

APPENDIX I. Conducted Peak Output Power**Test Result**

Conducted peak output power

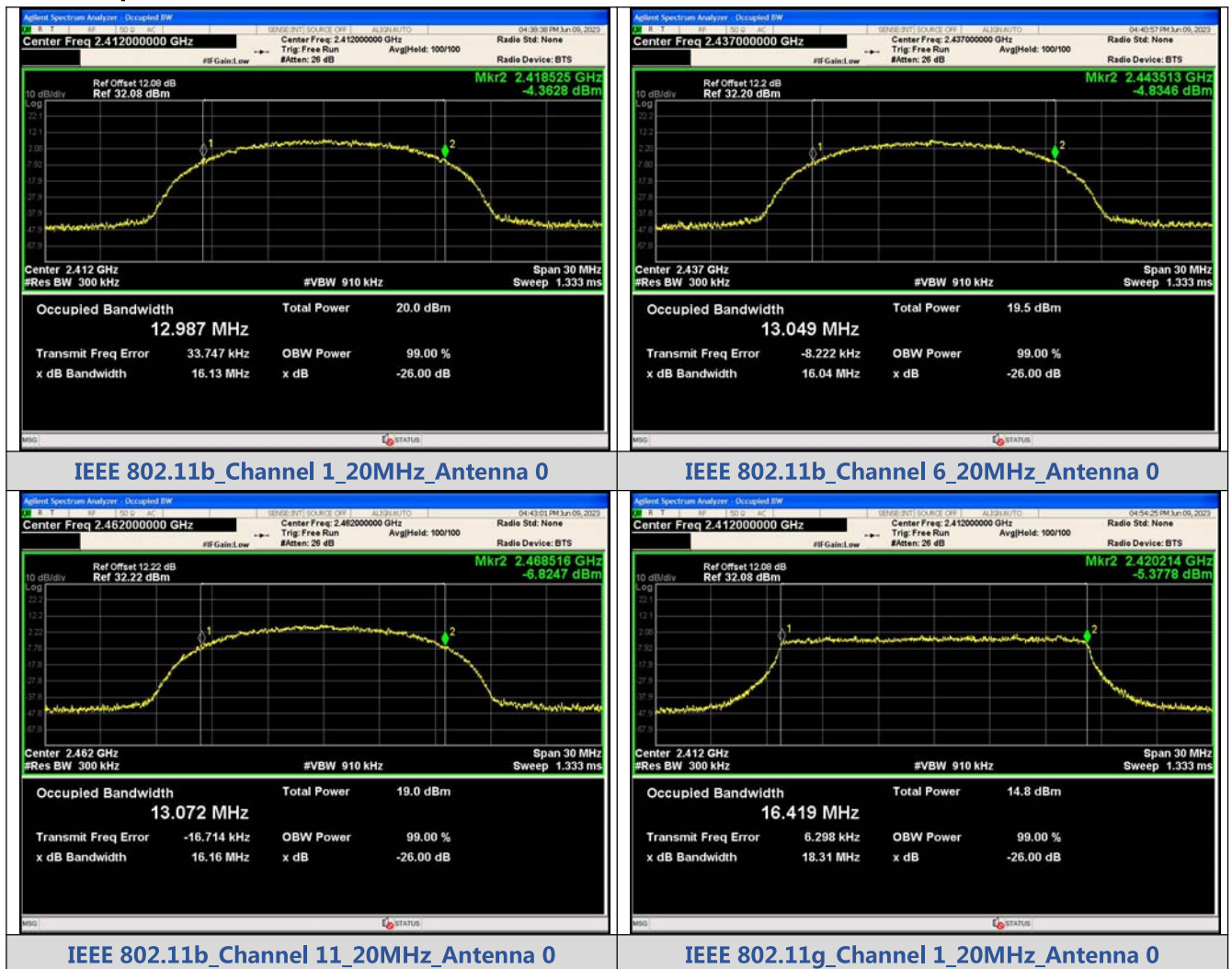
| Mode | Channel | Ant. 0 (dBm) | Ant. 1 (dBm) | Ant. 2 (dBm) | Ant. 3 (dBm) | Total (dBm) | Limit (dBm) | Result |
|--------------------|---------|--------------|--------------|--------------|--------------|-------------|-------------|--------|
| IEEE 802.11b | 1 | 19.25 | N/A | N/A | N/A | N/A | 30 | PASS |
| | 6 | 18.69 | N/A | N/A | N/A | N/A | 30 | PASS |
| | 11 | 18.10 | N/A | N/A | N/A | N/A | 30 | PASS |
| IEEE 802.11g | 1 | 16.57 | N/A | N/A | N/A | N/A | 30 | PASS |
| | 6 | 16.19 | N/A | N/A | N/A | N/A | 30 | PASS |
| | 11 | 15.93 | N/A | N/A | N/A | N/A | 30 | PASS |
| IEEE 802.11n_20 | 1 | 15.30 | N/A | N/A | N/A | N/A | 30 | PASS |
| | 6 | 14.88 | N/A | N/A | N/A | N/A | 30 | PASS |
| | 11 | 14.60 | N/A | N/A | N/A | N/A | 30 | PASS |
| IEEE 802.11n_40 | 3 | 14.36 | N/A | N/A | N/A | N/A | 30 | PASS |
| | 6 | 13.78 | N/A | N/A | N/A | N/A | 30 | PASS |
| | 9 | 13.86 | N/A | N/A | N/A | N/A | 30 | PASS |

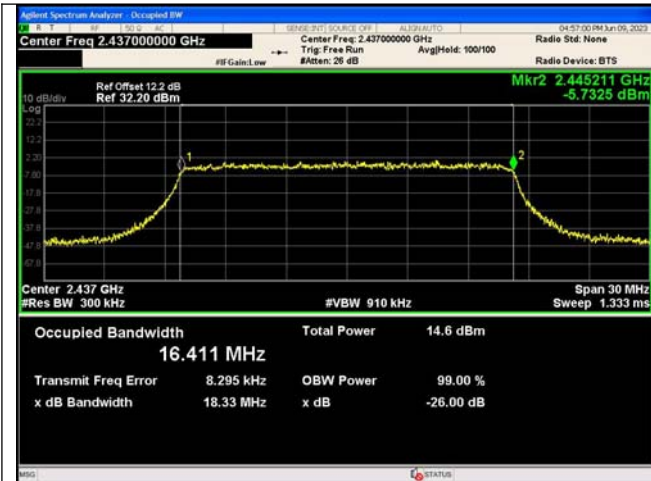
APPENDIX II.99% Bandwidth

Test Result

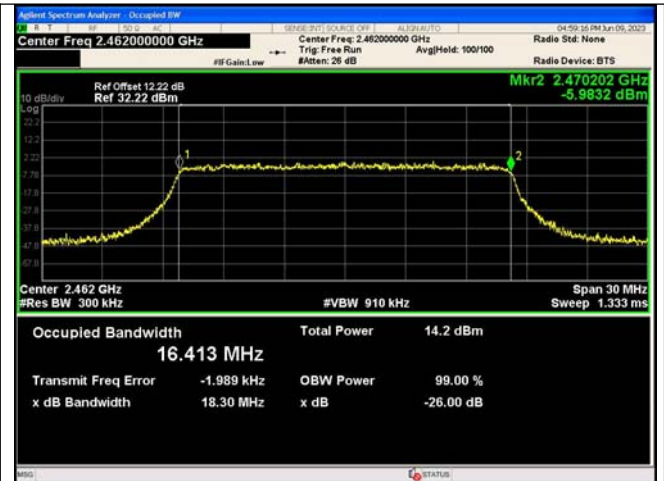
| Mode | Channel | Ant. | 99% BW (MHz) |
|-----------------|---------|------|--------------|
| IEEE 802.11b | 1 | 0 | 12.987 |
| | 6 | | 13.049 |
| | 11 | | 13.072 |
| IEEE 802.11g | 1 | | 16.419 |
| | 6 | | 16.411 |
| | 11 | | 16.413 |
| IEEE 802.11n_20 | 1 | | 17.194 |
| | 6 | | 17.191 |
| | 11 | | 17.212 |
| IEEE 802.11n_40 | 3 | | 34.106 |
| | 6 | | 34.071 |
| | 9 | | 34.117 |

