

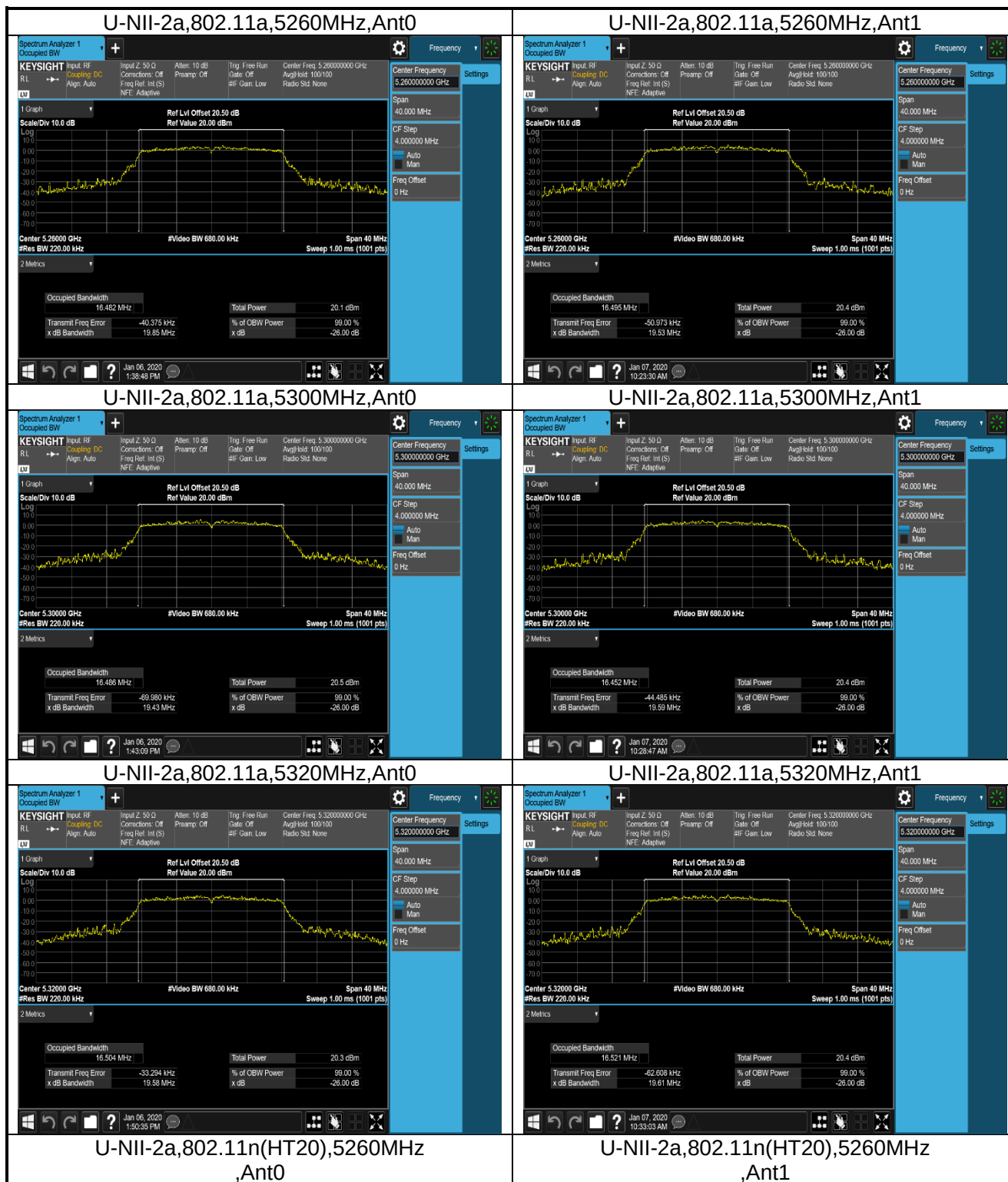
## Appendix A: Test results

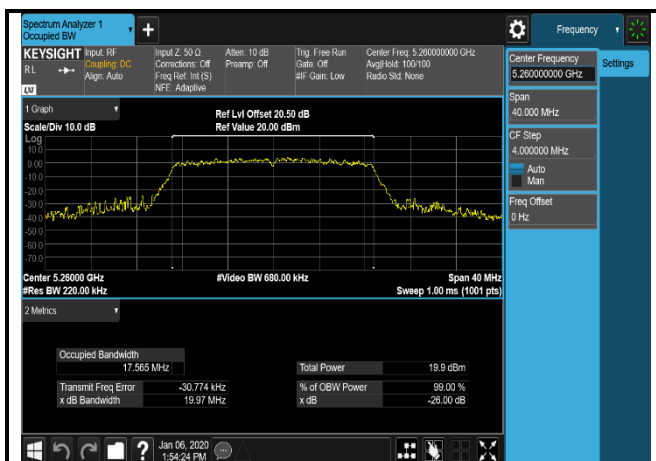
### 1. Occupied N dB Bandwidth

#### 1.1 Test Data

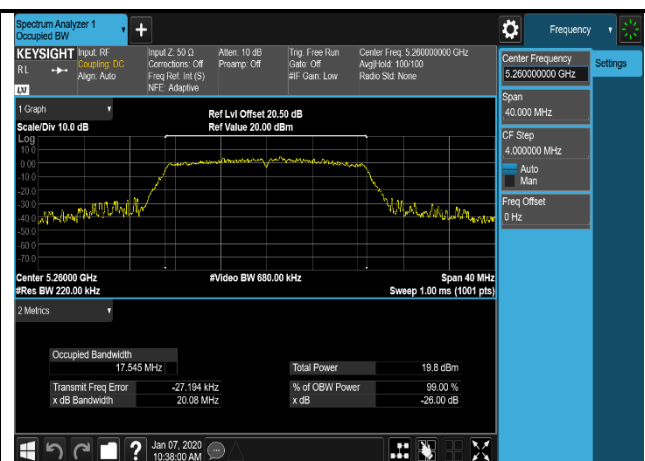
| U-NII-2a Occupied N dB Bandwidth |                      |      |                          |        |
|----------------------------------|----------------------|------|--------------------------|--------|
| Mode                             | Test Frequency (MHz) | Ant  | Occupied Bandwidth (MHz) | Result |
| 802.11a                          | 5260                 | Ant0 | 19.85                    | Pass   |
| 802.11a                          | 5260                 | Ant1 | 19.53                    | Pass   |
| 802.11a                          | 5300                 | Ant0 | 19.43                    | Pass   |
| 802.11a                          | 5300                 | Ant1 | 19.59                    | Pass   |
| 802.11a                          | 5320                 | Ant0 | 19.58                    | Pass   |
| 802.11a                          | 5320                 | Ant1 | 19.61                    | Pass   |
| 802.11n (HT20)                   | 5260                 | Ant0 | 19.97                    | Pass   |
| 802.11n (HT20)                   | 5260                 | Ant1 | 20.08                    | Pass   |
| 802.11n (HT20)                   | 5300                 | Ant0 | 20.03                    | Pass   |
| 802.11n (HT20)                   | 5300                 | Ant1 | 20.17                    | Pass   |
| 802.11n (HT20)                   | 5320                 | Ant0 | 20.10                    | Pass   |
| 802.11n (HT20)                   | 5320                 | Ant1 | 20.23                    | Pass   |
| 802.11n (HT40)                   | 5270                 | Ant0 | 40.04                    | Pass   |
| 802.11n (HT40)                   | 5270                 | Ant1 | 40.26                    | Pass   |
| 802.11n (HT40)                   | 5310                 | Ant0 | 40.19                    | Pass   |
| 802.11n (HT40)                   | 5310                 | Ant1 | 40.33                    | Pass   |
| 802.11ac (VHT80)                 | 5290                 | Ant0 | 80.58                    | Pass   |
| 802.11ac (VHT80)                 | 5290                 | Ant1 | 79.99                    | Pass   |

