3_40MHz_Antenna 0



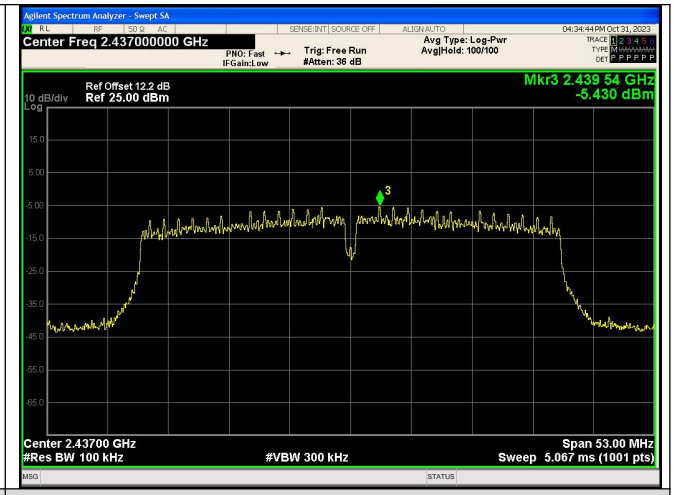

Out Of Band Emission

IEEE 802.11n_Channel 3_40MHz_Antenna 0



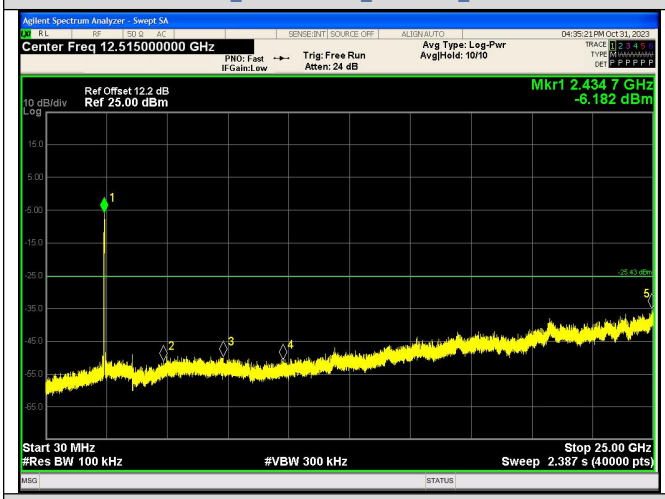

**Spurious Emission**

**IEEE 802.11n_Channel 3_40MHz_Antenna 0**



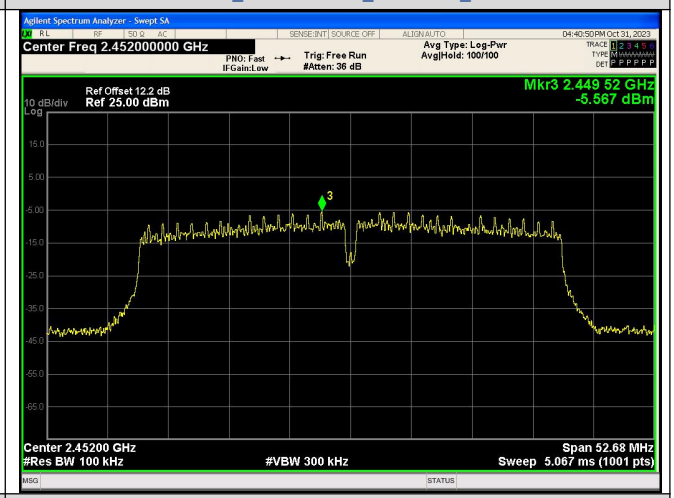

**In-Band Reference Level**

**IEEE 802.11n_Channel 6_40MHz_Antenna 0**



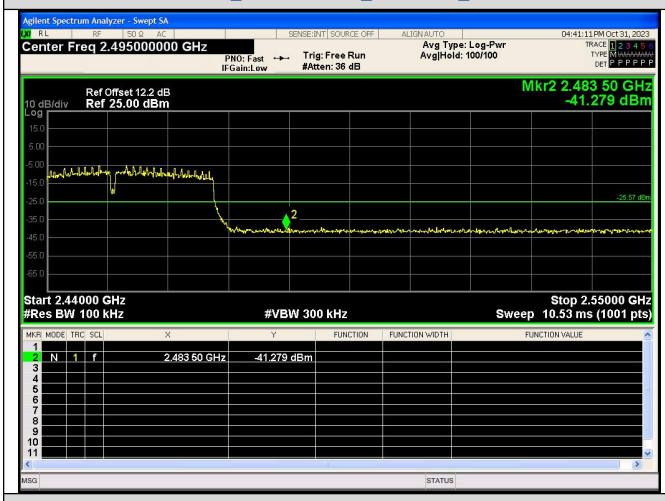

**Spurious Emissions**

**IEEE 802.11n_Channel 6_40MHz_Antenna 0**



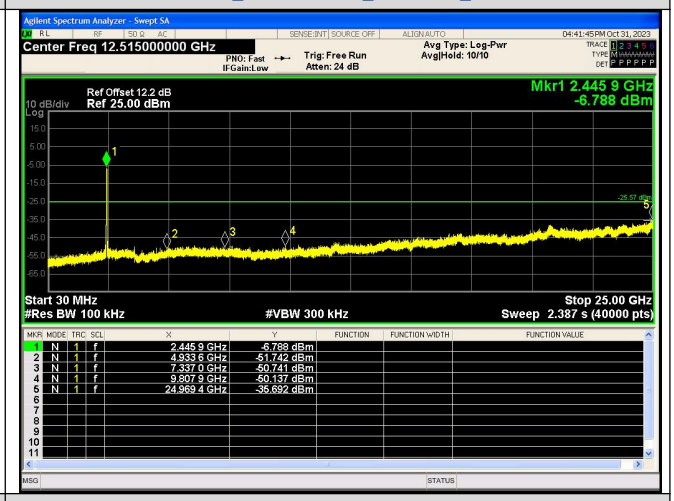

**In-Band Reference Level**

**IEEE 802.11n_Channel 9_40MHz_Antenna 0**




**Out Of Band Emission**

**IEEE 802.11n_Channel 9_40MHz_Antenna 0**




**Spurious Emission**

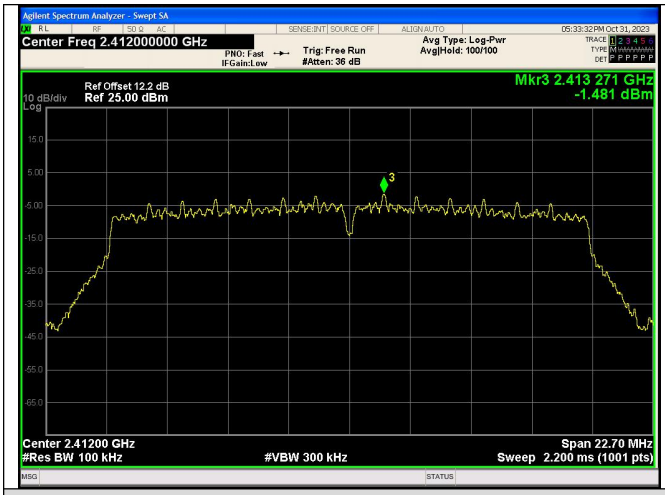
**IEEE 802.11n_Channel 9_40MHz_Antenna 0**

