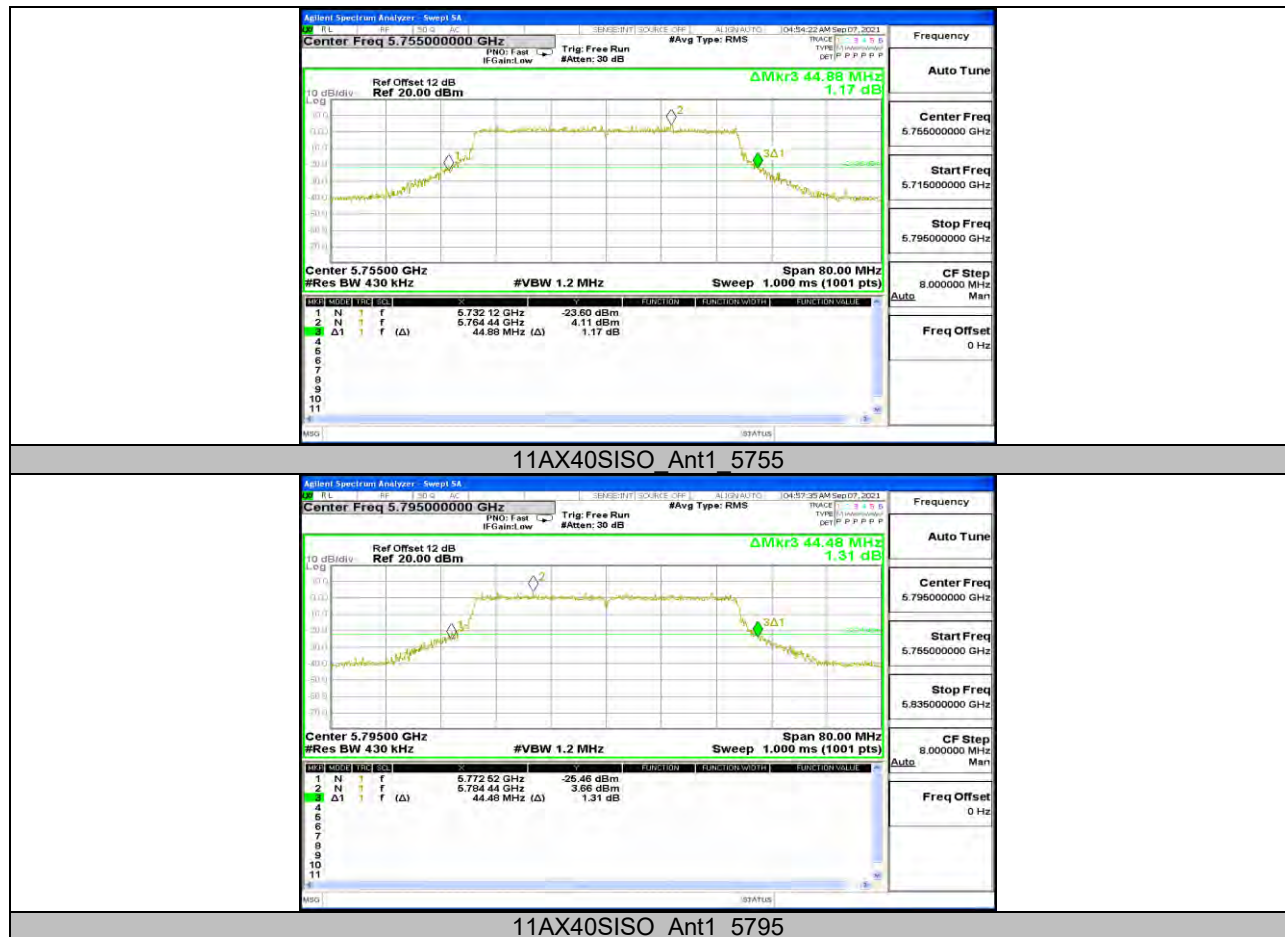




**13.2. Appendix A2: Occupied Channel Bandwidth****13.2.1. Test Result**

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11A	Ant1	5180	17.989	5170.969	5188.958	PASS
		5200	18.041	5190.955	5208.996	PASS
		5240	17.981	5230.948	5248.929	PASS
		5260	17.969	5250.990	5268.959	PASS
		5280	18.013	5271.001	5289.014	PASS
		5320	18.008	5310.993	5329.001	PASS
		5500	18.061	5490.986	5509.047	PASS
		5580	17.975	5571.059	5589.034	PASS
		5700	17.935	5690.959	5708.894	PASS
		5720	17.948	5710.920	5728.868	PASS
		5720 UNII-2C	14.08	5710.920	5725	PASS
		5720 UNII-3	3.868	5725	5728.868	PASS
		5745	17.945	5735.942	5753.887	PASS
		5785	18.038	5775.921	5793.959	PASS
		5825	17.999	5815.884	5833.883	PASS
11N20SISO	Ant1	5180	19.062	5170.474	5189.536	PASS
		5200	19.078	5190.473	5209.551	PASS
		5240	19.096	5230.477	5249.573	PASS
		5260	19.085	5250.471	5269.556	PASS
		5280	19.160	5270.447	5289.607	PASS
		5320	19.107	5310.521	5329.628	PASS
		5500	19.249	5490.440	5509.689	PASS
		5580	19.193	5570.456	5589.649	PASS
		5700	19.122	5690.415	5709.537	PASS
		5720	19.188	5710.378	5729.566	PASS
		5720 UNII-2C	14.622	5710.378	5725	PASS
		5720 UNII-3	4.566	5725	5729.566	PASS
		5745	19.146	5735.395	5754.541	PASS
		5785	19.203	5775.341	5794.544	PASS
		5825	19.245	5815.302	5834.547	PASS
11N40SISO	Ant1	5190	37.621	5171.267	5208.888	PASS
		5230	37.533	5211.224	5248.757	PASS
		5270	37.598	5251.260	5288.858	PASS
		5310	37.694	5291.200	5328.894	PASS
		5510	37.614	5491.270	5528.884	PASS
		5550	37.594	5531.272	5568.866	PASS
		5670	37.715	5651.123	5688.838	PASS
		5710	37.567	5691.171	5728.738	PASS
		5710 UNII-2C	33.829	5691.171	5725	PASS
		5710 UNII-3	3.738	5725	5728.738	PASS
		5755	37.668	5736.061	5773.729	PASS
		5795	37.614	5776.045	5813.659	PASS
11AX20SISO	Ant1	5180	19.662	5170.239	5189.901	PASS
		5200	19.721	5190.187	5209.908	PASS
		5240	19.618	5230.189	5249.807	PASS
		5260	19.632	5250.235	5269.867	PASS
		5280	19.720	5270.177	5289.897	PASS
		5320	19.689	5310.167	5329.856	PASS
		5500	19.731	5490.181	5509.912	PASS
		5580	19.631	5570.190	5589.821	PASS
		5700	19.656	5690.208	5709.864	PASS
		5720	19.661	5710.185	5729.846	PASS



		5720 UNII-2C	14.815	5710.185	5725	PASS
		5720 UNII-3	4.846	5725	5729.846	PASS
		5745	19.649	5735.185	5754.834	PASS
		5785	19.625	5775.182	5794.807	PASS
		5825	19.667	5815.187	5834.854	PASS
11AX40SISO	Ant1	5190	38.429	5170.801	5209.230	PASS
		5230	38.418	5210.799	5249.217	PASS
		5270	38.537	5250.803	5289.340	PASS
		5310	38.531	5290.791	5329.322	PASS
		5510	38.416	5490.837	5529.253	PASS
		5550	38.485	5530.840	5569.325	PASS
		5670	38.478	5650.734	5689.212	PASS
		5710	38.512	5690.653	5729.165	PASS
		5710 UNII-2C	34.347	5690.653	5725	PASS
		5710 UNII-3	4.165	5725	5729.165	PASS
		5755	38.470	5735.809	5774.279	PASS
		5795	38.450	5775.717	5814.167	PASS

13.2.2. Test Graphs























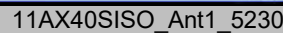
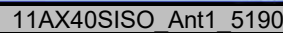
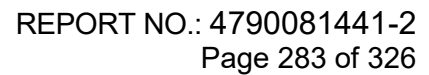


















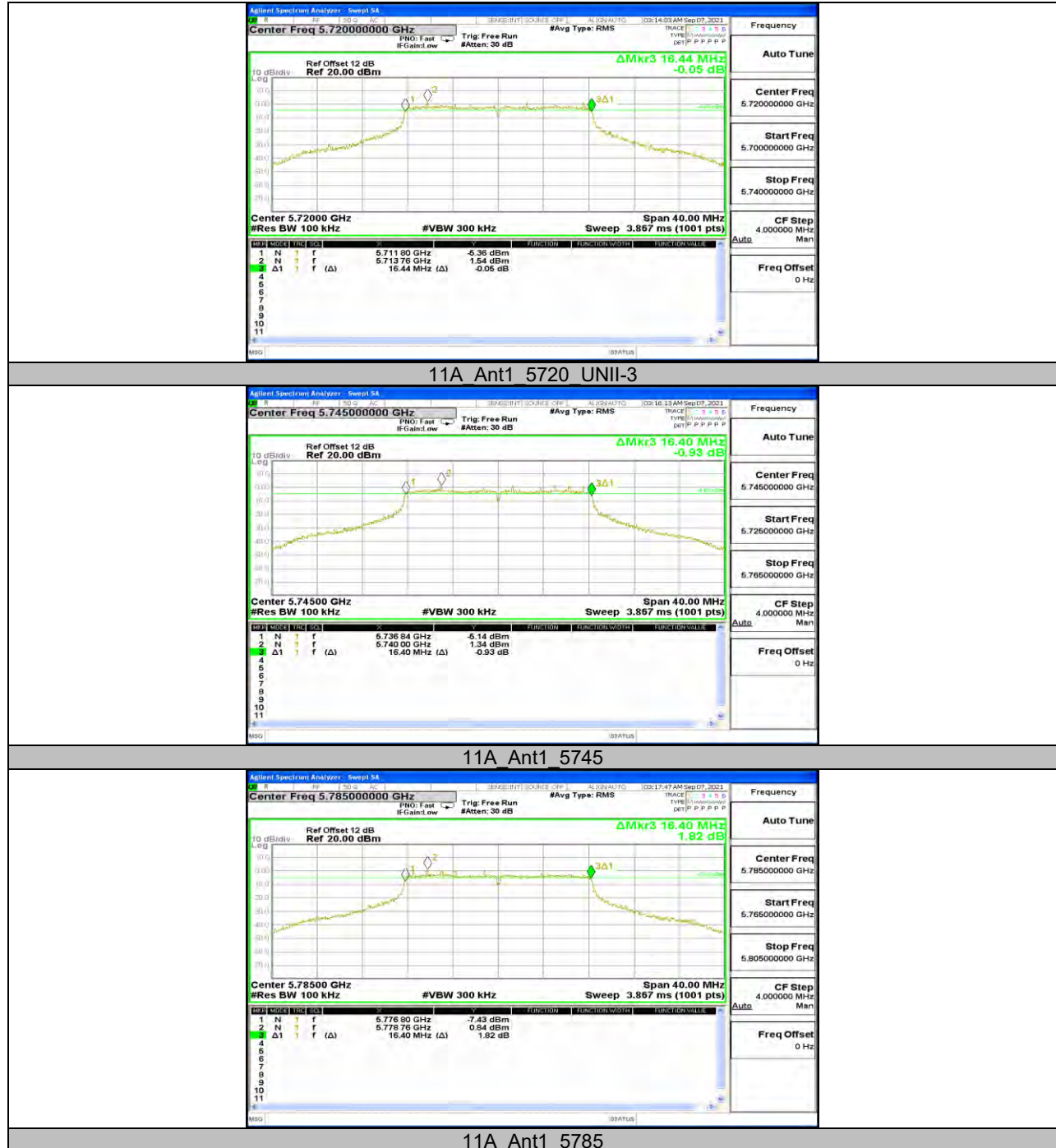


13.3. Appendix A3: Min Emission Bandwidth

13.3.1. Test Result

Test Mode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5720 UNII-3	3.24	5725	5728.240	0.5	PASS
		5745	16.400	5736.840	5753.240	0.5	PASS
		5785	16.400	5776.800	5793.200	0.5	PASS
		5825	16.440	5816.800	5833.240	0.5	PASS
11N20SISO	Ant1	5720 UNII-3	3.84	5725	5728.840	0.5	PASS
		5745	17.640	5736.200	5753.840	0.5	PASS
		5785	17.640	5776.200	5793.840	0.5	PASS
		5825	17.360	5816.200	5833.560	0.5	PASS
11N40SISO	Ant1	5710 UNII-3	3.24	5725	5728.240	0.5	PASS
		5755	36.240	5736.760	5773.000	0.5	PASS
		5795	36.240	5776.760	5813.000	0.5	PASS
11AX20SISO	Ant1	5720 UNII-3	4.44	5725	5729.44	0.5	PASS
		5745	18.960	5735.520	5754.480	0.5	PASS
		5785	18.960	5775.520	5794.480	0.5	PASS
		5825	19.040	5815.520	5834.560	0.5	PASS
11AX40SISO	Ant1	5710 UNII-3	4.04	5725	5729.04	0.5	PASS
		5755	38.160	5735.880	5774.040	0.5	PASS
		5795	38.000	5775.960	5813.960	0.5	PASS

