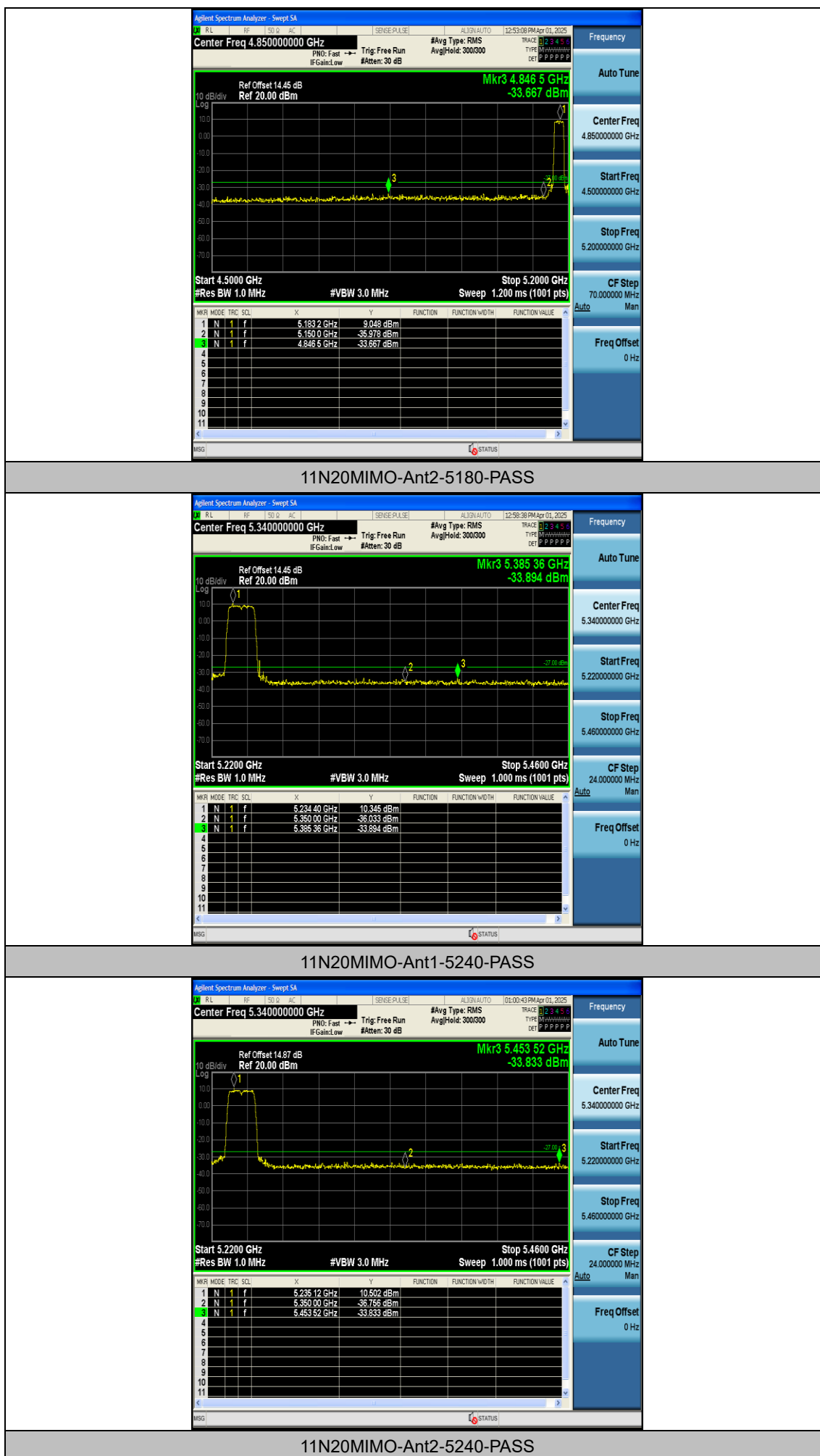
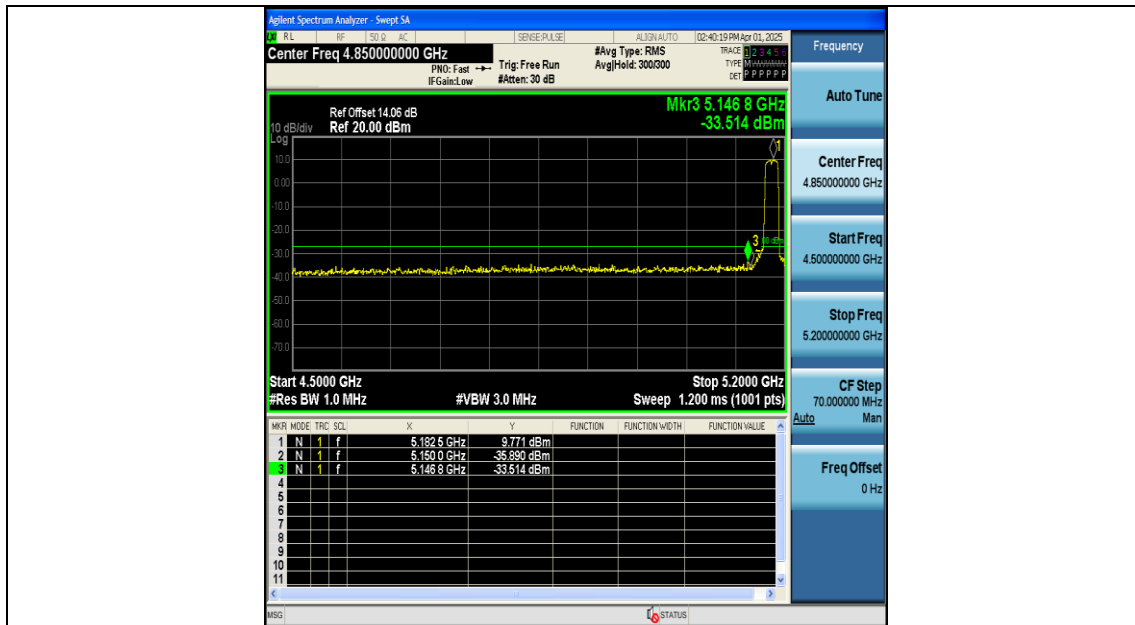
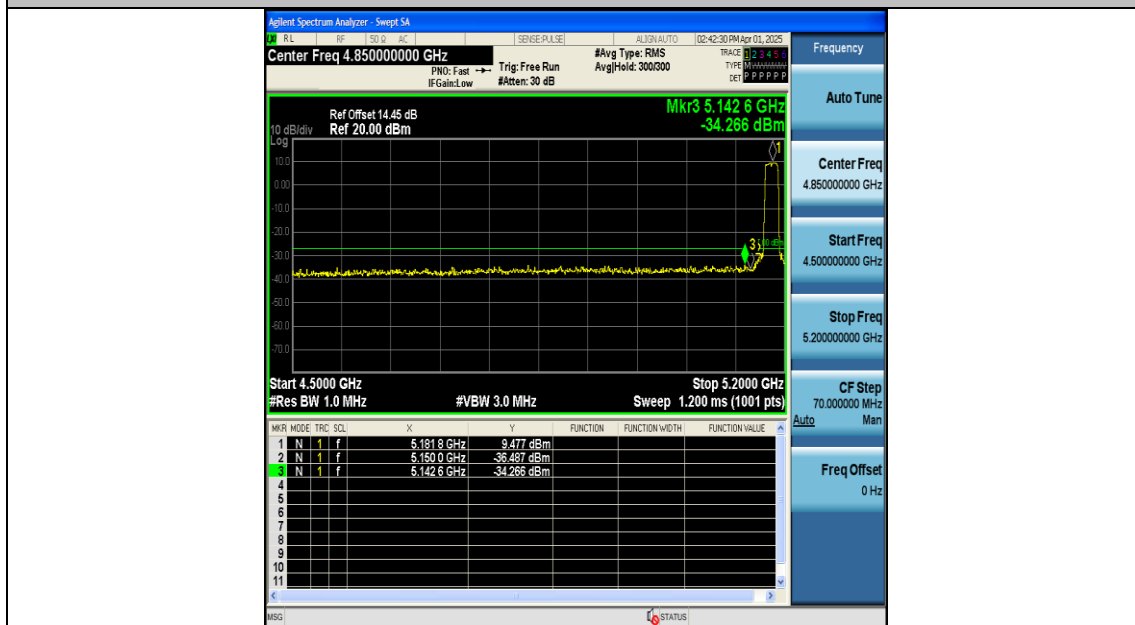


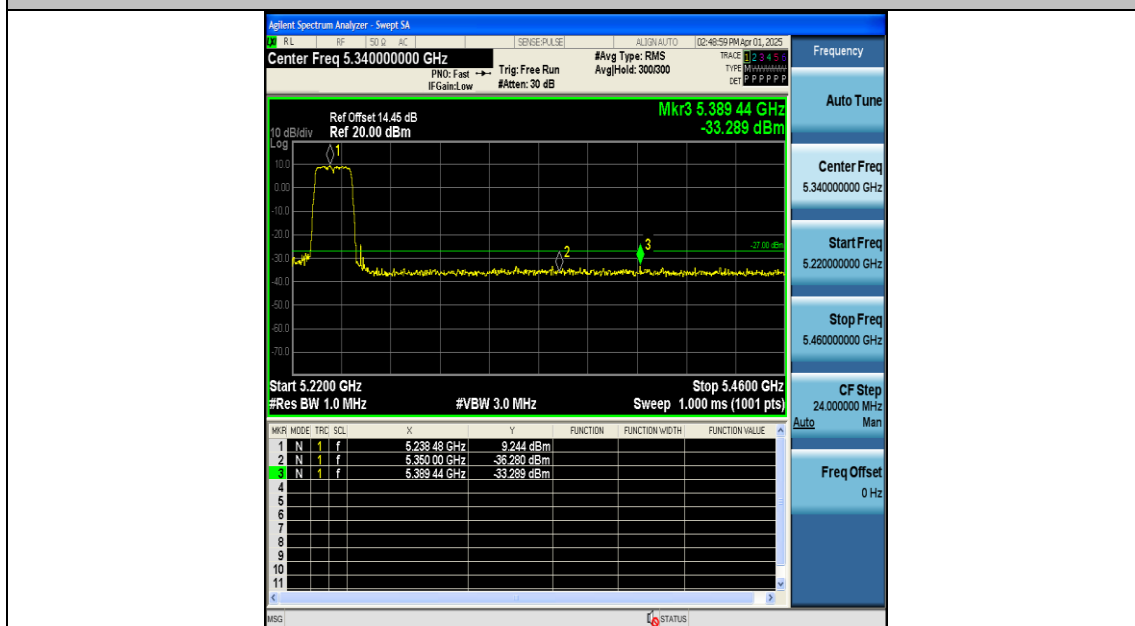




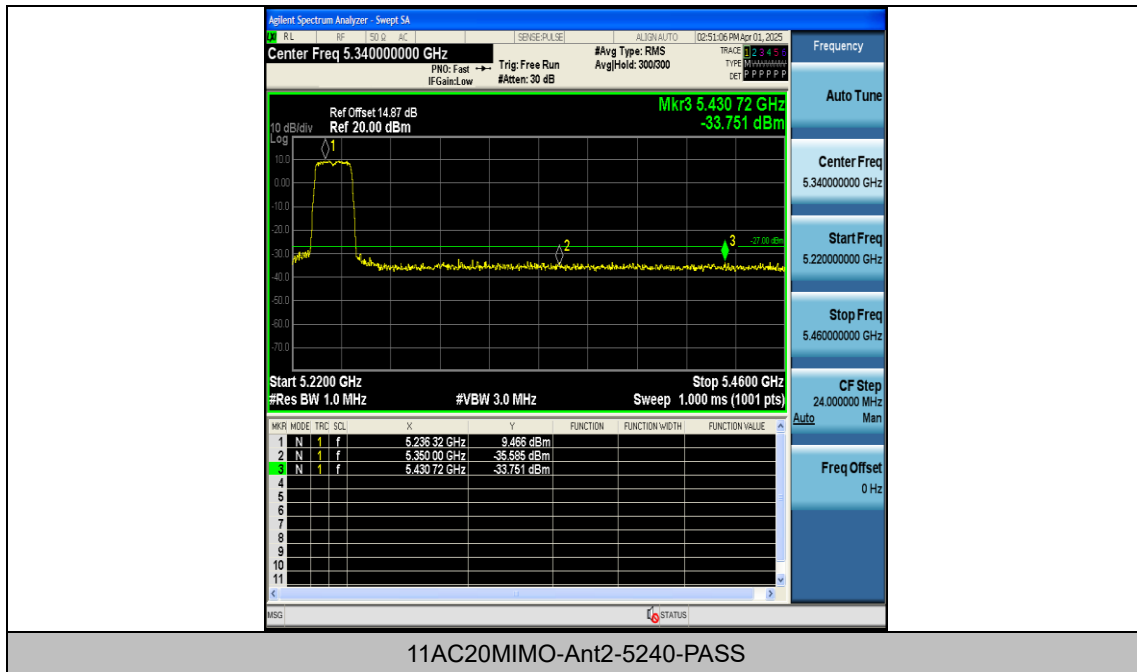
11AC20MIMO-Ant1-5180-PASS



11AC20MIMO-Ant2-5180-PASS



11AC20MIMO-Ant1-5240-PASS



Appendix E: Frequency Stability

Test Result

Ant1

Frequency (MHz)	Enviroment Temperature (Degree)	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