Antenna 1+2:

**Test Result**

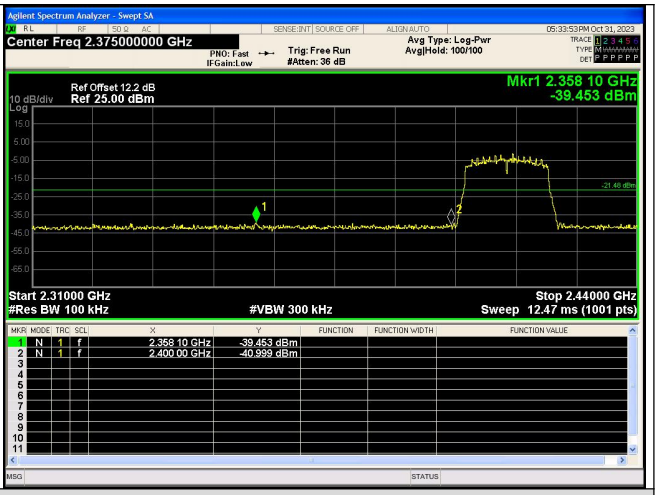
| Mode | Channel | Ant. | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Over Limit (dB) | Result |
|---|---|---|---|---|---|---|---|
| IEEE 802.11n_20 | 1 | 1+2 | 2400.00 | -40.999 | -21.48 | -19.519 | PASS |
| | | | 2358.10 | -39.453 | -21.48 | -17.973 | PASS |
| | | | 4826.90 | -52.106 | -21.48 | -30.626 | PASS |
| | | | 7255.90 | -50.824 | -21.48 | -29.344 | PASS |
| | | | 9660.50 | -51.899 | -21.48 | -30.419 | PASS |
| | | | 24908.2 | -35.654 | -21.48 | -14.174 | PASS |
| | 6 | | 4884.29 | -51.332 | -21.4 | -29.932 | PASS |
| | | | 7325.17 | -51.432 | -21.4 | -30.032 | PASS |
| | | | 9767.29 | -50.397 | -21.4 | -28.997 | PASS |
| | | | 24907.6 | -35.236 | -21.4 | -13.836 | PASS |
| | 11 | | 2483.50 | -41.789 | -21.37 | -20.419 | PASS |
| | | | 4927.99 | -51.128 | -21.37 | -29.758 | PASS |
| | | | 7403.20 | -50.930 | -21.37 | -29.560 | PASS |
| | | | 9859.69 | -51.209 | -21.37 | -29.839 | PASS |
| | | | 24917.6 | -35.827 | -21.37 | -14.457 | PASS |
| IEEE 802.11n_40 | 3 | | 2400.00 | -42.336 | -24.6 | -17.736 | PASS |
| | | | 2391.12 | -39.530 | -24.6 | -14.930 | PASS |
| | | | 4846.20 | -51.796 | -24.6 | -27.196 | PASS |
| | | | 7250.90 | -50.435 | -24.6 | -25.835 | PASS |
| | | | 9670.50 | -51.110 | -24.6 | -26.510 | PASS |
| | | | 24867.7 | -35.493 | -24.6 | -10.893 | PASS |
| | 6 | | 4896.15 | -50.950 | -24.47 | -26.480 | PASS |
| | | | 7326.42 | -50.303 | -24.47 | -25.833 | PASS |
| | | | 9783.53 | -51.675 | -24.47 | -27.205 | PASS |
| | | | 24836.4 | -35.137 | -24.47 | -10.667 | PASS |
| | 9 | | 2483.50 | -42.229 | -24.64 | -17.589 | PASS |
| | | | 4905.51 | -51.923 | -24.64 | -27.283 | PASS |
| | | | 7328.91 | -50.285 | -24.64 | -25.645 | PASS |
| | | | 9769.17 | -49.900 | -24.64 | -25.260 | PASS |
| | | | 24915.1 | -35.545 | -24.64 | -10.905 | PASS |

**Test Graphs**



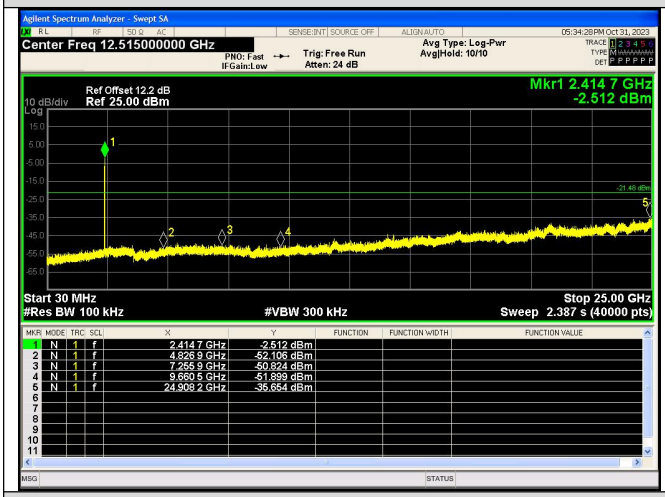

**In-Band Reference Level**

**IEEE 802.11n_Channel 1_20MHz_Antenna 0**



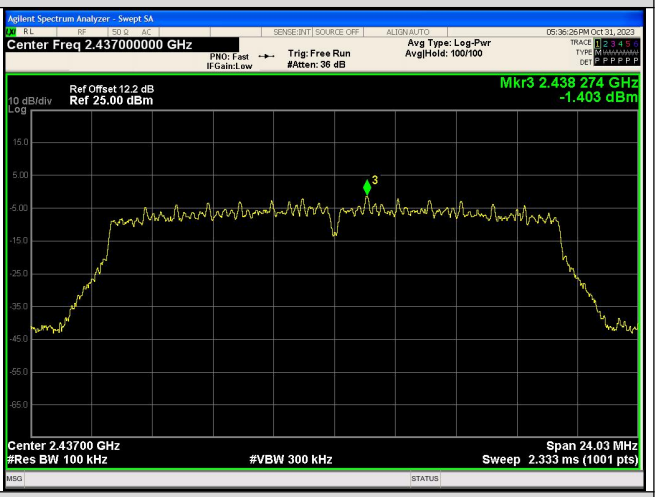

**Out Of Band Emission**

**IEEE 802.11n_Channel 1_20MHz_Antenna 0**




**Spurious Emission**

**IEEE 802.11n_Channel 1_20MHz_Antenna 0**




**In-Band Reference Level**

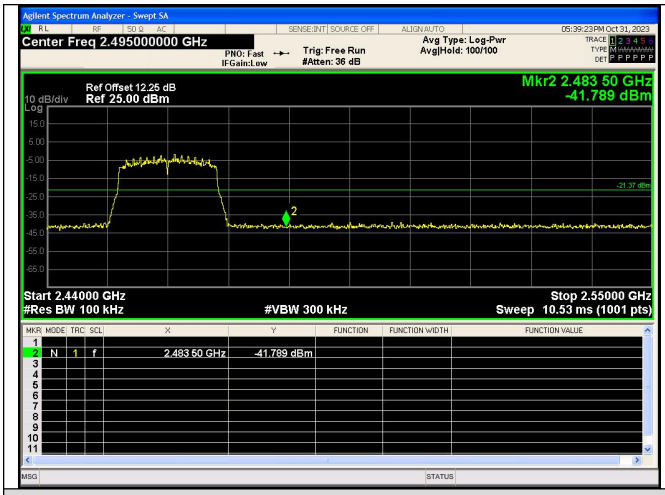
**IEEE 802.11n_Channel 6_20MHz_Antenna 0**

