

RF Test Data for RLAN(5.2G) (Conducted Measurement)

Product Name: Space Automatic Pet Feeder

Trade Mark: PETLIBRO

Test Model: PLAF107

FCC ID: 2A3DE-PLAF107

Environmental Conditions

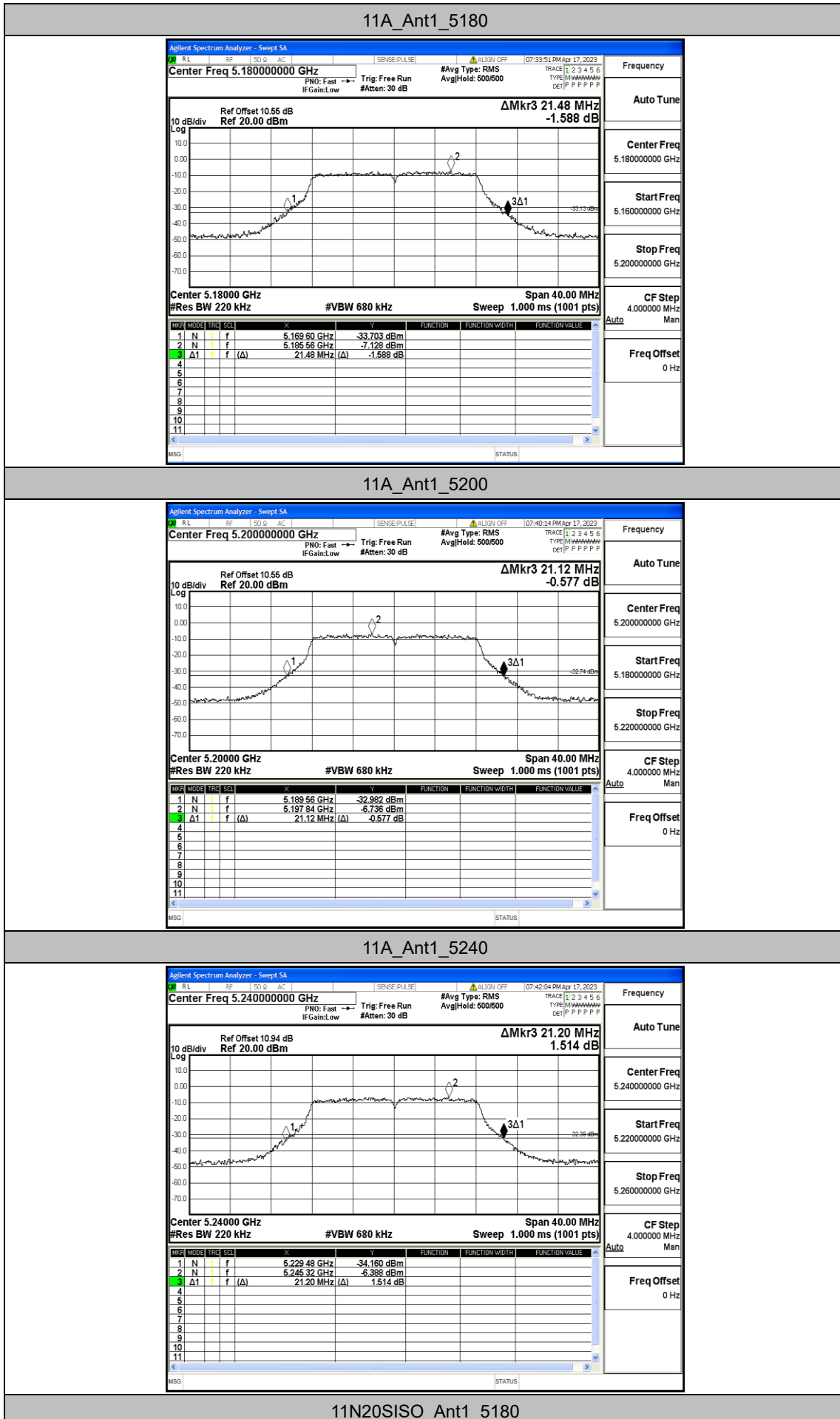
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

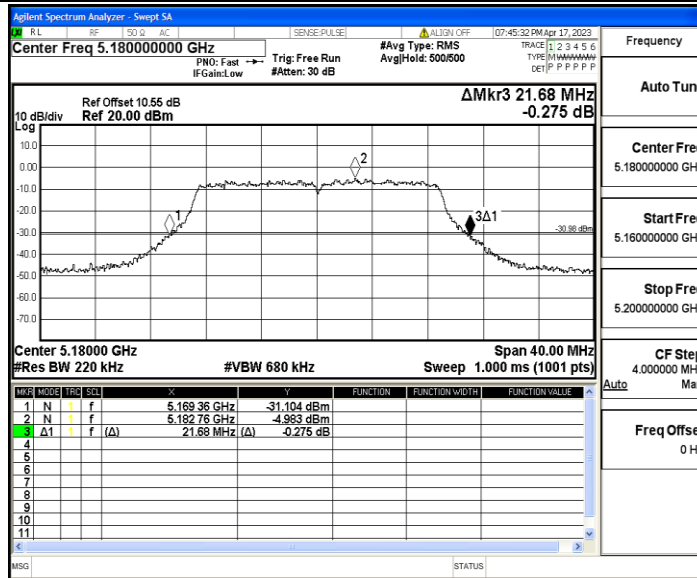
Appendix A1: Emission Bandwidth

Test Result

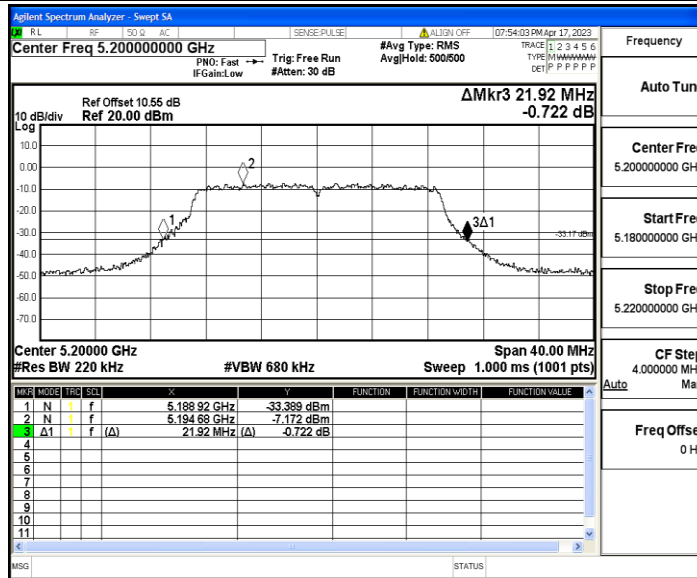
TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	21.480	5169.600	5191.080	---	---
		5200	21.120	5189.560	5210.680	---	---
		5240	21.200	5229.480	5250.680	---	---
11N20SISO	Ant1	5180	21.680	5169.360	5191.040	---	---
		5200	21.920	5188.920	5210.840	---	---
		5240	21.800	5229.240	5251.040	---	---
11N40SISO	Ant1	5190	38.960	5170.640	5209.600	---	---
		5230	38.800	5210.720	5249.520	---	---

