

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

| Test Mode | Frequency (MHz) | Duty Cycle (%) | Correction Factor(dB) |
|-----------------|-----------------|----------------|-----------------------|
| 802.11a | 5180 | 82.96% | 0.81 |
| 802. 11n HT20 | 5180 | 89.33% | 0.49 |
| 802. 11n HT40 | 5190 | 64.01% | 1.94 |
| 802. 11ac VHT20 | 5180 | 80.39% | 0.95 |
| 802. 11ac VHT40 | 5190 | 80.80% | 0.93 |
| 802. 11ac VHT80 | 5210 | 40.07% | 3.97 |

**Output Power
NIII**

| Mode | Freq (MHz) | Chain | Conducted average power output(dBm) |
|-------------|------------|--------|-------------------------------------|
| 802.11a | 5180 | Chain0 | 13.40 |
| | 5220 | Chain0 | 13.20 |
| | 5240 | Chain0 | 13.00 |
| 802.11n20M | 5180 | Chain0 | 13.30 |
| | 5220 | Chain0 | 13.30 |
| | 5240 | Chain0 | 13.10 |
| 802.11n40M | 5190 | Chain0 | 12.80 |
| | 5230 | Chain0 | 12.70 |
| 802.11ac20M | 5180 | Chain0 | 13.50 |
| | 5220 | Chain0 | 13.40 |
| | 5240 | Chain0 | 13.20 |
| 802.11ac40M | 5190 | Chain0 | 12.90 |
| | 5230 | Chain0 | 12.80 |
| 802.11ac80M | 5210 | Chain0 | 11.80 |

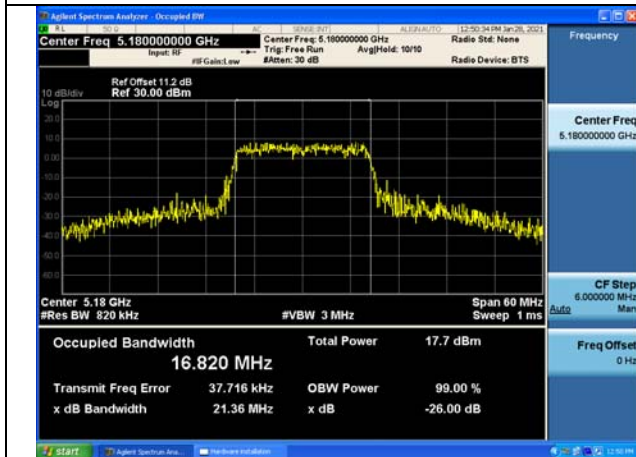
Emission Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

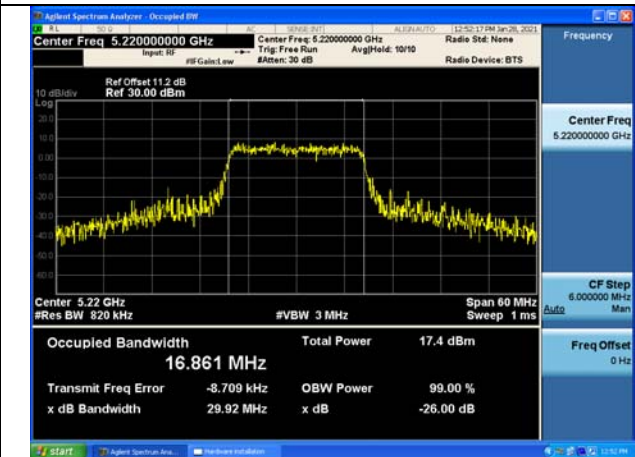
Test Mode:802.11a

| Carrier frequency (MHz) | Chain | 26dB Bandwidth (MHz) |
|-------------------------|--------|----------------------|
| 5180 | Chain0 | 21.36 |
| 5220 | Chain0 | 29.92 |
| 5240 | Chain0 | 24.03 |

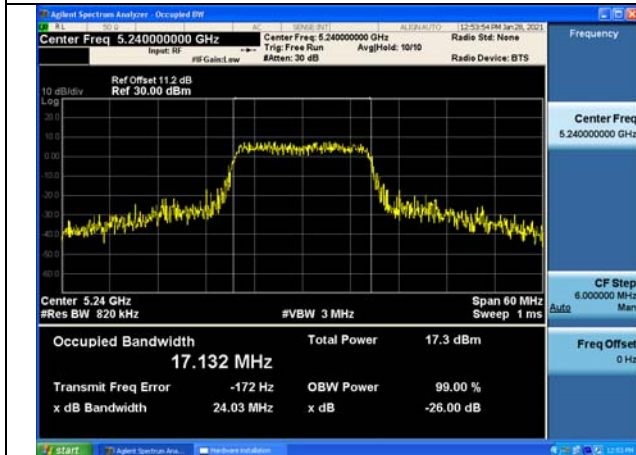
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