**Spurious Emissions**

**IEEE 802.11n_Channel 6_20MHz_Antenna 0**

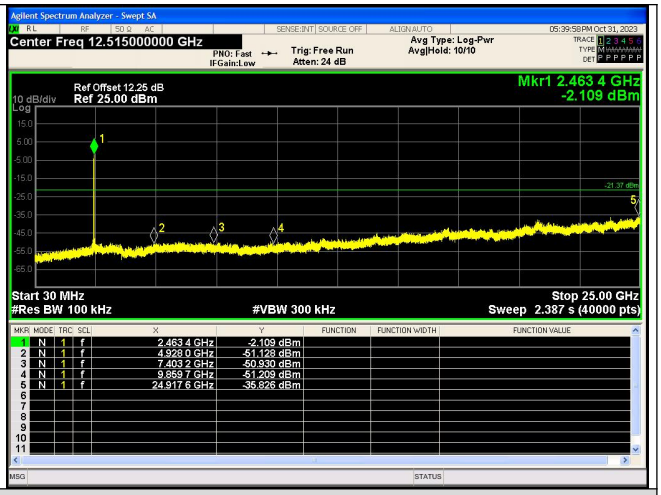
**In-Band Reference Level**

**IEEE 802.11n_Channel 11_20MHz_Antenna 0**



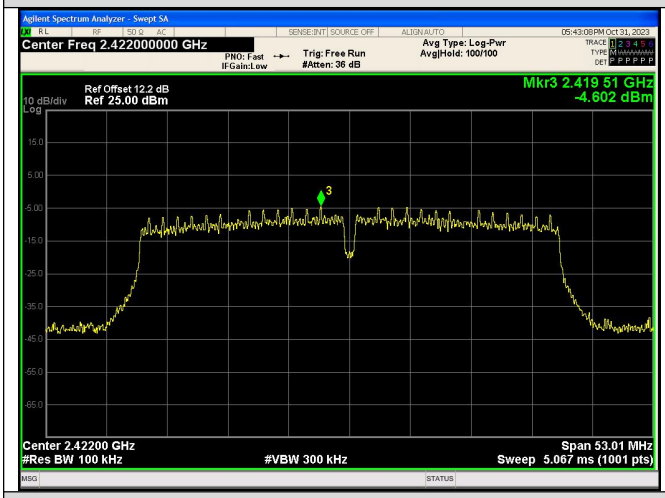

**Out Of Band Emission**

**IEEE 802.11n_Channel 11_20MHz_Antenna 0**



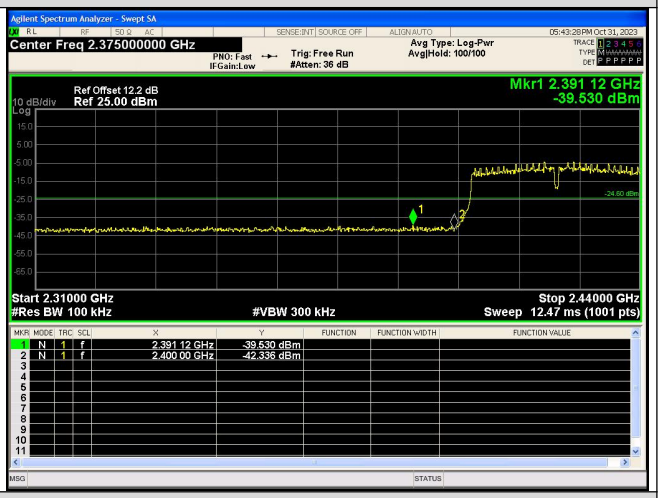

**Spurious Emission**

**IEEE 802.11n_Channel 11_20MHz_Antenna 0**



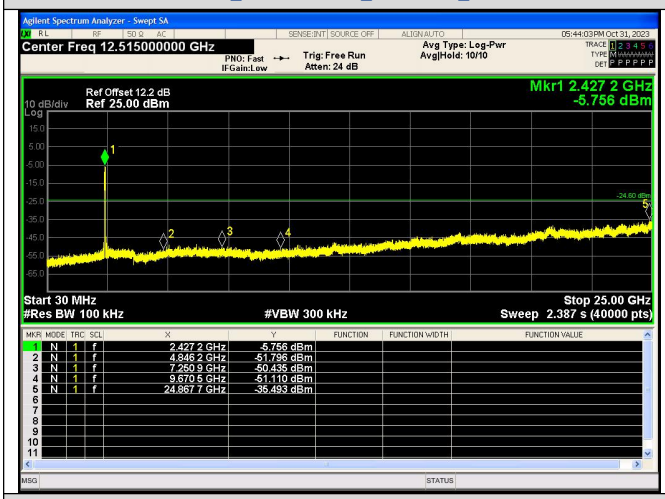

**In-Band Reference Level**

**IEEE 802.11n_Channel 3_40MHz_Antenna 0**



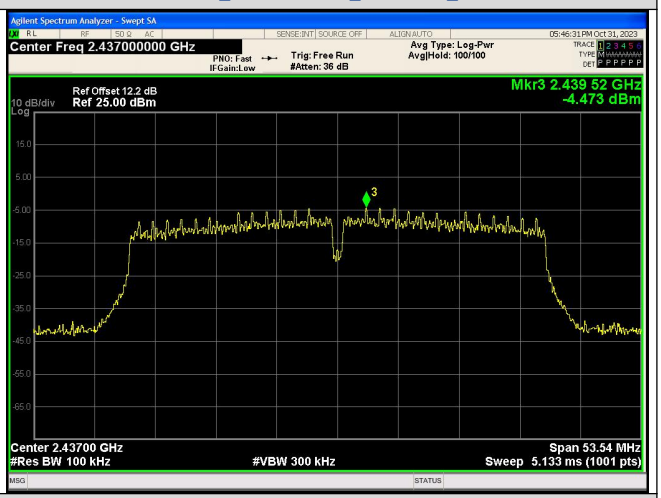

**Out Of Band Emission**

**IEEE 802.11n_Channel 3_40MHz_Antenna 0**



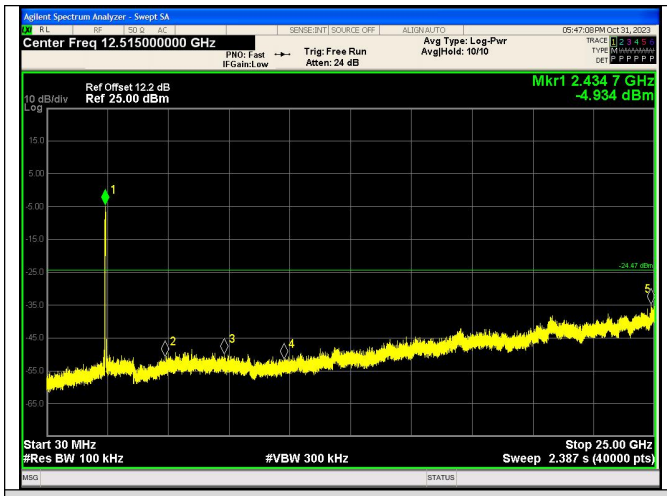

