



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

Product Name: XVision RX

Trade Mark: SYNCO

Test Model: XVision HD RX

FCC ID: 2AXWL-HD-RX

Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A1: Emission Bandwidth

Test Result

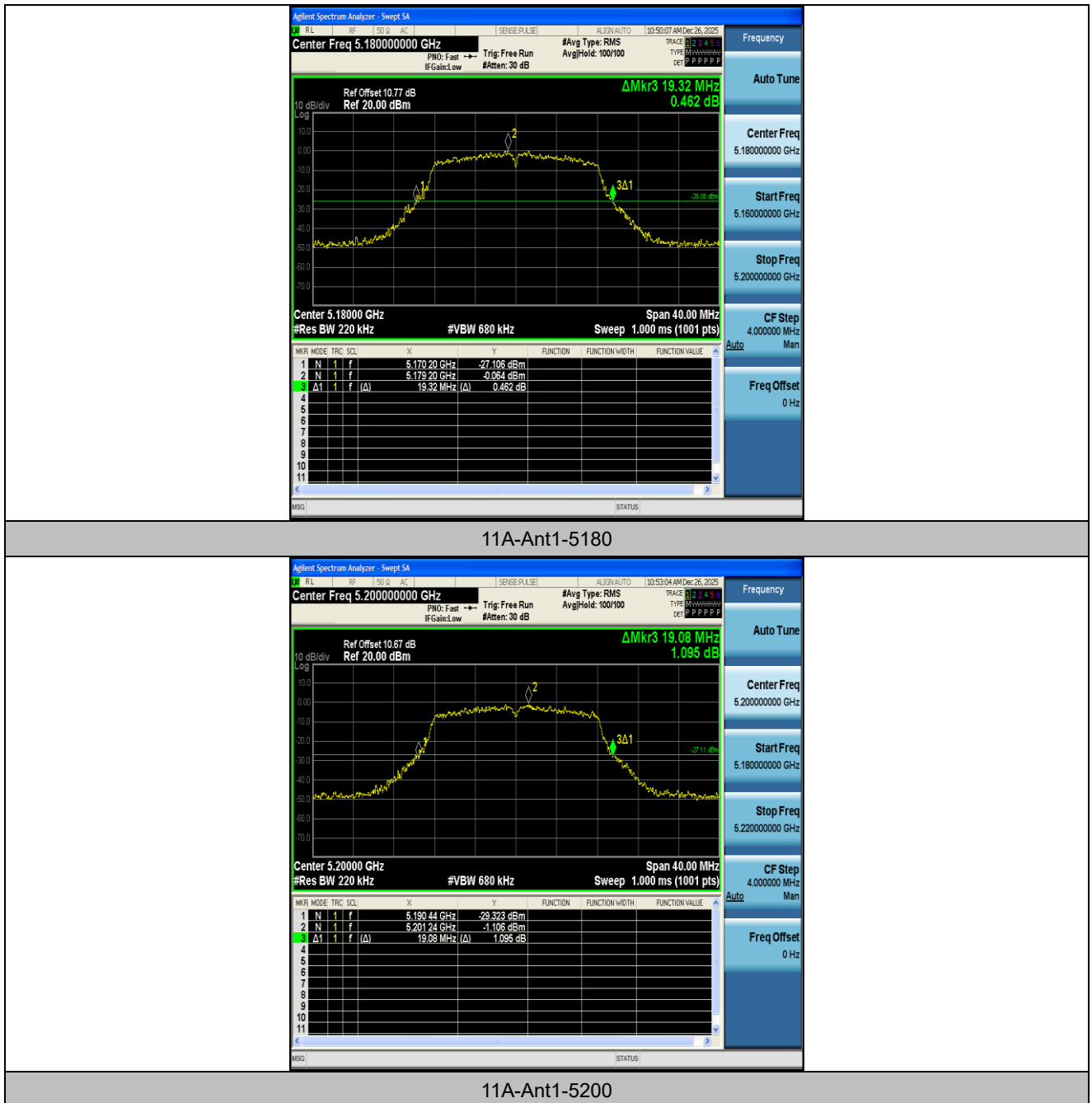
Test Mode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	19.320	5170.200	5189.520	---	---
11A	Ant1	5200	19.080	5190.440	5209.520	---	---
11A	Ant1	5240	18.960	5230.600	5249.560	---	---
11N20SISO	Ant1	5180	20.120	5169.920	5190.040	---	---
11N20SISO	Ant1	5200	20.360	5190.000	5210.360	---	---
11N20SISO	Ant1	5240	20.040	5229.960	5250.000	---	---
11N40SISO	Ant1	5190	38.160	5170.960	5209.120	---	---
11N40SISO	Ant1	5230	38.000	5210.960	5248.960	---	---