13.3.2. Test Graphs





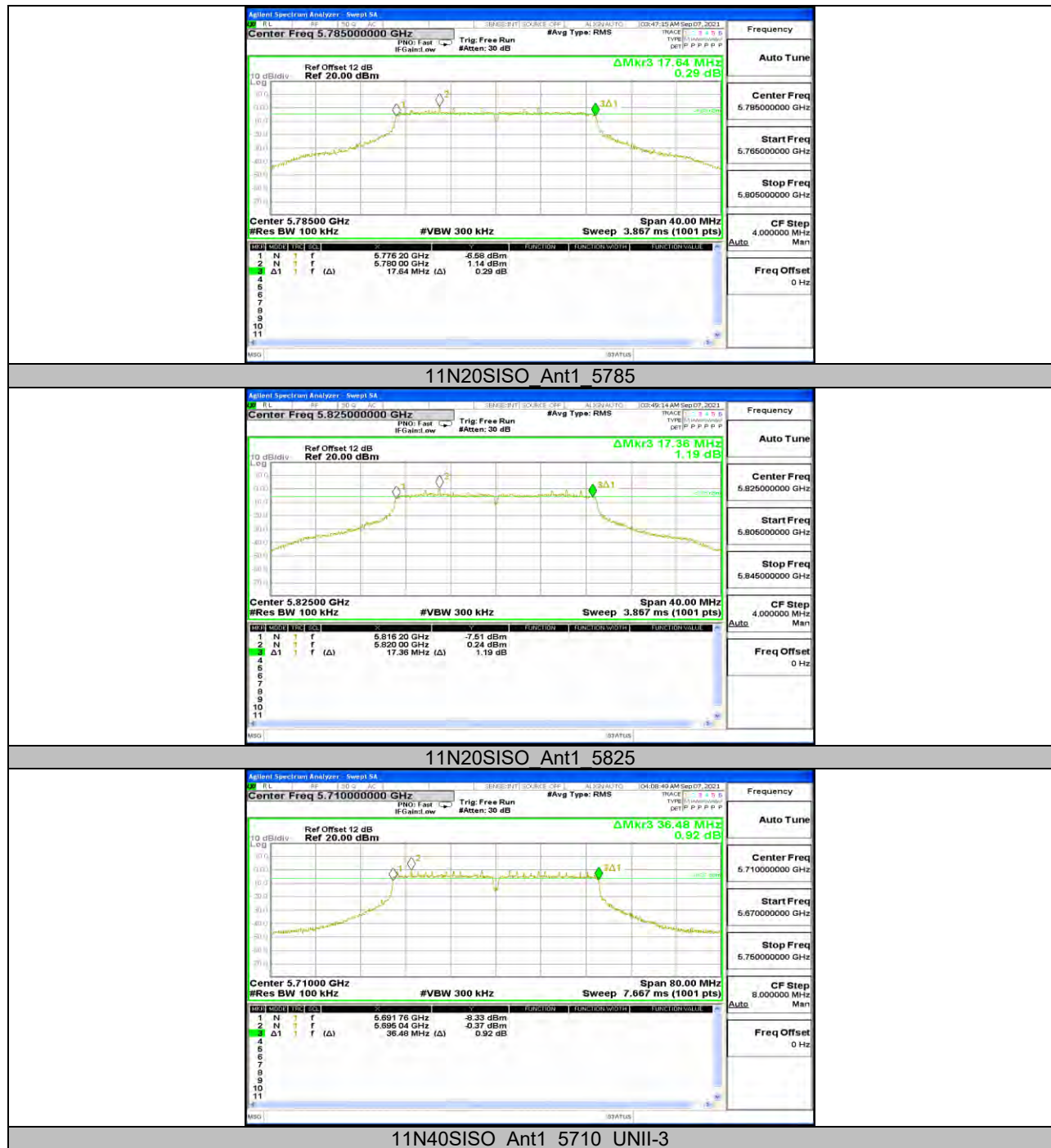
11A Ant1 5825



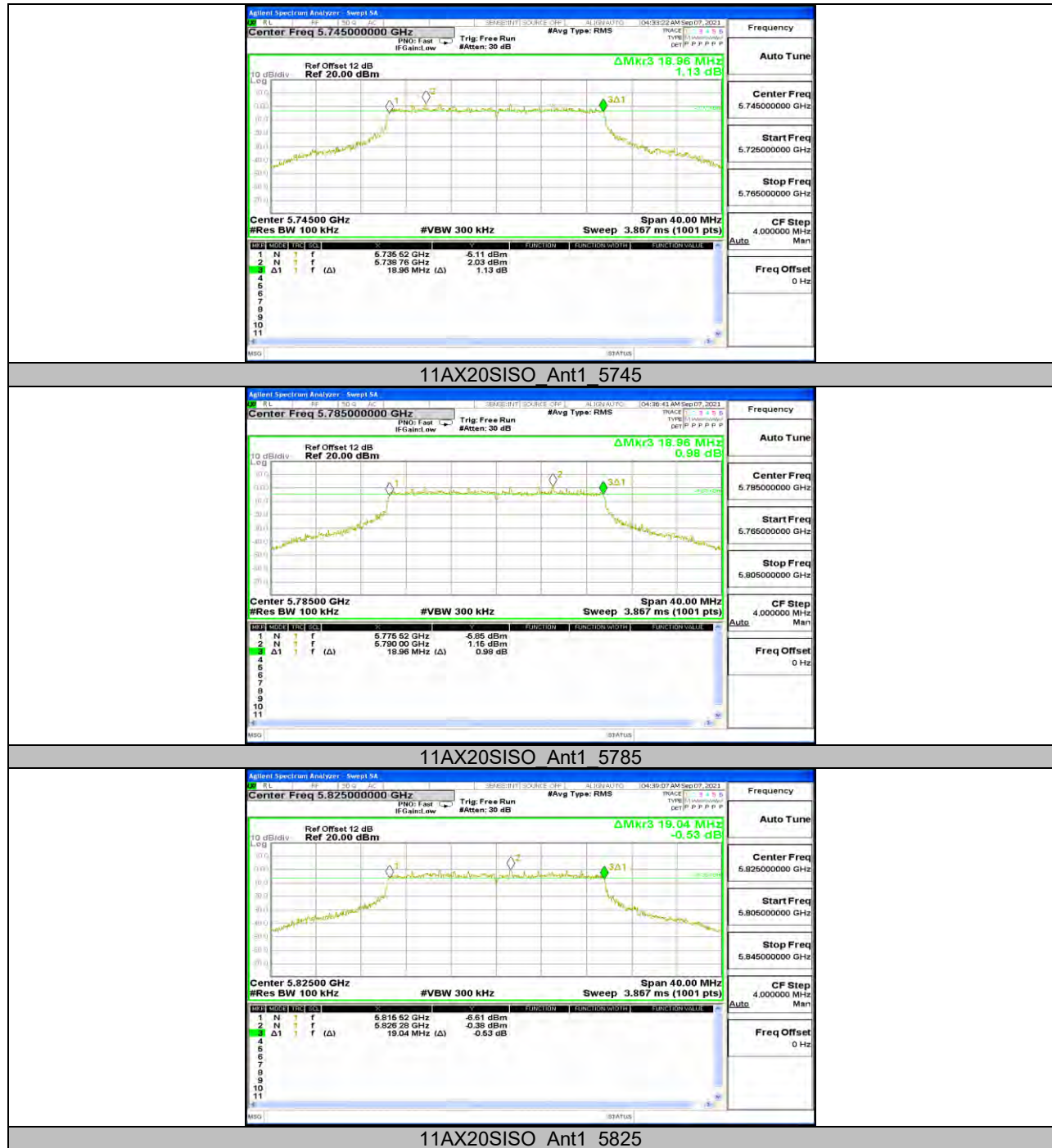
11N20SISO Ant1 5720 UNII-3

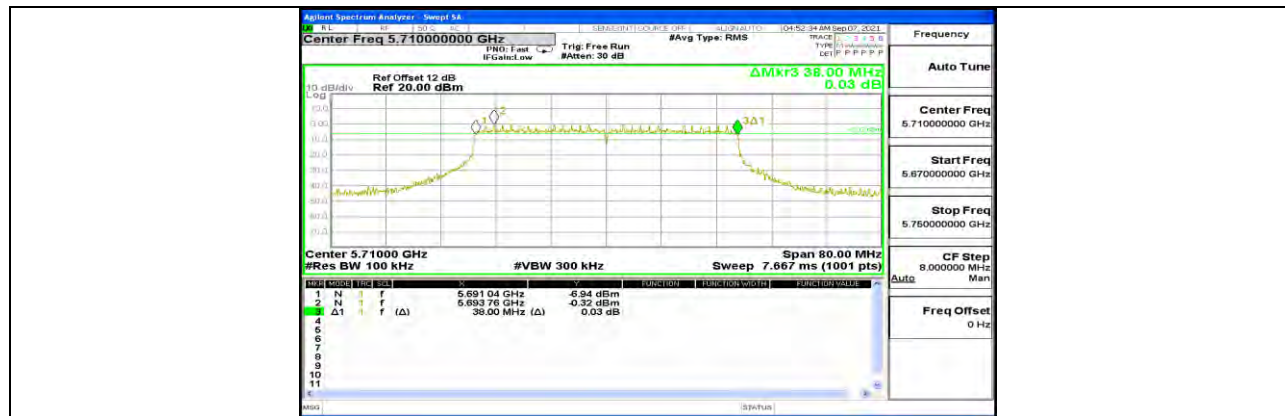


11N20SISO Ant1 5745

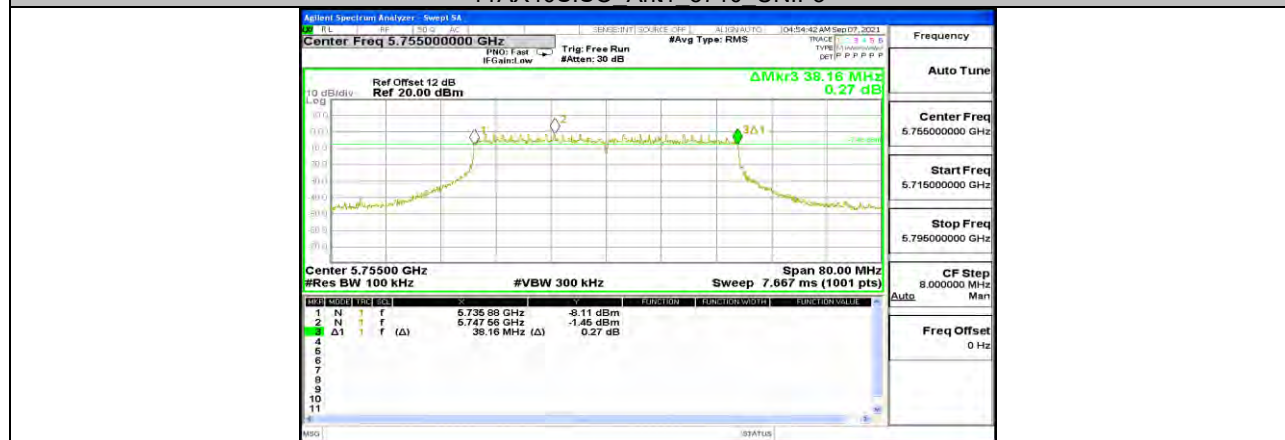




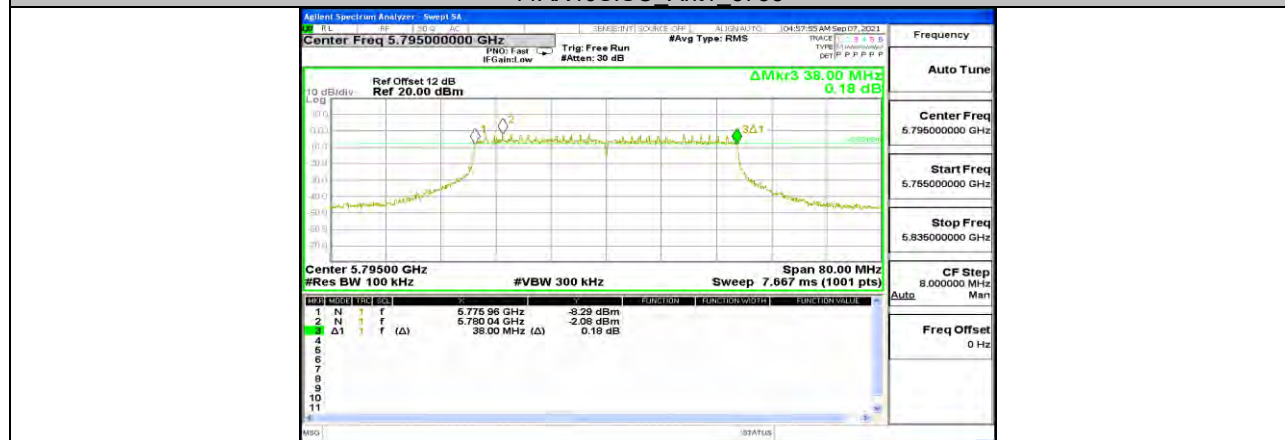




11AX40SISO Ant1 5710 UNII-3



11AX40SISO Ant1 5755



11AX40SISO Ant1 5795

**13.4. Appendix B: Maximum Average Conducted Output Power****13.4.1. Test Result**

Test Mode	Antenna	Channel	Power [dBm]	FCC Limit [dBm]	ISED Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	11.63	≤23.98	---	15.99	≤22.55	PASS
		5200	10.43	≤23.98	---	14.79	≤22.56	PASS
		5240	10.17	≤23.98	---	14.53	≤22.55	PASS
		5260	10.28	≤23.98	≤23.55	14.64	≤29.55	PASS
		5280	10.06	≤23.98	≤23.56	14.42	≤29.56	PASS
		5320	10.35	≤23.98	≤23.56	14.71	≤29.55	PASS
		5500	14.37	≤23.98	≤23.57	18.73	≤29.57	PASS
		5580	14.45	≤23.98	≤23.55	18.81	≤29.55	PASS
		5700	13.67	≤23.98	≤23.54	18.03	≤29.54	PASS
		5720 UNII-2C	12.03	≤23.37	≤22.49	16.39	≤28.49	PASS
		5720 UNII-3	5.99	≤30	≤30	10.35	---	PASS
		5745	12.39	≤30	≤30	16.75	---	PASS
		5785	11.72	≤30	≤30	16.08	---	PASS
		5825	10.64	≤30	≤30	15.00	---	PASS
11N20SISO	Ant1	5180	10.45	≤23.98	---	14.81	≤22.80	PASS
		5200	10.23	≤23.98	---	14.59	≤22.81	PASS
		5240	10.20	≤23.98	---	14.56	≤22.81	PASS
		5260	10.07	≤23.98	≤23.81	14.43	≤29.81	PASS
		5280	9.83	≤23.98	≤23.82	14.19	≤29.82	PASS
		5320	10.36	≤23.98	≤23.81	14.72	≤29.81	PASS
		5500	12.60	≤23.98	≤23.84	16.96	≤29.84	PASS
		5580	12.25	≤23.98	≤23.83	16.61	≤29.83	PASS
		5700	11.18	≤23.98	≤23.82	15.54	≤29.82	PASS
		5720 UNII-2C	12.13	≤23.44	≤22.651	16.49	≤28.65	PASS
		5720 UNII-3	6.30	≤30	≤30	10.66	---	PASS
		5745	12.69	≤30	≤30	17.05	---	PASS
		5785	11.79	≤30	≤30	16.15	---	PASS
		5825	10.76	≤30	≤30	15.12	---	PASS
11N40SISO	Ant1	5190	10.60	≤23.98	---	14.96	≤23	PASS
		5230	10.32	≤23.98	---	14.68	≤23	PASS
		5270	10.20	≤23.98	≤23.98	14.56	≤30	PASS
		5310	10.50	≤23.98	≤23.98	14.86	≤30	PASS
		5510	14.24	≤23.98	≤23.98	18.60	≤30	PASS
		5550	14.63	≤23.98	≤23.98	18.99	≤30	PASS
		5670	14.28	≤23.98	≤23.98	18.64	≤30	PASS
		5710 UNII-2C	12.94	≤23.98	≤23.98	17.30	≤30	PASS
		5710 UNII-3	2.47	≤30	≤30	6.83	---	PASS
		5755	12.80	≤30	≤30	17.16	---	PASS
		5795	11.44	≤30	≤30	15.80	---	PASS
11AX20SISO	Ant1	5180	10.41	≤23.98	---	14.77	≤22.97	PASS
		5200	10.47	≤23.98	---	14.83	≤22.95	PASS
		5240	10.56	≤23.98	---	14.92	≤22.93	PASS
		5260	10.11	≤23.98	≤23.93	14.47	≤29.93	PASS
		5280	10.40	≤23.98	≤23.95	14.76	≤29.95	PASS
		5320	10.65	≤23.98	≤23.94	15.01	≤29.94	PASS
		5500	14.88	≤23.98	≤23.95	19.24	≤29.95	PASS
		5580	14.67	≤23.98	≤23.93	19.03	≤29.93	PASS
		5700	13.95	≤23.98	≤23.94	18.31	≤29.95	PASS
		5720 UNII-2C	12.21	≤23.98	≤22.71	16.57	≤28.71	PASS
		5720 UNII-3	7.07	≤30	≤30	11.43	---	PASS
		5745	12.82	≤30	≤30	17.18	---	PASS
		5785	11.94	≤30	≤30	16.30	---	PASS



		5825	11.23	≤30	≤30	15.59	---	PASS
11AX40SISO	Ant1	5190	10.60	≤23.98	---	14.96	≤23	PASS
		5230	10.77	≤23.98	---	15.13	≤23	PASS
		5270	10.12	≤23.98	≤23.98	14.48	≤30	PASS
		5310	10.62	≤23.98	≤23.98	14.98	≤30	PASS
		5510	14.39	≤23.98	≤23.98	18.75	≤30	PASS
		5550	14.93	≤23.98	≤23.98	19.29	≤30	PASS
		5670	14.63	≤23.98	≤23.98	18.99	≤30	PASS
		5710 UNII-2C	13.29	≤23.98	≤23.98	17.65	≤30	PASS
		5710 UNII-3	3.48	≤30	≤30	7.84	---	PASS
		5755	12.81	≤30	≤30	17.17	---	PASS
		5795	11.84	≤30	≤30	16.20	---	PASS