Ant2

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	132	5179.943117	5150 – 5250	PASS
5180	20	108	5180.089708	5150 – 5250	PASS
5180	50	120	5179.927032	5150 – 5250	PASS
5180	40	120	5180.079981	5150 – 5250	PASS
5180	30	120	5179.955466	5150 – 5250	PASS
5180	20	120	5180.093140	5150 – 5250	PASS
5180	10	120	5180.076612	5150 – 5250	PASS
5180	0	120	5179.939233	5150 – 5250	PASS
5180	-10	120	5180.015180	5150 – 5250	PASS
5180	-20	120	5179.904034	5150 – 5250	PASS
5180	-30	120	5179.974530	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

Ant2

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5200	20	132	5200.015771	5150 – 5250	PASS
5200	20	108	5200.084972	5150 – 5250	PASS
5200	50	120	5199.970996	5150 – 5250	PASS
5200	40	120	5200.057669	5150 – 5250	PASS
5200	30	120	5199.983715	5150 – 5250	PASS
5200	20	120	5200.020240	5150 – 5250	PASS
5200	10	120	5200.055100	5150 – 5250	PASS
5200	0	120	5199.999311	5150 – 5250	PASS
5200	-10	120	5199.942525	5150 – 5250	PASS
5200	-20	120	5200.051667	5150 – 5250	PASS
5200	-30	120	5199.901170	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

Ant2

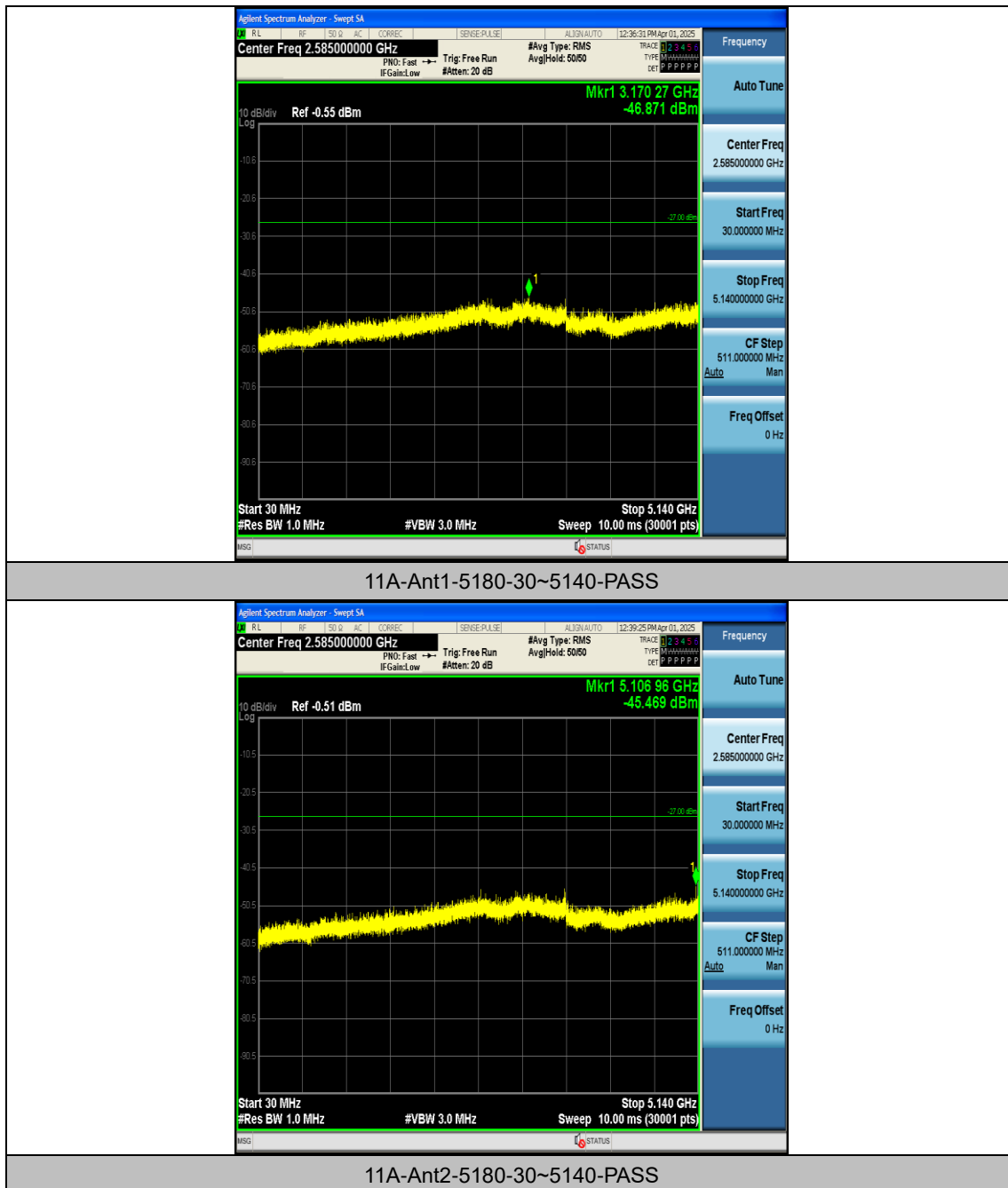
Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	132	5240.092594	5150 – 5250	PASS
5240	20	108	5240.034917	5150 – 5250	PASS
5240	50	120	5239.995319	5150 – 5250	PASS
5240	40	120	5239.907488	5150 – 5250	PASS
5240	30	120	5240.094972	5150 – 5250	PASS
5240	20	120	5239.992698	5150 – 5250	PASS
5240	10	120	5240.010046	5150 – 5250	PASS
5240	0	120	5239.900120	5150 – 5250	PASS
5240	-10	120	5239.941660	5150 – 5250	PASS
5240	-20	120	5239.973675	5150 – 5250	PASS
5240	-30	120	5240.081840	5150 – 5250	PASS

