

Appendix Test Data for RLAN(5.8G) (Conducted Measurement)

Product Name: Granary Automatic Pet Feeder-WiFi Control

Trade Mark: PETLIBRO

Test Model: PLAF103

FCC ID: 2A3DEPLAF103S

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

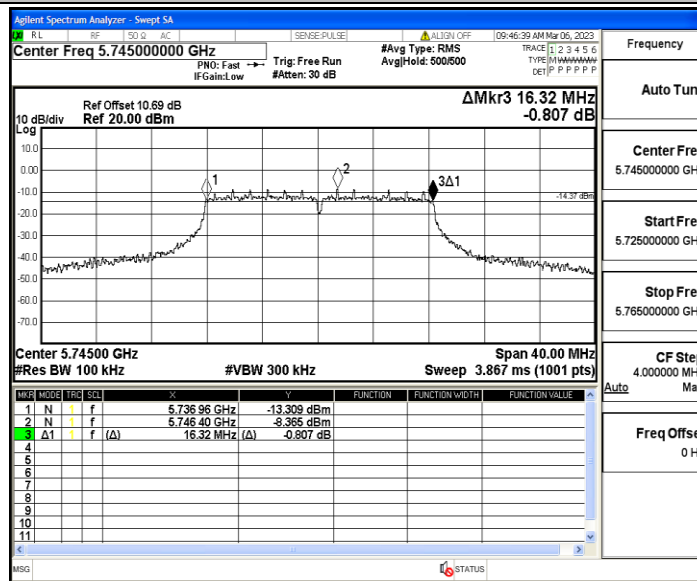
Appendix A: Min emission bandwidth

Test Result

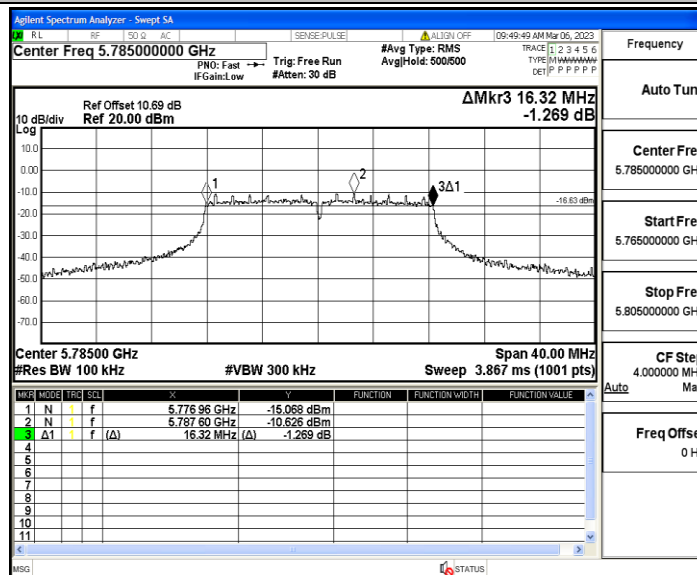
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.960	5753.280	0.5	PASS
		5785	16.320	5776.960	5793.280	0.5	PASS
		5825	16.280	5816.960	5833.240	0.5	PASS
11N20MIMO	Ant1	5745	16.880	5736.360	5753.240	0.5	PASS
		5785	17.320	5776.320	5793.640	0.5	PASS
		5825	17.120	5816.520	5833.640	0.5	PASS
11N40MIMO	Ant1	5755	35.360	5737.320	5772.680	0.5	PASS
		5795	35.360	5777.320	5812.680	0.5	PASS