## 1.2 Test Plots

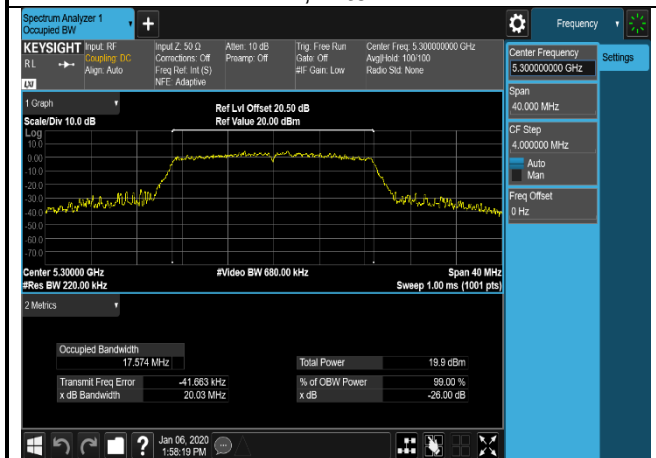




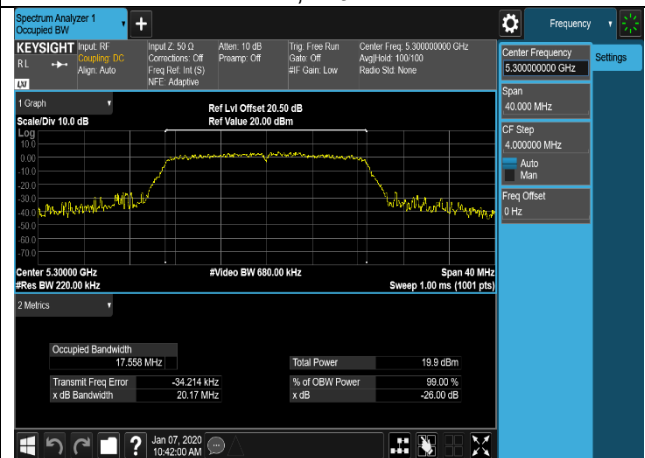
U-NII-2a,802.11n(HT20),5300MHz  
,Ant0



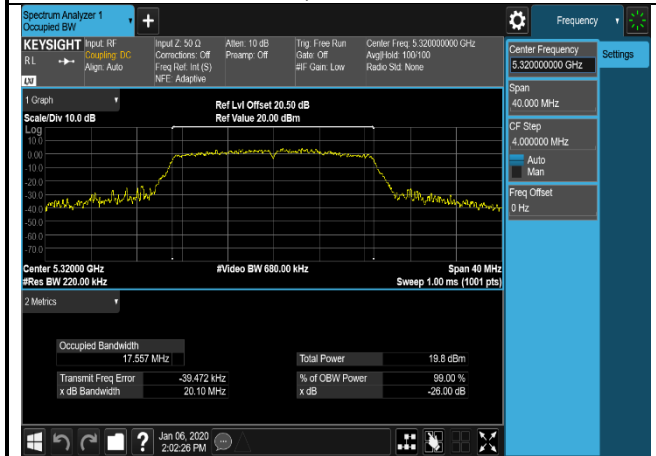
U-NII-2a,802.11n(HT20),5300MHz  
,Ant1



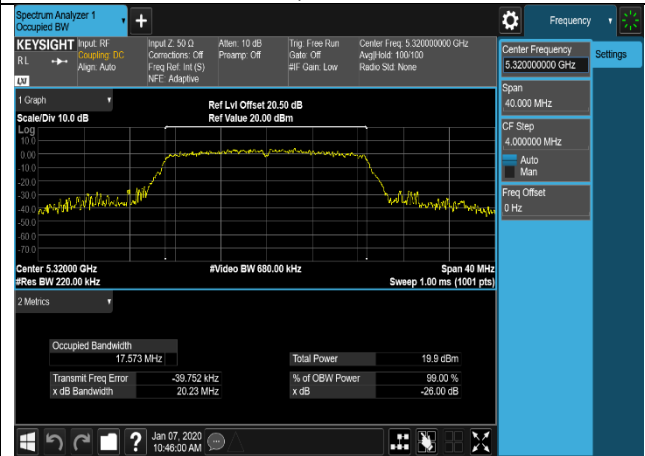
U-NII-2a,802.11n(HT20),5320MHz  
,Ant0



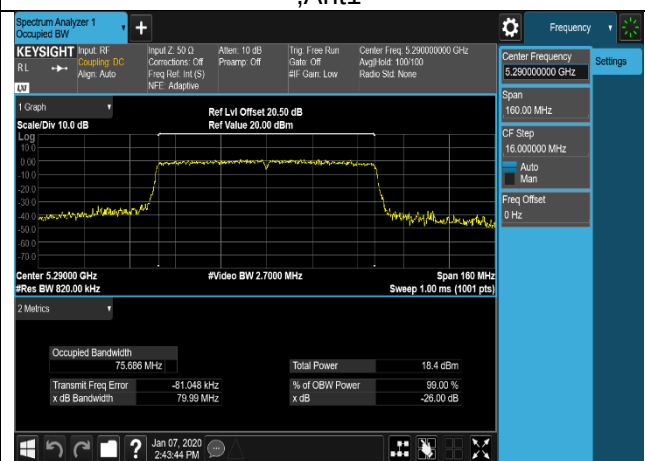
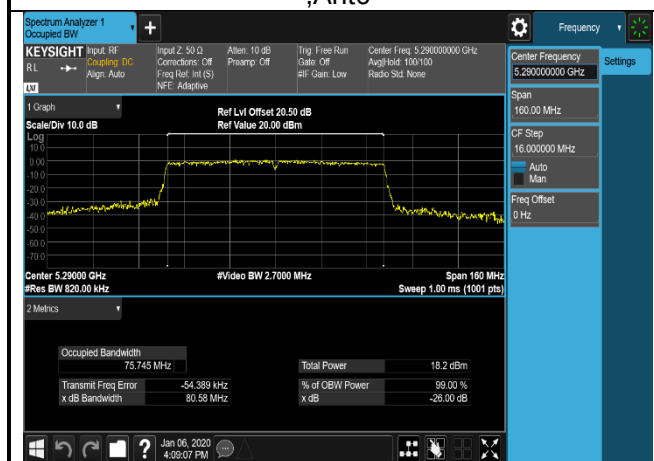
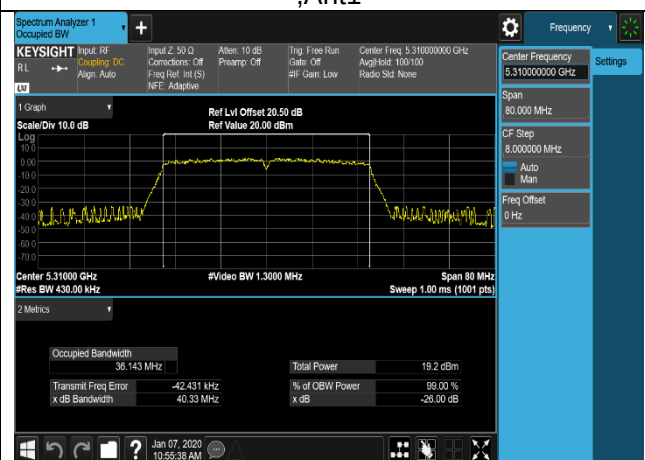
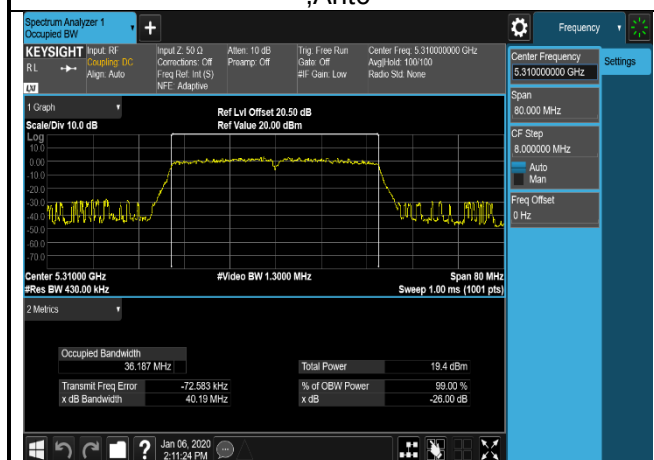
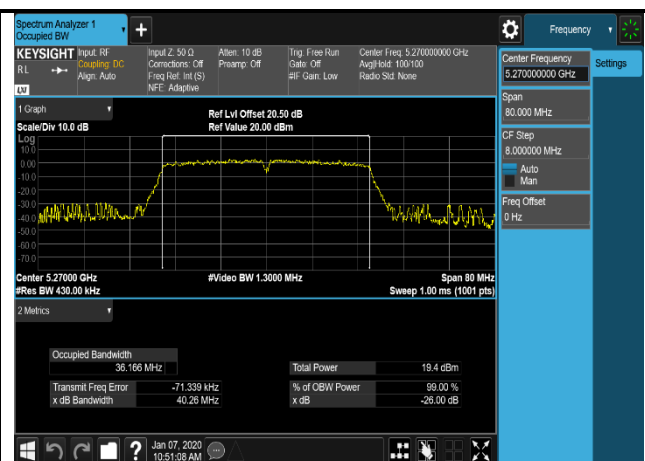
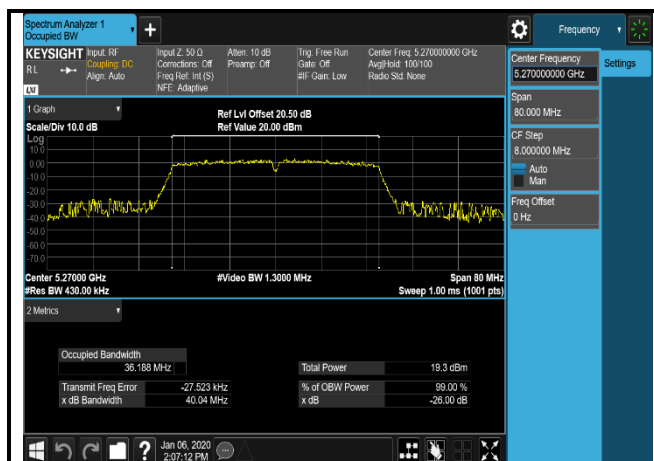
U-NII-2a,802.11n(HT20),5320MHz  
,Ant1