Note: 1. Conducted Power=Meas. Level+ Correction Factor

2. The Duty Cycle Factor (refer to section 7.1) had already compensated to the test data.

**13.5. Appendix C: Maximum Power Spectral Density****13.5.1. Test Result**

Test Mode	Antenna	Channel	Power [dBm/MHz]	Limit [dBm/MHz]	EIRP [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	0.39	≤11	4.75	≤10	PASS
		5200	-0.43	≤11	3.93	≤10	PASS
		5240	1.67	≤11	6.03	≤10	PASS
		5260	-0.48	≤11	---	---	PASS
		5280	-0.94	≤11	---	---	PASS
		5320	-0.71	≤11	---	---	PASS
		5500	3.51	≤11	---	---	PASS
		5580	3.52	≤11	---	---	PASS
		5700	2.72	≤11	---	---	PASS
		5720_UNII-2C	5.79	≤11	---	---	PASS
		5720_UNII-3	0.7	≤11	---	---	PASS
		5745	-1.14	≤30	---	---	PASS
		5785	-1.63	≤30	---	---	PASS
		5825	-2.96	≤30	---	---	PASS
11N20SISO	Ant1	5180	-0.81	≤11	3.55	≤10	PASS
		5200	-0.45	≤11	3.91	≤10	PASS
		5240	-1.24	≤11	3.12	≤10	PASS
		5260	-1.13	≤11	---	---	PASS
		5280	-1.25	≤11	---	---	PASS
		5320	-0.62	≤11	---	---	PASS
		5500	1.13	≤11	---	---	PASS
		5580	0.83	≤11	---	---	PASS
		5700	-0.12	≤11	---	---	PASS
		5720_UNII-2C	3.41	≤11	---	---	PASS
		5720_UNII-3	-0.74	≤11	---	---	PASS
		5745	-1.09	≤30	---	---	PASS
		5785	-2.06	≤30	---	---	PASS
		5825	-2.88	≤30	---	---	PASS
11N40SISO	Ant1	5190	-3.63	≤11	0.73	≤10	PASS
		5230	-4	≤11	0.36	≤10	PASS
		5270	-3.98	≤11	---	---	PASS
		5310	-3.46	≤11	---	---	PASS
		5510	0.57	≤11	---	---	PASS
		5550	0.55	≤11	---	---	PASS
		5670	0.18	≤11	---	---	PASS
		5710_UNII-2C	1.67	≤11	---	---	PASS
		5710_UNII-3	-5.83	≤11	---	---	PASS
		5755	-4.35	≤30	---	---	PASS
		5795	-5.47	≤30	---	---	PASS
		5825	-3.29	≤30	---	---	PASS
11AX20SISO	Ant1	5180	-0.96	≤11	3.40	≤10	PASS
		5200	-0.79	≤11	3.57	≤10	PASS
		5240	-0.72	≤11	3.64	≤10	PASS
		5260	-0.49	≤11	---	---	PASS
		5280	-0.64	≤11	---	---	PASS
		5320	-0.84	≤11	---	---	PASS
		5500	3.38	≤11	---	---	PASS
		5580	3.31	≤11	---	---	PASS
		5700	2.3	≤11	---	---	PASS
		5720_UNII-2C	2.05	≤11	---	---	PASS
		5720_UNII-3	-1.17	≤11	---	---	PASS
		5745	-0.7	≤30	---	---	PASS
		5785	-2.17	≤30	---	---	PASS
		5825	-3.29	≤30	---	---	PASS



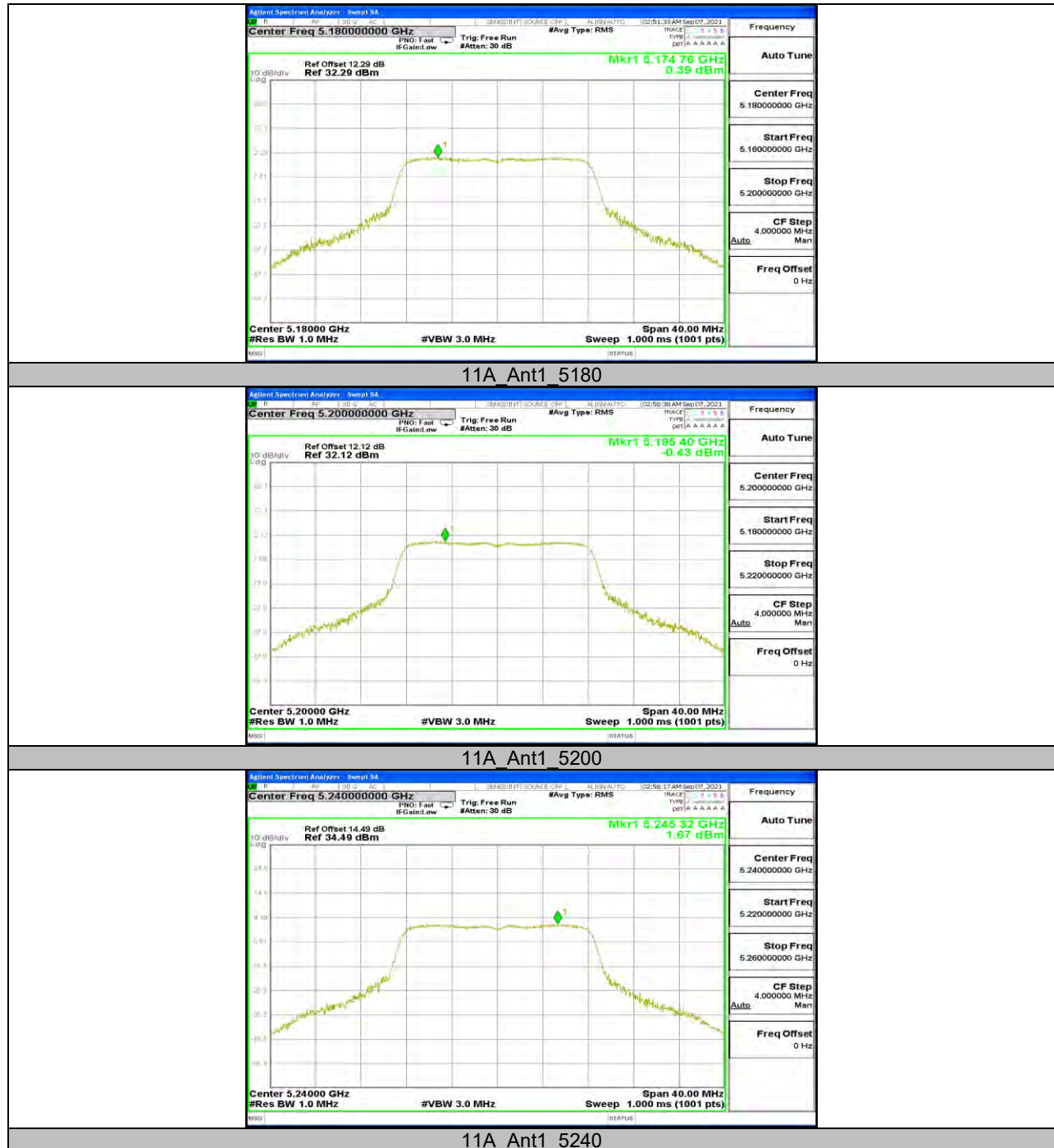
11AX40SISO	Ant1	5190	-3.91	≤ 11	0.45	≤ 10	PASS
		5230	-3.61	≤ 11	0.75	≤ 10	PASS
		5270	-4.09	≤ 11	---	---	PASS
		5310	-4.28	≤ 11	---	---	PASS
		5510	0.06	≤ 11	---	---	PASS
		5550	0.6	≤ 11	---	---	PASS
		5670	0.14	≤ 11	---	---	PASS
		5710 UNII-2C	-0.83	≤ 11	---	---	PASS
		5710 UNII-3	-5.36	≤ 11	---	---	PASS
		5755	-3.89	≤ 30	---	---	PASS
		5795	-4.86	≤ 30	---	---	PASS

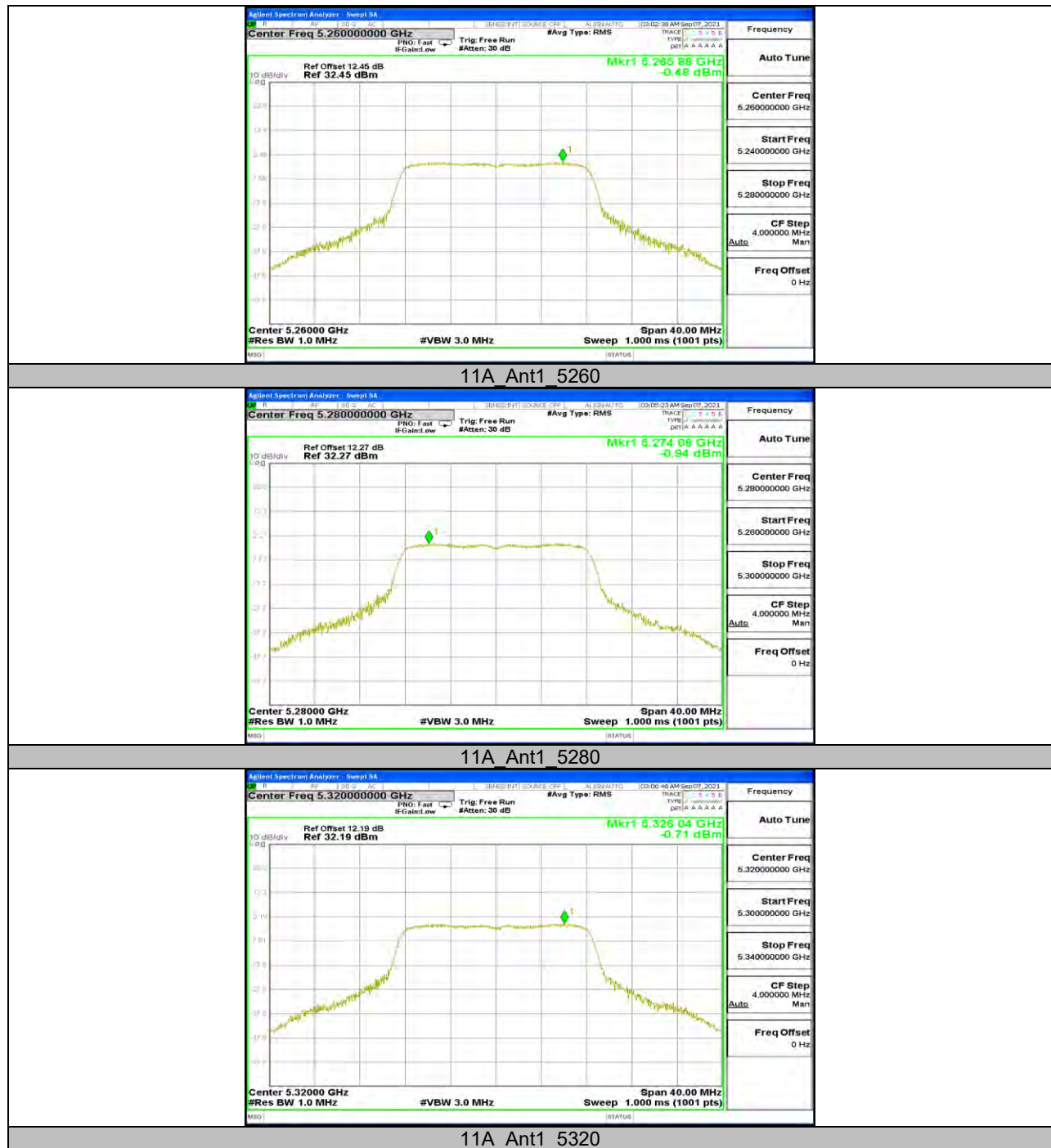
Note: 1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

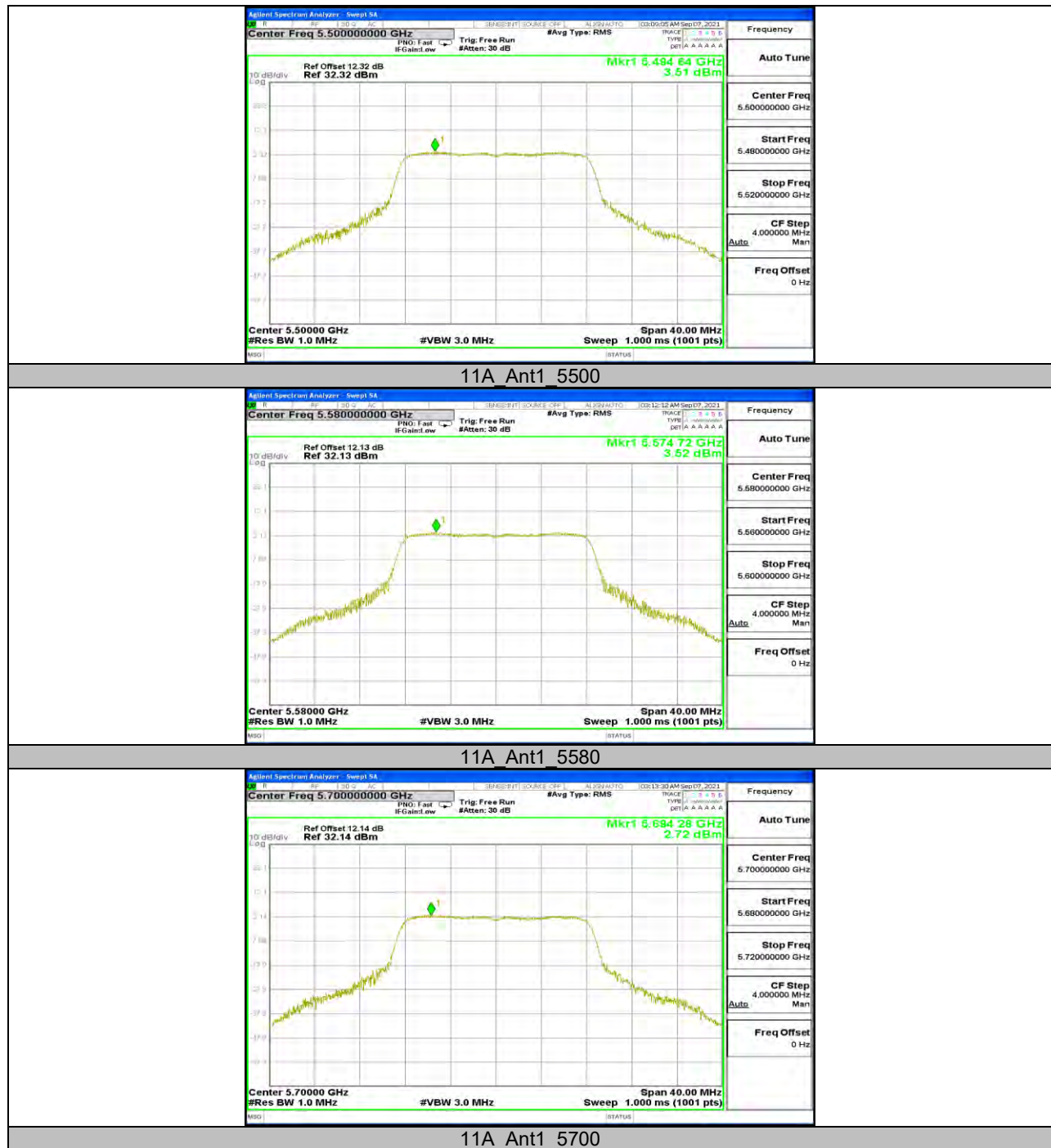
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.

