

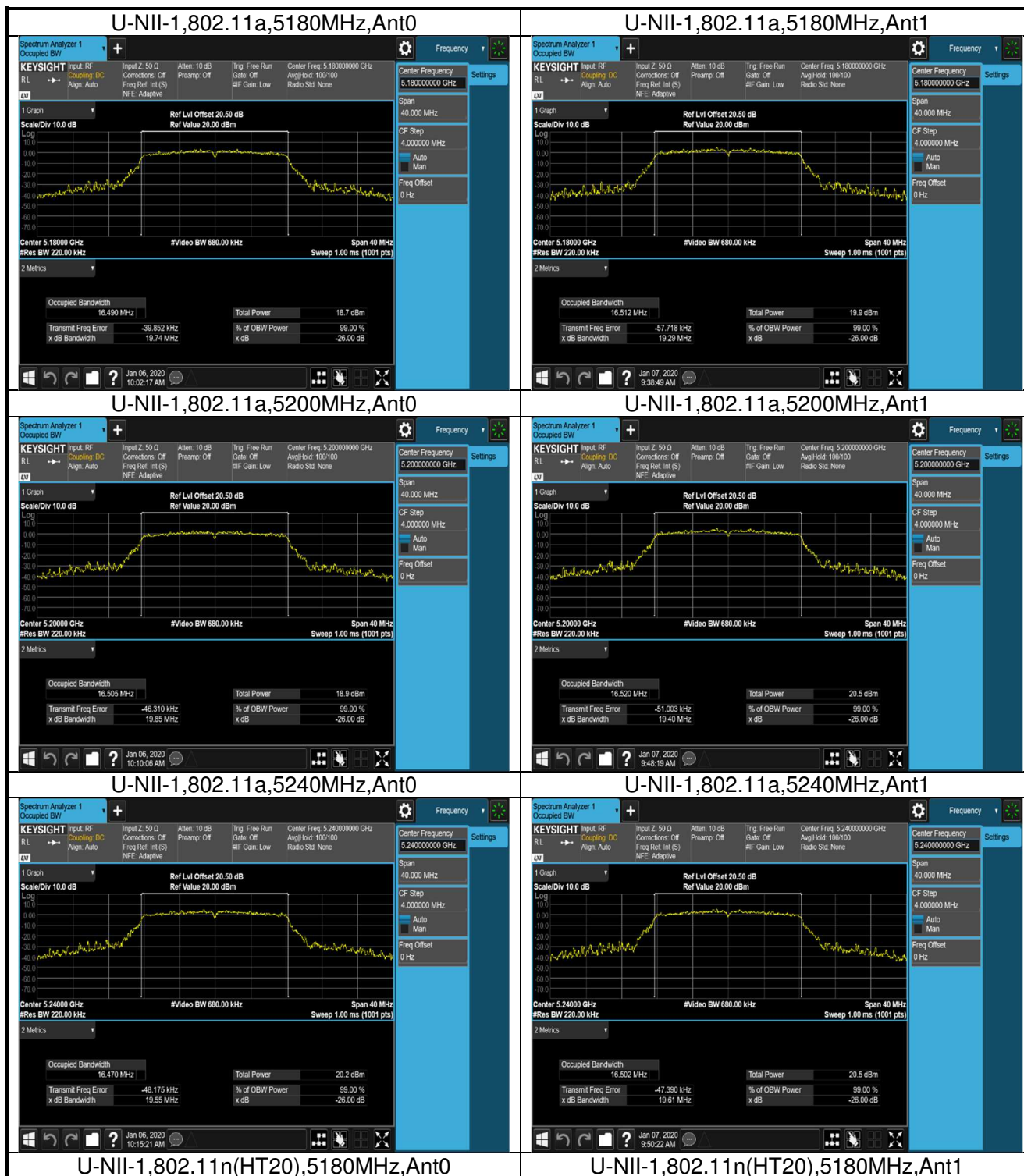
## Appendix A: Test results

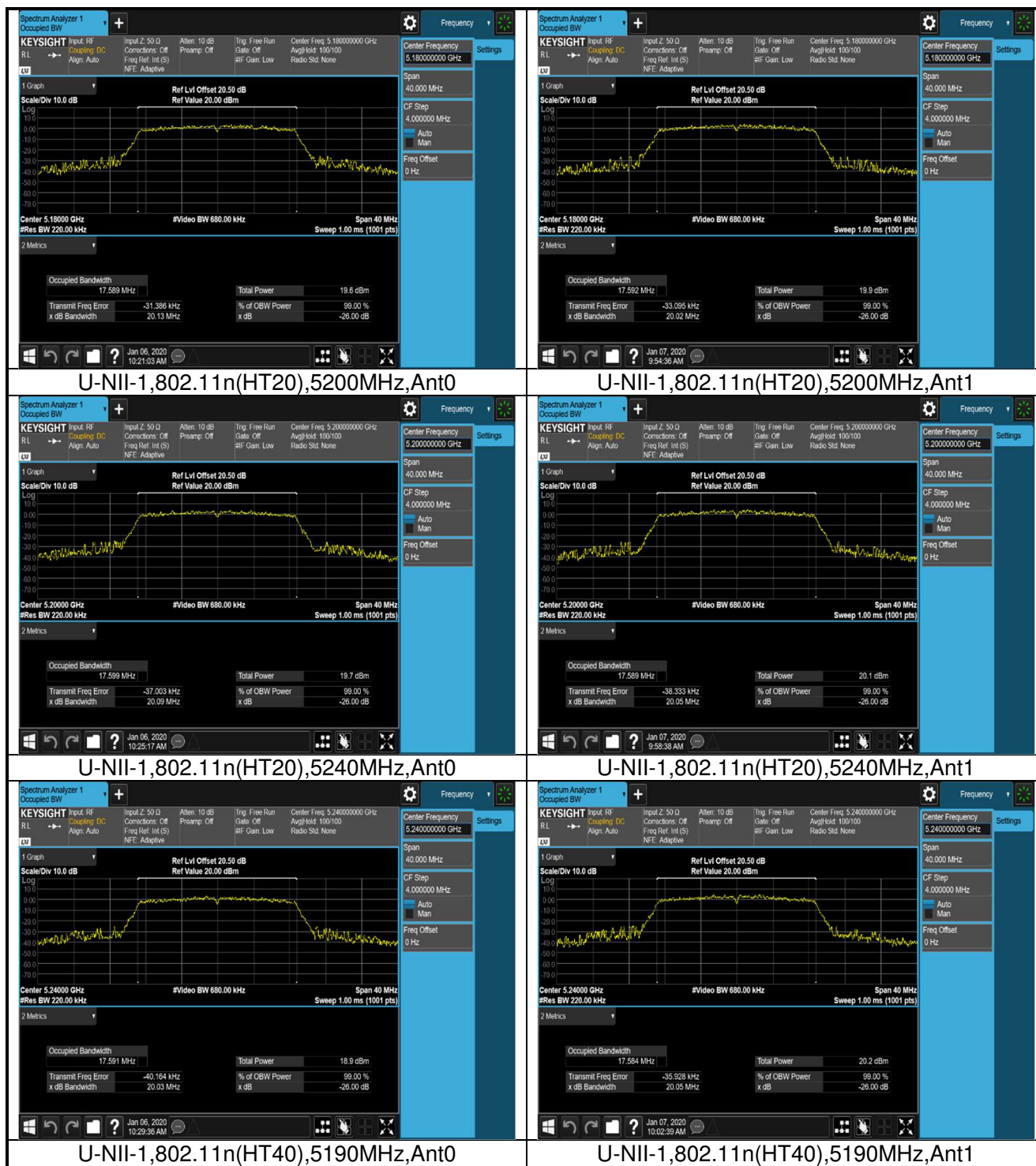
### 1. Occupied 26dB Bandwidth

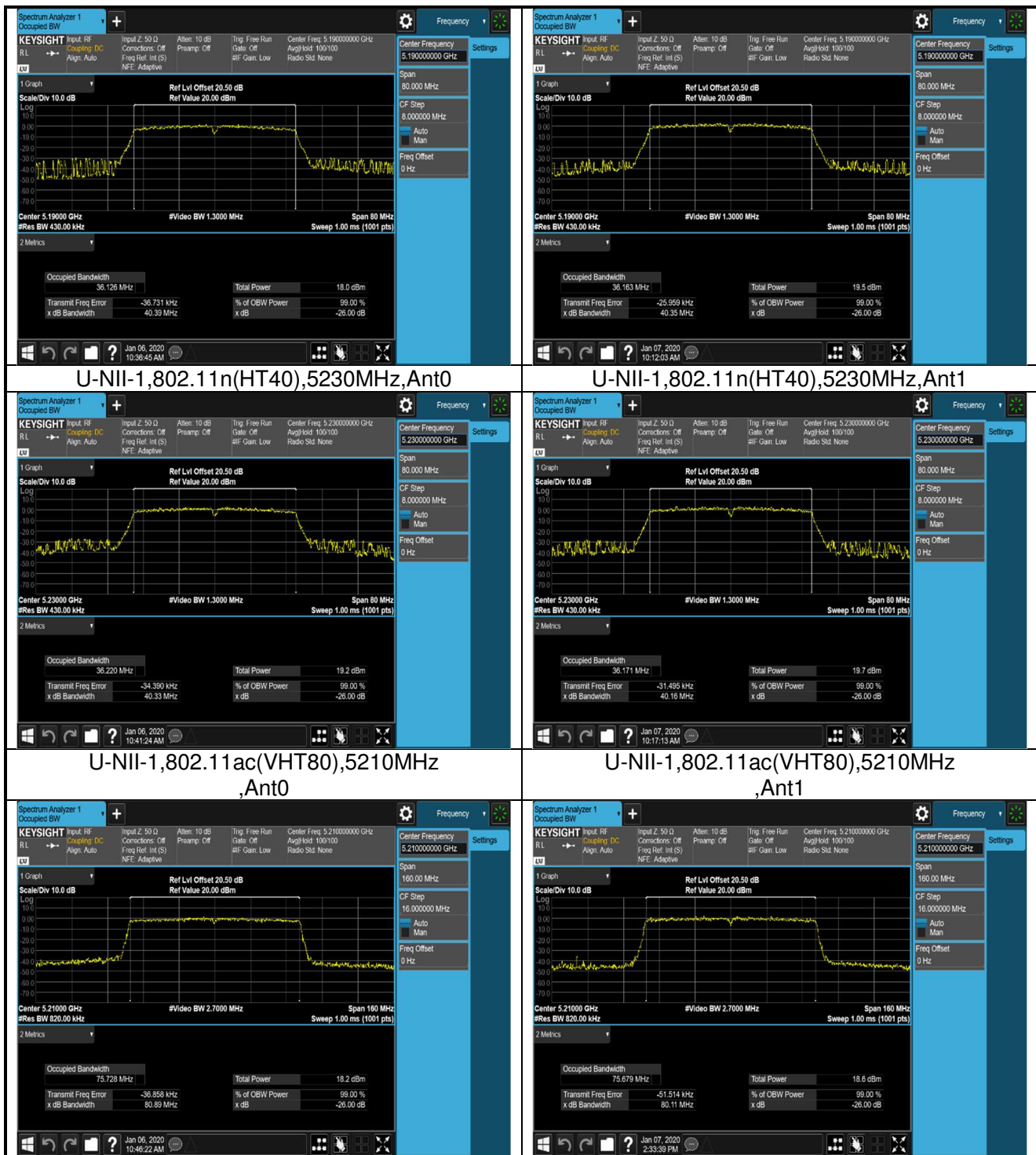
#### 1.1 Test Data

| U-NII-1 Occupied 26dB Bandwidth |                      |      |                          |        |
|---------------------------------|----------------------|------|--------------------------|--------|
| Mode                            | Test Frequency (MHz) | Ant  | Occupied Bandwidth (MHz) | Result |
| 802.11a                         | 5180                 | Ant0 | 19.74                    | Pass   |
| 802.11a                         | 5180                 | Ant1 | 19.29                    | Pass   |
| 802.11a                         | 5200                 | Ant0 | 19.85                    | Pass   |
| 802.11a                         | 5200                 | Ant1 | 19.40                    | Pass   |
| 802.11a                         | 5240                 | Ant0 | 19.55                    | Pass   |
| 802.11a                         | 5240                 | Ant1 | 19.61                    | Pass   |
| 802.11n (HT20)                  | 5180                 | Ant0 | 20.13                    | Pass   |
| 802.11n (HT20)                  | 5180                 | Ant1 | 20.02                    | Pass   |
| 802.11n (HT20)                  | 5200                 | Ant0 | 20.09                    | Pass   |
| 802.11n (HT20)                  | 5200                 | Ant1 | 20.05                    | Pass   |
| 802.11n (HT20)                  | 5240                 | Ant0 | 20.03                    | Pass   |
| 802.11n (HT20)                  | 5240                 | Ant1 | 20.05                    | Pass   |
| 802.11n (HT40)                  | 5190                 | Ant0 | 40.39                    | Pass   |
| 802.11n (HT40)                  | 5190                 | Ant1 | 40.35                    | Pass   |
| 802.11n (HT40)                  | 5230                 | Ant0 | 40.33                    | Pass   |
| 802.11n (HT40)                  | 5230                 | Ant1 | 40.16                    | Pass   |
| 802.11ac (VHT80)                | 5210                 | Ant0 | 80.89                    | Pass   |
| 802.11ac (VHT80)                | 5210                 | Ant1 | 80.11                    | Pass   |

