

## RF Test Data for RLAN(5.8G) (Conducted Measurement)

**Product Name: Granary Automatic Pet Feeder - Camera Monitoring 5L**

**Trade Mark: Petlibro**

**Test Model: PLAF203**

**FCC ID: 2A3DE-PLAF203**

### Environmental Conditions

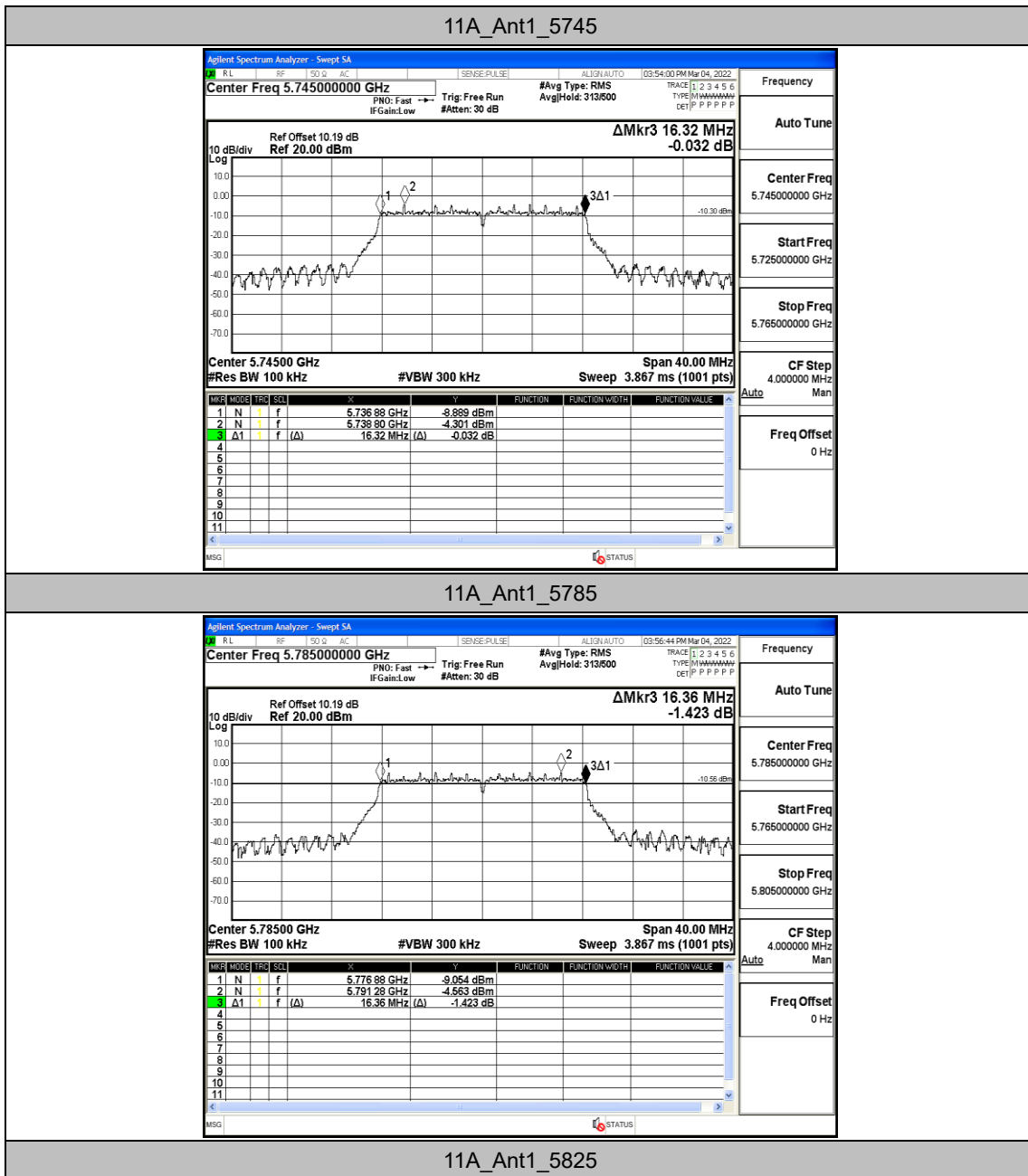
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

