

RF Test Data for RLAN(5.2G) (Conducted Measurement)**Product Name: Granary Automatic Pet Feeder - Camera Monitoring 5L****Trade Mark: Petlibro****Test Model: PLAF203****FCC ID: 2A3DE-PLAF203****Environmental Conditions**

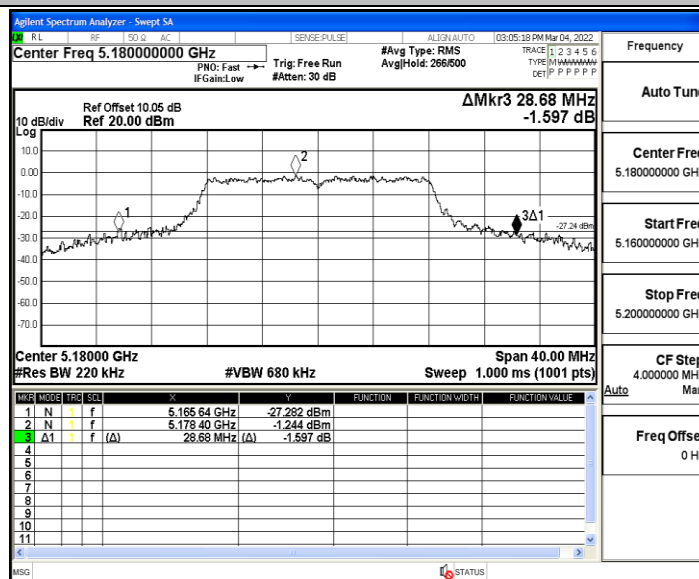
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A1: Emission Bandwidth**Test Result**

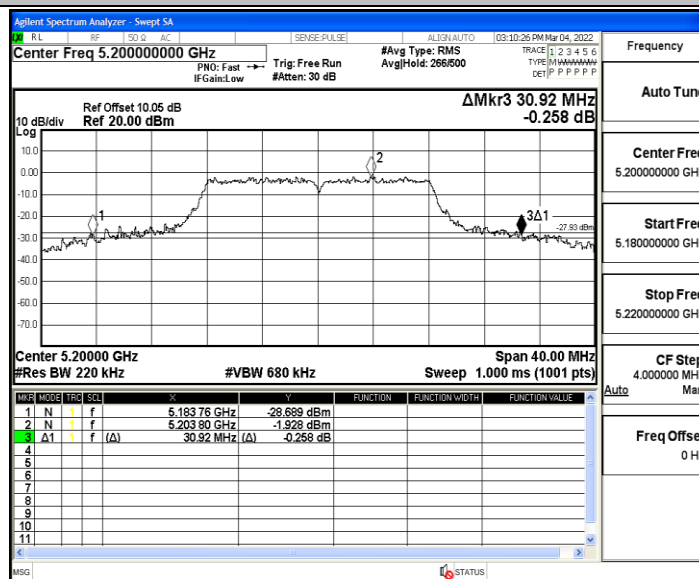
TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	28.680	5165.640	5194.320	---	PASS
		5200	30.920	5183.760	5214.680	---	PASS
		5240	28.120	5225.480	5253.600	---	PASS
11N20SISO	Ant1	5180	29.240	5165.560	5194.800	---	PASS
		5200	31.560	5184.880	5216.440	---	PASS
		5240	32.680	5223.800	5256.480	---	PASS
11N40SISO	Ant1	5190	40.640	5169.600	5210.240	---	PASS
		5230	40.880	5209.760	5250.640	---	PASS