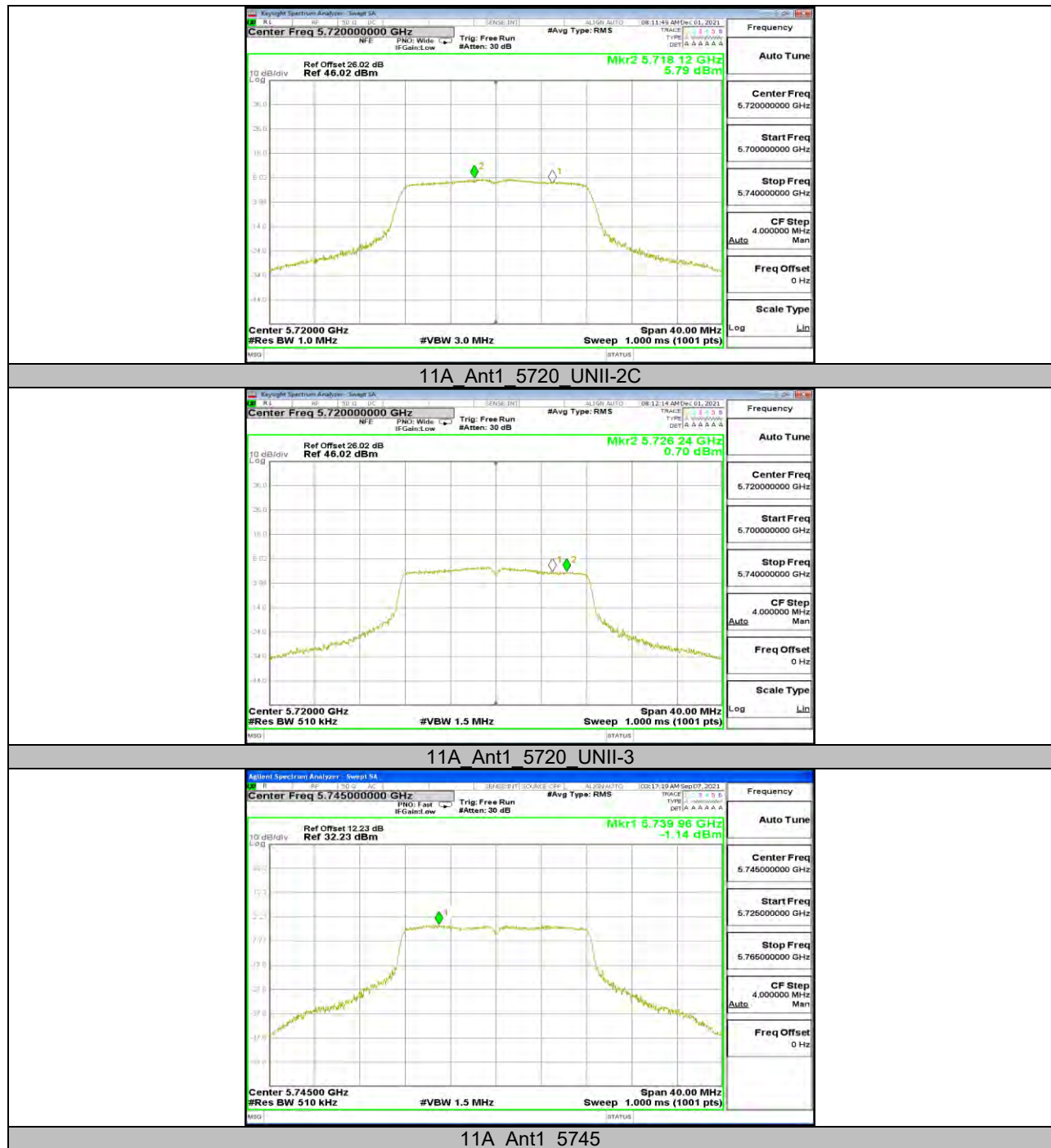


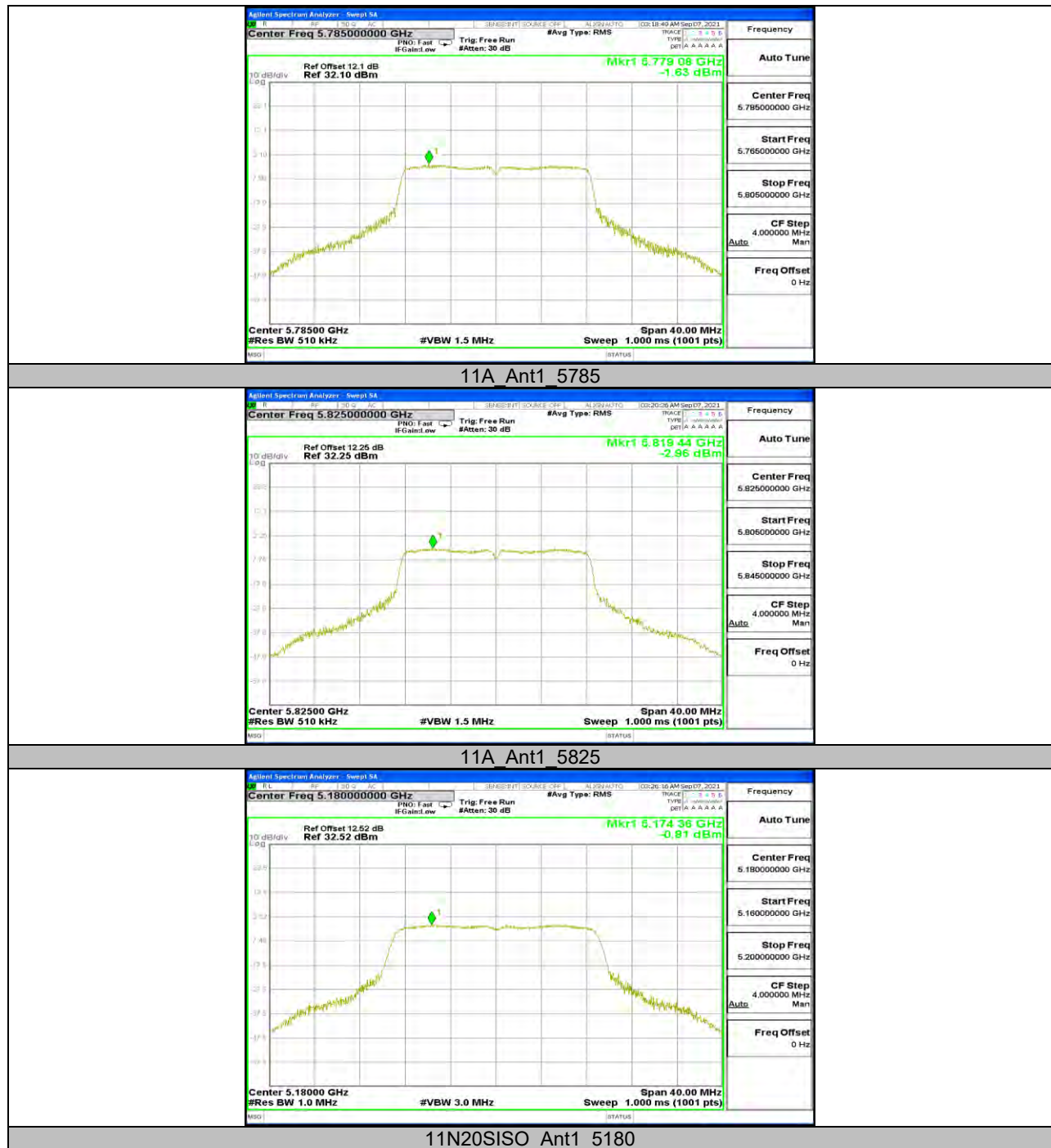
13.5.2. Test Graphs

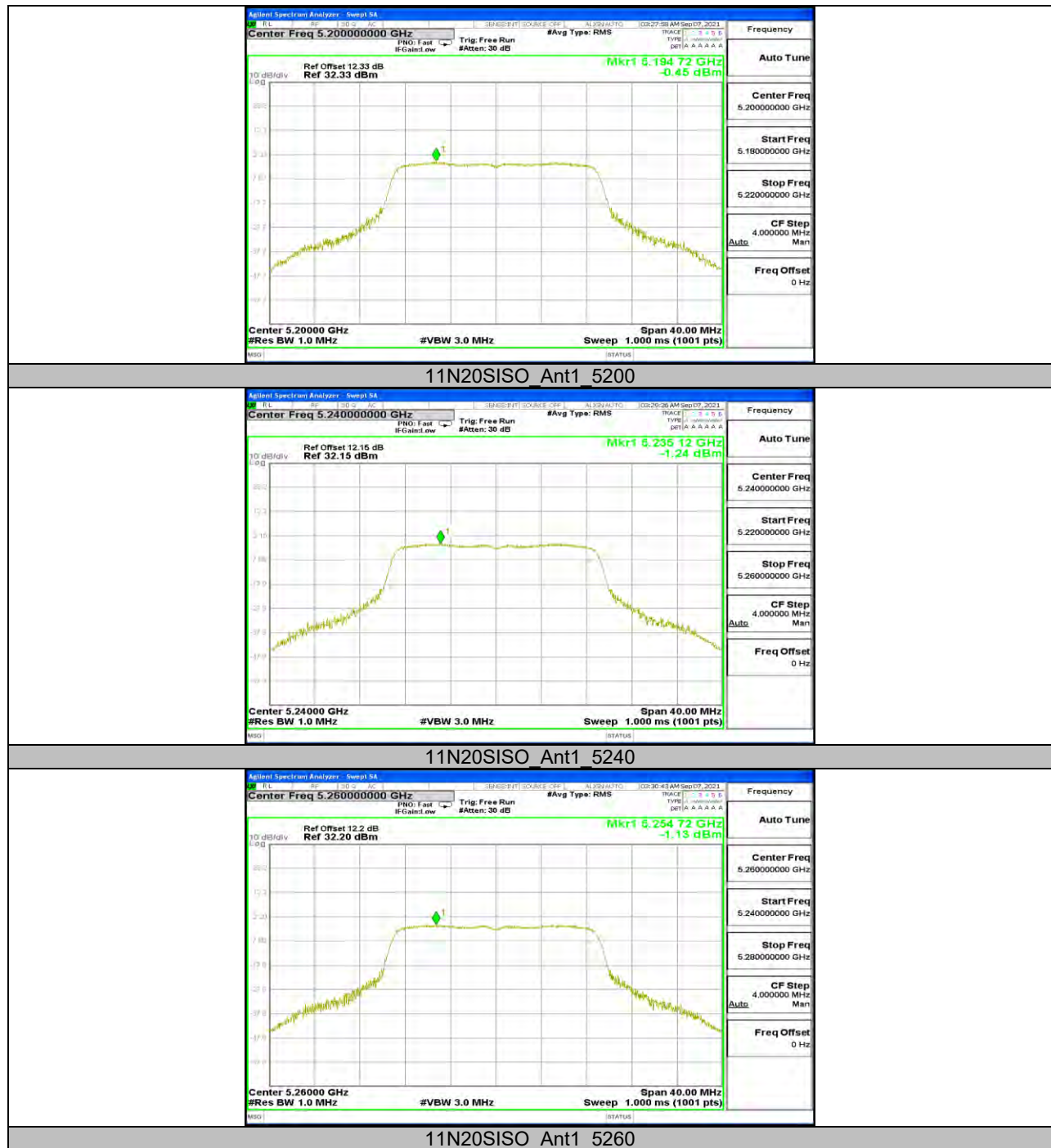


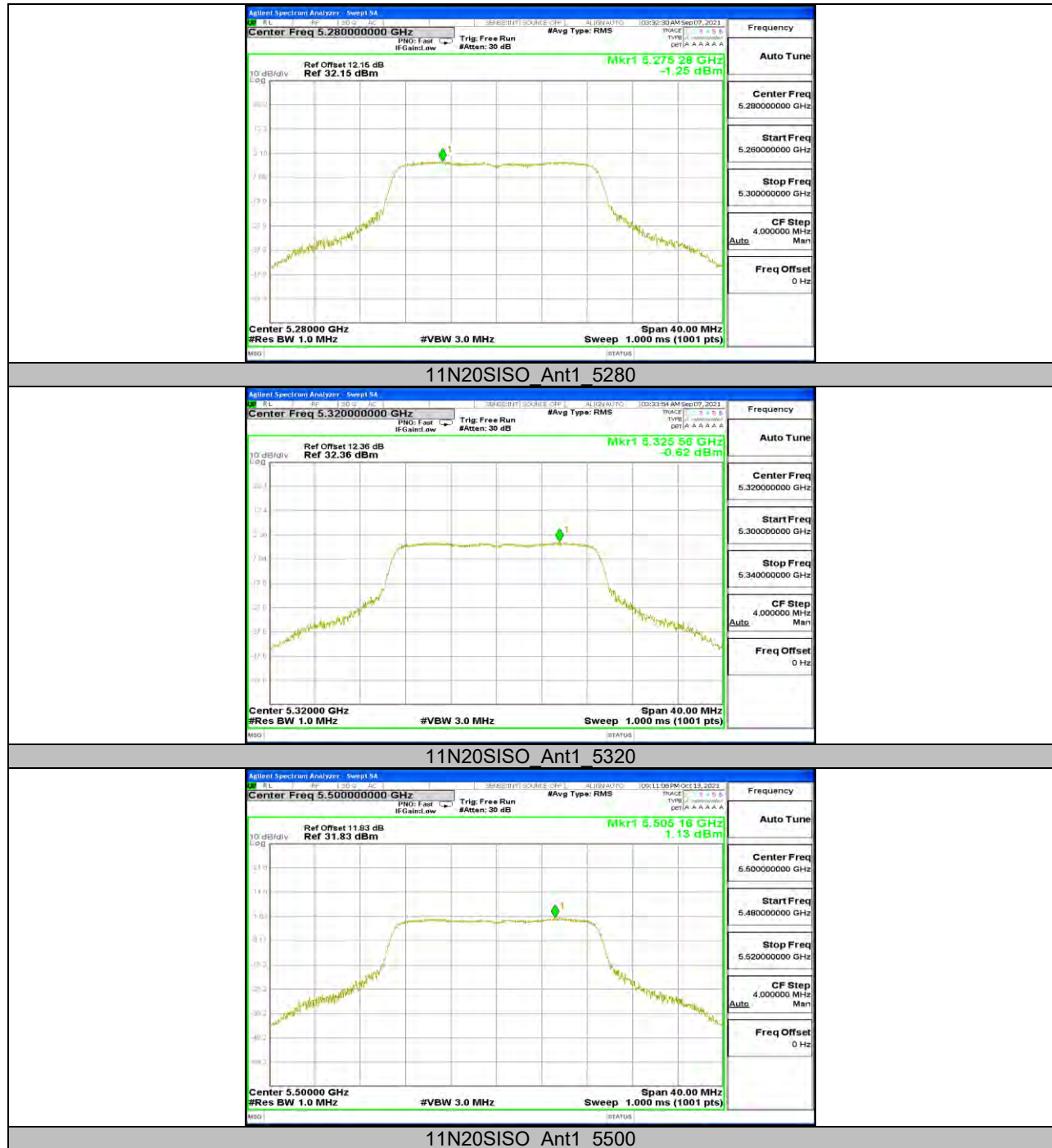