U-NII-2a,802.11n(HT40),5270MHz  
,Ant0



U-NII-2a,802.11n(HT40),5270MHz  
,Ant1

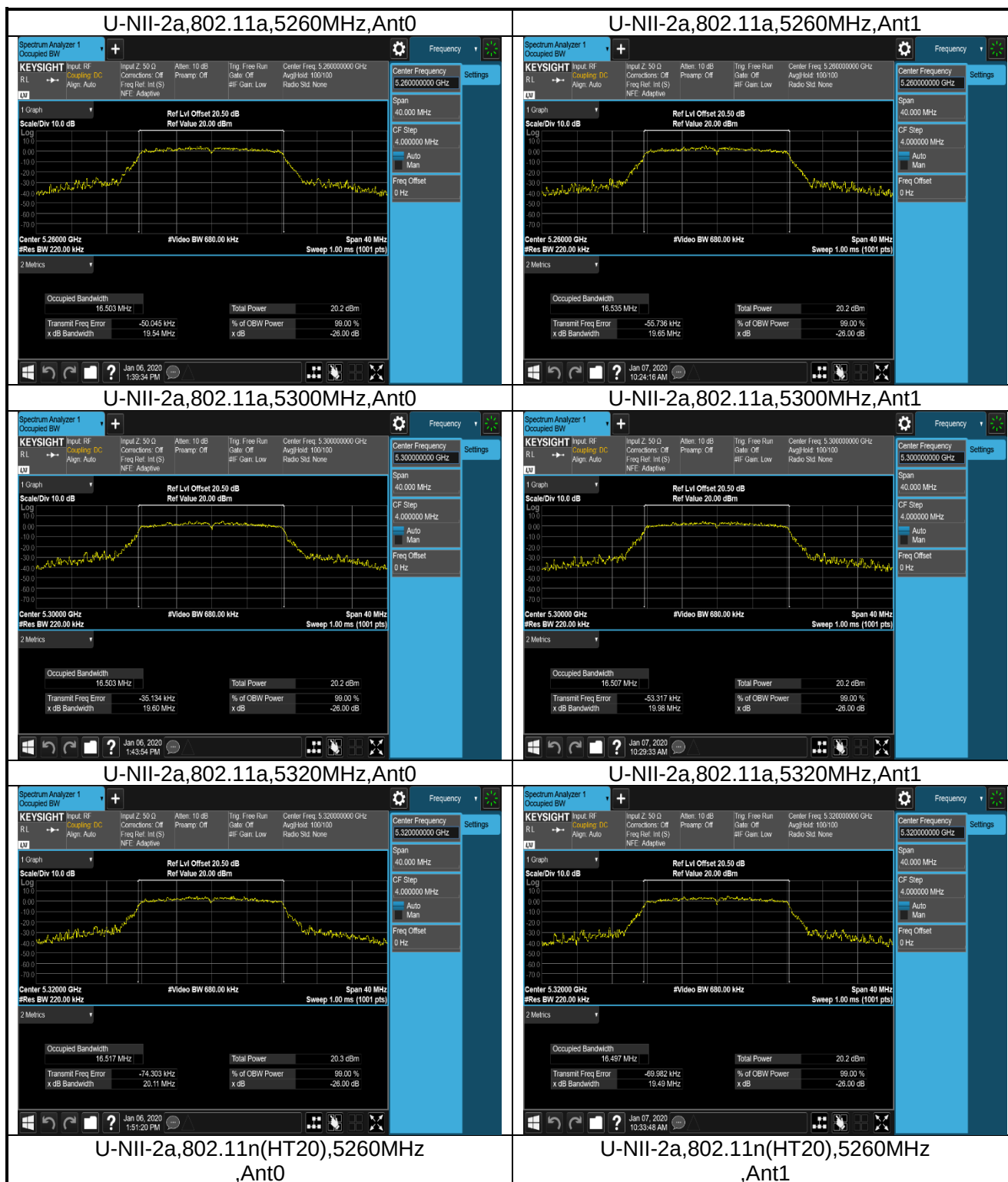


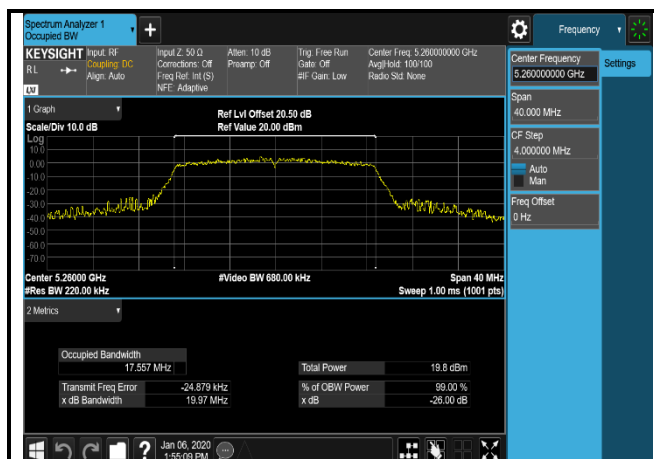
## 2. 99% Occupied Bandwidth

### 2.1 Test Data

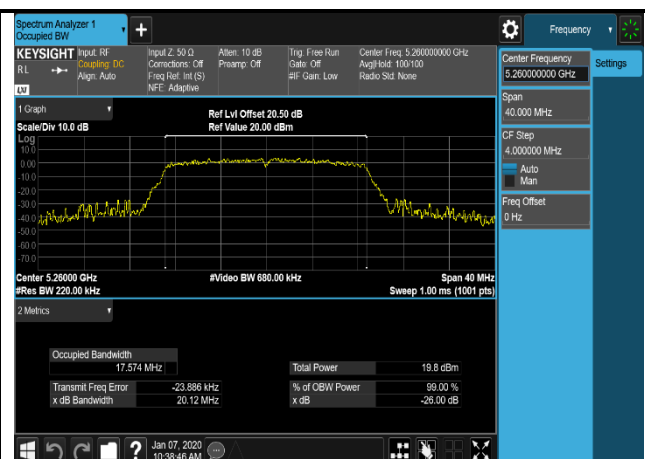
| U-NII-2a 99% Occupied Bandwidth |                      |      |                              |        |
|---------------------------------|----------------------|------|------------------------------|--------|
| Mode                            | Test Frequency (MHz) | Ant  | 99% Occupied Bandwidth (MHz) | Result |
| 802.11a                         | 5260                 | Ant0 | 16.503                       | Pass   |
| 802.11a                         | 5260                 | Ant1 | 16.535                       | Pass   |
| 802.11a                         | 5300                 | Ant0 | 16.503                       | Pass   |
| 802.11a                         | 5300                 | Ant1 | 16.507                       | Pass   |
| 802.11a                         | 5320                 | Ant0 | 16.517                       | Pass   |
| 802.11a                         | 5320                 | Ant1 | 16.497                       | Pass   |
| 802.11n (HT20)                  | 5260                 | Ant0 | 17.557                       | Pass   |
| 802.11n (HT20)                  | 5260                 | Ant1 | 17.574                       | Pass   |
| 802.11n (HT20)                  | 5300                 | Ant0 | 17.589                       | Pass   |
| 802.11n (HT20)                  | 5300                 | Ant1 | 17.574                       | Pass   |
| 802.11n (HT20)                  | 5320                 | Ant0 | 17.568                       | Pass   |
| 802.11n (HT20)                  | 5320                 | Ant1 | 17.570                       | Pass   |
| 802.11n (HT40)                  | 5270                 | Ant0 | 36.209                       | Pass   |
| 802.11n (HT40)                  | 5270                 | Ant1 | 36.192                       | Pass   |
| 802.11n (HT40)                  | 5310                 | Ant0 | 36.154                       | Pass   |
| 802.11n (HT40)                  | 5310                 | Ant1 | 36.195                       | Pass   |
| 802.11ac (VHT80)                | 5290                 | Ant0 | 75.699                       | Pass   |
| 802.11ac (VHT80)                | 5290                 | Ant1 | 75.698                       | Pass   |