Test Graphs

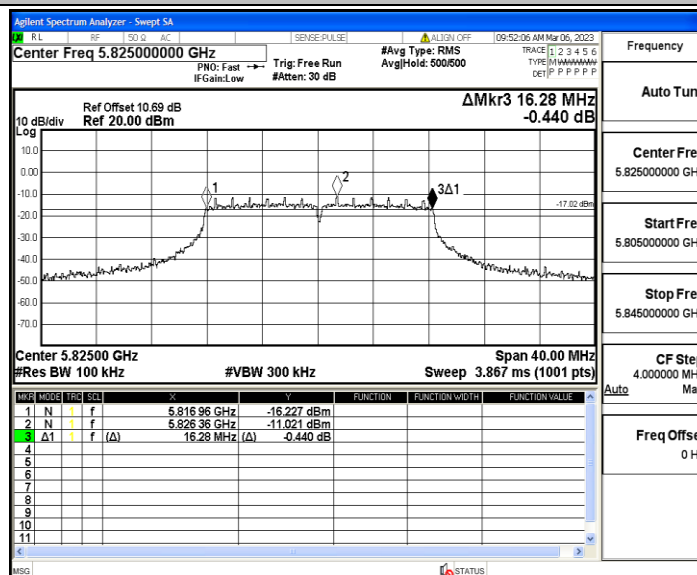
11A_Ant1_5745



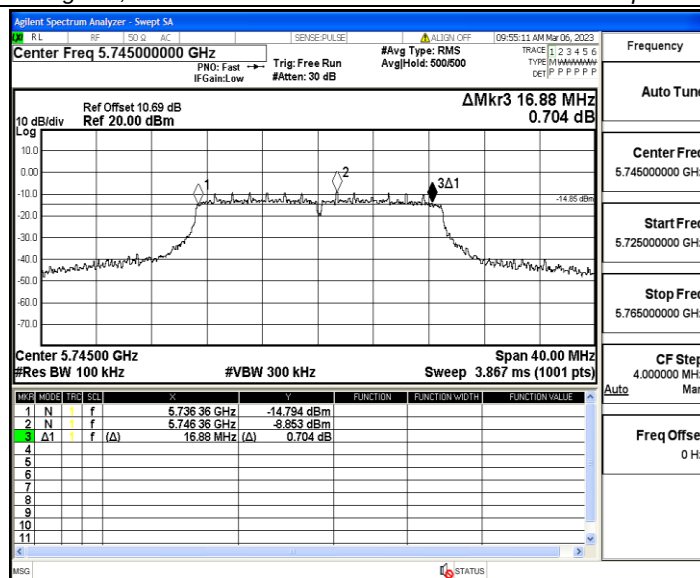
11A_Ant1_5785



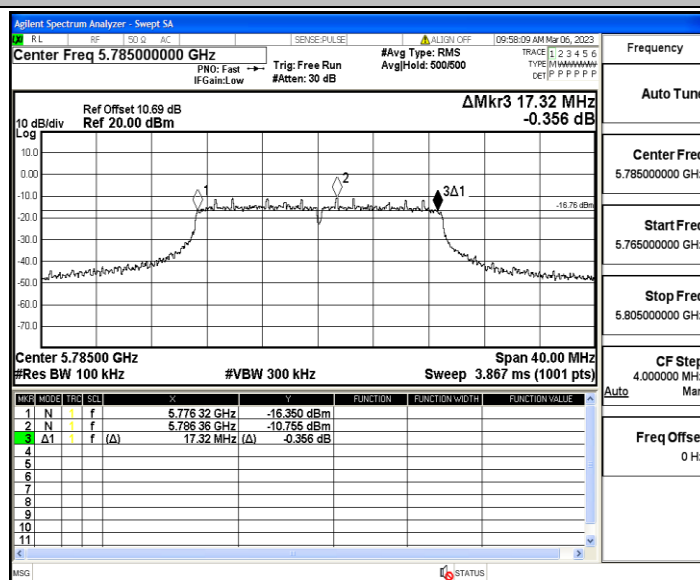
11A_Ant1_5825



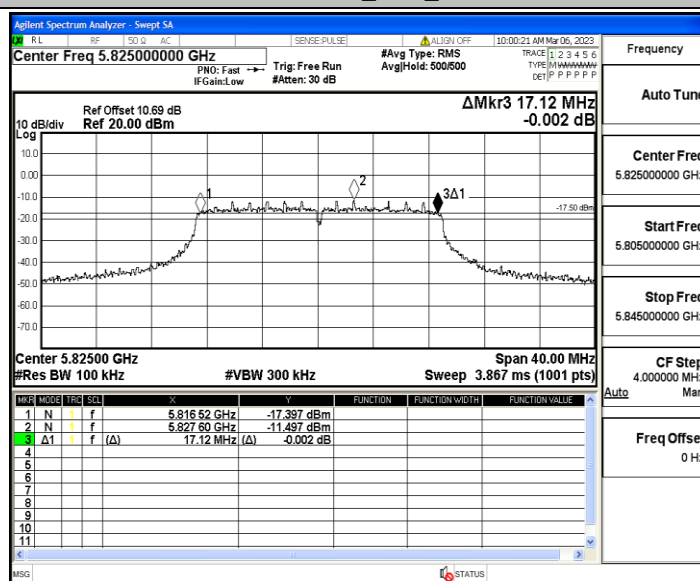
11N20MIMO_Ant1_5745



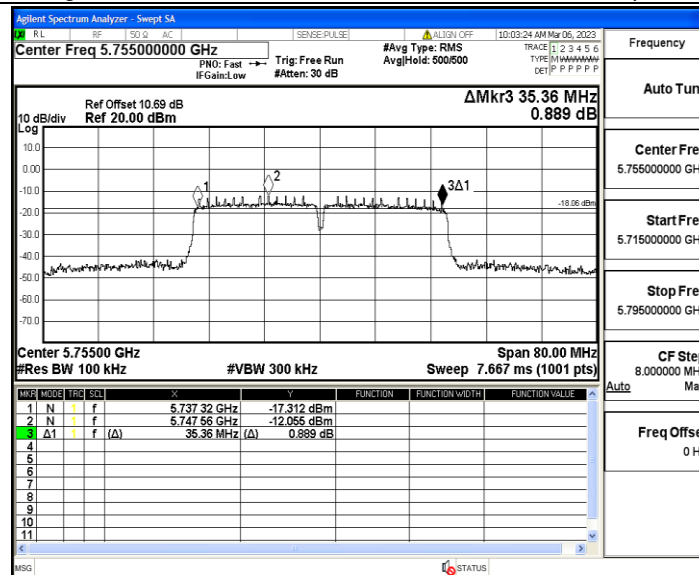
11N20MIMO_Ant1_5785



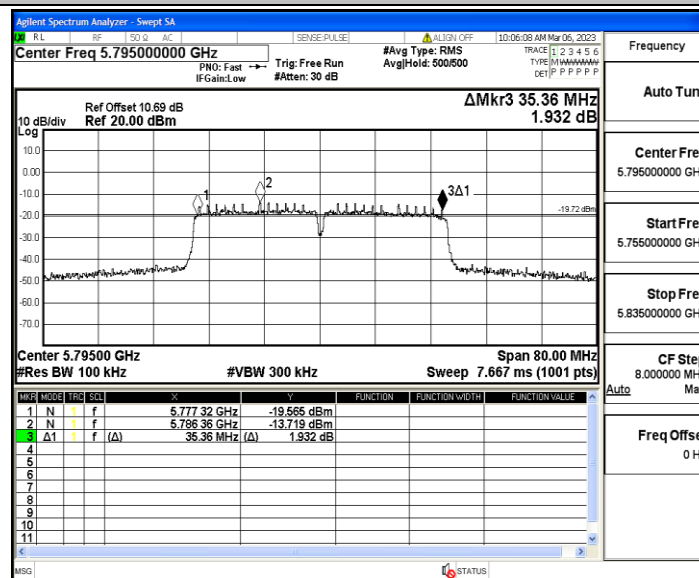
11N20MIMO_Ant1_5825



11N40MIMO_Ant1_5755



11N40MIMO_Ant1_5795



Appendix B: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5745	2.27	≤30.00	PASS
		5785	0.52	≤30.00	PASS
		5825	-0.23	≤30.00	PASS
11N20MIMO	Ant1	5745	1.96	≤30.00	PASS
		5785	0.22	≤30.00	PASS
		5825	-0.36	≤30.00	PASS
11N40MIMO	Ant1	5755	1.78	≤30.00	PASS
		5795	0.17	≤30.00	PASS

Note: The Duty Cycle Factor is compensated in the test result.