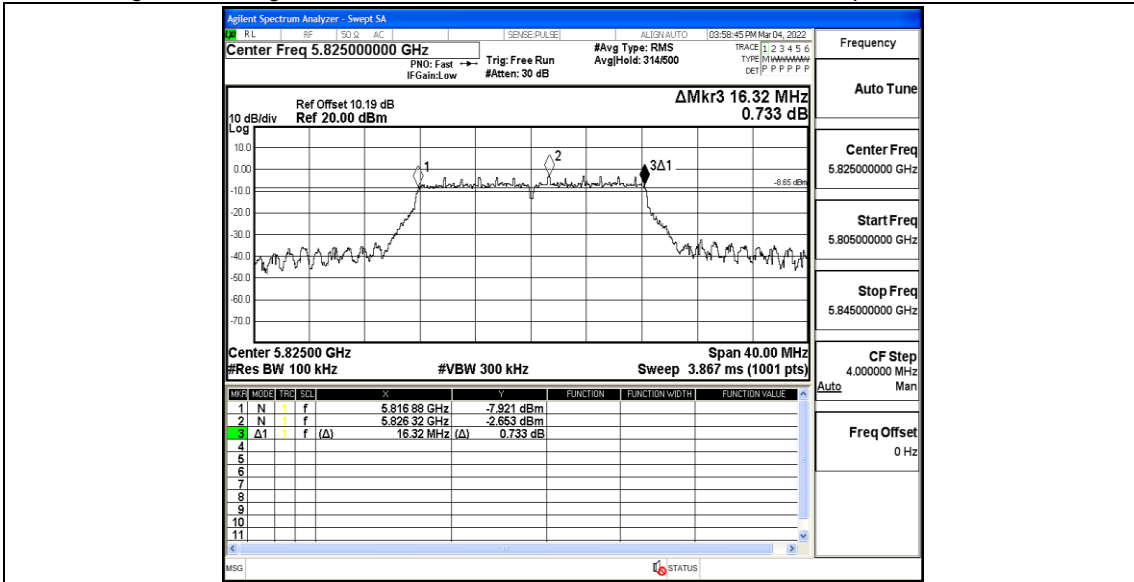
### Appendix A: Min emission bandwidth

#### Test Result

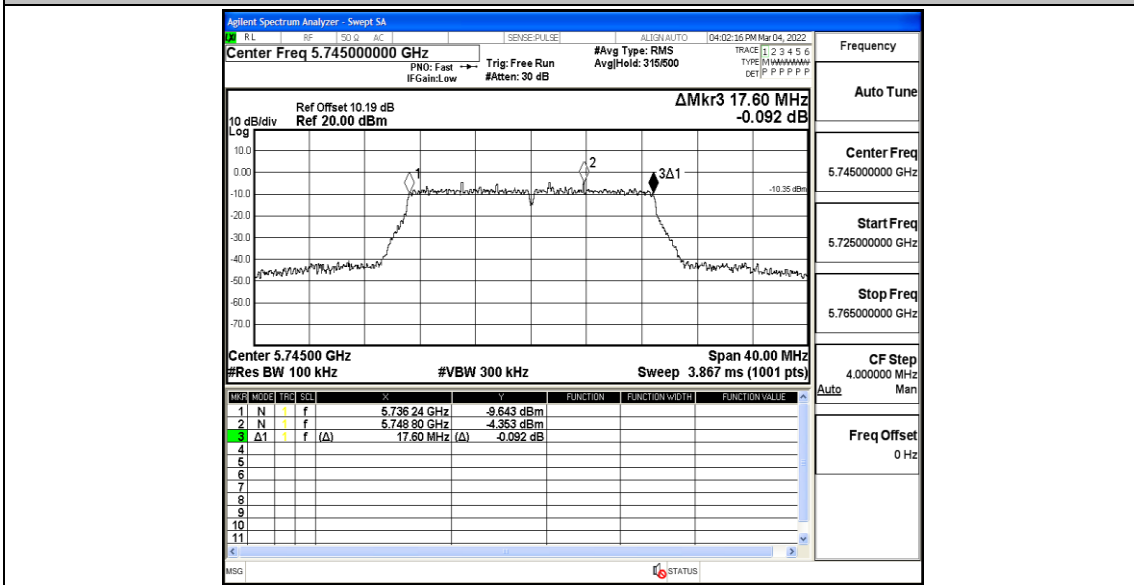
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.880	5753.200	0.5	PASS
		5785	16.360	5776.880	5793.240	0.5	PASS
		5825	16.320	5816.880	5833.200	0.5	PASS
11N20SISO	Ant1	5745	17.600	5736.240	5753.840	0.5	PASS
		5785	17.600	5776.240	5793.840	0.5	PASS
		5825	17.560	5816.280	5833.840	0.5	PASS
11N40SISO	Ant1	5755	35.920	5736.920	5772.840	0.5	PASS
		5795	36.000	5777.160	5813.160	0.5	PASS