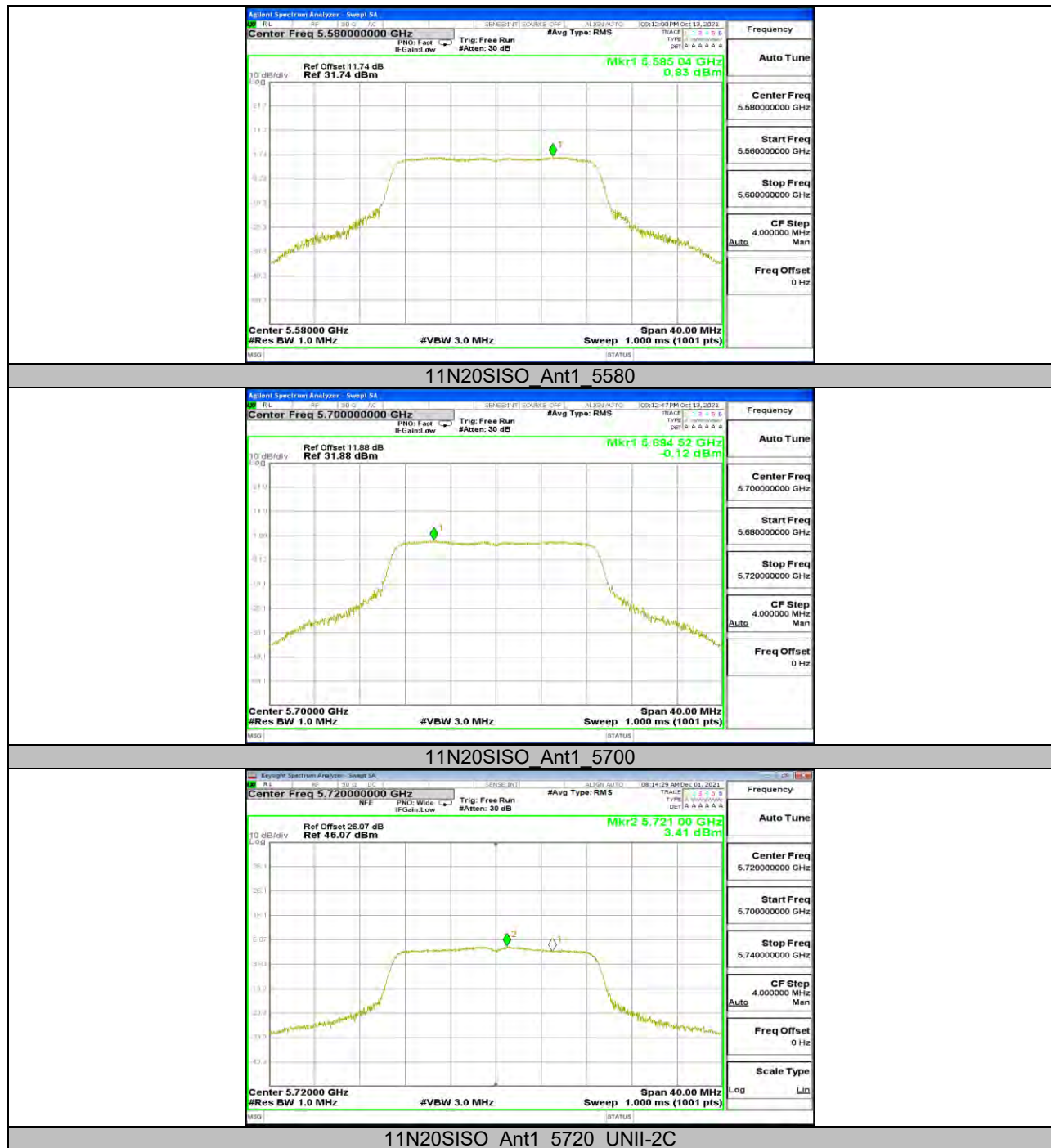


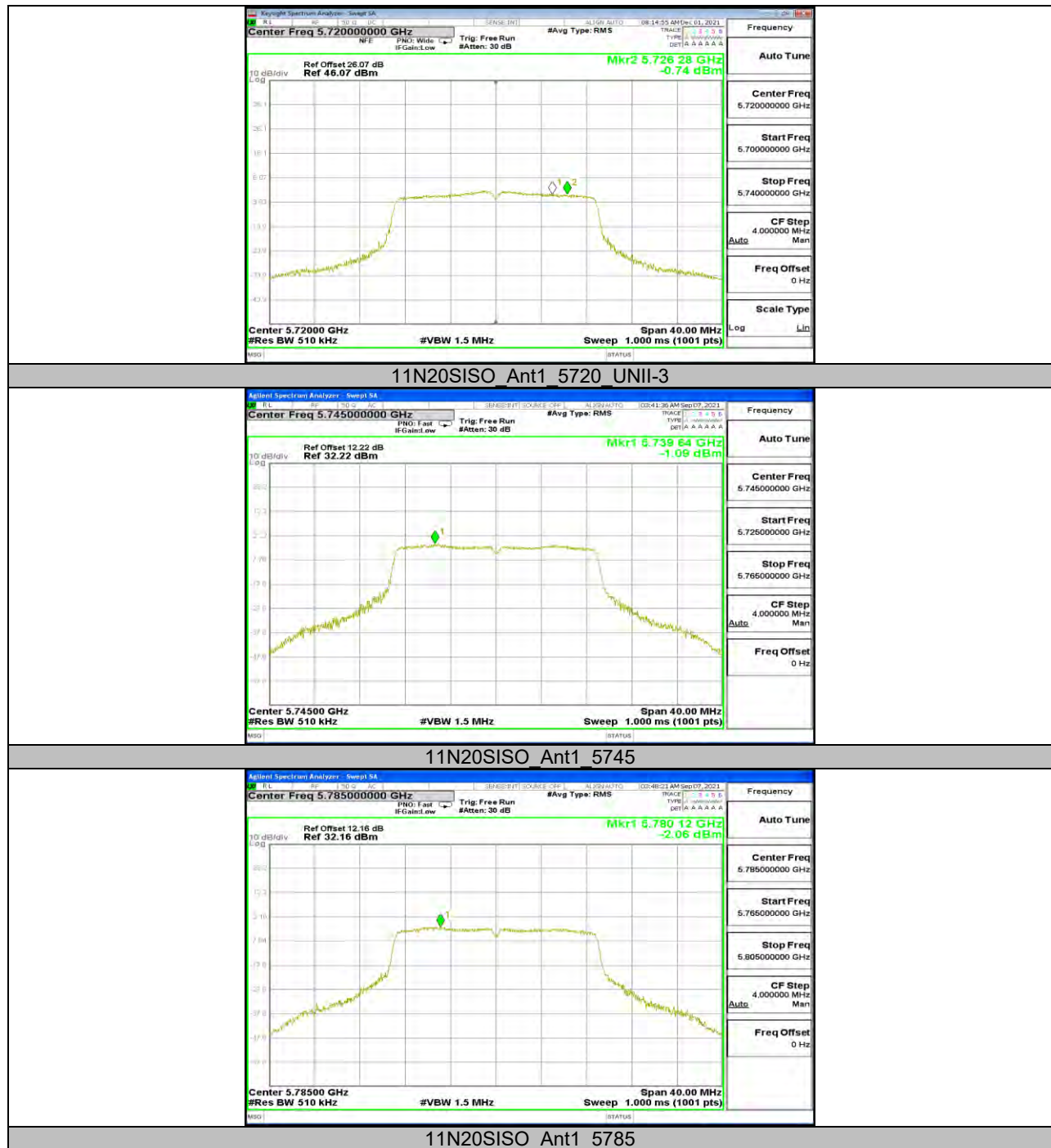


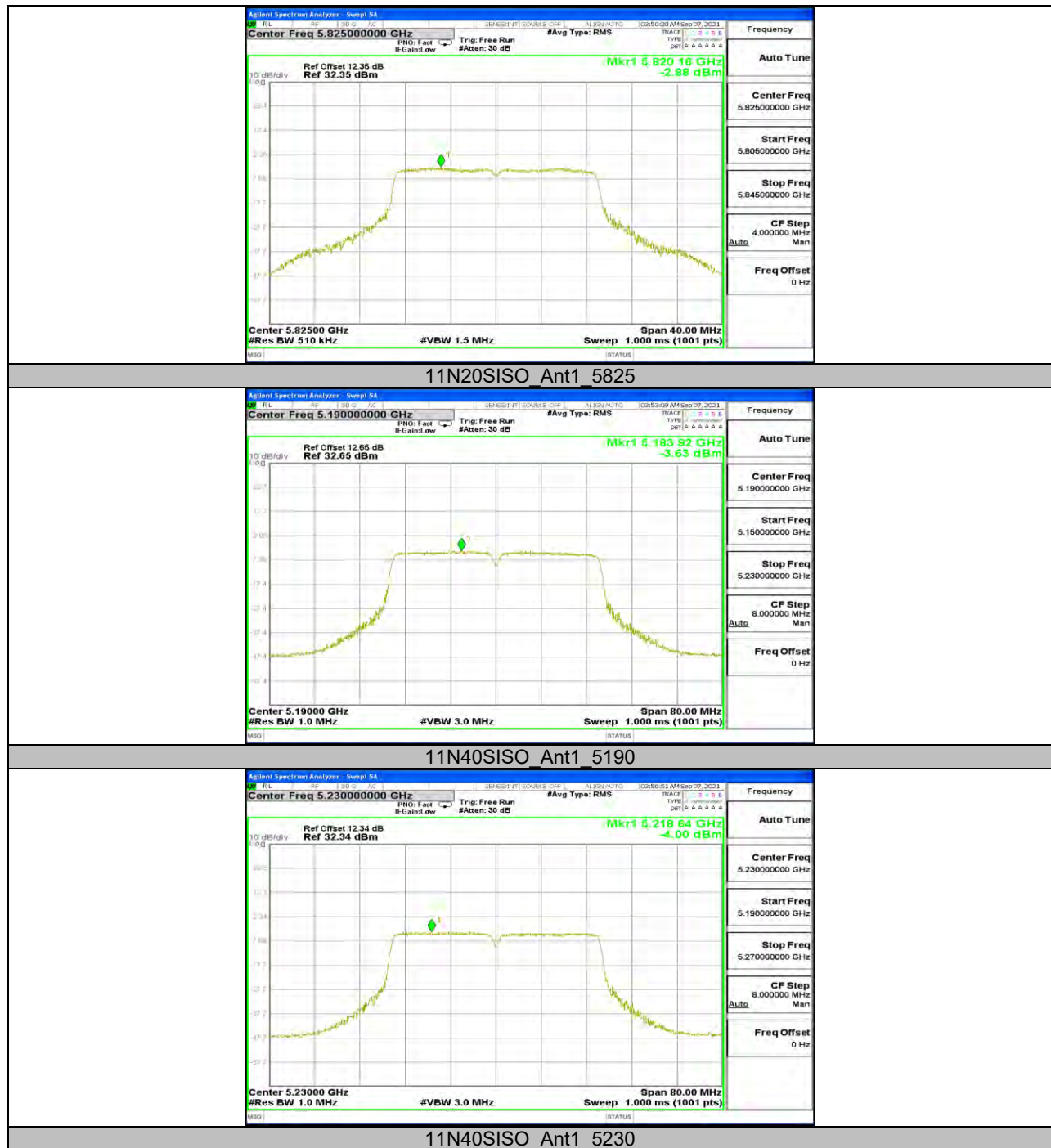


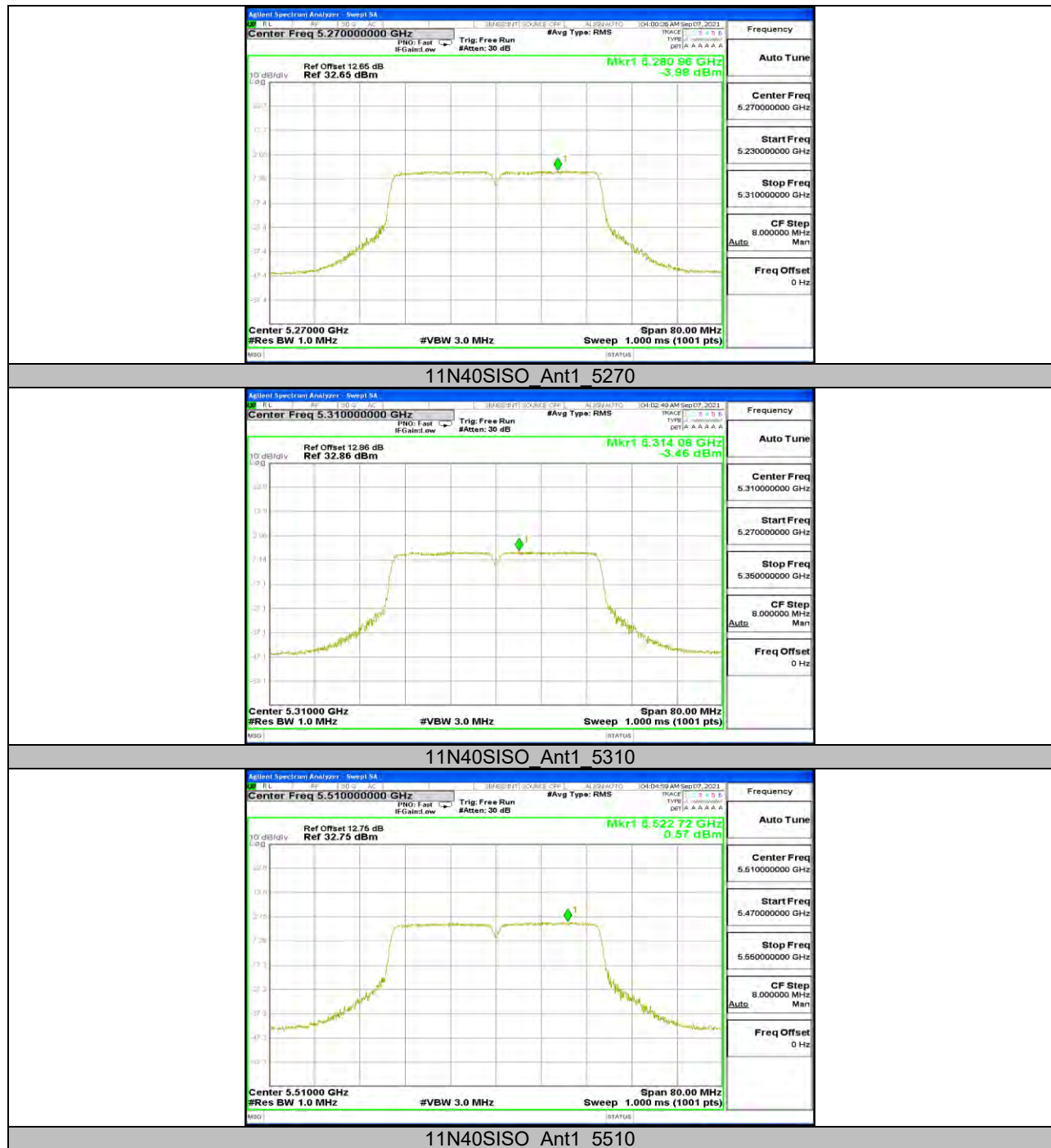


