

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

Product Name: Air WiFi Feeder

Trade Mark: PETLIBRO

Test Model: PLAF301

FCC ID: 2A3DE-PLAF301

### Environmental Conditions

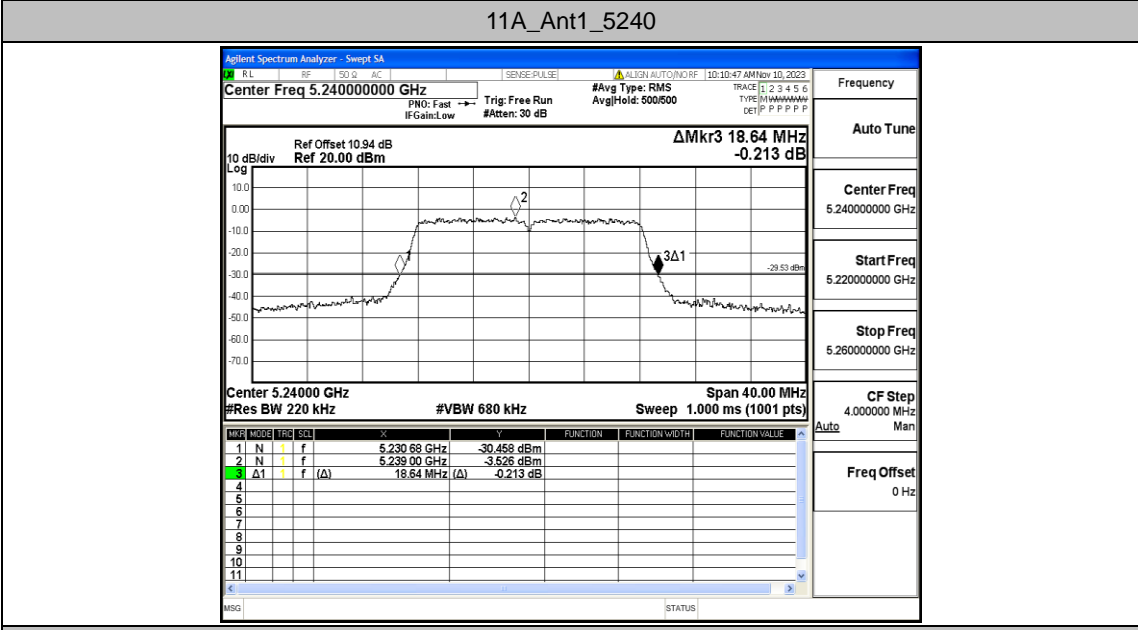
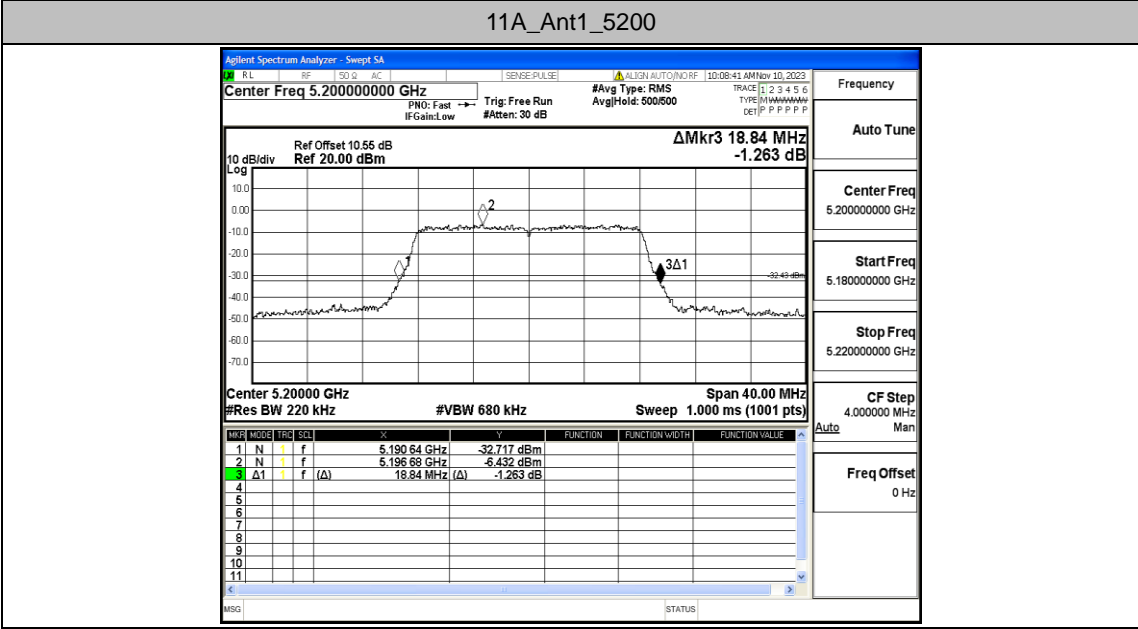
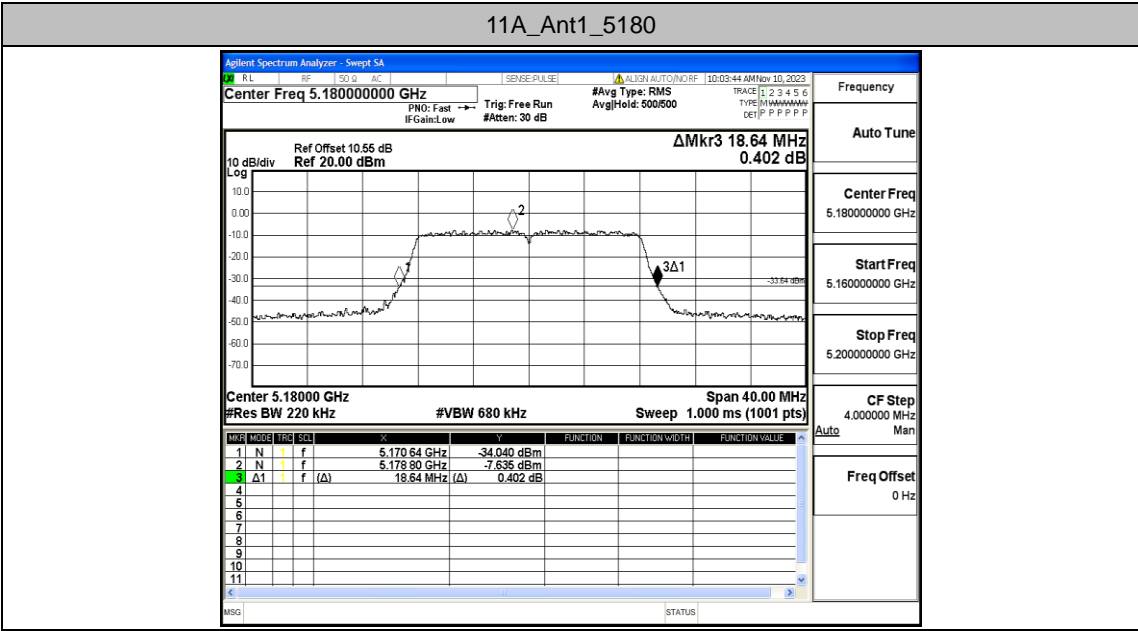
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

### Appendix A1: Emission Bandwidth

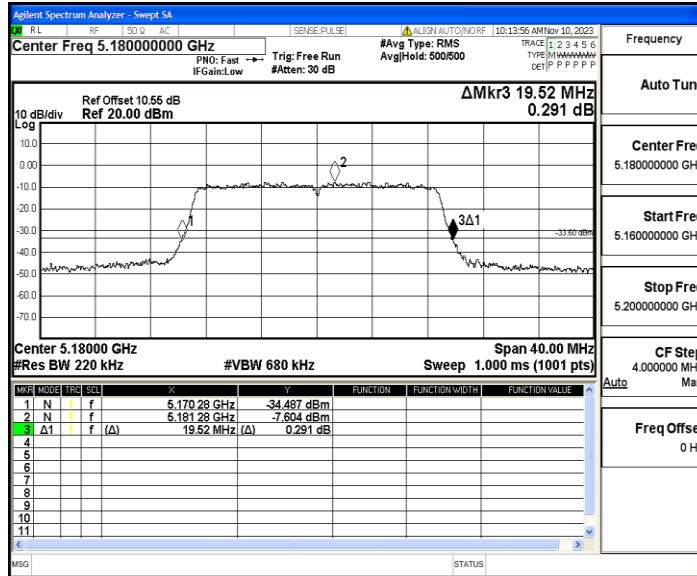
#### Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	18.640	5170.640	5189.280	---	---
		5200	18.840	5190.640	5209.480	---	---
		5240	18.640	5230.680	5249.320	---	---
11N20SISO	Ant1	5180	19.520	5170.280	5189.800	---	---
		5200	19.560	5190.280	5209.840	---	---
		5240	19.520	5230.200	5249.720	---	---
11N40SISO	Ant1	5190	41.040	5169.680	5210.720	---	---
		5230	41.280	5209.440	5250.720	---	---