Test Graphs

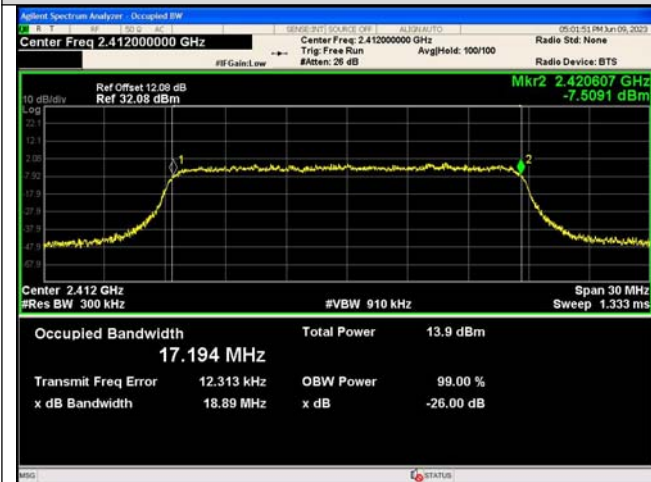




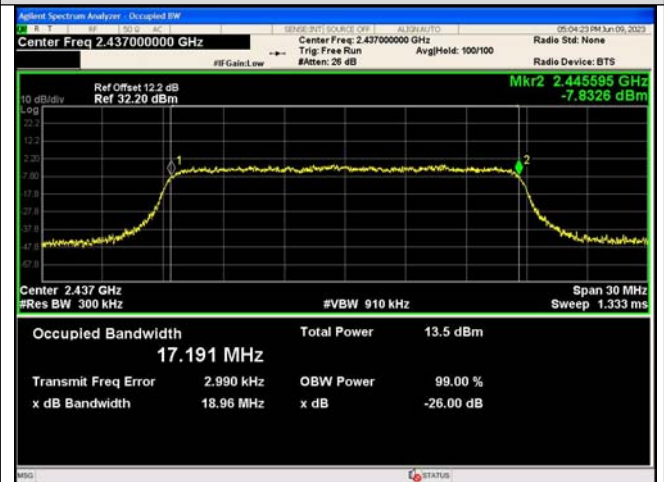
IEEE 802.11g_Channel 6_20MHz_Antenna 0



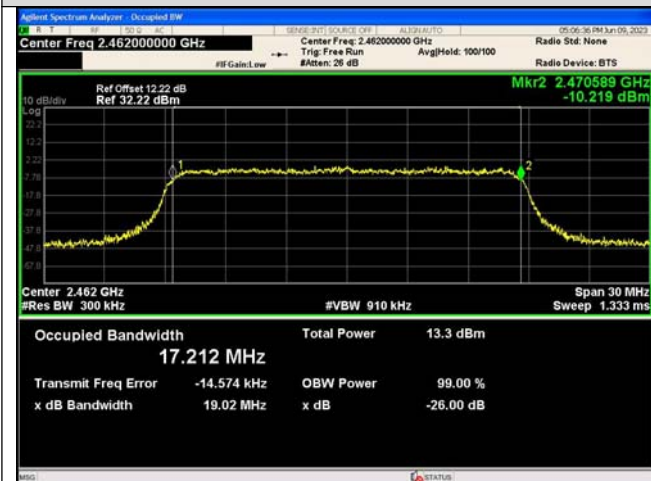
IEEE 802.11g_Channel 11_20MHz_Antenna 0



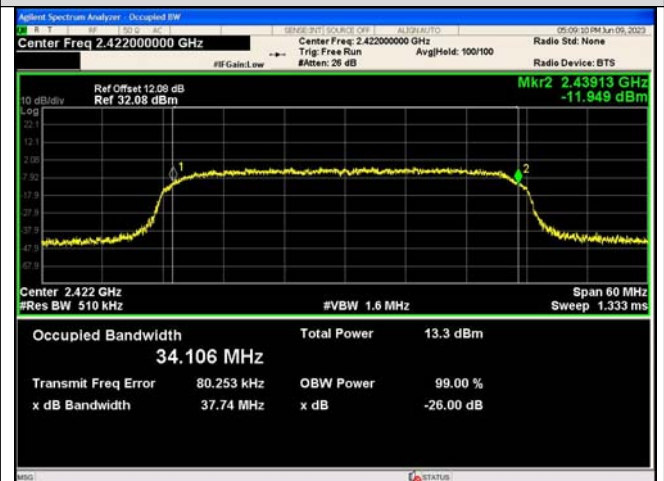
IEEE 802.11n_Channel 1_20MHz_Antenna 0



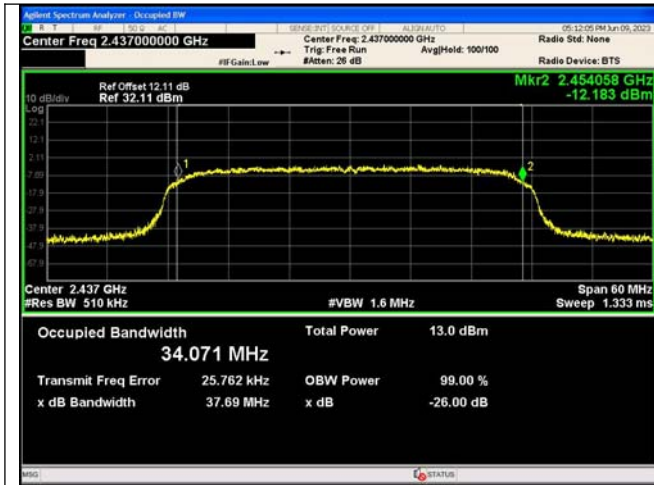
IEEE 802.11n_Channel 6_20MHz_Antenna 0



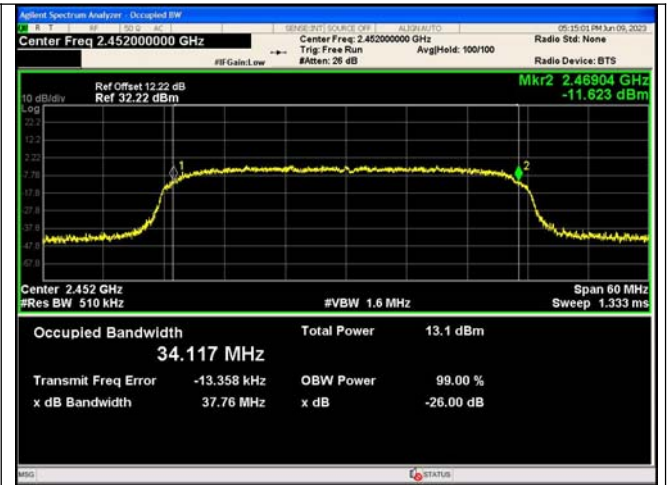
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



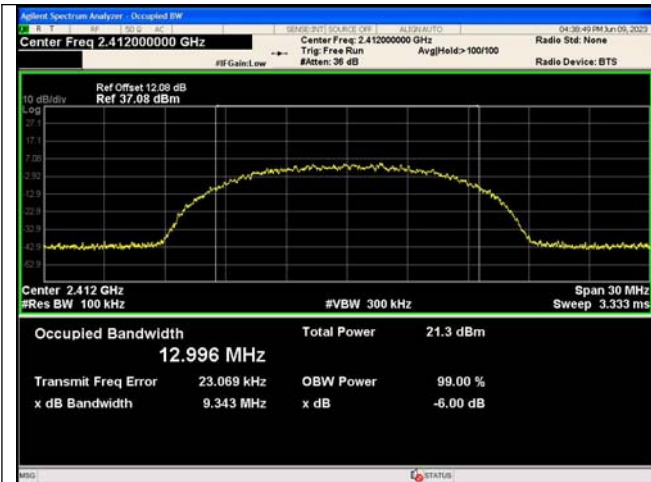
IEEE 802.11n_Channel 9_40MHz_Antenna 0

APPENDIX III.6dB Bandwidth

Test Result

| Mode | Channel | Ant. | Center Frequency (MHz) | 6 dB Bandwidth (MHz) | Limit (MHz) | Result |
|-----------------|---------|------|------------------------|----------------------|-------------|--------|
| IEEE 802.11b | 1 | 0 | 2412 | 9.343 | 0.5 | PASS |
| | 6 | | 2437 | 9.231 | | PASS |
| | 11 | | 2462 | 9.124 | | PASS |
| IEEE 802.11g | 1 | | 2412 | 16.48 | | PASS |
| | 6 | | 2437 | 16.47 | | PASS |
| | 11 | | 2462 | 16.45 | | PASS |
| IEEE 802.11n_20 | 1 | | 2412 | 16.95 | | PASS |
| | 6 | | 2437 | 16.88 | | PASS |
| | 11 | | 2462 | 16.91 | | PASS |
| IEEE 802.11n_40 | 3 | | 2422 | 30.09 | | PASS |
| | 6 | | 2437 | 27.30 | | PASS |
| | 9 | | 2452 | 29.19 | | PASS |

