

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

Product Name: Air WiFi Feeder

Trade Mark: PETLIBRO

Test Model: PLAF301

FCC ID: 2A3DE-PLAF301

Environmental Conditions

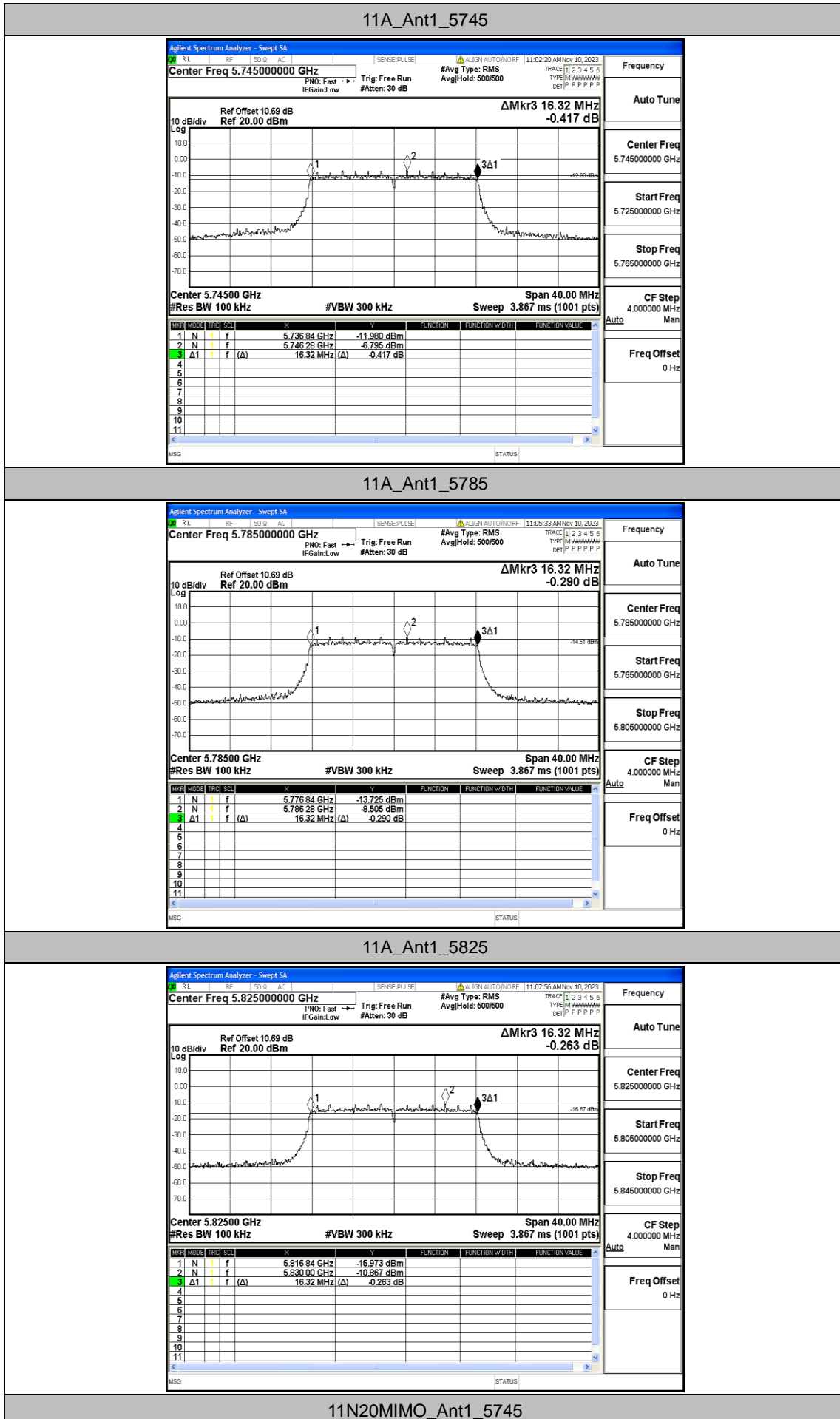
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engneer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

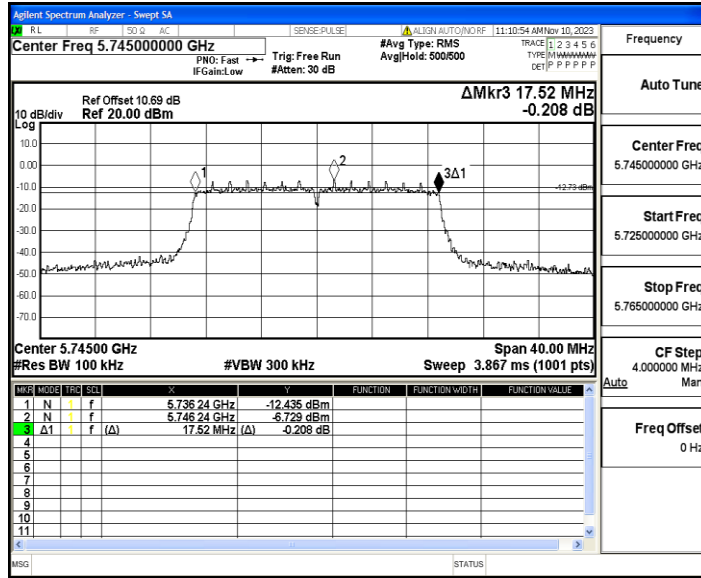
Appendix A: Min emission bandwidth

Test Result

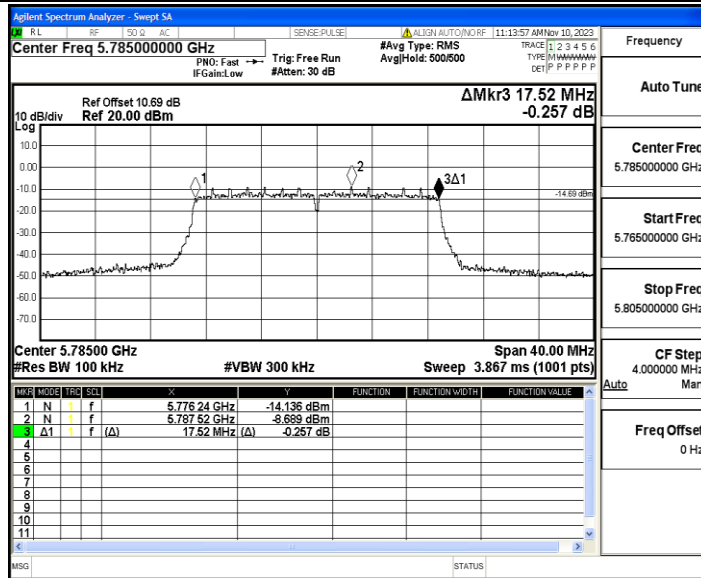
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20MIMO	Ant1	5745	17.520	5736.240	5753.760	0.5	PASS
		5785	17.520	5776.240	5793.760	0.5	PASS
		5825	17.520	5816.240	5833.760	0.5	PASS
11N40MIMO	Ant1	5755	35.360	5737.400	5772.760	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS

