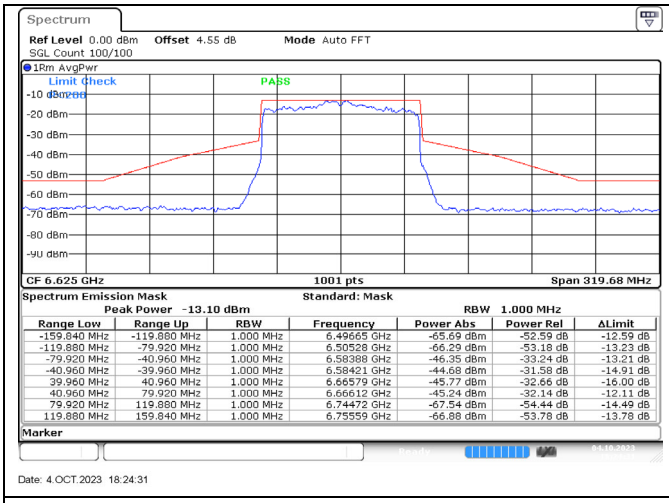
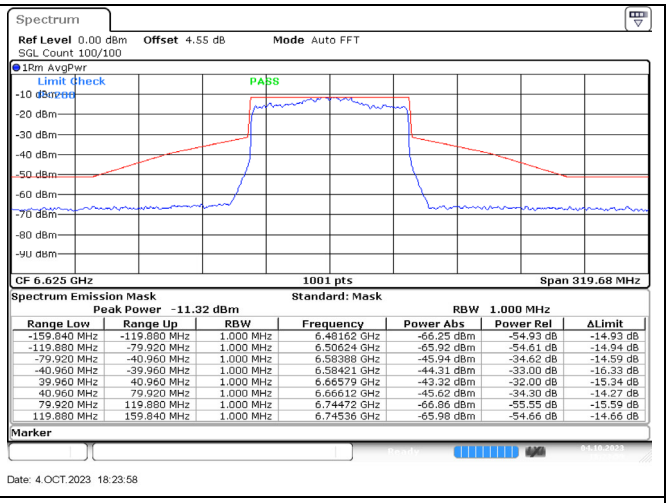
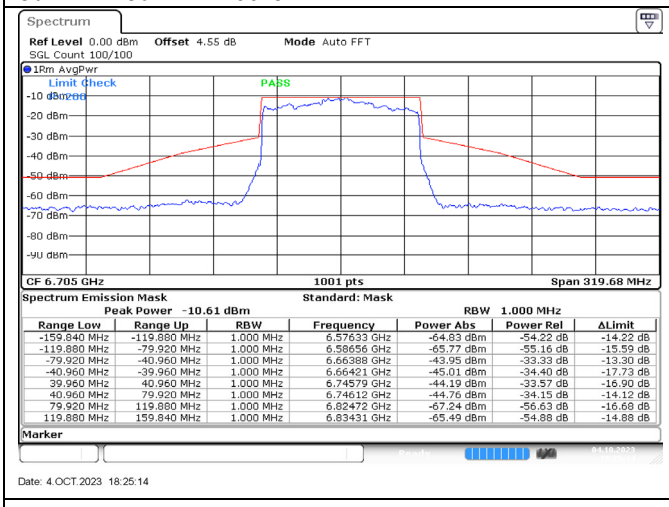