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs





11A-Ant1-5240

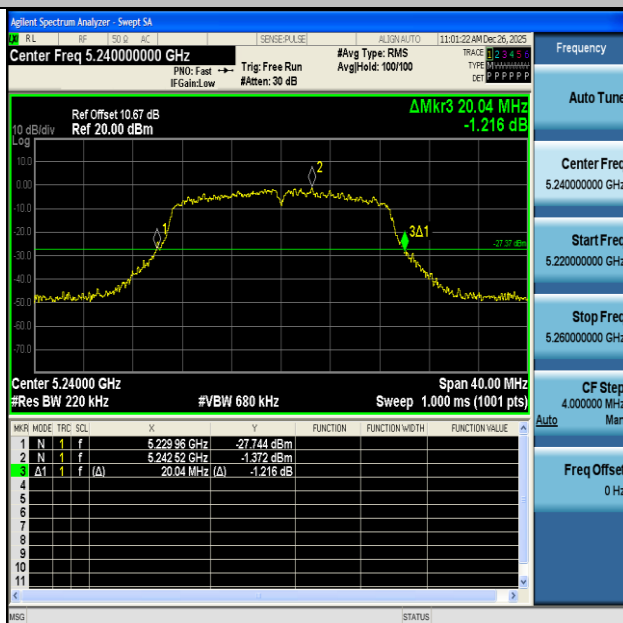


11N20SISO-Ant1-5180



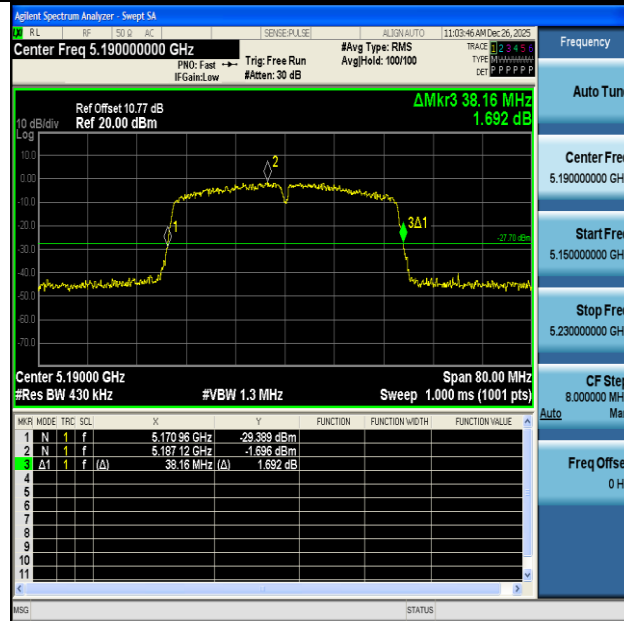


11N20SISO-Ant1-5200

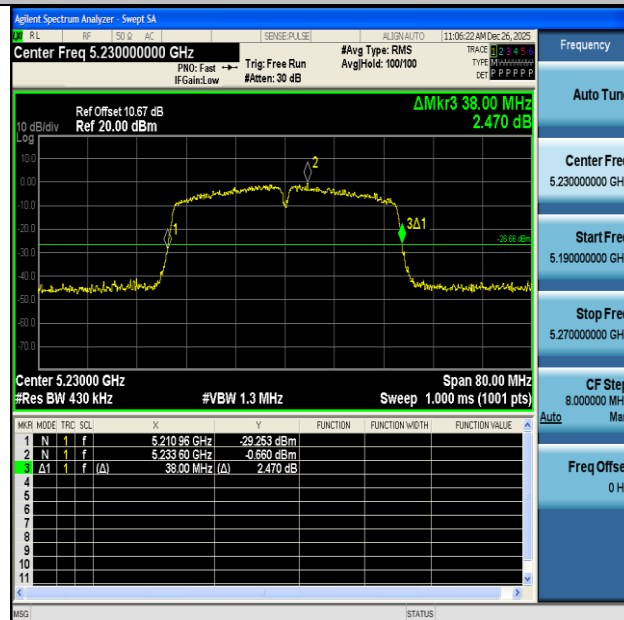


11N20SISO-Ant1-5240





11N40SISO-Ant1-5190



11N40SISO-Ant1-5230





Appendix A2: Occupied channel bandwidth

Test Result

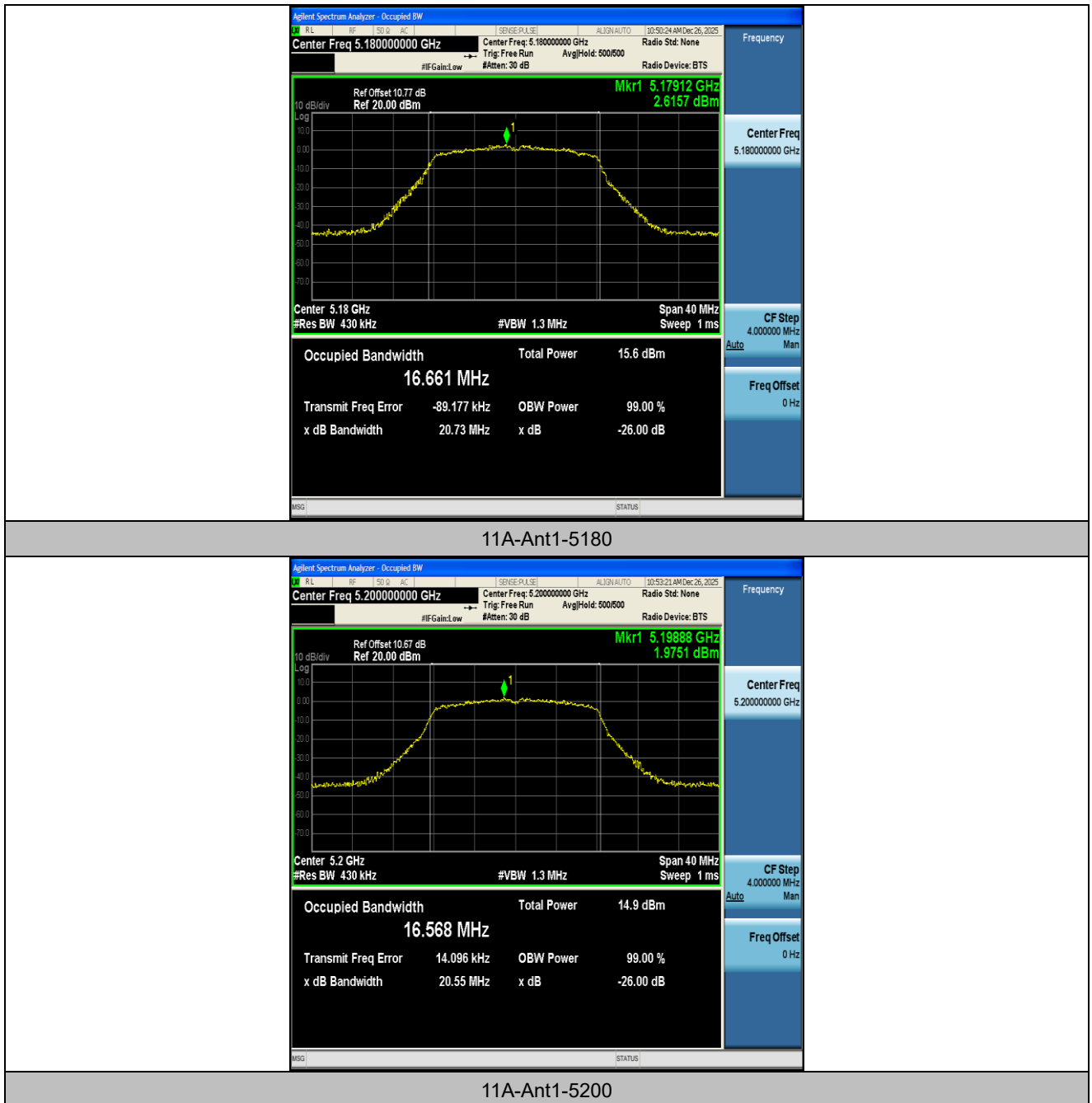
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	16.661	5171.5803	5188.2413	---	---
11A	Ant1	5200	16.568	5191.7301	5208.2981	---	---
11A	Ant1	5240	16.473	5231.7927	5248.2657	---	---
11N20SISO	Ant1	5180	17.543	5171.1889	5188.7319	---	---
11N20SISO	Ant1	5200	17.614	5191.1808	5208.7948	---	---
11N20SISO	Ant1	5240	17.549	5231.2332	5248.7822	---	---
11N40SISO	Ant1	5190	35.313	5172.3903	5207.7033	---	---
11N40SISO	Ant1	5230	35.250	5212.4208	5247.6708	---	---

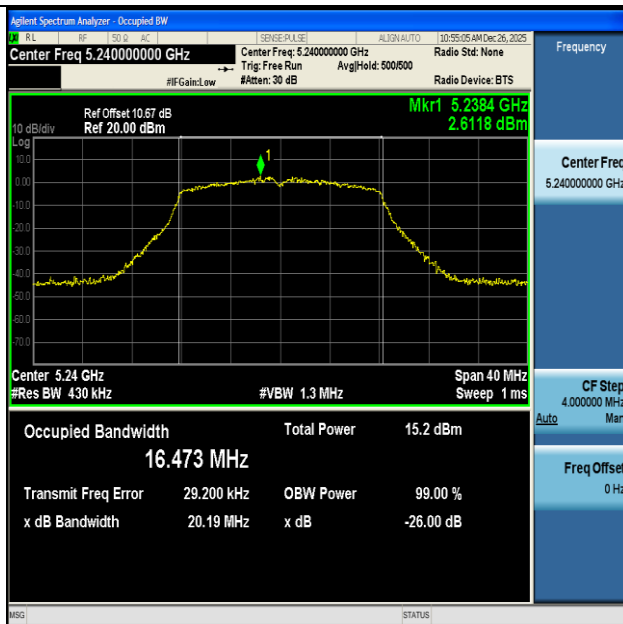
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



