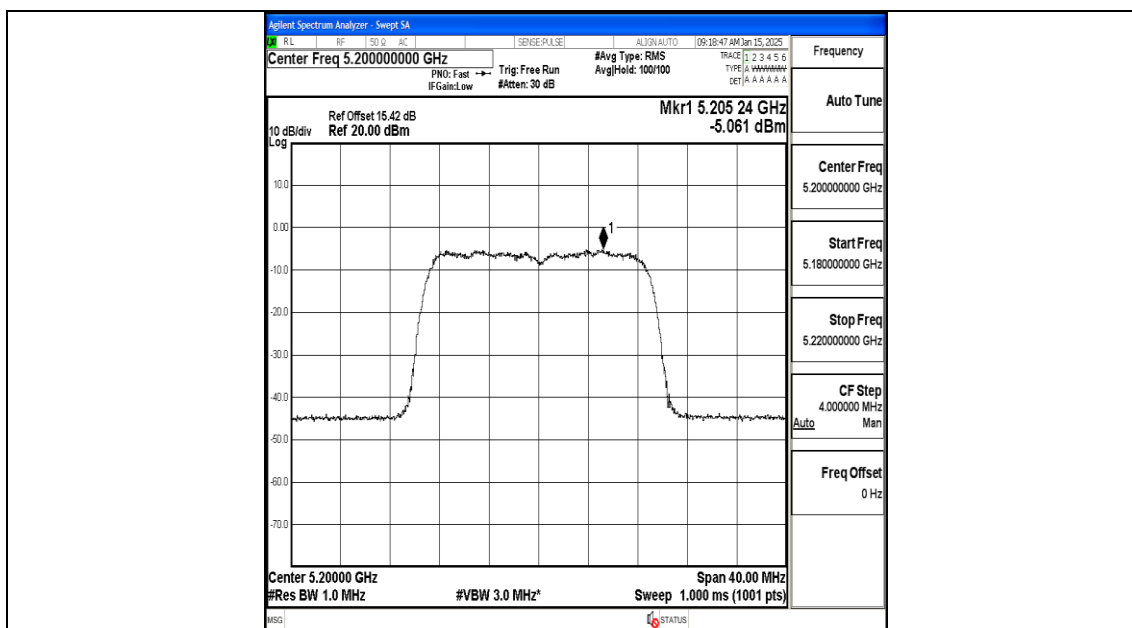
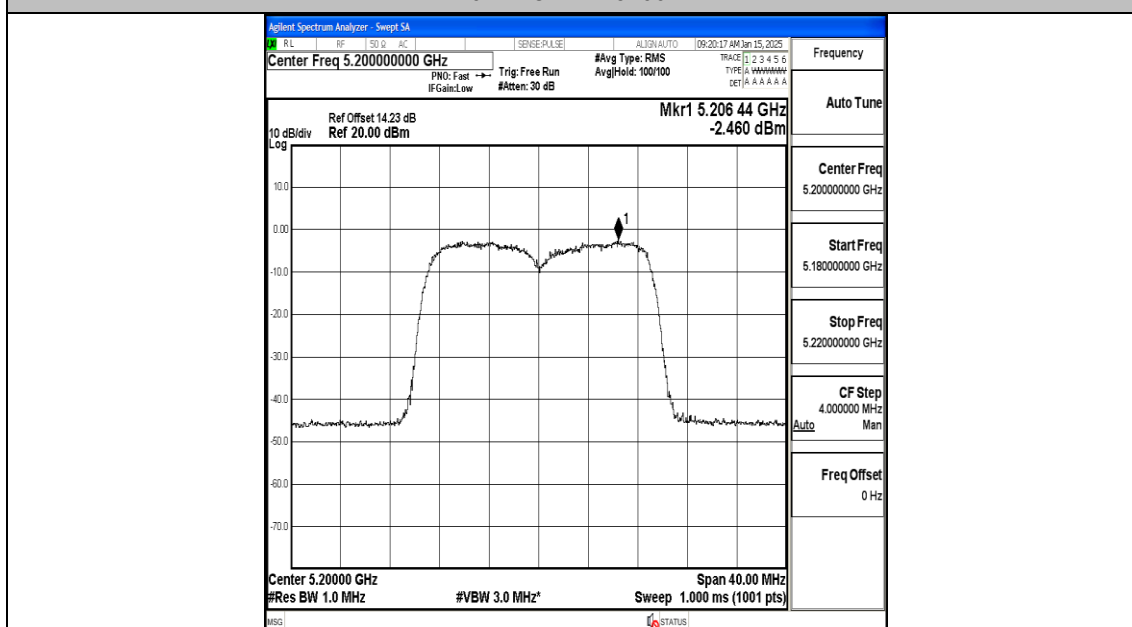
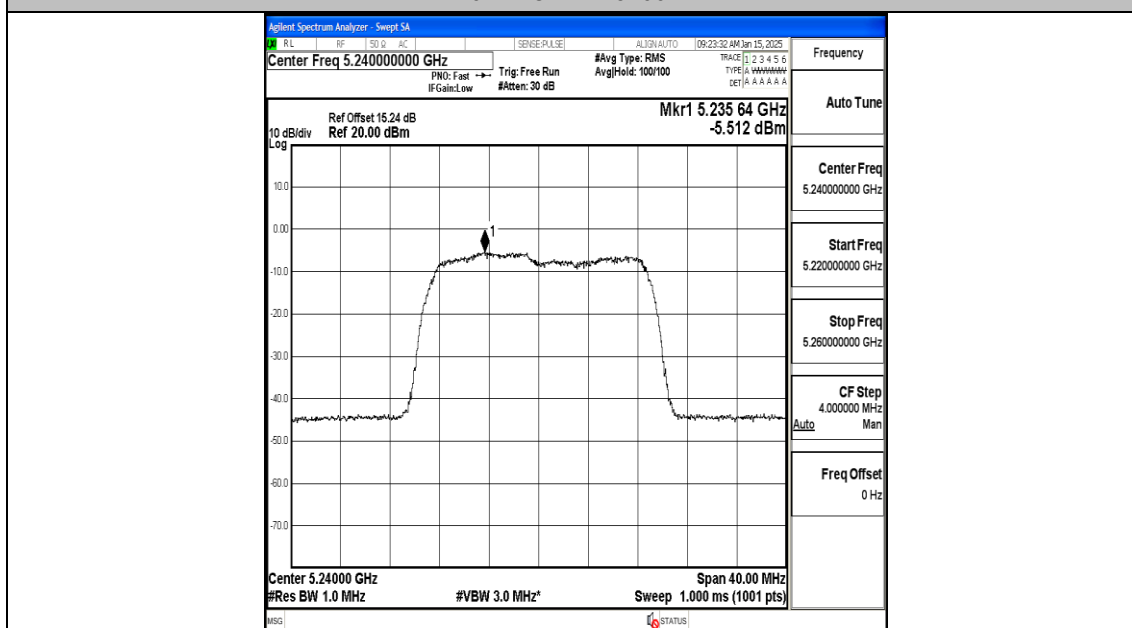