Appendix C: Maximum power spectral density

Test Result

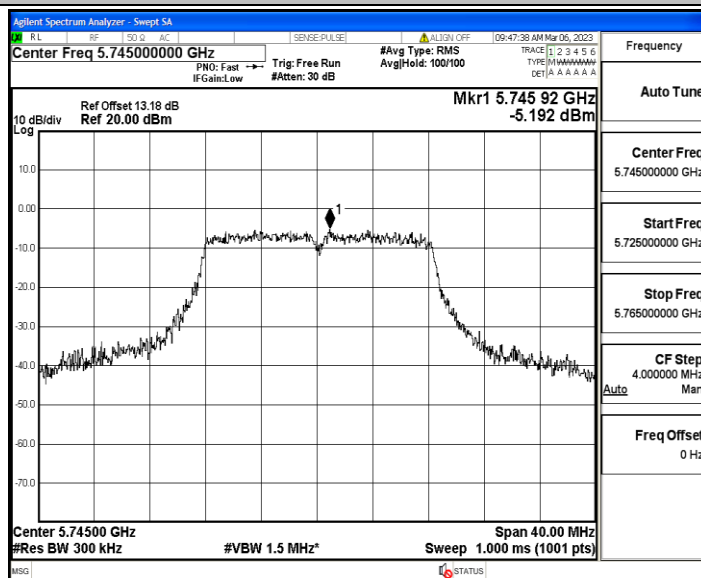
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-5.19	≤30.00	PASS
		5785	-6.34	≤30.00	PASS
		5825	-7.04	≤30.00	PASS
11N20MIMO	Ant1	5745	-5.41	≤30.00	PASS
		5785	-7.34	≤30.00	PASS
		5825	-7.6	≤30.00	PASS
11N40MIMO	Ant1	5755	-8.12	≤30.00	PASS
		5795	-9.67	≤30.00	PASS

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

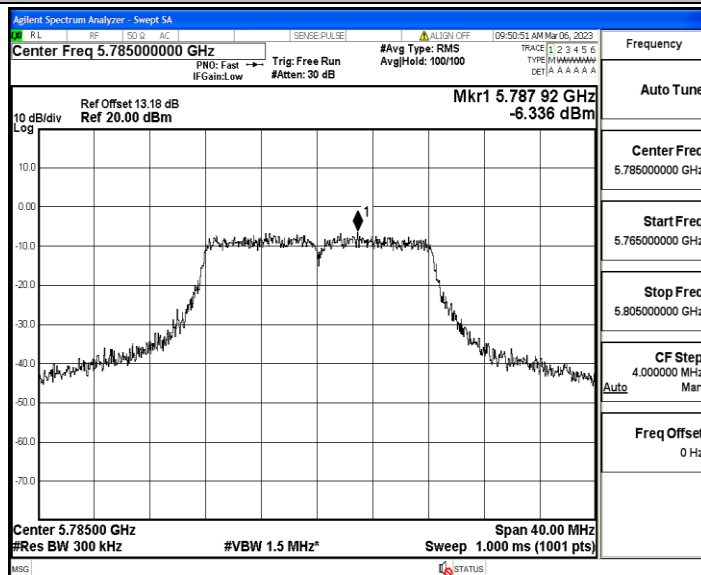
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