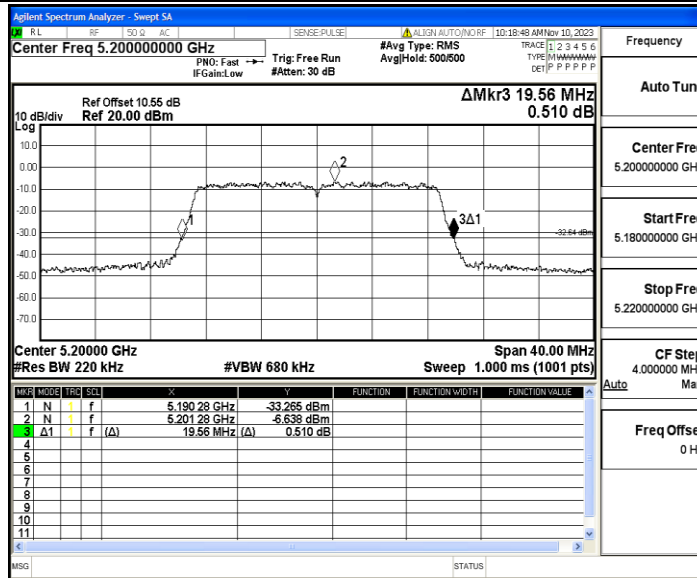
### Test Graphs



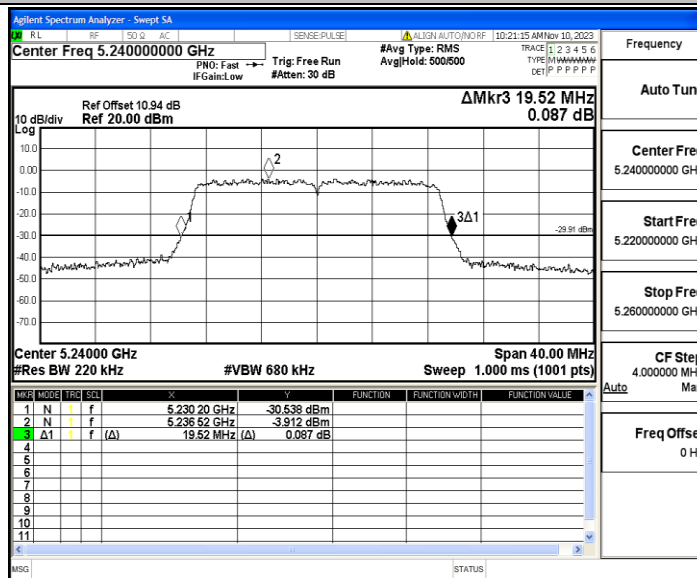
11N20SISO\_Ant1\_5180



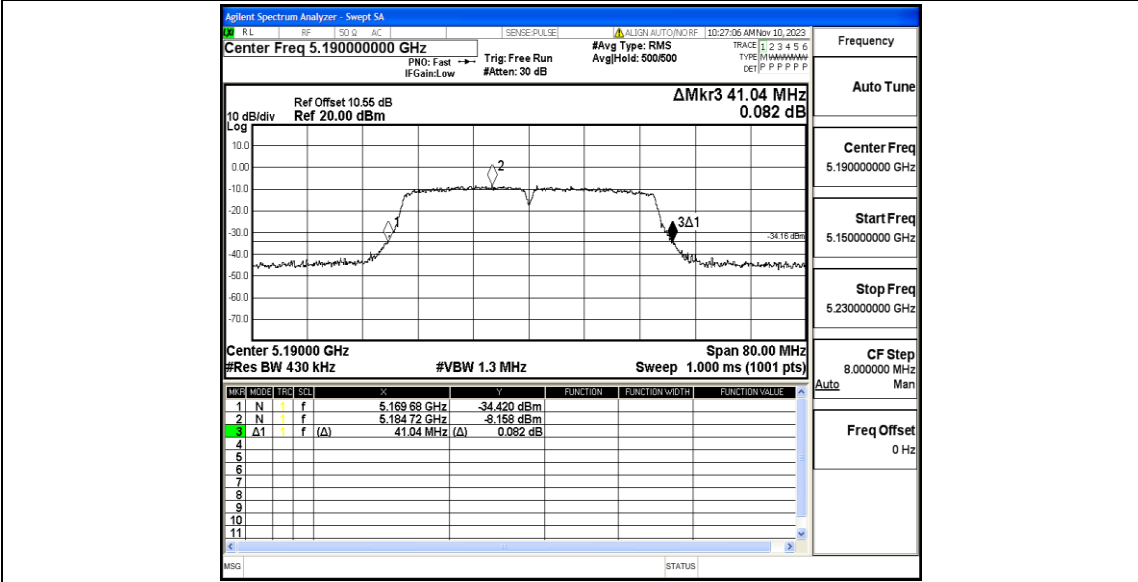
11N20SISO\_Ant1\_5200



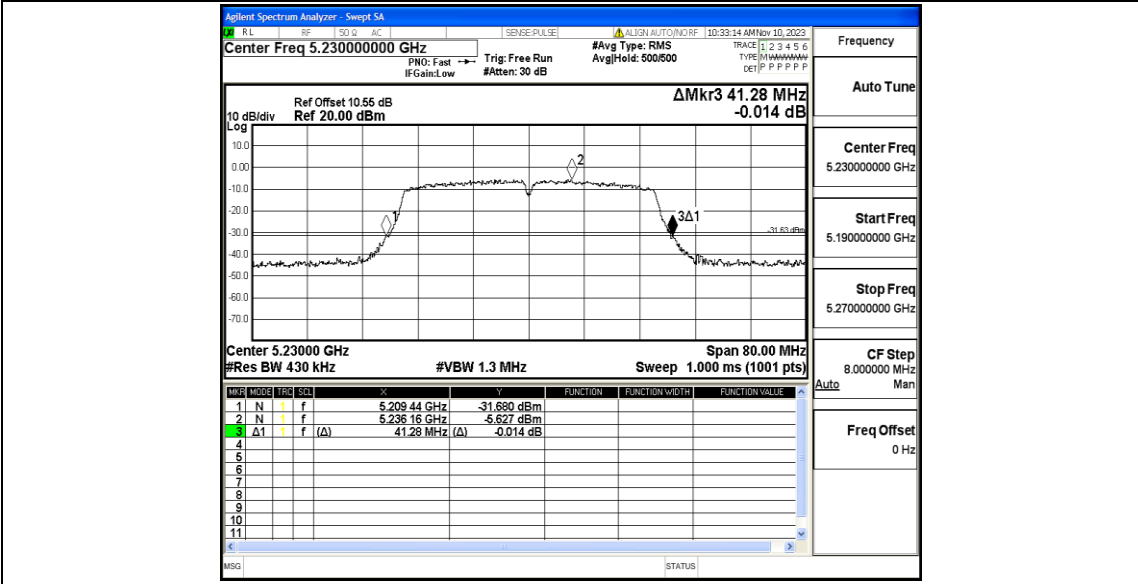
11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230

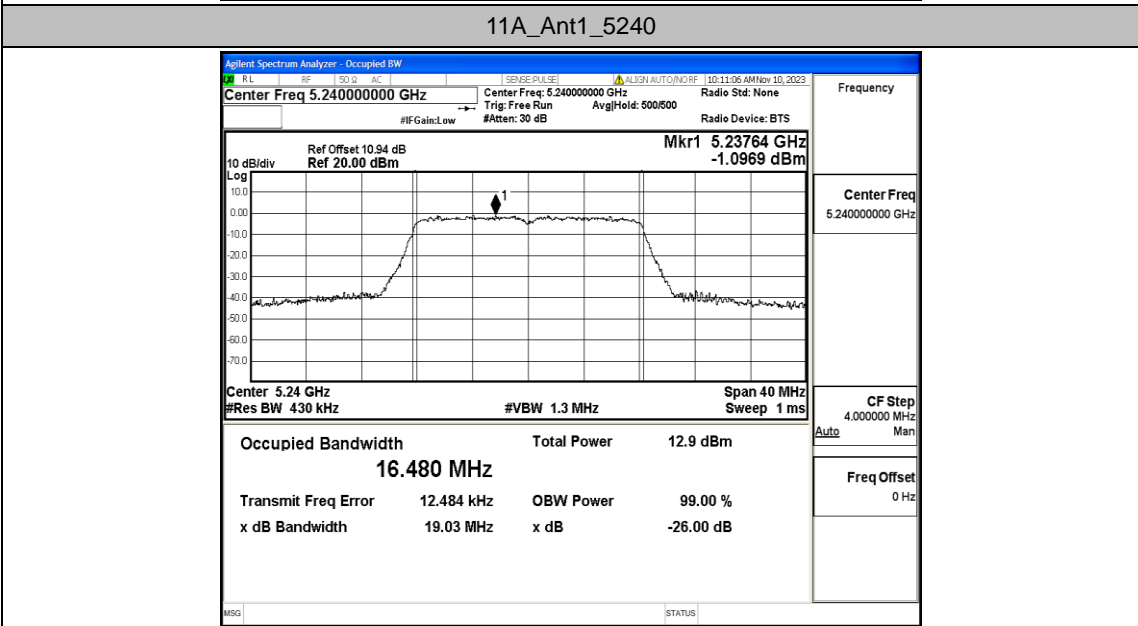
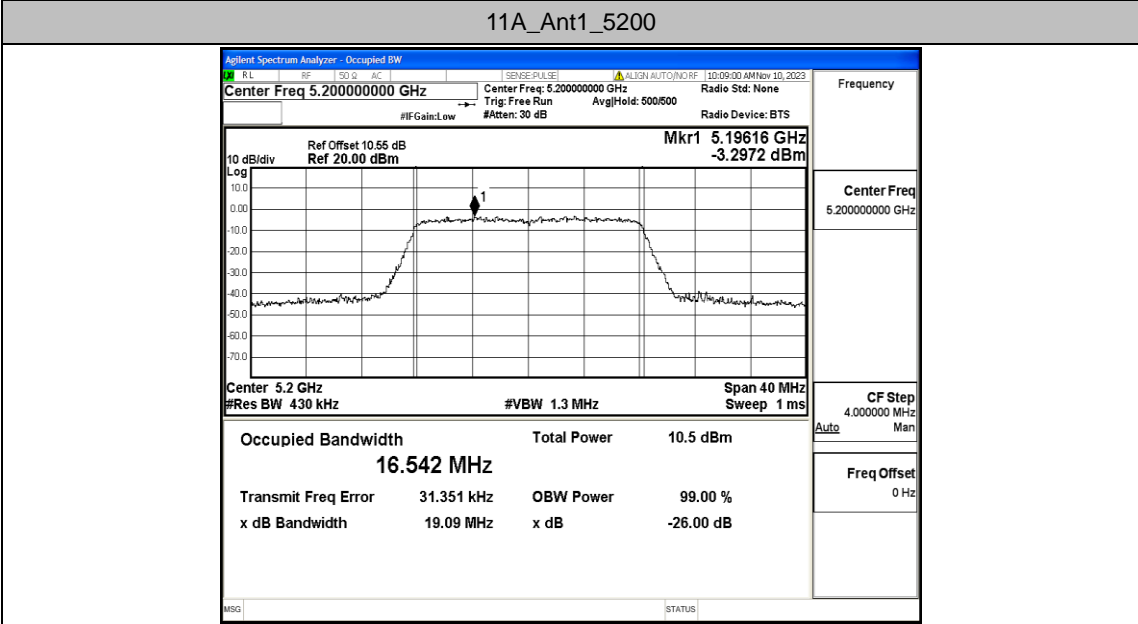
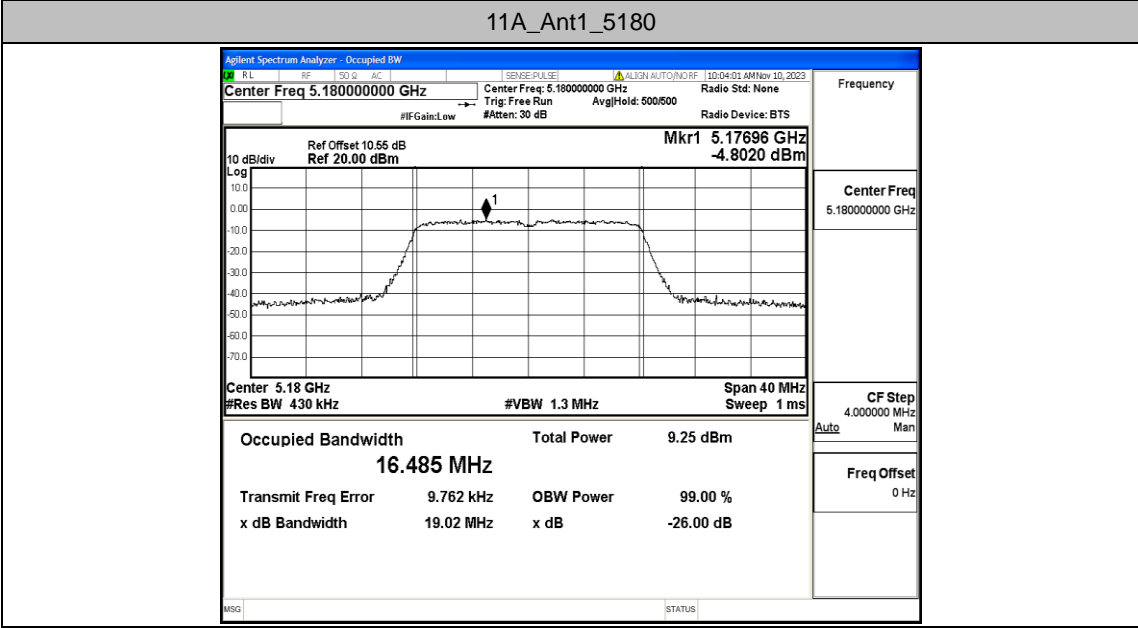


