

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

Product Name: Space Automatic Pet Feeder

Trade Mark: PETLIBRO

Test Model: PLAF107

FCC ID: 2A3DE-PLAF107

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

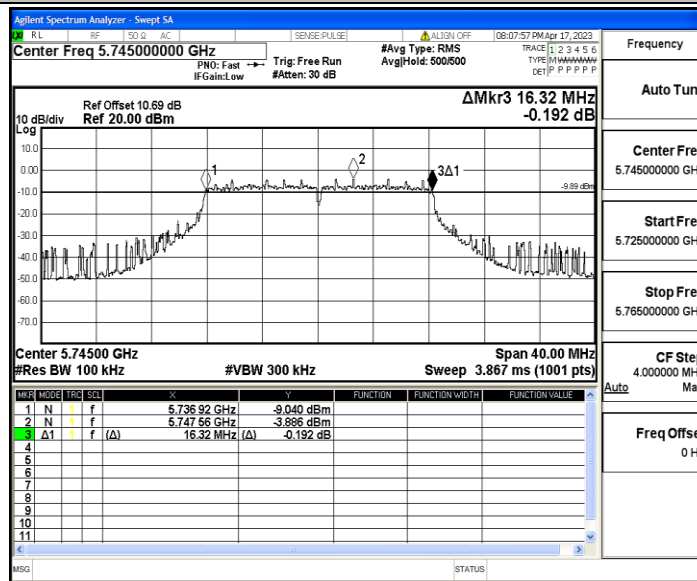
Appendix A: Min emission bandwidth

Test Result

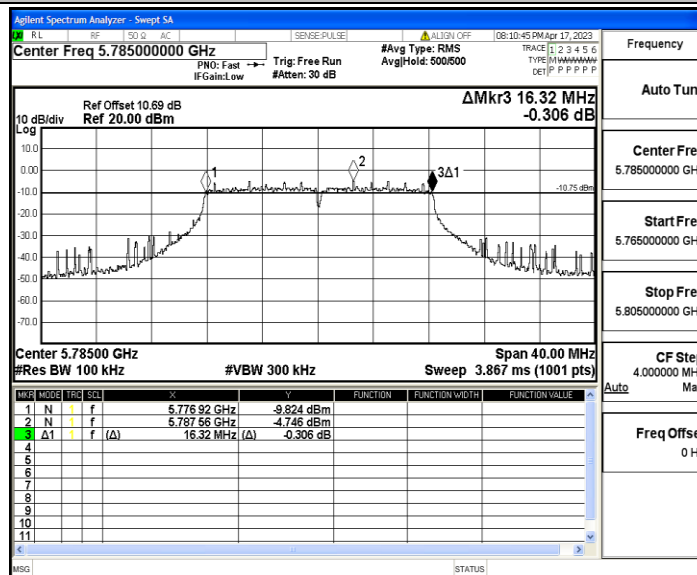
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.920	5753.240	0.5	PASS
		5785	16.320	5776.920	5793.240	0.5	PASS
		5825	16.320	5816.920	5833.240	0.5	PASS
11N20MIMO	Ant1	5745	17.520	5736.320	5753.840	0.5	PASS
		5785	17.520	5776.320	5793.840	0.5	PASS
		5825	16.920	5816.600	5833.520	0.5	PASS
11N40MIMO	Ant1	5755	35.360	5737.480	5772.840	0.5	PASS
		5795	35.120	5777.560	5812.680	0.5	PASS