Test Graphs

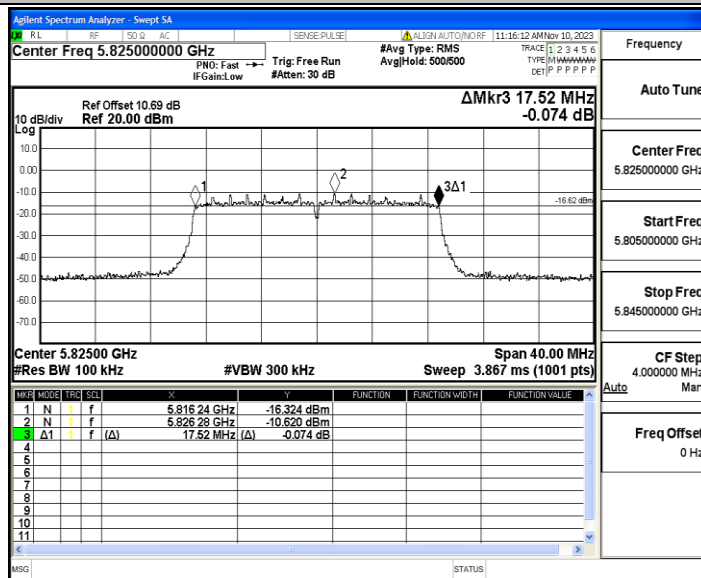




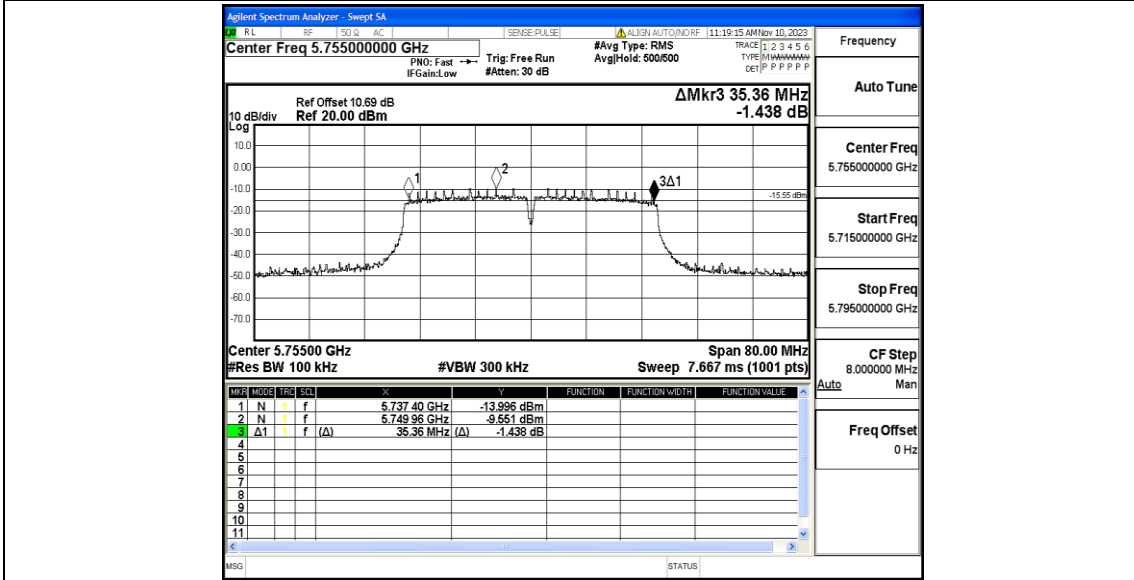
11N20MIMO_Ant1_5785



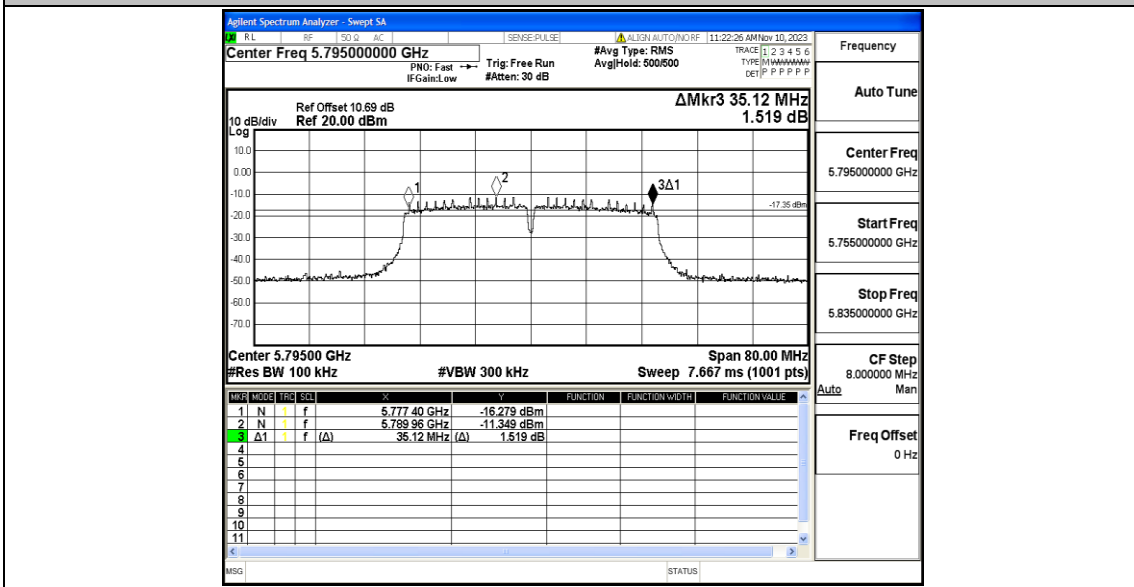
11N20MIMO_Ant1_5825



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	4.40	≤30.00	PASS
		5785	2.83	≤30.00	PASS
		5825	0.88	≤30.00	PASS
11N20MIMO	Ant1	5745	4.39	≤30.00	PASS
		5785	2.86	≤30.00	PASS
		5825	0.83	≤30.00	PASS
11N40MIMO	Ant1	5755	4.48	≤30.00	PASS
		5795	2.41	≤30.00	PASS