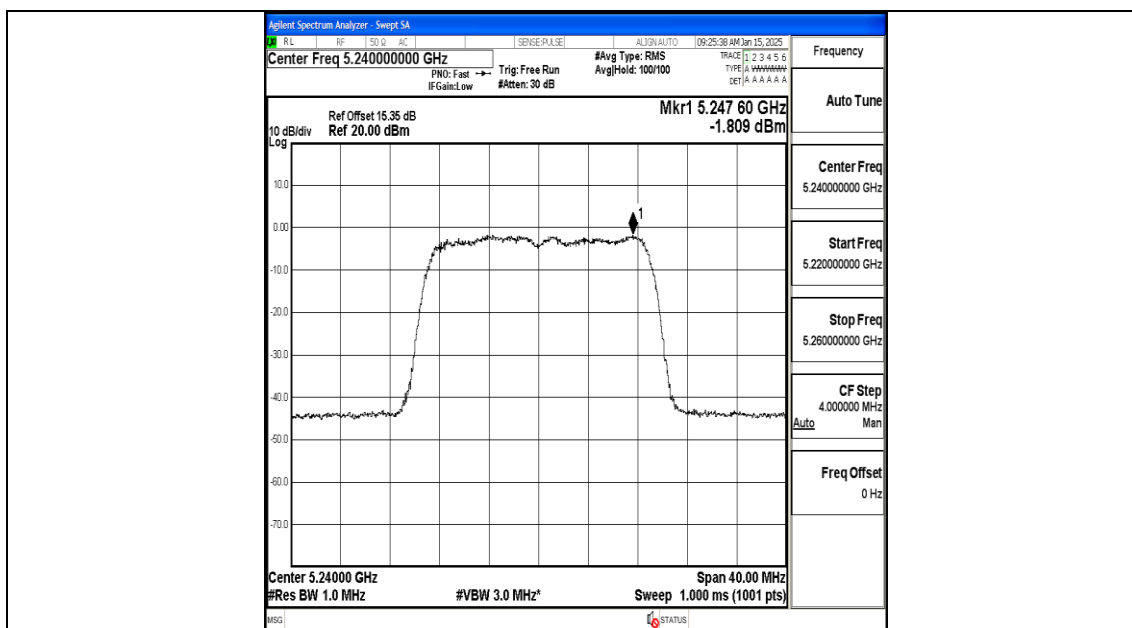
11N20MIMO-Ant1-5200-PASS



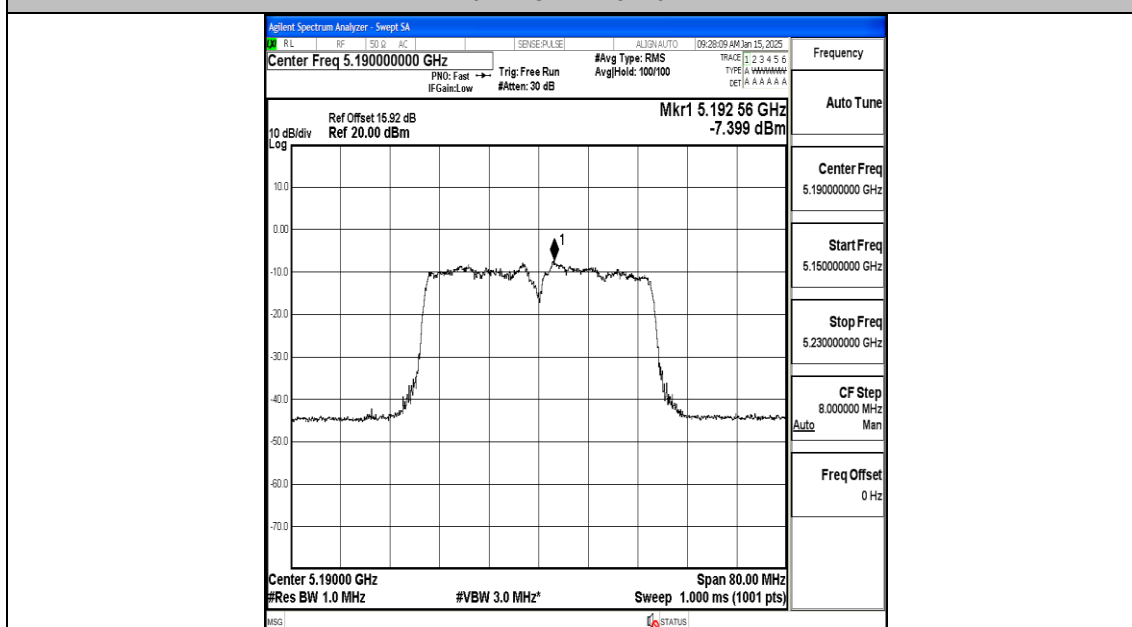
11N20MIMO-Ant2-5200-PASS



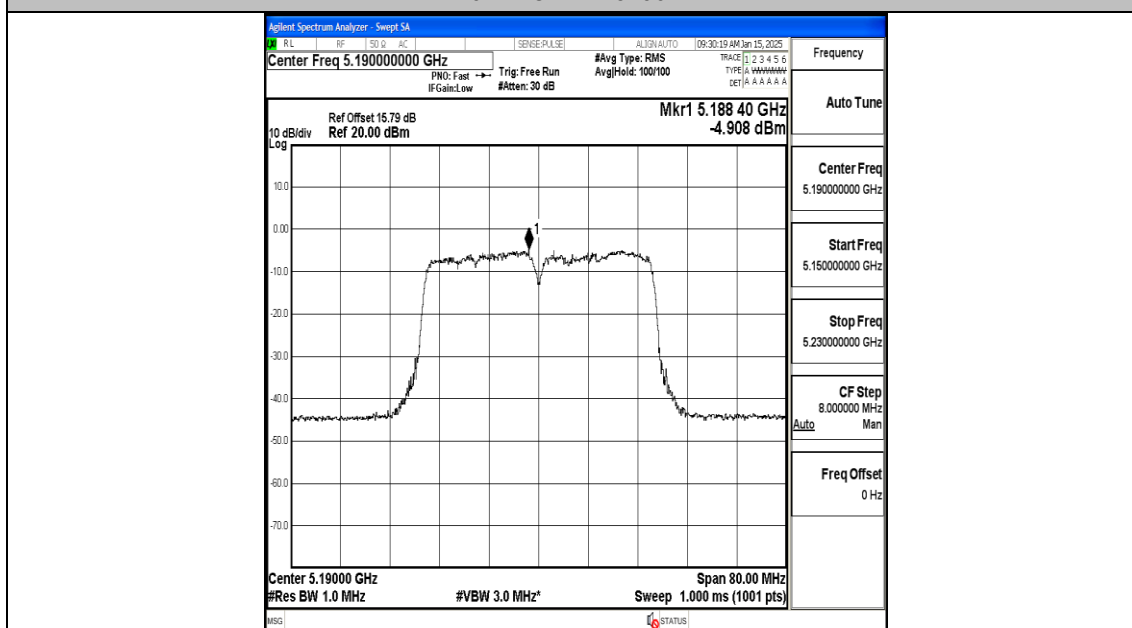
11N20MIMO-Ant1-5240-PASS



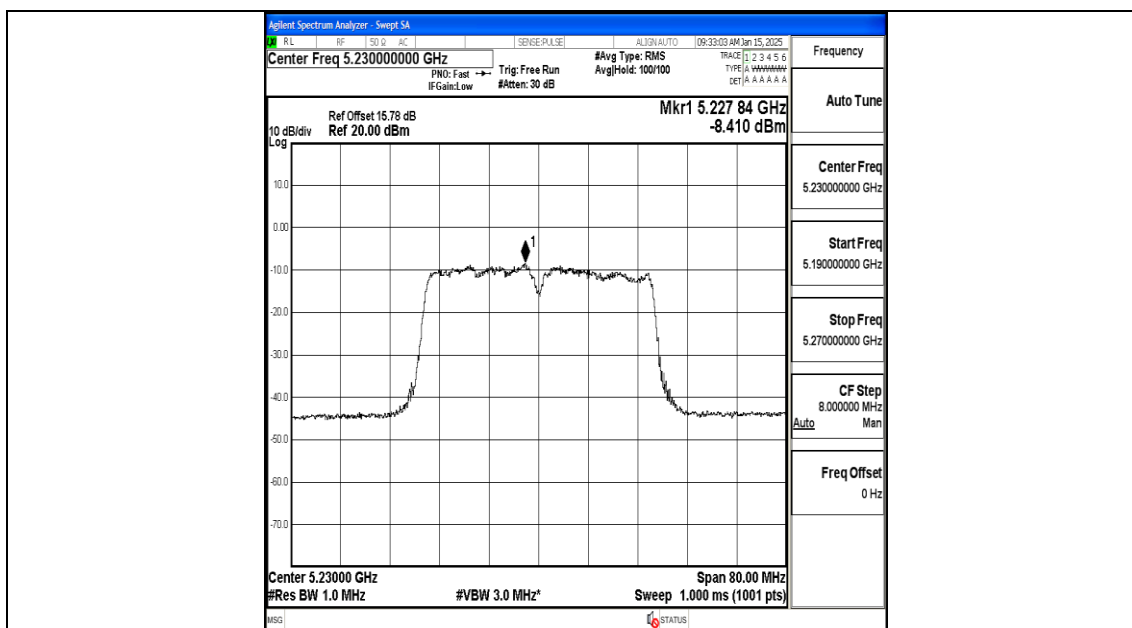
11N20MIMO-Ant2-5240-PASS



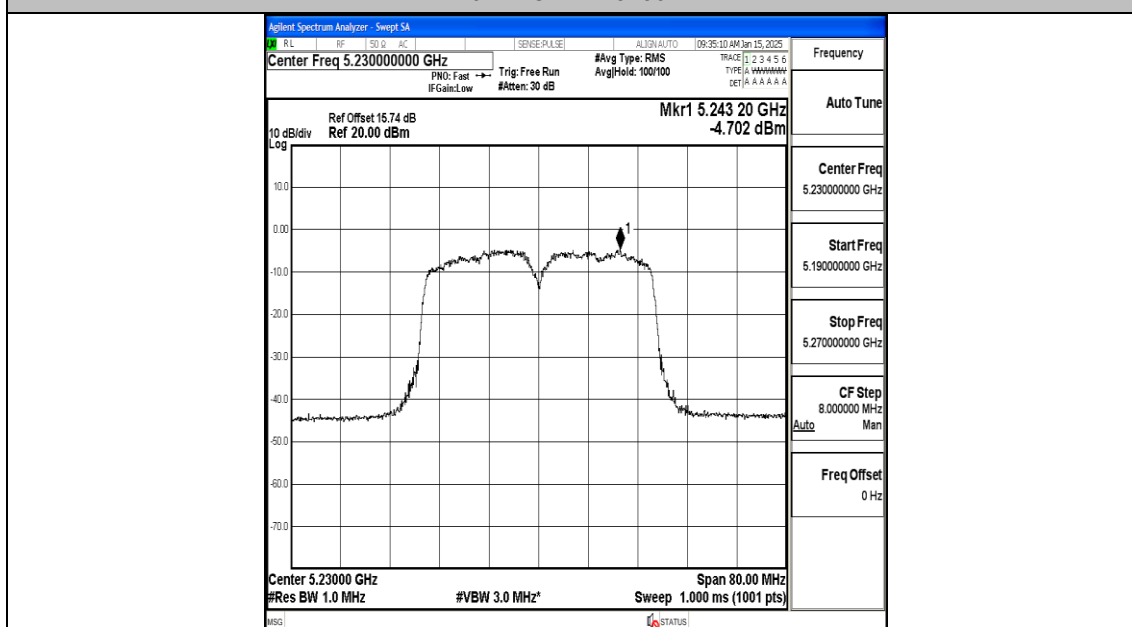
11N40MIMO-Ant1-5190-PASS



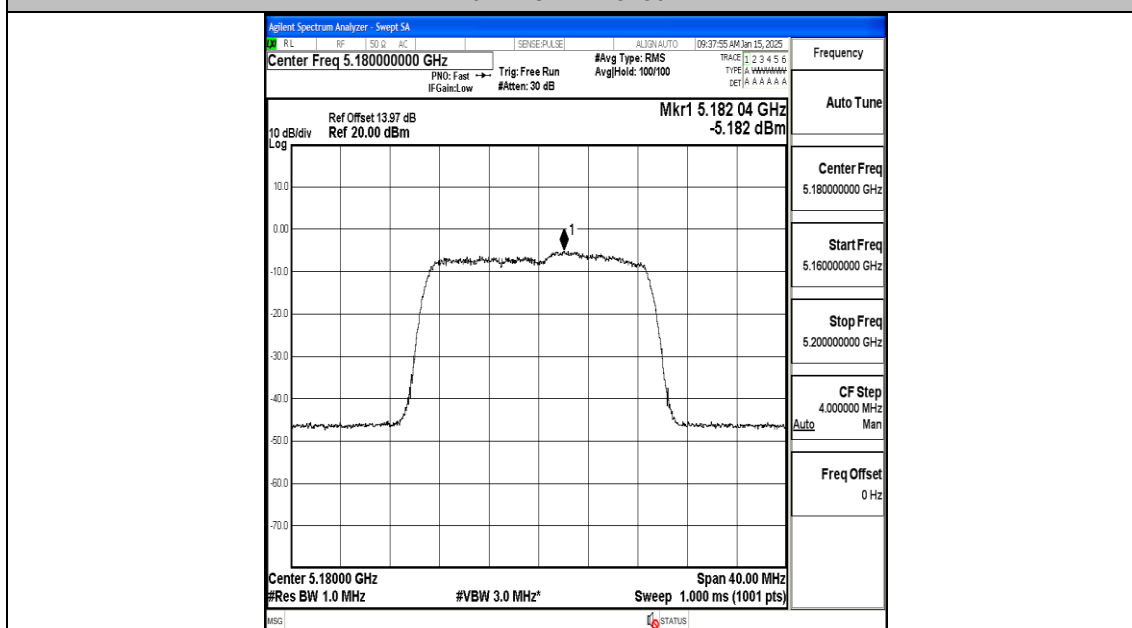
11N40MIMO-Ant2-5190-PASS



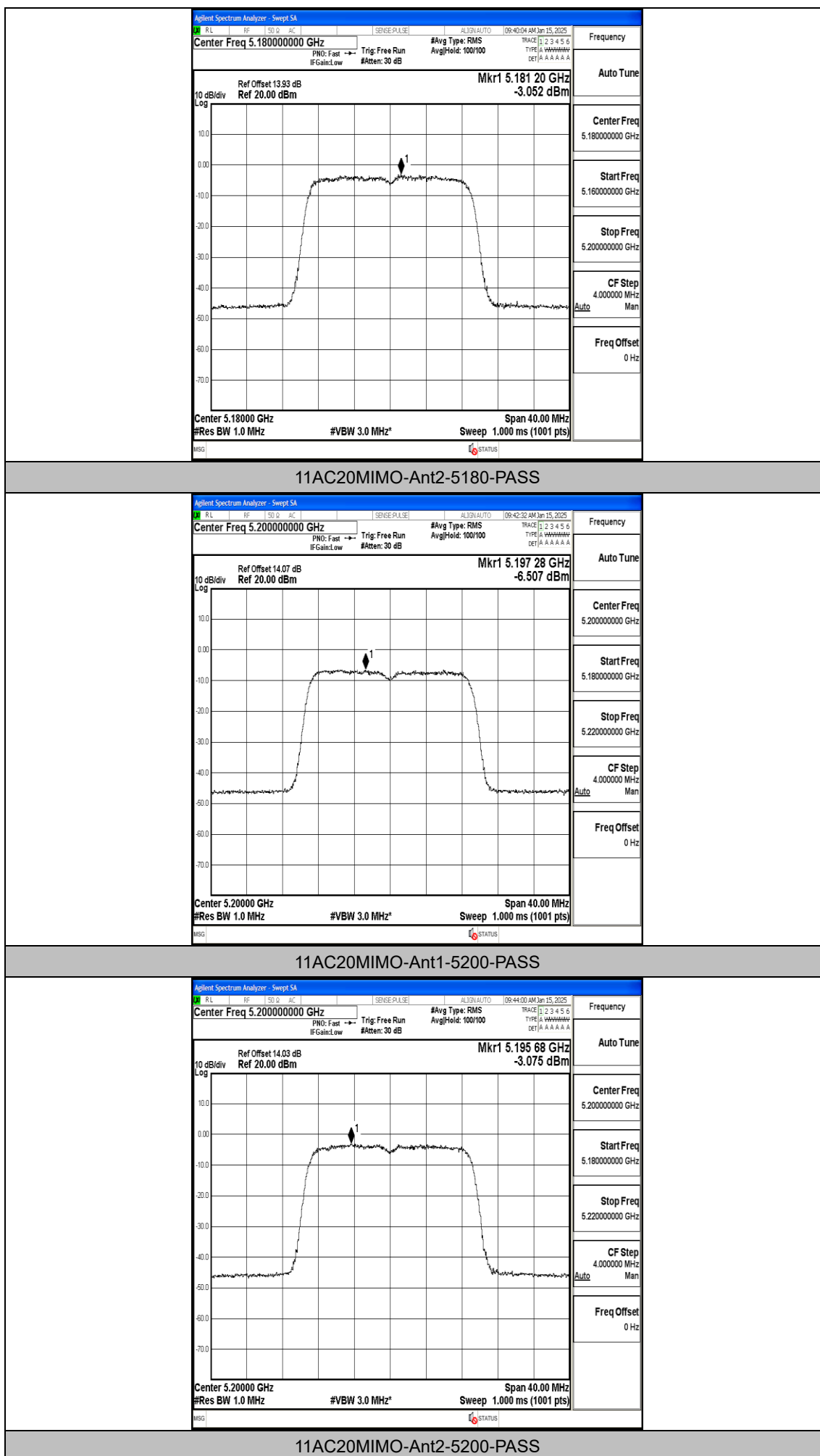
11N40MIMO-Ant1-5230-PASS

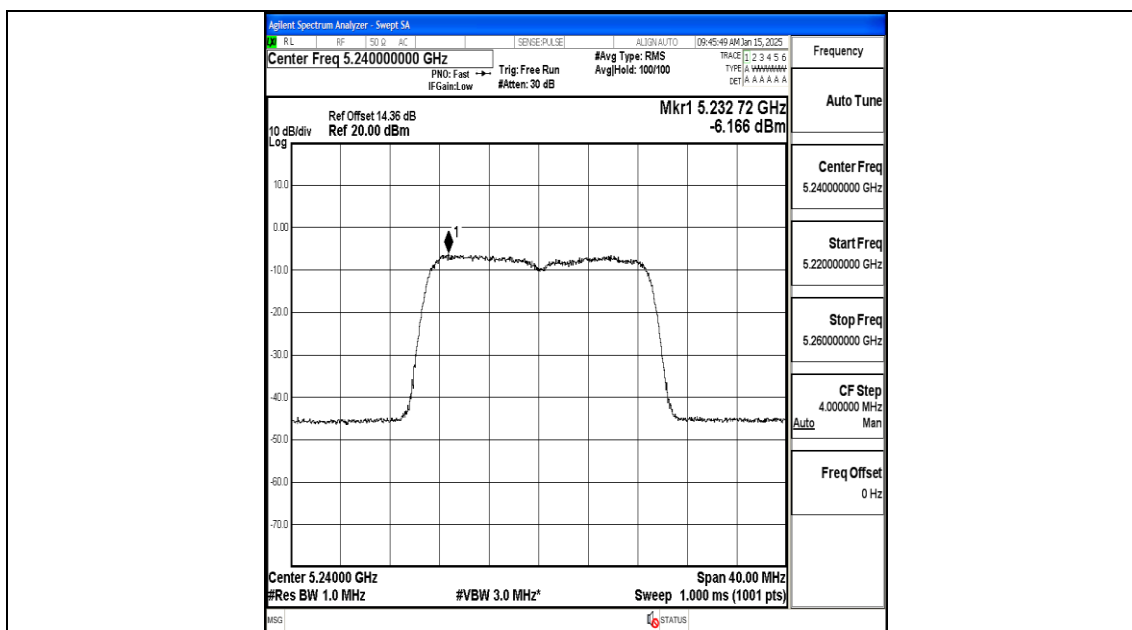