## 2.2 Test Plots

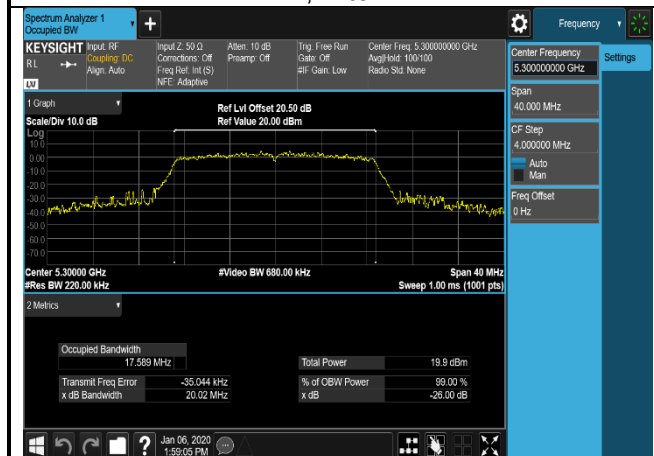




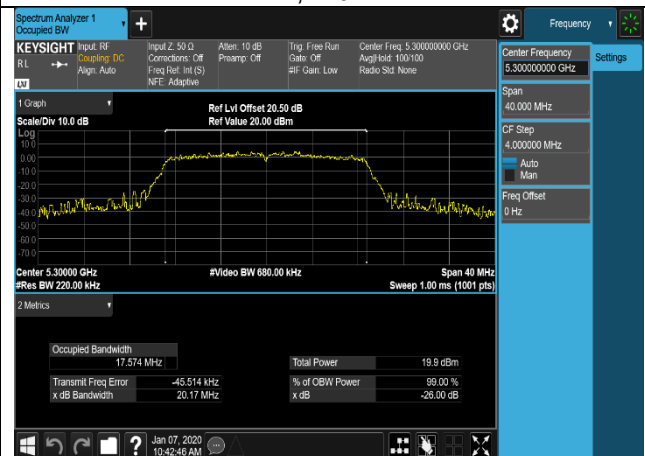
U-NII-2a,802.11n(HT20),5300MHz  
,Ant0



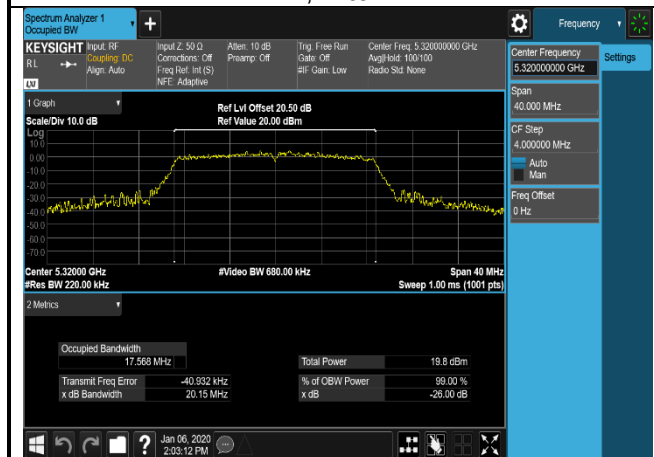
U-NII-2a,802.11n(HT20),5300MHz  
,Ant1



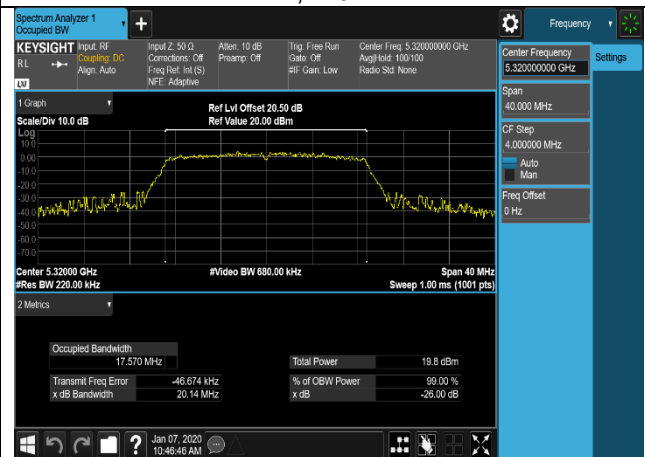
U-NII-2a,802.11n(HT20),5320MHz  
,Ant0



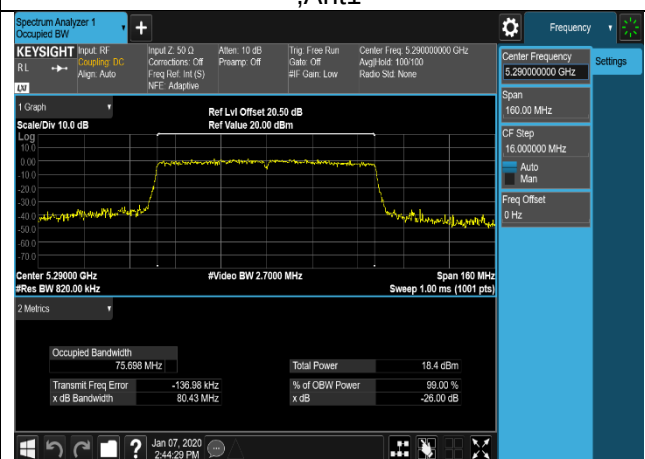
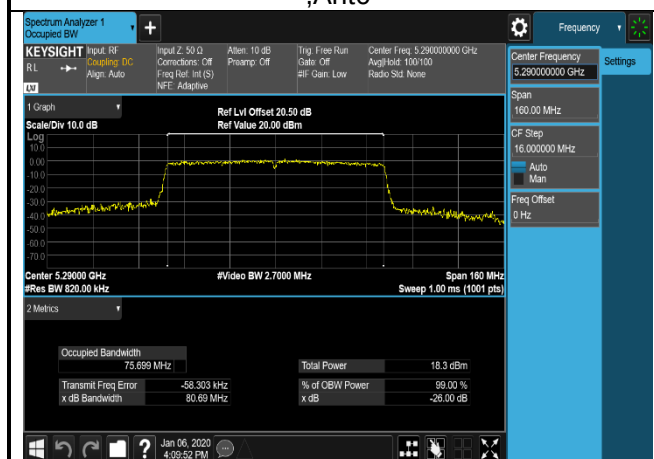
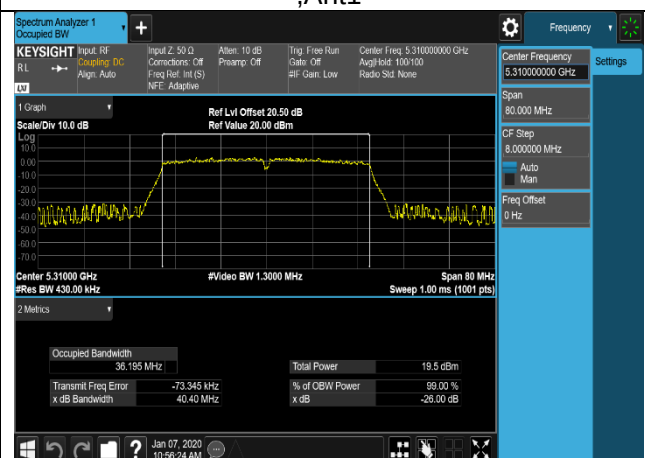
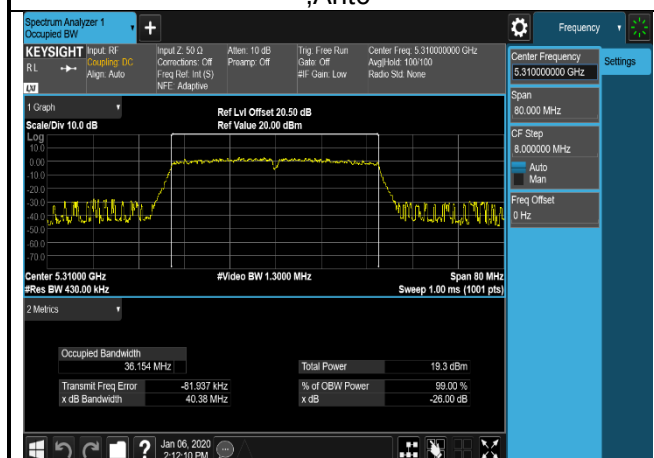
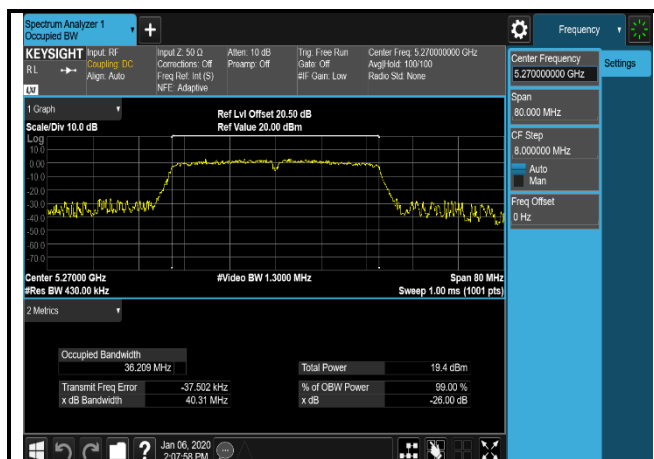
U-NII-2a,802.11n(HT20),5320MHz  
,Ant1



