

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

Product Name: AoA positioning Locator

Trade Mark: Dusun

Test Model: DSGW-200

FCC ID: 2AUXBDSGW-200

### Environmental Conditions

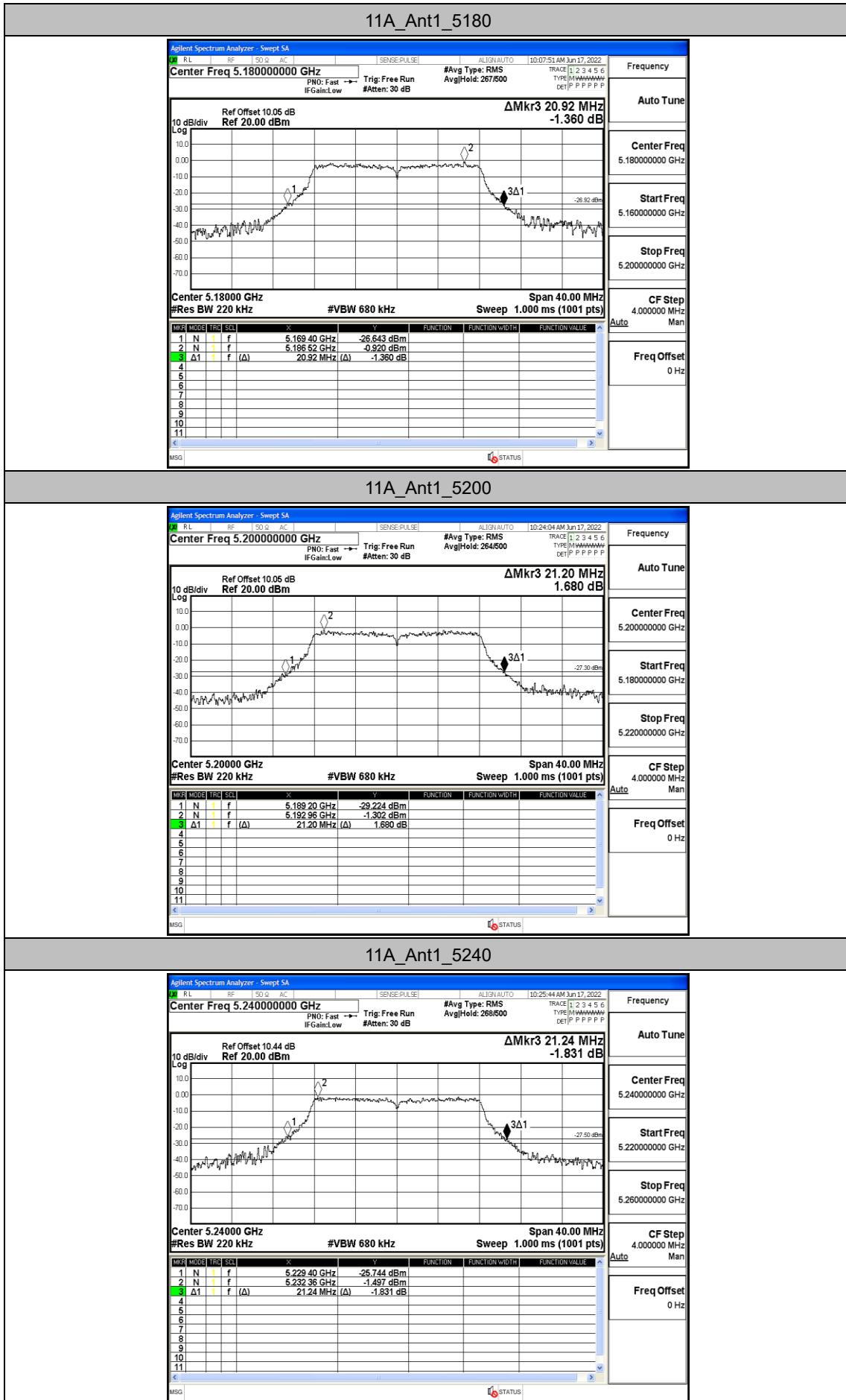
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test #JobTitle:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

## Appendix A1: Emission Bandwidth

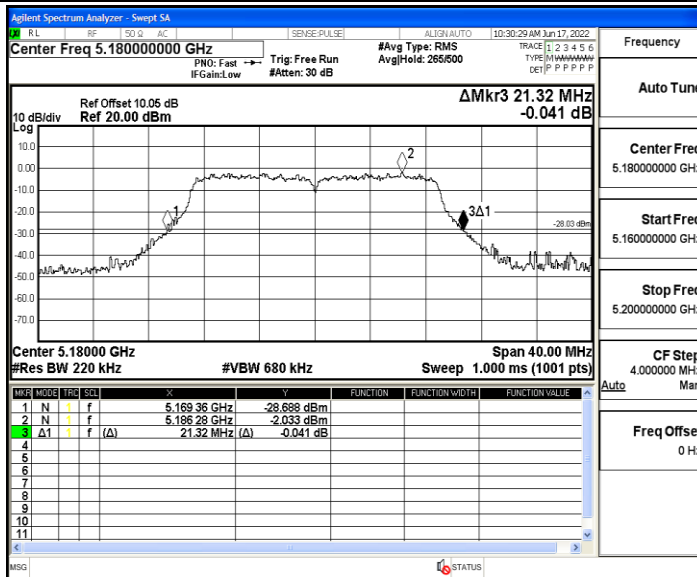
### Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.920	5169.400	5190.320	---	PASS
		5200	21.200	5189.200	5210.400	---	PASS
		5240	21.240	5229.400	5250.640	---	PASS
11N20SISO	Ant1	5180	21.320	5169.360	5190.680	---	PASS
		5200	21.880	5189.280	5211.160	---	PASS
		5240	21.240	5229.360	5250.600	---	PASS
11N40SISO	Ant1	5190	42.080	5168.880	5210.960	---	PASS
		5230	41.920	5209.040	5250.960	---	PASS
11AC20SISO	Ant1	5180	21.720	5169.360	5191.080	---	PASS
		5200	21.160	5189.480	5210.640	---	PASS
		5240	21.680	5229.160	5250.840	---	PASS
11AC40SISO	Ant1	5190	41.840	5169.280	5211.120	---	PASS
		5230	42.320	5209.520	5251.840	---	PASS
11AC80SISO	Ant1	5210	82.400	5169.200	5251.600	---	PASS