## Appendix A2: Occupied channel bandwidth

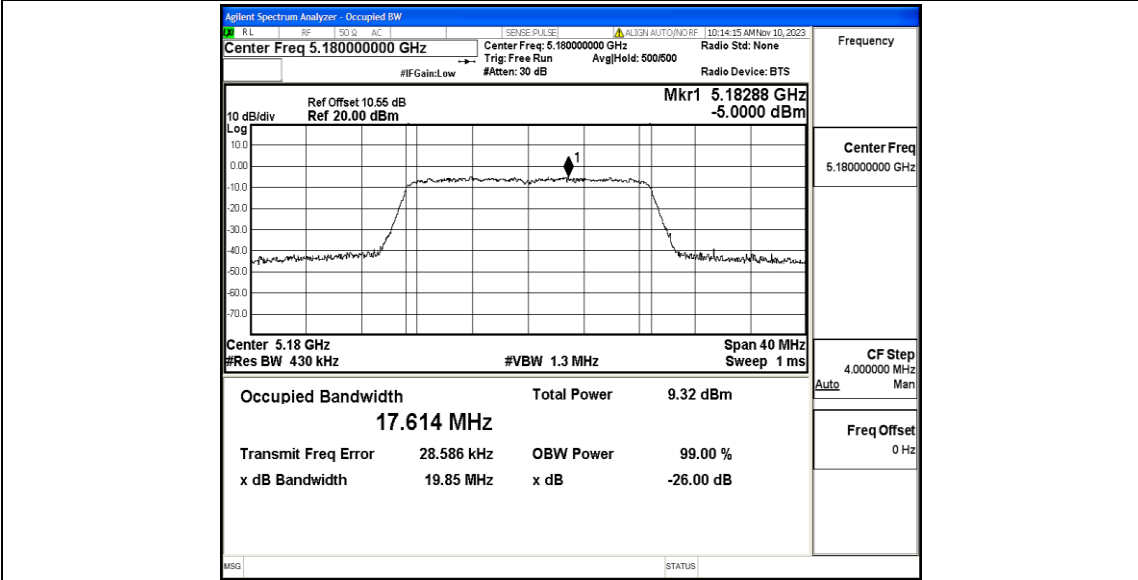
### Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.485	5171.7673	5188.2523	---	---
		5200	16.542	5191.7604	5208.3024	---	---
		5240	16.480	5231.7725	5248.2525	---	---
11N20SISO	Ant1	5180	17.614	5171.2216	5188.8356	---	---
		5200	17.644	5191.2043	5208.8483	---	---
		5240	17.635	5231.1904	5248.8254	---	---
11N40SISO	Ant1	5190	36.364	5171.8885	5208.2525	---	---
		5230	36.318	5211.9795	5248.2975	---	---

