

Appendix: 5.2G Wi-Fi

Contents

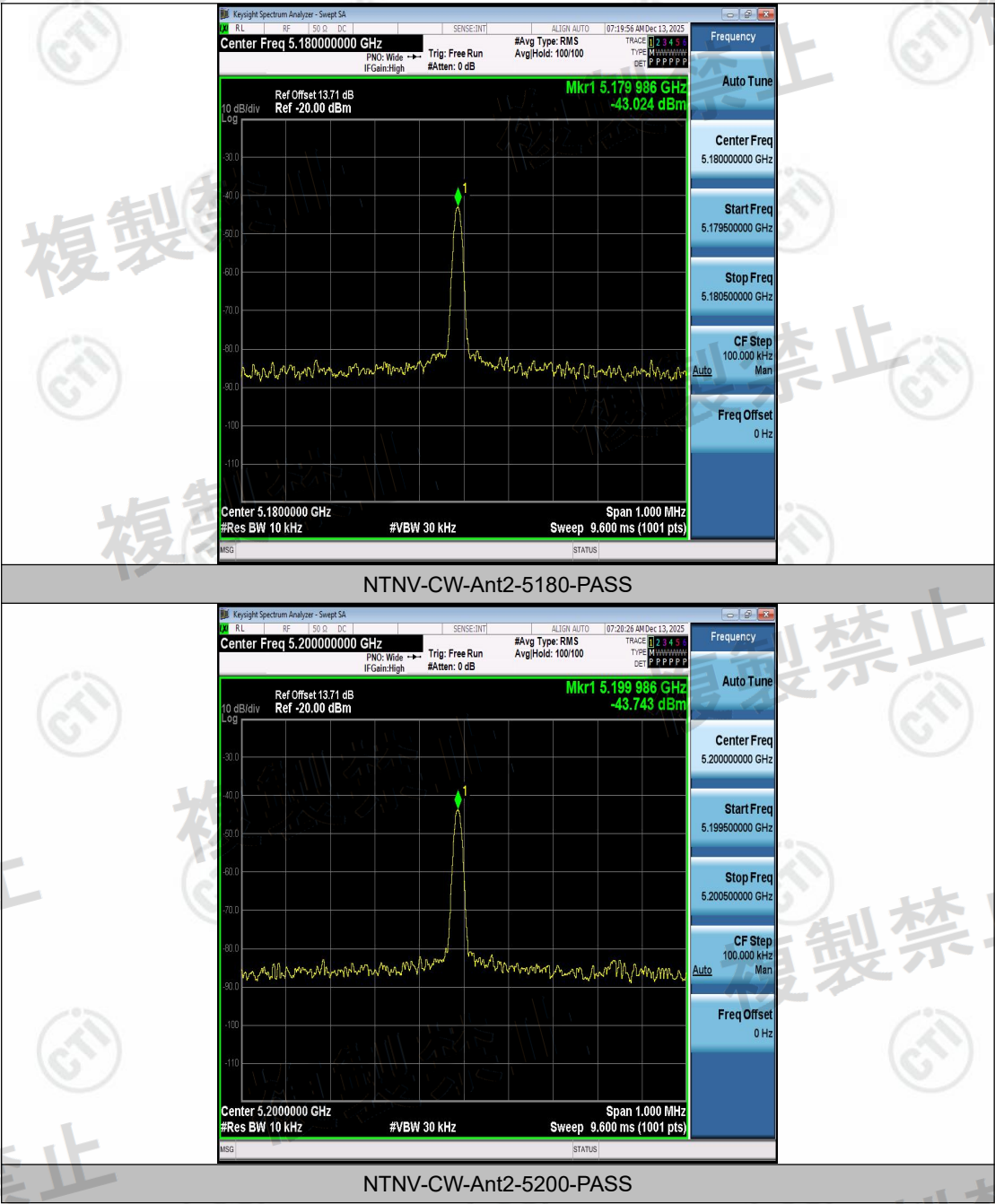
Appendix A: Frequency Error	3
Test Result	3
Test Graphs	4
Appendix B: Antenna Power	8
Test Result PSD	8
Test Graphs	11
Appendix C: Occupied Bandwidth	35
Test Result	35
Test Graphs	36
Appendix D: Spread Bandwidth	48
Test Result	48
Test Graphs	49
Appendix E: Unwanted Emission Strength	61
Test Result	61
Test Result_Step2	68
Test Graphs	69
Test Graphs_Step2	143
Appendix F: Secondary Radiated Emission Strength	149
Test Result	149
Test Graphs	160
Appendix G: Transmission Burst Length	248
Test Result	248
Test Graphs	249
Appendix H: Adjacent Channel Power Tolerance	261
Test Result	261
Test Graphs	264
Appendix I: Carrier Sense Function	276
Test Result	276
Test Graphs	277

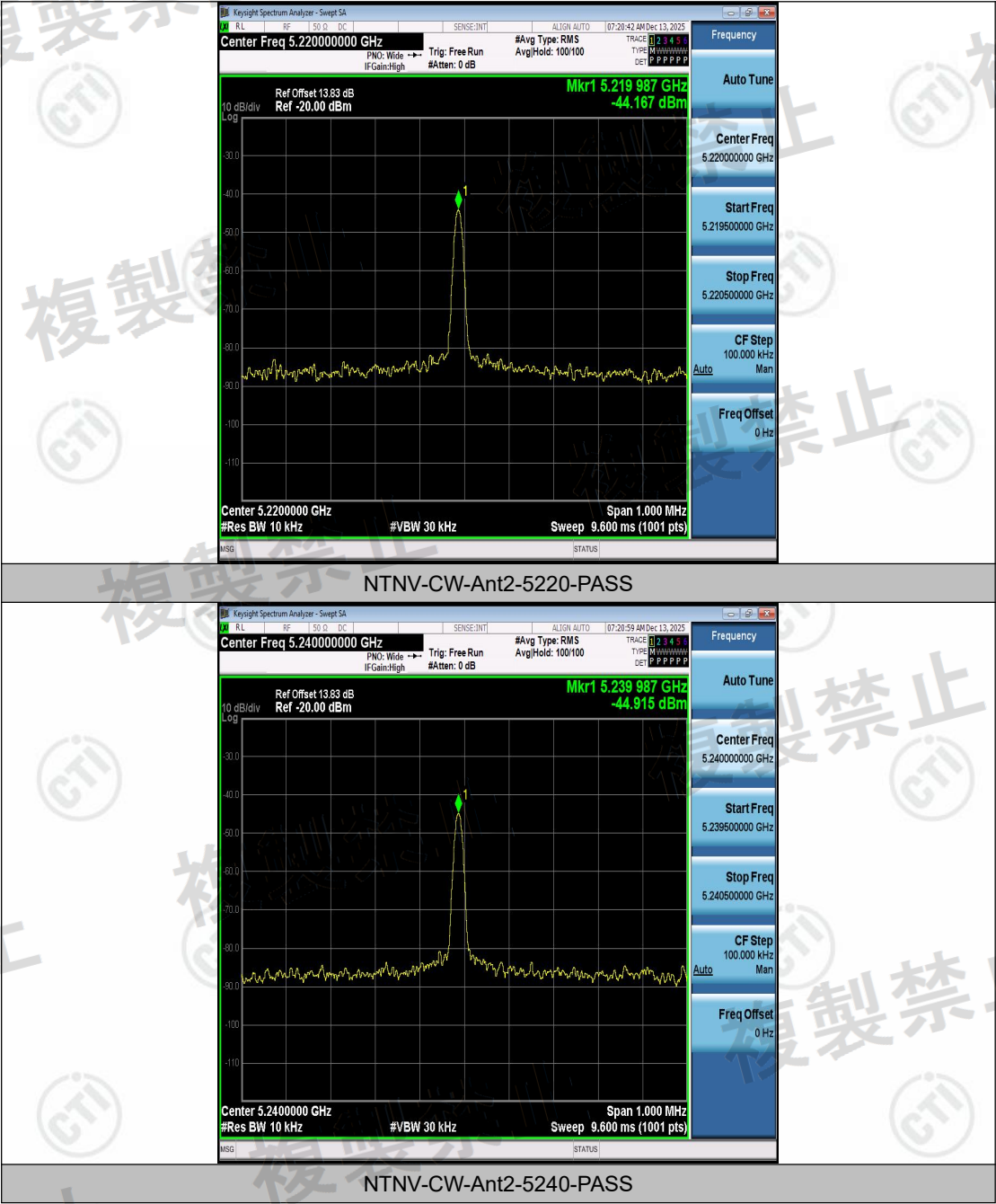
Appendix A: Frequency Error

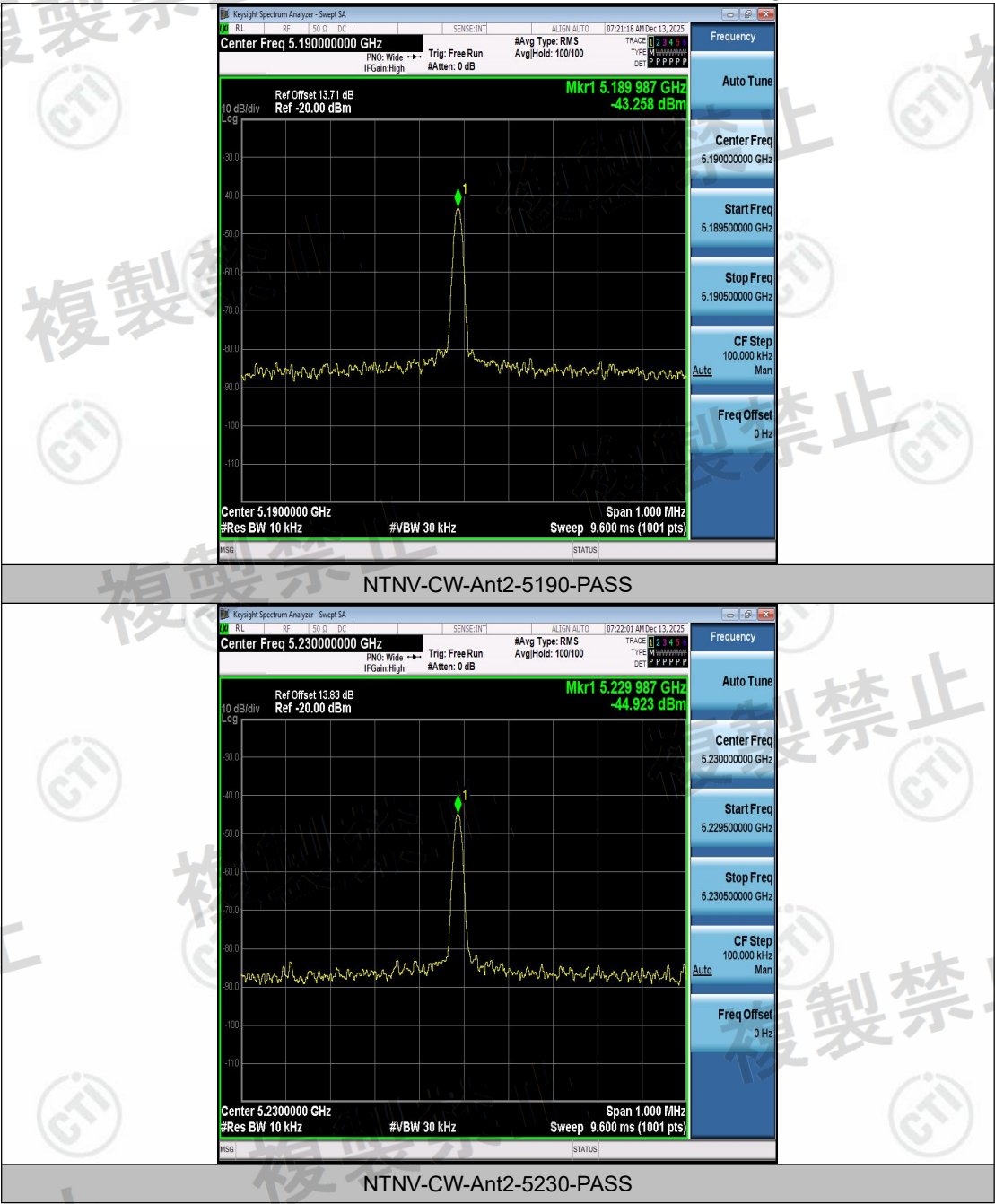
Test Result

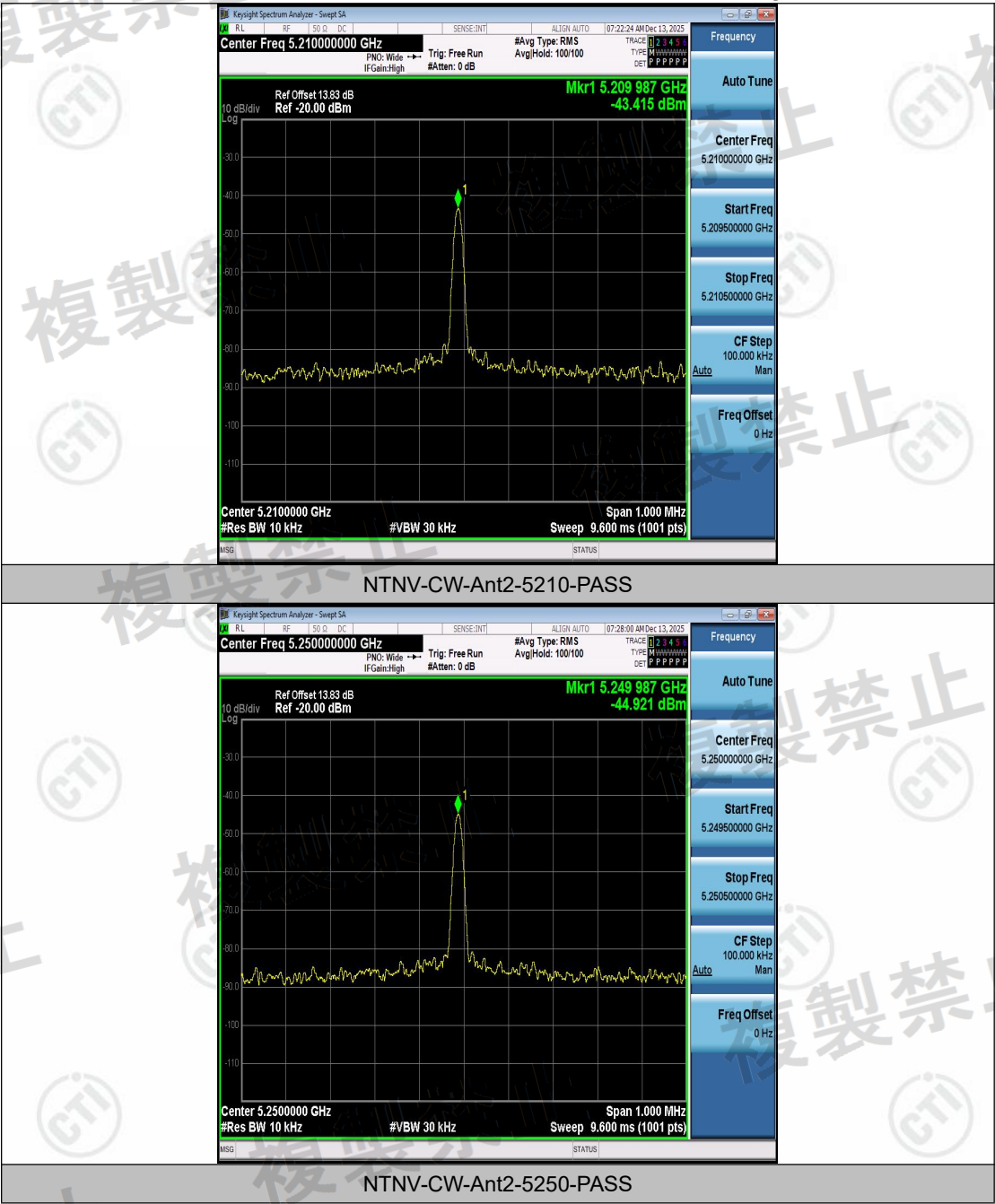
TestCondition	TestMode	Antenna	Frequen cy[MHz]	CenterFreq [MHz]	Result [ppm]	Limit [ppm]	Verdict
NTNV	CW	Ant2	5180	5179.986	-2.70270	±20	PASS
NTNV	CW	Ant2	5200	5199.986	-2.69231	±20	PASS
NTNV	CW	Ant2	5220	5219.987	-2.49042	±20	PASS
NTNV	CW	Ant2	5240	5239.987	-2.48092	±20	PASS
NTNV	CW	Ant2	5190	5189.987	-2.50482	±20	PASS
NTNV	CW	Ant2	5230	5229.987	-2.48566	±20	PASS
NTNV	CW	Ant2	5210	5209.987	-2.49520	±20	PASS