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

Appendix C: Maximum power spectral density

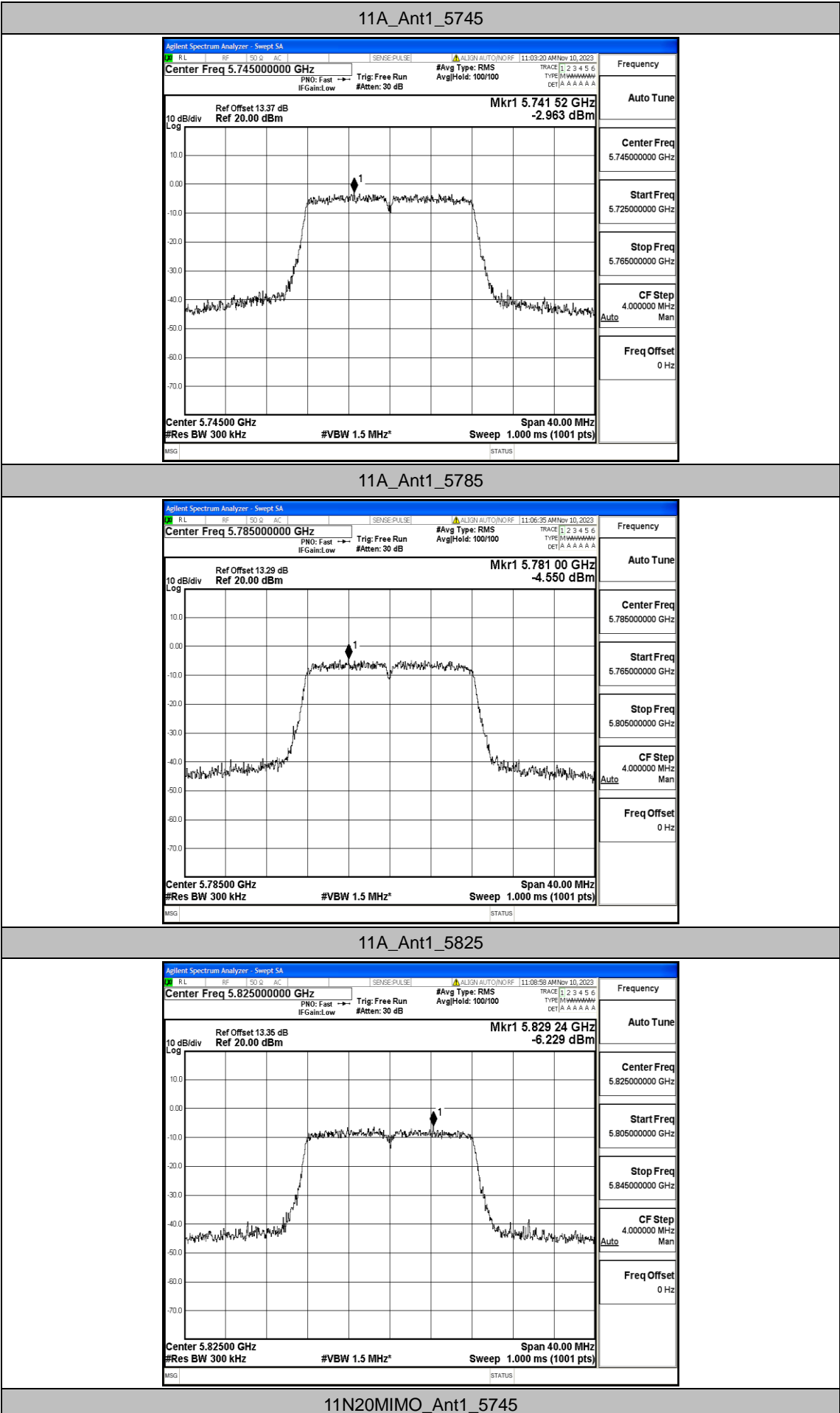
Test Result

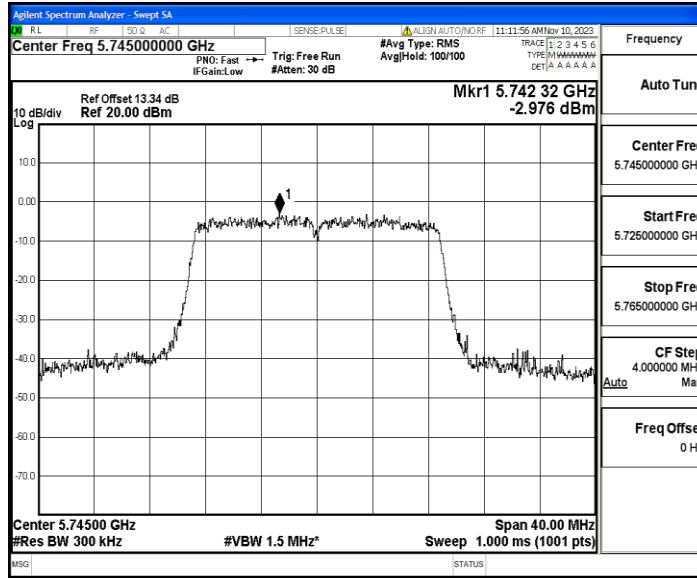
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-2.96	≤30.00	PASS
		5785	-4.55	≤30.00	PASS
		5825	-6.23	≤30.00	PASS
11N20MIMO	Ant1	5745	-2.98	≤30.00	PASS
		5785	-4.52	≤30.00	PASS
		5825	-6.36	≤30.00	PASS
11N40MIMO	Ant1	5755	-5.48	≤30.00	PASS
		5795	-7.43	≤30.00	PASS

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

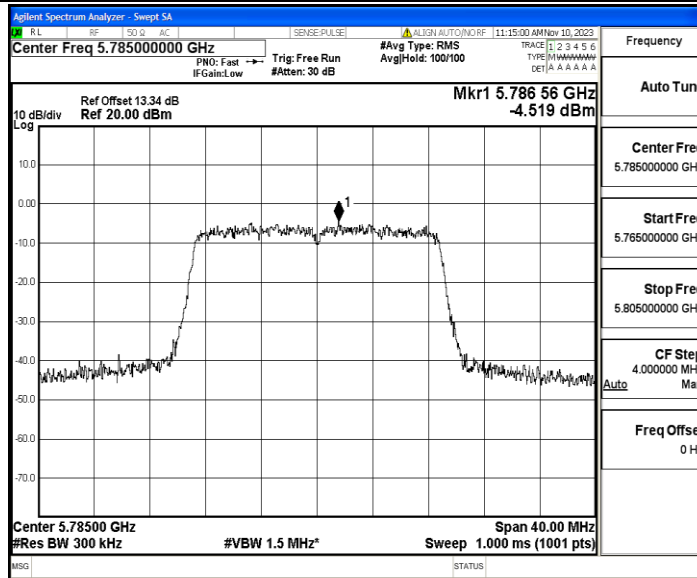
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