11N40MIMO-Ant2-5230-PASS

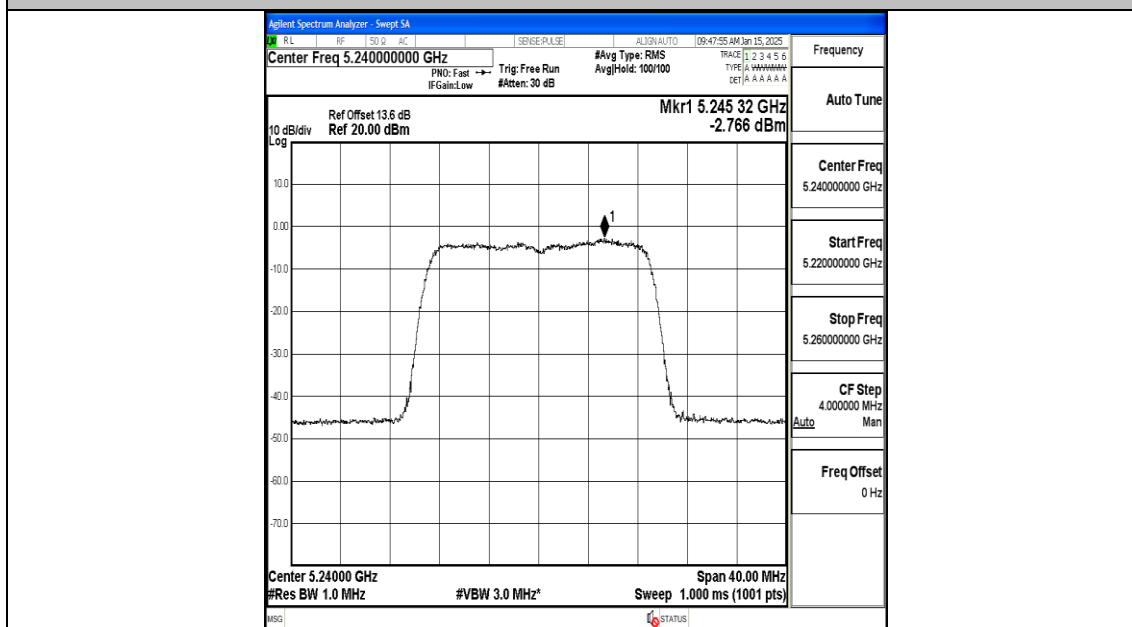


11AC20MIMO-Ant1-5180-PASS

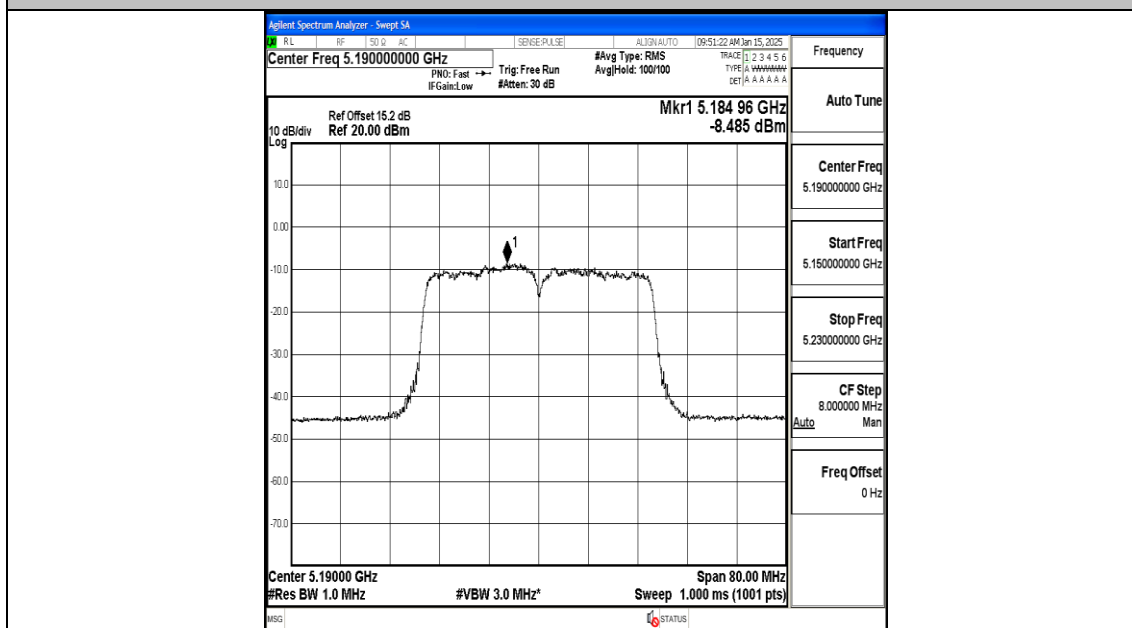




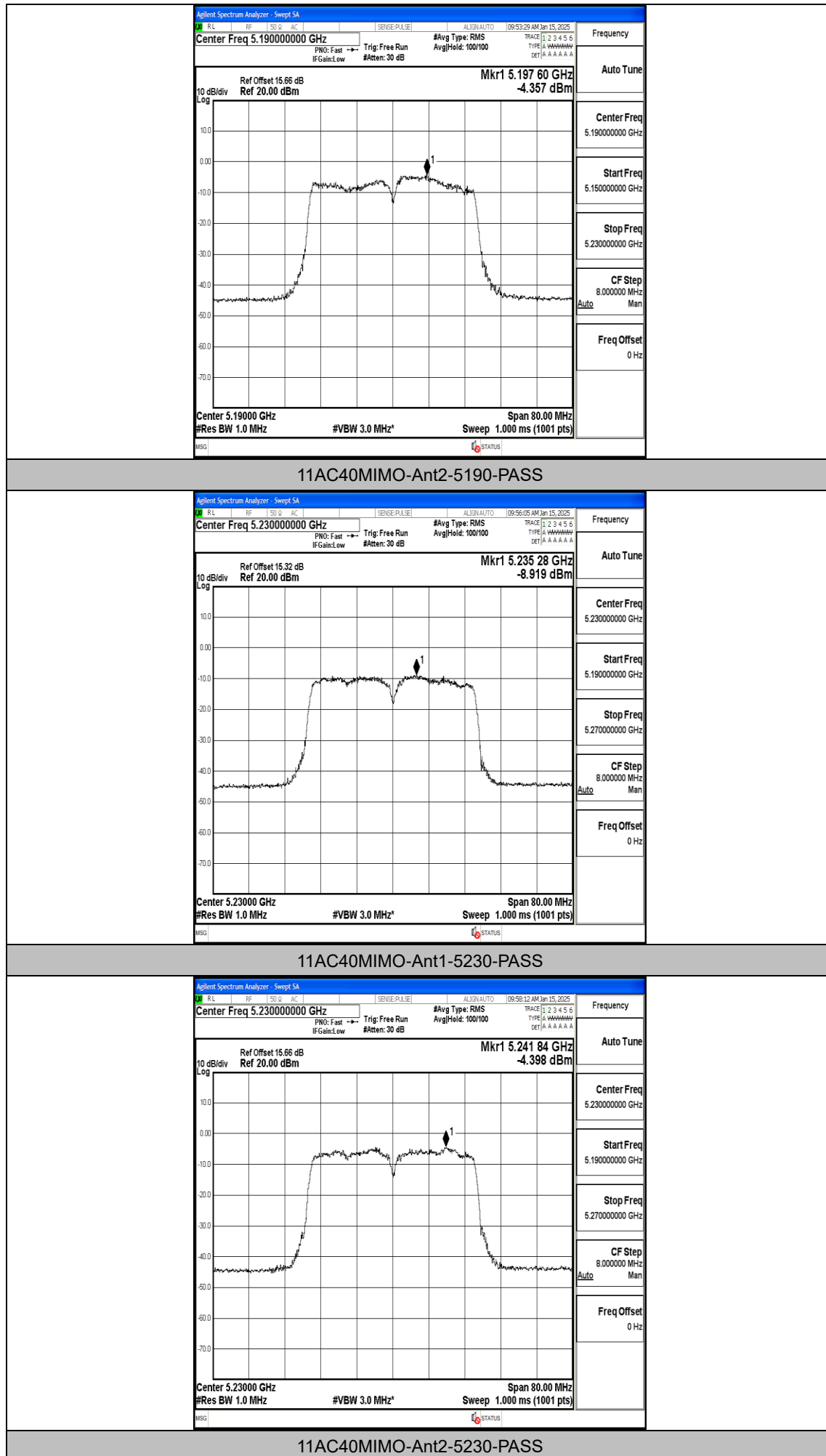
11AC20MIMO-Ant1-5240-PASS

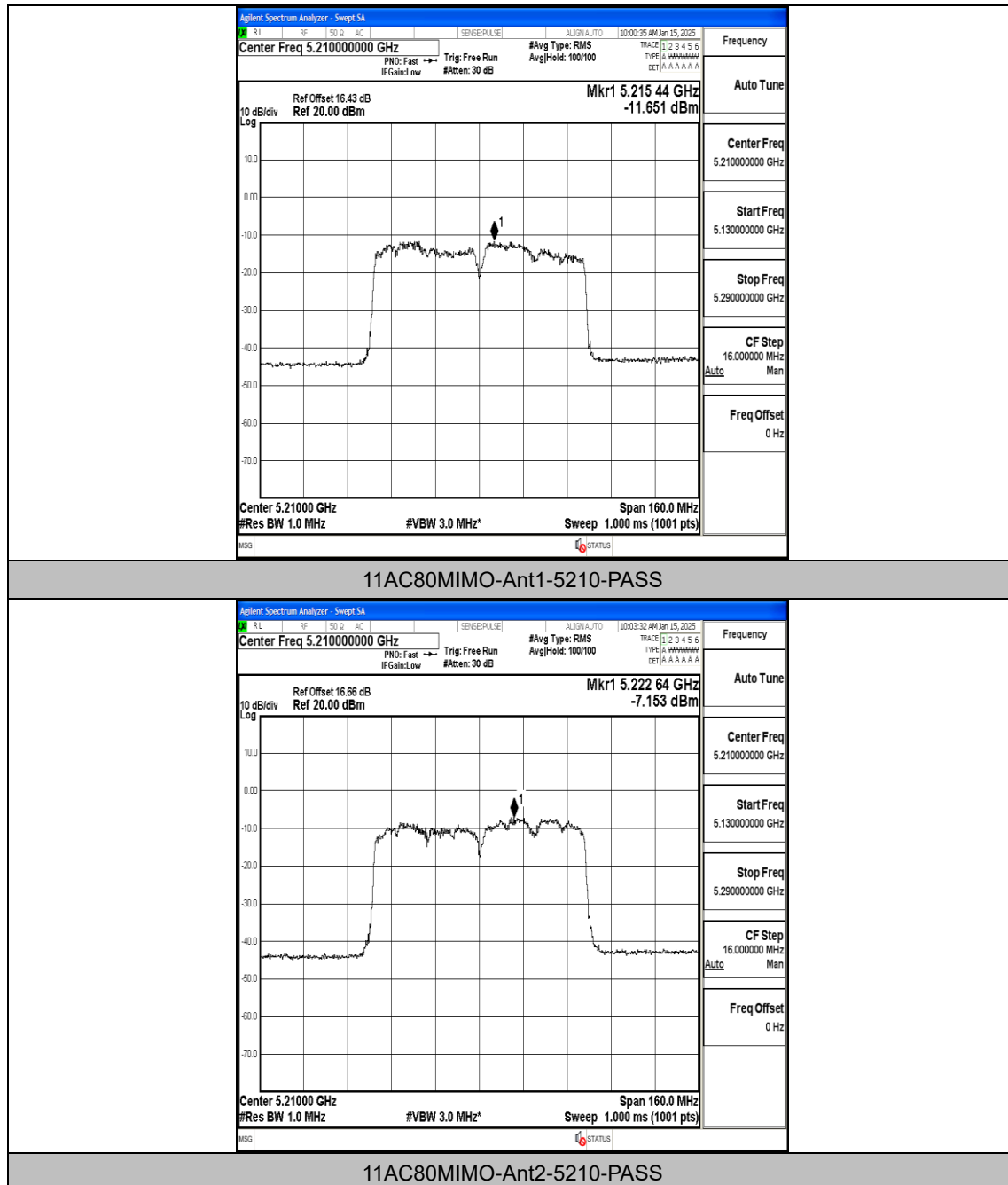


11AC20MIMO-Ant2-5240-PASS



11AC40MIMO-Ant1-5190-PASS



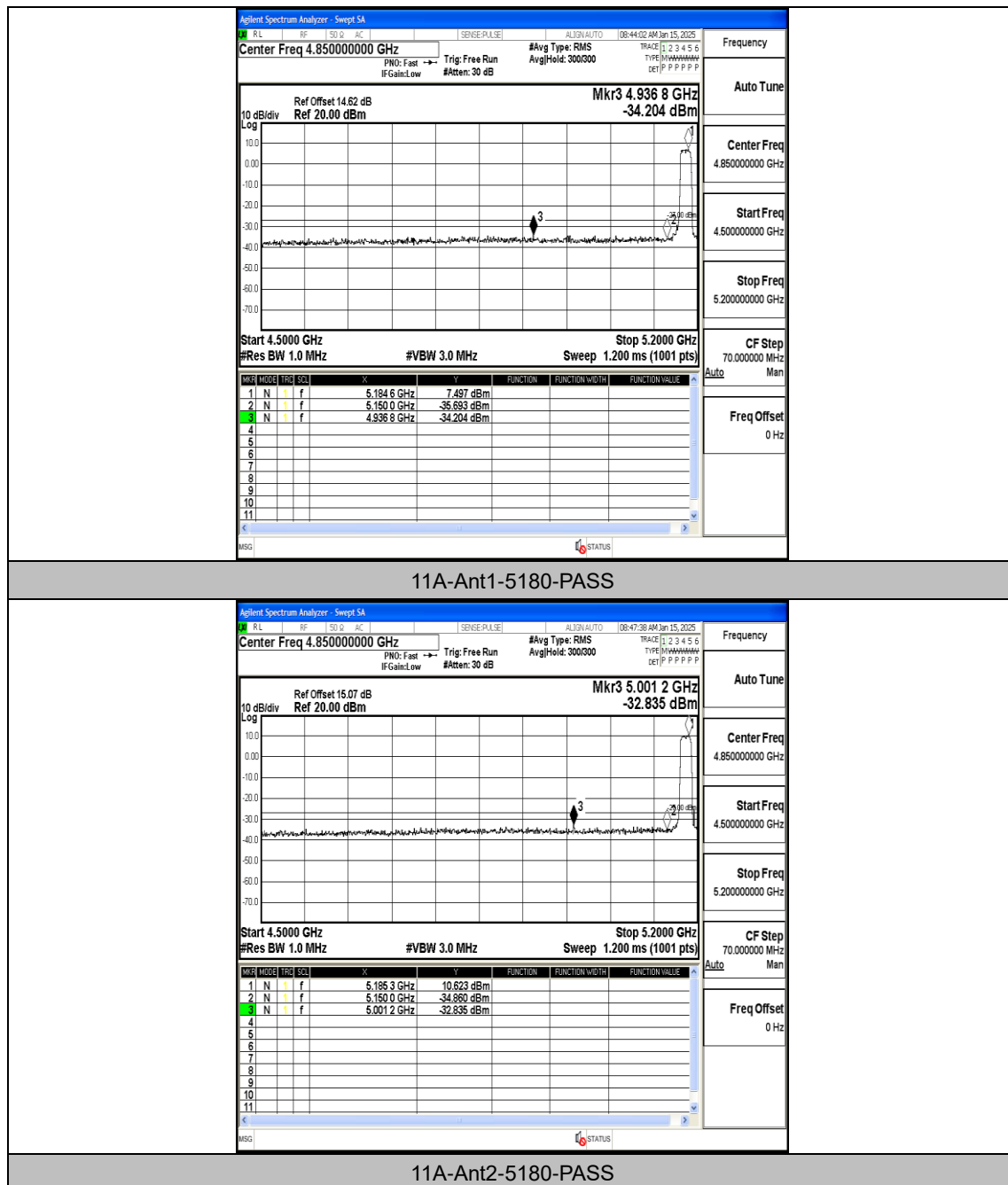


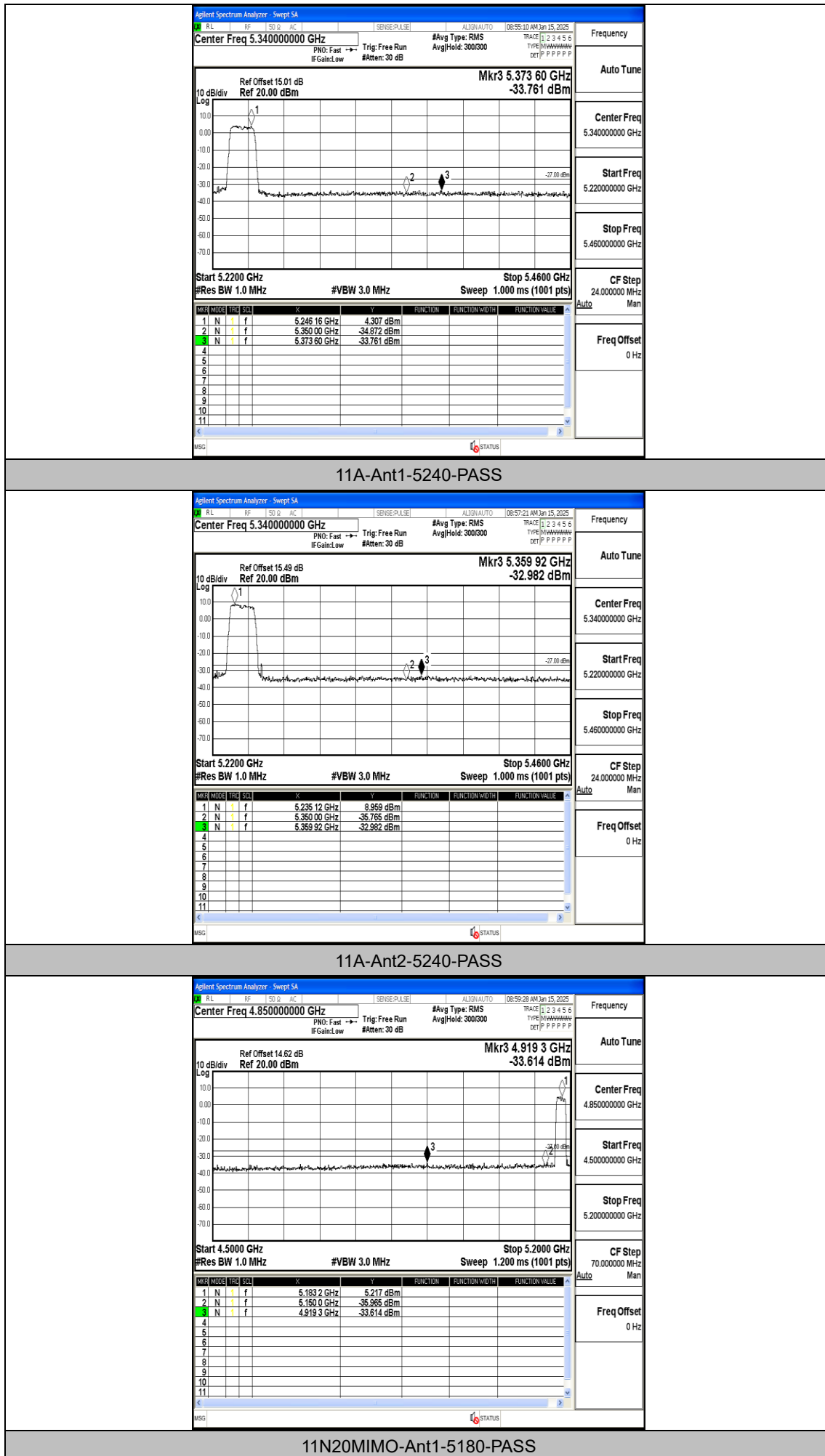
Appendix D: Band edge measurements

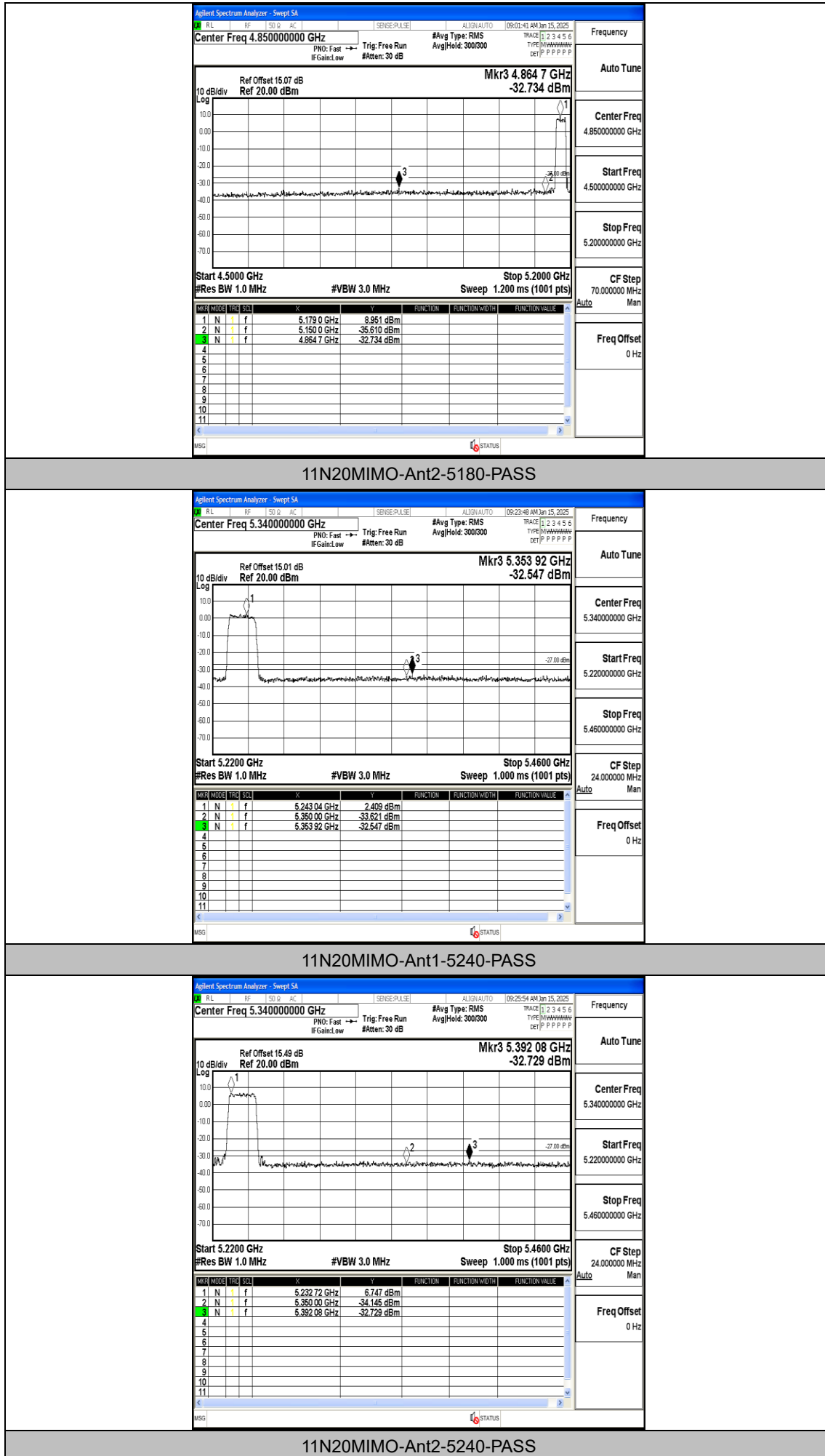
Test Result

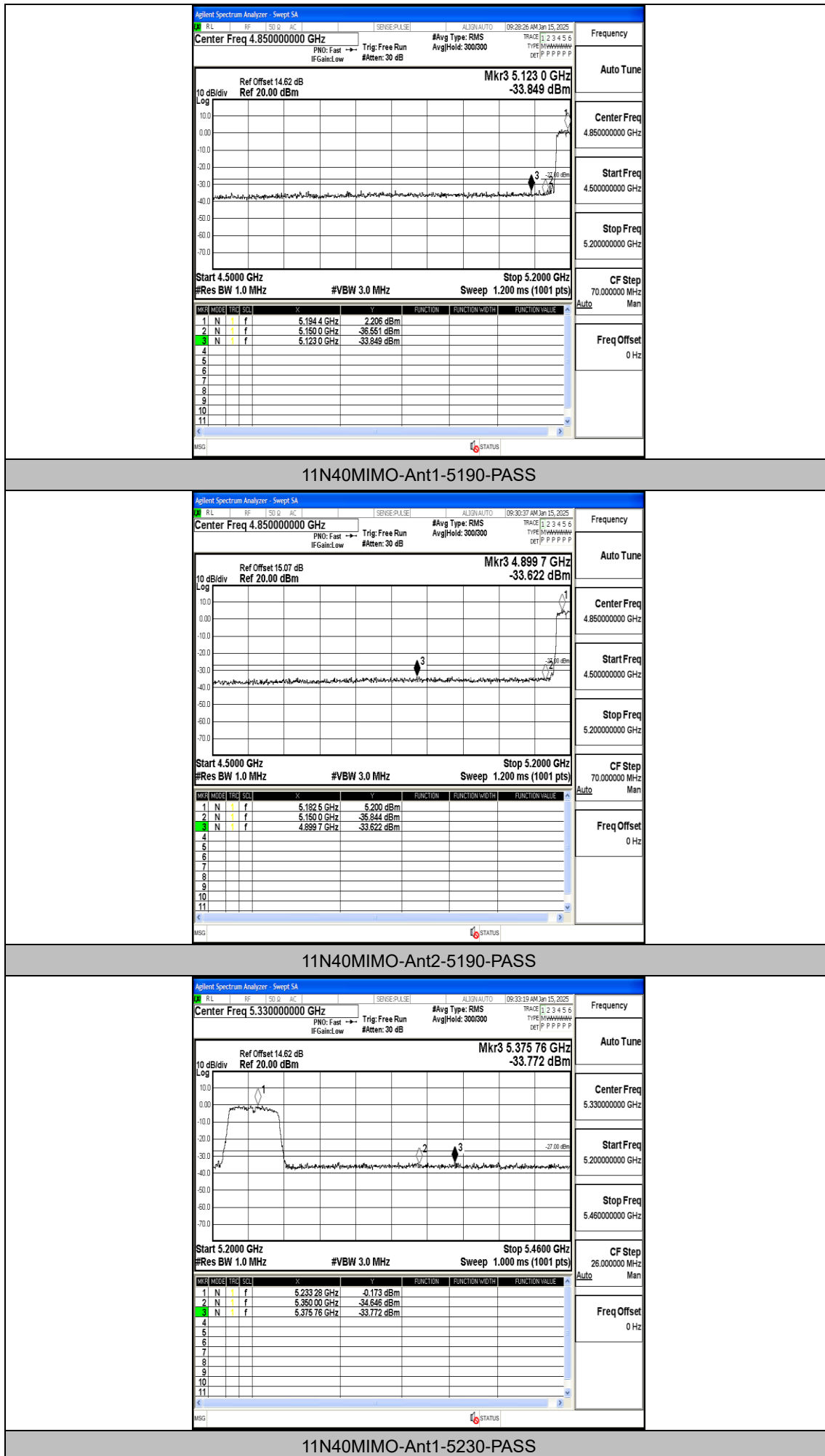
