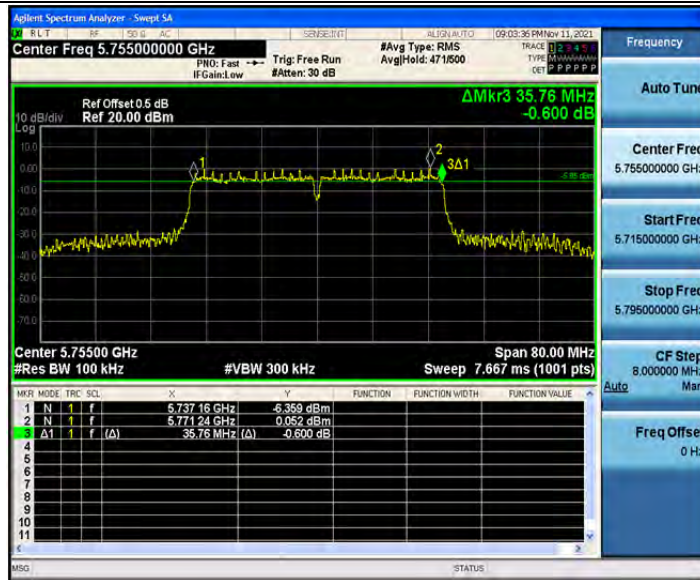
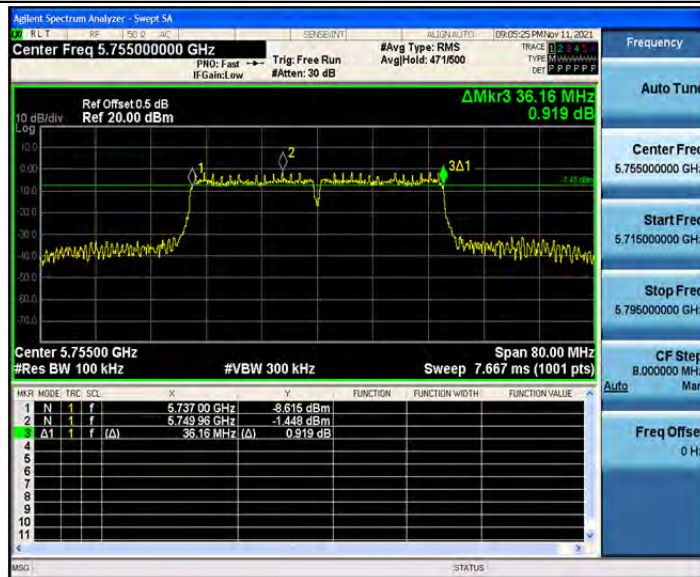
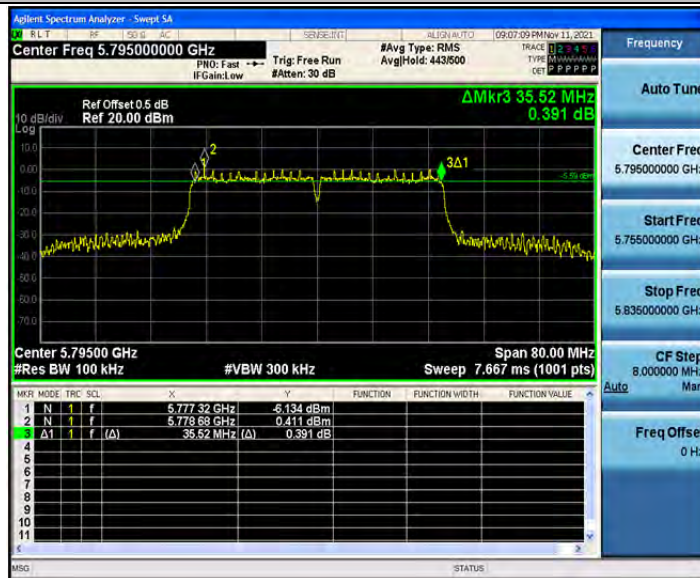




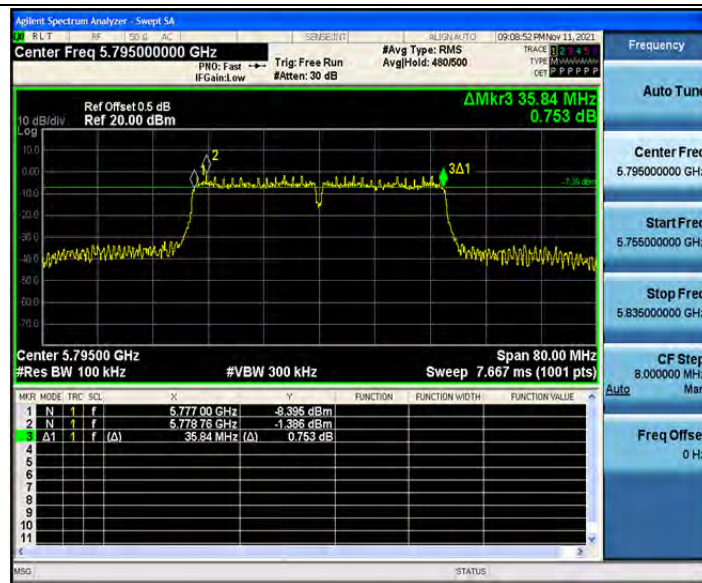
802.11n(HT40)\_Ant2\_5755



802.11n(HT40)\_Ant1\_5795



802.11n(HT40)\_Ant2\_5795



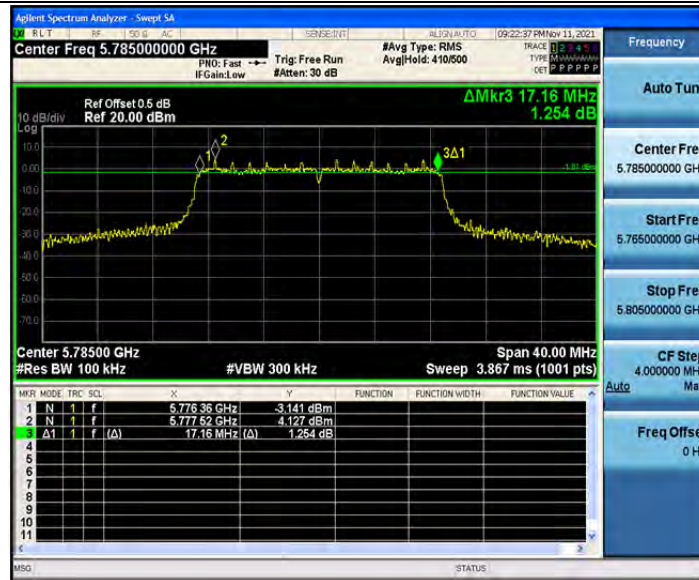
802.11ac(VHT20)\_Ant1\_5745



802.11ac(VHT20)\_Ant2\_5745



802.11ac(VHT20)\_Ant1\_5785



802.11ac(VHT20)\_Ant2\_5785



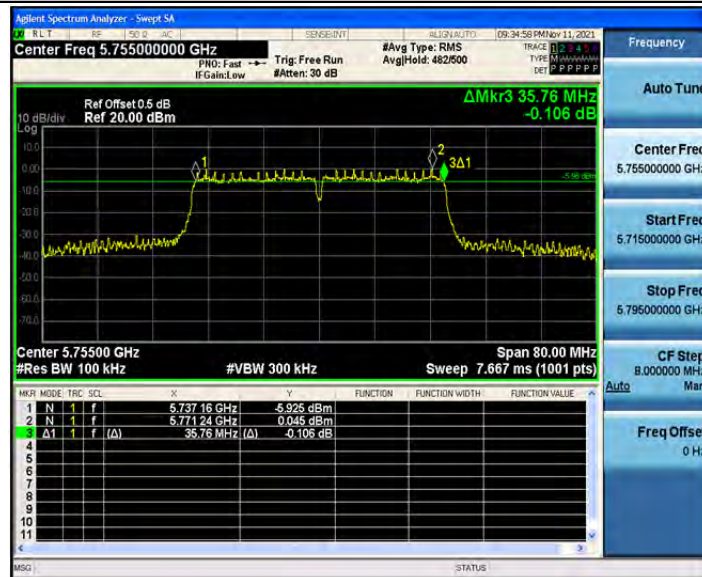
802.11ac(VHT20)\_Ant1\_5825



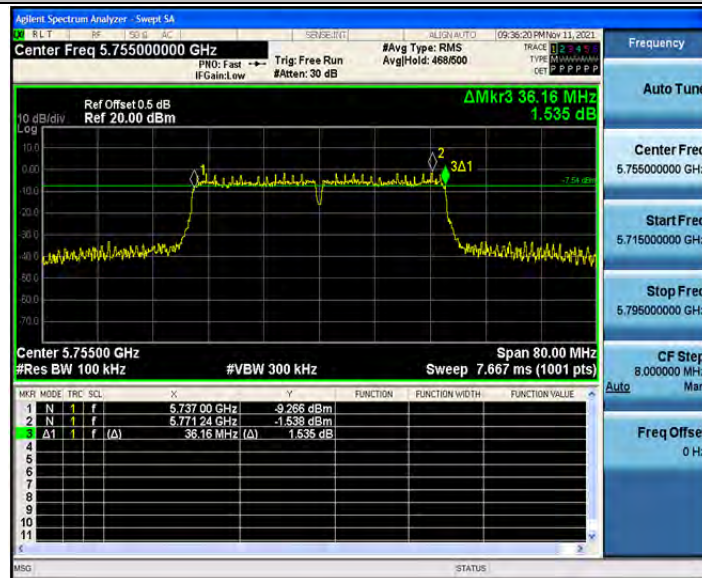
802.11ac(VHT20)\_Ant2\_5825



802.11ac(VHT40)\_Ant1\_5755



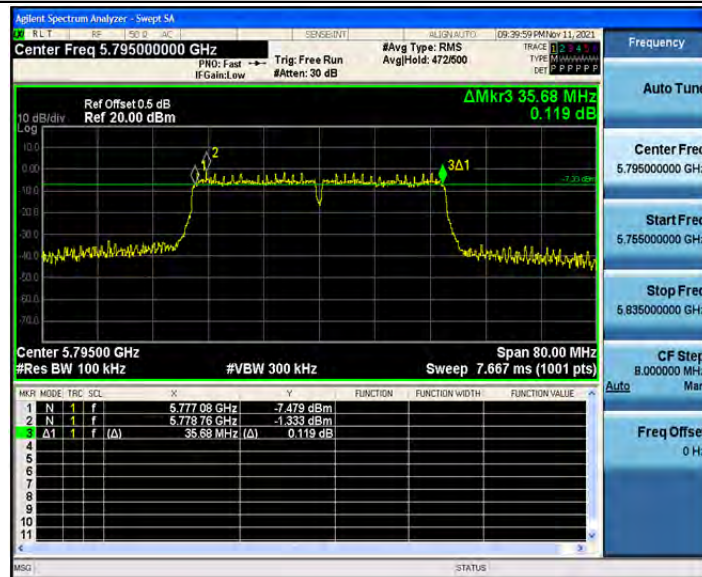
802.11ac(VHT40)\_Ant2\_5755



802.11ac(VHT40)\_Ant1\_5795



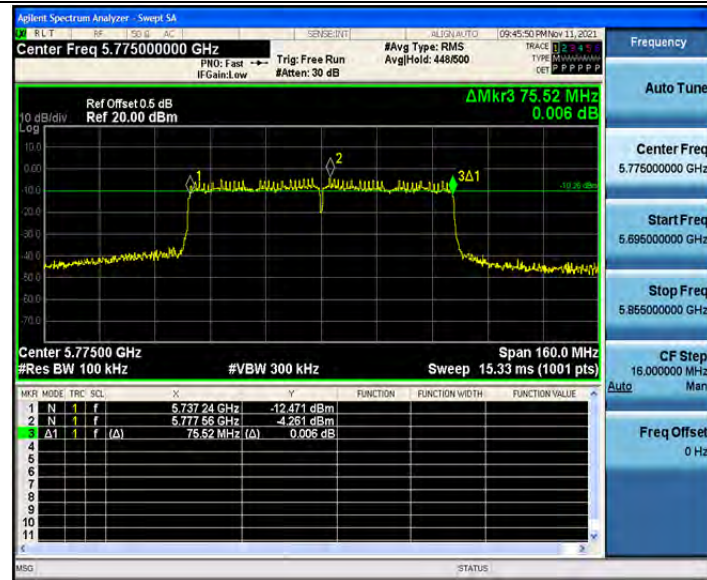
802.11ac(VHT40)\_Ant2\_5795



802.11ac(VHT80)\_Ant1\_5775



802.11ac(VHT80)\_Ant2\_5775



## Appendix B: Maximum conducted output power

### Test Result

| Test Mode     | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|---------------|---------|---------|-------------|------------|---------|
| 802.11a       | Ant1    | 5180    | 16.36       | <=24       | PASS    |
|               | Ant2    | 5180    | 16.16       | <=24       | PASS    |
|               | Ant1    | 5200    | 15.27       | <=24       | PASS    |
|               | Ant2    | 5200    | 16.19       | <=24       | PASS    |
|               | Ant1    | 5240    | 15.20       | <=24       | PASS    |
|               | Ant2    | 5240    | 16.35       | <=24       | PASS    |
|               | Ant1    | 5745    | 15.76       | <=30       | PASS    |
|               | Ant2    | 5745    | 15.00       | <=30       | PASS    |
|               | Ant1    | 5785    | 15.93       | <=30       | PASS    |
|               | Ant2    | 5785    | 14.71       | <=30       | PASS    |
|               | Ant1    | 5825    | 15.57       | <=30       | PASS    |
|               | Ant2    | 5825    | 13.99       | <=30       | PASS    |
| 802.11n(HT20) | Ant1    | 5180    | 15.56       | <=24       | PASS    |
|               | Ant2    | 5180    | 16.15       | <=24       | PASS    |
|               | Total   | 5180    | 18.88       | <=24       | PASS    |
|               | Ant1    | 5200    | 15.30       | <=24       | PASS    |
|               | Ant2    | 5200    | 16.14       | <=24       | PASS    |
|               | Total   | 5200    | 18.75       | <=24       | PASS    |
|               | Ant1    | 5240    | 15.25       | <=24       | PASS    |
|               | Ant2    | 5240    | 16.30       | <=24       | PASS    |
|               | Total   | 5240    | 18.82       | <=24       | PASS    |
|               | Ant1    | 5745    | 15.68       | <=30       | PASS    |
|               | Ant2    | 5745    | 14.93       | <=30       | PASS    |
|               | Total   | 5745    | 18.33       | <=30       | PASS    |
|               | Ant1    | 5785    | 15.84       | <=30       | PASS    |
|               | Ant2    | 5785    | 14.61       | <=30       | PASS    |
|               | Total   | 5785    | 18.28       | <=30       | PASS    |
|               | Ant1    | 5825    | 15.49       | <=30       | PASS    |
|               | Ant2    | 5825    | 13.89       | <=30       | PASS    |
|               | Total   | 5825    | 17.77       | <=30       | PASS    |
| 802.11n(HT40) | Ant1    | 5190    | 11.69       | <=24       | PASS    |
|               | Ant2    | 5190    | 12.55       | <=24       | PASS    |
|               | Total   | 5190    | 15.15       | <=24       | PASS    |
|               | Ant1    | 5230    | 11.46       | <=24       | PASS    |
|               | Ant2    | 5230    | 12.69       | <=24       | PASS    |
|               | Total   | 5230    | 15.13       | <=24       | PASS    |
|               | Ant1    | 5755    | 15.75       | <=30       | PASS    |
|               | Ant2    | 5755    | 14.88       | <=30       | PASS    |
|               | Total   | 5755    | 18.35       | <=30       | PASS    |
|               | Ant1    | 5795    | 15.69       | <=30       | PASS    |
|               | Ant2    | 5795    | 14.32       | <=30       | PASS    |
|               | Total   | 5795    | 18.07       | <=30       | PASS    |