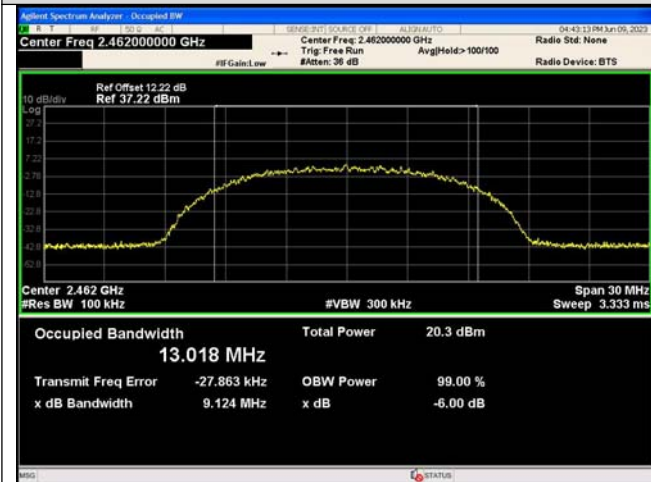
Test Graphs



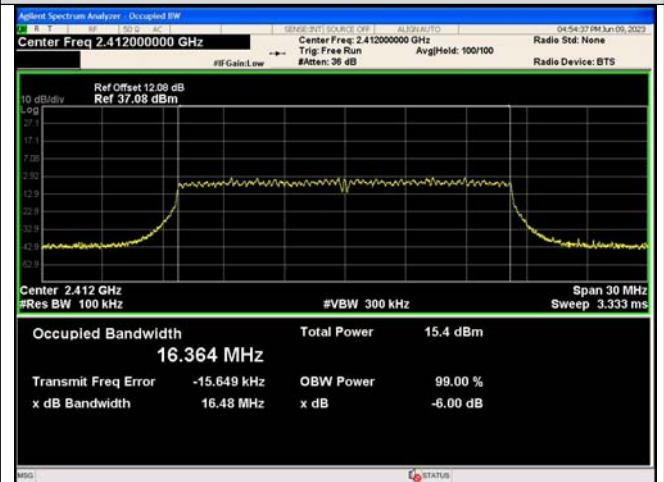
IEEE 802.11b_Channel 1_20MHz_Antenna 0



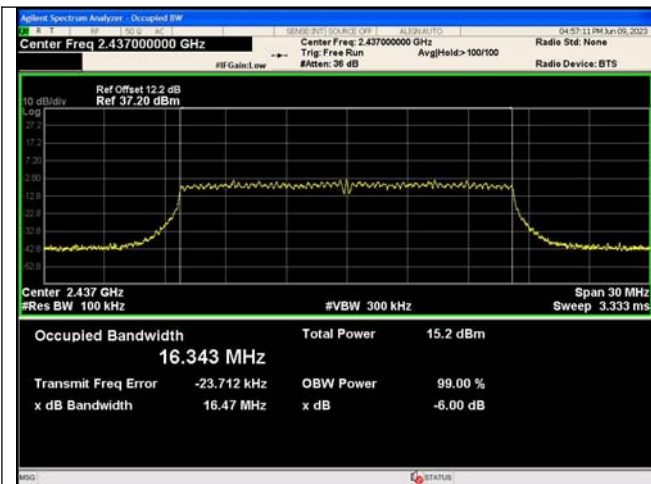
IEEE 802.11b_Channel 6_20MHz_Antenna 0



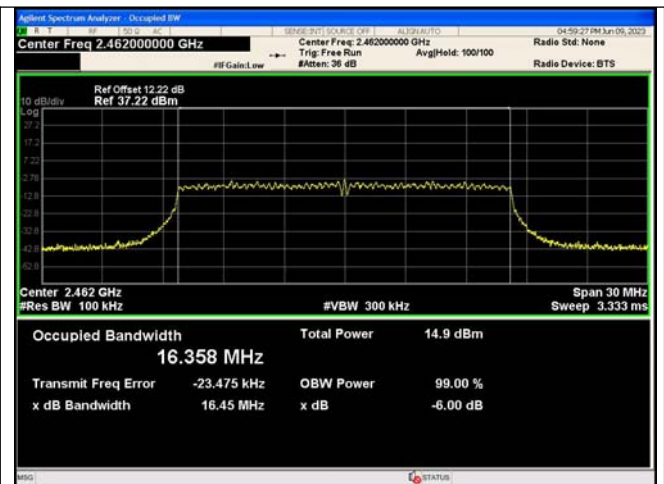
IEEE 802.11b_Channel 11_20MHz_Antenna 0



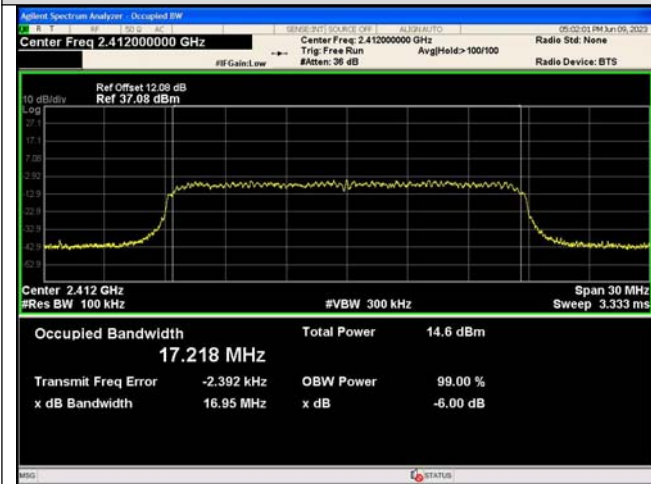
IEEE 802.11g_Channel 1_20MHz_Antenna 0



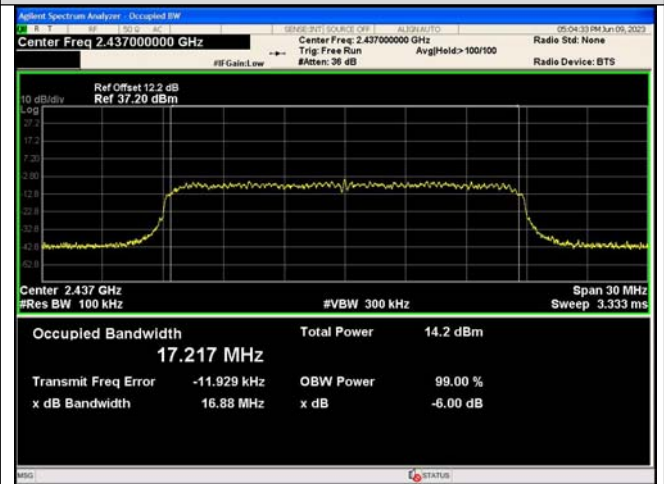
IEEE 802.11g_Channel 6_20MHz_Antenna 0



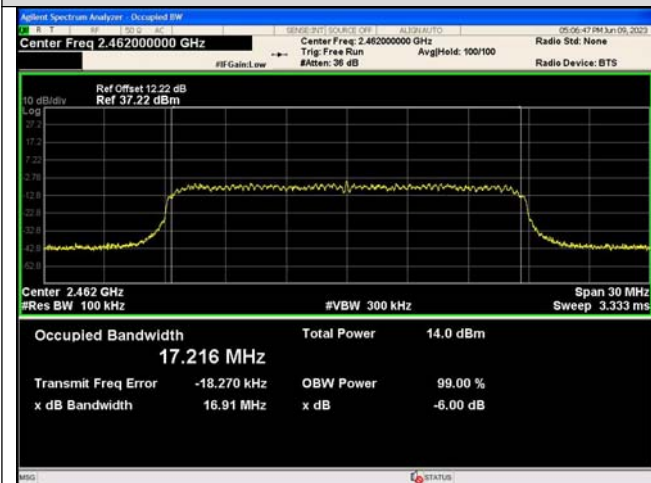
IEEE 802.11g_Channel 11_20MHz_Antenna 0



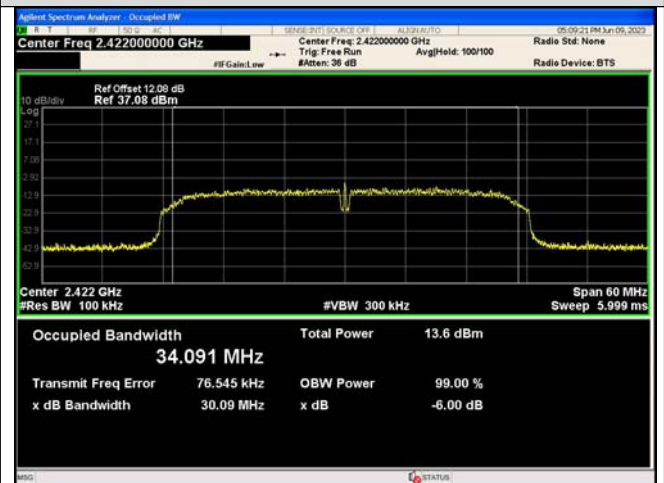
IEEE 802.11n_Channel 1_20MHz_Antenna 0



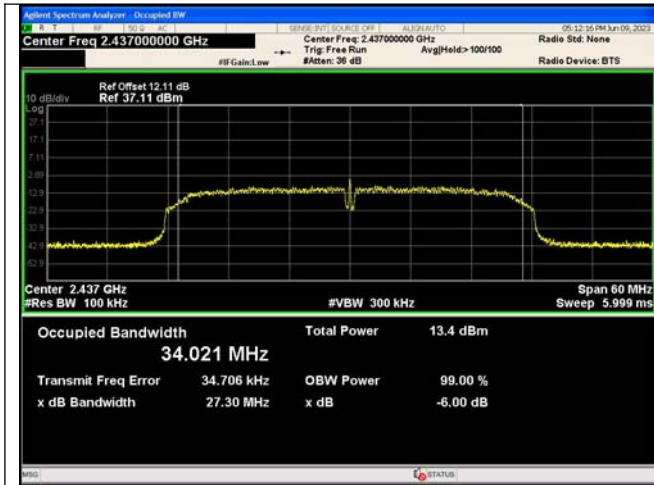
IEEE 802.11n_Channel 6_20MHz_Antenna 0



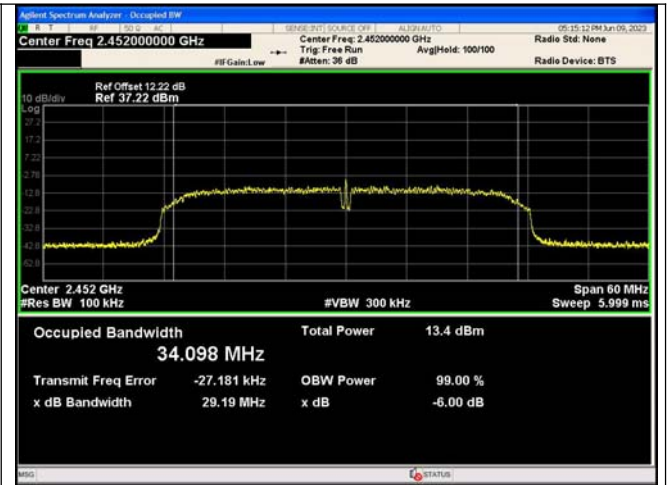
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



IEEE 802.11n_Channel 9_40MHz_Antenna 0

APPENDIX IV. Conducted Out Of Band Emission

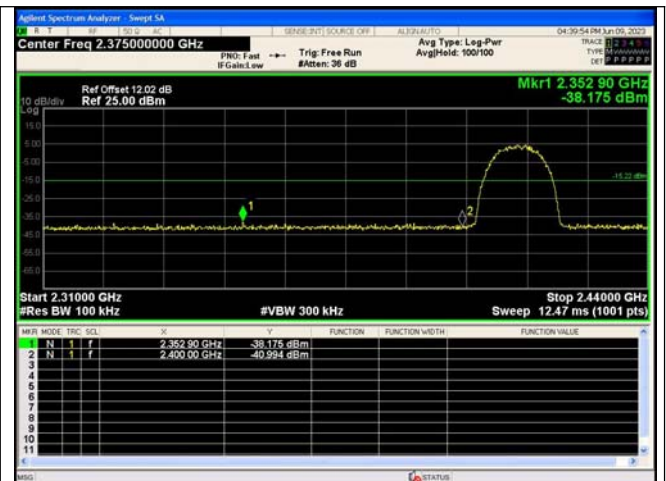
Test Result

| Mode | Channel | Ant. | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Over Limit (dB) | Result | |
|-----------------|---------|---------|------------------------------|--------------------------|-------------|-----------------|---------|------|
| IEEE 802.11b | 1 | 0 | 2400.00 | -40.994 | -15.22 | -25.774 | PASS | |
| | | | 2352.90 | -38.175 | -15.22 | -22.955 | PASS | |
| | | | 24974.4 | -38.481 | -15.22 | -23.261 | PASS | |
| | 6 | | 24939.4 | -38.508 | -15.48 | -23.028 | PASS | |
| | | | 11 | 2483.50 | -40.919 | -15.78 | -25 | PASS |
