



## Frequency Stability

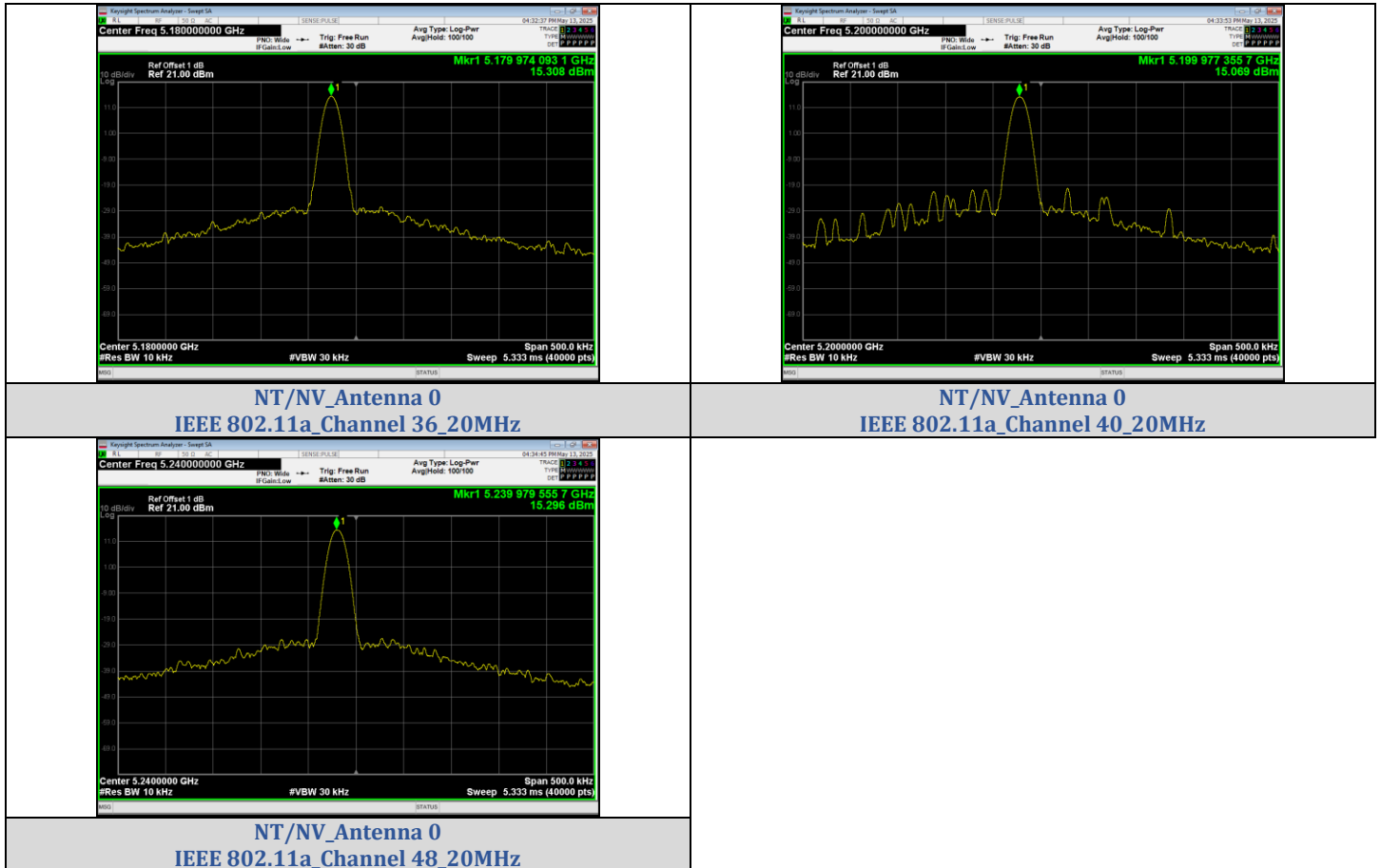
### Test Result

| Condition | Mode            | Ch. | Center Frequency (MHz) | Calculated Value of Center Frequency(MHz) | Result (ppm) | Limit (ppm)            | State |
|-----------|-----------------|-----|------------------------|-------------------------------------------|--------------|------------------------|-------|
| NT/NV     | IEEE 802.11a    | 36  | 5180.0                 | 5179.974093                               | -5.0         | Within authorized band | PASS  |
|           |                 | 40  | 5200.0                 | 5199.977356                               | -4.35        |                        | PASS  |
|           |                 | 48  | 5240.0                 | 5239.979556                               | -3.9         |                        | PASS  |
|           | IEEE 802.11n_20 | 36  | 5180.0                 | 5179.984656                               | -2.96        |                        | PASS  |
|           |                 | 40  | 5200.0                 | 5199.985556                               | -2.78        |                        | PASS  |
|           |                 | 48  | 5240.0                 | 5239.989006                               | -2.1         |                        | PASS  |
|           | IEEE 802.11n_40 | 38  | 5190.0                 | 5189.983918                               | -3.1         |                        | PASS  |
|           |                 | 46  | 5230.0                 | 5229.987606                               | -2.37        |                        | PASS  |
|           |                 |     |                        |                                           |              |                        | PASS  |