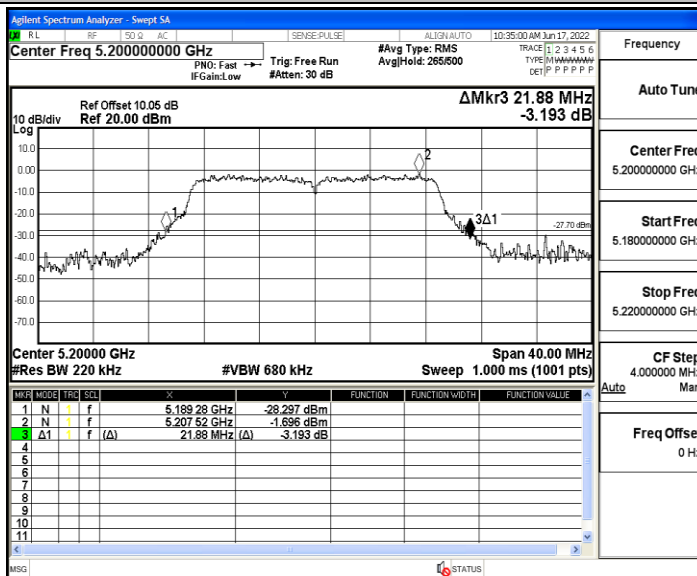
Test Graphs



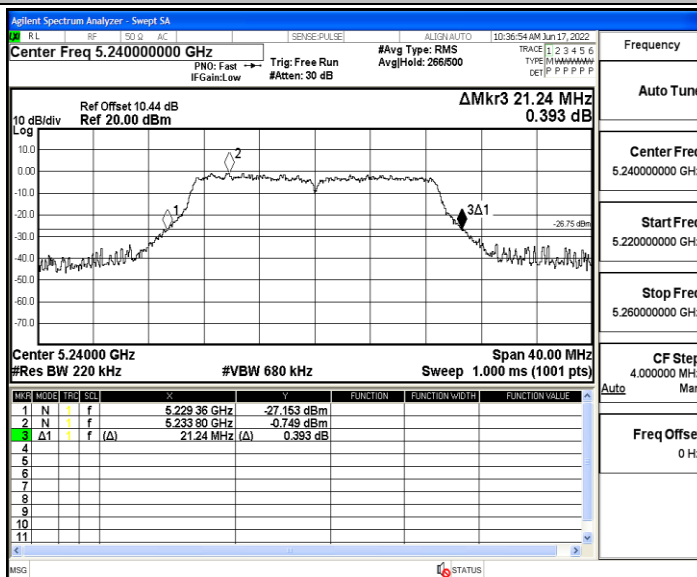
11N20SISO\_Ant1\_5180



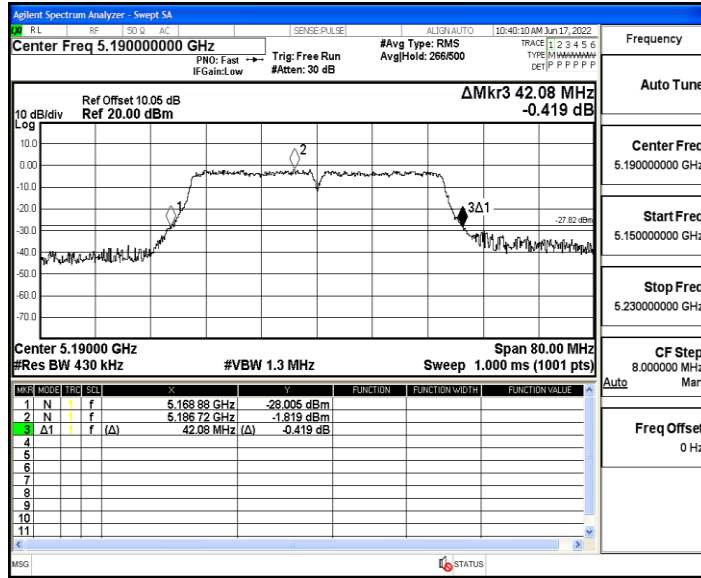
11N20SISO\_Ant1\_5200



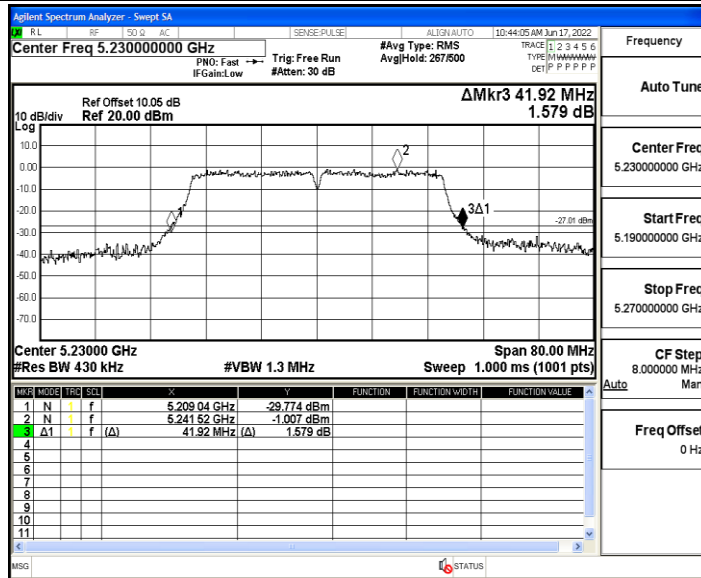
11N20SISO\_Ant1\_5240



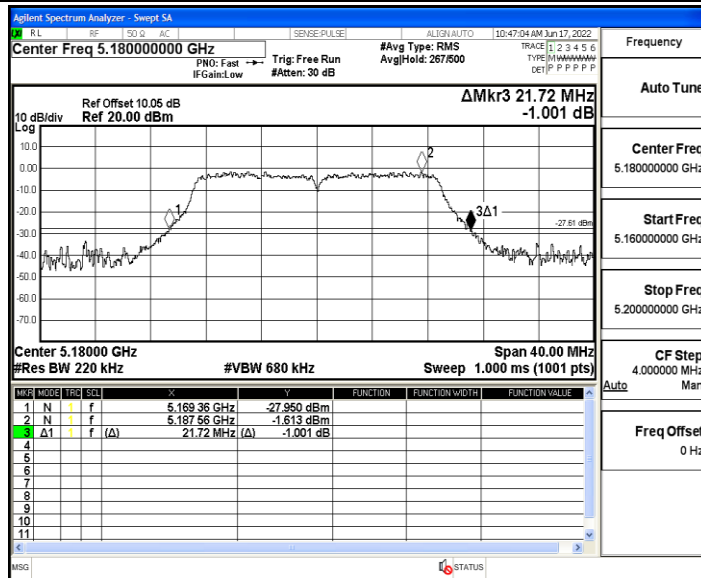
11N40SISO\_Ant1\_5190



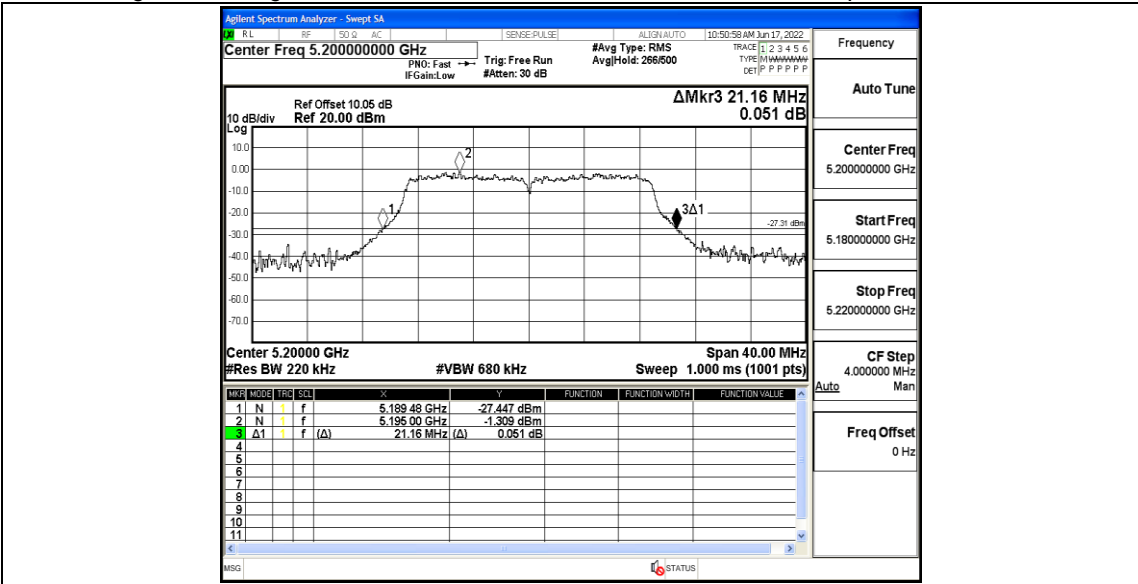
11N40SISO\_Ant1\_5230



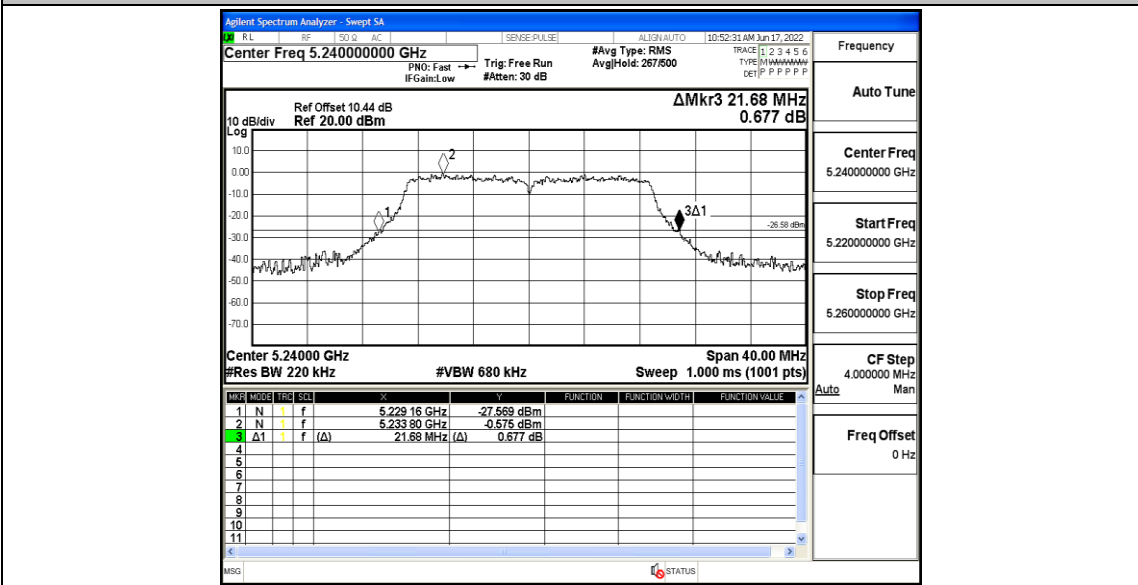
11AC20SISO\_Ant1\_5180



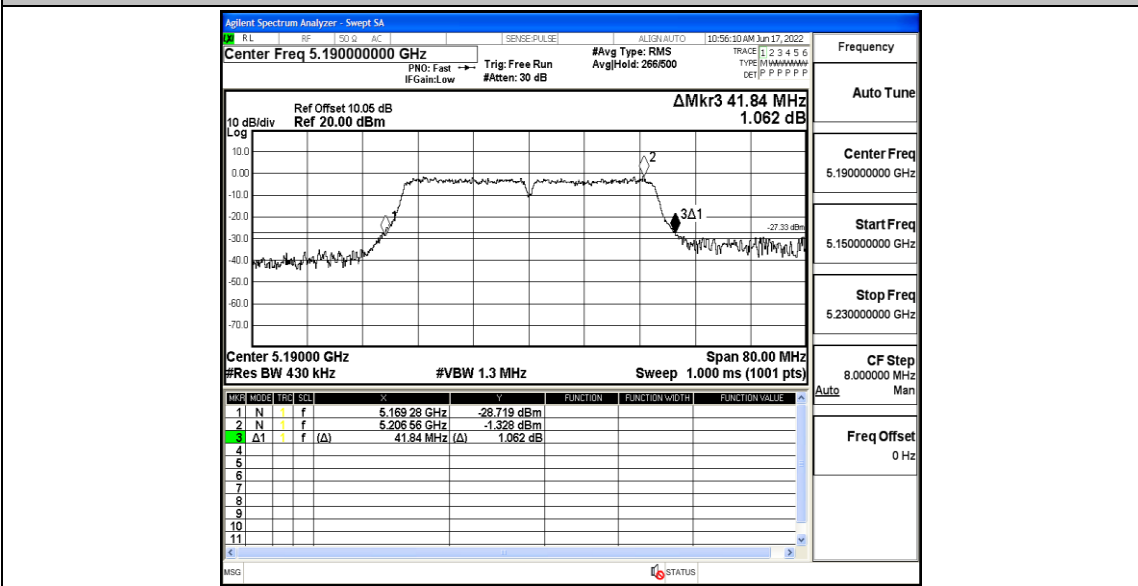
11AC20SISO\_Ant1\_5200



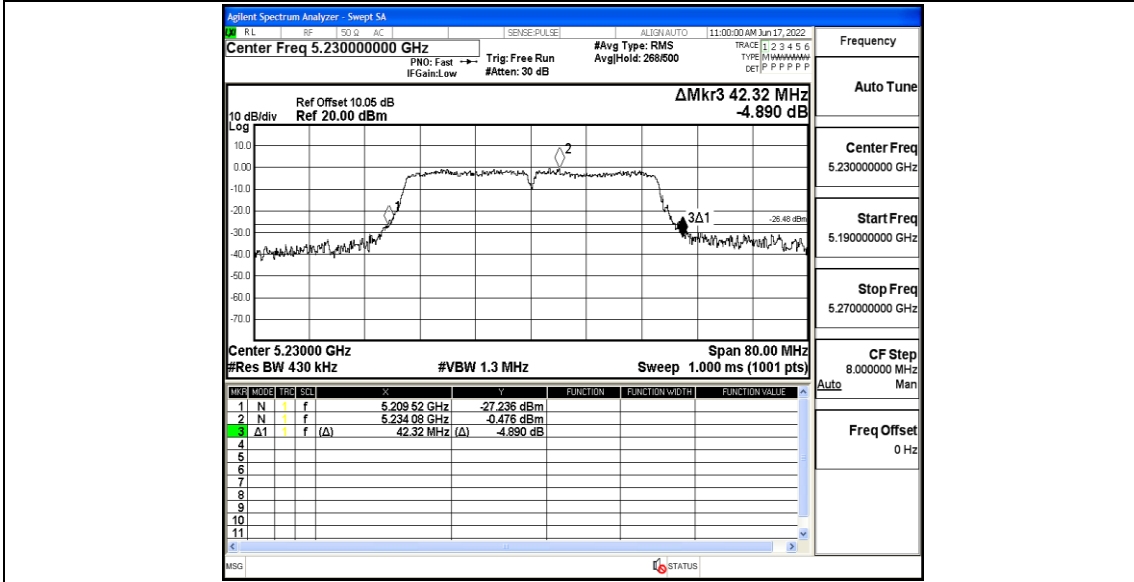
11AC20SISO\_Ant1\_5240



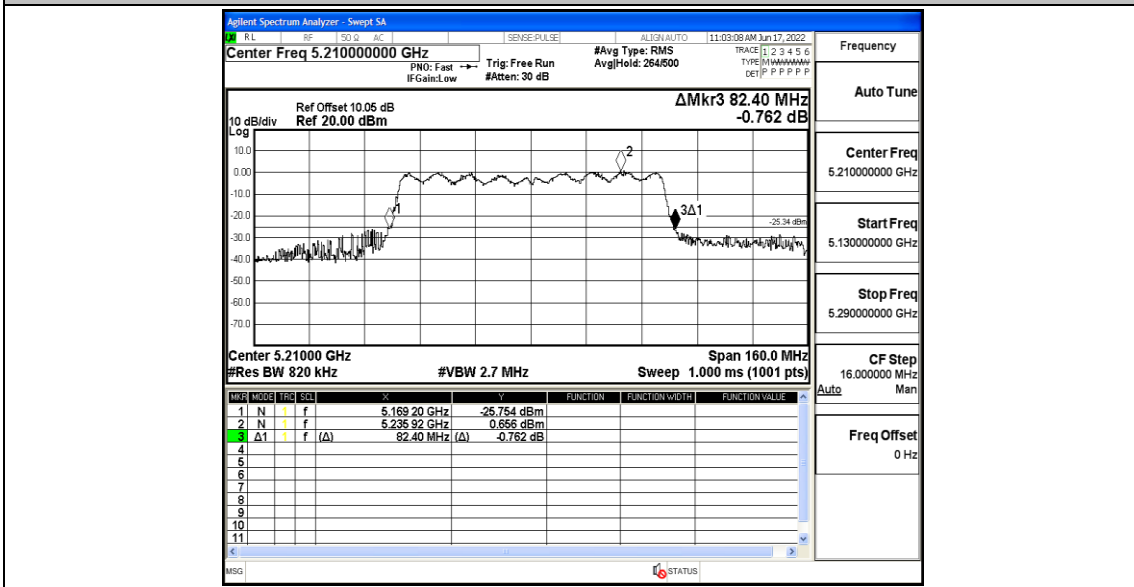
11AC40SISO\_Ant1\_5190



11AC40SISO\_Ant1\_5230



11AC80SISO\_Ant1\_5210

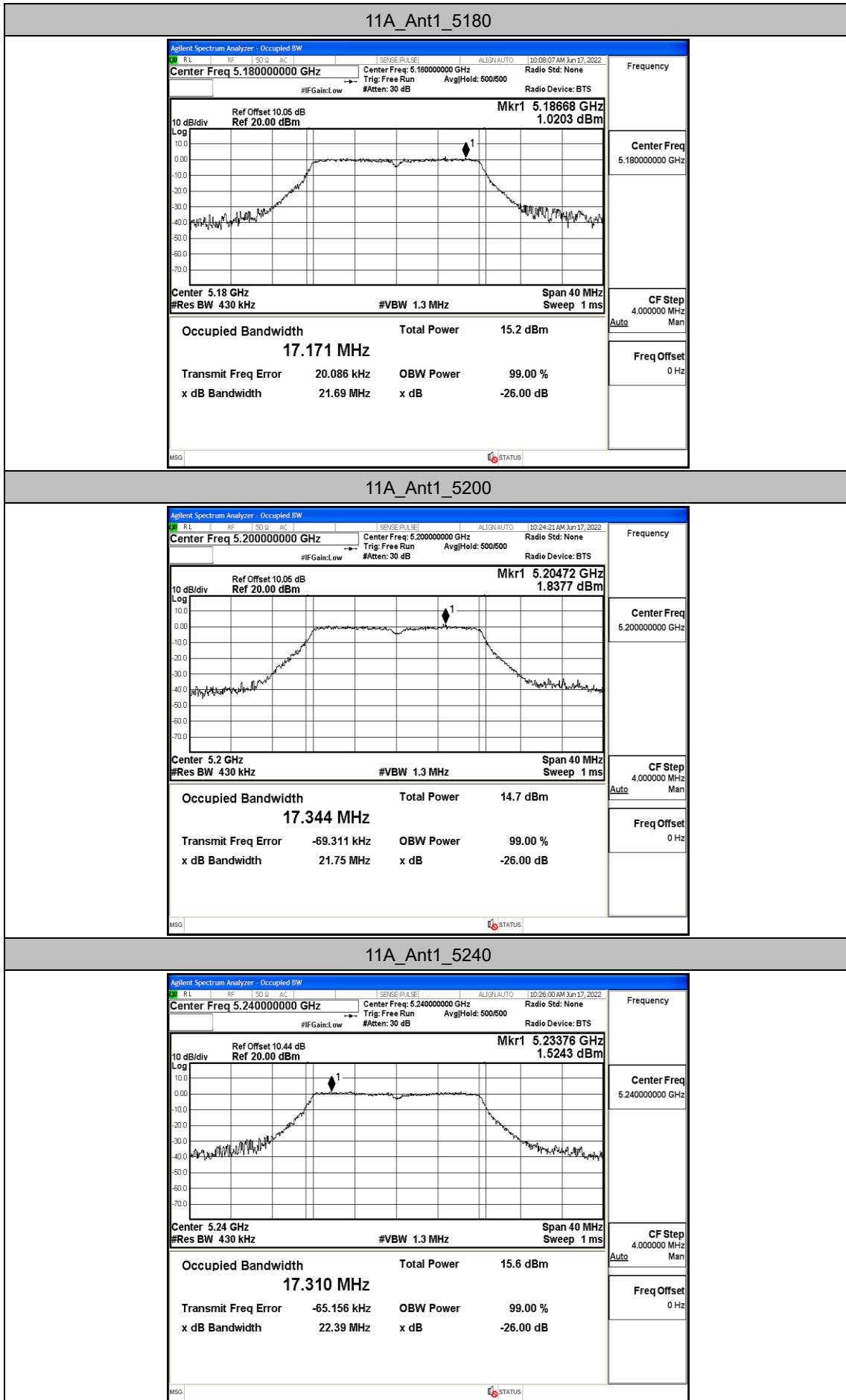


## Appendix A2: Occupied channel bandwidth

### Test Result

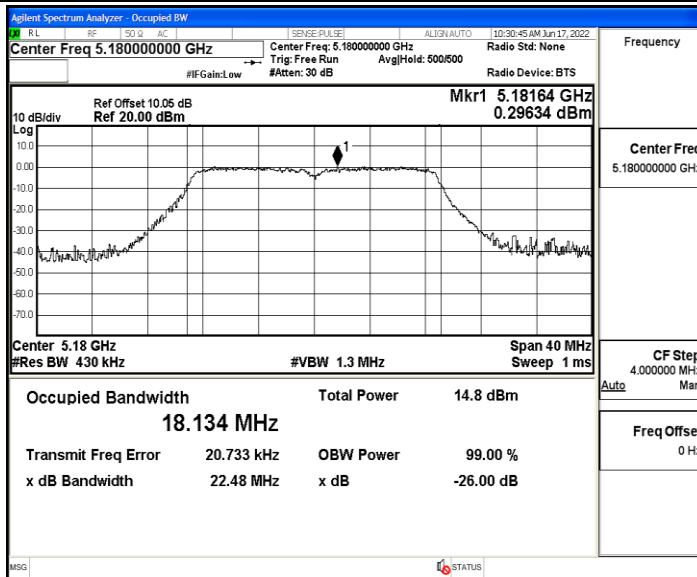
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.171	5171.435	5188.606	---	PASS
		5200	17.344	5191.259	5208.603	---	PASS
		5240	17.310	5231.280	5248.590	---	PASS
11N20SISO	Ant1	5180	18.134	5170.954	5189.088	---	PASS
		5200	18.280	5190.903	5209.183	---	PASS
		5240	18.109	5230.967	5249.076	---	PASS
11N40SISO	Ant1	5190	36.644	5171.778	5208.422	---	PASS
		5230	36.696	5211.715	5248.411	---	PASS
11AC20SISO	Ant1	5180	18.218	5171.007	5189.225	---	PASS
		5200	18.080	5191.020	5209.100	---	PASS
		5240	18.184	5230.901	5249.085	---	PASS
11AC40SISO	Ant1	5190	36.808	5171.738	5208.546	---	PASS
		5230	36.904	5211.735	5248.639	---	PASS
11AC80SISO	Ant1	5210	76.107	5172.155	5248.262	---	PASS

