

FCC Appendix RF Test Data for 5GWIFI

FCC ID : 2BVF8WTI5500

Company : Worldwide Telecommunications, Inc.

EUT : Industrial Router

Model Number : 5500

Report No. : CTA26042702502

Reviewed By : Eric Wang

FCC Appendix RF Test Data for 5GWIFI Antenna 1

Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.080	5168.600	5191.680	---	---
		5220	23.560	5208.160	5231.720	---	---
		5240	22.960	5228.840	5251.800	---	---
		5745	24.480	5732.720	5757.200	---	---
		5785	24.680	5772.400	5797.080	---	---
		5825	24.520	5812.840	5837.360	---	---
11N20SISO	Ant1	5180	24.200	5168.280	5192.480	---	---
		5220	23.440	5208.280	5231.720	---	---
		5240	24.320	5227.640	5251.960	---	---
		5745	24.360	5732.600	5756.960	---	---
		5785	24.520	5772.840	5797.360	---	---
		5825	25.160	5812.520	5837.680	---	---
11N40SISO	Ant1	5190	44.320	5168.000	5212.320	---	---
		5230	44.080	5208.480	5252.560	---	---
		5755	45.120	5733.160	5778.280	---	---
		5795	44.640	5773.400	5818.040	---	---
11AC20SISO	Ant1	5180	22.720	5168.680	5191.400	---	---
		5220	22.760	5208.960	5231.720	---	---
		5240	22.560	5228.800	5251.360	---	---
		5745	23.120	5733.520	5756.640	---	---
		5785	25.840	5772.080	5797.920	---	---
		5825	23.680	5813.320	5837.000	---	---
11AC40SISO	Ant1	5190	43.040	5168.400	5211.440	---	---
		5230	42.160	5208.960	5251.120	---	---
		5755	44.880	5733.160	5778.040	---	---
		5795	44.560	5773.560	5818.120	---	---

Test Graphs





11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



11N20SISO_Ant1_5745



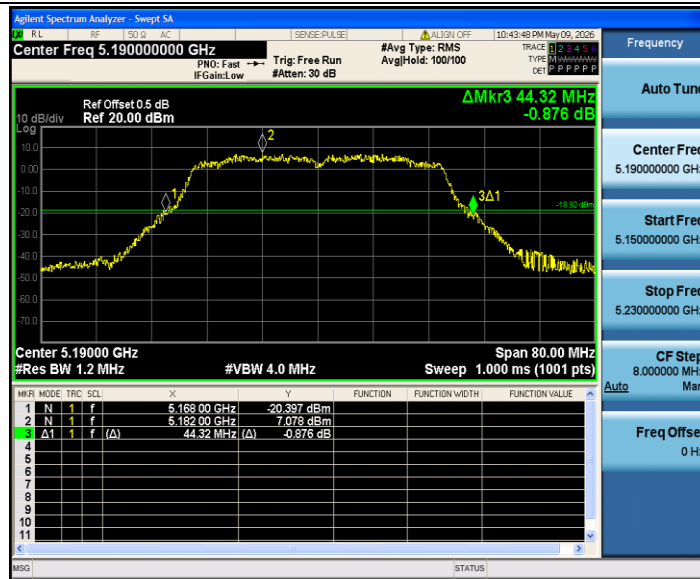
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



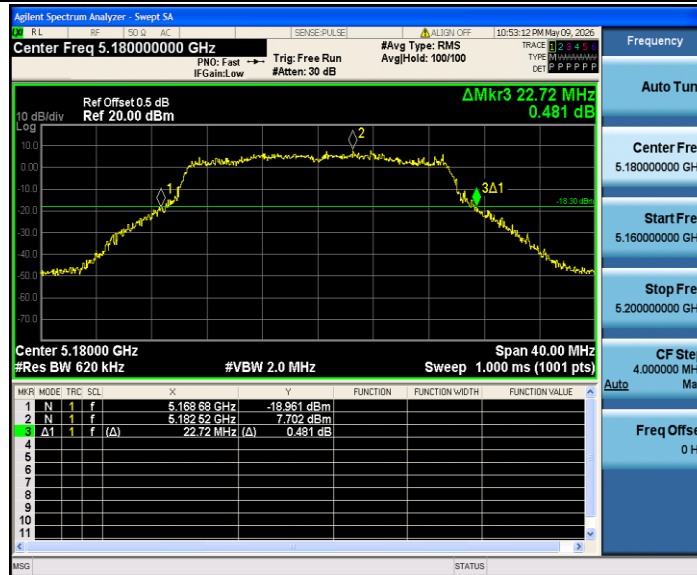
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5220