| | | | | 24946.3 | -37.579 | -15.78 | -21.799 | PASS |
| IEEE 802.11g | 1 | | | 2400.00 | -39.743 | -23.58 | -16.163 | PASS |
| | | | 2343.41 | -38.941 | -23.58 | -15.361 | PASS | |
| | | | 24970.7 | -38.244 | -23.58 | -14.664 | PASS | |
| | 6 | | 24865.2 | -38.446 | -23.68 | -14.766 | PASS | |
| | | | 11 | 2483.50 | -39.798 | -23.36 | -16 | PASS |
| | | | | 24863.3 | -38.110 | -23.36 | -14.750 | PASS |
| IEEE 802.11n_20 | 1 | | | 2400.00 | -39.249 | -24.82 | -14.429 | PASS |
| | | | 2371.10 | -39.152 | -24.82 | -14.332 | PASS | |
| | | | 3216.30 | -38.021 | -24.82 | -13.201 | PASS | |
| | 6 | | 3249.34 | -38.399 | -24.38 | -14.019 | PASS | |
| | | | 11 | 2483.50 | -40.960 | -24.54 | -16 | PASS |
| | | | | 24929.5 | -38.335 | -24.54 | -13.795 | PASS |
| IEEE 802.11n_40 | 3 | 2400.00 | | -40.265 | -25.62 | -14.645 | PASS | |
| | | 2392.29 | -38.658 | -25.62 | -13.038 | PASS | | |
| | | 24944.4 | -37.807 | -25.62 | -12.187 | PASS | | |
| | 6 | 24862.7 | -37.710 | -25.31 | -12.400 | PASS | | |
| | | 9 | 2483.50 | -40.878 | -24.91 | -16 | PASS | |
| | | | 24978.8 | -38.538 | -24.91 | -13.628 | PASS | |

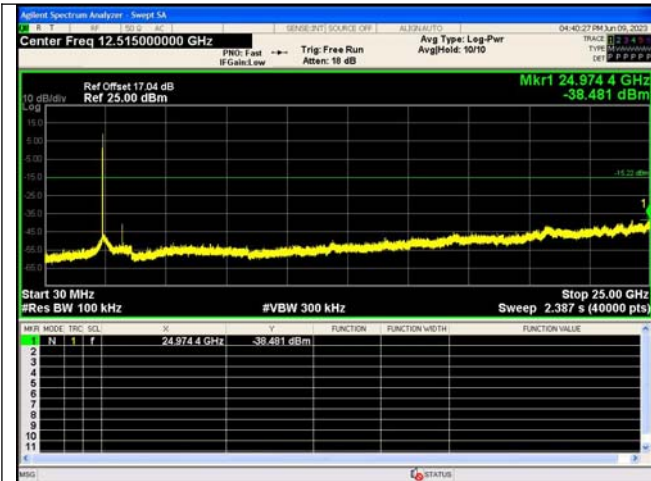
Test Graphs



In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0



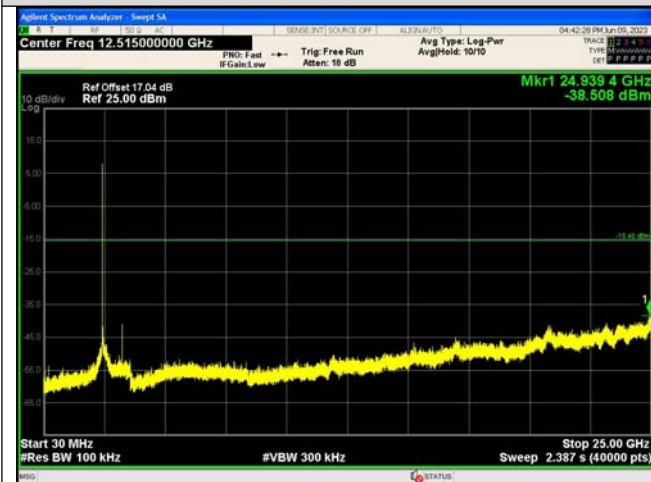
Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0



Spurious Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0



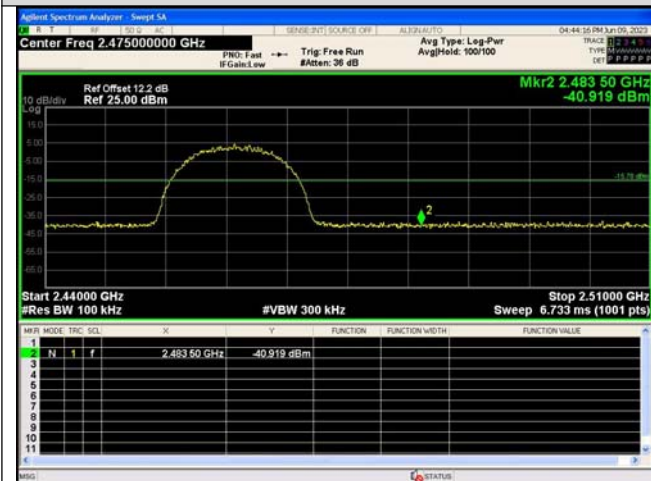
In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