Test Graphs

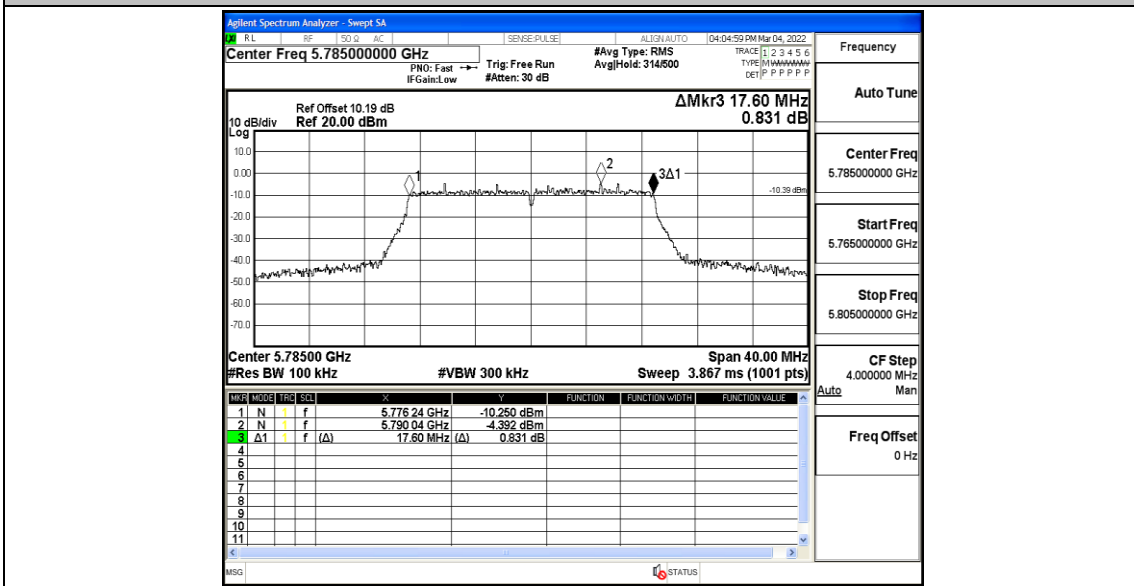




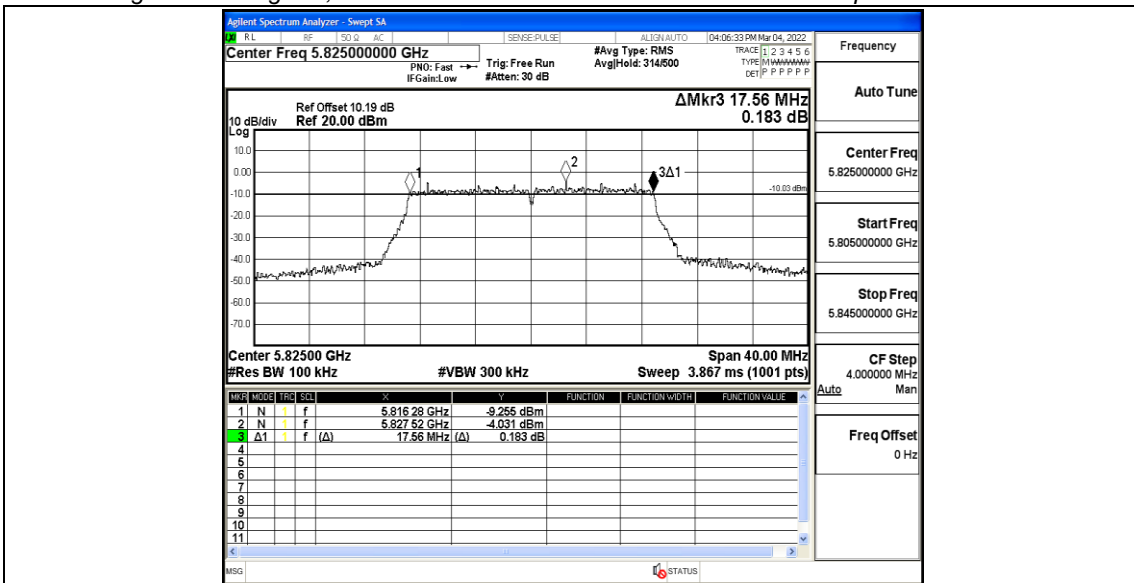
11N20MIMO\_Ant1\_5745



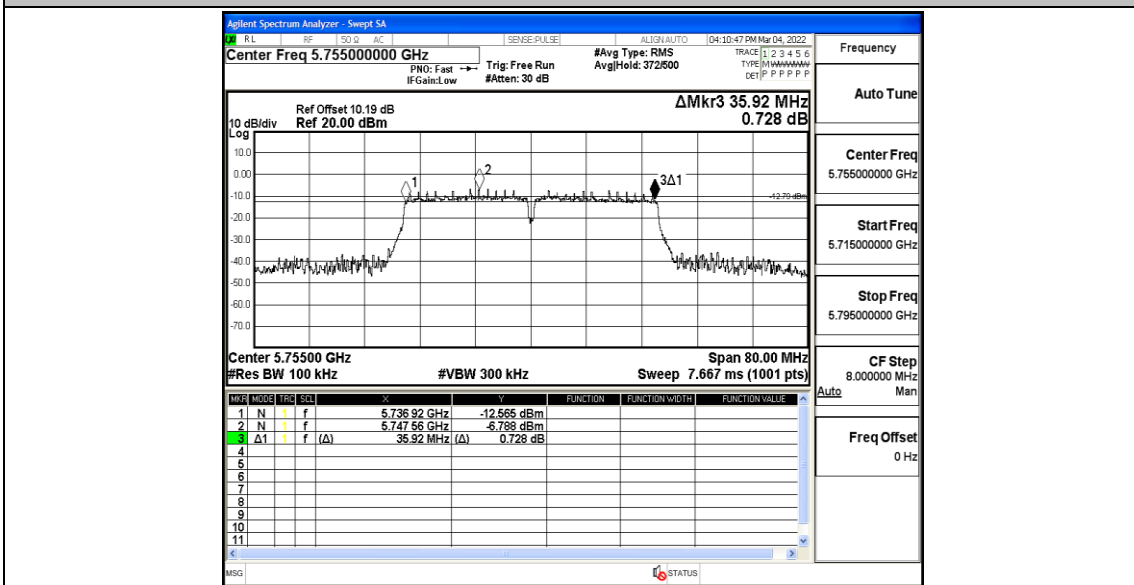
11N20MIMO\_Ant1\_5785



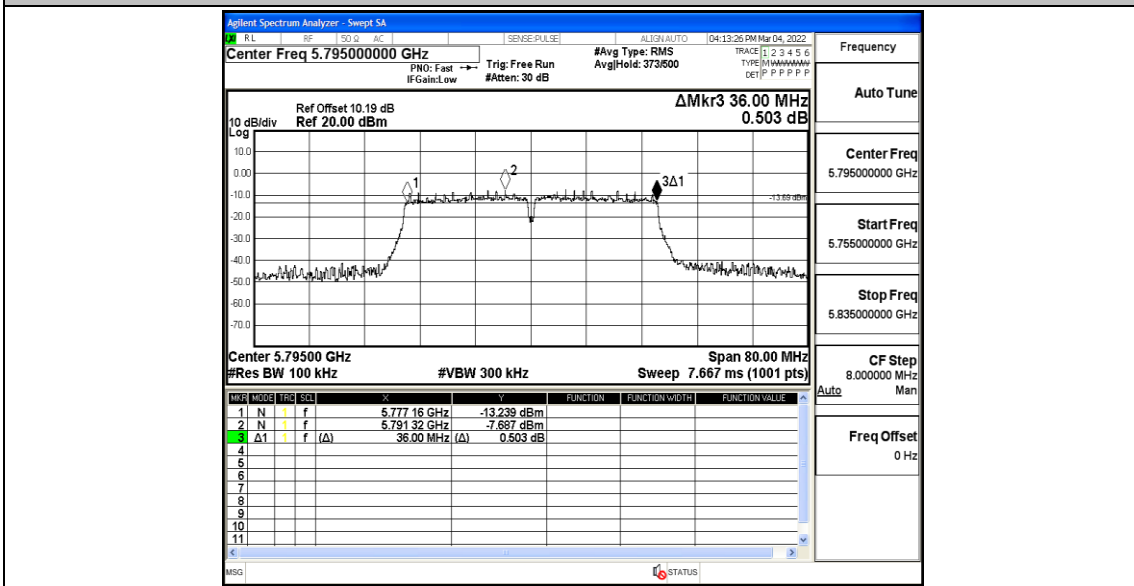
11N20MIMO\_Ant1\_5825



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	7.15	≤30	PASS
		5785	7.25	≤30	PASS
		5825	8.49	≤30	PASS
11N20SISO	Ant1	5745	7.14	≤30	PASS
		5785	7.21	≤30	PASS
		5825	7.42	≤30	PASS
11N40SISO	Ant1	5755	7.39	≤30	PASS
		5795	6.87	≤30	PASS