Test Mode	Antenna	Ch. Name	Frequency [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5180	-34.2	≤-27	PASS
11A	Ant2	Low	5180	-32.84	≤-27	PASS
11A	Ant1	High	5240	-33.76	≤-27	PASS
11A	Ant2	High	5240	-32.98	≤-27	PASS
11N20MIMO	Ant1	Low	5180	-33.61	≤-27	PASS
11N20MIMO	Ant2	Low	5180	-32.73	≤-27	PASS
11N20MIMO	Ant1	High	5240	-32.55	≤-27	PASS
11N20MIMO	Ant2	High	5240	-32.73	≤-27	PASS
11N40MIMO	Ant1	Low	5190	-33.85	≤-27	PASS
11N40MIMO	Ant2	Low	5190	-33.62	≤-27	PASS
11N40MIMO	Ant1	High	5230	-33.77	≤-27	PASS
11N40MIMO	Ant2	High	5230	-33.2	≤-27	PASS
11AC20MIMO	Ant1	Low	5180	-34.05	≤-27	PASS
11AC20MIMO	Ant2	Low	5180	-33.61	≤-27	PASS
11AC20MIMO	Ant1	High	5240	-33.04	≤-27	PASS
11AC20MIMO	Ant2	High	5240	-32.48	≤-27	PASS
11AC40MIMO	Ant1	Low	5190	-33.66	≤-27	PASS
11AC40MIMO	Ant2	Low	5190	-32.52	≤-27	PASS
11AC40MIMO	Ant1	High	5230	-34.05	≤-27	PASS
11AC40MIMO	Ant2	High	5230	-32.3	≤-27	PASS
11AC80MIMO	Ant1	Low	5210	-33.28	≤-27	PASS
11AC80MIMO	Ant1	High	5210	-33.65	≤-27	PASS
11AC80MIMO	Ant2	Low	5210	-33.11	≤-27	PASS
11AC80MIMO	Ant2	High	5210	-32.96	≤-27	PASS