## 1.2 Test Plots







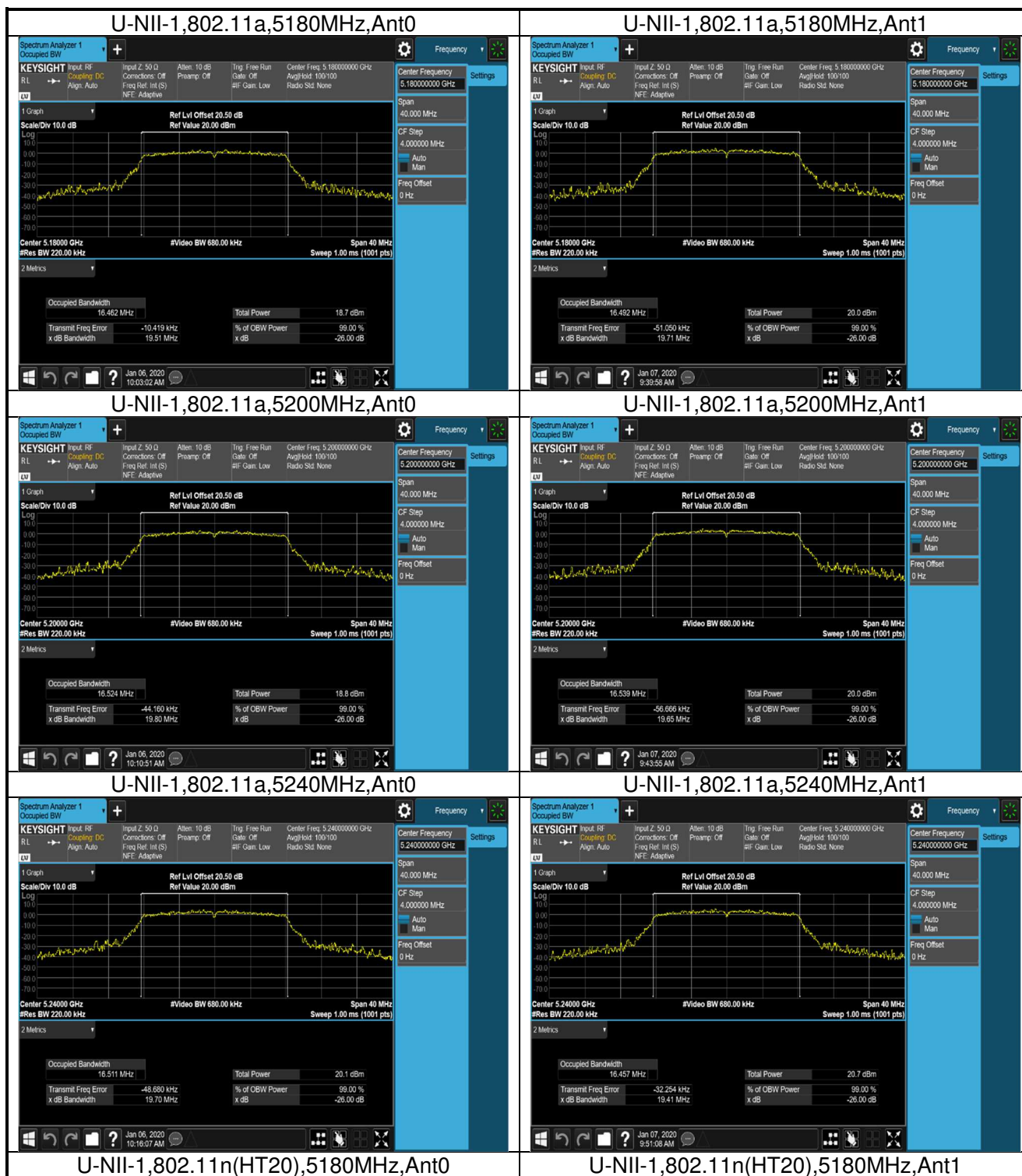
## 2. 99% Occupied Bandwidth

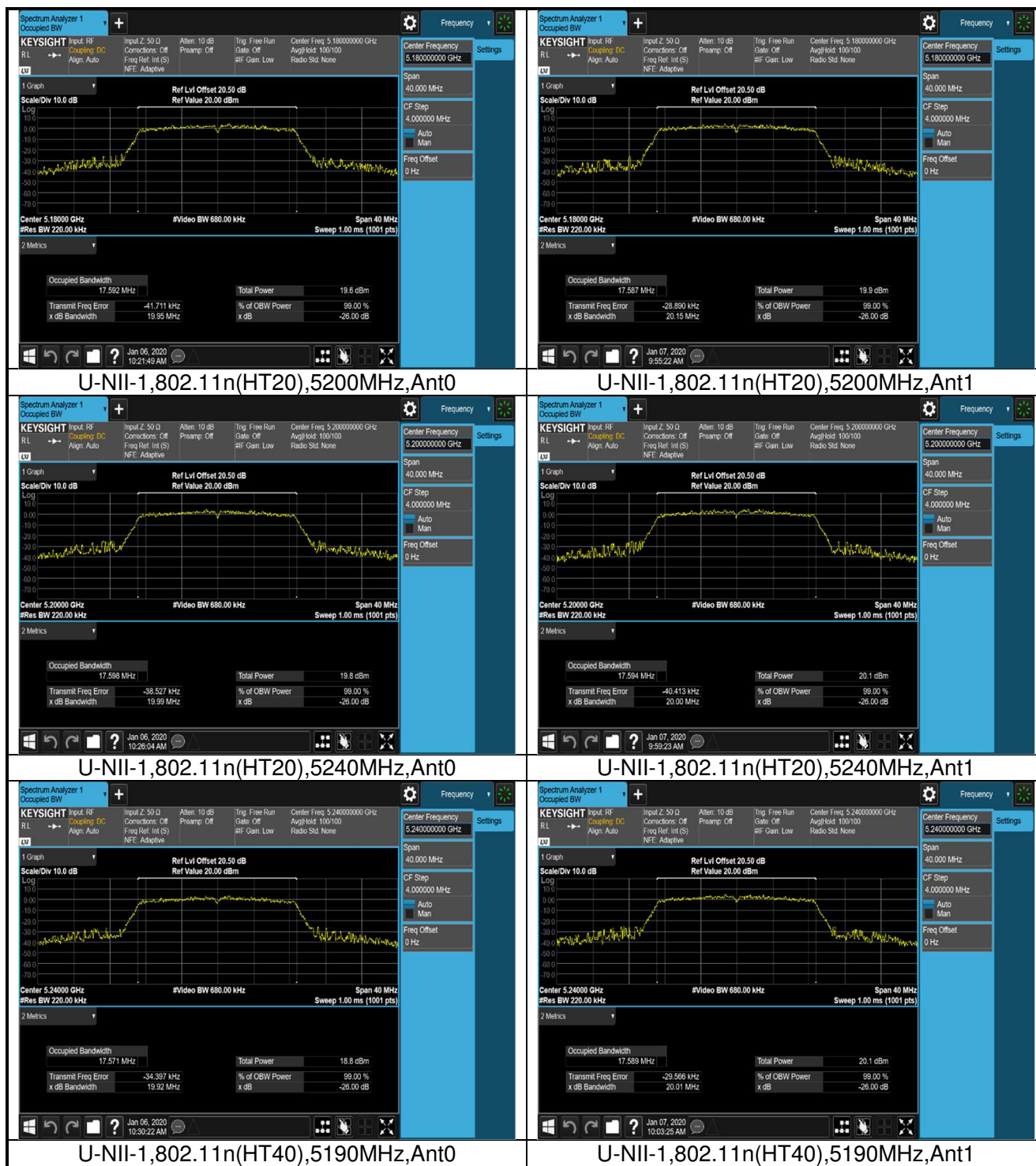
### 2.1 Test Data

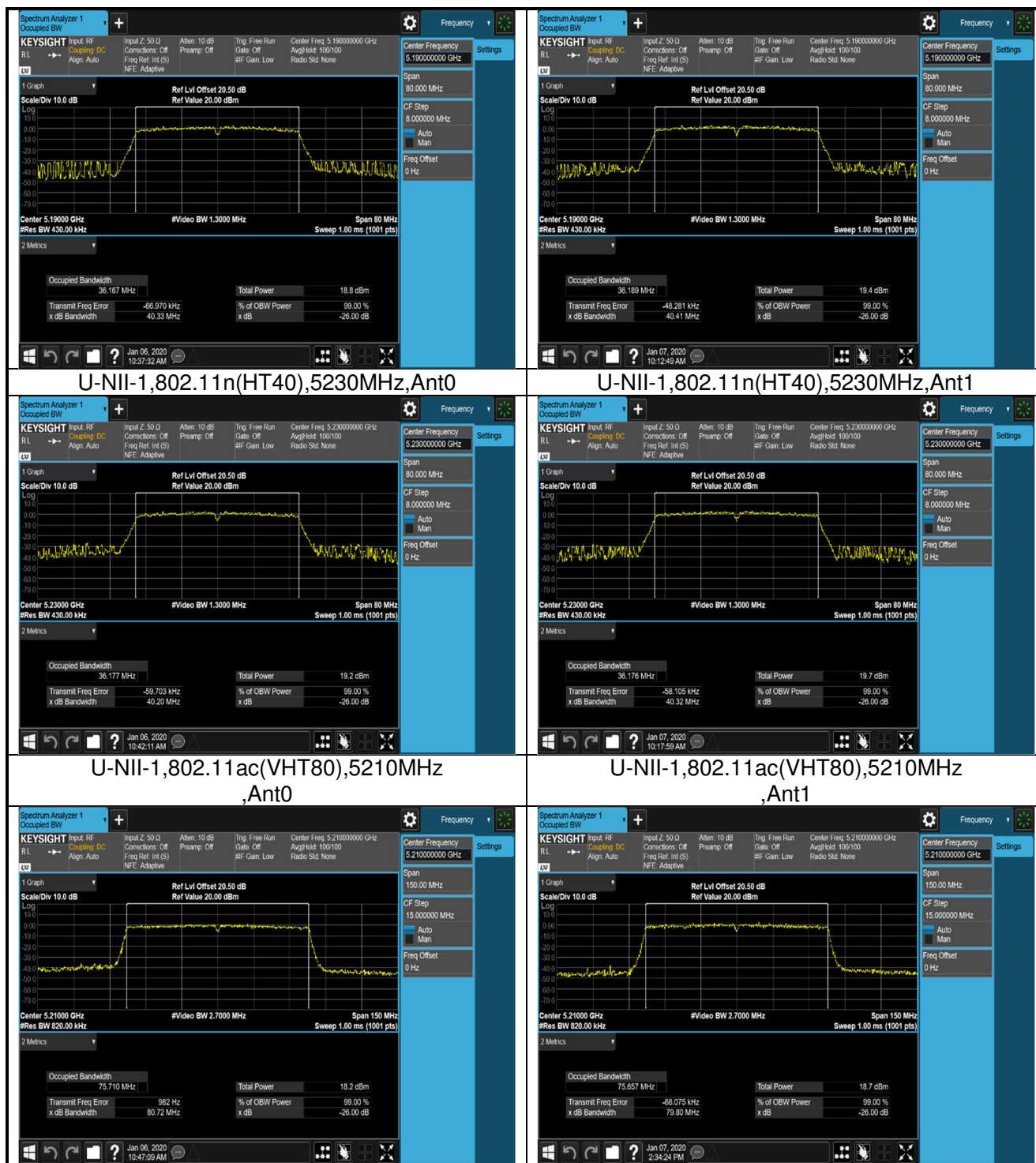
| U-NII-1 99% Occupied Bandwidth |                      |      |                              |        |
|--------------------------------|----------------------|------|------------------------------|--------|
| Mode                           | Test Frequency (MHz) | Ant  | 99% Occupied Bandwidth (MHz) | Result |
| 802.11a                        | 5180                 | Ant0 | 16.462                       | Pass   |
| 802.11a                        | 5180                 | Ant1 | 16.492                       | Pass   |
| 802.11a                        | 5200                 | Ant0 | 16.524                       | Pass   |
| 802.11a                        | 5200                 | Ant1 | 16.539                       | Pass   |
| 802.11a                        | 5240                 | Ant0 | 16.511                       | Pass   |
| 802.11a                        | 5240                 | Ant1 | 16.457                       | Pass   |
| 802.11n (HT20)                 | 5180                 | Ant0 | 17.592                       | Pass   |
| 802.11n (HT20)                 | 5180                 | Ant1 | 17.587                       | Pass   |
| 802.11n (HT20)                 | 5200                 | Ant0 | 17.598                       | Pass   |
| 802.11n (HT20)                 | 5200                 | Ant1 | 17.594                       | Pass   |
| 802.11n (HT20)                 | 5240                 | Ant0 | 17.571                       | Pass   |
| 802.11n (HT20)                 | 5240                 | Ant1 | 17.589                       | Pass   |
| 802.11n (HT40)                 | 5190                 | Ant0 | 36.167                       | Pass   |
| 802.11n (HT40)                 | 5190                 | Ant1 | 36.189                       | Pass   |
| 802.11n (HT40)                 | 5230                 | Ant0 | 36.177                       | Pass   |
| 802.11n (HT40)                 | 5230                 | Ant1 | 36.176                       | Pass   |
| 802.11ac (VHT80)               | 5210                 | Ant0 | 75.710                       | Pass   |
| 802.11ac (VHT80)               | 5210                 | Ant1 | 75.657                       | Pass   |