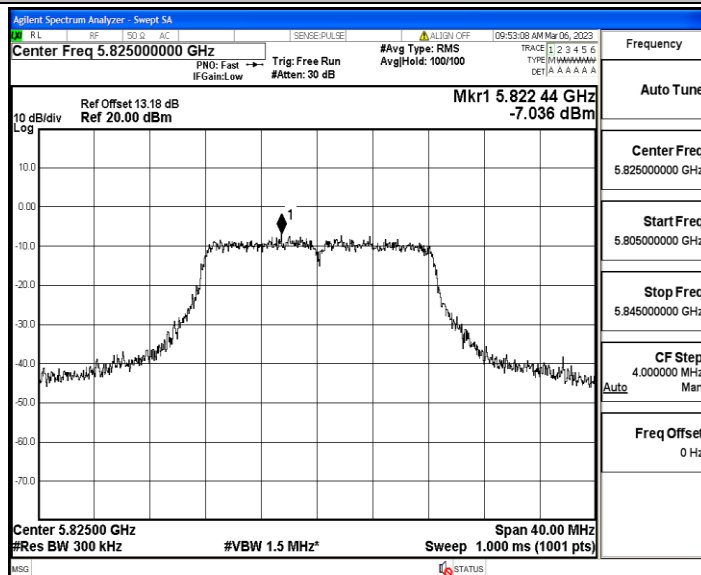
11A_Ant1_5745



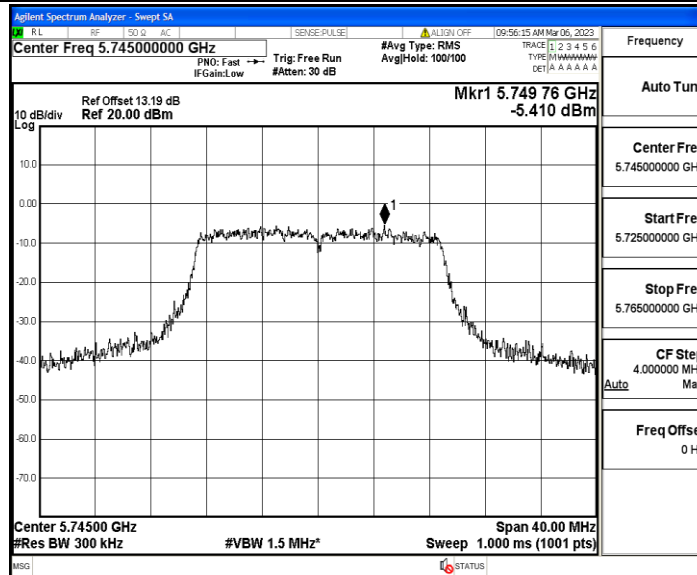
11A_Ant1_5785



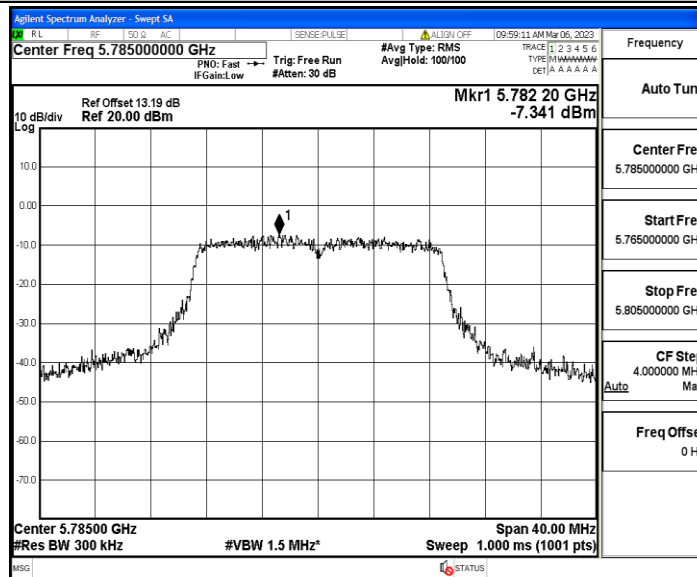
11A_Ant1_5825



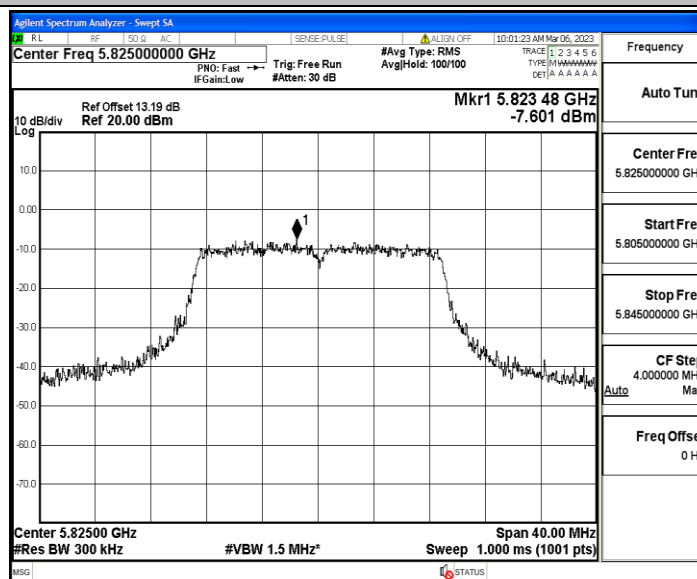
11N20MIMO_Ant1_5745



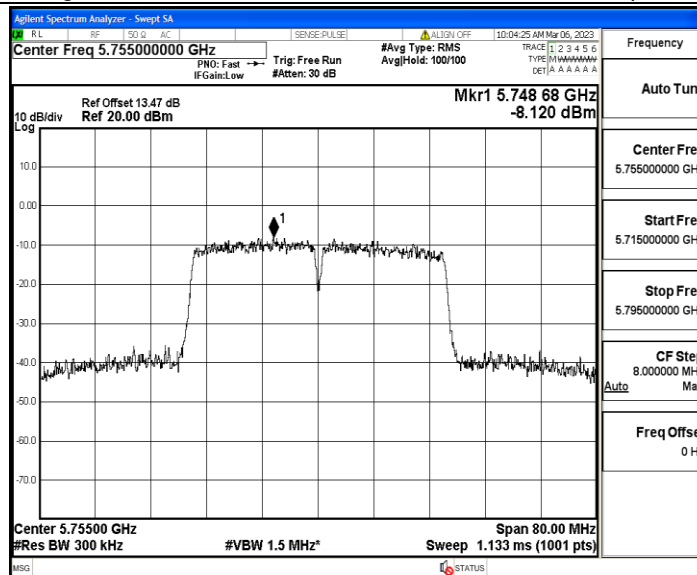
11N20MIMO_Ant1_5785



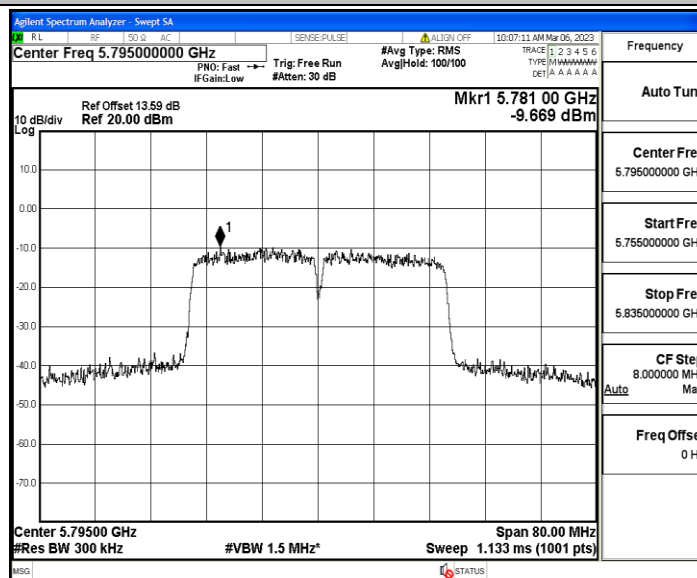
11N20MIMO_Ant1_5825



11N40MIMO_Ant1_5755



11N40MIMO_Ant1_5795



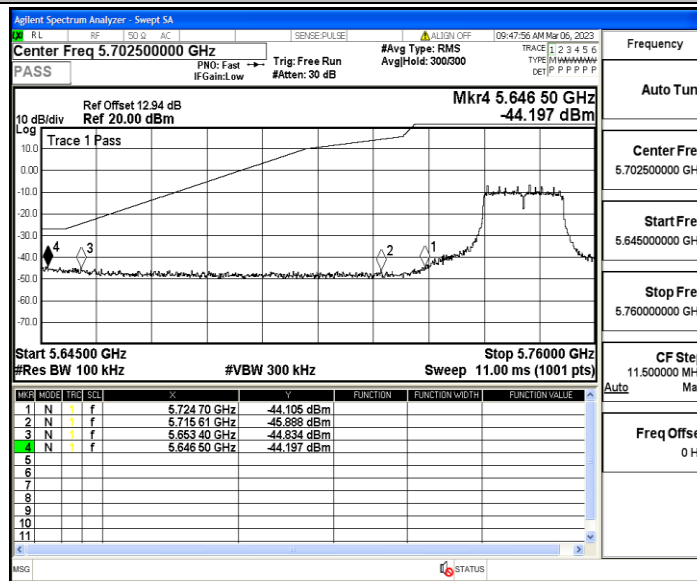
Appendix D: Band edge measurements

Test Result

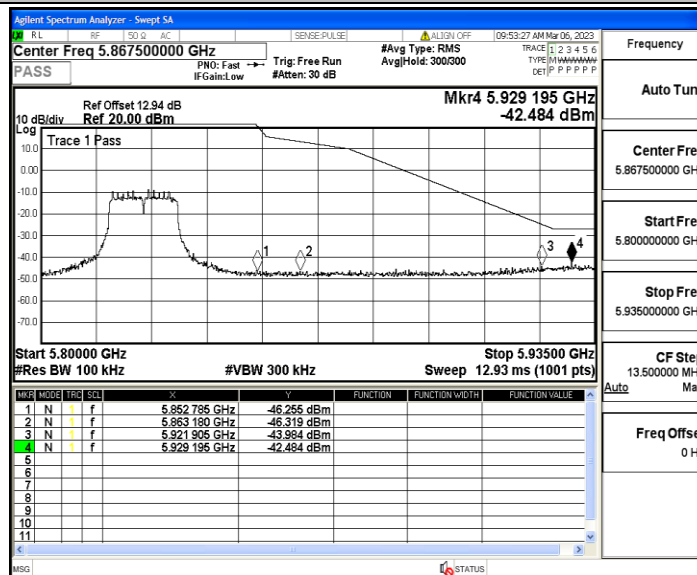
TestMode	Antenna	ChName	Channel	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-44.83	≤-24.49	PASS
				5700~5720	-45.89	≤14.37	PASS
				5720~5725	-44.11	≤26.30	PASS
				5760~5650	-44.2	≤-27	PASS
		High	5825	5850~5855	-46.26	≤21.95	PASS
				5855~5875	-46.32	≤12.29	PASS
				5875~5925	-43.98	≤7.71	PASS
				5925~5935	-42.48	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-44.79	≤-24.83	PASS
				5700~5720	-46.7	≤12.73	PASS
				5720~5725	-43.15	≤26.57	PASS
				5760~5650	-44.07	≤-27	PASS
		High	5825	5850~5855	-45.66	≤19.18	PASS
				5855~5875	-45.6	≤15.16	PASS
				5875~5925	-44.11	≤9.91	PASS
				5925~5935	-43.22	≤-27	PASS
11N40MI MO	Ant1	Low	5755	5650~5700	-43	≤-23.81	PASS
				5700~5720	-41.1	≤14.94	PASS
				5720~5725	-41.48	≤20.66	PASS
				5780~5650	-42.02	≤-27	PASS
		High	5795	5850~5855	-45.77	≤16.03	PASS
				5855~5875	-45.3	≤13.83	PASS
				5875~5925	-43.54	≤-4.70	PASS
				5925~5935	-46.08	≤-27	PASS