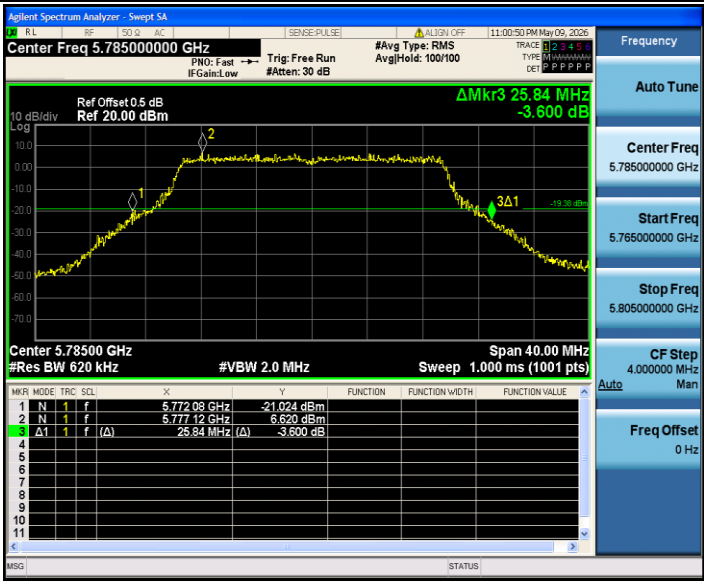
11AC20SISO_Ant1_5240



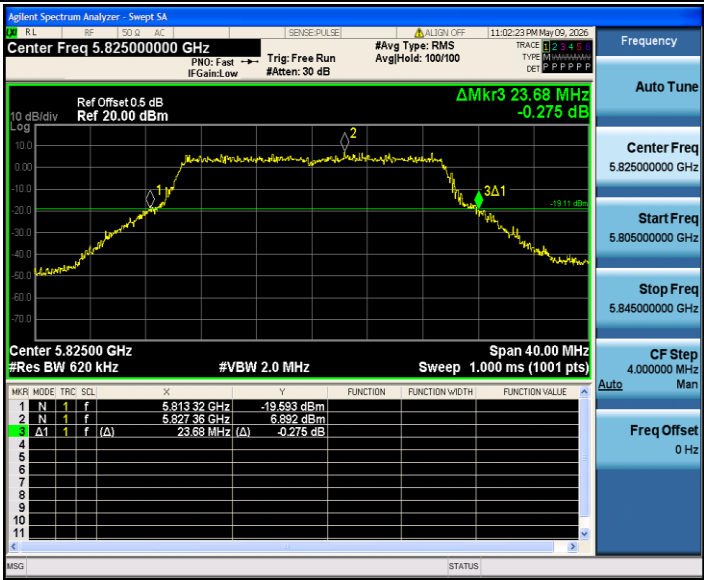
11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