|                 |       |      |       |      |      |
|-----------------|-------|------|-------|------|------|
| 802.11ac(VHT20) | Ant1  | 5180 | 15.64 | <=24 | PASS |
|                 | Ant2  | 5180 | 16.19 | <=24 | PASS |
|                 | Total | 5180 | 18.93 | <=24 | PASS |
|                 | Ant1  | 5200 | 15.32 | <=24 | PASS |
|                 | Ant2  | 5200 | 16.20 | <=24 | PASS |
|                 | Total | 5200 | 18.79 | <=24 | PASS |
|                 | Ant1  | 5240 | 15.28 | <=24 | PASS |
|                 | Ant2  | 5240 | 16.34 | <=24 | PASS |
|                 | Total | 5240 | 18.85 | <=24 | PASS |
|                 | Ant1  | 5745 | 15.69 | <=30 | PASS |
|                 | Ant2  | 5745 | 14.93 | <=30 | PASS |
|                 | Total | 5745 | 18.34 | <=30 | PASS |
|                 | Ant1  | 5785 | 15.85 | <=30 | PASS |
|                 | Ant2  | 5785 | 14.68 | <=30 | PASS |
|                 | Total | 5785 | 18.32 | <=30 | PASS |
|                 | Ant1  | 5825 | 12.10 | <=30 | PASS |
|                 | Ant2  | 5825 | 10.29 | <=30 | PASS |
|                 | Total | 5825 | 14.30 | <=30 | PASS |
| 802.11ac(VHT40) | Ant1  | 5190 | 11.35 | <=24 | PASS |
|                 | Ant2  | 5190 | 11.90 | <=24 | PASS |
|                 | Total | 5190 | 14.64 | <=24 | PASS |
|                 | Ant1  | 5230 | 10.70 | <=24 | PASS |
|                 | Ant2  | 5230 | 12.04 | <=24 | PASS |
|                 | Total | 5230 | 14.43 | <=24 | PASS |
|                 | Ant1  | 5755 | 15.69 | <=30 | PASS |
|                 | Ant2  | 5755 | 14.88 | <=30 | PASS |
|                 | Total | 5755 | 18.31 | <=30 | PASS |
|                 | Ant1  | 5795 | 15.71 | <=30 | PASS |
|                 | Ant2  | 5795 | 14.40 | <=30 | PASS |
|                 | Total | 5795 | 18.12 | <=30 | PASS |
| 802.11ac(VHT80) | Ant1  | 5210 | 10.86 | <=24 | PASS |
|                 | Ant2  | 5210 | 11.49 | <=24 | PASS |
|                 | Total | 5210 | 14.20 | <=24 | PASS |
|                 | Ant1  | 5775 | 15.41 | <=30 | PASS |
|                 | Ant2  | 5775 | 14.35 | <=30 | PASS |
|                 | Total | 5775 | 17.92 | <=30 | PASS |

Note: 1. Test results increased RF cable loss by 0.5dB.

## Appendix C: Maximum power spectral density

### Test Result

| Test Mode     | Antenna | Channel | Result [dBm/MHz] | Limit[dBm/MHz] | Verdict |
|---------------|---------|---------|------------------|----------------|---------|
| 802.11a       | Ant1    | 5180    | 3.93             | <=11           | PASS    |
|               | Ant2    | 5180    | 2.64             | <=11           | PASS    |
|               | Ant1    | 5200    | 4.25             | <=11           | PASS    |
|               | Ant2    | 5200    | 0.75             | <=11           | PASS    |
|               | Ant1    | 5240    | 2.93             | <=11           | PASS    |
|               | Ant2    | 5240    | 1.15             | <=11           | PASS    |
|               | Ant1    | 5745    | 0.76             | <=30           | PASS    |
|               | Ant2    | 5745    | -1.11            | <=30           | PASS    |
|               | Ant1    | 5785    | 1.15             | <=30           | PASS    |
|               | Ant2    | 5785    | -0.51            | <=30           | PASS    |
|               | Ant1    | 5825    | 1.01             | <=30           | PASS    |
|               | Ant2    | 5825    | -1.05            | <=30           | PASS    |
| 802.11n(HT20) | Ant1    | 5180    | 2.66             | <=11           | PASS    |
|               | Ant2    | 5180    | 3.25             | <=11           | PASS    |
|               | Total   | 5180    | 5.98             | <=9.87         | PASS    |
|               | Ant1    | 5200    | 3.68             | <=11           | PASS    |
|               | Ant2    | 5200    | 2.58             | <=11           | PASS    |
|               | Total   | 5200    | 6.18             | <=9.87         | PASS    |
|               | Ant1    | 5240    | 3.09             | <=11           | PASS    |
|               | Ant2    | 5240    | 1.37             | <=11           | PASS    |
|               | Total   | 5240    | 5.32             | <=9.87         | PASS    |
|               | Ant1    | 5745    | 0.02             | <=30           | PASS    |
|               | Ant2    | 5745    | -0.71            | <=30           | PASS    |
|               | Total   | 5745    | 2.68             | <=28.74        | PASS    |
|               | Ant1    | 5785    | 0.47             | <=30           | PASS    |
|               | Ant2    | 5785    | -0.88            | <=30           | PASS    |
|               | Total   | 5785    | 2.86             | <=28.74        | PASS    |
|               | Ant1    | 5825    | 0.22             | <=30           | PASS    |
|               | Ant2    | 5825    | -1.61            | <=30           | PASS    |
|               | Total   | 5825    | 2.41             | <=28.74        | PASS    |
| 802.11n(HT40) | Ant1    | 5190    | 0.13             | <=11           | PASS    |
|               | Ant2    | 5190    | -0.88            | <=11           | PASS    |
|               | Total   | 5190    | 2.66             | <=9.87         | PASS    |
|               | Ant1    | 5230    | 0.07             | <=11           | PASS    |
|               | Ant2    | 5230    | -2.02            | <=11           | PASS    |
|               | Total   | 5230    | 2.16             | <=9.87         | PASS    |
|               | Ant1    | 5755    | -3.04            | <=30           | PASS    |
|               | Ant2    | 5755    | -4.27            | <=30           | PASS    |
|               | Total   | 5755    | -0.60            | <=28.74        | PASS    |
|               | Ant1    | 5795    | -3.08            | <=30           | PASS    |
|               | Ant2    | 5795    | -4.43            | <=30           | PASS    |

|                 |       |      |       |              |      |
|-----------------|-------|------|-------|--------------|------|
|                 | Total | 5795 | -0.69 | $\leq 28.74$ | PASS |
| 802.11ac(VHT20) | Ant1  | 5180 | 3.37  | $\leq 11$    | PASS |
|                 | Ant2  | 5180 | 1.95  | $\leq 11$    | PASS |
|                 | Total | 5180 | 5.73  | $\leq 9.87$  | PASS |
|                 | Ant1  | 5200 | 3.19  | $\leq 11$    | PASS |
|                 | Ant2  | 5200 | 0.9   | $\leq 11$    | PASS |
|                 | Total | 5200 | 5.20  | $\leq 9.87$  | PASS |
|                 | Ant1  | 5240 | 2.42  | $\leq 11$    | PASS |
|                 | Ant2  | 5240 | 1.72  | $\leq 11$    | PASS |
|                 | Total | 5240 | 5.09  | $\leq 9.87$  | PASS |
|                 | Ant1  | 5745 | -0.02 | $\leq 30$    | PASS |
|                 | Ant2  | 5745 | -0.19 | $\leq 30$    | PASS |
|                 | Total | 5745 | 2.91  | $\leq 28.74$ | PASS |
|                 | Ant1  | 5785 | 0.68  | $\leq 30$    | PASS |
|                 | Ant2  | 5785 | 0.19  | $\leq 30$    | PASS |
|                 | Total | 5785 | 3.45  | $\leq 28.74$ | PASS |
|                 | Ant1  | 5825 | 1.06  | $\leq 30$    | PASS |
|                 | Ant2  | 5825 | -0.82 | $\leq 30$    | PASS |
|                 | Total | 5825 | 3.23  | $\leq 28.74$ | PASS |
| 802.11ac(VHT40) | Ant1  | 5190 | 0.43  | $\leq 11$    | PASS |
|                 | Ant2  | 5190 | -1.56 | $\leq 11$    | PASS |
|                 | Total | 5190 | 2.56  | $\leq 9.87$  | PASS |
|                 | Ant1  | 5230 | -0.56 | $\leq 11$    | PASS |
|                 | Ant2  | 5230 | -1.75 | $\leq 11$    | PASS |
|                 | Total | 5230 | 1.90  | $\leq 9.87$  | PASS |
|                 | Ant1  | 5755 | -3.09 | $\leq 30$    | PASS |
|                 | Ant2  | 5755 | -4.63 | $\leq 30$    | PASS |
|                 | Total | 5755 | -0.78 | $\leq 28.74$ | PASS |
|                 | Ant1  | 5795 | -3.27 | $\leq 30$    | PASS |
|                 | Ant2  | 5795 | -4.47 | $\leq 30$    | PASS |
|                 | Total | 5795 | -0.82 | $\leq 28.74$ | PASS |
| 802.11ac(VHT80) | Ant1  | 5210 | -3.23 | $\leq 11$    | PASS |
|                 | Ant2  | 5210 | -5.53 | $\leq 11$    | PASS |
|                 | Total | 5210 | -1.22 | $\leq 9.87$  | PASS |
|                 | Ant1  | 5775 | -6.26 | $\leq 30$    | PASS |
|                 | Ant2  | 5775 | -7.54 | $\leq 30$    | PASS |
|                 | Total | 5775 | -3.84 | $\leq 28.74$ | PASS |

Note: 1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2. The Duty Cycle Factor and RBW Factor is compensated in the graph.

3. The U-NII-1 Directional Gain=7.13dBi > 6dBi. So Pout = Plimit-(GTX-6)] = 11-1.13=9.87dBm

The U-NII-3 Directional Gain=7.26dBi > 6dBi. So Pout = Plimit-(GTX-6)] = 30-1.26=28.74dBm