Test Graphs

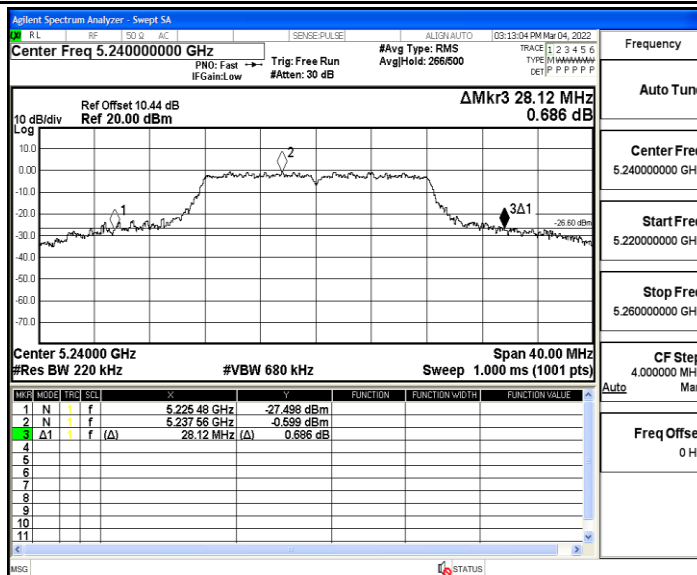
11A_Ant1_5180



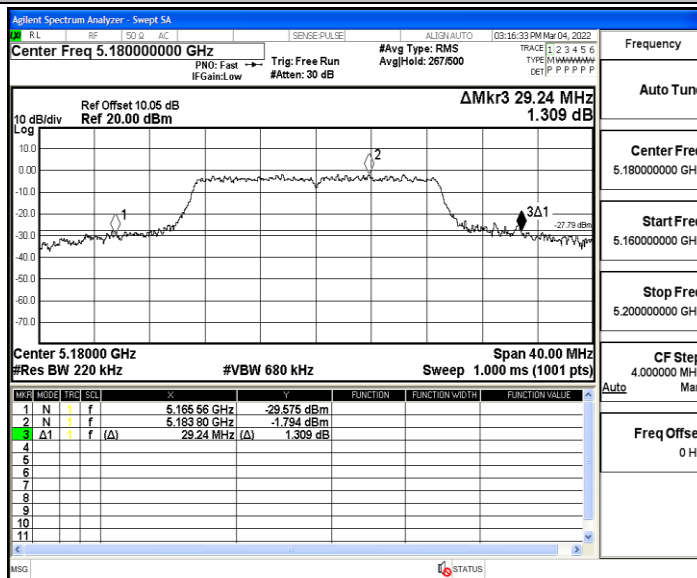
11A_Ant1_5200



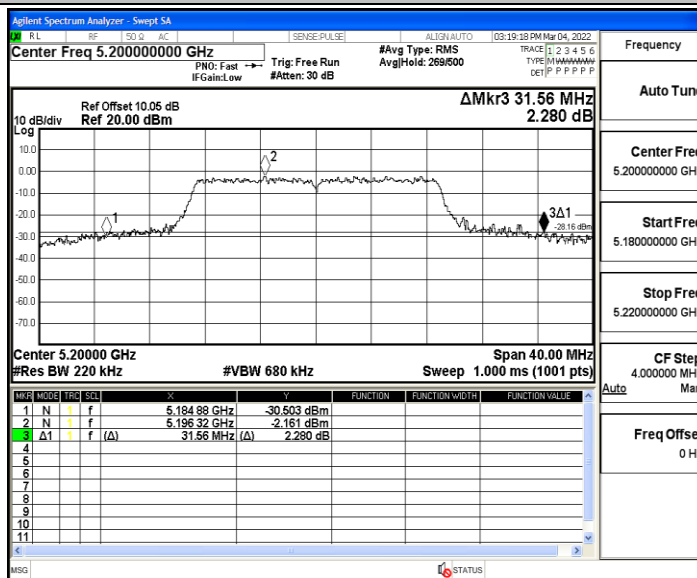
11A_Ant1_5240



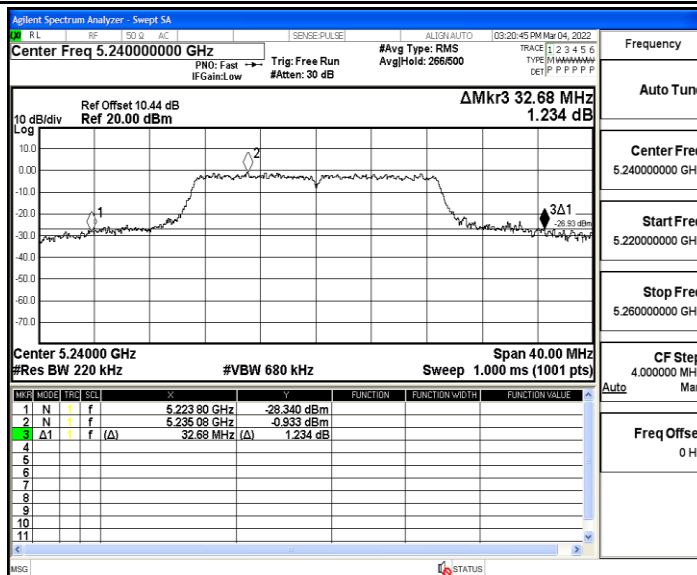
11N20SISO_Ant1_5180



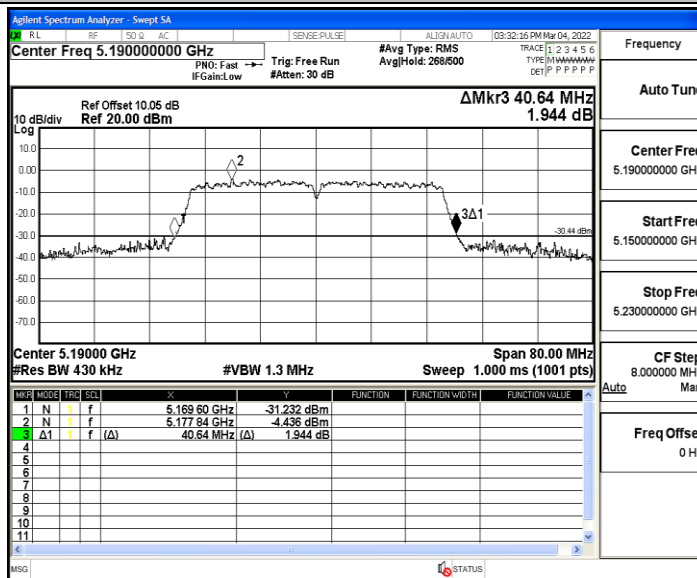
11N20SISO_Ant1_5200



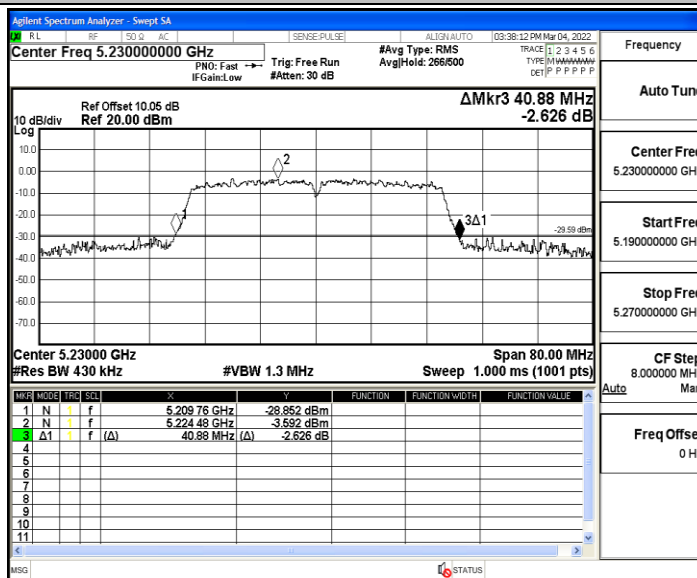
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



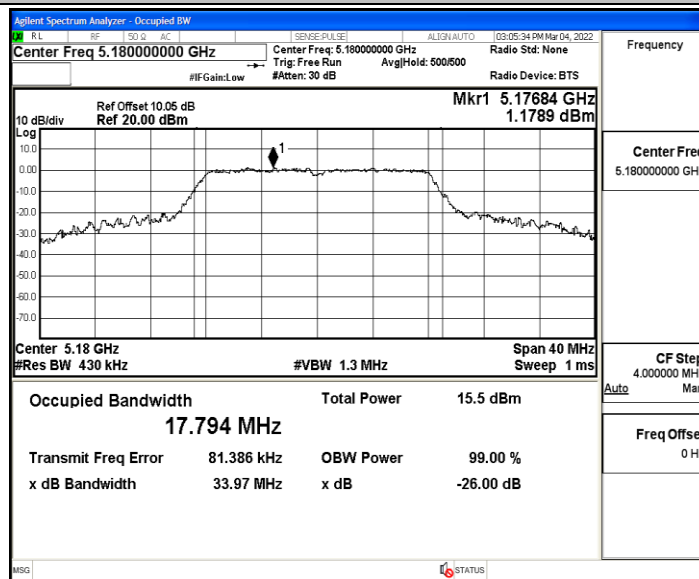
Appendix A2: Occupied channel bandwidth

Test Result

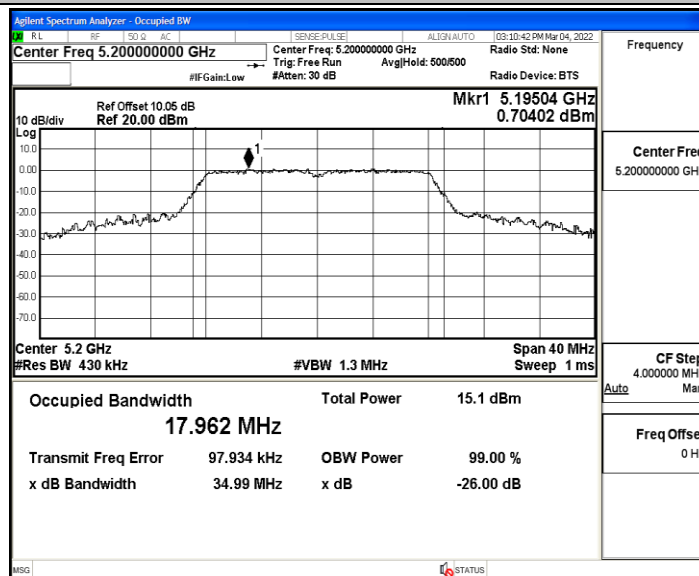
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.794	5171.184	5188.978	---	PASS
		5200	17.962	5191.117	5209.079	---	PASS
		5240	17.936	5231.042	5248.978	---	PASS
11N20SISO	Ant1	5180	18.505	5170.864	5189.369	---	PASS
		5200	18.738	5190.760	5209.498	---	PASS
		5240	18.744	5230.711	5249.455	---	PASS
11N40SISO	Ant1	5190	36.703	5171.789	5208.492	---	PASS
		5230	36.672	5211.793	5248.465	---	PASS