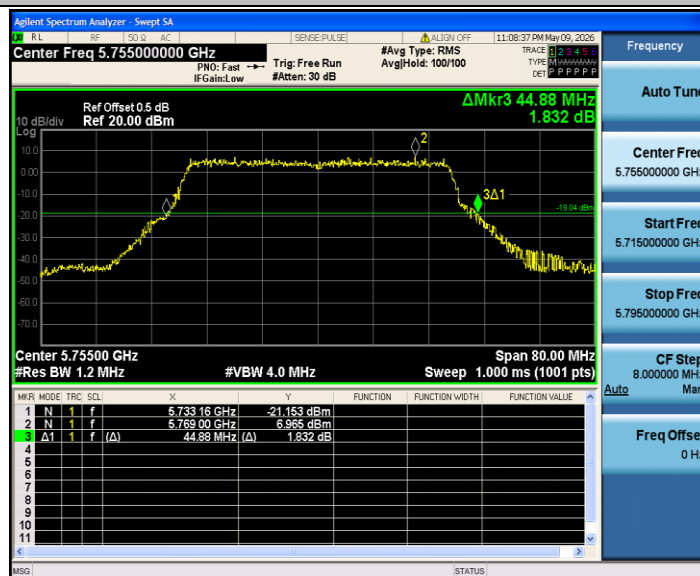
11AC40SISO_Ant1_5190



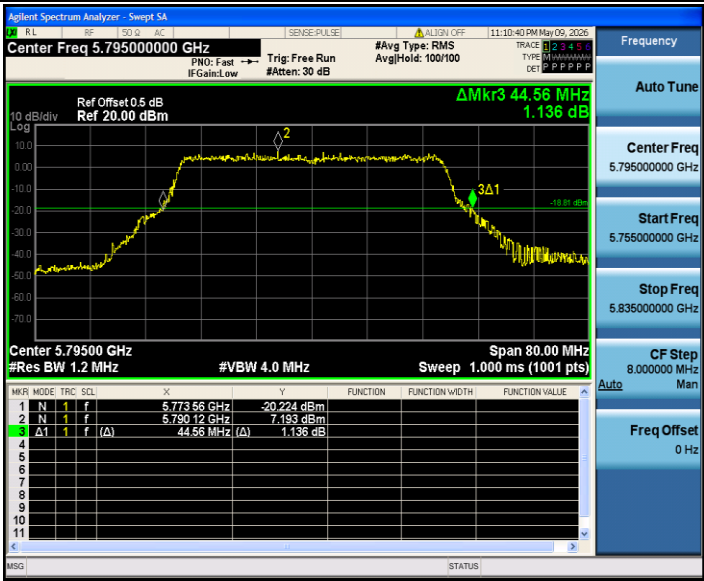
11AC40SISO_Ant1_5230



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



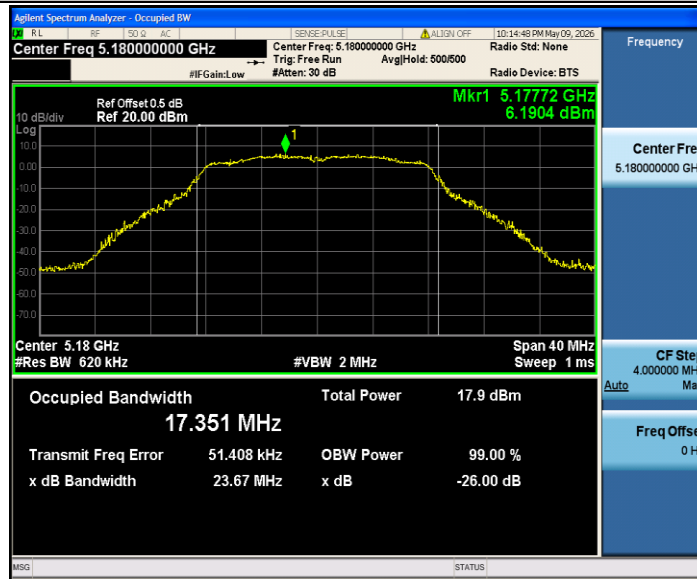
Appendix A2: Occupied channel bandwidth

Test Result

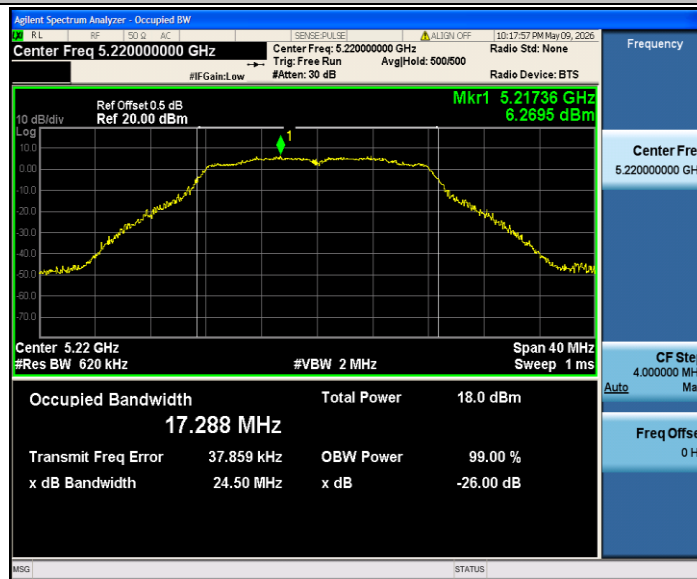
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.351	5171.3759	5188.7269	---	---
		5220	17.288	5211.3939	5228.6819	---	---
		5240	17.315	5231.3783	5248.6933	---	---
		5745	17.581	5736.2344	5753.8154	---	---
		5785	17.654	5776.1926	5793.8466	---	---
		5825	17.620	5816.2197	5833.8397	---	---
11N20SISO	Ant1	5180	18.255	5170.8988	5189.1538	---	---
		5220	18.271	5210.8597	5229.1307	---	---
		5240	18.278	5230.8880	5249.1660	---	---
		5745	18.670	5735.6782	5754.3482	---	---
		5785	18.672	5775.6726	5794.3446	---	---
		5825	18.763	5815.6547	5834.4177	---	---
11N40SISO	Ant1	5190	36.367	5171.8872	5208.2542	---	---
		5230	36.279	5211.9751	5248.2541	---	---
		5755	36.973	5736.6170	5773.5900	---	---
		5795	36.927	5776.6385	5813.5655	---	---
11AC20SISO	Ant1	5180	19.093	5170.5070	5189.6000	---	---
		5220	19.072	5210.5090	5229.5810	---	---
		5240	19.119	5230.4688	5249.5878	---	---
		5745	19.383	5735.2997	5754.6827	---	---
		5785	19.384	5775.3368	5794.7208	---	---
		5825	19.347	5815.3760	5834.7230	---	---
11AC40SISO	Ant1	5190	37.830	5171.1081	5208.9381	---	---
		5230	37.830	5211.1936	5249.0236	---	---
		5755	38.274	5735.9445	5774.2185	---	---
		5795	38.386	5775.8542	5814.2402	---	---

Test Graphs

11A_Ant1_5180



11A_Ant1_5220



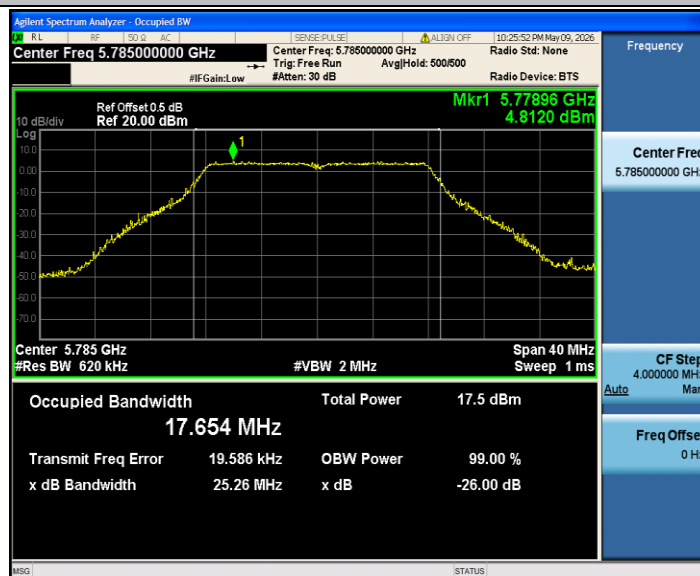
11A_Ant1_5240



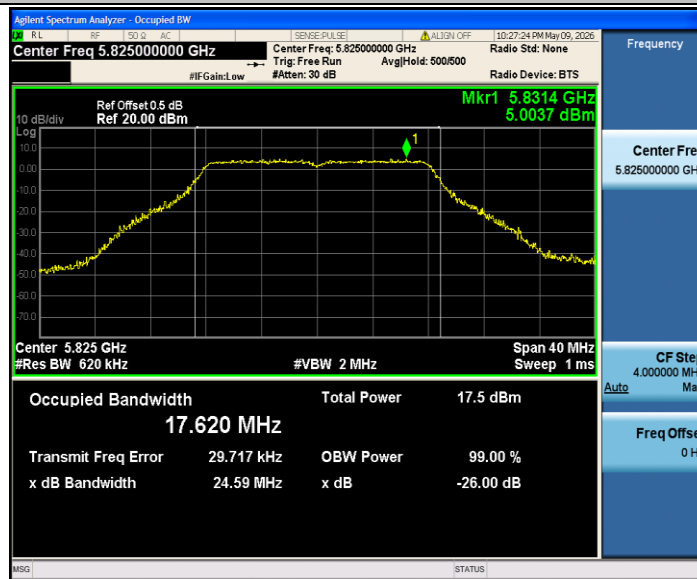
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