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

## Appendix C: Maximum power spectral density

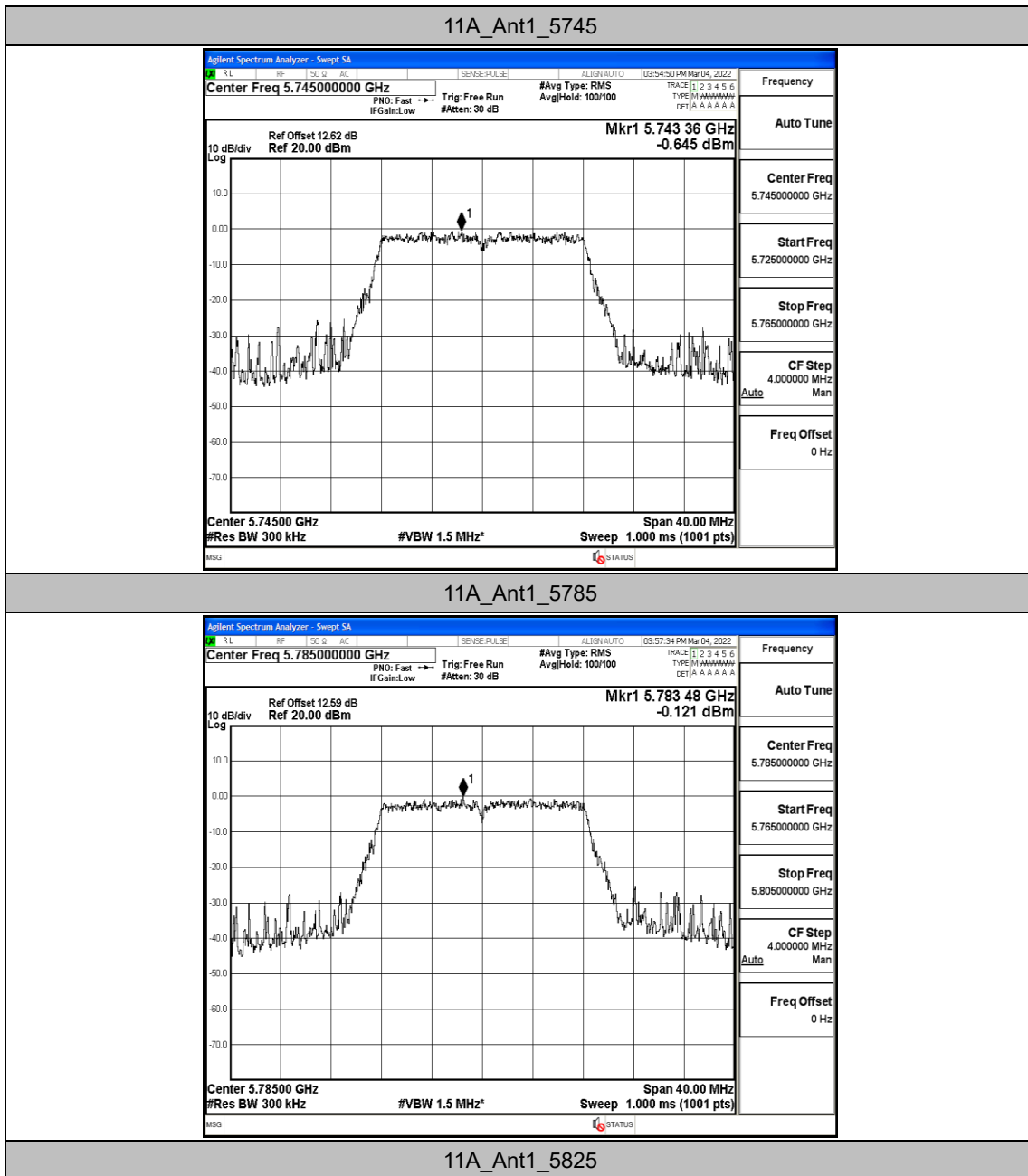
### Test Result

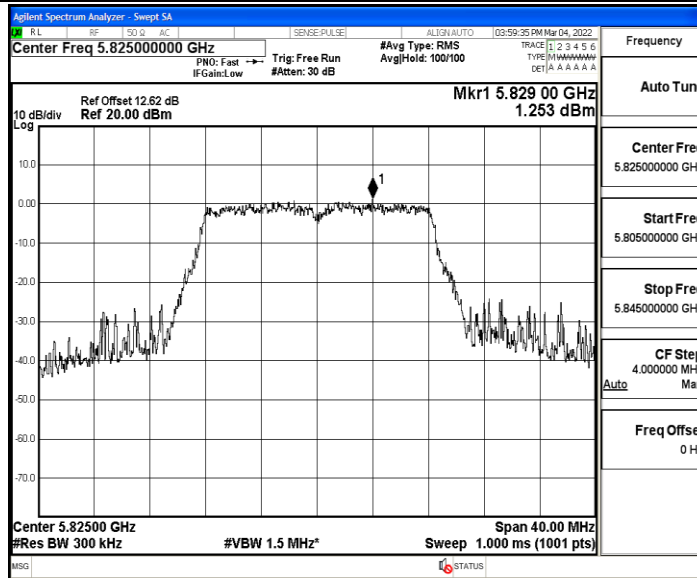
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-0.65	≤30	PASS
		5785	-0.12	≤30	PASS
		5825	1.25	≤30	PASS
11N20SISO	Ant1	5745	-0.75	≤30	PASS
		5785	-0.22	≤30	PASS
		5825	0.02	≤30	PASS
11N40SISO	Ant1	5755	-3.09	≤30	PASS
		5795	-3.96	≤30	PASS

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

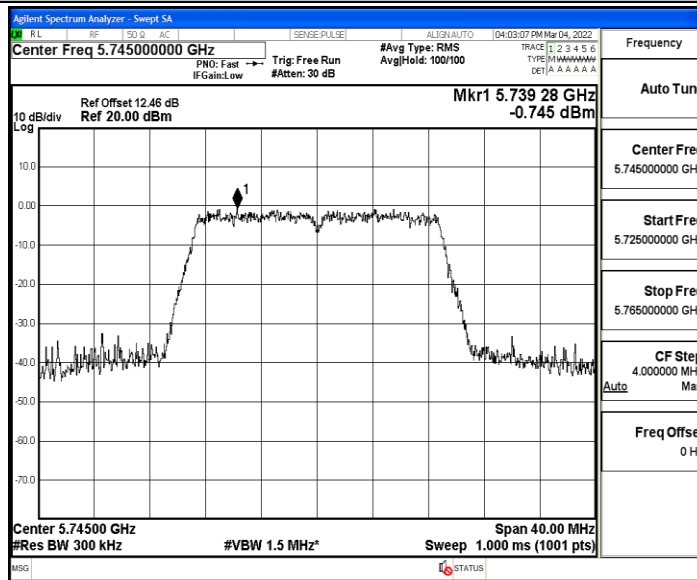
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

