Detector = Peak.
Sweep time = auto.
Trace mode = max hold.
Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of 1/x, where x is the duty cycle. For example, use at least 200 traces if the duty cycle is 25 percent. (If a specific emission is demonstrated to be continuous—i.e., 100 percent duty cycle—rather than turning on and off with the transmit cycle, at least 50 traces shall be averaged.)

■ Band edge measurements.

Unwanted band-edge emissions may be measured using either of the special band-edge measurement techniques (the marker-delta or integration methods) described below. Note that the marker-delta method is primarily a radiated measurement technique that requires the 99% occupied bandwidth edge to be within 2 MHz of the authorized band edge, whereas the integration method can be used in either a radiated or conducted measurement without any special requirement with regards to the displacement of the unwanted emission(s) relative to the authorized bandwidth.
Marker-Delta Method.
The marker-delta method, as described in ANSI C63.10, can be used to perform measurements of the radiated unwanted emissions level of emissions provided that the 99% occupied bandwidth of the fundamental is within 2 MHz of the authorized band-edge.

8.5.5 Test Results

The voltage AC 120V &240V and the modes 802.11a/n/ac has been tested and the worst result recorded as below

■ ☒For Undesirable radiated Spurious Emission in U-NII – 1
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
: ☒Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5180 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 8899.92 | V | 56.06 | -39.17 | -27 | -12.17 |
| 12550.89 | V | 53.91 | -41.32 | -27 | -14.32 |
| 15698.02 | V | 49.54 | -45.69 | -27 | -18.69 |
| 8842.55 | H | 56.76 | -38.47 | -27 | -11.47 |
| 11764.66 | H | 50.12 | -45.11 | -27 | -18.11 |
| 15457.28 | H | 47.69 | -47.54 | -27 | -20.54 |

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5200 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 8991.49 | V | 55.27 | -39.96 | -27 | -12.96 |
| 12265.65 | V | 51.68 | -43.55 | -27 | -16.55 |
| 16750.33 | V | 48.29 | -46.94 | -27 | -19.94 |
| 8416.46 | H | 57.21 | -38.02 | -27 | -11.02 |
| 12463.23 | H | 50.14 | -45.09 | -27 | -18.09 |
| 15899.03 | H | 48.07 | -47.16 | -27 | -20.16 |

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5240 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 8892.39 | V | 55.69 | -39.54 | -27 | -12.54 |
| 12044.58 | V | 53.11 | -42.12 | -27 | -15.12 |
| 15436.10 | V | 47.43 | -47.8 | -27 | -20.8 |
| 8952.45 | H | 55.13 | -40.1 | -27 | -13.1 |
| 13050.66 | H | 50.66 | -44.57 | -27 | -17.57 |
| 15961.73 | H | 47.34 | -47.89 | -27 | -20.89 |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

| Test mode: | 802.11a | Frequency(MHz): | 5180 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 8899.92 | V | 56.06 | 43.04 | 74.00 | 54.00 | -17.94 | -10.96 |
| 12550.89 | V | 53.91 | 39.58 | 74.00 | 54.00 | -20.09 | -14.42 |
| 15698.02 | V | 49.54 | 37.31 | 74.00 | 54.00 | -24.46 | -16.69 |
| 8842.55 | H | 56.76 | 42.13 | 74.00 | 54.00 | -17.24 | -11.87 |
| 11764.66 | H | 50.12 | 38.12 | 74.00 | 54.00 | -23.88 | -15.88 |
| 15457.28 | H | 47.69 | 36.19 | 74.00 | 54.00 | -26.31 | -17.81 |

| Test mode: | 802.11a | Frequency(MHz): | 5200 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 8991.49 | V | 55.27 | 42.23 | 74.00 | 54.00 | -18.73 | -11.77 |
| 12265.65 | V | 51.68 | 39.98 | 74.00 | 54.00 | -22.32 | -14.02 |
| 16750.33 | V | 48.29 | 36.62 | 74.00 | 54.00 | -25.71 | -17.38 |
| 8416.46 | H | 57.21 | 43.40 | 74.00 | 54.00 | -16.79 | -10.60 |
| 12463.23 | H | 50.14 | 40.71 | 74.00 | 54.00 | -23.86 | -13.29 |
| 15899.03 | H | 48.07 | 37.53 | 74.00 | 54.00 | -25.93 | -16.47 |

| Test mode: | 802.11a | Frequency(MHz): | 5240 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 8892.39 | V | 55.69 | 43.12 | 74.00 | 54.00 | -18.31 | -10.88 |
| 12044.58 | V | 53.11 | 39.16 | 74.00 | 54.00 | -20.89 | -14.84 |
| 15436.10 | V | 47.43 | 36.91 | 74.00 | 54.00 | -26.57 | -17.09 |
| 8952.45 | H | 55.13 | 42.35 | 74.00 | 54.00 | -18.87 | -11.65 |
| 13050.66 | H | 50.66 | 38.59 | 74.00 | 54.00 | -23.34 | -15.41 |
| 15961.73 | H | 47.34 | 37.77 | 74.00 | 54.00 | -26.66 | -16.23 |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

| Test mode: | 802.11a | Frequency(MHz): | 5180 |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (RBW=100KHz) (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|
| 5127.25 | H | 51.49 | -43.74 | -27 | Pass |
| 5141.55 | V | 52.09 | -43.14 | -27 | Pass |

| Test mode: | 802.11a | Frequency(MHz): | 5240 |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (RBW=100KHz) (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|
| 5352.86 | H | 51.52 | -43.71 | -27 | Pass |
| 5351.21 | V | 52.08 | -43.15 | -27 | Pass |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

| Test mode: | 802.11a | Frequency(MHz): | 5180 |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

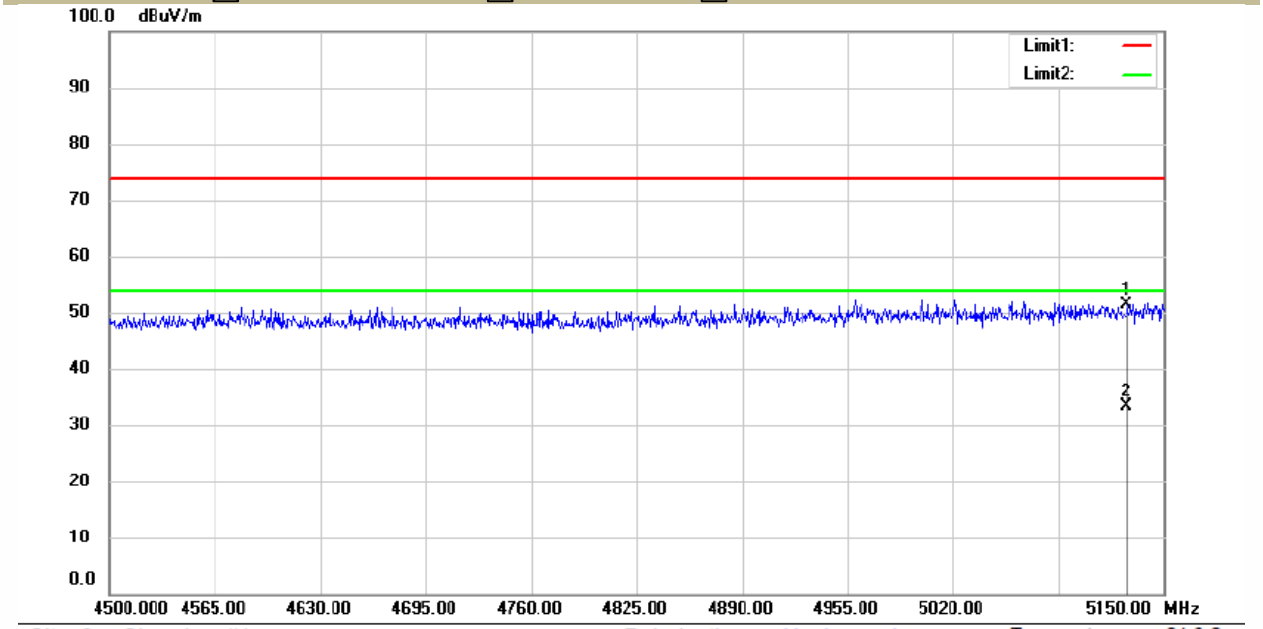
| Frequency (MHz) | Polarity H/V | PK(dBuV/m) (VBW=3MHz) | Limit 3m (dBuV/m) | AV(dBuV/m) (VBW=10Hz) | Limit 3m (dBuV/m) |
|---|---|---|---|---|---|
| 5127.25 | H | 51.49 | 74 | 33.49 | 54 |
| 5141.55 | V | 52.09 | 74 | 34.09 | 54 |

| Test mode: | 802.11a | Frequency(MHz): | 5240 |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Frequency (MHz) | Polarity H/V | PK(dBuV/m) (VBW=3MHz) | Limit 3m (dBuV/m) | AV(dBuV/m) (VBW=10Hz) | Limit 3m (dBuV/m) |
|---|---|---|---|---|---|
| 5352.86 | H | 51.52 | 74 | 33.52 | 54 |
| 5351.21 | V | 52.08 | 74 | 34.08 | 54 |

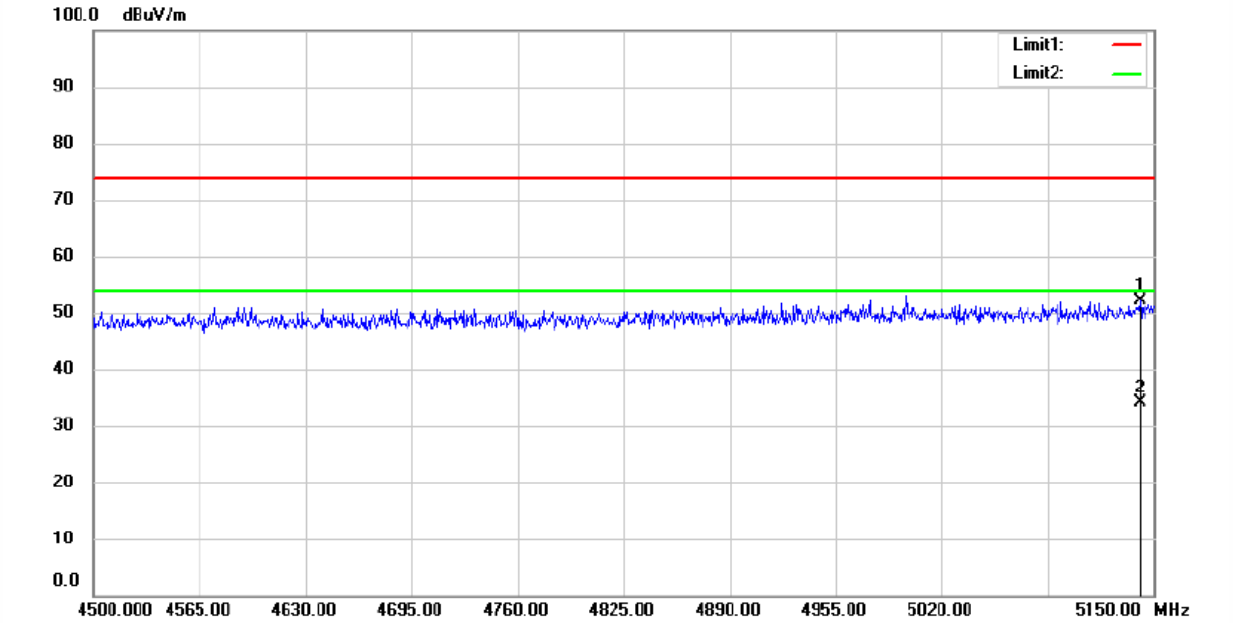
**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

| Test Model | U-NII - 1<br>Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)<br>☒802.11a ☐802.11n(HT20) ☐802.11n(HT40)<br>☒5180 ☐5200 ☐5240 Ant.Pol H |
|---|---|