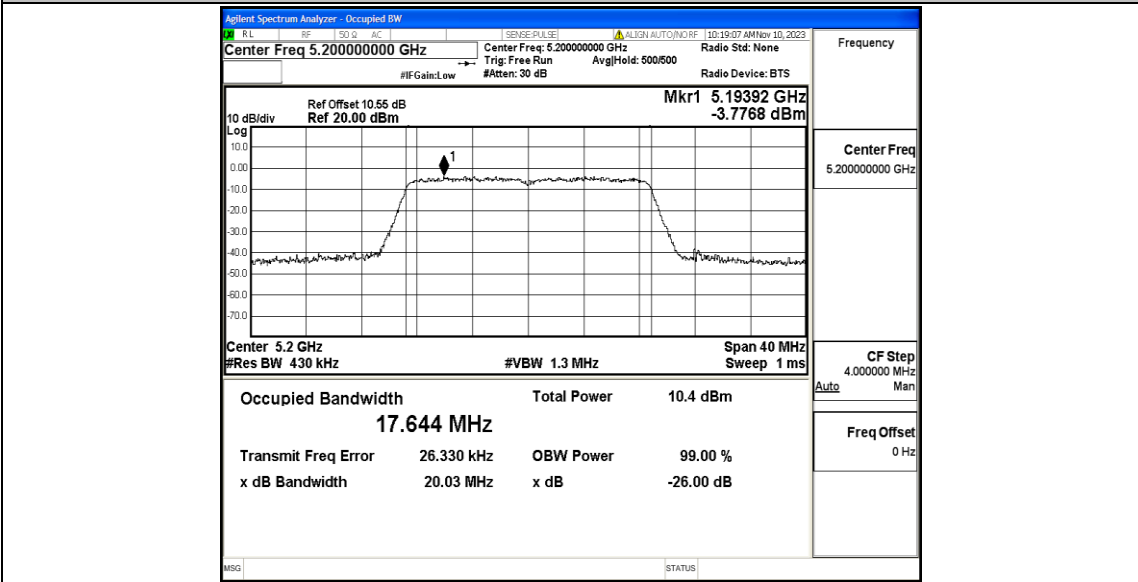
### Test Graphs



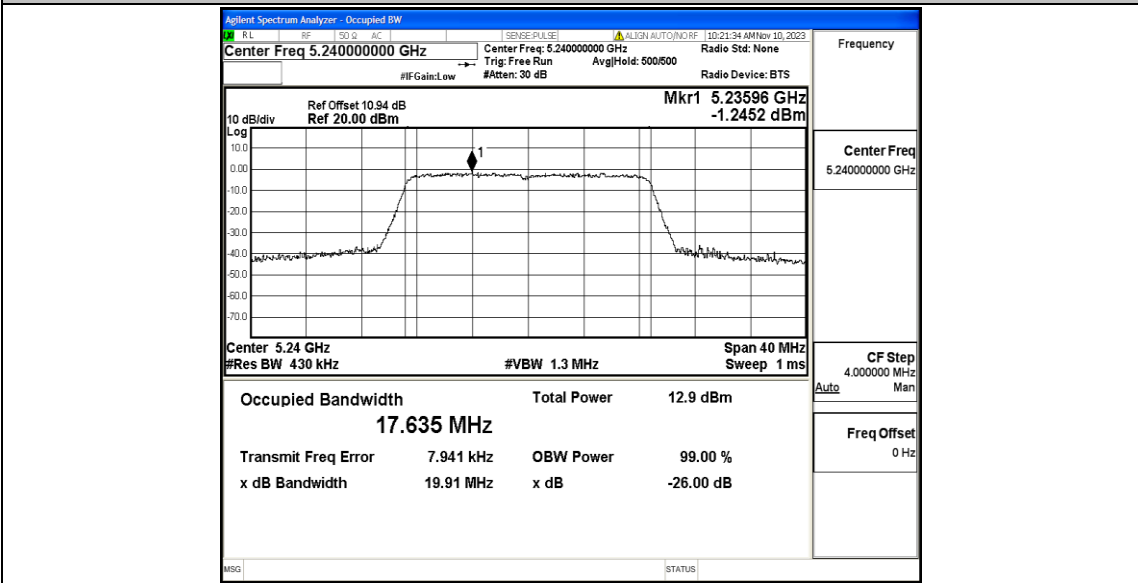
11N20SISO\_Ant1\_5180



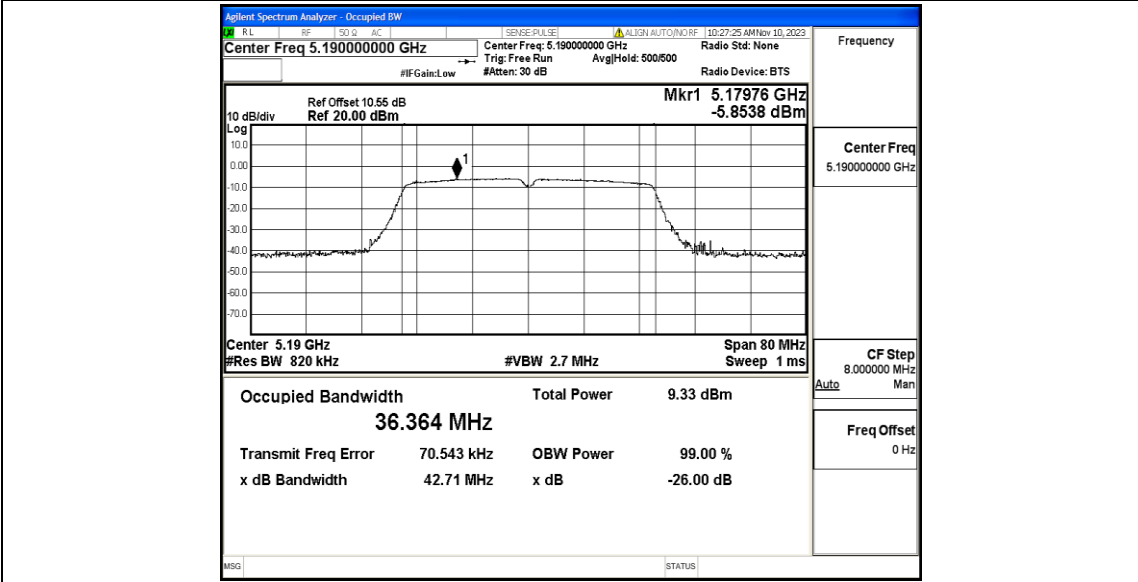
11N20SISO\_Ant1\_5200



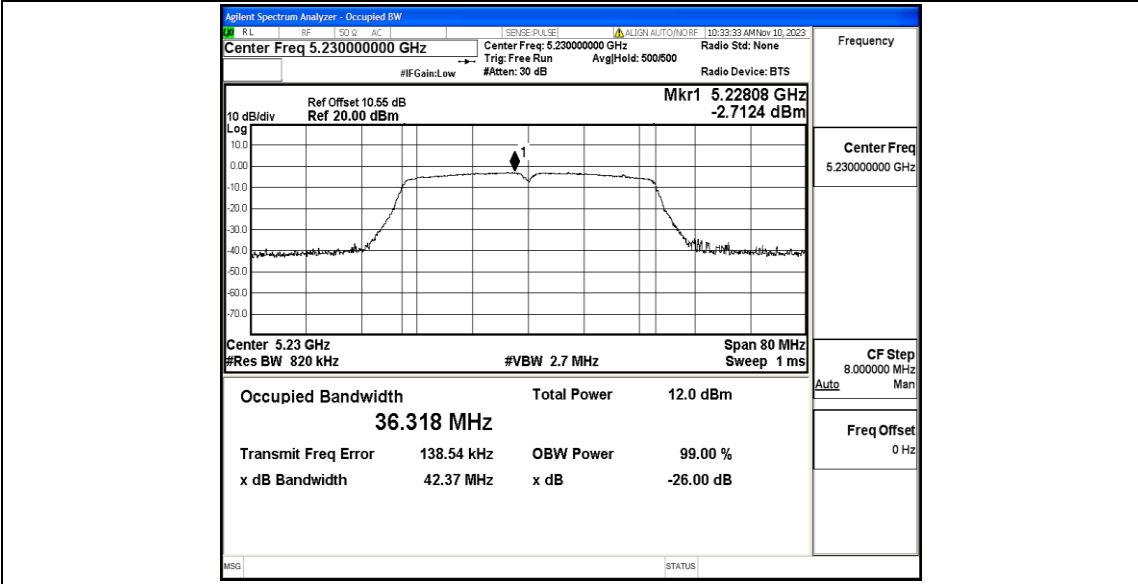
11N20SISO\_Ant1\_5240



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	2.79	≤23.98	PASS
		5200	3.93	≤23.98	PASS
		5240	6.52	≤23.98	PASS
11N20SISO	Ant1	5180	2.90	≤23.98	PASS
		5200	3.77	≤23.98	PASS
		5240	6.39	≤23.98	PASS
11N40SISO	Ant1	5190	2.44	≤23.98	PASS
		5230	5.01	≤23.98	PASS

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

## Appendix C: Maximum power spectral density

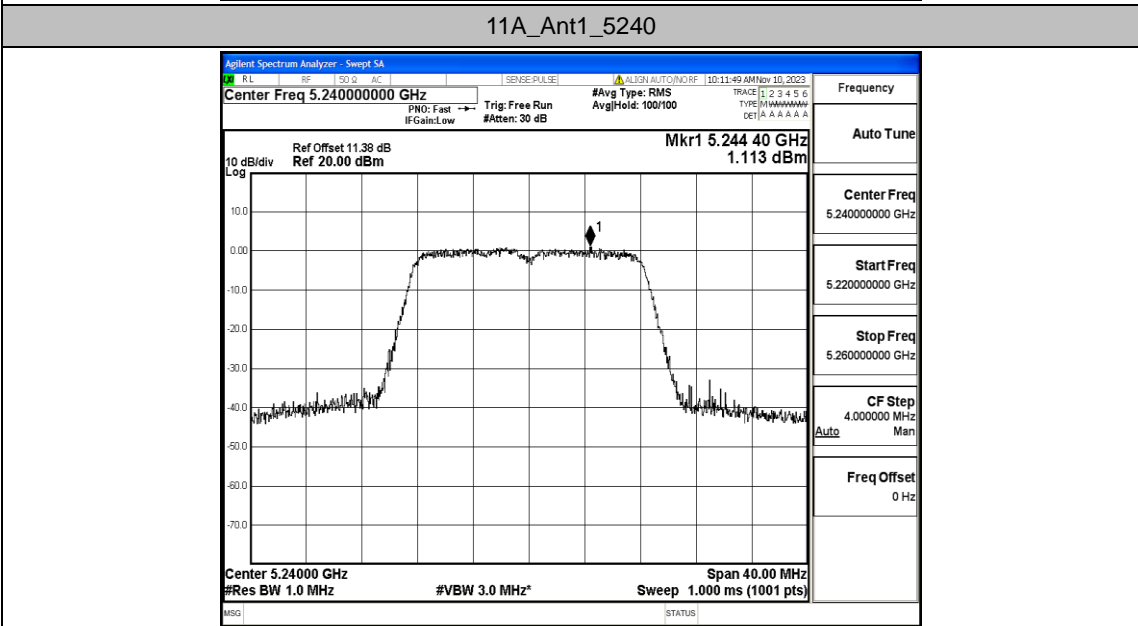
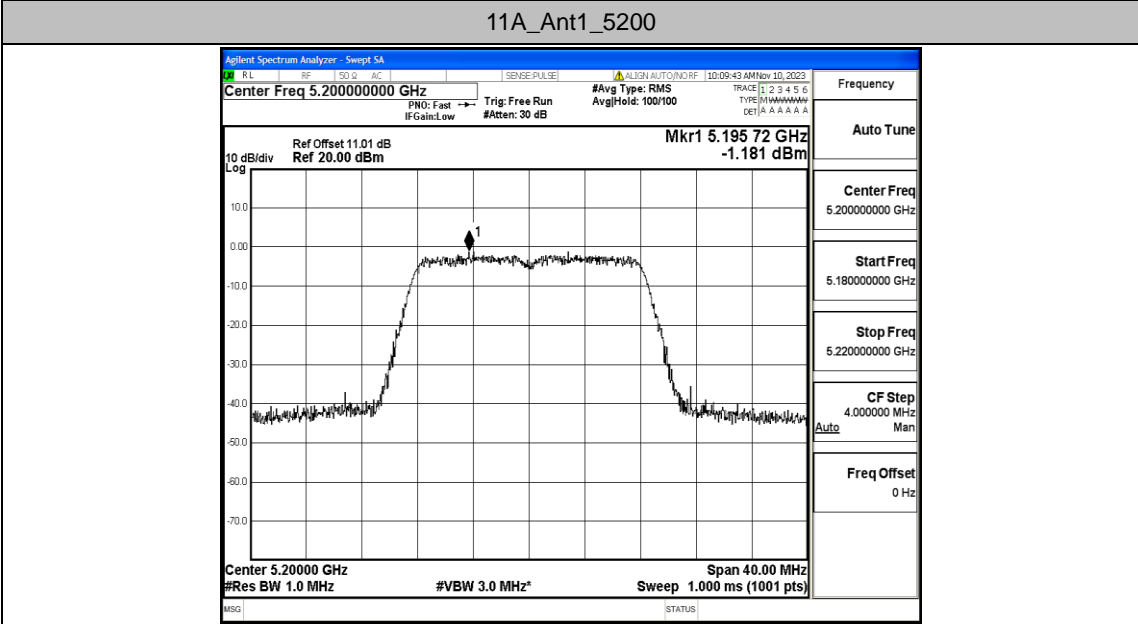
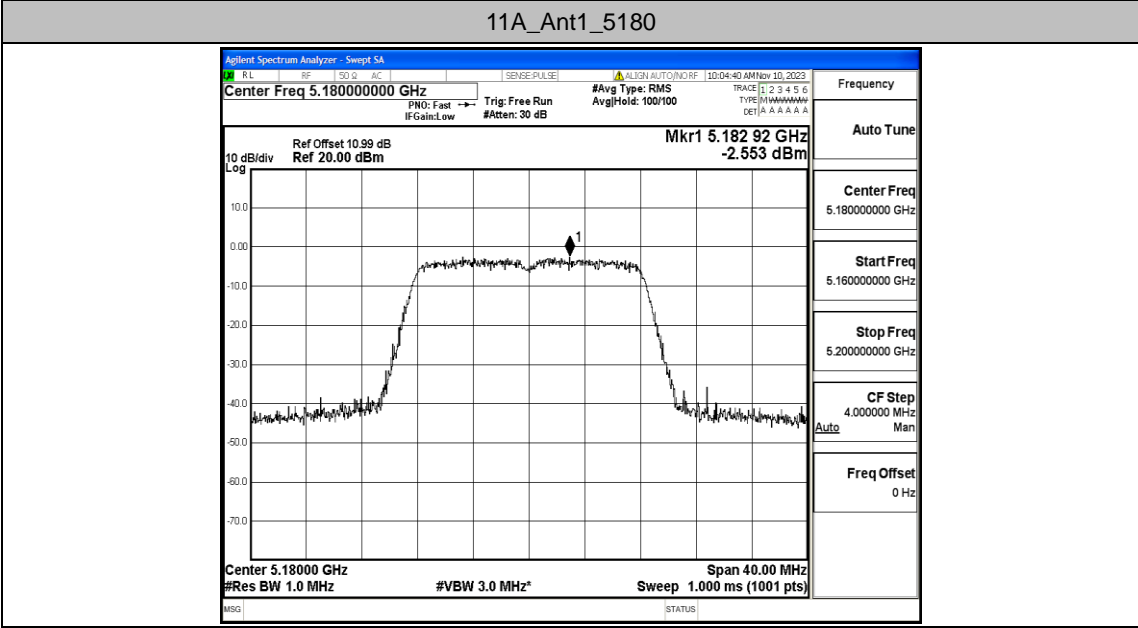
### Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-2.55	≤11.00	PASS
		5200	-1.18	≤11.00	PASS
		5240	1.11	≤11.00	PASS
11N20SISO	Ant1	5180	-2.61	≤11.00	PASS
		5200	-1.67	≤11.00	PASS
		5240	0.52	≤11.00	PASS
11N40SISO	Ant1	5190	-5.57	≤11.00	PASS
		5230	-3.23	≤11.00	PASS

