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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 Gigabit Wireless Router

Model: GL-SF1200

FCC ID: 2AFIW-SF1200

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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	21.440	5168.480	5189.920	PASS
	Ant2	5180	19.760	5170.120	5189.880	PASS
	Ant1	5200	20.080	5190.280	5210.360	PASS
	Ant2	5200	20.000	5189.880	5209.880	PASS
	Ant1	5240	20.520	5229.920	5250.440	PASS
	Ant2	5240	21.680	5228.160	5249.840	PASS
	Ant1	5745	19.600	5735.320	5754.920	PASS
	Ant2	5745	19.560	5735.200	5754.760	PASS
	Ant1	5785	19.680	5775.080	5794.760	PASS
	Ant2	5785	19.600	5775.200	5794.800	PASS
	Ant1	5825	19.720	5815.160	5834.880	PASS
	Ant2	5825	19.520	5815.160	5834.680	PASS
802.11n(HT20)	Ant1	5180	23.200	5168.040	5191.240	PASS
	Ant2	5180	22.800	5167.240	5190.040	PASS
	Ant1	5200	22.960	5188.240	5211.200	PASS
	Ant2	5200	22.160	5188.080	5210.240	PASS
	Ant1	5240	21.800	5228.120	5249.920	PASS
	Ant2	5240	21.760	5228.360	5250.120	PASS
	Ant1	5745	20.280	5734.880	5755.160	PASS
	Ant2	5745	19.760	5735.200	5754.960	PASS
	Ant1	5785	21.040	5773.880	5794.920	PASS
	Ant2	5785	19.520	5775.320	5794.840	PASS
	Ant1	5825	21.280	5813.840	5835.120	PASS
	Ant2	5825	19.800	5815.200	5835.000	PASS
802.11n(HT40)	Ant1	5190	39.680	5170.080	5209.760	PASS
	Ant2	5190	39.280	5170.480	5209.760	PASS
	Ant1	5230	39.760	5210.160	5249.920	PASS
	Ant2	5230	39.440	5210.400	5249.840	PASS
	Ant1	5755	39.360	5735.320	5774.680	PASS
	Ant2	5755	39.600	5735.240	5774.840	PASS
	Ant1	5795	39.600	5775.240	5814.840	PASS
	Ant2	5795	39.440	5775.320	5814.760	PASS
802.11ac(VHT20)	Ant1	5180	19.880	5170.120	5190.000	PASS
	Ant2	5180	19.720	5170.160	5189.880	PASS
	Ant1	5200	19.840	5190.120	5209.960	PASS
	Ant2	5200	19.760	5190.200	5209.960	PASS
	Ant1	5240	19.960	5230.120	5250.080	PASS
	Ant2	5240	20.040	5229.960	5250.000	PASS
	Ant1	5745	19.840	5735.120	5754.960	PASS
	Ant2	5745	19.960	5735.080	5755.040	PASS
	Ant1	5785	19.960	5774.960	5794.920	PASS

	Ant2	5785	19.840	5775.120	5794.960	PASS
	Ant1	5825	20.040	5815.120	5835.160	PASS
	Ant2	5825	20.040	5815.000	5835.040	PASS
802.11ac(VHT40)	Ant1	5190	39.440	5170.240	5209.680	PASS
	Ant2	5190	39.600	5170.160	5209.760	PASS
	Ant1	5230	39.680	5210.160	5249.840	PASS
	Ant2	5230	39.360	5210.400	5249.760	PASS
	Ant1	5755	39.520	5735.240	5774.760	PASS
	Ant2	5755	39.440	5735.240	5774.680	PASS
	Ant1	5795	39.360	5775.400	5814.760	PASS
	Ant2	5795	39.520	5775.240	5814.760	PASS
802.11ac(VHT80)	Ant1	5210	80.960	5169.520	5250.480	PASS
	Ant2	5210	79.840	5170.000	5249.840	PASS
	Ant1	5775	80.960	5734.520	5815.480	PASS
	Ant2	5775	79.680	5735.000	5814.680	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