## Test Graphs

802.11a\_Ant1\_5180



802.11a\_Ant2\_5180



802.11a\_Ant1\_5200



# 802.11a\_Ant2\_5200



# 802.11a\_Ant1\_5240



# 802.11a\_Ant2\_5240



# 802.11a\_Ant1\_5745



802.11a\_Ant2\_5745



802.11a\_Ant1\_5785



802.11a\_Ant2\_5785



802.11a\_Ant1\_5825



802.11a\_Ant2\_5825



802.11n(HT20)\_Ant1\_5180



802.11n(HT20)\_Ant2\_5180



802.11n(HT20)\_Ant1\_5200



802.11n(HT20)\_Ant2\_5200



802.11n(HT20)\_Ant1\_5240



802.11n(HT20)\_Ant2\_5240



802.11n(HT20)\_Ant1\_5745



802.11n(HT20)\_Ant2\_5745



802.11n(HT20)\_Ant1\_5785



802.11n(HT20)\_Ant2\_5785



802.11n(HT20)\_Ant1\_5825



802.11n(HT20)\_Ant2\_5825



802.11n(HT40)\_Ant1\_5190



802.11n(HT40)\_Ant2\_5190



802.11n(HT40)\_Ant1\_5230



802.11n(HT40)\_Ant2\_5230



802.11n(HT40)\_Ant1\_5755



802.11n(HT40)\_Ant2\_5755



802.11n(HT40)\_Ant1\_5795



802.11n(HT40)\_Ant2\_5795



802.11ac(VHT20)\_Ant1\_5180



802.11ac(VHT20)\_Ant2\_5180



802.11ac(VHT20)\_Ant1\_5200



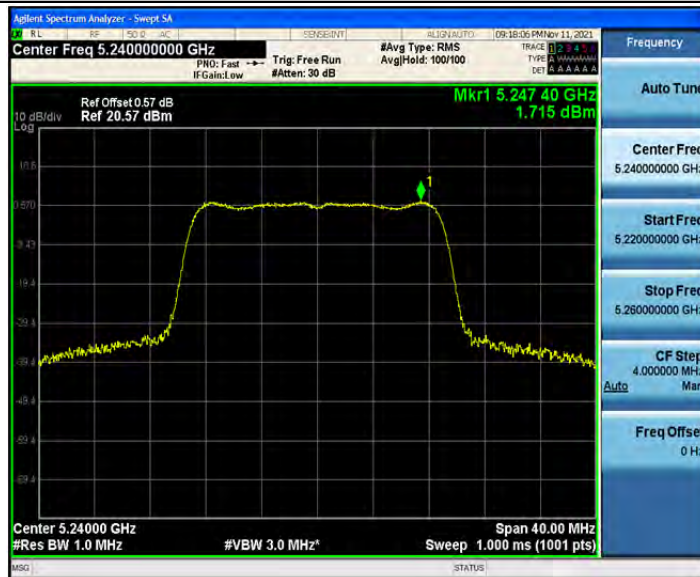
802.11ac(VHT20)\_Ant2\_5200



802.11ac(VHT20)\_Ant1\_5240



802.11ac(VHT20)\_Ant2\_5240



802.11ac(VHT20)\_Ant1\_5745



802.11ac(VHT20)\_Ant2\_5745



802.11ac(VHT20)\_Ant1\_5785



802.11ac(VHT20)\_Ant2\_5785



802.11ac(VHT20)\_Ant1\_5825



802.11ac(VHT20)\_Ant2\_5825



802.11ac(VHT40)\_Ant1\_5190



802.11ac(VHT40)\_Ant2\_5190



802.11ac(VHT40)\_Ant1\_5230



802.11ac(VHT40)\_Ant2\_5230



802.11ac(VHT40)\_Ant1\_5755



802.11ac(VHT40)\_Ant2\_5755



802.11ac(VHT40)\_Ant1\_5795



802.11ac(VHT40)\_Ant2\_5795



802.11ac(VHT80)\_Ant1\_5210



802.11ac(VHT80)\_Ant2\_5210



802.11ac(VHT80)\_Ant1\_5775



802.11ac(VHT80)\_Ant2\_5775



## Appendix D: Frequency Stability

### Test Result

| Voltage   |         |         |               |                  |                |                 |             |         |
|-----------|---------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Test Mode | Antenna | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 20MHz     | Ant1    | 5180    | NV            | NT               | 5000           | 0.965251        | 20          | PASS    |
|           |         |         | LV            | NT               | 5000           | 0.965251        | 20          | PASS    |
|           |         |         | HV            | NT               | 6000           | 1.158301        | 20          | PASS    |
|           | Ant2    | 5180    | NV            | NT               | 11000          | 2.123552        | 20          | PASS    |
|           |         |         | LV            | NT               | 10000          | 1.930502        | 20          | PASS    |
|           |         |         | HV            | NT               | 11000          | 2.123552        | 20          | PASS    |
|           | Ant1    | 5200    | NV            | NT               | 13000          | 2.500000        | 20          | PASS    |
|           |         |         | LV            | NT               | 11000          | 2.115385        | 20          | PASS    |
|           |         |         | HV            | NT               | 7000           | 1.346154        | 20          | PASS    |
|           | Ant2    | 5200    | NV            | NT               | -10000         | -1.923077       | 20          | PASS    |
|           |         |         | LV            | NT               | -10000         | -1.923077       | 20          | PASS    |
|           |         |         | HV            | NT               | -12000         | -2.307692       | 20          | PASS    |
|           | Ant1    | 5240    | NV            | NT               | -17000         | -3.244275       | 20          | PASS    |
|           |         |         | LV            | NT               | -17000         | -3.244275       | 20          | PASS    |
|           |         |         | HV            | NT               | -17000         | -3.244275       | 20          | PASS    |
|           | Ant2    | 5240    | NV            | NT               | -23000         | -4.389313       | 20          | PASS    |
|           |         |         | LV            | NT               | -23000         | -4.389313       | 20          | PASS    |
|           |         |         | HV            | NT               | -23000         | -4.389313       | 20          | PASS    |
|           | Ant1    | 5745    | NV            | NT               | -24000         | -4.177546       | 20          | PASS    |
|           |         |         | LV            | NT               | -24000         | -4.177546       | 20          | PASS    |
|           |         |         | HV            | NT               | -23000         | -4.003481       | 20          | PASS    |
|           | Ant2    | 5745    | NV            | NT               | -4000          | -0.696258       | 20          | PASS    |
|           |         |         | LV            | NT               | -4000          | -0.696258       | 20          | PASS    |
|           |         |         | HV            | NT               | -4000          | -0.696258       | 20          | PASS    |
|           | Ant1    | 5785    | NV            | NT               | -11000         | -1.901469       | 20          | PASS    |
|           |         |         | LV            | NT               | -12000         | -2.074330       | 20          | PASS    |
|           |         |         | HV            | NT               | -12000         | -2.074330       | 20          | PASS    |
|           | Ant2    | 5785    | NV            | NT               | -18000         | -3.111495       | 20          | PASS    |
|           |         |         | LV            | NT               | -18000         | -3.111495       | 20          | PASS    |
|           |         |         | HV            | NT               | -19000         | -3.284356       | 20          | PASS    |
|           | Ant1    | 5825    | NV            | NT               | -20000         | -3.433476       | 20          | PASS    |
|           |         |         | LV            | NT               | -21000         | -3.605150       | 20          | PASS    |
|           |         |         | HV            | NT               | -21000         | -3.605150       | 20          | PASS    |
|           | Ant2    | 5825    | NV            | NT               | -24000         | -4.120172       | 20          | PASS    |
|           |         |         | LV            | NT               | -24000         | -4.120172       | 20          | PASS    |
|           |         |         | HV            | NT               | -24000         | -4.120172       | 20          | PASS    |
| 40MHz     | Ant1    | 5190    | NV            | NT               | -20000         | -3.853565       | 20          | PASS    |
|           |         |         | LV            | NT               | -22000         | -4.238921       | 20          | PASS    |
|           |         |         | HV            | NT               | -21000         | -4.046243       | 20          | PASS    |
|           | Ant2    | 5190    | NV            | NT               | -24000         | -4.624277       | 20          | PASS    |

|       |      |      |    |    |        |           |    |      |
|-------|------|------|----|----|--------|-----------|----|------|
|       | Ant1 | 5230 | LV | NT | -22000 | -4.238921 | 20 | PASS |
|       |      |      | HV | NT | -22000 | -4.238921 | 20 | PASS |
|       |      |      | NV | NT | -21000 | -4.015296 | 20 | PASS |
|       |      |      | LV | NT | -22000 | -4.206501 | 20 | PASS |
|       |      |      | HV | NT | -23000 | -4.397706 | 20 | PASS |
|       |      |      | NV | NT | -24000 | -4.588910 | 20 | PASS |
|       | Ant2 | 5230 | LV | NT | -25000 | -4.780115 | 20 | PASS |
|       |      |      | HV | NT | -24000 | -4.588910 | 20 | PASS |
|       |      |      | NV | NT | -23000 | -3.996525 | 20 | PASS |
|       | Ant1 | 5755 | LV | NT | -24000 | -4.170287 | 20 | PASS |
|       |      |      | HV | NT | -24000 | -4.170287 | 20 | PASS |
|       |      |      | NV | NT | -26000 | -4.517811 | 20 | PASS |
|       | Ant2 | 5755 | LV | NT | -26000 | -4.517811 | 20 | PASS |
|       |      |      | HV | NT | -26000 | -4.517811 | 20 | PASS |
|       |      |      | NV | NT | -25000 | -4.314064 | 20 | PASS |
|       | Ant1 | 5795 | LV | NT | -26000 | -4.486626 | 20 | PASS |
|       |      |      | HV | NT | -25000 | -4.314064 | 20 | PASS |
|       |      |      | NV | NT | -25000 | -4.314064 | 20 | PASS |
|       | Ant2 | 5795 | LV | NT | -27000 | -4.659189 | 20 | PASS |
|       |      |      | HV | NT | -26000 | -4.486626 | 20 | PASS |
|       |      |      | NV | NT | -22000 | -4.222649 | 20 | PASS |
| 80MHz | Ant1 | 5210 | LV | NT | -23000 | -4.414587 | 20 | PASS |
|       |      |      | HV | NT | -23000 | -4.414587 | 20 | PASS |
|       |      |      | NV | NT | -23000 | -4.414587 | 20 | PASS |
|       | Ant2 | 5210 | LV | NT | -24000 | -4.606526 | 20 | PASS |
|       |      |      | HV | NT | -23000 | -4.414587 | 20 | PASS |
|       |      |      | NV | NT | -23000 | -3.982684 | 20 | PASS |
|       | Ant1 | 5775 | LV | NT | -24000 | -4.155844 | 20 | PASS |
|       |      |      | HV | NT | -25000 | -4.329004 | 20 | PASS |
|       |      |      | NV | NT | -26000 | -4.502165 | 20 | PASS |
|       | Ant2 | 5775 | LV | NT | -27000 | -4.675325 | 20 | PASS |
|       |      |      | HV | NT | -27000 | -4.675325 | 20 | PASS |
|       |      |      | NV | NT | -27000 | -4.675325 | 20 | PASS |

| Temperature |         |         |               |                  |                |                 |             |         |
|-------------|---------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Test Mode   | Antenna | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 20MHz       | Ant1    | 5180    | NV            | 0                | 8000           | 1.544402        | 20          | PASS    |
|             |         |         | NV            | 10               | 8000           | 1.544402        | 20          | PASS    |
|             |         |         | NV            | 20               | 9000           | 1.737452        | 20          | PASS    |
|             |         |         | NV            | 30               | 9000           | 1.737452        | 20          | PASS    |
|             |         |         | NV            | 40               | 10000          | 1.930502        | 20          | PASS    |
|             | Ant2    | 5180    | NV            | 0                | 10000          | 1.930502        | 20          | PASS    |
|             |         |         | NV            | 10               | 10000          | 1.930502        | 20          | PASS    |
|             |         |         | NV            | 20               | 10000          | 1.930502        | 20          | PASS    |
|             |         |         | NV            | 30               | 10000          | 1.930502        | 20          | PASS    |
|             |         |         | NV            | 40               | 10000          | 1.930502        | 20          | PASS    |
|             | Ant1    | 5200    | NV            | 0                | -1000          | -0.192308       | 20          | PASS    |
|             |         |         | NV            | 10               | -1000          | -0.192308       | 20          | PASS    |
|             |         |         | NV            | 20               | -4000          | -0.769231       | 20          | PASS    |
|             |         |         | NV            | 30               | -4000          | -0.769231       | 20          | PASS    |
|             |         |         | NV            | 40               | -6000          | -1.153846       | 20          | PASS    |
|             | Ant2    | 5200    | NV            | 0                | -15000         | -2.884615       | 20          | PASS    |
|             |         |         | NV            | 10               | -15000         | -2.884615       | 20          | PASS    |
|             |         |         | NV            | 20               | -15000         | -2.884615       | 20          | PASS    |
|             |         |         | NV            | 30               | -16000         | -3.076923       | 20          | PASS    |
|             |         |         | NV            | 40               | -16000         | -3.076923       | 20          | PASS    |
|             | Ant1    | 5240    | NV            | 0                | -19000         | -3.625954       | 20          | PASS    |
|             |         |         | NV            | 10               | -20000         | -3.816794       | 20          | PASS    |
|             |         |         | NV            | 20               | -21000         | -4.007634       | 20          | PASS    |
|             |         |         | NV            | 30               | -20000         | -3.816794       | 20          | PASS    |
|             |         |         | NV            | 40               | -21000         | -4.007634       | 20          | PASS    |
|             | Ant2    | 5240    | NV            | 0                | -23000         | -4.389313       | 20          | PASS    |
|             |         |         | NV            | 10               | -23000         | -4.389313       | 20          | PASS    |
|             |         |         | NV            | 20               | -22000         | -4.198473       | 20          | PASS    |
|             |         |         | NV            | 30               | -23000         | -4.389313       | 20          | PASS    |
|             |         |         | NV            | 40               | -23000         | -4.389313       | 20          | PASS    |
|             | Ant1    | 5745    | NV            | 0                | -13000         | -2.262837       | 20          | PASS    |
|             |         |         | NV            | 10               | -12000         | -2.088773       | 20          | PASS    |
|             |         |         | NV            | 20               | -9000          | -1.566580       | 20          | PASS    |
|             |         |         | NV            | 30               | -8000          | -1.392515       | 20          | PASS    |
|             |         |         | NV            | 40               | -6000          | -1.044386       | 20          | PASS    |
|             | Ant2    | 5745    | NV            | 0                | -7000          | -1.218451       | 20          | PASS    |
|             |         |         | NV            | 10               | -9000          | -1.566580       | 20          | PASS    |
|             |         |         | NV            | 20               | -9000          | -1.566580       | 20          | PASS    |
|             |         |         | NV            | 30               | -10000         | -1.740644       | 20          | PASS    |
|             |         |         | NV            | 40               | -10000         | -1.740644       | 20          | PASS    |
|             | Ant1    | 5785    | NV            | 0                | -14000         | -2.420052       | 20          | PASS    |
|             |         |         | NV            | 10               | -15000         | -2.592913       | 20          | PASS    |
|             |         |         | NV            | 20               | -13000         | -2.247191       | 20          | PASS    |

|       |      |      |    |    |        |           |    |      |
|-------|------|------|----|----|--------|-----------|----|------|
|       |      |      | NV | 30 | -14000 | -2.420052 | 20 | PASS |
|       |      |      | NV | 40 | -16000 | -2.765774 | 20 | PASS |
|       | Ant2 | 5785 | NV | 0  | -20000 | -3.457217 | 20 | PASS |
|       |      |      | NV | 10 | -20000 | -3.457217 | 20 | PASS |
|       |      |      | NV | 20 | -20000 | -3.457217 | 20 | PASS |
|       |      |      | NV | 30 | -20000 | -3.457217 | 20 | PASS |
|       |      |      | NV | 40 | -20000 | -3.457217 | 20 | PASS |
|       | Ant1 | 5825 | NV | 0  | -22000 | -3.776824 | 20 | PASS |
|       |      |      | NV | 10 | -23000 | -3.948498 | 20 | PASS |
|       |      |      | NV | 20 | -23000 | -3.948498 | 20 | PASS |
|       |      |      | NV | 30 | -24000 | -4.120172 | 20 | PASS |
|       |      |      | NV | 40 | -22000 | -3.776824 | 20 | PASS |
|       | Ant2 | 5825 | NV | 0  | -25000 | -4.291845 | 20 | PASS |
|       |      |      | NV | 10 | -25000 | -4.291845 | 20 | PASS |
|       |      |      | NV | 20 | -24000 | -4.120172 | 20 | PASS |
|       |      |      | NV | 30 | -25000 | -4.291845 | 20 | PASS |
|       |      |      | NV | 40 | -24000 | -4.120172 | 20 | PASS |
| 40MHz | Ant1 | 5190 | NV | 0  | -22000 | -4.238921 | 20 | PASS |
|       |      |      | NV | 10 | -22000 | -4.238921 | 20 | PASS |
|       |      |      | NV | 20 | -22000 | -4.238921 | 20 | PASS |
|       |      |      | NV | 30 | -22000 | -4.238921 | 20 | PASS |
|       |      |      | NV | 40 | -22000 | -4.238921 | 20 | PASS |
|       | Ant2 | 5190 | NV | 0  | -23000 | -4.431599 | 20 | PASS |
|       |      |      | NV | 10 | -23000 | -4.431599 | 20 | PASS |
|       |      |      | NV | 20 | -23000 | -4.431599 | 20 | PASS |
|       |      |      | NV | 30 | -23000 | -4.431599 | 20 | PASS |
|       |      |      | NV | 40 | -23000 | -4.431599 | 20 | PASS |
|       | Ant1 | 5230 | NV | 0  | -23000 | -4.397706 | 20 | PASS |
|       |      |      | NV | 10 | -23000 | -4.397706 | 20 | PASS |
|       |      |      | NV | 20 | -22000 | -4.206501 | 20 | PASS |
|       |      |      | NV | 30 | -22000 | -4.206501 | 20 | PASS |
|       |      |      | NV | 40 | -23000 | -4.397706 | 20 | PASS |
|       | Ant2 | 5230 | NV | 0  | -25000 | -4.780115 | 20 | PASS |
|       |      |      | NV | 10 | -24000 | -4.588910 | 20 | PASS |
|       |      |      | NV | 20 | -24000 | -4.588910 | 20 | PASS |
|       |      |      | NV | 30 | -24000 | -4.588910 | 20 | PASS |
|       |      |      | NV | 40 | -24000 | -4.588910 | 20 | PASS |
|       | Ant1 | 5755 | NV | 0  | -25000 | -4.344049 | 20 | PASS |
|       |      |      | NV | 10 | -25000 | -4.344049 | 20 | PASS |
|       |      |      | NV | 20 | -26000 | -4.517811 | 20 | PASS |
|       |      |      | NV | 30 | -25000 | -4.344049 | 20 | PASS |
|       |      |      | NV | 40 | -25000 | -4.344049 | 20 | PASS |
|       | Ant2 | 5755 | NV | 0  | -26000 | -4.517811 | 20 | PASS |
|       |      |      | NV | 10 | -27000 | -4.691573 | 20 | PASS |
|       |      |      | NV | 20 | -26000 | -4.517811 | 20 | PASS |
|       |      |      | NV | 30 | -26000 | -4.517811 | 20 | PASS |

|       |      |      |    |    |        |           |    |      |
|-------|------|------|----|----|--------|-----------|----|------|
|       |      |      | NV | 40 | -26000 | -4.517811 | 20 | PASS |
|       | Ant1 | 5795 | NV | 0  | -25000 | -4.314064 | 20 | PASS |
|       |      |      | NV | 10 | -25000 | -4.314064 | 20 | PASS |
|       |      |      | NV | 20 | -25000 | -4.314064 | 20 | PASS |
|       |      |      | NV | 30 | -25000 | -4.314064 | 20 | PASS |
|       |      |      | NV | 40 | -25000 | -4.314064 | 20 | PASS |
|       | Ant2 | 5795 | NV | 0  | -26000 | -4.486626 | 20 | PASS |
|       |      |      | NV | 10 | -26000 | -4.486626 | 20 | PASS |
|       |      |      | NV | 20 | -26000 | -4.486626 | 20 | PASS |
|       |      |      | NV | 30 | -26000 | -4.486626 | 20 | PASS |
|       |      |      | NV | 40 | -26000 | -4.486626 | 20 | PASS |
| 80MHz | Ant1 | 5210 | NV | 0  | -23000 | -4.414587 | 20 | PASS |
|       |      |      | NV | 10 | -23000 | -4.414587 | 20 | PASS |
|       |      |      | NV | 20 | -23000 | -4.414587 | 20 | PASS |
|       |      |      | NV | 30 | -23000 | -4.414587 | 20 | PASS |
|       |      |      | NV | 40 | -23000 | -4.414587 | 20 | PASS |
|       | Ant2 | 5210 | NV | 0  | -24000 | -4.606526 | 20 | PASS |
|       |      |      | NV | 10 | -23000 | -4.414587 | 20 | PASS |
|       |      |      | NV | 20 | -23000 | -4.414587 | 20 | PASS |
|       |      |      | NV | 30 | -23000 | -4.414587 | 20 | PASS |
|       |      |      | NV | 40 | -23000 | -4.414587 | 20 | PASS |
|       | Ant1 | 5775 | NV | 0  | -25000 | -4.329004 | 20 | PASS |
|       |      |      | NV | 10 | -26000 | -4.502165 | 20 | PASS |
|       |      |      | NV | 20 | -26000 | -4.502165 | 20 | PASS |
|       |      |      | NV | 30 | -26000 | -4.502165 | 20 | PASS |
|       |      |      | NV | 40 | -26000 | -4.502165 | 20 | PASS |
|       | Ant2 | 5775 | NV | 0  | -26000 | -4.502165 | 20 | PASS |
|       |      |      | NV | 10 | -27000 | -4.675325 | 20 | PASS |
|       |      |      | NV | 20 | -26000 | -4.502165 | 20 | PASS |
|       |      |      | NV | 30 | -26000 | -4.502165 | 20 | PASS |
|       |      |      | NV | 40 | -26000 | -4.502165 | 20 | PASS |