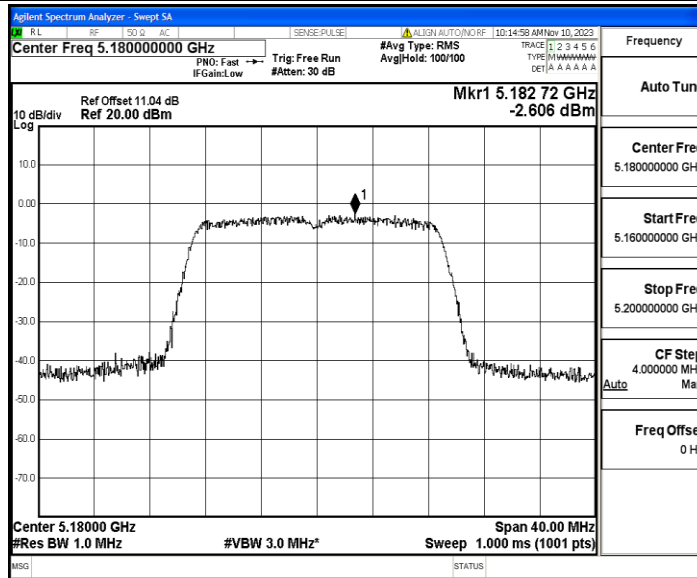
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

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

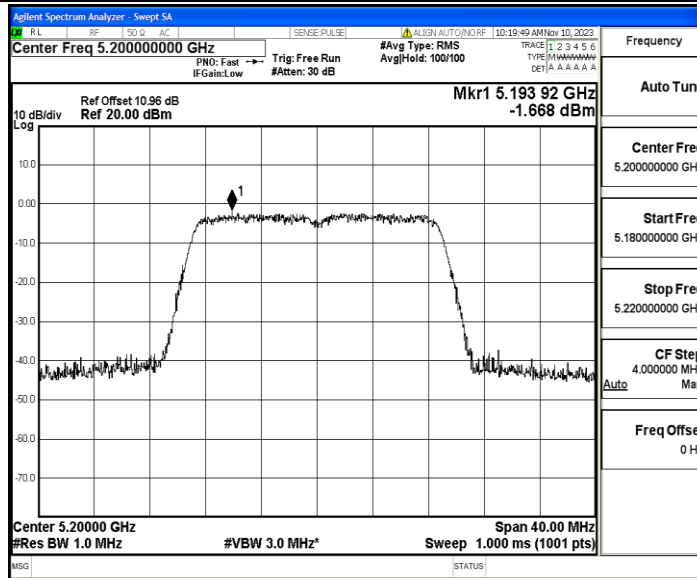
### Test Graphs



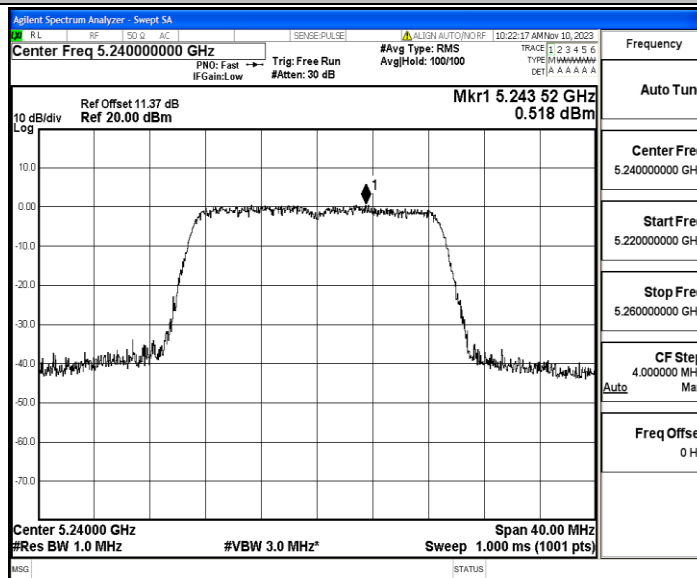
**11N20SISO\_Ant1\_5180**



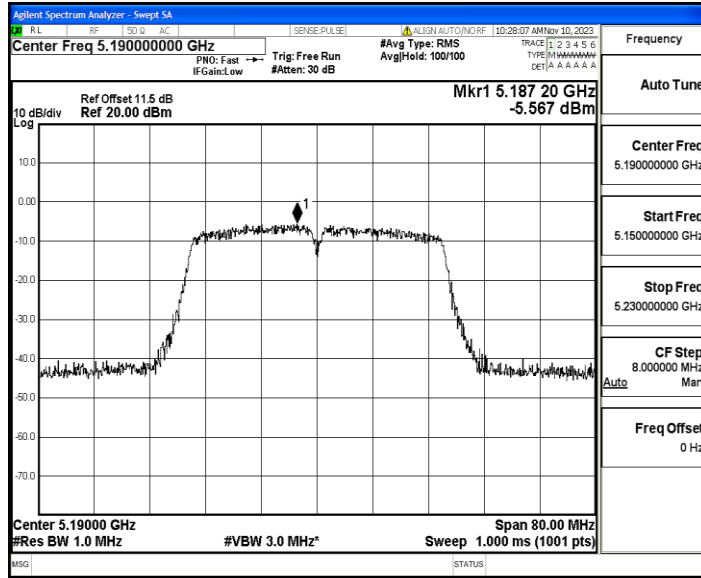
11N20SISO\_Ant1\_5200



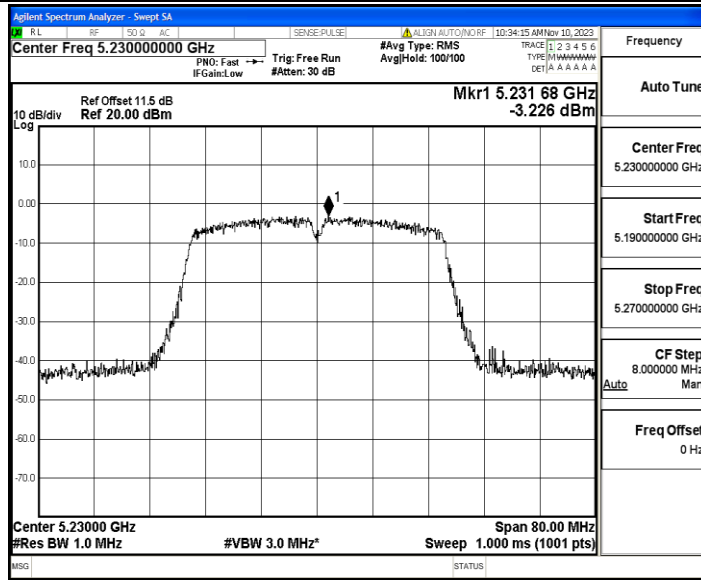
11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230