U-NII-2a,802.11n(HT40),5270MHz  
,Ant0



U-NII-2a,802.11n(HT40),5270MHz  
,Ant1

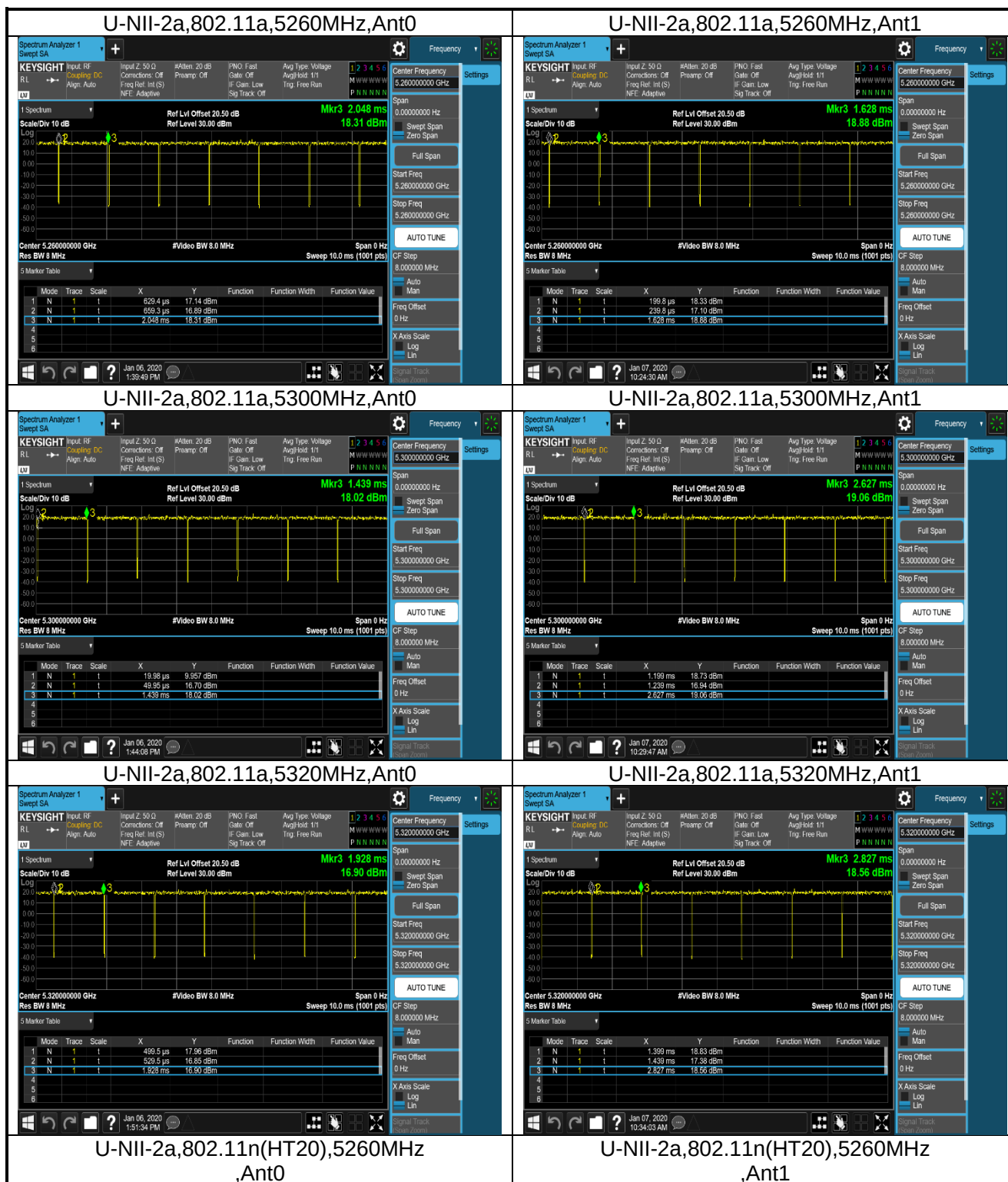


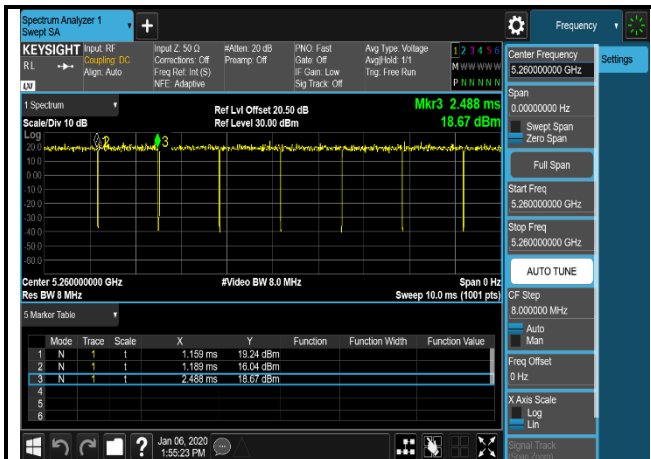
### 3. Duty Cycle

#### 3.1 Test Data

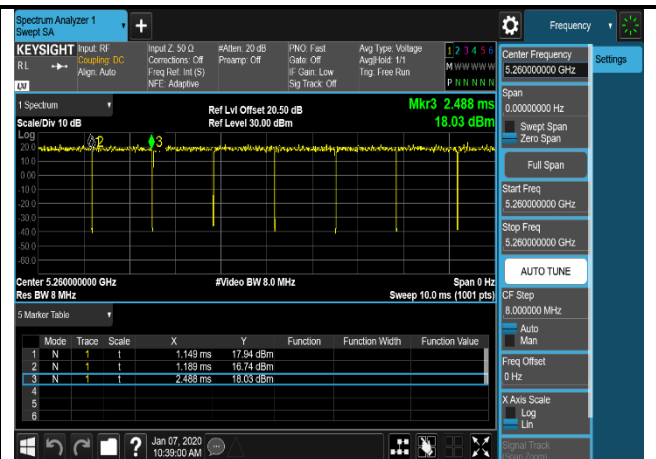
| U-NII-2a Duty Cycle |                      |      |                |                        |
|---------------------|----------------------|------|----------------|------------------------|
| Mode                | Test Frequency (MHz) | Ant  | Duty Cycle (%) | Duty Cycle Factor (dB) |
| 802.11a             | 5260                 | Ant0 | 97.89          | 0.09                   |
| 802.11a             | 5260                 | Ant1 | 97.20          | 0.12                   |
| 802.11a             | 5300                 | Ant0 | 97.89          | 0.09                   |
| 802.11a             | 5300                 | Ant1 | 97.20          | 0.12                   |
| 802.11a             | 5320                 | Ant0 | 97.90          | 0.09                   |
| 802.11a             | 5320                 | Ant1 | 97.20          | 0.12                   |
| 802.11n (HT20)      | 5260                 | Ant0 | 97.74          | 0.10                   |
| 802.11n (HT20)      | 5260                 | Ant1 | 97.01          | 0.13                   |
| 802.11n (HT20)      | 5300                 | Ant0 | 97.74          | 0.10                   |
| 802.11n (HT20)      | 5300                 | Ant1 | 97.01          | 0.13                   |
| 802.11n (HT20)      | 5320                 | Ant0 | 97.74          | 0.10                   |
| 802.11n (HT20)      | 5320                 | Ant1 | 97.74          | 0.10                   |
| 802.11n (HT40)      | 5270                 | Ant0 | 95.59          | 0.20                   |
| 802.11n (HT40)      | 5270                 | Ant1 | 95.59          | 0.20                   |
| 802.11n (HT40)      | 5310                 | Ant0 | 95.59          | 0.20                   |
| 802.11n (HT40)      | 5310                 | Ant1 | 94.12          | 0.26                   |
| 802.11ac (VHT80)    | 5290                 | Ant0 | 84.08          | 0.75                   |
| 802.11ac (VHT80)    | 5290                 | Ant1 | 84.08          | 0.75                   |