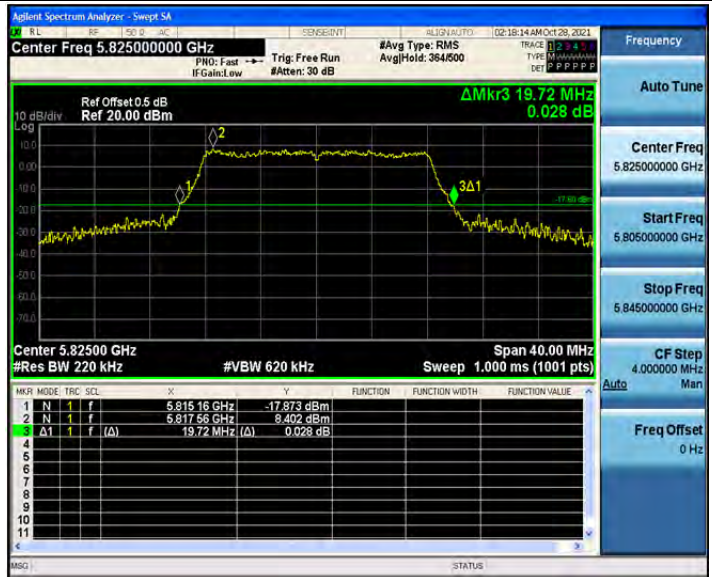
802.11a_Ant1_5785



802.11a_Ant2_5785



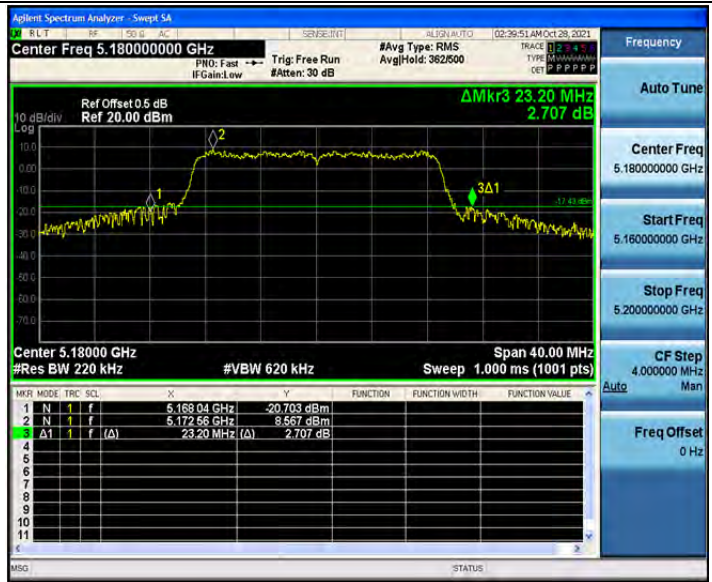
802.11a_Ant1_5825



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



802.11n(HT20)_Ant1_5825



802.11n(HT20)_Ant2_5825



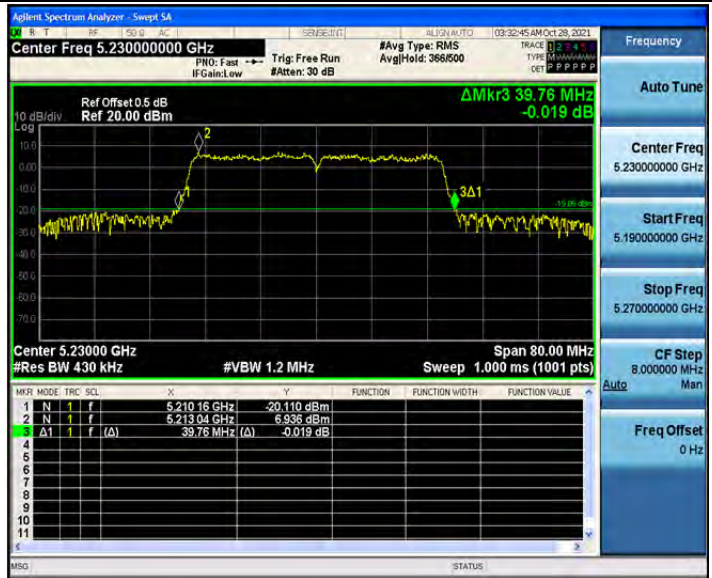
802.11n(HT40)_Ant1_5190



802.11n(HT40)_Ant2_5190



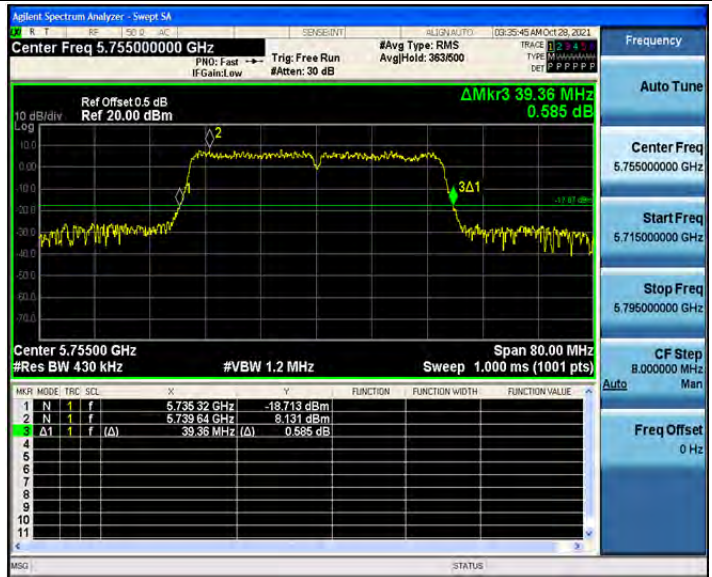
802.11n(HT40)_Ant1_5230



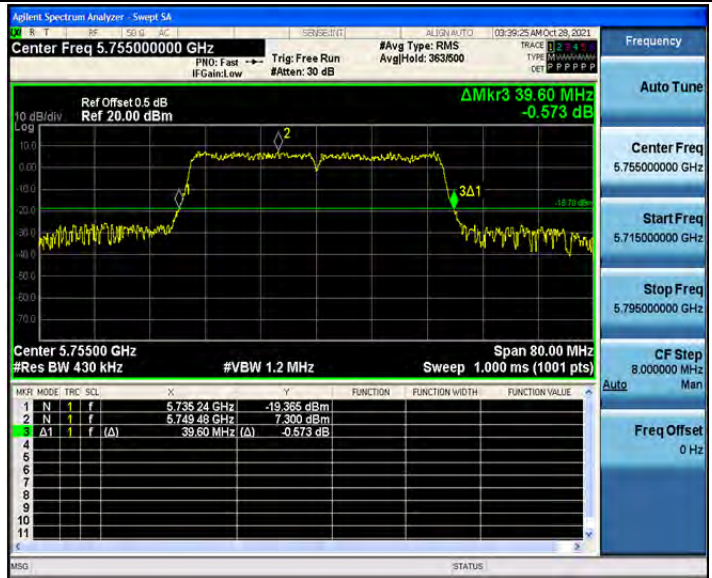
802.11n(HT40)_Ant2_5230



802.11n(HT40)_Ant1_5755



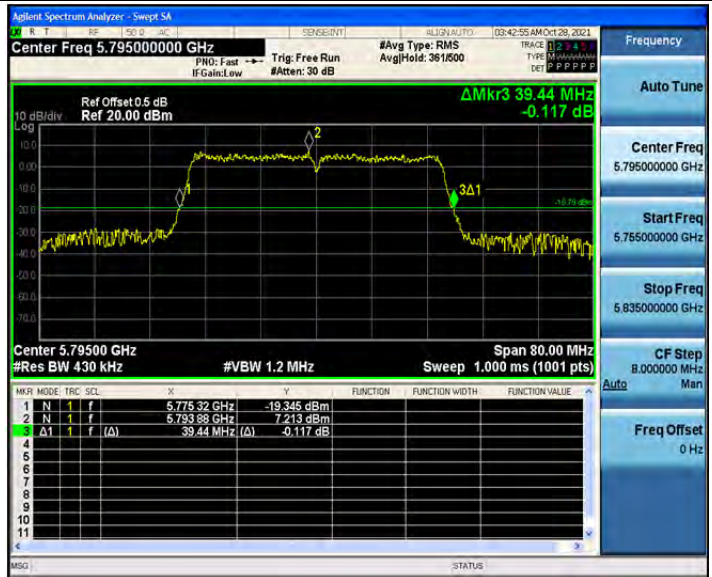
802.11n(HT40)_Ant2_5755



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 A2: Occupied channel bandwidth

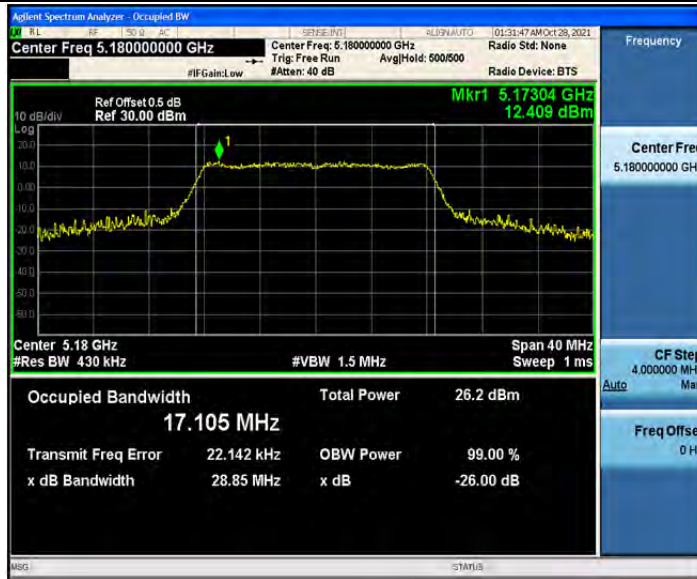
Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
802.11a	Ant1	5180	17.105	5171.470	5188.575	PASS
	Ant2	5180	16.950	5171.568	5188.518	PASS
	Ant1	5200	17.085	5191.475	5208.560	PASS
	Ant2	5200	16.973	5191.550	5208.523	PASS
	Ant1	5240	17.114	5231.481	5248.595	PASS
	Ant2	5240	16.948	5231.549	5248.497	PASS
	Ant1	5745	16.956	5736.578	5753.534	PASS
	Ant2	5745	16.836	5736.625	5753.461	PASS
	Ant1	5785	17.037	5776.515	5793.552	PASS
	Ant2	5785	16.873	5776.603	5793.476	PASS
	Ant1	5825	17.000	5816.547	5833.547	PASS
	Ant2	5825	16.871	5816.610	5833.481	PASS
802.11n(HT20)	Ant1	5180	17.889	5171.105	5188.994	PASS
	Ant2	5180	17.908	5171.065	5188.973	PASS
	Ant1	5200	17.815	5191.117	5208.932	PASS
	Ant2	5200	17.835	5191.101	5208.936	PASS
	Ant1	5240	17.865	5231.101	5248.966	PASS
	Ant2	5240	17.865	5231.072	5248.937	PASS
	Ant1	5745	17.778	5736.163	5753.941	PASS
	Ant2	5745	17.707	5736.166	5753.873	PASS
	Ant1	5785	17.854	5776.102	5793.956	PASS
	Ant2	5785	17.725	5776.180	5793.905	PASS
	Ant1	5825	17.865	5816.078	5833.943	PASS
	Ant2	5825	17.760	5816.169	5833.929	PASS
802.11n(HT40)	Ant1	5190	36.376	5171.819	5208.195	PASS
	Ant2	5190	36.503	5171.726	5208.229	PASS
	Ant1	5230	36.476	5211.771	5248.247	PASS
	Ant2	5230	36.494	5211.747	5248.241	PASS
	Ant1	5755	36.334	5736.823	5773.157	PASS
	Ant2	5755	36.331	5736.860	5773.191	PASS
	Ant1	5795	36.455	5776.782	5813.237	PASS
	Ant2	5795	36.355	5776.821	5813.176	PASS
802.11ac(VHT20)	Ant1	5180	17.764	5171.140	5188.904	PASS
	Ant2	5180	17.720	5171.181	5188.901	PASS
	Ant1	5200	17.764	5191.154	5208.918	PASS
	Ant2	5200	17.683	5191.205	5208.888	PASS
	Ant1	5240	17.795	5231.136	5248.931	PASS
	Ant2	5240	17.733	5231.169	5248.902	PASS
	Ant1	5745	17.762	5736.159	5753.921	PASS
	Ant2	5745	17.736	5736.181	5753.917	PASS
	Ant1	5785	17.783	5776.128	5793.911	PASS