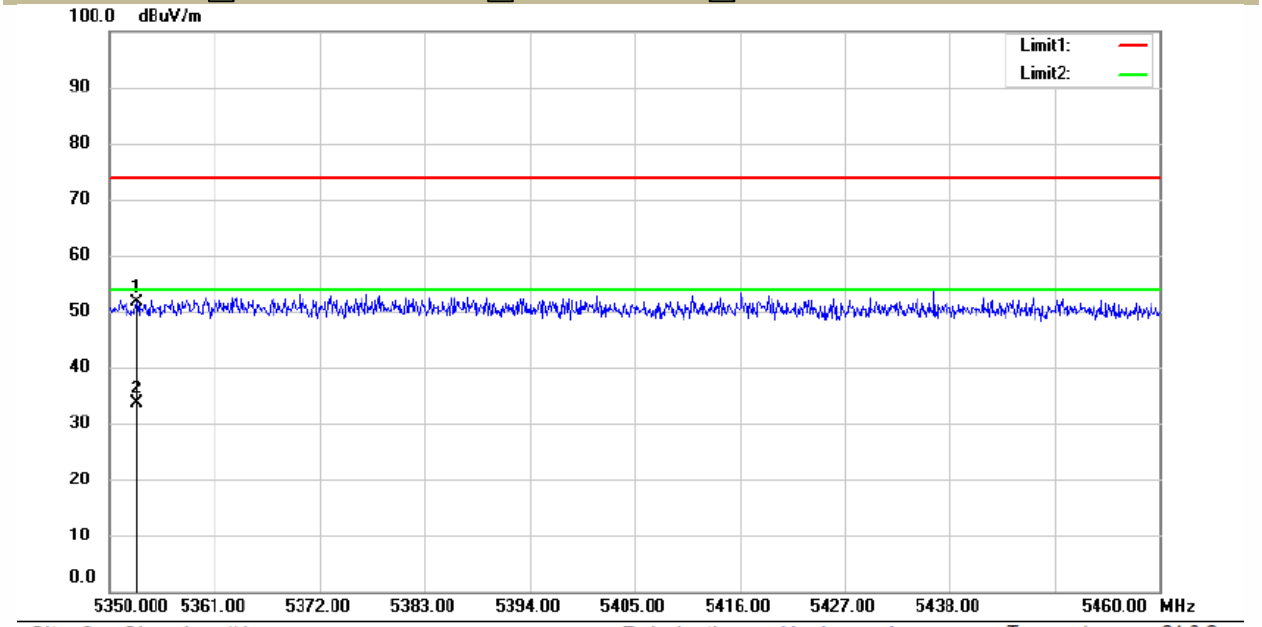

Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII - 1<br>Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)<br>☒802.11a ☐802.11n(HT20) ☐802.11n(HT40)<br>☒5180 ☐5200 ☐5240 Ant.Pol V |
|---|---|



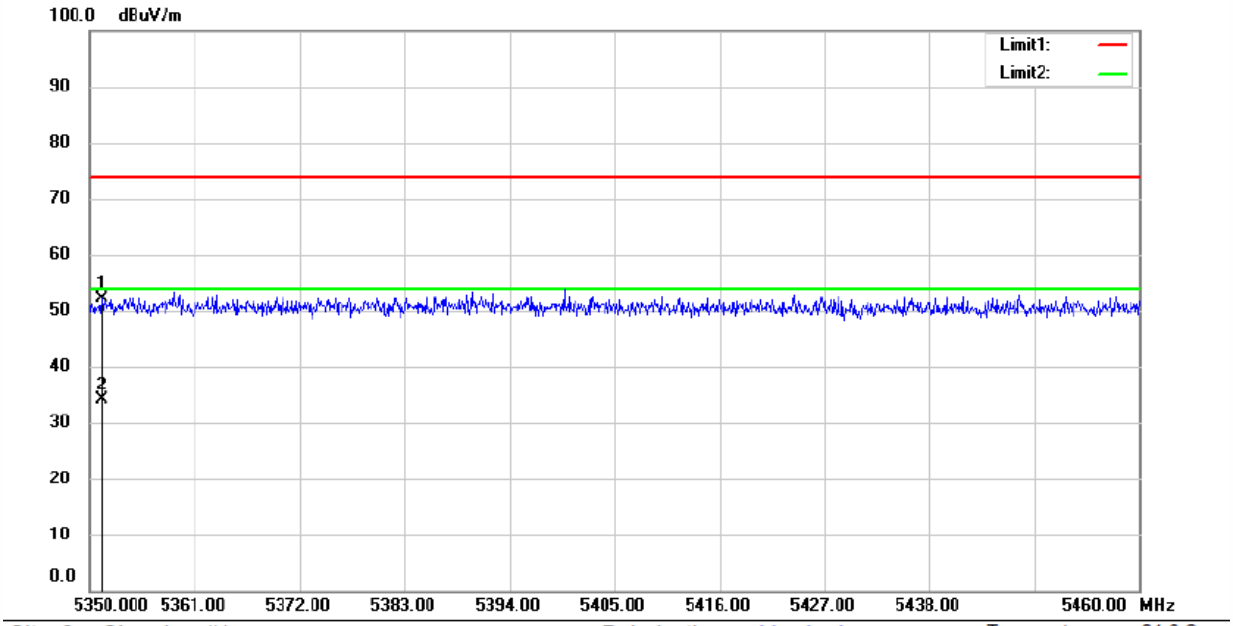

Site 3m Chamber #1 Polarization: *Vertical* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII - 1<br>Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )<br>☒802.11a ☐802.11n(HT20) ☐802.11n(HT40)<br>☐5180 ☐5200 ☒5240 Ant.Pol H |
|---|---|




Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII - 1<br>Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )<br>☒802.11a ☐802.11n(HT20) ☐802.11n(HT40)<br>☐5180 ☐5200 ☒5240 Ant.Pol V |
|---|---|




Site 3m Chamber #1 Polarization: *Vertical* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

■ ☒For Undesirable radiated Spurious Emission in U-NII -2A
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
: ☒Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5260 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 8792.27 | V | 57.88 | -37.35 | -27 | -10.35 |
| 11546.83 | V | 52.23 | -43.00 | -27 | -16 |
| 15596.92 | V | 49.97 | -45.26 | -27 | -18.26 |
| 8432.09 | H | 57.79 | -37.44 | -27 | -10.44 |
| 12602.25 | H | 50.86 | -44.37 | -27 | -17.37 |
| 15452.57 | H | 50.39 | -44.84 | -27 | -17.84 |

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5280 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 9036.79 | V | 56.18 | -39.05 | -27 | -12.05 |
| 12113.12 | V | 50.89 | -44.34 | -27 | -17.34 |
| 15512.16 | V | 49.72 | -45.51 | -27 | -18.51 |
| 8517.21 | H | 57.23 | -38.00 | -27 | -11 |
| 11601.37 | H | 51.39 | -43.84 | -27 | -16.84 |
| 15843.11 | H | 47.02 | -48.21 | -27 | -21.21 |

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5320 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 8721.58 | V | 58.02 | -37.21 | -27 | -10.21 |
| 12868.96 | V | 52.12 | -43.11 | -27 | -16.11 |
| 15619.53 | V | 49.27 | -45.96 | -27 | -18.96 |
| 8501.66 | H | 56.08 | -39.15 | -27 | -12.15 |
| 11778.68 | H | 50.75 | -44.48 | -27 | -17.48 |
| 15724.17 | H | 48.24 | -46.99 | -27 | -19.99 |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

| Test mode: | 802.11a | Frequency(MHz): | 5260 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 8792.27 | V | 57.88 | 42.19 | 74.00 | 54.00 | -16.12 | -11.81 |
| 11546.83 | V | 52.23 | 39.40 | 74.00 | 54.00 | -21.77 | -14.60 |
| 15596.92 | V | 49.97 | 37.98 | 74.00 | 54.00 | -24.03 | -16.02 |
| 8432.09 | H | 57.79 | 41.61 | 74.00 | 54.00 | -16.21 | -12.39 |
| 12602.25 | H | 50.86 | 40.97 | 74.00 | 54.00 | -23.14 | -13.03 |
| 15452.57 | H | 50.39 | 37.40 | 74.00 | 54.00 | -23.61 | -16.60 |

| Test mode: | 802.11a | Frequency(MHz): | 5280 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 9036.79 | V | 56.18 | 43.25 | 74.00 | 54.00 | -17.82 | -10.75 |
| 12113.12 | V | 50.89 | 38.99 | 74.00 | 54.00 | -23.11 | -15.01 |
| 15512.16 | V | 49.72 | 36.52 | 74.00 | 54.00 | -24.28 | -17.48 |
| 8517.21 | H | 57.23 | 43.98 | 74.00 | 54.00 | -16.77 | -10.02 |
| 11601.37 | H | 51.39 | 38.00 | 74.00 | 54.00 | -22.61 | -16.00 |
| 15843.11 | H | 47.02 | 37.04 | 74.00 | 54.00 | -26.98 | -16.96 |

| Test mode: | 802.11a | Frequency(MHz): | 5320 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 8721.58 | V | 58.02 | 42.63 | 74.00 | 54.00 | -15.98 | -11.37 |
| 12868.96 | V | 52.12 | 39.06 | 74.00 | 54.00 | -21.88 | -14.94 |
| 15619.53 | V | 49.27 | 37.65 | 74.00 | 54.00 | -24.73 | -16.35 |
| 8501.66 | H | 56.08 | 41.28 | 74.00 | 54.00 | -17.92 | -12.72 |
| 11778.68 | H | 50.75 | 40.10 | 74.00 | 54.00 | -23.25 | -13.90 |
| 15724.17 | H | 48.24 | 36.41 | 74.00 | 54.00 | -25.76 | -17.59 |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

| Test mode: | 802.11a | Frequency(MHz): | 5260 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (RBW=100KHz) (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|
| 5133.10 | H | 52.83 | -42.40 | -27 | Pass |
| 5132.45 | V | 53.06 | -42.17 | -27 | Pass |

| Test mode: | 802.11a | Frequency(MHz): | 5320 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (RBW=100KHz) (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|
| 5353.19 | H | 52.25 | -42.98 | -27 | Pass |
| 5353.08 | V | 53.03 | -42.20 | -27 | Pass |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

| Test mode: | 802.11a | Frequency(MHz): | 5260 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

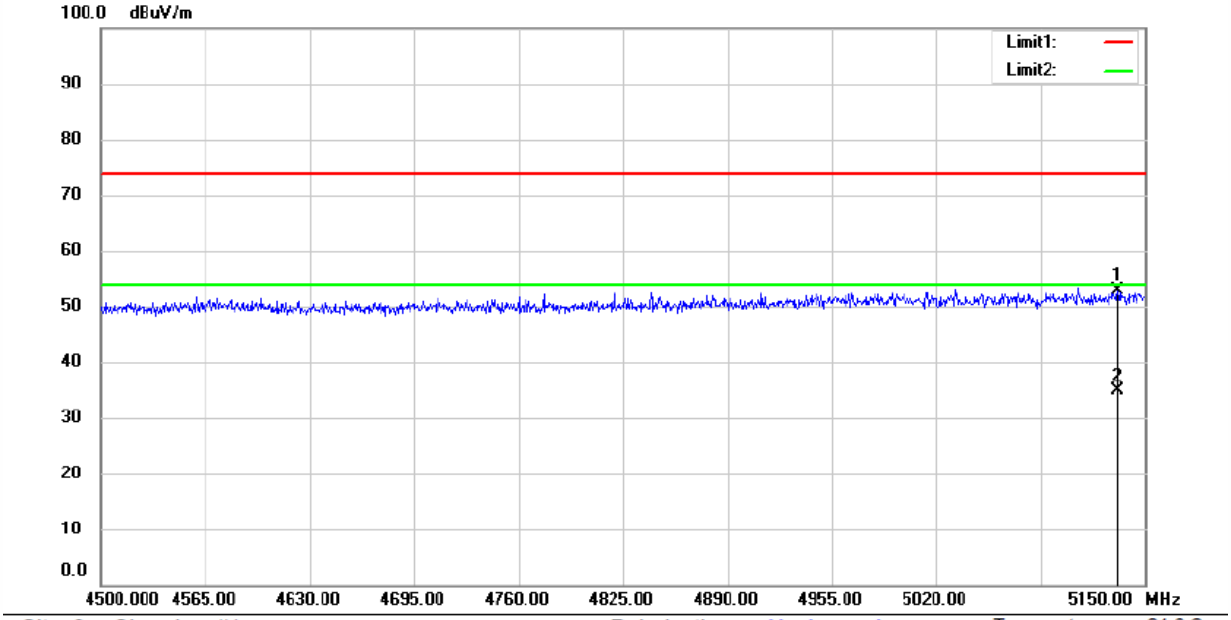
| Frequency (MHz) | Polarity H/V | PK(dBuV/m) (VBW=3MHz) | Limit 3m (dBuV/m) | AV(dBuV/m) (VBW=10Hz) | Limit 3m (dBuV/m) |
|---|---|---|---|---|---|
| 5133.10 | H | 52.83 | 74 | 34.83 | 54 |
| 5132.45 | V | 53.06 | 74 | 35.06 | 54 |

| Test mode: | 802.11a | Frequency(MHz): | 5320 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Frequency (MHz) | Polarity H/V | PK(dBuV/m) (VBW=3MHz) | Limit 3m (dBuV/m) | AV(dBuV/m) (VBW=10Hz) | Limit 3m (dBuV/m) |
|---|---|---|---|---|---|
| 5353.19 | H | 52.25 | 74 | 34.25 | 54 |
| 5353.08 | V | 53.03 | 74 | 35.03 | 54 |