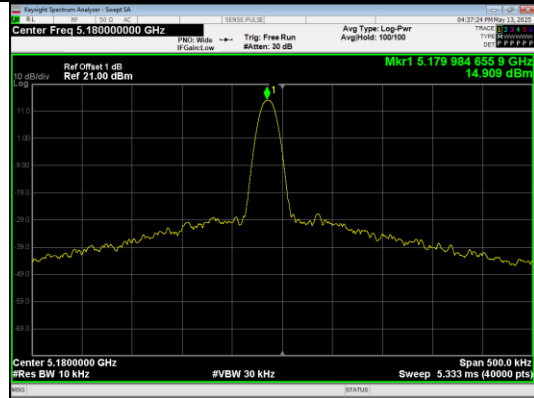
### Test Graphs

#### NT/NV

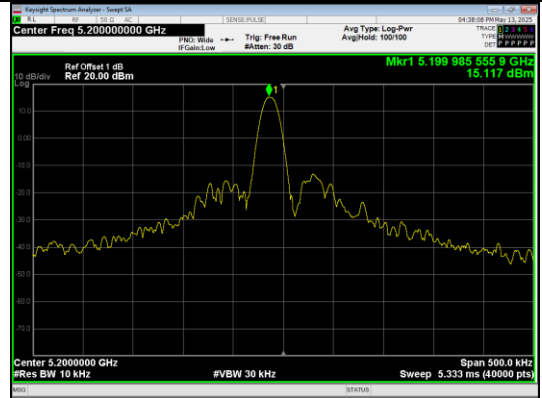
#### IEEE 802.11a



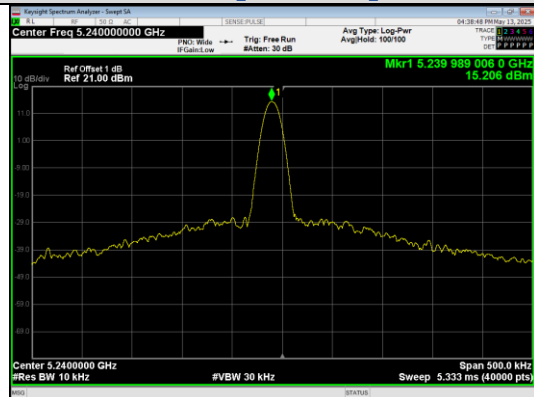
#### IEEE 802.11n\_20



NT/NV\_Antenna 0  
IEEE 802.11n\_Channel 36\_20MHz

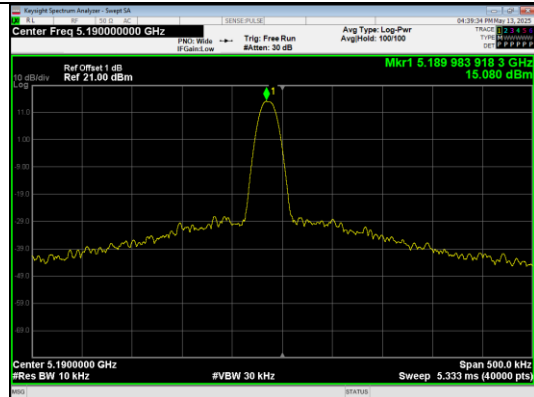


NT/NV\_Antenna 0  
IEEE 802.11n\_Channel 40\_20MHz

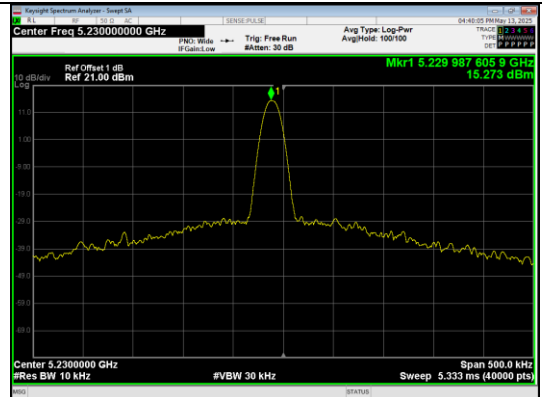


NT/NV\_Antenna 0  
IEEE 802.11n\_Channel 48\_20MHz

IEEE 802.11n\_40



NT/NV\_Antenna 0  
IEEE 802.11n\_Channel 38\_40MHz



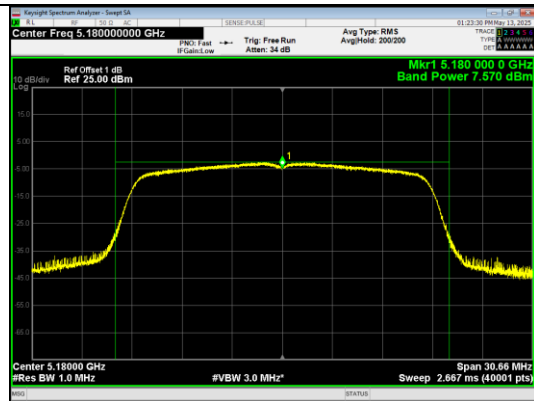
NT/NV\_Antenna 0  
IEEE 802.11n\_Channel 46\_40MHz