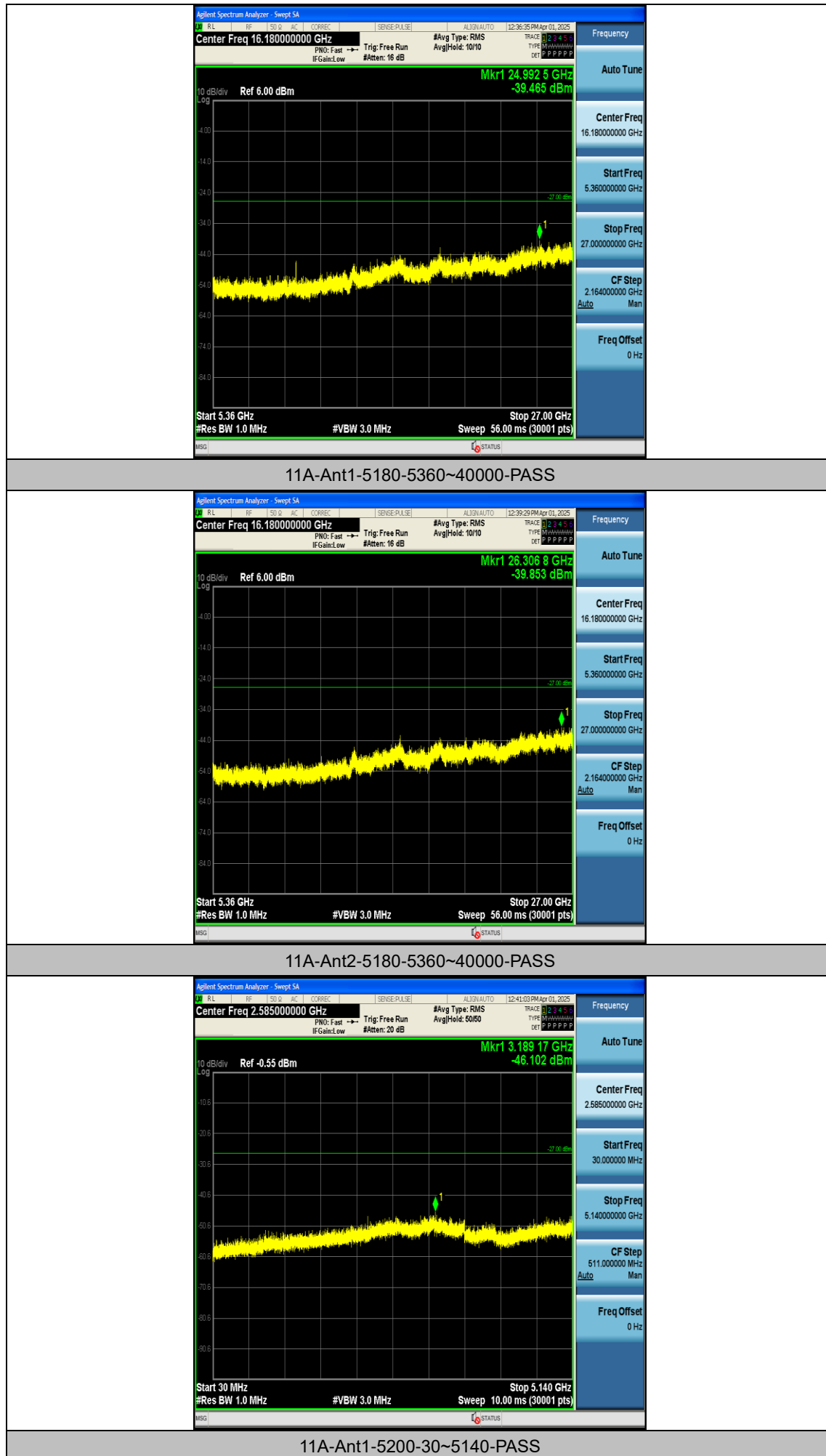
Appendix F: Conducted Spurious Emission

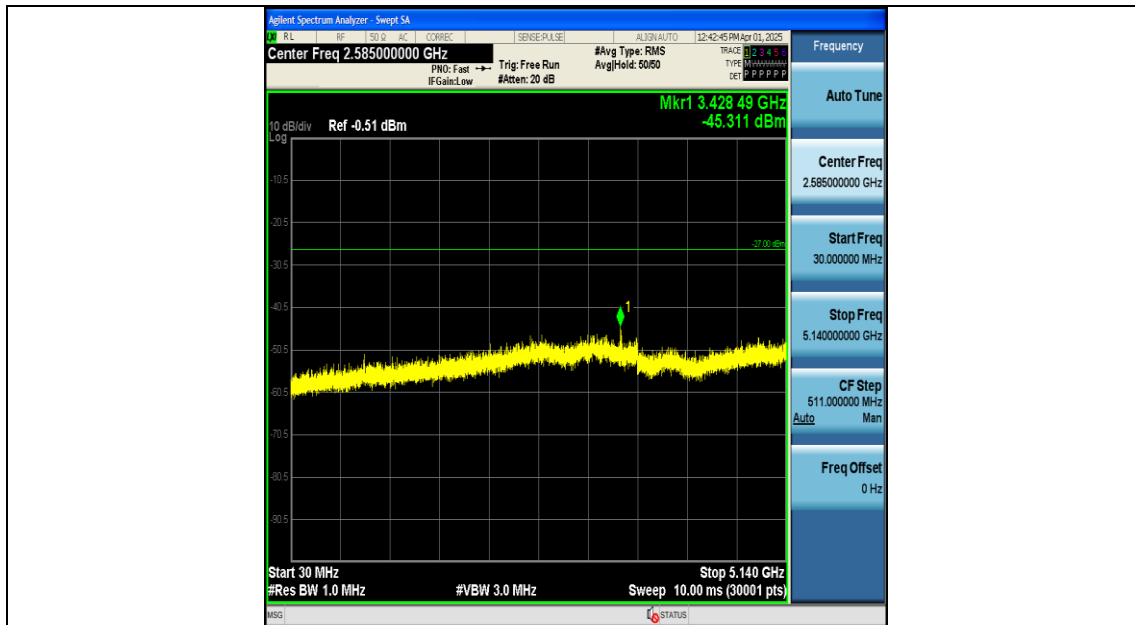
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	3170.27	-46.87	≤-27	PASS
11A	Ant2	5180	30~5140	5106.96	-45.47	≤-27	PASS
11A	Ant1	5180	5360~40000	24992.53	-39.47	≤-27	PASS
11A	Ant2	5180	5360~40000	26306.8	-39.85	≤-27	PASS
11A	Ant1	5200	30~5140	3189.17	-46.1	≤-27	PASS
11A	Ant2	5200	30~5140	3428.49	-45.31	≤-27	PASS
11A	Ant1	5200	5360~40000	26627.79	-40.01	≤-27	PASS
11A	Ant2	5200	5360~40000	26187.06	-40.21	≤-27	PASS
11A	Ant1	5240	30~5140	2694.01	-46.78	≤-27	PASS
11A	Ant2	5240	30~5140	3142.84	-46.76	≤-27	PASS
11A	Ant1	5240	5360~40000	26669.63	-39.79	≤-27	PASS
11A	Ant2	5240	5360~40000	26790.81	-40	≤-27	PASS
11N20MIMO	Ant1	5180	30~5140	3157.66	-46.62	≤-27	PASS
11N20MIMO	Ant2	5180	30~5140	3153.57	-46.27	≤-27	PASS
11N20MIMO	Ant1	5180	5360~40000	26202.93	-39.83	≤-27	PASS
11N20MIMO	Ant2	5180	5360~40000	24915.35	-38.6	≤-27	PASS
11N20MIMO	Ant1	5200	30~5140	3136.71	-46.9	≤-27	PASS
11N20MIMO	Ant2	5200	30~5140	3267.36	-47.04	≤-27	PASS
11N20MIMO	Ant1	5200	5360~40000	26078.14	-39.92	≤-27	PASS
11N20MIMO	Ant2	5200	5360~40000	24983.87	-39.82	≤-27	PASS
11N20MIMO	Ant1	5240	30~5140	3299.55	-46.97	≤-27	PASS
11N20MIMO	Ant2	5240	30~5140	3155.62	-46.53	≤-27	PASS
11N20MIMO	Ant1	5240	5360~40000	25085.58	-39.88	≤-27	PASS
11N20MIMO	Ant2	5240	5360~40000	25054.56	-38.86	≤-27	PASS
11AC20MIMO	Ant1	5180	30~5140	5106.44	-46.6	≤-27	PASS
11AC20MIMO	Ant2	5180	30~5140	3159.19	-46.01	≤-27	PASS
11AC20MIMO	Ant1	5180	5360~40000	26026.2	-39.45	≤-27	PASS
11AC20MIMO	Ant2	5180	5360~40000	26036.3	-39.41	≤-27	PASS
11AC20MIMO	Ant1	5200	30~5140	3496.11	-44.36	≤-27	PASS
11AC20MIMO	Ant2	5200	30~5140	3499.01	-45.12	≤-27	PASS
11AC20MIMO	Ant1	5200	5360~40000	25053.84	-40.04	≤-27	PASS
11AC20MIMO	Ant2	5200	5360~40000	26986.29	-39.8	≤-27	PASS
11AC20MIMO	Ant1	5240	30~5140	3498.84	-44	≤-27	PASS
11AC20MIMO	Ant2	5240	30~5140	3153.4	-46.62	≤-27	PASS
11AC20MIMO	Ant1	5240	5360~40000	26839.86	-38.85	≤-27	PASS
11AC20MIMO	Ant2	5240	5360~40000	26332.77	-39.2	≤-27	PASS