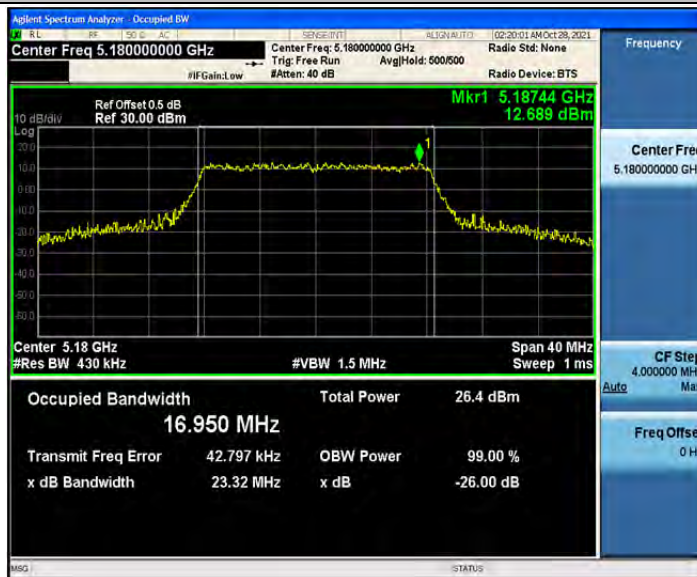
	Ant2	5785	17.731	5776.169	5793.900	PASS
	Ant1	5825	17.761	5816.164	5833.925	PASS
	Ant2	5825	17.715	5816.177	5833.892	PASS
802.11ac(VHT40)	Ant1	5190	36.323	5171.827	5208.150	PASS
	Ant2	5190	36.410	5171.802	5208.212	PASS
	Ant1	5230	36.339	5211.844	5248.183	PASS
	Ant2	5230	36.355	5211.817	5248.172	PASS
	Ant1	5755	36.316	5736.890	5773.206	PASS
	Ant2	5755	36.347	5736.875	5773.222	PASS
	Ant1	5795	36.298	5776.868	5813.166	PASS
	Ant2	5795	36.240	5776.879	5813.119	PASS
802.11ac(VHT80)	Ant1	5210	75.275	5172.296	5247.571	PASS
	Ant2	5210	75.331	5172.256	5247.587	PASS
	Ant1	5775	75.310	5737.340	5812.650	PASS
	Ant2	5775	75.228	5737.308	5812.536	PASS