Test Graphs









Appendix B: Antenna Power

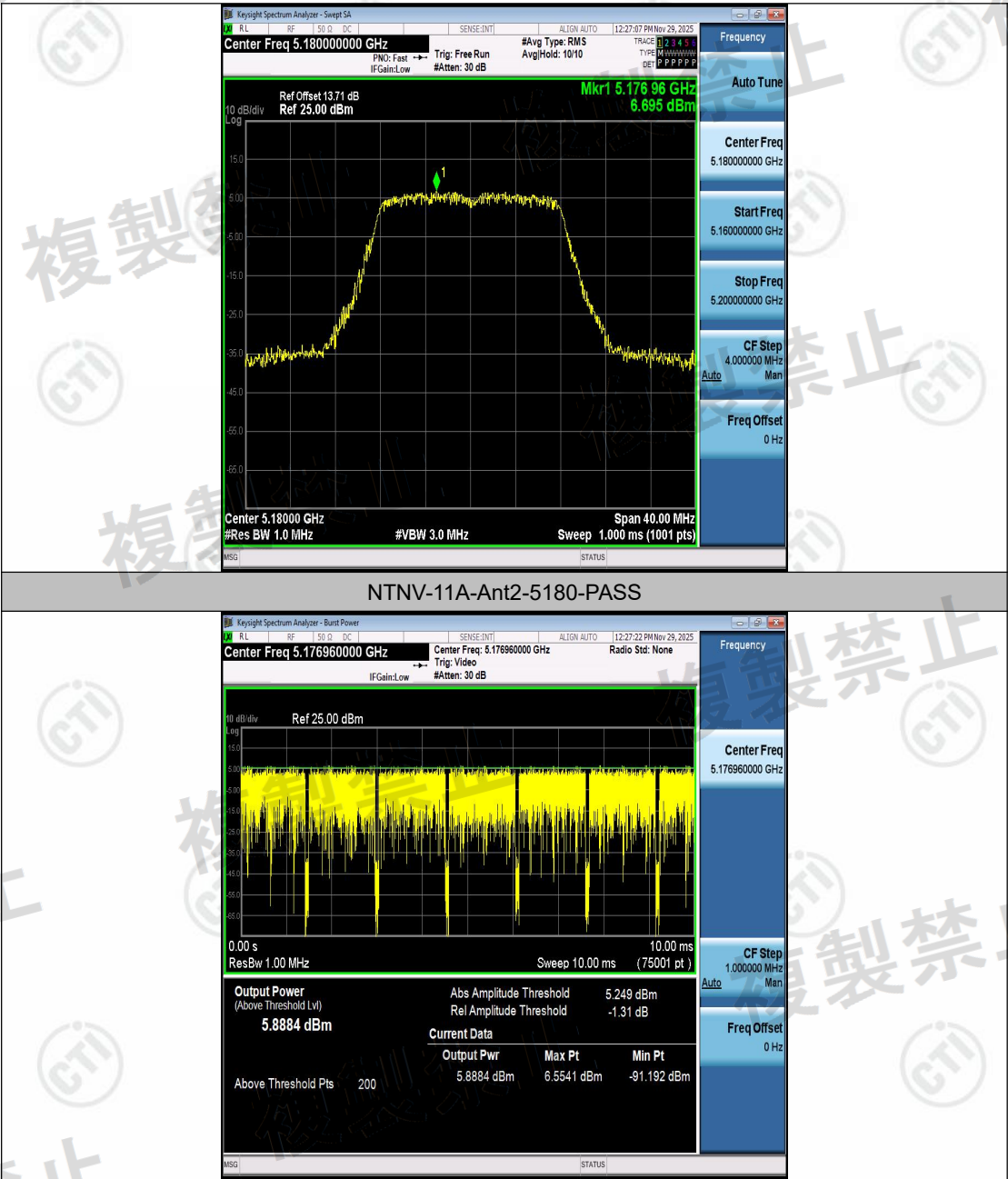
Test Result PSD

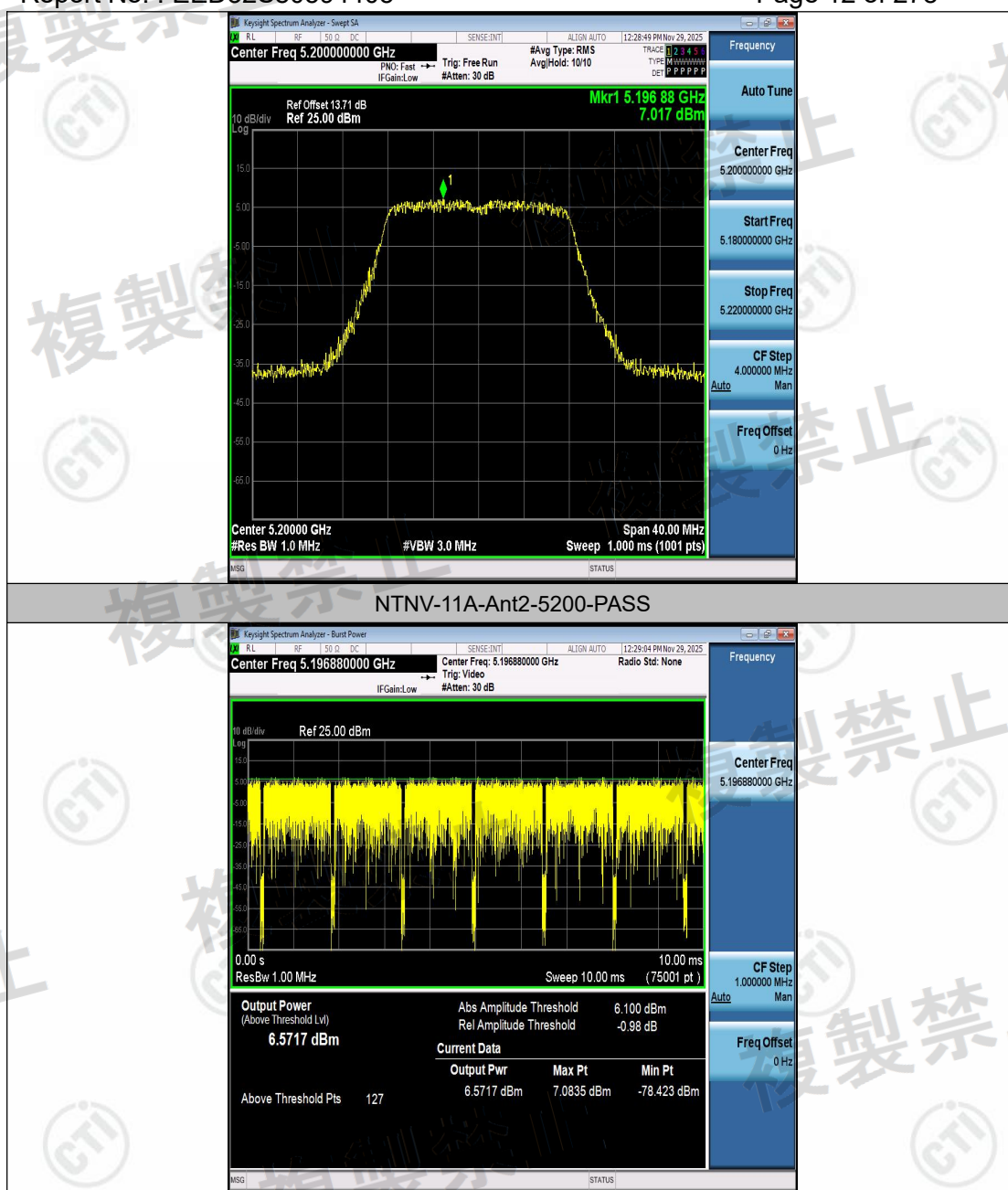
TestCon dition	TestMode	Anten na	Frequen cy[MHz]	Result(dBm /MHz)	Result(mW/ MHz)	Limit(mW /MHz)	Verdict
NTNV	11A	Ant2	5180	5.89	3.8815	≤10	PASS
NTNV	11A	Ant2	5200	6.57	4.5394	≤10	PASS
NTNV	11A	Ant2	5220	6.23	4.1976	≤10	PASS
NTNV	11A	Ant2	5240	6.34	4.3053	≤10	PASS
NTNV	11N20SISO	Ant2	5180	6.21	4.1783	≤10	PASS
NTNV	11N20SISO	Ant2	5200	6.13	4.1020	≤10	PASS
NTNV	11N20SISO	Ant2	5220	6.53	4.4978	≤10	PASS
NTNV	11N20SISO	Ant2	5240	6.56	4.5290	≤10	PASS
NTNV	11N40SISO	Ant2	5190	3.52	2.2491	≤5	PASS
NTNV	11N40SISO	Ant2	5230	3.06	2.0230	≤5	PASS
NTNV	11AC20SISO	Ant2	5180	6.06	4.0365	≤10	PASS
NTNV	11AC20SISO	Ant2	5200	6.15	4.1210	≤10	PASS
NTNV	11AC20SISO	Ant2	5220	5.04	3.1915	≤10	PASS
NTNV	11AC20SISO	Ant2	5240	6.54	4.5082	≤10	PASS
NTNV	11AC40SISO	Ant2	5190	2.52	1.7865	≤5	PASS
NTNV	11AC40SISO	Ant2	5230	1.67	1.4689	≤5	PASS
NTNV	11AC80SISO	Ant2	5210	0.44	1.1066	≤2.5	PASS
NTNV	11AX20SISO	Ant2	5180	6.46	4.4259	≤10	PASS
NTNV	11AX20SISO	Ant2	5200	6.41	4.3752	≤10	PASS
NTNV	11AX20SISO	Ant2	5220	6.28	4.2462	≤10	PASS
NTNV	11AX20SISO	Ant2	5240	6.54	4.5082	≤10	PASS
NTNV	11AX40SISO	Ant2	5190	3.44	2.2080	≤5	PASS
NTNV	11AX40SISO	Ant2	5230	1.96	1.5704	≤5	PASS
NTNV	11AX80SISO	Ant2	5210	-0.17	0.9616	≤2.5	PASS

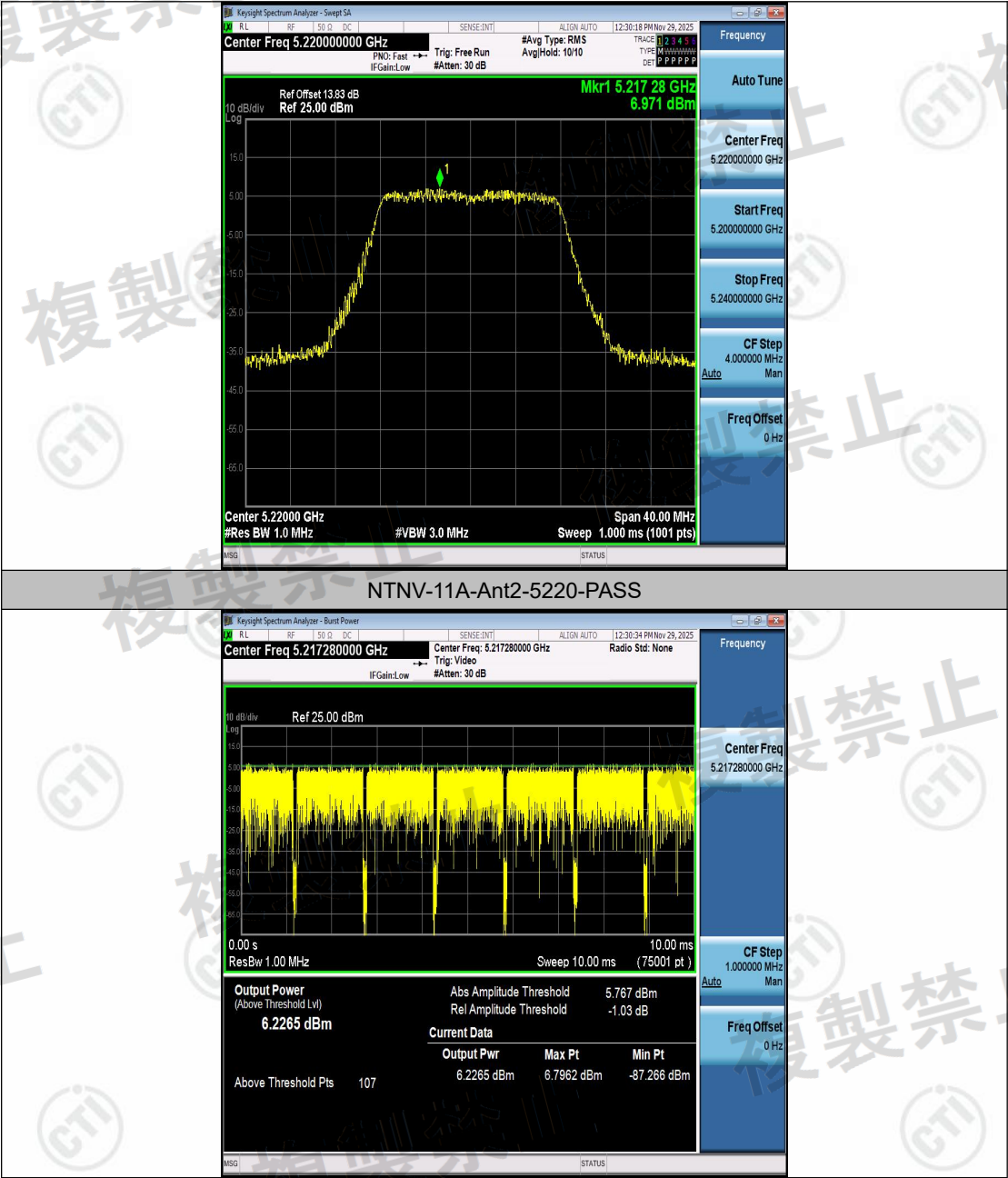
Test Condition	Test Mode	Antenna	Frequency [MHz]	Power (mW/MHz)	Rated Power (mW/MHz)	Result (%)	Limit (%)	Verdict
NTNV	11A	Ant2	5180	3.8815	4.5	-13.74	-80 to +20	PASS
NTNV	11A	Ant2	5200	4.5394	4.5	+0.88	-80 to +20	PASS
NTNV	11A	Ant2	5220	4.1976	4.5	-6.72	-80 to +20	PASS
NTNV	11A	Ant2	5240	4.3053	4.5	-4.33	-80 to +20	PASS
NTNV	11N20SISO	Ant2	5180	4.1783	4.5	-7.15	-80 to +20	PASS
NTNV	11N20SISO	Ant2	5200	4.1020	4.5	-8.84	-80 to +20	PASS
NTNV	11N20SISO	Ant2	5220	4.4978	4.5	-0.05	-80 to +20	PASS
NTNV	11N20SISO	Ant2	5240	4.5290	4.5	+0.64	-80 to +20	PASS
NTNV	11N40SISO	Ant2	5190	2.2491	2.5	-10.04	-80 to +20	PASS
NTNV	11N40SISO	Ant2	5230	2.0230	2.5	-19.08	-80 to +20	PASS
NTNV	11AC20SISO	Ant2	5180	4.0365	4	+0.91	-80 to +20	PASS
NTNV	11AC20SISO	Ant2	5200	4.1210	4	+3.03	-80 to +20	PASS
NTNV	11AC20SISO	Ant2	5220	3.1915	4	-20.21	-80 to +20	PASS
NTNV	11AC20SISO	Ant2	5240	4.5082	4	+12.71	-80 to +20	PASS
NTNV	11AC40SISO	Ant2	5190	1.7865	2.2	-18.80	-80 to +20	PASS
NTNV	11AC40SISO	Ant2	5230	1.4689	2.2	-33.23	-80 to +20	PASS
NTNV	11AC80SISO	Ant2	5210	1.1066	1.5	-26.23	-80 to +20	PASS
NTNV	11AX20SISO	Ant2	5180	4.4259	4.5	-1.65	-80 to +20	PASS
NTNV	11AX20SISO	Ant2	5200	4.3752	4.5	-2.77	-80 to +20	PASS
NTNV	11AX20SISO	Ant2	5220	4.2462	4.5	-5.64	-80 to +20	PASS
NTNV	11AX20SISO	Ant2	5240	4.5082	4.5	+0.18	-80 to +20	PASS
NTNV	11AX40SISO	Ant2	5190	2.2080	2.5	-11.68	-80 to +20	PASS
NTNV	11AX40SISO	Ant2	5230	1.5704	2.5	-37.18	-80 to +20	PASS
NTNV	11AX80SISO	Ant2	5210	0.9616	1	-3.84	-80 to +20	PASS

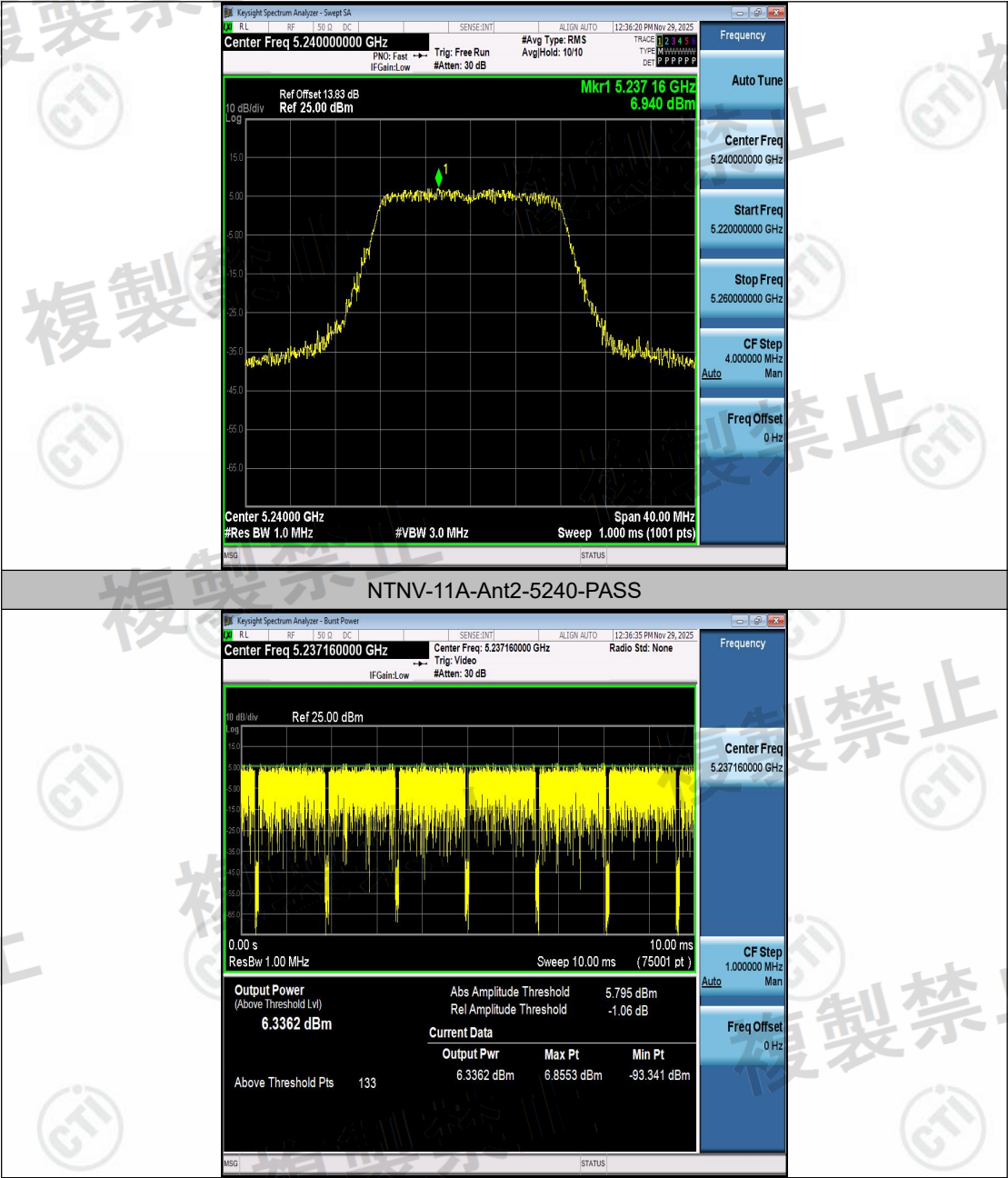
TestCondition	TestMode	Antenna	Frequency[MHz]	Result(mW/MHz)	EIRP(mW/MHz)	Limit(mW/MHz)	Verdict
NTNV	11A	Ant2	5180	3.8815	8.4918	≤10	PASS
NTNV	11A	Ant2	5200	4.5394	9.9312	≤10	PASS
NTNV	11A	Ant2	5220	4.1976	9.1833	≤10	PASS
NTNV	11A	Ant2	5240	4.3053	9.4189	≤10	PASS
NTNV	11N20SISO	Ant2	5180	4.1783	9.1411	≤10	PASS
NTNV	11N20SISO	Ant2	5200	4.1020	8.9743	≤10	PASS
NTNV	11N20SISO	Ant2	5220	4.4978	9.8401	≤10	PASS
NTNV	11N20SISO	Ant2	5240	4.5290	9.9083	≤10	PASS
NTNV	11N40SISO	Ant2	5190	2.2491	4.9204	≤5	PASS
NTNV	11N40SISO	Ant2	5230	2.0230	4.4259	≤5	PASS
NTNV	11AC20SISO	Ant2	5180	4.0365	8.8308	≤10	PASS
NTNV	11AC20SISO	Ant2	5200	4.1210	9.0157	≤10	PASS
NTNV	11AC20SISO	Ant2	5220	3.1915	6.9823	≤10	PASS
NTNV	11AC20SISO	Ant2	5240	4.5082	9.8628	≤10	PASS
NTNV	11AC40SISO	Ant2	5190	1.7865	3.9084	≤5	PASS
NTNV	11AC40SISO	Ant2	5230	1.4689	3.2137	≤5	PASS
NTNV	11AC80SISO	Ant2	5210	1.1066	2.4210	≤2.5	PASS
NTNV	11AX20SISO	Ant2	5180	4.4259	9.6828	≤10	PASS
NTNV	11AX20SISO	Ant2	5200	4.3752	9.5719	≤10	PASS
NTNV	11AX20SISO	Ant2	5220	4.2462	9.2897	≤10	PASS
NTNV	11AX20SISO	Ant2	5240	4.5082	9.8628	≤10	PASS
NTNV	11AX40SISO	Ant2	5190	2.2080	4.8306	≤5	PASS
NTNV	11AX40SISO	Ant2	5230	1.5704	3.4356	≤5	PASS
NTNV	11AX80SISO	Ant2	5210	0.9616	2.1038	≤2.5	PASS