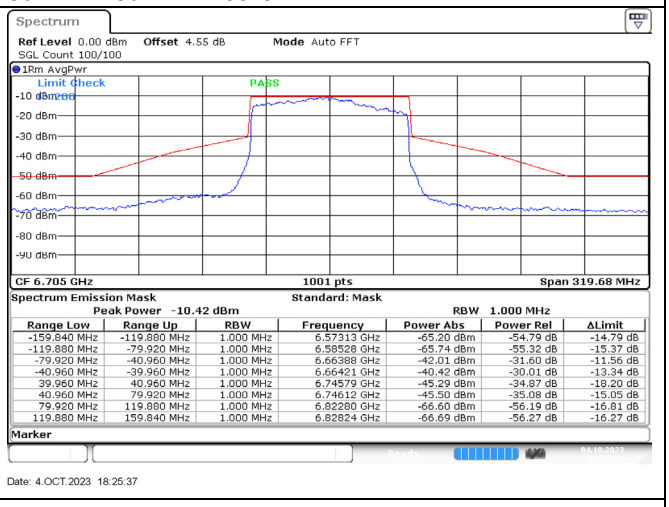

802.11ax-80 MHz / 6625 MHz / Chain A



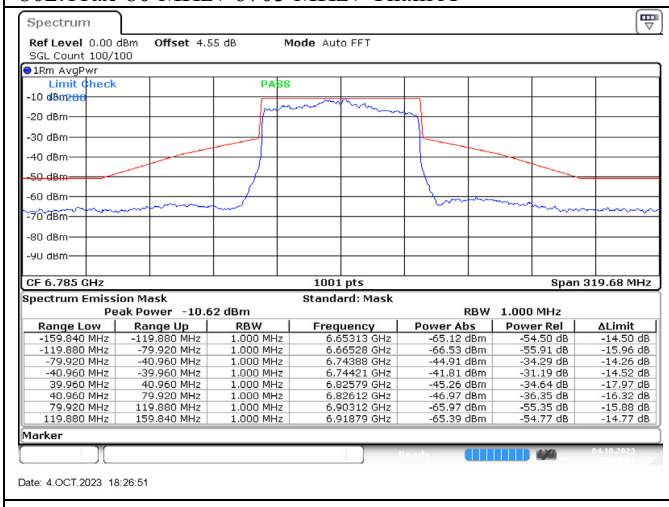

802.11ax-80 MHz / 6625 MHz / Chain B



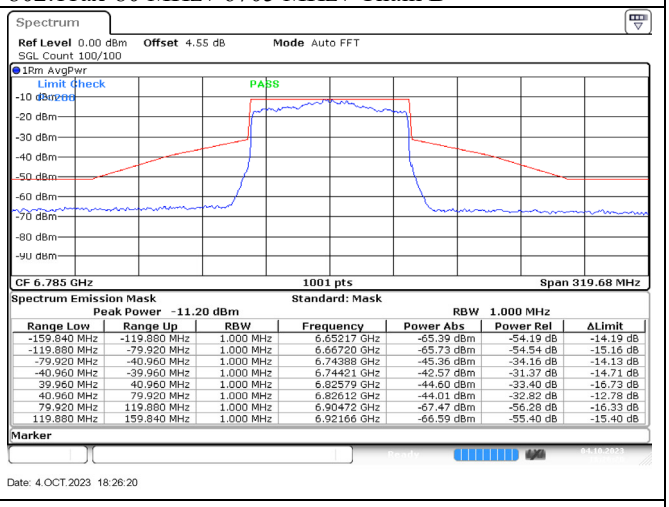

802.11ax-80 MHz / 6705 MHz / Chain A



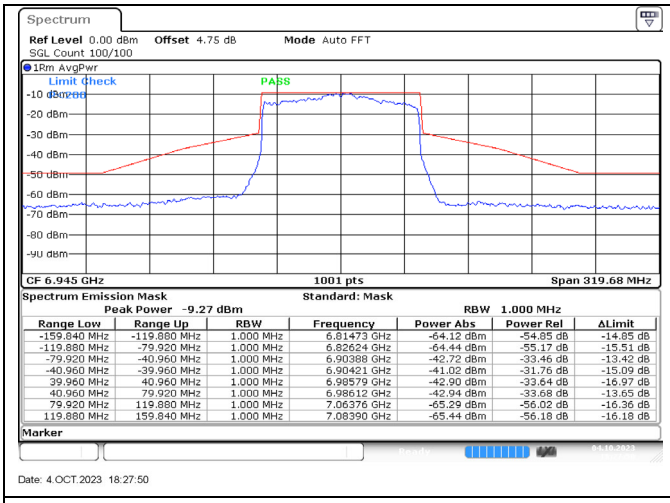

802.11ax-80 MHz / 6705 MHz / Chain B



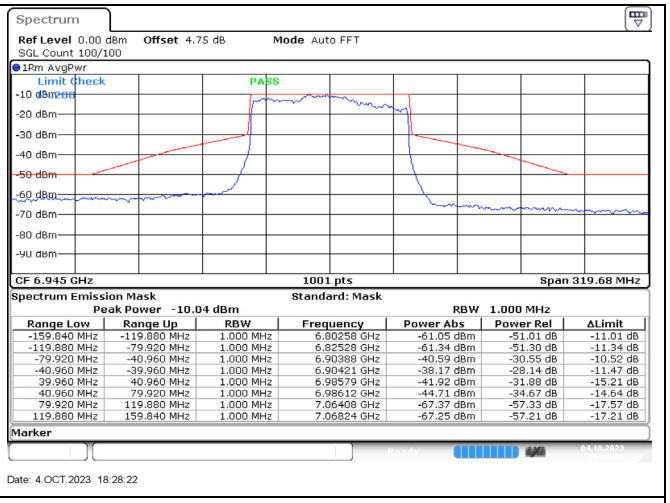

802.11ax-80 MHz / 6785 MHz / Chain A



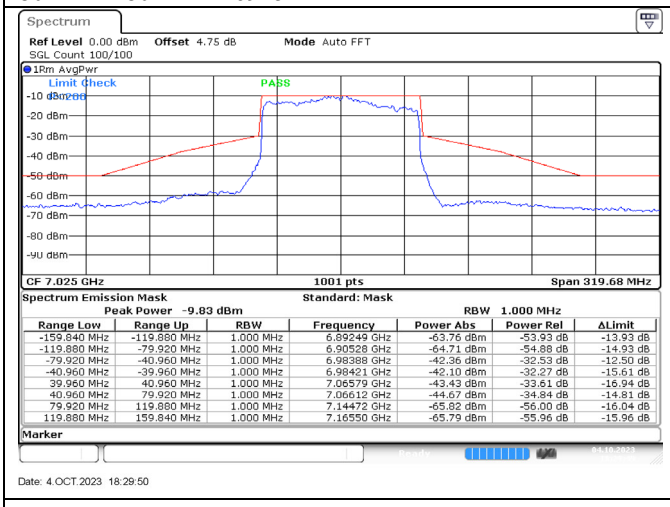

802.11ax-80 MHz / 6785 MHz / Chain B



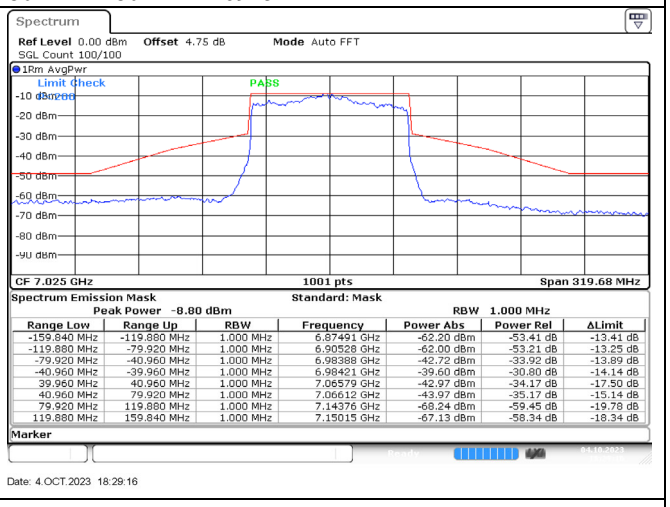

802.11ax-80 MHz / 6945 MHz / Chain A



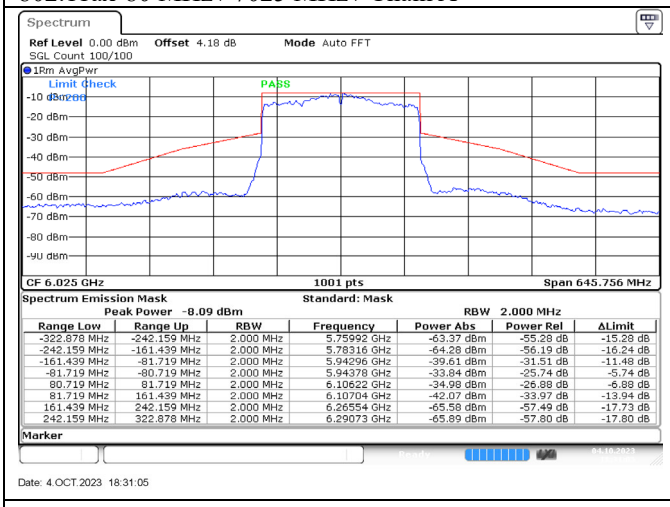

802.11ax-80 MHz / 6945 MHz / Chain B



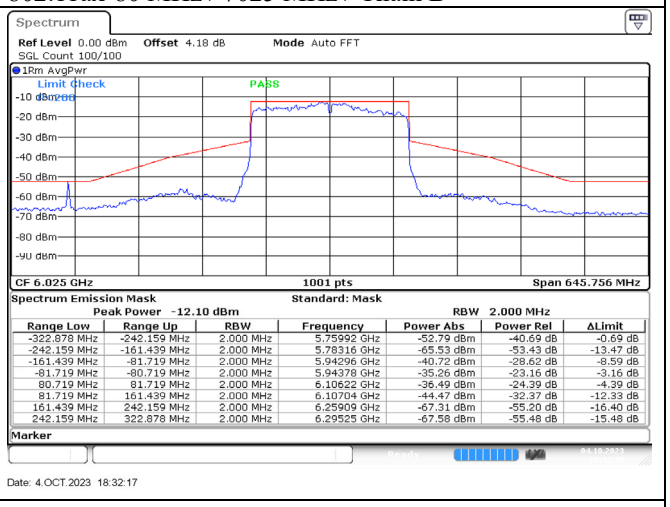

802.11ax-80 MHz / 7025 MHz / Chain A



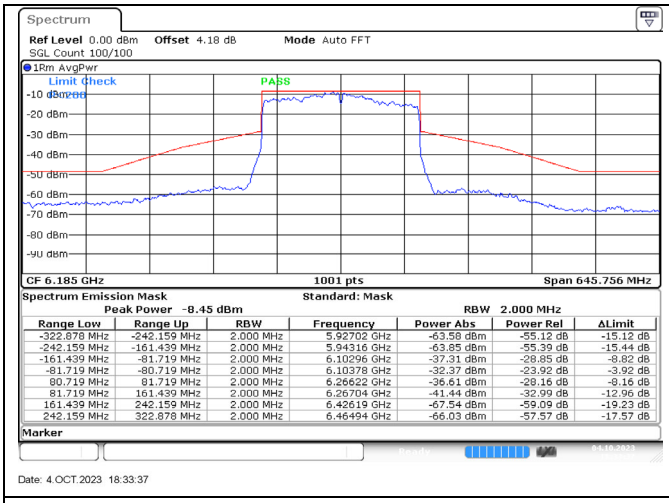

802.11ax-80 MHz / 7025 MHz / Chain B



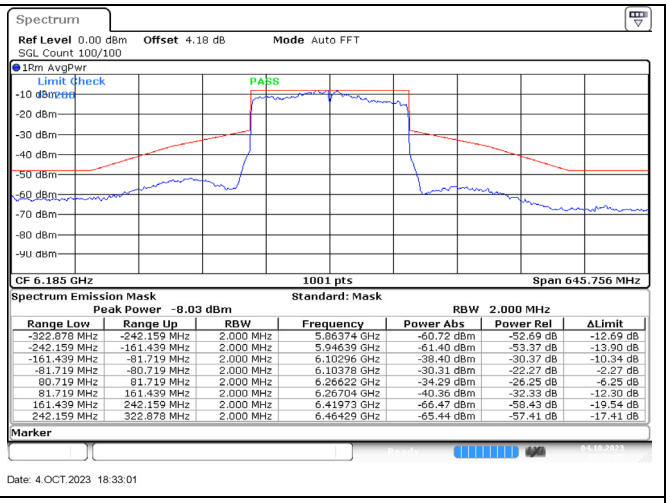

802.11ax-160 MHz / 6025 MHz / Chain A



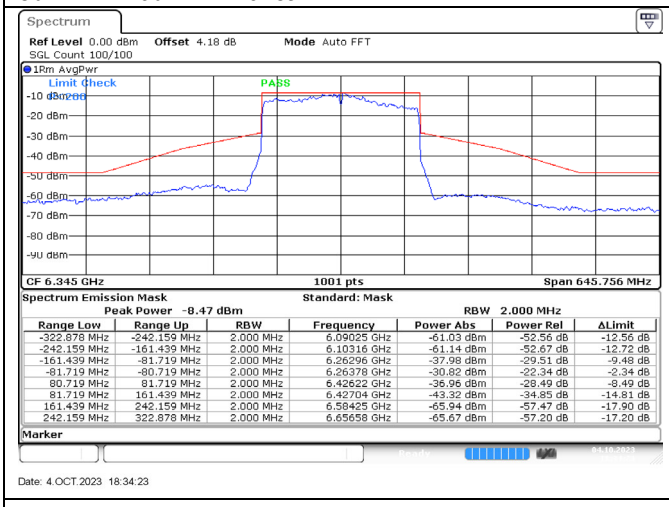

802.11ax-160 MHz / 6025 MHz / Chain B



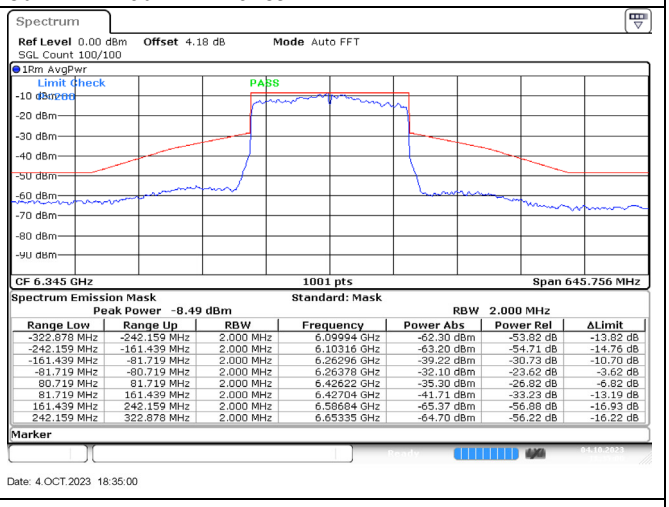

802.11ax-160 MHz / 6185 MHz / Chain A



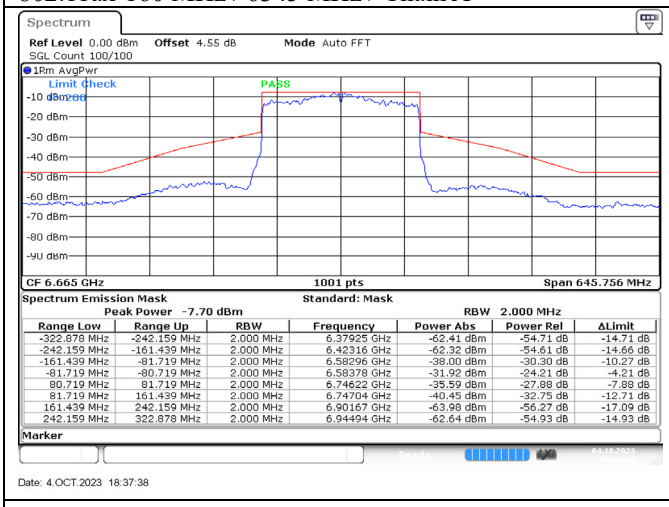

802.11ax-160 MHz / 6185 MHz / Chain B



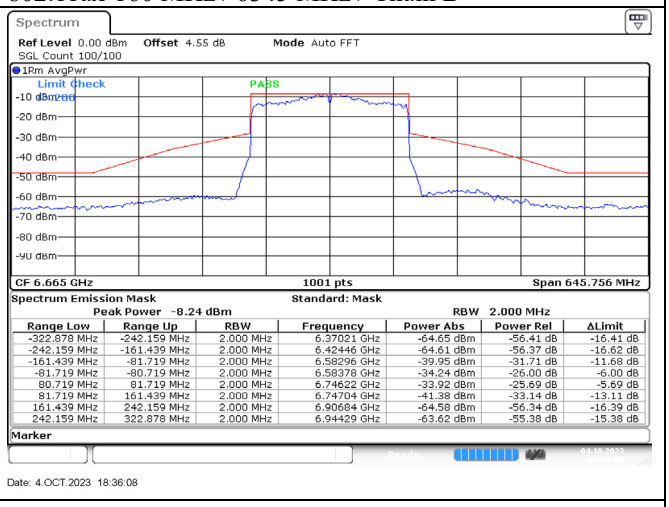

802.11ax-160 MHz / 6345 MHz / Chain A



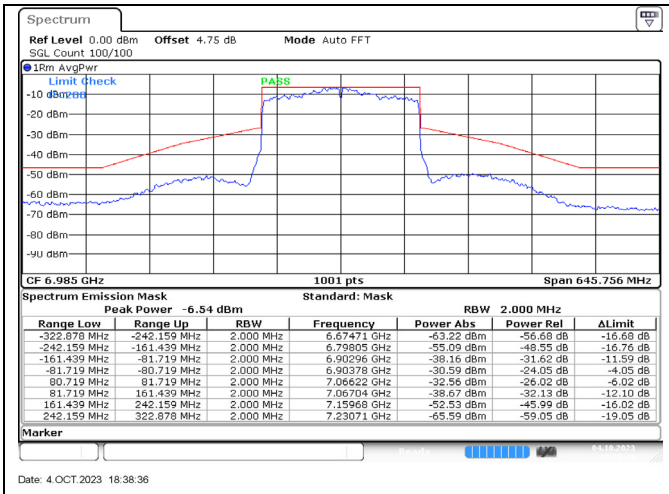

802.11ax-160 MHz / 6345 MHz / Chain B



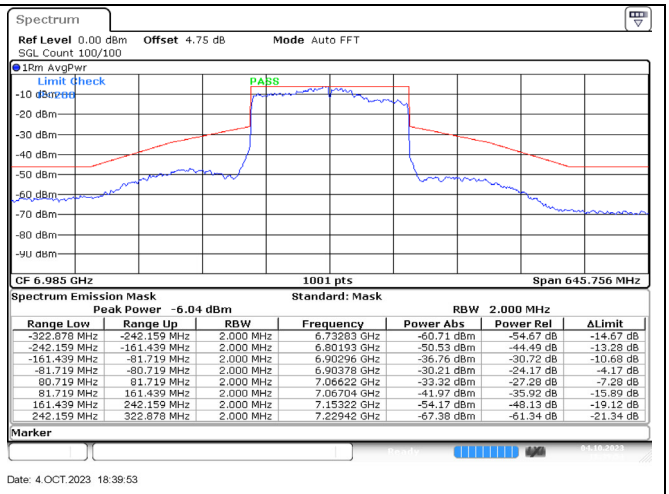

802.11ax-160 MHz / 6665 MHz / Chain A




802.11ax-160 MHz / 6665 MHz / Chain B



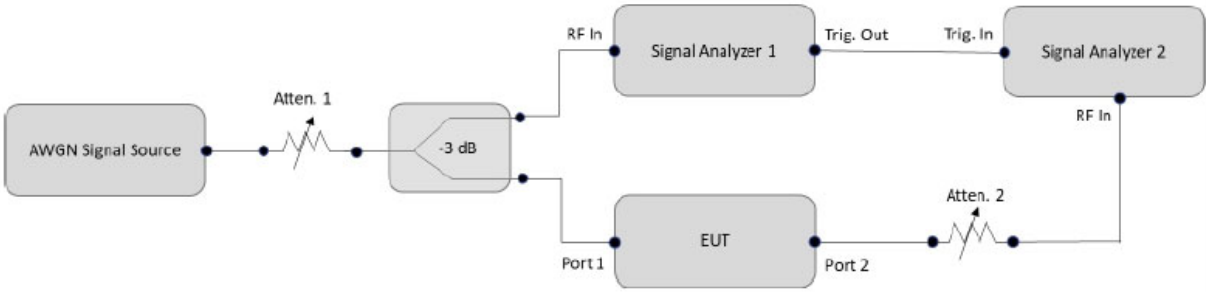

802.11ax-160 MHz / 6985 MHz / Chain A




802.11ax-160 MHz / 6985 MHz / Chain B

# 9. Contention Based Protocol

## 9.1. Test Setup




## 9.2. Limits

Unlicensed indoor low-power devices must detect co-channe radio frequency power that is at least -62 dBm (The threshold is referenced to a 0dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channek energy with 90% or greater certainty.