## 2.2 Test Plots







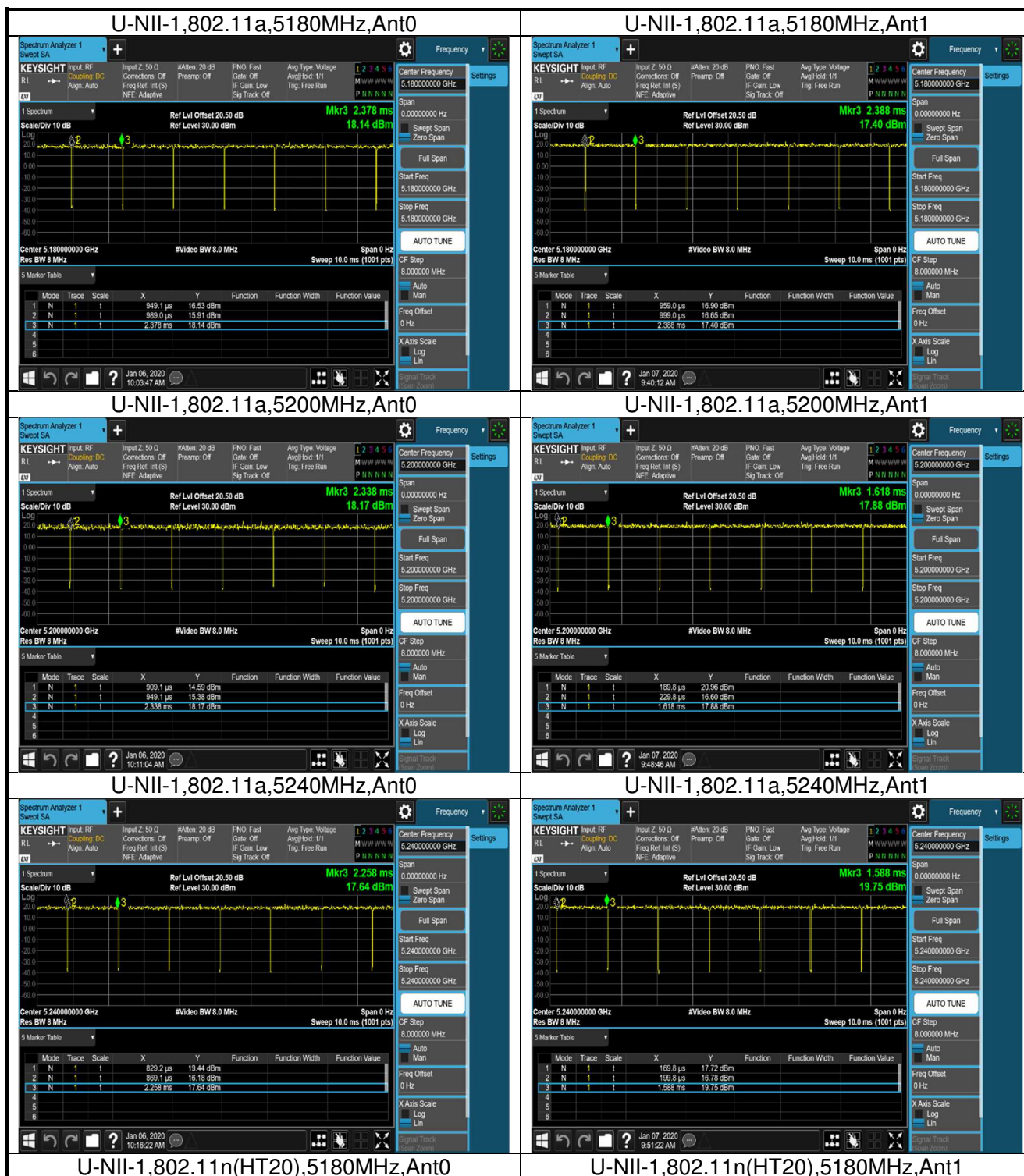


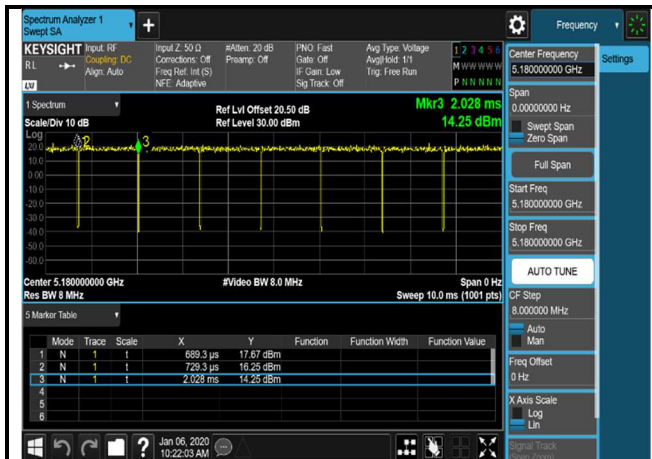
### 3. Duty Cycle

#### 3.1 Test Data

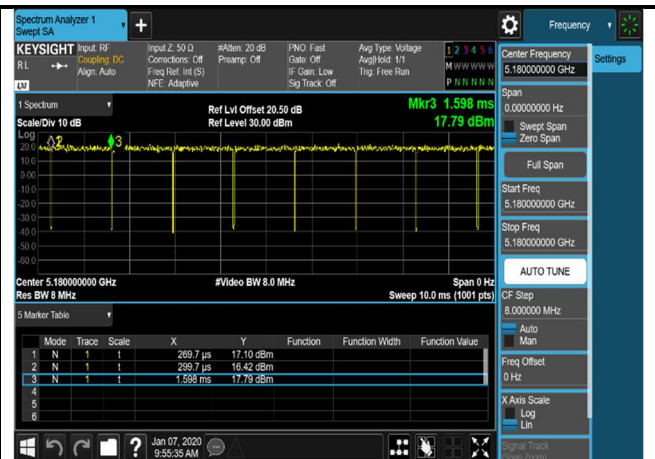
| U-NII-1 Duty Cycle |                      |      |                |                        |
|--------------------|----------------------|------|----------------|------------------------|
| Mode               | Test Frequency (MHz) | Ant  | Duty Cycle (%) | Duty Cycle Factor (dB) |
| 802.11a            | 5180                 | Ant0 | 97.20          | 0.12                   |
| 802.11a            | 5180                 | Ant1 | 97.20          | 0.12                   |
| 802.11a            | 5200                 | Ant0 | 97.20          | 0.12                   |
| 802.11a            | 5200                 | Ant1 | 97.20          | 0.12                   |
| 802.11a            | 5240                 | Ant0 | 97.20          | 0.12                   |
| 802.11a            | 5240                 | Ant1 | 97.89          | 0.09                   |
| 802.11n (HT20)     | 5180                 | Ant0 | 97.01          | 0.13                   |
| 802.11n (HT20)     | 5180                 | Ant1 | 97.74          | 0.10                   |
| 802.11n (HT20)     | 5200                 | Ant0 | 97.74          | 0.10                   |
| 802.11n (HT20)     | 5200                 | Ant1 | 97.01          | 0.13                   |
| 802.11n (HT20)     | 5240                 | Ant0 | 97.74          | 0.10                   |
| 802.11n (HT20)     | 5240                 | Ant1 | 97.01          | 0.13                   |
| 802.11n (HT40)     | 5190                 | Ant0 | 94.12          | 0.26                   |
| 802.11n (HT40)     | 5190                 | Ant1 | 94.20          | 0.26                   |
| 802.11n (HT40)     | 5230                 | Ant0 | 94.20          | 0.26                   |
| 802.11n (HT40)     | 5230                 | Ant1 | 95.59          | 0.20                   |
| 802.11ac (VHT80)   | 5210                 | Ant0 | 84.34          | 0.74                   |
| 802.11ac (VHT80)   | 5210                 | Ant1 | 84.34          | 0.74                   |

