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Appendix for 5G WIFI

Applicant: GL TECHNOLOGIES (HONG KONG) LIMITED

**Address: FLAT/RM 203 2/F BUILDING 19W 19 SCIENCE PARK
WEST AVENUE SHATIN NT SHATIN HONG KONG**

Product Name: AC1200 Wireless Travel Router

Model: GL-SFT1200

FCC ID: 2AFIW-SFT1200

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Appendix A1: Emission Bandwidth

Test Result

| Test Mode | Antenna | Channel | 26db EBW [MHz] | FL[MHz] | FH[MHz] | Verdict |
|-----------------|---------|---------|----------------|----------|----------|---------|
| 802.11a | Ant1 | 5180 | 19.840 | 5169.960 | 5189.800 | PASS |
| | Ant2 | 5180 | 19.600 | 5170.160 | 5189.760 | PASS |
| | Ant1 | 5200 | 21.160 | 5188.760 | 5209.920 | PASS |
| | Ant2 | 5200 | 19.440 | 5190.320 | 5209.760 | PASS |
| | Ant1 | 5240 | 20.120 | 5230.120 | 5250.240 | PASS |
| | Ant2 | 5240 | 19.760 | 5230.000 | 5249.760 | PASS |
| | Ant1 | 5745 | 20.160 | 5734.680 | 5754.840 | PASS |
| | Ant2 | 5745 | 19.560 | 5735.240 | 5754.800 | PASS |
| | Ant1 | 5785 | 20.400 | 5774.360 | 5794.760 | PASS |
| | Ant2 | 5785 | 19.560 | 5775.240 | 5794.800 | PASS |
| | Ant1 | 5825 | 24.920 | 5812.040 | 5836.960 | PASS |
| | Ant2 | 5825 | 19.640 | 5815.160 | 5834.800 | PASS |
| 802.11n(HT20) | Ant1 | 5180 | 20.400 | 5169.520 | 5189.920 | PASS |
| | Ant2 | 5180 | 20.160 | 5169.840 | 5190.000 | PASS |
| | Ant1 | 5200 | 20.520 | 5189.480 | 5210.000 | PASS |
| | Ant2 | 5200 | 19.880 | 5190.080 | 5209.960 | PASS |
| | Ant1 | 5240 | 21.440 | 5228.400 | 5249.840 | PASS |
| | Ant2 | 5240 | 20.040 | 5230.040 | 5250.080 | PASS |
| | Ant1 | 5745 | 20.120 | 5734.880 | 5755.000 | PASS |
| | Ant2 | 5745 | 20.040 | 5735.040 | 5755.080 | PASS |
| | Ant1 | 5785 | 22.440 | 5772.720 | 5795.160 | PASS |
| | Ant2 | 5785 | 20.080 | 5774.840 | 5794.920 | PASS |
| | Ant1 | 5825 | 23.640 | 5812.200 | 5835.840 | PASS |
| | Ant2 | 5825 | 19.880 | 5815.000 | 5834.880 | PASS |
| 802.11n(HT40) | Ant1 | 5190 | 57.040 | 5157.520 | 5214.560 | PASS |
| | Ant2 | 5190 | 39.840 | 5170.000 | 5209.840 | PASS |
| | Ant1 | 5230 | 47.360 | 5207.280 | 5254.640 | PASS |
| | Ant2 | 5230 | 40.720 | 5209.200 | 5249.920 | PASS |
| | Ant1 | 5755 | 40.960 | 5734.200 | 5775.160 | PASS |
| | Ant2 | 5755 | 39.520 | 5735.240 | 5774.760 | PASS |
| | Ant1 | 5795 | 42.080 | 5772.840 | 5814.920 | PASS |
| | Ant2 | 5795 | 39.280 | 5775.400 | 5814.680 | PASS |
| 802.11ac(VHT20) | Ant1 | 5180 | 24.360 | 5165.960 | 5190.320 | PASS |
| | Ant2 | 5180 | 19.960 | 5170.040 | 5190.000 | PASS |
| | Ant1 | 5200 | 19.880 | 5190.080 | 5209.960 | PASS |
| | Ant2 | 5200 | 19.880 | 5190.080 | 5209.960 | PASS |
| | Ant1 | 5240 | 19.880 | 5230.000 | 5249.880 | PASS |
| | Ant2 | 5240 | 20.560 | 5229.680 | 5250.240 | PASS |
| | Ant1 | 5745 | 20.240 | 5734.760 | 5755.000 | PASS |
| | Ant2 | 5745 | 19.920 | 5735.120 | 5755.040 | PASS |
| | Ant1 | 5785 | 21.520 | 5773.480 | 5795.000 | PASS |

| | | | | | | |
|-----------------|------|------|--------|----------|----------|------|
| | Ant2 | 5785 | 19.840 | 5775.120 | 5794.960 | PASS |
| | Ant1 | 5825 | 21.400 | 5813.480 | 5834.880 | PASS |
| | Ant2 | 5825 | 19.920 | 5815.040 | 5834.960 | PASS |
| 802.11ac(VHT40) | Ant1 | 5190 | 39.840 | 5170.080 | 5209.920 | PASS |
| | Ant2 | 5190 | 39.440 | 5170.160 | 5209.600 | PASS |
| | Ant1 | 5230 | 40.000 | 5210.080 | 5250.080 | PASS |
| | Ant2 | 5230 | 39.920 | 5210.080 | 5250.000 | PASS |
| | Ant1 | 5755 | 40.000 | 5735.160 | 5775.160 | PASS |
| | Ant2 | 5755 | 39.440 | 5735.240 | 5774.680 | PASS |
| | Ant1 | 5795 | 40.080 | 5774.920 | 5815.000 | PASS |
| | Ant2 | 5795 | 39.520 | 5775.320 | 5814.840 | PASS |
| 802.11ac(VHT80) | Ant1 | 5210 | 81.600 | 5168.880 | 5250.480 | PASS |
| | Ant2 | 5210 | 80.000 | 5170.320 | 5250.320 | PASS |
| | Ant1 | 5775 | 81.280 | 5734.360 | 5815.640 | PASS |
| | Ant2 | 5775 | 79.520 | 5735.320 | 5814.840 | PASS |

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



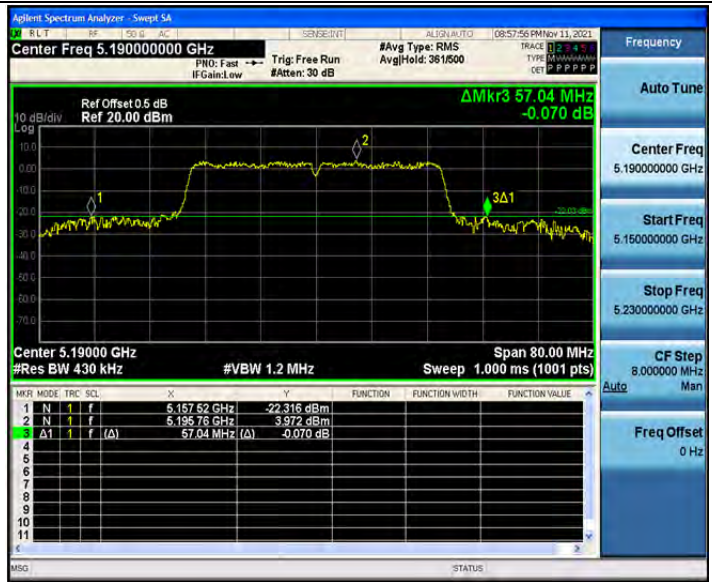
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802.11n(HT20)_Ant2_5825



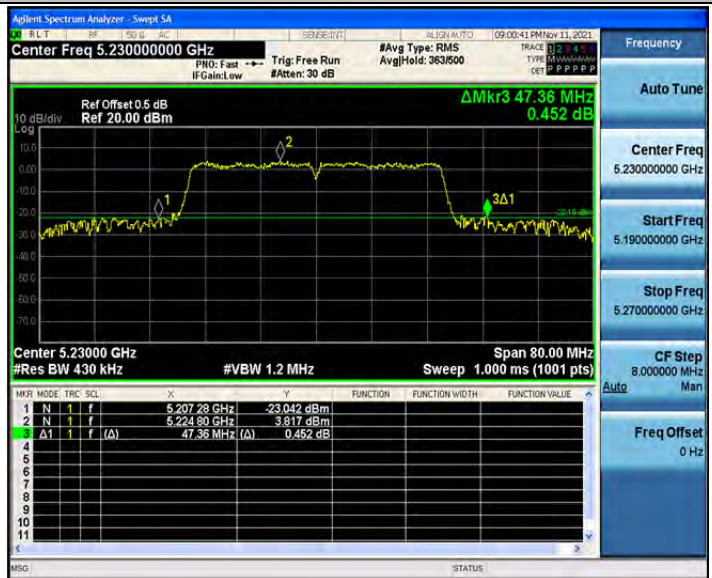
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802.11n(HT40)_Ant2_5190