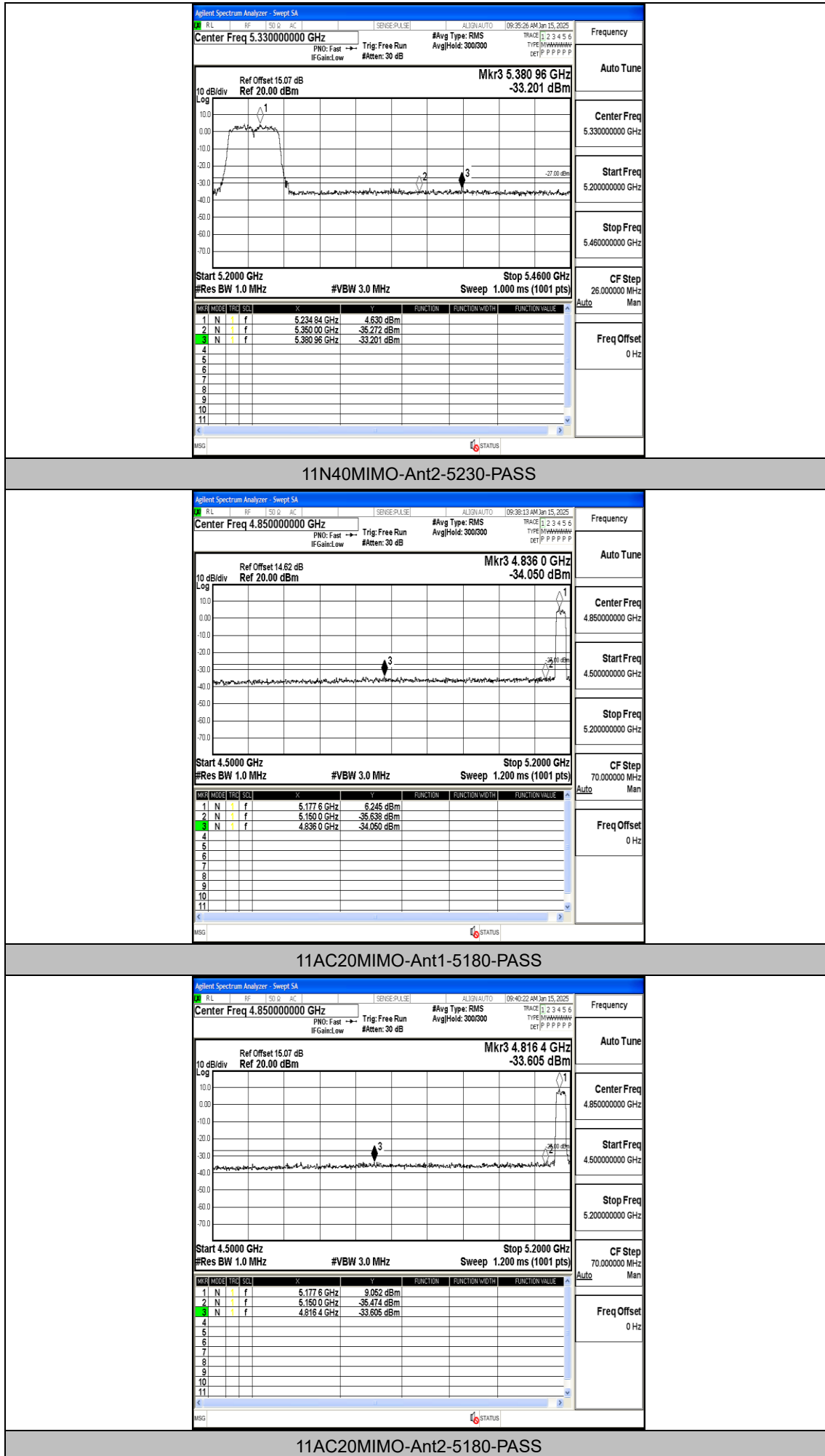
Test Graphs

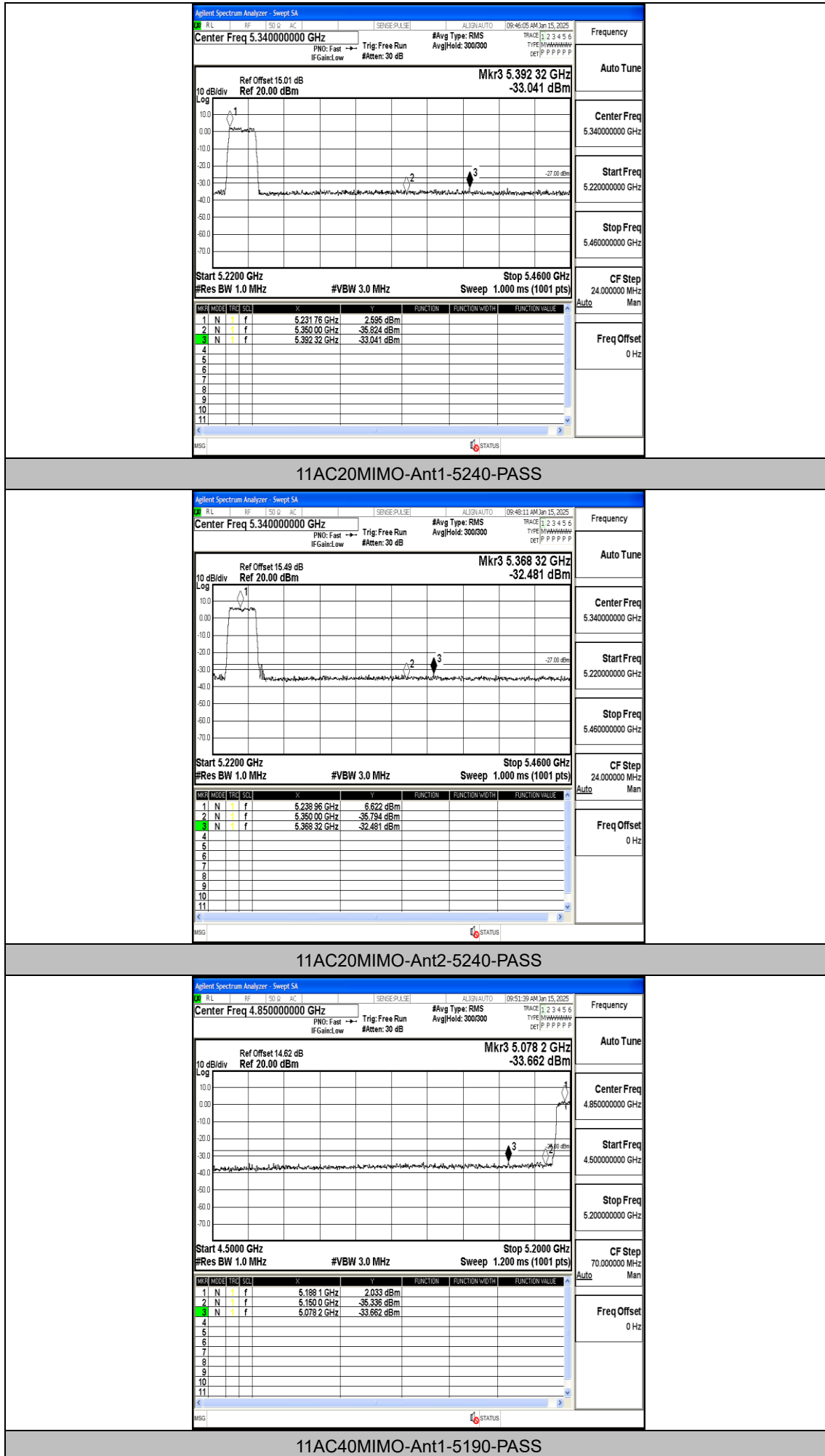


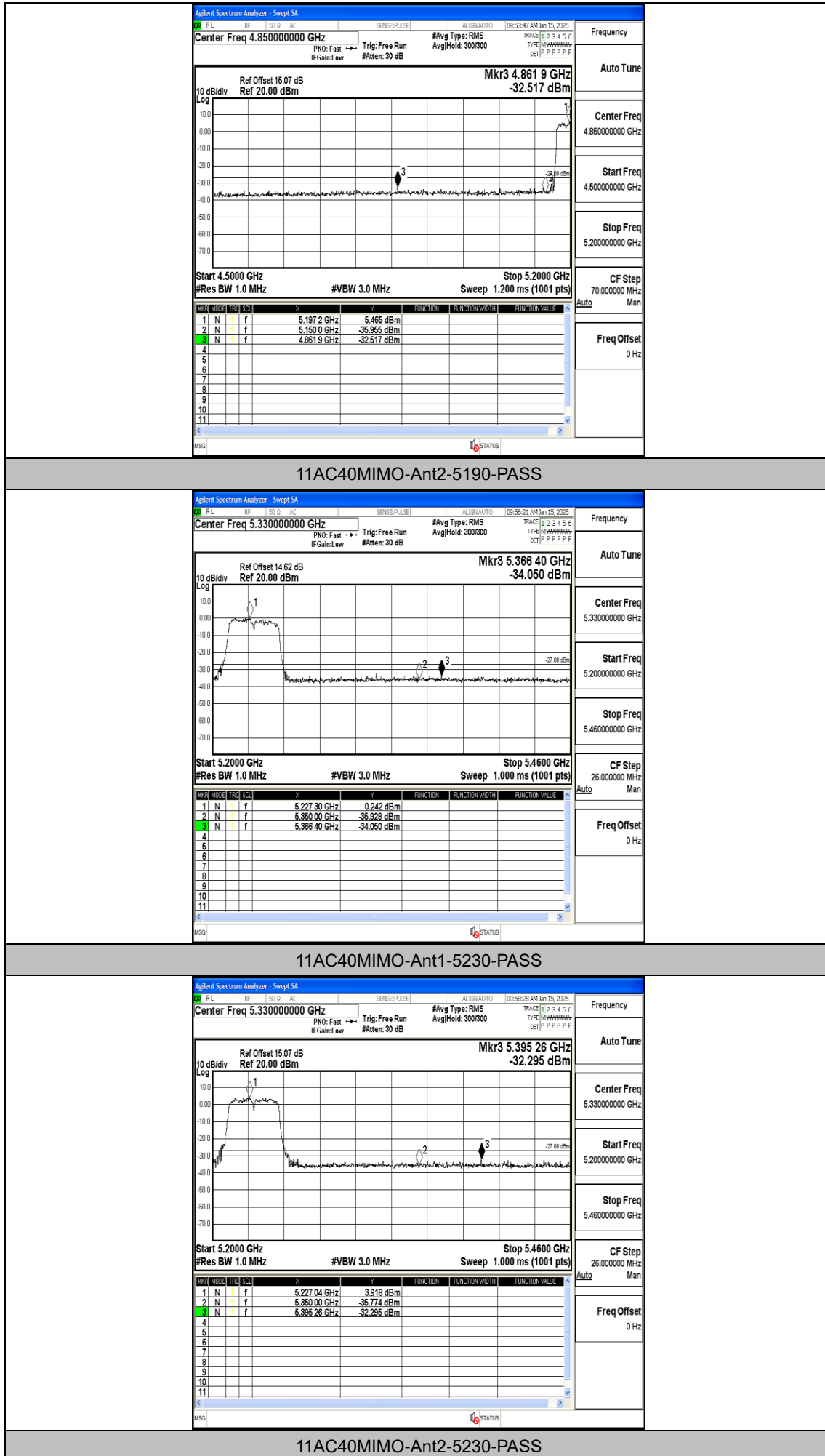


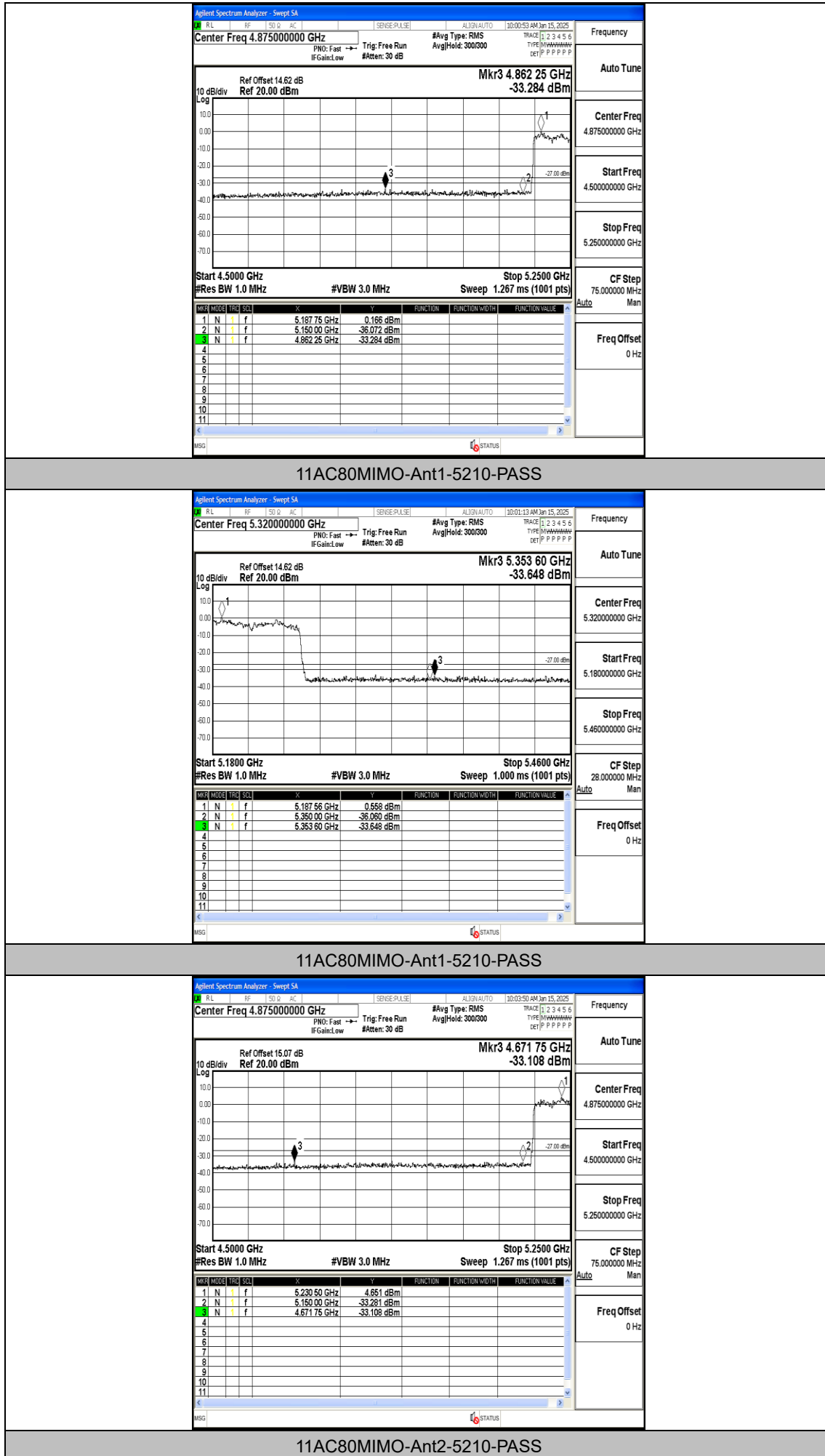


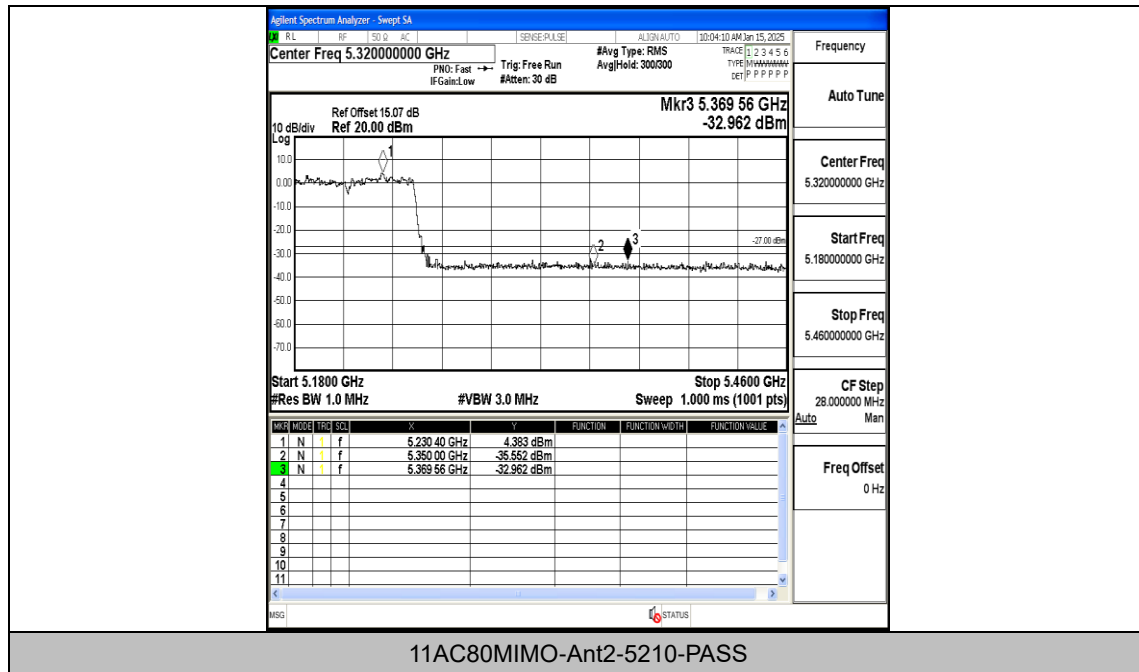












Appendix E: Frequency Stability

Test Result

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	240	5180.005129	5150 – 5250	PASS
5180	20	100	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)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	240	5179.943117	5150 – 5250	PASS
5180	20	100	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)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5200	20	240	5199.946412	5150 – 5250	PASS
5200	20	100	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)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5200	20	240	5200.015771	5150 – 5250	PASS
5200	20	100	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)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	240	5240.022422	5150 – 5250	PASS
5240	20	100	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)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	240	5240.092594	5150 – 5250	PASS
5240	20	100	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