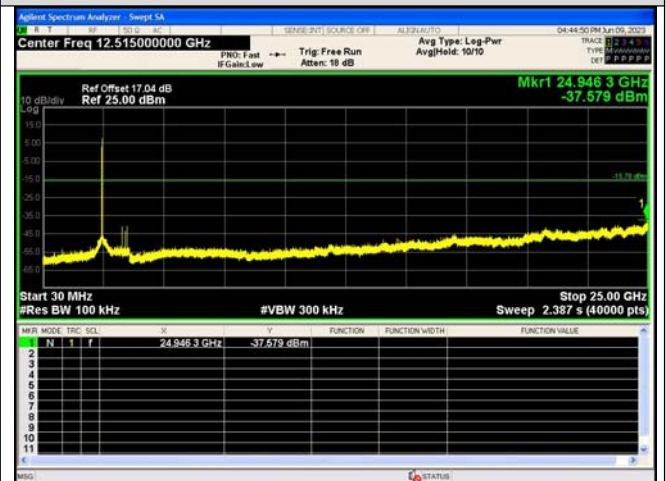
Spurious Emissions
IEEE 802.11b_Channel 6_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0



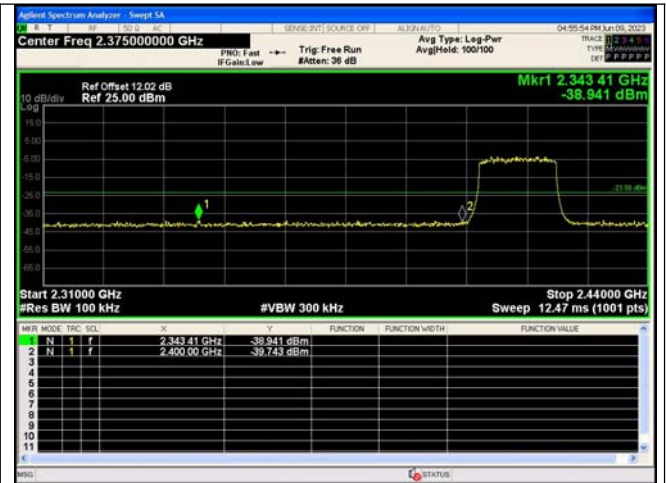
Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0



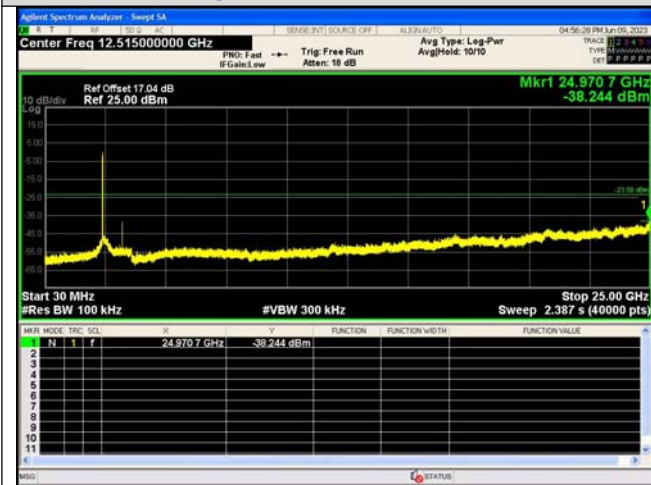
Spurious Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0



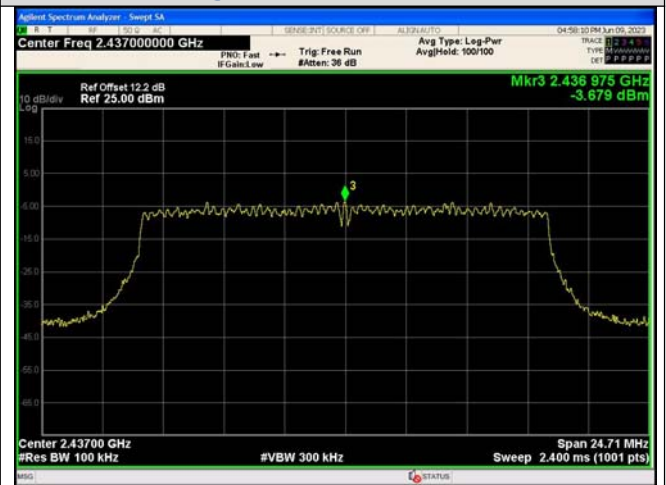
In-Band Reference Level
 IEEE 802.11g_Channel 1_20MHz_Antenna 0



Out Of Band Emission
 IEEE 802.11g_Channel 1_20MHz_Antenna 0



Spurious Emission
 IEEE 802.11g_Channel 1_20MHz_Antenna 0



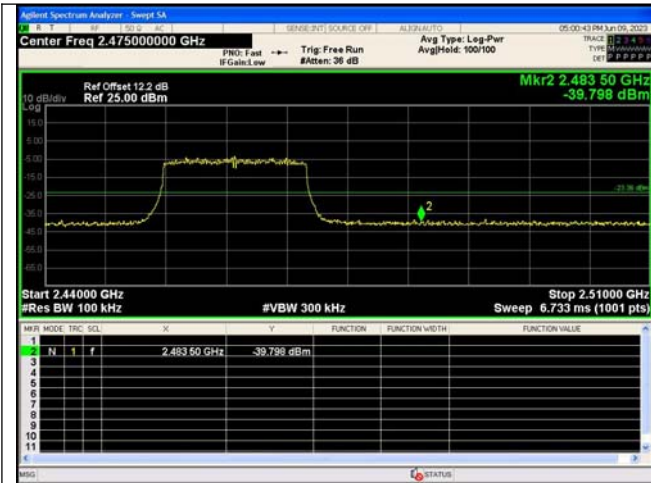
In-Band Reference Level
 IEEE 802.11g_Channel 6_20MHz_Antenna 0



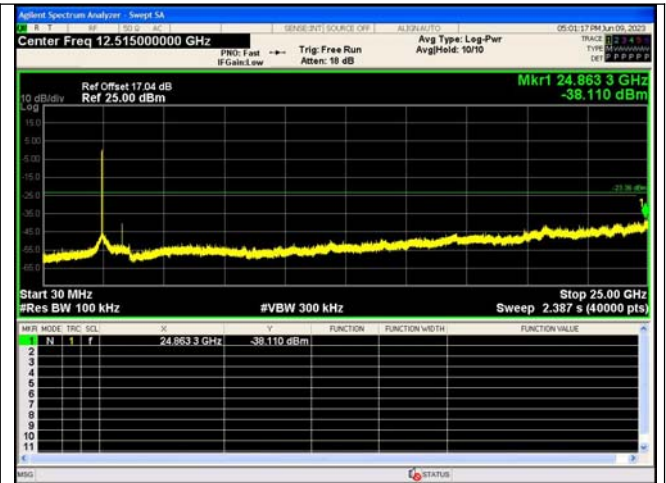
Spurious Emissions
 IEEE 802.11g_Channel 6_20MHz_Antenna 0



In-Band Reference Level
 IEEE 802.11g_Channel 11_20MHz_Antenna 0



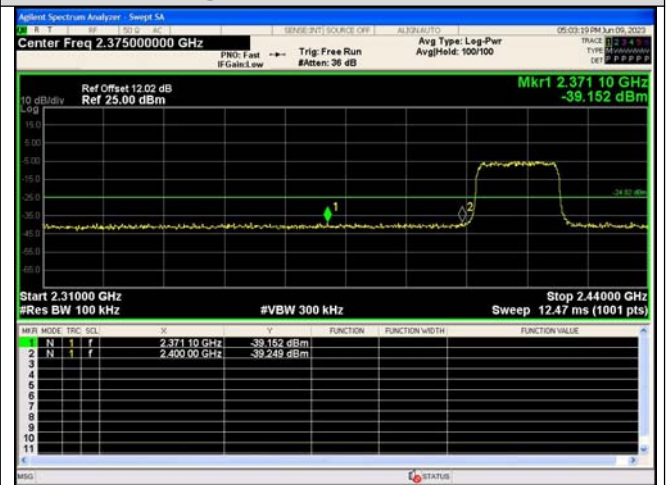
Out Of Band Emission
IEEE 802.11g_Channel 11_20MHz_Antenna 0