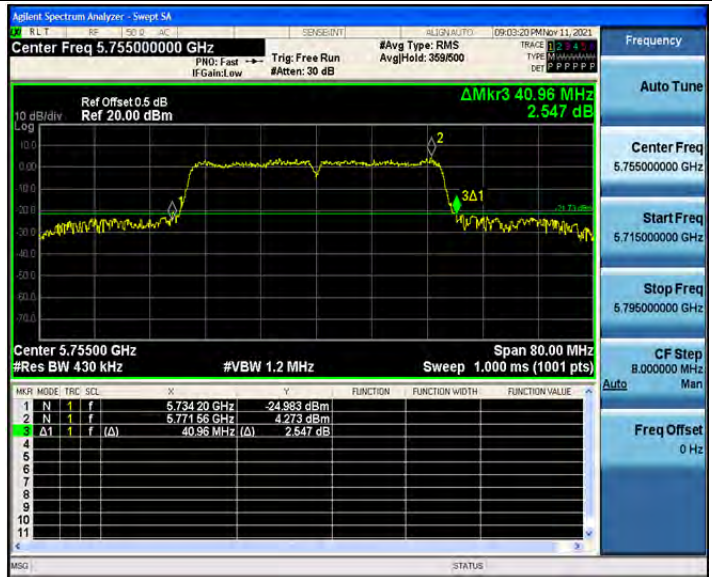
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802.11n(HT40)_Ant2_5230



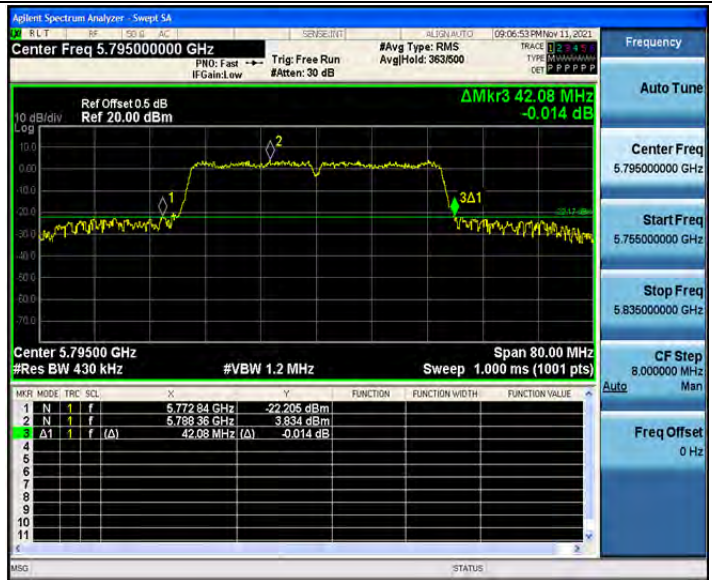
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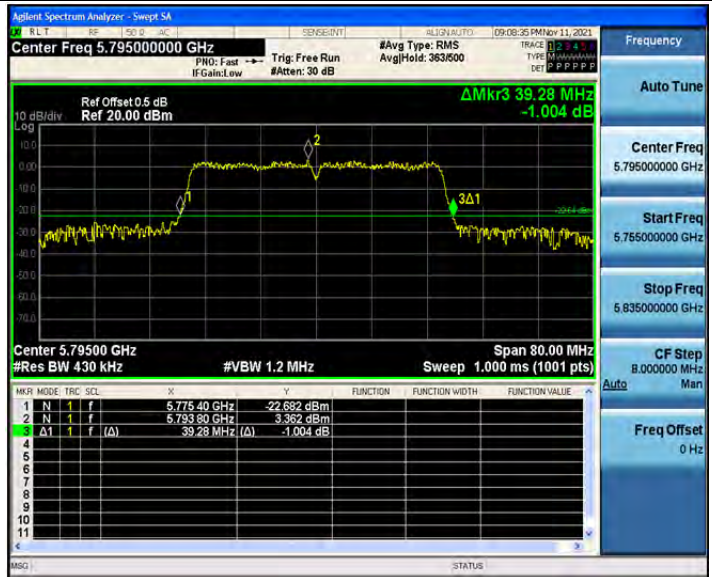
802.11n(HT40)_Ant2_5755



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



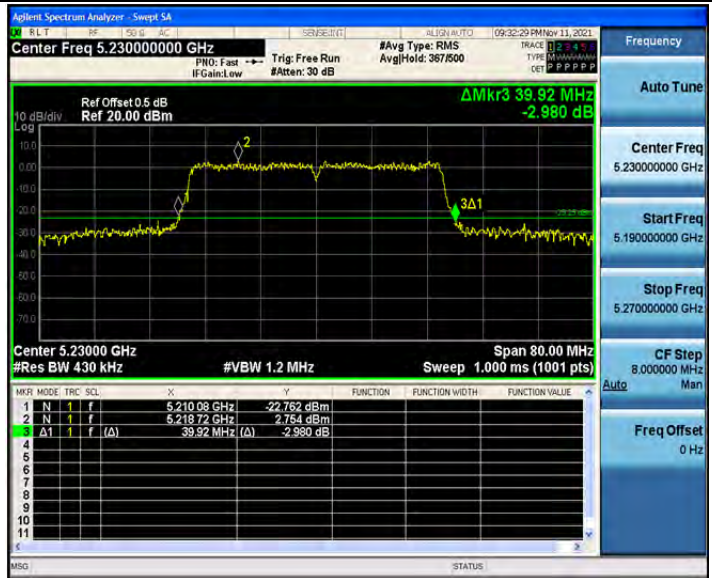
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802.11ac(VHT40)_Ant1_5230



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 A2: Occupied channel bandwidth

Test Result

| Test Mode | Antenna | Channel | OCB [MHz] | FL[MHz] | FH[MHz] | Verdict |
|-----------------|---------|---------|-----------|----------|----------|---------|
| 802.11a | Ant1 | 5180 | 17.052 | 5171.441 | 5188.493 | PASS |
| | Ant2 | 5180 | 16.908 | 5171.551 | 5188.459 | PASS |
| | Ant1 | 5200 | 17.125 | 5191.397 | 5208.522 | PASS |
| | Ant2 | 5200 | 16.935 | 5191.525 | 5208.460 | PASS |
| | Ant1 | 5240 | 17.058 | 5231.460 | 5248.518 | PASS |
| | Ant2 | 5240 | 16.936 | 5231.524 | 5248.460 | PASS |
| | Ant1 | 5745 | 17.063 | 5736.426 | 5753.489 | PASS |
| | Ant2 | 5745 | 16.872 | 5736.567 | 5753.439 | PASS |
| | Ant1 | 5785 | 17.110 | 5776.415 | 5793.525 | PASS |
| | Ant2 | 5785 | 16.878 | 5776.536 | 5793.414 | PASS |
| | Ant1 | 5825 | 17.280 | 5816.332 | 5833.612 | PASS |
| | Ant2 | 5825 | 16.885 | 5816.503 | 5833.388 | PASS |
| 802.11n(HT20) | Ant1 | 5180 | 17.867 | 5171.023 | 5188.890 | PASS |
| | Ant2 | 5180 | 17.758 | 5171.108 | 5188.866 | PASS |
| | Ant1 | 5200 | 17.822 | 5191.057 | 5208.879 | PASS |
| | Ant2 | 5200 | 17.754 | 5191.101 | 5208.855 | PASS |
| | Ant1 | 5240 | 17.844 | 5231.062 | 5248.906 | PASS |
| | Ant2 | 5240 | 17.781 | 5231.093 | 5248.874 | PASS |
| | Ant1 | 5745 | 17.825 | 5736.065 | 5753.890 | PASS |
| | Ant2 | 5745 | 17.771 | 5736.084 | 5753.855 | PASS |
| | Ant1 | 5785 | 17.841 | 5776.043 | 5793.884 | PASS |
| | Ant2 | 5785 | 17.764 | 5776.091 | 5793.855 | PASS |
| | Ant1 | 5825 | 17.845 | 5816.020 | 5833.865 | PASS |
| | Ant2 | 5825 | 17.749 | 5816.087 | 5833.836 | PASS |
| 802.11n(HT40) | Ant1 | 5190 | 36.627 | 5171.654 | 5208.281 | PASS |
| | Ant2 | 5190 | 36.454 | 5171.816 | 5208.270 | PASS |
| | Ant1 | 5230 | 36.584 | 5211.691 | 5248.275 | PASS |
| | Ant2 | 5230 | 36.528 | 5211.721 | 5248.249 | PASS |
| | Ant1 | 5755 | 36.595 | 5736.744 | 5773.339 | PASS |
| | Ant2 | 5755 | 36.387 | 5736.839 | 5773.226 | PASS |
| | Ant1 | 5795 | 36.550 | 5776.695 | 5813.245 | PASS |
| | Ant2 | 5795 | 36.436 | 5776.703 | 5813.139 | PASS |
| 802.11ac(VHT20) | Ant1 | 5180 | 17.812 | 5171.076 | 5188.888 | PASS |
| | Ant2 | 5180 | 17.732 | 5171.122 | 5188.854 | PASS |
| | Ant1 | 5200 | 17.837 | 5191.054 | 5208.891 | PASS |
| | Ant2 | 5200 | 17.734 | 5191.108 | 5208.842 | PASS |
| | Ant1 | 5240 | 17.808 | 5231.072 | 5248.880 | PASS |
| | Ant2 | 5240 | 17.767 | 5231.104 | 5248.871 | PASS |
| | Ant1 | 5745 | 17.798 | 5736.079 | 5753.877 | PASS |
| | Ant2 | 5745 | 17.773 | 5736.111 | 5753.884 | PASS |
| | Ant1 | 5785 | 17.828 | 5776.076 | 5793.904 | PASS |