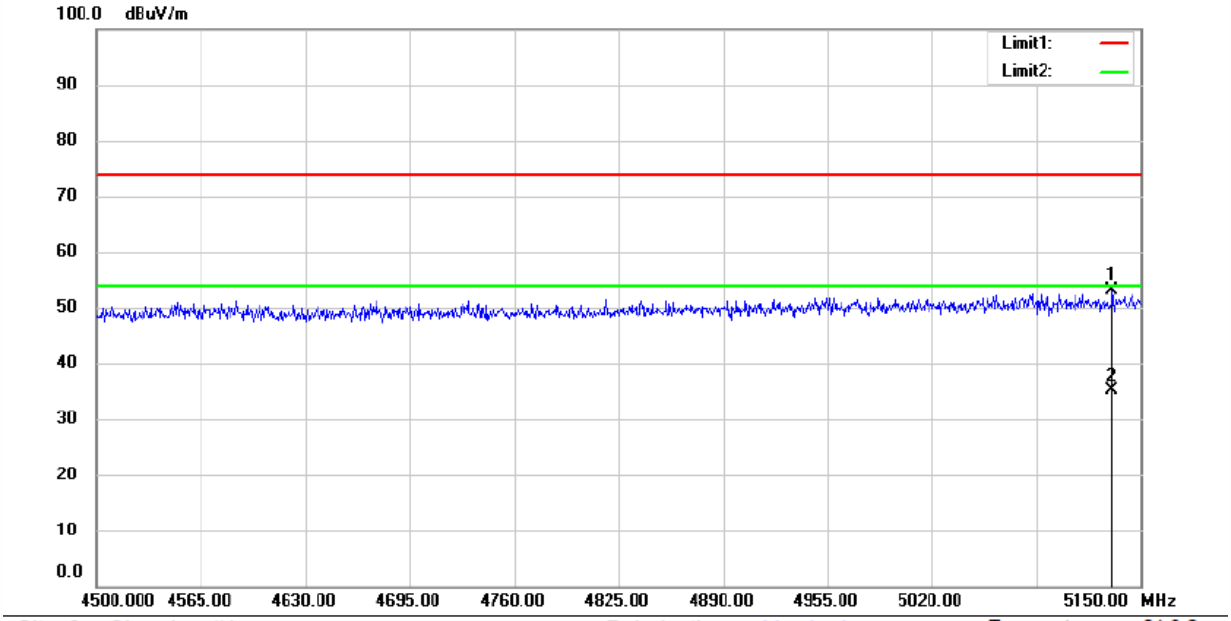
**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

| Test Model | U-NII -2A<br>Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)<br>☒802.11a ☐802.11n(HT20) ☐802.11 ac (VHT20)<br>☒5260 ☐5300 ☐5320 Ant.Pol H |
|---|---|



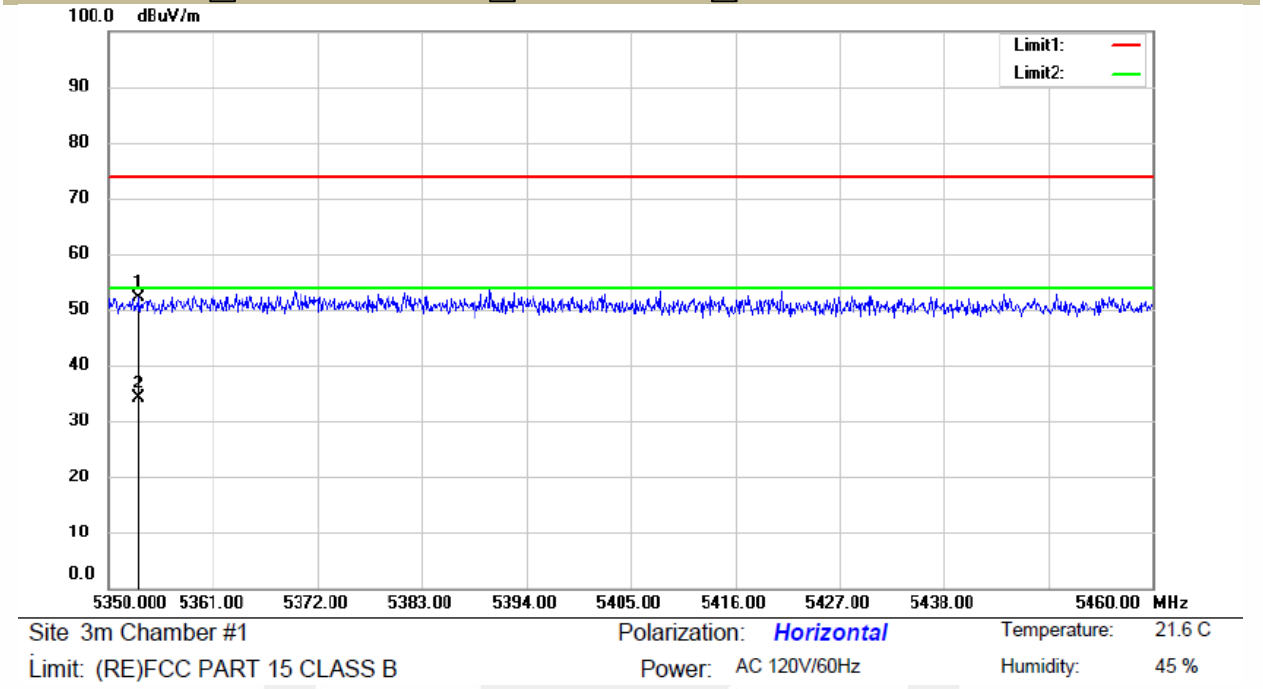

Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII -2A<br>Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)<br>☒802.11a ☐802.11n(HT20) ☐802.11 ac (VHT20)<br>☒5260 ☐5300 ☐5320 Ant.Pol V |
|---|---|



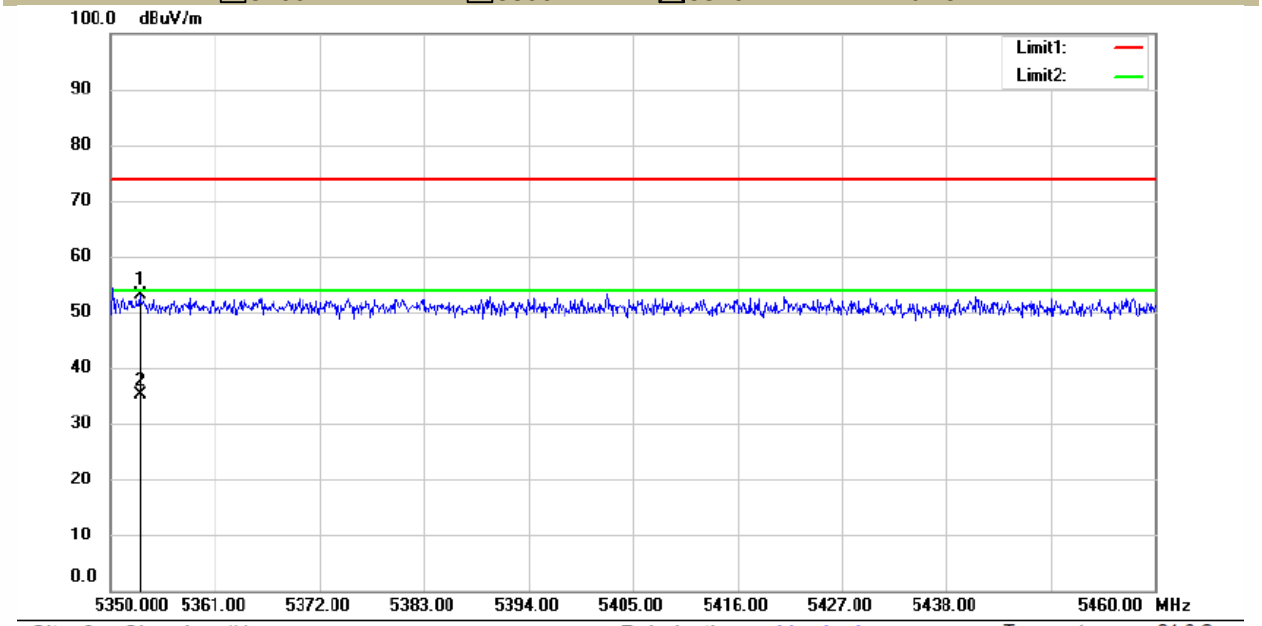

Site 3m Chamber #1 Polarization: *Vertical* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII -2A<br>Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )<br>☒802.11a ☐802.11n(HT20) ☐802.11 ac (VHT20)<br>☐5260 ☐5300 ☒5320 Ant.Pol H |
|---|---|




Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII -2A<br>Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )<br>☒802.11a ☐802.11n(HT20) ☐802.11 ac (VHT20)<br>☐5260 ☐5300 ☒5320 Ant.Pol V |
|---|---|




Site 3m Chamber #1 Polarization: *Vertical* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

■ ☒For Undesirable radiated Spurious Emission in U-NII -2C
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
: ☒Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5500 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 9131.45 | V | 57.93 | -37.3 | -27 | -10.3 |
| 12994.04 | V | 50.14 | -45.09 | -27 | -18.09 |
| 16792.91 | V | 47.01 | -48.22 | -27 | -21.22 |
| 8489.07 | H | 58.85 | -36.38 | -27 | -9.38 |
| 11607.54 | H | 53.26 | -41.97 | -27 | -14.97 |
| 15467.03 | H | 50.90 | -44.33 | -27 | -17.33 |

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5580 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 8387.99 | V | 55.85 | -39.38 | -27 | -12.38 |
| 12679.67 | V | 50.81 | -44.42 | -27 | -17.42 |
| 16454.58 | V | 47.70 | -47.53 | -27 | -20.53 |
| 8746.14 | H | 57.11 | -38.12 | -27 | -11.12 |
| 11738.27 | H | 50.55 | -44.68 | -27 | -17.68 |
| 16374.06 | H | 48.00 | -47.23 | -27 | -20.23 |

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5700 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 8473.32 | V | 56.29 | -38.94 | -27 | -11.94 |
| 13050.99 | V | 51.63 | -43.6 | -27 | -16.6 |
| 16117.04 | V | 50.48 | -44.75 | -27 | -17.75 |
| 8783.78 | H | 58.44 | -36.79 | -27 | -9.79 |
| 11954.66 | H | 53.81 | -41.42 | -27 | -14.42 |
| 15976.81 | H | 47.62 | -47.61 | -27 | -20.61 |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

| Test mode: | 802.11a | Frequency(MHz): | 5500 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 9131.45 | V | 57.93 | 43.89 | 74.00 | 54.00 | -16.07 | -10.11 |
| 12994.04 | V | 50.14 | 38.74 | 74.00 | 54.00 | -23.86 | -15.26 |
| 16792.91 | V | 47.01 | 37.20 | 74.00 | 54.00 | -26.99 | -16.80 |
| 8489.07 | H | 58.85 | 42.25 | 74.00 | 54.00 | -15.15 | -11.75 |
| 11607.54 | H | 53.26 | 40.61 | 74.00 | 54.00 | -20.74 | -13.39 |
| 15467.03 | H | 50.90 | 36.12 | 74.00 | 54.00 | -23.10 | -17.88 |

| Test mode: | 802.11a | Frequency(MHz): | 5580 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 8387.99 | V | 55.85 | 41.70 | 74.00 | 54.00 | -18.15 | -12.30 |
| 12679.67 | V | 50.81 | 38.33 | 74.00 | 54.00 | -23.19 | -15.67 |
| 16454.58 | V | 47.70 | 36.11 | 74.00 | 54.00 | -26.30 | -17.89 |
| 8746.14 | H | 57.11 | 43.87 | 74.00 | 54.00 | -16.89 | -10.13 |
| 11738.27 | H | 50.55 | 40.13 | 74.00 | 54.00 | -23.45 | -13.87 |
| 16374.06 | H | 48.00 | 36.80 | 74.00 | 54.00 | -26.00 | -17.20 |

| Test mode: | 802.11a | Frequency(MHz): | 5700 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 8473.32 | V | 56.29 | 41.46 | 74.00 | 54.00 | -17.71 | -12.54 |
| 13050.99 | V | 51.63 | 40.16 | 74.00 | 54.00 | -22.37 | -13.84 |
| 16117.04 | V | 50.48 | 37.94 | 74.00 | 54.00 | -23.52 | -16.06 |
| 8783.78 | H | 58.44 | 43.22 | 74.00 | 54.00 | -15.56 | -10.78 |
| 11954.66 | H | 53.81 | 38.19 | 74.00 | 54.00 | -20.19 | -15.81 |
| 15976.81 | H | 47.62 | 36.69 | 74.00 | 54.00 | -26.38 | -17.31 |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

| Test mode: | 802.11a | Frequency(MHz): | 5500 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (RBW=100KHz) (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|
| 5467.75 | H | 52.42 | -42.81 | -27 | Pass |
| 5468.80 | V | 52.87 | -42.36 | -27 | Pass |

| Test mode: | 802.11a | Frequency(MHz): | 5700 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (RBW=100KHz) (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|
| 5726.55 | H | 53.08 | -42.15 | -27 | Pass |
| 5726.05 | V | 52.55 | -42.68 | -27 | Pass |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

| Test mode: | 802.11a | Frequency(MHz): | 5500 |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