Test Graphs

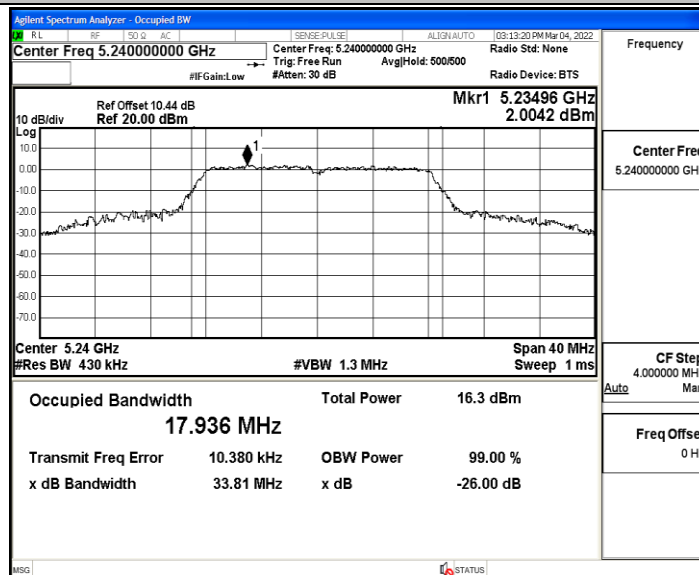
11A_Ant1_5180



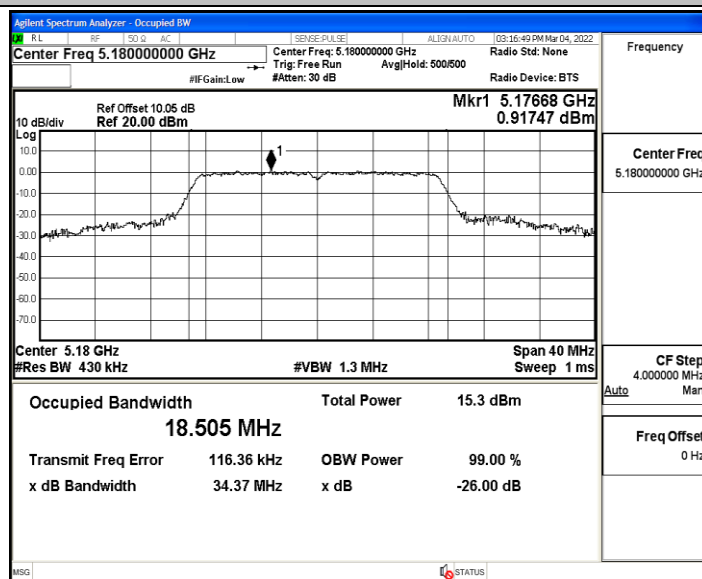
11A_Ant1_5200



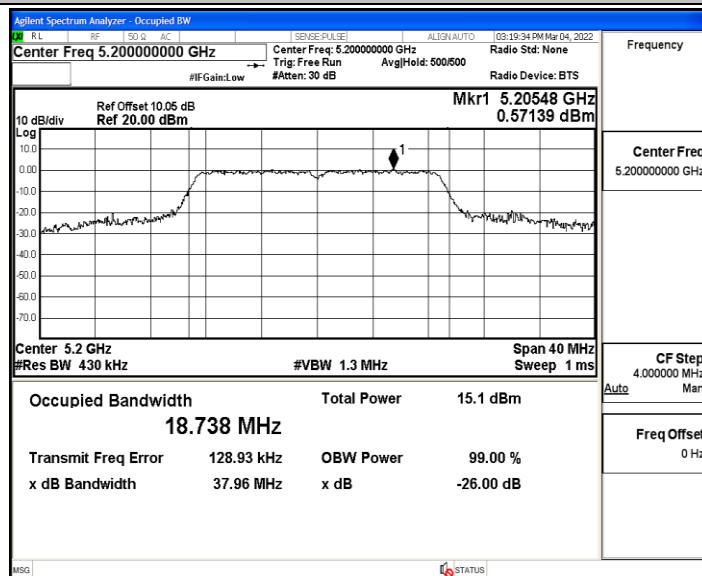
11A_Ant1_5240



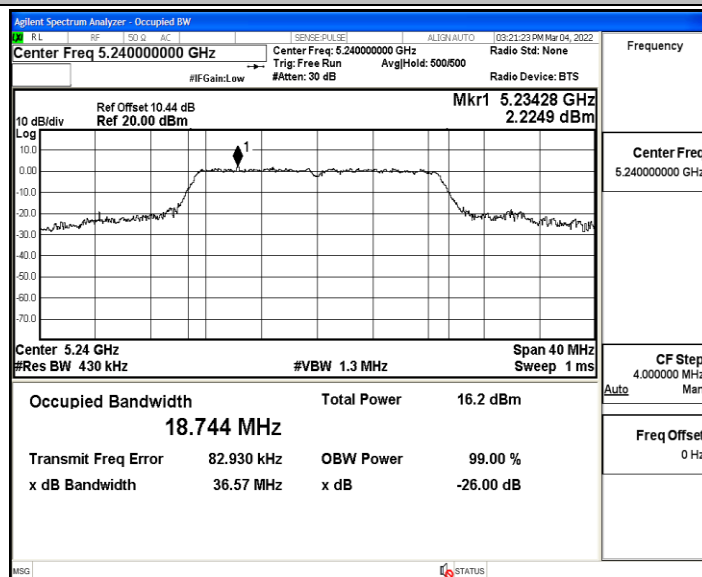
11N20SISO_Ant1_5180



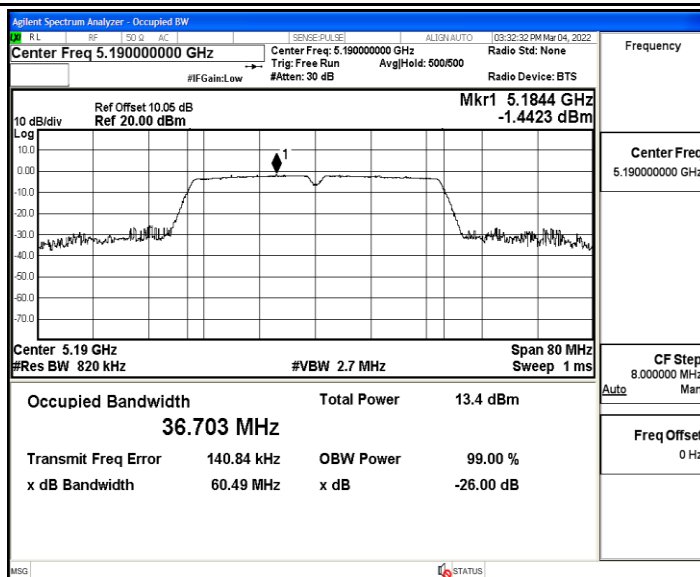
11N20SISO_Ant1_5200



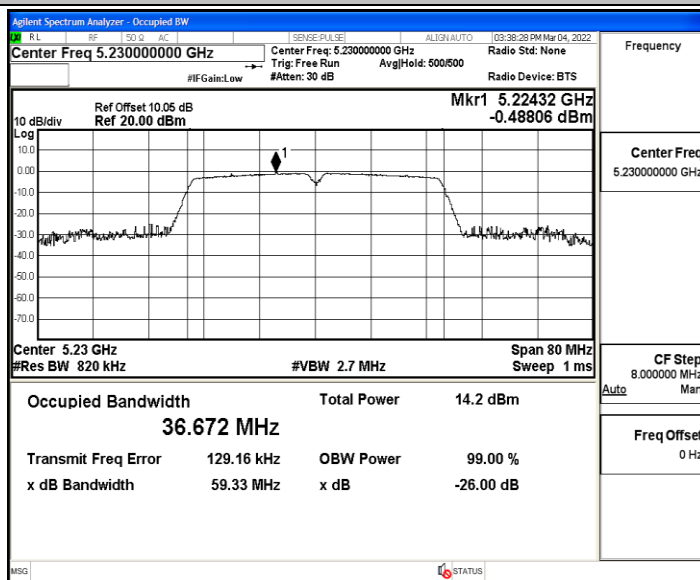
11N20SISO_Ant1_5240



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	8.74	≤23.98	PASS
		5200	8.39	≤23.98	PASS
		5240	9.61	≤23.98	PASS
11N20SISO	Ant1	5180	8.44	≤23.98	PASS
		5200	8.25	≤23.98	PASS
		5240	9.44	≤23.98	PASS
11N40SISO	Ant1	5190	6.17	≤23.98	PASS
		5230	6.98	≤23.98	PASS

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

Appendix C: Maximum power spectral density

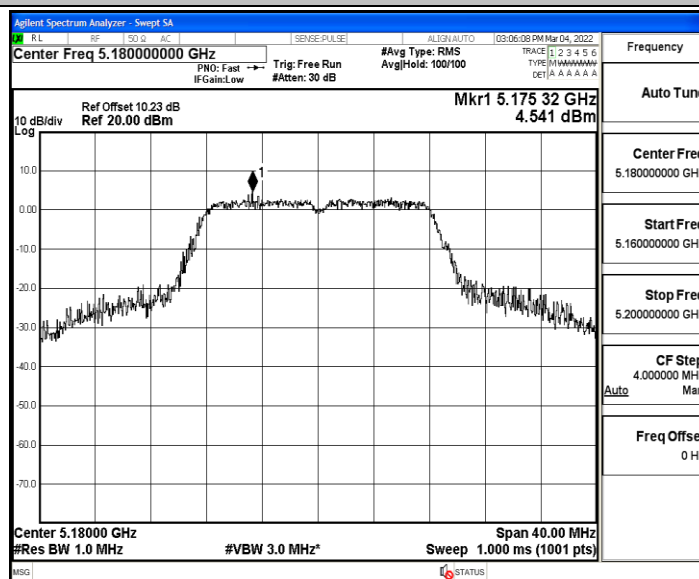
Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	4.54	≤11	PASS
		5200	3.58	≤11	PASS
		5240	5.37	≤11	PASS
11N20SISO	Ant1	5180	2.55	≤11	PASS
		5200	1.83	≤11	PASS
		5240	3.23	≤11	PASS
11N40SISO	Ant1	5190	-2.85	≤11	PASS
		5230	-1.85	≤11	PASS

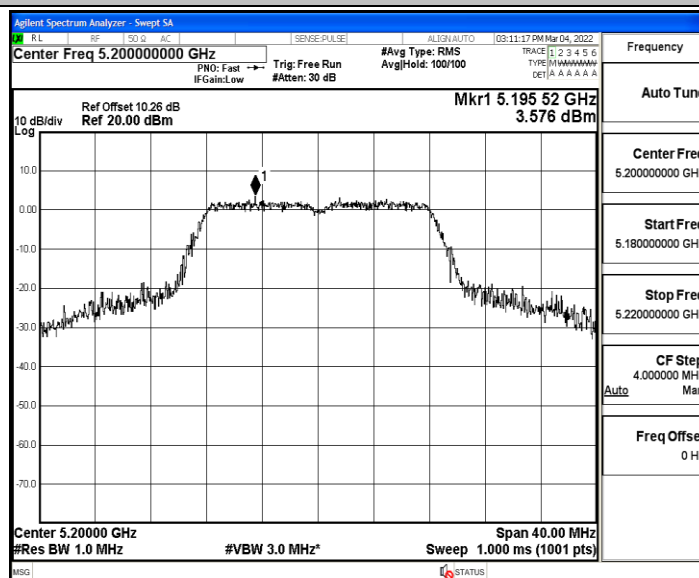
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