Test Graphs

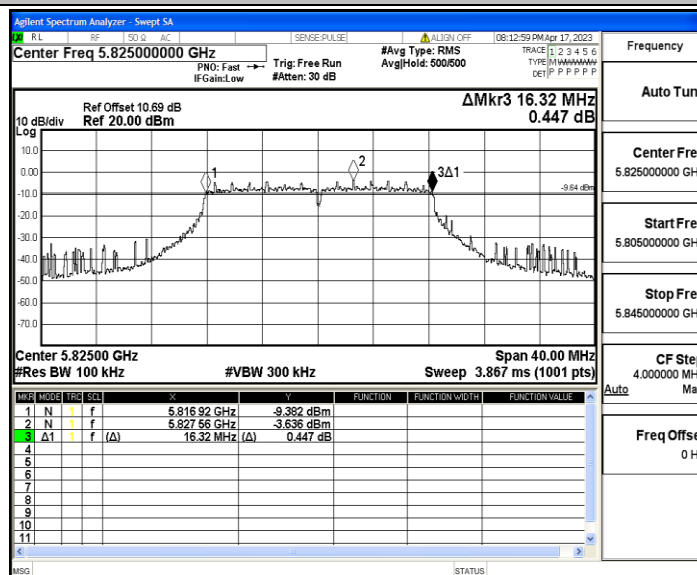
11A_Ant1_5745



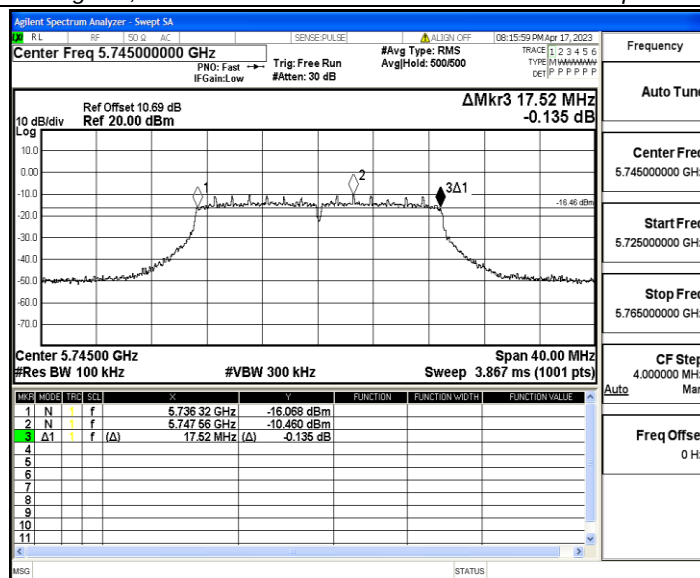
11A_Ant1_5785



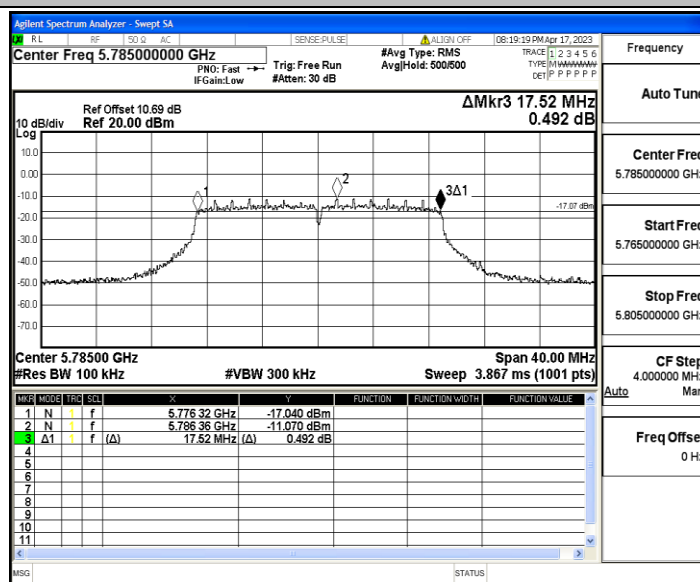
11A_Ant1_5825



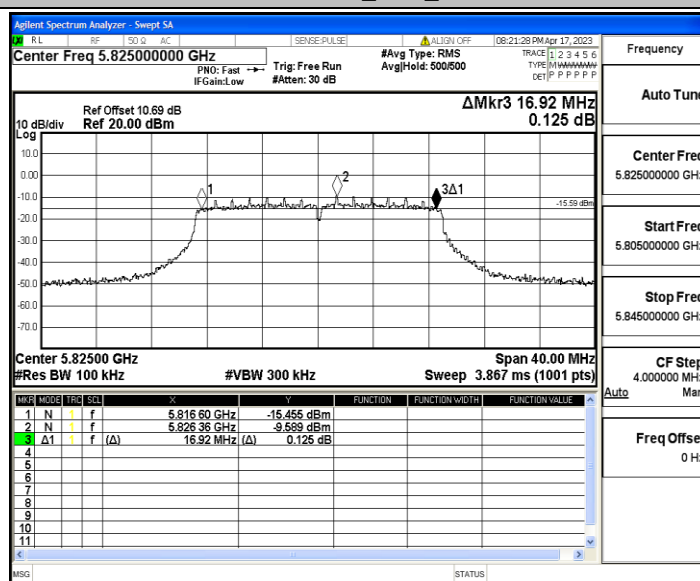
11N20MIMO_Ant1_5745



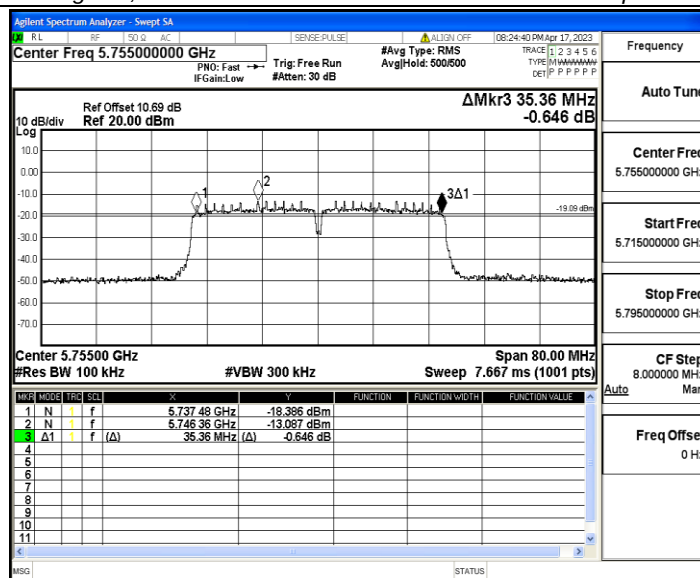
11N20MIMO_Ant1_5785



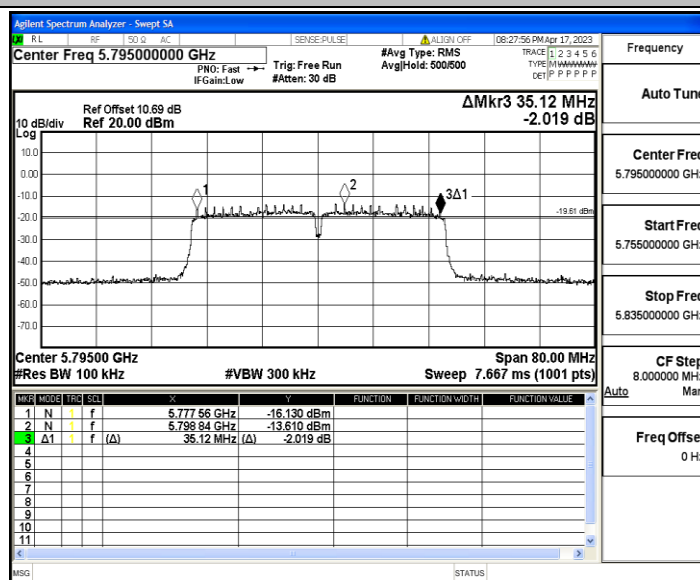
11N20MIMO_Ant1_5825



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	7.37	≤30.00	PASS
		5785	6.54	≤30.00	PASS
		5825	7.57	≤30.00	PASS
11N20MIMO	Ant1	5745	0.84	≤30.00	PASS
		5785	0.33	≤30.00	PASS
		5825	1.39	≤30.00	PASS
11N40MIMO	Ant1	5755	1.06	≤30.00	PASS
		5795	1.02	≤30.00	PASS