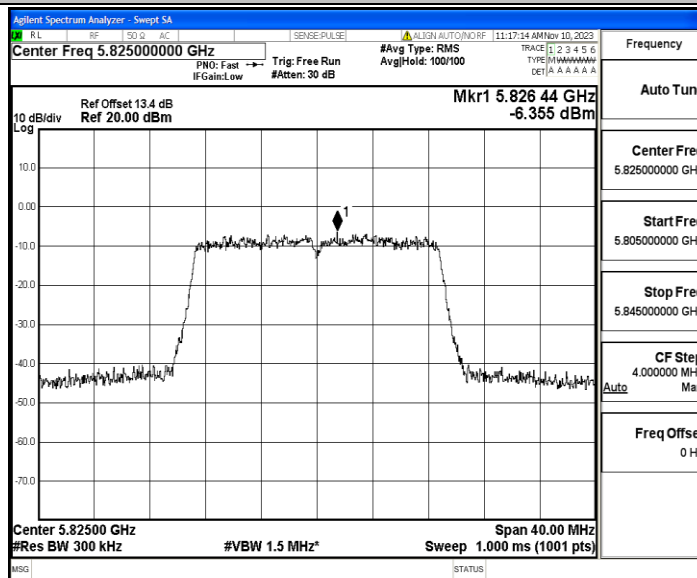




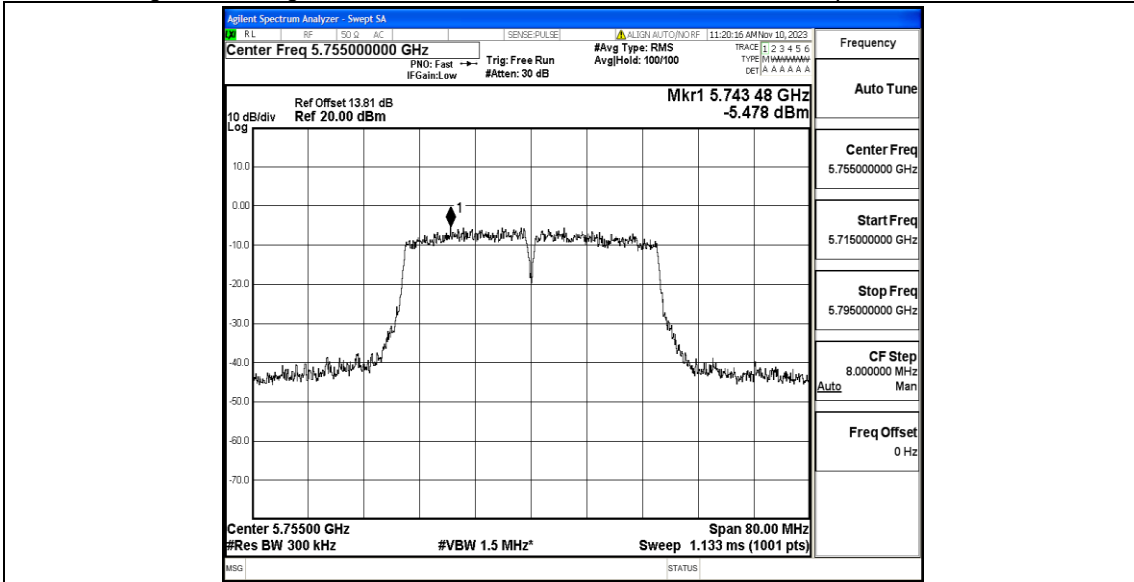
11N20MIMO_Ant1_5785



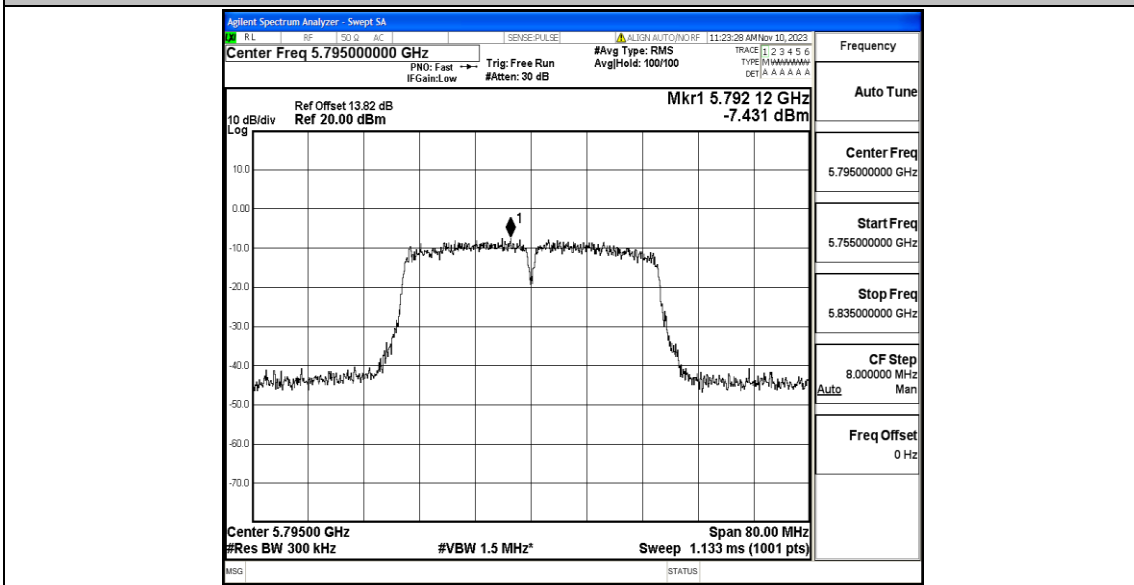
11N20MIMO_Ant1_5825