### Test Graphs

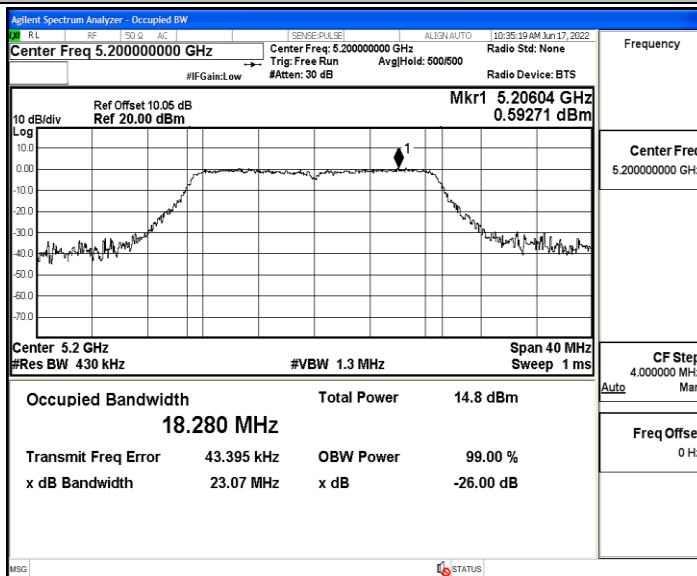




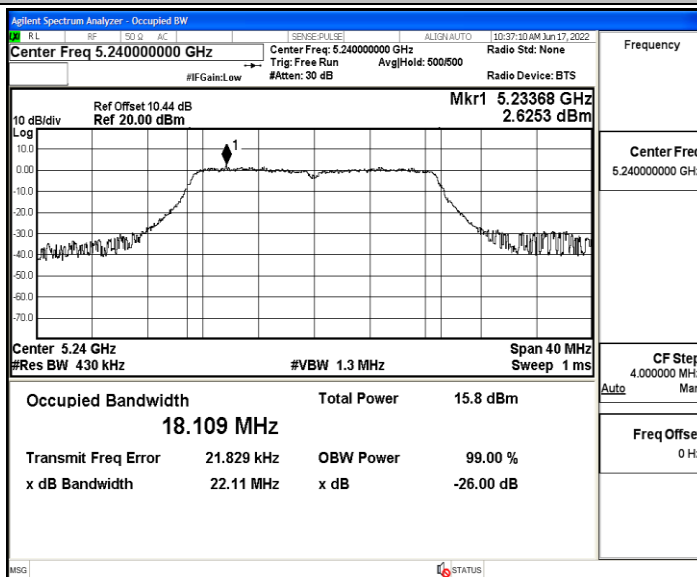
11N20SISO\_Ant1\_5180



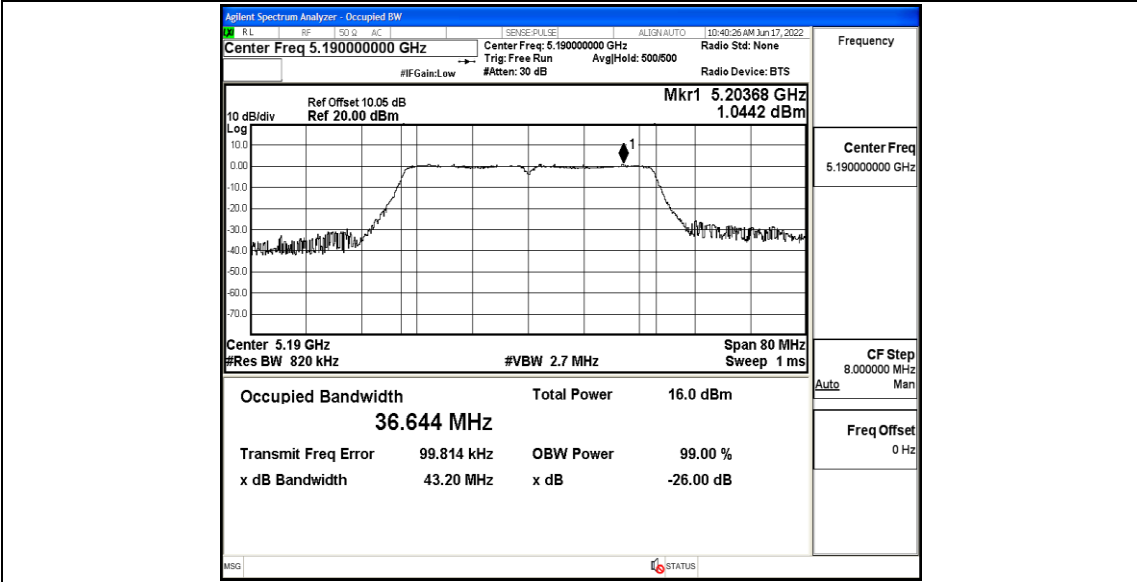
11N20SISO\_Ant1\_5200



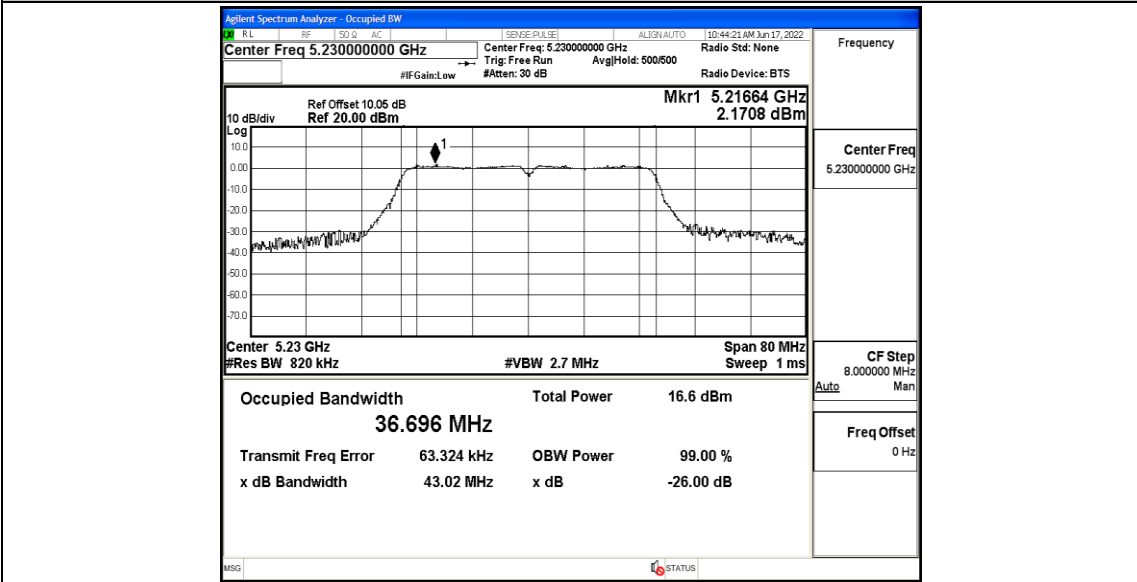
11N20SISO\_Ant1\_5240



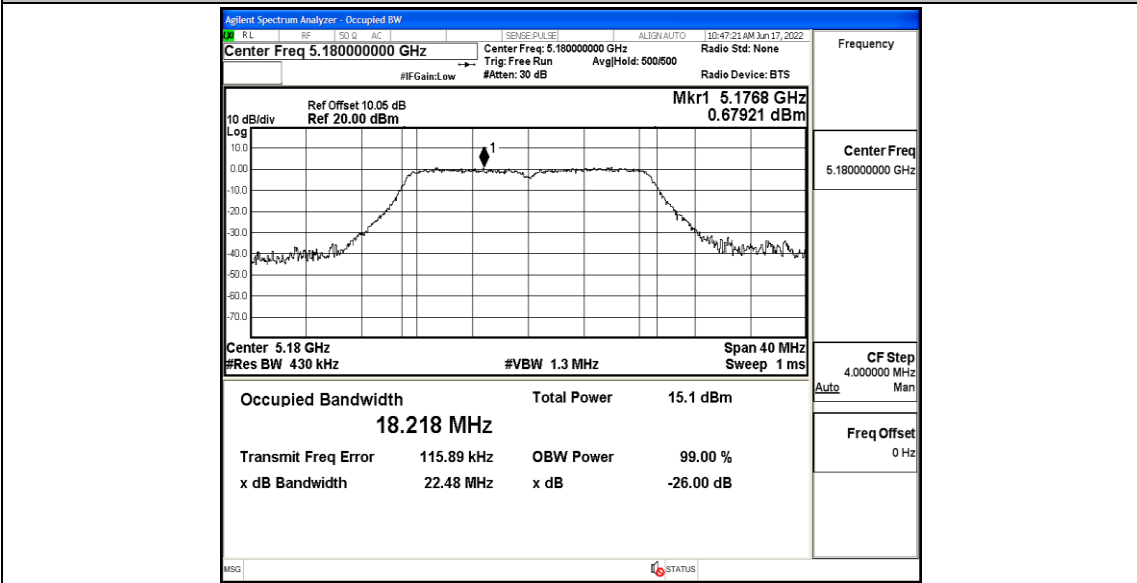
11N40SISO\_Ant1\_5190



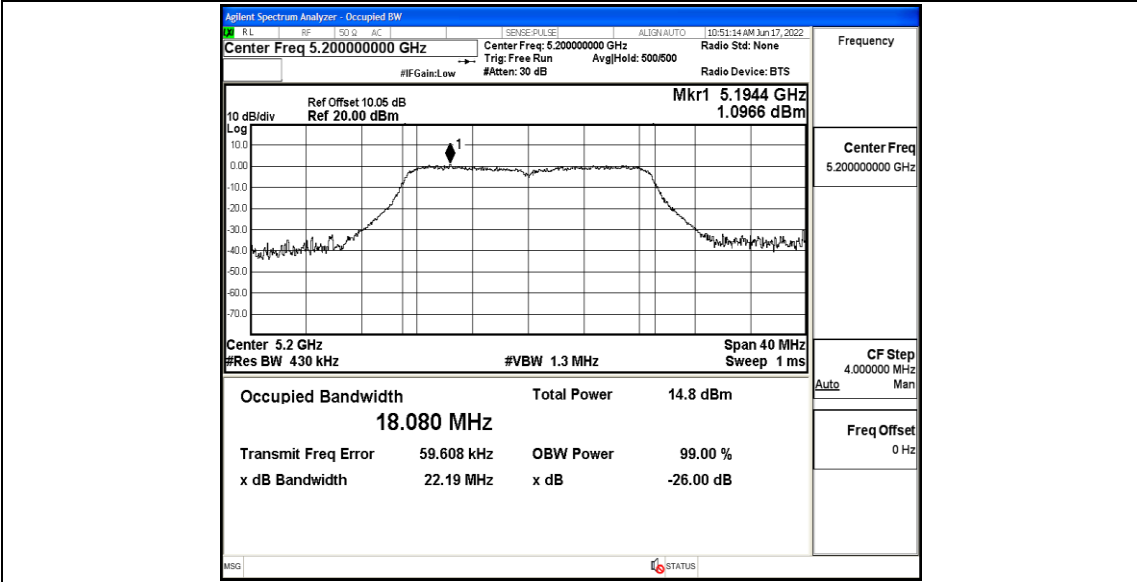
11N40SISO\_Ant1\_5230



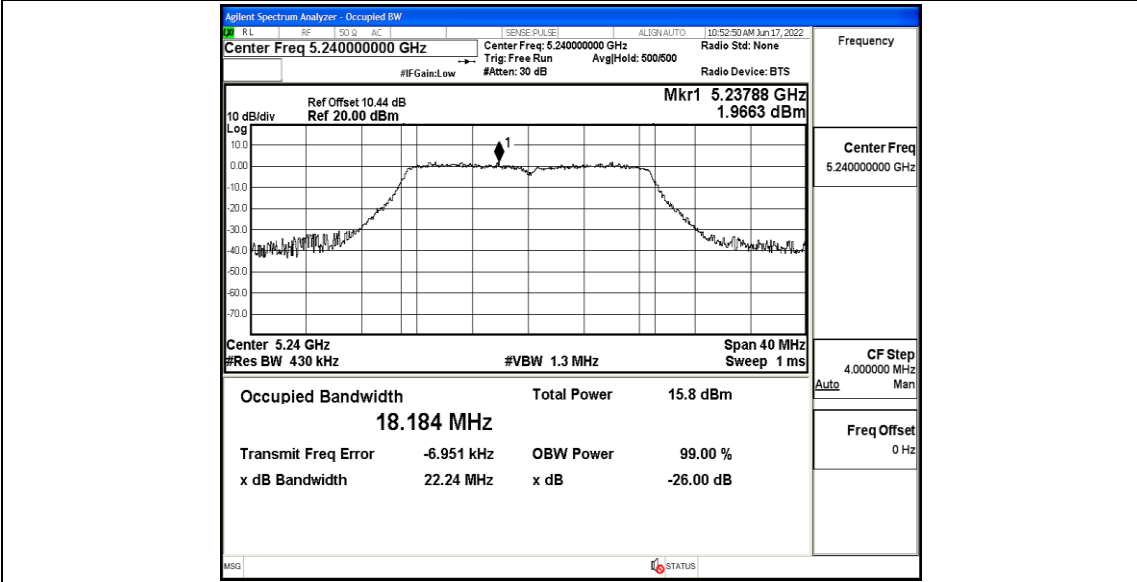
11A20SISO\_Ant1\_5180



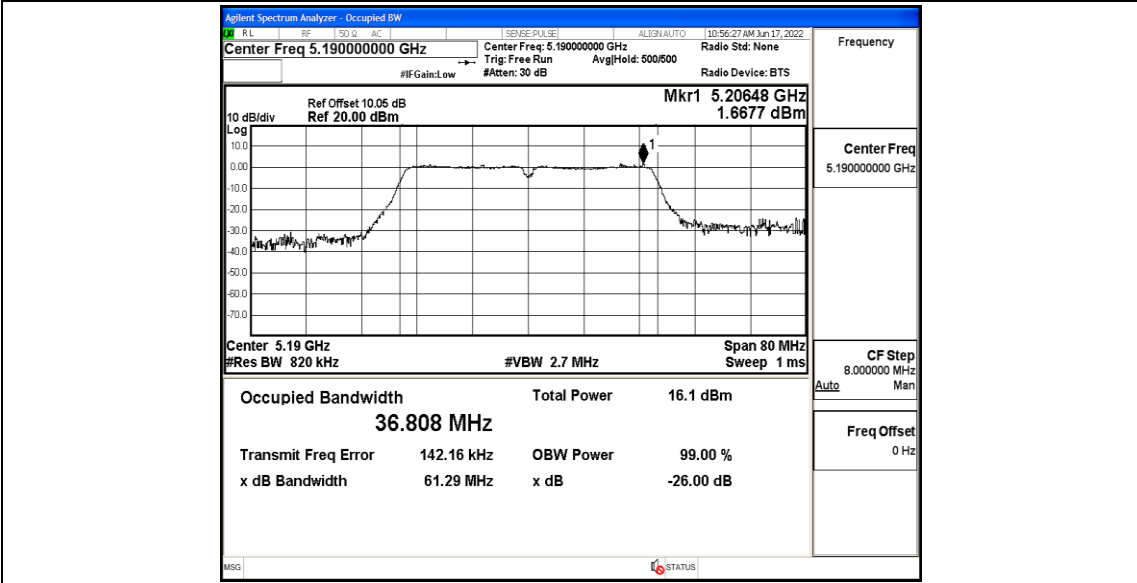
11A20SISO\_Ant1\_5200



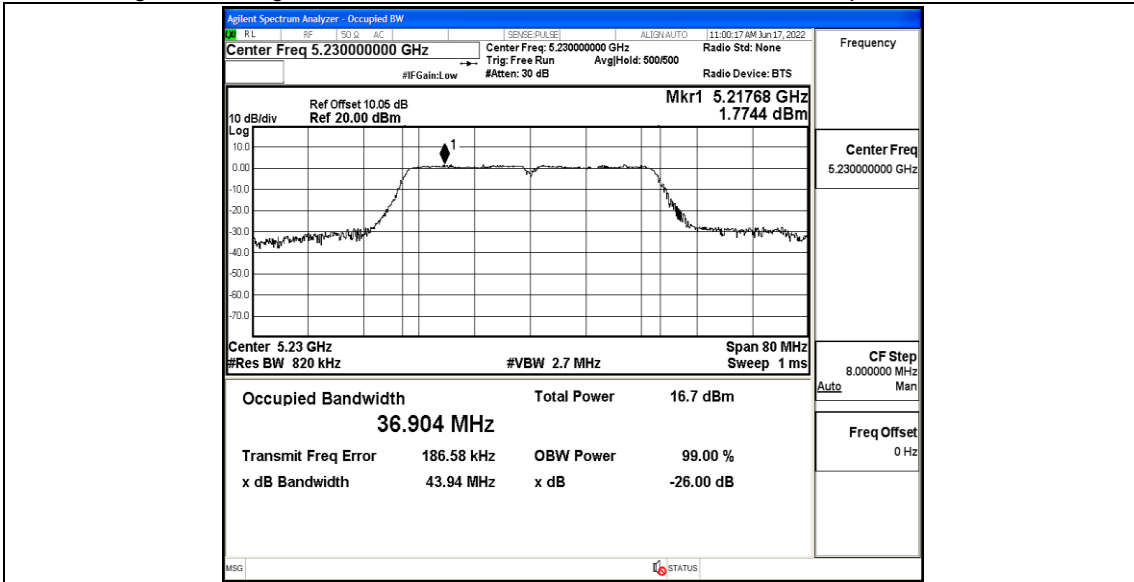
11AC20SISO\_Ant1\_5240



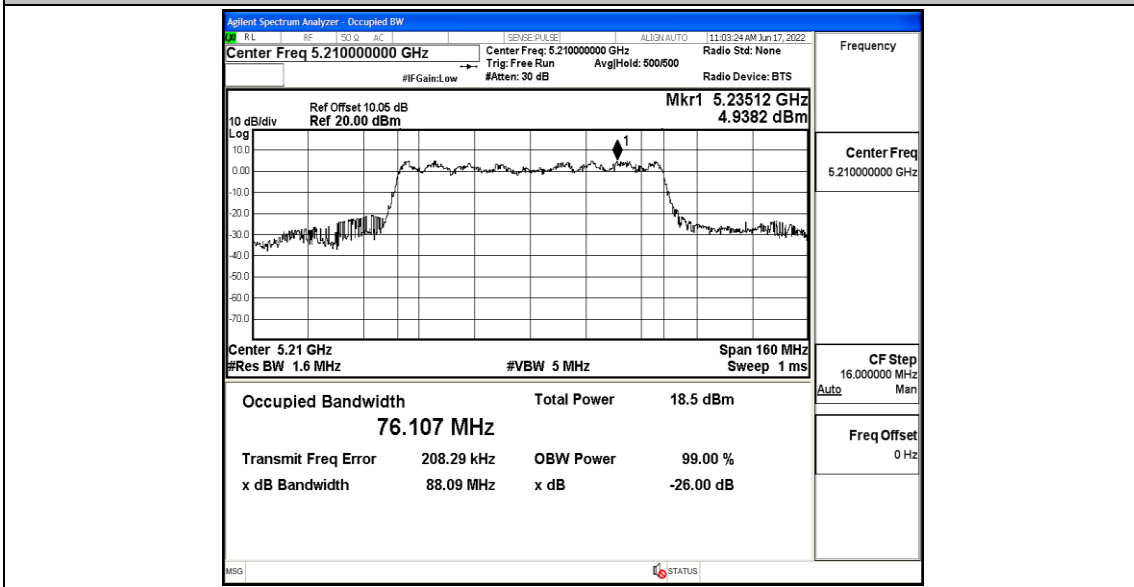
11AC40SISO\_Ant1\_5190



11AC40SISO\_Ant1\_5230



11AC80SISO\_Ant1\_5210



## Appendix B: Maximum conducted output power

### Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	8.54	≤23.98	PASS
		5200	7.64	≤23.98	PASS
		5240	8.67	≤23.98	PASS
11N20SISO	Ant1	5180	8.12	≤23.98	PASS
		5200	7.84	≤23.98	PASS
		5240	8.95	≤23.98	PASS
11N40SISO	Ant1	5190	8.74	≤23.98	PASS