### 3.2 Test Plots

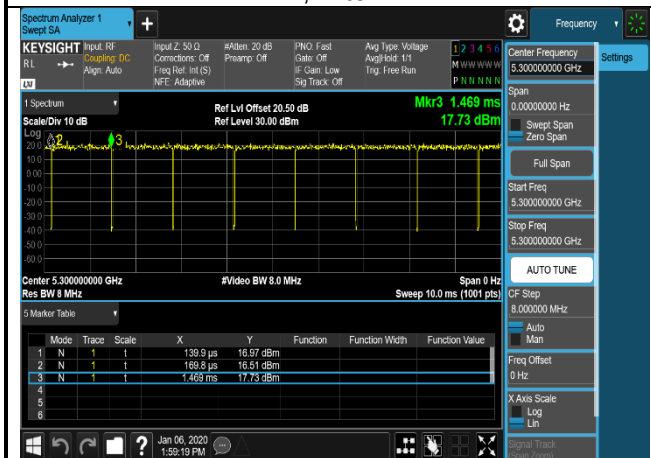




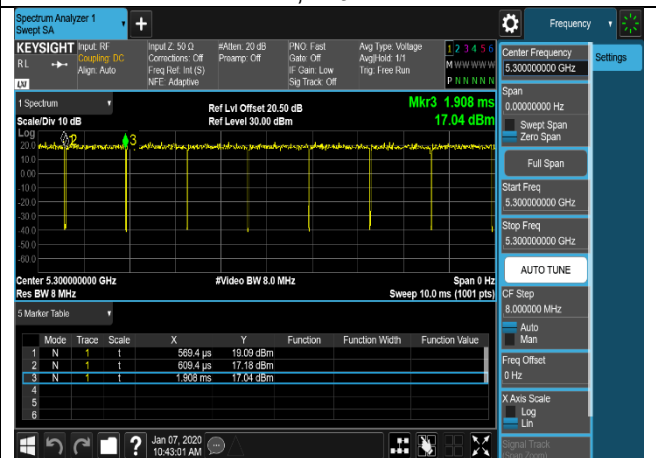
U-NII-2a,802.11n(HT20),5300MHz  
,Ant0



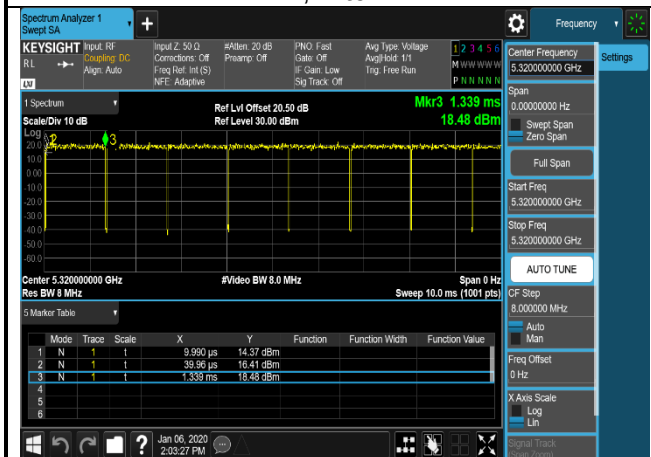
U-NII-2a,802.11n(HT20),5300MHz  
,Ant1



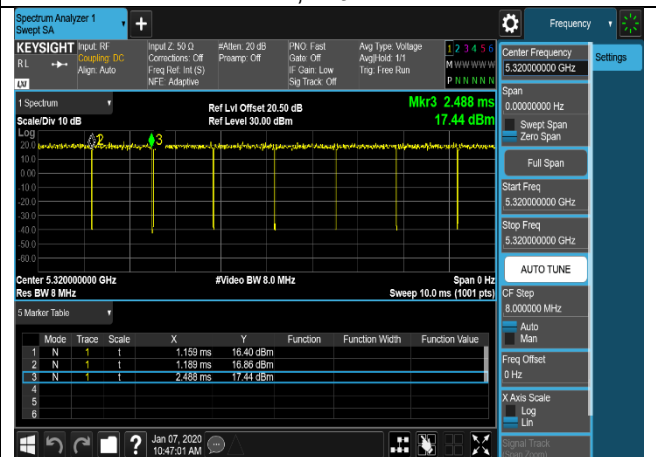
U-NII-2a,802.11n(HT20),5320MHz  
,Ant0



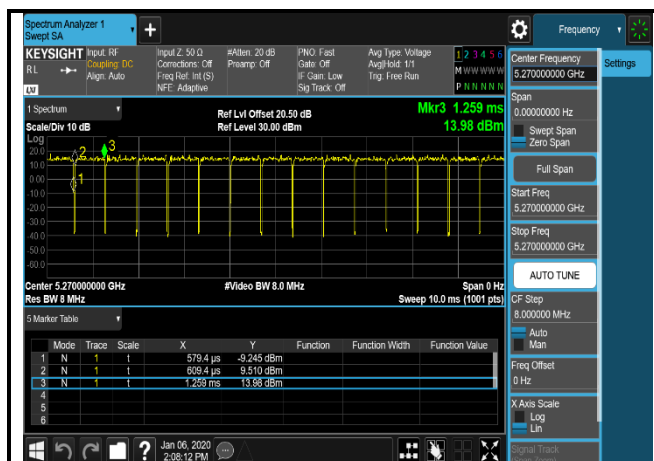
U-NII-2a,802.11n(HT20),5320MHz  
,Ant1



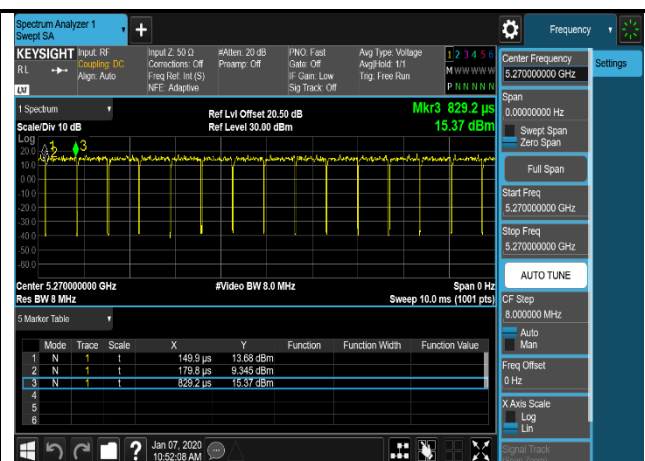
U-NII-2a,802.11n(HT40),5270MHz  
,Ant0



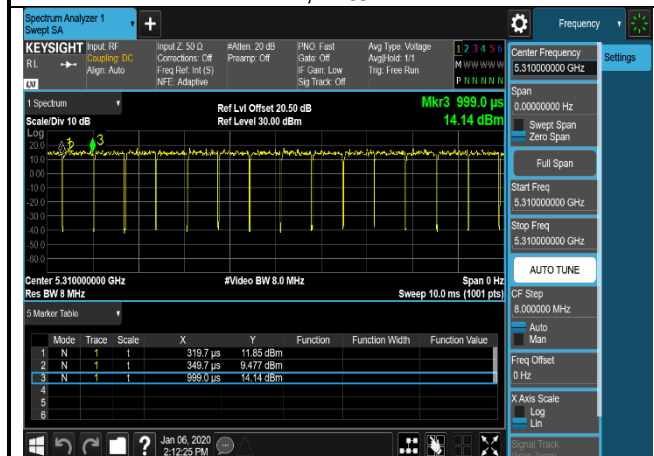
U-NII-2a,802.11n(HT40),5270MHz  
,Ant1



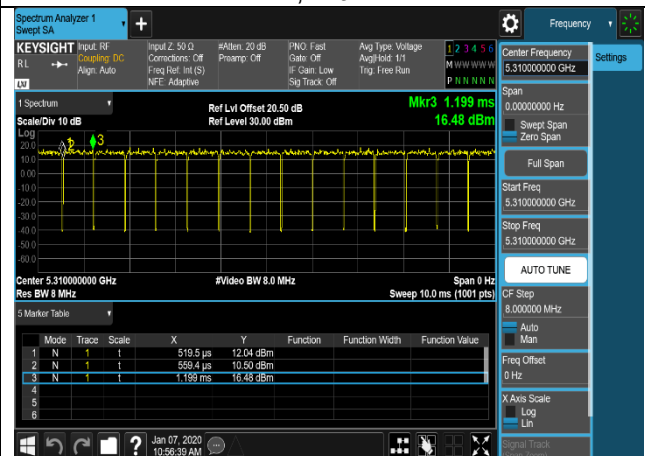
U-NII-2a,802.11n(HT40),5310MHz  
,Ant0



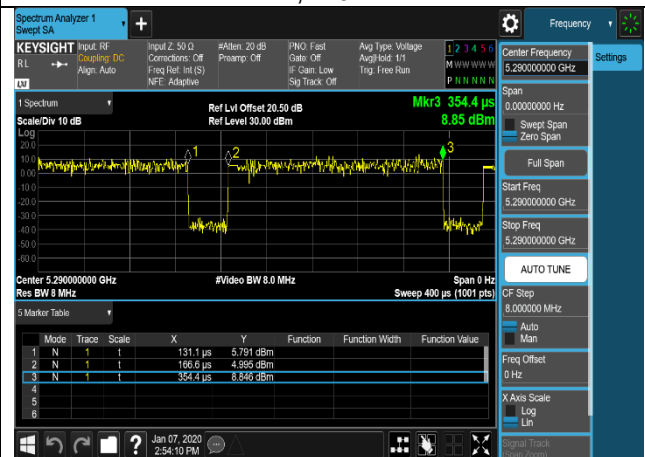
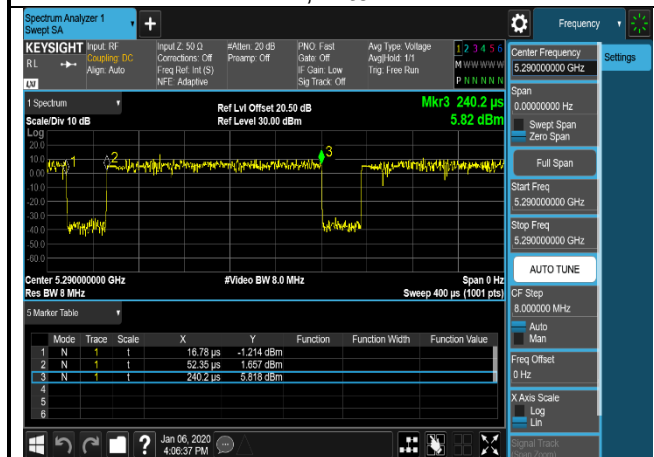
U-NII-2a,802.11n(HT40),5310MHz  
,Ant1