Test Graphs

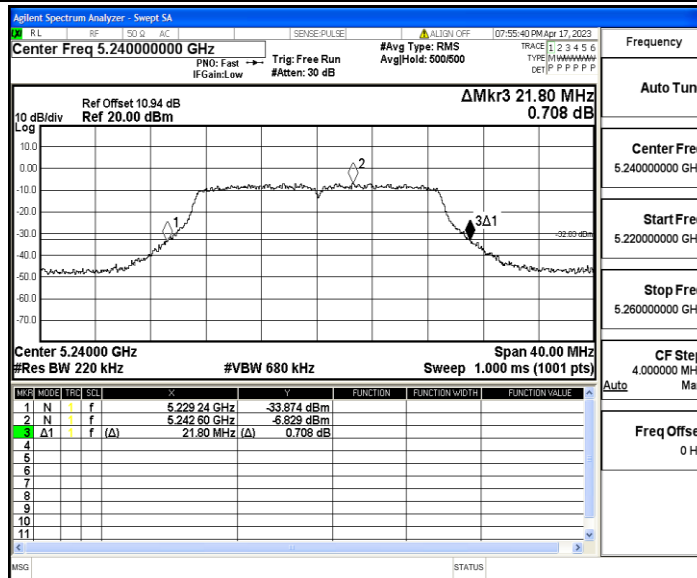




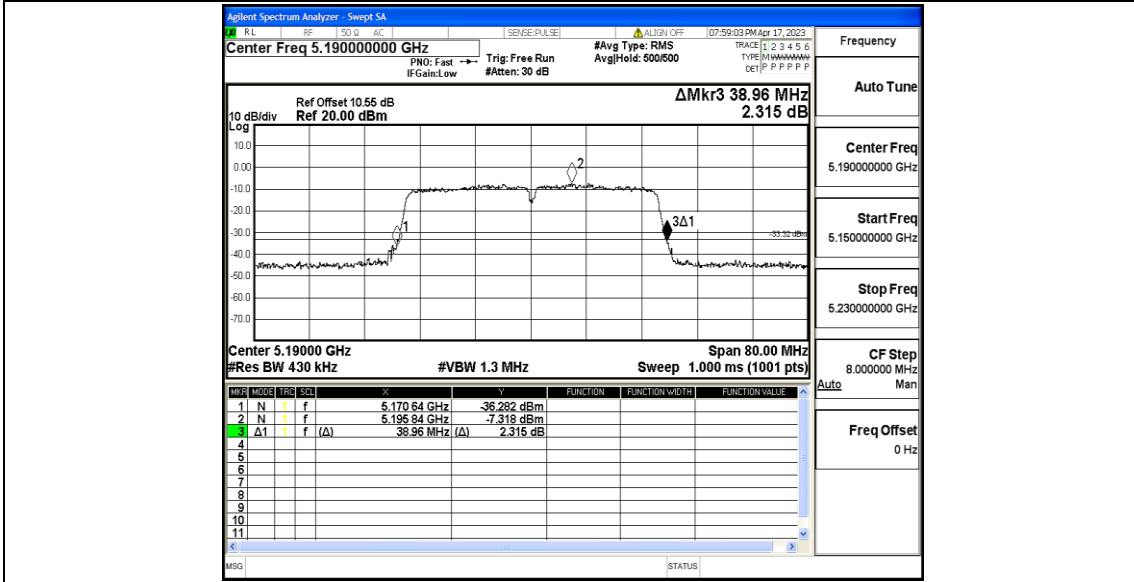
11N20SISO_Ant1_5200



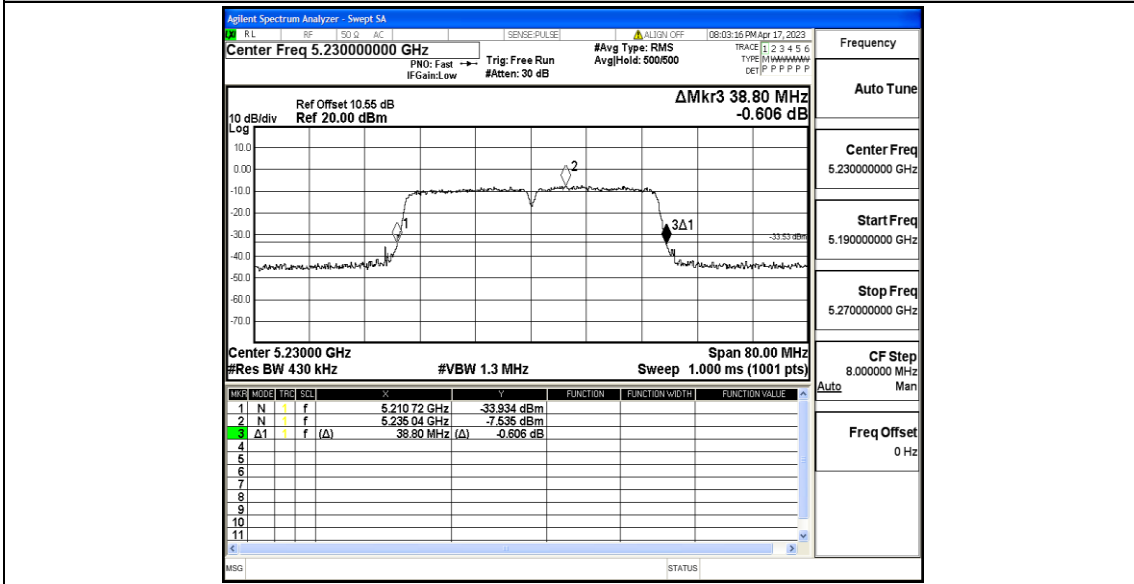
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230