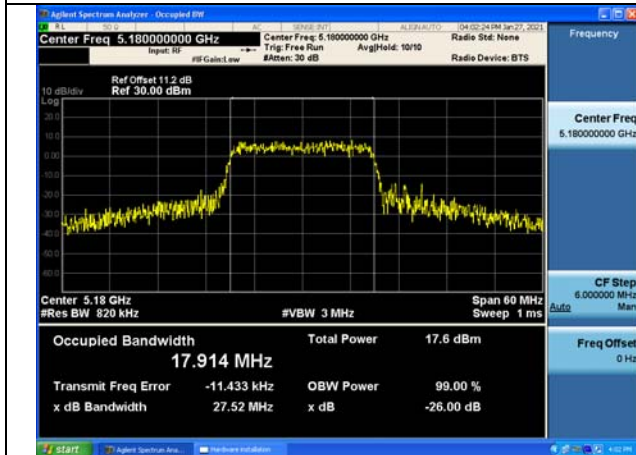
Test Mode:802.11a Chain0



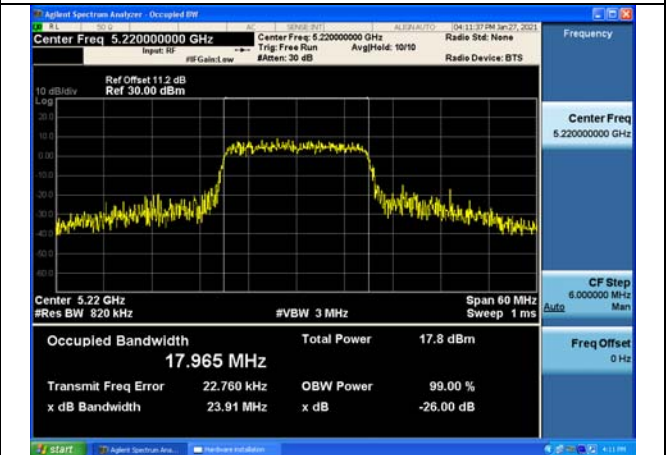
Test Mode:802. 11n HT20

| Carrier frequency (MHz) | Chain | 26dB Bandwidth (MHz) |
|-------------------------|--------|----------------------|
| 5180 | Chain0 | 27.52 |
| 5220 | Chain0 | 23.91 |
| 5240 | Chain0 | 21.12 |

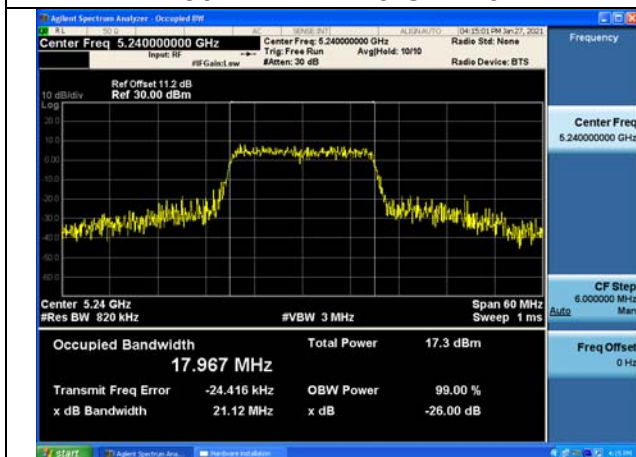
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



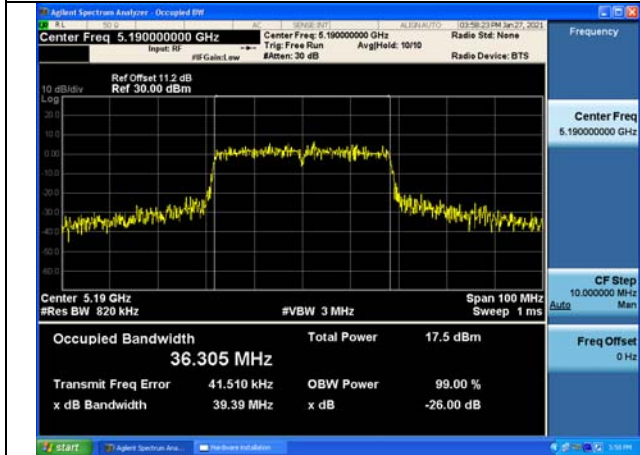
Test Mode:802. 11n HT20 Chain0



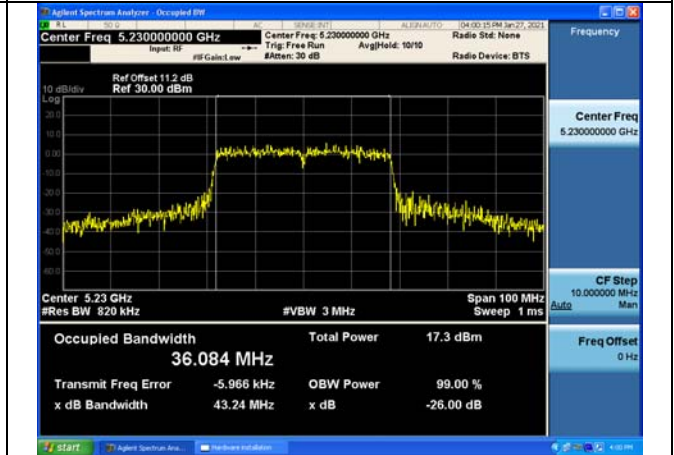
Test Mode:802. 11n HT40

| Carrier frequency (MHz) | Chain | 26dB Bandwidth (MHz) |
|-------------------------|--------|----------------------|
| 5190 | Chain0 | 39.39 |
| 5230 | Chain0 | 43.24 |