Test Graphs

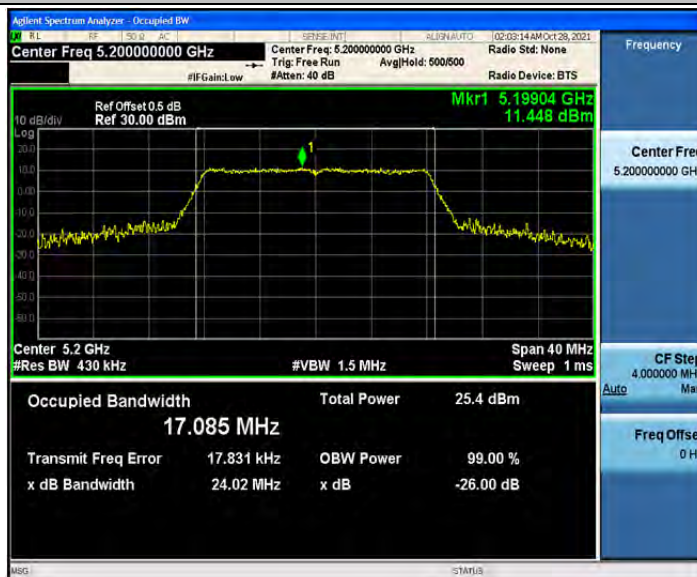
802.11a_Ant1_5180



802.11a_Ant2_5180



802.11a_Ant1_5200



802.11a_Ant2_5200



802.11a_Ant1_5240



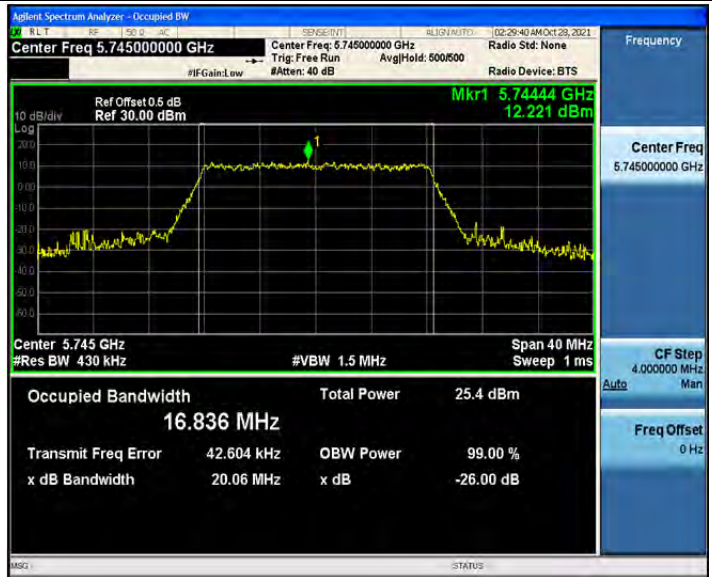
802.11a_Ant2_5240



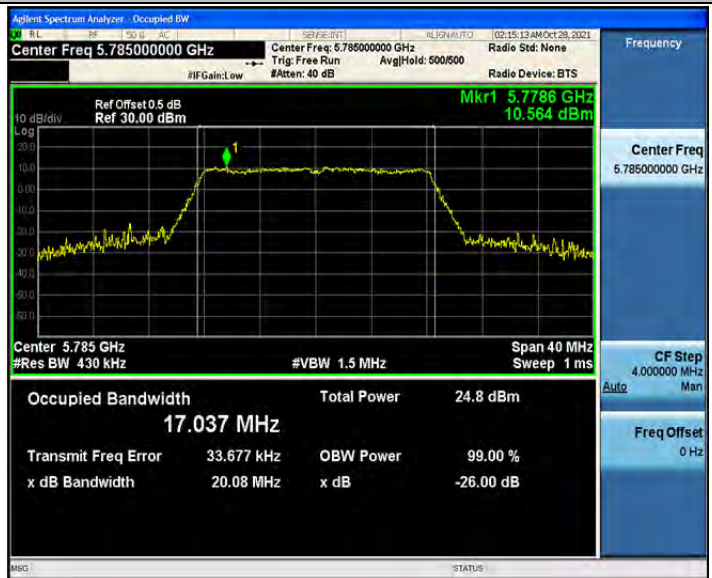
802.11a_Ant1_5745



802.11a_Ant2_5745



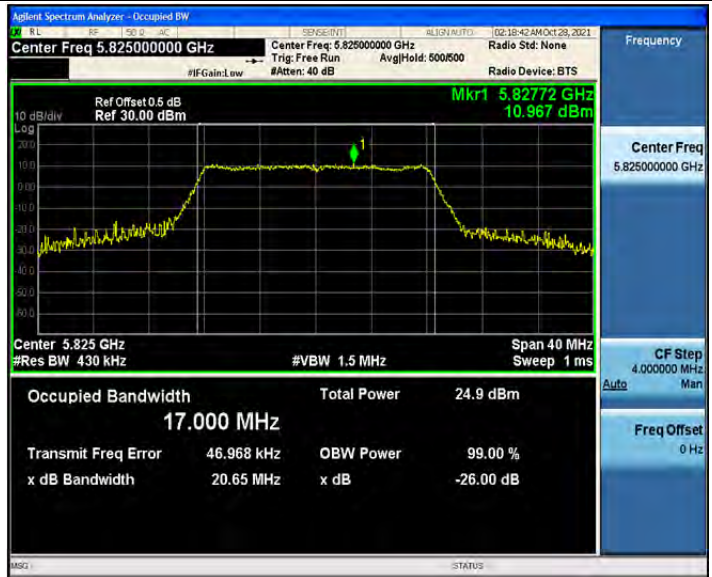
802.11a_Ant1_5785



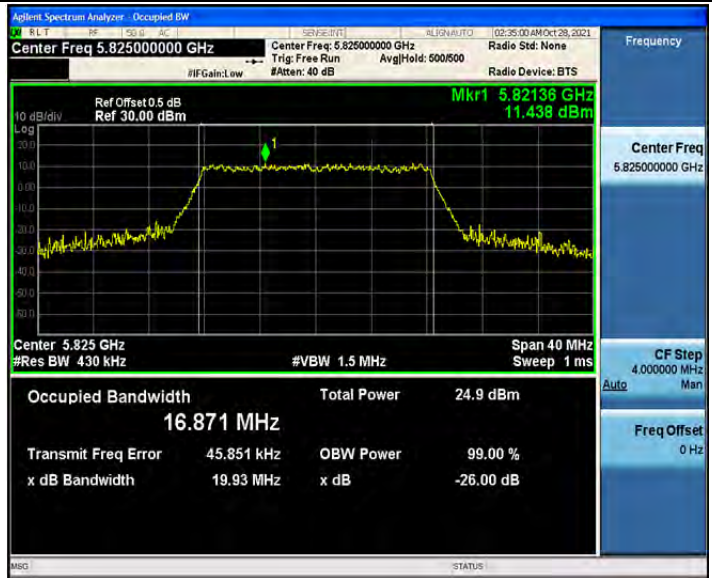
802.11a_Ant2_5785



802.11a_Ant1_5825



802.11a_Ant2_5825



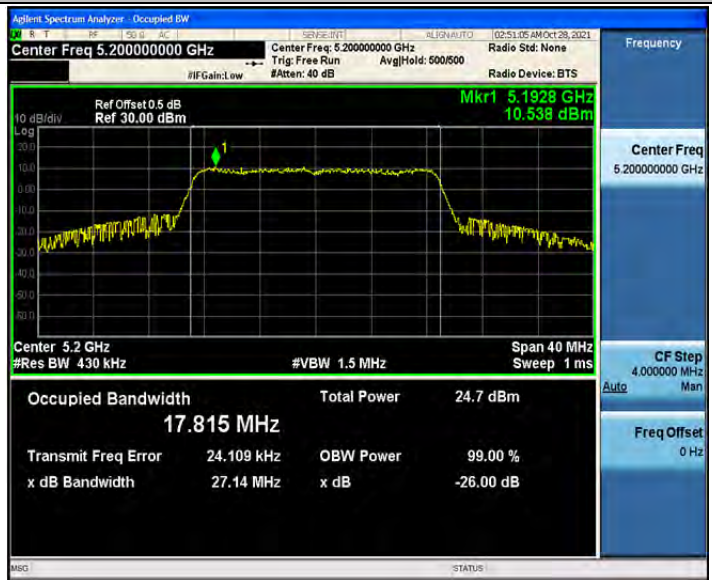
802.11n(HT20)_Ant1_5180



802.11n(HT20)_Ant2_5180



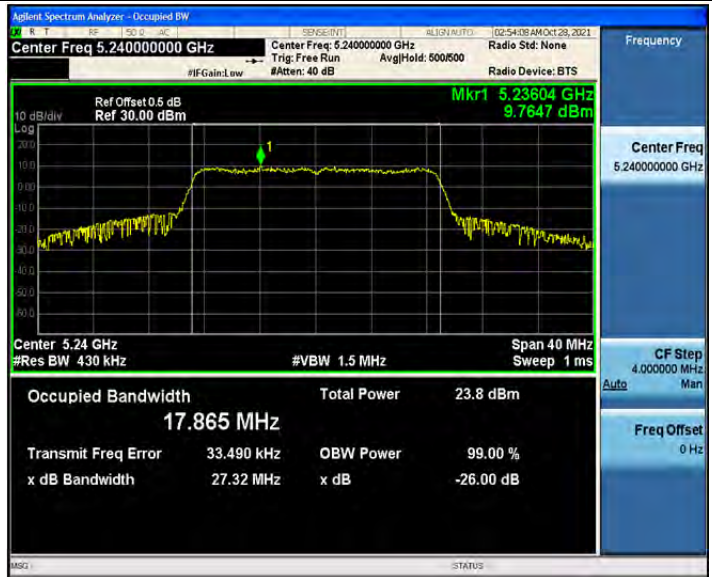
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802.11n(HT20)_Ant2_5200



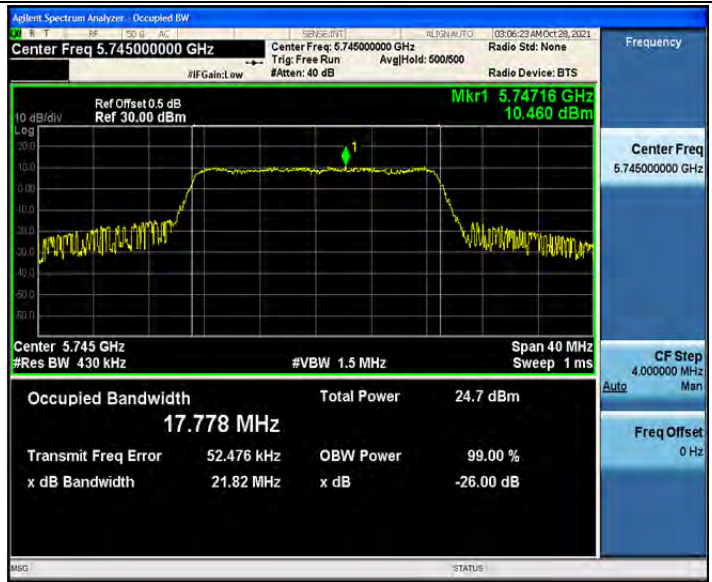
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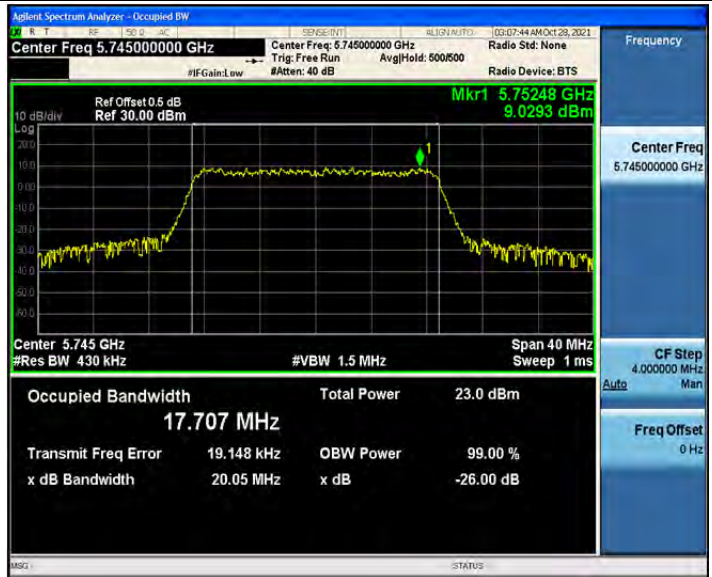
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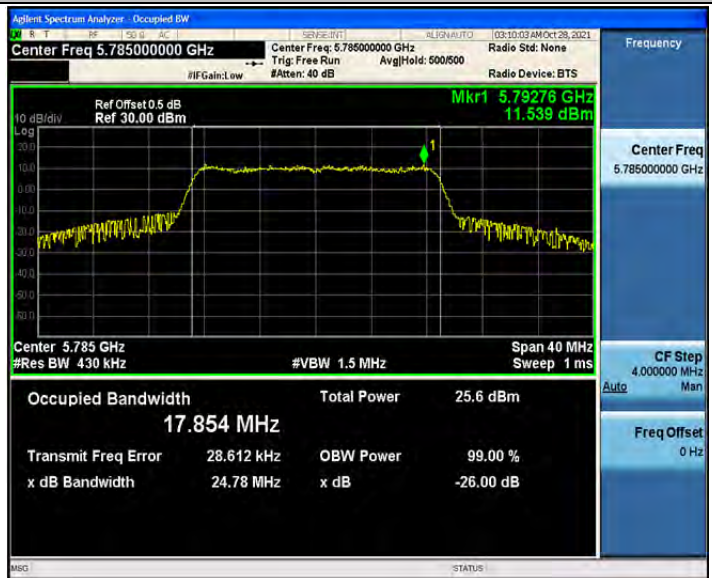
802.11n(HT20)_Ant1_5745