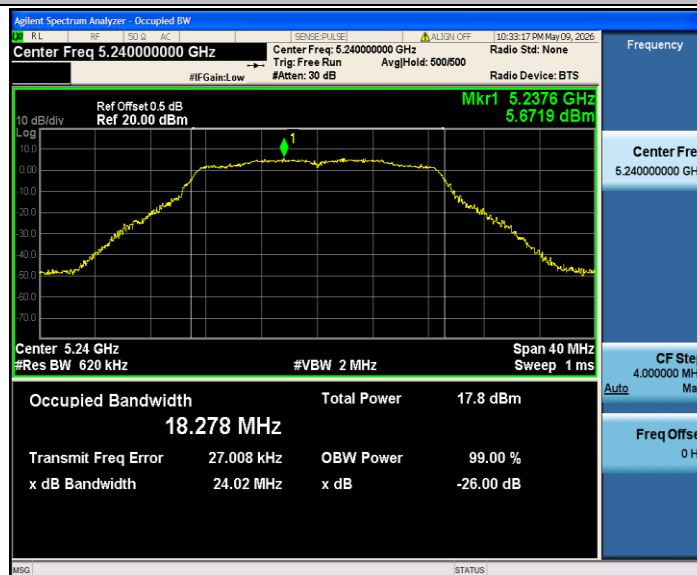
11N20SISO_Ant1_5180



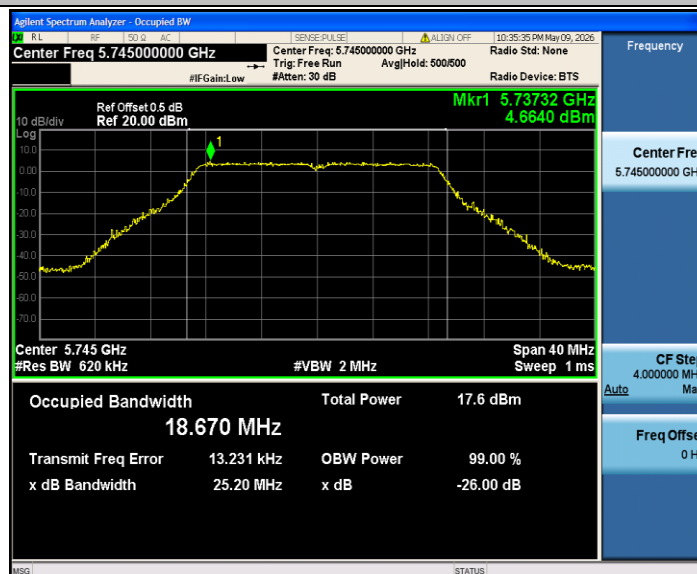
11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



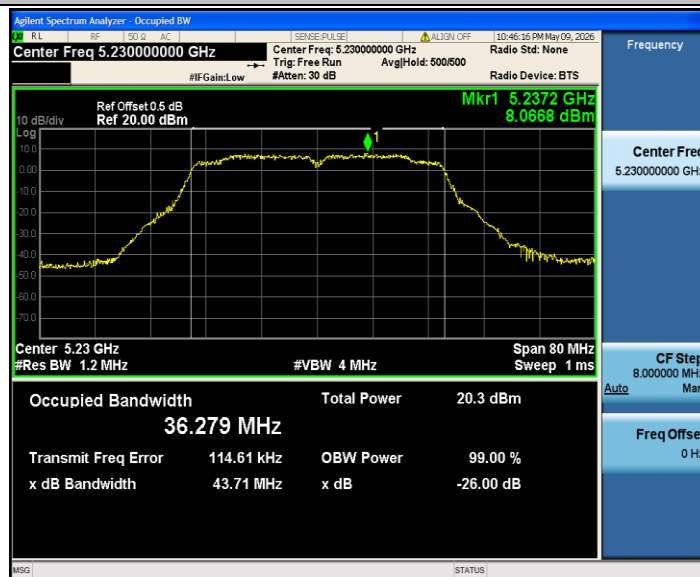
11N20SISO_Ant1_5825



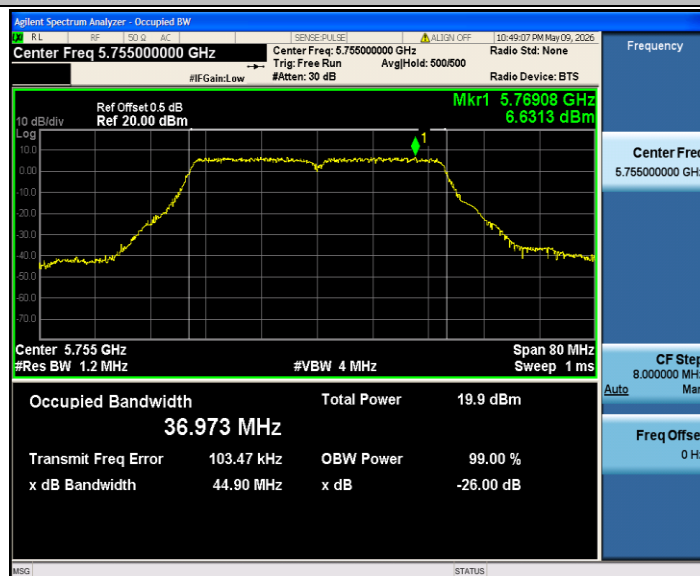
11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