## Appendix E: Duty Cycle

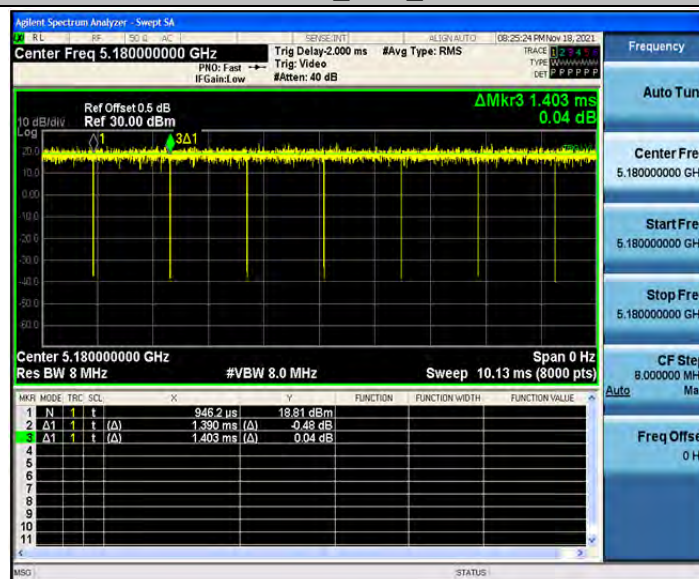
### Test Result

| Test Mode           | Antenna | Channel | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | 1/T Minimum VBW (kHz) | Final setting For VBW (kHz) |
|---------------------|---------|---------|----------------------------|--------------------------|----------------|-----------------------|-----------------------------|
| 802.11a             | Ant1    | 5180    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant2    | 5180    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant1    | 5200    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant2    | 5200    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant1    | 5240    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant2    | 5240    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant1    | 5745    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant2    | 5745    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant1    | 5785    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant2    | 5785    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant1    | 5825    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
|                     | Ant2    | 5825    | 1.39                       | 1.40                     | 99.29          | 0.72                  | 1                           |
| 802.11n<br>(HT20)   | Ant1    | 5180    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant2    | 5180    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant1    | 5200    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant2    | 5200    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant1    | 5240    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant2    | 5240    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant1    | 5745    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant2    | 5745    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant1    | 5785    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant2    | 5785    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant1    | 5825    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
|                     | Ant2    | 5825    | 1.30                       | 1.31                     | 99.24          | 0.77                  | 1                           |
| 802.11n<br>(HT40)   | Ant1    | 5190    | 0.64                       | 0.66                     | 96.97          | 1.56                  | 2                           |
|                     | Ant2    | 5190    | 0.64                       | 0.66                     | 96.97          | 1.56                  | 2                           |
|                     | Ant1    | 5230    | 0.64                       | 0.66                     | 96.97          | 1.56                  | 2                           |
|                     | Ant2    | 5230    | 0.65                       | 0.66                     | 98.48          | 1.54                  | 2                           |
|                     | Ant1    | 5755    | 0.64                       | 0.66                     | 96.97          | 1.56                  | 2                           |
|                     | Ant2    | 5755    | 0.65                       | 0.66                     | 98.48          | 1.54                  | 2                           |
|                     | Ant1    | 5795    | 0.65                       | 0.66                     | 98.48          | 1.54                  | 2                           |
|                     | Ant2    | 5795    | 0.65                       | 0.66                     | 98.48          | 1.54                  | 2                           |
| 802.11ac<br>(VHT20) | Ant1    | 5180    | 1.30                       | 1.32                     | 98.48          | 0.77                  | 1                           |
|                     | Ant2    | 5180    | 1.30                       | 1.32                     | 98.48          | 0.77                  | 1                           |
|                     | Ant1    | 5200    | 1.30                       | 1.32                     | 98.48          | 0.77                  | 1                           |
|                     | Ant2    | 5200    | 1.30                       | 1.32                     | 98.48          | 0.77                  | 1                           |
|                     | Ant1    | 5240    | 1.30                       | 1.32                     | 98.48          | 0.77                  | 1                           |
|                     | Ant2    | 5240    | 1.30                       | 1.32                     | 98.48          | 0.77                  | 1                           |
|                     | Ant1    | 5745    | 1.30                       | 1.32                     | 98.48          | 0.77                  | 1                           |
|                     | Ant2    | 5745    | 1.30                       | 1.32                     | 98.48          | 0.77                  | 1                           |

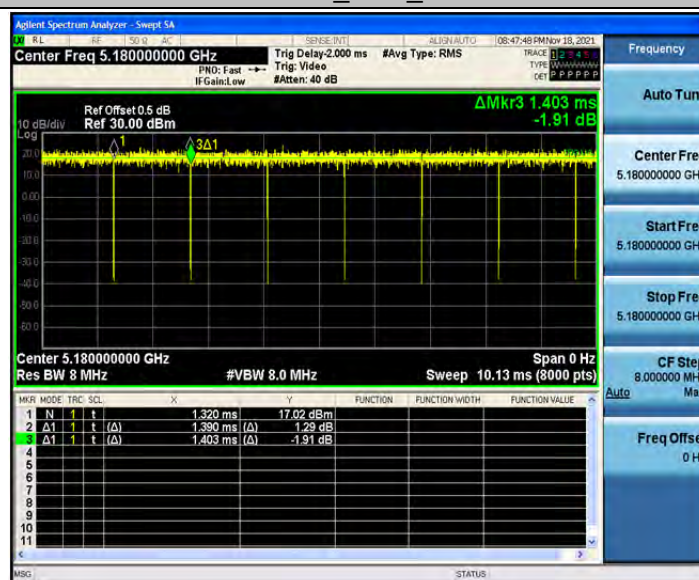
|                     |      |      |      |      |       |      |   |
|---------------------|------|------|------|------|-------|------|---|
|                     | Ant1 | 5785 | 1.30 | 1.31 | 99.24 | 0.77 | 1 |
|                     | Ant2 | 5785 | 1.30 | 1.32 | 98.48 | 0.77 | 1 |
|                     | Ant1 | 5825 | 1.30 | 1.32 | 98.48 | 0.77 | 1 |
|                     | Ant2 | 5825 | 1.30 | 1.32 | 98.48 | 0.77 | 1 |
| 802.11ac<br>(VHT40) | Ant1 | 5190 | 0.65 | 0.66 | 98.48 | 1.54 | 2 |
|                     | Ant2 | 5190 | 0.65 | 0.66 | 98.48 | 1.54 | 2 |
|                     | Ant1 | 5230 | 0.65 | 0.66 | 98.48 | 1.54 | 2 |
|                     | Ant2 | 5230 | 0.65 | 0.66 | 98.48 | 1.54 | 2 |
|                     | Ant1 | 5755 | 0.65 | 0.66 | 98.48 | 1.54 | 2 |
|                     | Ant2 | 5755 | 0.65 | 0.66 | 98.48 | 1.54 | 2 |
|                     | Ant1 | 5795 | 0.65 | 0.66 | 98.48 | 1.54 | 2 |
|                     | Ant2 | 5795 | 0.65 | 0.66 | 98.48 | 1.54 | 2 |
| 802.11ac<br>(VHT80) | Ant1 | 5210 | 0.32 | 0.33 | 96.97 | 3.13 | 4 |
|                     | Ant2 | 5210 | 0.32 | 0.33 | 96.97 | 3.13 | 4 |
|                     | Ant1 | 5775 | 0.32 | 0.33 | 96.97 | 3.13 | 4 |
|                     | Ant2 | 5775 | 0.32 | 0.33 | 96.97 | 3.13 | 4 |