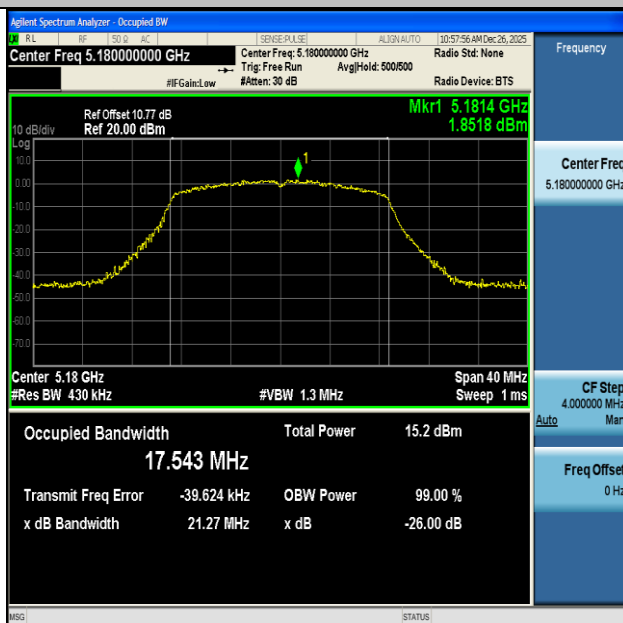


Test Graphs



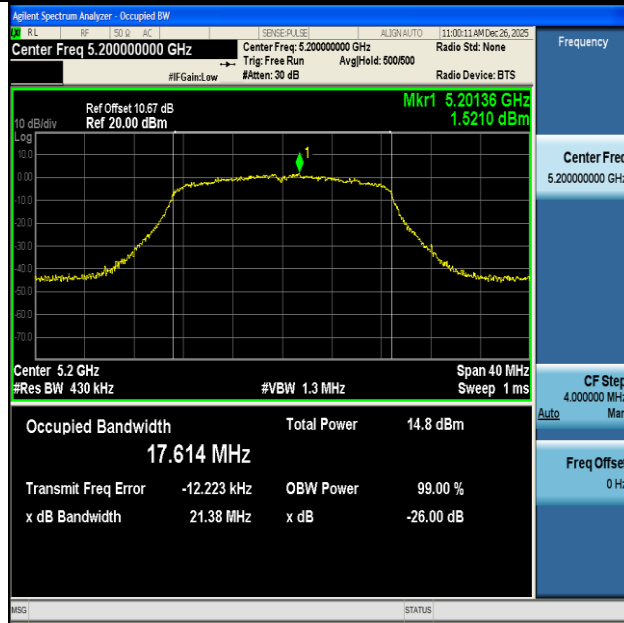


11A-Ant1-5240

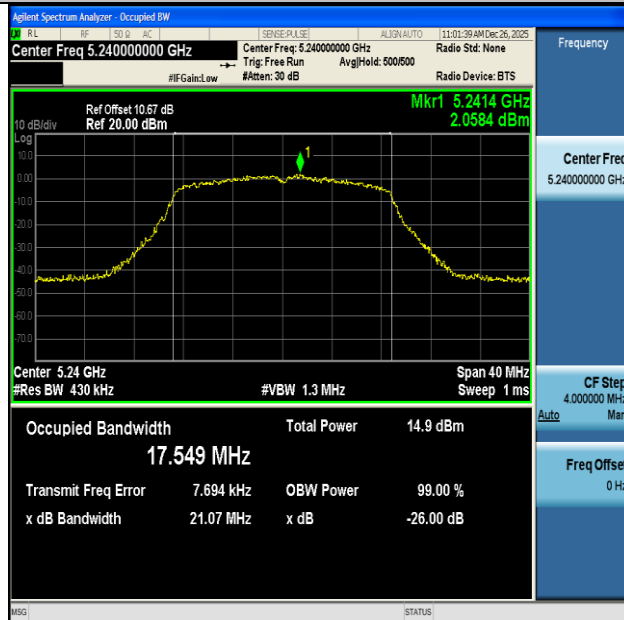


11N20SISO-Ant1-5180



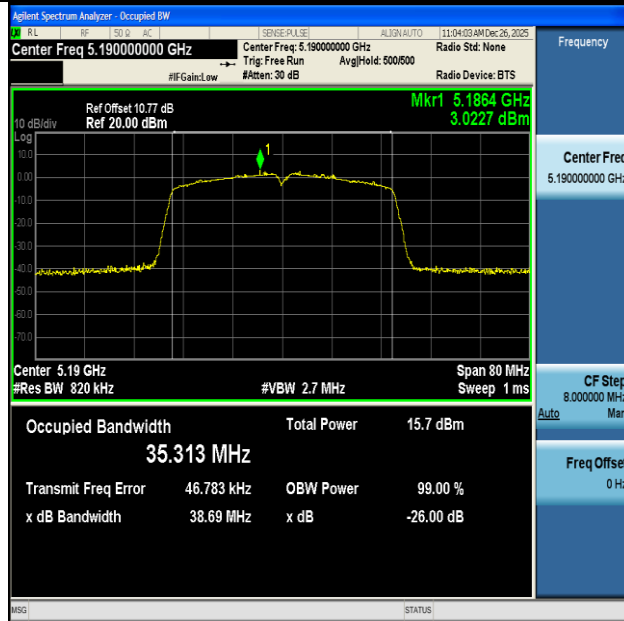


11N20SISO-Ant1-5200

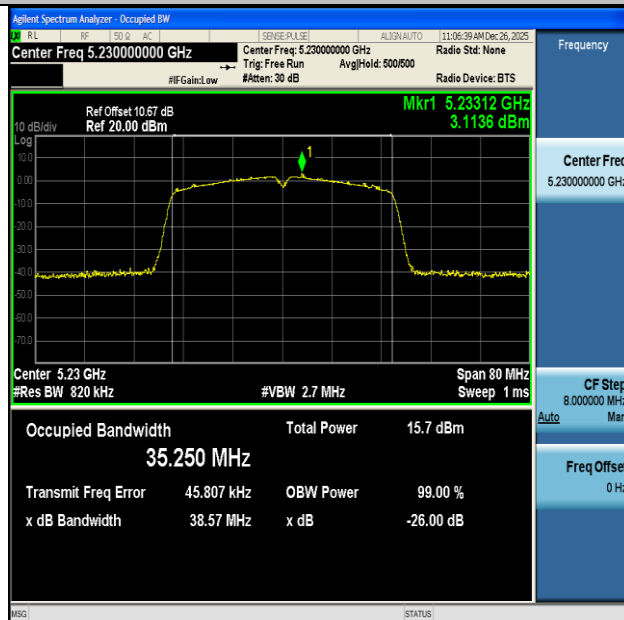


11N20SISO-Ant1-5240





11N40SISO-Ant1-5190



11N40SISO-Ant1-5230





Appendix B: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11A	Ant1	5180	8.83	≤23.98	PASS
11A	Ant1	5200	8.29	≤23.98	PASS
11A	Ant1	5240	8.65	≤23.98	PASS
11N20SISO	Ant1	5180	8.61	≤23.98	PASS
11N20SISO	Ant1	5200	8.21	≤23.98	PASS
11N20SISO	Ant1	5240	8.20	≤23.98	PASS
11N40SISO	Ant1	5190	8.56	≤23.98	PASS
11N40SISO	Ant1	5230	8.59	≤23.98	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)





Appendix C: Maximum power spectral density

Test Result

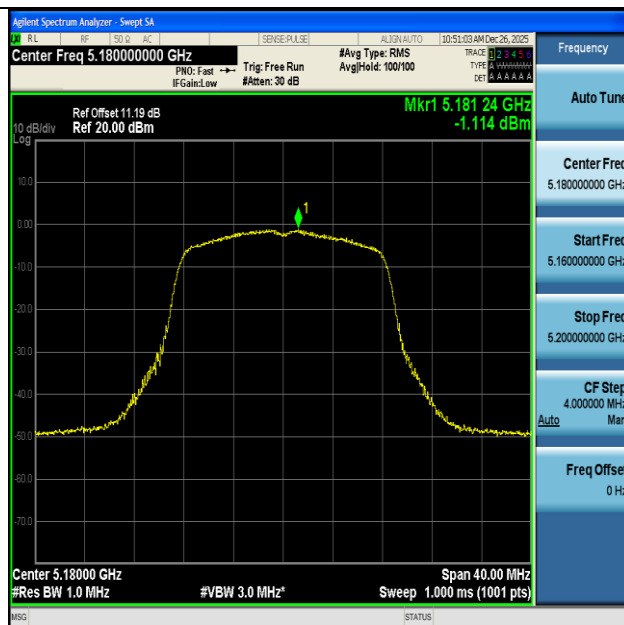
Test Mode	Antenna	Frequency [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	-1.11	≤11.00	PASS
11A	Ant1	5200	-1.57	≤11.00	PASS
11A	Ant1	5240	-1.11	≤11.00	PASS
11N20SISO	Ant1	5180	-1.31	≤11.00	PASS
11N20SISO	Ant1	5200	-1.80	≤11.00	PASS
11N20SISO	Ant1	5240	-1.75	≤11.00	PASS
11N40SISO	Ant1	5190	-4.47	≤11.00	PASS
11N40SISO	Ant1	5230	-4.12	≤11.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