### Test Graphs

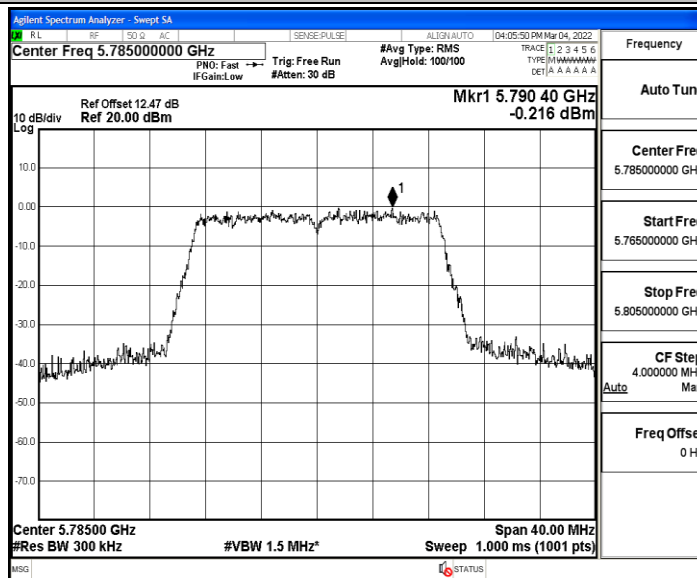




11N20MIMO\_Ant1\_5745

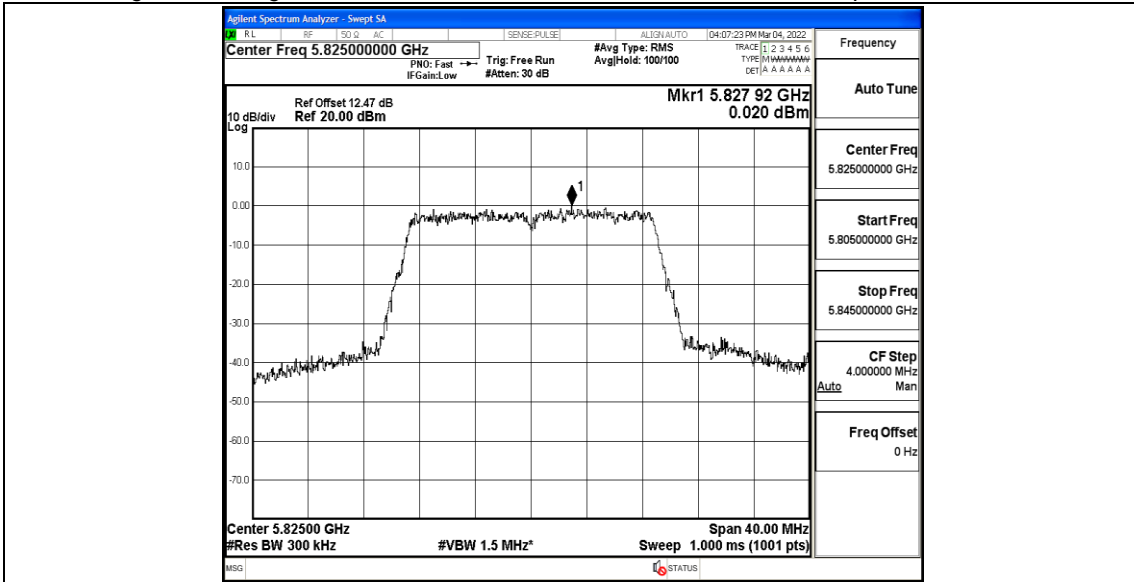


11N20MIMO\_Ant1\_5785

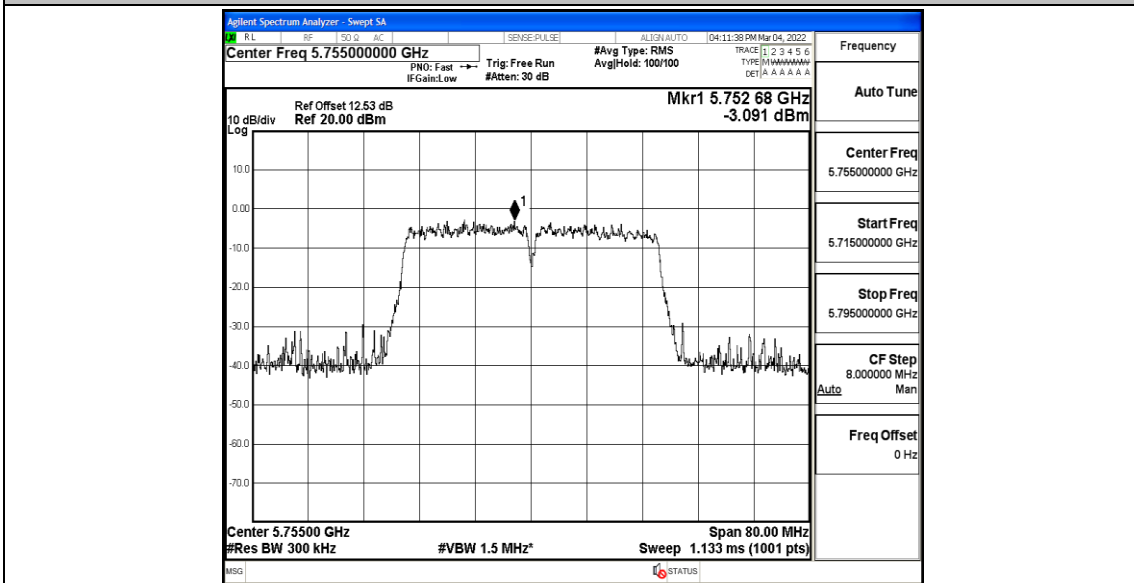


11N20MIMO\_Ant1\_5825

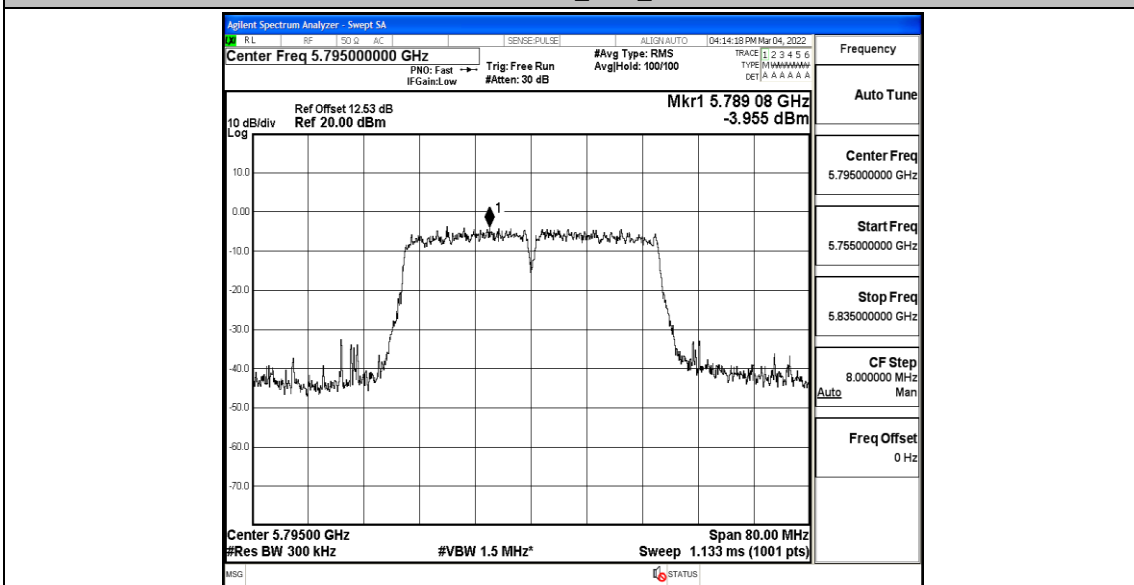




11N40MIMO\_Ant1\_5755



11N40MIMO\_Ant1\_5795

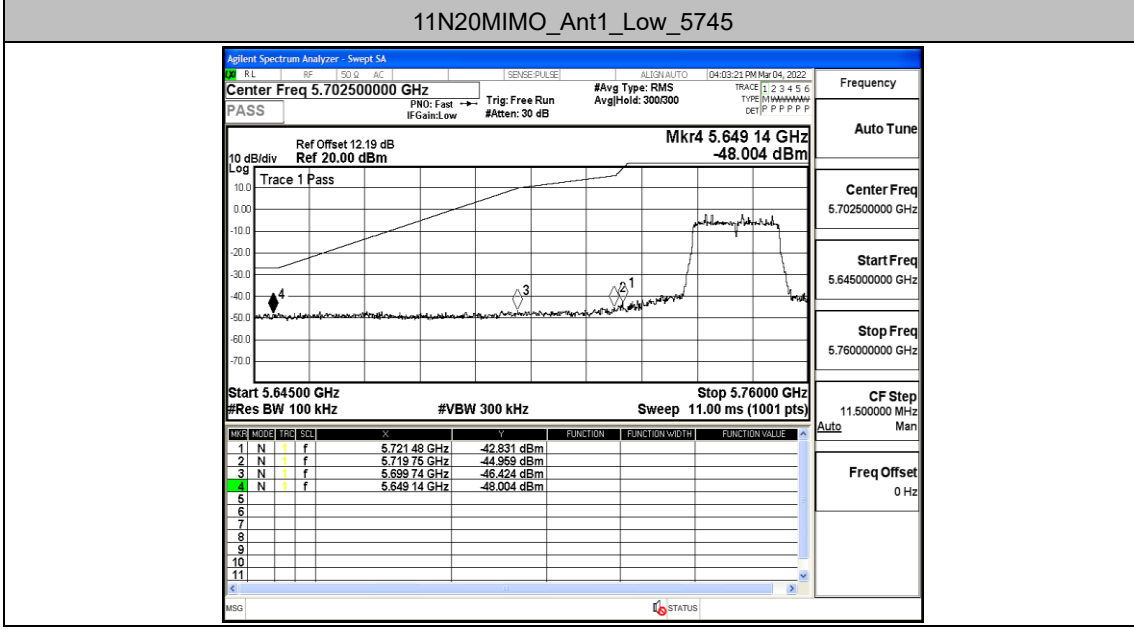
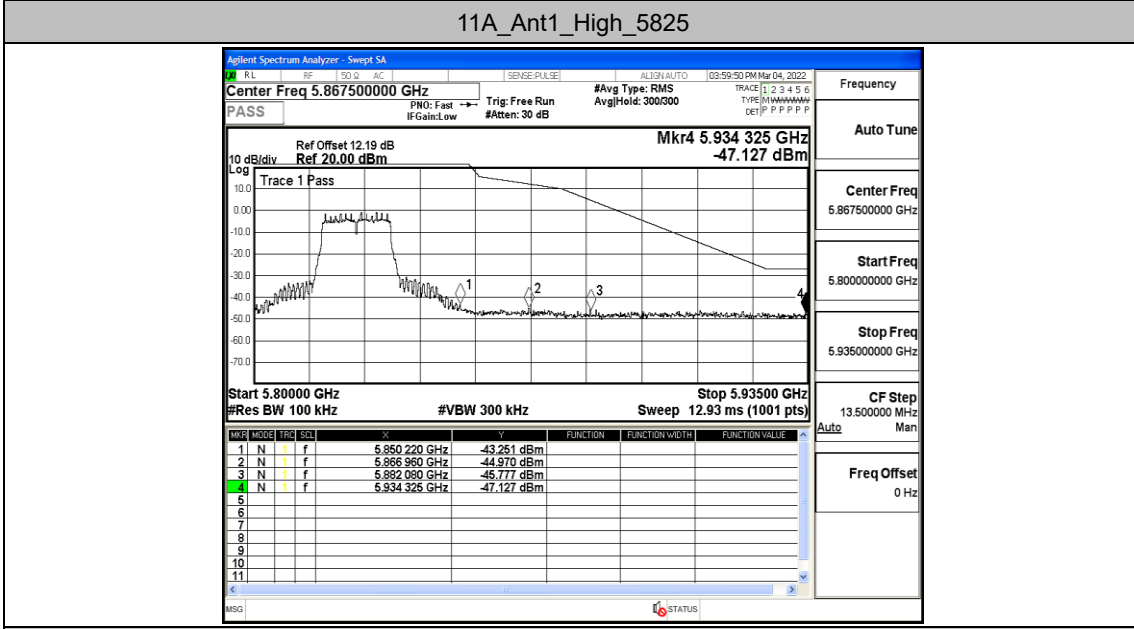
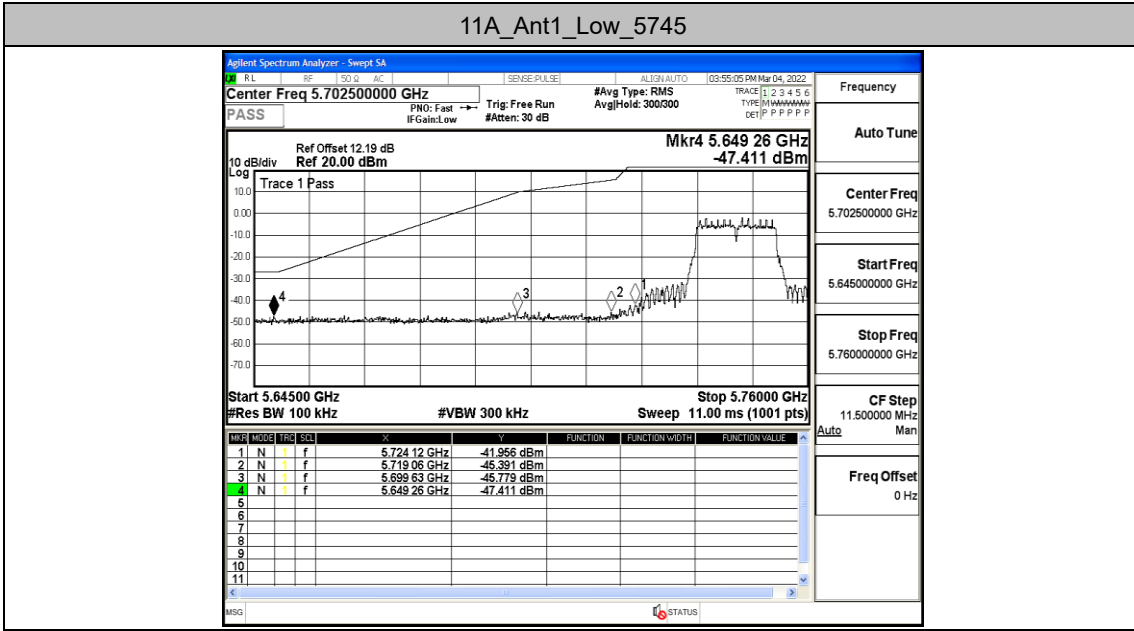


