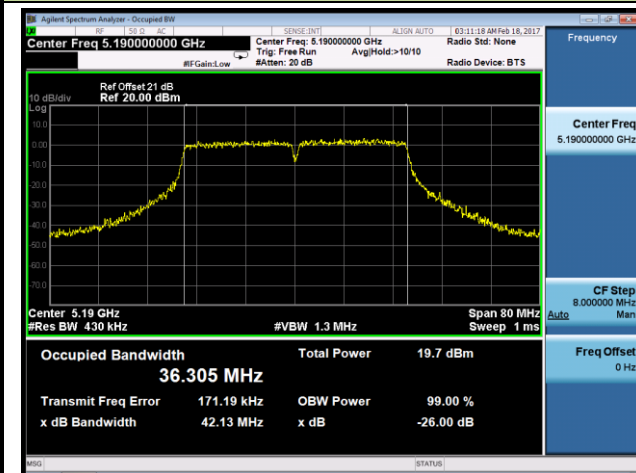
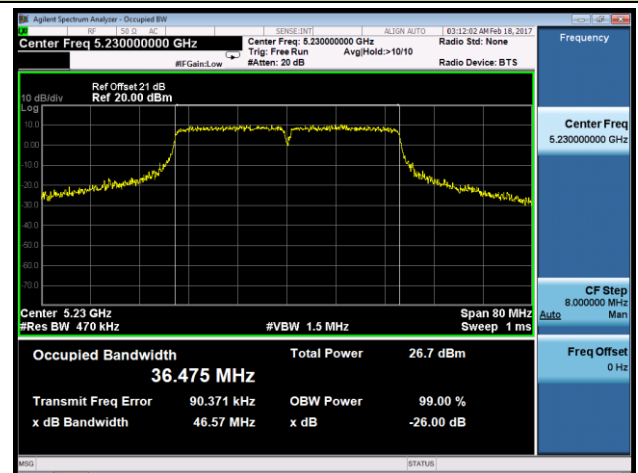
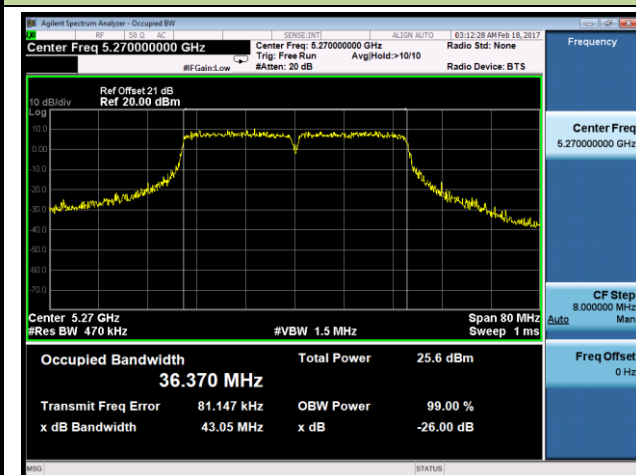
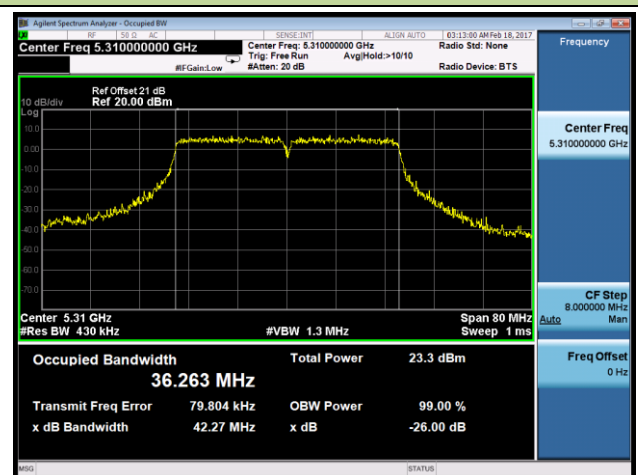
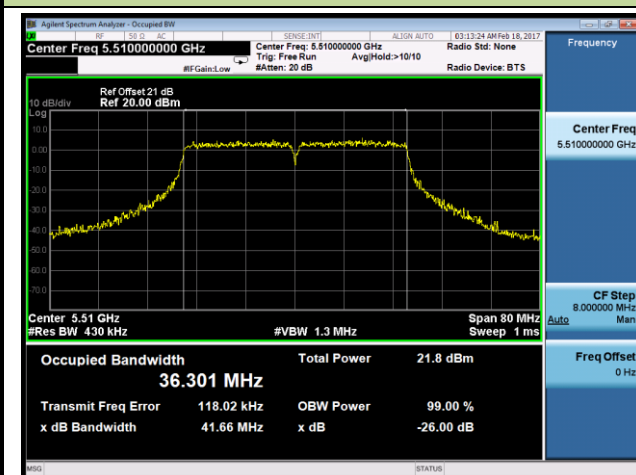
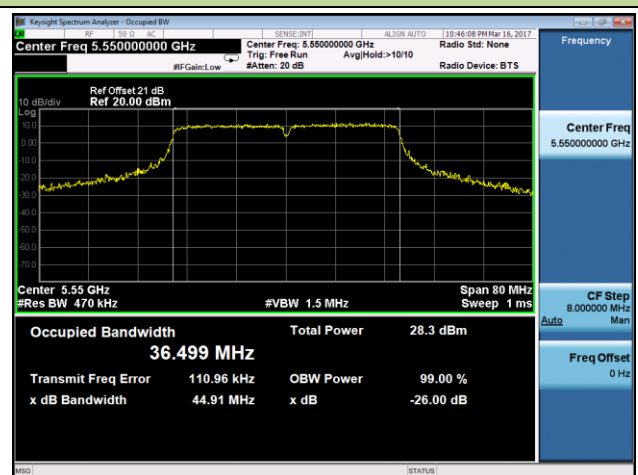
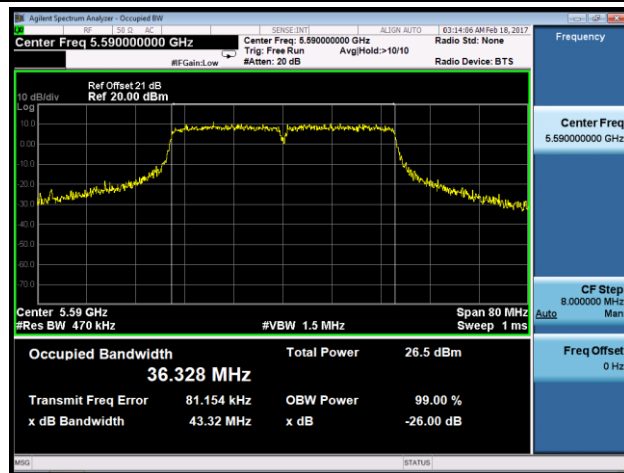
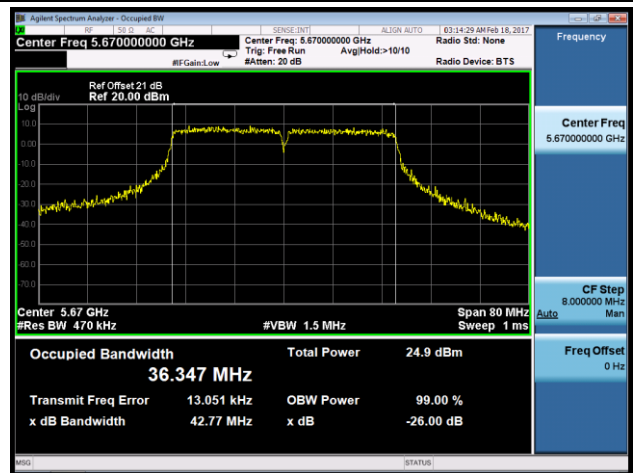


802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth - Ant 2
Channel 38 (5190MHz)

Channel 46 (5230MHz)

Channel 54 (5270MHz)

Channel 62 (5310MHz)

Channel 102 (5510MHz)

Channel 110 (5550MHz)


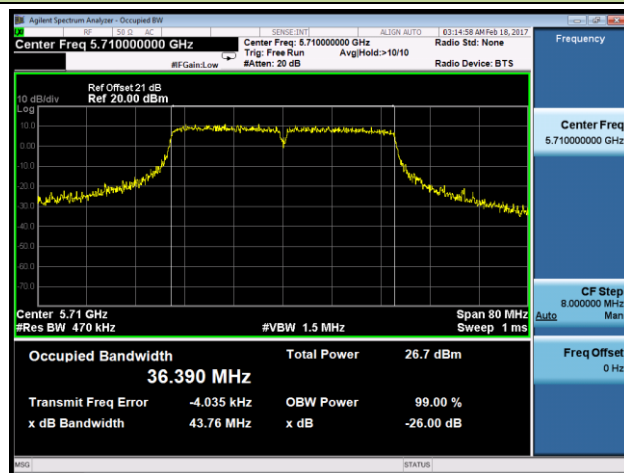
Channel 118 (5590MHz)



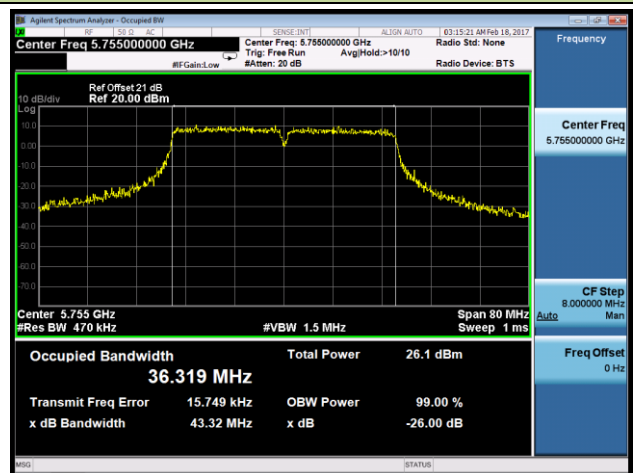
Channel 134 (5670MHz)



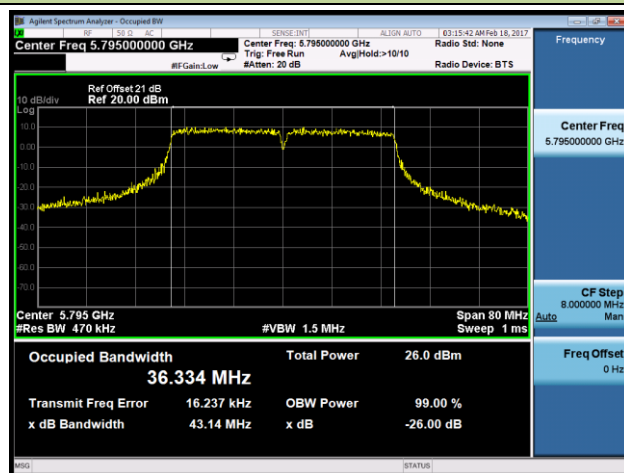
Channel 142 (5710MHz)

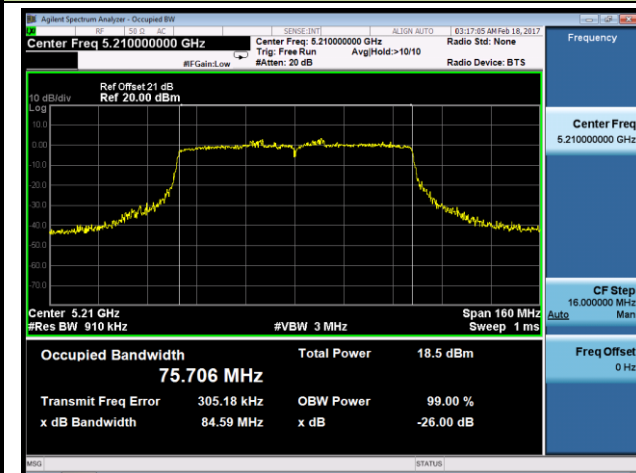
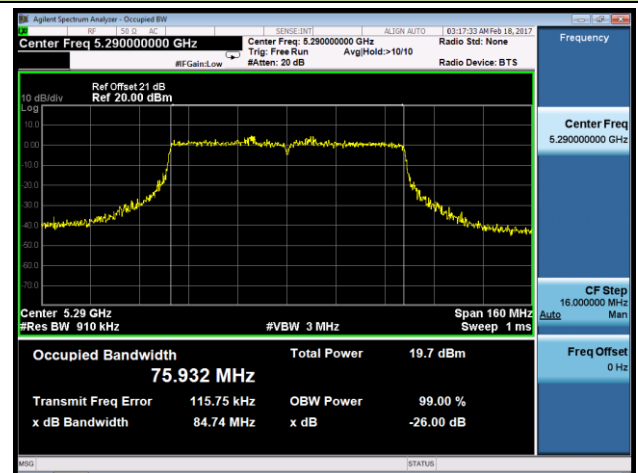
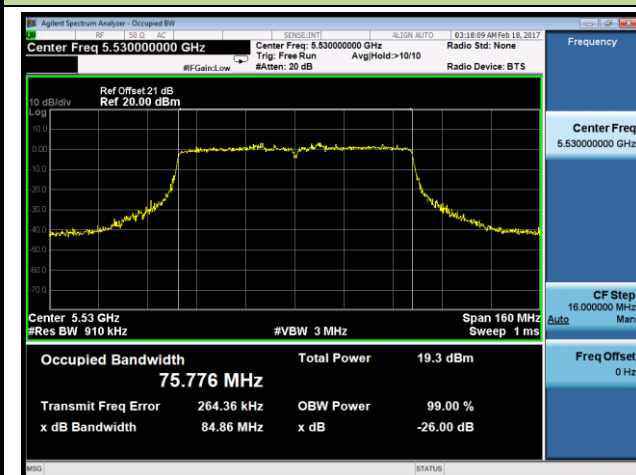
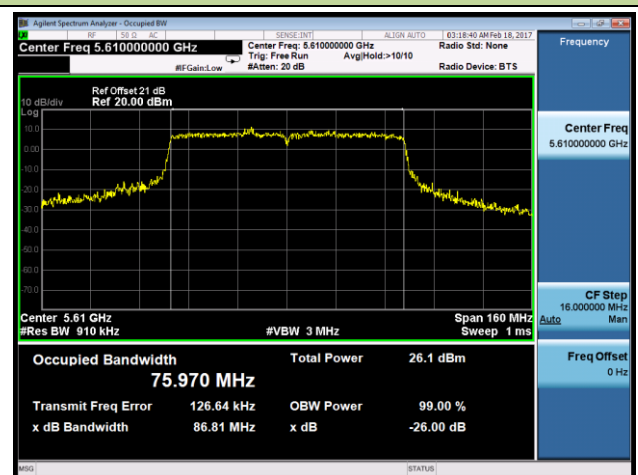
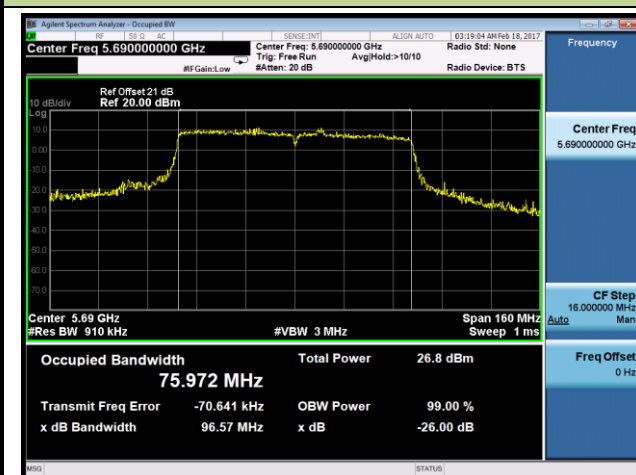
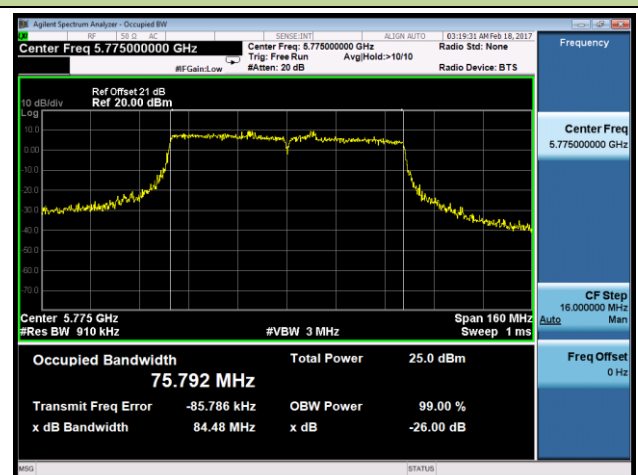


Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth - Ant 2
Channel 42 (5210MHz)

Channel 58 (5290MHz)

Channel 106 (5530MHz)

Channel 122 (5610MHz)

Channel 138 (5690MHz)

Channel 155 (5775MHz)


7.3. 6dB Bandwidth Measurement

7.3.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

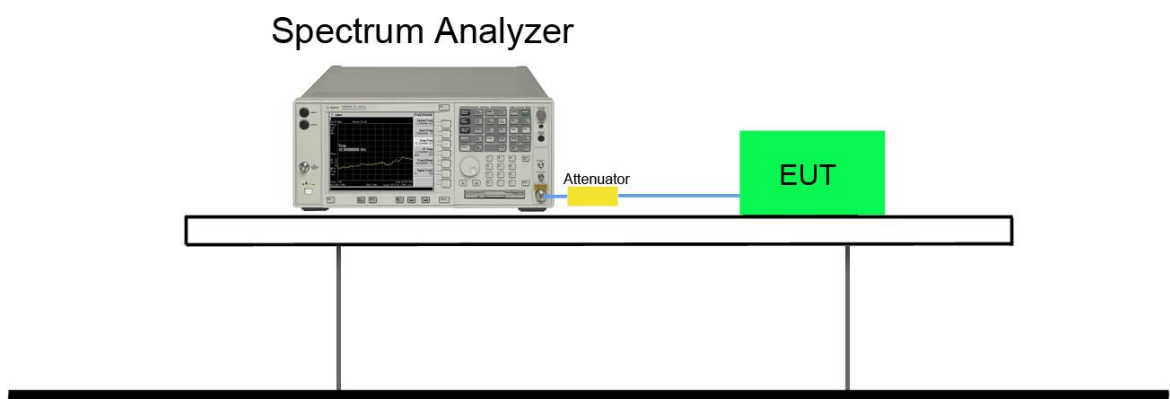
7.3.2. Test Procedure used

KDB 789033 D02v01r03 - Section C.2

7.3.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 100 kHz.
3. VBW $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.3.4. Test Setup



7.3.5. Test Result

| | | | |
|-----------|---------------------------------|-------------------|---------------|
| Product | US Wi-Fi AP 2x2 OD ext. antenna | Test Engineer | Johnson Liao |
| Test Site | SR2 | Test Date | 2017/02/18 |
| Test Item | 6dB Bandwidth | Antenna Model No. | WiFi Omni Ant |

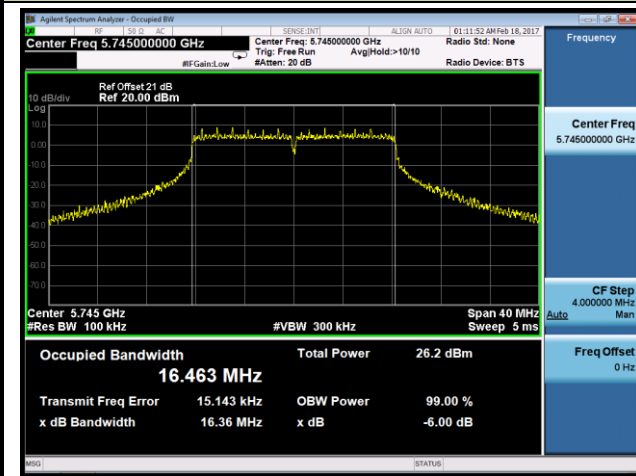
| Test Mode | Data Rate (Mbps) | Channel No. | Frequency (MHz) | 6dB Bandwidth (MHz) | Limit (MHz) | Result |
|----------------|------------------|-------------|-----------------|---------------------|-------------|--------|
| Ant 1 | | | | | | |
| 802.11a | 6 | 149 | 5745 | 16.36 | ≥ 0.5 | Pass |
| 802.11a | 6 | 157 | 5785 | 16.35 | ≥ 0.5 | Pass |
| 802.11a | 6 | 165 | 5825 | 16.34 | ≥ 0.5 | Pass |
| 802.11n-HT20 | 6.5 | 149 | 5745 | 17.56 | ≥ 0.5 | Pass |
| 802.11n-HT20 | 6.5 | 157 | 5785 | 17.57 | ≥ 0.5 | Pass |
| 802.11n-HT20 | 6.5 | 165 | 5825 | 17.57 | ≥ 0.5 | Pass |
| 802.11n-HT40 | 13.5 | 151 | 5755 | 36.36 | ≥ 0.5 | Pass |
| 802.11n-HT40 | 13.5 | 159 | 5795 | 36.35 | ≥ 0.5 | Pass |
| 802.11ac-VHT20 | 6.5 | 149 | 5745 | 17.60 | ≥ 0.5 | Pass |
| 802.11ac-VHT20 | 6.5 | 157 | 5785 | 17.58 | ≥ 0.5 | Pass |
| 802.11ac-VHT20 | 6.5 | 165 | 5825 | 17.58 | ≥ 0.5 | Pass |
| 802.11ac-VHT40 | 13.5 | 151 | 5755 | 36.36 | ≥ 0.5 | Pass |
| 802.11ac-VHT40 | 13.5 | 159 | 5795 | 36.37 | ≥ 0.5 | Pass |
| 802.11ac-VHT80 | 29.3 | 155 | 5775 | 76.39 | ≥ 0.5 | Pass |