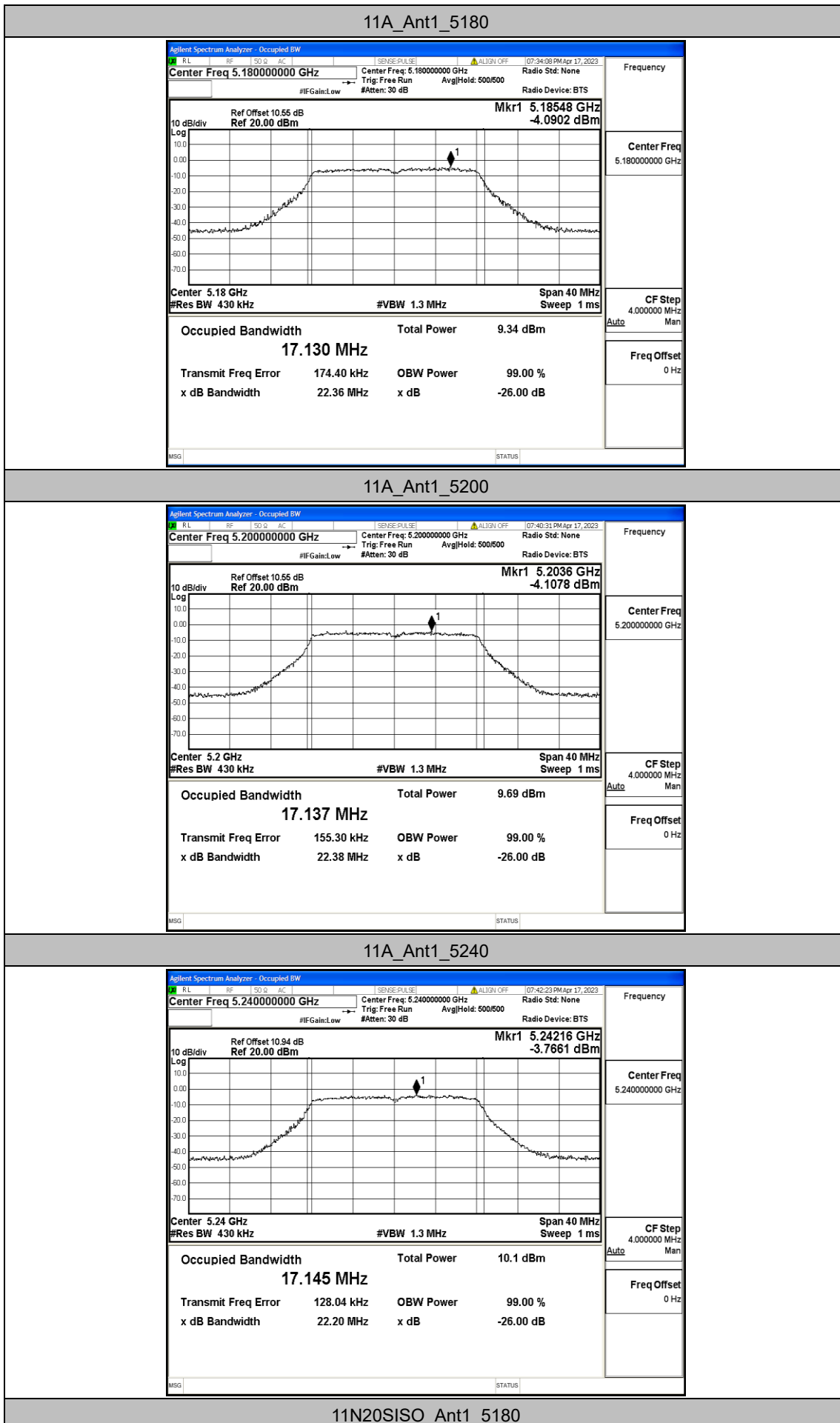


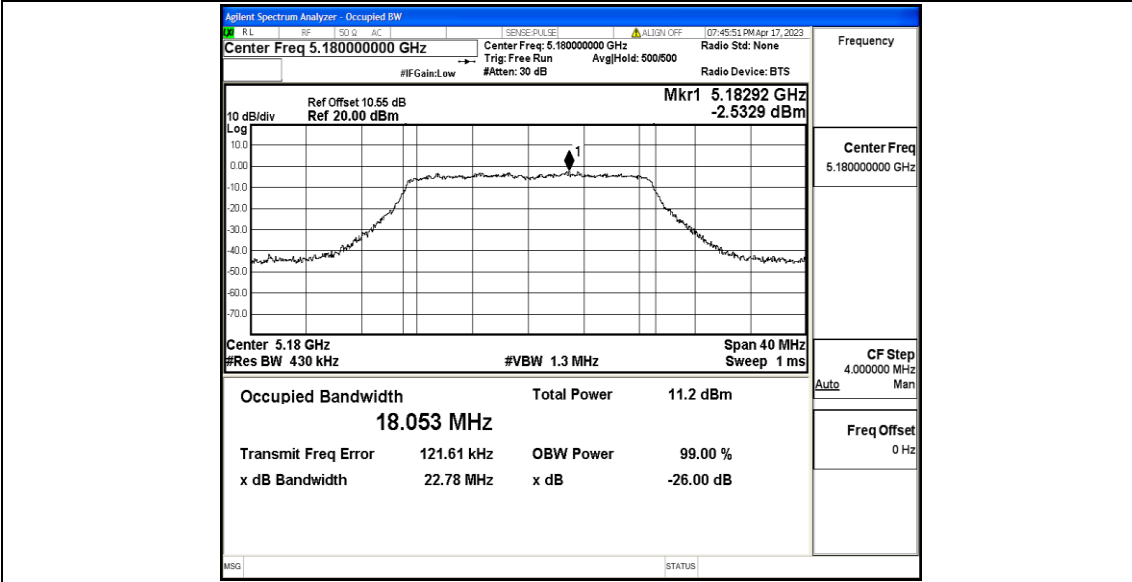
Appendix A2: Occupied channel bandwidth

Test Result

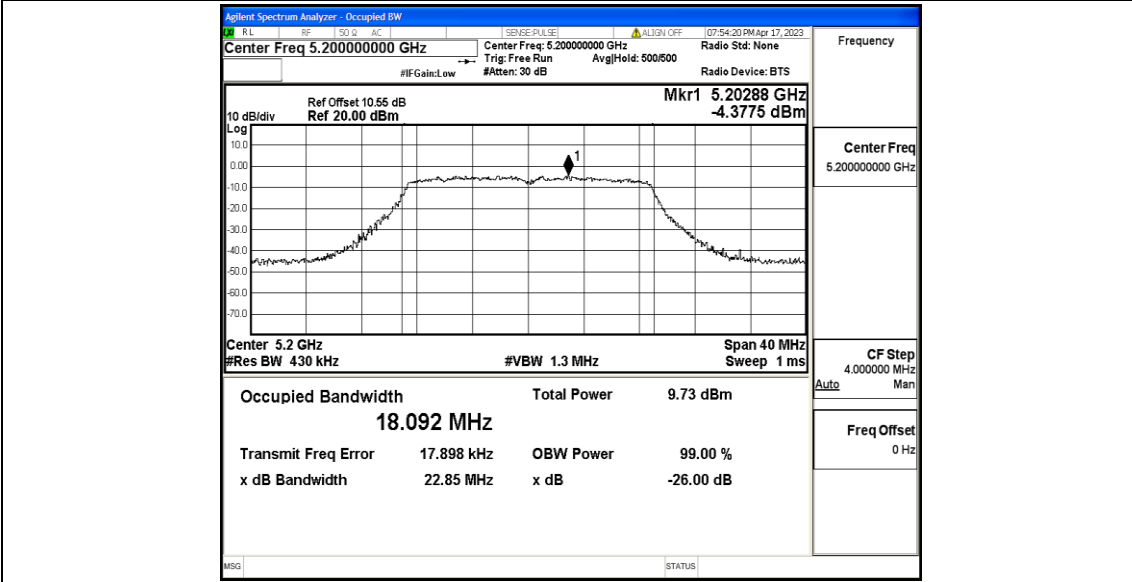
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.130	5171.6094	5188.7394	---	---
		5200	17.137	5191.5868	5208.7238	---	---
		5240	17.145	5231.5555	5248.7005	---	---
11N20SISO	Ant1	5180	18.053	5171.0951	5189.1481	---	---
		5200	18.092	5190.9719	5209.0639	---	---
		5240	18.045	5231.1192	5249.1642	---	---
11N40SISO	Ant1	5190	35.825	5172.2703	5208.0953	---	---
		5230	35.929	5212.2144	5248.1434	---	---

Test Graphs

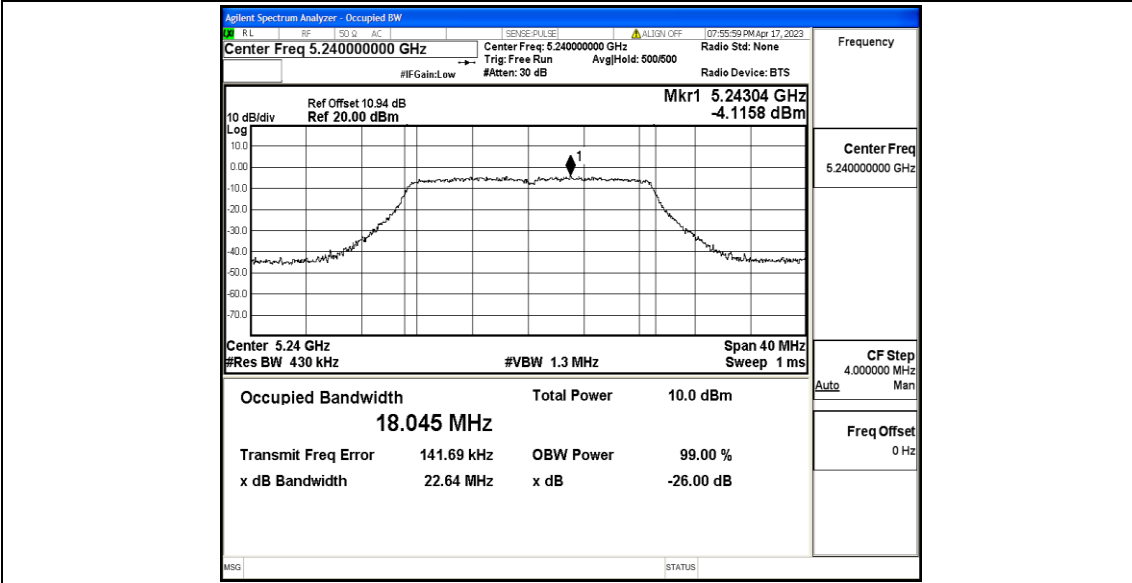




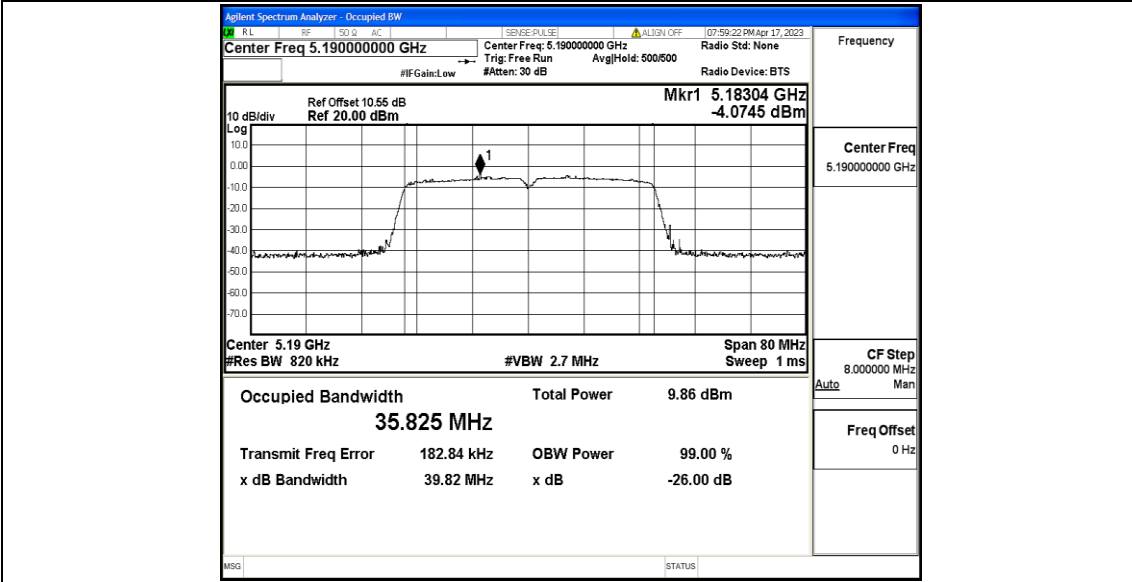
11N20SISO_Ant1_5200



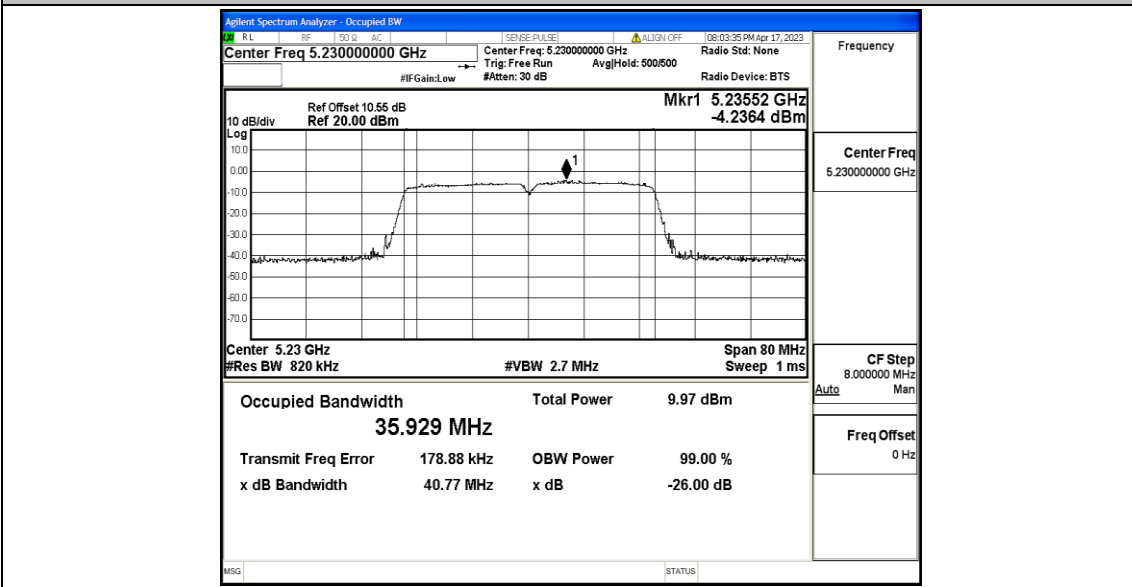
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