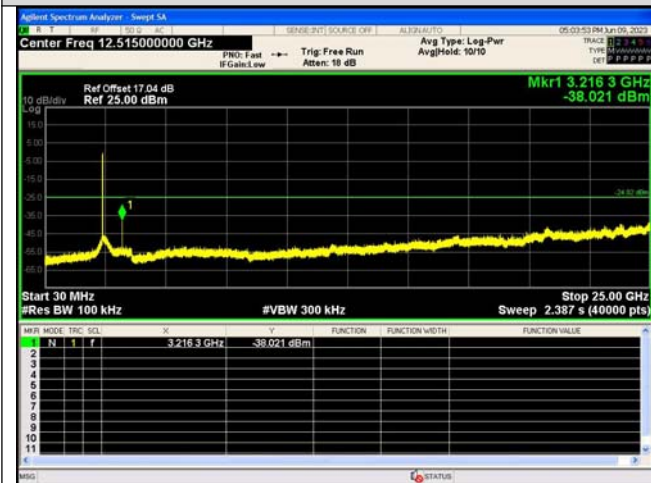
Spurious Emission
IEEE 802.11g_Channel 11_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 1_20MHz_Antenna 0



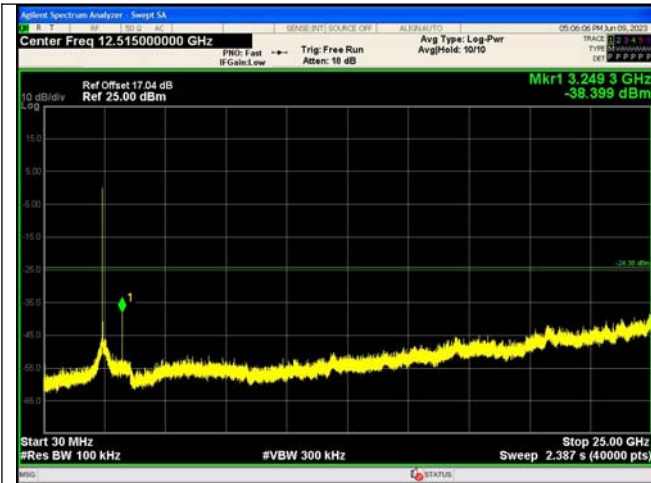
Out Of Band Emission
IEEE 802.11n_Channel 1_20MHz_Antenna 0



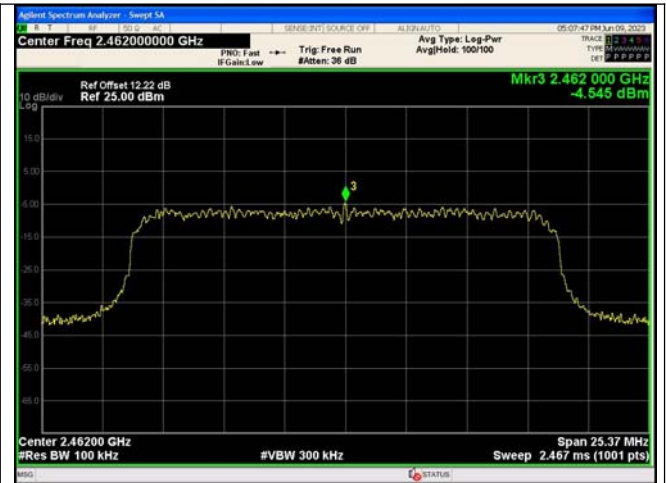
Spurious Emission
IEEE 802.11n_Channel 1_20MHz_Antenna 0



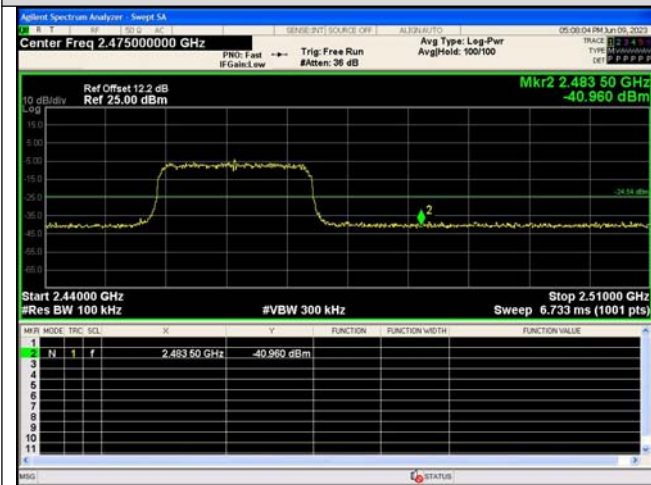
In-Band Reference Level
IEEE 802.11n_Channel 6_20MHz_Antenna 0



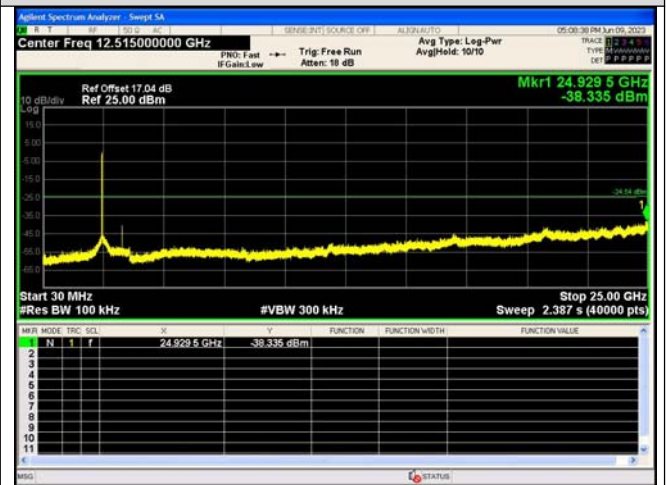
Spurious Emissions
 IEEE 802.11n_Channel 6_20MHz_Antenna 0



In-Band Reference Level
 IEEE 802.11n_Channel 11_20MHz_Antenna 0



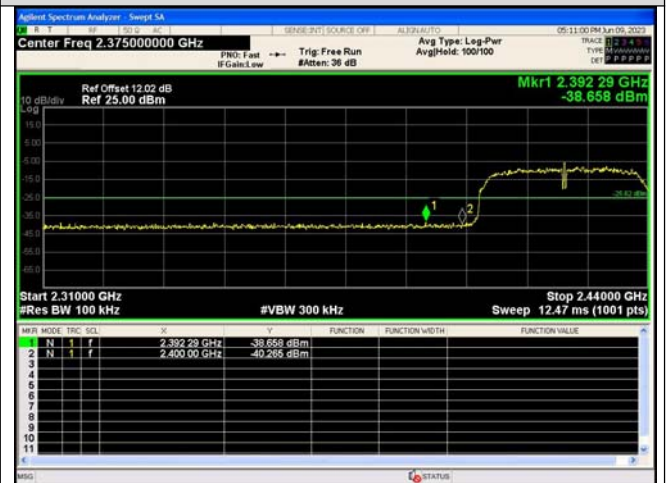
Out Of Band Emission
 IEEE 802.11n_Channel 11_20MHz_Antenna 0



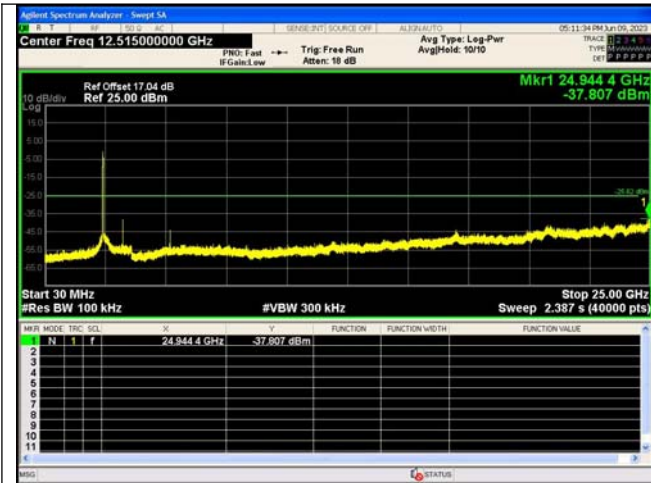
Spurious Emission
 IEEE 802.11n_Channel 11_20MHz_Antenna 0



In-Band Reference Level
 IEEE 802.11n_Channel 3_40MHz_Antenna 0



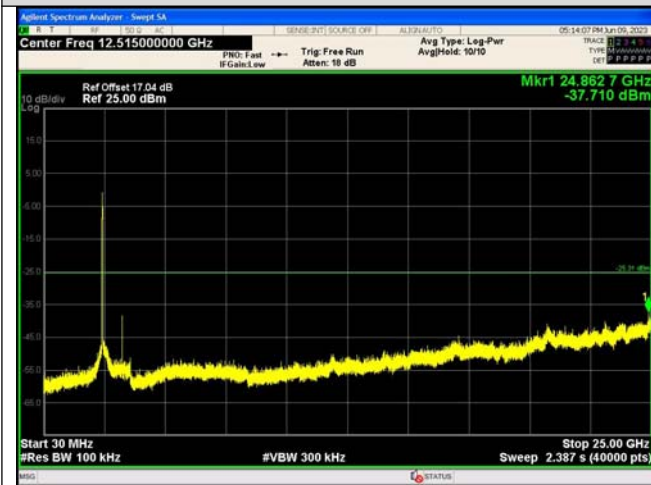
Out Of Band Emission
 IEEE 802.11n_Channel 3_40MHz_Antenna 0