Ant1

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5190	20	240	5190.087750	5150 – 5250	PASS
5190	20	100	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

Ant2

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5190	20	240	5190.030027	5150 – 5250	PASS
5190	20	100	5190.061777	5150 – 5250	PASS
5190	50	120	5190.024711	5150 – 5250	PASS
5190	40	120	5190.032731	5150 – 5250	PASS
5190	30	120	5190.095051	5150 – 5250	PASS
5190	20	120	5189.994575	5150 – 5250	PASS
5190	10	120	5190.030037	5150 – 5250	PASS
5190	0	120	5189.953970	5150 – 5250	PASS
5190	-10	120	5190.046604	5150 – 5250	PASS
5190	-20	120	5189.936429	5150 – 5250	PASS
5190	-30	120	5189.912859	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5230	20	240	5229.942115	5150 – 5250	PASS
5230	20	100	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

Ant2

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5230	20	240	5229.962000	5150 – 5250	PASS
5230	20	100	5229.904677	5150 – 5250	PASS
5230	50	120	5229.999759	5150 – 5250	PASS
5230	40	120	5230.062056	5150 – 5250	PASS
5230	30	120	5230.094389	5150 – 5250	PASS
5230	20	120	5229.943975	5150 – 5250	PASS
5230	10	120	5230.009883	5150 – 5250	PASS
5230	0	120	5230.037175	5150 – 5250	PASS
5230	-10	120	5229.925838	5150 – 5250	PASS
5230	-20	120	5230.030330	5150 – 5250	PASS
5230	-30	120	5230.000707	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5210	20	240	5210.091640	5150 – 5250	PASS
5210	20	100	5210.043473	5150 – 5250	PASS
5210	50	120	5210.032886	5150 – 5250	PASS
5210	40	120	5210.027515	5150 – 5250	PASS
5210	30	120	5210.042971	5150 – 5250	PASS
5210	20	120	5209.971419	5150 – 5250	PASS
5210	10	120	5210.047780	5150 – 5250	PASS
5210	0	120	5209.997254	5150 – 5250	PASS
5210	-10	120	5209.970826	5150 – 5250	PASS
5210	-20	120	5209.927968	5150 – 5250	PASS
5210	-30	120	5210.061009	5150 – 5250	PASS

Ant2

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5210	20	240	5209.960213	5150 – 5250	PASS
5210	20	100	5210.026727	5150 – 5250	PASS
5210	50	120	5210.017396	5150 – 5250	PASS
5210	40	120	5209.944325	5150 – 5250	PASS
5210	30	120	5210.072901	5150 – 5250	PASS
5210	20	120	5210.099086	5150 – 5250	PASS
5210	10	120	5210.089456	5150 – 5250	PASS
5210	0	120	5209.973485	5150 – 5250	PASS
5210	-10	120	5209.941942	5150 – 5250	PASS
5210	-20	120	5210.041055	5150 – 5250	PASS
5210	-30	120	5210.093554	5150 – 5250	PASS