		5230	9.52	≤23.98	PASS
11AC20SISO	Ant1	5180	8.30	≤23.98	PASS
		5200	8.04	≤23.98	PASS
		5240	9.08	≤23.98	PASS
11AC40SISO	Ant1	5190	8.58	≤23.98	PASS
		5230	9.25	≤23.98	PASS
11AC80SISO	Ant1	5210	10.33	≤23.98	PASS

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

## Appendix C: Maximum power spectral density

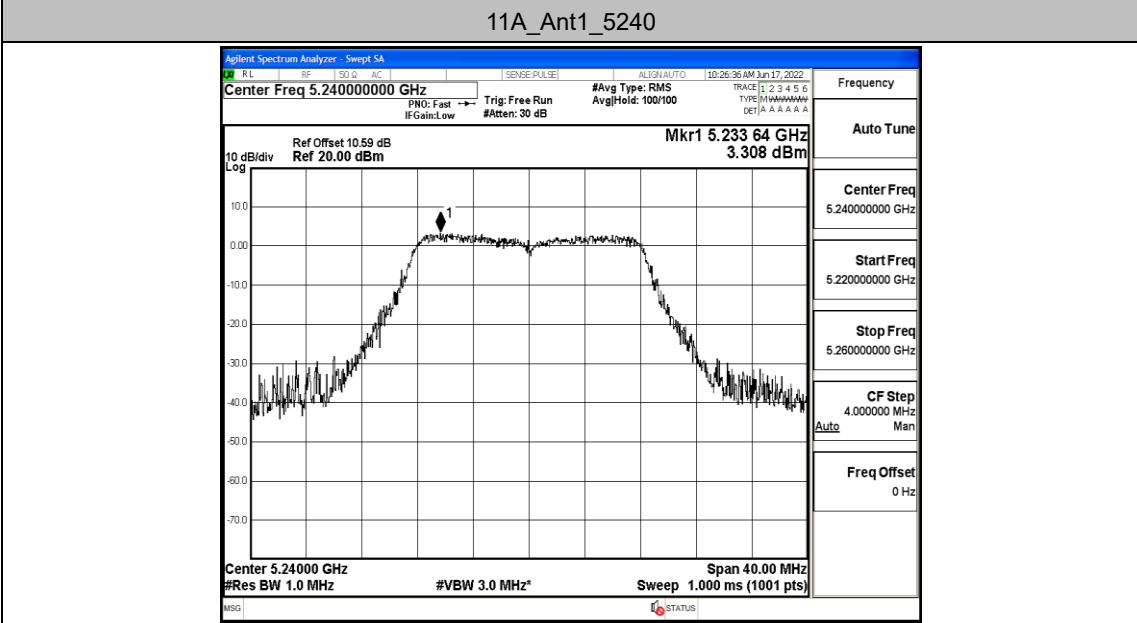
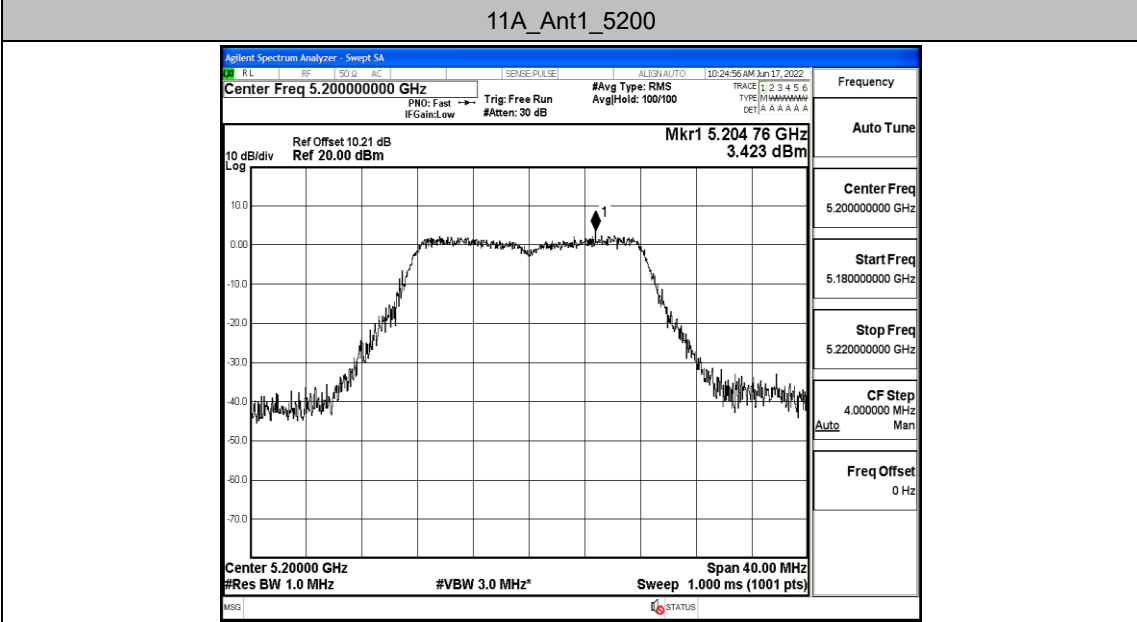
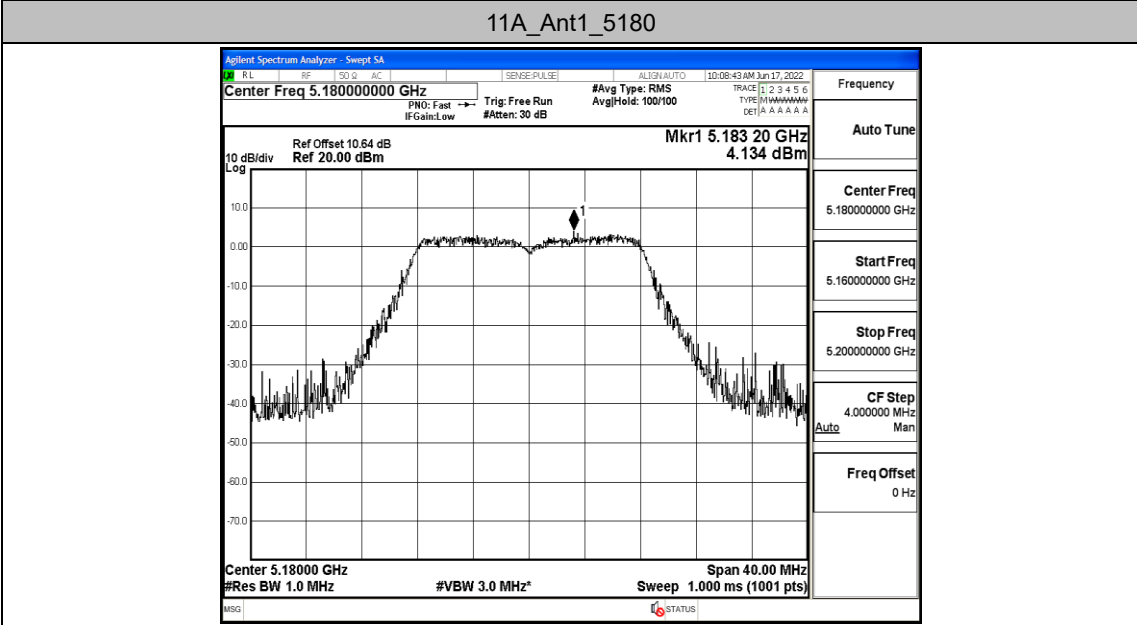
### Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	4.13	≤11.00	PASS
		5200	3.42	≤11.00	PASS
		5240	3.31	≤11.00	PASS
11N20SISO	Ant1	5180	2.55	≤11.00	PASS
		5200	2.66	≤11.00	PASS
		5240	3.23	≤11.00	PASS
11N40SISO	Ant1	5190	0.56	≤11.00	PASS
		5230	1.25	≤11.00	PASS
11AC20SISO	Ant1	5180	2.61	≤11.00	PASS
		5200	2.65	≤11.00	PASS
		5240	3.32	≤11.00	PASS
11AC40SISO	Ant1	5190	0.82	≤11.00	PASS
		5230	0.88	≤11.00	PASS
11AC80SISO	Ant1	5210	3.11	≤11.00	PASS

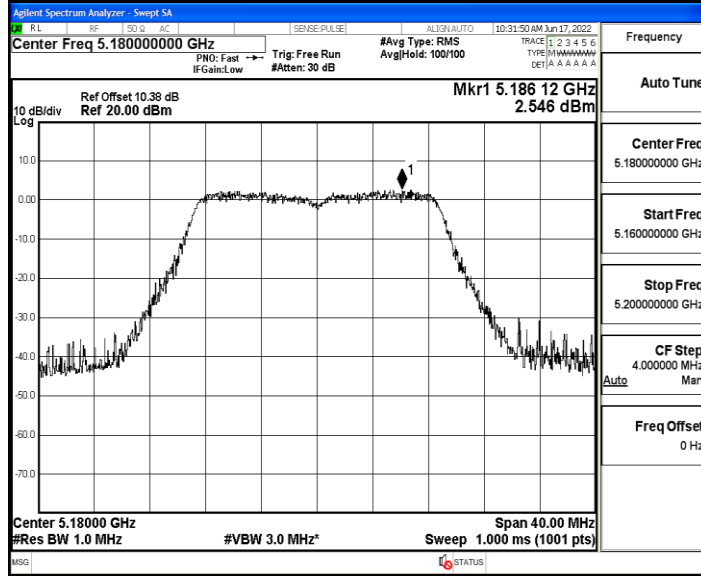
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