## Appendix D: Band edge measurements

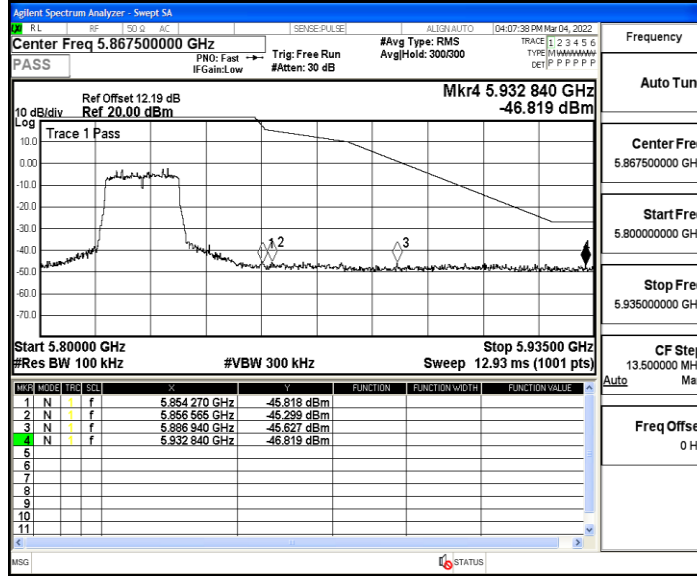
### Test Result

TestMode	Antenna	ChName	Channel	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-45.78	≤9.72	PASS
				5700~5720	-45.39	≤15.34	PASS
				5720~5725	-41.96	≤24.99	PASS
				5760~5650	-47.41	≤-27	PASS
		High	5825	5850~5855	-43.25	≤16.10	PASS
				5855~5875	-44.97	≤13.35	PASS
				5875~5925	-45.78	≤-21.76	PASS
				5925~5935	-47.13	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-46.42	≤9.81	PASS
				5700~5720	-44.96	≤15.53	PASS
				5720~5725	-42.83	≤18.96	PASS
				5760~5650	-48	≤-27	PASS
		High	5825	5850~5855	-45.82	≤25.34	PASS
				5855~5875	-45.3	≤10.44	PASS
				5875~5925	-45.63	≤-18.16	PASS
				5925~5935	-46.82	≤-27	PASS
11N40MI MO	Ant1	Low	5755	5650~5700	-46.84	≤9.26	PASS
				5700~5720	-37.09	≤15.54	PASS
				5720~5725	-35.7	≤16.97	PASS
				5780~5650	-47.97	≤-27	PASS
		High	5795	5850~5855	-46.75	≤15.66	PASS
				5855~5875	-46.1	≤10.69	PASS
				5875~5925	-46.19	≤-19.35	PASS
				5925~5935	-47.19	≤-27	PASS