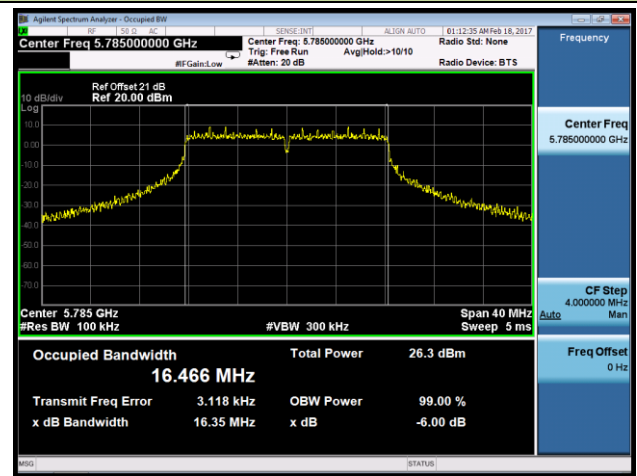
| Test Mode | Data Rate (Mbps) | Channel No. | Frequency (MHz) | 6dB Bandwidth (MHz) | Limit (MHz) | Result |
|----------------|------------------|-------------|-----------------|---------------------|-------------|--------|
| Ant 2 | | | | | | |
| 802.11a | 6 | 149 | 5745 | 16.35 | ≥ 0.5 | Pass |
| 802.11a | 6 | 157 | 5785 | 16.34 | ≥ 0.5 | Pass |
| 802.11a | 6 | 165 | 5825 | 16.35 | ≥ 0.5 | Pass |
| 802.11n-HT20 | 6.5 | 149 | 5745 | 17.57 | ≥ 0.5 | Pass |
| 802.11n-HT20 | 6.5 | 157 | 5785 | 17.57 | ≥ 0.5 | Pass |
| 802.11n-HT20 | 6.5 | 165 | 5825 | 17.57 | ≥ 0.5 | Pass |
| 802.11n-HT40 | 13.5 | 151 | 5755 | 35.78 | ≥ 0.5 | Pass |
| 802.11n-HT40 | 13.5 | 159 | 5795 | 35.78 | ≥ 0.5 | Pass |
| 802.11ac-VHT20 | 6.5 | 149 | 5745 | 17.56 | ≥ 0.5 | Pass |
| 802.11ac-VHT20 | 6.5 | 157 | 5785 | 17.56 | ≥ 0.5 | Pass |
| 802.11ac-VHT20 | 6.5 | 165 | 5825 | 17.57 | ≥ 0.5 | Pass |
| 802.11ac-VHT40 | 13.5 | 151 | 5755 | 35.97 | ≥ 0.5 | Pass |
| 802.11ac-VHT40 | 13.5 | 159 | 5795 | 36.04 | ≥ 0.5 | Pass |
| 802.11ac-VHT80 | 29.3 | 155 | 5775 | 75.74 | ≥ 0.5 | Pass |

802.11a 6dB Bandwidth - Ant 1

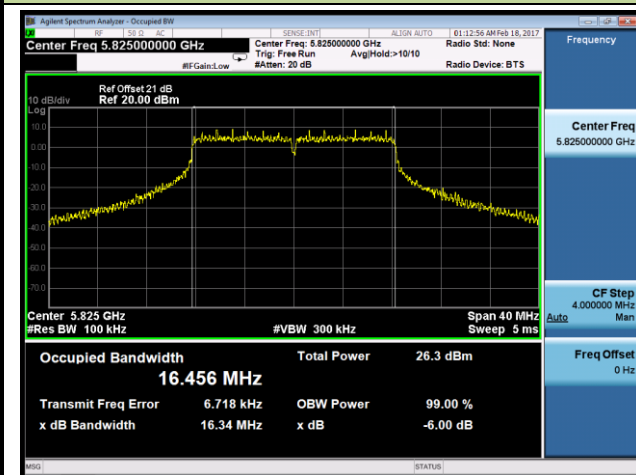
Channel 149 (5745MHz)



Channel 157 (5785MHz)

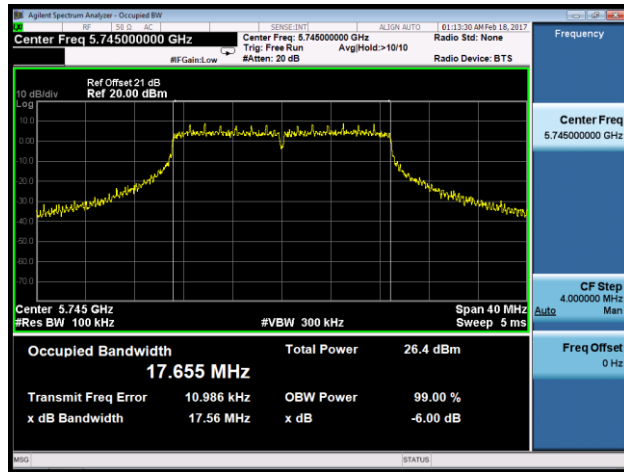


Channel 165 (5825MHz)

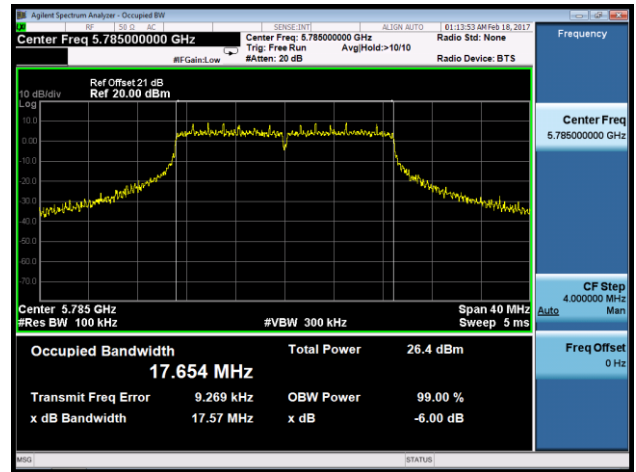


802.11n-HT20 6dB Bandwidth - Ant 1

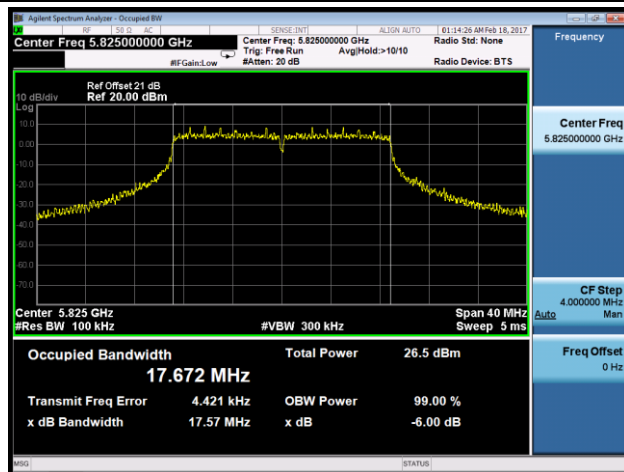
Channel 149 (5745MHz)



Channel 157 (5785MHz)

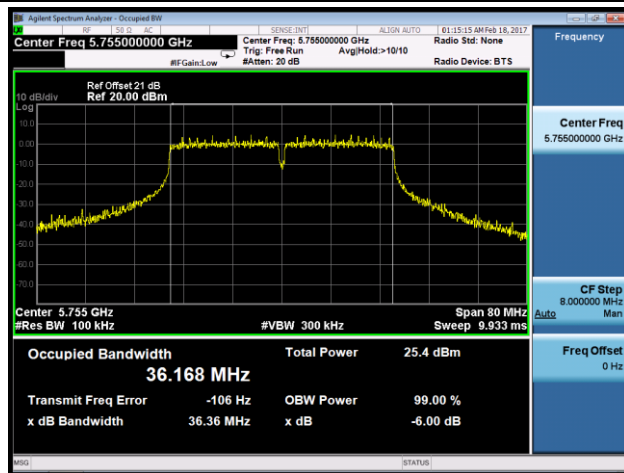


Channel 165 (5825MHz)

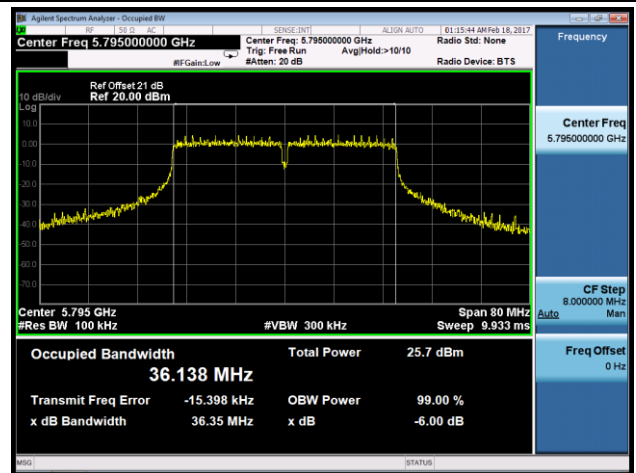


802.11n-HT40 6dB Bandwidth - Ant 1

Channel 151 (5755MHz)

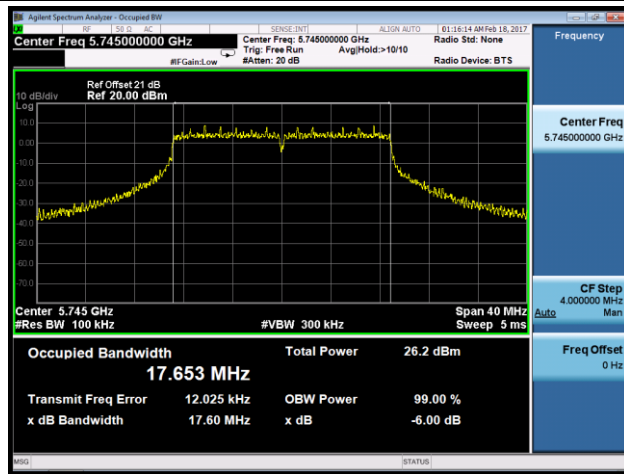


Channel 159 (5795MHz)

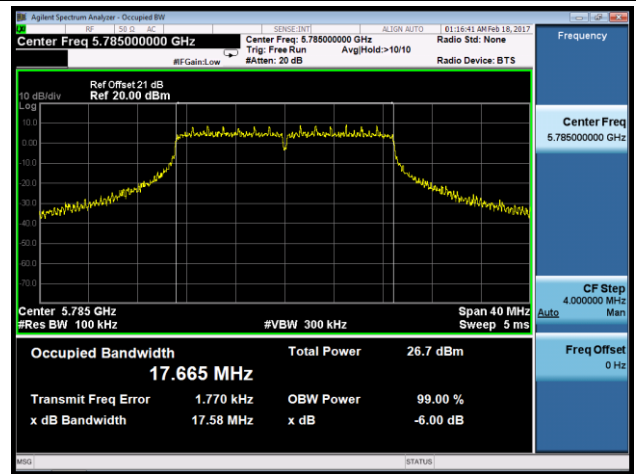


802.11ac-VHT20 6dB Bandwidth - Ant 1

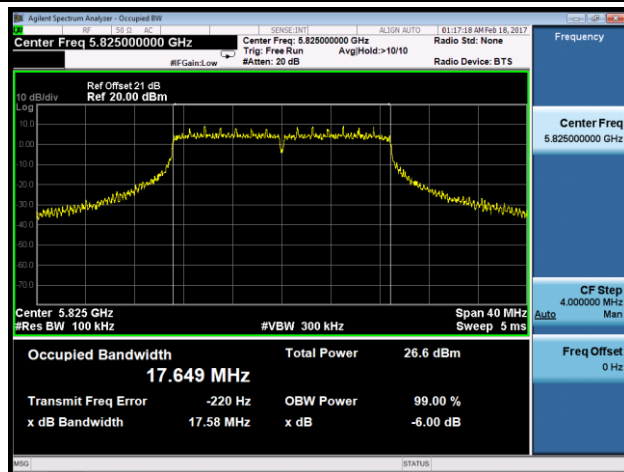
Channel 149 (5745MHz)



Channel 157 (5785MHz)

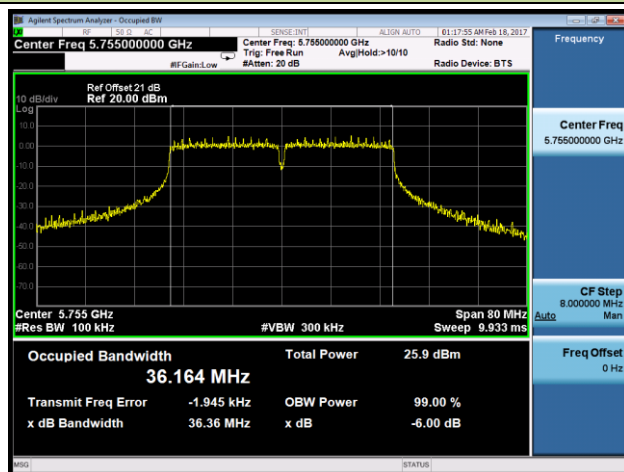


Channel 165 (5825MHz)

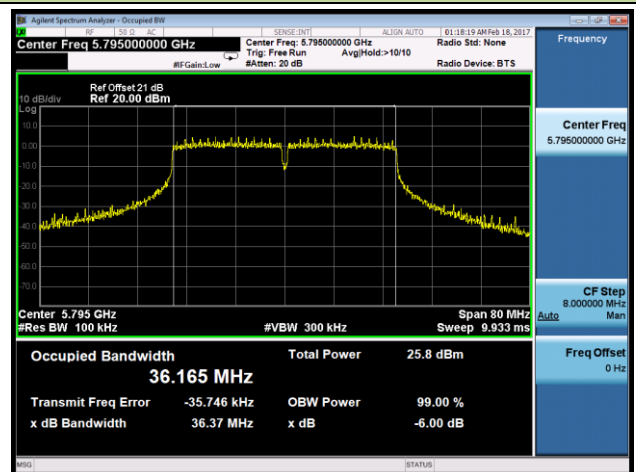


802.11ac-VHT40 6dB Bandwidth - Ant 1

Channel 151 (5755MHz)

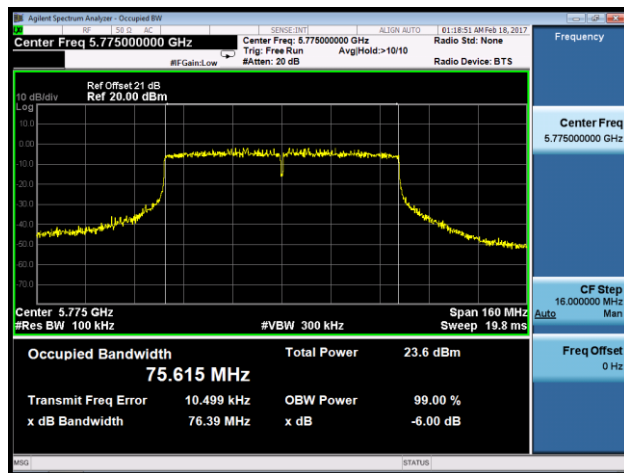


Channel 159 (5795MHz)



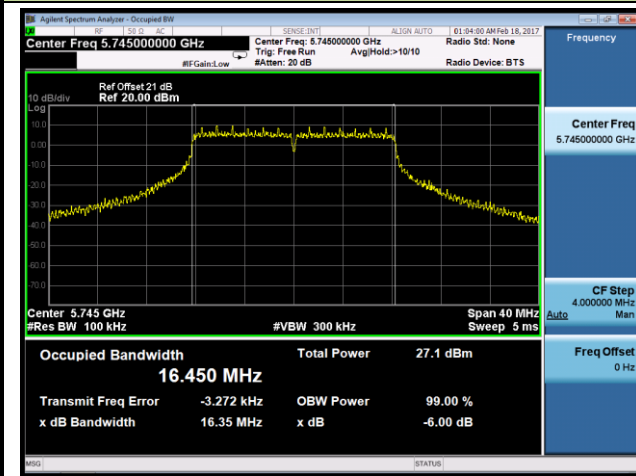
802.11ac-VHT80 6dB Bandwidth - Ant 1

Channel 155 (5775MHz)

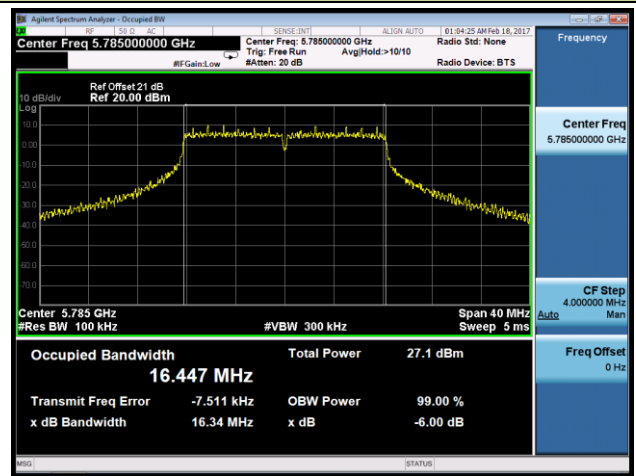


802.11a 6dB Bandwidth - Ant 2

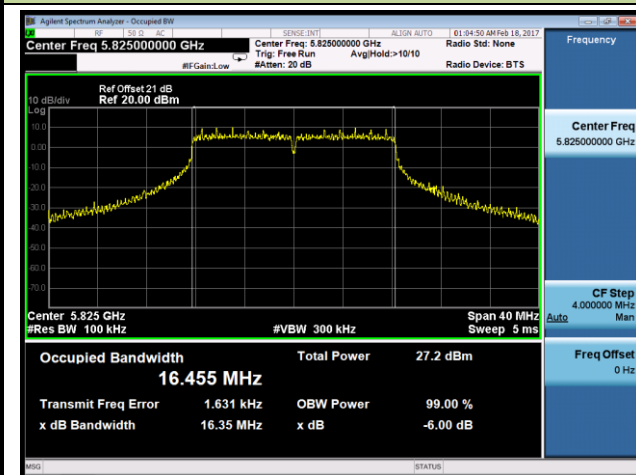
Channel 149 (5745MHz)



Channel 157 (5785MHz)

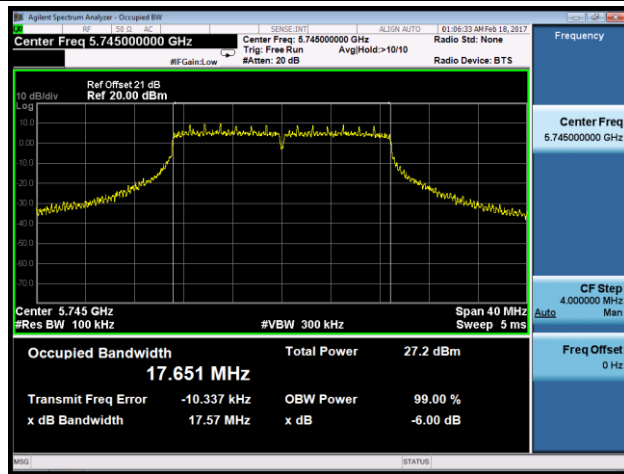


Channel 165 (5825MHz)