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

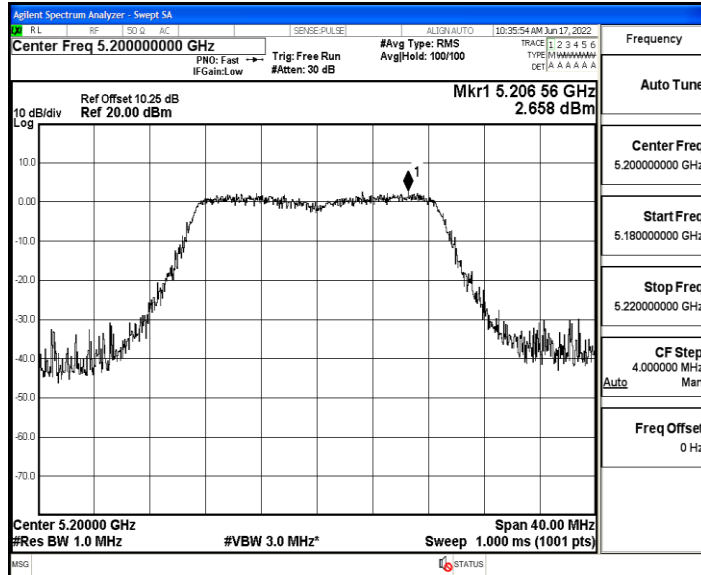
### Test Graphs



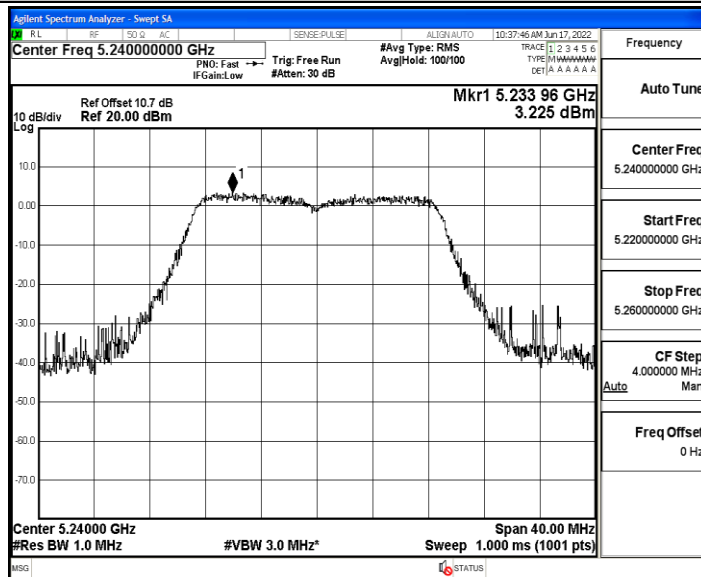
11N20SISO\_Ant1\_5180



11N20SISO\_Ant1\_5200

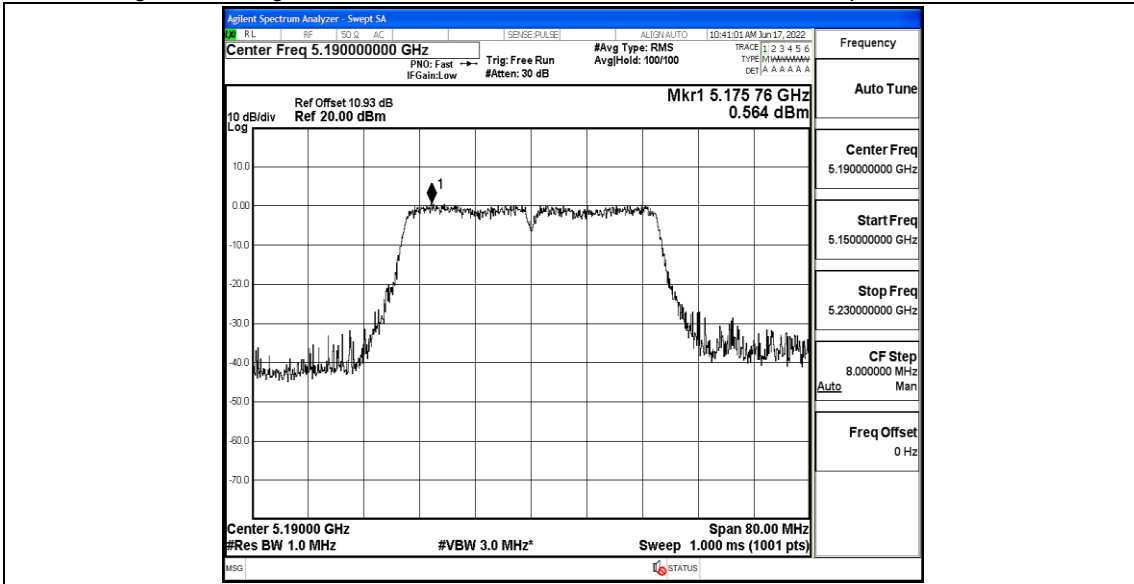


11N20SISO\_Ant1\_5240

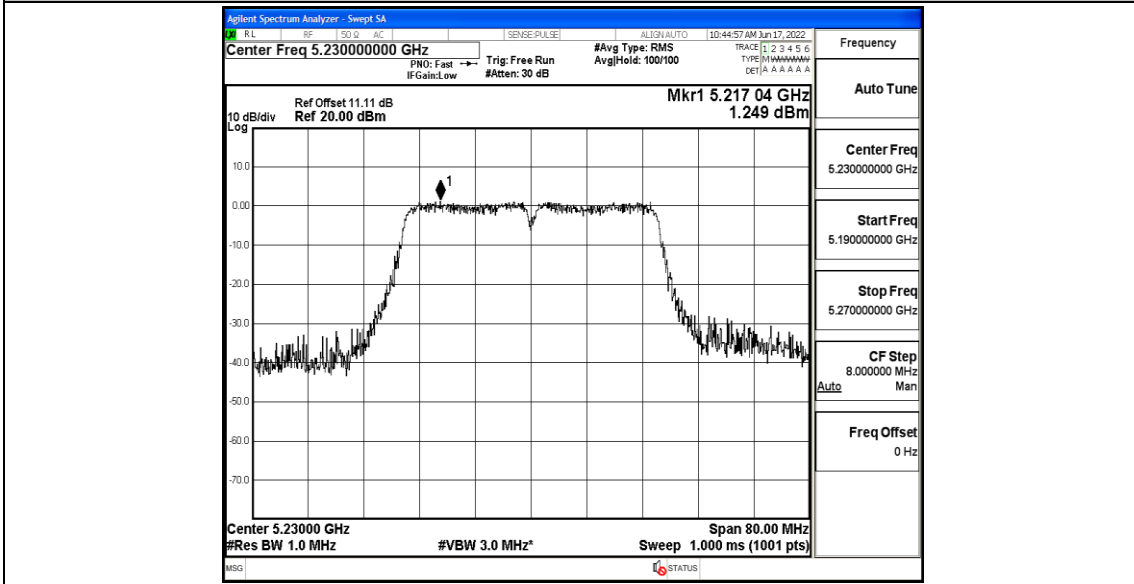


11N40SISO\_Ant1\_5190

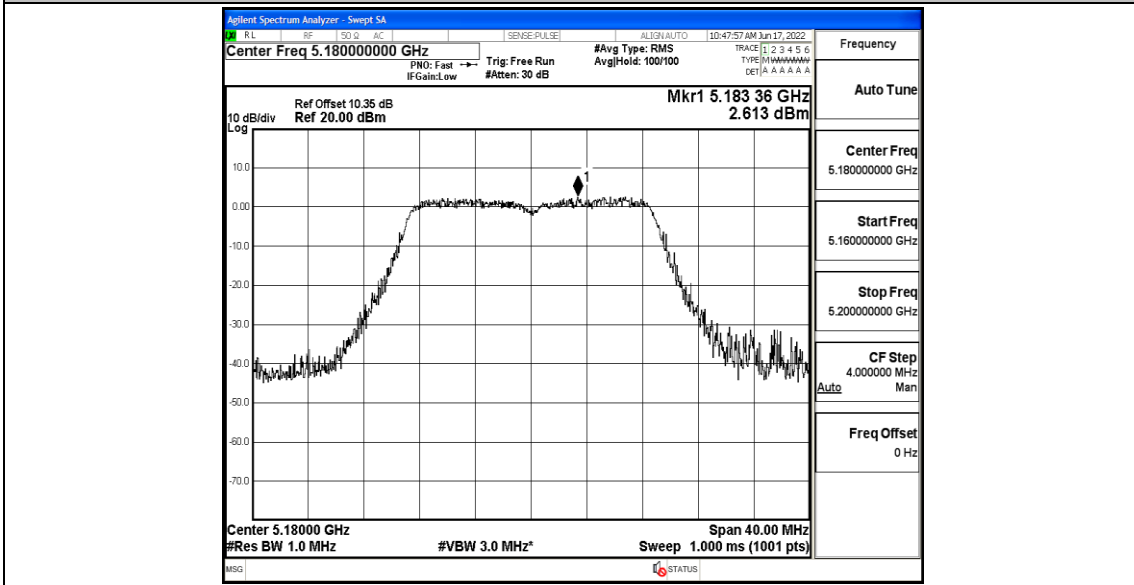




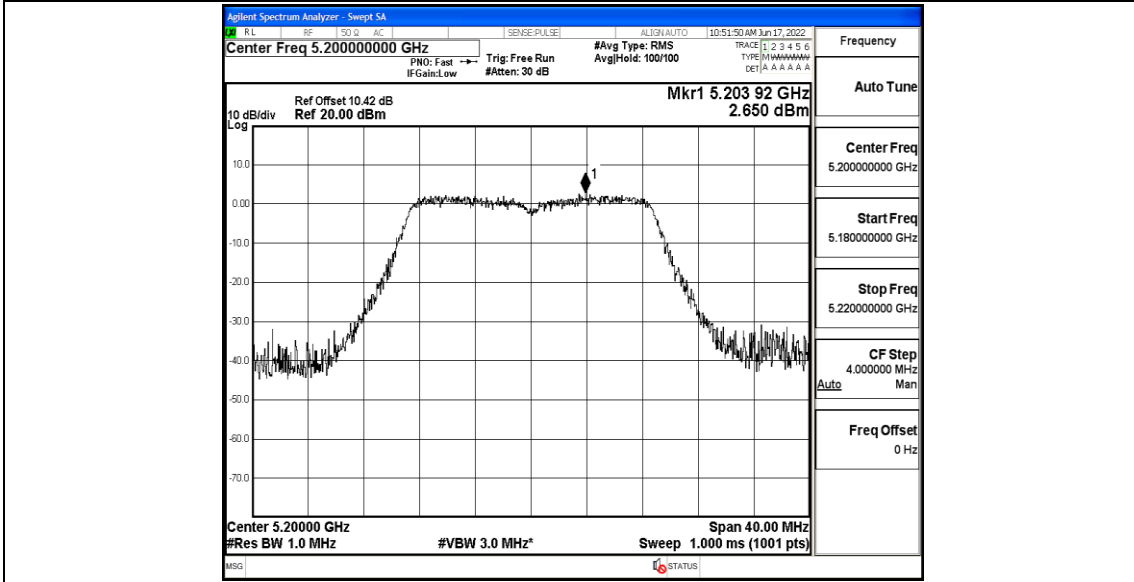
11N40SISO\_Ant1\_5230



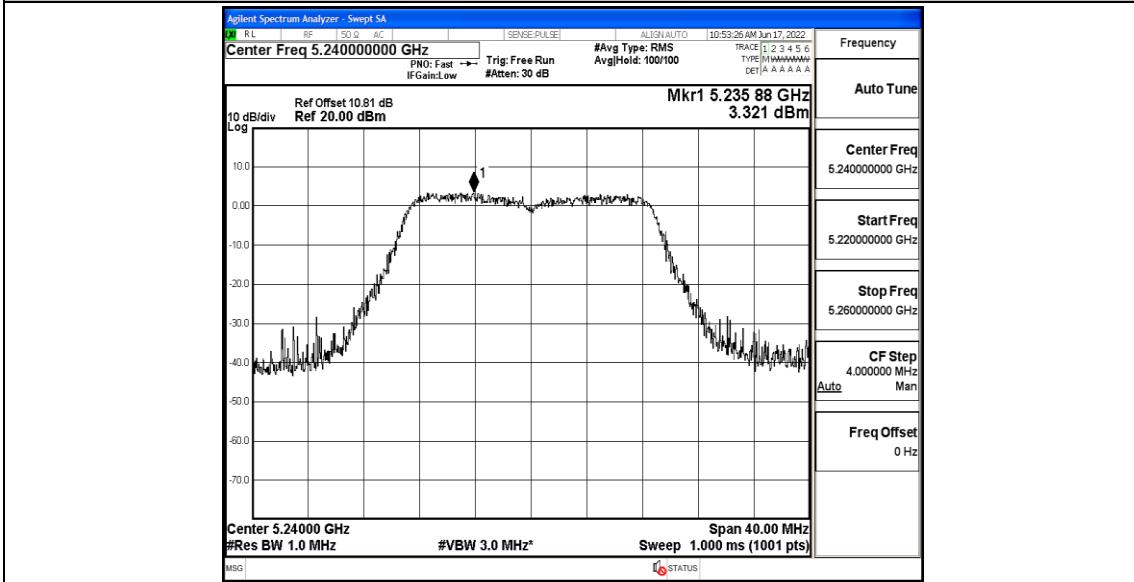
11AC20SISO\_Ant1\_5180



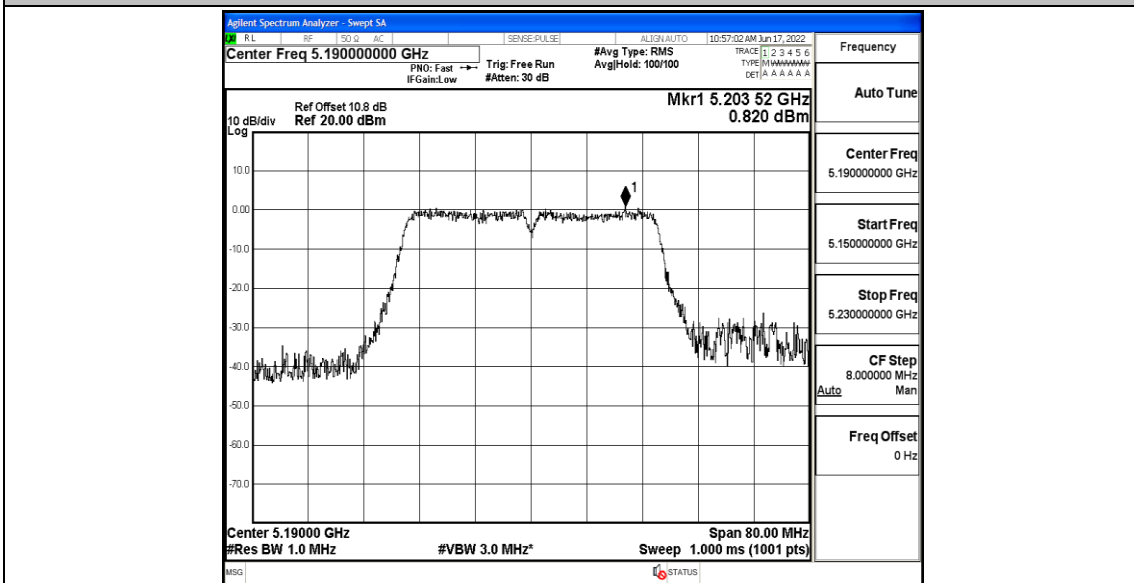
11AC20SISO\_Ant1\_5200



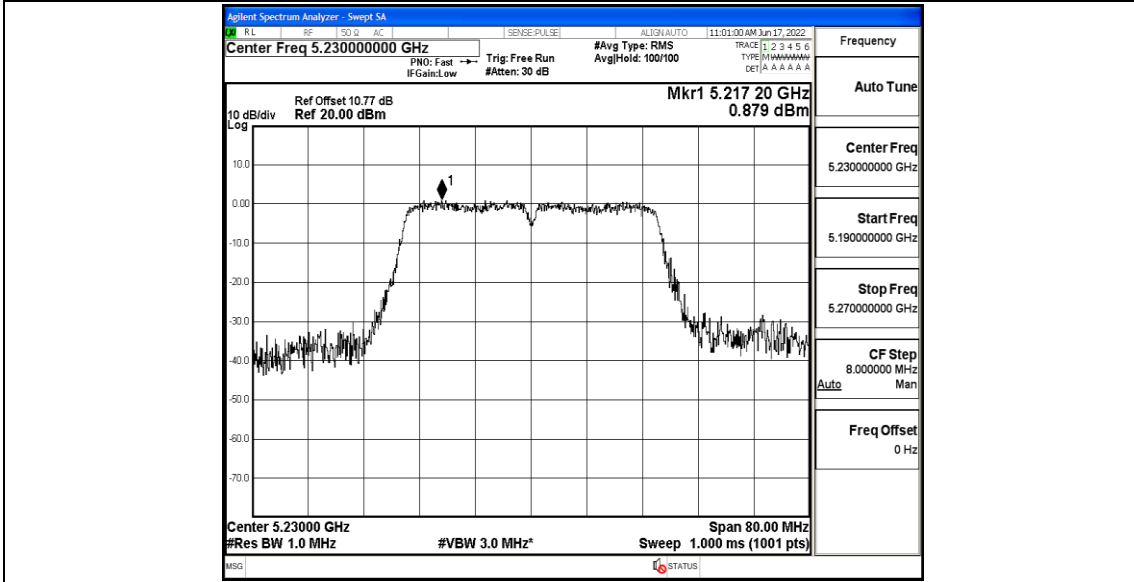
11AC20SISO\_Ant1\_5240



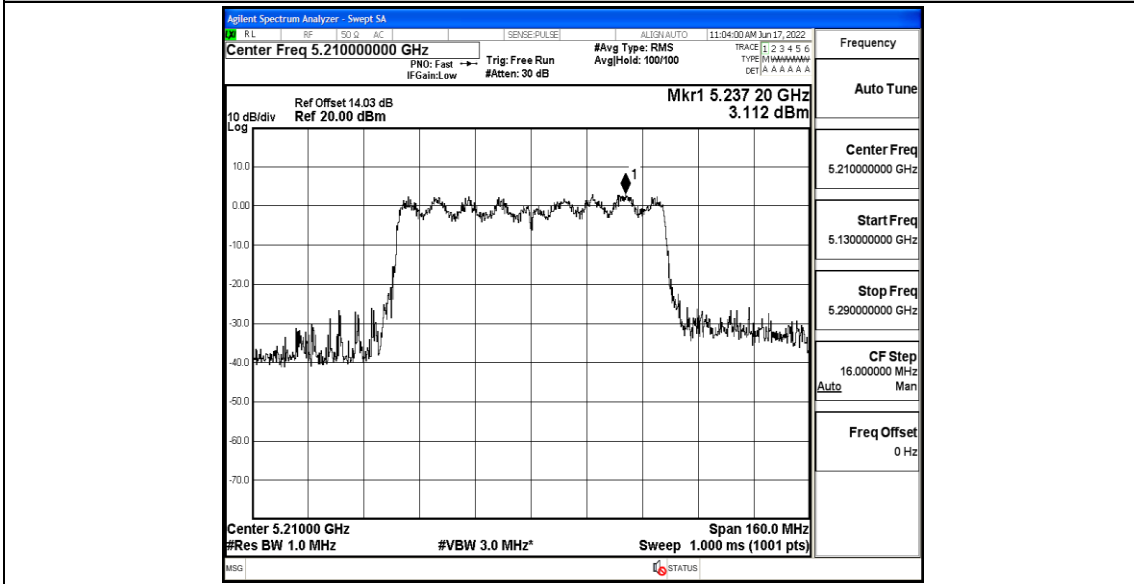