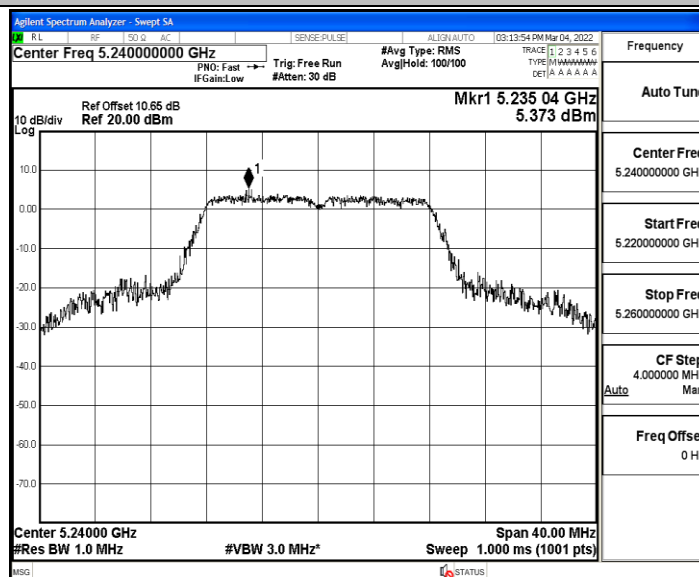
11A_Ant1_5180



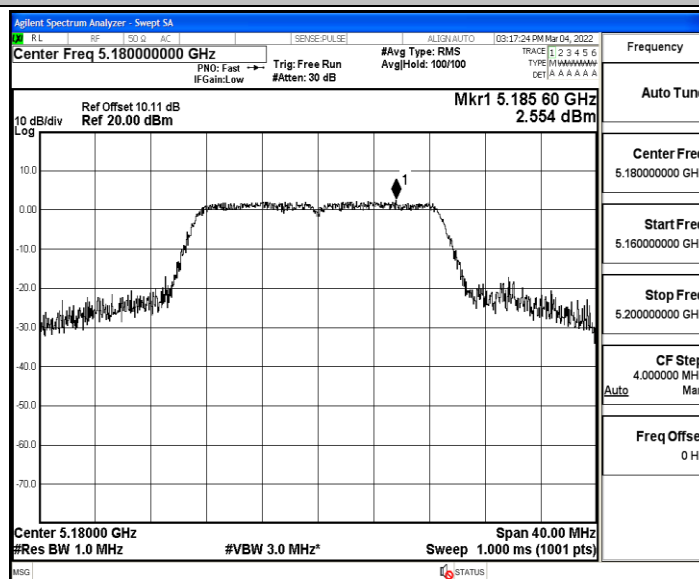
11A_Ant1_5200



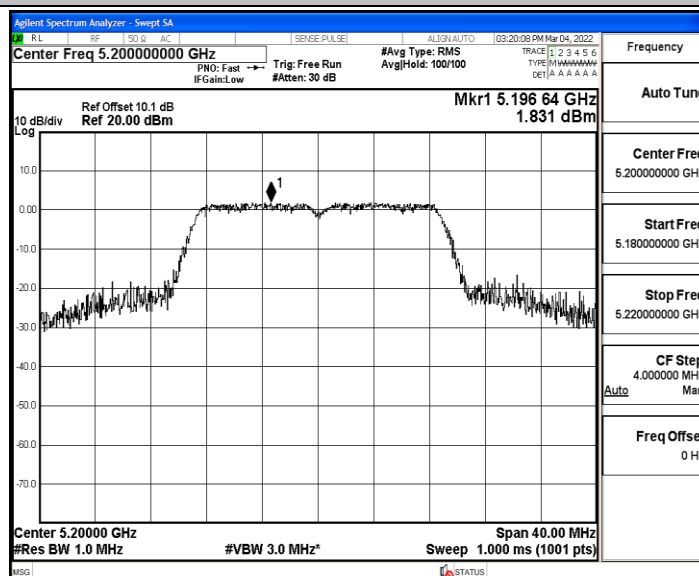
11A_Ant1_5240



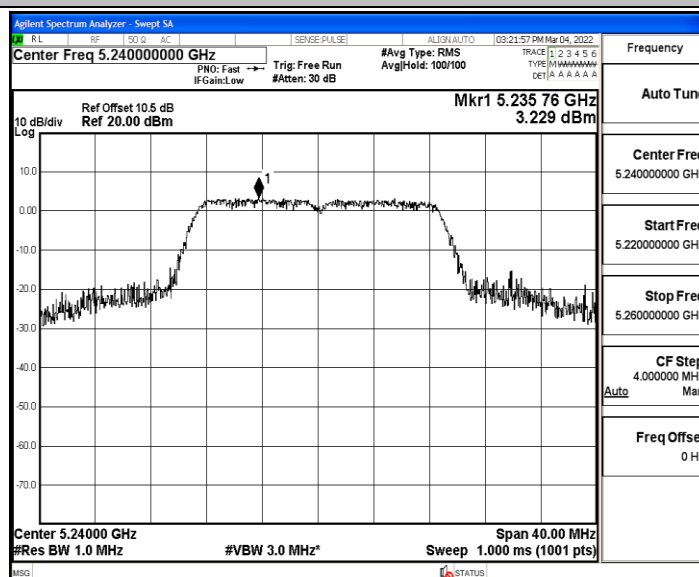
11N20SISO_Ant1_5180



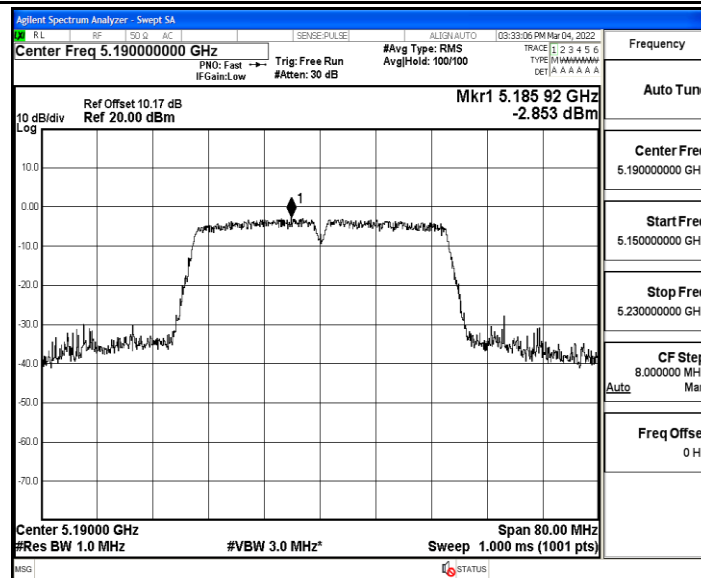
11N20SISO_Ant1_5200



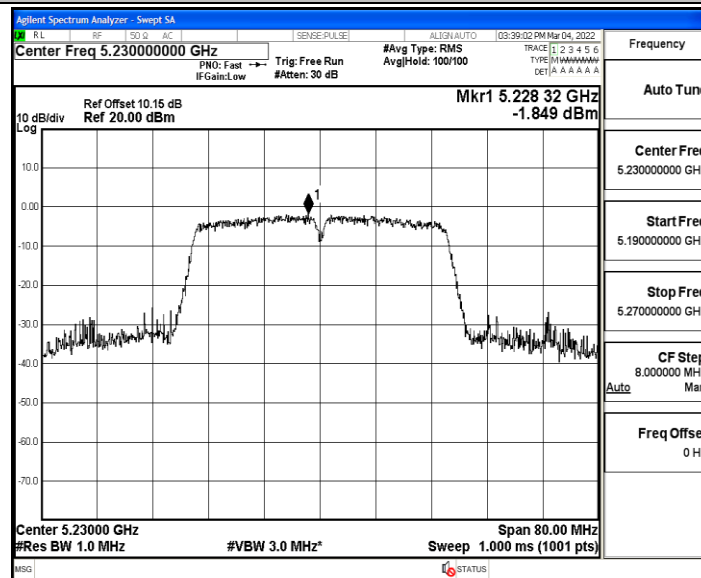
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