802.11n(HT20)_Ant2_5745



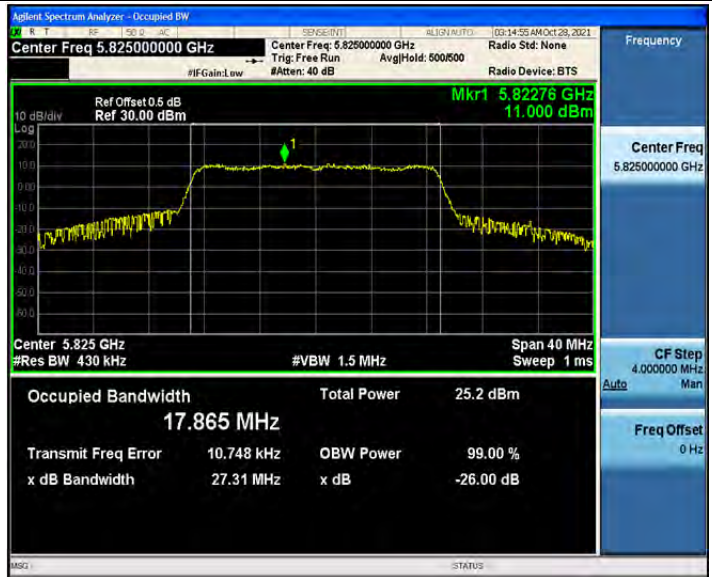
802.11n(HT20)_Ant1_5785



802.11n(HT20)_Ant2_5785



802.11n(HT20)_Ant1_5825



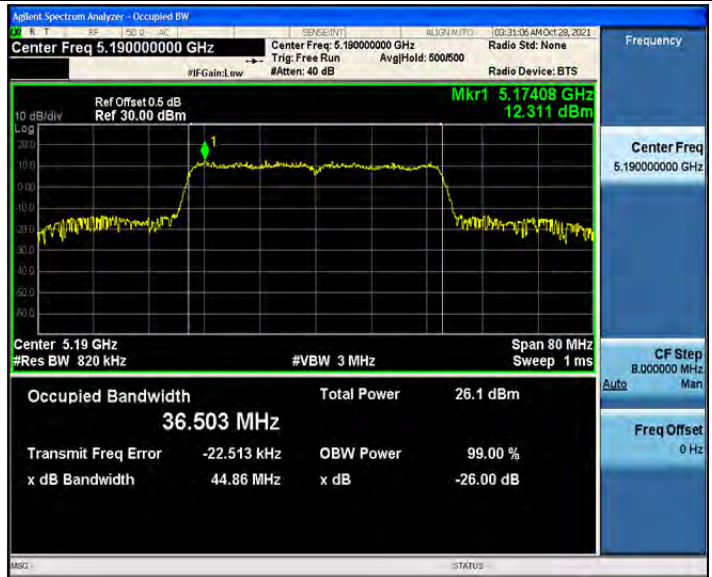
802.11n(HT20)_Ant2_5825



802.11n(HT40)_Ant1_5190



802.11n(HT40)_Ant2_5190



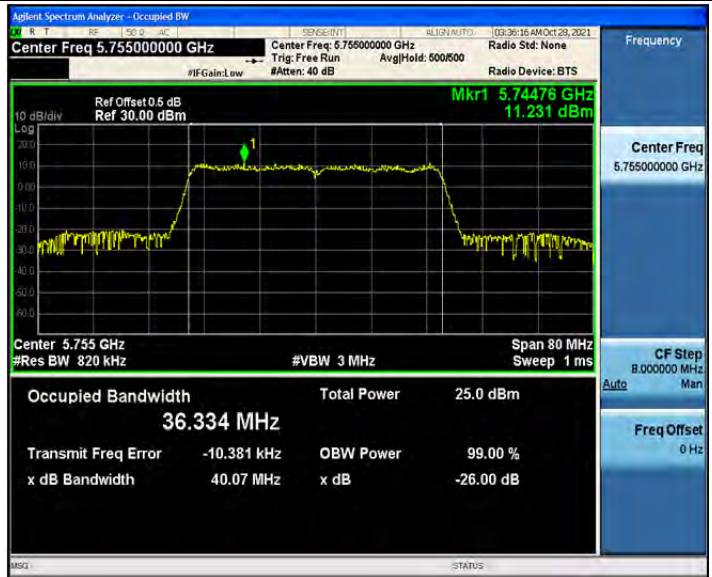
802.11n(HT40)_Ant1_5230



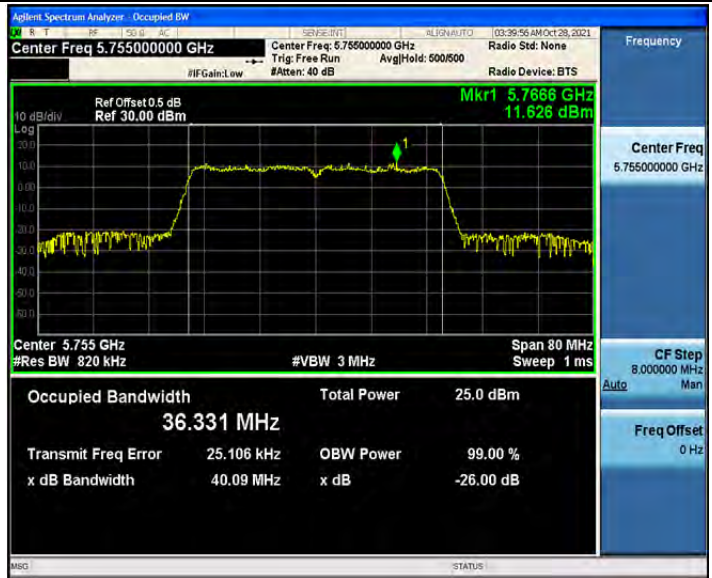
802.11n(HT40)_Ant2_5230



802.11n(HT40)_Ant1_5755



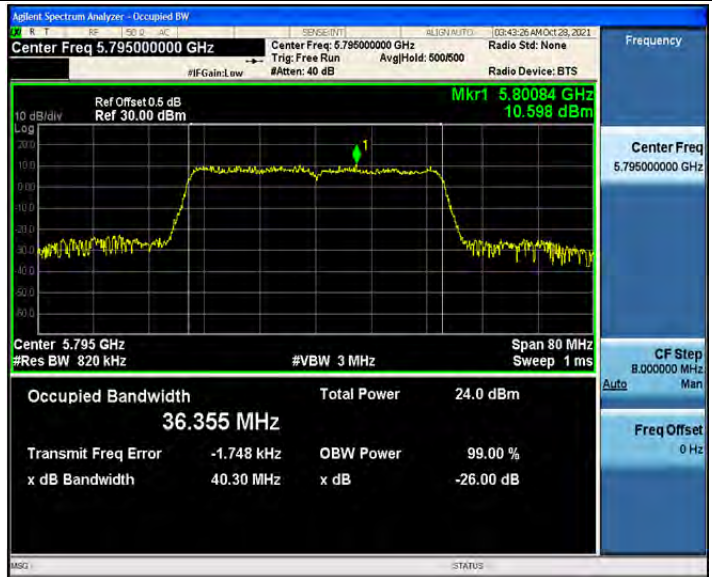
802.11n(HT40)_Ant2_5755



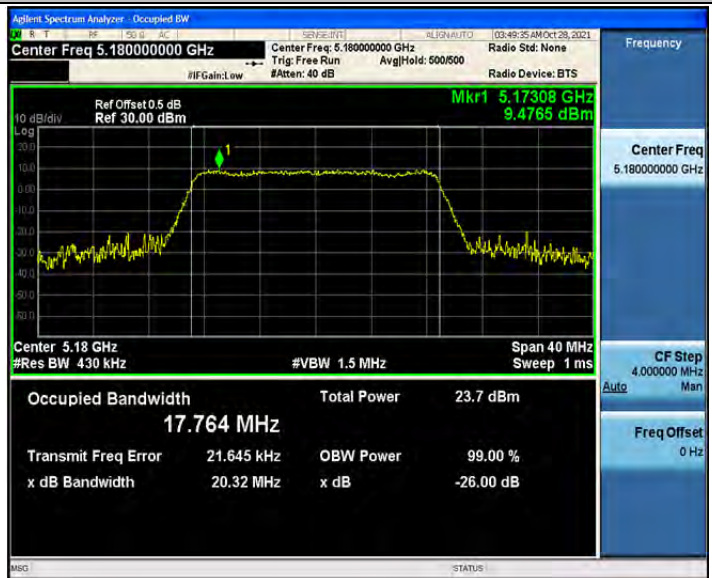
802.11n(HT40)_Ant1_5795



802.11n(HT40)_Ant2_5795



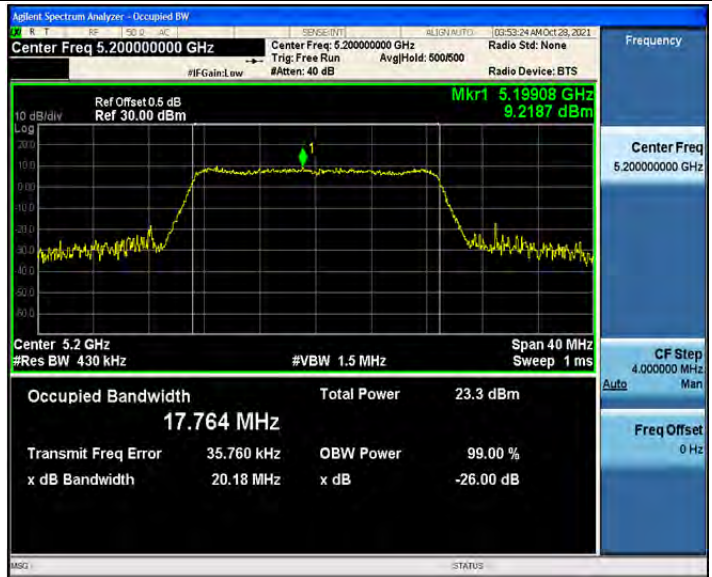
802.11ac(VHT20)_Ant1_5180