Appendix B: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	2.57	≤23.98	PASS
		5200	2.99	≤23.98	PASS
		5240	3.43	≤23.98	PASS
11N20SISO	Ant1	5180	2.29	≤23.98	PASS
		5200	3.02	≤23.98	PASS
		5240	3.30	≤23.98	PASS
11N40SISO	Ant1	5190	2.59	≤23.98	PASS
		5230	2.78	≤23.98	PASS

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

Appendix C: Maximum power spectral density

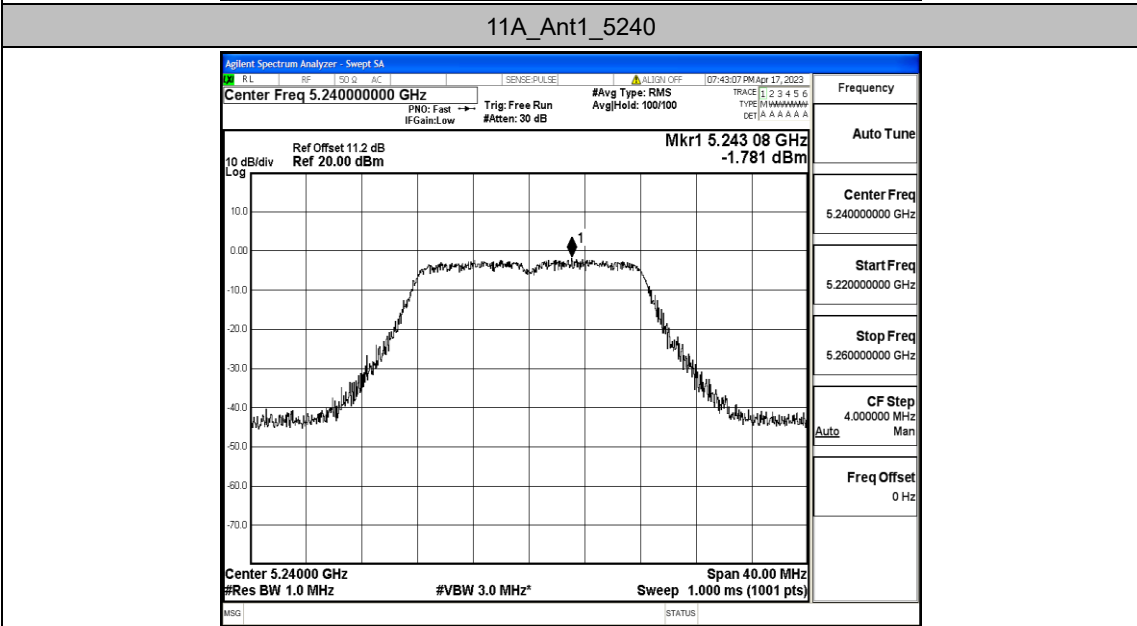
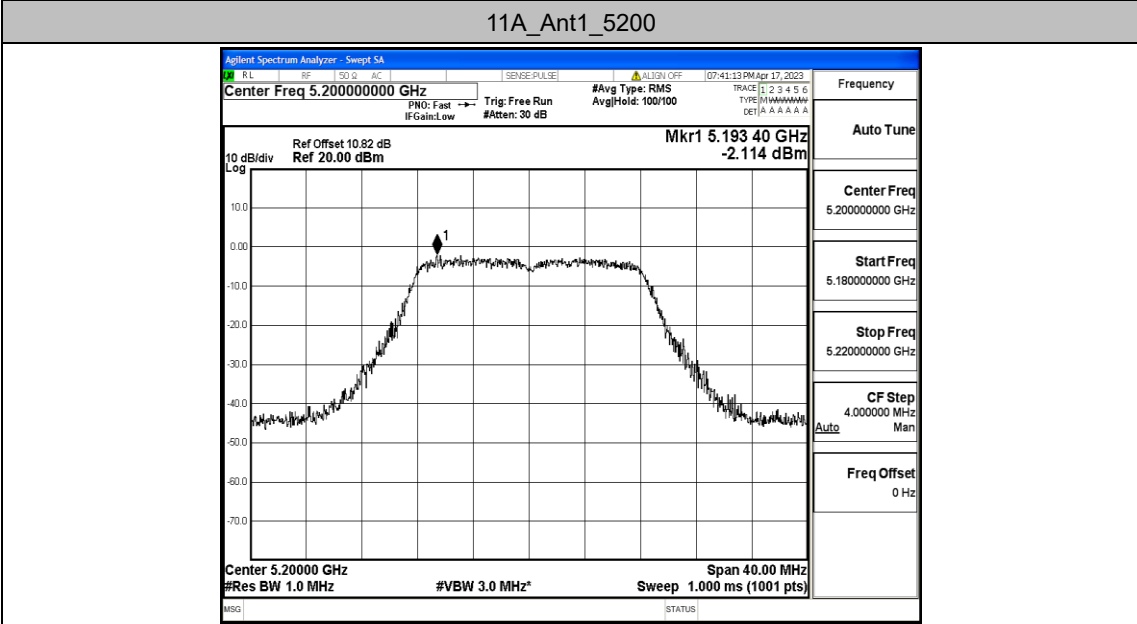
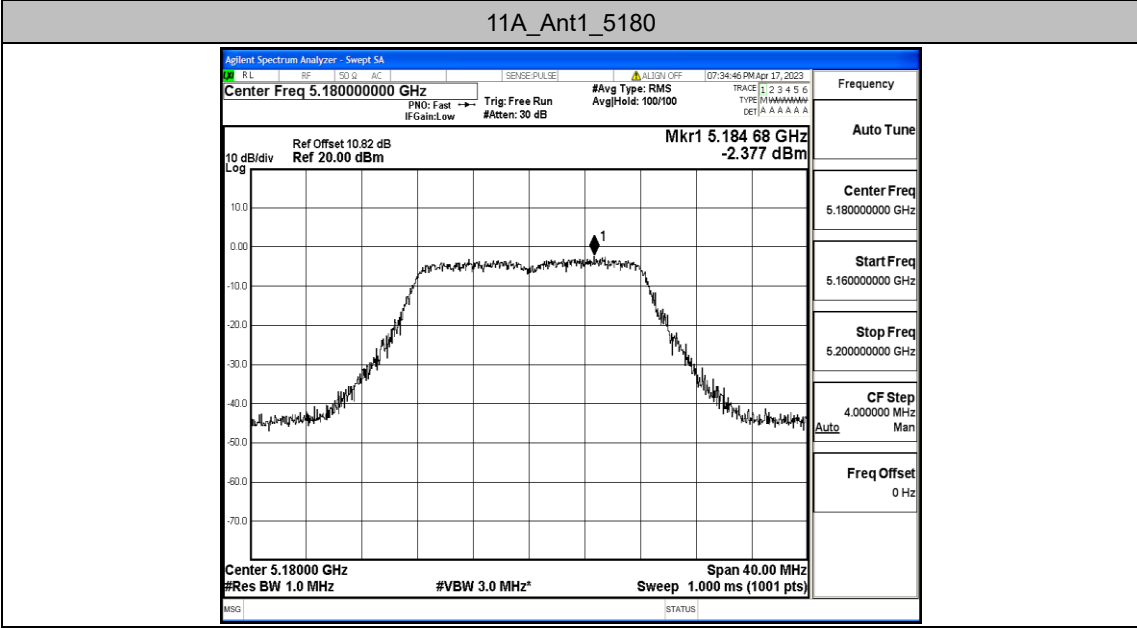
Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-2.38	≤11.00	PASS
		5200	-2.11	≤11.00	PASS
		5240	-1.78	≤11.00	PASS
11N20SISO	Ant1	5180	-3.64	≤11.00	PASS
		5200	-2.81	≤11.00	PASS
		5240	-2.69	≤11.00	PASS
11N40SISO	Ant1	5190	-5.89	≤11.00	PASS
		5230	-4.85	≤11.00	PASS