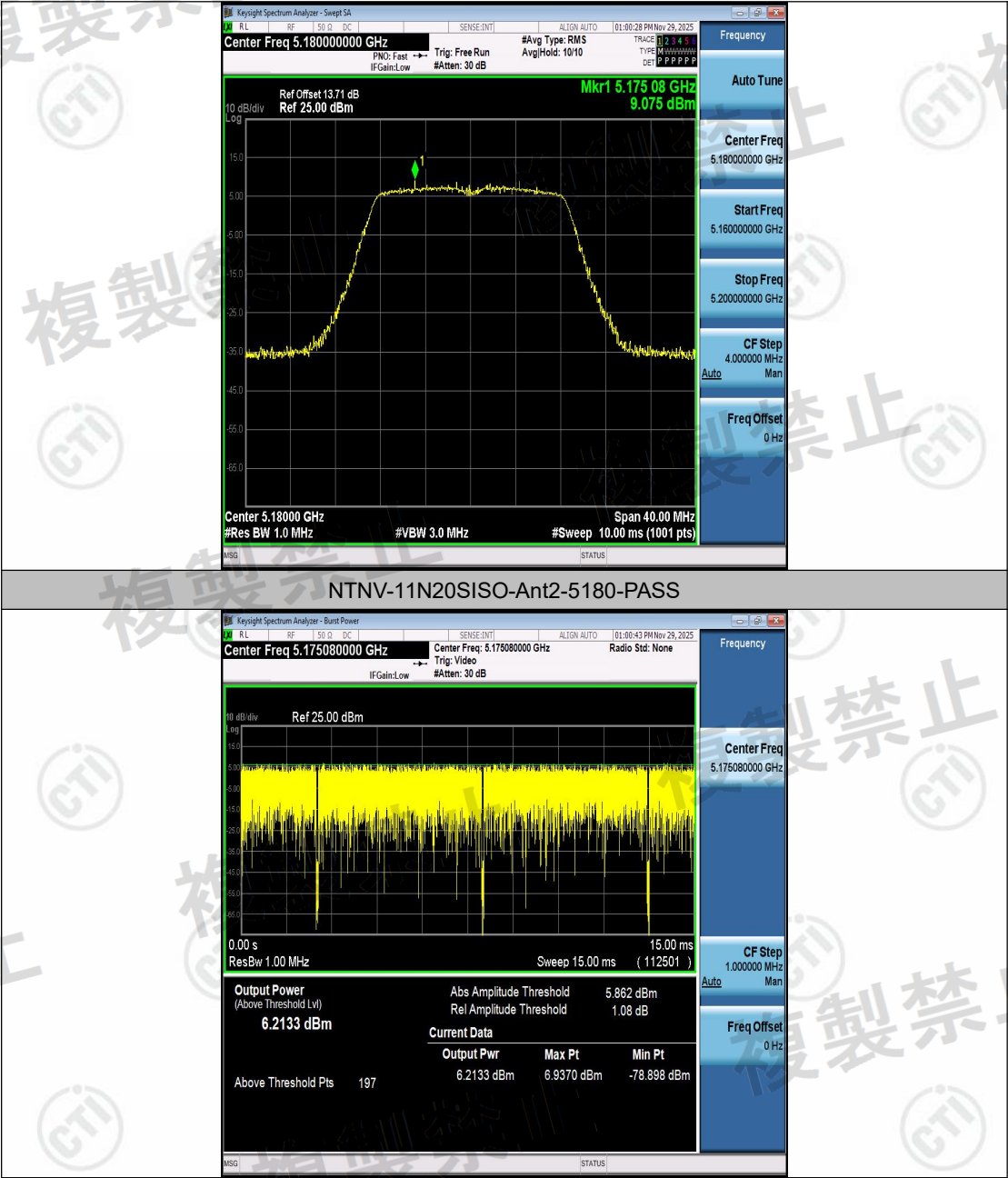
Test Graphs

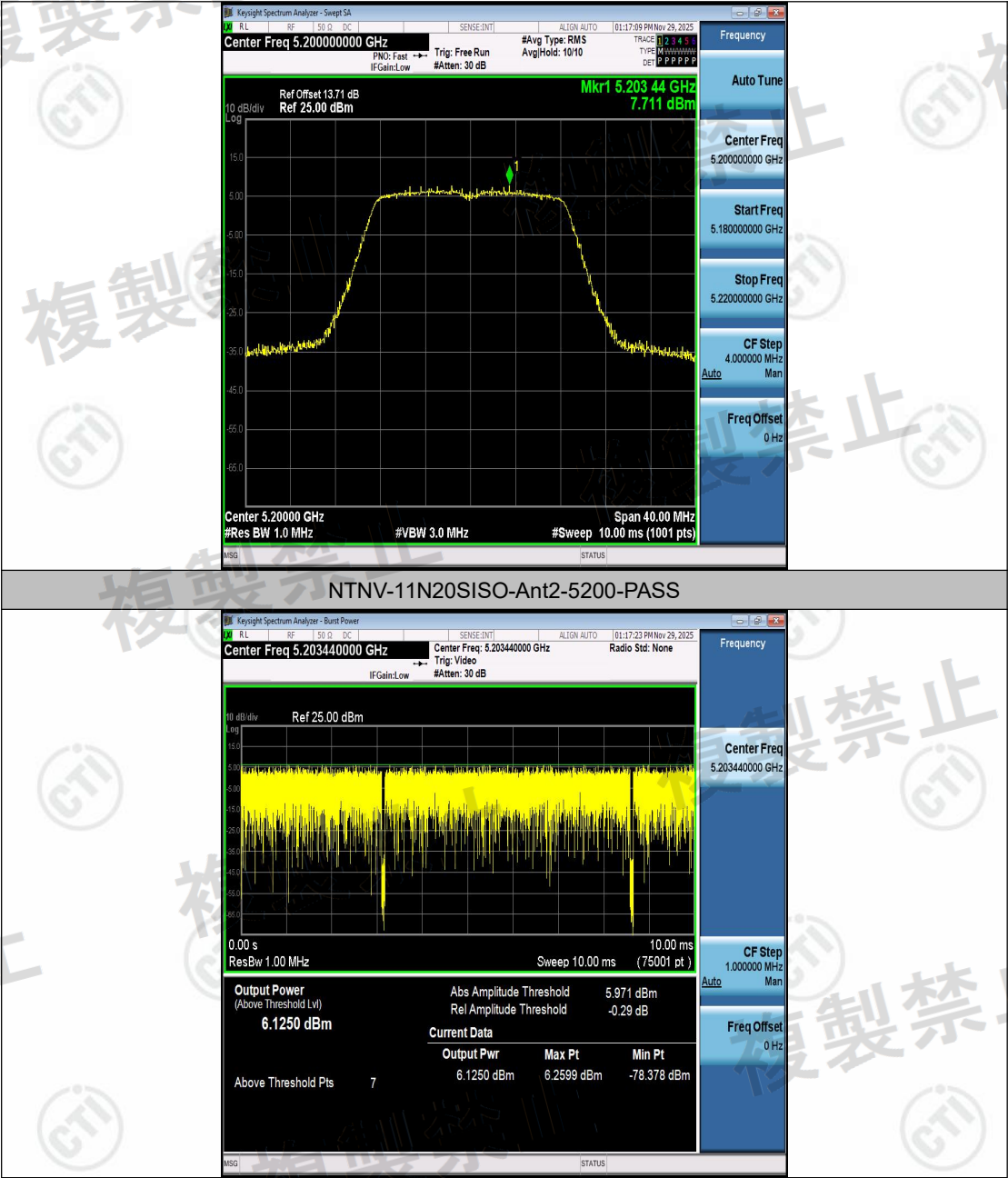


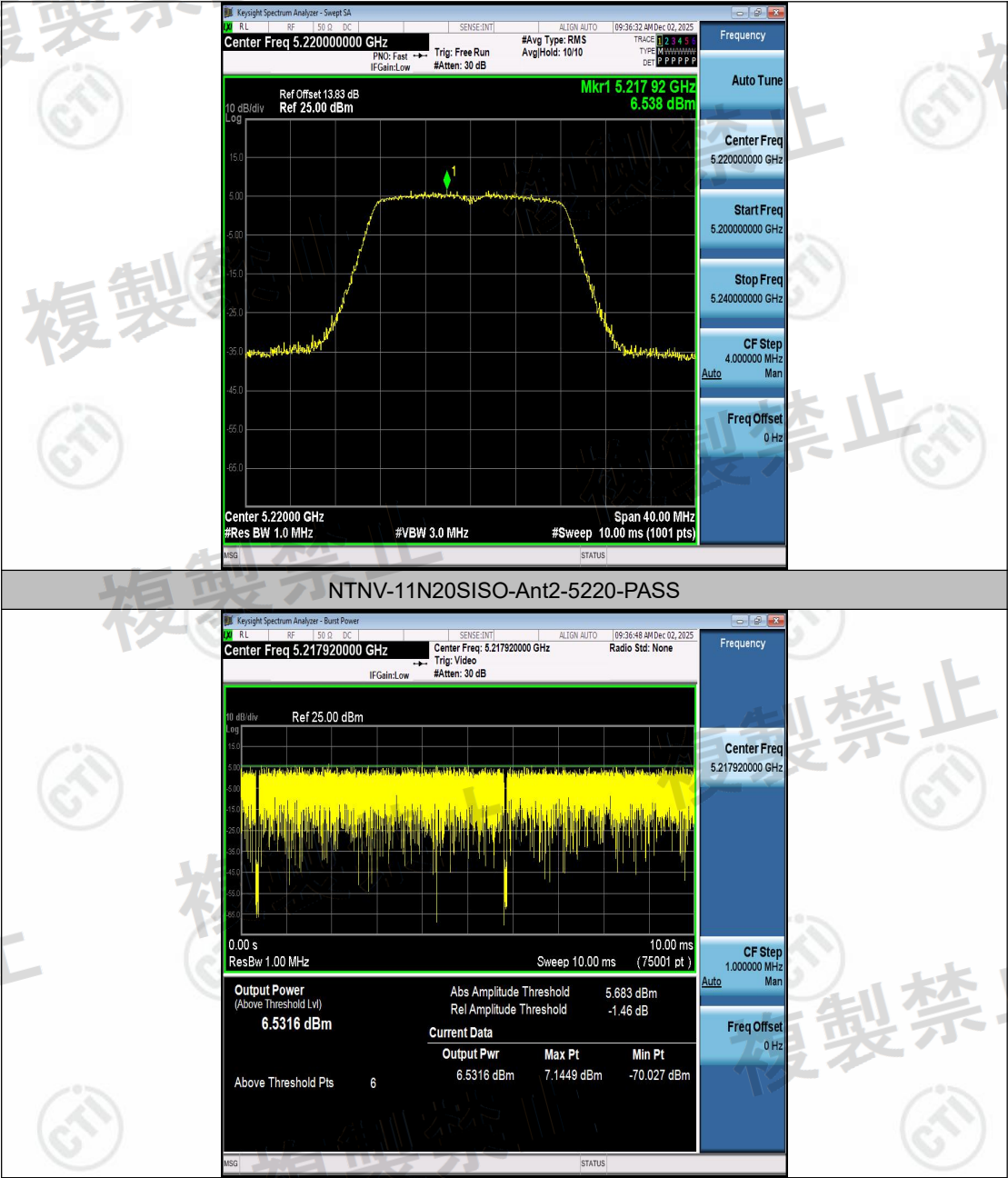


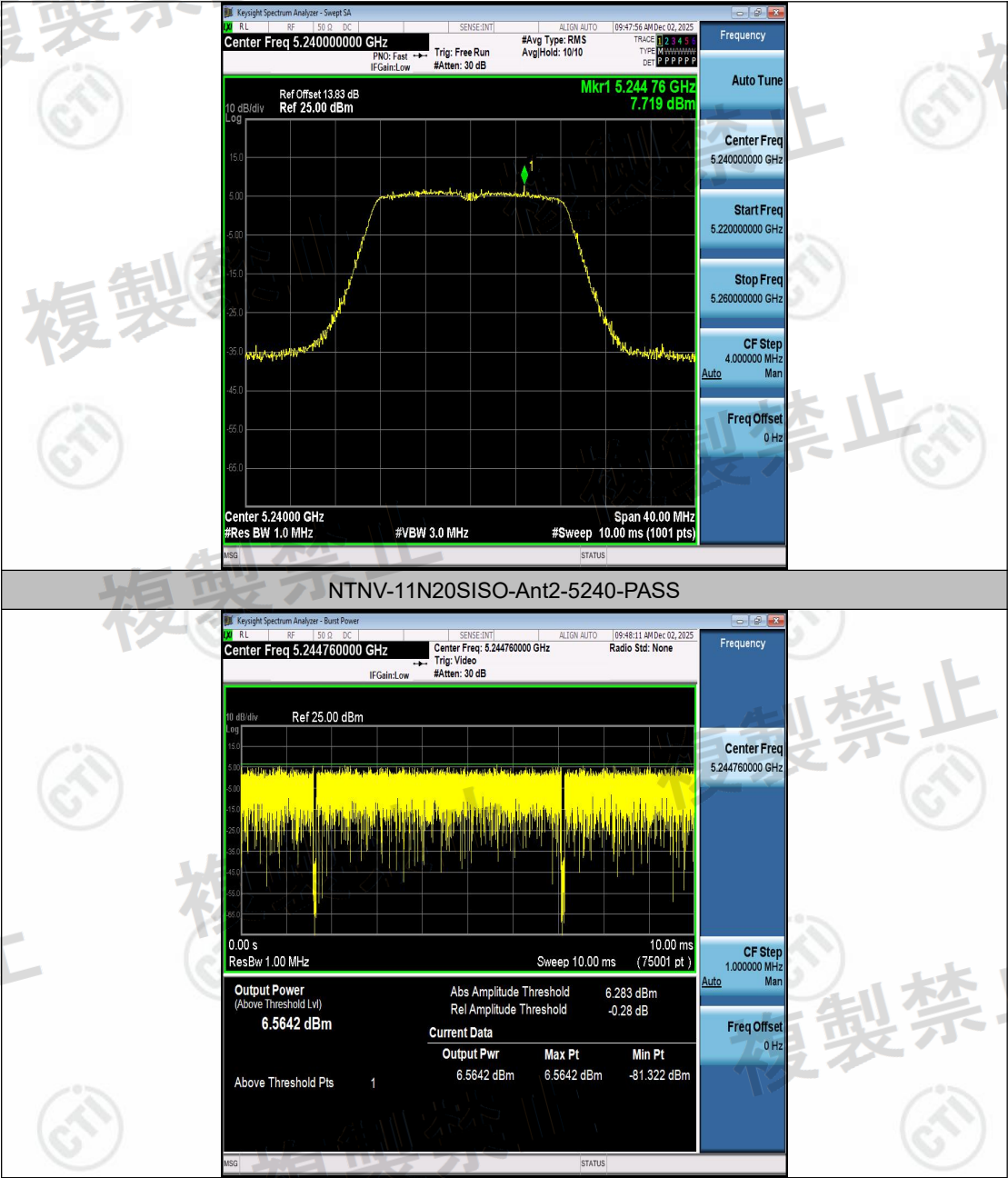


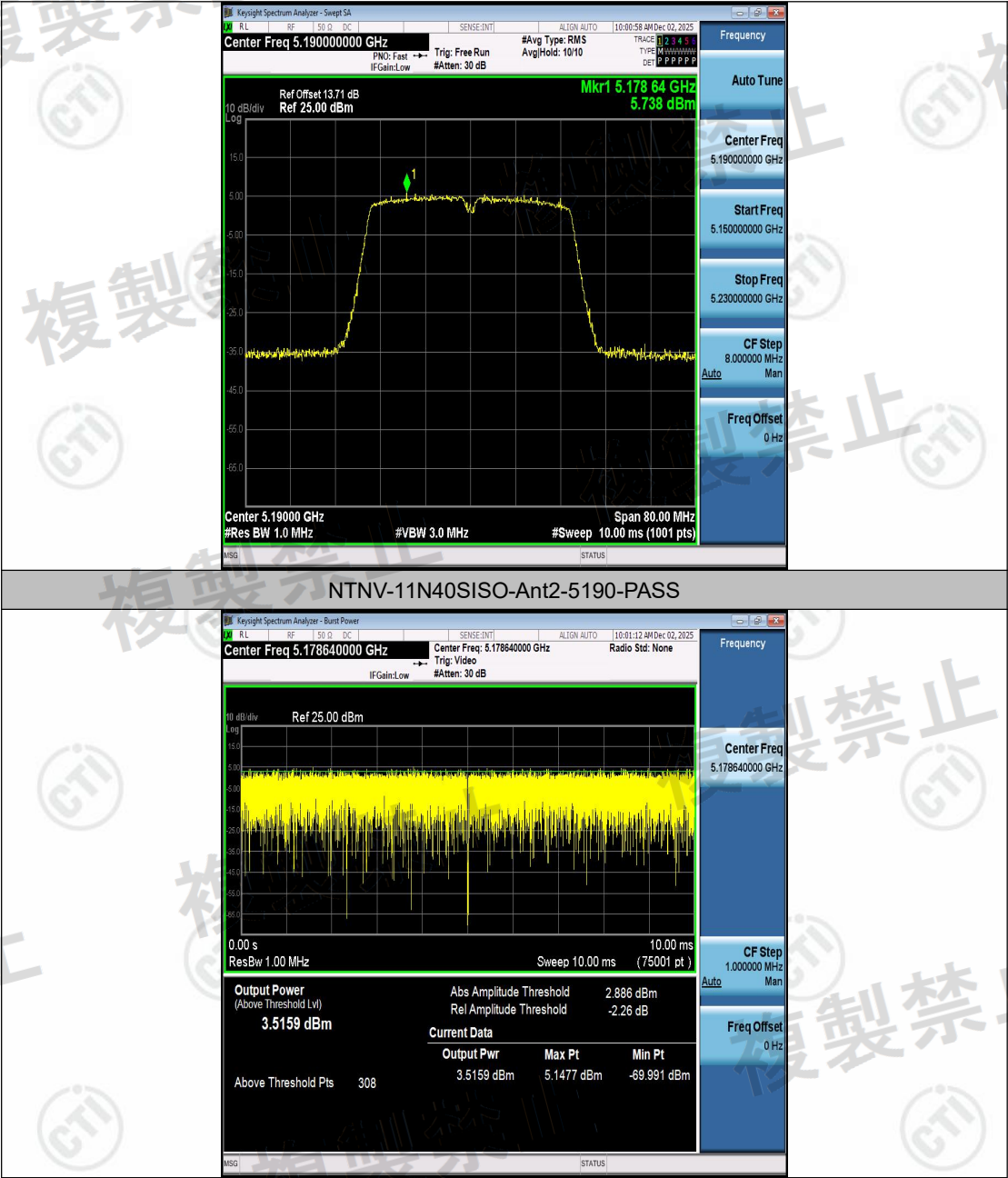


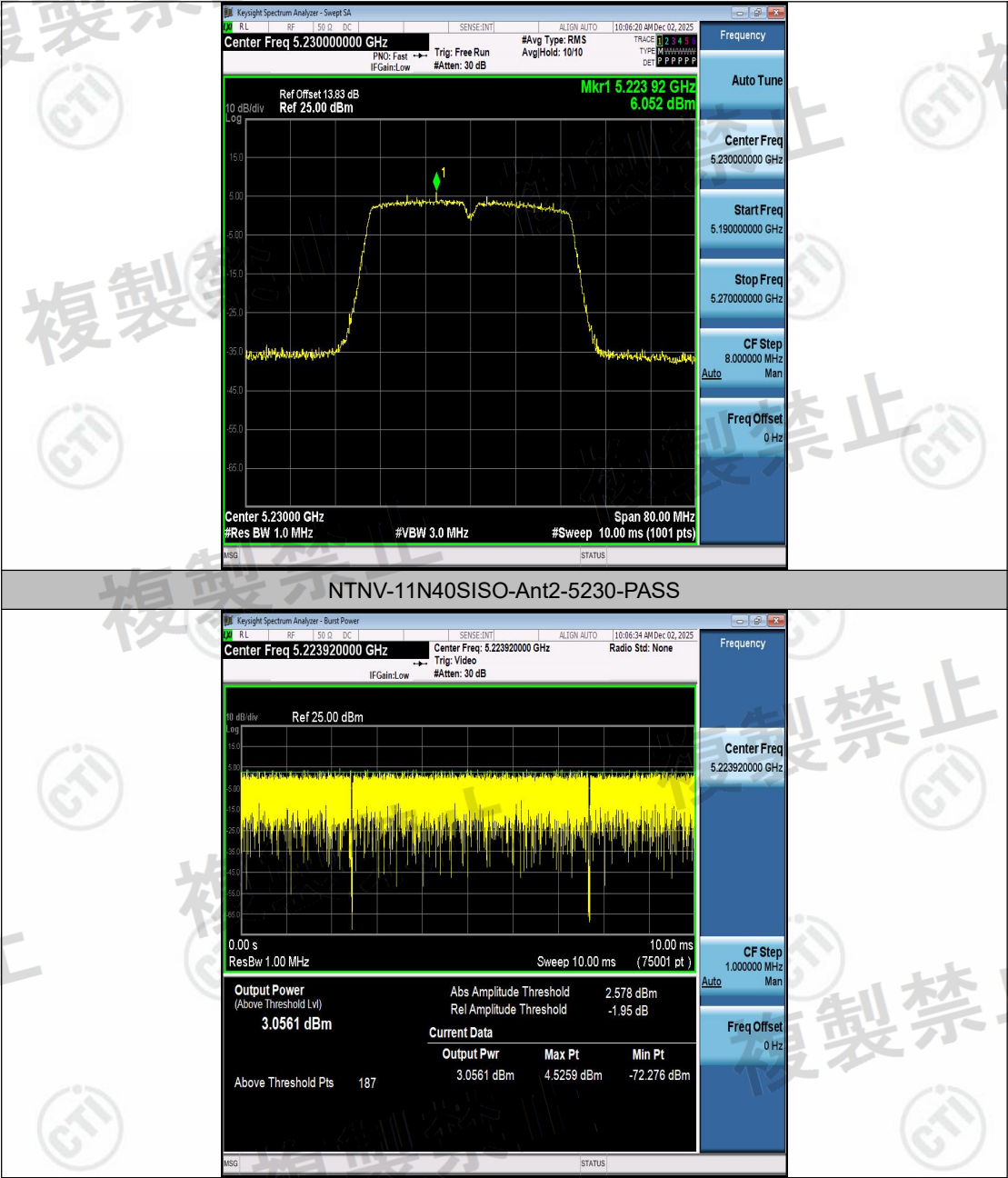


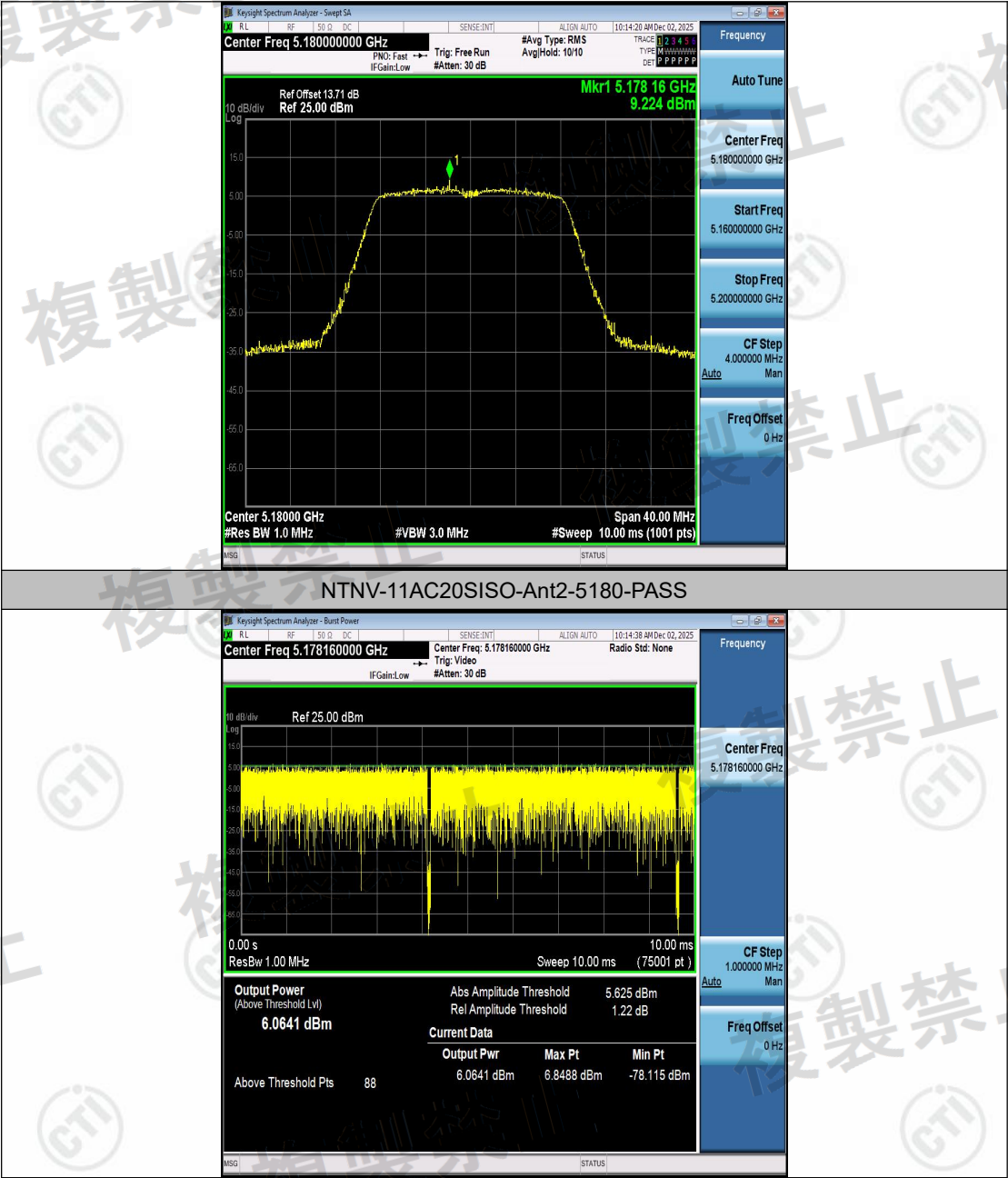


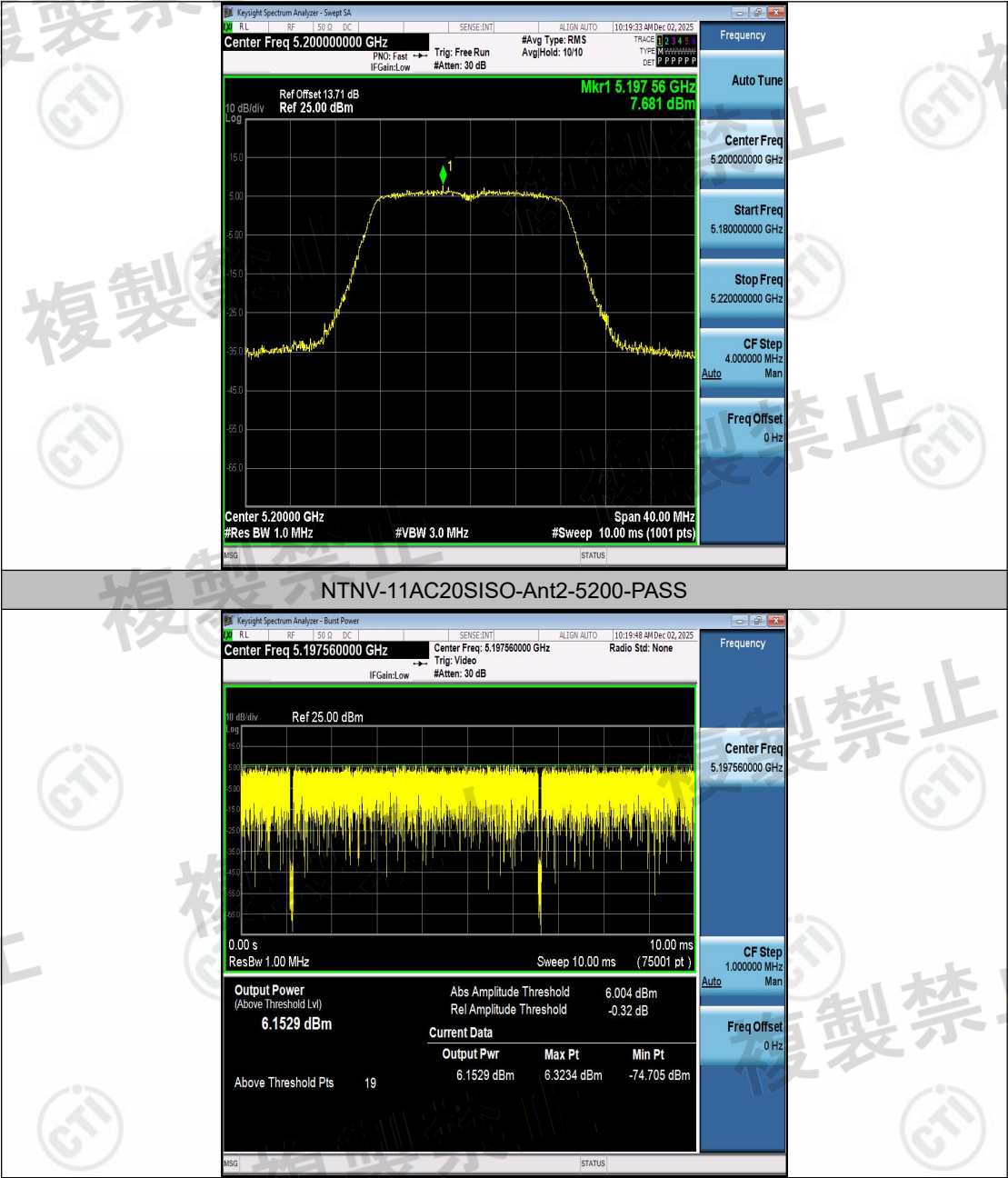


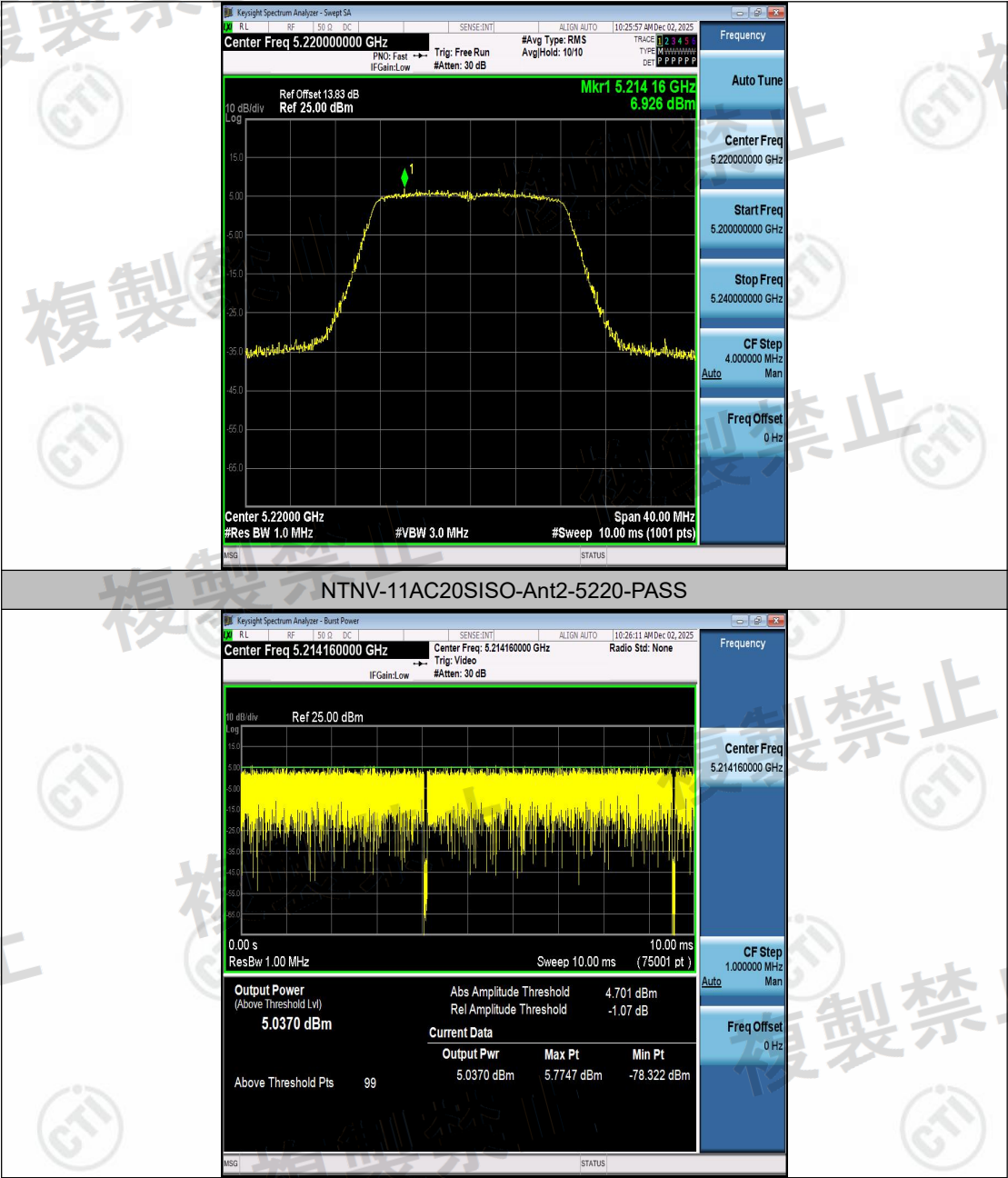


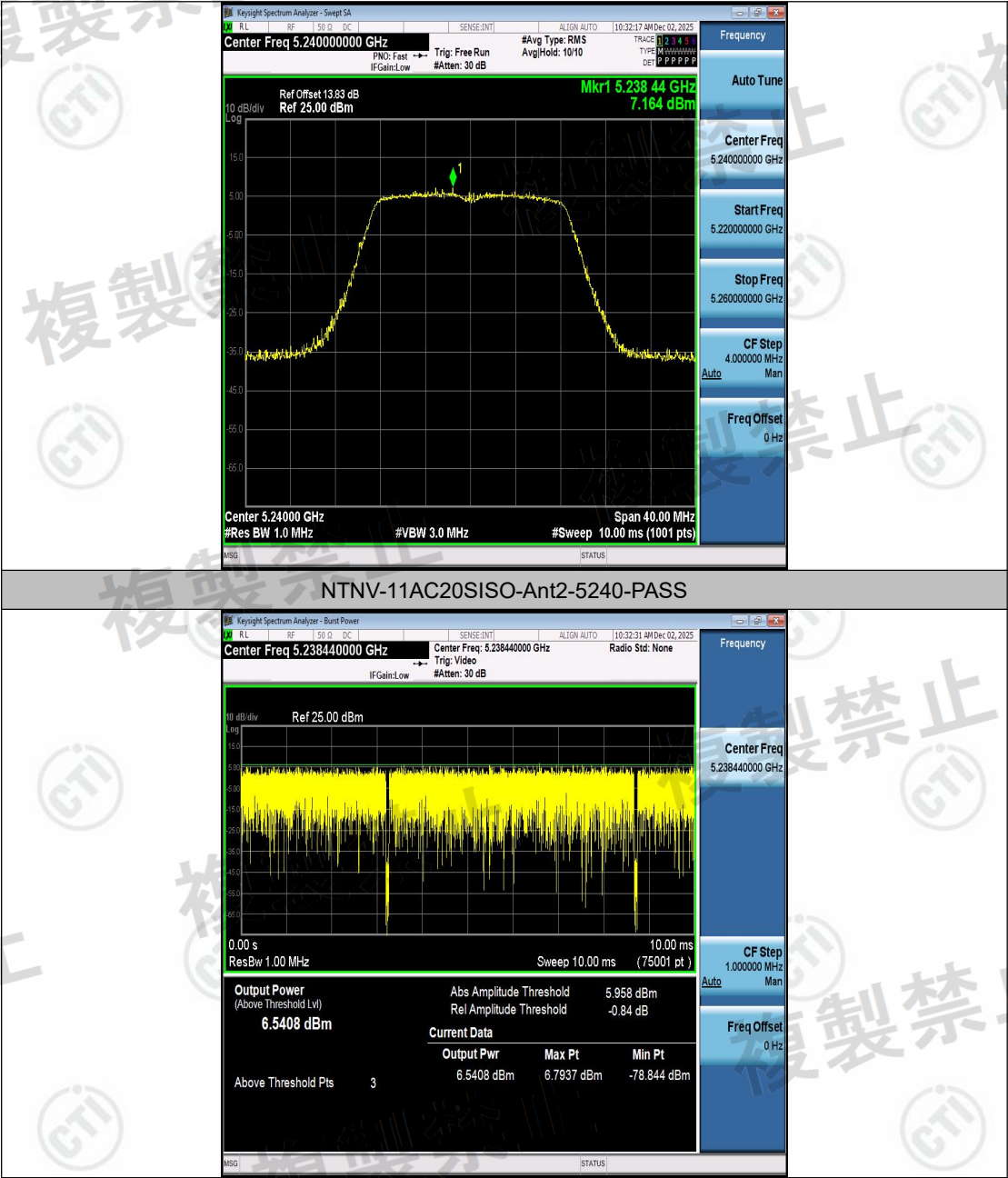


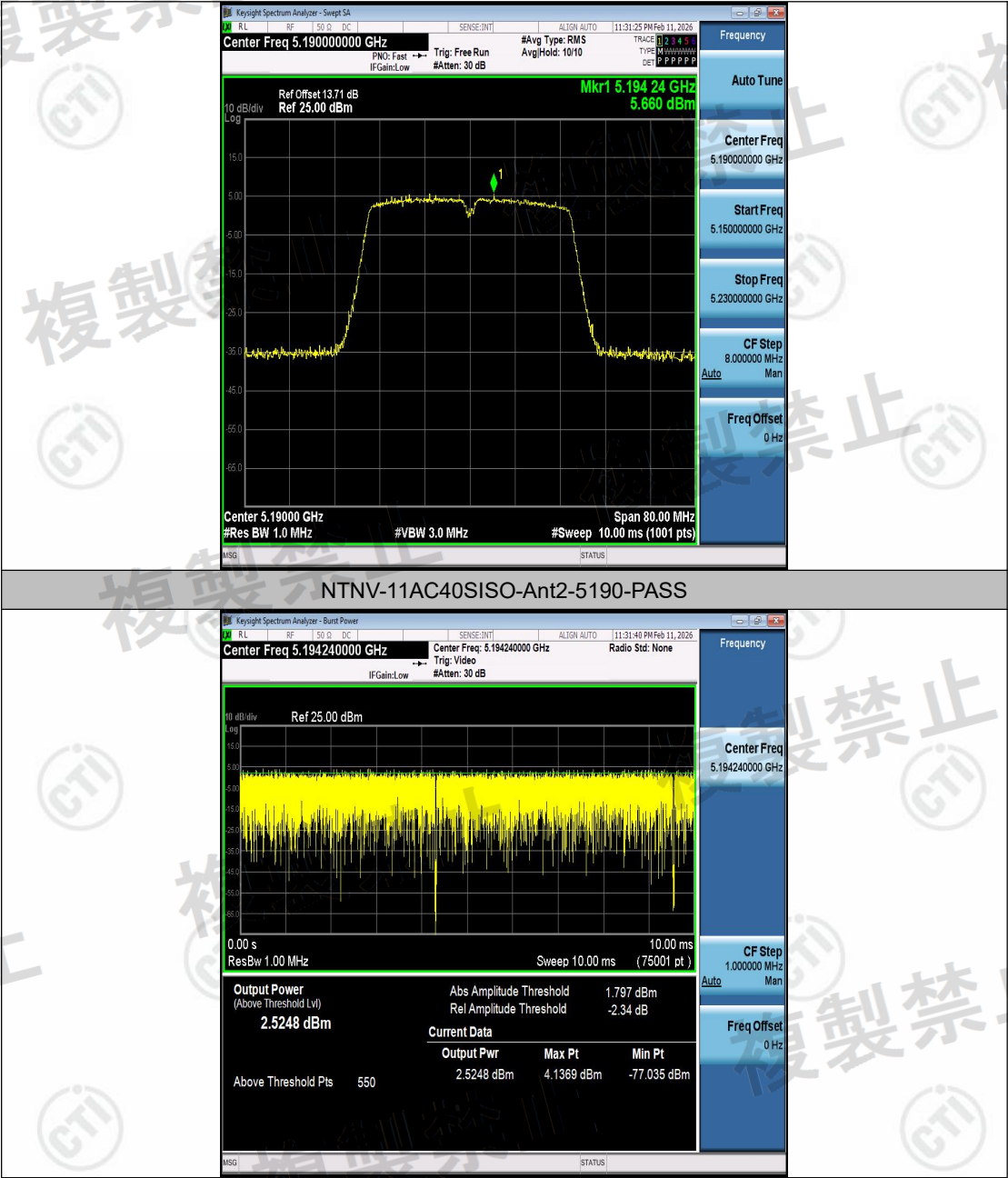


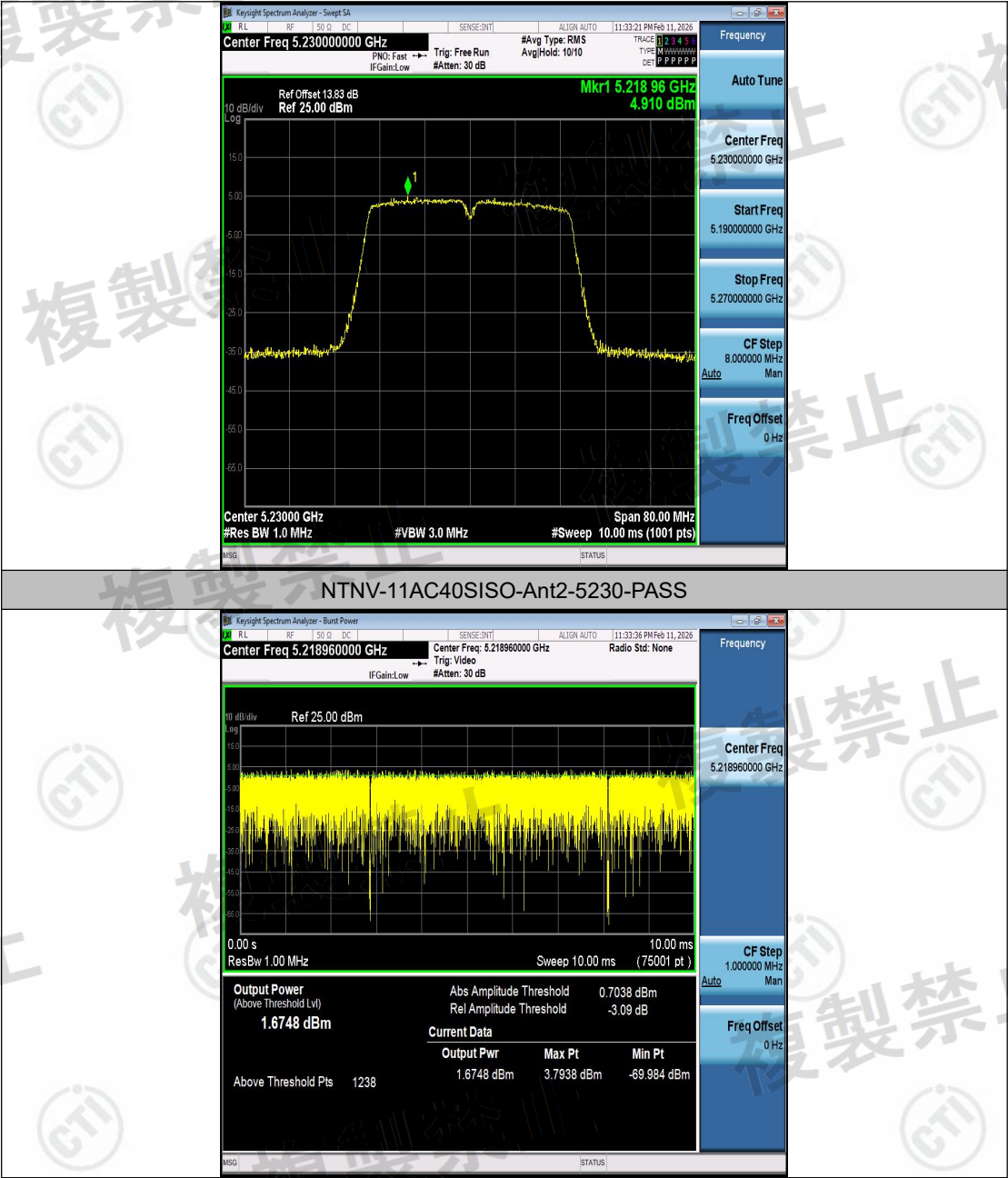


