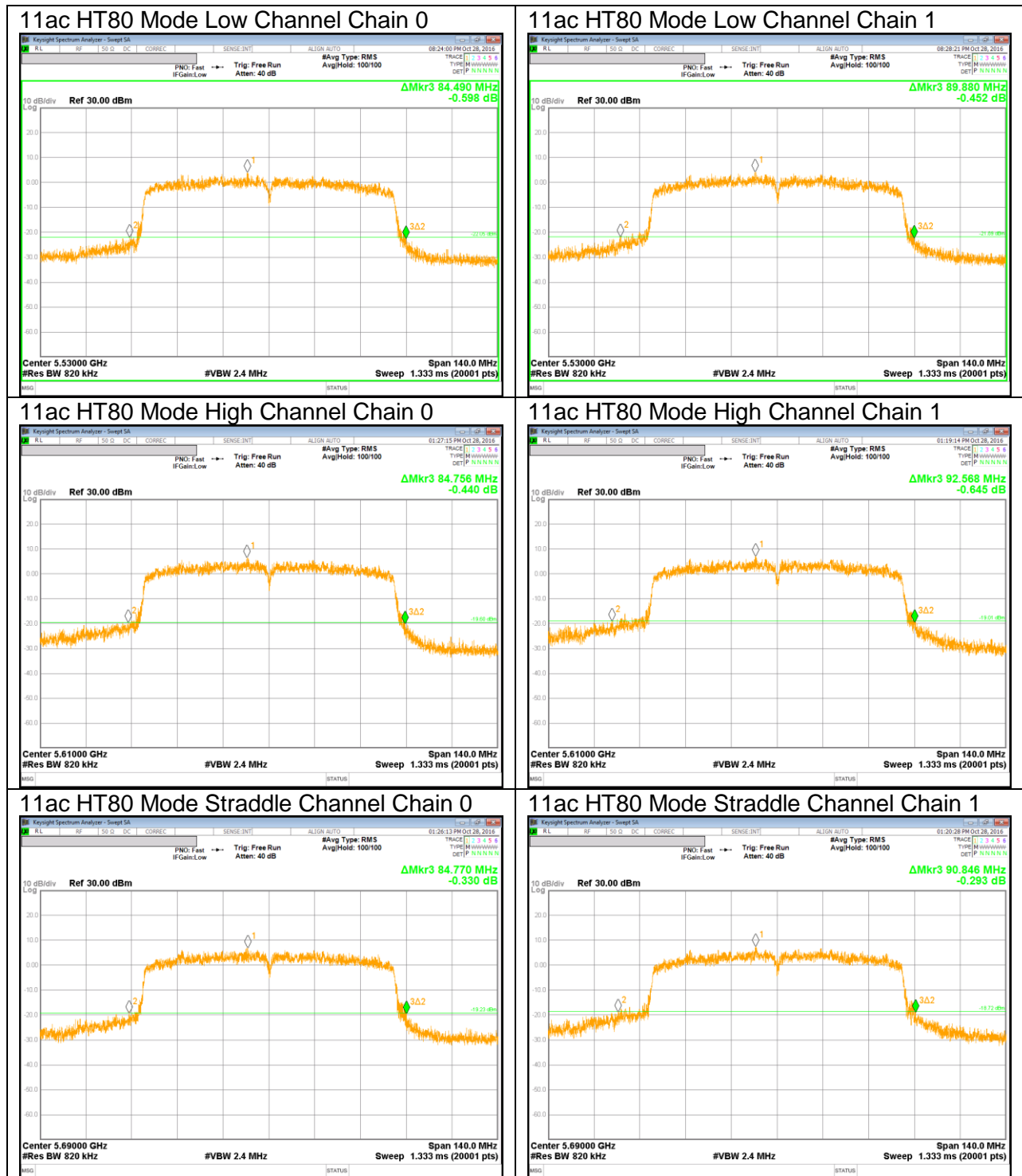
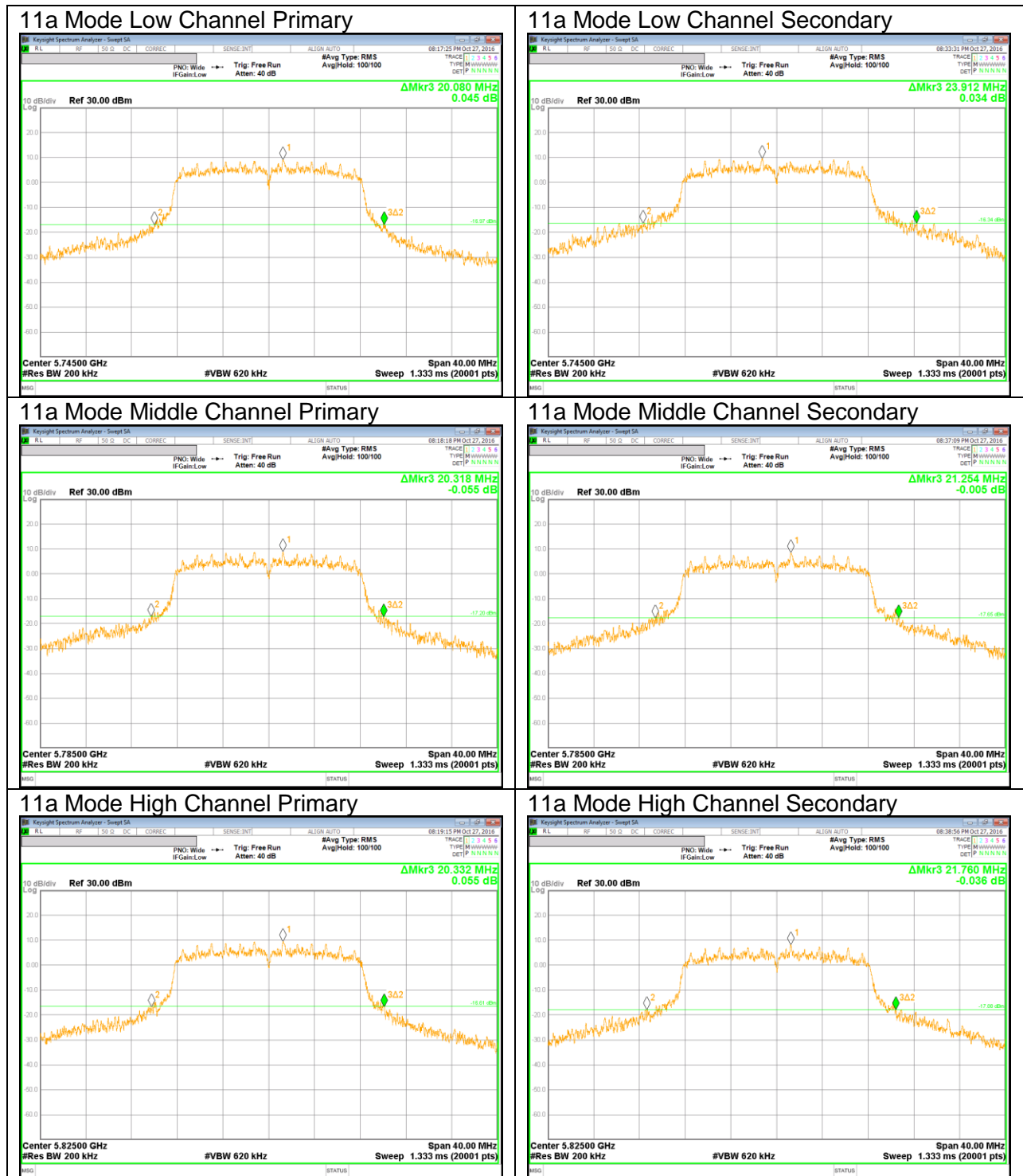