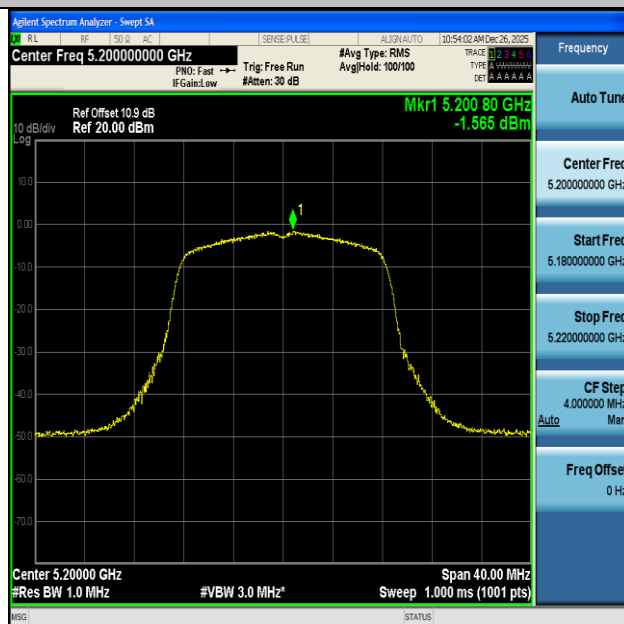




Test Graphs

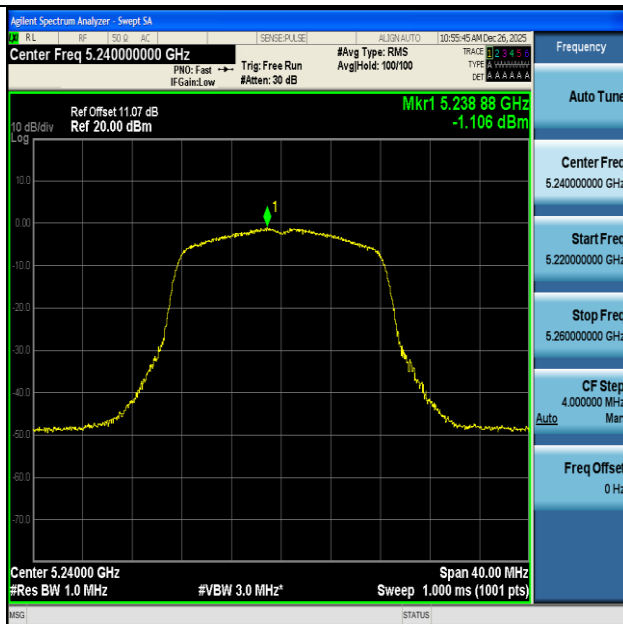


11A-Ant1-5180-PASS

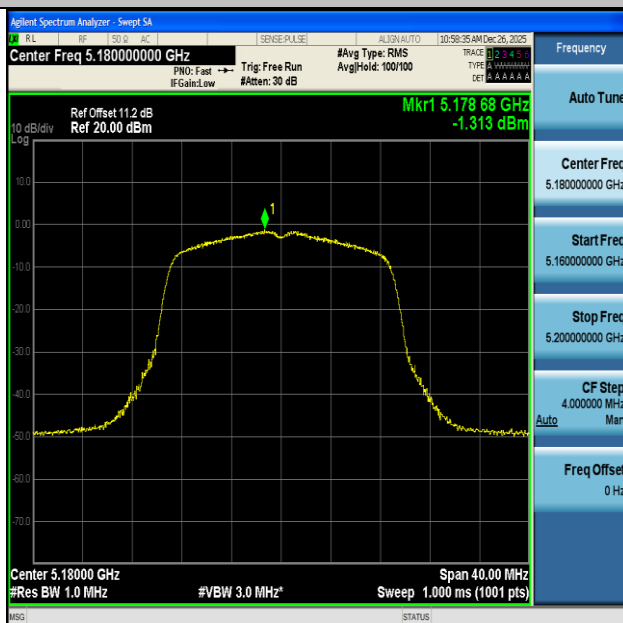


11A-Ant1-5200-PASS



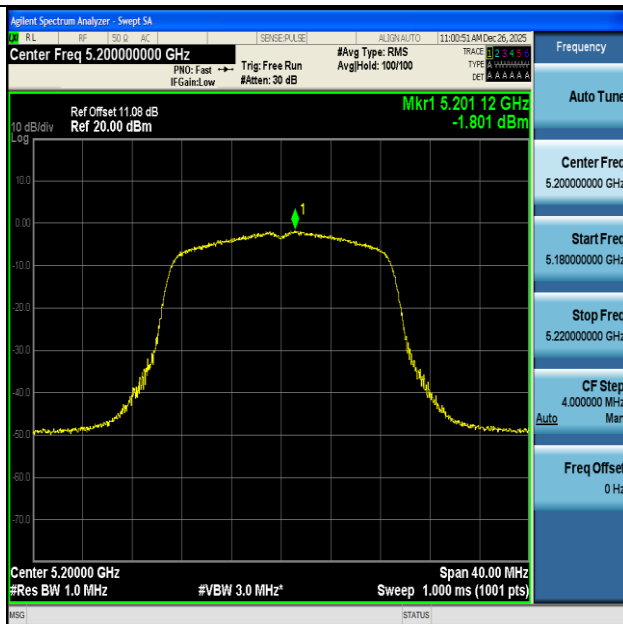


11A-Ant1-5240-PASS

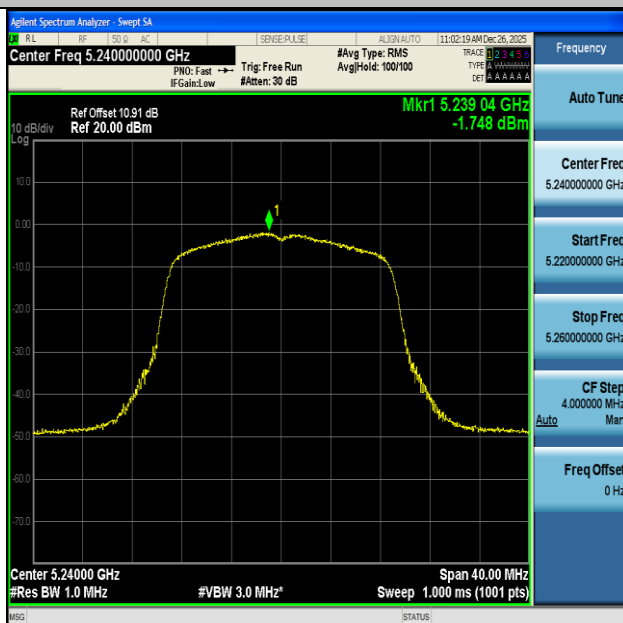


11N20SISO-Ant1-5180-PASS



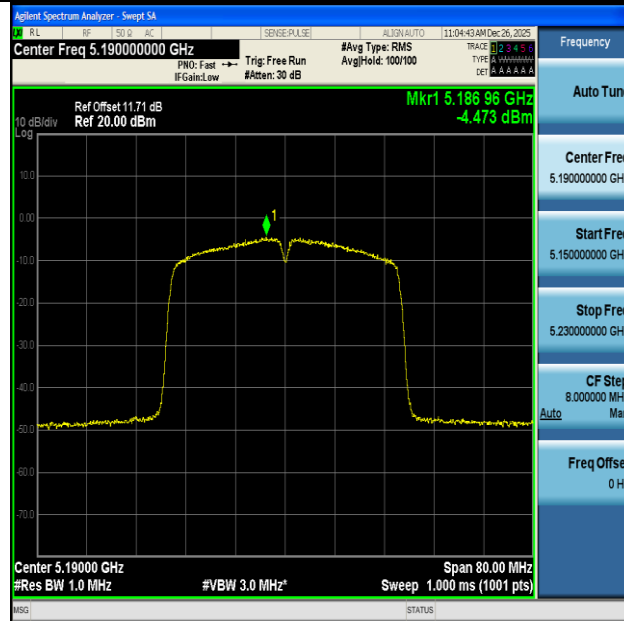


11N20SISO-Ant1-5200-PASS

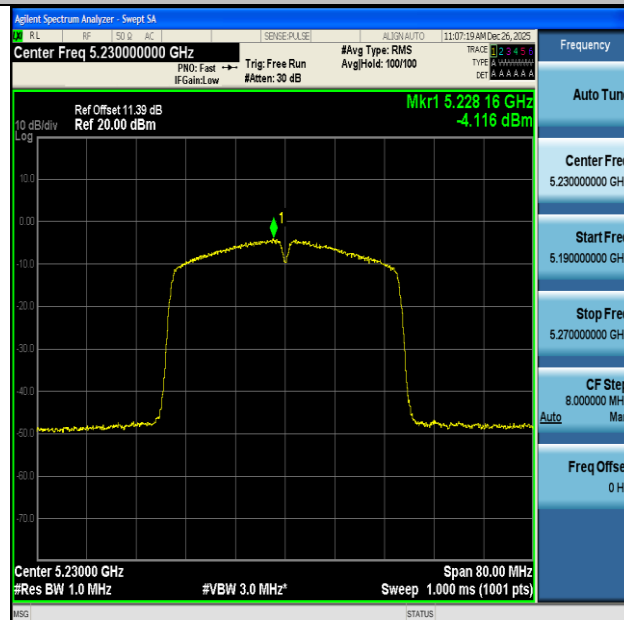


11N20SISO-Ant1-5240-PASS





11N40SISO-Ant1-5190-PASS



11N40SISO-Ant1-5230-PASS





Appendix D: Band edge measurements

Test Result

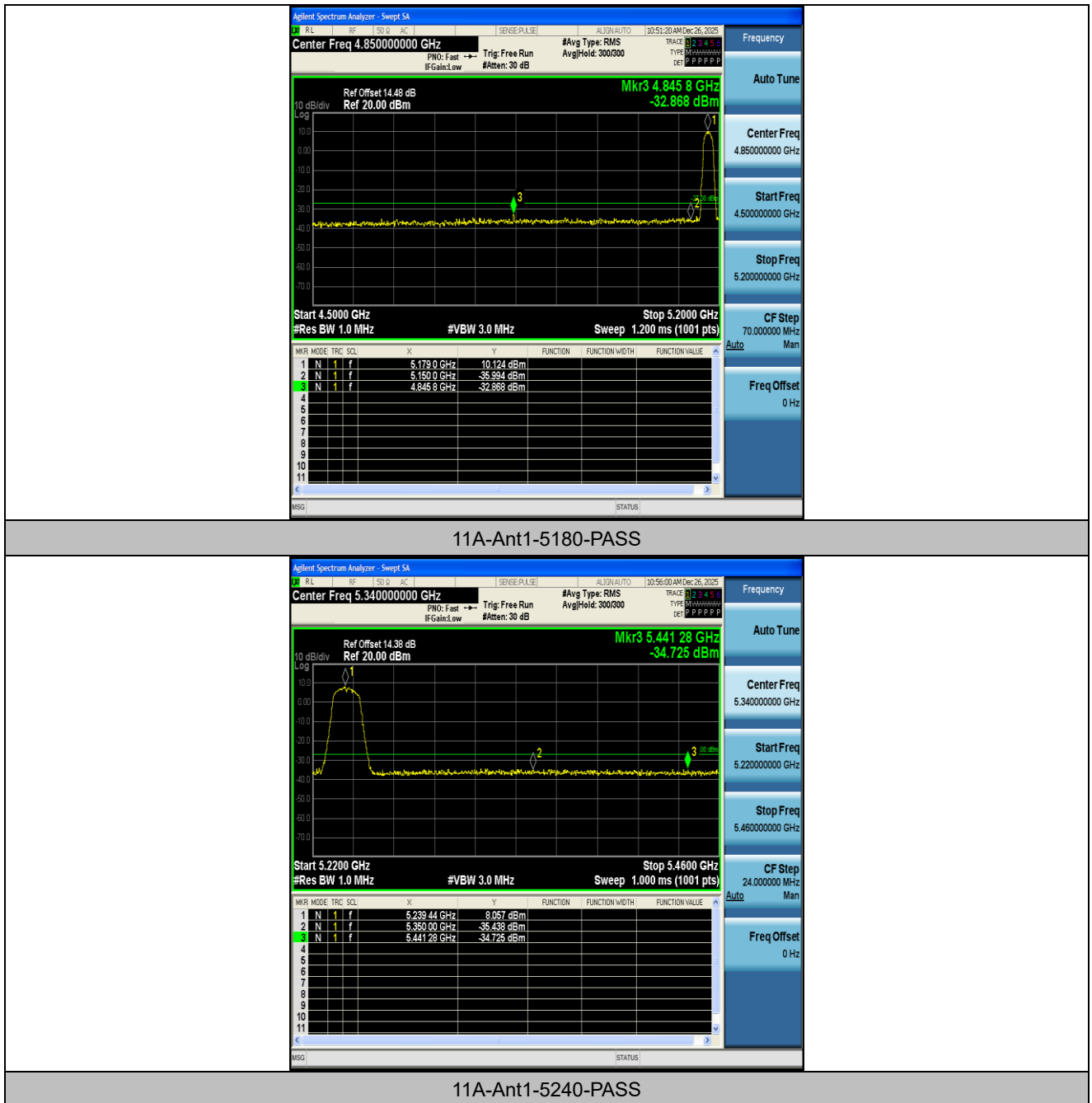
Test Mode	Antenna	Ch. Name	Frequency [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5180	-32.87	≤-27	PASS
11A	Ant1	High	5240	-34.73	≤-27	PASS
11N20SISO	Ant1	Low	5180	-33.68	≤-27	PASS
11N20SISO	Ant1	High	5240	-33.83	≤-27	PASS
11N40SISO	Ant1	Low	5190	-34.22	≤-27	PASS
11N40SISO	Ant1	High	5230	-34.13	≤-27	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)+antenna gain(dBi)