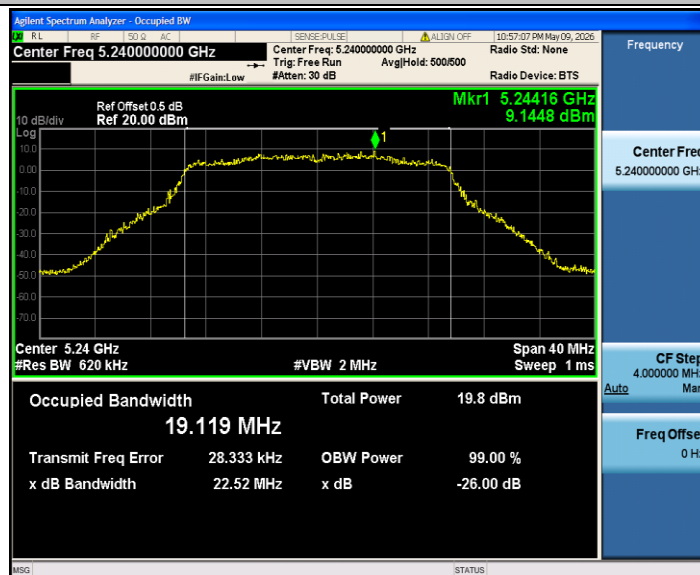
11AC20SISO_Ant1_5180



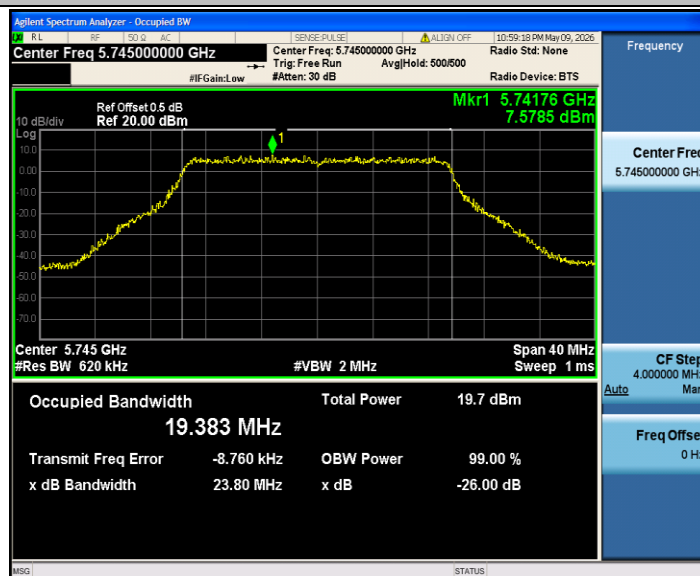
11AC20SISO_Ant1_5220



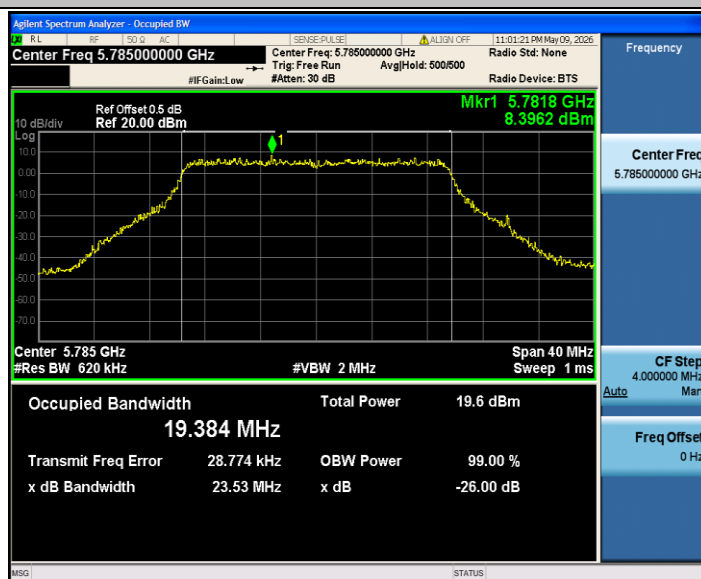
11AC20SISO_Ant1_5240



11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



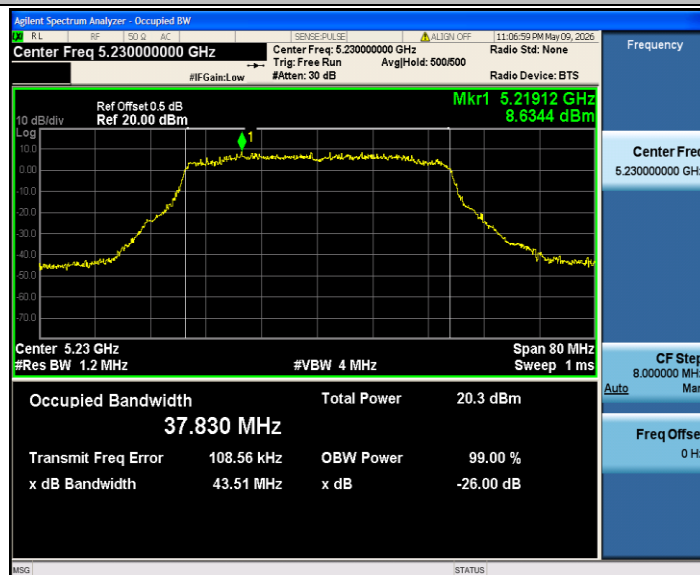
11AC20SISO_Ant1_5825



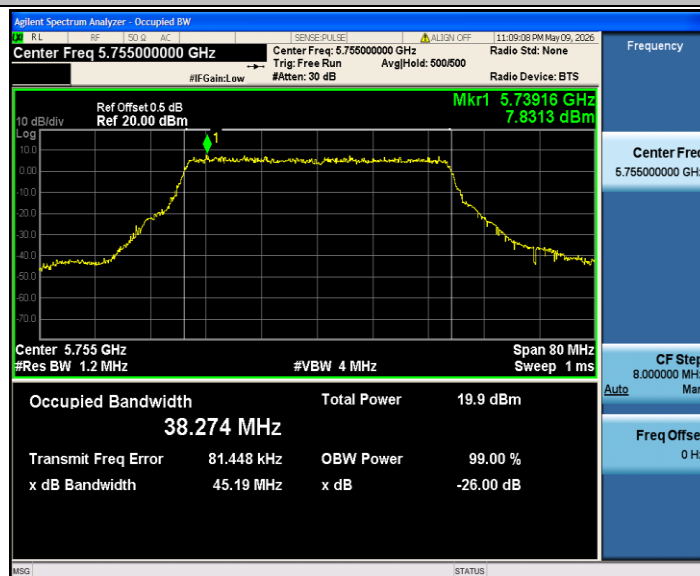
11AC40SISO_Ant1_5190



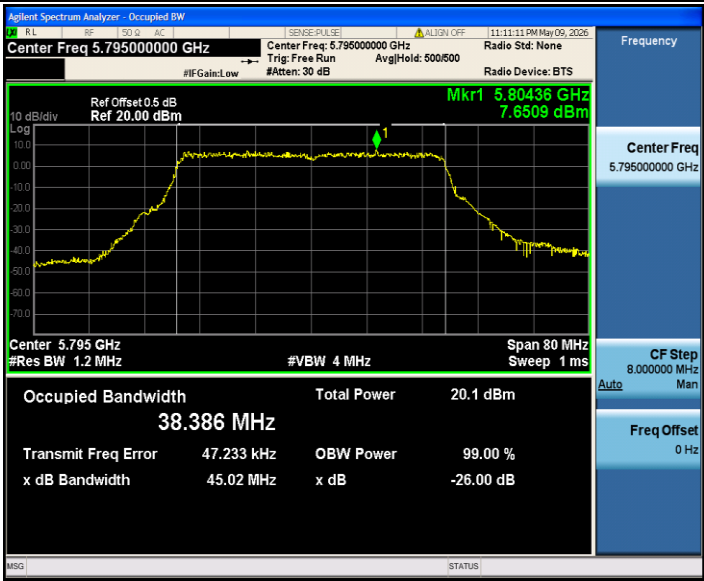
11AC40SISO_Ant1_5230



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



Appendix A3: Min emission bandwidth