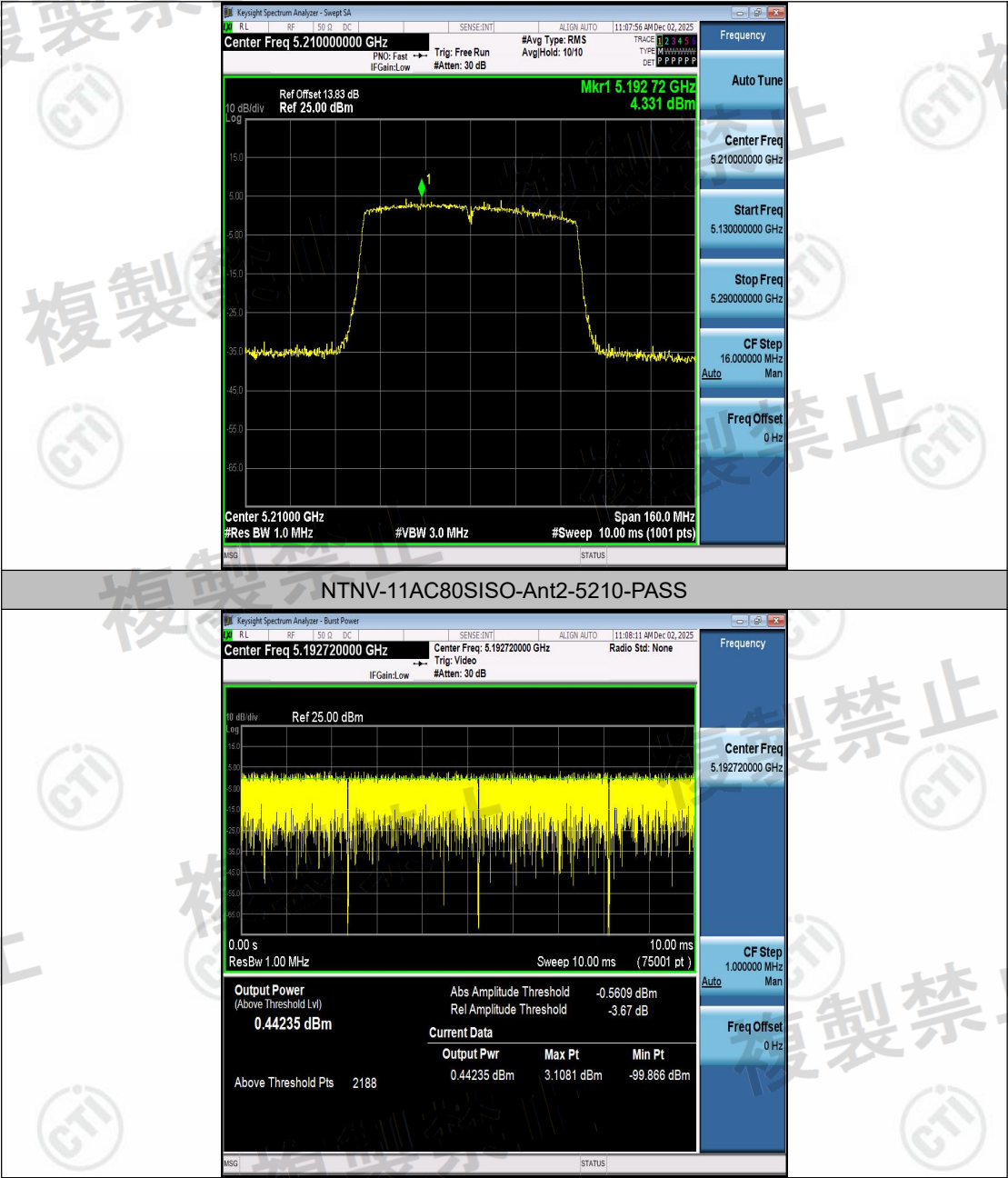


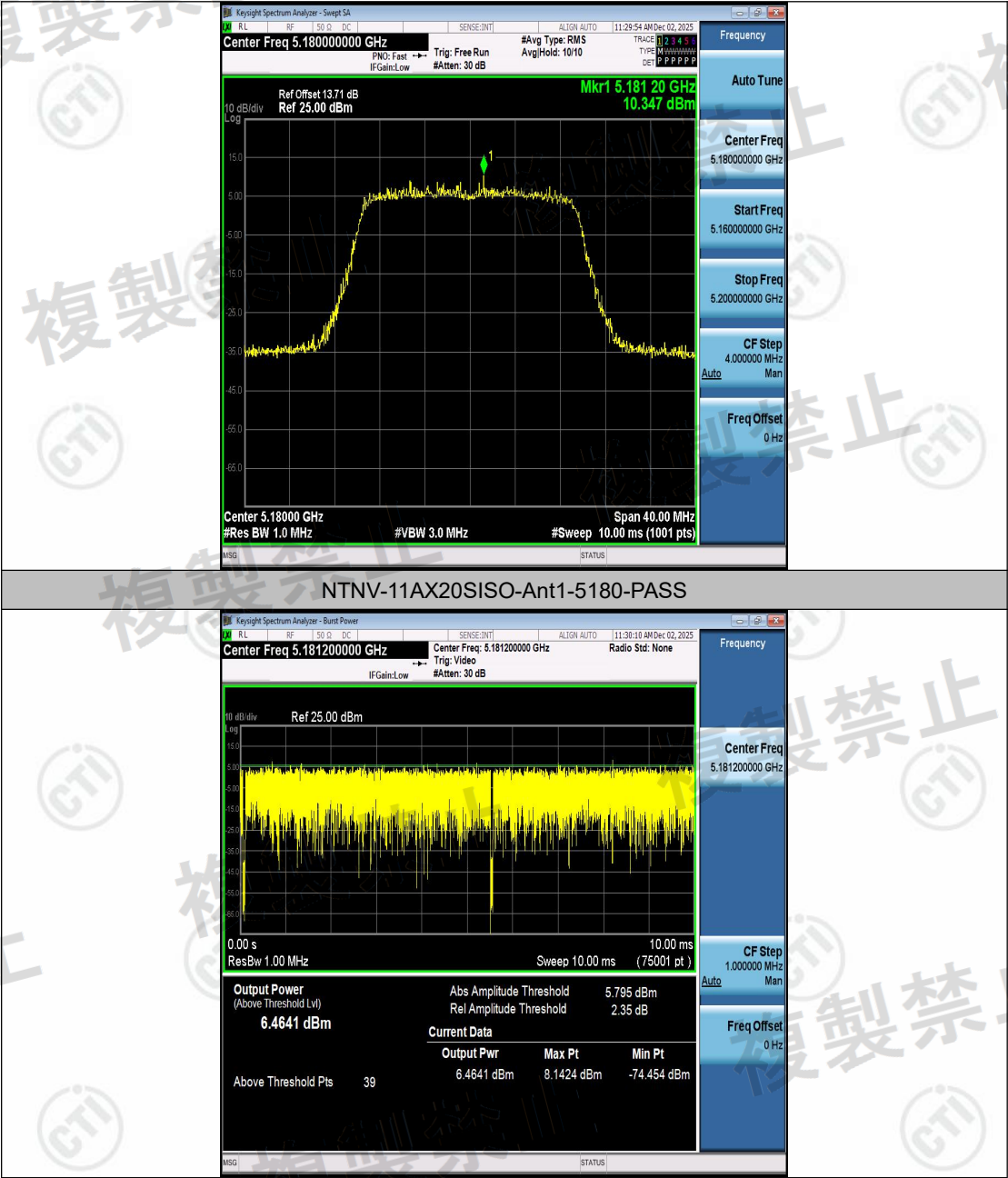


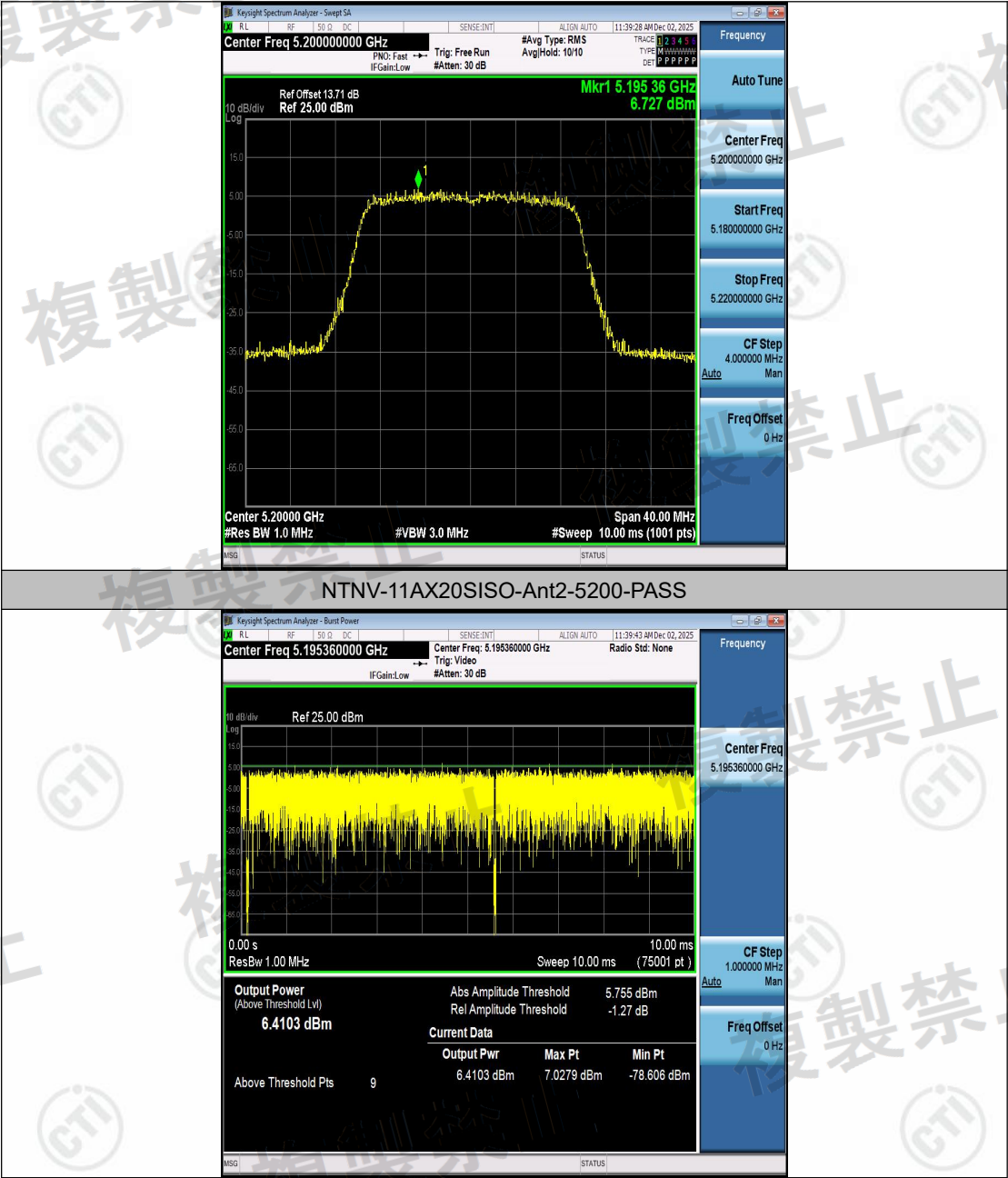


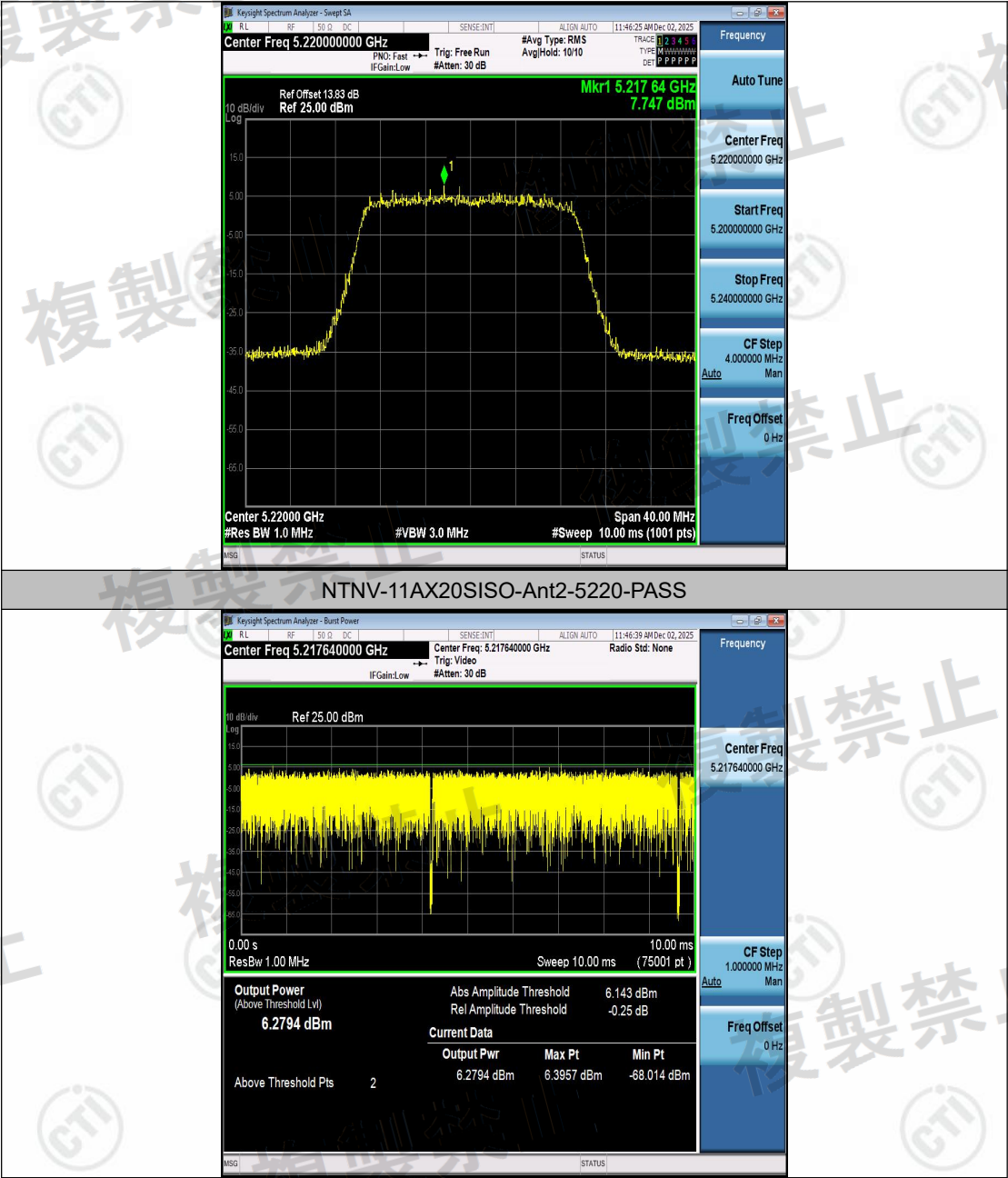


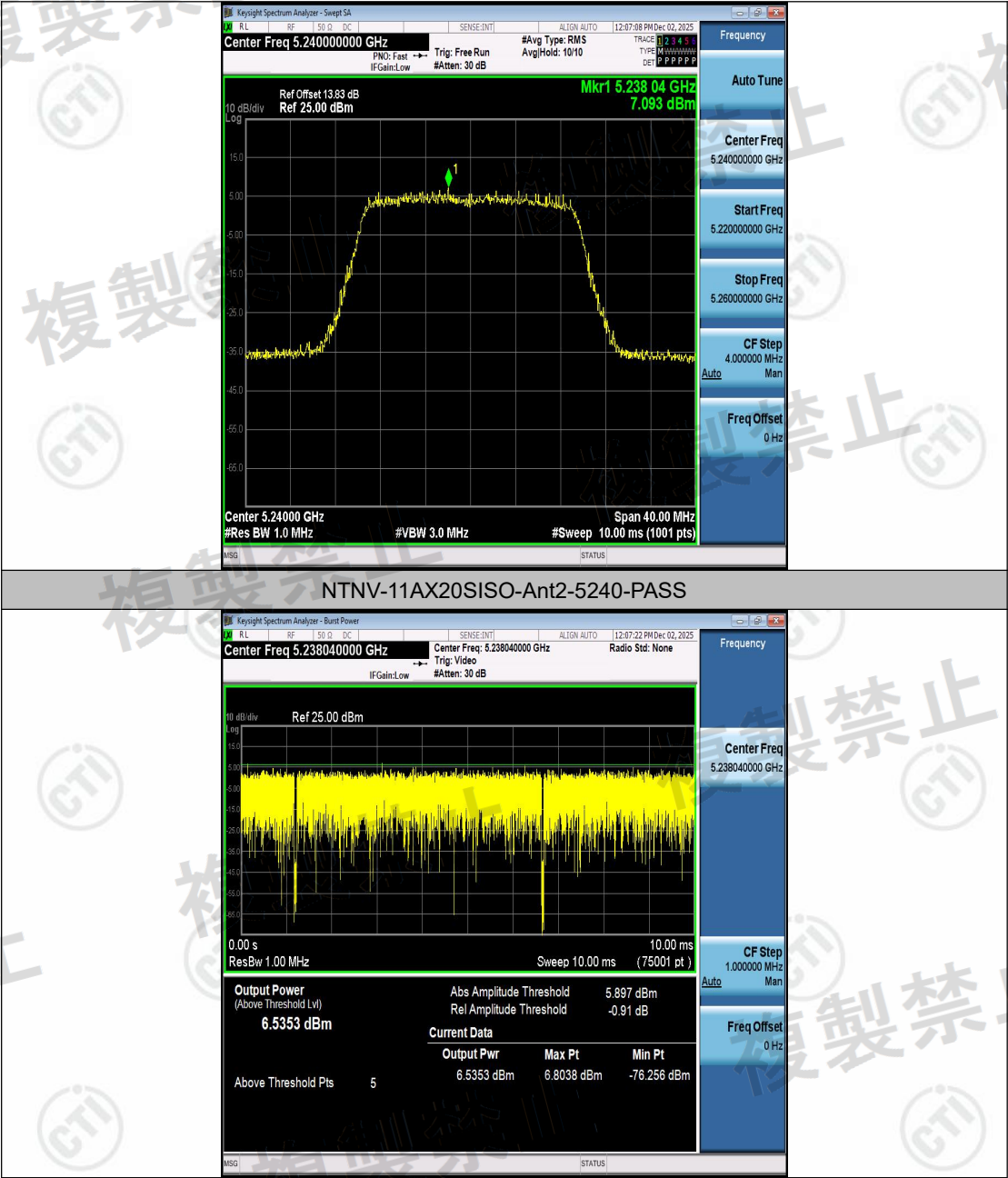


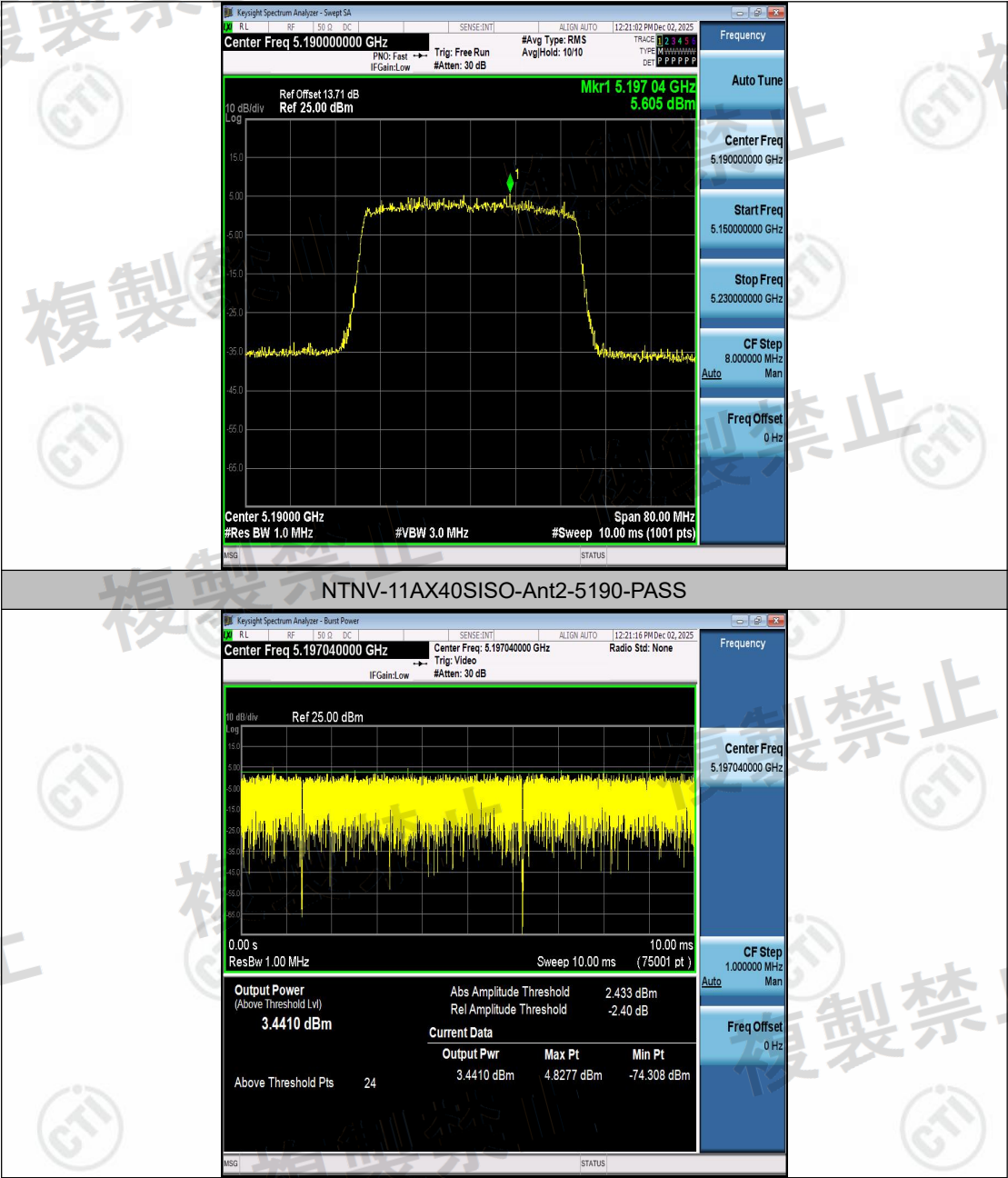


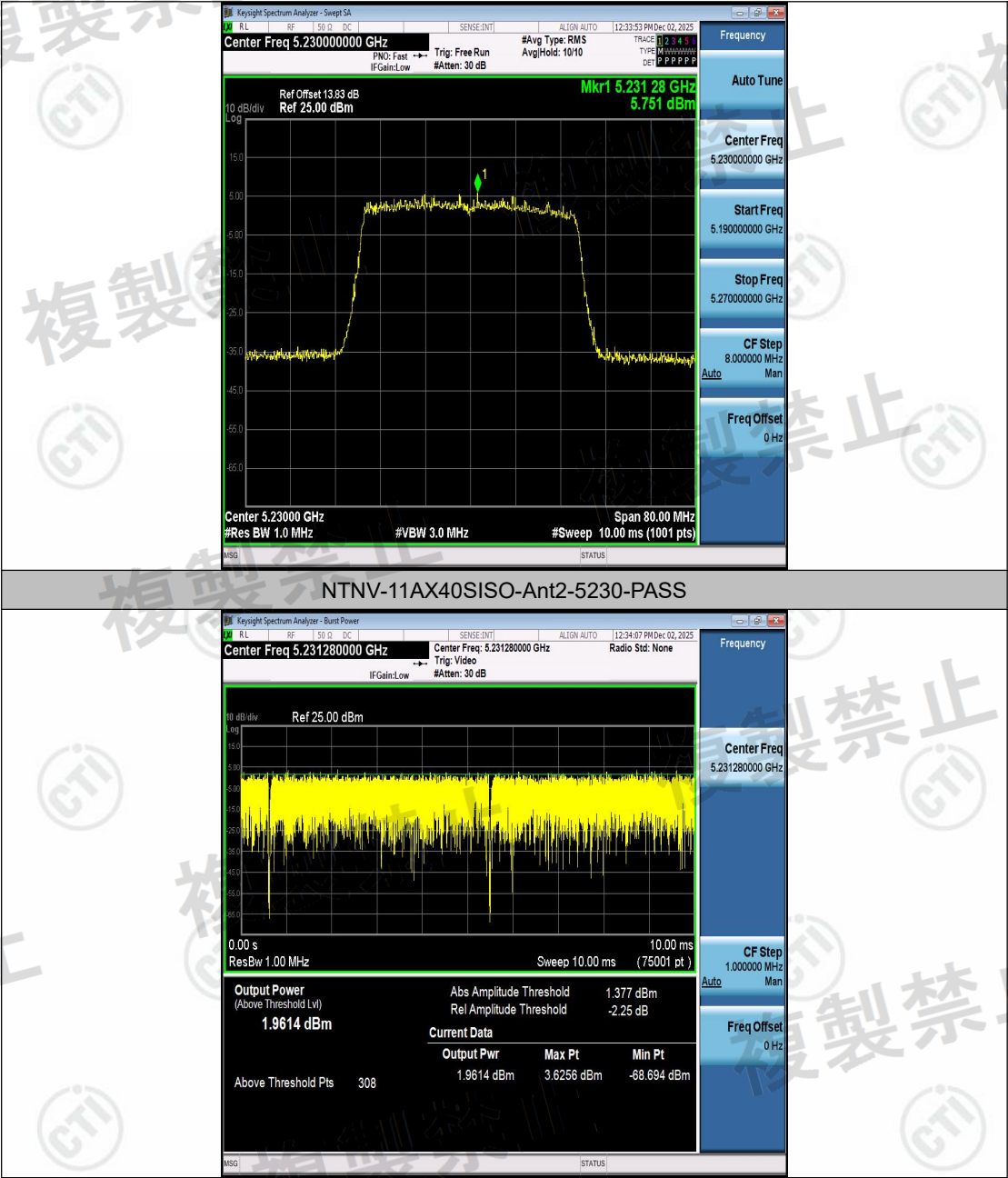


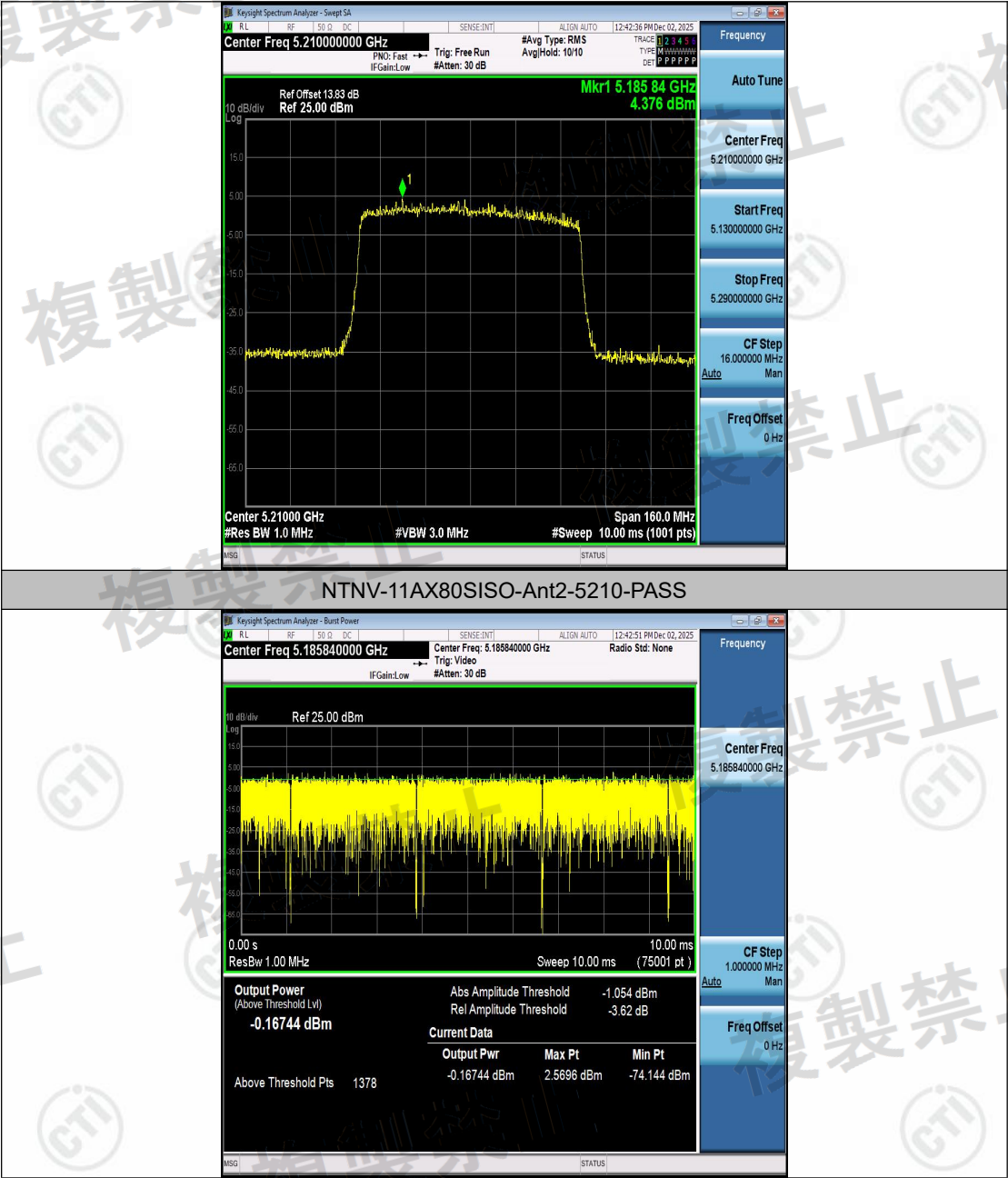










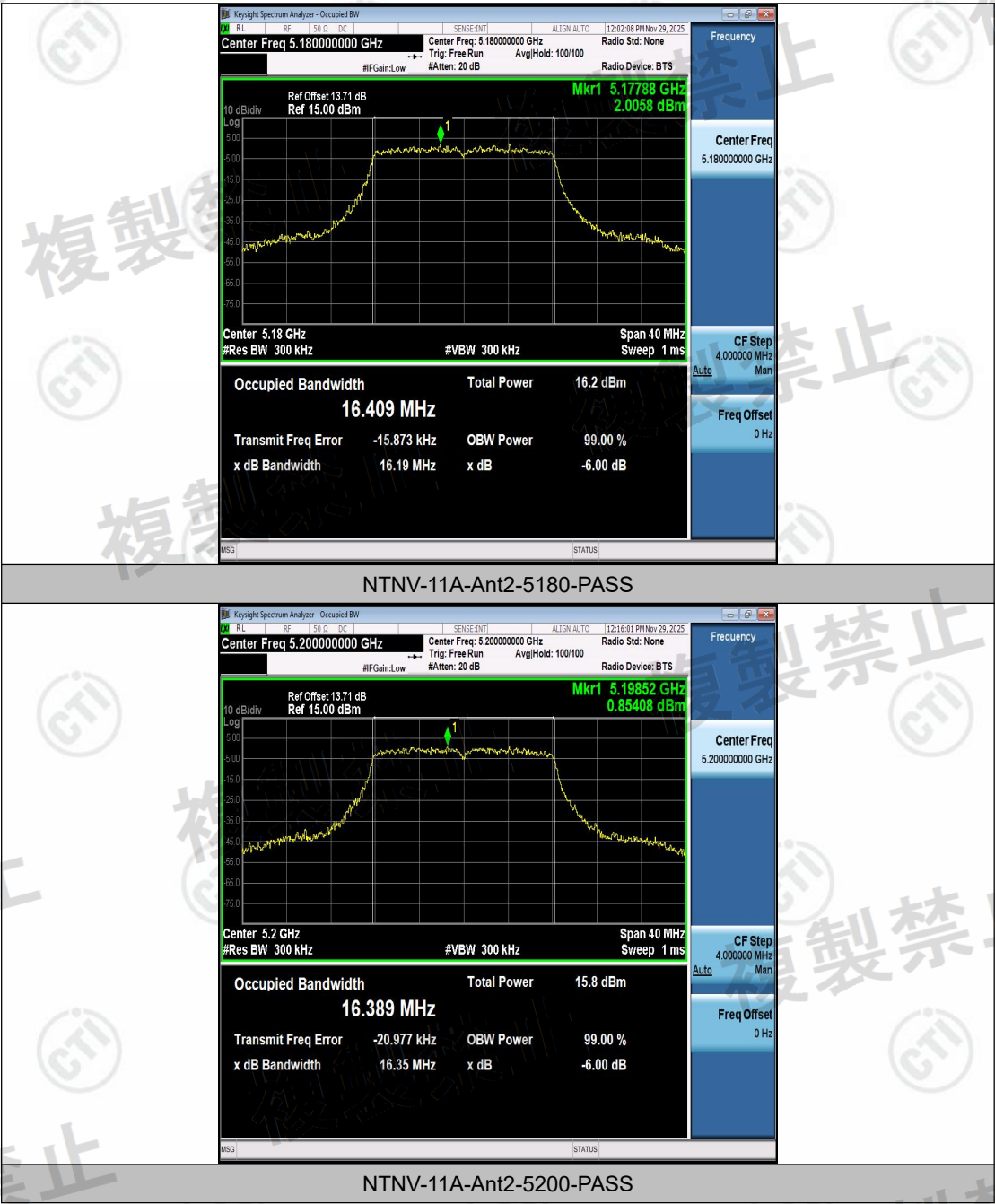


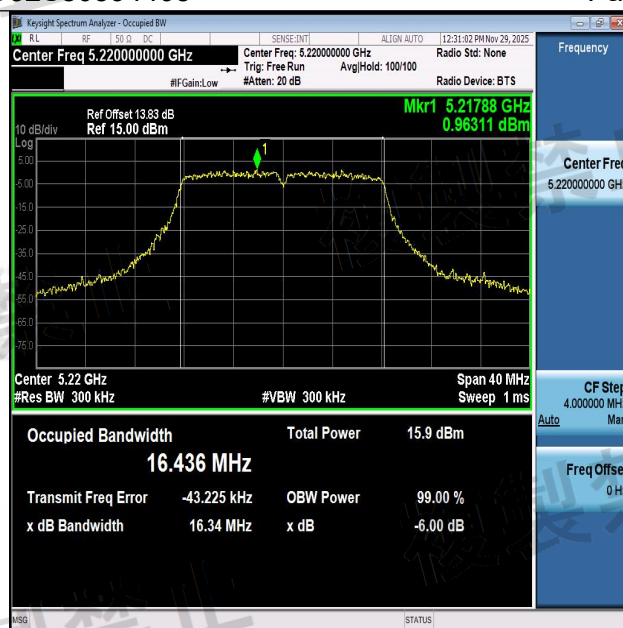
Appendix C: Occupied Bandwidth

Test Result

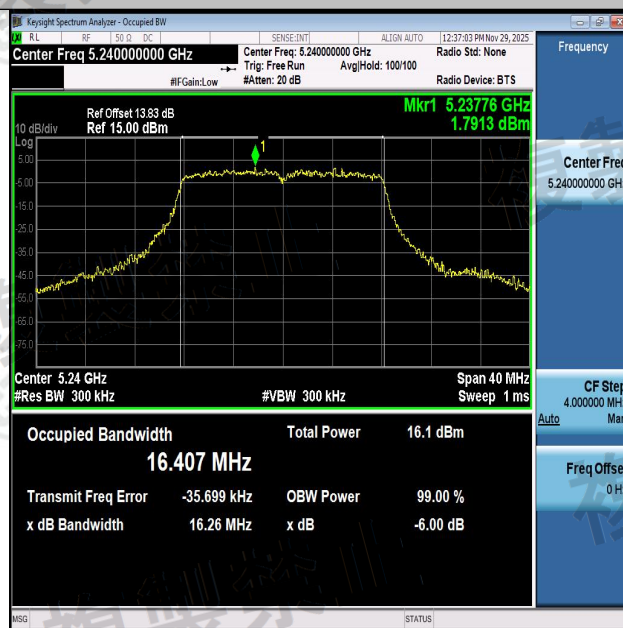