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

Appendix C: Maximum power spectral density

Test Result

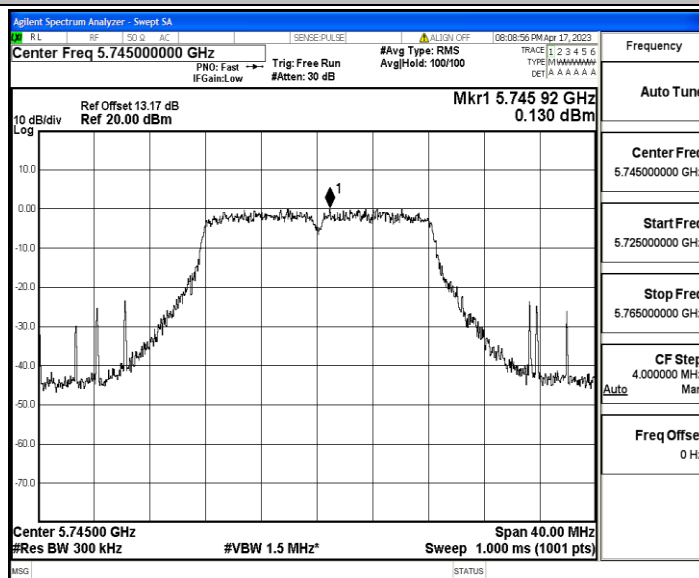
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	0.13	≤30.00	PASS
		5785	-0.61	≤30.00	PASS
		5825	0.22	≤30.00	PASS
11N20MIMO	Ant1	5745	-7	≤30.00	PASS
		5785	-6.63	≤30.00	PASS
		5825	-5.78	≤30.00	PASS
11N40MIMO	Ant1	5755	-9.01	≤30.00	PASS
		5795	-9.34	≤30.00	PASS

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

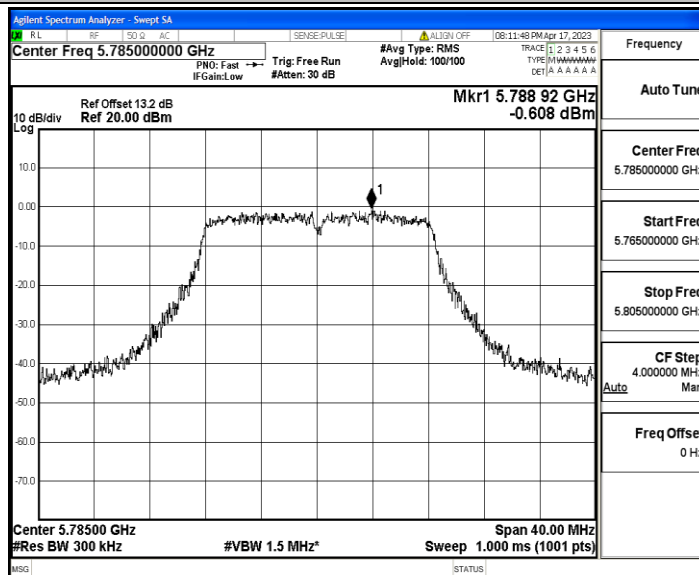
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