## Test Graphs

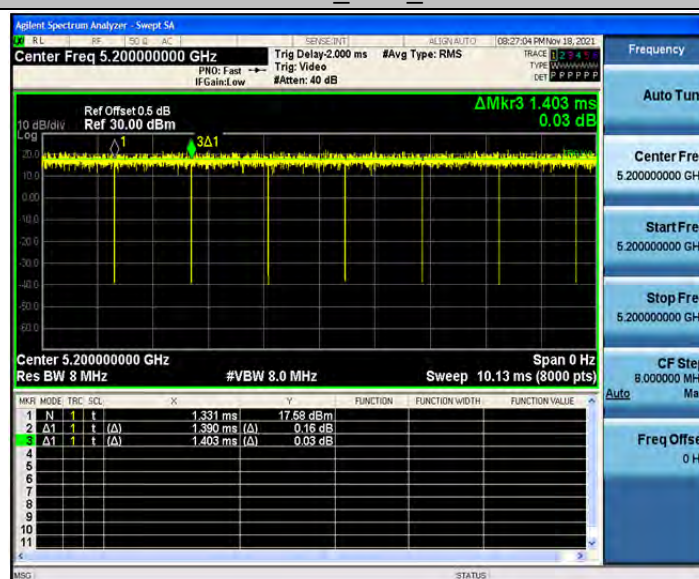
802.11a\_Ant1\_5180



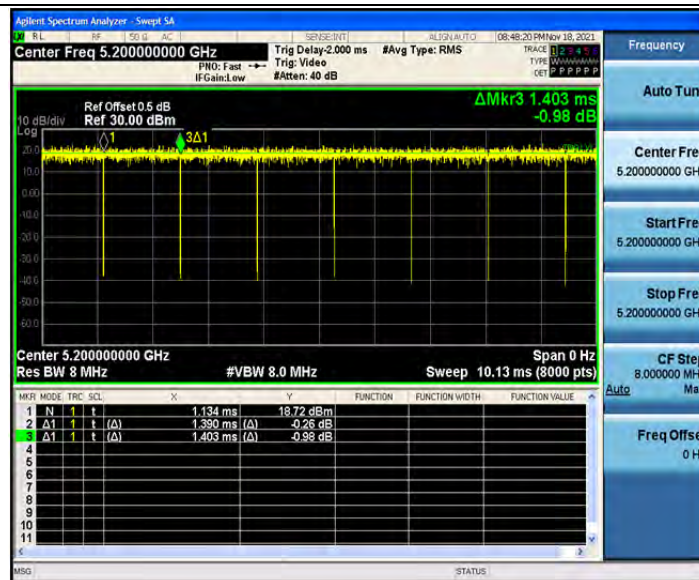
802.11a\_Ant2\_5180



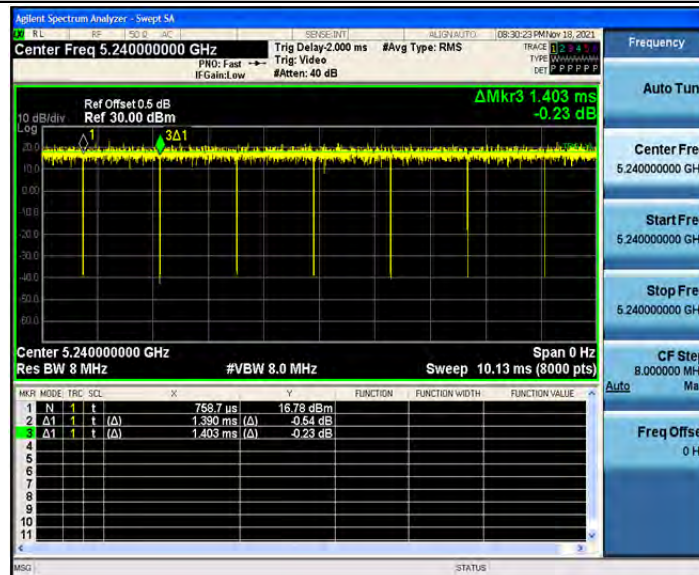
802.11a\_Ant1\_5200



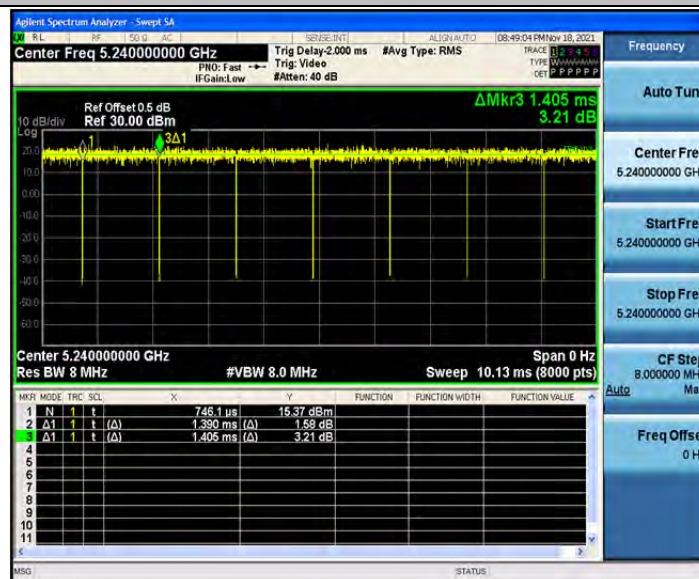
802.11a\_Ant2\_5200



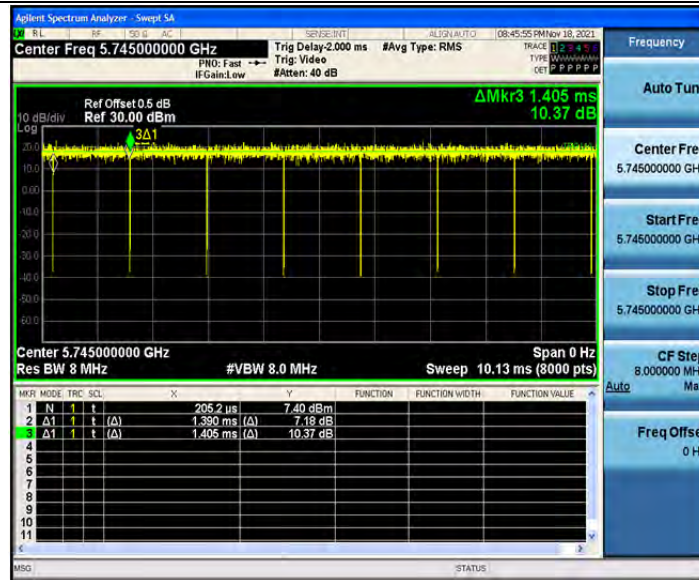
802.11a\_Ant1\_5240



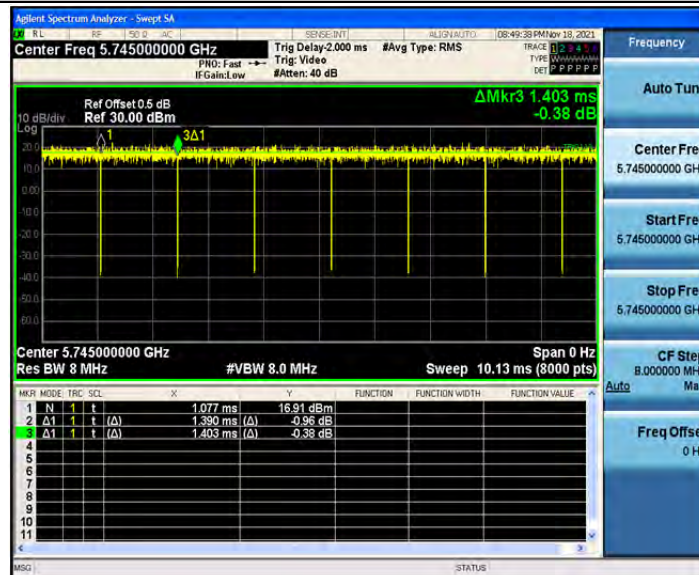
802.11a\_Ant2\_5240



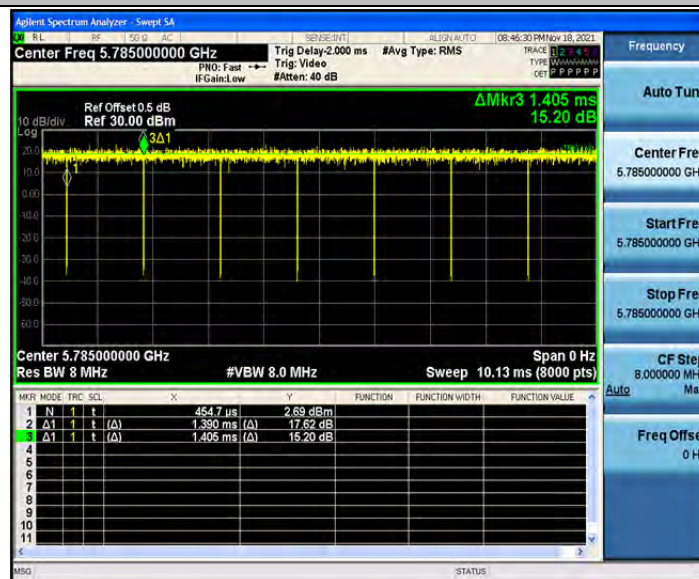
802.11a\_Ant1\_5745



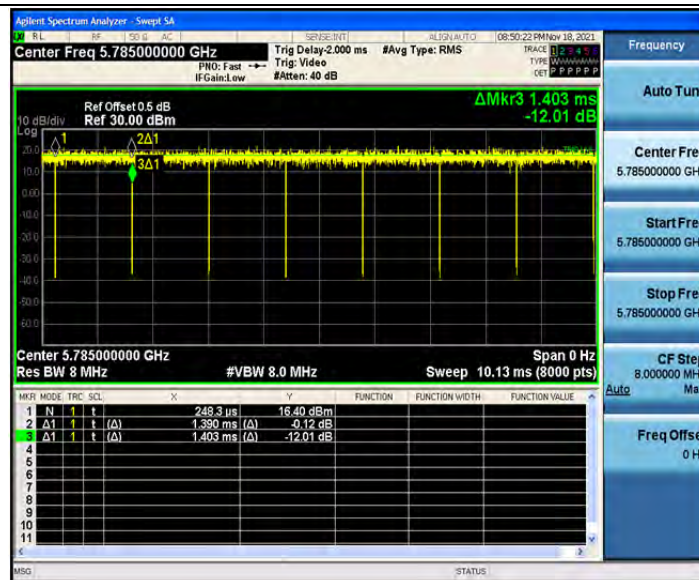
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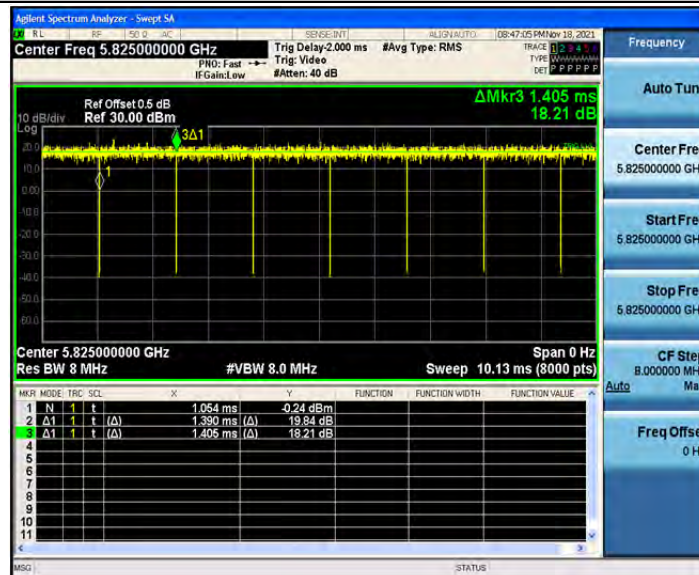
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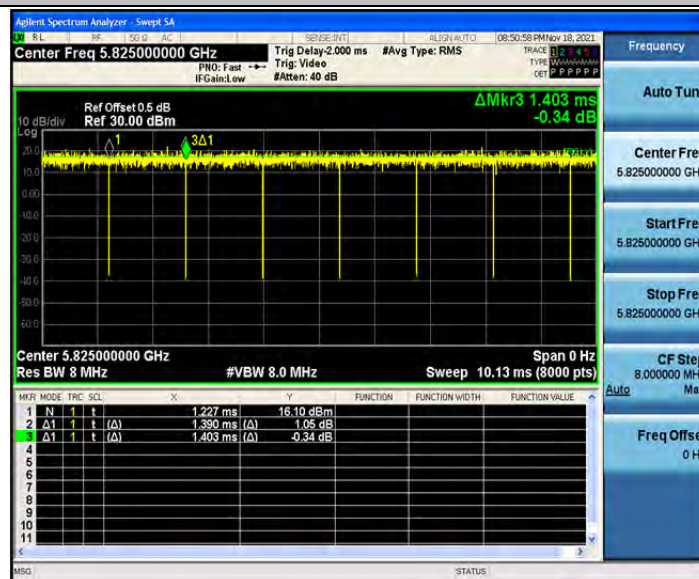
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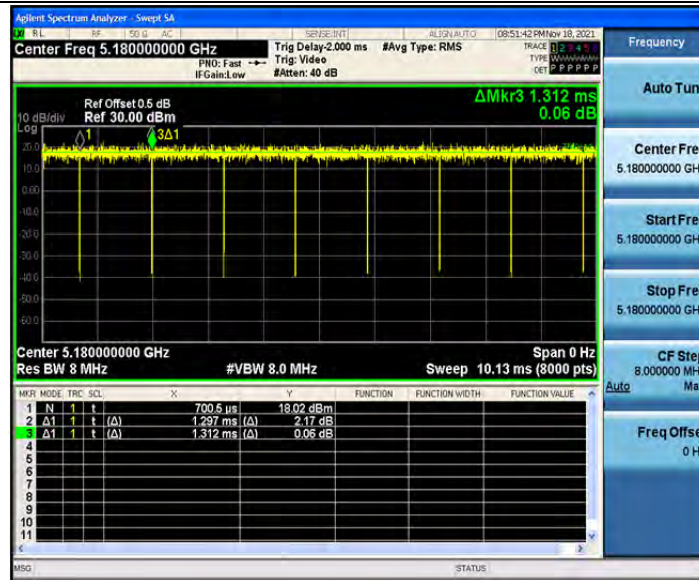
802.11a\_Ant1\_5825