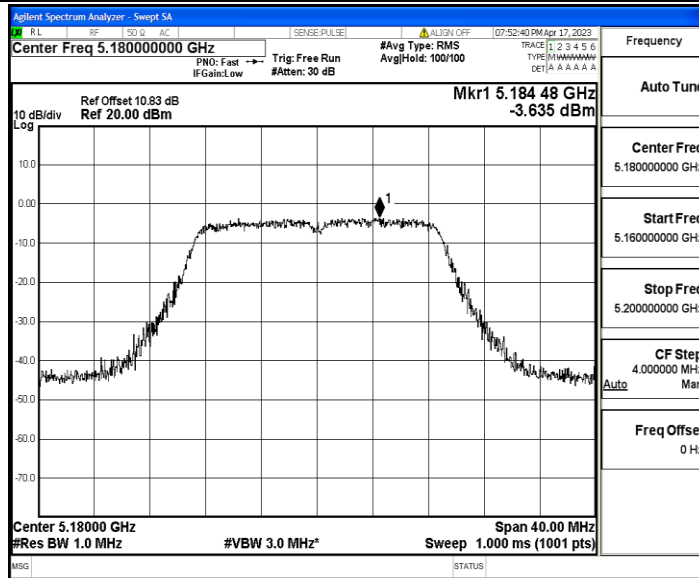
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

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

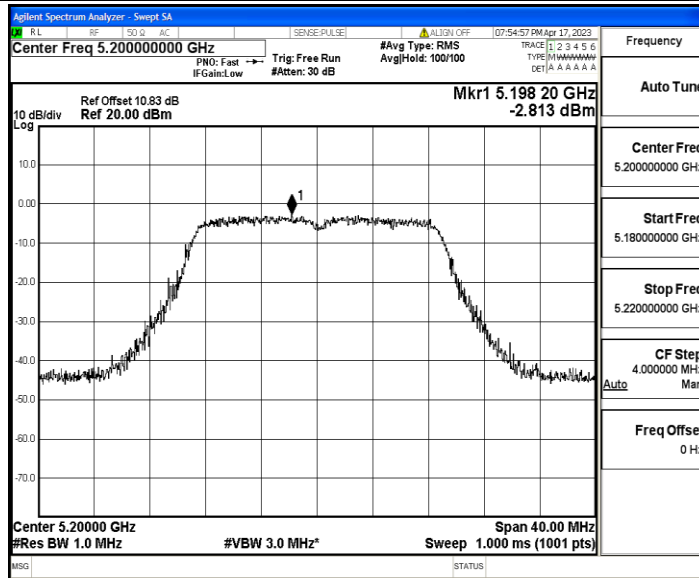
Test Graphs



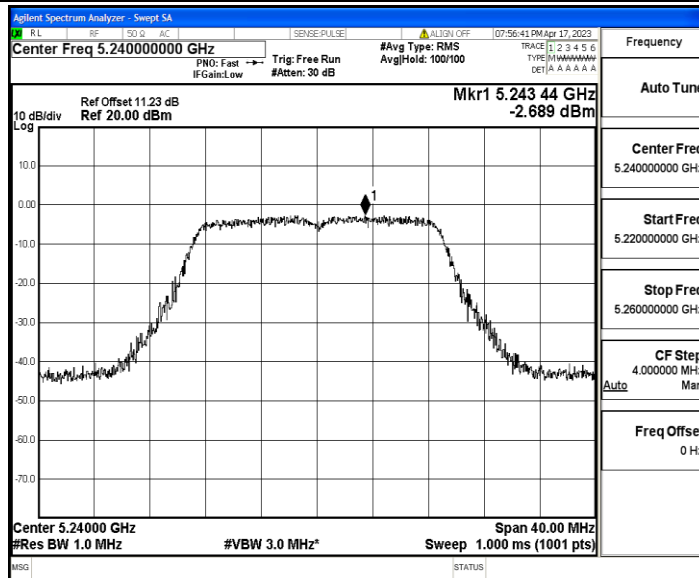
11N20SISO_Ant1_5180



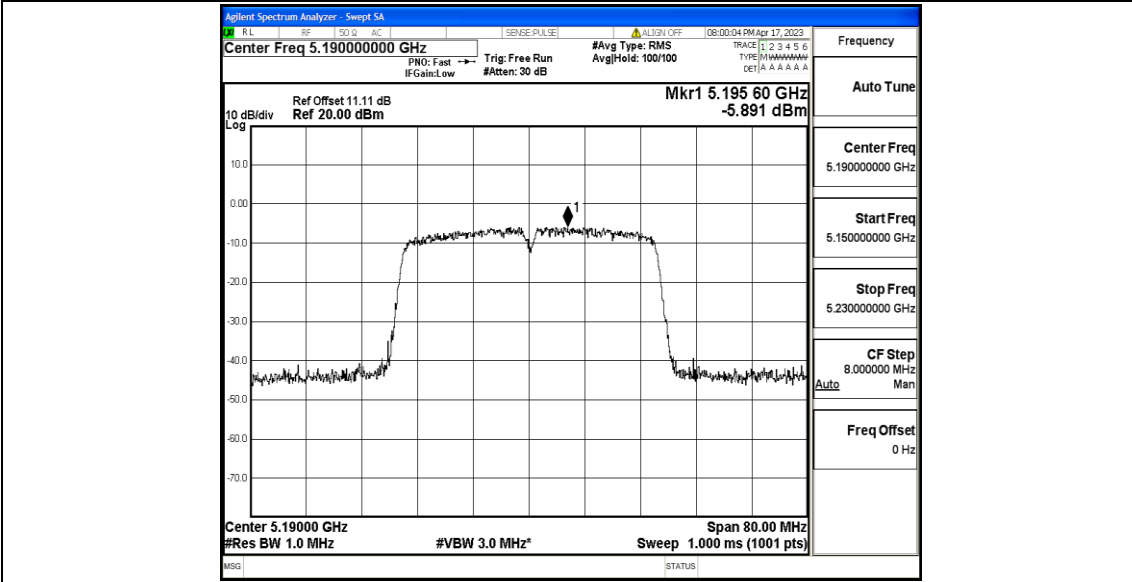
11N20SISO_Ant1_5200



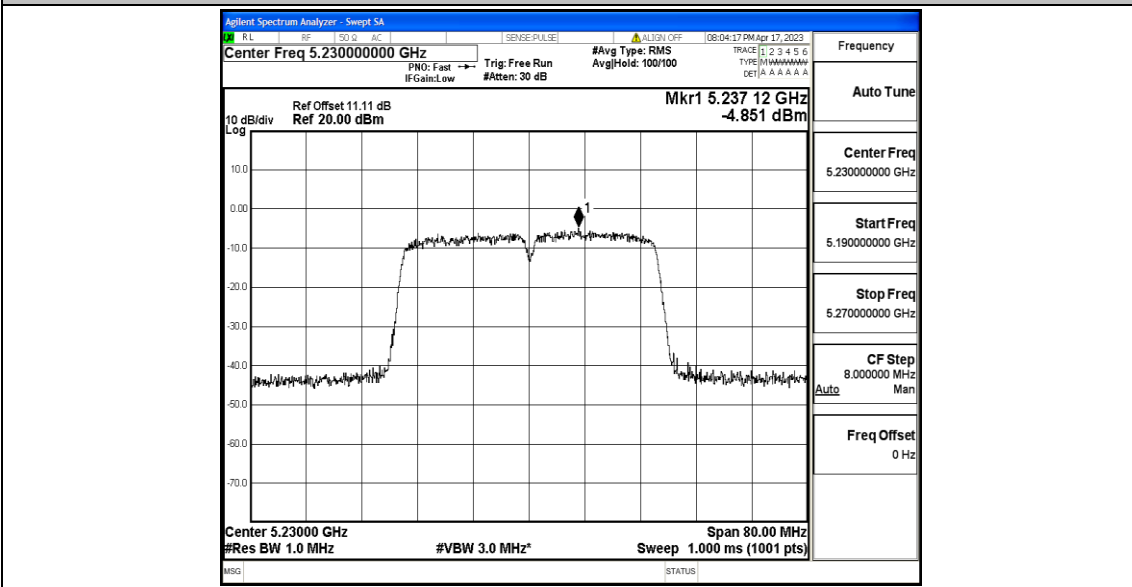
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230