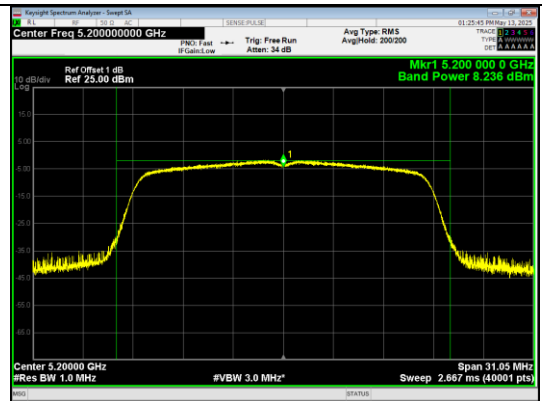
## Conducted Output Power

Conducted output power

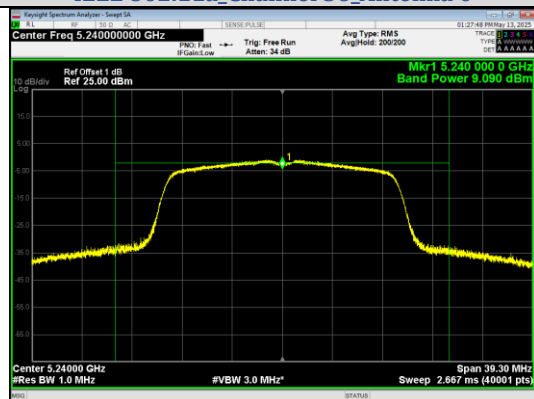
| Mode            | Channel | Ant. 0 (dBm) | Corr'd Value Ant. 0 (dBm) | Limit (dBm) | Result |
|-----------------|---------|--------------|---------------------------|-------------|--------|
| IEEE 802.11a    | 36      | 7.570        | 7.7                       | ≤24         | PASS   |
|                 | 40      | 8.236        | 8.37                      | ≤24         | PASS   |
|                 | 48      | 9.090        | 9.22                      | ≤24         | PASS   |
| IEEE 802.11n_20 | 36      | 9.325        | 9.46                      | ≤24         | PASS   |
|                 | 40      | 9.250        | 9.39                      | ≤24         | PASS   |
|                 | 48      | 7.932        | 8.07                      | ≤24         | PASS   |
| IEEE 802.11n_40 | 38      | 8.902        | 9.18                      | ≤24         | PASS   |
|                 | 46      | 8.686        | 8.97                      | ≤24         | PASS   |



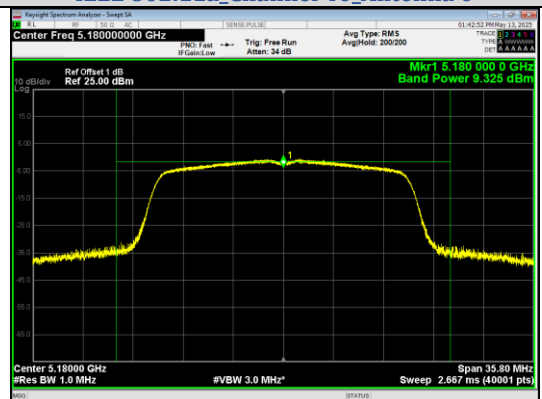
Conducted AVG output power  
IEEE 802.11a\_Channel 36\_Antenna 0



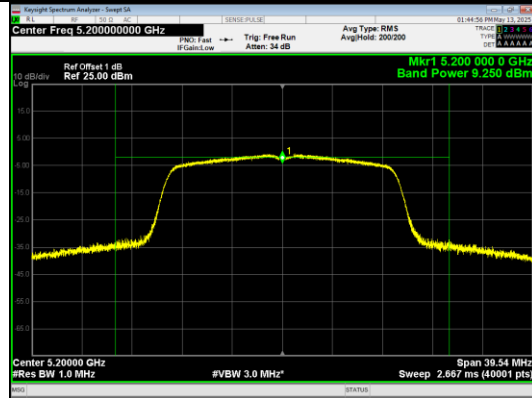
Conducted AVG output power  
IEEE 802.11a\_Channel 40\_Antenna 0



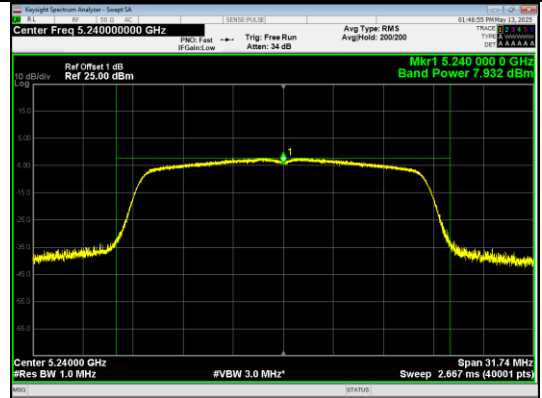
Conducted AVG output power  
IEEE 802.11a\_Channel 48\_Antenna 0



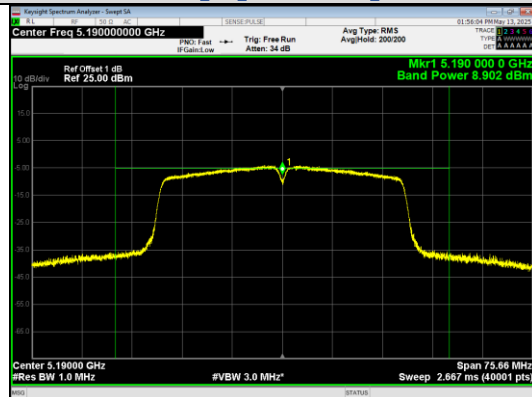
Conducted AVG output power  
IEEE 802.11n\_20\_Channel 36\_Antenna 0



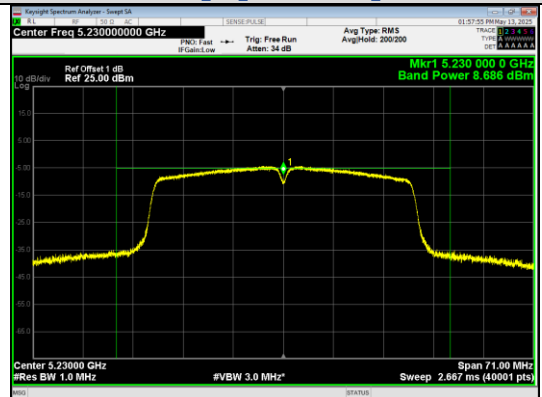
Conducted AVG output power  
IEEE 802.11n\_20\_Channel 40\_Antenna 0