**Spurious Emission**

**IEEE 802.11n_Channel 3_40MHz_Antenna 0**



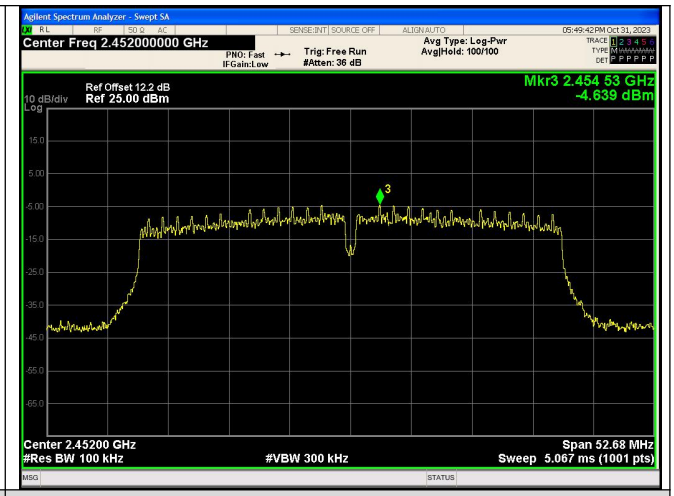

**In-Band Reference Level**

**IEEE 802.11n_Channel 6_40MHz_Antenna 0**



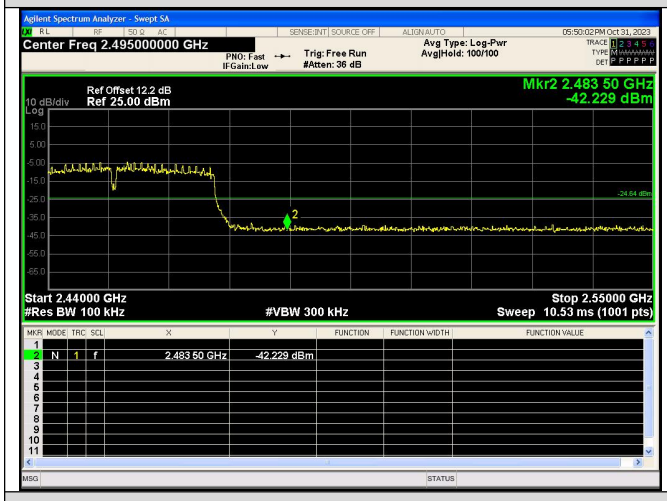

**Spurious Emissions**

**IEEE 802.11n_Channel 6_40MHz_Antenna 0**



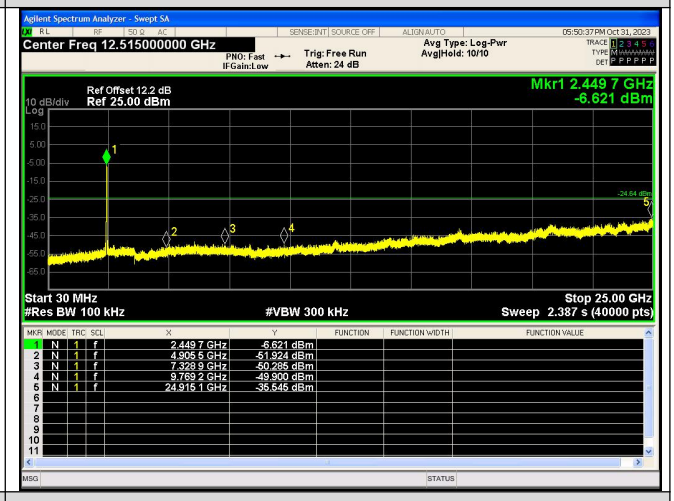

**In-Band Reference Level**

**IEEE 802.11n_Channel 9_40MHz_Antenna 0**




**Out Of Band Emission**

**IEEE 802.11n_Channel 9_40MHz_Antenna 0**




**Spurious Emission**

**IEEE 802.11n_Channel 9_40MHz_Antenna 0**

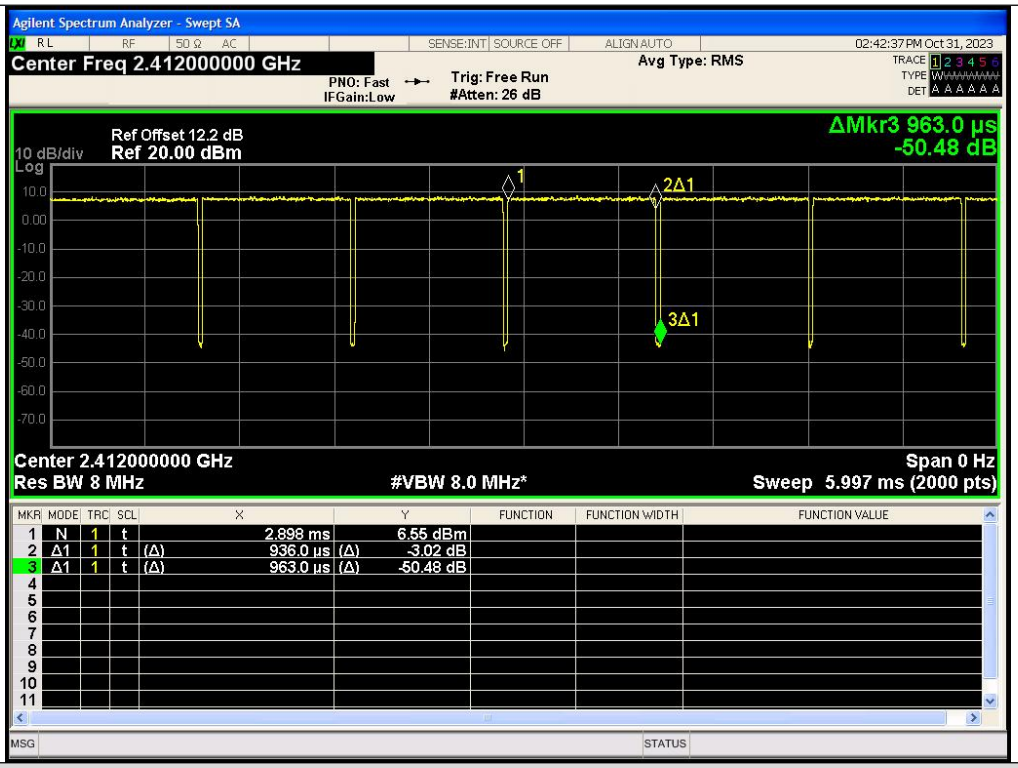
# APPENDIX V.Duty Cycle

Antenna 1:

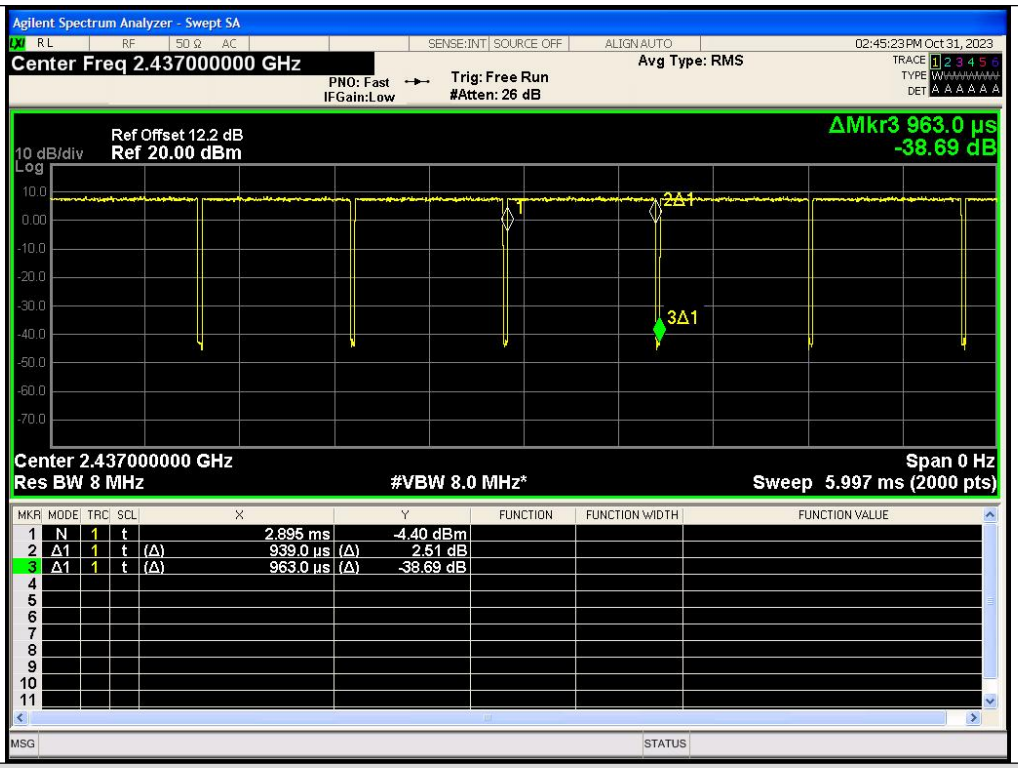
**Test Result**

| Mode | Data rates | Channel | Antenna | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) |
|---|---|---|---|---|---|---|---|---|
| IEEE 802.11b | 11 | 1 | 1 | 0.936 | 0.963 | 97.20 | 0.9720 | 0.1233 |
| | | 6 | | 0.939 | 0.963 | 97.51 | 0.9751 | 0.1095 |
| | | 11 | | 0.936 | 0.963 | 97.20 | 0.9720 | 0.1233 |
| IEEE 802.11g | 54 | 1 | | 0.180 | 0.294 | 61.22 | 0.6122 | 2.1311 |
| | | 6 | | 0.180 | 0.303 | 59.41 | 0.5941 | 2.2614 |
| | | 11 | | 0.179 | 0.302 | 59.04 | 0.5904 | 2.2885 |
| IEEE 802.11n_20 | MCS 7 | 1 | | 0.168 | 0.300 | 56.00 | 0.5600 | 2.5181 |
| | | 6 | | 0.168 | 0.300 | 56.00 | 0.5600 | 2.5181 |
| | | 11 | | 0.168 | 0.300 | 56.00 | 0.5600 | 2.5181 |
| IEEE 802.11n_40 | | 3 | | 0.104 | 0.298 | 34.90 | 0.3490 | 4.5717 |
| | | 6 | | 0.104 | 0.299 | 34.78 | 0.3478 | 4.5867 |
| | | 9 | | 0.104 | 0.298 | 34.90 | 0.3490 | 4.5717 |