Test Mode:802. 11n HT40 Chain0



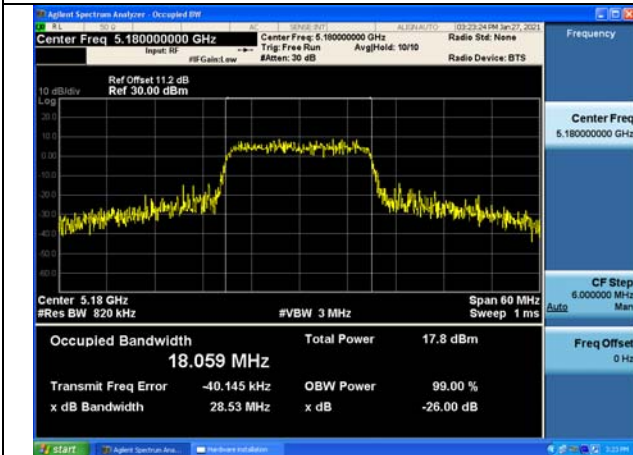
Test Mode:802. 11n HT40 Chain0



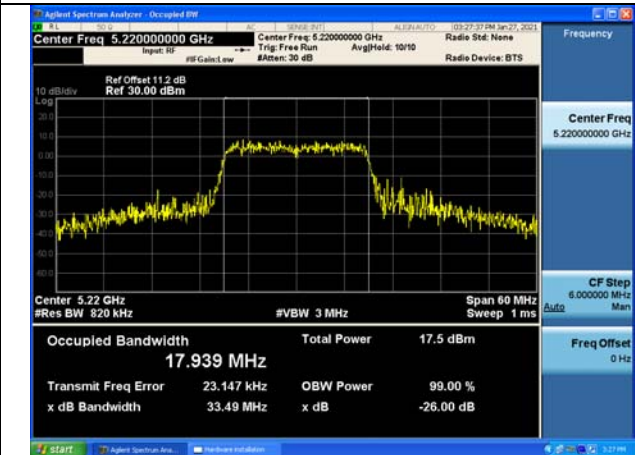
Test Mode:802. 11ac VHT20

| Carrier frequency (MHz) | Chain | 26dB Bandwidth (MHz) |
|-------------------------|--------|----------------------|
| 5180 | Chain0 | 28.53 |
| 5220 | Chain0 | 33.49 |
| 5240 | Chain0 | 22.42 |

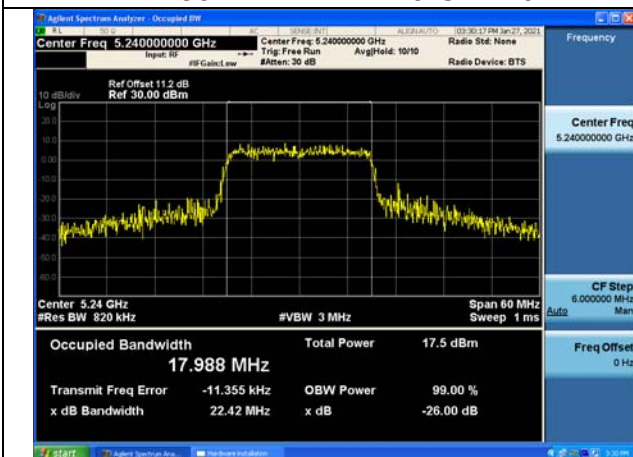
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



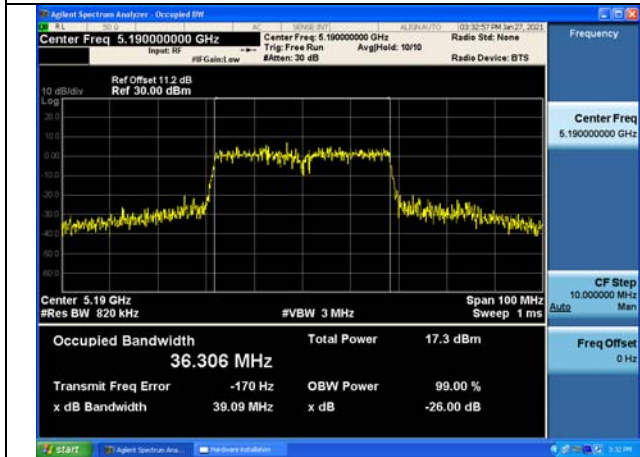
Test Mode:802. 11ac VHT20 Chain0



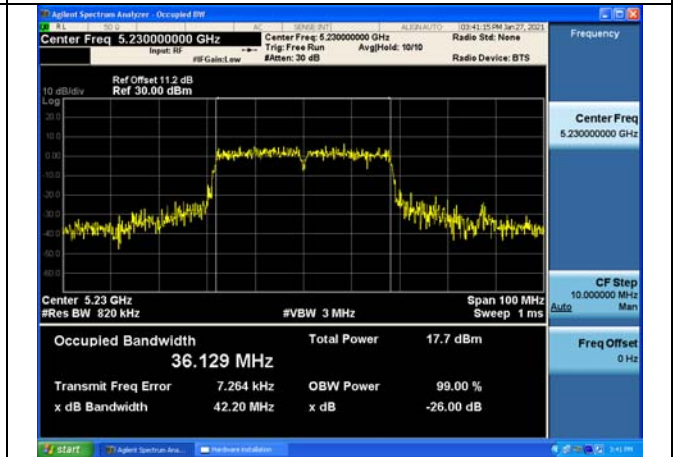
Test Mode:802. 11ac VHT40

| Carrier frequency (MHz) | Chain | 26dB Bandwidth (MHz) |
|-------------------------|--------|----------------------|
| 5190 | Chain0 | 39.09 |
| 5230 | Chain0 | 42.20 |

Test Mode:802. 11ac VHT40 Chain0



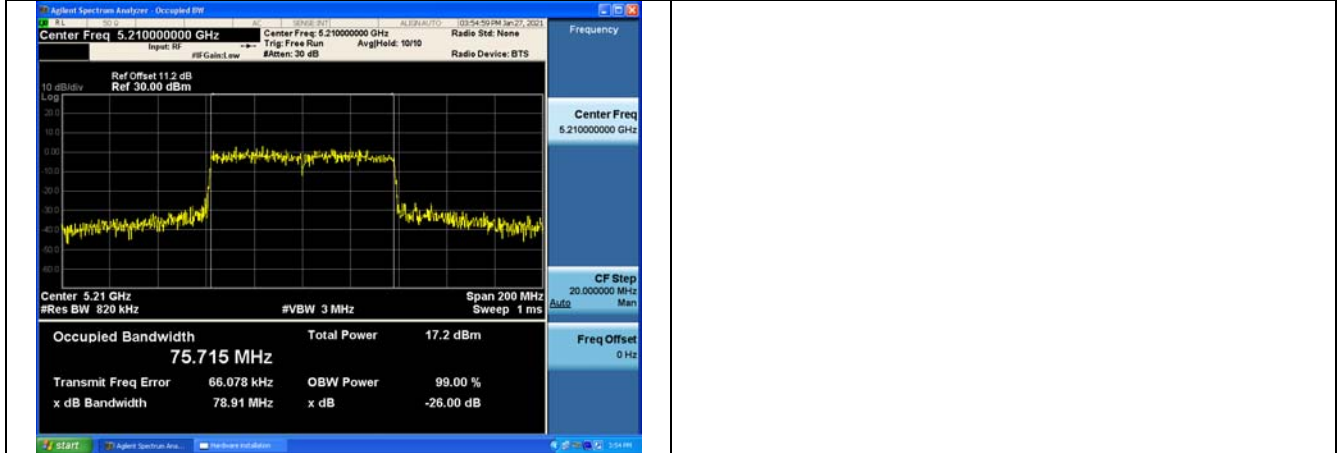
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