Test Result B4

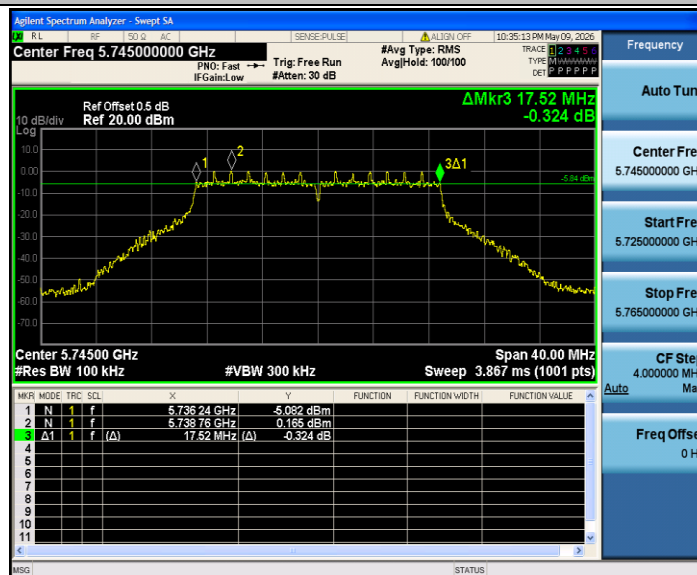
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.520	5736.240	5753.760	0.5	PASS
		5785	17.280	5776.480	5793.760	0.5	PASS
		5825	17.520	5816.240	5833.760	0.5	PASS
11N40SISO	Ant1	5755	36.320	5736.840	5773.160	0.5	PASS
		5795	36.080	5776.840	5812.920	0.5	PASS
11AC20SISO	Ant1	5745	18.720	5735.760	5754.480	0.5	PASS
		5785	18.560	5775.720	5794.280	0.5	PASS
		5825	18.560	5815.720	5834.280	0.5	PASS
11AC40SISO	Ant1	5755	37.600	5736.280	5773.880	0.5	PASS
		5795	37.840	5776.040	5813.880	0.5	PASS