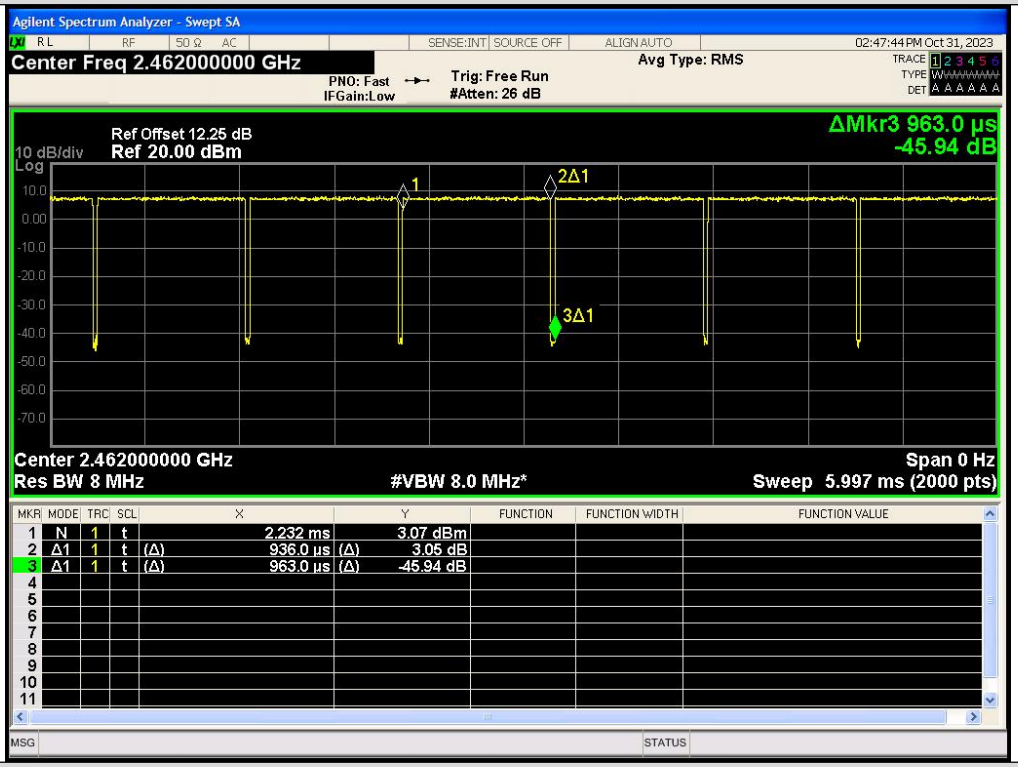
**Test Graphs**



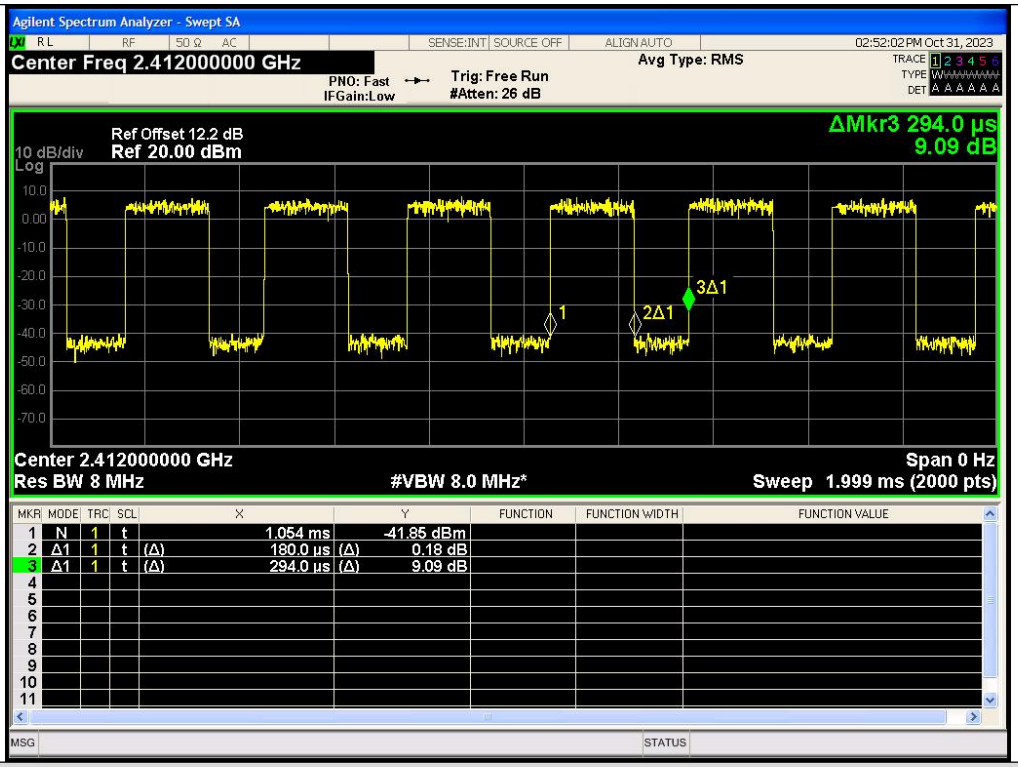

IEEE 802.11b_20MHz_Channel 1



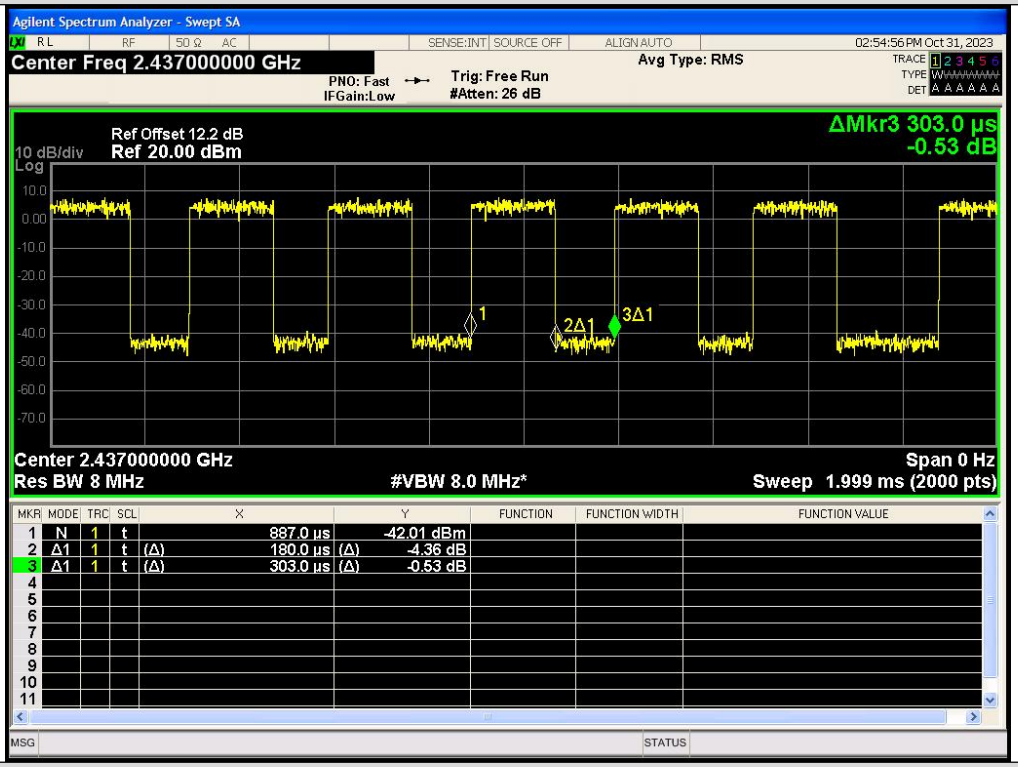

IEEE 802.11b_20MHz_Channel 6



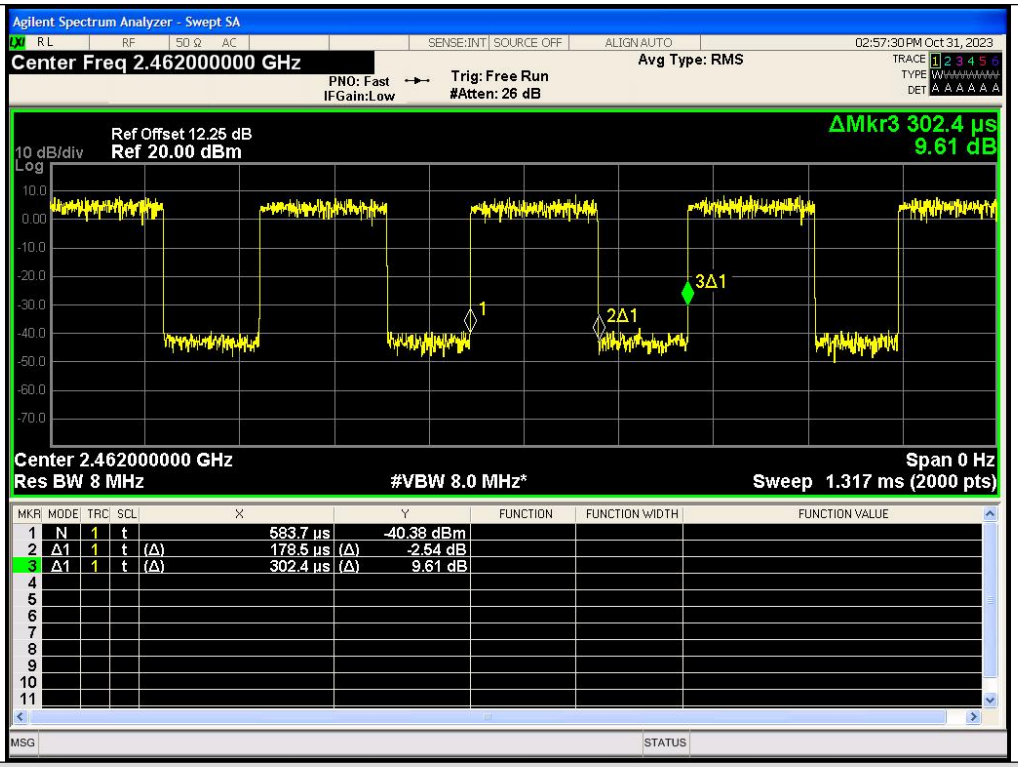