| Carrier frequency (MHz) | Chain | 26dB Bandwidth (MHz) |
|-------------------------|--------|----------------------|
| 5210 | Chain0 | 78.91 |

Test Mode:802. 11ac VHT80 Chain0



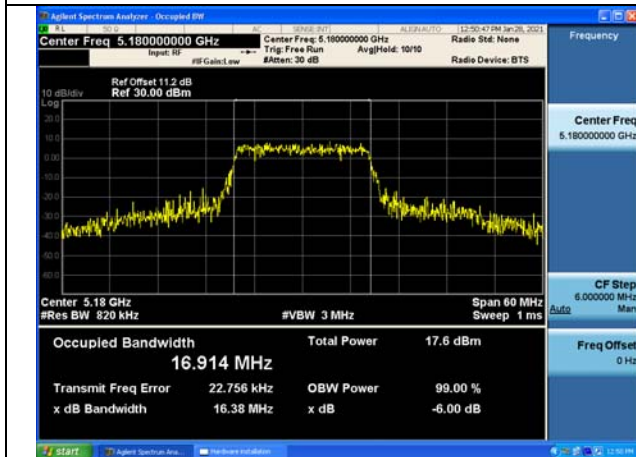
Occupied Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

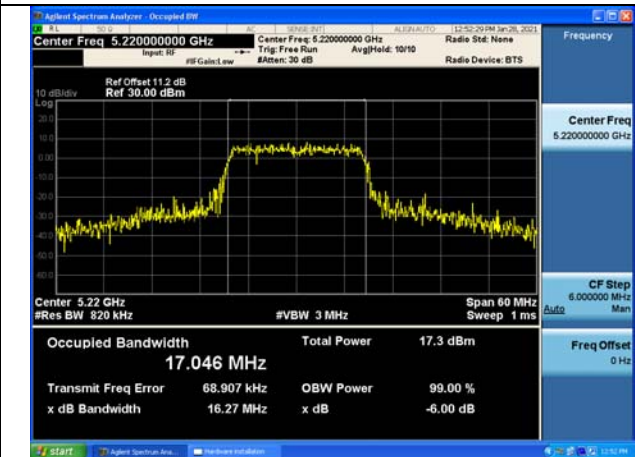
Test Mode:802.11a

| Carrier frequency (MHz) | Chain | Occupied Bandwidth (MHz) |
|-------------------------|--------|--------------------------|
| 5180 | Chain0 | 16.914 |
| 5220 | Chain0 | 17.046 |
| 5240 | Chain0 | 16.908 |

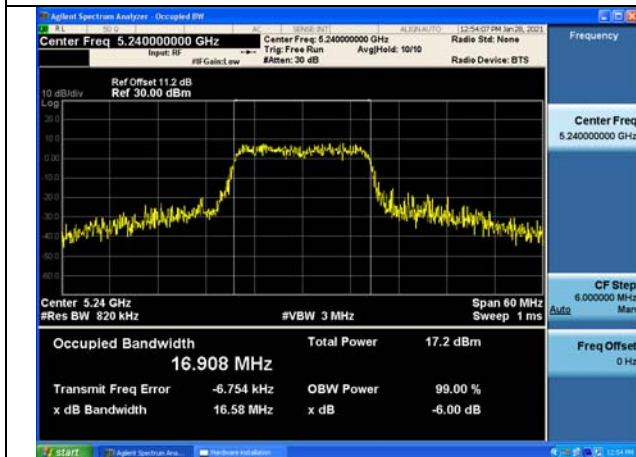
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



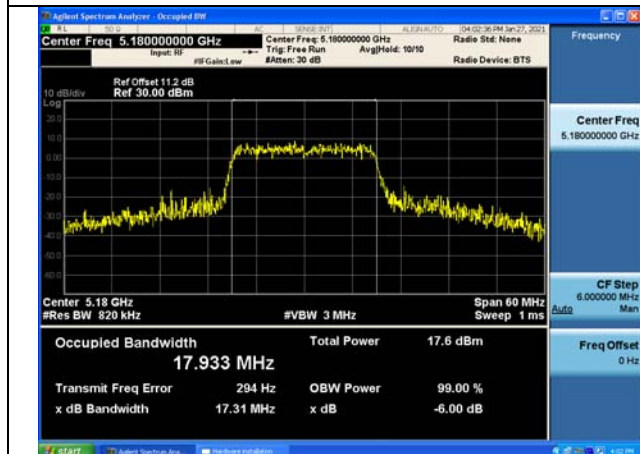
Test Mode:802.11a Chain0



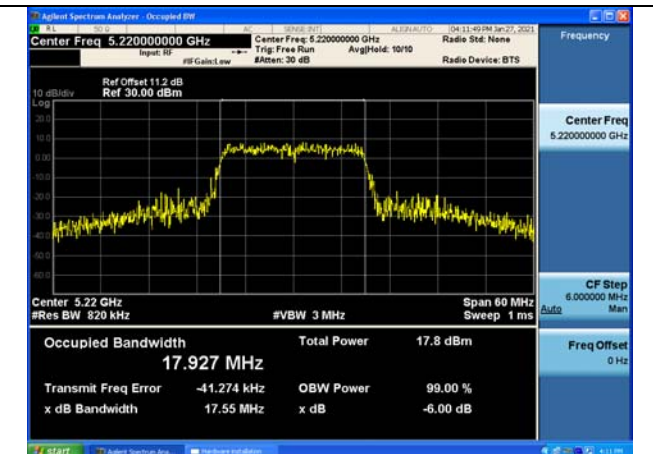
Test Mode:802. 11n HT20

| Carrier frequency (MHz) | Chain | Occupied Bandwidth (MHz) |
|-------------------------|--------|--------------------------|
| 5180 | Chain0 | 17.933 |
| 5220 | Chain0 | 17.927 |
| 5240 | Chain0 | 17.921 |