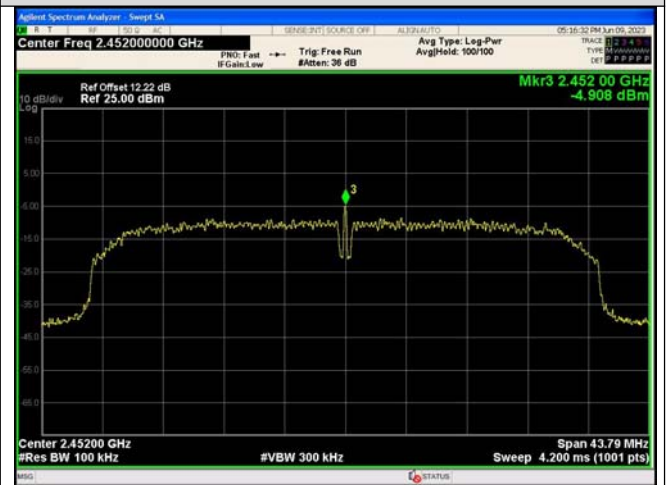
Spurious Emission
IEEE 802.11n_Channel 3_40MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 6_40MHz_Antenna 0



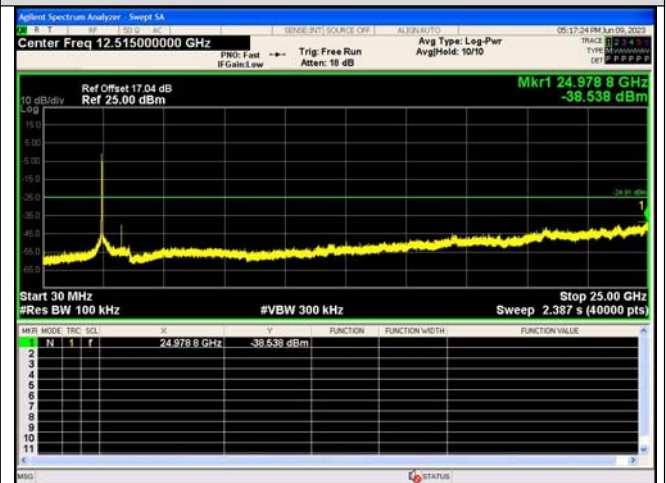
Spurious Emissions
IEEE 802.11n_Channel 6_40MHz_Antenna 0



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

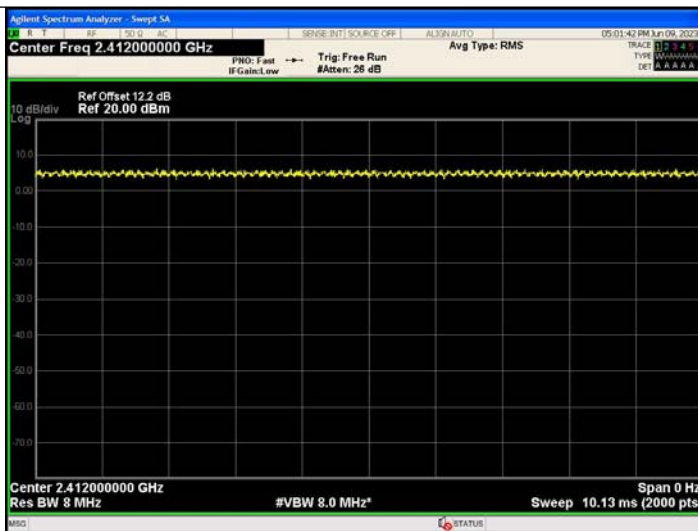
APPENDIX V.Duty Cycle

Test Result

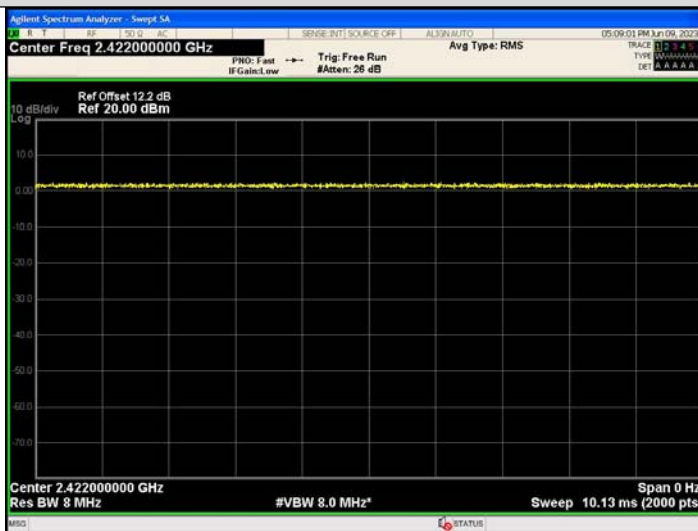
| Mode | Data rates | Channel | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) |
|-----------------|------------|---------|--------------|-------------|----------------|---------------------|------------------------|
| IEEE 802.11b | 11 | 1 | 30.120 | 30.120 | 100 | 1 | 0.0 |
| IEEE 802.11g | 54 | 1 | 10.130 | 10.130 | 100 | 1 | 0.0 |
| IEEE 802.11n_20 | MCS 7 | 1 | 10.130 | 10.130 | 100 | 1 | 0.0 |
| IEEE 802.11n_40 | | 3 | 10.130 | 10.130 | 100 | 1 | 0.0 |