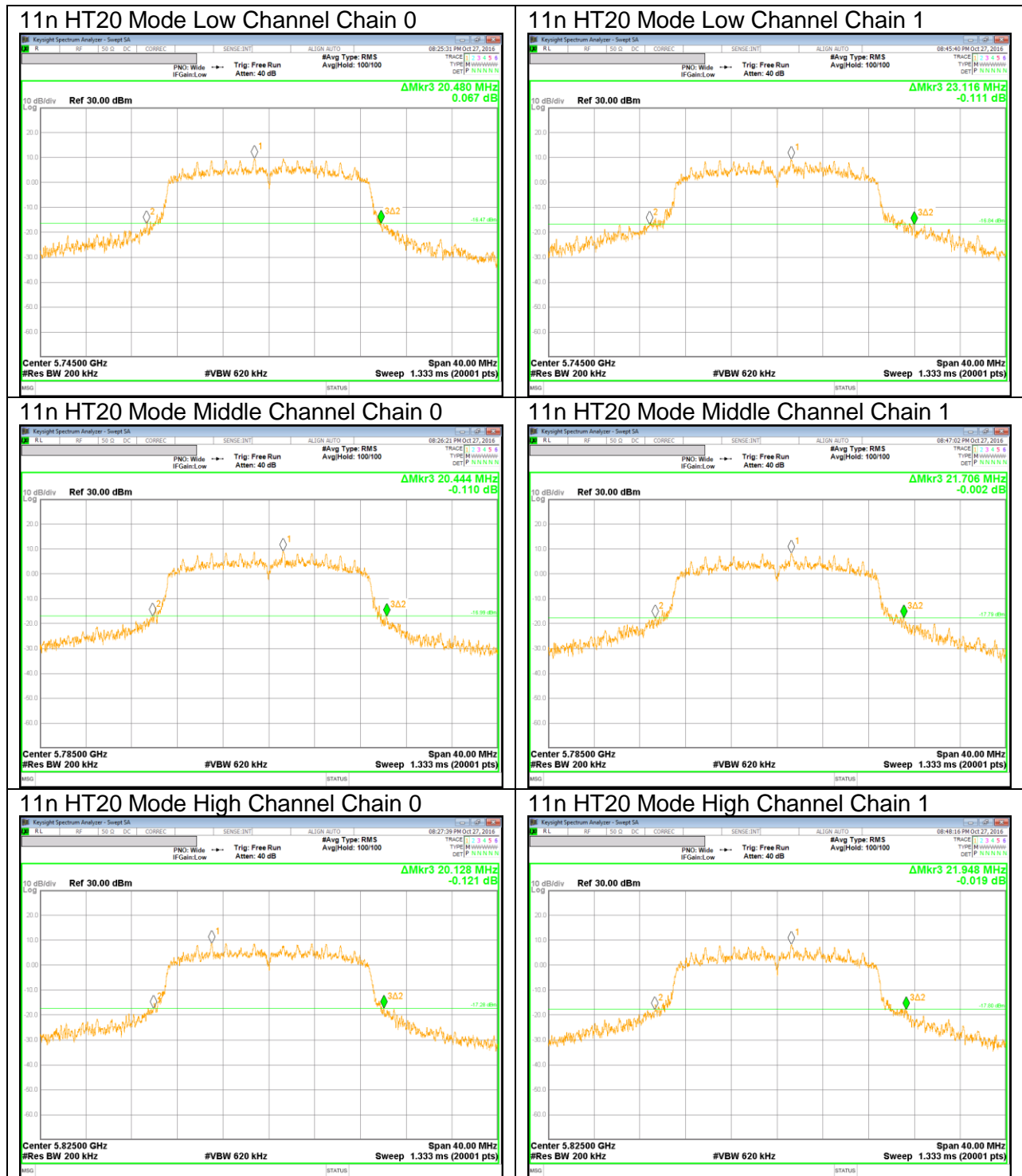
UNII 5.5 GHz IEEE 802.11ac VHT80 mode



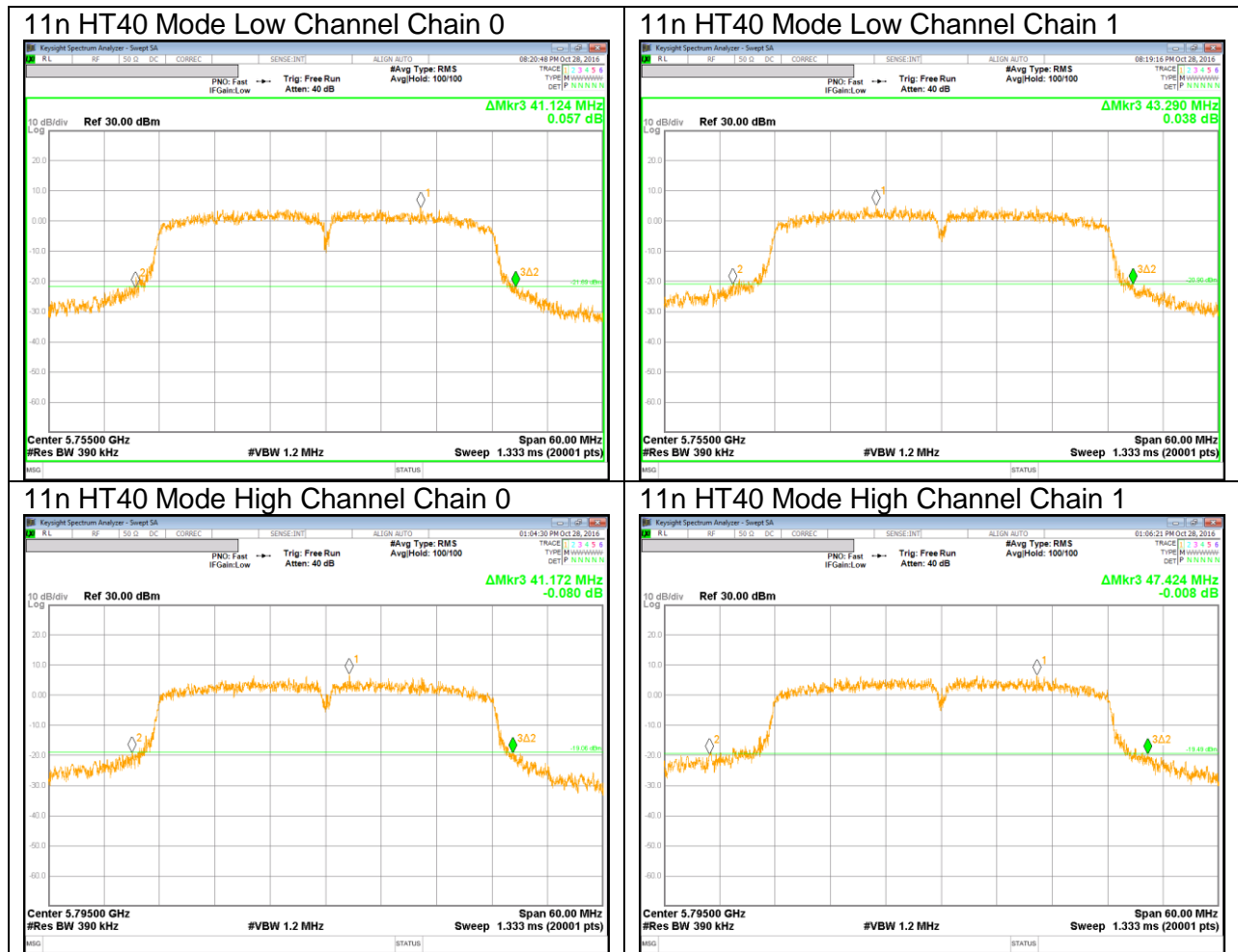
UNII 5.8 GHz IEEE 802.11a mode



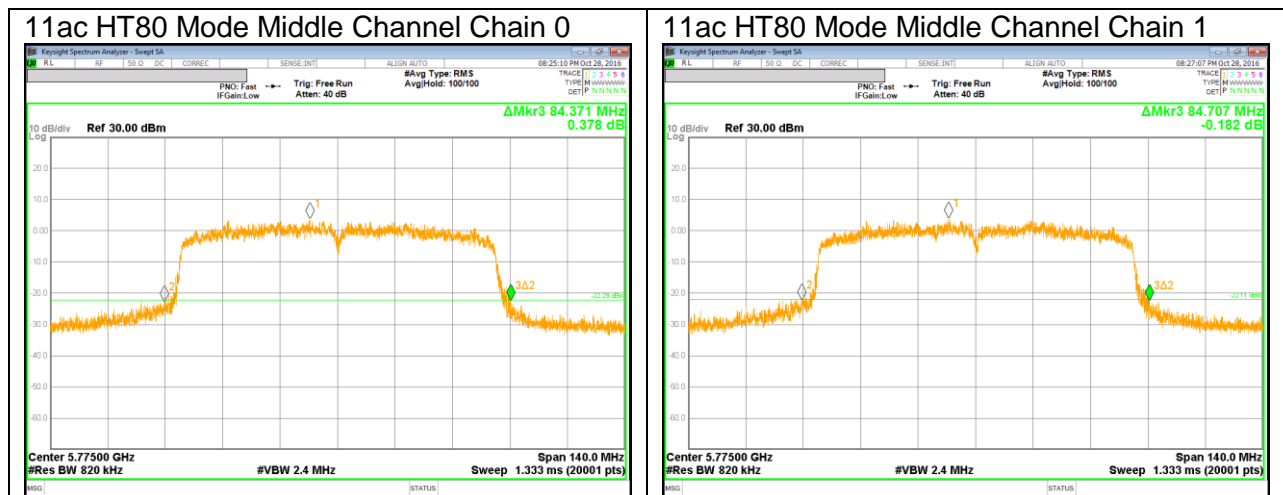
UNII 5.8 GHz IEEE 802.11n HT20 mode



UNII 5.8 GHz IEEE 802.11n HT40 mode



UNII 5.8 GHz IEEE 802.11ac VHT80 mode



10.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

NOTE

- Calculation for 99% Bandwidth of UNII-2C and UNII-3 Straddle Channel
 - ex) 802.11a mode
 - Fundamental frequency : 5720MHz
 - 99% BW : 16.459MHz
 - Turning Frequency : 5725MHz
 - 99% Bandwidth of UNII-2C band Portion
= $(5725 - (5720 - (16.459 / 2))) = 13.229$ MHz
 - 99% Bandwidth of UNII-3 band Portion
= $(5720 + (16.459 / 2) - 5725) = 3.230$ MHz

RESULTS

10.3.1. 802.11a MODE IN THE 5.2 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|---------|--------------------|------------------------|-----------|
| | | Primary | Secondary |
| Low | 5180 | 16.331 | 16.394 |
| Mid | 5200 | 16.367 | 16.386 |
| High | 5240 | 16.353 | 16.376 |
| Worst | | 16.394 | |

10.3.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|---------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Low | 5180 | 17.462 | 17.495 |
| Mid | 5200 | 17.465 | 17.485 |
| High | 5240 | 17.422 | 17.480 |
| Worst | | 17.495 | |

10.3.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|---------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Low | 5190 | 35.945 | 35.905 |
| High | 5230 | 35.892 | 35.997 |
| Worst | | 35.997 | |

10.3.4. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|---------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Middle | 5210 | 75.188 | 75.062 |
| Worst | | 75.188 | |

10.3.5. 802.11a MODE IN THE 5.3 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|---------|--------------------|------------------------|-----------|
| | | Primary | Secondary |
| Low | 5260 | 16.385 | 16.473 |
| Mid | 5300 | 16.398 | 16.494 |
| High | 5320 | 16.382 | 16.477 |
| Worst | | 16.494 | |

10.3.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|---------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Low | 5260 | 17.470 | 17.575 |
| Mid | 5300 | 17.479 | 17.538 |
| High | 5320 | 17.484 | 17.493 |
| Worst | | 17.575 | |