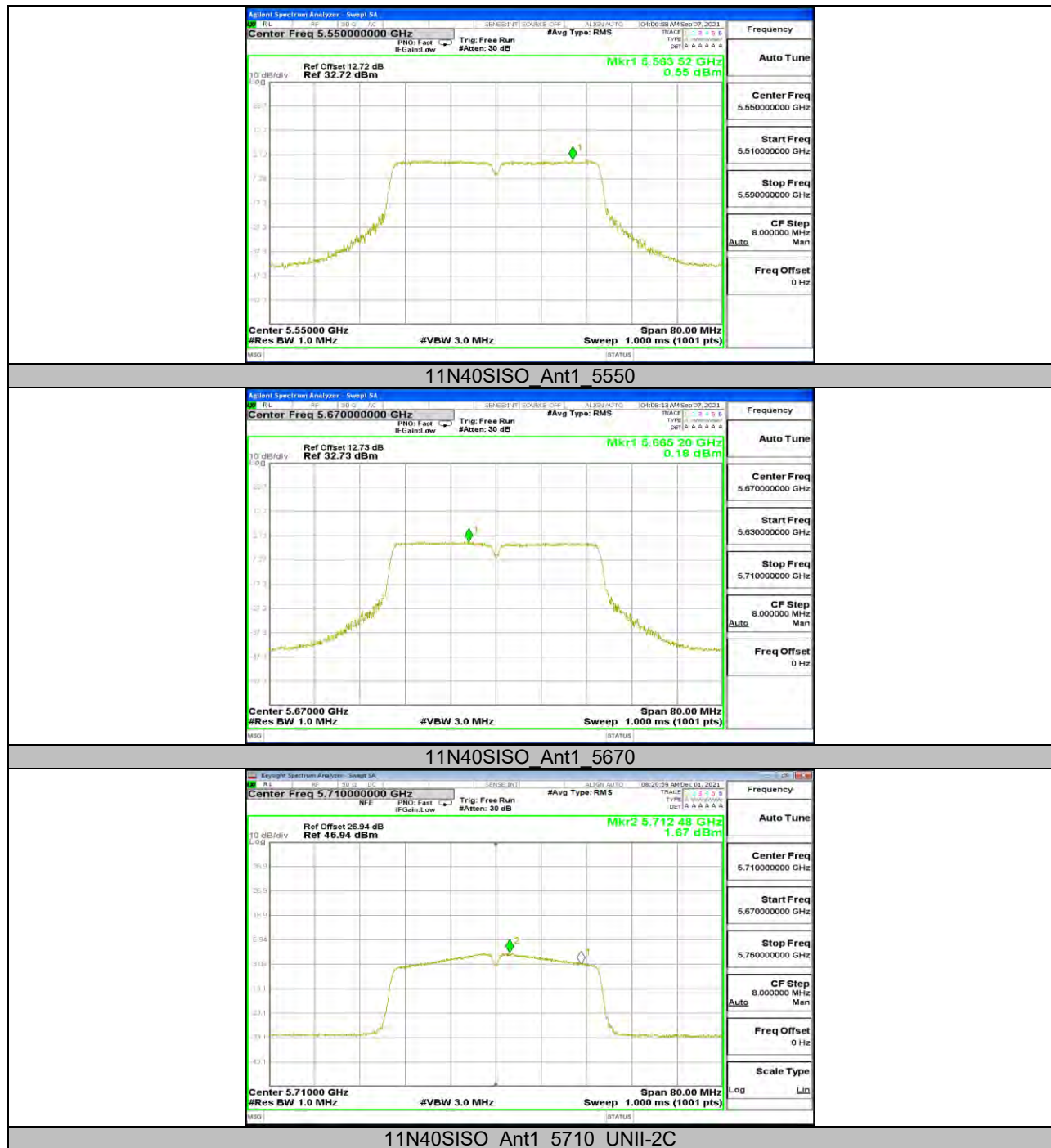


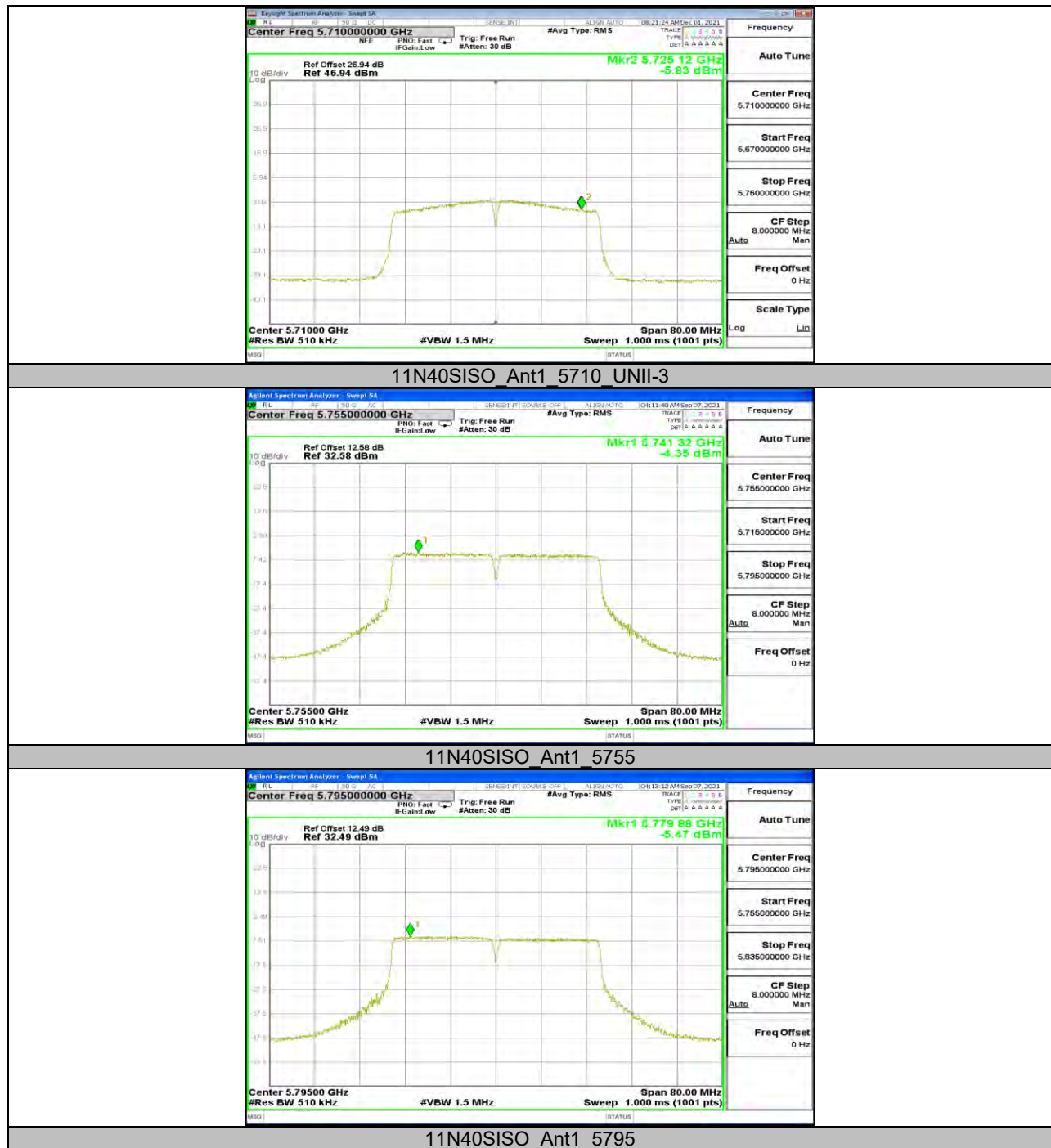


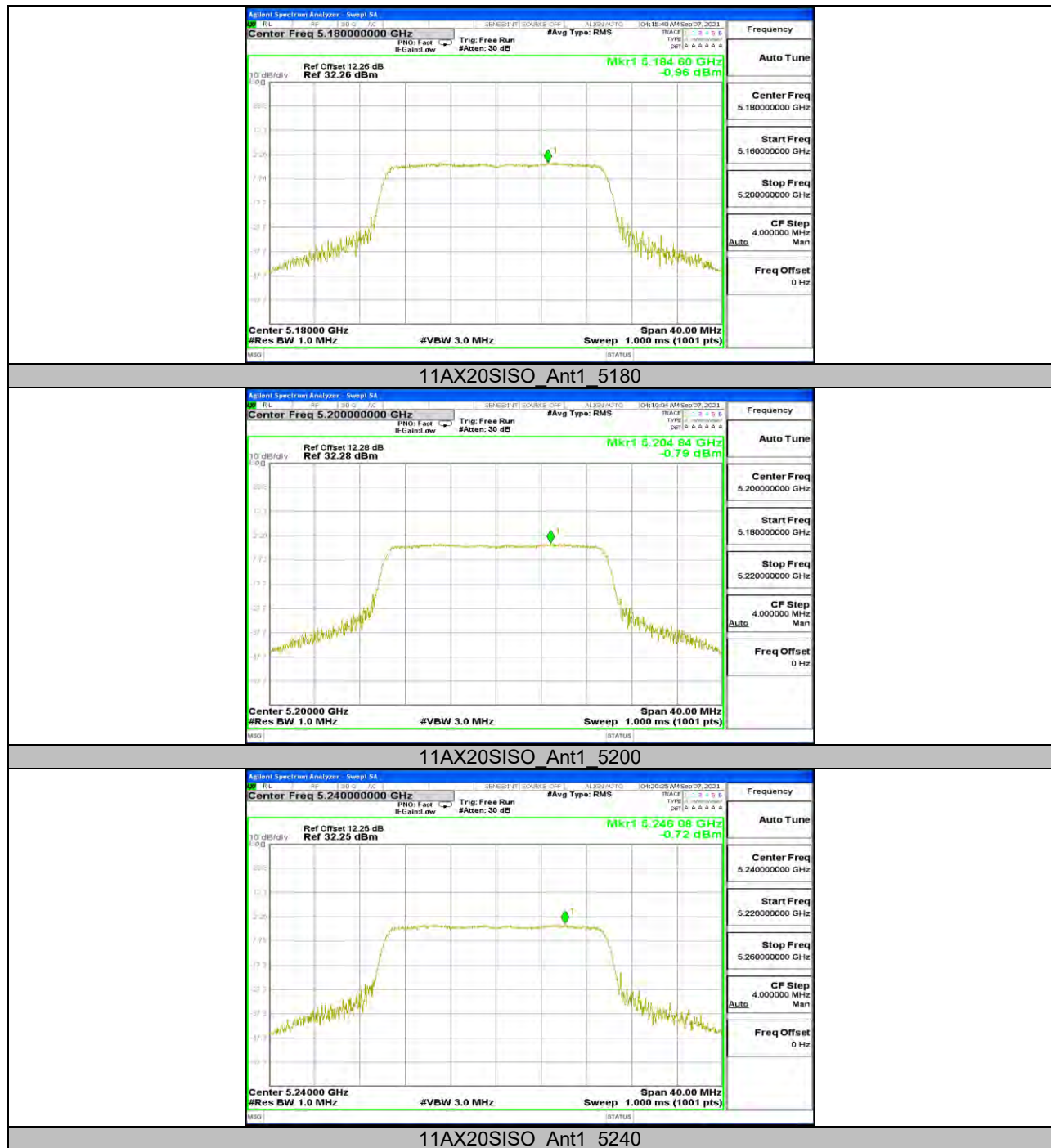


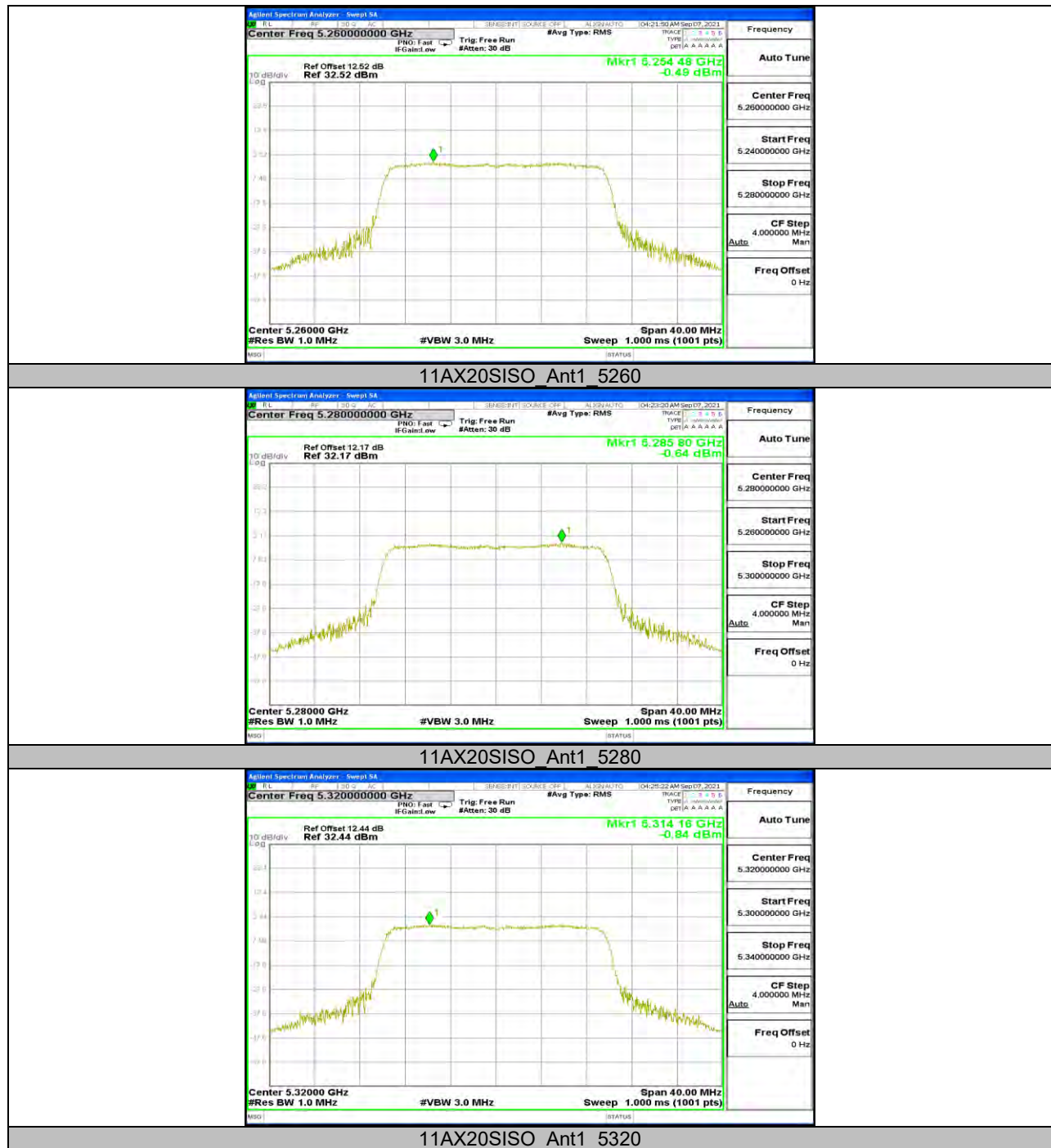
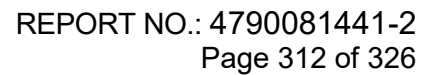