Test Graphs B4

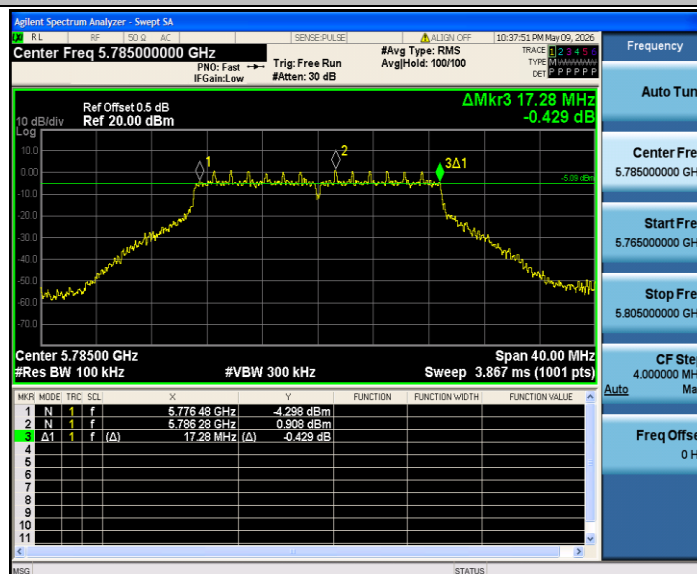




11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



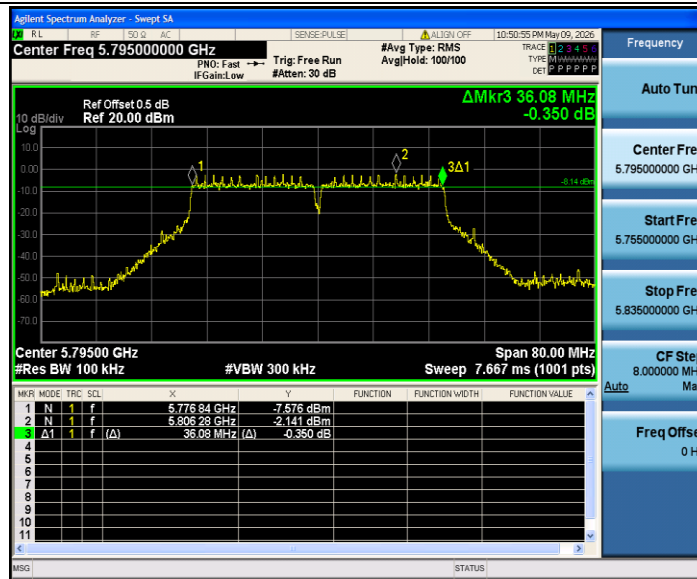
11N20SISO_Ant1_5825



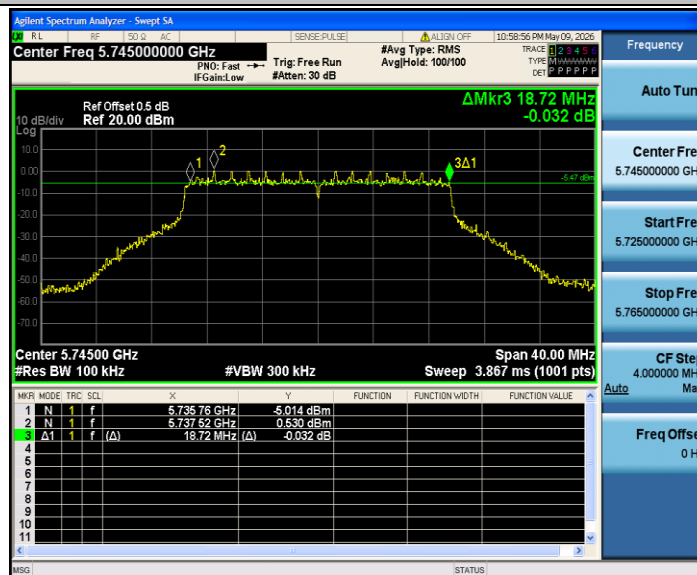
11N40SISO_Ant1_5755



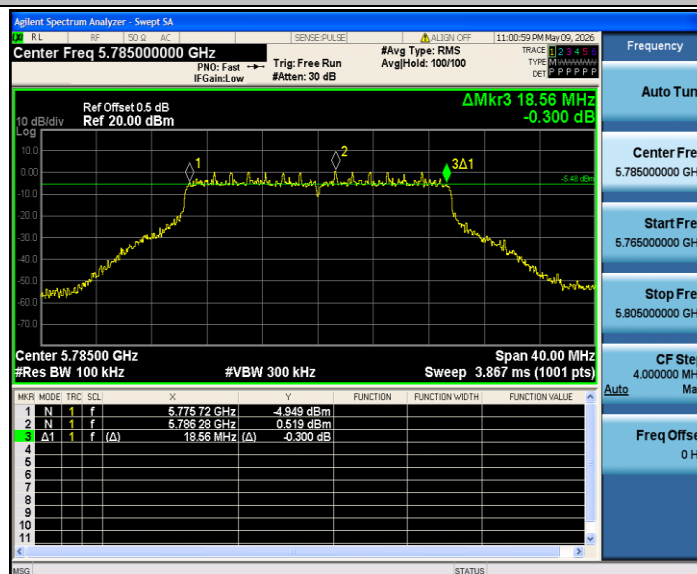
11N40SISO_Ant1_5795



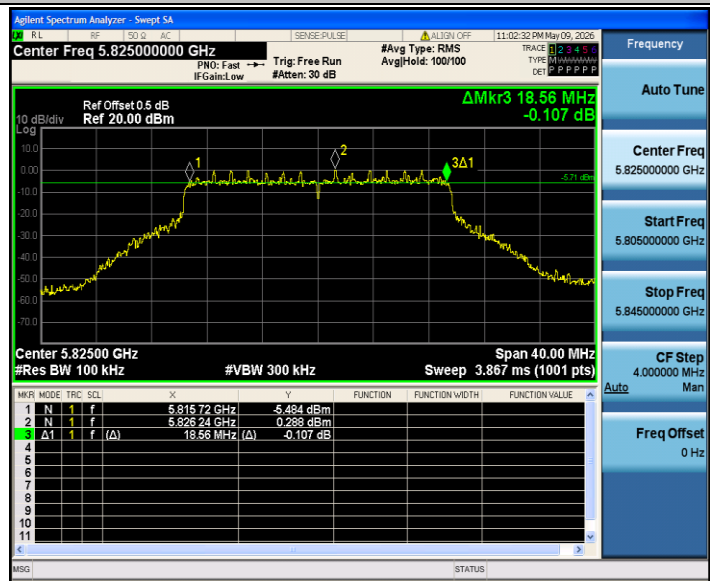
11AC20SISO_Ant1_5745



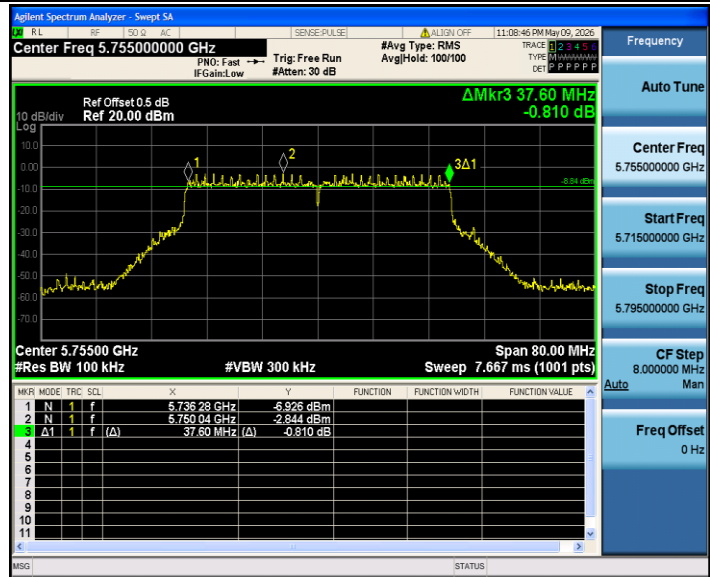
11AC20SISO_Ant1_5785



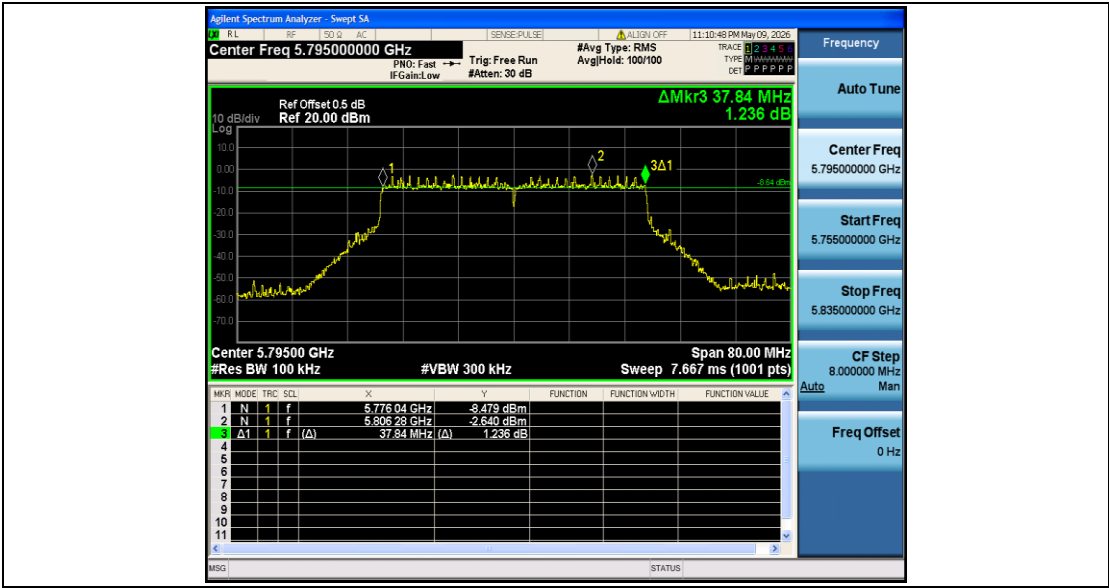
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



Appendix B: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	Limit	Verdict
11A	Ant1	5180	0.15	0.20	75.00	1.25	---	---
		5220	0.15	0.20	75.00	1.25	---	---
		5240	0.15	0.20	75.00	1.25	---	---
		5745	0.15	0.19	78.95	1.03	---	---
		5785	0.15	0.19	78.95	1.03	---	---