Conducted AVG output power  
IEEE 802.11n\_20\_Channel 48\_Antenna 0



Conducted AVG output power  
IEEE 802.11n\_40\_Channel 38\_Antenna 0



Conducted AVG output power  
IEEE 802.11n\_40\_Channel 46\_Antenna 0

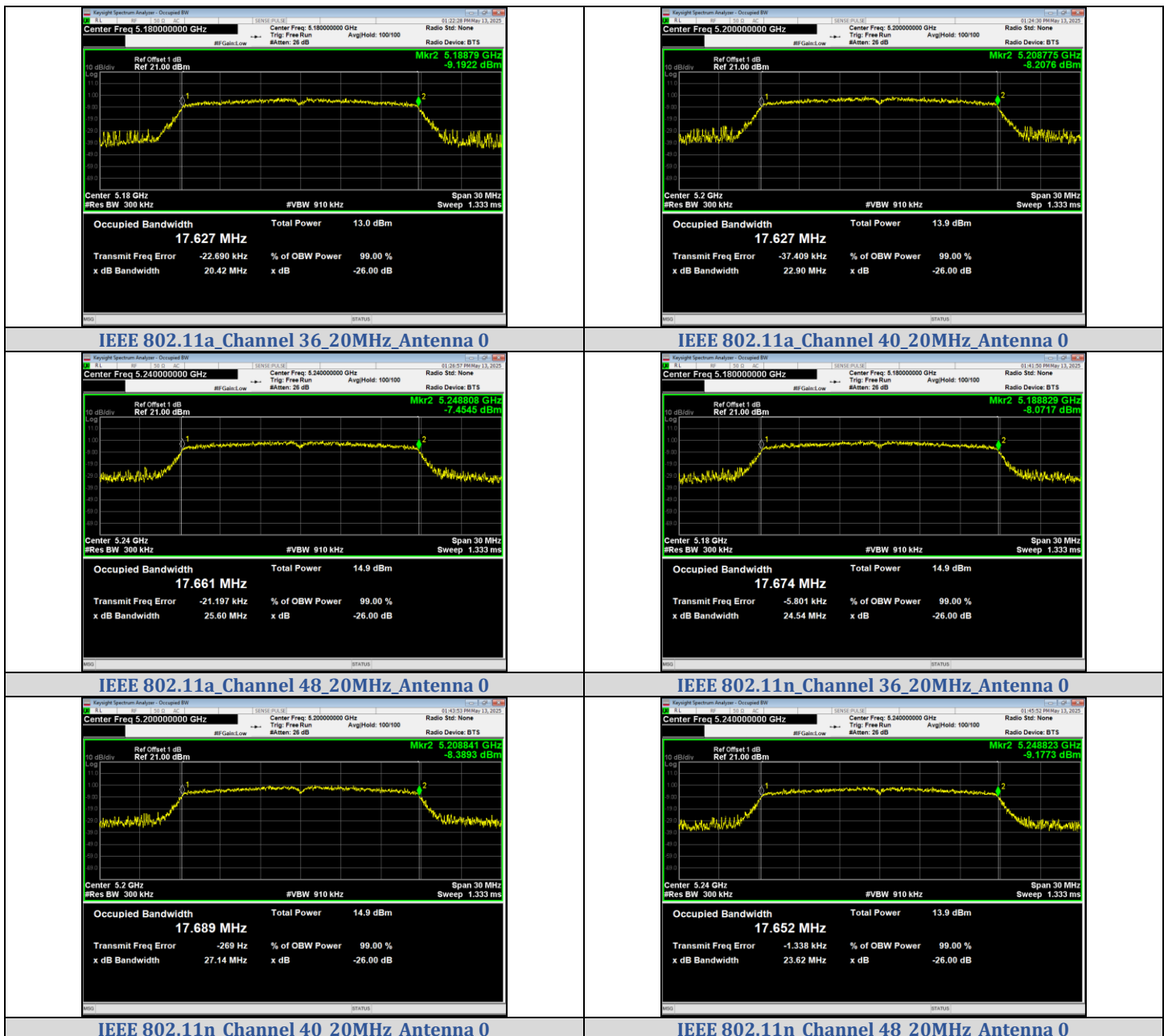


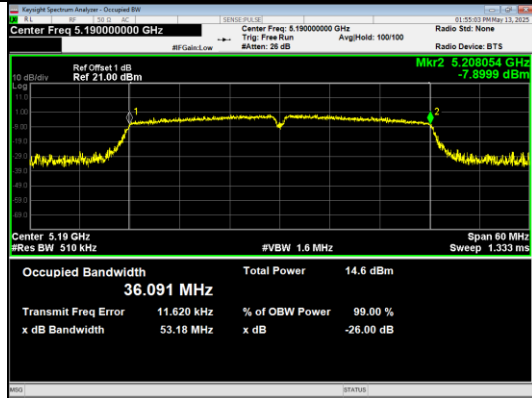
## 99% Bandwidth

### Test Result

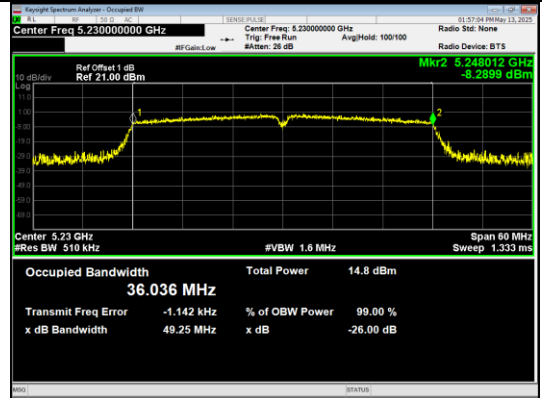
| Mode            | Channel | Center Frequency (MHz) | 99% BW (MHz) |
|-----------------|---------|------------------------|--------------|
| IEEE 802.11a    | 36      | 5180                   | 17.627       |
|                 | 40      | 5200                   | 17.627       |
|                 | 48      | 5240                   | 17.661       |
| IEEE 802.11n_20 | 36      | 5180                   | 17.674       |
|                 | 40      | 5200                   | 17.689       |
|                 | 48      | 5240                   | 17.652       |
| IEEE 802.11n_40 | 38      | 5190                   | 36.091       |
|                 | 46      | 5230                   | 36.036       |