11AC40SISO\_Ant1\_5190



11AC40SISO\_Ant1\_5230



11AC80SISO\_Ant1\_5210

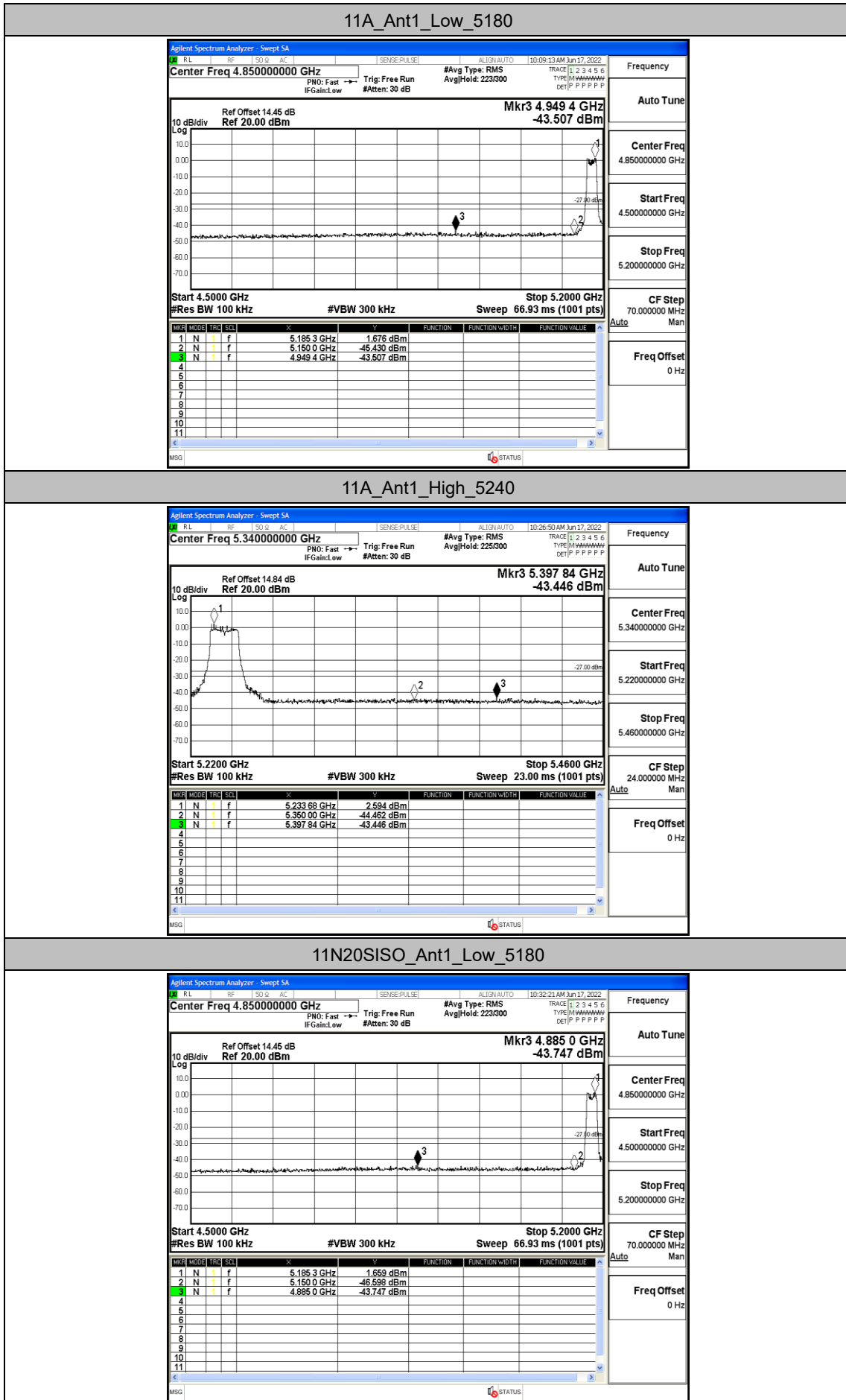


## Appendix D: Band edge measurements

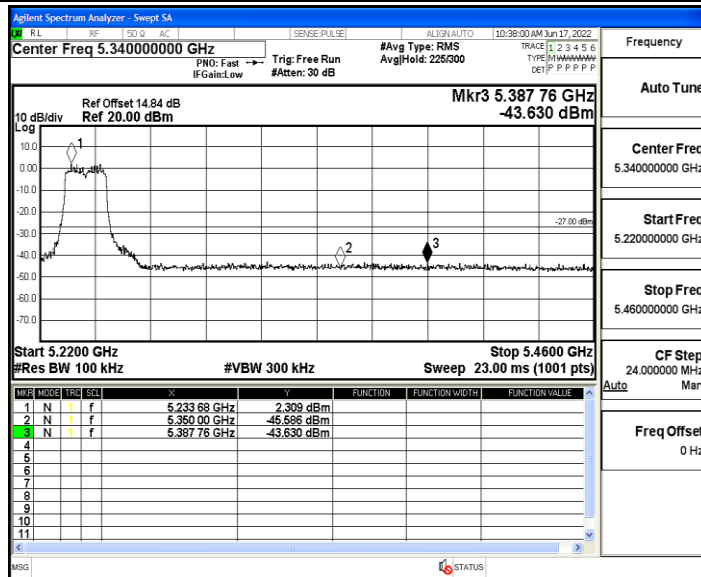
### Test Result

TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-43.51	≤-27	PASS
		High	5240	-43.45	≤-27	PASS
11N20SISO	Ant1	Low	5180	-43.75	≤-27	PASS
		High	5240	-43.63	≤-27	PASS
11N40SISO	Ant1	Low	5190	-42.91	≤-27	PASS
		High	5230	-44.03	≤-27	PASS
11AC20SISO	Ant1	Low	5180	-43.98	≤-27	PASS
		High	5240	-42.84	≤-27	PASS
11AC40SISO	Ant1	Low	5190	-41.42	≤-27	PASS
		High	5230	-44.02	≤-27	PASS
11AC80SISO	Ant1	Low	5210	-38.05	≤-27	PASS
		High	5210	-43.65	≤-27	PASS