U-NII-2a,802.11ac(VHT80),5290MHz  
,Ant0



U-NII-2a,802.11ac(VHT80),5290MHz  
,Ant1

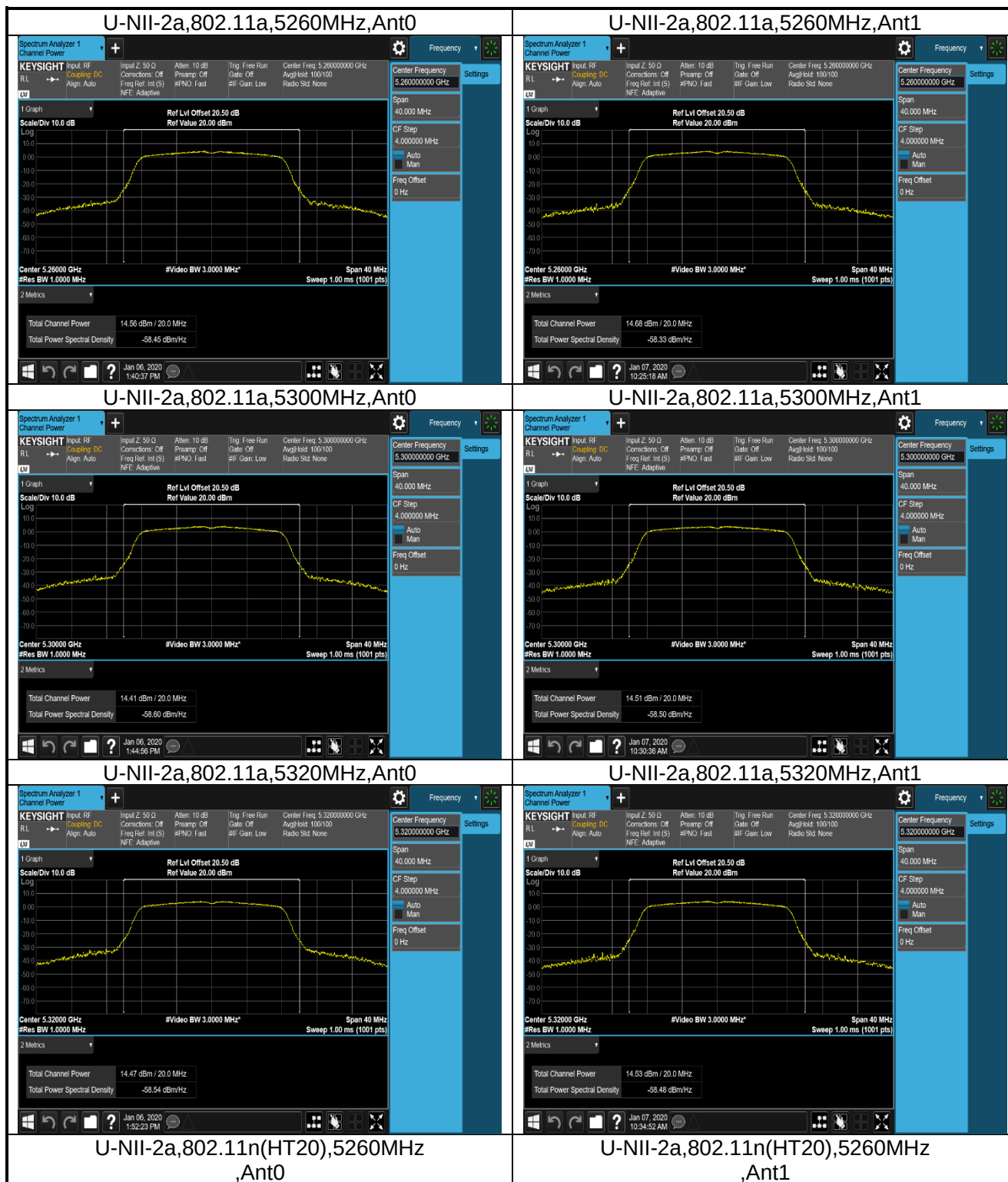


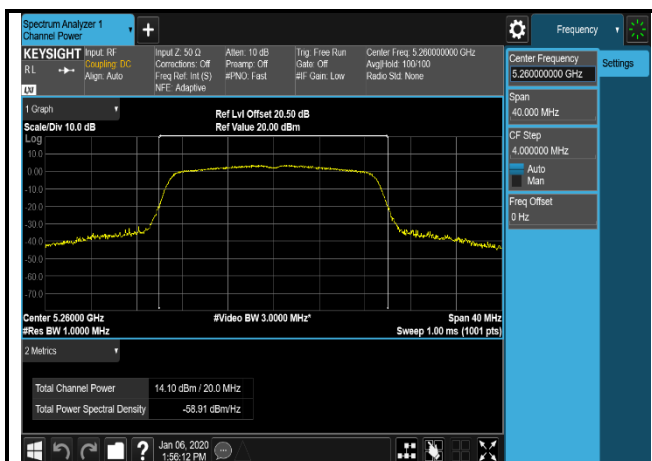
#### 4. AVGSA Output Power

##### 4.1 Test Data

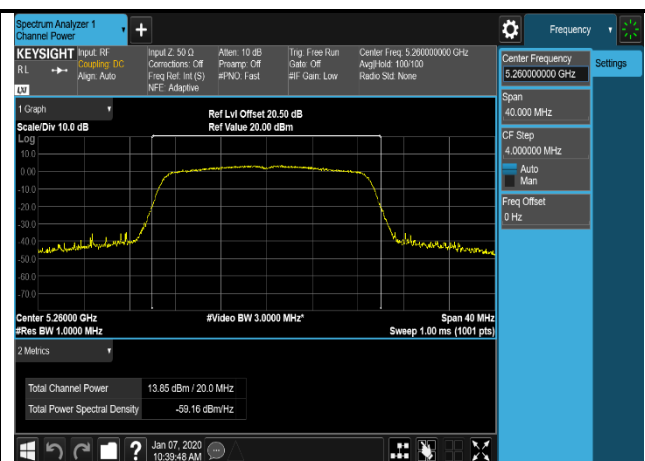
| U-NII-2a AVGSA Output Power |                      |      |                        |                 |                   |                       |                      |            |        |
|-----------------------------|----------------------|------|------------------------|-----------------|-------------------|-----------------------|----------------------|------------|--------|
| Mode                        | Test Frequency (MHz) | Ant  | Duty Cycle Factor (dB) | Max Power (dBm) | Total Power (dBm) | FCC Power Limit (dBm) | IC Power Limit (dBm) | EIRP (dBm) | Result |
| 802.11a                     | 5260                 | Ant0 | 0.09                   | 14.65           | 14.65             | 24                    | 23                   | 16.26      | Pass   |
| 802.11a                     | 5260                 | Ant1 | 0.12                   | 14.80           | 14.80             | 24                    | 23                   | 14.95      | Pass   |
| 802.11a                     | 5300                 | Ant0 | 0.09                   | 14.50           | 14.50             | 24                    | 23                   | 16.11      | Pass   |
| 802.11a                     | 5300                 | Ant1 | 0.12                   | 14.63           | 14.63             | 24                    | 23                   | 14.78      | Pass   |
| 802.11a                     | 5320                 | Ant0 | 0.09                   | 14.56           | 14.56             | 24                    | 23                   | 16.17      | Pass   |
| 802.11a                     | 5320                 | Ant1 | 0.12                   | 14.65           | 14.65             | 24                    | 23                   | 14.80      | Pass   |
| 802.11n (HT20)              | 5260                 | Ant0 | 0.10                   | 14.20           | 17.10             | 24                    | 23                   | 18.05      | Pass   |
| 802.11n (HT20)              | 5260                 | Ant1 | 0.13                   | 13.98           |                   |                       |                      |            |        |