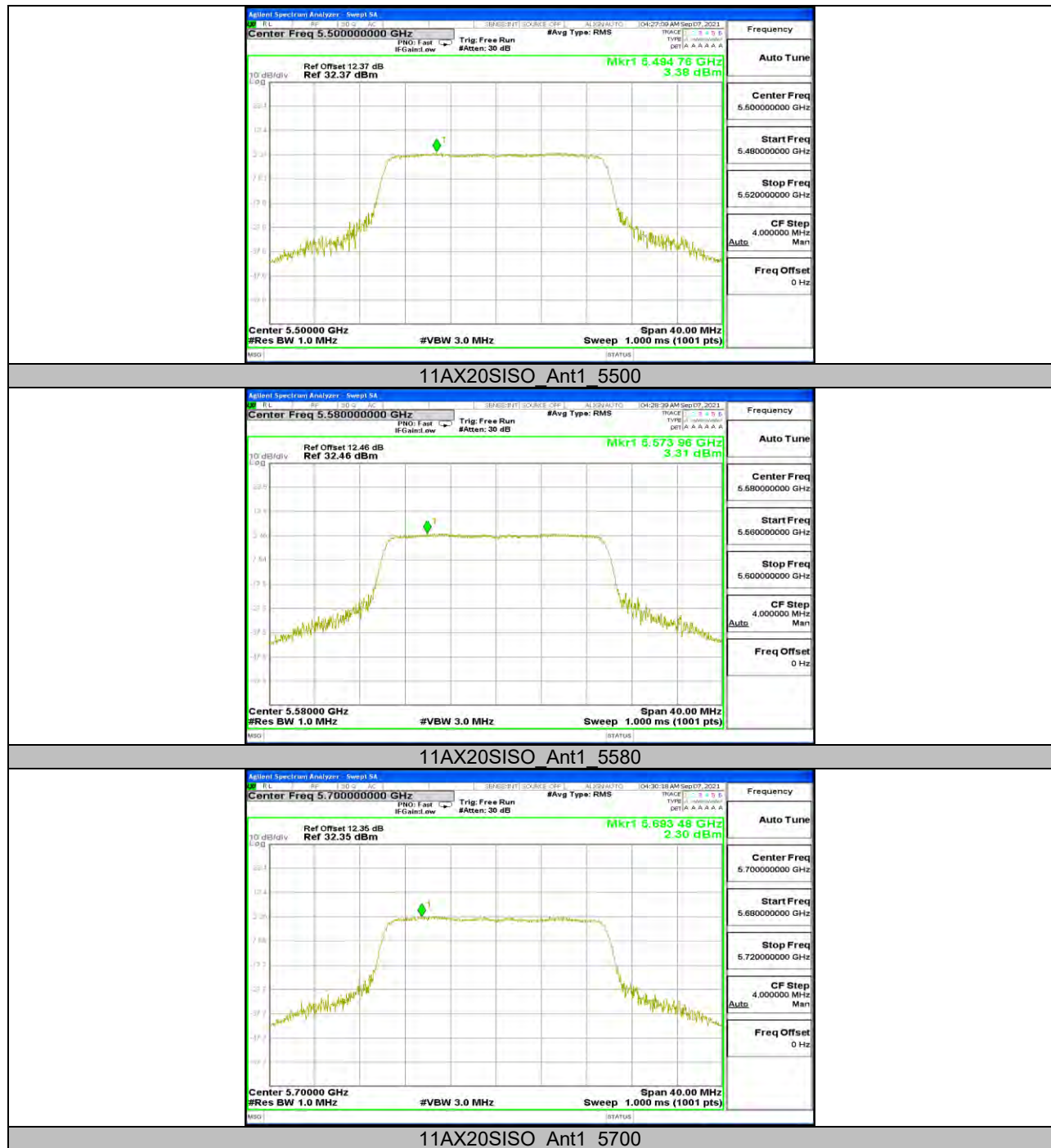


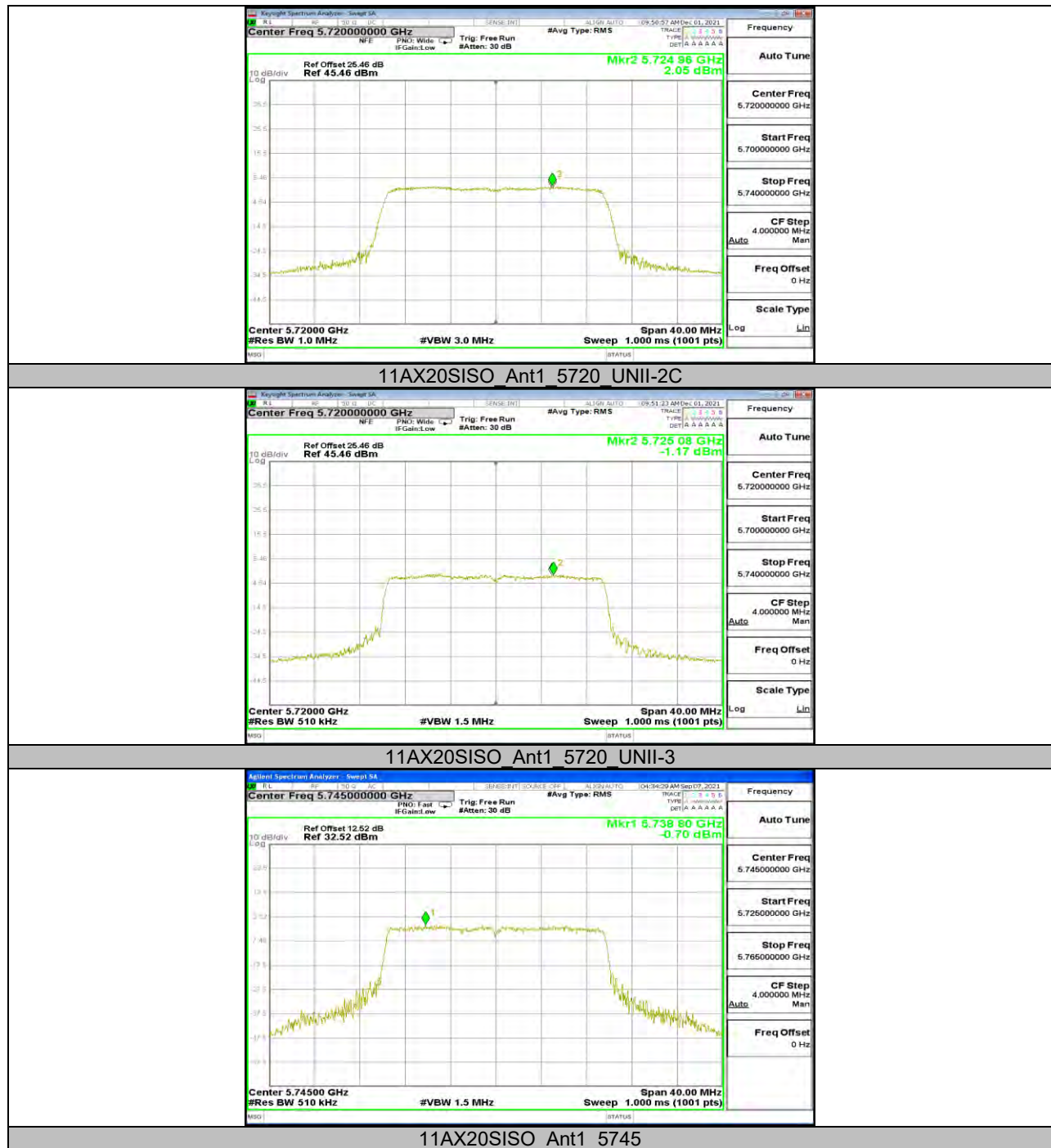


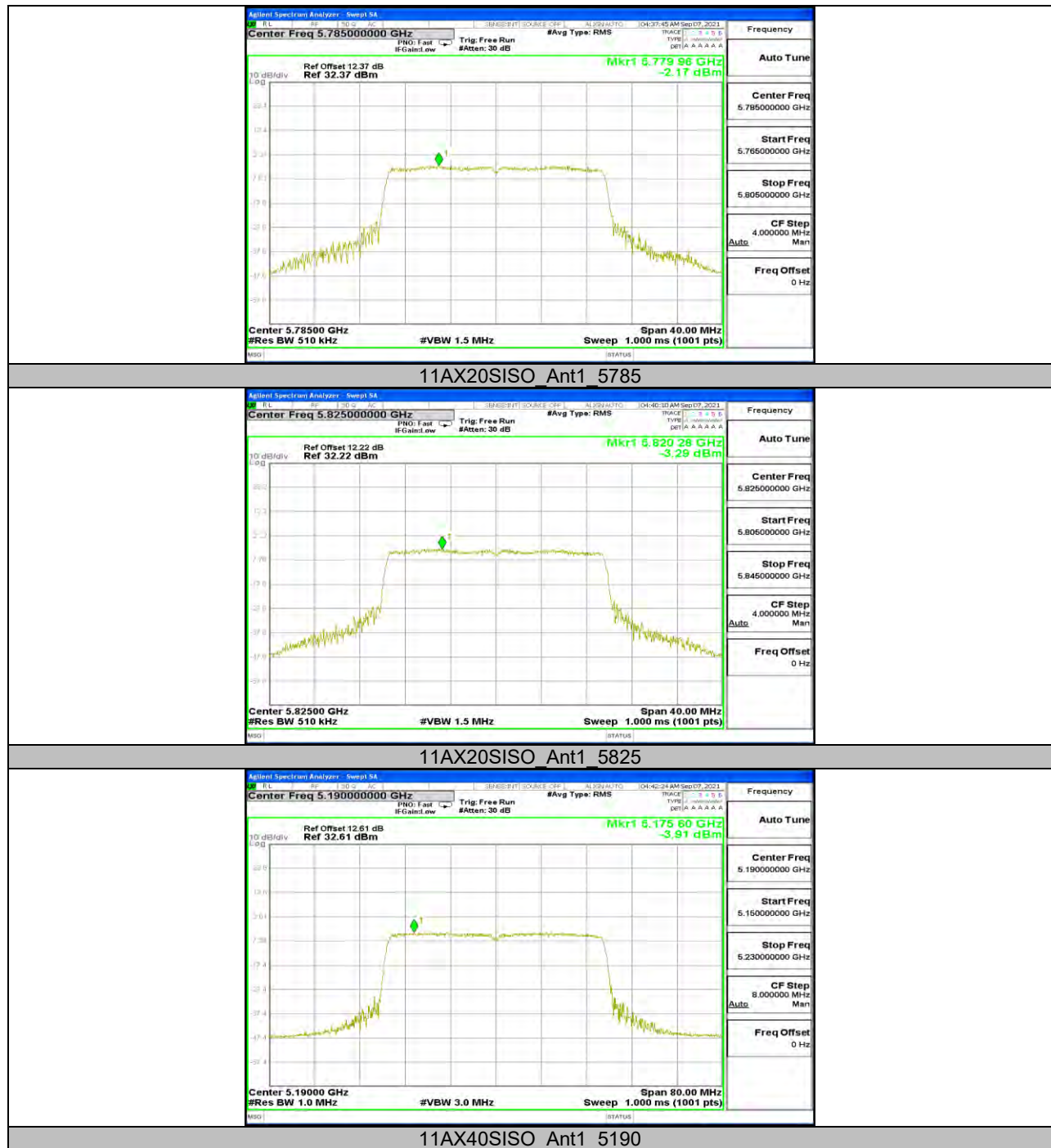


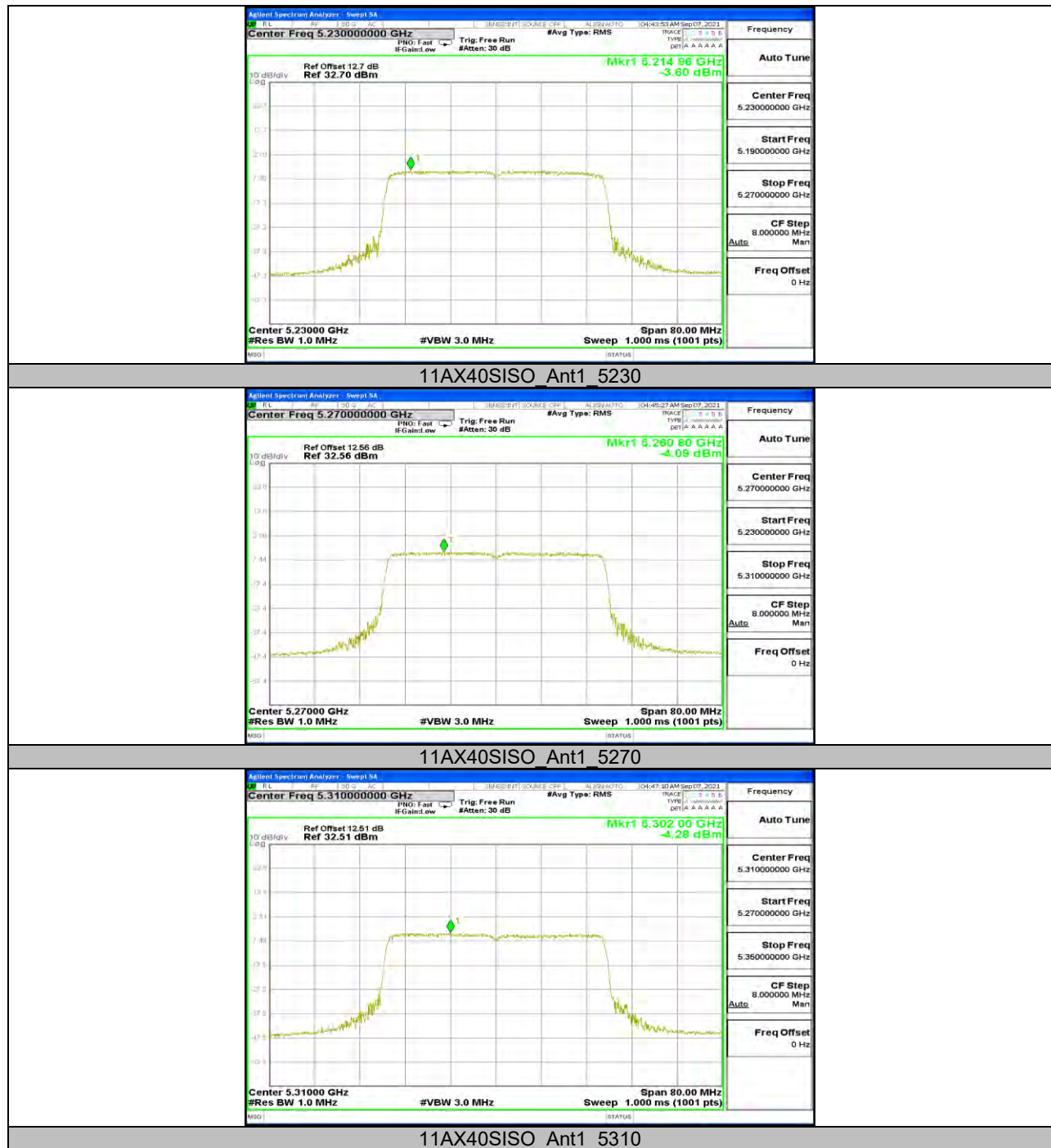


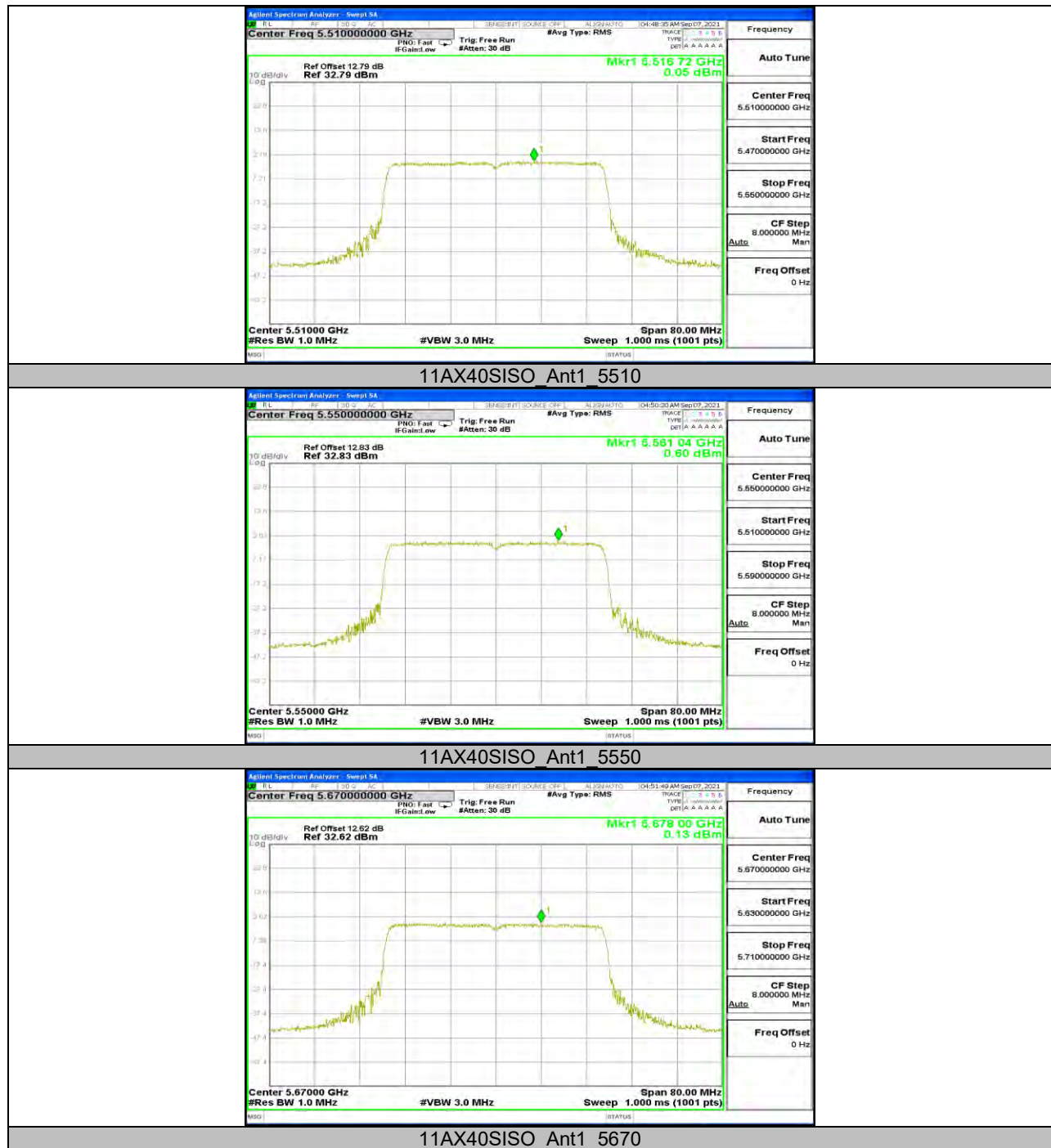


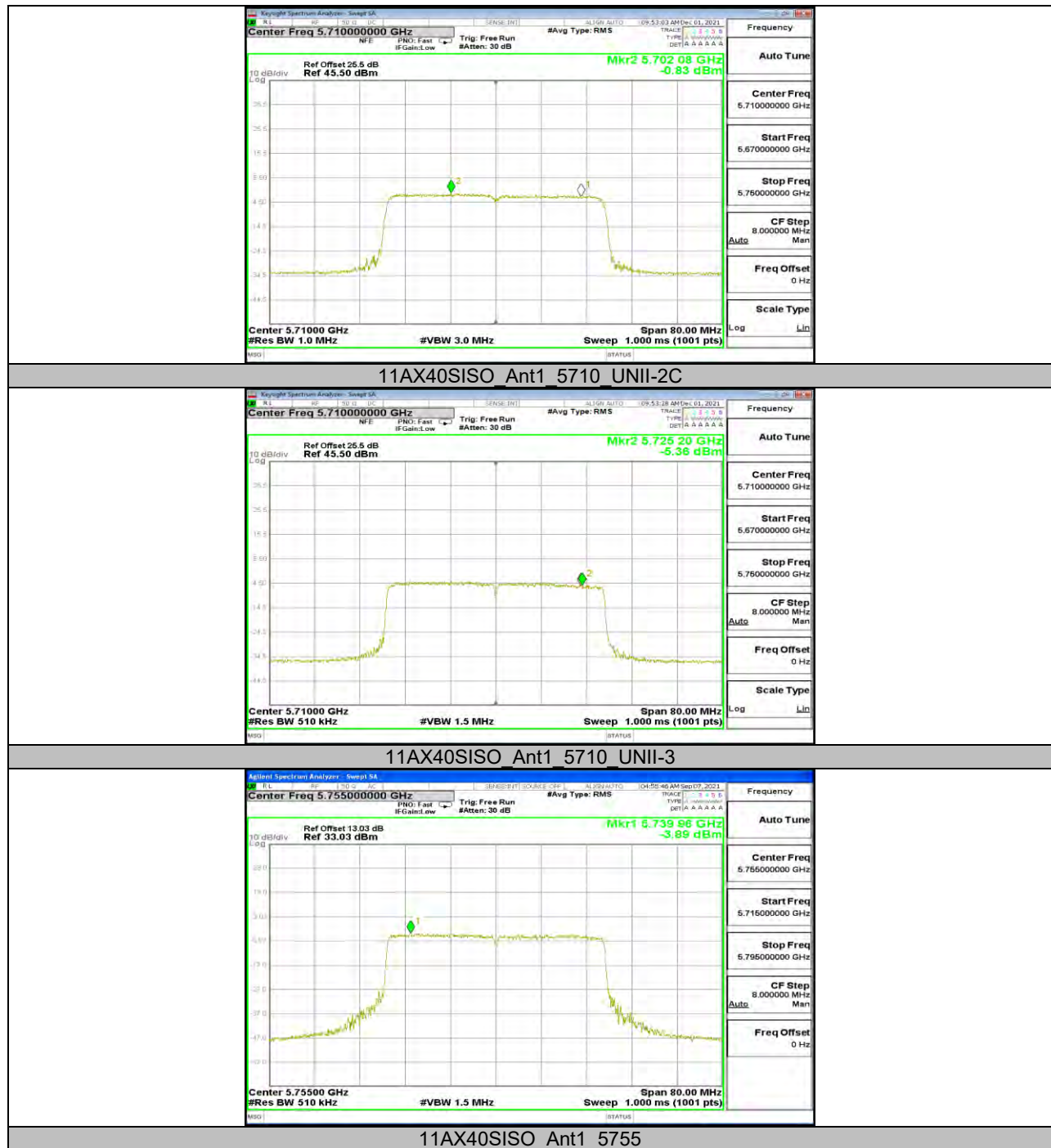
















13.6. Appendix D: Duty Cycle

13.6.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A	2.03	2.17	0.9355	93.55	0.29	0.49	0.5
11N20SISO	1.89	2.13	0.8873	88.73	0.52	0.53	1
11N40SISO	0.93	1.08	0.8611	86.11	0.65	1.08	2
11AX20SISO	1.45	1.54	0.9416	94.16	0.26	0.69	1
11AX40SISO	0.74	0.86	0.8605	86.05	0.65	1.35	2

Note:

Duty Cycle Correction Factor=10log (1/x).

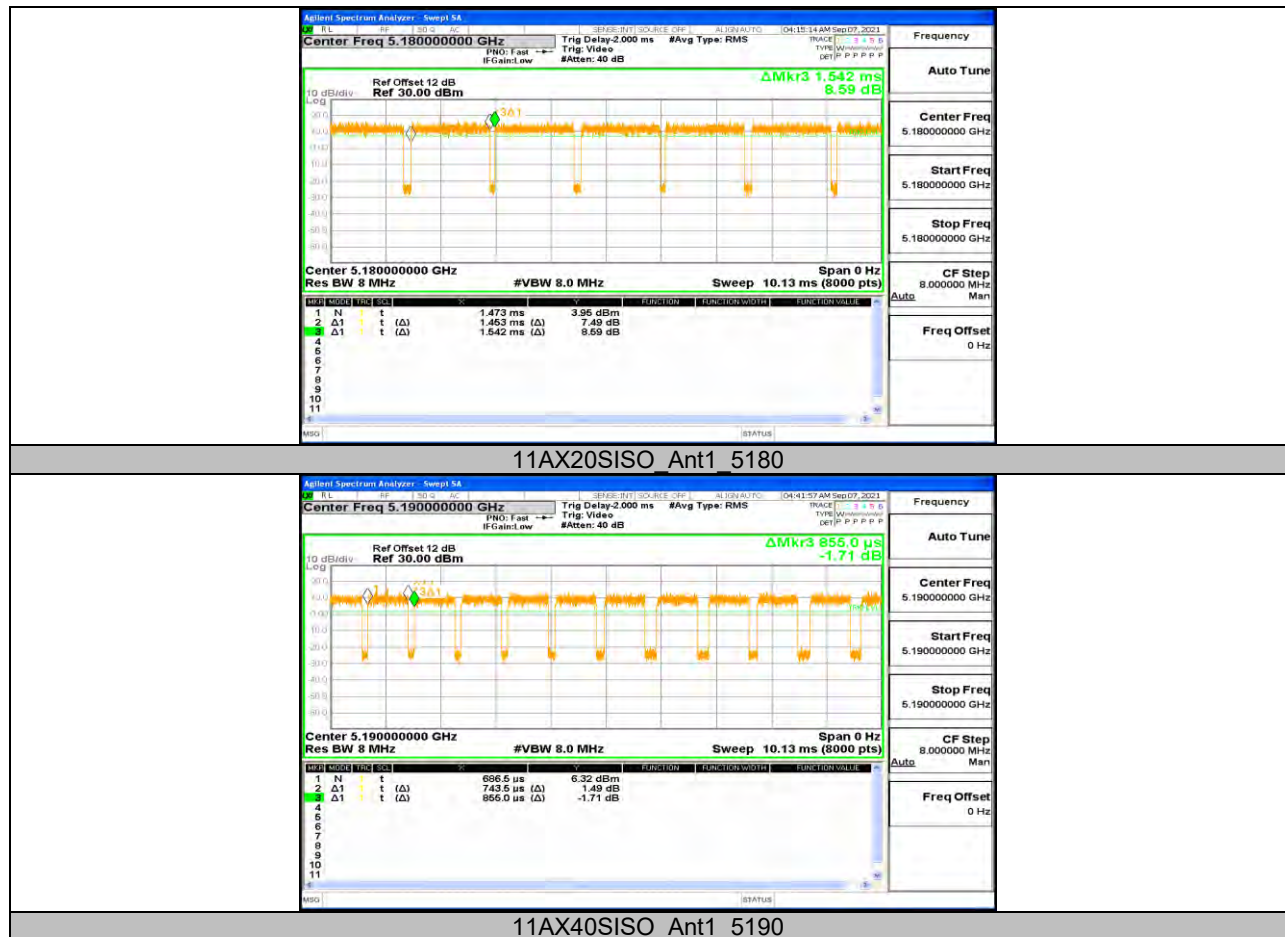
Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

13.6.2. Test Graphs







13.7. Appendix E: Frequency Stability

13.7.1. Test Result

Frequency Error vs. Voltage									
802.11a20: 5200MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5199.9983	-0.32	5200.0035	0.68	5200.0072	1.38	5200.0119	2.28
TN	VN	5199.9909	-1.75	5199.9909	-1.74	5200.0149	2.86	5199.9868	-2.53
TN	VH	5200.0090	1.72	5199.9979	-0.40	5200.0171	3.29	5200.0076	1.47
Frequency Error vs. Temperature									
802.11a20: 5200MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
40	VN	5199.9783	-4.17	5200.0239	4.59	5200.0041	0.79	5200.0243	4.67
30	VN	5200.0066	1.27	5200.0127	2.44	5199.9897	-1.99	5199.9896	-1.99
20	VN	5199.9772	-4.39	5199.9789	-4.05	5200.0069	1.32	5199.9983	-0.33
10	VN	5199.9862	-2.65	5199.9858	-2.72	5199.9797	-3.90	5200.0025	0.47
0	VN	5199.9845	-2.98	5199.9852	-2.85	5199.9927	-1.40	5200.0101	1.93



Frequency Error vs. Voltage									
802.11a: 5825MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5824.9876	-2.13	5824.9842	-2.72	5825.0197	3.38	5824.9841	-2.73