| | | | | | | |
|-----------------|------|------|--------|----------|----------|------|
| | Ant2 | 5785 | 17.769 | 5776.103 | 5793.872 | PASS |
| | Ant1 | 5825 | 17.892 | 5815.999 | 5833.891 | PASS |
| | Ant2 | 5825 | 17.764 | 5816.085 | 5833.849 | PASS |
| 802.11ac(VHT40) | Ant1 | 5190 | 36.403 | 5171.767 | 5208.170 | PASS |
| | Ant2 | 5190 | 36.374 | 5171.787 | 5208.161 | PASS |
| | Ant1 | 5230 | 36.446 | 5211.723 | 5248.169 | PASS |
| | Ant2 | 5230 | 36.397 | 5211.791 | 5248.188 | PASS |
| | Ant1 | 5755 | 36.393 | 5736.853 | 5773.246 | PASS |
| | Ant2 | 5755 | 36.313 | 5736.887 | 5773.200 | PASS |
| | Ant1 | 5795 | 36.408 | 5776.815 | 5813.223 | PASS |
| | Ant2 | 5795 | 36.374 | 5776.798 | 5813.172 | PASS |
| 802.11ac(VHT80) | Ant1 | 5210 | 75.514 | 5172.254 | 5247.768 | PASS |
| | Ant2 | 5210 | 75.368 | 5172.401 | 5247.769 | PASS |
| | Ant1 | 5775 | 75.442 | 5737.328 | 5812.770 | PASS |
| | Ant2 | 5775 | 75.190 | 5737.444 | 5812.634 | PASS |

Test Graphs

802.11a_Ant1_5180



802.11a_Ant2_5180



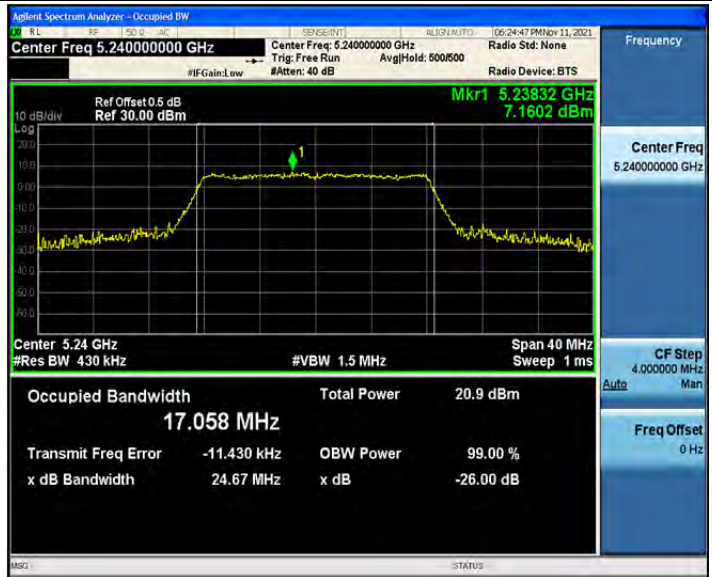
802.11a_Ant1_5200



802.11a_Ant2_5200



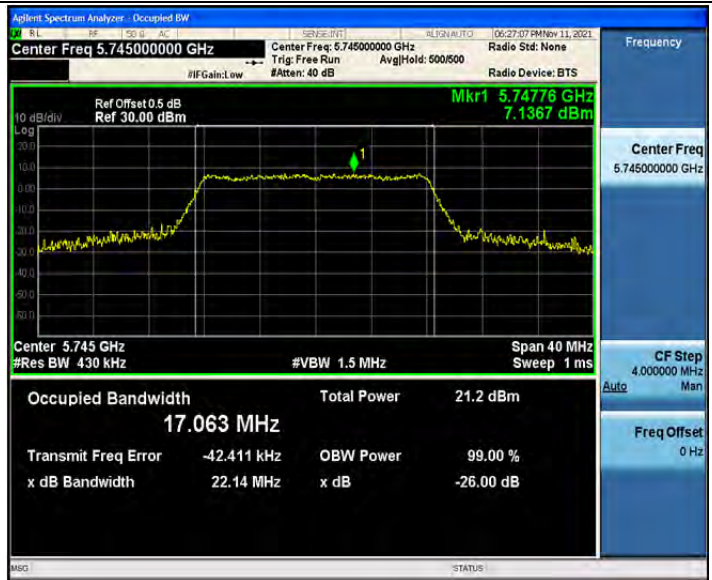
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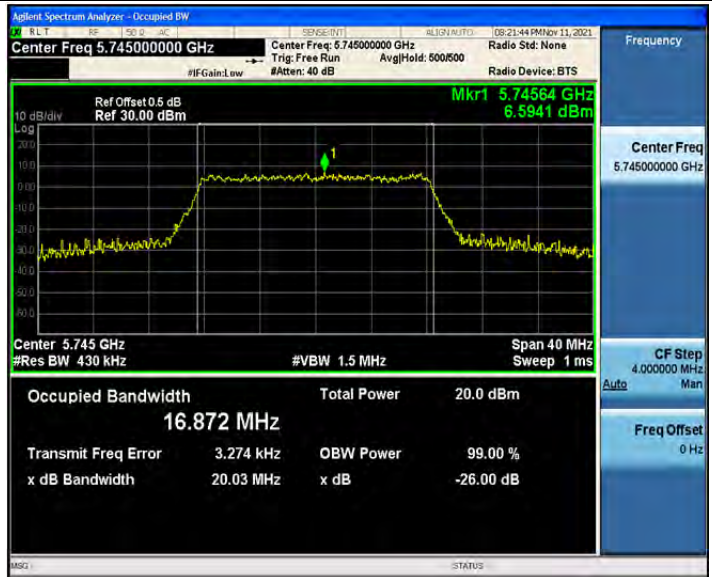
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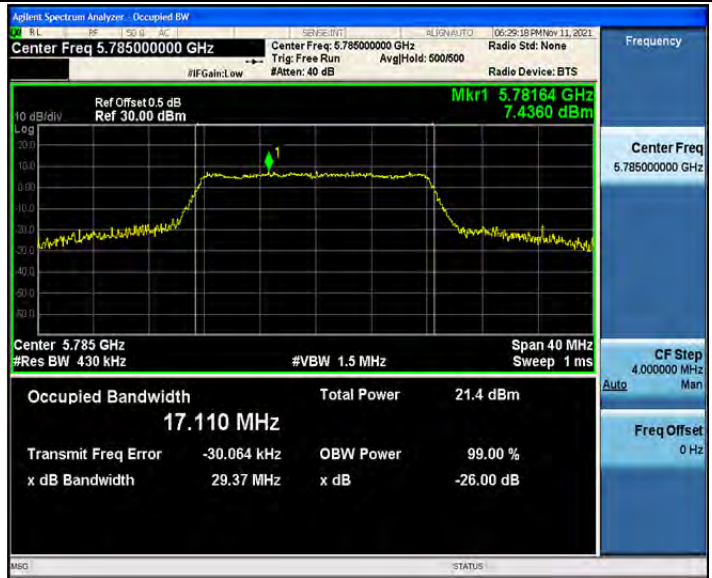
802.11a_Ant1_5745



802.11a_Ant2_5745



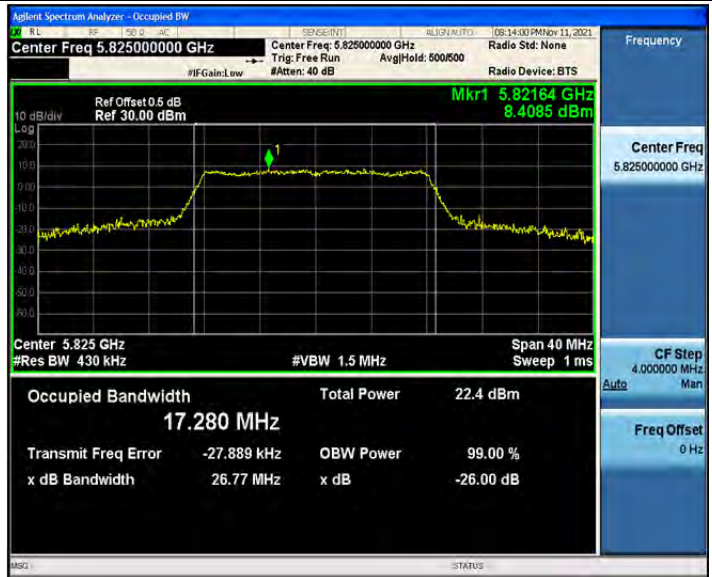
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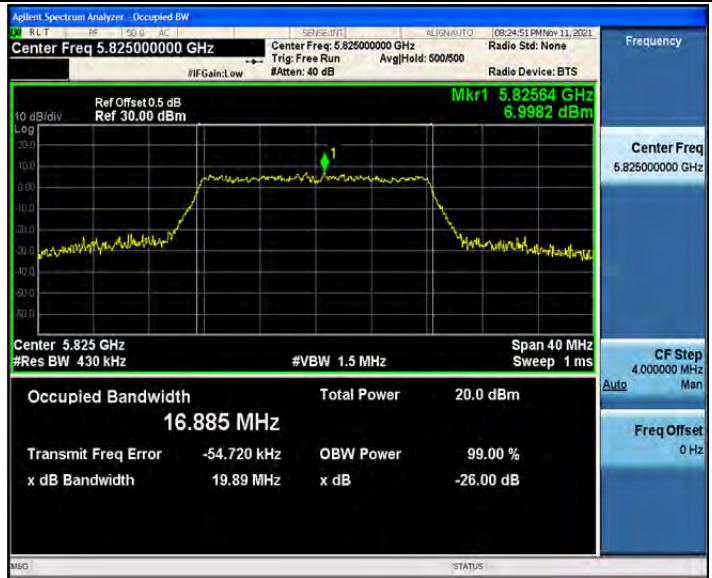
802.11a_Ant2_5785