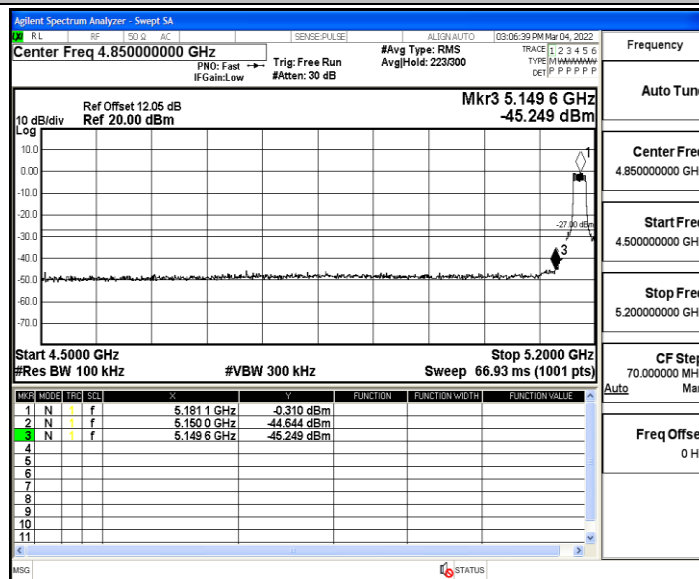
Appendix D: Band edge measurements

Test Result

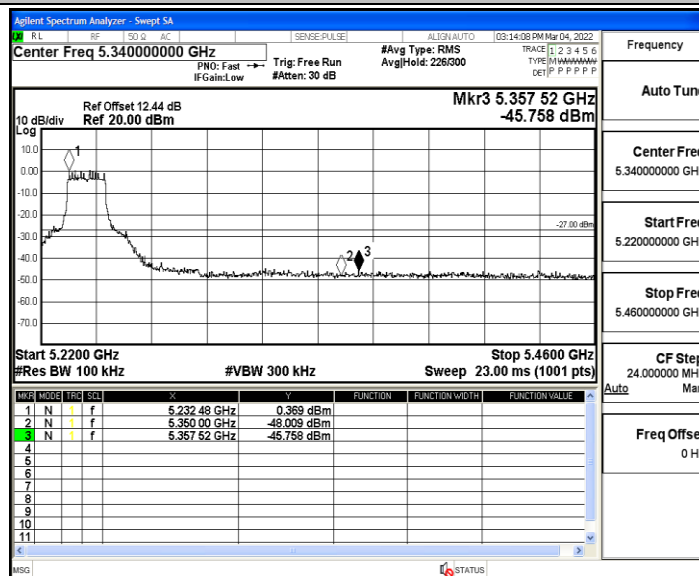
TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-45.25	≤ -27	PASS
		High	5240	-45.76	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-45.2	≤ -27	PASS
		High	5240	-45.15	≤ -27	PASS
11N40SISO	Ant1	Low	5190	-43.09	≤ -27	PASS
		High	5230	-45.73	≤ -27	PASS