TN	VN	5825.0153	2.63	5825.0107	1.84	5825.0107	1.84	5825.0112	1.93
TN	VH	5825.0159	2.72	5825.0052	0.88	5825.0136	2.33	5825.0094	1.61
Frequency Error vs. Temperature									
802.11a:5825MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
70	VN	5825.0057	0.98	5824.9866	-2.29	5825.0205	3.53	5824.9997	-0.05
60	VN	5824.9837	-2.81	5824.9862	-2.36	5825.0025	0.42	5824.9826	-2.98
50	VN	5824.9920	-1.38	5824.9843	-2.69	5825.0044	0.75	5824.9901	-1.71
40	VN	5825.0062	1.06	5824.9790	-3.60	5825.0021	0.35	5825.0223	3.83
30	VN	5825.0004	0.06	5825.0229	3.93	5824.9775	-3.87	5825.0110	1.88
20	VN	5825.0001	0.02	5825.0165	2.84	5824.9838	-2.78	5824.9968	-0.54
10	VN	5825.0205	3.52	5824.9915	-1.46	5825.0125	2.15	5825.0128	2.20
0	VN	5824.9847	-2.62	5825.0074	1.27	5824.9908	-1.57	5824.9922	-1.34

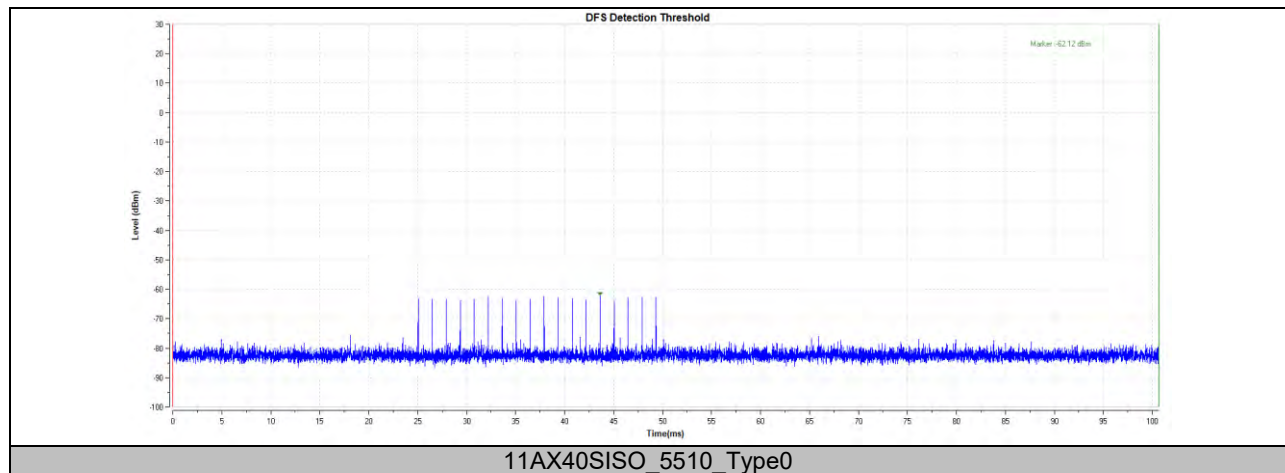
Note: All antennas and test modes have been tested, only the worst data record in the report.

13.8. Appendix F: Dynamic Frequency Selection

Radar Signal Test Result

Test Mode	Channel	Radar Type	Result	Limit[dbm]	Verdict
11AX40SISO	5510	Type0	-62.12	-57.64	PASS

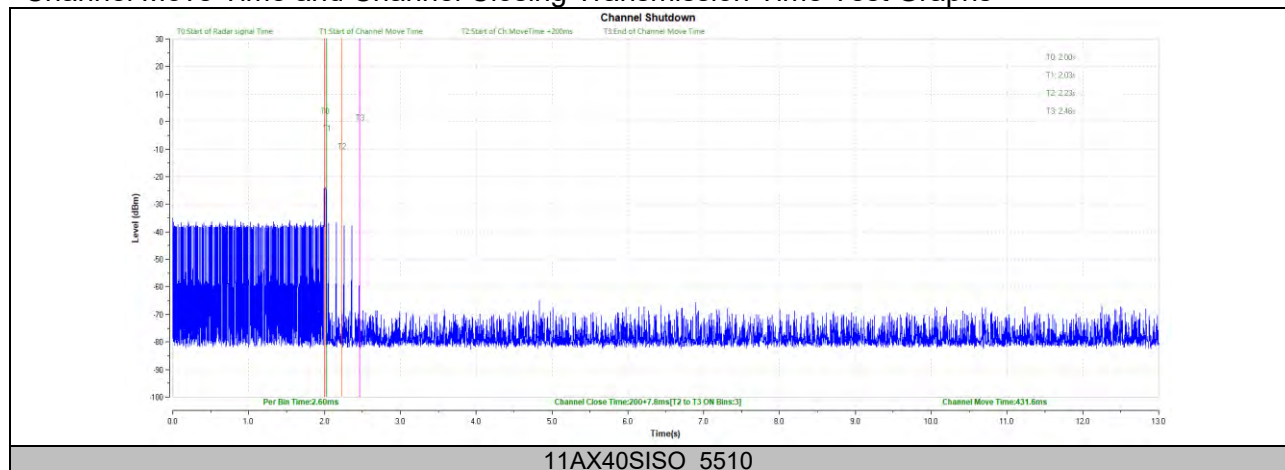
Radar Signal Test Graphs



Channel Move Time and Channel Closing Transmission Time Test Result

Test Mode	Channel	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11AX40SISO	5510	200+7.8	200+60	431.6	10000	PASS

Channel Move Time and Channel Closing Transmission Time Test Graphs

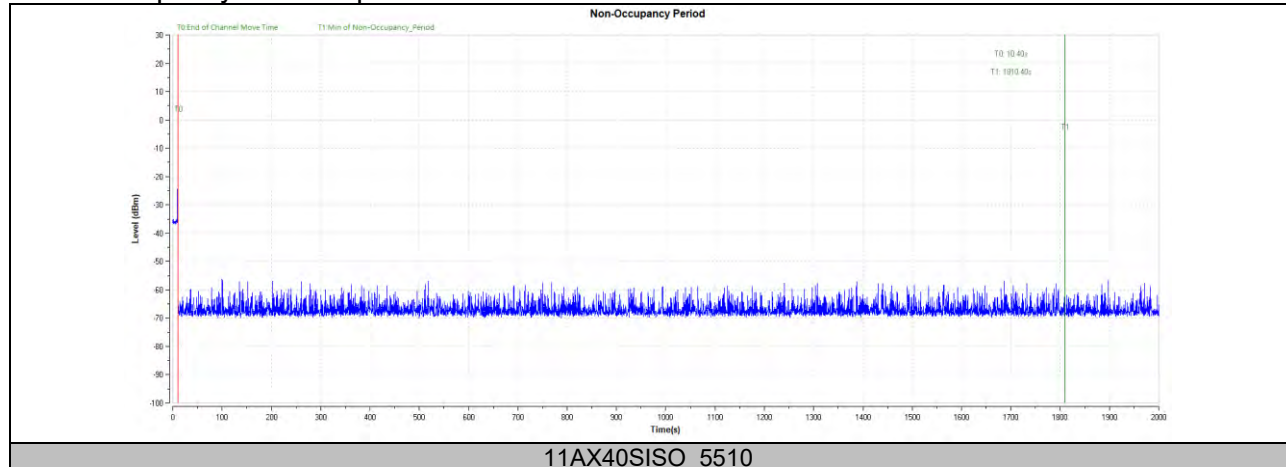




Non-Occupancy Period Test Result

Test Mode	Channel	Result	Limit[s]	Verdict
11AX40SISO	5510	see test graph	≥1800	PASS

Non-Occupancy Test Graphs



END OF REPORT