802.11a_Ant1_5825



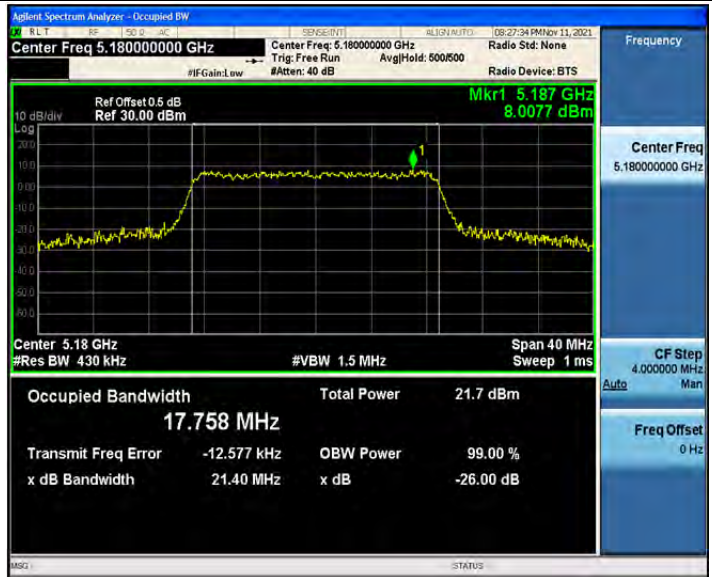
802.11a_Ant2_5825



802.11n(HT20)_Ant1_5180



802.11n(HT20)_Ant2_5180



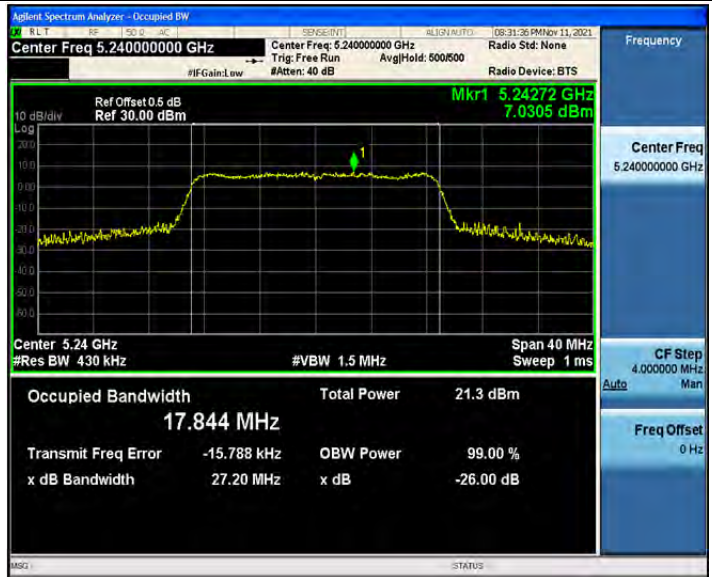
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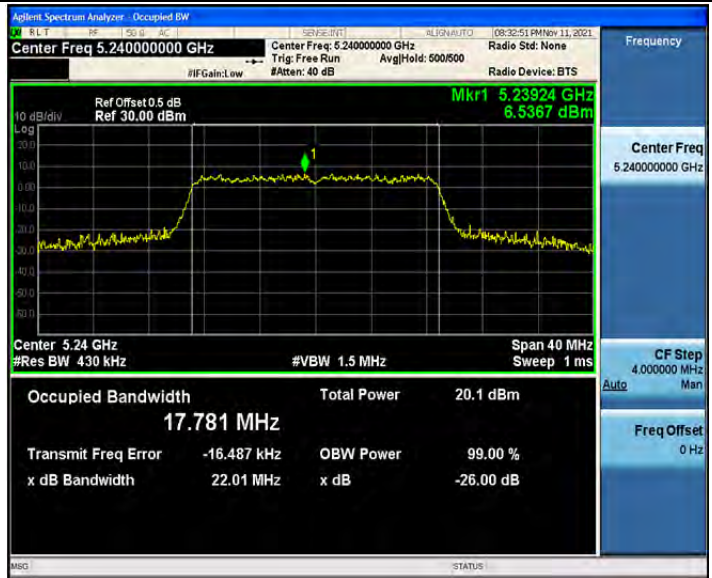
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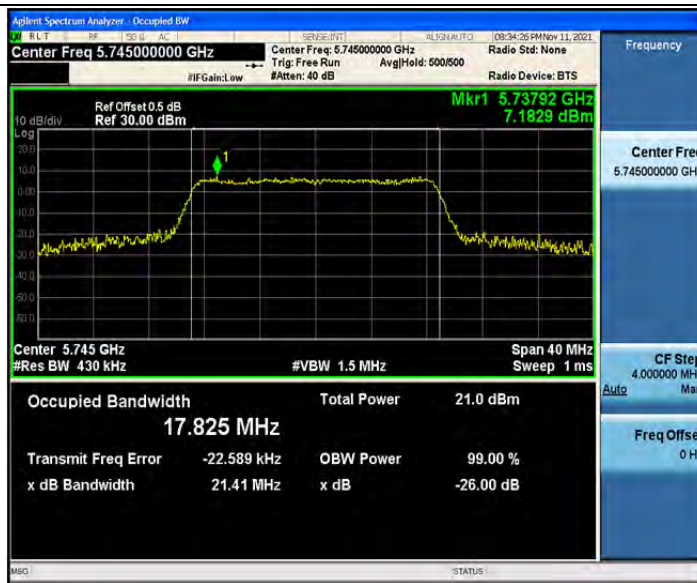
802.11n(HT20)_Ant1_5240



802.11n(HT20)_Ant2_5240



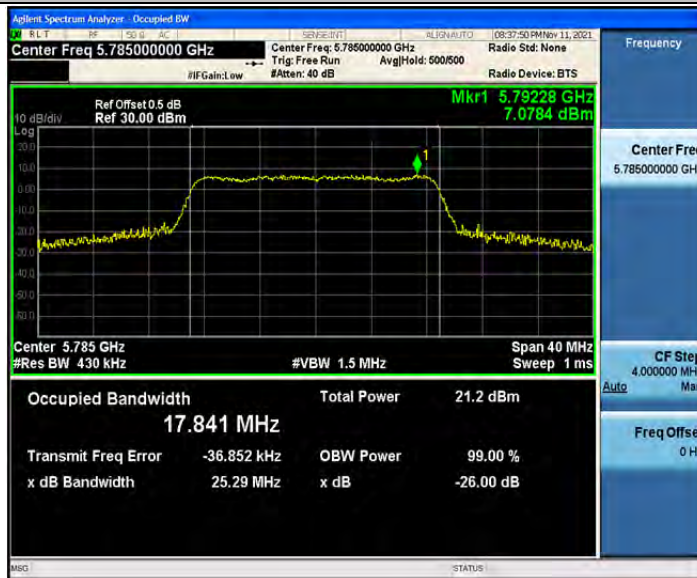
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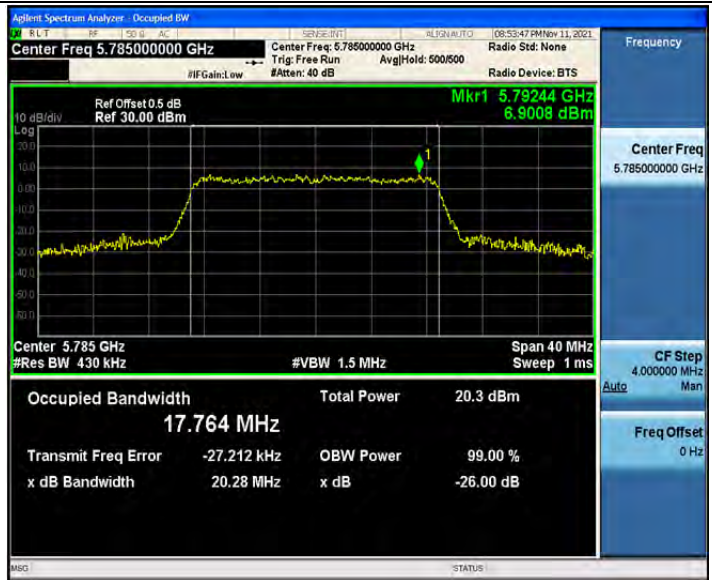
802.11n(HT20)_Ant2_5745