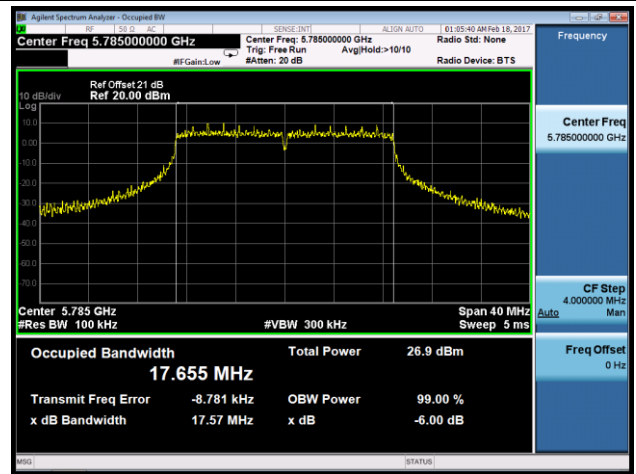


802.11n-HT20 6dB Bandwidth - Ant 2

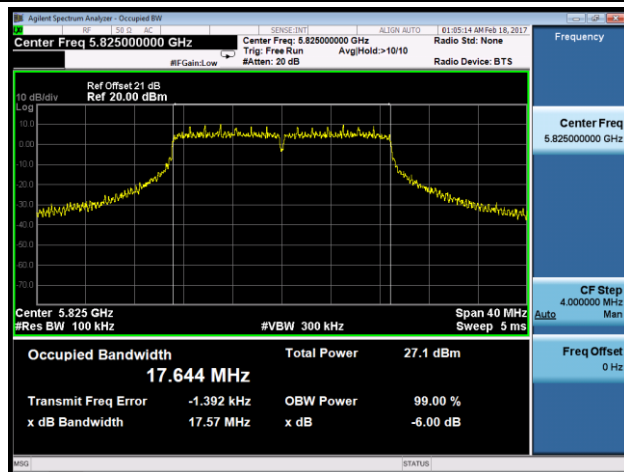
Channel 149 (5745MHz)



Channel 157 (5785MHz)

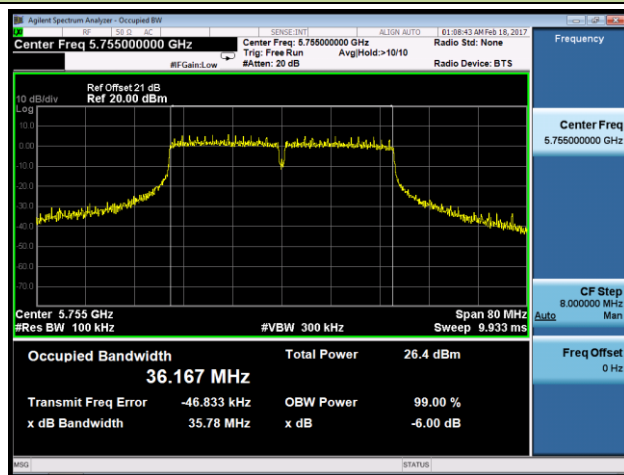


Channel 165 (5825MHz)

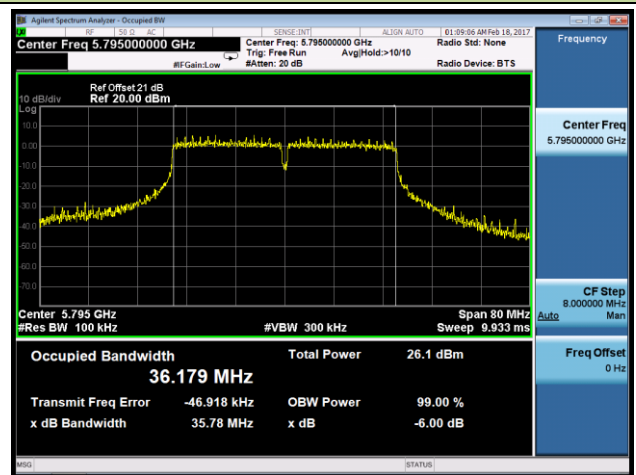


802.11n-HT40 6dB Bandwidth - Ant 2

Channel 151 (5755MHz)

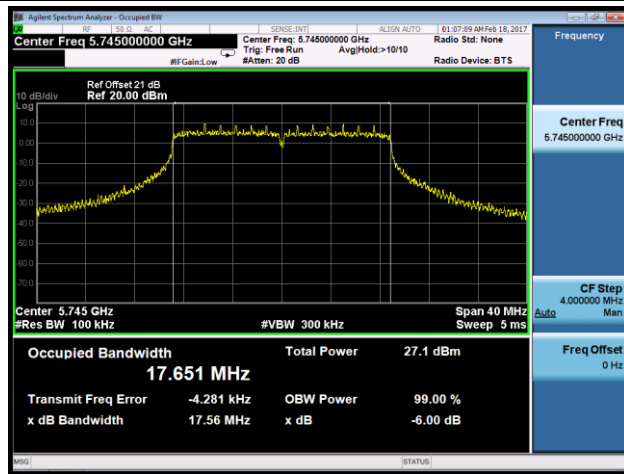


Channel 159 (5795MHz)

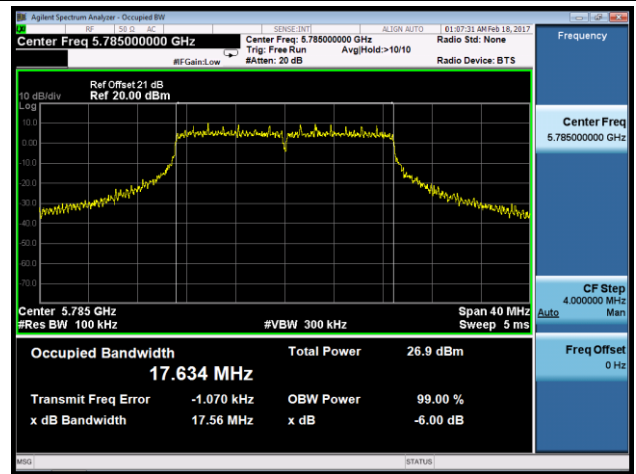


802.11ac-VHT20 6dB Bandwidth - Ant 2

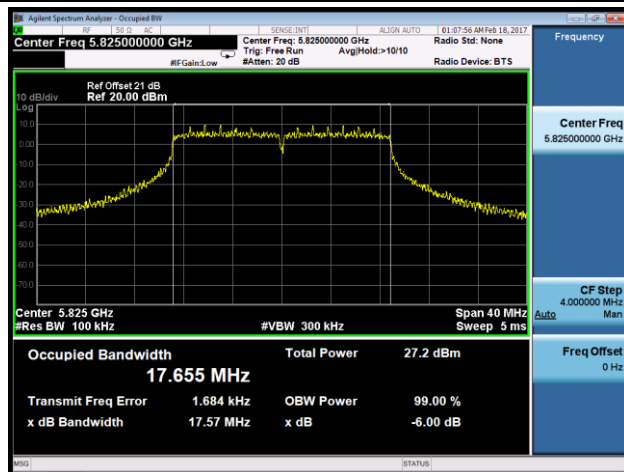
Channel 149 (5745MHz)



Channel 157 (5785MHz)

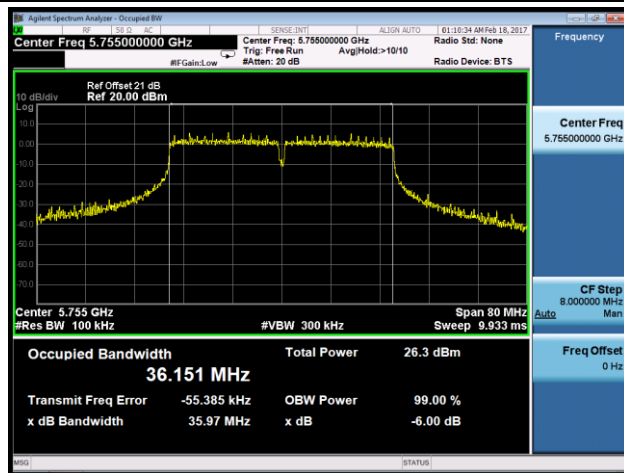


Channel 165 (5825MHz)

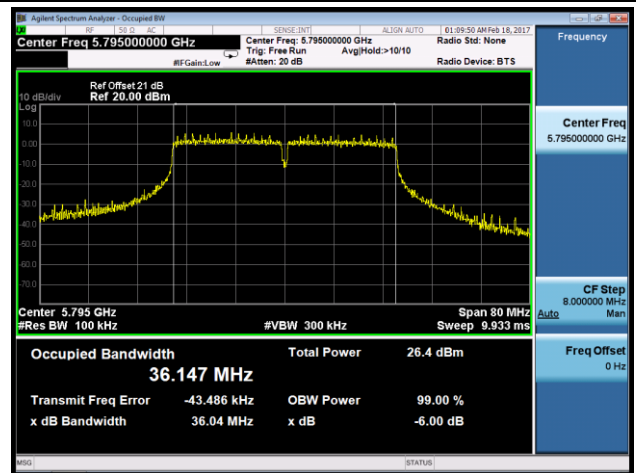


802.11ac-VHT40 6dB Bandwidth - Ant 2

Channel 151 (5755MHz)

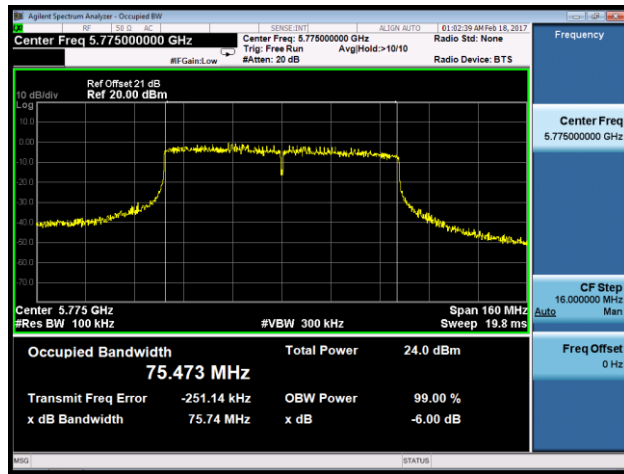


Channel 159 (5795MHz)



802.11ac-VHT80 6dB Bandwidth - Ant 2

Channel 155 (5775MHz)



7.4. Operation Frequency Range of 26dBc Bandwidth Measurement

7.4.1. Test Limit

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz.

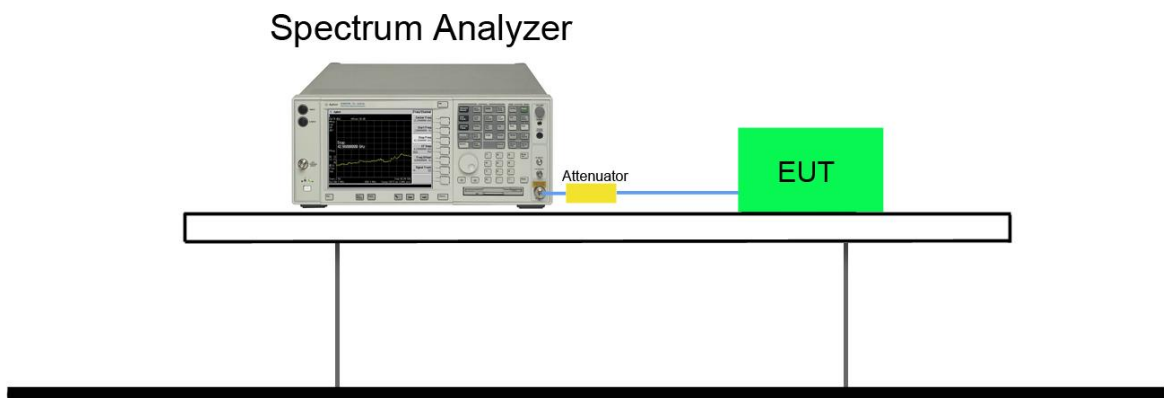
7.4.2. Test Procedure used

N/A

7.4.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency.
2. Span = 1.5 times to 5.0 times the OBW.
3. RBW = 1 % to 5 % of the OBW.
4. VBW $\geq 3 \times$ RBW.
5. Detector = Peak.
6. Trace mode = max hold.
7. Allow the trace to stabilize and set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
8. Determine the “-26 dB down amplitude” using [(reference value) - 26].
9. Using the marker function of the instrument to show 5250MHz frequency level.

7.4.4. Test Setup



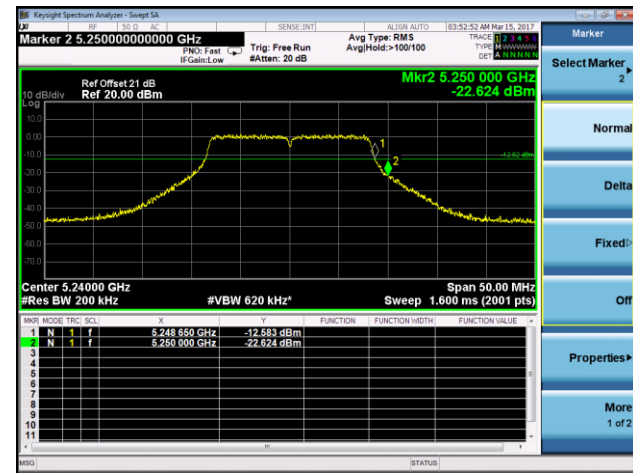
7.4.5. Test Result

| | | | |
|-----------|--|---------------|--------------|
| Product | US Wi-Fi AP 2x2 OD ext. antenna | Test Engineer | Johnson Liao |
| Test Site | SR2 | Test Date | 2017/03/15 |
| Test Item | Operation Frequency Range of 26dBc Bandwidth Measurement | | |

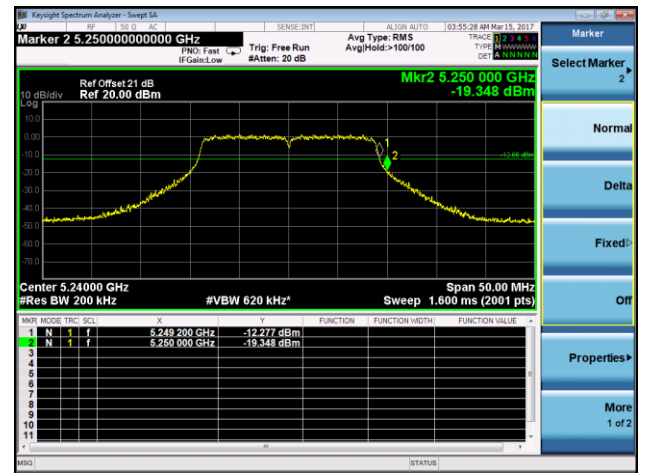
| Test Mode | Data Rate (Mbps) | Channel No. | Frequency (MHz) | Result |
|----------------|------------------|-------------|-----------------|--------|
| Ant 1 | | | | |
| 802.11a | 6 | 48 | 5240 | Pass |
| 802.11n-HT20 | 6.5 | 48 | 5240 | Pass |
| 802.11n-HT40 | 13.5 | 46 | 5230 | Pass |
| 802.11ac-VHT20 | 6.5 | 48 | 5240 | Pass |
| 802.11ac-VHT40 | 13.5 | 46 | 5230 | Pass |
| 802.11ac-VHT80 | 29.3 | 42 | 5210 | Pass |

Operation Frequency Range of 26dBc Bandwidth - Ant 1

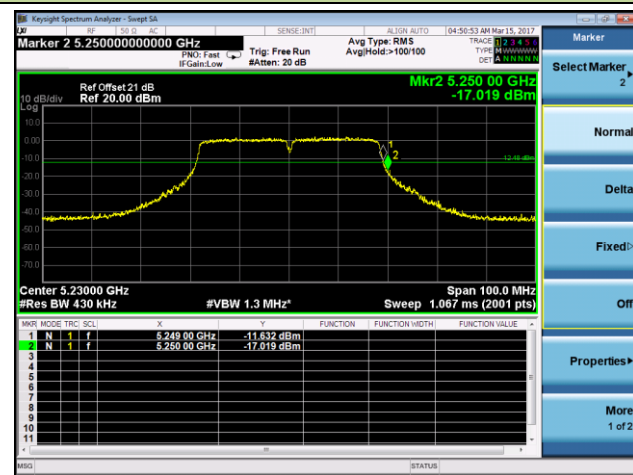
802.11a - Channel 48 (5240MHz)



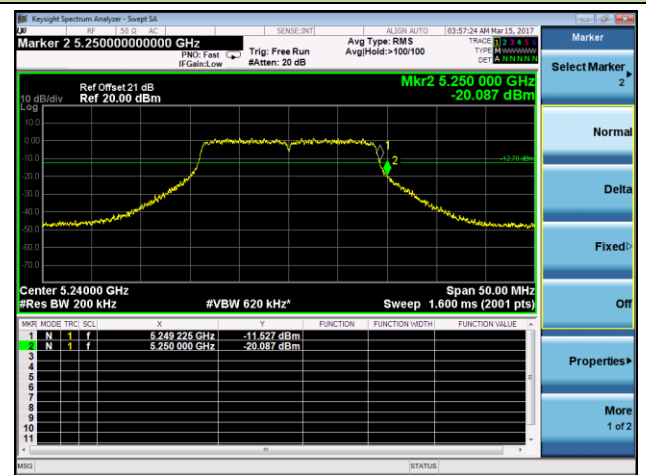
802.11n-HT20 - Channel 48 (5240MHz)



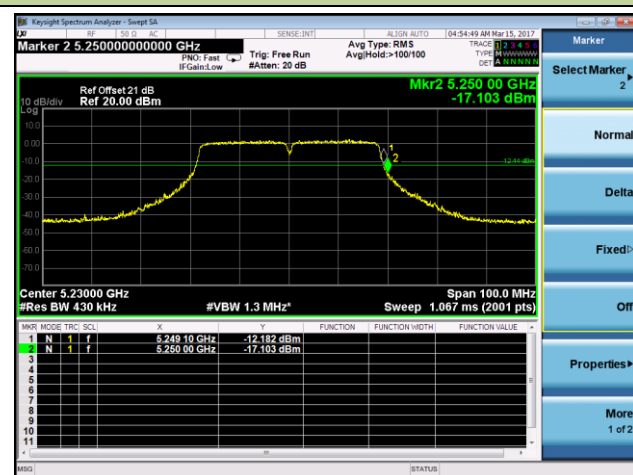
802.11n-HT40 - Channel 46 (5230MHz)



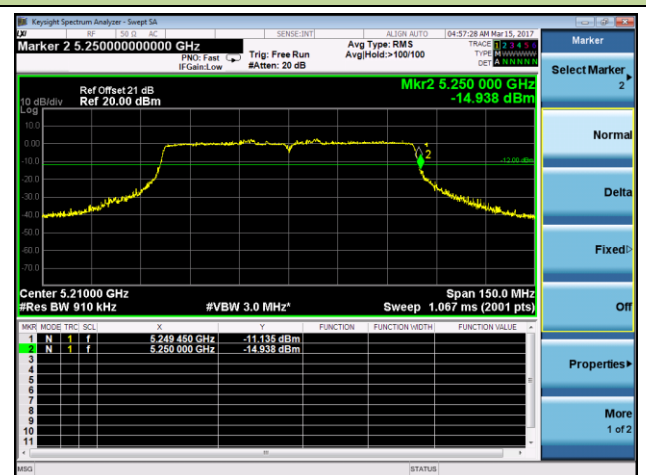
802.11ac-VHT20 - Channel 48 (5240MHz)



802.11ac-VHT40 - Channel 46 (5230MHz)



802.11ac-VHT80 - Channel 42 (5210MHz)



7.5. Output Power Measurement

7.5.1. Test Limit

For FCC Power Measurement Limit

For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (23.98dBm) or $11\text{dBm} + 10 \log(26\text{dB BW})$.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

For IC Power Measurement Limit

For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW (23.01dBm) or $10 + 10 \cdot \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed 250 mW (23.98dBm) or $11 + 10 \log_{10} B$, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W (30dBm) or $17 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

For the 5.725-5.85 GHz band, the maximum conducted output power shall not exceed 1 W.