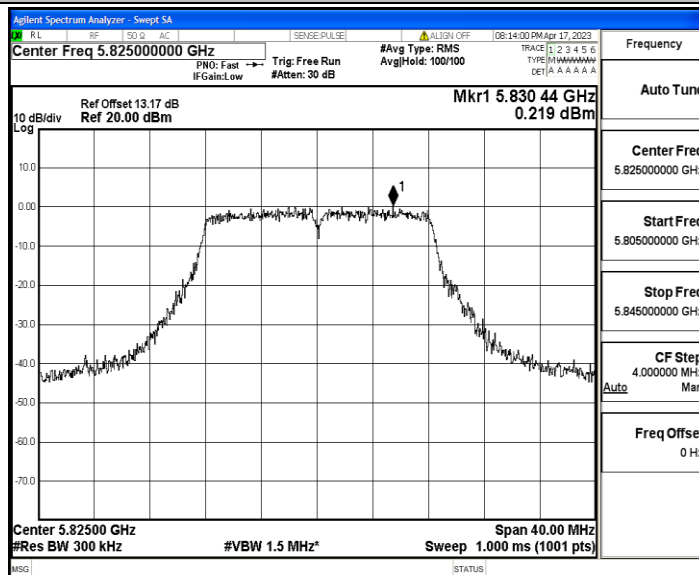
11A_Ant1_5745



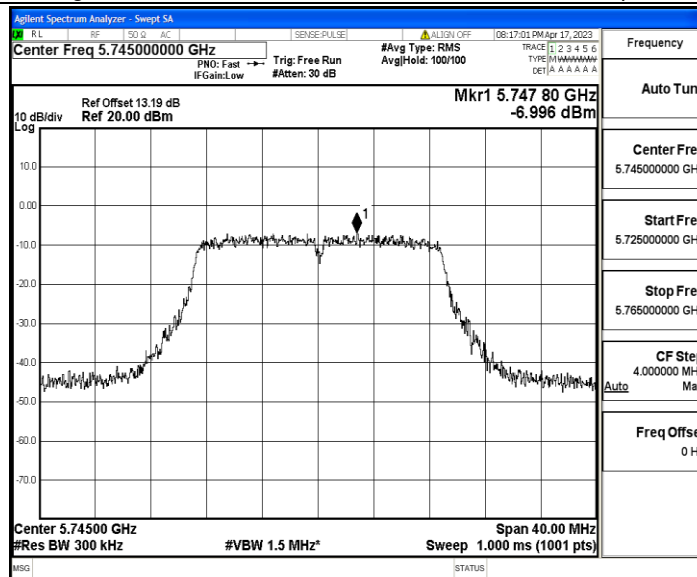
11A_Ant1_5785



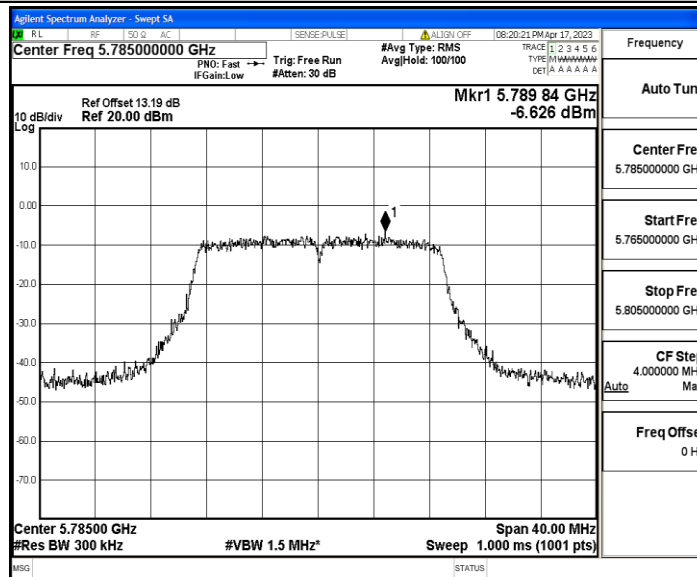
11A_Ant1_5825



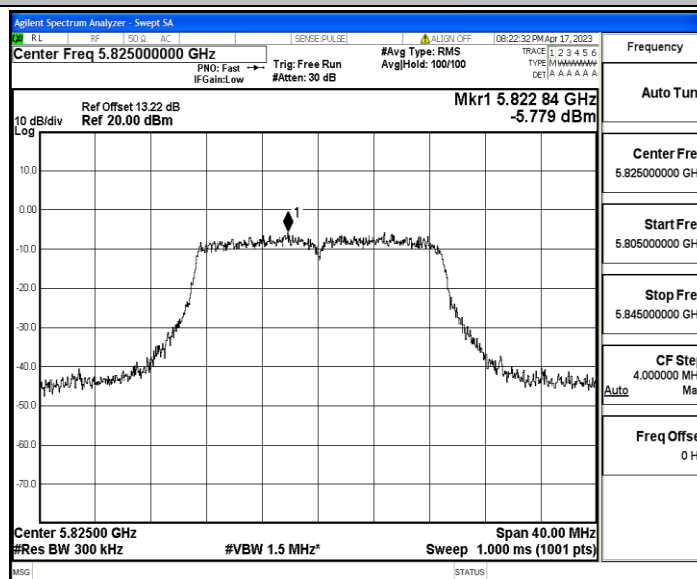
11N20MIMO_Ant1_5745



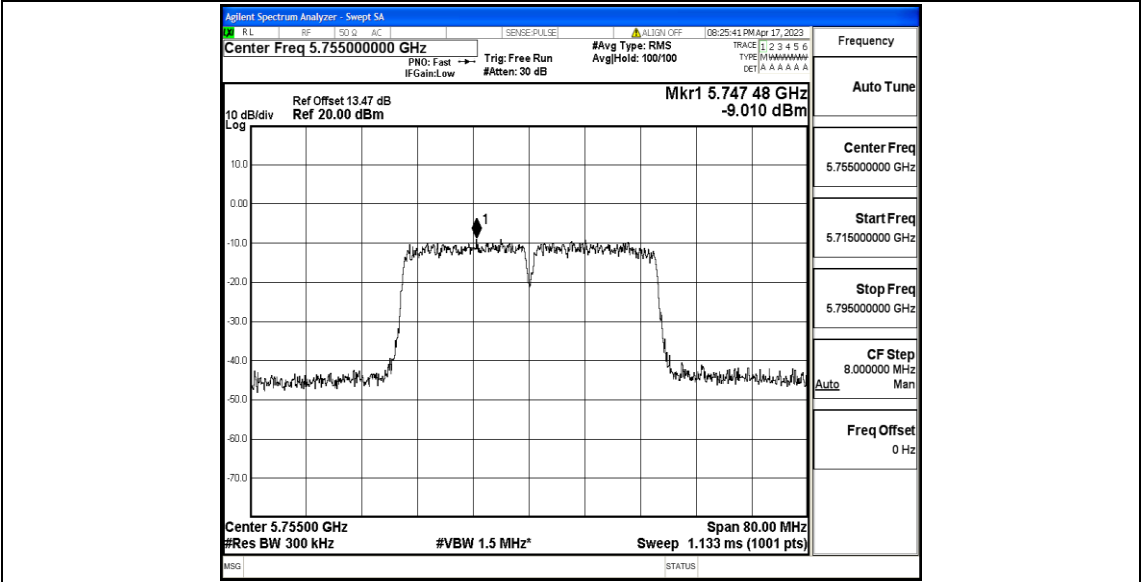
11N20MIMO_Ant1_5785



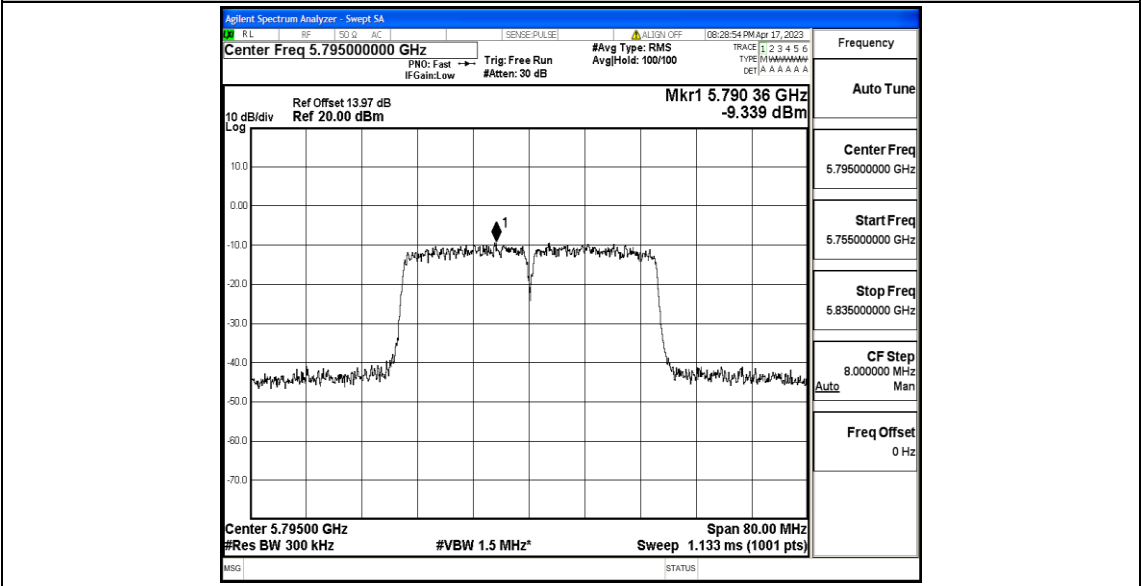
11N20MIMO_Ant1_5825



11N40MIMO_Ant1_5755



11N40MIMO_Ant1_5795



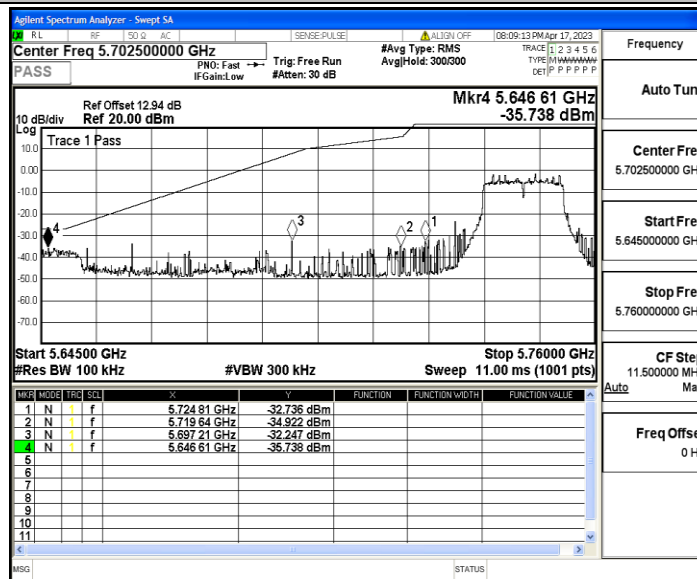
Appendix D: Band edge measurements

Test Result

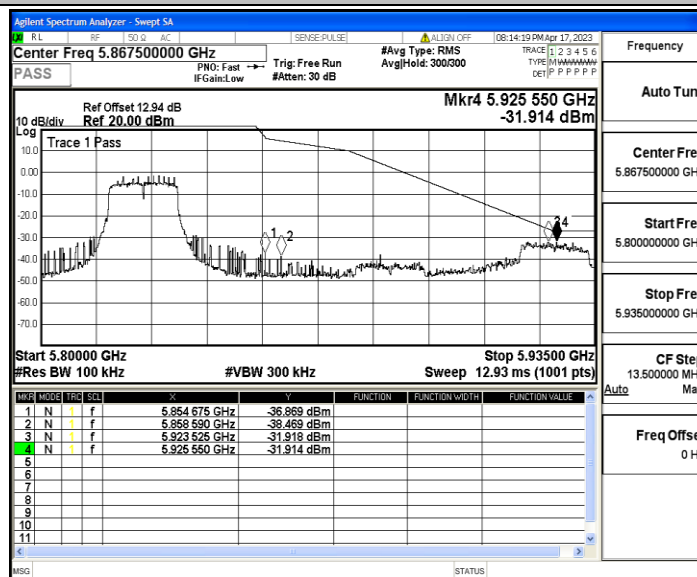
TestMode	Antenna	ChName	Channel	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-32.25	≤7.94	PASS
				5700~5720	-34.92	≤15.50	PASS
				5720~5725	-32.74	≤26.57	PASS
				5760~5650	-35.74	≤-27	PASS
		High	5825	5850~5855	-36.87	≤26.26	PASS
				5855~5875	-38.47	≤11.01	PASS
				5875~5925	-31.92	≤8.91	PASS
				5925~5935	-31.91	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-43.14	≤-25.76	PASS
				5700~5720	-45.61	≤11.89	PASS
				5720~5725	-46.04	≤24.73	PASS
				5760~5650	-42.66	≤-27	PASS
		High	5825	5850~5855	-46.42	≤16.41	PASS
				5855~5875	-46	≤13.05	PASS
				5875~5925	-38.51	≤6.51	PASS
				5925~5935	-39.2	≤-27	PASS
11N40MI MO	Ant1	Low	5755	5650~5700	-43.47	≤-20.91	PASS
				5700~5720	-46.33	≤15.54	PASS
				5720~5725	-45.74	≤22.82	PASS
				5780~5650	-44.83	≤-27	PASS
		High	5795	5850~5855	-45.82	≤26.19	PASS
				5855~5875	-43.97	≤14.29	PASS
				5875~5925	-41.89	≤-17.40	PASS
				5925~5935	-44.89	≤-27	PASS