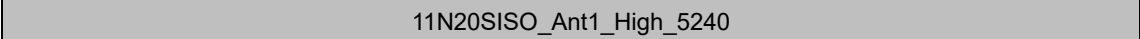
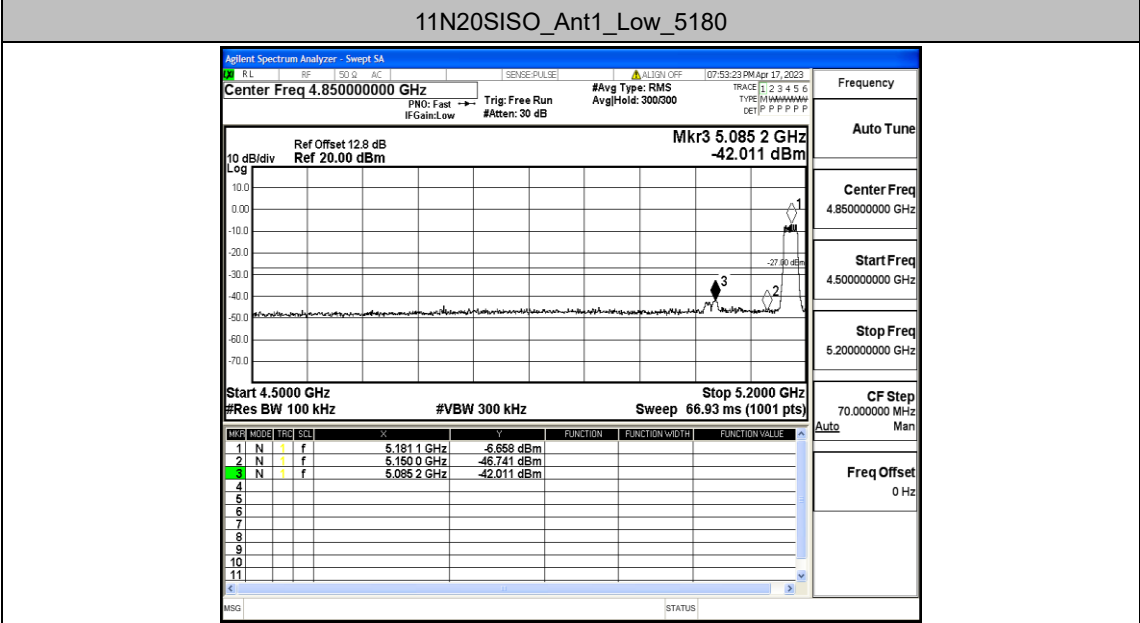
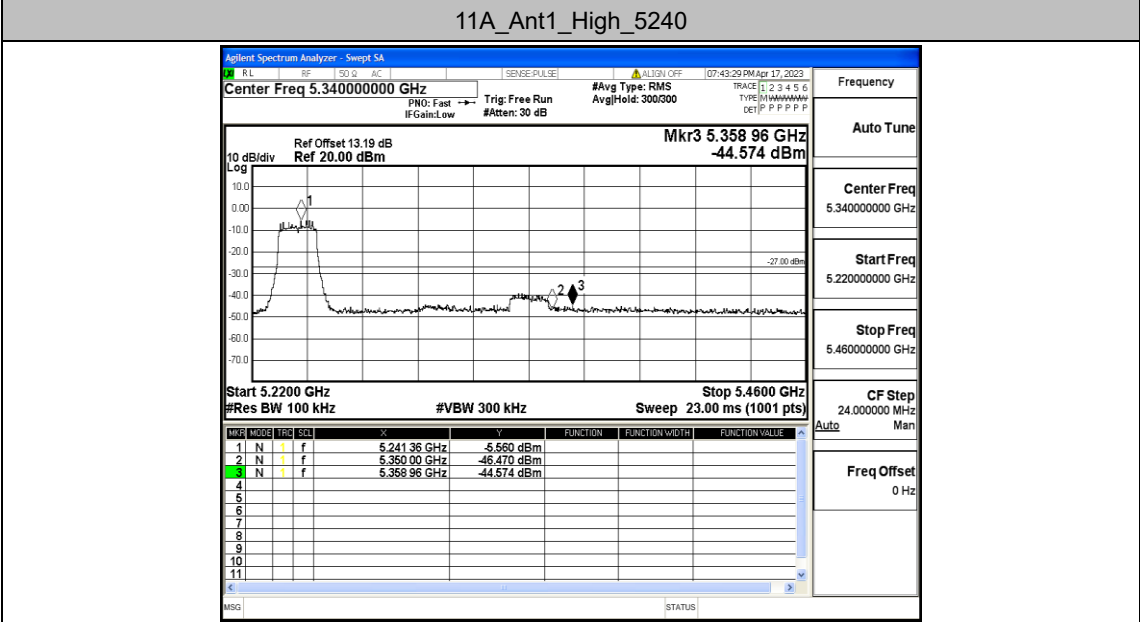
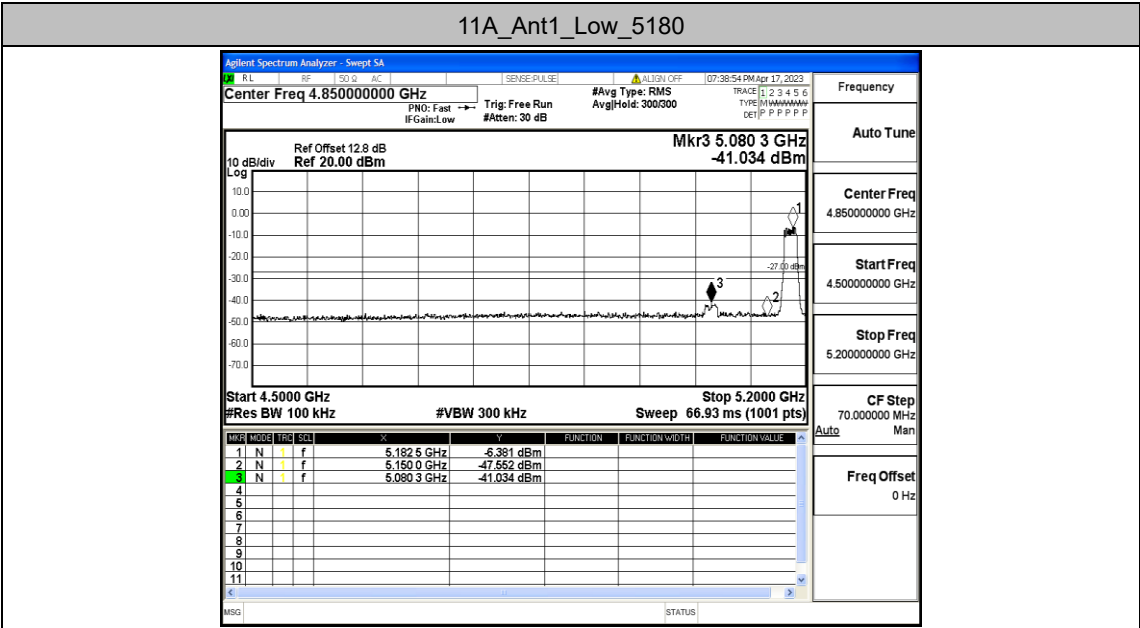