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

EIRP Limit Calculation as below:

For 5150-5250MHz

- 802.11a: $10 + 10 \log_{10} (16.88\text{MHz}) = 22.27\text{dBm} < 23.01\text{dBm}$;
- 802.11n-HT20: $10 + 10 \log_{10} (17.94\text{MHz}) = 22.54\text{dBm} < 23.01\text{dBm}$;
- 802.11ac-VHT20: $10 + 10 \log_{10} (17.90\text{MHz}) = 22.53\text{dBm} < 23.01\text{dBm}$;
- 802.11n-HT40/ac-VHT40/ac-VHT80: $10 + 10 \log_{10} B > 23.01\text{dBm}$;

For 5250-5350MHz, 5470-5725MHz

- 802.11a: $17 + 10 \log_{10} (16.88\text{MHz}) = 29.27\text{dBm} < 30\text{dBm}$;
- 802.11n-HT20: $17 + 10 \log_{10} (17.94\text{MHz}) = 29.54\text{dBm} < 30\text{dBm}$;
- 802.11ac-VHT20: $17 + 10 \log_{10} (17.90\text{MHz}) = 29.53\text{dBm} < 30\text{dBm}$;
- 802.11n-HT40/ac-VHT40/ac-VHT80: $10 + 10 \log_{10} B > 30\text{dBm}$;

Max Conducted Output Power Limit Calculation as below:

For 5250-5350MHz, 5470-5725MHz

- 802.11a: $11 + 10 \log_{10} (16.88\text{MHz}) = 23.27\text{dBm} < 23.98\text{dBm}$;
- 802.11n-HT20: $11 + 10 \log_{10} (17.94\text{MHz}) = 23.54\text{dBm} < 23.98\text{dBm}$;
- 802.11ac-VHT20: $11 + 10 \log_{10} (17.90\text{MHz}) = 23.53\text{dBm} < 23.98\text{dBm}$;
- 802.11n-HT40/ac-VHT40/ac-VHT80: $11 + 10 \log_{10} B > 23.98\text{dBm}$;

| Frequency Band (MHz) | Per Chain Max Antenna Gain (dBi) | | CDD & Beam Forming Directional Gain (dBi) | Limit of SISO (dBm) | | Limit of MIMO (dBm) Ant 1 + 2 |
|----------------------|----------------------------------|-------|---|---------------------|-------|----------------------------------|
| | Ant 1 | Ant 2 | | Ant 1 | Ant 2 | |
| WiFi Omni Ant | | | | | | |
| 5150 ~ 5250 | 7.00 | 7.00 | 10.01 | 29.00 | 29.00 | 25.99 |
| 30°elevation angle | 7.00 | 7.00 | N/A | N/A | N/A | N/A |
| 5250 ~ 5350 | 7.00 | 7.00 | 10.01 | 22.98 | 22.98 | 19.97 |
| 5470 ~ 5725 | 7.00 | 7.00 | 10.01 | 22.98 | 22.98 | 19.97 |
| 5725 ~ 5850 | 7.00 | 7.00 | 10.01 | 29.00 | 29.00 | 25.99 |

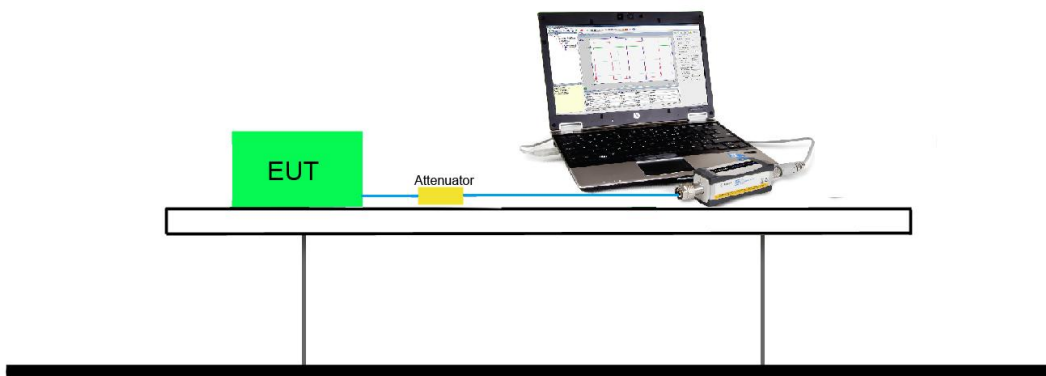
7.5.2. Test Procedure Used

KDB 789033 D02v01r03 - Section E) 3) b) Method PM-G

7.5.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.5.4. Test Setup



7.5.5. Test Rate Assessment

Power output test was verified over all data rates of each mode shown as below, and then choose the maximum power output (yellow marker) for final test of each channel.

| N _{Tx} | 802.11a | MCS Index for 802.11n | Data Rate (Mbps) | | | |
|-----------------|---------|-----------------------|------------------|----------|-----------------|----------|
| | | | 20MHz Bandwidth | | 40MHz Bandwidth | |
| | | | 800ns GI | 400ns GI | 800ns GI | 400ns GI |
| 1 | 6 | 0 | 6.5 | 7.2 | 13.5 | 15.0 |
| 1 | 9 | 1 | 13.0 | 14.4 | 27.0 | 30.0 |
| 1 | 12 | 2 | 19.5 | 21.7 | 40.5 | 45.0 |
| 1 | 18 | 3 | 26.0 | 28.9 | 54.0 | 60.0 |
| 1 | 24 | 4 | 39.0 | 43.3 | 81.0 | 90.0 |
| 1 | 36 | 5 | 52.0 | 57.8 | 108.0 | 120.0 |
| 1 | 48 | 6 | 58.5 | 65.0 | 121.5 | 135.0 |
| 1 | 54 | 7 | 65.0 | 72.2 | 135.0 | 150.0 |

| N _{Tx} | 802.11a | MCS Index for 802.11n | Data Rate (Mbps) | | | |
|-----------------|---------|-----------------------|------------------|----------|-----------------|----------|
| | | | 20MHz Bandwidth | | 40MHz Bandwidth | |
| | | | 800ns GI | 400ns GI | 800ns GI | 400ns GI |
| 2 | 6 | 12 | 13 | 14.4 | 27 | 30 |
| 2 | 9 | 12.5 | 26 | 28.9 | 54 | 60 |
| 2 | 12 | 13 | 39 | 43.3 | 81 | 90 |
| 2 | 18 | 13.5 | 52 | 57.8 | 108 | 120 |
| 2 | 24 | 14 | 78 | 86.7 | 162 | 180 |
| 2 | 36 | 14.5 | 104 | 115.6 | 216 | 240 |
| 2 | 48 | 15 | 117 | 130 | 243 | 270 |
| 2 | 54 | 15.5 | 130 | 144 | 270 | 300 |

| N _{Tx} | MCS Index for 802.11ac | Data Rate (Mbps) | | | | | |
|-----------------|---------------------------|------------------|----------|-----------------|----------|-----------------|----------|
| | | 20MHz Bandwidth | | 40MHz Bandwidth | | 80MHz Bandwidth | |
| | | 800ns GI | 400ns GI | 800ns GI | 400ns GI | 800ns GI | 400ns GI |
| 1 | 0 | 6.5 | 7.2 | 13.5 | 15.0 | 29.3 | 32.5 |
| 1 | 1 | 13.0 | 14.4 | 27.0 | 30.0 | 58.5 | 65.0 |
| 1 | 2 | 19.5 | 21.7 | 40.5 | 45.0 | 87.8 | 97.5 |
| 1 | 3 | 26.0 | 28.9 | 54.0 | 60.0 | 117.0 | 130.0 |
| 1 | 4 | 39.0 | 43.3 | 81.0 | 90.0 | 175.5 | 195.0 |
| 1 | 5 | 52.0 | 57.8 | 108.0 | 120.0 | 234.0 | 260.0 |
| 1 | 6 | 58.5 | 65.0 | 121.5 | 135.0 | 263.3 | 292.5 |
| 1 | 7 | 65.0 | 72.2 | 135.0 | 150.0 | 292.5 | 325.0 |
| 1 | 8 | 78.0 | 86.7 | 162.0 | 180.0 | 351.0 | 390.0 |
| 1 | 9 | -- | -- | 180.0 | 200.0 | 390.0 | 433.3 |

| N _{Tx} | MCS Index for 802.11ac | Data Rate (Mbps) | | | | | |
|-----------------|---------------------------|------------------|----------|-----------------|----------|-----------------|----------|
| | | 20MHz Bandwidth | | 40MHz Bandwidth | | 80MHz Bandwidth | |
| | | 800ns GI | 400ns GI | 800ns GI | 400ns GI | 800ns GI | 400ns GI |
| 2 | 0 | 13 | 14.4 | 27 | 30 | 58.6 | 65 |
| 2 | 1 | 26 | 28.8 | 54 | 60 | 117 | 130 |
| 2 | 2 | 39 | 43.4 | 81 | 90 | 175.6 | 195 |
| 2 | 3 | 52 | 57.8 | 108 | 120 | 234 | 260 |
| 2 | 4 | 78 | 86.6 | 162 | 180 | 351 | 390 |
| 2 | 5 | 104 | 115.6 | 216 | 240 | 468 | 520 |
| 2 | 6 | 117 | 130 | 243 | 270 | 526.6 | 585 |
| 2 | 7 | 130 | 144.4 | 270 | 300 | 585 | 650 |
| 2 | 8 | 156 | 173.4 | 324 | 360 | 702 | 780 |
| 2 | 9 | -- | -- | 360 | 400 | 780 | 866.6 |

Note: Power output test was verified over all data rates of each mode shown as above, and then choose the maximum power output (yellow marker) for final test of each channel.

Output power at various data rates for Ant 1:

| Test Mode | Bandwidth | Channel | Frequency (MHz) | Data Rate (Mbps) | Average Power (dBm) |
|-----------|-----------|---------|-----------------|------------------|---------------------|
| 802.11a | 20 | 36 | 5180 | 6 | 13.37 |
| | | | | 24 | 13.11 |
| | | | | 54 | 12.98 |
| 802.11n | 20 | 36 | 5180 | 6.5 | 13.31 |
| | | | | 7.2 | 13.19 |
| | | | | 26 | 12.88 |
| | | | | 28.9 | 12.90 |
| | | | | 65 | 12.56 |
| | | | | 72.2 | 12.52 |
| 802.11n | 40 | 38 | 5190 | 13.5 | 13.55 |
| | | | | 15 | 13.50 |
| | | | | 54 | 13.26 |
| | | | | 60 | 13.22 |
| | | | | 135 | 13.03 |
| | | | | 150 | 12.99 |
| 802.11ac | 20 | 36 | 5180 | 6.5 | 13.32 |
| | | | | 7.2 | 13.28 |
| | | | | 39 | 13.09 |
| | | | | 78 | 13.11 |
| | | | | 81 | 12.90 |
| | | | | 86.7 | 12.92 |
| 802.11ac | 40 | 38 | 5190 | 13.5 | 13.61 |
| | | | | 15 | 13.57 |
| | | | | 108 | 13.36 |
| | | | | 120 | 13.33 |
| | | | | 180 | 13.10 |
| | | | | 200 | 13.06 |

| | | | | | |
|----------|----|----|------|-------|-------|
| 802.11ac | 80 | 42 | 5210 | 29.3 | 13.48 |
| | | | | 32.5 | 13.44 |
| | | | | 260 | 13.28 |
| | | | | 234 | 13.26 |
| | | | | 390 | 13.04 |
| | | | | 433.3 | 13.01 |

7.5.6. Test Result

| | | | |
|-----------|---------------------------------|---------------|--------------|
| Product | US Wi-Fi AP 2x2 OD ext. antenna | Test Engineer | Johnson Liao |
| Test Site | SR2 | Test Date | 2017/02/03 |
| Test Item | Output Power | | |

For FCC Bands (UNII-2A & UNII-2C & UNII-3) & IC Bands (UNII-1 & UNII-2A & UNII-2C & UNII-3)

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP (dBm) | EIRP Limit (dBm) | Result |
|--------------|------------------|-------------|-------------|---------------------|---------------------------|---------------------------|------------|------------------|--------|
| Ant 1 | | | | | | | | | |
| 11a | 6 | 36 | 5180 | 14.82 | 14.82 | -- | 21.82 | ≤ 22.27 | Pass |
| 11a | 6 | 44 | 5220 | 15.16 | 15.16 | -- | 22.16 | ≤ 22.27 | Pass |
| 11a | 6 | 48 | 5240 | 15.04 | 15.04 | -- | 22.04 | ≤ 22.27 | Pass |
| 11a | 6 | 52 | 5260 | 21.52 | 21.52 | ≤ 22.98 | 28.52 | ≤ 29.27 | Pass |
| 11a | 6 | 60 | 5300 | 21.57 | 21.57 | ≤ 22.98 | 28.57 | ≤ 29.27 | Pass |
| 11a | 6 | 64 | 5320 | 21.54 | 21.54 | ≤ 22.98 | 28.54 | ≤ 29.27 | Pass |
| 11a | 6 | 100 | 5500 | 19.89 | 19.89 | ≤ 22.98 | 26.89 | ≤ 29.27 | Pass |
| 11a | 6 | 116 | 5580 | 20.45 | 20.45 | ≤ 22.98 | 27.45 | ≤ 29.27 | Pass |
| 11a | 6 | 120 | 5600 | 20.35 | 20.35 | ≤ 22.98 | 27.35 | ≤ 29.27 | Pass |
| 11a | 6 | 140 | 5700 | 19.85 | 19.85 | ≤ 22.98 | 26.85 | ≤ 29.27 | Pass |
| 11a | 6 | 149 | 5745 | 20.68 | 20.68 | ≤ 29.00 | -- | -- | Pass |
| 11a | 6 | 157 | 5785 | 20.87 | 20.87 | ≤ 29.00 | -- | -- | Pass |
| 11a | 6 | 165 | 5825 | 20.75 | 20.75 | ≤ 29.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 36 | 5180 | 15.33 | 15.33 | -- | 22.33 | ≤ 22.54 | Pass |
| 11n-HT20 | 6.5 | 44 | 5220 | 15.16 | 15.16 | -- | 22.16 | ≤ 22.54 | Pass |
| 11n-HT20 | 6.5 | 48 | 5240 | 14.96 | 14.96 | -- | 21.96 | ≤ 22.54 | Pass |
| 11n-HT20 | 6.5 | 52 | 5260 | 21.52 | 21.52 | ≤ 22.98 | 28.52 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 60 | 5300 | 21.55 | 21.55 | ≤ 22.98 | 28.55 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 64 | 5320 | 21.47 | 21.47 | ≤ 22.98 | 28.47 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 100 | 5500 | 19.86 | 19.86 | ≤ 22.98 | 26.86 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 116 | 5580 | 20.12 | 20.12 | ≤ 22.98 | 27.12 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 120 | 5600 | 20.29 | 20.29 | ≤ 22.98 | 27.29 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 140 | 5700 | 19.27 | 19.27 | ≤ 22.98 | 26.27 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 149 | 5745 | 20.62 | 20.62 | ≤ 29.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 157 | 5785 | 20.79 | 20.79 | ≤ 29.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 165 | 5825 | 20.71 | 20.71 | ≤ 29.00 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP (dBm) | EIRP Limit (dBm) | Result |
|------------|------------------|-------------|-------------|---------------------|---------------------------|---------------------------|------------|------------------|--------|
| Ant 1 | | | | | | | | | |
| 11n-HT40 | 13.5 | 38 | 5190 | 15.56 | 15.56 | -- | 22.56 | ≤ 23.01 | Pass |
| 11n-HT40 | 13.5 | 46 | 5230 | 15.24 | 15.24 | -- | 22.24 | ≤ 23.01 | Pass |
| 11n-HT40 | 13.5 | 54 | 5270 | 22.19 | 22.19 | ≤ 22.98 | 29.19 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 62 | 5310 | 21.82 | 21.82 | ≤ 22.98 | 28.82 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 102 | 5510 | 17.51 | 17.51 | ≤ 22.98 | 24.51 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 110 | 5550 | 21.86 | 21.86 | ≤ 22.98 | 28.16 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 118 | 5590 | 21.08 | 21.08 | ≤ 22.98 | 28.08 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 134 | 5670 | 19.43 | 19.43 | ≤ 22.98 | 26.43 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 151 | 5755 | 20.19 | 20.19 | ≤ 29.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 159 | 5795 | 20.34 | 20.34 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 36 | 5180 | 15.34 | 15.34 | -- | 22.34 | ≤ 22.53 | Pass |
| 11ac-VHT20 | 6.5 | 44 | 5220 | 15.16 | 15.16 | -- | 22.16 | ≤ 22.53 | Pass |
| 11ac-VHT20 | 6.5 | 48 | 5240 | 15.01 | 15.01 | -- | 22.01 | ≤ 22.53 | Pass |
| 11ac-VHT20 | 6.5 | 52 | 5260 | 21.47 | 21.47 | ≤ 22.98 | 28.47 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 60 | 5300 | 21.51 | 21.51 | ≤ 22.98 | 28.51 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 64 | 5320 | 21.45 | 21.45 | ≤ 22.98 | 28.45 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 100 | 5500 | 20.37 | 20.37 | ≤ 22.98 | 27.37 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 116 | 5580 | 20.26 | 20.26 | ≤ 22.98 | 27.26 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 120 | 5600 | 20.33 | 20.33 | ≤ 22.98 | 27.33 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 140 | 5700 | 19.35 | 19.35 | ≤ 22.98 | 26.35 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 144 | 5720 | 19.77 | 19.77 | ≤ 22.98 | 26.77 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 149 | 5745 | 20.66 | 20.66 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 157 | 5785 | 20.80 | 20.80 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 165 | 5825 | 20.72 | 20.72 | ≤ 29.00 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP (dBm) | EIRP Limit (dBm) | Result |
|------------|------------------|-------------|-------------|---------------------|---------------------------|---------------------------|------------|------------------|--------|
| Ant 1 | | | | | | | | | |
| 11ac-VHT40 | 13.5 | 38 | 5190 | 15.62 | 15.62 | -- | 22.62 | ≤ 23.01 | Pass |
| 11ac-VHT40 | 13.5 | 46 | 5230 | 15.24 | 15.24 | -- | 22.24 | ≤ 23.01 | Pass |
| 11ac-VHT40 | 13.5 | 54 | 5270 | 22.26 | 22.26 | ≤ 22.98 | 29.26 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 62 | 5310 | 21.82 | 21.82 | ≤ 22.98 | 28.82 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 102 | 5510 | 17.03 | 17.03 | ≤ 22.98 | 24.03 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 110 | 5550 | 21.98 | 21.98 | ≤ 22.98 | 28.98 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 118 | 5590 | 21.17 | 21.17 | ≤ 22.98 | 28.17 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 134 | 5670 | 18.93 | 18.93 | ≤ 22.98 | 25.93 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 142 | 5710 | 20.31 | 20.31 | ≤ 22.98 | 27.31 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 151 | 5755 | 20.29 | 20.29 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 159 | 5795 | 20.38 | 20.38 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 42 | 5210 | 15.63 | 15.63 | -- | 22.63 | ≤ 23.01 | Pass |
| 11ac-VHT80 | 29.3 | 58 | 5290 | 19.44 | 19.44 | ≤ 22.98 | 26.44 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 29.3 | 106 | 5530 | 16.49 | 16.49 | ≤ 22.98 | 23.49 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 29.3 | 122 | 5610 | 20.89 | 20.89 | ≤ 22.98 | 27.89 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 29.3 | 138 | 5690 | 20.19 | 20.19 | ≤ 22.98 | 27.19 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 29.3 | 155 | 5775 | 19.96 | 19.96 | ≤ 29.00 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP (dBm) | EIRP Limit (dBm) | Result |
|-----------|------------------|-------------|-------------|---------------------|---------------------------|---------------------------|------------|------------------|--------|
| Ant 2 | | | | | | | | | |
| 11a | 6 | 36 | 5180 | 14.95 | 14.95 | -- | 21.95 | ≤ 22.27 | Pass |
| 11a | 6 | 44 | 5220 | 14.64 | 14.64 | -- | 21.64 | ≤ 22.27 | Pass |
| 11a | 6 | 48 | 5240 | 14.82 | 14.82 | -- | 21.82 | ≤ 22.27 | Pass |
| 11a | 6 | 52 | 5260 | 21.03 | 21.03 | ≤ 22.98 | 28.03 | ≤ 29.27 | Pass |
| 11a | 6 | 60 | 5300 | 21.47 | 21.47 | ≤ 22.98 | 28.47 | ≤ 29.27 | Pass |
| 11a | 6 | 64 | 5320 | 21.48 | 21.48 | ≤ 22.98 | 28.48 | ≤ 29.27 | Pass |
| 11a | 6 | 100 | 5500 | 20.89 | 20.89 | ≤ 22.98 | 27.89 | ≤ 29.27 | Pass |
| 11a | 6 | 116 | 5580 | 20.11 | 20.11 | ≤ 22.98 | 27.11 | ≤ 29.27 | Pass |
| 11a | 6 | 120 | 5600 | 20.43 | 20.43 | ≤ 22.98 | 27.43 | ≤ 29.27 | Pass |
| 11a | 6 | 140 | 5700 | 19.48 | 19.48 | ≤ 22.98 | 26.48 | ≤ 29.27 | Pass |
| 11a | 6 | 149 | 5745 | 20.54 | 20.54 | ≤ 29.00 | -- | -- | Pass |
| 11a | 6 | 157 | 5785 | 21.15 | 21.15 | ≤ 29.00 | -- | -- | Pass |
| 11a | 6 | 165 | 5825 | 20.75 | 20.75 | ≤ 29.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 36 | 5180 | 14.98 | 14.98 | -- | 21.98 | ≤ 22.54 | Pass |
| 11n-HT20 | 6.5 | 44 | 5220 | 15.04 | 15.04 | -- | 22.04 | ≤ 22.54 | Pass |
| 11n-HT20 | 6.5 | 48 | 5240 | 15.23 | 15.23 | -- | 22.23 | ≤ 22.54 | Pass |
| 11n-HT20 | 6.5 | 52 | 5260 | 21.89 | 21.89 | ≤ 22.98 | 28.89 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 60 | 5300 | 21.42 | 21.42 | ≤ 22.98 | 28.42 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 64 | 5320 | 21.45 | 21.45 | ≤ 22.98 | 28.45 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 100 | 5500 | 20.36 | 20.36 | ≤ 22.98 | 27.36 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 116 | 5580 | 19.98 | 19.98 | ≤ 22.98 | 26.98 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 120 | 5600 | 20.33 | 20.33 | ≤ 22.98 | 27.33 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 140 | 5700 | 18.41 | 18.41 | ≤ 22.98 | 25.41 | ≤ 29.54 | Pass |
| 11n-HT20 | 6.5 | 149 | 5745 | 20.45 | 20.45 | ≤ 29.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 157 | 5785 | 21.01 | 21.01 | ≤ 29.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 165 | 5825 | 20.66 | 20.66 | ≤ 29.00 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP (dBm) | EIRP Limit (dBm) | Result |
|------------|------------------|-------------|-------------|---------------------|---------------------------|---------------------------|------------|------------------|--------|
| Ant 2 | | | | | | | | | |
| 11n-HT40 | 13.5 | 38 | 5190 | 15.43 | 15.43 | -- | 22.43 | ≤ 23.01 | Pass |
| 11n-HT40 | 13.5 | 46 | 5230 | 15.54 | 15.54 | -- | 22.54 | ≤ 23.01 | Pass |
| 11n-HT40 | 13.5 | 54 | 5270 | 21.95 | 21.95 | ≤ 22.98 | 28.95 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 62 | 5310 | 20.72 | 20.72 | ≤ 22.98 | 27.72 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 102 | 5510 | 18.52 | 18.52 | ≤ 22.98 | 25.52 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 110 | 5550 | 21.74 | 21.74 | ≤ 22.98 | 28.74 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 118 | 5590 | 21.78 | 21.78 | ≤ 22.98 | 28.78 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 134 | 5670 | 19.75 | 19.75 | ≤ 22.98 | 26.75 | ≤ 30.00 | Pass |
| 11n-HT40 | 13.5 | 151 | 5755 | 20.47 | 20.47 | ≤ 29.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 159 | 5795 | 20.54 | 20.54 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 36 | 5180 | 14.96 | 14.96 | -- | 21.96 | ≤ 22.53 | Pass |
| 11ac-VHT20 | 6.5 | 44 | 5220 | 15.06 | 15.06 | -- | 22.06 | ≤ 22.53 | Pass |
| 11ac-VHT20 | 6.5 | 48 | 5240 | 15.28 | 15.28 | -- | 22.28 | ≤ 22.53 | Pass |
| 11ac-VHT20 | 6.5 | 52 | 5260 | 21.88 | 21.88 | ≤ 22.98 | 28.88 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 60 | 5300 | 21.42 | 21.42 | ≤ 22.98 | 28.42 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 64 | 5320 | 21.44 | 21.44 | ≤ 22.98 | 28.44 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 100 | 5500 | 20.82 | 20.82 | ≤ 22.98 | 27.82 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 116 | 5580 | 20.24 | 20.24 | ≤ 22.98 | 27.24 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 120 | 5600 | 20.37 | 20.37 | ≤ 22.98 | 27.37 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 140 | 5700 | 18.45 | 18.45 | ≤ 22.98 | 25.45 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 144 | 5720 | 19.90 | 19.90 | ≤ 22.98 | 26.90 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 6.5 | 149 | 5745 | 20.45 | 20.45 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 157 | 5785 | 21.01 | 21.01 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 165 | 5825 | 20.66 | 20.66 | ≤ 29.00 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP (dBm) | EIRP Limit (dBm) | Result |
|------------|------------------|-------------|-------------|---------------------|---------------------------|---------------------------|------------|------------------|--------|
| Ant 2 | | | | | | | | | |
| 11ac-VHT40 | 13.5 | 38 | 5190 | 15.47 | 15.47 | -- | 22.47 | ≤ 23.01 | Pass |
| 11ac-VHT40 | 13.5 | 46 | 5230 | 15.58 | 15.58 | -- | 22.58 | ≤ 23.01 | Pass |
| 11ac-VHT40 | 13.5 | 54 | 5270 | 21.73 | 21.73 | ≤ 22.98 | 28.73 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 62 | 5310 | 21.17 | 21.17 | ≤ 22.98 | 28.17 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 102 | 5510 | 18.47 | 18.47 | ≤ 22.98 | 25.47 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 110 | 5550 | 21.92 | 21.92 | ≤ 22.98 | 28.92 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 118 | 5590 | 21.76 | 21.76 | ≤ 22.98 | 28.76 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 134 | 5670 | 19.70 | 19.70 | ≤ 22.98 | 26.70 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 142 | 5710 | 20.96 | 20.96 | ≤ 22.98 | 27.96 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 13.5 | 151 | 5755 | 20.45 | 20.45 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 159 | 5795 | 20.47 | 20.47 | ≤ 29.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 42 | 5210 | 15.63 | 15.63 | -- | 22.63 | ≤ 23.01 | Pass |
| 11ac-VHT80 | 29.3 | 58 | 5290 | 17.99 | 17.99 | ≤ 22.98 | 24.99 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 29.3 | 106 | 5530 | 17.17 | 17.17 | ≤ 22.98 | 24.17 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 29.3 | 122 | 5610 | 21.29 | 21.29 | ≤ 22.98 | 28.29 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 29.3 | 138 | 5690 | 21.05 | 21.05 | ≤ 22.98 | 28.05 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 29.3 | 155 | 5775 | 20.21 | 20.21 | ≤ 29.00 | -- | -- | Pass |