10.3.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|---------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Low | 5270 | 35.975 | 36.184 |
| High | 5310 | 35.904 | 35.904 |
| Worst | | 36.184 | |

10.3.8. 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|---------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Middle | 5290 | 75.137 | 75.037 |
| Worst | | 75.137 | |

10.3.9. 802.11a MODE IN THE 5.5 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|----------|--------------------|------------------------|-----------|
| | | Primary | Secondary |
| Low | 5500 | 16.371 | 16.435 |
| Mid | 5580 | 16.354 | 16.445 |
| High | 5700 | 16.377 | 16.454 |
| Straddle | 5720 | 13.179 | 13.198 |
| Worst | | 16.454 | |

10.3.10. 802.11n HT20 MODE IN THE 5.5 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|----------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Low | 5500 | 17.481 | 17.535 |
| Mid | 5580 | 17.432 | 17.553 |
| High | 5700 | 17.461 | 17.503 |
| Straddle | 5720 | 13.710 | 13.742 |
| Worst | | 17.553 | |

10.3.11. 802.11n HT40 MODE IN THE 5.5 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|----------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Low | 5510 | 35.791 | 35.884 |
| Mid | 5590 | 35.881 | 35.876 |
| High | 5670 | 35.876 | 35.998 |
| Straddle | 5710 | 32.936 | 32.946 |
| Worst | | 35.998 | |

10.3.12. 802.11ac VHT80 MODE IN THE 5.5 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|----------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Low | 5530 | 75.005 | 75.114 |
| High | 5610 | 75.068 | 74.987 |
| Straddle | 5690 | 72.581 | 72.497 |
| Worst | | 75.114 | |

10.3.13. 802.11a MODE IN THE 5.8 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|----------|--------------------|------------------------|-----------|
| | | Primary | Secondary |
| Straddle | 5720 | 3.180 | 3.199 |
| Low | 5745 | 16.370 | 16.444 |
| Mid | 5785 | 16.367 | 16.446 |
| High | 5825 | 16.386 | 16.387 |
| Worst | | 16.446 | |

10.3.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|----------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Straddle | 5720 | 3.710 | 3.743 |
| Low | 5745 | 17.433 | 17.528 |
| Mid | 5785 | 17.471 | 17.492 |
| High | 5825 | 17.466 | 17.476 |
| Worst | | 17.528 | |