Test Graphs

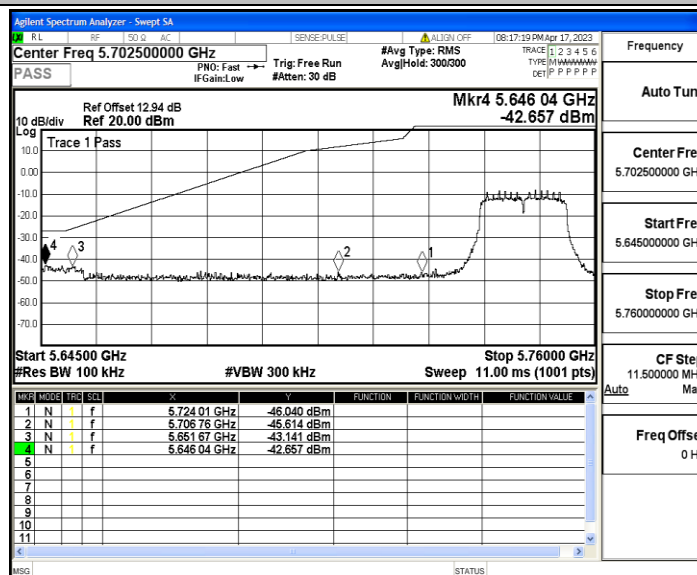
11A_Ant1_Low_5745



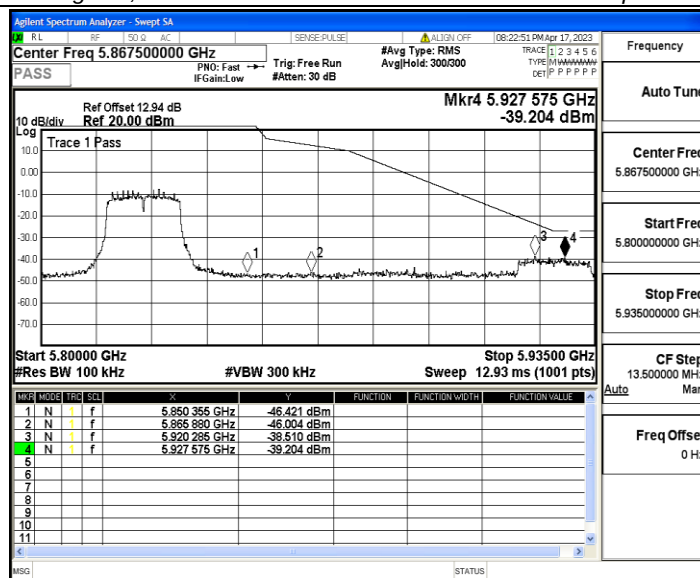
11A_Ant1_High_5825



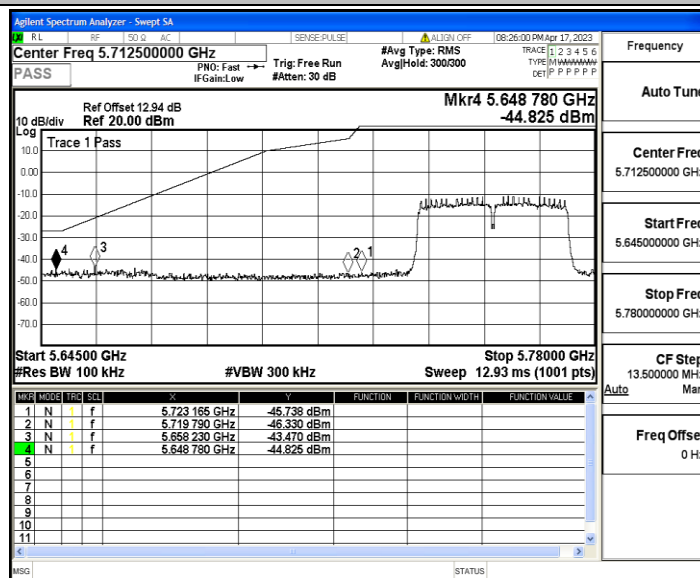
11N20MIMO_Ant1_Low_5745



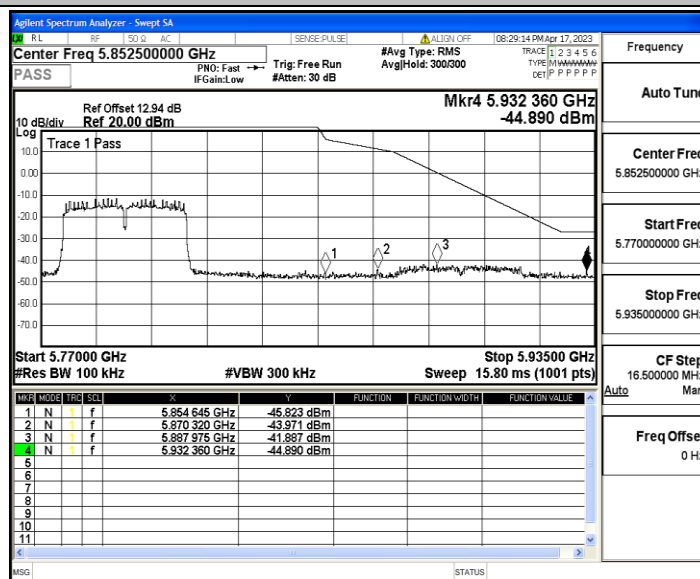
11N20MIMO_Ant1_High_5825



11N40MIMO_Ant1_Low_5755



11N40MIMO_Ant1_High_5795



Appendix E: Frequency Stability

Test Result

Ant1

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5745	20	132	5744.924523	5745 – 5825	PASS
5745	20	108	5744.984171	5745 – 5825	PASS
5745	50	120	5744.936586	5745 – 5825	PASS
5745	40	120	5744.905883	5745 – 5825	PASS
5745	30	120	5744.926768	5745 – 5825	PASS
5745	20	120	5744.963012	5745 – 5825	PASS
5745	10	120	5744.948956	5745 – 5825	PASS
5745	0	120	5745.071155	5745 – 5825	PASS
5745	-10	120	5745.001966	5745 – 5825	PASS
5745	-20	120	5745.001562	5745 – 5825	PASS
5745	-30	120	5744.936541	5745 – 5825	PASS

Ant1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5785	20	132	5785.028635	5745 – 5825	PASS
5785	20	108	5784.959042	5745 – 5825	PASS
5785	50	120	5784.994066	5745 – 5825	PASS
5785	40	120	5785.083100	5745 – 5825	PASS
5785	30	120	5784.929608	5745 – 5825	PASS
5785	20	120	5785.049143	5745 – 5825	PASS
5785	10	120	5784.916514	5745 – 5825	PASS
5785	0	120	5785.036429	5745 – 5825	PASS
5785	-10	120	5785.029746	5745 – 5825	PASS
5785	-20	120	5785.023191	5745 – 5825	PASS
5785	-30	120	5785.022850	5745 – 5825	PASS

Ant1

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5825	20	132	5825.034726	5745 – 5825	PASS
5825	20	108	5825.069746	5745 – 5825	PASS
5825	50	120	5824.957736	5745 – 5825	PASS
5825	40	120	5825.023443	5745 – 5825	PASS
5825	30	120	5824.926015	5745 – 5825	PASS
5825	20	120	5824.902382	5745 – 5825	PASS
5825	10	120	5825.008040	5745 – 5825	PASS
5825	0	120	5825.047791	5745 – 5825	PASS
5825	-10	120	5825.014268	5745 – 5825	PASS
5825	-20	120	5824.942612	5745 – 5825	PASS
5825	-30	120	5825.096712	5745 – 5825	PASS