9.3. Test Procedure

1. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
2. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).
3. Determine number of times detection threshold test as following table

| Test Items | Number of Tests | Placement of Incumbent Transmission |
|---|---|---|
| $BW_{EUT} \leqq BW_{Inc}$ | Once | Same as EUT transmission |
| $BW_{Inc} < BW_{EUT} \leqq 2xBW_{Inc}$ | Once | Contained within BWEUT |
| $2xBW_{Inc} < BW_{EUT} \leqq 4xBW_{Inc}$ | Twice.<br>(Incumbent transmission is contained within BWEUT) | Closely to the lower edge and upper edge of the EUT Channel |
| $BW_{EUT} > 4xBW_{Inc}$ | Three times | Closely to the lower edge ,in the middle and upper edge of the EUT Channel |

4. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
5. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a -3 dB splitter, to the signal analyzer 1 and the EUT.
6. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
7. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
8. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
9. Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

## 9.4. Test Result of Contention Based Protocol

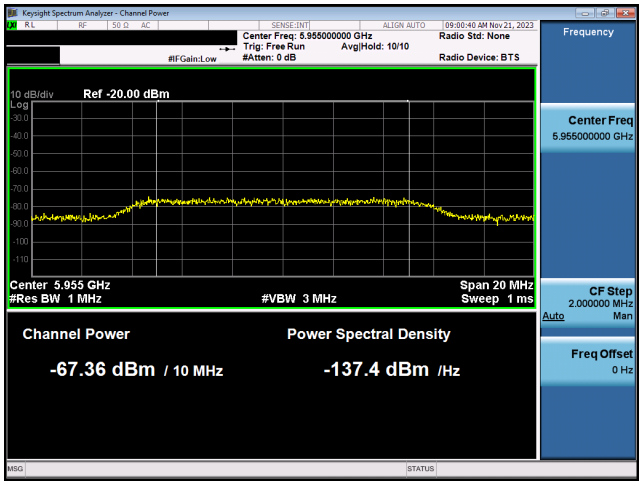
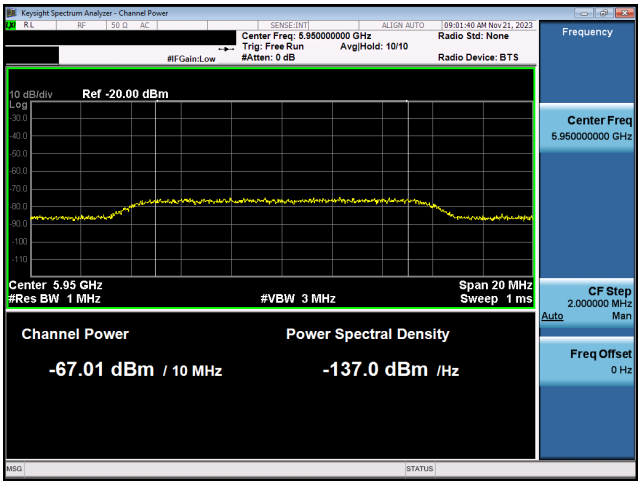
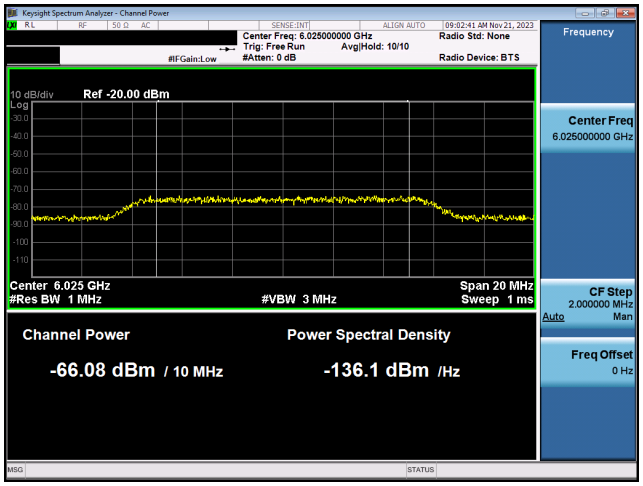
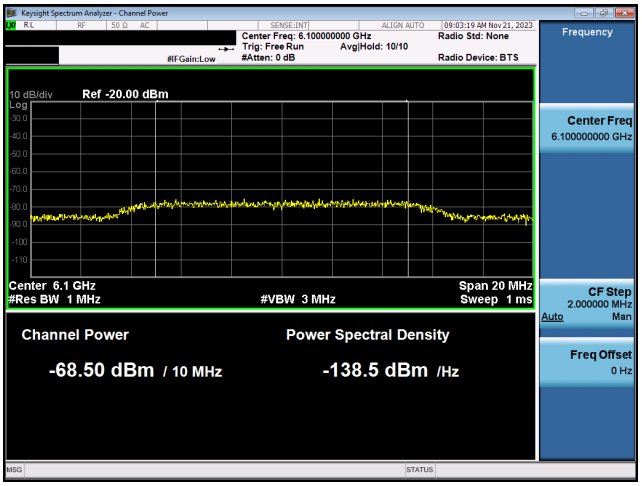
Product : Set Back Box with Wi-Fi6E, BT & PoE
Test Item : Contention Based Protocol

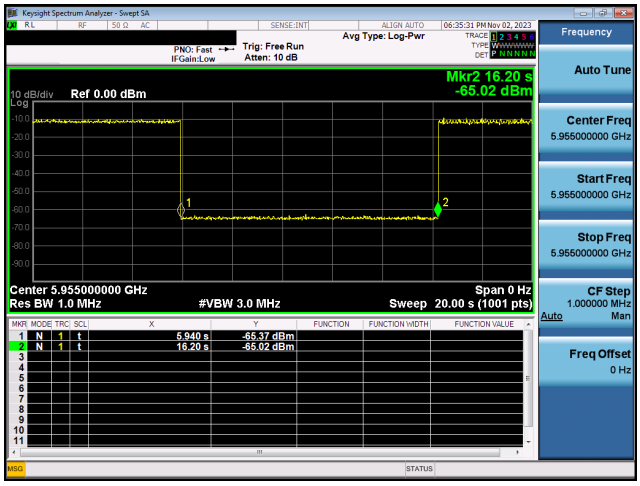
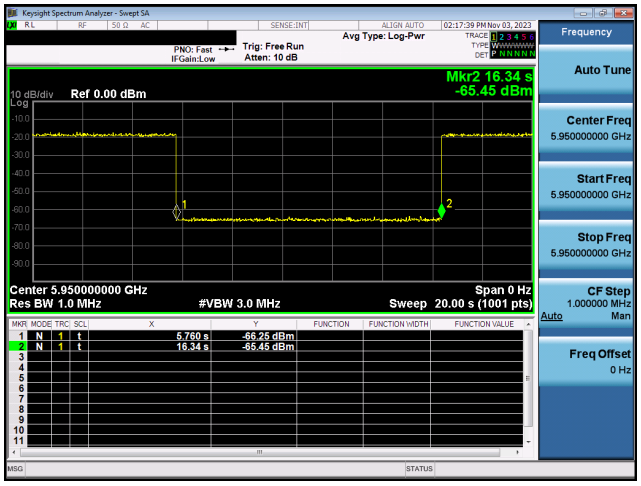
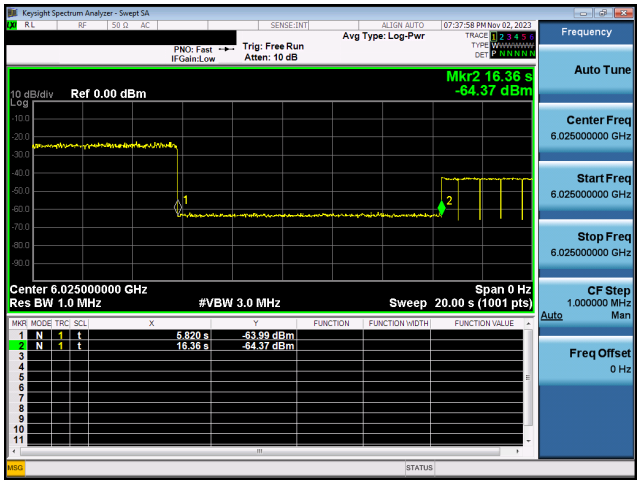
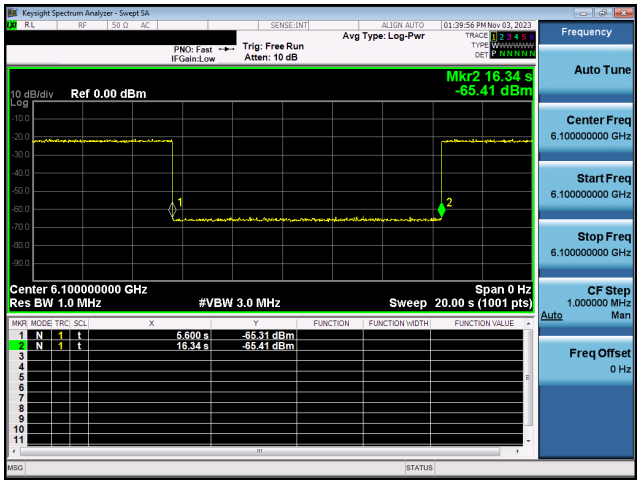
| Contention Based Protocol Probability | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Measurement Mode | | Conducted measurement | | | Device Type | | client | | | | |
| | | | | | Test Result | | | | | | |
| Operation Band | Operation Mode | Channel Bandwidth (MHz) | Channel Number | Channel Frequency (MHz) | AWGN Signals Frequency (MHz) | The Incumbent Signal (AWGN) Level (dBm) | Number of Times | Number of Detected | Detection Rate | Limit | Pass/ Fail |
| U-NII 5 | 802.11ax | 20MHz | 01 | 5955 | 5955 | -67.36 | 10 | 10 | 100% | 90% | Pass |
| | | 160MHz | 15 | 6025 | 5950 | -67.01 | 10 | 10 | 100% | 90% | Pass |
| | | | | | 6025 | -66.08 | 10 | 10 | 100% | 90% | Pass |
| | | | | | 6100 | -68.50 | 10 | 10 | 100% | 90% | Pass |

| Contention Based Protocol Measurement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operation Band | Operation Mode | Channel Bandwidth | Channel Number | Channel Frequency | AWGN Signals Frequency (MHz) | Injected (AWGN) POWER (dBm) | Antenna Gain (dBi) | Path Loss (dB) | Adjusted Power (dBm) | Detection limit (dBm) | EUT Tx Status |
| U-NII 5 | 802.11ax | 20MHz | 1 | 5955 | 5955 | -67.36 | 2.14 | 0 | -69.50 | -62 | Ceased |
| | | | | | | -68.60 | 2.14 | 0 | -70.74 | -62 | Minimal |
| | | | | | | -71.60 | 2.14 | 0 | -73.74 | -62 | Normal |
| | | 160MHz | 15 | 6025 | 5950 | -67.01 | 2.14 | 0 | -69.15 | -62 | Ceased |
| | | | | | | -68.40 | 2.14 | 0 | -70.54 | -62 | Minimal |
| | | | | | | -70.80 | 2.14 | 0 | -72.94 | -62 | Normal |
| | | | | | 6025 | -66.08 | 2.14 | 0 | -68.22 | -62 | Ceased |
| | | | | | | -66.80 | 2.14 | 0 | -68.94 | -62 | Minimal |
| | | | | | | -67.90 | 2.14 | 0 | -70.04 | -62 | Normal |
| | | | | | 6100 | -68.50 | 2.14 | 0 | -70.64 | -62 | Ceased |
| | | | | | | -70.10 | 2.14 | 0 | -72.24 | -62 | Minimal |
| | | | | | | -72.50 | 2.14 | 0 | -74.64 | -62 | Normal |