TestCondition	TestMode	Antenna	Frequency[MHz]	Result [MHz]	Limit [MHz]	Verdict
NTNV	11A	Ant2	5180	16.409	≤20	PASS
NTNV	11A	Ant2	5200	16.389	≤20	PASS
NTNV	11A	Ant2	5220	16.436	≤20	PASS
NTNV	11A	Ant2	5240	16.407	≤20	PASS
NTNV	11N20SISO	Ant2	5180	17.593	≤20	PASS
NTNV	11N20SISO	Ant2	5200	17.577	≤20	PASS
NTNV	11N20SISO	Ant2	5220	17.587	≤20	PASS
NTNV	11N20SISO	Ant2	5240	17.603	≤20	PASS
NTNV	11N40SISO	Ant2	5190	35.938	≤40	PASS
NTNV	11N40SISO	Ant2	5230	35.972	≤40	PASS
NTNV	11AC20SISO	Ant2	5180	17.596	≤20	PASS
NTNV	11AC20SISO	Ant2	5200	17.597	≤20	PASS
NTNV	11AC20SISO	Ant2	5220	17.584	≤20	PASS
NTNV	11AC20SISO	Ant2	5240	17.588	≤20	PASS
NTNV	11AC40SISO	Ant2	5190	35.975	≤40	PASS
NTNV	11AC40SISO	Ant2	5230	35.942	≤40	PASS
NTNV	11AC80SISO	Ant2	5210	75.276	≤80	PASS
NTNV	11AX20SISO	Ant2	5180	18.909	≤20	PASS
NTNV	11AX20SISO	Ant2	5200	18.916	≤20	PASS
NTNV	11AX20SISO	Ant2	5220	18.917	≤20	PASS
NTNV	11AX20SISO	Ant2	5240	18.927	≤20	PASS
NTNV	11AX40SISO	Ant2	5190	37.649	≤40	PASS
NTNV	11AX40SISO	Ant2	5230	37.734	≤40	PASS
NTNV	11AX80SISO	Ant2	5210	77.002	≤80	PASS