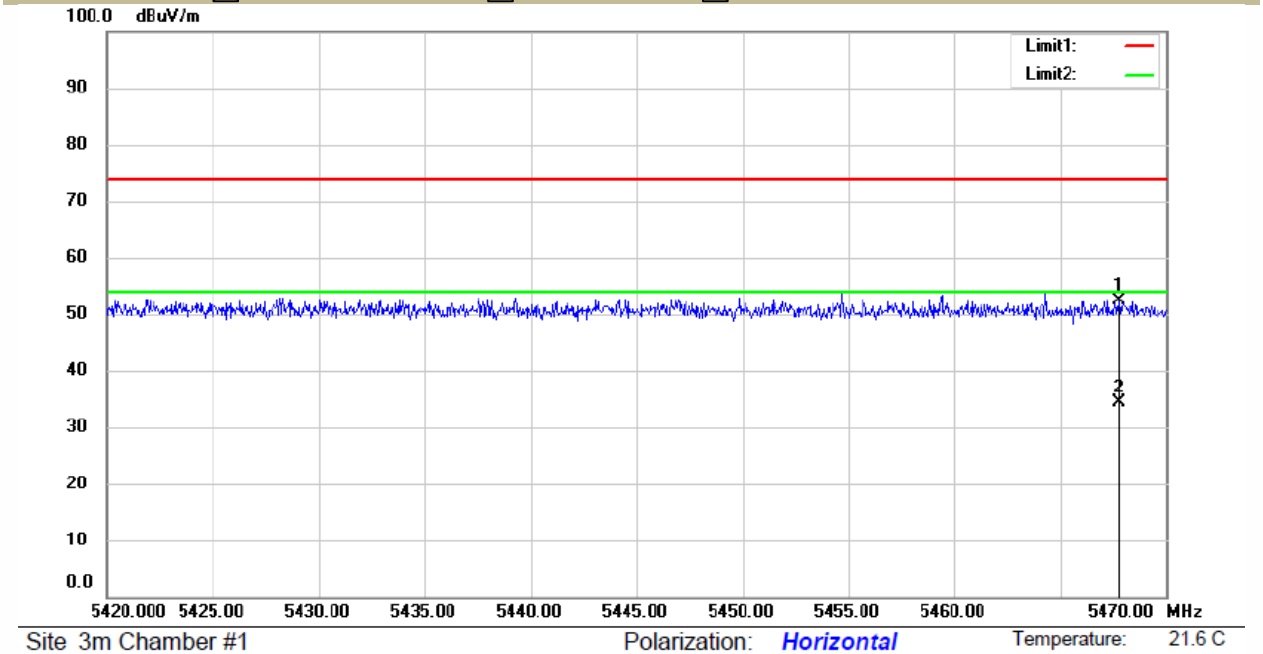
| Frequency (MHz) | Polarity H/V | PK(dBuV/m) (VBW=3MHz) | Limit 3m (dBuV/m) | AV(dBuV/m) (VBW=10Hz) | Limit 3m (dBuV/m) |
|---|---|---|---|---|---|
| 5467.75 | H | 52.42 | 74 | 34.42 | 54 |
| 5468.80 | V | 52.87 | 74 | 34.87 | 54 |

| Test mode: | 802.11a | Frequency(MHz): | 5700 |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Frequency (MHz) | Polarity H/V | PK(dBuV/m) (VBW=3MHz) | Limit 3m (dBuV/m) | AV(dBuV/m) (VBW=10Hz) | Limit 3m (dBuV/m) |
|---|---|---|---|---|---|
| 5726.55 | H | 53.08 | 74 | 35.08 | 54 |
| 5726.05 | V | 52.55 | 74 | 34.55 | 54 |

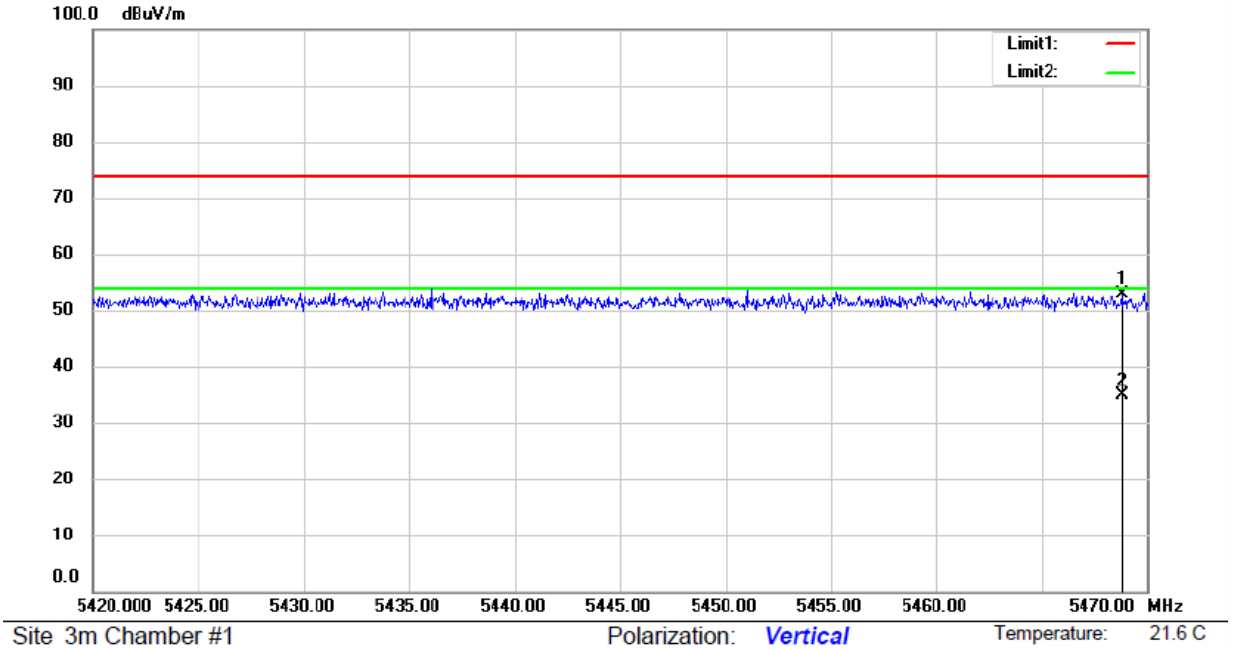
**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

| Test Model | U-NII -2C<br>Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)<br>☒802.11a ☐802.11n(HT20) ☐802.11 ac (VHT20)<br>☒5500 ☐5580 ☐5700 Ant.Pol H |
|---|---|



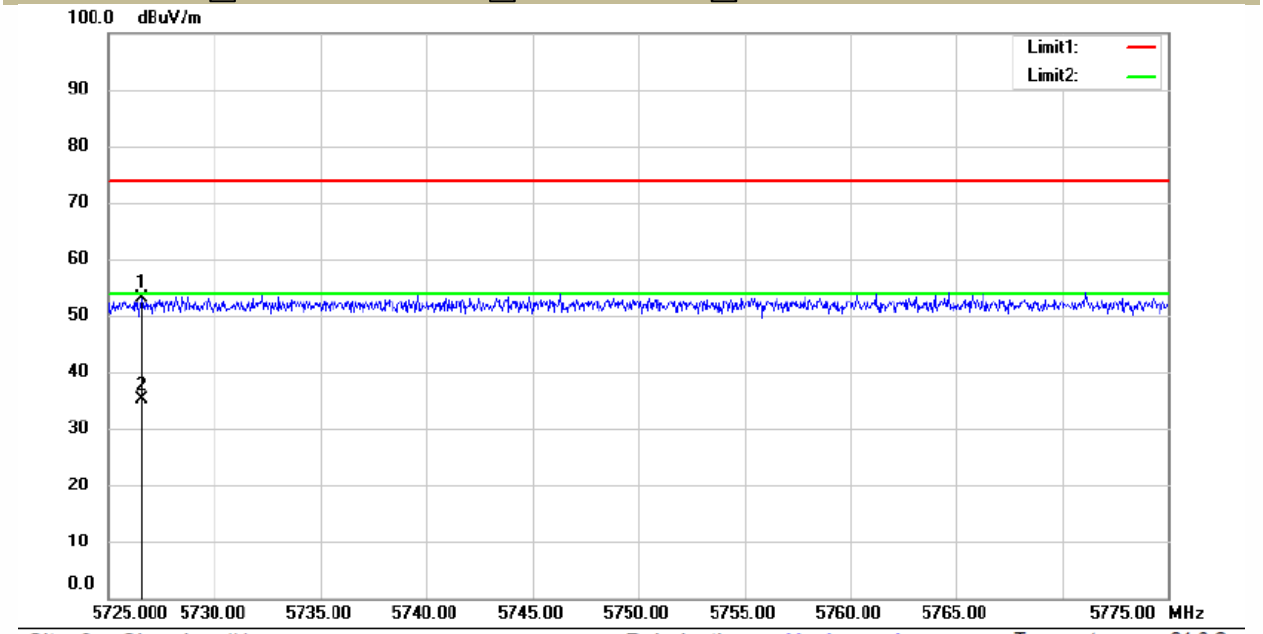

Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII -2C<br>Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)<br>☒802.11a ☐802.11n(HT20) ☐802.11 ac (VHT20)<br>☒5500 ☐5580 ☐5700 Ant.Pol V |
|---|---|



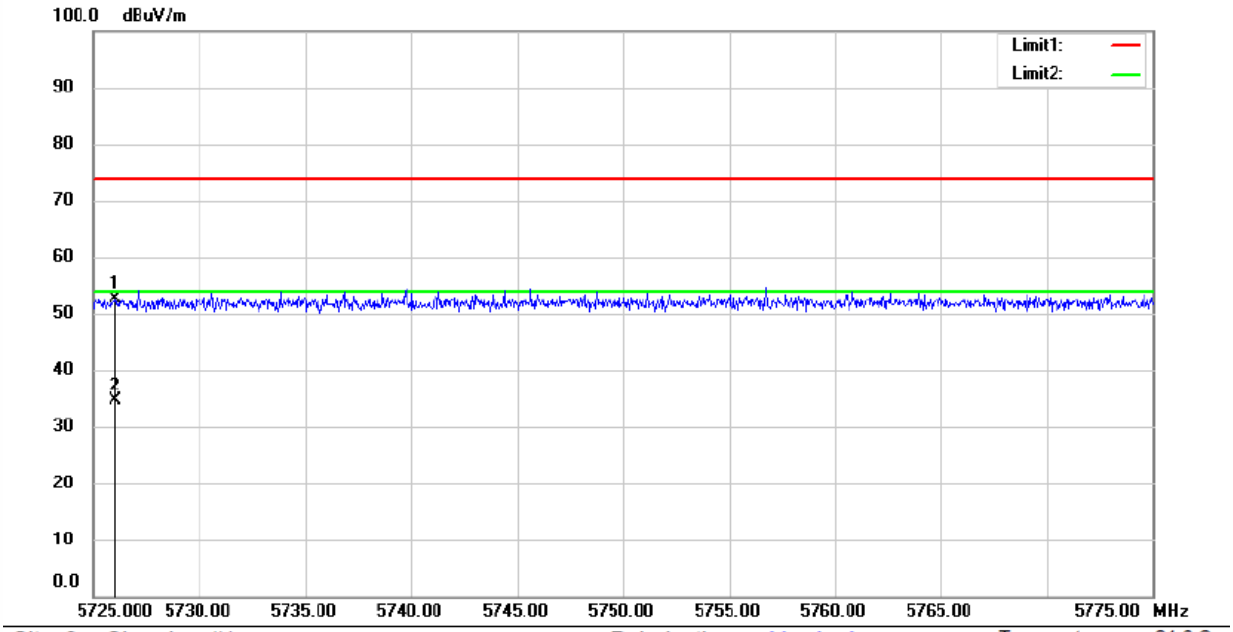

Site 3m Chamber #1 Polarization: *Vertical* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII -2C<br>Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )<br>☒802.11a ☐802.11n(HT20) ☐802.11 ac (VHT20)<br>☐5500 ☐5580 ☒5700 Ant.Pol H |
|---|---|




Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII -2C<br>Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )<br>☒802.11a ☐802.11n(HT20) ☐802.11 ac (VHT20)<br>☐5500 ☐5580 ☒5700 Ant.Pol V |
|---|---|




Site 3m Chamber #1 Polarization: *Vertical* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

■ ☒For Undesirable radiated Spurious Emission in U-NII -3

All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:

● ☒Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5745 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 9132.98 | V | 57.29 | -37.94 | -27 | -10.94 |
| 12226.58 | V | 51.20 | -44.03 | -27 | -17.03 |
| 15360.84 | V | 47.18 | -48.05 | -27 | -21.05 |
| 9113.00 | H | 57.48 | -37.75 | -27 | -10.75 |
| 12751.08 | H | 52.74 | -42.49 | -27 | -15.49 |
| 17033.15 | H | 48.92 | -46.31 | -27 | -19.31 |

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5785 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 8493.75 | V | 57.43 | -37.8 | -27 | -10.8 |
| 11989.92 | V | 53.93 | -41.3 | -27 | -14.3 |
| 16996.03 | V | 47.84 | -47.39 | -27 | -20.39 |
| 8495.10 | H | 55.21 | -40.02 | -27 | -13.02 |
| 11774.48 | H | 53.70 | -41.53 | -27 | -14.53 |
| 17124.76 | H | 50.60 | -44.63 | -27 | -17.63 |

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency(MHz): | 5825 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|---|---|---|---|---|---|
| 9122.93 | V | 56.11 | -39.12 | -27 | -12.12 |
| 11812.48 | V | 51.26 | -43.97 | -27 | -16.97 |
| 16755.46 | V | 48.49 | -46.74 | -27 | -19.74 |
| 8849.13 | H | 56.56 | -38.67 | -27 | -11.67 |
| 11771.28 | H | 52.85 | -42.38 | -27 | -15.38 |
| 16476.85 | H | 49.07 | -46.16 | -27 | -19.16 |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

| Test mode: | 802.11a | Frequency(MHz): | 5745 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 9132.98 | V | 57.29 | 41.21 | 74.00 | 54.00 | -16.71 | -12.79 |
| 12226.58 | V | 51.20 | 38.82 | 74.00 | 54.00 | -22.80 | -15.18 |
| 15360.84 | V | 47.18 | 36.67 | 74.00 | 54.00 | -26.82 | -17.33 |
| 9113.00 | H | 57.48 | 41.63 | 74.00 | 54.00 | -16.52 | -12.37 |
| 12751.08 | H | 52.74 | 38.54 | 74.00 | 54.00 | -21.26 | -15.46 |
| 17033.15 | H | 48.92 | 35.23 | 74.00 | 54.00 | -25.08 | -18.77 |

| Test mode: | 802.11a | Frequency(MHz): | 5785 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 8493.75 | V | 57.43 | 41.03 | 74.00 | 54.00 | -16.57 | -12.97 |
| 11989.92 | V | 53.93 | 38.61 | 74.00 | 54.00 | -20.07 | -15.39 |
| 16996.03 | V | 47.84 | 36.00 | 74.00 | 54.00 | -26.16 | -18.00 |
| 8495.10 | H | 55.21 | 43.32 | 74.00 | 54.00 | -18.79 | -10.68 |
| 11774.48 | H | 53.70 | 39.18 | 74.00 | 54.00 | -20.30 | -14.82 |
| 17124.76 | H | 50.60 | 36.02 | 74.00 | 54.00 | -23.40 | -17.98 |

| Test mode: | 802.11a | Frequency(MHz): | 5825 MHz |
|---|---|---|---|
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. | Emission Level(dBuV/m) | | Limit 3m(dBuV/m) | | Over(dB) | |
|---|---|---|---|---|---|---|---|
| | H/V | PK | AV | PK | AV | PK | AV |
| 9122.93 | V | 56.11 | 43.00 | 74.00 | 54.00 | -17.89 | -11.00 |
| 11812.48 | V | 51.26 | 40.28 | 74.00 | 54.00 | -22.74 | -13.72 |
| 16755.46 | V | 48.49 | 36.23 | 74.00 | 54.00 | -25.51 | -17.77 |
| 8849.13 | H | 56.56 | 43.95 | 74.00 | 54.00 | -17.44 | -10.05 |
| 11771.28 | H | 52.85 | 40.67 | 74.00 | 54.00 | -21.15 | -13.33 |
| 16476.85 | H | 49.07 | 36.07 | 74.00 | 54.00 | -24.93 | -17.93 |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

- ☒Undesirable radiated Spurious Emission in band edge

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency: | 5745 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

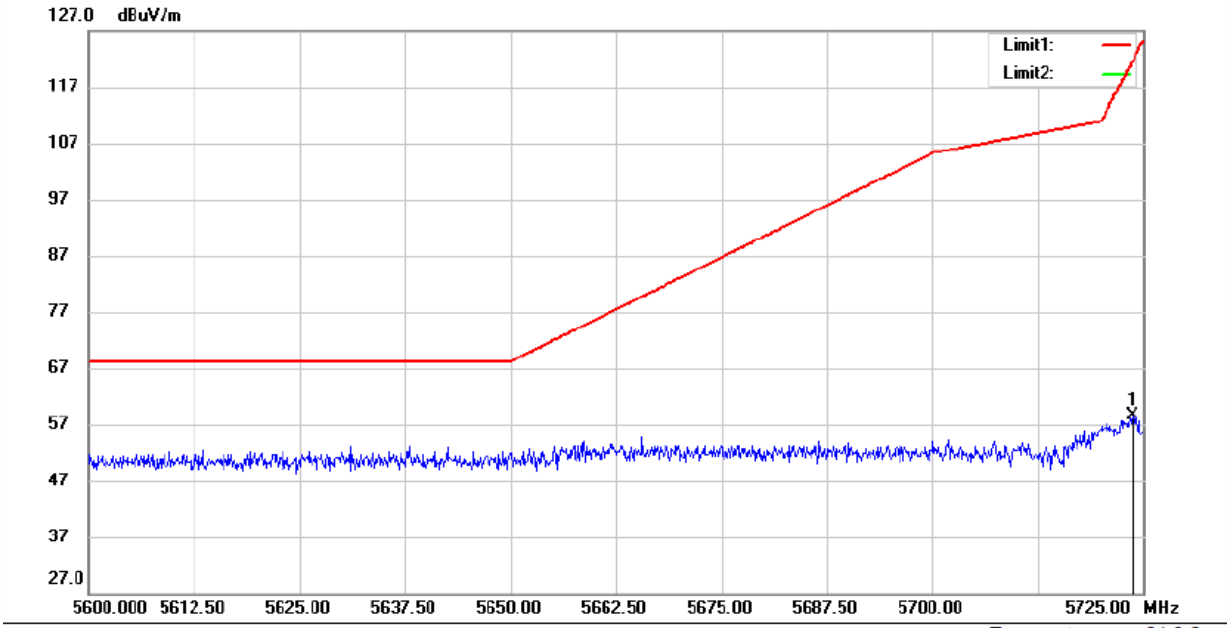
| Freq. (MHz) | Ant.Pol. H/V | Field Strength (RBW=100KHz) (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|
| 5723.75 | H | 58.73 | -36.50 | 24.15 | PASS |
| 5723.75 | V | 59.74 | -35.49 | 24.15 | PASS |

| | | | |
|---|---|---|---|
| Test mode: | 802.11a | Frequency: | 5825 MHz |
| Test By: | ZXW | Test date: | June 11 2021 |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (RBW=100KHz) (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|
| 5853.37 | V | 53.36 | -41.87 | 19.31 | PASS |
| 5851.00 | H | 53.11 | -42.12 | 24.72 | PASS |

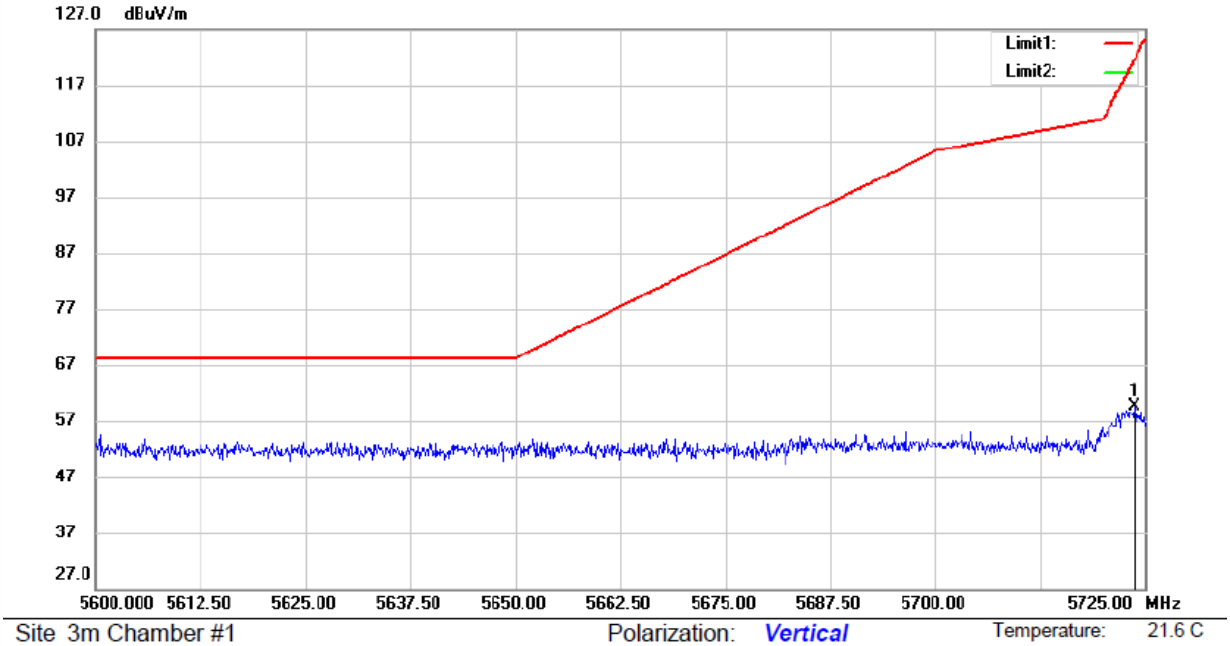
**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

| Test Model | U-NII -3<br>Undesirable radiated Undesirable radiated Spurious Emission in Band Edge<br>☒802.11a ☐802.11n(HT20) ☐802.11n(HT40)<br>☒5745 Ant.Pol H |
|---|---|