Note: EIRP (dBm) = Total Average Power + Antenna Gain.



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 Average Power (dBm) | Ant 2 Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | Max EIRP (dBm) | EIRP Limit (dBm) | Result |
|-----------|------------------|-------------|-------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------|------------------|--------|
| Ant 1 + 2 | | | | | | | | | | |
| 11a | 6 | 36 | 5180 | 9.01 | 8.93 | 11.98 | -- | 18.98 | ≤ 22.27 | Pass |
| 11a | 6 | 44 | 5220 | 8.94 | 9.06 | 12.01 | -- | 19.01 | ≤ 22.27 | Pass |
| 11a | 6 | 48 | 5240 | 9.13 | 8.88 | 12.02 | -- | 19.02 | ≤ 22.27 | Pass |
| 11a | 6 | 52 | 5260 | 15.53 | 15.62 | 18.59 | ≤ 19.97 | 28.60 | ≤ 29.27 | Pass |
| 11a | 6 | 60 | 5300 | 16.35 | 16.02 | 19.20 | ≤ 19.97 | 29.21 | ≤ 29.27 | Pass |
| 11a | 6 | 64 | 5320 | 16.03 | 16.06 | 19.06 | ≤ 19.97 | 29.07 | ≤ 29.27 | Pass |
| 11a | 6 | 100 | 5500 | 15.01 | 15.53 | 18.29 | ≤ 19.97 | 28.30 | ≤ 29.27 | Pass |
| 11a | 6 | 116 | 5580 | 14.88 | 15.03 | 17.97 | ≤ 19.97 | 27.98 | ≤ 29.27 | Pass |
| 11a | 6 | 120 | 5600 | 14.42 | 15.11 | 17.79 | ≤ 19.97 | 27.80 | ≤ 29.27 | Pass |
| 11a | 6 | 140 | 5700 | 14.43 | 15.15 | 17.82 | ≤ 19.97 | 27.83 | ≤ 29.27 | Pass |
| 11a | 6 | 149 | 5745 | 20.67 | 20.64 | 23.67 | ≤ 29.00 | -- | -- | Pass |
| 11a | 6 | 157 | 5785 | 20.82 | 21.17 | 24.01 | ≤ 29.00 | -- | -- | Pass |
| 11a | 6 | 165 | 5825 | 20.76 | 20.88 | 23.83 | ≤ 29.00 | -- | -- | Pass |
| 11n-HT20 | 13 | 36 | 5180 | 8.78 | 8.57 | 11.69 | -- | 21.70 | ≤ 22.54 | Pass |
| 11n-HT20 | 13 | 44 | 5220 | 8.77 | 9.07 | 11.93 | -- | 21.94 | ≤ 22.54 | Pass |
| 11n-HT20 | 13 | 48 | 5240 | 9.23 | 9.11 | 12.18 | -- | 22.19 | ≤ 22.54 | Pass |
| 11n-HT20 | 13 | 52 | 5260 | 16.35 | 15.88 | 19.13 | ≤ 19.97 | 29.14 | ≤ 29.54 | Pass |
| 11n-HT20 | 13 | 60 | 5300 | 16.25 | 16.09 | 19.18 | ≤ 19.97 | 29.19 | ≤ 29.54 | Pass |
| 11n-HT20 | 13 | 64 | 5320 | 16.03 | 15.98 | 19.02 | ≤ 19.97 | 29.03 | ≤ 29.54 | Pass |
| 11n-HT20 | 13 | 100 | 5500 | 15.11 | 15.65 | 18.40 | ≤ 19.97 | 28.41 | ≤ 29.54 | Pass |
| 11n-HT20 | 13 | 116 | 5580 | 14.86 | 15.25 | 18.07 | ≤ 19.97 | 28.08 | ≤ 29.54 | Pass |
| 11n-HT20 | 13 | 120 | 5600 | 14.24 | 15.03 | 17.66 | ≤ 19.97 | 27.67 | ≤ 29.54 | Pass |
| 11n-HT20 | 13 | 140 | 5700 | 14.03 | 14.99 | 17.55 | ≤ 19.97 | 27.56 | ≤ 29.54 | Pass |
| 11n-HT20 | 13 | 149 | 5745 | 20.67 | 20.71 | 23.70 | ≤ 25.99 | -- | -- | Pass |
| 11n-HT20 | 13 | 157 | 5785 | 20.84 | 21.22 | 24.04 | ≤ 25.99 | -- | -- | Pass |
| 11n-HT20 | 13 | 165 | 5825 | 20.74 | 20.85 | 23.81 | ≤ 25.99 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 Average Power (dBm) | Ant 2 Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | Max EIRP (dBm) | EIRP Limit (dBm) | Result |
|------------|------------------|-------------|-------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------|------------------|--------|
| Ant 1 + 2 | | | | | | | | | | |
| 11n-HT40 | 27 | 38 | 5190 | 9.56 | 9.57 | 12.58 | -- | 22.59 | ≤ 23.01 | Pass |
| 11n-HT40 | 27 | 46 | 5230 | 9.33 | 9.62 | 12.49 | -- | 22.50 | ≤ 23.01 | Pass |
| 11n-HT40 | 27 | 54 | 5270 | 16.53 | 16.58 | 19.57 | ≤ 19.97 | 29.58 | ≤ 30.00 | Pass |
| 11n-HT40 | 27 | 62 | 5310 | 16.63 | 16.03 | 19.35 | ≤ 19.97 | 29.36 | ≤ 30.00 | Pass |
| 11n-HT40 | 27 | 102 | 5510 | 16.39 | 16.18 | 19.30 | ≤ 19.97 | 29.31 | ≤ 30.00 | Pass |
| 11n-HT40 | 27 | 110 | 5550 | 16.36 | 16.79 | 19.59 | ≤ 19.97 | 29.60 | ≤ 30.00 | Pass |
| 11n-HT40 | 27 | 118 | 5590 | 16.25 | 16.88 | 19.59 | ≤ 19.97 | 29.60 | ≤ 30.00 | Pass |
| 11n-HT40 | 27 | 134 | 5670 | 15.98 | 16.75 | 19.39 | ≤ 19.97 | 29.40 | ≤ 30.00 | Pass |
| 11n-HT40 | 27 | 151 | 5755 | 20.30 | 20.73 | 23.53 | ≤ 25.99 | -- | -- | Pass |
| 11n-HT40 | 27 | 159 | 5795 | 20.42 | 20.69 | 23.57 | ≤ 25.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 36 | 5180 | 9.45 | 9.33 | 12.40 | -- | 22.41 | ≤ 22.53 | Pass |
| 11ac-VHT20 | 13 | 44 | 5220 | 8.76 | 9.11 | 11.95 | -- | 21.96 | ≤ 22.53 | Pass |
| 11ac-VHT20 | 13 | 48 | 5240 | 9.21 | 9.08 | 12.16 | -- | 22.17 | ≤ 22.53 | Pass |
| 11ac-VHT20 | 13 | 52 | 5260 | 16.35 | 15.85 | 19.12 | ≤ 19.97 | 29.13 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 13 | 60 | 5300 | 16.07 | 16.15 | 19.12 | ≤ 19.97 | 29.13 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 13 | 64 | 5320 | 16.25 | 15.98 | 19.13 | ≤ 19.97 | 29.14 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 13 | 100 | 5500 | 15.43 | 15.54 | 18.50 | ≤ 19.97 | 28.51 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 13 | 116 | 5580 | 15.38 | 15.86 | 18.64 | ≤ 19.97 | 28.65 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 13 | 120 | 5600 | 15.03 | 15.35 | 18.20 | ≤ 19.97 | 28.21 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 13 | 140 | 5700 | 14.75 | 15.35 | 18.07 | ≤ 19.97 | 28.08 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 13 | 144 | 5720 | 14.68 | 15.03 | 17.87 | ≤ 19.97 | 27.88 | ≤ 29.53 | Pass |
| 11ac-VHT20 | 13 | 149 | 5745 | 20.70 | 20.72 | 23.72 | ≤ 25.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 157 | 5785 | 20.85 | 21.21 | 24.04 | ≤ 25.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 165 | 5825 | 20.72 | 20.86 | 23.80 | ≤ 25.99 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 Average Power (dBm) | Ant 2 Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP (dBm) | EIRP Limit (dBm) | Result |
|------------|------------------|-------------|-------------|---------------------------|---------------------------|---------------------------|---------------------------|------------|------------------|--------|
| Ant 1 + 2 | | | | | | | | | | |
| 11ac-VHT40 | 27 | 38 | 5190 | 9.58 | 9.68 | 12.64 | -- | 22.65 | ≤ 23.01 | Pass |
| 11ac-VHT40 | 27 | 46 | 5230 | 9.31 | 9.57 | 12.45 | -- | 22.46 | ≤ 23.01 | Pass |
| 11ac-VHT40 | 27 | 54 | 5270 | 16.46 | 16.41 | 19.45 | ≤ 19.97 | 29.46 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 27 | 62 | 5310 | 16.59 | 16.08 | 19.35 | ≤ 19.97 | 29.36 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 27 | 102 | 5510 | 16.09 | 16.38 | 19.25 | ≤ 19.97 | 29.26 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 27 | 110 | 5550 | 15.98 | 16.75 | 19.39 | ≤ 19.97 | 29.40 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 27 | 118 | 5590 | 15.95 | 16.86 | 19.44 | ≤ 19.97 | 29.45 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 27 | 134 | 5670 | 15.56 | 16.56 | 19.10 | ≤ 19.97 | 29.11 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 27 | 142 | 5710 | 15.86 | 16.73 | 19.33 | ≤ 19.97 | 29.34 | ≤ 30.00 | Pass |
| 11ac-VHT40 | 27 | 151 | 5755 | 20.29 | 20.69 | 23.50 | ≤ 25.99 | -- | -- | Pass |
| 11ac-VHT40 | 27 | 159 | 5795 | 20.45 | 20.75 | 23.61 | ≤ 25.99 | -- | -- | Pass |
| 11ac-VHT80 | 58.6 | 42 | 5210 | 9.15 | 9.73 | 12.46 | -- | 22.47 | ≤ 23.01 | Pass |
| 11ac-VHT80 | 58.6 | 58 | 5290 | 16.85 | 16.24 | 19.57 | ≤ 19.97 | 29.58 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 58.6 | 106 | 5530 | 15.62 | 15.99 | 18.82 | ≤ 19.97 | 28.83 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 58.6 | 122 | 5610 | 16.05 | 16.75 | 19.42 | ≤ 19.97 | 29.43 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 58.6 | 138 | 5690 | 16.03 | 17.01 | 19.56 | ≤ 19.97 | 29.57 | ≤ 30.00 | Pass |
| 11ac-VHT80 | 58.6 | 155 | 5775 | 20.07 | 20.49 | 23.30 | ≤ 25.99 | -- | -- | Pass |

Note 1: The Total Average Power (dBm) = $10 \cdot \log\{10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)}\}$.

Note 2: The EIRP (dBm) = Total Average Power + Directional Gain.

For FCC Band (UNII-1)

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP of 30° Elevation Angle (dBm) | EIRP Limit of 30° Elevation Angle (dBm) | Result |
|--------------|------------------|-------------|-------------|---------------------|---------------------------|---------------------------|-----------------------------------|---|--------|
| Ant 1 | | | | | | | | | |
| 11a | 6 | 36 | 5180 | 13.37 | 13.37 | ≤ 29.00 | 20.37 | ≤ 21.00 | Pass |
| 11a | 6 | 44 | 5220 | 13.62 | 13.62 | ≤ 29.00 | 20.62 | ≤ 21.00 | Pass |
| 11a | 6 | 48 | 5240 | 13.49 | 13.49 | ≤ 29.00 | 20.49 | ≤ 21.00 | Pass |
| 11n-HT20 | 6.5 | 36 | 5180 | 13.31 | 13.31 | ≤ 29.00 | 20.31 | ≤ 21.00 | Pass |
| 11n-HT20 | 6.5 | 44 | 5220 | 13.57 | 13.57 | ≤ 29.00 | 20.57 | ≤ 21.00 | Pass |
| 11n-HT20 | 6.5 | 48 | 5240 | 13.45 | 13.45 | ≤ 29.00 | 20.45 | ≤ 21.00 | Pass |
| 11n-HT40 | 13.5 | 38 | 5190 | 13.55 | 13.55 | ≤ 29.00 | 20.55 | ≤ 21.00 | Pass |
| 11n-HT40 | 13.5 | 46 | 5230 | 13.32 | 13.32 | ≤ 29.00 | 20.32 | ≤ 21.00 | Pass |
| 11ac-VHT20 | 6.5 | 36 | 5180 | 13.32 | 13.32 | ≤ 29.00 | 20.32 | ≤ 21.00 | Pass |
| 11ac-VHT20 | 6.5 | 44 | 5220 | 13.61 | 13.61 | ≤ 29.00 | 20.61 | ≤ 21.00 | Pass |
| 11ac-VHT20 | 6.5 | 48 | 5240 | 13.48 | 13.48 | ≤ 29.00 | 20.48 | ≤ 21.00 | Pass |
| 11ac-VHT40 | 13.5 | 38 | 5190 | 13.61 | 13.61 | ≤ 29.00 | 20.61 | ≤ 21.00 | Pass |
| 11ac-VHT40 | 13.5 | 46 | 5230 | 13.29 | 13.29 | ≤ 29.00 | 20.29 | ≤ 21.00 | Pass |
| 11ac-VHT80 | 29.3 | 42 | 5210 | 13.48 | 13.48 | ≤ 29.00 | 20.48 | ≤ 21.00 | Pass |

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP of 30° Elevation Angle (dBm) | EIRP Limit of 30° Elevation Angle (dBm) | Result |
|------------|------------------|-------------|-------------|---------------------|---------------------------|---------------------------|-----------------------------------|---|--------|
| Ant 2 | | | | | | | | | |
| 11a | 6 | 36 | 5180 | 13.59 | 13.59 | ≤ 29.00 | 20.59 | ≤ 21.00 | Pass |
| 11a | 6 | 44 | 5220 | 13.39 | 13.39 | ≤ 29.00 | 20.39 | ≤ 21.00 | Pass |
| 11a | 6 | 48 | 5240 | 13.49 | 13.49 | ≤ 29.00 | 20.49 | ≤ 21.00 | Pass |
| 11n-HT20 | 6.5 | 36 | 5180 | 13.58 | 13.58 | ≤ 29.00 | 20.58 | ≤ 21.00 | Pass |
| 11n-HT20 | 6.5 | 44 | 5220 | 13.36 | 13.36 | ≤ 29.00 | 20.36 | ≤ 21.00 | Pass |
| 11n-HT20 | 6.5 | 48 | 5240 | 13.51 | 13.51 | ≤ 29.00 | 20.51 | ≤ 21.00 | Pass |
| 11n-HT40 | 13.5 | 38 | 5190 | 13.63 | 13.63 | ≤ 29.00 | 20.63 | ≤ 21.00 | Pass |
| 11n-HT40 | 13.5 | 46 | 5230 | 13.43 | 13.43 | ≤ 29.00 | 20.43 | ≤ 21.00 | Pass |
| 11ac-VHT20 | 6.5 | 36 | 5180 | 13.64 | 13.64 | ≤ 29.00 | 20.64 | ≤ 21.00 | Pass |
| 11ac-VHT20 | 6.5 | 44 | 5220 | 13.39 | 13.39 | ≤ 29.00 | 20.39 | ≤ 21.00 | Pass |
| 11ac-VHT20 | 6.5 | 48 | 5240 | 13.48 | 13.48 | ≤ 29.00 | 20.48 | ≤ 21.00 | Pass |
| 11ac-VHT40 | 13.5 | 38 | 5190 | 13.66 | 13.66 | ≤ 29.00 | 20.66 | ≤ 21.00 | Pass |
| 11ac-VHT40 | 13.5 | 46 | 5230 | 13.42 | 13.42 | ≤ 29.00 | 20.42 | ≤ 21.00 | Pass |
| 11ac-VHT80 | 29.3 | 42 | 5210 | 13.44 | 13.44 | ≤ 29.00 | 20.44 | ≤ 21.00 | Pass |

Note: EIRP of 30° Elevation Angle (dBm) = Total Average Power (dBm) + 30° Elevation Angle Gain (dBi).