Test Graphs





IEEE 802.11n_20MHz_Channel 1



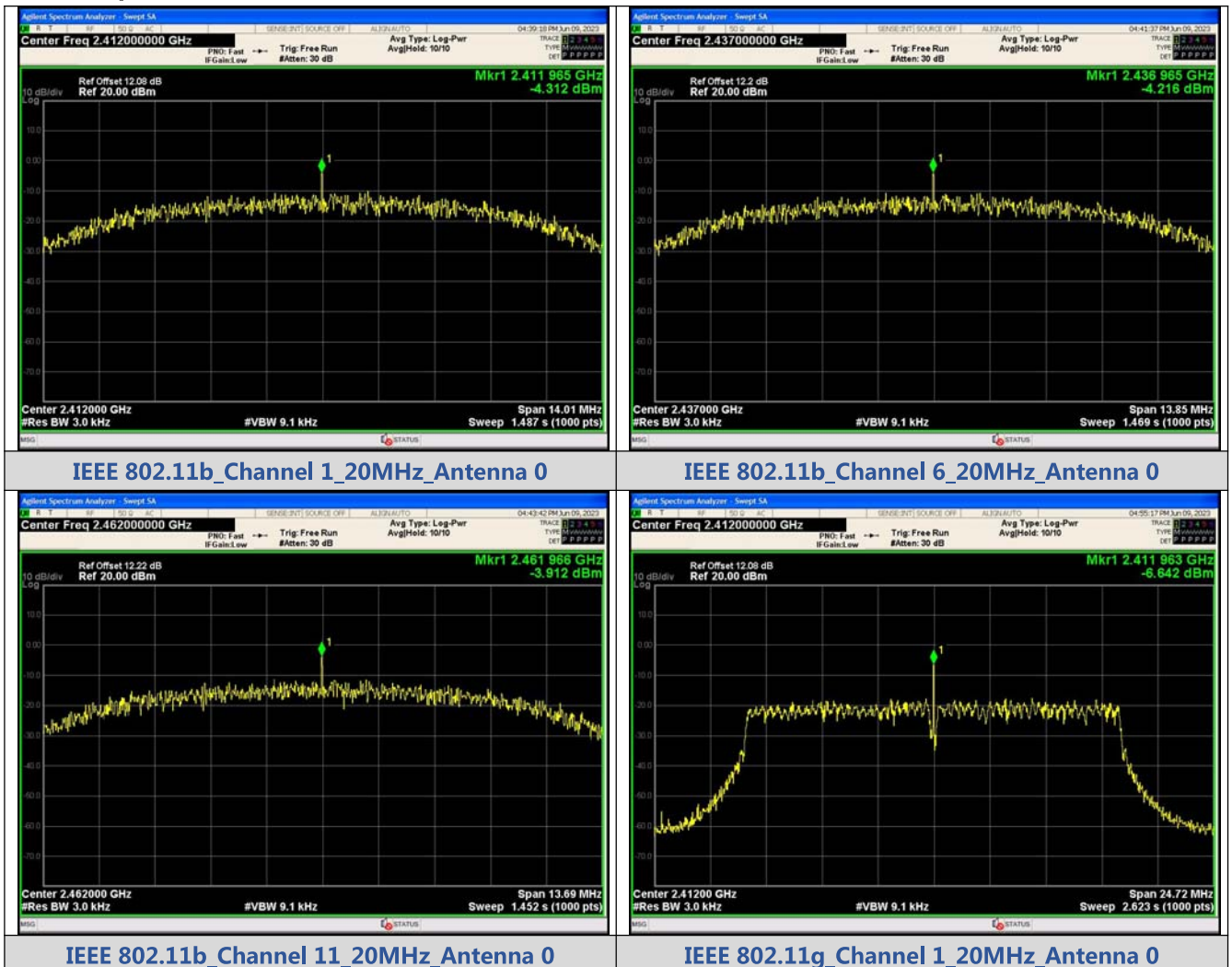
IEEE 802.11n_40MHz_Channel 3

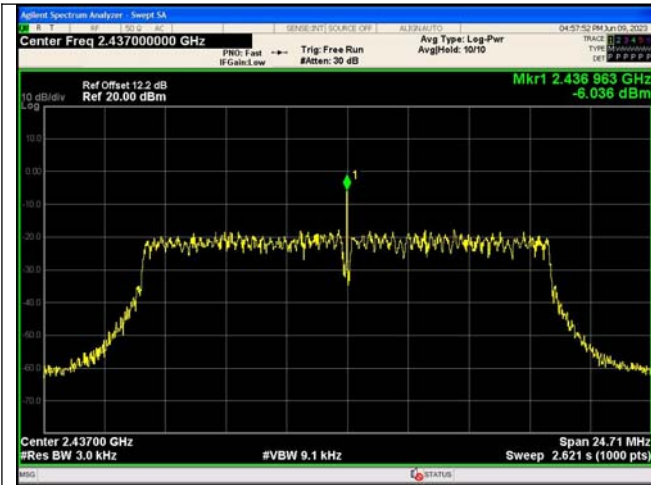
APPENDIX VI. Power Spectral Density

Test Result

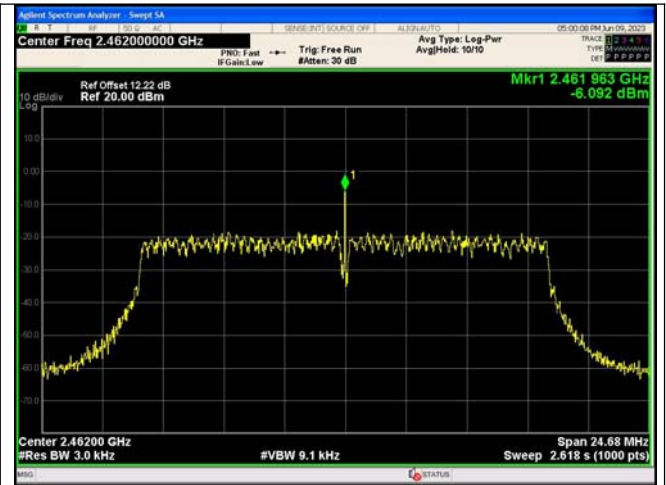
| Mode | Channel | PSD (dBm/3kHz) Ant. 0 | Limit (dBm/3kHz) | Result |
|-----------------|---------|--------------------------|------------------|--------|
| IEEE 802.11b | 1 | -4.312 | 8 | PASS |
| | 6 | -4.216 | | PASS |
| | 11 | -3.912 | | PASS |
| IEEE 802.11g | 1 | -6.642 | | PASS |
| | 6 | -6.036 | | PASS |
| | 11 | -6.092 | | PASS |
| IEEE 802.11n_20 | 1 | -6.552 | | PASS |
| | 6 | -5.913 | | PASS |
| | 11 | -6.095 | | PASS |
| IEEE 802.11n_40 | 3 | -6.671 | | PASS |
| | 6 | -6.378 | | PASS |
| | 9 | -6.322 | | PASS |

Test Graphs





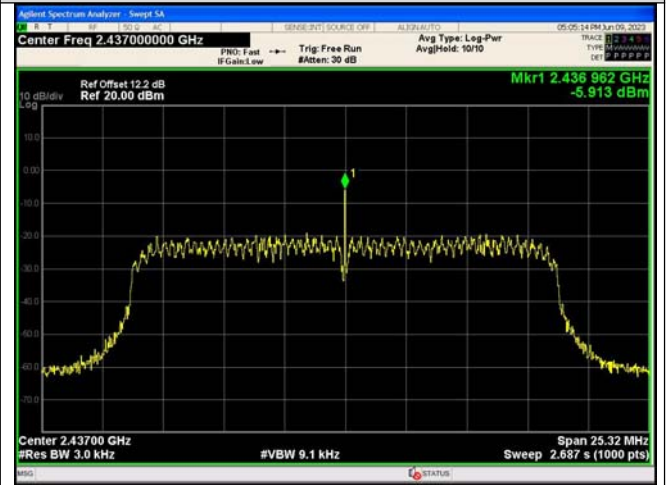
IEEE 802.11g_Channel 6_20MHz_Antenna 0



IEEE 802.11g_Channel 11_20MHz_Antenna 0



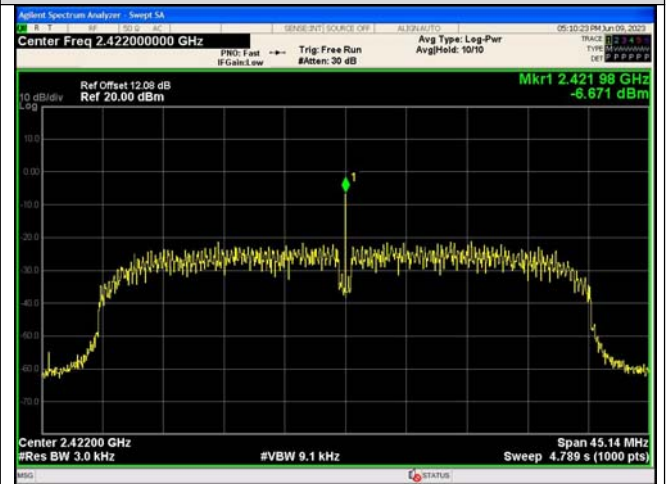
IEEE 802.11n_Channel 1_20MHz_Antenna 0



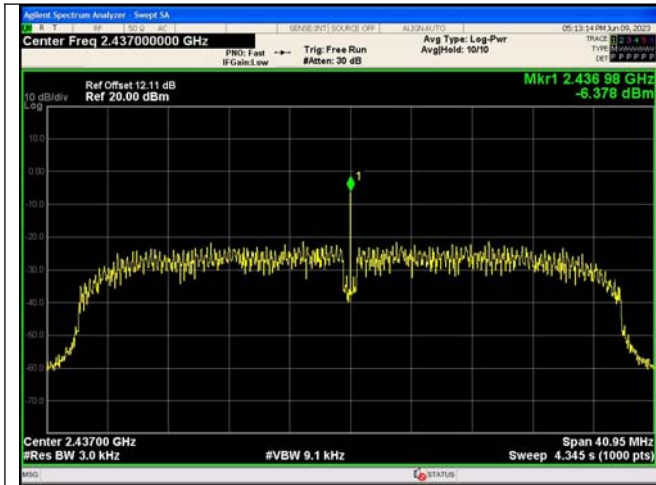
IEEE 802.11n_Channel 6_20MHz_Antenna 0



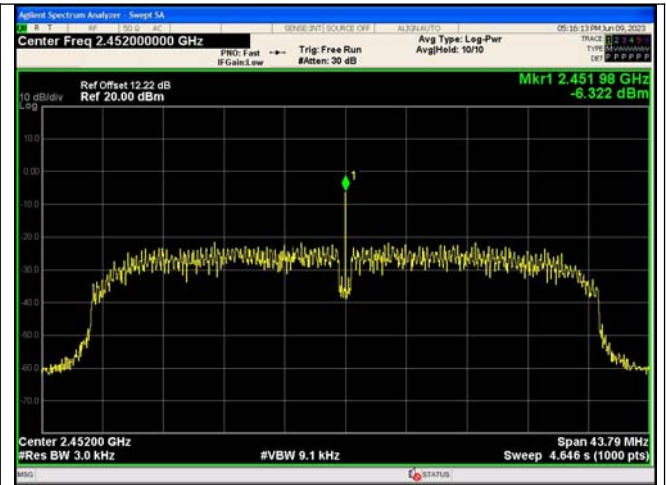
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



IEEE 802.11n_Channel 9_40MHz_Antenna 0

***** End of Report *****