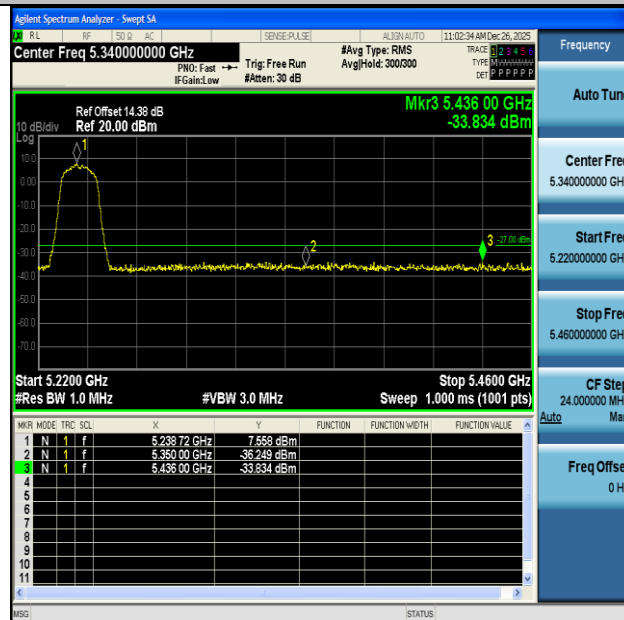


Test Graphs



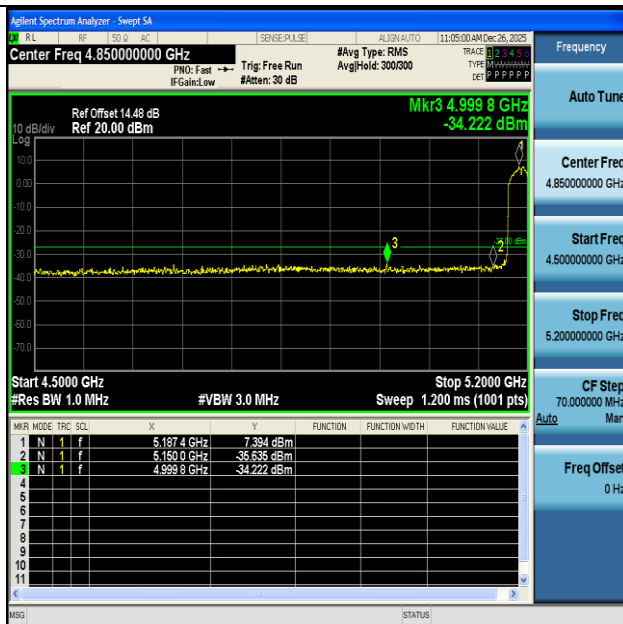


11N20SISO-Ant1-5180-PASS

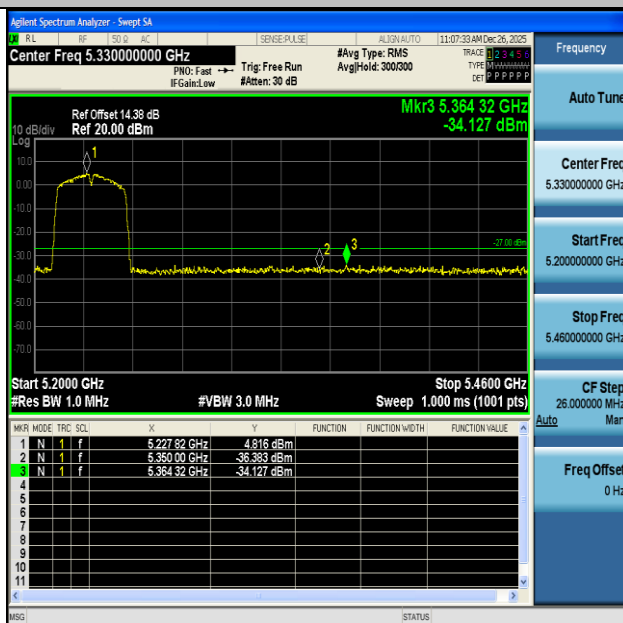


11N20SISO-Ant1-5240-PASS





11N40SISO-Ant1-5190-PASS



11N40SISO-Ant1-5230-PASS





Appendix E: Frequency Stability

Test Result

Ant1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	132	5180.005129	5150 – 5250	PASS
5180	20	108	5179.969335	5150 – 5250	PASS
5180	50	120	5180.034933	5150 – 5250	PASS
5180	40	120	5179.961207	5150 – 5250	PASS
5180	30	120	5179.944016	5150 – 5250	PASS
5180	20	120	5179.953366	5150 – 5250	PASS
5180	10	120	5179.926704	5150 – 5250	PASS
5180	0	120	5179.968161	5150 – 5250	PASS
5180	-10	120	5180.093015	5150 – 5250	PASS
5180	-20	120	5179.977630	5150 – 5250	PASS
5180	-30	120	5179.939434	5150 – 5250	PASS





Ant1

Frequency (MHz)	Enviroment Temperature (Dregree)	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





Ant1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	132	5240.022422	5150 – 5250	PASS
5240	20	108	5239.979973	5150 – 5250	PASS
5240	50	120	5239.911140	5150 – 5250	PASS
5240	40	120	5240.011221	5150 – 5250	PASS
5240	30	120	5240.076001	5150 – 5250	PASS
5240	20	120	5240.097196	5150 – 5250	PASS
5240	10	120	5239.964981	5150 – 5250	PASS
5240	0	120	5239.934266	5150 – 5250	PASS
5240	-10	120	5239.964559	5150 – 5250	PASS
5240	-20	120	5240.005501	5150 – 5250	PASS
5240	-30	120	5239.949387	5150 – 5250	PASS





Ant1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5190	20	132	5190.087750	5150 – 5250	PASS
5190	20	108	5189.930950	5150 – 5250	PASS
5190	50	120	5189.928768	5150 – 5250	PASS
5190	40	120	5189.971984	5150 – 5250	PASS
5190	30	120	5189.981768	5150 – 5250	PASS
5190	20	120	5190.087799	5150 – 5250	PASS
5190	10	120	5190.093155	5150 – 5250	PASS
5190	0	120	5190.012565	5150 – 5250	PASS
5190	-10	120	5190.021701	5150 – 5250	PASS
5190	-20	120	5189.987662	5150 – 5250	PASS
5190	-30	120	5190.027504	5150 – 5250	PASS





Ant1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5230	20	132	5229.942115	5150 – 5250	PASS
5230	20	108	5229.909968	5150 – 5250	PASS
5230	50	120	5230.079754	5150 – 5250	PASS
5230	40	120	5230.049069	5150 – 5250	PASS
5230	30	120	5230.053682	5150 – 5250	PASS
5230	20	120	5229.996703	5150 – 5250	PASS
5230	10	120	5230.037926	5150 – 5250	PASS
5230	0	120	5230.058278	5150 – 5250	PASS
5230	-10	120	5230.070241	5150 – 5250	PASS
5230	-20	120	5229.960882	5150 – 5250	PASS
5230	-30	120	5229.926624	5150 – 5250	PASS





Appendix F: Conducted Spurious Emission

Test Result

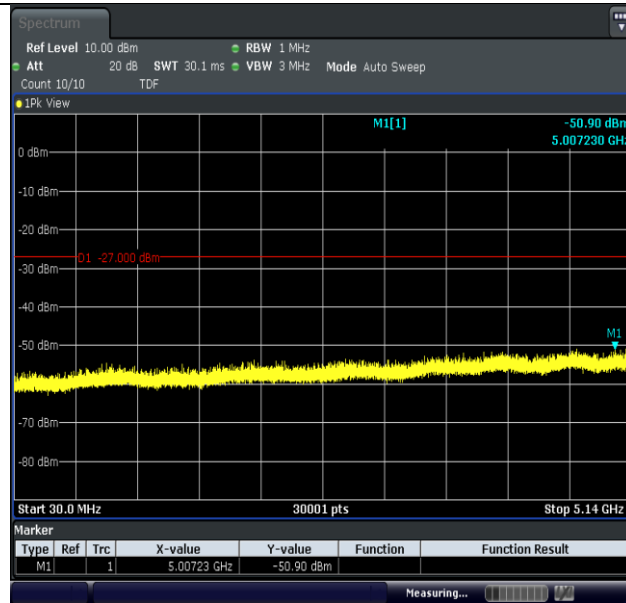
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	5007.23	-50.9	≤-27	PASS
11A	Ant1	5180	5360~40000	6784.2	-53.16	≤-27	PASS
11A	Ant1	5200	30~5140	4649.71	-51.02	≤-27	PASS
11A	Ant1	5200	5360~40000	6781.9	-52.43	≤-27	PASS
11A	Ant1	5240	30~5140	4693.83	-50.53	≤-27	PASS
11A	Ant1	5240	5360~40000	6992.1	-53.14	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	4273.97	-51.16	≤-27	PASS
11N20SISO	Ant1	5180	5360~40000	6718.4	-53.11	≤-27	PASS
11N20SISO	Ant1	5200	30~5140	5135.32	-50.84	≤-27	PASS
11N20SISO	Ant1	5200	5360~40000	6984	-53.04	≤-27	PASS
11N20SISO	Ant1	5240	30~5140	4727.89	-50.06	≤-27	PASS
11N20SISO	Ant1	5240	5360~40000	6336.2	-51.24	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	4576.81	-50.13	≤-27	PASS
11N40SISO	Ant1	5190	5360~40000	6660.7	-52.96	≤-27	PASS
11N40SISO	Ant1	5230	30~5140	4705.24	-50.61	≤-27	PASS
11N40SISO	Ant1	5230	5360~40000	6981.7	-52.51	≤-27	PASS

Note: For spurious emissions plots from 30MHz to 40 GHz, the cable loss , attenuator factors and antenna gain have been set in the 'TDF' of the Spectrum Analyzer during the test.