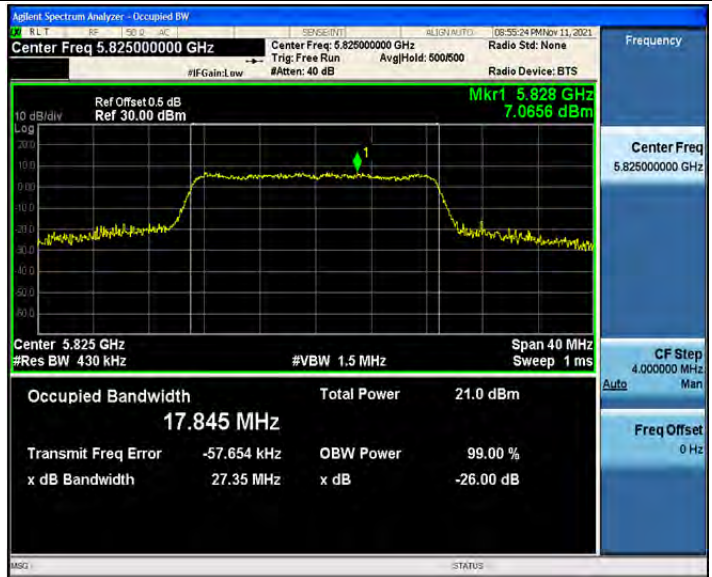
802.11n(HT20)_Ant1_5785



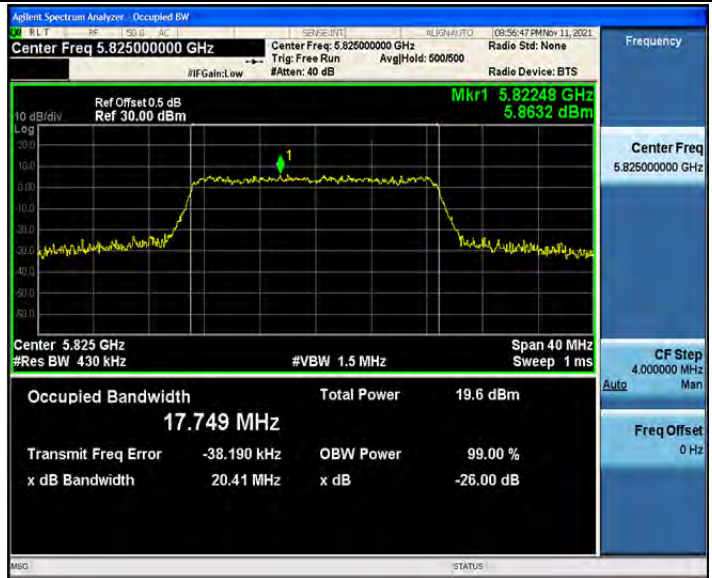
802.11n(HT20)_Ant2_5785



802.11n(HT20)_Ant1_5825



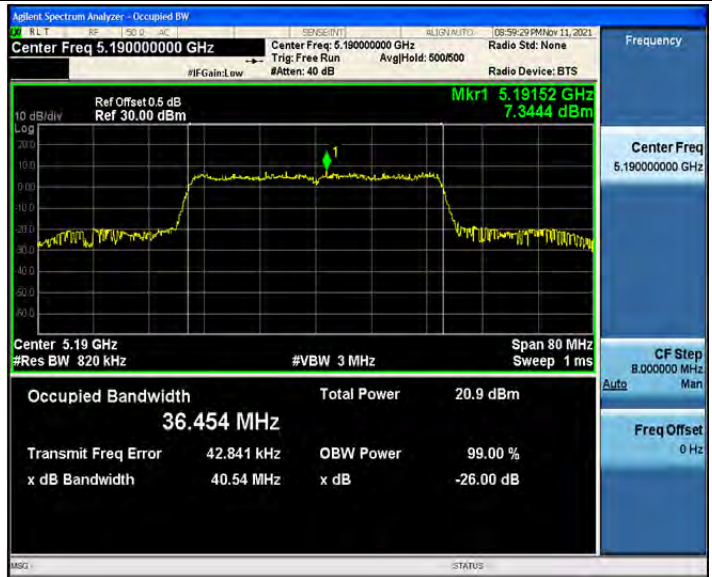
802.11n(HT20)_Ant2_5825



802.11n(HT40)_Ant1_5190



802.11n(HT40)_Ant2_5190



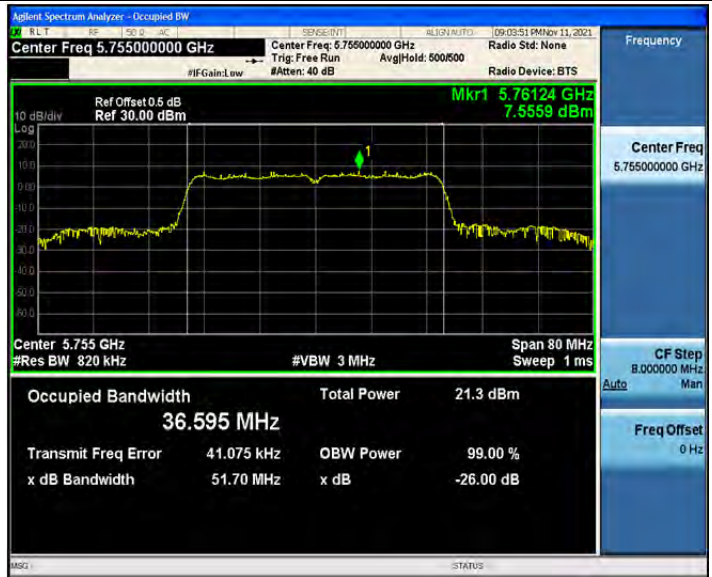
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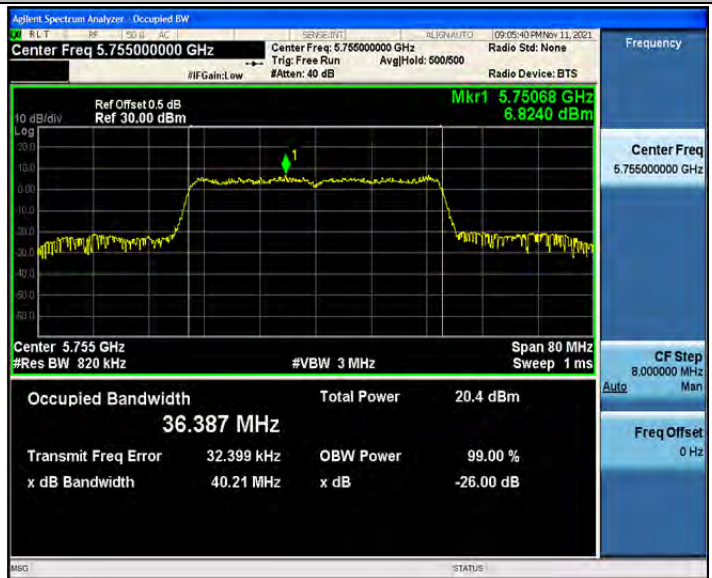
802.11n(HT40)_Ant2_5230



802.11n(HT40)_Ant1_5755



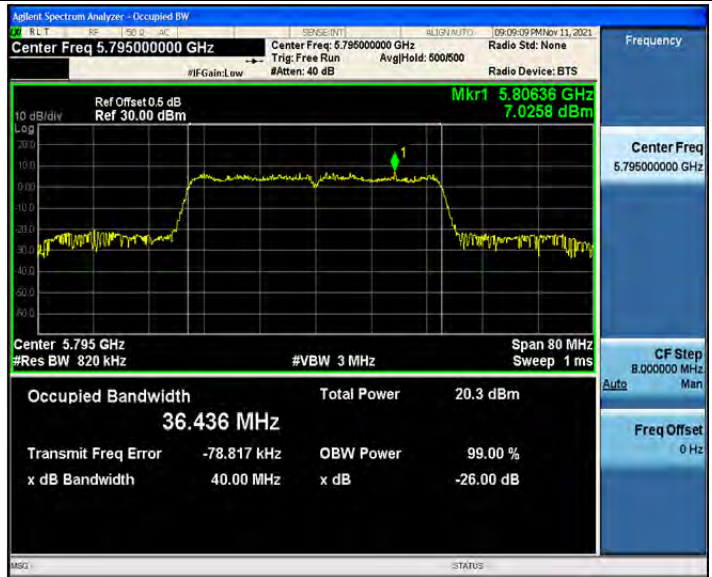
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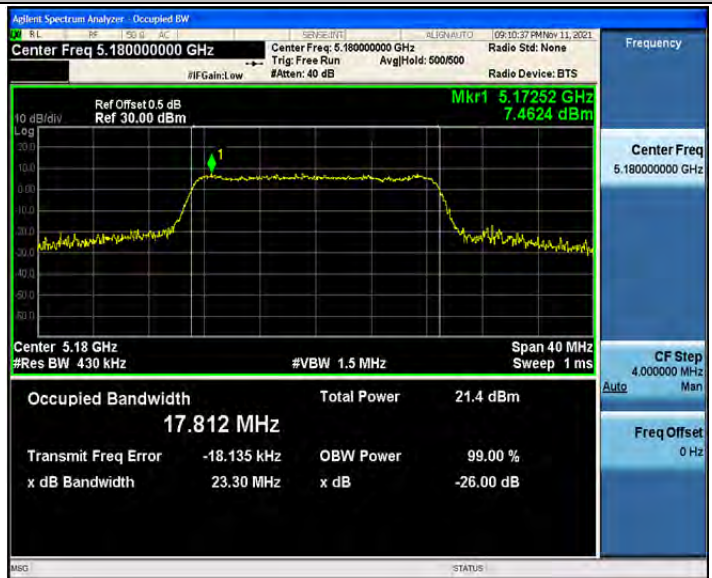
802.11n(HT40)_Ant1_5795