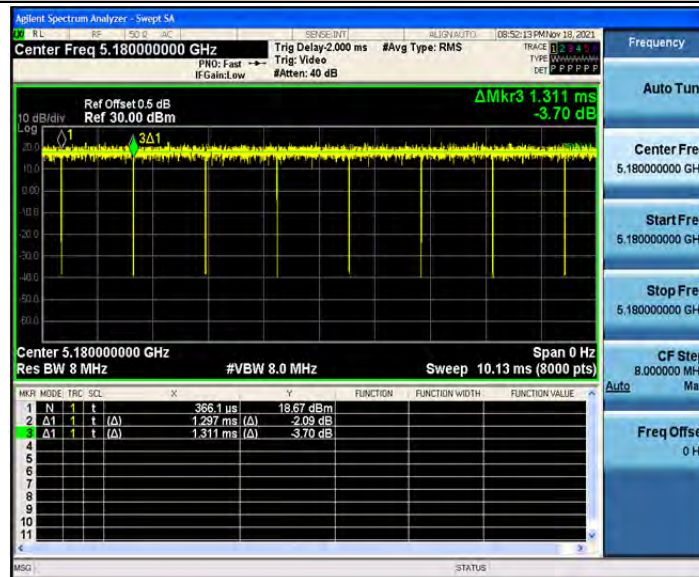
802.11a\_Ant2\_5825



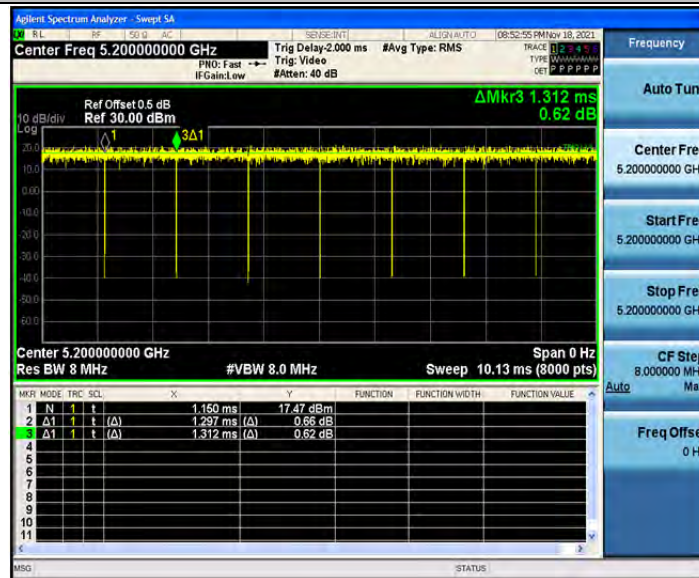
802.11n(HT20)\_Ant1\_5180



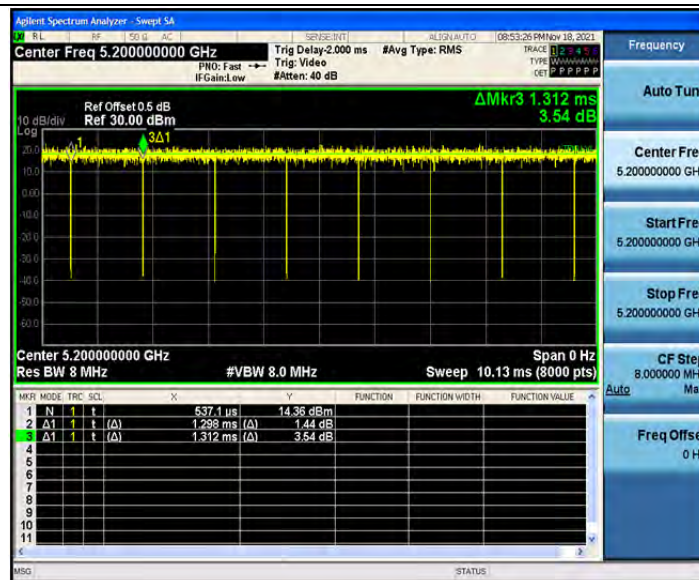
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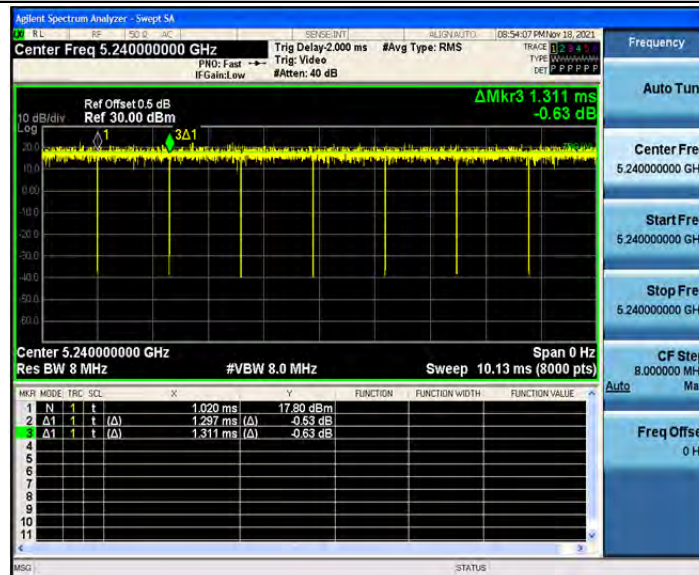
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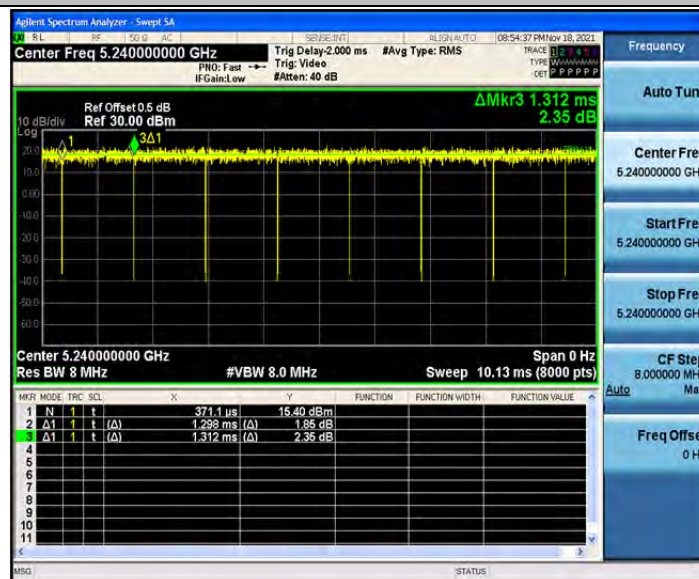
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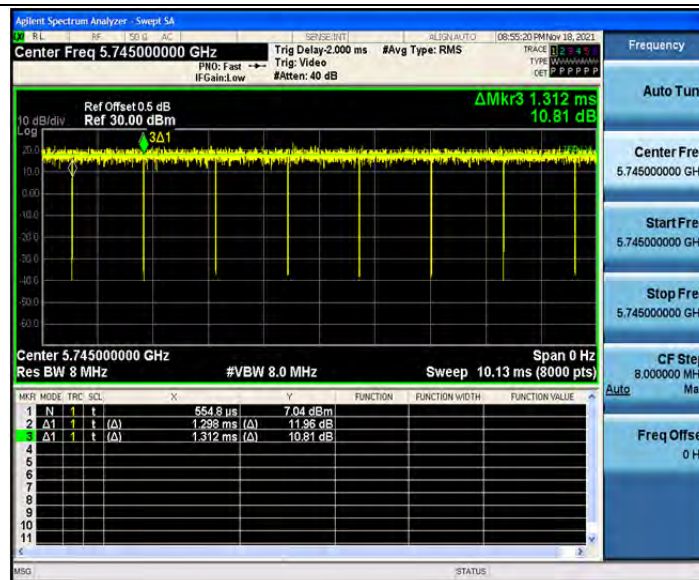
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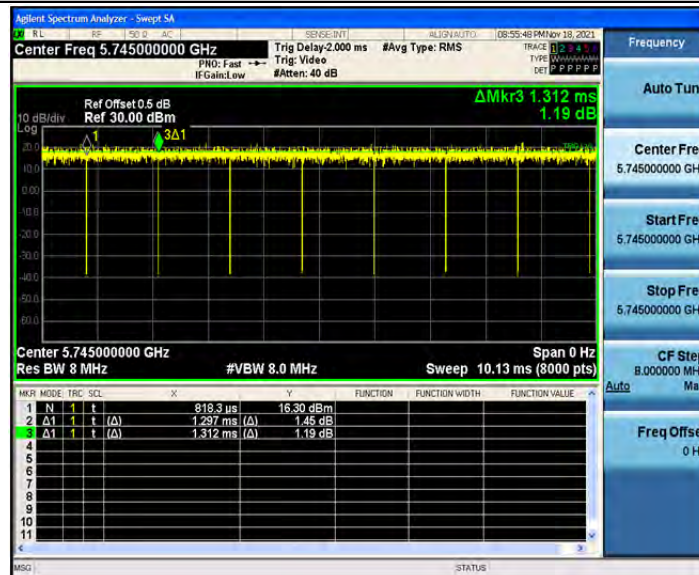
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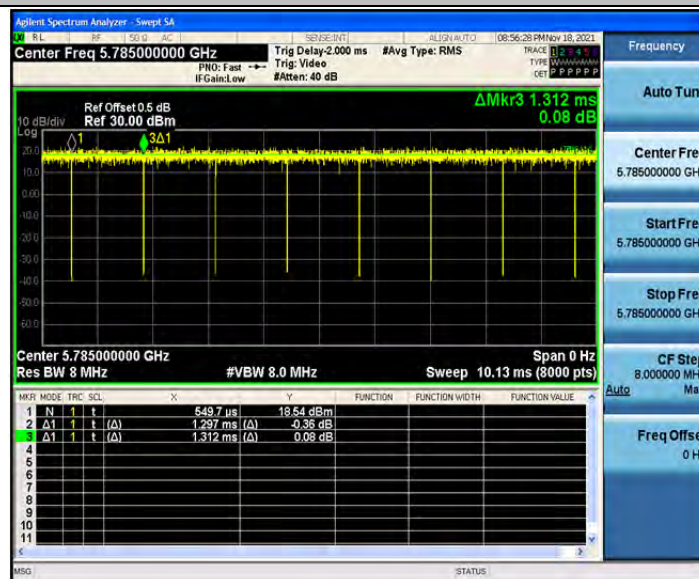
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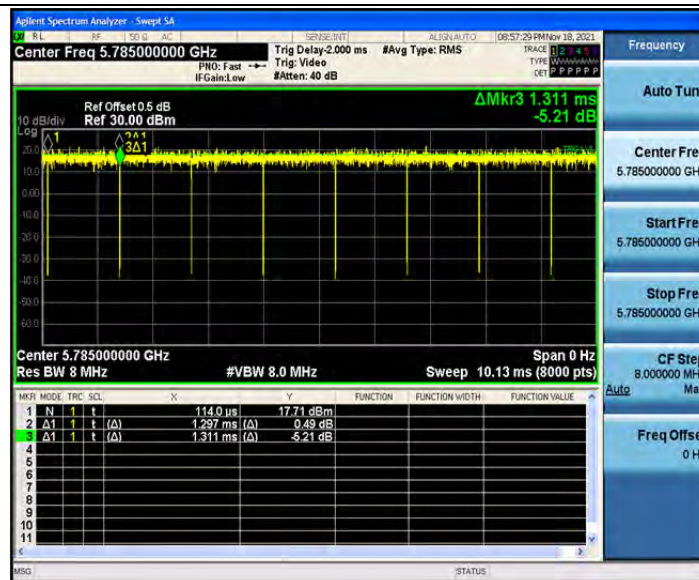
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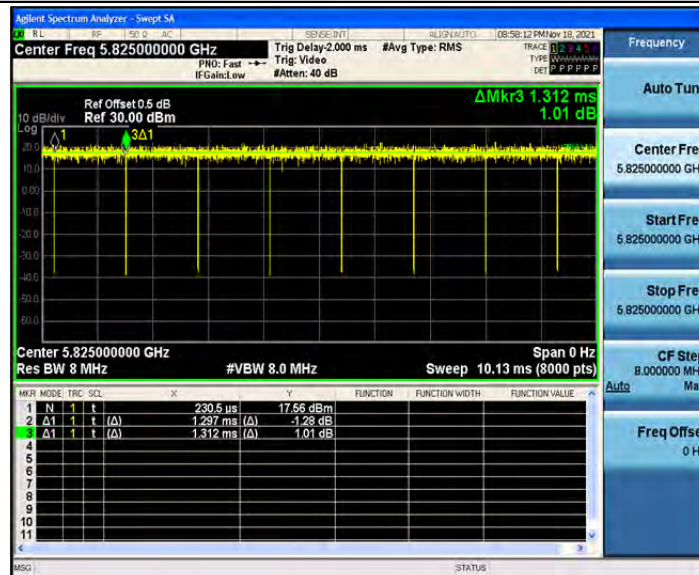
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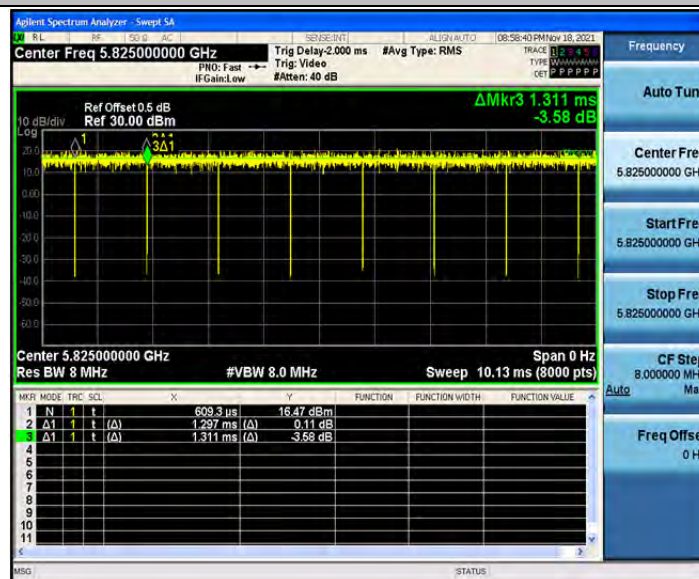
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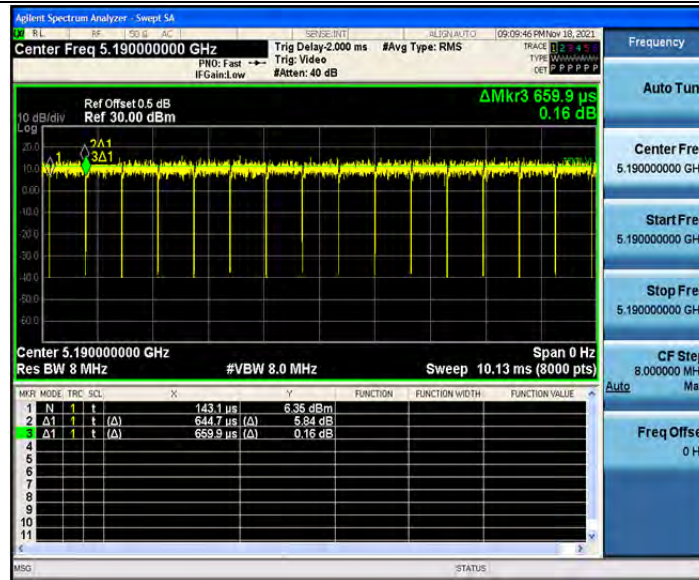
802.11n(HT20)\_Ant1\_5825



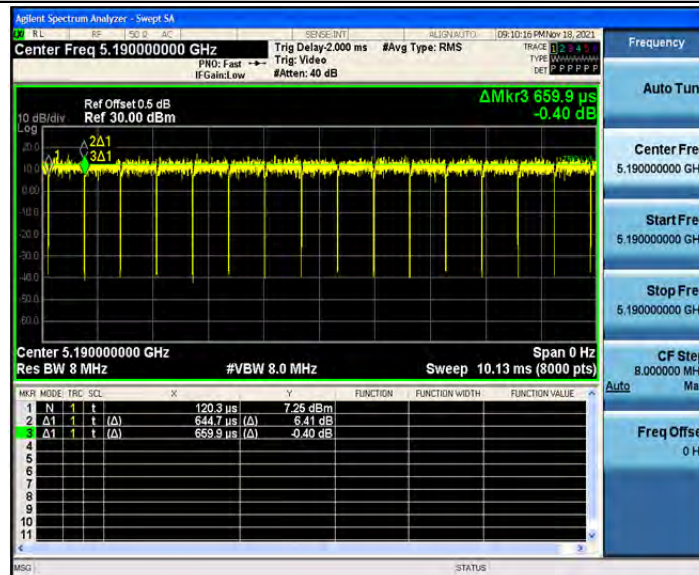
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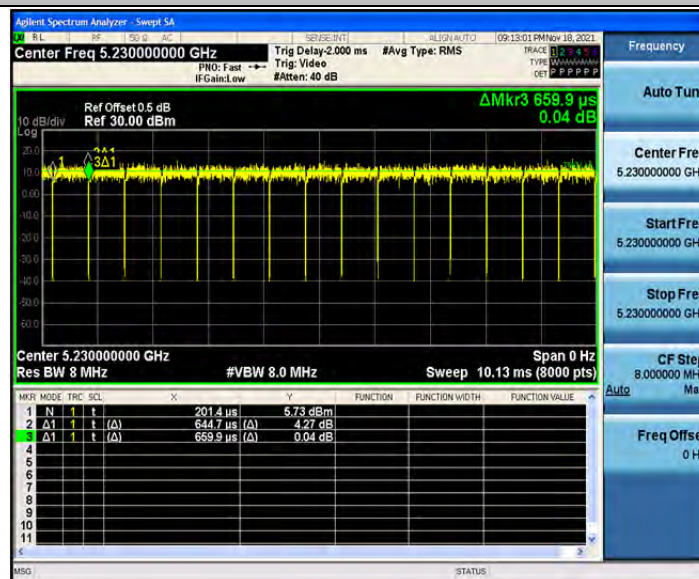
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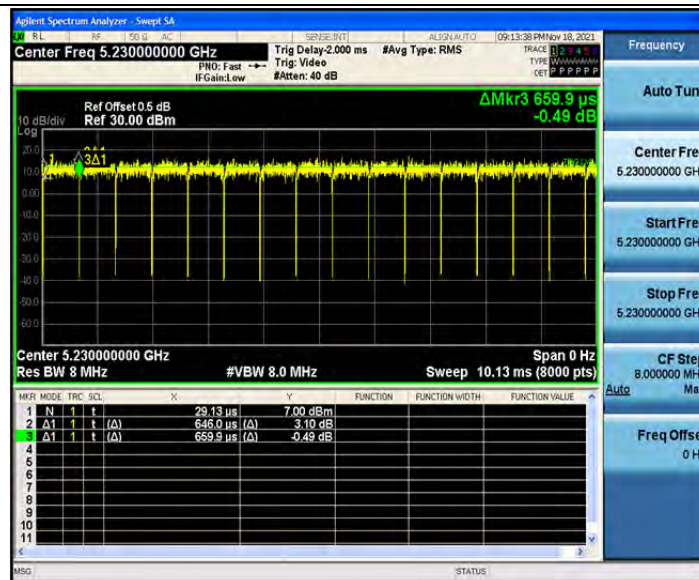
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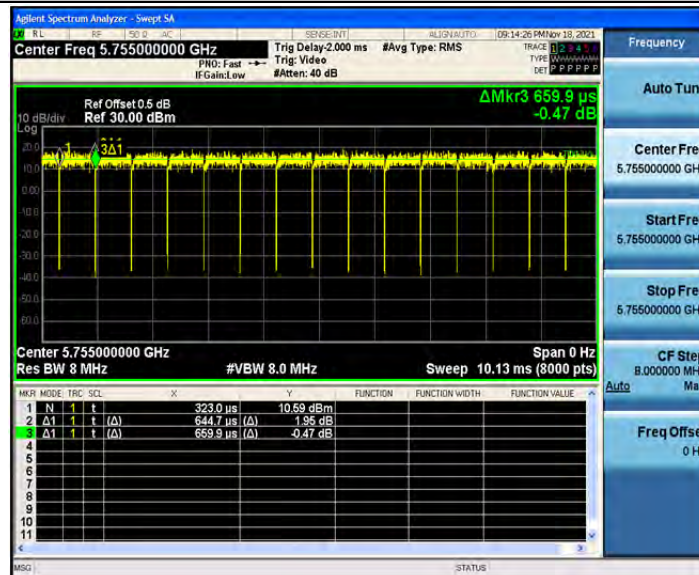
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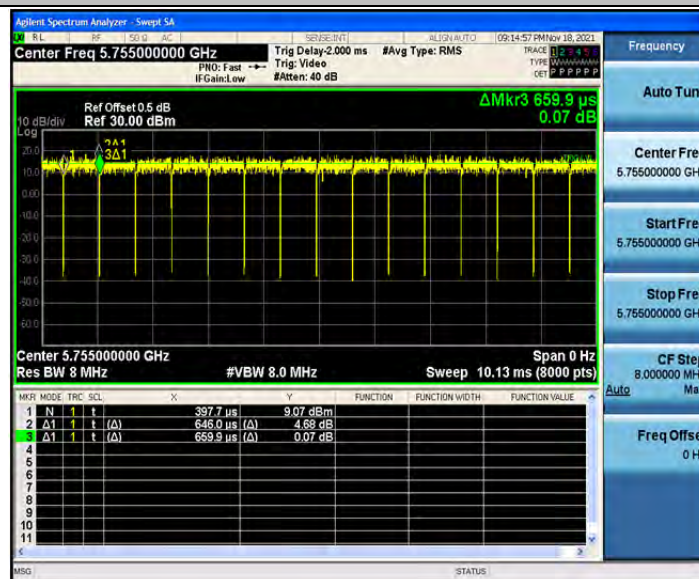
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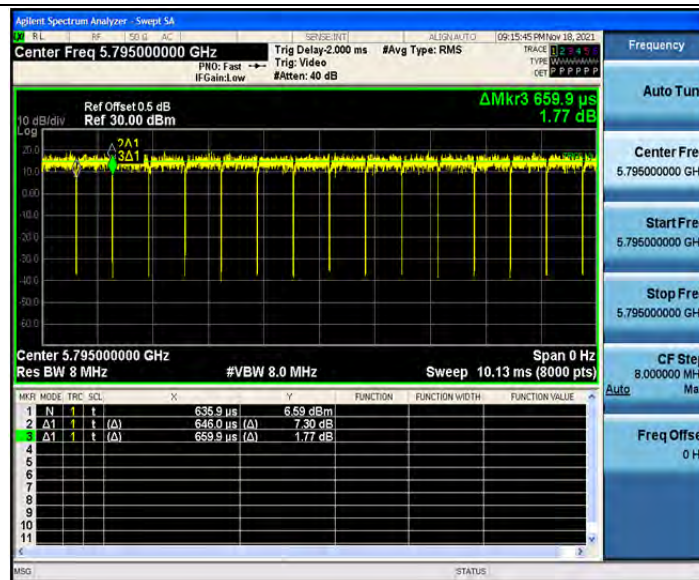
802.11n(HT40)\_Ant1\_5755