802.11ac(VHT20)_Ant2_5180



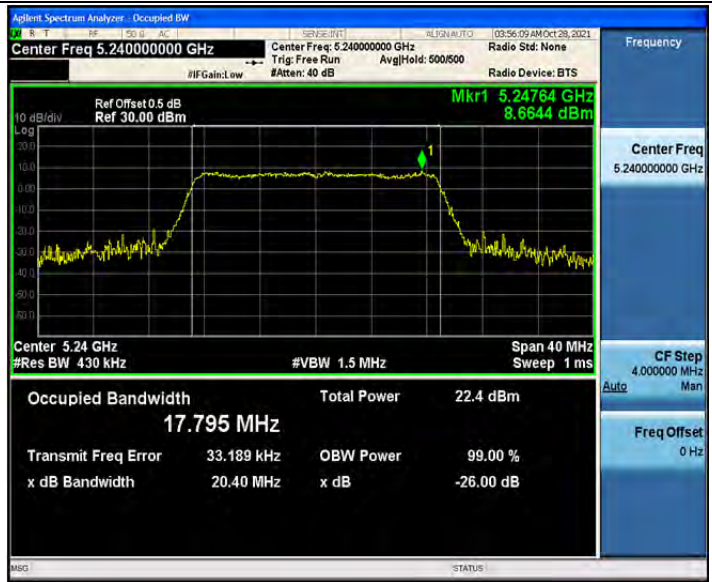
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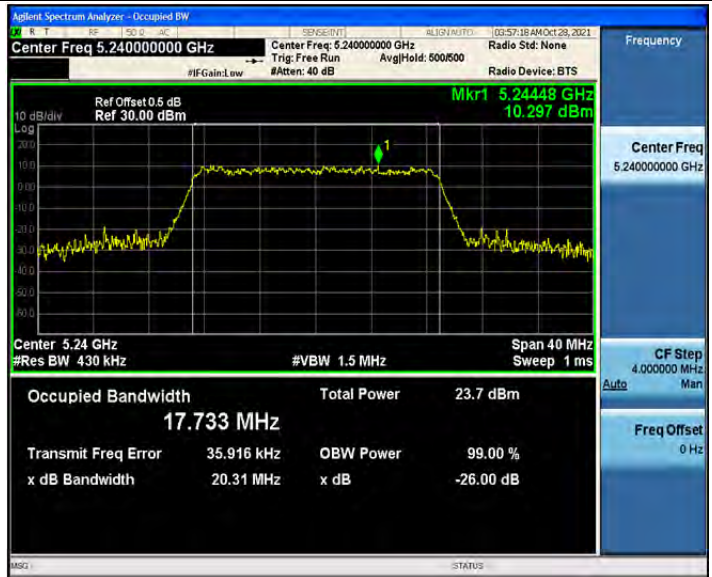
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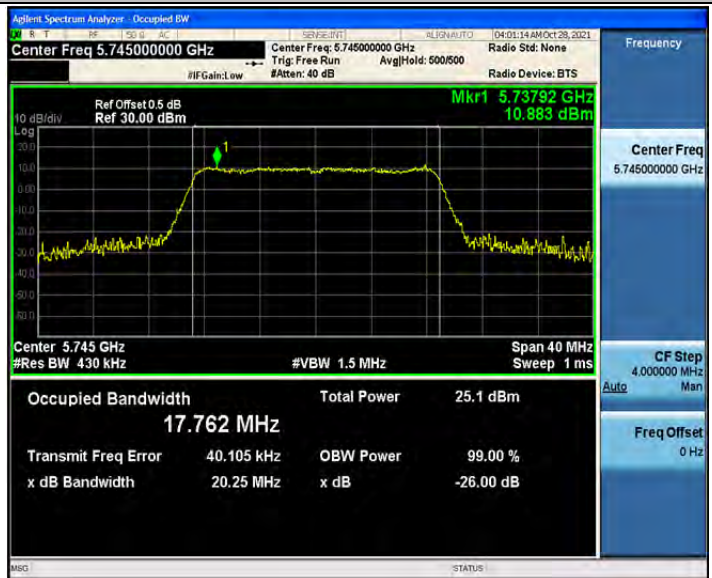
802.11ac(VHT20)_Ant1_5240



802.11ac(VHT20)_Ant2_5240



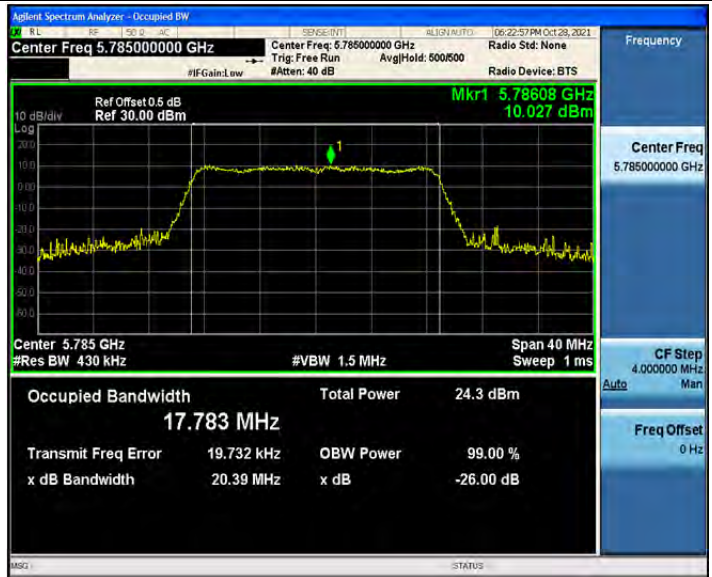
802.11ac(VHT20)_Ant1_5745



802.11ac(VHT20)_Ant2_5745



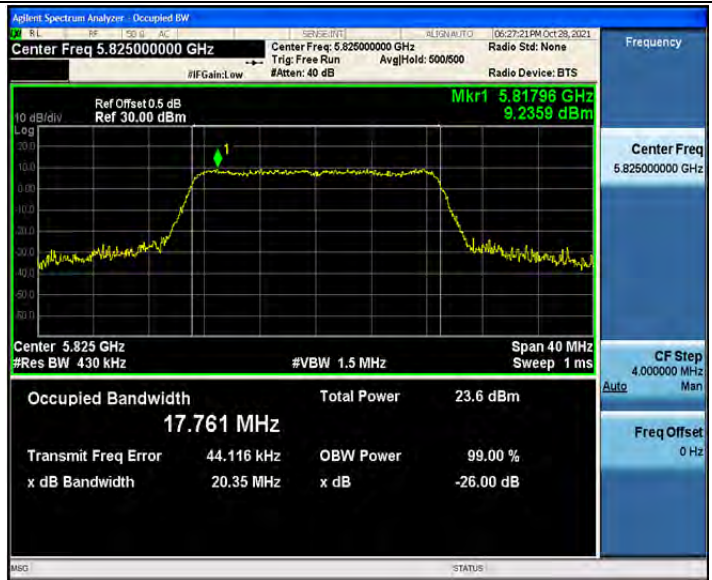
802.11ac(VHT20)_Ant1_5785



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



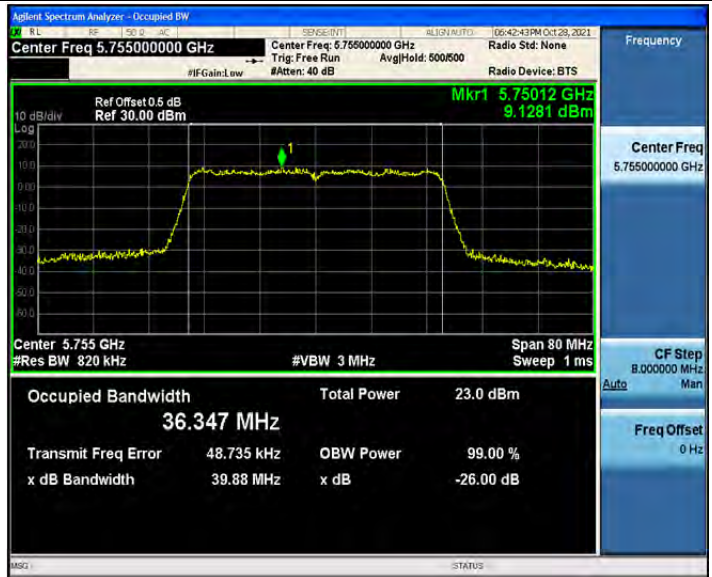
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802.11ac(VHT40)_Ant1_5755