Test Graphs

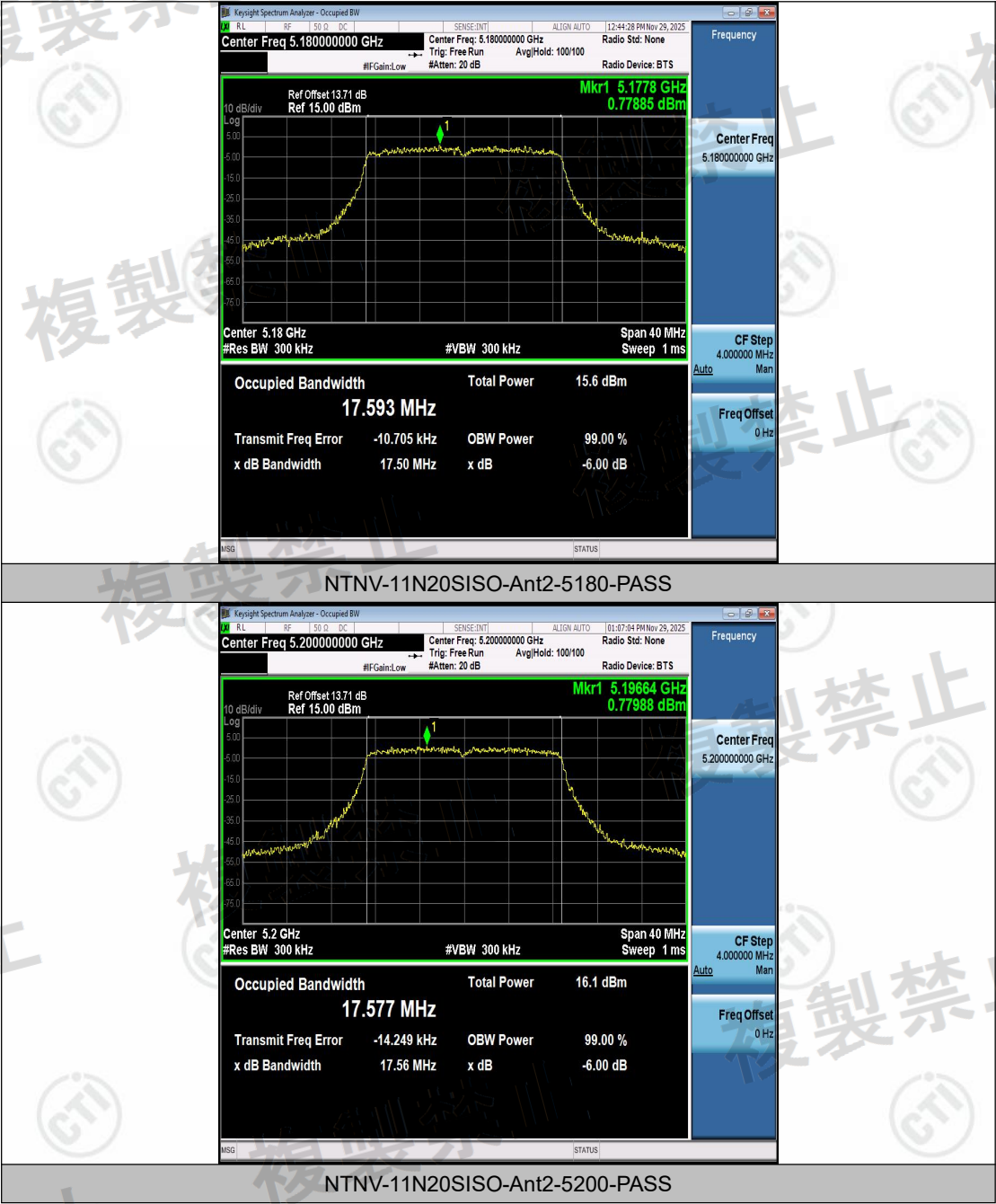


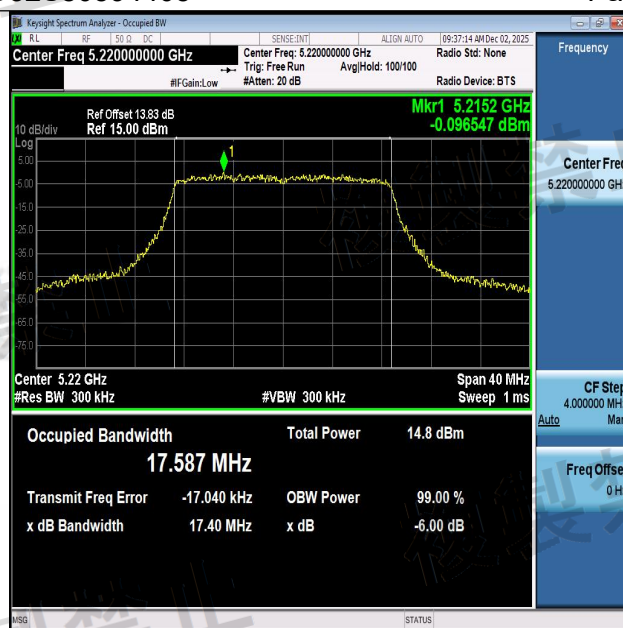


NTNV-11A-Ant2-5220-PASS

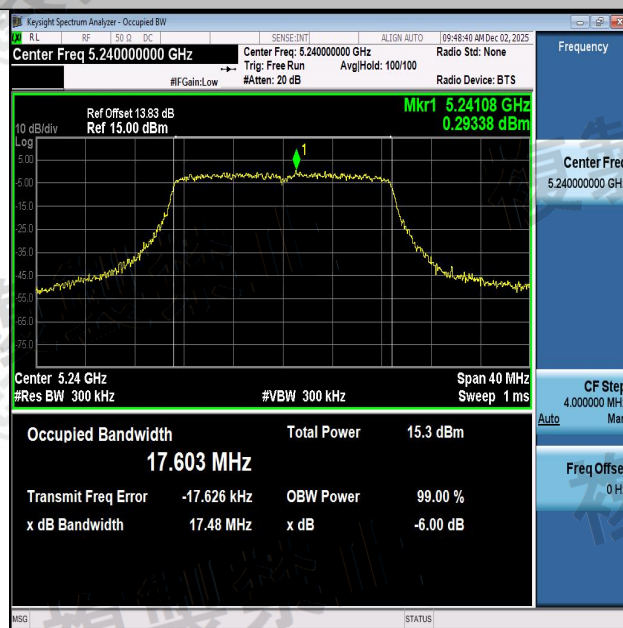


NTNV-11A-Ant2-5240-PASS

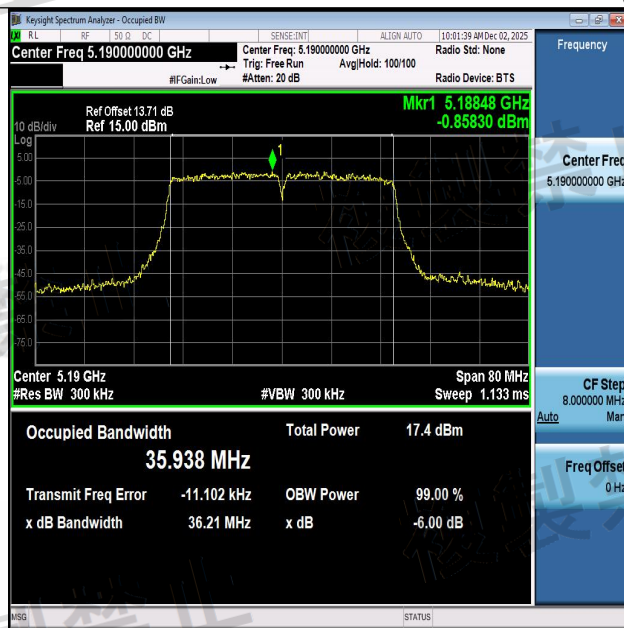




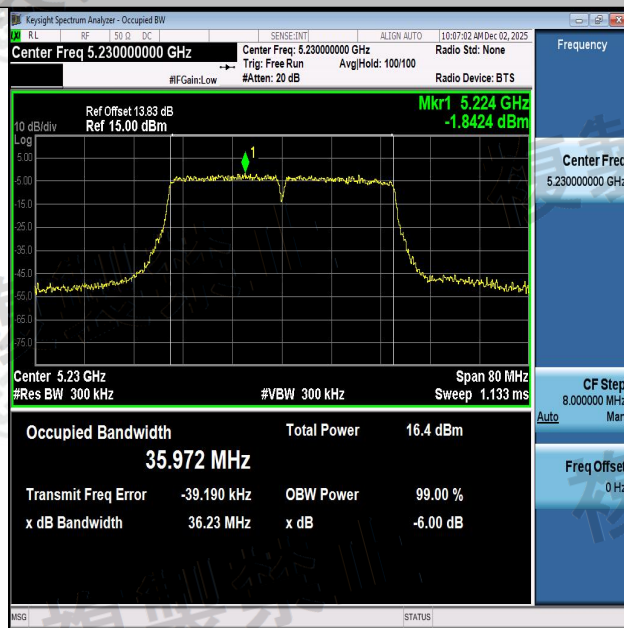
NTNV-11N20SISO-Ant2-5220-PASS



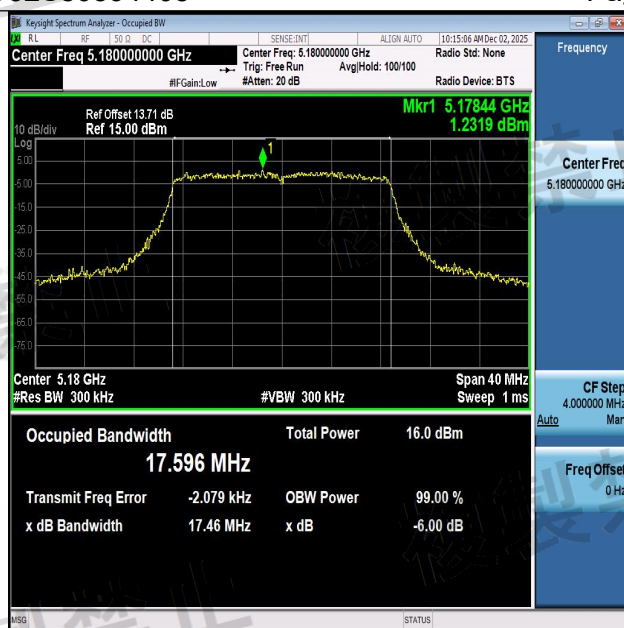
NTNV-11N20SISO-Ant2-5240-PASS



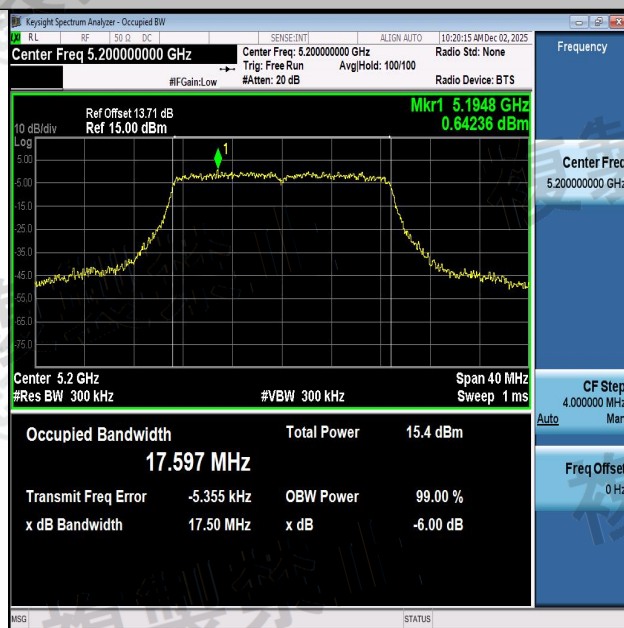
NTNV-11N40SISO-Ant2-5190-PASS



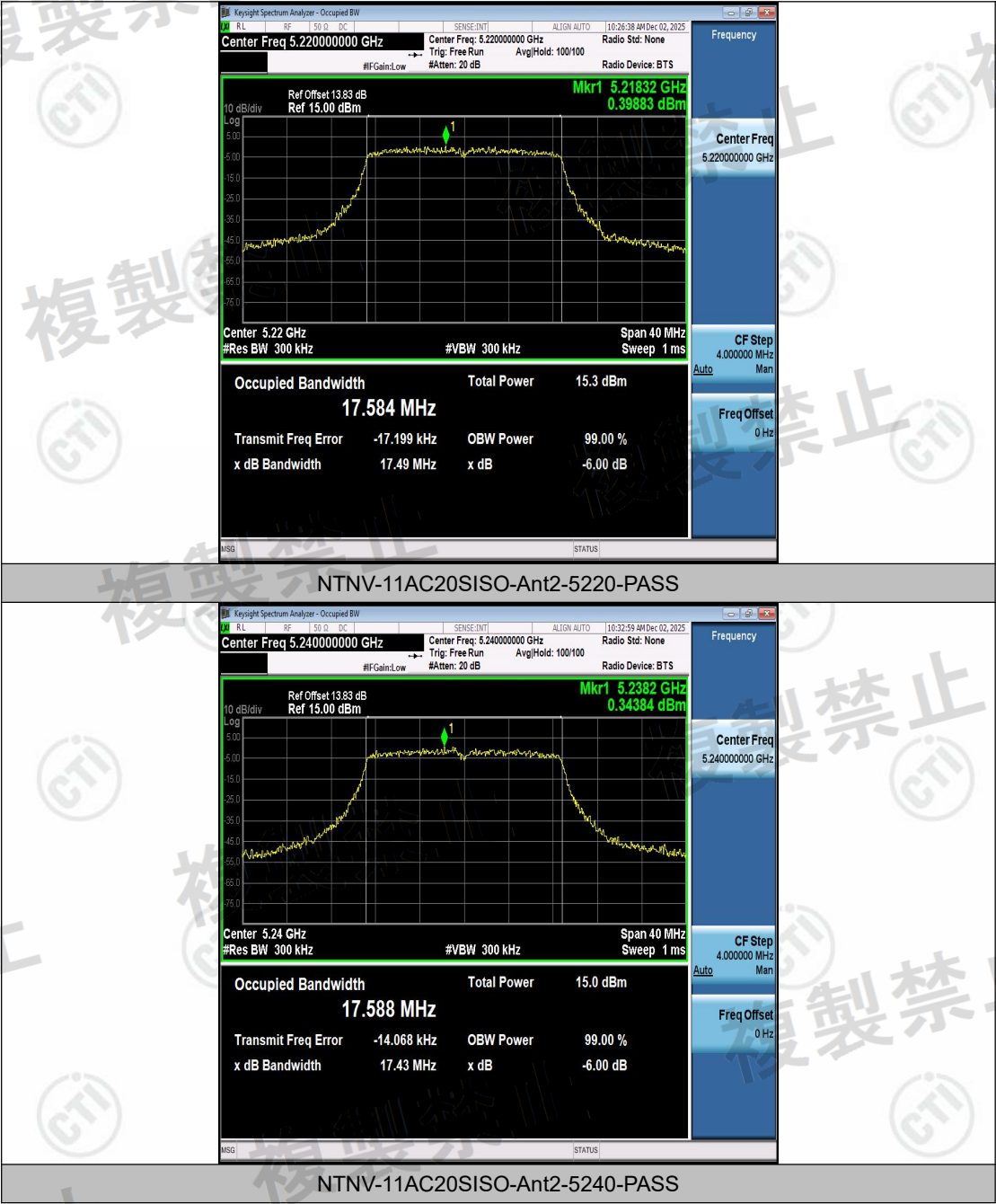
NTNV-11N40SISO-Ant2-5230-PASS

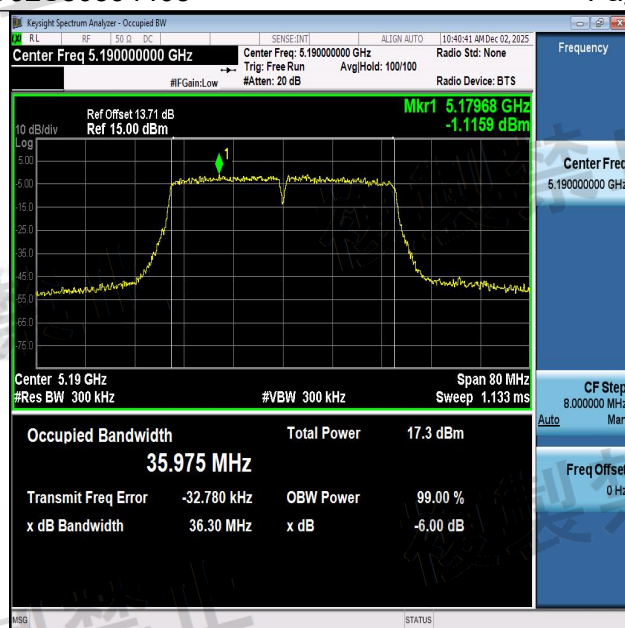


NTNV-11AC20SISO-Ant2-5180-PASS

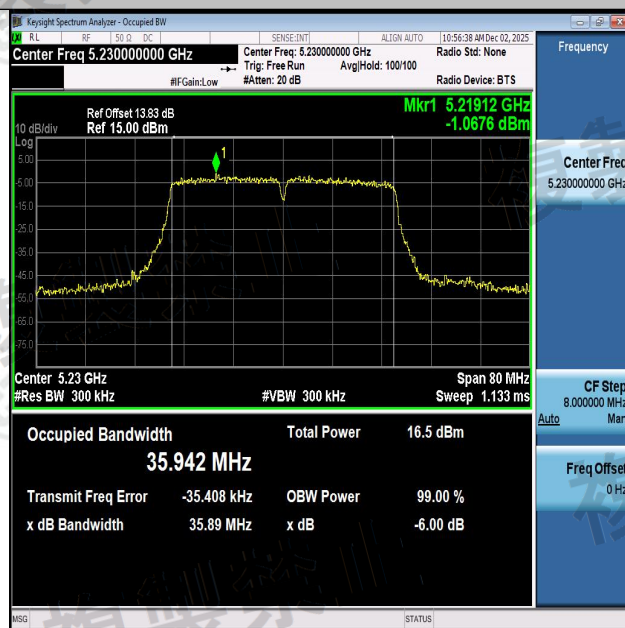


NTNV-11AC20SISO-Ant2-5200-PASS

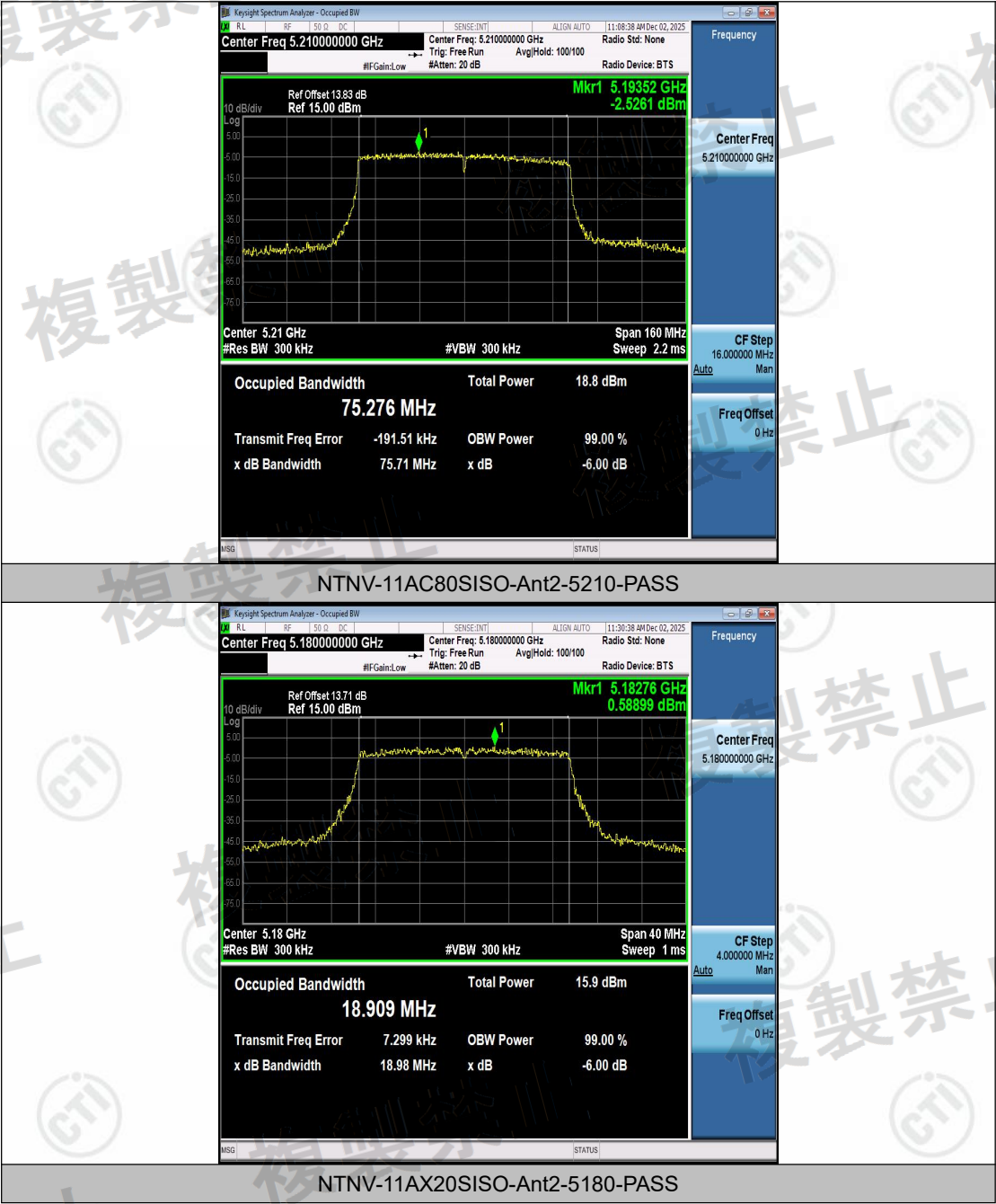


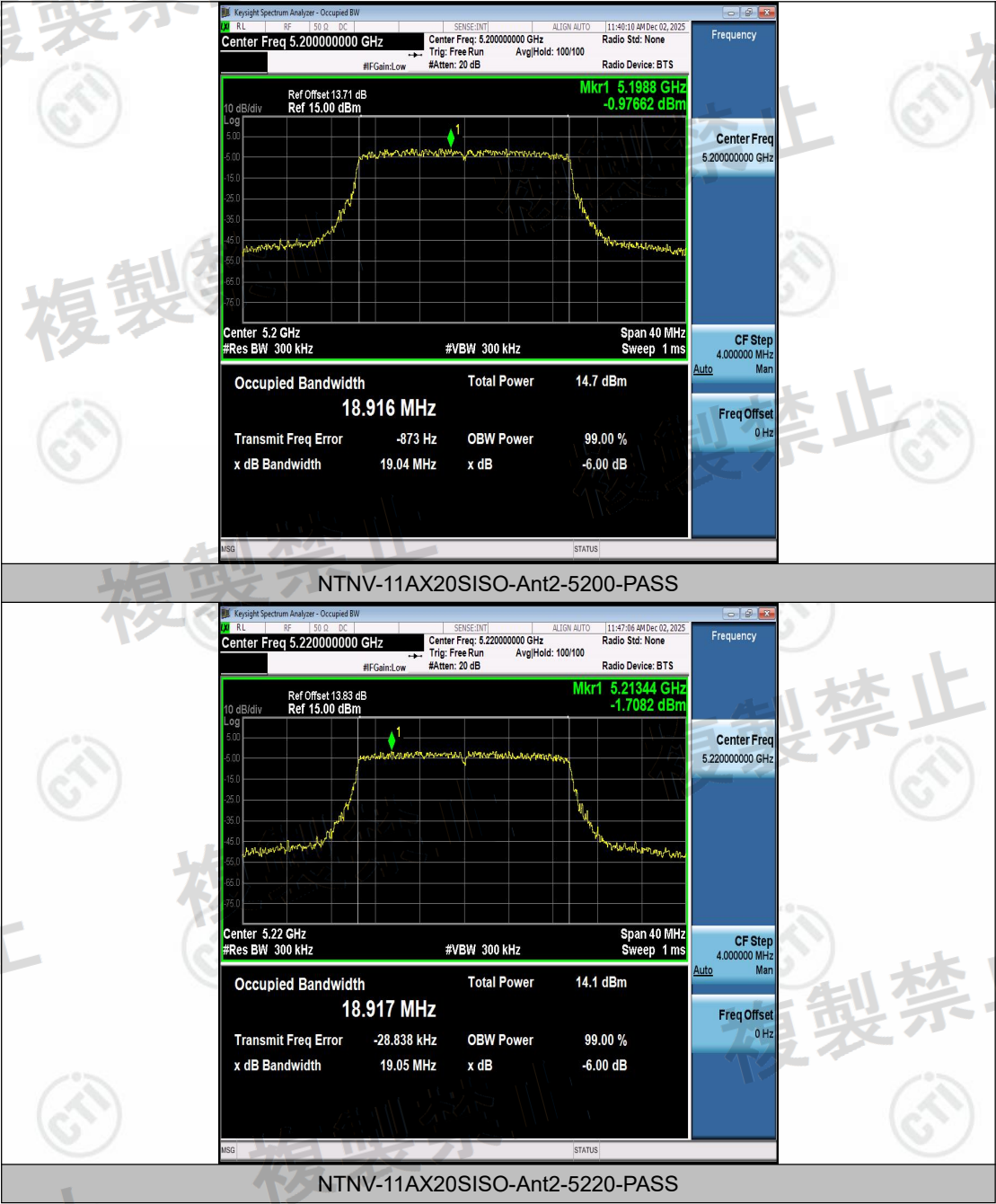


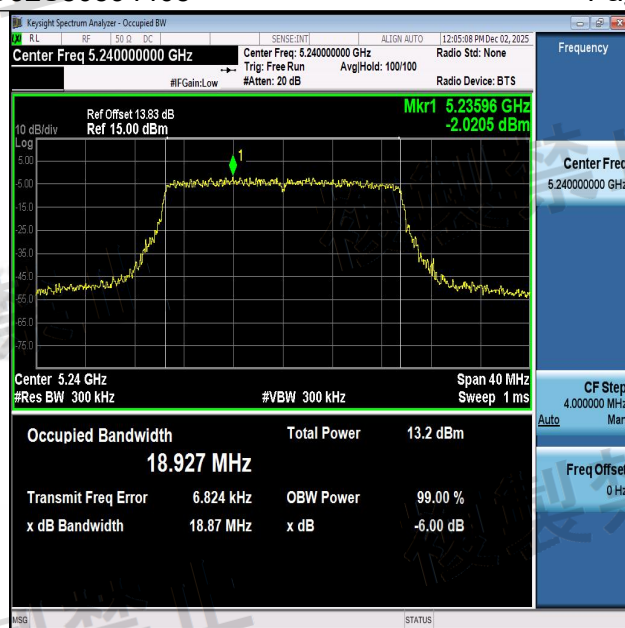
NTNV-11AC40SISO-Ant2-5190-PASS



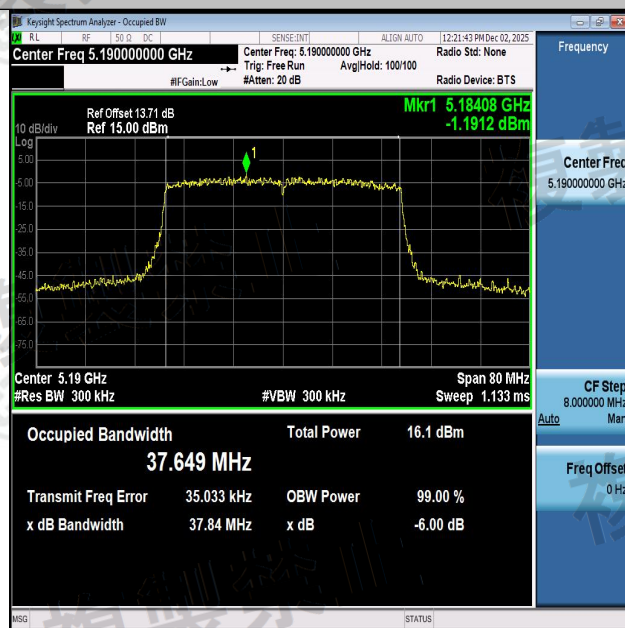
NTNV-11AC40SISO-Ant2-5230-PASS



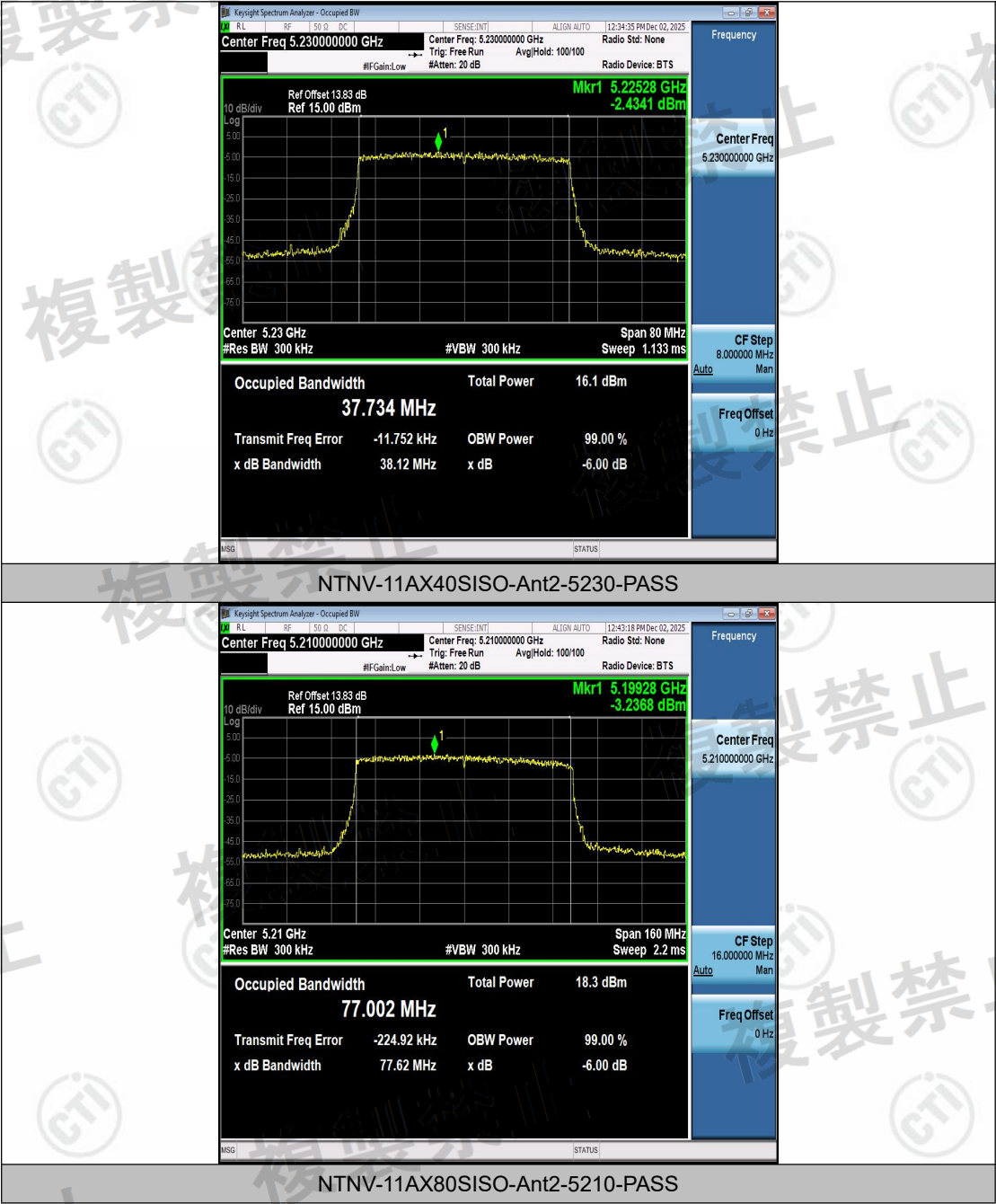




NTNV-11AX20SISO-Ant2-5240-PASS



NTNV-11AX40SISO-Ant2-5190-PASS



Appendix D: Spread Bandwidth

Test Result