| 802.11n (HT20)              | 5300                 | Ant0 | 0.10                   | 13.97           | 17.02             | 24                    | 23                   | 17.96      | Pass   |
| 802.11n (HT20)              | 5300                 | Ant1 | 0.13                   | 14.05           |                   |                       |                      |            |        |
| 802.11n (HT20)              | 5320                 | Ant0 | 0.10                   | 13.94           | 16.99             | 24                    | 23                   | 17.93      | Pass   |
| 802.11n (HT20)              | 5320                 | Ant1 | 0.10                   | 14.02           |                   |                       |                      |            |        |
| 802.11n (HT40)              | 5270                 | Ant0 | 0.20                   | 13.47           | 16.45             | 24                    | 24                   | 17.39      | Pass   |
| 802.11n (HT40)              | 5270                 | Ant1 | 0.20                   | 13.41           |                   |                       |                      |            |        |
| 802.11n (HT40)              | 5310                 | Ant0 | 0.20                   | 13.31           | 16.49             | 24                    | 24                   | 17.44      | Pass   |
| 802.11n (HT40)              | 5310                 | Ant1 | 0.26                   | 13.65           |                   |                       |                      |            |        |
| 802.11ac(VHT80)             | 5290                 | Ant0 | 0.75                   | 10.10           | 13.06             | 24                    | 24                   | 14.00      | Pass   |
| 802.11ac(VHT80)             | 5290                 | Ant1 | 0.75                   | 10.00           |                   |                       |                      |            |        |

## 4.2 Test Plots

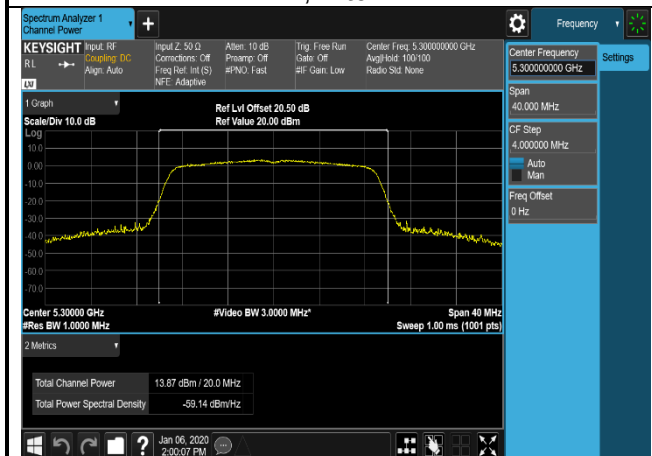




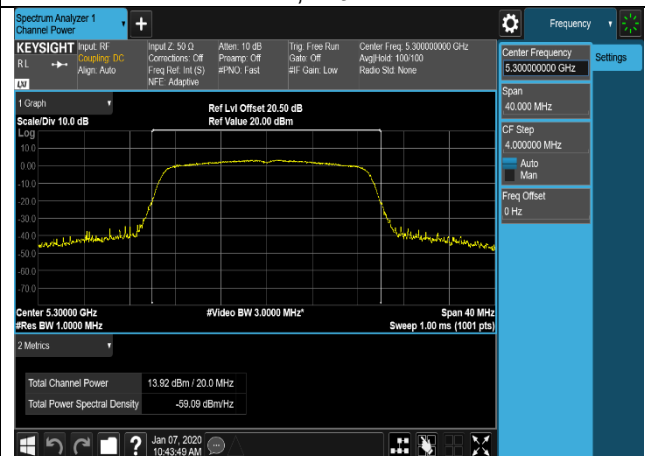
U-NII-2a,802.11n(HT20),5300MHz  
,Ant0



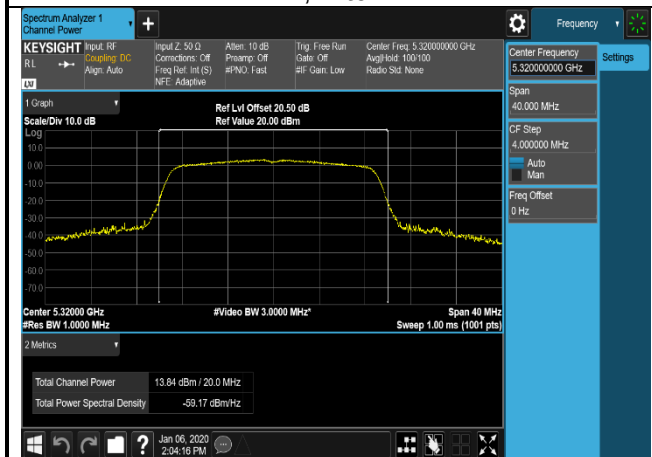
U-NII-2a,802.11n(HT20),5300MHz  
,Ant1



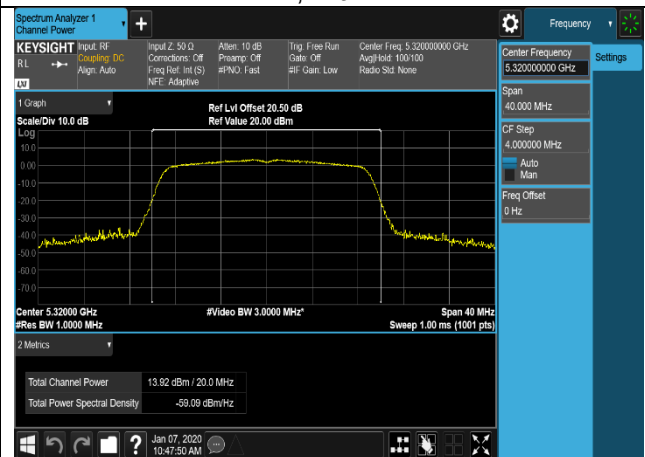
U-NII-2a,802.11n(HT20),5320MHz  
,Ant0



U-NII-2a,802.11n(HT20),5320MHz  
,Ant1



U-NII-2a,802.11n(HT40),5270MHz  
,Ant0



U-NII-2a,802.11n(HT40),5270MHz  
,Ant1