802.11ac(VHT40)_Ant2_5755



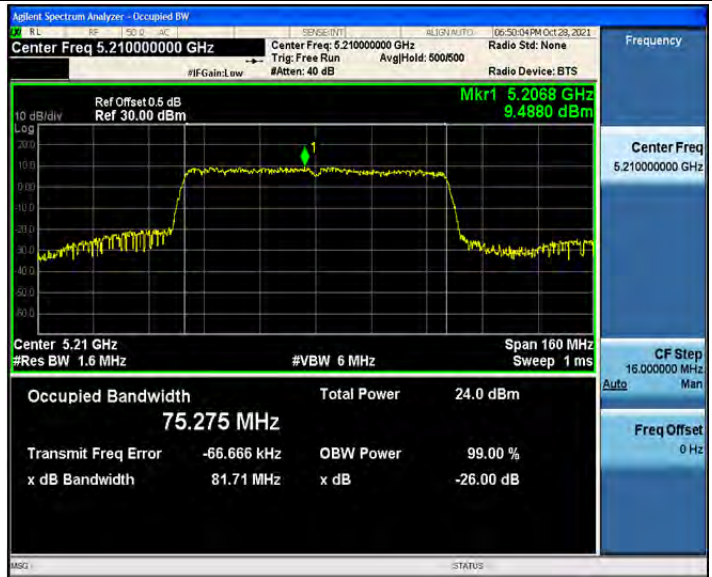
802.11ac(VHT40)_Ant1_5795



802.11ac(VHT40)_Ant2_5795



802.11ac(VHT80)_Ant1_5210



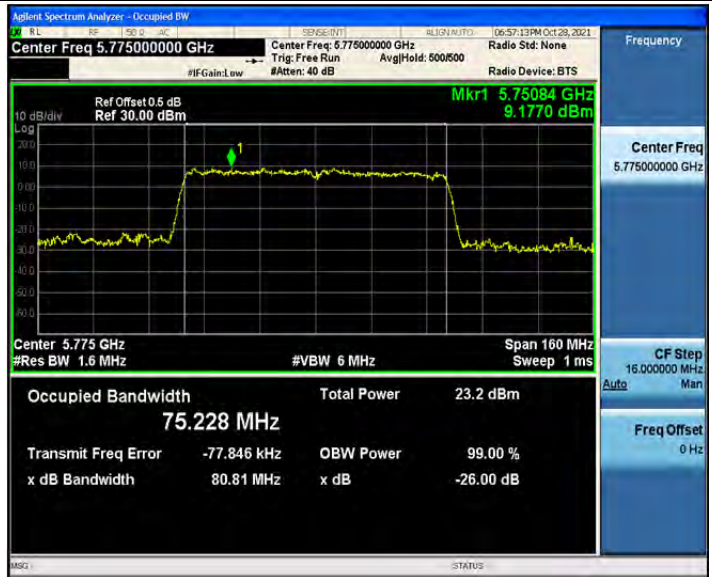
802.11ac(VHT80)_Ant2_5210



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	16.400	5736.840	5753.240	>0.5	PASS
	Ant2	5745	16.480	5736.800	5753.280	>0.5	PASS
	Ant1	5785	16.440	5776.840	5793.280	>0.5	PASS
	Ant2	5785	16.440	5776.840	5793.280	>0.5	PASS
	Ant1	5825	16.440	5816.840	5833.280	>0.5	PASS
	Ant2	5825	16.440	5816.840	5833.280	>0.5	PASS
802.11n(HT20)	Ant1	5745	17.200	5736.440	5753.640	>0.5	PASS
	Ant2	5745	17.160	5736.480	5753.640	>0.5	PASS
	Ant1	5785	17.240	5776.360	5793.600	>0.5	PASS
	Ant2	5785	17.360	5776.240	5793.600	>0.5	PASS
	Ant1	5825	17.160	5816.480	5833.640	>0.5	PASS
	Ant2	5825	17.400	5816.480	5833.880	>0.5	PASS
802.11n(HT40)	Ant1	5755	35.520	5737.160	5772.680	>0.5	PASS
	Ant2	5755	35.600	5737.080	5772.680	>0.5	PASS
	Ant1	5795	35.280	5777.400	5812.680	>0.5	PASS
	Ant2	5795	35.760	5777.080	5812.840	>0.5	PASS
802.11ac(VHT20)	Ant1	5745	17.120	5736.440	5753.560	>0.5	PASS
	Ant2	5745	17.120	5736.480	5753.600	>0.5	PASS
	Ant1	5785	17.040	5776.480	5793.520	>0.5	PASS
	Ant2	5785	17.320	5776.240	5793.560	>0.5	PASS
	Ant1	5825	17.120	5816.480	5833.600	>0.5	PASS
	Ant2	5825	17.040	5816.440	5833.480	>0.5	PASS
802.11ac(VHT40)	Ant1	5755	35.840	5737.080	5772.920	>0.5	PASS
	Ant2	5755	35.600	5737.160	5772.760	>0.5	PASS
	Ant1	5795	35.600	5777.080	5812.680	>0.5	PASS
	Ant2	5795	35.600	5777.080	5812.680	>0.5	PASS
802.11ac(VHT80)	Ant1	5775	75.520	5737.240	5812.760	>0.5	PASS
	Ant2	5775	75.360	5737.400	5812.760	>0.5	PASS