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 Average Power (dBm) | Ant 2 Average Power (dBm) | Total Average Power (dBm) | Average Power Limit (dBm) | EIRP of 30° Elevation Angle (dBm) | EIRP Limit of 30° Elevation Angle (dBm) | Result |
|------------|------------------|-------------|-------------|---------------------------|---------------------------|---------------------------|---------------------------|-----------------------------------|---|--------|
| Ant 1 + 2 | | | | | | | | | | |
| 11a | 6 | 36 | 5180 | 10.86 | 10.43 | 13.66 | ≤ 29.00 | 20.66 | ≤ 21.00 | Pass |
| 11a | 6 | 44 | 5220 | 10.16 | 10.63 | 13.41 | ≤ 29.00 | 20.41 | ≤ 21.00 | Pass |
| 11a | 6 | 48 | 5240 | 10.35 | 10.76 | 13.57 | ≤ 29.00 | 20.57 | ≤ 21.00 | Pass |
| 11n-HT20 | 27 | 36 | 5180 | 7.48 | 7.43 | 10.47 | ≤ 25.99 | 20.48 | ≤ 21.00 | Pass |
| 11n-HT20 | 27 | 44 | 5220 | 7.31 | 7.62 | 10.48 | ≤ 25.99 | 20.49 | ≤ 21.00 | Pass |
| 11n-HT20 | 27 | 48 | 5240 | 7.29 | 7.51 | 10.41 | ≤ 25.99 | 20.42 | ≤ 21.00 | Pass |
| 11n-HT40 | 54 | 38 | 5190 | 7.69 | 7.38 | 10.55 | ≤ 25.99 | 20.56 | ≤ 21.00 | Pass |
| 11n-HT40 | 54 | 46 | 5230 | 7.09 | 7.26 | 10.19 | ≤ 25.99 | 20.20 | ≤ 21.00 | Pass |
| 11ac-VHT20 | 27 | 36 | 5180 | 7.52 | 7.05 | 10.30 | ≤ 25.99 | 20.31 | ≤ 21.00 | Pass |
| 11ac-VHT20 | 27 | 44 | 5220 | 7.32 | 7.59 | 10.47 | ≤ 25.99 | 20.48 | ≤ 21.00 | Pass |
| 11ac-VHT20 | 27 | 48 | 5240 | 7.30 | 7.41 | 10.37 | ≤ 25.99 | 20.38 | ≤ 21.00 | Pass |
| 11ac-VHT40 | 54 | 38 | 5190 | 7.74 | 7.38 | 10.57 | ≤ 25.99 | 20.58 | ≤ 21.00 | Pass |
| 11ac-VHT40 | 54 | 46 | 5230 | 7.47 | 7.69 | 10.59 | ≤ 25.99 | 20.60 | ≤ 21.00 | Pass |
| 11ac-VHT80 | 117.2 | 42 | 5210 | 7.21 | 7.17 | 10.20 | ≤ 25.99 | 20.21 | ≤ 21.00 | Pass |

Note 1: The Total Average Power (dBm) = $10 \cdot \log\{10^{(\text{Ant 1 Average Power}/10)} + 10^{(\text{Ant 2 Average Power}/10)}\}$.

Note 2: Max EIRP of 30° Elevation Angle (dBm) = $10 \cdot \log\{10^{(\text{Ant 1 Average Power} + \text{Ant 1 30° Elevation Angle Gain})/10} + 10^{(\text{Ant 2 Average Power} + \text{Ant 2 30° Elevation Angle Gain})/10}\}$.

7.6. Transmit Power Control

7.6.1. Test Limit

The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

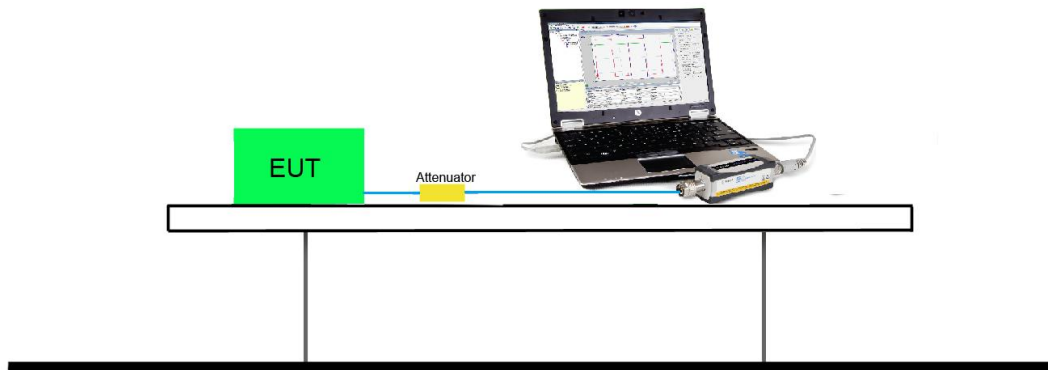
7.6.2. Test Procedure Used

KDB 789033 D02v01r03 - Section E) 3) b) Method PM-G

7.6.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.6.4. Test Setup



7.6.5. Test Result

| | | | |
|---------------|---------------------------------|-------------------|------------|
| Product | US Wi-Fi AP 2x2 OD ext. antenna | Temperature | 25°C |
| Test Engineer | Johnson Liao | Relative Humidity | 50 ~ 58% |
| Test Site | SR2 | Test Date | 2017/02/27 |
| Test Item | TPC | | |

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | TPC Power (dBm) | EIRP TPC (dBm) | EIRP TPC Limit (dBm) | Result |
|--------------|------------------|-------------|-------------|-----------------|----------------|----------------------|--------|
| Ant 1 | | | | | | | |
| 11a | 6 | 52 | 5260 | 15.45 | 22.45 | ≤ 24.00 | Pass |
| 11a | 6 | 60 | 5300 | 15.39 | 22.39 | ≤ 24.00 | Pass |
| 11a | 6 | 64 | 5320 | 15.53 | 22.53 | ≤ 24.00 | Pass |
| 11a | 6 | 100 | 5500 | 13.76 | 20.76 | ≤ 24.00 | Pass |
| 11a | 6 | 116 | 5580 | 14.32 | 21.32 | ≤ 24.00 | Pass |
| 11a | 6 | 120 | 5600 | 14.16 | 21.16 | ≤ 24.00 | Pass |
| 11a | 6 | 140 | 5700 | 13.65 | 20.65 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 52 | 5260 | 15.47 | 22.47 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 60 | 5300 | 15.40 | 22.40 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 64 | 5320 | 15.44 | 22.44 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 100 | 5500 | 13.77 | 20.77 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 116 | 5580 | 14.10 | 21.10 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 120 | 5600 | 14.12 | 21.12 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 140 | 5700 | 13.13 | 20.13 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 54 | 5270 | 16.17 | 23.17 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 62 | 5310 | 15.81 | 22.81 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 102 | 5510 | 11.43 | 18.43 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 110 | 5550 | 15.75 | 22.75 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 118 | 5590 | 14.99 | 21.99 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 134 | 5670 | 13.26 | 20.26 | ≤ 24.00 | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | TPC Power (dBm) | EIRP TPC (dBm) | EIRP TPC Limit (dBm) | Result |
|------------|------------------|-------------|-------------|-----------------|----------------|----------------------|--------|
| Ant 1 | | | | | | | |
| 11ac-VHT20 | 6.5 | 52 | 5260 | 15.42 | 22.42 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 60 | 5300 | 15.44 | 22.44 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 64 | 5320 | 15.34 | 22.34 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 100 | 5500 | 14.20 | 21.20 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 116 | 5580 | 14.17 | 21.17 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 120 | 5600 | 14.15 | 21.15 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 140 | 5700 | 13.18 | 20.18 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 144 | 5720 | 13.62 | 20.62 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 54 | 5270 | 16.11 | 23.11 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 62 | 5310 | 15.78 | 22.78 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 102 | 5510 | 11.03 | 18.03 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 110 | 5550 | 15.84 | 22.84 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 118 | 5590 | 15.04 | 22.04 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 134 | 5670 | 12.81 | 19.81 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 142 | 5710 | 14.25 | 21.25 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 29.3 | 58 | 5290 | 13.36 | 20.36 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 29.3 | 106 | 5530 | 10.36 | 17.36 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 29.3 | 122 | 5610 | 14.83 | 21.83 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 29.3 | 138 | 5690 | 14.03 | 21.03 | ≤ 24.00 | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | TPC Power (dBm) | EIRP TPC (dBm) | EIRP TPC Limit (dBm) | Result |
|------------|------------------|-------------|-------------|-----------------|----------------|----------------------|--------|
| Ant 2 | | | | | | | |
| 11a | 6 | 52 | 5260 | 14.85 | 21.85 | ≤ 24.00 | Pass |
| 11a | 6 | 60 | 5300 | 15.39 | 22.39 | ≤ 24.00 | Pass |
| 11a | 6 | 64 | 5320 | 15.32 | 22.32 | ≤ 24.00 | Pass |
| 11a | 6 | 100 | 5500 | 14.72 | 21.72 | ≤ 24.00 | Pass |
| 11a | 6 | 116 | 5580 | 13.93 | 20.93 | ≤ 24.00 | Pass |
| 11a | 6 | 120 | 5600 | 14.27 | 21.27 | ≤ 24.00 | Pass |
| 11a | 6 | 140 | 5700 | 13.36 | 20.36 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 52 | 5260 | 15.83 | 22.83 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 60 | 5300 | 15.29 | 22.29 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 64 | 5320 | 15.32 | 22.32 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 100 | 5500 | 14.26 | 21.26 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 116 | 5580 | 13.87 | 20.87 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 120 | 5600 | 14.14 | 21.14 | ≤ 24.00 | Pass |
| 11n-HT20 | 6.5 | 140 | 5700 | 12.28 | 19.28 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 54 | 5270 | 15.85 | 22.85 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 62 | 5310 | 14.56 | 21.56 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 102 | 5510 | 12.48 | 19.48 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 110 | 5550 | 15.64 | 22.64 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 118 | 5590 | 15.77 | 22.77 | ≤ 24.00 | Pass |
| 11n-HT40 | 13.5 | 134 | 5670 | 13.55 | 20.55 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 52 | 5260 | 15.83 | 22.83 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 60 | 5300 | 15.24 | 22.24 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 64 | 5320 | 15.34 | 22.34 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 100 | 5500 | 14.68 | 21.68 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 116 | 5580 | 14.04 | 21.04 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 120 | 5600 | 14.35 | 21.35 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 140 | 5700 | 12.25 | 19.25 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 6.5 | 144 | 5720 | 13.75 | 20.75 | ≤ 24.00 | Pass |

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 2 TPC Power (dBm) | EIRP TPC (dBm) | EIRP TPC Limit (dBm) | Result |
|------------|------------------|-------------|-------------|-----------------------|----------------|----------------------|--------|
| Ant 2 | | | | | | | |
| 11ac-VHT40 | 13.5 | 54 | 5270 | 15.58 | 22.58 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 62 | 5310 | 15.15 | 22.15 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 102 | 5510 | 12.43 | 19.43 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 110 | 5550 | 15.80 | 22.80 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 118 | 5590 | 15.62 | 22.62 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 134 | 5670 | 13.62 | 20.62 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 13.5 | 142 | 5710 | 14.96 | 21.96 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 29.3 | 58 | 5290 | 11.87 | 18.87 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 29.3 | 106 | 5530 | 11.17 | 18.17 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 29.3 | 122 | 5610 | 15.25 | 22.25 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 29.3 | 138 | 5690 | 14.90 | 21.90 | ≤ 24.00 | Pass |

Note: EIRP TPC (dBm) = TPC Power (dBm) + Antenna Gain (dBi).



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 TPC Power (dBm) | Ant 2 TPC Power (dBm) | EIRP TPC (dBm) | EIRP TPC Limit (dBm) | Result |
|------------|------------------|-------------|-------------|-----------------------|-----------------------|----------------|----------------------|--------|
| Ant 1 + 2 | | | | | | | | |
| 11a | 6 | 52 | 5260 | 9.33 | 9.61 | 19.48 | ≤ 24.00 | Pass |
| 11a | 6 | 60 | 5300 | 10.22 | 9.87 | 20.06 | ≤ 24.00 | Pass |
| 11a | 6 | 64 | 5320 | 9.86 | 9.98 | 19.93 | ≤ 24.00 | Pass |
| 11a | 6 | 100 | 5500 | 8.86 | 9.38 | 19.14 | ≤ 24.00 | Pass |
| 11a | 6 | 116 | 5580 | 8.81 | 8.98 | 18.91 | ≤ 24.00 | Pass |
| 11a | 6 | 120 | 5600 | 8.38 | 8.94 | 18.68 | ≤ 24.00 | Pass |
| 11a | 6 | 140 | 5700 | 8.42 | 9.01 | 18.74 | ≤ 24.00 | Pass |
| 11n-HT20 | 13 | 52 | 5260 | 10.31 | 9.72 | 23.05 | ≤ 24.00 | Pass |
| 11n-HT20 | 13 | 60 | 5300 | 10.05 | 9.92 | 23.01 | ≤ 24.00 | Pass |
| 11n-HT20 | 13 | 64 | 5320 | 9.84 | 9.82 | 22.85 | ≤ 24.00 | Pass |
| 11n-HT20 | 13 | 100 | 5500 | 8.99 | 9.56 | 22.30 | ≤ 24.00 | Pass |
| 11n-HT20 | 13 | 116 | 5580 | 8.67 | 9.20 | 21.96 | ≤ 24.00 | Pass |
| 11n-HT20 | 13 | 120 | 5600 | 8.14 | 8.84 | 21.52 | ≤ 24.00 | Pass |
| 11n-HT20 | 13 | 140 | 5700 | 7.88 | 8.99 | 21.49 | ≤ 24.00 | Pass |
| 11n-HT40 | 27 | 54 | 5270 | 10.44 | 10.50 | 23.49 | ≤ 24.00 | Pass |
| 11n-HT40 | 27 | 62 | 5310 | 10.60 | 9.93 | 23.30 | ≤ 24.00 | Pass |
| 11n-HT40 | 27 | 102 | 5510 | 10.33 | 9.99 | 23.18 | ≤ 24.00 | Pass |
| 11n-HT40 | 27 | 110 | 5550 | 10.17 | 10.63 | 23.43 | ≤ 24.00 | Pass |
| 11n-HT40 | 27 | 118 | 5590 | 10.11 | 10.82 | 23.50 | ≤ 24.00 | Pass |
| 11n-HT40 | 27 | 134 | 5670 | 9.93 | 10.74 | 23.37 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 13 | 52 | 5260 | 10.28 | 9.74 | 23.04 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 13 | 60 | 5300 | 9.94 | 10.08 | 23.03 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 13 | 64 | 5320 | 10.13 | 9.96 | 23.07 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 13 | 100 | 5500 | 9.38 | 9.36 | 22.39 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 13 | 116 | 5580 | 9.23 | 9.73 | 22.51 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 13 | 120 | 5600 | 9.01 | 9.18 | 22.12 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 13 | 140 | 5700 | 8.71 | 9.15 | 21.96 | ≤ 24.00 | Pass |
| 11ac-VHT20 | 13 | 144 | 5720 | 8.55 | 9.00 | 21.80 | ≤ 24.00 | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 TPC Power (dBm) | Ant 2 TPC Power (dBm) | EIRP TPC (dBm) | EIRP TPC Limit (dBm) | Result |
|------------|------------------|-------------|-------------|-----------------------|-----------------------|----------------|----------------------|--------|
| Ant 1 + 2 | | | | | | | | |
| 11ac-VHT40 | 27 | 54 | 5270 | 10.43 | 10.28 | 23.38 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 27 | 62 | 5310 | 10.57 | 9.92 | 23.28 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 27 | 102 | 5510 | 10.06 | 10.32 | 23.21 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 27 | 110 | 5550 | 9.83 | 10.55 | 23.23 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 27 | 118 | 5590 | 9.80 | 10.75 | 23.32 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 27 | 134 | 5670 | 9.51 | 10.41 | 23.00 | ≤ 24.00 | Pass |
| 11ac-VHT40 | 27 | 142 | 5710 | 9.81 | 10.65 | 23.27 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 58.6 | 58 | 5290 | 10.67 | 10.20 | 23.46 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 58.6 | 106 | 5530 | 9.49 | 9.82 | 22.68 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 58.6 | 122 | 5610 | 9.90 | 10.63 | 23.30 | ≤ 24.00 | Pass |
| 11ac-VHT80 | 58.6 | 138 | 5690 | 10.01 | 10.99 | 23.55 | ≤ 24.00 | Pass |

Note: The EIRP TPC (dBm) = $10 \cdot \log\{10^{(\text{Ant 1 TPC Power} / 10)} + 10^{(\text{Ant 2 TPC Power} / 10)}\} + \text{Directional Gain (dBi)}$

7.7. Power Spectral Density Measurement

7.7.1. Test Limit

For FCC Power Spectral Density Limit

For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

For IC Power Spectral Density Limit

For the band 5.15-5.25 GHz, the e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

For the 5.725-5.85 GHz band, the power spectral density shall not exceed 30 dBm in any 500 kHz band.