10.3.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

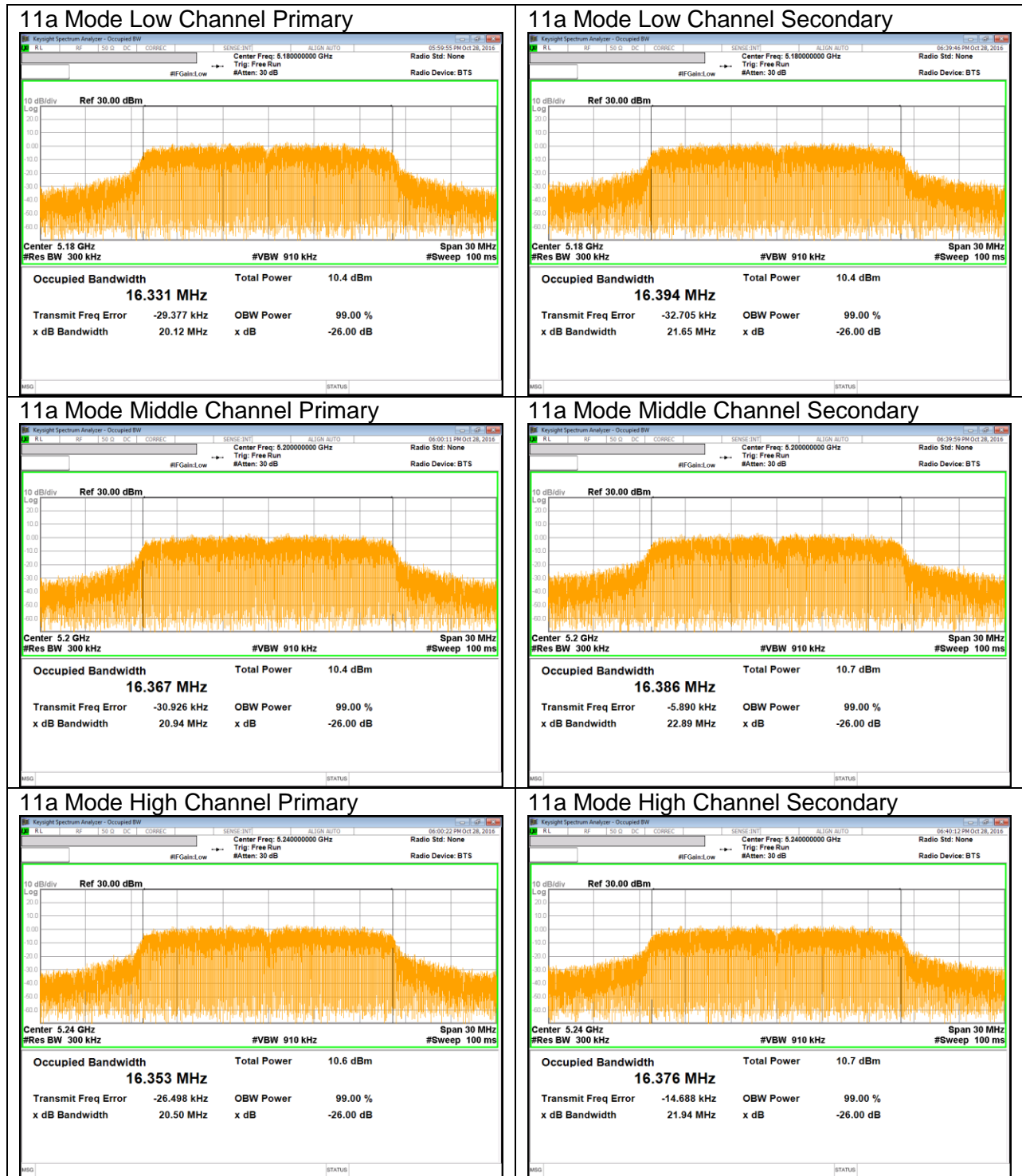
| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|----------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Straddle | 5710 | 2.935 | 2.945 |
| Low | 5755 | 35.878 | 35.901 |
| High | 5795 | 35.881 | 35.899 |
| Worst | | 35.901 | |

10.3.16. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

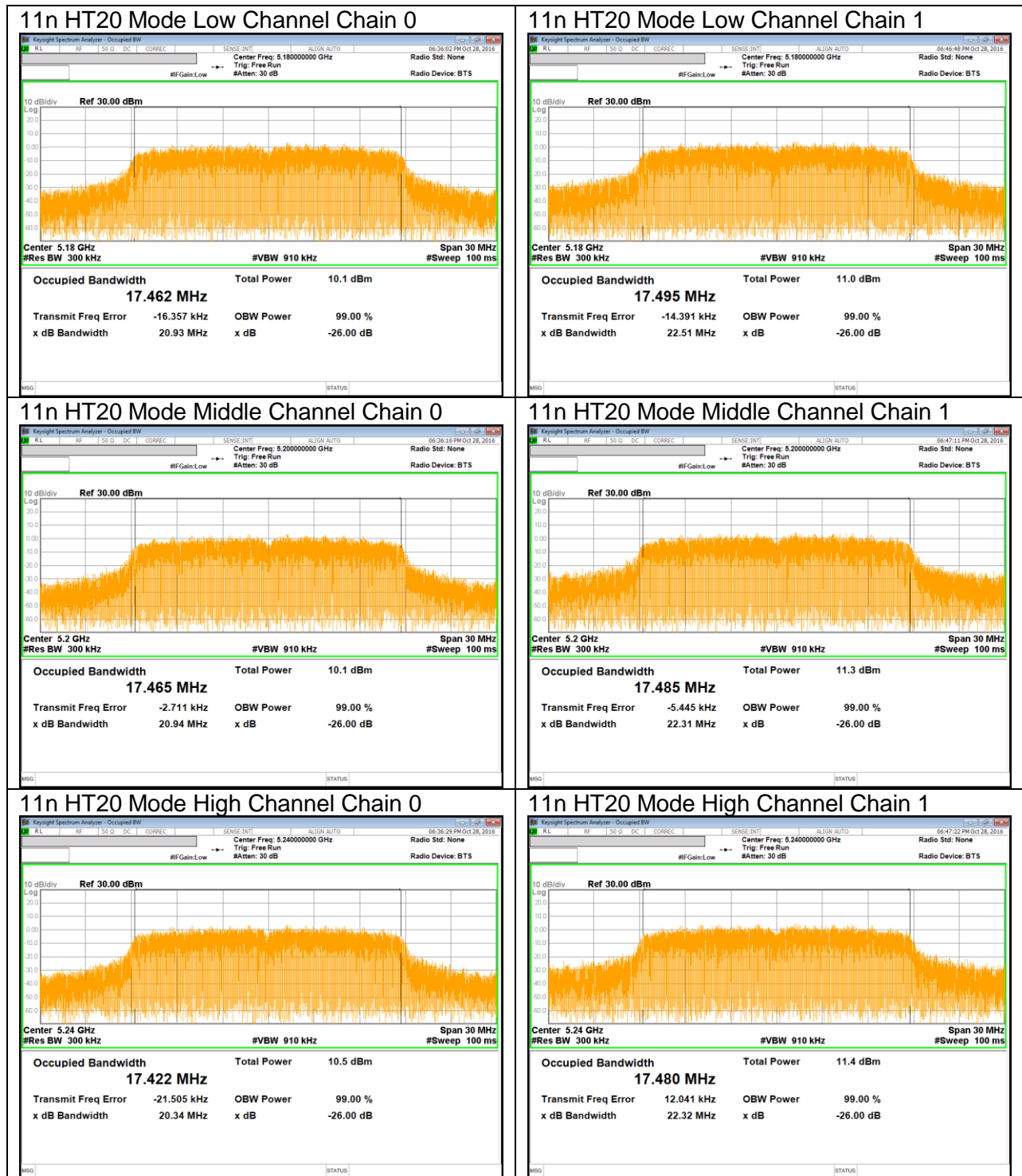
| Channel | Frequency [MHz] | 99% Bandwidth [MHz] | |
|----------|--------------------|------------------------|---------|
| | | Chain 0 | Chain 1 |
| Straddle | 5690 | 2.581 | 2.497 |
| Middle | 5775 | 75.046 | 74.968 |
| Worst | | 75.046 | |