11N40MIMO_Ant1_5755



11N40MIMO_Ant1_5795

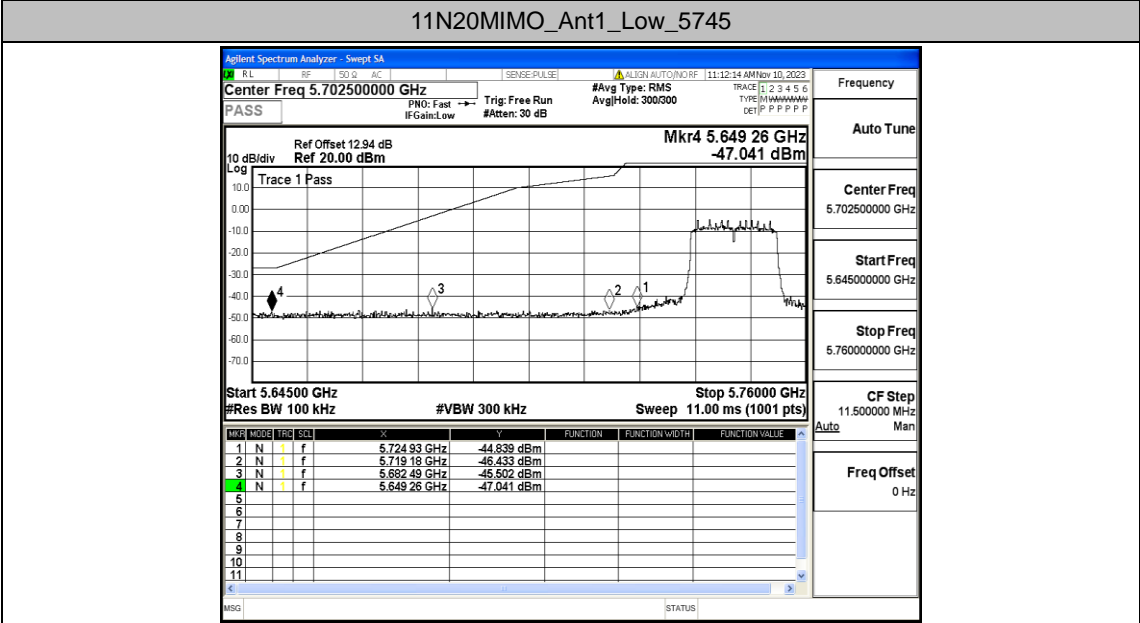
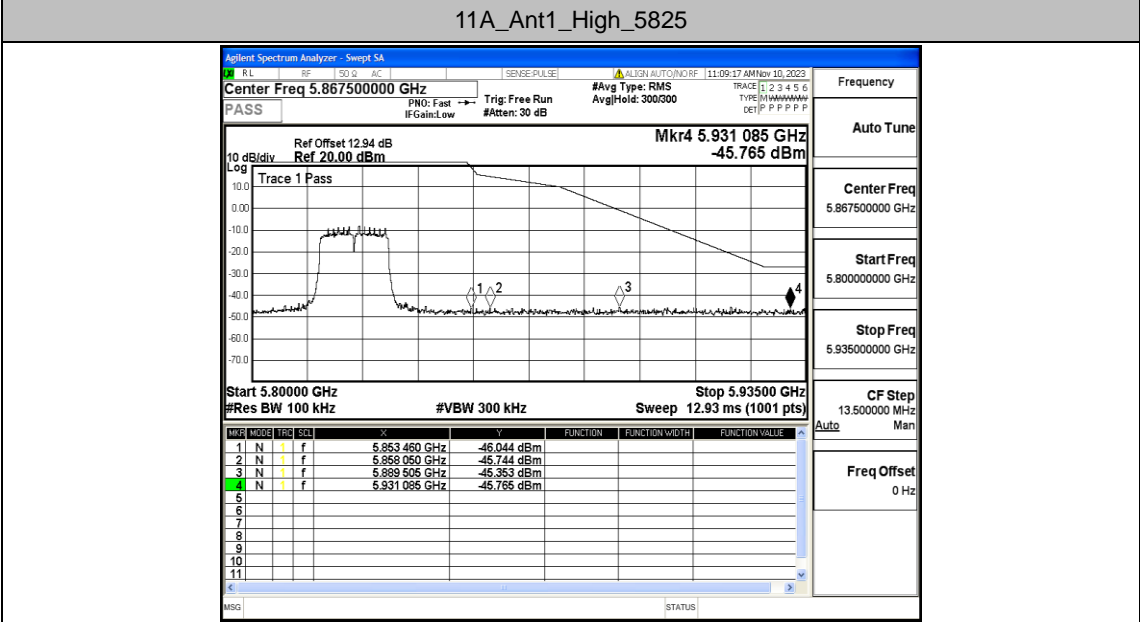
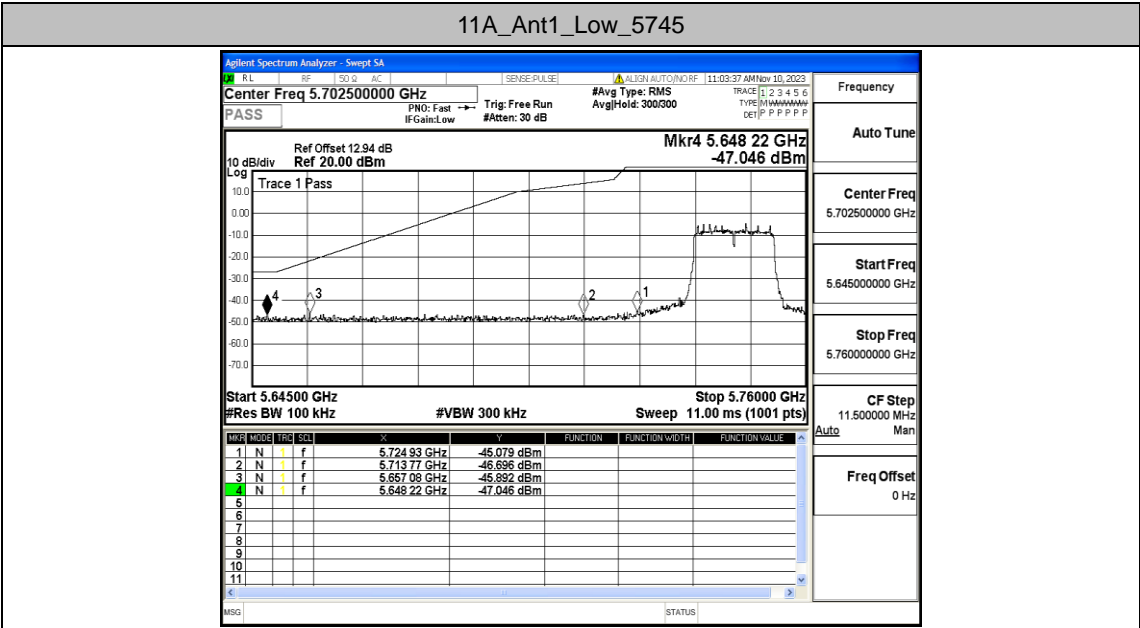