### Test Graphs





IEEE 802.11n\_Channel 38\_40MHz\_Antenna 0



IEEE 802.11n\_Channel 46\_40MHz\_Antenna 0

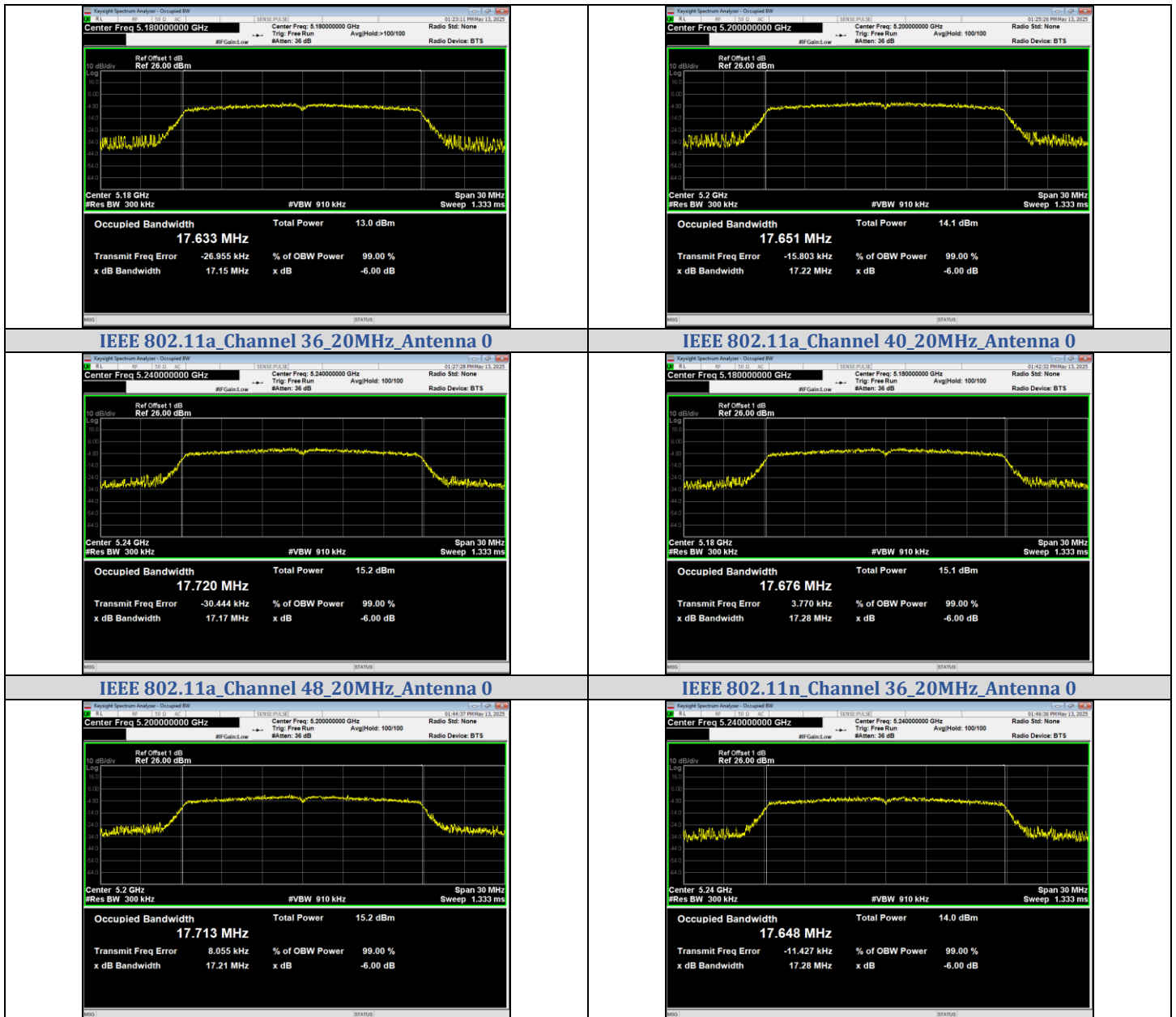


## 6dB Bandwidth

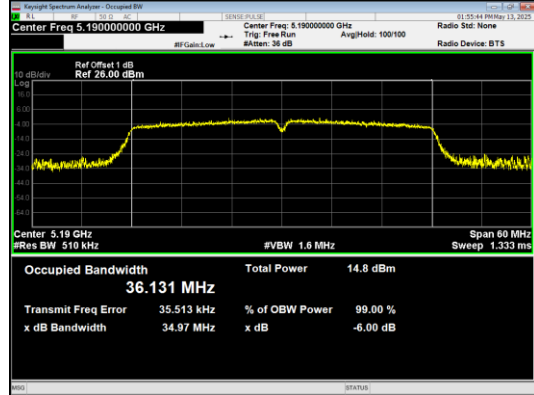
### Test Result

| Mode            | Channel | Center Frequency (MHz) | 6 dB Bandwidth (MHz) | Limit (MHz) | Result |
|-----------------|---------|------------------------|----------------------|-------------|--------|
| IEEE 802.11a    | 36      | 5180                   | 17.15                | ≥0.5        | PASS   |
|                 | 40      | 5200                   | 17.22                |             | PASS   |
|                 | 48      | 5240                   | 17.17                |             | PASS   |
| IEEE 802.11n_20 | 36      | 5180                   | 17.28                |             | PASS   |
|                 | 40      | 5200                   | 17.21                |             | PASS   |
|                 | 48      | 5240                   | 17.28                |             | PASS   |
| IEEE 802.11n_40 | 38      | 5190                   | 34.97                |             | PASS   |
|                 | 46      | 5230                   | 35.35                |             | PASS   |