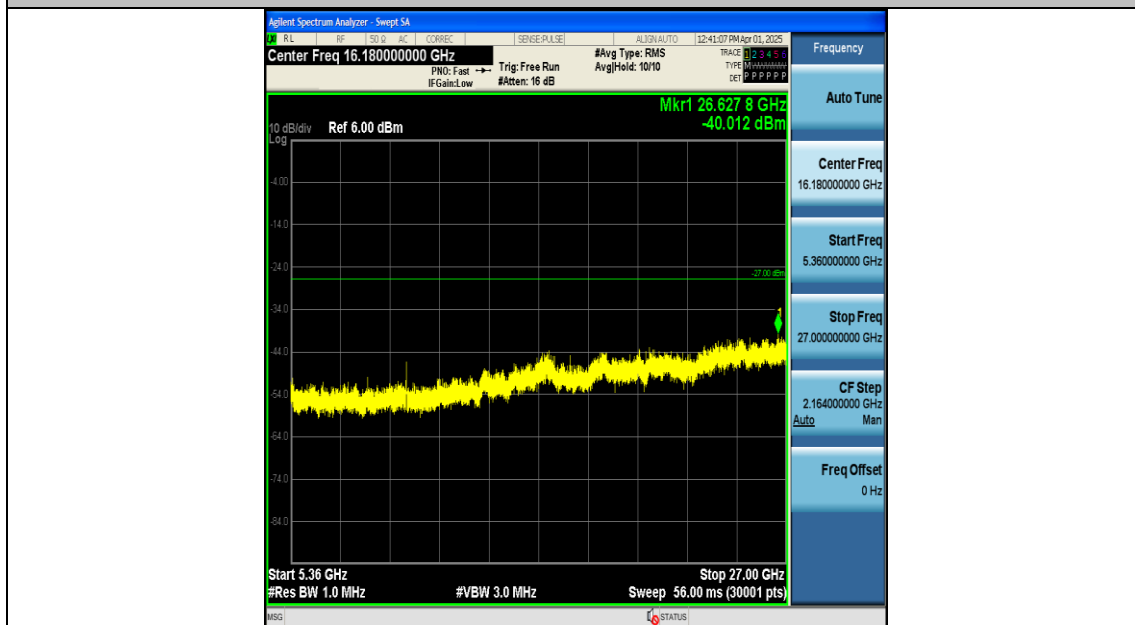
Test Graphs



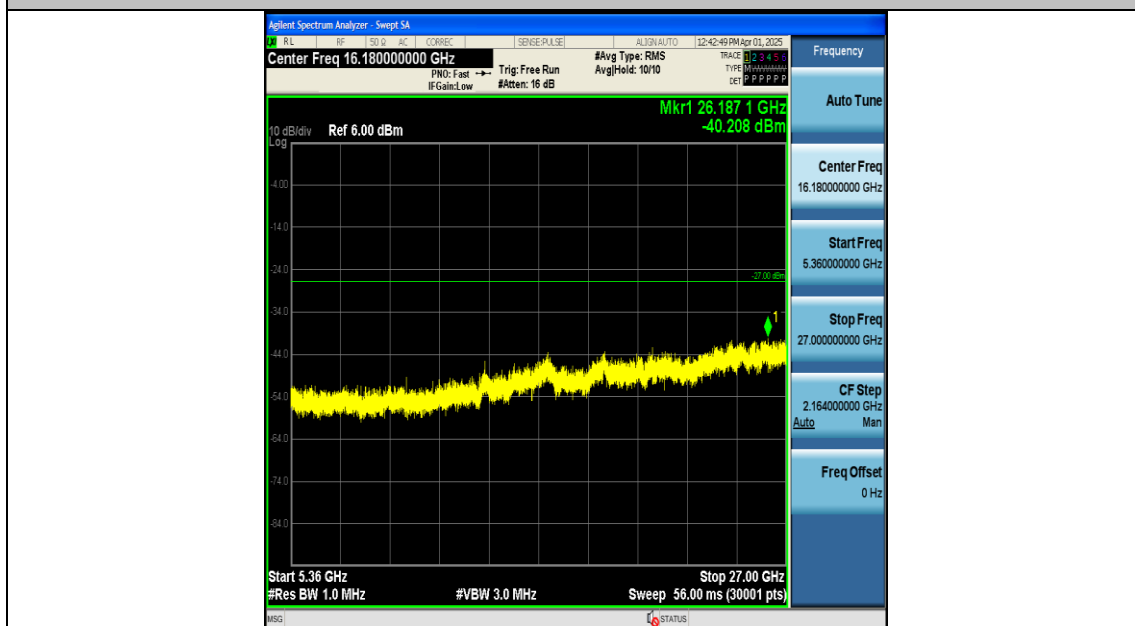




11A-Ant2-5200-30~5140-PASS



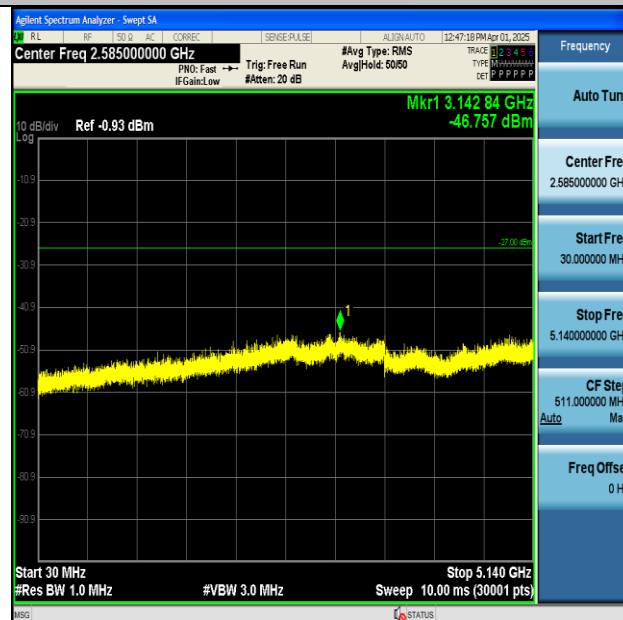
11A-Ant1-5200-5360~40000-PASS



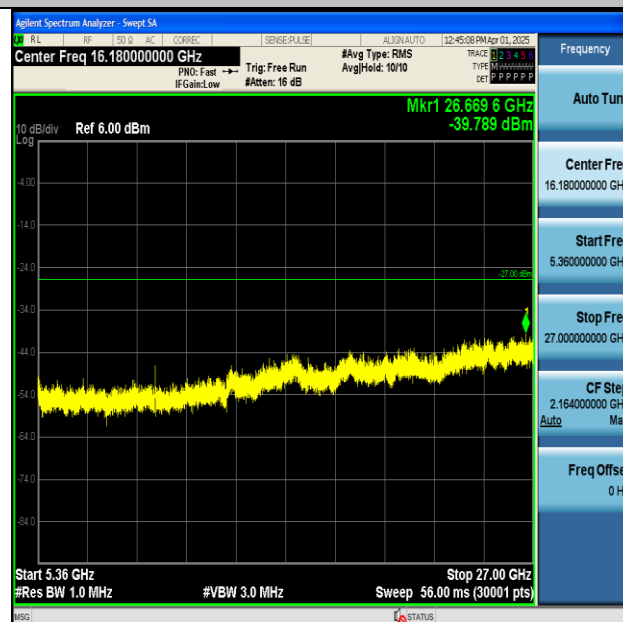
11A-Ant2-5200-5360~40000-PASS



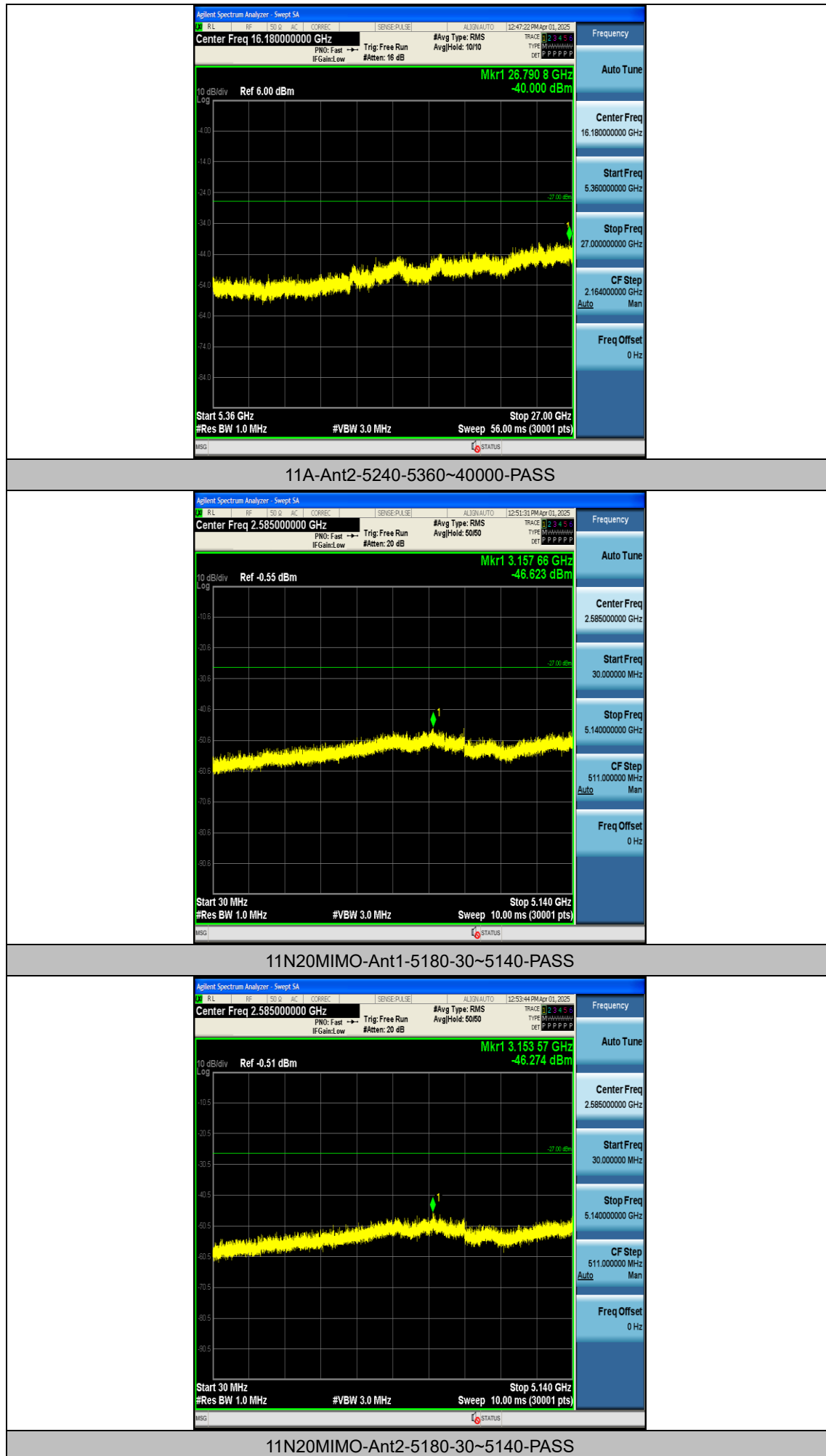
11A-Ant1-5240-30~5140-PASS

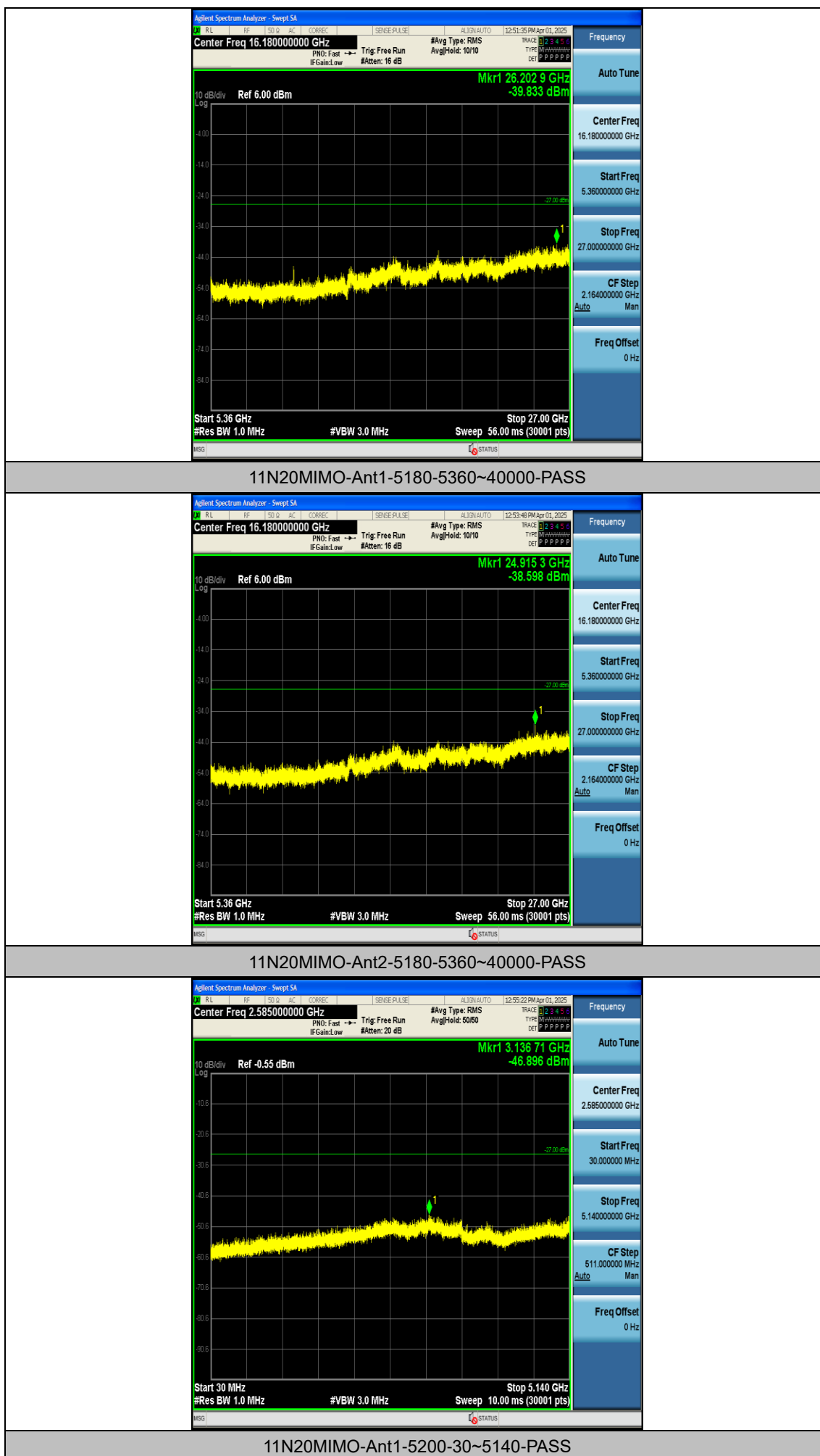


11A-Ant2-5240-30~5140-PASS



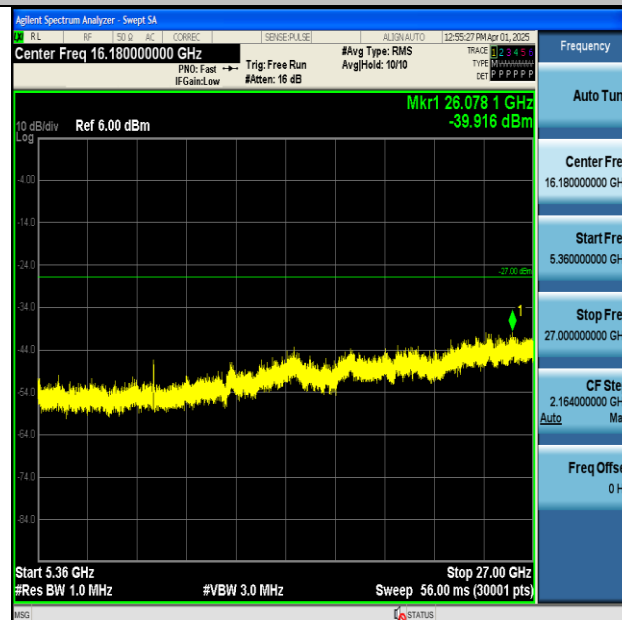
11A-Ant1-5240-5360~40000-PASS



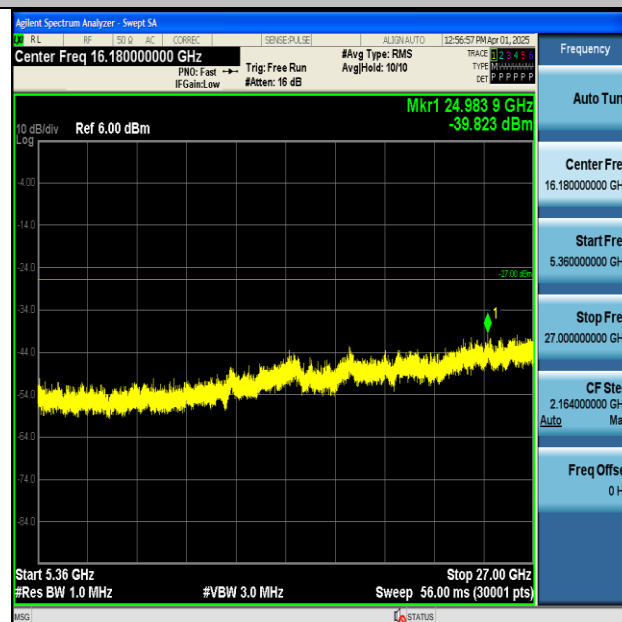




11N20MIMO-Ant2-5200-30~5140-PASS



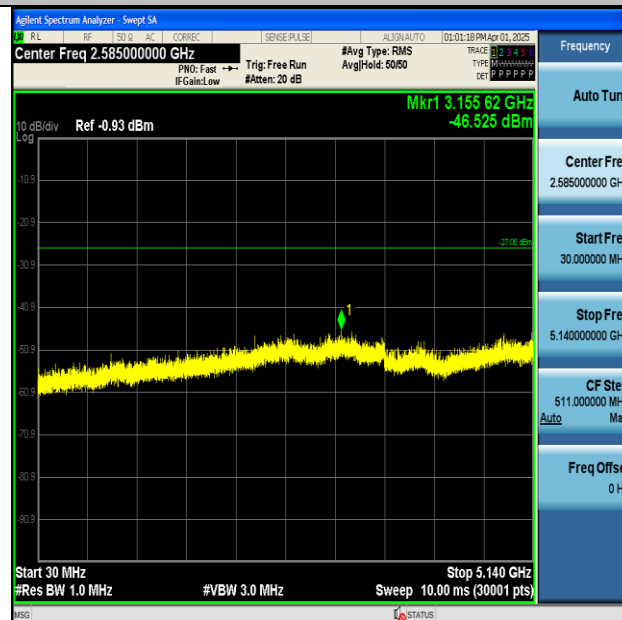