Appendix D: Band edge measurements

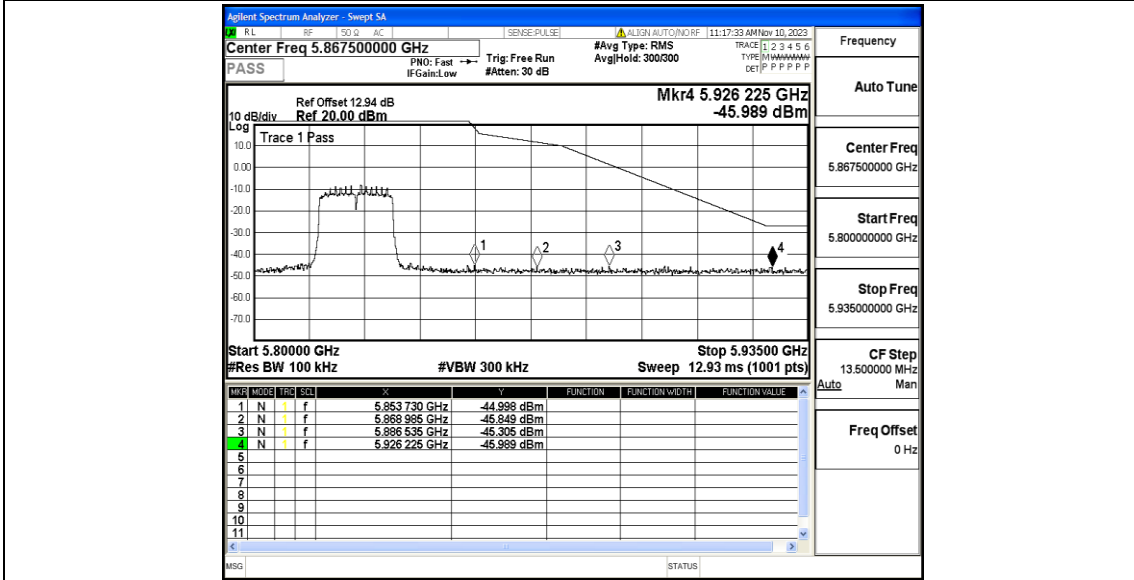
Test Result

TestMode	Antenna	ChName	Channel	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-45.89	≤-21.76	PASS
				5700~5720	-46.7	≤13.86	PASS
				5720~5725	-45.08	≤26.83	PASS
				5760~5650	-47.05	≤-27	PASS
		High	5825	5850~5855	-46.04	≤23.49	PASS
				5855~5875	-45.74	≤10.85	PASS
				5875~5925	-45.35	≤-16.27	PASS
				5925~5935	-45.77	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-45.5	≤-2.96	PASS
				5700~5720	-46.43	≤15.37	PASS
				5720~5725	-44.84	≤26.83	PASS
				5760~5650	-47.04	≤-27	PASS
		High	5825	5850~5855	-45	≤24.10	PASS
				5855~5875	-45.85	≤13.92	PASS
				5875~5925	-45.31	≤-18.46	PASS
				5925~5935	-45.99	≤-27	PASS
11N40MI MO	Ant1	Low	5755	5650~5700	-46.23	≤9.36	PASS
				5700~5720	-44.94	≤15.24	PASS
				5720~5725	-44.05	≤25.59	PASS
				5780~5650	-47.57	≤-27	PASS
		High	5795	5850~5855	-45.86	≤23.18	PASS
				5855~5875	-45.63	≤11.33	PASS
				5875~5925	-45.08	≤-8.49	PASS
				5925~5935	-45.79	≤-27	PASS