		5825	0.15	0.19	78.95	1.03	---	---
11N20SISO	Ant1	5180	0.17	0.22	77.27	1.12	---	---
		5220	0.17	0.22	77.27	1.12	---	---
		5240	0.18	0.22	81.82	0.87	---	---
		5745	0.18	0.22	81.82	0.87	---	---
		5785	0.18	0.23	78.26	1.06	---	---
		5825	0.18	0.22	81.82	0.87	---	---
11N40SISO	Ant1	5190	0.18	0.23	78.26	1.06	---	---
		5230	0.18	0.23	78.26	1.06	---	---
		5755	0.18	0.23	78.26	1.06	---	---
		5795	0.18	0.23	78.26	1.06	---	---
11AC20SISO	Ant1	5180	0.25	0.30	83.33	0.79	---	---
		5220	0.25	0.30	83.33	0.79	---	---
		5240	0.26	0.31	83.87	0.76	---	---
		5745	0.25	0.30	83.33	0.79	---	---
		5785	0.26	0.31	83.87	0.76	---	---
		5825	0.26	0.30	86.67	0.62	---	---
11AC40SISO	Ant1	5190	0.17	0.22	77.27	1.12	---	---
		5230	0.18	0.22	81.82	0.87	---	---
		5755	0.18	0.23	78.26	1.06	---	---
		5795	0.18	0.23	78.26	1.06	---	---