### 3.2 Test Plots

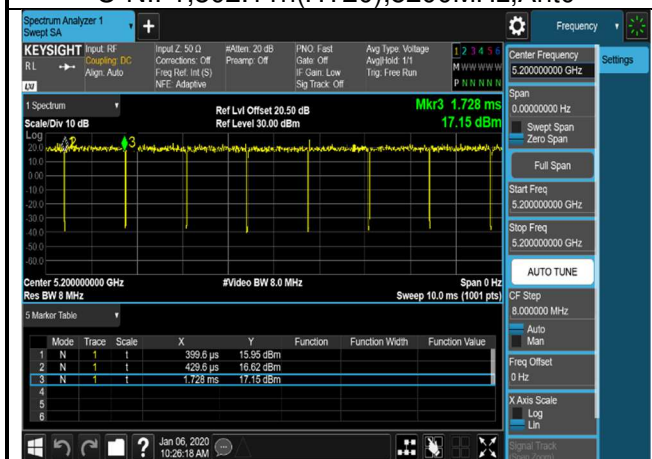




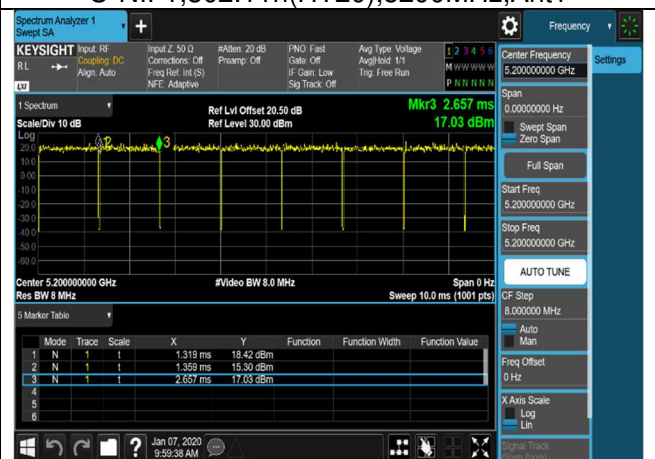
U-NII-1,802.11n(HT20),5200MHz,Ant0



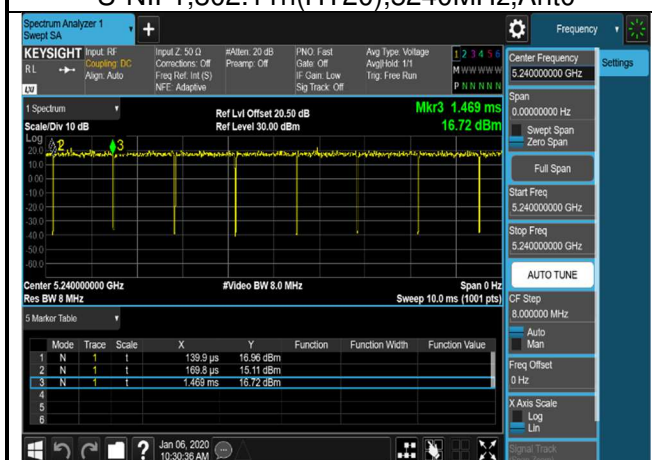
U-NII-1,802.11n(HT20),5200MHz,Ant1