Test Graphs

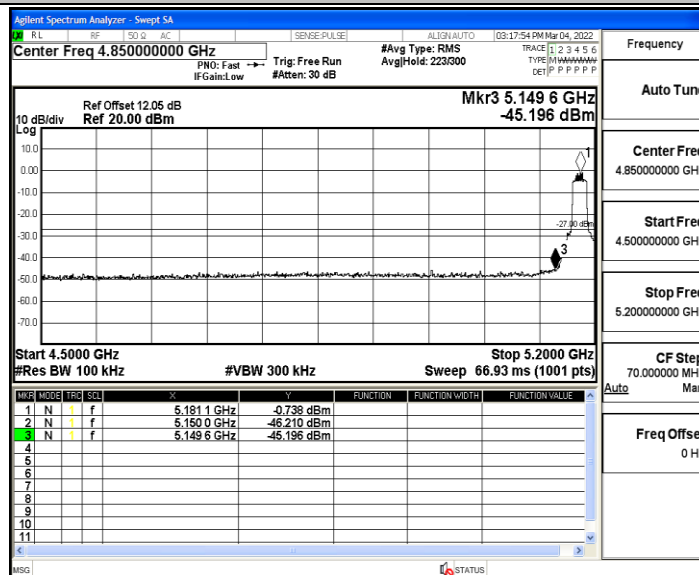
11A_Ant1_Low_5180



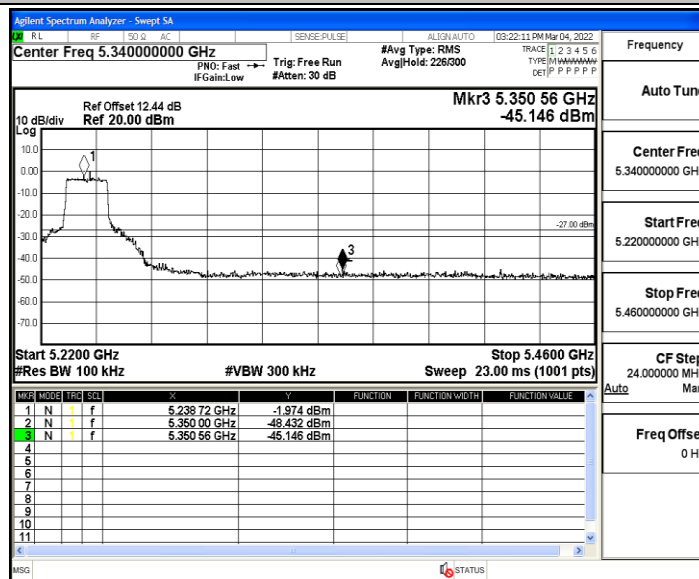
11A_Ant1_High_5240



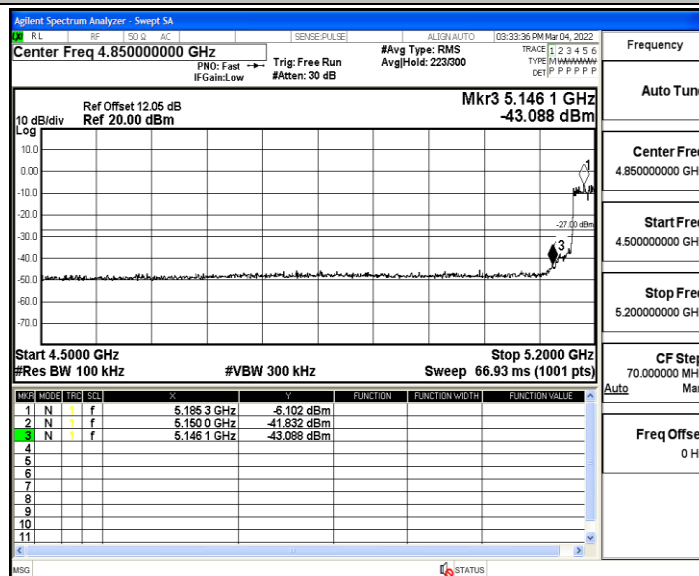
11N20SISO Ant1_Low 5180



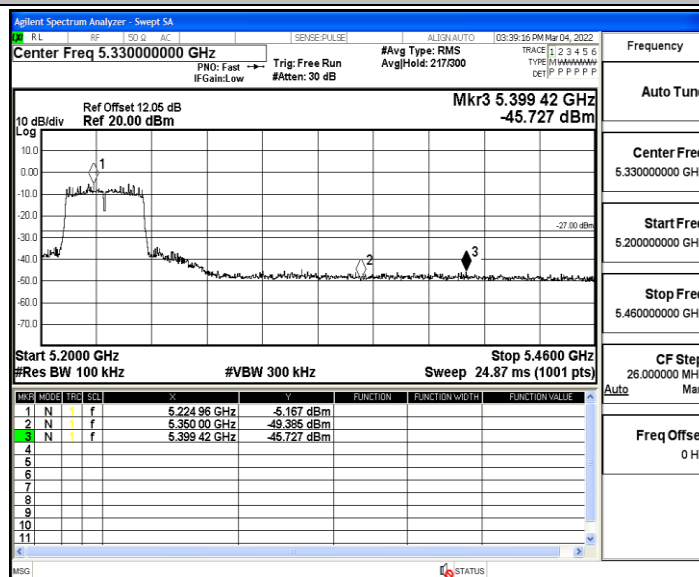
11N20SISO_Ant1_High_5240



11N40SISO_Ant1_Low_5190



11N40SISO_Ant1_High_5230



Appendix E: Frequency Stability

Test Result

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	132	5180.013578	5150 – 5250	PASS
5180	20	108	5180.020035	5150 – 5250	PASS
5180	50	120	5180.056597	5150 – 5250	PASS
5180	40	120	5179.915047	5150 – 5250	PASS
5180	30	120	5180.053699	5150 – 5250	PASS
5180	20	120	5180.019462	5150 – 5250	PASS
5180	10	120	5179.974730	5150 – 5250	PASS
5180	0	120	5180.060654	5150 – 5250	PASS
5180	-10	120	5179.983011	5150 – 5250	PASS
5180	-20	120	5179.976904	5150 – 5250	PASS
5180	-30	120	5179.937857	5150 – 5250	PASS

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5200	20	132	5200.068999	5150 – 5250	PASS
5200	20	108	5200.080479	5150 – 5250	PASS
5200	50	120	5200.036712	5150 – 5250	PASS
5200	40	120	5199.925854	5150 – 5250	PASS
5200	30	120	5199.957587	5150 – 5250	PASS
5200	20	120	5200.085441	5150 – 5250	PASS
5200	10	120	5200.092410	5150 – 5250	PASS
5200	0	120	5199.981830	5150 – 5250	PASS
5200	-10	120	5200.040970	5150 – 5250	PASS
5200	-20	120	5200.039302	5150 – 5250	PASS
5200	-30	120	5200.002117	5150 – 5250	PASS

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	132	5239.966544	5150 – 5250	PASS
5240	20	108	5239.999542	5150 – 5250	PASS
5240	50	120	5240.045189	5150 – 5250	PASS
5240	40	120	5239.909195	5150 – 5250	PASS
5240	30	120	5240.070417	5150 – 5250	PASS
5240	20	120	5240.050261	5150 – 5250	PASS