### Test Graphs

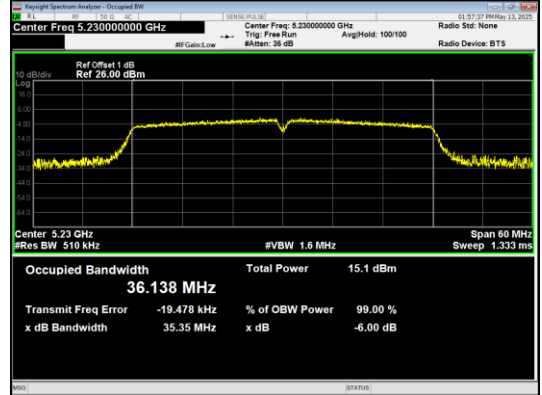


### IEEE 802.11n\_Channel 40\_20MHz\_Antenna 0



### IEEE 802.11n\_Channel 38\_40MHz\_Antenna 0

### IEEE 802.11n\_Channel 48\_20MHz\_Antenna 0



### IEEE 802.11n\_Channel 46\_40MHz\_Antenna 0

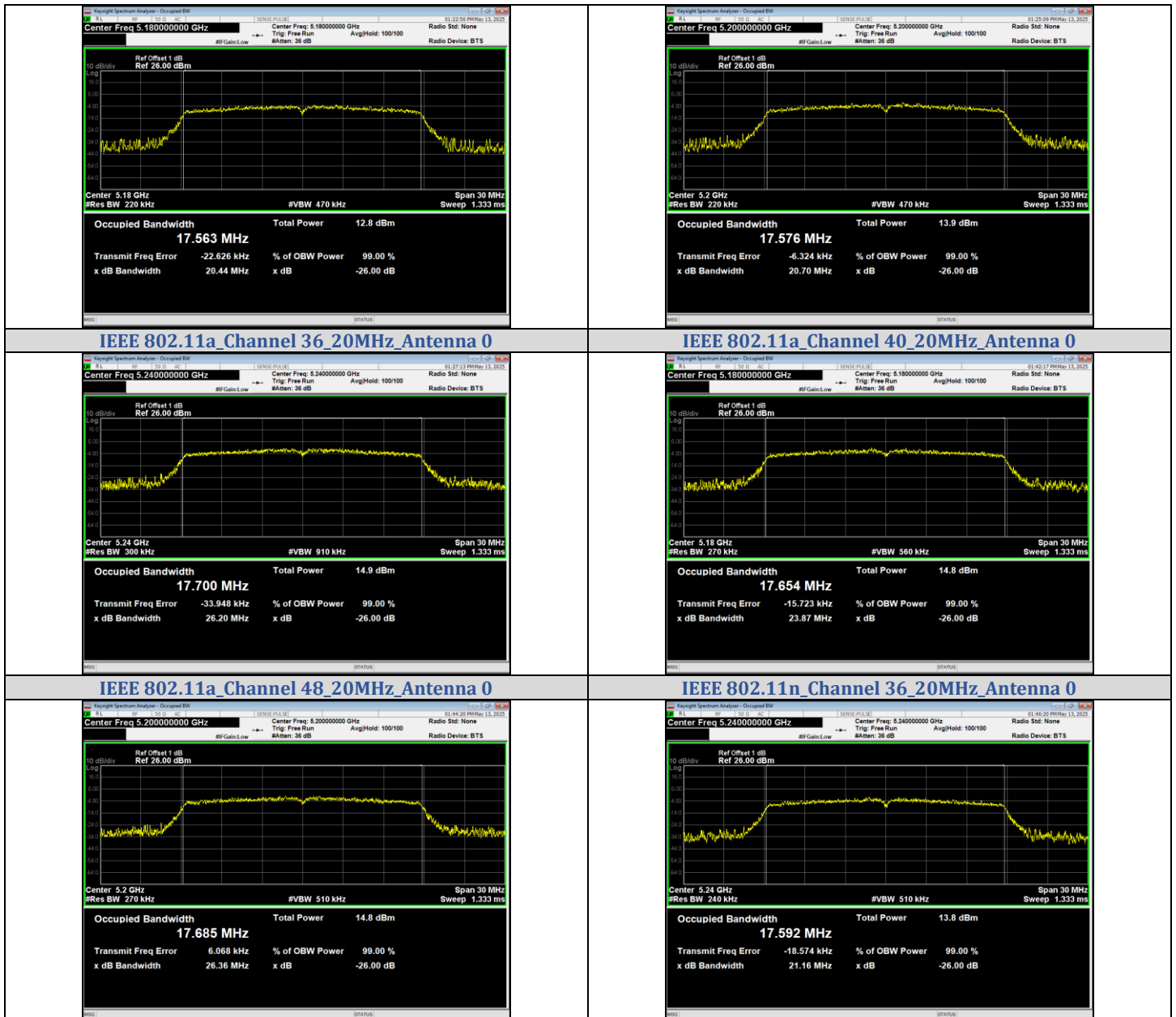


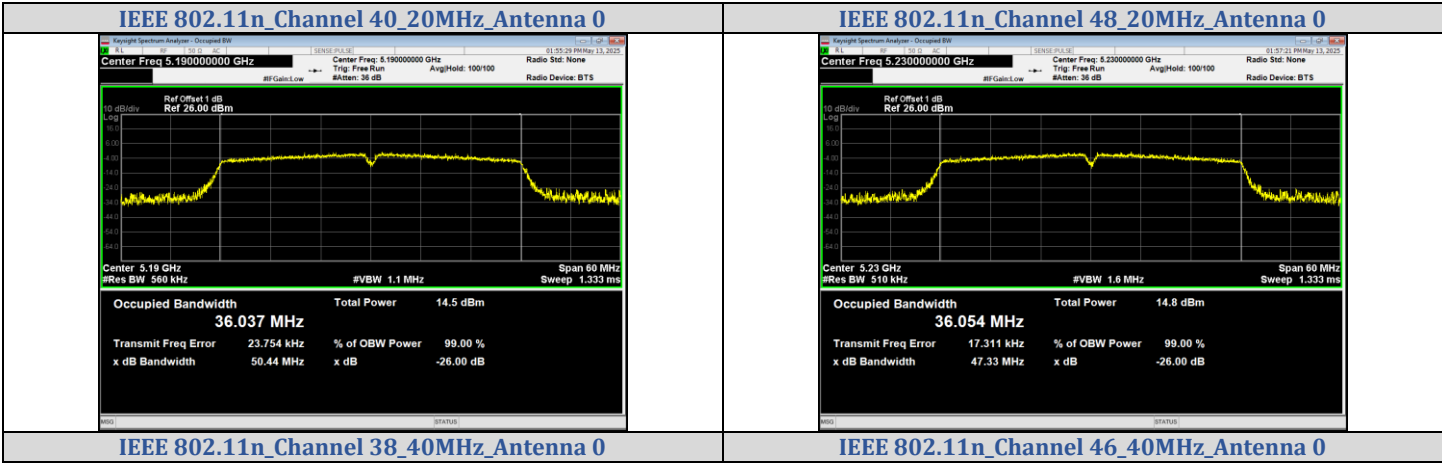
## 26dB Bandwidth

### Test Result

| Mode            | Channel | Center Frequency (MHz) | 26 dB Bandwidth (MHz) | RBW/EBW |
|-----------------|---------|------------------------|-----------------------|---------|
| IEEE 802.11a    | 36      | 5180                   | 20.44                 | 1.1     |
|                 | 40      | 5200                   | 20.70                 | 1.09    |
|                 | 48      | 5240                   | 26.20                 | 1.15    |
| IEEE 802.11n_20 | 36      | 5180                   | 23.87                 | 1.13    |
|                 | 40      | 5200                   | 26.36                 | 1.0     |
|                 | 48      | 5240                   | 21.16                 | 1.18    |
| IEEE 802.11n_40 | 38      | 5190                   | 50.44                 | 1.12    |
|                 | 46      | 5230                   | 47.33                 | 1.08    |

### Test Graphs





## Duty Cycle Test Result

| Mode            | Data rates | Channel | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) | 1/T    |
|-----------------|------------|---------|--------------|-------------|----------------|---------------------|------------------------|--------|
| IEEE 802.11a    | 6          | 36      | 1.303        | 1.346       | 96.85          | 0.9685              | 0.139                  | 0.7675 |
|                 |            | 40      | 1.304        | 1.345       | 96.95          | 0.9695              | 0.1345                 | 0.7669 |
|                 |            | 48      | 1.304        | 1.345       | 96.95          | 0.9695              | 0.1345                 | 0.7669 |
| IEEE 802.11n_20 | MCS 0      | 36      | 1.291        | 1.333       | 96.82          | 0.9682              | 0.1403                 | 0.7746 |
|                 |            | 40      | 1.292        | 1.333       | 96.88          | 0.9688              | 0.1377                 | 0.7740 |
|                 |            | 48      | 1.292        | 1.334       | 96.85          | 0.9685              | 0.139                  | 0.7740 |
| IEEE 802.11n_40 |            | 38      | 0.638        | 0.681       | 93.75          | 0.9375              | 0.2803                 | 1.5674 |
|                 |            | 46      | 0.638        | 0.680       | 93.75          | 0.9375              | 0.2803                 | 1.5674 |