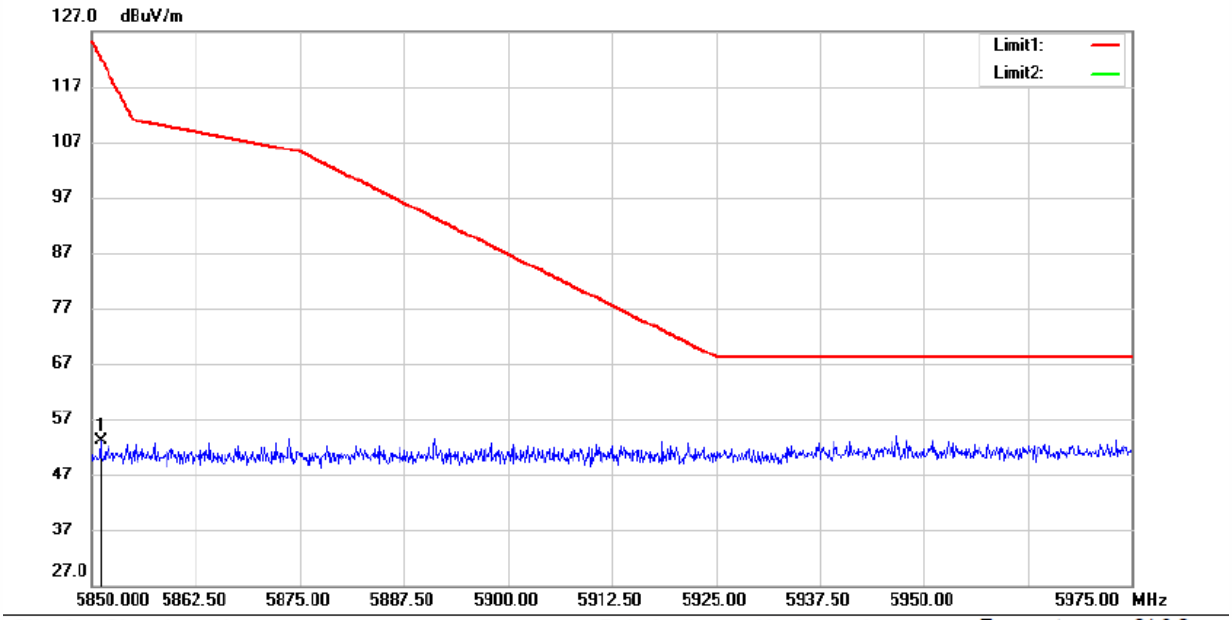

Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 21.6 C
Limit: (RE)FCC PART 15C B4 ( 5G Bandedge) Peak Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII -3<br>Undesirable radiated Undesirable radiated Spurious Emission in Band Edge<br>☒802.11a ☐802.11n(HT20) ☐802.11n(HT40)<br>☒5745 Ant.Pol V |
|---|---|



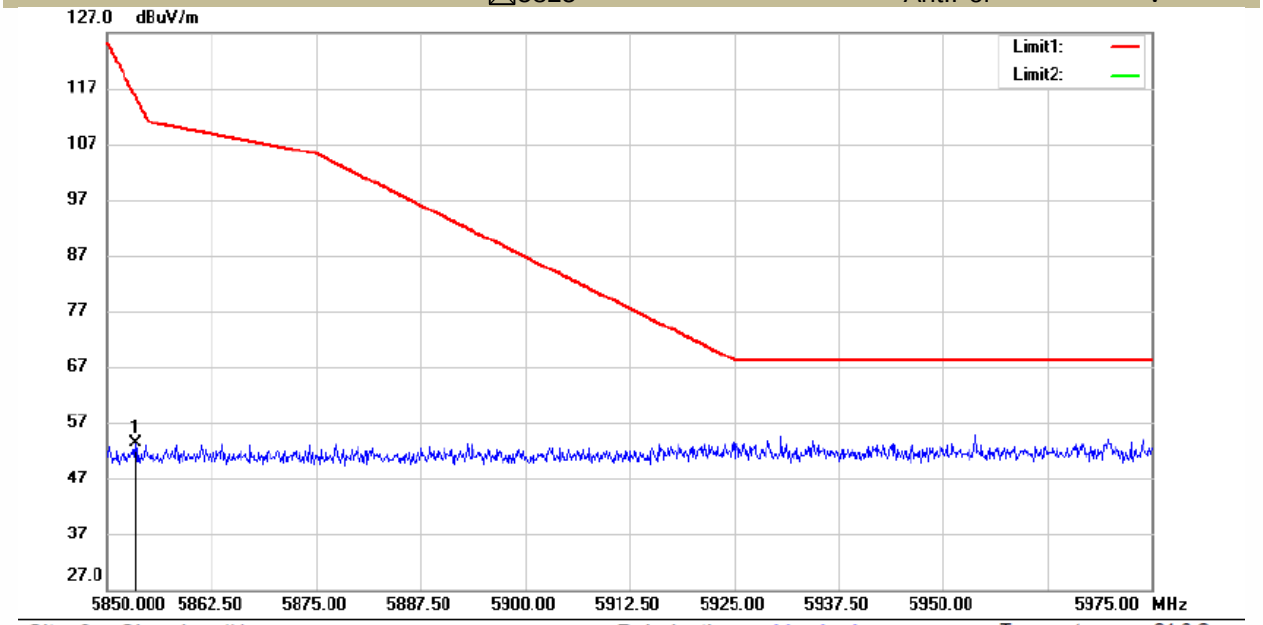

Site 3m Chamber #1 Polarization: *Vertical* Temperature: 21.6 C
Limit: (RE)FCC PART 15C B4 ( 5G Bandedge) Peak Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII -3<br>Undesirable radiated Undesirable radiated Spurious Emission in Band Edge<br>☒802.11a ☐802.11n(HT20) ☐802.11n(HT40)<br>☒5825 Ant.Pol H |
|---|---|



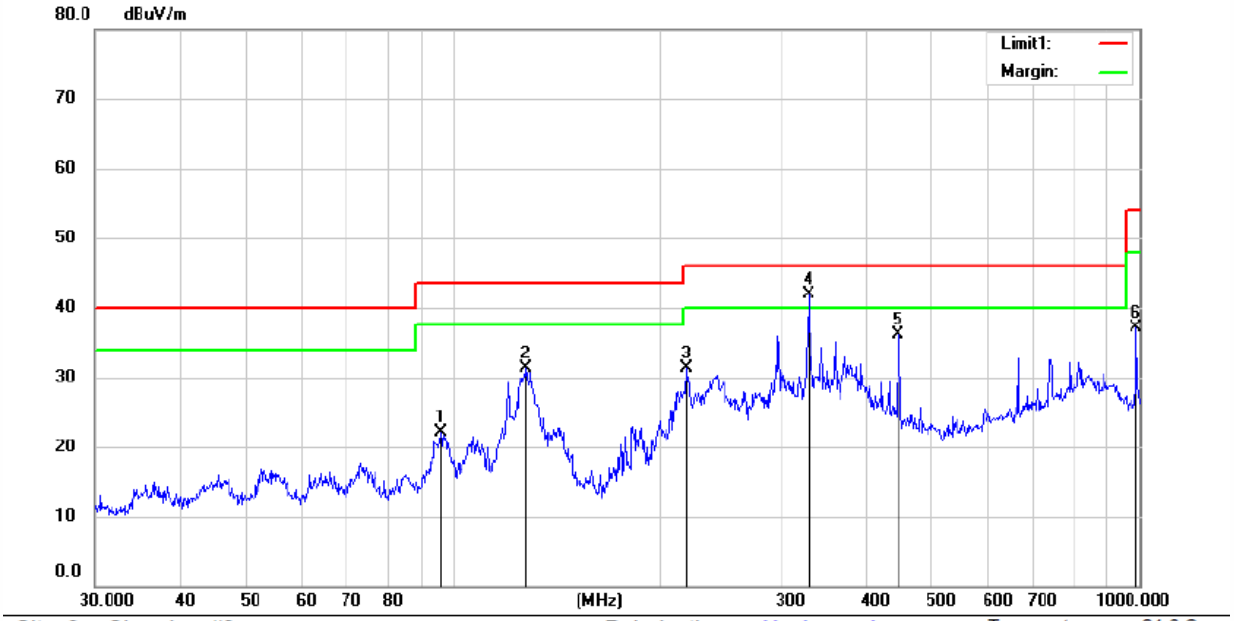

Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 21.6 C
Limit: (RE)FCC PART 15C B4 ( 5G Bandedge) Peak Power: AC 120V/60Hz Humidity: 45 %

| Test Model | U-NII -3<br>Undesirable radiated Undesirable radiated Spurious Emission in Band Edge<br>☒802.11a ☐802.11n(HT20) ☐802.11n(HT40)<br>☒5825 Ant.Pol V |
|---|---|



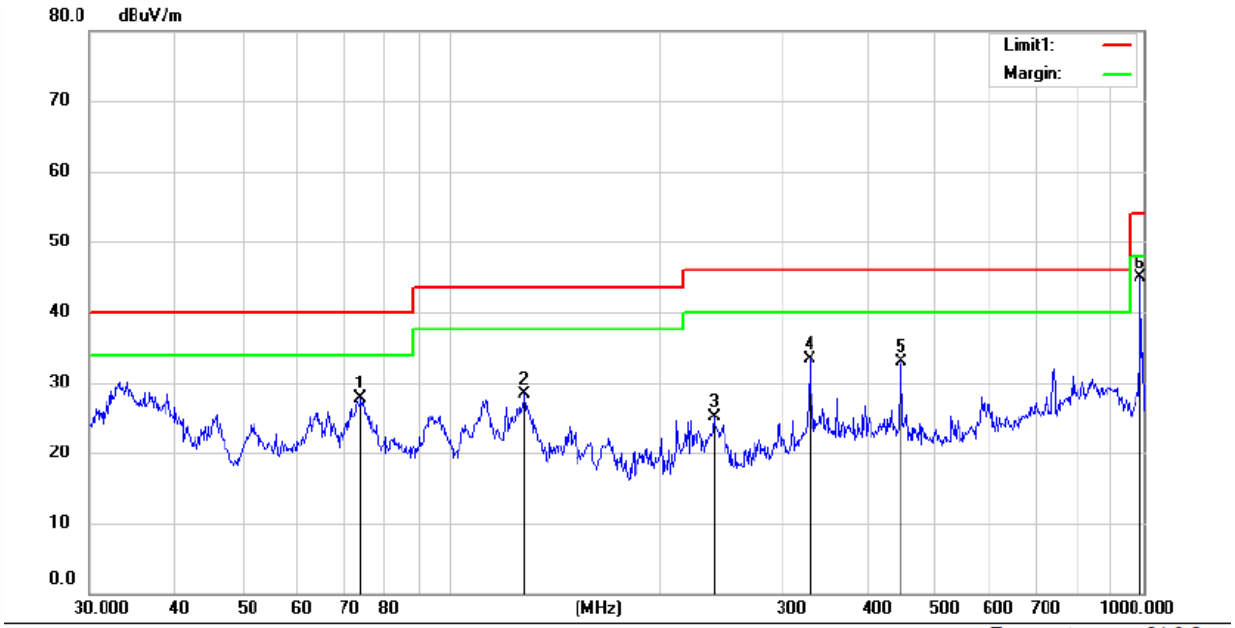

Site 3m Chamber #1 Polarization: *Vertical* Temperature: 21.6 C
Limit: (RE)FCC PART 15C B4 ( 5G Bandedge) Peak Power: AC 120V/60Hz Humidity: 45 %

- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)
  All the modes 802.11a/n/ac has been tested and the worst result 802.11ac recorded as below:




Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 21.6 C
Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %
Mode:WIFI 5G 5180
Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 95.9302 | 39.65 | -17.55 | 22.10 | 43.50 | -21.40 | QP | | | |
| 2 | | 127.9446 | 48.72 | -17.49 | 31.23 | 43.50 | -12.27 | QP | | | |
| 3 | | 218.5957 | 47.97 | -16.66 | 31.31 | 46.00 | -14.69 | QP | | | |
| 4 | * | 330.0501 | 53.91 | -11.96 | 41.95 | 46.00 | -4.05 | QP | | | |
| 5 | | 445.8274 | 44.57 | -8.48 | 36.09 | 46.00 | -9.91 | QP | | | |
| 6 | | 989.9692 | 38.87 | -1.70 | 37.17 | 54.00 | -16.83 | QP | | | |