Power Spectral Density Measurement Limit of WiFi Omni Ant

| Frequency Band (MHz) | Per Chain Max Antenna Gain (dBi) | | CDD & Beam Forming Directional Gain (dBi) | Limit of SISO (dBm/MHz) | | Limit of MIMO (dBm/MHz) |
|----------------------|----------------------------------|-------|---|----------------------------|-------|----------------------------|
| | Ant 1 | Ant 2 | | Ant 1 | Ant 2 | Ant 1 + 2 |
| 5150 ~ 5250 | 7.00 | 7.00 | 10.01 | 16.00 | 16.00 | 12.99 |
| 5250 ~ 5350 | 7.00 | 7.00 | 10.01 | 10.00 | 10.00 | 6.99 |
| 5470 ~ 5725 | 7.00 | 7.00 | 10.01 | 10.00 | 10.00 | 6.99 |
| Frequency Band (MHz) | Per Chain Max Antenna Gain (dBi) | | CDD & Beam Forming Directional Gain (dBi) | Limit of SISO (dBm/500kHz) | | Limit of MIMO (dBm/500kHz) |
| | Ant 1 | Ant 2 | | Ant 1 | Ant 2 | Ant 1 + 2 |
| 5725 ~ 5850 | 7.00 | 7.00 | 10.01 | 29.00 | 29.00 | 25.99 |

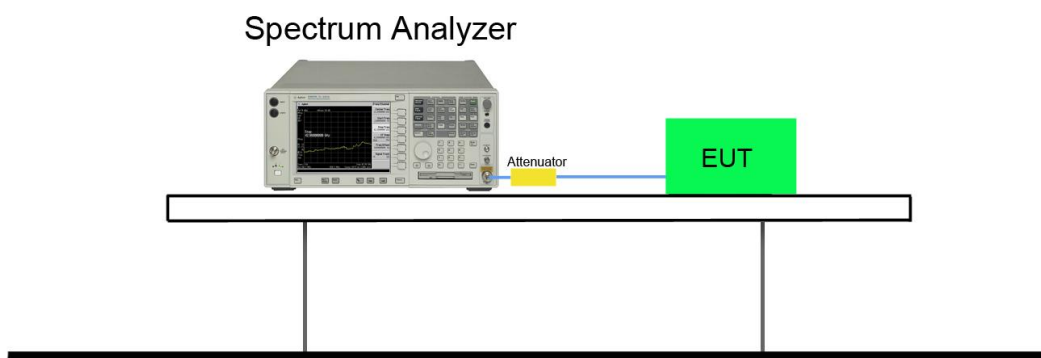
7.7.2. Test Procedure Used

KDB 789033 D02v01r03 - Section F

7.7.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz, if measurement bandwidth of Maximum PSD is specified in 500 kHz,
4. RBW = 100 kHz
5. VBW = 3MHz
6. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
7. Detector = power averaging (Average)
8. Sweep time = auto
9. Trigger = free run
10. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
11. Add $10 \cdot \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \cdot \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
12. When the measurement bandwidth of Maximum PSD is specified in 500 kHz, add a constant factor $10 \cdot \log(500\text{kHz}/100\text{kHz}) = 7$ dB to the measured result

7.7.4. Test Setup



7.7.5. Test Result



| | | | |
|-----------|---------------------------------|---------------|--------------|
| Product | US Wi-Fi AP 2x2 OD ext. antenna | Test Engineer | Johnson Liao |
| Test Site | SR2 | Test Date | 2017/02/17 |
| Test Item | Power Spectral Density | | |

For FCC bands (UNII-2A & UNII-2C & UNII-3) & IC bands (UNII-1 & UNII-2A & UNII-2C & UNII-3)

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | PSD (dBm/MHz) | Duty Cycle (%) | Total PSD (dBm/MHz) | PSD Limit (dBm/MHz) | EIRP PSD (dBm/MHz) | EIRP PSD Limit (dBm/MHz) | Result |
|--------------|------------------|-------------|-------------|---------------|----------------|---------------------|---------------------|--------------------|--------------------------|--------|
| Ant 1 | | | | | | | | | | |
| 11a | 6 | 36 | 5180 | 2.35 | 95.10 | 2.57 | -- | 9.57 | ≤ 10.00 | Pass |
| 11a | 6 | 44 | 5220 | 2.12 | 95.10 | 2.34 | -- | 9.34 | ≤ 10.00 | Pass |
| 11a | 6 | 48 | 5240 | 2.14 | 95.10 | 2.36 | -- | 9.36 | ≤ 10.00 | Pass |
| 11a | 6 | 52 | 5260 | 9.09 | 95.10 | 9.31 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 60 | 5300 | 9.31 | 95.10 | 9.53 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 64 | 5320 | 9.21 | 95.10 | 9.43 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 100 | 5500 | 8.13 | 95.10 | 8.35 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 116 | 5580 | 9.15 | 95.10 | 9.37 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 120 | 5600 | 8.96 | 95.10 | 9.18 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 140 | 5700 | 9.39 | 95.10 | 9.61 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 36 | 5180 | 2.09 | 90.24 | 2.54 | -- | 9.54 | ≤ 10.00 | Pass |
| 11n-HT20 | 6.5 | 44 | 5220 | 1.86 | 90.24 | 2.31 | -- | 9.31 | ≤ 10.00 | Pass |
| 11n-HT20 | 6.5 | 48 | 5240 | 2.01 | 90.24 | 2.46 | -- | 9.46 | ≤ 10.00 | Pass |
| 11n-HT20 | 6.5 | 52 | 5260 | 8.72 | 90.24 | 9.17 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 60 | 5300 | 9.00 | 90.24 | 9.45 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 64 | 5320 | 9.14 | 90.24 | 9.59 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 100 | 5500 | 7.88 | 90.24 | 8.33 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 116 | 5580 | 9.09 | 90.24 | 9.54 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 120 | 5600 | 8.89 | 90.24 | 9.34 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 140 | 5700 | 8.40 | 90.24 | 8.85 | ≤ 10.00 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | PSD (dBm/MHz) | Duty Cycle (%) | Total PSD (dBm/MHz) | PSD Limit (dBm/MHz) | EIRP PSD (dBm/MHz) | EIRP PSD Limit (dBm/MHz) | Result |
|------------|------------------|-------------|-------------|---------------|----------------|---------------------|---------------------|--------------------|--------------------------|--------|
| Ant 1 | | | | | | | | | | |
| 11n-HT40 | 13.5 | 38 | 5190 | -0.83 | 81.66 | 0.05 | -- | 7.05 | ≤ 10.00 | Pass |
| 11n-HT40 | 13.5 | 46 | 5230 | -1.31 | 81.66 | -0.43 | -- | 6.57 | ≤ 10.00 | Pass |
| 11n-HT40 | 13.5 | 54 | 5270 | 6.51 | 81.66 | 7.39 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 62 | 5310 | 6.17 | 81.66 | 7.05 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 102 | 5510 | 2.76 | 81.66 | 3.64 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 110 | 5550 | 6.75 | 81.66 | 7.63 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 118 | 5590 | 6.57 | 81.66 | 7.45 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 134 | 5670 | 5.13 | 81.66 | 6.01 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 36 | 5180 | 2.03 | 89.55 | 2.51 | -- | 9.51 | ≤ 10.00 | Pass |
| 11ac-VHT20 | 6.5 | 44 | 5220 | 1.90 | 89.55 | 2.38 | -- | 9.38 | ≤ 10.00 | Pass |
| 11ac-VHT20 | 6.5 | 48 | 5240 | 1.85 | 89.55 | 2.33 | -- | 9.33 | ≤ 10.00 | Pass |
| 11ac-VHT20 | 6.5 | 52 | 5260 | 8.90 | 89.55 | 9.38 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 60 | 5300 | 9.32 | 89.55 | 9.80 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 64 | 5320 | 9.01 | 89.55 | 9.49 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 100 | 5500 | 8.51 | 89.55 | 8.99 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 116 | 5580 | 8.91 | 89.55 | 9.39 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 120 | 5600 | 9.16 | 89.55 | 9.64 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 140 | 5700 | 8.53 | 89.55 | 9.01 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 144 | 5720 | 8.93 | 89.55 | 9.41 | ≤ 10.00 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | PSD (dBm/MHz) | Duty Cycle (%) | Total PSD (dBm/MHz) | PSD Limit (dBm/MHz) | EIRP PSD (dBm/MHz) | EIRP PSD Limit (dBm/MHz) | Result |
|------------|------------------|-------------|-------------|---------------|----------------|---------------------|---------------------|--------------------|--------------------------|--------|
| Ant 1 | | | | | | | | | | |
| 11ac-VHT40 | 13.5 | 38 | 5190 | -2.71 | 82.89 | -1.90 | -- | 5.10 | ≤ 10.00 | Pass |
| 11ac-VHT40 | 13.5 | 46 | 5230 | -3.02 | 82.89 | -2.21 | -- | 4.79 | ≤ 10.00 | Pass |
| 11ac-VHT40 | 13.5 | 54 | 5270 | 6.58 | 82.89 | 7.39 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 62 | 5310 | 6.22 | 82.89 | 7.03 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 102 | 5510 | 1.93 | 82.89 | 2.74 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 110 | 5550 | 6.97 | 82.89 | 7.78 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 118 | 5590 | 6.23 | 82.89 | 7.04 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 134 | 5670 | 4.72 | 82.89 | 5.53 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 142 | 5710 | 6.38 | 82.89 | 7.19 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 42 | 5210 | -4.09 | 72.78 | -2.71 | -- | 4.29 | ≤ 10.00 | Pass |
| 11ac-VHT80 | 29.3 | 58 | 5290 | 0.42 | 72.78 | 1.80 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 106 | 5530 | -1.54 | 72.78 | -0.16 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 122 | 5610 | 3.57 | 72.78 | 4.95 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 138 | 5690 | 2.67 | 72.78 | 4.05 | ≤ 10.00 | -- | -- | Pass |



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | PSD (dBm/MHz) | Duty Cycle (%) | Total PSD (dBm/MHz) | PSD Limit (dBm/MHz) | EIRP PSD (dBm/MHz) | EIRP PSD Limit (dBm/MHz) | Result |
|-----------|------------------|-------------|-------------|---------------|----------------|---------------------|---------------------|--------------------|--------------------------|--------|
| Ant 2 | | | | | | | | | | |
| 11a | 6 | 36 | 5180 | 2.40 | 95.10 | 2.62 | -- | 9.62 | ≤ 10.00 | Pass |
| 11a | 6 | 44 | 5220 | 2.35 | 95.10 | 2.57 | -- | 9.57 | ≤ 10.00 | Pass |
| 11a | 6 | 48 | 5240 | 2.11 | 95.10 | 2.33 | -- | 9.33 | ≤ 10.00 | Pass |
| 11a | 6 | 52 | 5260 | 9.54 | 95.10 | 9.76 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 60 | 5300 | 9.30 | 95.10 | 9.52 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 64 | 5320 | 9.29 | 95.10 | 9.51 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 100 | 5500 | 9.22 | 95.10 | 9.44 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 116 | 5580 | 9.31 | 95.10 | 9.53 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 120 | 5600 | 9.38 | 95.10 | 9.60 | ≤ 10.00 | -- | -- | Pass |
| 11a | 6 | 140 | 5700 | 8.75 | 95.10 | 8.97 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 36 | 5180 | 1.91 | 90.24 | 2.36 | -- | 9.36 | ≤ 10.00 | Pass |
| 11n-HT20 | 6.5 | 44 | 5220 | 2.03 | 90.24 | 2.48 | -- | 9.48 | ≤ 10.00 | Pass |
| 11n-HT20 | 6.5 | 48 | 5240 | 2.07 | 90.24 | 2.52 | -- | 9.52 | ≤ 10.00 | Pass |
| 11n-HT20 | 6.5 | 52 | 5260 | 9.32 | 90.24 | 9.77 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 60 | 5300 | 9.13 | 90.24 | 9.58 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 64 | 5320 | 9.06 | 90.24 | 9.51 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 100 | 5500 | 8.65 | 90.24 | 9.10 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 116 | 5580 | 9.12 | 90.24 | 9.57 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 120 | 5600 | 8.95 | 90.24 | 9.40 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT20 | 6.5 | 140 | 5700 | 7.79 | 90.24 | 8.24 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 38 | 5190 | -0.29 | 81.66 | 0.59 | -- | 7.59 | ≤ 10.00 | Pass |
| 11n-HT40 | 13.5 | 46 | 5230 | -0.65 | 81.66 | 0.23 | -- | 7.23 | ≤ 10.00 | Pass |
| 11n-HT40 | 13.5 | 54 | 5270 | 5.85 | 81.66 | 6.73 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 62 | 5310 | 4.92 | 81.66 | 5.80 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 102 | 5510 | 3.73 | 81.66 | 4.61 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 110 | 5550 | 7.39 | 81.66 | 8.27 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 118 | 5590 | 6.97 | 81.66 | 7.85 | ≤ 10.00 | -- | -- | Pass |
| 11n-HT40 | 13.5 | 134 | 5670 | 5.70 | 81.66 | 6.58 | ≤ 10.00 | -- | -- | Pass |

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | PSD (dBm/MHz) | Duty Cycle (%) | Total PSD (dBm/MHz) | PSD Limit (dBm/MHz) | EIRP PSD (dBm/MHz) | EIRP PSD Limit (dBm/MHz) | Result |
|------------|------------------|-------------|-------------|---------------|----------------|---------------------|---------------------|--------------------|--------------------------|--------|
| Ant 2 | | | | | | | | | | |
| 11ac-VHT20 | 6.5 | 36 | 5180 | 1.90 | 89.55 | 2.38 | -- | 9.38 | ≤ 10.00 | Pass |
| 11ac-VHT20 | 6.5 | 44 | 5220 | 2.16 | 89.55 | 2.64 | -- | 9.64 | ≤ 10.00 | Pass |
| 11ac-VHT20 | 6.5 | 48 | 5240 | 1.98 | 89.55 | 2.46 | -- | 9.46 | ≤ 10.00 | Pass |
| 11ac-VHT20 | 6.5 | 52 | 5260 | 9.14 | 89.55 | 9.62 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 60 | 5300 | 8.75 | 89.55 | 9.23 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 64 | 5320 | 8.84 | 89.55 | 9.32 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 100 | 5500 | 9.15 | 89.55 | 9.63 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 116 | 5580 | 9.12 | 89.55 | 9.60 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 120 | 5600 | 8.89 | 89.55 | 9.37 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 140 | 5700 | 7.79 | 89.55 | 8.27 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT20 | 6.5 | 144 | 5720 | 9.25 | 89.55 | 9.73 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 38 | 5190 | -0.33 | 82.89 | 0.48 | -- | 7.48 | ≤ 10.00 | Pass |
| 11ac-VHT40 | 13.5 | 46 | 5230 | -0.67 | 82.89 | 0.14 | -- | 7.14 | ≤ 10.00 | Pass |
| 11ac-VHT40 | 13.5 | 54 | 5270 | 5.89 | 82.89 | 6.70 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 62 | 5310 | 5.39 | 82.89 | 6.20 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 102 | 5510 | 3.63 | 82.89 | 4.44 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 110 | 5550 | 7.31 | 82.89 | 8.12 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 118 | 5590 | 6.74 | 82.89 | 7.55 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 134 | 5670 | 5.70 | 82.89 | 6.51 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT40 | 13.5 | 142 | 5710 | 7.54 | 82.89 | 8.35 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 42 | 5210 | -3.63 | 72.78 | -2.25 | -- | 4.75 | ≤ 10.00 | Pass |
| 11ac-VHT80 | 29.3 | 58 | 5290 | -1.36 | 72.78 | 0.02 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 106 | 5530 | 0.77 | 72.78 | 2.15 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 122 | 5610 | 3.43 | 72.78 | 4.81 | ≤ 10.00 | -- | -- | Pass |
| 11ac-VHT80 | 29.3 | 138 | 5690 | 4.34 | 72.78 | 5.72 | ≤ 10.00 | -- | -- | Pass |

Note 1: When EUT duty cycle < 98%, the total PSD = Ant PSD (dBm/MHz) + 10*log(1/duty cycle),

Note 2: EIRP PSD (dBm/MHz) = Total PSD (dBm/MHz) + Antenna Gain (dBi)



| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 PSD (dBm/MHz) | Ant 2 PSD (dBm/MHz) | Duty Cycle (%) | Total PSD (dBm/MHz) | PSD Limit (dBm/MHz) | EIRP PSD (dBm/MHz) | EIRP PSD Limit (dBm/MHz) | Result |
|-----------|------------------|-------------|-------------|---------------------|---------------------|----------------|---------------------|---------------------|--------------------|--------------------------|--------|
| Ant 1 + 2 | | | | | | | | | | | |
| 11a | 6 | 36 | 5180 | -3.52 | -3.86 | 95.10 | -0.46 | -- | 9.55 | ≤ 10.00 | Pass |
| 11a | 6 | 44 | 5220 | -3.72 | -3.67 | 95.10 | -0.47 | -- | 9.54 | ≤ 10.00 | Pass |
| 11a | 6 | 48 | 5240 | -3.83 | -4.06 | 95.10 | -0.71 | -- | 9.30 | ≤ 10.00 | Pass |
| 11a | 6 | 52 | 5260 | 3.49 | 2.77 | 95.10 | 6.37 | ≤ 6.99 | -- | -- | Pass |
| 11a | 6 | 60 | 5300 | 3.56 | 3.33 | 95.10 | 6.68 | ≤ 6.99 | -- | -- | Pass |
| 11a | 6 | 64 | 5320 | 3.65 | 3.12 | 95.10 | 6.62 | ≤ 6.99 | -- | -- | Pass |
| 11a | 6 | 100 | 5500 | 3.73 | 3.16 | 95.10 | 6.68 | ≤ 6.99 | -- | -- | Pass |
| 11a | 6 | 116 | 5580 | 2.85 | 3.90 | 95.10 | 6.64 | ≤ 6.99 | -- | -- | Pass |
| 11a | 6 | 120 | 5600 | 2.95 | 3.77 | 95.10 | 6.61 | ≤ 6.99 | -- | -- | Pass |
| 11a | 6 | 140 | 5700 | 2.48 | 3.64 | 95.10 | 6.33 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT20 | 13 | 36 | 5180 | -4.20 | -4.17 | 90.24 | -0.73 | -- | 9.28 | ≤ 10.00 | Pass |
| 11n-HT20 | 13 | 44 | 5220 | -4.04 | -3.88 | 90.24 | -0.50 | -- | 9.51 | ≤ 10.00 | Pass |
| 11n-HT20 | 13 | 48 | 5240 | -4.12 | -4.10 | 90.24 | -0.65 | -- | 9.36 | ≤ 10.00 | Pass |
| 11n-HT20 | 13 | 52 | 5260 | 3.28 | 3.07 | 90.24 | 6.63 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT20 | 13 | 60 | 5300 | 3.32 | 3.17 | 90.24 | 6.70 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT20 | 13 | 64 | 5320 | 3.41 | 3.19 | 90.24 | 6.76 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT20 | 13 | 100 | 5500 | 3.12 | 2.51 | 90.24 | 6.28 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT20 | 13 | 116 | 5580 | 2.24 | 3.90 | 90.24 | 6.61 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT20 | 13 | 120 | 5600 | 2.62 | 3.39 | 90.24 | 6.48 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT20 | 13 | 140 | 5700 | 2.50 | 3.66 | 90.24 | 6.57 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT40 | 27 | 38 | 5190 | -6.21 | -5.88 | 81.66 | -3.03 | -- | 6.98 | ≤ 10.00 | Pass |
| 11n-HT40 | 27 | 46 | 5230 | -6.68 | -5.84 | 81.66 | -2.35 | -- | 7.66 | ≤ 10.00 | Pass |
| 11n-HT40 | 27 | 54 | 5270 | 2.73 | -0.23 | 81.66 | 5.39 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT40 | 27 | 62 | 5310 | 0.30 | -0.74 | 81.66 | 3.70 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT40 | 27 | 102 | 5510 | 1.06 | 0.88 | 81.66 | 4.86 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT40 | 27 | 110 | 5550 | 0.80 | 1.35 | 81.66 | 4.97 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT40 | 27 | 118 | 5590 | 1.31 | 2.06 | 81.66 | 5.59 | ≤ 6.99 | -- | -- | Pass |
| 11n-HT40 | 27 | 134 | 5670 | 0.39 | 2.86 | 81.66 | 5.69 | ≤ 6.99 | -- | -- | Pass |

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 PSD (dBm/MHz) | Ant 2 PSD (dBm/MHz) | Duty Cycle (%) | Total PSD (dBm/MHz) | PSD Limit (dBm/MHz) | EIRP PSD (dBm/MHz) | EIRP PSD Limit (dBm/MHz) | Result |
|------------|------------------|-------------|-------------|---------------------|---------------------|----------------|---------------------|---------------------|--------------------|--------------------------|--------|
| Ant 1 + 2 | | | | | | | | | | | |
| 11ac-VHT20 | 13 | 36 | 5180 | -3.76 | -3.87 | 89.55 | -0.33 | -- | 9.68 | ≤ 10.00 | Pass |
| 11ac-VHT20 | 13 | 44 | 5220 | -4.23 | -3.93 | 89.55 | -0.59 | -- | 9.42 | ≤ 10.00 | Pass |
| 11ac-VHT20 | 13 | 48 | 5240 | -4.14 | -4.12 | 89.55 | -0.64 | -- | 9.37 | ≤ 10.00 | Pass |
| 11ac-VHT20 | 13 | 52 | 5260 | 3.11 | 3.22 | 89.55 | 6.65 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 60 | 5300 | 3.38 | 3.17 | 89.55 | 6.77 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 64 | 5320 | 3.17 | 2.69 | 89.55 | 6.43 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 100 | 5500 | 3.20 | 2.44 | 89.55 | 6.33 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 116 | 5580 | 2.24 | 3.54 | 89.55 | 6.43 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 120 | 5600 | 2.49 | 3.13 | 89.55 | 6.31 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 140 | 5700 | 2.11 | 3.52 | 89.55 | 6.36 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT20 | 13 | 144 | 5720 | 2.34 | 3.15 | 89.55 | 6.25 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT40 | 27 | 38 | 5190 | -6.86 | -6.66 | 82.89 | -2.93 | -- | 7.08 | ≤ 10.00 | Pass |
| 11ac-VHT40 | 27 | 46 | 5230 | -7.54 | -6.80 | 82.89 | -3.33 | -- | 6.68 | ≤ 10.00 | Pass |
| 11ac-VHT40 | 27 | 54 | 5270 | -0.35 | -0.07 | 82.89 | 3.62 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT40 | 27 | 62 | 5310 | 0.17 | -0.38 | 82.89 | 3.73 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT40 | 27 | 102 | 5510 | 0.96 | 0.65 | 82.89 | 4.63 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT40 | 27 | 110 | 5550 | 0.76 | 1.46 | 82.89 | 4.95 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT40 | 27 | 118 | 5590 | 1.37 | 1.96 | 82.89 | 5.50 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT40 | 27 | 134 | 5670 | 0.58 | 2.53 | 82.89 | 5.49 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT40 | 27 | 142 | 5710 | 1.30 | 2.23 | 82.89 | 5.62 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT80 | 58.6 | 42 | 5210 | -10.03 | -9.96 | 72.78 | -5.60 | -- | 4.41 | ≤ 10.00 | Pass |
| 11ac-VHT80 | 58.6 | 58 | 5290 | -2.34 | -3.35 | 72.78 | 1.57 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT80 | 58.6 | 106 | 5530 | -2.44 | -2.44 | 72.78 | 1.95 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT80 | 58.6 | 122 | 5610 | -2.10 | -0.42 | 72.78 | 3.21 | ≤ 6.99 | -- | -- | Pass |
| 11ac-VHT80 | 58.6 | 138 | 5690 | -2.06 | 0.35 | 72.78 | 3.70 | ≤ 6.99 | -- | -- | Pass |