Test Graphs

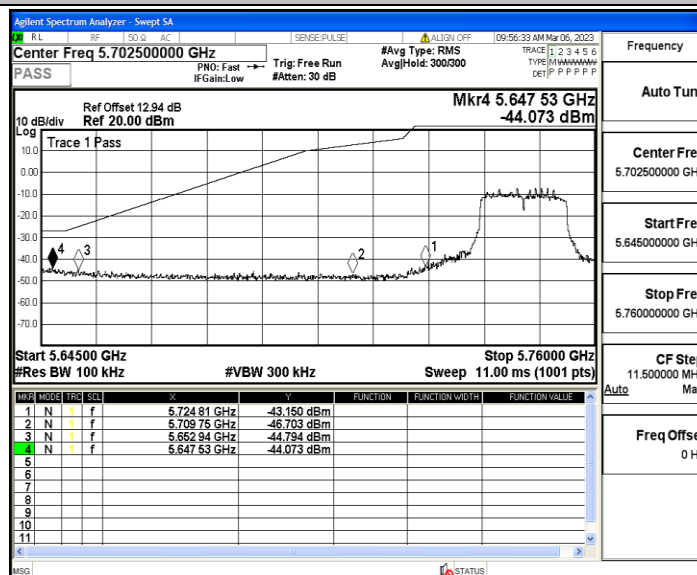
11A_Ant1_Low_5745



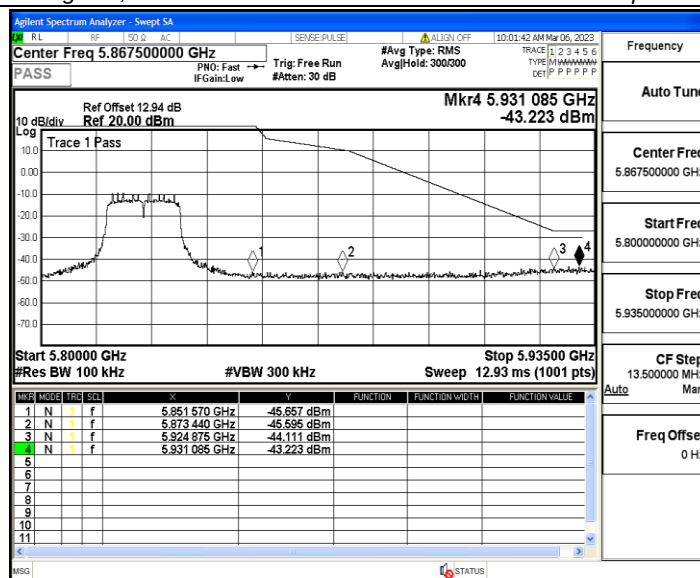
11A_Ant1_High_5825



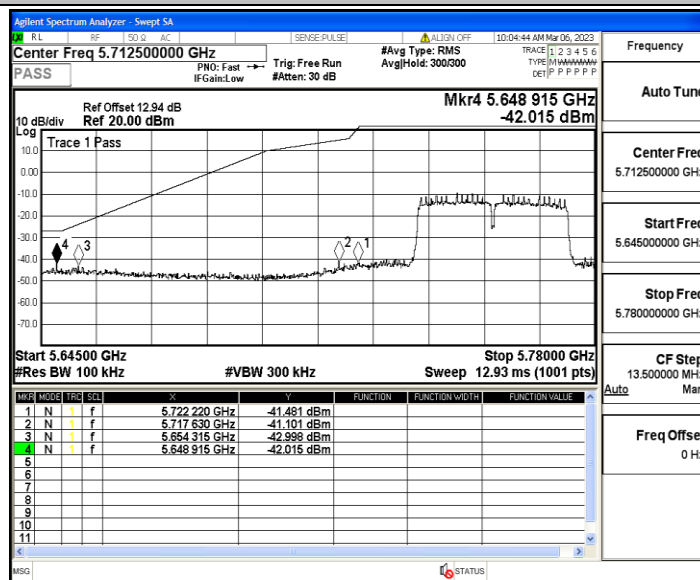
11N20MIMO_Ant1_Low_5745



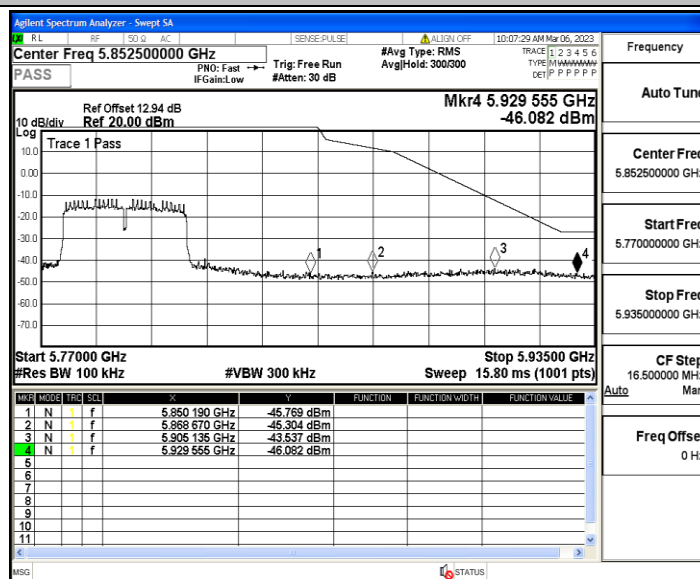
11N20MIMO_Ant1_High_5825



11N40MIMO_Ant1_Low_5755



11N40MIMO_Ant1_High_5795



Appendix E: Frequency Stability

Test Result

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5745	20	132	5744.926653	5745 – 5825	PASS
5745	20	108	5745.069963	5745 – 5825	PASS
5745	50	120	5745.085080	5745 – 5825	PASS
5745	40	120	5744.988950	5745 – 5825	PASS
5745	30	120	5744.937855	5745 – 5825	PASS
5745	20	120	5744.981490	5745 – 5825	PASS
5745	10	120	5744.926691	5745 – 5825	PASS
5745	0	120	5745.075959	5745 – 5825	PASS
5745	-10	120	5744.936695	5745 – 5825	PASS
5745	-20	120	5744.960390	5745 – 5825	PASS
5745	-30	120	5744.963308	5745 – 5825	PASS

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5785	20	132	5785.057778	5745 – 5825	PASS
5785	20	108	5785.024728	5745 – 5825	PASS
5785	50	120	5785.064675	5745 – 5825	PASS
5785	40	120	5784.979717	5745 – 5825	PASS
5785	30	120	5785.095145	5745 – 5825	PASS
5785	20	120	5784.932300	5745 – 5825	PASS
5785	10	120	5785.088402	5745 – 5825	PASS
5785	0	120	5784.910932	5745 – 5825	PASS
5785	-10	120	5784.980927	5745 – 5825	PASS
5785	-20	120	5784.994164	5745 – 5825	PASS
5785	-30	120	5784.978401	5745 – 5825	PASS

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5825	20	132	5824.911566	5745 – 5825	PASS
5825	20	108	5824.967391	5745 – 5825	PASS
5825	50	120	5825.096207	5745 – 5825	PASS
5825	40	120	5824.948049	5745 – 5825	PASS
5825	30	120	5825.066037	5745 – 5825	PASS
5825	20	120	5825.007960	5745 – 5825	PASS
5825	10	120	5824.952698	5745 – 5825	PASS
5825	0	120	5824.954026	5745 – 5825	PASS
5825	-10	120	5825.070793	5745 – 5825	PASS
5825	-20	120	5824.900645	5745 – 5825	PASS
5825	-30	120	5824.960897	5745 – 5825	PASS

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5755	20	132	5754.935496	5745 – 5825	PASS
5755	20	108	5754.903096	5745 – 5825	PASS
5755	50	120	5754.931421	5745 – 5825	PASS
5755	40	120	5754.948226	5745 – 5825	PASS
5755	30	120	5754.967172	5745 – 5825	PASS
5755	20	120	5755.056383	5745 – 5825	PASS
5755	10	120	5755.019839	5745 – 5825	PASS
5755	0	120	5755.044358	5745 – 5825	PASS
5755	-10	120	5755.095225	5745 – 5825	PASS
5755	-20	120	5755.077266	5745 – 5825	PASS
5755	-30	120	5755.058087	5745 – 5825	PASS