802.11n(HT40)_Ant2_5795



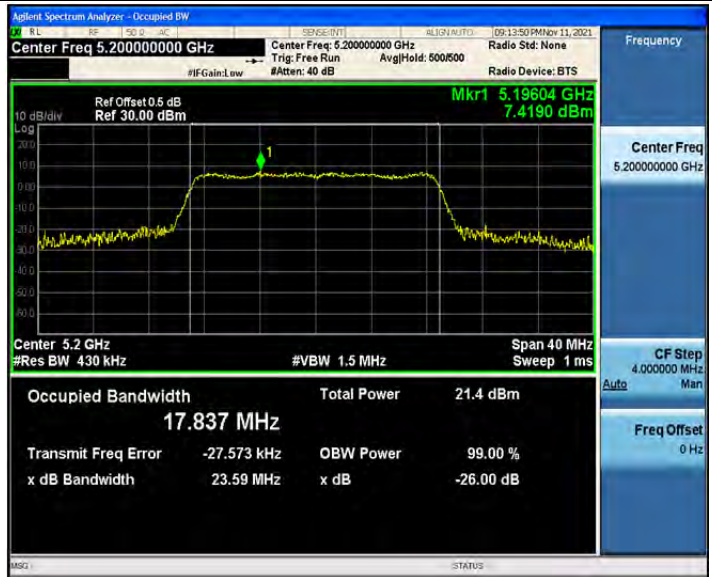
802.11ac(VHT20)_Ant1_5180



802.11ac(VHT20)_Ant2_5180



802.11ac(VHT20)_Ant1_5200



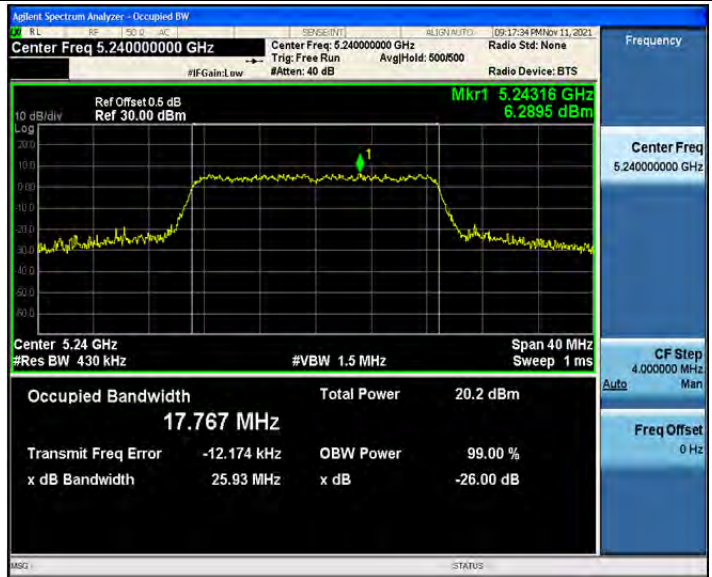
802.11ac(VHT20)_Ant2_5200



802.11ac(VHT20)_Ant1_5240



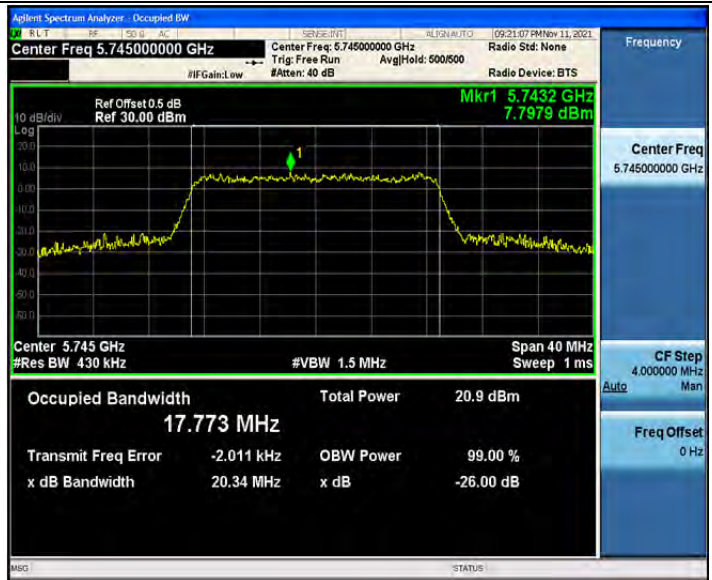
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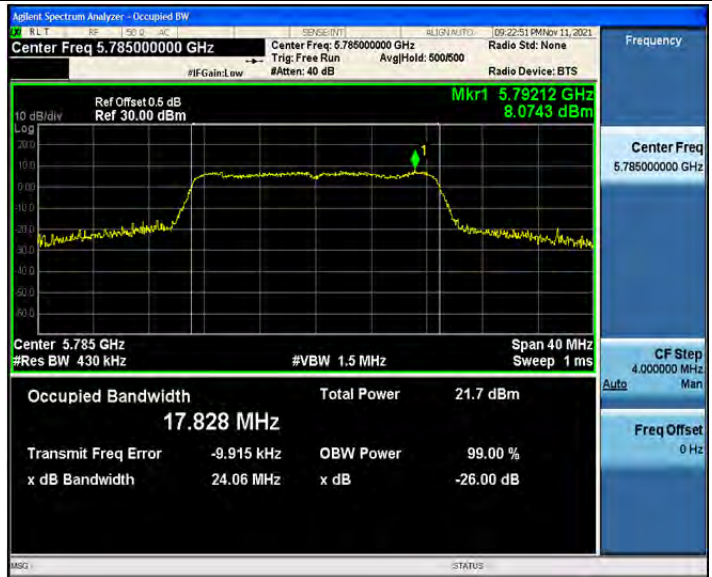
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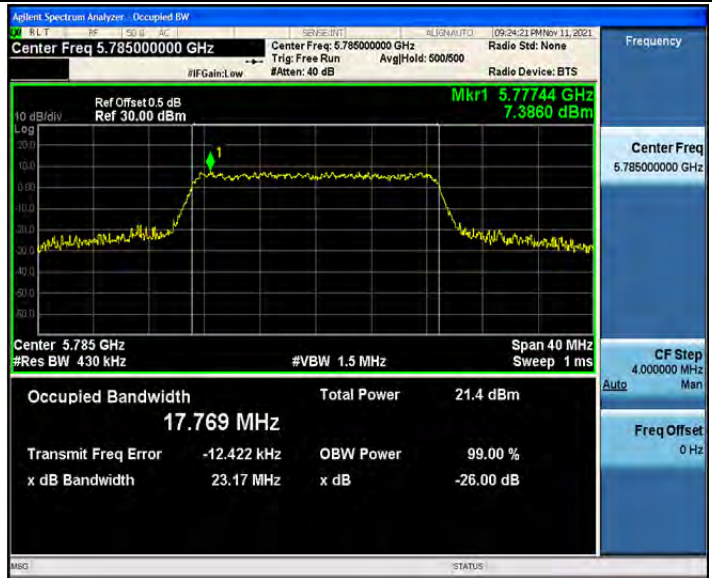
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802.11ac(VHT20)_Ant1_5785