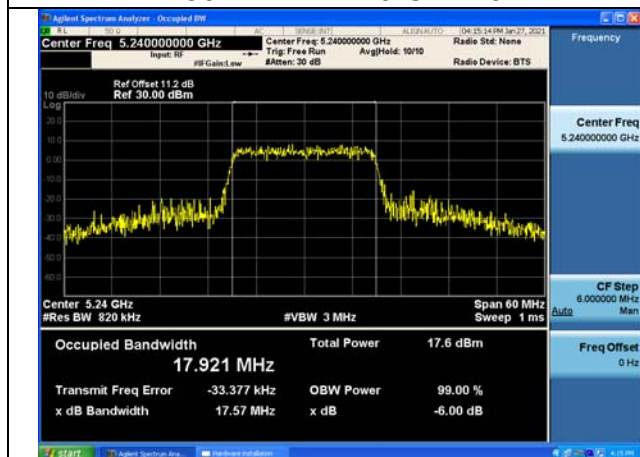
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



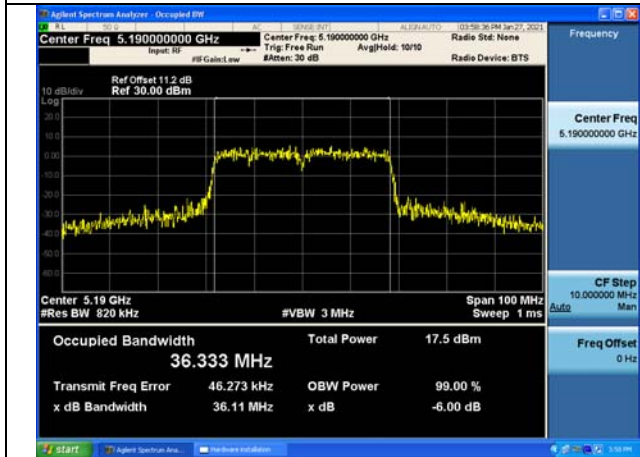
Test Mode:802. 11n HT20 Chain0



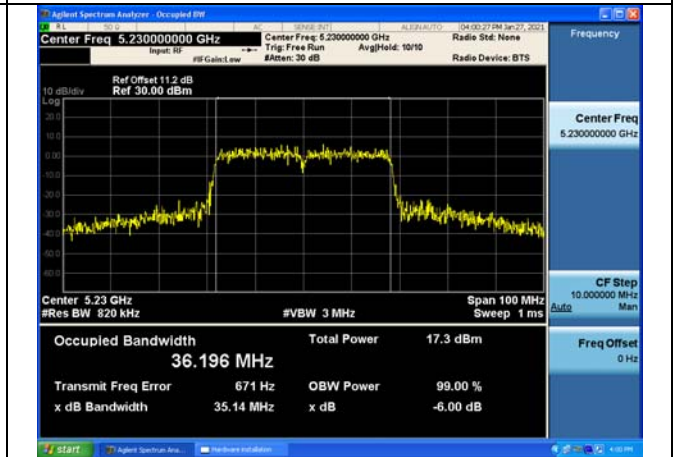
Test Mode:802. 11n HT40

| Carrier frequency (MHz) | Chain | Occupied Bandwidth (MHz) |
|-------------------------|--------|--------------------------|
| 5190 | Chain0 | 36.333 |
| 5230 | Chain0 | 36.196 |

Test Mode:802. 11n HT40 Chain0



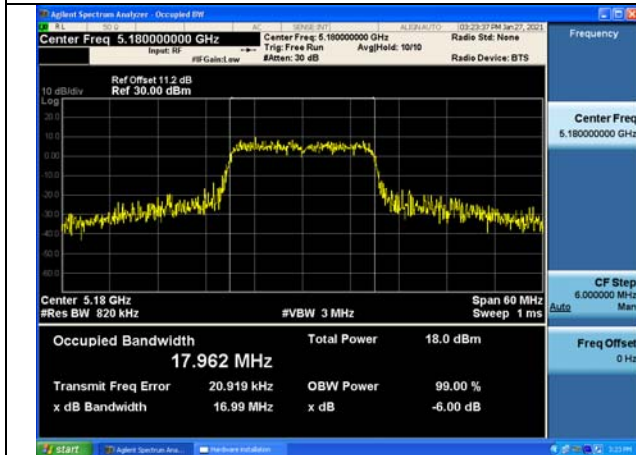
Test Mode:802. 11n HT40 Chain0



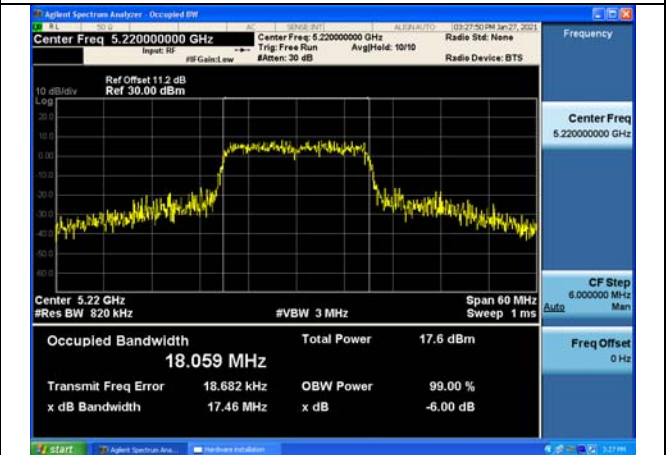
Test Mode:802. 11ac VHT20

| Carrier frequency (MHz) | Chain | Occupied Bandwidth (MHz) |
|-------------------------|--------|--------------------------|
| 5180 | Chain0 | 17.962 |
| 5220 | Chain0 | 18.059 |
| 5240 | Chain0 | 17.982 |