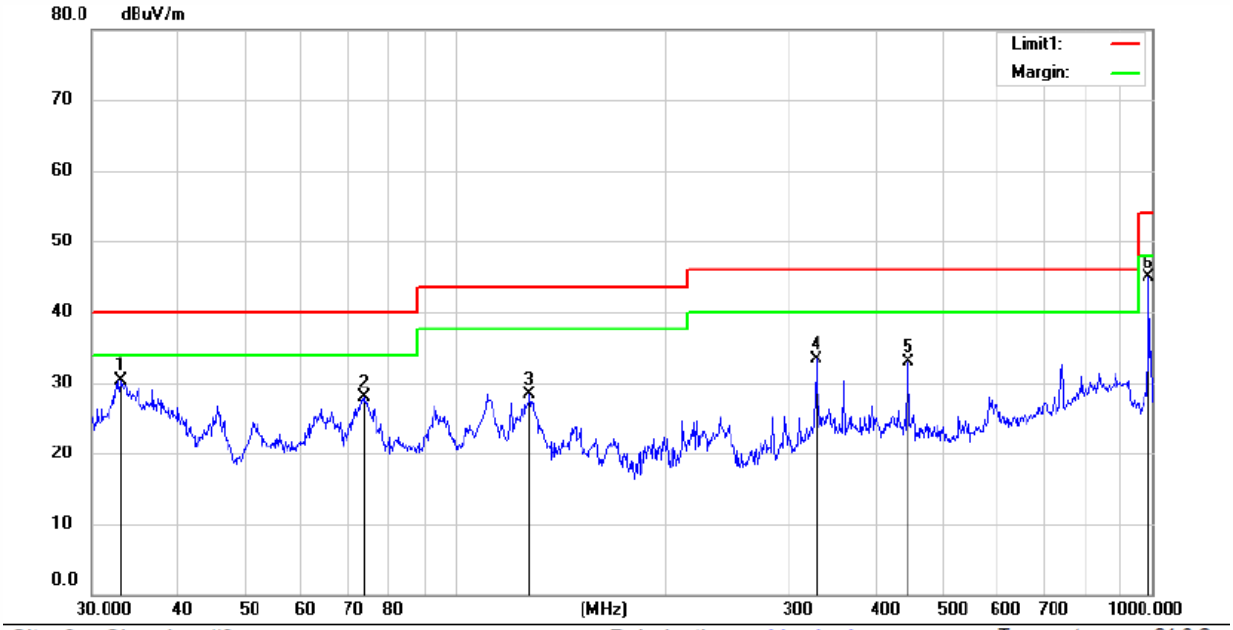

Site 3m Chamber #3 Polarization: *Vertical* Temperature: 21.6 C

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

Mode:WIFI 5G 5180

Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 74.0376 | 44.49 | -16.79 | 27.70 | 40.00 | -12.30 | QP | | | |
| 2 | | 127.9446 | 45.88 | -17.49 | 28.39 | 43.50 | -15.11 | QP | | | |
| 3 | | 239.9873 | 40.79 | -15.75 | 25.04 | 46.00 | -20.96 | QP | | | |
| 4 | | 330.0501 | 45.36 | -11.96 | 33.40 | 46.00 | -12.60 | QP | | | |
| 5 | | 446.8056 | 41.34 | -8.46 | 32.88 | 46.00 | -13.12 | QP | | | |
| 6 | * | 990.4033 | 46.49 | -1.68 | 44.81 | 54.00 | -9.19 | QP | | | |



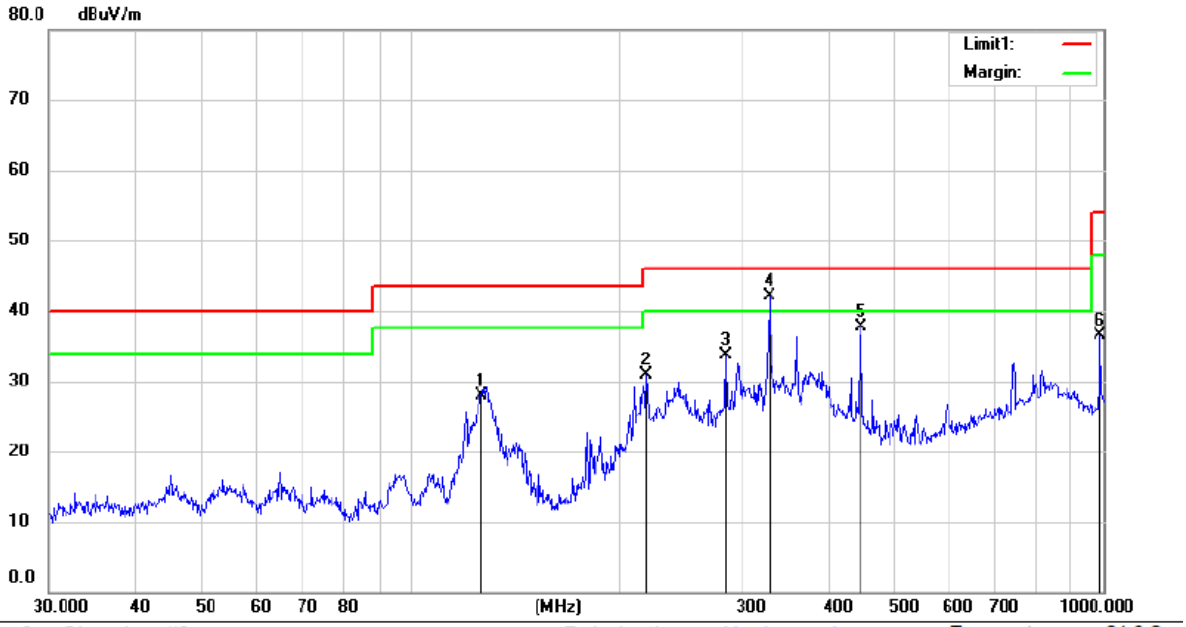

Site 3m Chamber #3 Polarization: *Vertical* Temperature: 21.6 C

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

Mode:WIFI 5G 5200

Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 33.0804 | 47.23 | -16.97 | 30.26 | 40.00 | -9.74 | QP | | | |
| 2 | | 74.1025 | 44.61 | -16.80 | 27.81 | 40.00 | -12.19 | QP | | | |
| 3 | | 127.9446 | 45.88 | -17.49 | 28.39 | 43.50 | -15.11 | QP | | | |
| 4 | | 330.0500 | 45.36 | -11.96 | 33.40 | 46.00 | -12.60 | QP | | | |
| 5 | | 446.8056 | 41.34 | -8.46 | 32.88 | 46.00 | -13.12 | QP | | | |
| 6 | * | 990.4033 | 46.49 | -1.68 | 44.81 | 54.00 | -9.19 | QP | | | |

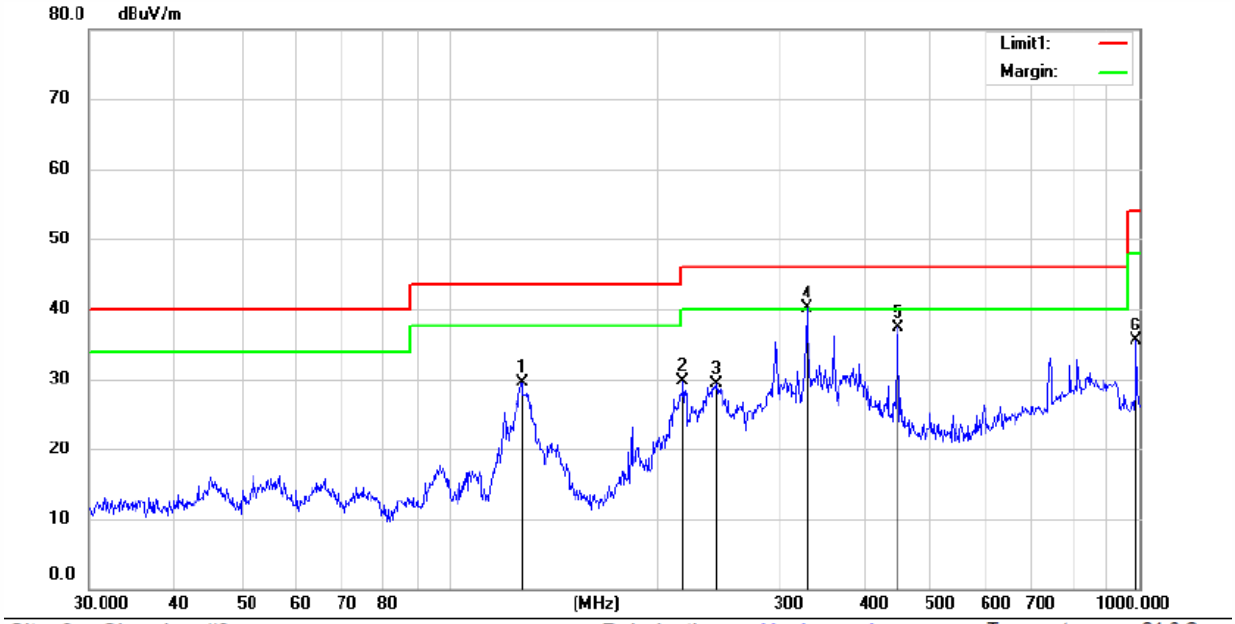



Site 3m Chamber #3
Limit: (RE)FCC PART 15 CLASS B
Mode:WIFI 5G 5200
Note:

Polarization: *Horizontal*
Power: AC 120V/60Hz

Temperature: 21.6 C
Humidity: 45 %

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 126.1625 | 45.36 | -17.53 | 27.83 | 43.50 | -15.67 | QP | | | |
| 2 | | 218.7874 | 47.56 | -16.65 | 30.91 | 46.00 | -15.09 | QP | | | |
| 3 | | 285.7271 | 47.29 | -13.49 | 33.80 | 46.00 | -12.20 | QP | | | |
| 4 | * | 330.0501 | 54.13 | -11.96 | 42.17 | 46.00 | -3.83 | QP | | | |
| 5 | | 446.8056 | 46.18 | -8.46 | 37.72 | 46.00 | -8.28 | QP | | | |
| 6 | | 990.4033 | 38.20 | -1.68 | 36.52 | 54.00 | -17.48 | QP | | | |



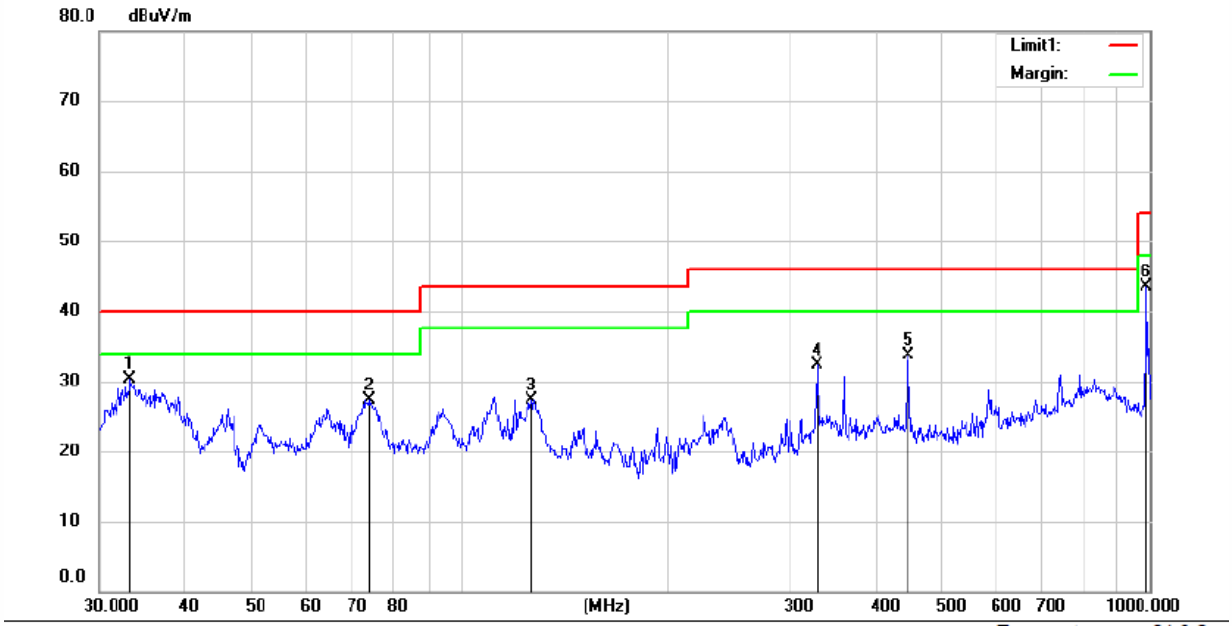

Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 21.6 C

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

Mode:WIFI 5G 5240

Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 127.6645 | 47.09 | -17.50 | 29.59 | 43.50 | -13.91 | QP | | | |
| 2 | | 217.8305 | 46.33 | -16.68 | 29.65 | 46.00 | -16.35 | QP | | | |
| 3 | | 244.1250 | 44.90 | -15.57 | 29.33 | 46.00 | -16.67 | QP | | | |
| 4 | * | 330.0501 | 52.07 | -11.96 | 40.11 | 46.00 | -5.89 | QP | | | |
| 5 | | 446.6098 | 45.82 | -8.47 | 37.35 | 46.00 | -8.65 | QP | | | |
| 6 | | 989.9692 | 37.12 | -1.70 | 35.42 | 54.00 | -18.58 | QP | | | |