5240	10	120	5239.992319	5150 – 5250	PASS
5240	0	120	5240.089444	5150 – 5250	PASS
5240	-10	120	5240.089597	5150 – 5250	PASS
5240	-20	120	5239.926345	5150 – 5250	PASS
5240	-30	120	5239.950203	5150 – 5250	PASS

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5190	20	132	5190.015723	5150 – 5250	PASS
5190	20	108	5189.945899	5150 – 5250	PASS
5190	50	120	5189.903399	5150 – 5250	PASS
5190	40	120	5190.011648	5150 – 5250	PASS
5190	30	120	5190.085576	5150 – 5250	PASS
5190	20	120	5189.967763	5150 – 5250	PASS
5190	10	120	5190.048937	5150 – 5250	PASS
5190	0	120	5189.964532	5150 – 5250	PASS
5190	-10	120	5189.937737	5150 – 5250	PASS
5190	-20	120	5189.977971	5150 – 5250	PASS
5190	-30	120	5189.930331	5150 – 5250	PASS

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5230	20	132	5229.908240	5150 – 5250	PASS
5230	20	108	5229.971353	5150 – 5250	PASS
5230	50	120	5230.062025	5150 – 5250	PASS
5230	40	120	5229.917389	5150 – 5250	PASS
5230	30	120	5229.990066	5150 – 5250	PASS
5230	20	120	5229.952593	5150 – 5250	PASS
5230	10	120	5229.942192	5150 – 5250	PASS
5230	0	120	5230.099458	5150 – 5250	PASS
5230	-10	120	5230.008863	5150 – 5250	PASS
5230	-20	120	5230.022739	5150 – 5250	PASS
5230	-30	120	5230.093993	5150 – 5250	PASS

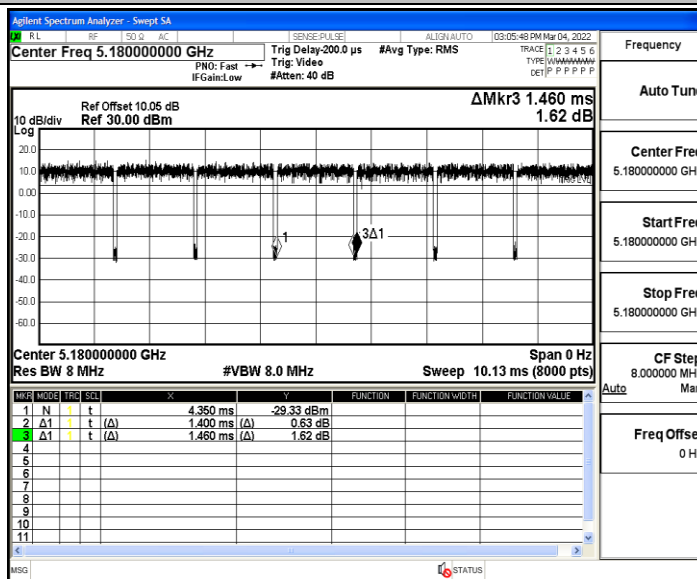
Appendix F: Duty Cycle

Test Result

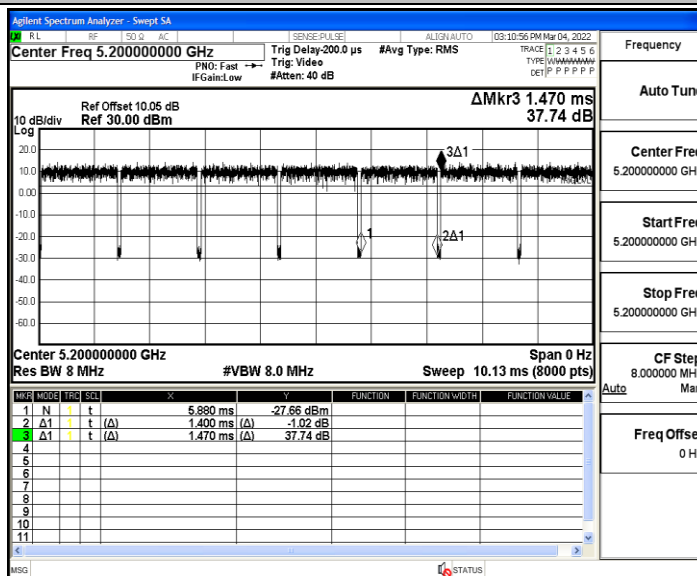
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/B [kHz]
11A	Ant1	5180	1.40	1.46	95.89	0.71
		5200	1.40	1.47	95.24	0.71
		5240	1.39	1.46	95.21	0.72
11N20SISO	Ant1	5180	5.08	5.15	98.64	0.20
		5200	5.09	5.15	98.83	0.20
		5240	5.08	5.15	98.64	0.20
11N40SISO	Ant1	5190	2.46	2.53	97.23	0.41
		5230	2.47	2.53	97.63	0.40