## Test Graphs





IEEE 802.11n\_40MHz\_Channel 38

IEEE 802.11n\_40MHz\_Channel 46

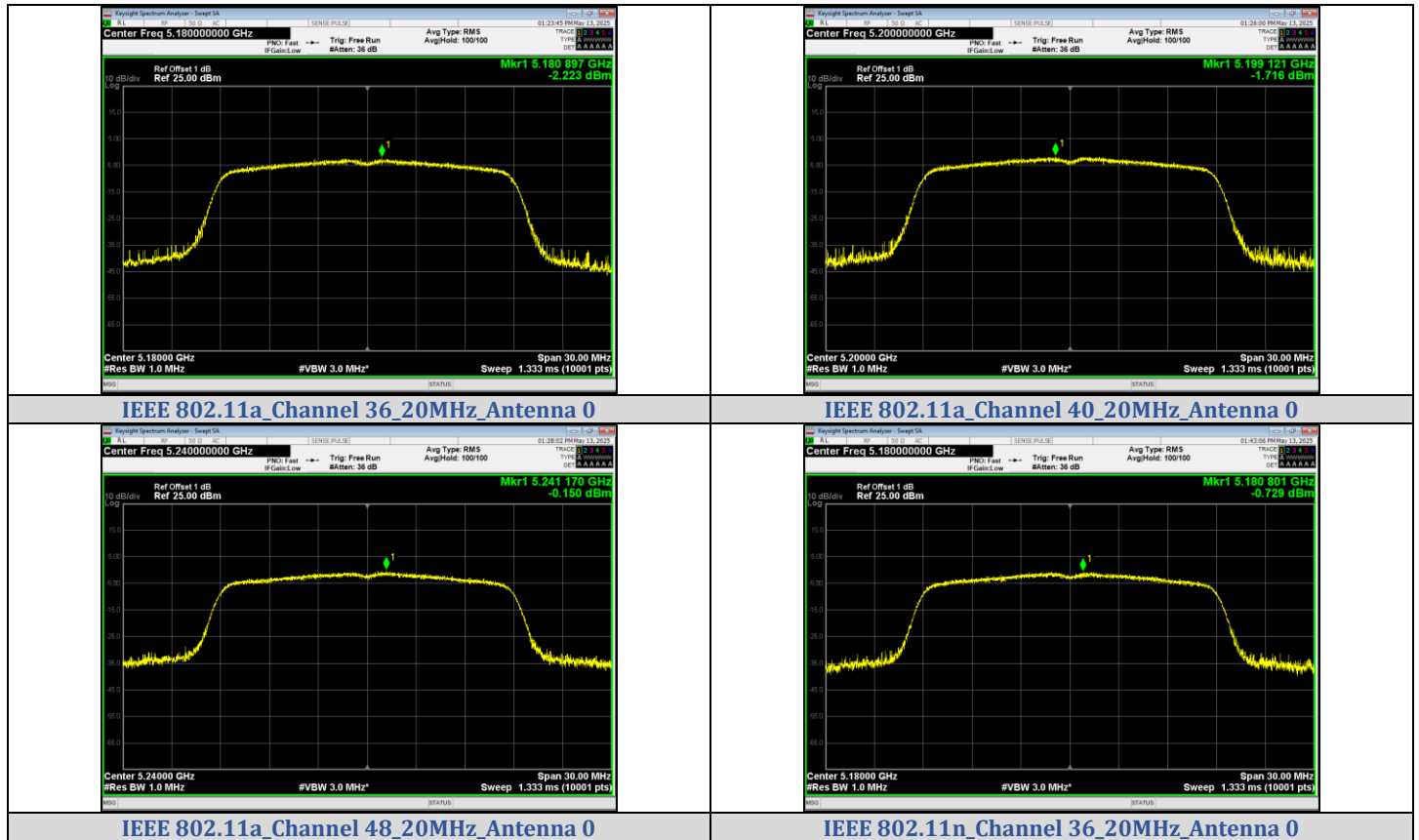


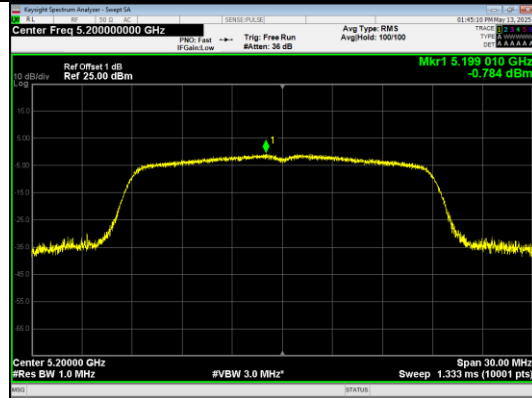
## Peak Power Spectral Density

### Test Result

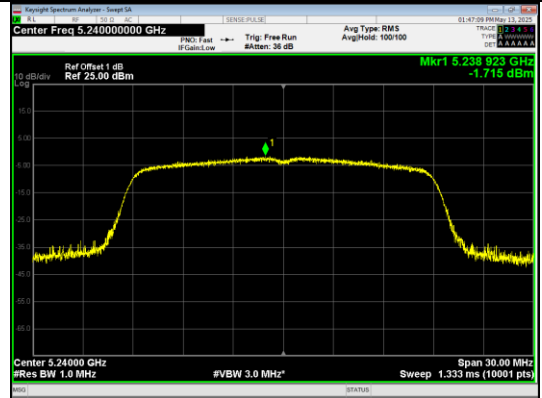
| Mode            | Channel | Ant. 0<br>Meas PSD<br>(dBm/MHz or<br>dBm/0.5MHz) | Ant. 0<br>Corr'd PSD<br>(dBm/MHz or<br>dBm/0.5MHz) | Limit<br>(dBm/MHz or<br>dBm/0.5MHz) | Result |
|-----------------|---------|--------------------------------------------------|----------------------------------------------------|-------------------------------------|--------|
| IEEE 802.11a    | 36      | -2.223                                           | -2.088                                             | 11                                  | PASS   |
|                 | 40      | -1.716                                           | -1.581                                             |                                     | PASS   |
|                 | 48      | -0.150                                           | -0.015                                             |                                     | PASS   |
| IEEE 802.11n_20 | 36      | -0.729                                           | -0.59                                              |                                     | PASS   |
|                 | 40      | -0.784                                           | -0.645                                             |                                     | PASS   |
|                 | 48      | -1.715                                           | -1.576                                             |                                     | PASS   |
| IEEE 802.11n_40 | 38      | -4.119                                           | -3.839                                             |                                     | PASS   |
|                 | 46      | -3.899                                           | -3.619                                             |                                     | PASS   |

### Test Graphs

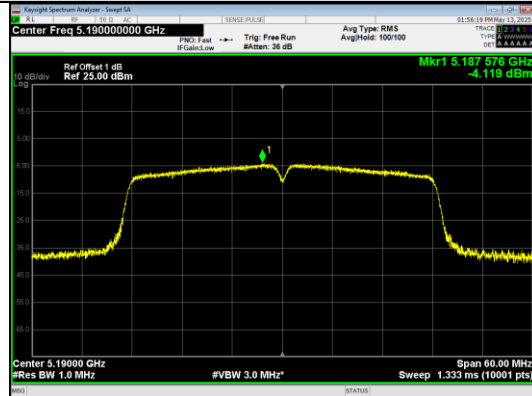




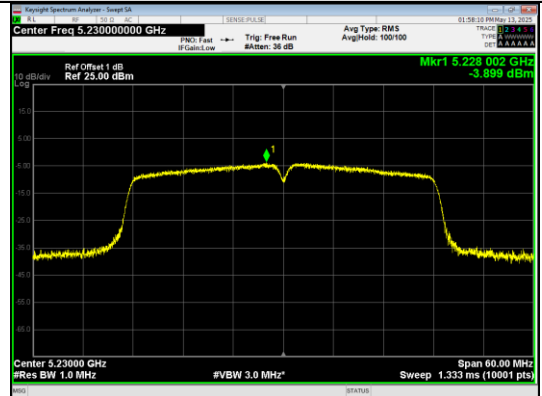
IEEE 802.11n\_Channel 40\_20MHz\_Antenna 0



IEEE 802.11n\_Channel 48\_20MHz\_Antenna 0



IEEE 802.11n\_Channel 38\_40MHz\_Antenna 0



IEEE 802.11n\_Channel 46\_40MHz\_Antenna 0