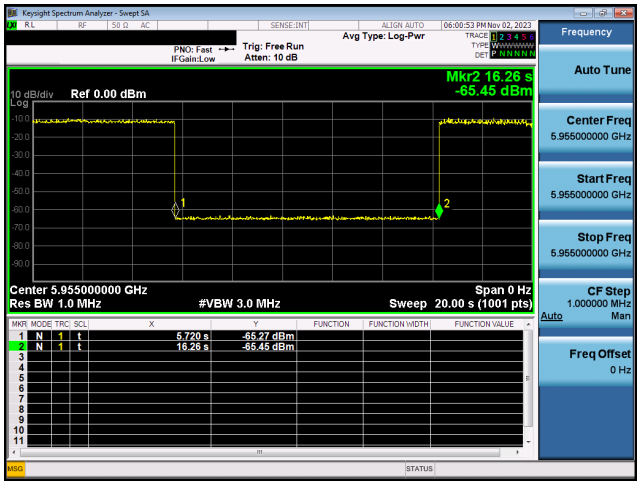
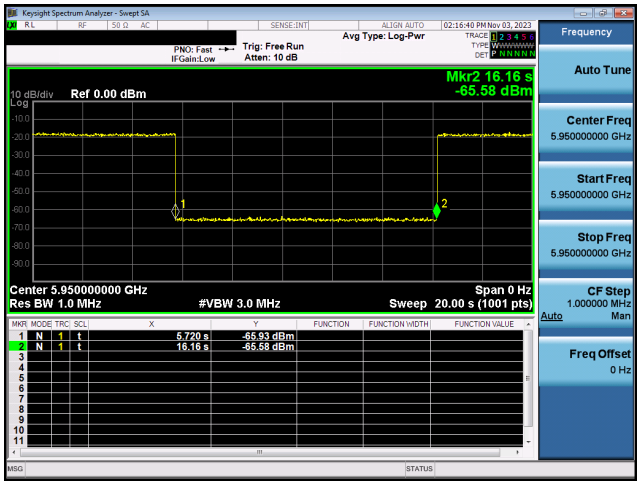
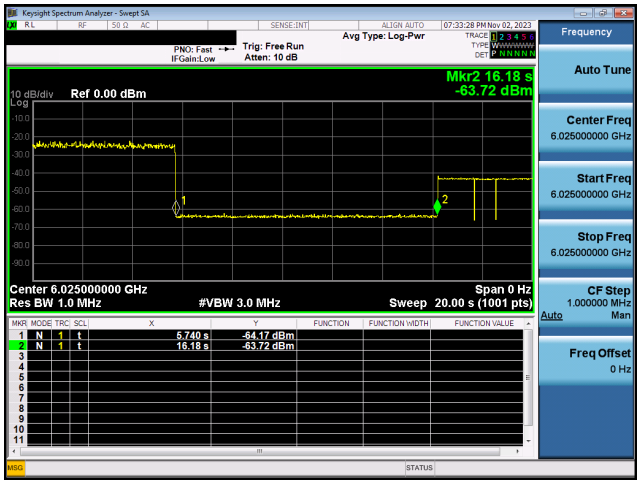
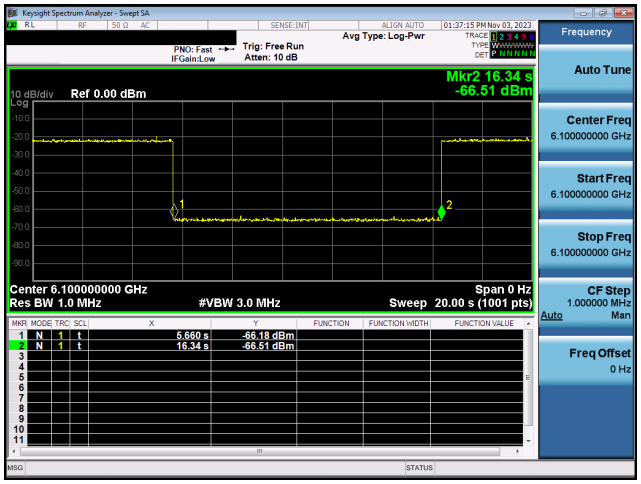
Note:

1. Adjusted Power(dBm) = Injected (AWGN) Power - Antenna Gain + Path Loss
2. Antenna Gain includes cable loss
3. Only one chain was performed for testing.
4. The AWGN level is reported for the following conditions:
   - Ceased = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds.
   - Minimal = AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently.
   - Normal = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds.

| Plots of shows Incumbent signal level | |
|---|---|
| 802.11ax-20 MHz / 5955 MHz | 802.11ax-160 MHz / 5950 MHz (Lower Edge) |
|  |  |
| 802.11ax-160 MHz / 6025 MHz (Middle) | 802.11ax-160 MHz / 6100 MHz (Upper Edge) |
|  |  |

| Plots of EUT ceased transmission in the time domain | |
|---|---|
| 802.11ax-20 MHz / 5955 MHz | 802.11ax-160 MHz / 5950 MHz<br>(Low Edge - 5950 MHz) |
|  |  |
| 802.11ax-160 MHz / 6025 MHz<br>(Middle - 6025 MHz) | 802.11ax-160 MHz / 6100 MHz<br>(High Edge - 6100 MHz) |
|  |  |

Note: Injected Interference signal at 10 sec.

| Plots of Start transmitting | |
|---|---|
| 802.11ax-20 MHz / 5955 MHz | 802.11ax-160 MHz / 5950 MHz<br>(Low Edge - 5950 MHz) |
|  |  |
| 802.11ax-160 MHz / 6025 MHz<br>(Middle - 6025 MHz) | 802.11ax-160 MHz / 6100 MHz<br>(High Edge - 6100 MHz) |
|  |  |

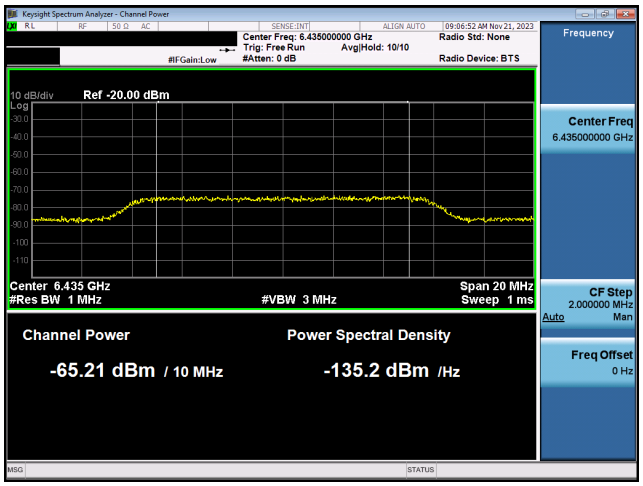
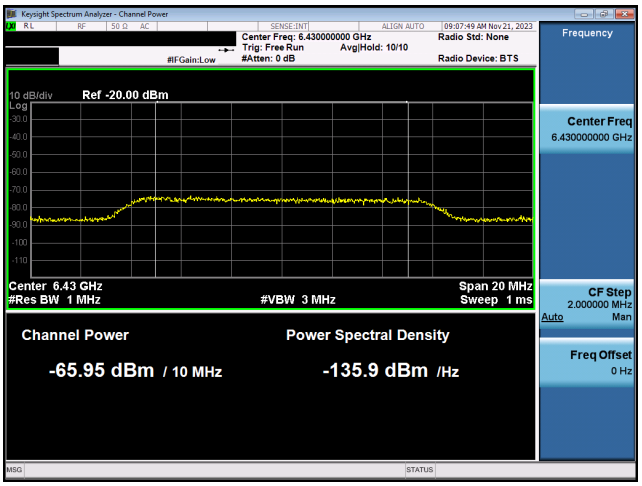
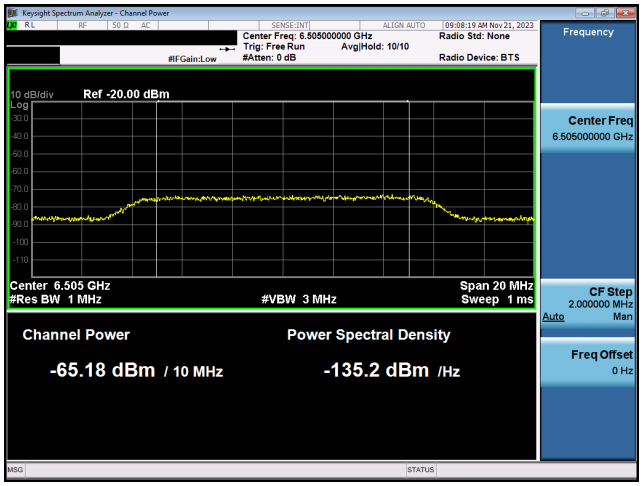
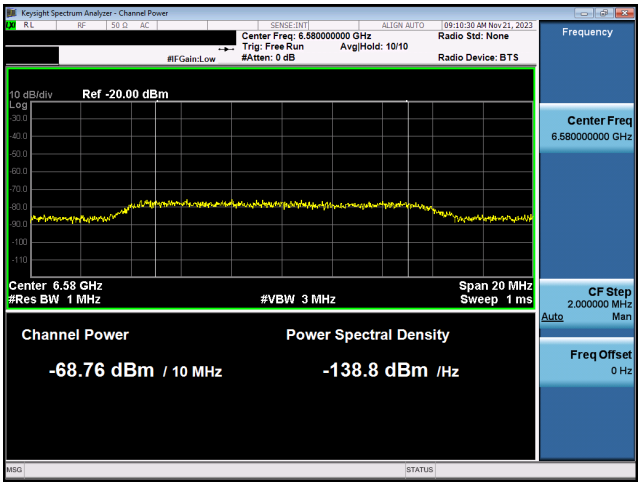
Product : Set Back Box with Wi-Fi6E, BT & PoE
Test Item : Contention Based Protocol