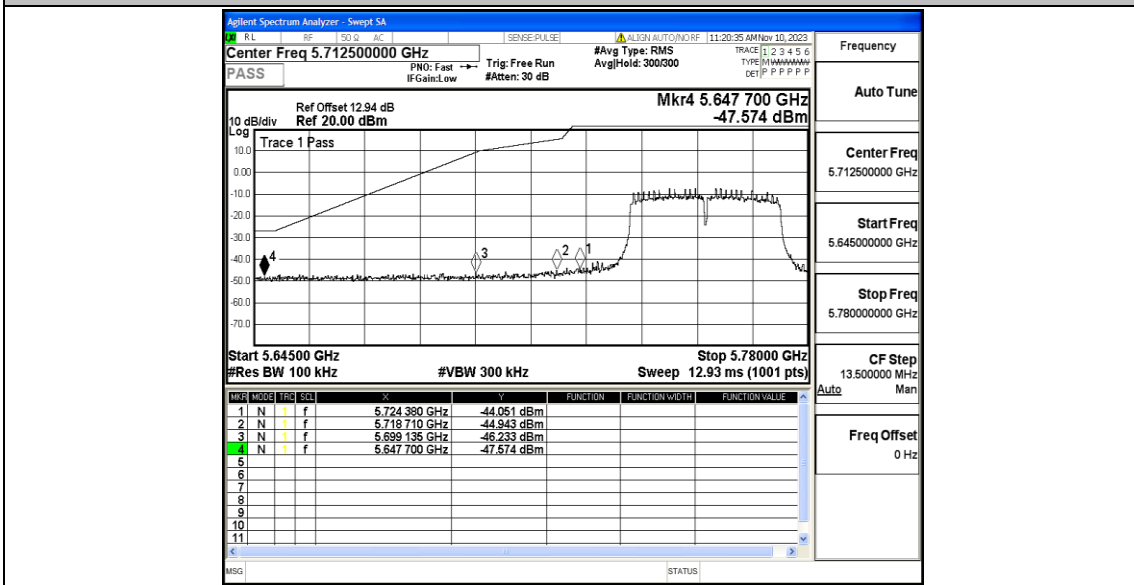
Test Graphs



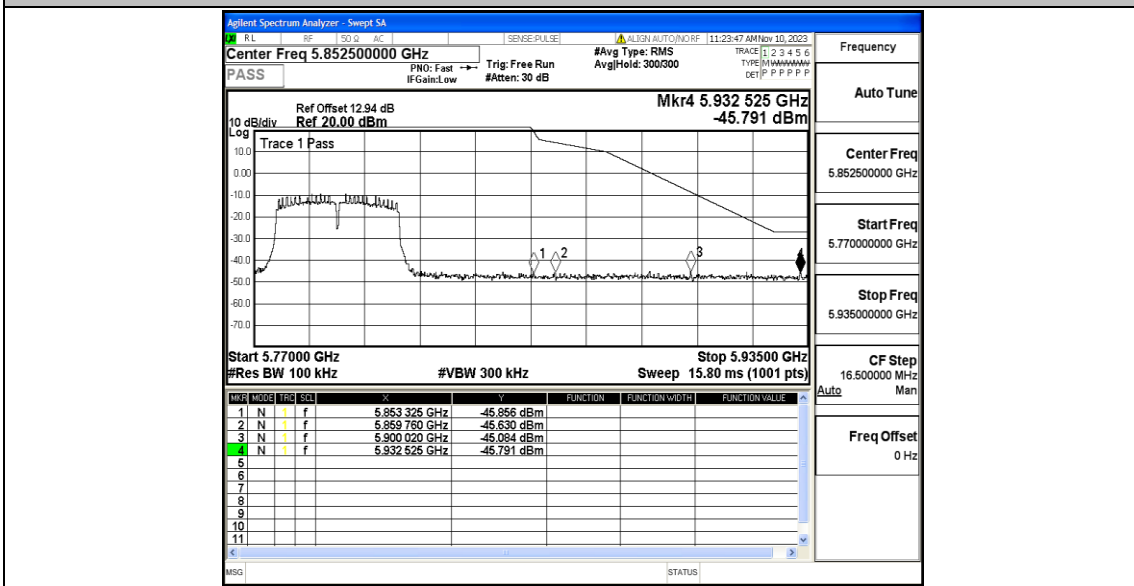
11N20MIMO_Ant1_High_5825



11N40MIMO_Ant1_Low_5755



11N40MIMO_Ant1_High_5795



Appendix E: Frequency Stability

Test Result

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5745	20	132	5744.923145	5150 – 5250	PASS
5745	20	108	5744.954203	5150 – 5250	PASS
5745	50	120	5744.996769	5150 – 5250	PASS
5745	40	120	5745.081695	5150 – 5250	PASS
5745	30	120	5745.029086	5150 – 5250	PASS
5745	20	120	5744.934129	5150 – 5250	PASS
5745	10	120	5745.095759	5150 – 5250	PASS
5745	0	120	5744.953415	5150 – 5250	PASS
5745	-10	120	5744.936394	5150 – 5250	PASS
5745	-20	120	5745.093384	5150 – 5250	PASS
5745	-30	120	5744.998549	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5785	20	132	5785.010830	5150 – 5250	PASS
5785	20	108	5785.015274	5150 – 5250	PASS
5785	50	120	5785.027991	5150 – 5250	PASS
5785	40	120	5784.976465	5150 – 5250	PASS
5785	30	120	5785.050158	5150 – 5250	PASS
5785	20	120	5784.915483	5150 – 5250	PASS
5785	10	120	5784.925536	5150 – 5250	PASS
5785	0	120	5785.089794	5150 – 5250	PASS
5785	-10	120	5784.905365	5150 – 5250	PASS
5785	-20	120	5784.952737	5150 – 5250	PASS
5785	-30	120	5785.044587	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5825	20	132	5824.970177	5150 – 5250	PASS
5825	20	108	5824.956126	5150 – 5250	PASS
5825	50	120	5824.960699	5150 – 5250	PASS
5825	40	120	5825.016446	5150 – 5250	PASS
5825	30	120	5824.912919	5150 – 5250	PASS
5825	20	120	5825.096808	5150 – 5250	PASS
5825	10	120	5825.003827	5150 – 5250	PASS
5825	0	120	5825.074763	5150 – 5250	PASS
5825	-10	120	5825.091173	5150 – 5250	PASS
5825	-20	120	5824.952072	5150 – 5250	PASS
5825	-30	120	5825.019484	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5755	20	132	5755.031730	5150 – 5250	PASS
5755	20	108	5755.097888	5150 – 5250	PASS
5755	50	120	5754.904639	5150 – 5250	PASS
5755	40	120	5755.093465	5150 – 5250	PASS
5755	30	120	5754.953031	5150 – 5250	PASS
5755	20	120	5754.938549	5150 – 5250	PASS
5755	10	120	5755.055701	5150 – 5250	PASS
5755	0	120	5754.946855	5150 – 5250	PASS
5755	-10	120	5755.009345	5150 – 5250	PASS
5755	-20	120	5755.034537	5150 – 5250	PASS
5755	-30	120	5754.998452	5150 – 5250	PASS

Ant1

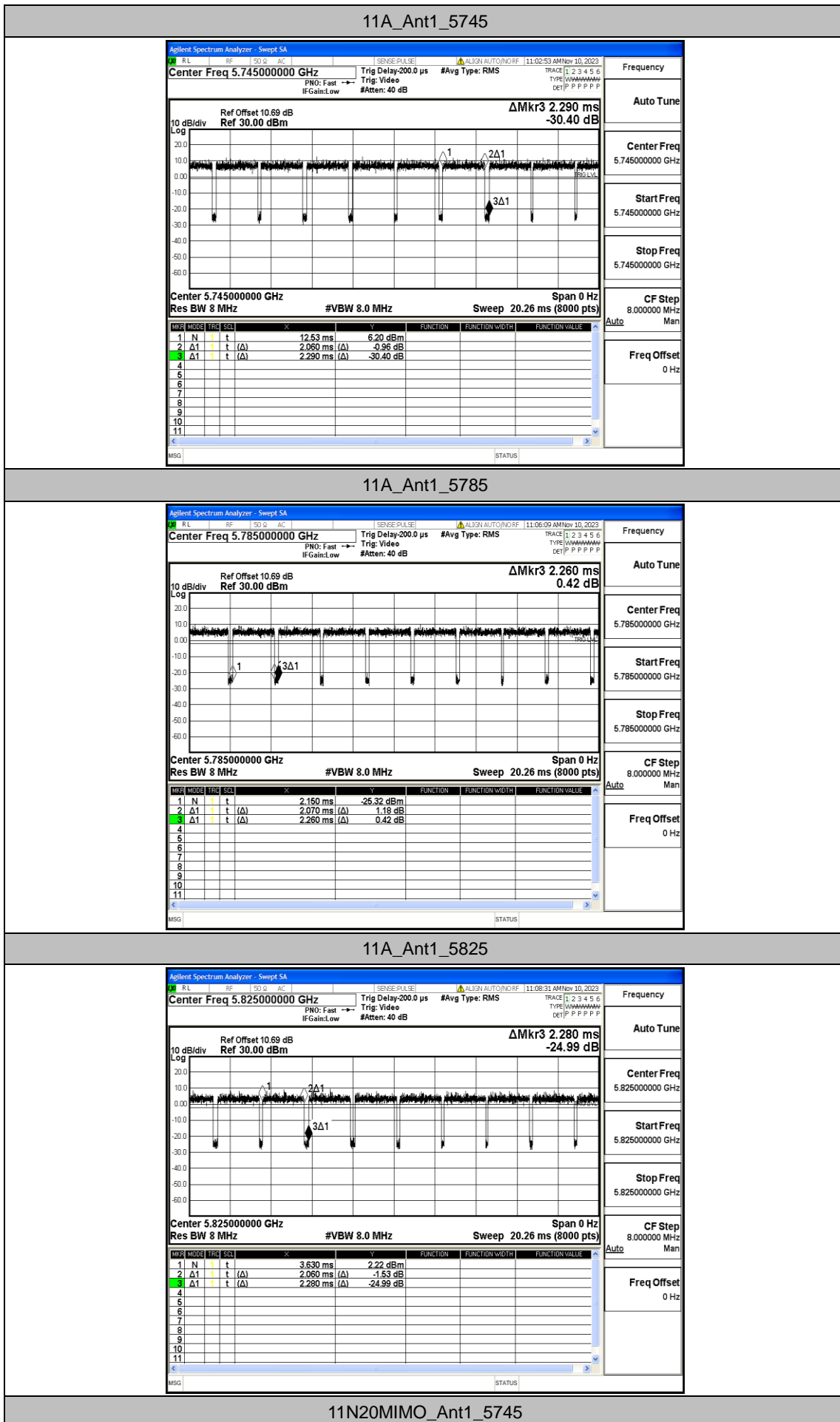
Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5795	20	132	5794.946353	5150 – 5250	PASS
5795	20	108	5794.990222	5150 – 5250	PASS
5795	50	120	5795.079502	5150 – 5250	PASS
5795	40	120	5794.971512	5150 – 5250	PASS
5795	30	120	5795.039446	5150 – 5250	PASS
5795	20	120	5794.991382	5150 – 5250	PASS
5795	10	120	5794.964805	5150 – 5250	PASS
5795	0	120	5794.966887	5150 – 5250	PASS
5795	-10	120	5794.943040	5150 – 5250	PASS
5795	-20	120	5794.938441	5150 – 5250	PASS
5795	-30	120	5794.960840	5150 – 5250	PASS