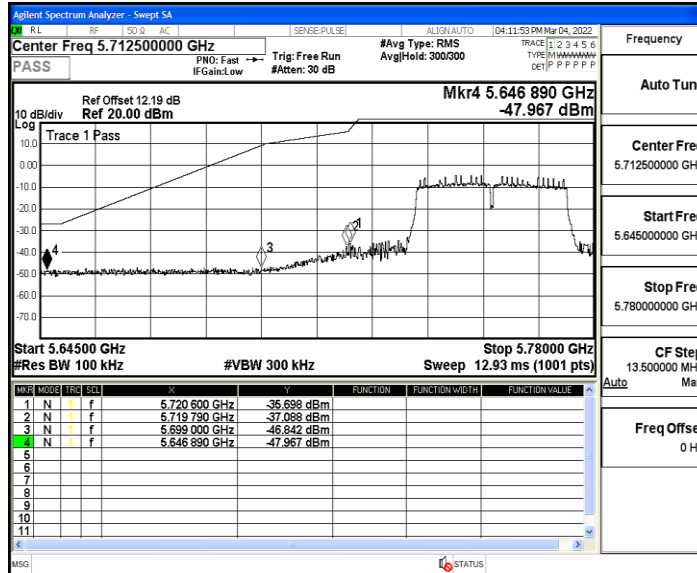
Test Graphs



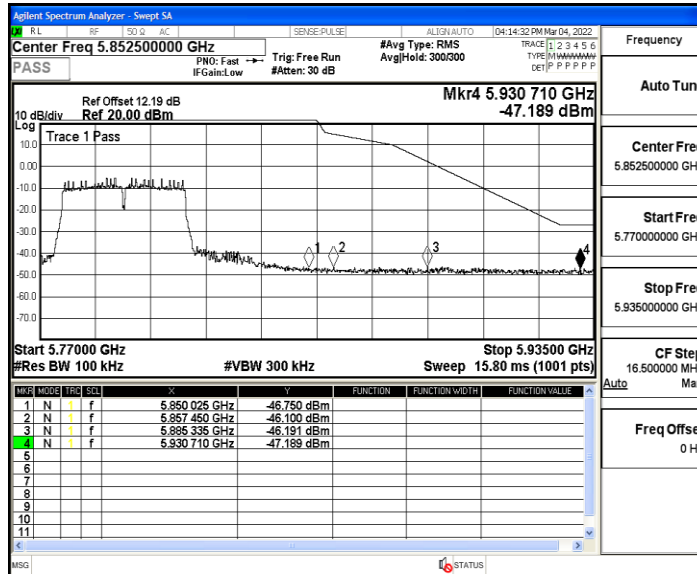
11N20MIMO\_Ant1\_High\_5825



11N40MIMO\_Ant1\_Low\_5755



11N40MIMO\_Ant1\_High\_5795



## Appendix E: Frequency Stability

### Test Result

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5745	20	132	5745.087514	5745 – 5825	PASS
5745	20	108	5745.031454	5745 – 5825	PASS
5745	50	120	5744.931799	5745 – 5825	PASS
5745	40	120	5745.058059	5745 – 5825	PASS
5745	30	120	5745.056128	5745 – 5825	PASS
5745	20	120	5745.060360	5745 – 5825	PASS
5745	10	120	5744.955400	5745 – 5825	PASS
5745	0	120	5745.057096	5745 – 5825	PASS
5745	-10	120	5745.061176	5745 – 5825	PASS
5745	-20	120	5745.054380	5745 – 5825	PASS
5745	-30	120	5744.994952	5745 – 5825	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5785	20	132	5784.936439	5745 – 5825	PASS
5785	20	108	5785.095041	5745 – 5825	PASS
5785	50	120	5785.063215	5745 – 5825	PASS
5785	40	120	5785.096237	5745 – 5825	PASS
5785	30	120	5785.080123	5745 – 5825	PASS
5785	20	120	5784.957349	5745 – 5825	PASS
5785	10	120	5784.932695	5745 – 5825	PASS
5785	0	120	5785.045712	5745 – 5825	PASS
5785	-10	120	5784.996711	5745 – 5825	PASS
5785	-20	120	5785.097252	5745 – 5825	PASS
5785	-30	120	5784.948406	5745 – 5825	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5825	20	132	5825.041552	5745 – 5825	PASS
5825	20	108	5824.975358	5745 – 5825	PASS
5825	50	120	5824.936486	5745 – 5825	PASS
5825	40	120	5824.961354	5745 – 5825	PASS
5825	30	120	5825.080429	5745 – 5825	PASS
5825	20	120	5825.093434	5745 – 5825	PASS
5825	10	120	5825.013420	5745 – 5825	PASS
5825	0	120	5824.986101	5745 – 5825	PASS
5825	-10	120	5825.019563	5745 – 5825	PASS
5825	-20	120	5825.026619	5745 – 5825	PASS
5825	-30	120	5824.976866	5745 – 5825	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5755	20	132	5755.057019	5745 – 5825	PASS
5755	20	108	5755.009196	5745 – 5825	PASS
5755	50	120	5754.939657	5745 – 5825	PASS
5755	40	120	5754.934508	5745 – 5825	PASS
5755	30	120	5754.935493	5745 – 5825	PASS
5755	20	120	5755.091644	5745 – 5825	PASS
5755	10	120	5754.979055	5745 – 5825	PASS
5755	0	120	5755.067570	5745 – 5825	PASS
5755	-10	120	5755.023372	5745 – 5825	PASS
5755	-20	120	5754.922766	5745 – 5825	PASS
5755	-30	120	5754.983772	5745 – 5825	PASS

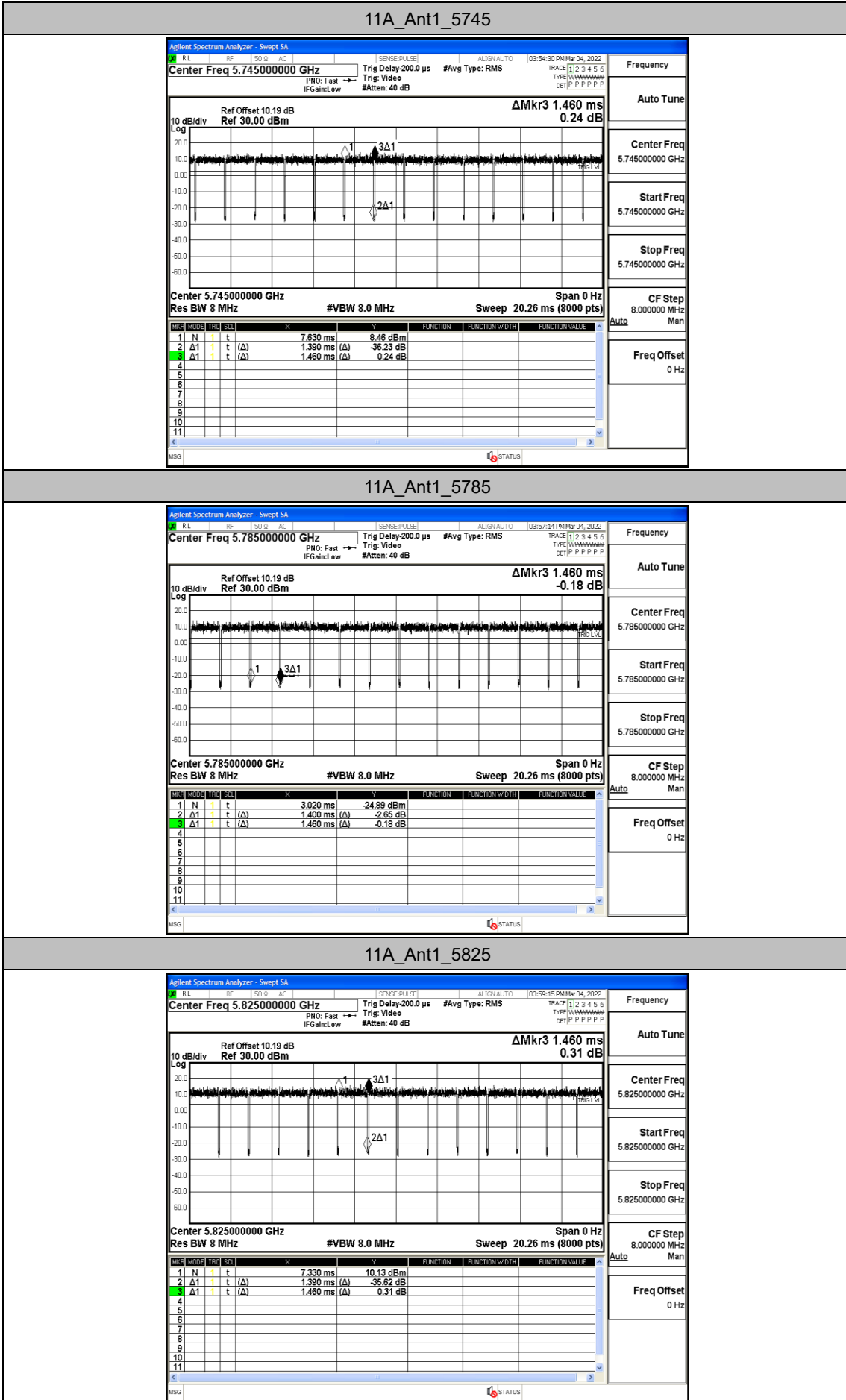
Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5795	20	132	5794.986822	5745 – 5825	PASS
5795	20	108	5795.098371	5745 – 5825	PASS
5795	50	120	5794.961393	5745 – 5825	PASS
5795	40	120	5795.038187	5745 – 5825	PASS
5795	30	120	5795.063815	5745 – 5825	PASS
5795	20	120	5794.961618	5745 – 5825	PASS
5795	10	120	5795.009808	5745 – 5825	PASS
5795	0	120	5794.997699	5745 – 5825	PASS
5795	-10	120	5794.924400	5745 – 5825	PASS
5795	-20	120	5794.902735	5745 – 5825	PASS
5795	-30	120	5795.091565	5745 – 5825	PASS