11N20MIMO-Ant1-5200-5360~40000-PASS



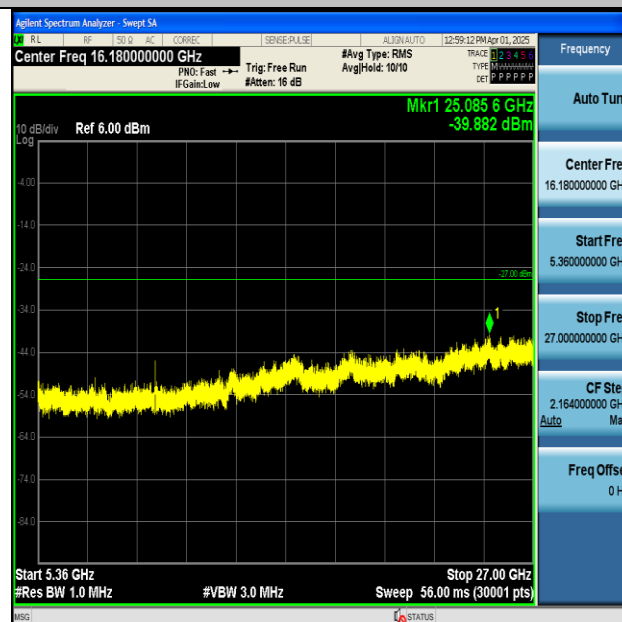
11N20MIMO-Ant2-5200-5360~40000-PASS



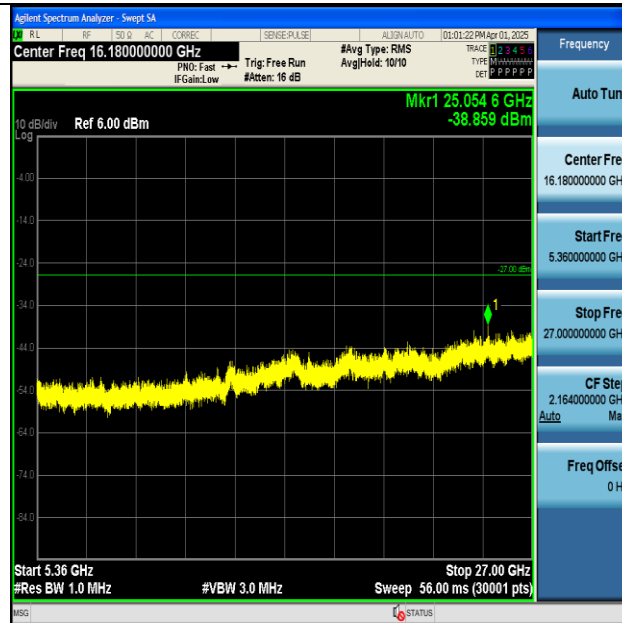
11N20MIMO-Ant1-5240-30~5140-PASS



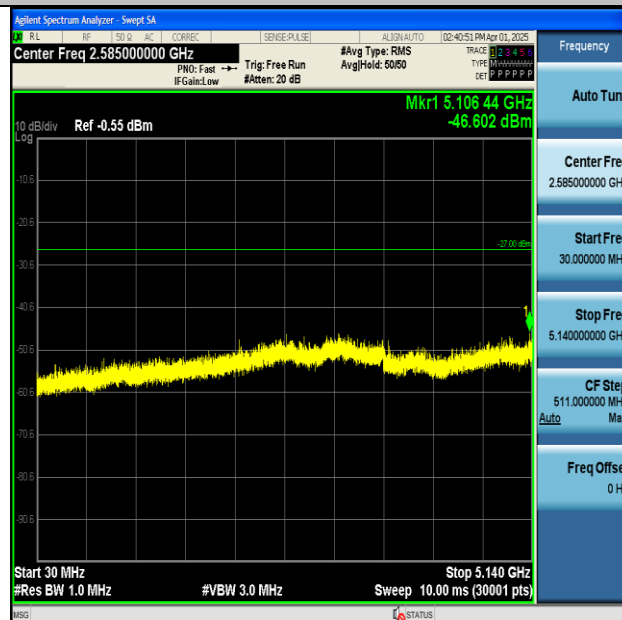
11N20MIMO-Ant2-5240-30~5140-PASS



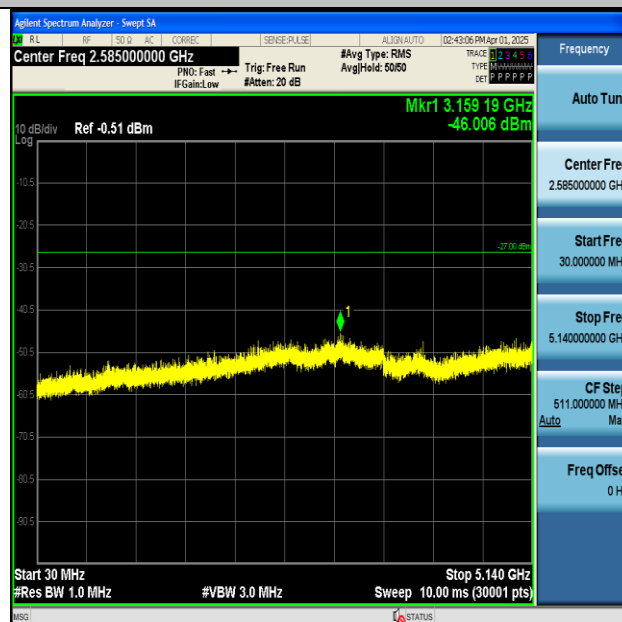
11N20MIMO-Ant1-5240-5360~40000-PASS



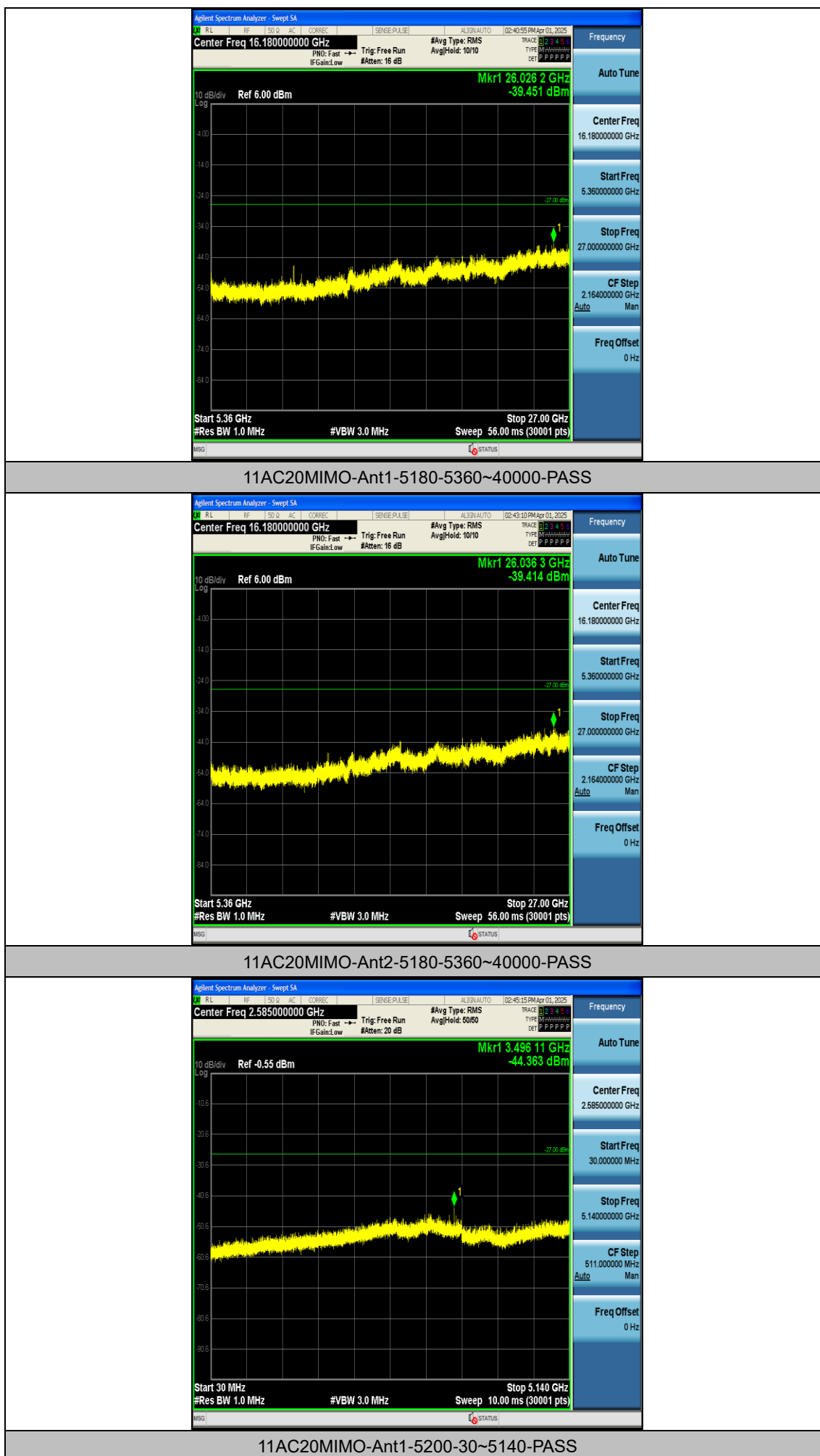
11N20MIMO-Ant2-5240-5360~40000-PASS

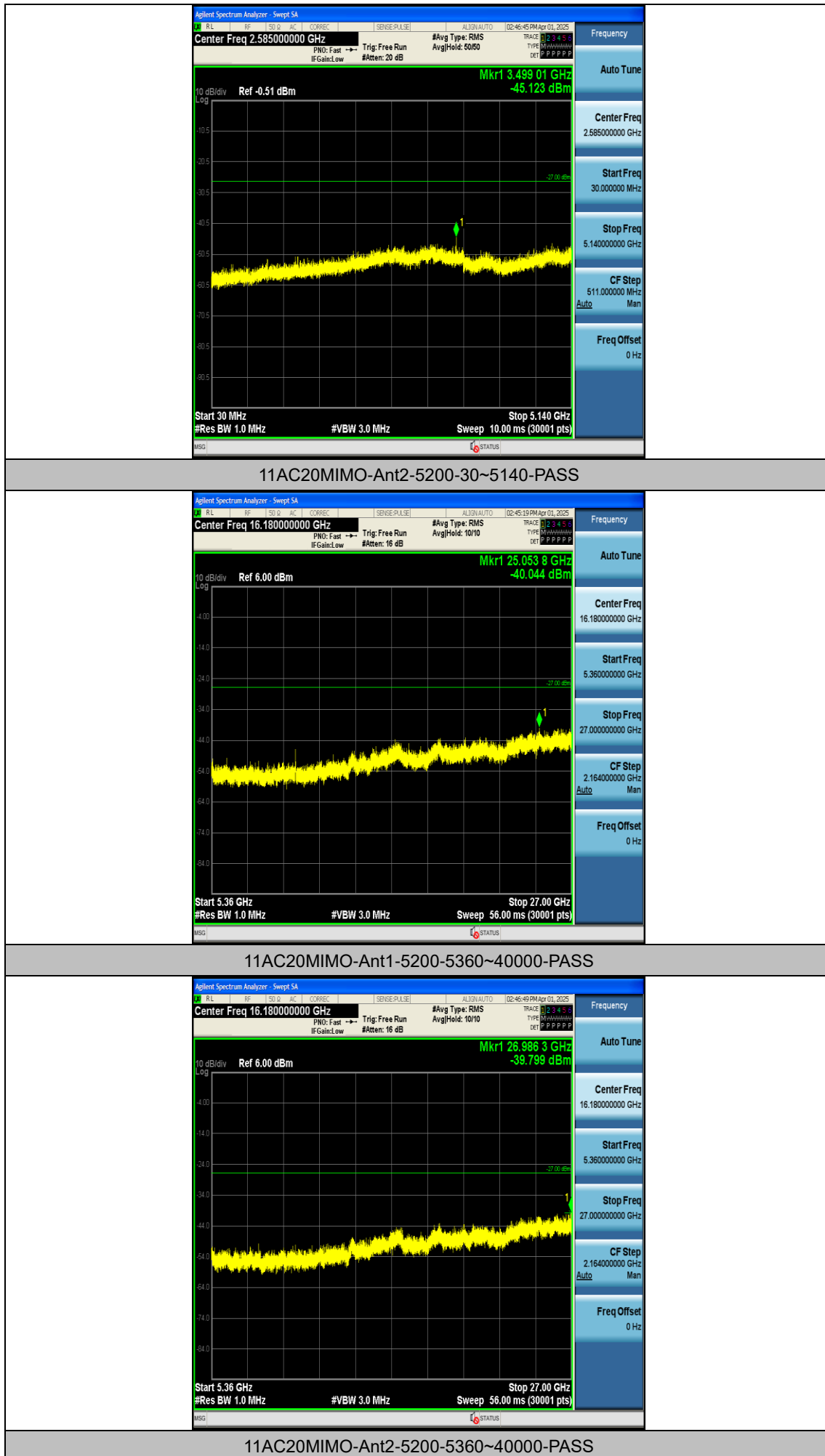


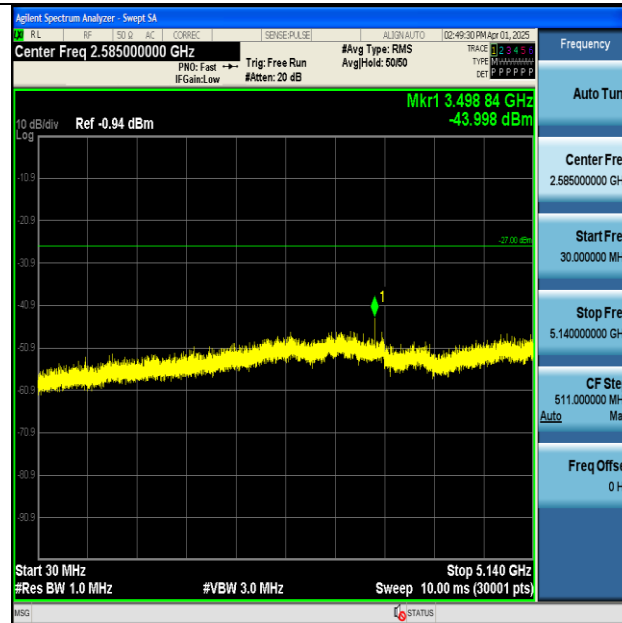
11AC20MIMO-Ant1-5180-30~5140-PASS



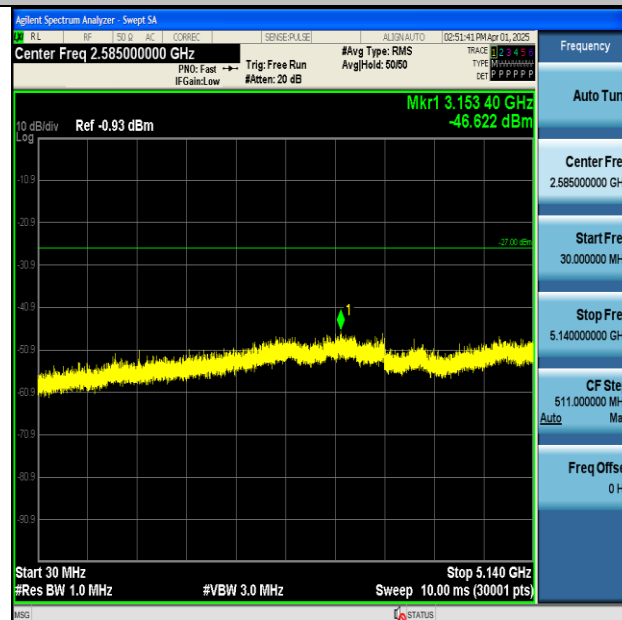
11AC20MIMO-Ant2-5180-30~5140-PASS