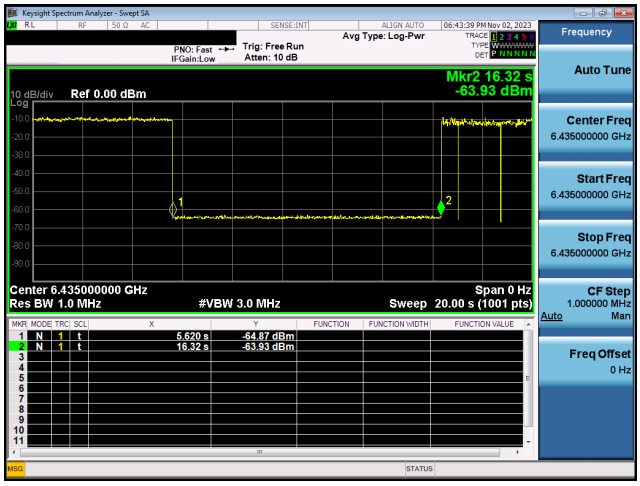
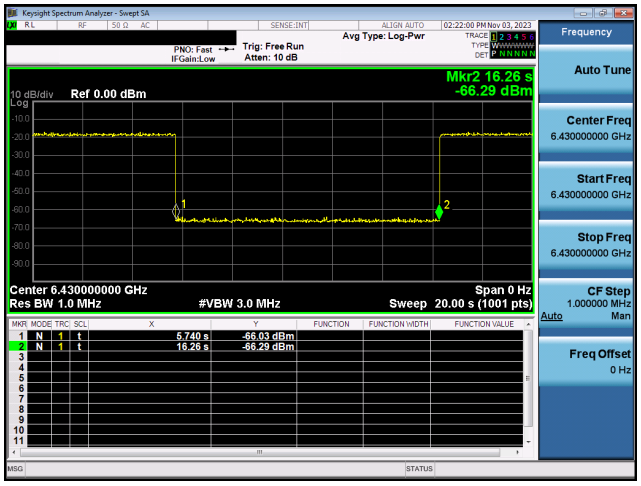
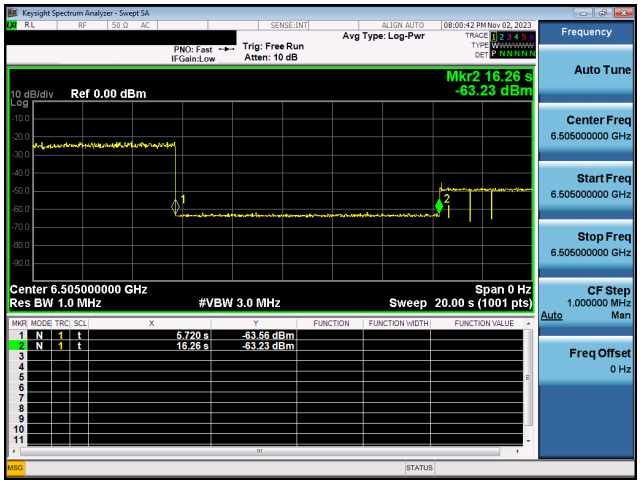
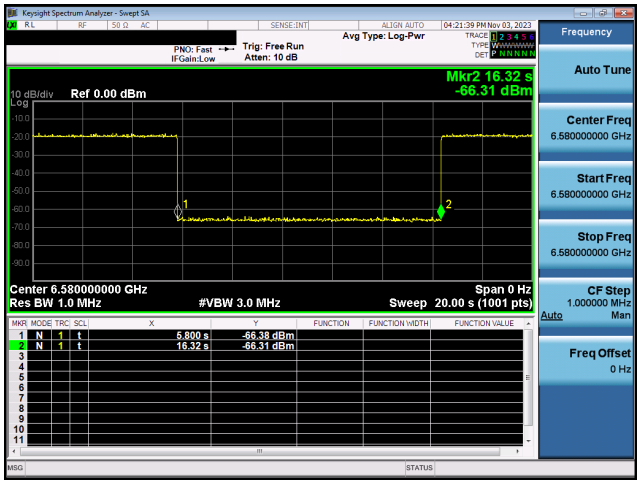
| Contention Based Protocol Probability | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Measurement Mode | | Conducted measurement | | | Device Type | | client | | | | |
| | | | | | Test Result | | | | | | |
| Operation Band | Operation Mode | Channel Bandwidth (MHz) | Channel Number | Channel Frequency (MHz) | AWGN Signals Frequency (MHz) | The Incumbent Signal (AWGN) Level (dBm) | Number of Times | Number of Detected | Detection Rate | Limit | Pass/ Fail |
| U-NII 6 | 802.11ax | 20MHz | 97 | 6435 | 6435 | -65.21 | 10 | 10 | 100% | 90% | Pass |
| | | 160MHz | 111 | 6505 | 6430 | -65.95 | 10 | 10 | 100% | 90% | Pass |
| | | | | | 6505 | -65.18 | 10 | 10 | 100% | 90% | Pass |
| | | | | | 6580 | -68.76 | 10 | 10 | 100% | 90% | Pass |

| Contention Based Protocol Measurement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operation Band | Operation Mode | Channel Bandwidth | Channel Number | Channel Frequency | AWGN Signals Frequency (MHz) | Injected (AWGN) POWER (dBm) | Antenna Gain (dBi) | Path Loss (dB) | Adjusted Power (dBm) | Detection limit (dBm) | EUT Tx Status |
| U-NII 6 | 802.11ax | 20MHz | 97 | 6435 | 6435 | -65.21 | 2.14 | 0 | -67.35 | -62 | Ceased |
| | | | | | | -66.10 | 2.14 | 0 | -68.24 | -62 | Minimal |
| | | | | | | -70.60 | 2.14 | 0 | -72.74 | -62 | Normal |
| | | 160MHz | 111 | 6505 | 6430 | -65.95 | 2.14 | 0 | -68.09 | -62 | Ceased |
| | | | | | | -67.00 | 2.14 | 0 | -69.14 | -62 | Minimal |
| | | | | | | -69.40 | 2.14 | 0 | -71.54 | -62 | Normal |
| | | | | | 6505 | -65.18 | 2.14 | 0 | -67.32 | -62 | Ceased |
| | | | | | | -66.20 | 2.14 | 0 | -68.34 | -62 | Minimal |
| | | | | | | -67.60 | 2.14 | 0 | -69.74 | -62 | Normal |
| | | | | | 6580 | -68.76 | 2.14 | 0 | -70.90 | -62 | Ceased |
| | | | | | | -69.80 | 2.14 | 0 | -71.94 | -62 | Minimal |
| | | | | | | -71.20 | 2.14 | 0 | -73.34 | -62 | Normal |

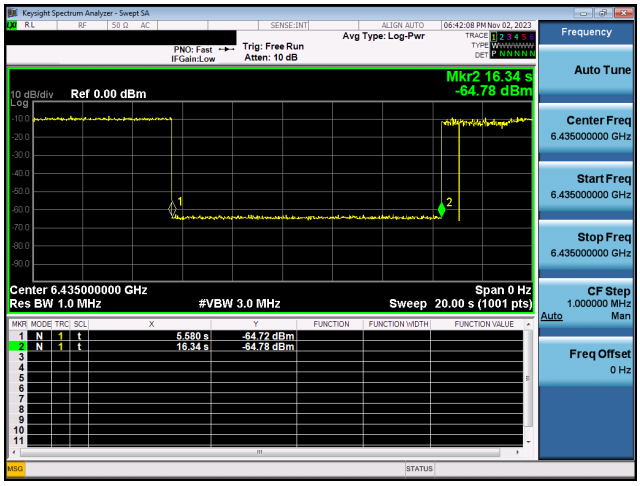
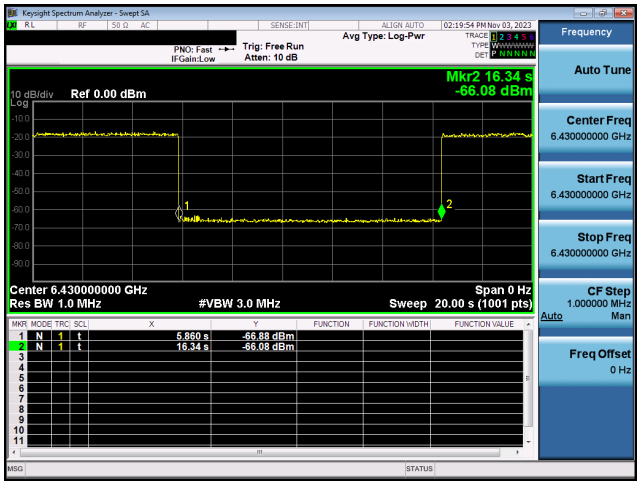
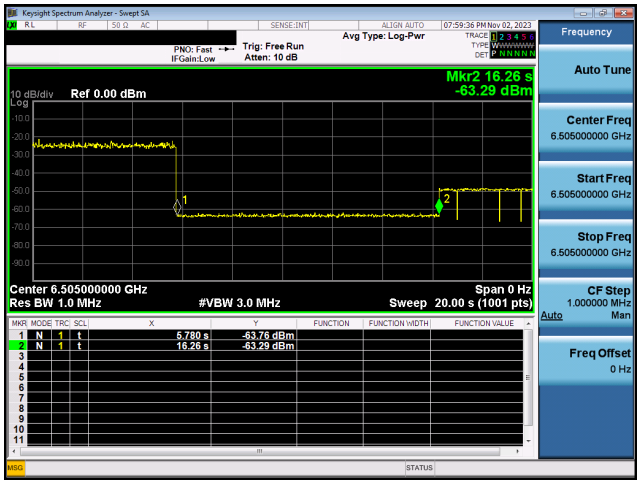
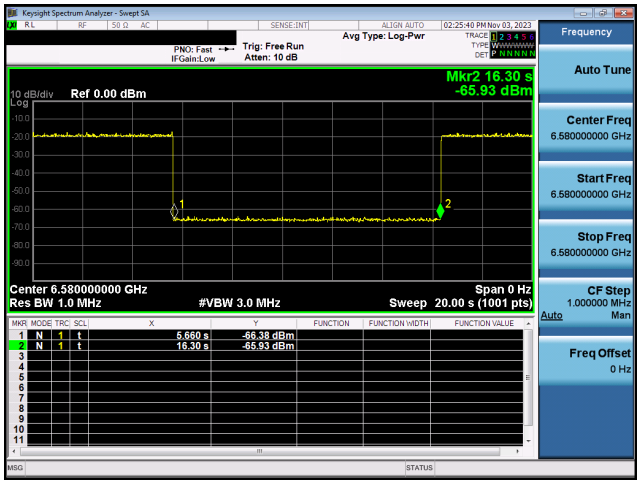
Note:

1. Adjusted Power(dBm) = Injected (AWGN) Power - Antenna Gain + Path Loss
2. Antenna Gain includes cable loss
3. Only one chain was performed for testing.
4. The AWGN level is reported for the following conditions:
   - Ceased = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds.
   - Minimal = AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently.
   - Normal = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds.

| Plots of shows Incumbent signal level | |
|---|---|
| 802.11ax-20 MHz / 6435 MHz | 802.11ax-160 MHz / 6430 MHz (Lower Edge) |
|  |  |
| 802.11ax-160 MHz / 6505 MHz (Middle) | 802.11ax-160 MHz / 6580 MHz (Upper Edge) |
|  |  |

| Plots of EUT ceased transmission in the time domain | |
|---|---|
| 802.11ax-20 MHz / 6435 MHz | 802.11ax-160 MHz / 6430 MHz<br>(Low Edge - 6430 MHz) |
|  |  |
| 802.11ax-160 MHz / 6505 MHz<br>(Middle - 6505 MHz) | 802.11ax-160 MHz / 6580 MHz<br>(High Edge - 6580 MHz) |
|  |  |

Note: Injected Interference signal at 10 sec.