TestCon dition	TestMode	Antenna	Frequency[MHz]	Result [MHz]	Limit [MHz]	Verdict
NTNV	11A	Ant2	5180	14.234	≥0.5	PASS
NTNV	11A	Ant2	5200	14.455	≥0.5	PASS
NTNV	11A	Ant2	5220	14.424	≥0.5	PASS
NTNV	11A	Ant2	5240	14.355	≥0.5	PASS
NTNV	11N20SISO	Ant2	5180	15.390	≥0.5	PASS
NTNV	11N20SISO	Ant2	5200	15.300	≥0.5	PASS
NTNV	11N20SISO	Ant2	5220	15.314	≥0.5	PASS
NTNV	11N20SISO	Ant2	5240	15.309	≥0.5	PASS
NTNV	11N40SISO	Ant2	5190	31.562	≥0.5	PASS
NTNV	11N40SISO	Ant2	5230	31.557	≥0.5	PASS
NTNV	11AC20SISO	Ant2	5180	15.348	≥0.5	PASS
NTNV	11AC20SISO	Ant2	5200	15.394	≥0.5	PASS
NTNV	11AC20SISO	Ant2	5220	15.369	≥0.5	PASS
NTNV	11AC20SISO	Ant2	5240	15.455	≥0.5	PASS
NTNV	11AC40SISO	Ant2	5190	31.723	≥0.5	PASS
NTNV	11AC40SISO	Ant2	5230	31.737	≥0.5	PASS
NTNV	11AC80SISO	Ant2	5210	64.930	≥0.5	PASS
NTNV	11AX20SISO	Ant2	5180	16.618	≥0.5	PASS
NTNV	11AX20SISO	Ant2	5200	16.574	≥0.5	PASS
NTNV	11AX20SISO	Ant2	5220	16.763	≥0.5	PASS
NTNV	11AX20SISO	Ant2	5240	16.577	≥0.5	PASS
NTNV	11AX40SISO	Ant2	5190	32.549	≥0.5	PASS
NTNV	11AX40SISO	Ant2	5230	33.138	≥0.5	PASS
NTNV	11AX80SISO	Ant2	5210	66.849	≥0.5	PASS

Test Graphs