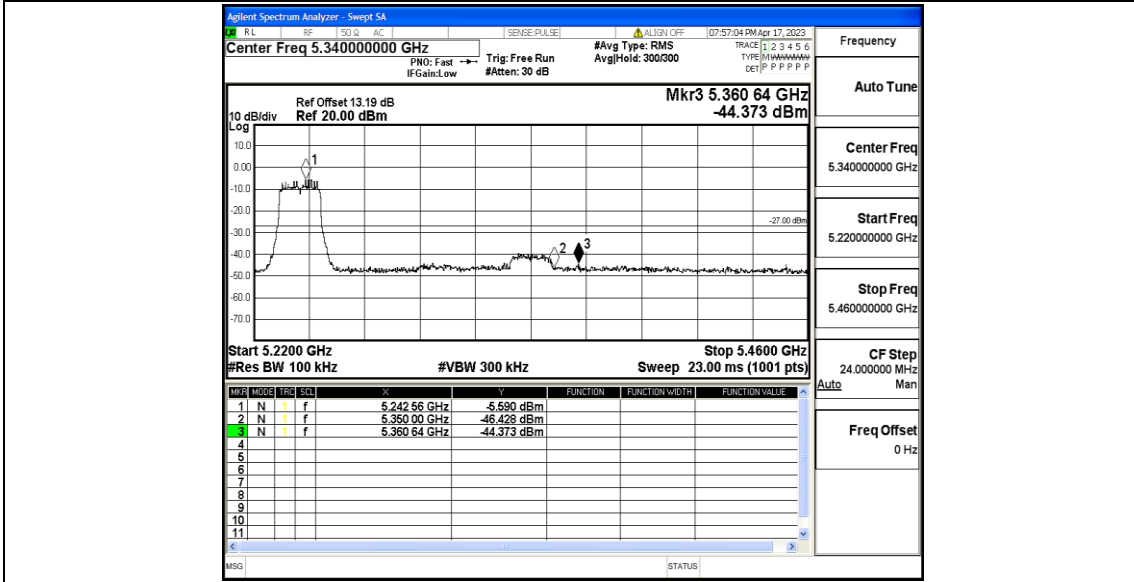
Appendix D: Band edge measurements

Test Result

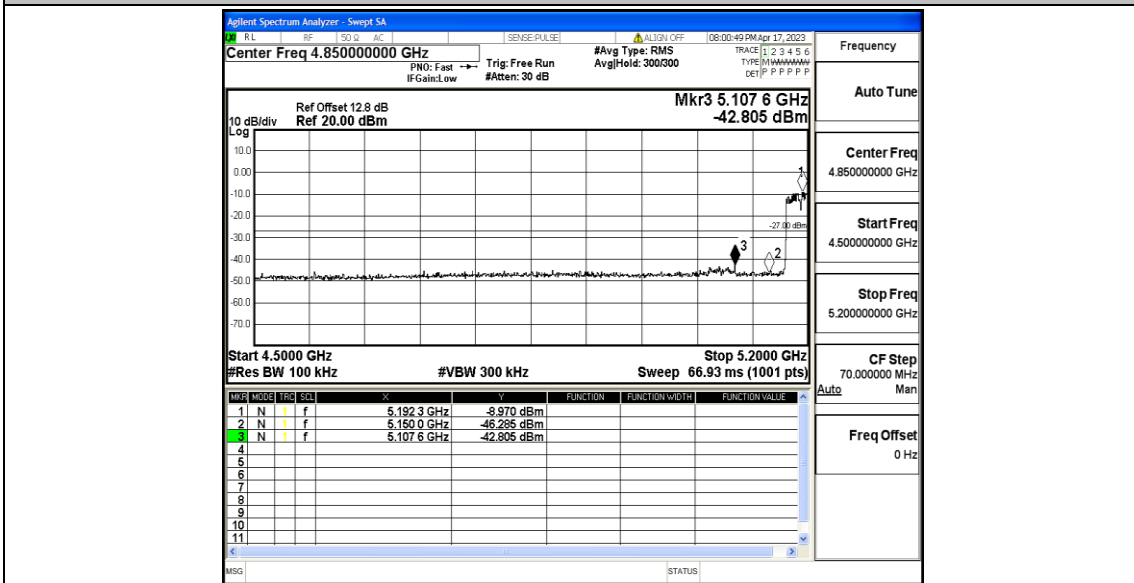
TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-41.03	≤ -27	PASS
		High	5240	-44.57	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-42.01	≤ -27	PASS
		High	5240	-44.37	≤ -27	PASS
11N40SISO	Ant1	Low	5190	-42.81	≤ -27	PASS
		High	5230	-44.93	≤ -27	PASS

Test Graphs

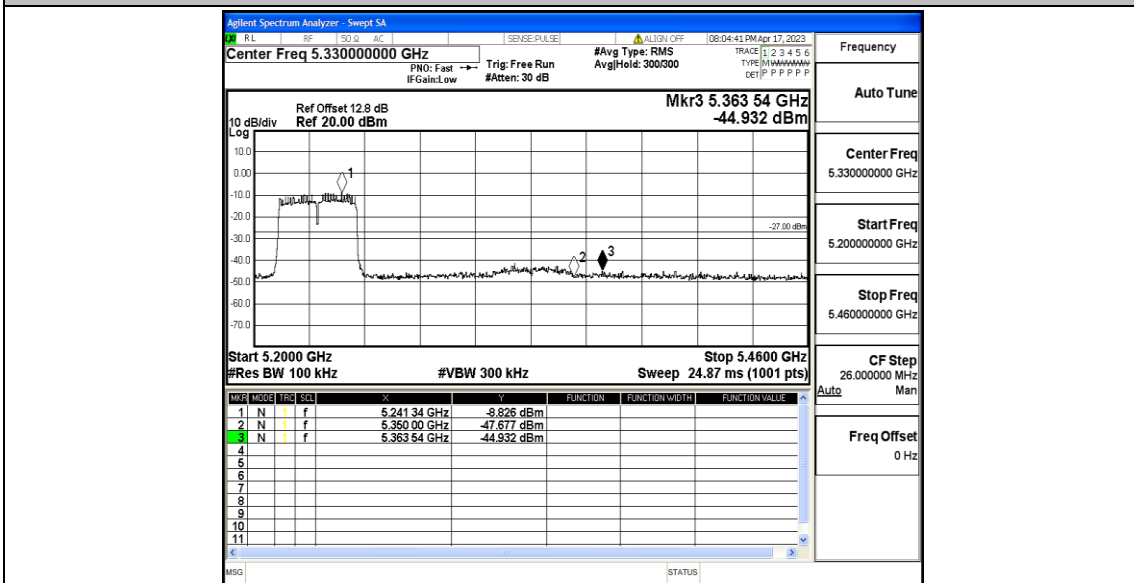




11N40SISO_Ant1_Low_5190



11N40SISO_Ant1_High_5230



Appendix E: Frequency Stability

Test Result

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	132	5180.068918	5150 – 5250	PASS
5180	20	108	5179.917996	5150 – 5250	PASS
5180	50	120	5180.046890	5150 – 5250	PASS
5180	40	120	5180.062548	5150 – 5250	PASS
5180	30	120	5179.908116	5150 – 5250	PASS
5180	20	120	5180.038832	5150 – 5250	PASS
5180	10	120	5180.074495	5150 – 5250	PASS
5180	0	120	5179.979239	5150 – 5250	PASS
5180	-10	120	5180.091764	5150 – 5250	PASS
5180	-20	120	5179.927566	5150 – 5250	PASS
5180	-30	120	5180.019378	5150 – 5250	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5200	20	132	5200.061562	5150 – 5250	PASS
5200	20	108	5200.089213	5150 – 5250	PASS
5200	50	120	5199.931066	5150 – 5250	PASS
5200	40	120	5199.944204	5150 – 5250	PASS
5200	30	120	5200.039037	5150 – 5250	PASS
5200	20	120	5200.090384	5150 – 5250	PASS
5200	10	120	5199.907554	5150 – 5250	PASS
5200	0	120	5200.034472	5150 – 5250	PASS
5200	-10	120	5199.940006	5150 – 5250	PASS
5200	-20	120	5200.061163	5150 – 5250	PASS
5200	-30	120	5200.007965	5150 – 5250	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	132	5240.096053	5150 – 5250	PASS
5240	20	108	5239.998614	5150 – 5250	PASS
5240	50	120	5240.040239	5150 – 5250	PASS
5240	40	120	5239.941029	5150 – 5250	PASS
5240	30	120	5239.931948	5150 – 5250	PASS
5240	20	120	5240.001652	5150 – 5250	PASS
5240	10	120	5240.008304	5150 – 5250	PASS
5240	0	120	5239.943841	5150 – 5250	PASS
5240	-10	120	5239.954013	5150 – 5250	PASS
5240	-20	120	5239.991491	5150 – 5250	PASS
5240	-30	120	5239.967989	5150 – 5250	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5190	20	132	5190.049065	5150 – 5250	PASS
5190	20	108	5189.957513	5150 – 5250	PASS
5190	50	120	5189.925181	5150 – 5250	PASS
5190	40	120	5189.935140	5150 – 5250	PASS
5190	30	120	5190.000865	5150 – 5250	PASS
5190	20	120	5189.950092	5150 – 5250	PASS
5190	10	120	5189.973680	5150 – 5250	PASS
5190	0	120	5190.058343	5150 – 5250	PASS
5190	-10	120	5190.096619	5150 – 5250	PASS
5190	-20	120	5189.900767	5150 – 5250	PASS
5190	-30	120	5189.938666	5150 – 5250	PASS