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5795	20	132	5795.066896	5745 – 5825	PASS
5795	20	108	5794.956405	5745 – 5825	PASS
5795	50	120	5795.043608	5745 – 5825	PASS
5795	40	120	5794.943755	5745 – 5825	PASS
5795	30	120	5794.974870	5745 – 5825	PASS
5795	20	120	5795.049400	5745 – 5825	PASS
5795	10	120	5794.925547	5745 – 5825	PASS
5795	0	120	5794.951518	5745 – 5825	PASS
5795	-10	120	5795.009028	5745 – 5825	PASS
5795	-20	120	5794.978703	5745 – 5825	PASS
5795	-30	120	5794.938444	5745 – 5825	PASS

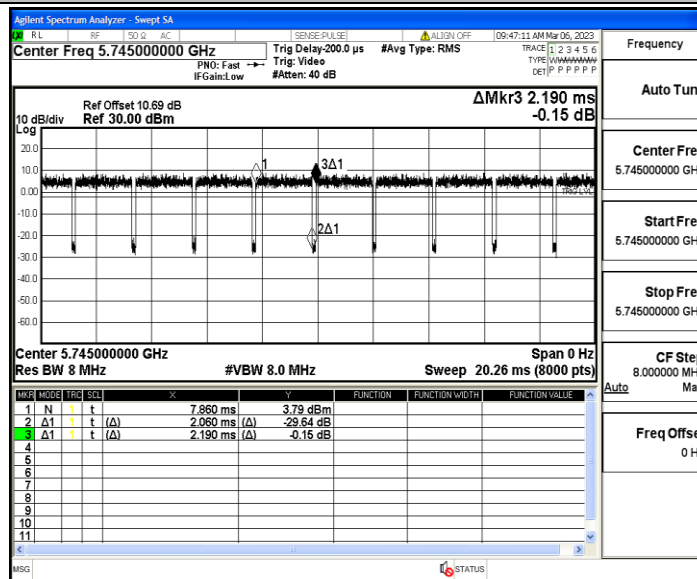
Appendix F: Duty Cycle

Test Result

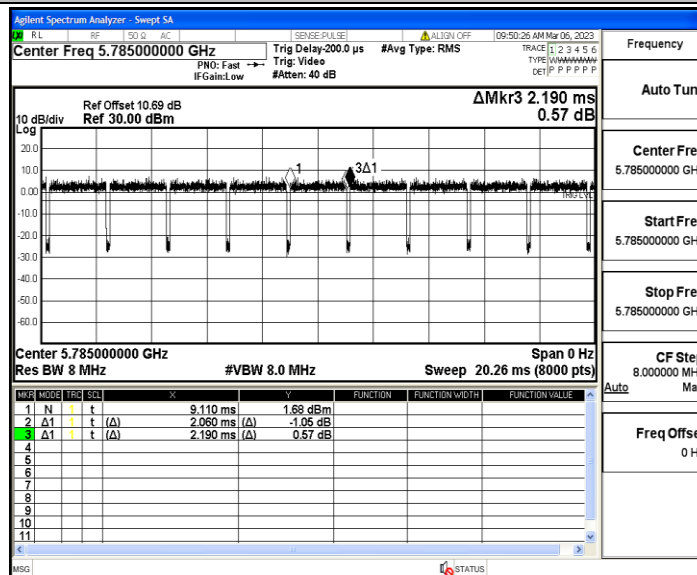
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]
11A	Ant1	5745	2.06	2.19	94.06	0.49
		5785	2.06	2.19	94.06	0.49
		5825	2.06	2.19	94.06	0.49
11N20MIMO	Ant1	5745	1.92	2.05	93.66	0.52
		5785	1.92	2.05	93.66	0.52
		5825	1.92	2.05	93.66	0.52
11N40MIMO	Ant1	5755	0.95	1.08	87.96	1.05
		5795	0.94	1.10	85.45	1.06