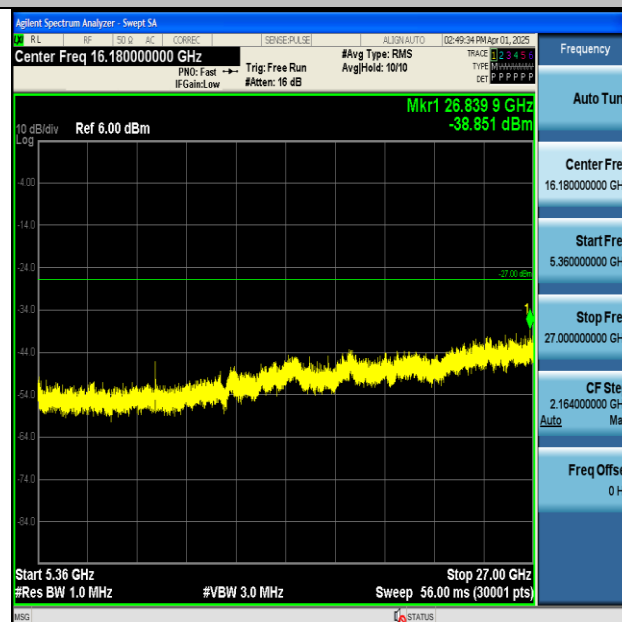




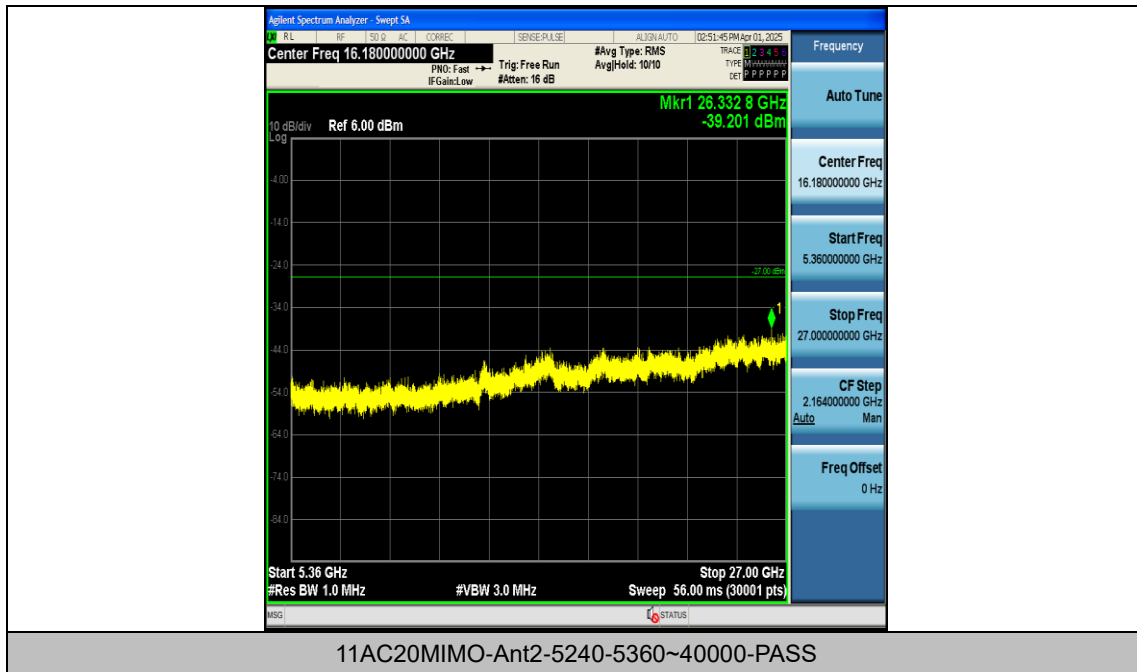
11AC20MIMO-Ant1-5240-30~5140-PASS



11AC20MIMO-Ant2-5240-30~5140-PASS



11AC20MIMO-Ant1-5240-5360~40000-PASS

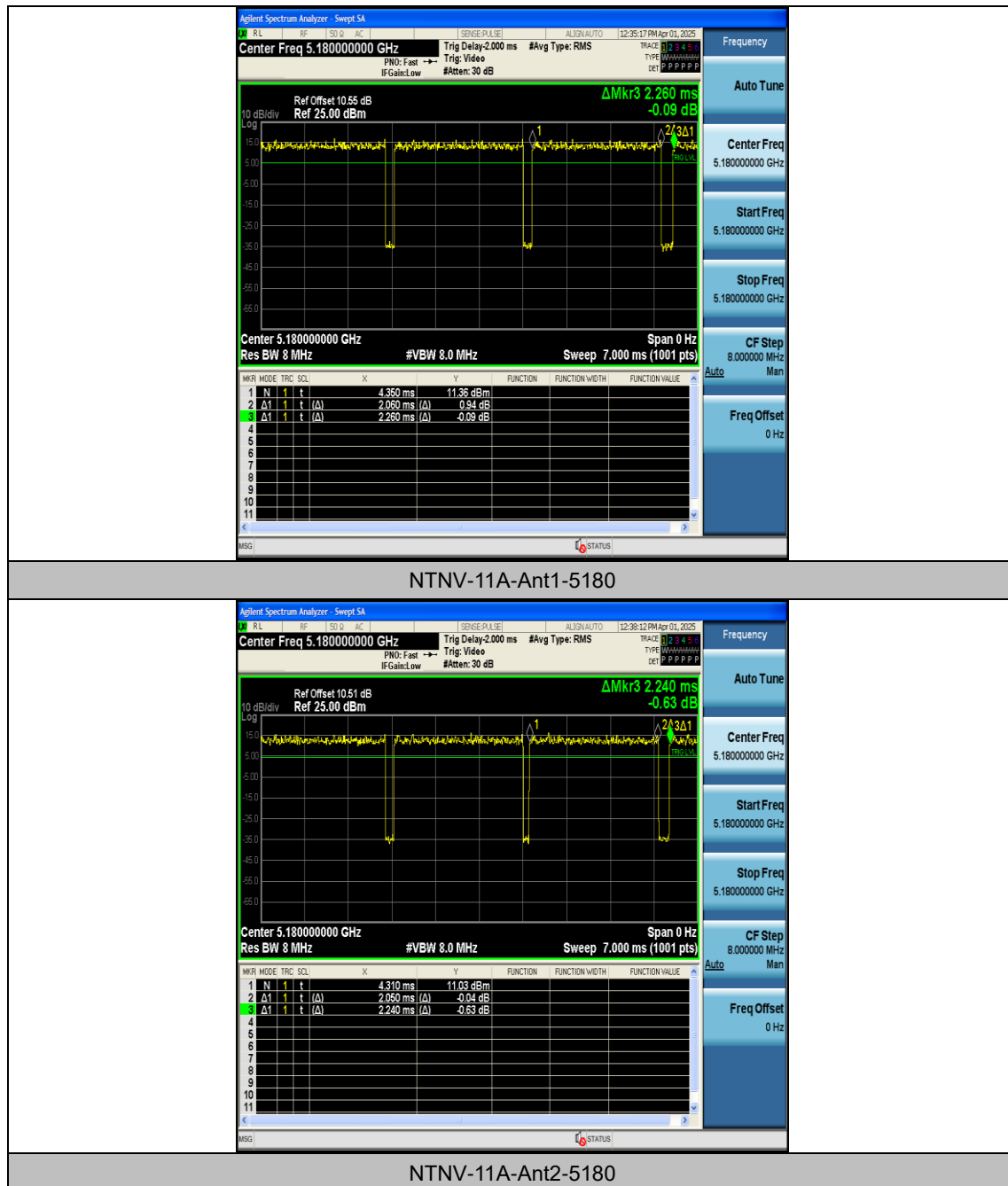


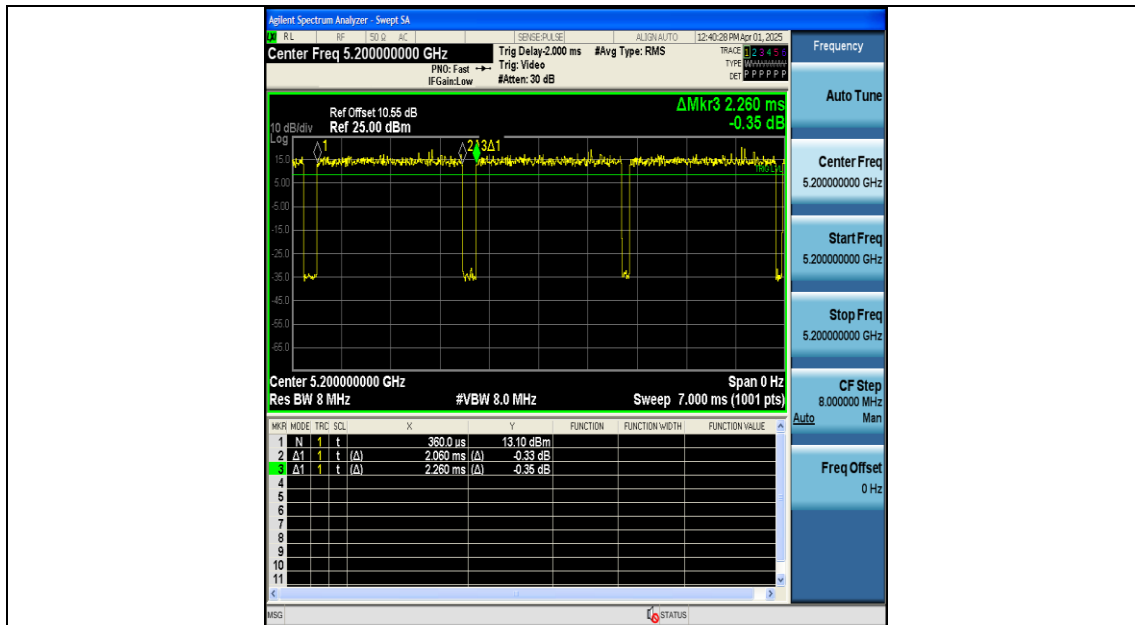
Appendix G: Duty Cycle

Test Result

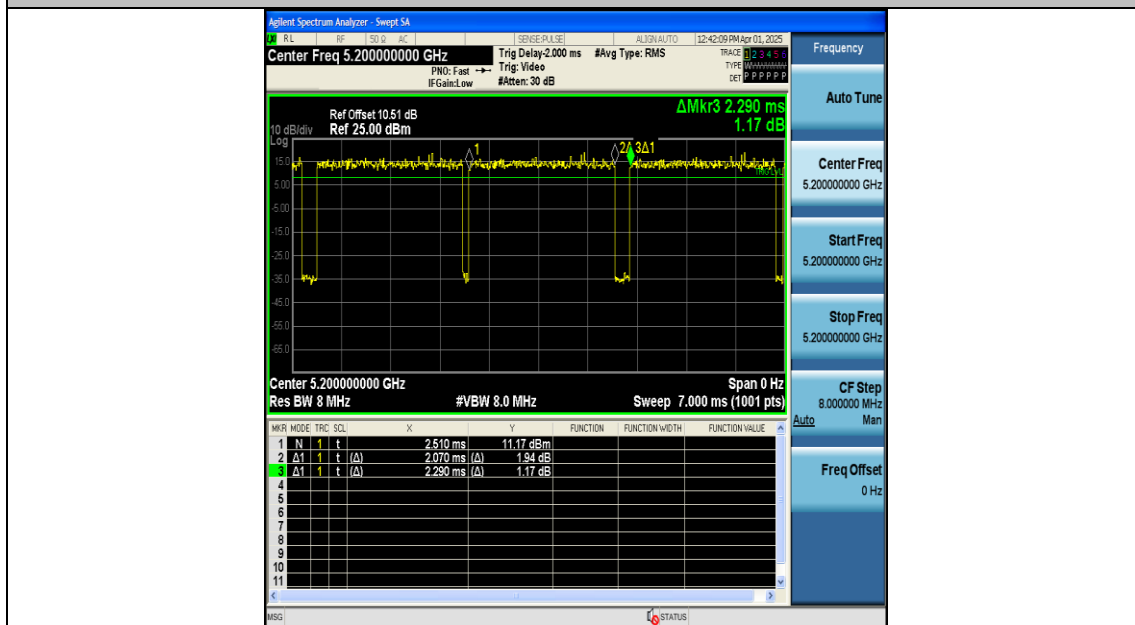
Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Dc. Factor [%]	1/T [kHz]
11A	Ant1	5180	2.06	2.26	91.15	0.40	0.49
11A	Ant2	5180	2.05	2.24	91.52	0.38	0.49
11A	Ant1	5200	2.06	2.26	91.15	0.40	0.49
11A	Ant2	5200	2.07	2.29	90.39	0.44	0.48
11A	Ant1	5240	2.07	2.24	92.41	0.34	0.48
11A	Ant2	5240	2.07	2.30	90.00	0.46	0.48
11N20MIMO	Ant1	5180	1.92	2.13	90.14	0.45	0.52
11N20MIMO	Ant2	5180	1.92	2.14	89.72	0.47	0.52
11N20MIMO	Ant1	5200	1.92	2.10	91.43	0.39	0.52
11N20MIMO	Ant2	5200	1.91	2.11	90.52	0.43	0.52
11N20MIMO	Ant1	5240	1.93	2.10	91.90	0.37	0.52
11N20MIMO	Ant2	5240	1.92	2.09	91.87	0.37	0.52
11AC20MIMO	Ant1	5180	1.93	2.07	93.24	0.30	0.52
11AC20MIMO	Ant2	5180	1.93	2.18	88.53	0.53	0.52
11AC20MIMO	Ant1	5200	1.94	2.15	90.23	0.45	0.52
11AC20MIMO	Ant2	5200	1.94	2.16	89.81	0.47	0.52
11AC20MIMO	Ant1	5240	1.93	2.19	88.13	0.55	0.52
11AC20MIMO	Ant2	5240	1.93	2.08	92.79	0.32	0.52