Ant1

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5755	20	132	5754.956015	5745 – 5825	PASS
5755	20	108	5755.047958	5745 – 5825	PASS
5755	50	120	5755.016844	5745 – 5825	PASS
5755	40	120	5754.930665	5745 – 5825	PASS
5755	30	120	5754.987357	5745 – 5825	PASS
5755	20	120	5755.050520	5745 – 5825	PASS
5755	10	120	5755.002318	5745 – 5825	PASS
5755	0	120	5754.904199	5745 – 5825	PASS
5755	-10	120	5754.912868	5745 – 5825	PASS
5755	-20	120	5755.009034	5745 – 5825	PASS
5755	-30	120	5754.948612	5745 – 5825	PASS

Ant1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5795	20	132	5795.010549	5745 – 5825	PASS
5795	20	108	5794.952219	5745 – 5825	PASS
5795	50	120	5794.944608	5745 – 5825	PASS
5795	40	120	5795.006313	5745 – 5825	PASS
5795	30	120	5794.960532	5745 – 5825	PASS
5795	20	120	5795.072197	5745 – 5825	PASS
5795	10	120	5795.015755	5745 – 5825	PASS
5795	0	120	5794.944830	5745 – 5825	PASS
5795	-10	120	5794.931370	5745 – 5825	PASS
5795	-20	120	5795.074691	5745 – 5825	PASS
5795	-30	120	5795.000282	5745 – 5825	PASS

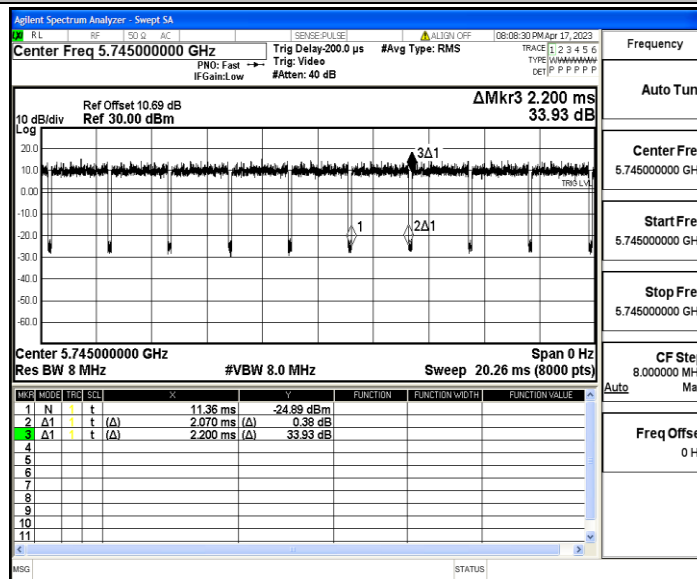
Appendix F: Duty Cycle

Test Result

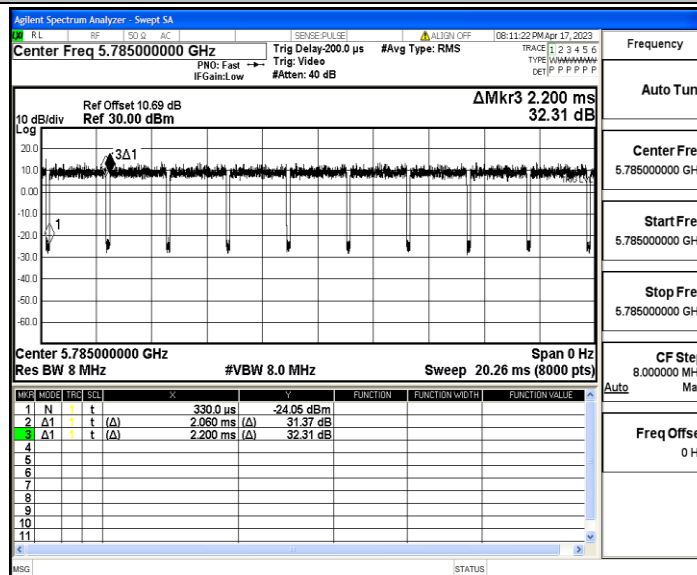
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]
11A	Ant1	5745	2.07	2.20	94.09	0.48
		5785	2.06	2.20	93.64	0.49
		5825	2.07	2.20	94.09	0.48
11N20MIMO	Ant1	5745	1.92	2.05	93.66	0.52
		5785	1.92	2.05	93.66	0.52
		5825	1.92	2.06	93.20	0.52
11N40MIMO	Ant1	5755	0.94	1.07	87.85	1.06
		5795	0.94	1.20	78.33	1.06