Test Graphs

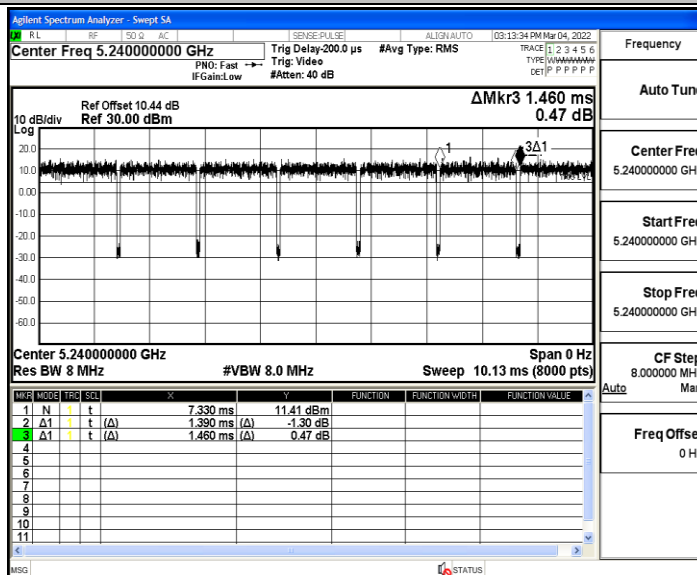
11A_Ant1_5180



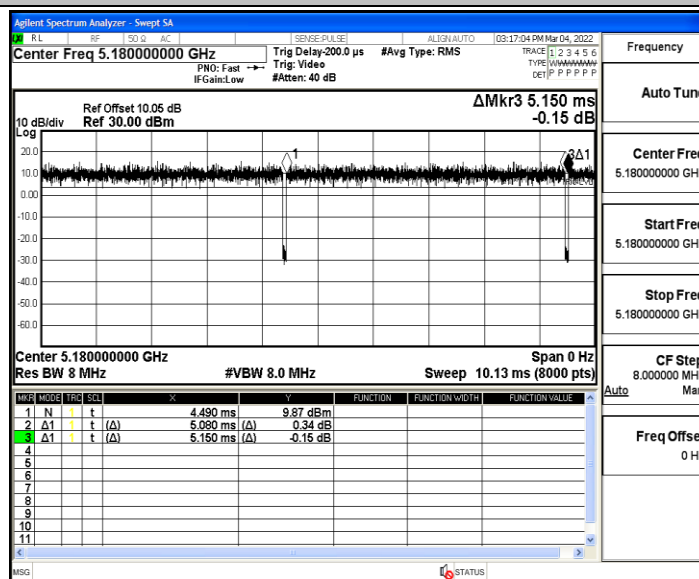
11A_Ant1_5200



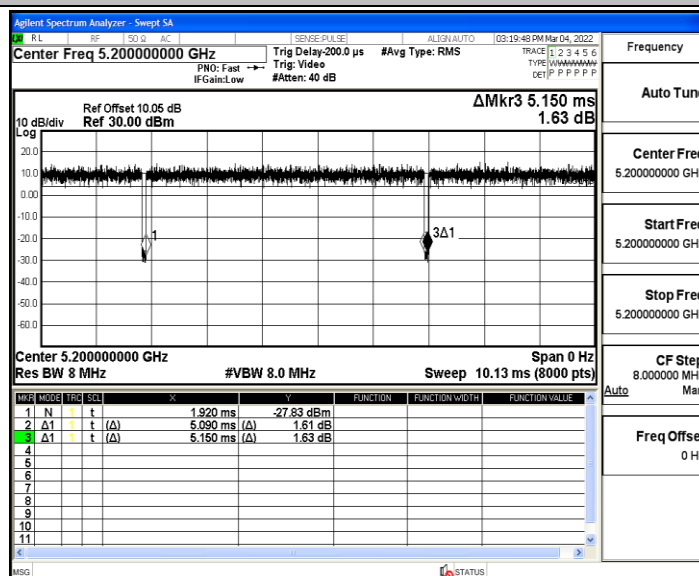
11A_Ant1_5240



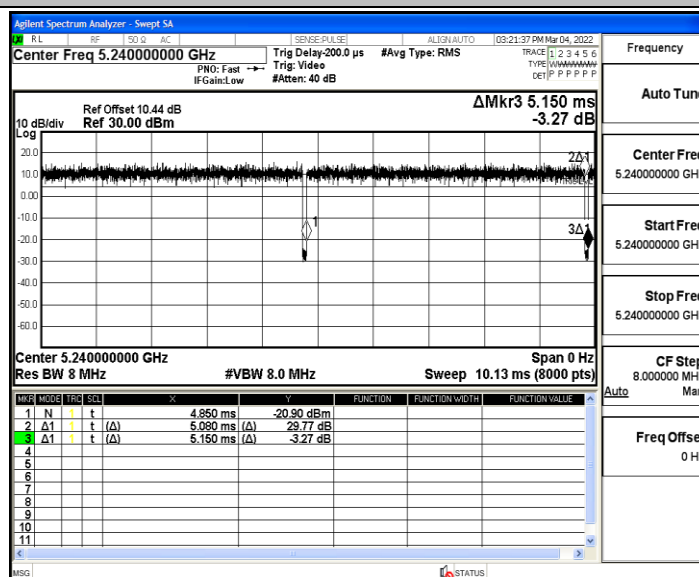
11N20SISO_Ant1_5180



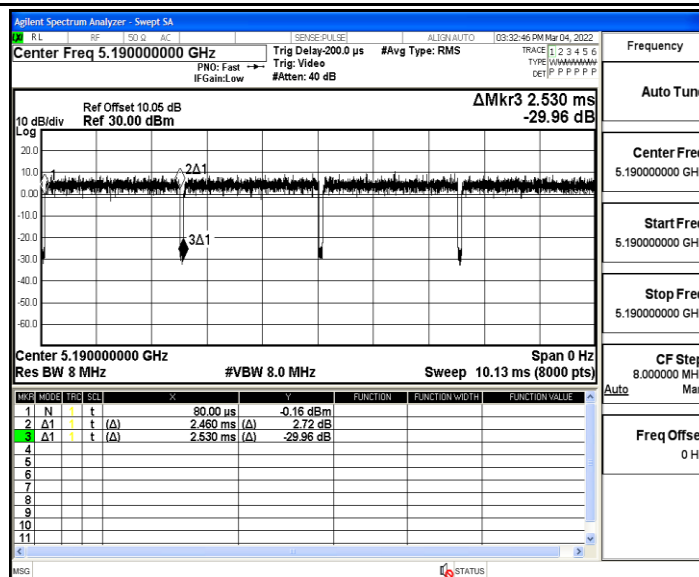
11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230