Test Graphs

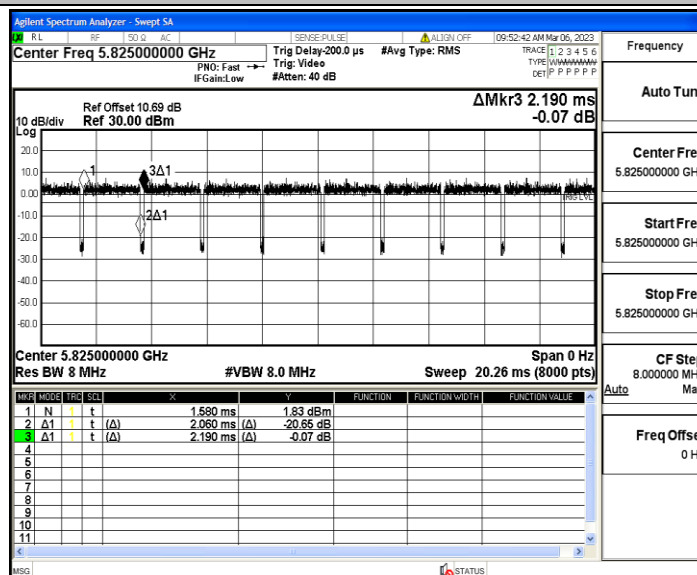
11A_Ant1_5745



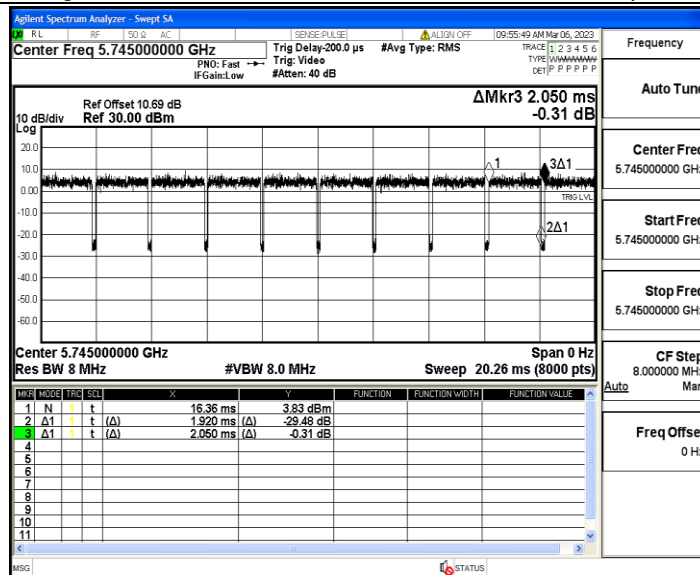
11A_Ant1_5785



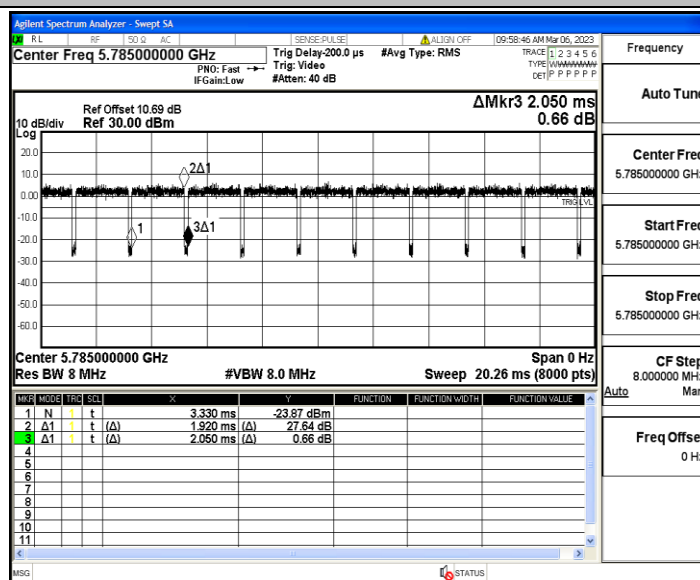
11A_Ant1_5825



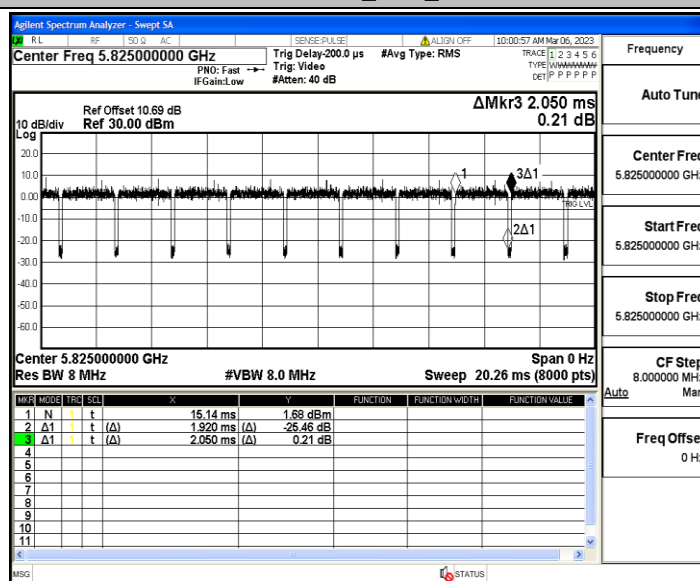
11N20MIMO_Ant1_5745



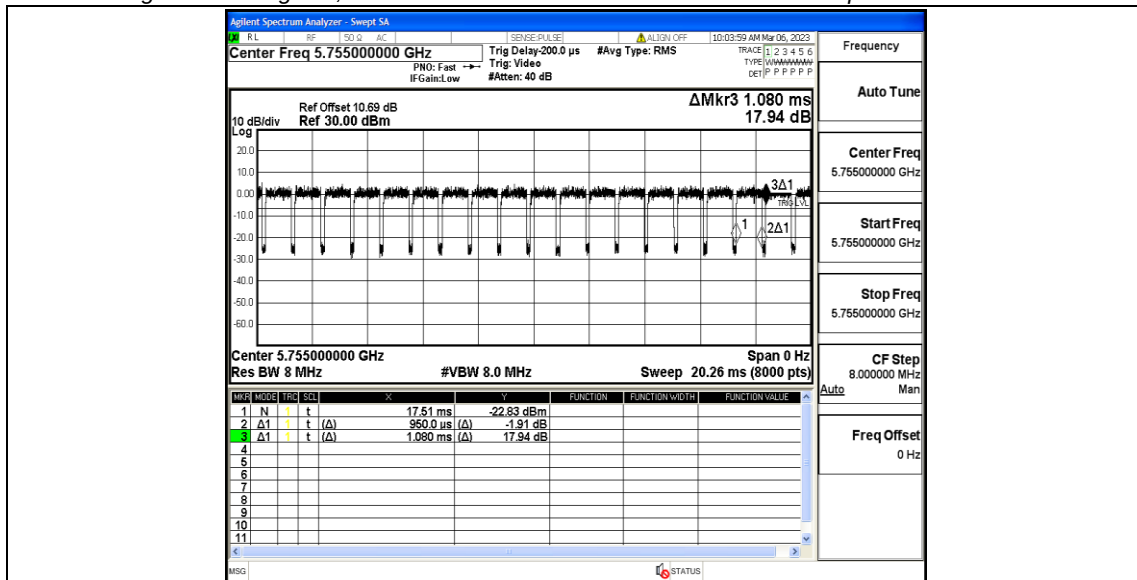
11N20MIMO_Ant1_5785



11N20MIMO_Ant1_5825



11N40MIMO_Ant1_5755



11N40MIMO_Ant1_5795