10.3.17. 99% BANDWIDTH PLOTS

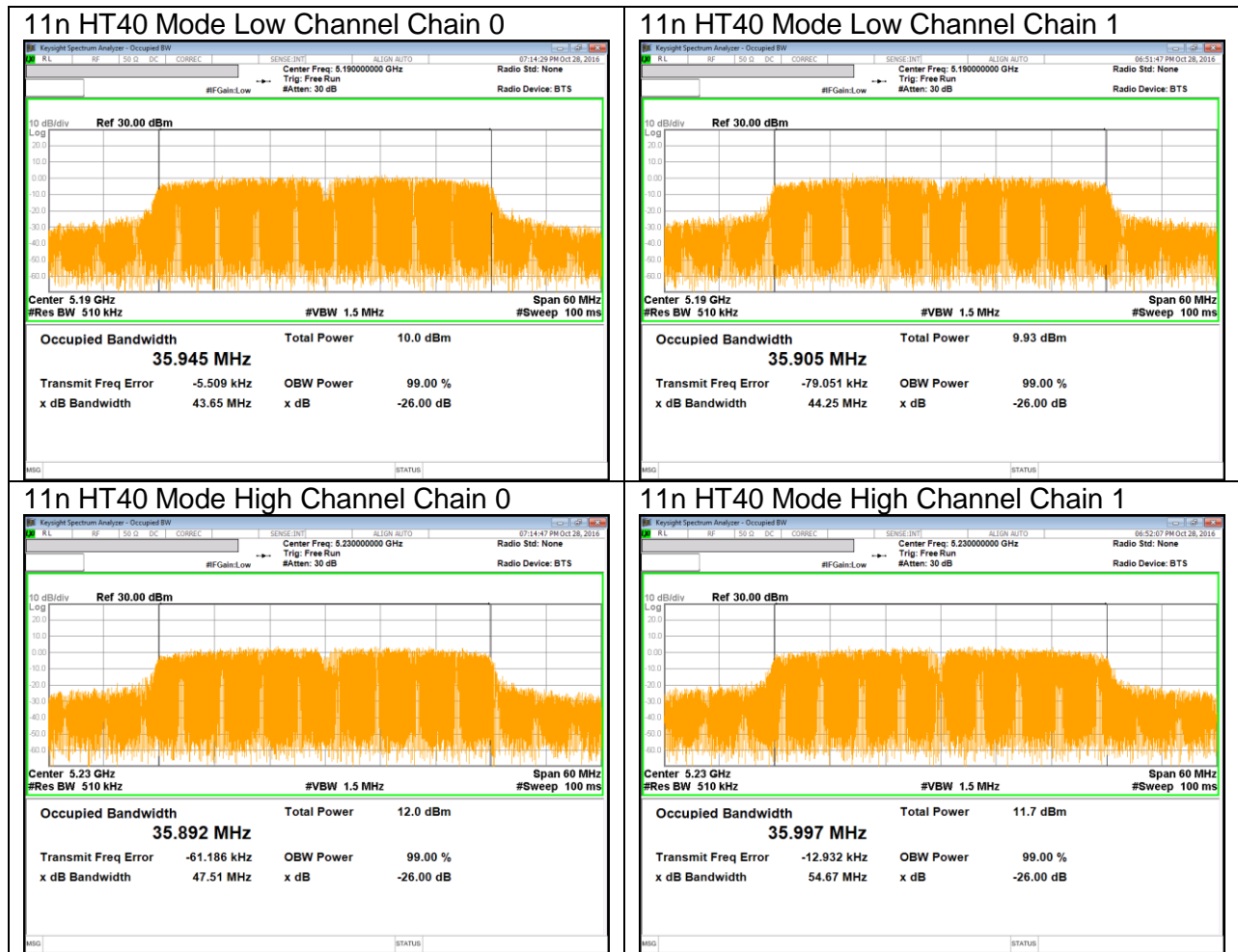
UNII 5.2 GHz IEEE 802.11a mode



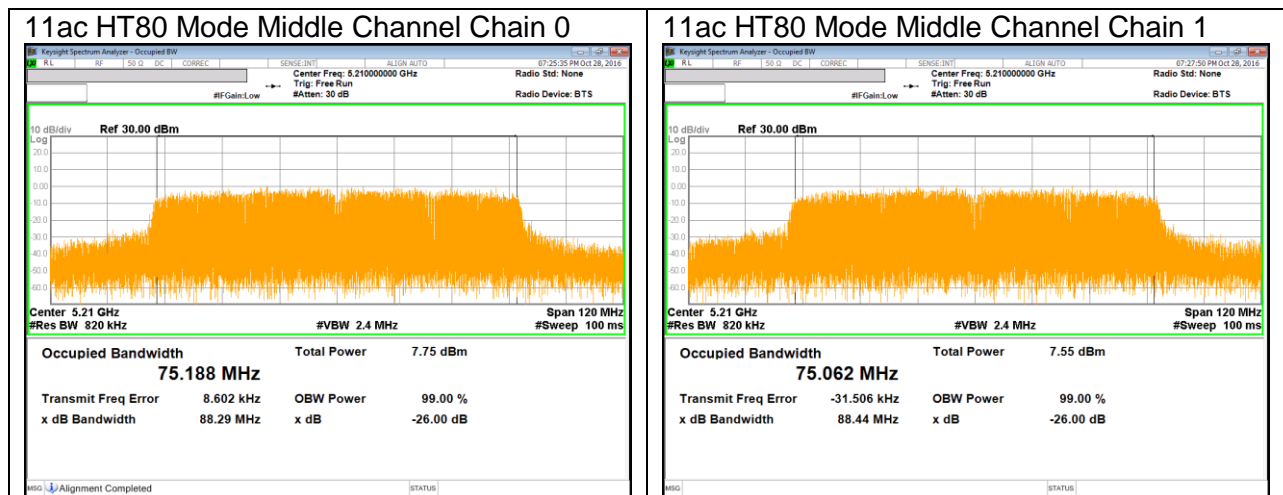
UNII 5.2 GHz IEEE 802.11n HT20 mode



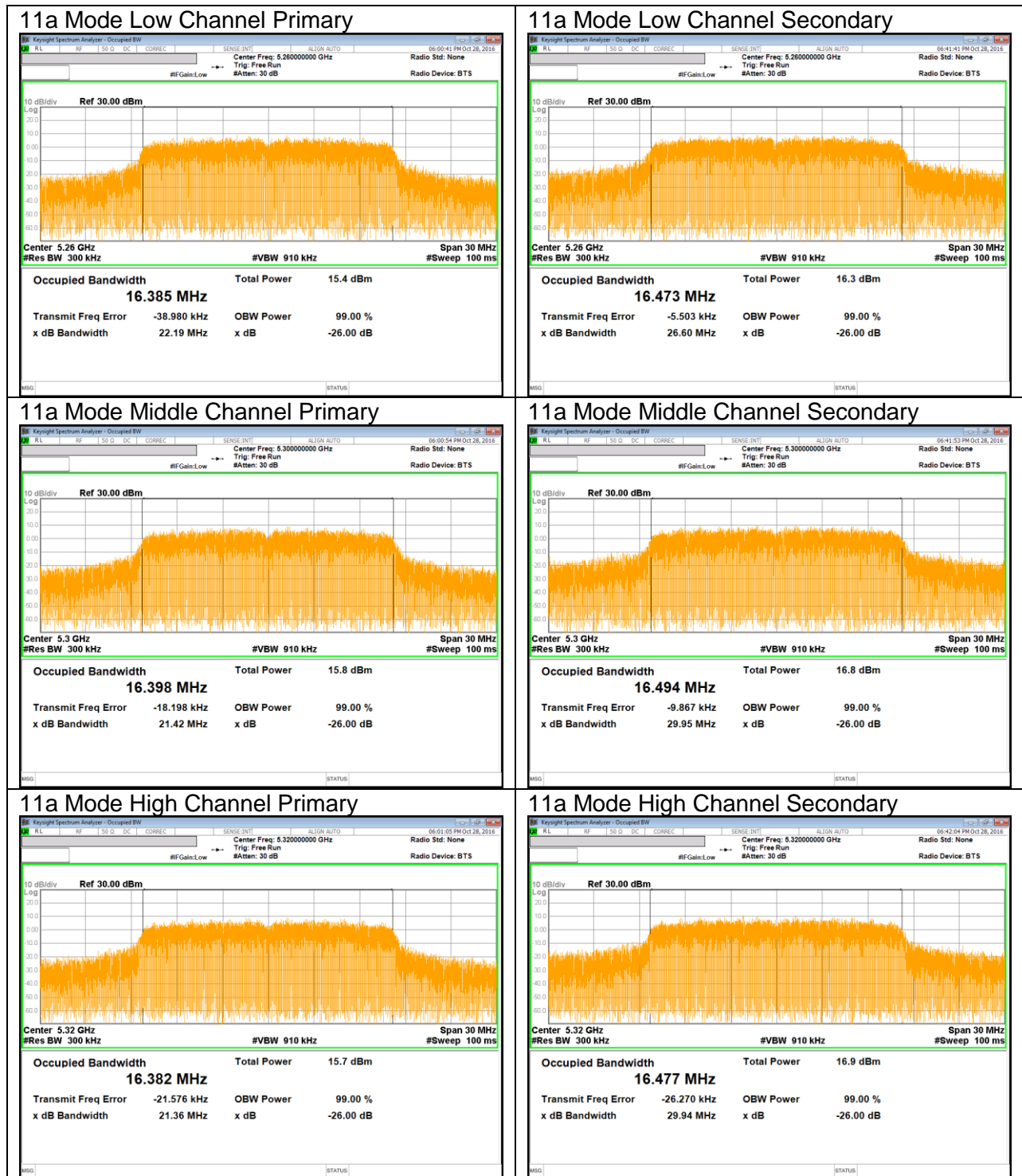