| Plots of Start transmitting | |
|---|---|
| 802.11ax-20 MHz / 6435 MHz | 802.11ax-160 MHz / 6430 MHz<br>(Low Edge - 6430 MHz) |
|  |  |
| 802.11ax-160 MHz / 6505 MHz<br>(Middle - 6505 MHz) | 802.11ax-160 MHz / 6580 MHz<br>(High Edge - 6580 MHz) |
|  |  |

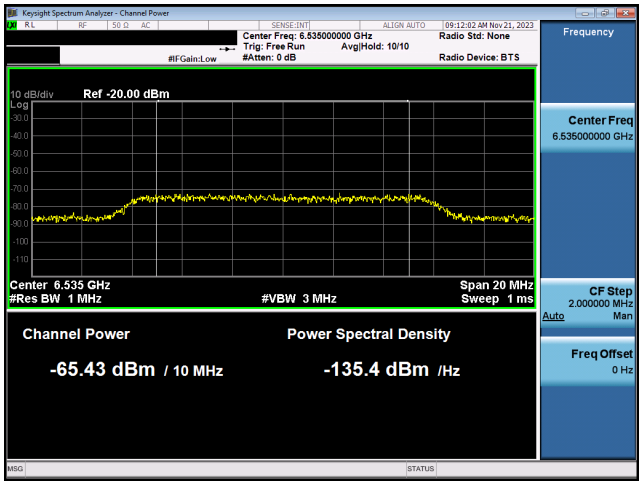
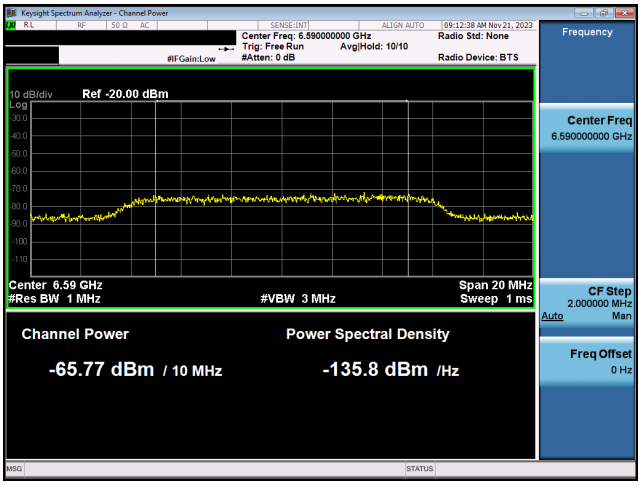
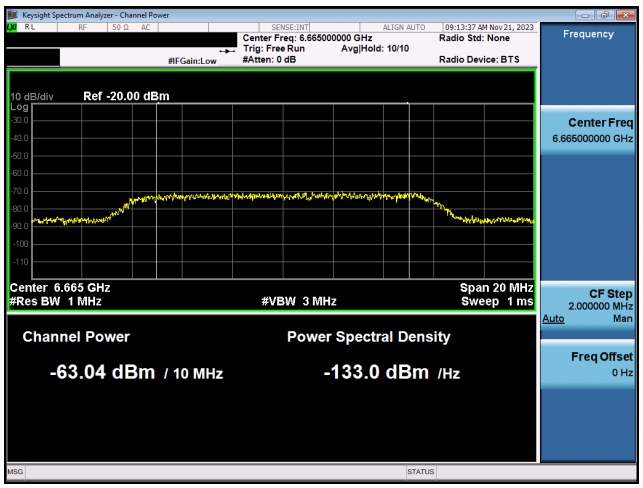
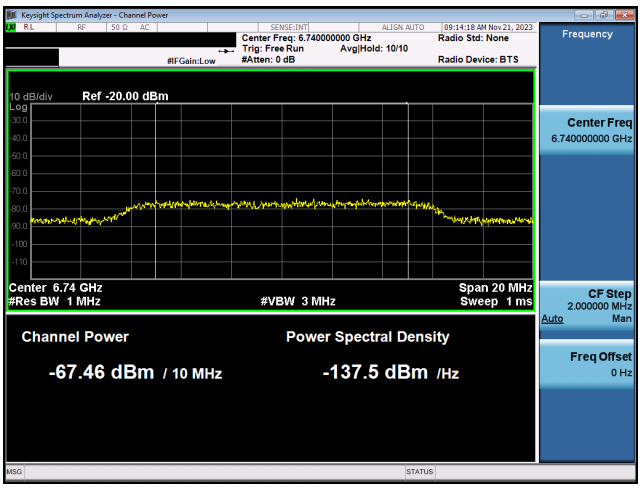
Product : Set Back Box with Wi-Fi6E, BT & PoE
Test Item : Contention Based Protocol

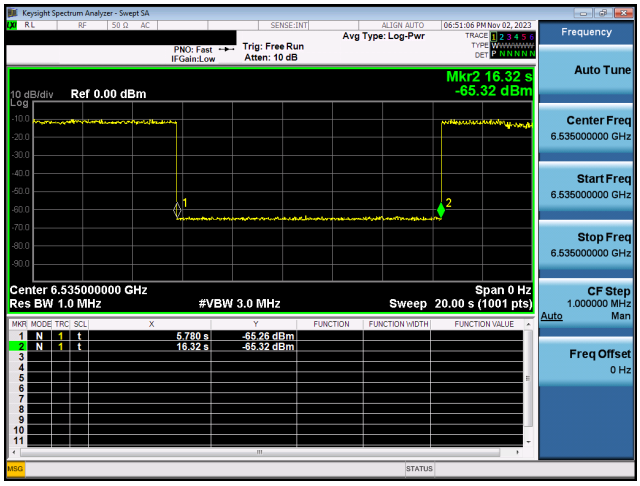
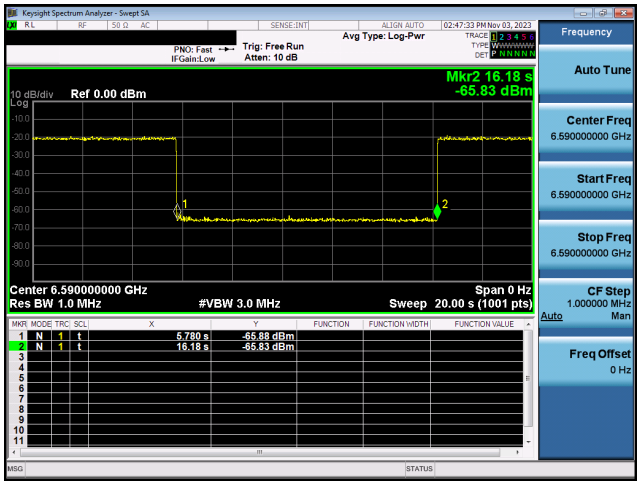
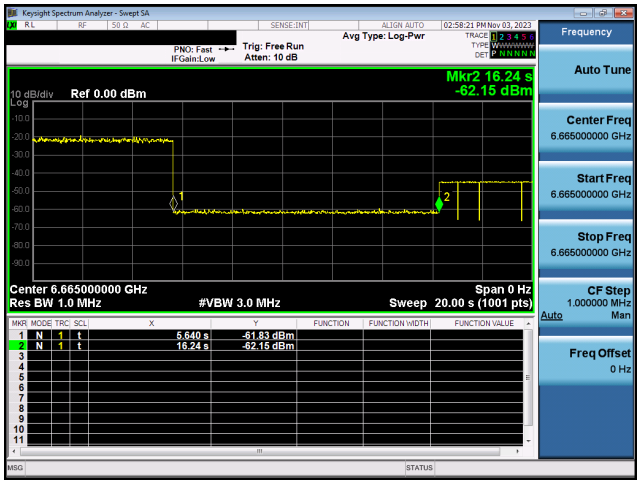
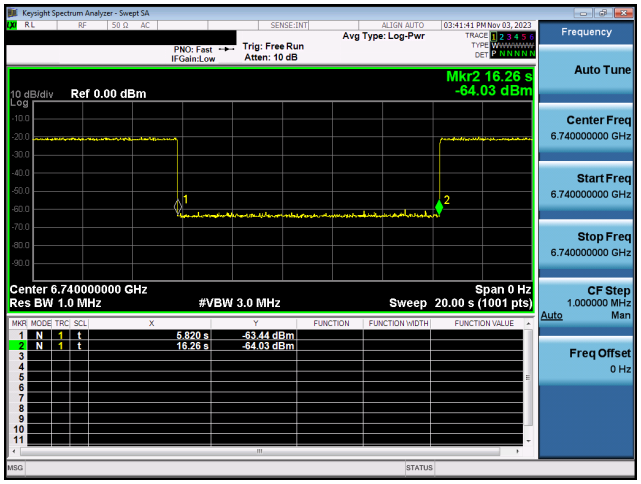
| Contention Based Protocol Probability | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Measurement Mode | | Conducted measurement | | | Device Type | | client | | | | |
| | | | | | Test Result | | | | | | |
| Operation Band | Operation Mode | Channel Bandwidth (MHz) | Channel Number | Channel Frequency (MHz) | AWGN Signals Frequency (MHz) | The Incumbent Signal (AWGN) Level (dBm) | Number of Times | Number of Detected | Detection Rate | Limit | Pass/ Fail |
| U-NII 7 | 802.11ax | 20MHz | 117 | 6535 | 6535 | -65.43 | 10 | 10 | 100% | 90% | Pass |
| | | 160MHz | 143 | 6665 | 6590 | -65.77 | 10 | 10 | 100% | 90% | Pass |
| | | | | | 6665 | -63.04 | 10 | 10 | 100% | 90% | Pass |
| | | | | | 6740 | -67.46 | 10 | 10 | 100% | 90% | Pass |

| Contention Based Protocol Measurement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operation Band | Operation Mode | Channel Bandwidth | Channel Number | Channel Frequency | AWGN Signals Frequency (MHz) | Injected (AWGN) POWER (dBm) | Antenna Gain (dBi) | Path Loss (dB) | Adjusted Power (dBm) | Detection limit (dBm) | EUT Tx Status |
| U-NII 7 | 802.11ax | 20MHz | 117 | 6535 | 6535 | -65.43 | 2.14 | 0 | -67.57 | -62 | Ceased |
| | | | | | | -66.10 | 2.14 | 0 | -68.24 | -62 | Minimal |
| | | | | | | -70.80 | 2.14 | 0 | -72.94 | -62 | Normal |
| | | 160MHz | 143 | 6665 | 6590 | -65.77 | 2.14 | 0 | -67.91 | -62 | Ceased |
| | | | | | | -66.60 | 2.14 | 0 | -68.74 | -62 | Minimal |
| | | | | | | -72.30 | 2.14 | 0 | -74.44 | -62 | Normal |
| | | | | | 6665 | -63.04 | 2.14 | 0 | -65.18 | -62 | Ceased |
| | | | | | | -65.90 | 2.14 | 0 | -68.04 | -62 | Minimal |
| | | | | | | -68.80 | 2.14 | 0 | -70.94 | -62 | Normal |
| | | | | | 6740 | -67.46 | 2.14 | 0 | -69.60 | -62 | Ceased |
| | | | | | | -68.90 | 2.14 | 0 | -71.04 | -62 | Minimal |
| | | | | | | -71.80 | 2.14 | 0 | -73.94 | -62 | Normal |