Site 3m Chamber #3 Polarization: *Vertical* Temperature: 21.6 C

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 45 %

Mode:WIFI 5G 5240

Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | * | 33.3132 | 47.16 | -16.93 | 30.23 | 40.00 | -9.77 | QP | | | |
| 2 | | 73.7785 | 44.05 | -16.73 | 27.32 | 40.00 | -12.68 | QP | | | |
| 3 | | 126.8278 | 44.91 | -17.51 | 27.40 | 43.50 | -16.10 | QP | | | |
| 4 | | 330.0501 | 44.26 | -11.96 | 32.30 | 46.00 | -13.70 | QP | | | |
| 5 | | 446.8056 | 42.26 | -8.46 | 33.80 | 46.00 | -12.20 | QP | | | |
| 6 | | 990.4033 | 45.14 | -1.68 | 43.46 | 54.00 | -10.54 | QP | | | |

## 8.6 POWER LINE CONDUCTED EMISSIONS

8.6.1 Applicable Standard

According to FCC Part 15.207(a)

8.6.2 Conformance Limit

| Conducted Emission Limit | | |
|---|---|---|
| Frequency(MHz) | Quasi-peak | Average |
| 0.15-0.5 | 66-56 | 56-46 |
| 0.5-5.0 | 56 | 46 |
| 5.0-30.0 | 60 | 50 |

Note: 1. The lower limit shall apply at the transition frequencies
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

8.6.3 Test Configuration

Test according to clause 6.3 conducted emission test setup

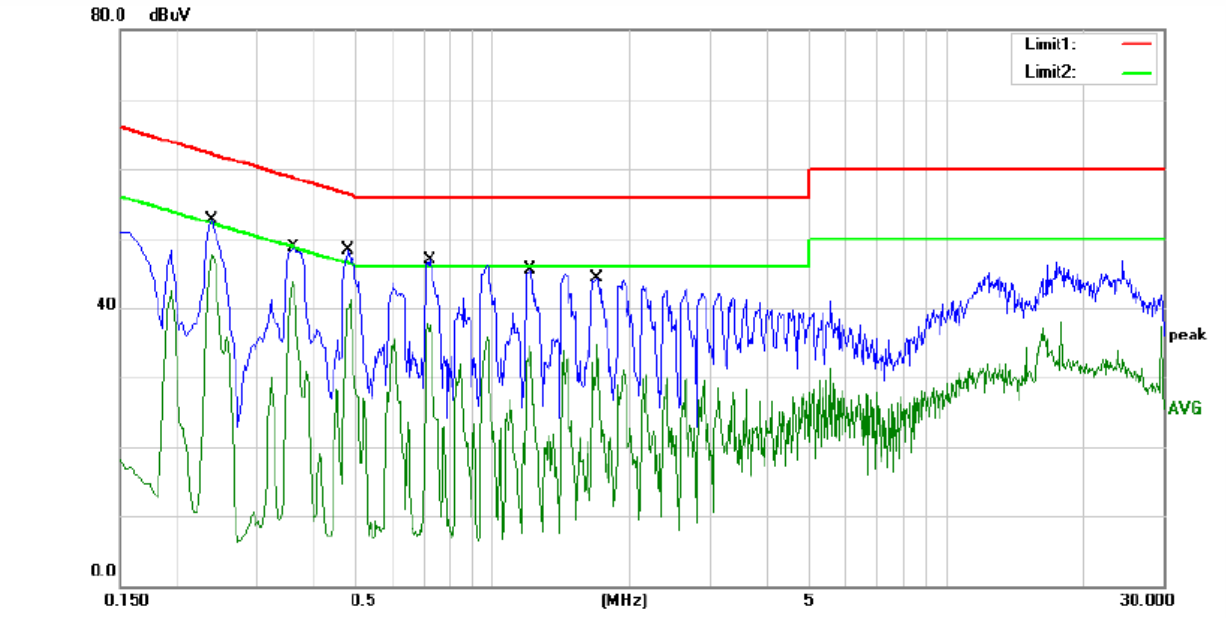
8.6.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Repeat above procedures until all frequency measured were complete.

8.6.5 Test Results

Pass

The AC 120V &240V voltagehave been tested, and the worst result recorded was report as below:



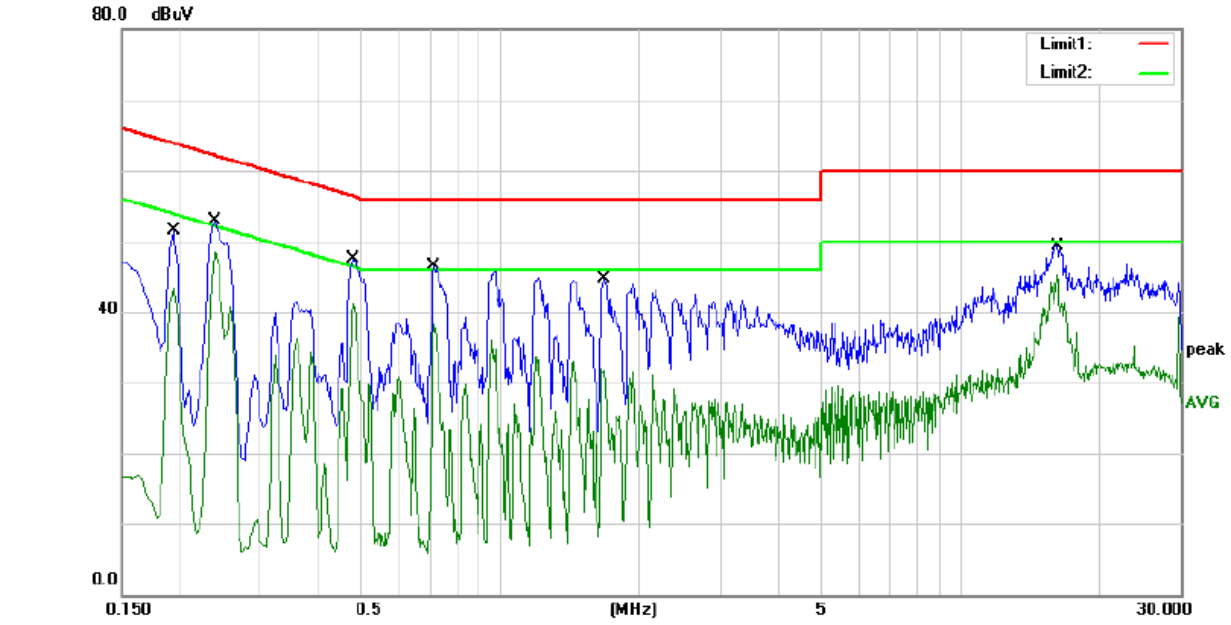

Site Conduction #1 Phase: L1 Temperature: 24.9

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 54 %

Mode: TX mode

Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.2380 | 43.13 | 9.55 | 52.68 | 62.17 | -9.49 | QP | |
| 2 | * | 0.2380 | 38.20 | 9.55 | 47.75 | 52.17 | -4.42 | AVG | |
| 3 | | 0.3580 | 39.07 | 9.56 | 48.63 | 58.77 | -10.14 | QP | |
| 4 | | 0.3580 | 34.07 | 9.56 | 43.63 | 48.77 | -5.14 | AVG | |
| 5 | | 0.4780 | 38.66 | 9.57 | 48.23 | 56.37 | -8.14 | QP | |
| 6 | | 0.4780 | 31.55 | 9.57 | 41.12 | 46.37 | -5.25 | AVG | |
| 7 | | 0.7220 | 37.32 | 9.57 | 46.89 | 56.00 | -9.11 | QP | |
| 8 | | 0.7220 | 27.91 | 9.57 | 37.48 | 46.00 | -8.52 | AVG | |
| 9 | | 1.2020 | 35.88 | 9.59 | 45.47 | 56.00 | -10.53 | QP | |
| 10 | | 1.2020 | 24.83 | 9.59 | 34.42 | 46.00 | -11.58 | AVG | |
| 11 | | 1.6900 | 34.64 | 9.59 | 44.23 | 56.00 | -11.77 | QP | |
| 12 | | 1.6900 | 25.18 | 9.59 | 34.77 | 46.00 | -11.23 | AVG | |




Site Conduction #1 Phase: N Temperature: 24.9

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 54 %

Mode: TX mode

Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1940 | 41.98 | 9.55 | 51.53 | 63.86 | -12.33 | QP | |
| 2 | | 0.1940 | 33.84 | 9.55 | 43.39 | 53.86 | -10.47 | AVG | |
| 3 | | 0.2365 | 42.80 | 9.55 | 52.35 | 62.22 | -9.87 | QP | |
| 4 | * | 0.2365 | 38.99 | 9.55 | 48.54 | 52.22 | -3.68 | AVG | |
| 5 | | 0.4780 | 37.98 | 9.57 | 47.55 | 56.37 | -8.82 | QP | |
| 6 | | 0.4780 | 31.49 | 9.57 | 41.06 | 46.37 | -5.31 | AVG | |
| 7 | | 0.7140 | 36.04 | 9.57 | 45.61 | 56.00 | -10.39 | QP | |
| 8 | | 0.7140 | 28.76 | 9.57 | 38.33 | 46.00 | -7.67 | AVG | |
| 9 | | 1.6620 | 35.19 | 9.59 | 44.78 | 56.00 | -11.22 | QP | |
| 10 | | 1.6620 | 22.29 | 9.59 | 31.88 | 46.00 | -14.12 | AVG | |
| 11 | | 16.1820 | 39.25 | 9.97 | 49.22 | 60.00 | -10.78 | QP | |
| 12 | | 16.1820 | 35.23 | 9.97 | 45.20 | 50.00 | -4.80 | AVG | |

## 8.7 ANTENNA APPLICATION

8.7.1 Antenna Requirement

| Standard | Requirement |
|---|---|
| FCC CRF Part 15.203 | An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded. |

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

8.7.2 Result

PASS.

- The EUT has 2 antennas: an FPC Antenna for WIFI 5G, the antenna 1 gain is 4.09 dBi, antenna 2 gain is 4.10 dBi,;

Note: ☒ Antennas use a permanently attached antenna which is not replaceable.
☐ Not using a standard antenna jack or electrical connector for antenna replacement
☐ The antenna has to be professionally installed (please provide method of installation)

Which in accordance to section 15.203, please refer to the internal photos.

Detail of factor for radiated emission

| Frequency(MHz) | Ant_F(dB) | Cab_L(dB) | Preamp(dB) | Correct Factor(dB) |
|---|---|---|---|---|
| 0.009 | 20.6 | 0.03 | \ | 20.63 |
| 0.15 | 20.7 | 0.1 | \ | 20.8 |
| 1 | 20.9 | 0.15 | \ | 21.05 |
| 10 | 20.1 | 0.28 | \ | 20.38 |
| 30 | 18.8 | 0.45 | \ | 19.25 |
| | | | | |
| 30 | 11.7 | 0.62 | 27.9 | -15.58 |
| 100 | 12.5 | 1.02 | 27.8 | -14.28 |
| 300 | 12.9 | 1.91 | 27.5 | -12.69 |
| 600 | 19.2 | 2.92 | 27 | -4.88 |
| 800 | 21.1 | 3.54 | 26.6 | -1.96 |
| 1000 | 22.3 | 4.17 | 26.2 | 0.27 |
| | | | | |
| 1000 | 25.6 | 1.76 | 41.4 | -14.04 |
| 3000 | 28.9 | 3.27 | 43.2 | -11.03 |
| 5000 | 31.1 | 4.2 | 44.6 | -9.3 |
| 8000 | 36.2 | 5.95 | 44.7 | -2.55 |
| 10000 | 38.4 | 6.3 | 43.9 | 0.8 |
| 12000 | 38.5 | 7.14 | 42.3 | 3.34 |
| 15000 | 40.2 | 8.15 | 41.4 | 6.95 |
| 18000 | 45.4 | 9.02 | 41.3 | 13.12 |
| | | | | |
| 18000 | 37.9 | 1.81 | 47.9 | -8.19 |
| 21000 | 37.9 | 1.95 | 48.7 | -8.85 |
| 25000 | 39.3 | 2.01 | 42.8 | -1.49 |
| 28000 | 39.6 | 2.16 | 46.0 | -4.24 |
| 31000 | 41.2 | 2.24 | 44.5 | -1.06 |
| 34000 | 41.5 | 2.29 | 46.6 | -2.81 |
| 37000 | 43.8 | 2.30 | 46.4 | -0.3 |
| 40000 | 43.2 | 2.50 | 42.2 | 3.5 |

--------- END OF REPORT --------