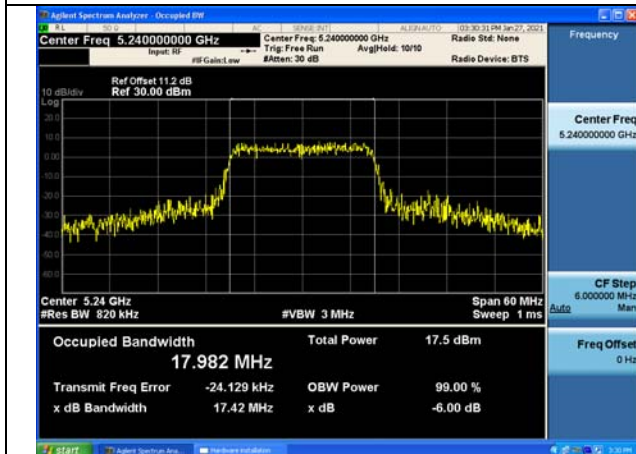
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



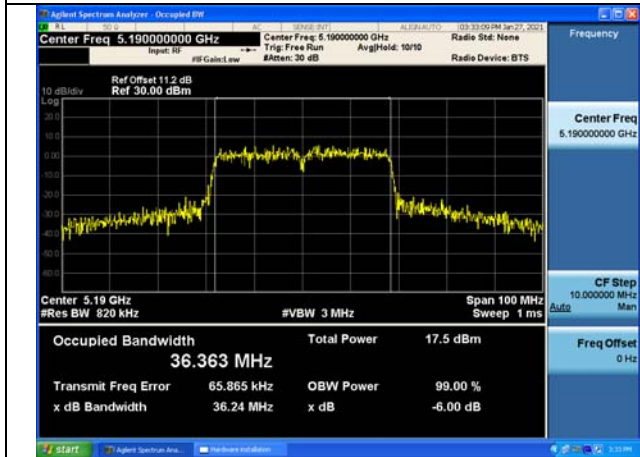
Test Mode:802. 11ac VHT20 Chain0



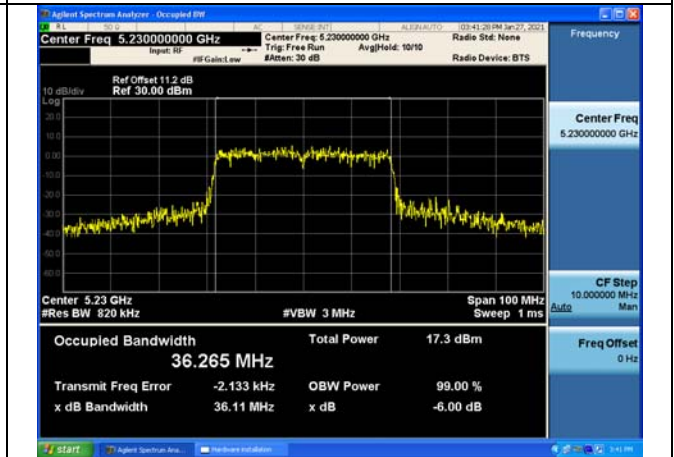
Test Mode:802. 11ac VHT40

| Carrier frequency (MHz) | Chain | Occupied Bandwidth (MHz) |
|-------------------------|--------|--------------------------|
| 5190 | Chain0 | 36.363 |
| 5230 | Chain0 | 36.265 |

Test Mode:802. 11ac VHT40 Chain0



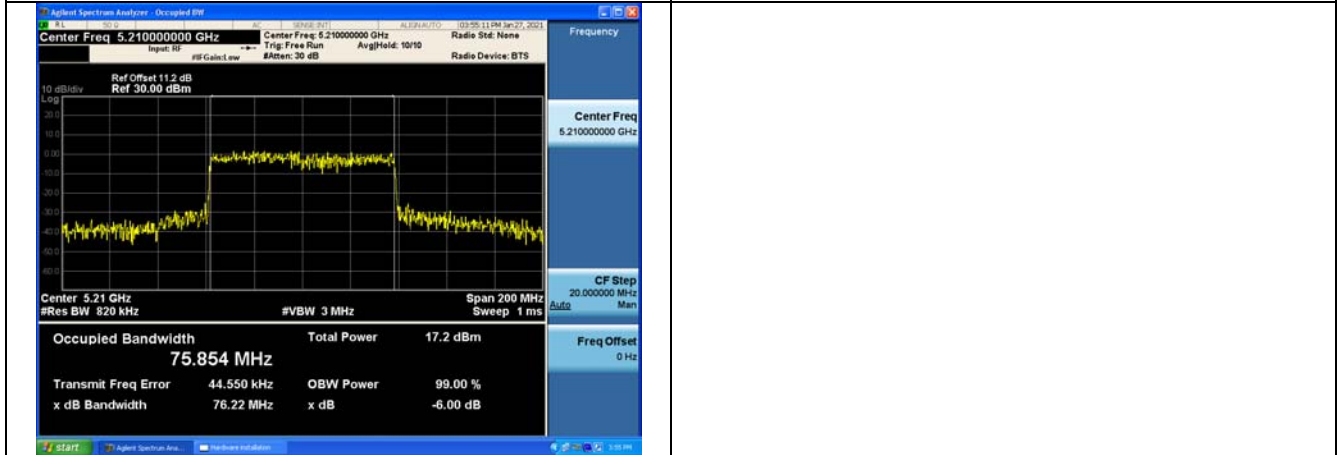
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

| Carrier frequency (MHz) | Chain | Occupied Bandwidth (MHz) |
|-------------------------|--------|--------------------------|
| 5210 | Chain0 | 75.854 |