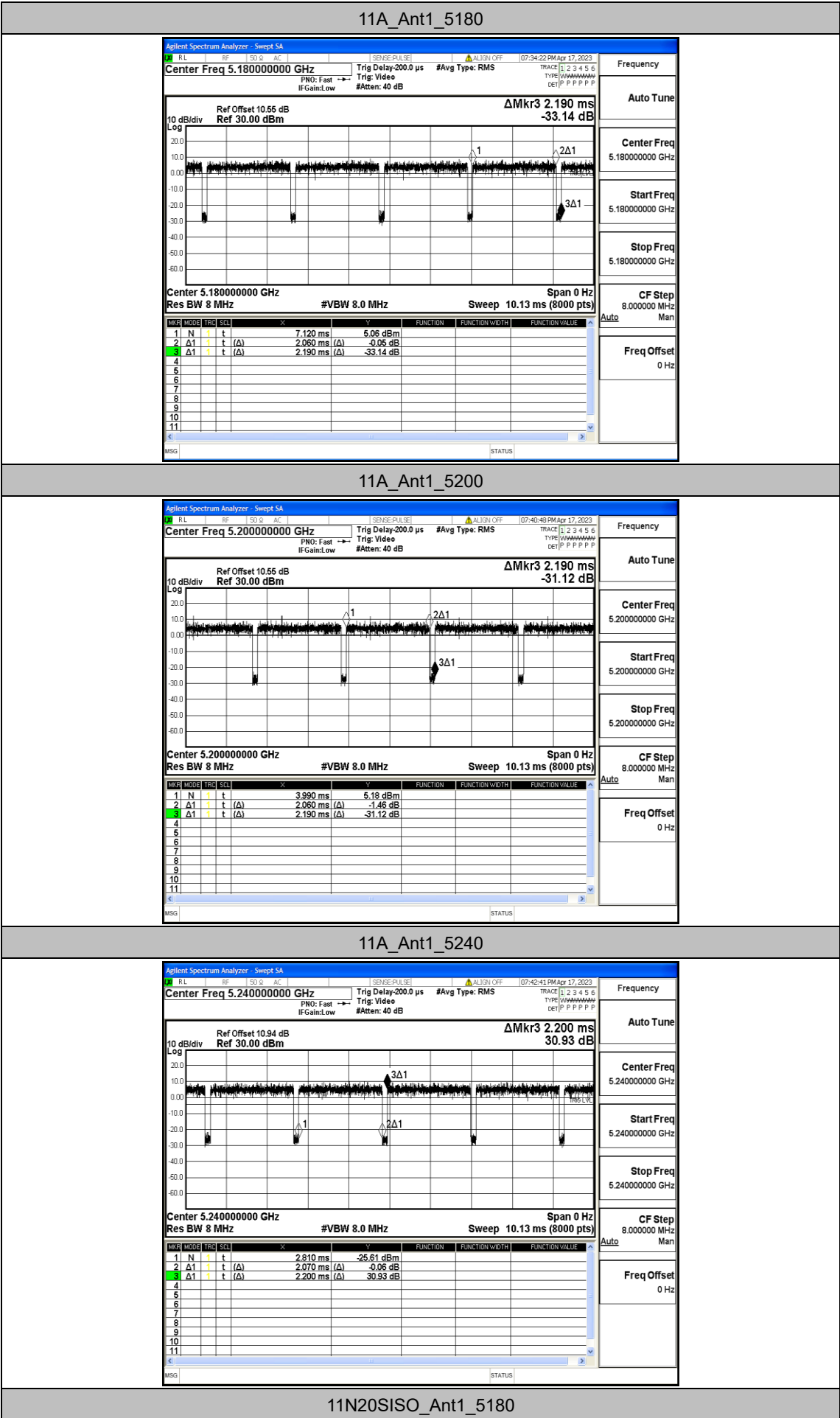
Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5230	20	132	5230.084200	5150 – 5250	PASS
5230	20	108	5229.904062	5150 – 5250	PASS
5230	50	120	5229.918893	5150 – 5250	PASS
5230	40	120	5229.921738	5150 – 5250	PASS
5230	30	120	5230.026316	5150 – 5250	PASS
5230	20	120	5230.035223	5150 – 5250	PASS
5230	10	120	5230.088196	5150 – 5250	PASS
5230	0	120	5229.970170	5150 – 5250	PASS
5230	-10	120	5230.039861	5150 – 5250	PASS
5230	-20	120	5229.927928	5150 – 5250	PASS
5230	-30	120	5229.995097	5150 – 5250	PASS

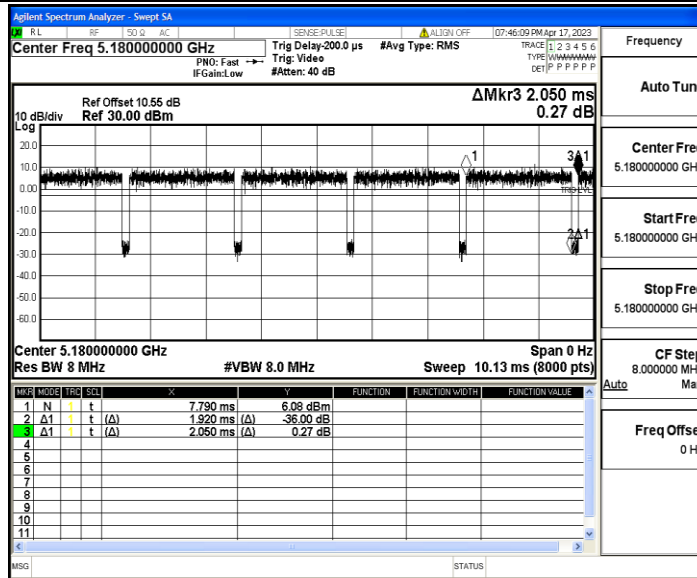
Appendix F: Duty Cycle

Test Result

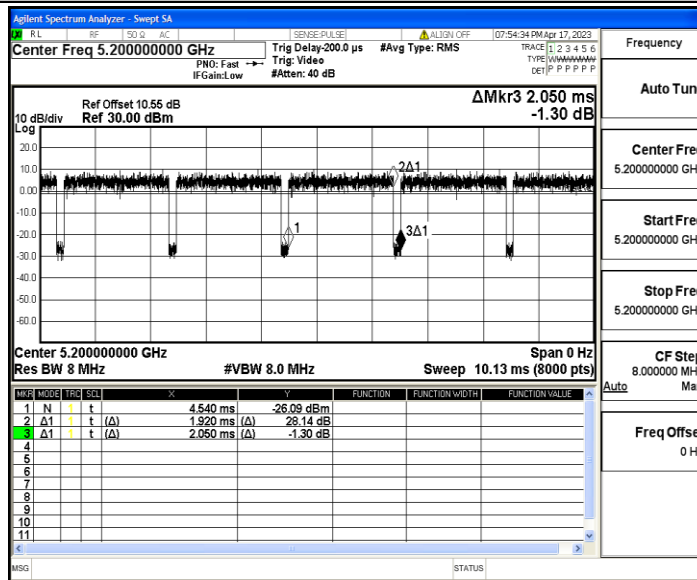
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]
11A	Ant1	5180	2.06	2.19	94.06	0.49
		5200	2.06	2.19	94.06	0.49
		5240	2.07	2.20	94.09	0.48
11N20SISO	Ant1	5180	1.92	2.05	93.66	0.52
		5200	1.92	2.05	93.66	0.52
		5240	1.91	2.04	93.63	0.52
11N40SISO	Ant1	5190	0.94	1.07	87.85	1.06
		5230	0.94	1.07	87.85	1.06

Test Graphs

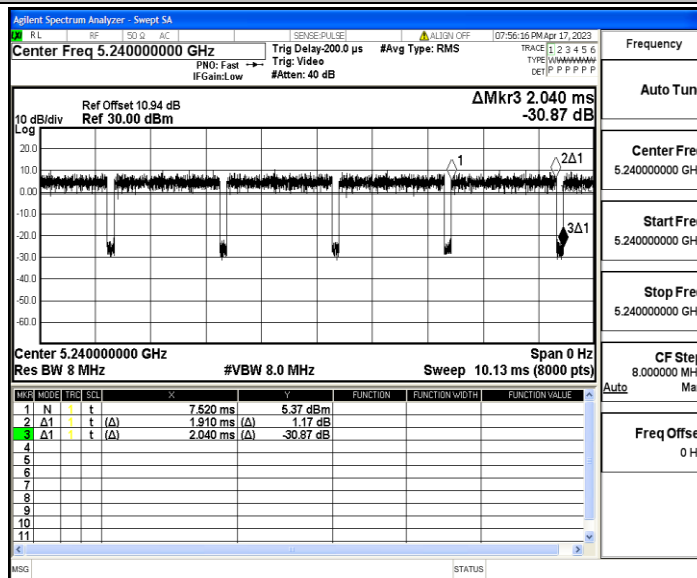




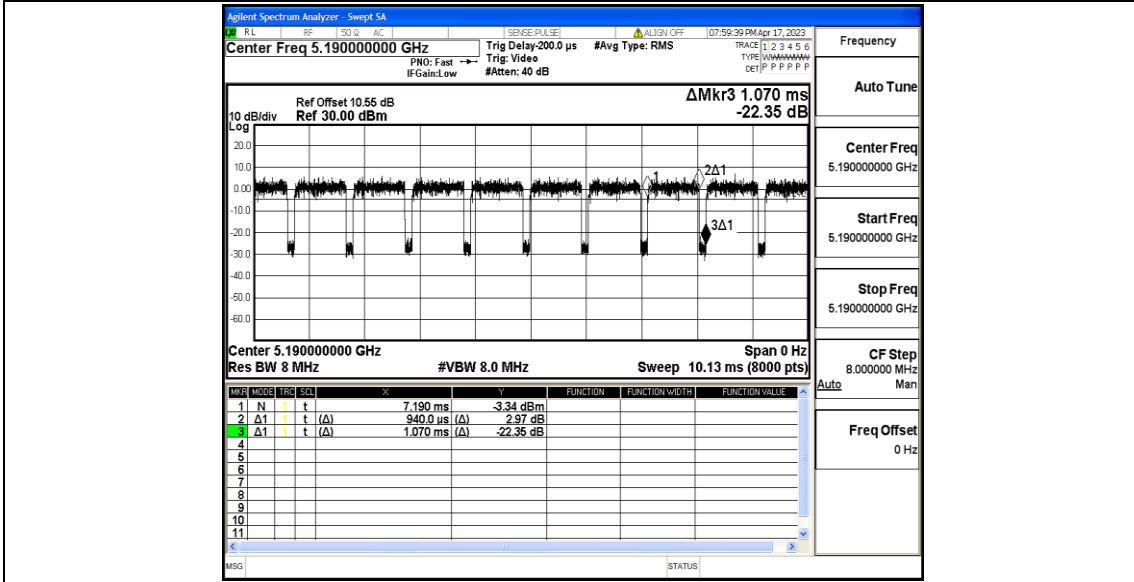
11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230