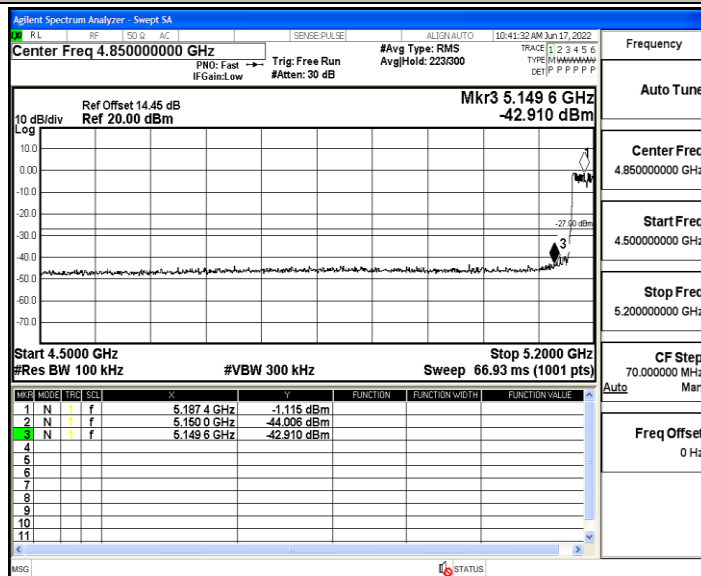
Test Graphs



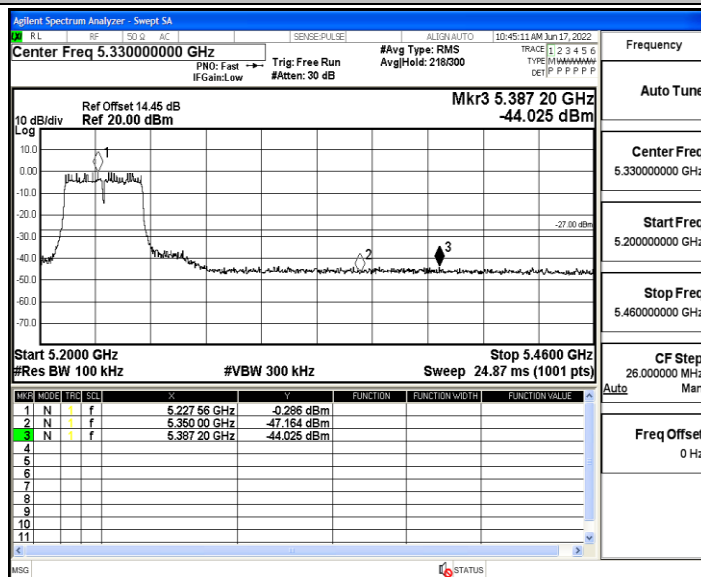
11N20SISO\_Ant1\_High\_5240



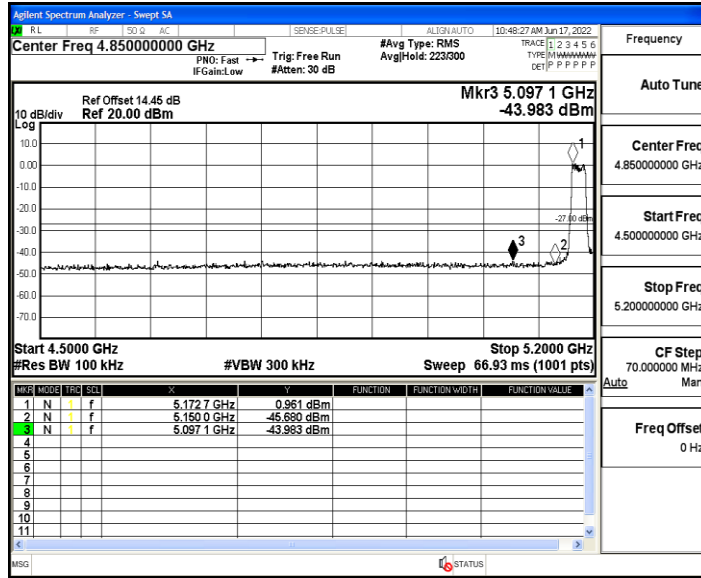
11N40SISO\_Ant1\_Low\_5190



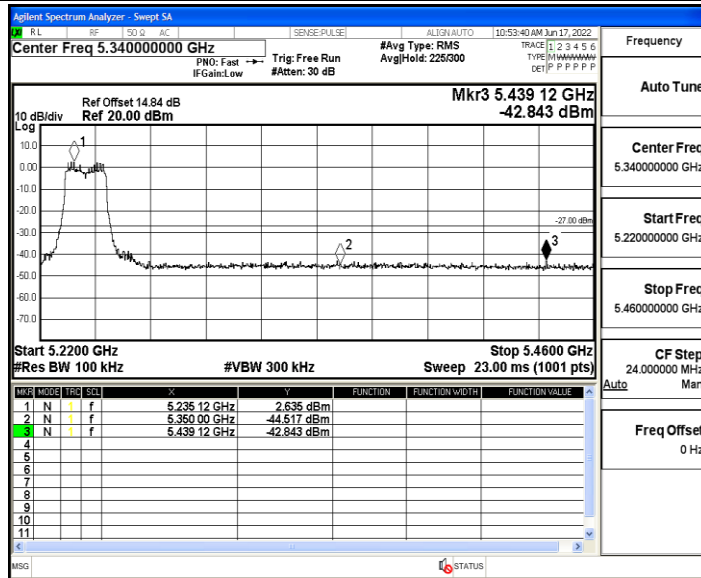
11N40SISO\_Ant1\_High\_5230



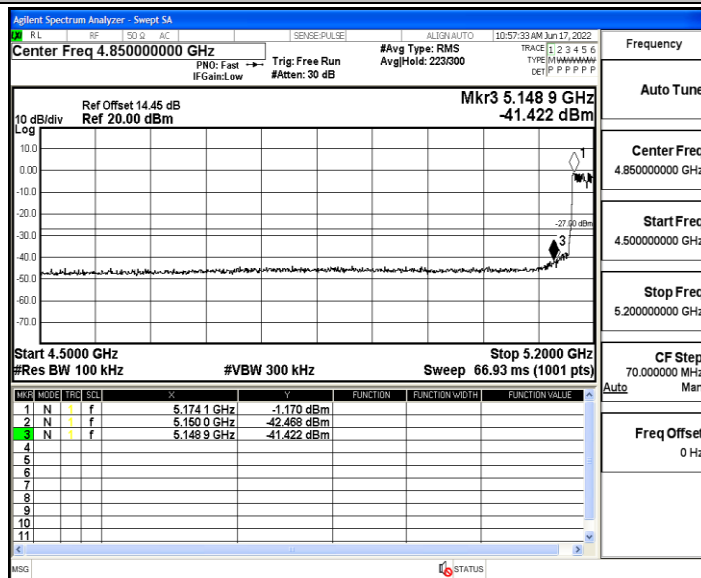
11AC20SISO\_Ant1\_Low\_5180



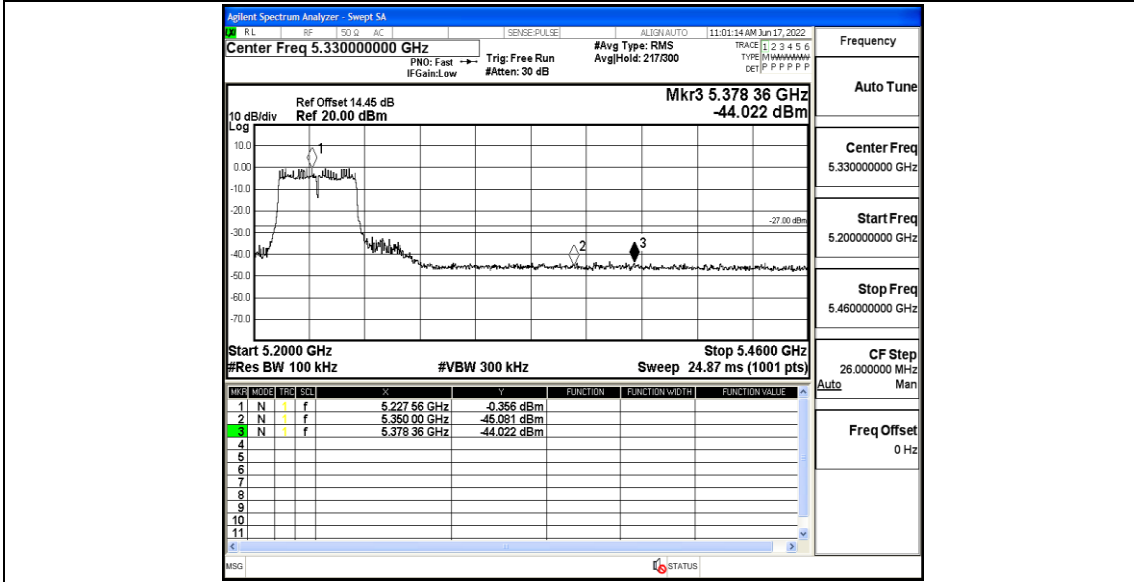
11AC20SISO\_Ant1\_High\_5240



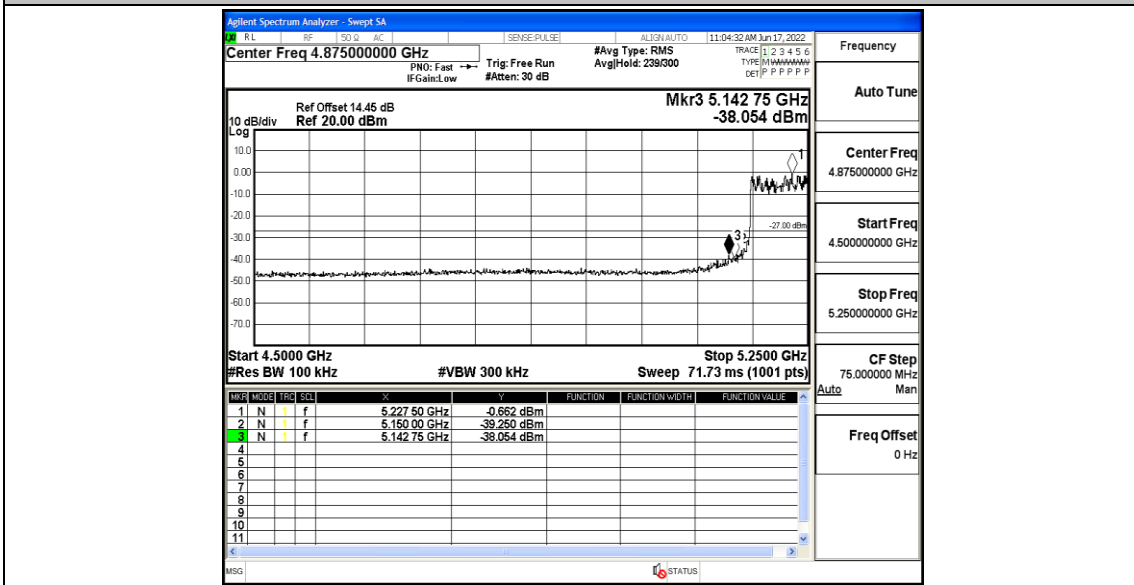
11AC40SISO\_Ant1\_Low\_5190



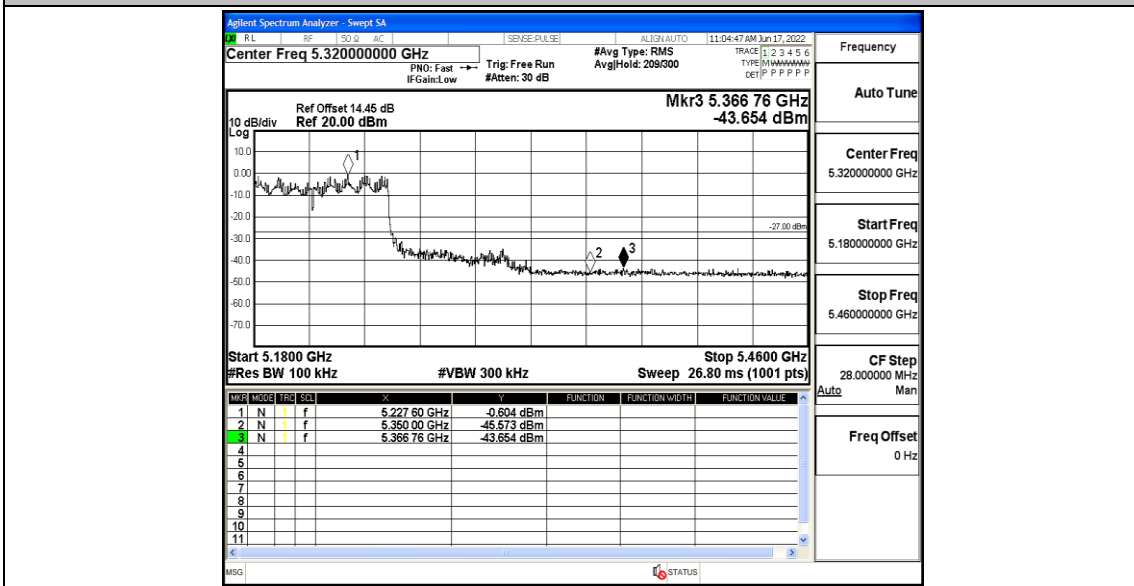
11AC40SISO\_Ant1\_High\_5230



11AC80SISO\_Ant1\_Low\_5210



11AC80SISO\_Ant1\_High\_5210





## Appendix E: Frequency Stability

### Test Result

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	132	5179.937633	5150 – 5250	PASS
5180	20	108	5180.030974	5150 – 5250	PASS
5180	50	120	5180.022304	5150 – 5250	PASS
5180	40	120	5179.978064	5150 – 5250	PASS
5180	30	120	5179.929256	5150 – 5250	PASS
5180	20	120	5179.982839	5150 – 5250	PASS
5180	10	120	5180.007400	5150 – 5250	PASS
5180	0	120	5180.021840	5150 – 5250	PASS
5180	-10	120	5179.923390	5150 – 5250	PASS
5180	-20	120	5179.931253	5150 – 5250	PASS
5180	-30	120	5180.054841	5150 – 5250	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5200	20	132	5199.946412	5150 – 5250	PASS
5200	20	108	5200.094176	5150 – 5250	PASS
5200	50	120	5200.039637	5150 – 5250	PASS
5200	40	120	5199.934464	5150 – 5250	PASS
5200	30	120	5200.037124	5150 – 5250	PASS
5200	20	120	5200.046432	5150 – 5250	PASS
5200	10	120	5199.944760	5150 – 5250	PASS
5200	0	120	5199.947695	5150 – 5250	PASS
5200	-10	120	5199.921535	5150 – 5250	PASS
5200	-20	120	5200.068697	5150 – 5250	PASS
5200	-30	120	5200.019136	5150 – 5250	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	132	5240.007637	5150 – 5250	PASS
5240	20	108	5239.935858	5150 – 5250	PASS
5240	50	120	5239.951041	5150 – 5250	PASS
5240	40	120	5240.092951	5150 – 5250	PASS
5240	30	120	5240.079100	5150 – 5250	PASS
5240	20	120	5239.980173	5150 – 5250	PASS
5240	10	120	5239.931113	5150 – 5250	PASS
5240	0	120	5239.925616	5150 – 5250	PASS
5240	-10	120	5239.939842	5150 – 5250	PASS
5240	-20	120	5240.008573	5150 – 5250	PASS
5240	-30	120	5239.945051	5150 – 5250	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5190	20	132	5190.057844	5150 – 5250	PASS
5190	20	108	5190.033171	5150 – 5250	PASS
5190	50	120	5190.017715	5150 – 5250	PASS
5190	40	120	5190.007581	5150 – 5250	PASS
5190	30	120	5190.002029	5150 – 5250	PASS
5190	20	120	5189.927379	5150 – 5250	PASS
5190	10	120	5190.005386	5150 – 5250	PASS
5190	0	120	5190.059752	5150 – 5250	PASS
5190	-10	120	5189.933813	5150 – 5250	PASS
5190	-20	120	5189.986298	5150 – 5250	PASS
5190	-30	120	5189.928150	5150 – 5250	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5230	20	132	5230.027855	5150 – 5250	PASS
5230	20	108	5230.045926	5150 – 5250	PASS
5230	50	120	5230.012398	5150 – 5250	PASS
5230	40	120	5230.080821	5150 – 5250	PASS
5230	30	120	5229.929236	5150 – 5250	PASS
5230	20	120	5230.087306	5150 – 5250	PASS
5230	10	120	5229.990253	5150 – 5250	PASS
5230	0	120	5230.009575	5150 – 5250	PASS
5230	-10	120	5230.004191	5150 – 5250	PASS
5230	-20	120	5229.950889	5150 – 5250	PASS
5230	-30	120	5229.979251	5150 – 5250	PASS

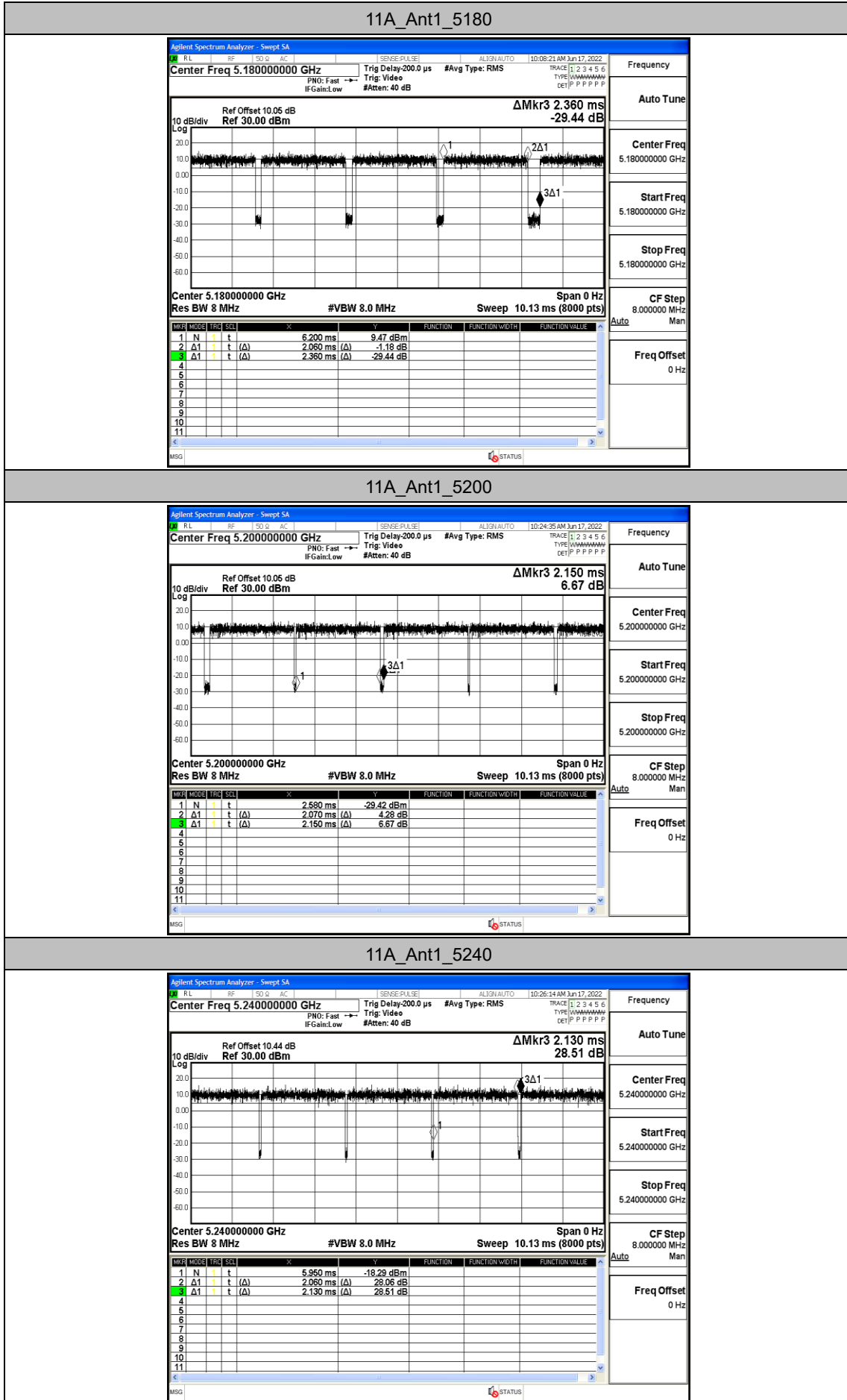
Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5210	20	132	5209.915470	5150 – 5250	PASS
5210	20	108	5209.972796	5150 – 5250	PASS
5210	50	120	5209.954850	5150 – 5250	PASS
5210	40	120	5209.923732	5150 – 5250	PASS
5210	30	120	5210.064005	5150 – 5250	PASS
5210	20	120	5210.002446	5150 – 5250	PASS
5210	10	120	5210.088320	5150 – 5250	PASS
5210	0	120	5209.958154	5150 – 5250	PASS
5210	-10	120	5210.040469	5150 – 5250	PASS
5210	-20	120	5210.050917	5150 – 5250	PASS
5210	-30	120	5210.037918	5150 – 5250	PASS