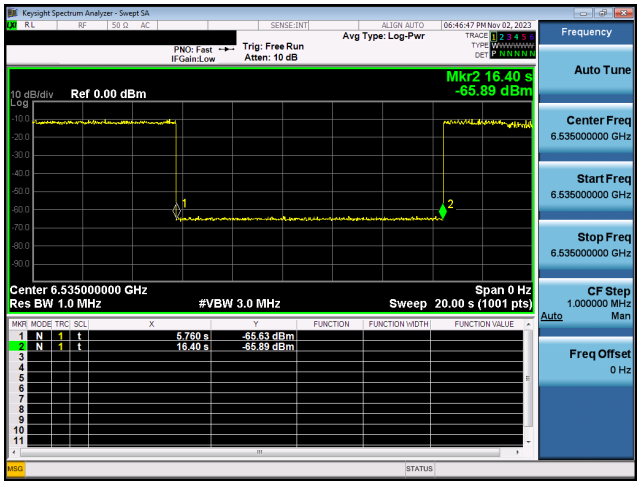
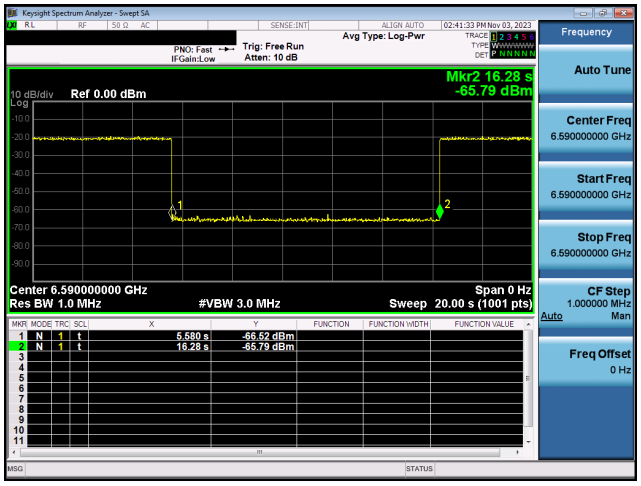
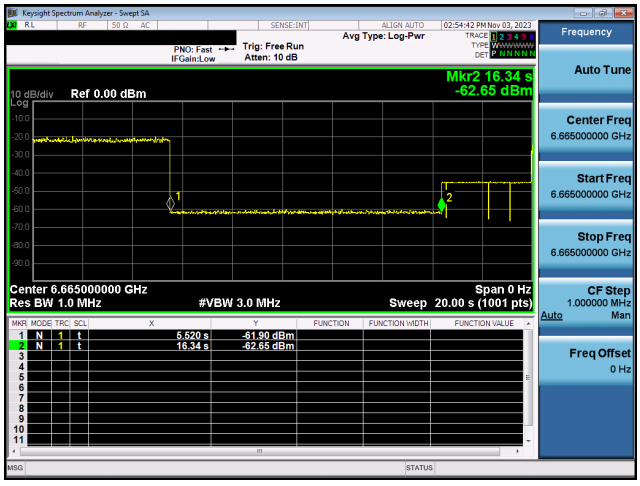
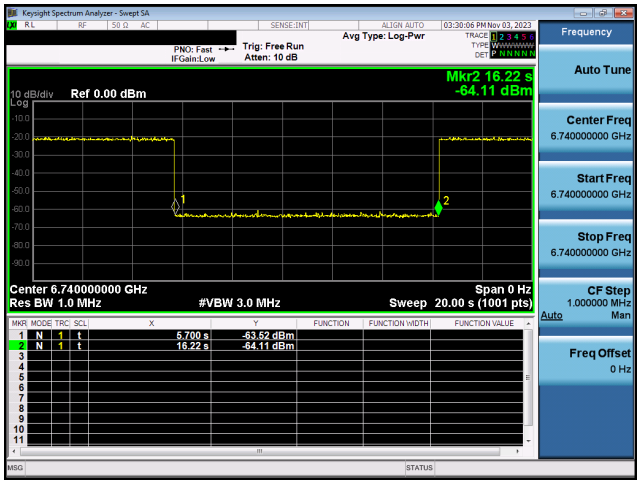
Note:

1. Adjusted Power(dBm) = Injected (AWGN) Power - Antenna Gain + Path Loss
2. Antenna Gain includes cable loss
3. Only one chain was performed for testing.
4. The AWGN level is reported for the following conditions:
   - Ceased = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds.
   - Minimal = AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently.
   - Normal = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds.

| Plots of shows Incumbent signal level | |
|---|---|
| 802.11ax-20 MHz / 6535 MHz | 802.11ax-160 MHz / 6590 MHz (Lower Edge) |
|  |  |
| 802.11ax-160 MHz / 6665 MHz (Middle) | 802.11ax-160 MHz / 6740 MHz (Upper Edge) |
|  |  |

| Plots of EUT ceased transmission in the time domain | |
|---|---|
| 802.11ax-20 MHz / 6535 MHz | 802.11ax-160 MHz / 6590 MHz<br>(Low Edge - 6590 MHz) |
|  |  |
| 802.11ax-160 MHz / 6665 MHz<br>(Middle - 6665 MHz) | 802.11ax-160 MHz / 6740 MHz<br>(High Edge - 6740 MHz) |
|  |  |

Note: Injected Interference signal at 10 sec.

| Plots of Start transmitting | |
|---|---|
| 802.11ax-20 MHz / 6535MHz | 802.11ax-160 MHz / 6590 MHz<br>(Low Edge - 6590 MHz) |
|  |  |
| 802.11ax-160 MHz / 6665 MHz<br>(Middle - 6665 MHz) | 802.11ax-160 MHz / 6740 MHz<br>(High Edge - 6740 MHz) |
|  |  |

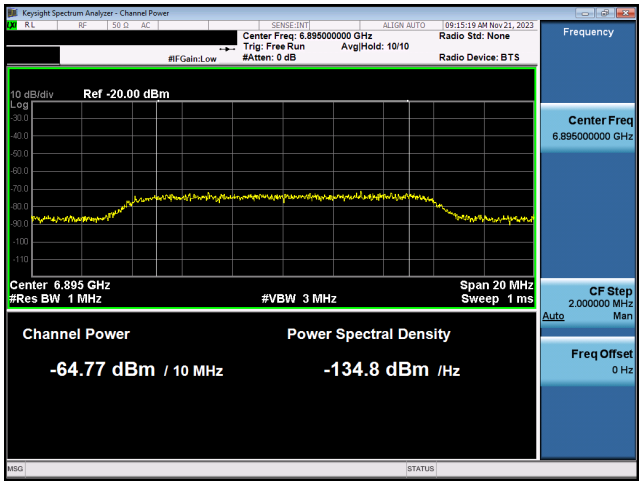
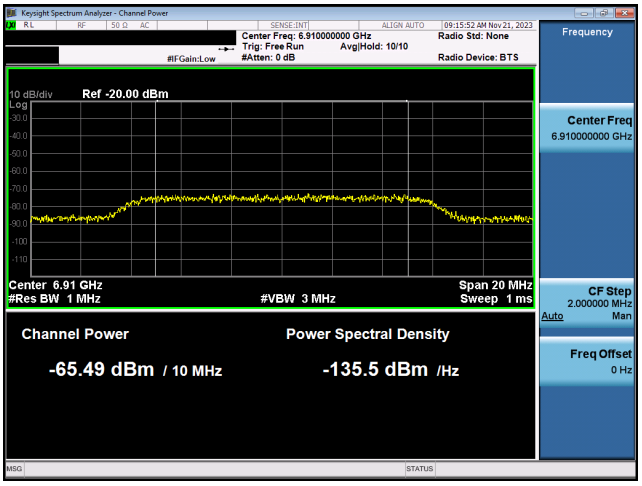
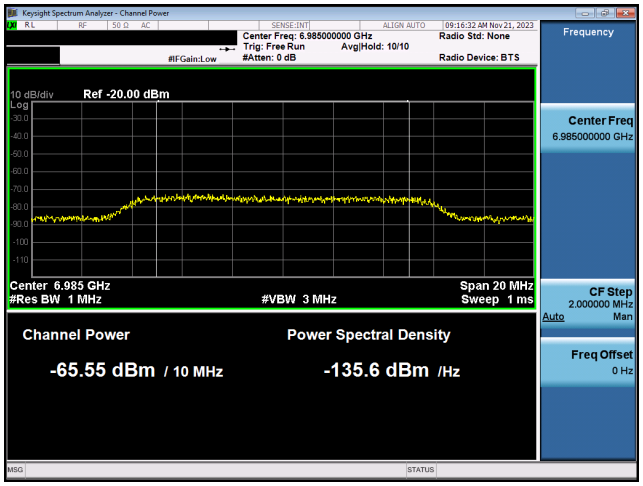
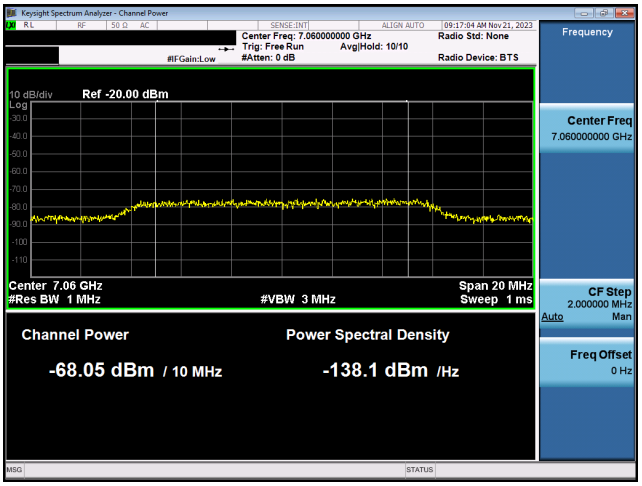
Product : Set Back Box with Wi-Fi6E, BT & PoE
Test Item : Contention Based Protocol