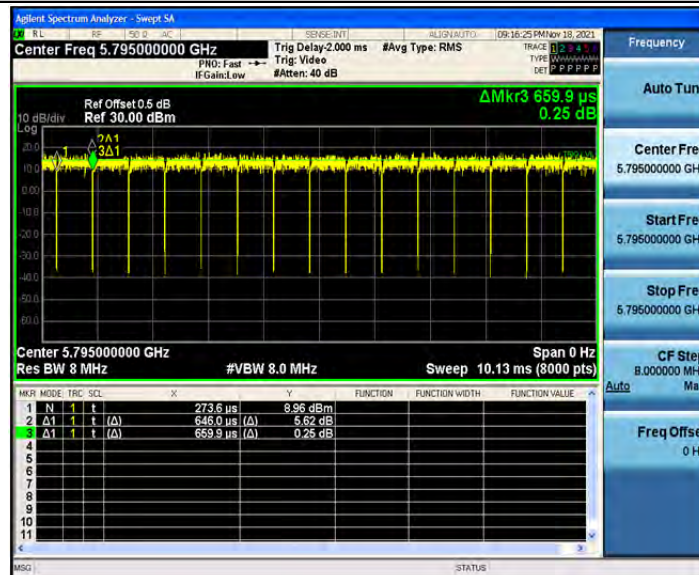
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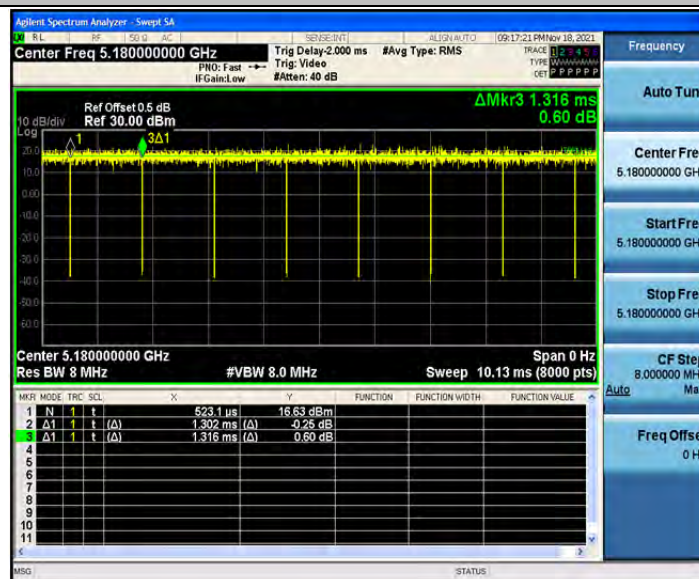
802.11n(HT40)\_Ant1\_5795



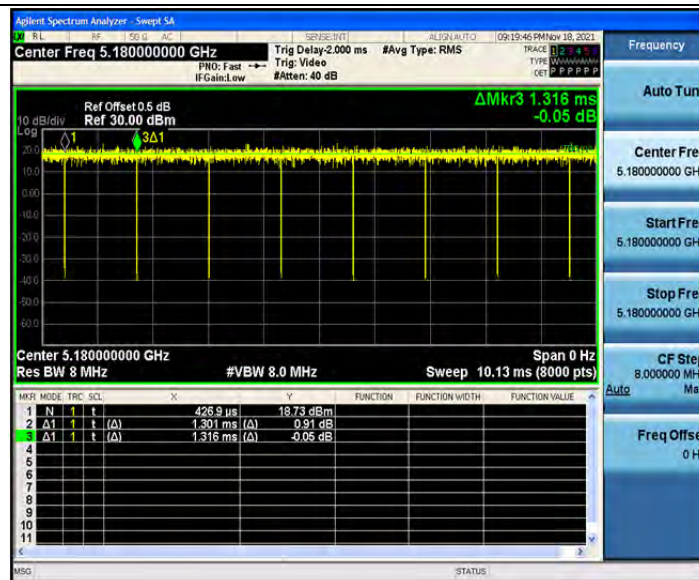
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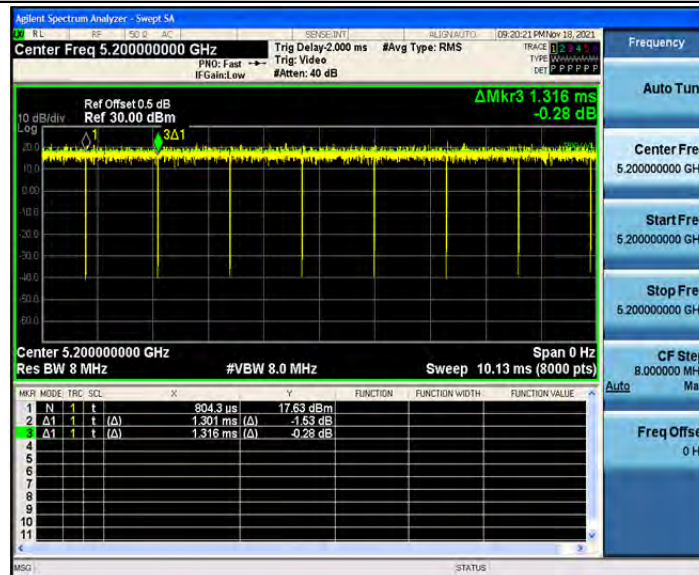
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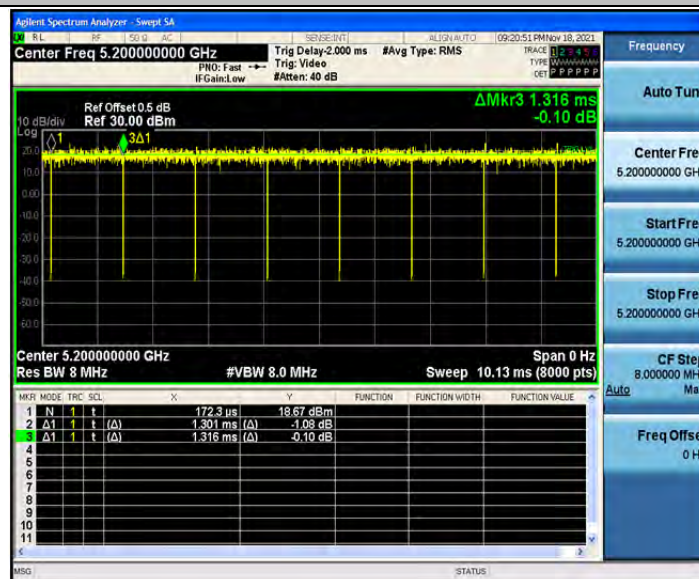
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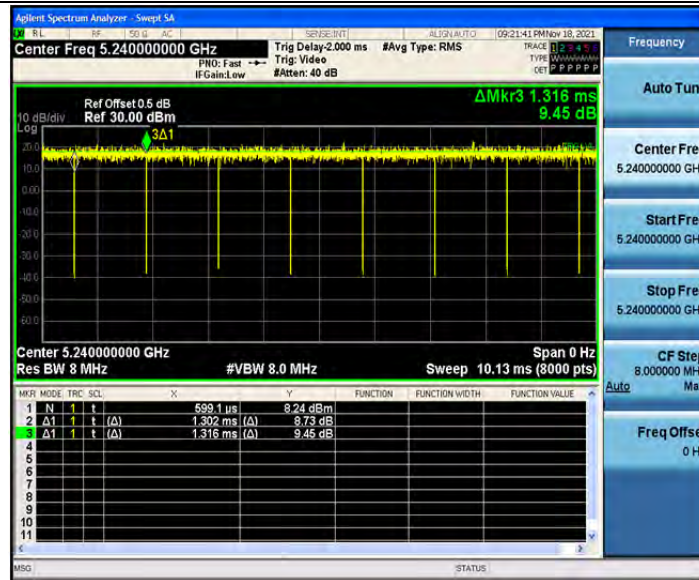
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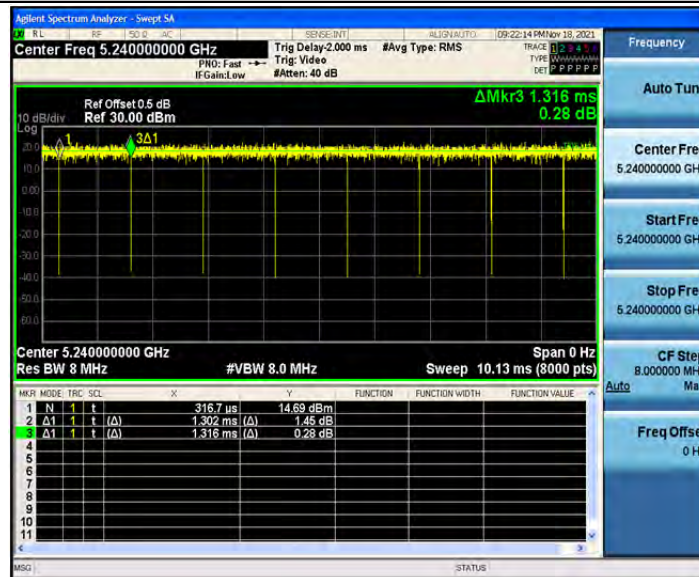
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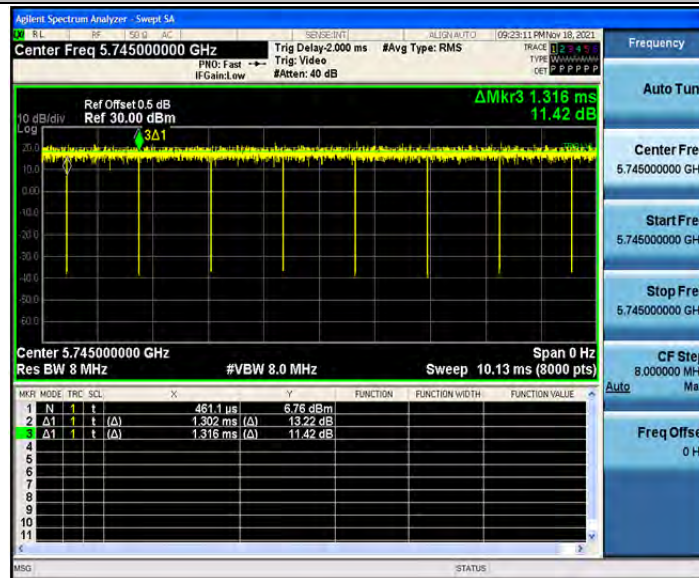
802.11ac(VHT20)\_Ant1\_5240



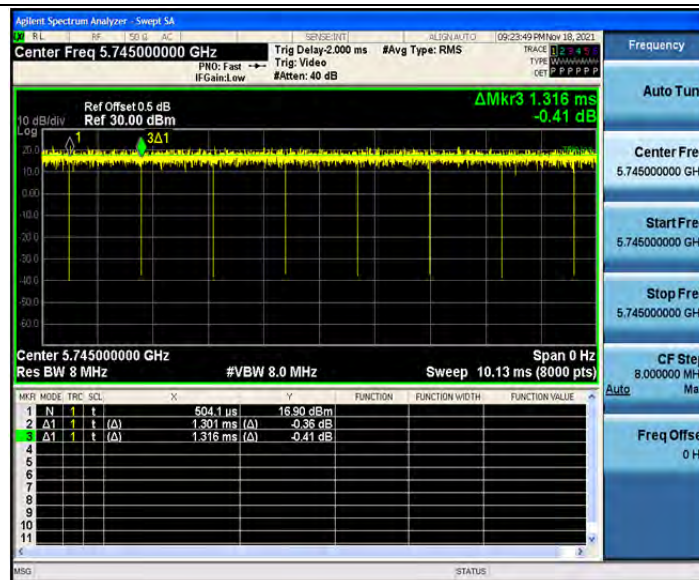
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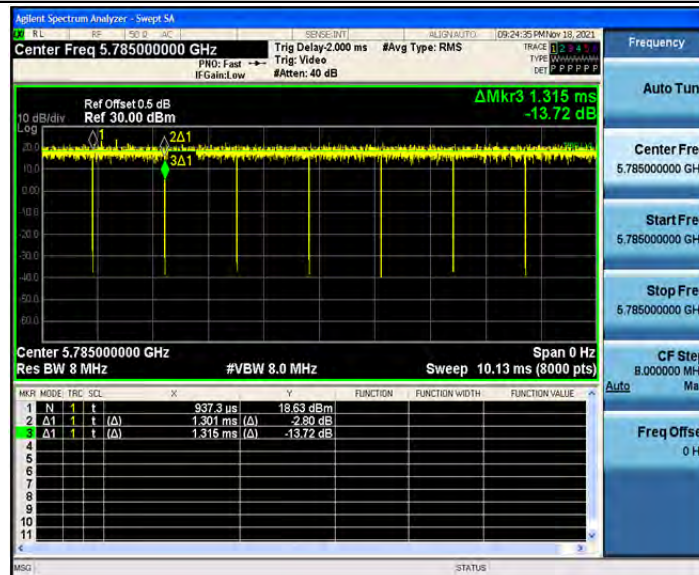
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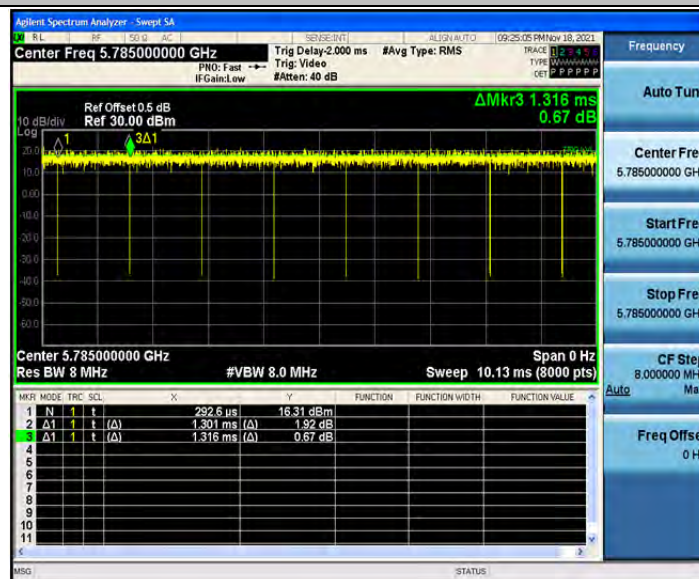
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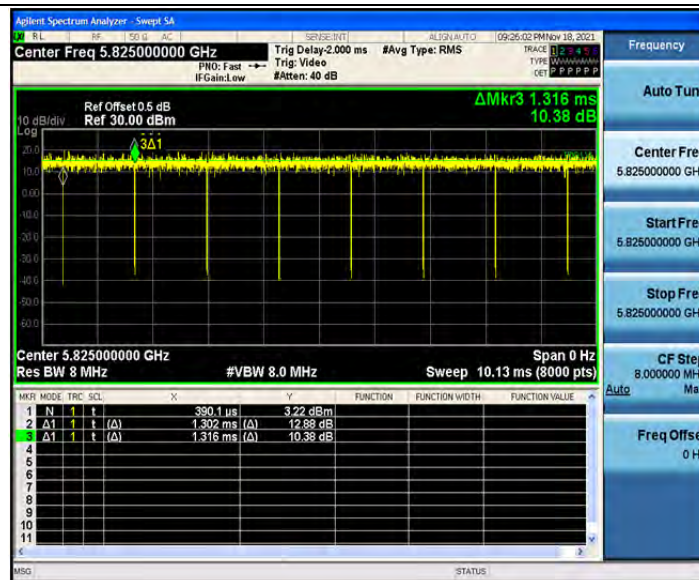
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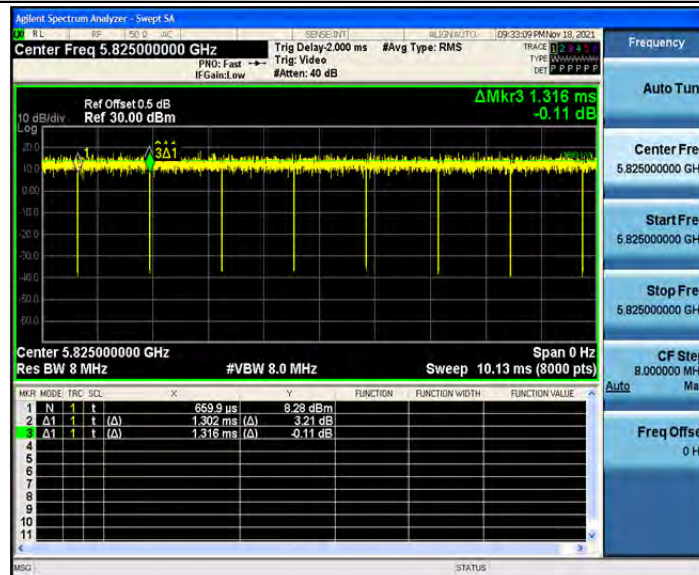
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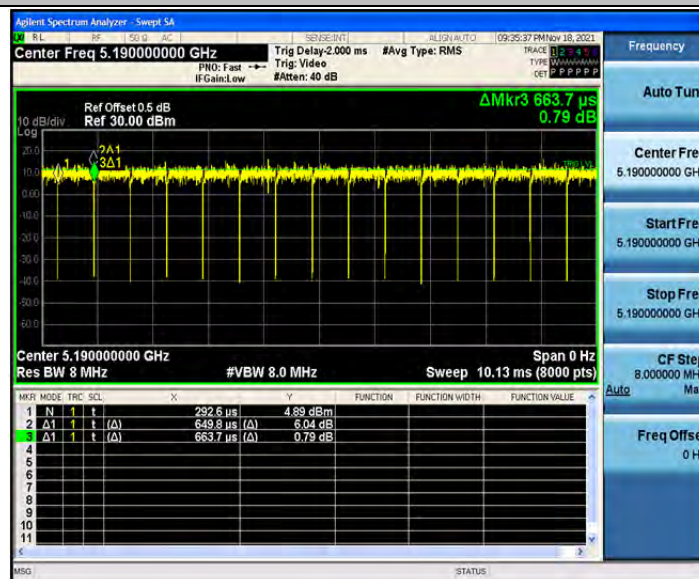
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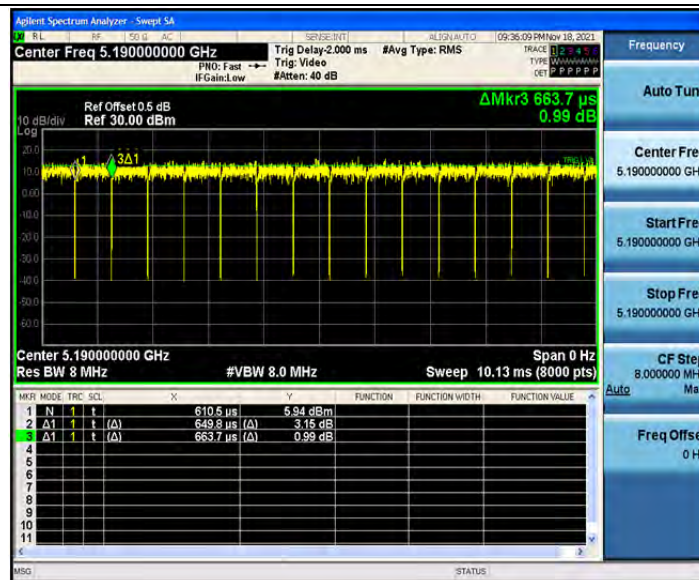
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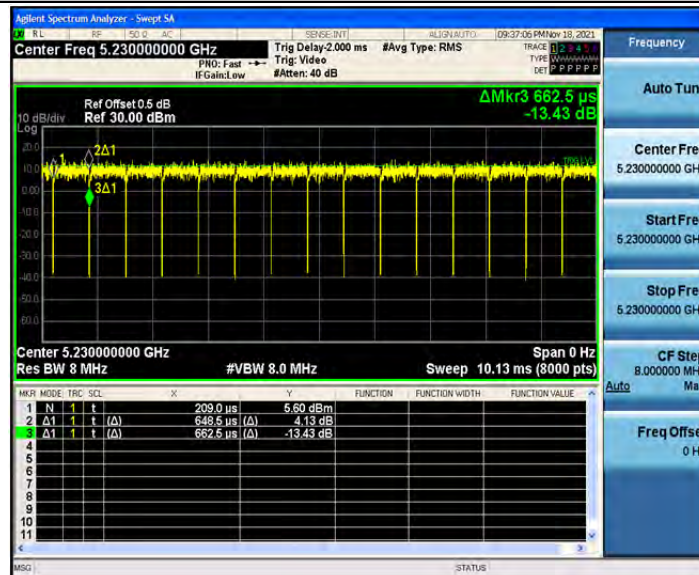
802.11ac(VHT40)\_Ant1\_5190