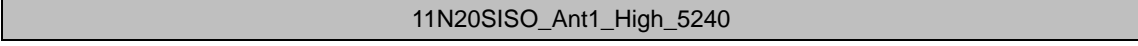
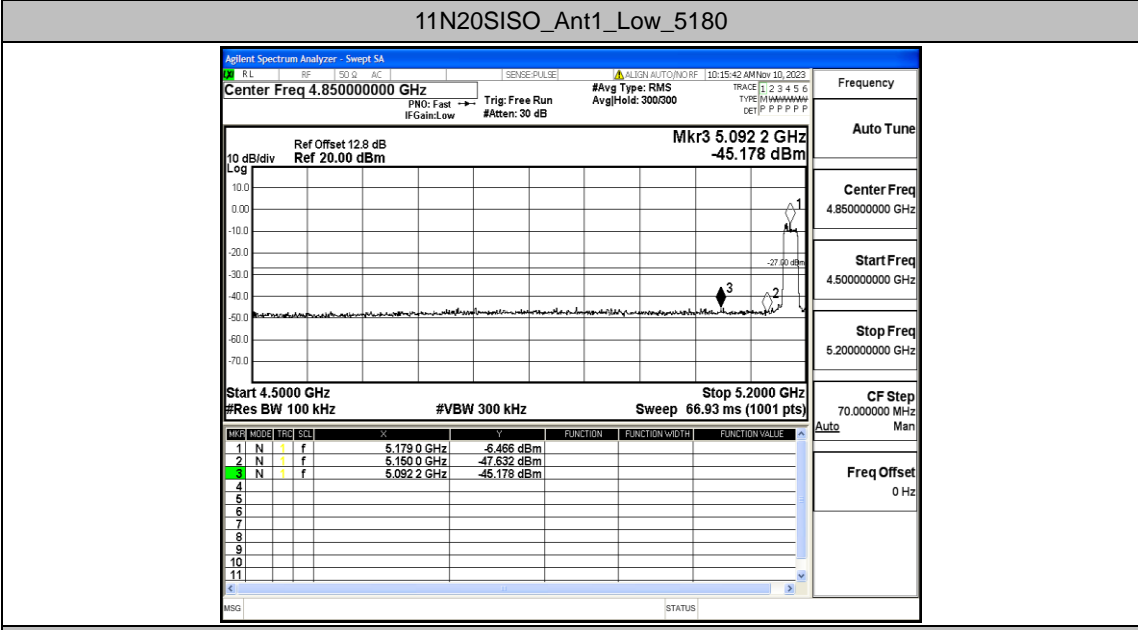
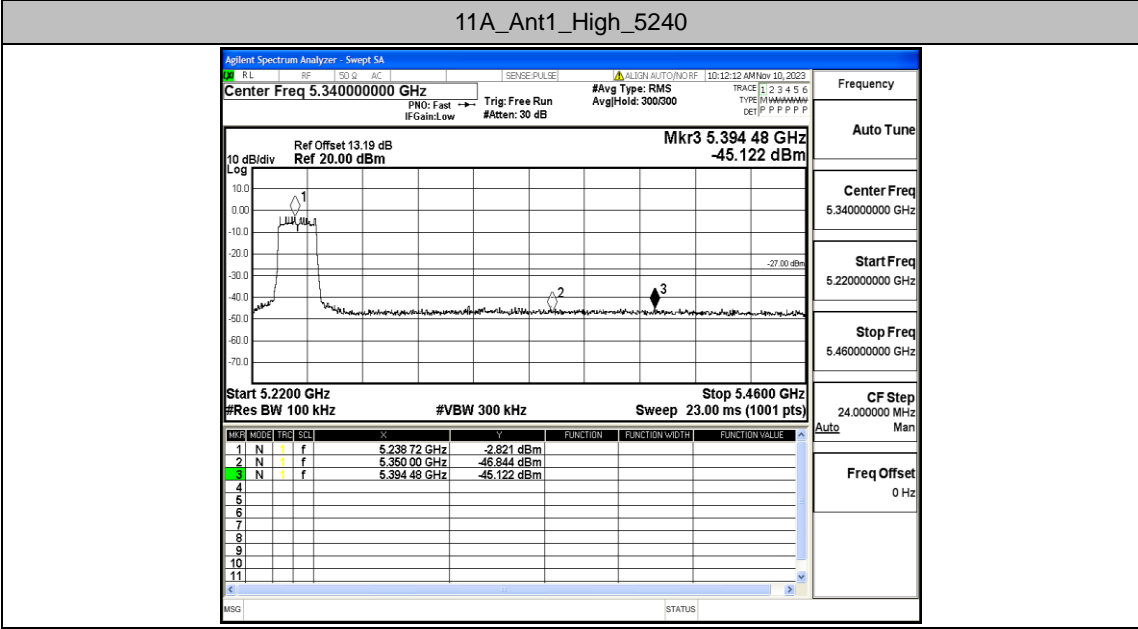
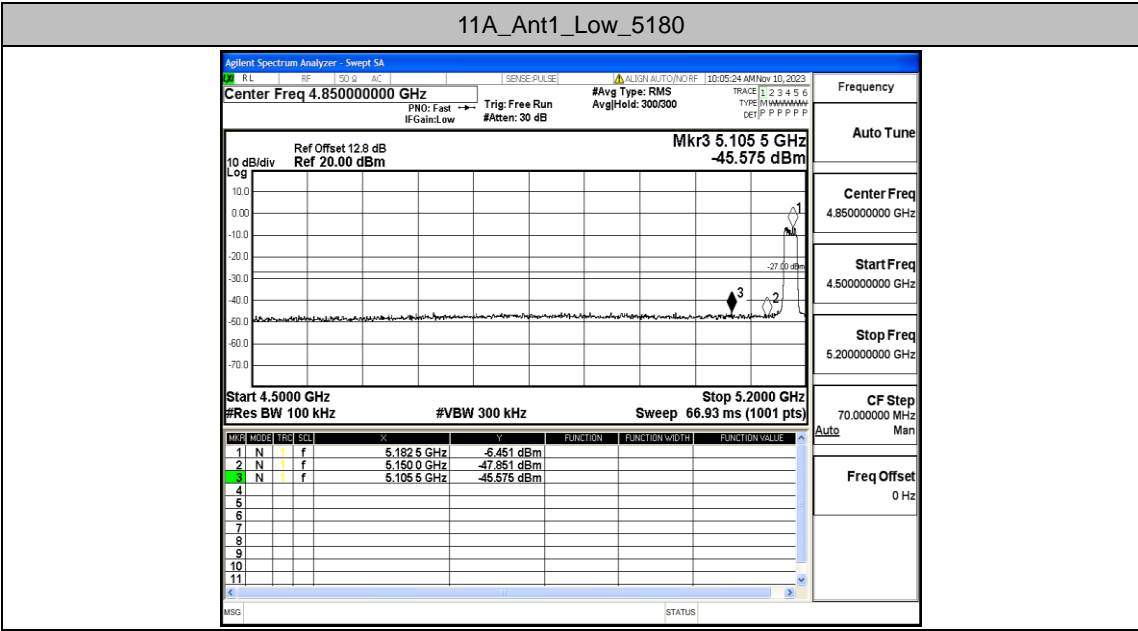


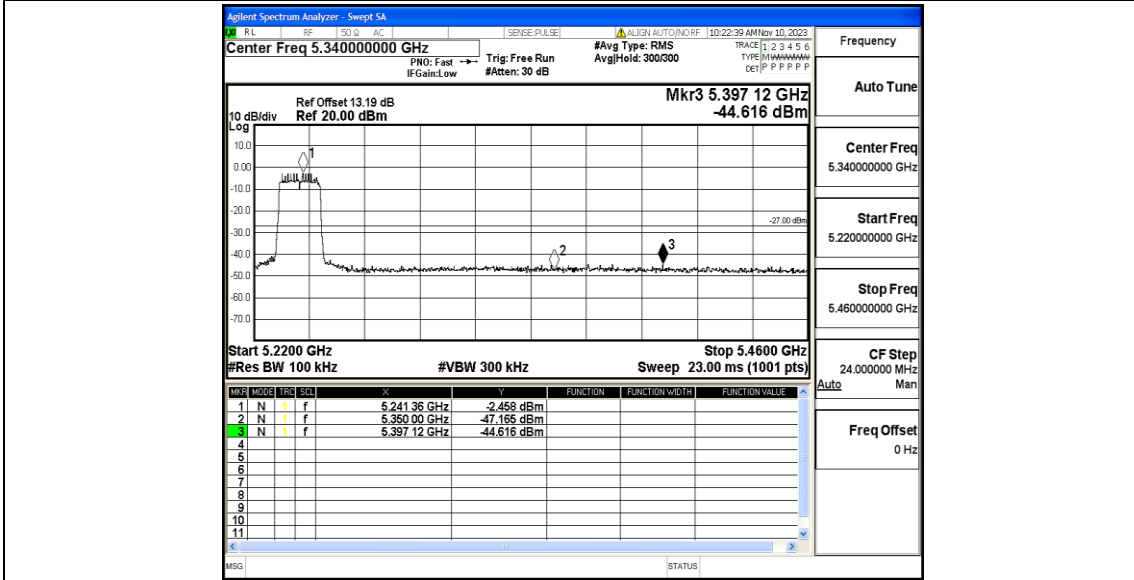
## Appendix D: Band edge measurements

### Test Result

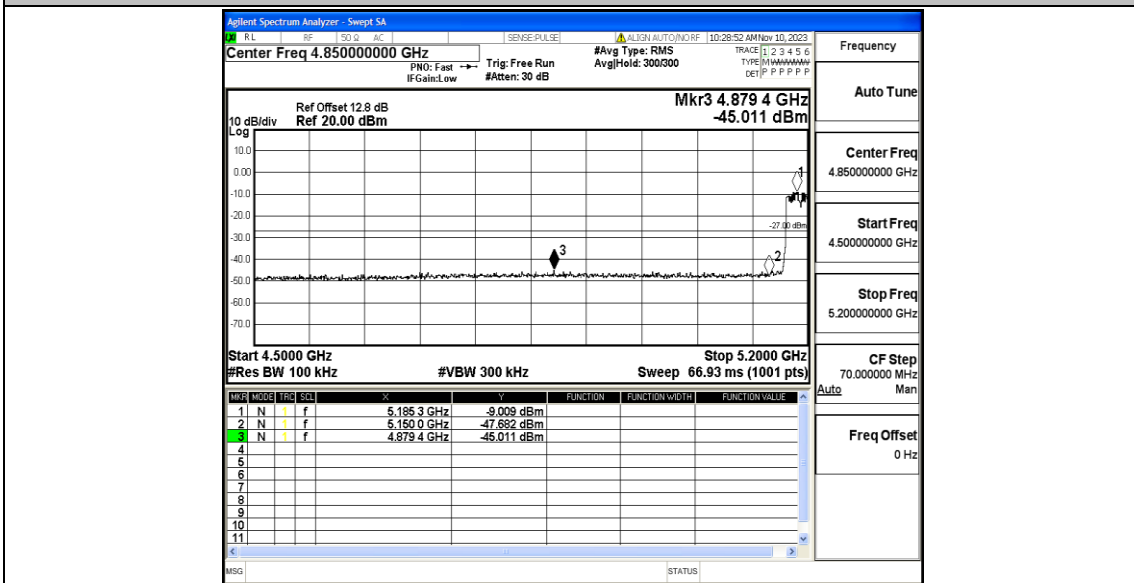
TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-45.58	$\leq -27$	PASS
		High	5240	-45.12	$\leq -27$	PASS
11N20SISO	Ant1	Low	5180	-45.18	$\leq -27$	PASS
		High	5240	-44.62	$\leq -27$	PASS
11N40SISO	Ant1	Low	5190	-45.01	$\leq -27$	PASS
		High	5230	-45.14	$\leq -27$	PASS