IEEE 802.11b_20MHz_Channel 11



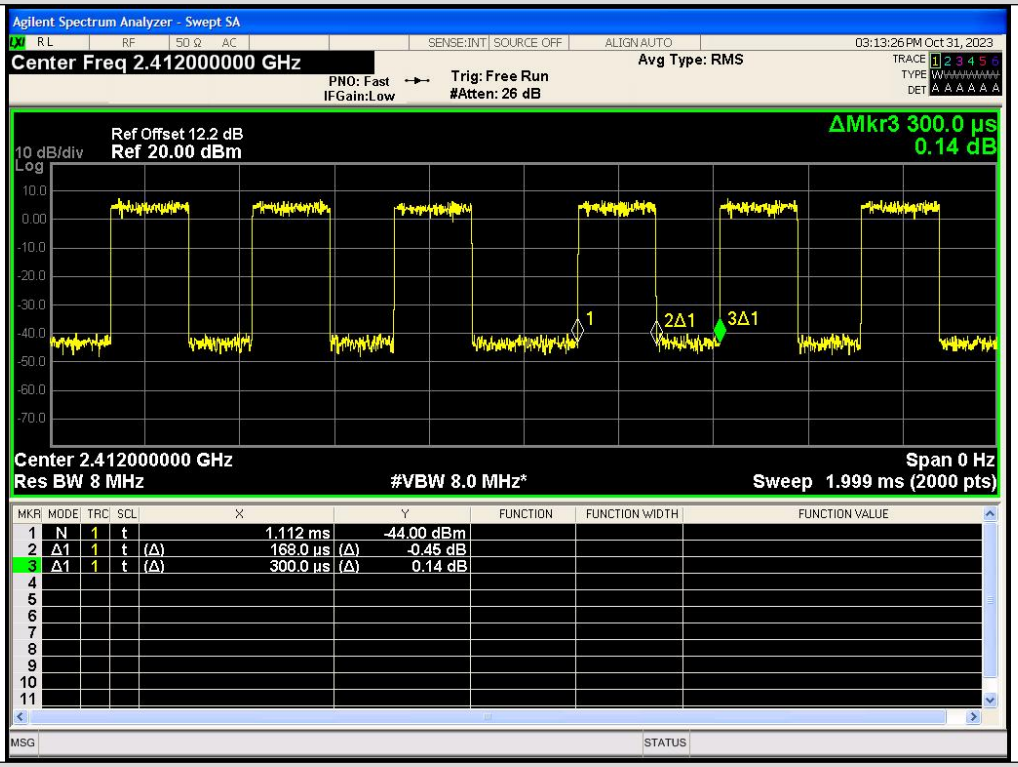

IEEE 802.11g_20MHz_Channel 1



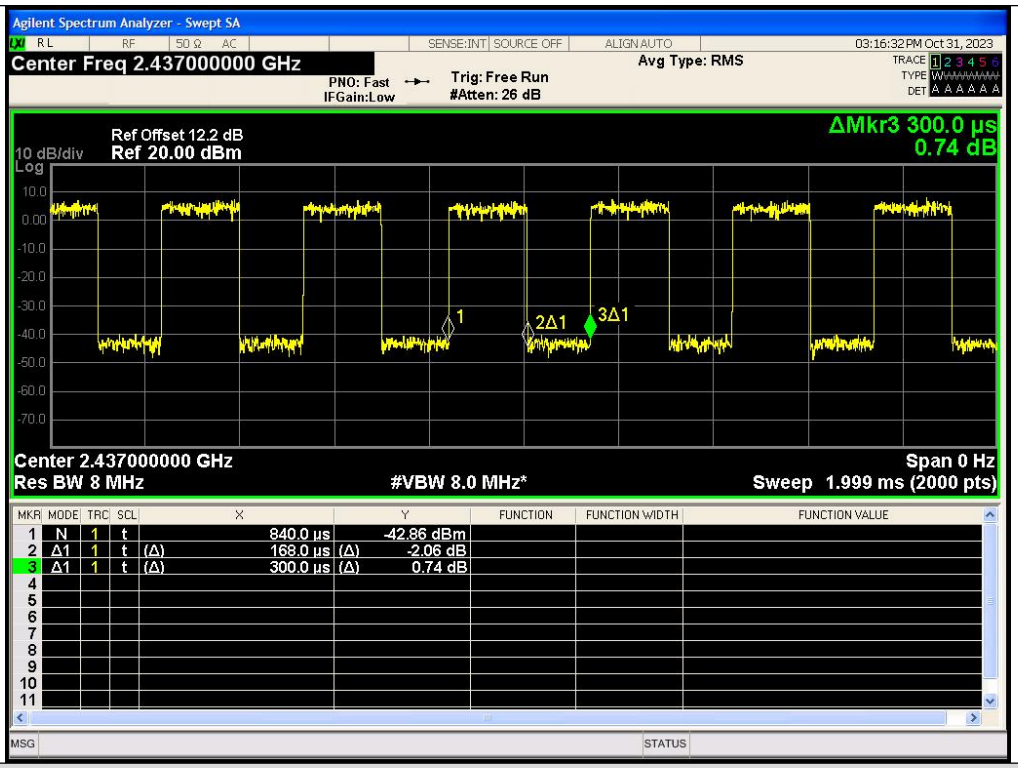

IEEE 802.11g_20MHz_Channel 6



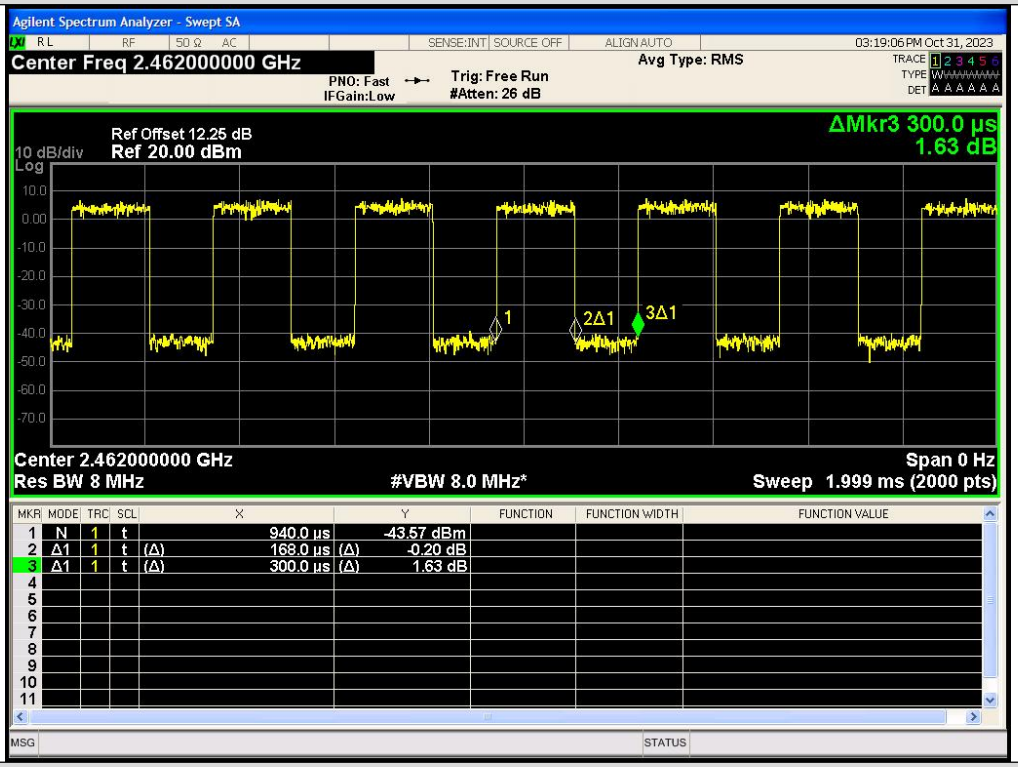

IEEE 802.11g_20MHz_Channel 11