Test Graphs

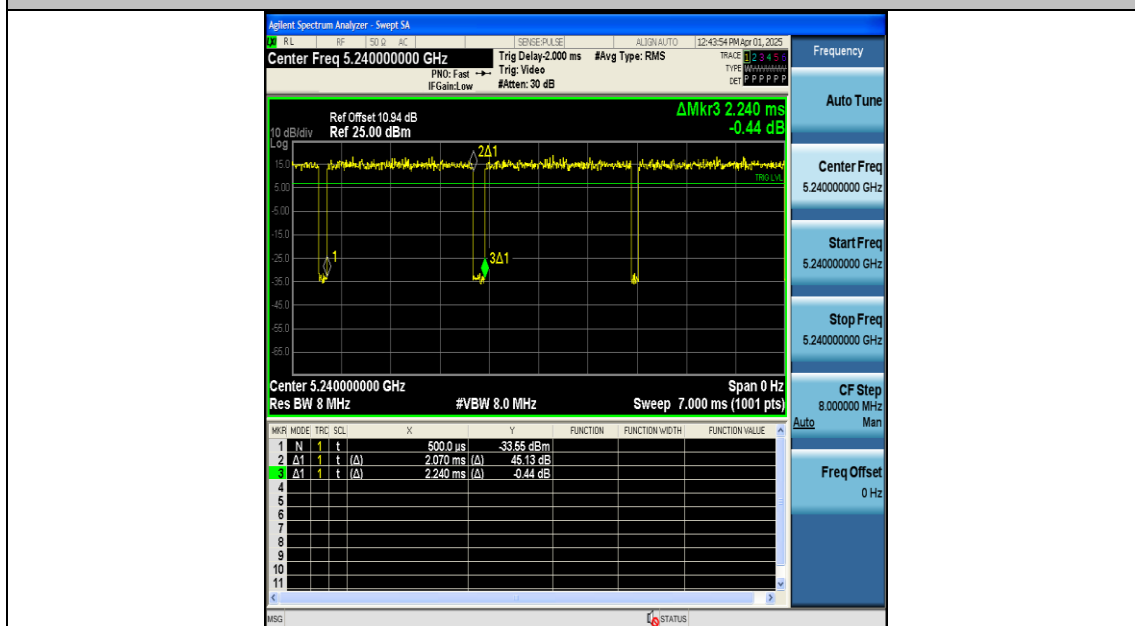




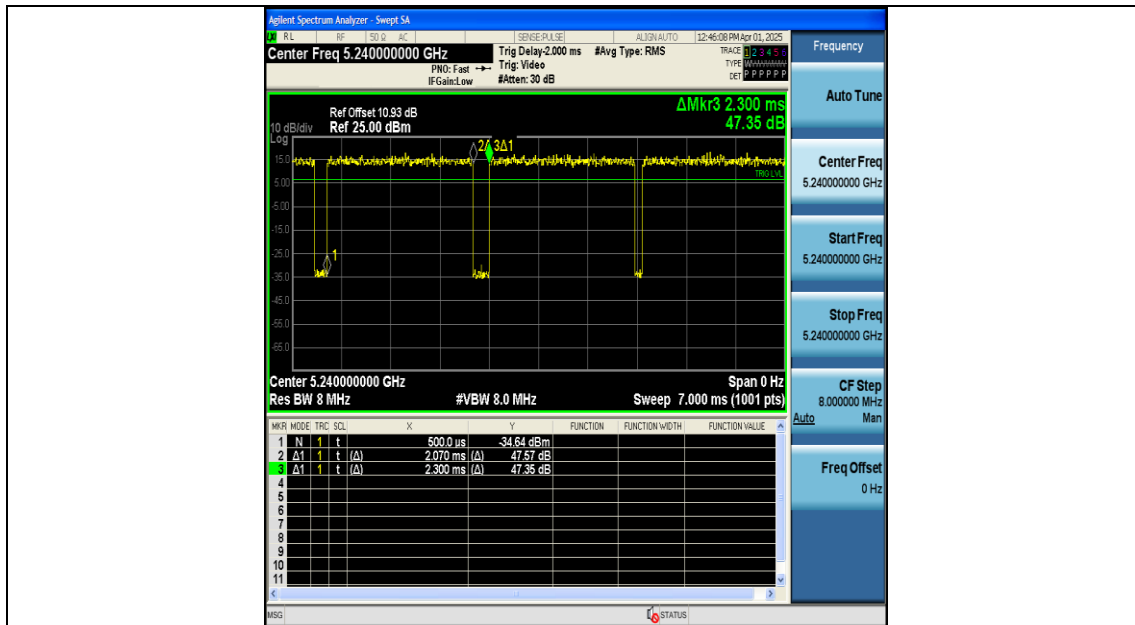
NTNV-11A-Ant1-5200



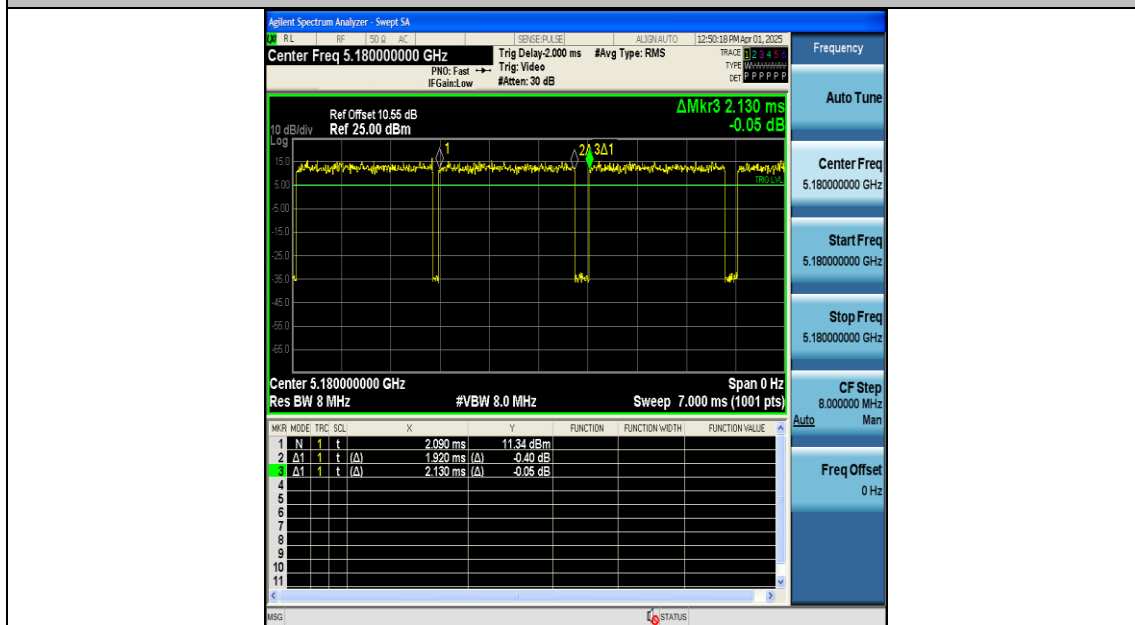
NTNV-11A-Ant2-5200



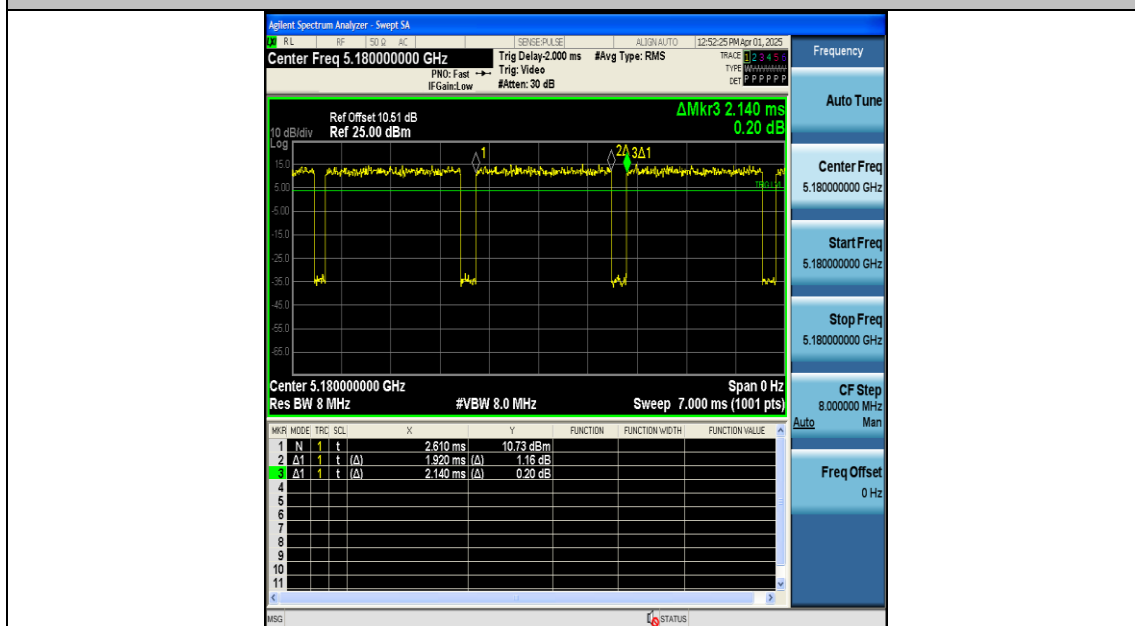
NTNV-11A-Ant1-5240



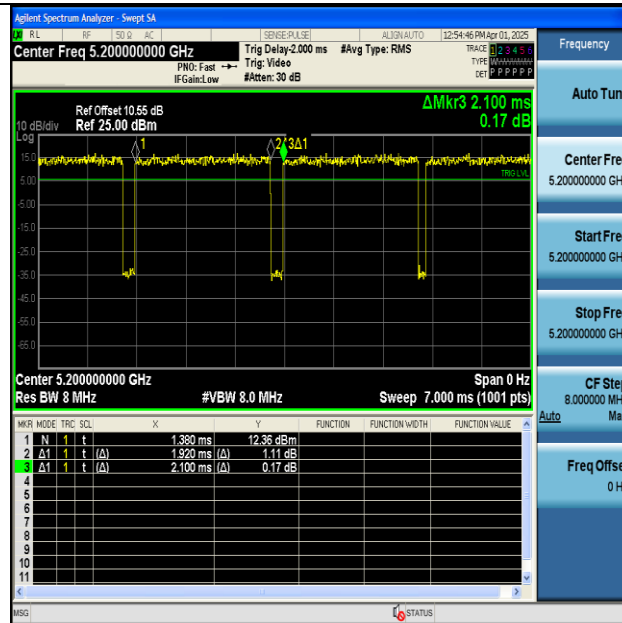
NTNV-11A-Ant2-5240



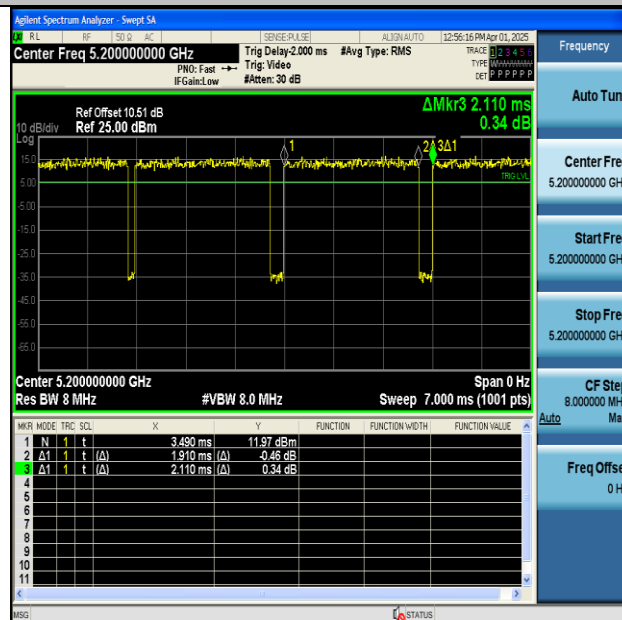
NTNV-11N20MIMO-Ant1-5180



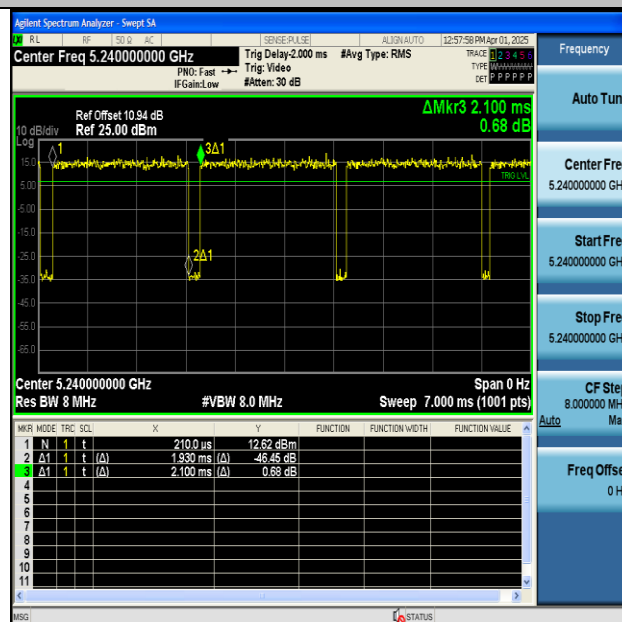
NTNV-11N20MIMO-Ant2-5180



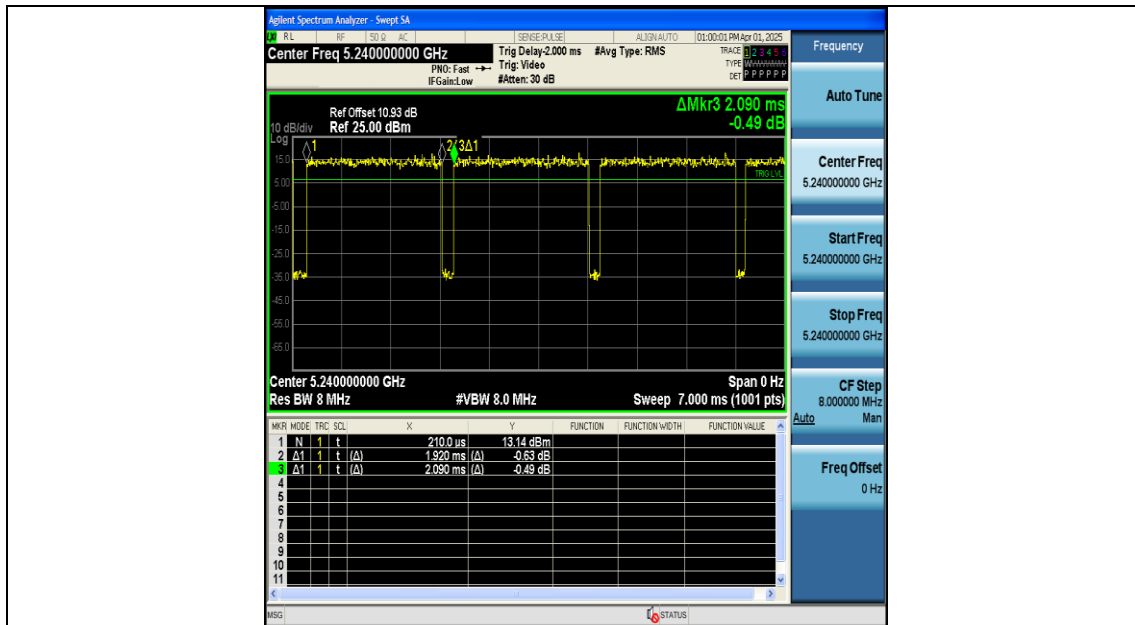
NTNV-11N20MIMO-Ant1-5200



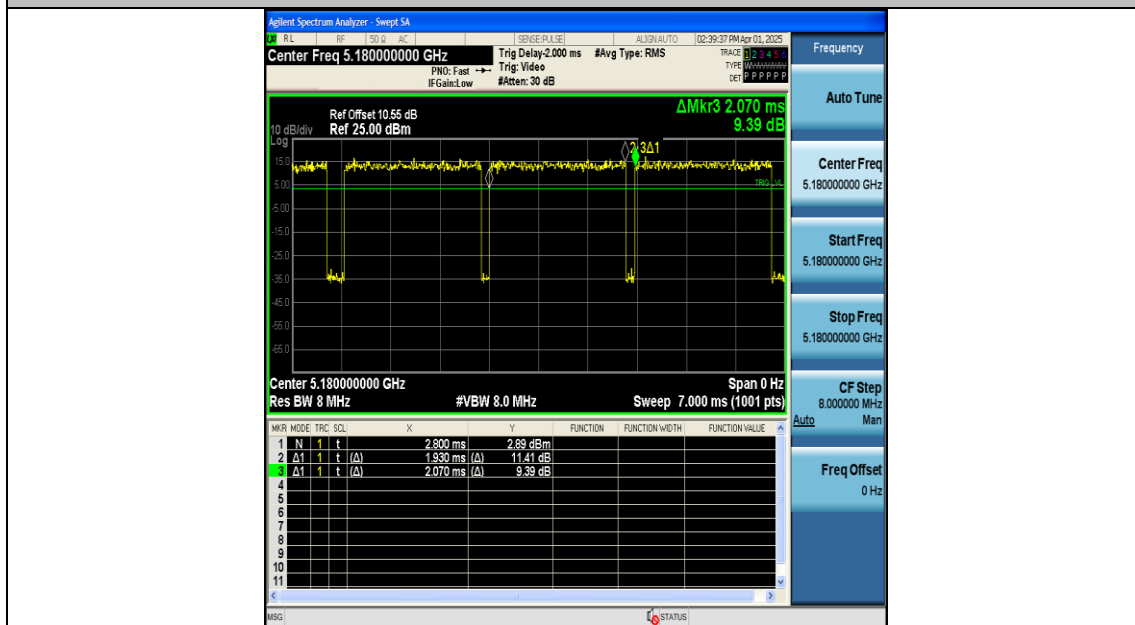
NTNV-11N20MIMO-Ant2-5200



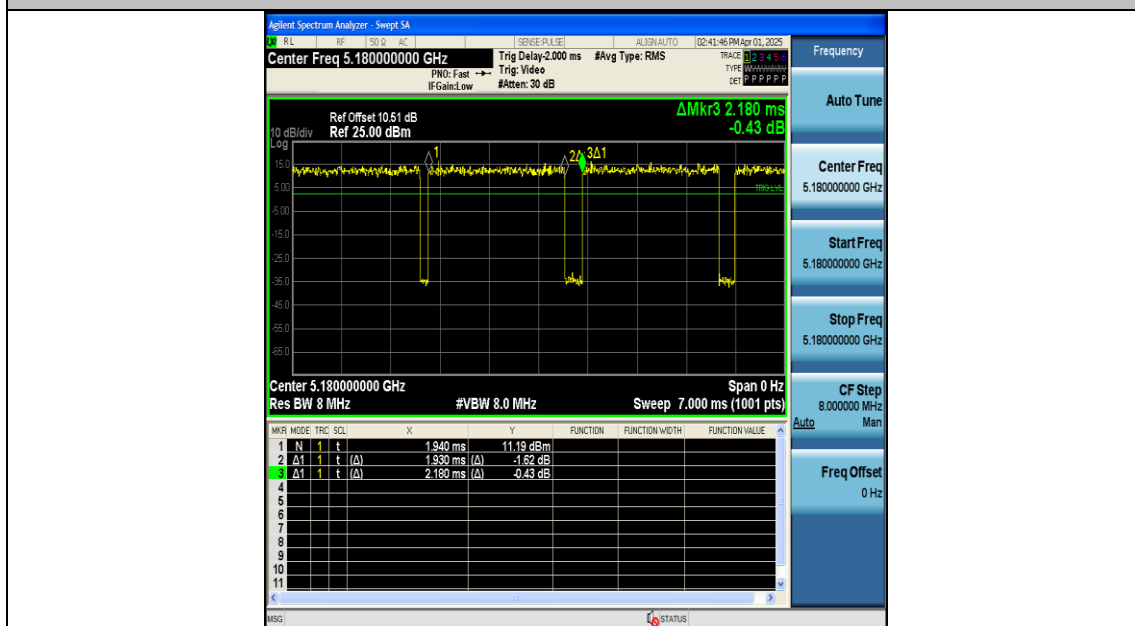
NTNV-11N20MIMO-Ant1-5240



NTNV-11N20MIMO-Ant2-5240



NTNV-11AC20MIMO-Ant1-5180



NTNV-11AC20MIMO-Ant2-5180