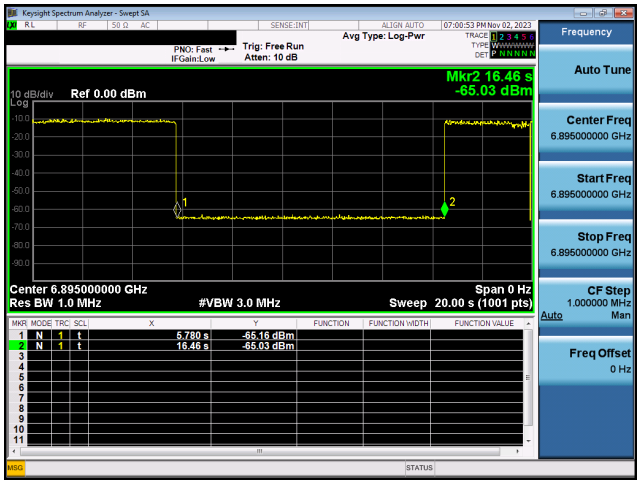
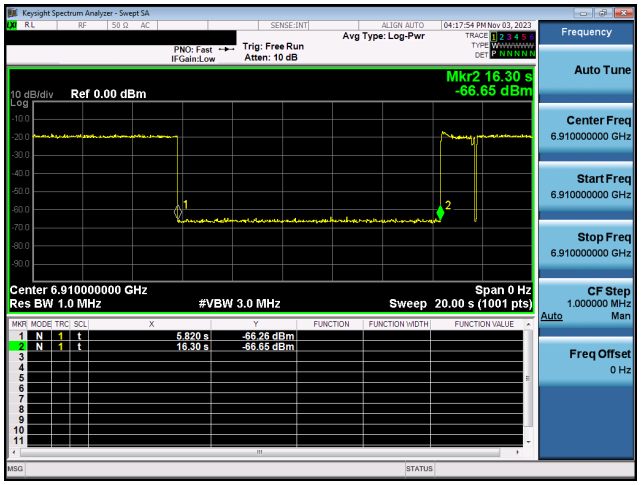
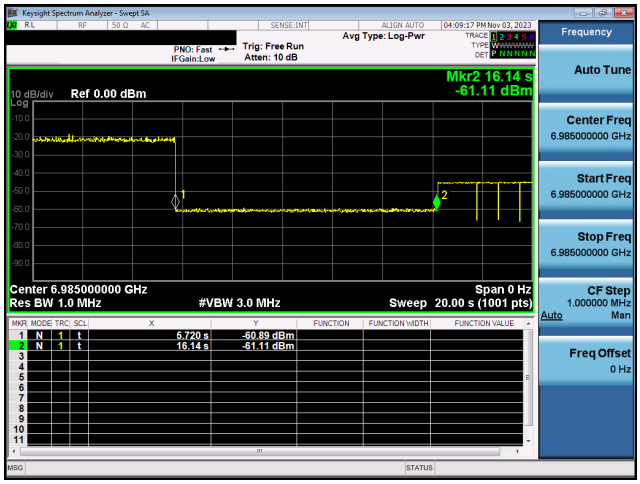
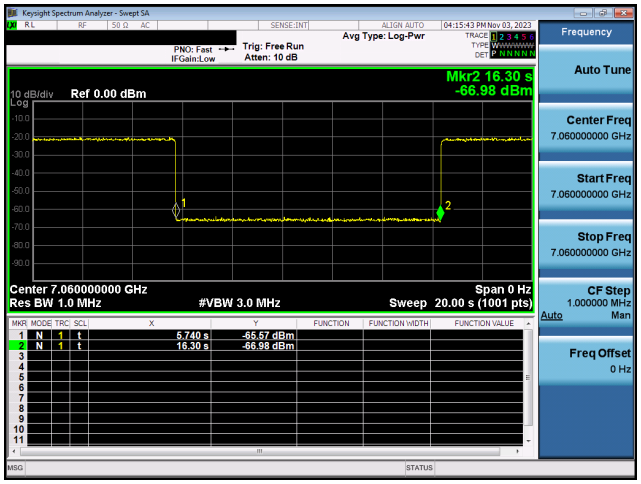
| Contention Based Protocol Probability | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Measurement Mode | | Conducted measurement | | | Device Type | | client | | | | |
| | | | | | Test Result | | | | | | |
| Operation Band | Operation Mode | Channel Bandwidth (MHz) | Channel Number | Channel Frequency (MHz) | AWGN Signals Frequency (MHz) | The Incumbent Signal (AWGN) Level (dBm) | Number of Times | Number of Detected | Detection Rate | Limit | Pass/ Fail |
| U-NII 8 | 802.11ax | 20MHz | 189 | 6895 | 6895 | -64.77 | 10 | 10 | 100% | 90% | Pass |
| | | 160MHz | 207 | 6985 | 6910 | -65.49 | 10 | 10 | 100% | 90% | Pass |
| | | | | | 6985 | -65.55 | 10 | 10 | 100% | 90% | Pass |
| | | | | | 7060 | -68.05 | 10 | 10 | 100% | 90% | Pass |

| Contention Based Protocol Measurement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operation Band | Operation Mode | Channel Bandwidth | Channel Number | Channel Frequency | AWGN Signals Frequency (MHz) | Injected (AWGN) POWER (dBm) | Antenna Gain (dBi) | Path Loss (dB) | Adjusted Power (dBm) | Detection limit (dBm) | EUT Tx Status |
| U-NII 8 | 802.11ax | 20MHz | 189 | 6895 | 6895 | -64.77 | 2.14 | 0 | -66.91 | -62 | Ceased |
| | | | | | | -65.60 | 2.14 | 0 | -67.74 | -62 | Minimal |
| | | | | | | -71.10 | 2.14 | 0 | -73.24 | -62 | Normal |
| | | 160MHz | 207 | 6985 | 6910 | -65.49 | 2.14 | 0 | -67.63 | -62 | Ceased |
| | | | | | | -66.00 | 2.14 | 0 | -68.14 | -62 | Minimal |
| | | | | | | -66.80 | 2.14 | 0 | -68.94 | -62 | Normal |
| | | | | | 6985 | -65.55 | 2.14 | 0 | -67.69 | -62 | Ceased |
| | | | | | | -66.20 | 2.14 | 0 | -68.34 | -62 | Minimal |
| | | | | | | -67.80 | 2.14 | 0 | -69.94 | -62 | Normal |
| | | | | | 7060 | -68.05 | 2.14 | 0 | -70.19 | -62 | Ceased |
| | | | | | | -69.00 | 2.14 | 0 | -71.14 | -62 | Minimal |
| | | | | | | -71.50 | 2.14 | 0 | -73.64 | -62 | Normal |

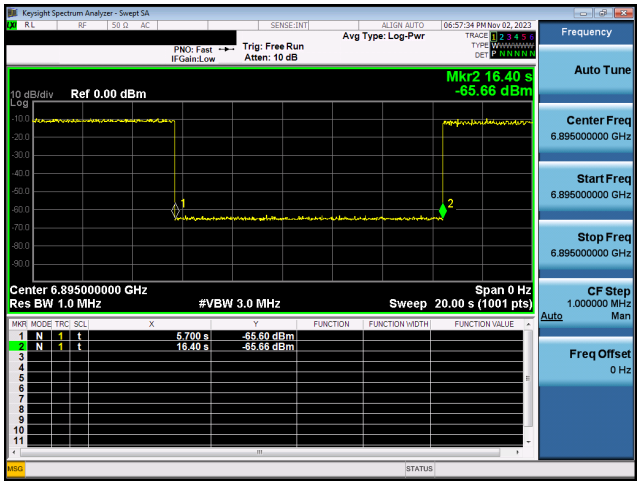
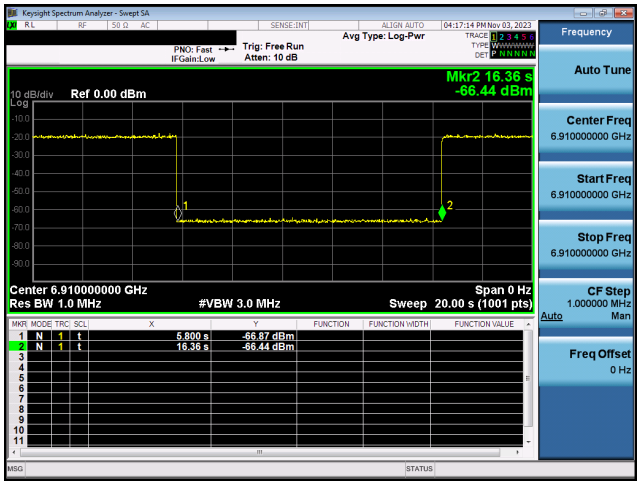
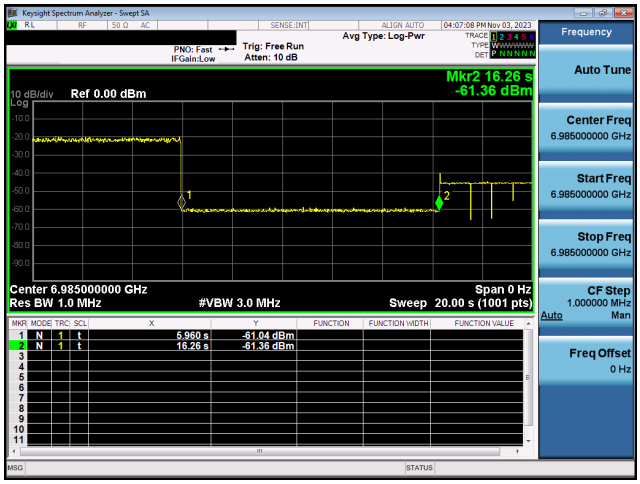
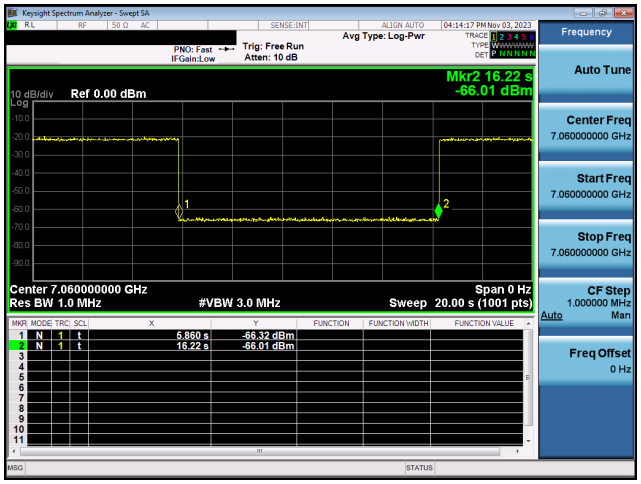
Note:

1. Adjusted Power(dBm) = Injected (AWGN) Power - Antenna Gain + Path Loss
2. Antenna Gain includes cable loss
3. Only one chain was performed for testing.
4. The AWGN level is reported for the following conditions:
   - Ceased = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds.
   - Minimal = AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently.
   - Normal = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds.

| Plots of shows Incumbent signal level | |
|---|---|
| 802.11ax-20 MHz / 6895 MHz | 802.11ax-160 MHz / 6910 MHz (Lower Edge) |
|  |  |
| 802.11ax-160 MHz / 6985 MHz (Middle) | 802.11ax-160 MHz / 7060 MHz (Upper Edge) |
|  |  |

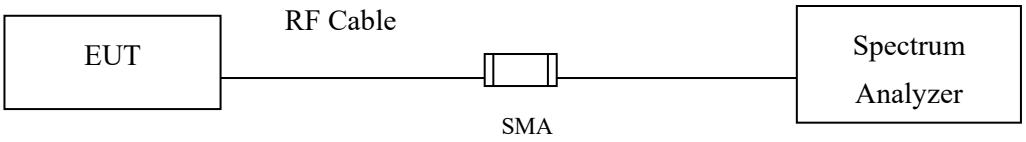
| Plots of EUT ceased transmission in the time domain | |
|---|---|
| 802.11ax-20 MHz / 6895 MHz | 802.11ax-160 MHz / 6910 MHz<br>(Low Edge - 6910 MHz) |
|  |  |
| 802.11ax-160 MHz / 6985 MHz<br>(Middle - 6985 MHz) | 802.11ax-160 MHz / 7060 MHz<br>(High Edge - 7060 MHz) |
|  |  |

Note: Injected Interference signal at 10 sec.

| Plots of Start transmitting | |
|---|---|
| 802.11ax (20MHz) / 6895 MHz | 802.11ax-160 MHz / 6910 MHz<br>(Low Edge - 6910 MHz) |
|  |  |
| 802.11ax-160 MHz / 6985 MHz<br>(Middle - 6985 MHz) | 802.11ax-160 MHz / 7060 MHz<br>(High Edge - 7060 MHz) |
|  |  |

## 10. Duty Cycle

10.1. Test Setup




10.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to U-NII test procedure of KDB789033 for compliance to FCC 47CFR 15.407 requirements.

10.3. Duty Cycle

Product : Set Back Box with Wi-Fi6E, BT & PoE
Test Item : Duty Cycle

| Mode | Time On ( ms ) | Time On + Time Off ( ms ) | Duty Cycle ( % ) | Duty Factor ( dB ) |
|---|---|---|---|---|
| 802.11a | 1.0320 | 2.0880 | 49.43 | 3.06 |
| 802.11ax-20 MHz | 5.4080 | 6.8200 | 79.30 | 1.01 |
| 802.11ax-40 MHz | 4.0600 | 4.6000 | 88.26 | 0.54 |
| 802.11ax-80 MHz | 2.3400 | 2.6700 | 87.64 | 0.57 |
| 802.11ax-160 MHz | 2.1600 | 2.6600 | 81.20 | 0.90 |

Note:

Offset = 20 log(1/duty cycle)

Accotding to KDB 789033

If power averaging (rms) mode was used in step (iv) above, the correction factor is 10 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB must be added to the measured emission levels.

If linear voltage averaging mode was used in step (iv) above, the correction factor is 20 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB must be added to the measured emission levels.