Test Graphs

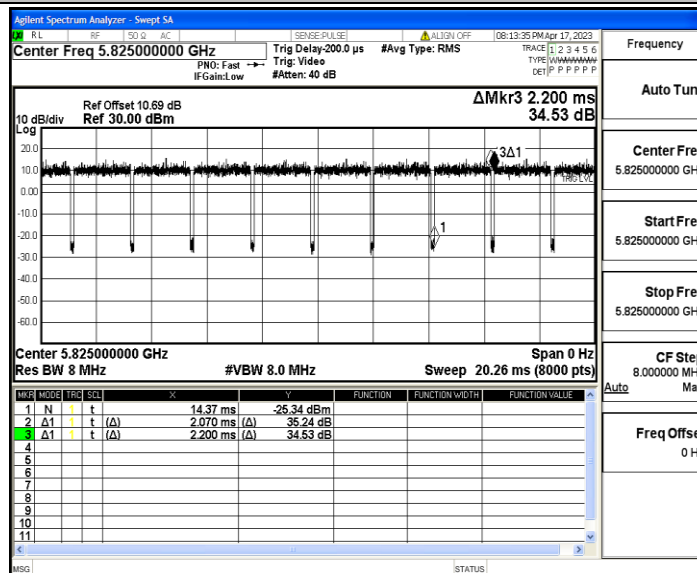
11A_Ant1_5745



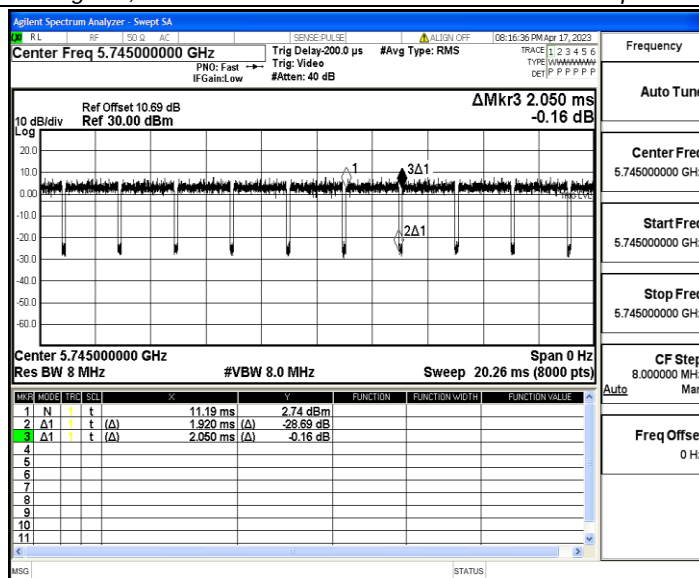
11A_Ant1_5785



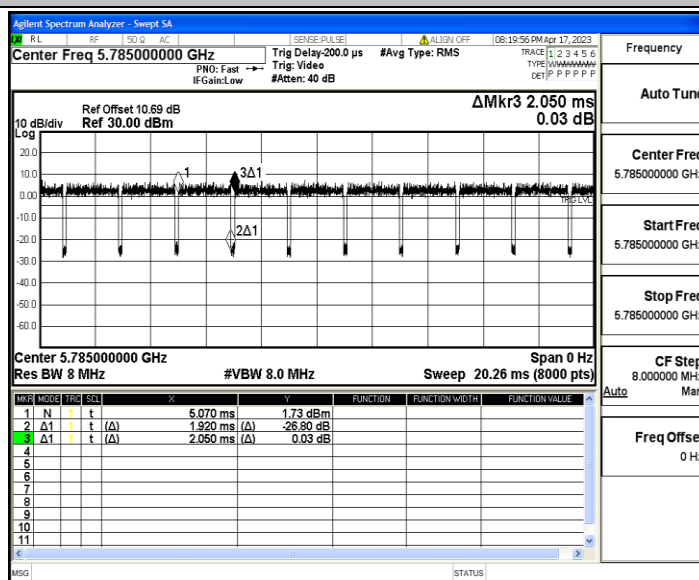
11A_Ant1_5825



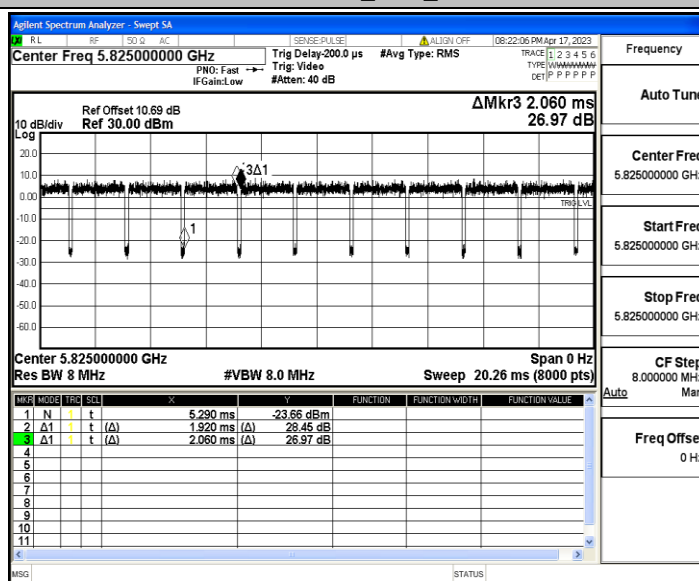
11N20MIMO_Ant1_5745



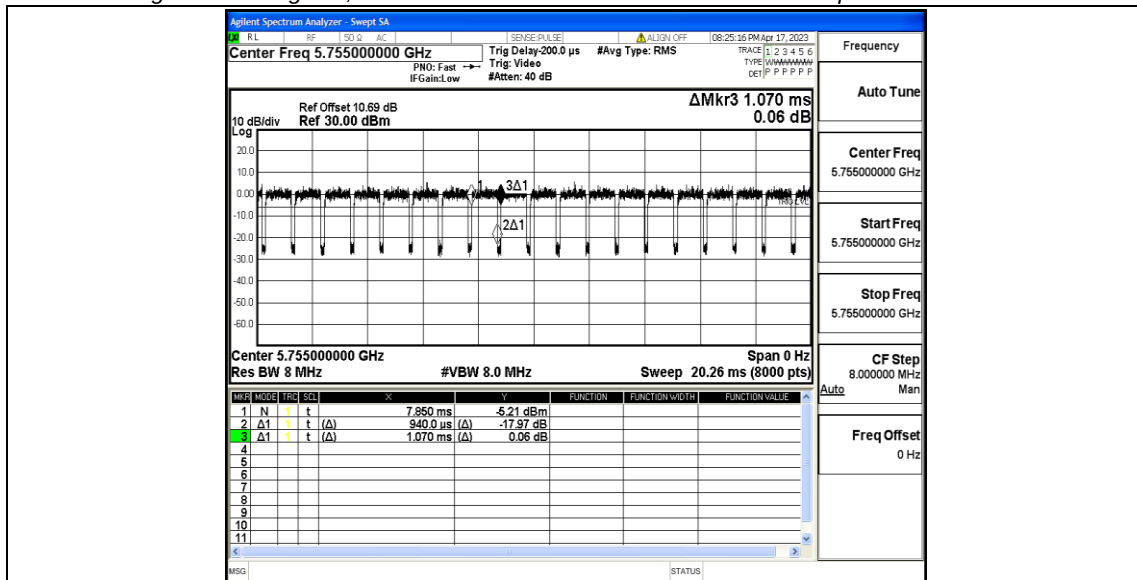
11N20MIMO_Ant1_5785



11N20MIMO_Ant1_5825



11N40MIMO_Ant1_5755



11N40MIMO_Ant1_5795