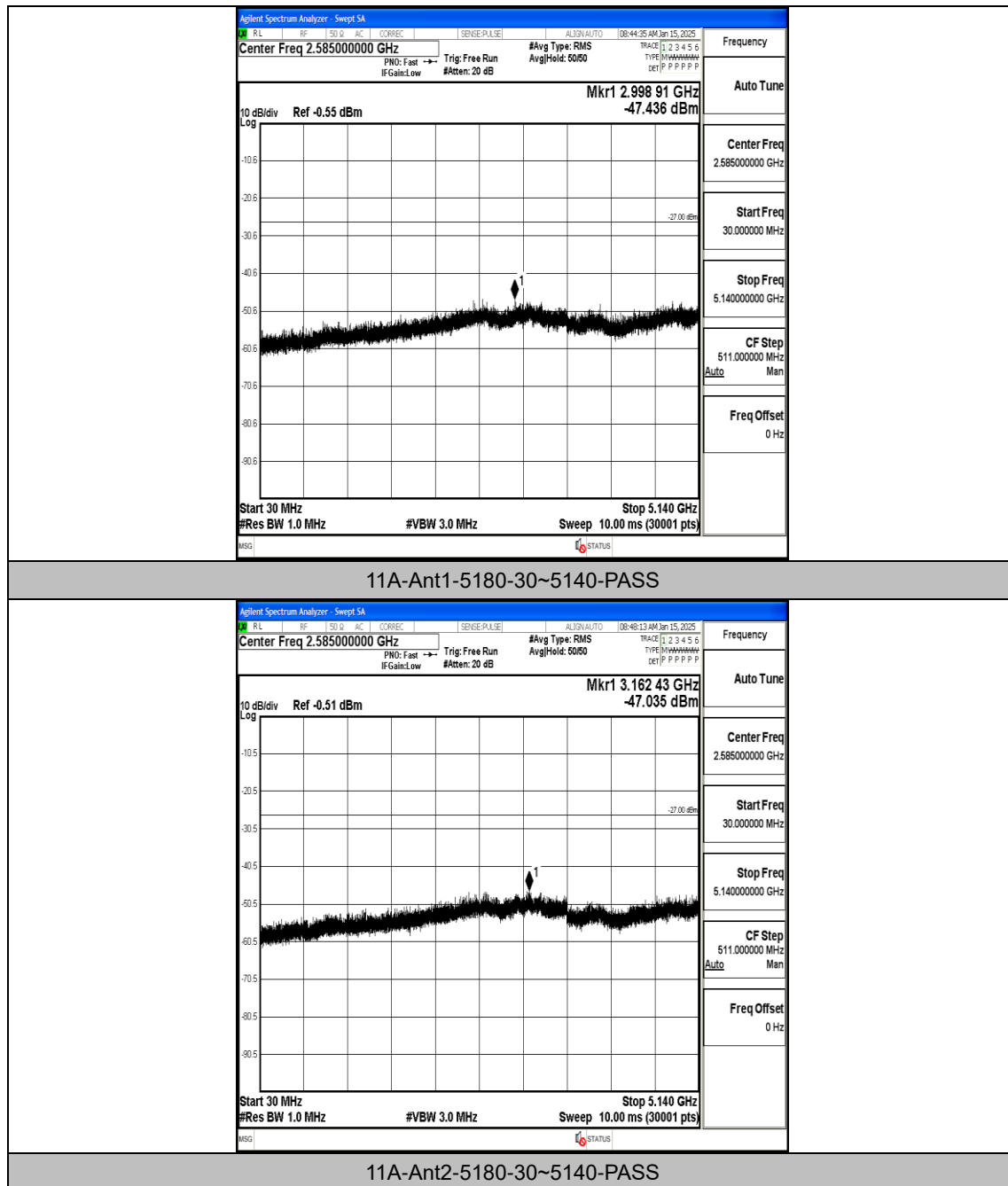
Appendix F: Conducted Spurious Emission

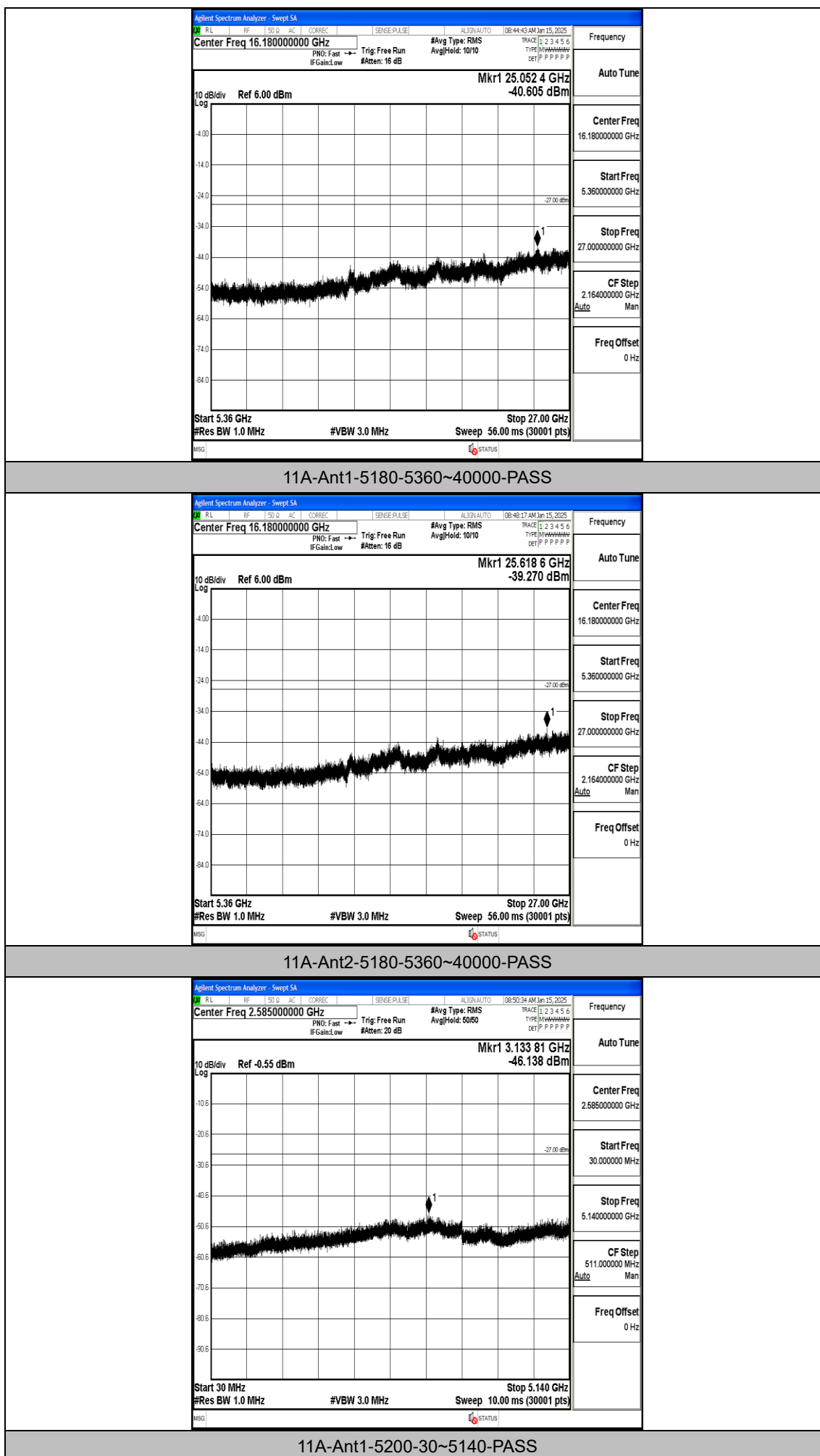
Test Result

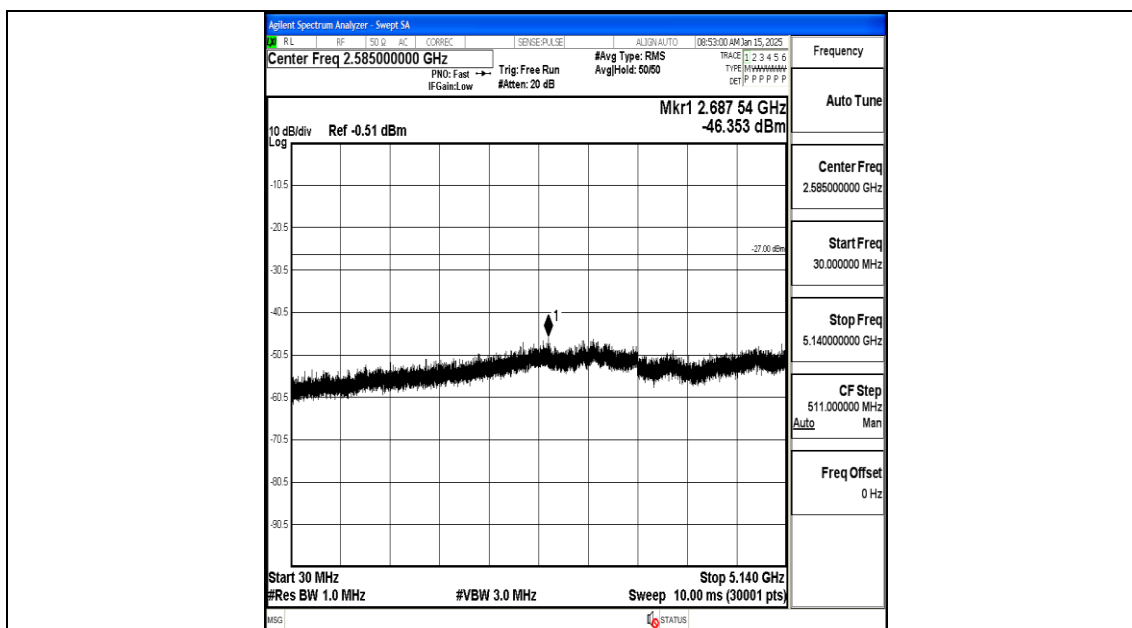
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	2998.91	-47.44	≤-27	PASS
11A	Ant2	5180	30~5140	3162.43	-47.04	≤-27	PASS
11A	Ant1	5180	5360~40000	25052.4	-40.61	≤-27	PASS
11A	Ant2	5180	5360~40000	25618.65	-39.27	≤-27	PASS
11A	Ant1	5200	30~5140	3133.81	-46.14	≤-27	PASS
11A	Ant2	5200	30~5140	2687.54	-46.35	≤-27	PASS
11A	Ant1	5200	5360~40000	26040.63	-39.95	≤-27	PASS
11A	Ant2	5200	5360~40000	26065.15	-39.83	≤-27	PASS
11A	Ant1	5240	30~5140	3162.43	-46.72	≤-27	PASS
11A	Ant2	5240	30~5140	3571.4	-46.9	≤-27	PASS
11A	Ant1	5240	5360~40000	26096.17	-38.19	≤-27	PASS
11A	Ant2	5240	5360~40000	26884.59	-39.32	≤-27	PASS
11N20MIMO	Ant1	5180	30~5140	3127.68	-44.87	≤-27	PASS
11N20MIMO	Ant2	5180	30~5140	5137.96	-45.97	≤-27	PASS
11N20MIMO	Ant1	5180	5360~40000	26764.85	-39.74	≤-27	PASS
11N20MIMO	Ant2	5180	5360~40000	26147.38	-38.99	≤-27	PASS
11N20MIMO	Ant1	5200	30~5140	2629.97	-46.77	≤-27	PASS
11N20MIMO	Ant2	5200	30~5140	3285.24	-46.37	≤-27	PASS
11N20MIMO	Ant1	5200	5360~40000	25045.19	-39.91	≤-27	PASS
11N20MIMO	Ant2	5200	5360~40000	26456.84	-40.45	≤-27	PASS
11N20MIMO	Ant1	5240	30~5140	3154.25	-45.64	≤-27	PASS
11N20MIMO	Ant2	5240	30~5140	3147.61	-46.38	≤-27	PASS
11N20MIMO	Ant1	5240	5360~40000	25088.47	-38.94	≤-27	PASS
11N20MIMO	Ant2	5240	5360~40000	26055.77	-39.78	≤-27	PASS
11N40MIMO	Ant1	5190	30~5140	3176.23	-46.68	≤-27	PASS
11N40MIMO	Ant2	5190	30~5140	2413.64	-45.6	≤-27	PASS
11N40MIMO	Ant1	5190	5360~40000	24552.52	-39.74	≤-27	PASS
11N40MIMO	Ant2	5190	5360~40000	26959.61	-39.97	≤-27	PASS
11N40MIMO	Ant1	5230	30~5140	3033.83	-45.61	≤-27	PASS
11N40MIMO	Ant2	5230	30~5140	3081.86	-45.92	≤-27	PASS
11N40MIMO	Ant1	5230	5360~40000	26024.76	-38.27	≤-27	PASS
11N40MIMO	Ant2	5230	5360~40000	25080.53	-39.63	≤-27	PASS
11AC20MIMO	Ant1	5180	30~5140	3149.31	-46.06	≤-27	PASS
11AC20MIMO	Ant2	5180	30~5140	2516.02	-46.64	≤-27	PASS
11AC20MIMO	Ant1	5180	5360~40000	24978.1	-40.01	≤-27	PASS
11AC20MIMO	Ant2	5180	5360~40000	26100.5	-39.12	≤-27	PASS
11AC20MIMO	Ant1	5200	30~5140	3146.08	-46.65	≤-27	PASS
11AC20MIMO	Ant2	5200	30~5140	3166.52	-46.72	≤-27	PASS
11AC20MIMO	Ant1	5200	5360~40000	26454.67	-39.91	≤-27	PASS
11AC20MIMO	Ant2	5200	5360~40000	25973.54	-39.81	≤-27	PASS

11AC20MIMO	Ant1	5240	30~5140	3158.68	-45.53	≤-27	PASS
11AC20MIMO	Ant2	5240	30~5140	3143.01	-47.14	≤-27	PASS
11AC20MIMO	Ant1	5240	5360~40000	25051.68	-39.78	≤-27	PASS
11AC20MIMO	Ant2	5240	5360~40000	26812.45	-39.27	≤-27	PASS
11AC40MIMO	Ant1	5190	30~5140	1922.91	-36.96	≤-27	PASS
11AC40MIMO	Ant2	5190	30~5140	2557.24	-43.1	≤-27	PASS
11AC40MIMO	Ant1	5190	5360~40000	25111.55	-40.09	≤-27	PASS
11AC40MIMO	Ant2	5190	5360~40000	25583.3	-39.69	≤-27	PASS
11AC40MIMO	Ant1	5230	30~5140	4795.25	-46.56	≤-27	PASS
11AC40MIMO	Ant2	5230	30~5140	3477.89	-46.8	≤-27	PASS
11AC40MIMO	Ant1	5230	5360~40000	26081.02	-40.11	≤-27	PASS
11AC40MIMO	Ant2	5230	5360~40000	26836.26	-39.97	≤-27	PASS
11AC80MIMO	Ant1	5210	30~5140	3253.73	-46.46	≤-27	PASS
11AC80MIMO	Ant2	5210	30~5140	3150.51	-46.04	≤-27	PASS
11AC80MIMO	Ant1	5210	5360~40000	26145.22	-39.08	≤-27	PASS
11AC80MIMO	Ant2	5210	5360~40000	26826.88	-39.92	≤-27	PASS

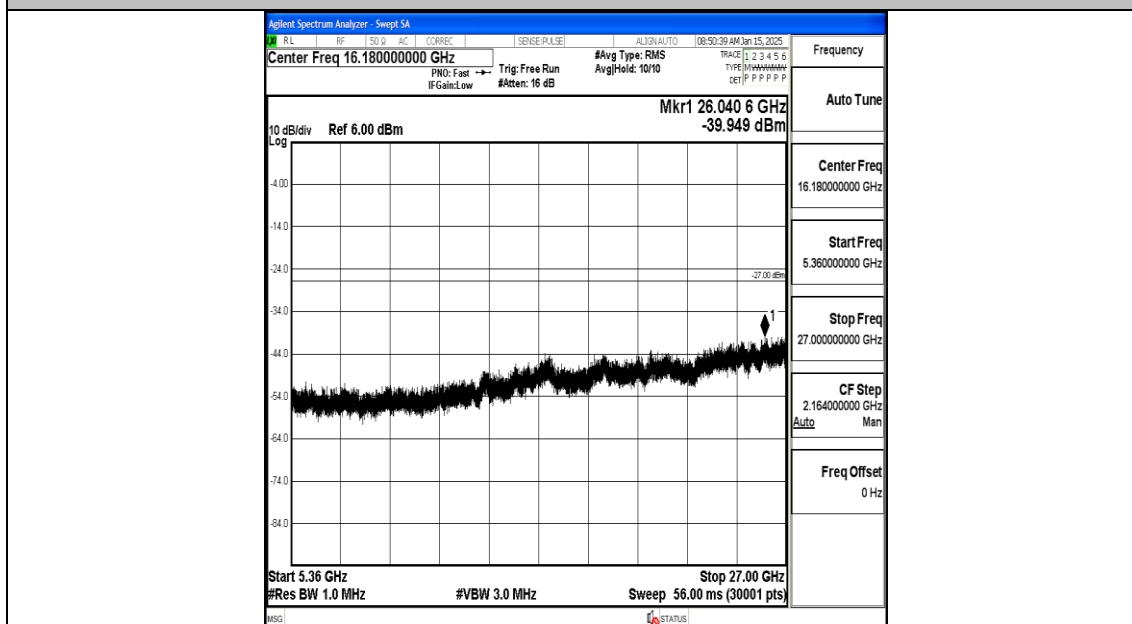
Test Graphs



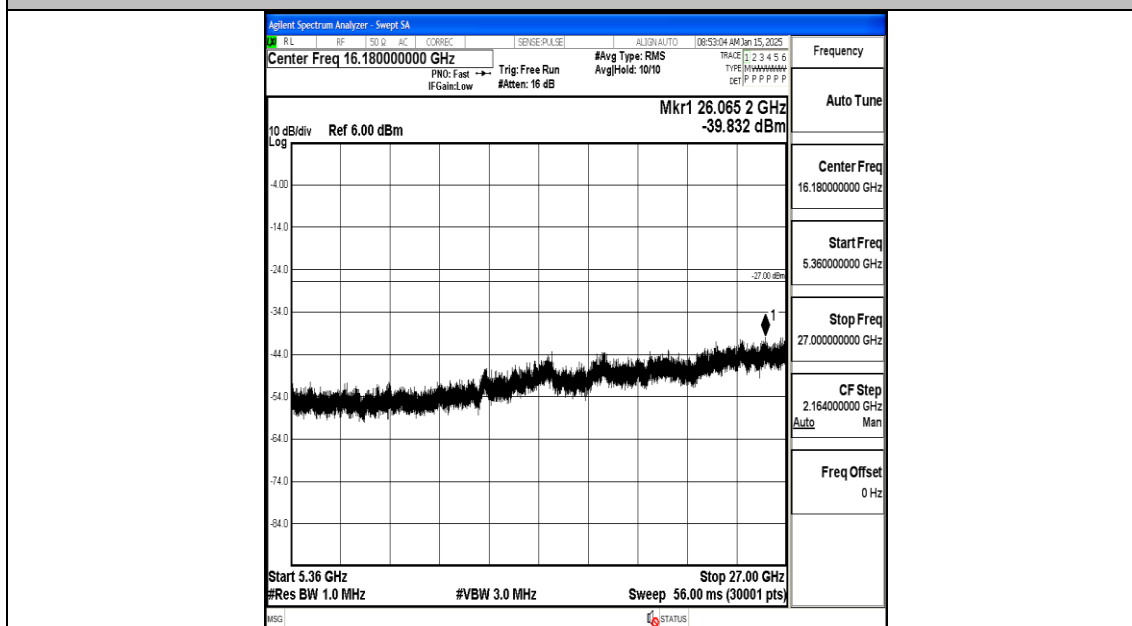




11A-Ant2-5200-30~5140-PASS



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



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