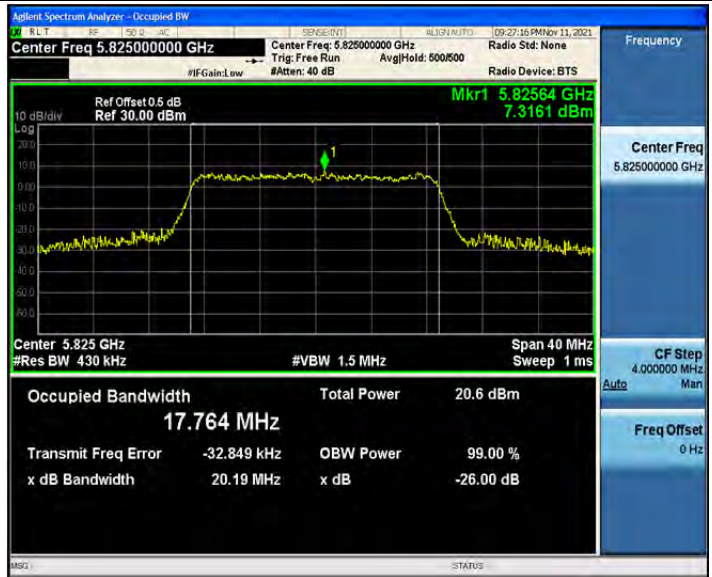
802.11ac(VHT20)_Ant2_5785



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



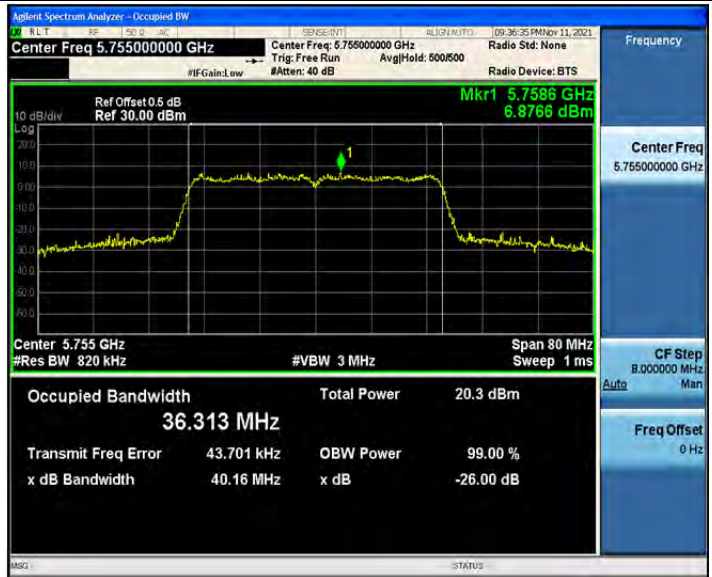
802.11ac(VHT40)_Ant2_5230



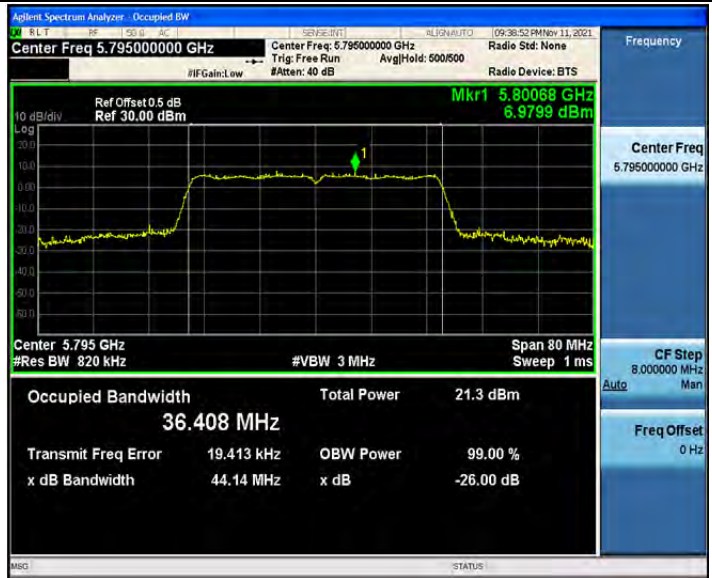
802.11ac(VHT40)_Ant1_5755



802.11ac(VHT40)_Ant2_5755



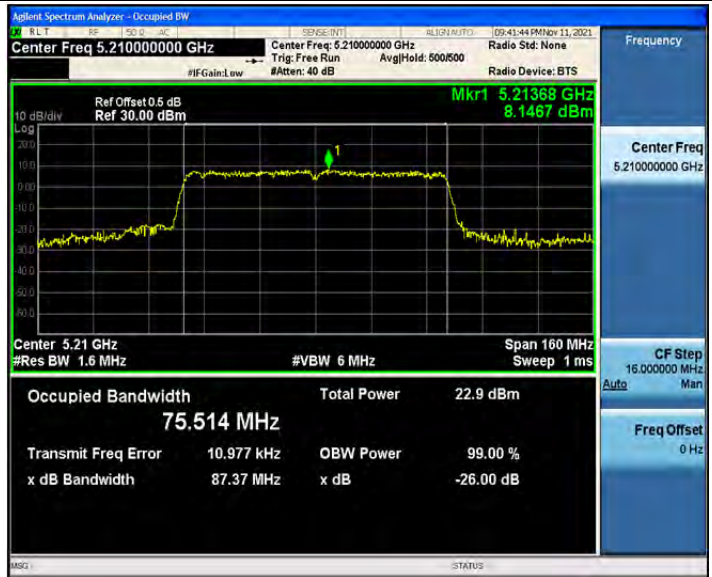
802.11ac(VHT40)_Ant1_5795



802.11ac(VHT40)_Ant2_5795



802.11ac(VHT80)_Ant1_5210



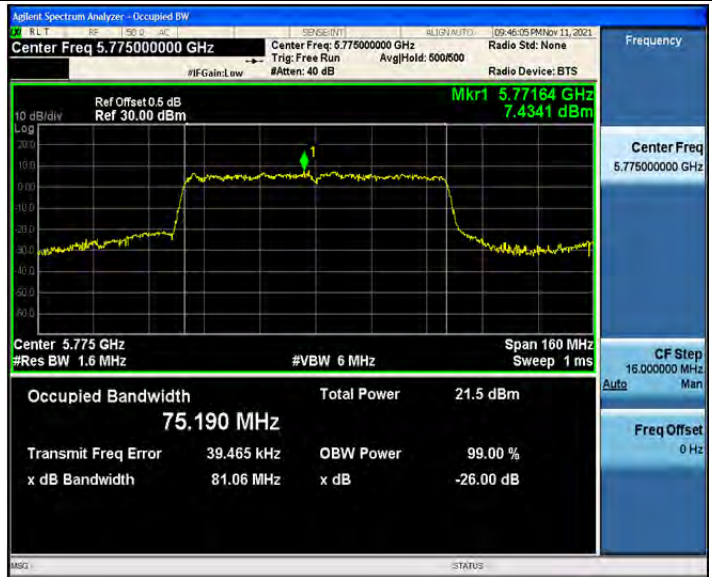
802.11ac(VHT80)_Ant2_5210



802.11ac(VHT80)_Ant1_5775



802.11ac(VHT80)_Ant2_5775



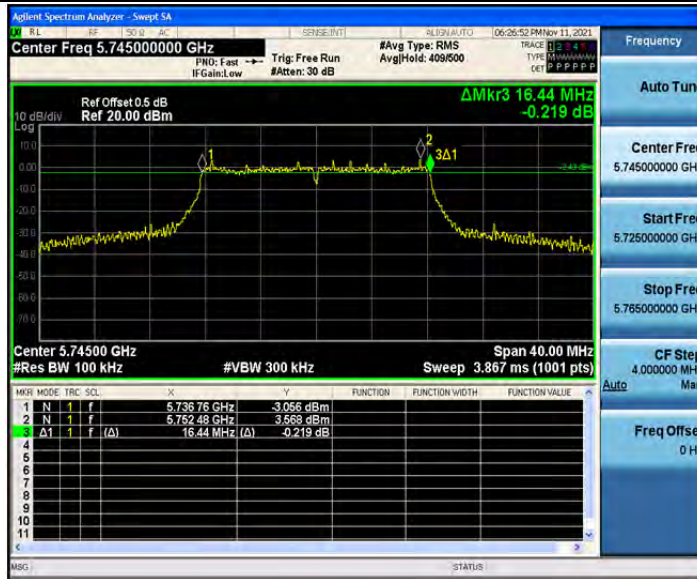
Appendix A3: Min emission bandwidth

Test Result

| TestMode | Antenna | Channel | 6db EBW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|-----------------|---------|---------|---------------|----------|----------|------------|---------|
| 802.11a | Ant1 | 5745 | 16.440 | 5736.760 | 5753.200 | >0.5 | PASS |
| | Ant2 | 5745 | 16.440 | 5736.760 | 5753.200 | >0.5 | PASS |
| | Ant1 | 5785 | 16.440 | 5776.760 | 5793.200 | >0.5 | PASS |
| | Ant2 | 5785 | 16.480 | 5776.720 | 5793.200 | >0.5 | PASS |
| | Ant1 | 5825 | 16.400 | 5816.800 | 5833.200 | >0.5 | PASS |
| | Ant2 | 5825 | 16.440 | 5816.760 | 5833.200 | >0.5 | PASS |
| 802.11n(HT20) | Ant1 | 5745 | 17.120 | 5736.400 | 5753.520 | >0.5 | PASS |
| | Ant2 | 5745 | 17.160 | 5736.400 | 5753.560 | >0.5 | PASS |
| | Ant1 | 5785 | 17.160 | 5776.400 | 5793.560 | >0.5 | PASS |
| | Ant2 | 5785 | 17.120 | 5776.400 | 5793.520 | >0.5 | PASS |
| | Ant1 | 5825 | 17.120 | 5816.400 | 5833.520 | >0.5 | PASS |
| | Ant2 | 5825 | 17.640 | 5816.160 | 5833.800 | >0.5 | PASS |
| 802.11n(HT40) | Ant1 | 5755 | 35.760 | 5737.160 | 5772.920 | >0.5 | PASS |
| | Ant2 | 5755 | 36.160 | 5737.000 | 5773.160 | >0.5 | PASS |
| | Ant1 | 5795 | 35.520 | 5777.320 | 5812.840 | >0.5 | PASS |
| | Ant2 | 5795 | 35.840 | 5777.000 | 5812.840 | >0.5 | PASS |
| 802.11ac(VHT20) | Ant1 | 5745 | 17.120 | 5736.400 | 5753.520 | >0.5 | PASS |
| | Ant2 | 5745 | 17.400 | 5736.400 | 5753.800 | >0.5 | PASS |
| | Ant1 | 5785 | 17.160 | 5776.360 | 5793.520 | >0.5 | PASS |
| | Ant2 | 5785 | 17.080 | 5776.440 | 5793.520 | >0.5 | PASS |
| | Ant1 | 5825 | 17.160 | 5816.400 | 5833.560 | >0.5 | PASS |
| | Ant2 | 5825 | 17.080 | 5816.440 | 5833.520 | >0.5 | PASS |
| 802.11ac(VHT40) | Ant1 | 5755 | 35.760 | 5737.160 | 5772.920 | >0.5 | PASS |
| | Ant2 | 5755 | 36.160 | 5737.000 | 5773.160 | >0.5 | PASS |
| | Ant1 | 5795 | 35.840 | 5777.000 | 5812.840 | >0.5 | PASS |
| | Ant2 | 5795 | 35.680 | 5777.080 | 5812.760 | >0.5 | PASS |
| 802.11ac(VHT80) | Ant1 | 5775 | 75.520 | 5737.240 | 5812.760 | >0.5 | PASS |
| | Ant2 | 5775 | 75.520 | 5737.240 | 5812.760 | >0.5 | PASS |