## Appendix F: Duty Cycle

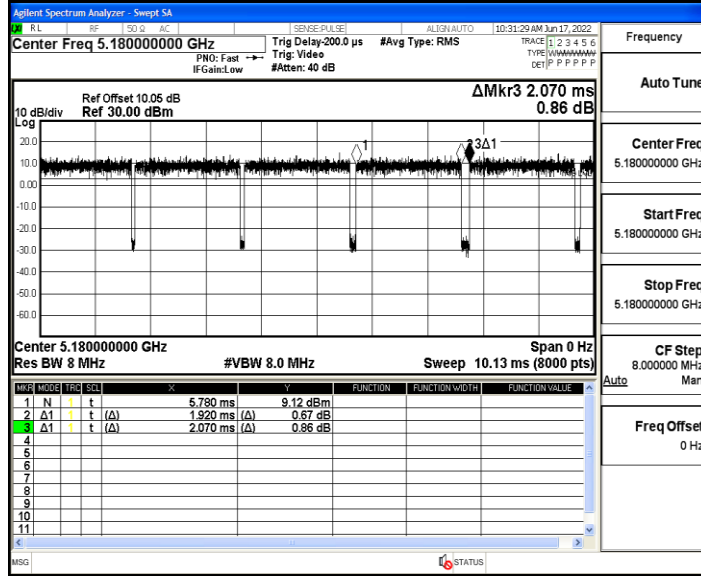
### Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]
11A	Ant1	5180	2.06	2.36	87.29	0.49
		5200	2.07	2.15	96.28	0.48
		5240	2.06	2.13	96.71	0.49
11N20SISO	Ant1	5180	1.92	2.07	92.75	0.52
		5200	1.92	2.01	95.52	0.52
		5240	1.92	2.04	94.12	0.52
11N40SISO	Ant1	5190	0.94	1.15	81.74	1.06
		5230	0.94	1.20	78.33	1.06
11AC20SISO	Ant1	5180	1.93	2.07	93.24	0.52
		5200	1.93	2.10	91.90	0.52
		5240	1.93	2.10	91.90	0.52
11AC40SISO	Ant1	5190	0.95	1.13	84.07	1.05
		5230	0.95	1.12	84.82	1.05
11AC80SISO	Ant1	5210	0.46	1.15	40.00	2.17

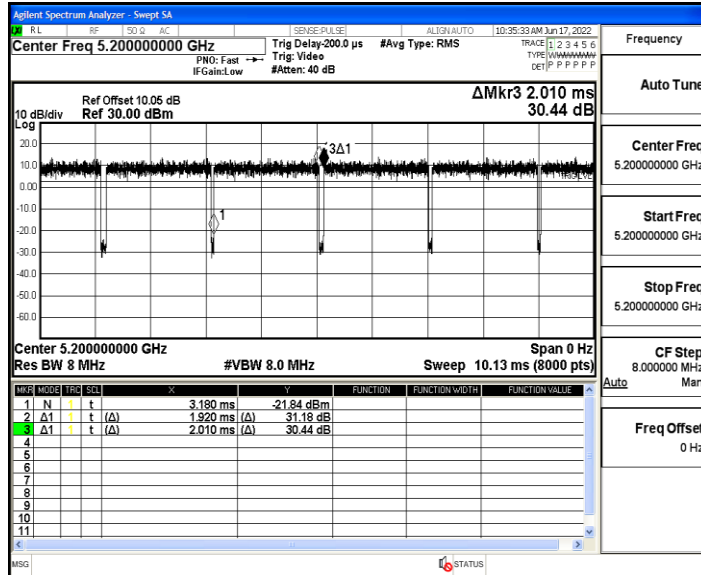
Test Graphs



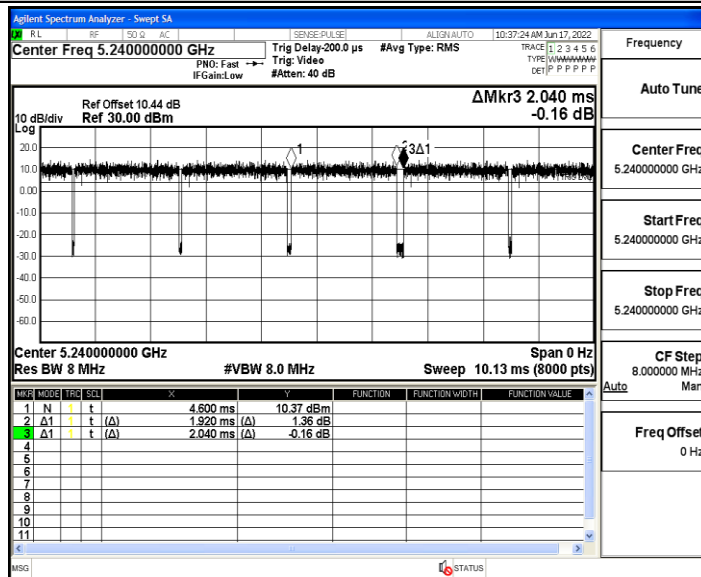
11N20SISO\_Ant1\_5180



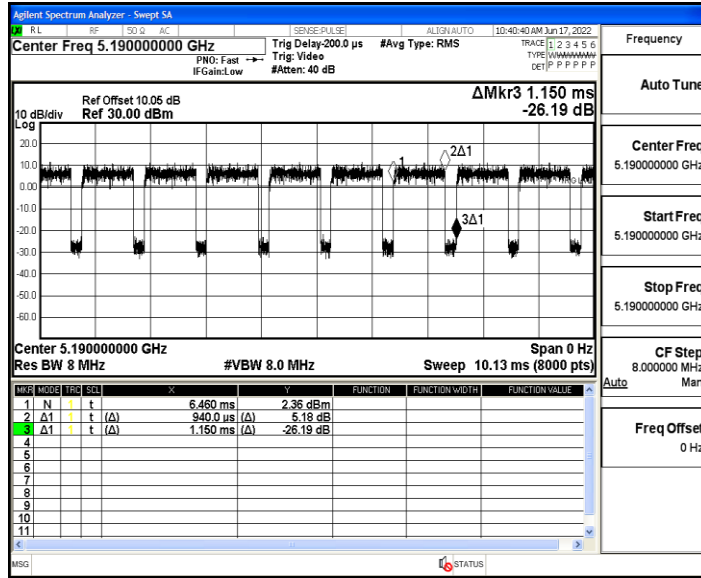
11N20SISO\_Ant1\_5200



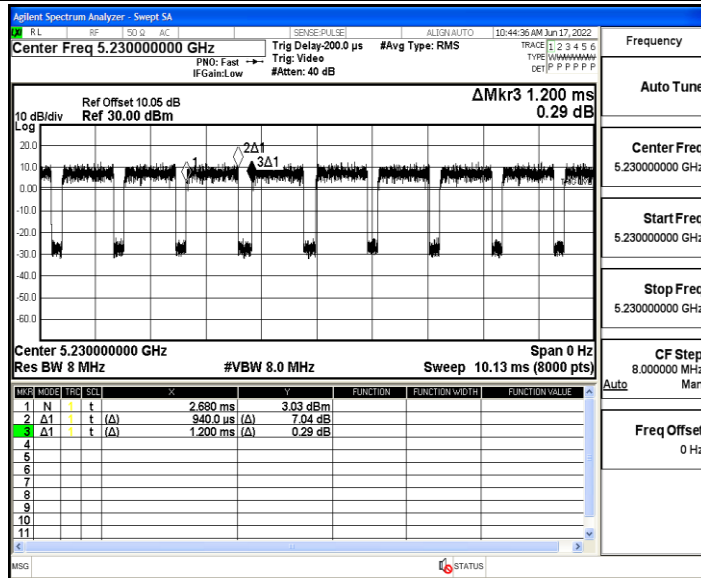
11N20SISO\_Ant1\_5240



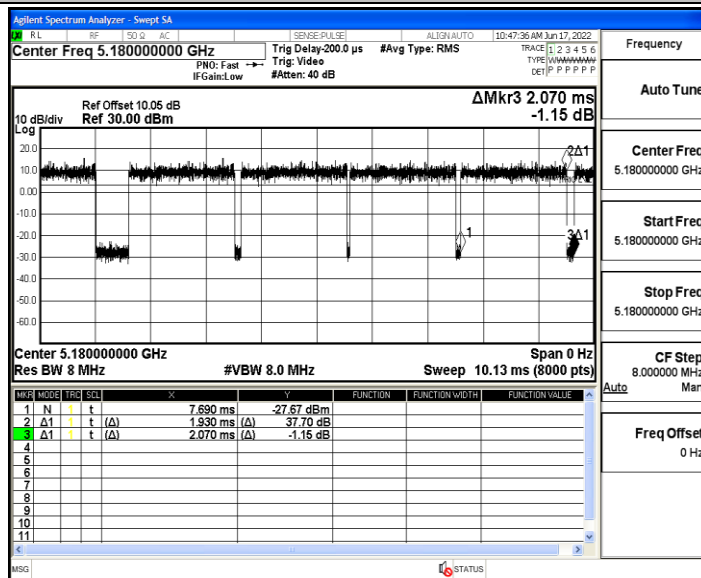
11N40SISO\_Ant1\_5190



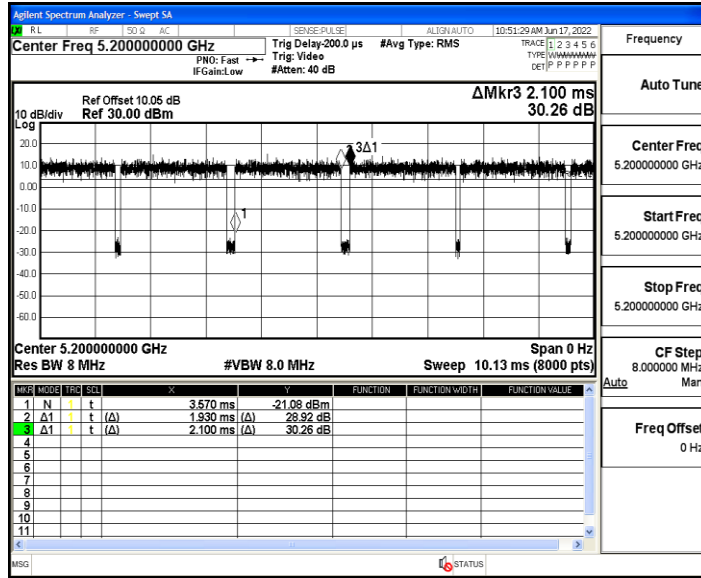
11N40SISO\_Ant1\_5230



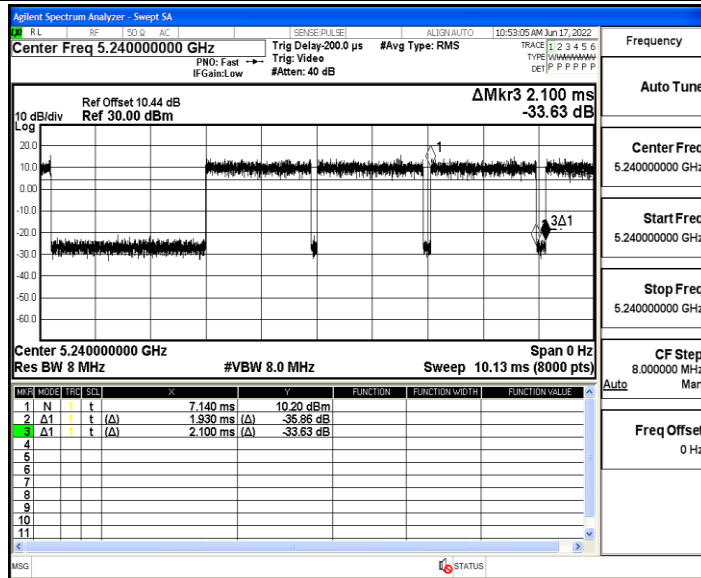
11AC20SISO\_Ant1\_5180



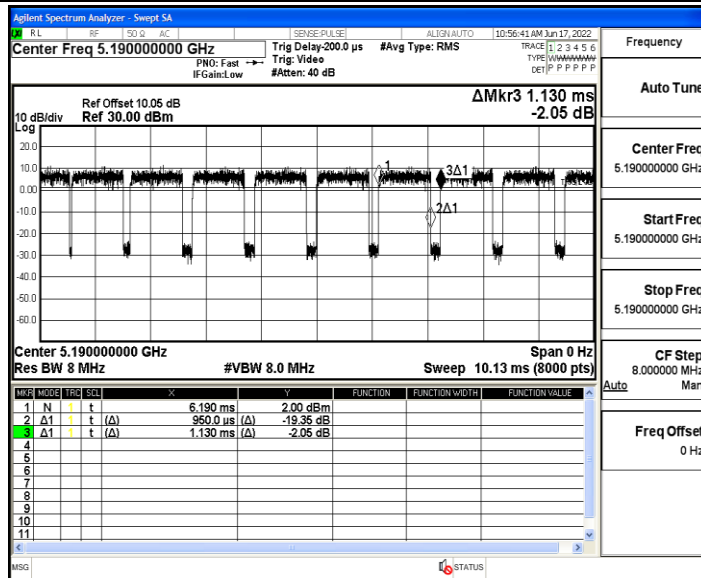
11AC20SISO\_Ant1\_5200



11AC20SISO\_Ant1\_5240

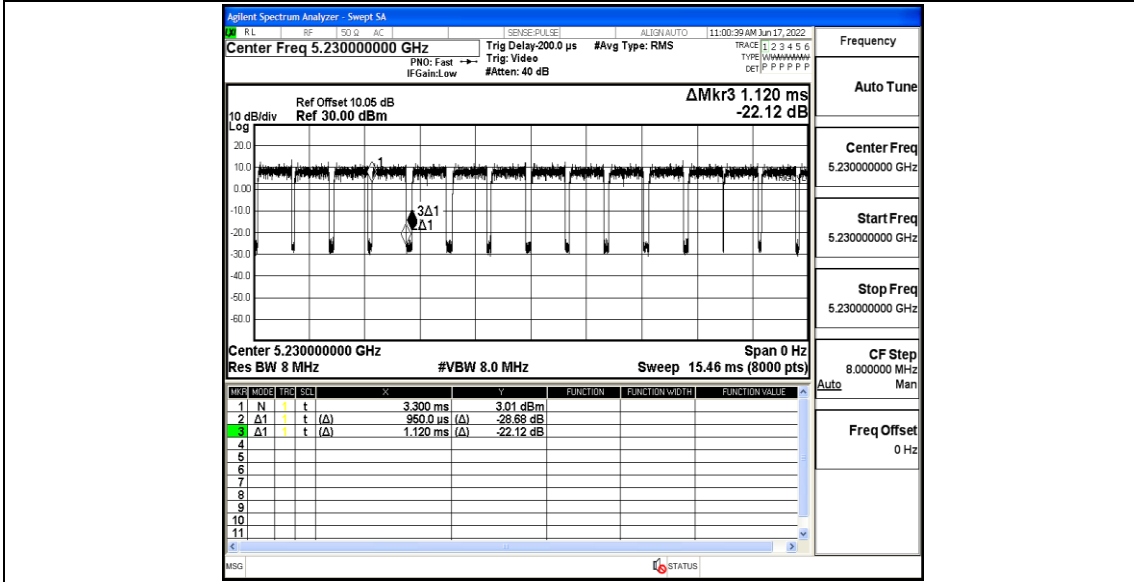


11AC40SISO\_Ant1\_5190



11AC40SISO\_Ant1\_5230





11AC80SISO\_Ant1\_5210