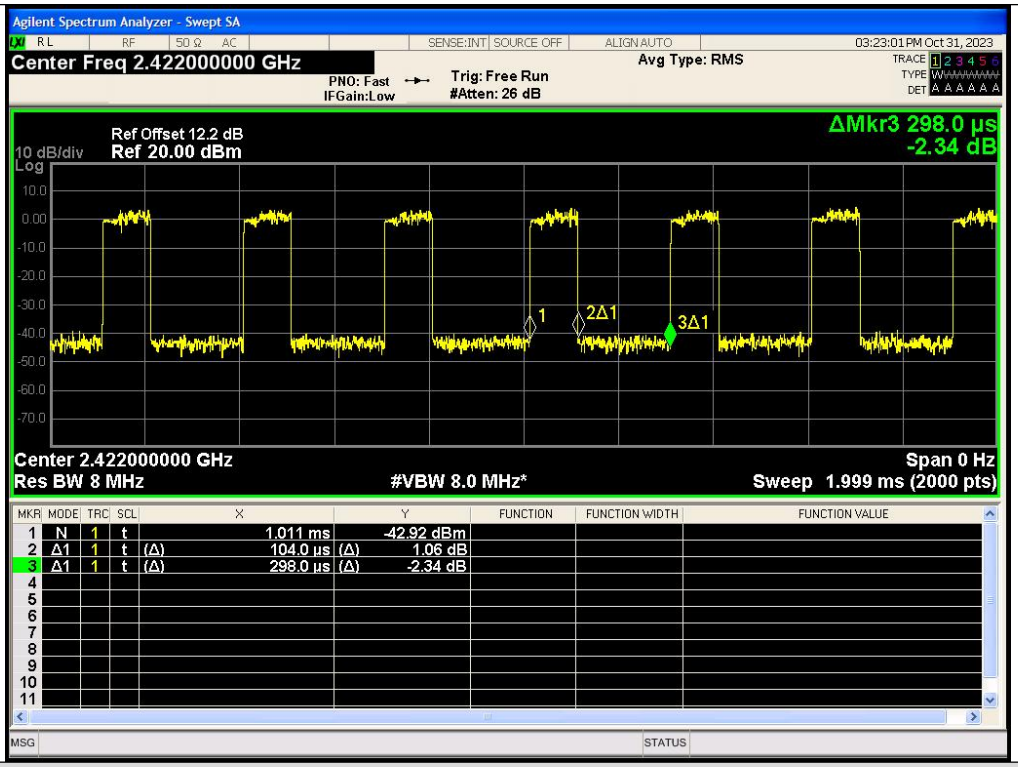

IEEE 802.11n_20MHz_Channel 1



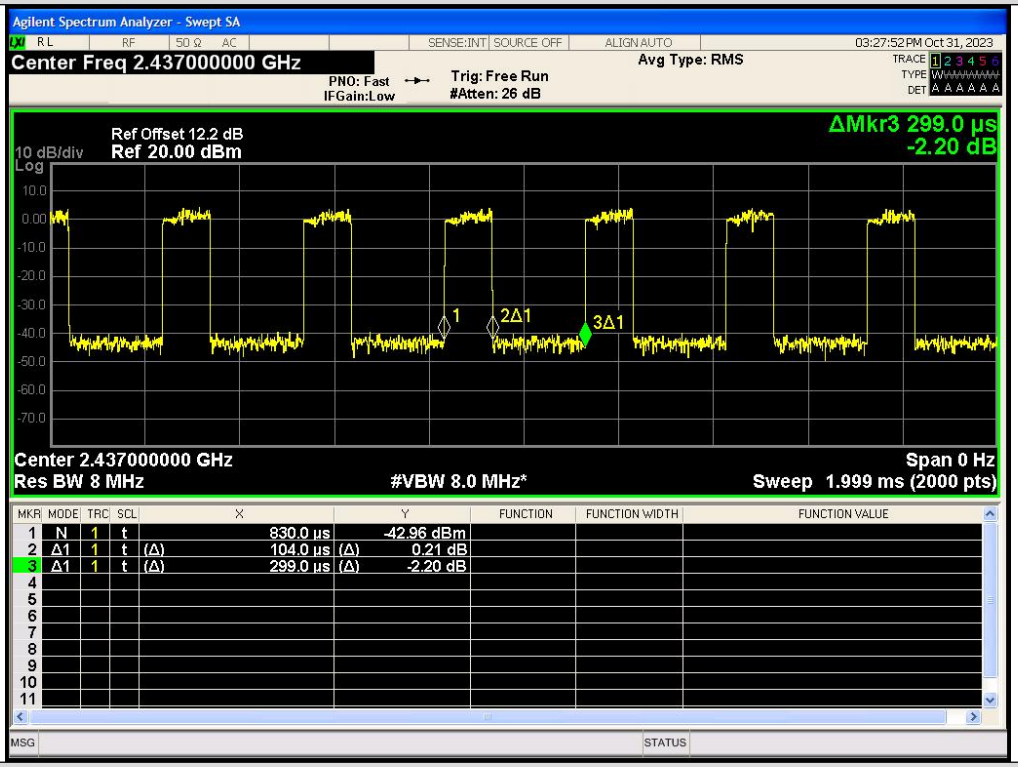

IEEE 802.11n_20MHz_Channel 6




IEEE 802.11n_20MHz_Channel 11




IEEE 802.11n_40MHz_Channel 3




IEEE 802.11n_40MHz_Channel 6