Test Mode:802. 11ac VHT80 Chain0



Transmitter Power Spectral Density

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

Test Mode:802.11a

| Carrier frequency (MHz) | Correction Factor(dB) | Chain | Power Density (dBm) |
|-------------------------|-----------------------|--------|---------------------|
| 5180 | 0.81 | Chain0 | 3.792 |
| 5220 | | Chain0 | 3.490 |
| 5240 | | Chain0 | 3.201 |

Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



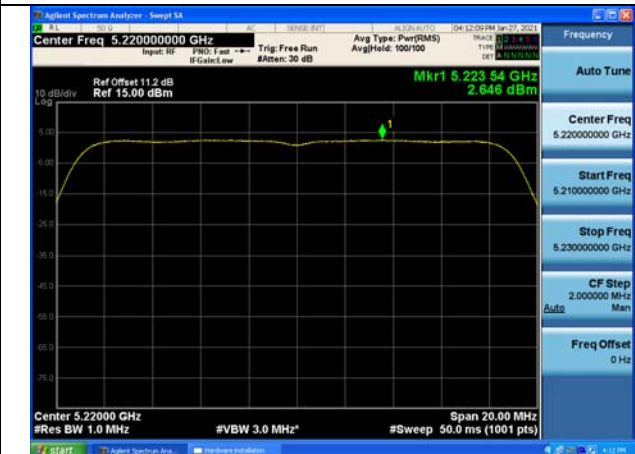
Test Mode:802. 11n HT20

| Carrier frequency (MHz) | Correction Factor(dB) | Chain | Power Density (dBm) |
|-------------------------|-----------------------|--------|---------------------|
| 5180 | 0.49 | Chain0 | 3.190 |
| 5220 | | Chain0 | 3.136 |
| 5240 | | Chain0 | 2.891 |

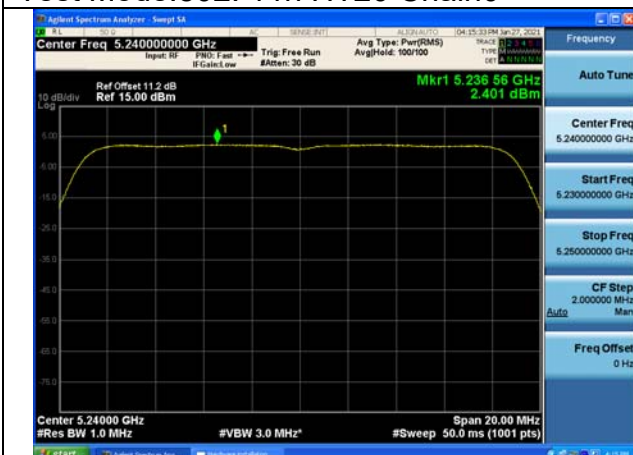
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT40

| Carrier frequency (MHz) | Correction Factor(dB) | Chain | Power Density (dBm) |
|-------------------------|-----------------------|--------|---------------------|
| 5190 | 1.94 | Chain0 | 1.77 |
| 5230 | | Chain0 | 1.70 |

Test Mode:802. 11n HT40 Chain0



Test Mode:802. 11n HT40 Chain0



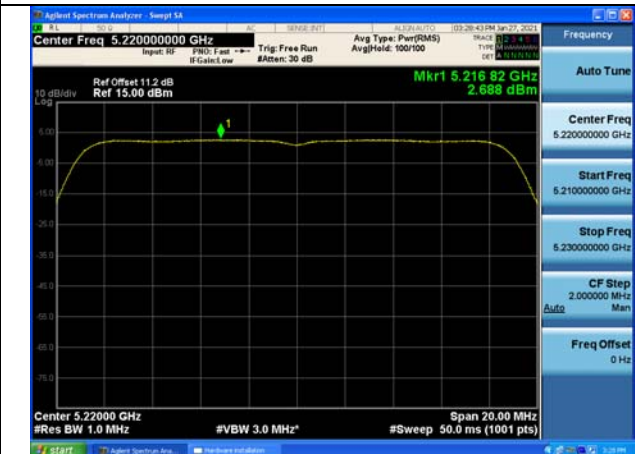
Test Mode:802. 11ac VHT20

| Carrier frequency (MHz) | Correction Factor(dB) | Chain | Power Density (dBm) |
|-------------------------|-----------------------|--------|---------------------|
| 5180 | 0.95 | Chain0 | 3.765 |
| 5220 | | Chain0 | 3.638 |
| 5240 | | Chain0 | 3.532 |

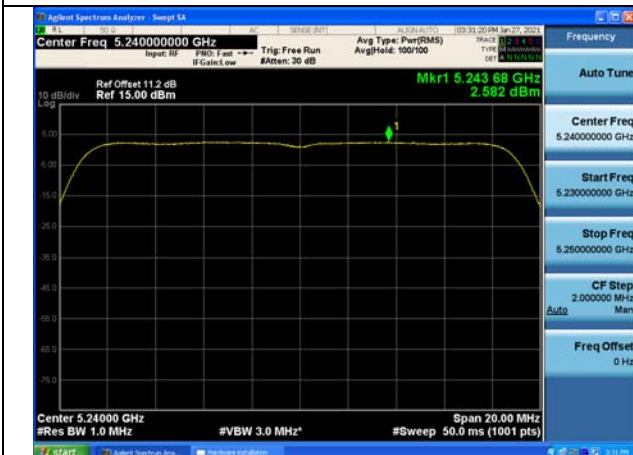
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0