## Appendix F: Duty Cycle

### Test Result

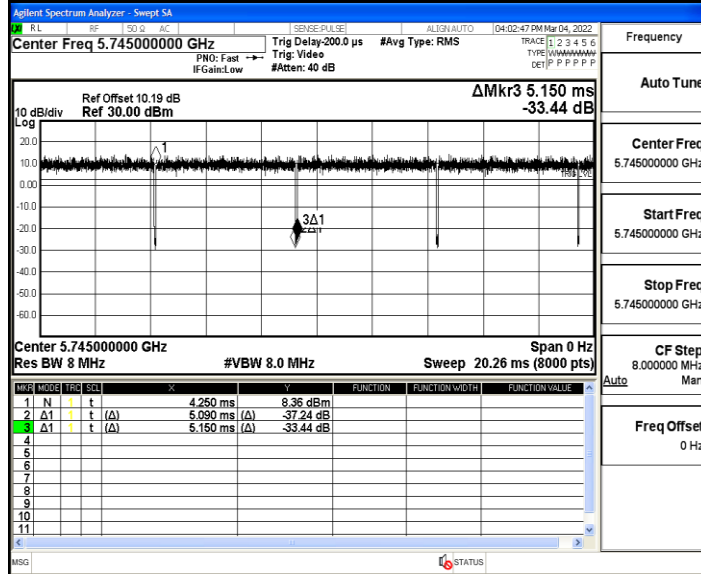
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5745	1.39	1.46	95.21
		5785	1.40	1.46	95.89
		5825	1.39	1.46	95.21
11N20SISO	Ant1	5745	5.09	5.15	98.83
		5785	5.08	5.15	98.64
		5825	5.09	5.16	98.64
11N40SISO	Ant1	5755	2.47	2.54	97.24
		5795	2.47	2.54	97.24

### Test Graphs

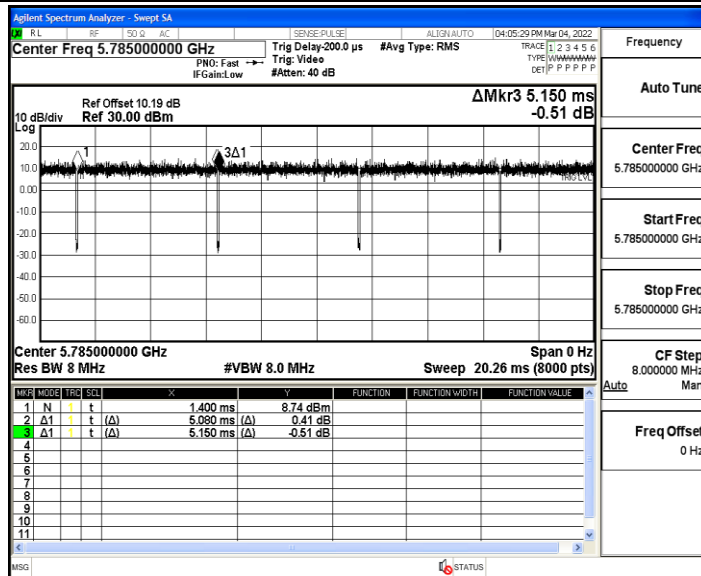




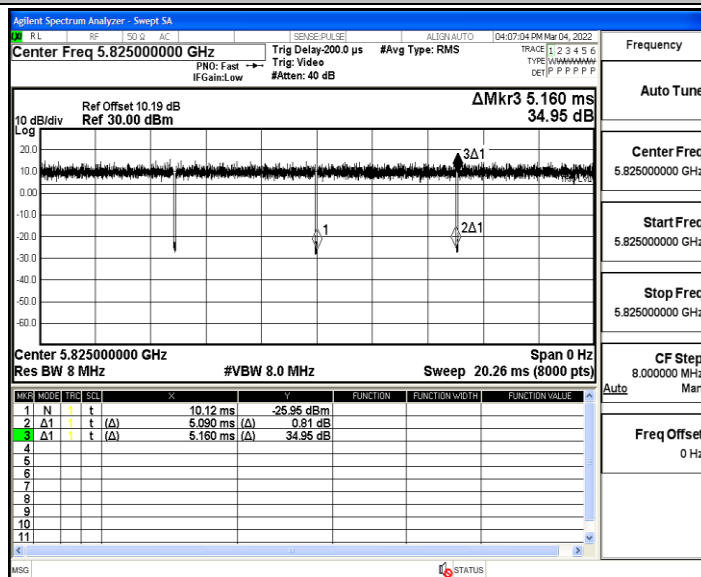
11N20MIMO\_Ant1\_5745



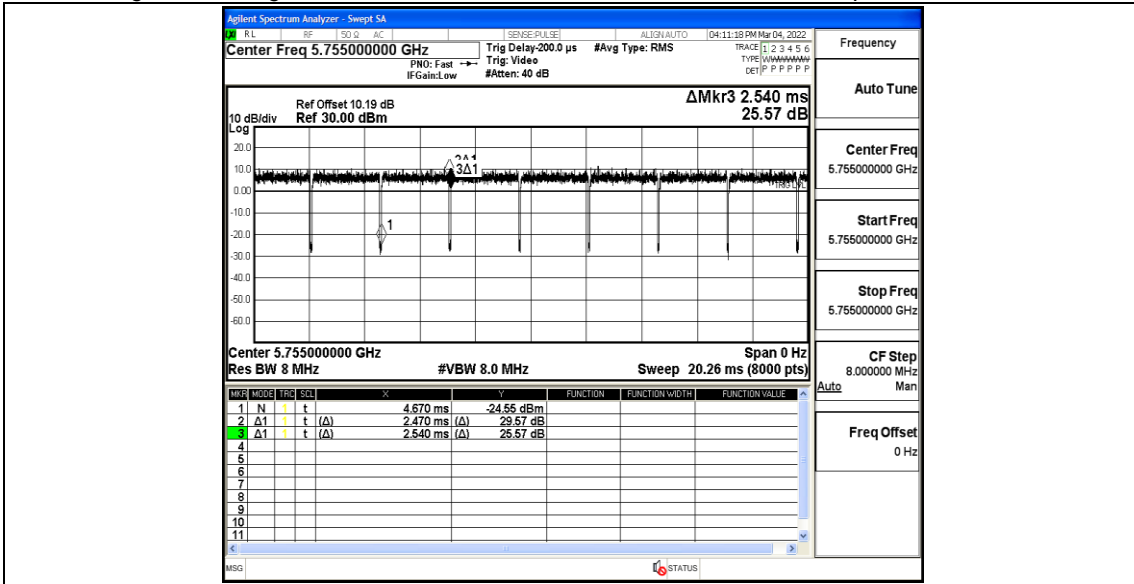
11N20MIMO\_Ant1\_5785



11N20MIMO\_Ant1\_5825



11N40MIMO\_Ant1\_5755



11N40MIMO\_Ant1\_5795