UNII 5.2 GHz IEEE 802.11n HT40 mode



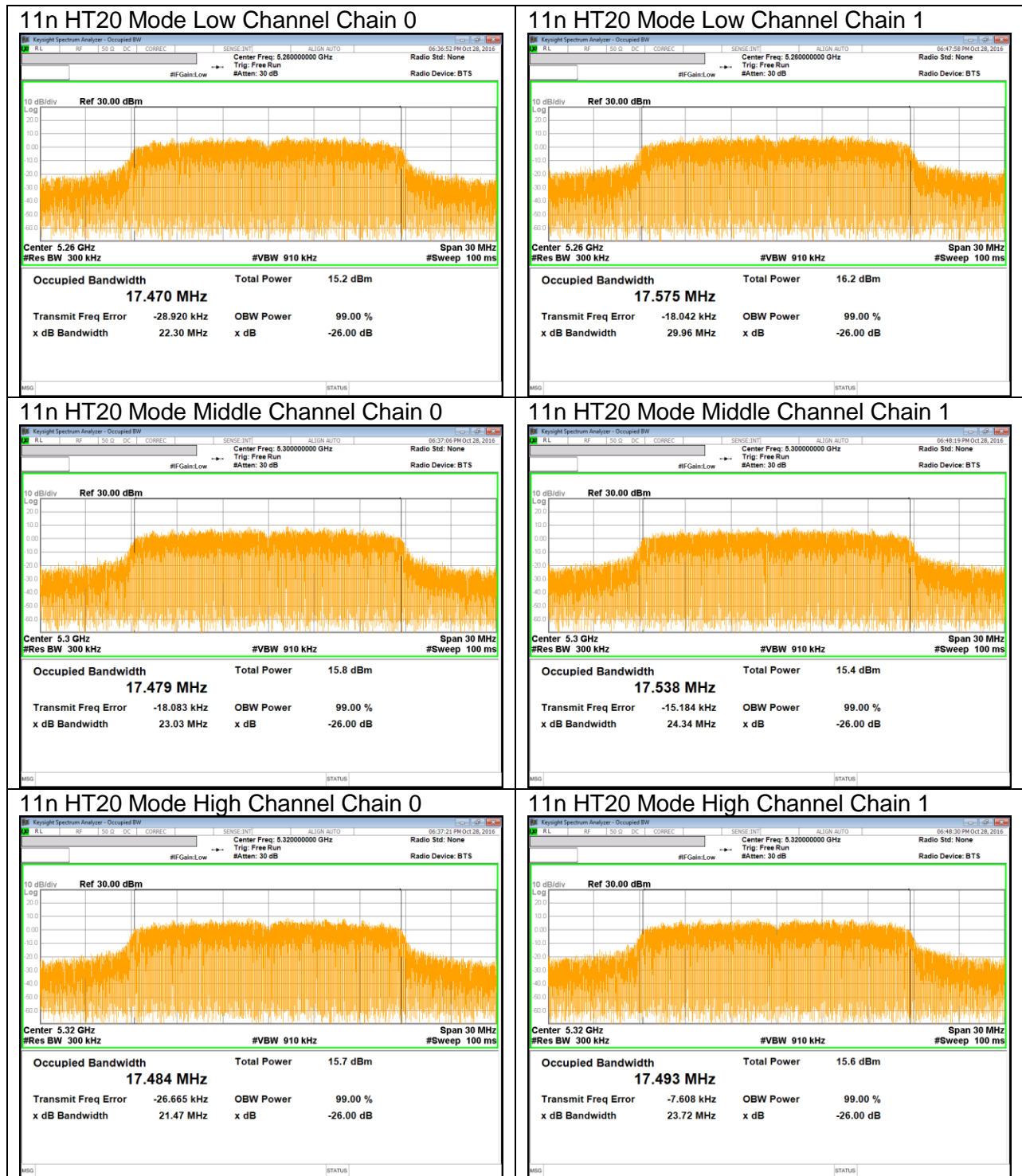
UNII 5.2 GHz IEEE 802.11ac VHT80 mode



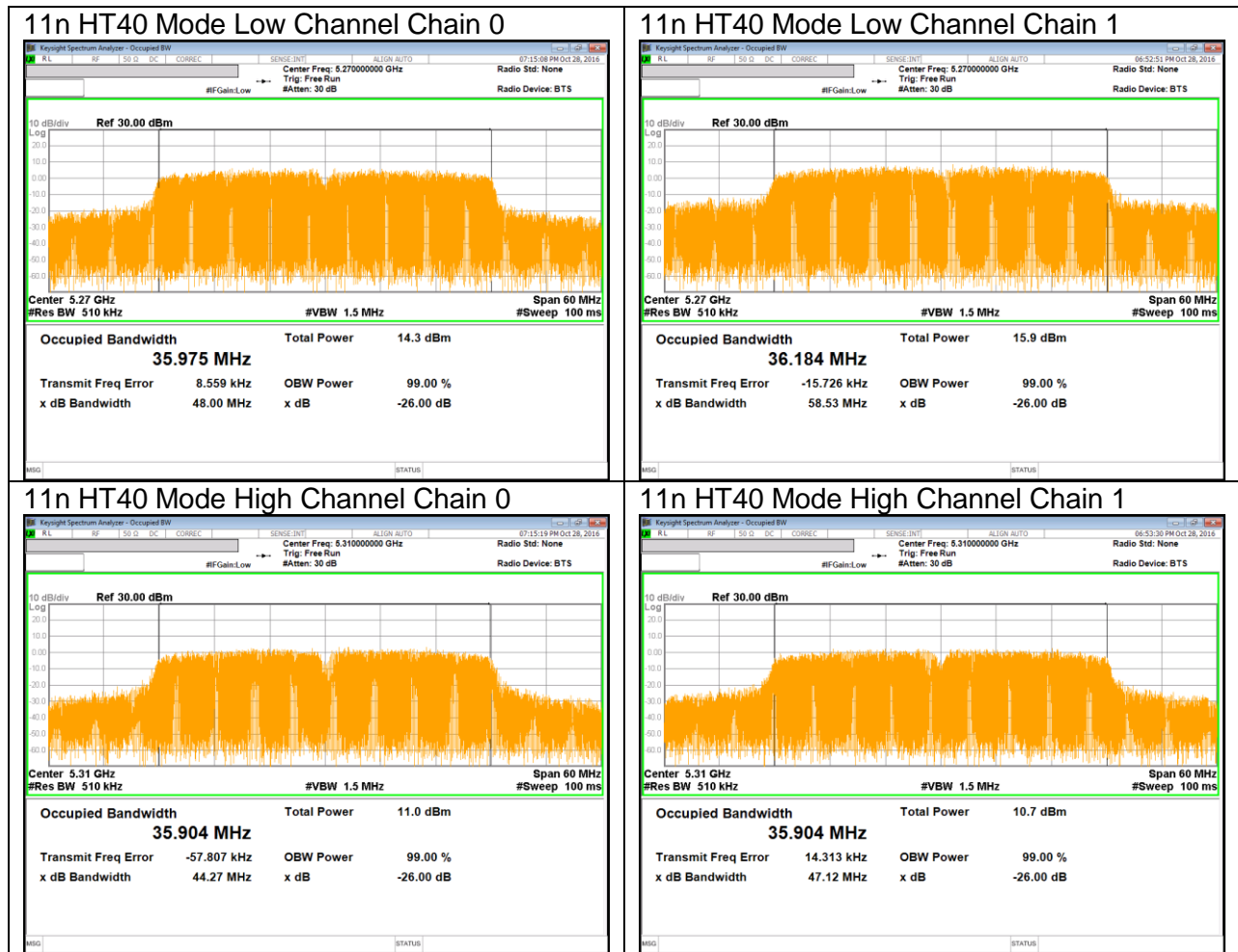
UNII 5.3 GHz IEEE 802.11a mode