Test Graphs

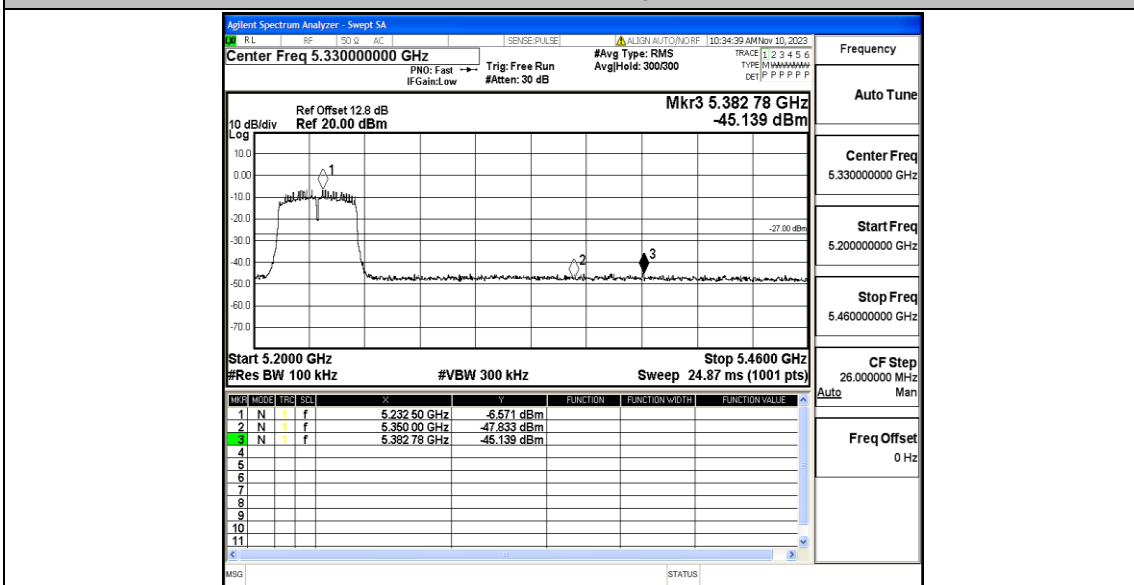




11N40SISO\_Ant1\_Low\_5190



11N40SISO\_Ant1\_High\_5230





## Appendix E: Frequency Stability

### Test Result

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	132	5179.950803	5150 – 5250	PASS
5180	20	108	5179.917953	5150 – 5250	PASS
5180	50	120	5179.995498	5150 – 5250	PASS
5180	40	120	5179.947103	5150 – 5250	PASS
5180	30	120	5180.091537	5150 – 5250	PASS
5180	20	120	5180.023340	5150 – 5250	PASS
5180	10	120	5179.933120	5150 – 5250	PASS
5180	0	120	5180.071368	5150 – 5250	PASS
5180	-10	120	5180.062590	5150 – 5250	PASS
5180	-20	120	5179.917599	5150 – 5250	PASS
5180	-30	120	5180.019556	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5200	20	132	5200.062835	5150 – 5250	PASS
5200	20	108	5199.987223	5150 – 5250	PASS
5200	50	120	5200.023235	5150 – 5250	PASS
5200	40	120	5200.001668	5150 – 5250	PASS
5200	30	120	5200.047819	5150 – 5250	PASS
5200	20	120	5199.915647	5150 – 5250	PASS
5200	10	120	5200.082534	5150 – 5250	PASS
5200	0	120	5200.085953	5150 – 5250	PASS
5200	-10	120	5199.927355	5150 – 5250	PASS
5200	-20	120	5200.060904	5150 – 5250	PASS
5200	-30	120	5199.901237	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	132	5239.924529	5150 – 5250	PASS
5240	20	108	5239.967781	5150 – 5250	PASS
5240	50	120	5239.925395	5150 – 5250	PASS
5240	40	120	5239.924654	5150 – 5250	PASS
5240	30	120	5240.017255	5150 – 5250	PASS
5240	20	120	5239.946357	5150 – 5250	PASS
5240	10	120	5239.906543	5150 – 5250	PASS
5240	0	120	5239.979851	5150 – 5250	PASS
5240	-10	120	5240.095403	5150 – 5250	PASS
5240	-20	120	5239.923564	5150 – 5250	PASS
5240	-30	120	5240.004068	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5190	20	132	5190.000660	5150 – 5250	PASS
5190	20	108	5190.065108	5150 – 5250	PASS
5190	50	120	5189.945112	5150 – 5250	PASS
5190	40	120	5190.023960	5150 – 5250	PASS
5190	30	120	5189.992574	5150 – 5250	PASS
5190	20	120	5189.932289	5150 – 5250	PASS
5190	10	120	5189.930090	5150 – 5250	PASS
5190	0	120	5190.037313	5150 – 5250	PASS
5190	-10	120	5190.014825	5150 – 5250	PASS
5190	-20	120	5190.068441	5150 – 5250	PASS
5190	-30	120	5190.068096	5150 – 5250	PASS

Ant1

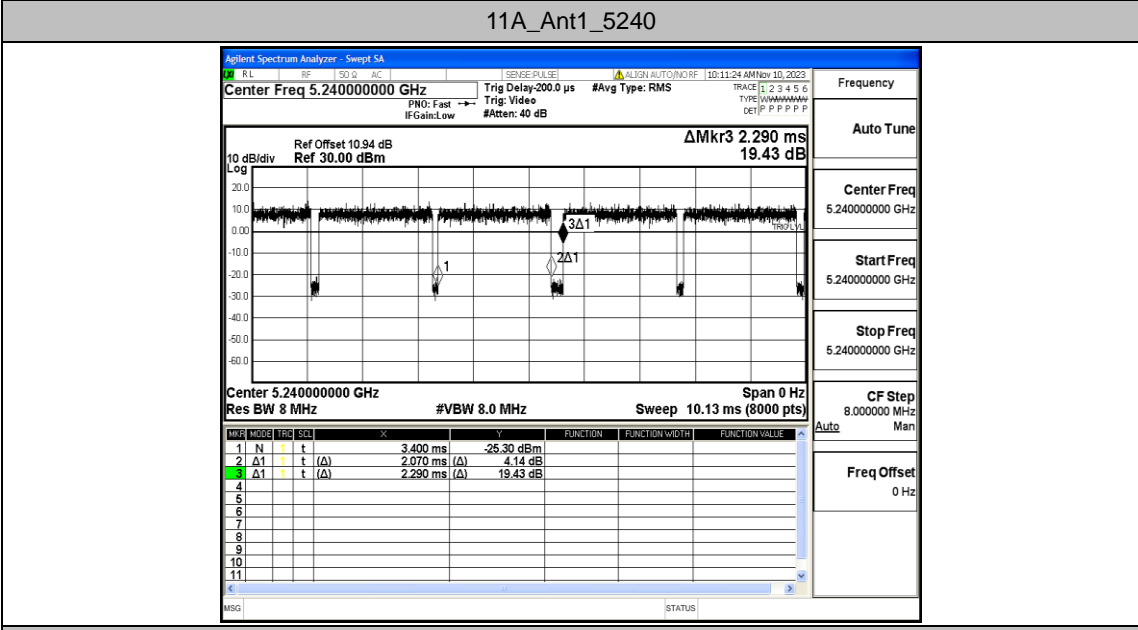
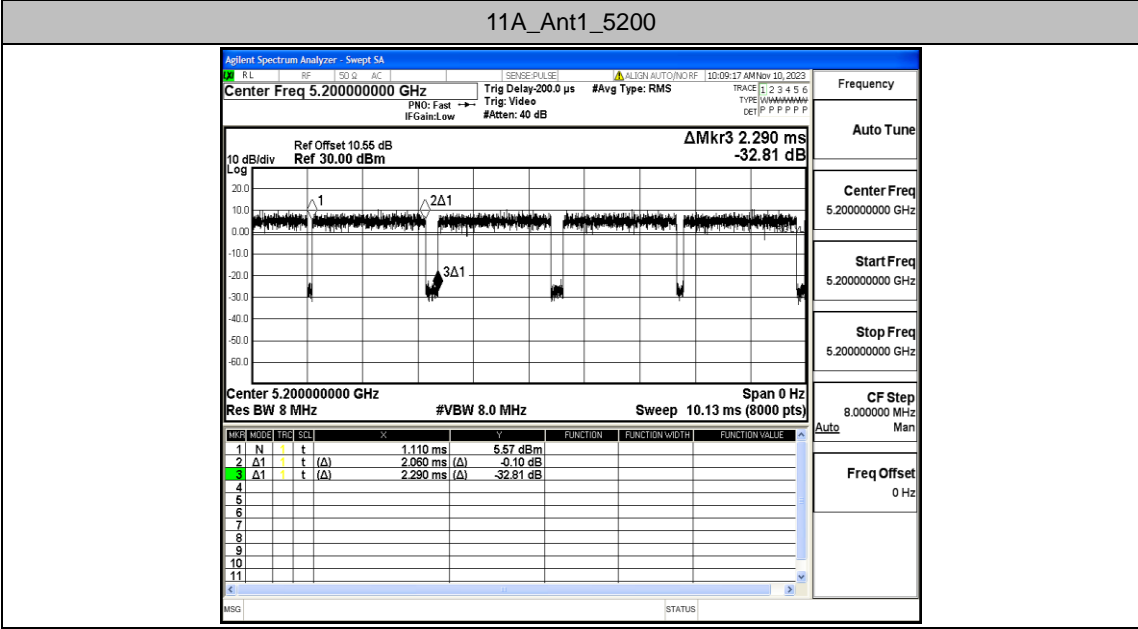
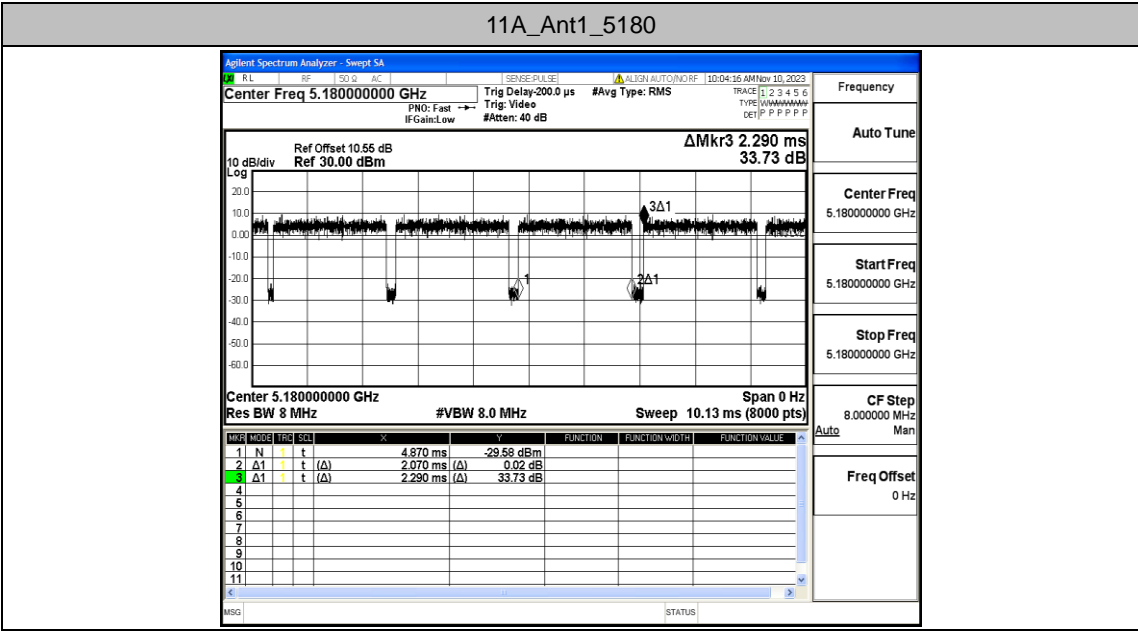
Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5230	20	132	5229.917418	5150 – 5250	PASS
5230	20	108	5230.017171	5150 – 5250	PASS
5230	50	120	5230.002767	5150 – 5250	PASS
5230	40	120	5230.020901	5150 – 5250	PASS
5230	30	120	5229.974721	5150 – 5250	PASS
5230	20	120	5230.074711	5150 – 5250	PASS
5230	10	120	5229.907945	5150 – 5250	PASS
5230	0	120	5230.092136	5150 – 5250	PASS
5230	-10	120	5229.996204	5150 – 5250	PASS
5230	-20	120	5229.924541	5150 – 5250	PASS
5230	-30	120	5230.025916	5150 – 5250	PASS