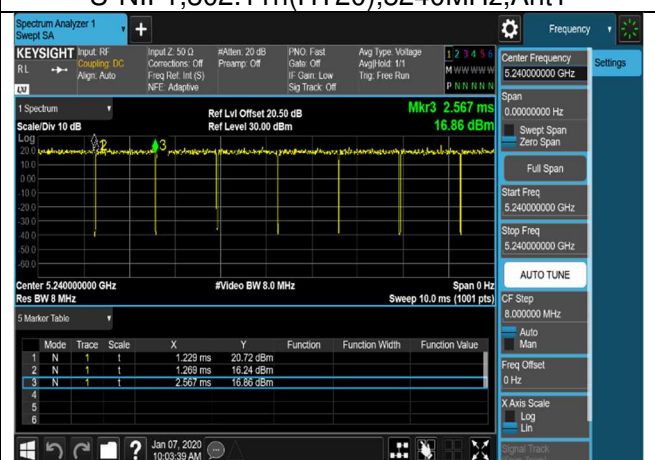
U-NII-1,802.11n(HT20),5240MHz,Ant0



U-NII-1,802.11n(HT20),5240MHz,Ant1

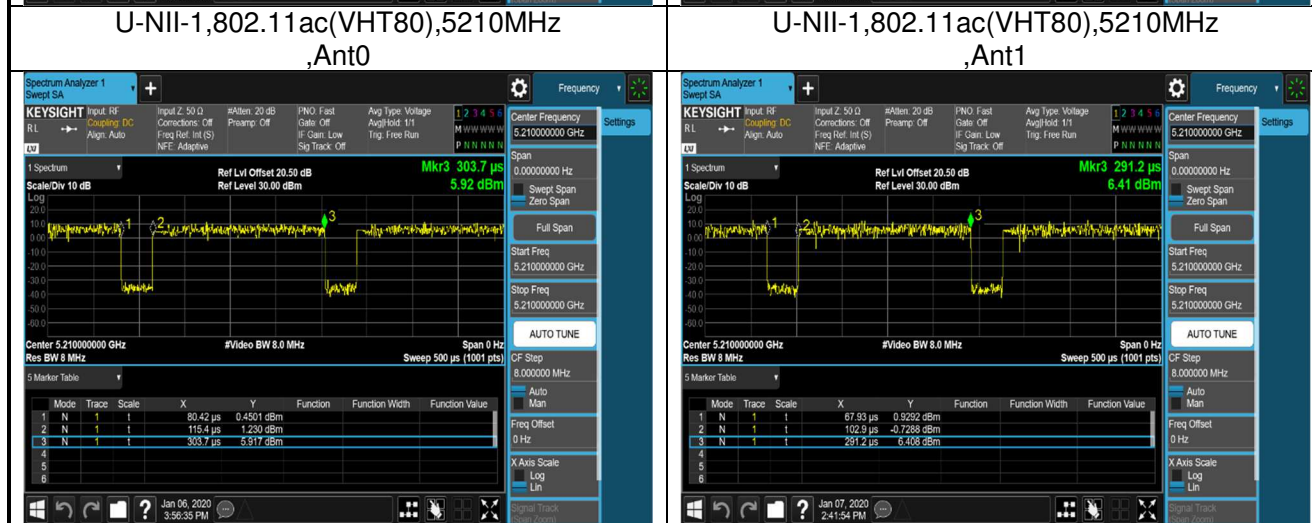
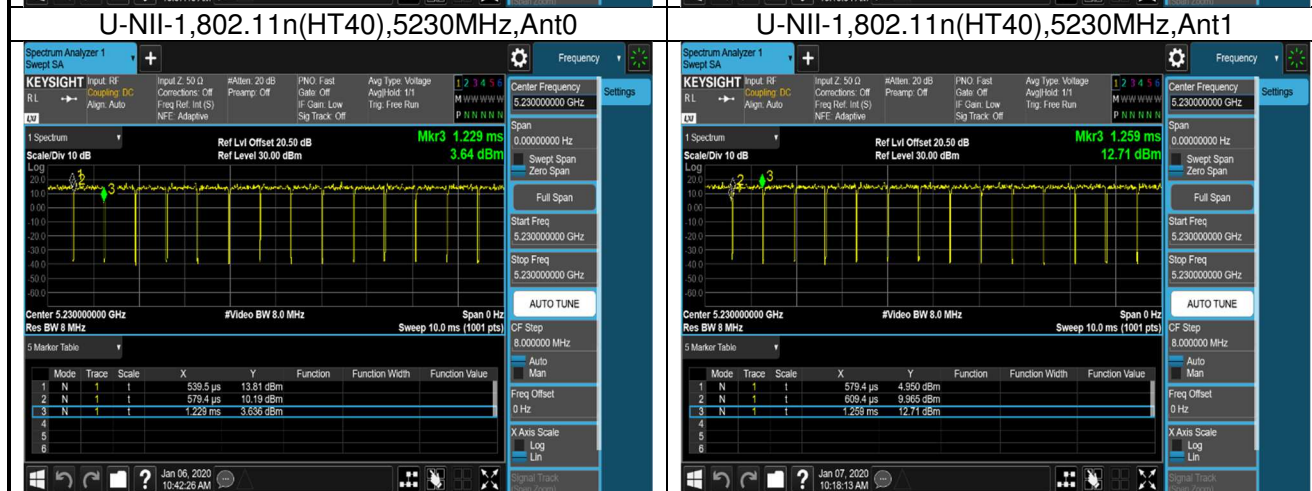
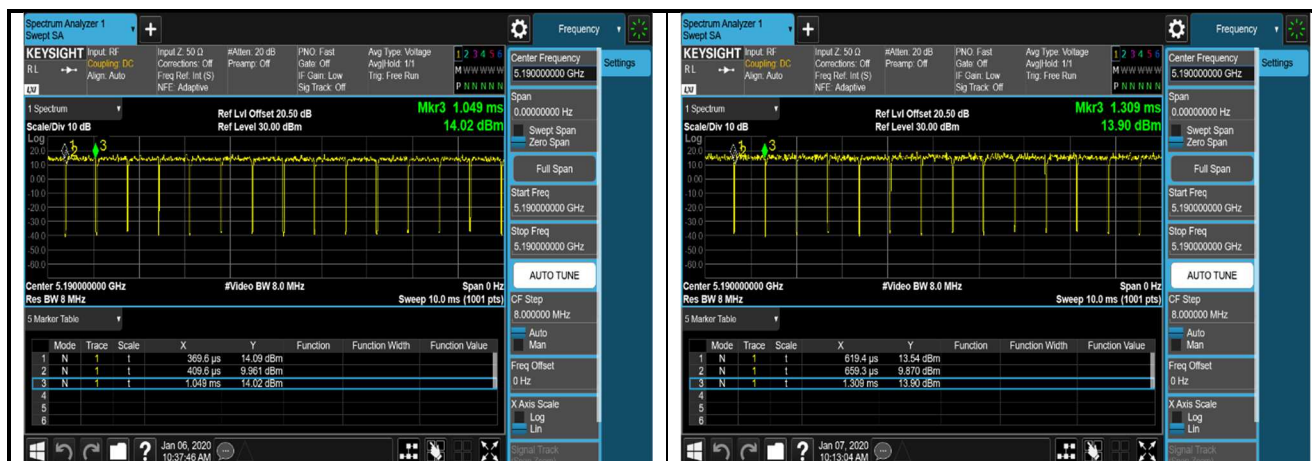