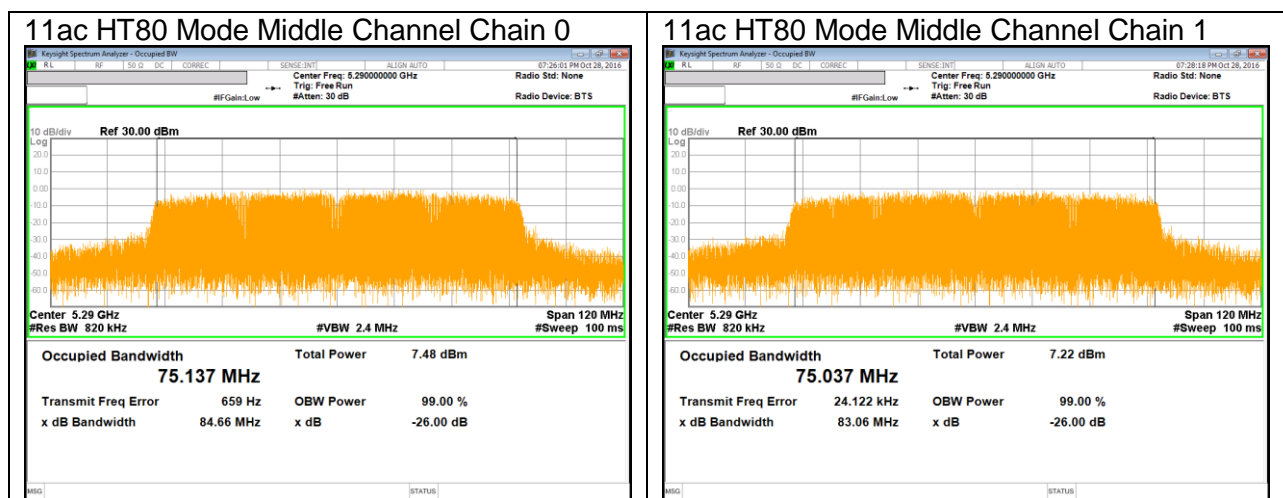
UNII 5.3 GHz IEEE 802.11n HT20 mode



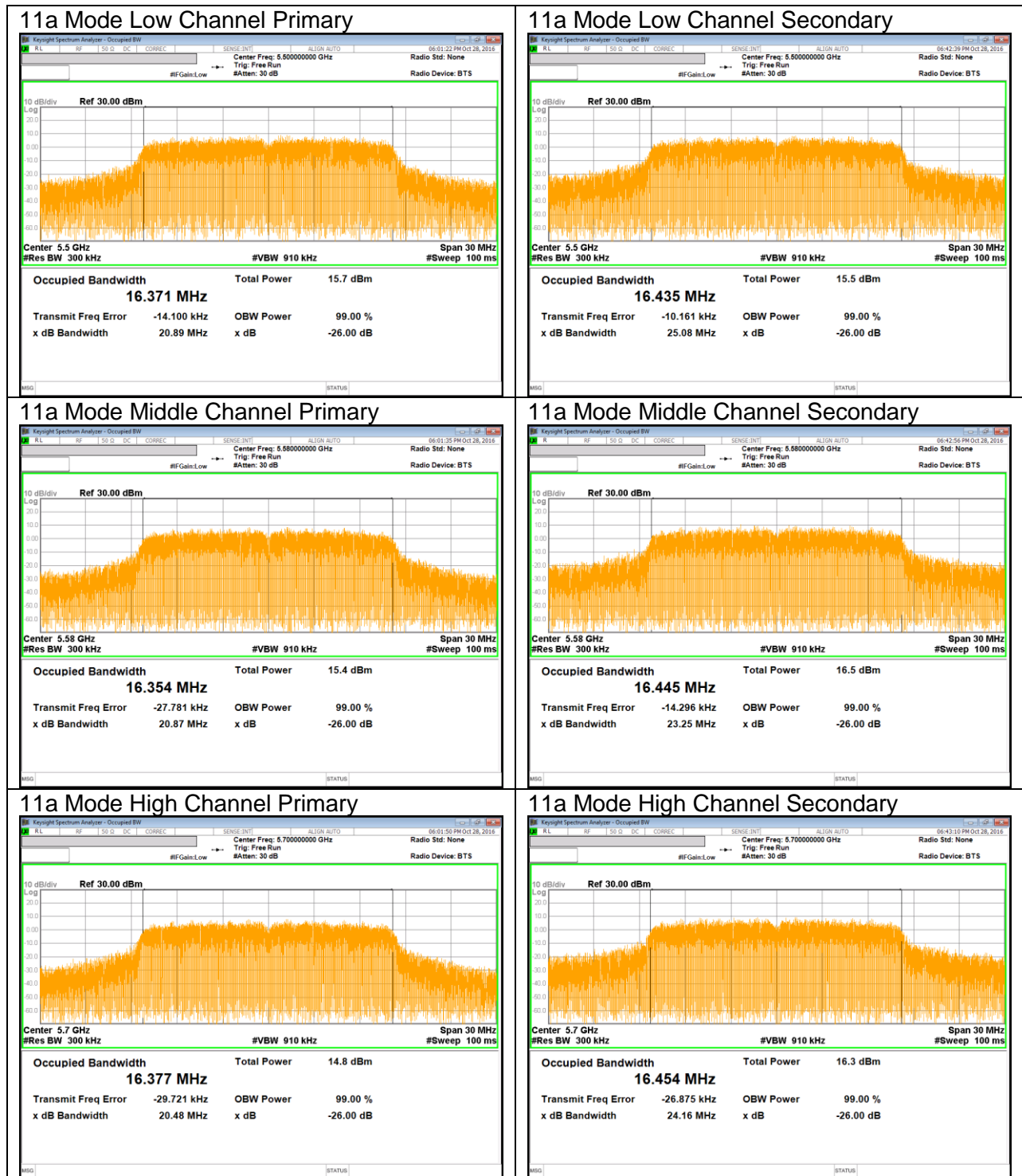
UNII 5.3 GHz IEEE 802.11n HT40 mode

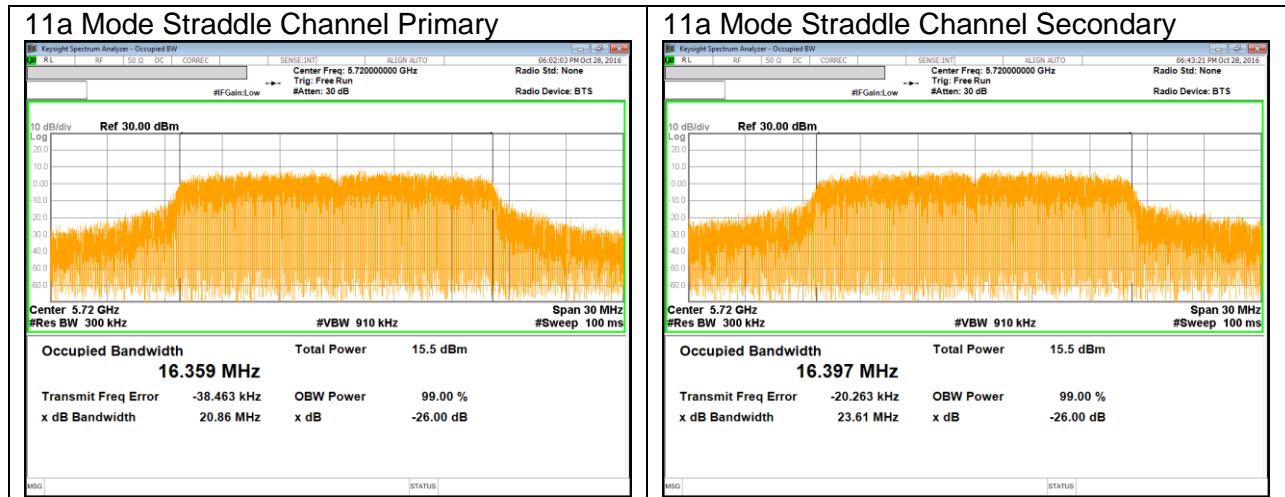


UNII 5.3 GHz IEEE 802.11ac VHT80 mode