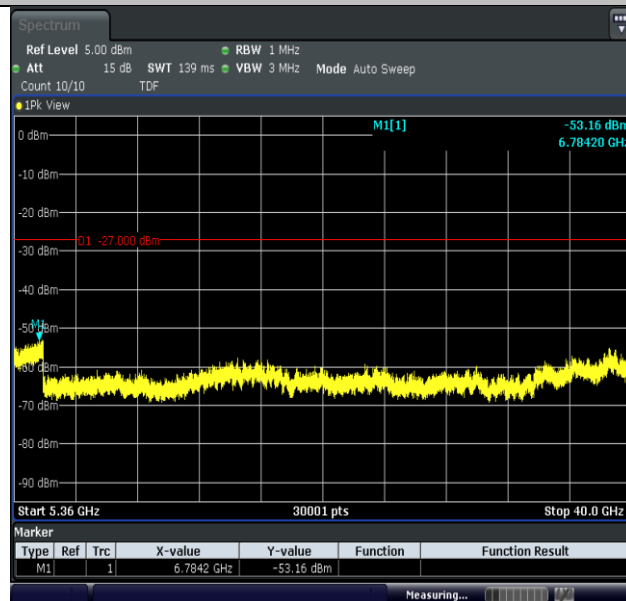




Test Graphs

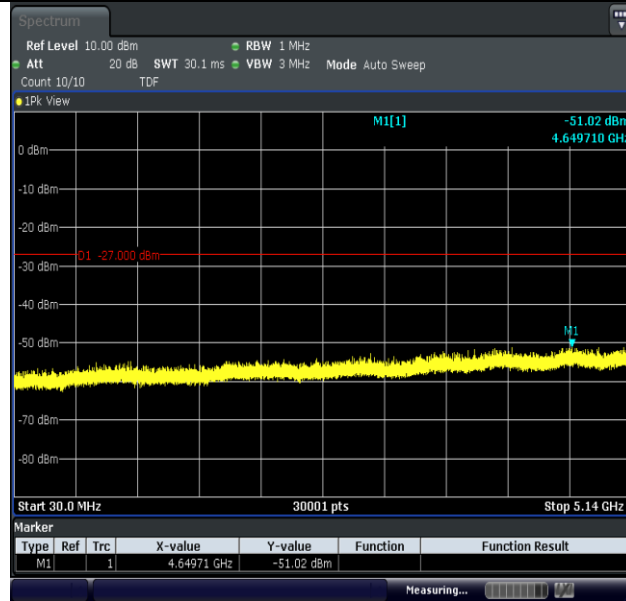


11A-Ant1-5180-30~5140-PASS

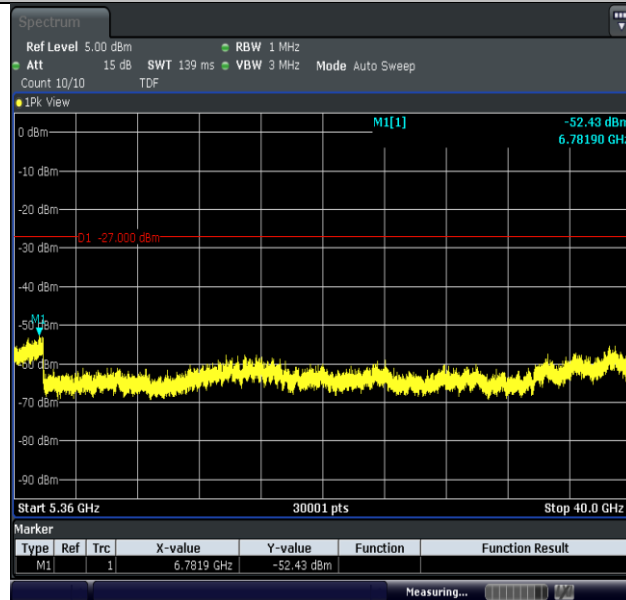


11A-Ant1-5180-5360~40000-PASS



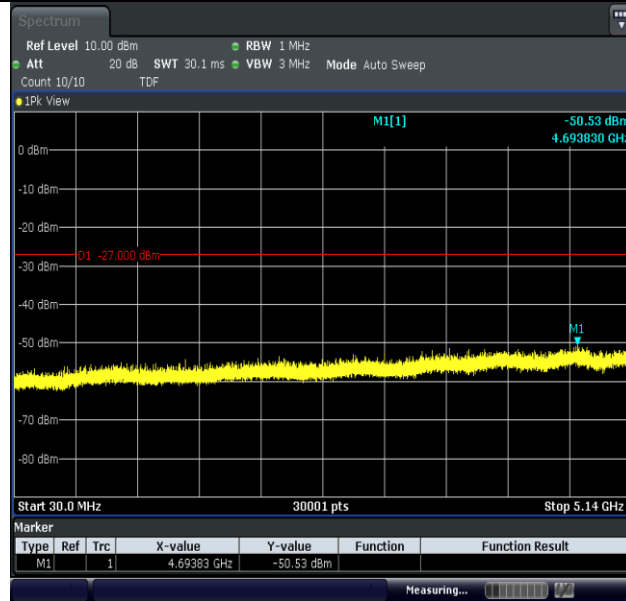


11A-Ant1-5200-30~5140-PASS

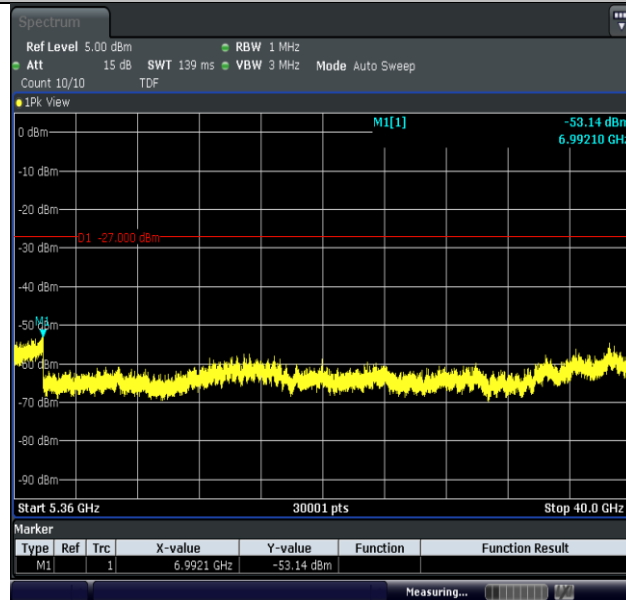


11A-Ant1-5200-5360~40000-PASS



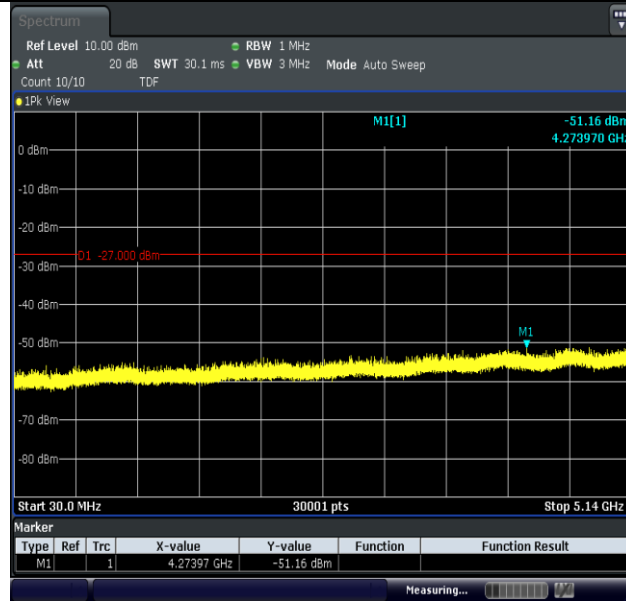


11A-Ant1-5240-30~5140-PASS

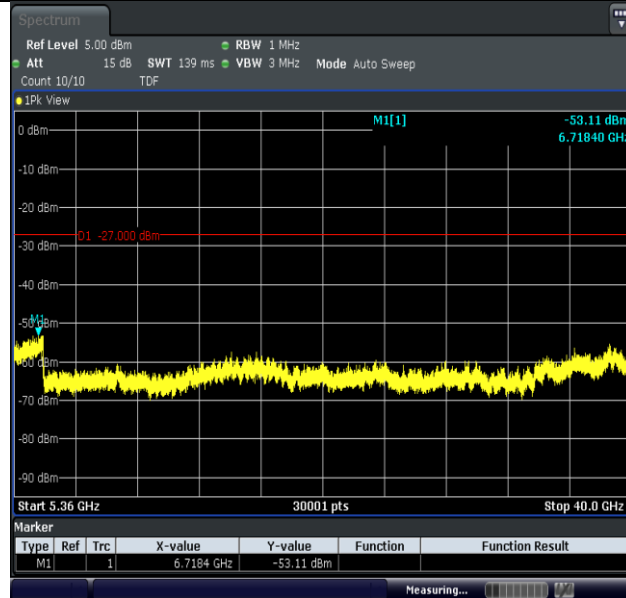


11A-Ant1-5240-5360~40000-PASS



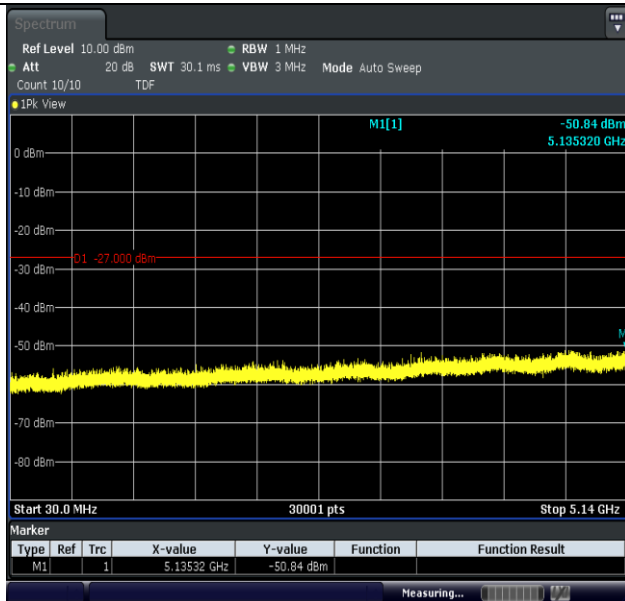


11N20SISO-Ant1-5180-30~5140-PASS

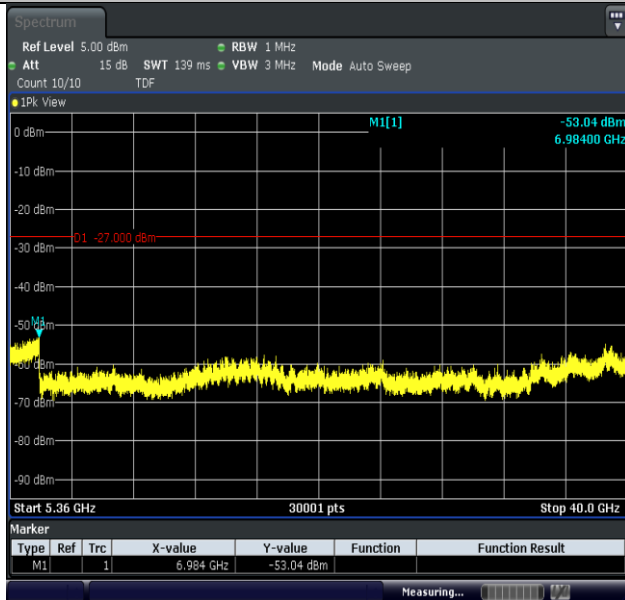


11N20SISO-Ant1-5180-5360~40000-PASS



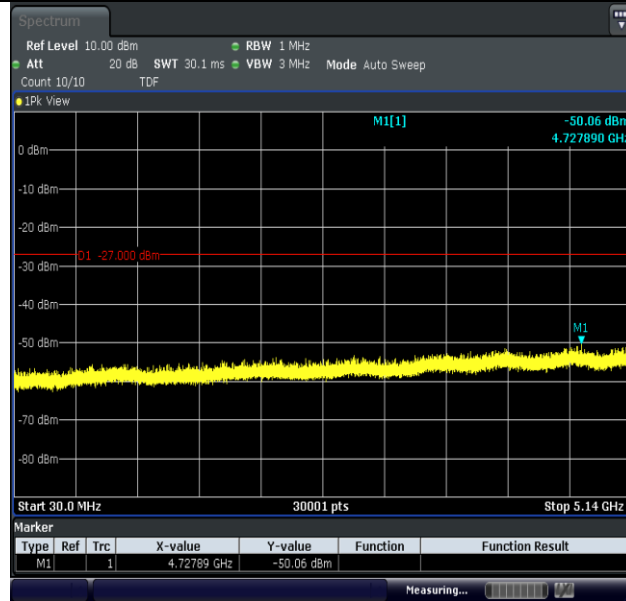


11N20SISO-Ant1-5200-30~5140-PASS

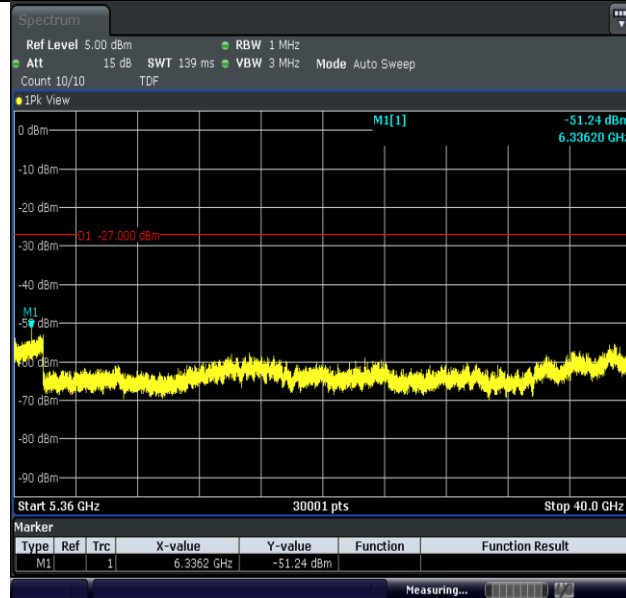


11N20SISO-Ant1-5200-5360~40000-PASS



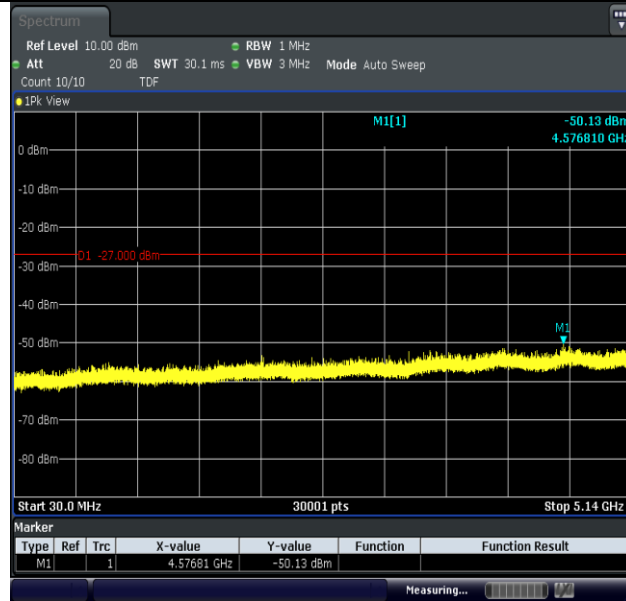