U-NII-1,802.11n(HT40),5190MHz,Ant0



U-NII-1,802.11n(HT40),5190MHz,Ant1







#### 4. AVGSA Output Power

##### 4.1 Test Data

| U-NII-1 AVGSA Output Power |                      |      |                        |                 |                   |                       |            |                     |        |
|----------------------------|----------------------|------|------------------------|-----------------|-------------------|-----------------------|------------|---------------------|--------|
| Mode                       | Test Frequency (MHz) | Ant  | Duty Cycle Factor (dB) | Max Power (dBm) | Total Power (dBm) | FCC Power Limit (dBm) | EIRP (dBm) | IC EIRP Limit (dBm) | Result |
| 802.11a                    | 5180                 | Ant0 | 0.12                   | 14.26           | 14.26             | 24                    | 15.87      | 22                  | Pass   |
| 802.11a                    | 5180                 | Ant1 | 0.12                   | 14.42           | 14.42             | 24                    | 14.57      | 22                  | Pass   |
| 802.11a                    | 5200                 | Ant0 | 0.12                   | 13.06           | 13.06             | 24                    | 14.67      | 22                  | Pass   |
| 802.11a                    | 5200                 | Ant1 | 0.12                   | 14.81           | 14.81             | 24                    | 14.96      | 22                  | Pass   |
| 802.11a                    | 5240                 | Ant0 | 0.12                   | 14.50           | 14.50             | 24                    | 16.11      | 22                  | Pass   |
| 802.11a                    | 5240                 | Ant1 | 0.09                   | 14.87           | 14.87             | 24                    | 15.02      | 22                  | Pass   |
| 802.11n (HT20)             | 5180                 | Ant0 | 0.13                   | 13.77           | 16.93             | 24                    | 17.87      | 22                  | Pass   |
| 802.11n (HT20)             | 5180                 | Ant1 | 0.10                   | 14.06           |                   |                       |            |                     |        |
| 802.11n (HT20)             | 5200                 | Ant0 | 0.10                   | 13.94           | 17.12             | 24                    | 18.06      | 22                  | Pass   |
| 802.11n (HT20)             | 5200                 | Ant1 | 0.13                   | 14.27           |                   |                       |            |                     |        |
| 802.11n (HT20)             | 5240                 | Ant0 | 0.10                   | 12.90           | 16.65             | 24                    | 17.60      | 22                  | Pass   |
| 802.11n (HT20)             | 5240                 | Ant1 | 0.13                   | 14.28           |                   |                       |            |                     |        |
| 802.11n (HT40)             | 5190                 | Ant0 | 0.26                   | 13.22           | 16.46             | 24                    | 17.40      | 23                  | Pass   |
| 802.11n (HT40)             | 5190                 | Ant1 | 0.26                   | 13.67           |                   |                       |            |                     |        |
| 802.11n (HT40)             | 5230                 | Ant0 | 0.26                   | 13.36           | 16.54             | 24                    | 17.49      | 23                  | Pass   |
| 802.11n (HT40)             | 5230                 | Ant1 | 0.20                   | 13.70           |                   |                       |            |                     |        |
| 802.11ac VHT80)            | 5210                 | Ant0 | 0.74                   | 9.95            | 12.90             | 24                    | 13.84      | 23                  | Pass   |
| 802.11ac VHT80)            | 5210                 | Ant1 | 0.75                   | 9.83            |                   |                       |            |                     |        |

## 4.2 Test Plots