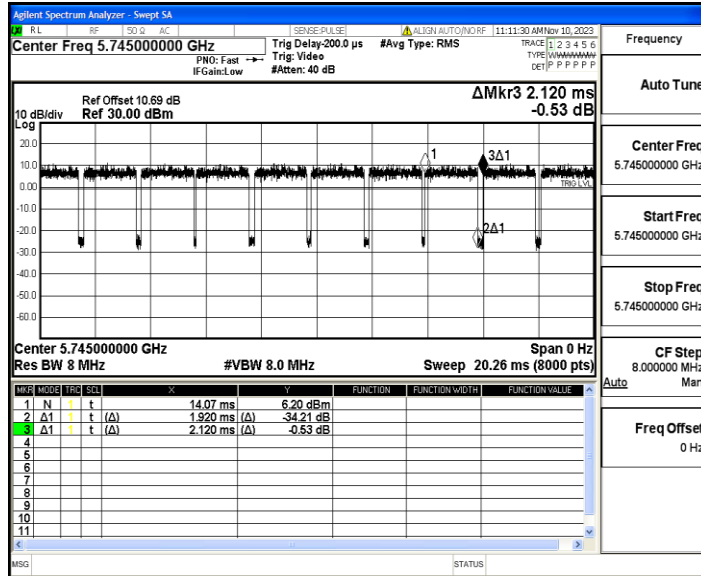
Appendix F: Duty Cycle

Test Result

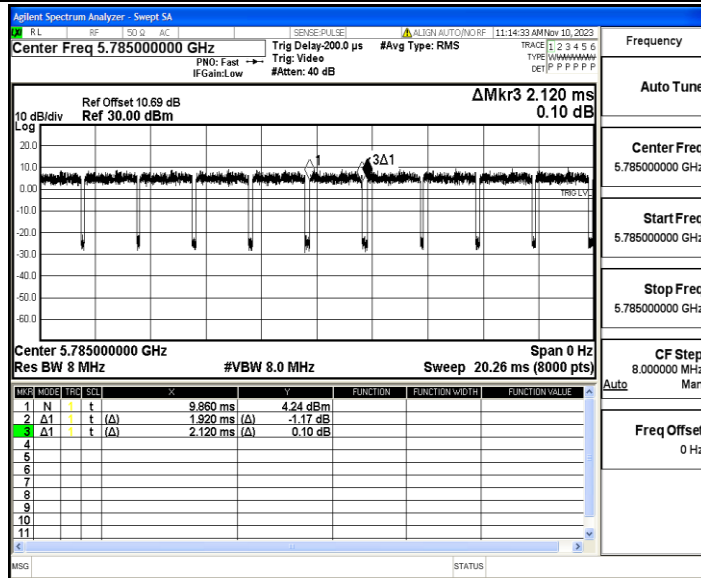
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]
11A	Ant1	5745	2.06	2.29	89.96	0.49
		5785	2.07	2.26	91.59	0.48
		5825	2.06	2.28	90.35	0.49
11N20MIMO	Ant1	5745	1.92	2.12	90.57	0.52
		5785	1.92	2.12	90.57	0.52
		5825	1.92	2.15	89.30	0.52
11N40MIMO	Ant1	5755	0.95	1.17	81.20	1.05
		5795	0.94	1.16	81.03	1.06

Test Graphs

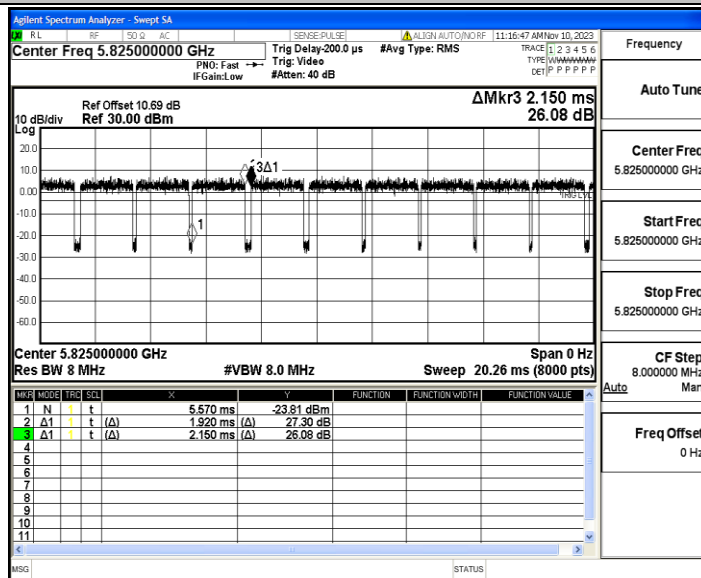




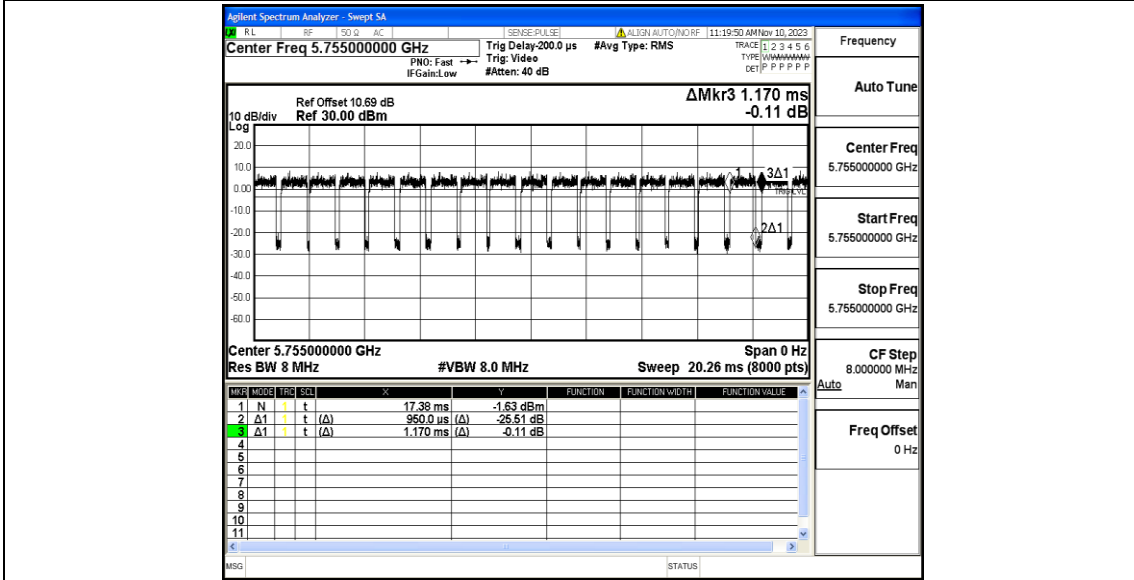
11N20MIMO_Ant1_5785



11N20MIMO_Ant1_5825



11N40MIMO_Ant1_5755



11N40MIMO_Ant1_5795