11N20SISO-Ant1-5240-30~5140-PASS

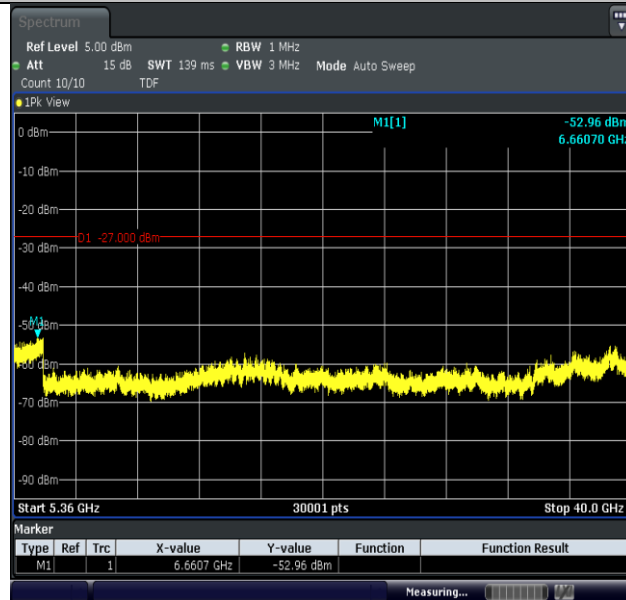


11N20SISO-Ant1-5240-5360~40000-PASS



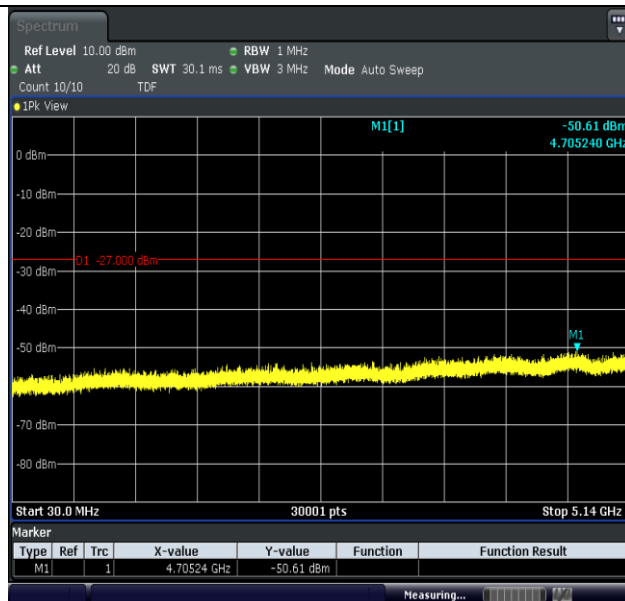


11N40SISO-Ant1-5190-30~5140-PASS

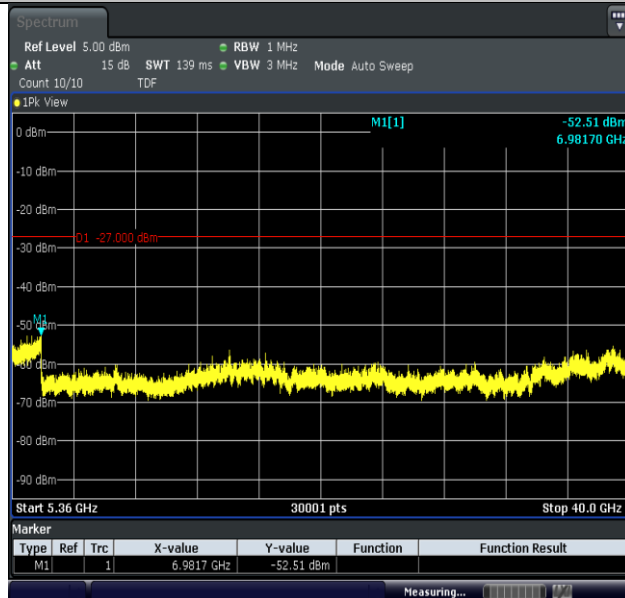


11N40SISO-Ant1-5190-5360~40000-PASS





11N40SISO-Ant1-5230-30~5140-PASS



11N40SISO-Ant1-5230-5360~40000-PASS





Appendix G: Duty Cycle

Test Result

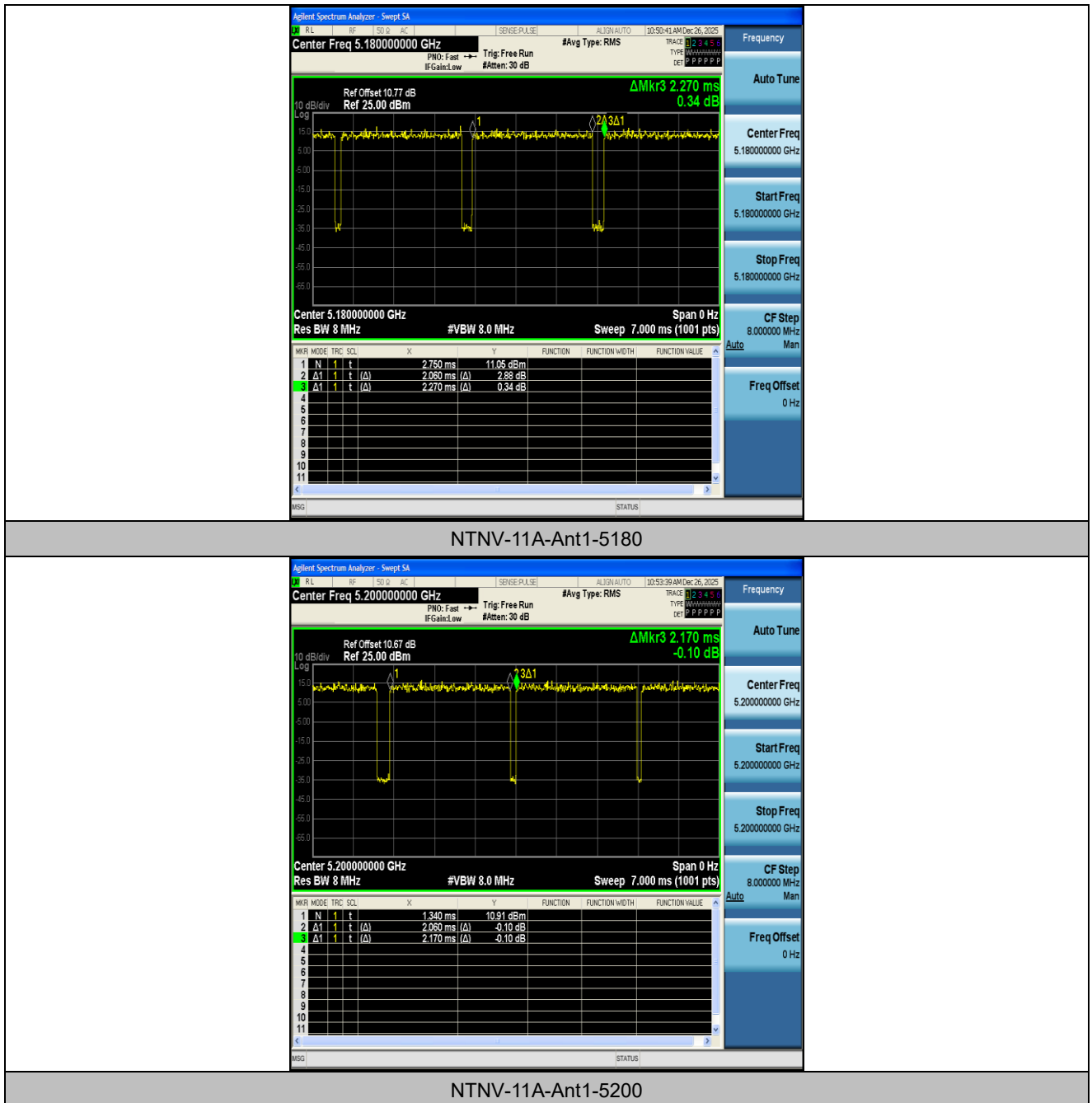
Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Dc. Factor [%]	1/T [kHz]
11A	Ant1	5180	2.06	2.27	90.75	0.42	0.49
11A	Ant1	5200	2.06	2.17	94.93	0.23	0.49
11A	Ant1	5240	2.06	2.26	91.15	0.40	0.49
11N20SISO	Ant1	5180	1.92	2.12	90.57	0.43	0.52
11N20SISO	Ant1	5200	1.92	2.11	91.00	0.41	0.52
11N20SISO	Ant1	5240	1.92	2.03	94.58	0.24	0.52
11N40SISO	Ant1	5190	0.95	1.18	80.51	0.94	1.05
11N40SISO	Ant1	5230	0.94	1.11	84.68	0.72	1.06