Test Graphs

802.11a_Ant1_5745



802.11a_Ant2_5745



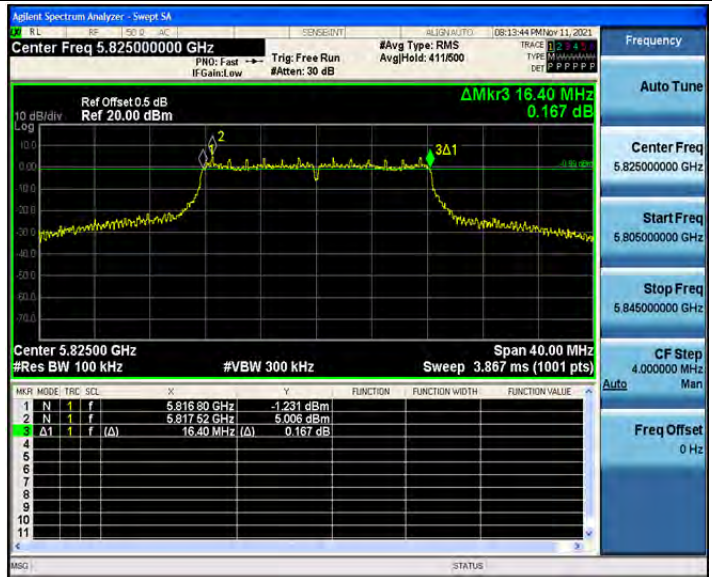
802.11a_Ant1_5785



802.11a_Ant2_5785



802.11a_Ant1_5825



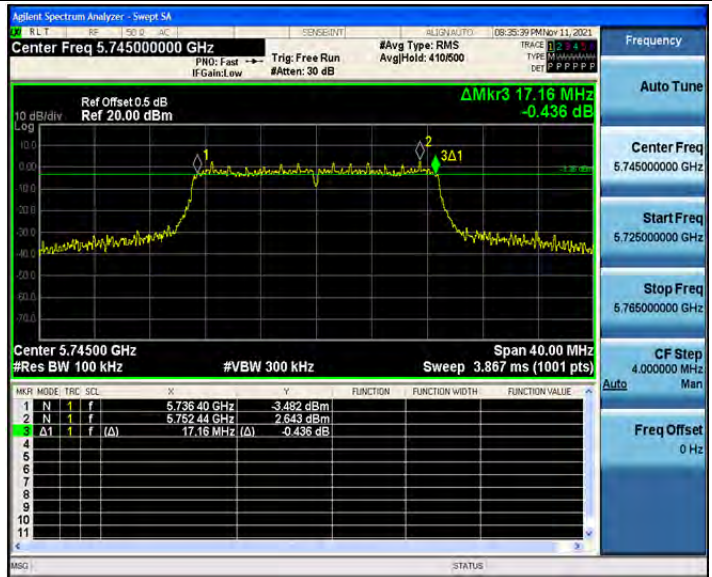
802.11a_Ant2_5825



802.11n(HT20)_Ant1_5745



802.11n(HT20)_Ant2_5745



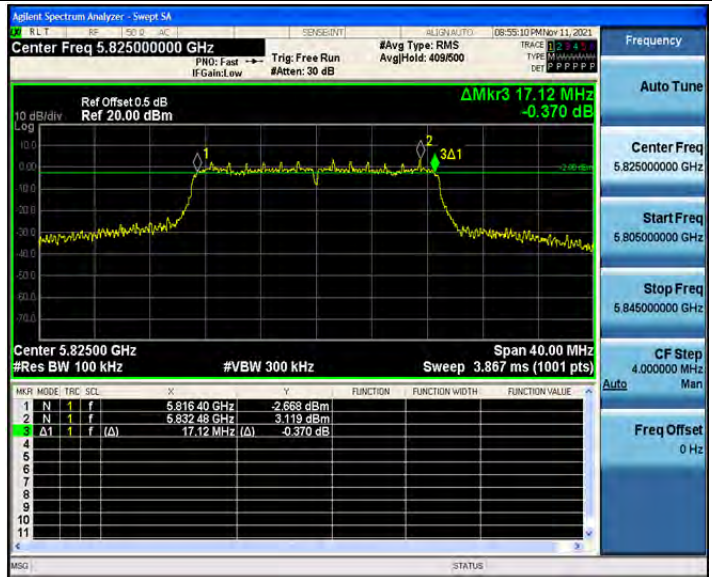
802.11n(HT20)_Ant1_5785



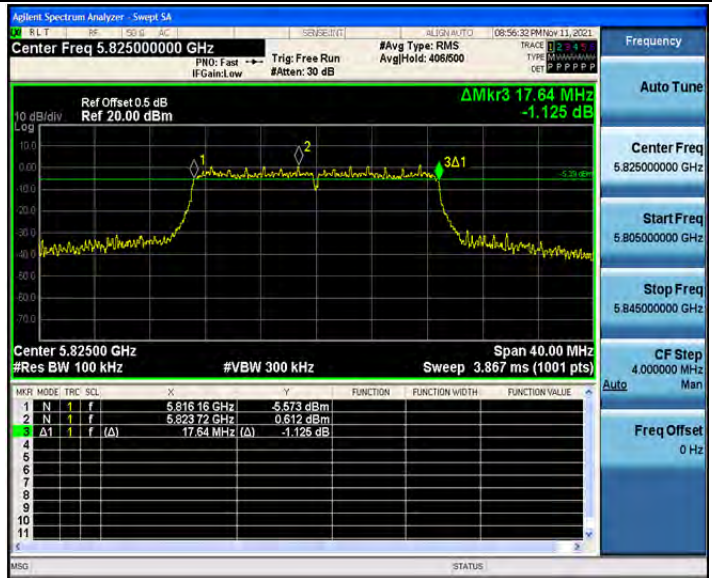
802.11n(HT20)_Ant2_5785



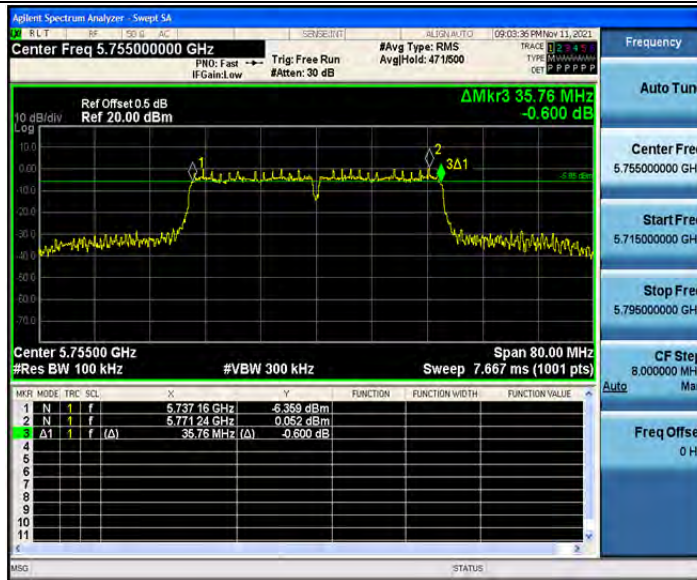
802.11n(HT20)_Ant1_5825



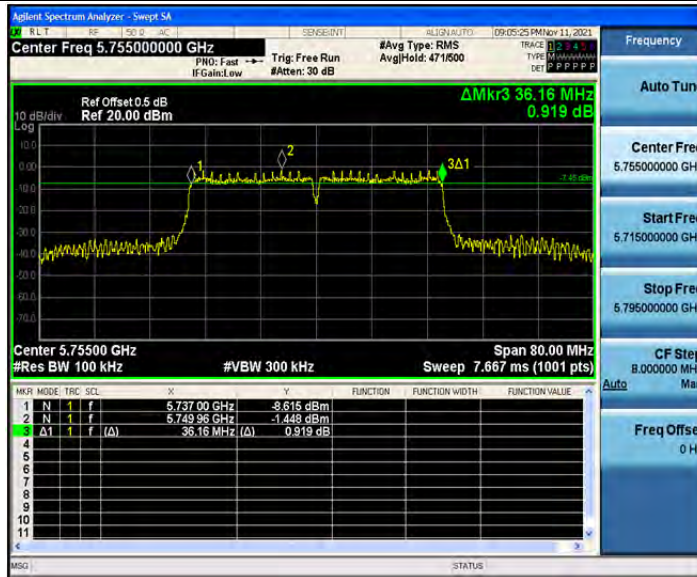
802.11n(HT20)_Ant2_5825



802.11n(HT40)_Ant1_5755



802.11n(HT40)_Ant2_5755



802.11n(HT40)_Ant1_5795



802.11n(HT40)_Ant2_5795