Note 1: When EUT duty cycle < 98%, the total PSD = $10 \cdot \log\{10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\} + 10 \cdot \log(1/\text{duty cycle})$,

Note 2: EIRP PSD (dBm/MHz) = Total PSD (dBm/MHz) + Antenna Gain(dBi)

**For FCC bands (UNII-1)**

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | PSD (dBm/MHz) | Duty Cycle (%) | Total PSD (dBm/MHz) | PSD Limit (dBm/MHz) | Result |
|--------------|------------------|-------------|-------------|---------------|----------------|---------------------|---------------------|--------|
| Ant 1 | | | | | | | | |
| 11a | 6 | 36 | 5180 | 0.50 | 95.10 | 0.72 | ≤ 16.00 | Pass |
| 11a | 6 | 44 | 5220 | 0.65 | 95.10 | 0.87 | ≤ 16.00 | Pass |
| 11a | 6 | 48 | 5240 | 0.74 | 95.10 | 0.96 | ≤ 16.00 | Pass |
| 11n-HT20 | 6.5 | 36 | 5180 | 0.63 | 90.24 | 1.08 | ≤ 16.00 | Pass |
| 11n-HT20 | 6.5 | 44 | 5220 | 0.38 | 90.24 | 0.83 | ≤ 16.00 | Pass |
| 11n-HT20 | 6.5 | 48 | 5240 | 0.46 | 90.24 | 0.91 | ≤ 16.00 | Pass |
| 11n-HT40 | 13.5 | 38 | 5190 | -2.79 | 81.66 | -1.91 | ≤ 16.00 | Pass |
| 11n-HT40 | 13.5 | 46 | 5230 | -3.06 | 81.66 | -2.18 | ≤ 16.00 | Pass |
| 11ac-VHT20 | 6.5 | 36 | 5180 | 0.24 | 89.55 | 0.72 | ≤ 16.00 | Pass |
| 11ac-VHT20 | 6.5 | 44 | 5220 | 0.52 | 89.55 | 1.00 | ≤ 16.00 | Pass |
| 11ac-VHT20 | 6.5 | 48 | 5240 | 0.28 | 89.55 | 0.76 | ≤ 16.00 | Pass |
| 11ac-VHT40 | 13.5 | 38 | 5190 | -2.71 | 82.89 | -1.90 | ≤ 16.00 | Pass |
| 11ac-VHT40 | 13.5 | 46 | 5230 | -3.02 | 82.89 | -2.21 | ≤ 16.00 | Pass |
| 11ac-VHT80 | 29.3 | 42 | 5210 | -5.80 | 72.78 | -4.42 | ≤ 16.00 | Pass |
| Ant 2 | | | | | | | | |
| 11a | 6 | 36 | 5180 | 0.50 | 95.10 | 0.72 | ≤ 16.00 | Pass |
| 11a | 6 | 44 | 5220 | 0.19 | 95.10 | 0.41 | ≤ 16.00 | Pass |
| 11a | 6 | 48 | 5240 | 0.19 | 95.10 | 0.41 | ≤ 16.00 | Pass |
| 11n-HT20 | 6.5 | 36 | 5180 | 0.23 | 90.24 | 0.68 | ≤ 16.00 | Pass |
| 11n-HT20 | 6.5 | 44 | 5220 | -0.20 | 90.24 | 0.25 | ≤ 16.00 | Pass |
| 11n-HT20 | 6.5 | 48 | 5240 | 0.14 | 90.24 | 0.59 | ≤ 16.00 | Pass |
| 11n-HT40 | 13.5 | 38 | 5190 | -2.52 | 81.66 | -1.64 | ≤ 16.00 | Pass |
| 11n-HT40 | 13.5 | 46 | 5230 | -3.55 | 81.66 | -2.67 | ≤ 16.00 | Pass |
| 11ac-VHT20 | 6.5 | 36 | 5180 | 0.25 | 89.55 | 0.73 | ≤ 16.00 | Pass |
| 11ac-VHT20 | 6.5 | 44 | 5220 | -0.37 | 89.55 | 0.11 | ≤ 16.00 | Pass |
| 11ac-VHT20 | 6.5 | 48 | 5240 | -0.27 | 89.55 | 0.21 | ≤ 16.00 | Pass |
| 11ac-VHT40 | 13.5 | 38 | 5190 | -2.56 | 82.89 | -1.75 | ≤ 16.00 | Pass |
| 11ac-VHT40 | 13.5 | 46 | 5230 | -3.46 | 82.89 | -2.65 | ≤ 16.00 | Pass |
| 11ac-VHT80 | 29.3 | 42 | 5210 | -6.20 | 72.78 | -4.82 | ≤ 16.00 | Pass |

Note: Total PSD (dBm/MHz) = Ant PSD (dBm/MHz) + 10*log(1/duty cycle)

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 PSD (dBm/MHz) | Ant 2 PSD (dBm/MHz) | Duty Cycle (%) | Total PSD (dBm/MHz) | PSD Limit (dBm/MHz) | Result |
|------------|------------------|-------------|-------------|---------------------|---------------------|----------------|---------------------|---------------------|--------|
| Ant 1 + 2 | | | | | | | | | |
| 11a | 6 | 36 | 5180 | -2.28 | -2.28 | 95.10 | 0.95 | ≤ 12.99 | Pass |
| 11a | 6 | 44 | 5220 | -3.04 | -2.41 | 95.10 | 0.51 | ≤ 12.99 | Pass |
| 11a | 6 | 48 | 5240 | -2.30 | -2.38 | 95.10 | 0.89 | ≤ 12.99 | Pass |
| 11n-HT20 | 13 | 36 | 5180 | -2.73 | -2.71 | 90.24 | 0.74 | ≤ 12.99 | Pass |
| 11n-HT20 | 13 | 44 | 5220 | -3.56 | -2.71 | 90.24 | 0.34 | ≤ 12.99 | Pass |
| 11n-HT20 | 13 | 48 | 5240 | -2.85 | -2.79 | 90.24 | 0.64 | ≤ 12.99 | Pass |
| 11n-HT40 | 27 | 38 | 5190 | -6.21 | -5.88 | 81.66 | -2.15 | ≤ 12.99 | Pass |
| 11n-HT40 | 27 | 46 | 5230 | -6.68 | -5.84 | 81.66 | -2.35 | ≤ 12.99 | Pass |
| 11ac-VHT20 | 13 | 36 | 5180 | -2.85 | -2.73 | 89.55 | 0.70 | ≤ 12.99 | Pass |
| 11ac-VHT20 | 13 | 44 | 5220 | -3.66 | -2.67 | 89.55 | 0.35 | ≤ 12.99 | Pass |
| 11ac-VHT20 | 13 | 48 | 5240 | -3.02 | -2.76 | 89.55 | 0.60 | ≤ 12.99 | Pass |
| 11ac-VHT40 | 27 | 38 | 5190 | -6.06 | -5.72 | 82.89 | -2.06 | ≤ 12.99 | Pass |
| 11ac-VHT40 | 27 | 46 | 5230 | -6.53 | -6.02 | 82.89 | -2.44 | ≤ 12.99 | Pass |
| 11ac-VHT80 | 58.6 | 42 | 5210 | -9.20 | -8.86 | 72.78 | -4.64 | ≤ 12.99 | Pass |

Note: Total PSD (dBm/MHz) = $10 \cdot \log\{10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\} + 10 \cdot \log(1/\text{duty cycle})$

**For FCC bands (UNII-4)**

| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | PSD (dBm/100kHz) | Duty Cycle (%) | Constant Factor | Total PSD (dBm/500kHz) | Limit (dBm/500kHz) | Result |
|--------------|------------------|-------------|-------------|------------------|----------------|-----------------|------------------------|--------------------|--------|
| Ant 1 | | | | | | | | | |
| 11a | 6 | 149 | 5745 | 1.17 | 95.10 | 6.99 | 8.38 | ≤ 29.00 | Pass |
| 11a | 6 | 157 | 5785 | 1.41 | 95.10 | 6.99 | 8.62 | ≤ 29.00 | Pass |
| 11a | 6 | 165 | 5825 | 1.55 | 95.10 | 6.99 | 8.76 | ≤ 29.00 | Pass |
| 11n-HT20 | 6.5 | 149 | 5745 | 0.50 | 90.24 | 6.99 | 7.94 | ≤ 29.00 | Pass |
| 11n-HT20 | 6.5 | 157 | 5785 | 0.64 | 90.24 | 6.99 | 8.08 | ≤ 29.00 | Pass |
| 11n-HT20 | 6.5 | 165 | 5825 | 0.51 | 90.24 | 6.99 | 7.95 | ≤ 29.00 | Pass |
| 11n-HT40 | 13.5 | 151 | 5755 | -2.61 | 81.66 | 6.99 | 5.26 | ≤ 29.00 | Pass |
| 11n-HT40 | 13.5 | 159 | 5795 | -2.60 | 81.66 | 6.99 | 5.27 | ≤ 29.00 | Pass |
| 11ac-VHT20 | 6.5 | 149 | 5745 | 0.69 | 89.55 | 6.99 | 8.16 | ≤ 29.00 | Pass |
| 11ac-VHT20 | 6.5 | 157 | 5785 | 0.84 | 89.55 | 6.99 | 8.31 | ≤ 29.00 | Pass |
| 11ac-VHT20 | 6.5 | 165 | 5825 | 1.04 | 89.55 | 6.99 | 8.51 | ≤ 29.00 | Pass |
| 11ac-VHT40 | 13.5 | 151 | 5755 | -2.60 | 82.89 | 6.99 | 5.20 | ≤ 29.00 | Pass |
| 11ac-VHT40 | 13.5 | 159 | 5795 | -2.69 | 82.89 | 6.99 | 5.11 | ≤ 29.00 | Pass |
| 11ac-VHT80 | 29.3 | 155 | 5775 | -6.61 | 72.78 | 6.99 | 1.76 | ≤ 29.00 | Pass |
| Ant 2 | | | | | | | | | |
| 11a | 6 | 149 | 5745 | 0.90 | 95.10 | 6.99 | 8.11 | ≤ 29.00 | Pass |
| 11a | 6 | 157 | 5785 | 1.61 | 95.10 | 6.99 | 8.82 | ≤ 29.00 | Pass |
| 11a | 6 | 165 | 5825 | 1.13 | 95.10 | 6.99 | 8.34 | ≤ 29.00 | Pass |
| 11n-HT20 | 6.5 | 149 | 5745 | 0.83 | 90.24 | 6.99 | 8.27 | ≤ 29.00 | Pass |
| 11n-HT20 | 6.5 | 157 | 5785 | 1.40 | 90.24 | 6.99 | 8.84 | ≤ 29.00 | Pass |
| 11n-HT20 | 6.5 | 165 | 5825 | 0.82 | 90.24 | 6.99 | 8.26 | ≤ 29.00 | Pass |
| 11n-HT40 | 13.5 | 151 | 5755 | -2.17 | 81.66 | 6.99 | 5.70 | ≤ 29.00 | Pass |
| 11n-HT40 | 13.5 | 159 | 5795 | -1.60 | 81.66 | 6.99 | 6.27 | ≤ 29.00 | Pass |
| 11ac-VHT20 | 6.5 | 149 | 5745 | 1.27 | 89.55 | 6.99 | 8.74 | ≤ 29.00 | Pass |
| 11ac-VHT20 | 6.5 | 157 | 5785 | 1.46 | 89.55 | 6.99 | 8.93 | ≤ 29.00 | Pass |
| 11ac-VHT20 | 6.5 | 165 | 5825 | 0.98 | 89.55 | 6.99 | 8.45 | ≤ 29.00 | Pass |
| 11ac-VHT40 | 13.5 | 151 | 5755 | -2.19 | 82.89 | 6.99 | 5.61 | ≤ 29.00 | Pass |
| 11ac-VHT40 | 13.5 | 159 | 5795 | -2.21 | 82.89 | 6.99 | 5.59 | ≤ 29.00 | Pass |
| 11ac-VHT80 | 29.3 | 155 | 5775 | -5.23 | 72.78 | 6.99 | 3.14 | ≤ 29.00 | Pass |

Note: Total PSD (dBm/500kHz) = Ant PSD (dBm/100kHz) + 10*log(1/duty cycle) + Constant Factor.

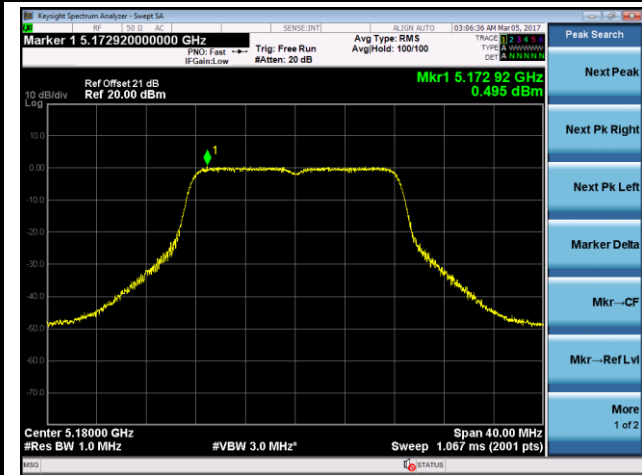


| Test Mode | Data Rate (Mbps) | Channel No. | Freq. (MHz) | Ant 1 PSD (dBm/100kHz) | Ant 2 PSD (dBm/100kHz) | Duty Cycle (%) | Constant Factor | Total PSD (dBm/500kHz) | Limit (dBm/500kHz) | Result |
|------------|------------------|-------------|-------------|------------------------|------------------------|----------------|-----------------|------------------------|--------------------|--------|
| Ant 1 + 2 | | | | | | | | | | |
| 11a | 6 | 149 | 5745 | 1.28 | 0.92 | 95.10 | 6.99 | 11.32 | ≤ 25.99 | Pass |
| 11a | 6 | 157 | 5785 | 1.59 | 1.99 | 95.10 | 6.99 | 12.01 | ≤ 25.99 | Pass |
| 11a | 6 | 165 | 5825 | 1.08 | 1.19 | 95.10 | 6.99 | 11.35 | ≤ 25.99 | Pass |
| 11n-HT20 | 13 | 149 | 5745 | 1.17 | 1.51 | 90.24 | 6.99 | 11.79 | ≤ 25.99 | Pass |
| 11n-HT20 | 13 | 157 | 5785 | 0.84 | 1.47 | 90.24 | 6.99 | 11.61 | ≤ 25.99 | Pass |
| 11n-HT20 | 13 | 165 | 5825 | 0.83 | 1.34 | 90.24 | 6.99 | 11.54 | ≤ 25.99 | Pass |
| 11n-HT40 | 27 | 151 | 5755 | -2.63 | -1.46 | 81.66 | 6.99 | 8.87 | ≤ 25.99 | Pass |
| 11n-HT40 | 27 | 159 | 5795 | -2.33 | -2.66 | 81.66 | 6.99 | 8.39 | ≤ 25.99 | Pass |
| 11ac-VHT20 | 13 | 149 | 5745 | 1.03 | 1.90 | 89.55 | 6.99 | 11.97 | ≤ 25.99 | Pass |
| 11ac-VHT20 | 13 | 157 | 5785 | 1.33 | 1.97 | 89.55 | 6.99 | 12.14 | ≤ 25.99 | Pass |
| 11ac-VHT20 | 13 | 165 | 5825 | 1.15 | 1.25 | 89.55 | 6.99 | 11.68 | ≤ 25.99 | Pass |
| 11ac-VHT40 | 27 | 151 | 5755 | -2.62 | -1.84 | 82.89 | 6.99 | 8.60 | ≤ 25.99 | Pass |
| 11ac-VHT40 | 27 | 159 | 5795 | -2.60 | -2.05 | 82.89 | 6.99 | 8.50 | ≤ 25.99 | Pass |
| 11ac-VHT80 | 58.6 | 155 | 5775 | -6.26 | -4.80 | 72.78 | 6.99 | 5.91 | ≤ 25.99 | Pass |

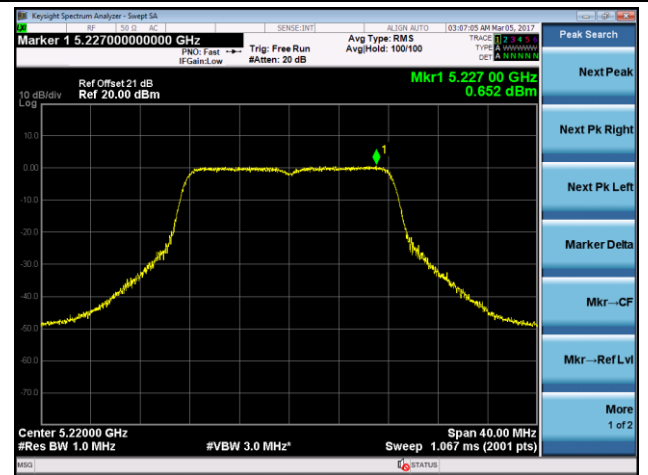
Note: Total PSD (dBm/500kHz) = $10 \cdot \log\{10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\} + 10 \cdot \log(1/\text{duty cycle}) + \text{Constant Factor}$.

802.11a Power Spectral Density - Ant 1

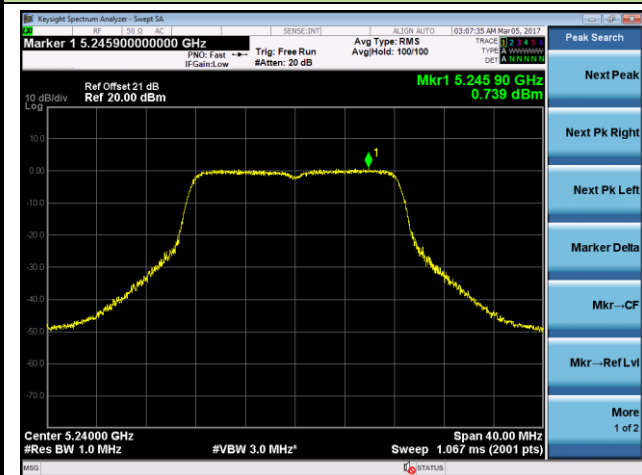
Channel 36 (5180MHz)



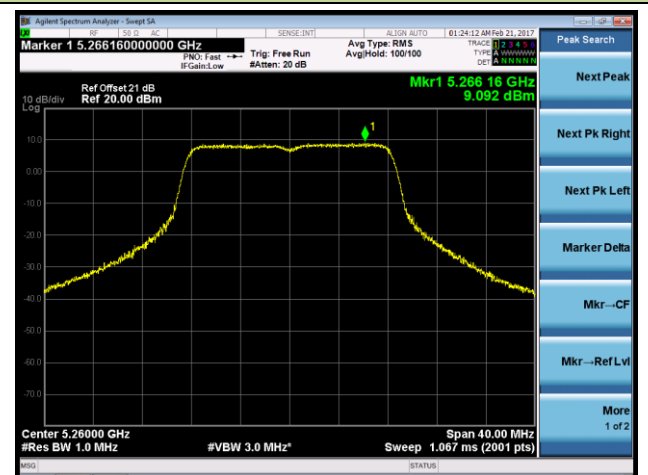
Channel 44 (5220MHz)



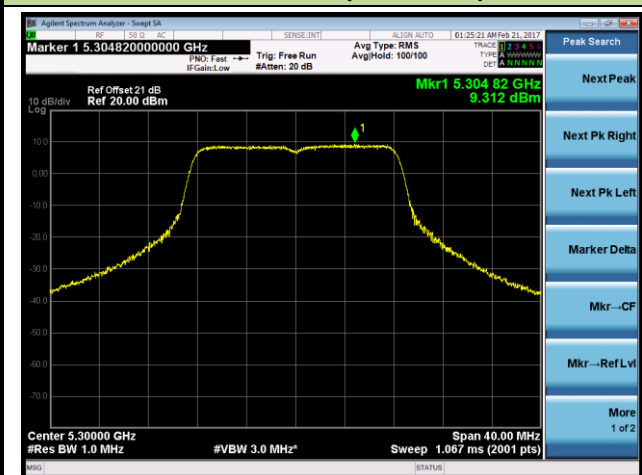
Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)