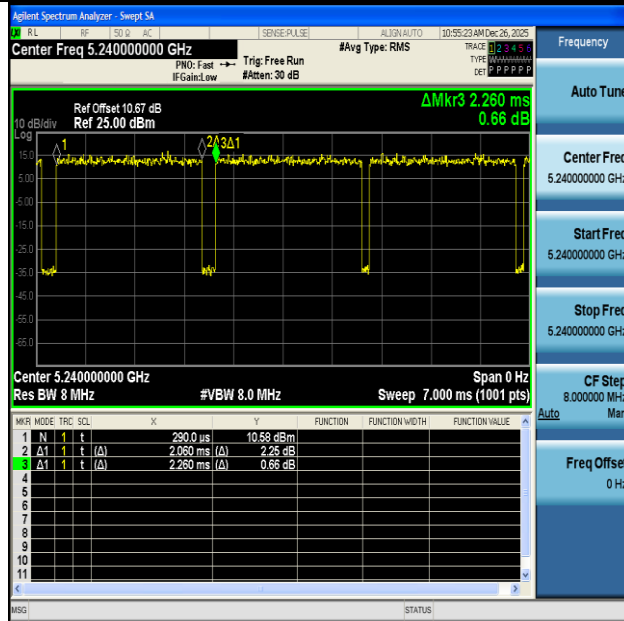
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



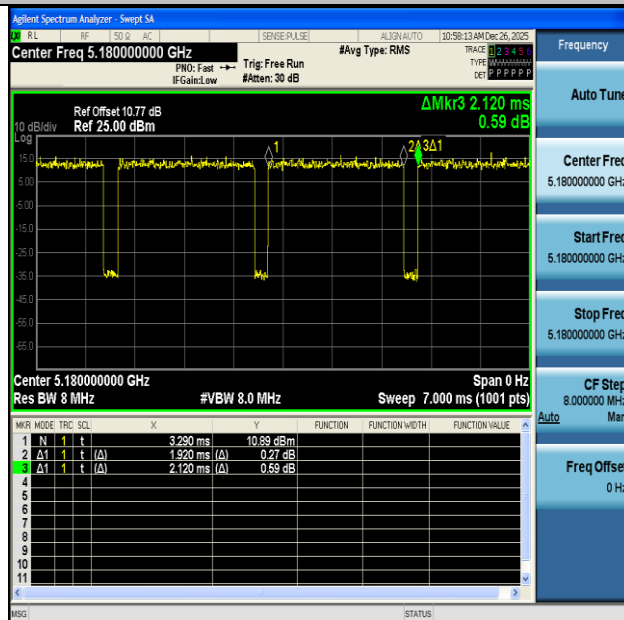


Test Graphs



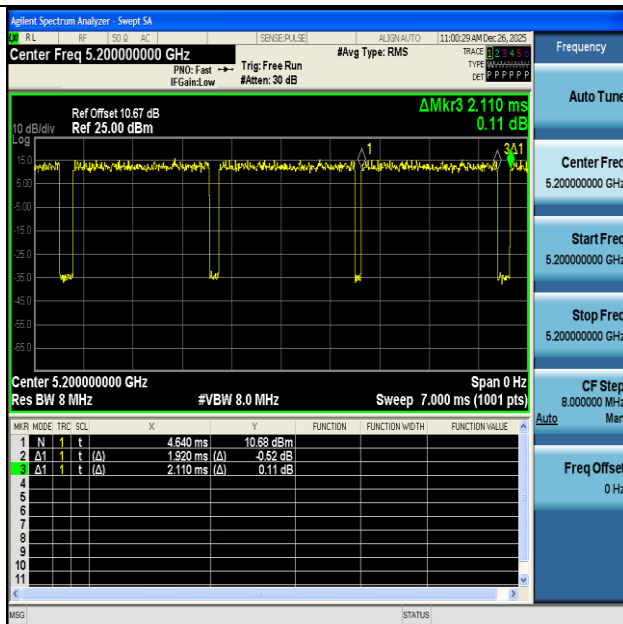


NTVN-11A-Ant1-5240

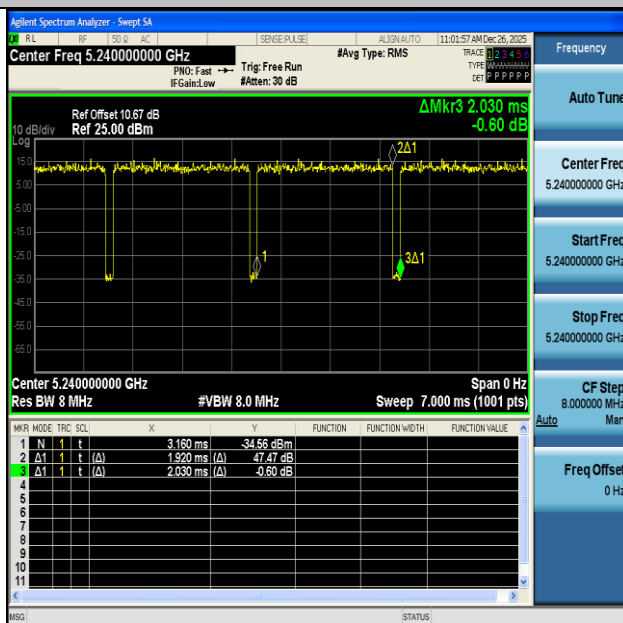


NTVN-11N20SISO-Ant1-5180



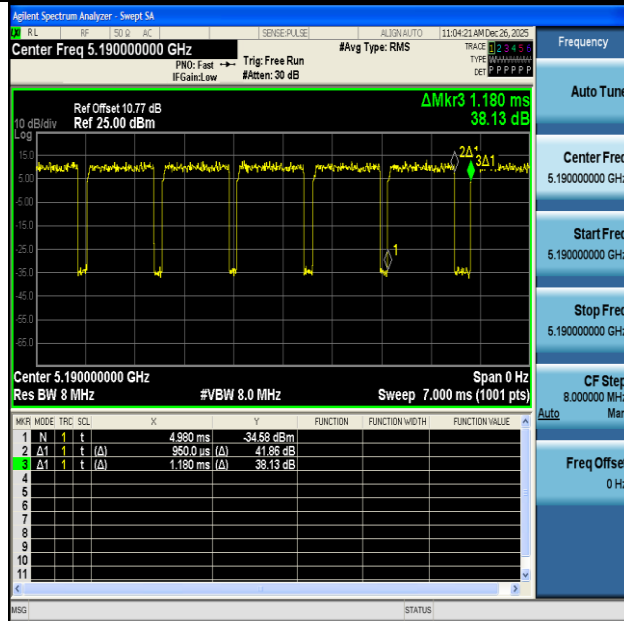


NTNV-11N20SISO-Ant1-5200

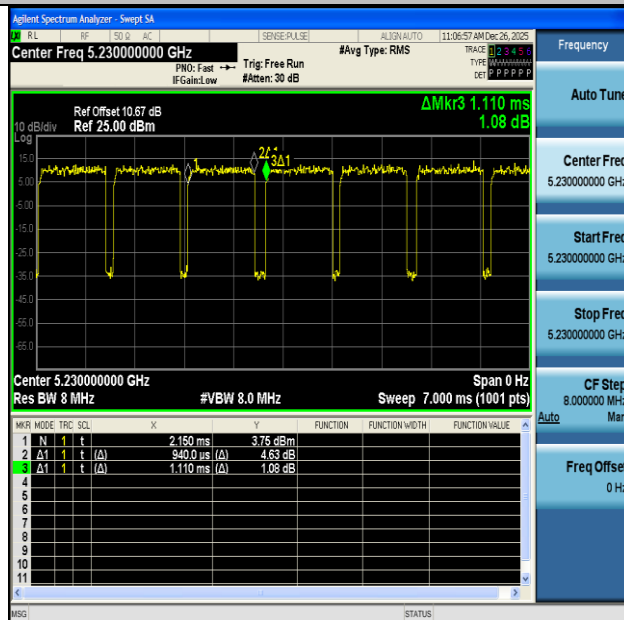


NTNV-11N20SISO-Ant1-5240





NTNV-11N40SISO-Ant1-5190



NTNV-11N40SISO-Ant1-5230