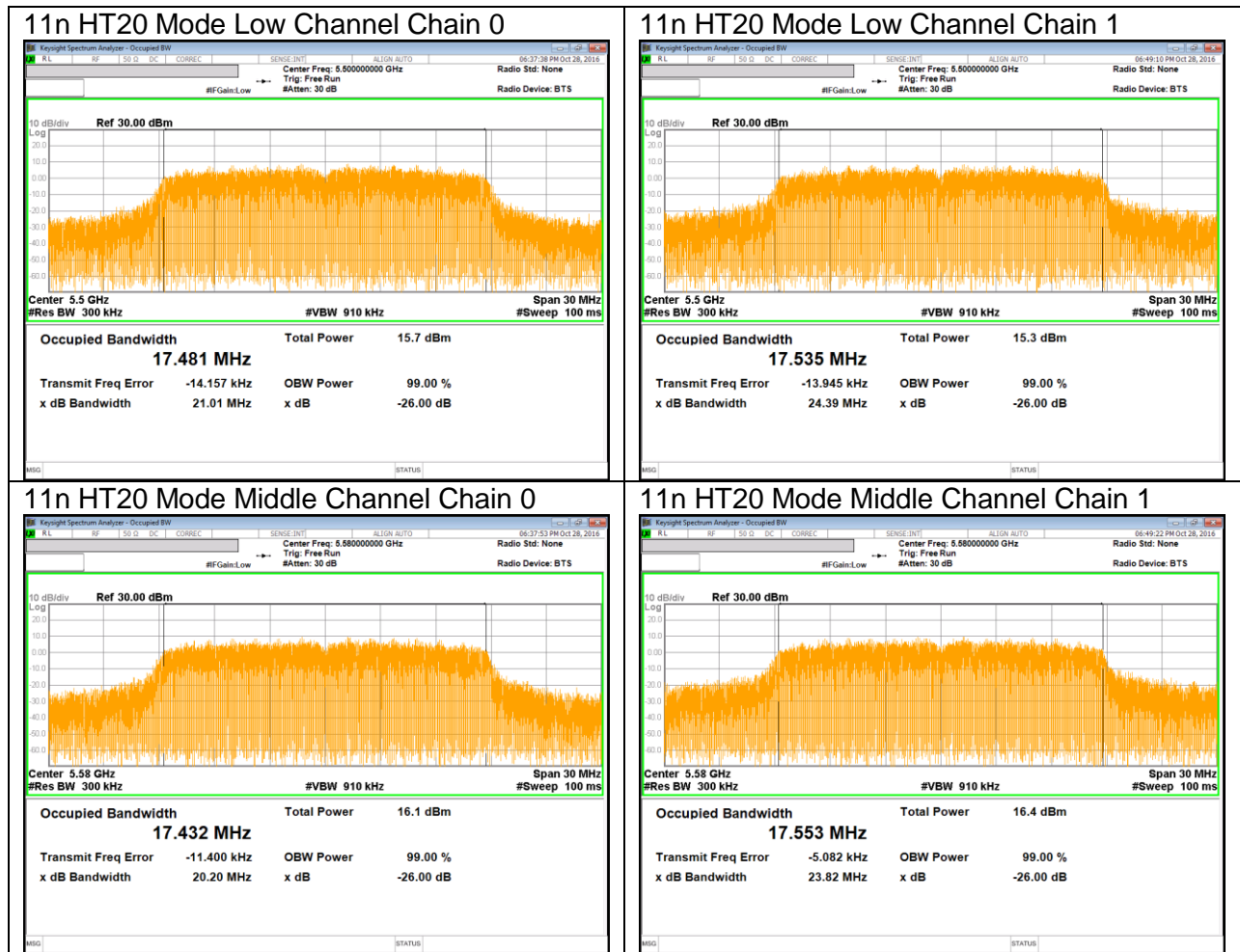


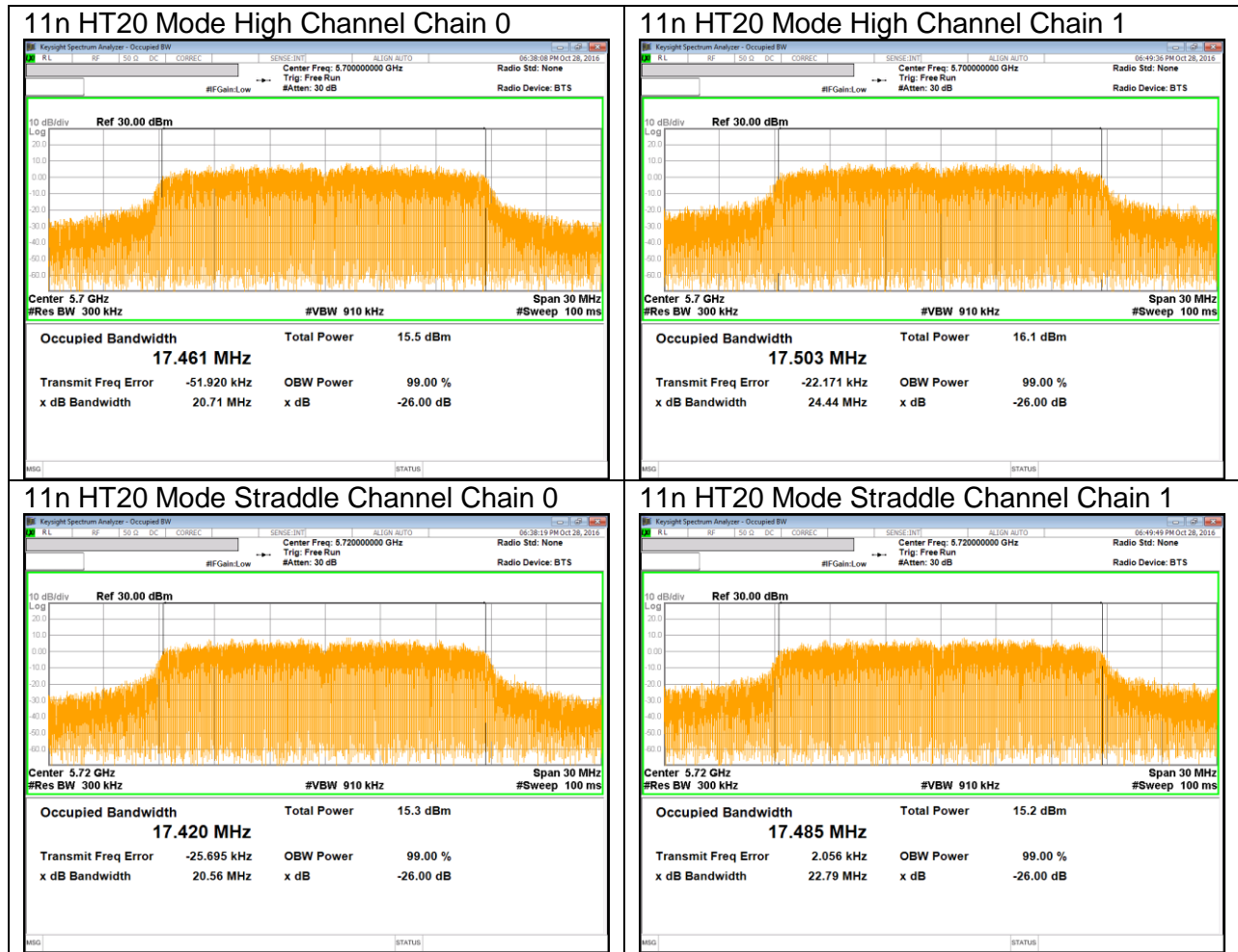
UNII 5.5 GHz IEEE 802.11a mode





UNII 5.5 GHz IEEE 802.11n HT20 mode





UNII 5.5 GHz IEEE 802.11n HT40 mode