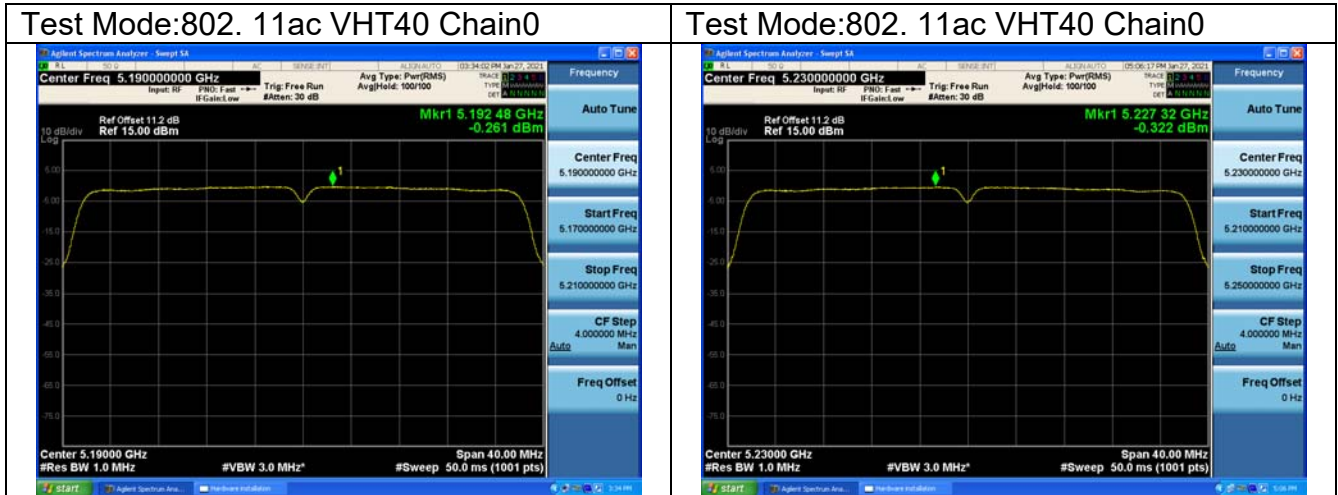


Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT40

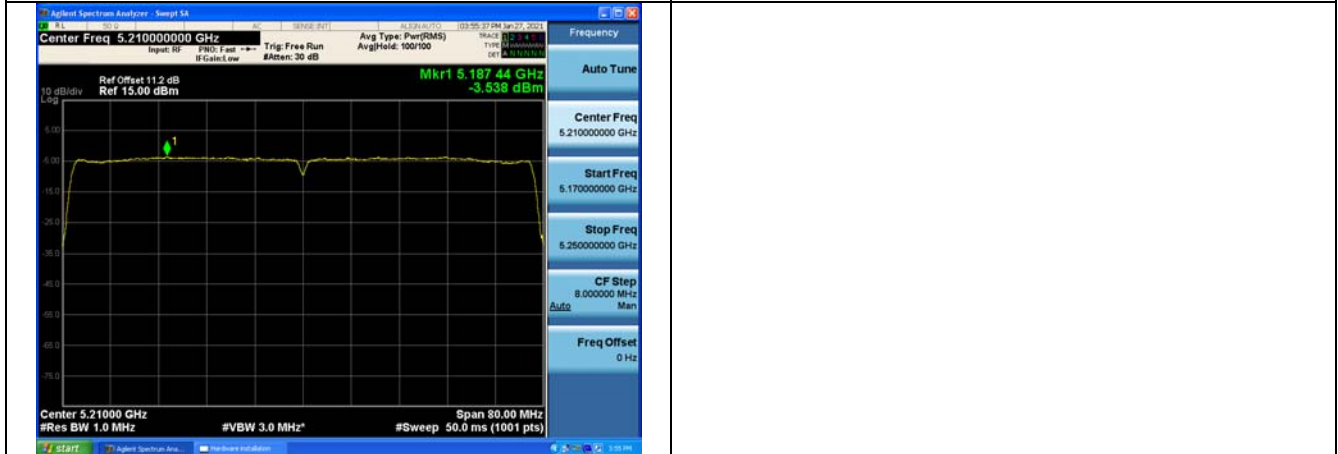
| Carrier frequency (MHz) | Correction Factor(dB) | Chain | Power Density (dBm) |
|-------------------------|-----------------------|--------|---------------------|
| 5190 | 0.93 | Chain0 | 0.669 |
| 5230 | | Chain0 | 0.608 |



Test Mode:802. 11ac VHT80

| Carrier frequency (MHz) | Correction Factor(dB) | Chain | Power Density (dBm) |
|-------------------------|-----------------------|--------|---------------------|
| 5210 | 3.97 | Chain0 | 0.432 |

Test Mode:802. 11ac VHT80 Chain0



Frequency Stability

NII1

| Mode | Data Rate | Chain | Center Frequency (MHz) | Measured Frequency (MHz) | Frequency Stability (ppm) | Voltage (V) | Temperature (°C) |
|---------|-----------|--------|------------------------|--------------------------|---------------------------|-------------|------------------|
| 802.11a | 6Mbps | Chain0 | 5180 | 5179.98605 | 2.69 | HV | +20 |
| | | | 5180 | 5179.98629 | 2.65 | LV | +20 |
| | | | 5180 | 5179.98581 | 2.74 | NV | +30 |
| | | | 5180 | 5179.98535 | 2.83 | NV | +50 |
| | | | 5180 | 5179.98557 | 2.79 | NV | +40 |
| | | | 5180 | 5179.98657 | 2.59 | NV | +20 |
| | | | 5180 | 5179.98794 | 2.33 | NV | -20 |
| | | | 5180 | 5179.98837 | 2.25 | NV | -30 |
| | | | 5180 | 5179.98756 | 2.40 | NV | -10 |
| | | | 5180 | 5179.98691 | 2.53 | NV | +10 |
| | | | 5180 | 5179.98722 | 2.47 | NV | 0 |