## Appendix F: Duty Cycle

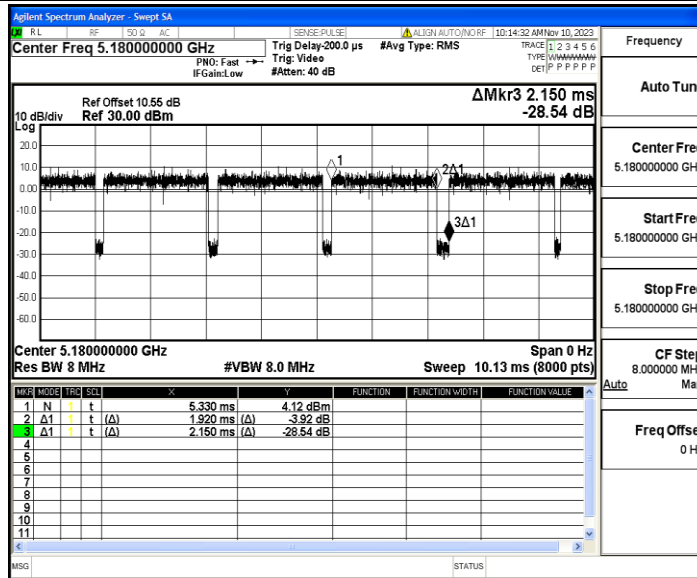
### Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]
11A	Ant1	5180	2.07	2.29	90.39	0.48
		5200	2.06	2.29	89.96	0.49
		5240	2.07	2.29	90.39	0.48
11N20SISO	Ant1	5180	1.92	2.15	89.30	0.52
		5200	1.92	2.11	91.00	0.52
		5240	1.92	2.12	90.57	0.52
11N40SISO	Ant1	5190	0.94	1.17	80.34	1.06
		5230	0.94	1.17	80.34	1.06

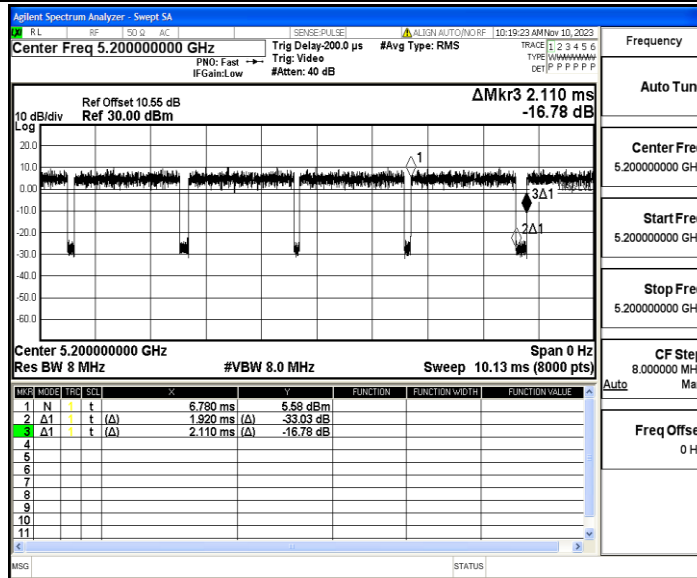
Test Graphs



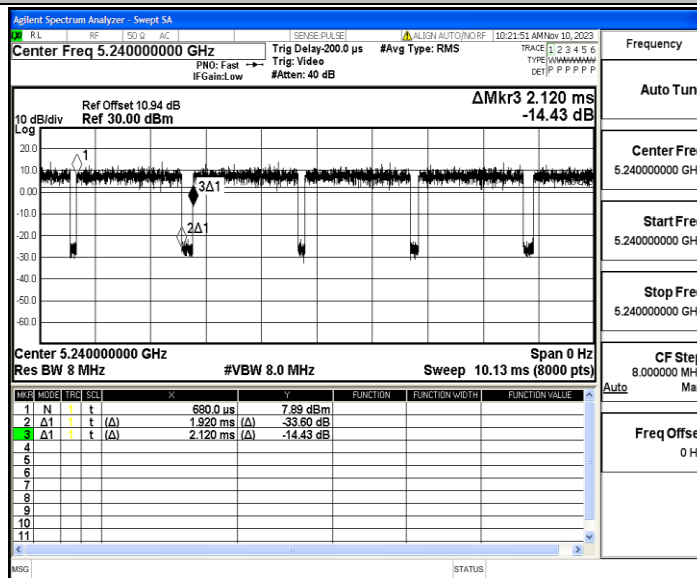
11N20SISO\_Ant1\_5180



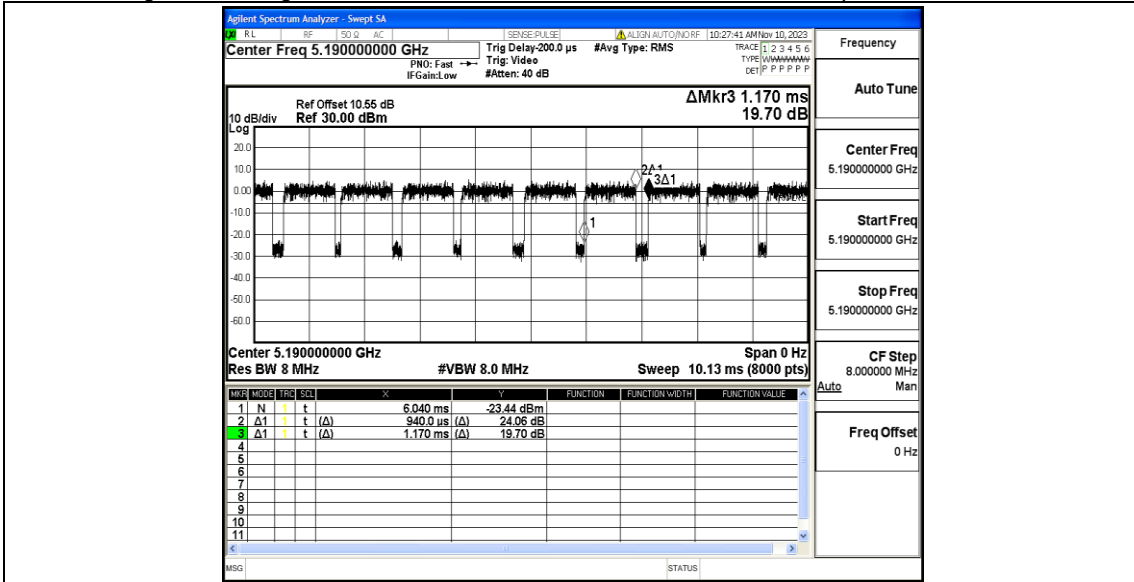
11N20SISO\_Ant1\_5200



11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230