Test Graphs

802.11a_Ant1_5745



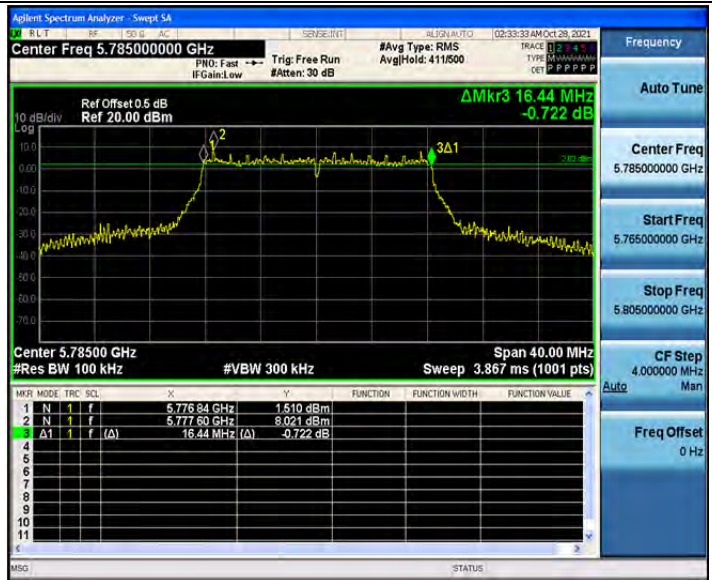
802.11a_Ant2_5745



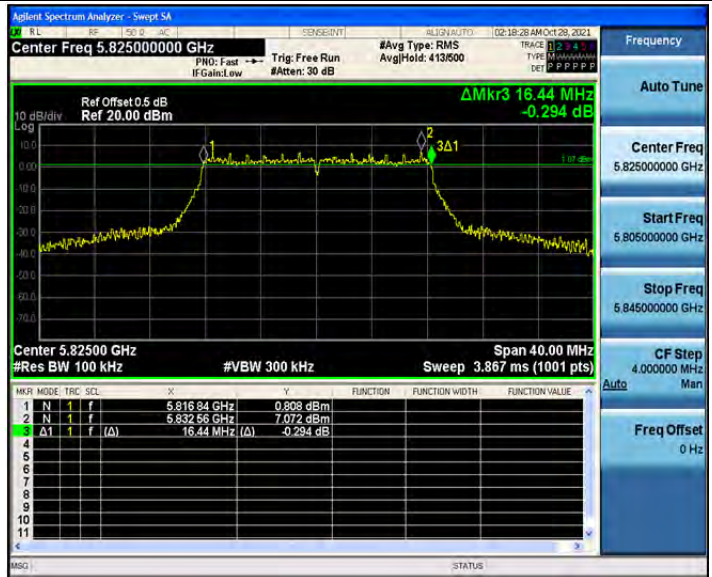
802.11a_Ant1_5785



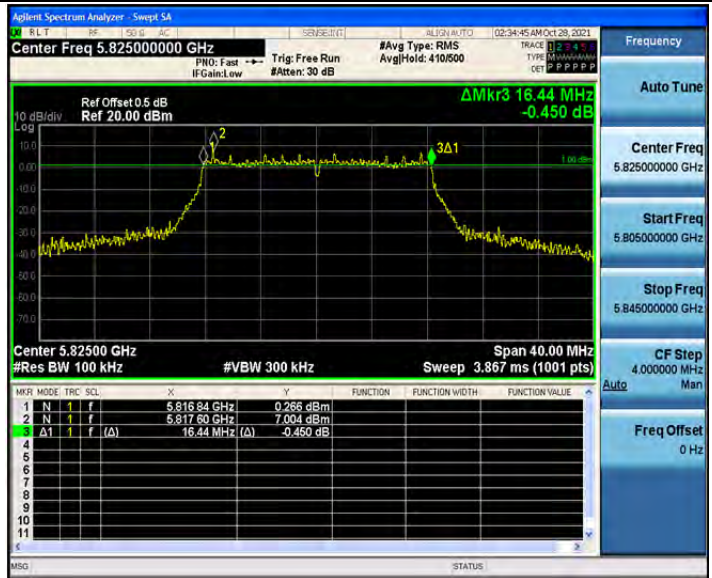
802.11a_Ant2_5785



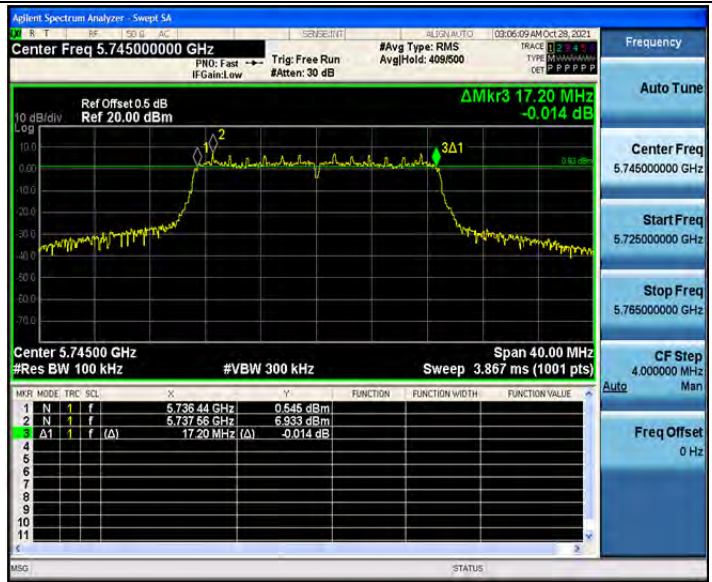
802.11a_Ant1_5825



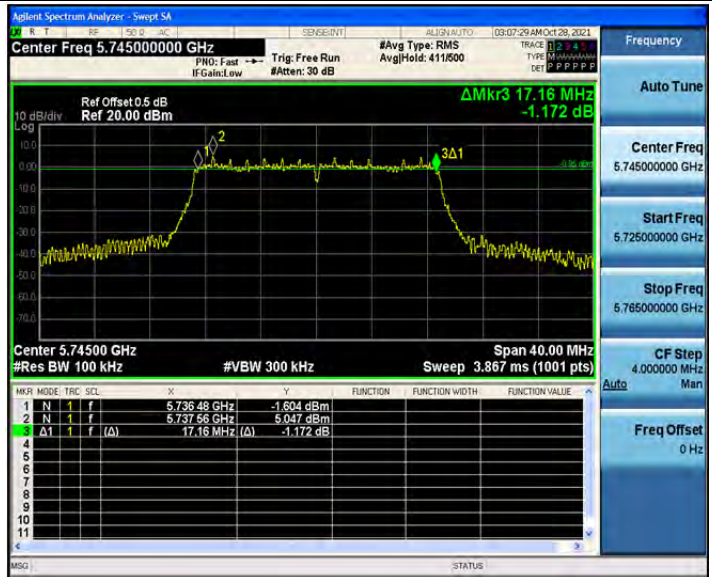
802.11a_Ant2_5825



802.11n(HT20)_Ant1_5745



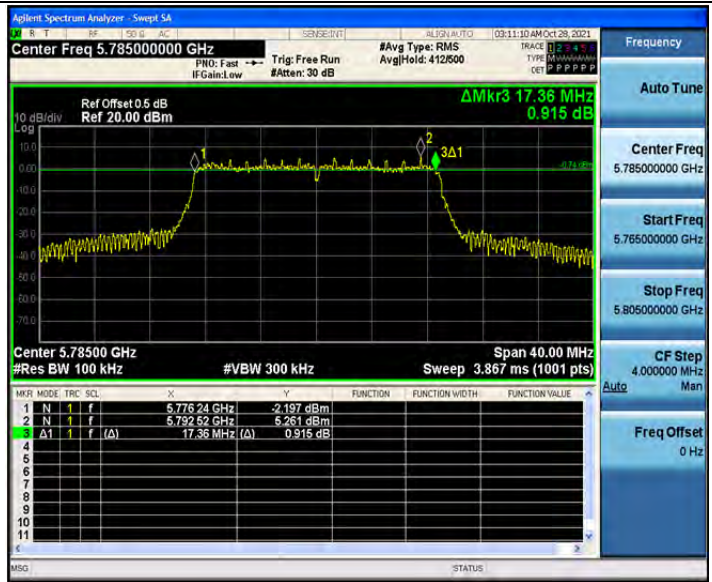
802.11n(HT20)_Ant2_5745



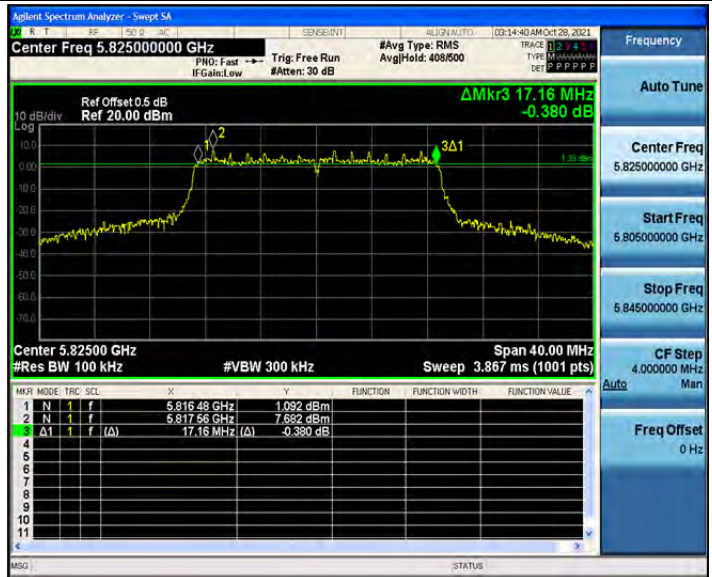
802.11n(HT20)_Ant1_5785



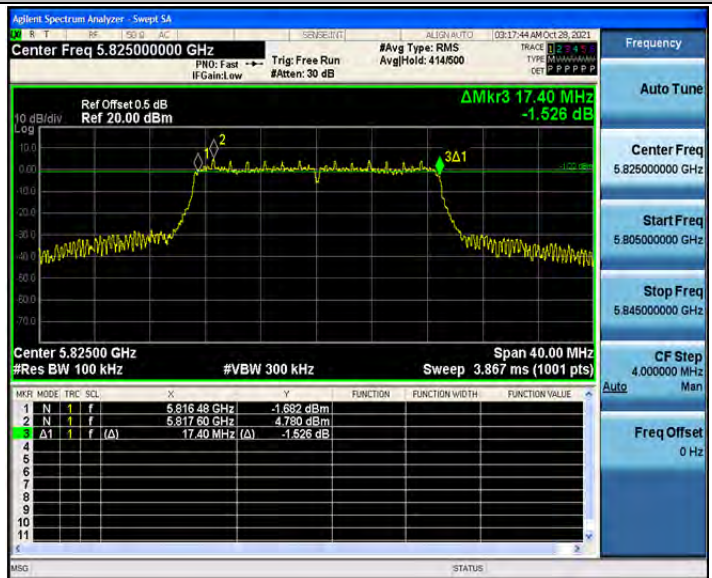
802.11n(HT20)_Ant2_5785



802.11n(HT20)_Ant1_5825



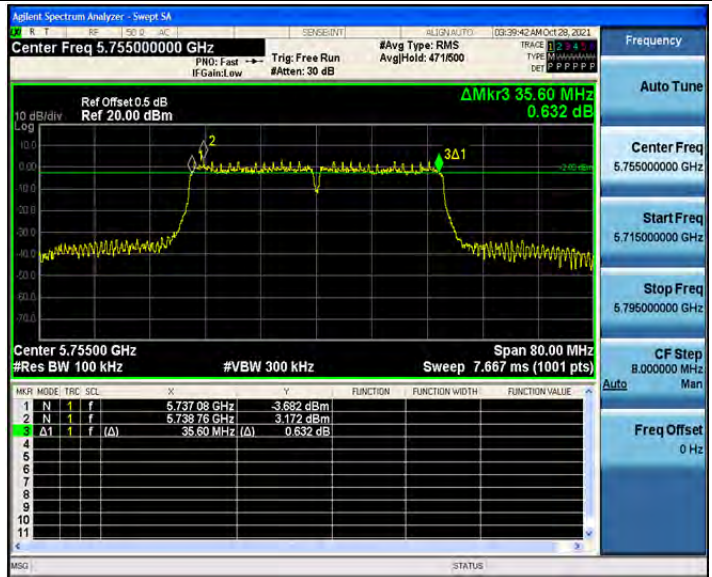
802.11n(HT20)_Ant2_5825



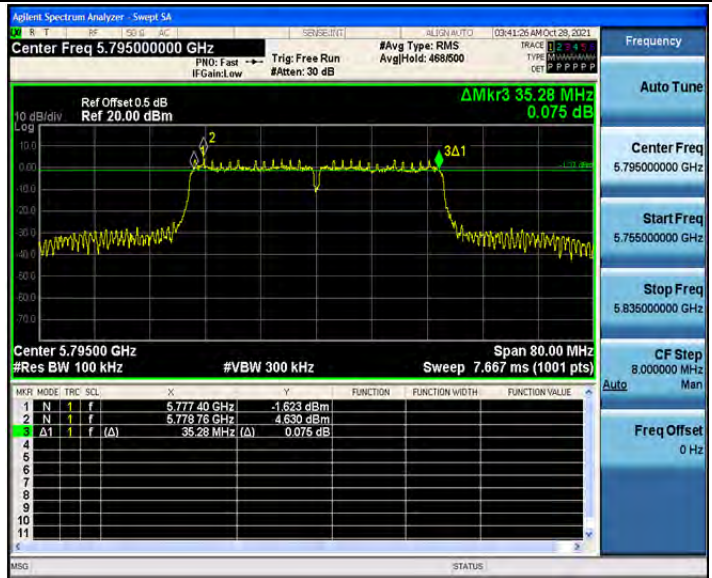
802.11n(HT40)_Ant1_5755



802.11n(HT40)_Ant2_5755



802.11n(HT40)_Ant1_5795



802.11n(HT40)_Ant2_5795