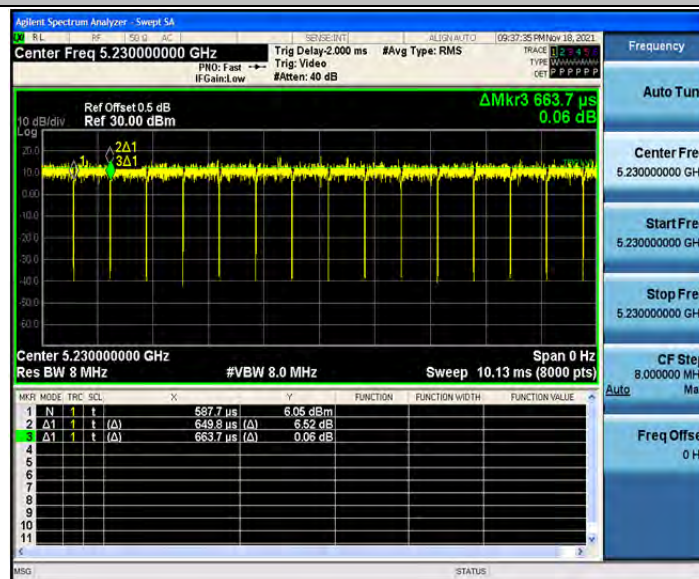
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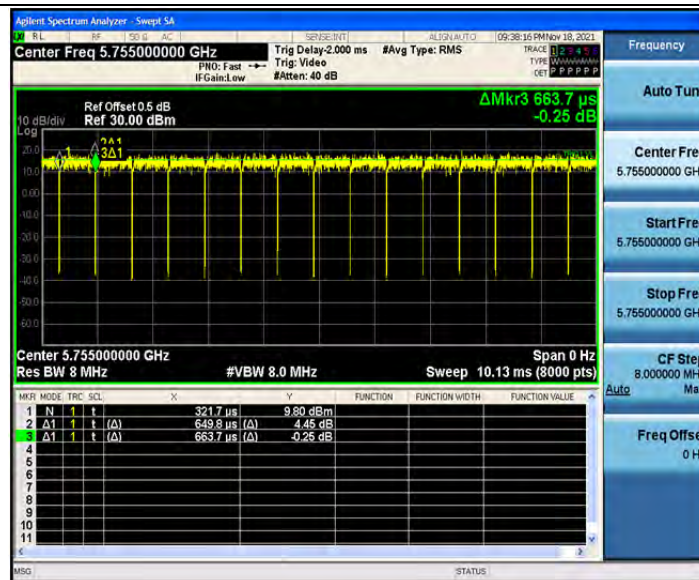
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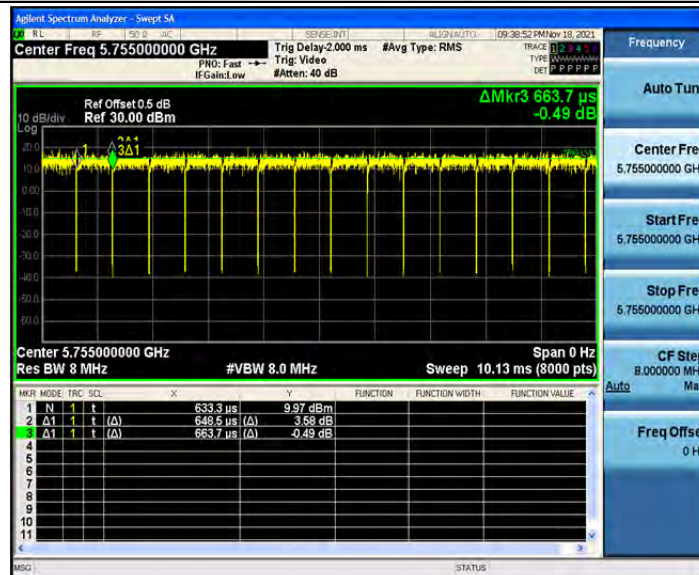
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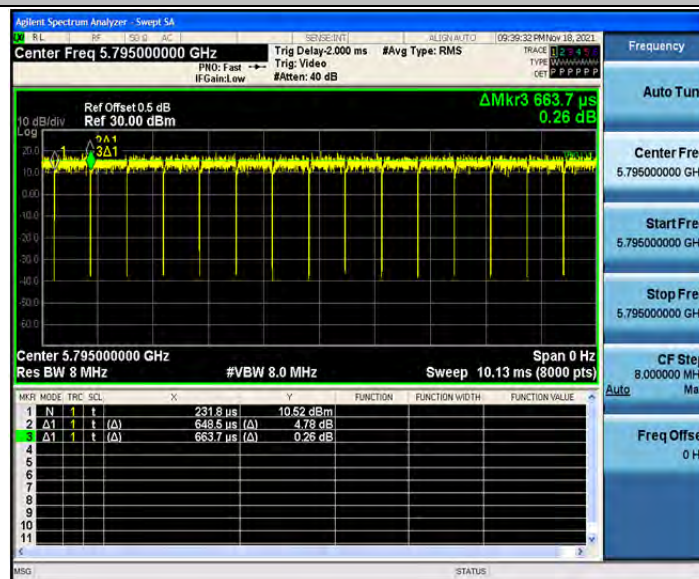
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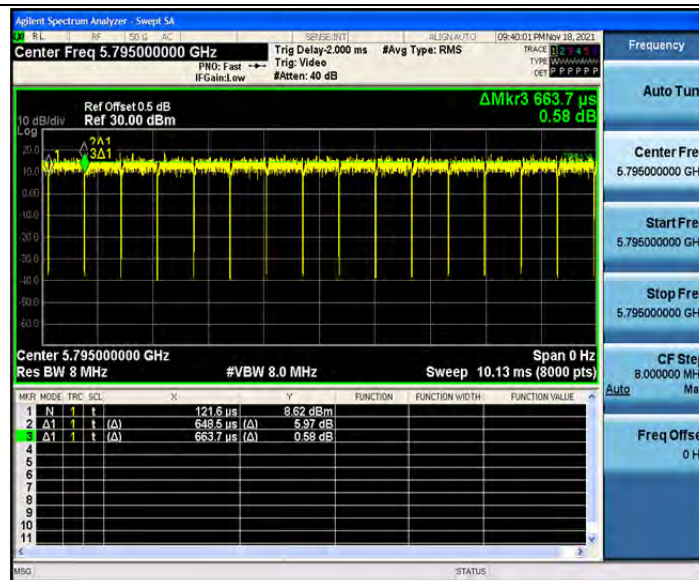
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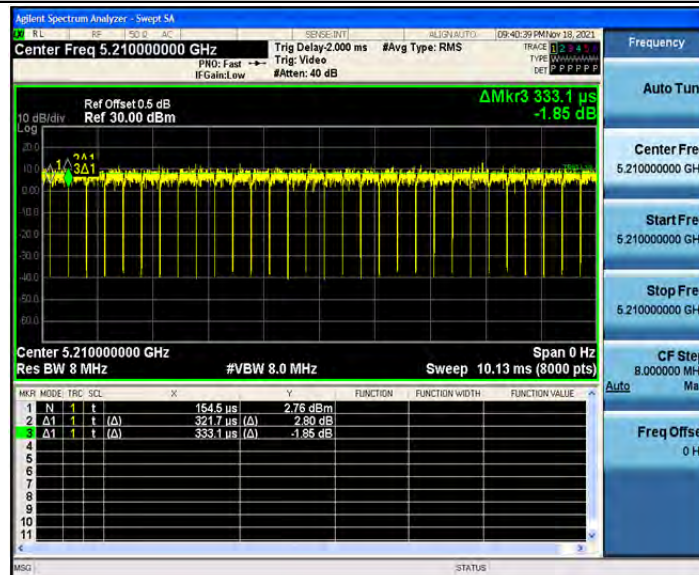
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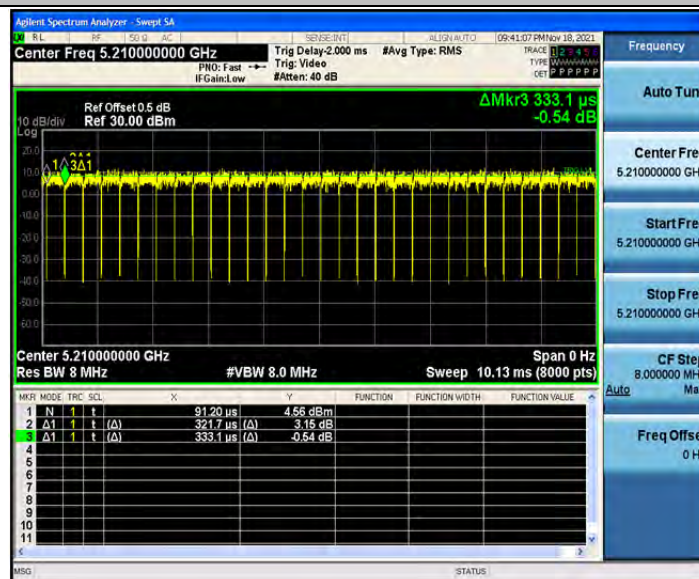
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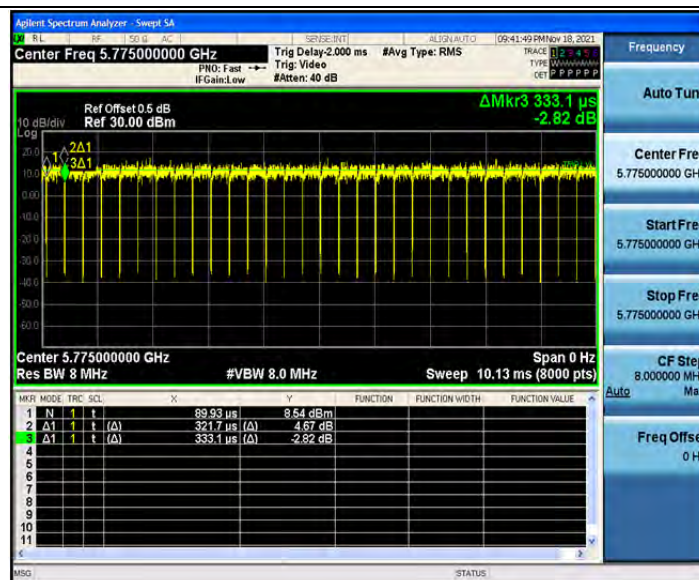
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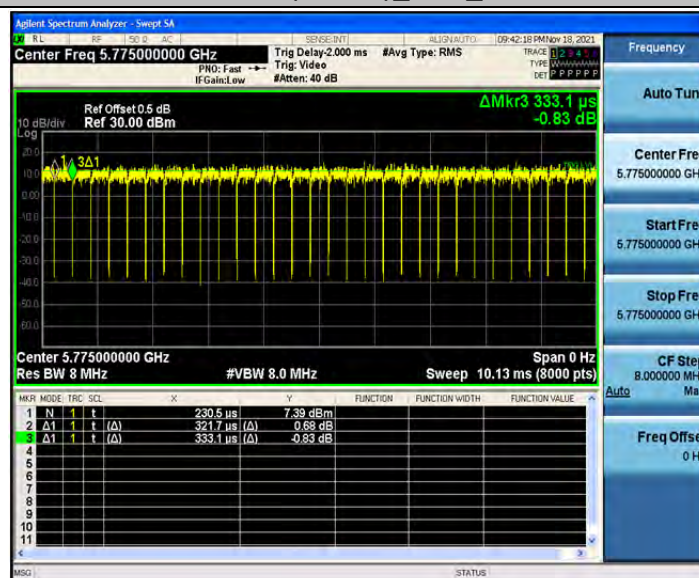
802.11ac(VHT80)\_Ant2\_5210



802.11ac(VHT80)\_Ant1\_5775



802.11ac(VHT80)\_Ant2\_5775



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